APPENDICES

Appendix A – Mitigation Measures Conceptual Design Plans

Appendix B – Mitigation Measures Corridor Improvements LRE Cost Estimates

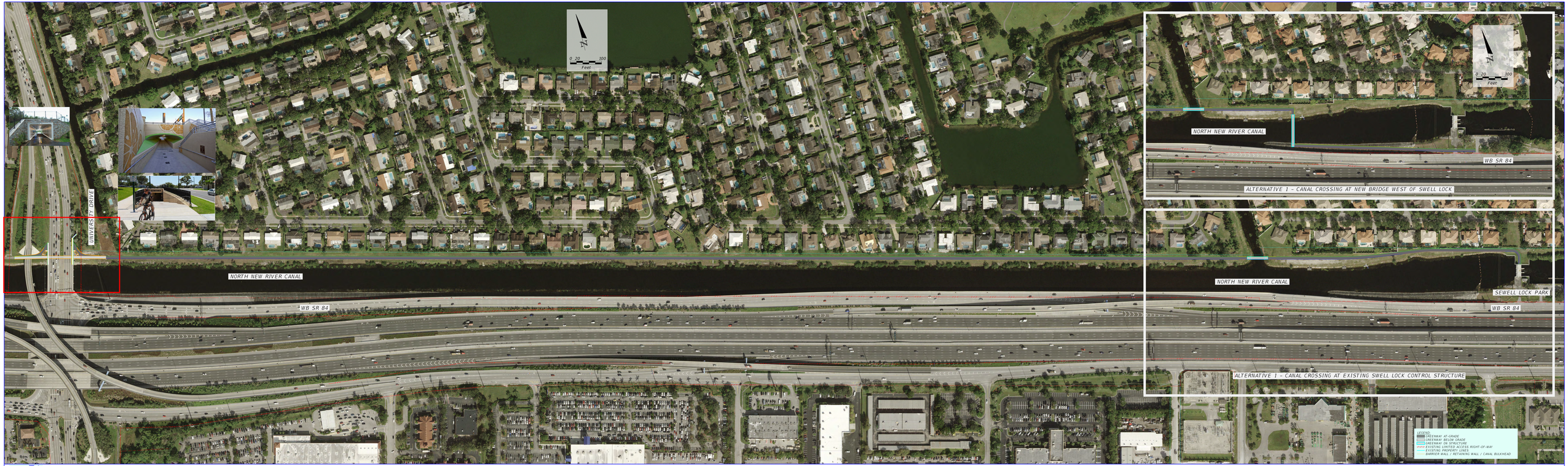
Appendix C – ICE Analysis Stage 1 Forms

Appendix D – Traffic Origin-Destination Summary Tables

Appendix E – Build Conditions 2045 AM and PM Peak Hour Intersection Traffic Analysis

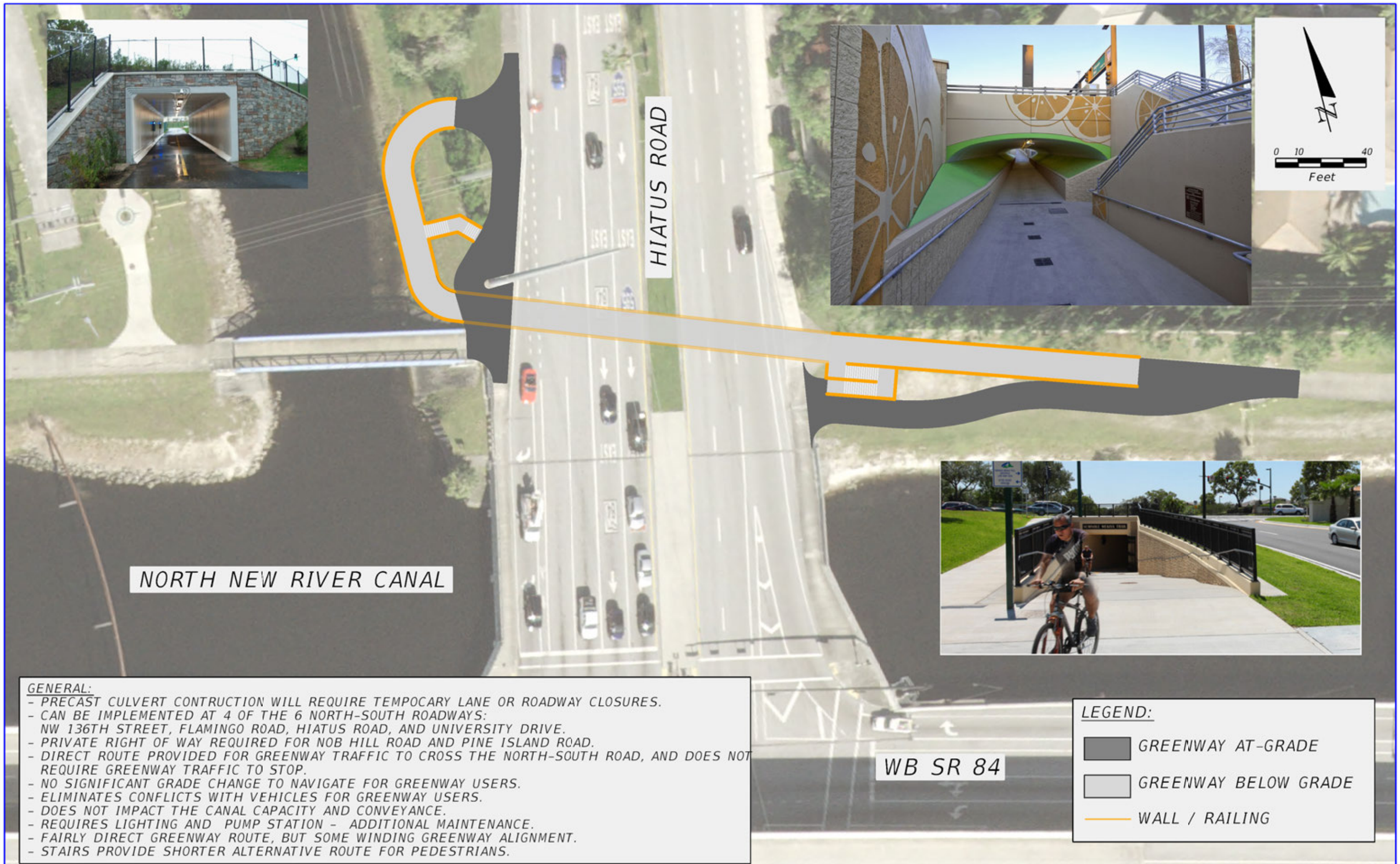
Appendix A – Mitigation Measures Conceptual Design Plans

Exhibit A-1
New River Greenway Extension between University Drive and Davie Road
Conceptual Design Plan


N
0 20 100
Feet
UNIVERSITY DRIVE
NORTH NEW RIVER CANAL
WB SR 84
NORTH NEW RIVER CANAL
WB SR 84
ALTERNATIVE 1 - CANAL CROSSING AT NEW BRIDGE WEST OF SWELL LOCK
NORTH NEW RIVER CANAL
SEWELL LOCK PARK
WB SR 84
ALTERNATIVE 1 - CANAL CROSSING AT EXISTING SWELL LOCK CONTROL STRUCTURE
LEGEND
GREENWAY AT-GRADE
GREENWAY BELOW GRADE
GREENWAY ABOVE GRADE
EXISTING LIMITED ACCESS RIGHT-OF-WAY
EXISTING PROPERTY LINES
BARRIER WALL / RETAINING WALL / CANAL BULKHEAD

FDOT

Exhibit A-2
New River Greenway Underpass
Conceptual Design Plan



GENERAL:
- PRECAST CULVERT CONTRUCTION WILL REQUIRE TEMPOCARY LANE OR ROADWAY CLOSURES.
- CAN BE IMPLEMENTED AT 4 OF THE 6 NORTH-SOUTH ROADWAYS: NW 136TH STREET, FLAMINGO ROAD, HIATUS ROAD, AND UNIVERSITY DRIVE.
- PRIVATE RIGHT OF WAY REQUIRED FOR NOB HILL ROAD AND PINE ISLAND ROAD.
- DIRECT ROUTE PROVIDED FOR GREENWAY TRAFFIC TO CROSS THE NORTH-SOUTH ROAD, AND DOES NOT REQUIRE GREENWAY TRAFFIC TO STOP.
- NO SIGNIFICANT GRADE CHANGE TO NAVIGATE FOR GREENWAY USERS.
- ELIMINATES CONFLICTS WITH VEHICLES FOR GREENWAY USERS.
- DOES NOT IMPACT THE CANAL CAPACITY AND CONVEYANCE.
- REQUIRES LIGHTING AND PUMP STATION - ADDITIONAL MAINTENANCE.
- FAIRLY DIRECT GREENWAY ROUTE, BUT SOME WINDING GREENWAY ALIGNMENT.
- STAIRS PROVIDE SHORTER ALTERNATIVE ROUTE FOR PEDESTRIANS.

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

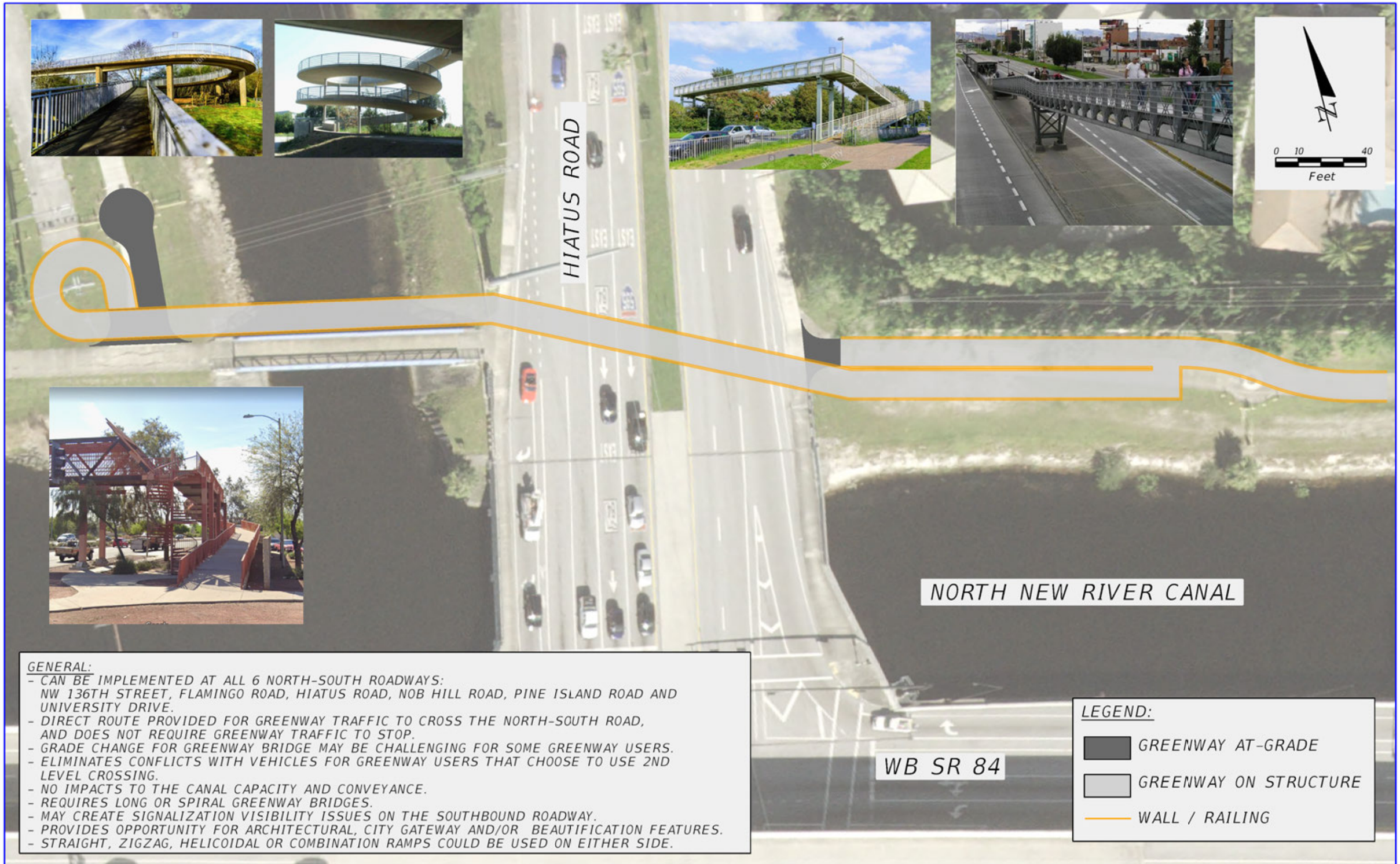
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
HIATUS	BROWARD	441954-1-12-01

New River Greenway Underpass
Conceptual Design Plan

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

Exhibit A-3
New River Greenway Overpass
Conceptual Design Plan



GENERAL:
- CAN BE IMPLEMENTED AT ALL 6 NORTH-SOUTH ROADWAYS: NW 136TH STREET, FLAMINGO ROAD, HIATUS ROAD, NOB HILL ROAD, PINE ISLAND ROAD AND UNIVERSITY DRIVE.
- DIRECT ROUTE PROVIDED FOR GREENWAY TRAFFIC TO CROSS THE NORTH-SOUTH ROAD, AND DOES NOT REQUIRE GREENWAY TRAFFIC TO STOP.
- GRADE CHANGE FOR GREENWAY BRIDGE MAY BE CHALLENGING FOR SOME GREENWAY USERS.
- ELIMINATES CONFLICTS WITH VEHICLES FOR GREENWAY USERS THAT CHOOSE TO USE 2ND LEVEL CROSSING.
- NO IMPACTS TO THE CANAL CAPACITY AND CONVEYANCE.
- REQUIRES LONG OR SPIRAL GREENWAY BRIDGES.
- MAY CREATE SIGNALIZATION VISIBILITY ISSUES ON THE SOUTHBOUND ROADWAY.
- PROVIDES OPPORTUNITY FOR ARCHITECTURAL, CITY GATEWAY AND/OR BEAUTIFICATION FEATURES.
- STRAIGHT, ZIGZAG, HELICOIDAL OR COMBINATION RAMPS COULD BE USED ON EITHER SIDE.

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

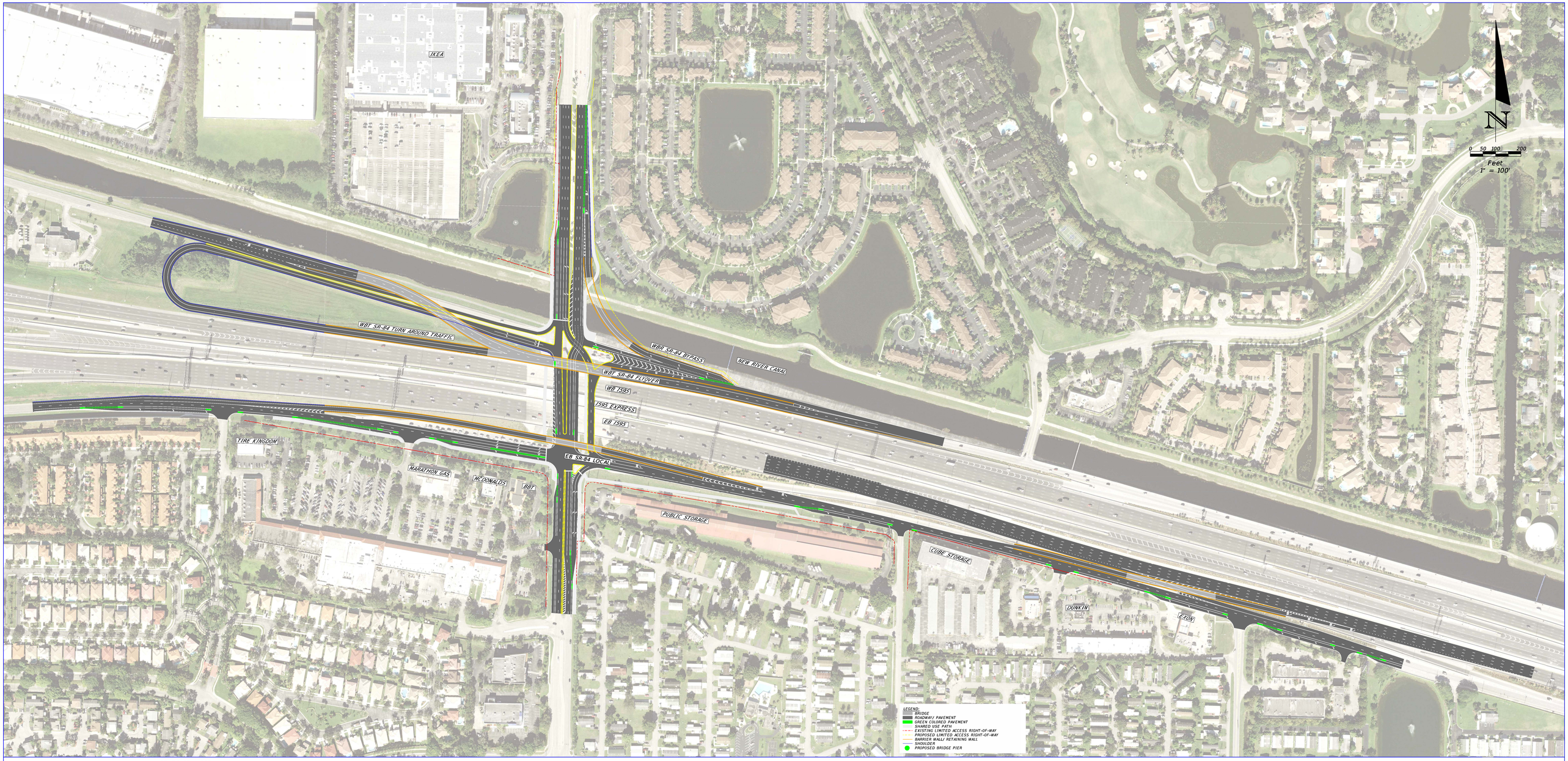
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
HIATUS	BROWARD	441954-1-12-01

New River Greenway Overpass
Conceptual Design Plan

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

Exhibit A-4
NW/SW 136th Avenue Interchange Concept Plan
Displaced Left-Turn with Bypass Lanes



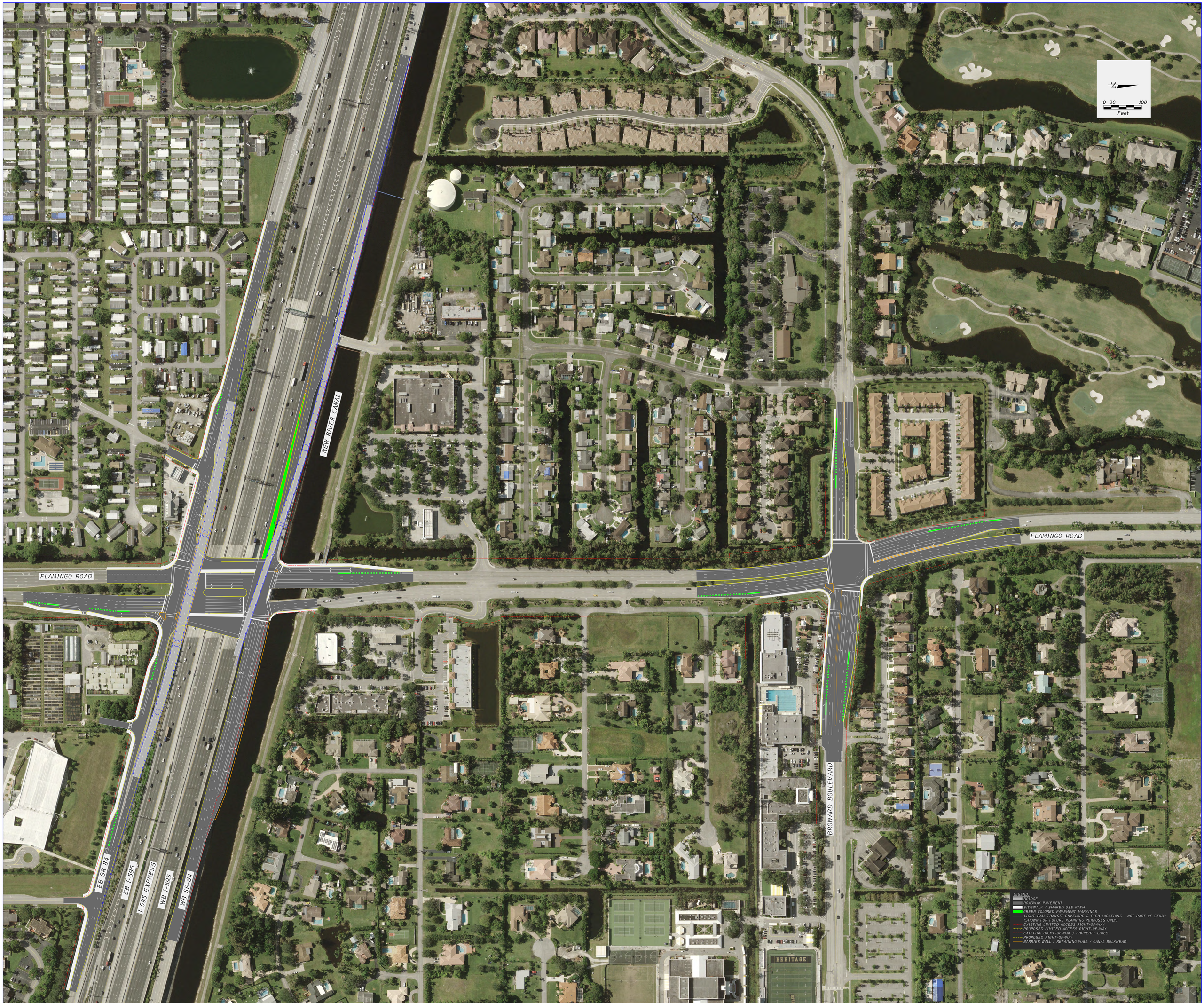
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

NW/SW 136th AVENUE INTERCHANGE CONCEPT PLAN
DISPLACED LEFT TURN WITH BYPASS LANES

Exhibit A-5
NW/SW 136th Avenue
Corridor Conceptual Design Plan
(Modified Diamond Interchange with Flyover and Bypass Lanes)

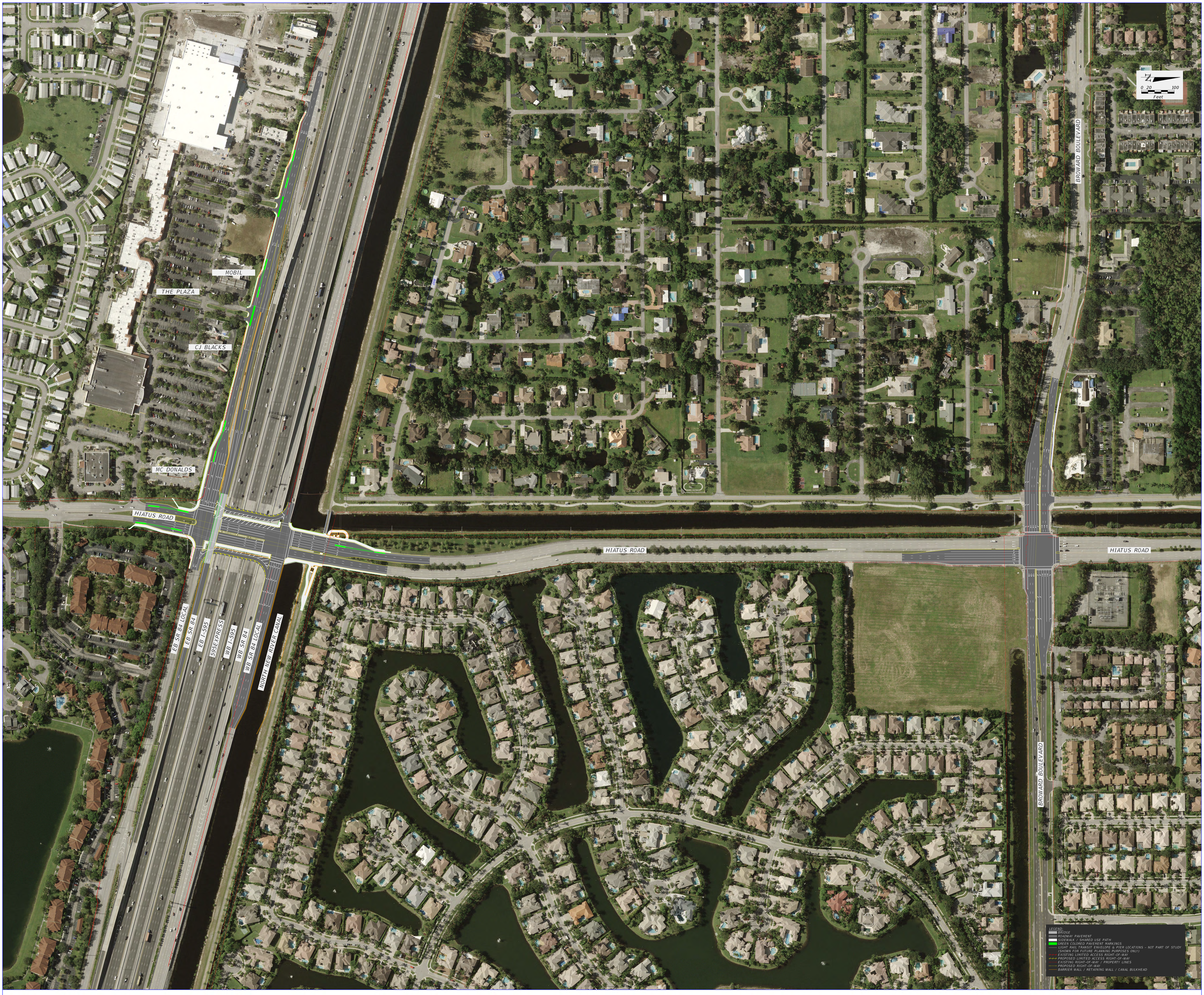
SW 136TH AVENUE IMPROVEMENTS CONCEPT

Exhibit A-6
Flamingo Road Corridor
Conceptual Design Plan



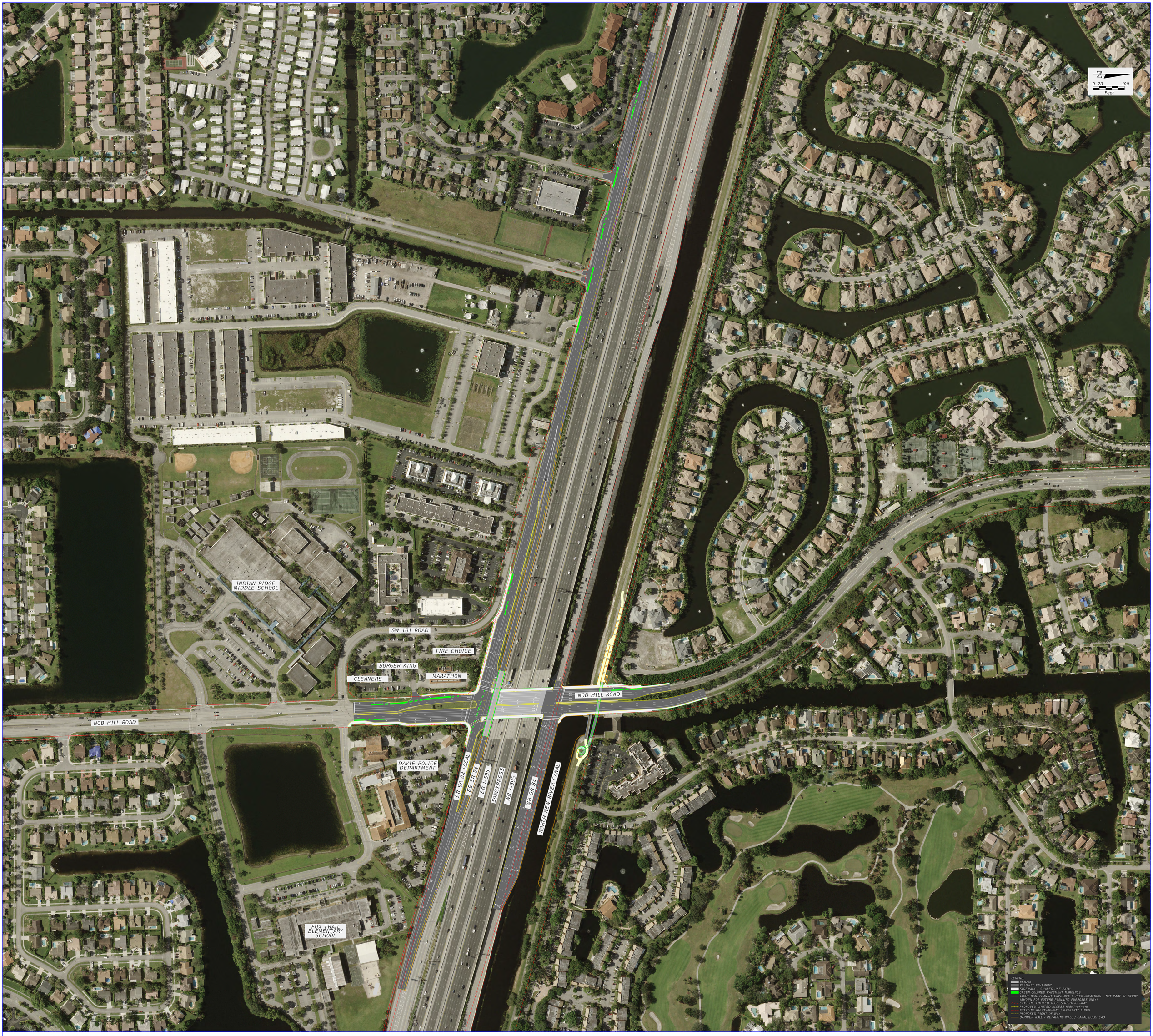
FLAMINGO ROAD IMPROVEMENTS CONCEPT

Exhibit A-7
Hiatus Road Corridor
Conceptual Design Plan



HIATUS ROAD IMPROVEMENTS CONCEPT

Exhibit A-8
Nob Hill Road Corridor
Conceptual Design Plan



NOB HILL ROAD IMPROVEMENTS CONCEPT

Exhibit A-9
Pine Island Road Corridor
Conceptual Design Plan

PINE ISLAND ROAD
NW 40TH PLACE
NW 40TH WAY
NW 40TH TERRACE
NW 40TH PLACE
NW 40TH WAY
NW 40TH TERRACE
NW 40TH PLACE
NW 40TH PLACE
NW 40TH WAY
ORANGE GROVE DRIVE
PINE ISLAND RIDGE PLAZA
MOBIL
7-ELEVEN
PINE ISLAND ROAD
PINE ISLAND ROAD
PINE ISLAND ROAD
NW 36TH PLACE
NW 36TH TERRACE
NW 36TH PLACE
NW 36TH WAY
NW 36TH PLACE
NW 36TH WAY

Exhibit A-10
University Drive Corridor
Conceptual Design Plan

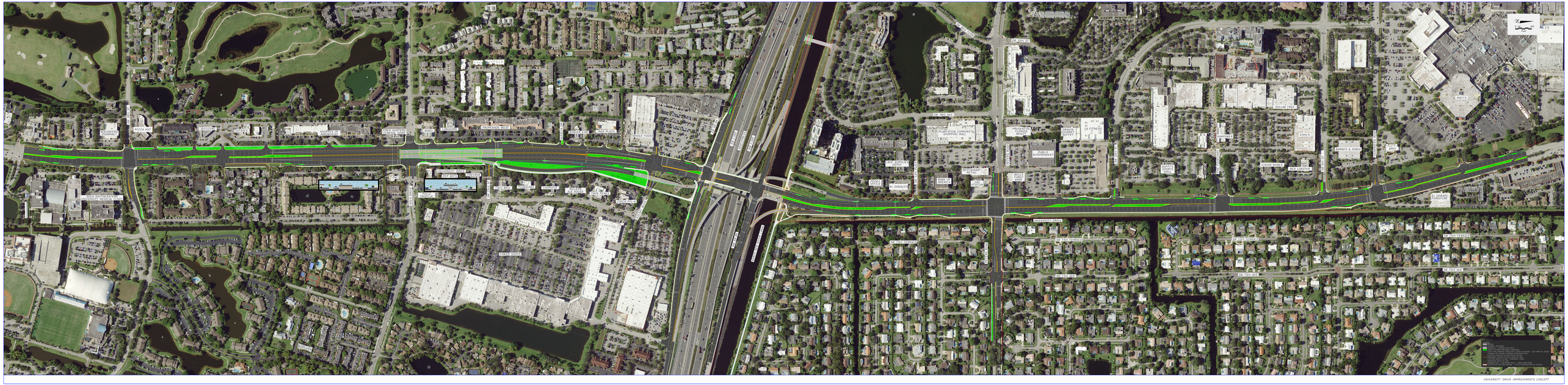
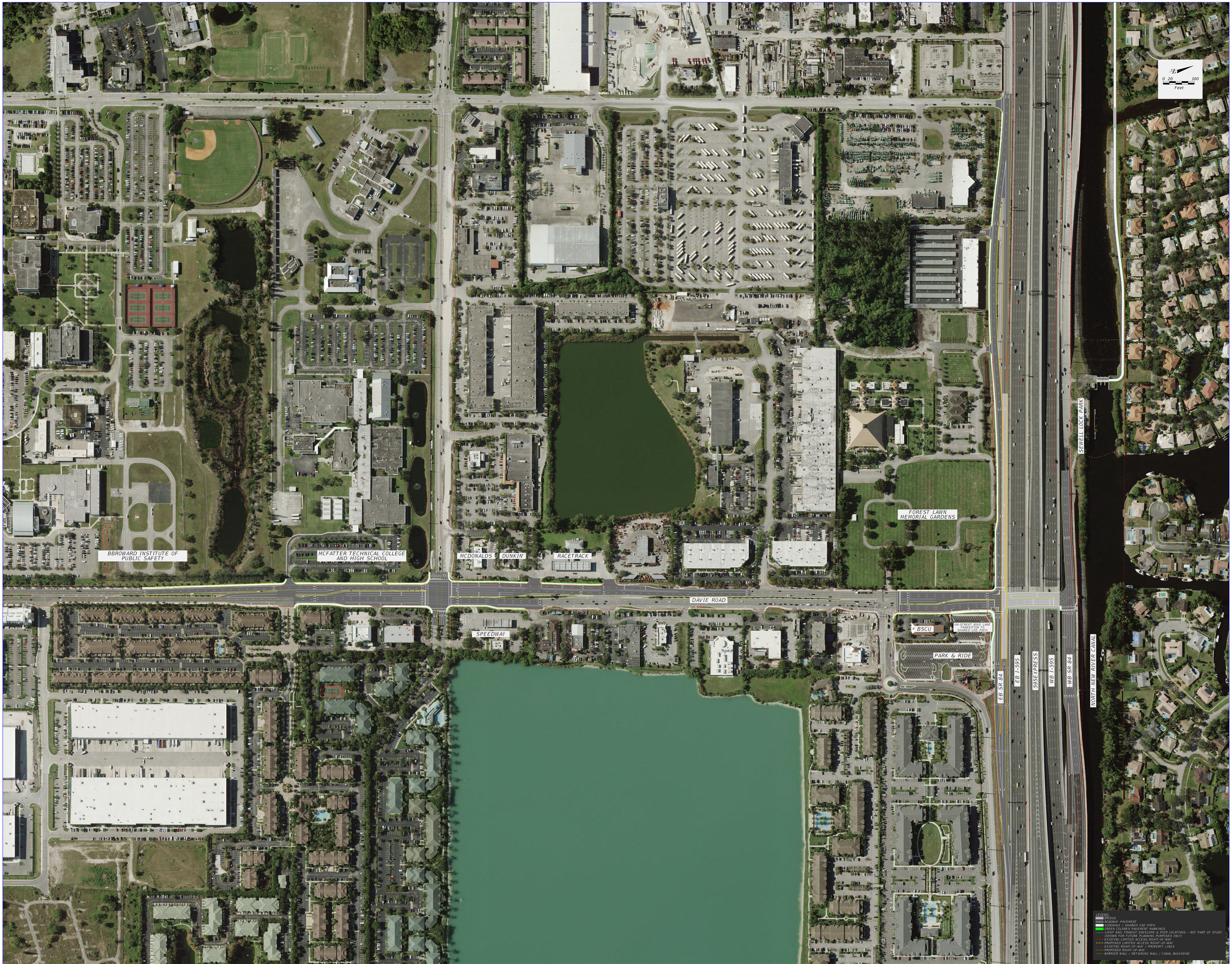
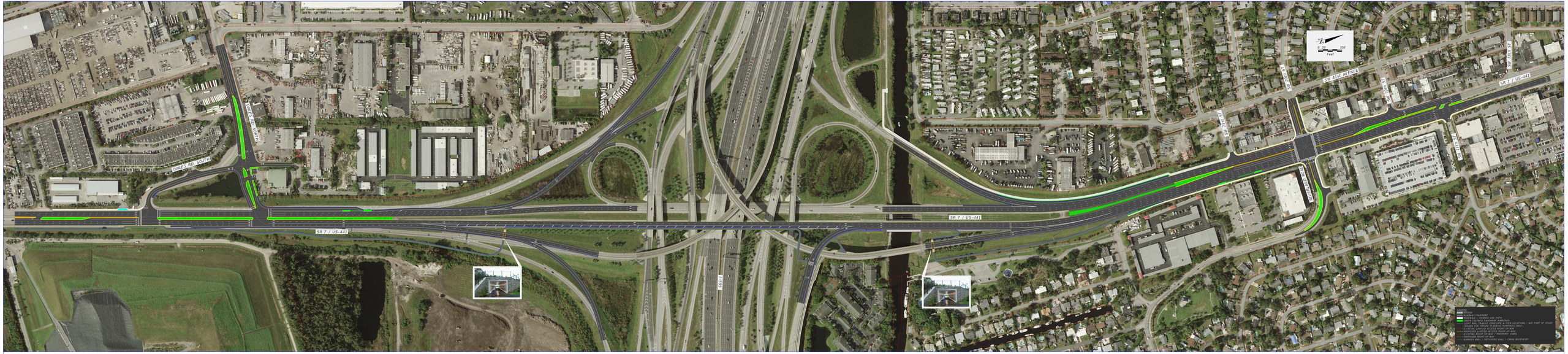

PIZZA HUT
PUBLIX
CVS
WALGREENS
PUBLIX
PUBLIX
PUBLIX

Exhibit A-11
Davie Road Corridor
Conceptual Design Plan



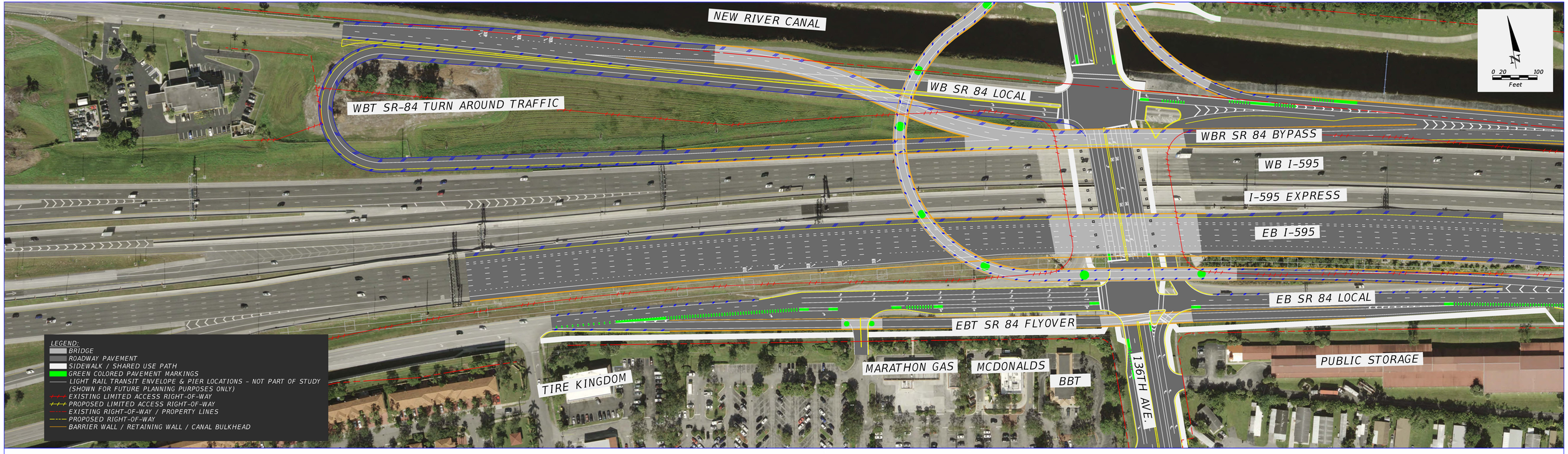
DAVIE ROAD IMPROVEMENTS CONCEPT

Exhibit A-12
SR 7 / US-441 Corridor
Conceptual Design Plan

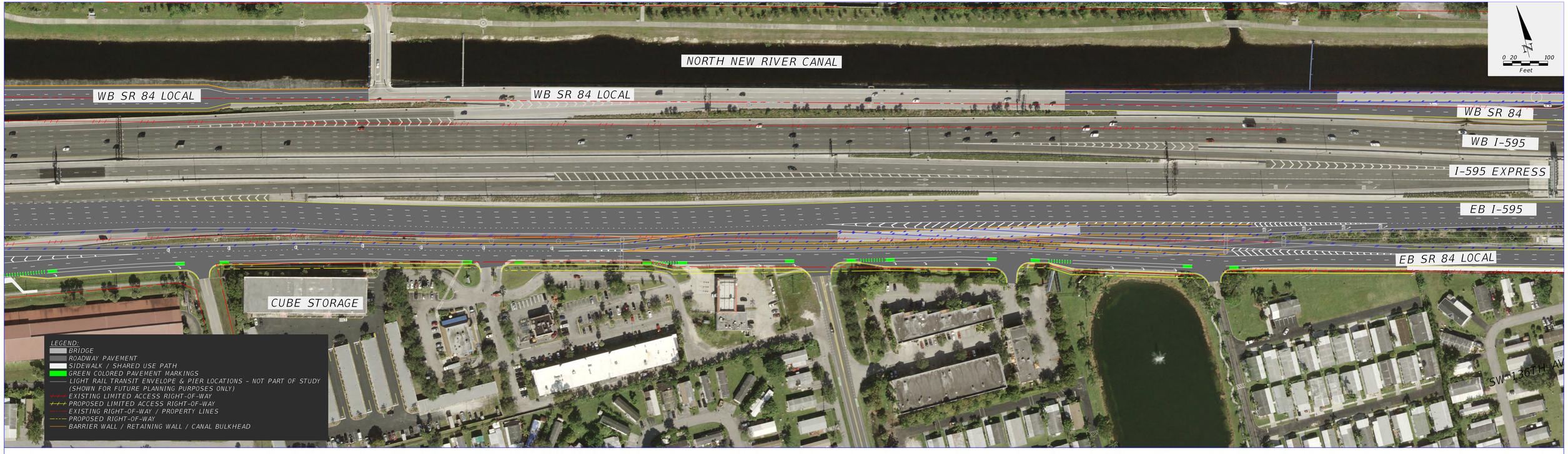


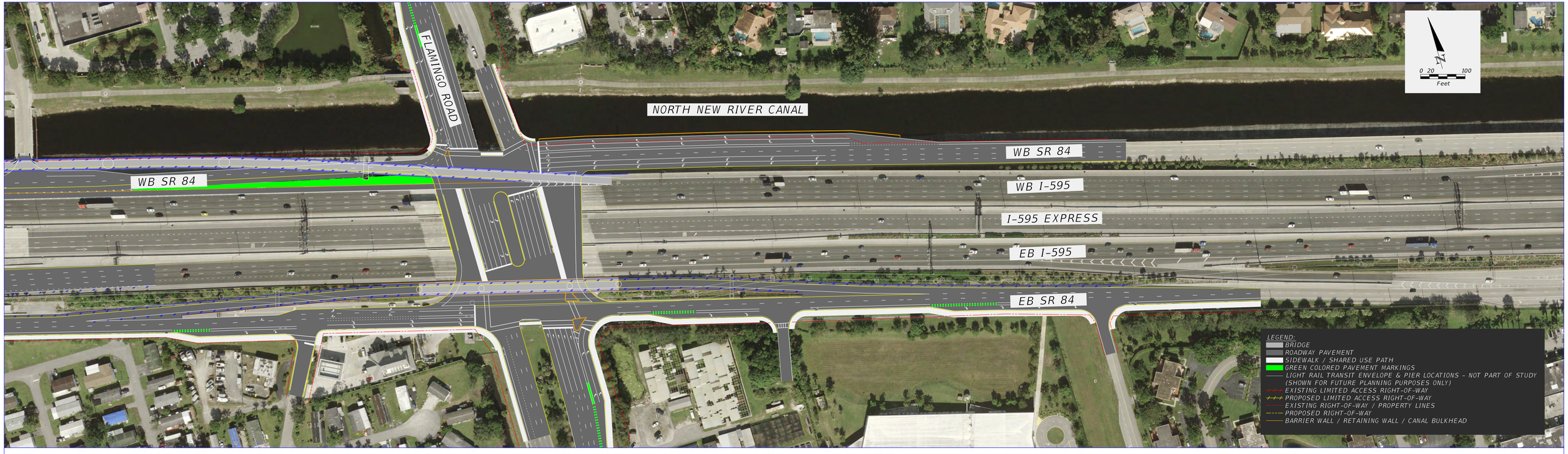
SR 7 / US-441 IMPROVEMENTS CONCEPT

Exhibit A-13
SR 84 Corridor
Conceptual Design Plan

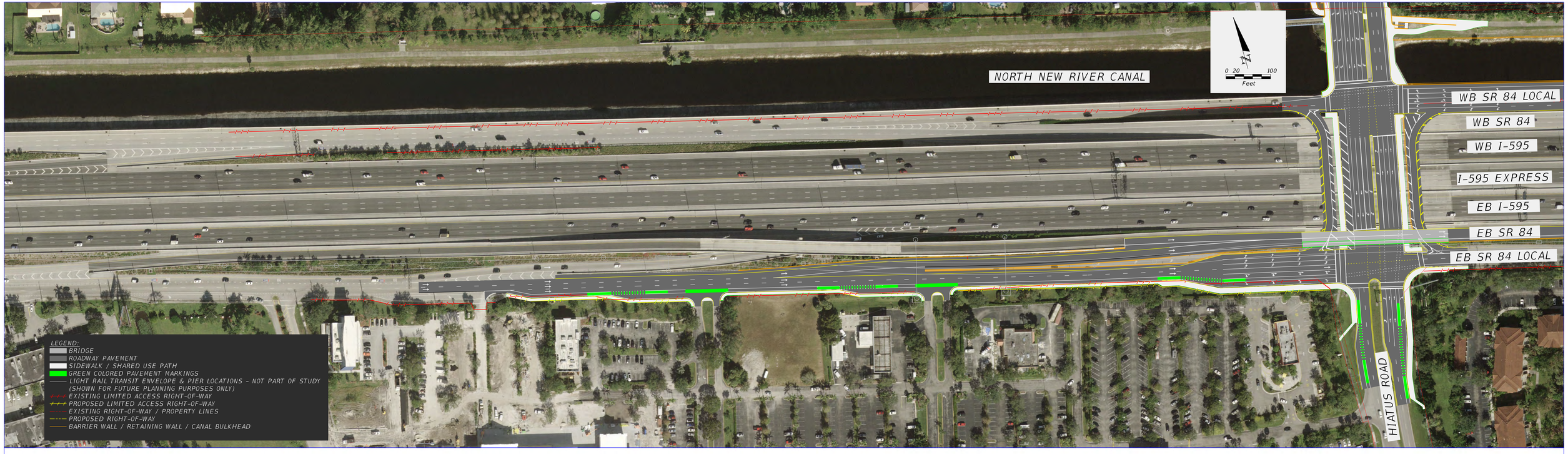


CONTINUOUS SR 84 IMPROVEMENTS CONCEPT

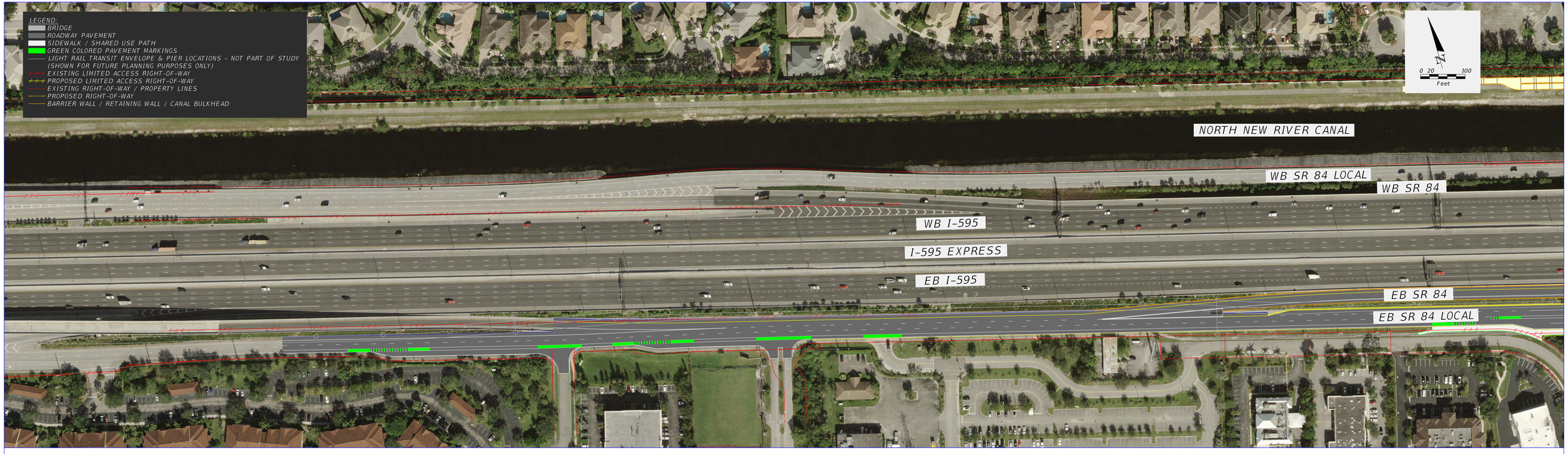

NORTH NEW RIVER CANAL
WB SR 84 LOCAL
WB SR 84 LOCAL
WB SR 84
WB I-595
I-595 EXPRESS
EB I-595
EB SR 84 LOCAL
CUBE STORAGE
SW 136TH AV
0 20 100
Feet
LEGEND:
BRIDGE
ROADWAY PAVEMENT
SIDEWALK / SHARED USE PATH
GREEN COLORED PAVEMENT MARKINGS
LIGHT RAIL TRANSIT ENVELOPE & PIER LOCATIONS - NOT PART OF STUDY (SHOWN FOR FUTURE PLANNING PURPOSES ONLY)
EXISTING LIMITED ACCESS RIGHT-OF-WAY
PROPOSED LIMITED ACCESS RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY / PROPERTY LINES
PROPOSED RIGHT-OF-WAY
BARRIER WALL / RETAINING WALL / CANAL BULKHEAD



CONTINUOUS SR 84 IMPROVEMENTS CONCEPT



CONTINUOUS SR 84 IMPROVEMENTS CONCEPT


LEGEND:
BRIDGE
ROADWAY PAVEMENT
SIDEWALK / SHARED USE PATH
GREEN COLORED PAVEMENT MARKINGS
LIGHT RAIL TRANSIT ENVELOPE & PIER LOCATIONS - NOT PART OF STUDY (SHOWN FOR FUTURE PLANNING PURPOSES ONLY)
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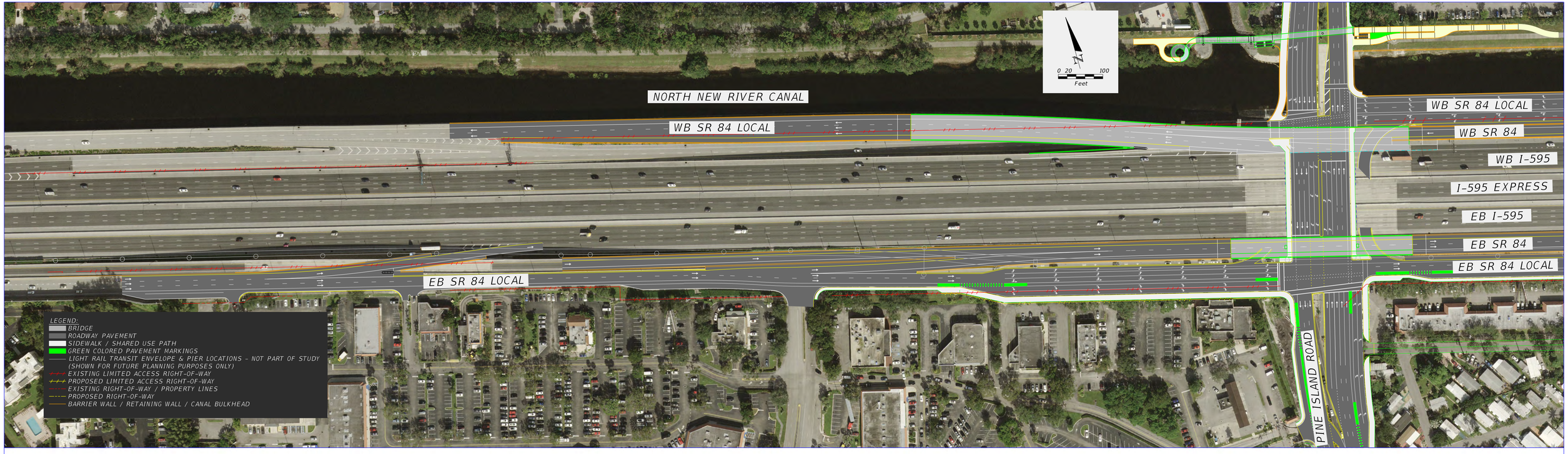
PROPOSED LIMITED ACCESS RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY / PROPERTY LINES
PROPOSED RIGHT-OF-WAY
BARRIER WALL / RETAINING WALL / CANAL BULKHEAD
0 20 100
Feet
NORTH NEW RIVER CANAL
WB SR 84 LOCAL
WB SR 84
WB I-595
I-595 EXPRESS
EB I-595
EB SR 84
EB SR 84 LOCAL

CONTINUOUS SR 84 IMPROVEMENTS CONCEPT


NORTH NEW RIVER CANAL
WB SR 84 LOCAL
EB SR 84 LOCAL
WB SR 84 LOCAL
WB SR 84
WB I-595
I-595 EXPRESS
EB I-595
EB SR 84
EB SR 84 LOCAL
PINE ISLAND ROAD
0 20 100
Feet
LEGEND:
BRIDGE
ROADWAY PAVEMENT
SIDEWALK / SHARED USE PATH
GREEN COLORED PAVEMENT MARKINGS
LIGHT RAIL TRANSIT ENVELOPE & PIER LOCATIONS - NOT PART OF STUDY (SHOWN FOR FUTURE PLANNING PURPOSES ONLY)
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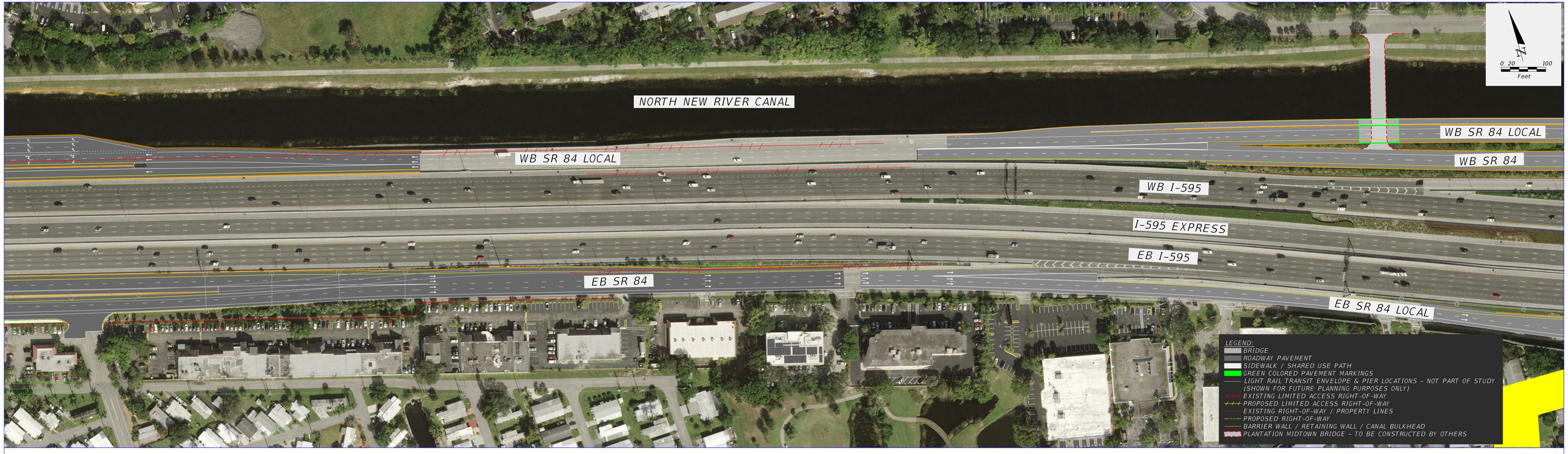
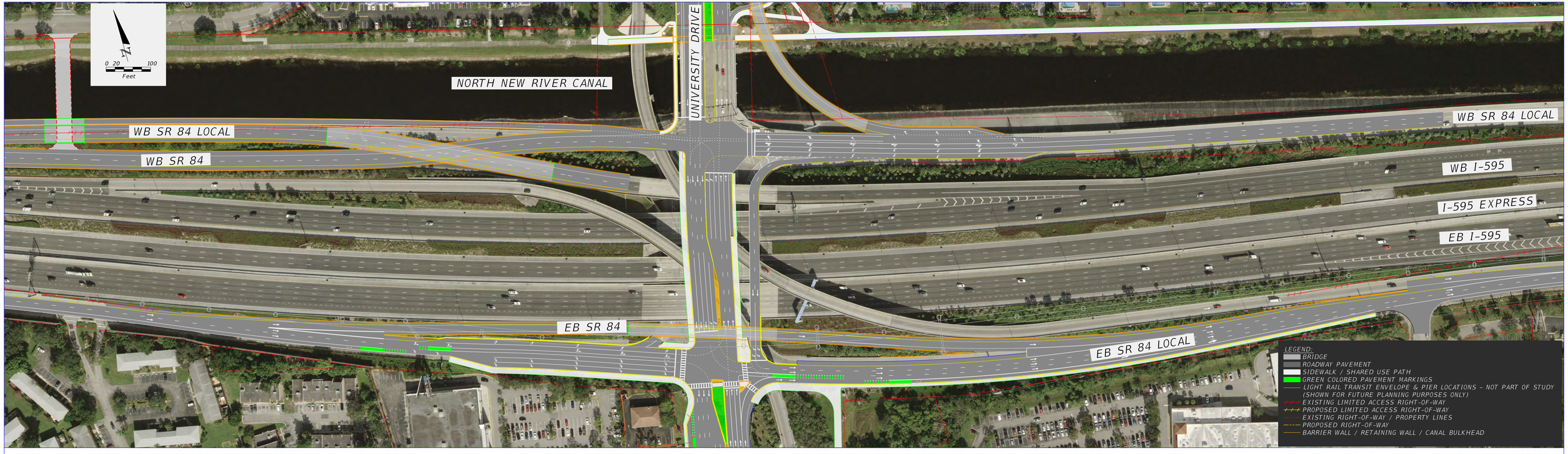
PROPOSED LIMITED ACCESS RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY / PROPERTY LINES
PROPOSED RIGHT-OF-WAY
BARRIER WALL / RETAINING WALL / CANAL BULKHEAD



CONTINUOUS SR 84 IMPROVEMENTS CONCEPT


0 20 100
Feet
NORTH NEW RIVER CANAL
UNIVERSITY DRIVE
WB SR 84 LOCAL
WB SR 84
WB SR 84 LOCAL
WB I-595
I-595 EXPRESS
EB I-595
EB SR 84
EB SR 84 LOCAL
LEGEND:
BRIDGE
ROADWAY PAVEMENT
SIDEWALK / SHARED USE PATH
GREEN COLORED PAVEMENT MARKINGS
LIGHT RAIL TRANSIT ENVELOPE & PIER LOCATIONS - NOT PART OF STUDY (SHOWN FOR FUTURE PLANNING PURPOSES ONLY)
EXISTING LIMITED ACCESS RIGHT-OF-WAY
PROPOSED LIMITED ACCESS RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY / PROPERTY LINES
PROPOSED RIGHT-OF-WAY
BARRIER WALL / RETAINING WALL / CANAL BULKHEAD

CONTINUOUS SR 84 IMPROVEMENTS CONCEPT

CONTINUOUS SR 84 IMPROVEMENTS CONCEPT

Appendix B – Mitigation Measures Corridor Improvements LRE Cost Estimates

Exhibit B-1
New River Greenway Extension between University Drive and Davie Road
Long Range Estimate (LRE)

Date: 6/28/2021 10:41:04 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: G59507-9-99-99 **Letting Date:** 01/2099

Description: University Drive Greenway extension east to Swell Lock Park.

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English
Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 1.373 MI

Project Manager: TBD

Version 1-P Project Grand Total **$7,317,019.91**
Description: University Drive Greenway extension east to Swell Lock Park.

Sequence: 1 NUR - New Construction, Undivided, Rural **Net Length:** 1.373 MI
7,249 LF

Description: Greenway 6750' east of University Drive. Includes two bridges over New River Canal and box culvert underneath crossing University Dr.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.373
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	16.64 AC	$33,443.72	$556,503.50
120-6	EMBANKMENT	30,442.28 CY	$24.01	$730,919.14

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	3,100.00 CY	$19.97	$61,907.00
	Comment: Tunnel L=450 w = 12' H=15.5			
120-6	EMBANKMENT	6,200.00 CY	$24.01	$148,862.00
	Comment: South side of canal L=900' w = 12' H=15.5			
	Earthwork Component Total			$1,498,191.64

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 12.00
Structural Spread Rate	275
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	9,665.92 SY	$6.83	$66,018.23
350-3-9	PLAIN CEMENT CONC PAVT, 10"	9,665.92 SY	$77.08	$745,049.11

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.75 GM	$4,016.39	$11,045.07
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	2.75 GM	$4,012.31	$11,033.85
	Roadway Component Total			$833,146.26

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	0
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	18,848.54 LF	$1.87	$35,246.77
104-11	FLOATING TURBIDITY BARRIER	343.25 LF	$11.70	$4,016.02
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	343.25 LF	$5.16	$1,771.17
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	$1,812.15	$3,624.30
107-1	LITTER REMOVAL	16.64 AC	$25.78	$428.98
107-2	MOWING	16.64 AC	$51.28	$853.30

Shoulder Component Total $45,940.54

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	1,104.00 LF	$101.49	$112,044.96
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	232.00 LF	$320.59	$74,376.88
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	55.00 EA	$1,444.17	$79,429.35
570-1-1	PERFORMANCE TURF	966.59 SY	$2.31	$2,232.82

Box Culvert 1

Description	Value
Size	12 x 12
Length	440.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	929.80 CY	$1,261.62	$1,173,054.28
415-1-1	REINF STEEL- ROADWAY	105,640.00 LB	$1.93	$203,885.20

Drainage Component Total $1,645,023.49

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00 AS	$340.80	$1,022.40
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	28.00 AS	$1,062.01	$29,736.28
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	3.00 AS	$4,659.74	$13,979.22

Signing Component Total $44,737.90

BRIDGES COMPONENT

Bridge 701

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	100.00
Width (LF)	12.00
Type	Low Level
Cost Factor	1.00
Structure No.	

Removal of Existing Structures area		0.00
Default Cost per SF		$120.00
Factored Cost per SF		$120.00
Final Cost per SF		**$135.07**
Basic Bridge Cost		**$144,000.00**
Description	SHARED USE PATH BRIDGE OVER CANAL EAST OF UNIVERSITY DR.	

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	26.67 CY	$497.63	$13,271.79
415-1-9	REINF STEEL- APPROACH SLABS	4,667.25 LB	$1.03	$4,807.27
	Bridge 701 Total			$162,079.06

Bridge 702

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Length (LF)		157.00
Width (LF)		12.00
Type		Low Level
Cost Factor		1.00
Structure No.		
Removal of Existing Structures area		0.00
Default Cost per SF		$120.00
Factored Cost per SF		$120.00
Final Cost per SF		**$129.60**
Basic Bridge Cost		**$226,080.00**
Description	BRIDGE OVER NEW RIVER CANAL	

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	26.67 CY	$497.63	$13,271.79
415-1-9	REINF STEEL- APPROACH SLABS	4,667.25 LB	$1.03	$4,807.27
	Bridge 702 Total			$244,159.06
	Bridges Component Total			$406,238.12

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	94.50
Begin height	8.00
End Height	8.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	756.00 SF	$42.18	$31,888.08

Retaining Wall 2

Description	Value
Length	94.50
Begin height	8.00
End Height	8.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	756.00 SF	$42.18	$31,888.08

Retaining Wall 3

Description	Value
Length	290.00
Begin height	15.50
End Height	15.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,495.00 SF	$42.18	$189,599.10

Retaining Wall 4

Description	Value
Length	280.00
Begin height	15.50
End Height	15.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,340.00 SF	$42.18	$183,061.20

Retaining Wall 5

Description	Value
Length	900.00
Begin height	15.50
End Height	15.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	13,950.00 SF	$42.18	$588,411.00

Retaining Walls Component Total $1,024,847.46

Sequence 1 Total	$5,498,125.41

Sequence: 2 MIS - Miscellaneous Construction **Net Length:** 0.000 MI
0 LF

Description: MISCELLANEOUS COMPONENT

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
1	RISK CONTINGENCIES **Comment:** 10% risk contingencies (to assume something for utilities, structures, Geotech, etc. issues)	1.00 LS	$590,000.00	$590,000.00
	Miscellaneous Component Total			$590,000.00

Sequence 2 Total $590,000.00

Date: 6/28/2021 10:41:05 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: G59507-9-99-99 **Letting Date:** 01/2099

Description: University Drive Greenway extension east to Swell Lock Park.

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 1.373 MI

Project Manager: TBD

Version 1-P Project Grand Total **$7,317,019.91**

Description: University Drive Greenway extension east to Swell Lock Park.

Project Sequences Subtotal			**$6,088,125.41**
102-1	Maintenance of Traffic	8.00 %	$487,050.03
101-1	Mobilization	10.00 %	$657,517.54
Project Sequences Total			**$7,232,692.98**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	2.00	LS	$6,000.00	$12,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$72,326.93	$72,326.93
Project Non-Bid Subtotal					**$84,326.93**
Version 1-P Project Grand Total					**$7,317,019.91**

Exhibit B-2
New River Greenway Underpass
Long Range Estimate (LRE)

FDOT Long Range Estimating System - Production
R4: Project Details Composite Report
By Version

Project: Based on G59507-9-99-99 **Letting Date:** 01/2099
Description: University Drive Greenway extension east to Swell Lock Park.
District: 04 **County:** 86 BROWARD
Project Manager: TBD

Version 1-P Project Grand Total **$3,300,084.10**
Description: University Drive Pedestrian Underpass

Pay Items					
Pay Item	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount
102-1	MAINTENANCE OF TRAFFIC	8.00			$199,153.41
101-1	MOBILIZATION	10.00			$255,141.76
104-10-3	SEDIMENT BARRIER	750.00	LF	$1.87	$1,402.50
104-11	FLOATING TURBIDITY BARRIER	343.25	LF	$11.70	$4,016.03
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	343.25	LF	$5.16	$1,771.17
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$1,812.15	$1,812.15
110-1-1	CLEARING & GRUBBING	0.50	AC	$33,443.72	$16,721.86
120-1	REGULAR EXCAVATION	3,100.00	CY	$19.97	$61,907.00
400-4-1	CONC CLASS IV, CULVERTS	929.80	CY	$1,261.62	$1,173,054.28
415-1-1	REINF STEEL- ROADWAY	105,640.00	LB	$1.93	$203,885.20
					$0.00
548-12	RET WALL SYSTEM, PERM, EX BARRIER	24,297.00	SF	$42.18	$1,024,847.46
999-16	PARTNERING (DO NOT BID)	2.00	LS	$6,000.00	$12,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)	1.00	LS	$50,000.00	$50,000.00
1	RISK CONTINGENCIES	1.00	LS	$294,371.28	$294,371.28

Version 1-P Project Grand Total **$3,300,084.10**

Exhibit B-3
New River Greenway Overpass
Long Range Estimate (LRE)

Date: 7/21/2021 6:07:09 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: G59511-9-99-99 **Letting Date:** 01/2099

Description: Ped Overpass with retaining walls and pedestrian ramp

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English
Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.100 MI

Project Manager:

Version 1-P Project Grand Total **$2,885,310.86**
Description: Pedestrian Overpass with retaining walls and pedestrian ramp

Sequence: 1 MIS - Miscellaneous Construction **Net Length:** 0.000 MI
0 LF

Description: Pedestrian Overpass with retaining walls and descending ramp. Stairs at both ends of the bridge.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	3,870.00 CY	$24.01	$92,918.70
	Comment: Retaining walls L=580' (w=12') Avg. Height=15'			
	Earthwork Component Total			$92,918.70

SHOULDER COMPONENT

User Input Data

Description	Value

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	707.00 SY	$43.10	$30,471.70
	Comment: Concrete sidewalk between retaining walls L=530' w=12'			
	Shoulder Component Total			$30,471.70

BRIDGES COMPONENT

Bridge 1

Description	Value

Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	170.00
Width (LF)	12.00
Type	Pedestrian Overpass
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$95.00
Factored Cost per SF	$142.50
Final Cost per SF	**$245.75**
Basic Bridge Cost	**$290,700.00**
Description	AVERAGE PEDESTRIAN OVERPASS

Bridge X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
515-2-212	PED/BICYCLE RAILING,STL, 42" TYPE 2	2,120.00 LF	$79.00	$167,480.00
	Comment: 2 sides of pedestrian ramps * two ramps (north and south)L=530*4			
550-10-353	FENCING, TYPE R, 8.1-10', W/FULL ENCLOS	170.00 LF	$253.87	$43,157.90
	Bridge 1 Total			$501,337.90

Bridge 2

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	530.00
Width (LF)	12.00
Type	Pedestrian Overpass
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$95.00
Factored Cost per SF	$142.50
Final Cost per SF	**$142.50**
Basic Bridge Cost	**$906,300.00**
Description	PEDESTRIAN RAMP

Bridge 2 Total	$906,300.00
Bridges Component Total	$1,407,637.90

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,075.00
Begin height	2.00
End Height	30.00

Multiplier 1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	17,200.00 SF	$42.18	$725,496.00
	Retaining Walls Component Total			$725,496.00

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
1	MISCELLANEOUS	1.00 LS	$120,000.00	$120,000.00
	Comment: 5% Additional Unforeseen Costs			
	Miscellaneous Component Total			$120,000.00

Sequence 1 Total $2,376,524.30

Date: 7/21/2021 6:07:09 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: G59511-9-99-99 **Letting Date:** 01/2099

Description: Ped Overpass with retaining walls and pedestrian ramp

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.100 MI

Project Manager:

Version 1-P Project Grand Total **$2,885,310.86**

Description: Pedestrian Overpass with retaining walls and pedestrian ramp

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Project Sequences Subtotal			**$2,376,524.30**
102-1	Maintenance of Traffic	8.00 %	$190,121.94
101-1	Mobilization	10.00 %	$256,664.62
Project Sequences Total			**$2,823,310.86**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	2.00	LS	$6,000.00	$12,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$50,000.00	$50,000.00
Project Non-Bid Subtotal					**$62,000.00**
Version 1-P Project Grand Total					**$2,885,310.86**

Exhibit B-4
NW/SW 136th Avenue Corridor Concept
Long Range Estimate (LRE)

Date: 6/23/2021 11:49:00 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 456789-1-32-02 **Letting Date:** 01/2099

Description: I-595 Arterial Improvements at SW 136th Avenue

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.682 MI

Project Manager: FDOT D4

Version 1-P Project Grand Total **$48,971,068.10**

Description: I-595 Arterial Improvements at SW 136th Avenue

Sequence: 1 NUR - New Construction, Undivided, Rural **Net Length:** 0.441 MI
2,327 LF

Description: I-595 WB off-ramp connection to SR-84 WB

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.114
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.35 AC	$33,443.72	$178,923.90
120-6	EMBANKMENT	3,889.96 CY	$24.01	$93,397.94
	Earthwork Component Total			$272,321.84

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	275
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	11,375.94 SY	$6.83	$77,697.67

285-709	OPTIONAL BASE,BASE GROUP 09	6,290.38 SY	$28.78	$181,037.14
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	853.20 TN	$157.57	$134,438.72
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	511.92 TN	$147.44	$75,477.48

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	49,928.89 SY	$4.72	$235,664.36
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	5,492.18 TN	$157.57	$865,402.80
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,997.15 TN	$147.44	$294,459.80

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	59.00 EA	$4.00	$236.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.76 GM	$862.34	$1,517.72
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.88 GM	$377.66	$332.34
	Roadway Component Total			$1,866,264.03

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	2,756.08 SY	$18.20	$50,160.66
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	142.20 TN	$157.57	$22,406.45
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	213.30 TN	$147.44	$31,448.95
570-1-1	PERFORMANCE TURF	1,380.62 SY	$2.31	$3,189.23

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,049.93 LF	$1.87	$11,313.37
104-11	FLOATING TURBIDITY BARRIER	110.18 LF	$11.70	$1,289.11
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	110.18 LF	$5.16	$568.53
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
107-1	LITTER REMOVAL	5.34 AC	$25.78	$137.67
107-2	MOWING	5.34 AC	$51.28	$273.84
	Shoulder Component Total			$122,599.95

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	352.00 LF	$101.49	$35,724.48
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	80.00 LF	$320.59	$25,647.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	18.00 EA	$1,444.17	$25,995.06
570-1-1	PERFORMANCE TURF	310.25 SY	$2.31	$716.68
	Drainage Component Total			$88,083.42

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	9.00 AS	$1,062.01	$9,558.09
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
	Signing Component Total			$14,558.63

BRIDGES COMPONENT

Bridge EB-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	545.00
Width (LF)	26.00
Type	Overpass Bridge
Cost Factor	2.00
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$150.00

Final Cost per SF		**$152.76**
Basic Bridge Cost		**$2,125,500.00**
Description	BRAIDED RAMP BRIDGE	

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	57.78 CY	$497.63	$28,753.06
415-1-9	REINF STEEL- APPROACH SLABS	10,111.50 LB	$1.03	$10,414.84
	Bridge EB-1 Total			$2,164,667.91
	Bridges Component Total			$2,164,667.91

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	2,327.00 LF	$268.33	$624,403.91

Retaining Wall 1

Description	Value
Length	2,327.00
Begin height	35.00
End Height	35.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	81,445.00 SF	$42.18	$3,435,350.10
	Retaining Walls Component Total			$4,059,754.01

Sequence 1 Total $8,588,249.79

Sequence: 2 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.340 MI
1,797 LF

Description: SW 136th Avenue

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.228
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.06	AC	$33,443.72	$68,894.06
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	2,020.67	CY	$31.19	$63,024.70
	Earthwork Component Total				$131,918.76

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	5.00 / 5.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,026.58	SY	$6.83	$20,671.54
285-709	OPTIONAL BASE,BASE GROUP 09	2,128.19	SY	$28.78	$61,249.31
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	14,374.27	SY	$4.72	$67,846.55
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,185.88	TN	$157.57	$186,859.11
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	274.51	TN	$157.57	$43,254.54
337-7-83		574.97	TN	$147.44	$84,773.58

	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	164.71 TN	$147.44	$24,284.84

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	10,724.88 SY	$4.72	$50,621.43
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,179.74 TN	$157.57	$185,891.63
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	429.00 TN	$147.44	$63,251.76

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	230.00 EA	$4.00	$920.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.72 GM	$862.34	$2,345.56
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.72 GM	$361.39	$982.98
	Roadway Component Total			$792,952.84

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	5.00 / 5.00
New Total Outside Shoulder Width L/R	8.25 / 8.25
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	6.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,796.78 LF	$27.84	$50,022.36
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,796.78 LF	$27.84	$50,022.36
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	2,395.71 SY	$43.10	$103,255.10

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
522-2		1,865.30 SY	$50.72	$94,608.02

CONCRETE SIDEWALK AND DRIVEWAYS, 6"

Comment: Additional sidewalk area for shared use path: (6'x1296')+(6'x1502')=1114.5 SY

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,593.57 LF	$1.87	$6,719.98
104-11	FLOATING TURBIDITY BARRIER	34.03 LF	$11.70	$398.15
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	34.03 LF	$5.16	$175.59
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	16.00 EA	$120.92	$1,934.72
107-1	LITTER REMOVAL	2.97 AC	$25.78	$76.57
107-2	MOWING	2.97 AC	$51.28	$152.30
	Shoulder Component Total			$309,177.29

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	875.00 LF	$39.98	$34,982.50
	Median Component Total			$34,982.50

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	13.00 EA	$5,717.85	$74,332.05
425-1-451	INLETS, CURB, TYPE J-5, <10'	4.00 EA	$7,505.59	$30,022.36
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	192.00 LF	$189.89	$36,458.88
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00 LF	$320.59	$17,953.04
570-1-1	PERFORMANCE TURF	103.45 SY	$2.31	$238.97
	Drainage Component Total			$159,005.30

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00 AS	$340.80	$2,726.40
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	$1,062.01	$1,062.01

700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	8.00 AS	$27.83	$222.64
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50
	Signing Component Total			$9,522.40

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00 LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00 EA	$54,576.49	$327,458.94
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00 EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68

Signalization 2

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00
630-2-12		300.00 LF	$23.35	$7,005.00

	CONDUIT, F& I, DIRECTIONAL BORE			
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00 EA	$54,576.49	$327,458.94
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00 EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68
	Signalizations Component Total			$931,793.50

BRIDGES COMPONENT

Bridge SB1

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,480.00
Width (LF)	26.00
Type	High Level
Cost Factor	2.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$180.00
Final Cost per SF	**$181.02**
Basic Bridge Cost	**$6,926,400.00**
Description	SB LEVEL 3 OVERPASS BRIDGE

Bridge Pay Items

Pay item	**Description**	**Quantity Unit**	**Unit Price**	**Extended Amount**
400-2-10	CONC CLASS II, APPROACH SLABS	57.78 CY	$497.63	$28,753.06
415-1-9	REINF STEEL- APPROACH SLABS	10,111.50 LB	$1.03	$10,414.84
	Bridge SB1 Total			$6,965,567.91

Bridge EX

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	264.00
Width (LF)	20.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$120.00
Factored Cost per SF	$150.00
Final Cost per SF	**$155.71**
Basic Bridge Cost	**$792,000.00**
Description	WIDENING OF EXISTING BRIDGE TO ADD 12' LANE WITH SIDEWALK AND C&G

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	44.44 CY	$497.63	$22,114.68
415-1-9	REINF STEEL- APPROACH SLABS	7,777.00 LB	$1.03	$8,010.31
	Bridge EX Total			$822,124.99
	Bridges Component Total			$7,787,692.90

Sequence 2 Total $10,157,045.49

Sequence: 3 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.780 MI 4,120 LF

Description: SR-84 widening and reconstruction

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.228
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.73 AC	$33,443.72	$158,188.80
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	2,020.67 CY	$31.19	$63,024.70
	Earthwork Component Total			$221,213.49

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Existing Roadway Pavement Width L/R	34.00 / 34.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	5.00 / 5.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,939.88 SY	$6.83	$47,399.38
285-709	OPTIONAL BASE,BASE GROUP 09	4,879.89 SY	$28.78	$140,443.23
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	31,128.77 SY	$4.72	$146,927.79
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	2,568.12 TN	$157.57	$404,658.67
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	629.44 TN	$157.57	$99,180.86
337-7-83		1,245.15 TN	$147.44	$183,584.92

	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	377.67 TN	$147.44	$55,683.66

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	9,822.20 SY	$6.83	$67,085.63
285-709	OPTIONAL BASE,BASE GROUP 09	9,822.20 SY	$28.78	$282,682.92
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	22,133.00 SY	$4.72	$104,467.76
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	3,515.07 TN	$157.57	$553,869.58
	Comment: Resurfacing and new construction of WB lanes= 2434.63+1080.44 = 3515.07			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,278.21 TN	$147.44	$188,459.28
	Comment: Resurfacing and new construction of WB lanes= 885.32+392.89 = 1278.21			
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	1,635.00 LF	$151.41	$247,555.35
	Comment: Lane separation between SR-84 local roads			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	316.00 EA	$4.00	$1,264.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	6.24 GM	$862.34	$5,381.00
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	3.12 GM	$361.39	$1,127.54

Roadway Component Total $2,529,771.58

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	5.00 / 5.00
New Total Outside Shoulder Width L/R	8.25 / 8.25
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	6.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10		4,119.98 LF	$27.84	$114,700.24

	CONCRETE CURB & GUTTER, TYPE F			
520-1-10	CONCRETE CURB & GUTTER, TYPE F	4,119.98 LF	$27.84	$114,700.24
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	5,493.31 SY	$43.10	$236,761.66

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	8,239.97 LF	$1.87	$15,408.74
104-11	FLOATING TURBIDITY BARRIER	78.03 LF	$11.70	$912.95
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	78.03 LF	$5.16	$402.63
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	36.00 EA	$120.92	$4,353.12
107-1	LITTER REMOVAL	6.80 AC	$25.78	$175.30
107-2	MOWING	6.80 AC	$51.28	$348.70
	Shoulder Component Total			$489,575.76

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	2,444.52 SY	$2.31	$5,646.84
	Median Component Total			$5,646.84

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	29.00 EA	$5,717.85	$165,817.65
425-1-451	INLETS, CURB, TYPE J-5, <10'	8.00 EA	$7,505.59	$60,044.72
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	432.00 LF	$189.89	$82,032.48
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	128.00 LF	$320.59	$41,035.52
570-1-1	PERFORMANCE TURF	237.21 SY	$2.31	$547.96
	Drainage Component Total			$349,478.33

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	18.00 AS	$340.80	$6,134.40

700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	$1,062.01	$2,124.02
700-1-50	SINGLE POST SIGN, RELOCATE	2.00 AS	$257.11	$514.22
700-1-60	SINGLE POST SIGN, REMOVE	18.00 AS	$27.83	$500.94
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	$4,659.74	$9,319.48
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	$594.50	$1,189.00
	Signing Component Total			$19,782.06

BRIDGES COMPONENT

Bridge EB-1

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	300.00
Width (LF)	26.00
Type	Overpass Bridge
Cost Factor	2.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$180.00
Final Cost per SF	**$185.02**
Basic Bridge Cost	**$1,404,000.00**
Description	WB FLYOVER RAMP PASSING OVER SW 136TH AVENUE

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	57.78 CY	$497.63	$28,753.06
415-1-9	REINF STEEL- APPROACH SLABS	10,111.50 LB	$1.03	$10,414.84
	Bridge EB-1 Total			$1,443,167.91

Bridge WB1

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,260.00
Width (LF)	43.00
Type	High Level
Cost Factor	2.10
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$157.50
Final Cost per SF	**$158.70**
Basic Bridge Cost	**$8,533,350.00**
Description	LEVEL 3 FLYOVER RAMP FROM SB SW 136TH AVENUE TO WB I-595

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount

400-2-10	CONC CLASS II, APPROACH SLABS	95.56 CY	$497.63	$47,553.52
415-1-9	REINF STEEL- APPROACH SLABS	16,723.00 LB	$1.03	$17,224.69
	Bridge WB1 Total			$8,598,128.21

Bridge WB2

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	361.00
Width (LF)	26.00
Type	Medium Level
Cost Factor	2.31
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$65.00
Factored Cost per SF	$150.15
Final Cost per SF	**$154.32**
Basic Bridge Cost	**$1,409,307.90**
Description	FLYOVER RAMP ACROSS SW 136TH AVENUE.

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	57.78 CY	$497.63	$28,753.06
415-1-9	REINF STEEL- APPROACH SLABS	10,111.50 LB	$1.03	$10,414.84
	Bridge WB2 Total			$1,448,475.81
	Bridges Component Total			$11,489,771.93

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	3,133.00 LF	$268.33	$840,677.89

Retaining Wall 1

Description	Value
Length	1,282.00
Begin height	15.00
End Height	25.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	25,640.00 SF	$42.18	$1,081,495.20

Retaining Wall 2

Description	Value
Length	249.00

Begin height	5.00
End Height	25.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,735.00	SF	$42.18	$157,542.30

Retaining Wall 3

Description	Value
Length	1,602.00
Begin height	15.00
End Height	25.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	32,040.00	SF	$42.18	$1,351,447.20

Retaining Walls Component Total $3,431,162.59

Sequence 3 Total $18,536,402.58

Sequence: 4 MIS - Miscellaneous Construction **Net Length:** 0.000 MI
0 LF

Description: Risk Contingencies (to assume something for utilities, structures, geotech, etc. issues)

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
1	RISK CONTINGENCIES **Comment:** 10% risk contingencies (to assume something for utilities, structures, geotech, etc. issues)	1.00 LS	$3,746,810.64	$3,746,810.64
	Miscellaneous Component Total			$3,746,810.64

Sequence 4 Total $3,746,810.64

Date: 6/23/2021 11:49:01 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 456789-1-32-02 **Letting Date:** 01/2099

Description: I-595 Arterial Improvements at SW 136th Avenue

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.682 MI

Project Manager: FDOT D4

Version 1-P Project Grand Total **$48,971,068.10**

Description: I-595 Arterial Improvements at SW 136th Avenue

Project Sequences Subtotal			**$41,028,508.50**
102-1	Maintenance of Traffic	10.00 %	$4,102,850.85
101-1	Mobilization	8.00 %	$3,610,508.75
Project Sequences Total			**$48,741,868.10**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	8.00	LS	$6,000.00	$48,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
999-20-1	DISPUTES REVIEW BD, MEETING-DO NOT BID	8	DA	$3,900.00	$31,200.00
Project Non-Bid Subtotal					**$229,200.00**
Version 1-P Project Grand Total					**$48,971,068.10**

Exhibit B-5
Flamingo Road Corridor Concept
Long Range Estimate (LRE)

Date: 6/23/2021 11:55:10 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 456789-1-32-01 **Letting Date:** 01/2099

Description: I-595 Arterial Improvements at Flamingo Road

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.682 MI

Project Manager: FDOT D4

Version 1-P Project Grand Total **$35,201,206.81**

Description: I-595 Arterial Improvements at Flamingo Road. Intersection improvements of Broward Blvd. at Flamingo Road Included under Sequence 3.

Sequence: 1 NUR - New Construction, Undivided, Rural **Net Length:** 0.114 MI 602 LF

Description: I-595 WB off-ramp connection to WB SR-84.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.114
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.38 AC	$33,443.72	$46,152.33
120-6	EMBANKMENT	3,315.69 CY	$24.01	$79,609.72
	Earthwork Component Total			$125,762.05

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
Structural Spread Rate	275
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount

160-4	TYPE B STABILIZATION	2,340.80 SY	$6.83	$15,987.66
285-709	OPTIONAL BASE,BASE GROUP 09	1,025.27 SY	$28.78	$29,507.27
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	137.94 TN	$157.57	$21,735.21
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	82.76 TN	$147.44	$12,202.13

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	4,697.00 SY	$4.72	$22,169.84
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	516.70 TN	$157.57	$81,416.42
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	187.90 TN	$147.44	$27,703.98
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	835.00 LF	$151.41	$126,427.35
	Comment: Barrier separation between I-595 on-ramp from SR-84 WB (local roads)			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.46 GM	$862.34	$396.68
	Roadway Component Total			$337,546.54

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	712.94 SY	$18.20	$12,975.51
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	36.78 TN	$157.57	$5,795.42
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	55.18 TN	$147.44	$8,135.74

570-1-1	PERFORMANCE TURF	357.14 SY	$2.31	$824.99

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,564.99 LF	$1.87	$2,926.53
104-11	FLOATING TURBIDITY BARRIER	28.50 LF	$11.70	$333.45
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	28.50 LF	$5.16	$147.06
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
107-1	LITTER REMOVAL	1.38 AC	$25.78	$35.58
107-2	MOWING	1.38 AC	$51.28	$70.77
	Shoulder Component Total			$33,057.20

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	96.00 LF	$101.49	$9,743.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00 LF	$320.59	$7,694.16
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00 EA	$1,444.17	$7,220.85
570-1-1	PERFORMANCE TURF	80.26 SY	$2.31	$185.40
	Drainage Component Total			$24,843.45

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00 AS	$1,062.01	$3,186.03
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
	Signing Component Total			$8,186.57

BRIDGES COMPONENT

Bridge WB-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,807.00
Width (LF)	26.00
Type	Overpass Bridge
Cost Factor	2.13
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00

Factored Cost per SF	$159.75
Final Cost per SF	**$160.58**
Basic Bridge Cost	**$7,505,374.50**
Description	595 WB OFF RAMP PASSING OVER FLAMINGO ROAD

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	57.78 CY	$497.63	$28,753.06
415-1-9	REINF STEEL- APPROACH SLABS	10,111.50 LB	$1.03	$10,414.84
	Bridge WB-1 Total			$7,544,542.41
	Bridges Component Total			$7,544,542.41

Sequence 1 Total	$8,073,938.22

Sequence: 2 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.516 MI
2,723 LF

Description: Flamingo Road roadway widening and intersection improvements
Special Conditions: Three lanes used for estimation and additional area accounted under X items

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.228
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.13 AC	$33,443.72	$104,678.84
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1,036.19 CY	$31.19	$32,318.77
	Earthwork Component Total			$136,997.61

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	12.00 / 12.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	8,822.18 SY	$6.83	$60,255.49
285-709	OPTIONAL BASE,BASE GROUP 09	7,460.74 SY	$28.78	$214,720.10
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	21,783.17 SY	$4.72	$102,816.56
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,797.11 TN	$157.57	$283,170.62
334-1-13		998.40 TN	$157.57	$157,317.89

	SUPERPAVE ASPHALTIC CONC, TRAFFIC C			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	871.33 TN	$147.44	$128,468.90
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	599.04 TN	$147.44	$88,322.46

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	33,737.60 SY	$4.72	$159,241.47
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	3,711.10 TN	$157.57	$584,758.03
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,349.50 TN	$147.44	$198,970.28

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	348.00 EA	$4.00	$1,392.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	4.13 GM	$862.34	$3,561.46
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	4.13 GM	$361.39	$1,492.54
	Roadway Component Total			$1,984,487.79

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	12.25 / 12.25
New Total Outside Shoulder Width L/R	13.25 / 13.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	6.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,722.90 LF	$27.84	$75,805.54
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,722.90 LF	$27.84	$75,805.54
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	3,630.53 SY	$43.10	$156,475.84
570-1-1	PERFORMANCE TURF	3,025.44 SY	$2.31	$6,988.77

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	1,114.50	SY	$50.72	$56,527.44
	Comment: Additional sidewalk area for shared use path: (6'x675')+(2'x209')+(409'x6')+(518'x6')=1114.5 SY				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,445.79	LF	$1.87	$10,183.63
104-11	FLOATING TURBIDITY BARRIER	51.57	LF	$11.70	$603.37
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	51.57	LF	$5.16	$266.10
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	24.00	EA	$120.92	$2,902.08
107-1	LITTER REMOVAL	4.50	AC	$25.78	$116.01
107-2	MOWING	4.50	AC	$51.28	$230.76
	Shoulder Component Total				$387,717.23

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	1,615.58	SY	$2.31	$3,731.99
	Median Component Total				$3,731.99

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	19.00	EA	$5,717.85	$108,639.15
425-1-451	INLETS, CURB, TYPE J-5, <10'	6.00	EA	$7,505.59	$45,033.54
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	288.00	LF	$189.89	$54,688.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	88.00	LF	$320.59	$28,211.92
570-1-1	PERFORMANCE TURF	156.77	SY	$2.31	$362.14
	Drainage Component Total				$236,935.07

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	12.00	AS	$340.80	$4,089.60

700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	$1,062.01	$2,124.02
700-1-50	SINGLE POST SIGN, RELOCATE	2.00 AS	$257.11	$514.22
700-1-60	SINGLE POST SIGN, REMOVE	12.00 AS	$27.83	$333.96
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	$4,659.74	$9,319.48
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	$594.50	$1,189.00
	Signing Component Total			$17,570.28

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	WB SR-84 and Flamingo Road

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00 LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00 EA	$54,576.49	$327,458.94
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00 EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68

Signalization 2

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	EB SR-84 and Flamingo Road

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00

630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00 LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00 EA	$54,576.49	$327,458.94
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00 EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68
	Signalizations Component Total			$931,793.50

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,722.90	LF	$11.05	$30,088.04
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	540.45	LF	$23.35	$12,619.51
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	19.00	EA	$715.68	$13,597.92
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	9,944.76	LF	$2.41	$23,966.87
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	19.00	EA	$6,073.04	$115,387.76
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	19.00	EA	$546.17	$10,377.23
	Subcomponent Total				$206,037.33
	Lighting Component Total				$206,037.33

BRIDGES COMPONENT

Bridge EB-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	418.00

Width (LF)	42.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$120.00
Factored Cost per SF	$150.00
Final Cost per SF	**$153.60**
Basic Bridge Cost	**$2,633,400.00**
Description	EB OVERPASS FLAMINGO ROAD

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	93.33 CY	$497.63	$46,443.81
415-1-9	REINF STEEL- APPROACH SLABS	16,332.75 LB	$1.03	$16,822.73
	Bridge EB-1 Total			$2,696,666.54

Bridge FLA_NB

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	392.00
Width (LF)	20.00
Type	Low Level, Widen
Cost Factor	2.73
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$55.00
Factored Cost per SF	$150.15
Final Cost per SF	**$153.99**
Basic Bridge Cost	**$1,177,176.00**
Description	WIDENING OF FLAMINGO BRIDGES OVER THE CANAL

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	44.44 CY	$497.63	$22,114.68
415-1-9	REINF STEEL- APPROACH SLABS	7,777.00 LB	$1.03	$8,010.31
	Bridge FLA_NB Total			$1,207,300.99
	Bridges Component Total			$3,903,967.53

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	2,258.00 LF	$268.33	$605,889.14

Retaining Wall 1

Description	Value
Length	540.00

Begin height	5.00
End Height	25.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,100.00 SF	$42.18	$341,658.00

Retaining Wall 2

Description	Value
Length	550.00
Begin height	5.00
End Height	25.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,250.00 SF	$42.18	$347,985.00

Retaining Wall 3

Description	Value
Length	806.00
Begin height	15.00
End Height	15.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	12,090.00 SF	$42.18	$509,956.20

Retaining Wall 4

Description	Value
Length	362.00
Begin height	25.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,430.00 SF	$42.18	$229,037.40

Retaining Walls Component Total	$2,034,525.74

Sequence 2 Total	$9,843,764.07

Sequence: 3 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.519 MI 2,738 LF

Description: Flamingo Road and Broward Blvd. (SR 842)

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.519
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.15 AC	$33,443.72	$105,347.72
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	596.78 CY	$31.19	$18,613.57
	Earthwork Component Total			$123,961.29

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Existing Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	5.00 / 5.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,612.36 SY	$6.83	$31,502.42
285-709	OPTIONAL BASE,BASE GROUP 09	3,243.26 SY	$28.78	$93,341.02
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	14,603.78 SY	$4.72	$68,929.84
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,204.81 TN	$157.57	$189,841.91
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	418.34 TN	$157.57	$65,917.83
337-7-83		584.15 TN	$147.44	$86,127.08

	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	251.00 TN	$147.44	$37,007.44

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	11,787.00 SY	$4.72	$55,634.64
	Comment: Flamingo road 4325+5675+5649+5185+4373+3682+8458 = 37347 sf additional lane: (12+12) * 1309 = 31416 sf Broward Blvd 7406+3470+8018+8124+4040+3311+2948 = 37317 sf			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,296.60 TN	$157.57	$204,305.26
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	471.50 TN	$147.44	$69,517.96

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	210.00 EA	$4.00	$840.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	4.15 GM	$862.34	$3,578.71
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.07 GM	$361.39	$748.08
	Roadway Component Total			$907,292.20

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	12.25 / 12.25
New Total Outside Shoulder Width L/R	12.25 / 12.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	5.00 / 5.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,738.21 LF	$27.84	$76,231.77
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,738.21 LF	$27.84	$76,231.77
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	3,042.45 SY	$43.10	$131,129.60
570-1-1	PERFORMANCE TURF	3,042.45 SY	$2.31	$7,028.06

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,476.42 LF	$1.87	$10,240.91
104-11	FLOATING TURBIDITY BARRIER	51.86 LF	$11.70	$606.76
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	51.86 LF	$5.16	$267.60
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	24.00 EA	$120.92	$2,902.08
107-1	LITTER REMOVAL	4.52 AC	$25.78	$116.53
107-2	MOWING	4.52 AC	$51.28	$231.79
	Shoulder Component Total			$306,799.01

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	678.00 LF	$39.98	$27,106.44
570-1-1	PERFORMANCE TURF	1,624.67 SY	$2.31	$3,752.99
	Median Component Total			$30,859.43

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	19.00 EA	$5,717.85	$108,639.15
425-1-451	INLETS, CURB, TYPE J-5, <10'	6.00 EA	$7,505.59	$45,033.54
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	288.00 LF	$189.89	$54,688.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	88.00 LF	$320.59	$28,211.92
570-1-1	PERFORMANCE TURF	157.65 SY	$2.31	$364.17
	Drainage Component Total			$236,937.10

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	12.00 AS	$340.80	$4,089.60
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	$1,062.01	$2,124.02
700-1-50	SINGLE POST SIGN, RELOCATE	2.00 AS	$257.11	$514.22
700-1-60	SINGLE POST SIGN, REMOVE	12.00 AS	$27.83	$333.96

700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	$4,659.74	$9,319.48
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	$594.50	$1,189.00
	Signing Component Total			$17,570.28

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00 LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00 EA	$54,576.49	$327,458.94
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00 EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68
	Signalizations Component Total			$465,896.75

Sequence 3 Total $2,089,316.06

Sequence: 4 WDU - Widen/Resurface, Divided, Urban **Net Length:** 1.988 MI
10,496 LF

Description: Bike lane with sidewalk from end of Flamingo Road to Sunrise Blvd.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.988
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	12.05 AC	$33,443.72	$402,996.83
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	40,011.64 CY	$31.19	$1,247,963.05
	Earthwork Component Total			$1,650,959.88

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	5.00 / 5.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	17,680.12 SY	$6.83	$120,755.22
285-709	OPTIONAL BASE,BASE GROUP 09	12,432.06 SY	$28.78	$357,794.69
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	83,968.90 SY	$4.72	$396,333.21
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	6,927.43 TN	$157.57	$1,091,555.15
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,603.57 TN	$157.57	$252,674.52
337-7-83		3,358.76 TN	$147.44	$495,215.57

	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	962.14 TN	$147.44	$141,857.92

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	1,342.00 EA	$4.00	$5,368.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	15.90 GM	$862.34	$13,711.21
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	15.90 GM	$361.39	$5,746.10
	Roadway Component Total			$2,881,011.59

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	5.00 / 5.00
New Total Outside Shoulder Width L/R	13.25 / 13.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	6.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	10,496.11 LF	$27.84	$292,211.70
520-1-10	CONCRETE CURB & GUTTER, TYPE F	10,496.11 LF	$27.84	$292,211.70
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	13,994.82 SY	$43.10	$603,176.74
570-1-1	PERFORMANCE TURF	11,662.35 SY	$2.31	$26,940.03

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	20,992.22 LF	$1.87	$39,255.45
104-11	FLOATING TURBIDITY BARRIER	198.79 LF	$11.70	$2,325.84
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	198.79 LF	$5.16	$1,025.76
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	$1,812.15	$3,624.30
104-18	INLET PROTECTION SYSTEM	92.00 EA	$120.92	$11,124.64
107-1	LITTER REMOVAL	17.33 AC	$25.78	$446.77

107-2	MOWING	17.33 AC	$51.28	$888.68
	Shoulder Component Total			$1,273,231.62

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	6,227.69 SY	$2.31	$14,385.96
	Median Component Total			$14,385.96

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	72.00 EA	$5,717.85	$411,685.20
425-1-451	INLETS, CURB, TYPE J-5, <10'	20.00 EA	$7,505.59	$150,111.80
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	1,104.00 LF	$189.89	$209,638.56
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	320.00 LF	$320.59	$102,588.80
570-1-1	PERFORMANCE TURF	604.32 SY	$2.31	$1,395.98
	Drainage Component Total			$875,420.34

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	44.00 AS	$340.80	$14,995.20
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00 AS	$1,062.01	$4,248.04
700-1-50	SINGLE POST SIGN, RELOCATE	4.00 AS	$257.11	$1,028.44
700-1-60	SINGLE POST SIGN, REMOVE	44.00 AS	$27.83	$1,224.52
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	4.00 AS	$4,659.74	$18,638.96
700-2-60	MULTI- POST SIGN, REMOVE	4.00 AS	$594.50	$2,378.00
	Signing Component Total			$42,513.16

Sequence 4 Total $6,737,522.55

Sequence: 5 MIS - Miscellaneous Construction **Net Length:** 0.000 MI
0 LF

Description: Risk Contingencies (to assume something for utilities, structures, geotech, etc. issues)

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
01	RISK CONTINGENCIES	1.00	LS	$2,693,175.27	$2,693,175.27
	Comment: 10% risk contingencies (to assume something for utilities, structures, geotech, etc. issues)				
	Miscellaneous Component Total				$2,693,175.27

Sequence 5 Total $2,693,175.27

Date: 6/23/2021 11:55:13 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 456789-1-32-01 **Letting Date:** 01/2099

Description: I-595 Arterial Improvements at Flamingo Road

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.682 MI

Project Manager: FDOT D4

Version 1-P Project Grand Total **$35,201,206.81**

Description: I-595 Arterial Improvements at Flamingo Road. Intersection improvements of Broward Blvd. at Flamingo Road Included under Sequence 3.

Project Sequences Subtotal			**$29,437,716.17**
102-1	Maintenance of Traffic	10.00 %	$2,943,771.62
101-1	Mobilization	8.00 %	$2,590,519.02
Project Sequences Total			**$34,972,006.81**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	8.00	LS	$6,000.00	$48,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
999-20-1	DISPUTES REVIEW BD, MEETING-DO NOT BID	8	DA	$3,900.00	$31,200.00
Project Non-Bid Subtotal					**$229,200.00**
Version 1-P Project Grand Total					**$35,201,206.81**

Exhibit B-6
Hiatus Road Corridor Concept
Long Range Estimate (LRE)

Date: 8/2/2021 9:13:11 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: HIATUS-1-52-01 **Letting Date:** 01/2099

Description: Hiatus Road Concept for the Arterial Connectivity Study

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 2.900 MI

Project Manager:

Version 2 Project Grand Total **$23,939,817.23**

Description: Hiatus Road Concept for the Arterial Connectivity Study excluding the New River Greenway Underpass

Sequence: 1 RSD - Resurfacing, Divided **Net Length:** 0.133 MI 702 LF

Description: Broward Blvd. at Hiatus Road

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	110
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	5,617.92	SY	$7.65	$42,977.09
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	308.99	TN	$157.57	$48,687.55
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	463.48	TN	$147.44	$68,335.49

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	875.00	SY	$19.39	$16,966.25
	Comment: Existing separator removal (545 SY), curb and gutter removal (96 SY) and existing sidewalk removal (234 SY)				
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	4,526.00	SY	$7.65	$34,623.90
	Comment: Additional 3 - 12' lanes not included in the section above (2800 SY) + transition areas on Broward Blvd. (1726 SY)				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	249.00	TN	$157.57	$39,234.93
	Comment: Additional 3 - 12' lanes not included in the section above.				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	351.12	TN	$147.44	$51,769.13
	Comment: Additional 3 - 12' lanes not included in the section above.				
999-20-1	DISPUTES REVIEW BD, MEETING-	36.00	DA	$3,900.00	$140,400.00

	DO NOT BID			
999-20-2	DISPUTES REVIEW BD, HEARING-DO NOT BID	2.00 EA	$4,500.00	$9,000.00

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	90.00 EA	$4.00	$360.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.53 GM	$862.34	$457.04
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.53 GM	$361.39	$191.54
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.53 GM	$4,232.75	$2,243.36
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.53 GM	$1,531.80	$811.85
	Roadway Component Total			$456,058.13

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	430.00 LF	$27.84	$11,971.20
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	234.00 SY	$43.10	$10,085.40

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	13.30 LF	$11.70	$155.61
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	13.30 LF	$5.16	$68.63
107-1	LITTER REMOVAL	0.97 AC	$25.78	$25.01
107-2	MOWING	0.97 AC	$51.28	$49.74
	Shoulder Component Total			$22,355.59

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-70	CONCRETE TRAFFIC SEPARATOR, SP- VAR WIDT	545.00	SY	$83.21	$45,349.45
	Median Component Total				$45,349.45

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	4.00	EA	$54,576.49	$218,305.96
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$662.15	$5,297.20
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$262.67	$1,050.68
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00	EA	$3,548.94	$14,195.76

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

660-4-11	VEHICLE DETECTION SYSTEM-VIDEO, CABINET	1.00 EA	$4,964.75	$4,964.75
660-4-12	VEHICLE DETECTION SYSTEM-VIDEO, ABOVE G	4.00 EA	$3,967.40	$15,869.60
	Signalizations Component Total			$358,676.88

Sequence 1 Total $882,440.05

Sequence: 2 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.610 MI 3,221 LF

Description: Hiatus Road from SR-84 to Broward Blvd.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.610
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.70 AC	$33,443.72	$123,741.76
120-1	REGULAR EXCAVATION	1,247.76 CY	$19.97	$24,917.77
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	355.48 CY	$31.19	$11,087.42
	Earthwork Component Total			$159,746.95

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	37.00 / 37.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	6.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 3.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,067.39	SY	$6.83	$34,610.27
285-709	OPTIONAL BASE,BASE GROUP 09	3,456.99	SY	$28.78	$99,492.17
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	26,482.13	SY	$7.65	$202,588.29
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,456.52	TN	$157.57	$229,503.86
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	531.43	TN	$157.57	$83,737.43
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	2,184.78	TN	$147.44	$322,123.96
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	265.72	TN	$147.44	$39,177.76

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	5,010.00	SY	$19.39	$97,143.90

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	412.00	EA	$4.00	$1,648.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.44	GM	$862.34	$2,104.11
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.44	GM	$361.39	$881.79
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.44	GM	$4,232.75	$10,327.91
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	2.44	GM	$1,531.80	$3,737.59
	Roadway Component Total				$1,127,077.04

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	12.25 / 12.25
New Total Outside Shoulder Width L/R	12.25 / 12.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	5.00 / 5.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	3,220.80	LF	$27.84	$89,667.07
520-1-10	CONCRETE CURB & GUTTER, TYPE F	3,220.80	LF	$27.84	$89,667.07
522-1	CONCRETE SIDEWALK AND	3,578.67	SY	$43.10	$154,240.68

	DRIVEWAYS, 4"			
570-1-1	PERFORMANCE TURF	3,578.67 SY	$2.31	$8,266.73

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,441.60 LF	$1.87	$12,045.79
104-11	FLOATING TURBIDITY BARRIER	61.00 LF	$11.70	$713.70
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	61.00 LF	$5.16	$314.76
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	29.00 EA	$120.92	$3,506.68
107-1	LITTER REMOVAL	5.32 AC	$25.78	$137.15
107-2	MOWING	5.32 AC	$51.28	$272.81
	Shoulder Component Total			$360,644.59

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	22.00 EA	$5,717.85	$125,792.70
425-1-451	INLETS, CURB, TYPE J-5, <10'	7.00 EA	$7,505.59	$52,539.13
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	336.00 LF	$189.89	$63,803.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	104.00 LF	$320.59	$33,341.36
570-1-1	PERFORMANCE TURF	185.44 SY	$2.31	$428.37
	Drainage Component Total			$275,904.60

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	14.00 AS	$340.80	$4,771.20
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	$1,062.01	$2,124.02
700-1-50	SINGLE POST SIGN, RELOCATE	2.00 AS	$257.11	$514.22
700-1-60	SINGLE POST SIGN, REMOVE	14.00 AS	$27.83	$389.62
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	$4,659.74	$9,319.48
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	$594.50	$1,189.00
	Signing Component Total			$18,307.54

Sequence 2 Total $1,941,680.72

Sequence: 3 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.189 MI 998 LF

Description: Hiatus Road at SR-84.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	20.00 / 20.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.380
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.92	AC	$33,443.72	$30,768.22
	Earthwork Component Total				$30,768.22

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	7,983.36	SY	$7.65	$61,072.70
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	439.08	TN	$157.57	$69,185.84
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	658.63	TN	$147.44	$97,108.41

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	4,479.00	SY	$19.39	$86,847.81
	Comment: Removal of existing sidewalk, curb and gutter and traffic separators				
160-4	TYPE B STABILIZATION	1,413.00	SY	$6.83	$9,650.79
	Comment: Widening of Hiatus Road SB to include additional right turn lane (846 SY); Widening of 425' of inside LT lane for SB Hiatus Road (567 SY)				
285-709	OPTIONAL BASE,BASE GROUP 09	1,413.00	SY	$28.78	$40,666.14
	Comment: Widening of Hiatus Road SB to include				

	additional right turn lane (846 SY); Widening of 425' of inside LT lane for SB Hiatus Road (567 SY)			
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	846.00 SY	$7.65	$6,471.90
	Comment: M&R of 632' of outside LT lanes			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	279.72 TN	$157.57	$44,075.48
	Comment: Widening of Hiatus Road SB for additional right turn lane (139.59 TN); M&R of 632' of LT lanes (46.53 TN); Widening of 425' of inside LT lane for SB Hiatus Road (93.6 TN)			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	186.37 TN	$147.44	$27,478.39
	Comment: Widening of Hiatus Road SB for additional right turn lane; M&R of 632' of LT lanes; Widening of 425' of inside LT lane for SB Hiatus Road (186.37 TN)			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	128.00 EA	$4.00	$512.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.76 GM	$862.34	$655.38
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.76 GM	$361.39	$274.66
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.76 GM	$4,232.75	$3,216.89
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.76 GM	$1,531.80	$1,164.17
	Roadway Component Total			$448,380.56

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	12.25 / 12.25
New Total Outside Shoulder Width L/R	12.25 / 12.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	5.00 / 5.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	997.92 LF	$27.84	$27,782.09
520-1-10	CONCRETE CURB & GUTTER, TYPE F	997.92 LF	$27.84	$27,782.09
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,108.80 SY	$43.10	$47,789.28
570-1-1	PERFORMANCE TURF	1,108.80 SY	$2.31	$2,561.33

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,173.00	SY	$6.83	$14,841.59
	Comment: Reconstruction of both EB to WB and WB to EB U-turns				
285-709	OPTIONAL BASE,BASE GROUP 09	2,173.00	SY	$28.78	$62,538.94
	Comment: Reconstruction of both EB to WB and WB to EB U-turns				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	3,585.45	TN	$157.57	$564,959.36
	Comment: Reconstruction of both EB to WB and WB to EB U-turns				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,195.15	TN	$147.44	$176,212.92
	Comment: Reconstruction of both EB to WB and WB to EB U-turns				
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,787.00	LF	$27.84	$49,750.08
521-72-44	SHLDR CONC BARRIER, 44" PIER PROTECTION	554.00	LF	$185.81	$102,938.74
	Comment: Pier protection on both sides of Hiatus Road				
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	2,334.00	SY	$43.10	$100,595.40
	Comment: New sidewalk (2334 SY)				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-18	INLET PROTECTION SYSTEM	9.00	EA	$120.92	$1,088.28
107-1	LITTER REMOVAL	1.65	AC	$25.78	$42.54
107-2	MOWING	1.65	AC	$51.28	$84.61
	Shoulder Component Total				$1,178,967.25

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	592.10	SY	$2.31	$1,367.75

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-70	CONCRETE TRAFFIC SEPARATOR, SP- VAR WIDT	358.00	SY	$83.21	$29,789.18
	Median Component Total				$31,156.93

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

425-1-351	INLETS, CURB, TYPE P-5, <10'	7.00 EA	$5,717.85	$40,024.95
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00 EA	$7,505.59	$15,011.18
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	112.00 LF	$189.89	$21,267.68
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00 LF	$320.59	$10,258.88
570-1-1	PERFORMANCE TURF	57.46 SY	$2.31	$132.73
	Drainage Component Total			$86,695.42

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	5.00 AS	$340.80	$1,704.00
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	$1,062.01	$1,062.01
700-1-60	SINGLE POST SIGN, REMOVE	6.00 AS	$27.83	$166.98
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50
	Signing Component Total			$8,187.23

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	2
Description	Includes signals at both sides of SR-84 along Hiatus Road

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00 LF	$11.05	$15,470.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	600.00 LF	$23.35	$14,010.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00 PI	$5,756.87	$11,513.74
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	24.00 EA	$715.68	$17,176.32
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00 AS	$2,791.46	$5,582.92
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00 LF	$5.93	$711.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	2.00 EA	$1,706.49	$3,412.98
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00 EA	$54,576.49	$327,458.94
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	40.00 AS	$998.28	$39,931.20
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	12.00 AS	$662.15	$7,945.80
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	12.00 EA	$245.18	$2,942.16
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00 AS	$35,970.31	$71,940.62
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	8.00 EA	$262.67	$2,101.36

700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	6.00 EA	$3,548.94	$21,293.64

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
660-4-11	VEHICLE DETECTION SYSTEM-VIDEO, CABINET	2.00 EA	$4,964.75	$9,929.50
660-4-12	VEHICLE DETECTION SYSTEM-VIDEO, ABOVE G	6.00 EA	$3,967.40	$23,804.40
	Signalizations Component Total			$575,225.18

Sequence 3 Total $2,359,380.79

Sequence: 6 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 0.155 MI 820 LF

Description: SR-84 Westbound

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 30.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.000
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.13 AC	$33,443.72	$37,791.40
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1,906.67 CY	$31.19	$59,469.04

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-5	CHANNEL EXCAVATION	9,493.00 CY	$35.04	$332,634.72
	Comment: 1602 LF of area on both sides of the canal; 8 foot canal depth; 20 feet of widening			
120-6	EMBANKMENT	9,493.00 CY	$24.01	$227,926.93
	Earthwork Component Total			$657,822.09

ROADWAY COMPONENT

User Input Data

Description	Value

Number of Lanes	5
Existing Roadway Pavement Width L/R	0.00 / 48.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 12.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,004.41	SY	$6.83	$13,690.12
285-709	OPTIONAL BASE,BASE GROUP 09	1,123.38	SY	$28.78	$32,330.88
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	4,373.25	SY	$7.65	$33,455.36
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	240.53	TN	$157.57	$37,900.31
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	180.40	TN	$157.57	$28,425.63
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	360.79	TN	$147.44	$53,194.88
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	90.20	TN	$147.44	$13,299.09

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	126.00	EA	$4.00	$504.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.31	GM	$862.34	$267.33
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.62	GM	$377.66	$234.15
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.31	GM	$4,232.75	$1,312.15
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.62	GM	$1,270.13	$787.48
	Roadway Component Total				$215,401.38

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	0.00 / 10.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	941.16	SY	$18.20	$17,129.11
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	150.33	TN	$157.57	$23,687.50
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	75.17	TN	$147.44	$11,083.06

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,640.00	LF	$192.04	$314,945.60
	Comment: includes walls on both sides of the canal.				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,885.96	LF	$1.87	$3,526.75
104-11	FLOATING TURBIDITY BARRIER	15.53	LF	$11.70	$181.70
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	15.53	LF	$5.16	$80.13
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	1.00	EA	$120.92	$120.92
107-1	LITTER REMOVAL	0.38	AC	$25.78	$9.80
107-2	MOWING	0.38	AC	$51.28	$19.49
	Shoulder Component Total				$372,596.20

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	24.00	LF	$101.49	$2,435.76
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$320.59	$5,129.44
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	2.00	EA	$1,444.17	$2,888.34
570-1-1	PERFORMANCE TURF	62.74	SY	$2.31	$144.93

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
571-1-11	PLASTIC EROSION MAT, TRM, TYPE 1	911.00	SY	$15.24	$13,883.64
	Drainage Component Total				$24,482.11

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12	1.00	AS	$340.80	$340.80

	SF			
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00 AS	$1,062.01	$4,248.04
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	4.00 AS	$27.83	$111.32
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	1.00 AS	$3,600.72	$3,600.72
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-3-208	SIGN PANEL, F&I OM, 301-400 SF	4.00 EA	$10,289.89	$41,159.56
700-3-608	SIGN PANEL, REMOVE, 301-400 SF	4.00 EA	$746.95	$2,987.80
700-4-137	OH STATIC SGN STR, F&I, M SP 151-200 FT	1.00 EA	$815,800.00	$815,800.00
700-4-620	OH STATIC SIGN STR, REMOVE, SPAN	1.00 EA	$11,261.39	$11,261.39
	Signing Component Total			$880,361.24

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
455-133-3	SHEET PILING STEEL, F&I PERMANENT	39,350.00 SF	$44.77	$1,761,699.50
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	787.00 LF	$268.33	$211,175.71
	Retaining Walls Component Total			$1,972,875.21

Sequence 6 Total $4,123,538.23

Sequence: 7 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 0.446 MI 2,355 LF

Description: SR-84 Eastbound (does not include 2-lane overpass)

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 30.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.000
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.24	AC	$33,443.72	$108,357.65
	Earthwork Component Total				$108,357.65

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Existing Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	6,279.68	SY	$7.65	$48,039.55
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	345.38	TN	$157.57	$54,421.53
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	518.07	TN	$147.44	$76,384.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	2,095.00	SY	$19.39	$40,622.05
160-4	TYPE B STABILIZATION	768.00	SY	$6.83	$5,245.44
	Comment: Includes widening of 2 additional lanes at the signal approach only.				
285-709	OPTIONAL BASE,BASE GROUP 09	768.00	SY	$28.78	$22,103.04
	Comment: Includes widening of 2 additional lanes at the signal approach only.				
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	768.00	SY	$7.65	$5,875.20
	Comment: Includes M&R of 2 lanes at the signal approach only.				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	168.90	TN	$157.57	$26,613.57
	Comment: Includes M&R of 2 lanes (42.2 TN) and widening of 2 additional lanes (126.7 TN) at the signal approach only.				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	126.72	TN	$147.44	$18,683.60
	Comment: Includes M&R of 2 lanes and widening of 2 additional lanes at the signal approach only.				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	60.00	EA	$4.00	$240.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.89	GM	$862.34	$767.48
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.45	GM	$377.66	$169.95
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.89	GM	$4,232.75	$3,767.15
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.45	GM	$1,270.13	$571.56
	Roadway Component Total				$303,504.36

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 7.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Existing Paved Outside Shoulder Width L/R	0.00 / 7.00
New Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	1,831.57	SY	$7.65	$14,011.51
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	100.74	TN	$157.57	$15,873.60
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	151.10	TN	$147.44	$22,278.18

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,044.00	LF	$27.84	$56,904.96
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	840.00	LF	$192.04	$161,313.60
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,641.00	SY	$43.10	$70,727.10

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,416.22	LF	$1.87	$10,128.33
104-11	FLOATING TURBIDITY BARRIER	44.60	LF	$11.70	$521.82
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	44.60	LF	$5.16	$230.14
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	1.00	EA	$120.92	$120.92

107-1	LITTER REMOVAL	1.08 AC	$25.78	$27.84
107-2	MOWING	1.08 AC	$51.28	$55.38
	Shoulder Component Total			$354,005.53

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	72.00 LF	$101.49	$7,307.28
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00 LF	$320.59	$10,258.88
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00 EA	$1,444.17	$7,220.85
570-1-1	PERFORMANCE TURF	180.18 SY	$2.31	$416.22

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-352	INLETS, CURB, TYPE P-5, >10'	2.00 EA	$7,906.38	$15,812.76
425-1-362	INLETS, CURB, TYPE P-6, >10'	5.00 EA	$8,130.30	$40,651.50
430-174-130	PIPE CULV, OPT MATL, ROUND,30"SD	2,000.00 LF	$119.33	$238,660.00
	Drainage Component Total			$320,327.49

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	9.00 AS	$1,062.01	$9,558.09
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	9.00 AS	$27.83	$250.47
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	1.00 AS	$3,600.72	$3,600.72
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-3-208	SIGN PANEL, F&I OM, 301-400 SF	4.00 EA	$10,289.89	$41,159.56
700-3-608	SIGN PANEL, REMOVE, 301-400 SF	4.00 EA	$746.95	$2,987.80
700-4-137	OH STATIC SGN STR, F&I, M SP 151-200 FT	1.00 EA	$815,800.00	$815,800.00
700-4-620	OH STATIC SIGN STR, REMOVE, SPAN	1.00 EA	$11,261.39	$11,261.39
	Signing Component Total			$885,810.44

Sequence 7 Total $1,972,005.47

Sequence: 8 NUR - New Construction, Undivided, Rural **Net Length:** 0.337 MI

1,781 LF

Description: Eastbound SR-84 Overpass. Includes a new bridge structure for traffic that needs to go over Hiatus Rd.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 10.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.402
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.43 AC	$33,443.72	$47,824.52
120-6	EMBANKMENT	17,749.32 CY	$24.01	$426,161.17
	Earthwork Component Total			$473,985.69

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,749.18 SY	$6.83	$32,436.90
285-709	OPTIONAL BASE,BASE GROUP 09	4,879.79 SY	$28.78	$140,440.36
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	783.62 TN	$157.57	$123,475.00
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	391.81 TN	$147.44	$57,768.47

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,280.00 SY	$6.83	$8,742.40
	Comment: Transition from bridge to match point along EB SR-84			
285-709	OPTIONAL BASE,BASE GROUP 09	1,280.00 SY	$28.78	$36,838.40
	Comment: Transition from bridge to match point along EB SR-84			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	211.20 TN	$157.57	$33,278.78
	Comment: Transition from bridge to match point along EB SR-84			

337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	105.60 TN	$147.44	$15,569.66
	Comment: Transition from bridge to match point along EB SR-84			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	46.00 EA	$4.00	$184.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.35 GM	$862.34	$1,164.16
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.67 GM	$377.66	$253.03
	Roadway Component Total			$450,151.16

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,159.00 SY	$6.83	$7,915.97
285-704	OPTIONAL BASE,BASE GROUP 04	1,159.00 SY	$18.20	$21,093.80
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	95.62 TN	$147.44	$14,098.21
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,138.00 LF	$192.04	$218,541.52

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,630.45 LF	$1.87	$8,658.94
104-11	FLOATING TURBIDITY BARRIER	84.32 LF	$11.70	$986.54
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	84.32 LF	$5.16	$435.09
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
107-1	LITTER REMOVAL	4.09 AC	$25.78	$105.44
107-2	MOWING	4.09 AC	$51.28	$209.74

	Shoulder Component Total	$273,857.40

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	272.00 LF	$101.49	$27,605.28
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00 LF	$320.59	$17,953.04
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	14.00 EA	$1,444.17	$20,218.38
570-1-1	PERFORMANCE TURF	237.46 SY	$2.31	$548.53
	Drainage Component Total			$66,325.23

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	7.00 AS	$1,062.01	$7,434.07
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
	Signing Component Total			$12,434.61

BRIDGES COMPONENT

Bridge 000001

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	327.00
Width (LF)	35.00
Type	Overpass Bridge
Cost Factor	2.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$180.00
Final Cost per SF	**$221.82**
Basic Bridge Cost	**$2,060,100.00**
Description	

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	77.78 CY	$497.63	$38,705.66
415-1-9	REINF STEEL- APPROACH SLABS	13,611.50 LB	$1.03	$14,019.84

Bridge X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-4-5	CONC CLASS IV, SUBSTRUCTURE	90.00 CY	$1,945.00	$175,050.00

415-1-5	REINF STEEL- SUBSTRUCTURE	13,500.00 LB	$1.24	$16,740.00
455-34-5	PRESTRESSED CONCRETE PILING, 24" SQ	850.00 LF	$192.25	$163,412.50
455-143-5	TEST PILES-PREST CONCRETE,24" SQ	200.00 LF	$341.45	$68,290.00
459-71	PILES, POLYETHYLENE SHEETING	220.00 SY	$10.73	$2,360.60
	Bridge 000001 Total			$2,538,678.61
	Bridges Component Total			$2,538,678.61

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	2,410.00	LF	$268.33	$646,675.30

Retaining Wall 1

Description	Value
Length	787.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	12,001.75	SF	$42.18	$506,233.82

Retaining Wall 2

Description	Value
Length	753.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	11,483.25	SF	$42.18	$484,363.48

Retaining Wall 3

Description	Value
Length	870.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	13,267.50	SF	$42.18	$559,623.15
	Retaining Walls Component Total				$2,196,895.75

Sequence 8 Total $6,012,328.45

Sequence: 9 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.203 MI 1,074 LF

Description: Hiatus Road from Rexmere Blvd. to SR-84

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.610
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.23 AC	$33,443.72	$41,135.78
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	462.84 CY	$31.19	$14,435.98
	Earthwork Component Total			$55,571.76

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Existing Roadway Pavement Width L/R	22.00 / 22.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	7.00 / 7.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,286.32 SY	$6.83	$15,615.57
285-709	OPTIONAL BASE,BASE GROUP 09	1,749.35 SY	$28.78	$50,346.29
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	5,250.43 SY	$7.65	$40,165.79
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	288.77 TN	$157.57	$45,501.49
334-1-13	SUPERPAVE ASPHALTIC CONC,	275.65 TN	$157.57	$43,434.17

	TRAFFIC C			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	433.16 TN	$147.44	$63,865.11
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	137.82 TN	$147.44	$20,320.18

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	1,432.00 SY	$19.39	$27,766.48

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	82.00 EA	$4.00	$328.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.81 GM	$862.34	$698.50
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.41 GM	$361.39	$148.17
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.81 GM	$4,232.75	$3,428.53
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.41 GM	$1,531.80	$628.04
	Roadway Component Total			$312,246.32

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	12.25 / 12.25
New Total Outside Shoulder Width L/R	15.25 / 7.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	8.00 / 0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,073.95 LF	$27.84	$29,898.77
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,073.95 LF	$27.84	$29,898.77
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	954.62 SY	$43.10	$41,144.12
570-1-1	PERFORMANCE TURF	1,193.28 SY	$2.31	$2,756.48

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,147.90 LF	$1.87	$4,016.57

104-11	FLOATING TURBIDITY BARRIER	20.34 LF	$11.70	$237.98
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	20.34 LF	$5.16	$104.95
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	10.00 EA	$120.92	$1,209.20
107-1	LITTER REMOVAL	1.77 AC	$25.78	$45.63
107-2	MOWING	1.77 AC	$51.28	$90.77
	Shoulder Component Total			$111,215.39

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	8.00 EA	$5,717.85	$45,742.80
425-1-451	INLETS, CURB, TYPE J-5, <10'	3.00 EA	$7,505.59	$22,516.77
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	120.00 LF	$189.89	$22,786.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00 LF	$320.59	$10,258.88
570-1-1	PERFORMANCE TURF	61.83 SY	$2.31	$142.83
	Drainage Component Total			$101,448.08

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	5.00 AS	$340.80	$1,704.00
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	5.00 AS	$27.83	$139.15
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50
	Signing Component Total			$8,416.51

Sequence 9 Total $588,898.06

Sequence: 11 MIS - Miscellaneous Construction **Net Length:** 0.000 MI 0 LF

Description: Risk Contingencies (to assume something for utilities, structures, geotech, ITS, etc. issues)

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
01	RISK CONTINGENCIES **Comment:** 10% risk contingencies (to assume something for utilities, structures, geotech, ITS, etc. issues)	1.00 LS	$2,139,776.41	$2,139,776.41

Miscellaneous Component Total	$2,139,776.41

Sequence 11 Total	$2,139,776.41

Date: 8/2/2021 9:13:16 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: HIATUS-1-52-01 **Letting Date:** 01/2099

Description: Hiatus Road Concept for the Arterial Connectivity Study

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 2.900 MI

Project Manager:

Version 2 Project Grand Total **$23,939,817.23**

Description: Hiatus Road Concept for the Arterial Connectivity Study excluding the New River Greenway Underpass

Project Sequences Subtotal			**$20,020,048.18**
102-1	Maintenance of Traffic	8.00 %	$1,601,603.85
101-1	Mobilization	10.00 %	$2,162,165.20
Project Sequences Total			**$23,783,817.23**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	2.00	LS	$3,000.00	$6,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$156,000.00**

Version 2 Project Grand Total **$23,939,817.23**

Exhibit B-7
Nob Hill Road Corridor Concept
Long Range Estimate (LRE)

Date: 6/30/2021 6:44:54 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: P59505-9-99-99 **Letting Date:** 01/2099

Description: Nob Hill Rd From SW 22 Ct to Broward Boulevard and SR 84 improvements.

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English
Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.330 MI

Project Manager: TBD

Version 1-P Project Grand Total **$26,988,253.58**
Description: Nob Hill Rd From SW 22 Ct to Broward Blvd and SR 84 improvements.

Sequence: 1 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.270 MI
1,426 LF

Description: Nob Hill Road - From 610 feet south of SR 84 eastbound to 750 feet north of SR 84 westbound. Includes 2 signalized intersections. Bridge over North New River Canal widening.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.270
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.64 AC	$33,443.72	$54,847.70
	Earthwork Component Total			$54,847.70

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	29.00 / 29.00
Structural Spread Rate	110

Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	9,187.20 SY	$7.65	$70,282.08
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	505.30 TN	$157.57	$79,620.12
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	757.94 TN	$147.44	$111,750.67

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,113.00 SY	$6.83	$7,601.79
	Comment: Rt Turn L= 320' (w=11') Through Lane L=590'(w=11')			
285-709	OPTIONAL BASE,BASE GROUP 09	1,931.00 SY	$28.78	$55,574.18
	Comment: Rt Turn 391sy Through Lane 722 sy			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	184.00 TN	$157.57	$28,992.88
	Comment: 1113 sy (3")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	92.00 TN	$147.44	$13,564.48
	Comment: 1113 sy (1.5")			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	182.00 EA	$4.00	$728.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	1.08 GM	$4,016.39	$4,337.70
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	1.08 GM	$1,300.59	$1,404.64
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	1.08 GM	$4,012.31	$4,333.29
	Roadway Component Total			$378,189.83

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	16.25 / 16.25
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	14.00 / 14.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,425.60 LF	$27.84	$39,688.70
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,425.60 LF	$27.84	$39,688.70
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	4,435.20 SY	$43.10	$191,157.12

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,851.20 LF	$1.87	$5,331.74
104-11	FLOATING TURBIDITY BARRIER	27.00 LF	$11.70	$315.90
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	27.00 LF	$5.16	$139.32
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	13.00 EA	$120.92	$1,571.96
107-1	LITTER REMOVAL	2.35 AC	$25.78	$60.58
107-2	MOWING	2.35 AC	$51.28	$120.51
	Shoulder Component Total			$279,886.70

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	28.00
Performance Turf Width	24.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	2,851.20 LF	$25.51	$72,734.11
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	562.00 LF	$39.98	$22,468.76
570-1-1	PERFORMANCE TURF	3,801.60 SY	$2.31	$8,781.70
	Median Component Total			$103,984.57

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	10.00 EA	$5,717.85	$57,178.50

425-1-451	INLETS, CURB, TYPE J-5, <10'	3.00 EA	$7,505.59	$22,516.77
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	152.00 LF	$189.89	$28,863.28
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00 LF	$320.59	$15,388.32
570-1-1	PERFORMANCE TURF	82.08 SY	$2.31	$189.60
	Drainage Component Total			$124,136.47

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	6.00 AS	$340.80	$2,044.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	6.00 AS	$27.83	$166.98
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50
	Signing Component Total			$8,785.14

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	SR 84 Westbound

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00 LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	3.00 EA	$54,576.49	$163,729.47
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE,	20.00 EA	$366.45	$7,329.00

	F&I, TYPE 2			
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68

Signalization 2

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	SR 84 Eastbound

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00 LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	3.00 EA	$54,576.49	$163,729.47
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00 EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68
	Signalizations Component Total			$604,334.56

BRIDGES COMPONENT

Bridge 501

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	150.00
Width (LF)	16.00
Type	Low Level, Widen
Cost Factor	2.00

Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$55.00
Factored Cost per SF	$110.00
Final Cost per SF	**$120.04**
Basic Bridge Cost	**$264,000.00**
Description	BRIDGE OVER NEW RIVER CANAL SIDEWALK WIDENING

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	35.56 CY	$497.63	$17,695.72
415-1-9	REINF STEEL- APPROACH SLABS	6,223.00 LB	$1.03	$6,409.69
	Bridge 501 Total			$288,105.41
	Bridges Component Total			$288,105.41

Sequence 1 Total $1,842,270.38

Sequence: 2 WUU - Widen/Resurface, Undivided, Urban **Net Length:** 1.007 MI
5,315 LF

Description: SR 84 Eastbound Milling and resurfacing. From 2530 feet west of Nob Hill Road to 2650 feet east of Nob Hill Road. Includes SR 84 Eastbound Overpass over Nob Hill Rd.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	19.00 / 19.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.879
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.64 AC	$33,443.72	$155,178.86
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	168.46 CY	$31.19	$5,254.27

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	20,305.00 CY	$24.01	$487,523.05
	Comment: SR 84 EB Ramp over Nob Hill Road (L=1310' w=27')(height avg= 15.5')			
	Earthwork Component Total			$647,956.18

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Existing Roadway Pavement Width L/R	11.00 / 18.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 2.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,704.67 SY	$6.83	$18,472.90
285-709	OPTIONAL BASE,BASE GROUP 09	1,375.96 SY	$28.78	$39,600.13

327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	17,125.62 SY	$7.65	$131,010.99
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	941.91 TN	$157.57	$148,416.76
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	194.88 TN	$157.57	$30,707.24
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,412.86 TN	$147.44	$208,312.08
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	97.44 TN	$147.44	$14,366.55

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,569.00 SY	$6.83	$51,696.27
	Comment: SR 84 EB Ramp over Nob Hill Road (L=2523' w=27')			
285-704	OPTIONAL BASE,BASE GROUP 04	3,364.00 SY	$18.20	$61,224.80
	Comment: SR 84 EB Ramp over Nob Hill Road (L=2523' w=12')			
285-709	OPTIONAL BASE,BASE GROUP 09	4,205.00 SY	$28.78	$121,019.90
	Comment: SR 84 EB Ramp over Nob Hill Road (L=2523' w=15')			
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	3,095.00 SY	$7.65	$23,676.75
	Comment: Aux. Lane (L=1164' w=12') Lt Turn (L=925' w=11') Rt Turn (L=335' w=11')			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	964.00 TN	$157.57	$151,897.48
	Comment: (1") M&R =3095 sy (3")SR 84 EB Ramp over Nob Hill Road = 4205 sy			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	879.70 TN	$147.44	$129,702.97
	Comment: (1.5") M&R =3095 sy (1.5") SR 84 EB Ramp over Nob Hill Road=7569			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	544.00 EA	$4.00	$2,176.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	4.03 GM	$4,016.39	$16,186.05
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	2.01 GM	$1,300.59	$2,614.19
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	4.03 GM	$4,012.31	$16,169.61

Roadway Component Total $1,167,250.67

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	3,415.00 LF	$27.84	$95,073.60
	Comment: SR 84 EB (RT and LT) L = 3415'			
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	974.00 SY	$43.10	$41,979.40
	Comment: SR 84 EB L=730' w=12'			
570-1-1	PERFORMANCE TURF	3,795.00 SY	$2.31	$8,766.45
	Comment: L=3415'(w=5')*2 sides			

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	10,629.70 LF	$1.87	$19,877.54
104-11	FLOATING TURBIDITY BARRIER	100.66 LF	$11.70	$1,177.72
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	100.66 LF	$5.16	$519.41
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	$1,812.15	$3,624.30
104-18	INLET PROTECTION SYSTEM	52.00 EA	$120.92	$6,287.84
107-1	LITTER REMOVAL	4.63 AC	$25.78	$119.36
107-2	MOWING	4.63 AC	$51.28	$237.43

Shoulder Component Total $177,663.04

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	37.00 EA	$5,717.85	$211,560.45
425-1-451	INLETS, CURB, TYPE J-5, <10'	11.00 EA	$7,505.59	$82,561.49
425-1-521	INLETS, DT BOT, TYPE C, <10'	6.00 EA	$4,045.36	$24,272.16
425-2-41	MANHOLES, P-7, <10'	6.00 EA	$4,691.89	$28,151.34
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	1,952.00 LF	$189.89	$370,665.28
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	5,040.00 LF	$482.95	$2,434,068.00
570-1-1	PERFORMANCE TURF	306.01 SY	$2.31	$706.88

Drainage Component Total $3,151,985.60

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	19.00 AS	$340.80	$6,475.20
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00 AS	$1,062.01	$3,186.03
700-1-50	SINGLE POST SIGN, RELOCATE	3.00 AS	$257.11	$771.33
700-1-60	SINGLE POST SIGN, REMOVE	19.00 AS	$27.83	$528.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	3.00 AS	$4,659.74	$13,979.22
700-2-60	MULTI- POST SIGN, REMOVE	3.00 AS	$594.50	$1,783.50

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-112	OH STATIC SIGN STR, F&I, C 21-30 FT	2.00 EA	$72,814.10	$145,628.20
700-4-124	OH STATIC SIGN STR, F&I, S 41-50 FT	1.00 EA	$179,000.00	$179,000.00
	Signing Component Total			$351,352.25

BRIDGES COMPONENT

Bridge 502

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	323.00
Width (LF)	27.00
Type	High Level
Cost Factor	2.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$180.00
Final Cost per SF	**$184.66**
Basic Bridge Cost	**$1,569,780.00**
Description	SR 84 EASTBOUND OVERPASS OVER NOB HILL ROAD

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	60.00 CY	$497.63	$29,857.80
415-1-9	REINF STEEL- APPROACH SLABS	10,500.00 LB	$1.03	$10,815.00
	Bridge 502 Total			$1,610,452.80
	Bridges Component Total			$1,610,452.80

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	890.00 LF	$268.33	$238,813.70

Retaining Wall 1

Description	Value
Length	890.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	13,572.50 SF	$42.18	$572,488.05

Retaining Wall 2

Description	Value
Length	385.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,871.25 SF	$42.18	$247,649.32

Retaining Walls Component Total $1,058,951.07

Sequence 2 Total $8,165,611.61

Sequence: 3 WUU - Widen/Resurface, Undivided, Urban **Net Length:** 0.936 MI
4,940 LF

Description: SR 84 Westbound. Milling, resurfacing and Rt turns widening. SR 84 westbound bulkhead.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	19.00 / 19.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.936
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.31 AC	$33,443.72	$144,142.43

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-5	CHANNEL EXCAVATION	5,761.00 CY	$35.04	$201,865.44
	Comment: Bulkhead length 2 sides canal = 960'+780' (H=8')(w=22')			
120-6	EMBANKMENT	24,921.00 CY	$24.01	$598,353.21
	Comment: SR 84 WB Overpass Ramp L=970' w=27' (Avg. H=15.5') SR 84 WB Right Turn L=820' w=21'(Avg. H=15.5')			
	Earthwork Component Total			$944,361.08

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Existing Roadway Pavement Width L/R	12.00 / 17.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2"	15,917.67 SY	$7.65	$121,770.18

	AVG DEPTH			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	875.47 TN	$157.57	$137,947.81
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,313.21 TN	$147.44	$193,619.68

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,600.00 SY	$6.83	$17,758.00
	Comment: 2 Rt. Turn Lane (L=900' w=26')			
285-709	OPTIONAL BASE,BASE GROUP 09	2,600.00 SY	$28.78	$74,828.00
	Comment: 2 Rt. Turn Lane (L=900' w=26')			
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	2,454.00 SY	$7.65	$18,773.10
	Comment: Lt Turn Lane (L=960' w=12') Rt turn Lane (L=960' w=11')			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	564.00 TN	$157.57	$88,869.48
	Comment: 2 Rt. Turn Lane 2600sy (3") M&R 2454 sy (1")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	417.00 TN	$147.44	$61,482.48
	Comment: M&R = 2600 sy (1.5") Turn Lanes = 2454 sy (1.5")			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	505.00 EA	$4.00	$2,020.00
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	3.74 GM	$4,287.03	$16,033.49
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	3.74 GM	$4,016.39	$15,021.30
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	1.87 GM	$1,300.59	$2,432.10
	Roadway Component Total			$750,555.62

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	12.25 / 12.25
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00

Sidewalk Width L/R 0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	9,879.94 LF	$1.87	$18,475.49
104-11	FLOATING TURBIDITY BARRIER	93.56 LF	$11.70	$1,094.65
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	93.56 LF	$5.16	$482.77
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	48.00 EA	$120.92	$5,804.16
107-1	LITTER REMOVAL	4.30 AC	$25.78	$110.85
107-2	MOWING	4.30 AC	$51.28	$220.50
	Shoulder Component Total			$28,000.58

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	34.00 EA	$5,717.85	$194,406.90
425-1-451	INLETS, CURB, TYPE J-5, <10'	10.00 EA	$7,505.59	$75,055.90
425-1-521	INLETS, DT BOT, TYPE C, <10'	5.00 EA	$4,045.36	$20,226.80
425-2-41	MANHOLES, P-7, <10'	5.00 EA	$4,691.89	$23,459.45
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	1,816.00 LF	$189.89	$344,840.24
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	4,680.00 LF	$482.95	$2,260,206.00
570-1-1	PERFORMANCE TURF	284.42 SY	$2.31	$657.01
	Drainage Component Total			$2,918,852.30

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	17.00 AS	$340.80	$5,793.60
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	$1,062.01	$2,124.02
700-1-50	SINGLE POST SIGN, RELOCATE	2.00 AS	$257.11	$514.22
700-1-60	SINGLE POST SIGN, REMOVE	17.00 AS	$27.83	$473.11
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	$4,659.74	$9,319.48
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	$594.50	$1,189.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00 EA	$197,000.00	$197,000.00

	Signing Component Total	$216,413.43

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
455-133-3	SHEET PILING STEEL, F&I PERMANENT	87,000.00 SF	$44.77	$3,894,990.00
	Comment: SR 84 WB Right Turn Lane (L=960') SR 84 WB north side of North New River Canal (L=780')			
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	960.00 LF	$268.33	$257,596.80
	Retaining Walls Component Total			$4,152,586.80

Sequence 3 Total	$9,010,769.81

Sequence: 4 RSD - Resurfacing, Divided **Net Length:** 1.674 MI
8,837 LF

Description: Nob Hill Road - Milling and resurfacing. From SW 22nd CT to 610 feet south of SR 84 Eastbound and from 750 feet north of SR 84 Westbound to Broward Boulevard.

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	29.00 / 29.00
Structural Spread Rate	110
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	56,950.43	SY	$7.65	$435,670.79
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	3,132.27	TN	$157.57	$493,551.78
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	2,278.02	TN	$147.44	$335,871.27

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	1,130.00	EA	$4.00	$4,520.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	6.69	GM	$4,016.39	$26,869.65
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	6.69	GM	$1,300.59	$8,700.95
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	6.69	GM	$4,012.31	$26,842.35
	Roadway Component Total				$1,332,026.79

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110

Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	9,819.04	SY	$2.47	$24,253.03
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	540.05	TN	$157.57	$85,095.68
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	392.76	TN	$163.70	$64,294.81
570-1-1	PERFORMANCE TURF	5,243.37	SY	$2.31	$12,112.18

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	167.37	LF	$11.70	$1,958.23
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	167.37	LF	$5.16	$863.63
107-1	LITTER REMOVAL	12.17	AC	$25.78	$313.74
107-2	MOWING	12.17	AC	$51.28	$624.08
	Shoulder Component Total				$189,515.38

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	18.00
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	17,674.27	SY	$2.31	$40,827.56
	Median Component Total				$40,827.56

Sequence 4 Total $1,562,369.73

Sequence: 5 MIS - Miscellaneous Construction **Net Length:** 0.000 MI
0 LF

Description: Miscellaneous Construction

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
1	RISK CONTINGENCIES **Comment:** 10% risk contingencies (to assume something for utilities, structures, Geotech, ITS, etc. issues)	1.00	LS	$2,000,000.00	$2,000,000.00
	Miscellaneous Component Total				$2,000,000.00

Sequence 5 Total $2,000,000.00

Date: 6/30/2021 6:44:55 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: P59505-9-99-99 **Letting Date:** 01/2099

Description: Nob Hill Rd From SW 22 Ct to Broward Boulevard and SR 84 improvements.

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English
Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.330 MI

Project Manager: TBD

Version 1-P Project Grand Total **$26,988,253.58**
Description: Nob Hill Rd From SW 22 Ct to Broward Blvd and SR 84 improvements.

Project Sequences Subtotal			**$22,581,021.53**
102-1	Maintenance of Traffic	8.00 %	$1,806,481.72
101-1	Mobilization	10.00 %	$2,438,750.33
Project Sequences Total			**$26,826,253.58**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	2.00	LS	$6,000.00	$12,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$162,000.00**
Version 1-P Project Grand Total					**$26,988,253.58**

Exhibit B-8
Pine Island Road Corridor Concept
Long Range Estimate (LRE)

Date: 8/2/2021 9:22:07 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: PNEISL-1-52-01 **Letting Date:** 01/2099

Description: Pine Island Road Concept for the Arterial Connectivity Study

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 2.000 MI

Project Manager:

Version 2 Project Grand Total **$74,290,445.75**

Description: Pine Island Road Concept for the Arterial Connectivity Study excluding the elevated(above grade) greenway crossing

Sequence: 2 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.268 MI 1,413 LF

Description: Pine Island Road at Nova Drive - Includes work along Pine Island Road Southbound only.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.270
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.62	AC	$33,443.72	$54,178.83
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	573.41	CY	$31.19	$17,884.66
	Earthwork Component Total				$72,063.49

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Existing Roadway Pavement Width L/R	22.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	11.00 / 0.00

Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,131.95	SY	$6.83	$14,561.22
285-709	OPTIONAL BASE,BASE GROUP 09	1,778.72	SY	$28.78	$51,191.56
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	3,453.82	SY	$7.65	$26,421.72
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	189.96	TN	$157.57	$29,932.00
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	284.94	TN	$157.57	$44,898.00
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	284.94	TN	$147.44	$42,011.55
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	142.47	TN	$147.44	$21,005.78

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	1,432.00	SY	$19.39	$27,766.48
160-4	TYPE B STABILIZATION	1,192.00	SY	$6.83	$8,141.36
	Comment: Widening for SB RT and LT Lanes				
285-709	OPTIONAL BASE,BASE GROUP 09	1,192.00	SY	$28.78	$34,305.76
	Comment: Widening for SB RT and LT Lanes				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	196.68	TN	$157.57	$30,990.87
	Comment: Widening for SB RT and LT Lanes				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	98.34	TN	$147.44	$14,499.25
	Comment: Widening for SB RT and LT Lanes				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	72.00	EA	$4.00	$288.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.07	GM	$862.34	$922.70
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.27	GM	$361.39	$97.58
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	1.07	GM	$4,232.75	$4,529.04
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.27	GM	$1,531.80	$413.59
	Roadway Component Total				$351,976.46

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,400.00	LF	$27.84	$38,976.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,121.00	SY	$43.10	$48,315.10

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-18	INLET PROTECTION SYSTEM	13.00	EA	$120.92	$1,571.96
107-1	LITTER REMOVAL	2.33	AC	$25.78	$60.07
107-2	MOWING	2.33	AC	$51.28	$119.48
	Shoulder Component Total				$89,042.61

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	801.00	LF	$39.98	$32,023.98
	Median Component Total				$32,023.98

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	10.00	EA	$5,717.85	$57,178.50
425-1-451	INLETS, CURB, TYPE J-5, <10'	3.00	EA	$7,505.59	$22,516.77
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	152.00	LF	$189.89	$28,863.28
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$320.59	$15,388.32
570-1-1	PERFORMANCE TURF	81.35	SY	$2.31	$187.92
	Drainage Component Total				$124,134.79

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	6.00	AS	$340.80	$2,044.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	6.00	AS	$27.83	$166.98
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$594.50	$594.50
	Signing Component Total				$8,785.14

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	4.00	EA	$54,576.49	$218,305.96
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$662.15	$5,297.20
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$262.67	$1,050.68
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00	EA	$3,548.94	$14,195.76

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-4-11	VEHICLE DETECTION SYSTEM-VIDEO, CABINET	1.00	EA	$4,964.75	$4,964.75
660-4-12	VEHICLE DETECTION SYSTEM-VIDEO, ABOVE G	4.00	EA	$3,967.40	$15,869.60
	Signalizations Component Total				$358,676.88

Sequence 2 Total $1,036,703.35

Sequence: 12 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.118 MI 625 LF

Description: Pine Island Road at Nova Drive - Includes work along Pine Island Road Northbound only.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.270
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.72 AC	$33,443.72	$24,079.48
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	769.82 CY	$31.19	$24,010.69
	Earthwork Component Total			$48,090.17

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	5
Existing Roadway Pavement Width L/R	0.00 / 44.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 16.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,290.59 SY	$6.83	$8,814.73
285-709	OPTIONAL BASE,BASE GROUP 09	1,134.30 SY	$28.78	$32,645.15
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	3,056.30 SY	$7.65	$23,380.70
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	168.10 TN	$157.57	$26,487.52
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	183.38 TN	$157.57	$28,895.19

337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	252.14 TN	$147.44	$37,175.52
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	91.69 TN	$147.44	$13,518.77

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	735.00 SY	$19.39	$14,251.65
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	591.00 LF	$192.04	$113,495.64

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	3

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	64.00 EA	$4.00	$256.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.47 GM	$862.34	$405.30
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.36 GM	$361.39	$130.10
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.47 GM	$4,232.75	$1,989.39
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.36 GM	$1,531.80	$551.45
	Roadway Component Total			$301,997.11

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,400.00 LF	$27.84	$38,976.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,121.00 SY	$43.10	$48,315.10

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-18	INLET PROTECTION SYSTEM	6.00 EA	$120.92	$725.52
107-1	LITTER REMOVAL	1.03 AC	$25.78	$26.55
107-2	MOWING	1.03 AC	$51.28	$52.82

	Shoulder Component Total	$88,095.99

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,006.00	LF	$27.84	$28,007.04
520-70	CONCRETE TRAFFIC SEPARATOR, SP- VAR WIDT	511.00	SY	$83.21	$42,520.31
	Median Component Total				$70,527.35

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	3.00	EA	$5,717.85	$17,153.55
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,505.59	$15,011.18
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	72.00	LF	$189.89	$13,672.08
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$320.59	$7,694.16
570-1-1	PERFORMANCE TURF	35.99	SY	$2.31	$83.14
	Drainage Component Total				$53,614.11

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$340.80	$1,022.40
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$27.83	$83.49
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$594.50	$594.50
	Signing Component Total				$7,679.25

Sequence 12 Total $570,003.98

Sequence: 13 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.150 MI 792 LF

Description: Pine Island Road at Nova Drive - Includes work along Nova Drive

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.270
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.91	AC	$33,443.72	$30,433.79
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	573.41	CY	$31.19	$17,884.66
	Earthwork Component Total				$48,318.45

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Existing Roadway Pavement Width L/R	0.00 / 33.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 11.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,195.04	SY	$6.83	$8,162.12
285-709	OPTIONAL BASE,BASE GROUP 09	997.04	SY	$28.78	$28,694.81
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	2,904.00	SY	$7.65	$22,215.60
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	159.72	TN	$157.57	$25,167.08
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	159.72	TN	$157.57	$25,167.08
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	239.58	TN	$147.44	$35,323.68
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	79.86	TN	$147.44	$11,774.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

110-4-10	REMOVAL OF EXIST CONC	327.00 SY	$19.39	$6,340.53
160-4	TYPE B STABILIZATION	1,318.00 SY	$6.83	$9,001.94
	Comment: Pavement work to tie to existing on both sides along Nova Drive			
285-709	OPTIONAL BASE,BASE GROUP 09	1,318.00 SY	$28.78	$37,932.04
	Comment: Pavement work to tie to existing on both sides along Nova Drive			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	217.50 TN	$157.57	$34,271.48
	Comment: Pavement work to tie to existing on both sides along Nova Drive			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	108.75 TN	$147.44	$16,034.10
	Comment: Pavement work to tie to existing on both sides along Nova Drive			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	61.00 EA	$4.00	$244.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.60 GM	$862.34	$517.40
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.30 GM	$361.39	$108.42
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.60 GM	$4,232.75	$2,539.65
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.30 GM	$1,531.80	$459.54
	Roadway Component Total			$263,954.03

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	399.00 LF	$27.84	$11,108.16
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	356.00 LF	$192.04	$68,366.24
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	240.00 SY	$43.10	$10,344.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,584.00	LF	$1.87	$2,962.08
104-11	FLOATING TURBIDITY BARRIER	15.00	LF	$11.70	$175.50
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	15.00	LF	$5.16	$77.40
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	7.00	EA	$120.92	$846.44
107-1	LITTER REMOVAL	1.31	AC	$25.78	$33.77
107-2	MOWING	1.31	AC	$51.28	$67.18
	Shoulder Component Total				$95,792.92

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	6.00	EA	$5,717.85	$34,307.10
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,505.59	$15,011.18
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	88.00	LF	$189.89	$16,710.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$320.59	$7,694.16
570-1-1	PERFORMANCE TURF	45.60	SY	$2.31	$105.34
	Drainage Component Total				$73,828.10

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$340.80	$1,363.20
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	4.00	AS	$27.83	$111.32
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$594.50	$594.50
	Signing Component Total				$8,047.88

Sequence 13 Total $489,941.38

Sequence: 14 RSD - Resurfacing, Divided **Net Length:** 0.572 MI 3,020 LF

Description: Pine Island Road from Nova Drive to SR 84

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6

Roadway Pavement Width L/R	38.00 / 38.00
Structural Spread Rate	110
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	25,503.57	SY	$7.65	$195,102.31
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,402.70	TN	$157.57	$221,023.44
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	2,104.04	TN	$147.44	$310,219.66

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	386.00	EA	$4.00	$1,544.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.29	GM	$862.34	$1,974.76
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.29	GM	$361.39	$827.58
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	2.29	GM	$4,232.75	$9,693.00
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	2.29	GM	$1,531.80	$3,507.82
	Roadway Component Total				$743,892.57

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	3,355.73	SY	$2.47	$8,288.65
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	184.57	TN	$157.57	$29,082.69

337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	134.23 TN	$163.70	$21,973.45
570-1-1	PERFORMANCE TURF	1,791.96 SY	$2.31	$4,139.43

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-18	INLET PROTECTION SYSTEM	16.00 EA	$120.92	$1,934.72
107-1	LITTER REMOVAL	4.16 AC	$25.78	$107.24
107-2	MOWING	4.16 AC	$51.28	$213.32
	Shoulder Component Total			$65,739.50

Sequence 14 Total $809,632.07

Sequence: 15 RSD - Resurfacing, Divided **Net Length:** 1.300 MI 6,864 LF

Description: Pine Island Road from SR 84 to Broward Blvd.

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	110
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	54,912.00 SY	$7.65	$420,076.80
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	3,020.16 TN	$157.57	$475,886.61
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	4,530.24 TN	$147.44	$667,938.59

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	878.00 EA	$4.00	$3,512.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	5.20 GM	$862.34	$4,484.17
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	5.20 GM	$361.39	$1,879.23

711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	5.20 GM	$4,232.75	$22,010.30
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	5.20 GM	$1,531.80	$7,965.36
	Roadway Component Total			$1,603,753.06

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-18	INLET PROTECTION SYSTEM	25.00 EA	$120.92	$3,023.00
107-1	LITTER REMOVAL	9.45 AC	$25.78	$243.62
107-2	MOWING	9.45 AC	$51.28	$484.60
	Shoulder Component Total			$3,751.22

BRIDGES COMPONENT

Bridge 00001

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	196.00
Width (LF)	30.00
Type	Medium Level, Widen
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$65.00
Factored Cost per SF	$81.25
Final Cost per SF	**$88.94**
Basic Bridge Cost	**$477,750.00**
Description	WIDENING OF SB BRIDGE

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	$497.63	$33,176.99
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	$1.03	$12,017.27
	Bridge 00001 Total			$522,944.26

Bridge 00002

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	196.00
Width (LF)	30.00
Type	Medium Level, Widen
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$65.00
Factored Cost per SF	$81.25
Final Cost per SF	**$88.94**
Basic Bridge Cost	**$477,750.00**
Description	WIDENING OF NB BRIDGE

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	$497.63	$33,176.99
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	$1.03	$12,017.27
	Bridge 00002 Total			$522,944.26
	Bridges Component Total			$1,045,888.52

Sequence 15 Total $2,653,392.80

Sequence: 16 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.242 MI 1,279 LF

Description: Pine Island Road at Peters Road

Special Conditions: Sequence length includes distance of the M&R of two lanes for both the EB and WB directions.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.270
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.47 AC	$33,443.72	$49,162.27

Earthwork Component Total	$49,162.27

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Existing Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	6,820.35	SY	$7.65	$52,175.68
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	375.12	TN	$157.57	$59,107.66
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	562.68	TN	$147.44	$82,961.54

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	1,716.00	SY	$19.39	$33,273.24
160-4	TYPE B STABILIZATION	10,234.00	SY	$6.83	$69,898.22
	Comment: Widening / Reconstruction of Peters Road WB for the additional lanes not covered by M&R operations and work on Pine Island Road.				
285-709	OPTIONAL BASE,BASE GROUP 09	10,234.00	SY	$28.78	$294,534.52
	Comment: Widening / Reconstruction of Peters Road WB for the additional lanes not covered by M&R operations and work on Pine Island Road.				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,688.70	TN	$157.57	$266,088.46
	Comment: Widening / Reconstruction of Peters Road WB for the additional lanes not covered by M&R operations and work on Pine Island Road.				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	844.33	TN	$147.44	$124,488.02
	Comment: Widening / Reconstruction of Peters Road WB for the additional lanes not covered by M&R operations and work on Pine Island Road.				
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	325.00	LF	$192.04	$62,413.00

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	98.00	EA	$4.00	$392.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.97	GM	$862.34	$836.47
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.48	GM	$361.39	$173.47
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.97	GM	$4,232.75	$4,105.77
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.48	GM	$1,531.80	$735.26
	Roadway Component Total				$1,051,183.31

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,890.00	LF	$27.84	$52,617.60
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	415.00	SY	$43.10	$17,886.50

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,557.63	LF	$1.87	$4,782.77
104-11	FLOATING TURBIDITY BARRIER	24.22	LF	$11.70	$283.37
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	24.22	LF	$5.16	$124.98
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	12.00	EA	$120.92	$1,451.04
107-1	LITTER REMOVAL	2.11	AC	$25.78	$54.40
107-2	MOWING	2.11	AC	$51.28	$108.20
	Shoulder Component Total				$79,121.01

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-70	CONCRETE TRAFFIC SEPARATOR, SP- VAR WIDT	881.00	SY	$83.21	$73,308.01

	Median Component Total	$73,308.01

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	9.00	EA	$5,717.85	$51,460.65
425-1-451	INLETS, CURB, TYPE J-5, <10'	3.00	EA	$7,505.59	$22,516.77
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	136.00	LF	$189.89	$25,825.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$320.59	$12,823.60
570-1-1	PERFORMANCE TURF	73.63	SY	$2.31	$170.09
	Drainage Component Total				$112,796.15

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	6.00	AS	$340.80	$2,044.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	6.00	AS	$27.83	$166.98
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$594.50	$594.50
	Signing Component Total				$8,785.14

Sequence 16 Total $1,374,355.89

Sequence: 17 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.135 MI 714 LF

Description: Pine Island Road at SW 6th Court

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.270
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %

Roadway Cross Slope L/R 2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.82	AC	$33,443.72	$27,423.85
	Earthwork Component Total				$27,423.85

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	720.00	SY	$19.39	$13,960.80
160-4	TYPE B STABILIZATION	176.00	SY	$6.83	$1,202.08
285-709	OPTIONAL BASE,BASE GROUP 09	176.00	SY	$28.78	$5,065.28
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	3,120.00	SY	$7.65	$23,868.00
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	200.64	TN	$157.57	$31,614.84
	Comment: M&R = 171.6 TN; Widening = 29.04 TN				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	271.92	TN	$147.44	$40,091.88
	Comment: M&R = 257.4 TN; Widening = 14.52 TN				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	55.00	EA	$4.00	$220.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.54	GM	$862.34	$465.66
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.27	GM	$361.39	$97.58
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.54	GM	$4,232.75	$2,285.68
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.27	GM	$1,531.80	$413.59

	Roadway Component Total	$119,285.40

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	924.00	LF	$27.84	$25,724.16
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	515.00	SY	$43.10	$22,196.50

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,427.71	LF	$1.87	$2,669.82
104-11	FLOATING TURBIDITY BARRIER	13.52	LF	$11.70	$158.18
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	13.52	LF	$5.16	$69.76
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	7.00	EA	$120.92	$846.44
107-1	LITTER REMOVAL	1.18	AC	$25.78	$30.42
107-2	MOWING	1.18	AC	$51.28	$60.51
	Shoulder Component Total				$53,567.94

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-70	CONCRETE TRAFFIC SEPARATOR, SP- VAR WIDT	881.00	SY	$83.21	$73,308.01
	Median Component Total				$73,308.01

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	5.00	EA	$5,717.85	$28,589.25
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,505.59	$15,011.18
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	80.00	LF	$189.89	$15,191.20
430-175-136	PIPE CULV, OPT MATL, ROUND,	24.00	LF	$320.59	$7,694.16

	36"S/CD			
570-1-1	PERFORMANCE TURF	41.10 SY	$2.31	$94.94
	Drainage Component Total			$66,580.73

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00 AS	$340.80	$1,022.40
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	3.00 AS	$27.83	$83.49
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50
	Signing Component Total			$7,679.25

Sequence 17 Total $347,845.18

Sequence: 19 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.498 MI 2,630 LF

Description: Pine Island Road at SR-84 - Includes work along Pine Island Road

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.270
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.02 AC	$33,443.72	$101,000.03
	Earthwork Component Total			$101,000.03

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	21,039.74	SY	$7.65	$160,954.01
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,157.19	TN	$157.57	$182,338.43
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,735.78	TN	$147.44	$255,923.40

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	6,722.00	SY	$19.39	$130,339.58
160-4	TYPE B STABILIZATION	5,587.00	SY	$6.83	$38,159.21
	Comment: Widening or reconstruction of turn lanes not covered by M&R estimated.				
285-709	OPTIONAL BASE,BASE GROUP 09	5,587.00	SY	$28.78	$160,793.86
	Comment: Widening or reconstruction of turn lanes not covered by M&R estimated.				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	921.86	TN	$157.57	$145,257.48
	Comment: Widening or reconstruction of turn lanes not covered by M&R estimated.				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	460.93	TN	$147.44	$67,959.52
	Comment: Widening or reconstruction of turn lanes not covered by M&R estimated.				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	336.00	EA	$4.00	$1,344.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.99	GM	$862.34	$1,716.06
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.99	GM	$361.39	$719.17
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	1.99	GM	$4,232.75	$8,423.17
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	1.99	GM	$1,531.80	$3,048.28

	Roadway Component Total	$1,156,976.17

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,080.00	SY	$6.83	$21,036.40
	Comment: Bike lanes				
285-709	OPTIONAL BASE,BASE GROUP 09	3,080.00	SY	$28.78	$88,642.40
	Comment: Bike lanes				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	508.20	TN	$157.57	$80,077.07
	Comment: Bike lanes				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	254.10	TN	$147.44	$37,464.50
	Comment: Bike lanes				
520-1-10	CONCRETE CURB & GUTTER, TYPE F	8,440.00	LF	$27.84	$234,969.60
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	273.00	LF	$192.04	$52,426.92
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	4,846.00	SY	$43.10	$208,862.60

Erosion Control
Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-18	INLET PROTECTION SYSTEM	23.00	EA	$120.92	$2,781.16
107-1	LITTER REMOVAL	4.34	AC	$25.78	$111.89
107-2	MOWING	4.34	AC	$51.28	$222.56
	Shoulder Component Total				$726,595.10

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	18.00	EA	$5,717.85	$102,921.30
425-1-451	INLETS, CURB, TYPE J-5, <10'	5.00	EA	$7,505.59	$37,527.95
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	280.00	LF	$189.89	$53,169.20
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	80.00	LF	$320.59	$25,647.20
570-1-1	PERFORMANCE TURF	151.42	SY	$2.31	$349.78
	Drainage Component Total				$219,615.43

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	11.00	AS	$340.80	$3,748.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	11.00	AS	$27.83	$306.13
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$594.50	$594.50

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-3-103	SIGN PANEL, F&I GM, 21-30 SF	4.00	EA	$1,097.69	$4,390.76
700-4-112	OH STATIC SIGN STR, F&I, C 21-30 FT	2.00	EA	$72,814.10	$145,628.20
700-4-610	OH STATIC SIGN STR, REMOVE, CANT	2.00	EA	$7,605.29	$15,210.58
	Signing Component Total				$175,857.83

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	2
Description	Signals at SR-84 and Pine Island for both the EB and WB directions

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$11.05	$15,470.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	600.00	LF	$23.35	$14,010.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00	PI	$5,756.87	$11,513.74
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	44.00	EA	$715.68	$31,489.92
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$2,791.46	$5,582.92
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00	LF	$5.93	$711.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	2.00	EA	$1,706.49	$3,412.98
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$54,576.49	$327,458.94
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	40.00	AS	$998.28	$39,931.20
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	16.00	AS	$662.15	$10,594.40
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	16.00	EA	$245.18	$3,922.88
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00	AS	$35,970.31	$71,940.62
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	8.00	EA	$262.67	$2,101.36
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	12.00	EA	$3,548.94	$42,587.28

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-4-11	VEHICLE DETECTION SYSTEM-VIDEO, CABINET	2.00	EA	$4,964.75	$9,929.50
660-4-12	VEHICLE DETECTION SYSTEM-VIDEO, ABOVE G	6.00	EA	$3,967.40	$23,804.40

Signalization 2

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	includes signal at New River Canal Road

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	4.00	EA	$54,576.49	$218,305.96
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$662.15	$5,297.20
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$262.67	$1,050.68
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00	EA	$3,548.94	$14,195.76

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-4-11	VEHICLE DETECTION SYSTEM-VIDEO, CABINET	1.00	EA	$4,964.75	$4,964.75
660-4-12	VEHICLE DETECTION SYSTEM-VIDEO, ABOVE G	4.00	EA	$3,967.40	$15,869.60
	Signalizations Component Total				$973,138.62

Sequence 19 Total $3,353,183.18

Sequence: 20 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.268 MI 1,415 LF

Description: WB SR-84 up to Pine Island Road

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.268
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.62 AC	$33,443.72	$54,178.83
	Earthwork Component Total			$54,178.83

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Existing Roadway Pavement Width L/R	0.00 / 36.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	5,660.16 SY	$7.65	$43,300.22
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	311.31 TN	$157.57	$49,053.12
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	466.96 TN	$147.44	$68,848.58

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,192.00 SY	$6.83	$14,971.36
	Comment: Widening or reconstruction of turn lanes and buffer not included in M&R area estimated.			
285-709	OPTIONAL BASE,BASE GROUP 09	2,192.00 SY	$28.78	$63,085.76
	Comment: Widening or reconstruction of turn lanes and buffer not included in M&R area estimated.			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	361.68 TN	$157.57	$56,989.92

	Comment: Widening or reconstruction of turn lanes and buffer not included in M&R area estimated.			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	180.84 TN	$147.44	$26,663.05
	Comment: Widening or reconstruction of turn lanes and buffer not included in M&R area estimated.			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	72.00 EA	$4.00	$288.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.14 GM	$862.34	$1,845.41
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.54 GM	$361.39	$195.15
	Roadway Component Total			$325,240.57

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,830.08 LF	$1.87	$5,292.25
104-11	FLOATING TURBIDITY BARRIER	26.80 LF	$11.70	$313.56
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	26.80 LF	$5.16	$138.29
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	13.00 EA	$120.92	$1,571.96
107-1	LITTER REMOVAL	2.34 AC	$25.78	$60.33
107-2	MOWING	2.34 AC	$51.28	$120.00
	Shoulder Component Total			$9,308.54

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	10.00 EA	$5,717.85	$57,178.50
425-1-451	INLETS, CURB, TYPE J-5, <10'	3.00 EA	$7,505.59	$22,516.77

430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	152.00 LF	$189.89	$28,863.28
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00 LF	$320.59	$15,388.32
570-1-1	PERFORMANCE TURF	81.47 SY	$2.31	$188.20
	Drainage Component Total			$124,135.07

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	6.00 AS	$340.80	$2,044.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	6.00 AS	$27.83	$166.98
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-3-106	SIGN PANEL, F&I GM, 101-200 SF	5.00 EA	$4,255.09	$21,275.45
700-4-127	OH STATIC SIGN STR, F&I, S 151-200 FT	1.00 EA	$278,771.33	$278,771.33
700-4-620	OH STATIC SIGN STR, REMOVE, SPAN	1.00 EA	$11,261.39	$11,261.39
	Signing Component Total			$320,093.31

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
455-133-3	SHEET PILING STEEL, F&I PERMANENT	105,300.00 SF	$44.77	$4,714,281.00
	Comment: Walls on both sides of the canal (2106 LF in total)			
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	2,106.00 LF	$268.33	$565,102.98
	Retaining Walls Component Total			$5,279,383.98

Sequence 20 Total $6,112,340.30

Sequence: 21 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.443 MI 2,338 LF

Description: EB SR-84 up to Pine Island Road

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00

Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.268
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.68	AC	$33,443.72	$89,629.17
	Earthwork Component Total				$89,629.17

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Existing Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	6,234.62	SY	$7.65	$47,694.84
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	342.90	TN	$157.57	$54,030.75
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	514.36	TN	$147.44	$75,837.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,077.00	SY	$6.83	$21,015.91
	Comment: Widening or reconstruction of lanes not included in M&R area estimated.				
285-709	OPTIONAL BASE,BASE GROUP 09	3,077.00	SY	$28.78	$88,556.06
	Comment: Widening or reconstruction of lanes not included in M&R area estimated.				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	507.80	TN	$157.57	$80,014.05
	Comment: Widening or reconstruction of lanes not included in M&R area estimated.				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	253.90	TN	$147.44	$37,435.02

Comment: Widening or reconstruction of lanes not included in M&R area estimated.

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	60.00	EA	$4.00	$240.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	3.54	GM	$862.34	$3,052.68
	Roadway Component Total				$407,876.55

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 7.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,818.00	SY	$6.83	$12,416.94
285-704	OPTIONAL BASE,BASE GROUP 04	1,818.00	SY	$18.20	$33,087.60
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	149.99	TN	$147.44	$22,114.53
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,106.00	LF	$27.84	$30,791.04
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	844.00	LF	$192.04	$162,081.76
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	443.00	SY	$43.10	$19,093.30

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-18	INLET PROTECTION SYSTEM	21.00	EA	$120.92	$2,539.32
107-1	LITTER REMOVAL	3.86	AC	$25.78	$99.51
107-2	MOWING	3.86	AC	$51.28	$197.94
	Shoulder Component Total				$282,421.94

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	16.00	EA	$5,717.85	$91,485.60

425-1-451	INLETS, CURB, TYPE J-5, <10'	5.00 EA	$7,505.59	$37,527.95
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	248.00 LF	$189.89	$47,092.72
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	72.00 LF	$320.59	$23,082.48
570-1-1	PERFORMANCE TURF	134.61 SY	$2.31	$310.95
	Drainage Component Total			$199,499.70

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	10.00 AS	$340.80	$3,408.00
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	10.00 AS	$27.83	$278.30
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50
	Signing Component Total			$10,259.66

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
455-133-3	SHEET PILING STEEL, F&I PERMANENT	105,300.00 SF	$44.77	$4,714,281.00
	Comment: Walls on both sides of the canal (2106 LF in total)			
	Retaining Walls Component Total			$4,714,281.00

Sequence 21 Total $5,703,968.02

Sequence: 22 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.492 MI 2,596 LF

Description: EB SR-84 from Pine Island Road to west of Pine Island Road

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.268
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %

Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.98	AC	$33,443.72	$99,662.29
	Earthwork Component Total				$99,662.29

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Existing Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	6,923.14	SY	$7.65	$52,962.02
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	380.77	TN	$157.57	$59,997.93
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	571.16	TN	$147.44	$84,211.83

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	1,737.00	SY	$19.39	$33,680.43
160-4	TYPE B STABILIZATION	4,419.00	SY	$6.83	$30,181.77
	Comment: Widening or reconstruction of lanes not included in M&R area estimated.				
285-709	OPTIONAL BASE,BASE GROUP 09	4,419.00	SY	$28.78	$127,178.82
	Comment: Widening or reconstruction of lanes not included in M&R area estimated.				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	729.19	TN	$157.57	$114,898.47
	Comment: Widening or reconstruction of lanes not included in M&R area estimated.				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	364.60	TN	$147.44	$53,756.62
	Comment: Widening or reconstruction of lanes not included in M&R area estimated.				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4

Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	66.00	EA	$4.00	$264.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	3.93	GM	$862.34	$3,389.00
	Roadway Component Total				$560,520.89

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 7.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,506.00	LF	$27.84	$41,927.04
520-2-4	CONCRETE CURB, TYPE D	1,137.00	LF	$20.10	$22,853.70
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,402.00	SY	$43.10	$60,426.20

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,192.35	LF	$1.87	$9,709.69
104-11	FLOATING TURBIDITY BARRIER	49.17	LF	$11.70	$575.29
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	49.17	LF	$5.16	$253.72
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	23.00	EA	$120.92	$2,781.16
107-1	LITTER REMOVAL	4.29	AC	$25.78	$110.60
107-2	MOWING	4.29	AC	$51.28	$219.99
	Shoulder Component Total				$140,669.54

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	18.00	EA	$5,717.85	$102,921.30
425-1-451	INLETS, CURB, TYPE J-5, <10'	5.00	EA	$7,505.59	$37,527.95
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	272.00	LF	$189.89	$51,650.08
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	80.00	LF	$320.59	$25,647.20
570-1-1	PERFORMANCE TURF	149.48	SY	$2.31	$345.30

	Drainage Component Total	$218,091.83

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	11.00 AS	$340.80	$3,748.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	11.00 AS	$27.83	$306.13
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	4.00 AS	$4,659.74	$18,638.96
700-4-113	OH STATIC SIGN STR, F&I, C 31-40 FT	2.00 EA	$60,433.33	$120,866.66

	Signing Component Total	$150,133.91

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	570.00 LF	$268.33	$152,948.10

Retaining Wall 1

Description	Value
Length	570.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,692.50 SF	$42.18	$366,649.65

	Retaining Walls Component Total	$519,597.75

Sequence 22 Total	$1,688,676.21

Sequence: 23 NUR - New Construction, Undivided, Rural **Net Length:** 0.645 MI 3,407 LF

Description: Eastbound SR 84 bypass/overpass

EARTHWORK COMPONENT

User Input Data

Description	Value

Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.645
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	7.82	AC	$33,443.72	$261,529.89
120-6	EMBANKMENT	18,744.67	CY	$24.01	$450,059.53
	Earthwork Component Total				$711,589.42

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	9,085.82	SY	$6.83	$62,056.15
285-709	OPTIONAL BASE,BASE GROUP 09	9,210.75	SY	$28.78	$265,085.38
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,499.16	TN	$157.57	$236,222.64
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	749.58	TN	$147.44	$110,518.08

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	87.00	EA	$4.00	$348.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.29	GM	$862.34	$1,112.42
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.65	GM	$377.66	$245.48
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	1.29	GM	$4,232.75	$5,460.25
711-16-231	THERMOPLASTIC, STD-OTH,	0.65	GM	$1,270.13	$825.58

	YELLOW, SKIP, 6"			
	Roadway Component Total			$681,873.99

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,814.00	SY	$6.83	$46,539.62
285-704	OPTIONAL BASE,BASE GROUP 04	6,814.00	SY	$18.20	$124,014.80
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	562.20	TN	$147.44	$82,890.77

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
107-1	LITTER REMOVAL	7.82	AC	$25.78	$201.60
107-2	MOWING	7.82	AC	$51.28	$401.01
	Shoulder Component Total				$254,047.80

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	520.00	LF	$101.49	$52,774.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	112.00	LF	$320.59	$35,906.08
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	26.00	EA	$1,444.17	$37,548.42
570-1-1	PERFORMANCE TURF	454.29	SY	$2.31	$1,049.41
	Drainage Component Total				$127,278.71

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$340.80	$681.60
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	13.00	AS	$1,062.01	$13,806.13
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,659.74	$9,319.48

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-3-403	SIGN PANEL, INSTALL, 21-30 SF	20.00 EA	$552.93	$11,058.60
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	5.00 EA	$197,000.00	$985,000.00
	Signing Component Total			$1,019,865.81

BRIDGES COMPONENT

Bridge 000001

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	408.00
Width (LF)	46.25
Type	Overpass Bridge
Cost Factor	2.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$180.00
Final Cost per SF	**$206.26**
Basic Bridge Cost	**$3,396,600.00**
Description	

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	102.78 CY	$497.63	$51,146.41
415-1-9	REINF STEEL- APPROACH SLABS	17,986.50 LB	$1.03	$18,526.10

Bridge X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-4-5	CONC CLASS IV, SUBSTRUCTURE	90.00 CY	$1,945.00	$175,050.00
415-1-5	REINF STEEL- SUBSTRUCTURE	13,500.00 LB	$1.24	$16,740.00
455-34-5	PRESTRESSED CONCRETE PILING, 24" SQ	850.00 LF	$192.25	$163,412.50
455-143-5	TEST PILES-PREST CONCRETE,24" SQ	200.00 LF	$341.45	$68,290.00
459-71	PILES, POLYETHYLENE SHEETING	220.00 SY	$10.73	$2,360.60
	Bridge 000001 Total			$3,892,125.61
	Bridges Component Total			$3,892,125.61

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	5,498.00 LF	$268.33	$1,475,278.34

Retaining Wall 1

Description	Value

Length	5,498.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	83,844.50 SF	$42.18	$3,536,561.01
	Retaining Walls Component Total			$5,011,839.35

Sequence 23 Total $11,698,620.69

Sequence: 24 NUR - New Construction, Undivided, Rural **Net Length:** 0.439 MI 2,316 LF

Description: Westbound SR 84 bypass/overpass

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.645
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.32 AC	$33,443.72	$177,920.59
120-6	EMBANKMENT	14,239.19 CY	$24.01	$341,882.95

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-5	CHANNEL EXCAVATION	6,978.00 CY	$35.04	$244,509.12
	Comment: 785 LF of area on both sides of the canal; 8 foot canal depth; approximate 30 feet of widening			
120-6	EMBANKMENT	6,978.00 CY	$24.01	$167,541.78
	Earthwork Component Total			$931,854.44

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 12.00
Structural Spread Rate	330

Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,087.74	SY	$6.83	$21,089.26
285-709	OPTIONAL BASE,BASE GROUP 09	3,172.66	SY	$28.78	$91,309.15
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	509.48	TN	$157.57	$80,278.76
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	254.74	TN	$147.44	$37,558.87

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,127.00	SY	$6.83	$21,357.41
	Comment: Includes new construction of lanes not included in the section above.				
285-709	OPTIONAL BASE,BASE GROUP 09	3,127.00	SY	$28.78	$89,995.06
	Comment: Includes new construction of lanes not included in the section above.				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	515.90	TN	$157.57	$81,290.36
	Comment: Includes new construction of lanes not included in the section above.				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	275.95	TN	$147.44	$40,686.07
	Comment: Includes new construction of lanes not included in the section above.				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.88	GM	$862.34	$758.86
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.88	GM	$4,232.75	$3,724.82
	Roadway Component Total				$468,048.62

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T

Rumble Strips ï¿½No. of Sides 0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,157.00 SY	$6.83	$14,732.31
285-704	OPTIONAL BASE,BASE GROUP 04	2,157.00 SY	$18.20	$39,257.40
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	177.95 TN	$147.44	$26,236.95

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,021.10 LF	$1.87	$11,259.46
104-11	FLOATING TURBIDITY BARRIER	109.65 LF	$11.70	$1,282.90
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	109.65 LF	$5.16	$565.79
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
107-1	LITTER REMOVAL	5.32 AC	$25.78	$137.15
107-2	MOWING	5.32 AC	$51.28	$272.81
	Shoulder Component Total			$95,556.93

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	352.00 LF	$101.49	$35,724.48
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	80.00 LF	$320.59	$25,647.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	18.00 EA	$1,444.17	$25,995.06
570-1-1	PERFORMANCE TURF	308.77 SY	$2.31	$713.26
	Drainage Component Total			$88,080.00

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	9.00 AS	$1,062.01	$9,558.09
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-3-106	SIGN PANEL, F&I GM, 101-200 SF	8.00 EA	$4,255.09	$34,040.72
700-4-127	OH STATIC SIGN STR, F&I, S 151-200 FT	2.00 EA	$278,771.33	$557,542.66
700-4-620	OH STATIC SIGN STR, REMOVE, SPAN	2.00 EA	$11,261.39	$22,522.78

Signing Component Total	$628,664.79

BRIDGES COMPONENT

Bridge 000001

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,118.00
Width (LF)	59.50
Type	Overpass Bridge
Cost Factor	2.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$180.00
Final Cost per SF	**$187.75**
Basic Bridge Cost	**$11,973,780.00**
Description	

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	132.22 CY	$497.63	$65,796.64
415-1-9	REINF STEEL- APPROACH SLABS	23,138.50 LB	$1.03	$23,832.66

Bridge X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-4-5	CONC CLASS IV, SUBSTRUCTURE	90.00 CY	$1,945.00	$175,050.00
415-1-5	REINF STEEL- SUBSTRUCTURE	13,500.00 LB	$1.24	$16,740.00
455-34-5	PRESTRESSED CONCRETE PILING, 24" SQ	850.00 LF	$192.25	$163,412.50
455-143-5	TEST PILES-PREST CONCRETE,24" SQ	200.00 LF	$341.45	$68,290.00
459-71	PILES, POLYETHYLENE SHEETING	220.00 SY	$10.73	$2,360.60
	Bridge 000001 Total			$12,489,262.40
	Bridges Component Total			$12,489,262.40

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
455-133-3	SHEET PILING STEEL, F&I PERMANENT	51,800.00 SF	$44.77	$2,319,086.00
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	3,916.00 LF	$268.33	$1,050,780.28

Retaining Wall 1

Description	**Value**
Length	2,880.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	43,920.00 SF	$42.18	$1,852,545.60
	Retaining Walls Component Total			$5,222,411.88

Sequence 24 Total $19,923,879.06

Sequence: 26 MIS - Miscellaneous Construction **Net Length:** 0.000 MI 0 LF

Description: Risk Contingencies (to assume something for utilities, structures, geotech, ITS, etc. issues)

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
01	RISK CONTINGENCIES	1.00 LS	$6,640,190.00	$6,640,190.00
	Comment: 10% risk contingencies (to assume something for utilities, structures, geotech, ITS, etc. issues)			
	Miscellaneous Component Total			$6,640,190.00

Sequence 26 Total $6,640,190.00

Date: 8/2/2021 9:22:14 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: PNEISL-1-52-01 **Letting Date:** 01/2099

Description: Pine Island Road Concept for the Arterial Connectivity Study

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 2.000 MI

Project Manager:

Version 2 Project Grand Total **$74,290,445.75**

Description: Pine Island Road Concept for the Arterial Connectivity Study excluding the elevated(above grade) greenway crossing

Project Sequences Subtotal			**$62,402,732.11**
102-1	Maintenance of Traffic	8.00 %	$4,992,218.57
101-1	Mobilization	10.00 %	$6,739,495.07
Project Sequences Total			**$74,134,445.75**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	2.00	LS	$3,000.00	$6,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$156,000.00**

Version 2 Project Grand Total **$74,290,445.75**

Exhibit B-9
University Drive Corridor Concept
Long Range Estimate (LRE)

Date: 7/9/2021 10:29:35 AM

FDOT Long Range Estimating System - Production

R2: Project Summary with Components Report

Project: P59507-9-99-99 **Letting Date:** 01/2099

Description: University Drive - From SW 33th Street to Broward Boulevard and SR 84 improvements.

District: 04 **County:** 86 BROWARD

Project Manager: TBD

Version 1-P Project Grand Total **$121,083,039.73**

Description: University Drive - From SW 33th Street to Broward Boulevard and SR 84 improvements.

Sequence 1 NDU

Description: University Drive Lower Level - From 1660' South of Nova Drive to SR 84 Eastbound.

Component:	Component Subtotals:
Earthwork	$5,513,476.59
Roadway	$2,653,192.00
Shoulder	$424,526.24
Median	$91,781.09
Drainage	$2,208,692.78
Signing	$674,197.30
Lighting	$261,497.59
Utilities	$632,541.64
Sequence 1 Total	**$12,459,905.23**

Sequence 2 NDR

Description: University Drive Upper Level - From 1660' South of Nova Drive to SR 84 Eastbound. Includes 3 Overpasses along University Dr.

Component:	Component Subtotals:
Earthwork	$4,804,361.05
Roadway	$1,420,428.20
Shoulder	$192,677.78
Median	$431,799.02
Drainage	$220,439.40
Signing	$256,151.60
Bridges	$17,431,869.84
Retaining Walls	$5,266,168.78
Sequence 2 Total	**$30,023,895.67**

Sequence 3 RSU

Description: Milling and Resurfacing Nova Drive Intersection at University Drive. Includes signalization.

Component:	Component Subtotals:
Roadway	$98,695.67
Shoulder	$252.89
Signalizations	$356,751.45
Sequence 3 Total	**$455,700.01**

Sequence 4 RSU

Description: Milling and Resurfacing SW 23rd Street Intersection at University Drive. Includes signalization.

Component:	Component Subtotals:
Roadway	$60,684.65
Shoulder	$241.48
Signalizations	$318,382.38
Sequence 4 Total	**$379,308.51**

Sequence 5 RSU

Description: Milling and Resurfacing Kolsky Blvd intersection at University Drive. Includes signalization.

Component:	Component Subtotals:
Roadway	$96,201.79
Shoulder	$280.74
Signalizations	$290,478.28
Sequence 5 Total	**$386,960.81**

Sequence 6 WUU

Description: SR 84 Eastbound Milling, resurfacing and widening. From 2535 feet west of University Drive to 2650 feet east of University Drive. Include SR84 Eastbound Overpass over University Drive

Component:	Component Subtotals:
Earthwork	$776,428.58
Roadway	$1,320,005.56
Shoulder	$699,868.72
Drainage	$3,310,706.57
Signing	$327,138.03
Bridges	$1,663,912.80
Retaining Walls	$1,214,217.90
Sequence 6 Total	**$9,312,278.16**

Sequence 7 WDU

Description: Milling, resurfacing and widening University Drive. From SR84 Eastbound to SR84 Westbound. Includes two signalized intersections.

Component:	Component Subtotals:
Earthwork	$23,410.60
Roadway	$173,817.52
Shoulder	$108,491.13
Median	$14,152.92
Drainage	$63,528.17
Signing	$7,706.07
Signalizations	$604,349.92
Sequence 7 Total	**$995,456.33**

Sequence 8 WUU

Description: SR 84 Westbound Milling, resurfacing and widening. New construction SR84 Westbound and bike lane segment, SR84 Westbound bulkhead. Includes two overpasses and one low level bridges.

Component:	Component Subtotals:
Earthwork	$1,060,231.50
Roadway	$1,835,055.36

	Shoulder	$23,691.42
	Drainage	$2,439,293.86
	Signing	$227,071.57
	Bridges	$6,581,466.28
	Retaining Walls	$13,951,428.29
Sequence 8 Total		**$26,118,238.28**

Sequence 9 WDU

Description: University Drive Milling, resurfacing and widening from SR84 Westbound to 950 feet north of SR84 Westbound.

	Component:	**Component Subtotals:**
	Earthwork	$96,096.73
	Roadway	$399,573.01
	Shoulder	$114,352.14
	Median	$51,266.09
	Drainage	$85,169.90
	Signing	$8,083.63
	Bridges	$558,124.99
Sequence 9 Total		**$1,312,666.49**

Sequence 10 WDU

Description: University Drive at Peters Road intersection improvements. From 950 feet north of SR84 Westbound to 500 feet north of Peters Road. Includes signalized intersection.

	Component:	**Component Subtotals:**
	Earthwork	$104,520.75
	Roadway	$1,246,634.20
	Shoulder	$270,134.54
	Median	$118,072.27
	Drainage	$151,762.09
	Signing	$9,593.87
	Signalizations	$465,904.43
Sequence 10 Total		**$2,366,622.15**

Sequence 11 WDU

Description: University Drive - From 500 feet north of Peters Road to Broward Boulevard. Milling, resurfacing and widening. Includes signalized intersection.

	Component:	**Component Subtotals:**
	Earthwork	$1,137,288.45
	Roadway	$3,257,066.81
	Shoulder	$610,702.83
	Median	$329,698.66
	Drainage	$424,841.76
	Signing	$21,075.54
	Signalizations	$602,261.38
Sequence 11 Total		**$6,382,935.43**

Sequence 12 WDU

Description: University Drive. From SW 33th Street to 1660 feet south of Nova Drive. Includes SW 30th Street improvements and signalized intersection.

	Component:	**Component Subtotals:**
	Earthwork	$181,535.92

		Roadway	$1,232,967.69
		Shoulder	$240,517.39
		Median	$101,231.56
		Drainage	$168,822.03
		Signing	$9,593.87
		Signalizations	$356,751.45
	Sequence 12 Total		**$2,291,419.91**
	Sequence 13 MIS		
	Description:	Miscellaneous Construction	
		Component:	**Component Subtotals:**
		Miscellaneous	$9,300,000.00
	Sequence 13 Total		**$9,300,000.00**
Project Sequences Subtotal			**$101,785,386.98**
	Maintenance of Traffic	8.00 %	$8,142,830.96
	Mobilization	10.00 %	$10,992,821.79
Project Sequences Total			**$120,921,039.73**
	Project Unknowns	0.00 %	$0.00
	Design/Build	0.00 %	$0.00
	Project Non-Bid Subtotal		$162,000.00
Version 1-P Project Grand Total			**$121,083,039.73**

Exhibit B-10
Davie Road Corridor Concept
Long Range Estimate (LRE)

Date: 7/1/2021 9:22:56 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: P59508-9-99-99 **Letting Date:** 01/2099

Description: Davie Road - From SW Cherecobb Street to SR 84 Westbound and SR 84 improvements.

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English
Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.932 MI

Project Manager: TBD

Version 1-P Project Grand Total **$25,652,007.51**
Description: Davie Road - From SW Cherecobb Street to SR 84 Westbound and SR 84 improvements.

Sequence: 1 WDR - Widen/Resurface, Divided, Rural **Net Length:** 0.167 MI
880 LF

Description: Davie Road - From 500 feet south of SR 84 Eastbound to SR 84 Westbound. Milling, resurfacing and widening Davie Road. Includes 2 signalized intersections.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	12.00 / 12.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.080
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.49 AC	$33,443.72	$16,387.42
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	198.68 CY	$31.19	$6,196.83
	Earthwork Component Total			$22,584.25

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	12.00 / 12.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,347.14 SY	$6.83	$16,030.97
285-709	OPTIONAL BASE,BASE GROUP 09	2,411.68 SY	$28.78	$69,408.15
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	7,041.41 SY	$7.65	$53,866.79
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	387.28 TN	$157.57	$61,023.71
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	387.28 TN	$157.57	$61,023.71
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	281.66 TN	$147.44	$41,527.95
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	93.89 TN	$147.44	$13,843.14

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	767.00 SY	$6.83	$5,238.61
	Comment: Rt Turn L=460' w=15'			
285-709	OPTIONAL BASE,BASE GROUP 09	767.00 SY	$28.78	$22,074.26
	Comment: Rt Turn 767sy			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	127.00 TN	$157.57	$20,011.39
	Comment: Rt Turn 767 sy (3")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	63.30 TN	$147.44	$9,332.95
	Comment: Rt Turn 767 sy (1.5")			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	113.00 EA	$4.00	$452.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.67 GM	$4,016.39	$2,690.98
711-16-131	THERMOPLASTIC, STD-OTH,	0.67 GM	$1,300.59	$871.40

	WHITE, SKIP, 6"			
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.67 GM	$4,012.31	$2,688.25
	Roadway Component Total			$380,084.25

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,000.00 LF	$27.84	$27,840.00
	Comment: L=500'x2			
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,120.00 SY	$43.10	$48,272.00
	Comment: L=500' w=6 + L=290' w=6' + L= 210 w=12'+ 280'w=12'			

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,024.40 LF	$1.87	$3,785.63
104-11	FLOATING TURBIDITY BARRIER	16.67 LF	$11.70	$195.04
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	16.67 LF	$5.16	$86.02
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
107-1	LITTER REMOVAL	1.21 AC	$25.78	$31.19
107-2	MOWING	1.21 AC	$51.28	$62.05
	Shoulder Component Total			$82,084.08

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	0.00 / 0.00
New Paved Median Shoulder Width L/R	0.00 / 0.00

Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE **Comment:** 450'+210'	760.00 LF	$39.98	$30,384.80
	Median Component Total			$30,384.80

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	136.00 LF	$101.49	$13,802.64
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00 LF	$320.59	$5,129.44
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	7.00 EA	$1,444.17	$10,109.19
570-1-1	PERFORMANCE TURF	117.36 SY	$2.31	$271.10
	Drainage Component Total			$29,312.37

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00 AS	$1,062.01	$5,310.05
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	5.00 AS	$27.83	$139.15
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT **Comment:** Davie Road NB	1.00 EA	$71,677.78	$71,677.78
700-4-610	OH STATIC SIGN STR, REMOVE, CANT	1.00 EA	$7,605.29	$7,605.29
	Signing Component Total			$90,584.42

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	SR 84 Westbound intersection

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00 LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	2.00 EA	$54,576.49	$109,152.98
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00 EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68

Signalization 2

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	SR 84 Eastbound intersection

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00 LF	$11.05	$8,287.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00 LF	$23.35	$5,837.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00 EA	$715.68	$11,450.88
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
649-21-10	STEEL MAST ARM ASSEMBLY,	2.00 EA	$44,968.35	$89,936.70

	F&I, 60'			
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00 AS	$998.28	$11,979.36
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00 EA	$366.45	$4,397.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00 AS	$1,288.40	$15,460.80
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68
	Signalizations Component Total			$448,124.69

Sequence 1 Total $1,083,158.86

Sequence: 2 WUU - Widen/Resurface, Undivided, Urban **Net Length:** 1.276 MI
6,736 LF

Description: SR 84 Eastbound Milling, resurfacing and widening. From 5200 feet west of Davie Road to 1440 feet east of Davie Road. Includes SR 84 eastbound Overpass over Davie Road.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	19.00 / 19.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.724
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.88 AC	$33,443.72	$196,649.07
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	62.30 CY	$31.19	$1,943.14

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	18,476.00 CY	$24.01	$443,608.76
	Comment: SR 84 EB Overpass L=832' w=27' H=15.5' + L=360' w=27'H=15.5'			
	Earthwork Component Total			$642,200.97

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Existing Roadway Pavement Width L/R	11.00 / 18.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 2.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,427.99 SY	$6.83	$23,413.17
285-709	OPTIONAL BASE,BASE GROUP 09	1,743.93 SY	$28.78	$50,190.31

327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	21,705.61	SY	$7.65	$166,047.92
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,193.81	TN	$157.57	$188,108.64
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	246.99	TN	$157.57	$38,918.21
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,790.71	TN	$147.44	$264,022.28
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	123.50	TN	$147.44	$18,208.84

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	11,257.00	SY	$6.83	$76,885.31
	Comment: SR 84 EB Widening (L=2655' w=16') SR 84 EB Overpass Ramp (L=2179 w=27')				
285-704	OPTIONAL BASE,BASE GROUP 04	2,905.00	SY	$18.20	$52,871.00
	Comment: SR 84 EB Overpass Ramp 2905 sy				
285-709	OPTIONAL BASE,BASE GROUP 09	8,352.00	SY	$28.78	$240,370.56
	Comment: SR 84 EB Widening 4720 sy SR 84 EB Overpass Ramp 3632 sy				
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	854.00	SY	$7.65	$6,533.10
	Comment: Lt Turn (L=320' w=12') Rt Turn (L=320' w=12')				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,425.00	TN	$157.57	$224,537.25
	Comment: SR 84 EB Widening 4720 sy (3") SR 84 EB Overpass Ramp 3632 sy (3") Turning Lane 854 sy (1")				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,365.00	TN	$147.44	$201,255.60
	Comment: SR 84 EB Widening 4720 sy (1.5") SR 84 EB Overpass Ramp 11257 sy (1.5") Turning Lane 854 sy (1.5")				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	689.00	EA	$4.00	$2,756.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	5.10	GM	$4,016.39	$20,483.59
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	2.55	GM	$1,300.59	$3,316.50
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	5.10	GM	$4,012.31	$20,462.78

Roadway Component Total	$1,598,381.06

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	12.25 / 12.25
New Total Outside Shoulder Width L/R	12.25 / 12.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	5.00 / 5.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	6,736.22	LF	$27.84	$187,536.36
520-1-10	CONCRETE CURB & GUTTER, TYPE F	6,736.22	LF	$27.84	$187,536.36
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	7,484.69	SY	$43.10	$322,590.14
570-1-1	PERFORMANCE TURF	7,484.69	SY	$2.31	$17,289.63

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	13,472.45	LF	$1.87	$25,193.48
104-11	FLOATING TURBIDITY BARRIER	127.58	LF	$11.70	$1,492.69
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	127.58	LF	$5.16	$658.31
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	$1,812.15	$3,624.30
104-18	INLET PROTECTION SYSTEM	66.00	EA	$120.92	$7,980.72
107-1	LITTER REMOVAL	5.87	AC	$25.78	$151.33
107-2	MOWING	5.87	AC	$51.28	$301.01

Shoulder Component Total	$754,354.34

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	46.00	EA	$5,717.85	$263,021.10
425-1-451	INLETS, CURB, TYPE J-5, <10'	13.00	EA	$7,505.59	$97,572.67
425-1-521	INLETS, DT BOT, TYPE C, <10'	7.00	EA	$4,045.36	$28,317.52
425-2-41	MANHOLES, P-7, <10'	7.00	EA	$4,691.89	$32,843.23
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	2,472.00	LF	$189.89	$469,408.08
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	6,384.00	LF	$482.95	$3,083,152.80
570-1-1	PERFORMANCE TURF	387.84	SY	$2.31	$895.91

Drainage Component Total	$3,975,211.31

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	23.00 AS	$340.80	$7,838.40
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00 AS	$1,062.01	$3,186.03
700-1-50	SINGLE POST SIGN, RELOCATE	3.00 AS	$257.11	$771.33
700-1-60	SINGLE POST SIGN, REMOVE	23.00 AS	$27.83	$640.09
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	3.00 AS	$4,659.74	$13,979.22
700-2-60	MULTI- POST SIGN, REMOVE	3.00 AS	$594.50	$1,783.50

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-112	OH STATIC SIGN STR, F&I, C 21-30 FT	2.00 EA	$72,814.10	$145,628.20
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00 EA	$197,000.00	$197,000.00
	Signing Component Total			$370,826.77

BRIDGES COMPONENT

Bridge 801

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,273.00
Width (LF)	27.00
Type	Overpass Bridge
Cost Factor	2.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$180.00
Final Cost per SF	**$181.18**
Basic Bridge Cost	**$6,186,780.00**
Description	SR 84 EASTBOUND OVERPASS OVER DAVIE ROAD

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	60.00 CY	$497.63	$29,857.80
415-1-9	REINF STEEL- APPROACH SLABS	10,500.00 LB	$1.03	$10,815.00
	Bridge 801 Total			$6,227,452.80
	Bridges Component Total			$6,227,452.80

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	1,247.00 LF	$268.33	$334,607.51
	Comment: 860'+387'			

Retaining Wall 1

Description	Value
Length	860.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	13,115.00 SF	$42.18	$553,190.70

Retaining Wall 2

Description	Value
Length	387.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,901.75 SF	$42.18	$248,935.82
	Retaining Walls Component Total			$1,136,734.03

Sequence 2 Total $14,705,161.28

Sequence: 3 WUU - Widen/Resurface, Undivided, Urban **Net Length:** 0.265 MI
1,400 LF

Description: SR 84 Westbound from 590 feet west of Davie Road to 810' East of Davie Road. Milling and Resurfacing 3-Lane SR 84 WB.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	19.00 / 19.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.189
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.22 AC	$33,443.72	$40,801.34
	Earthwork Component Total			$40,801.34

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Existing Roadway Pavement Width L/R	0.00 / 38.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	5,912.19 SY	$7.65	$45,228.25
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	325.17 TN	$157.57	$51,237.04
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	487.76 TN	$147.44	$71,915.33

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2"	1,577.00 SY	$7.65	$12,064.05

	AVG DEPTH			
	Comment: Lt Turn L=500'+790'=1290' w=11'			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	86.70 TN	$157.57	$13,661.32
	Comment: Lt Turn=1577sy (1")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	130.10 TN	$147.44	$19,181.94
	Comment: Lt Turn=1577sy (1.5")			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	143.00 EA	$4.00	$572.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	1.06 GM	$4,016.39	$4,257.37
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.53 GM	$1,300.59	$689.31
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	1.06 GM	$4,012.31	$4,253.05
	Roadway Component Total			$223,059.66

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,800.51 LF	$1.87	$5,236.95
104-11	FLOATING TURBIDITY BARRIER	26.52 LF	$11.70	$310.28
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	26.52 LF	$5.16	$136.84
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	14.00 EA	$120.92	$1,692.88
107-1	LITTER REMOVAL	1.22 AC	$25.78	$31.45
107-2	MOWING	1.22 AC	$51.28	$62.56

	Shoulder Component Total	$9,283.12

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	10.00 EA	$5,717.85	$57,178.50
425-1-451	INLETS, CURB, TYPE J-5, <10'	3.00 EA	$7,505.59	$22,516.77
425-1-521	INLETS, DT BOT, TYPE C, <10'	2.00 EA	$4,045.36	$8,090.72
425-2-41	MANHOLES, P-7, <10'	2.00 EA	$4,691.89	$9,383.78
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	520.00 LF	$189.89	$98,742.80
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	1,328.00 LF	$482.95	$641,357.60
570-1-1	PERFORMANCE TURF	80.62 SY	$2.31	$186.23
	Drainage Component Total			$837,456.40

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	5.00 AS	$340.80	$1,704.00
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	5.00 AS	$27.83	$139.15
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	$594.50	$594.50
	Signing Component Total			$8,416.51

Sequence 3 Total	$1,119,017.03

Sequence: 4 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.536 MI
2,830 LF

Description: Davie Road at Nova Drive intersection improvements. From 1450 feet north of Nova Dr. to 1380 feet south of Nova Drive. Includes signalization.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.536
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.25 AC	$33,443.72	$108,692.09
	Earthwork Component Total			$108,692.09

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Existing Roadway Pavement Width L/R	25.00 / 25.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	15,722.67 SY	$7.65	$120,278.43
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	864.75 TN	$157.57	$136,258.66
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,297.12 TN	$147.44	$191,247.37

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,139.00 SY	$6.83	$41,929.37
	Comment: Widening Davie Rd SB (L=2210 w=25')			
285-709	OPTIONAL BASE,BASE GROUP 09	6,139.00 SY	$28.78	$176,680.42
	Comment: Widening=6139sy			
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	7,190.00 SY	$7.65	$55,003.50
	Comment: Davie Rd NB (L=2200' w=10),Lt Turn (L=(240'*2 +480*2 +390*2)w=10'),Rt Turn ((L=390+210+270+200+721+260) w=10')			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,409.00 TN	$157.57	$222,016.13
	Comment: M&R=7190sy (1") Widening Davie Rd SB (L=2210 w=25')(3")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,100.00 TN	$147.44	$162,184.00
	Comment: M&R=7190sy (1.5") Widening=6139sy (1.5")			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	217.00 EA	$4.00	$868.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.14 GM	$4,016.39	$8,595.07
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	1.07 GM	$1,300.59	$1,391.63
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	2.14 GM	$4,012.31	$8,586.34
	Roadway Component Total			$1,125,038.93

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	8.25 / 8.25
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	6.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,830.08 LF	$27.84	$78,789.43

520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,830.08 LF	$27.84	$78,789.43
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	3,773.44 SY	$43.10	$162,635.26

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,660.16 LF	$1.87	$10,584.50
104-11	FLOATING TURBIDITY BARRIER	53.60 LF	$11.70	$627.12
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	53.60 LF	$5.16	$276.58
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	25.00 EA	$120.92	$3,023.00
107-1	LITTER REMOVAL	4.67 AC	$25.78	$120.39
107-2	MOWING	4.67 AC	$51.28	$239.48
	Shoulder Component Total			$336,897.34

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	9.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	5,660.16 LF	$25.51	$144,390.68
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	1,055.00 LF	$39.98	$42,178.90
570-1-1	PERFORMANCE TURF	2,830.08 SY	$2.31	$6,537.48
	Median Component Total			$193,107.06

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	20.00 EA	$5,717.85	$114,357.00
425-1-451	INLETS, CURB, TYPE J-5, <10'	6.00 EA	$7,505.59	$45,033.54
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	296.00 LF	$189.89	$56,207.44
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	88.00 LF	$320.59	$28,211.92
570-1-1	PERFORMANCE TURF	162.94 SY	$2.31	$376.39
	Drainage Component Total			$244,186.29

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	12.00 AS	$340.80	$4,089.60
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	$1,062.01	$2,124.02
700-1-50	SINGLE POST SIGN, RELOCATE	2.00 AS	$257.11	$514.22
700-1-60	SINGLE POST SIGN, REMOVE	12.00 AS	$27.83	$333.96
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	$4,659.74	$9,319.48
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	$594.50	$1,189.00
	Signing Component Total			$17,570.28

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	Nova Drive intersection

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00 LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	4.00 EA	$54,576.49	$218,305.96
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00 EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68
	Signalizations Component Total			$356,743.77

Sequence 4 Total	$2,382,235.76

Sequence: 5 RSD - Resurfacing, Divided **Net Length:** 0.131 MI
690 LF

Description: Davie Road - Milling and resurfacing from 1450 feet north of Nova Drive to 500 feet south of SR 84 Eastbound.

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	38.00 / 38.00
Structural Spread Rate	110
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	5,827.48	SY	$7.65	$44,580.22
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	320.51	TN	$157.57	$50,502.76
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	233.10	TN	$147.44	$34,368.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	1,106.00	SY	$7.65	$8,460.90
	Comment: Lt Turn L=180' w=11', Rt Turn L=255+180+290=725' w=11'				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	60.80	TN	$157.57	$9,580.26
	Comment: Turn Lanes = 1106 sy (1")				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	91.20	TN	$147.44	$13,446.53
	Comment: Turn Lanes = 1106 sy (1.5")				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	35.00	EA	$4.00	$140.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.52	GM	$4,016.39	$2,088.52
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.13	GM	$1,300.59	$169.08

711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.52 GM	$4,012.31	$2,086.40
	Roadway Component Total			$165,422.93

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	13.07	LF	$11.70	$152.92
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	13.07	LF	$5.16	$67.44
107-1	LITTER REMOVAL	0.95	AC	$25.78	$24.49
107-2	MOWING	0.95	AC	$51.28	$48.72
	Shoulder Component Total				$293.57

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	40.00
Performance Turf Width	5.34
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	409.46	SY	$2.31	$945.85
	Median Component Total				$945.85

Sequence 5 Total $166,662.35

Sequence: 6 MIS - Miscellaneous Construction **Net Length:** 0.000 MI 0 LF

Description: Miscellaneous Construction

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
1	RISK CONTINGENCIES **Comment:** 10% risk contingencies (to assume something for utilities, structures, Geotech, etc. issues)	1.00	LS	$2,000,000.00	$2,000,000.00
	Miscellaneous Component Total				$2,000,000.00

Sequence 6 Total $2,000,000.00

Date: 7/1/2021 9:22:59 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: P59508-9-99-99 **Letting Date:** 01/2099

Description: Davie Road - From SW Cherecobb Street to SR 84 Westbound and SR 84 improvements.

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English
Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 0.932 MI

Project Manager: TBD

Version 1-P Project Grand Total **$25,652,007.51**
Description: Davie Road - From SW Cherecobb Street to SR 84 Westbound and SR 84 improvements.

Project Sequences Subtotal			**$21,456,235.28**
102-1	Maintenance of Traffic	8.00 %	$1,716,498.82
101-1	Mobilization	10.00 %	$2,317,273.41
Project Sequences Total			**$25,490,007.51**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	2.00	LS	$6,000.00	$12,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$162,000.00**
Version 1-P Project Grand Total					**$25,652,007.51**

Exhibit B-11
SR 7 / US-441 Corridor Concept
Long Range Estimate (LRE)

Date: 7/1/2021 4:42:17 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: P59509-9-99-99 **Letting Date:** 01/2099

Description: State Road 7 - From 1800 feet north of I-595 to 1580 feet north of Riverland Road and from 1340 feet south of I-595 to 850 feet south of Oakes Road.

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 1.870 MI

Project Manager: TBD

Version 1-P Project Grand Total **$19,125,935.57**

Description: State Road 7 - From 1800 feet north of I-595 to 1580 feet north of Riverland Road and from 1340 feet south of I-595 to 850 feet south of Oakes Road.

Sequence: 1 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.599 MI
3,160 LF

Description: SR 7 Milling, resurfacing and widening. From 850 feet south of Oakes Road to 1340 feet south of I-595. Includes two signalized intersection.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.598
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.62 AC	$33,443.72	$121,066.27
	Earthwork Component Total			$121,066.27

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6

Existing Roadway Pavement Width L/R	33.00 / 33.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	23,173.92 SY	$7.65	$177,280.49
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,274.57 TN	$157.57	$200,833.99
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,911.85 TN	$147.44	$281,883.16

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,550.00 SY	$6.83	$31,076.50
	Comment: Aux. Lane+shoulder L =1950' (w=11'+10')			
285-704	OPTIONAL BASE,BASE GROUP 04	2,167.00 SY	$18.20	$39,439.40
	Comment: Shoulder L=1950 (w=10')			
285-709	OPTIONAL BASE,BASE GROUP 09	2,383.00 SY	$28.78	$68,582.74
	Comment: Aux Lane L =1950' (w=11')			
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	2,332.00 SY	$7.65	$17,839.80
	Comment: Lt Turn L= 170'+360' (w=11') Rt Turn L=550' (w=11') SB Bike Lane L=1300' (w=7')			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	522.00 TN	$157.57	$82,251.54
	Comment: M&R 2332 sy (1") Aux Lan 2383 (3")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	568.00 TN	$147.44	$83,745.92
	Comment: M&R 2332 (1.5") Widening 4550 (1.5")			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	404.00 EA	$4.00	$1,616.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.39 GM	$4,016.39	$9,599.17
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	2.39 GM	$1,300.59	$3,108.41
711-16-201	THERMOPLASTIC, STD-	2.39 GM	$4,012.31	$9,589.42

OTH,YELLOW, SOLID, 6"

Roadway Component Total $1,006,846.54

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	560.00 LF	$27.84	$15,590.40
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	431.00 SY	$43.10	$18,576.10
	Comment: L=485' (w=8')			
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	623.00 SY	$50.72	$31,598.56
	Comment: L=75' (w=13')			
570-1-1	PERFORMANCE TURF	3,511.00 SY	$2.31	$8,110.41
	Comment: L=3160' (w=5'*2)			

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,320.16 LF	$1.87	$11,818.70
104-11	FLOATING TURBIDITY BARRIER	59.85 LF	$11.70	$700.24
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	59.85 LF	$5.16	$308.83
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	28.00 EA	$120.92	$3,385.76
107-1	LITTER REMOVAL	5.22 AC	$25.78	$134.57
107-2	MOWING	5.22 AC	$51.28	$267.68

Shoulder Component Total $92,303.40

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	18.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	6,320.16 LF	$25.51	$161,227.28

520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	1,020.00 LF	$39.98	$40,779.60
570-1-1	PERFORMANCE TURF	6,320.16 SY	$2.31	$14,599.57
	Median Component Total			$216,606.45

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	22.00 EA	$5,717.85	$125,792.70
425-1-451	INLETS, CURB, TYPE J-5, <10'	6.00 EA	$7,505.59	$45,033.54
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	336.00 LF	$189.89	$63,803.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	96.00 LF	$320.59	$30,776.64
570-1-1	PERFORMANCE TURF	181.94 SY	$2.31	$420.28
	Drainage Component Total			$265,826.20

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	14.00 AS	$340.80	$4,771.20
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	$1,062.01	$2,124.02
700-1-50	SINGLE POST SIGN, RELOCATE	2.00 AS	$257.11	$514.22
700-1-60	SINGLE POST SIGN, REMOVE	14.00 AS	$27.83	$389.62
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	$4,659.74	$9,319.48
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	$594.50	$1,189.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-113	OH STATIC SIGN STR, F&I, C 31-40 FT	2.00 EA	$60,433.33	$120,866.66
	Signing Component Total			$139,174.20

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	SW 36th Street intersection

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00 LF	$11.05	$8,287.50
630-2-12	CONDUIT, F& I, DIRECTIONAL	250.00 LF	$23.35	$5,837.50

	BORE			
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00 EA	$715.68	$11,450.88
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	3.00 EA	$44,968.35	$134,905.05
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00 AS	$998.28	$11,979.36
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00 EA	$366.45	$4,397.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00 AS	$1,288.40	$15,460.80
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68

Signalization 2

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	Oakes Road intersection

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00 LF	$11.05	$8,287.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00 LF	$23.35	$5,837.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00 EA	$715.68	$11,450.88
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	3.00 EA	$44,968.35	$134,905.05
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00 AS	$998.28	$11,979.36
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00 EA	$366.45	$4,397.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00 AS	$1,288.40	$15,460.80
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68

Signalizations Component Total	$491,004.50
Sequence 1 Total	$2,332,827.56

Sequence: 2 NUR - New Construction, Undivided, Rural **Net Length:** 0.215 MI
1,135 LF

Description: SR 7 Northbound two lane Off-ramp to I-595 EB&WB Reconstruction.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.215
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.61 AC	$33,443.72	$87,288.11
120-6	EMBANKMENT	11,540.78 CY	$24.01	$277,094.13
	Earthwork Component Total			$364,382.24

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,297.60 SY	$6.83	$36,182.61
285-709	OPTIONAL BASE,BASE GROUP 09	3,110.45 SY	$28.78	$89,518.75
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	499.49 TN	$157.57	$78,704.64
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	249.74 TN	$147.44	$36,821.67

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,580.00 SY	$6.83	$17,621.40
	Comment: One Lane ramp L=860' (w=27')			
285-704	OPTIONAL BASE,BASE GROUP 04	1,147.00 SY	$18.20	$20,875.40
	Comment: Shoulders L=860' (w=6'*2)			
285-709	OPTIONAL BASE,BASE GROUP 09	1,433.00 SY	$28.78	$41,241.74

	Comment: Ramp L=860' (w=15')			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	237.00 TN	$157.57	$37,344.09
	Comment: Ramp 1433 sy (3")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	213.00 TN	$147.44	$31,404.72
	Comment: Ramp and shldrs 2580 sy (1.5")			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	29.00 EA	$4.00	$116.00
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.43 GM	$4,287.03	$1,843.42
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.43 GM	$4,016.39	$1,727.05
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.22 GM	$1,270.13	$279.43
	Roadway Component Total			$393,680.92

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	4.00 / 5.00
Structural Spread Rate	0
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,218.45 SY	$18.20	$22,175.79
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	93.65 TN	$147.44	$13,807.76
570-1-1	PERFORMANCE TURF	673.55 SY	$2.31	$1,555.90

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,951.52 LF	$1.87	$5,519.34

104-11	FLOATING TURBIDITY BARRIER	53.75 LF	$11.70	$628.88
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	53.75 LF	$5.16	$277.35
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
107-1	LITTER REMOVAL	2.61 AC	$25.78	$67.29
107-2	MOWING	2.61 AC	$51.28	$133.84
	Shoulder Component Total			$45,978.29

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	176.00 LF	$101.49	$17,862.24
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00 LF	$320.59	$12,823.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00 EA	$1,444.17	$12,997.53
570-1-1	PERFORMANCE TURF	151.36 SY	$2.31	$349.64
	Drainage Component Total			$44,033.01

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00 AS	$1,062.01	$5,310.05
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-113	OH STATIC SIGN STR, F&I, C 31-40 FT	2.00 EA	$60,433.33	$120,866.66
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00 EA	$197,000.00	$197,000.00
700-4-610	OH STATIC SIGN STR, REMOVE, CANT	1.00 EA	$7,605.29	$7,605.29
700-4-620	OH STATIC SIGN STR, REMOVE, SPAN	1.00 EA	$11,261.39	$11,261.39
	Signing Component Total			$347,043.93

Sequence 2 Total $1,195,118.39

Sequence: 3 NUR - New Construction, Undivided, Rural **Net Length:** 0.487 MI
2,570 LF

Description: SR 7 Southbound two lane On-ramp from I-595 EB & Turnpike Reconstruction.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.487
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.90 AC	$33,443.72	$197,317.95
120-6	EMBANKMENT	14,106.29 CY	$24.01	$338,692.02
	Earthwork Component Total			$536,009.97

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,564.63 SY	$6.83	$72,156.42
285-709	OPTIONAL BASE,BASE GROUP 09	4,377.19 SY	$28.78	$125,975.53
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	706.69 TN	$157.57	$111,353.14
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	353.34 TN	$147.44	$52,096.45

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,238.00 SY	$6.83	$22,115.54
	Comment: One Lane On- ramp L=920' (w=27') Loop ramp L=205' (w=21')			
285-704	OPTIONAL BASE,BASE GROUP 04	1,363.00 SY	$18.20	$24,806.60
	Comment: Shoulder One Lane on-ramp L=920' (w=12') Shoulder Loop ramp L=205' (w=6')			

285-709	OPTIONAL BASE,BASE GROUP 09	1,875.00 SY	$28.78	$53,962.50
	Comment: One Lane on-ramp L=920' (w=15') Loop ramp L=205' (w=15')			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	310.00 TN	$157.57	$48,846.70
	Comment: Ramps 1875 sy (3")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	267.00 TN	$147.44	$39,366.48
	Comment: Ramps 1875 (1.5") Shoulders 1363 (1.5")			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.97 GM	$4,016.39	$3,895.90
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.97 GM	$4,012.31	$3,891.94
	Roadway Component Total			$558,467.20

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	8.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	3,900.35 SY	$18.20	$70,986.37
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	204.15 TN	$157.57	$32,167.92
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	306.23 TN	$147.44	$45,150.55
570-1-1	PERFORMANCE TURF	1,524.73 SY	$2.31	$3,522.13

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	90.00 LF	$192.04	$17,283.60

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,681.42 LF	$1.87	$12,494.26
104-11	FLOATING TURBIDITY BARRIER	121.68 LF	$11.70	$1,423.66
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	121.68 LF	$5.16	$627.87
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
107-1	LITTER REMOVAL	5.90 AC	$25.78	$152.10
107-2	MOWING	5.90 AC	$51.28	$302.55
	Shoulder Component Total			$185,923.15

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	392.00 LF	$101.49	$39,784.08
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	88.00 LF	$320.59	$28,211.92
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	20.00 EA	$1,444.17	$28,883.40
570-1-1	PERFORMANCE TURF	342.64 SY	$2.31	$791.50
	Drainage Component Total			$97,670.90

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	10.00 AS	$1,062.01	$10,620.10
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
	Signing Component Total			$15,620.64

Sequence 3 Total $1,393,691.86

Sequence: 4 NDR - New Construction, Divided, Rural **Net Length:** 0.201 MI
1,062 LF

Description: SW 36th Street Intersection at Oaks Road reconstruction. From 1050 feet west of SR 7 to SR 7.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	100.00 / 100.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.201
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.87 AC	$33,443.72	$162,870.92
120-6	EMBANKMENT	17,156.57 CY	$24.01	$411,929.25
	Earthwork Component Total			$574,800.16

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	8,022.55 SY	$6.83	$54,794.02
285-709	OPTIONAL BASE,BASE GROUP 09	5,818.71 SY	$28.78	$167,462.47
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	934.39 TN	$157.57	$147,231.83
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	226.52 TN	$147.44	$33,398.11

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	3,200.00 SY	$7.65	$24,480.00
	Comment: Oaks Road L=900' w=32'			
334-1-13	SUPERPAVE ASPHALTIC CONC,	176.00 TN	$157.57	$27,732.32

	TRAFFIC C **Comment:** 3200 sy (1")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22 **Comment:** 3200 sy (1.5")	264.00 TN	$147.44	$38,924.16

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	81.00 EA	$4.00	$324.00
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.40 GM	$361.39	$144.56
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.80 GM	$4,016.39	$3,213.11
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.40 GM	$1,300.59	$520.24
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.80 GM	$4,012.31	$3,209.85
	Roadway Component Total			$501,434.66

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	0
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,257.65 SY	$18.20	$22,889.23
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	47.19 TN	$147.44	$6,957.69
570-1-1	PERFORMANCE TURF	630.01 SY	$2.31	$1,455.32

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,760.70 LF	$1.87	$5,162.51

104-11	FLOATING TURBIDITY BARRIER	50.28 LF	$11.70	$588.28
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	50.28 LF	$5.16	$259.44
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	2.00 EA	$120.92	$241.84
107-1	LITTER REMOVAL	4.87 AC	$25.78	$125.55
107-2	MOWING	4.87 AC	$51.28	$249.73
	Shoulder Component Total			$39,741.75

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	630.01 SY	$2.31	$1,455.32

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,500.00 LF	$25.51	$38,265.00
	Median Component Total			$39,720.32

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00 EA	$8,217.68	$16,435.36
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	160.00 LF	$101.49	$16,238.40
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	72.00 LF	$189.89	$13,672.08
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	64.00 LF	$320.59	$20,517.76
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00 EA	$1,444.17	$12,997.53
524-1-1	CONCRETE DITCH PAVT, NR, 3"	402.20 SY	$50.05	$20,130.11
570-1-1	PERFORMANCE TURF	141.57 SY	$2.31	$327.03
	Drainage Component Total			$100,318.27

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00 AS	$1,062.01	$5,310.05
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,659.74	$4,659.74
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	2.00 AS	$6,673.93	$13,347.86
	Signing Component Total			$23,658.45

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	Oaks Road intersection

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00 LF	$11.05	$8,287.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00 LF	$23.35	$5,837.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00 EA	$715.68	$11,450.88
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	4.00 EA	$44,968.35	$179,873.40
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00 AS	$998.28	$11,979.36
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00 EA	$366.45	$4,397.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00 AS	$1,288.40	$15,460.80
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68
	Signalizations Component Total			$290,470.60

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
455-133-3	SHEET PILING STEEL, F&I PERMANENT	37,500.00 SF	$44.77	$1,678,875.00
	Comment: Wet Pond Wall L=750' (H=50')			
521-8-7	CONC BARRIER, W/JUNCT SL, 36 SS	750.00 LF	$268.33	$201,247.50
	Retaining Walls Component Total			$1,880,122.50

Sequence 4 Total $3,450,266.71

Sequence: 5 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.763 MI
4,030 LF

Description: SR 7 Milling, resurfacing and widening. From 1880 feet south of Riverland Road to 1580 feet north of Riverland Road. Includes signalized intersection.

Special Conditions: Includes on-ramp from I-595 EB and off-ramp to I-595 WB.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.763
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.62 AC	$33,443.72	$154,509.99
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	24,446.38 CY	$31.19	$762,482.59
	Earthwork Component Total			$916,992.58

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Existing Roadway Pavement Width L/R	34.00 / 34.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	18.00 / 18.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	18,431.56 SY	$6.83	$125,887.55
285-709	OPTIONAL BASE,BASE GROUP 09	16,416.45 SY	$28.78	$472,465.43
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	30,450.58 SY	$7.65	$232,946.94

334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,674.78 TN	$157.57	$263,895.08
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	2,659.95 TN	$157.57	$419,128.32
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	2,512.17 TN	$147.44	$370,394.34
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,329.97 TN	$147.44	$196,090.78

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,367.00 SY	$6.83	$36,656.61
	Comment: Lt Turn L=360'(w=10') Rt Turn L=1245'(w=11')+200'(w=10')+400'(w=10') Shoulders L=2500'(w=10')			
285-704	OPTIONAL BASE,BASE GROUP 04	2,778.00 SY	$18.20	$50,559.60
	Comment: Shoulders 2778 sy			
285-709	OPTIONAL BASE,BASE GROUP 09	2,589.00 SY	$28.78	$74,511.42
	Comment: Lt Turn 400 sy Rt Turn 2189 sy			
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	3,288.00 SY	$7.65	$25,153.20
	Comment: Lt Turns L=820'*2+570'+120'+360'=2690'(w=11')			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	608.00 TN	$157.57	$95,802.56
	Comment: M&R 3288 sy (1") Widening 2589 sy (3")			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	714.00 TN	$147.44	$105,272.16
	Comment: M&R 3288 sy (1.5") Widening and shldrs 5367 sy (1.5")			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	721.00 EA	$4.00	$2,884.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	3.05 GM	$4,016.39	$12,249.99
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	4.58 GM	$1,300.59	$5,956.70
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	3.05 GM	$4,012.31	$12,237.55
	Roadway Component Total			$2,502,092.23

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	13.25 / 13.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	6.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	4,030.22 LF	$27.84	$112,201.32
520-1-10	CONCRETE CURB & GUTTER, TYPE F	4,030.22 LF	$27.84	$112,201.32
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	5,373.63 SY	$43.10	$231,603.45
570-1-1	PERFORMANCE TURF	4,478.03 SY	$2.31	$10,344.25

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	813.30 SY	$43.10	$35,053.23
	Comment: SR 7 SB sidewalk additional width 6' (L=1220')			

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	8,060.45 LF	$1.87	$15,073.04
104-11	FLOATING TURBIDITY BARRIER	76.33 LF	$11.70	$893.06
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	76.33 LF	$5.16	$393.86
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	36.00 EA	$120.92	$4,353.12
107-1	LITTER REMOVAL	6.66 AC	$25.78	$171.69
107-2	MOWING	6.66 AC	$51.28	$341.52
	Shoulder Component Total			$524,442.03

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	8,060.45 LF	$25.51	$205,622.08
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	900.00 LF	$39.98	$35,982.00

570-1-1	PERFORMANCE TURF	2,391.27 SY	$2.31	$5,523.83
	Median Component Total			$247,127.91

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	28.00 EA	$5,717.85	$160,099.80
425-1-451	INLETS, CURB, TYPE J-5, <10'	8.00 EA	$7,505.59	$60,044.72
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	424.00 LF	$189.89	$80,513.36
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	128.00 LF	$320.59	$41,035.52
570-1-1	PERFORMANCE TURF	232.04 SY	$2.31	$536.01
	Drainage Component Total			$342,229.41

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	17.00 AS	$340.80	$5,793.60
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	$1,062.01	$2,124.02
700-1-50	SINGLE POST SIGN, RELOCATE	2.00 AS	$257.11	$514.22
700-1-60	SINGLE POST SIGN, REMOVE	17.00 AS	$27.83	$473.11
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	$4,659.74	$9,319.48
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	$594.50	$1,189.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-112	OH STATIC SIGN STR, F&I, C 21-30 FT	2.00 EA	$72,814.10	$145,628.20
	Comment: SR 7 SB			
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00 EA	$197,000.00	$197,000.00
	Comment: SR 7 SB			
	Signing Component Total			$362,041.63

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	Riverland Road intersection

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00 LF	$11.05	$7,735.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00 LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	$5,756.87	$5,756.87
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00 EA	$715.68	$15,744.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	$2,791.46	$2,791.46
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	$5.93	$355.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	$1,706.49	$1,706.49
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	4.00 EA	$54,576.49	$218,305.96
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00 AS	$998.28	$19,965.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	$662.15	$5,297.20
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00 EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00 AS	$1,288.40	$25,768.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	$245.18	$1,961.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	$262.67	$1,050.68
	Signalizations Component Total			$356,743.77

Sequence 5 Total $5,251,669.56

Sequence: 6 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.227 MI
1,200 LF

Description: Riverland Road intersection. Milling, resurfacing and widening. From 250 feet West of SR 7 to 750 feet east of SR 7.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.227
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.38	AC	$33,443.72	$46,152.33
	Earthwork Component Total				$46,152.33

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Existing Roadway Pavement Width L/R	11.00 / 22.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	4,400.53	SY	$7.65	$33,664.05
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	242.03	TN	$157.57	$38,136.67
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	363.04	TN	$147.44	$53,526.62

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	526.00	SY	$6.83	$3,592.58
	Comment: Lt Turn L = 190' (w=11') L+240' (w=11')				
285-709	OPTIONAL BASE,BASE GROUP 09	526.00	SY	$28.78	$15,138.28
	Comment: 526 sy				
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	575.00	SY	$7.65	$4,398.75
	Comment: Lt Turns L = 230'(w=11') Rt Turn L = 240'(w=11')				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	118.40	TN	$157.57	$18,656.29
	Comment: M&R 575 sy (1") Widening 526 sy (3")				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	91.00	TN	$147.44	$13,417.04
	Comment: M&R 575 sy (1.5") Widening 526 sy (1.5")				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	92.00	EA	$4.00	$368.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.91	GM	$4,016.39	$3,654.91
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.45	GM	$1,300.59	$585.27
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.91	GM	$4,012.31	$3,651.20
	Roadway Component Total				$188,789.66

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	841.00	LF	$27.84	$23,413.44
	Comment: Riverland Road EB (L=331') Riverland Road WB (L=510')				

522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	561.00 SY	$43.10	$24,179.10
	Comment: Riverland Road EB (L=331')(w=6') Riverland Road WB (L=510')(w=6')			

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,400.29 LF	$1.87	$4,488.54
104-11	FLOATING TURBIDITY BARRIER	22.73 LF	$11.70	$265.94
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	22.73 LF	$5.16	$117.29
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	11.00 EA	$120.92	$1,330.12
107-1	LITTER REMOVAL	1.98 AC	$25.78	$51.04
107-2	MOWING	1.98 AC	$51.28	$101.53
	Shoulder Component Total			$55,759.16

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	320.00 LF	$39.98	$12,793.60
570-1-1	PERFORMANCE TURF	712.09 SY	$2.31	$1,644.93

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,160.00 LF	$25.51	$29,591.60
	Median Component Total			$44,030.13

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	9.00 EA	$5,717.85	$51,460.65
425-1-451	INLETS, CURB, TYPE J-5, <10'	3.00 EA	$7,505.59	$22,516.77
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	128.00 LF	$189.89	$24,305.92
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00 LF	$320.59	$12,823.60
570-1-1	PERFORMANCE TURF	69.10 SY	$2.31	$159.62
	Drainage Component Total			$111,266.56

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	6.00	AS	$340.80	$2,044.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,062.01	$1,062.01
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	6.00	AS	$27.83	$166.98
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,659.74	$4,659.74
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$594.50	$594.50
	Signing Component Total				$8,785.14

Sequence 6 Total $454,782.98

Sequence: 7 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 0.144 MI
760 LF

Description: SR 7 Northbound two lane On-ramp from SR84 westbound. Milling resurfacing and widening

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 30.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.144
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.05 AC	$33,443.72	$35,115.91
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	338.20 CY	$31.19	$10,548.46
	Earthwork Component Total			$45,664.36

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Existing Roadway Pavement Width L/R	0.00 / 11.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	11.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,772.85 SY	$6.83	$12,108.57
285-709	OPTIONAL BASE,BASE GROUP 09	956.49 SY	$28.78	$27,527.78
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	928.63 SY	$7.65	$7,104.02
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	51.07 TN	$157.57	$8,047.10
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	153.22 TN	$157.57	$24,142.88
337-7-83	ASPH CONC FC,TRAFFIC C,FC-	76.61 TN	$147.44	$11,295.38

	12.5,PG 76-22			
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	76.61 TN	$147.44	$11,295.38

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	19.00 EA	$4.00	$76.00
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.14 GM	$377.66	$52.87
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.29 GM	$4,287.03	$1,243.24
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.29 GM	$4,016.39	$1,164.75
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.14 GM	$1,300.59	$182.08
	Roadway Component Total			$104,240.05

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 10.00
New Total Outside Shoulder Width L/R	10.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Existing Paved Outside Shoulder Width L/R	0.00 / 10.00
New Paved Outside Shoulder Width L/R	8.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	703.23 SY	$18.20	$12,798.79
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	844.21 SY	$2.47	$2,085.20
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	37.15 TN	$157.57	$5,853.73
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	27.01 TN	$147.44	$3,982.35
570-1-1	PERFORMANCE TURF	168.84 SY	$2.31	$390.02

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,747.52	LF	$1.87	$3,267.86
104-11	FLOATING TURBIDITY BARRIER	14.39	LF	$11.70	$168.36
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	14.39	LF	$5.16	$74.25
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$1,812.15	$1,812.15
104-18	INLET PROTECTION SYSTEM	1.00	EA	$120.92	$120.92
107-1	LITTER REMOVAL	0.35	AC	$25.78	$9.02
107-2	MOWING	0.35	AC	$51.28	$17.95
	Shoulder Component Total				$30,580.60

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	24.00	LF	$101.49	$2,435.76
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$320.59	$5,129.44
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	2.00	EA	$1,444.17	$2,888.34
570-1-1	PERFORMANCE TURF	58.14	SY	$2.31	$134.30
	Drainage Component Total				$10,587.84

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$340.80	$340.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,062.01	$3,186.03
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$257.11	$257.11
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$27.83	$83.49
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	1.00	AS	$3,600.72	$3,600.72
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$594.50	$594.50
	Signing Component Total				$8,062.65

Sequence 7 Total $199,135.50

Sequence: 8 RSU - Resurfacing, Undivided **Net Length:** 0.224 MI
1,182 LF

Description: SR 7 Northbound two lane On-ramp from SR84 eastbound. Milling and resurfacing.

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	11.00 / 11.00
Structural Spread Rate	110
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	2,889.80	SY	$7.65	$22,106.97
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	158.94	TN	$157.57	$25,044.18
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	238.41	TN	$147.44	$35,151.17

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	30.00	EA	$4.00	$120.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.45	GM	$862.34	$388.05
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.22	GM	$377.66	$83.09
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.45	GM	$4,016.39	$1,807.38
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.45	GM	$4,012.31	$1,805.54
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.22	GM	$1,270.13	$279.43
	Roadway Component Total				$86,785.80

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00

Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,111.00	SY	$6.83	$7,588.13
	Comment: Shoulder L=1000' (w=10')				
285-704	OPTIONAL BASE,BASE GROUP 04	556.00	SY	$18.20	$10,119.20
	Comment: Shoulder L=1000' (w=5')				
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	478.00	SY	$2.84	$1,357.52
	Comment: Shoulder L=860' (w=5')				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	86.00	TN	$147.44	$12,679.84
	Comment: M&R 478sy (1.5") Shoulder 556sy (1.5")				

Erosion Control
Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	22.39	LF	$11.70	$261.96
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	22.39	LF	$5.16	$115.53
104-18	INLET PROTECTION SYSTEM	1.00	EA	$120.92	$120.92
107-1	LITTER REMOVAL	0.54	AC	$25.78	$13.92
107-2	MOWING	0.54	AC	$51.28	$27.69
	Shoulder Component Total				$32,284.72

Sequence 8 Total $119,070.52

Sequence: 9 RSU - Resurfacing, Undivided **Net Length:** 0.055 MI
290 LF

Description: SR 7 Southbound two lane Off-ramp to SR 84 westbound. Milling, resurfacing and widening

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	11.00 / 11.00
Structural Spread Rate	110
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	708.58	SY	$7.65	$5,420.64
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	38.97	TN	$157.57	$6,140.50
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	58.46	TN	$147.44	$8,619.34

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	767.00	SY	$6.83	$5,238.61
	Comment: Inside lane L=300' (w=11) Shoulder L = 300' (w=12)				
285-704	OPTIONAL BASE,BASE GROUP 04	400.00	SY	$18.20	$7,280.00
	Comment: Shoulder 400sy				
285-709	OPTIONAL BASE,BASE GROUP 09	367.00	SY	$28.78	$10,562.26
	Comment: Inside lane 367 sy				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	61.00	TN	$157.57	$9,611.77
	Comment: Inside Lane 367 sy (3")				
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	64.00	TN	$147.44	$9,436.16
	Comment: Inside lane + shldr = 767 sy (1.5")				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	7.00	EA	$4.00	$28.00
710-11-101	PAINTED PAVT	0.11	GM	$862.34	$94.86

	MARK,STD,WHITE,SOLID,6"			
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.11 GM	$4,016.39	$441.80
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.11 GM	$4,012.31	$441.35
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.05 GM	$1,270.13	$63.51
	Roadway Component Total			$63,378.80

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	5.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	161.04	SY	$2.47	$397.77
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	8.86	TN	$157.57	$1,396.07
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	6.44	TN	$147.44	$949.51

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	5.49	LF	$11.70	$64.23
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	5.49	LF	$5.16	$28.33
104-18	INLET PROTECTION SYSTEM	1.00	EA	$120.92	$120.92
107-1	LITTER REMOVAL	0.13	AC	$25.78	$3.35
107-2	MOWING	0.13	AC	$51.28	$6.67
	Shoulder Component Total				$2,966.85

Sequence 9 Total $66,345.65

Sequence: 10 MIS - Miscellaneous Construction

Net Length: 0.000 MI 0 LF

Description: Miscellaneous Construction

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
1	RISK CONTINGENCIES **Comment:** 10% risk contingencies (to assume something for utilities, structures, Geotech, ITS etc. issues)	1.00	LS	$1,500,000.00	$1,500,000.00
	Miscellaneous Component Total				$1,500,000.00

Sequence 10 Total $1,500,000.00

Date: 7/1/2021 4:42:20 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: P59509-9-99-99 **Letting Date:** 01/2099

Description: State Road 7 - From 1800 feet north of I-595 to 1580 feet north of Riverland Road and from 1340 feet south of I-595 to 850 feet south of Oakes Road.

District: 04 **County:** 86 BROWARD **Market Area:** 12 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 1.870 MI

Project Manager: TBD

Version 1-P Project Grand Total **$19,125,935.57**

Description: State Road 7 - From 1800 feet north of I-595 to 1580 feet north of Riverland Road and from 1340 feet south of I-595 to 850 feet south of Oakes Road.

Project Sequences Subtotal			**$15,962,908.73**
102-1	Maintenance of Traffic	8.00 %	$1,277,032.70
101-1	Mobilization	10.00 %	$1,723,994.14
Project Sequences Total			**$18,963,935.57**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	2.00	LS	$6,000.00	$12,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$162,000.00**
Version 1-P Project Grand Total					**$19,125,935.57**

Appendix C – ICE Analysis Stage 1 Forms

ICE FORM

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	136th Ave & SR-84: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C4 - Urban General		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This area is a mix of residential and commercial spaces surrounding the interchange. There is a canal just north of the interchange that is parallel I-595 in the east/west direction. The IKEA shopping center is in the northwest quadrant, a Publix is in the southwest quadrant and a storage unit facility is in the southeast quadrant. The northeast quadrant is a residential area.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks and sidewalks are installed at the interchange. Bike lanes are installed on the eastbound and westbound approaches.				

Major Street Information

Route #:	84	Route Name(s)	SR 84	Milepost	5.804
Existing Control Type	Signal	Existing AADT	28,500	Design Year AADT	34,500
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Minor Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1								
Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
Sidewalks along	One side of the approach	Left-Turn	2				
Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
On-Street Bike Facilities?	Yes	Through	2	Left	659	Left	759
Multi-Use Path?	No	Left-Through-Right	0	Through	1,066	Through	1,054
Scheduled Bus Service?	Yes	Through-Right	0	Right	115	Right	148
Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Approach #2							
Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
Sidewalks along:	One side of the approach	Left-Turn	1				
Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
On-Street Bike Facilities?	No	Through	0	Left	571	Left	1,055
Multi-Use Path?	No	Left-Through-Right	0	Through	577	Through	509
Scheduled Bus Service?	Yes	Through-Right	1	Right	1,714	Right	1,184
Bus Stop on Approach?	No	Right-Turn	2	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	136th Avenue			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	36,500		Design Year AADT	48,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Minor Arterial					Design Speed (mph)	45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	2	Left	115	Left	128
	Multi-Use Path?	No	Left-Through-Right	0	Through	527	Through	426
	Scheduled Bus Service?	No	Through-Right	0	Right	1,013	Right	663
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	2	Left	738	Left	1,360
	Multi-Use Path?	No	Left-Through-Right	0	Through	463	Through	446
	Scheduled Bus Service?	Yes	Through-Right	0	Right	230	Right	271
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study interchange. Over the five year history, 190 total crashes were reported with 52 involving injuries and one fatal crash. There were seven pedestrian crashes and two bicycle crashes. Fifty-one percent of the total crashes were rear-end crashes. Thirteen percent of crashes occurred on wet pavement conditions and 28 percent occurred in dark conditions

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
All-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Signalized Control	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Roundabout	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Median U-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Signalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Unsignalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Jughandle				N/A		See page 4 for Interchange Strategies evaluated.
Displaced Left-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Continuous Green Tee	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Quadrant Roadway	N/A	N/A	N/A			See page 4 for Interchange Strategies evaluated.
Partial MUT	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Other 2 (Type)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
Control Strategy	CAP-X Outputs			SPICE Ranking	Strategy to Be Advanced?	Justification
	V/C Ratio		Multimodal Score			
	AM	PM				
Traditional Diamond (No Build)	1.50	2.30	2.4	4	Yes	No Build conditions show V/C greater than 1 in both AM & PM. PM conditions are more critical. Advance No Build for comparison.
Traditional Diamond* (Alternative)	0.75	0.89	2.4	3	Yes	Addition of lanes to the critical movements improve AM Peak & PM Peak. However, installing additional lanes at intersection may be difficult due to ROW constraints.
Traditional Diamond with Flyover* (+ WBR Connection)	0.78	1.00	2.4	2	Yes	Including a SB to EB flyover and WB to NB connection improves V/C ratio without significantly impacting existing intersections.
Displaced Left Turn* (Interchange)	0.74	0.87	2.4	-	Yes	Including a SB to EB flyover and WB to NB connection improves V/C ratio without significantly impacting existing intersections.
DDI*	0.56	0.57	3.3	1	No	Not feasible. Due to adjacent driveways, the EB through movement must be accommodated through the signal, so benefits are lower and key design features of DDI could not be accommodated.
SPUI*	0.60	0.62	2.4	-	No	SPUI alternative is effective at handling No Build volume. However, there is a significant footprint impact. Not feasible, as major reconstruction of the 3 I-595 bridge overpasses would be necessary.

* Assumed EB & WB Bypass

Note: Displaced Left-turn cannot be analyzed as an interchange.

SPUI cannot be analyzed since there are no SPFs for that strategy.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Flamingo Rd & SR-84: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C4 - Urban General		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This area is a mostly residential with some commercial spaces surrounding the interchange. There is a canal just north of the interchange that is parallel I-595 in the east/west direction. There is a Publix market plaza on the NW quadrant. On the NE quadrant, there is a gas station and various businesses. The SW quadrant is primarily residential, and the SE quadrant is occupied by green houses.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks and sidewalks are installed at the interchange. Bike lanes are installed on the eastbound, westbound and southbound approaches.				

Major Street Information

Route #:	84	Route Name(s)	SR 84	Milepost	6.859
Existing Control Type	Signal	Existing AADT	25,500	Design Year AADT	31,000
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Minor Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	1	Left	579	Left	698
	Multi-Use Path?	No	Left-Through-Right	0	Through	669	Through	597
	Scheduled Bus Service?	No	Through-Right	0	Right	442	Right	615
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Neither side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	1	Left	665	Left	776
	Multi-Use Path?	No	Left-Through-Right	0	Through	174	Through	243
	Scheduled Bus Service?	No	Through-Right	0	Right	703	Right	678
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	823	Route Name(s)	Flamingo Road			Milepost (if app.)	10.83
Existing Control Type	Signal		Existing AADT	40,500		Design Year AADT	51,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Principal Arterial					Design Speed (mph)	45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	3	Left	549	Left	338
	Multi-Use Path?	No	Left-Through-Right	0	Through	833	Through	763
	Scheduled Bus Service?	No	Through-Right	0	Right	936	Right	633
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	721	Left	926
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,013	Through	1,218
	Scheduled Bus Service?	No	Through-Right	0	Right	736	Right	640
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study interchange. Over the five year history, 442 total crashes were reported with zero crashes involving a fatality and 88 involving injuries. Of the total crashes, 75 percent occurred in the eastbound direction. There were zero pedestrian crashes and five bicycle crashes. Sixty percent of the crashes were Rear-end crashes. Twenty-two percent of crashes occurred on wet pavement conditions and 32 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
All-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Signalized Control	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Roundabout	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Median U-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Signalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Unsignalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Jughandle				N/A		See page 4 for Interchange Strategies evaluated.
Displaced Left-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Continuous Green Tee	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Quadrant Roadway	N/A	N/A	N/A			See page 4 for Interchange Strategies evaluated.
Partial MUT	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Other 2 (Type)						

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
Control Strategy	CAP-X Outputs			SPICE Ranking	Strategy to Be Advanced?	Justification
	V/C Ratio		Multimodal Score			
	AM	PM				
Traditional Diamond (No Build)	1.24	1.45	2.4	3	Yes	No Build conditions show V/C greater than 1 in both AM & PM. PM conditions are more critical. Advance No Build for comparison.
Traditional Diamond* (Alternative)	0.72	0.85	2.4	2	Yes	Addition of lanes to the critical movements improve AM & PM Peak conditions V/C operates close to 1.0.
Displaced Left Turn * (Interchange)	0.70	0.79	2.4	-	No	DLT concept shows improvement, however its V/C operations are close to the traditional diamond (TD) alternative making the TD more attractive to consider. Furthermore, there is a significant footprint impact.
DDI*	0.61	0.62	3.3	1	No	DDI provides the greatest operational benefits for both AM & PM peak periods. Reconfiguration not necessary to achieve acceptable v/c; not recommended since cost and impacts would be greater than traditional diamond.
SPUI*	0.60	0.72	2.4	-	No	SPUI alternatives provides operational benefits for both AM & PM peak periods. However, there is an expected significant impact to existing footprint. Not feasible, as major reconstruction of the 3 I-595 bridge overpasses would be necessary.

* Assumed EB Bypass

Note: Displaced Left-turn cannot be analyzed as an interchange.

SPUI cannot be analyzed since there are no SPFs for that strategy.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Flamingo Rd & Broward Blvd: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Plantation		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C3R - Suburban Residential		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This area is primarily residential, the NW, NE and SW quadrants are residential areas. The SE quadrant contains the American Heritage School, Broward Campus.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks and sidewalks are installed on all intersection approaches. Pedestrian and bicycle traffic can be expected due to the proximity of the school and residential areas. Furthermore, there are nearby bus stops on Flamingo Rd north of the intersection and on Broward Blvd east of the intersection.				

Major Street Information

Route #:	NA	Route Name(s)	Flamingo Road	Milepost	NA
Existing Control Type	Signal	Existing AADT	40,500	Design Year AADT	51,000
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Principal Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	3	Left	62	Left	82
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,601	Through	1,596
	Scheduled Bus Service?	No	Through-Right	0	Right	479	Right	504
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	3	Left	513	Left	514
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,983	Through	2,288
	Scheduled Bus Service?	Yes	Through-Right	0	Right	106	Right	116
	Bus Stop on Approach?	Yes	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Broward Boulevard			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	19,000		Design Year AADT	24,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification		Urban Minor Arterial				Design Speed (mph)	45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	2	Left	140	Left	71
	Multi-Use Path?	No	Left-Through-Right	0	Through	152	Through	110
	Scheduled Bus Service?	No	Through-Right	0	Right	244	Right	199
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	2	Left	379	Left	442
	Multi-Use Path?	No	Left-Through-Right	0	Through	100	Through	165
	Scheduled Bus Service?	Yes	Through-Right	0	Right	619	Right	418
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study intersection. Over the five year history, 158 total crashes were reported with 47 involving injuries and zero fatalities. There was one pedestrian crash and one bicycle crash. Sixty-one percent of the total crashes were rear-end crashes. Eighteen percent of crashes occurred on wet pavement conditions and 31 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	0.95	0.85	4.8	3	Yes	Advance No Build for comparison. Intersection LOS E (77.1 sec) is expected in the AM peak per Synchro HCM output, LOS D for PM peak.
Roundabout						
Median U-Turn	1.00	0.97	6.3	1	No	Full median U-turn results greater V/C ratios than No Build makes alternative unfavorable.
RCUT (Signalized)	0.81	0.78	6.3	5	No	Effective V/C ratios however, signalized alternative provides similar benefits with smaller footprint impact.
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.52 (Full) 0.65 (Partial)	0.56 (Full) 0.69 (Partial)	4.8	2	No	Signalized alternative provides effective V/C with smaller impacts to existing conditions.
Continuous Green Tee						
Quadrant Roadway						
Partial MUT	0.86	0.84	6.3	-	No	Effective V/C ratios. However, signalized alternative provides similar benefits with smaller impacts to existing conditions.
Signalized Alt (Added Lanes)	0.85	0.83	4.8	4	Yes	Effective V/C and minimal impact to existing footprint.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Hiatus Rd & SR-84: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C3R - Suburban Residential		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	The areas surrounding the interchange are primarily residential. There is a canal just north of the interchange that is parallel I-595 in the east/west direction. There is a shopping plaza on the SW quadrant while the remaining quadrants are residential zones.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks and sidewalks are installed on all intersection approaches. Bike lanes are installed on all approaches.				

Major Street Information

Route #:	84	Route Name(s)	SR 84	Milepost	7.880
Existing Control Type	Signal	Existing AADT	15,000	Design Year AADT	18,000
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Minor Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	1	Left	626	Left	778
	Multi-Use Path?	No	Left-Through-Right	0	Through	502	Through	456
	Scheduled Bus Service?	No	Through-Right	0	Right	157	Right	287
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Neither side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	1	Left	292	Left	586
	Multi-Use Path?	No	Left-Through-Right	0	Through	113	Through	150
	Scheduled Bus Service?	No	Through-Right	0	Right	551	Right	892
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Hiatus Road			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	20,000		Design Year AADT	25,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Minor Arterial					Design Speed (mph)	45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	2	Left	240	Left	146
	Multi-Use Path?	No	Left-Through-Right	0	Through	386	Through	315
	Scheduled Bus Service?	No	Through-Right	0	Right	510	Right	278
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	2	Left	1,049	Left	669
	Multi-Use Path?	Yes	Left-Through-Right	0	Through	424	Through	552
	Scheduled Bus Service?	No	Through-Right	0	Right	916	Right	837
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study interchange. Over the five year history, 161 total crashes were reported with 47 involving injuries and no fatalities. There were zero pedestrian crashes and one bicycle crash. Of the total crashes at this interchange, 74 percent occurred in the eastbound direction. Fifty-six percent of the total crashes were rear-end crashes. Eighteen percent of crashes occurred on wet pavement conditions and 33 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
All-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Signalized Control	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Roundabout	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Median U-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Signalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Unsignalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Jughandle				N/A		See page 4 for Interchange Strategies evaluated.
Displaced Left-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Continuous Green Tee	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Quadrant Roadway	N/A	N/A	N/A			See page 4 for Interchange Strategies evaluated.
Partial MUT	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Other 2 (Type)						

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
Control Strategy	CAP-X Outputs			SPICE Ranking	Strategy to Be Advanced?	Justification
	V/C Ratio		Multimodal Score			
	AM	PM				
Traditional Diamond (No Build)	1.04	1.34	4.8	3	Yes	No Build conditions perform at V/C ratios greater than one with PM peak being the critical peak.
Traditional Diamond* (Alternative)	0.78	0.88	4.8	2	Yes	Improvement of lane additions minimizes impact and provides V/C improvements. Recommend investigating this alternative further.
Displaced Left Turn* (Interchange)	0.58	0.78	4.8	-	No	Benefits to V/C ratios. However, significant impacts to existing footprint make alternative unfavorable.
DDI*	0.61	0.55	6.7	1	No	Benefits to V/C ratios. However, significant impacts to existing footprint make alternative unfavorable.
SPUI*	0.59	0.56	4.8	-	No	Benefits to V/C ratios. However, not feasible, as major reconstruction of the 3 I-595 bridge overpasses would be necessary.

* Assumed EB Bypass

Note: Displaced Left-turn cannot be analyzed as an interchange.

SPUI cannot be analyzed since there are no SPFs for that strategy.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Hiatus Rd & Broward Blvd: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Plantation		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C3R - Suburban Residential		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This area is primarily residential, there is a canal running parallel to Hiatus Rd in the north-south direction. The churches are located on the NW quadrant and the SW quadrant is a residential zone. The NE quadrant contains electric utility infrastructure while the SE quadrant is a vacant undeveloped lot.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks and sidewalks are installed on all intersection approaches. Bike lane keyhole facilities are installed on all four approaches. Futhermore, there are bus stops on Broward Blvd east and west of the intersection.				

Major Street Information

Route #:	NA	Route Name(s)	Hiatus Road	Milepost	NA
Existing Control Type	Signal	Existing AADT	20,000	Design Year AADT	25,000
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Minor Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	423	Left	432
	Multi-Use Path?	No	Left-Through-Right	0	Through	746	Through	1,202
	Scheduled Bus Service?	No	Through-Right	0	Right	394	Right	349
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	286	Left	174
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,212	Through	995
	Scheduled Bus Service?	No	Through-Right	0	Right	330	Right	224
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Broward Boulevard			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	26,000		Design Year AADT	32,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Minor Arterial					Design Speed (mph)	45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	291	Left	315
	Multi-Use Path?	No	Left-Through-Right	0	Through	637	Through	816
	Scheduled Bus Service?	Yes	Through-Right	0	Right	703	Right	487
	Bus Stop on Approach?	Yes	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	470	Left	568
	Multi-Use Path?	No	Left-Through-Right	0	Through	643	Through	780
	Scheduled Bus Service?	Yes	Through-Right	0	Right	213	Right	207
	Bus Stop on Approach?	Yes	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study intersection. Over the five year history, 141 total crashes were reported with 45 involving injuries and zero fatalities. There was one pedestrian crash and zero bicycle crashes. Forty-four percent of the total crashes were rear-end crashes, while 26 percent were left-turn crashes. Sixteen percent of crashes occurred on wet pavement conditions and 31 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	1.17	1.12	4.8	4	Yes	No Build conditions operating at a V/C ratio > 1. Advance No Build for comparison.
Roundabout						
Median U-Turn	0.97	0.95	6.3	1	No	Significant impact to existing footprint. Not recommended as signalized alternative provides better benefits.
RCUT (Signalized)	1.57	1.81	6.3	3	No	Performs worse than No-Build conditions. Therefore, not recommended for further consideration.
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.44 (Full) 0.54 (PDLT)	0.42 (Full) 0.58 (PDLT)	4.8	2	No	Improved V/C ratios. However, significant impact to existing footprint, when signalized alternative suffices.
Continuous Green Tee						
Quadrant Roadway	0.74	0.77	4.4		No	Significant impact to existing footprint, when signalized alternative suffices.
Partial MUT	0.73	0.66	6.3	-	No	Not recommended as signalized alternative provides similar benefits.
Signalized Alt (Added Lanes)	0.78	0.79	4.8	5	Yes	Provides significant V/C improvements with minor impact to No Build conditions.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Nob Hill Rd & SR-84: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C4 - Urban General		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	The area surrounding the interchange is a mix of residential, commercial, and public agencies. There is a canal just north of the interchange that is parallel I-595 in the east/west direction. The NE and NW quadrant are residential zones. The SW quadrant is a commercial area that contains a gas station and a Burger King. The SE quadrant holds the Davie Police Department and the Fire Rescue Station.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks and sidewalks are installed on all approaches at the interchange. Bike lanes are installed on all approaches.				

Major Street Information

Route #:	84	Route Name(s)	SR 84	Milepost	8.920
Existing Control Type	Signal	Existing AADT	20,500	Design Year AADT	26,000
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Minor Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	1	Left	467	Left	335
	Multi-Use Path?	No	Left-Through-Right	0	Through	549	Through	570
	Scheduled Bus Service?	No	Through-Right	0	Right	290	Right	321
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Neither side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	0	Left	567	Left	704
	Multi-Use Path?	No	Left-Through-Right	1	Through	93	Through	162
	Scheduled Bus Service?	No	Through-Right	0	Right	755	Right	1,080
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Nob Hill Road			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	35,000		Design Year AADT	42,500
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Minor Arterial					Design Speed (mph)	45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	2	Left	325	Left	298
	Multi-Use Path?	No	Left-Through-Right	0	Through	511	Through	533
	Scheduled Bus Service?	No	Through-Right	0	Right	892	Right	667
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	2	Left	1,183	Left	837
	Multi-Use Path?	No	Left-Through-Right	0	Through	652	Through	691
	Scheduled Bus Service?	No	Through-Right	0	Right	310	Right	364
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study interchange. Over the five year history, 256 total crashes were reported with 59 involving injuries and no fatalities. There was one pedestrian crash and two bicycle crashes. Of the total crashes at this interchange, 72 percent occurred in the eastbound direction. Sixty-eight percent of the total crashes were rear-end crashes. Eighteen percent of crashes occurred on wet pavement conditions and 26 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
All-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Signalized Control	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Roundabout	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Median U-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Signalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Unsignalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Jughandle				N/A		See page 4 for Interchange Strategies evaluated.
Displaced Left-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Continuous Green Tee	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Quadrant Roadway	N/A	N/A	N/A			See page 4 for Interchange Strategies evaluated.
Partial MUT	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Other 2 (Type)						

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
Control Strategy	CAP-X Outputs			SPICE Ranking	Strategy to Be Advanced?	Justification
	V/C Ratio		Multimodal Score			
	AM	PM				
Traditional Diamond (No Build)	1.46	1.63	2.4	3	Yes	No Build conditions perform at V/C ratios greater than one with PM peak being the critical peak. Advance No Build for comparison.
Traditional Diamond* (Alternative)	1.00	0.98	2.4	2	Yes	Improvement of lane additions minimizes impact and provides improvements. Recommended for further analysis since other alternatives have significant impacts to surrounding area.
Displaced Left Turn* (Interchange)	0.70	0.70	2.4	-	No	Not recommended since cost and ROW needs are significant, and impacts would be greater than improved traditional diamond.
DDI*	0.80	0.68	3.3	1	No	Not recommended since cost and ROW needs are significant, and impacts would be greater than improved traditional diamond.
SPUI*	0.75	0.69	2.4	-	No	Not recommended since cost and ROW needs are significant, and impacts would be greater than improved traditional diamond. Furthermore, not feasible, as major reconstruction of the 3 I-595 bridge overpasses would be necessary.

* Assumed EB Bypass

Note: Displaced Left-turn cannot be analyzed as an interchange.

SPUI cannot be analyzed since there are no SPFs for that strategy.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Nob Hill Rd & Broward Blvd: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Plantation		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C4 - Urban General		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This area is a mix of residential and commercial zones. The NE and NW quadrants are commercial with various businesses that include a bank and gas station while the SE and SW quadrants are residential areas. There is a canal running parallel to Broward Blvd in the east-west direction.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks and sidewalks are installed on all intersection approaches. Bike lanes are installed on the northbound approach.				

Major Street Information

Route #:	NA	Route Name(s)	Nob Hill Road	Milepost	NA
Existing Control Type	Signal	Existing AADT	35,000	Design Year AADT	42,500
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Minor Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0				
	On-Street Bike Facilities?	Yes	Through	3	Left	216	Left	207
	Multi-Use Path?	No	Left-Through-Right	0	Through	953	Through	1,314
	Scheduled Bus Service?	No	Through-Right	0	Right	622	Right	373
	Bus Stop on Approach?	No	Right-Turn	2	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0				
	On-Street Bike Facilities?	No	Through	3	Left	381	Left	240
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,487	Through	1,108
	Scheduled Bus Service?	No	Through-Right	0	Right	205	Right	172
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Broward Boulevard			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	25,000		Design Year AADT	30,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Minor Arterial					Design Speed (mph)	45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0				
	On-Street Bike Facilities?	No	Through	3	Left	147	Left	208
	Multi-Use Path?	No	Left-Through-Right	0	Through	857	Through	860
	Scheduled Bus Service?	Yes	Through-Right	0	Right	189	Right	186
	Bus Stop on Approach?	Yes	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0				
	On-Street Bike Facilities?	No	Through	3	Left	378	Left	654
	Multi-Use Path?	No	Left-Through-Right	0	Through	759	Through	1,100
	Scheduled Bus Service?	Yes	Through-Right	0	Right	226	Right	359
	Bus Stop on Approach?	Yes	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through					
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study intersection. Over the five year history, 261 total crashes were reported with 73 involving injuries and zero fatalities. There were zero pedestrian crashes and zero bicycle crashes. Fifty-five percent of the total crashes were rear-end crashes, while 10 percent were left-turn crashes. Sixteen percent of crashes occurred on wet pavement conditions and 30 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy			Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	0.81	0.82	2.4	3	Yes	No Build V/C is acceptable and is comparable to other alternatives. No Build with optimization is recommended since it would have least impacts and
Roundabout						
Median U-Turn	0.81	0.96	3.1	1	No	Provides minimal added benefit over No Build.
RCUT (Signalized)	1.44	1.82	3.1	4	No	RCUT expected V/C > 1, No Build is expected to perform better, therefore not recommended for advancement.
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.48 (Full) 0.57 (PDLT)	0.46 (Full) 0.62 (PDLT)	2.4	2	No	DLT & PDLT provides benefit, however existing signal configuration appears to suffice with minimal impacts.
Continuous Green Tee						
Quadrant Roadway						
Partial MUT	0.65	0.68	3.1	-	No	PMUT provides benefit, however existing signal configuration appears to suffice with minimal impacts.
Other 2 (Type)						

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Pine Island Rd & Nova Dr: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C3R - Suburban Residential		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This area mainly consists of residential zones. The NE, NW and SW quadrants are residential communities. There is a church located in the SE quadrant. There is a canal running along east side of Pine Island Rd in the north-south direction.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks are installed on the southbound approach and the eastbound approach. Bike lanes are installed on the southbound approach.				

Major Street Information

Route #:	NA	Route Name(s)	Pine Island Road	Milepost	NA
Existing Control Type	Signal	Existing AADT	42,000	Design Year AADT	50,500
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Minor Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	No	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	3	Left	163	Left	271
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,581	Through	1,284
	Scheduled Bus Service?	No	Through-Right	0	Right	332	Right	251
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	319	Left	283
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,334	Through	1,613
	Scheduled Bus Service?	No	Through-Right	0	Right	187	Right	317
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Nova Drive			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	11,000		Design Year AADT	15,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Major Collector					Design Speed (mph)	35
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	0	Left	418	Left	233
	Multi-Use Path?	No	Left-Through-Right	0	Through	240	Through	121
	Scheduled Bus Service?	No	Through-Right	1	Right	259	Right	216
	Bus Stop on Approach?	No	Right-Turn	0	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	No	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	0	Left	243	Left	289
	Multi-Use Path?	No	Left-Through-Right	0	Through	77	Through	189
	Scheduled Bus Service?	No	Through-Right	1	Right	132	Right	218
	Bus Stop on Approach?	No	Right-Turn	0	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2014-2018) was collected for the study intersection. Over the five year history, 29 total crashes were reported with 12 involving injuries and one fatal crash. There were zero pedestrian crashes and one bicycle crash. Forty-five percent of the total crashes were rear-end crashes, while 24 percent were left-turn crashes. Fourteen percent of crashes occurred on wet pavement conditions and 52 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	1.10	1.00	4.8	4	Yes	No Build conditions perform just at or above V/C greater than 1. Advance No Build for comparison.
Roundabout						
Median U-Turn	0.92	0.82	6.3	1	No	Provides similar improvement to v/c as adding lanes to the existing signalized intersection, but would impact access and reroute traffic unnecessarily.
RCUT (Signalized)	0.91	0.76	6.3	5	No	Provides similar improvement to v/c as adding lanes to the existing signalized intersection, but would impact access and reroute traffic unnecessarily.
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.57 (Full) 0.61 (PDLT)	0.52 (Full) 0.57 (PDLT)	4.8	2	No	Benefits in V/C Ratio, however lane additions appear to suffice with minimal impacts.
Continuous Green Tee						
Quadrant Roadway						
Partial MUT	0.69	0.70	6.3	-	No	Benefits in V/C Ratio, however lane additions appear to suffice with minimal impacts.
Traffic Signal (Alternative)	0.94	0.85	4.8	3	Yes	Lane additions to No Build conditions provides improved V/C conditions.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Pine Island Rd & SR-84: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C4 - Urban General		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This is an interchange. The area surrounding the interchange is mostly commercial. There is a canal just north of the interchange that is parallel I-595 in the east/west direction The SE quadrant is a residential zone while the NE quadrant holds apartment complexes and a hotel. The NW and SW quadrant hold commercial businesses.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks and sidewalks are installed on all approaches at the interchange. Bike lanes are installed on the southbound, eastbound and westbound approaches.				

Major Street Information								
Route #:	84	Route Name(s)	SR 84				Milepost	9.950
Existing Control Type	Signal		Existing AADT	23,500		Design Year AADT		31,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)				
Primary Functional Classification	Urban Minor Arterial					Design Speed (mph)		45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]		

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	1	Left	969	Left	991
	Multi-Use Path?	No	Left-Through-Right	0	Through	861	Through	742
	Scheduled Bus Service?	No	Through-Right	0	Right	659	Right	680
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Neither side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	0	Left	475	Left	999
	Multi-Use Path?	No	Left-Through-Right	0	Through	656	Through	993
	Scheduled Bus Service?	No	Through-Right	1	Right	1,122	Right	1,384
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Pine Island Road			Milepost (if app.)	NA
Existing Control Type		Signal	Existing AADT	52,000		Design Year AADT	65,500
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification		Urban Minor Arterial				Design Speed (mph)	45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	2	Left	695	Left	502
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,015	Through	1,125
	Scheduled Bus Service?	No	Through-Right	0	Right	909	Right	488
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	2	Left	1,179	Left	763
	Multi-Use Path?	No	Left-Through-Right	0	Through	901	Through	968
	Scheduled Bus Service?	No	Through-Right	0	Right	820	Right	870
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study interchange. Over the five year history, 481 total crashes were reported with 124 involving injuries and no fatalities. There were three pedestrian crashes and one bicycle crash. Of the total crashes at this interchange, 66 percent occurred in the eastbound direction. Fifty-nine percent of the total crashes were rear-end crashes. Fourteen percent of crashes occurred on wet pavement conditions and 30 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
All-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Signalized Control	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Roundabout	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Median U-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Signalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Unsignalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Jughandle				N/A		See page 4 for Interchange Strategies evaluated.
Displaced Left-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Continuous Green Tee	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Quadrant Roadway	N/A	N/A	N/A			See page 4 for Interchange Strategies evaluated.
Partial MUT	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Other 2 (Type)						

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
Control Strategy	CAP-X Outputs			SPICE Ranking	Strategy to Be Advanced?	Justification
	V/C Ratio		Multimodal Score			
	AM	PM				
Traditional Diamond (No Build)	1.71	2.08	2.4	4	Yes	No Build conditions with significantly high V/C ratios. Advance No Build for comparison.
Traditional Diamond* (Alternative)	1.07	1.64	2.4	3	Yes	Added lanes to traditional diamond improves V/C ratios. Recommend this alternative as innovative intersections have a significant impact to available ROW.
Traditional Diamond with Flyover* (+ WBR Connection)	0.79	1.10	2.4	2	No	Including a SB to EB flyover and WB to NB connection improves V/C ratio without significantly impacting existing intersections. Not recommended for advancement due to significant ROW impacts to businesses in SE quadrant, and significant impacts to access for properties along Pine Island Rd north of SR 84.
Displaced Left Turn* (Interchange)	0.95	1.34	2.4	-	No	Does not fully address V/C > 1 and not recommended since cost and ROW needs are significant, and impacts would be greater than improved traditional diamond.
DDI*	0.96	0.92	3.3	1	No	not recommended since cost and ROW needs are significant, and impacts would be greater than improved traditional diamond.
SPUI*	0.95	1.10	2.4	-	No	Does not fully address V/C > 1 and not recommended since cost and ROW needs are significant, and impacts would be greater than improved traditional diamond. Furthermore, not feasible, as major reconstruction of the 3 I-595 bridge overpasses would be necessary.

* Assumed EB & WB Bypass

Note: Displaced Left-turn cannot be analyzed as an interchange.

SPUI cannot be analyzed since there are no SPFs for that strategy.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Pine Island Rd & Peters Rd: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Plantation		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C4 - Urban General		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	The area surrounding this intersection is primarily commercial. It is a T-intersection with a north, south, and east leg. Peters Road does not extend west of Pine Island Road. Along the west side of Pine Island Road is a golf course and residential area. The NE quadrant holds corporate offices and businesses while the SE quadrant holds a restaurant and additional businesses.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	There are crosswalks on the southbound and westbound approach. Bike lanes are installed on the northbound and southbound approaches.				

Major Street Information								
Route #:	NA	Route Name(s)	Pine Island Road				Milepost	NA
Existing Control Type	Signal		Existing AADT	52,000		Design Year AADT		65,500
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)				
Primary Functional Classification	Urban Minor Arterial					Design Speed (mph)		45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]		

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	Both sides of the approach	Left-Turn	0				
	Crosswalk on Approach?	No	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	0	Left	0
	Multi-Use Path?	No	Left-Through-Right	0	Through	2,426	Through	3,073
	Scheduled Bus Service?	Yes	Through-Right	0	Right	609	Right	601
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	722	Left	705
	Multi-Use Path?	No	Left-Through-Right	0	Through	2,408	Through	2,032
	Scheduled Bus Service?	No	Through-Right	0	Right	0	Right	0
	Bus Stop on Approach?	No	Right-Turn	0	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Peters Road			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	19,000		Design Year AADT	25,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Major Collector					Design Speed (mph)	40
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	0	Left	410	Left	450
	Multi-Use Path?	No	Left-Through-Right	0	Through	0	Through	0
	Scheduled Bus Service?	Yes	Through-Right	0	Right	407	Right	521
	Bus Stop on Approach?	Yes	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2014-2018) was collected for the study intersection. Over the five year history, 118 total crashes were reported with 27 involving injuries and one fatal crash. There were zero pedestrian crashes and zero bicycle crashes. Fifty-six percent of the total crashes were rear-end crashes. Eleven percent of crashes occurred on wet pavement conditions and 27 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	0.92	1.07	2.4	3	Yes	V/C ratios in No Build > 1. Advance No Build for comparison.
Roundabout						
Median U-Turn						
RCUT (Signalized)						
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.67 (PDLT)	0.79 (PDLT)	2.4	2	No	Not recommended since modification impacts are greater than adding turn lanes to signalized intersections.
Continuous Green Tee	0.78	0.91	1.5	1	No	CAPX analysis show good V/C ratios. However, Synchro results show SBL and NBT are critical movements which aren't improved with Green T.
Quadrant Roadway						
Partial MUT						
Signalized Control (Alternative)	0.88	1.02	2.4	3	Yes	Recommend for consideration as improvement is observed when compared to No Build and minimal impact to existing footprint.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Pine Island Rd & SW 6th Ct: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Plantation		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C4 - Urban General		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This area is a mix of commercial and residential zones. The NW and SW quadrants are residential properties. SW 6th Court west of Pine Island Road provides access to a very large residential neighborhood and Jacaranda Country Club. There is a medical/office building in the NE corner and a fitness center building in the SE corner.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	There are crosswalks installed on all approaches. Bike lanes are installed in the northbound and southbound direction.				

Major Street Information

Route #:	NA	Route Name(s)	Pine Island Road	Milepost	NA
Existing Control Type	Signal	Existing AADT	52,000	Design Year AADT	65,500
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Minor Arterial			Design Speed (mph)	35
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	99	Left	175
	Multi-Use Path?	No	Left-Through-Right	0	Through	2,114	Through	2,840
	Scheduled Bus Service?	Yes	Through-Right	0	Right	396	Right	293
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	2	Left	165	Left	116
	Multi-Use Path?	No	Left-Through-Right	0	Through	2,772	Through	1,922
	Scheduled Bus Service?	Yes	Through-Right	1	Right	30	Right	54
	Bus Stop on Approach?	Yes	Right-Turn	0	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	SW 6th Court			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	9,000		Design Year AADT	14,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Minor Collector					Design Speed (mph)	30
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Neither side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	0	Left	60	Left	38
	Multi-Use Path?	No	Left-Through-Right	0	Through	33	Through	29
	Scheduled Bus Service?	No	Through-Right	1	Right	223	Right	110
	Bus Stop on Approach?	No	Right-Turn	0	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	0	Left	190	Left	493
	Multi-Use Path?	No	Left-Through-Right	0	Through	17	Through	43
	Scheduled Bus Service?	No	Through-Right	1	Right	54	Right	247
	Bus Stop on Approach?	No	Right-Turn	0	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2014-2018) was collected for the study intersection. Over the five year history, 96 total crashes were reported with 24 involving injuries and zero fatalities. There were zero pedestrian crashes and one bicycle crash. Forty-seven percent of the total crashes were rear-end crashes. Nineteen percent of crashes occurred on wet pavement conditions and 22 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	1.03	1.16	2.4	3	Yes	No Build conditions operate at V/C > 1. Advance No Build for comparison.
Roundabout						
Median U-Turn	0.79	1.07	3.1	1	No	Improvement in V/C ratio, however, implementation would require significant impact to existing footprint when signalized alternative suffices.
RCUT (Signalized)	0.78	1.08	3.1	5	No	V/C ratio remains > 1 in PM peak. Significant footprint impact, therefore not recommended for advancement.
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.64 (Full) 0.76 (PDLT)	0.83 (Full) 0.87 (PDLT)	2.4	2	No	Improvement of V/C ratios, however, implementation would require significant impact to existing footprint when signalized alt suffices.
Continuous Green Tee						
Quadrant Roadway						
Partial MUT	0.86	0.97	3.1	-	No	Improvement in V/C ratio, however, implementation would require significant impact to existing footprint when signalized alt suffices.
Traffic Signal (Alternative)	0.97	1.09	2.4	3	Yes	Lane additions improves V/C ratio. Furthermore, it has least impacts to surrounding area, therefore it is recommended for further evaluation.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Davie Rd & SR-84: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C3C - Suburban Commercial		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This is an interchange in a commercial area. The interchange provides access to Davie Road south of SR 84. A canal runs parallel to I-595 in the east/west direction along the north side of the interchange. The northern quadrants of the interchange are residential and not accessible through the interchange. There is a cemetery in the SW quadrant and a credit union and park-and-ride lot in the SE quadrant.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	There are crosswalks installed on all approaches. There are bike lanes installed on the eastbound and northbound approaches.				

Major Street Information

Route #:	84	Route Name(s)	SR 84	Milepost	12.445
Existing Control Type	Signal	Existing AADT	29,000	Design Year AADT	38,000
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Minor Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	One side of the approach	Left-Turn	0				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	0	Left	74	Left	261
	Multi-Use Path?	No	Left-Through-Right	0	Through	411	Through	612
	Scheduled Bus Service?	No	Through-Right	1	Right	1,458	Right	1,388
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	2	Left	1,525	Left	2,025
	Multi-Use Path?	No	Left-Through-Right	0	Through	2,017	Through	2,322
	Scheduled Bus Service?	No	Through-Right	0	Right	0	Right	0
	Bus Stop on Approach?	No	Right-Turn	0	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Davie Road			Milepost (if app.)	NA
Existing Control Type		Signal		Existing AADT	46,500	Design Year AADT	61,000
Design Vehicle		Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification			Urban Minor Arterial			Design Speed (mph)	35
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	0	Left	1,622	Left	1,525
	Multi-Use Path?	No	Left-Through-Right	0	Through	0	Through	0
	Scheduled Bus Service?	Yes	Through-Right	0	Right	1,196	Right	1,229
	Bus Stop on Approach?	No	Right-Turn	2	Daily Truck %		2.0%	
Approach #2	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study interchange. Over the five year history, 475 total crashes were reported with 104 involving injuries and two fatal crashes. There were zero pedestrian or bicycle crashes. Forty percent of the total crashes were rear-end crashes. Twenty-one percent of crashes occurred on wet pavement conditions and 26 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
All-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Signalized Control	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Roundabout	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Median U-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Signalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Unsignalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Jughandle				N/A		See page 4 for Interchange Strategies evaluated.
Displaced Left-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Continuous Green Tee	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Quadrant Roadway	N/A	N/A	N/A			See page 4 for Interchange Strategies evaluated.
Partial MUT	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Other 2 (Type)						

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
Control Strategy	CAP-X Outputs			SPICE Ranking	Strategy to Be Advanced?	Justification
	V/C Ratio		Multimodal Score			
	AM	PM				
Traditional Diamond (No Build)	1.91	2.64	4.8	3	Yes	No Build conditions V/C Ratio > 1. Advance No Build for comparison.
Traditional Diamond* (Alternative)	1.84	2.03	4.8	2	Yes	Lane improvements provide minor benefits when compared to No-Build. Recommended to further evaluation as concept is less impactful when compared to other strategies.
Displaced Left Turn* (Interchange)	1.73	1.99	4.8	-	No	Due to SR 84 WB constraint at Sewell Lock Park, allowable space under I-595 bridge, and need to still accommodate an EB Thru movement thru the signal, this alternative is not physically feasible.
DDI*	1.78	2.01	6.7	1	No	Alternative is similar to DLT. Due to SR 84 WB constraint at Sewell Lock Park, allowable space under I-595 bridge, and need to still accommodate an EB Thru movement thru the signal, this alternative is not physically feasible. Since this could not be designed as a typical DDI configuration benefits would not be as high as shown here from CAP-X.
SPUI*	1.84	2.07	4.8	-	No	Does not fully address V/C > 1 and not feasible, as major reconstruction of the 3 I-595 bridge overpasses would be necessary.

* Assumed EB Bypass

Note: 3-Legged intersection analyzed with lanes in SB apporach due to CAP-X limitations and constraints.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Davie Rd & Nova Dr: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C3C - Suburban Commercial		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This area is mostly commercial. The NW quadrant holds a McDonald's. The NE quadrant holds a Speedway gas station. The SE quadrant holds a bank and CVS. Lastly, the SW quadrant holds a technical college and high school.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	There are crosswalks installed on all approaches. Bike lanes are provided along Davie Road in both directions.				

Major Street Information								
Route #:	NA	Route Name(s)	Davie Road				Milepost	NA
Existing Control Type	Signal		Existing AADT	46,500		Design Year AADT		61,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)				
Primary Functional Classification	Urban Minor Arterial					Design Speed (mph)		35
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]		

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	2	Left	294	Left	105
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,280	Through	1,171
	Scheduled Bus Service?	Yes	Through-Right	0	Right	102	Right	130
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	2	Left	265	Left	427
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,278	Through	1,444
	Scheduled Bus Service?	Yes	Through-Right	0	Right	1,437	Right	1,330
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Nova Drive			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	11,000		Design Year AADT	34,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Minor Collector					Design Speed (mph)	35
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	0	Left	575	Left	714
	Multi-Use Path?	No	Left-Through-Right	0	Through	138	Through	242
	Scheduled Bus Service?	Yes	Through-Right	1	Right	271	Right	350
	Bus Stop on Approach?	Yes	Right-Turn	0	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	1	Left	124	Left	128
	Multi-Use Path?	No	Left-Through-Right	0	Through	263	Through	238
	Scheduled Bus Service?	No	Through-Right	1	Right	568	Right	312
	Bus Stop on Approach?	No	Right-Turn	0	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2014-2018) was collected for the study intersection. Over the five year history, 86 total crashes were reported with 16 involving injuries and zero fatalities. There was one pedestrian crash and zero bicycle crashes. Forty-two percent of the total crashes were rear-end crashes. Nineteen percent of crashes occurred on wet pavement conditions and 22 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	1.46	1.29	4.8	4	Yes	No Build conditions operate at V/C > 1. Advance No Build for comparison.
Roundabout	3.07 (2x2) 5.17 (2NSx1EW)	4.04(2x2) 6.00 (2NSx1EW)	5.6	1	No	Roundabout alternatives result in worsened conditions.
Median U-Turn						
RCUT (Signalized)	1.24	1.41	6.3	5	No	RCUT performs poorer than No Build and would have a significant impact to footprint.
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.66 (Full) 0.86 (PDL)	0.66 (Full) 0.78 (PDL)	4.8	2	No	DLT options provides improvement. However, would have a significant impact to footprint.
Continuous Green Tee						
Quadrant Roadway						
Partial MUT	1.06	1.00	6.3	-	No	PMUT does not significantly improve conditions when compared to No Build and would have a significant impact to footprint.
Signalized Control (Alternative)	1.02	0.89	4.8	3	Yes	Minimal lane additions provide noticeable improvement. This option has least impacts to surrounding area, thus recommended for further

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	SR7 & Oakes Rd: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C3C - Suburban Commercial		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	The area surrounding the intersection is primarily industrial. There are office and industrial buildings in the SW and NW corners, as well as a Town of Davie Fire Station in the NW corner, and a landfill along the east side of SR 7/US-441. The intersection provides access to the Florida 595 Truck Stop located NW of the intersection from Oakes Road. The intersection is a 3-leg intersection; Oakes Road does not extend east of				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	There is a crosswalk installed in the northbound direction. Bike lanes are not installed on any approach. There is sidewalk along one side of Oakes Road, and sidewalk along one side of SR 7 south of Oakes Road. There is a bus stop on the east side of SR 7 at the intersection.				

Major Street Information

Route #:	SR 7	Route Name(s)	SR-7/US-441	Milepost	7.095
Existing Control Type	Signal	Existing AADT	63,500	Design Year AADT	83,500
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Principal Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	135	Left	109
	Multi-Use Path?	No	Left-Through-Right	0	Through	3,250	Through	3,626
	Scheduled Bus Service?	Yes	Through-Right	0	Right	0	Right	0
	Bus Stop on Approach?	Yes	Right-Turn	0	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Neither side of the approach	Left-Turn	0				
	Crosswalk on Approach?	No	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	3	Left	0	Left	0
	Multi-Use Path?	No	Left-Through-Right	0	Through	3,103	Through	2,830
	Scheduled Bus Service?	Yes	Through-Right	0	Right	651	Right	321
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Oakes Rd			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	10,000		Design Year AADT	13,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification		Urban Local				Design Speed (mph)	30
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	No	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	0	Left	418	Left	653
	Multi-Use Path?	No	Left-Through-Right	0	Through	0	Through	0
	Scheduled Bus Service?	No	Through-Right	0	Right	124	Right	123
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study intersection. Over the five year history, 153 total crashes were reported with 34 involving injuries and three fatal crashes. There was one pedestrian crashes and zero bicycle crashes. Forty-six percent of the total crashes were rear-end crashes. Sixteen percent of crashes occurred on wet pavement conditions and 27 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	1.05	1.23	4.8	3	Yes	No Build conditions V/C ratio > 1. Advance No Build for comparison.
Roundabout						
Median U-Turn						
RCUT (Signalized)	0.79	0.94	6.3	5	No	Alternative provides benefits, however, with significant truck traffic using Oakes Road to turn left onto SR 7, it is not feasible to divert large volume of trucks on SR 7
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.86 (PDLT)	0.90 (PDLT)	4.8	2	No	Alternative provides theoretical benefits, however, it does not address long delays and queues on Oakes Rd for truck traffic turning left onto SR 7.
Continuous Green Tee	0.82	0.82	3.0	1	No	Alternative provides theoretical benefits, however, not feasible, since it does not accommodate a key movement for vehicles from Oakes Rd to turn left and
Quadrant Roadway	0.82	0.90	4.4		Yes	Recommended for further evaluation since it could improve operations and provide a more direct route for trucks turning left from Oakes Rd.
Partial MUT						
Signalized Control (Alternative)	0.91	1.01	4.8	4	Yes	Recommended for further evaluation due to improved V/C ratio outcome with minimal impact to existing footprint.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	SR7 & Riverland Rd: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Fort Lauderdal		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C4 - Urban General		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	The area is mainly commercial. A 7-Eleven is located on the NW. A Shell gas station is located on the NE. A Storage facility is located in the SE. Various businesses are in a plaza on the SW. Riverland Road provides access to large residential neighborhoods and elementary and middle schools located east and west of the SR 7 intersection. Also, there is a designated school zone through the intersection along SR 7.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks are installed on all approaches. There is sidewalk along both sides of all 4 approaches. Bike lane keyholes on the NB and SB approaches and there is a bus stop on the east side of SR 7 at the intersection.				

Major Street Information

Route #:	7	Route Name(s)	SR-7/US-441	Milepost	8.512
Existing Control Type	Signal	Existing AADT	61,000	Design Year AADT	77,000
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Principal Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	170	Left	241
	Multi-Use Path?	No	Left-Through-Right	0	Through	2,768	Through	2,903
	Scheduled Bus Service?	Yes	Through-Right	0	Right	481	Right	676
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	98	Left	99
	Multi-Use Path?	No	Left-Through-Right	0	Through	2,619	Through	2,476
	Scheduled Bus Service?	Yes	Through-Right	0	Right	72	Right	135
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Riverland Road			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	14,000		Design Year AADT	18,000
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Major Collector					Design Speed (mph)	35
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	1	Left	228	Left	190
	Multi-Use Path?	No	Left-Through-Right	0	Through	67	Through	61
	Scheduled Bus Service?	No	Through-Right	0	Right	301	Right	132
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	0	Left	703	Left	497
	Multi-Use Path?	No	Left-Through-Right	0	Through	58	Through	99
	Scheduled Bus Service?	Yes	Through-Right	1	Right	190	Right	156
	Bus Stop on Approach?	No	Right-Turn	0	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study intersection. Over the five year history, 190 total crashes were reported with 52 involving injuries and one fatal crash. There were seven pedestrian crashes and two bicycle crashes. Fifty-one percent of the total crashes were rear-end crashes. Thirteen percent of crashes occurred on wet pavement conditions and 28 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	1.11	1.08	4.8	2	Yes	No Build conditions V/C ratio > 1. Advance No Build for comparison.
Roundabout						
Median U-Turn						
RCUT (Signalized)	1.07	0.99	6.3	4	No	Alternative provides theoretical benefits, however, not recommended due to heavy EB & WB left turn volume of traffic.
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.77 (PDLT)	0.69 (PDLT)	4.8	1	No	Alternative provides theoretical benefits, however, does not fit within context of the area and would have significant ROW impacts, also challenging for large
Continuous Green Tee						
Quadrant Roadway						
Partial MUT	0.86	0.74	6.3	-	No	Alternative provides theoretical benefits, however, not recommended due to heavy left turn volume of traffic and ROW impacts expected to provide large
Signalized Control (Alternative)	1.06	0.95	4.8	2	Yes	Recommended for further evaluation due to improved V/C ratio outcome with minimal impact to existing footprint.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	University Dr & Peters Rd: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Plantation		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C4 - Urban General		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	The area surrounding the intersection is partially commercial and residential. The west side of University Drive is commercial. A Wells Fargo Bank and Publix is located on the NW quadrant. A Chevron and the Plantation Commons shopping center is located on the SW quadrant. The NE and SE quadrants are residential areas.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks are installed on all approaches. Bike lanes are installed on the southbound and northbound approaches. There is sidewalk along both sides of all 4 approaches. Also there are bus stops on all 4 approaches at the intersection.				

Major Street Information

Route #:	817	Route Name(s)	University Drive	Milepost	9.264
Existing Control Type	Signal	Existing AADT	81,500	Design Year AADT	107,000
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Principal Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	543	Left	409
	Multi-Use Path?	No	Left-Through-Right	0	Through	2,750	Through	2,711
	Scheduled Bus Service?	Yes	Through-Right	0	Right	836	Right	879
	Bus Stop on Approach?	Yes	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	3	Left	344	Left	359
	Multi-Use Path?	No	Left-Through-Right	0	Through	3,465	Through	3,215
	Scheduled Bus Service?	Yes	Through-Right	0	Right	186	Right	128
	Bus Stop on Approach?	Yes	Right-Turn	1	Daily Truck %		2.0%	

Minor Street Information							
Route #:	NA	Route Name(s)	Peters Road			Milepost (if app.)	NA
Existing Control Type	Signal		Existing AADT	18,000		Design Year AADT	23,500
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Major Collector					Design Speed (mph)	40
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	2	Left	260	Left	294
	Multi-Use Path?	No	Left-Through-Right	0	Through	480	Through	423
	Scheduled Bus Service?	Yes	Through-Right	0	Right	687	Right	1,030
	Bus Stop on Approach?	Yes	Right-Turn	2	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	2	Left	1,028	Left	897
	Multi-Use Path?	No	Left-Through-Right	0	Through	582	Through	441
	Scheduled Bus Service?	Yes	Through-Right	0	Right	447	Right	504
	Bus Stop on Approach?	Yes	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study intersection. Over the five year history, 476 total crashes were reported with 117 involving injuries and two fatal crash. There were four pedestrian crashes and zero bicycle crashes. Eighteen percent of the total crashes were rear-end crashes. Thirteen percent of crashes occurred on wet pavement conditions and 26 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled						
All-Way Stop-Controlled						
Signalized Control	1.50	1.44	2.4	3	Yes	No Build conditions V/C ratio > 1. Advance No Build for comparison.
Roundabout						
Median U-Turn	1.53	1.44	3.1	1	No	Not recommended due to heavy left turn volume of traffic and ROW impacts expected to provide large downstream signalized intersections for u-turns.
RCUT (Signalized)	1.81	1.66	3.4	5	No	Not recommended due to heavy left turn volume of traffic and ROW impacts expected to provide large downstream signalized intersections for u-turns.
RCUT (Unsignalized)						
Jughandle						
Displaced Left-Turn	0.80 (Full) 0.96 (PDLT)	0.72 (Full) 0.97 (PDLT)	2.4	2	Yes	Alternative provides benefits but has ROW and access impacts.
Continuous Green Tee						
Quadrant Roadway						
Partial MUT	1.11	1.15	3.1	-	No	Not recommended due to heavy left turn volume of traffic and ROW impacts expected to provide large downstream signalized intersections for u-turns.
Signal (1) Overpass Left (2)	1.47 (1) 1.11 (2-Main) 0.86 (2-Ovrpss)	1.42 (1) 1.23 (2-Main) 0.71 (2-Ovrpss)	2.4	4	Yes	(1) Added lanes provide minor V/C improvements. (2) Alternative provides benefits but has ROW and access impacts.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms can be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	Universtiy Dr & SR-84: ACS Along I-595		FDOT Project #	441954-1-12-01	
Submitted By	Antonio Fuentes	Agency/Company	RS&H	Date	7/6/2021
Email	Antonio.Fuentes@rsandh.com	FDOT District	District 4	County	Broward
Project Locality (*City/Town/Village*)	Davie		Project Type	Corridor Improvement Project	
Project Funding Source	Non-federal	FDOT Context Classification	C5 - Urban Center		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	The Arterial Connectivity Study (ACS) along I-595 is intended to support the Florida Department of Transportation (FDOT) District Four and its partners in providing better connectivity for all modes and to provide congestion relief for travel along the north-south study roadways and their access points with I-595 and SR 84.				
Project Setting Description (*Describe the area surrounding the intersection*)	This is an interchange. A canal runs parallel to I-595 in the east/west direction along the north side of the interchange. The northern quadrants of the interchange are residential. There is a commercial center with various businesses in the SW quadrant and a Costco Shopping Center in the SE quadrant. Flyovers for NB to WB and SB to EB are existing in the interchange.				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	Crosswalks are installed on the southbound, westbound and eastbound approaches. Bike lanes are installed only on the eastbound approach.				

Major Street Information

Route #:	817	Route Name(s)	University Drive	Milepost	8.751
Existing Control Type	Signal	Existing AADT	81,500	Design Year AADT	107,000
Design Vehicle	Interstate Semitrailer (WB-67)	Control Vehicle	Florida Interstate Semitrailer (WB-62FL)		
Primary Functional Classification	Urban Principal Arterial			Design Speed (mph)	45
Secondary Functional Classification (if app.)				Target Speed (mph) [if app.]	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along	One side of the approach	Left-Turn	2				
	Crosswalk on Approach?	No	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	3	Left	145	Left	281
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,785	Through	2,276
	Scheduled Bus Service?	Yes	Through-Right	0	Right	1,106	Right	1,055
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	2				
	Crosswalk on Approach?	Yes	Left-Through	0	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	3	Left	436	Left	388
	Multi-Use Path?	No	Left-Through-Right	0	Through	1,842	Through	2,022
	Scheduled Bus Service?	Yes	Through-Right	1	Right	504	Right	443
	Bus Stop on Approach?	No	Right-Turn	0	Daily Truck %		2.0%	

Minor Street Information							
Route #:	84	Route Name(s)	SR 84			Milepost (if app.)	10.92
Existing Control Type	Signal		Existing AADT	31,000		Design Year AADT	40,500
Design Vehicle	Interstate Semitrailer (WB-67)		Control Vehicle	Florida Interstate Semitrailer (WB-62FL)			
Primary Functional Classification	Urban Minor Arterial					Design Speed (mph)	45
Secondary Functional Classification (if app.)						Target Speed (mph) [if app.]	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	Yes	Through	0	Left	533	Left	592
	Multi-Use Path?	No	Left-Through-Right	0	Through	534	Through	559
	Scheduled Bus Service?	No	Through-Right	1	Right	968	Right	806
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Neither side of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through	1	Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	0	Left	1,353	Left	748
	Multi-Use Path?	No	Left-Through-Right	0	Through	78	Through	403
	Scheduled Bus Service?	No	Through-Right	1	Right	1,848	Right	1,134
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		2.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)
Append the most recent five-years of crash data for the intersection from the CAR System. If the crash data evidences any issues relating to safety performance, discuss briefly here:
The most recent five years of crash data on record (2013-2017) was collected for the study interchange. Over the five year history, 802 total crashes were reported with 194 involving injuries and one fatal crash. There was one pedestrian crash and zero bicycle crashes. Sixty-three percent of the total crashes were rear-end crashes. Seventeen percent of crashes occurred on wet pavement conditions and 21 percent occurred in dark conditions.

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
	CAP-X Outputs					
	V/C Ratio					
Control Strategy	Weekday AM Peak	Weekday PM Peak	Multimodal Score	SPICE Ranking	Strategy to Be Advanced?	Justification
Two-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
All-Way Stop-Controlled	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Signalized Control	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Roundabout	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Median U-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Signalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
RCUT (Unsignalized)	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Jughandle				N/A		See page 4 for Interchange Strategies evaluated.
Displaced Left-Turn	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Continuous Green Tee	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Quadrant Roadway	N/A	N/A	N/A			See page 4 for Interchange Strategies evaluated.
Partial MUT	N/A	N/A	N/A	N/A		See page 4 for Interchange Strategies evaluated.
Other 2 (Type)						

Control Strategy Evaluation						
Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.						
Control Strategy	CAP-X Outputs			SPICE Ranking	Strategy to Be Advanced?	Justification
	V/C Ratio		Multimodal Score			
	AM	PM				
Traditional Diamond (No Build)	2.49	1.71	2.4	3	Yes	No Build conditions perform at V/C ratios greater than two with AM peak being the critical peak. Advance No Build for comparison.
Traditional Diamond* (Alternative)	1.09	0.94	2.4	2	Yes	Modifying and adding turn lanes minimizes impact and improves V/C. Recommend investigating this alternative further.
Displaced Left Turn* (Interchange)	1.22	1.05	2.4	-	No	Improves V/C ratios. However, significant impacts to existing footprint make alternative unfavorable. Not feasible as major reconstruction would be necessary.
DDI*	0.97	1.01	3.3	1	No	Improves V/C ratios. However, significant impacts to existing footprint make alternative unfavorable. Not feasible as major reconstruction would be necessary.
SPUI*	0.82	0.76	2.4	-	No	Improves V/C ratios. However, not feasible, as major reconstruction of the 3 I-595 bridge overpasses would be necessary.

* Assumed EB Bypass and WB Right turn lane bypass

Note: Displaced Left-turn cannot be analyzed as an interchange.

SPUI cannot be analyzed since there are no SPFs for that strategy.

Resolution					
To be filled out by FDOT District Traffic Operations Engineer and District Design Engineer					
Project Determination	Multiple Viable Alternatives Identified: Continue to Stage 2				
Comments					
DOTE Name		Signature		Date	
DDE Name		Signature		Date	

CAP-X

No Build

Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - SW 136th Ave & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	659	1066	115	2.00%	0.00%
Westbound	0	571	577	1714	2.00%	0.00%
Southbound	0	738	463	230	2.00%	0.00%
Northbound	0	115	527	1013	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.30**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - SW 136th Ave & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	759	1054	148	2.00%	0.00%
Westbound	0	1055	509	1184	2.00%	0.00%
Southbound	0	1360	446	271	2.00%	0.00%
Northbound	0	128	426	663	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.94**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Flamingo Rd & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	579	669	442	2.00%	0.00%
Westbound	0	665	174	703	2.00%	0.00%
Southbound	0	721	1013	736	2.00%	0.00%
Northbound	0	549	833	936	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.24**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Flamingo Rd & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	698	597	615	2.00%	0.00%
Westbound	0	776	243	678	2.00%	0.00%
Southbound	0	926	1218	640	2.00%	0.00%
Northbound	0	338	763	633	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.45**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Flamingo Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	140	152	244	2.00%	0.00%
Westbound	4	379	100	619	2.00%	0.00%
Southbound	7	513	1983	106	2.00%	0.00%
Northbound	13	62	1601	479	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**0.95**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Flamingo Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	5	71	110	199	2.00%	0.00%
Westbound	2	442	165	418	2.00%	0.00%
Southbound	2	514	2288	116	2.00%	0.00%
Northbound	26	82	1596	504	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**0.85**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Hiatus & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	626	502	157	2.00%	0.00%
Westbound	0	292	113	551	2.00%	0.00%
Southbound	0	1049	424	916	2.00%	0.00%
Northbound	4	240	386	510	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.04**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Hiatus & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	778	456	287	2.00%	0.00%
Westbound	0	586	150	892	2.00%	0.00%
Southbound	0	669	552	837	2.00%	0.00%
Northbound	6	146	315	278	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.34**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Hiatus Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	11	291	637	703	2.00%	0.00%
Westbound	3	470	643	213	2.00%	0.00%
Southbound	3	286	1212	330	2.00%	0.00%
Northbound	0	423	746	394	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.17**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Hiatus Rd at Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	2	315	816	487	2.00%	0.00%
Westbound	0	568	780	207	2.00%	0.00%
Southbound	0	174	995	224	2.00%	0.00%
Northbound	2	432	1202	349	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.12**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Nob Hill & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	467	549	290	2.00%	0.00%
Westbound	0	567	93	755	2.00%	0.00%
Southbound	4	1183	652	310	2.00%	0.00%
Northbound	4	325	511	892	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.46**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Nob Hill & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	335	570	321	2.00%	0.00%
Westbound	0	704	162	1080	2.00%	0.00%
Southbound	0	837	691	364	2.00%	0.00%
Northbound	4	298	533	667	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.63**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Nob Hill Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	147	857	189	2.00%	0.00%
Westbound	0	378	759	226	2.00%	0.00%
Southbound	0	381	1487	205	2.00%	0.00%
Northbound	0	216	953	622	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**0.81**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Nob Hill Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	2	208	860	186	2.00%	0.00%
Westbound	0	654	1100	359	2.00%	0.00%
Southbound	31	240	1108	172	2.00%	0.00%
Northbound	4	207	1314	373	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**0.82**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Pine Island Rd & Nova Dr: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	418	240	259	2.00%	0.00%
Westbound	0	243	77	132	2.00%	0.00%
Southbound	6	319	1334	187	2.00%	0.00%
Northbound	13	163	1581	332	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.10**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Pine Island Rd & Nova Dr: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	2	233	121	216	2.00%	0.00%
Westbound	0	289	189	218	2.00%	0.00%
Southbound	5	283	1613	317	2.00%	0.00%
Northbound	2	271	1284	251	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.00**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Pine Island & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	969	861	659	2.00%	0.00%
Westbound	0	475	656	1122	2.00%	0.00%
Southbound	0	1179	901	820	2.00%	0.00%
Northbound	0	695	1015	909	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.71**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Pine Island & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	991	742	680	2.00%	0.00%
Westbound	0	999	993	1384	2.00%	0.00%
Southbound	4	763	968	870	2.00%	0.00%
Northbound	5	502	1125	488	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**2.08**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Pine Island & Peters Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	2.00%	0.00%
Westbound	0	410	0	407	2.00%	0.00%
Southbound	3	722	2408	0	2.00%	0.00%
Northbound	0	0	2426	609	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**0.92**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Pine Island & Peters Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	2.00%	0.00%
Westbound	2	450	0	521	2.00%	0.00%
Southbound	4	705	2032	0	2.00%	0.00%
Northbound	0	0	3073	601	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.07**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Pine Island & SW 6th Ct: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	60	33	233	2.00%	0.00%
Westbound	0	190	17	54	2.00%	0.00%
Southbound	10	165	2772	30	2.00%	0.00%
Northbound	28	99	2114	396	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.03**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Pine Island & SW 6th Ct: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	38	29	110	2.00%	0.00%
Westbound	0	493	43	247	2.00%	0.00%
Southbound	10	116	1922	54	2.00%	0.00%
Northbound	38	175	2840	293	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.16**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Davie Rd & SR 84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	3
Which leg is the minor street?	S

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	74	411	1458	2.00%	0.00%
Westbound	0	1525	666	0	2.00%	0.00%
Southbound	0	0	0	0	2.00%	0.00%
Northbound	0	1622	0	1196	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.91**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Davie Rd & SR 84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	3
Which leg is the minor street?	S

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	261	612	1388	2.00%	0.00%
Westbound	0	2025	766	0	2.00%	0.00%
Southbound	0	0	0	0	2.00%	0.00%
Northbound	0	1525	0	1229	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**2.64**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Davie Rd & Nova Drive: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	23	575	138	271	2.00%	0.00%
Westbound	2	124	263	568	2.00%	0.00%
Southbound	97	265	1278	1437	2.00%	0.00%
Northbound	0	294	1280	102	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.46**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - Davie Rd & Nova Drive: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	18	714	242	350	2.00%	0.00%
Westbound	0	128	238	312	2.00%	0.00%
Southbound	66	427	1444	1330	2.00%	0.00%
Northbound	0	105	1171	130	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.29**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - SR 7 & Oakes Road: ACS Along I-595
Project Number:	106-0069-000
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	418	0	124	2.00%	0.00%
Westbound	0	0	0	0	2.00%	0.00%
Southbound	2	0	3103	651	2.00%	0.00%
Northbound	2	135	3250	0	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C5-Urban Center**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.05**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - SR 7 & Oakes Road: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	2	653	0	123	2.00%	0.00%
Westbound	0	0	0	0	2.00%	0.00%
Southbound	0	0	2830	321	2.00%	0.00%
Northbound	0	109	3626	0	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.23**	**1**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - SR 7 & Riverland Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Ft Lauderdale, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	4	228	67	301	2.00%	0.00%
Westbound	0	703	58	190	2.00%	0.00%
Southbound	25	98	2619	72	2.00%	0.00%
Northbound	45	170	2768	481	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.11**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - SR 7 & Riverland Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Ft Lauderdale, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	190	61	132	2.00%	0.00%
Westbound	0	497	99	156	2.00%	0.00%
Southbound	37	99	2476	135	2.00%	0.00%
Northbound	53	241	2903	676	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.08**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - University Dr & Peters Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	13	260	480	687	2.00%	0.00%
Westbound	2	1028	582	447	2.00%	0.00%
Southbound	7	344	3465	186	2.00%	0.00%
Northbound	7	543	2750	836	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.50**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - University Dr & Peters Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	7	294	423	1030	2.00%	0.00%
Westbound	0	897	441	504	2.00%	0.00%
Southbound	2	359	3215	128	2.00%	0.00%
Northbound	3	409	2711	879	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.44**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - University Dr & SR 84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	533	534	968	2.00%	0.00%
Westbound	0	1353	78	1848	2.00%	0.00%
Southbound	0	436	1842	504	2.00%	0.00%
Northbound	0	145	1785	1106	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C5-Urban Center**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**2.49**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	No Build - University Dr & SR 84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	592	559	806	2.00%	0.00%
Westbound	0	748	403	1134	2.00%	0.00%
Southbound	0	388	2022	443	2.00%	0.00%
Northbound	0	281	2276	1055	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C5-Urban Center**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.71**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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CAP-X
Build

Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - SW 136th Ave & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	659	565	115	2.00%	0.00%
Westbound	0	571	29	1714	2.00%	0.00%
Southbound	0	738	463	230	2.00%	0.00%
Northbound	0	115	527	1013	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diverging Diamond Interchange N-S	**0.56**	**1**	**3.3**	**Fair**	**Fair**	**Fair**
Single Point N-S	**0.60**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Displaced Left Turn (Interchange) N-S	**0.74**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
Diamond N-S	**0.75**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - SW 136th Ave & SR-84 Flyover: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	885	565	115	2.00%	0.00%
Westbound	0	0	0	428	2.00%	0.00%
Southbound	0	288	463	230	2.00%	0.00%
Northbound	0	341	527	1013	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**0.78**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - SW 136th Ave & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	759	453	148	2.00%	0.00%
Westbound	0	1055	26	1184	2.00%	0.00%
Southbound	0	1360	446	271	2.00%	0.00%
Northbound	0	128	426	663	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diverging Diamond Interchange N-S	**0.57**	**1**	**3.3**	**Fair**	**Fair**	**Fair**
Single Point N-S	**0.62**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Displaced Left Turn (Interchange) N-S	**0.87**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
Diamond N-S	**0.89**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - SW 136th Ave & SR-84 Flyover: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	1189	453	148	2.00%	0.00%
Westbound	0	0	0	296	2.00%	0.00%
Southbound	0	574	446	271	2.00%	0.00%
Northbound	0	558	426	663	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.00**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Flamingo Rd & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	579	33	442	2.00%	0.00%
Westbound	0	665	174	703	2.00%	0.00%
Southbound	0	721	1013	736	2.00%	0.00%
Northbound	0	549	833	936	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C5-Urban Center**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Single Point N-S	**0.60**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Diverging Diamond Interchange N-S	**0.61**	**2**	**3.3**	**Fair**	**Fair**	**Fair**
Displaced Left Turn (Interchange) N-S	**0.70**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
Diamond N-S	**0.72**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Flamingo Rd & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	698	30	615	2.00%	0.00%
Westbound	0	776	243	678	2.00%	0.00%
Southbound	0	926	1218	640	2.00%	0.00%
Northbound	0	338	763	633	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C5-Urban Center**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diverging Diamond Interchange N-S	**0.62**	**1**	**3.3**	**Fair**	**Fair**	**Fair**
Single Point N-S	**0.72**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Displaced Left Turn (Interchange) N-S	**0.79**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
Diamond N-S	**0.85**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Flamingo Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	140	152	244	2.00%	0.00%
Westbound	4	379	100	619	2.00%	0.00%
Southbound	7	513	1983	106	2.00%	0.00%
Northbound	13	62	1601	479	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.52**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Partial Displaced Left Turn N-S	**0.65**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Signalized Restricted Crossing U-Turn N-S	**0.81**	**3**	**6.3**	**Good**	**Good**	**Fair**
Traffic Signal	**0.85**	**4**	**4.8**	**Fair**	**Fair**	**Good**
Partial Median U-Turn N-S	**0.86**	**5**	**6.3**	**Good**	**Good**	**Fair**
Median U-Turn N-S	**1.00**	**6**	**6.3**	**Good**	**Good**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Flamingo Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	5	71	110	199	2.00%	0.00%
Westbound	2	442	165	418	2.00%	0.00%
Southbound	2	514	2288	116	2.00%	0.00%
Northbound	26	82	1596	504	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.56**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Partial Displaced Left Turn N-S	**0.69**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Signalized Restricted Crossing U-Turn N-S	**0.78**	**3**	**6.3**	**Good**	**Good**	**Fair**
Traffic Signal	**0.83**	**4**	**4.8**	**Fair**	**Fair**	**Good**
Partial Median U-Turn N-S	**0.84**	**5**	**6.3**	**Good**	**Good**	**Fair**
Median U-Turn N-S	**0.97**	**6**	**6.3**	**Good**	**Good**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Hiatus & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	626	115	157	2.00%	0.00%
Westbound	0	292	113	551	2.00%	0.00%
Southbound	0	1049	424	916	2.00%	0.00%
Northbound	4	240	386	510	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn (Interchange) N-S	**0.58**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Single Point N-S	**0.59**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Diverging Diamond Interchange N-S	**0.61**	**3**	**6.7**	**Good**	**Good**	**Good**
Diamond N-S	**0.78**	**4**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Hiatus & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	778	91	287	2.00%	0.00%
Westbound	0	586	150	892	2.00%	0.00%
Southbound	0	669	552	837	2.00%	0.00%
Northbound	6	146	315	278	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diverging Diamond Interchange N-S	**0.55**	**1**	**6.7**	**Good**	**Good**	**Good**
Single Point N-S	**0.56**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Displaced Left Turn (Interchange) N-S	**0.78**	**3**	**4.8**	**Fair**	**Fair**	**Good**
Diamond N-S	**0.88**	**4**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Hiatus Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	11	291	637	703	2.00%	0.00%
Westbound	3	470	643	213	2.00%	0.00%
Southbound	3	286	1212	330	2.00%	0.00%
Northbound	0	423	746	394	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.44**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Partial Displaced Left Turn N-S	**0.54**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Partial Median U-Turn N-S	**0.73**	**3**	**6.3**	**Good**	**Good**	**Fair**
Quadrant Roadway S-E	**0.74**	**4**	**4.4**	**Fair**	**Fair**	**Fair**
Traffic Signal	**0.78**	**5**	**4.8**	**Fair**	**Fair**	**Good**
Median U-Turn N-S	**0.97**	**6**	**6.3**	**Good**	**Good**	**Fair**
Signalized Restricted Crossing U-Turn N-S	**1.57**	**7**	**6.3**	**Good**	**Good**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Hiatus Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	2	315	816	487	2.00%	0.00%
Westbound	0	568	780	207	2.00%	0.00%
Southbound	0	174	995	224	2.00%	0.00%
Northbound	2	432	1202	349	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.42**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Partial Displaced Left Turn N-S	**0.58**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Partial Median U-Turn N-S	**0.66**	**3**	**6.3**	**Good**	**Good**	**Fair**
Quadrant Roadway S-E	**0.77**	**4**	**4.4**	**Fair**	**Fair**	**Fair**
Traffic Signal	**0.79**	**5**	**4.8**	**Fair**	**Fair**	**Good**
Median U-Turn N-S	**0.95**	**6**	**6.3**	**Good**	**Good**	**Fair**
Signalized Restricted Crossing U-Turn N-S	**1.81**	**7**	**6.3**	**Good**	**Good**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Nob Hill & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	467	27	290	2.00%	0.00%
Westbound	0	567	93	755	2.00%	0.00%
Southbound	4	1183	652	310	2.00%	0.00%
Northbound	4	325	511	892	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn (Interchange) N-S	**0.70**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Single Point N-S	**0.75**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Diverging Diamond Interchange N-S	**0.80**	**3**	**3.3**	**Fair**	**Fair**	**Fair**
Diamond N-S	**1.00**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Nob Hill & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	335	28	321	2.00%	0.00%
Westbound	0	704	162	1080	2.00%	0.00%
Southbound	0	837	691	364	2.00%	0.00%
Northbound	4	298	533	667	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diverging Diamond Interchange N-S	**0.68**	**1**	**3.3**	**Fair**	**Fair**	**Fair**
Single Point N-S	**0.69**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Displaced Left Turn (Interchange) N-S	**0.70**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
Diamond N-S	**0.98**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Nob Hill Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	147	857	189	2.00%	0.00%
Westbound	0	378	759	226	2.00%	0.00%
Southbound	0	381	1487	205	2.00%	0.00%
Northbound	0	216	953	622	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.48**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Displaced Left Turn N-S	**0.57**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Median U-Turn N-S	**0.65**	**3**	**3.1**	**Fair**	**Fair**	**Poor**
Median U-Turn N-S	**0.81**	**4**	**3.1**	**Fair**	**Fair**	**Poor**
Signalized Restricted Crossing U-Turn N-S	**1.44**	**5**	**3.1**	**Fair**	**Fair**	**Poor**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Nob Hill Rd & Broward Blvd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	2	208	860	186	2.00%	0.00%
Westbound	0	654	1100	359	2.00%	0.00%
Southbound	31	240	1108	172	2.00%	0.00%
Northbound	4	207	1314	373	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.46**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Displaced Left Turn N-S	**0.62**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Median U-Turn N-S	**0.68**	**3**	**3.1**	**Fair**	**Fair**	**Poor**
Median U-Turn N-S	**0.96**	**4**	**3.1**	**Fair**	**Fair**	**Poor**
Signalized Restricted Crossing U-Turn N-S	**1.82**	**5**	**3.1**	**Fair**	**Fair**	**Poor**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island Rd & Nova Dr: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	418	240	259	2.00%	0.00%
Westbound	0	243	77	132	2.00%	0.00%
Southbound	6	319	1334	187	2.00%	0.00%
Northbound	13	163	1581	332	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.57**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Partial Displaced Left Turn N-S	**0.61**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Partial Median U-Turn N-S	**0.69**	**3**	**6.3**	**Good**	**Good**	**Fair**
Signalized Restricted Crossing U-Turn N-S	**0.91**	**4**	**6.3**	**Good**	**Good**	**Fair**
Median U-Turn N-S	**0.92**	**5**	**6.3**	**Good**	**Good**	**Fair**
Traffic Signal	**0.94**	**6**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island Rd & Nova Dr: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	2	233	121	216	2.00%	0.00%
Westbound	0	289	189	218	2.00%	0.00%
Southbound	5	283	1613	317	2.00%	0.00%
Northbound	2	271	1284	251	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.52**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Partial Displaced Left Turn N-S	**0.57**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Partial Median U-Turn N-S	**0.70**	**3**	**6.3**	**Good**	**Good**	**Fair**
Signalized Restricted Crossing U-Turn N-S	**0.76**	**4**	**6.3**	**Good**	**Good**	**Fair**
Median U-Turn N-S	**0.82**	**5**	**6.3**	**Good**	**Good**	**Fair**
Traffic Signal	**0.85**	**6**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	969	43	659	2.00%	0.00%
Westbound	0	475	426	1122	2.00%	0.00%
Southbound	0	1179	901	820	2.00%	0.00%
Northbound	0	695	1015	909	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn (Interchange) N-S	**0.95**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Single Point N-S	**0.95**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Diverging Diamond Interchange N-S	**0.96**	**3**	**3.3**	**Fair**	**Fair**	**Fair**
Diamond N-S	**1.07**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island & SR-84 Flyover: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	969	43	659	2.00%	0.00%
Westbound	0	475	426	10	2.00%	0.00%
Southbound	0	236	901	820	2.00%	0.00%
Northbound	0	695	1015	909	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**0.79**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island & SR-84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	991	37	680	2.00%	0.00%
Westbound	0	999	626	1384	2.00%	0.00%
Southbound	4	763	968	870	2.00%	0.00%
Northbound	5	502	1125	488	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diverging Diamond Interchange N-S	**0.92**	**1**	**3.3**	**Fair**	**Fair**	**Fair**
Single Point N-S	**1.10**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Displaced Left Turn (Interchange) N-S	**1.34**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
Diamond N-S	**1.64**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island & SR-84 Flyover: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	991	37	680	2.00%	0.00%
Westbound	0	999	626	10	2.00%	0.00%
Southbound	4	229	968	870	2.00%	0.00%
Northbound	5	502	1125	488	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Diamond N-S	**1.10**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island & Peters Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	2.00%	0.00%
Westbound	0	410	0	407	2.00%	0.00%
Southbound	3	722	2408	0	2.00%	0.00%
Northbound	0	0	2426	609	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Partial Displaced Left Turn N-S	**0.67**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Continuous Green T E	**0.78**	**2**	**1.5**	**Poor**	**Poor**	**Fair**
Traffic Signal	**0.88**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island & Peters Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	2.00%	0.00%
Westbound	2	450	0	521	2.00%	0.00%
Southbound	4	705	2032	0	2.00%	0.00%
Northbound	0	0	3073	601	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Partial Displaced Left Turn N-S	**0.79**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Continuous Green T E	**0.91**	**2**	**1.5**	**Poor**	**Poor**	**Fair**
Traffic Signal	**1.02**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island & SW 6th Ct
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	60	33	233	2.00%	0.00%
Westbound	0	190	17	54	2.00%	0.00%
Southbound	10	165	2772	30	2.00%	0.00%
Northbound	28	99	2114	396	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.64**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Displaced Left Turn N-S	**0.76**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Signalized Restricted Crossing U-Turn N-S	**0.78**	**3**	**3.1**	**Fair**	**Fair**	**Poor**
Median U-Turn N-S	**0.79**	**4**	**3.1**	**Fair**	**Fair**	**Poor**
Partial Median U-Turn N-S	**0.86**	**5**	**3.1**	**Fair**	**Fair**	**Poor**
Traffic Signal	**0.97**	**6**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Pine Island & SW 6th Ct: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	38	29	110	2.00%	0.00%
Westbound	0	493	43	247	2.00%	0.00%
Southbound	10	116	1922	54	2.00%	0.00%
Northbound	38	175	2840	293	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.83**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Displaced Left Turn N-S	**0.87**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Median U-Turn N-S	**0.97**	**3**	**3.1**	**Fair**	**Fair**	**Poor**
Median U-Turn N-S	**1.07**	**4**	**3.1**	**Fair**	**Fair**	**Poor**
Signalized Restricted Crossing U-Turn N-S	**1.08**	**5**	**3.1**	**Fair**	**Fair**	**Poor**
Traffic Signal	**1.09**	**6**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Davie Rd & SR 84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	3
Which leg is the minor street?	S

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	74	21	1458	2.00%	0.00%
Westbound	0	1525	2017	0	2.00%	0.00%
Southbound	0	0	0	0	2.00%	0.00%
Northbound	0	1622	0	1196	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn (Interchange) N-S	**1.73**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Diverging Diamond Interchange N-S	**1.78**	**2**	**6.7**	**Good**	**Good**	**Good**
Diamond N-S	**1.84**	**3**	**4.8**	**Fair**	**Fair**	**Good**
Single Point N-S	**1.84**	**3**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Davie Rd & SR 84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	3
Which leg is the minor street?	S

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	261	31	1388	2.00%	0.00%
Westbound	0	2025	2322	0	2.00%	0.00%
Southbound	0	0	0	0	2.00%	0.00%
Northbound	0	1525	0	1229	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn (Interchange) N-S	**1.99**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Diverging Diamond Interchange N-S	**2.01**	**2**	**6.7**	**Good**	**Good**	**Good**
Diamond N-S	**2.03**	**3**	**4.8**	**Fair**	**Fair**	**Good**
Single Point N-S	**2.07**	**4**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Davie Rd & Nova Drive: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	18	714	242	350	2.00%	0.00%
Westbound	0	128	238	312	2.00%	0.00%
Southbound	66	427	1444	1330	2.00%	0.00%
Northbound	0	105	1171	130	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.66**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Partial Displaced Left Turn N-S	**0.78**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Traffic Signal	**0.89**	**3**	**4.8**	**Fair**	**Fair**	**Good**
Partial Median U-Turn N-S	**1.00**	**4**	**6.3**	**Good**	**Good**	**Fair**
Signalized Restricted Crossing U-Turn N-S	**1.41**	**5**	**6.3**	**Good**	**Good**	**Fair**
2 X 2	**4.04**	**6**	**5.6**	**Fair**	**Good**	**Good**
2NS X 1EW	**6.00**	**7**	**5.6**	**Fair**	**Good**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - Davie Rd & Nova Drive: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	23	575	138	271	2.00%	0.00%
Westbound	2	124	263	568	2.00%	0.00%
Southbound	97	265	1278	1437	2.00%	0.00%
Northbound	0	294	1280	102	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.66**	**1**	**4.8**	**Fair**	**Fair**	**Good**
Partial Displaced Left Turn N-S	**0.86**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Traffic Signal	**1.02**	**3**	**4.8**	**Fair**	**Fair**	**Good**
Partial Median U-Turn N-S	**1.06**	**4**	**6.3**	**Good**	**Good**	**Fair**
Signalized Restricted Crossing U-Turn N-S	**1.24**	**5**	**6.3**	**Good**	**Good**	**Fair**
2 X 2	**3.07**	**6**	**5.6**	**Fair**	**Good**	**Good**
2NS X 1EW	**5.17**	**7**	**5.6**	**Fair**	**Good**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - SR 7 & Oakes Road: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	418	0	124	2.00%	0.00%
Westbound	0	0	0	0	2.00%	0.00%
Southbound	2	0	3103	651	2.00%	0.00%
Northbound	2	135	3250	0	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Signalized Restricted Crossing U-Turn N-S	0.79	1	6.3	Good	Good	Fair
Continuous Green T W	0.82	2	3.0	Poor	Poor	Good
Quadrant Roadway N-W	0.82	2	4.4	Fair	Fair	Fair
Partial Displaced Left Turn N-S	0.86	4	4.8	Fair	Fair	Good
Traffic Signal	0.91	5	4.8	Fair	Fair	Good
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - SR 7 & Oakes Road: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	2	653	0	123	2.00%	0.00%
Westbound	0	0	0	0	2.00%	0.00%
Southbound	0	0	2830	321	2.00%	0.00%
Northbound	0	109	3626	0	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C3C-Suburban Commercial**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Continuous Green T W	**0.82**	**1**	**3.0**	**Poor**	**Poor**	**Good**
Quadrant Roadway N-W	**0.90**	**2**	**4.4**	**Fair**	**Fair**	**Fair**
Partial Displaced Left Turn N-S	**0.90**	**2**	**4.8**	**Fair**	**Fair**	**Good**
Signalized Restricted Crossing U-Turn N-S	**0.94**	**4**	**6.3**	**Good**	**Good**	**Fair**
Traffic Signal	**1.01**	**5**	**4.8**	**Fair**	**Fair**	**Good**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - SR 7 & Riverland Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Ft Lauderdale, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	4	228	67	301	2.00%	0.00%
Westbound	0	703	58	190	2.00%	0.00%
Southbound	25	98	2619	72	2.00%	0.00%
Northbound	45	170	2768	481	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Partial Displaced Left Turn N-S	**0.77**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Median U-Turn N-S	**0.86**	**2**	**3.1**	**Fair**	**Fair**	**Poor**
Traffic Signal	**1.06**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
Signalized Restricted Crossing U-Turn N-S	**1.07**	**4**	**3.1**	**Fair**	**Fair**	**Poor**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - SR 7 & Riverland Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Ft Lauderdale, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	190	61	132	2.00%	0.00%
Westbound	0	497	99	156	2.00%	0.00%
Southbound	37	99	2476	135	2.00%	0.00%
Northbound	53	241	2903	676	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Partial Displaced Left Turn N-S	**0.69**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Median U-Turn N-S	**0.74**	**2**	**3.1**	**Fair**	**Fair**	**Poor**
Traffic Signal	**0.95**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
Signalized Restricted Crossing U-Turn N-S	**0.99**	**4**	**3.1**	**Fair**	**Fair**	**Poor**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - University Dr & Peters Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	13	260	480	687	2.00%	0.00%
Westbound	2	1028	582	447	2.00%	0.00%
Southbound	7	344	3465	186	2.00%	0.00%
Northbound	7	543	2750	836	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.80**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Displaced Left Turn N-S	**0.96**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Median U-Turn N-S	**1.11**	**3**	**3.1**	**Fair**	**Fair**	**Poor**
Traffic Signal	**1.47**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
Median U-Turn N-S	**1.53**	**5**	**3.1**	**Fair**	**Fair**	**Poor**
Signalized Restricted Crossing U-Turn N-S	**1.81**	**6**	**3.1**	**Fair**	**Fair**	**Poor**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - University Dr & Peters Rd CLT: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	13	39	480	687	2.00%	0.00%
Westbound	2	154	582	447	2.00%	0.00%
Southbound	7	52	3465	186	2.00%	0.00%
Northbound	0	81	2750	836	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.11**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - University Dr & Peters Rd CLT Ovrpass: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	221	0	0	2.00%	0.00%
Westbound	0	874	0	0	2.00%	0.00%
Southbound	0	292	0	0	2.00%	0.00%
Northbound	0	462	0	0	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**0.86**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - University Dr & Peters Rd: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	7	294	423	1030	2.00%	0.00%
Westbound	0	897	441	504	2.00%	0.00%
Southbound	2	359	3215	128	2.00%	0.00%
Northbound	3	409	2711	879	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Displaced Left Turn	**0.72**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Displaced Left Turn N-S	**0.97**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Partial Median U-Turn N-S	**1.15**	**3**	**3.1**	**Fair**	**Fair**	**Poor**
Traffic Signal	**1.42**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
Median U-Turn N-S	**1.44**	**5**	**3.1**	**Fair**	**Fair**	**Poor**
Signalized Restricted Crossing U-Turn N-S	**1.66**	**6**	**3.1**	**Fair**	**Fair**	**Poor**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - University Dr & Peters Rd CLT: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	7	44	423	1030	2.00%	0.00%
Westbound	0	135	441	504	2.00%	0.00%
Southbound	2	54	3215	128	2.00%	0.00%
Northbound	0	61	2711	879	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**1.23**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - University Dr & Peters Rd CLT Ovrpass: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Plantation, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	250	0	0	2.00%	0.00%
Westbound	0	762	0	0	2.00%	0.00%
Southbound	0	305	0	0	2.00%	0.00%
Northbound	0	348	0	0	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C4-General Urban Residential**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Traffic Signal	**0.71**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - University Dr & SR 84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 AM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	533	27	968	2.00%	0.00%
Westbound	0	1353	78	92	2.00%	0.00%
Southbound	0	436	1842	504	2.00%	0.00%
Northbound	0	145	1785	1106	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C5-Urban Center**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Single Point N-S	**0.82**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Diverging Diamond Interchange N-S	**0.97**	**2**	**3.3**	**Fair**	**Fair**	**Fair**
Diamond N-S	**1.09**	**3**	**2.4**	**Poor**	**Poor**	**Fair**
Displaced Left Turn (Interchange) N-S	**1.22**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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Capacity Analysis for Planning of Junctions

Summary Report - Page 1 of 2

Project Name:	Build - University Dr & SR 84: ACS Along I-595
Project Number:	441954-1-12-01
Location:	Davie, FL
Date:	2045 PM
Number of Intersection Legs:	4
Major Street Direction	East-West

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	592	28	806	2.00%	0.00%
Westbound	0	748	403	57	2.00%	0.00%
Southbound	0	388	2022	443	2.00%	0.00%
Northbound	0	281	2276	1055	2.00%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone	**C5-Urban Center**		
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Capacity Analysis for Planning of Junctions

Summary Report - Page 2 of 2

TYPE OF INTERSECTION	Overall v/c Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Single Point N-S	**0.76**	**1**	**2.4**	**Poor**	**Poor**	**Fair**
Diamond N-S	**0.94**	**2**	**2.4**	**Poor**	**Poor**	**Fair**
Diverging Diamond Interchange N-S	**1.01**	**3**	**3.3**	**Fair**	**Fair**	**Fair**
Displaced Left Turn (Interchange) N-S	**1.05**	**4**	**2.4**	**Poor**	**Poor**	**Fair**
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SPICE

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS Along I-595	**Intersection Type**	Ramp Terminal Intersections
Intersection:	136th Ave & SR-84	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Area Type**	Urban
City:	Davie		
State:	Florida		
Date:	6/14/2021		
Analyst:	C. Hart		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?
Conventional Traffic Signal	Total	48.25	68.61	1592.18	2	No
	Fatal & Injury	13.26	20.08	453.11		
Conventional Traffic Signal (Alt)	Total	48.25	49.11	1312.93	1	No
	Fatal & Injury	13.26	12.32	334.94		

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS Along I-595	**Intersection Type**	Ramp Terminal Intersections
Intersection:	136th Ave & SR-84	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Area Type**	Urban
City:	Davie		
State:	Florida		
Date:	6/14/2021		
Analyst:	C. Hart		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?
Conventional Traffic Signal	Total	48.25	68.61	1592.18	3	No
	Fatal & Injury	13.26	20.08	453.11		
Conventional Traffic Signal (Alt)	Total	48.25	61.28	1491.51	2	No
	Fatal & Injury	13.26	16.64	406.73		
Crossover Traffic Signal (of DDI)	Total	32.33	45.97	1066.76	1	N/A
	Fatal & Injury	7.82	11.85	267.33		
Single-Point Diamond Traffic Signal	Total	No SPF	No SPF	No SPF	--	N/A
	Fatal & Injury	No SPF	No SPF	No SPF		

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	Ramp Terminal Intersections
Intersection:	Flamingo and SR 84	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Area Type**	Urban
City:	Davie		
State:	Florida		
Date:	6/15/2021		
Analyst:	C. Hart		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?
Conventional Traffic Signal	Total	77.96	91.31	2288.74	3	Yes
	Fatal & Injury	21.90	25.59	644.30		
Conventional Traffic Signal (Alt)	Total	77.96	73.47	2026.79	2	Yes
	Fatal & Injury	21.90	20.90	574.51		
Crossover Traffic Signal (of DDI)	Total	52.24	61.18	1533.46	1	N/A
	Fatal & Injury	12.92	15.10	380.14		
Single-Point Diamond Traffic Signal	Total	No SPF	No SPF	No SPF	--	N/A
	Fatal & Injury	No SPF	No SPF	No SPF		

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	Flamingo and Broward	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Plantation	**Number of Legs**	4-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	6 or more
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	30.02	34.26	868.73	3	Yes	Uncalibrated SPF
	Fatal & Injury	9.56	11.06	278.53			
Traffic Signal (Alt)	Total	35.83	40.90	1036.96	4	Yes	Uncalibrated SPF
	Fatal & Injury	11.40	13.19	332.27			
Displaced Left Turn (DLT)	Total	26.42	30.15	764.48	2	N/A	CMF
	Fatal & Injury	8.41	9.73	245.10			
Median U-Turn (MUT)	Total	25.52	29.12	738.42	1	N/A	CMF
	Fatal & Injury	6.69	7.74	194.97			
Signalized RCUT	Total	33.06	47.17	1079.32	5	No	Uncalibrated SPF
	Fatal & Injury	11.87	17.41	393.45			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	Ramp Terminal Intersections
Intersection:	Hiatus and SR 84	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Area Type**	Urban
City:	Davie		
State:	Florida		
Date:	6/15/2021		
Analyst:	C.Hart		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?
Conventional Traffic Signal	Total	27.49	35.52	858.03	3	Yes
	Fatal & Injury	8.47	11.63	273.58		
Conventional Traffic Signal (Alt)	Total	27.49	35.33	855.45	2	Yes
	Fatal & Injury	8.47	11.55	272.54		
Crossover Traffic Signal (of DDI)	Total	18.42	23.80	574.88	1	N/A
	Fatal & Injury	4.99	6.86	161.41		
Single-Point Diamond Traffic Signal	Total	No SPF	No SPF	No SPF	--	N/A
	Fatal & Injury	No SPF	No SPF	No SPF		

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	Hiatus and Broward	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Plantation	**Number of Legs**	4-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	6 or more
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	26.17	29.54	752.71	4	Yes	Uncalibrated SPF
	Fatal & Injury	8.87	10.13	256.73			
Traffic Signal (Alt)	Total	34.24	38.60	984.21	5	Yes	Uncalibrated SPF
	Fatal & Injury	11.55	13.18	334.19			
Displaced Left Turn (DLT)	Total	23.03	25.99	662.39	2	N/A	CMF
	Fatal & Injury	7.80	8.92	225.92			
Median U-Turn (MUT)	Total	22.24	25.11	639.80	1	N/A	CMF
	Fatal & Injury	6.21	7.09	179.71			
Signalized RCUT	Total	19.98	27.96	645.09	3	No	Uncalibrated SPF
	Fatal & Injury	7.84	11.24	256.59			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	Ramp Terminal Intersections
Intersection:	Nob Hill and SR 84	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Area Type**	Urban
City:	Davie		
State:	Florida		
Date:	6/15/2021		
Analyst:	C.Hart		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?
Conventional Traffic Signal	Total	40.47	50.36	1235.31	3	Yes
	Fatal & Injury	11.22	14.83	354.36		
Conventional Traffic Signal (Alt)	Total	40.47	47.11	1188.68	2	Yes
	Fatal & Injury	11.22	14.13	344.12		
Crossover Traffic Signal (of DDI)	Total	27.12	33.74	827.66	1	N/A
	Fatal & Injury	6.62	8.75	209.07		
Single-Point Diamond Traffic Signal	Total	No SPF	No SPF	No SPF	--	N/A
	Fatal & Injury	No SPF	No SPF	No SPF		

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	Nob Hill and Broward	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Plantation	**Number of Legs**	4-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	5 or fewer
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	3.38	4.21	102.46	3	Yes	Calibrated SPF
	Fatal & Injury	2.65	3.34	80.79			
Displaced Left Turn (DLT)	Total	2.98	3.71	90.16	2	N/A	CMF
	Fatal & Injury	2.33	2.94	71.10			
Median U-Turn (MUT)	Total	2.88	3.58	87.09	1	N/A	CMF
	Fatal & Injury	1.86	2.34	56.55			
Signalized RCUT	Total	25.09	33.64	790.90	4	No	Uncalibrated SPF
	Fatal & Injury	13.50	18.48	430.36			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	Pine Island Road and Nova Drive	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Davie	**Number of Legs**	4-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	5 or fewer
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	16.37	21.34	508.62	4	Yes	Calibrated SPF
	Fatal & Injury	5.89	7.77	184.11			
Traffic Signal (Alt)	Total	15.13	19.72	470.06	3	Yes	Calibrated SPF
	Fatal & Injury	5.44	7.19	170.25			
Displaced Left Turn (DLT)	Total	14.41	18.78	447.58	2	N/A	CMF
	Fatal & Injury	5.18	6.84	162.02			
Median U-Turn (MUT)	Total	13.91	18.14	432.32	1	N/A	CMF
	Fatal & Injury	4.12	5.44	128.88			
Signalized RCUT	Total	23.32	32.68	753.90	5	Yes	Uncalibrated SPF
	Fatal & Injury	7.96	11.63	263.35			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	Ramp Terminal Intersections
Intersection:	Pine Island and SR 84	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Area Type**	Urban
City:	Davie		
State:	Florida		
Date:	6/15/2021		
Analyst:	C.Hart		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?
Conventional Traffic Signal	Total	88.24	120.11	2835.59	3	No
	Fatal & Injury	25.18	36.74	840.74		
Conventional Traffic Signal (Alt)	Total	88.24	101.96	2578.16	2	No
	Fatal & Injury	25.18	30.54	753.77		
Crossover Traffic Signal (of DDI)	Total	59.12	80.47	1899.85	1	N/A
	Fatal & Injury	14.85	21.67	496.03		
Single-Point Diamond Traffic Signal	Total	No SPF	No SPF	No SPF	--	N/A
	Fatal & Injury	No SPF	No SPF	No SPF		

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	Ramp Terminal Intersections
Intersection:	Pine Island and SR 84	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Area Type**	Urban
City:	Davie		
State:	Florida		
Date:	6/15/2021		
Analyst:	C.Hart		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?
Conventional Traffic Signal	Total	88.24	120.11	2835.59	2	No
	Fatal & Injury	25.18	36.74	840.74		
Conventional Traffic Signal (Alt)	Total	88.24	91.30	2425.83	1	No
	Fatal & Injury	25.18	24.32	665.40		

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	Pine Island and Peters	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Plantation	**Number of Legs**	3-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	6 or more
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	8.19	9.72	242.06	3	Yes	Uncalibrated SPF
	Fatal & Injury	4.45	5.39	132.92			
Traffic Signal (Alt)	Total	8.19	9.72	242.06	3	Yes	Uncalibrated SPF
	Fatal & Injury	4.45	5.39	132.92			
Displaced Left Turn (DLT)	Total	7.21	8.56	213.01	2	N/A	CMF
	Fatal & Injury	3.92	4.74	116.97			
Continuous Green-T Intersection	Total	7.86	9.33	232.38	1	N/A	CMF
	Fatal & Injury	3.78	4.58	112.98			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	Pine Island and 6th Ct	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Plantation	**Number of Legs**	4-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	6 or more
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	16.60	20.01	495.53	3	Yes	Uncalibrated SPF
	Fatal & Injury	4.69	5.74	141.17			
Traffic Signal (Alt)	Total	16.60	20.01	495.53	3	Yes	Uncalibrated SPF
	Fatal & Injury	4.69	5.74	141.17			
Displaced Left Turn (DLT)	Total	14.60	17.61	436.07	2	N/A	CMF
	Fatal & Injury	4.13	5.05	124.23			
Median U-Turn (MUT)	Total	14.11	17.01	421.20	1	N/A	CMF
	Fatal & Injury	3.28	4.02	98.82			
Signalized RCUT	Total	37.61	58.76	1295.30	5	Yes	Uncalibrated SPF
	Fatal & Injury	12.28	20.36	437.65			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	Ramp Terminal Intersections
Intersection:	Davie and SR 84	**Opening Year**	2016
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Area Type**	Urban
City:	Davie		
State:	Florida		
Date:	6/15/2021		
Analyst:	C.Hart		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?
Conventional Traffic Signal	Total	76.29	114.62	2887.51	3	No
	Fatal & Injury	17.98	28.92	706.42		
Conventional Traffic Signal (Alt)	Total	76.29	110.43	2825.23	2	No
	Fatal & Injury	17.98	26.98	679.02		
Crossover Traffic Signal (of DDI)	Total	51.11	76.80	1934.63	1	N/A
	Fatal & Injury	10.61	17.06	416.79		
Single-Point Diamond Traffic Signal	Total	No SPF	No SPF	No SPF	--	N/A
	Fatal & Injury	No SPF	No SPF	No SPF		
Other 1	Total	No SPF	No SPF	No SPF	--	N/A
	Fatal & Injury	No SPF	No SPF	No SPF		

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	Davie Road and Nova Drive	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Davie	**Number of Legs**	4-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	5 or fewer
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	17.63	30.42	652.10	4	No	Calibrated SPF
	Fatal & Injury	6.53	11.36	242.47			
Traffic Signal (Alt)	Total	17.04	29.39	630.19	3	No	Calibrated SPF
	Fatal & Injury	6.31	10.99	234.52			
2-lane Roundabout	Total	26.17	46.87	982.39	1	No	Uncalibrated SPF
	Fatal & Injury	5.13	9.74	199.31			
Displaced Left Turn (DLT)	Total	15.51	26.77	573.85	2	N/A	CMF
	Fatal & Injury	5.74	10.00	213.37			
Signalized RCUT	Total	26.09	57.38	1127.12	5	No	Uncalibrated SPF
	Fatal & Injury	8.87	23.01	427.53			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	SR 7 and Oakes Road	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Davie	**Number of Legs**	3-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	6 or more
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	27.65	8.24	508.40	3	No	Uncalibrated SPF
	Fatal & Injury	7.44	1.71	127.65			
Traffic Signal (Alt)	Total	31.00	9.24	570.02	4	No	Uncalibrated SPF
	Fatal & Injury	8.34	1.91	143.00			
Displaced Left Turn (DLT)	Total	24.33	7.25	447.39	2	N/A	CMF
	Fatal & Injury	6.55	1.51	112.33			
Signalized RCUT	Total	115.26	6.69	1449.66	5	No	Uncalibrated SPF
	Fatal & Injury	51.28	2.39	618.42			
Continuous Green-T Intersection	Total	26.54	7.91	488.06	1	N/A	CMF
	Fatal & Injury	6.33	1.45	108.50			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	SR 7 and Riverland Road	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Ft. Lauderdale	**Number of Legs**	4-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	6 or more
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	33.95	38.92	984.81	2	Yes	Uncalibrated SPF
	Fatal & Injury	10.00	11.63	292.37			
Traffic Signal (Alt)	Total	33.95	38.92	984.81	2	Yes	Uncalibrated SPF
	Fatal & Injury	10.00	11.63	292.37			
Displaced Left Turn (DLT)	Total	29.87	34.25	866.64	1	N/A	CMF
	Fatal & Injury	8.80	10.23	257.29			
Signalized RCUT	Total	55.86	80.54	1834.65	4	No	Uncalibrated SPF
	Fatal & Injury	19.64	29.18	655.89			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	At-Grade Intersections
Intersection:	University Drive and Peters Road	**Opening Year**	2019
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Facility Type**	On Urban and Suburban Arterial
City:	Plantation	**Number of Legs**	4-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	6/17/2021	**# of Major Street Lanes (both directions)**	6 or more
Analyst:	C.Hart	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	84.45	98.23	2469.64	3	Yes	Uncalibrated SPF
	Fatal & Injury	21.40	25.33	631.71			
Traffic Signal (Alt)	Total	94.26	109.60	2755.84	4	Yes	Uncalibrated SPF
	Fatal & Injury	23.86	28.25	704.44			
Displaced Left Turn (DLT)	Total	74.31	86.44	2173.29	2	N/A	CMF
	Fatal & Injury	18.83	22.29	555.90			
Median U-Turn (MUT)	Total	71.78	83.50	2099.20	1	N/A	CMF
	Fatal & Injury	14.98	17.73	442.20			
Signalized RCUT	Total	81.13	122.98	2742.26	5	No	Uncalibrated SPF
	Fatal & Injury	29.98	46.88	1031.19			

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	ACS along I-595	**Intersection Type**	Ramp Terminal Intersections
Intersection:	University and SR 84	**Opening Year**	2016
Agency:	FDOT	**Design Year**	2045
Project Reference:		**Area Type**	Urban
City:	Davie		
State:	Florida		
Date:	6/15/2021		
Analyst:	C.Hart		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?
Conventional Traffic Signal	Total	128.40	172.67	4539.78	3	No
	Fatal & Injury	36.93	52.89	1353.15		
Conventional Traffic Signal (Alt)	Total	128.40	126.54	3801.82	2	No
	Fatal & Injury	36.93	34.27	1049.29		
Crossover Traffic Signal (of DDI)	Total	86.03	115.69	3041.65	1	N/A
	Fatal & Injury	21.79	31.20	798.36		
Single-Point Diamond Traffic Signal	Total	No SPF	No SPF	No SPF	--	N/A
	Fatal & Injury	No SPF	No SPF	No SPF		

Appendix D – Traffic Origin-Destination Summary Tables

Origin-Destination Traffic Data
Volume Split by Movement

Origin-Destination Traffic Data
Volume Split by Movement

		EBT at EB SR-84				WBT at WB SR-84				SBL at EB SR-84				WBR at WB SR-84			
		AM		PM		AM		PM		AM		PM		AM		PM	
		Bypass	Signal	Bypass	Signal	Bypass	Signal	Bypass	Signal	Flyover	Signal	Flyover	Signal	Connection	Signal	Connection	Signal
SW 136th Ave	No Build PH Volume	-	1066	-	1054	-	577	-	509	-	738	-	1362	-	1714	-	1184
	% Split	*47%*	*53%*	*57%*	*43%*	*100%*	*0%*	*100%*	*0%*	*95%*	*5%*	*95%*	*5%*	*75%*	*25%*	*75%*	*25%*
	Build PH Volume	501	565	601	453	577	0	509	0	701	37	1294	68	1286	428	888	296

Determined per StreetLight OD Analysis

Determined per concept re-routing

Determined per conservative assumption that some vehicles will still use signal

		EBT at EB SR-84				WBT at WB SR-84			
		AM		PM		AM		PM	
		Bypass	Signal	Bypass	Signal	Bypass	Signal	Bypass	Signal
Flamingo Ave	No Build PH Volume	-	669	-	597	-	174	-	243
	% Split	*95%*	*5%*	*95%*	*5%*	-	*100%*	-	*100%*
	Build PH Volume	636	33	567	30	-	174	-	243

Determined per conservative assumption that some vehicles will still use signal

		EBT at EB SR-84				WBT at WB SR-84			
		AM		PM		AM		PM	
		Bypass	Signal	Bypass	Signal	Bypass	Signal	Bypass	Signal
Hiatus Rd	No Build PH Volume	-	502	-	456	1748	113	2112	150
	% Split	*77%*	*23%*	*80%*	*20%*	*94%*	*6%*	*93%*	*7%*
	Build PH Volume	387	115	365	91	1748	113	2112	150

Determined per StreetLight OD Analysis

2045 forecasted volumes

		EBT at EB SR-84				WBT at WB SR-84			
		AM		PM		AM		PM	
		Bypass	Signal	Bypass	Signal	Bypass	Signal	Bypass	Signal
Nob Hill Rd	No Build PH Volume	-	549	-	570	-	93	-	162
	% Split	*95%*	*5%*	*95%*	*5%*	-	*100%*	-	*100%*
	Build PH Volume	522	27	542	28	-	93	-	162

Determined per conservative assumption that some vehicles will still use signal

		EBT at EB SR-84				WBT at WB SR-84			
		AM		PM		AM		PM	
		Bypass	Signal	Bypass	Signal	Bypass	Signal	Bypass	Signal
Pine Island Rd	No Build PH Volume	-	861	-	742	-	656	-	993
	% Split	*95%*	*5%*	*95%*	*5%*	*35%*	*65%*	*37%*	*63%*
	Build PH Volume	818	43	705	37	230	426	367	626

Determined per conservative assumption that some vehicles will still use signal

Determined per StreetLight OD Analysis

		EBT at EB SR-84				WBT at WB SR-84				NBL at EB SR-84				WBR at WB SR-84			
		AM		PM		AM		PM		AM		PM		AM		PM	
		Bypass	Signal	Bypass	Signal	Bypass	Signal	Bypass	Signal	Flyover	Signal	Flyover	Signal	Connection	Signal	Connection	Signal
University Dr	No Build PH Volume	-	534	-	559	-	78	-	408	-		-		-	1848	-	1134
	% Split	*95%*	*5%*	*95%*	*5%*	*0%*	*100%*	*0%*	*100%*	*0%*	*0%*	*0%*	*0%*	*95%*	*5%*	*95%*	*5%*
	Build PH Volume	507	27	531	28	0	78	0	408	0	0	0	0	1756	92	1077	57

Determined per conservative assumption that some vehicles will still use signal

Determined per StreetLight OD Analysis

		EBT at EB SR-84				WBT at WB SR-84			
		AM		PM		AM		PM	
		Bypass	Signal	Bypass	Signal	Bypass	Signal	Bypass	Signal
Davie Rd	No Build PH Volume	-	411	-	612	-	666	-	766
	% Split	*95%*	*5%*	*95%*	*5%*	-	*> 100%*	-	*> 100%*
	Build PH Volume	390	21	581	31	-	2017	-	2322

Determined per conservative assumption that some vehicles will still use signal

Continous-T lane removed in Build to allow triple NBL recieveing lanes

Origin-Destination Traffic Data
Interchange Origin-Destination Distribution

Origin-Destination Traffic Data
Interchange Origin-Destination Distribution

SW 136th Ave: EB

StreetLight Volume		
AM: O/D	EB I-595	EB SR-84
SB SW 136 Ave	848	532
NB SW 136 Ave	1141	448
EB SR-84	1911	1678
Total	**3900**	**2658**

StreetLight Percent By Approach		
AM: O/D	EB I-595	EB SR-84
SB SW 136 Ave	61%	39%
NB SW 136 Ave	72%	28%
EB SR-84	53%	47%

StreetLight Volume		
PM: O/D	EB I-595	EB SR-84
SB SW 136 Ave	1154	824
NB SW 136 Ave	830	490
EB SR-84	1489	1980
Total	**3473**	**3294**

StreetLight Percent By Approach		
PM: O/D	EB I-595	EB SR-84
SB SW 136 Ave	58%	42%
NB SW 136 Ave	63%	37%
EB SR-84	43%	57%

Flamingo: EB

StreetLight Volume		
AM: O/D	EB I-595	EB SR-84
SB Flamingo Rd	784	226
NB Flamingo Rd	1761	524
EB SR-84	1572	1418
Total	**4117**	**2168**

StreetLight Percent By Approach		
AM: O/D	EB I-595	EB SR-84
SB Flamingo Rd	78%	22%
NB Flamingo Rd	77%	23%
EB SR-84	53%	47%

StreetLight Volume		
PM: O/D	EB I-595	EB SR-84
SB Flamingo Rd	1346	326
NB Flamingo Rd	1437	595
EB SR-84	1310	1533
Total	**4093**	**2454**

StreetLight Percent By Approach		
PM: O/D	EB I-595	EB SR-84
SB Flamingo Rd	81%	19%
NB Flamingo Rd	71%	29%
EB SR-84	46%	54%

Hiatus: EB

StreetLight Volume		
AM: O/D	EB I-595	EB SR-84
SB Hiatus Rd	1477	580
NB Hiatus Rd	1124	732
EB SR-84	733	2499
Total	**3334**	**3811**

StreetLight Percent By Approach		
AM: O/D	EB I-595	EB SR-84
SB Hiatus Rd	72%	28%
NB Hiatus Rd	61%	39%
EB SR-84	23%	77%

StreetLight Volume		
PM: O/D	EB I-595	EB SR-84
SB Hiatus Rd	1393	583
NB Hiatus Rd	541	398
EB SR-84	658	2699
Total	**2592**	**3680**

StreetLight Percent By Approach		
PM: O/D	EB I-595	EB SR-84
SB Hiatus Rd	70%	30%
NB Hiatus Rd	58%	42%
EB SR-84	20%	80%

Nob Hill: EB

StreetLight Volume		
AM: O/D	EB I-595	EB SR-84
SB Nob Hill	1944	899
NB Nob Hill	1435	563
EB SR-84	917	1647
Total	**4296**	**3109**

StreetLight Percent By Approach		
AM: O/D	EB I-595	EB SR-84
SB Nob Hill	68%	32%
NB Nob Hill	72%	28%
EB SR-84	36%	64%

StreetLight Volume		
PM: O/D	EB I-595	EB SR-84
SB Nob Hill	1022	963
NB Nob Hill	793	1166
EB SR-84	717	2118
Total	**2532**	**4247**

StreetLight Percent By Approach		
PM: O/D	EB I-595	EB SR-84
SB Nob Hill	51%	49%
NB Nob Hill	40%	60%
EB SR-84	25%	75%

Pine Island: EB

StreetLight Volume		
AM: O/D	EB I-595	EB SR-84
SB Pine Island	1669	413
NB Pine Island	1145	148
EB SR-84	1814	1828
Total	**4628**	**2389**

StreetLight Percent By Approach		
AM: O/D	EB I-595	EB SR-84
SB Pine Island	80%	20%
NB Pine Island	89%	11%
EB SR-84	50%	50%

StreetLight Volume		
PM: O/D	EB I-595	EB SR-84
SB Pine Island	1035	434
NB Pine Island	475	172
EB SR-84	1233	2232
Total	**2743**	**2838**

StreetLight Percent By Approach		
PM: O/D	EB I-595	EB SR-84
SB Pine Island	70%	30%
NB Pine Island	73%	27%
EB SR-84	36%	64%

University : EB

StreetLight Volume		
AM: O/D	EB I-595	EB SR-84
SB University	1033	700
SB University Flyover	1427	833
NB University	1469	195
EB SR-84	723	849
Total	**4652**	**2577**

StreetLight Percent By Approach		
AM: O/D	EB I-595	EB SR-84
SB University	60%	40%
SB University Flyover	63%	37%
NB University	88%	12%
EB SR-84	46%	54%

StreetLight Volume		
PM: O/D	EB I-595	EB SR-84
SB University	1289	743
SB University Flyover	1811	743
NB University	2239	289
EB SR-84	406	875
Total	**5745**	**2650**

StreetLight Percent By Approach		
PM: O/D	EB I-595	EB SR-84
SB University	63%	37%
SB University Flyover	71%	29%
NB University	89%	11%
EB SR-84	32%	68%

Flamingo: WB

StreetLight Volume		
AM: O/D	WB I-595	WB SR-84
NB Flamingo	448	559
SB Flamingo	719	188
WB SR-84	220	673
Total	**1387**	**1420**

StreetLight Percent By Approach		
AM: O/D	WB I-595	WB SR-84
NB Flamingo	44%	56%
SB Flamingo	79%	21%
WB SR-84	25%	75%

StreetLight Volume		
PM: O/D	WB I-595	WB SR-84
NB Flamingo	626	382
SB Flamingo	1197	493
WB SR-84	417	1129
Total	**2240**	**2004**

StreetLight Percent By Approach		
PM: O/D	WB I-595	WB SR-84
NB Flamingo	62%	38%
SB Flamingo	71%	29%
WB SR-84	27%	73%

Hiatus: WB

StreetLight Volume		
AM: O/D	WB I-595	WB SR-84
NB Hiatus	496	238
SB Hiatus	1273	291
WB SR-84	639	1478
Total	**2408**	**2007**

StreetLight Percent By Approach		
AM: O/D	WB I-595	WB SR-84
NB Hiatus	68%	32%
SB Hiatus	81%	19%
WB SR-84	30%	70%

StreetLight Volume		
PM: O/D	WB I-595	WB SR-84
NB Hiatus	286	162
SB Hiatus	1962	311
WB SR-84	1293	2743
Total	**3541**	**3216**

StreetLight Percent By Approach		
PM: O/D	WB I-595	WB SR-84
NB Hiatus	64%	36%
SB Hiatus	86%	14%
WB SR-84	32%	68%

Nob Hill: WB

StreetLight Volume		
AM: O/D	WB I-595	WB SR-84
NB Nob Hill	344	175
SB Nob Hill	420	147
WB SR-84	203	368
Total	**967**	**690**

StreetLight Percent By Approach		
AM: O/D	WB I-595	WB SR-84
NB Nob Hill	66%	34%
SB Nob Hill	74%	26%
WB SR-84	36%	64%

StreetLight Volume		
PM: O/D	WB I-595	WB SR-84
NB Nob Hill	623	423
SB Nob Hill	672	174
WB SR-84	317	682
Total	**1612**	**1279**

StreetLight Percent By Approach		
PM: O/D	WB I-595	WB SR-84
NB Nob Hill	60%	40%
SB Nob Hill	79%	21%
WB SR-84	32%	68%

Pine Island: WB

StreetLight Volume		
AM: O/D	WB I-595	WB SR-84
NB Pine Island	897	816
SB Pine Island	1390	343
WB SR-84	1238	680
Total	**3525**	**1839**

StreetLight Percent By Approach		
AM: O/D	WB I-595	WB SR-84
NB Pine Island	52%	48%
SB Pine Island	80%	20%
WB SR-84	65%	35%

StreetLight Volume		
PM: O/D	WB I-595	WB SR-84
NB Pine Island	906	486
SB Pine Island	2735	758
WB SR-84	2752	1611
Total	**6393**	**2855**

StreetLight Percent By Approach		
PM: O/D	WB I-595	WB SR-84
NB Pine Island	65%	35%
SB Pine Island	78%	22%
WB SR-84	63%	37%

University : WB

StreetLight Volume		
AM: O/D	WB I-595	WB SR-84
NB University	165	121
NB University Flyover	1240	201
SB University	919	137
WB SR-84	328	307
Total	**2652**	**766**

StreetLight Percent By Approach		
AM: O/D	WB I-595	WB SR-84
NB University	58%	42%
NB University Flyover	86%	14%
SB University	87%	13%
WB SR-84	52%	48%

StreetLight Volume		
PM: O/D	WB I-595	WB SR-84
NB University	661	436
NB University Flyover	3105	615
SB University	1664	288
WB SR-84	838	560
Total	**6268**	**1899**

StreetLight Percent By Approach		
PM: O/D	WB I-595	WB SR-84
NB University	60%	40%
NB University Flyover	83%	17%
SB University	85%	15%
WB SR-84	60%	40%

Davie: WB

StreetLight Volume		
AM: O/D	WB I-595	WB SR-84
NB Davie	857	641
WB SR-84	3348	1952
Total	**4205**	**2593**

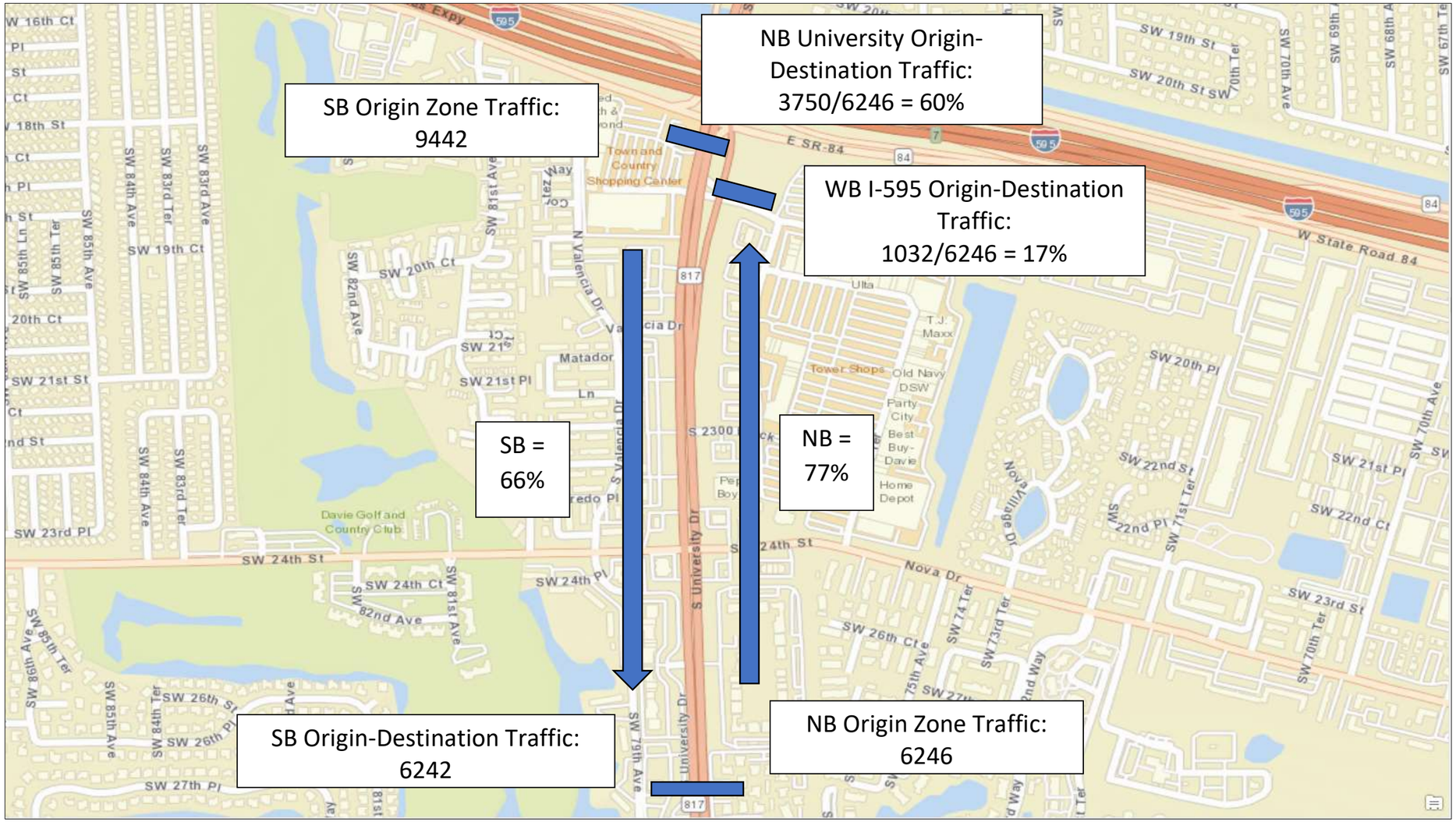
StreetLight Percent By Approach		
AM: O/D	WB I-595	WB SR-84
NB Davie	57%	43%
WB SR-84	63%	37%

StreetLight Volume		
PM: O/D	WB I-595	WB SR-84
NB Davie	1393	848
WB SR-84	6350	3472
Total	**7743**	**4320**

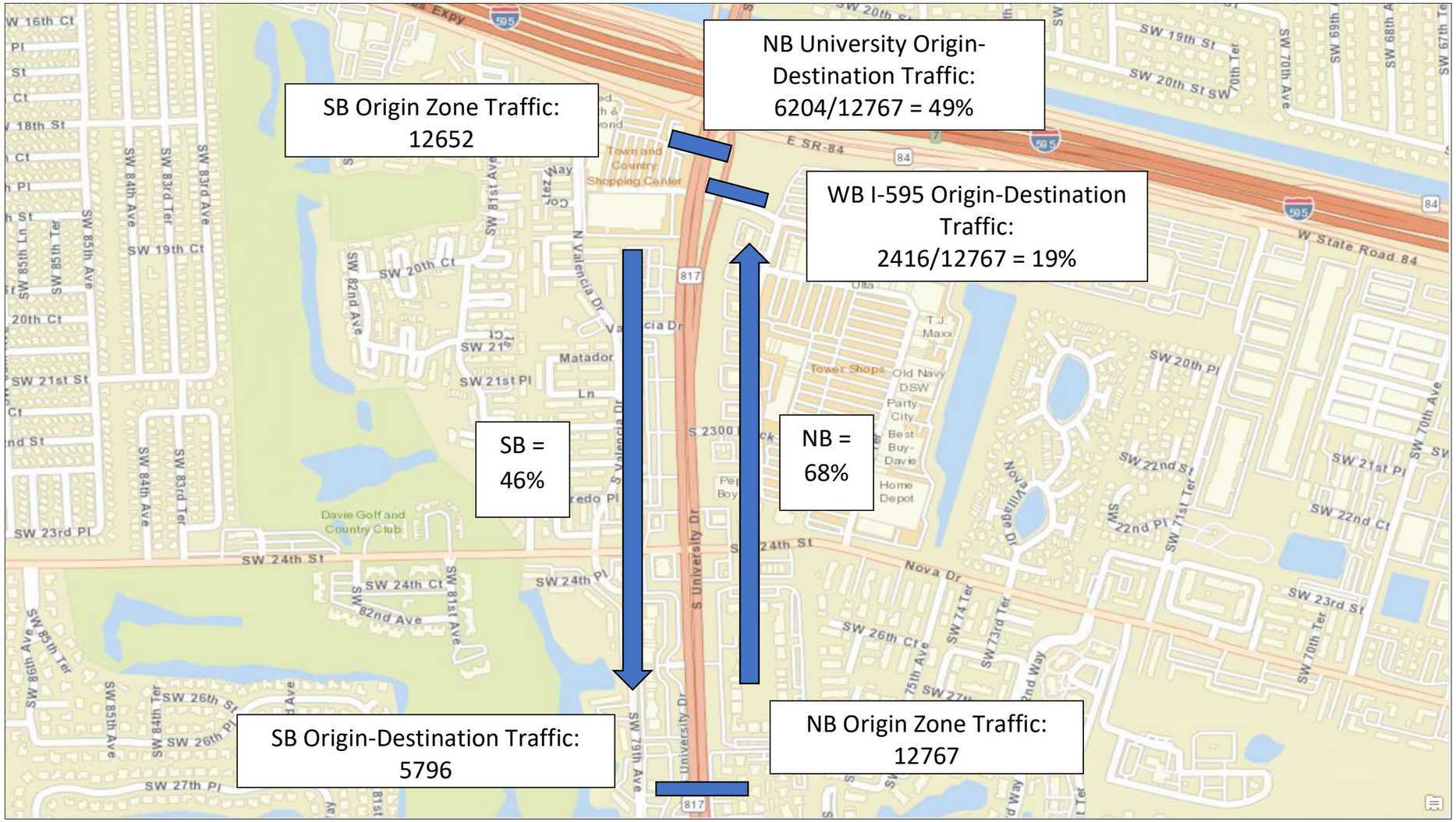
StreetLight Percent By Approach		
PM: O/D	WB I-595	WB SR-84
NB Davie	62%	38%
WB SR-84	65%	35%

Origin-Destination Traffic Data
University Drive Elevated Lanes

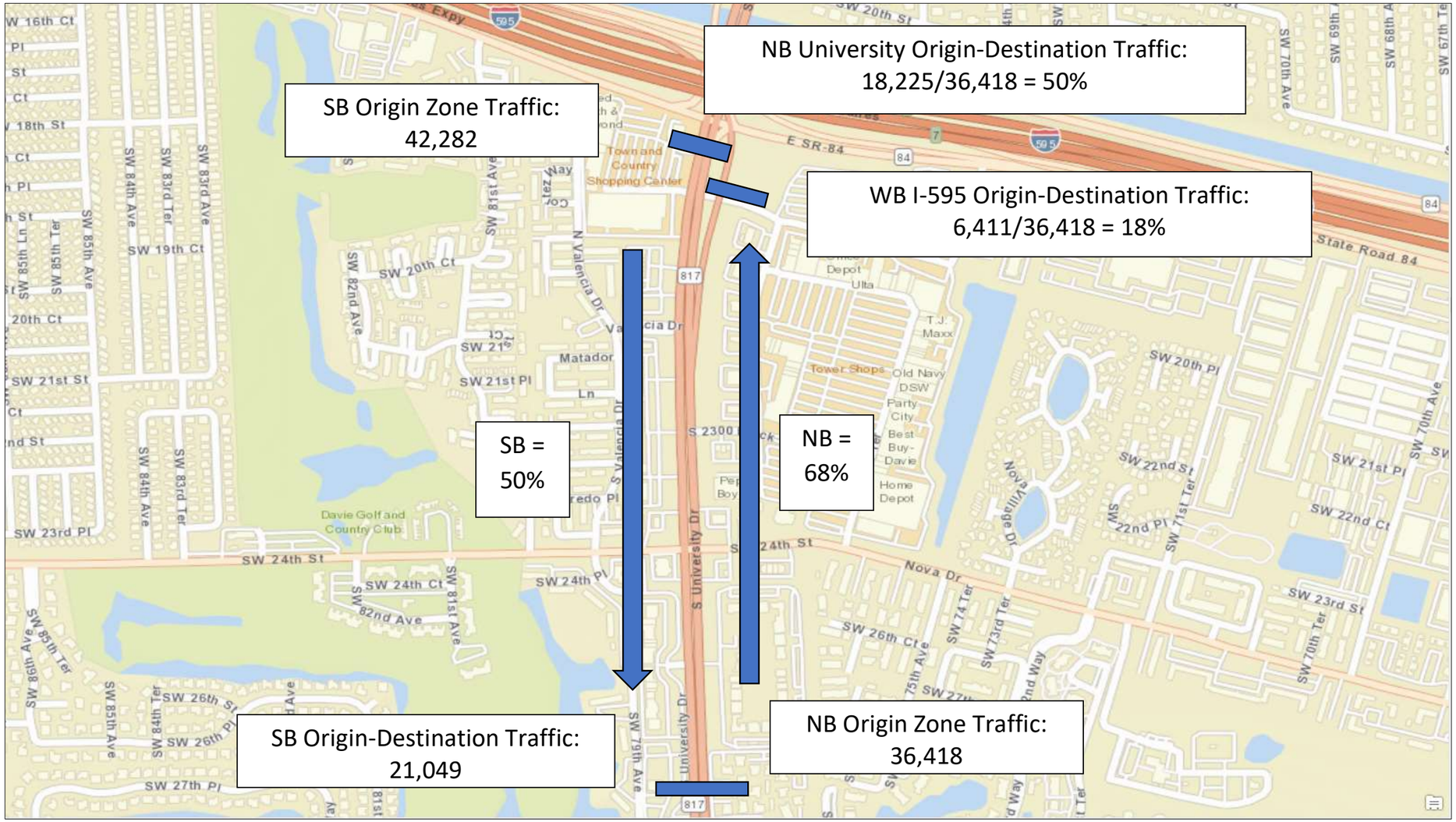
AM Peak: Expected Use of Elevated Lanes Over 23rd Street and Nova Drive



PM Peak: Expected Use of Elevated Lanes Over 23rd Street and Nova Drive



Daily: Expected Use of Elevated Lanes Over 23rd Street and Nova Drive



Appendix E – Build Conditions 2045 AM and PM Peak Hour Intersection Traffic Analysis

Table E-1

NW/SW 136th Avenue AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
1	NW/SW 136th Avenue at Shenandoah Pkwy/SW 5th St	EB	EBL	466 (271)	#459 (261)	39.8 (41.4)	D (D)	36.4 (39.7)	D (D)
			EBT	27 (9)	29 (17)	19.2 (30.7)	B (C)		
			EBR	65 (42)	26 (26)	19.3 (30.8)	B (C)		
		WB	WBL	15 (13)	35 (32)	48.9 (54.9)	D (D)	61.2 (54.9)	E (D)
			WBT	42 (11)	#173 (61)	62.2 (54.9)	E (D)		
			WBR	134 (72)	- (-)	- (-)	- (-)		
		NB	NBU	2 (0)	- (-)	- (-)	- (-)	25.0 (12.3)	C (B)
			NBL	90 (74)	100 (63)	22.9 (12.4)	C (B)		
			NBT	1035 (771)	436 (233)	25.2 (12.3)	C (B)		
			NBR	14 (29)	- (-)	- (-)	- (-)		
		SB	SBU	19 (42)	- (-)	- (-)	- (-)	20.7 (13.0)	C (B)
			SBL	38 (94)	86 (125)	31.7 (16.2)	C (B)		
			SBT	679 (831)	253 (244)	20.7 (12.4)	C (B)		
			SBR	372 (611)	55 (50)	18.8 (13.2)	B (B)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								27.8 (17.2)	C (B)
2	NW/SW 136th Avenue at EB SR-84	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
		EB	EBL	885 (1189)	#527 (#675)	83.5 (76.7)	F (E)	67.8 (61.9)	E (E)
			EBT	565 (453)	337 (256)	47.4 (32.6)	D (C)		
			EBR	115 (148)	- (-)	- (-)	- (-)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	0.0 (0.0)	A (A)
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	0 (0)	- (-)	- (-)	- (-)		
		NB	NBL	0 (0)	- (-)	- (-)	- (-)	65.7 (63.6)	E (E)
			NBT	641 (552)	276 (276)	32.1 (44.2)	C (D)		
			NBR	1013 (663)	#663 (#452)	87.0 (79.8)	F (E)		
		SB	SBU	- (-)	- (-)	- (-)	- (-)	8.7 (23.3)	A (C)
			SBL	37 (68)	m30 (m52)	22.2 (28.5)	C (C)		
			SBT	1034 (1501)	403 (672)	8.3 (23.1)	A (C)		
			SBR	0 (0)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								52.3 (49.1)	D (D)
3	NW/SW 136th Avenue at WB SR-84	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
		EB	EBL	0 (0)	- (-)	- (-)	- (-)	27.3 (39.2)	C (D)
			EBT	0 (0)	- (-)	- (-)	- (-)		
			EBR	571 (1055)	0 (24)	27.3 (39.2)	C (D)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	178.3 (67.4)	F (E)
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	428 (296)	#640 (#391)	178.3 (67.4)	F (E)		
		NB	NBU	- (-)	- (-)	- (-)	- (-)	5.2 (3.7)	A (A)
			NBL	341 (558)	m27 (m26)	4.8 (3.5)	A (A)		
			NBT	1186 (1185)	m91 (m56)	5.3 (3.8)	A (A)		
			NBR	0 (0)	- (-)	- (-)	- (-)		
		SB	SBL	0 (0)	- (-)	- (-)	- (-)	40.5 (40.7)	D (D)
			SBT	498 (514)	167 (172)	41.5 (41.7)	D (D)		
			SBR	230 (271)	66 (71)	38.2 (38.7)	D (D)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								39.8 (25.7)	D (C)
4	NW/SW 136th Avenue at NW 2nd St	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
		EB	EBU	2 (0)	- (-)	- (-)	- (-)	52.8 (51.1)	D (D)
			EBL	135 (264)	88 (148)	54.2 (54.8)	D (D)		
			EBT	0 (0)	- (-)	- (-)	- (-)		
			EBR	172 (349)	68 (96)	51.6 (48.4)	D (D)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	- (-)	- (-)
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	0 (0)	- (-)	- (-)	- (-)		
		NB	NBU	25 (14)	- (-)	- (-)	- (-)	4.7 (9.5)	A (A)
			NBL	221 (273)	93 (229)	8.3 (40.0)	A (D)		
			NBT	2451 (1916)	269 (230)	4.4 (5.0)	A (A)		
			NBR	0 (0)	- (-)	- (-)	- (-)		
		SB	SBL	0 (0)	- (-)	- (-)	- (-)	7.8 (15.3)	A (B)
			SBT	1248 (1596)	221 (416)	8.0 (16.0)	A (B)		
			SBR	128 (282)	25 (46)	6.2 (11.9)	A (B)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								9.1 (17.3)	A (B)

Table E-2

WB SR-84 at Commodore Drive AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (veh)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
5	WB SR-84 at Commodore Drive	EB	EBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			EBT	- (-)	- (-)	- (-)	- (-)		
			EBR	- (-)	- (-)	- (-)	- (-)		
		WB	WBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			WBT	2855 (2450)	- (-)	- (-)	- (-)		
			WBR	204 (427)	- (-)	- (-)	- (-)		
		NB	NBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			NBT	- (-)	- (-)	- (-)	- (-)		
			NBR	- (-)	- (-)	- (-)	- (-)		
		SB	SBL	- (-)	- (-)	- (-)	- (-)	>300 (>300)	F (F)
			SBT	- (-)	- (-)	- (-)	- (-)		
			SBR	0 (381)	484 (Err)	>300 (>300)	F (F)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								>300 (>300)	F (F)

WB SR-84 at SW 125th Avenue AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (veh)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
6	WB SR-84 at SW 125th Ave	EB	EBL	0 (0)	- (-)	- (-)	- (-)	- (-)	- (-)
			EBT	0 (0)	- (-)	- (-)	- (-)		
			EBR	- (-)	- (-)	- (-)	- (-)		
		WB	WBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			WBT	1925 (1656)	- (-)	- (-)	- (-)		
			WBR	13 (54)	- (-)	- (-)	- (-)		
		NB	NBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			NBT	- (-)	- (-)	- (-)	- (-)		
			NBR	- (-)	- (-)	- (-)	- (-)		
		SB	SBL	0 (0)	- (-)	- (-)	- (-)	21.7 (25.4)	C (D)
			SBT	- (-)	- (-)	- (-)	- (-)		
			SBR	18 (102)	7 (43)	21.7 (25.4)	C (D)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								21.7 (25.4)	C (D)

Table E-3

Flamingo Road AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
7	Flamingo Road at SW 8th St	EB	EBL	171 (161)	263 (245)	82.8 (74.2)	F (E)	75.4 (69.2)	E (E)
			EBT	0 (0)	0 (0)	- (-)	- (-)		
			EBR	89 (91)	54 (53)	61.2 (60.4)	E (E)		
		WB	WBL	0 (0)	0 (0)	- (-)	- (-)	- (-)	- (-)
			WBT	0 (0)	0 (0)	- (-)	- (-)		
			WBR	0 (0)	0 (0)	- (-)	- (-)		
		NB	NBU	3 (3)	- (-)	- (-)	- (-)	12.0 (9.9)	B (A)
			NBL	102 (149)	60 (154)	11.3 (34.9)	B (C)		
			NBT	2047 (1671)	505 (324)	12.0 (7.6)	B (A)		
		SB	SBU	30 (14)	m4 (m2)	6.1 (1.6)	A (A)	2.4 (2.8)	A (A)
			SBT	1763 (1965)	125 (171)	2.4 (3.0)	A (A)		
			SBR	284 (447)	17 (25)	1.6 (2.1)	A (A)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								11.2 (9.4)	B (A)
8	Flamingo Road at EB SR-84	EB	EBL	579 (698)	440 (#648)	75.5 (79.6)	E (E)	66.6 (62.0)	E (E)
			EBT	33 (30)	435 (410)	74.0 (56.1)	E (E)		
			EBR	442 (615)	192 (306)	55.3 (52.8)	E (D)		
		WB	WBL	0 (0)	0 (0)	- (-)	- (-)	0.0 (0.0)	A (A)
			WBT	0 (0)	0 (0)	- (-)	- (-)		
			WBR	0 (0)	0 (0)	- (-)	- (-)		
		NB	NBL	0 (0)	0 (0)	- (-)	- (-)	58.7 (87.7)	E (F)
			NBT	1382 (1101)	382 (309)	46.9 (53.3)	D (D)		
			NBR	936 (633)	347 (172)	76.1 (147.4)	E (F)		
		SB	SBL	721 (926)	m445 (m428)	31.2 (17.7)	C (B)	20.1 (16.2)	C (B)
			SBT	1678 (1994)	m555 (m715)	15.4 (15.5)	B (B)		
			SBR	0 (0)	0 (0)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								44.1 (47.1)	D (D)
9	Flamingo Road at WB SR-84	EB	EBL	0 (0)	0 (0)	- (-)	- (-)	0.0 (0.0)	A (A)
			EBT	0 (0)	0 (0)	- (-)	- (-)		
			EBR	0 (0)	0 (0)	- (-)	- (-)		
		WB	WBL	665 (776)	#462 (295)	79.1 (58.7)	E (E)	78.2 (99.5)	E (F)
			WBT	174 (243)	#516 (#694)	93.4 (138.5)	F (F)		
			WBR	703 (678)	259 (#481)	60.7 (86.4)	E (F)		
		NB	NBL	549 (338)	290 (m64)	16.1 (12.4)	B (B)	17.0 (7.5)	B (A)
			NBT	1412 (1461)	456 (388)	17.3 (6.4)	B (A)		
			NBR	0 (0)	0 (0)	- (-)	- (-)		
		SB	SBL	0 (0)	0 (0)	- (-)	- (-)	43.0 (46.4)	D (D)
			SBT	1734 (2144)	434 (#585)	46.1 (51.7)	D (D)		
			SBR	736 (640)	311 (130)	35.7 (28.9)	D (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								43.5 (49.6)	D (D)
10	Flamingo Road at Broward Blvd	EB	EBU	- (5)	- (-)	- (-)	- (-)	93.8 (73.7)	F (E)
			EBL	140 (71)	#317 (#173)	156.4 (91.9)	F (F)		
			EBT	152 (110)	121 (95)	72.1 (70.4)	E (E)		
			EBR	244 (199)	137 (74)	71.5 (68.5)	E (E)		
		WB	WBU	4 (2)	- (-)	- (-)	- (-)	73.9 (65.5)	E (E)
			WBL	379 (442)	270 (#327)	79.8 (77.8)	E (E)		
			WBT	100 (165)	76 (119)	61.0 (57.0)	E (E)		
			WBR	619 (418)	208 (52)	72.4 (55.7)	E (E)		
		NB	NBU	13 (26)	- (-)	- (-)	- (-)	24.6 (18.7)	C (B)
			NBL	62 (82)	147 (#218)	93.6 (98.5)	F (F)		
			NBT	1601 (1596)	#774 (364)	28.5 (19.1)	C (B)		
			NBR	479 (504)	0 (0)	0.5 (0.5)	A (A)		
		SB	SBU	7 (2)	- (-)	- (-)	- (-)	38.9 (37.4)	D (D)
			SBL	513 (514)	347 (346)	65.6 (68.6)	E (E)		
			SBT	1983 (2288)	834 (833)	33.0 (31.5)	C (C)		
			SBR	106 (116)	4 (8)	18.9 (15.8)	B (B)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								44.7 (37.6)	D (D)

Table E-4

Hiatus Road AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
11	Hiatus Road at EB SR-84	EB	EBL	626 (778)	248 (266)	95.8 (50.4)	F (D)	83.7 (47.8)	F (D)
			EBT	115 (91)	92 (102)	56.9 (43.2)	E (D)		
			EBR	157 (287)	0 (21)	53.8 (41.4)	D (D)		
		WB	WBL	0 (0)	0 (0)	- (-)	- (-)	0.0 (0.0)	A (A)
			WBT	0 (0)	0 (0)	- (-)	- (-)		
			WBR	0 (0)	0 (0)	- (-)	- (-)		
		NB	NBL	0 (0)	0 (0)	- (-)	- (-)	69.5 (54.3)	E (D)
			NBT	630 (467)	249 (202)	53.5 (64.1)	D (E)		
			NBR	510 (278)	#570 (63)	89.4 (37.9)	F (D)		
		SB	SBL	1049 (669)	#652 (#471)	46.2 (66.5)	D (E)	29.9 (30.2)	C (C)
			SBT	716 (1138)	141 (442)	6.0 (8.9)	A (A)		
			SBR	0 (0)	0 (0)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								54.5 (40.5)	D (D)
12	Hiatus Road at WB SR-84	EB	EBL	0 (0)	0 (0)	- (-)	- (-)	0.0 (0.0)	A (A)
			EBT	0 (0)	0 (0)	- (-)	- (-)		
			EBR	0 (0)	0 (0)	- (-)	- (-)		
		WB	WBL	292 (586)	168 (350)	46.3 (60.9)	D (E)	48.6 (73.5)	D (E)
			WBT	113 (150)	298 (#595)	54.5 (106.5)	D (F)		
			WBR	551 (892)	150 (#376)	46.8 (66.7)	D (E)		
		NB	NBU	4 (6)	- (-)	- (-)	- (-)	22.2 (2.6)	C (A)
			NBL	240 (146)	#361 (m22)	70.4 (8.9)	E (A)		
			NBT	1012 (1093)	213 (0)	10.6 (1.7)	B (A)		
			NBR	0 (0)	0 (0)	- (-)	- (-)		
		SB	SBL	0 (0)	0 (0)	- (-)	- (-)	29.5 (45.0)	C (D)
			SBT	1469 (1215)	332 (338)	29.4 (44.7)	C (D)		
			SBR	916 (837)	214 (263)	29.6 (45.5)	C (D)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								31.5 (43.7)	C (D)
13	Hiatus Road at Broward Blvd	EB	EBU	11 (2)		- (-)	- (-)	57.6 (63.3)	E (E)
			EBL	291 (315)	#459 (#498)	89.4 (91.6)	F (F)		
			EBT	637 (816)	295 (373)	61.8 (69.0)	E (E)		
			EBR	703 (487)	384 (244)	40.1 (35.5)	D (D)		
		WB	WBU	3 (-)	- (-)	- (-)	- (-)	68.5 (72.8)	E (E)
			WBL	470 (568)	323 (#409)	78.6 (82.5)	E (F)		
			WBT	643 (780)	#326 (#381)	71.7 (73.6)	E (E)		
			WBR	213 (207)	158 (183)	36.7 (42.9)	D (D)		
		NB	NBU	- (2)	- (-)	- (-)	- (-)	54.2 (54.6)	D (D)
			NBL	423 (432)	#313 (#328)	78.6 (81.7)	E (F)		
			NBT	746 (1202)	330 (525)	52.2 (53.6)	D (D)		
			NBR	394 (349)	317 (259)	31.9 (24.3)	C (C)		
		SB	SBU	3 (-)	- (-)	- (-)	- (-)	53.4 (54.4)	D (D)
			SBL	286 (174)	418 (#312)	83.1 (95.0)	F (F)		
			SBT	1212 (995)	525 (432)	54.5 (54.3)	D (D)		
			SBR	330 (224)	223 (143)	23.4 (23.5)	C (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								57.8 (61.0)	E (E)

Table E-5

Nob Hill Road AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
14	Nob Hill Road at SW 13th St	EB	EBL	52 (18)	#130 (46)	212.5 (66.7)	F (E)	167.4 (66.0)	F (E)
			EBT	12 (4)	35 (30)	54.5 (65.2)	D (E)		
			EBR	9 (12)	- (-)	- (-)	- (-)		
		WB	WBL	140 (31)	200 (68)	75.1 (67.8)	E (E)	65.0 (66.1)	E (E)
			WBT	4 (3)	177 (57)	59.7 (65.4)	E (E)		
			WBR	260 (73)	- (-)	- (-)	- (-)		
		NB	NBU	3 (0)	- (-)	- (-)	- (-)	17.4 (6.7)	B (A)
			NBL	31 (12)	21 (5)	9.9 (4.8)	A (A)		
			NBT	1218 (1119)	595 (261)	18.3 (6.8)	B (A)		
			NBR	164 (20)	65 (0)	12.1 (4.2)	B (A)		
		SB	SBU	48 (140)	- (-)	- (-)	- (-)	12.1 (6.4)	B (A)
			SBL	191 (42)	167 (42)	19.1 (4.0)	B (A)		
			SBT	1186 (1569)	406 (398)	11.0 (6.7)	B (A)		
			SBR	79 (9)	23 (0)	7.0 (3.1)	A (A)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								23.9 (9.3)	C (A)
15	Nob Hill Road at SW 101 Rd	EB	EBL	138 (156)	#200 (#213)	89.7 (73.4)	F (E)	60.1 (57.3)	E (E)
			EBT	68 (5)	128 (119)	36.3 (38.7)	D (D)		
			EBR	103 (130)	0 (-)	- (-)	- (-)		
		WB	WBU	31 (-)	- (-)	- (-)	- (-)	36.9 (35.9)	D (D)
			WBL	20 (15)	66 (28)	35.6 (36.1)	D (D)		
			WBT	18 (6)	144 (39)	37.3 (35.9)	D (D)		
			WBR	162 (49)	- (-)	- (-)	- (-)		
		NB	NBU	- (18)	- (-)	- (-)	- (-)	9.5 (8.9)	A (A)
			NBL	114 (76)	#138 (#146)	20.2 (41.8)	C (D)		
			NBT	1426 (1244)	287 (201)	8.8 (6.5)	A (A)		
			NBR	36 (12)	9 (1)	4.5 (3.7)	A (A)		
		SB	SBU	- (53)	- (-)	- (-)	- (-)	11.7 (8.4)	B (A)
			SBL	137 (18)	#197 (38)	46.7 (7.9)	D (A)		
			SBT	1328 (1649)	256 (330)	8.2 (8.6)	A (A)		
			SBR	25 (44)	6 (10)	4.5 (3.8)	A (A)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								16.5 (13.3)	B (B)
16	Nob Hill Road at EB SR-84	EB	EBL	467 (335)	357 (247)	84.6 (52.6)	F (D)	72.3 (51.1)	E (D)
			EBT	27 (28)	354 (246)	81.5 (52.5)	F (D)		
			EBR	290 (321)	104 (117)	53.9 (49.6)	D (D)		
		WB	WBL	0 (0)	0 (-)	- (-)	- (-)	0.0 (0.0)	A (A)
			WBT	0 (0)	0 (-)	- (-)	- (-)		
			WBR	0 (0)	0 (-)	- (-)	- (-)		
		NB	NBL	0 (0)	0 (-)	- (-)	- (-)	59.2 (50.6)	E (D)
			NBT	836 (835)	351 (344)	57.0 (54.2)	E (D)		
			NBR	892 (667)	332 (54)	61.3 (46.2)	E (D)		
		SB	SBL	1183 (837)	693 (m425)	34.0 (19.1)	C (B)	22.9 (18.1)	C (B)
			SBT	1219 (1395)	555 (m750)	12.1 (17.5)	B (B)		
			SBR	0 (0)	0 (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								43.5 (34.3)	D (C)
17	Nob Hill Road at WB SR-84	EB	EBL	0 (0)	0 (0)	- (-)	- (-)	0.0 (0.0)	A (A)
			EBT	0 (0)	0 (0)	- (-)	- (-)		
			EBR	0 (0)	0 (0)	- (-)	- (-)		
		WB	WBL	567 (704)	#486 (#605)	71.8 (77.5)	E (E)	57.7 (65.5)	E (E)
			WBT	93 (162)	252 (334)	52.5 (51.5)	D (D)		
			WBR	755 (1080)	253 (#459)	55.0 (68.2)	E (E)		
		NB	NBU	4 (4)	- (-)	- (-)	- (-)	22.6 (9.8)	C (A)
			NBL	325 (298)	#479 (334)	44.0 (11.2)	D (B)		
			NBT	978 (868)	425 (405)	15.5 (9.4)	B (A)		
			NBR	0 (0)	- (-)	- (-)	- (-)		
		SB	SBL	0 (0)	- (-)	- (-)	- (-)	37.5 (57.7)	D (E)
			SBT	1835 (1524)	507 (#518)	38.8 (60.9)	D (E)		
			SBR	310 (364)	117 (182)	29.7 (44.6)	C (D)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								39.4 (49.5)	D (D)

Table E-6

Nob Hill Road AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
18	Nob Hill Road at Hawks View Blvd	EB	EBU	3 (4)	- (-)	- (-)	- (-)	46.6 (46.6)	D (D)
			EBL	134 (89)	155 (116)	51.6 (49.7)	D (D)		
			EBT	0 (0)	- (-)	- (-)	- (-)		
			EBR	176 (117)	78 (53)	42.8 (44.2)	D (D)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	- (-)	- (-)
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	0 (0)	- (-)	- (-)	- (-)		
		NB	NBU	2 (5)	- (-)	- (-)	- (-)	6.1 (5.1)	A (A)
			NBL	107 (127)	84 (85)	20.7 (15.0)	C (B)		
			NBT	1649 (1806)	196 (189)	5.1 (4.4)	A (A)		
			NBR	0 (0)	- (-)	- (-)	- (-)		
		SB	SBU	8 (3)	11 (6)	8.3 (7.2)	A (A)	12.9 (11.2)	B (B)
			SBL	1935 (1791)	421 (364)	13.2 (11.5)	B (B)		
			SBT	111 (158)	25 (29)	7.8 (7.5)	A (A)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								12.6 (10.1)	B (B)
19	Nob Hill Road at Broward Blvd	EB	EBU	- (2)	- (-)	- (-)	- (-)	56.4 (63.2)	E (E)
			EBL	147 (208)	163 (#293)	45.9 (68.9)	D (E)		
			EBT	857 (860)	387 (397)	64.0 (67.7)	E (E)		
			EBR	189 (186)	109 (123)	30.4 (35.9)	C (D)		
		WB	WBL	378 (654)	#293 (#467)	86.2 (80.0)	F (E)	59.7 (58.5)	E (E)
			WBT	759 (1100)	316 (450)	51.1 (49.7)	D (D)		
			WBR	226 (359)	69 (281)	44.2 (46.5)	D (D)		
		NB	NBU	- (4)	- (-)	- (-)	- (-)	42.5 (54.5)	D (D)
			NBL	216 (207)	#322 (#309)	78.3 (73.9)	E (E)		
			NBT	953 (1314)	384 (578)	45.8 (61.8)	D (E)		
			NBR	622 (373)	285 (125)	25.2 (17.9)	C (B)		
		SB	SBU	- (31)	- (-)	- (-)	- (-)	54.8 (59.6)	D (E)
			SBL	381 (240)	267 (#221)	77.5 (87.4)	E (F)		
			SBT	1487 (1108)	639 (485)	53.2 (57.6)	D (E)		
			SBR	205 (172)	114 (92)	24.3 (28.0)	C (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								52.7 (58.5)	D (E)

Table E-7

Pine Island Road AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
20	Pine Island Road at Nova Drive	EB	EBU	- (2)	- (-)	- (-)	- (-)	80.1 (79.1)	F (E)
			EBL	418 (233)	#601 (#327)	87.7 (90.3)	F (F)		
			EBT	240 (121)	#407 (200)	87.7 (80.2)	F (F)		
			EBR	259 (216)	154 (85)	60.6 (66.4)	E (E)		
		WB	WBL	243 (289)	#362 (#383)	101.6 (71.0)	F (E)	90.2 (70.6)	F (E)
			WBT	77 (189)	#156 (286)	87.3 (81.0)	F (F)		
			WBR	132 (218)	3 (79)	70.8 (61.1)	E (E)		
		NB	NBU	13 (2)	- (-)	- (-)	- (-)	46.1 (42.2)	D (D)
			NBL	163 (271)	152 (#421)	36.2 (83.5)	D (F)		
			NBT	1581 (1284)	657 (507)	49.5 (36.2)	D (D)		
			NBR	332 (251)	123 (62)	34.9 (28.2)	C (C)		
		SB	SBU	6 (5)	- (-)	- (-)	- (-)	44.2 (39.0)	D (D)
			SBL	319 (283)	#511 (322)	74.7 (47.7)	E (D)		
			SBT	1334 (1613)	376 (662)	30.4 (39.6)	C (D)		
			SBR	187 (317)	119 (65)	90.2 (28.1)	F (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								55.1 (48.6)	E (D)
21	Pine Island Road at Orange Grove Dr	EB	EBU	3 (-)	- (-)	- (-)	- (-)	46.4 (41.7)	D (D)
			EBL	283 (157)	#269 (152)	49.7 (44.2)	D (D)		
			EBT	0 (0)	- (-)	- (-)	- (-)		
			EBR	46 (49)	26 (31)	25.9 (33.9)	C (C)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	- (-)	- (-)
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	0 (0)	- (-)	- (-)	- (-)		
		NB	NBU	- (6)	- (-)	- (-)	- (-)	17.6 (11.8)	B (B)
			NBL	28 (68)	m12 (40)	10.0 (10.4)	B (B)		
			NBT	2256 (1788)	m533 (318)	17.7 (11.8)	B (B)		
			NBR	0 (0)	- (-)	- (-)	- (-)		
		SB	SBU	63 (106)	m28 (m81)	15.2 (15.7)	B (B)	20.3 (15.9)	C (B)
			SBT	1748 (2127)	563 (m451)	20.4 (14.5)	C (B)		
			SBR	122 (269)	m57 (m67)	21.2 (27.5)	C (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								20.8 (15.4)	C (B)
22	Pine Island Road at EB SR-84	EB	EBL	969 (991)	441 (#651)	51.3 (122.7)	D (F)	51.4 (120.9)	D (F)
			EBT	43 (37)	512 (#754)	54.0 (135.9)	D (F)		
			EBR	659 (680)	368 (#566)	50.2 (111.6)	D (F)		
		WB	WBL	0 (0)	0 (0)	- (-)	- (-)	0.0 (0.0)	A (A)
			WBT	0 (0)	0 (0)	- (-)	- (-)		
			WBR	0 (0)	0 (0)	- (-)	- (-)		
		NB	NBL	0 (0)	0 (0)	- (-)	- (-)	69.8 (80.3)	E (F)
			NBT	1710 (1628)	#557 (#580)	72.8 (87.7)	E (F)		
			NBR	909 (488)	256 (121)	64.0 (55.4)	E (E)		
		SB	SBU	- (-)	- (-)	- (-)	- (-)	48.3 (19.8)	D (B)
			SBL	1179 (763)	m589 (m292)	75.0 (22.4)	E (C)		
			SBT	1376 (1967)	m436 (m499)	25.4 (18.9)	C (B)		
			SBR	0 (0)	- (0)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								57.3 (65.7)	E (E)
23	Pine Island Road at WB SR-84	EB	EBL	0 (0)	0 (0)	- (-)	- (-)	0.0 (0.0)	A (A)
			EBT	0 (0)	0 (0)	- (-)	- (-)		
			EBR	0 (0)	0 (0)	- (-)	- (-)		
		WB	WBL	475 (999)	#832 (#1555)	171.1 (164.2)	F (F)	79.4 (115.1)	E (F)
			WBT	426 (626)	#928 (#1589)	58.5 (160.4)	E (F)		
			WBR	1122 (1384)	525 (754)	53.3 (59.8)	D (E)		
		NB	NBU	- (-)	- (-)	- (-)	- (-)	42.5 (20.1)	D (C)
			NBL	695 (502)	m#497 (m234)	122.1 (52.8)	F (D)		
			NBT	1984 (2116)	m650 (m755)	14.6 (12.3)	B (B)		
			NBR	0 (0)	0 (0)	- (-)	- (-)		
		SB	SBL	0 (0)	0 (0)	- (-)	- (-)	93.0 (183.4)	F (F)
			SBT	2080 (1730)	#863 (m#644)	101.3 (192.6)	F (F)		
			SBR	820 (870)	#309 (m#659)	45.9 (137.6)	D (F)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								71.6 (106.5)	E (F)

Table E-8

Pine Island Road AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
24	Pine Island Road at New River Canal Rd	EB	EBL	84 (47)	#111 (55)	70.4 (30.1)	E (C)	52.1 (29.5)	D (C)
			EBT	6 (5)	45 (35)	34.3 (29.1)	C (C)		
			EBR	80 (53)	- (-)	- (-)	- (-)		
		WB	WBL	60 (276)	#75 (#343)	42.2 (117.2)	D (F)	39.4 (95.9)	D (F)
			WBT	8 (30)	49 (90)	35.2 (30.7)	D (C)		
			WBR	34 (60)	- (-)	- (-)	- (-)		
		NB	NBU	- (4)	- (-)	- (-)	- (-)	6.4 (29.6)	A (C)
			NBL	38 (67)	m3 (m18)	5.7 (18.5)	A (B)		
			NBT	2915 (3326)	493 (#1205)	6.7 (30.6)	A (C)		
			NBR	153 (103)	m3 (m8)	1.3 (4.9)	A (A)		
		SB	SBU	- (6)	- (-)	- (-)	- (-)	9.8 (19.0)	A (B)
			SBL	43 (45)	m29 (#90)	7.7 (29.0)	A (C)		
			SBT	2760 (2344)	711 (500)	9.9 (18.8)	A (B)		
			SBR	41 (51)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								9.8 (29.3)	A (C)
25	Pine Island Road at Peters Rd	EB	EBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			EBT	- (-)	- (-)	- (-)	- (-)		
			EBR	- (-)	- (-)	- (-)	- (-)		
		WB	WBU	0 (2)	- (-)	- (-)	- (-)	63.0 (85.5)	E (F)
			WBL	410 (450)	#228 (#274)	91.4 (133.1)	F (F)		
			WBT	- (-)	- (-)	- (-)	- (-)		
			WBR	407 (521)	234 (343)	34.3 (44.2)	C (D)		
		NB	NBL	- (-)	- (-)	- (-)	- (-)	41.6 (78.7)	D (E)
			NBT	2426 (3073)	#961 (#1474)	47.7 (90.5)	D (F)		
			NBR	609 (601)	57 (96)	16.9 (18.0)	B (B)		
		SB	SBL	722 (705)	m430 (m#527)	55.2 (110.6)	E (F)	20.1 (29.2)	C (C)
			SBT	2408 (2032)	m452 (m32)	9.6 (0.9)	A (A)		
			SBR	- (-)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								34.4 (61.2)	C (E)
26	Pine Island Road at SW 6th Ct	EB	EBL	60 (38)	119 (#102)	87.5 (122.2)	F (F)	118.5 (107.4)	F (F)
			EBT	33 (29)	#410 (#212)	125.7 (103.4)	F (F)		
			EBR	223 (110)	- (-)	- (-)	- (-)		
		WB	WBL	190 (493)	#191 (#412)	117.9 (110.1)	F (F)	102.2 (96.0)	F (F)
			WBT	17 (43)	71 (#366)	60.5 (72.0)	E (E)		
			WBR	54 (247)	- (-)	- (-)	- (-)		
		NB	NBU	28 (38)	- (-)	- (-)	- (-)	15.4 (62.0)	B (E)
			NBL	99 (175)	m#165 (m208)	116.4 (52.5)	F (D)		
			NBT	2114 (2840)	m178 (m968)	11.6 (65.3)	B (E)		
			NBR	396 (293)	m20 (m167)	3.9 (37.3)	A (D)		
		SB	SBU	10 (10)	- (-)	- (-)	- (-)	52.6 (43.0)	D (D)
			SBL	165 (116)	#316 (#292)	100.8 (154.4)	F (F)		
			SBT	2772 (1922)	#1227 (726)	49.6 (35.9)	D (D)		
			SBR	30 (54)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								42.2 (61.2)	D (E)

Table E-9

Peters Road AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
27	Peters Road at SW 80th Terrace	EB	EBU	5 (12)		- (-)	- (-)	11 (36.5)	B (D)
			EBL	88 (84)	52 (91)	6.5 (22)	A (C)		
			EBT	1140 (1234)	425 (755)	11.7 (38.4)	B (D)		
			EBR	105 (67)	29 (13)	8.1 (23.2)	A (C)		
		WB	WBU	2 (51)		- (-)	- (-)	11 (29.1)	B (C)
			WBL	36 (30)	25 (#81)	8.1 (32.4)	A (C)		
			WBT	811 (741)	282 (378)	11.4 (29.8)	B (C)		
			WBR	383 (153)	43 (46)	10.6 (23.9)	B (C)		
		NB	NBL	3 (115)	- (-)	- (-)	- (-)	52.3 (41.4)	D (D)
			NBT	4 (24)	20 (204)	52.2 (47.9)	D (D)		
			NBR	53 (95)	1 (36)	52.3 (31.9)	D (C)		
		SB	SBL	186 (380)	- (-)	- (-)	- (-)	71 (70.8)	E (E)
			SBT	11 (13)	288 (#602)	74.9 (87.9)	E (F)		
			SBR	41 (177)	0 (57)	52.2 (32.8)	D (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								16.9 (40.7)	B (D)

EB SR-84 AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (veh)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
28	EB SR-84 at SW 81st Avenue	EB	EBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			EBT	1758 (1892)	- (-)	- (-)	- (-)		
			EBR	77 (227)	- (-)	- (-)	- (-)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	- (-)	- (-)
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	- (-)	- (-)	- (-)	- (-)		
		NB	NBL	0 (0)	- (-)	- (-)	- (-)	266.6 (68.3)	F (F)
			NBT	- (-)	- (-)	- (-)	- (-)		
			NBR	354 (152)	534 (139)	266.6 (68.3)	F (F)		
		SB	SBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			SBT	- (-)	- (-)	- (-)	- (-)		
			SBR	- (-)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								266.6 (68.3)	F (F)

Table E-10

University Drive AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
29	University Drive at SW 30 th St	EB	EBL	298 (275)	#429 (#390)	63.7 (113.6)	E (F)	94.2 (86.5)	F (F)
			EBT	360 (153)	#653 (242)	134.4 (63.8)	F (E)		
			EBR	111 (94)	49 (70)	45.9 (44.3)	D (D)		
		WB	WBL	139 (207)	#260 (267)	137.4 (52.9)	F (D)	63.4 (86.5)	E (F)
			WBT	60 (191)	116 (290)	67.7 (64.0)	E (E)		
			WBR	461 (952)	232 (#756)	40.6 (98.4)	D (F)		
		NB	NBL	75 (177)	140 (#322)	85.6 (101.8)	F (F)	70.9 (53.9)	E (D)
			NBT	2538 (2905)	#928 (#956)	75.1 (53.2)	E (D)		
			NBR	272 (167)	140 (51)	27.6 (15.5)	C (B)		
		SB	SBL	744 (373)	#594 (#334)	114.0 (119.9)	F (F)	49.2 (49.4)	D (D)
			SBT	2704 (2337)	819 (733)	35.5 (41.7)	D (D)		
			SBR	248 (283)	m5 (126)	4.1 (20.2)	A (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								62.5 (59.7)	E (E)
30	University Drive at Nova Dr	EB	EBL	353 (272)	248 (198)	77.4 (76.7)	E (E)	67.3 (66.9)	E (E)
			EBT	339 (264)	244 (198)	75.1 (76.0)	E (E)		
			EBR	344 (196)	311 (80)	49.1 (40.9)	D (D)		
		WB	WBU	34 (88)	- (-)	- (-)	- (-)	56.0 (52.0)	E (D)
			WBL	443 (470)	330 (359)	80.8 (70.4)	F (E)		
			WBT	183 (246)	277 (344)	66.5 (65.5)	E (E)		
			WBR	837 (952)	417 (282)	39.5 (37.7)	D (D)		
		NB	NBU	24 (24)	- (-)	- (-)	- (-)	29.6 (42.1)	C (D)
			NBL	130 (189)	m189 (m237)	83.8 (70.5)	F (E)		
			NBT	419 (523)	m112 (m205)	29.2 (37.4)	C (D)		
			NBR	470 (455)	m38 (m44)	12.3 (34.3)	B (C)		
		SB	SBU	18 (6)	- (-)	- (-)	- (-)	64.6 (72.0)	E ()
			SBL	578 (375)	#475 (m281)	65.4 (52.7)	E (D)		
			SBT	447 (281)	270 (m157)	46.6 (40.2)	D (D)		
			SBR	171 (327)	120 (m150)	109.0 (121.9)	F (F)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								54.9 (56.0)	D (E)
31	University Drive at SW 23rd St	EB	EBL	113 (83)	- (-)	- (-)	- (-)	73.3 (74.5)	E (E)
			EBT	13 (22)	118 (102)	73.3 (74.5)	E (E)		
			EBR	29 (27)	- (-)	- (-)	- (-)		
		WB	WBL	71 (349)	126 (#555)	75.0 (71.2)	E (E)	70.8 (61.1)	E (E)
			WBT	8 (15)	87 (#376)	70.2 (59.5)	E (E)		
			WBR	191 (569)	47 (193)	68.8 (52.4)	E (D)		
		NB	NBU	4 (4)	- (-)	- (-)	- (-)	27.7 (50.0)	C (D)
			NBL	38 (55)	m76 (m109)	80.4 (86.1)	F (F)		
			NBT	1455 (1270)	874 (#851)	26.6 (54.5)	C (D)		
			NBR	132 (424)	m58 (162)	22.3 (31.7)	C (C)		
		SB	SBU	74 (125)	- (-)	- (-)	- (-)	22.5 (48.5)	C (D)
			SBL	115 (326)	m130 (m263)	88.7 (105.7)	F (F)		
			SBT	1101 (728)	210 (m115)	11.7 (15.0)	B (B)		
			SBR	60 (52)	m0 (m0)	12.3 (22.1)	B (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								31.1 (52.9)	C (D)
32	University Drive at Kolsky Blvd	EB	EBL	20 (193)	40 (181)	79.2 (70.5)	E (E)	77.7 (75.7)	E (E)
			EBT	6 (23)	42 (180)	79.1 (69.9)	E (E)		
			EBR	15 (226)	0 (218)	75.3 (81.0)	E (F)		
		WB	WBL	46 (297)	64 (260)	74.9 (71.6)	E (E)	62.5 (52.8)	E (D)
			WBT	4 (33)	64 (265)	74.8 (71.5)	E (E)		
			WBR	112 (449)	32 (157)	57.1 (39.0)	E (D)		
		NB	NBU	27 (42)	- (-)	- (-)	- (-)	17.1 (171.8)	B (F)
			NBL	30 (115)	m103 (m#362)	68.9 (64.0)	E (E)		
			NBT	2904 (2971)	681 (#1497)	16.3 (185.7)	B (F)		
			NBR	58 (183)	m2 (m144)	8.3 (38.7)	A (D)		
		SB	SBL	91 (341)	81 (#367)	72.8 (64.9)	E (E)	25.8 (85.1)	C (F)
			SBT	3748 (2934)	1135 (#1134)	24.8 (88.5)	C (F)		
			SBR	28 (53)	0 (0)	8.8 (26.4)	A (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								23.3 (117.9)	C (F)

Table E-11

University Drive AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
33	University Drive at EB SR-84	EB	EBL	533 (592)	298 (#456)	37.1 (64.3)	D (E)	46.1 (73.2)	D (E)
			EBT	27 (28)	304 (#463)	37.2 (64.7)	D (E)		
			EBR	968 (806)	#434 (#456)	51.2 (79.9)	D (E)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	0.0 (0.0)	A (A)
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	0 (0)	- (-)	- (-)	- (-)		
		NB	NBL	0 (0)	- (-)	- (-)	- (-)	92.4 (87.0)	F (F)
			NBT	1934 (2559)	#751 (#1096)	92.4 (87.0)	F (F)		
			NBR	0 (0)	- (-)	- (-)	- (-)		
		SB	SBU	0 (0)	- (-)	- (-)	- (-)	53.2 (23.2)	D (C)
			SBL	436 (388)	n#3530 (m#244	29.8 (73.4)	C (E)		
			SBT	3195 (2770)	0 (m1047)	56.4 (16.2)	E (B)		
			SBR	0 (0)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								62.3 (56.1)	E (E)
34	University Drive at WB SR-84	EB	EBL	0 (0)	- (-)	0 (0)	0 (0)	0.0 (0.0)	A (A)
			EBT	0 (0)	- (-)	0 (0)	0 (0)		
			EBR	0 (0)	- (-)	0 (0)	0 (0)		
		WB	WBL	1353 (748)	#581 (#473)	72.1 (70.3)	E (E)	74.8 (116.9)	E (F)
			WBT	78 (403)	#694 (#875)	88.6 (191.4)	F (F)		
			WBR	92 (57)	2 (0)	30.0 (42.0)	C (D)		
		NB	NBU	- (-)	- (-)	- (-)	- (-)	20.8 (15.2)	C (B)
			NBL	145 (281)	m48 (m117)	70.3 (42.6)	E (D)		
			NBT	2318 (2868)	m256 (m281)	17.7 (12.5)	B (B)		
			NBR	0 (0)	- (-)	0 (0)	0 (0)		
		SB	SBL	0 (0)	- (-)	0 (0)	0 (0)	25.2 (29.7)	C (C)
			SBT	2274 (2407)	474 (586)	26.5 (30.6)	C (C)		
			SBR	504 (443)	57 (340)	19.4 (24.9)	B (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								34.8 (38.0)	C (D)
35	University Drive at Peters Rd	EB	EBU	13 (7)		- (-)	- (-)	109.3 (114.2)	F (F)
			EBL	480 (294)	330 (m#271)	59.7 (127.6)	E (F)		
			EBT	687 (423)	447 (m268)	57.0 (56.3)	E (E)		
			EBR	687 (1030)	447 (#866)	57.0 (134.1)	E (F)		
		WB	WBU	0 (-)	- (-)	- (-)	- (-)	137.4 (98.3)	F (F)
			WBL	1028 (897)	#621 (#497)	227.4 (149.1)	F (F)		
			WBT	582 (441)	363 (248)	52.8 (40.9)	D (D)		
			WBR	447 (504)	390 (#631)	40.7 (58.2)	D (E)		
		NB	NBL	543 (409)	#590 (#590)	419.7 (312.1)	F (F)	130.7 (85.8)	F (F)
			NBT	2750 (2711)	#1064 (#1064)	107.6 (74.1)	F (E)		
			NBR	836 (879)	333 (333)	18.8 (16.8)	B (B)		
		SB	SBU	7 (2)	- (-)	- (-)	- (-)	231.7 (147.7)	F (F)
			SBL	344 (359)	#361 (m#366)	191.3 (246.3)	F (F)		
			SBT	3465 (3215)	#1529 (#1299)	247.0 (142.4)	F (F)		
			SBR	186 (128)	m60 (m1)	22.8 (2.1)	C (A)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								164.0 (112.6)	F (F)

Table E-12

University Drive AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
36	University Drive at The Fountains	EB	EBL	10 (243)	17 (170)	75.6 (64.1)	E (E)	75.2 (80.1)	E (F)
			EBT	- (-)	- (-)	- (-)	- (-)		
			EBR	36 (300)	41 (#309)	75.1 (93.1)	E (F)		
		WB	WBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			WBT	- (-)	- (-)	- (-)	- (-)		
			WBR	- (-)	- (-)	- (-)	- (-)		
		NB	NBL	50 (294)	m6 (m127)	138.4 (35.8)	F (D)	12.9 (18.3)	B (B)
			NBT	3411 (3214)	m382 (m590)	11.0 (16.7)	B (B)		
			NBR	- (-)	- (-)	- (-)	- (-)		
		SB	SBL	- (-)	- (-)	- (-)	- (-)	6.9 (11.8)	A (B)
			SBT	4008 (3359)	916 (m159)	7.0 (12.5)	A (B)		
			SBR	49 (200)	m1 (m0)	1.9 (0.9)	A (A)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								10.1 (19.7)	B (B)
37	University Drive at Federated Rd	EB	EBL	58 (222)	- (-)	- (-)	- (-)	72.8 (67.8)	E (E)
			EBT	6 (5)	121 (326)	78.3 (82.0)	E (F)		
			EBR	61 (261)	0 (180)	67.1 (55.4)	E (E)		
		WB	WBL	11 (48)	36 (100)	78.9 (79.2)	E (E)	77.8 (77.2)	E (E)
			WBT	6 (13)	29 (47)	76.6 (73.3)	E (E)		
			WBR	5 (11)	- (-)	- (-)	- (-)		
		NB	NBU	2 (7)	- (-)	- (-)	- (-)	35.5 (43.1)	D (D)
			NBL	70 (198)	m65 (#246)	80.1 (85.0)	F (F)		
			NBT	3339 (3236)	1104 (#578)	34.5 (40.4)	C (D)		
			NBR	10 (16)	- (-)	- (-)	- (-)		
		SB	SBU	- (15)	- (-)	- (-)	- (-)	26.6 (81.0)	C (F)
			SBL	7 (5)	m5 (m17)	76.3 (84.0)	E (F)		
			SBT	3973 (3367)	m280 (m425)	26.9 (83.2)	C (F)		
			SBR	98 (128)	m0 (m7)	10.8 (22.0)	B (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								31.5 (62.7)	C (E)

Table E-13

Davie Road AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
38	Davie Road at Nova Dr	EB	EBU	23 (18)	- (-)	- (-)	- (-)	69.7 (73.9)	E (E)
			EBL	575 (714)	#458 (#561)	88.3 (93.8)	F (F)		
			EBT	138 (242)	199 (343)	49.0 (51.7)	D (D)		
			EBR	271 (350)	236 (370)	39.4 (47.7)	D (D)		
		WB	WBU	2 (-)	- (-)	- (-)	- (-)	81.8 (85.4)	F (F)
			WBL	124 (128)	211 (212)	88.7 (88.0)	F (F)		
			WBT	263 (238)	#478 (#468)	110.3 (134.7)	F (F)		
			WBR	568 (312)	#728 (294)	67.2 (46.5)	E (D)		
		NB	NBL	294 (105)	#268 (#110)	107.6 (92.8)	F (F)	62.2 (51.6)	E (D)
			NBT	1280 (1171)	557 (484)	54.6 (50.5)	D (D)		
			NBR	102 (130)	15 (34)	27.6 (27.2)	C (C)		
		SB	SBU	97 (66)	- (-)	- (-)	- (-)	37.9 (29.4)	D (C)
			SBL	265 (427)	m199 (m272)	59.5 (77.5)	E (E)		
			SBT	1278 (1444)	#876 (m740)	38.7 (28.3)	D (C)		
			SBR	1437 (1330)	952 (m551)	31.7 (12.9)	C (B)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								55.0 (48.6)	D (D)
39	Davie Road at Reese Rd	EB	EBL	5 (18)	- (-)	- (-)	- (-)	47.2 (48.0)	D (D)
			EBT	5 (7)	38 (58)	47.2 (48.0)	D (D)		
			EBR	20 (14)	- (-)	- (-)	- (-)		
		WB	WBL	280 (307)	#455 (#554)	86.4 (111.1)	F (F)	88.3 (85.8)	F (F)
			WBT	4 (8)	#539 (382)	89.7 (62.0)	F (E)		
			WBR	377 (318)	- (-)	- (-)	- (-)		
		NB	NBU	47 (36)	- (-)	- (-)	- (-)	35.4 (40.4)	D (D)
			NBL	7 (0)	m17 (m13)	50.3 (40.5)	D (D)		
			NBT	2359 (2153)	1012 (m890)	36.4 (42.1)	D (D)		
			NBR	134 (231)	m32 (m139)	12.3 (24.1)	B (C)		
		SB	SBU	52 (70)	- (-)	- (-)	- (-)	35.5 (34.9)	D (C)
			SBL	238 (371)	#240 (m#342)	89.2 (105.2)	F (F)		
			SBT	2688 (2965)	1018 (#1289)	29.7 (24.5)	C (C)		
			SBR	8 (7)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								41.1 (42.0)	D (D)
40	Davie Road at EB SR-84	EB	EBL	74 (261)	125 (#501)	55.5 (133.4)	E (F)	18.8 (30.5)	B (C)
			EBT	21 (31)	47 (66)	53.6 (58.9)	D (E)		
			EBR	1458 (1388)	#154 (0)	16.5 (10.5)	B (B)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	0.0 (0.0)	A (A)
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	0 (0)	- (-)	- (-)	- (-)		
		NB	NBL	0 (0)	- (-)	- (-)	- (-)	44.5 (42.9)	D (D)
			NBT	1548 (1264)	#763 (m#652)	76.2 (83.5)	E (F)		
			NBR	1242 (1295)	0 (m1596)	5.1 (3.3)	A (A)		
		SB	SBL	0 (0)	- (-)	- (-)	- (-)	0.2 (2.8)	A (A)
			SBT	1525 (2025)	0 (m0)	0.2 (2.8)	A (A)		
			SBR	0 (0)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								26.2 (26.6)	C (C)
41	Davie Road at WB SR-84	EB	EBL	- (-)	- (-)	- (-)	- (-)	0.0 (0.0)	A (A)
			EBT	0 (0)	- (-)	- (-)	- (-)		
			EBR	0 (0)	- (-)	- (-)	- (-)		
		WB	WBL	1525 (2025)	840 (#1379)	34.1 (70.3)	C (E)	31.3 (47.7)	C (D)
			WBT	2017 (2322)	686 (779)	29.1 (28.1)	C (C)		
			WBR	- (-)	- (-)	- (-)	- (-)		
		NB	NBL	1622 (1525)	m708 (m530)	47.1 (32.5)	D (C)	47.1 (32.5)	D (C)
			NBT	- (-)	- (-)	- (-)	- (-)		
			NBR	0 (0)	- (-)	- (-)	- (-)		
		SB	SBL	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
			SBT	- (-)	- (-)	- (-)	- (-)		
			SBR	- (-)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								36.2 (43.8)	D (D)

Table E-14

SR 7/US 441 AM (PM)

Study Intersection Number	Study Intersection Location	Approach	Movement	Volume (vph)	Queue Length 95th % (ft)	Delay (s/veh)	LOS	Approach Delay (s/Veh)	Approach LOS
42	SR 7/US 441 at Oakes Rd South	EB	EBU	0 (0)	- (-)	- (-)	- (-)	34.9 (32.3)	C (C)
			EBL	0 (0)	- (-)	- (-)	- (-)		
			EBT	0 (0)	- (-)	- (-)	- (-)		
			EBR	124 (123)	#126 (113)	34.9 (32.3)	C (C)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	- (-)	- (-)
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	0 (0)	- (-)	- (-)	- (-)		
		NB	NBL	135 (109)	123 (101)	32.5 (30.3)	C (C)	2.0 (1.9)	A (A)
			NBT	3250 (3626)	0 (0)	0.7 (1.1)	A (A)		
			NBR	0 (0)	- (-)	- (-)	- (-)		
		SB	SBL	0 (0)	- (-)	- (-)	- (-)	1.5 (1.0)	A (A)
			SBT	3103 (2830)	0 (0)	1.5 (1.0)	A (A)		
			SBR	10 (10)	- (-)	- (-)	- (-)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								2.4 (2.1)	A (A)
43	SR 7/US 441 at Riverland Rd/SW 20th St	EB	EBU	4 (0)		- (-)	- (-)	109.7 (82.4)	F (F)
			EBL	228 (190)	#429 (#329)	98.8 (114.4)	F (F)		
			EBT	67 (61)	144 (100)	89.1 (58.7)	F (E)		
			EBR	301 (132)	#387 (97)	122.7 (47.4)	F (D)		
		WB	WBL	703 (497)	#549 (#335)	83.4 (57.2)	F (E)	86.2 (70.3)	F (E)
			WBT	58 (99)	#383 (#384)	94.1 (95.9)	F (F)		
			WBR	190 (156)	- (-)	- (-)	- (-)		
		NB	NBU	45 (53)		- (-)	- (-)	34.3 (39.7)	C (D)
			NBL	170 (241)	179 (#232)	76.3 (104.0)	E (F)		
			NBT	2768 (2903)	866 (740)	36.0 (39.9)	D (D)		
			NBR	481 (676)	117 (209)	5.7 (10.7)	A (B)		
		SB	SBU	25 (37)		- (-)	- (-)	45.5 (45.0)	D (D)
			SBL	98 (99)	118 (#140)	86.2 (164.9)	F (F)		
			SBT	2619 (2476)	910 (629)	44.2 (39.7)	D (D)		
			SBR	72 (135)	0 (42)	23.8 (21.2)	C (C)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								50.4 (46.6)	D (D)
44	SR 7/US 441 at Oakes Rd North	EB	EBU	0 (0)		- (-)	- (-)	59.3 (153.5)	E (F)
			EBL	418 (653)	#200 (#326)	59.3 (153.5)	E (F)		
			EBT	0 (0)	- (-)	- (-)	- (-)		
			EBR	0 (0)	- (-)	- (-)	- (-)		
		WB	WBL	0 (0)	- (-)	- (-)	- (-)	()	0
			WBT	0 (0)	- (-)	- (-)	- (-)		
			WBR	0 (0)	- (-)	- (-)	- (-)		
		NB	NBU	0 (0)	- (-)	- (-)	- (-)	8.7 (12.4)	A (B)
			NBL	0 (0)	- (-)	- (-)	- (-)		
			NBT	3250 (3626)	310 (445)	8.7 (12.4)	A (B)		
			NBR	0 (0)	- (-)	- (-)	- (-)		
		SB	SBU	0 (0)	- (-)	- (-)	- (-)	13.5 (12.7)	B (B)
			SBL	0 (0)	- (-)	- (-)	- (-)		
			SBT	3103 (2830)	518 (448)	15.0 (13.5)	B (B)		
			SBR	641 (311)	27 (23)	6.3 (5.3)	A (A)		
		Intersection						Int. Delay (s/Veh)	Int. LOS
								14.0 (24.9)	B (C)

AM Peak Hour

NW/SW 136th Avenue

HCM Signalized Intersection Capacity Analysis
1: 136 Ave & SW 5 St

07/09/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	466	27	65	15	42	134	2	90	1035	14	19	38
Future Volume (vph)	466	27	65	15	42	134	2	90	1035	14	19	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0			5.0	5.0			5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	0.95			1.00
Frt	1.00	1.00	0.85	1.00	0.89			1.00	1.00			1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00			0.95
Satd. Flow (prot)	1770	1863	1583	1770	1650			1770	3532			1770
Flt Permitted	0.24	1.00	1.00	0.74	1.00			0.30	1.00			0.15
Satd. Flow (perm)	454	1863	1583	1377	1650			566	3532			273
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	491	28	68	16	44	141	2	95	1089	15	20	40
RTOR Reduction (vph)	0	0	39	0	83	0	0	0	1	0	0	0
Lane Group Flow (vph)	491	28	29	16	102	0	0	97	1103	0	0	60
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	Perm	NA		Perm	Perm
Protected Phases	7	4			8				2			
Permitted Phases	4		4	8			2	2			6	6
Actuated Green, G (s)	49.8	49.8	49.8	10.4	10.4			55.3	55.3			55.3
Effective Green, g (s)	49.8	49.8	49.8	10.4	10.4			55.3	55.3			55.3
Actuated g/C Ratio	0.43	0.43	0.43	0.09	0.09			0.48	0.48			0.48
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0			5.0	5.0			5.0
Vehicle Extension (s)	2.2	2.0	2.0	2.0	2.0			3.0	3.0			3.0
Lane Grp Cap (vph)	573	799	679	123	147			269	1682			130
v/s Ratio Prot	c0.25	0.02			0.06				c0.31			
v/s Ratio Perm	c0.12		0.02	0.01				0.17				0.22
v/c Ratio	0.86	0.04	0.04	0.13	0.69			0.36	0.66			0.46
Uniform Delay, d1	28.0	19.2	19.3	48.7	51.3			19.2	23.2			20.4
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	11.7	0.0	0.0	0.2	10.9			3.7	2.0			11.3
Delay (s)	39.8	19.2	19.3	48.9	62.2			22.9	25.2			31.7
Level of Service	D	B	B	D	E			C	C			C
Approach Delay (s)		36.4			61.2				25.0			
Approach LOS		D			E				C			

Intersection Summary			
HCM 2000 Control Delay	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	116.1	Sum of lost time (s)	17.0
Intersection Capacity Utilization	100.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	679	372
Future Volume (vph)	679	372
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	715	392
RTOR Reduction (vph)	0	205
Lane Group Flow (vph)	715	187
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	55.3	55.3
Effective Green, g (s)	55.3	55.3
Actuated g/C Ratio	0.48	0.48
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1685	754
v/s Ratio Prot	0.20	
v/s Ratio Perm		0.12
v/c Ratio	0.42	0.25
Uniform Delay, d1	20.0	18.0
Progression Factor	1.00	1.00
Incremental Delay, d2	0.8	0.8
Delay (s)	20.7	18.8
Level of Service	C	B
Approach Delay (s)	20.7	
Approach LOS	C	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	885	565	115	0	0	0	0	641	1013	37	1034	0
Future Volume (vph)	885	565	115	0	0	0	0	641	1013	37	1034	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5						7.0	7.0	7.0	7.0	
Lane Util. Factor	0.97	0.95						0.95	0.88	1.00	0.95	
Frt	1.00	0.97						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3449						3539	2787	1770	3539	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3449						3539	2787	1770	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	932	595	121	0	0	0	0	675	1066	39	1088	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	932	702	0	0	0	0	0	675	1066	39	1088	0
Turn Type	Split	NA						NA	Prot	Prot	NA	
Protected Phases	3	3						2	2	1	1 2	
Permitted Phases												
Actuated Green, G (s)	31.5	31.5						43.0	43.0	27.0	77.0	
Effective Green, g (s)	31.5	31.5						43.0	43.0	27.0	77.0	
Actuated g/C Ratio	0.26	0.26						0.36	0.36	0.22	0.64	
Clearance Time (s)	4.5	4.5						7.0	7.0	7.0		
Vehicle Extension (s)	3.0	3.0						2.5	2.5	0.2		
Lane Grp Cap (vph)	901	905						1268	998	398	2270	
v/s Ratio Prot	c0.27	0.20						0.19	c0.38	0.02	c0.31	
v/s Ratio Perm												
v/c Ratio	1.03	0.78						0.53	1.07	0.10	0.48	
Uniform Delay, d1	44.2	41.0						30.5	38.5	36.8	11.1	
Progression Factor	1.00	1.00						1.00	1.00	0.59	0.68	
Incremental Delay, d2	39.2	6.5						1.6	48.5	0.5	0.7	
Delay (s)	83.5	47.4						32.1	87.0	22.2	8.3	
Level of Service	F	D						C	F	C	A	
Approach Delay (s)		67.8			0.0			65.7			8.7	
Approach LOS		E			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	52.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBR	WBR2	NBL	NBT	SBT	SBR2
Lane Configurations						
Traffic Volume (vph)	571	428	341	1186	498	230
Future Volume (vph)	571	428	341	1186	498	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	0.88	1.00	0.97	0.95	0.91	1.00
Frt	0.85	0.86	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	2787	1611	3433	3539	5085	1583
Flt Permitted	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	2787	1611	3433	3539	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	601	451	359	1248	524	242
RTOR Reduction (vph)	386	0	0	0	0	188
Lane Group Flow (vph)	215	451	359	1248	524	54
Turn Type	Prot	Prot	Split	NA	NA	Prot
Protected Phases	2	1	2 3	2 3	1	1
Permitted Phases						
Actuated Green, G (s)	43.0	27.0	81.5	81.5	27.0	27.0
Effective Green, g (s)	43.0	27.0	81.5	81.5	27.0	27.0
Actuated g/C Ratio	0.36	0.22	0.68	0.68	0.22	0.22
Clearance Time (s)	7.0	7.0			7.0	7.0
Vehicle Extension (s)	2.5	0.2			0.2	0.2
Lane Grp Cap (vph)	998	362	2331	2403	1144	356
v/s Ratio Prot	0.08	c0.28	0.10	c0.35	0.10	0.03
v/s Ratio Perm						
v/c Ratio	0.22	1.25	0.15	0.52	0.46	0.15
Uniform Delay, d1	26.8	46.5	6.9	9.5	40.2	37.3
Progression Factor	1.00	1.00	0.69	0.51	1.00	1.00
Incremental Delay, d2	0.5	131.8	0.1	0.4	1.3	0.9
Delay (s)	27.3	178.3	4.8	5.3	41.5	38.2
Level of Service	C	F	A	A	D	D
Approach Delay (s)				5.2	40.5	
Approach LOS				A	D	

Intersection Summary			
HCM 2000 Control Delay	39.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	2	135	172	25	221	2451	1248	128
Future Volume (vph)	2	135	172	25	221	2451	1248	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		5.5	5.5	5.5	5.5
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	1.00
Frt		1.00	0.85		1.00	1.00	1.00	0.85
Flt Protected		0.95	1.00		0.95	1.00	1.00	1.00
Satd. Flow (prot)		3433	1583		1770	5085	5085	1583
Flt Permitted		0.95	1.00		0.17	1.00	1.00	1.00
Satd. Flow (perm)		3433	1583		312	5085	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	142	181	26	233	2580	1314	135
RTOR Reduction (vph)	0	0	167	0	0	0	0	42
Lane Group Flow (vph)	0	144	14	0	259	2580	1314	93
Turn Type	Prot	Prot	Prot	custom	pm+pt	NA	NA	Perm
Protected Phases	4	4	4		5	2	6	
Permitted Phases				5	2			6
Actuated Green, G (s)		9.4	9.4		99.1	99.1	83.1	83.1
Effective Green, g (s)		9.4	9.4		99.1	99.1	83.1	83.1
Actuated g/C Ratio		0.08	0.08		0.83	0.83	0.69	0.69
Clearance Time (s)		6.0	6.0		5.5	5.5	5.5	5.5
Vehicle Extension (s)		2.0	2.0		1.5	3.0	3.0	3.0
Lane Grp Cap (vph)		268	124		385	4199	3521	1096
v/s Ratio Prot		c0.04	0.01		0.06	c0.51	0.26	
v/s Ratio Perm					c0.50			0.06
v/c Ratio		0.54	0.11		0.67	0.61	0.37	0.09
Uniform Delay, d1		53.2	51.4		4.7	3.7	7.7	6.0
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		1.0	0.1		3.6	0.7	0.3	0.2
Delay (s)		54.2	51.6		8.3	4.4	8.0	6.2
Level of Service		D	D		A	A	A	A
Approach Delay (s)		52.8				4.7	7.8	
Approach LOS		D				A	A	

Intersection Summary			
HCM 2000 Control Delay	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
1: 136 Ave & SW 5 St

07/09/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	491	28	68	16	185	97	1104	60	715	392
v/c Ratio	0.86	0.04	0.09	0.13	0.80	0.36	0.66	0.47	0.42	0.41
Control Delay	43.7	18.5	4.7	52.1	52.2	26.3	26.6	38.2	22.0	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.7	18.5	4.7	52.1	52.2	26.3	26.6	38.2	22.0	3.3
Queue Length 50th (ft)	289	12	0	12	72	49	352	32	196	0
Queue Length 95th (ft)	#459	29	26	35	#173	100	436	86	253	55
Internal Link Dist (ft)		883			677		429		1148	
Turn Bay Length (ft)	220			50		220		140		330
Base Capacity (vph)	616	902	801	154	266	269	1680	129	1683	958
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.03	0.08	0.10	0.70	0.36	0.66	0.47	0.42	0.41

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	932	716	675	1066	39	1088
v/c Ratio	1.03	0.78	0.53	1.07	0.10	0.48
Control Delay	82.6	46.8	32.4	86.0	22.5	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.5
Total Delay	82.6	46.8	32.4	86.0	22.5	8.9
Queue Length 50th (ft)	~400	264	216	~518	14	329
Queue Length 95th (ft)	#527	337	276	#663	m30	403
Internal Link Dist (ft)		677	1148			334
Turn Bay Length (ft)				350		
Base Capacity (vph)	901	919	1268	998	398	2270
Starvation Cap Reductn	0	0	0	0	0	670
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.78	0.53	1.07	0.10	0.68

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBR	WBR2	NBL	NBT	SBT	SBR2
Lane Group Flow (vph)	601	451	359	1248	524	242
v/c Ratio	0.36	1.25	0.16	0.54	0.46	0.45
Control Delay	0.6	171.3	5.5	6.1	41.7	7.6
Queue Delay	0.0	0.0	0.0	0.4	0.2	0.0
Total Delay	0.6	171.3	5.5	6.5	41.9	7.6
Queue Length 50th (ft)	0	~435	24	88	129	0
Queue Length 95th (ft)	0	#640	m27	m91	167	66
Internal Link Dist (ft)				334	643	
Turn Bay Length (ft)	200					300
Base Capacity (vph)	1687	362	2260	2329	1144	543
Starvation Cap Reductn	0	0	0	537	0	0
Spillback Cap Reductn	32	0	0	0	154	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	1.25	0.16	0.70	0.53	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	144	181	259	2580	1314	135
v/c Ratio	0.54	0.62	0.67	0.61	0.37	0.12
Control Delay	60.2	17.3	13.7	4.6	8.8	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.2	17.3	13.7	4.6	8.8	1.8
Queue Length 50th (ft)	56	0	31	199	132	0
Queue Length 95th (ft)	88	68	93	269	221	25
Internal Link Dist (ft)	937			405	811	
Turn Bay Length (ft)	120		200			360
Base Capacity (vph)	543	402	579	4198	3522	1137
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.45	0.45	0.61	0.37	0.12

Intersection Summary

Flamingo Road

HCM Unsignalized Intersection Capacity Analysis
6: WB SR-84 & SW 125th Ave

07/07/2021

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	1925	13	0	18
Future Volume (Veh/h)	0	0	1925	13	0	18
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	2026	14	0	19
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2040				2033	1020
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2040				2033	1020
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	92
cM capacity (veh/h)	273				49	234

Direction, Lane #	WB 1	WB 2	SB 1
Volume Total	1351	689	19
Volume Left	0	0	0
Volume Right	0	14	19
cSH	1700	1700	234
Volume to Capacity	0.79	0.41	0.08
Queue Length 95th (ft)	0	0	7
Control Delay (s)	0.0	0.0	21.7
Lane LOS			C
Approach Delay (s)	0.0		21.7
Approach LOS			C

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	171	89	3	102	2047	30	1763	284
Future Volume (vph)	171	89	3	102	2047	30	1763	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		7.5	7.5	7.5	7.5	7.5
Lane Util. Factor	1.00	1.00		1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85		1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1583		1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00		0.09	1.00	0.06	1.00	1.00
Satd. Flow (perm)	1770	1583		159	5085	116	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	180	94	3	107	2155	32	1856	299
RTOR Reduction (vph)	0	82	0	0	0	0	0	71
Lane Group Flow (vph)	180	12	0	110	2155	32	1856	228
Turn Type	Prot	Prot	custom	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	4	4		5	2	1	6	
Permitted Phases			5	2		6		6
Actuated Green, G (s)	20.7	20.7		122.0	114.4	114.6	110.7	110.7
Effective Green, g (s)	20.7	20.7		122.0	114.4	114.6	110.7	110.7
Actuated g/C Ratio	0.13	0.13		0.76	0.72	0.72	0.69	0.69
Clearance Time (s)	6.0	6.0		7.5	7.5	7.5	7.5	7.5
Vehicle Extension (s)	2.0	2.0		1.5	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	228	204		197	3635	123	3518	1095
v/s Ratio Prot	c0.10	0.01		c0.03	c0.42	0.01	0.36	
v/s Ratio Perm				0.40		0.18		0.14
v/c Ratio	0.79	0.06		0.56	0.59	0.26	0.53	0.21
Uniform Delay, d1	67.5	61.1		9.4	11.3	8.9	12.0	8.9
Progression Factor	1.00	1.00		1.00	1.00	0.65	0.16	0.14
Incremental Delay, d2	15.3	0.0		1.9	0.7	0.3	0.5	0.4
Delay (s)	82.8	61.2		11.3	12.0	6.1	2.4	1.6
Level of Service	F	E		B	B	A	A	A
Approach Delay (s)	75.4				12.0		2.4	
Approach LOS	E				B		A	

Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	579	33	442	0	0	0	0	1382	936	721	1678	0
Future Volume (vph)	579	33	442	0	0	0	0	1382	936	721	1678	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5	7.5					7.5	7.5	8.5	8.5	
Lane Util. Factor	0.95	0.95	0.88					0.81	0.88	0.97	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1694	2787					7544	2787	3433	5085	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1694	2787					7544	2787	3433	5085	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	609	35	465	0	0	0	0	1455	985	759	1766	0
RTOR Reduction (vph)	0	0	154	0	0	0	0	0	610	0	0	0
Lane Group Flow (vph)	323	321	311	0	0	0	0	1455	375	759	1766	0
Turn Type	Split	NA	Prot					NA	Prot	Prot	NA	
Protected Phases	1 6	1 6	1 6					4 5	4 5	2 3	2 3 4 5	
Permitted Phases												
Actuated Green, G (s)	45.5	45.5	45.5					42.5	42.5	48.0	98.5	
Effective Green, g (s)	37.5	37.5	37.5					42.5	42.5	48.0	83.0	
Actuated g/C Ratio	0.23	0.23	0.23					0.27	0.27	0.30	0.52	
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)	393	397	653					2003	740	1029	2637	
v/s Ratio Prot	c0.19	0.19	0.11					c0.19	0.13	c0.22	0.35	
v/s Ratio Perm												
v/c Ratio	0.82	0.81	0.48					0.73	0.51	0.74	0.67	
Uniform Delay, d1	58.1	57.9	52.8					53.5	49.8	50.3	28.4	
Progression Factor	1.00	1.00	1.00					0.86	1.52	0.59	0.53	
Incremental Delay, d2	17.4	16.1	2.5					1.0	0.2	1.2	0.3	
Delay (s)	75.5	74.0	55.3					46.9	76.1	31.2	15.4	
Level of Service	E	E	E					D	E	C	B	
Approach Delay (s)		66.6			0.0			58.7			20.1	
Approach LOS		E			A			E			C	

Intersection Summary			
HCM 2000 Control Delay	44.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	48.0
Intersection Capacity Utilization	89.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	665	174	703	549	1412	0	0	1734	736
Future Volume (vph)	0	0	0	665	174	703	549	1412	0	0	1734	736
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				8.0	8.0	8.0	8.5	7.5			7.5	7.5
Lane Util. Factor				0.86	0.76	0.86	0.97	0.91			0.81	0.88
Frt				1.00	0.94	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	0.99	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3044	2622	2723	3433	5085			7544	2787
Flt Permitted				0.95	0.99	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3044	2622	2723	3433	5085			7544	2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	700	183	740	578	1486	0	0	1825	775
RTOR Reduction (vph)	0	0	0	0	38	160	0	0	0	0	0	260
Lane Group Flow (vph)	0	0	0	560	514	351	578	1486	0	0	1825	515
Turn Type				Split	NA	Prot	Prot	NA			NA	Prot
Protected Phases				3 4	3 4	3 4	5 6	1 2 5 6			1 2	1 2
Permitted Phases												
Actuated Green, G (s)				32.5	32.5	32.5	60.0	111.5			43.5	43.5
Effective Green, g (s)				32.5	32.5	32.5	60.0	95.0			43.5	43.5
Actuated g/C Ratio				0.20	0.20	0.20	0.38	0.59			0.27	0.27
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)				618	532	553	1287	3019			2051	757
v/s Ratio Prot				0.18	c0.20	0.13	c0.17	c0.29			c0.24	0.18
v/s Ratio Perm												
v/c Ratio				0.91	0.97	0.63	0.45	0.49			0.89	0.68
Uniform Delay, d1				62.3	63.2	58.3	37.6	18.7			55.9	52.0
Progression Factor				1.00	1.00	1.00	0.41	0.91			0.73	0.60
Incremental Delay, d2				16.9	30.2	2.4	0.8	0.4			5.4	4.2
Delay (s)				79.1	93.4	60.7	16.1	17.3			46.1	35.7
Level of Service				E	F	E	B	B			D	D
Approach Delay (s)		0.0			78.2			17.0			43.0	
Approach LOS		A			E			B			D	

Intersection Summary			
HCM 2000 Control Delay	43.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	48.0
Intersection Capacity Utilization	89.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	140	152	244	4	379	100	619	13	62	1601	479	7
Future Volume (vph)	140	152	244	4	379	100	619	13	62	1601	479	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0		7.0	7.0	7.0		7.0	7.0	4.0	
Lane Util. Factor	1.00	0.95	1.00		0.97	0.95	0.88		1.00	0.91	1.00	
Frt	1.00	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)	1770	3539	1583		3433	3539	2787		1770	5085	1583	
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)	1770	3539	1583		3433	3539	2787		1770	5085	1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	160	257	4	399	105	652	14	65	1685	504	7
RTOR Reduction (vph)	0	0	200	0	0	0	366	0	0	0	0	0
Lane Group Flow (vph)	147	160	57	0	403	105	286	0	79	1685	504	0
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	Prot	NA	Free	Prot
Protected Phases	7	4		3	3	8		5	5	2		1
Permitted Phases			4				8				Free	
Actuated Green, G (s)	13.0	13.3	13.3		22.2	22.5	22.5		12.5	63.9	160.0	
Effective Green, g (s)	13.0	13.3	13.3		22.2	22.5	22.5		12.5	63.9	160.0	
Actuated g/C Ratio	0.08	0.08	0.08		0.14	0.14	0.14		0.08	0.40	1.00	
Clearance Time (s)	7.0	7.0	7.0		7.0	7.0	7.0		7.0	7.0		
Vehicle Extension (s)	1.5	2.5	2.5		1.5	2.5	2.5		1.5	3.0		
Lane Grp Cap (vph)	143	294	131		476	497	391		138	2030	1583	
v/s Ratio Prot	0.08	0.05			c0.12	0.03			0.04	c0.33		
v/s Ratio Perm			0.04				c0.10				0.32	
v/c Ratio	1.03	0.54	0.44		0.85	0.21	0.73		0.57	0.83	0.32	
Uniform Delay, d1	73.5	70.4	69.8		67.2	60.9	65.9		71.2	43.2	0.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.27	0.57	1.00	
Incremental Delay, d2	82.9	1.6	1.7		12.6	0.2	6.5		3.2	3.7	0.5	
Delay (s)	156.4	72.1	71.5		79.8	61.0	72.4		93.6	28.5	0.5	
Level of Service	F	E	E		E	E	E		F	C	A	
Approach Delay (s)		93.8				73.9				24.6		
Approach LOS		F				E				C		

Intersection Summary			
HCM 2000 Control Delay	44.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	98.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	513	1983	106
Future Volume (vph)	513	1983	106
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	540	2087	112
RTOR Reduction (vph)	0	0	53
Lane Group Flow (vph)	547	2087	59
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	32.6	84.0	84.0
Effective Green, g (s)	32.6	84.0	84.0
Actuated g/C Ratio	0.20	0.52	0.52
Clearance Time (s)	7.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	699	2669	831
v/s Ratio Prot	c0.16	c0.41	
v/s Ratio Perm			0.04
v/c Ratio	0.78	0.78	0.07
Uniform Delay, d1	60.3	30.6	18.7
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	5.3	2.4	0.2
Delay (s)	65.6	33.0	18.9
Level of Service	E	C	B
Approach Delay (s)		38.9	
Approach LOS		D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	2115	0	0	2470	0
Future Volume (vph)	0	0	0	0	0	0	0	2115	0	0	2470	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								7.0			7.0	
Lane Util. Factor								0.91			0.91	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								5085			5085	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								5085			5085	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	0	0	0	2226	0	0	2600	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	2226	0	0	2600	0
Turn Type								NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								140.6			140.6	
Effective Green, g (s)								140.6			140.6	
Actuated g/C Ratio								0.88			0.88	
Clearance Time (s)								7.0			7.0	
Vehicle Extension (s)								1.0			1.0	
Lane Grp Cap (vph)								4468			4468	
v/s Ratio Prot								0.44			c0.51	
v/s Ratio Perm												
v/c Ratio								0.50			0.58	
Uniform Delay, d1								2.1			2.4	
Progression Factor								0.73			0.54	
Incremental Delay, d2								0.3			0.4	
Delay (s)								1.9			1.7	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			1.9			1.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	1.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
7: Flamingo Rd & SW 8th St

07/07/2021

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	180	94	110	2155	32	1856	299
v/c Ratio	0.79	0.33	0.56	0.58	0.24	0.53	0.26
Control Delay	90.4	13.2	17.7	12.4	7.3	2.6	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.4	13.2	17.7	12.4	7.3	2.6	0.8
Queue Length 50th (ft)	185	0	23	383	1	93	7
Queue Length 95th (ft)	263	54	60	505	m4	125	17
Internal Link Dist (ft)	1136			1101		824	
Turn Bay Length (ft)			290		190		230
Base Capacity (vph)	354	391	290	3685	162	3520	1167
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.24	0.38	0.58	0.20	0.53	0.26

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	323	321	465	1455	985	759	1766
v/c Ratio	0.68	0.67	0.50	0.71	0.72	0.74	0.56
Control Delay	59.0	58.5	28.2	47.1	15.0	32.6	10.0
Queue Delay	0.0	0.0	0.0	1.6	0.0	50.9	48.4
Total Delay	59.0	58.5	28.2	48.6	15.0	83.6	58.4
Queue Length 50th (ft)	316	313	130	346	228	393	521
Queue Length 95th (ft)	440	435	192	382	347	m445	m555
Internal Link Dist (ft)		97		727			287
Turn Bay Length (ft)							
Base Capacity (vph)	478	481	936	2051	1362	1019	3130
Starvation Cap Reductn	0	0	0	0	0	337	1604
Spillback Cap Reductn	0	0	0	390	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.67	0.50	0.88	0.72	1.11	1.16

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	560	552	511	578	1486	1825	775
v/c Ratio	0.92	0.98	0.72	0.45	0.42	0.87	0.75
Control Delay	83.9	91.0	42.3	16.4	9.3	44.7	21.0
Queue Delay	0.0	0.7	0.0	2.7	3.5	30.7	0.3
Total Delay	83.9	91.7	42.3	19.0	12.8	75.4	21.3
Queue Length 50th (ft)	338	353	181	205	413	461	268
Queue Length 95th (ft)	#462	#516	259	290	456	434	311
Internal Link Dist (ft)		105			287	439	
Turn Bay Length (ft)							325
Base Capacity (vph)	608	562	705	1276	3575	2098	1032
Starvation Cap Reductn	0	0	0	558	1963	96	35
Spillback Cap Reductn	0	2	1	0	28	379	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.99	0.73	0.81	0.92	1.06	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	147	160	257	403	105	652	79	1685	504	547	2087	112
v/c Ratio	1.03	0.55	0.78	0.85	0.21	0.86	0.58	0.83	0.32	0.78	0.78	0.12
Control Delay	151.8	76.7	29.8	84.0	59.8	34.5	104.9	29.8	0.5	69.1	34.5	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.8	76.7	29.8	84.0	59.8	34.5	104.9	29.8	0.5	69.1	34.5	0.5
Queue Length 50th (ft)	~163	86	39	214	52	140	87	326	0	283	626	0
Queue Length 95th (ft)	#317	121	137	270	76	208	147	#774	0	347	834	4
Internal Link Dist (ft)		1352			1255			1687			1132	
Turn Bay Length (ft)	200		215	300		340	290		330	280		280
Base Capacity (vph)	143	663	473	557	951	1060	137	2033	1583	699	2672	912
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.24	0.54	0.72	0.11	0.62	0.58	0.83	0.32	0.78	0.78	0.12

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBT	SBT
Lane Group Flow (vph)	2226	2600
v/c Ratio	0.46	0.54
Control Delay	2.0	1.8
Queue Delay	0.0	0.0
Total Delay	2.0	1.8
Queue Length 50th (ft)	16	0
Queue Length 95th (ft)	m265	215
Internal Link Dist (ft)	439	1687
Turn Bay Length (ft)		
Base Capacity (vph)	4824	4824
Starvation Cap Reductn	132	0
Spillback Cap Reductn	0	38
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.47	0.54

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Hiatus Road

HCM Signalized Intersection Capacity Analysis
11: Hiatus Rd & EB SR-84

07/07/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	626	115	157	0	0	0	0	630	510	1049	716	0
Future Volume (vph)	626	115	157	0	0	0	0	630	510	1049	716	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					7.0	7.5	7.0	7.0	
Lane Util. Factor	0.94	0.91	0.91					0.91	1.00	0.97	0.95	
Frt	1.00	0.94	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3194	1441					5085	1583	3433	3539	
Flt Permitted	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	4990	3194	1441					5085	1583	3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	659	121	165	0	0	0	0	663	537	1104	754	0
RTOR Reduction (vph)	0	65	77	0	0	0	0	0	104	0	0	0
Lane Group Flow (vph)	659	132	12	0	0	0	0	663	433	1104	754	0
Turn Type	Perm	NA	Perm					NA	custom	Prot	NA	
Protected Phases		1 6						4 5	3 4 5	2	2 3 4 5	
Permitted Phases	1 6		1 6									
Actuated Green, G (s)	26.0	26.0	26.0					29.0	46.0	47.0	100.0	
Effective Green, g (s)	18.5	18.5	18.5					29.0	39.0	47.0	92.5	
Actuated g/C Ratio	0.13	0.13	0.13					0.21	0.28	0.34	0.66	
Clearance Time (s)										7.0		
Vehicle Extension (s)										2.5		
Lane Grp Cap (vph)	659	422	190					1053	440	1152	2338	
v/s Ratio Prot		0.04						0.13	c0.27	c0.32	0.21	
v/s Ratio Perm	c0.13		0.01									
v/c Ratio	1.00	0.31	0.06					0.63	0.98	0.96	0.32	
Uniform Delay, d1	60.8	55.0	53.2					50.6	50.2	45.5	10.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.65	0.56	
Incremental Delay, d2	35.1	1.9	0.6					2.9	39.2	16.6	0.3	
Delay (s)	95.8	56.9	53.8					53.5	89.4	46.2	6.0	
Level of Service	F	E	D					D	F	D	A	
Approach Delay (s)		83.7			0.0			69.5			29.9	
Approach LOS		F			A			E			C	

Intersection Summary			
HCM 2000 Control Delay	54.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	43.0
Intersection Capacity Utilization	91.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	292	113	551	4	240	1012	0	0	1469
Future Volume (vph)	0	0	0	292	113	551	4	240	1012	0	0	1469
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.5	7.5	7.5		7.0	7.0			7.0
Lane Util. Factor				0.97	0.91	0.91		1.00	0.91			0.86
Frt				1.00	0.92	0.85		1.00	1.00			1.00
Flt Protected				0.95	1.00	1.00		0.95	1.00			1.00
Satd. Flow (prot)				3433	1563	2882		1770	5085			6408
Flt Permitted				0.95	1.00	1.00		0.95	1.00			1.00
Satd. Flow (perm)				3433	1563	2882		1770	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	307	119	580	4	253	1065	0	0	1546
RTOR Reduction (vph)	0	0	0	0	28	183	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	307	219	269	0	257	1065	0	0	1546
Turn Type				Perm	NA	Prot	Prot	Prot	NA			NA
Protected Phases					3 4	3 4	5 6	5 6	1 2 5 6			1 2
Permitted Phases				3 4								
Actuated Green, G (s)				33.0	33.0	33.0		23.5	93.0			62.0
Effective Green, g (s)				33.0	33.0	33.0		23.5	85.5			62.0
Actuated g/C Ratio				0.24	0.24	0.24		0.17	0.61			0.44
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)				809	368	679		297	3105			2837
v/s Ratio Prot					c0.14	0.09		c0.15	0.21			c0.24
v/s Ratio Perm				0.09								
v/c Ratio				0.38	0.60	0.40		0.87	0.34			0.54
Uniform Delay, d1				44.9	47.6	45.1		56.7	13.4			28.6
Progression Factor				1.00	1.00	1.00		0.87	0.78			1.00
Incremental Delay, d2				1.4	7.0	1.7		21.2	0.2			0.8
Delay (s)				46.3	54.5	46.8		70.4	10.6			29.4
Level of Service				D	D	D		E	B			C
Approach Delay (s)		0.0			48.6				22.2			29.5
Approach LOS		A			D				C			C

Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	43.0
Intersection Capacity Utilization	91.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	916
Future Volume (vph)	916
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.0
Lane Util. Factor	0.88
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	2787
Flt Permitted	1.00
Satd. Flow (perm)	2787
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	964
RTOR Reduction (vph)	332
Lane Group Flow (vph)	633
Turn Type	Prot
Protected Phases	1 2
Permitted Phases	
Actuated Green, G (s)	62.0
Effective Green, g (s)	62.0
Actuated g/C Ratio	0.44
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1234
v/s Ratio Prot	0.23
v/s Ratio Perm	
v/c Ratio	0.51
Uniform Delay, d1	28.1
Progression Factor	1.00
Incremental Delay, d2	1.5
Delay (s)	29.6
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	11	291	637	703	3	470	643	213	423	746	394	3
Future Volume (vph)	11	291	637	703	3	470	643	213	423	746	394	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	
Lane Util. Factor		1.00	0.91	0.88		0.97	0.91	1.00	0.97	0.91	1.00	
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)		1770	5085	2787		3433	5085	1583	3433	5085	1583	
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (perm)		1770	5085	2787		3433	5085	1583	3433	5085	1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	12	306	671	740	3	495	677	224	445	785	415	3
RTOR Reduction (vph)	0	0	0	75	0	0	0	58	0	0	69	0
Lane Group Flow (vph)	0	318	671	665	0	498	677	166	445	785	346	0
Turn Type	Prot	Prot	NA	pt+ov	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot
Protected Phases	7!	7	4	4 5!	3!	3	8	1!	5	2	3!	1!
Permitted Phases								8			2	
Actuated Green, G (s)		31.6	30.7	62.1		26.6	25.7	57.2	24.4	43.2	69.8	
Effective Green, g (s)		31.6	30.7	62.1		26.6	25.7	57.2	24.4	43.2	69.8	
Actuated g/C Ratio		0.20	0.19	0.39		0.17	0.16	0.36	0.15	0.27	0.44	
Clearance Time (s)		7.0	7.0			7.0	7.0	7.0	7.0	7.0	7.0	
Vehicle Extension (s)		1.5	2.0			1.5	2.0	3.0	3.0	3.0	1.5	
Lane Grp Cap (vph)		349	975	1081		570	816	635	523	1372	759	
v/s Ratio Prot		c0.18	c0.13	0.24		0.15	c0.13	0.05	0.13	0.15	0.08	
v/s Ratio Perm								0.05			0.14	
v/c Ratio		0.91	0.69	0.61		0.87	0.83	0.26	0.85	0.57	0.46	
Uniform Delay, d1		62.8	60.2	39.3		65.1	65.0	36.4	66.0	50.4	31.7	
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		26.6	1.6	0.7		13.5	6.7	0.2	12.6	1.7	0.2	
Delay (s)		89.4	61.8	40.1		78.6	71.7	36.7	78.6	52.2	31.9	
Level of Service		F	E	D		E	E	D	E	D	C	
Approach Delay (s)			57.6				68.5			54.2		
Approach LOS			E				E			D		

Intersection Summary			
HCM 2000 Control Delay	57.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	96.9%	ICU Level of Service	F
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	286	1212	330
Future Volume (vph)	286	1212	330
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0
Lane Util. Factor	1.00	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	1770	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	301	1276	347
RTOR Reduction (vph)	0	0	37
Lane Group Flow (vph)	304	1276	310
Turn Type	Prot	NA	pm+ov
Protected Phases	1	6	7!
Permitted Phases			6
Actuated Green, G (s)	31.5	50.3	81.9
Effective Green, g (s)	31.5	50.3	81.9
Actuated g/C Ratio	0.20	0.31	0.51
Clearance Time (s)	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	1.5
Lane Grp Cap (vph)	348	1598	879
v/s Ratio Prot	c0.17	c0.25	0.07
v/s Ratio Perm			0.13
v/c Ratio	0.87	0.80	0.35
Uniform Delay, d1	62.3	50.2	23.3
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	20.7	4.3	0.1
Delay (s)	83.1	54.5	23.4
Level of Service	F	D	C
Approach Delay (s)		53.4	
Approach LOS		D	

Intersection Summary

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	659	197	89	663	537	1104	754
v/c Ratio	0.71	0.30	0.21	0.63	0.88	0.96	0.30
Control Delay	58.4	31.4	1.1	53.7	49.2	47.0	4.3
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.4
Total Delay	58.4	31.4	1.1	53.8	49.2	47.0	4.7
Queue Length 50th (ft)	202	52	0	203	357	518	138
Queue Length 95th (ft)	248	92	0	249	#570	#652	141
Internal Link Dist (ft)		85		378			263
Turn Bay Length (ft)					150		
Base Capacity (vph)	926	654	429	1053	611	1152	2527
Starvation Cap Reductn	0	0	0	0	0	0	1167
Spillback Cap Reductn	6	0	0	41	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.30	0.21	0.66	0.88	0.96	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	307	247	452	257	1065	1546	964
v/c Ratio	0.39	0.63	0.53	0.85	0.32	0.54	0.62
Control Delay	47.0	49.4	23.9	68.4	8.0	29.5	12.2
Queue Delay	0.0	0.0	0.0	5.3	1.1	0.2	0.0
Total Delay	47.0	49.4	23.9	73.7	9.0	29.7	12.2
Queue Length 50th (ft)	122	192	91	211	186	296	138
Queue Length 95th (ft)	168	298	150	#361	213	332	214
Internal Link Dist (ft)		90			263	951	
Turn Bay Length (ft)							125
Base Capacity (vph)	796	390	852	303	3377	2837	1565
Starvation Cap Reductn	0	0	0	20	1956	0	0
Spillback Cap Reductn	0	0	0	0	0	470	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.63	0.53	0.91	0.75	0.65	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	318	671	740	498	677	224	445	785	415	304	1276	347
v/c Ratio	0.91	0.69	0.64	0.87	0.83	0.33	0.85	0.57	0.50	0.87	0.80	0.38
Control Delay	91.9	64.4	35.5	81.5	74.6	19.9	81.8	53.8	22.5	86.9	55.5	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	91.9	64.4	35.5	81.5	74.6	19.9	81.8	53.8	22.5	86.9	55.5	16.6
Queue Length 50th (ft)	325	238	291	264	252	90	236	271	215	309	463	158
Queue Length 95th (ft)	#459	295	384	323	#326	158	#313	330	317	418	525	223
Internal Link Dist (ft)		1236			1450			2383			1284	
Turn Bay Length (ft)	430		390	380		300	410		315	310		310
Base Capacity (vph)	398	978	1147	665	816	731	539	1372	863	398	1597	954
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.69	0.65	0.75	0.83	0.31	0.83	0.57	0.48	0.76	0.80	0.36

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Nob Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	52	12	9	140	4	260	3	31	1218	164	48	191
Future Volume (vph)	52	12	9	140	4	260	3	31	1218	164	48	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			7.0	7.0	7.0		7.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	0.95	1.00		1.00
Frt	1.00	0.94		1.00	0.85			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1748		1770	1587			1770	3539	1583		1770
Flt Permitted	0.20	1.00		0.74	1.00			0.21	1.00	1.00		0.14
Satd. Flow (perm)	365	1748		1384	1587			389	3539	1583		262
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	55	13	9	147	4	274	3	33	1282	173	51	201
RTOR Reduction (vph)	0	8	0	0	159	0	0	0	0	49	0	0
Lane Group Flow (vph)	55	14	0	147	119	0	0	36	1282	124	0	252
Turn Type	Perm	NA		Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4			8			5	2		2	1	6
Actuated Green, G (s)	20.4	20.4		20.4	20.4			93.3	89.6	89.6		112.6
Effective Green, g (s)	20.4	20.4		20.4	20.4			93.3	89.6	89.6		112.6
Actuated g/C Ratio	0.14	0.14		0.14	0.14			0.64	0.61	0.61		0.77
Clearance Time (s)	6.0	6.0		6.0	6.0			7.0	7.0	7.0		7.0
Vehicle Extension (s)	2.0	2.0		2.0	2.0			1.5	3.0	3.0		1.5
Lane Grp Cap (vph)	51	244		193	221			283	2171	971		367
v/s Ratio Prot		0.01			0.07			0.00	0.36			c0.08
v/s Ratio Perm	c0.15			0.11				0.08		0.08		c0.45
v/c Ratio	1.08	0.06		0.76	0.54			0.13	0.59	0.13		0.69
Uniform Delay, d1	62.8	54.5		60.5	58.4			9.8	17.1	11.8		14.9
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	149.7	0.0		14.7	1.3			0.1	1.2	0.3		4.2
Delay (s)	212.5	54.5		75.1	59.7			9.9	18.3	12.1		19.1
Level of Service	F	D		E	E			A	B	B		B
Approach Delay (s)		167.4			65.0				17.4			
Approach LOS		F			E				B			

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1186	79
Future Volume (vph)	1186	79
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	7.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1248	83
RTOR Reduction (vph)	0	23
Lane Group Flow (vph)	1248	60
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	101.9	101.9
Effective Green, g (s)	101.9	101.9
Actuated g/C Ratio	0.70	0.70
Clearance Time (s)	7.0	7.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2470	1104
v/s Ratio Prot	0.35	
v/s Ratio Perm		0.04
v/c Ratio	0.51	0.05
Uniform Delay, d1	10.3	6.9
Progression Factor	1.00	1.00
Incremental Delay, d2	0.7	0.1
Delay (s)	11.0	7.0
Level of Service	B	A
Approach Delay (s)	12.1	
Approach LOS	B	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	138	68	103	31	20	18	162	114	1426	36	137	1328
Future Volume (vph)	138	68	103	31	20	18	162	114	1426	36	137	1328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	6.0		7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.91			1.00	0.86		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1695			1770	1611		1770	3539	1583	1770	3539
Flt Permitted	0.50	1.00			0.53	1.00		0.15	1.00	1.00	0.13	1.00
Satd. Flow (perm)	935	1695			985	1611		288	3539	1583	247	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	145	72	108	33	21	19	171	120	1501	38	144	1398
RTOR Reduction (vph)	0	57	0	0	0	49	0	0	0	12	0	0
Lane Group Flow (vph)	145	123	0	0	54	141	0	120	1501	26	144	1398
Turn Type	Perm	NA		Perm	Perm	NA		Perm	NA	Perm	Perm	NA
Protected Phases		4				8			2			6
Permitted Phases	4			8	8			2		2	6	
Actuated Green, G (s)	16.1	16.1			16.1	16.1		66.9	66.9	66.9	66.9	66.9
Effective Green, g (s)	16.1	16.1			16.1	16.1		66.9	66.9	66.9	66.9	66.9
Actuated g/C Ratio	0.17	0.17			0.17	0.17		0.70	0.70	0.70	0.70	0.70
Clearance Time (s)	6.0	6.0			6.0	6.0		7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	2.0	2.0			2.0	2.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	156	284			165	270		200	2466	1103	172	2466
v/s Ratio Prot		0.07				0.09			0.42			0.40
v/s Ratio Perm	c0.16				0.05			0.42		0.02	c0.58	
v/c Ratio	0.93	0.43			0.33	0.52		0.60	0.61	0.02	0.84	0.57
Uniform Delay, d1	39.4	35.9			35.2	36.4		7.6	7.7	4.5	10.6	7.3
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	50.3	0.4			0.4	0.8		12.6	1.1	0.0	36.1	1.0
Delay (s)	89.7	36.3			35.6	37.3		20.2	8.8	4.5	46.7	8.2
Level of Service	F	D			D	D		C	A	A	D	A
Approach Delay (s)		60.1				36.9			9.5			11.7
Approach LOS		E				D			A			B

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	96.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	89.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	25
Future Volume (vph)	25
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	26
RTOR Reduction (vph)	8
Lane Group Flow (vph)	18
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	66.9
Effective Green, g (s)	66.9
Actuated g/C Ratio	0.70
Clearance Time (s)	7.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1103
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.02
Uniform Delay, d1	4.5
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	4.5
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	467	27	290	0	0	0	0	836	892	4	1183	1219
Future Volume (vph)	467	27	290	0	0	0	0	836	892	4	1183	1219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					7.0	7.0		7.0	7.0
Lane Util. Factor	0.95	0.95	0.88					0.91	0.88		0.97	0.95
Frt	1.00	1.00	0.85					1.00	0.85		1.00	1.00
Flt Protected	0.95	0.96	1.00					1.00	1.00		0.95	1.00
Satd. Flow (prot)	1681	1694	2787					5085	2787		3433	3539
Flt Permitted	0.95	0.96	1.00					1.00	1.00		0.95	1.00
Satd. Flow (perm)	1681	1694	2787					5085	2787		3433	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	492	28	305	0	0	0	0	880	939	4	1245	1283
RTOR Reduction (vph)	0	0	152	0	0	0	0	0	435	0	0	0
Lane Group Flow (vph)	261	259	153	0	0	0	0	880	504	0	1249	1283
Turn Type	Split	NA	Prot					NA	Prot	Prot	Prot	NA
Protected Phases	1 6	1 6	1 6					4 5	4 5	2 3	2 3	2 3 4 5
Permitted Phases												
Actuated Green, G (s)	34.0	34.0	34.0					34.0	34.0		60.5	102.0
Effective Green, g (s)	26.5	26.5	26.5					34.0	34.0		60.5	94.5
Actuated g/C Ratio	0.18	0.18	0.18					0.23	0.23		0.40	0.63
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)	296	299	492					1152	631		1384	2229
v/s Ratio Prot	c0.16	0.15	0.05					0.17	c0.18		c0.36	0.36
v/s Ratio Perm												
v/c Ratio	0.88	0.87	0.31					0.76	0.80		0.90	0.58
Uniform Delay, d1	60.2	60.0	53.8					54.2	54.8		42.0	16.1
Progression Factor	1.00	1.00	1.00					1.00	1.00		0.67	0.74
Incremental Delay, d2	24.4	21.5	0.1					2.8	6.5		5.8	0.1
Delay (s)	84.6	81.5	53.9					57.0	61.3		34.0	12.1
Level of Service	F	F	D					E	E		C	B
Approach Delay (s)		72.3			0.0			59.2				22.9
Approach LOS		E			A			E				C

Intersection Summary			
HCM 2000 Control Delay	43.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	43.0
Intersection Capacity Utilization	105.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	567	93	755	4	325	978	0	0	1835
Future Volume (vph)	0	0	0	567	93	755	4	325	978	0	0	1835
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.5	7.5	7.5		7.0	7.0			7.0
Lane Util. Factor				0.91	0.91	0.76		1.00	0.95			0.86
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1610	3267	3610		1770	3539			6408
Flt Permitted				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (perm)				1610	3267	3610		1770	3539			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	597	98	795	4	342	1029	0	0	1932
RTOR Reduction (vph)	0	0	0	0	0	270	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	298	397	525	0	346	1029	0	0	1932
Turn Type				Split	NA	Prot	Prot	Prot	NA			NA
Protected Phases				3 4	3 4	3 4	5 6	5 6	1 2 5 6			1 2
Permitted Phases												
Actuated Green, G (s)				33.0	33.0	33.0		34.5	103.0			61.0
Effective Green, g (s)				33.0	33.0	33.0		34.5	95.5			61.0
Actuated g/C Ratio				0.22	0.22	0.22		0.23	0.64			0.41
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)				354	718	794		407	2253			2605
v/s Ratio Prot				c0.19	0.12	0.15		c0.20	0.29			c0.30
v/s Ratio Perm												
v/c Ratio				0.84	0.55	0.66		0.85	0.46			0.74
Uniform Delay, d1				56.0	51.9	53.4		55.3	14.0			37.8
Progression Factor				1.00	1.00	1.00		0.60	1.11			1.00
Incremental Delay, d2				15.8	0.5	1.6		10.8	0.0			1.0
Delay (s)				71.8	52.5	55.0		44.0	15.5			38.8
Level of Service				E	D	E		D	B			D
Approach Delay (s)		0.0			57.7				22.6			37.5
Approach LOS		A			E				C			D

Intersection Summary			
HCM 2000 Control Delay	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	43.0
Intersection Capacity Utilization	105.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	310
Future Volume (vph)	310
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	326
RTOR Reduction (vph)	153
Lane Group Flow (vph)	173
Turn Type	Prot
Protected Phases	1 2
Permitted Phases	
Actuated Green, G (s)	61.0
Effective Green, g (s)	61.0
Actuated g/C Ratio	0.41
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	643
v/s Ratio Prot	0.11
v/s Ratio Perm	
v/c Ratio	0.27
Uniform Delay, d1	29.6
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	29.7
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	3	134	176	2	107	1649	8	1935	111
Future Volume (vph)	3	134	176	2	107	1649	8	1935	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		7.0	7.0	7.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00	0.91	1.00	0.91	1.00
Frt		1.00	0.85		1.00	1.00	1.00	1.00	0.85
Flt Protected		0.95	1.00		0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1770	1583		1770	5085	1770	5085	1583
Flt Permitted		0.95	1.00		0.06	1.00	0.13	1.00	1.00
Satd. Flow (perm)		1770	1583		106	5085	235	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	141	185	2	113	1736	8	2037	117
RTOR Reduction (vph)	0	0	142	0	0	0	0	0	43
Lane Group Flow (vph)	0	144	43	0	115	1736	8	2037	74
Turn Type	Prot	Prot	Perm	Perm	pm+pt	NA	Perm	NA	Perm
Protected Phases	4	4			5	2		6	
Permitted Phases			4	2	2		6		6
Actuated Green, G (s)		12.9	12.9		81.1	81.1	67.4	67.4	67.4
Effective Green, g (s)		12.9	12.9		81.1	81.1	67.4	67.4	67.4
Actuated g/C Ratio		0.12	0.12		0.76	0.76	0.63	0.63	0.63
Clearance Time (s)		6.0	6.0		7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)		2.0	2.0		1.5	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		213	190		184	3854	148	3203	997
v/s Ratio Prot		c0.08			0.04	c0.34		0.40	
v/s Ratio Perm			0.03		c0.43		0.03		0.05
v/c Ratio		0.68	0.23		0.62	0.45	0.05	0.64	0.07
Uniform Delay, d1		45.0	42.5		16.0	4.8	7.6	12.2	7.7
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		6.5	0.2		4.7	0.4	0.7	1.0	0.1
Delay (s)		51.6	42.8		20.7	5.1	8.3	13.2	7.8
Level of Service		D	D		C	A	A	B	A
Approach Delay (s)		46.6				6.1		12.9	
Approach LOS		D				A		B	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	107.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	857	189	378	759	226	216	953	622	381	1487	205
Future Volume (vph)	147	857	189	378	759	226	216	953	622	381	1487	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.91	0.88	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	1770	5085	2787	3433	5085	1583
Flt Permitted	0.27	1.00	1.00	0.95	1.00	1.00	0.07	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	508	5085	1583	3433	5085	1583	140	5085	2787	3433	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	155	902	199	398	799	238	227	1003	655	401	1565	216
RTOR Reduction (vph)	0	0	70	0	0	172	0	0	36	0	0	62
Lane Group Flow (vph)	155	902	129	398	799	66	227	1003	619	401	1565	154
Turn Type	pm+pt	NA	custom	Prot	NA	Perm	pm+pt	NA	custom	Prot	NA	custom
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6 3			2	4		4 5			8 1
Actuated Green, G (s)	48.5	36.0	65.6	21.0	44.5	44.5	72.1	53.4	80.9	22.6	57.3	76.3
Effective Green, g (s)	48.5	36.0	65.6	21.0	44.5	44.5	72.1	53.4	80.9	22.6	57.3	76.3
Actuated g/C Ratio	0.30	0.22	0.41	0.13	0.28	0.28	0.45	0.33	0.51	0.14	0.36	0.48
Clearance Time (s)	7.0	7.0		7.0	7.0	7.0	6.5	6.5		6.5	6.5	
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	2.5		2.0	2.5	
Lane Grp Cap (vph)	252	1144	649	450	1414	440	253	1697	1409	484	1821	754
v/s Ratio Prot	0.05	c0.18		c0.12	0.16		0.10	0.20		c0.12	c0.31	
v/s Ratio Perm	0.14		0.08			0.04	0.30		0.22			0.10
v/c Ratio	0.62	0.79	0.20	0.88	0.57	0.15	0.90	0.59	0.44	0.83	0.86	0.20
Uniform Delay, d1	42.8	58.4	30.3	68.3	49.5	43.5	48.1	44.2	25.1	66.8	47.6	24.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	5.5	0.1	17.9	1.6	0.7	30.2	1.5	0.1	10.7	5.6	0.0
Delay (s)	45.9	64.0	30.4	86.2	51.1	44.2	78.3	45.8	25.2	77.5	53.2	24.3
Level of Service	D	E	C	F	D	D	E	D	C	E	D	C
Approach Delay (s)		56.4			59.7			42.5			54.8	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	90.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
14: Nob Hill Rd & SW 13th St

07/07/2021

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	55	22	147	278	36	1282	173	252	1248	83
v/c Ratio	1.08	0.09	0.76	0.73	0.12	0.59	0.17	0.69	0.50	0.07
Control Delay	208.8	35.3	83.5	30.9	8.1	20.7	5.6	20.5	11.8	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Total Delay	208.8	35.3	83.5	30.9	8.1	20.7	5.6	20.5	12.4	2.6
Queue Length 50th (ft)	~59	11	137	85	7	366	16	55	271	2
Queue Length 95th (ft)	#130	35	200	177	21	595	65	167	406	23
Internal Link Dist (ft)		737		793		965			615	
Turn Bay Length (ft)					195		200	190		130
Base Capacity (vph)	77	378	293	482	293	2171	1020	450	2502	1141
Starvation Cap Reductn	0	0	0	0	0	0	0	0	750	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.06	0.50	0.58	0.12	0.59	0.17	0.56	0.71	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	145	180	54	190	120	1501	38	144	1398	26
v/c Ratio	0.93	0.53	0.33	0.60	0.60	0.61	0.03	0.84	0.57	0.02
Control Delay	96.5	28.2	40.7	33.3	23.5	9.1	1.7	54.5	8.6	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Total Delay	96.5	28.2	40.7	33.3	23.5	9.4	1.7	54.5	8.6	1.4
Queue Length 50th (ft)	87	61	29	72	34	228	0	58	203	0
Queue Length 95th (ft)	#200	128	66	144	#138	287	9	#197	256	6
Internal Link Dist (ft)		740		837		615			603	
Turn Bay Length (ft)	155		165		210		210	170		115
Base Capacity (vph)	165	356	174	333	201	2466	1114	171	2466	1113
Starvation Cap Reductn	0	0	0	0	0	347	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.51	0.31	0.57	0.60	0.71	0.03	0.84	0.57	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	261	259	305	880	939	1249	1283
v/c Ratio	0.69	0.68	0.39	0.76	0.88	0.89	0.53
Control Delay	63.5	63.0	20.4	59.3	32.4	34.7	9.6
Queue Delay	0.0	0.0	0.0	50.4	0.0	46.7	2.1
Total Delay	63.5	63.0	20.4	109.7	32.4	81.4	11.7
Queue Length 50th (ft)	248	246	54	297	226	605	483
Queue Length 95th (ft)	357	354	104	351	332	693	555
Internal Link Dist (ft)		95		603			211
Turn Bay Length (ft)					430		
Base Capacity (vph)	381	383	774	1152	1067	1396	2406
Starvation Cap Reductn	0	0	0	0	0	283	933
Spillback Cap Reductn	0	0	0	400	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.68	0.39	1.17	0.88	1.12	0.87

Intersection Summary

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	298	397	795	346	1029	1932	326
v/c Ratio	0.86	0.56	0.75	0.84	0.42	0.74	0.41
Control Delay	79.5	55.9	35.6	46.5	11.9	40.0	8.5
Queue Delay	0.0	0.0	0.0	55.5	50.5	2.1	0.0
Total Delay	79.5	55.9	35.6	102.0	62.5	42.0	8.5
Queue Length 50th (ft)	310	192	187	302	362	463	41
Queue Length 95th (ft)	#486	252	253	#479	425	507	117
Internal Link Dist (ft)		29			211	441	
Turn Bay Length (ft)							
Base Capacity (vph)	348	708	1053	413	2430	2605	796
Starvation Cap Reductn	0	0	0	154	1501	0	0
Spillback Cap Reductn	0	0	0	0	0	499	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.56	0.75	1.34	1.11	0.92	0.41

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	144	185	115	1736	8	2037	117
v/c Ratio	0.67	0.56	0.62	0.45	0.05	0.64	0.11
Control Delay	60.0	16.0	29.6	5.5	11.4	14.3	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.0	16.0	29.6	5.5	11.4	14.3	2.3
Queue Length 50th (ft)	96	15	22	134	2	283	0
Queue Length 95th (ft)	155	78	84	196	11	421	25
Internal Link Dist (ft)	1080			3596		252	
Turn Bay Length (ft)			200				
Base Capacity (vph)	297	400	235	3852	147	3202	1040
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.46	0.49	0.45	0.05	0.64	0.11

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	155	902	199	398	799	238	227	1003	655	401	1565	216
v/c Ratio	0.62	0.79	0.28	0.89	0.56	0.39	0.90	0.59	0.45	0.83	0.86	0.26
Control Delay	43.9	64.4	13.1	89.7	51.6	6.9	80.6	46.5	23.4	81.5	53.8	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	64.4	13.1	89.7	51.6	6.9	80.6	46.5	23.4	81.5	53.8	11.7
Queue Length 50th (ft)	106	331	52	212	267	0	182	320	214	212	569	56
Queue Length 95th (ft)	163	387	109	#293	316	69	#322	384	285	267	639	114
Internal Link Dist (ft)		1251			1420			634			1230	
Turn Bay Length (ft)	340		200	345		800	355		245	260		260
Base Capacity (vph)	269	1145	752	472	1415	612	284	1697	1470	572	1820	835
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.79	0.26	0.84	0.56	0.39	0.80	0.59	0.45	0.70	0.86	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Pine Island Road

HCM Signalized Intersection Capacity Analysis
20: Pine Island Rd & Nova Dr

07/08/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	418	240	259	243	77	132	13	163	1581	332	6	319
Future Volume (vph)	418	240	259	243	77	132	13	163	1581	332	6	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0		7.0	7.0	7.0		7.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.91	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583		1770	5085	1583		1770
Flt Permitted	0.39	1.00	1.00	0.54	1.00	1.00		0.15	1.00	1.00		0.06
Satd. Flow (perm)	732	1863	1583	1014	1863	1583		274	5085	1583		108
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	440	253	273	256	81	139	14	172	1664	349	6	336
RTOR Reduction (vph)	0	0	184	0	0	130	0	0	0	179	0	0
Lane Group Flow (vph)	440	253	89	256	81	9	0	186	1664	170	0	342
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	pm+pt	pm+pt
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases	4		4	8		8	2	2		2	6	6
Actuated Green, G (s)	50.0	25.1	25.1	28.9	10.0	10.0		74.9	61.8	61.8		97.0
Effective Green, g (s)	50.0	25.1	25.1	28.9	10.0	10.0		74.9	61.8	61.8		97.0
Actuated g/C Ratio	0.31	0.16	0.16	0.18	0.06	0.06		0.47	0.39	0.39		0.61
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		7.0	7.0	7.0		7.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	3.0		1.5
Lane Grp Cap (vph)	449	292	248	272	116	98		250	1964	611		358
v/s Ratio Prot	c0.21	0.14		0.11	0.04			0.06	0.33			c0.17
v/s Ratio Perm	c0.10		0.06	0.06		0.01		0.29		0.11		c0.41
v/c Ratio	0.98	0.87	0.36	0.94	0.70	0.09		0.74	0.85	0.28		0.96
Uniform Delay, d1	51.1	65.8	60.3	63.1	73.5	70.7		26.2	44.8	33.8		53.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.81
Incremental Delay, d2	36.6	21.9	0.3	38.5	13.8	0.1		10.0	4.8	1.1		31.5
Delay (s)	87.7	87.7	60.6	101.6	87.3	70.8		36.2	49.5	34.9		74.7
Level of Service	F	F	E	F	F	E		D	D	C		E
Approach Delay (s)		80.1			90.2				46.1			
Approach LOS		F			F				D			

Intersection Summary			
HCM 2000 Control Delay	55.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	101.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1334	187
Future Volume (vph)	1334	187
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	7.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1404	197
RTOR Reduction (vph)	0	102
Lane Group Flow (vph)	1404	95
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	76.9	76.9
Effective Green, g (s)	76.9	76.9
Actuated g/C Ratio	0.48	0.48
Clearance Time (s)	7.0	7.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2443	760
v/s Ratio Prot	0.28	
v/s Ratio Perm		0.06
v/c Ratio	0.57	0.12
Uniform Delay, d1	29.8	23.0
Progression Factor	0.99	3.92
Incremental Delay, d2	0.8	0.3
Delay (s)	30.4	90.2
Level of Service	C	F
Approach Delay (s)	44.2	
Approach LOS	D	

Intersection Summary

Movement	EBU	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	3	283	46	28	2256	63	1748	122
Future Volume (vph)	3	283	46	28	2256	63	1748	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		1.00	1.00	1.00	0.91	1.00	0.91	1.00
Frt		1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected		0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1770	1583	1770	5085	1770	5085	1583
Flt Permitted		0.95	1.00	0.09	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1770	1583	174	5085	167	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	298	48	29	2375	66	1840	128
RTOR Reduction (vph)	0	0	39	0	0	0	0	57
Lane Group Flow (vph)	0	301	9	29	2375	66	1840	71
Turn Type	Prot	Prot	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	4	4		5	2	1	6	
Permitted Phases			4	2		6		6
Actuated Green, G (s)		15.8	15.8	44.5	42.9	47.9	44.6	44.6
Effective Green, g (s)		15.8	15.8	44.5	42.9	47.9	44.6	44.6
Actuated g/C Ratio		0.20	0.20	0.56	0.54	0.60	0.56	0.56
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	2.0	1.5	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)		349	312	128	2726	166	2834	882
v/s Ratio Prot		c0.17		0.00	c0.47	c0.02	0.36	
v/s Ratio Perm			0.01	0.12		0.22		0.05
v/c Ratio		0.86	0.03	0.23	0.87	0.40	0.65	0.08
Uniform Delay, d1		31.0	25.9	9.3	16.1	13.3	12.3	8.2
Progression Factor		1.00	1.00	1.06	0.94	1.11	1.59	2.57
Incremental Delay, d2		18.6	0.0	0.2	2.5	0.5	1.0	0.2
Delay (s)		49.7	25.9	10.0	17.7	15.2	20.4	21.2
Level of Service		D	C	B	B	B	C	C
Approach Delay (s)		46.4			17.6		20.3	
Approach LOS		D			B		C	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	969	43	659	0	0	0	0	1710	909	1179	1376	0
Future Volume (vph)	969	43	659	0	0	0	0	1710	909	1179	1376	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					7.0	7.0	7.0	7.0	
Lane Util. Factor	0.91	0.91	0.88					0.81	0.88	0.97	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3221	1624	2787					7544	2787	3433	5085	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3221	1624	2787					7544	2787	3433	5085	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1020	45	694	0	0	0	0	1800	957	1241	1448	0
RTOR Reduction (vph)	0	0	118	0	0	0	0	0	572	0	0	0
Lane Group Flow (vph)	704	361	576	0	0	0	0	1800	385	1241	1448	0
Turn Type	Split	NA	Prot					NA	Prot	Prot	NA	
Protected Phases	1 6	1 6	1 6					4 5	4 5	2 3	2 3 4 5	
Permitted Phases												
Actuated Green, G (s)	49.0	49.0	49.0					37.0	37.0	53.0	97.0	
Effective Green, g (s)	49.0	49.0	49.0					37.0	37.0	53.0	97.0	
Actuated g/C Ratio	0.31	0.31	0.31					0.23	0.23	0.33	0.61	
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)	986	497	853					1744	644	1137	3082	
v/s Ratio Prot	0.22	c0.22	0.21					c0.24	0.14	c0.36	0.28	
v/s Ratio Perm												
v/c Ratio	0.71	0.73	0.68					1.03	0.60	1.09	0.47	
Uniform Delay, d1	49.3	49.5	48.5					61.5	54.9	53.5	17.3	
Progression Factor	1.00	1.00	1.00					0.78	1.16	0.60	1.47	
Incremental Delay, d2	2.1	4.5	1.7					24.8	0.5	42.8	0.0	
Delay (s)	51.3	54.0	50.2					72.8	64.0	75.0	25.4	
Level of Service	D	D	D					E	E	E	C	
Approach Delay (s)		51.4			0.0			69.8			48.3	
Approach LOS		D			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	57.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	42.0
Intersection Capacity Utilization	130.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	475	426	1122	695	1984	0	0	2080	820
Future Volume (vph)	0	0	0	475	426	1122	695	1984	0	0	2080	820
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.0	7.0	7.0	7.0	7.0			7.0	7.0
Lane Util. Factor				0.95	0.95	0.76	0.97	0.91			0.76	0.76
Frt				1.00	1.00	0.85	1.00	1.00			0.98	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1681	1761	3610	3433	5085			6912	1203
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1681	1761	3610	3433	5085			6912	1203
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	500	448	1181	732	2088	0	0	2189	863
RTOR Reduction (vph)	0	0	0	0	0	111	0	0	0	0	21	158
Lane Group Flow (vph)	0	0	0	450	498	1071	732	2088	0	0	2574	299
Turn Type				Prot	NA	Prot	Prot	NA			NA	Perm
Protected Phases				3	3 4	3 4	5 6	1 2 5 6			1 2	
Permitted Phases												1 2
Actuated Green, G (s)				36.0	49.0	56.0	30.0	90.0			53.0	53.0
Effective Green, g (s)				36.0	49.0	56.0	30.0	90.0			53.0	53.0
Actuated g/C Ratio				0.22	0.31	0.35	0.19	0.56			0.33	0.33
Clearance Time (s)				7.0								
Vehicle Extension (s)				2.0								
Lane Grp Cap (vph)				378	616	1263	643	2860			2289	398
v/s Ratio Prot				c0.27	0.18	c0.30	c0.21	0.41			c0.37	
v/s Ratio Perm					0.10							0.25
v/c Ratio				1.19	0.81	0.85	1.14	0.73			1.12	0.75
Uniform Delay, d1				62.0	51.2	48.1	65.0	26.0			53.5	47.6
Progression Factor				1.00	1.00	1.00	0.80	0.55			0.77	0.87
Incremental Delay, d2				109.1	7.3	5.2	70.1	0.3			60.1	4.3
Delay (s)				171.1	58.5	53.3	122.1	14.6			101.3	45.9
Level of Service				F	E	D	F	B			F	D
Approach Delay (s)		0.0			79.4			42.5			93.0	
Approach LOS		A			E			D			F	

Intersection Summary			
HCM 2000 Control Delay	71.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	42.0
Intersection Capacity Utilization	130.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	6	80	60	8	34	38	2915	153	43	2760	41
Future Volume (vph)	84	6	80	60	8	34	38	2915	153	43	2760	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91	1.00	1.00	0.91	
Frt	1.00	0.86		1.00	0.88		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1602		1770	1634		1770	5085	1583	1770	5074	
Flt Permitted	0.73	1.00		0.70	1.00		0.07	1.00	1.00	0.07	1.00	
Satd. Flow (perm)	1357	1602		1301	1634		125	5085	1583	136	5074	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	88	6	84	63	8	36	40	3068	161	45	2905	43
RTOR Reduction (vph)	0	77	0	0	4	0	0	0	35	0	2	0
Lane Group Flow (vph)	88	13	0	63	40	0	40	3068	126	45	2946	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	6.4	6.4		6.4	6.4		62.6	62.6	62.6	54.6	54.6	
Effective Green, g (s)	6.4	6.4		6.4	6.4		62.6	62.6	62.6	54.6	54.6	
Actuated g/C Ratio	0.08	0.08		0.08	0.08		0.78	0.78	0.78	0.68	0.68	
Clearance Time (s)	6.0	6.0		6.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	108	128		104	130		159	3979	1238	92	3463	
v/s Ratio Prot		0.01			0.02		0.01	c0.60			c0.58	
v/s Ratio Perm	c0.06			0.05			0.19		0.08	0.33		
v/c Ratio	0.81	0.10		0.61	0.31		0.25	0.77	0.10	0.49	0.85	
Uniform Delay, d1	36.2	34.1		35.6	34.7		12.2	4.8	2.1	6.1	9.6	
Progression Factor	1.00	1.00		1.00	1.00		0.45	1.21	0.60	0.76	0.85	
Incremental Delay, d2	34.2	0.1		6.7	0.5		0.2	0.9	0.1	3.1	1.7	
Delay (s)	70.4	34.3		42.2	35.2		5.7	6.7	1.3	7.7	9.9	
Level of Service	E	C		D	D		A	A	A	A	A	
Approach Delay (s)		52.1			39.4			6.4			9.8	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	410	407	2426	609	722	2408
Future Volume (vph)	410	407	2426	609	722	2408
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	15%		0%			0%
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	0.94	0.88	0.91	0.88	0.97	0.91
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	4616	2578	5085	2787	3433	5085
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	4616	2578	5085	2787	3433	5085
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	432	428	2554	641	760	2535
RTOR Reduction (vph)	0	1	0	231	0	0
Lane Group Flow (vph)	432	427	2554	410	760	2535
Turn Type	Prot	pt+ov	NA	Prot	Prot	NA
Protected Phases	4	4 1	2	2	1	1 2
Permitted Phases						
Actuated Green, G (s)	16.5	64.5	82.5	82.5	41.5	130.5
Effective Green, g (s)	16.5	64.5	82.5	82.5	41.5	130.5
Actuated g/C Ratio	0.10	0.40	0.52	0.52	0.26	0.82
Clearance Time (s)	6.5		6.5	6.5	6.5	
Vehicle Extension (s)	2.0		3.0	3.0	1.5	
Lane Grp Cap (vph)	476	1039	2621	1437	890	4147
v/s Ratio Prot	c0.09	0.17	c0.50	0.15	c0.22	0.50
v/s Ratio Perm						
v/c Ratio	0.91	0.41	0.97	0.29	0.85	0.61
Uniform Delay, d1	71.0	34.2	37.7	22.0	56.4	5.4
Progression Factor	1.00	1.00	1.01	0.75	0.92	1.73
Incremental Delay, d2	20.4	0.1	9.5	0.3	3.0	0.2
Delay (s)	91.4	34.3	47.7	16.9	55.2	9.6
Level of Service	F	C	D	B	E	A
Approach Delay (s)	63.0		41.6			20.1
Approach LOS	E		D			C

Intersection Summary			
HCM 2000 Control Delay	34.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	60	33	223	190	17	54	28	99	2114	396	10	165
Future Volume (vph)	60	33	223	190	17	54	28	99	2114	396	10	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0		6.0	6.0			6.0	6.0	6.0		6.0
Lane Util. Factor	1.00	1.00		0.97	1.00			1.00	0.91	1.00		1.00
Frt	1.00	0.87		1.00	0.89			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1620		3433	1650			1770	5085	1583		1770
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (perm)	1770	1620		3433	1650			1770	5085	1583		1770
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	35	235	200	18	57	29	104	2225	417	11	174
RTOR Reduction (vph)	0	73	0	0	49	0	0	0	0	93	0	0
Lane Group Flow (vph)	63	197	0	200	26	0	0	133	2225	324	0	185
Turn Type	Prot	NA		Prot	NA		Prot	Prot	NA	Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases										2		
Actuated Green, G (s)	8.9	20.0		10.0	22.1			12.9	87.0	87.0		19.0
Effective Green, g (s)	8.9	20.0		10.0	22.1			12.9	87.0	87.0		19.0
Actuated g/C Ratio	0.06	0.12		0.06	0.14			0.08	0.54	0.54		0.12
Clearance Time (s)	5.0	6.0		6.0	6.0			6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0			1.5	3.0	3.0		1.5
Lane Grp Cap (vph)	98	202		214	227			142	2764	860		210
v/s Ratio Prot	0.04	c0.12		c0.06	0.02			0.08	0.44			c0.10
v/s Ratio Perm										0.20		
v/c Ratio	0.64	0.98		0.93	0.11			0.94	0.80	0.38		0.88
Uniform Delay, d1	74.0	69.8		74.7	60.4			73.1	29.6	20.9		69.4
Progression Factor	1.00	1.00		1.00	1.00			1.15	0.35	0.16		1.00
Incremental Delay, d2	13.5	55.9		43.2	0.1			32.6	1.1	0.5		31.4
Delay (s)	87.5	125.7		117.9	60.5			116.4	11.6	3.9		100.8
Level of Service	F	F		F	E			F	B	A		F
Approach Delay (s)		118.5			102.2				15.4			
Approach LOS		F			F				B			

Intersection Summary			
HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	102.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	2772	30
Future Volume (vph)	2772	30
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	
Lane Util. Factor	0.91	
Frt	1.00	
Flt Protected	1.00	
Satd. Flow (prot)	5077	
Flt Permitted	1.00	
Satd. Flow (perm)	5077	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	2918	32
RTOR Reduction (vph)	1	0
Lane Group Flow (vph)	2949	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Actuated Green, G (s)	93.1	
Effective Green, g (s)	93.1	
Actuated g/C Ratio	0.58	
Clearance Time (s)	6.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	2954	
v/s Ratio Prot	c0.58	
v/s Ratio Perm		
v/c Ratio	1.00	
Uniform Delay, d1	33.4	
Progression Factor	1.00	
Incremental Delay, d2	16.2	
Delay (s)	49.6	
Level of Service	D	
Approach Delay (s)	52.6	
Approach LOS	D	

Intersection Summary

Queues
20: Pine Island Rd & Nova Dr

07/08/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	440	253	273	256	81	139	186	1664	349	342	1404	197
v/c Ratio	0.98	0.87	0.63	0.94	0.70	0.48	0.74	0.85	0.44	0.96	0.57	0.23
Control Delay	88.5	93.3	21.3	89.7	103.5	6.2	40.6	50.1	8.6	73.9	31.2	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	88.5	93.3	21.3	89.7	103.5	6.2	40.6	50.1	8.6	73.9	31.2	13.0
Queue Length 50th (ft)	419	260	51	214	84	0	84	591	39	340	411	95
Queue Length 95th (ft)	#601	#407	154	#362	#156	3	152	657	123	#511	376	119
Internal Link Dist (ft)		1181			1574			1361			3527	
Turn Bay Length (ft)	240		240	235		235	330		330	420		420
Base Capacity (vph)	448	302	439	272	128	299	315	1967	791	368	2447	864
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.84	0.62	0.94	0.63	0.46	0.59	0.85	0.44	0.93	0.57	0.23

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	301	48	29	2375	66	1840	128
v/c Ratio	0.86	0.14	0.16	0.85	0.35	0.60	0.13
Control Delay	55.4	9.3	7.1	17.4	10.8	18.0	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.4	9.3	7.1	17.4	10.8	18.0	4.1
Queue Length 50th (ft)	144	0	8	470	19	524	22
Queue Length 95th (ft)	#269	26	m12	m533	m28	563	m57
Internal Link Dist (ft)	953			3527		322	
Turn Bay Length (ft)			250		170		200
Base Capacity (vph)	376	374	182	2802	186	3062	1004
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.13	0.16	0.85	0.35	0.60	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	704	361	694	1800	957	1241	1448
v/c Ratio	0.71	0.73	0.71	1.03	0.79	1.09	0.47
Control Delay	54.1	59.3	41.3	71.7	17.1	74.6	25.6
Queue Delay	0.0	0.0	0.0	28.2	0.0	7.5	51.1
Total Delay	54.1	59.3	41.3	99.8	17.1	82.1	76.7
Queue Length 50th (ft)	360	372	283	~493	160	~756	513
Queue Length 95th (ft)	441	512	368	#557	256	m589	m436
Internal Link Dist (ft)		62		305			239
Turn Bay Length (ft)					270		
Base Capacity (vph)	986	497	971	1744	1216	1137	3082
Starvation Cap Reductn	0	0	0	0	0	566	2251
Spillback Cap Reductn	0	0	0	510	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.73	0.71	1.46	0.79	2.17	1.74

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	450	498	1181	732	2088	2595	457
v/c Ratio	1.19	1.26	0.86	1.14	0.73	1.12	0.82
Control Delay	160.5	183.7	48.6	116.5	15.0	97.4	28.8
Queue Delay	0.0	0.0	0.1	2.8	47.7	1.0	3.6
Total Delay	160.5	183.7	48.7	119.3	62.8	98.4	32.4
Queue Length 50th (ft)	~594	~684	443	~464	737	~804	190
Queue Length 95th (ft)	#832	#928	525	m#497	m650	#863	#309
Internal Link Dist (ft)		59			239	580	
Turn Bay Length (ft)							300
Base Capacity (vph)	378	396	1374	643	2860	2311	556
Starvation Cap Reductn	0	0	0	193	1149	0	46
Spillback Cap Reductn	0	0	8	0	266	696	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.19	1.26	0.86	1.63	1.22	1.61	0.90

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	88	90	63	44	40	3068	161	45	2948
v/c Ratio	0.70	0.40	0.53	0.28	0.20	0.74	0.12	0.45	0.79
Control Delay	64.5	15.3	50.4	36.1	2.4	6.7	0.3	18.5	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay	64.5	15.3	50.4	36.1	2.4	6.8	0.3	18.5	9.6
Queue Length 50th (ft)	43	3	30	19	2	814	2	9	678
Queue Length 95th (ft)	#111	45	#75	49	m3	493	m3	m29	711
Internal Link Dist (ft)		1101		963		580			1530
Turn Bay Length (ft)	130		125		180		200	200	
Base Capacity (vph)	135	235	130	167	202	4119	1313	99	3731
Starvation Cap Reductn	0	0	0	0	0	148	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.38	0.48	0.26	0.20	0.77	0.12	0.45	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	432	428	2554	641	760	2535
v/c Ratio	0.91	0.41	0.97	0.38	0.85	0.61
Control Delay	94.1	35.5	47.6	4.5	55.4	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.1	35.5	47.6	4.5	55.4	9.7
Queue Length 50th (ft)	161	180	941	25	424	441
Queue Length 95th (ft)	#228	234	#961	57	m430	m452
Internal Link Dist (ft)	1188		1530			1376
Turn Bay Length (ft)	300			350	300	
Base Capacity (vph)	476	1040	2621	1668	890	4147
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.41	0.97	0.38	0.85	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	63	270	200	75	133	2225	417	185	2950
v/c Ratio	0.56	1.02	0.93	0.27	0.94	0.80	0.43	0.88	0.99
Control Delay	91.1	106.4	119.6	24.8	115.6	11.4	2.3	105.8	46.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	91.1	106.4	119.6	24.8	115.6	11.4	2.3	105.8	46.3
Queue Length 50th (ft)	65	~216	109	17	147	154	16	191	1075
Queue Length 95th (ft)	119	#410	#191	71	m#165	m178	m20	#316	#1227
Internal Link Dist (ft)		1005		1200		1376			1136
Turn Bay Length (ft)	80		178		200		180	150	
Base Capacity (vph)	132	265	214	277	143	2795	962	232	2984
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	1.02	0.93	0.27	0.93	0.80	0.43	0.80	0.99

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

University Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	58	6	61	11	6	5	2	70	3339	10	7	3973
Future Volume (vph)	58	6	61	11	6	5	2	70	3339	10	7	3973
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)		6.0	6.0	6.0	6.0			7.0	10.0		7.0	7.0
Lane Util. Factor		1.00	1.00	1.00	1.00			0.97	0.86		1.00	0.86
Frpb, ped/bikes		1.00	0.99	1.00	1.00			1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Frt		1.00	0.85	1.00	0.93			1.00	1.00		1.00	1.00
Flt Protected		0.96	1.00	0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (prot)		1709	1485	1639	1817			3334	6510		1852	6576
Flt Permitted		0.74	1.00	0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (perm)		1318	1485	1639	1817			3334	6510		1852	6576
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	61	6	64	12	6	5	2	74	3515	11	7	4182
RTOR Reduction (vph)	0	0	58	0	5	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	67	6	12	6	0	0	76	3526	0	7	4182
Confl. Peds. (#/hr)			2									
Heavy Vehicles (%)	10%	0%	10%	13%	0%	0%	0%	8%	3%	0%	0%	2%
Turn Type	Perm	NA	Perm	Split	NA		Prot	Prot	NA		Prot	NA
Protected Phases		4		8	8		5	5	2		1	6
Permitted Phases	4		4									
Actuated Green, G (s)		13.9	13.9	4.8	4.8			9.7	113.7		1.6	105.6
Effective Green, g (s)		13.9	13.9	4.8	4.8			9.7	110.7		1.6	105.6
Actuated g/C Ratio		0.09	0.09	0.03	0.03			0.06	0.69		0.01	0.66
Clearance Time (s)		6.0	6.0	6.0	6.0			7.0	7.0		7.0	7.0
Vehicle Extension (s)		3.5	3.5	3.5	3.5			3.5	3.5		3.5	3.5
Lane Grp Cap (vph)		114	129	49	54			202	4504		18	4340
v/s Ratio Prot				c0.01	0.00			c0.02	c0.54		0.00	c0.64
v/s Ratio Perm		c0.05	0.00									
v/c Ratio		0.59	0.04	0.24	0.11			0.38	0.78		0.39	0.96
Uniform Delay, d1		70.3	67.0	75.8	75.5			72.2	16.6		78.7	25.4
Progression Factor		1.00	1.00	1.00	1.00			1.09	2.01		0.95	1.02
Incremental Delay, d2		8.0	0.2	3.1	1.1			1.1	1.1		1.5	0.9
Delay (s)		78.3	67.1	78.9	76.6			80.1	34.5		76.3	26.9
Level of Service		E	E	E	E			F	C		E	C
Approach Delay (s)		72.8			77.8				35.5			26.6
Approach LOS		E			E				D			C

Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	98
Future Volume (vph)	98
Ideal Flow (vphpl)	1950
Total Lost time (s)	7.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1609
Flt Permitted	1.00
Satd. Flow (perm)	1609
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	103
RTOR Reduction (vph)	35
Lane Group Flow (vph)	68
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	3%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	105.6
Effective Green, g (s)	105.6
Actuated g/C Ratio	0.66
Clearance Time (s)	7.0
Vehicle Extension (s)	3.5
Lane Grp Cap (vph)	1061
v/s Ratio Prot	
v/s Ratio Perm	0.04
v/c Ratio	0.06
Uniform Delay, d1	9.7
Progression Factor	1.11
Incremental Delay, d2	0.0
Delay (s)	10.8
Level of Service	B
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	36	50	3411	4008	49
Future Volume (vph)	10	36	50	3411	4008	49
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950
Total Lost time (s)	6.0	6.0	7.0	7.0	7.0	7.0
Lane Util. Factor	0.97	1.00	0.97	0.86	0.86	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3072	1546	3180	6513	6576	1658
Flt Permitted	0.95	1.00	0.03	1.00	1.00	1.00
Satd. Flow (perm)	3072	1546	97	6513	6576	1658
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	38	53	3591	4219	52
RTOR Reduction (vph)	0	37	0	0	0	8
Lane Group Flow (vph)	11	1	53	3591	4219	44
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	17%	4%	13%	3%	2%	0%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	5.3	5.3	141.7	141.7	130.4	130.4
Effective Green, g (s)	5.3	5.3	141.7	141.7	130.4	130.4
Actuated g/C Ratio	0.03	0.03	0.89	0.89	0.82	0.82
Clearance Time (s)	6.0	6.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	101	51	168	5768	5359	1351
v/s Ratio Prot	c0.00		0.01	c0.55	c0.64	
v/s Ratio Perm		0.00	0.27			0.03
v/c Ratio	0.11	0.02	0.32	0.62	0.79	0.03
Uniform Delay, d1	75.1	74.8	18.8	2.3	7.6	2.8
Progression Factor	1.00	1.00	7.36	4.70	0.86	0.67
Incremental Delay, d2	0.6	0.2	0.1	0.0	0.5	0.0
Delay (s)	75.6	75.1	138.4	11.0	7.0	1.9
Level of Service	E	E	F	B	A	A
Approach Delay (s)	75.2			12.9	6.9	
Approach LOS	E			B	A	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	13	260	480	687	1028	582	447	543	2750	836	7	344
Future Volume (vph)	13	260	480	687	1028	582	447	543	2750	836	7	344
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)		6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0		7.0
Lane Util. Factor		0.97	0.95	0.88	0.94	0.95	1.00	0.97	0.86	0.88		0.97
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)		3494	3668	2888	5122	3597	1594	3523	6576	2805		3523
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)		3494	3668	2888	5122	3597	1594	3523	6576	2805		3523
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	14	274	505	723	1082	613	471	572	2895	880	7	362
RTOR Reduction (vph)	0	0	0	78	0	0	44	0	0	29	0	0
Lane Group Flow (vph)	0	288	505	645	1082	613	427	572	2895	851	0	369
Confl. Peds. (#/hr)				1						1		
Heavy Vehicles (%)	0%	3%	1%	1%	2%	3%	4%	2%	2%	4%	2%	2%
Turn Type	Prot	Prot	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	pt+ov	Prot	Prot
Protected Phases	7!	7	4	4 5	3	8	1!	5	2	2 3	1!	1
Permitted Phases							8					
Actuated Green, G (s)		8.5	30.6	52.0	25.5	47.6	61.5	14.9	63.0	95.5		13.9
Effective Green, g (s)		8.5	30.6	52.0	25.5	47.6	61.5	14.9	63.0	95.5		13.9
Actuated g/C Ratio		0.05	0.19	0.32	0.16	0.30	0.38	0.09	0.39	0.60		0.09
Clearance Time (s)		6.5	6.5		6.5	6.5	7.0	7.0	7.0			7.0
Vehicle Extension (s)		1.5	2.0		1.5	2.0	1.5	1.5	3.0			1.5
Lane Grp Cap (vph)		185	701	938	816	1070	612	328	2589	1674		306
v/s Ratio Prot		0.08	0.14	c0.22	c0.21	0.17	0.06	c0.16	0.44	0.30		0.10
v/s Ratio Perm							0.21					
v/c Ratio		1.56	0.72	0.69	1.33	0.57	0.70	1.74	1.12	0.51		1.21
Uniform Delay, d1		75.8	60.7	46.9	67.2	47.6	41.4	72.5	48.5	18.7		73.0
Progression Factor		0.78	0.95	1.19	1.09	1.10	0.92	1.00	1.00	1.00		1.10
Incremental Delay, d2		268.6	2.2	1.2	154.1	0.4	2.4	347.2	59.1	0.1		110.8
Delay (s)		327.8	59.7	57.0	227.4	52.8	40.7	419.7	107.6	18.8		191.3
Level of Service		F	E	E	F	D	D	F	F	B		F
Approach Delay (s)			109.3			137.4			130.7			
Approach LOS			F			F			F			

Intersection Summary			
HCM 2000 Control Delay	164.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	119.1%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3465	186
Future Volume (vph)	3465	186
Ideal Flow (vphpl)	1950	1950
Total Lost time (s)	7.0	6.5
Lane Util. Factor	0.86	1.00
Frpb, ped/bikes	1.00	0.99
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	6576	1587
Flt Permitted	1.00	1.00
Satd. Flow (perm)	6576	1587
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	3647	196
RTOR Reduction (vph)	0	65
Lane Group Flow (vph)	3647	131
Confl. Peds. (#/hr)		3
Heavy Vehicles (%)	2%	3%
Turn Type	NA	pm+ov
Protected Phases	6	7!
Permitted Phases		6
Actuated Green, G (s)	62.0	70.5
Effective Green, g (s)	62.0	70.5
Actuated g/C Ratio	0.39	0.44
Clearance Time (s)	7.0	6.5
Vehicle Extension (s)	3.0	1.5
Lane Grp Cap (vph)	2548	699
v/s Ratio Prot	c0.55	0.01
v/s Ratio Perm		0.07
v/c Ratio	1.43	0.19
Uniform Delay, d1	49.0	27.3
Progression Factor	1.05	0.83
Incremental Delay, d2	195.6	0.0
Delay (s)	247.0	22.8
Level of Service	F	C
Approach Delay (s)	231.7	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	273	1167	1125	0	0	186
Future Volume (vph)	273	1167	1125	0	0	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5			4.5
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	1.00			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1770	3539	3539			1611
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1770	3539	3539			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	287	1228	1184	0	0	196
RTOR Reduction (vph)	0	0	0	0	0	42
Lane Group Flow (vph)	287	1228	1184	0	0	154
Turn Type	Prot	NA	NA			Over
Protected Phases	7	4	8			7
Permitted Phases						
Actuated Green, G (s)	18.4	80.0	52.6			18.4
Effective Green, g (s)	18.4	80.0	52.6			18.4
Actuated g/C Ratio	0.23	1.00	0.66			0.23
Clearance Time (s)	4.5	4.5	4.5			4.5
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	407	3539	2326			370
v/s Ratio Prot	c0.16	0.35	c0.33			0.10
v/s Ratio Perm						
v/c Ratio	0.71	0.35	0.51			0.42
Uniform Delay, d1	28.3	0.0	7.1			26.2
Progression Factor	1.00	1.00	2.91			1.00
Incremental Delay, d2	5.5	0.1	0.1			0.8
Delay (s)	33.8	0.1	20.6			27.0
Level of Service	C	A	C			C
Approach Delay (s)		6.4	20.6		27.0	
Approach LOS		A	C		C	

Intersection Summary			
HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SWR
Lane Group Flow (vph)	287	1228	1184	196
v/c Ratio	0.71	0.35	0.51	0.48
Control Delay	37.4	0.3	23.9	21.6
Queue Delay	0.0	0.0	0.3	0.0
Total Delay	37.4	0.3	24.2	21.6
Queue Length 50th (ft)	132	0	346	60
Queue Length 95th (ft)	190	0	m198	106
Internal Link Dist (ft)		295	433	
Turn Bay Length (ft)				
Base Capacity (vph)	630	3539	2326	609
Starvation Cap Reductn	0	0	533	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.46	0.35	0.66	0.32

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBT	EBR2	WBT	WBR2	NBT	NBR2	SBT	SBR2	SEL	NWL	SWL
Lane Configurations											
Traffic Volume (vph)	480	687	582	447	3300	836	3465	186	260	1028	344
Future Volume (vph)	480	687	582	447	3300	836	3465	186	260	1028	344
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.95	1.00	0.86	1.00	0.86	1.00	1.00	0.97	1.00
Frt	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85	1.00	1.00	1.00
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Satd. Flow (prot)	3539	1583	3539	1583	6408	1583	6408	1583	1770	3433	1770
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Satd. Flow (perm)	3539	1583	3539	1583	6408	1583	6408	1583	1770	3433	1770
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	505	723	613	471	3474	880	3647	196	274	1082	362
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	505	723	613	471	3474	880	3647	196	274	1082	362
Turn Type	NA	Free	NA	Free	NA	Free	NA	Free	Prot	Prot	Prot
Protected Phases	4!		8!		2!		6!		4!	8!	6!
Permitted Phases		Free		Free!		Free!		Free			
Actuated Green, G (s)	26.0	80.0	26.0	80.0	46.0	80.0	46.0	80.0	26.0	26.0	46.0
Effective Green, g (s)	26.0	80.0	26.0	80.0	46.0	80.0	46.0	80.0	26.0	26.0	46.0
Actuated g/C Ratio	0.32	1.00	0.32	1.00	0.58	1.00	0.58	1.00	0.32	0.32	0.58
Clearance Time (s)	4.0		4.0		4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	1150	1583	1150	1583	3684	1583	3684	1583	575	1115	1017
v/s Ratio Prot	0.14		0.17		0.54		c0.57		0.15	c0.32	0.20
v/s Ratio Perm		0.46		0.30		0.56		0.12			
v/c Ratio	0.44	0.46	0.53	0.30	0.94	0.56	0.99	0.12	0.48	0.97	0.36
Uniform Delay, d1	21.3	0.0	22.0	0.0	15.8	0.0	16.8	0.0	21.6	26.6	9.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.74	1.48	1.00
Incremental Delay, d2	0.3	0.9	0.5	0.5	6.5	1.4	12.4	0.2	0.6	17.7	0.2
Delay (s)	21.5	0.9	22.5	0.5	22.2	1.4	29.2	0.2	38.2	57.2	9.3
Level of Service	C	A	C	A	C	A	C	A	D	E	A
Approach Delay (s)	9.4		12.9		18.0		27.7				9.3
Approach LOS	A		B		B		C				A

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	128.0%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Lane Group	EBT	EBR2	WBT	WBR2	NBT	NBR2	SBT	SBR2	SEL	NWL	SWL
Lane Group Flow (vph)	505	723	613	471	3474	880	3647	196	274	1082	362
v/c Ratio	0.44	0.46	0.53	0.30	0.94	0.56	0.99	0.12	0.48	0.97	0.36
Control Delay	22.7	0.9	24.1	0.5	22.9	1.4	30.4	0.2	41.1	58.2	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0
Total Delay	22.7	0.9	24.1	0.5	22.9	1.4	32.3	0.2	41.1	58.2	10.3
Queue Length 50th (ft)	103	0	130	0	429	0	479	0	152	310	89
Queue Length 95th (ft)	146	0	180	0	#508	0	#626	0	229	#425	141
Internal Link Dist (ft)	433		404		343		521				224
Turn Bay Length (ft)		150		150		150		150			
Base Capacity (vph)	1150	1583	1150	1583	3684	1583	3684	1583	575	1115	1017
Starvation Cap Reductn	0	0	0	0	0	0	35	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.46	0.53	0.30	0.94	0.56	1.00	0.12	0.48	0.97	0.36

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	550	3010	0	351	3651	0	0	447
Future Volume (vph)	0	0	550	3010	0	351	3651	0	0	447
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.5	4.5		4.5	4.5			4.5
Lane Util. Factor			0.97	0.91		0.97	0.86			1.00
Frt			1.00	1.00		1.00	1.00			0.86
Flt Protected			0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)			3433	5085		3433	6408			1611
Flt Permitted			0.95	1.00		0.95	1.00			1.00
Satd. Flow (perm)			3433	5085		3433	6408			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	579	3168	0	369	3843	0	0	471
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	579	3168	0	369	3843	0	0	471
Turn Type			Prot	NA		Prot	NA			pm+ov
Protected Phases			5	2		1	6			1
Permitted Phases										2
Actuated Green, G (s)			18.1	55.5		13.4	50.8			68.9
Effective Green, g (s)			18.1	55.5		13.4	50.8			68.9
Actuated g/C Ratio			0.23	0.71		0.17	0.65			0.88
Clearance Time (s)			4.5	4.5		4.5	4.5			4.5
Vehicle Extension (s)			3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)			797	3622		590	4178			1611
v/s Ratio Prot			c0.17	0.62		0.11	c0.60			0.05
v/s Ratio Perm										0.24
v/c Ratio			0.73	0.87		0.63	0.92			0.29
Uniform Delay, d1			27.6	8.5		29.9	11.8			0.7
Progression Factor			1.00	1.00		1.00	1.00			1.00
Incremental Delay, d2			3.3	3.3		2.1	4.4			0.1
Delay (s)			30.9	11.8		32.0	16.2			0.8
Level of Service			C	B		C	B			A
Approach Delay (s)	0.0			14.8			17.6		0.8	
Approach LOS	A			B			B		A	

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	77.9	Sum of lost time (s)	9.0
Intersection Capacity Utilization	93.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBL	NBT	SBL	SBT	NWR
Lane Group Flow (vph)	579	3168	369	3843	471
v/c Ratio	0.73	0.87	0.63	0.92	0.29
Control Delay	33.3	12.8	35.0	17.6	0.5
Queue Delay	0.0	1.7	0.0	0.0	0.0
Total Delay	33.3	14.5	35.0	17.6	0.5
Queue Length 50th (ft)	136	375	86	415	0
Queue Length 95th (ft)	180	487	128	#654	0
Internal Link Dist (ft)		521		274	
Turn Bay Length (ft)	100				
Base Capacity (vph)	992	3624	683	4181	1593
Starvation Cap Reductn	0	287	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.95	0.54	0.92	0.30

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	824	0	1030	1029	0	836
Future Volume (vph)	824	0	1030	1029	0	836
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5		4.5
Lane Util. Factor	0.95		0.97	0.95		1.00
Frt	1.00		1.00	1.00		0.86
Flt Protected	1.00		0.95	1.00		1.00
Satd. Flow (prot)	3539		3433	3539		1611
Flt Permitted	1.00		0.95	1.00		1.00
Satd. Flow (perm)	3539		3433	3539		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	867	0	1084	1083	0	880
RTOR Reduction (vph)	0	0	0	0	0	37
Lane Group Flow (vph)	867	0	1084	1083	0	843
Turn Type	NA		Prot	NA		Over
Protected Phases	4		3	8		3
Permitted Phases						
Actuated Green, G (s)	27.4		43.6	80.0		43.6
Effective Green, g (s)	27.4		43.6	80.0		43.6
Actuated g/C Ratio	0.34		0.55	1.00		0.55
Clearance Time (s)	4.5		4.5	4.5		4.5
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	1212		1870	3539		877
v/s Ratio Prot	c0.24		0.32	0.31		c0.52
v/s Ratio Perm						
v/c Ratio	0.72		0.58	0.31		0.96
Uniform Delay, d1	22.9		12.1	0.0		17.4
Progression Factor	1.02		1.00	1.00		1.00
Incremental Delay, d2	1.8		0.4	0.0		21.4
Delay (s)	25.0		12.5	0.0		38.8
Level of Service	C		B	A		D
Approach Delay (s)	25.0			6.3	38.8	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBR
Lane Group Flow (vph)	867	1084	1083	880
v/c Ratio	0.72	0.58	0.31	0.96
Control Delay	25.9	14.7	0.2	41.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	25.9	14.7	0.2	41.7
Queue Length 50th (ft)	150	173	0	366
Queue Length 95th (ft)	134	280	0	#718
Internal Link Dist (ft)	404		198	
Turn Bay Length (ft)				
Base Capacity (vph)	1570	1870	3539	914
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.55	0.58	0.31	0.96

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	55	505	723	164	613	471	85	2895	880	62	3647	196
v/c Ratio	0.77	0.59	0.86	1.26	0.65	0.93	1.02	0.91	1.01	0.79	1.15	0.24
Control Delay	99.8	50.6	52.1	212.5	62.9	71.2	99.4	42.5	48.7	108.1	105.2	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.8	50.6	52.1	212.5	62.9	71.2	99.4	42.5	48.7	108.1	105.2	8.9
Queue Length 50th (ft)	60	274	397	~217	286	326	~122	857	~486	67	~1297	34
Queue Length 95th (ft)	m#79	311	#446	#380	394	#541	m#118	m576	m410	m71	#1335	m38
Internal Link Dist (ft)		1456			2245			676			1005	
Turn Bay Length (ft)	210		125	340		670	500		450	330		220
Base Capacity (vph)	73	905	872	130	1000	529	83	3185	867	78	3164	822
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.56	0.83	1.26	0.61	0.89	1.02	0.91	1.01	0.79	1.15	0.24

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	13	39	480	687	2	154	582	447	81	2750	836	7
Future Volume (vph)	13	39	480	687	2	154	582	447	81	2750	836	7
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)		6.5	6.5	7.0		6.5	6.5	6.5	7.0	7.0	7.0	
Lane Util. Factor		1.00	0.95	0.88		1.00	0.95	1.00	1.00	0.86	1.00	
Frpb, ped/bikes		1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)		1812	3668	2857		1817	3597	1594	1816	6576	1573	
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (perm)		1812	3668	2857		1817	3597	1594	1816	6576	1573	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	14	41	505	723	2	162	613	471	85	2895	880	7
RTOR Reduction (vph)	0	0	0	52	0	0	0	88	0	0	105	0
Lane Group Flow (vph)	0	55	505	671	0	164	613	383	85	2895	775	0
Confl. Peds. (#/hr)				1							1	
Heavy Vehicles (%)	0%	3%	1%	1%	0%	2%	3%	4%	2%	2%	4%	2%
Turn Type	Prot	Prot	NA	pm+ov	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot
Protected Phases	7	7	4	5	3	3	8		5	2		1
Permitted Phases				4				8			2	
Actuated Green, G (s)		6.3	37.1	44.5		11.5	42.3	42.3	7.4	77.5	77.5	
Effective Green, g (s)		6.3	37.1	44.5		11.5	42.3	42.3	7.4	77.5	77.5	
Actuated g/C Ratio		0.04	0.23	0.28		0.07	0.26	0.26	0.05	0.48	0.48	
Clearance Time (s)		6.5	6.5	7.0		6.5	6.5	6.5	7.0	7.0	7.0	
Vehicle Extension (s)		1.5	2.0	1.5		1.5	2.0	2.0	1.5	3.0	3.0	
Lane Grp Cap (vph)		71	850	794		130	950	421	83	3185	761	
v/s Ratio Prot		0.03	0.14	0.04		c0.09	0.17		c0.05	0.44		
v/s Ratio Perm				0.20				c0.24			0.49	
v/c Ratio		0.77	0.59	0.85		1.26	0.65	0.91	1.02	0.91	1.02	
Uniform Delay, d1		76.1	54.7	54.5		74.2	52.2	57.0	76.3	38.0	41.2	
Progression Factor		0.78	0.89	1.00		0.98	1.16	1.18	0.93	1.09	1.16	
Incremental Delay, d2		26.1	0.5	5.3		157.6	0.9	19.7	35.9	0.5	14.8	
Delay (s)		85.3	49.2	59.9		230.4	61.2	87.0	106.6	42.1	62.5	
Level of Service		F	D	E		F	E	F	F	D	E	
Approach Delay (s)			56.8				93.2			48.2		
Approach LOS			E				F			D		

Intersection Summary			
HCM 2000 Control Delay	75.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	99.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	52	3465	186
Future Volume (vph)	52	3465	186
Ideal Flow (vphpl)	1950	1950	1950
Total Lost time (s)	7.0	7.0	7.0
Lane Util. Factor	1.00	0.86	1.00
Frpb, ped/bikes	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1816	6576	1584
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	1816	6576	1584
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	55	3647	196
RTOR Reduction (vph)	0	0	60
Lane Group Flow (vph)	62	3647	136
Confl. Peds. (#/hr)			3
Heavy Vehicles (%)	2%	2%	3%
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	6.9	77.0	77.0
Effective Green, g (s)	6.9	77.0	77.0
Actuated g/C Ratio	0.04	0.48	0.48
Clearance Time (s)	7.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	78	3164	762
v/s Ratio Prot	0.03	c0.55	
v/s Ratio Perm			0.09
v/c Ratio	0.79	1.15	0.18
Uniform Delay, d1	75.8	41.5	23.5
Progression Factor	1.19	0.90	0.90
Incremental Delay, d2	15.2	70.0	0.2
Delay (s)	105.8	107.6	21.2
Level of Service	F	F	C
Approach Delay (s)		103.2	
Approach LOS		F	

Intersection Summary

66: University Drive - Lefts & Peters Road - Lefts

Lane Group	EBL	WBL	NBL	SBL
Lane Group Flow (vph)	233	920	486	307
v/c Ratio	0.25	0.97	0.88	0.56
Control Delay	11.3	44.2	46.5	28.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	11.3	44.2	46.5	28.1
Queue Length 50th (ft)	59	415	230	128
Queue Length 95th (ft)	100	#690	#405	208
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)	953	953	552	552
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.24	0.97	0.88	0.56

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	0	0	874	0	0	462	0	0	292	0	0
Future Volume (vph)	221	0	0	874	0	0	462	0	0	292	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	7.0			7.0			7.0			7.0		
Lane Util. Factor	1.00			1.00			1.00			1.00		
Frt	1.00			1.00			1.00			1.00		
Flt Protected	0.95			0.95			0.95			0.95		
Satd. Flow (prot)	1816			1816			1816			1816		
Flt Permitted	0.95			0.95			0.95			0.95		
Satd. Flow (perm)	1816			1816			1816			1816		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	233	0	0	920	0	0	486	0	0	307	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	233	0	0	920	0	0	486	0	0	307	0	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7			3			5			1		
Permitted Phases												
Actuated Green, G (s)	41.6			41.6			24.4			24.4		
Effective Green, g (s)	41.6			41.6			24.4			24.4		
Actuated g/C Ratio	0.52			0.52			0.30			0.30		
Clearance Time (s)	7.0			7.0			7.0			7.0		
Vehicle Extension (s)	3.0			3.0			3.0			3.0		
Lane Grp Cap (vph)	944			944			553			553		
v/s Ratio Prot	0.13			c0.51			c0.27			0.17		
v/s Ratio Perm												
v/c Ratio	0.25			0.97			0.88			0.56		
Uniform Delay, d1	10.6			18.7			26.4			23.3		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	0.1			23.1			17.8			4.0		
Delay (s)	10.7			41.8			44.2			27.2		
Level of Service	B			D			D			C		
Approach Delay (s)		10.7			41.8			44.2			27.2	
Approach LOS		B			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1353	78	92	145	2318	0	0	2274	504
Future Volume (vph)	0	0	0	1353	78	92	145	2318	0	0	2274	504
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)				7.0	7.0	7.0	7.0	7.0			7.0	7.0
Lane Util. Factor				0.91	0.91	1.00	0.97	0.91			0.86	1.00
Frt				1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	0.96	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3305	1659	1609	3489	5219			6513	1594
Flt Permitted				0.95	0.96	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3305	1659	1609	3489	5219			6513	1594
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	1424	82	97	153	2440	0	0	2394	531
RTOR Reduction (vph)	0	0	0	0	0	68	0	0	0	0	0	274
Lane Group Flow (vph)	0	0	0	997	509	29	153	2440	0	0	2394	257
Heavy Vehicles (%)	0%	0%	0%	2%	6%	3%	3%	2%	0%	0%	3%	4%
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					12		10	2 4 10			2 4	
Permitted Phases				12		12						2 4
Actuated Green, G (s)				36.0	36.0	36.0	5.0	70.0			58.0	58.0
Effective Green, g (s)				36.0	36.0	36.0	5.0	70.0			58.0	58.0
Actuated g/C Ratio				0.30	0.30	0.30	0.04	0.58			0.48	0.48
Clearance Time (s)				7.0	7.0	7.0	7.0					
Vehicle Extension (s)				3.5	3.5	3.5	3.5					
Lane Grp Cap (vph)				991	497	482	145	3044			3147	770
v/s Ratio Prot							0.04	c0.47			0.37	
v/s Ratio Perm				0.30	0.31	0.02						0.16
v/c Ratio				1.01	1.02	0.06	1.06	0.80			0.76	0.33
Uniform Delay, d1				42.0	42.0	29.9	57.5	19.6			25.3	19.1
Progression Factor				1.00	1.00	1.00	0.55	0.88			1.00	1.00
Incremental Delay, d2				30.1	46.6	0.1	38.6	0.4			1.2	0.3
Delay (s)				72.1	88.6	30.0	70.3	17.7			26.5	19.4
Level of Service				E	F	C	E	B			C	B
Approach Delay (s)		0.0			74.8			20.8			25.2	
Approach LOS		A			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	34.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	127.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	533	27	968	0	0	0	0	1934	0	436	3195	0
Future Volume (vph)	533	27	968	0	0	0	0	1934	0	436	3195	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Lane Util. Factor	0.95	0.95	*0.76					0.91		0.97	0.91	
Frt	1.00	1.00	0.85					1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1709	1721	3742					5168		3267	5219	
Flt Permitted	0.95	0.96	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1709	1721	3742					5168		3267	5219	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	561	28	1019	0	0	0	0	2036	0	459	3363	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	292	297	1019	0	0	0	0	2036	0	459	3363	0
Heavy Vehicles (%)	3%	3%	1%	0%	0%	0%	0%	3%	2%	10%	2%	0%
Turn Type	Perm	NA	custom					NA		Prot	NA	
Protected Phases		12	12					4 10		2	2 4 10	
Permitted Phases	12		12									
Actuated Green, G (s)	36.0	36.0	36.0					43.0		20.0	70.0	
Effective Green, g (s)	36.0	36.0	36.0					43.0		20.0	70.0	
Actuated g/C Ratio	0.30	0.30	0.30					0.36		0.17	0.58	
Clearance Time (s)	7.0	7.0	7.0							7.0		
Vehicle Extension (s)	3.5	3.5	3.5							3.5		
Lane Grp Cap (vph)	512	516	1122					1851		544	3044	
v/s Ratio Prot			c0.27					0.39		0.14	c0.64	
v/s Ratio Perm	0.17	0.17										
v/c Ratio	0.57	0.58	0.91					1.10		0.84	1.10	
Uniform Delay, d1	35.5	35.5	40.4					38.5		48.5	25.0	
Progression Factor	1.00	1.00	1.00					1.00		0.59	0.18	
Incremental Delay, d2	1.7	1.7	10.8					53.9		1.2	52.0	
Delay (s)	37.1	37.2	51.2					92.4		29.8	56.4	
Level of Service	D	D	D					F		C	E	
Approach Delay (s)		46.1			0.0			92.4			53.2	
Approach LOS		D			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	62.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	127.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	20	6	15	46	4	112	27	30	2904	58	91	3748
Future Volume (vph)	20	6	15	46	4	112	27	30	2904	58	91	3748
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0		7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	0.88		1.00	*0.70	*0.70	0.97	0.86
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	0.97	1.00	0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1630	1722	1658	1760	1777	2860		1852	5353	1160	3489	6576
Flt Permitted	0.95	0.97	1.00	0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1630	1722	1658	1760	1777	2860		1852	5353	1160	3489	6576
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	6	16	48	4	118	28	32	3057	61	96	3945
RTOR Reduction (vph)	0	0	16	0	0	99	0	0	0	19	0	0
Lane Group Flow (vph)	13	14	0	26	26	19	0	60	3057	42	96	3945
Heavy Vehicles (%)	8%	0%	0%	0%	0%	2%	0%	0%	2%	0%	3%	2%
Turn Type	Split	NA	Prot	Split	NA	pt+ov	Prot	Prot	NA	Perm	Prot	NA
Protected Phases	8	8	8	4	4	4 1	5	5	2		1	6
Permitted Phases										2		
Actuated Green, G (s)	4.9	4.9	4.9	8.4	8.4	25.3		13.3	109.8	109.8	10.9	107.4
Effective Green, g (s)	4.9	4.9	4.9	8.4	8.4	25.3		13.3	109.8	109.8	10.9	107.4
Actuated g/C Ratio	0.03	0.03	0.03	0.05	0.05	0.16		0.08	0.69	0.69	0.07	0.67
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0			7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5			3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	49	52	50	92	93	452		153	3673	796	237	4414
v/s Ratio Prot	0.01	c0.01	0.00	c0.01	0.01	0.01		c0.03	0.57		0.03	c0.60
v/s Ratio Perm										0.04		
v/c Ratio	0.27	0.27	0.01	0.28	0.28	0.04		0.39	0.83	0.05	0.41	0.89
Uniform Delay, d1	75.8	75.8	75.2	72.9	72.9	57.1		69.5	18.4	8.2	71.4	21.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.96	0.76	1.00	1.00	1.00
Incremental Delay, d2	3.4	3.3	0.1	2.0	1.9	0.0		1.9	2.3	0.1	1.3	3.2
Delay (s)	79.2	79.1	75.3	74.9	74.8	57.1		68.9	16.3	8.3	72.8	24.8
Level of Service	E	E	E	E	E	E		E	B	A	E	C
Approach Delay (s)		77.7			62.5				17.1			25.8
Approach LOS		E			E				B			C

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1950
Total Lost time (s)	7.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1658
Flt Permitted	1.00
Satd. Flow (perm)	1658
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	29
RTOR Reduction (vph)	10
Lane Group Flow (vph)	19
Heavy Vehicles (%)	0%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	107.4
Effective Green, g (s)	107.4
Actuated g/C Ratio	0.67
Clearance Time (s)	7.0
Vehicle Extension (s)	3.5
Lane Grp Cap (vph)	1112
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.02
Uniform Delay, d1	8.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	8.8
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	113	13	29	71	8	191	4	38	1455	132	74	115
Future Volume (vph)	113	13	29	71	8	191	4	38	1455	132	74	115
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)		7.0		7.0	7.0	7.0		7.0	7.0	7.0		7.0
Lane Util. Factor		0.95		0.95	0.91	0.95		1.00	0.95	1.00		0.97
Frt		0.97		1.00	0.87	0.85		1.00	1.00	0.85		1.00
Flt Protected		0.96		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)		3355		1676	1498	1529		1852	3597	1625		3572
Flt Permitted		0.96		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)		3355		1676	1498	1529		1852	3597	1625		3572
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	119	14	31	75	8	201	4	40	1532	139	78	121
RTOR Reduction (vph)	0	16	0	0	87	99	0	0	0	54	0	0
Lane Group Flow (vph)	0	148	0	67	23	8	0	44	1532	85	0	199
Heavy Vehicles (%)	1%	33%	0%	5%	0%	3%	0%	0%	3%	2%	0%	1%
Turn Type	Split	NA		Split	NA	Perm	Prot	Prot	NA	Perm	Prot	Prot
Protected Phases	8	8		4	4		5	5	2		1	1
Permitted Phases						4				2		
Actuated Green, G (s)		12.9		12.4	12.4	12.4		8.6	90.2	90.2		16.5
Effective Green, g (s)		12.9		12.4	12.4	12.4		8.6	90.2	90.2		16.5
Actuated g/C Ratio		0.08		0.08	0.08	0.08		0.05	0.56	0.56		0.10
Clearance Time (s)		7.0		7.0	7.0	7.0		7.0	7.0	7.0		7.0
Vehicle Extension (s)		3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5
Lane Grp Cap (vph)		270		129	116	118		99	2027	916		368
v/s Ratio Prot		c0.04		c0.04	0.02			0.02	c0.43			c0.06
v/s Ratio Perm						0.01				0.05		
v/c Ratio		0.55		0.52	0.20	0.07		0.44	0.76	0.09		0.54
Uniform Delay, d1		70.8		70.9	69.2	68.5		73.4	26.5	16.1		68.2
Progression Factor		1.00		1.00	1.00	1.00		1.05	0.92	1.38		1.29
Incremental Delay, d2		2.5		4.1	1.0	0.3		3.1	2.2	0.2		0.9
Delay (s)		73.3		75.0	70.2	68.8		80.4	26.6	22.3		88.7
Level of Service		E		E	E	E		F	C	C		F
Approach Delay (s)		73.3			70.8				27.7			
Approach LOS		E			E				C			

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1101	60
Future Volume (vph)	1101	60
Ideal Flow (vphpl)	1950	1950
Total Lost time (s)	10.0	7.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3632	1658
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3632	1658
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1159	63
RTOR Reduction (vph)	0	24
Lane Group Flow (vph)	1159	39
Heavy Vehicles (%)	2%	0%
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	98.1	98.1
Effective Green, g (s)	95.1	98.1
Actuated g/C Ratio	0.59	0.61
Clearance Time (s)	7.0	7.0
Vehicle Extension (s)	3.5	3.5
Lane Grp Cap (vph)	2158	1016
v/s Ratio Prot	c0.32	
v/s Ratio Perm		0.02
v/c Ratio	0.54	0.04
Uniform Delay, d1	19.3	12.3
Progression Factor	0.58	1.00
Incremental Delay, d2	0.5	0.0
Delay (s)	11.7	12.3
Level of Service	B	B
Approach Delay (s)	22.5	
Approach LOS	C	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	353	339	344	34	443	183	837	24	130	419	470	18
Future Volume (vph)	353	339	344	34	443	183	837	24	130	419	470	18
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	7.0	7.0	7.0		7.0	7.0	7.0		7.0	7.0	7.0	
Lane Util. Factor	0.97	0.95	1.00		0.97	1.00	0.88		1.00	0.95	1.00	
Frt	1.00	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)	3594	3668	1641		3465	1857	2805		1735	3632	1625	
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)	3594	3668	1641		3465	1857	2805		1735	3632	1625	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	372	357	362	36	466	193	881	25	137	441	495	19
RTOR Reduction (vph)	0	0	91	0	0	0	139	0	0	0	262	0
Lane Group Flow (vph)	372	357	271	0	502	193	742	0	162	441	233	0
Heavy Vehicles (%)	0%	1%	1%	0%	4%	5%	4%	0%	8%	2%	2%	0%
Turn Type	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	Prot	NA	Perm	Prot
Protected Phases	7	4	5!	3	3	8	1!	5!	5	2		1!
Permitted Phases			4				8				2	
Actuated Green, G (s)	20.5	20.1	44.3		26.1	25.7	62.6		24.2	48.9	48.9	
Effective Green, g (s)	20.5	20.1	44.3		26.1	25.7	62.6		24.2	48.9	48.9	
Actuated g/C Ratio	0.13	0.13	0.28		0.16	0.16	0.39		0.15	0.31	0.31	
Clearance Time (s)	7.0	7.0	7.0		7.0	7.0	7.0		7.0	7.0	7.0	
Vehicle Extension (s)	1.5	2.0	1.5		1.5	2.0	1.5		1.5	3.0	3.0	
Lane Grp Cap (vph)	460	460	526		565	298	1220		262	1110	496	
v/s Ratio Prot	0.10	0.10	0.08		c0.14	c0.10	c0.14		0.09	0.12		
v/s Ratio Perm			0.09				0.12				c0.14	
v/c Ratio	0.81	0.78	0.51		0.89	0.65	0.61		0.62	0.40	0.47	
Uniform Delay, d1	67.8	67.8	48.8		65.5	62.9	38.9		63.6	43.9	45.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.30	0.66	0.25	
Incremental Delay, d2	9.5	7.3	0.4		15.3	3.6	0.6		1.1	0.4	1.2	
Delay (s)	77.4	75.1	49.1		80.8	66.5	39.5		83.8	29.2	12.3	
Level of Service	E	E	D		F	E	D		F	C	B	
Approach Delay (s)		67.3				56.0				29.6		
Approach LOS		E				E				C		

Intersection Summary			
HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	578	447	171
Future Volume (vph)	578	447	171
Ideal Flow (vphpl)	1950	1950	1950
Total Lost time (s)	7.0	7.0	7.0
Lane Util. Factor	0.97	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3559	3668	1564
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3559	3668	1564
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	608	471	180
RTOR Reduction (vph)	0	0	111
Lane Group Flow (vph)	627	471	69
Heavy Vehicles (%)	1%	1%	6%
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	36.9	61.6	61.6
Effective Green, g (s)	36.9	61.6	61.6
Actuated g/C Ratio	0.23	0.39	0.39
Clearance Time (s)	7.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	820	1412	602
v/s Ratio Prot	c0.18	0.13	
v/s Ratio Perm			0.04
v/c Ratio	0.76	0.33	0.12
Uniform Delay, d1	57.5	34.7	31.7
Progression Factor	1.08	1.33	3.43
Incremental Delay, d2	3.4	0.6	0.3
Delay (s)	65.4	46.6	109.0
Level of Service	E	D	F
Approach Delay (s)		64.6	
Approach LOS		E	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	298	360	111	139	60	461	75	2538	272	744	2704	248
Future Volume (vph)	298	360	111	139	60	461	75	2538	272	744	2704	248
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	6.0	6.0	7.0	6.0	6.0	6.0	7.0	7.0	6.0	7.0	7.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00	0.86	1.00	0.97	0.86	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1799	1950	1625	1781	1950	2917	1700	6576	1641	3558	6576	1609
Flt Permitted	0.52	1.00	1.00	0.26	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	979	1950	1625	481	1950	2917	1700	6576	1641	3558	6576	1609
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	314	379	117	146	63	485	79	2672	286	783	2846	261
RTOR Reduction (vph)	0	0	87	0	0	72	0	0	86	0	0	86
Lane Group Flow (vph)	314	379	30	146	63	413	79	2672	200	783	2846	175
Heavy Vehicles (%)	3%	0%	2%	4%	0%	0%	9%	2%	1%	1%	2%	3%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	8 1	5	2	3	1	6	7
Permitted Phases	4		4	8					2			6
Actuated Green, G (s)	44.0	29.0	39.9	24.6	15.6	54.6	10.9	63.0	72.0	33.0	85.1	107.5
Effective Green, g (s)	44.0	29.0	39.9	24.6	15.6	54.6	10.9	63.0	72.0	33.0	85.1	107.5
Actuated g/C Ratio	0.28	0.18	0.25	0.15	0.10	0.34	0.07	0.39	0.45	0.21	0.53	0.67
Clearance Time (s)	6.0	6.0	7.0	6.0	6.0		7.0	7.0	6.0	7.0	7.0	6.0
Vehicle Extension (s)	1.5	2.0	1.5	1.5	2.0		1.5	3.0	1.5	1.5	3.0	1.5
Lane Grp Cap (vph)	384	353	405	147	190	995	115	2589	738	733	3497	1081
v/s Ratio Prot	c0.11	c0.19	0.01	0.06	0.03	0.14	0.05	c0.41	0.02	c0.22	0.43	0.02
v/s Ratio Perm	0.11		0.01	0.10					0.11			0.09
v/c Ratio	0.82	1.07	0.07	0.99	0.33	0.42	0.69	1.03	0.27	1.07	0.81	0.16
Uniform Delay, d1	51.6	65.5	45.9	65.6	67.3	40.4	72.9	48.5	27.6	63.5	30.9	9.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.08	0.42
Incremental Delay, d2	12.1	68.9	0.0	71.8	0.4	0.1	12.7	26.6	0.1	52.8	2.2	0.0
Delay (s)	63.7	134.4	45.9	137.4	67.7	40.6	85.6	75.1	27.6	114.0	35.5	4.1
Level of Service	E	F	D	F	E	D	F	E	C	F	D	A
Approach Delay (s)		94.2			63.4			70.9			49.2	
Approach LOS		F			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	62.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	104.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	67	64	12	11	76	3526	7	4182	103
v/c Ratio	0.59	0.27	0.16	0.13	0.37	0.73	0.09	0.94	0.09
Control Delay	89.7	2.9	77.6	55.1	82.7	30.0	70.0	25.8	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.7	2.9	77.6	55.1	82.7	30.0	70.0	25.8	2.3
Queue Length 50th (ft)	69	0	12	6	43	1030	7	560	5
Queue Length 95th (ft)	121	0	36	29	m65	1104	m5	m280	m0
Internal Link Dist (ft)	1439			1068		423		741	
Turn Bay Length (ft)					345		230		150
Base Capacity (vph)	304	432	194	220	203	4831	77	4436	1121
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.15	0.06	0.05	0.37	0.73	0.09	0.94	0.09

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	11	38	53	3591	4219	52
v/c Ratio	0.09	0.38	0.28	0.61	0.76	0.04
Control Delay	75.2	31.3	9.2	10.9	7.0	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.2	31.3	9.2	10.9	7.0	0.8
Queue Length 50th (ft)	5	0	7	522	126	1
Queue Length 95th (ft)	17	41	m6	m382	916	m1
Internal Link Dist (ft)	1045			951	813	
Turn Bay Length (ft)			415			200
Base Capacity (vph)	134	104	192	5873	5523	1400
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.37	0.28	0.61	0.76	0.04

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	288	505	723	1082	613	471	572	2895	880	369	3647	196
v/c Ratio	1.56	0.72	0.71	1.33	0.57	0.66	1.74	1.12	0.52	1.21	1.43	0.26
Control Delay	306.8	62.1	49.7	206.9	54.5	32.8	385.2	103.5	18.6	172.8	233.3	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	306.8	62.1	49.7	206.9	54.5	32.8	385.2	103.5	18.6	172.8	233.3	8.5
Queue Length 50th (ft)	~221	280	373	~526	274	244	~467	~1008	271	~258	~1487	29
Queue Length 95th (ft)	m#313	330	447	#621	363	390	#590	#1064	333	#361	#1529	m60
Internal Link Dist (ft)		1456			2245			676			1005	
Turn Bay Length (ft)	210		125	340		670	500		450	330		220
Base Capacity (vph)	185	722	1018	816	1090	718	328	2589	1694	306	2548	768
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.56	0.70	0.71	1.33	0.56	0.66	1.74	1.12	0.52	1.21	1.43	0.26

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	997	509	97	153	2440	2394	531
v/c Ratio	1.01	1.02	0.16	1.06	0.80	0.76	0.51
Control Delay	72.2	87.9	0.7	73.5	18.1	27.3	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	72.2	87.9	0.7	73.5	18.5	27.3	3.3
Queue Length 50th (ft)	~428	~460	0	~57	274	428	0
Queue Length 95th (ft)	#581	#694	2	m48	m256	474	57
Internal Link Dist (ft)		56			414	867	
Turn Bay Length (ft)				175			400
Base Capacity (vph)	991	498	597	145	3044	3147	1044
Starvation Cap Reductn	0	0	0	0	196	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	1.02	0.16	1.06	0.86	0.76	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	292	297	1019	2036	459	3363
v/c Ratio	0.57	0.58	0.91	1.10	0.84	1.10
Control Delay	40.7	40.8	53.0	90.7	49.6	55.9
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.1
Total Delay	40.7	40.8	53.0	91.1	49.6	56.0
Queue Length 50th (ft)	201	205	332	~655	~990	151
Queue Length 95th (ft)	298	304	#434	#751	m#3530	0
Internal Link Dist (ft)		1370		84		414
Turn Bay Length (ft)	600		600		150	
Base Capacity (vph)	512	516	1122	1851	544	3044
Starvation Cap Reductn	0	0	0	242	0	195
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.58	0.91	1.27	0.84	1.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	13	14	16	26	26	118	60	3057	61	96	3945	29
v/c Ratio	0.17	0.18	0.09	0.28	0.28	0.21	0.39	0.81	0.07	0.40	0.87	0.02
Control Delay	77.9	77.8	0.9	79.9	79.8	9.3	74.2	16.3	0.5	76.1	24.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.8	0.0
Total Delay	77.9	77.8	0.9	79.9	79.8	9.3	74.2	16.3	0.5	76.1	69.9	0.0
Queue Length 50th (ft)	13	14	0	28	28	0	63	513	0	50	968	0
Queue Length 95th (ft)	40	42	0	64	64	32	m103	681	m2	81	1135	0
Internal Link Dist (ft)		1060			1063			377			253	
Turn Bay Length (ft)							410		220			
Base Capacity (vph)	407	430	501	209	211	568	154	3753	845	238	4512	1172
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	1070	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.03	0.12	0.12	0.21	0.39	0.81	0.07	0.40	1.15	0.02

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	164	67	110	107	44	1532	139	199	1159	63
v/c Ratio	0.57	0.52	0.54	0.46	0.39	0.76	0.14	0.54	0.53	0.06
Control Delay	71.1	84.1	27.1	13.5	83.1	28.2	6.1	90.6	12.5	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0
Total Delay	71.1	84.1	27.1	13.5	83.1	29.4	6.1	90.6	12.5	0.5
Queue Length 50th (ft)	79	72	17	0	47	505	7	113	113	0
Queue Length 95th (ft)	118	126	87	47	m76	874	m58	m130	210	m0
Internal Link Dist (ft)	1062		1280			212			534	
Turn Bay Length (ft)					250			455		145
Base Capacity (vph)	893	188	251	281	114	2029	970	367	2191	1077
Starvation Cap Reductn	0	0	0	0	0	272	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.36	0.44	0.38	0.39	0.87	0.14	0.54	0.53	0.06

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	372	357	362	502	193	881	162	441	495	627	471	180
v/c Ratio	0.81	0.78	0.59	0.89	0.65	0.65	0.62	0.40	0.65	0.77	0.33	0.25
Control Delay	81.8	79.7	33.0	83.8	73.3	28.8	88.1	29.3	4.3	68.5	48.0	16.5
Queue Delay	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	79.7	33.0	83.8	73.3	28.8	88.1	29.4	4.3	68.5	48.0	16.5
Queue Length 50th (ft)	198	193	211	267	191	309	178	107	36	343	202	43
Queue Length 95th (ft)	248	244	311	330	277	417	m189	m112	m38	#475	270	120
Internal Link Dist (ft)		1080			1256			655			355	
Turn Bay Length (ft)	200			370		180	400		400	290		230
Base Capacity (vph)	651	802	610	628	406	1348	262	1112	759	819	1414	713
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	68	0	0	0	0	9	0	41	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.45	0.59	0.80	0.48	0.66	0.62	0.41	0.65	0.77	0.33	0.25

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	314	379	117	146	63	485	79	2672	286	783	2846	261
v/c Ratio	0.82	1.07	0.21	0.99	0.33	0.45	0.69	1.03	0.32	1.07	0.81	0.21
Control Delay	69.3	128.6	7.5	123.5	73.0	32.3	101.1	73.6	11.4	109.5	36.1	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.3	128.6	7.5	123.5	73.0	32.3	101.1	73.6	11.4	109.5	36.1	0.7
Queue Length 50th (ft)	291	~438	1	~123	63	173	82	~867	74	~459	779	1
Queue Length 95th (ft)	#429	#653	49	#260	116	232	140	#928	140	#594	819	m5
Internal Link Dist (ft)		950			838			1318			785	
Turn Bay Length (ft)	225		225	310		440	370		270	490		347
Base Capacity (vph)	387	353	578	147	190	1085	148	2589	889	733	3499	1231
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	1.07	0.20	0.99	0.33	0.45	0.53	1.03	0.32	1.07	0.81	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Davie Road

HCM Signalized Intersection Capacity Analysis
38: Davie Rd & Nova Dr

07/08/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	23	575	138	271	2	124	263	568	294	1280	102	97
Future Volume (vph)	23	575	138	271	2	124	263	568	294	1280	102	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor		0.97	1.00	1.00		1.00	1.00	1.00	0.97	0.91	1.00	
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)		3433	1863	1583		1770	1863	1583	3433	5085	1583	
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (perm)		3433	1863	1583		1770	1863	1583	3433	5085	1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	24	605	145	285	2	131	277	598	309	1347	107	102
RTOR Reduction (vph)	0	0	0	67	0	0	0	68	0	0	62	0
Lane Group Flow (vph)	0	629	145	218	0	133	277	530	309	1347	45	0
Turn Type	Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot
Protected Phases	7!	7	4	5	3!	3	8	1!	5	2	3!	1!
Permitted Phases				4				8			2	
Actuated Green, G (s)		30.7	39.9	55.1		15.5	24.7	53.6	15.2	51.7	67.2	
Effective Green, g (s)		30.7	39.9	55.1		15.5	24.7	53.6	15.2	51.7	67.2	
Actuated g/C Ratio		0.19	0.25	0.34		0.10	0.15	0.34	0.09	0.32	0.42	
Clearance Time (s)		6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	1.5		1.5	2.0	1.5	1.5	3.0	1.5	
Lane Grp Cap (vph)		658	464	604		171	287	589	326	1643	724	
v/s Ratio Prot		c0.18	0.08	0.03		0.08	0.15	c0.16	0.09	0.26	0.01	
v/s Ratio Perm				0.10				0.17			0.02	
v/c Ratio		0.96	0.31	0.36		0.78	0.97	0.90	0.95	0.82	0.06	
Uniform Delay, d1		64.0	48.9	39.3		70.6	67.2	50.7	72.0	49.9	27.6	
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		24.3	0.1	0.1		18.1	43.0	16.5	35.6	4.7	0.0	
Delay (s)		88.3	49.0	39.4		88.7	110.3	67.2	107.6	54.6	27.6	
Level of Service		F	D	D		F	F	E	F	D	C	
Approach Delay (s)			69.7				81.8			62.2		
Approach LOS			E				F			E		

Intersection Summary			
HCM 2000 Control Delay	55.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	109.6%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	265	1278	1437
Future Volume (vph)	265	1278	1437
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	0.88
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	2787
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	2787
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	279	1345	1513
RTOR Reduction (vph)	0	0	44
Lane Group Flow (vph)	381	1345	1469
Turn Type	Prot	NA	pt+ov
Protected Phases	1	6	6 7!
Permitted Phases			
Actuated Green, G (s)	28.9	65.4	102.1
Effective Green, g (s)	28.9	65.4	102.1
Actuated g/C Ratio	0.18	0.41	0.64
Clearance Time (s)	6.0	6.0	
Vehicle Extension (s)	1.5	3.0	
Lane Grp Cap (vph)	620	1446	1778
v/s Ratio Prot	0.11	c0.38	0.53
v/s Ratio Perm			
v/c Ratio	0.61	0.93	0.83
Uniform Delay, d1	60.4	45.1	22.2
Progression Factor	0.97	0.71	1.36
Incremental Delay, d2	0.6	6.7	1.6
Delay (s)	59.5	38.7	31.7
Level of Service	E	D	C
Approach Delay (s)		37.9	
Approach LOS		D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	5	5	20	280	4	377	47	7	2359	134	52	238
Future Volume (vph)	5	5	20	280	4	377	47	7	2359	134	52	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0			6.0	6.0	6.0		6.0
Lane Util. Factor		1.00		1.00	1.00			1.00	0.91	1.00		0.97
Frt		0.91		1.00	0.85			1.00	1.00	0.85		1.00
Flt Protected		0.99		0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1679		1770	1586			1770	5085	1583		3433
Flt Permitted		0.76		0.74	1.00			0.05	1.00	1.00		0.95
Satd. Flow (perm)		1282		1373	1586			85	5085	1583		3433
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	5	21	295	4	397	49	7	2483	141	55	251
RTOR Reduction (vph)	0	15	0	0	50	0	0	0	0	46	0	0
Lane Group Flow (vph)	0	16	0	295	351	0	0	56	2483	95	0	306
Turn Type	Perm	NA		Perm	NA		custom	pm+pt	NA	Perm	Prot	Prot
Protected Phases		4			8			5	2		1	1
Permitted Phases	4			8			5	2		2		
Actuated Green, G (s)		37.9		37.9	37.9			91.6	87.6	87.6		16.5
Effective Green, g (s)		37.9		37.9	37.9			91.6	87.6	87.6		16.5
Actuated g/C Ratio		0.24		0.24	0.24			0.57	0.55	0.55		0.10
Clearance Time (s)		6.0		6.0	6.0			6.0	6.0	6.0		6.0
Vehicle Extension (s)		2.0		2.0	2.0			1.5	3.0	3.0		2.0
Lane Grp Cap (vph)		303		325	375			90	2784	866		354
v/s Ratio Prot					c0.22			0.02	0.49			c0.09
v/s Ratio Perm		0.01		0.21				0.34		0.06		
v/c Ratio		0.05		0.91	0.94			0.62	0.89	0.11		0.86
Uniform Delay, d1		47.2		59.3	59.8			30.4	32.0	17.4		70.6
Progression Factor		1.00		1.00	1.00			1.49	1.06	0.70		1.00
Incremental Delay, d2		0.0		27.0	29.9			4.8	2.6	0.1		18.6
Delay (s)		47.2		86.4	89.7			50.3	36.4	12.3		89.2
Level of Service		D		F	F			D	D	B		F
Approach Delay (s)		47.2			88.3				35.4			
Approach LOS		D			F				D			

Intersection Summary			
HCM 2000 Control Delay	41.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	2688	8
Future Volume (vph)	2688	8
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	
Lane Util. Factor	0.91	
Frt	1.00	
Flt Protected	1.00	
Satd. Flow (prot)	5083	
Flt Permitted	1.00	
Satd. Flow (perm)	5083	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	2829	8
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	2837	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Actuated Green, G (s)	100.1	
Effective Green, g (s)	100.1	
Actuated g/C Ratio	0.63	
Clearance Time (s)	6.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	3180	
v/s Ratio Prot	c0.56	
v/s Ratio Perm		
v/c Ratio	0.89	
Uniform Delay, d1	25.4	
Progression Factor	1.00	
Incremental Delay, d2	4.3	
Delay (s)	29.7	
Level of Service	C	
Approach Delay (s)	35.5	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	21	1458	0	0	0	0	1548	1242	0	1525	0
Future Volume (vph)	74	21	1458	0	0	0	0	1548	1242	0	1525	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	4.0					7.0	4.0		7.0	
Lane Util. Factor	1.00	1.00	1.00					0.91	1.00		0.95	
Frt	1.00	1.00	0.85					1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00					1.00	1.00		1.00	
Satd. Flow (prot)	1770	1863	1583					5085	1583		3539	
Flt Permitted	0.95	1.00	1.00					1.00	1.00		1.00	
Satd. Flow (perm)	1770	1863	1583					5085	1583		3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	78	22	1535	0	0	0	0	1629	1307	0	1605	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	78	22	1535	0	0	0	0	1629	1307	0	1605	0
Turn Type	Perm	NA	Free					NA	Free		NA	
Protected Phases		1						3 4			2 3 4 5	
Permitted Phases	1		Free						Free			
Actuated Green, G (s)	34.0	34.0	167.0					54.0	167.0		119.0	
Effective Green, g (s)	34.0	34.0	167.0					54.0	167.0		119.0	
Actuated g/C Ratio	0.20	0.20	1.00					0.32	1.00		0.71	
Clearance Time (s)	7.0	7.0										
Vehicle Extension (s)	2.0	2.0										
Lane Grp Cap (vph)	360	379	1583					1644	1583		2521	
v/s Ratio Prot		0.01						0.32			0.45	
v/s Ratio Perm	0.04		c0.97						0.83			
v/c Ratio	0.22	0.06	0.97					0.99	0.83		0.64	
Uniform Delay, d1	55.4	53.6	0.0					56.3	0.0		12.6	
Progression Factor	1.00	1.00	1.00					1.00	1.00		0.00	
Incremental Delay, d2	0.1	0.0	16.5					19.9	5.1		0.2	
Delay (s)	55.5	53.6	16.5					76.2	5.1		0.2	
Level of Service	E	D	B					E	A		A	
Approach Delay (s)		18.8			0.0			44.5			0.2	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	167.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	1525	2017	1622	0
Future Volume (vph)	0	0	1525	2017	1622	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	7.0	
Lane Util. Factor			0.97	0.91	0.94	
Frt			1.00	1.00	1.00	
Flt Protected			0.95	1.00	0.95	
Satd. Flow (prot)			3433	5085	4990	
Flt Permitted			0.95	1.00	0.95	
Satd. Flow (perm)			3433	5085	4990	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	1605	2123	1707	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1605	2123	1707	0
Turn Type			Split	NA	Prot	
Protected Phases			2 3	2 3	1 4 5	
Permitted Phases						
Actuated Green, G (s)			93.0	93.0	60.0	
Effective Green, g (s)			93.0	93.0	60.0	
Actuated g/C Ratio			0.56	0.56	0.36	
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)			1911	2831	1792	
v/s Ratio Prot			c0.47	0.42	c0.34	
v/s Ratio Perm						
v/c Ratio			0.84	0.75	0.95	
Uniform Delay, d1			30.8	28.2	52.1	
Progression Factor			1.00	1.00	0.81	
Incremental Delay, d2			3.3	1.0	4.7	
Delay (s)			34.1	29.1	47.1	
Level of Service			C	C	D	
Approach Delay (s)	0.0			31.3	47.1	
Approach LOS	A			C	D	

Intersection Summary			
HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	167.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	103.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Queues
38: Davie Rd & Nova Dr

07/08/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	629	145	285	133	277	598	309	1347	107	381	1345	1513
v/c Ratio	0.96	0.31	0.43	0.78	0.96	0.91	0.95	0.82	0.13	0.62	0.93	0.83
Control Delay	89.2	52.0	25.5	98.9	110.2	58.7	109.3	55.5	1.5	60.8	39.2	30.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.2	52.0	25.5	98.9	110.2	58.7	109.3	55.5	1.5	60.8	39.2	30.6
Queue Length 50th (ft)	339	124	139	138	292	497	169	494	0	164	749	855
Queue Length 95th (ft)	#458	199	236	211	#478	#728	#268	557	15	m199	#876	952
Internal Link Dist (ft)		1107			1135			1070			2085	
Turn Bay Length (ft)	185		150	100			315		380	150		1000
Base Capacity (vph)	665	465	667	221	291	683	325	1643	842	686	1446	1827
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.31	0.43	0.60	0.95	0.88	0.95	0.82	0.13	0.56	0.93	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	31	295	401	56	2483	141	306	2837
v/c Ratio	0.10	0.91	0.94	0.55	0.89	0.15	0.87	0.88
Control Delay	23.9	90.0	80.5	41.7	37.4	4.5	94.2	29.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.1
Total Delay	23.9	90.0	80.5	41.7	37.4	4.5	94.2	76.0
Queue Length 50th (ft)	9	295	348	15	947	29	164	947
Queue Length 95th (ft)	38	#455	#539	m17	1012	m32	#240	1018
Internal Link Dist (ft)	946		1186		2085			457
Turn Bay Length (ft)				150		150	180	
Base Capacity (vph)	343	351	455	102	2784	912	364	3219
Starvation Cap Reductn	0	0	0	0	0	0	0	773
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.84	0.88	0.55	0.89	0.15	0.84	1.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBT
Lane Group Flow (vph)	78	22	1535	1629	1307	1605
v/c Ratio	0.22	0.06	0.97	0.99	0.83	0.64
Control Delay	57.3	54.3	18.3	75.7	5.1	0.6
Queue Delay	0.0	0.0	0.0	44.6	0.0	0.6
Total Delay	57.3	54.3	18.3	120.3	5.1	1.2
Queue Length 50th (ft)	72	20	0	652	0	0
Queue Length 95th (ft)	125	47	#154	#763	0	0
Internal Link Dist (ft)		1169		457		224
Turn Bay Length (ft)			260		175	
Base Capacity (vph)	360	379	1583	1644	1583	2521
Starvation Cap Reductn	0	0	0	319	0	479
Spillback Cap Reductn	0	0	0	1149	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.06	0.97	3.29	0.83	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	NBL
Lane Group Flow (vph)	1605	2123	1707
v/c Ratio	0.84	0.75	0.95
Control Delay	36.0	30.3	47.6
Queue Delay	0.0	0.0	48.1
Total Delay	36.0	30.3	95.6
Queue Length 50th (ft)	734	631	700
Queue Length 95th (ft)	840	686	m708
Internal Link Dist (ft)		1216	224
Turn Bay Length (ft)	270		
Base Capacity (vph)	1911	2831	1792
Starvation Cap Reductn	0	0	1159
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.84	0.75	2.70

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

SR 7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	124	135	3250	3103	10
Future Volume (vph)	0	124	135	3250	3103	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00	0.91	0.91	
Frt		0.86	1.00	1.00	1.00	
Flt Protected		1.00	0.95	1.00	1.00	
Satd. Flow (prot)		1611	1770	5085	5083	
Flt Permitted		1.00	0.95	1.00	1.00	
Satd. Flow (perm)		1611	1770	5085	5083	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	131	142	3421	3266	11
RTOR Reduction (vph)	0	2	0	0	1	0
Lane Group Flow (vph)	0	129	142	3421	3277	0
Turn Type		Perm	Prot	NA	NA	
Protected Phases			5	2	6	
Permitted Phases		5				
Actuated Green, G (s)		9.0	9.0	80.0	57.0	
Effective Green, g (s)		11.0	12.0	80.0	60.0	
Actuated g/C Ratio		0.14	0.15	1.00	0.75	
Clearance Time (s)		7.0	7.0	7.0	7.0	
Vehicle Extension (s)		1.5	1.5	3.0	3.0	
Lane Grp Cap (vph)		221	265	5085	3812	
v/s Ratio Prot			0.08	c0.67	c0.64	
v/s Ratio Perm		0.08				
v/c Ratio		0.58	0.54	0.67	0.86	
Uniform Delay, d1		32.4	31.4	0.0	7.0	
Progression Factor		1.00	1.00	1.00	0.06	
Incremental Delay, d2		2.5	1.0	0.7	1.1	
Delay (s)		34.9	32.5	0.7	1.5	
Level of Service		C	C	A	A	
Approach Delay (s)	34.9			2.0	1.5	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	2.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	4	228	67	301	703	58	190	45	170	2768	481	25
Future Volume (vph)	4	228	67	301	703	58	190	45	170	2768	481	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	7.0	5.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	0.97	1.00			0.97	0.86	1.00	
Frt		1.00	1.00	0.85	1.00	0.89			1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1770	1863	1583	3433	1649			3433	6408	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1770	1863	1583	3433	1649			3433	6408	1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	4	240	71	317	740	61	200	47	179	2914	506	26
RTOR Reduction (vph)	0	0	0	87	0	66	0	0	0	0	43	0
Lane Group Flow (vph)	0	244	71	230	740	195	0	0	226	2914	463	0
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA		Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	7	4	5!	3	8		5!	5	2	3	1
Permitted Phases				4							2	
Actuated Green, G (s)		26.3	9.2	27.2	40.0	23.9			18.0	95.8	135.8	
Effective Green, g (s)		28.3	11.2	27.2	42.0	25.9			21.0	98.8	141.8	
Actuated g/C Ratio		0.16	0.06	0.15	0.23	0.14			0.12	0.55	0.79	
Clearance Time (s)		6.0	6.0	7.0	7.0	6.0			7.0	7.0	7.0	
Vehicle Extension (s)		2.0	2.0	1.5	2.0	2.0			1.5	3.0	2.0	
Lane Grp Cap (vph)		278	115	239	801	237			400	3517	1282	
v/s Ratio Prot		0.14	0.04	c0.10	c0.22	c0.12			0.07	c0.45	0.09	
v/s Ratio Perm				0.05							0.21	
v/c Ratio		0.88	0.62	0.96	0.92	0.82			0.56	0.83	0.36	
Uniform Delay, d1		74.2	82.3	75.9	67.4	74.8			75.2	33.6	5.7	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		24.6	6.8	46.8	15.9	19.2			1.1	2.4	0.1	
Delay (s)		98.8	89.1	122.7	83.4	94.1			76.3	36.0	5.7	
Level of Service		F	F	F	F	F			E	D	A	
Approach Delay (s)			109.7			86.2				34.3		
Approach LOS			F			F				C		

Intersection Summary			
HCM 2000 Control Delay	50.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	98	2619	72
Future Volume (vph)	98	2619	72
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3433	6408	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3433	6408	1583
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	103	2757	76
RTOR Reduction (vph)	0	0	39
Lane Group Flow (vph)	129	2757	37
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	8.0	85.8	85.8
Effective Green, g (s)	11.0	88.8	88.8
Actuated g/C Ratio	0.06	0.49	0.49
Clearance Time (s)	7.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	209	3161	780
v/s Ratio Prot	0.04	c0.43	
v/s Ratio Perm			0.02
v/c Ratio	0.62	0.87	0.05
Uniform Delay, d1	82.4	40.6	23.7
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	3.8	3.7	0.1
Delay (s)	86.2	44.2	23.8
Level of Service	F	D	C
Approach Delay (s)		45.5	
Approach LOS		D	

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	418	0	0	3250	3103	641
Future Volume (vph)	418	0	0	3250	3103	641
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			7.0	7.0	7.0
Lane Util. Factor	0.97			0.86	0.91	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	0.95			1.00	1.00	1.00
Satd. Flow (prot)	3433			6408	5085	1583
Flt Permitted	0.95			1.00	1.00	1.00
Satd. Flow (perm)	3433			6408	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	440	0	0	3421	3266	675
RTOR Reduction (vph)	0	0	0	0	0	203
Lane Group Flow (vph)	440	0	0	3421	3266	473
Turn Type	Prot			NA	NA	Perm
Protected Phases	4			1	1	
Permitted Phases						1
Actuated Green, G (s)	11.0			56.0	56.0	56.0
Effective Green, g (s)	11.0			56.0	56.0	56.0
Actuated g/C Ratio	0.14			0.70	0.70	0.70
Clearance Time (s)	6.0			7.0	7.0	7.0
Vehicle Extension (s)	2.0			3.0	3.0	3.0
Lane Grp Cap (vph)	472			4485	3559	1108
v/s Ratio Prot	c0.13			0.53	c0.64	
v/s Ratio Perm						0.30
v/c Ratio	0.93			0.76	0.92	0.43
Uniform Delay, d1	34.1			7.7	10.1	5.1
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	25.1			0.9	5.0	1.2
Delay (s)	59.3			8.7	15.0	6.3
Level of Service	E			A	B	A
Approach Delay (s)	59.3			8.7	13.5	
Approach LOS	E			A	B	

Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	131	142	3421	3277
v/c Ratio	0.59	0.54	0.67	0.86
Control Delay	43.7	39.7	0.7	1.6
Queue Delay	0.0	0.0	0.0	0.1
Total Delay	43.7	39.7	0.7	1.6
Queue Length 50th (ft)	61	67	0	0
Queue Length 95th (ft)	#126	123	0	0
Internal Link Dist (ft)			954	710
Turn Bay Length (ft)		145		
Base Capacity (vph)	223	265	5085	3810
Starvation Cap Reductn	0	0	0	32
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.59	0.54	0.67	0.87

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	244	71	317	740	261	226	2914	506	129	2757	76
v/c Ratio	0.88	0.62	0.85	0.92	0.86	0.57	0.83	0.38	0.62	0.87	0.09
Control Delay	103.6	104.6	67.2	84.9	78.3	80.7	36.6	3.5	95.7	45.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.6	104.6	67.2	84.9	78.3	80.7	36.6	3.5	95.7	45.1	0.2
Queue Length 50th (ft)	283	83	251	442	221	130	830	77	78	869	0
Queue Length 95th (ft)	#429	144	#387	#549	#383	179	866	117	118	910	0
Internal Link Dist (ft)		1090			944		983			801	
Turn Bay Length (ft)	240			200		400			210		210
Base Capacity (vph)	295	124	392	820	306	438	3518	1328	212	3163	873
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.57	0.81	0.90	0.85	0.52	0.83	0.38	0.61	0.87	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	NBT	SBT	SBR
Lane Group Flow (vph)	440	3421	3266	675
v/c Ratio	0.93	0.76	0.92	0.52
Control Delay	63.7	8.8	15.8	1.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	63.7	8.8	15.8	1.9
Queue Length 50th (ft)	113	266	418	0
Queue Length 95th (ft)	#200	310	518	27
Internal Link Dist (ft)	277	710	779	
Turn Bay Length (ft)				340
Base Capacity (vph)	472	4485	3559	1310
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.93	0.76	0.92	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Peters Road

HCM Signalized Intersection Capacity Analysis
27: SW 80th Terrace & Peters Rd

07/09/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	88	1140	105	2	36	811	383	3	4	53	186
Future Volume (vph)	5	88	1140	105	2	36	811	383	3	4	53	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00		1.00	0.95	1.00		1.00	1.00	
Frt		1.00	1.00	0.85		1.00	1.00	0.85		1.00	0.85	
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00		0.98	1.00	
Satd. Flow (prot)		1770	3539	1583		1770	3539	1583		1824	1583	
Flt Permitted		0.29	1.00	1.00		0.19	1.00	1.00		0.91	1.00	
Satd. Flow (perm)		531	3539	1583		355	3539	1583		1691	1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	93	1200	111	2	38	854	403	3	4	56	196
RTOR Reduction (vph)	0	0	0	31	0	0	0	130	0	0	45	0
Lane Group Flow (vph)	0	98	1200	80	0	40	854	273	0	7	11	0
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA	custom	pm+pt
Protected Phases		1	6			5	2		7	4	4	3
Permitted Phases	1	6		6	5	2		2	4		4	8
Actuated Green, G (s)		115.1	108.6	108.6		110.7	106.4	106.4		29.1	29.1	
Effective Green, g (s)		119.1	110.6	110.6		114.7	108.4	108.4		31.1	31.1	
Actuated g/C Ratio		0.74	0.69	0.69		0.72	0.68	0.68		0.19	0.19	
Clearance Time (s)		6.0	6.0	6.0		6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)		1.5	3.0	3.0		1.5	3.0	3.0		2.5	2.5	
Lane Grp Cap (vph)		461	2446	1094		310	2397	1072		328	307	
v/s Ratio Prot		c0.01	c0.34			0.01	0.24				0.01	
v/s Ratio Perm		0.15		0.05		0.09		0.17		0.00		
v/c Ratio		0.21	0.49	0.07		0.13	0.36	0.25		0.02	0.04	
Uniform Delay, d1		6.4	11.5	8.0		8.0	11.0	10.1		52.1	52.3	
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1	0.2	0.0		0.1	0.4	0.6		0.0	0.0	
Delay (s)		6.5	11.7	8.1		8.1	11.4	10.6		52.2	52.3	
Level of Service		A	B	A		A	B	B		D	D	
Approach Delay (s)			11.0				11.0			52.3		
Approach LOS			B				B			D		

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	11	41
Future Volume (vph)	11	41
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	4.0
Lane Util. Factor	1.00	1.00
Frt	1.00	0.85
Flt Protected	0.96	1.00
Satd. Flow (prot)	1779	1583
Flt Permitted	0.73	1.00
Satd. Flow (perm)	1366	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	12	43
RTOR Reduction (vph)	0	35
Lane Group Flow (vph)	208	8
Turn Type	NA	Perm
Protected Phases	8	
Permitted Phases		8
Actuated Green, G (s)	29.1	29.1
Effective Green, g (s)	31.1	31.1
Actuated g/C Ratio	0.19	0.19
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	2.5	2.5
Lane Grp Cap (vph)	265	307
v/s Ratio Prot		
v/s Ratio Perm	c0.15	0.01
v/c Ratio	0.78	0.03
Uniform Delay, d1	61.3	52.2
Progression Factor	1.00	1.00
Incremental Delay, d2	13.6	0.0
Delay (s)	74.9	52.2
Level of Service	E	D
Approach Delay (s)	71.0	
Approach LOS	E	

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1758	77	0	0	0	354
Future Volume (Veh/h)	1758	77	0	0	0	354
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1851	81	0	0	0	373
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1932		1892	966
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1932		1892	966
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	0
cM capacity (veh/h)			301		62	254

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total	1234	698	373
Volume Left	0	0	0
Volume Right	0	81	373
cSH	1700	1700	254
Volume to Capacity	0.73	0.41	1.47
Queue Length 95th (ft)	0	0	534
Control Delay (s)	0.0	0.0	266.6
Lane LOS			F
Approach Delay (s)	0.0		266.6
Approach LOS			F

Intersection Summary			
Average Delay	43.1		
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

Queues
27: SW 80th Terrace & Peters Rd

07/09/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	98	1200	111	40	854	403	7	56	208	43
v/c Ratio	0.21	0.49	0.10	0.12	0.36	0.34	0.02	0.14	0.78	0.11
Control Delay	7.1	13.2	2.5	7.1	12.4	1.9	47.4	0.8	80.7	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.1	13.2	2.5	7.1	12.4	1.9	47.4	0.8	80.7	0.6
Queue Length 50th (ft)	24	293	3	9	186	0	6	0	209	0
Queue Length 95th (ft)	52	425	29	25	282	43	20	1	288	0
Internal Link Dist (ft)		1130			928		910		606	
Turn Bay Length (ft)	200		200	205						
Base Capacity (vph)	468	2472	1136	339	2397	1202	416	466	336	466
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.49	0.10	0.12	0.36	0.34	0.02	0.12	0.62	0.09

Intersection Summary

PM Peak Hour

NW/SW 136th Avenue

HCM Signalized Intersection Capacity Analysis
1: 136 Ave & SW 5 St

07/09/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	271	9	42	13	11	72	74	771	29	42	94	831
Future Volume (vph)	271	9	42	13	11	72	74	771	29	42	94	831
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95			1.00	0.95
Frt	1.00	1.00	0.85	1.00	0.87		1.00	0.99			1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1621		1770	3520			1770	3539
Flt Permitted	0.38	1.00	1.00	0.75	1.00		0.28	1.00			0.29	1.00
Satd. Flow (perm)	711	1863	1583	1400	1621		516	3520			539	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	285	9	44	14	12	76	78	812	31	44	99	875
RTOR Reduction (vph)	0	0	31	0	72	0	0	2	0	0	0	0
Lane Group Flow (vph)	285	9	13	14	16	0	78	841	0	0	143	875
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	Perm	NA
Protected Phases	7	4			8			2				6
Permitted Phases	4		4	8			2			6	6	
Actuated Green, G (s)	35.7	35.7	35.7	7.2	7.2		75.3	75.3			75.3	75.3
Effective Green, g (s)	35.7	35.7	35.7	7.2	7.2		75.3	75.3			75.3	75.3
Actuated g/C Ratio	0.29	0.29	0.29	0.06	0.06		0.62	0.62			0.62	0.62
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	2.2	2.0	2.0	2.0	2.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	403	545	463	82	95		318	2172			332	2184
v/s Ratio Prot	c0.13	0.00			0.01			0.24				0.25
v/s Ratio Perm	c0.08		0.01	0.01			0.15				c0.27	
v/c Ratio	0.71	0.02	0.03	0.17	0.17		0.25	0.39			0.43	0.40
Uniform Delay, d1	36.6	30.7	30.8	54.6	54.6		10.5	11.7			12.2	11.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	4.8	0.0	0.0	0.4	0.3		1.8	0.5			4.0	0.5
Delay (s)	41.4	30.7	30.8	54.9	54.9		12.4	12.3			16.2	12.4
Level of Service	D	C	C	D	D		B	B			B	B
Approach Delay (s)		39.7			54.9			12.3				13.0
Approach LOS		D			D			B				B

Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	122.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	611
Future Volume (vph)	611
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	643
RTOR Reduction (vph)	246
Lane Group Flow (vph)	397
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	75.3
Effective Green, g (s)	75.3
Actuated g/C Ratio	0.62
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	977
v/s Ratio Prot	
v/s Ratio Perm	0.25
v/c Ratio	0.41
Uniform Delay, d1	11.9
Progression Factor	1.00
Incremental Delay, d2	1.3
Delay (s)	13.2
Level of Service	B
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1189	453	148	0	0	0	0	552	663	68	1501	0
Future Volume (vph)	1189	453	148	0	0	0	0	552	663	68	1501	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0						7.0	7.0	7.0	7.0	
Lane Util. Factor	0.97	0.95						0.95	0.88	1.00	0.95	
Frt	1.00	0.96						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3408						3539	2787	1770	3539	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3408						3539	2787	1770	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1252	477	156	0	0	0	0	581	698	72	1580	0
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	1252	621	0	0	0	0	0	581	698	72	1580	0
Turn Type	Split	NA						NA	Prot	Prot	NA	
Protected Phases	3	3						2	2	1	1 2	
Permitted Phases												
Actuated Green, G (s)	42.0	42.0						30.0	30.0	27.0	64.0	
Effective Green, g (s)	42.0	42.0						30.0	30.0	27.0	64.0	
Actuated g/C Ratio	0.35	0.35						0.25	0.25	0.22	0.53	
Clearance Time (s)	7.0	7.0						7.0	7.0	7.0		
Vehicle Extension (s)	2.0	2.0						2.5	2.5	0.2		
Lane Grp Cap (vph)	1201	1192						884	696	398	1887	
v/s Ratio Prot	c0.36	0.18						0.16	c0.25	0.04	c0.45	
v/s Ratio Perm												
v/c Ratio	1.04	0.52						0.66	1.00	0.18	0.84	
Uniform Delay, d1	39.0	31.0						40.4	45.0	37.6	23.6	
Progression Factor	1.00	1.00						1.00	1.00	0.74	0.82	
Incremental Delay, d2	37.7	1.6						3.8	34.8	0.8	3.7	
Delay (s)	76.7	32.6						44.2	79.8	28.5	23.1	
Level of Service	E	C						D	E	C	C	
Approach Delay (s)		61.9			0.0			63.6			23.3	
Approach LOS		E			A			E			C	

Intersection Summary			
HCM 2000 Control Delay	49.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBR	WBR2	NBL	NBT	SBT	SBR2
Lane Configurations						
Traffic Volume (vph)	1055	296	558	1185	514	271
Future Volume (vph)	1055	296	558	1185	514	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	0.88	1.00	0.97	0.95	0.91	1.00
Frt	0.85	0.86	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	2787	1611	3433	3539	5085	1583
Flt Permitted	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	2787	1611	3433	3539	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1111	312	587	1247	541	285
RTOR Reduction (vph)	833	0	0	0	0	221
Lane Group Flow (vph)	278	312	587	1247	541	64
Turn Type	Prot	Prot	Split	NA	NA	Prot
Protected Phases	2	1	2 3	2 3	1	1
Permitted Phases						
Actuated Green, G (s)	30.0	27.0	79.0	79.0	27.0	27.0
Effective Green, g (s)	30.0	27.0	79.0	79.0	27.0	27.0
Actuated g/C Ratio	0.25	0.22	0.66	0.66	0.22	0.22
Clearance Time (s)	7.0	7.0			7.0	7.0
Vehicle Extension (s)	2.5	0.2			0.2	0.2
Lane Grp Cap (vph)	696	362	2260	2329	1144	356
v/s Ratio Prot	0.10	c0.19	0.17	c0.35	0.11	0.04
v/s Ratio Perm						
v/c Ratio	0.40	0.86	0.26	0.54	0.47	0.18
Uniform Delay, d1	37.5	44.7	8.4	10.8	40.3	37.6
Progression Factor	1.00	1.00	0.40	0.32	1.00	1.00
Incremental Delay, d2	1.7	22.7	0.1	0.3	1.4	1.1
Delay (s)	39.2	67.4	3.5	3.8	41.7	38.7
Level of Service	D	E	A	A	D	D
Approach Delay (s)				3.7	40.7	
Approach LOS				A	D	

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	264	349	14	273	1916	1596	282
Future Volume (vph)	264	349	14	273	1916	1596	282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		5.5	5.5	5.5	5.5
Lane Util. Factor	0.97	1.00		1.00	0.91	0.91	1.00
Frt	1.00	0.85		1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583		1770	5085	5085	1583
Flt Permitted	0.95	1.00		0.09	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583		165	5085	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	278	367	15	287	2017	1680	297
RTOR Reduction (vph)	0	321	0	0	0	0	122
Lane Group Flow (vph)	278	46	0	302	2017	1680	175
Turn Type	Prot	Prot	custom	pm+pt	NA	NA	Perm
Protected Phases	4	4		5	2	6	
Permitted Phases			5	2			6
Actuated Green, G (s)	14.1	14.1		94.4	94.4	70.6	70.6
Effective Green, g (s)	14.1	14.1		94.4	94.4	70.6	70.6
Actuated g/C Ratio	0.12	0.12		0.79	0.79	0.59	0.59
Clearance Time (s)	6.0	6.0		5.5	5.5	5.5	5.5
Vehicle Extension (s)	2.0	2.0		1.5	3.0	3.0	3.0
Lane Grp Cap (vph)	403	186		374	4000	2991	931
v/s Ratio Prot	c0.08	0.03		c0.12	0.40	0.33	
v/s Ratio Perm				c0.51			0.11
v/c Ratio	0.69	0.25		0.81	0.50	0.56	0.19
Uniform Delay, d1	50.9	48.1		28.6	4.5	15.2	11.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.9	0.3		11.4	0.5	0.8	0.4
Delay (s)	54.8	48.4		40.0	5.0	16.0	11.9
Level of Service	D	D		D	A	B	B
Approach Delay (s)	51.1				9.5	15.3	
Approach LOS	D				A	B	

Intersection Summary			
HCM 2000 Control Delay	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
1: 136 Ave & SW 5 St

07/09/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	285	9	44	14	88	78	843	143	875	643
v/c Ratio	0.71	0.02	0.09	0.17	0.53	0.25	0.39	0.43	0.40	0.53
Control Delay	46.0	28.1	8.5	58.3	27.4	14.4	12.9	18.6	13.1	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	28.1	8.5	58.3	27.4	14.4	12.9	18.6	13.1	2.6
Queue Length 50th (ft)	187	5	0	11	9	27	167	56	177	0
Queue Length 95th (ft)	261	17	26	32	61	63	233	125	244	50
Internal Link Dist (ft)		882			640		545		1142	
Turn Bay Length (ft)	220			50		220		140		330
Base Capacity (vph)	424	641	573	126	215	318	2175	332	2185	1223
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.01	0.08	0.11	0.41	0.25	0.39	0.43	0.40	0.53

Intersection Summary

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	1252	633	581	698	72	1580
v/c Ratio	1.04	0.53	0.66	1.00	0.18	0.84
Control Delay	76.1	32.0	44.6	80.0	28.8	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	12.6
Total Delay	76.1	32.0	44.6	80.0	28.8	36.0
Queue Length 50th (ft)	~541	197	213	~309	31	602
Queue Length 95th (ft)	#675	256	276	#452	m52	672
Internal Link Dist (ft)		677	1142			334
Turn Bay Length (ft)				350		
Base Capacity (vph)	1201	1205	884	696	398	1887
Starvation Cap Reductn	0	0	0	0	0	317
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.53	0.66	1.00	0.18	1.01

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBR	WBR2	NBL	NBT	SBT	SBR2
Lane Group Flow (vph)	1111	312	587	1247	541	285
v/c Ratio	0.70	0.86	0.26	0.54	0.47	0.49
Control Delay	3.6	68.2	3.6	3.8	41.9	7.6
Queue Delay	0.3	0.0	0.3	0.7	2.1	0.0
Total Delay	3.9	68.2	3.9	4.5	44.0	7.6
Queue Length 50th (ft)	0	234	25	56	134	0
Queue Length 95th (ft)	24	#391	m26	m56	172	71
Internal Link Dist (ft)				334	587	
Turn Bay Length (ft)	200					300
Base Capacity (vph)	1595	362	2260	2329	1144	577
Starvation Cap Reductn	0	0	1059	662	0	0
Spillback Cap Reductn	103	0	0	0	441	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.86	0.49	0.75	0.77	0.49

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	278	367	302	2017	1680	297
v/c Ratio	0.69	0.72	0.81	0.50	0.56	0.28
Control Delay	59.7	14.0	40.0	5.3	17.6	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	14.0	40.0	5.3	17.6	2.6
Queue Length 50th (ft)	108	2	136	167	278	0
Queue Length 95th (ft)	148	96	229	230	416	46
Internal Link Dist (ft)	1036			443	831	
Turn Bay Length (ft)	120		200			360
Base Capacity (vph)	715	617	500	4000	2991	1053
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.59	0.60	0.50	0.56	0.28

Intersection Summary

Flamingo Road

HCM Unsignalized Intersection Capacity Analysis
6: WB SR-84 & SW 125th Ave

07/07/2021

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	1656	54	0	102
Future Volume (Veh/h)	0	0	1656	54	0	102
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	1743	57	0	107
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1800				1772	900
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1800				1772	900
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	62
cM capacity (veh/h)	339				74	282

Direction, Lane #	WB 1	WB 2	SB 1
Volume Total	1162	638	107
Volume Left	0	0	0
Volume Right	0	57	107
cSH	1700	1700	282
Volume to Capacity	0.68	0.38	0.38
Queue Length 95th (ft)	0	0	43
Control Delay (s)	0.0	0.0	25.4
Lane LOS			D
Approach Delay (s)	0.0		25.4
Approach LOS			D

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	161	91	3	149	1671	14	1965	447
Future Volume (vph)	161	91	3	149	1671	14	1965	447
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85		1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1583		1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00		0.06	1.00	0.12	1.00	1.00
Satd. Flow (perm)	1770	1583		112	5085	214	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	169	96	3	157	1759	15	2068	471
RTOR Reduction (vph)	0	83	0	0	0	0	0	109
Lane Group Flow (vph)	169	13	0	160	1759	15	2068	362
Turn Type	Prot	Prot	custom	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	4	4		5	2	1	6	
Permitted Phases			5	2		6		6
Actuated Green, G (s)	19.6	19.6		126.9	117.6	108.7	106.9	106.9
Effective Green, g (s)	21.6	21.6		130.4	121.1	115.7	110.4	110.4
Actuated g/C Ratio	0.14	0.14		0.82	0.76	0.72	0.69	0.69
Clearance Time (s)	6.0	6.0		7.5	7.5	7.5	7.5	7.5
Vehicle Extension (s)	2.0	2.0		1.5	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	238	213		257	3848	206	3508	1092
v/s Ratio Prot	c0.10	0.01		c0.06	0.35	0.00	0.41	
v/s Ratio Perm				c0.44		0.05		0.23
v/c Ratio	0.71	0.06		0.62	0.46	0.07	0.59	0.33
Uniform Delay, d1	66.2	60.4		31.6	7.2	6.3	13.0	10.0
Progression Factor	1.00	1.00		1.00	1.00	0.25	0.19	0.15
Incremental Delay, d2	8.0	0.0		3.4	0.4	0.0	0.6	0.6
Delay (s)	74.2	60.4		34.9	7.6	1.6	3.0	2.1
Level of Service	E	E		C	A	A	A	A
Approach Delay (s)	69.2				9.9		2.8	
Approach LOS	E				A		A	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	698	30	615	0	0	0	0	1101	633	926	1994	0
Future Volume (vph)	698	30	615	0	0	0	0	1101	633	926	1994	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81	0.88	0.97	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1693	2787					7544	2787	3433	5085	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1693	2787					7544	2787	3433	5085	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	735	32	647	0	0	0	0	1159	666	975	2099	0
RTOR Reduction (vph)	0	0	143	0	0	0	0	0	508	0	0	0
Lane Group Flow (vph)	448	319	504	0	0	0	0	1159	158	975	2099	0
Turn Type	Split	NA	Prot					NA	Prot	Prot	NA	
Protected Phases	1 6	1 6	1 6					4 5	4 5	2 3	2 3 4 5	
Permitted Phases												
Actuated Green, G (s)	47.5	47.5	47.5					34.5	34.5	54.0	96.5	
Effective Green, g (s)	46.5	46.5	46.5					38.0	38.0	58.5	94.5	
Actuated g/C Ratio	0.29	0.29	0.29					0.24	0.24	0.37	0.59	
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)	488	492	809					1791	661	1255	3003	
v/s Ratio Prot	c0.27	0.19	0.18					0.15	0.06	c0.28	c0.41	
v/s Ratio Perm												
v/c Ratio	0.92	0.65	0.62					0.65	0.24	0.78	0.70	
Uniform Delay, d1	54.9	49.6	49.2					55.0	49.3	45.0	22.8	
Progression Factor	1.00	1.00	1.00					0.96	2.99	0.37	0.67	
Incremental Delay, d2	24.7	6.5	3.6					0.6	0.1	1.1	0.3	
Delay (s)	79.6	56.1	52.8					53.3	147.4	17.7	15.5	
Level of Service	E	E	D					D	F	B	B	
Approach Delay (s)		62.0			0.0			87.7			16.2	
Approach LOS		E			A			F			B	

Intersection Summary			
HCM 2000 Control Delay	47.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	776	243	678	338	1461	0	0	2144	640
Future Volume (vph)	0	0	0	776	243	678	338	1461	0	0	2144	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				0.86	0.76	0.86	0.97	0.91			0.81	0.88
Frt				1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	0.97	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3044	2747	2723	3433	5085			7544	2787
Flt Permitted				0.95	0.97	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3044	2747	2723	3433	5085			7544	2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	817	256	714	356	1538	0	0	2257	674
RTOR Reduction (vph)	0	0	0	0	0	158	0	0	0	0	0	377
Lane Group Flow (vph)	0	0	0	408	665	556	356	1538	0	0	2257	297
Turn Type				Split	NA	Prot	Prot	NA			NA	Prot
Protected Phases				3 4	3 4	3 4	5 6	1 2 5 6			1 2	1 2
Permitted Phases												
Actuated Green, G (s)				30.5	30.5	30.5	60.0	113.5			45.5	45.5
Effective Green, g (s)				34.5	34.5	34.5	64.5	107.5			49.0	49.0
Actuated g/C Ratio				0.22	0.22	0.22	0.40	0.67			0.31	0.31
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)				656	592	587	1383	3416			2310	853
v/s Ratio Prot				0.13	c0.24	0.20	0.10	c0.30			c0.30	0.11
v/s Ratio Perm												
v/c Ratio				0.62	1.35dl	0.95	0.26	0.45			0.98	0.35
Uniform Delay, d1				56.8	62.8	61.9	31.8	12.3			54.9	43.1
Progression Factor				1.00	1.00	1.00	0.38	0.49			0.72	0.65
Incremental Delay, d2				1.8	75.8	24.6	0.3	0.3			12.1	0.9
Delay (s)				58.7	138.5	86.4	12.4	6.4			51.7	28.9
Level of Service				E	F	F	B	A			D	C
Approach Delay (s)		0.0			99.5			7.5			46.4	
Approach LOS		A			F			A			D	

Intersection Summary			
HCM 2000 Control Delay	49.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	5	71	110	199	2	442	165	418	26	82	1596	504
Future Volume (vph)	5	71	110	199	2	442	165	418	26	82	1596	504
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	1.0
Lane Util. Factor		1.00	0.95	1.00		0.97	0.95	0.88		1.00	0.91	1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1770	3539	1583		3433	3539	2787		1770	5085	1583
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1770	3539	1583		3433	3539	2787		1770	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	75	116	209	2	465	174	440	27	86	1680	531
RTOR Reduction (vph)	0	0	0	192	0	0	0	362	0	0	0	0
Lane Group Flow (vph)	0	80	116	17	0	467	174	78	0	113	1680	531
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	Prot	NA	Free
Protected Phases	7	7	4		3	3	8		5	5	2	
Permitted Phases				4				8				Free
Actuated Green, G (s)		7.0	10.1	10.1		22.4	25.5	25.5		11.7	71.3	160.0
Effective Green, g (s)		10.0	13.1	13.1		25.4	28.5	28.5		14.7	74.3	160.0
Actuated g/C Ratio		0.06	0.08	0.08		0.16	0.18	0.18		0.09	0.46	1.00
Clearance Time (s)		7.0	7.0	7.0		7.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)		1.5	2.5	2.5		1.5	2.5	2.5		1.5	3.0	
Lane Grp Cap (vph)		110	289	129		544	630	496		162	2361	1583
v/s Ratio Prot		0.05	0.03			c0.14	0.05			0.06	0.33	
v/s Ratio Perm				0.01				0.03				c0.34
v/c Ratio		0.73	0.40	0.13		0.86	0.28	0.16		0.70	0.71	0.34
Uniform Delay, d1		73.7	69.7	68.2		65.5	56.8	55.6		70.5	34.3	0.0
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00		1.27	0.51	1.00
Incremental Delay, d2		18.2	0.7	0.3		12.3	0.2	0.1		9.2	1.7	0.5
Delay (s)		91.9	70.4	68.5		77.8	57.0	55.7		98.5	19.1	0.5
Level of Service		F	E	E		E	E	E		F	B	A
Approach Delay (s)			73.7				65.5				18.7	
Approach LOS			E				E				B	

Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (vph)	2	514	2288	116
Future Volume (vph)	2	514	2288	116
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0
Lane Util. Factor		0.97	0.91	1.00
Frt		1.00	1.00	0.85
Flt Protected		0.95	1.00	1.00
Satd. Flow (prot)		3433	5085	1583
Flt Permitted		0.95	1.00	1.00
Satd. Flow (perm)		3433	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	541	2408	122
RTOR Reduction (vph)	0	0	0	53
Lane Group Flow (vph)	0	543	2408	69
Turn Type	Prot	Prot	NA	Perm
Protected Phases	1	1	6	
Permitted Phases				6
Actuated Green, G (s)		28.2	87.8	87.8
Effective Green, g (s)		31.2	90.8	90.8
Actuated g/C Ratio		0.19	0.57	0.57
Clearance Time (s)		7.0	7.0	7.0
Vehicle Extension (s)		1.5	3.0	3.0
Lane Grp Cap (vph)		669	2885	898
v/s Ratio Prot		c0.16	c0.47	
v/s Ratio Perm				0.04
v/c Ratio		0.81	0.83	0.08
Uniform Delay, d1		61.6	28.4	15.6
Progression Factor		1.00	1.00	1.00
Incremental Delay, d2		7.0	3.0	0.2
Delay (s)		68.6	31.5	15.8
Level of Service		E	C	B
Approach Delay (s)			37.4	
Approach LOS			D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	2139	0	0	2784	0
Future Volume (vph)	0	0	0	0	0	0	0	2139	0	0	2784	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								7.0			7.0	
Lane Util. Factor								0.91			0.91	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								5085			5085	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								5085			5085	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	0	0	0	2252	0	0	2931	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	2252	0	0	2931	0
Turn Type								NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								140.6			140.6	
Effective Green, g (s)								140.6			140.6	
Actuated g/C Ratio								0.88			0.88	
Clearance Time (s)								7.0			7.0	
Vehicle Extension (s)								1.0			1.0	
Lane Grp Cap (vph)								4468			4468	
v/s Ratio Prot								0.44			c0.58	
v/s Ratio Perm												
v/c Ratio								0.50			0.66	
Uniform Delay, d1								2.1			2.8	
Progression Factor								0.99			0.44	
Incremental Delay, d2								0.3			0.4	
Delay (s)								2.4			1.6	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			2.4			1.6	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	2.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
7: Flamingo Rd & SW 8th St

07/07/2021

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	169	96	160	1759	15	2068	471
v/c Ratio	0.71	0.32	0.62	0.44	0.06	0.59	0.39
Control Delay	81.8	12.8	35.4	7.1	1.5	3.3	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.8	12.8	35.4	7.1	1.5	3.3	1.2
Queue Length 50th (ft)	172	0	71	161	1	134	13
Queue Length 95th (ft)	245	53	154	324	m2	171	25
Internal Link Dist (ft)	1136			1101		824	
Turn Bay Length (ft)			290		190		230
Base Capacity (vph)	320	365	339	3990	237	3509	1201
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.26	0.47	0.44	0.06	0.59	0.39

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	448	319	647	1159	666	975	2099
v/c Ratio	0.84	0.59	0.63	0.63	0.56	0.78	0.65
Control Delay	65.6	51.2	34.3	53.5	11.4	18.7	12.8
Queue Delay	0.0	0.0	0.0	0.4	0.0	49.6	47.8
Total Delay	65.6	51.2	34.3	53.9	11.4	68.3	60.6
Queue Length 50th (ft)	460	295	230	275	67	387	704
Queue Length 95th (ft)	#648	410	306	309	172	m428	m715
Internal Link Dist (ft)		97		727			287
Turn Bay Length (ft)							
Base Capacity (vph)	535	539	1025	1838	1182	1244	3209
Starvation Cap Reductn	0	0	0	0	0	389	1418
Spillback Cap Reductn	0	0	0	231	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.59	0.63	0.72	0.56	1.14	1.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	408	665	714	356	1538	2257	674
v/c Ratio	0.63	1.35dl	0.97	0.26	0.41	0.96	0.54
Control Delay	62.4	137.0	70.7	12.6	4.1	48.2	6.8
Queue Delay	0.0	0.0	0.7	0.7	1.1	43.7	0.2
Total Delay	62.4	137.0	71.4	13.3	5.2	91.9	7.0
Queue Length 50th (ft)	228	~532	330	28	354	583	65
Queue Length 95th (ft)	295	#694	#481	m64	388	#585	130
Internal Link Dist (ft)		105			287	439	
Turn Bay Length (ft)							325
Base Capacity (vph)	646	583	736	1373	3750	2357	1244
Starvation Cap Reductn	0	0	0	675	1854	212	106
Spillback Cap Reductn	0	0	3	0	96	432	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	1.14	0.97	0.51	0.81	1.17	0.59

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	80	116	209	467	174	440	113	1680	531	543	2408	122
v/c Ratio	0.73	0.40	0.64	0.86	0.28	0.51	0.70	0.71	0.34	0.81	0.83	0.13
Control Delay	107.7	73.4	16.0	81.4	57.4	6.6	108.1	19.6	0.5	71.8	32.4	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.7	73.4	16.0	81.4	57.4	6.6	108.1	19.6	0.5	71.8	32.4	0.8
Queue Length 50th (ft)	84	61	0	247	83	0	121	351	0	281	768	0
Queue Length 95th (ft)	#173	95	74	#327	119	52	#218	364	0	346	833	8
Internal Link Dist (ft)		1352			1255			1687			1132	
Turn Bay Length (ft)	200		215	300		340	290		330	280		280
Base Capacity (vph)	110	353	354	557	707	909	167	2361	1583	732	2884	971
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.33	0.59	0.84	0.25	0.48	0.68	0.71	0.34	0.74	0.83	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBT	SBT
Lane Group Flow (vph)	2252	2931
v/c Ratio	0.47	0.61
Control Delay	2.6	1.7
Queue Delay	0.0	0.1
Total Delay	2.6	1.8
Queue Length 50th (ft)	11	0
Queue Length 95th (ft)	m536	265
Internal Link Dist (ft)	439	1687
Turn Bay Length (ft)		
Base Capacity (vph)	4824	4824
Starvation Cap Reductn	142	0
Spillback Cap Reductn	0	413
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.48	0.66

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Hiatus Road

HCM Signalized Intersection Capacity Analysis
11: Hiatus Rd & EB SR-84

07/07/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	778	91	287	0	0	0	0	467	278	669	1138	0
Future Volume (vph)	778	91	287	0	0	0	0	467	278	669	1138	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					7.0	7.5	7.0	7.0	
Lane Util. Factor	0.94	0.91	0.91					0.91	1.00	0.97	0.95	
Frt	1.00	0.91	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3079	1441					5085	1583	3433	3539	
Flt Permitted	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	4990	3079	1441					5085	1583	3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	819	96	302	0	0	0	0	492	293	704	1198	0
RTOR Reduction (vph)	0	57	114	0	0	0	0	0	207	0	0	0
Lane Group Flow (vph)	819	190	37	0	0	0	0	492	86	704	1198	0
Turn Type	Perm	NA	Perm					NA	custom	Prot	NA	
Protected Phases		1 6						4 5		2	2 3 4 5	
Permitted Phases	1 6		1 6						3 4 5			
Actuated Green, G (s)	42.0	42.0	42.0					19.0	48.0	29.0	84.0	
Effective Green, g (s)	34.5	34.5	34.5					19.0	41.0	29.0	76.5	
Actuated g/C Ratio	0.25	0.25	0.25					0.14	0.29	0.21	0.55	
Clearance Time (s)										7.0		
Vehicle Extension (s)										2.5		
Lane Grp Cap (vph)	1229	758	355					690	463	711	1933	
v/s Ratio Prot		0.06						c0.10		c0.21	c0.34	
v/s Ratio Perm	c0.16		0.03						0.05			
v/c Ratio	0.67	0.25	0.10					0.71	0.19	0.99	0.62	
Uniform Delay, d1	47.6	42.4	40.8					57.9	37.0	55.4	21.8	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.74	0.36	
Incremental Delay, d2	2.9	0.8	0.6					6.2	0.9	25.6	1.0	
Delay (s)	50.4	43.2	41.4					64.1	37.9	66.5	8.9	
Level of Service	D	D	D					E	D	E	A	
Approach Delay (s)		47.8			0.0			54.3			30.2	
Approach LOS		D			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	43.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	586	150	892	6	146	1093	0	0	1215
Future Volume (vph)	0	0	0	586	150	892	6	146	1093	0	0	1215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.5	7.5	7.5		7.0	7.0			7.0
Lane Util. Factor				0.97	0.91	0.91		1.00	0.91			0.86
Frt				1.00	0.91	0.85		1.00	1.00			1.00
Flt Protected				0.95	1.00	1.00		0.95	1.00			1.00
Satd. Flow (prot)				3433	1546	2882		1770	5085			6408
Flt Permitted				0.95	1.00	1.00		0.95	1.00			1.00
Satd. Flow (perm)				3433	1546	2882		1770	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	617	158	939	6	154	1151	0	0	1279
RTOR Reduction (vph)	0	0	0	0	37	164	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	617	346	550	0	160	1151	0	0	1279
Turn Type				Perm	NA	Prot	Prot	Prot	NA			NA
Protected Phases					3 4	3 4	5 6	5 6	1 2 5 6			1 2
Permitted Phases				3 4								
Actuated Green, G (s)				31.0	31.0	31.0		45.5	95.0			42.0
Effective Green, g (s)				31.0	31.0	31.0		45.5	87.5			42.0
Actuated g/C Ratio				0.22	0.22	0.22		0.32	0.62			0.30
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)				760	342	638		575	3178			1922
v/s Ratio Prot					c0.22	0.19		0.09	c0.23			c0.20
v/s Ratio Perm				0.18								
v/c Ratio				0.81	1.01	0.86		0.28	0.36			0.67
Uniform Delay, d1				51.7	54.5	52.4		35.1	12.7			42.9
Progression Factor				1.00	1.00	1.00		0.23	0.11			1.00
Incremental Delay, d2				9.2	52.0	14.3		1.0	0.3			1.8
Delay (s)				60.9	106.5	66.7		8.9	1.7			44.7
Level of Service				E	F	E		A	A			D
Approach Delay (s)		0.0			73.5				2.6			45.0
Approach LOS		A			E				A			D

Intersection Summary			
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	43.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	837
Future Volume (vph)	837
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.0
Lane Util. Factor	0.88
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	2787
Flt Permitted	1.00
Satd. Flow (perm)	2787
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	881
RTOR Reduction (vph)	365
Lane Group Flow (vph)	516
Turn Type	Prot
Protected Phases	1 2
Permitted Phases	
Actuated Green, G (s)	42.0
Effective Green, g (s)	42.0
Actuated g/C Ratio	0.30
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	836
v/s Ratio Prot	0.19
v/s Ratio Perm	
v/c Ratio	0.62
Uniform Delay, d1	42.1
Progression Factor	1.00
Incremental Delay, d2	3.4
Delay (s)	45.5
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	315	816	487	568	780	207	2	432	1202	349	174
Future Volume (vph)	2	315	816	487	568	780	207	2	432	1202	349	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0
Lane Util. Factor		1.00	0.91	0.88	0.97	0.91	1.00		0.97	0.91	1.00	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95
Satd. Flow (prot)		1770	5085	2787	3433	5085	1583		3433	5085	1583	1770
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95
Satd. Flow (perm)		1770	5085	2787	3433	5085	1583		3433	5085	1583	1770
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	332	859	513	598	821	218	2	455	1265	367	183
RTOR Reduction (vph)	0	0	0	46	0	0	52	0	0	0	37	0
Lane Group Flow (vph)	0	334	859	467	598	821	166	0	457	1265	330	183
Turn Type	Prot	Prot	NA	pt+ov	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7!	7	4	4 5!	3	8	1!	5!	5	2	3!	1
Permitted Phases							8				2	
Actuated Green, G (s)		32.6	31.6	62.9	30.2	29.2	48.7		24.3	50.7	80.9	19.5
Effective Green, g (s)		32.6	31.6	62.9	30.2	29.2	48.7		24.3	50.7	80.9	19.5
Actuated g/C Ratio		0.20	0.20	0.39	0.19	0.18	0.30		0.15	0.32	0.51	0.12
Clearance Time (s)		7.0	7.0		7.0	7.0	7.0		7.0	7.0	7.0	7.0
Vehicle Extension (s)		1.5	2.0		1.5	2.0	3.0		3.0	3.0	1.5	3.0
Lane Grp Cap (vph)		360	1004	1095	647	928	551		521	1611	869	215
v/s Ratio Prot		c0.19	c0.17	0.17	0.17	0.16	0.04		c0.13	c0.25	0.07	0.10
v/s Ratio Perm							0.07				0.14	
v/c Ratio		0.93	0.86	0.43	0.92	0.88	0.30		0.88	0.79	0.38	0.85
Uniform Delay, d1		62.5	62.0	35.4	63.8	63.8	42.6		66.4	49.7	24.2	68.8
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		29.0	7.0	0.1	18.7	9.8	0.3		15.3	3.9	0.1	26.2
Delay (s)		91.6	69.0	35.5	82.5	73.6	42.9		81.7	53.6	24.3	95.0
Level of Service		F	E	D	F	E	D		F	D	C	F
Approach Delay (s)			63.3			72.8				54.6		
Approach LOS			E			E				D		

Intersection Summary			
HCM 2000 Control Delay	61.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	995	224
Future Volume (vph)	995	224
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	7.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1047	236
RTOR Reduction (vph)	0	38
Lane Group Flow (vph)	1047	198
Turn Type	NA	pm+ov
Protected Phases	6	7!
Permitted Phases		6
Actuated Green, G (s)	45.9	78.5
Effective Green, g (s)	45.9	78.5
Actuated g/C Ratio	0.29	0.49
Clearance Time (s)	7.0	7.0
Vehicle Extension (s)	3.0	1.5
Lane Grp Cap (vph)	1458	845
v/s Ratio Prot	0.21	0.05
v/s Ratio Perm		0.08
v/c Ratio	0.72	0.23
Uniform Delay, d1	51.2	23.5
Progression Factor	1.00	1.00
Incremental Delay, d2	3.1	0.1
Delay (s)	54.3	23.5
Level of Service	D	C
Approach Delay (s)	54.4	
Approach LOS	D	

Intersection Summary

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	819	247	151	492	293	704	1198
v/c Ratio	0.55	0.25	0.26	0.71	0.40	0.99	0.56
Control Delay	42.7	26.1	2.6	64.3	5.2	67.2	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	27.9	3.2
Total Delay	42.7	26.1	2.6	64.3	5.2	95.1	10.1
Queue Length 50th (ft)	221	63	0	159	0	340	382
Queue Length 95th (ft)	266	102	21	202	63	#471	442
Internal Link Dist (ft)		85		378			263
Turn Bay Length (ft)					150		
Base Capacity (vph)	1497	976	571	690	730	711	2123
Starvation Cap Reductn	0	0	0	0	0	58	796
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.25	0.26	0.71	0.40	1.08	0.90

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	617	383	714	160	1151	1279	881
v/c Ratio	0.83	1.03	0.90	0.28	0.33	0.67	0.73
Control Delay	62.6	100.1	52.8	8.9	1.3	44.9	21.1
Queue Delay	0.0	0.0	0.0	0.8	0.2	0.8	0.0
Total Delay	62.6	100.1	52.8	9.6	1.5	45.7	21.1
Queue Length 50th (ft)	278	~368	257	13	0	296	172
Queue Length 95th (ft)	350	#595	#376	m22	0	338	263
Internal Link Dist (ft)		90			263	951	
Turn Bay Length (ft)							125
Base Capacity (vph)	747	373	792	581	3450	1922	1201
Starvation Cap Reductn	0	0	0	213	1378	0	0
Spillback Cap Reductn	0	0	0	0	0	329	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	1.03	0.90	0.43	0.56	0.80	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	334	859	513	598	821	218	457	1265	367	183	1047	236
v/c Ratio	0.93	0.86	0.45	0.92	0.89	0.36	0.88	0.79	0.41	0.85	0.72	0.27
Control Delay	93.7	71.3	31.2	84.3	75.9	26.4	84.7	54.9	18.3	100.1	55.4	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.7	71.3	31.2	84.3	75.9	26.4	84.7	54.9	18.3	100.1	55.4	14.4
Queue Length 50th (ft)	340	318	186	316	309	107	243	462	178	189	375	88
Queue Length 95th (ft)	#498	373	244	#409	#381	183	#328	525	259	#312	432	143
Internal Link Dist (ft)		1236			1450			2383			1284	
Turn Bay Length (ft)	430		390	380		300	410		315	310		310
Base Capacity (vph)	398	1048	1130	686	934	613	538	1610	920	232	1459	913
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.82	0.45	0.87	0.88	0.36	0.85	0.79	0.40	0.79	0.72	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Nob Hill Road

HCM Signalized Intersection Capacity Analysis
14: Nob Hill Rd & SW 13th St

07/07/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	18	4	12	31	3	73	12	1119	20	140	42	1569
Future Volume (vph)	18	4	12	31	3	73	12	1119	20	140	42	1569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		7.0	7.0	7.0		7.0	7.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.89		1.00	0.86		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1649		1770	1594		1770	3539	1583		1770	3539
Flt Permitted	0.67	1.00		0.75	1.00		0.13	1.00	1.00		0.21	1.00
Satd. Flow (perm)	1249	1649		1390	1594		236	3539	1583		384	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	19	4	13	33	3	77	13	1178	21	147	44	1652
RTOR Reduction (vph)	0	12	0	0	73	0	0	0	5	0	0	0
Lane Group Flow (vph)	19	5	0	33	7	0	13	1178	16	0	191	1652
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	custom	pm+pt	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8			2		2	1	6	
Actuated Green, G (s)	8.3	8.3		8.3	8.3		112.8	111.1	111.1		122.6	116.0
Effective Green, g (s)	8.3	8.3		8.3	8.3		112.8	111.1	111.1		122.6	116.0
Actuated g/C Ratio	0.06	0.06		0.06	0.06		0.77	0.76	0.76		0.84	0.79
Clearance Time (s)	6.0	6.0		6.0	6.0		7.0	7.0	7.0		7.0	7.0
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	3.0	3.0		1.5	3.0
Lane Grp Cap (vph)	71	93		79	90		200	2693	1204		385	2811
v/s Ratio Prot		0.00			0.00		0.00	0.33			c0.02	c0.47
v/s Ratio Perm	0.02			c0.02			0.05		0.01		0.39	
v/c Ratio	0.27	0.05		0.42	0.08		0.07	0.44	0.01		0.50	0.59
Uniform Delay, d1	65.9	65.1		66.5	65.2		4.7	6.3	4.2		3.7	5.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.7	0.1		1.3	0.1		0.1	0.5	0.0		0.4	0.9
Delay (s)	66.7	65.2		67.8	65.4		4.8	6.8	4.2		4.0	6.7
Level of Service	E	E		E	E		A	A	A		A	A
Approach Delay (s)		66.0			66.1			6.7				6.4
Approach LOS		E			E			A				A

Intersection Summary			
HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	9
Future Volume (vph)	9
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	9
RTOR Reduction (vph)	2
Lane Group Flow (vph)	7
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	116.0
Effective Green, g (s)	116.0
Actuated g/C Ratio	0.79
Clearance Time (s)	7.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1257
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	3.1
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	3.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	156	5	130	15	6	49	18	76	1244	12	53	18
Future Volume (vph)	156	5	130	15	6	49	18	76	1244	12	53	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			7.0	7.0	7.0		7.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	0.95	1.00		1.00
Frt	1.00	0.86		1.00	0.87			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1593		1770	1612			1770	3539	1583		1770
Flt Permitted	0.72	1.00		0.61	1.00			0.10	1.00	1.00		0.18
Satd. Flow (perm)	1340	1593		1142	1612			180	3539	1583		339
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	164	5	137	16	6	52	19	80	1309	13	56	19
RTOR Reduction (vph)	0	35	0	0	45	0	0	0	0	4	0	0
Lane Group Flow (vph)	164	107	0	16	13	0	0	99	1309	9	0	75
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		4			8				2			
Permitted Phases	4			8			2	2		2	6	6
Actuated Green, G (s)	13.4	13.4		13.4	13.4			69.6	69.6	69.6		69.6
Effective Green, g (s)	13.4	13.4		13.4	13.4			69.6	69.6	69.6		69.6
Actuated g/C Ratio	0.14	0.14		0.14	0.14			0.72	0.72	0.72		0.72
Clearance Time (s)	6.0	6.0		6.0	6.0			7.0	7.0	7.0		7.0
Vehicle Extension (s)	2.0	2.0		2.0	2.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	187	222		159	225			130	2565	1147		245
v/s Ratio Prot		0.07			0.01				0.37			
v/s Ratio Perm	c0.12			0.01				c0.55		0.01		0.22
v/c Ratio	0.88	0.48		0.10	0.06			0.76	0.51	0.01		0.31
Uniform Delay, d1	40.5	38.1		36.0	35.8			8.1	5.8	3.7		4.7
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	33.0	0.6		0.1	0.0			33.7	0.7	0.0		3.2
Delay (s)	73.4	38.7		36.1	35.9			41.8	6.5	3.7		7.9
Level of Service	E	D		D	D			D	A	A		A
Approach Delay (s)		57.3			35.9				8.9			
Approach LOS		E			D				A			

Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	96.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1649	44
Future Volume (vph)	1649	44
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	7.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1736	46
RTOR Reduction (vph)	0	10
Lane Group Flow (vph)	1736	36
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	69.6	69.6
Effective Green, g (s)	69.6	69.6
Actuated g/C Ratio	0.72	0.72
Clearance Time (s)	7.0	7.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2565	1147
v/s Ratio Prot	0.49	
v/s Ratio Perm		0.02
v/c Ratio	0.68	0.03
Uniform Delay, d1	7.1	3.7
Progression Factor	1.00	1.00
Incremental Delay, d2	1.5	0.1
Delay (s)	8.6	3.8
Level of Service	A	A
Approach Delay (s)	8.4	
Approach LOS	A	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	335	28	321	0	0	0	0	835	667	837	1395	0
Future Volume (vph)	335	28	321	0	0	0	0	835	667	837	1395	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					7.0	7.0	7.0	7.0	
Lane Util. Factor	0.95	0.95	0.88					0.91	0.88	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1698	2787					5085	2787	3433	3539	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1698	2787					5085	2787	3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	353	29	338	0	0	0	0	879	702	881	1468	0
RTOR Reduction (vph)	0	0	145	0	0	0	0	0	534	0	0	0
Lane Group Flow (vph)	191	191	193	0	0	0	0	879	168	881	1468	0
Turn Type	Split	NA	Prot					NA	Prot	Prot	NA	
Protected Phases	1 6	1 6	1 6					4 5	4 5	2 3	2 3 4 5	
Permitted Phases												
Actuated Green, G (s)	40.0	40.0	40.0					36.0	36.0	52.5	96.0	
Effective Green, g (s)	32.5	32.5	32.5					36.0	36.0	52.5	88.5	
Actuated g/C Ratio	0.22	0.22	0.22					0.24	0.24	0.35	0.59	
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)	364	367	603					1220	668	1201	2088	
v/s Ratio Prot	c0.11	0.11	0.07					c0.17	0.06	c0.26	0.41	
v/s Ratio Perm												
v/c Ratio	0.52	0.52	0.32					0.72	0.25	0.73	0.70	
Uniform Delay, d1	51.9	51.9	49.5					52.4	46.1	42.6	21.5	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.43	0.79	
Incremental Delay, d2	0.6	0.6	0.1					1.8	0.1	0.9	0.4	
Delay (s)	52.6	52.5	49.6					54.2	46.2	19.1	17.5	
Level of Service	D	D	D					D	D	B	B	
Approach Delay (s)		51.1			0.0			50.6			18.1	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	34.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	43.0
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	704	162	1080	4	298	868	0	0	1524
Future Volume (vph)	0	0	0	704	162	1080	4	298	868	0	0	1524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.5	7.5	7.5		7.0	7.0			7.0
Lane Util. Factor				0.91	0.91	0.76		1.00	0.95			0.86
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.97	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1610	3278	3610		1770	3539			6408
Flt Permitted				0.95	0.97	1.00		0.95	1.00			1.00
Satd. Flow (perm)				1610	3278	3610		1770	3539			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	741	171	1137	4	314	914	0	0	1604
RTOR Reduction (vph)	0	0	0	0	0	296	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	370	542	841	0	318	914	0	0	1604
Turn Type				Split	NA	Prot	Prot	Prot	NA			NA
Protected Phases				3 4	3 4	3 4	5 6	5 6	1 2 5 6			1 2
Permitted Phases												
Actuated Green, G (s)				38.0	38.0	38.0		49.6	98.0			40.9
Effective Green, g (s)				38.0	38.0	38.0		49.6	90.5			40.9
Actuated g/C Ratio				0.25	0.25	0.25		0.33	0.60			0.27
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)				407	830	914		585	2135			1747
v/s Ratio Prot				0.23	0.17	c0.23		c0.18	0.26			c0.25
v/s Ratio Perm												
v/c Ratio				0.91	0.88dl	0.92		0.54	0.43			0.92
Uniform Delay, d1				54.3	50.1	54.5		41.0	15.9			52.9
Progression Factor				1.00	1.00	1.00		0.26	0.59			1.00
Incremental Delay, d2				23.2	1.4	13.7		0.6	0.0			8.0
Delay (s)				77.5	51.5	68.2		11.2	9.4			60.9
Level of Service				E	D	E		B	A			E
Approach Delay (s)		0.0			65.5				9.8			57.7
Approach LOS		A			E				A			E

Intersection Summary			
HCM 2000 Control Delay	49.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	43.0
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	364
Future Volume (vph)	364
Ideal Flow (vphpl)	1900
Total Lost time (s)	7.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	383
RTOR Reduction (vph)	215
Lane Group Flow (vph)	168
Turn Type	Prot
Protected Phases	1 2
Permitted Phases	
Actuated Green, G (s)	40.9
Effective Green, g (s)	40.9
Actuated g/C Ratio	0.27
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	431
v/s Ratio Prot	0.11
v/s Ratio Perm	
v/c Ratio	0.39
Uniform Delay, d1	44.4
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	44.6
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	4	89	117	5	127	1806	3	1791	158
Future Volume (vph)	4	89	117	5	127	1806	3	1791	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		7.0	7.0	7.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00	0.91	1.00	0.91	1.00
Frt		1.00	0.85		1.00	1.00	1.00	1.00	0.85
Flt Protected		0.95	1.00		0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1770	1583		1770	5085	1770	5085	1583
Flt Permitted		0.95	1.00		0.07	1.00	0.11	1.00	1.00
Satd. Flow (perm)		1770	1583		137	5085	196	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	4	94	123	5	134	1901	3	1885	166
RTOR Reduction (vph)	0	0	111	0	0	0	0	0	59
Lane Group Flow (vph)	0	98	12	0	139	1901	3	1885	107
Turn Type	Prot	Prot	Perm	Perm	pm+pt	NA	Perm	NA	Perm
Protected Phases	4	4			5	2		6	
Permitted Phases			4	2	2		6		6
Actuated Green, G (s)		10.2	10.2		83.8	83.8	68.9	68.9	68.9
Effective Green, g (s)		10.2	10.2		83.8	83.8	68.9	68.9	68.9
Actuated g/C Ratio		0.10	0.10		0.78	0.78	0.64	0.64	0.64
Clearance Time (s)		6.0	6.0		7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)		2.0	2.0		1.5	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		168	150		227	3982	126	3274	1019
v/s Ratio Prot		c0.06			0.05	c0.37		0.37	
v/s Ratio Perm			0.01		c0.43		0.02		0.07
v/c Ratio		0.58	0.08		0.61	0.48	0.02	0.58	0.10
Uniform Delay, d1		46.4	44.1		11.5	4.0	6.9	10.8	7.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		3.3	0.1		3.4	0.4	0.3	0.7	0.2
Delay (s)		49.7	44.2		15.0	4.4	7.2	11.5	7.5
Level of Service		D	D		B	A	A	B	A
Approach Delay (s)		46.6				5.1		11.2	
Approach LOS		D				A		B	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	107.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	2	208	860	186	654	1100	359	4	207	1314	373	31
Future Volume (vph)	2	208	860	186	654	1100	359	4	207	1314	373	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0	7.0	7.0		6.5	6.5	6.5	
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	1.00		1.00	0.91	0.88	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		1770	5085	1583	3433	5085	1583		1770	5085	2787	
Flt Permitted		0.17	1.00	1.00	0.95	1.00	1.00		0.08	1.00	1.00	
Satd. Flow (perm)		326	5085	1583	3433	5085	1583		153	5085	2787	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	219	905	196	688	1158	378	4	218	1383	393	33
RTOR Reduction (vph)	0	0	0	77	0	0	130	0	0	0	32	0
Lane Group Flow (vph)	0	221	905	119	688	1158	248	0	222	1383	361	0
Turn Type	custom	pm+pt	NA	custom	Prot	NA	Perm	custom	pm+pt	NA	custom	Prot
Protected Phases		1	6		5	2			7	4		3
Permitted Phases	1	6		6 3			2	7	4		4 5	
Actuated Green, G (s)		50.8	34.2	57.0	34.4	52.0	52.0		67.2	48.6	89.5	
Effective Green, g (s)		50.8	34.2	57.0	34.4	52.0	52.0		67.2	48.6	89.5	
Actuated g/C Ratio		0.32	0.21	0.36	0.21	0.32	0.32		0.42	0.30	0.56	
Clearance Time (s)		7.0	7.0		7.0	7.0	7.0		6.5	6.5		
Vehicle Extension (s)		2.0	3.0		2.0	3.0	3.0		2.0	2.5		
Lane Grp Cap (vph)		253	1086	563	738	1652	514		252	1544	1558	
v/s Ratio Prot		0.09	0.18		c0.20	0.23			c0.10	c0.27		
v/s Ratio Perm		c0.19		0.08			0.16		0.27		0.13	
v/c Ratio		0.87	0.83	0.21	0.93	0.70	0.48		0.88	0.90	0.23	
Uniform Delay, d1		43.0	60.2	35.9	61.7	47.2	43.2		46.5	53.3	17.8	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2		25.9	7.5	0.1	18.3	2.5	3.2		27.4	8.5	0.0	
Delay (s)		68.9	67.7	35.9	80.0	49.7	46.5		73.9	61.8	17.9	
Level of Service		E	E	D	E	D	D		E	E	B	
Approach Delay (s)			63.2			58.5				54.5		
Approach LOS			E			E				D		

Intersection Summary			
HCM 2000 Control Delay	58.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	240	1108	172
Future Volume (vph)	240	1108	172
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	253	1166	181
RTOR Reduction (vph)	0	0	68
Lane Group Flow (vph)	286	1166	113
Turn Type	Prot	NA	custom
Protected Phases	3	8	
Permitted Phases			8 1
Actuated Green, G (s)	15.8	45.8	68.9
Effective Green, g (s)	15.8	45.8	68.9
Actuated g/C Ratio	0.10	0.29	0.43
Clearance Time (s)	6.5	6.5	
Vehicle Extension (s)	2.0	2.5	
Lane Grp Cap (vph)	339	1455	681
v/s Ratio Prot	0.08	0.23	
v/s Ratio Perm			0.07
v/c Ratio	0.84	0.80	0.17
Uniform Delay, d1	70.9	52.9	27.9
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	16.5	4.7	0.0
Delay (s)	87.4	57.6	28.0
Level of Service	F	E	C
Approach Delay (s)		59.6	
Approach LOS		E	

Intersection Summary

Queues
14: Nob Hill Rd & SW 13th St

07/07/2021

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	19	17	33	80	13	1178	21	191	1652	9
v/c Ratio	0.27	0.16	0.42	0.49	0.06	0.44	0.02	0.49	0.57	0.01
Control Delay	74.4	36.4	81.8	24.7	2.8	7.1	0.1	6.4	6.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
Total Delay	74.4	36.4	81.8	24.7	2.8	7.1	0.1	6.4	6.9	0.0
Queue Length 50th (ft)	18	4	31	3	1	183	0	22	168	0
Queue Length 95th (ft)	46	30	68	57	5	261	0	42	398	0
Internal Link Dist (ft)		737		793		965			615	
Turn Bay Length (ft)					195		200	190		130
Base Capacity (vph)	119	169	133	222	253	2693	1234	527	2913	1316
Starvation Cap Reductn	0	0	0	0	0	0	0	0	884	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.10	0.25	0.36	0.05	0.44	0.02	0.36	0.81	0.01

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	164	142	16	58	99	1309	13	75	1736	46
v/c Ratio	0.88	0.55	0.10	0.22	0.76	0.51	0.01	0.31	0.68	0.04
Control Delay	83.0	35.8	37.4	14.5	48.1	6.7	0.3	8.8	8.9	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Total Delay	83.0	35.8	37.4	14.5	48.1	6.7	0.3	8.8	9.4	1.7
Queue Length 50th (ft)	99	57	9	3	32	159	0	14	261	1
Queue Length 95th (ft)	#213	119	28	39	#146	201	1	38	330	10
Internal Link Dist (ft)		740		837		615			603	
Turn Bay Length (ft)	155		165		210		210	170		115
Base Capacity (vph)	195	267	166	279	131	2567	1157	245	2567	1158
Starvation Cap Reductn	0	0	0	0	0	0	0	0	356	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.53	0.10	0.21	0.76	0.51	0.01	0.31	0.79	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	191	191	338	879	702	881	1468
v/c Ratio	0.43	0.42	0.38	0.72	0.58	0.73	0.65
Control Delay	49.1	48.9	21.0	56.3	5.2	19.9	14.1
Queue Delay	0.0	0.0	0.0	3.1	0.0	50.9	49.0
Total Delay	49.1	48.9	21.0	59.5	5.2	70.8	63.1
Queue Length 50th (ft)	164	163	66	292	0	365	638
Queue Length 95th (ft)	247	246	117	344	54	m425	m750
Internal Link Dist (ft)		95		603			211
Turn Bay Length (ft)					430		
Base Capacity (vph)	442	446	869	1220	1202	1212	2264
Starvation Cap Reductn	0	0	0	0	0	487	1058
Spillback Cap Reductn	0	0	0	237	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.43	0.39	0.89	0.58	1.22	1.22

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	370	542	1137	318	914	1604	383
v/c Ratio	0.92	0.88dl	0.95	0.54	0.40	0.92	0.59
Control Delay	83.4	55.1	51.7	13.2	7.6	62.4	15.2
Queue Delay	0.0	0.0	0.0	8.2	2.1	45.7	0.0
Total Delay	83.4	55.1	51.7	21.4	9.7	108.1	15.2
Queue Length 50th (ft)	390	263	339	185	343	449	67
Queue Length 95th (ft)	#605	334	#459	334	405	#518	182
Internal Link Dist (ft)		29			211	441	
Turn Bay Length (ft)							
Base Capacity (vph)	402	819	1200	601	2299	1745	646
Starvation Cap Reductn	0	0	0	239	1194	0	0
Spillback Cap Reductn	0	0	0	0	0	341	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.66	0.95	0.88	0.83	1.14	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	98	123	139	1901	3	1885	166
v/c Ratio	0.58	0.47	0.61	0.48	0.02	0.58	0.15
Control Delay	59.7	14.1	22.3	4.7	10.3	12.5	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	14.1	22.3	4.7	10.3	12.5	2.0
Queue Length 50th (ft)	65	0	19	134	1	239	0
Queue Length 95th (ft)	116	53	85	189	6	364	29
Internal Link Dist (ft)	1080			3596		252	
Turn Bay Length (ft)			200				
Base Capacity (vph)	231	314	306	3983	126	3273	1078
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.39	0.45	0.48	0.02	0.58	0.15

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	221	905	196	688	1158	378	222	1383	393	286	1166	181
v/c Ratio	0.87	0.83	0.31	0.93	0.70	0.59	0.88	0.90	0.25	0.84	0.80	0.24
Control Delay	70.0	68.0	16.1	81.5	50.2	25.6	76.8	62.0	14.6	92.2	58.3	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.0	68.0	16.1	81.5	50.2	25.6	76.8	62.0	14.6	92.2	58.3	11.0
Queue Length 50th (ft)	153	339	55	363	394	165	177	513	90	153	425	38
Queue Length 95th (ft)	#293	397	123	#467	450	281	#309	578	125	#221	485	92
Internal Link Dist (ft)		1251			1420			634			1230	
Turn Bay Length (ft)	340		200	345		800	355		245	260		260
Base Capacity (vph)	268	1087	643	772	1652	643	277	1543	1625	356	1456	766
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.83	0.30	0.89	0.70	0.59	0.80	0.90	0.24	0.80	0.80	0.24

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Pine Island Road

HCM Signalized Intersection Capacity Analysis
20: Pine Island Rd & Nova Dr

07/08/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	2	233	121	216	289	189	218	2	271	1284	251	5
Future Volume (vph)	2	233	121	216	289	189	218	2	271	1284	251	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		7.0	7.0	7.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		1770	1863	1583	1770	1863	1583		1770	5085	1583	
Flt Permitted		0.43	1.00	1.00	0.33	1.00	1.00		0.06	1.00	1.00	
Satd. Flow (perm)		804	1863	1583	613	1863	1583		109	5085	1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	245	127	227	304	199	229	2	285	1352	264	5
RTOR Reduction (vph)	0	0	0	205	0	0	198	0	0	0	149	0
Lane Group Flow (vph)	0	247	127	22	304	199	31	0	287	1352	115	0
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	pm+pt	NA	Perm	pm+pt
Protected Phases	7	7	4		3	8		5	5	2		1
Permitted Phases	4	4		4	8		8	2	2		2	6
Actuated Green, G (s)		33.0	15.4	15.4	45.3	21.7	21.7		93.2	69.4	69.4	
Effective Green, g (s)		33.0	15.4	15.4	45.3	21.7	21.7		93.2	69.4	69.4	
Actuated g/C Ratio		0.21	0.10	0.10	0.28	0.14	0.14		0.58	0.43	0.43	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		7.0	7.0	7.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	3.0	
Lane Grp Cap (vph)		272	179	152	346	252	214		310	2205	686	
v/s Ratio Prot		0.10	0.07		c0.13	0.11			c0.14	0.27		
v/s Ratio Perm		0.09		0.01	c0.12		0.02		c0.40		0.07	
v/c Ratio		0.91	0.71	0.14	0.88	0.79	0.15		0.93	0.61	0.17	
Uniform Delay, d1		59.5	70.1	66.3	50.1	66.9	61.0		51.8	34.9	27.7	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2		30.8	10.0	0.2	20.9	14.0	0.1		31.8	1.3	0.5	
Delay (s)		90.3	80.2	66.4	71.0	81.0	61.1		83.5	36.2	28.2	
Level of Service		F	F	E	E	F	E		F	D	C	
Approach Delay (s)			79.1			70.6				42.2		
Approach LOS			E			E				D		

Intersection Summary			
HCM 2000 Control Delay	48.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	283	1613	317
Future Volume (vph)	283	1613	317
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0
Lane Util. Factor	1.00	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	5085	1583
Flt Permitted	0.11	1.00	1.00
Satd. Flow (perm)	209	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	298	1698	334
RTOR Reduction (vph)	0	0	186
Lane Group Flow (vph)	303	1698	148
Turn Type	pm+pt	NA	Perm
Protected Phases	1	6	
Permitted Phases	6		6
Actuated Green, G (s)	96.2	70.9	70.9
Effective Green, g (s)	96.2	70.9	70.9
Actuated g/C Ratio	0.60	0.44	0.44
Clearance Time (s)	7.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	372	2253	701
v/s Ratio Prot	0.13	0.33	
v/s Ratio Perm	0.36		0.09
v/c Ratio	0.81	0.75	0.21
Uniform Delay, d1	35.5	37.2	27.4
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	12.2	2.4	0.7
Delay (s)	47.7	39.6	28.1
Level of Service	D	D	C
Approach Delay (s)		39.0	
Approach LOS		D	

Intersection Summary

Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	157	49	6	68	1788	106	2127	269
Future Volume (vph)	157	49	6	68	1788	106	2127	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85		1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1583		1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00		0.07	1.00	0.08	1.00	1.00
Satd. Flow (perm)	1770	1583		136	5085	140	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	165	52	6	72	1882	112	2239	283
RTOR Reduction (vph)	0	45	0	0	0	0	0	108
Lane Group Flow (vph)	165	7	0	78	1882	112	2239	175
Turn Type	Prot	Perm	custom	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	4			5	2	1	6	
Permitted Phases		4	5	2		6		6
Actuated Green, G (s)	12.1	12.1		59.1	54.8	60.7	55.6	55.6
Effective Green, g (s)	12.1	12.1		59.1	54.8	60.7	55.6	55.6
Actuated g/C Ratio	0.13	0.13		0.66	0.61	0.67	0.62	0.62
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	2.0		1.5	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	237	212		167	3096	186	3141	977
v/s Ratio Prot	c0.09			0.02	0.37	c0.03	c0.44	
v/s Ratio Perm		0.00		0.28		0.37		0.11
v/c Ratio	0.70	0.03		0.47	0.61	0.60	0.71	0.18
Uniform Delay, d1	37.2	33.9		9.6	10.9	8.6	11.7	7.4
Progression Factor	1.00	1.00		1.00	1.00	1.52	1.15	3.67
Incremental Delay, d2	7.0	0.0		0.8	0.9	2.7	1.0	0.3
Delay (s)	44.2	33.9		10.4	11.8	15.7	14.5	27.5
Level of Service	D	C		B	B	B	B	C
Approach Delay (s)	41.7				11.8		15.9	
Approach LOS	D				B		B	

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	991	37	680	0	0	0	0	1628	488	763	1967	0
Future Volume (vph)	991	37	680	0	0	0	0	1628	488	763	1967	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					7.0	7.0	7.0	7.0	
Lane Util. Factor	0.91	0.91	0.88					0.81	0.88	0.97	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3221	1623	2787					7544	2787	3433	5085	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3221	1623	2787					7544	2787	3433	5085	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1043	39	716	0	0	0	0	1714	514	803	2071	0
RTOR Reduction (vph)	0	0	120	0	0	0	0	0	287	0	0	0
Lane Group Flow (vph)	720	362	596	0	0	0	0	1714	227	803	2071	0
Turn Type	Split	NA	Prot					NA	Prot	Prot	NA	
Protected Phases	1 6	1 6	1 6					4 5	4 5	2 3	2 3 4 5	
Permitted Phases												
Actuated Green, G (s)	38.0	38.0	38.0					40.0	40.0	81.0	128.0	
Effective Green, g (s)	38.0	38.0	38.0					40.0	40.0	81.0	128.0	
Actuated g/C Ratio	0.21	0.21	0.21					0.22	0.22	0.45	0.71	
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)	679	342	588					1676	619	1544	3616	
v/s Ratio Prot	c0.22	0.22	0.21					c0.23	0.08	0.23	c0.41	
v/s Ratio Perm												
v/c Ratio	1.06	1.06	1.01					1.02	0.37	0.52	0.57	
Uniform Delay, d1	71.0	71.0	71.0					70.0	59.3	35.5	12.7	
Progression Factor	1.00	1.00	1.00					0.88	0.93	0.63	1.49	
Incremental Delay, d2	51.7	64.9	40.6					26.0	0.1	0.0	0.0	
Delay (s)	122.7	135.9	111.6					87.7	55.4	22.4	18.9	
Level of Service	F	F	F					F	E	C	B	
Approach Delay (s)		120.9			0.0			80.3			19.8	
Approach LOS		F			A			F			B	

Intersection Summary			
HCM 2000 Control Delay	65.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	42.0
Intersection Capacity Utilization	138.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	999	626	1384	502	2116	0	0	1730	870
Future Volume (vph)	0	0	0	999	626	1384	502	2116	0	0	1730	870
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.0	7.0	7.0	7.0	7.0			7.0	7.0
Lane Util. Factor				0.95	0.95	0.76	0.97	0.91			0.76	0.76
Frt				1.00	1.00	0.85	1.00	1.00			0.97	0.85
Flt Protected				0.95	0.99	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1681	1748	3610	3433	5085			6865	1203
Flt Permitted				0.95	0.99	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1681	1748	3610	3433	5085			6865	1203
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	1052	659	1457	528	2227	0	0	1821	916
RTOR Reduction (vph)	0	0	0	0	0	90	0	0	0	0	25	113
Lane Group Flow (vph)	0	0	0	842	869	1367	528	2227	0	0	2254	345
Turn Type				Split	NA	Perm	Prot	NA			NA	Prot
Protected Phases				3 4	3 4		5 6	1 2 5 6			1 2	1 2
Permitted Phases						3 4						
Actuated Green, G (s)				74.0	74.0	74.0	39.0	92.0			46.0	46.0
Effective Green, g (s)				74.0	74.0	74.0	39.0	92.0			46.0	46.0
Actuated g/C Ratio				0.41	0.41	0.41	0.22	0.51			0.26	0.26
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)				691	718	1484	743	2599			1754	307
v/s Ratio Prot				c0.50	0.50		0.15	c0.44			c0.33	0.29
v/s Ratio Perm						0.38						
v/c Ratio				1.22	1.21	0.92	0.71	0.86			1.28	1.12
Uniform Delay, d1				53.0	53.0	50.2	65.3	38.3			67.0	67.0
Progression Factor				1.00	1.00	1.00	0.80	0.31			0.93	0.94
Incremental Delay, d2				111.2	107.4	9.6	0.3	0.3			130.4	74.9
Delay (s)				164.2	160.4	59.8	52.8	12.3			192.6	137.6
Level of Service				F	F	E	D	B			F	F
Approach Delay (s)		0.0			115.1			20.1			183.4	
Approach LOS		A			F			C			F	

Intersection Summary			
HCM 2000 Control Delay	106.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	42.0
Intersection Capacity Utilization	138.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	47	5	53	276	30	60	4	67	3326	103	6	45
Future Volume (vph)	47	5	53	276	30	60	4	67	3326	103	6	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	0.91	1.00		1.00
Frt	1.00	0.86		1.00	0.90			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1606		1770	1677			1770	5085	1583		1770
Flt Permitted	0.70	1.00		0.72	1.00			0.07	1.00	1.00		0.08
Satd. Flow (perm)	1295	1606		1336	1677			131	5085	1583		143
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	49	5	56	291	32	63	4	71	3501	108	6	47
RTOR Reduction (vph)	0	45	0	0	1	0	0	0	0	30	0	0
Lane Group Flow (vph)	49	16	0	291	94	0	0	75	3501	78	0	53
Turn Type	Perm	NA		Perm	NA		pm+pt	pm+pt	NA	Perm	Perm	Perm
Protected Phases		4			8		5	5	2			
Permitted Phases	4			8			2	2		2	6	6
Actuated Green, G (s)	18.0	18.0		18.0	18.0			61.0	61.0	61.0		52.0
Effective Green, g (s)	18.0	18.0		18.0	18.0			61.0	61.0	61.0		52.0
Actuated g/C Ratio	0.20	0.20		0.20	0.20			0.68	0.68	0.68		0.58
Clearance Time (s)	6.0	6.0		6.0	6.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	2.0	2.0		2.0	2.0			1.5	3.0	3.0		3.0
Lane Grp Cap (vph)	259	321		267	335			161	3446	1072		82
v/s Ratio Prot		0.01			0.06			0.02	c0.69			
v/s Ratio Perm	0.04			c0.22				0.29		0.05		0.37
v/c Ratio	0.19	0.05		1.09	0.28			0.47	1.02	0.07		0.65
Uniform Delay, d1	29.9	29.1		36.0	30.5			15.6	14.5	4.9		12.8
Progression Factor	1.00	1.00		1.00	1.00			1.16	1.11	0.99		1.00
Incremental Delay, d2	0.1	0.0		81.2	0.2			0.3	14.5	0.1		16.2
Delay (s)	30.1	29.1		117.2	30.7			18.5	30.6	4.9		29.0
Level of Service	C	C		F	C			B	C	A		C
Approach Delay (s)		29.5			95.9				29.6			
Approach LOS		C			F				C			

Intersection Summary			
HCM 2000 Control Delay	29.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	2344	51
Future Volume (vph)	2344	51
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	
Lane Util. Factor	0.91	
Frt	1.00	
Flt Protected	1.00	
Satd. Flow (prot)	5069	
Flt Permitted	1.00	
Satd. Flow (perm)	5069	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	2467	54
RTOR Reduction (vph)	3	0
Lane Group Flow (vph)	2518	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Actuated Green, G (s)	52.0	
Effective Green, g (s)	52.0	
Actuated g/C Ratio	0.58	
Clearance Time (s)	5.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	2928	
v/s Ratio Prot	0.50	
v/s Ratio Perm		
v/c Ratio	0.86	
Uniform Delay, d1	15.9	
Progression Factor	1.00	
Incremental Delay, d2	2.8	
Delay (s)	18.8	
Level of Service	B	
Approach Delay (s)	19.0	
Approach LOS	B	

Intersection Summary

Movement	WBU	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	2	450	521	3073	601	705	2032
Future Volume (vph)	2	450	521	3073	601	705	2032
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)		15%		0%			0%
Total Lost time (s)		6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor		0.94	0.88	0.91	0.88	0.97	0.91
Frt		1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		4616	2578	5085	2787	3433	5085
Flt Permitted		0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		4616	2578	5085	2787	3433	5085
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	474	548	3235	633	742	2139
RTOR Reduction (vph)	0	0	1	0	180	0	0
Lane Group Flow (vph)	0	476	547	3235	453	742	2139
Turn Type	Prot	Prot	pt+ov	NA	Prot	Prot	NA
Protected Phases	4	4	4 1	2	2	1	1 2
Permitted Phases							
Actuated Green, G (s)		15.5	55.5	91.5	91.5	33.5	131.5
Effective Green, g (s)		15.5	55.5	91.5	91.5	33.5	131.5
Actuated g/C Ratio		0.10	0.35	0.57	0.57	0.21	0.82
Clearance Time (s)		6.5		6.5	6.5	6.5	
Vehicle Extension (s)		2.0		3.0	3.0	1.5	
Lane Grp Cap (vph)		447	894	2907	1593	718	4179
v/s Ratio Prot		c0.10	0.21	c0.64	0.16	c0.22	0.42
v/s Ratio Perm							
v/c Ratio		1.06	0.61	1.11	0.28	1.03	0.51
Uniform Delay, d1		72.2	43.3	34.2	17.5	63.2	4.4
Progression Factor		1.00	1.00	1.00	1.00	1.20	0.15
Incremental Delay, d2		60.9	0.9	56.3	0.4	34.7	0.3
Delay (s)		133.1	44.2	90.5	18.0	110.6	0.9
Level of Service		F	D	F	B	F	A
Approach Delay (s)		85.5		78.7			29.2
Approach LOS		F		E			C

Intersection Summary			
HCM 2000 Control Delay	61.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	38	29	110	493	43	247	38	175	2840	293	10	116
Future Volume (vph)	38	29	110	493	43	247	38	175	2840	293	10	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0	6.0		6.0
Lane Util. Factor	1.00	1.00		0.97	1.00			1.00	0.91	1.00		1.00
Frt	1.00	0.88		1.00	0.87			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1642		3433	1625			1770	5085	1583		1770
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (perm)	1770	1642		3433	1625			1770	5085	1583		1770
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	31	116	519	45	260	40	184	2989	308	11	122
RTOR Reduction (vph)	0	83	0	0	99	0	0	0	0	61	0	0
Lane Group Flow (vph)	40	64	0	519	206	0	0	224	2989	247	0	133
Turn Type	Prot	NA		Prot	NA		Prot	Prot	NA	Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases										2		
Actuated Green, G (s)	4.8	8.2		24.0	27.4			22.7	91.8	91.8		12.0
Effective Green, g (s)	4.8	8.2		24.0	27.4			22.7	91.8	91.8		12.0
Actuated g/C Ratio	0.03	0.05		0.15	0.17			0.14	0.57	0.57		0.08
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0			1.5	3.0	3.0		1.5
Lane Grp Cap (vph)	53	84		514	278			251	2917	908		132
v/s Ratio Prot	0.02	0.04		c0.15	c0.13			c0.13	c0.59			0.08
v/s Ratio Perm										0.16		
v/c Ratio	0.75	0.76		1.01	0.74			0.89	1.02	0.27		1.01
Uniform Delay, d1	77.0	74.9		68.0	62.9			67.5	34.1	17.2		74.0
Progression Factor	1.00	1.00		1.00	1.00			0.72	1.53	2.16		1.00
Incremental Delay, d2	45.2	28.5		42.1	9.0			4.0	13.1	0.1		80.4
Delay (s)	122.2	103.4		110.1	72.0			52.5	65.3	37.3		154.4
Level of Service	F	F		F	E			D	E	D		F
Approach Delay (s)		107.4			96.0				62.0			
Approach LOS		F			F				E			

Intersection Summary			
HCM 2000 Control Delay	61.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	104.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1922	54
Future Volume (vph)	1922	54
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	
Lane Util. Factor	0.91	
Frt	1.00	
Flt Protected	1.00	
Satd. Flow (prot)	5064	
Flt Permitted	1.00	
Satd. Flow (perm)	5064	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	2023	57
RTOR Reduction (vph)	2	0
Lane Group Flow (vph)	2078	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Actuated Green, G (s)	81.1	
Effective Green, g (s)	81.1	
Actuated g/C Ratio	0.51	
Clearance Time (s)	6.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	2566	
v/s Ratio Prot	0.41	
v/s Ratio Perm		
v/c Ratio	0.81	
Uniform Delay, d1	33.0	
Progression Factor	1.00	
Incremental Delay, d2	2.9	
Delay (s)	35.9	
Level of Service	D	
Approach Delay (s)	43.0	
Approach LOS	D	

Intersection Summary

Queues
20: Pine Island Rd & Nova Dr

07/08/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	247	127	227	304	199	229	287	1352	264	303	1698	334
v/c Ratio	0.91	0.71	0.64	0.88	0.79	0.56	0.93	0.61	0.32	0.81	0.75	0.38
Control Delay	85.2	90.9	15.8	75.7	87.9	12.0	84.6	38.0	4.6	50.4	41.5	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	85.2	90.9	15.8	75.7	87.9	12.0	84.6	38.0	4.6	50.4	41.5	4.3
Queue Length 50th (ft)	215	131	0	275	204	0	244	406	0	205	560	0
Queue Length 95th (ft)	#327	200	85	#383	286	79	#421	507	62	322	662	65
Internal Link Dist (ft)		1181			1574			1361			3527	
Turn Bay Length (ft)	240		240	235		235	330		330	420		420
Base Capacity (vph)	276	244	404	354	326	465	342	2206	836	422	2254	887
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.52	0.56	0.86	0.61	0.49	0.84	0.61	0.32	0.72	0.75	0.38

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	165	52	78	1882	112	2239	283
v/c Ratio	0.69	0.20	0.43	0.60	0.55	0.70	0.26
Control Delay	52.2	11.7	15.6	12.5	19.5	14.8	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.2	11.7	15.6	12.5	19.5	14.8	3.5
Queue Length 50th (ft)	90	0	11	230	49	380	30
Queue Length 95th (ft)	152	31	40	318	m81	m451	m67
Internal Link Dist (ft)	953			3527		322	
Turn Bay Length (ft)			250		170		200
Base Capacity (vph)	295	307	200	3161	243	3210	1103
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.17	0.39	0.60	0.46	0.70	0.26

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	720	362	716	1714	514	803	2071
v/c Ratio	1.06	1.06	1.01	1.02	0.57	0.52	0.57
Control Delay	117.0	129.9	90.4	85.8	17.8	22.6	19.1
Queue Delay	0.0	0.0	0.0	30.8	0.0	53.7	49.4
Total Delay	117.0	129.9	90.4	116.6	17.8	76.4	68.5
Queue Length 50th (ft)	~510	~513	~410	~531	85	374	701
Queue Length 95th (ft)	#651	#754	#566	#580	121	m292	m499
Internal Link Dist (ft)		62		305			239
Turn Bay Length (ft)					270		
Base Capacity (vph)	679	342	708	1676	906	1544	3616
Starvation Cap Reductn	0	0	0	0	0	1000	2453
Spillback Cap Reductn	0	0	0	333	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.06	1.06	1.01	1.28	0.57	1.48	1.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	842	869	1457	528	2227	2279	458
v/c Ratio	1.22	1.21	0.93	0.71	0.86	1.28	1.09
Control Delay	155.6	152.0	55.8	53.4	12.5	176.1	95.9
Queue Delay	0.0	0.0	19.2	53.6	47.1	1.6	0.0
Total Delay	155.6	152.0	75.0	107.0	59.7	177.7	95.9
Queue Length 50th (ft)	~1277	~1311	662	248	882	~900	~626
Queue Length 95th (ft)	#1555	#1589	754	m234	m755	m#644	m#659
Internal Link Dist (ft)		59			239	580	
Turn Bay Length (ft)							300
Base Capacity (vph)	691	718	1573	743	2599	1779	420
Starvation Cap Reductn	0	0	0	279	958	0	0
Spillback Cap Reductn	0	0	164	0	357	632	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.22	1.21	1.03	1.14	1.36	1.99	1.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	49	61	291	95	75	3501	108	53	2521
v/c Ratio	0.19	0.17	1.09	0.28	0.42	1.02	0.10	0.63	0.84
Control Delay	32.2	11.1	117.7	32.9	8.9	31.4	1.2	52.5	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.0
Total Delay	32.2	11.1	117.7	32.9	8.9	45.9	1.2	52.5	19.2
Queue Length 50th (ft)	23	2	~188	46	11	~1134	3	19	419
Queue Length 95th (ft)	55	35	#343	90	m18	#1205	m8	#90	500
Internal Link Dist (ft)		1101		963		580			1529
Turn Bay Length (ft)	130		125		180		200	200	
Base Capacity (vph)	259	366	267	336	179	3446	1103	84	2988
Starvation Cap Reductn	0	0	0	0	0	126	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.17	1.09	0.28	0.42	1.05	0.10	0.63	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	476	548	3235	633	742	2139
v/c Ratio	1.06	0.61	1.11	0.36	1.03	0.51
Control Delay	127.1	46.8	89.4	6.1	106.1	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	127.1	46.8	89.4	6.1	106.1	0.9
Queue Length 50th (ft)	~193	269	~1413	56	~420	31
Queue Length 95th (ft)	#274	343	#1474	96	m#527	m32
Internal Link Dist (ft)	1164		1529			1381
Turn Bay Length (ft)	300			350	300	
Base Capacity (vph)	447	894	2907	1774	718	4179
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.61	1.11	0.36	1.03	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	40	147	519	305	224	2989	308	133	2080
v/c Ratio	0.61	0.94	1.01	0.81	0.90	1.01	0.31	1.01	0.80
Control Delay	110.7	88.4	108.2	56.2	53.6	57.7	18.9	151.2	35.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	110.7	88.4	108.2	56.2	53.6	57.7	18.9	151.2	35.2
Queue Length 50th (ft)	42	62	~287	199	218	~1072	182	~142	662
Queue Length 95th (ft)	#102	#212	#412	#366	m208	m968	m167	#292	726
Internal Link Dist (ft)		1005		1200		1381			1136
Turn Bay Length (ft)	80		178		200		180	150	
Base Capacity (vph)	66	156	514	377	276	2955	980	132	2608
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.94	1.01	0.81	0.81	1.01	0.31	1.01	0.80

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

University Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	222	5	261	48	13	11	7	198	3236	16	15	5
Future Volume (vph)	222	5	261	48	13	11	7	198	3236	16	15	5
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)		6.0	6.0	6.0	6.0			7.0	7.0			7.0
Lane Util. Factor		1.00	1.00	1.00	1.00			0.97	0.86			1.00
Frpb, ped/bikes		1.00	0.98	1.00	1.00			1.00	1.00			1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00			1.00	1.00			1.00
Frt		1.00	0.85	1.00	0.93			1.00	1.00			1.00
Flt Protected		0.95	1.00	0.95	1.00			0.95	1.00			0.95
Satd. Flow (prot)		1823	1615	1852	1815			3559	6637			1852
Flt Permitted		0.71	1.00	0.95	1.00			0.95	1.00			0.95
Satd. Flow (perm)		1361	1615	1852	1815			3559	6637			1852
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	234	5	275	51	14	12	7	208	3406	17	16	5
RTOR Reduction (vph)	0	0	137	0	11	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	239	138	51	15	0	0	215	3423	0	0	21
Confl. Peds. (#/hr)			3									
Heavy Vehicles (%)	2%	0%	1%	0%	0%	0%	0%	1%	1%	0%	0%	0%
Turn Type	Perm	NA	Perm	Split	NA		Prot	Prot	NA		Prot	Prot
Protected Phases		4		8	8		5	5	2		1	1
Permitted Phases	4		4									
Actuated Green, G (s)		33.0	33.0	7.8	7.8			16.4	89.7			3.5
Effective Green, g (s)		33.0	33.0	7.8	7.8			16.4	89.7			3.5
Actuated g/C Ratio		0.21	0.21	0.05	0.05			0.10	0.56			0.02
Clearance Time (s)		6.0	6.0	6.0	6.0			7.0	7.0			7.0
Vehicle Extension (s)		2.0	2.0	2.0	2.0			1.5	3.0			1.5
Lane Grp Cap (vph)		280	333	90	88			364	3720			40
v/s Ratio Prot				c0.03	0.01			c0.06	c0.52			0.01
v/s Ratio Perm		c0.18	0.09									
v/c Ratio		0.85	0.41	0.57	0.17			0.59	0.92			0.53
Uniform Delay, d1		61.2	55.1	74.4	73.0			68.6	31.9			77.4
Progression Factor		1.00	1.00	1.00	1.00			1.22	1.15			1.08
Incremental Delay, d2		20.8	0.3	4.8	0.3			1.3	3.8			0.5
Delay (s)		82.0	55.4	79.2	73.3			85.0	40.4			84.0
Level of Service		F	E	E	E			F	D			F
Approach Delay (s)		67.8			77.2				43.1			
Approach LOS		E			E				D			

Intersection Summary			
HCM 2000 Control Delay	62.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3367	128
Future Volume (vph)	3367	128
Ideal Flow (vphpl)	1950	1950
Total Lost time (s)	7.0	7.0
Lane Util. Factor	0.86	1.00
Frpb, ped/bikes	1.00	1.00
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	6642	1594
Flt Permitted	1.00	1.00
Satd. Flow (perm)	6642	1594
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	3544	135
RTOR Reduction (vph)	0	57
Lane Group Flow (vph)	3544	78
Confl. Peds. (#/hr)		
Heavy Vehicles (%)	1%	4%
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	76.8	76.8
Effective Green, g (s)	76.8	76.8
Actuated g/C Ratio	0.48	0.48
Clearance Time (s)	7.0	7.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	3188	765
v/s Ratio Prot	c0.53	
v/s Ratio Perm		0.05
v/c Ratio	1.11	0.10
Uniform Delay, d1	41.6	22.7
Progression Factor	0.78	0.97
Incremental Delay, d2	50.8	0.0
Delay (s)	83.2	22.0
Level of Service	F	C
Approach Delay (s)	81.0	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	243	300	294	3214	3359	200
Future Volume (vph)	243	300	294	3214	3359	200
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950
Total Lost time (s)	6.0	6.0	7.0	7.0	7.0	7.0
Lane Util. Factor	0.97	1.00	0.97	0.86	0.86	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3523	1634	3390	6576	6576	1641
Flt Permitted	0.95	1.00	0.04	1.00	1.00	1.00
Satd. Flow (perm)	3523	1634	128	6576	6576	1641
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	256	316	309	3383	3536	211
RTOR Reduction (vph)	0	119	0	0	0	37
Lane Group Flow (vph)	256	197	309	3383	3536	174
Confl. Peds. (#/hr)		1				
Heavy Vehicles (%)	2%	0%	6%	2%	2%	1%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	22.5	22.5	124.5	124.5	104.5	104.5
Effective Green, g (s)	22.5	22.5	124.5	124.5	104.5	104.5
Actuated g/C Ratio	0.14	0.14	0.78	0.78	0.65	0.65
Clearance Time (s)	6.0	6.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	2.0	2.0	2.0	3.0	3.0	3.0
Lane Grp Cap (vph)	495	229	364	5116	4294	1071
v/s Ratio Prot	0.07		0.07	c0.51	0.54	
v/s Ratio Perm		c0.12	c0.59			0.11
v/c Ratio	0.52	0.86	0.85	0.66	0.82	0.16
Uniform Delay, d1	63.7	67.2	55.0	8.1	20.8	10.8
Progression Factor	1.00	1.00	0.62	2.06	0.59	0.08
Incremental Delay, d2	0.4	25.9	1.7	0.1	0.2	0.0
Delay (s)	64.1	93.1	35.8	16.7	12.5	0.9
Level of Service	E	F	D	B	B	A
Approach Delay (s)	80.1			18.3	11.8	
Approach LOS	F			B	B	

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	7	294	423	1030	897	441	504	409	2711	879	2	359
Future Volume (vph)	7	294	423	1030	897	441	504	409	2711	879	2	359
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)		6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0		7.0
Lane Util. Factor		0.97	0.95	0.88	0.94	0.95	1.00	0.97	0.86	0.88		0.97
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)		3594	3668	2888	5172	3668	1641	3558	6576	2860		3558
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)		3594	3668	2888	5172	3668	1641	3558	6576	2860		3558
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	7	309	445	1084	944	464	531	431	2854	925	2	378
RTOR Reduction (vph)	0	0	0	82	0	0	49	0	0	27	0	0
Lane Group Flow (vph)	0	316	445	1002	944	464	482	431	2854	898	0	380
Confl. Peds. (#/hr)				1						1		
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	0%	1%
Turn Type	Prot	Prot	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	pt+ov	Prot	Prot
Protected Phases	7!	7	4	4 5	3	8	1!	5	2	2 3	1!	1
Permitted Phases							8					
Actuated Green, G (s)		14.5	27.5	47.0	25.5	38.5	51.5	13.0	67.0	99.5		13.0
Effective Green, g (s)		14.5	27.5	47.0	25.5	38.5	51.5	13.0	67.0	99.5		13.0
Actuated g/C Ratio		0.09	0.17	0.29	0.16	0.24	0.32	0.08	0.42	0.62		0.08
Clearance Time (s)		6.5	6.5		6.5	6.5	7.0	7.0	7.0			7.0
Vehicle Extension (s)		1.5	2.0		1.5	2.0	1.5	1.5	3.0			1.5
Lane Grp Cap (vph)		325	630	848	824	882	528	289	2753	1778		289
v/s Ratio Prot		0.09	0.12	c0.35	c0.18	0.13	0.07	c0.12	0.43	0.31		0.11
v/s Ratio Perm							0.22					
v/c Ratio		0.97	0.71	1.18	1.15	0.53	0.91	1.49	1.04	0.50		1.31
Uniform Delay, d1		72.5	62.4	56.5	67.2	52.8	52.1	73.5	46.5	16.7		73.5
Progression Factor		1.24	0.86	0.74	1.05	0.77	0.77	1.00	1.00	1.00		1.24
Incremental Delay, d2		37.9	2.5	92.0	78.2	0.2	18.1	238.6	27.6	0.1		155.0
Delay (s)		127.6	56.3	134.1	149.1	40.9	58.2	312.1	74.1	16.8		246.3
Level of Service		F	E	F	F	D	E	F	E	B		F
Approach Delay (s)			114.2			98.3			85.8			
Approach LOS			F			F			F			

Intersection Summary			
HCM 2000 Control Delay	112.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	113.9%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3215	128
Future Volume (vph)	3215	128
Ideal Flow (vphpl)	1950	1950
Total Lost time (s)	7.0	6.5
Lane Util. Factor	0.86	1.00
Frpb, ped/bikes	1.00	0.99
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	6576	1604
Flt Permitted	1.00	1.00
Satd. Flow (perm)	6576	1604
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	3384	135
RTOR Reduction (vph)	0	57
Lane Group Flow (vph)	3384	78
Confl. Peds. (#/hr)		3
Heavy Vehicles (%)	2%	2%
Turn Type	NA	pm+ov
Protected Phases	6	7!
Permitted Phases		6
Actuated Green, G (s)	67.0	81.5
Effective Green, g (s)	67.0	81.5
Actuated g/C Ratio	0.42	0.51
Clearance Time (s)	7.0	6.5
Vehicle Extension (s)	3.0	1.5
Lane Grp Cap (vph)	2753	817
v/s Ratio Prot	c0.51	0.01
v/s Ratio Perm		0.04
v/c Ratio	1.23	0.10
Uniform Delay, d1	46.5	20.2
Progression Factor	0.80	0.10
Incremental Delay, d2	105.1	0.0
Delay (s)	142.4	2.1
Level of Service	F	A
Approach Delay (s)	147.7	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	748	403	57	281	2868	0	0	2407	443
Future Volume (vph)	0	0	0	748	403	57	281	2868	0	0	2407	443
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)				7.0	7.0	7.0	7.0	7.0			7.0	7.0
Lane Util. Factor				0.91	0.91	1.00	0.97	0.91			0.86	1.00
Frt				1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	0.99	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3338	1743	1641	3594	5219			6576	1641
Flt Permitted				0.95	0.99	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3338	1743	1641	3594	5219			6576	1641
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	787	424	60	296	3019	0	0	2534	466
RTOR Reduction (vph)	0	0	0	0	0	46	0	0	0	0	0	44
Lane Group Flow (vph)	0	0	0	708	503	14	296	3019	0	0	2534	422
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	0%	2%	0%	0%	2%	1%
Turn Type				custom	NA	Perm	Prot	NA			NA	custom
Protected Phases				12	12		10	2 4 10			2 4	2 4
Permitted Phases				12		12						2 4
Actuated Green, G (s)				32.0	32.0	32.0	18.0	94.0			69.0	69.0
Effective Green, g (s)				32.0	32.0	32.0	18.0	94.0			69.0	69.0
Actuated g/C Ratio				0.23	0.23	0.23	0.13	0.67			0.49	0.49
Clearance Time (s)				7.0	7.0	7.0	7.0					
Vehicle Extension (s)				3.0	3.0	3.0	3.0					
Lane Grp Cap (vph)				762	398	375	462	3504			3241	808
v/s Ratio Prot				0.21	c0.29		0.08	c0.58			0.39	0.26
v/s Ratio Perm						0.01						
v/c Ratio				0.93	1.26	0.04	0.64	0.86			0.78	0.52
Uniform Delay, d1				52.9	54.0	42.0	57.9	17.9			29.3	24.3
Progression Factor				1.00	1.00	1.00	0.73	0.69			1.00	1.00
Incremental Delay, d2				17.5	137.4	0.0	0.3	0.2			1.3	0.6
Delay (s)				70.3	191.4	42.0	42.6	12.5			30.6	24.9
Level of Service				E	F	D	D	B			C	C
Approach Delay (s)		0.0			116.9			15.2			29.7	
Approach LOS		A			F			B			C	

Intersection Summary			
HCM 2000 Control Delay	38.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	301	1453	850	0	0	540
Future Volume (vph)	301	1453	850	0	0	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5			4.5
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	1.00			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1770	3539	3539			1611
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1770	3539	3539			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	317	1529	895	0	0	568
RTOR Reduction (vph)	0	0	0	0	0	74
Lane Group Flow (vph)	317	1529	895	0	0	494
Turn Type	Prot	NA	NA			Over
Protected Phases	7	4	8			7
Permitted Phases						
Actuated Green, G (s)	29.5	80.0	41.5			29.5
Effective Green, g (s)	29.5	80.0	41.5			29.5
Actuated g/C Ratio	0.37	1.00	0.52			0.37
Clearance Time (s)	4.5	4.5	4.5			4.5
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	652	3539	1835			594
v/s Ratio Prot	0.18	0.43	c0.25			c0.31
v/s Ratio Perm						
v/c Ratio	0.49	0.43	0.49			0.83
Uniform Delay, d1	19.4	0.0	12.4			23.0
Progression Factor	1.00	1.00	2.35			1.00
Incremental Delay, d2	0.6	0.1	0.1			9.3
Delay (s)	20.0	0.1	29.2			32.3
Level of Service	B	A	C			C
Approach Delay (s)		3.5	29.2		32.3	
Approach LOS		A	C		C	

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SWR
Lane Group Flow (vph)	317	1529	895	568
v/c Ratio	0.49	0.43	0.49	0.85
Control Delay	21.2	0.4	32.5	30.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	21.2	0.4	32.5	30.3
Queue Length 50th (ft)	115	0	261	200
Queue Length 95th (ft)	171	0	m218	313
Internal Link Dist (ft)		295	433	
Turn Bay Length (ft)				
Base Capacity (vph)	691	3539	1958	701
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.46	0.43	0.46	0.81

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBT	EBR2	WBT	WBR2	NBT	NBR2	SBT	SBR2	SEL	NWL	SWL
Lane Configurations											
Traffic Volume (vph)	423	1030	441	504	2711	879	3215	504	294	897	359
Future Volume (vph)	423	1030	441	504	2711	879	3215	504	294	897	359
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.95	1.00	0.86	1.00	0.86	1.00	1.00	0.97	1.00
Frt	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85	1.00	1.00	1.00
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Satd. Flow (prot)	3539	1583	3539	1583	6408	1583	6408	1583	1770	3433	1770
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Satd. Flow (perm)	3539	1583	3539	1583	6408	1583	6408	1583	1770	3433	1770
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	445	1084	464	531	2854	925	3384	531	309	944	378
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	445	1084	464	531	2854	925	3384	531	309	944	378
Turn Type	NA	Free	NA	Free	NA	Free	NA	Free	Prot	Prot	Prot
Protected Phases	4!		8!		2!		6!		4!	8!	6!
Permitted Phases		Free		Free!		Free!		Free			
Actuated Green, G (s)	25.0	80.0	25.0	80.0	47.0	80.0	47.0	80.0	25.0	25.0	47.0
Effective Green, g (s)	25.0	80.0	25.0	80.0	47.0	80.0	47.0	80.0	25.0	25.0	47.0
Actuated g/C Ratio	0.31	1.00	0.31	1.00	0.59	1.00	0.59	1.00	0.31	0.31	0.59
Clearance Time (s)	4.0		4.0		4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	1105	1583	1105	1583	3764	1583	3764	1583	553	1072	1039
v/s Ratio Prot	0.13		0.13		0.45		c0.53		0.17	c0.27	0.21
v/s Ratio Perm		0.68		0.34		0.58		0.34			
v/c Ratio	0.40	0.68	0.42	0.34	0.76	0.58	0.90	0.34	0.56	0.88	0.36
Uniform Delay, d1	21.6	0.0	21.8	0.0	12.3	0.0	14.4	0.0	22.9	26.1	8.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.68	1.12	1.00
Incremental Delay, d2	0.2	2.2	0.3	0.6	1.5	1.6	3.3	0.6	1.1	8.0	0.2
Delay (s)	21.8	2.2	22.0	0.6	13.8	1.6	17.7	0.6	39.5	37.1	8.9
Level of Service	C	A	C	A	B	A	B	A	D	D	A
Approach Delay (s)	7.9		10.6		10.8		15.4				8.9
Approach LOS	A		B		B		B				A

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.6%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Queues
University Drive and Peters Road

Lane Group	EBT	EBR2	WBT	WBR2	NBT	NBR2	SBT	SBR2	SEL	NWL	SWL
Lane Group Flow (vph)	445	1084	464	531	2854	925	3384	531	309	944	378
v/c Ratio	0.40	0.68	0.42	0.34	0.76	0.58	0.90	0.34	0.56	0.88	0.36
Control Delay	22.9	2.2	23.2	0.6	13.9	1.6	18.8	0.6	43.2	39.8	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Total Delay	22.9	2.2	23.2	0.6	13.9	1.6	19.1	0.6	43.2	39.8	9.9
Queue Length 50th (ft)	91	0	95	0	281	0	391	0	172	270	90
Queue Length 95th (ft)	132	0	137	0	327	0	455	0	252	#354	143
Internal Link Dist (ft)	433		404		343		521				224
Turn Bay Length (ft)		150		150		150		150			
Base Capacity (vph)	1105	1583	1105	1583	3767	1583	3767	1583	553	1072	1040
Starvation Cap Reductn	0	0	0	0	0	0	75	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.68	0.42	0.34	0.76	0.58	0.92	0.34	0.56	0.88	0.36

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	412	3005	0	361	3343	0	0	504
Future Volume (vph)	0	0	412	3005	0	361	3343	0	0	504
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.5	4.5		4.5	4.5			4.5
Lane Util. Factor			0.97	0.91		0.97	0.86			1.00
Frt			1.00	1.00		1.00	1.00			0.86
Flt Protected			0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)			3433	5085		3433	6408			1611
Flt Permitted			0.95	1.00		0.95	1.00			1.00
Satd. Flow (perm)			3433	5085		3433	6408			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	434	3163	0	380	3519	0	0	531
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	434	3163	0	380	3519	0	0	531
Turn Type			Prot	NA		Prot	NA			pm+ov
Protected Phases			5	2		1	6			1
Permitted Phases										2
Actuated Green, G (s)			14.0	64.0		15.6	65.6			79.6
Effective Green, g (s)			14.0	64.0		15.6	65.6			79.6
Actuated g/C Ratio			0.16	0.72		0.18	0.74			0.90
Clearance Time (s)			4.5	4.5		4.5	4.5			4.5
Vehicle Extension (s)			3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)			542	3673		604	4744			1611
v/s Ratio Prot			c0.13	c0.62		0.11	0.55			c0.06
v/s Ratio Perm										0.27
v/c Ratio			0.80	0.86		0.63	0.74			0.33
Uniform Delay, d1			36.0	9.0		33.8	6.6			0.6
Progression Factor			1.00	1.00		1.00	1.00			1.00
Incremental Delay, d2			8.3	2.9		2.1	1.1			0.1
Delay (s)			44.3	11.9		35.9	7.7			0.8
Level of Service			D	B		D	A			A
Approach Delay (s)	0.0			15.8			10.4		0.8	
Approach LOS	A			B			B		A	

Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	88.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBL	NBT	SBL	SBT	NWR
Lane Group Flow (vph)	434	3163	380	3519	531
v/c Ratio	0.80	0.86	0.63	0.74	0.33
Control Delay	48.1	13.0	38.4	8.0	0.5
Queue Delay	0.0	3.3	0.0	0.0	0.0
Total Delay	48.1	16.3	38.4	8.0	0.5
Queue Length 50th (ft)	121	403	102	276	0
Queue Length 95th (ft)	#187	550	143	315	0
Internal Link Dist (ft)		521		274	
Turn Bay Length (ft)					
Base Capacity (vph)	562	3673	717	4741	1587
Starvation Cap Reductn	0	415	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.77	0.97	0.53	0.74	0.33

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	782	0	897	945	0	879
Future Volume (vph)	782	0	897	945	0	879
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5		4.5
Lane Util. Factor	0.95		0.97	0.95		1.00
Frt	1.00		1.00	1.00		0.86
Flt Protected	1.00		0.95	1.00		1.00
Satd. Flow (prot)	3539		3433	3539		1611
Flt Permitted	1.00		0.95	1.00		1.00
Satd. Flow (perm)	3539		3433	3539		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	823	0	944	995	0	925
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	823	0	944	995	0	921
Turn Type	NA		Prot	NA		Over
Protected Phases	4		3	8		3
Permitted Phases						
Actuated Green, G (s)	20.6		50.4	80.0		50.4
Effective Green, g (s)	20.6		50.4	80.0		50.4
Actuated g/C Ratio	0.26		0.63	1.00		0.63
Clearance Time (s)	4.5		4.5	4.5		4.5
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	911		2162	3539		1014
v/s Ratio Prot	c0.23		0.27	0.28		c0.57
v/s Ratio Perm						
v/c Ratio	0.90		0.44	0.28		0.91
Uniform Delay, d1	28.7		7.6	0.0		12.8
Progression Factor	0.73		1.00	1.00		1.00
Incremental Delay, d2	10.7		0.1	0.0		11.5
Delay (s)	31.6		7.7	0.0		24.3
Level of Service	C		A	A		C
Approach Delay (s)	31.6			3.8	24.3	
Approach LOS	C			A	C	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBR
Lane Group Flow (vph)	823	944	995	925
v/c Ratio	0.90	0.44	0.28	0.91
Control Delay	35.7	8.2	0.2	27.2
Queue Delay	0.0	0.0	0.0	0.6
Total Delay	35.7	8.2	0.2	27.9
Queue Length 50th (ft)	115	105	0	335
Queue Length 95th (ft)	#314	140	0	#649
Internal Link Dist (ft)	404		198	
Turn Bay Length (ft)				
Base Capacity (vph)	912	2209	3539	1041
Starvation Cap Reductn	0	0	0	17
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.90	0.43	0.28	0.90

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	53	445	1084	142	464	531	64	2854	925	59	3384	135
v/c Ratio	0.84	0.43	1.15	1.31	0.41	0.90	1.12	0.95	1.08	1.04	1.13	0.17
Control Delay	146.6	39.9	109.0	252.3	31.5	43.9	142.0	40.5	69.0	163.6	90.9	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	146.6	39.9	109.0	252.3	31.5	43.9	142.0	40.5	69.0	163.6	90.9	4.3
Queue Length 50th (ft)	58	124	~645	~185	145	451	~76	849	~948	~65	~1179	12
Queue Length 95th (ft)	m#96	m205	#803	m#339	184	#662	m#74	m833	m#922	m#78	#1220	m16
Internal Link Dist (ft)		1456			2245			676			1005	
Turn Bay Length (ft)	210		125	340		670	500		450	330		220
Base Capacity (vph)	63	1043	941	108	1134	589	57	3000	854	57	3000	792
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.43	1.15	1.31	0.41	0.90	1.12	0.95	1.08	1.04	1.13	0.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	7	44	423	1030	135	441	504	61	2711	879	2	54
Future Volume (vph)	7	44	423	1030	135	441	504	61	2711	879	2	54
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)		6.5	6.5	7.0	6.5	6.5	6.5	7.0	7.0	7.0		7.0
Lane Util. Factor		1.00	0.95	0.88	1.00	0.95	1.00	1.00	0.86	1.00		1.00
Frpb, ped/bikes		1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)		1852	3668	2854	1834	3668	1641	1834	6576	1603		1835
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)		1852	3668	2854	1834	3668	1641	1834	6576	1603		1835
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	7	46	445	1084	142	464	531	64	2854	925	2	57
RTOR Reduction (vph)	0	0	0	49	0	0	82	0	0	123	0	0
Lane Group Flow (vph)	0	53	445	1035	142	464	449	64	2854	802	0	59
Confl. Peds. (#/hr)				1						1		
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	0%	1%
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	Prot
Protected Phases	7	7	4	5	3	8		5	2		1	1
Permitted Phases				4			8			2		
Actuated Green, G (s)		5.5	45.5	50.5	9.5	49.5	49.5	5.0	73.0	73.0		5.0
Effective Green, g (s)		5.5	45.5	50.5	9.5	49.5	49.5	5.0	73.0	73.0		5.0
Actuated g/C Ratio		0.03	0.28	0.32	0.06	0.31	0.31	0.03	0.46	0.46		0.03
Clearance Time (s)		6.5	6.5	7.0	6.5	6.5	6.5	7.0	7.0	7.0		7.0
Vehicle Extension (s)		1.5	2.0	1.5	1.5	2.0	2.0	1.5	3.0	3.0		1.5
Lane Grp Cap (vph)		63	1043	900	108	1134	507	57	3000	731		57
v/s Ratio Prot		0.03	0.12	c0.04	c0.08	0.13		0.03	0.43			0.03
v/s Ratio Perm				0.33			c0.27			0.50		
v/c Ratio		0.84	0.43	1.15	1.31	0.41	0.89	1.12	0.95	1.10		1.04
Uniform Delay, d1		76.8	46.6	54.8	75.2	43.7	52.5	77.5	41.8	43.5		77.5
Progression Factor		1.18	0.83	0.71	1.34	0.70	0.65	1.06	0.94	0.93		1.25
Incremental Delay, d2		48.1	0.1	77.4	185.0	0.1	13.8	74.5	1.0	45.8		78.7
Delay (s)		138.5	38.8	116.3	285.7	30.5	48.1	156.7	40.5	86.1		175.6
Level of Service		F	D	F	F	C	D	F	D	F		F
Approach Delay (s)			95.2			70.6			53.4			
Approach LOS			F			E			D			

Intersection Summary			
HCM 2000 Control Delay	74.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3215	128
Future Volume (vph)	3215	128
Ideal Flow (vphpl)	1950	1950
Total Lost time (s)	7.0	7.0
Lane Util. Factor	0.86	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	6576	1599
Flt Permitted	1.00	1.00
Satd. Flow (perm)	6576	1599
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	3384	135
RTOR Reduction (vph)	0	63
Lane Group Flow (vph)	3384	72
Confl. Peds. (#/hr)		3
Heavy Vehicles (%)	2%	2%
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	73.0	73.0
Effective Green, g (s)	73.0	73.0
Actuated g/C Ratio	0.46	0.46
Clearance Time (s)	7.0	7.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	3000	729
v/s Ratio Prot	c0.51	
v/s Ratio Perm		0.04
v/c Ratio	1.13	0.10
Uniform Delay, d1	43.5	24.8
Progression Factor	0.75	0.71
Incremental Delay, d2	59.3	0.1
Delay (s)	91.9	17.7
Level of Service	F	B
Approach Delay (s)	90.5	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	250	0	0	762	0	0	348	0	0	305	0	0
Future Volume (vph)	250	0	0	762	0	0	348	0	0	305	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	7.0			7.0			7.0			7.0		
Lane Util. Factor	1.00			1.00			1.00			1.00		
Frt	1.00			1.00			1.00			1.00		
Flt Protected	0.95			0.95			0.95			0.95		
Satd. Flow (prot)	1816			1816			1816			1816		
Flt Permitted	0.95			0.95			0.95			0.95		
Satd. Flow (perm)	1816			1816			1816			1816		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	263	0	0	802	0	0	366	0	0	321	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	263	0	0	802	0	0	366	0	0	321	0	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7			3			5			1		
Permitted Phases												
Actuated Green, G (s)	39.9			39.9			26.1			26.1		
Effective Green, g (s)	39.9			39.9			26.1			26.1		
Actuated g/C Ratio	0.50			0.50			0.33			0.33		
Clearance Time (s)	7.0			7.0			7.0			7.0		
Vehicle Extension (s)	3.0			3.0			3.0			3.0		
Lane Grp Cap (vph)	905			905			592			592		
v/s Ratio Prot	0.14			c0.44			c0.20			0.18		
v/s Ratio Perm												
v/c Ratio	0.29			0.89			0.62			0.54		
Uniform Delay, d1	11.8			18.0			22.7			22.1		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	0.2			10.4			1.9			1.0		
Delay (s)	11.9			28.4			24.7			23.1		
Level of Service	B			C			C			C		
Approach Delay (s)		11.9			28.4			24.7			23.1	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

64: University Drive Lefts & Peters Road Lefts

Lane Group	EBL	WBL	NBL	SBL
Lane Group Flow (vph)	263	802	366	321
v/c Ratio	0.29	0.89	0.62	0.54
Control Delay	12.1	30.9	29.5	27.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	12.1	30.9	29.5	27.4
Queue Length 50th (ft)	68	317	160	136
Queue Length 95th (ft)	110	#545	258	223
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)	976	976	592	592
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.27	0.82	0.62	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	592	28	806	0	0	0	0	2559	0	388	2770	0
Future Volume (vph)	592	28	806	0	0	0	0	2559	0	388	2770	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Lane Util. Factor	0.95	0.95	0.76					0.91		0.97	0.91	
Frt	1.00	1.00	0.85					1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1725	1734	3779					5219		3209	5271	
Flt Permitted	0.95	0.96	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1725	1734	3779					5219		3209	5271	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	623	29	848	0	0	0	0	2694	0	408	2916	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	324	328	848	0	0	0	0	2694	0	408	2916	0
Heavy Vehicles (%)	2%	4%	0%	0%	0%	0%	0%	2%	2%	12%	1%	0%
Turn Type	custom	NA	custom					NA		Prot	NA	
Protected Phases	12	12	12					4 10		2	2 4 10	
Permitted Phases	12		12									
Actuated Green, G (s)	32.0	32.0	32.0					66.0		21.0	94.0	
Effective Green, g (s)	32.0	32.0	32.0					66.0		21.0	94.0	
Actuated g/C Ratio	0.23	0.23	0.23					0.47		0.15	0.67	
Clearance Time (s)	7.0	7.0	7.0							7.0		
Vehicle Extension (s)	3.0	3.0	3.0							3.0		
Lane Grp Cap (vph)	394	396	863					2460		481	3539	
v/s Ratio Prot	0.19	0.19	c0.22					c0.52		0.13	c0.55	
v/s Ratio Perm												
v/c Ratio	0.82	0.83	0.98					1.10		0.85	0.82	
Uniform Delay, d1	51.3	51.4	53.7					37.0		57.9	16.9	
Progression Factor	1.00	1.00	1.00					1.00		1.14	0.91	
Incremental Delay, d2	13.0	13.3	26.2					50.0		7.5	0.9	
Delay (s)	64.3	64.7	79.9					87.0		73.4	16.2	
Level of Service	E	E	E					F		E	B	
Approach Delay (s)		73.2			0.0			87.0			23.2	
Approach LOS		E			A			F			C	

Intersection Summary			
HCM 2000 Control Delay	56.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	193	23	226	297	33	449	42	115	2971	183	341	2934
Future Volume (vph)	193	23	226	297	33	449	42	115	2971	183	341	2934
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0		7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	0.88		1.00	*0.75	*0.75	0.97	0.86
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	0.96	1.00	0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1760	1782	1658	1709	1739	2888		1852	5680	1243	3594	6642
Flt Permitted	0.95	0.96	1.00	0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1760	1782	1658	1709	1739	2888		1852	5680	1243	3594	6642
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	203	24	238	313	35	473	44	121	3127	193	359	3088
RTOR Reduction (vph)	0	0	103	0	0	171	0	0	0	63	0	0
Lane Group Flow (vph)	114	113	135	172	176	302	0	165	3127	130	359	3088
Heavy Vehicles (%)	0%	0%	0%	3%	0%	1%	0%	0%	3%	0%	0%	1%
Turn Type	Split	NA	Prot	Split	NA	pt+ov	Prot	Prot	NA	Perm	Prot	NA
Protected Phases	8	8	8	4	4	4 1	5	5	2		1	6
Permitted Phases										2		
Actuated Green, G (s)	17.8	17.8	17.8	23.3	23.3	54.4		24.0	67.8	67.8	25.1	68.9
Effective Green, g (s)	17.8	17.8	17.8	23.3	23.3	54.4		24.0	67.8	67.8	25.1	68.9
Actuated g/C Ratio	0.11	0.11	0.11	0.15	0.15	0.34		0.15	0.42	0.42	0.16	0.43
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0			7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			1.5	3.0	3.0	1.5	3.0
Lane Grp Cap (vph)	195	198	184	248	253	981		277	2406	526	563	2860
v/s Ratio Prot	0.06	0.06	c0.08	0.10	c0.10	0.10		0.09	c0.55		c0.10	0.46
v/s Ratio Perm										0.10		
v/c Ratio	0.58	0.57	0.73	0.69	0.70	0.31		0.60	1.30	0.25	0.64	1.08
Uniform Delay, d1	67.6	67.5	68.8	65.0	65.0	38.9		63.5	46.1	29.7	63.2	45.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.97	1.04	1.27	1.00	1.00
Incremental Delay, d2	2.9	2.5	12.2	6.6	6.5	0.1		2.2	137.9	1.1	1.7	43.0
Delay (s)	70.5	69.9	81.0	71.6	71.5	39.0		64.0	185.7	38.7	64.9	88.5
Level of Service	E	E	F	E	E	D		E	F	D	E	F
Approach Delay (s)		75.7			52.8				171.8			85.1
Approach LOS		E			D				F			F

Intersection Summary			
HCM 2000 Control Delay	117.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	94.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1950
Total Lost time (s)	7.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1658
Flt Permitted	1.00
Satd. Flow (perm)	1658
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	56
RTOR Reduction (vph)	32
Lane Group Flow (vph)	24
Heavy Vehicles (%)	0%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	68.9
Effective Green, g (s)	68.9
Actuated g/C Ratio	0.43
Clearance Time (s)	7.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	713
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.03
Uniform Delay, d1	26.3
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	26.4
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	83	22	27	349	15	569	4	55	1270	424	125	326
Future Volume (vph)	83	22	27	349	15	569	4	55	1270	424	125	326
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)		7.0		7.0	7.0	7.0		7.0	7.0	7.0		7.0
Lane Util. Factor		0.95		0.95	0.91	0.95		1.00	0.95	1.00		0.97
Frt		0.97		1.00	0.87	0.85		1.00	1.00	0.85		1.00
Flt Protected		0.97		0.95	0.99	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)		3381		1760	1543	1575		1818	3632	1658		3594
Flt Permitted		0.97		0.95	0.99	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)		3381		1760	1543	1575		1818	3632	1658		3594
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	23	28	367	16	599	4	58	1337	446	132	343
RTOR Reduction (vph)	0	17	0	0	99	188	0	0	0	157	0	0
Lane Group Flow (vph)	0	121	0	330	230	135	0	62	1337	289	0	475
Heavy Vehicles (%)	0%	18%	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	Prot	NA	Perm	Prot	Prot
Protected Phases	8	8		4	4		5	5	2		1	1
Permitted Phases						4				2		
Actuated Green, G (s)		10.6		36.4	36.4	36.4		8.3	63.0	63.0		22.0
Effective Green, g (s)		10.6		36.4	36.4	36.4		8.3	63.0	63.0		22.0
Actuated g/C Ratio		0.07		0.23	0.23	0.23		0.05	0.39	0.39		0.14
Clearance Time (s)		7.0		7.0	7.0	7.0		7.0	7.0	7.0		7.0
Vehicle Extension (s)		2.5		2.0	2.0	2.0		1.5	3.0	3.0		1.5
Lane Grp Cap (vph)		223		400	351	358		94	1430	652		494
v/s Ratio Prot		c0.04		c0.19	0.15			0.03	c0.37			c0.13
v/s Ratio Perm						0.09				0.17		
v/c Ratio		0.54		0.82	0.66	0.38		0.66	0.93	0.44		0.96
Uniform Delay, d1		72.4		58.8	56.1	52.2		74.5	46.5	35.6		68.6
Progression Factor		1.00		1.00	1.00	1.00		1.01	0.93	0.84		1.37
Incremental Delay, d2		2.1		12.4	3.3	0.2		10.6	11.4	1.9		11.4
Delay (s)		74.5		71.2	59.5	52.4		86.1	54.5	31.7		105.7
Level of Service		E		E	E	D		F	D	C		F
Approach Delay (s)		74.5			61.1				50.0			
Approach LOS		E			E				D			

Intersection Summary			
HCM 2000 Control Delay	52.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	728	52
Future Volume (vph)	728	52
Ideal Flow (vphpl)	1950	1950
Total Lost time (s)	7.0	7.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3668	1579
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3668	1579
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	766	55
RTOR Reduction (vph)	0	29
Lane Group Flow (vph)	766	26
Heavy Vehicles (%)	1%	5%
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	76.7	76.7
Effective Green, g (s)	76.7	76.7
Actuated g/C Ratio	0.48	0.48
Clearance Time (s)	7.0	7.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1758	756
v/s Ratio Prot	0.21	
v/s Ratio Perm		0.02
v/c Ratio	0.44	0.03
Uniform Delay, d1	27.4	22.1
Progression Factor	0.54	1.00
Incremental Delay, d2	0.2	0.0
Delay (s)	15.0	22.1
Level of Service	B	C
Approach Delay (s)	48.5	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	272	264	196	88	470	246	952	24	189	523	455	6
Future Volume (vph)	272	264	196	88	470	246	952	24	189	523	455	6
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	7.0	7.0	7.0		7.0	7.0	7.0		7.0	7.0	7.0	
Lane Util. Factor	0.97	0.95	1.00		0.97	1.00	0.88		1.00	0.95	1.00	
Frt	1.00	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)	3558	3632	1625		3594	1912	2888		1820	3668	1641	
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)	3558	3632	1625		3594	1912	2888		1820	3668	1641	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	286	278	206	93	495	259	1002	25	199	551	479	6
RTOR Reduction (vph)	0	0	123	0	0	0	350	0	0	0	321	0
Lane Group Flow (vph)	286	278	83	0	588	259	652	0	224	551	158	0
Heavy Vehicles (%)	1%	2%	2%	0%	0%	2%	1%	0%	2%	1%	1%	0%
Turn Type	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	Prot	NA	Perm	Prot
Protected Phases	7	4	5!	3	3	8	1!	5!	5	2		1!
Permitted Phases			4				8				2	
Actuated Green, G (s)	17.1	16.6	48.3		31.2	30.7	62.2		31.7	52.7	52.7	
Effective Green, g (s)	17.1	16.6	48.3		31.2	30.7	62.2		31.7	52.7	52.7	
Actuated g/C Ratio	0.11	0.10	0.30		0.19	0.19	0.39		0.20	0.33	0.33	
Clearance Time (s)	7.0	7.0	7.0		7.0	7.0	7.0		7.0	7.0	7.0	
Vehicle Extension (s)	1.5	2.0	1.5		1.5	2.0	1.5		1.5	3.0	3.0	
Lane Grp Cap (vph)	380	376	561		700	366	1249		360	1208	540	
v/s Ratio Prot	0.08	0.08	0.03		c0.16	c0.14	0.10		c0.12	c0.15		
v/s Ratio Perm			0.02				0.12				0.10	
v/c Ratio	0.75	0.74	0.15		0.84	0.71	0.52		0.62	0.46	0.29	
Uniform Delay, d1	69.4	69.6	40.8		62.0	60.5	37.5		58.7	42.3	39.8	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.19	0.88	0.85	
Incremental Delay, d2	7.3	6.4	0.0		8.4	5.0	0.2		0.6	0.3	0.3	
Delay (s)	76.7	76.0	40.9		70.4	65.5	37.7		70.5	37.4	34.3	
Level of Service	E	E	D		E	E	D		E	D	C	
Approach Delay (s)		66.9				52.0				42.1		
Approach LOS		E				D				D		

Intersection Summary			
HCM 2000 Control Delay	56.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	375	281	327
Future Volume (vph)	375	281	327
Ideal Flow (vphpl)	1950	1950	1950
Total Lost time (s)	7.0	10.0	7.0
Lane Util. Factor	0.97	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3559	3705	1658
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3559	3705	1658
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	395	296	344
RTOR Reduction (vph)	0	0	231
Lane Group Flow (vph)	401	296	113
Heavy Vehicles (%)	1%	0%	0%
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	31.5	52.5	52.5
Effective Green, g (s)	31.5	49.5	52.5
Actuated g/C Ratio	0.20	0.31	0.33
Clearance Time (s)	7.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	700	1146	544
v/s Ratio Prot	0.11	0.08	
v/s Ratio Perm			0.07
v/c Ratio	0.57	0.26	0.21
Uniform Delay, d1	58.2	41.5	38.8
Progression Factor	0.90	0.96	3.13
Incremental Delay, d2	0.6	0.5	0.7
Delay (s)	52.7	40.2	121.9
Level of Service	D	D	F
Approach Delay (s)		72.0	
Approach LOS		E	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	153	94	207	191	952	177	2905	167	373	2337	283
Future Volume (vph)	275	153	94	207	191	952	177	2905	167	373	2337	283
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Total Lost time (s)	6.0	6.0	7.0	6.0	6.0	6.0	7.0	7.0	6.0	7.0	7.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00	0.86	1.00	0.97	0.86	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1852	1931	1637	1816	1950	2917	1834	6576	1542	3594	6642	1625
Flt Permitted	0.42	1.00	1.00	0.41	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	822	1931	1637	792	1950	2917	1834	6576	1542	3594	6642	1625
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	289	161	99	218	201	1002	186	3058	176	393	2460	298
RTOR Reduction (vph)	0	0	50	0	0	47	0	0	53	0	0	87
Lane Group Flow (vph)	289	161	49	218	201	955	186	3058	123	393	2460	211
Confl. Peds. (#/hr)			9			1			9			4
Heavy Vehicles (%)	0%	1%	0%	2%	0%	0%	1%	2%	6%	0%	1%	0%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	8 1	5	2	3	1	6	7
Permitted Phases	4		4	8					2			6
Actuated Green, G (s)	38.4	24.4	42.8	43.6	27.0	50.0	18.4	76.0	92.6	17.0	74.6	88.6
Effective Green, g (s)	38.4	24.4	42.8	43.6	27.0	50.0	18.4	76.0	92.6	17.0	74.6	88.6
Actuated g/C Ratio	0.24	0.15	0.27	0.27	0.17	0.31	0.11	0.48	0.58	0.11	0.47	0.55
Clearance Time (s)	6.0	6.0	7.0	6.0	6.0		7.0	7.0	6.0	7.0	7.0	6.0
Vehicle Extension (s)	1.5	2.0	1.5	1.5	2.0		1.5	3.0	1.5	1.5	3.0	1.5
Lane Grp Cap (vph)	287	294	437	322	329	911	210	3123	892	381	3096	899
v/s Ratio Prot	c0.09	0.08	0.01	0.07	0.10	c0.33	0.10	c0.46	0.01	0.11	0.37	0.02
v/s Ratio Perm	0.15		0.02	0.11					0.07			0.11
v/c Ratio	1.01	0.55	0.11	0.68	0.61	1.05	0.89	0.98	0.14	1.03	0.79	0.23
Uniform Delay, d1	58.7	62.7	44.3	48.5	61.6	55.0	69.8	41.2	15.4	71.5	36.2	18.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	1.09	1.10
Incremental Delay, d2	54.9	1.1	0.0	4.4	2.4	43.4	32.1	11.9	0.0	54.4	2.2	0.0
Delay (s)	113.6	63.8	44.3	52.9	64.0	98.4	101.8	53.2	15.5	119.9	41.7	20.2
Level of Service	F	E	D	D	E	F	F	D	B	F	D	C
Approach Delay (s)		86.5			86.5			53.9			49.4	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	59.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	239	275	51	26	215	3423	21	3544	135
v/c Ratio	0.85	0.59	0.49	0.23	0.59	0.88	0.33	1.09	0.16
Control Delay	86.6	24.5	88.4	50.1	85.7	37.4	83.2	74.5	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.6	24.5	88.4	50.1	85.7	37.4	83.2	74.5	6.6
Queue Length 50th (ft)	244	95	53	14	118	436	23	~1282	16
Queue Length 95th (ft)	326	180	100	47	#246	#578	m17	m425	m7
Internal Link Dist (ft)	1442			1077		423		741	
Turn Bay Length (ft)					345		230		150
Base Capacity (vph)	327	519	219	226	364	3886	63	3238	832
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.53	0.23	0.12	0.59	0.88	0.33	1.09	0.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	256	316	309	3383	3536	211
v/c Ratio	0.52	0.91	0.85	0.66	0.82	0.19
Control Delay	66.5	66.9	30.1	18.2	13.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.5	66.9	30.1	18.2	13.3	0.5
Queue Length 50th (ft)	128	193	124	599	192	0
Queue Length 95th (ft)	170	#309	m127	m590	m159	m0
Internal Link Dist (ft)	1043			951	813	
Turn Bay Length (ft)			415			200
Base Capacity (vph)	638	409	391	5117	4295	1108
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.77	0.79	0.66	0.82	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	316	445	1084	944	464	531	431	2854	925	380	3384	135
v/c Ratio	0.97	0.71	1.16	1.15	0.53	0.83	1.49	1.04	0.51	1.31	1.23	0.15
Control Delay	125.8	59.6	114.9	138.5	42.9	41.9	284.9	72.6	16.7	218.3	138.9	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	125.8	59.6	114.9	138.5	42.9	41.9	284.9	72.6	16.7	218.3	138.9	0.6
Queue Length 50th (ft)	178	186	~713	~401	203	467	~320	~930	271	~268	~1250	1
Queue Length 95th (ft)	m#271	m268	#866	#497	248	#631	#435	#987	330	m#366	#1299	m1
Internal Link Dist (ft)		1456			2245			676			1005	
Turn Bay Length (ft)	210		125	340		670	500		450	330		220
Base Capacity (vph)	325	630	938	824	882	640	289	2753	1797	289	2753	878
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.71	1.16	1.15	0.53	0.83	1.49	1.04	0.51	1.31	1.23	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	708	503	60	296	3019	2534	466
v/c Ratio	0.93	1.26	0.12	0.64	0.86	0.78	0.55
Control Delay	72.2	181.0	0.5	43.2	12.8	31.5	22.5
Queue Delay	0.0	0.0	0.0	0.0	1.4	1.2	0.0
Total Delay	72.2	181.0	0.5	43.2	14.3	32.7	22.5
Queue Length 50th (ft)	349	~630	0	121	300	541	235
Queue Length 95th (ft)	#473	#875	0	m117	m281	586	340
Internal Link Dist (ft)		90			414	867	
Turn Bay Length (ft)				175			400
Base Capacity (vph)	762	398	483	462	3504	3241	852
Starvation Cap Reductn	0	0	0	0	290	0	0
Spillback Cap Reductn	0	0	0	0	0	449	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.93	1.26	0.12	0.64	0.94	0.91	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	324	328	848	2694	408	2916
v/c Ratio	0.82	0.83	0.98	1.10	0.85	0.82
Control Delay	69.2	69.7	80.1	85.6	75.6	16.9
Queue Delay	0.0	0.0	0.0	2.7	0.0	11.8
Total Delay	69.2	69.7	80.1	88.3	75.6	28.6
Queue Length 50th (ft)	296	302	339	~1013	169	989
Queue Length 95th (ft)	#456	#463	#456	#1096	m#244	m1047
Internal Link Dist (ft)		1302		123		414
Turn Bay Length (ft)	600		600		150	
Base Capacity (vph)	394	396	863	2460	481	3539
Starvation Cap Reductn	0	0	0	566	0	659
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.83	0.98	1.42	0.85	1.01

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	114	113	238	172	176	473	165	3127	193	359	3088	56
v/c Ratio	0.58	0.57	0.83	0.69	0.70	0.40	0.60	1.30	0.33	0.64	1.08	0.07
Control Delay	78.0	77.2	57.7	78.6	78.7	18.7	70.8	177.0	18.7	68.1	85.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	0.0
Total Delay	78.0	77.2	57.7	78.6	78.7	18.7	70.8	177.0	18.7	68.1	95.1	0.2
Queue Length 50th (ft)	122	121	130	182	186	91	164	~1387	76	183	~1049	0
Queue Length 95th (ft)	181	180	218	260	265	157	m#362	#1497	m144	#367	#1134	0
Internal Link Dist (ft)		1061			1056			377			212	
Turn Bay Length (ft)							410		220			
Base Capacity (vph)	440	445	501	258	262	1164	277	2405	589	564	2861	776
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	710	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.25	0.48	0.67	0.67	0.41	0.60	1.30	0.33	0.64	1.44	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	138	330	329	323	62	1337	446	475	766	55
v/c Ratio	0.57	0.82	0.73	0.59	0.58	0.93	0.55	0.96	0.43	0.07
Control Delay	72.0	76.5	45.4	19.1	92.5	54.6	14.7	103.7	15.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	17.0	0.2	0.0	0.0	0.0
Total Delay	72.0	76.5	45.4	19.1	92.5	71.6	15.0	103.7	15.1	0.2
Queue Length 50th (ft)	65	349	221	71	65	748	106	271	117	0
Queue Length 95th (ft)	102	#555	#376	193	m109	#851	162	m263	m115	m0
Internal Link Dist (ft)	1049		1161			212			534	
Turn Bay Length (ft)					250			455		145
Base Capacity (vph)	732	400	449	546	170	1430	809	494	1789	833
Starvation Cap Reductn	0	0	0	0	0	130	61	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.82	0.73	0.59	0.36	1.03	0.60	0.96	0.43	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	286	278	206	588	259	1002	224	551	479	401	296	344
v/c Ratio	0.75	0.74	0.30	0.84	0.71	0.64	0.62	0.46	0.56	0.57	0.26	0.44
Control Delay	82.0	81.7	8.5	73.0	70.9	16.2	73.5	37.7	3.4	56.7	41.5	14.6
Queue Delay	0.1	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.0	81.7	8.5	73.0	70.9	16.6	73.5	37.7	3.4	56.7	41.5	14.6
Queue Length 50th (ft)	152	151	21	308	257	206	231	175	40	202	120	74
Queue Length 95th (ft)	198	198	80	359	344	282	m237	m205	m44	m281	m157	m150
Internal Link Dist (ft)		1077			1208			655			355	
Turn Bay Length (ft)	200			370		180	400		400	290		230
Base Capacity (vph)	1445	612	676	1460	373	1574	361	1208	861	701	1145	775
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	252	0	0	0	0	205	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.45	0.30	0.40	0.69	0.73	0.62	0.46	0.56	0.57	0.26	0.44

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	289	161	99	218	201	1002	186	3058	176	393	2460	298
v/c Ratio	1.01	0.55	0.21	0.68	0.61	1.03	0.89	0.98	0.18	1.03	0.79	0.30
Control Delay	105.9	71.1	16.1	57.3	70.5	84.8	106.9	52.9	4.3	116.9	42.1	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	105.9	71.1	16.1	57.3	70.5	84.8	106.9	52.9	4.3	116.9	42.1	6.6
Queue Length 50th (ft)	~266	160	23	184	198	~603	193	900	19	~222	657	68
Queue Length 95th (ft)	#390	242	70	267	290	#756	#322	#956	51	#334	733	126
Internal Link Dist (ft)		934			869			1258			785	
Turn Bay Length (ft)	225		225	310		440	437		340	490		347
Base Capacity (vph)	287	294	493	337	329	976	229	3123	966	381	3098	996
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.55	0.20	0.65	0.61	1.03	0.81	0.98	0.18	1.03	0.79	0.30

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Davie Road

HCM Signalized Intersection Capacity Analysis
38: Davie Rd & Nova Dr

07/08/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	18	714	242	350	128	238	312	105	1171	130	66	427
Future Volume (vph)	18	714	242	350	128	238	312	105	1171	130	66	427
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0
Lane Util. Factor		0.97	1.00	1.00	1.00	1.00	1.00	0.97	0.91	1.00		0.97
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)		3433	1863	1583	1770	1863	1583	3433	5085	1583		3433
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)		3433	1863	1583	1770	1863	1583	3433	5085	1583		3433
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	19	752	255	368	135	251	328	111	1233	137	69	449
RTOR Reduction (vph)	0	0	0	71	0	0	72	0	0	78	0	0
Lane Group Flow (vph)	0	771	255	297	135	251	256	111	1233	59	0	518
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	Prot
Protected Phases	7!	7	4	5	3	8	1!	5	2	3	1!	1
Permitted Phases				4			8			2		
Actuated Green, G (s)		36.0	41.2	48.1	15.8	21.0	47.4	6.9	52.6	68.4		26.4
Effective Green, g (s)		36.0	41.2	48.1	15.8	21.0	47.4	6.9	52.6	68.4		26.4
Actuated g/C Ratio		0.22	0.26	0.30	0.10	0.13	0.30	0.04	0.33	0.43		0.16
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0
Vehicle Extension (s)		1.5	2.0	1.5	1.5	2.0	1.5	1.5	3.0	1.5		1.5
Lane Grp Cap (vph)		772	479	535	174	244	528	148	1671	736		566
v/s Ratio Prot		c0.22	0.14	0.02	0.08	c0.13	0.08	0.03	0.24	0.01		c0.15
v/s Ratio Perm				0.16			0.08			0.03		
v/c Ratio		1.00	0.53	0.55	0.78	1.03	0.49	0.75	0.74	0.08		0.92
Uniform Delay, d1		62.0	51.1	47.0	70.4	69.5	46.3	75.7	47.6	27.1		65.7
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.07
Incremental Delay, d2		31.8	0.6	0.7	17.7	65.2	0.3	17.1	3.0	0.0		7.1
Delay (s)		93.8	51.7	47.7	88.0	134.7	46.5	92.8	50.5	27.2		77.5
Level of Service		F	D	D	F	F	D	F	D	C		E
Approach Delay (s)			73.9			85.4			51.6			
Approach LOS			E			F			D			

Intersection Summary			
HCM 2000 Control Delay	48.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	103.3%	ICU Level of Service	G
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1444	1330
Future Volume (vph)	1444	1330
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.95	0.88
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	2787
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	2787
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1520	1400
RTOR Reduction (vph)	0	37
Lane Group Flow (vph)	1520	1363
Turn Type	NA	pt+ov
Protected Phases	6	6 7!
Permitted Phases		
Actuated Green, G (s)	72.1	114.1
Effective Green, g (s)	72.1	114.1
Actuated g/C Ratio	0.45	0.71
Clearance Time (s)	6.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	1594	1987
v/s Ratio Prot	c0.43	0.49
v/s Ratio Perm		
v/c Ratio	0.95	0.69
Uniform Delay, d1	42.3	12.9
Progression Factor	0.54	0.99
Incremental Delay, d2	5.4	0.2
Delay (s)	28.3	12.9
Level of Service	C	B
Approach Delay (s)	29.4	
Approach LOS	C	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	18	7	14	307	8	318	36	0	2153	231	70	371
Future Volume (vph)	18	7	14	307	8	318	36	0	2153	231	70	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0			6.0	6.0	6.0		6.0
Lane Util. Factor		1.00		1.00	1.00			1.00	0.91	1.00		0.97
Frt		0.95		1.00	0.85			1.00	1.00	0.85		1.00
Flt Protected		0.98		0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1731		1770	1590			1770	5085	1583		3433
Flt Permitted		0.58		0.73	1.00			0.05	1.00	1.00		0.95
Satd. Flow (perm)		1030		1360	1590			91	5085	1583		3433
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	19	7	15	323	8	335	38	0	2266	243	74	391
RTOR Reduction (vph)	0	11	0	0	69	0	0	0	0	50	0	0
Lane Group Flow (vph)	0	30	0	323	274	0	0	38	2266	193	0	465
Turn Type	Perm	NA		Perm	NA		custom	pm+pt	NA	Perm	Prot	Prot
Protected Phases		4			8			5	2		1	1
Permitted Phases	4			8			5	2		2		
Actuated Green, G (s)		38.0		38.0	38.0			86.0	82.0	82.0		22.0
Effective Green, g (s)		38.0		38.0	38.0			86.0	82.0	82.0		22.0
Actuated g/C Ratio		0.24		0.24	0.24			0.54	0.51	0.51		0.14
Clearance Time (s)		6.0		6.0	6.0			6.0	6.0	6.0		6.0
Vehicle Extension (s)		2.0		2.0	2.0			1.5	3.0	3.0		2.0
Lane Grp Cap (vph)		244		323	377			90	2606	811		472
v/s Ratio Prot					0.17			0.01	0.45			c0.14
v/s Ratio Perm		0.03		c0.24				0.21		0.12		
v/c Ratio		0.12		1.00	0.73			0.42	0.87	0.24		0.99
Uniform Delay, d1		47.9		61.0	56.2			36.9	34.3	21.7		68.8
Progression Factor		1.00		1.00	1.00			1.08	1.15	1.09		1.16
Incremental Delay, d2		0.1		50.1	5.8			0.8	2.8	0.4		25.6
Delay (s)		48.0		111.1	62.0			40.5	42.1	24.1		105.2
Level of Service		D		F	E			D	D	C		F
Approach Delay (s)		48.0			85.8				40.4			
Approach LOS		D			F				D			

Intersection Summary			
HCM 2000 Control Delay	42.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	100.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	2965	7
Future Volume (vph)	2965	7
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	
Lane Util. Factor	0.91	
Frt	1.00	
Flt Protected	1.00	
Satd. Flow (prot)	5084	
Flt Permitted	1.00	
Satd. Flow (perm)	5084	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	3121	7
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	3128	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Actuated Green, G (s)	100.0	
Effective Green, g (s)	100.0	
Actuated g/C Ratio	0.62	
Clearance Time (s)	6.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	3177	
v/s Ratio Prot	c0.62	
v/s Ratio Perm		
v/c Ratio	0.98	
Uniform Delay, d1	29.2	
Progression Factor	0.55	
Incremental Delay, d2	8.3	
Delay (s)	24.5	
Level of Service	C	
Approach Delay (s)	34.9	
Approach LOS	C	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	31	1388	0	0	0	0	1264	1295	0	2025	0
Future Volume (vph)	261	31	1388	0	0	0	0	1264	1295	0	2025	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	4.0					7.0	4.0		7.0	
Lane Util. Factor	1.00	1.00	1.00					0.91	1.00		0.95	
Frt	1.00	1.00	0.85					1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00					1.00	1.00		1.00	
Satd. Flow (prot)	1770	1863	1583					5085	1583		3539	
Flt Permitted	0.95	1.00	1.00					1.00	1.00		1.00	
Satd. Flow (perm)	1770	1863	1583					5085	1583		3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	275	33	1461	0	0	0	0	1331	1363	0	2132	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	275	33	1461	0	0	0	0	1331	1363	0	2132	0
Turn Type	custom	NA	Free					NA	Free		NA	
Protected Phases	1	1						3 4			2 3 4 5	
Permitted Phases	1		Free						Free			
Actuated Green, G (s)	24.0	24.0	160.0					39.0	160.0		122.0	
Effective Green, g (s)	24.0	24.0	160.0					39.0	160.0		122.0	
Actuated g/C Ratio	0.15	0.15	1.00					0.24	1.00		0.76	
Clearance Time (s)	7.0	7.0										
Vehicle Extension (s)	2.0	2.0										
Lane Grp Cap (vph)	265	279	1583					1239	1583		2698	
v/s Ratio Prot	0.16	0.02						c0.26			0.60	
v/s Ratio Perm			c0.92						0.86			
v/c Ratio	1.04	0.12	0.92					1.07	0.86		0.79	
Uniform Delay, d1	68.0	58.8	0.0					60.5	0.0		11.4	
Progression Factor	1.00	1.00	1.00					0.69	1.00		0.24	
Incremental Delay, d2	65.4	0.1	10.5					41.7	3.3		0.2	
Delay (s)	133.4	58.9	10.5					83.5	3.3		2.8	
Level of Service	F	E	B					F	A		A	
Approach Delay (s)		30.5			0.0			42.9			2.8	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	2025	2322	1525	0
Future Volume (vph)	0	0	2025	2322	1525	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	7.0	
Lane Util. Factor			0.97	0.91	0.94	
Frt			1.00	1.00	1.00	
Flt Protected			0.95	1.00	0.95	
Satd. Flow (prot)			3433	5085	4990	
Flt Permitted			0.95	1.00	0.95	
Satd. Flow (perm)			3433	5085	4990	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	2132	2444	1605	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2132	2444	1605	0
Turn Type			Split	NA	Prot	
Protected Phases			2 3	2 3	1 4 5	
Permitted Phases						
Actuated Green, G (s)			94.0	94.0	52.0	
Effective Green, g (s)			94.0	94.0	52.0	
Actuated g/C Ratio			0.59	0.59	0.32	
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)			2016	2987	1621	
v/s Ratio Prot			c0.62	0.48	c0.32	
v/s Ratio Perm						
v/c Ratio			1.06	0.82	0.99	
Uniform Delay, d1			33.0	26.2	53.7	
Progression Factor			1.00	1.00	0.52	
Incremental Delay, d2			37.3	1.8	4.8	
Delay (s)			70.3	28.1	32.5	
Level of Service			E	C	C	
Approach Delay (s)	0.0			47.7	32.5	
Approach LOS	A			D	C	

Intersection Summary			
HCM 2000 Control Delay	43.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	114.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Queues
38: Davie Rd & Nova Dr

07/08/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	771	255	368	135	251	328	111	1233	137	518	1520	1400
v/c Ratio	1.00	0.53	0.61	0.78	1.03	0.55	0.76	0.74	0.17	0.92	0.95	0.69
Control Delay	93.1	57.0	37.1	97.5	131.0	32.8	104.5	51.1	3.3	78.1	28.9	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.1	57.0	37.1	97.5	131.0	32.8	104.5	51.1	3.3	78.1	28.9	12.2
Queue Length 50th (ft)	420	232	235	140	~279	191	60	426	0	261	688	512
Queue Length 95th (ft)	#561	343	370	212	#468	294	#110	484	34	m272	m740	m551
Internal Link Dist (ft)		1107			1135			1070			2085	
Turn Bay Length (ft)	185		150	100			315		380	150		1000
Base Capacity (vph)	772	479	603	232	244	611	150	1670	859	600	1595	2024
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.53	0.61	0.58	1.03	0.54	0.74	0.74	0.16	0.86	0.95	0.69

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	41	323	343	38	2266	243	465	3128
v/c Ratio	0.16	1.00	0.77	0.38	0.87	0.28	0.99	0.97
Control Delay	35.4	109.8	53.9	22.1	42.6	14.1	103.6	23.1
Queue Delay	0.0	0.0	0.2	0.0	9.4	0.0	0.0	23.7
Total Delay	35.4	109.8	54.2	22.1	52.0	14.1	103.6	46.8
Queue Length 50th (ft)	22	342	254	11	872	106	247	1245
Queue Length 95th (ft)	58	#554	382	m13	m890	m139	m#342	#1289
Internal Link Dist (ft)	946		1186		2085			457
Turn Bay Length (ft)				150		150	180	
Base Capacity (vph)	255	323	446	101	2606	861	472	3216
Starvation Cap Reductn	0	0	0	0	0	0	0	253
Spillback Cap Reductn	0	0	5	0	344	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	1.00	0.78	0.38	1.00	0.28	0.99	1.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBT
Lane Group Flow (vph)	275	33	1461	1331	1363	2132
v/c Ratio	1.04	0.12	0.92	1.07	0.86	0.79
Control Delay	129.3	60.2	11.4	81.9	26.5	3.0
Queue Delay	0.0	0.0	23.9	17.5	0.0	7.8
Total Delay	129.3	60.2	35.2	99.4	26.5	10.8
Queue Length 50th (ft)	~308	30	0	~553	1439	30
Queue Length 95th (ft)	#501	66	0	m#652	m1596	m0
Internal Link Dist (ft)		1169		457		224
Turn Bay Length (ft)			260		175	
Base Capacity (vph)	265	279	1583	1239	1583	2698
Starvation Cap Reductn	0	0	0	12	0	544
Spillback Cap Reductn	0	0	187	821	0	419
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.12	1.05	3.18	0.86	0.99

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	WBT	NBL
Lane Group Flow (vph)	2132	2444	1605
v/c Ratio	1.06	0.82	0.99
Control Delay	69.7	29.2	33.4
Queue Delay	0.0	0.0	41.9
Total Delay	69.7	29.2	75.3
Queue Length 50th (ft)	~1255	718	586
Queue Length 95th (ft)	#1379	779	m530
Internal Link Dist (ft)		762	224
Turn Bay Length (ft)			
Base Capacity (vph)	2016	2987	1621
Starvation Cap Reductn	0	0	892
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.06	0.82	2.20

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

SR 7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	123	109	3626	2830	10
Future Volume (vph)	0	123	109	3626	2830	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00	0.91	0.91	
Frt		0.86	1.00	1.00	1.00	
Flt Protected		1.00	0.95	1.00	1.00	
Satd. Flow (prot)		1611	1770	5085	5082	
Flt Permitted		1.00	0.95	1.00	1.00	
Satd. Flow (perm)		1611	1770	5085	5082	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	129	115	3817	2979	11
RTOR Reduction (vph)	0	3	0	0	1	0
Lane Group Flow (vph)	0	126	115	3817	2989	0
Turn Type		Over	Prot	NA	NA	
Protected Phases		5	5	2	6	
Permitted Phases		5				
Actuated Green, G (s)		10.0	10.0	80.0	56.0	
Effective Green, g (s)		12.0	13.0	80.0	59.0	
Actuated g/C Ratio		0.15	0.16	1.00	0.74	
Clearance Time (s)		7.0	7.0	7.0	7.0	
Vehicle Extension (s)		1.5	1.5	3.0	3.0	
Lane Grp Cap (vph)		241	287	5085	3747	
v/s Ratio Prot		0.08	0.06	c0.75	0.59	
v/s Ratio Perm						
v/c Ratio		0.52	0.40	0.75	0.80	
Uniform Delay, d1		31.4	30.0	0.0	6.7	
Progression Factor		1.00	1.00	1.00	0.01	
Incremental Delay, d2		0.9	0.3	1.1	0.9	
Delay (s)		32.3	30.3	1.1	1.0	
Level of Service		C	C	A	A	
Approach Delay (s)	32.3			1.9	1.0	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	2.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	190	61	132	497	99	156	53	241	2903	676	37	99
Future Volume (vph)	190	61	132	497	99	156	53	241	2903	676	37	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	7.0	6.0	6.0			7.0	7.0	6.0		7.0
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00			0.97	0.86	1.00		0.97
Frt	1.00	1.00	0.85	1.00	0.91			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	3433	1692			3433	6408	1583		3433
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (perm)	1770	1863	1583	3433	1692			3433	6408	1583		3433
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	200	64	139	523	104	164	56	254	3056	712	39	104
RTOR Reduction (vph)	0	0	70	0	33	0	0	0	0	101	0	0
Lane Group Flow (vph)	200	64	69	523	235	0	0	310	3056	611	0	143
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot
Protected Phases	7	4	5!	3	8		5!	5	2	3	1	1
Permitted Phases			4							2		
Actuated Green, G (s)	15.0	9.6	21.6	24.6	19.2			12.0	64.8	89.4		5.0
Effective Green, g (s)	15.0	9.6	21.6	24.6	19.2			12.0	64.8	89.4		5.0
Actuated g/C Ratio	0.12	0.07	0.17	0.19	0.15			0.09	0.50	0.69		0.04
Clearance Time (s)	6.0	6.0	7.0	6.0	6.0			7.0	7.0	6.0		7.0
Vehicle Extension (s)	2.0	2.0	1.5	2.0	2.0			1.5	3.0	2.0		1.5
Lane Grp Cap (vph)	204	137	263	649	249			316	3194	1088		132
v/s Ratio Prot	0.11	0.03	0.02	c0.15	c0.14			c0.09	c0.48	0.11		0.04
v/s Ratio Perm			0.02							0.28		
v/c Ratio	0.98	0.47	0.26	0.81	0.94			0.98	0.96	0.56		1.08
Uniform Delay, d1	57.4	57.7	47.3	50.4	54.9			58.9	31.3	10.3		62.5
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	57.0	0.9	0.2	6.8	41.0			45.1	8.6	0.4		102.4
Delay (s)	114.4	58.7	47.4	57.2	95.9			104.0	39.9	10.7		164.9
Level of Service	F	E	D	E	F			F	D	B		F
Approach Delay (s)		82.4			70.3				39.7			
Approach LOS		F			E				D			

Intersection Summary			
HCM 2000 Control Delay	46.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	2476	135
Future Volume (vph)	2476	135
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	7.0	7.0
Lane Util. Factor	0.86	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	6408	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	6408	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	2606	142
RTOR Reduction (vph)	0	74
Lane Group Flow (vph)	2606	68
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	57.8	57.8
Effective Green, g (s)	57.8	57.8
Actuated g/C Ratio	0.44	0.44
Clearance Time (s)	7.0	7.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2849	703
v/s Ratio Prot	0.41	
v/s Ratio Perm		0.04
v/c Ratio	0.91	0.10
Uniform Delay, d1	33.8	20.9
Progression Factor	1.00	1.00
Incremental Delay, d2	5.9	0.3
Delay (s)	39.7	21.2
Level of Service	D	C
Approach Delay (s)	45.0	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	653	0	0	3626	2830	311
Future Volume (vph)	653	0	0	3626	2830	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			7.0	7.0	7.0
Lane Util. Factor	0.97			0.86	0.91	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	0.95			1.00	1.00	1.00
Satd. Flow (prot)	3433			6408	5085	1583
Flt Permitted	0.95			1.00	1.00	1.00
Satd. Flow (perm)	3433			6408	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	687	0	0	3817	2979	327
RTOR Reduction (vph)	0	0	0	0	0	106
Lane Group Flow (vph)	687	0	0	3817	2979	221
Turn Type	Prot			NA	NA	Perm
Protected Phases	4			1	1	
Permitted Phases						1
Actuated Green, G (s)	13.0			54.0	54.0	54.0
Effective Green, g (s)	13.0			54.0	54.0	54.0
Actuated g/C Ratio	0.16			0.68	0.68	0.68
Clearance Time (s)	6.0			7.0	7.0	7.0
Vehicle Extension (s)	2.0			3.0	3.0	3.0
Lane Grp Cap (vph)	557			4325	3432	1068
v/s Ratio Prot	c0.20			c0.60	0.59	
v/s Ratio Perm						0.14
v/c Ratio	1.23			0.88	0.87	0.21
Uniform Delay, d1	33.5			10.5	10.2	4.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	120.0			1.9	3.3	0.4
Delay (s)	153.5			12.4	13.5	5.3
Level of Service	F			B	B	A
Approach Delay (s)	153.5			12.4	12.7	
Approach LOS	F			B	B	

Intersection Summary			
HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	129	115	3817	2990
v/c Ratio	0.53	0.40	0.75	0.80
Control Delay	39.0	34.8	1.1	1.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	39.0	34.8	1.1	1.0
Queue Length 50th (ft)	58	52	0	1
Queue Length 95th (ft)	113	101	0	0
Internal Link Dist (ft)			954	656
Turn Bay Length (ft)		145		
Base Capacity (vph)	245	287	5085	3747
Starvation Cap Reductn	0	0	0	51
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.53	0.40	0.75	0.81

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	200	64	139	523	268	310	3056	712	143	2606	142
v/c Ratio	0.98	0.37	0.36	0.81	1.00	0.98	0.94	0.56	1.08	0.90	0.18
Control Delay	115.3	62.3	20.3	62.0	103.6	104.6	37.2	5.8	159.4	37.8	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.3	62.3	20.3	62.0	103.6	104.6	37.2	5.8	159.4	37.8	4.4
Queue Length 50th (ft)	171	52	37	227	~199	136	684	123	~69	576	4
Queue Length 95th (ft)	#329	100	97	#335	#384	#232	740	209	#140	629	42
Internal Link Dist (ft)		1090			944		983			801	
Turn Bay Length (ft)	240			200		400		300	210		210
Base Capacity (vph)	204	171	388	649	267	316	3253	1268	132	2908	791
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.37	0.36	0.81	1.00	0.98	0.94	0.56	1.08	0.90	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	NBT	SBT	SBR
Lane Group Flow (vph)	687	3817	2979	327
v/c Ratio	1.23	0.88	0.87	0.28
Control Delay	151.7	12.8	13.9	1.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	151.7	12.8	13.9	1.2
Queue Length 50th (ft)	~222	382	366	0
Queue Length 95th (ft)	#326	445	448	23
Internal Link Dist (ft)	267	656	779	
Turn Bay Length (ft)				340
Base Capacity (vph)	557	4325	3432	1174
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.23	0.88	0.87	0.28

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Peters Road

HCM Signalized Intersection Capacity Analysis
27: SW 80th Terrace & Peters Rd

07/09/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	12	84	1234	67	51	30	741	153	115	24	95	380
Future Volume (vph)	12	84	1234	67	51	30	741	153	115	24	95	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0		6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor		1.00	0.95	1.00		1.00	0.95	1.00		1.00	1.00	
Frt		1.00	1.00	0.85		1.00	1.00	0.85		1.00	0.85	
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00		0.96	1.00	
Satd. Flow (prot)		1770	3539	1583		1770	3539	1583		1789	1583	
Flt Permitted		0.27	1.00	1.00		0.08	1.00	1.00		0.32	1.00	
Satd. Flow (perm)		498	3539	1583		151	3539	1583		587	1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	88	1299	71	54	32	780	161	121	25	100	400
RTOR Reduction (vph)	0	0	0	38	0	0	0	85	0	0	62	0
Lane Group Flow (vph)	0	101	1299	33	0	86	780	76	0	146	38	0
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA	custom	pm+pt
Protected Phases		1	6			5	2		7	4	4	3
Permitted Phases	1	6		6	5	2		2	4		4	8
Actuated Green, G (s)		81.3	74.8	74.8		82.1	75.2	75.2		60.3	60.3	
Effective Green, g (s)		81.3	74.8	74.8		82.1	75.2	75.2		60.3	60.3	
Actuated g/C Ratio		0.51	0.47	0.47		0.51	0.47	0.47		0.38	0.38	
Clearance Time (s)		6.0	6.0	6.0		6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)		1.5	3.0	3.0		1.5	3.0	3.0		2.5	2.5	
Lane Grp Cap (vph)		304	1654	740		147	1663	744		221	596	
v/s Ratio Prot		0.01	c0.37			c0.03	0.22				0.02	
v/s Ratio Perm		0.15		0.02		0.28		0.05		0.25		
v/c Ratio		0.33	0.79	0.04		0.59	0.47	0.10		0.66	0.06	
Uniform Delay, d1		21.8	35.8	23.2		28.6	28.8	23.6		41.4	31.8	
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2	2.5	0.0		3.8	1.0	0.3		6.5	0.0	
Delay (s)		22.0	38.4	23.2		32.4	29.8	23.9		47.9	31.9	
Level of Service		C	D	C		C	C	C		D	C	
Approach Delay (s)			36.5				29.1			41.4		
Approach LOS			D				C			D		

Intersection Summary			
HCM 2000 Control Delay	40.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	13	177
Future Volume (vph)	13	177
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	6.0
Lane Util. Factor	1.00	1.00
Frt	1.00	0.85
Flt Protected	0.95	1.00
Satd. Flow (prot)	1777	1583
Flt Permitted	0.60	1.00
Satd. Flow (perm)	1121	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	14	186
RTOR Reduction (vph)	0	108
Lane Group Flow (vph)	414	78
Turn Type	NA	Perm
Protected Phases	8	
Permitted Phases		8
Actuated Green, G (s)	60.3	60.3
Effective Green, g (s)	60.3	60.3
Actuated g/C Ratio	0.38	0.38
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	2.5	2.5
Lane Grp Cap (vph)	422	596
v/s Ratio Prot		
v/s Ratio Perm	c0.37	0.05
v/c Ratio	0.98	0.13
Uniform Delay, d1	49.3	32.7
Progression Factor	1.00	1.00
Incremental Delay, d2	38.6	0.1
Delay (s)	87.9	32.8
Level of Service	F	C
Approach Delay (s)	70.8	
Approach LOS	E	

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1892	227	0	0	0	152
Future Volume (Veh/h)	1892	227	0	0	0	152
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1992	239	0	0	0	160
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			2231		2112	1116
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			2231		2112	1116
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	21
cM capacity (veh/h)			229		44	202

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total	1328	903	160
Volume Left	0	0	0
Volume Right	0	239	160
cSH	1700	1700	202
Volume to Capacity	0.78	0.53	0.79
Queue Length 95th (ft)	0	0	139
Control Delay (s)	0.0	0.0	68.3
Lane LOS			F
Approach Delay (s)	0.0		68.3
Approach LOS			F

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		

Queues
27: SW 80th Terrace & Peters Rd

07/09/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	101	1299	71	86	780	161	146	100	414	186
v/c Ratio	0.33	0.78	0.09	0.59	0.47	0.19	0.66	0.15	0.98	0.26
Control Delay	22.9	41.4	1.8	35.9	31.2	4.3	55.5	5.0	87.7	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	41.4	1.8	35.9	31.2	4.3	55.5	5.0	87.7	5.7
Queue Length 50th (ft)	50	613	0	42	300	0	125	0	421	8
Queue Length 95th (ft)	91	755	13	#81	378	46	204	36	#602	57
Internal Link Dist (ft)		1130			928		910		606	
Turn Bay Length (ft)	200		200	205						
Base Capacity (vph)	306	1655	794	150	1662	829	228	678	436	722
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.78	0.09	0.57	0.47	0.19	0.64	0.15	0.95	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.