THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

TO: Technical Review Committee

FROM: Planning Department

RE: Technical Review Project: #22-09000002
(Preliminary Plat)

MEETING DATE : June 16, 2022

Subdivision- Kings Highway Commerce Park

Southeast Corner of Kings Highway and White Road

2324-241-0004-000-0, 2324-211-0001-000-6, 2324-214-0002-000-2, 2324-211-0001-000-5, 2324-241-0002-000-6, 2324-241-0003-000-3, 2324-232-0000-000-4, 2324-210-0000-000-6 , 2324-211-0002-000-3

The above referenced project is being submitted for your review and comments. The applicant is requesting a Preliminary Plat on 107.5 acres for a 1.5 million square foot distribution center to be subdivided into three (3) lots with easements over access and stormwater areas dedicated to the property owner association.

Please send all comments to planning@cityoffortpierce.com and/or through interoffice mail to the Planning Department.

If you have comments, please respond prior to Tuesday, June 14, 2022.

If you have any questions, please contact the Planning Department at 772-467-3737.

Thank you

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

Subdivision

Property address or Location Southeast corner of Kings hwy & White Rd

Parcel ID #(s) Please see attached

Project description 107.5 ac , 1.5 msf distribution center to be subdivided into 3 lots with easements over access & stormwater areas dedicated to Property owner association

Jeff Iravani, Authorized agent

Property Owner(s)
Sacnnell Properties #533, LLC

Street Address
8801 River Crossing Blvd Ste 300

City State Zip
Indianapolis, Indiana 46240

Phone Number

Email Address

Jeff H. Iravani

Applicant/Representative, Title, Company
Jeff H. Iravani Inc- Authorized Agent

Street Address
1934 Commerce Lane Suite 5

City State Zip
Jupiter, FL 33458

Phone Number
561-575-6030

Email Address
jhi@bellsouth.net

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY Palm Beach

The foregoing instrument was acknowledged before me this 26 day of May, 2022, by Jeff H Iravani who is personally known to me or has produced _____ as identification.

Signature of Notary

(Seal) NOTARY PUBLIC STATE OF FLORIDA

Jenna L. Jenkins
COMMISSION # GG270322
EXPIRES: October 23, 2022
Bonded Thru Aaron Notary

INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____
Intake Planner_____
Planner Assigned_____
Approved By_____ Date _____
Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

☑ SUBDIVISION: PRELIMINARY PLAT

Please submit one (1) original and thirteen (13) hard copies and one (1) CD of the following:

- ☐ Preliminary Plat prepared by a surveyor registered in the State of Florida meeting the requirements of Sections 18-5, & 18-10 (a) (1-3) & (c)
- ☐ A copy of the deed
- ☐ Signed and sealed survey
- ☐ Concurrency application, complete
- ☐ Complete, notarized application

☑ SUBDIVISION: INFRASTRUCTURE PLAN REVIEW

Please submit one (1) original and four (4) hard copies and one (1) CD of the following, stamped by a state of Florida registered engineer meeting the requirements of 18-10 (a) (4) :

- ☐ Street construction plans
- ☐ Electric Infrastructure plans
- ☐ Water & Sewer system construction plans
- ☐ Gas Infrastructure plans
- ☐ Stormwater Retention plans
- ☐ Complete, notarized application

☐ SUBDIVISION: FINAL PLAT

Please submit one (1) original and thirteen (13) hard copies and one (1) CD of the following:

- ☐ A copy of the deed
- ☐ Signed and sealed survey
- ☐ Final Plat stamped by a state of Florida registered surveyor meeting the requirements of 18-5, & 18-10 (b & c):
- ☐ Complete, notarized application

☐ SUBDIVISION: MINOR REPLAT

Please submit one (1) original and thirteen (13) hard copies and one (1) CD of the following:

- ☐ A copy of the deed
- ☐ As-built survey of original parcel stamped by a registered surveyor in the State of Florida
- ☐ Scaled drawing, stamped by a registered surveyor in the State of Florida, of surveyed parcel indicating
  - proposed lots, including acreage, square footage, & dimensions.
  - any & all easements, rights-of-way, or similar instruments found on or adjacent to the subject property
- ☐ Complete, notarized application

Construction Plans & Specifications
For
Kings Highway Commerce Park
Phase-II

Section 24 Township 35S Range 39E

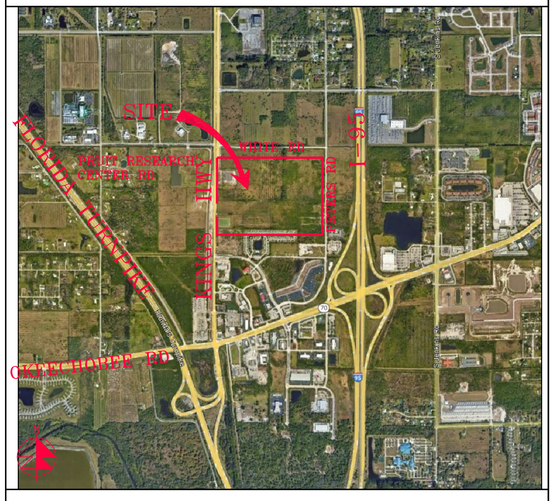
Fort Pierce, Florida

Developer

Scannel Properties #533, LLC

8801 River Crossing Blvd,
Suite 300,
Indianapolis, Indiana 46240

Aerial



Vicinity Map

Drawing Index

C-1	Cover Sheet
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C-34	Grading, Paving, & Drainage Details
C-35	Grading, Paving, & Drainage Details
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C-37	Water Details
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C-39	Wastewater Details
C-40	Lift Station Details
C-41	Lift Station Details
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~~C-43~~	~~Truck Routing Plan~~

REVISIONS

Jeff H. Iravani, Inc.
Consulting Engineers
1934 COMMERCE LANE, SUITE 5
JUPITER, FLORIDA 33458
TEL: (561) 575-6030
FAX: (561) 575-6088
EMAIL: JHI@bellsouth.net
WEBSITE: www.JHIinc.com

Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Cover Sheet

JOB NO.	2101-1355
DRAWN BY	CLJ
DESIGNED BY	JHI
SCALE	NA
DATE	01/22/21

SEAL

FR # 6986

SHEET NO.
C-1

PRUIT RESEARCH CENTER ROAD

WHITE ROAD

WHITE ROAD

WHITE ROAD

KING'S HIGHWAY (SR-713)

KING'S HIGHWAY (SR-713)

PETERS ROAD

EXIST 35 R/W

PROP 60' R/W

PROP ADD'L 25' R/W

N89°44'28"E

2490.37'

DRY DET-4
0.70 AC
(BIO-SWALE)

DRY DET-5
2.59 AC (BIO-SWALE)

FUTURE TRAILER PARKING

LITTORAL ZONE

R=8511.00'

A=478.81'

FOUNTAIN

N89°44'39"E
43.08'

LAKE-1
5.34 AC

R=8468.00'

A=471.37'

FOUNTAIN

R=8408.00'

A=623.78'

LITTORAL ZONE

LAKE-2
1.93 AC

LITTORAL ZONE

FOUNTAIN

N89°51'22"E
30.02'

Δ=00°18'46"

N89°50'04"W
343.82'

BENCH W/TRASH BIN TYP

295.04'
N00°07'16"W

175

367 sp

192

600'

1,250'

BLDG-C
PH-II
750.5 KSF
40 KSF OFFICE
710.5 KSF WAREHOUSE

221 sp

DRY DETENTION-7 11.63 AC (BIO-SWALE)

1929.06'

DRY DET-6
2.56 AC

LS

BLDG-A
PH-IA
265.4 KSF
17 KSF OFFICE
248.4 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

BLDG-B
PH-IB
220.3 KSF
15 KSF OFFICE
205.3 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

LITTORAL ZONE

LAKE-3
2.30 AC

FOUNTAIN

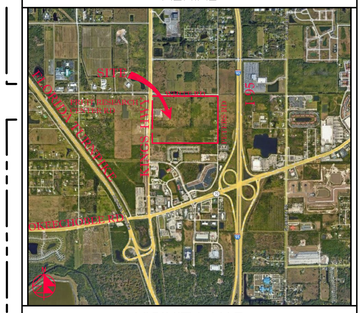
S00°04'58"E

DRY DETENTION-8 2.07 AC

N89°50'03"W

2215.32'

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

100' 0 50' 100' 200'

SCALE: 1" = 100'

REVISIONS

REV PER CITY 06-25-21
REV PER SP 06-25-21
REV PER SLC 07-26-21
REV PER FDOT 08-25-21
REV PER FDOT 09-17-21
REV PER FPUA 11-30-21
REV PER SP 01-15-21

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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Overall Pavement Marking Plan

DRAWN BY: DDI
DESIGNED BY: JHI
SCALE: 1" = 100'
DATE: 01-22-2021

SEAL

COA 6986

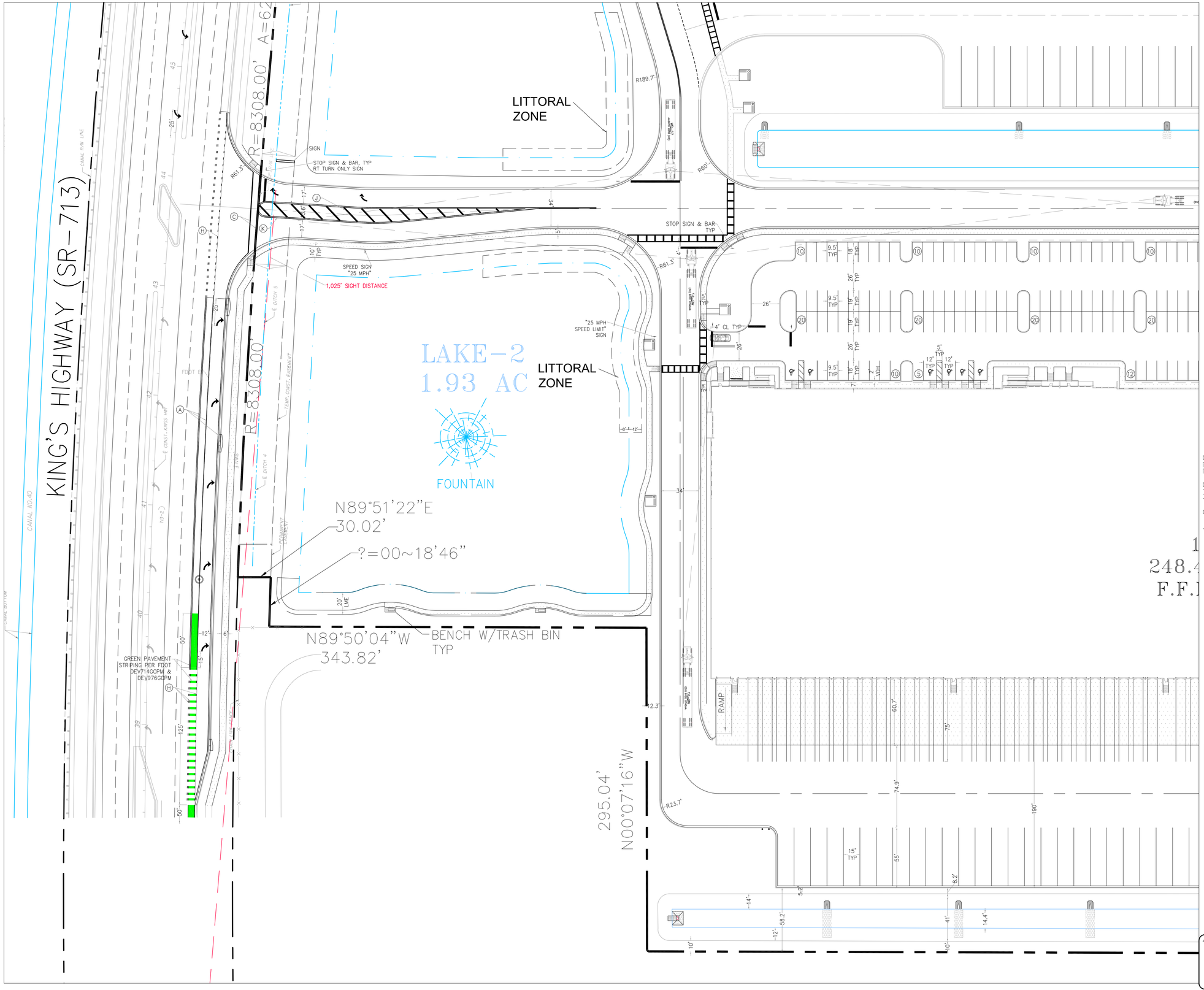
SHEET NO.
C-2

LEGEND

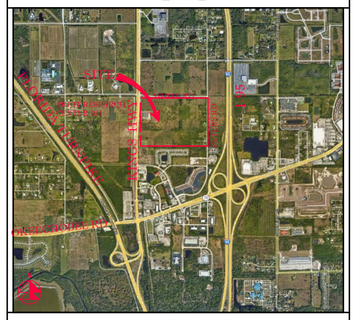
⊕19.7	PROP PAV'T EL
18.4	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
-WMD	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
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F.F.EL	FIN. FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

48 HOURS BEFORE DIGGING
CALL TOLL FREE
811
CALL SUNSHINE
NOTIFICATION CENTER

SEE SHT C-6



AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

NOTES:

1. SOD ALL FDOT R/W DISTURBED BY CONSTRUCTION WITH COMMON BERMUDA SOD.
2. ALL STRIPING PERTAINING TO FDOT DRIVEWAY AND ROAD WIDENING SHALL BE THERMOPLASTIC.
3. GORE STRIPING RAISED PAVEMENT MARKERS SHALL BE INSTALLED PER FDOT STANDARD INDEX 711-001.
4. ALL CONSTRUCTION IN FDOT R/W MUST BE PERFORMED ACCORDING TO THE APPLICABLE FDOT ROADWAY AND DRAINAGE DESIGN STANDARDS AND SPECIFICATIONS.
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7. SURVEYOR SHALL VERIFY ALL DIMENSIONS PRIOR & INFORM THE ENGINEER OF RECORD OF ANY DISCREPANCIES.
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10. CONTRACTOR SHALL PROTECT ALL INLETS & SITE PERIMETERS DURING CONSTRUCTION PER FLORIDA STORMWATER, ERROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.

STRIPING LEGEND	
(A)	6" SOLID WHITE
(B)	8" SOLID WHITE
(C)	12" SOLID WHITE
(D)	18" SOLID WHITE
(E)	24" SOLID WHITE
(F)	6" SKIP WHITE TYP (10'-30')
(G)	6" SKIP WHITE TYP (6'-10')
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(P)	PRM BI-DIRECTIONAL AMBER/AMBER
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(T)	RPM BI-DIRECTIONAL WHITE/RED
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WEBSITE: www.JHIinc.com

Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Pavement Marking Plan

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

COA 6986

SHEET NO.
C-3

SEE SHT C-8

DRY DET-6
2.56 AC

"25 MPH SPEED LIMIT" SIGN

"25 MPH SPEED LIMIT" SIGN

"25 MPH SPEED LIMIT" SIGN

LS

R61.5' TYP

4' CL TYP

4' CL TYP

5' TYP

12' TYP

12' TYP

9.5' TYP

18' TYP

26' TYP

19' TYP

2' VCH

9.5' TYP

9.5' TYP

18' TYP

26' TYP

19' TYP

5' TYP

12' TYP

12' TYP

5'

5'

34'

BLDG-A
PH-IA
265.4 KSF
17 KSF OFFICE
248.4 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

FIRE PUMP

ELECT YARD

DUMPSTR ENCL.

STOP

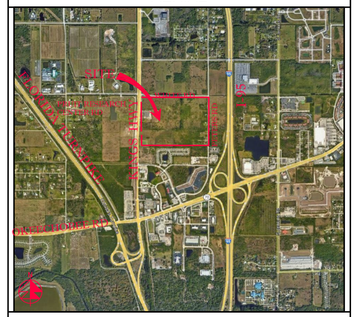
190'

DRY DETENTION-8 2.07 AC

N89°50'03"W

SEE SHT C-5

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

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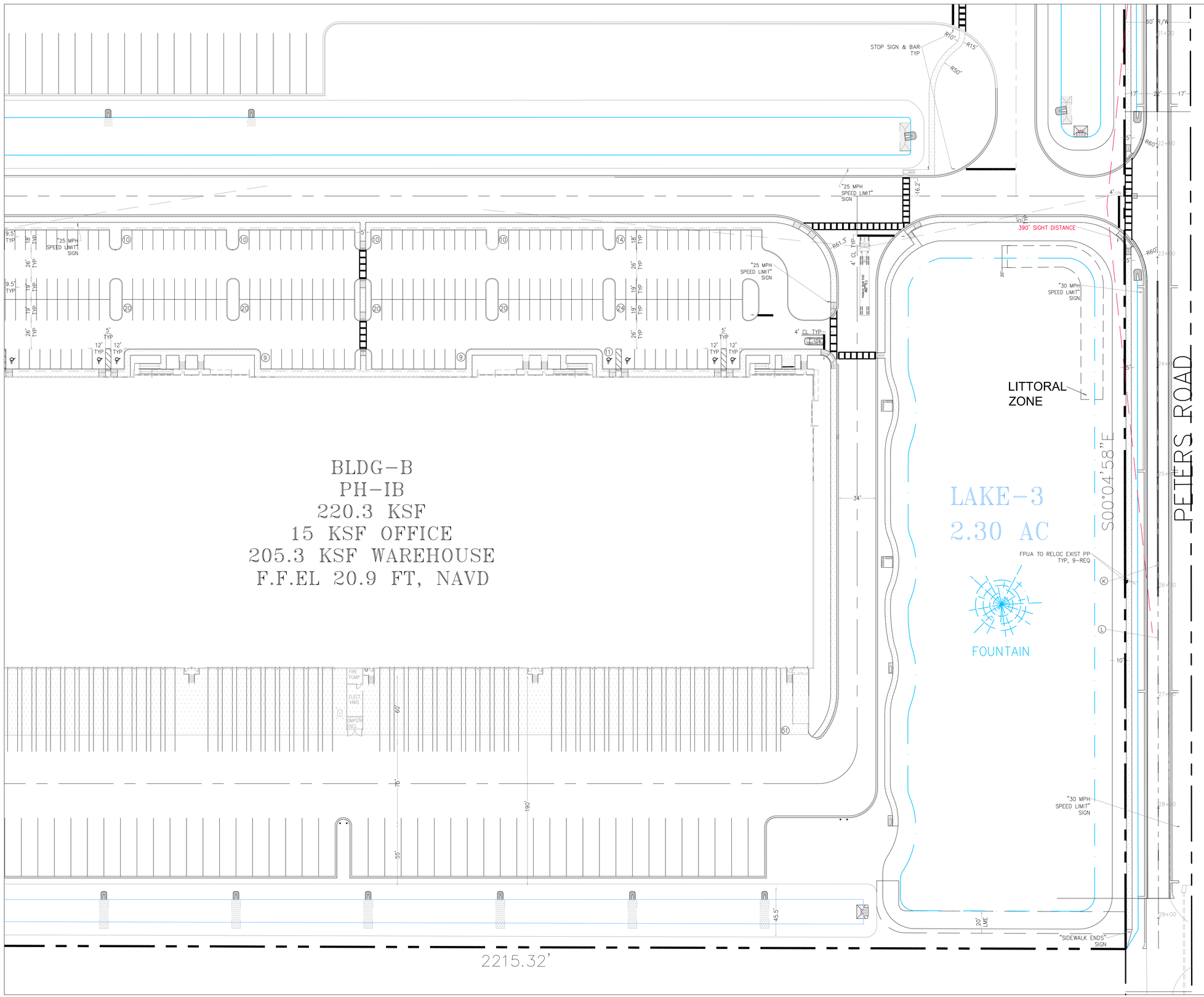
SEAL

COA 6986

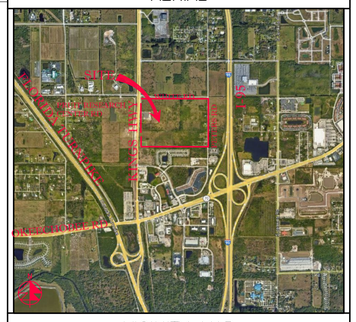
SHEET NO.
C-4

SEE SHT C-10

SEE SHT C-4



AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

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	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
S	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

48 HOURS BEFORE DIGGING
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811
CALL SUNSHINE
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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Pavement Marking Plan

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

COA 6986

SHEET NO.
C-5

SEE SHT C-7

N89°44'39"E
43.08'

LAKE-1
5.34 AC

R=8468.00' A=471.37'

R=8308.00' A=623.78'

FOUNTAIN

STOP SIGN & BAR
TYP, 9 REQ

"25 MPH
SPEED LIMIT"
SIGN

175

367 sp

192

600'

34'

R25'

85.5'

26'

26.9'

26.9'

191'

42.1'

R132

R60'

R189.7'

LITTORAL
ZONE

SIGN

STOP SIGN & BAR, TYP
RT TURN ONLY SIGN

STOP SIGN & BAR
TYP

SPEED SIGN
"25 MPH"

1,025' SIGHT DISTANCE

"25 MPH
SPEED LIMIT"
SIGN

14' CL TYP

LAKE-2

LITTORAL

CANAL R/W LINE

PROP. R/W LINE

PERMANENT EASEMENT

CANAL BOTTOM

CANAL NO.40

E CONST. KINGS HWY

E DITCH 5

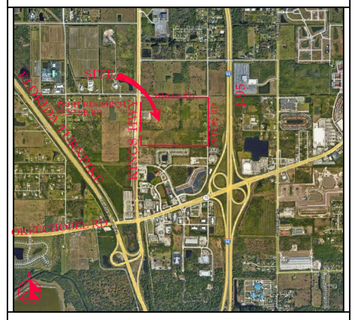
SEMINOLE PRATT WHITNEY RD

KINGS HIGHWAY (SR-713)

SEE SHT C-8

SEE SHT C-3

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

NOTES:

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SEAL

COA 6986

SHEET NO.
C-6

PRUIT RESEARCH CENTER ROAD

WHITE ROAD

KING'S HIGHWAY (SR-713)

CANAL NO.40

CANAL BOTTOM

STOP SIGN & BAR

1,025' SIGHT DISTANCE

"30 MPH SPEED LIMIT" SIGN

DETECTABLE WARNING 2 REQ'D, TYP

STOP SIGN & BAR, TYP

510' SIGHT DISTANCE

N89°44'28"E

DRY DET-4

0.70 AC

(BIO-SWALE)

"25 MPH SPEED LIMIT" SIGN

LITTORAL ZONE

43' FDOT TEMPORARY CONSTRUCTION EASEMENT

PROPOSED FDOT DRAINAGE EASEMENT

R=8511.00' A=478.81'

A=471.37'

GREEN PAVEMENT STRIPING PER FDOT DEV714CPM & DEV976CPM

FOUNTAIN

N89°44'39"E
43.08'

LAKE-1
5.34 AC

STOP SIGN & BAR TYP, 9 REQ

175

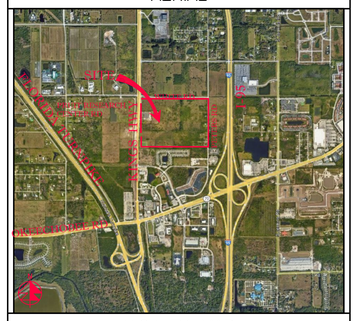
367 sp

600'

SEE SHT C-6

SEE SHT C-9

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

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40' 0 20' 40' 80'

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Kings Highway Commerce Park
Phase-II

Fort Pierce, Florida

Pavement Marking Plan

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01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

COA 6986

SHEET NO.

C-7

SEE SHT C-9

BLDG-C
PH-II
750.5 KSF
40 KSF OFFICE
710.5 KSF WAREHOUSE

SEE SHT C-6

1,250'

DRY DET-6
2.56 AC

"25 MPH SPEED LIMIT" SIGN

LS

SEE SHT C-4

SEE SHT C-10

NOTES:

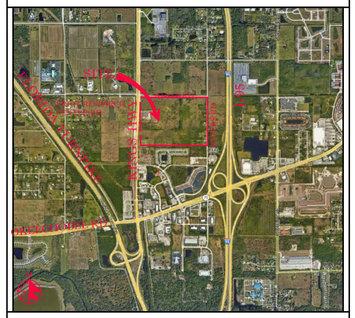
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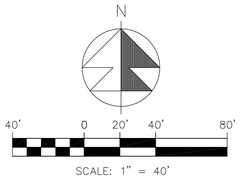
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AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E



SCALE: 1" = 40'

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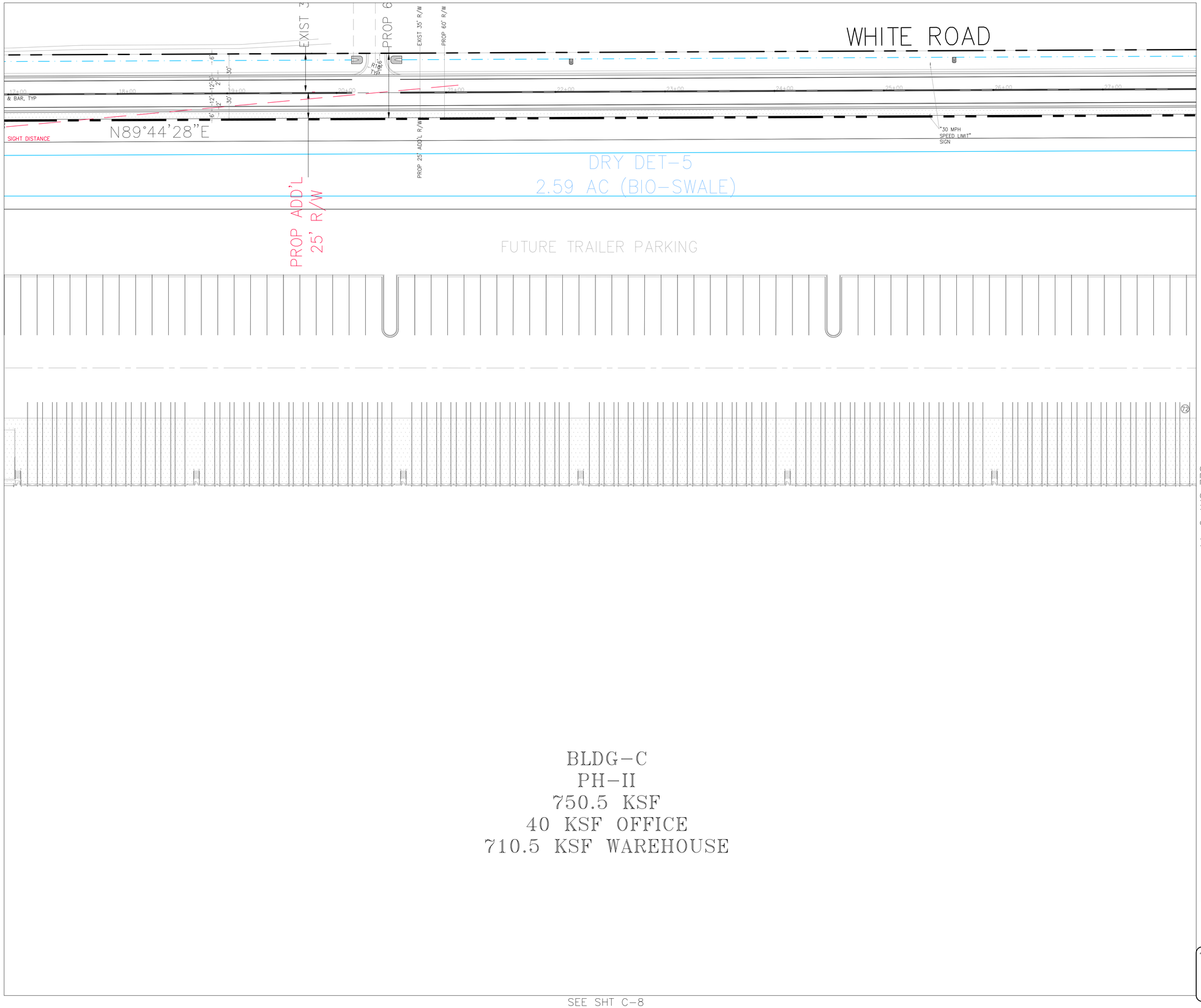
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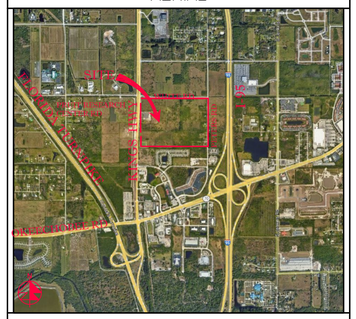
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COA 6986

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AERIAL



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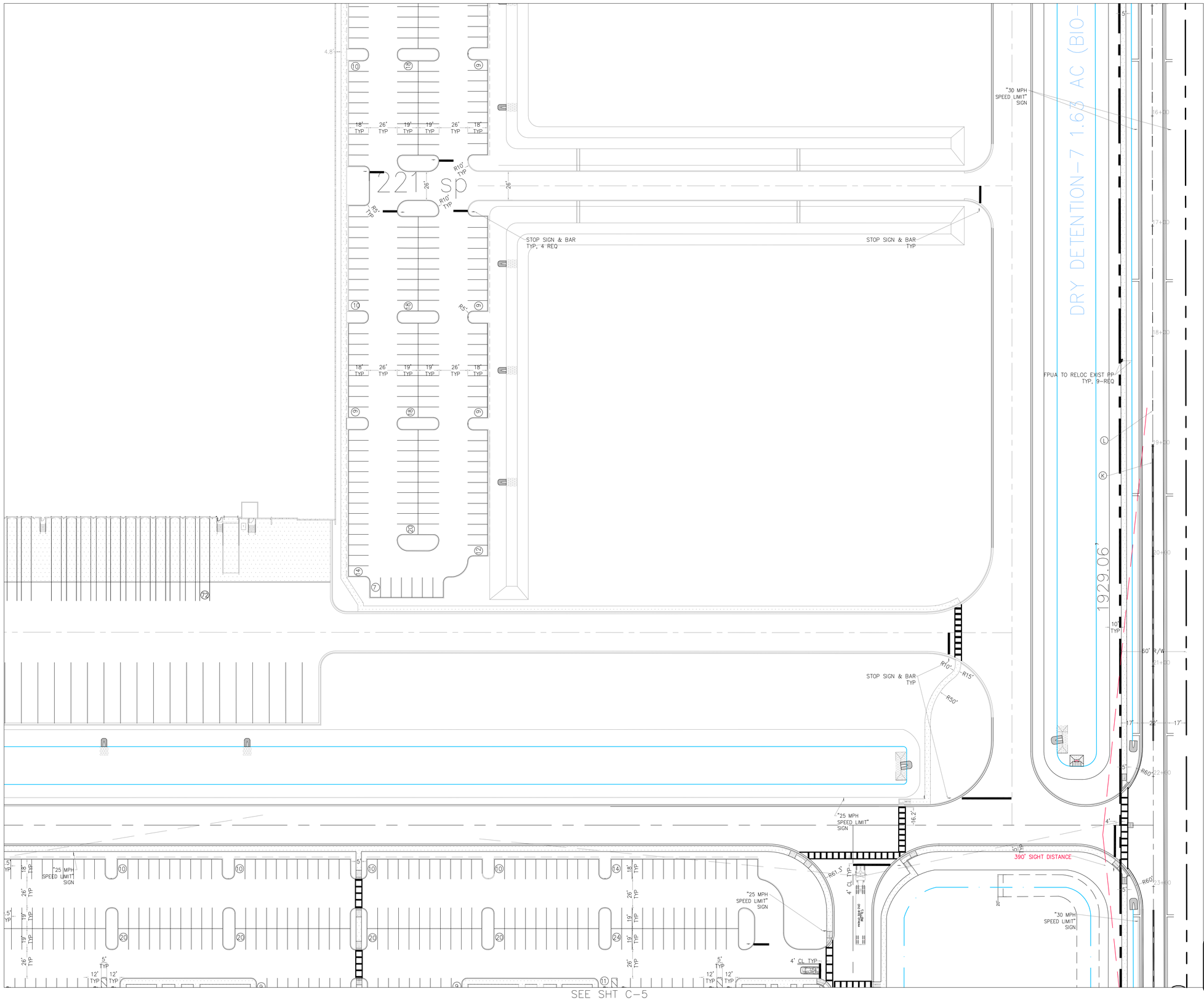
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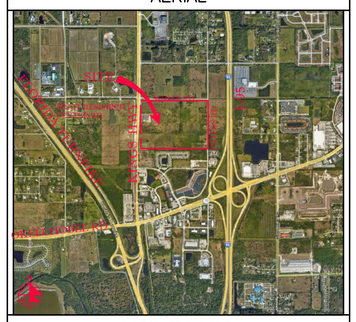
C-9

SEE SHT C-11

SEE SHT C-8



AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

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(D)	18" SOLID WHITE
(E)	24" SOLID WHITE
(F)	6" SKIP WHITE TYP (10'-30')
(G)	6" SKIP WHITE TYP (6'-10')
(H)	6" SKIP WHITE TYP (2'-4')
(I)	6" SOLID YELLOW
(J)	18" SOLID YELLOW
(K)	6" DOUBLE YELLOW
(L)	6" SKIP YELLOW (10'-30')
(M)	6" SKIP YELLOW TYP (6'-10')
(N)	6" SKIP YELLOW TYP (2'-4')
(P)	PRM BI-DIRECTIONAL AMBER/AMBER
(R)	FDP WHITE
(S)	FDP YELLOW
(T)	RPM BI-DIRECTIONAL WHITE/RED
(U)	RPM BI-DIRECTIONAL RED/YELLOW

LEGEND	
⊕19.7	PROP PAV'T EL
19.7	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
FH	FIRE HYDRANT
GV	GATE VALVE
GV	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
B--	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

48 HOURS BEFORE DIGGING
CALL TOLL FREE
811
CALL SUNSHINE
NOTIFICATION CENTER

REVISIONS

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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

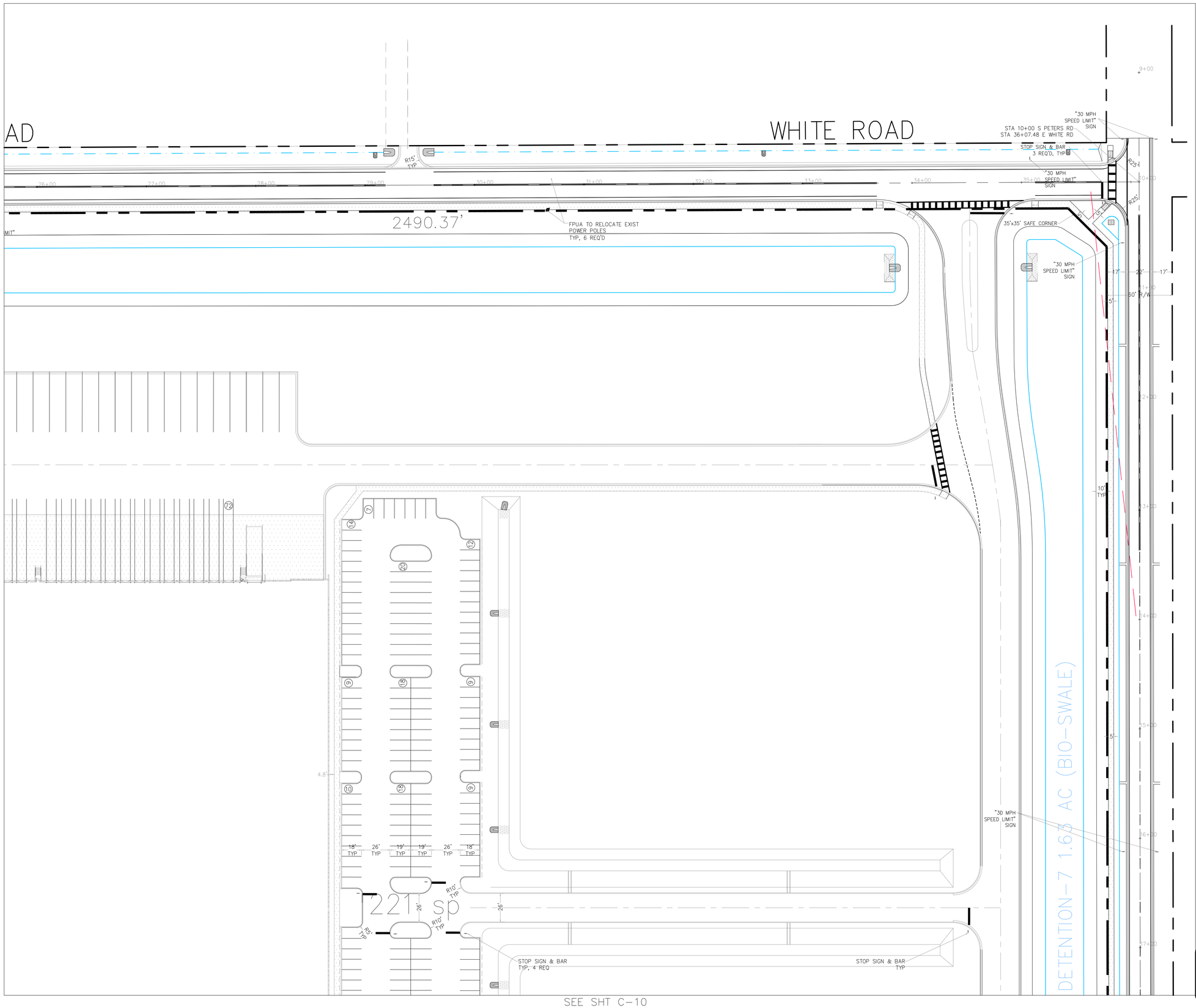
Pavement Marking Plan

JOB NO.	2101-1355
DRAWN BY	DDI
DESIGNED BY	JHI
SCALE	1"=40'
DATE	01-22-21

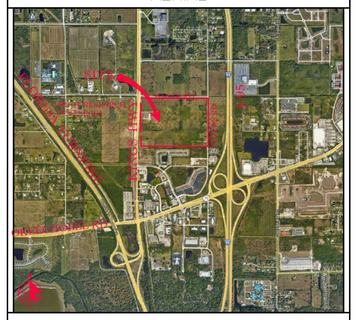
SEAL

COA 6986

SHEET NO.
C-10



AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

NOTES:

1. SOD ALL FDOT R/W DISTURBED BY CONSTRUCTION WITH COMMON BERMUDA SOD.
2. ALL STRIPING PERTAINING TO FDOT DRIVEWAY AND ROAD WIDENING SHALL BE THERMOPLASTIC.
3. GORE STRIPING RAISED PAVEMENT MARKERS SHALL BE INSTALLED PER FDOT STANDARD INDEX 711-001.
4. ALL CONSTRUCTION IN FDOT R/W MUST BE PERFORMED ACCORDING TO THE APPLICABLE FDOT ROADWAY AND DRAINAGE DESIGN STANDARDS AND SPECIFICATIONS.
5. STD PARKING STALL STRIPING SHALL BE TRAFFIC PAINT ALL OTHER STRIPING & PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
6. 19'-24" DEEP ROOT BARRIERS MUST BE INSTALLED ALONG ALL CURBS & SIDEWALKS WITHIN 10' OF EXISTING OR PROPOSED TREES. (SEE LANDSCAPE PLANS).
7. SURVEYOR SHALL VERIFY ALL DIMENSIONS PRIOR & INFORM THE ENGINEER OF RECORD OF ANY DISCREPANCIES.
8. ALL HANDICAP RAMPS & DETECTABLE WARNINGS CONSTRUCTED IN ACCORD W/ DESIGN STD'S.
9. ALL CONSTRUCTION AND RESTORATION WORK WITHIN THE RIGHT-OF-WAY SHALL COMPLY WITH THE LATEST EDITION OF THE FDOT STANDARDS INDEX AND THE FDOT STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
10. CONTRACTOR SHALL PROTECT ALL INLETS & SITE PERIMETERS DURING CONSTRUCTION PER FLORIDA STORMWATER, EROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.

STRIPING LEGEND	
(A)	6" SOLID WHITE
(B)	8" SOLID WHITE
(C)	12" SOLID WHITE
(D)	18" SOLID WHITE
(E)	24" SOLID WHITE
(F)	6" SKIP WHITE TYP (10'-30')
(G)	6" SKIP WHITE TYP (6'-10')
(H)	6" SKIP WHITE TYP (2'-4')
(I)	6" SOLID YELLOW
(J)	18" SOLID YELLOW
(K)	6" DOUBLE YELLOW
(L)	6" SKIP YELLOW (10'-30')
(M)	6" SKIP YELLOW TYP (6'-10')
(N)	6" SKIP YELLOW TYP (2'-4')
(P)	PRM BI-DIRECTIONAL AMBER/AMBER
(R)	FDP WHITE
(S)	FDP YELLOW
(T)	RPM BI-DIRECTIONAL WHITE/RED
(U)	RPM BI-DIRECTIONAL RED/YELLOW

LEGEND	
⊕19.7	PROP PAV'T EL
19.1	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
FH	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

48 HOURS BEFORE DIGGING
CALL TOLL FREE
811
CALL SUNSHINE
NOTIFICATION CENTER

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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Pavement Marking Plan

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

COA 6986

SHEET NO.
C-11

PRUIT RESEARCH CENTER ROAD

WHITE ROAD

WHITE ROAD

WHITE ROAD

KING'S HIGHWAY (SR-713)

CS-200 TYPE "H"

CS-92 "H"

DRY DET-4
0.70 AC
(BIO-SWALE)

DRY DET-5
2.59 AC (BIO-SWALE)

FUTURE TRAILER PARKING

LITTORAL ZONE

FOUNTAIN

LAKE-1
5.34 AC

BLDG-C
PH-II
750.5 KSF
40 KSF OFFICE
710.5 KSF WAREHOUSE

600'

1,250'

DRY DETENTION-7 1.63 AC (BIO-SWALE)

FOUNTAIN

CS-1 "E"

LITTORAL ZONE

DRY DET-6
2.56 AC

CS-103 "H"

LAKE-2
1.93 AC

LITTORAL ZONE

FOUNTAIN

CS-2 "E"

BLDG-A
PH-IA
265.4 KSF
17 KSF OFFICE
248.4 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

BLDG-B
PH-IB
220.3 KSF
15 KSF OFFICE
205.3 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

LITTORAL ZONE

LAKE-3
2.30 AC

FOUNTAIN

BENCH W/TRASH BIN TYP

295.04'

DRY DETENTION-8 2.07 AC

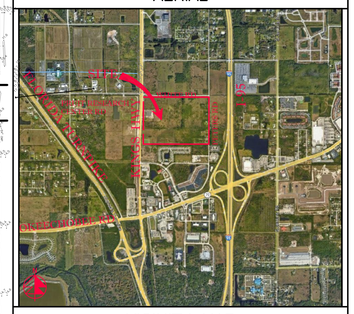
2215.32'

CS-5 "H"

CS-28 "H"

PETERS ROAD

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

100' 0 50' 100' 200'

SCALE: 1" = 100'

48 HOURS BEFORE DIGGING
CALL TOLL FREE
811
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NOTIFICATION CENTER

LEGEND

⊕19.7	PROP PAV'T EL
✕	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV. EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

REVISIONS

REV PER CITY 06-25-21
REV PER SP 06-25-21
REV PER SLC 07-26-21
REV PER FDOT 08-25-21
REV PER FDOT 09-17-21
REV PER FPUA 11-30-21
REV PER SP 01-15-21

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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Overall Drainage Plan

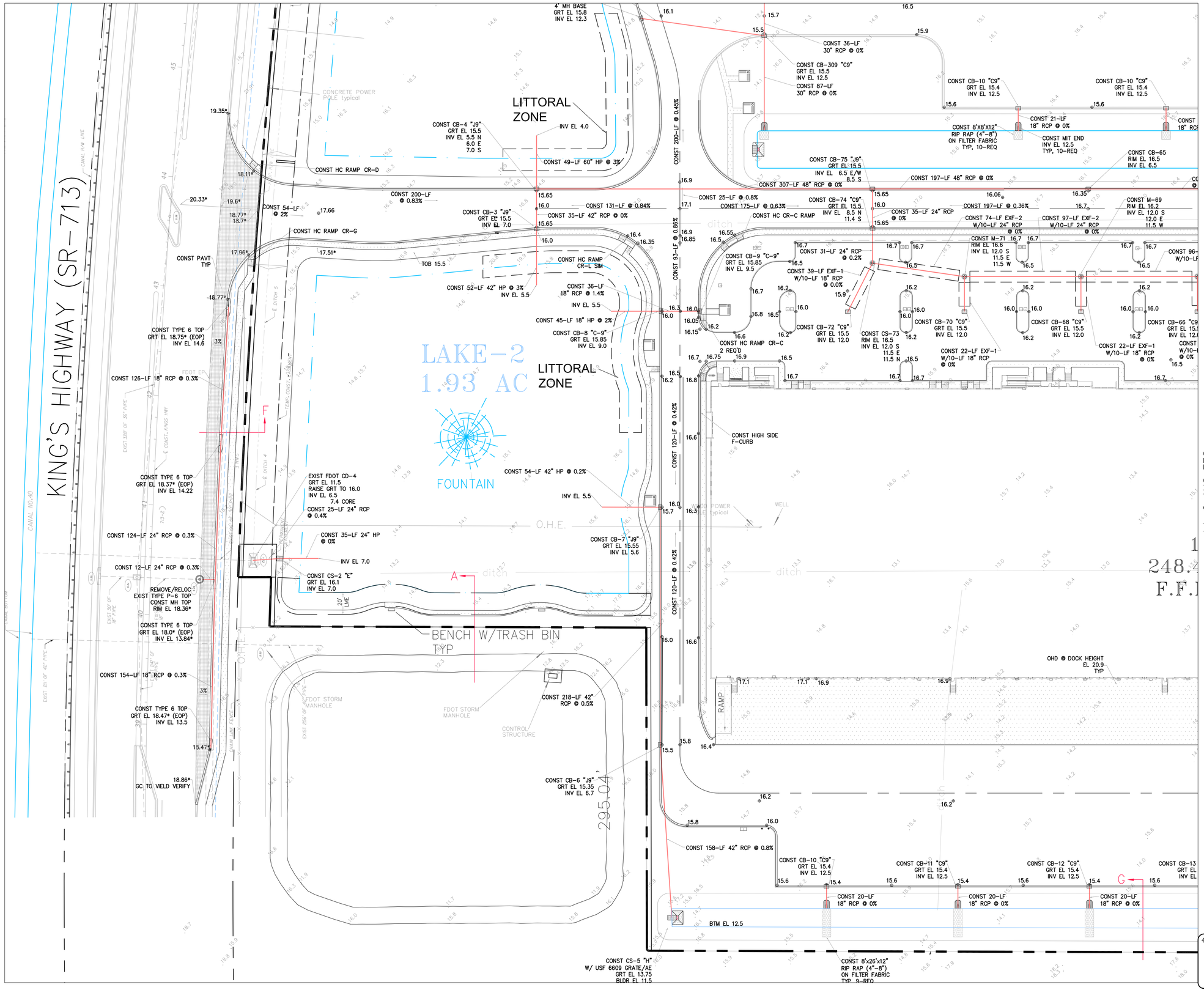
DRAWN BY: DDI
DESIGNED BY: JHI
SCALE: 1" = 100'
DATE: 01-22-2021

SEAL

COA 6986

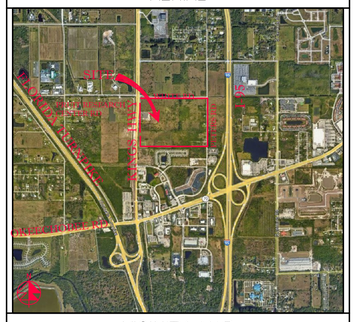
SHEET NO.
C-12

SEE SHT C-16



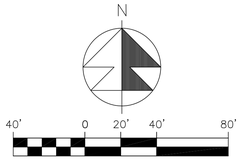
SEE SHT C-14

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E



NOTES:

1. GRT EL OF TYPE-9 INLETS ARE AT THE GUTTER FLOWLINE.
2. TYPE "C-9" STRUCTURES SHALL BE TYPE "C" BOX WITH TYPE "9" GRATE PER FDOT INDEX 425-052.
3. ALL OTHER INLET GRATES SHALL BE USF HEAVY DUTY LOADING GRATES. CS-5, CS-28, CS-92, CS-103 SHALL USE STEEL USF 6609 GRATE /AE.
4. ALL EXIST INFO & TOPO ARE PER MAGELLAN SURVEYING & MAPPING, INC., DWG # 21-020. ALL ELEV'S ARE IN FT, NAVD 1988.
5. THE FINAL LANDSCAPE GRADE AT BLDG SHALL BE 6" TYP, 3" MIN BELOW FIN FL ELEV.
6. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL DRAINAGE STRUCTURES, PIPES, SUBGRADE MATERIAL, BASE MATERIAL, ASPHALT PAVEMENT SPEC, CONCRETE MIX DESIGN AT THE MINIMUM PRIOR TO CONSTRUCTION.
7. INLETS SHALL BE PROTECTED DURING CONSTRUCTION PER FLORIDA STORMWATER, ERROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.
8. ALL CATCH BASINS LOCATED IN E/F-CURB SHALL HAVE USF 6168 FRAME & GRATE.
9. ALL CATCH BASINS AND MANHOLES SHALL HAVE TURBIDITY CONTROL BARRIERS PER DETAIL DURING THE CONST PHASE OF THE PROJECT.
10. CONTRACTOR SHALL CONSTRUCT SILT FENCE AT P/L.
11. ACCESSIBLE ROUTES INCL SW'S, HANDICAP RAMPS & DET WARNINGS SHALL CONFORM TO 2010 US DOJ "STD'S FOR ACCESSIBLE DESIGN", FBC CHAPTER 11, & FDOT INDEX 522-002.
12. CONTRACTOR SHALL PROTECT ALL INLETS & SITE PERIMETERS DURING CONSTRUCTION PER FLORIDA STORMWATER, ERROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.
13. PAVT SHALL BE ½" ABOVE THE INLET GRATE & E/F-CURB
14. ALL D-CURBS SHALL TERMINATE WITH 2' TAPER.
15. ALL CATCH BASINS TYPES REFER TO FDOT INDEX 425-052.
16. ADS HP STORM PIPE MAY BE SUBSTITUTED FOR RCP PIPE PENDING EOR APPROVAL. CONTRACTOR TO PROVIDE AN ALTERNATE BID FOR ADS PIPE.

LEGEND

@19.7	PROP PAV'T EL
18.7*	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
DWM	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

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Kings Highway Commerce Park
Off-site Improvements
Fort Pierce, Florida

Grading, Paving & Drainage Plan

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

COA 6986

SHEET NO.
C-13

SEE SHT C-18

SEE SHT C-13

SEE SHT C-15

DRY DET-6
2.56 AC

BLDG-A
PH-IA
265.4 KSF
17 KSF OFFICE
248.4 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

DRY DETENTION-8 2.07 AC

CONST CB-10 "C9" GRT EL 15.4 INV EL 12.5

CONST 21-LF 18" RCP @ 0%

CONST MIT END INV EL 12.5 TYP, 10-REQ

CONST CB-65 RIM EL 16.5 INV EL 6.5

CONST 243-LF 48" RCP @ 0%

CONST M-69 RIM EL 16.2 INV EL 12.0 S 12.0 E 11.5 W

CONST 97-LF EXF-2 W/10-LF 24" RCP @ 0%

CONST 243-LF @ 0.3%

CONST 96-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST M-67 RIM EL 16.2 INV EL 12.0

CONST 22-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST CB-68 "C9" GRT EL 15.5 INV EL 12.0

CONST CB-66 "C9" GRT EL 15.5 INV EL 12.0

CONST 22-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST 34-LF 24" RCP @ 0.2%

CONST 44-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST CB-61 "C9" GRT EL 15.5 INV EL 12.0

CONST CB-63 "C9" GRT EL 15.5 INV EL 8.5 N 11.4 S

CONST 35-LF 24" RCP @ 0%

CONST CS-62 RIM EL 16.5 INV EL 12.0 S 11.5 E 11.5 N

CONST CB-64 "J9" GRT EL 15.5 INV EL 6.5 E/W 8.5 S

CONST 185-LF 48" RCP @ 0%

CONST 63-LF EXF-2 W/10-LF 24" RCP @ 0%

CONST M-60 RIM EL 16.18 INV EL 12.0 S 11.5 E 11.5 W

CONST 22-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST CB-59 "C9" GRT EL 15.5 INV EL 12.0

CONST CB-54 "J9" GRT EL 16.25 INV EL 6.5 E/W

CONST 286-LF @ 0.38%

CONST 101-LF EXF W/10-LF 24" RCP @ 0%

CONST M-58 RIM EL 16.18 INV EL 12.0 S 12.0 E 11.5 W

CONST CS-41 "C9" GRT EL 15.45 INV EL 9.0 N 12.0 S

CONST 97-LF EXF-2 W/10-LF 24" RCP @ 0%

CONST 22-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST CB-55 "C9" GRT EL 15.5 INV EL 12.0

CONST 22-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST 197-LF 54" RCP @ 0%

CONST 153-LF @ 0.59%

CONST HC RAMP CR-C SIM 2 REQ'D

CONST M-56 RIM EL 16.18 INV EL 12.0

CONST 17-LF B-CURB

CONST 35-LF 18" RCP @ 0%

CONST PAVT TYP

CONST CB-57 "C9" GRT EL 15.5 INV EL 12.0

CONST CB-51 "C9" GRT EL 15.35 INV EL 9.0

CONST CB-53 "J9" GRT EL 15.6 INV EL 6.5 E/W 9.0 S

CONST 109-LF 18" RCP @ 0%

CONST 153-LF @ 0.59%

CONST 335-LF 48" RCP @ 0%

CONST 181-LF @ 0.61%

CONST CB-50 "J9" GRT EL 15.5 INV EL 6.5 E/W 8.5 S

CONST CB-49 "C9" GRT EL 15.35 INV EL 8.5 N 11.4 S

CONST 90-LF @ 0.33%

CONST 105-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST 22-LF EXF-1 W/10-LF 18" RCP @ 0.0%

CONST 95-LF EXF-2 W/10-LF 24" RCP @ 0%

CONST HC RAMP CR-G RAMP 4 REQ'D

CONST CB-52 "C9" GRT EL 15.35 INV EL 9.0

CONST CB-43 "C9" GRT EL 15.5 INV EL 12.0

CONST M-44 RIM EL 16.18 INV EL 12.0

CONST CB-45 "C9" GRT EL 15.5 INV EL 12.0

CONST 22-LF EXF-1 W/10-LF 18" RCP @ 0.0%

CONST 115-LF @ 0.86%

CONST 94-LF @ 0.43%

CONST CB-18 "C9" GRT EL 16.2 INV EL 10.0

CONST CB-19 "C9" GRT EL 16.2 INV EL 10.0 W 12.0 S

CONST 35-LF 18" RCP @ 0.0%

CONST 152-LF 18" RCP @ 0.0%

CONST 154-LF @ 0.43%

CONST CB-20 "C9" GRT EL 16.75 INV EL 12.0 N 9.8 S

OHD @ DOCK HEIGHT EL 20.9 TYP

CONST CB-12 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-13 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-14 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-15 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-16 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-17 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-21 "C9" GRT EL 15.4 INV EL 9.8 N 12.5 S

CONST 180-LF 18" RCP @ 0%

CONST CB-22 "C9" GRT EL 15.4 INV EL 12.5

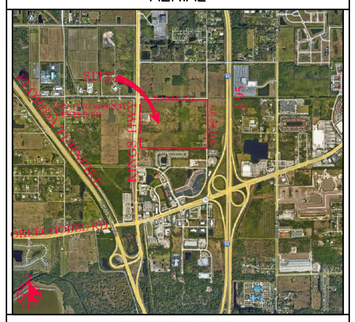
CONST CB-23 "C9" GRT EL 15.4 INV EL 12.5

CONST 20-LF 18" RCP @ 0%

BTM EL 12.5

CONST 8'x26'x12" RIP RAP (4"-8") ON FILTER FABRIC TYP, 9-REQ

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

NOTES:

1. GRT EL OF TYPE-9 INLETS ARE AT THE GUTTER FLOWLINE.
2. TYPE "C-9" STRUCTURES SHALL BE TYPE "C" BOX WITH TYPE "9" GRATE PER FDOT INDEX 425-052.
3. ALL OTHER INLET GRATES SHALL BE USF HEAVY DUTY LOADING GRATES. CS-5, CS-28, CS-92, CS-103 SHALL USE STEEL USF 6609 GRATE /AE.
4. ALL EXIST INFO & TOPO ARE PER MAGELLAN SURVEYING & MAPPING, INC., DWG # 21-020. ALL ELEV'S ARE IN FT, NAVD 1988.
5. THE FINAL LANDSCAPE GRADE AT BLDG SHALL BE 6" TYP, 3" MIN BELOW FIN FL ELEV.
6. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL DRAINAGE STRUCTURES, PIPES, SUBGRADE MATERIAL, BASE MATERIAL, ASPHALT PAVEMENT SPEC, CONCRETE MIX DESIGN AT THE MINIMUM PRIOR TO CONSTRUCTION.
7. INLETS SHALL BE PROTECTED DURING CONSTRUCTION PER FLORIDA STORMWATER, ERROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.
8. ALL CATCH BASINS LOCATED IN E/F-CURB SHALL HAVE USF 6168 FRAME & GRATE.
9. ALL CATCH BASINS AND MANHOLES SHALL HAVE TURBIDITY CONTROL BARRIERS PER DETAIL DURING THE CONST PHASE OF THE PROJECT.
10. CONTRACTOR SHALL CONSTRUCT SILT FENCE AT P/L.
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14. ALL D-CURBS SHALL TERMINATE WITH 2' TAPER.
15. ALL CATCH BASINS TYPES REFER TO FDOT INDEX 425-052.
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LEGEND

⊕19.7	PROP PAVT EL
	EXIST EL
	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VALVE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

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CALL SUNSHINE
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TEL: (561) 575-6030
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WEBSITE: www.JHInc.com
EMAIL: JHI@bellsouth.net

Kings Highway Commerce Park
Fort Pierce, Florida

Grading, Paving & Drainage Plan

JOB NO.	2101-1355
DRAWN BY	DDI
DESIGNED BY	JHI
SCALE	1" =40'
DATE	01-22-21

SEAL

COA 6986

SHEET NO.
C-14

SEE SHT C-20

SEE SHT C-14

BLDG-B
PH-IB
220.3 KSF
15 KSF OFFICE
205.3 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

LAKE-3
2.30 AC

LITTORAL ZONE
REMOVE EXIST DWY & CULVERT, TYP

PETERS ROAD

REMOVE EXIST ROAD PAVT & RE-CONST PER PETERS RD SECTION ON SHT C-33 TYP

FPUA TO RELOC EXIST PP TYP, 9-REQ

FOUNTAIN

EXIST SAN
EXIST WM
CULVERT
HEADWALL

CONST CS-103 "H" W/ USF 6609 GRATE/AE GRT EL 13.75 BLDR EL 11.5 INV EL 7.2

CONST MIT END INV EL 15.45 TYP, 2 REQ

CONST 79-LF 18" RCP @ 2.0%

CONST 43-LF 42" RCP @ 1.8%

CONST CB-32 "C9" GRT EL 16.3 INV EL 6.5

CONST 42-LF 48" RCP @ 0.0%

CONST 331-LF 48" RCP @ 0%

CONST 40-LF CONST @ 3%

CONST 102-LF @ 0.35%

CONST 101-LF @ 0.64%

CONST CS-102 "E" GRT EL 17.83 INV EL 13.84 N INV EL 12.91 S

CONST CB-33 "C9" GRT EL 16.32 INV EL 6.5

CONST 79-LF 18" RCP @ 2.7%

CONST HC RAMP CR-G 2 REQ'D

CONST CB-31 "C9" GRT EL 15.35 INV EL 6.2

CONST 59-LF 48" HP @ 2.6%

INV EL 5.0

CONST 37-LF 18" HP @ 3.2%

CONST CB-30 "C9" GRT EL 15.35 INV EL 9.5 CONST HC RAMP CR-G 2 REQ'D

CONST 60-LF @ 1.67%

CONST 137-LF @ 0.6%

CONST 83-LF @ 0.35%

CONST 67-LF @ 0.3%

CONST 100-LF @ 0.3%

CONST 88-LF @ 0.32%

CONST 148-LF @ 0.34%

CONST 190-LF @ 0.37%

CONST 143-LF 18" RCP @ 0%

CONST 61-LF 36" HP @ 3.3%

CONST HIGH SIDE F-CURB

CONST CB-10 "C9" GRT EL 15.5 INV EL 12.5

CONST CB-10 "C9" GRT EL 15.4 INV EL 12.5

CONST 21-LF 18" RCP @ 0%

CONST CB-42 "J9" GRT EL 16.25 INV EL 6.5

CONST CB-41 "C9" GRT EL 15.5 INV EL 6.5 E/W 8.5 S

CONST CB-50 "J9" GRT EL 15.5 INV EL 6.5 E/W 8.5 S

CONST 335-LF 48" RCP @ 0%

CONST 227-LF 48" RCP @ 0%

CONST 192-LF 48" RCP @ 0%

CONST 35-LF 24" RCP @ 0%

CONST CB-49 "C9" GRT EL 15.35 INV EL 8.5 N 11.4 S

CONST 181-LF @ 0.61%

CONST 54-LF 24" RCP @ 0.2%

CONST 225-LF @ 0.33%

CONST 198-LF @ 0.38%

CONST CB-40 "C9" GRT EL 15.5 INV EL 8.5 N 11.4 S

CONST HC RAMP CR-C SIM 2 REQ'D

CONST 42-LF 18" RCP @ 0.2%

CONST 128-LF @ 0.86%

CONST 105-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST 95-LF EXF-2 W/10-LF 24" RCP @ 0%

CONST CS-48 RIM EL 16.5 INV EL 12.0 S 11.5 W 11.5 N

CONST M-35 RIM EL 15.45 INV EL 12.0

CONST 22-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST 96-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST 106-LF EXF-2 W/10-LF 24" RCP @ 0%

CONST CS-39 RIM EL 16.5 INV EL 11.5 W 11.5 N 12.0 S

CONST M-37 RIM EL 15.45 INV EL 12.0 S 11.5 E 11.5 W

CONST CB-43 "C9" GRT EL 15.5 INV EL 12.0

CONST M-44 RIM EL 16.18 INV EL 12.0

CONST CB-45 "C9" GRT EL 15.5 INV EL 12.0

CONST 22-LF EXF-1 W/10-LF 18" RCP @ 0.0%

CONST M-46 RIM EL 16.6 INV EL 12.0 S 11.5 E 12.0 W

CONST CB-47 "C9" GRT EL 15.5 INV EL 12.0

CONST 35-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST CB-34 "C9" GRT EL 15.5 INV EL 12.0

CONST CB-36 "C9" GRT EL 15.5 INV EL 12.0

CONST CB-38 "C9" GRT EL 15.5 INV EL 12.0

CONST 23-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST 32-LF EXF-1 W/10-LF 18" RCP @ 0%

CONST CB-22 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-23 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-24 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-25 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-26 "C9" GRT EL 15.4 INV EL 12.5

CONST CB-27 "C9" GRT EL 15.4 INV EL 12.5

CONST CS-28 "H" W/ USF 6609 GRATE/AE GRT EL 13.75 BLDR EL 11.5 INV EL 7.0

CONST 20-LF 18" RCP @ 0%

BTM EL 12.5

CONST CB-29 "C9" GRT EL 15.5 INV EL 12.5

INV EL 5.0

END MILL & OVERLAY

CONST FLARED END PER FDOT 510-001 TYP, 2 REQ

GRADE @ 6H:1V MATCH EXIST GRADE, SOD

MILL & OVERLAY TO 1" MIN SP 9.5

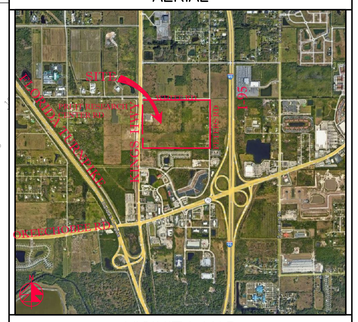
BEGIN MILL & OVERLAY

2215.32'

8'x26'x12" P (4"-8") TER FABRIC -REQ

FIRE PUMP
ELECT YARD
DUMPSTR ENCL
WELL

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

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LEGEND

19.7	PROP PAV'T EL
19.7	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
FH	FIRE HYDRANT
GV	GATE VALVE
GV	GATE VALVE
SC	SIAMESE CONN.
CV	CHECK VALVE
DCVA	DOUBLE DETECTOR CHECK VALVE
RPBP	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
SP	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
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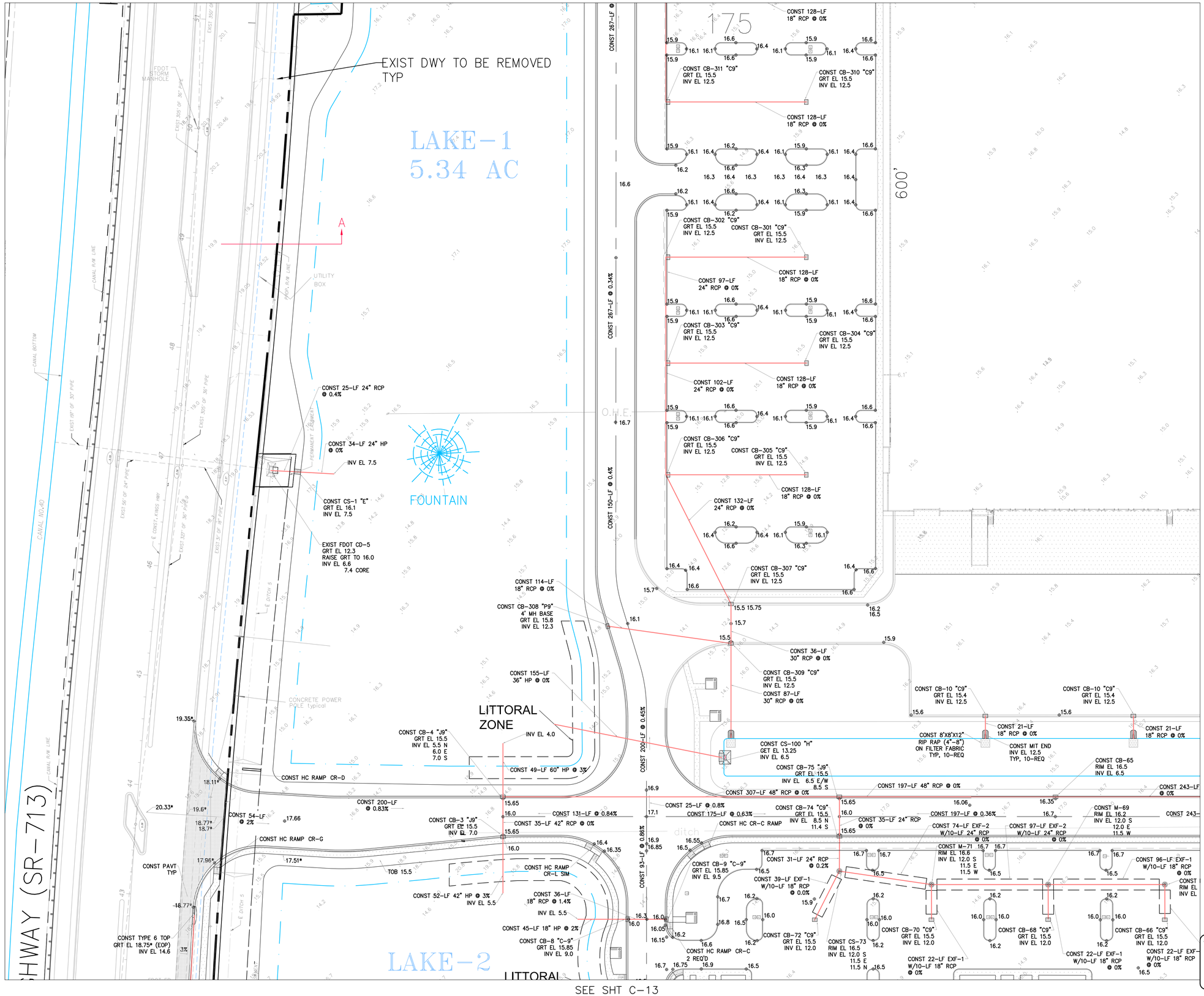
DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

COA 6986

SHEET NO.
C-15

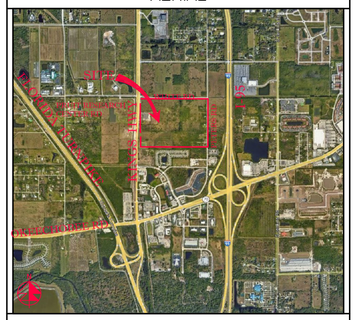
SEE SHT C-17



SEE SHT C-18

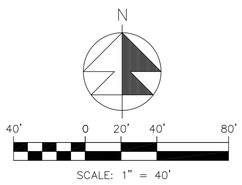
SEE SHT C-13

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E



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INV EL	INVERT EL
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FM	FORCE MAIN
FIM	FIRE MAIN
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GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
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TV	TAPPING VAVLE
CO	CLEANOUT
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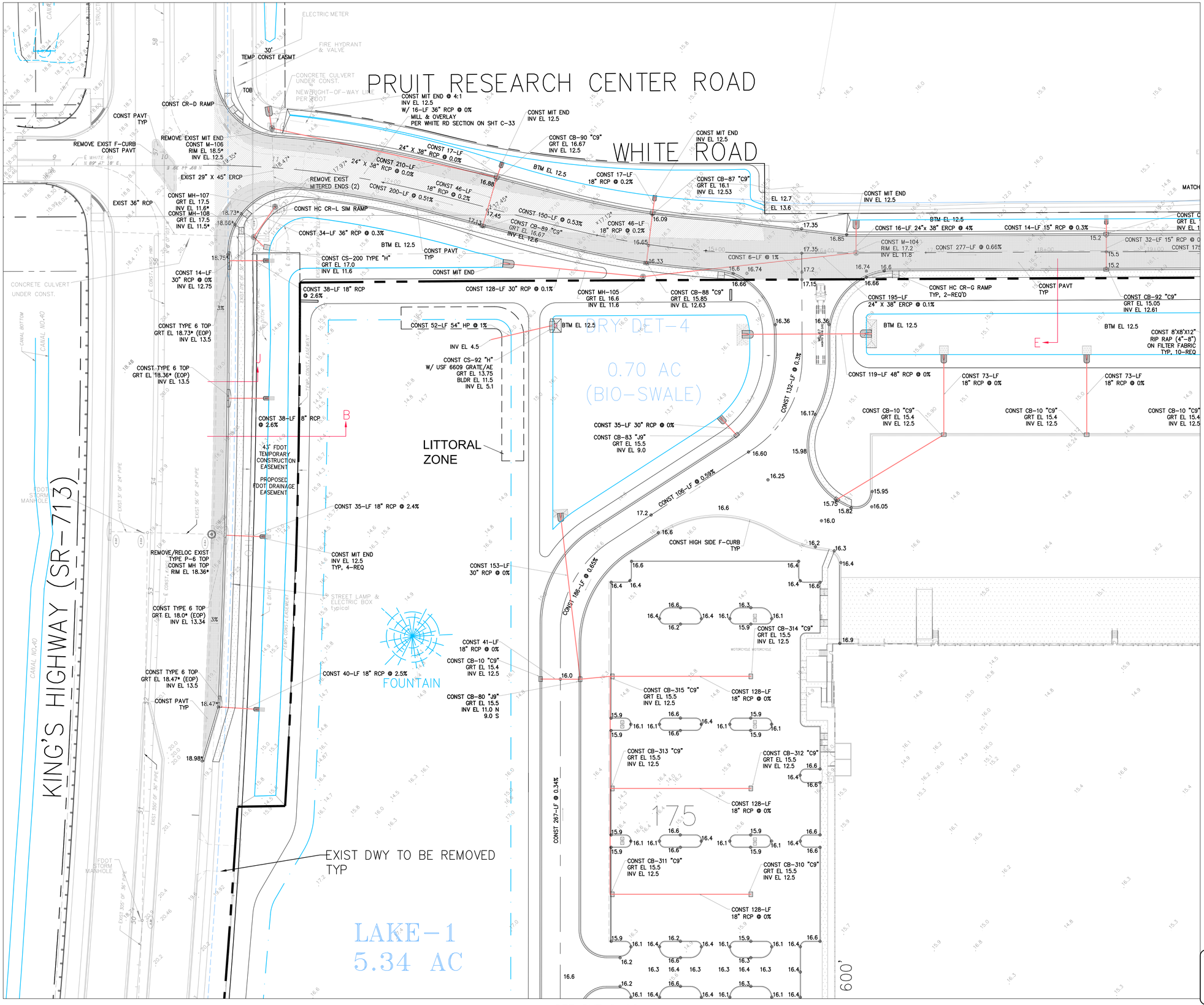
Grading, Paving & Drainage Plan

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01-22-21	1"=40'	JHI	DDI	2101-1355

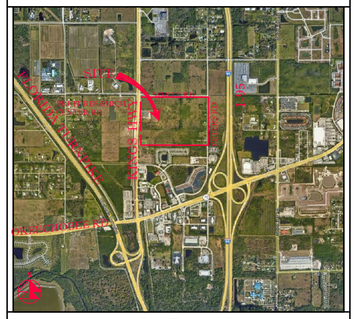
SEAL

COA 6986

SHEET NO.
C-16

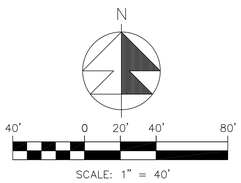


AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E



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TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
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SEAL

COA 6986

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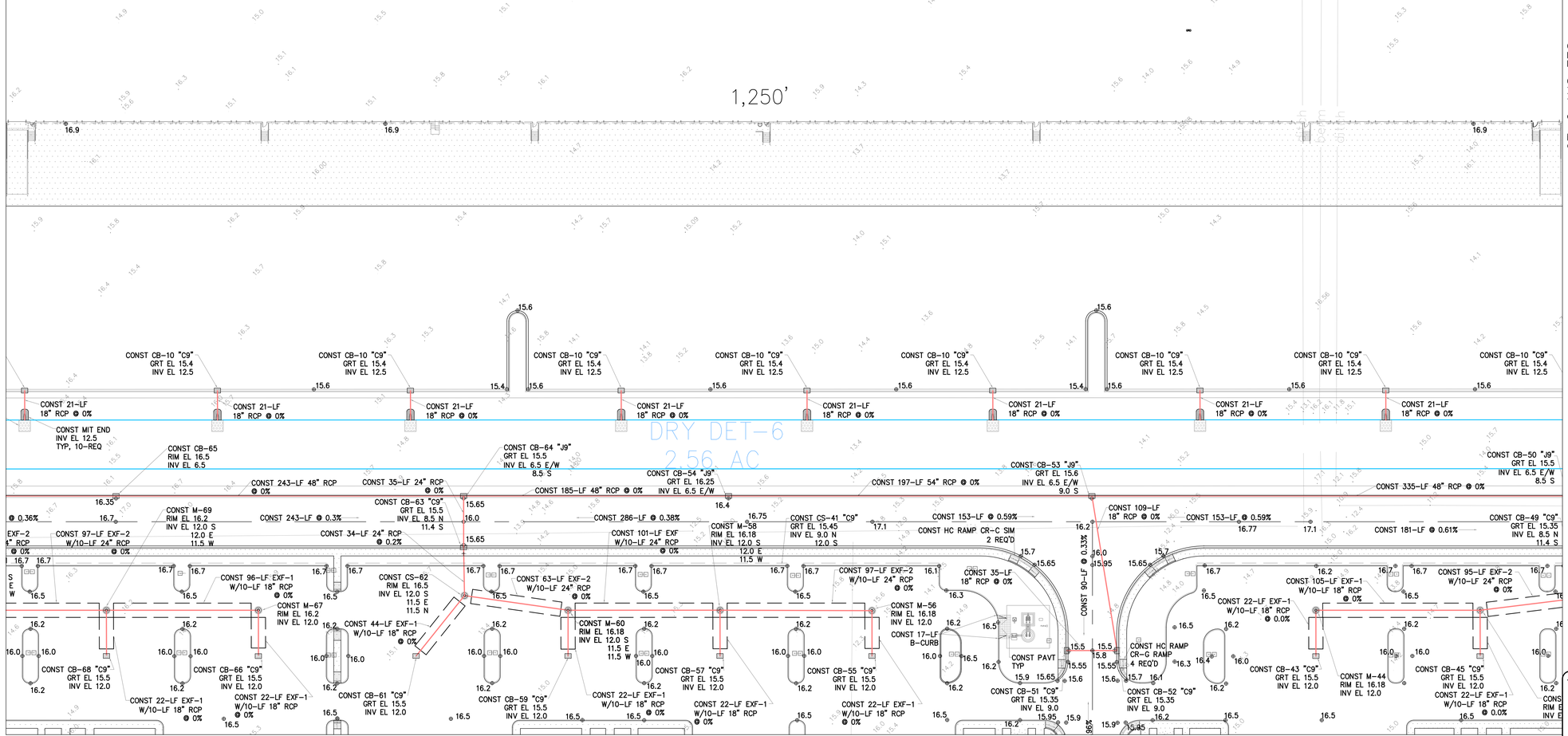
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BLDG-C
PH-II
750.5 KSF
40 KSF OFFICE
710.5 KSF WAREHOUSE

SEE SHT C-16

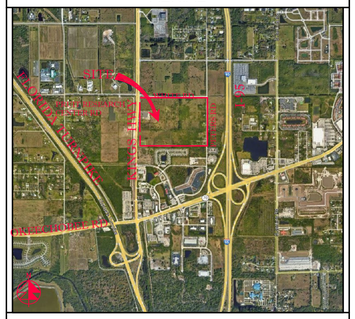
SEE SHT C-20

1,250'



SEE SHT C-14

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

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Kings Highway Commerce Park
Fort Pierce, Florida

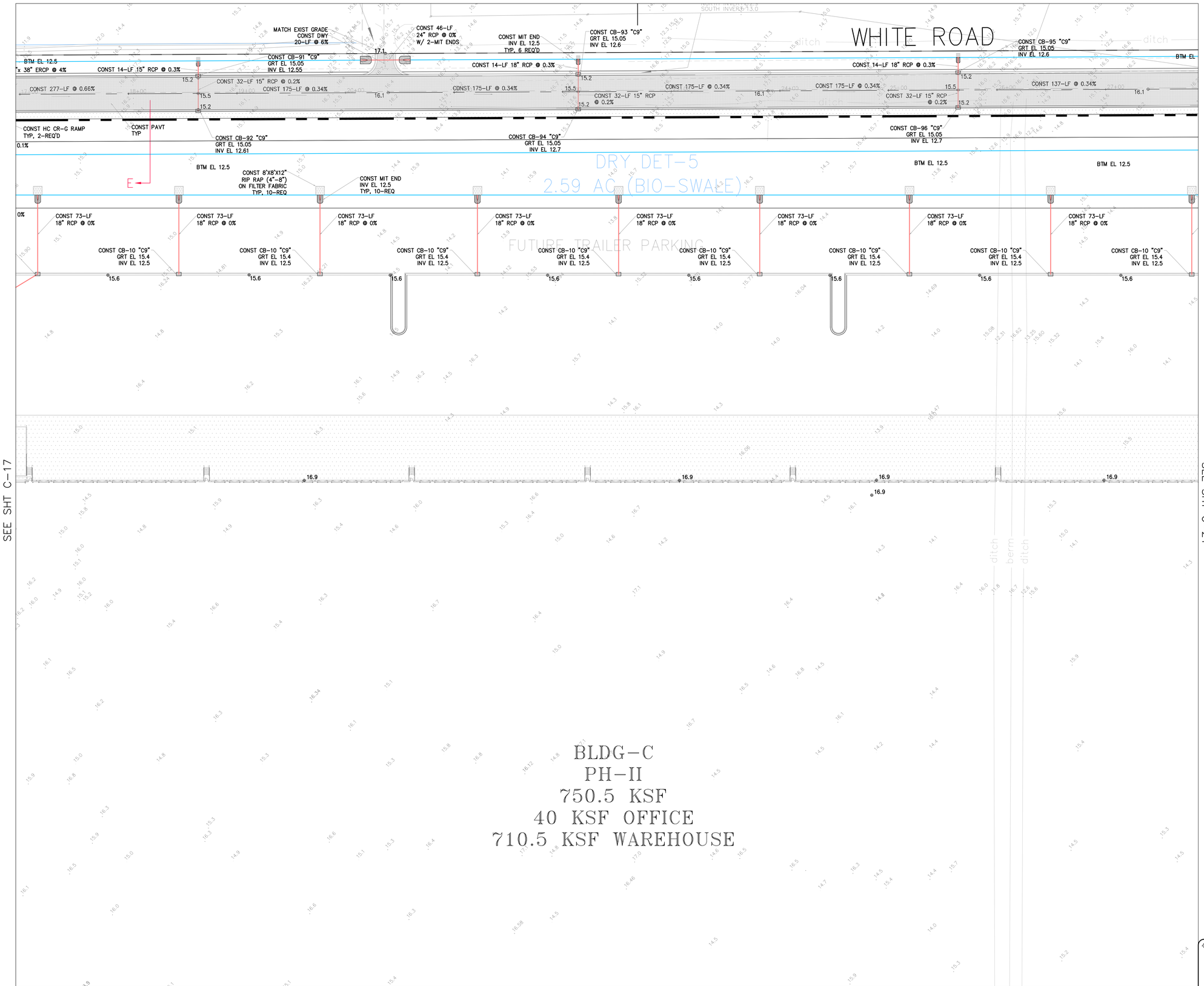
Grading, Paving & Drainage Plan

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

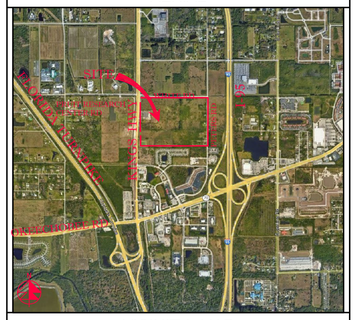
SEAL

COA 6986

SHEET NO.
C-18

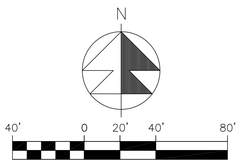


AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E



SCALE: 1" = 40'

NOTES:

1. GRT EL OF TYPE-9 INLETS ARE AT THE GUTTER FLOWLINE.
2. TYPE "C-9" STRUCTURES SHALL BE TYPE "C" BOX WITH TYPE "9" GRATE PER FDOT INDEX 425-052.
3. ALL OTHER INLET GRATES SHALL BE USF HEAVY DUTY LOADING GRATES. CS-5, CS-28, CS-92, CS-103 SHALL USE STEEL USF 6609 GRATE /AE.
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5. THE FINAL LANDSCAPE GRADE AT BLDG SHALL BE 6" TYP, 3" MIN BELOW FIN FL ELEV.
6. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL DRAINAGE STRUCTURES, PIPES, SUBGRADE MATERIAL, BASE MATERIAL, ASPHALT PAVEMENT SPEC, CONCRETE MIX DESIGN AT THE MINIMUM PRIOR TO CONSTRUCTION.
7. INLETS SHALL BE PROTECTED DURING CONSTRUCTION PER FLORIDA STORMWATER, ERROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.
8. ALL CATCH BASINS LOCATED IN E/F-CURB SHALL HAVE USF 6168 FRAME & GRATE.
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48 HOURS BEFORE DIGGING
CALL TOLL FREE
811
CALL SUNSHINE
NOTIFICATION CENTER

LEGEND

@19.7	PROP PAV'T EL
15.2	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
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TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
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Fort Pierce, Florida

Grading, Paving & Drainage Plan

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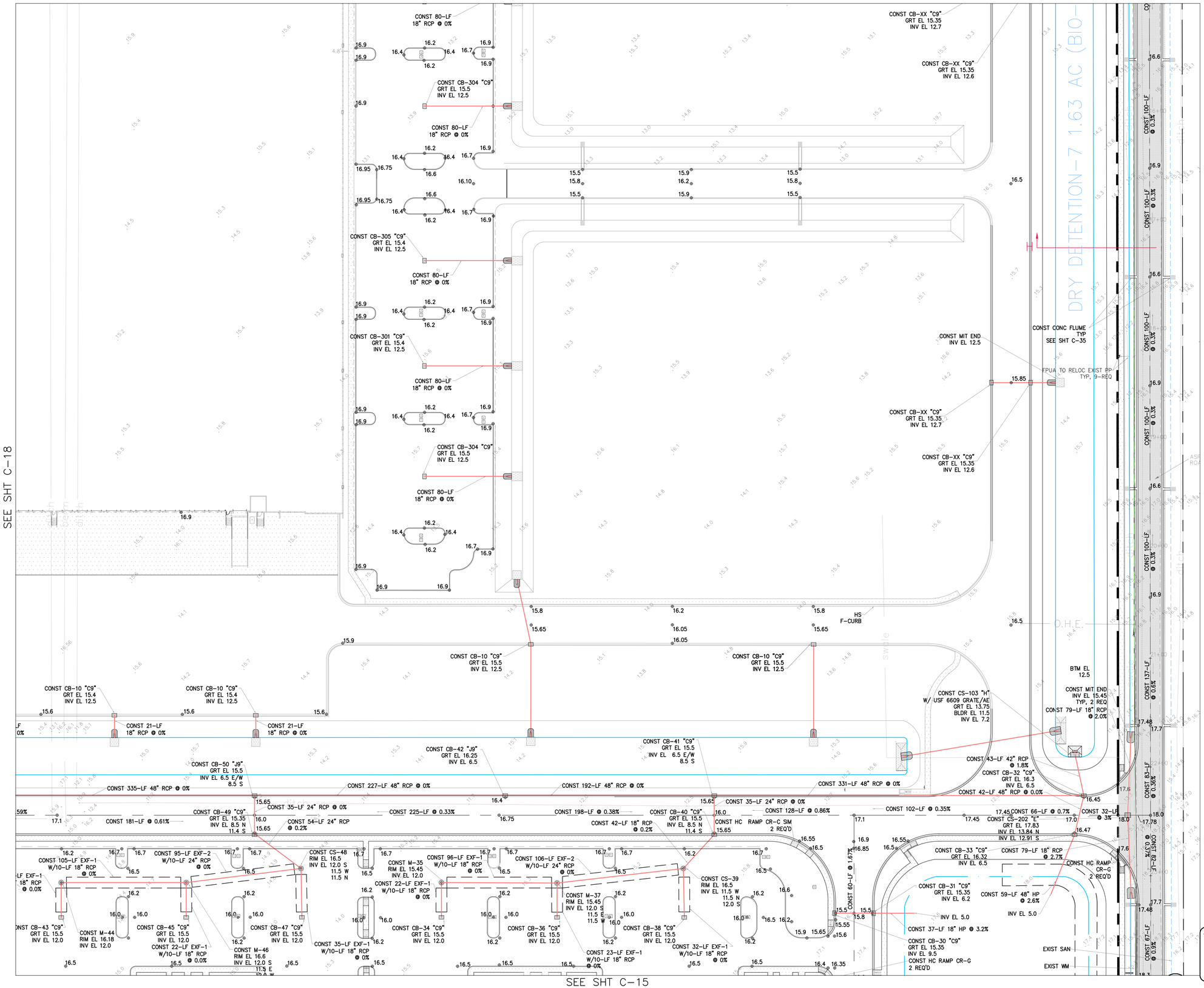
SEAL

COA 6986

SHEET NO.
C-19

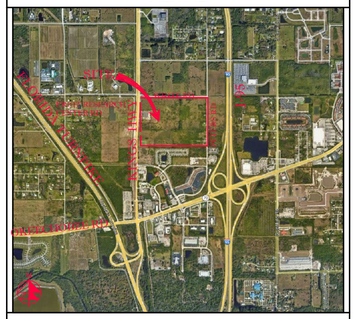
SEE SHT C-21

SEE SHT C-18



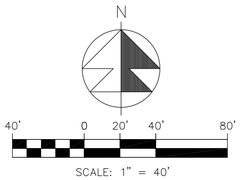
SEE SHT C-15

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E



SCALE: 1" = 40'

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19.7	EXIST EL
✳	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
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BE	BOTTOM EL
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	SAMPLE POINT
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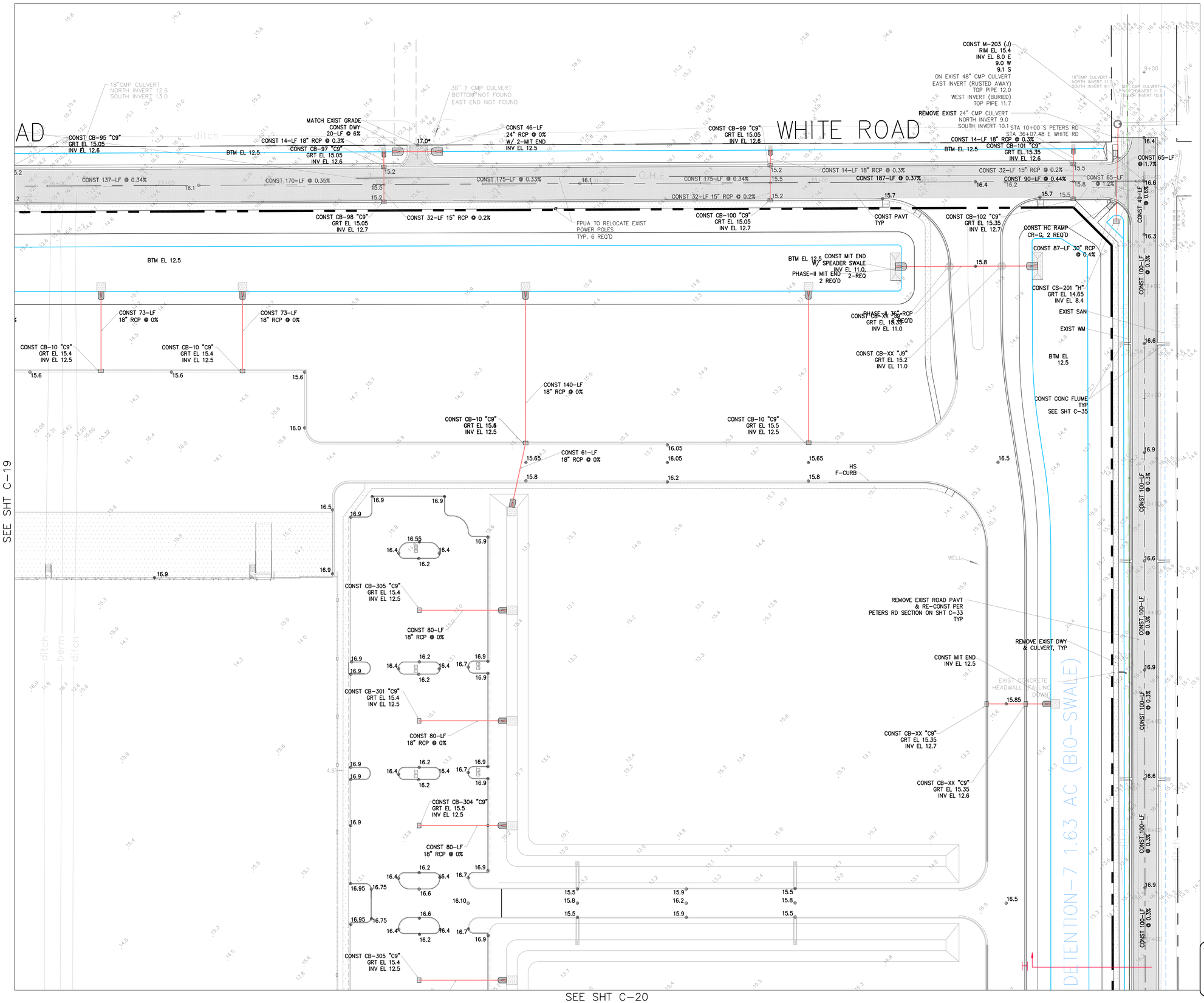
Grading, Paving & Drainage Plan

JOB NO.	DRAWN BY	DESIGNED BY	SCALE	DATE
2101-1355	DDI	JHI	1"=40'	01-22-21

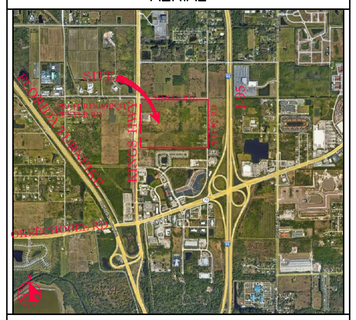
SEAL

COA 6986

SHEET NO.
C-20



AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

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	FIRE HYDRANT
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	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
MES	MITERED END SECTION
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CO	CLEANOUT
B1	BORING NO. AND LOCATION
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Kings Highway Commerce Park
Off-site Improvements
Fort Pierce, Florida

Grading, Paving & Drainage Plan

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

COA 6986

SHEET NO.

C-21

PRUIT RESEARCH CENTER ROAD

WHITE ROAD

WHITE ROAD

WHITE ROAD

KING'S HIGHWAY (SR-713)

KING'S HIGHWAY (SR-713)

PETERS ROAD

DRY DET-4
0.70 AC
(BIO-SWALE)

DRY DET-5
2.59 AC (BIO-SWALE)

FUTURE TRAILER PARKING

LITTORAL ZONE

FOUNTAIN

LAKE-1
5.34 AC

BLDG-C
PH-II
750.5 KSF
40 KSF OFFICE
710.5 KSF WAREHOUSE

600'

1,250'

DRY DETENTION-7 1.63 AC (BIO-SWALE)

DRY DET-6
2.56 AC

LAKE-2
1.93 AC

BLDG-A
PH-IA
265.4 KSF
17 KSF OFFICE
248.4 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

BLDG-B
PH-IB
220.3 KSF
15 KSF OFFICE
205.3 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

LAKE-3
2.30 AC

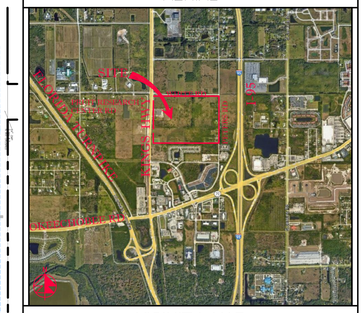
BENCH W/TRASH BIN TYP

295.04'

DRY DETENTION-8 2.07 AC

2215.32'

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

100' 0 50' 100' 200'

SCALE: 1" = 100'

REVISIONS

REV PER CITY 06-25-21
REV PER SP 06-25-21
REV PER SLC 07-26-21
REV PER FDOT 08-25-21
REV PER FDOT 09-17-21
REV PER FPUA 11-30-21
REV PER SP 01-15-21

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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Water & Wastewater Overall Plan

DRAWN BY	DESIGNED BY	SCALE	DATE
DDI	JHI	1" = 100'	01-22-2021

SEAL

COA 6986

SHEET NO.

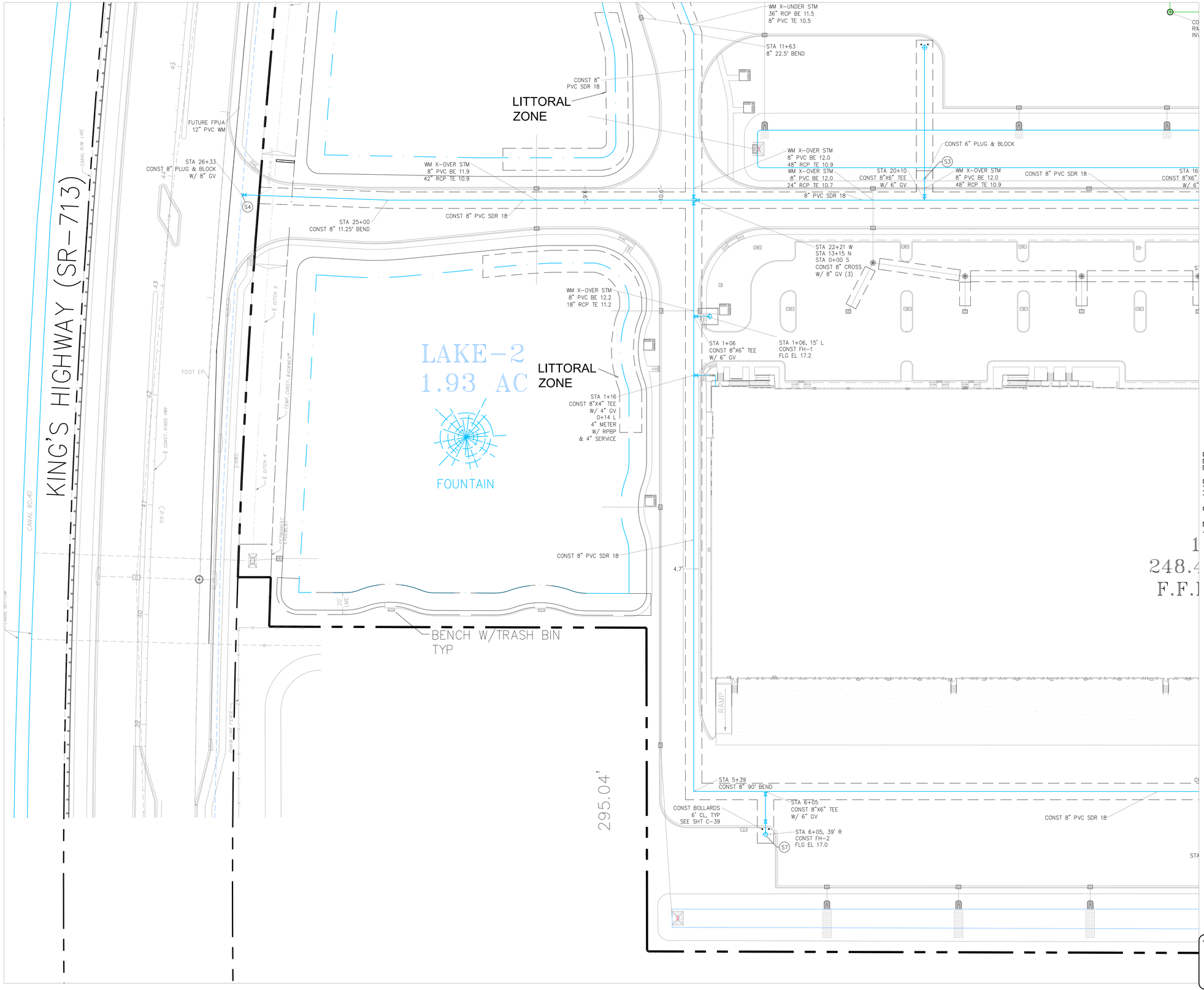
C-22

LEGEND

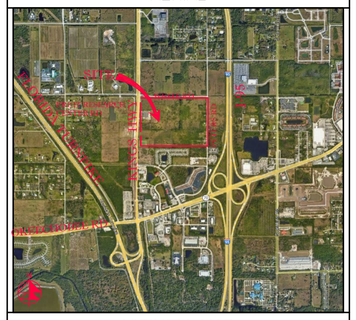
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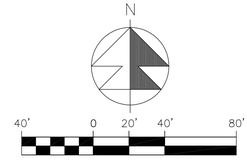


AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E



SCALE: 1" = 40'

1. THE LIFT STATION SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF FT PIERCE'S LATEST TECHNICAL PROVISIONS AND STANDARD DETAILS.

2. SANITARY SERVICES SHALL BE CONSTRUCTED @ 1% MIN SLOPE W/ CLEANOUTS EVERY 75' OC.

3. CONTRACTOR SHALL VERIFY SAN SERV INV EL @ BLDG W/ GC PRIOR TO CONSTRUCTION.

4. FIRE LINE AFTER REDUCED PRESSURE DET ASSEMBLY/RPDA SHALL BE DESIGNED & CONSTRUCTED BY FL REG FIRE SPRINKLER CONTRACTOR WHO SHALL VERIFY LOCATION OF ALL CONNECTIONS INCLUDING FIRE DEPT CONN'S.

5. WATER MAIN SHALL BE PVC SDR-18. FIRE MAIN SHALL BE PVC C-900 SDR-14. SANITARY MAINS & SERVICES SHALL BE PVC SDR-26.

6. ALL WM PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)3, F.A.C., USING BLUE AS AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING THE MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED NO MORE THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER THE INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIP THE PIPE DURING THE INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.

7. EXACT LOCATION OF WATER SERVICE & FIRE LINE STUB OUTS TO BE VERIFIED WITH GC.

8. MECH ENG DESIGNING THE FIRE SPRINKLER SYSTEM FOR THE BLDG SHALL VERIFY THE FIRE LINE SIZE & NOTIFY ENG OF MODIFICATION IF ANY.

9. CONTRACTOR SHALL CLEAN & FLUSH THE WATER LINE & PERFORM A ONE HR P&L TEST (150 PSI) ON THE WM PER CITY OF FT PIERCE'S UTILITY'S REQ'S.

10. CONTRACTOR SHALL PROVIDE P&L TEST ON FIM PER CITY OF FT PIERCE'S UTILITY'S REQ'S (200 PSI).

11. ALL SEWER INFRASTRUCTURE TO MEET CITY OF FT PIERCE'S LATEST TECHNICAL PROVISIONS AND STANDARD DETAILS.

12. WATER LINE SHALL BE SWABBED.

13. 2" BLOW OF ASSEMBLY SHALL BE CONSTRUCTED OF BRASS AND WILL REMAIN PERMANENT.

14. A JUMPER METER SHALL BE CONSTRUCTED AT TIE-IN LOCATION. THE JUMPER METER WILL REMAIN IN PLACE UNTIL CLEARANCE IS RECEIVED FROM FDEP.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LABOR, MATERIALS, AND EQUIPMENT TO PERFORM THE TIE-IN TO THE WATER MAIN(S).

16. WATER SERVICE LINES SHALL CONSIST OF A BRONZE SERVICE SADDLE, CORPORATION STOP, TYPE "K" COPPER, AND CURB STOP (CURB STOPS FOR 1.5" AND 2" SHALL BE FLARE X FLANGE).

17. 8" FIRELINE AFTER DDCV SHALL BE DESIGNED AND CONSTRUCTED BY A FLORIDA REGISTERED FIRE SPRINKLER CONTRACTOR WHO SHALL VERIFY LOCATION OF ALL CONNECTIONS INCLUDING SIAMESE CONN, PIV, & CHECK VALVES.

18. ALL WELLS & SEPTIC TANKS TO BE ABANDONED. ALL DRAIN FIELDS TO BE DRAINED & ABANDONED. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS INCL. FROM ST LUCIE COUNTY HEALTH DEPT FOR ALL ABANDONMENTS.

19. ALL WM CONSTRUCTION ON PETERS RD SHALL BE DONE BEFORE ROADWAY IMPROVEMENTS / PLACEMENT OF BASE ARE STARTED.

LEGEND

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TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

48 HOURS BEFORE DIGGING
CALL TOLL FREE
811
CALL SUNSHINE
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Consulting Engineers
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JUPITER, FLORIDA 33458
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FAX: (561) 575-6088
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EMAIL: JHI@bellsouth.net

Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Water & Wastewater Plan

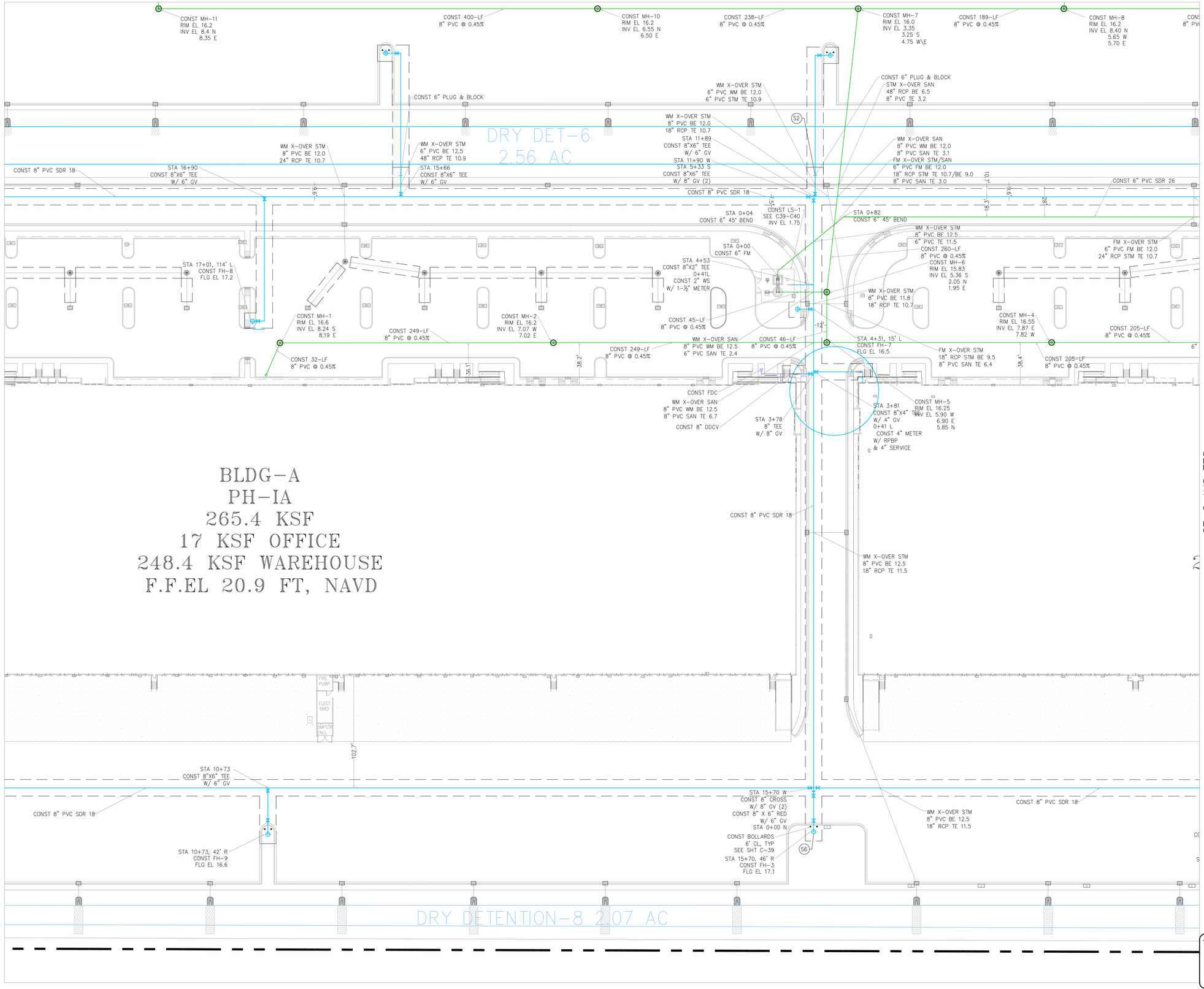
DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

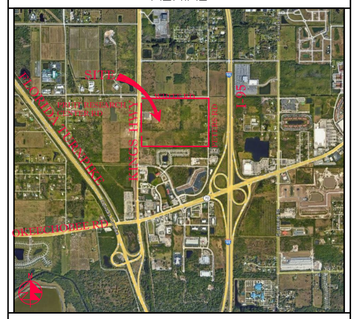
COA 6986

SHEET NO.
C-23

SEE SHT C-28

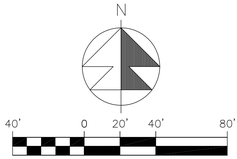


AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E



1. THE LIFT STATION SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF FT PIERCE'S LATEST TECHNICAL PROVISIONS AND STANDARD DETAILS.

2. SANITARY SERVICES SHALL BE CONSTRUCTED @ 1% MIN SLOPE W/ CLEANOUTS EVERY 75' OC.

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LEGEND

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19.7	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
S	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
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Phase-II
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Water & Wastewater Plan

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SEAL

COA 6986

SHEET NO.
C-24

SEE SHT C-30

SEE SHT C-24

CONST 189-LF
8" PVC @ 0.45%

CONST MH-8
RIM EL 16.2
INV EL 8.40 N
5.65 W
5.70 E

CONST 400-LF
8" PVC @ 0.45%

RIM EL 16.2
INV EL 8.10 N
INV EL 7.40 W

CONST 6" PLUG & BLOCK

WM X-OVER STM
30" RCP BE 11.5
8" PVC TE 10.5

STA 0+00
CONST 8" WET TAP
CONST 8"X6" TAPPING SLEEVE
W/ 8" TV

SAN X-OVER WM
8" PVC WM TE 11.5
12" CLR MIN

CONST 6" PLUG & BLOCK

WM X-OVER STM
6" PVC WM BE 12.0
48" RCP STM TE 10.9

STA 7+25
CONST 8"X6" TEE
W/ 6" GV

WM X-OVER STM
24" RCP TE 10.7

WM X-OVER FM
6" PVC WM BE 12.0
6" PVC FM TE 11.0

STA 3+04 E
CONST 8"X6" TEE
W/ 6" GV
STA 29+95 S

WM X-OVER STM
8" PVC BE 12.0
48" RCP TE 10.9

WM X-OVER FM
8" PVC WM BE 12.0
6" PVC FM TE 11.0

STA 1+50 E
STA 0+00 N
CONST 8" TEE
W/ 8" GV

7/BE 9.0

STA 7+40
CONST 8"X6" TEE
W/ 6" GV

CONST 6" PVC SDR 26

CONST 8" PVC SDR 18

10.7' | 19.6' | 82' | 18.3'

STM
2.5
1.5
0-LF
0.45%
MH-6
15.83
5.36 S
2.05 N
1.95 E

FM X-OVER STM
6" PVC FM BE 12.0
24" RCP STM TE 10.7

WM X-OVER STM
8" PVC BE 12.0
24" RCP TE 10.7

FM X-OVER STM
6" PVC FM BE 12.0
18" RCP STM TE 10.7

WM X-OVER STM
8" PVC BE 12.0
48" RCP TE 10.9

FM X-OVER STM
6" PVC FM BE 12.0
48" RCP STM TE 10.9

WM X-OVER STM
8" PVC BE 12.5
18" RCP TE 11.2

WM X-UNDER STM
18" RCP BE 13.9
8" PVC TE 12.7
SAN X-UNDER STM
18" RCP BE 13.3
6" PVC FM TE 12.3

CONST MH-4
RIM EL 16.55
INV EL 7.87 E
7.82 W

CONST 205-LF
8" PVC @ 0.45%

CONST MH-3
RIM EL 16.5
INV EL 8.84 S
8.79 W

CONST 33-LF
6" PVC @ 0.65%

STA 7+46, 114' L
CONST FH-6
FLG EL 17.2

STA 28+93, 15' L
CONST FH-5
FLG EL 16.6

STA 28+34
8" TEE
W/ 8" GV

STA 12+52
CONST 6" WET TAP
CONST 6"X6" TAPPING SLEEVE
W/ 6" GV
CONST OPEN CUT
& RESTORE
SEE SHT C-34

LITTORAL
ZONE

X-OVER STM
RCP STM BE 9.5
PVC SAN TE 6.4

38.4'

CONST 205-LF
8" PVC @ 0.45%

CONST FDC

CONST 8" DDCV

EXIST 6" FM
EXIST 8" WM

BLDG-B
PH-IB
220.3 KSF
15 KSF OFFICE
205.3 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

CONST 8" PVC SDR 18

LAKE-3
2.30 AC

FPUA TO RELOC EXIST PP
TYP, 9-REQ

FOUNTAIN

4.7'

FIRE PUMP

ELECT YARD

DMPSTR ENCL

102.7'

STA 20+01
CONST 8"X6" TEE
W/ 6" GV

CONST 8" PVC SDR 18

STA 24+56
CONST 8" TEE
W/ 8" GV
CONST 8" X 6" RED
W/ 6" GV

VER STM
BE 12.5
TE 11.5

CONST BOLLARDS
6' CL, TYP
SEE SHT C-39

STA 20+01, 42' R
CONST FH-10
FLG EL 16.6

CONST BOLLARDS
6' CL, TYP
SEE SHT C-39

STA 24+56, 39' R
CONST FH-4
FLG EL 16.8

EXIST 8" WM
EXIST 6" FM

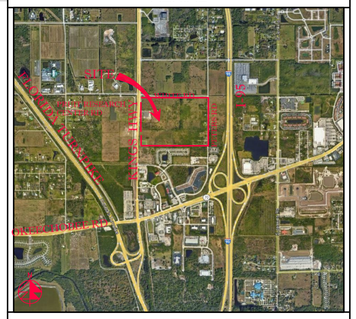
20' LAKE

PETERS ROAD

21+00 | 22+00 | 23+00 | 24+00 | 25+00 | 26+00 | 27+00 | 28+00 | 29+00

2215.32'

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

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*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
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	DOUBLE DETECTOR CHECK VALVE
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S	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Water & Wastewater Plan

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SEAL

COA 6986

SHEET NO.
C-25

SEE SHT C-27

LAKE-1
5.34 AC

8" PVC SDR 18

S9

CONST 6" PLUG & BLOCK

STA 7+57
CONST 8"X6" TEE
W/ 8" GV
CONST 6" GV

600'

FOUNTAIN

STA 10+87
8" 22.5° BEND

WM X-UNDER STM
36" RCP BE 11.5
8" PVC TE 10.5

STA 11+63
8" 22.5° BEND

CONST 96-LF
6" PVC @ 0.65%

CONST MH-11
RIM EL 16.2
INV EL 8.4 N
8.35 E

CONST 8"
PVC SDR 18

LITTORAL
ZONE

FUTURE FPUA
12" PVC WM

STA 26+33
CONST 8" PLUG & BLOCK
W/ 8" GV

WM X-OVER STM
8" PVC BE 11.9
42" RCP TE 10.9

WM X-OVER STM
8" PVC BE 12.0
48" RCP TE 10.9

WM X-OVER STM
8" PVC BE 12.0
24" RCP TE 10.7

STA 20+10
CONST 8"X6" TEE
W/ 6" GV

CONST 6" PLUG & BLOCK

WM X-OVER STM
8" PVC BE 12.0
48" RCP TE 10.9

CONST 8" PVC SDR 18

STA 16+90
CONST 8"X6" TEE
W/ 6" GV

8" PVC SDR 18

CONST 8" PVC SDR 18

STA 25+00
CONST 8" 11.25° BEND

STA 22+21 W
STA 13+15 N
STA 0+00 S
CONST 8" CROSS
W/ 8" GV (3)

STA 17+01, 11
CONST F
FLG EL

WM X-OVER STM
8" PVC BE 12.2
18" RCP TE 11.2

LAKE-2

STA 1+06
CONST 8"X6" TEE
W/ 6" GV

STA 1+06, 15° L
CONST FH-1
FLG EL 17.2

LITTORAL

CANAL R/W LINE

CANAL BOTTOM

CANAL NO-40

PROP. R/W LINE

PERMANENT EASEMENT

E DITCH 5

E CONST. KINGS HWY

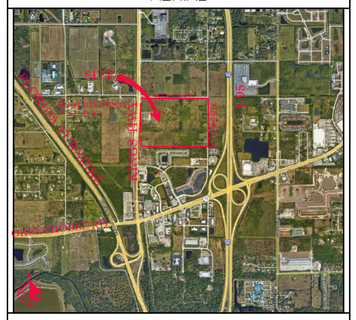
FRONT ED

gas

SEE SHT C-23

SEE SHT C-28

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19.7	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

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EMAIL: JHI@bellsouth.net

Kings Highway Commerce Park
Phase-II

Fort Pierce, Florida

Water & Wastewater Plan

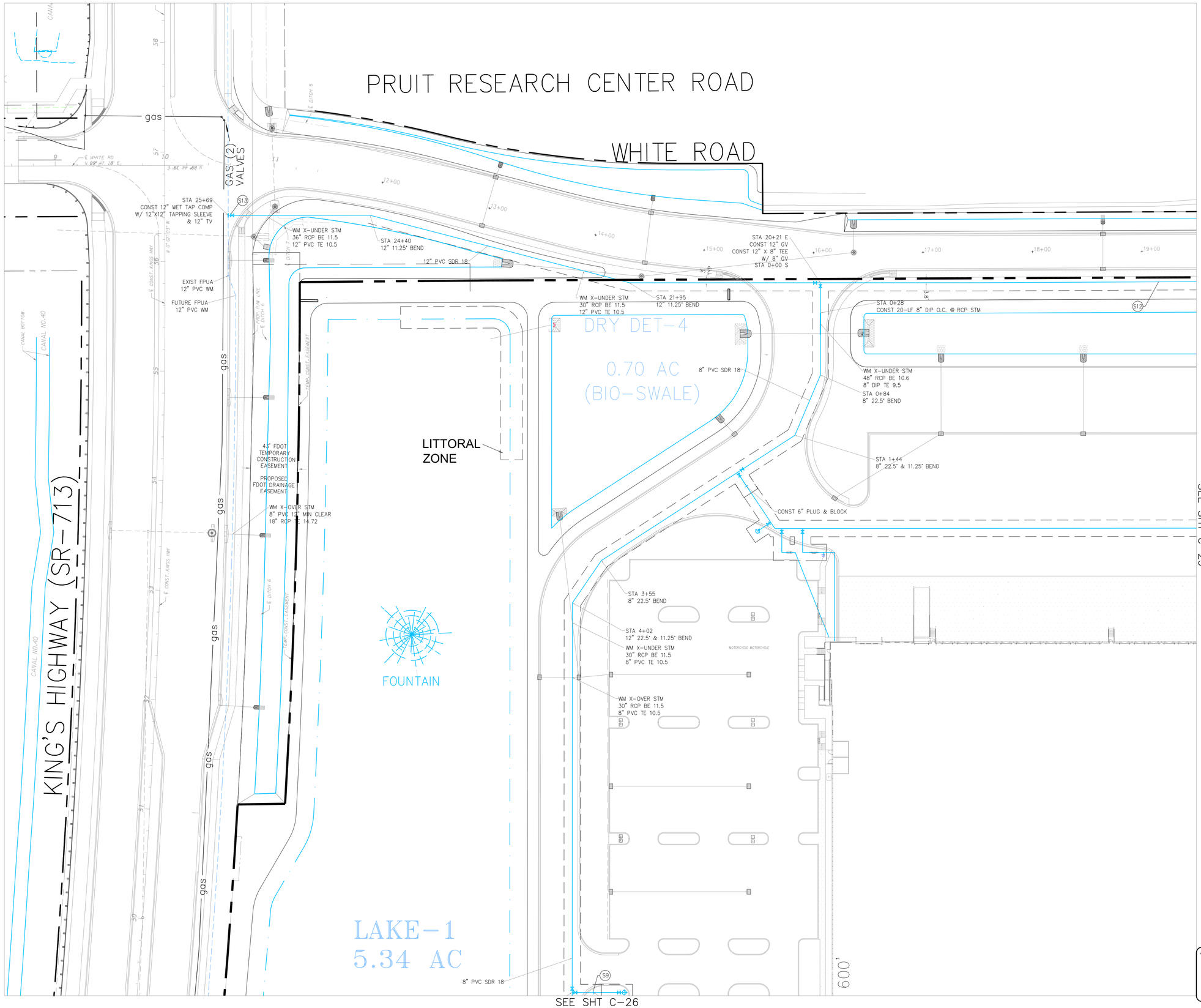
JOB NO.	DRAWN BY	DESIGNED BY	SCALE	DATE
2101-1355	DDI	JHI	1"=40'	01-22-21

SEAL

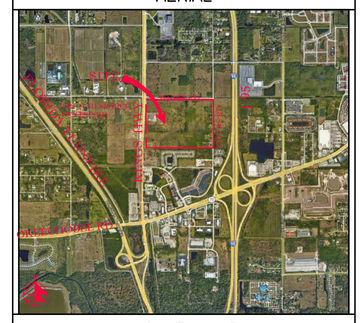
CDA 6986

SHEET NO.

C-26



AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

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TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
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Phase-II
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Water & Wastewater Plan

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

COA 6986

SHEET NO.
C-27

SEE SHT C-29

BLDG-C
PH-II
750.5 KSF
40 KSF OFFICE
710.5 KSF WAREHOUSE

SEE SHT C-26

1,250'

CONST 96-LF
6" PVC @ 0.65%

CONST MH-11
RIM EL 16.2
INV EL 8.4 N
8.35 E

CONST 400-LF
8" PVC @ 0.45%

CONST MH-10
RIM EL 16.2
INV EL 6.55 N
6.50 E

CONST 238-LF
8" PVC @ 0.45%

CONST MH-7
RIM EL 16.0
INV EL 3.35
3.25 S
4.75 W\E

CONST 189-LF
8" PVC @ 0.45%

CONST MH-8
RIM EL 16.2
INV EL 8.40 N
5.65 W
5.70 E

CONST 96-LF
6" PVC @ 0.65%

CONST 6" PLUG & BLOCK

WM X-OVER STM
8" PVC BE 12.0
24" RCP TE 10.7

WM X-OVER STM
6" PVC BE 12.5
48" RCP TE 10.9

DRY DET-6
2.56 AC

WM X-OVER STM
8" PVC BE 12.0
6" PVC STM TE 10.9

WM X-OVER STM
8" PVC BE 12.0
18" RCP TE 10.7

STA 11+89
CONST 8"X6" TEE
W/ 6" GV

STA 11+90 W
STA 5+33 S
CONST 8"X6" TEE
W/ 8" GV (2)

CONST 6" PLUG & BLOCK
STM X-OVER SAN
48" RCP BE 6.5
8" PVC TE 3.2

WM X-OVER SAN
8" PVC WM BE 12.0
8" PVC SAN TE 3.1
FM X-OVER STM/SAN
6" PVC FM BE 12.0
18" RCP STM TE 10.7/BE 9.0
8" PVC SAN TE 3.0

CONST 8" PVC SDR 18

STA 16+90
CONST 8"X6" TEE
W/ 6" GV

STA 15+66
CONST 8"X6" TEE
W/ 6" GV

CONST 8" PVC SDR 18

CONST 6" PVC SDR 26

STA 0+04
CONST 6" 45° BEND

CONST LS-1
SEE C39-C40
INV EL 1.75

STA 0+82
CONST 6" 45° BEND

STA 0+00
CONST 6" FM

STA 4+53
CONST 8"X2" TEE
0+47L
CONST 2" WS
W/ 1-½" METER

WM X-OVER STM
8" PVC BE 12.5
6" PVC TE 11.5
CONST 260-LF
8" PVC @ 0.45%
CONST MH-6
RIM EL 15.83
INV EL 5.36 S
2.05 N
1.95 E

FM X-OVER STM
6" PVC FM BE 12.0
24" RCP STM TE 10.7

WM X-OVER STM
8" PVC BE 11.8
18" RCP TE 10.7

STA 17+01, 114' L
CONST FH-8
FLG EL 17.2

CONST MH-1
RIM EL 16.6
INV EL 8.24 S
8.19 E

CONST 249-LF
8" PVC @ 0.45%

CONST MH-2
RIM EL 16.2
INV EL 7.07 W
7.02 E

CONST 45-LF
8" PVC @ 0.45%

CONST 249-LF
8" PVC @ 0.45%

WM X-OVER SAN
8" PVC WM BE 12.5
6" PVC SAN TE 2.4

CONST 46-LF
8" PVC @ 0.45%

STA 4+31, 15' L
CONST FH-7
FLG EL 16.5

FM X-OVER STM
18" RCP STM BE 9.5
8" PVC SAN TE 6.4

CONST MH-4
RIM EL 16.55
INV EL 7.87 E
7.82 W

CONST 205-LF
8" PVC @ 0.45%

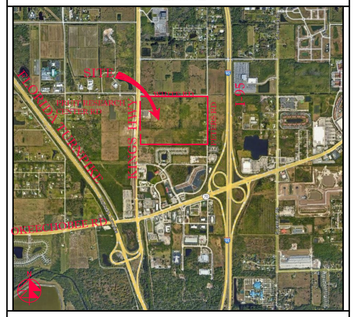
CONST 205-LF
8" PVC @ 0.45%

CONST 32-LF
8" PVC @ 0.45%

SEE SHT C-24

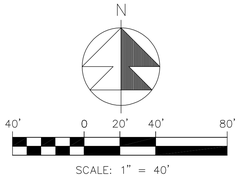
SEE SHT C-30

AERIAL



VICINITY MAP

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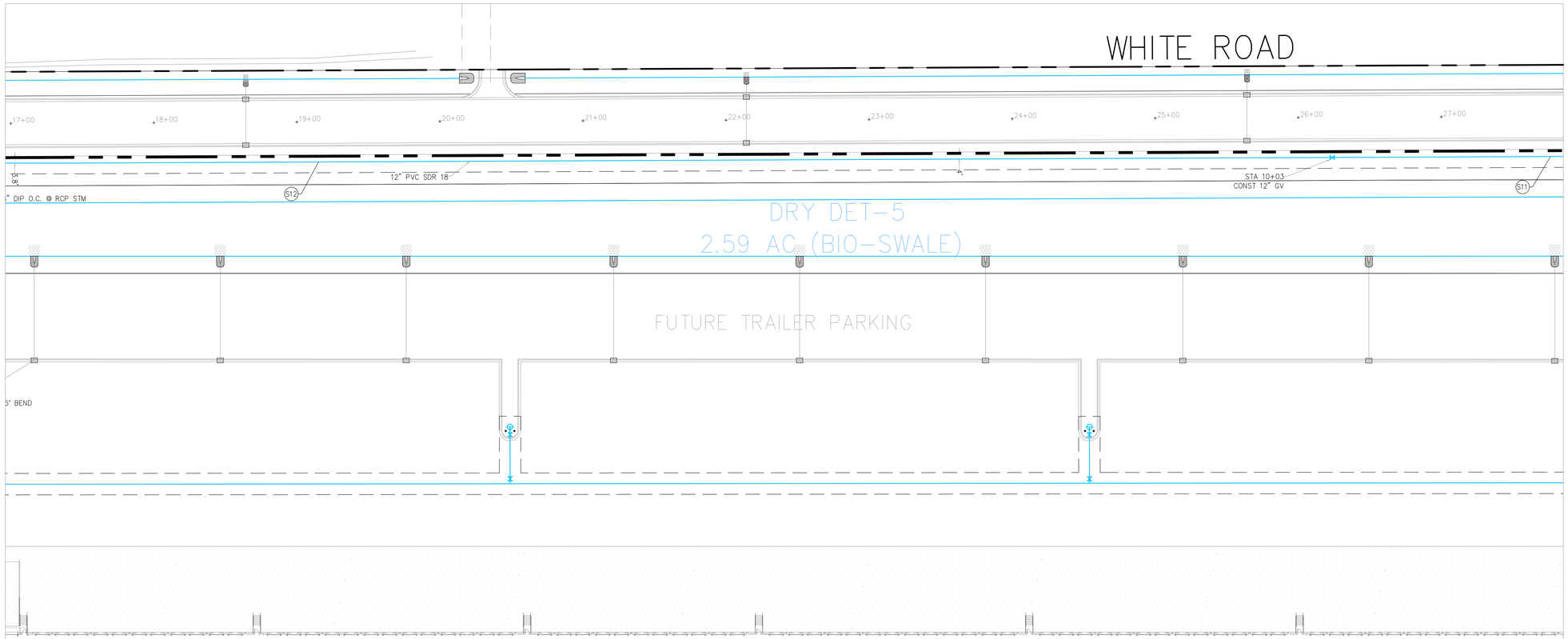
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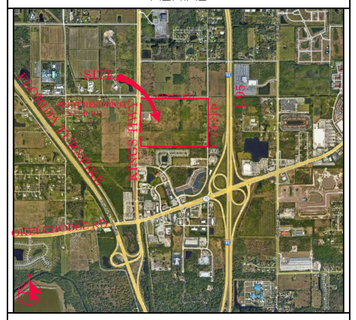
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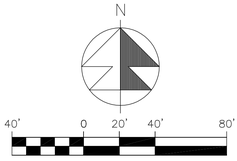


AERIAL



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01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

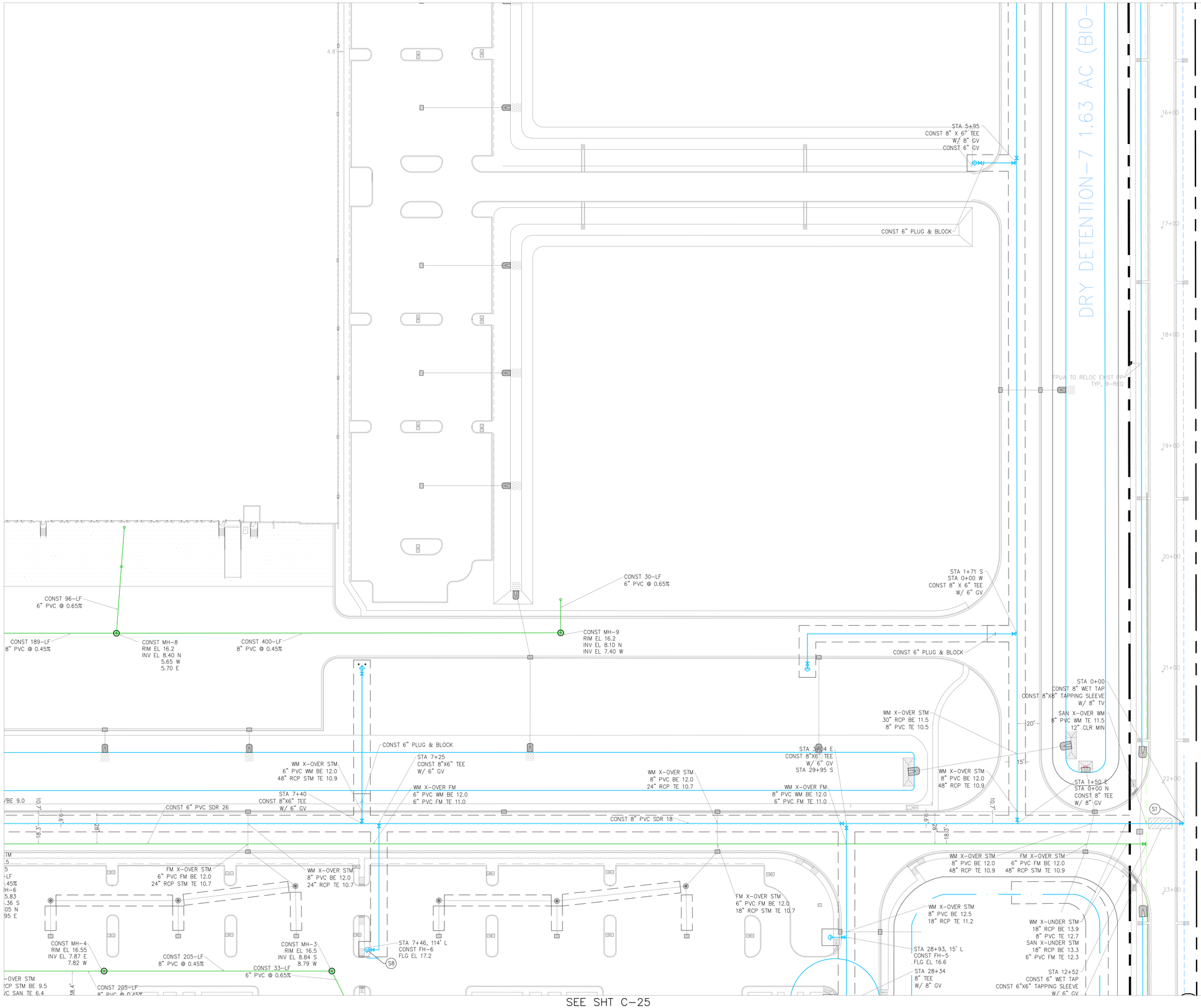
COA 6986

SHEET NO.

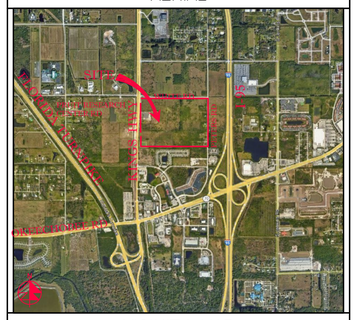
C-29

SEE SHT C-28

SEE SHT C-31



AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

1. THE LIFT STATION SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF FT PIERCE'S LATEST TECHNICAL PROVISIONS AND STANDARD DETAILS.

2. SANITARY SERVICES SHALL BE CONSTRUCTED @ 1% MIN SLOPE W/ CLEANOUTS EVERY 75' OC.

3. CONTRACTOR SHALL VERIFY SAN SERV INV EL @ BLDG W/ GC PRIOR TO CONSTRUCTION.

4. FIRE LINE AFTER REDUCED PRESSURE DET ASSEMBLY/RPDA SHALL BE DESIGNED & CONSTRUCTED BY FL REG FIRE SPRINKLER CONTRACTOR WHO SHALL VERIFY LOCATION OF ALL CONNECTIONS INCLUDING FIRE DEPT CONN'S.

5. WATER MAIN SHALL BE PVC SDR-18. FIRE MAIN SHALL BE PVC C-900 SDR-14. SANITARY MAINS & SERVICES SHALL BE PVC SDR-26.

6. ALL WM PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)3, F.A.C., USING BLUE AS AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING THE MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED NO MORE THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER THE INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIP THE PIPE DURING THE INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE. FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.

7. EXACT LOCATION OF WATER SERVICE & FIRE LINE STUB OUTS TO BE VERIFIED WITH GC.

8. MECH ENG DESIGNING THE FIRE SPRINKLER SYSTEM FOR THE BLDG SHALL VERIFY THE FIRE LINE SIZE & NOTIFY ENG OF MODIFICATION IF ANY.

9. CONTRACTOR SHALL CLEAN & FLUSH THE WATER LINE & PERFORM A ONE HR P&L TEST (150 PSI) ON THE WM PER CITY OF FT PIERCE'S UTILITY'S REQ'S.

10. CONTRACTOR SHALL PROVIDE P&L TEST ON FIM PER CITY OF FT PIERCE'S UTILITY'S REQ'S (200 PSI).

11. ALL SEWER INFRASTRUCTURE TO MEET CITY OF FT PIERCE'S LATEST TECHNICAL PROVISIONS AND STANDARD DETAILS.

12. WATER LINE SHALL BE SWABBED.

13. 2" BLOW OF ASSEMBLY SHALL BE CONSTRUCTED OF BRASS AND WILL REMAIN PERMANENT.

14. A JUMPER METER SHALL BE CONSTRUCTED AT TIE-IN LOCATION. THE JUMPER METER WILL REMAIN IN PLACE UNTIL CLEARANCE IS RECEIVED FROM FDEP.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LABOR, MATERIALS, AND EQUIPMENT TO PERFORM THE TIE-IN TO THE WATER MAIN(S).

16. WATER SERVICE LINES SHALL CONSIST OF A BRONZE SERVICE SADDLE, CORPORATION STOP, TYPE "K" COPPER, AND CURB STOP (CURB STOPS FOR 1.5" AND 2" SHALL BE FLARE X FLANGE).

17. 8" FIRELINE AFTER DDCV SHALL BE DESIGNED AND CONSTRUCTED BY A FLORIDA REGISTERED FIRE SPRINKLER CONTRACTOR WHO SHALL VERIFY LOCATION OF ALL CONNECTIONS INCLUDING SIAMESE CONN, PIV, & CHECK VALVES.

18. ALL WELLS & SEPTIC TANKS TO BE ABANDONED. ALL DRAIN FIELDS TO BE DRAINED & ABANDONED. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS INCL. FROM ST LUCIE COUNTY HEALTH DEPT FOR ALL ABANDONMENTS.

19. ALL WM CONSTRUCTION ON PETERS RD SHALL BE DONE BEFORE ROADWAY IMPROVEMENTS / PLACEMENT OF BASE ARE STARTED.

LEGEND

⊕19.7	PROP PAV'T EL
19.7	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
B-	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
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TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

48 HOURS BEFORE DIGGING
CALL TOLL FREE
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CALL SUNSHINE
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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Water & Wastewater Plan

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

COA 6986

SHEET NO.

C-30

AD

WHITE ROAD

SEE SHT C-29

SEE SHT C-30

26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00

STA 10+00 S PETERS RD
STA 36+07.48 E WHITE RD

24" CMP CULVERT
NORTH INVERT 11.7
SOUTH INVERT 10.8

STA 0+65
CONST 12"X6" TEE
W/ 6" GV
STA 0+65, 7' L
CONST FH-11
FLG EL 17.0

STA 0+00
CONST 12" WET TAP COMP
W/ 12"X12" TAPPING SLEEVE
& 12" TV

S10

4.2'

0.5'

A 10+03
12" GV

S11

EPUA TO RELOCATE EXIST
POWER POLES
TYP, 6 REQ'D

12" PVC SDR 18

STA 1+61 E
CONST 12" X 8" TEE
W/ 8" GV
CONST 12" GV
STA 12+11 S

WM X-OVER STM
30" RCP STM BE 11.5
8" PVC WM TE 10.5

WM X-OVER STM
12" PVC WM BE 12.2
30" RCP STM TE 11.14

SAN X-OVER WM
12" PVC WM TE 11.5
12" CLR MIN

CONST OPEN CUT
& RESTORE
SEE SHT C-34

EXIST 8" WM

EXIST 6" FM

15'

STA 10+24
STA 9+93
CONST 8" 22.5° BEND (2)

CONST 6" PLUG & BLOCK

STA 9+78 N
STA 19+74 W
CONST 8" TEE
W/ 8" GV (2)

15'

20.7'

4.8'

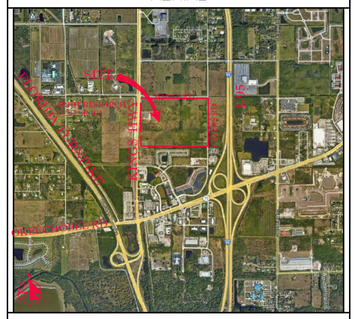
STA 5+95
CONST 8" X 6" TEE
W/ 8" GV
CONST 6" GV

(DW)

CONST 6" PLUG & BLOCK

DETENTION-7 1.63 AC (BIO-SWALE)

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Water & Wastewater Plan

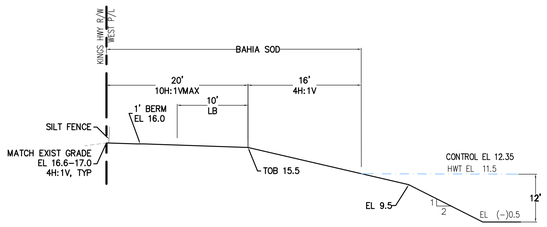
DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01-22-21	1"=40'	JHI	DDI	2101-1355

SEAL

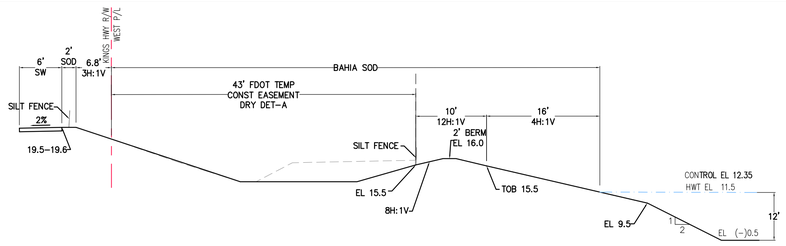
COA 6986

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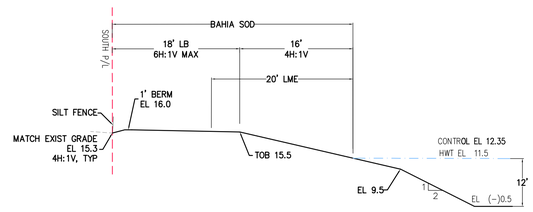
C-31



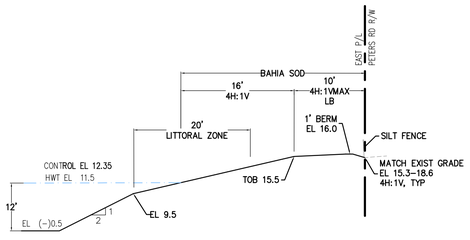
LAKE-1 SECTION
@ WEST P/L
SECTION A



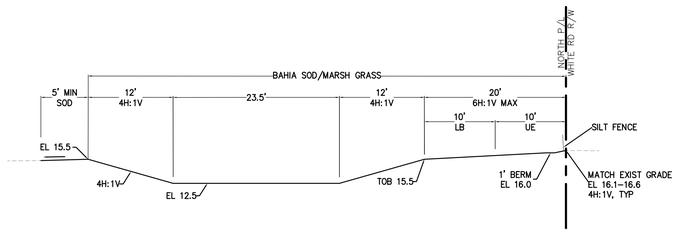
LAKE-1 SECTION
@ WEST P/L
SECTION B



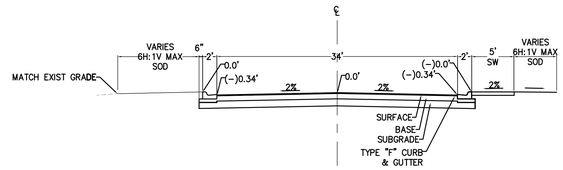
LAKE-3 SECTION
@ SOUTH P/L
SECTION C



LAKE-3 SECTION
@ EAST P/L
SECTION D



DRY DETENTION / BIO-SWALE @ NORTH P/L
SECTION E



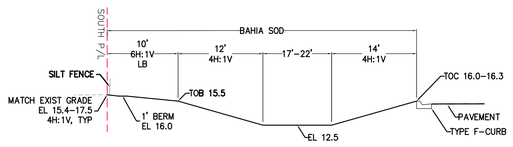
PAVEMENT SECTION:

SURFACE: 3" TYPE S-1 @ 2-1.5" LIFTS

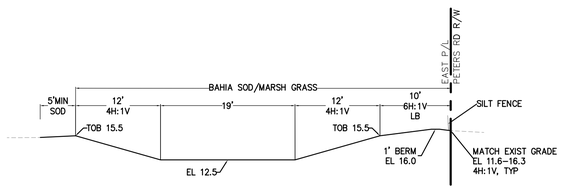
BASE: 8" LIMEROCK / COQUINA ROCK / CRUSHED CONCRETE

SUBGRADE: 12" STABILIZED LBR-40

MAIN DRIVE
TYPICAL SECTION



DRY DETENTION @ SOUTH P/L
SECTION F



DRY DETENTION / BIO-SWALE @ EAST P/L
SECTION G

REVISIONS

REV PER SLC 06-15-21
REV PER SFWMD 09-11-21

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Kings Highway Commerce Park
Fort Pierce, Florida

SECTIONS

JOB NO.	2101-1355
DRAWN BY	CLJ
DESIGNED BY	JHI
SCALE	NA
DATE	01/22/2021

SEAL

FR # 6986

SHEET NO.
C-32

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING ABOVE GROUND, UNDERGROUND, AND ON THE SURFACE STRUCTURES AND UTILITIES AGAINST THE CONSTRUCTION OPERATION THAT MAY CAUSE DAMAGE TO SAID FACILITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED TESTS TO BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS PRIOR TO ANY REQUIRED INSPECTIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY FOR INSPECTION AND/OR TEST.
4. THE CONTRACTOR SHALL GIVE ADEQUATE NOTIFICATION TO ALL AFFECTED UTILITY OWNERS FOR REMOVAL, RELOCATION AND ALTERATION OF THEIR EXISTING FACILITIES.
5. WHERE ENCOUNTERED, UNSUITABLE MATERIAL SHALL BE REMOVED TO A DEPTH AN AREA DETERMINANT BY THE ENGINEER AND BACKFILLED WITH CLEAN GRANULAR SAND OR SELECT MATERIAL APPROVED BY THE ENGINEER. BACKFILLING SHALL BE IN LAYERS NOT GREATER THAN 8" THICKNESS AND COMPACTED TO 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO T99-C. FILL UNDER BUILDING SHALL BE PLACED IN ACCORDANCE WITH SOIL ENGINEER'S RECOMMENDATIONS.
6. ALL WORK SHALL BE PERFORMED IN A WORKMANSHIP MANNER AND SHALL MEET WITH ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL REGULATIONS AND/OR CODES, INCLUDING OSHA.
7. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND/OR LICENSES TO COMMENCE CONSTRUCTION.
8. ALL CONCRETE SHALL DEVELOP A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI OR OTHERWISE NOTED.
9. ALL REINFORCING STEEL SHALL CONFORM TO ASTM-615 AND HAVE A TENSILE STRENGTH OF 60,000 PSI OR OTHERWISE NOTED.
10. THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR FORM THE DATE THAT PROJECT HAS BEEN ACCEPTED. ALL FAULTY CONSTRUCTION AND/OR MATERIALS DURING FORESAID PERIOD SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

DRAINAGE

1. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED AS PER DETAIL AND IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
2. PIPE TRENCH SHALL BE DRY WHILE PIPE IS BEING LAID AND TO BE BEDDED PER DETAIL AND IN CONFORMANCE WITH SECTION 430, FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. PIPE TRENCHES TO EXCAVATED AND BACKFIELD IN ACCORDANCE WITH SECTION 125, FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
4. THE FOLLOWING PIPES SHALL CONFORM WITH THE APPROPRIATE FOLLOWING SECTIONS OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION:
   1. REINFORCED CONCRETE PIPE (RCP) – SECTIONS 430 AND 941
   2. CORRUGATED ALUMINUM PIPE (CAP) – SECTIONS 430 AND 945
   3. CORRUGATED STEEL PIPE (CMP) – SECTIONS 430 AND 943
5. ALL CORRUGATED PIPES SHALL BE INSTALLED WITH MAXIMUM LENGTHS IN ORDER TO MINIMIZE JOINTS.
6. ALL CONNECTION BANDS, FOR CORRUGATED PIPES, SHALL BE CORRUGATED, LAP-TYPE, IN CONFORMANCE WITH AASHTO M-196, AND TO BE MADE WATER-TIGHT BY USING A GASKET AT LEAST SIX (6) INCHES WIDE BY 3/4" THICK.
7. HDPE PIPE MATERIALS:
   HDPE PIPES 12" THROUGH 36" NOMINAL DIAMETER:
   TYPE "S" SMOOTH INTERIOR PIPE IN CONFORMACE WITH AASHTO M294.
   NOTE: CORRUGATIONS SHALL BE ANNULAR CONFIGURATION ONLY.
   HDPE PIPES 42" AND 48" NOMINAL DIAMETER:
   TYPE "D" SMOOTH INTERIOR, SMOOTH EXTERIOR PIPE IN CONFORMANCE MP46-95 TYPE "D".
8. ALL SOD LAID WITHIN SLOPES OF BERMS, DRAINAGE SWALES, AND RETENTION AREAS SHALL BE PINNED PER ENGINEERS DIRECTION.
9. ALL PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.
10. ALL ROOF DRAINS AND YARD DRAINS SHALL BE CONNECTED TO STRUCTURES BY THE UNDERGROUND CONTRACTOR.

ROADWAY

1. SUBGRADE SHALL BE AS SHOWN ON SECTION.
2. BASE SHALL BE AS SHOWN ON SECTION, HAVE A MINIMUM LBR 100 AND TO BE COMPACTED TO 98 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTOT-180.
3. PRIME COAT SHALL BE APPLIED AT THE RATE OF .15 GALLON PER SQ. YARD. WHERE REQUIRED, TACK SHALL BE APPLIED AT THE RATE OF . .08 GALLON PER SQUARE YARD.
4. THE CONTRACTOR IS TO SUBMIT ALL REQUIRED TESTS ON SUBGRADE, BASE AND SURFACE COURSE MATERIAL PRIOR TO ANY REQUEST FOR PAYMENT.
5. IF ANY TEST FAILS TO MEET THEIR SPECIFICATIONS, THE CONTRACTOR, AT HIS EXPENSE, SHALL CORRECT ALL DEFICIENT WORK AND SUBMIT TEST RESULTS INDICATING COMPLIANCE WITH THESE SPECIFICATIONS PRIOR TO ANY REQUEST FOR PAYMENT.
6. ALL UNDERGROUND UTILITIES WITHIN ROADWAY CONSTRUCTION SHALL BE INSTALLED PRIOR TO ROAD CONSTRUCTION.
7. ALL ROADWAY CONSTRUCTION AND MATERIAL SHALL CONFORM TO THE APPLICABLE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
8. ALL CURBING, AND RAISED SIDEWALK IF SHOWN, SHALL BE CONSTRUCTED PRIOR TO ASPHALT PAVING.

CONSTRUCTION INSPECTION CHECKPOINTS

ROADWAY: THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR INSPECTION AT THE FOLLOWING CHECKPOINTS:

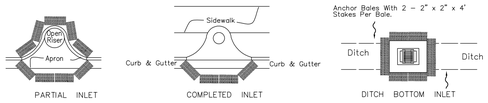
1. PRIOR TO ANY DEVIATION FROM THE APPROVED GRADING, PAVING, AND DRAINAGE PLANS.
2. PRIOR TO BACK FILLING OF TRENCHES CONTAINING HYDRAULIC CONDUITS, SO THAT JOINTS MAY BE INSPECTED.
3. UPON COMPLETION OF THE SUBGRADE COMPACTION.
4. AT THE TIME OF DELIVERY OF BASE MATERIAL.
5. UPON COMPLETION OF THE BASE AND PRIOR TO PRIMING
6. IMMEDIATELY PRIOR TO AND DURING THE FIRST APPLICATION OF THE MIXES WEARING SURFACE.
7. UPON COMPLETION OF CONSTRUCTION A FINAL INSPECTION MAY BE MADE WITH THE CONTRACTOR.

STRIPING

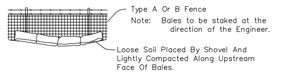
1. ALL PAVEMENT STRIPING SHALL BE TRAFFIC PAINT IN ACCORDANCE WITH FDOT INDEX 17346. STRIPING FOR PEDESTRIAN CROSSING AND STOP BARS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FDOT INDEX 17346.

CONCRETE SPECIFICATIONS

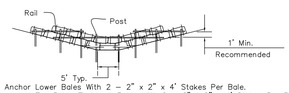
1. ALL CONCRETE SHALL REACH COMP STRENGTH OF 3,000 PSI MIN IN 28 DAYS. MIX DESIGN SHALL INCLUDE MINIMUM CEMENT CONTENT OF 470 LBS OF PORTLAND CEMENT TYPE II PER ASTM C-150 & 120 LB OF FLY ASH /AE PER CY AND ADMIXTURES SHALL CONFORM TO ASTM C-494. WATER/CEMENT=0.5 MAX.
2. SLUMP AND CYLINDER TESTS (ASTM C-31) SHALL BE MADE BY AN INDEPENDENT TESTING LABORATORY. PROVIDE 4 TESTS WITH EACH CONCRETE POUR AND/OR EACH 50 YD OF CONCRETE PLACED. SLUMP @ POUR SHALL BE 5 IN MAX. (6" FOR PUMP MIX). NO WATER IS TO BE ADDED ON THE JOB SITE.
3. CONTRACTOR SHALL SUBMIT THE MIX DESIGN TO ENGINEER FOR REVIEW.



PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

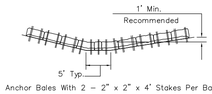


BALES BACKED BY FENCE



Application and Spacing: The use of Types I & II bale barriers should be limited to the conditions outlined in Chart 1, Sheet 1 of 3, Index No. 102, FDOT standard specifications.

BARRIER FOR UNPAVED DITCHES



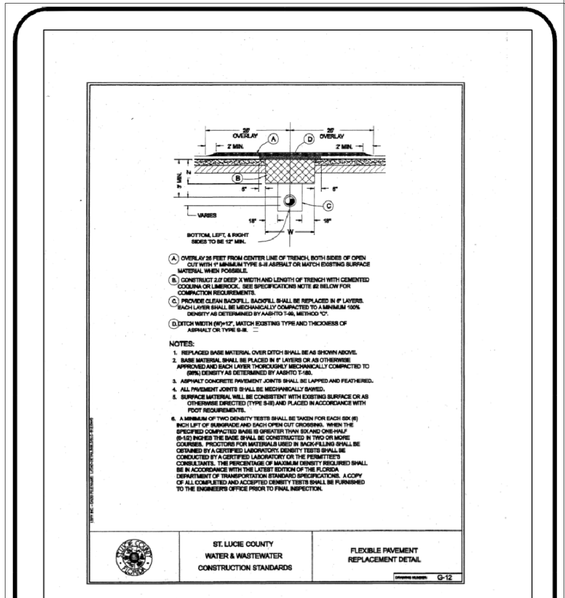


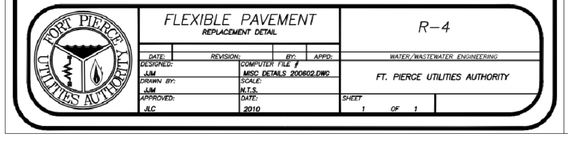
Note: Spacing for Type III Fence to be in accordance with Chart 1, Sheet 1 of 3 and ditch installations at drainage structures Sheet 2 of 3.

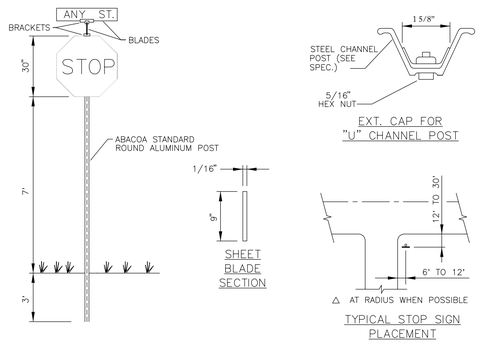
Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS
8" MIN EMBEDMENT

BALED HAY OR STRAW BARRIERS AND SILT FENCES



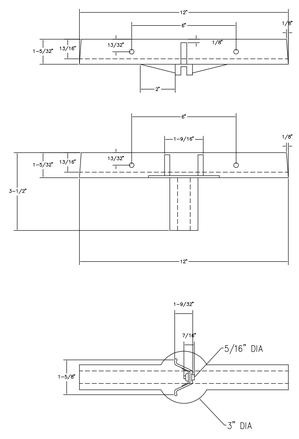




GENERAL SPECIFICATIONS

FLAT BLADE: ALCOA #86054.6063-T6 ALLOY ETCHED, DEGREASED WITH #1200 ALODINE FINISH WITH #2277 GREEN SCOTCHLITE BACKGROUND OR EQUAL DIMENSIONS – 9" & 12" MIN H., 24",30" OR 36" L.
LETTER: NAME – 6" & 9" SERIES 'B' #2270 SCOTCHLITE (SILVER) OR EQUAL – SUFFIX – 4.5" SERIES AS ABOVE.
BRACKETS: SEE DETAILS
POST: STEEL FLANGED CHANNEL POST WITH BAKED GREEN ALKYD FINISH PER A.S.T.M. – A – 123 WITHOUT ANCHOR PLATES.
STOP SIGN: R1-1 MUTCD – 30"x30" (HIGH INTENSITY) 36"x36" (FDOT DRIVEWAYS)
LOCATION: ONE PER INTERSECTION AS INDICATED ON THE PLANS.
POLICY: 9" BLADE WITH 6" LETTERS FOR TWO LANE ROADS WITH A SPEED LIMIT UNDER 45 MPH.
12" BLADES WITH 9" LETTERS:
–THOROUGHFARE ROADS FOUR LANES OR WIDER
–TWO LANE ROADS WITH A POSTED SPEED LIMIT 45 MPH OR MORE.

STREET SIGN/STOP SIGN DETAIL



9"-12" SNS (D-3) BRACKET DETAIL

A- ALL DIMENSIONS AND SPECIFICATIONS CONTAINED IN DRAWINGS

B- MATERIALS: ALUMINUM HIGH STRENGTH ALLOY 380 ASTM B95-60T. HARDWARE SHALL BE SMOOTHLY FINISHED AND PRECISION MACHINED TO FIT STANDARD FLAT BLADE SECTION. ALLOWING CLEARANCE FOR REFLECTIVE FACING ACCORDING TO REQUIREMENTS

C- POST TO SIGN BRACKET: THEY SHALL BE ATTACHED FIRMLY ON STANDARD ROUND TUBING OR U-CHANNEL POSTS BY MEANS OF (2) 5/16" DIAMETER HEX HEAD SCREWS

D- SIGN TO SIGN BRACKET: THEY SHALL BE 90 OR 45 DEGREE TYPE WITH MINIMUM REQUIREMENTS EQUAL TO THE POST TO SIGN BRACKET

REVISIONS

REV PER FDOT 09-16-21

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Kings Highway Commerce Park
Fort Pierce, Florida

PAVING, GRADING, & DRAINAGE DETAILS

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01/22/2021	NA	JHI	CLJ	2101-1355

SEAL

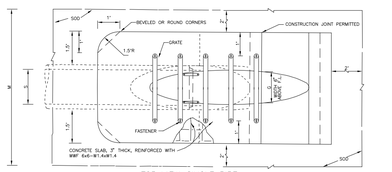
COA # 6986

SHEET NO.
C-34

4 TO 1 SLOPE

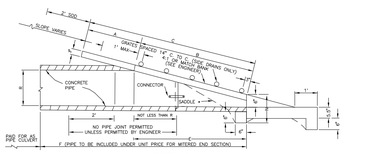
	D	X	A	B	C	E	F	G	M SINGLE PIPE	M DOUBLE PIPE	M TRIPLE PIPE	M QUAD PIPE	N	GRATE STANDARD WEIGHT PIPE
15"	2'-1"	2.21'	4.58'	6.36'	4.00'	8"	1.22'	4.63'	7.25'	9.39'	12.37'	1.19'	15"
18"	2'-7½"	2.56'	5.12'	7.48'	4.00'	9"	1.41'	4.84'	7.70'	10.06'	13.42'	1.31'	15"
24"	3'-3"	2.93'	6.18'Δ	9.11'	7.00'Δ1'	11"	1.74'	5.50'	8.62'	12.33'	15.79'	1.59'	15"
30"	4'-1"	3.70'	9.76'	11.95'	9.00'	13"	2.00'	6.08'	10.13'	14.58'	18.83'	1.78'	15"

Δ 6.42' Δ 6.25' DIMENSIONS PERMITTED TO ALLOW USE OF 8' STANDARD PIPE LENGTHS.
Δ1 10.42' Δ1 10.10' DIMENSIONS PERMITTED TO ALLOW USE OF 12' STANDARD PIPE LENGTHS.
Δ-Δ CONCRETE SLAB SHALL BE DEEPENED TO FORM BRIDGE ACROSS CROWN OF PIPE. SEE SECTION BELOW.



TOP VIEW-SINGLE PIPE

NOTE:
1. GRATE SHALL BE UTILIZED ONLY FOR CROSS DRAIN UNDER PUBLIC RIGHT OF WAY.

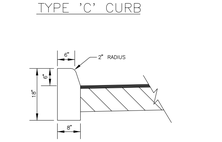


SECTION

• SLOPE:
TO MAJOR AND FOR PIPES 24" & 30" AND SMALLER, 2:1 FOR PIPES 36" & 42" AND LARGER.

MITERED END DETAIL

SEE LATEST FDOT ROADWAY & TRAFFIC DESIGN STANDARDS MANUAL
SIDE DRAIN MITERED END SECTION FOR SINGLE AND MULTIPLE ROUND CONCRETE PIPE



DENSITY PROCEDURES:

The backfill for the first and second stages shall be placed in 6" layers (compacted thickness) and shall be compacted to 100% of maximum density as determined by AASHTO T-99.

Stage #1

The contractor shall provide adequate compacted fill beneath the haunches of the pipe, using mechanical tamps suitable for this purpose. This compaction applies to the material placed beneath the haunches of the pipe and above any bedding required.

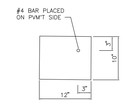
Stage #2

The contractor shall obtain a well compacted bed and fill along the sides of the pipe and to a point indicating the top of sub-grade material.

GENERAL NOTES:

1. See Notes For Typical Trench detail for backfill and bedding material specifications.
2. Base material shall be placed in 6" layers and each layer compacted to 98% of maximum density per AASHTO T-180.
3. Asphalt concrete pavement joints shall be mechanically sawed (butt joints only).
4. Surface material will be consistent with the existing surface. The affected area shall be restored to equal or better condition.
5. The developer/contractor shall be responsible for compliance regarding any additional specifications as required by the property owner. (FDOT, County, City, etc.....)
6. Excavatable "Flowable Fill" with ultimate compressive strength between 50 and 150 psi may be used to substitute for the backfill and base materials.
7. Pavement overlay on both sides of the cut maybe required per owner specification.
8. Magnetic Tape is required for all Potable Water Mains and all PVC/HDPE Force Mains and Reclaimed Water Mains. (See Trenching Detail for installation instructions).
9. The contractor shall be compliant with applicable trench safety regulations (OSHA, etc.)

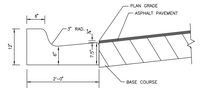
PIPE INSTALLATION UNDER EXISTING PAVEMENT - OPEN CUT



TYPE 'C' CURB

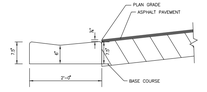
NOTES:
1. SEE F.D.O.T. INDEX NO. 520-001 FOR ADDITIONAL INFORMATION.
2. CONCRETE TO BE A MINIMUM OF 3000 PSI CONCRETE AT 28 DAYS
3. CURB TO BE IN PLACE PRIOR TO SURFACE COURSE BEING PLACED.
4. SAWCUTS TO BE MADE AT 10' O.C. THROUGHOUT CURB CONST.

TYPE "D" CURB
NOT TO SCALE



NOTE:
1. INSTALL CURB IN ACCORDANCE WITH F.D.O.T. INDEX NO. 520-001
2. CURB TO BE IN PLACE PRIOR TO SURFACE COURSE BEING PLACED.

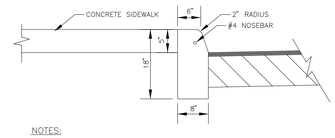
TYPE "F" CURB
NOT TO SCALE



NOTE:
1. INSTALL CURB IN ACCORDANCE WITH F.D.O.T. INDEX NO. 520-001
2. CURB TO BE IN PLACE PRIOR TO SURFACE COURSE BEING PLACED.

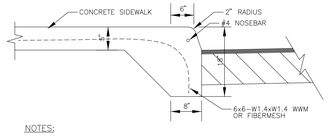
DROP CURB
NOT TO SCALE

CURB DETAILS



NOTES:
1. SEE F.D.O.T. INDEX NO. 520-001 FOR ADDITIONAL INFORMATION.
2. CONCRETE TO BE A MINIMUM OF 3000 PSI CONCRETE AT 28 DAYS
3. CURB TO BE IN PLACE PRIOR TO SURFACE COURSE BEING PLACED.
4. SAWCUTS TO BE MADE AT 10' O.C. THROUGHOUT CURB CONST.
5. SIDEWALK TO BE POURED AFTER CURB CONSTRUCTION
6. SEE SIDEWALK DETAIL FOR JOINT PLACEMENT

RAISED SIDEWALK W/ CURB
NOT TO SCALE

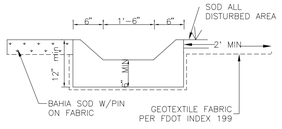


NOTES:
1. SEE F.D.O.T. INDEX NO. 520-001 FOR ADDITIONAL INFORMATION.
2. CONCRETE TO BE A MINIMUM OF 3000 PSI CONCRETE AT 28 DAYS
3. SEE SIDEWALK DETAIL FOR JOINT PLACEMENT

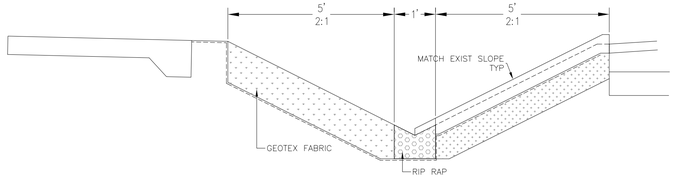
MONOLITHIC RAISED SIDEWALK
NOT TO SCALE

SIDEWALK DETAILS

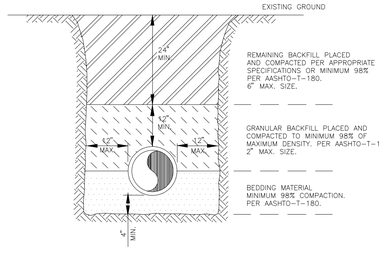
FRONT



SIDE

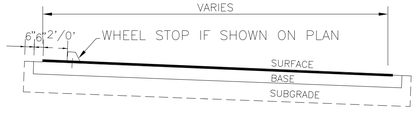


PETERS RD CONC FLUME DETAIL



NOTES:
1. BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8"-7/8" SIZING. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK, AND DEBRIS.
5. DENSITY TESTS ARE REQUIRED IN 1 FOOT LIFTS ABOVE THE PIPE AT INTERVALS OF 400' MAXIMUM, OR AS DIRECTED BY THE INSPECTOR.

TYPICAL TRENCH DETAIL



FLEXIBLE PAVEMENT (PARKING)
SURFACE: 2.5"ACSC (1ST LIFT 1.5" S-1 2ND LIFT 1" S-3)
BASE: 8" LIMEROCK/COQUINA ROCK/CRUSHED CONC* MIN LBR 100
SUBGRADE: 12" COMP
COMP: COMPACTED TO 98% MAX D.D. AASHTO T-180

FLEXIBLE PAVEMENT (ROADWAY/HEAVY DUTY)
SURFACE: 3" S-1 ACSC (2-1.5" LIFTS)
BASE: 8" LIMEROCK/COQUINA ROCK/CRUSHED CONC* MIN LBR 100
SUBGRADE: 12" STAB 40 LBR
COMP: COMPACTED TO 98% MAX D.D. AASHTO T-180

CONC SLAB
SURFACE: 6" 3KSI W/2-6X6 W1.4XW1.4 WWM
W/1.5" SAW-CUTS @ 12' MAX O.C. E.W.
SAW CUT SLAB DIM'S PROPORTION SHALL BE 1.5:1MIN
ALL JOINTS SHALL BE IN ACCORD W/ FDOT INDEX 305
BASE: 6" LIMEROCK / COQUINA ROCK COMP MIN LBR 100
SUBGRADE: 12" COMP

CONCRETE SPECIFICATIONS
1. ALL CONCRETE SHALL REACH COMP STRENGTH OF 3,000 PSI MIN IN 28 DAYS. MIX DESIGN SHALL INCLUDE MINIMUM CEMENT CONTENT OF 470 LBS OF PORTLAND CEMENT TYPE II PER ASTM C-150 & 120 LB OF FLY ASH /AE PER CY AND ADMIXTURES SHALL CONFORM TO ASTM C-494. WATER/CEMENT=0.5 MAX.
2. SLUMP AND CYLINDER TESTS (ASTM C-31) SHALL BE MADE BY AN INDEPENDENT TESTING LABORATORY. PROVIDE 4 TESTS WITH EACH CONCRETE POUR AND/OR EACH 50 YD OF CONCRETE PLACED. SLUMP @ POUR SHALL BE 5 IN MAX. (6" FOR PUMP MIX). NO WATER IS TO BE ADDED ON THE JOB SITE.
3. CONTRACTOR SHALL SUBMIT THE MIX DESIGN TO ENGINEER FOR REVIEW.

PAVEMENT TYP SECTION

REVISIONS
REV PER CLT 06-25-21
REV PER SLC 07-26-21
REV PER FDOT 09-16-21

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Kings Highway Commerce Park
Off-Site Improvements
Fort Pierce, Florida

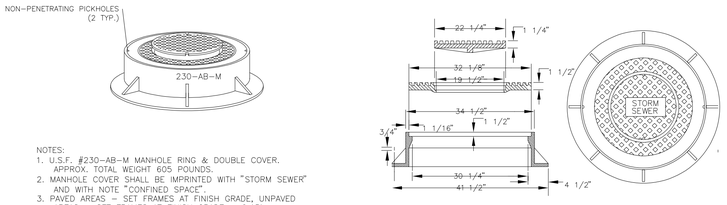
PAVING, GRADING, & DRAINAGE DETAILS

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01/22/2021	NA	JHI	CLJ	2101-1355

SEAL

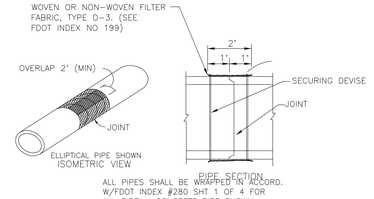
CDA # 6986

SHEET NO.
C-35



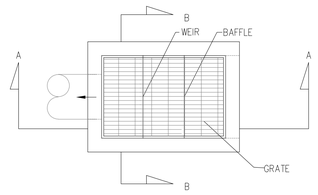
NOTES:
1. U.S.F. #230-AB-M MANHOLE RING & DOUBLE COVER. APPROX. TOTAL WEIGHT 605 POUNDS.
2. MANHOLE COVER SHALL BE IMPRINTED WITH "STORM SEWER" AND WITH NOTE "CONFINED SPACE".
3. PAVED AREAS - SET FRAMES AT FINISH GRADE, UNPAVED AREAS - SET FRAMES AT FINISH GRADE + 0.15'.

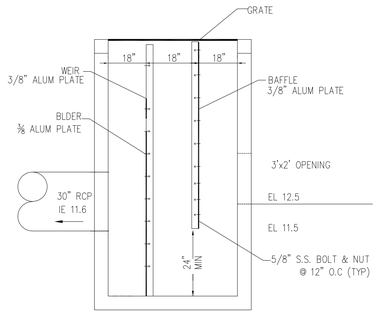
MANHOLE FRAME AND RING DETAIL



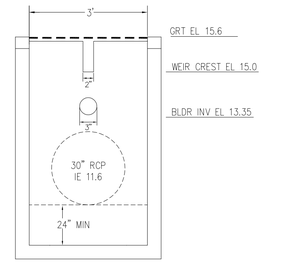
ALL PIPES SHALL BE WRAPPED IN ACCORD. W/FDOT INDEX #280 SHT 1 OF 4 FOR ALL PIPE - CONCRETE PIPE SHOWN

FILTER FABRIC JACKET



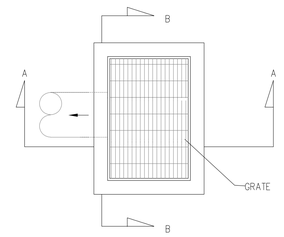


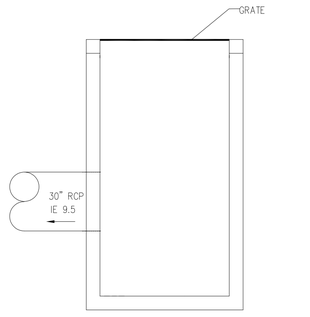
SECTION A-A



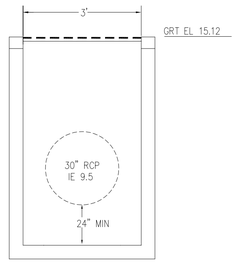
SECTION B-B

CS-200 TYPE "E" CONTROL STRUCTURE



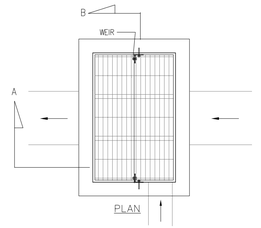


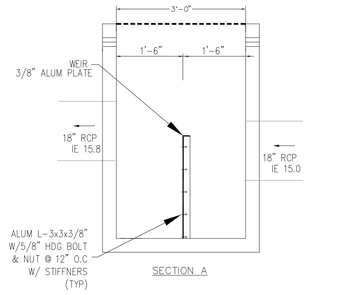
SECTION A-A



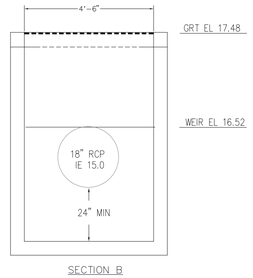
SECTION B-B

CS-201 TYPE "H" CONTROL STRUCTURE





SECTION A

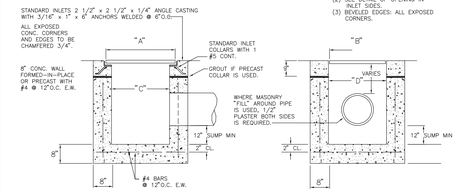


SECTION B

CS-202 TYPE "E" CONTROL STRUCTURE

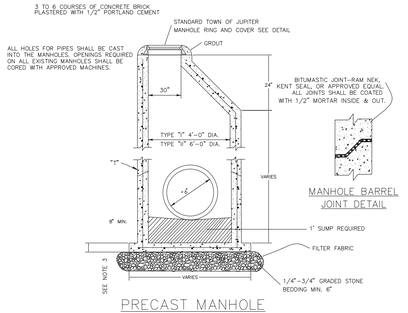
MAX. C.F.S.	TYPE INLET	"A"	"B"	"C"	"D"	GRATE APPROX. WT.
15.66	E	2'-4"	3'-0"	2'-0"	3'-1"	330 LBS.
23.49	G	4'-4"	3'-0"	4'-1"	3'-1"	580 LBS.
30.23	I	5'-4"	4'-4"	5'-0"	4'-6"	665 LBS.
58.20	H	5'-4"	6'-4"	5'-0"	6'-7"	725 LBS.

NOTES:(1) GRATES TO BE CAST IRON WITH ONE (1) SHOP COAT OF RED LEAD PAINT AND WITH A FIELD COAT TO MEET FDOT STANDARD SPECIFICATIONS, LATEST EDITION.
(2) SEE DETAIL OF OPENING IN INLET SIDES.
(3) BEVELED EDGES: ALL EXPOSED CORNERS.



CROSS SECTION LONGITUDINAL SECTION

INLET DETAILS
N.T.S.



MANHOLE BARREL JOINT DETAIL

PRECAST MANHOLE
NTS

NOTES:
1. MANHOLE SHALL CONFORM TO ASTM C478 WITH 4000 PSI CONCRETE.
2. CONE SECTION MAY BE EITHER CONCENTRIC OR ECCENTRIC.
3. BASE SHALL BE A MINIMUM OF 5" AND PRECAST WITH BOTTOM SECTION.
4. ONE CAGE #5 @ 12" CTRS., BOTH WAYS, IN CENTER 1/3 OF CONCRETE WALL.
5. COMPLETELY FILL ANNULUS BETWEEN PIPE AND M/H WALL WITH CLAY BRICK AND PORTLAND TYPE II CEMENT.
6. MINIMUM CONCRETE STRENGTH 4000 PSI MINIMUM.
7. FOR ADDITIONAL INFORMATION AND CLARIFICATION CONCERNING MANHOLE AND INLET CONSTRUCTION DETAILS AND SPECIFICATIONS, REFER TO FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (STANDARD INDEX MANUAL) LATEST EDITION.

STORM SEWER PRECAST MANHOLE

REVISIONS

REV PER CLT 06-25-21
REV PER SLC 07-26-21
REV PER JHI 10-15-21

Jeff H. Iravani, Inc.
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Kings Highway Commerce Park
Off-Site Improvements
Fort Pierce, Florida

PAVING, GRADING, & DRAINAGE DETAILS

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01/22/2021	NA	JHI	CLJ	2101-1355

SEAL

CDA # 6986

SHEET NO.
C-36

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE , SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THHN WIRE.
5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED
6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT, IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
10. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
12. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
13. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
14. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
15. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

WATER DISTRIBUTION	G-1 NOTES
02-06 DATE: REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLM DRAWN BY: JLM APPROVED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG SCALE: N.T.S. DATE: 2010
FT. PIERCE UTILITIES AUTHORITY	SHEET 1 OF 2

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES CONTINUED

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
17. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
18. THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
19. WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFICATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITIES AUTHORITY SPECIFICATIONS.
20. SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE. CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
21. MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.
22. ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600, – 2 HR MINIMUM TEST

$$L = \frac{SD(P)\ 1/2}{148{,}000}$$

L= LEAKAGE IN GPH
S= LENGTH OF PIPE IN FEET
D= PIPE DIAMETER IN INCHES
P= TESTING PRESSURE IN PSI

23. PRIOR TO ANY TESTING, ALL MAINS 8" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st. JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45% AND EXTENDED SO THAT SWABBING AND A FULL BORE FLUSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED. WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.
24. A MINIMUM SIX FEET AND PREFERABLY TEN FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTWATER LINES. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE. WHERE THE MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGHTS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
25. WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20 FEET OF THE CROSSING.
26. CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WATER DISTRIBUTION	G-1 NOTES
02-06 DATE: REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLM DRAWN BY: JLM APPROVED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG SCALE: N.T.S. DATE: 2010
FT. PIERCE UTILITIES AUTHORITY	SHEET 2 OF 2

STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

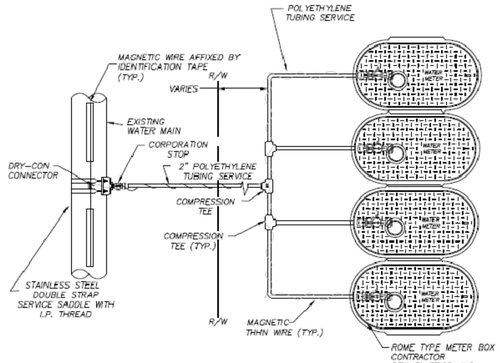
A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT	G-3 WATER/SEWER CONFLICT
02-06 DATE: REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLM DRAWN BY: JLM APPROVED: JLC	COMPUTER FILE # DETAIL NOTES 200602.DWG SCALE: N.T.S. DATE: 2010
FT. PIERCE UTILITIES AUTHORITY	SHEET 1 OF 1

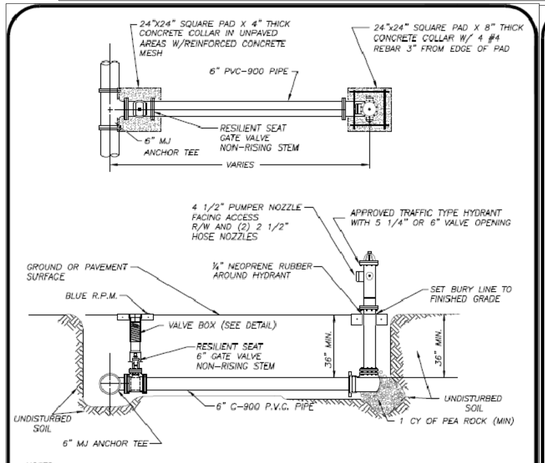


NOTES:

1. BLUE 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE AND RAN TO OUTER METERS ONLY.
2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
3. ALL METER SIZES SHALL REQUIRE LOCKABLE METER VALVE. (CURB STOP)
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".
5. POLY SERVICE LINE SHALL VARY IN SIZE PER COMMERCIAL USE.
6. F.P.U.A. SHALL REMOVE METER BOXES AND INSTALL STAND PIPES AT THE TIME OF CONNECTION.

TYPICAL MULTIPLE WATER SERVICE CONNECTION (COMMERCIAL)
(N.T.S.)

TYPICAL MULTIPLE WATER SERVICE CONNECTION (COMMERCIAL)	W-4.A
03-09 DATE: DESIGN REVISION: SLL BY: J.C APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: J.C DRAWN BY: SLL APPROVED: J.C	COMPUTER FILE # W-4.DWG SCALE: N.T.S. DATE: 2020
FT. PIERCE UTILITIES AUTHORITY	SHEET 1 OF 1

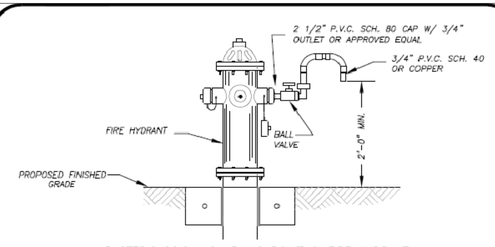


NOTES:

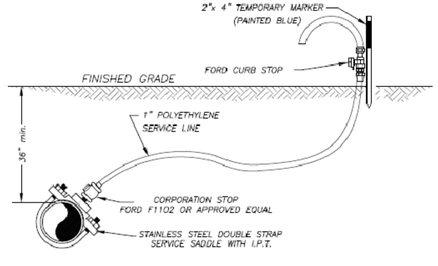
1. HYDRANT SHALL BE INSTALLED PLUMB & TRUE.
2. HYDRANT SHALL BE PAINTED CARNIVAL RED FROM FACTORY.
3. HEEL TO REST IN UNDISTURBED SOIL.
4. THE ONLY HYDRANTS ACCEPTABLE ARE: MUELLER SUPER CENTURION 250 OR AMERICAN DARLING B-84-B-5.
5. HYDRANT ASSEMBLY MUST BE RESTRAINED TO TEE.
6. ALL FITTINGS SHALL BE MECHANICAL JOINT.
7. ENTIRE ASSEMBLY TO BE MECHANICALLY RESTRAINED.
8. BLUE LOCATOR SHALL BE PLACED IN CENTER OF TRAVEL LANE CLOSEST TO HYDRANT.
9. ALL HYDRANT VALVE BOX COVERS SHALL BE PAINTED CARNIVAL RED.
10. LOCATE WIRE SHALL TERMINATE AT HYDRANT ISOLATION VALVE
11. HYDRANTS SHALL BE NO MORE THAN FIFTEEN FEET (15 FT.) FROM THE CURB OF ROADWAYS OR FROM THE EDGE OF PAVEMENT. CLEARANCES OF SEVEN AND ONE HALF FEET (7FT-6IN.) IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANTS, WITH FOUR FOOT (4 FT.) CLEARANCE TO THE REAR OF HYDRANTS SHALL BE MAINTAINED.

TYPICAL FIRE HYDRANT ASSEMBLY
(N.T.S.)

TYPICAL FIRE HYDRANT ASSEMBLY	W-5
03-09 DATE: EXISTION REVISION: SLL BY: J.C APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: J.C DRAWN BY: SLL APPROVED: J.C	COMPUTER FILE # WATERDETAIL.DWG SCALE: N.T.S. DATE: 2010
FT. PIERCE UTILITIES AUTHORITY	SHEET 1 OF 1



BACTERIOLOGICAL SAMPLING POINT @ FIRE HYDRANT
(N.T.S.)

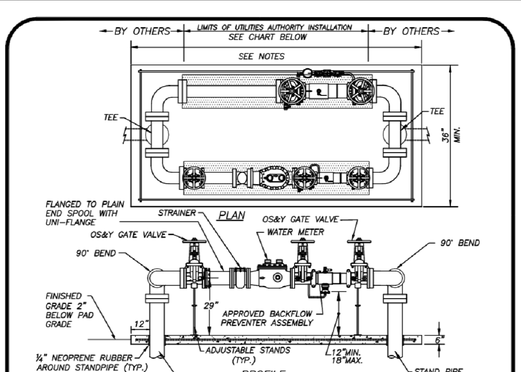


BACTERIOLOGICAL SAMPLING POINT @ WATER MAIN
(N.T.S.)

NOTE:

AFTER TESTING REMOVE 1" P.E. LINE AND CAP WITH BRASS PLUG AT CORPORATION STOP.

BACTERIOLOGICAL SAMPLING PONIT DETAIL	W-6
03-09 DATE: 02-15 REVISION: SLL BY: J.C APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: J.C DRAWN BY: SLL APPROVED: J.C	COMPUTER FILE # WATERDETAIL.DWG SCALE: N.T.S. DATE: 2010
FT. PIERCE UTILITIES AUTHORITY	SHEET 1 OF 1



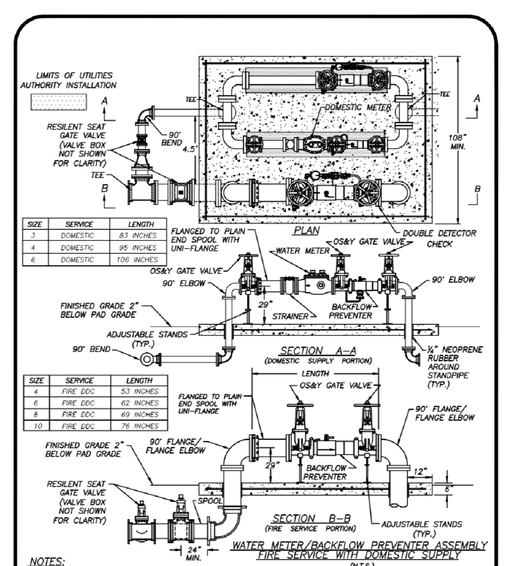
NOTES:

1. LANDSCAPING IS REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE. NO PLANTS OR TREES WITHIN 36" AROUND METER TO ALLOW MAINTENANCE WITHOUT DAMAGE TO PLANTS ETC.
2. CONTRACTOR TO INSTALL APPROPRIATE SIZED SPOOL PIECES TO FIT BETWEEN 90° BENDS UNTIL METERS ARE APPROVED FOR INSTALLATION. ALL SPOOL PIECES SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE IN ACCORDANCE WITH THE CHART BELOW.
3. PRIOR TO POURING CONCRETE PAD, VERIFY THAT THE STANDPIPES ARE PLUMB, TRUE AND ARE INSTALLED AT THE SAME ELEVATION IN THE PRESENCE OF THE FPUA INSPECTOR.
4. ALL CONCRETE SHALL HAVE FIBERGLASS MESH REINFORCEMENT WITH #4 REBAR 3" FROM THE OUTER PERIMETER.

SIZE	SERVICE	LENGTH
3	COMPOUND	83 INCHES
4	COMPOUND	95 INCHES
6	COMPOUND	106 INCHES

WATER METER/BACKFLOW PREVENTER ASSEMBLY
COMMERCIAL WATER METER SERVICES (METER SIZE ≥ 3")

WATER METER/BACKFLOW PREVENTER DOMESTIC SERVICE (METER SIZE ≥ 3")	W-9
03-09 DATE: CONCRETE SLAB REVISION: SLL BY: J.C APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: DRAWN BY: SLL APPROVED: J.C	COMPUTER FILE # WATER DETAILS 200602.DWG SCALE: DATE: 2010
FT. PIERCE UTILITIES AUTHORITY	SHEET 1 OF 1



WATER METER/BACKFLOW PREVENTER ASSEMBLY
FIRE SERVICE WITH DOMESTIC SUPPLY
(N.T.S.)

NOTES:

1. LANDSCAPING IS REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE. NO PLANTS OR TREES WITHIN 36" AROUND METER TO ALLOW MAINTENANCE WITHOUT DAMAGE TO PLANTS ETC.
2. NO SOLDER JOINTS.
3. ASSEMBLY TO BE 29" FROM FINISH GRADE TO CENTERLINE OF THE FLANGED 90° BEND.
4. DOMESTIC SERVICE 2" OR LESS, USE 2" POLY STUBBED 12" ABOVE GRADE.
5. ALL CONCRETE SHALL HAVE FIBERGLASS MESH REINFORCEMENT WITH #4 REBAR 3" FROM THE OUTER PERIMETER

WATER METER/BACKFLOW PREVENTER FIRE SERVICE WITH DOMESTIC SUPPLY	W-11
03-09 DATE: CONCRETE PAD REVISION: SLL BY: J.C APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: DRAWN BY: SLL APPROVED: J.C	COMPUTER FILE # WATER DETAILS 200602.DWG SCALE: N.T.S. DATE: 2010
FT. PIERCE UTILITIES AUTHORITY	SHEET 1 OF 1

REVISIONS

REV PER FPUA 11/01/21

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Kings Highway Commerce Park
Fort Pierce, Florida

WATER DETAILS

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01/22/2021	NA	JHI	CLJ	2101-1355

SEAL

CDA # 6986

SHEET NO.
C-37

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
3. THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
4. WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THEN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
5. A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISTING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
7. MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANCE FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FORM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER,
11. TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
12. CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
13. WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
16. WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
17. MINIMUM COVER SHALL BE 36 INCHES, PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITIES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS			G-2 CONSTRUCTION NOTES
02-06 DATE	REVISION:	BY:	APP'D: WATER/WASTEWATER ENGINEERING
DESIGNED: JLM	COMPUTER FILE # DETAIL NOTES 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JLM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	

STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

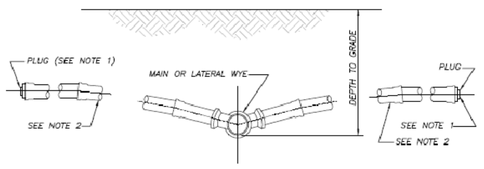
A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT			G-3 WATER/SEWER CONFLICT
02-06 DATE	REVISION:	BY:	APP'D: WATER/WASTEWATER ENGINEERING
DESIGNED: JLM	COMPUTER FILE # DETAIL NOTES 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JLM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	

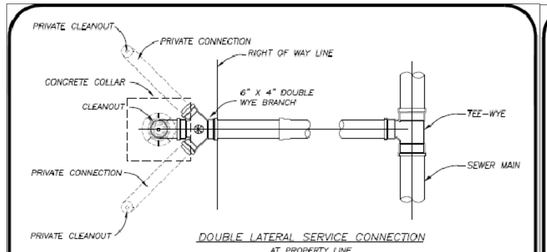


NOTES:

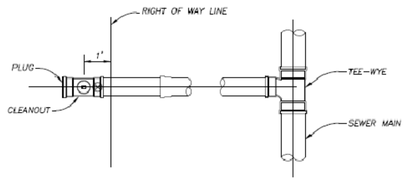
1) BALL TYPE WASTEWATER LOCATOR BY 3M CORP. OR APPROVED EQUAL.
2) MINIMUM SLOPE OF 1/8" PER FOOT, USE GREATER SLOPE WHERE POSSIBLE.
3) SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT.
4) INSTALL CLEANOUT AT THE PROPERTY LINE. REFER TO DETAIL S-1 FOR SPECIFIC PROPERTY LAYOUT.

SERVICE CONNECTION
(N.T.S.)

SERVICE CONNECTION WASTEWATER			S-2
02-06 DATE	REVISION:	BY:	APP'D: WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JLM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1	



DOUBLE LATERAL SERVICE CONNECTION
AT PROPERTY LINE



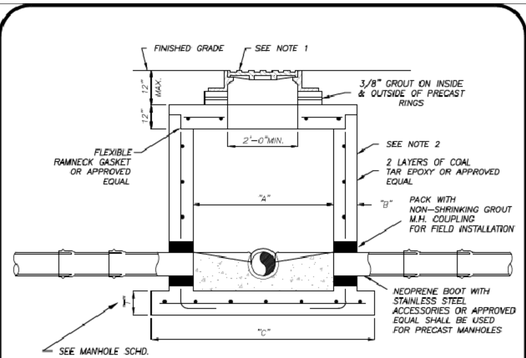
SINGLE SERVICE LATERAL CONNECTION

⊕ = BALL TYPE WASTEWATER LOCATOR INSTALLED ABOVE THIS POINT. BALL BY 3M CORP. OR APPROVED EQUAL

SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT

SERVICE CONNECTION
(N.T.S.)

SERVICE CONNECTION WASTEWATER			S-3
02-06 DATE	REVISION:	BY:	APP'D: WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JLM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	



PIPE DIA.	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	4'-0"	8"	76"	8"
30"-36"	5'-0"	8"	88"	10"
42"-48"	6'-0"	8"	100"	12"

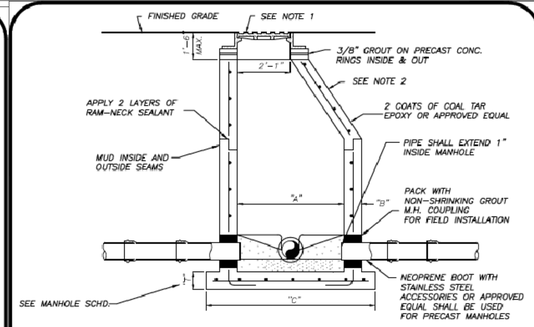
TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.
3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.
4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

SHALLOW MANHOLE
DEPTH OF LESS THAN 5'-0"
(N.T.S.)

PRECAST MANHOLE DEPTH OF LESS THAN 5'- 0"			S-6
02-06 DATE	REVISION:	BY:	APP'D: WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JLM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	



PIPE DIA.	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	4'-0"	8"	76"	8"
30"-36"	5'-0"	8"	88"	10"
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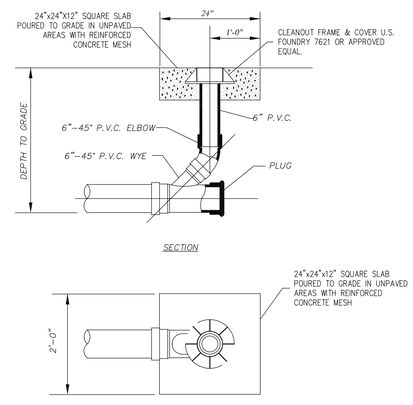
TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.
3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.
4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

STANDARD MANHOLE
DEPTH 5'-0" AND GREATER
(N.T.S.)

PRECAST MANHOLE DEPTH 5'- 0" & GREATER			S-7
02-06 DATE	REVISION:	BY:	APP'D: WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JLM	SCALE: N.T.S.		
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	



SECTION

PLAN

CLEANOUT DETAIL
(N.T.S.)

TERMINAL CLEANOUT DETAIL WASTEWATER			
02-06 DATE	REVISION:	BY:	APP'D: WATER/WASTEWATER/GAS ENGINEERING
DESIGNED:	COMPUTER FILE # SEWER DETAIL 200602.DWG		FT. PIERCE UTILITIES AUTHORITY 206 SOUTH 6TH STREET FT. PIERCE, FLORIDA 34948 (561) 466-1600
DRAWN BY: DLP	SCALE: N.T.S.		
APPROVED:	DATE: DECEMBER, 2007	SHEET 1 OF 1	

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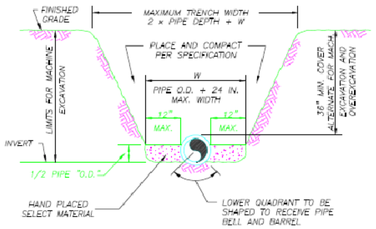
WASTEWATER DETAILS

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01/22/2021	NA	JHI	CLJ	2101-1355

SEAL

CDA # 6986

SHEET NO.
C-38

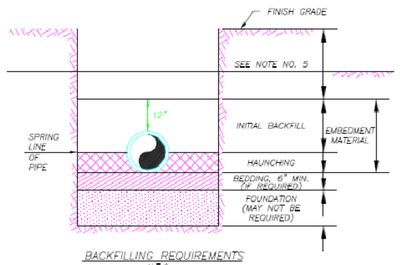


NOTES:

1) THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.
2) INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL
N.T.S.

EPUA COMMUNITY PROUD	TYPICAL TRENCH DETAIL	M-1
12-09 CONCRETE SLAB SLL JLC	WATER/WASTEWATER ENGINEERING	
JLC	MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
SLL JLC 2015	SHEET 1 OF 1	

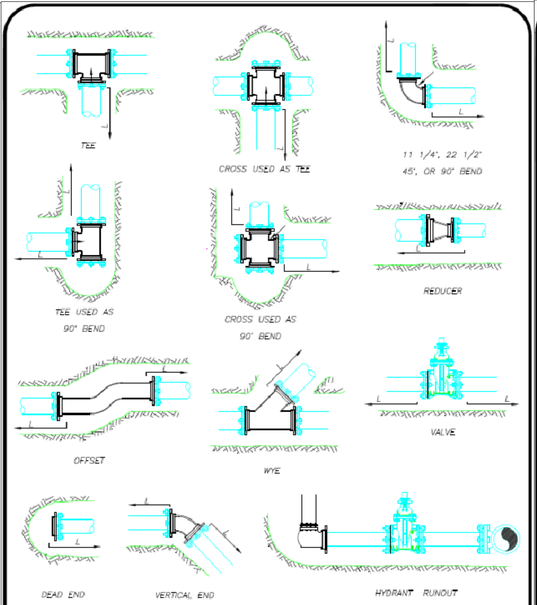


BACKFILLING REQUIREMENTS
N.T.S.

NOTES:

1) IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
2) BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
3) HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
4) INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY.(AASHTO T-99)
5) BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW (PROPOSED) PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-180.
6) DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTORS EXPENSE.
7) CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

EPUA COMMUNITY PROUD	BACKFILLING REQUIREMENTS	M-2
12-09 CONCRETE SLAB SLL JLC	WATER/WASTEWATER ENGINEERING	
JLC	MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
SLL JLC 2015	SHEET 1 OF 1	



MECHANICAL JOINT ANCHORING REQUIREMENTS
N.T.S.

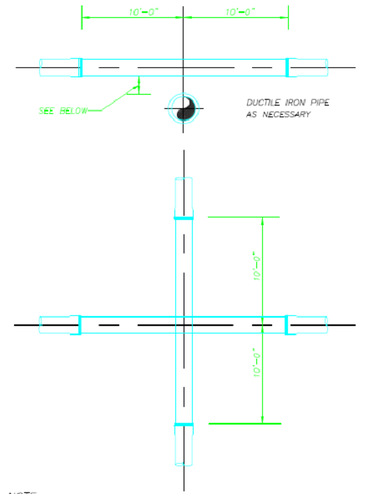
EPUA COMMUNITY PROUD	MECHANICAL JOINT ANCHORING REQUIREMENTS	M-3
12-09 CONCRETE SLAB SLL JLC	WATER/WASTEWATER ENGINEERING	
JLC	MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
SLL JLC 2015	SHEET 1 OF 1	

MECHANICAL JOINT RESTRAINT NOTES

NOTES:

1) THE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING THE REQUIRED LENGTH TO BE RESTRAINED BASED UPON THE PROJECT AREA SOIL TYPE, PROPOSED TRENCH CONDITIONS AND DEPTH, PRESSURE OF 150 PSI, AND A SAFETY FACTOR OF TWO (2). A DRAWING OF EVERY TYPICAL FITTING ASSEMBLY WITHIN THE PROJECT SHALL BE SUBMITTED WHICH REFLECTS THE RESTRAINT DETAIL PROPOSED FOR USE, INCLUDING LENGTH OF PIPE RESTRAINT.
2) REQUIRED RESTRAINED LENGTH CALCULATIONS SHALL ALSO CONSIDER THE CONDITIONS OF OTHER BENDS OR FITTINGS THAT WILL BE LOCATED WITHIN THE CALCULATED RESTRAINED LENGTH (L) OF THE BEND OR FITTING IN QUESTION.
3) EVERY JOINT OR FITTING MUST BE RESTRAINED ON BOTH SIDES OF THE BEND AND FOR TEES ALONG THE BEND ALSO.

EPUA COMMUNITY PROUD	MECHANICAL JOINT RESTRAINT NOTES	M-4
12-09 CONCRETE SLAB SLL JLC	WATER/WASTEWATER ENGINEERING	
JLC	MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
SLL JLC 2015	SHEET 1 OF 1	

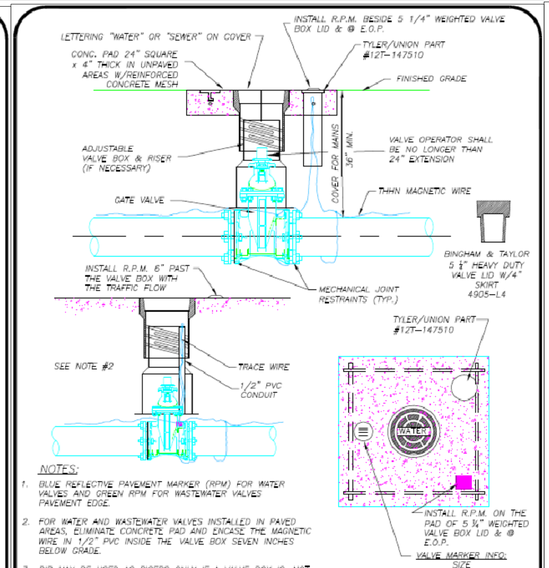


NOTE:

PLEASE REFER TO FORT PIERCE UTILITIES STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS.

UTILITY CROSSING DETAIL
N.T.S.

EPUA COMMUNITY PROUD	UTILITY CROSSING DETAIL	M-5
12-09 CONCRETE SLAB SLL JLC	WATER/WASTEWATER ENGINEERING	
JLC	MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
SLL JLC 2015	SHEET 1 OF 1	

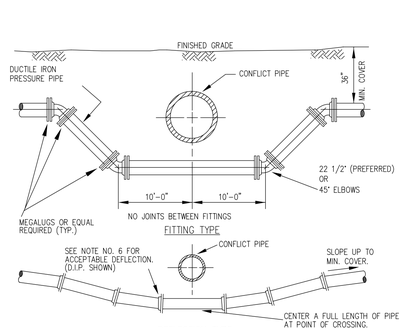


NOTES:

1. BLUE REFLECTIVE PAVEMENT MARKER (RPM) FOR WATER VALVES AND GREEN RPM FOR WASTEWATER VALVES PAVEMENT EDGE.
2. FOR WATER AND WASTEWATER VALVES INSTALLED IN PAVED AREAS, ELIMINATE CONCRETE PAD AND ENCASE THE MAGNETIC WIRE IN 1/2" PVC INSIDE THE VALVE BOX SEVEN INCHES BELOW GRADE.
3. DIP MAY BE USED AS RISERS ONLY IF A VALVE BOX IS NOT MANUFACTURED FOR THAT DEPTH. NO PVC RISERS SHALL BE USED IN ANY CIRCUMSTANCES.

TYPICAL GATE VALVE & VALVE BOX DETAIL
N.T.S.

EPUA COMMUNITY PROUD	TYPICAL GATE VALVE & VALVE BOX DETAIL	M-6
12-09 CONCRETE SLAB SLL JLC	WATER/WASTEWATER ENGINEERING	
JLC	MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
SLL JLC 2015	SHEET 1 OF 1	

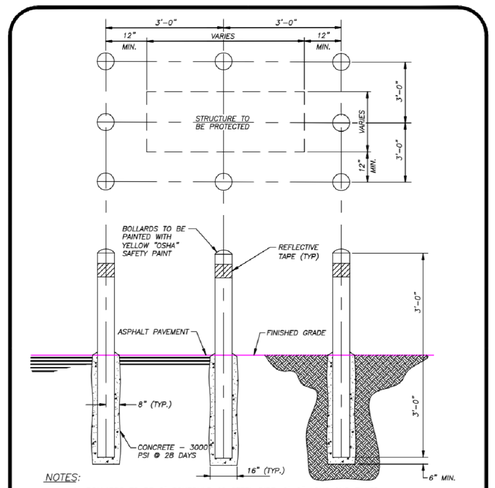


DEFLECTION TYPE

NOTES:

1. STORM SEWER, GRAVITY WASTEWATER AND RECLAIMED WATER MAIN CROSSING UNDER POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE STORM/WASTEWATER/RECLAIMED WATER PIPE JOINTS AND POTABLE WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS, BOTH PIPES SHALL BE D.I.P., AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6 INCHES. WHERE THERE IS NO ALTERNATIVE TO STORM/WASTEWATER/RECLAIMED WATER PIPES CROSSING OVER A POTABLE WATER MAIN, THE CRITERIA FOR MINIMUM 12" VERTICAL SEPARATION BETWEEN LINES AND JOINT ARRANGEMENT, AS STATED ABOVE, SHALL BE REQUIRED,
2. WHENEVER POSSIBLE MAINTAIN 10' (MIN 6') HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN POTABLE WATER MAIN AND STORM SEWER, WASTEWATER MAIN, OR FORCE MAIN MIN.
3. FORCE MAIN CROSSING POTABLE WATER MAIN OR RECLAIMED WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND OUTSIDE OF THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN WITH THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN CROSSING OVER THE FORCE MAIN.
4. FITTINGS SHALL BE RESTRAINED.
5. THE DEFLECTION TYPE CROSSING IS PREFERRED.
6. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION FOR DUCTILE IRON PIPE.
7. ALL EXPOSED TIE STEEL SHALL BE COATED WITH COAL-TAR EPOXY
8. POTABLE WATER SERVICE LINES SHALL CROSS OVER WASTEWATER MAINS WITH MIN. 12" VERTICAL SEPARATION. WHERE THIS MIN. SEPARATION CAN NOT BE MAINTAINED, THE WATER SERVICE SHALL BE ENCASED IN A MIN. 10' LONG CASING CENTERED OVER THE CROSSING WITH MIN. 6" VERTICAL SEPARATION.

RECLAIMED WATER MAIN POTABLE WATER/FORCE MAIN PRESSURE PIPE CONFLICT DETAIL



NOTES:

1) BOLLARDS TO BE 6" SCHEDULE 40 STEEL PIPE, 6'-0" LONG AND FILLED WITH CONCRETE.
2) BOLLARDS ON SIDE NOT ACCESSIBLE TO VEHICLES MAY BE OMITTED BY THE APPROVING AGENCY.
3) PLACE 6" WIDE YELLOW CLASS 4 REFLECTIVE TAPE 4" DOWN FROM TOP FOR FULL DIAMETER ON ALL BOLLARDS.
4) CONTRACTOR TO ASSURE THAT BOLLARDS ARE PLACED TO ALLOW FULL ACCESS TO THE PROTECTED FACILITY.

EPUA COMMUNITY PROUD	BOLLARD DETAIL	M-12
12-09 CONCRETE SLAB SLL JLC	WATER/WASTEWATER ENGINEERING	
JLC	MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
SLL JLC 2015	SHEET 1 OF 1	

REVISIONS

REV PER FPUA 11/01/21

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Kings Highway Commerce Park
Fort Pierce, Florida

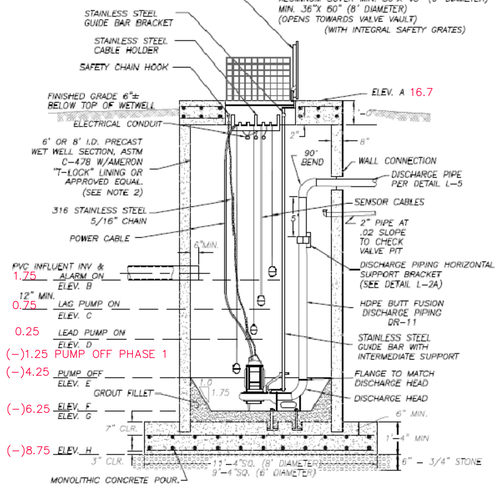
WASTEWATER DETAILS

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01/22/2021	NA	JHI	CLJ	2101-1355

SEAL

CDA # 6986

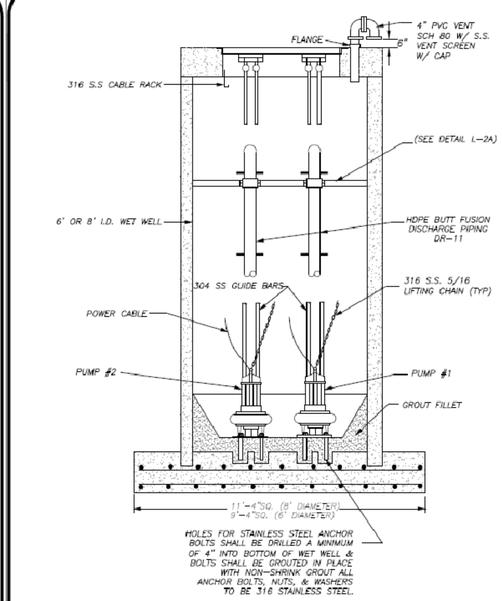
SHEET NO.
C-39



NOTES:

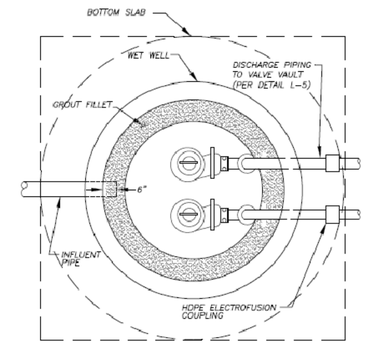
1. ALL INTERIOR CONCRETE SURFACES OF WET WELL NOT COVERED WITH AMERON "T-LOCK" SHALL HAVE 2 COATS OF COAL TAR EPOXY IN INSTANCES WHERE FPUA ENGINEERING DIRECTS.
2. "T-LOCK" OR APPROVED EQUAL SHALL ALSO BE REQUIRED ON ALL STRUCTURE PENETRATIONS AND THE INTERIOR OF THE TOP SLAB.
3. TRIPLEX MASTER LIFT STATIONS SHALL HAVE 12' DIAMETER WETWELL.
4. MINIMUM SIZE DISCHARGE PIPING SHALL BE AS FOLLOWS: 4" FOR 6' DIA WETWELL, 6" FOR 8' DIA WETWELL, AND 8" FOR 12' DIA WETWELL.
5. STRUCTURAL DESIGN– PER MANUFACTURERS SHOP DRAWINGS.
6. FLOATATION PER DESIGN ENGINEER.

FPUA COMMUNITY PROUD	LIFT STATION SECTION VIEW	L-1
	DESIGNED: JLM; DRAWN BY: JLM; APPROVED: JLC; COMPUTER FILE #: LIFT STATION DETAILS200802.DWG; SCALE: N.T.S.; DATE: FEBRUARY 2017	FT. PIERCE UTILITIES AUTHORITY; SHEET 1 OF 1



HOLES FOR STAINLESS STEEL ANCHOR BOLTS SHALL BE DRILLED A MINIMUM OF 4" INTO BOTTOM OF WET WELL & BOLTS SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT ALL ANCHOR BOLTS, NUTS, & WASHERS TO BE 316 STAINLESS STEEL.

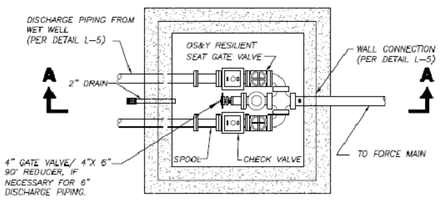
FPUA COMMUNITY PROUD	SECTION VIEW–DUPLEX PUMP INSTALLATION	L-2
	DESIGNED: JLM; DRAWN BY: JLM; APPROVED: JLC; COMPUTER FILE #: LIFT STATION DETAILS200802.DWG; SCALE: N.T.S.; DATE: FEBRUARY 2017	FT. PIERCE UTILITIES AUTHORITY; SHEET 1 OF 1



NOTE:

TOP SLAB NOT SHOWN FOR CLARITY

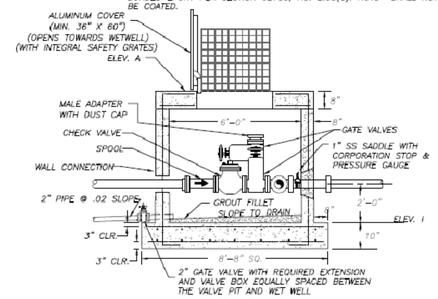
FPUA COMMUNITY PROUD	LIFT STATION PLAN VIEW	L-3
	DESIGNED: JLM; DRAWN BY: JLM; APPROVED: JLC; COMPUTER FILE #: LIFT STATION DETAILS200802.DWG; SCALE: N.T.S.; DATE: DECEMBER 2007	FT. PIERCE UTILITIES AUTHORITY; SHEET 1 OF 1



PLAN

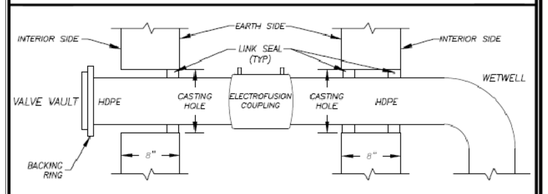
NOTES:

1. TOP SLAB NOT SHOWN FOR CLARITY
2. VALVES, PIPES, & FITTINGS ALL 4" I.D. OR LARGER FOR DISCHARGE PIPING. (AS PER SECTIONS 02600 & 02732)
3. ALL INTERIOR DUCTILE IRON PIPING SHALL BE COATED WITH FUSION BONDED EPOXY PER SECTION 02735, NO. 2.05(C). NUTS SHALL NOT BE COATED.



SECTION A–A

FPUA COMMUNITY PROUD	LIFT STATION VALVE PIT	L-4
	DESIGNED: JLC; DRAWN BY: SLL; APPROVED: JLC; COMPUTER FILE #: LIFT STATION DETAILS200802.DWG; SCALE: N.T.S.; DATE: DECEMBER 2007	FT. PIERCE UTILITIES AUTHORITY; SHEET 1 OF 1



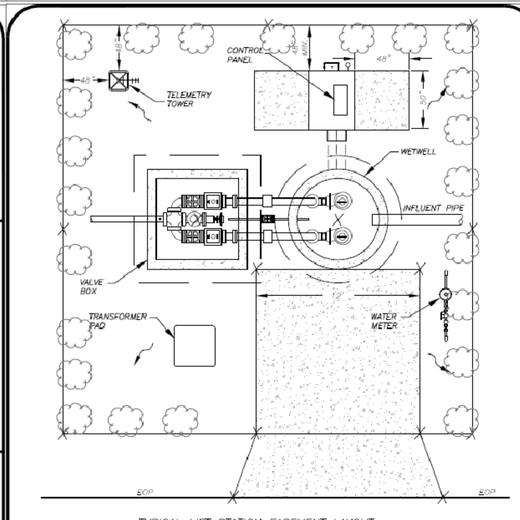
HDPE

NOTE:

1) MODEL "OS–316" LINK–SEAL MODULAR SEALS WITH NITRILE ELEMENTS OR APPROVED EQUAL.
2) CASTING HOLE DIAMETER VARIES WITH THE SIZE OF WET–WELL DISCHARGE PIPE.

DISCHARGE PIPE	CASTING HOLE DIAMETER
4" HDPE DR–11	8 INCHES
6" HDPE DR–11	10 INCHES

FPUA COMMUNITY PROUD	LIFT STATION TO VALVE VAULT PIPING CONNECTION DETAIL	L-5
	DESIGNED: JLM; DRAWN BY: JLM; APPROVED: JLC; COMPUTER FILE #: LIFT STATION DETAILS200802.DWG; SCALE: N.T.S.; DATE: DECEMBER 2007	FT. PIERCE UTILITIES AUTHORITY; SHEET 1 OF 1

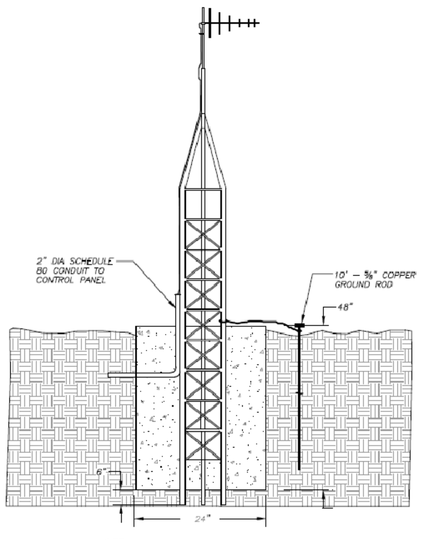


TYPICAL LIFT STATION EASEMENT LAYOUT
N.T.S

NOTES:

1) ONLY TO BE USED FOR GENERAL SITE LAYOUT. REFER TO FPUA'S LIFT STATIONS, PUMPS, AND CONTROL DESIGN AND CONSTRUCTION STANDARDS 02735 FOR SPECIFIC CONSTRUCTION REQUIREMENTS.
2) LANDSCAPE AROUND LIFT STATION PER LOCAL ORDINANCE. (COCO PLUM)
3) AREA TO BE LAID WITH SOD.
4) BOLD "X" REPRESENTS ELEVATIONS NECESSARY TO CONFIRM DRAINAGE AND INSTALLATION REQUIREMENTS.
5) LIFT STATION EASEMENT SHALL MEASURE 30' x 30' (MINIMUM)

FPUA COMMUNITY PROUD	LIFT STATION LAYOUT PLAN	L-6
	2015 CONCRETE PAD; DESIGNED: JLC; DRAWN BY: SLL; APPROVED: JLC; COMPUTER FILE #: LIFT STATION DETAILS200802.DWG; SCALE: N.T.S.; DATE: AUGUST 2014	FT. PIERCE UTILITIES AUTHORITY; SHEET 1 OF 1

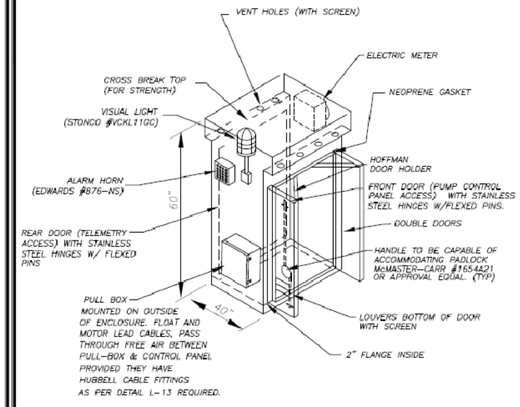


NOTE

1. CONSTRUCT TELEMETRY TOWER SUCH THAT THE ANTENNA IS AT LEAST 10 FEET AWAY FROM ELECTRIC DISTRIBUTION LINES.

150 MPH WIND RATED

FPUA COMMUNITY PROUD	RADIO TOWER LAYOUT – REMOTE SITE	L-7
	2015 DESIGNED: JLM; DRAWN BY: JLM; APPROVED: JLC; COMPUTER FILE #: LIFT STATION DETAILS200802.DWG; SCALE: N.T.S.; DATE: DECEMBER 2007	FT. PIERCE UTILITIES AUTHORITY; SHEET 1 OF 1



NOTES:

1. ATTACH ENCLOSURE TO EQUIPMENT PAD WITH A MINIMUM OF 12– 3/8" x 3 1/2" STAINLESS STEEL DRILLED ANCHORS.
2. ENCLOSURE SHALL BE OF 1/8" GAUGE 5052 ALUMINUM.

FPUA COMMUNITY PROUD	LIFT STATION OVER–HOUSE CONTROL PANEL	L-8
	DESIGNED: JLC; DRAWN BY: JLM; APPROVED: JLC; COMPUTER FILE #: LIFT STATION DETAILS200802.DWG; SCALE: N.T.S.; DATE: DECEMBER 2007	FT. PIERCE UTILITIES AUTHORITY; SHEET 1 OF 1

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Fort Pierce, Florida

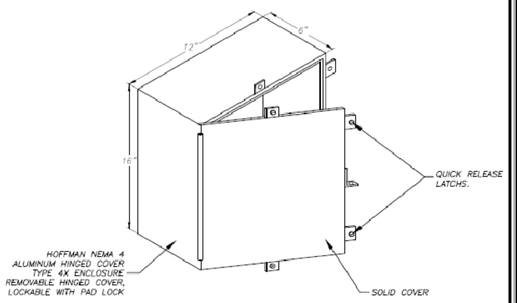
LIFT STATION DETAILS

DATE	SCALE	DESIGNED BY	DRAWN BY:	JOB NO.
01/22/2021	NA	JHI	CLJ	2101–1355

SEAL

CDA # 6986

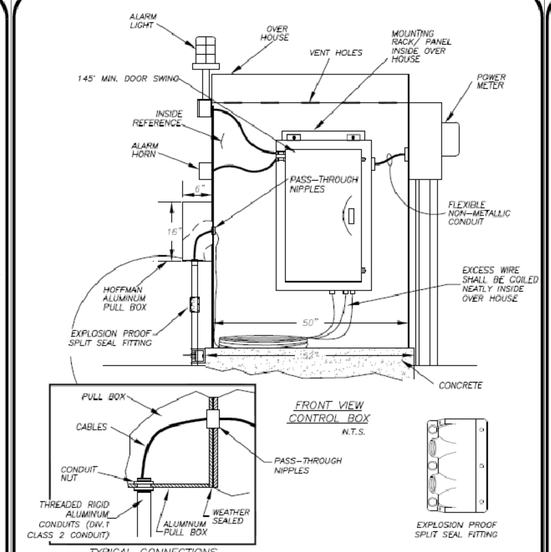
SHEET NO.
C–40



NOTES

1. MOTOR LEADS AND FLOAT LEADS SHALL BE CONTINUOUS THROUGH PULL BOX.
2. CABLES FROM PULL BOX TO CONTROL PANEL SHALL BE SEALED OFF WITH HUBBLE FITTINGS P-200KLBK (SEE DETAIL L-10.)
3. CAT NO. A-16P12AL (16" X 12" X 6"), LARGER ENCLOSER MAY BE REQUIRED.

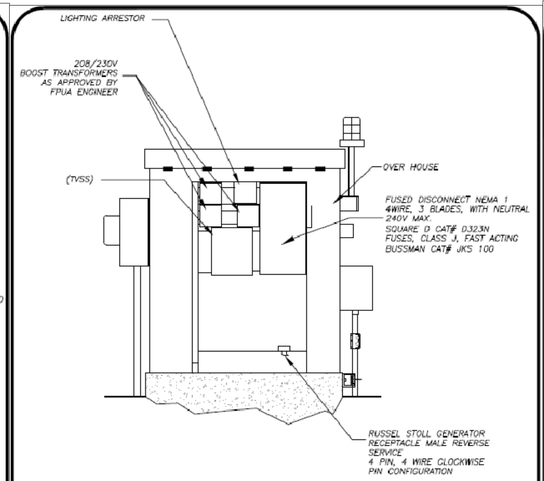
FPUA COMMUNITY PROUD	LIFT STATION PULL BOX		L-9
2015 DATE:	REVISION:	BY:	APPD:
DESIGNED: JJH	COMPUTER FILE #: LIFT STATION DETAILS2016002.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: CJM	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: DECEMBER 2007		SHEET 1 OF 1



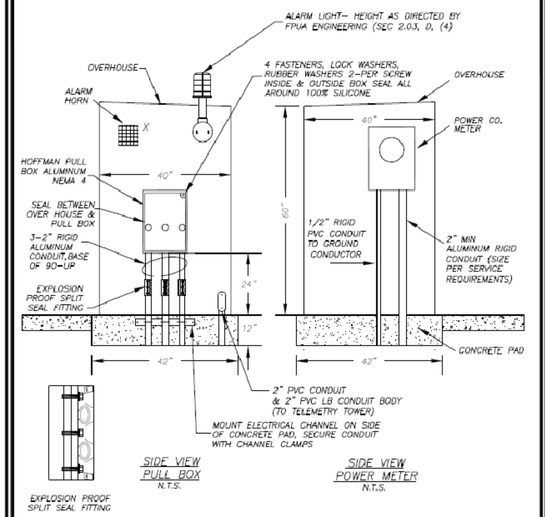
TYPICAL CONNECTIONS INSIDE DETAIL

PULL BOX MUST BE NEMA 4, CONDUIT WILL BE ALUMINUM, RIGID AND THREADED ENDS, CONNECTIONS FROM ELBOW TO BOTTOM OF PULL BOX, AS PER "NFPA 820 STANDARDS, CLASS1 DIVISION2, AND NEC, SECTION 501-4 UNDER EXCEPTION4.

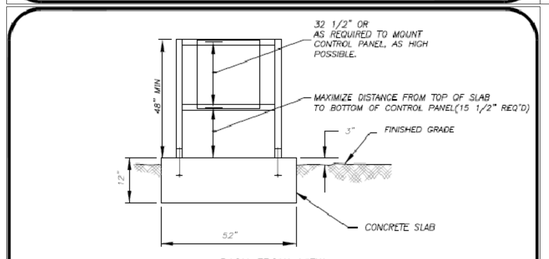
FPUA COMMUNITY PROUD	CONTROL PANEL / OVERHOUSE FRONT VIEW		L-10
2014 DATE:	REVISION:	BY:	APPD:
DESIGNED: JLC	COMPUTER FILE #: LIFT STATION DETAILS2016002.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: DECEMBER 2007		SHEET 1 OF 1



FPUA COMMUNITY PROUD	CONTROL PANEL / OVERHOUSE REAR VIEW		L-11
2014 DATE:	REVISION:	BY:	APPD:
DESIGNED: JLC	COMPUTER FILE #: LIFT STATION DETAILS2016002.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: DECEMBER 2007		SHEET 1 OF 1



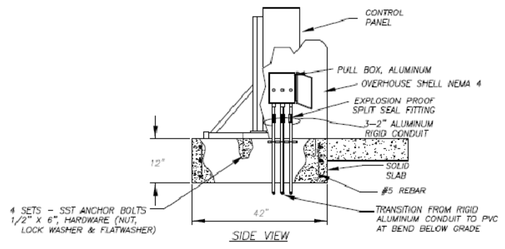
FPUA COMMUNITY PROUD	LIFT STATION CONTROL PANEL OVERHOUSE SIDE VIEWS		L-12
2014 DATE:	REVISION:	BY:	APPD:
DESIGNED: JLC	COMPUTER FILE #: LIFT STATION DETAILS2016002.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: DECEMBER 2007		SHEET 1 OF 1



RACK FRONT VIEW

NOTES:

1. ALL BOLTS, NUTS & WASHERS REQUIRED FOR ASSEMBLING FRAMING SHALL BE 316 STAINLESS STEEL
2. FRAMING SHALL BE 2" SQ. 5052 ALUMINUM TUBING.



SIDE VIEW

FPUA COMMUNITY PROUD	LIFT STATION EQUIPMENT MOUNTING RACK		L-13
2014 DATE:	REVISION:	BY:	APPD:
DESIGNED: JLC	COMPUTER FILE #: LIFT STATION DETAILS2016002.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: DECEMBER 2007		SHEET 1 OF 1

PUMP DATA: MANUFACTURER, Barnes with 130mm Impeller
MOD. No. XGV IMP. No. 50N2 MOTOR, _____ HP, ____
RPM, _____ VOLTS, 230 PHASE, 60 HERTZ

OPERATING CONDITIONS: 244 GPM AT 75.5 TDH. 34.5 % EFFICIENCY

AS-BUILT: PUMP NO. 1: _____ GPM AT _____ TDH.
PUMP NO. 2: _____ GPM AT _____ TDH.

WET WELL: SIZED FOR MINIMUM PUMP CYCLE TIME OF 5 MINUTES AND A MAXIMUM OF 12 PUMP STARTS PER HOUR. WORKING DEPTH 3 FT. WORKING VOLUME 1,128 GALS.

ELECTRICAL: FEEDERS AND CONDUIT _____ MAIN SWITCH _____ POLES _____ AMPS

REVISIONS

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Kings Highway Commerce Park
Fort Pierce, Florida

LIFT STATION DETAILS

DATE	SCALE	DESIGNED BY	DRAWN BY	JOB NO.
01/22/2021	NA	JHI	CLJ	2101-1355

SEAL

CDA # 6986

SHEET NO.
C-41

PRUIT RESEARCH CENTER ROAD

WHITE ROAD

WHITE ROAD

WHITE ROAD

KING'S HIGHWAY (SR-713)

DRY DET-4
0.70 AC
(BIO-SWALE)

DRY DET-5
2.59 AC (BIO-SWALE)

CONST SILT FENCE
TYP

FUTURE TRAILER PARKING

LITTORAL
ZONE

FOUNTAIN

LAKE-1
5.34 AC

BLDG-C
PH-II
750.5 KSF
40 KSF OFFICE
710.5 KSF WAREHOUSE

600'

1,250'

DRY DETENTION-7 11.63 AC (BIO-SWALE)

PETERS ROAD

LITTORAL
ZONE

FOUNTAIN

DRY DET-6
2.56 AC

CONST SILT FENCE
TYP

40'X50' CONSTRUCTION ENTRANCE
12" DEEP #4 FDOT AGGREGATE
2-REQ

LAKE-2
1.93 AC

LITTORAL
ZONE

FOUNTAIN

BENCH W/TRASH BIN
TYP

BLDG-A
PH-IA
265.4 KSF
17 KSF OFFICE
248.4 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

BLDG-B
PH-IB
220.3 KSF
15 KSF OFFICE
205.3 KSF WAREHOUSE
F.F.EL 20.9 FT, NAVD

LITTORAL
ZONE

LAKE-3
2.30 AC

FOUNTAIN

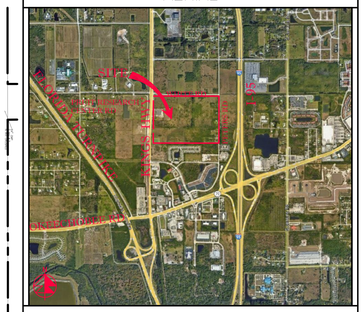
295.04'

DRY DETENTION-8 2.07 AC

2215.32'

CONST SILT FENCE
TYP

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

100' 0 50' 100' 200'

SCALE: 1" = 100'

NOTES:

1. SILT FENCE SHALL BE INSTALLED PRIOR TO START OF CONSTRUCTION.
2. FILTER FABRIC SHALL BE INSTALLED UNDER INLET GRATES IN CONSTRUCTION AREAS & SHALL BE MAINTAINED/REPLACED AS REQ'D. FABRIC SHALL NOT BE REMOVED UNTIL ALL DISTURBED AREAS HAVE BEEN RESTORED, CLEANED FREE OF SEDIMENTATION & SOD IS INSTALLED AS REQ'D.
3. MINIMUM 6" DEEP #1 FDOT AGGREGATE SHALL BE INSTALLED AT THE CONSTRUCTION ENTRANCE PRIOR TO START OF CONSTRUCTION.
4. CONTRACTOR SHALL STABILIZE / SEED & MULCH ANY DISTURBED AREA WITH NO WITH NO CONTRUCTION ACTIVITY IN 14 DAYS.
5. CONTRACTOR SHALL UTILIZE BEST MANAGEMENT PRACTICES FOR EROSION & SEDIMENTATION CONTROL PER FDEP GUIDELINE.
6. ALL LAKES SHALL BE EXCAVATED WET WITH NO DEWATERING.
7. ALL DEWATERING DISCHARGE SHALL BE KEPT ON SITE.

48 HOURS BEFORE DIGGING
CALL TOLL FREE
811
CALL SUNSHINE
NOTIFICATION CENTER

LEGEND

●19.7	PROP PAV'T EL
19.7	EXIST EL
*	CONTRACTOR TO FIELD VERIFY
INV EL	INVERT EL
CB	CATCH BASIN
YD	YARD DRAIN
BC	BOTTOM OF CURB
BE	BOTTOM EL
TC	TOP OF CURB
TE	TOP EL
EXF	EXFILTRATION TRENCH
WM	WATER MAIN
FM	FORCE MAIN
FIM	FIRE MAIN
SAN	WASTEWATER GRAVITY
	FIRE HYDRANT
GV	GATE VALVE
	GATE VALVE
	SIAMESE CONN.
	CHECK VALVE
	DOUBLE DETECTOR CHECK VALVE
	WATER METER W/ REDUCED PRESSURE BACKFLOW PREV.
	SAMPLE POINT
MES	MITERED END SECTION
F.F.EL	FIN FLOOR ELEV
F.L.EL	FLOW LINE ELEV
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TOC	TOP OF CONCRETE
TV	TAPPING VAVLE
CO	CLEANOUT
B1	BORING NO. AND LOCATION
/AE	APPROVED EQUIVALENT

REVISIONS

REV PER CITY 06-25-21
REV PER SP 06-25-21
REV PER SLC 07-26-21
REV PER FDOT 08-25-21
REV PER FDOT 09-17-21
REV PER FPUA 11-30-21
REV PER SP 01-15-21

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Kings Highway Commerce Park
Phase-II
Fort Pierce, Florida

Pollution Prevention Plan

DRAWN BY: DDI
DESIGNED BY: JHI
SCALE: 1" = 100'
DATE: 01-22-2021

SEAL

COA 6986

SHEET NO.
C-42

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	Vacant/ AG	Com / RL / RU	AG-1 / AR-1 / R-1
South	Vacant / RV Park	GC/ MXD	C-3 / GC
East	Vacant	GC	C-3
West	Vacant	RM	R4

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	GC	CP-1		109.46	X
****Proposed**					N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot 66,000 GPD
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 132,000
**Proposed Zoning/FLU	Total gallons per day
**Change in Demand	Total gallons per day 0

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot 66,000 GPD
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 132,000
**Proposed Zoning/FLU	Total gallons per day
**Change in Demand	Total gallons per day 0

C. Parks and Recreation (Residential Classifications Only):
(Du x 2.6 = persons + 44,227 = population /LOS)

Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people			
Urban District	5 acres per 1,000 people			
Community	2.5 acres per 1,000 people			
Neighborhood	1.36 acres per 1,000 people			

D. Public Schools (Residential Classifications Only):
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

	K-8	High
School Name		
City		
Distance		
Current Zoning/FLU Enrollment Demand		
****Proposed Zoning/FLU Enrollment Demand**		
****Change in Demand**		

E. Solid Waste: Residential (2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)	
Demand Analysis	Maximum
Current Zoning/FLU	59,400 CY
****Proposed Zoning/FLU**	
***Change in Demand**	0

F. Stormwater:
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

Impact	

III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning/FLU	3,262	354/374
****Proposed Zoning/FLU**		
***Change in Demand**	Trips 0	Trips 0
Impact to Capacity	LOC-C or better @ 2023	

IV. Project Description

PHASING
Is this project (phase) part of a larger project? [X] Yes [ ] No
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.
Total Project: Residential Units: Single Family: Multifamily:
Non-residential (square footage): 1,508 ksf
Mixed-use (describe use):
(If this is a single phase project, name it Phase I – Total)

RESIDENTIAL DATA					
Type	**Phase**	**Number of Units**	**Acres**	**Expected beginning date**	**Expected completion date**
Single-family, detached					
Single-family, attached					
Multi-family					
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. ☐ Yes ☐ No

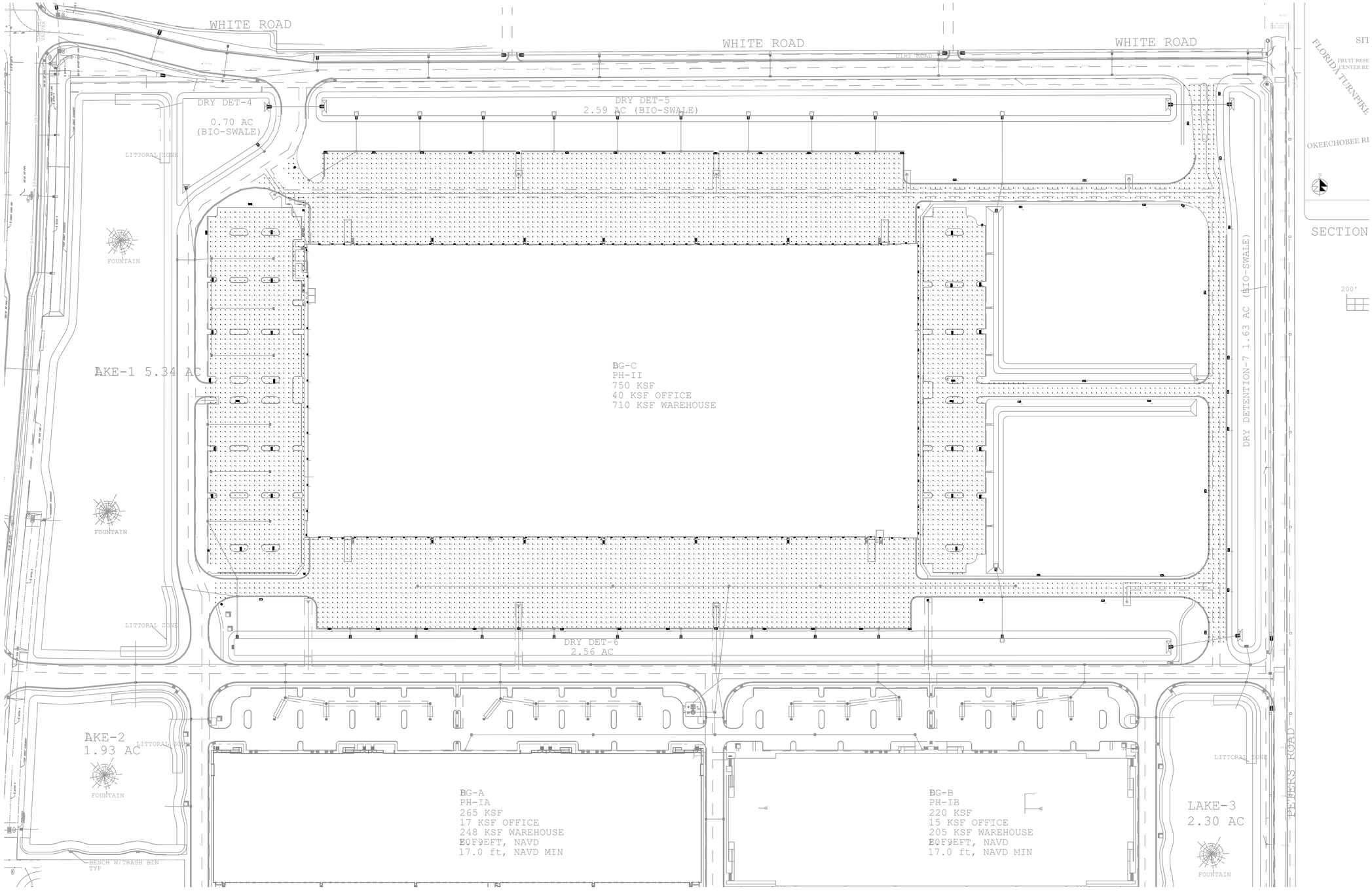
B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☐ No
If yes, what is the size of the structure(s) to be demolished or re-used? _____
2. What is the current use of the structure to be demolished or re-used? _____
3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? ☐ Yes ☐ No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

** Complete section if requesting a change in zoning, future land use, or expanding

Luminaire Schedule										
Symbol	Qty	Label	Arrangement	Description	Tag	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	Mounting Height
	28	GLEON-SA4A-827-U-SL4-HSS_BB	Back-Back	GLEON-SA4A-827-U-SL4-HSS-BB	SP2	1.000	11216	129	7224	25
	8	GLEON-SA4C-827-U-SL4-HSS	Single	GLEON-SA4C-827-U-SL4-HSS	SP3	1.000	17023	225	1800	25
	51	GLEON-SA8C-827-U-T4FT	Single	GLEON-SA8C-827-U-T4FT	SP8	1.000	41922	445	22695	25
	24	GWC-SA2A-827-U-SL4-HSS	Single	GWC-SA2A-827-U-SL4-HSS	WP1	1.000	5802	66	1584	10
	98	GWC-SA2B-827-U-T4FT	Single	GWC-SA2B-827-U-T4FT	WP3	1.000	8820	85	8330	18

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
parking	Illuminance	Fc	3.10	9.2	1.0	3.10	9.20
roadway	Illuminance	Fc	4.06	8.6	1.1	3.69	7.82



1 PHOTOMETRIC PLAN
SCALE: 1/8" = 1'-0"

RGD CONSULTING ENGINEERS
JUPITER | ORLANDO
561-743-0165 | 407-845-6630
WWW.RGDENGINEERS.COM

MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: COTLEUR & HEARING
1934 COMMERCE LANE, SUITE 1,
JUPITER, FL, 33458

DATE 1.31.2022

REVISIONS:

NO.	DESCRIPTION	DATE

KEY PLAN
AREA DESCRIPTION

PROJECT ADDRESS:
KINGS HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KINGS HIGHWAY
COMMERCE PARK PHASE
II

DATE: 01/21/2022

RGD PROJ. NO: 22-1024

SCALE: AS SHOWN

DRAWN:

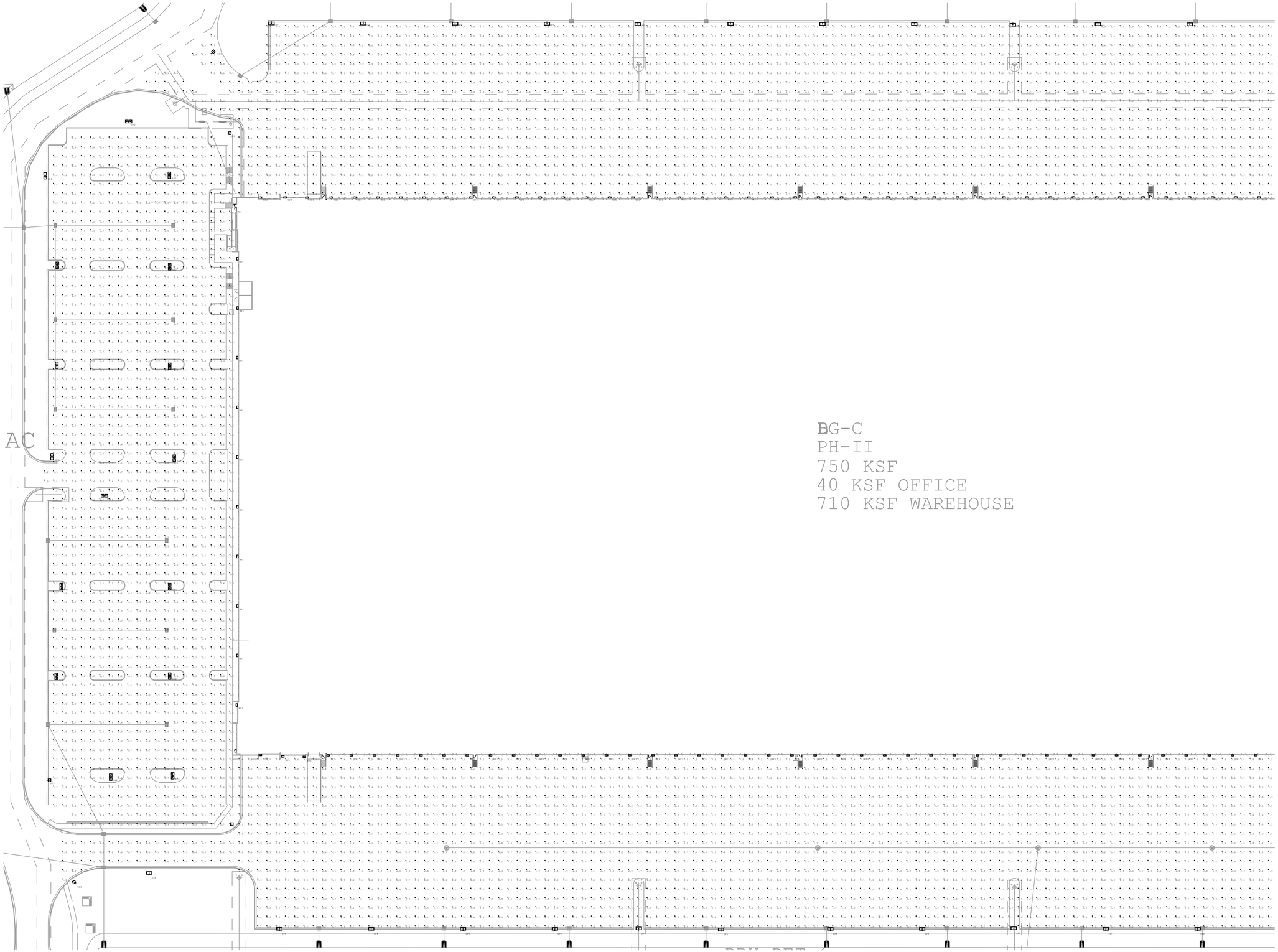
CHECKED:

SHEET NAME:
PHOTOMETRIC PLAN

SHEET NO.
E0.1

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

These Drawings are NOT VALID for any purpose which requires the original signature and seal of the engineer unless the original signature and seal are affixed. Drawings not signed and sealed by the engineer shall not be submitted to any authority or used for any purpose where signed and sealed documents are required.



1 ENLARGED PLAN A
SCALE: 1/4" = 1'-0"

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SUITE 2000, JUPITER, FL 33477

CLIENT: COTLEUR & HEARING
1934 COMMERCE LANE, SUITE 1,
JUPITER, FL, 33458

DATE 1.31.2022

REVISIONS:

NO.	DESCRIPTION	DATE

KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KINGS HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KINGS HIGHWAY
COMMERCE PARK PHASE
II

DATE: 01/21/2022

RGD PROJ. NO: 22-1024

SCALE: AS SHOWN

DRAWN:

CHECKED:

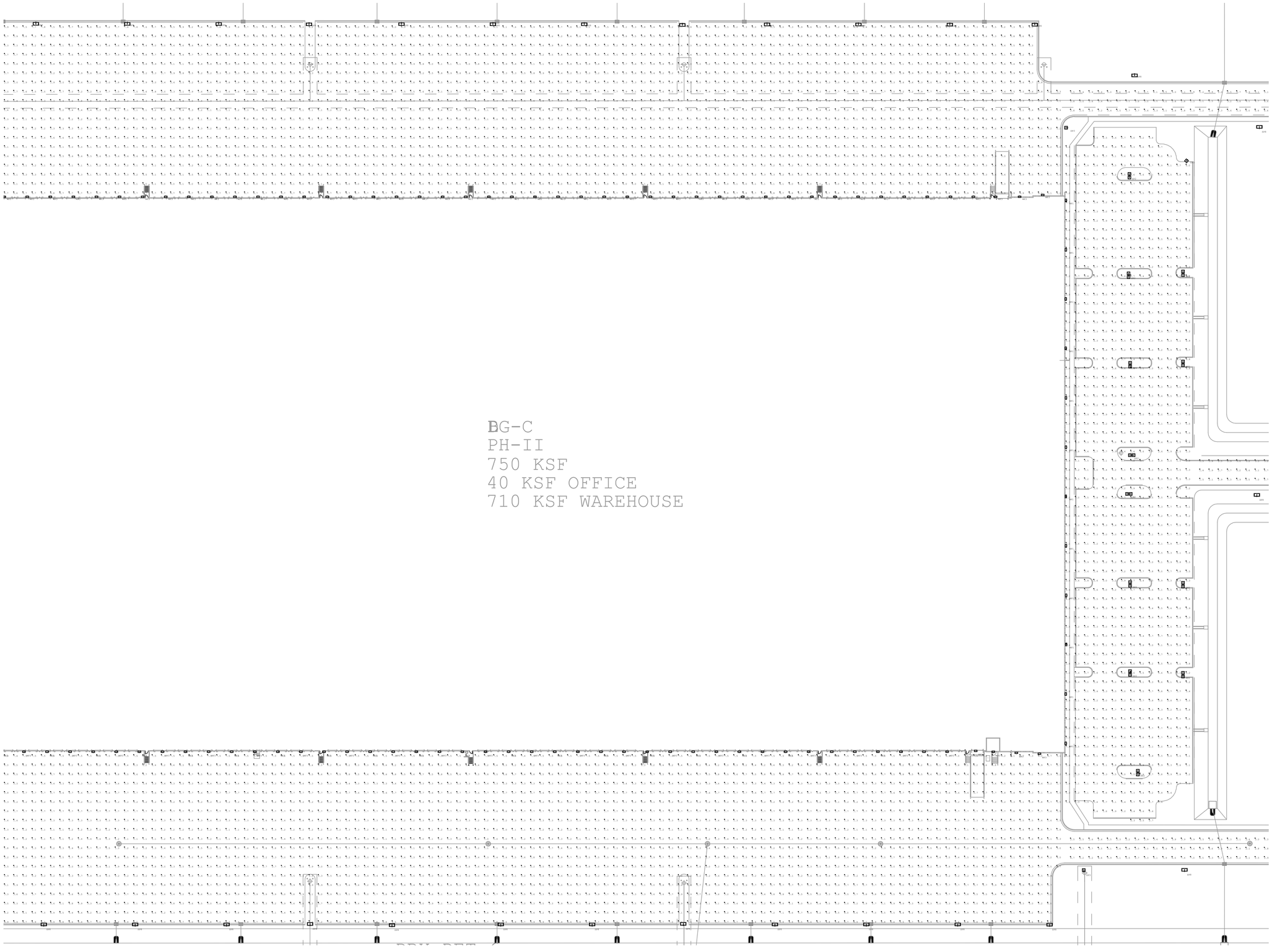
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ENLARGED PLAN A

SHEET NO.
E1.1

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

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1 ENLARGE PLAN B
SCALE: 1/4" = 1'-0"

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MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: COTLEUR & HEARING
1934 COMMERCE LANE, SUITE 1,
JUPITER, FL, 33458

DATE 1.31.2022

REVISIONS:

NO.	DESCRIPTION	DATE

KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KINGS HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KINGS HIGHWAY
COMMERCE PARK PHASE
II

DATE: 01/21/2022

RGD PROJ. NO: 22-1024

SCALE: AS SHOWN

DRAWN:

CHECKED:

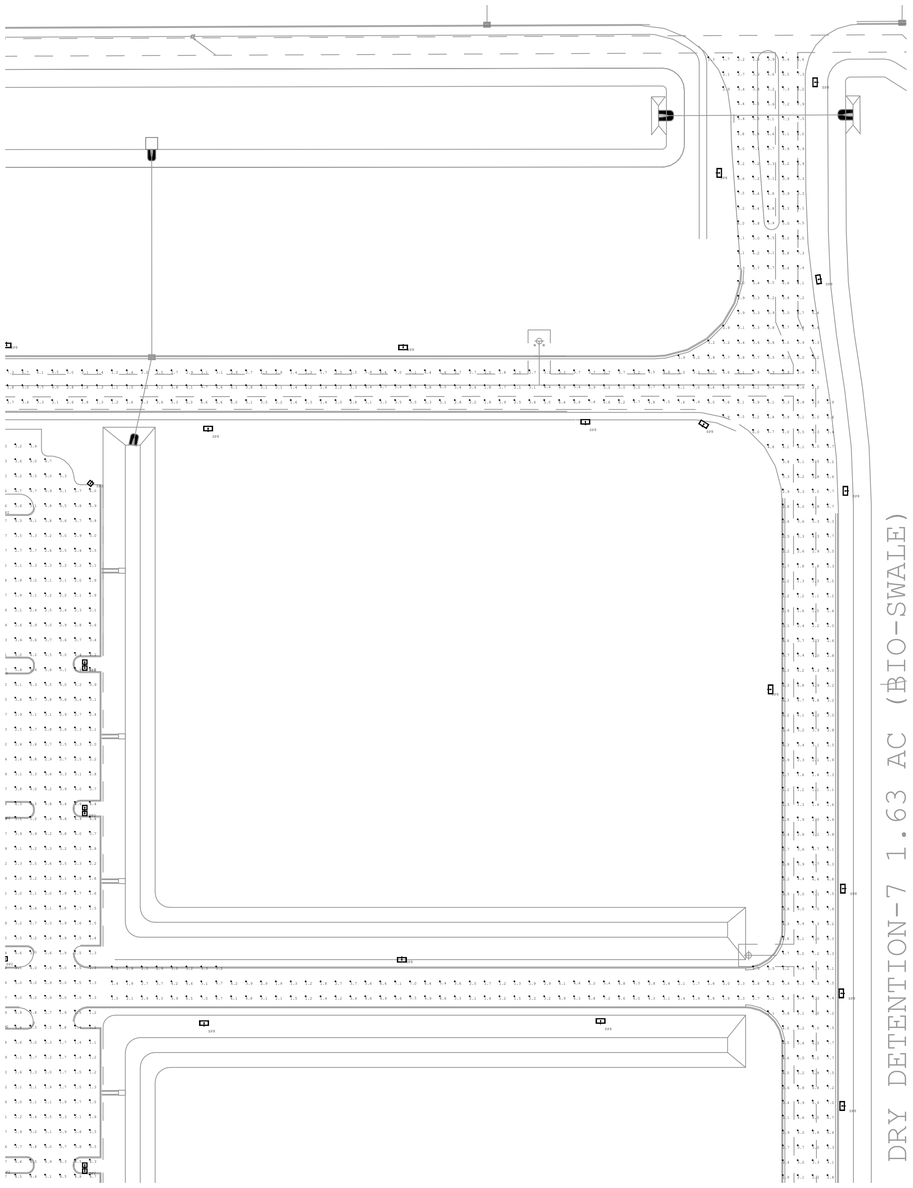
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ENLARGE PLAN B

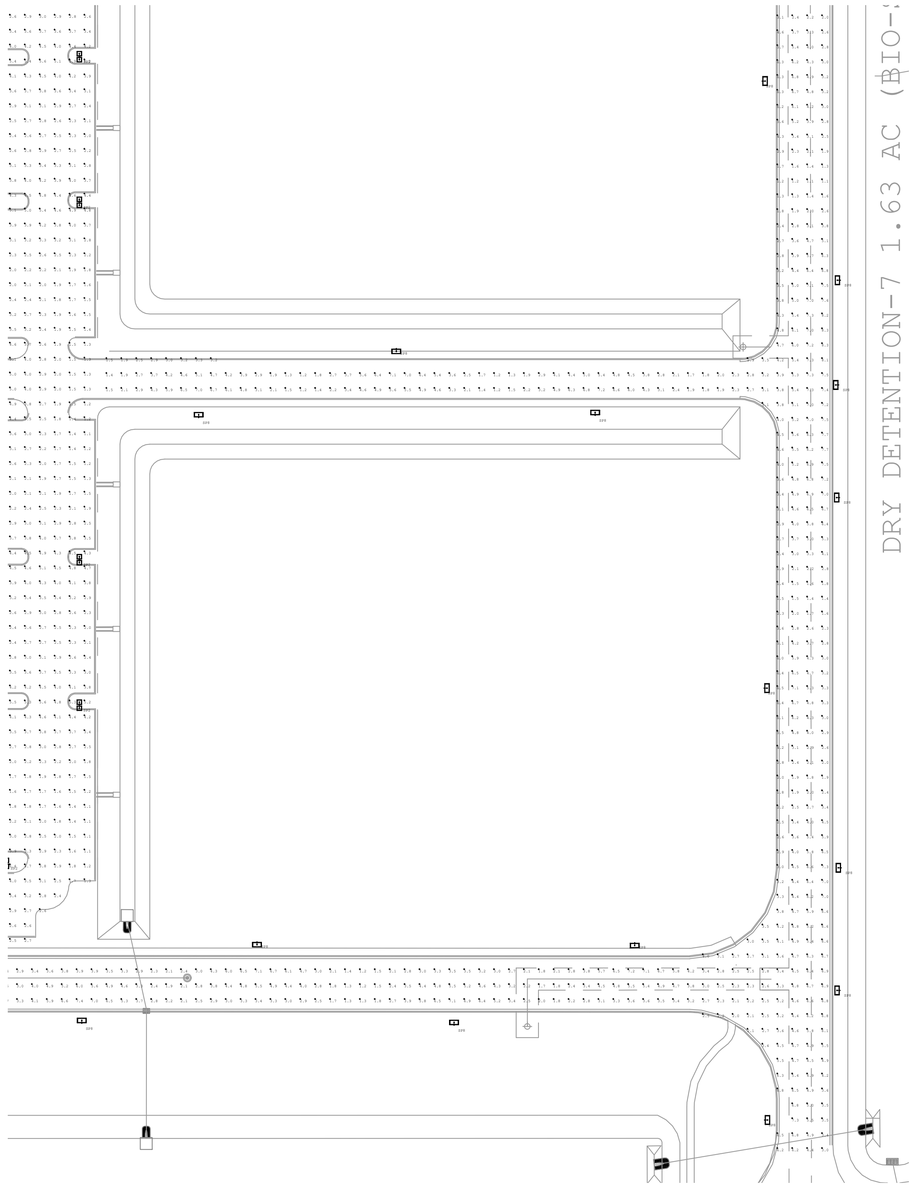
SHEET NO.
E1.2

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

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1 ENLARGED ROADWAY A
SCALE: 1/4" = 1'-0"



1 ENLARGED ROADWAY B
SCALE: 1/4" = 1'-0"

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SUITE 2000, JUPITER, FL 33477

CLIENT: COTLEUR & HEARING
1934 COMMERCE LANE, SUITE 1,
JUPITER, FL, 33458

DATE 1.31.2022

REVISIONS:

NO.	DESCRIPTION	DATE

KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KINGS HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KINGS HIGHWAY
COMMERCE PARK PHASE
II

DATE: 01/21/2022

RGD PROJ. NO: 22-1024

SCALE: AS SHOWN

DRAWN:

CHECKED:

SHEET NAME:
ENLARGE PLAN C

SHEET NO.
E1.3

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

These Drawings are NOT VALID for any purpose which requires the original signature and seal of the engineer unless the original signature and seal are affixed. Drawings not signed and sealed by the engineer shall not be submitted to any authority or used for any purpose where signed and sealed documents are required.

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GLEON Galleon

Area / Site Luminaire

Typical Applications

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

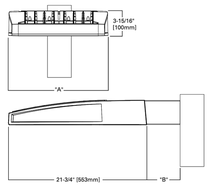
Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 4
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 9

Quick Facts

- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt

Dimensional Details



Product Certifications

DLC · DLC Premium · ISTI · cULus Certified · 3G VIB · IP66 · cULus Certified · FC · WARNING · IP66 · IDA · 5 YEAR

Product Features

LumenSafe Technology · Enlighted · WaveLinx · Light Advisories™

Connected Systems

- WaveLinx
- Enlighted

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Extended Arm Length [1]	"B" Quick Mount Arm Length	"B" Quick Mount Extended Arm Length
1-4	15-1/2"	7"	10"	10-5/8"	16-9/16"
5-6	21-5/8"	7"	10"	10-5/8"	16-9/16"
7-8	27-5/8"	7"	13"	10-5/8"	--
9-10	33-3/4"	7"	16"	--	--

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

McGraw-Edison — GLEON Galleon

Ordering Information

SAMPLE NUMBER: **GLEON-SA4C-740-U-T4FT-GM**

Product Family [1,2]	Light Engine: Configuration	Light Engine: Drive Current	Color Temperature	Voltage	Distribution	Mounting	Finish
GLEON–Galleon	**SA1**–1 Square **SA2**–2 Squares **SA3**–3 Squares **SA4**–4 Squares [3] **SA5**–5 Squares **SA6**–6 Squares **SA7**–7 Squares [4] **SA8**–8 Squares [4] **SA9**–9 Squares [4] **SA10**–10 Squares [4]	**A**=350mA **B**=525mA **C**=700mA **D**=1200mA [5]	**722**=702CRI, 2200K **727**=702CRI, 2700K **730**=702CRI, 3000K **735**=702CRI, 3500K **740**=702CRI, 4000K **750**=702CRI, 5000K **760**=702CRI, 6000K **AWC**=CCT, 2200K **830**=802CRI, 3000K **AMB**=Amber, 590nm [6,8]	**U**=120-277V **1**=120V **2**=208V **3**=240V **4**=277V **8**=480V [14] **9**=347V [14]	**T2**=Type II **T3**=Type III **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline	[blank]=Arm for Round or Square Pole **EA**=Extended Arm [7] **MA**=Mast Arm Adapter [9] **WM**=Wall Mount **QM**=Quick Mount Arm (Standard Length) [7] **QMEA**=Quick Mount Arm (Extended Length) [7]	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)
DIM=External 0-10V Dimming Leads [10,28] **F**=Single Fuse (120, 277 or 347V Specify Voltage) **FF**=Double Fused (208, 240 or 480V Specify Voltage) **20K**=Series 20kV UL 1449 Surge Protective Device **2L**=Two Circuits [11,29] **HA**=50°C High Ambient [29] **HSS**=Houseside Shield [12,29] **GRSBK**=Glare Reducing Shield, Black [29] **GRSWH**=Glare Reducing Shield, White [29] **LCF**=Light Square Trim Painted to Match Housing [29] **MT**=Installed Mesh Top **TH**=Tool-less Door Hardware **CC**=Coastal Construction finish [3] **L30**=Optics Rotated 90° Left **R90**=Optics Rotated 90° Right **SF**=Single Fuse **AHD1A8S**=After Hours Dim, 6 Hours [29] **AHD2A8S**=After Hours Dim, 6 Hours [29] **AHD2B5S**=After Hours Dim, 7 Hours [29] **AHD3S5**=After Hours Dim, 8 Hours [29] **DALI**=DALI Drivers	**BPC**=Button Type Photocontrol **PIR**=NEMA 3-PIN Photocontrol Receptacle **PR7**=NEMA 7-PIN Photocontrol Receptacle [31] **SPB3**=Dimming Occupancy Sensor with Bluetooth Interface, 8' - 20' Mounting [31] **SPB4**=Dimming Occupancy Sensor with Bluetooth Interface, 21' - 40' Mounting [31] **MS-L20**=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height [28] **MS-L40W**=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height [28] **MSLX-L20**=Bi-Level Motion Sensor, 9' - 20' Mounting Height [26,28] **MSLX-L40W**=Bi-Level Motion Sensor, 21' - 40' Mounting Height [26,28] **MS/DIM-L20**=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height [28] **MS/DIM-L40W**=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height [28] **ZW**=WaveLinx Module and 4-PIN Receptacle **ZD**=WaveLinx Module with DALI driver and 4-PIN Receptacle **SWPSXX**=WaveLinx Sensor Only, 7'-15' [15,16,28] **SWPOSXX**=WaveLinx Sensor Only, 15'-40' [15,16,28] **WOBXX**=WaveLinx Sensor with Bluetooth, 7'-15' [15,16] **WOFXX**=WaveLinx Sensor with Bluetooth, 15'-40' [15,16] **LWR-LW**=Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height [15,16,28] **LWR-LN**=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height [15,16,28]	**GA/RA1016**=NEMA Photocontrol Multi-Tap - 105-285V [28] **GA/RA1027**=NEMA Photocontrol - 480V **GA/RA1285**=NEMA Photocontrol - 347V [28] **GA/RA1013**=Photocontrol Shorting Cap **GA/RA1014**=120V Photocontrol **MA1252**=10kV Surge Module Replacement **MA1026-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1027-XX**=(@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1197-XX**=(@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1188-XX**=(@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1189-XX**=(@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1190-XX**=(@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1191-XX**=(@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1028-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1029-XX**=(@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1192-XX**=(@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1193-XX**=(@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1194-XX**=(@60° Tenon Adapter for 3-1/2" O.D. Tenon **MA1195-XX**=(@90° Tenon Adapter for 3-1/2" O.D. Tenon **GLEON-MP1**=Field Installed Mesh Top for 1-4 Light Square **GLEON-MT1**=Field Installed Mesh Top for 1-4 Light Square **GLEON-MT2**=Field Installed Mesh Top for 5-6 Light Square **GLEON-MT3**=Field Installed Mesh Top for 7-8 Light Squares **GLEON-MT4**=Field Installed Mesh Top for 9-10 Light Squares **GLEON-QM**=Quick Mount Arm Kit [7] **GLEON-QMEA**=Quick Mount Extended Arm Kit [7] **LSAHS**=Field Installed House Side Shield [6,28] **LSGRSBK**=Glare Reducing Shield, Black [6,28] **LSGRSWH**=Glare Reducing Shield, White [6,28] **LSPFS**=Perimeter Shield, Black [6] **WCLC-7P-10A**=WaveLinx Outdoor Control Module [16,28] **SWPO4-XX**=Wireless Wireless Sensor, 7'–15' Mounting Height [15,16,28,30] **SWPOS-XX**=Wireless Wireless Sensor, 15' – 40' Mounting Height [15,16,28,30]

NOTES:
1. Configurator is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.
2. Design Lights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 5,000 hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
4. Not available with HSS option.
5. Not compatible with extended quick mount arm (QMEA).
6. Requires the use of a step down transformer. Not available in combination with sensor options at 1200mA.
7. Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A.
8. Not available with 1200mA, SPD, or HSS. Not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
9. Reserved.
10. Cannot be used with other control options.
11. Not available in 1200mA. When used with CSP or HA options, only available with single light square.
12. Not available in 1200mA, HFC or HA. CSP only available with single light square.
13. Not available with 1200mA, HFC, HA, CSP, PR, or HSS options.
14. Operates a single light square only. Operates at -20°C to +40°C. Backbox is non-IP rated. Control option limited to BPC.
15. Compatible with standard 3-PIN photocontrols, 5-PIN or 7-PIN ANSI controls.
16. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information.
17. The FSIR-100 configuration tool is required to adjust parameters such as high and low modes, sensitivity, time delay and cutoff. Consult your lighting representative at Cooper Lighting Solutions for more information.
18. Replace LXR with L30 (-U mounting), L20 (F-20' mounting) or L40W (21'-40' mounting.)
19. Includes integral photosensor.
20. Not available with Enlighted wireless sensors.
21. Cannot be used with other control options.
22. Low voltage control lead brought out 18" outside fixture.
23. Not available if any "MS" sensor is selected. Motion sensor has an integral photocell.
24. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information.
25. Not for use with 14FT, 14W or SL4 optics. See IES files for details.
26. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
27. Replace X with number of Light Squares operating in low output mode.
28. Enlighted wireless sensors are factory installed only requiring network components LWP-EM-1, LWP-GW-1 and LWP-PoE8 in appropriate quantities. See Enlighted Sensor Guide for more information.
29. Not for use with SWO, SWO, SWQ or RW optics. A black trim plate is used when HSS is selected.
30. CE is not available with the 1200, DALI, LWR, WO, MS/DIM, BPC, PIR or PR7 options. Available in 120-277V only.
31. One required for each light square.
32. Requires PR7.
33. Not for use with 14FT, 14W or SL4 optics.
34. Cannot be used in conjunction with additional photocontrol or other controls systems (BPC, PIR, PR7, MS, LWR).
35. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (120V to PoE injector) power supply if needed.
36. Not available with 1200mA.
37. Replace XX with sensor color (WH, BZ, or BK).
38. Specify 120V or 277V.
39. Smart device with mobile application required to change system defaults. See controls section for details.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology	**D**=Standard Dome Camera **H**=Hi-Res Dome Camera **Z**=Remote PTZ Camera	**C**=Cellular, No SIM **A**=Cellular, AT&T **V**=Cellular, Verizon **S**=Cellular, Sprint	**R**=Cellular, Rogers **W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GWC Galleon Wall

Wall Mount Luminaire

Typical Applications

Exterior Wall • Walkway

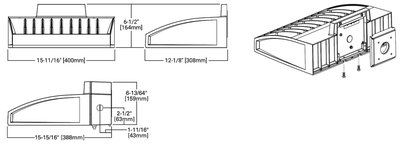
Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 3
- Energy and Performance Data page 4
- Control Options page 6

Quick Facts

- Choice of thirteen high-efficiency, patented AccuLED Optics™
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

Dimensional Details



Product Certifications

DLC · DLC Premium · ISTI · cULus Certified · 3G VIB · FC · WARNING · IP66 · IDA · 5 YEAR · Light Advisories™

Connected Systems

- WaveLinx
- Enlighted

McGraw-Edison — GWC Galleon Wall

Ordering Information

SAMPLE NUMBER: **GWC-SA2C-740-U-T4FT-GM**

Product Family [1]	Light Engine: Configuration	Light Engine: Drive Current	Color Temperature	Voltage	Distribution	Finish
GWC–Galleon Wall	**SA1**–1 Square **SA2**–2 Squares [2]	**A**=350mA **B**=525mA **D**=1200mA [3]	**722**=702CRI, 2200K **727**=702CRI, 2700K **730**=702CRI, 3000K **735**=702CRI, 3500K **740**=702CRI, 4000K **750**=702CRI, 5000K **760**=702CRI, 6000K **AWC**=CCT, 2200K **830**=802CRI, 3000K **AMB**=Amber, 590nm [4,5]	**U**=120-277V **1**=120V **2**=208V **3**=240V **4**=277V **8**=480V [4] **9**=347V [4]	**T2**=Type II **T3**=Type III **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I **SWQ**=Type V Square Narrow **SMQ**=Type V Square Medium **SWQ**=Type V Square Wide	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)
F=Single Fused (120, 277 or 347V, Must Specify Voltage) **FF**=Double Fused (208, 240 or 480V, Must Specify Voltage) **10K**=10kV Surge Module **20K**=Series 20kV UL 1449 Surge Protective Device **DIM**=External 0-10V Dimming Leads [6,18] **CBP**=Battery Pack with Back Box, Cold Weather Rated [3,4,14,18] **CBP-CEC**=Battery Pack with Back Box, Cold Weather Rated, CEC compliant [3,4,18] **L90**=Optics Rotated 90° Left **R90**=Optics Rotated 90° Right **GRSBK**=Glare Reducing House Side Shield [8] **GRSWH**=Factory Installed Glare Shield, White [8,21] **UPL**=Uplight Housing [18] **HA**=50°C High Ambient [18] **LCF**=Light Square Trim Plate Painted to Match Housing [20] **MT**=Factory Installed Mesh Top **CC**=Coastal Construction finish [1] **ID**=ID Marking and Small Terminal Block [24] **AHD1A8S**=After Hours Dim, 6 Hours [18] **AHD2A8S**=After Hours Dim, 6 Hours [18] **AHD2S5**=After Hours Dim, 7 Hours [18] **AHD3S5**=After Hours Dim, 8 Hours [18] **DALI**=DALI Driver [22]	**BPC**=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) **PIR**=NEMA 3-PIN Twistlock Photocontrol Receptacle **PR7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [25] **SPB1**=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting [18,26] **SPB2**=Dimming Occupancy Sensor with Bluetooth Interface, 8' - 20' Mounting [18,26] **SPB4**=Dimming Occupancy Sensor with Bluetooth Interface, 21' - 40' Mounting [18,26] **MS-LXX**=Motion Sensor for On/Off Operation [12,18,19] **MS/DIM-LXX**=Motion Sensor for Dimming Operation [12,18,19] **ZW**=WaveLinx enabled 4-PIN Twistlock Receptacle [18,28] **ZD**=WaveLinx Module with DALI driver and 4-PIN Receptacle [18,28] **SWPSXX**=WaveLinx Sensor Only, 7'-15' [18,19,28] **SWPOSXX**=WaveLinx Sensor Only, 15'-40' [18,19,28] **WOBXX**=WaveLinx Sensor with Bluetooth, 7'-15' [18,19] **WOFXX**=WaveLinx Sensor with Bluetooth, 15'-40' [18,19] **LWR-LW**=Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height [18,19,28] **LWR-LN**=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height [18,19,28]	**GA/RA1013**=Photocontrol Shorting Cap [18] **GA/RA1016**=NEMA Photocontrol Multi-Tap - 105-285V [18] **GA/RA1285**=NEMA Photocontrol - 347V [18] **GA/RA1027**=NEMA Photocontrol - 480V [18] **MA1252**=10kV Circuit Module Replacement **MA1050XX**=Thru-branch Back Box (Must Specify Color) **LSAHS**=Field Installed House Side Shield [8,18] **LSGRSBK**=Glare Shield, Black [8,18] **LSGRSWH**=Glare Shield, White [8,18,21] **LSPFS**=Perimeter Shield, Black **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [17] **WCLC-7P-10A**=WaveLinx Outdoor Control Module (7-pin) [16,28] **SWPO4-XX**=Wavelinx Wireless Sensor, 7' – 15' Mounting Height [15,16,18,28] **SWPOS-XX**=Wavelinx Wireless Sensor, 15' – 40' Mounting Height [15,16,18,28]

NOTES
1. DesignLight Consortium® Qualified. Refer to www.designlights.org. Qualified Products List under Family Models for details.
2. Two light squares with CSP options limited to 25°C. Not available in combination with sensor options at 1200mA.
3. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A, supplied at 500mA drive current only. Available with SWQ, SMQ, SL2, SL3 and SL4 distributions. Can be used with HSS option
4. Not available with HA option.
5. Coastal construction finish salt spray tested to over 5,000 hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
6. Requires the use of a step down transformer. Not available in combination with sensor options at 1200mA.
7. 480V must use Wye system only. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
8. Reserved.
9. Cannot be used with other control options.
10. Low voltage control leads terminated 18" from fixture.
11. Not available in 1200mA. When used with CSP or HA options, only available with single light square.
12. Not available in 1200mA, HFC or HA. CSP only available with single light square.
13. Not available with 1200mA, HFC, HA, CSP, PR, or HSS options.
14. Operates a single light square only. Operates at -20°C to +40°C. Backbox is non-IP rated. Control option limited to BPC.
15. Compatible with standard 3-PIN photocontrols, 5-PIN or 7-PIN ANSI controls.
16. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information.
17. The FSIR-100 configuration tool is required to adjust parameters such as high and low modes, sensitivity, time delay and cutoff. Consult your lighting representative at Cooper Lighting Solutions for more information.
18. Replace LXX with L08 (<8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting.)
19. Includes integral photosensor.
20. Enlighted wireless sensors are factory installed requiring network components in appropriate quantities.
21. White sensor shipped on all housing color options.
22. Not available with HSS or GRS options.
23. Not for use with SWQ, SMQ, SWQ or RW optics. The light square trim plate is painted black when the HSS option is selected.
24. CE is not available with the 1200, DALI, LWR, WO, MS/DIM, BPC, PIR or PR7 options. Available in 120-277V only.
25. One required for each light square.
26. Requires PR7.
27. Not for use with 14FT, 14W or SL4 optics.
28. Cannot be used in conjunction with additional photocontrol or other controls systems (BPC, PIR, PR7, MS, LWR).
29. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (120V to PoE injector) power supply if needed.
30. Not available with 1200mA.
31. Replace XX with sensor color (WH, BZ, or BK).
32. Specify 120V or 277V.
33. Smart device with mobile application required to change system defaults. See controls section for details.

Product Specifications

Construction
- Driver enclosure thermally isolated from optics for optimal thermal performance
- Die-cast aluminum heat sinks
- IP66 rated housing
- 1.5G vibration rated

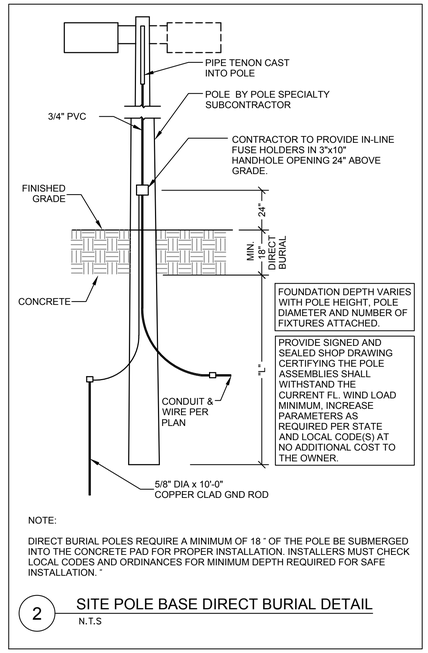
Optics
- Patented, high-efficiency injection-molded AccuLED Optics technology
- 13 optical distributions
- IDA Certified (3000K CCT and warmer only)

Electrical
- LED driver assembly mounted for ease of maintenance
- Standard with 0-10V dimming
- Optional 10kV or 20kV surge module
- Suitable for operation in -40C to 40C ambient environments. Optional 50C high ambient (HA) configuration.

Mounting
- Gasketed and zinc plated rigid steel mounting attachment
- "Hook-N-Lock" mechanism for easy installation

Finish
- Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- Heat sink is powder coated black
- RAL and custom color matches available
- Coastal Construction (CC) option available

Warranty
- Five-year warranty



NOTE:

DIRECT BURIAL POLES REQUIRE A MINIMUM OF 18 " OF THE POLE BE SUBMERGED INTO THE CONCRETE PAD FOR PROPER INSTALLATION. INSTALLERS MUST CHECK LOCAL CODES AND ORDINANCES FOR MINIMUM DEPTH REQUIRED FOR SAFE INSTALLATION. "

2 SITE POLE BASE DIRECT BURIAL DETAIL
N.T.S

1 DATA SHEETS AND DETAILS

RGD CONSULTING ENGINEERS

JUPITER | ORLANDO
561-743-0165 | 407-845-6630
WWW.RGDENGINEERS.COM

MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: COTLEUR & HEARING
1934 COMMERCE LANE, SUITE 1,
JUPITER, FL, 33458

DATE 1.31.2022

REVISIONS:

NO.	DESCRIPTION	DATE

KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KINGS HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KINGS HIGHWAY
COMMERCE PARK PHASE
II

DATE: 01/21/2022

RGD PROJ. NO: 22-1024

SCALE: AS SHOWN

DRAWN:

CHECKED:

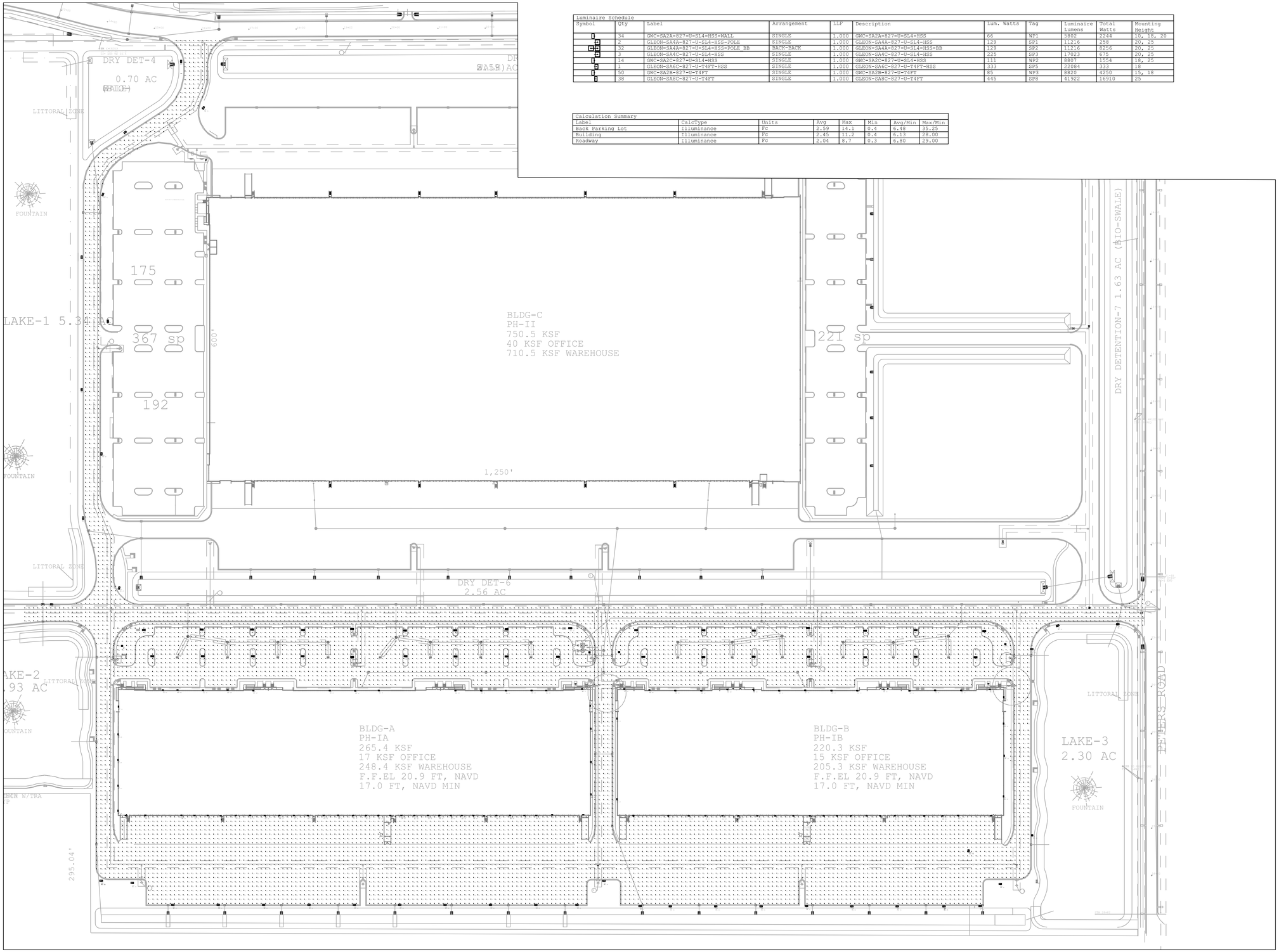
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DATA SHEETS AND DETAILS

SHEET NO. E2.1

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

These Drawings are NOT VALID for any purpose which requires the original signature and seal of the engineer unless the original signature and seal are affixed. Drawings not signed and sealed by the engineer shall not be submitted to any authority or used for any purpose where signed and sealed documents are required.



Luminaire Schedule

Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Watts	Tag	Luminaire Lumens	Total Watts	Mounting Height
	34	GWC-SA2A-827-U-SL4-HSS-WALL	SINGLE	1.000	GWC-SA2A-827-U-SL4-HSS	66	WP1	5802	2244	10, 18, 20
	2	GLEON-SA4A-827-U-SL4-HSS-POLE	SINGLE	1.000	GLEON-SA4A-827-U-SL4-HSS	129	SP1	11216	258	20, 25
	32	GLEON-SA4A-827-U-SL4-HSS-POLE_BB	BACK-BACK	1.000	GLEON-SA4A-827-U-SL4-HSS-BB	129	SP2	11216	8256	20, 25
	3	GLEON-SA4C-827-U-SL4-HSS	SINGLE	1.000	GLEON-SA4C-827-U-SL4-HSS	225	SP3	17023	675	20, 25
	14	GWC-SA2C-827-U-SL4-HSS	SINGLE	1.000	GWC-SA2C-827-U-SL4-HSS	111	WP2	8807	1554	18, 25
	1	GLEON-SA6C-827-U-T4FT-HSS	SINGLE	1.000	GLEON-SA6C-827-U-T4FT-HSS	333	SP5	22084	333	18
	50	GWC-SA2B-827-U-T4FT	SINGLE	1.000	GWC-SA2B-827-U-T4FT	85	WP3	8820	4250	15, 18
	38	GLEON-SA8C-827-U-T4FT	SINGLE	1.000	GLEON-SA8C-827-U-T4FT	445	SP8	41922	16910	25

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Back Parking Lot	Illuminance	Fc	2.59	14.1	0.4	6.48	35.25
Building	Illuminance	Fc	2.45	11.2	0.4	6.13	28.00
Roadway	Illuminance	Fc	2.04	8.7	0.3	6.80	29.00

1 PHOTOMETRIC PLAN
SCALE: 1/8" = 1'-0"

GLOBAL REVISION 2

RGD CONSULTING ENGINEERS
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WWW.RGDENGINEERS.COM

MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: JEFF H. IRAVANI, INC
1934 COMMERCE LN-5
JUPITER, FL, 33458

DATE 2.24.22

REVISIONS:

NO.	DESCRIPTION	DATE
1	UPDATED PHOTOMETRICS	02.04.2022
2	UPDATED PHOTOMETRICS	02.24.2022

KEY PLAN
AREA DESCRIPTION
N

PROJECT ADDRESS:
KINGS HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KINGS HIGHWAY
COMMERCE PARK PHASE I

DATE: 02/24/2022

RGD PROJ. NO: 21-1089

SCALE: AS SHOWN

DRAWN:

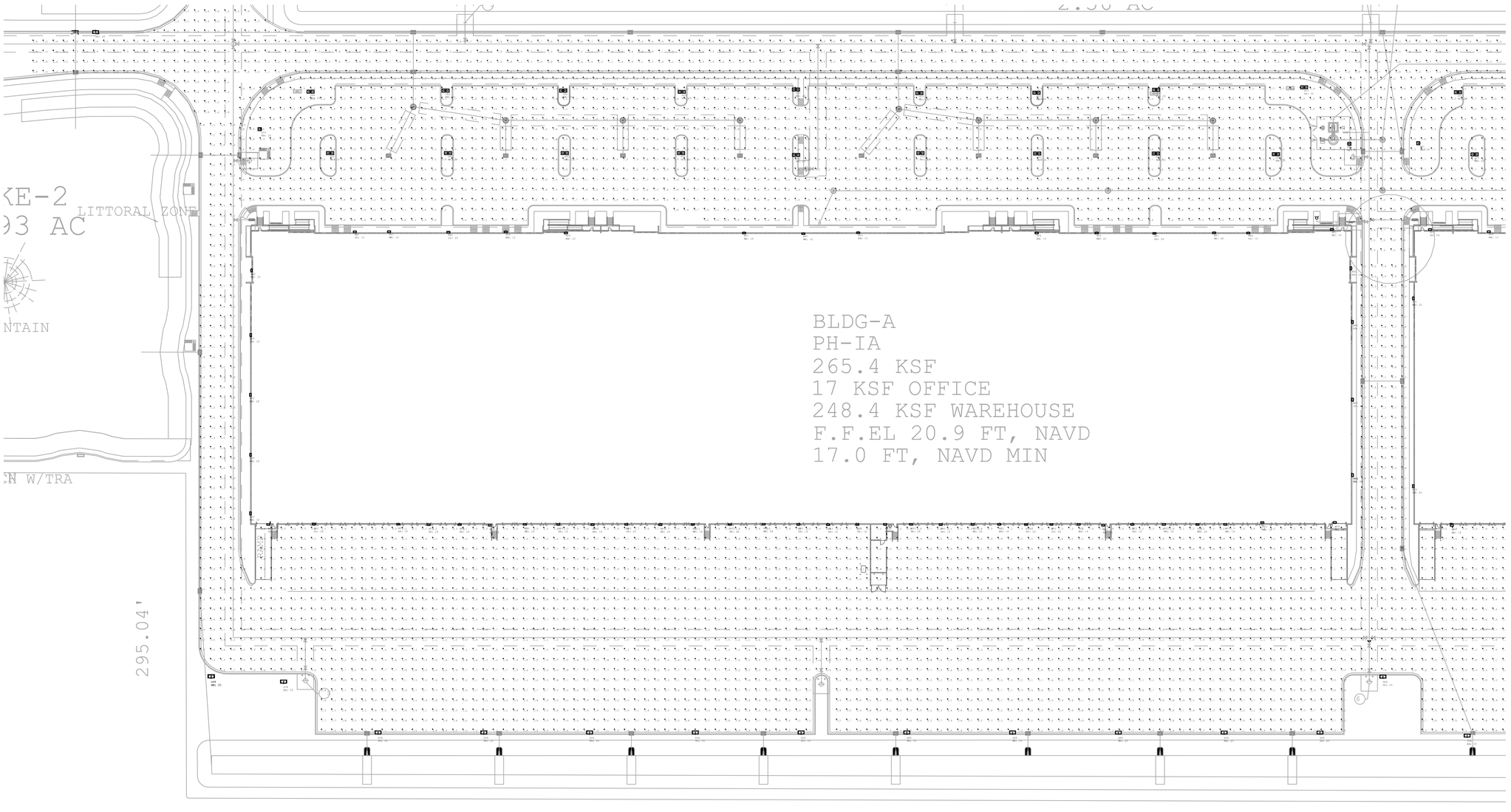
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SHEET NAME:
PHOTOMETRIC PLAN

SHEET NO.
E0.1

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

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1 ENLARGED PLAN - BUILDING A

SCALE: 1/4" = 1'-0"

GLOBAL REVISION 1

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ENGINEERS

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MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: JEFF H. IRAVANI, INC
1934 COMMERCE LN-5
JUPITER, FL, 33458

DATE 2.24.22

REVISIONS:

NO.	DESCRIPTION	DATE
1	UPDATED PHOTOMETRICS	02.04.2022
2	UPDATED PHOTOMETRICS	02.24.2022

KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KINGS HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KINGS HIGHWAY
COMMERCE PARK PHASE I

DATE: 02/24/2022

RGD PROJ. NO: 21-1089

SCALE: AS SHOWN

DRAWN:

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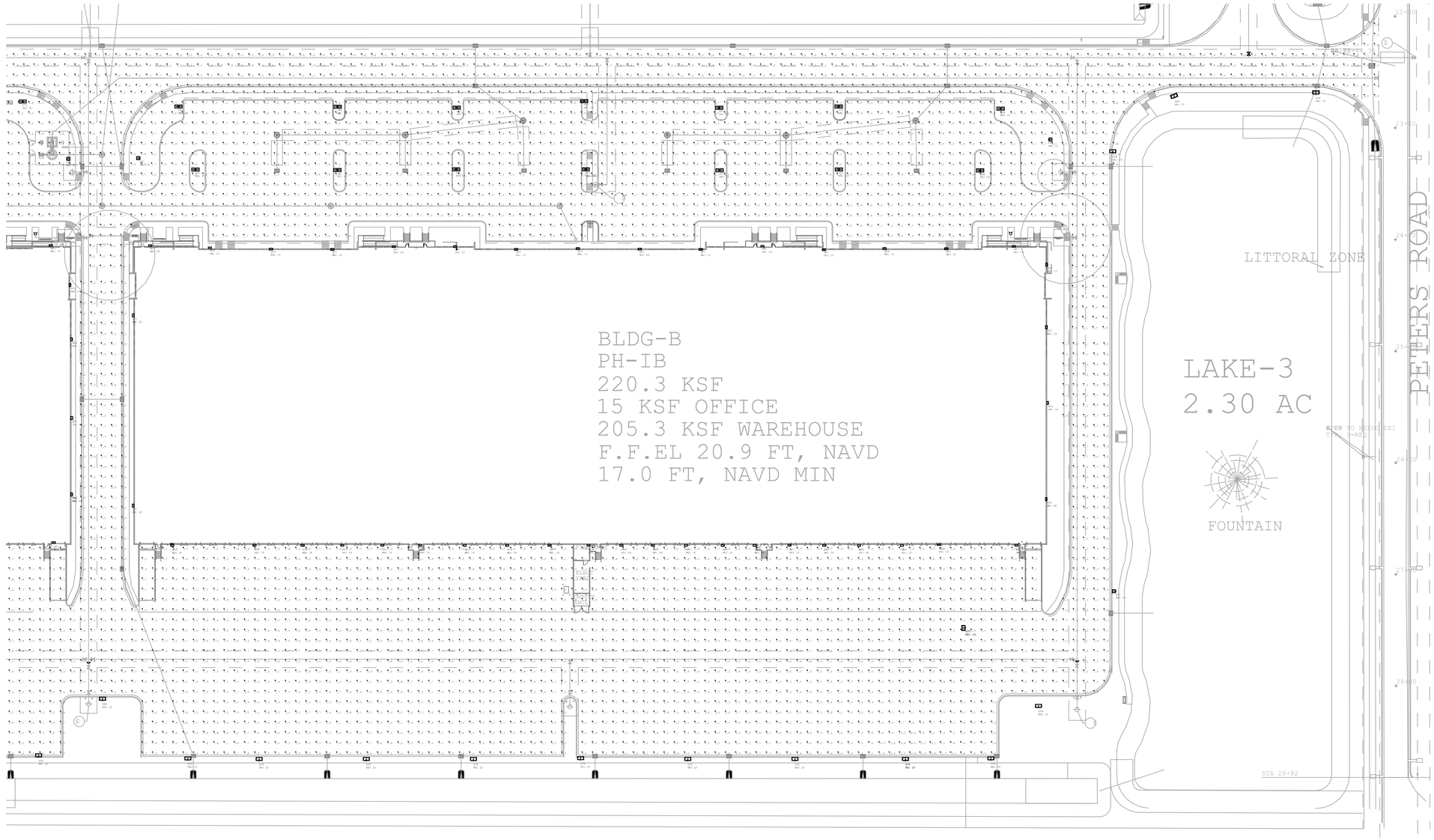
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ENLARGED PLAN - BUILDING A

SHEET NO. E0.1A

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

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1 ENLARGED PLAN - BUILDING B
SCALE: 1/4" = 1'-0"

GLOBAL REVISION 1

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MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: JEFF H. IRAVANI, INC
1934 COMMERCE LN-5
JUPITER, FL, 33458

DATE 2.24.22

REVISIONS:

NO.	DESCRIPTION	DATE
1	UPDATED PHOTOMETRICS	02.04.2022
2	UPDATED PHOTOMETRICS	02.24.2022

KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KINGS HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KINGS HIGHWAY
COMMERCE PARK PHASE I

DATE: 02/24/2022

RGD PROJ. NO: 21-1089

SCALE: AS SHOWN

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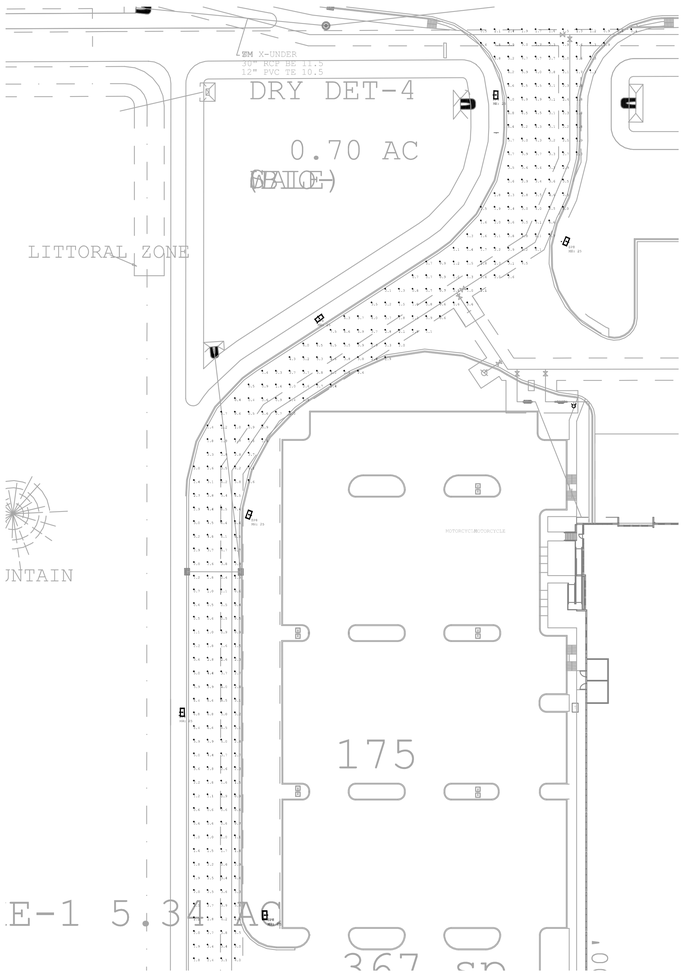
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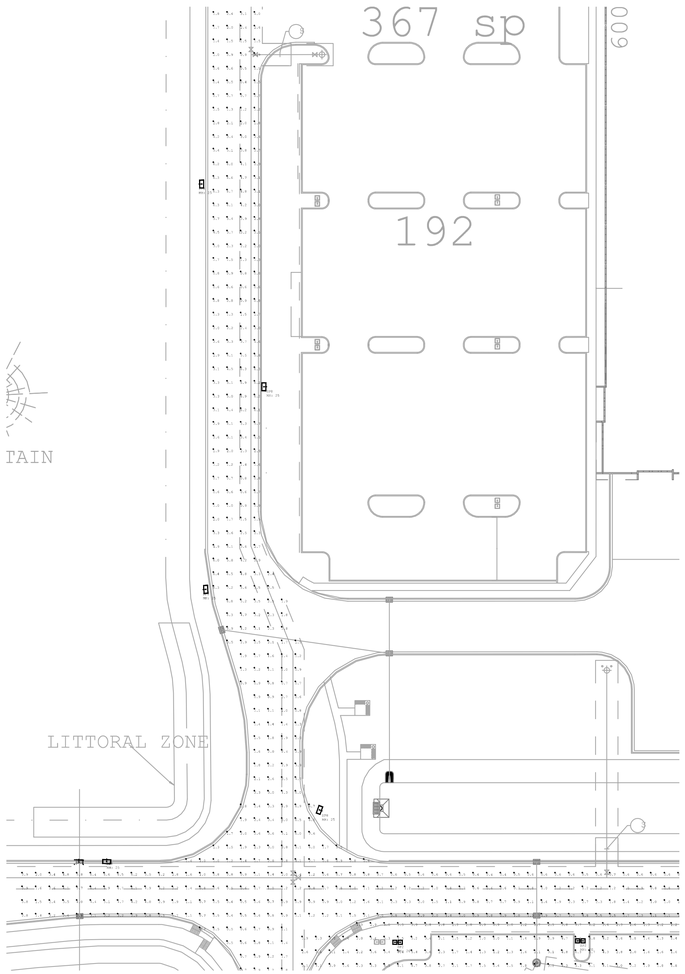
PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

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1 ENLARGED PARTIAL PLAN - ROADWAY

SCALE: 1/4" = 1'-0"



2 ENLARGED PARTIAL PLAN - ROADWAY

SCALE: 1/4" = 1' 0"

GLOBAL REVISION 1

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MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: JEFF H. IRAVANI, INC
1934 COMMERCE LN-5
JUPITER, FL, 33458

DATE 2.24.22

REVISIONS:

NO.	DESCRIPTION	DATE
1	UPDATED PHOTOMETRICS	02.04.2022
2	UPDATED PHOTOMETRICS	02.24.2022

KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KINGS HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KINGS HIGHWAY
COMMERCE PARK PHASE I

DATE: 02/24/2022

RGD PROJ. NO: 21-1089

SCALE: AS SHOWN

DRAWN:

CHECKED:

SHEET NAME:

ENLARGED PLAN - ROADWAY

SHEET NO. E0.1C

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

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Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GLEON Galleon

Area / Site Luminaire

Typical Applications

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

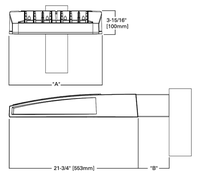
Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 4
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 9

Quick Facts

- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt

Dimensional Details



Product Certifications

Product Features

Luminaire Technology · Adaptive · Wireless · Light Attributes®

Connected Systems

- WaveLinx
- Enlighted

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Extended Arm Length [1]	"B" Quick Mount Arm Length	"B" Quick Mount Extended Arm Length
1-4	15-1/2"	7"	10"	10-5/8"	16-9/16"
5-6	21-5/8"	7"	10"	10-5/8"	16-9/16"
7-8	27-5/8"	7"	13"	10-5/8"	--
9-10	33-3/4"	7"	16"	--	--

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

McGraw-Edison — GLEON Galleon

Ordering Information

SAMPLE NUMBER: **GLEON-SA4C-740-U-T4FT-GM**

Product Family [1]	Light Engine: Configuration	Light Engine: Drive Current	Color Temperature	Voltage	Distribution	Mounting	Finish
GLEON=Galleon	**SA1**=1 Square **SA2**=2 Squares **SA3**=3 Squares **SA4**=4 Squares **SA5**=5 Squares [4] **SA6**=6 Squares [4] **SA7**=7 Squares [4] **SA8**=8 Squares [4] **SA9**=9 Squares [4] **SA0**=10 Squares [4]	**A**=400mA **B**=800mA **C**=1000mA **D**=1200mA [4]	**722**=702CRI, 2200K **727**=70CRI, 2700K **730**=70CRI, 3000K **735**=70CRI, 3500K **740**=70CRI, 4000K **750**=70CRI, 5000K **760**=70CRI, 6000K **827**=80CRI, 2700K **830**=80CRI, 3000K **AMB**=Amber, 590nm [14, 15]	**U**=120-277V 1=120V 2=208V 3=240V 4=277V 8=480V [4] 9=347V [4]	**T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T3R**=Type III Roadway **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **T5**=Type V Square **SWS**=Type V Square Medium **SWQ**=Type V Square Wide **SLX**=Type IV w/Spill Control **SL3**=Type III w/Spill Control **SL2**=Type II w/Spill Control **SLA**=Type III w/Spill Control Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline	**[blank]**=Arm for Round or Square Pole **EA**=Extended Arm [1] **MA**=Mast Arm Adapter [14] **WM**=Wall Mount **QM**=Quick Mount Arm (Standard Length) [1] **QMEA**=Quick Mount Arm (Extended Length) [1]	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)
DIM=External 0-10V Dimming Leads [16, 28] **F**=Single Fuse (120, 277 or 347V Specify Voltage) **FF**=Double Fuse (208, 240 or 480V. Must Specify Voltage) **10K**=10kV Surge Module **20K**=Series 20kV UL 1449 Surge Protective Device **2L**=Two Circuits [17, 18] **HA**=50°C High Ambient **HS**=Factory Installed House Side Shield [6] **GRSBK**=Glare Reducing Shield, Black [6] **GRSWH**=Glare Reducing Shield, White [6] **LCF**=Light Square Trim Painted to Match Housing [6] **MT**=Installed Mesh Top **BLK**=Factory Painted Black **CC**=Coastal Construction finish [7] **L90**=Optics Rotated 90° Left **R90**=Optics Rotated 90° Right **CE**=CE Marking **AH01HR**=After Hours Dim, 6 Hours [8] **AH02HR**=After Hours Dim, 6 Hours [8] **AH03HR**=After Hours Dim, 7 Hours [8] **AH04HR**=After Hours Dim, 8 Hours [8] **DALI**=DALI Drivers [9]	**BPC**=Button Type Photocontrol **PR**=NEMA 7-PIN Photocontrol Receptacle **PR7**=NEMA 7-PIN Photocontrol Receptacle [9] **SPBD**=Dimming Occupancy Sensor with Bluetooth Interface, 8' - 20' Mounting [9,24] **SPBH**=Dimming Occupancy Sensor with Bluetooth Interface, 21' - 40' Mounting [9,24] **MS-L20**=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height [9] **MS-L40W**=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height [9] **MS/X-L20**=Bi-Level Motion Sensor, 9' - 20' Mounting Height [9] **MS/X-L40W**=Bi-Level Motion Sensor, 21' - 40' Mounting Height [9,10] **MS/DIM-L20**=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height [9] **MS/DIM-L40W**=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height [9,10] **ZW**=WaveLinx Module and 4-PIN Receptacle **ZD**=WaveLinx Module with DALI driver and 4-PIN Receptacle **SWPDXD**=WaveLinx Sensor Only, 8' - 20' [9,11] **SWPDXD3**=WaveLinx Sensor Only, 7'-12' [9,11] **SWPDXD4**=WaveLinx Sensor Only, 21'-40' [9,11] **WDBXD**=WaveLinx Sensor with Bluetooth, 8' - 20' [9,11] **WDFXD**=WaveLinx Sensor with Bluetooth, 21'-40' [9,11] **WDWXD**=WaveLinx Wireless Sensor, Wide Lens for 8'-15' Mounting Height [9,11] **LWN-LN**=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height [9,26,31]	**GA/RA1010**=NEMA Photocontrol Multi-Tap - 105-285V [29] **GA/RA1020**=NEMA Photocontrol - 208V **GA/RA1201**=NEMA Photocontrol - 347V **GA/RA1013**=Photocontrol Shorting Cap **GA/RA1014**=120V Photocontrol **MA1202**=10kV Surge Module Replacement **MA1026-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1027-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1028-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1188-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1189-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1190-XX**=3@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1191-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1038-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1039-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1193-XX**=3@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1192-XX**=4@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1194-XX**=2@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1195-XX**=3@90° Tenon Adapter for 3-1/2" O.D. Tenon **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [34] **GLEON-MT1**=Field Installed Mesh Top for 1-4 Light Squares **GLEON-MT2**=Field Installed Mesh Top for 5-6 Light Squares **GLEON-MT3**=Field Installed Mesh Top for 7-8 Light Squares **GLEON-MT4**=Field Installed Mesh Top for 9-10 Light Squares **GLEON-QM**=Quick Mount Arm Kit [1] **GLEON-QMEA**=Quick Mount Extended Arm Kit [1] **LSHSS**=Field Installed House Side Shield [6,35] **LSGRSBK**=Glare Reducing Shield, Black [6,35] **LSGRSWH**=Glare Reducing Shield, White [6,35] **LSPFS**=Perimeter Shield, Black **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [34] **WGL-CP-18A**=WaveLinx Outdoor Control Module (7-pin) [9,35] **SWPDX-XX**=Wireless Wireless Sensor, 7' – 15' Mounting Height [9,26,31,32] **SWPDX-XX**=Wireless Wireless Sensor, 15' – 40' Mounting Height [9,26,31,32]

NOTES:
1. Luminaire is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to Enlighted's paper WP012109TEN for additional support information.
2. Ambient lights Conversion™ Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654, and a blister rating of 10 per ASTM D714.
4. Not compatible with 8EA-3 LED or WD-1 LCE sensors.
5. Not compatible with extended quick mount arm (QMEA).
6. Not compatible with extended quick mount arm (QMEA), or extended quick mount arm (QMEA).
7. Requires the use of an internal step down transformer when combined with sensor options, Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A.
8. Reserved. Not compatible with 480V, MS/L, MS/X, MS/DIM, BPC, PR or PR7 options. Not available in corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
9. Cannot be used with other control options.
10. Low voltage control leads extended 18" from fixture.
11. Not available in 1200mA. When used with CSP or HA options, only available with single light square.
12. Not available in 1200mA, UFL or CSP options. Available with single light square.
13. Not available with HS, SHS, SQ, SLS, SLT, SLX and SL4 distributions. Can be used with HSS option.
14. Operates a single light square only. Operates at -30°C to +40°C. Ranges above +40°C. Ranges above +40°C. Ranges above

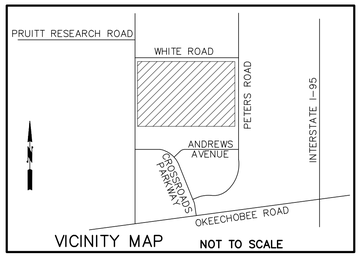
Jeff H. Iravani, Inc.
Consulting Engineers
1934 Commerce Lane, Suite 5
Jupiter, Florida 33458
Tel: (561) 575-6030 Fax: (561) 575-6088
Email: JHI@bellsouth.net Website: www.JHIinc.com

Kings Highway Commerce Park
Parcel ID #'s

	Parcel ID#'s	Owner
"A"	2324-241-0004-000-0	Scannell Properties #533, LLC
"B"	2324-211-0001-000-6	"
	2324-214-0002-000-2	"
	2324-211-0001-000-5	"
	2324-241-0002-000-6	"
	2324-241-0003-000-3	"
	2324-232-0000-000-4	"
	2324-210-0000-000-6	"
	2324-211-0002-000-3	"

KINGS HIGHWAY COMMERCE PARK

BEING A PARCEL LYING IN THE NORTH THREE–QUARTERS (3/4) OF THE NORTHWEST QUARTER OF
SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST
CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA



VICINITY MAP NOT TO SCALE

DEDICATION AND RESERVATIONS:

KNOW ALL MEN BY THESE PRESENTS THAT SCANNELL PROPERTIES, LLC, A FLORIDA CORPORATION, AUTHORIZED TO DO BUSINESS IN FLORIDA, OWNER OF THE LAND SHOWN HEREON AS "KINGS HIGHWAY COMMERCE PARK" BEING A PARCEL OF LAND LYING IN THE NORTH THREE–QUARTERS (N 3/4) OF THE NORTHWEST QUARTER OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA, AND PROCEED NORTH 89 DEGREES 44 MINUTES 28 SECONDS EAST, ALONG THE NORTH LINE OF SAID NORTHWEST QUARTER OF SECTION 24, A DISTANCE OF 134.91 FEET; THENCE SOUTH AT RIGHT ANGLES TO SAID NORTH LINE, A DISTANCE OF 35 FEET TO THE SOUTH LINE OF WHITE ROAD AS RECORDED IN OFFICIAL RECORDS BOOK 500, PAGE 2004, ST. LUCIE COUNTY, FLORIDA PUBLIC RECORDS; THENCE NORTH 89 DEGREES 44 MINUTES 28 SECONDS EAST, ALONG A LINE PARALLEL TO SAID NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 24, A DISTANCE OF 2490.37 FEET TO A POINT 30 FEET WEST OF THE EAST LINE OF SAID NORTHWEST QUARTER OF SECTION 24 AND A POINT ON THE WEST RIGHT–OF–WAY LINE OF PETERS ROAD AS LAID OUT AND IN USE; THENCE SOUTH 00 DEGREES 04 MINUTES 58 SECONDS EAST PARALLEL TO SAID EAST LINE OF THE NORTHWEST QUARTER, A DISTANCE OF 1929.06 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH THREE QUARTERS OF SAID NORTHWEST QUARTER OF SECTION 24; THENCE NORTH 89 DEGREES 50 MINUTES 03 SECONDS WEST ALONG SAID SOUTH LINE OF THE NORTH THREE QUARTERS, A DISTANCE OF 2215.32 FEET TO THE SOUTHEAST CORNER OF TAKING PARCEL NO. 111, AS DESCRIBED IN OFFICIAL RECORDS BOOK 3904, PAGE 1474, ST. LUCIE COUNTY, PUBLIC RECORDS; THENCE NORTH 00 DEGREES 07 MINUTES 16 SECONDS WEST, ALONG THE EAST LINE OF SAID TAKING PARCEL NO. 111, A DISTANCE OF 295.04 FEET TO THE NORTHEAST CORNER OF SAID TAKING PARCEL NO, 111; THENCE NORTH 89 DEGREES 50 MINUTES 04 SECONDS WEST ALONG THE NORTH LINE OF SAID TAKING PARCEL NO 111, A DISTANCE OF 343.82 FEET TO THE EAST RIGHT–OF–WAY LINE OF KINGS HIGHWAY AS DESCRIBED IN SAID TAKING PARCEL NO. 111; THENCE ALONG THE EAST RIGHT–OF WAY OF KINGS HIGHWAY FOR THE FOLLOWING 4 COURSES, BEING THE EAST LINE OF TAKING PARCELS NO. 111, 112 AND 113, DESCRIBED IN OFFICIAL RECORDS BOOK 3904, PAGE 1474, OFFICIAL RECORDS BOOK 3917, PAGE 899, OFFICIAL RECORDS BOOK 3917, PAGE 1057, ST LUCIE COUNTY, PUBLIC RECORDS, RESPECTFULLY;
1)THENCE ALONG A CURVE CONCAVE TO THE EAST HAVING A RADIUS OF 8264.54 FEET, THROUGH A CENTRAL ANGLE OF 00 DEGREES 18 MINUTES 46 SECONDS, AN ARC DISTANCE OF 45.11 FEET, SAID CURVE SUBTENDED BY A CHORD BEARING OF NORTH 01 DEGREES 48 MINUTES 41 SECONDS EAST, A DISTANCE OF 45.11 FEET;
2)NORTH 89 DEGREES 52 MINUTES 44 SECONDS EAST, A DISTANCE OF 30.02 FEET;
3)THENCE ALONG A CURVE CONCAVE TO THE EAST HAVING A RADIUS OF 8308.00 FEET, THROUGH A CENTRAL ANGLE OF 04 DEGREES 18 MINUTES 07 SECONDS, AN ARC DISTANCE OF 623.79 FEET, SAID CURVE SUBTENDED BY A CHORD BEARING OF NORTH 04 DEGREES 06 MINUTES 39 SECONDS EAST, A DISTANCE OF 623.64 FEET TO A POINT OF REVERSE CURVATURE;
4)THENCE ALONG A CURVE CONCAVE TO THE WEST HAVING A RADIUS OF 8468.00 FEET, THROUGH A CENTRAL ANGLE OF 06 DEGREES 24 MINUTES 45 SECONDS, AN ARC DISTANCE OF 950.19 FEET, SAID CURVE SUBTENDED BY A CHORD BEARING OF NORTH 02 DEGREES 53 MINUTES 46 SECONDS EAST, A DISTANCE OF 904.84 FEET TO THE POINT OF BEGINNING.
CONTAINING 109.460 ACRES MORE OR LESS

HAVE CAUSED THE SAME TO BE SURVEYED AND PLATTED AS SHOWN HEREON AND DO HEREBY DEDICATE AS FOLLOWS:

1.TRACT "A", AS SHOWN HEREON, IS HEREBY DEDICATED AND GRANTED IN FEE SIMPLE TO THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FOR THE PERPETUAL USE OF THE PUBLIC FOR ROADWAY PURPOSES.

2.TRACTS "B" AND "C" AS SHOWN HEREON, IS HEREBY DEDICATED AND GRANTED FEE SIMPLE TO THE COUNTY OF ST. LUCIE FOR THE PERPETUAL USE OF THE PUPLIC FOR ROADWAY PURPOSES.

3.THE ACCESS AND DRAINAGE EASEMENTS (S. KINGS COMMERCE WAY, E. KINGS COMMERCE WAY AND W. KINGS COMMERCE WAY) SHOWN HEREON WITHIN THE BOUNDARY OF THIS PLAT ARE HEREBY DEDICATED TO THE OF KINGS HIGHWAY COMMERCE PARK, PROPERTY OWNERS ASSOCIATION FOR ACCESS EASEMENT AND DRAINAGE EASEMENT PURPOSES AND OTHER UTILITY PURPOSES (INCLUDING CABLE TV SERVICES), AND AMENITIES SUCH AS GAZEBOS, BENCHES, LIGHT POLES AND OTHER AMENITIES APPROVED BY THE PROPERTY OWNERS ASSOCIATION AND SHALL BE MAINTAINED, REPAIRED, AND REPLACED BY THE PROPERTY OWNERS ASSOCIATION, WITHOUT RECOURSE TO THE CITY OF FORT PIERCE.

4.THE STORM MAINTENANCE EASEMENTS 1 THROUGH 8 (LAKES AND DRY RETENTION AREAS) SHOWN HEREON WITHIN THE BOUNDARY OF THIS PLAT ARE HEREBY DEDICATED TO THE OF KINGS HIGHWAY COMMERCE PARK, PROPERTY OWNERS ASSOCIATION FOR STORM WATER MANAGEMENT PURPOSES, AND SHALL BE MAINTAINED AND REPARED BY THE PROPERTY OWNERS ASSOCIATION, WITHOUT RECOURSE TO THE CITY OF FORT PIERCE.

5.THE LAKE MAINTENCE EASEMENTS SHOWN HEREON WITHIN THE BOUNDARY OF THIS PLAT IS DEDICATED TO THE PROPERTY OWNERS ASSOCIATION FOR LAKE MAINTENANCE PURPOSES, AND SHALL BE MAINTAINED AND REPARED BY THE PROPERTY OWNERS ASSOCIATION WITHOUT RECOURSE TO THE CITY OF FORT PIERCE.

6.THE UTILITY EASEMENTS SHOWN HEREON, ARE HEREBY DEDICATED TO THE PUBLC FOR THE INSTALLATION AND MAINTENCE OF PUBLIC UTILITIES, INCLUDING WATER AND SEWER AND OTHER UTILITIES PURPOSES (INCLUDING CABLE TV SERVICES).

7.THE CITY OF FORT PIERCE SHALL HAVE THE RIGHT , BUT NOT THE OBLIGATION TO MAINTAIN ANY PORTION OF THE DRAINAGE SYSTEM WITHIN THE LIMITS OF THIS PLAT, INCLUDING THE RIGHT TO UTILIZE FOR PUBLIC PURPOSES AND ALL DRAINAGE, ROADS PRIVATE OR PUBLIC, AND PARKING AND ACCESS EASEMENTS ASSOCIATED WITH SAID DRAINAGE SYSTEM, SHOULD THE CITY DEEMS IT NESSARY TO MAINTAIN ANY DRAINAGE WITHIN THE LIMITS OF THIS PLAT, FOR PUBLIC PURPOSES, THE CITY MAY REQUIRE THE PROPERTY OWNERS TO PAY AND ALL PART OF THE MAINTENANCE COST.

IN WITNESS WHEREOF, THE ABOVE–NAMED CORPORATION HAS CAUSED THESE PRESENTS TO BE SIGNED BY ITS DEPUTY CHIEF EXECUTIVE OFFICER, AND ITS CORPORATE SEAL TO BE AFFIXED HERETO BY AND WITH THE AUTHORITY OF ITS BOARD OF DIRECTORS

THIS _____ DAY OF _____, 2022

SCANNELL PROPERTIES, LLC
A FLORIDA CORPORATION

WITNESS: _____ BY: _____
PRINT NAME _____ SCANNELL PROPERTIES, LLC

WITNESS: _____
PRINT NAME _____

ACKNOWLEDGEMENT

STATE OF FLORIDA
COUNTY OF ST. LUCIE

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MEANS OF PHYSICAL PRESENCE, THIS _____ DAY OF _____, 2022
BY _____ SCANNELL PROPERTIES, LLC
ON BEHALF OF THE CORPORATION, WHO IS PERSONALLY KNOWN TO ME.

MY COMMISSION EXPIRXXXXXXX 20XX _____ (SIGNATURE)
(SIGNATURE)
_____ – NOTARY PUBLIC
#_____

NOTARY SEAL

TITLE CERTIFICATION

STATE OF FLORIDA
COUNTY OF ST.LUCIE

I, _____, A DULY LICENSED ATTORNEY IN THE STATE OF FLORIDA, DO HEREBY CERTIFY THAT I HAVE EXAMINED THE TITLE TO THE HEREON DESCRIBED PROPERTY; THAT I FIND THE TITLE TO THE PROPERTY IS VESTED IN SCANNELL PROPERTIES, LLC., A FLORIDA CORPORATION; THAT THE CURRENT TAXES HAVE BEEN PAID; AND THAT ALL ST. LUCIE COUNTY SPECIAL ASSESSMENT ITEMS, AND ALL OTHER ITEMS HELD AGAINST SAID LANDS HAVE BEEN SATISFIED; THAT THERE ARE NO MORTGAGES OF RECORD, AND THAT THERE ARE ENCUMBRANCES OF RECORD BUT THOSE ENCUMBRANCES DO NOT PROHIBIT THE CREATION OF THE SUBDIVISION DEPICTED BY THIS PLAT.

DATE: _____

BY: _____
_____
FLORIDA BAR NO. #_____

MORTGAGEE'S CONSENT

STATE OF FLORIDA
COUNTY OF ST. LUCIE

_____, THE OWNER AND HOLDER OF THOSE CERTAIN INDEMNITY MORTGAGES, DATED_____ AND RECORDED IN OFFICIAL RECORDS BOOK _____, PAGE _____, IN THE PUBLIC RECORS OF ST. LUCIE COUNTY, FLORIDA, DOES HEREBY CONSENT TO THE DEDICATIONS HEREON AND DOES SUBORDINATE IT MORTGAGE TO SUCH DEDICATIONS
DATED THIS _____ DAY OF _____, 2022

MORTGAGE COMPANY NAMEWITNESS 1
BY_____
PRINT NAME: _____PRINT NAME: _____
POSITION: _____WITNESS 2
_____
PRINT NAME: _____

ACKNOWLEDGEMENT

STATE OF FLORIDA
COUNTY OF ST. LUCIE

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MEANS OF PHYSICAL PRESENCE, THIS _____ DAY OF _____, 2022
BY _____ SCANNELL PROPERTIES, LLC
ON BEHALF OF THE CORPORATION, WHO IS PERSONALLY KNOWN TO ME.

MY COMMISSION EXPIRXXXXXXX 20XX _____ (SIGNATURE)
(SIGNATURE)
CITY COMMISSION CERTIFICATE
_____ – NOTARY PUBLIC
#_____

NOTARY SEAL

ACCEPTANCE OF DEDICATIONS

STATE OF FLORIDA
COUNTY OF ST. LUCIE

KINGS HIGHWAY COMMERCE PROPERTY OWNER ASSOCIATION, A FLORIDA LIMITED LIABILITY COMPANY, HEREBY ACCEPTS THE DEDICATIONS OR RESRVATIONS AS STATED AND SHOWN HEREON.

DATED THIS _____ DAY OF _____2022

_____ _____ _____
SIGNED WITNESS WITNESS

POSITION _____

_____ _____ _____
PRINT NAME PRINT NAME PRINT NAME

ACKNOWLEDGEMENT

STATE OF FLORIDA
COUNTY OF ST. LUCIE

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MEANS OF PHYSICAL PRESENCE, THIS _____ DAY OF _____, 2022
BY _____ SCANNELL PROPERTIES, LLC
ON BEHALF OF THE CORPORATION, WHO IS PERSONALLY KNOWN TO ME.

MY COMMISSION EXPIRXXXXXXX 20XX _____ (SIGNATURE)
(SIGNATURE)
CITY COMMISSION CERTIFICATE
_____ – NOTARY PUBLIC
#_____

NOTARY SEAL

SURVEYORS REVIEW CERTIFICATE

IT IS HEREBY CERTIFIED THAT THE UNDERSIGND SURVEYOR AND MAPPER DULY LICENSED IN THE STATE OF FLORIDA HAS REVIEWED THIS PLAT FOR CONFORMITY WITH THE REGULATIONS OF CHAPTER 177, FLORIDA STATUES

THSI _____ DAY OF _____, 2022

BY _____
FREGORY S. FLEMING
PROFFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIVICATE NO.4350

PLANNING & ZONING APPROVAL

IT IS HEREBY CERTIFIED THAT THE PLAT MEETS THE REQUIREMENT OF THE PLANNED DEVELOPMENT, AS SET FORTH IN SECTION 125–212 OF THE CITY OF FORT PIERCE LAND DEVELOPMENT CODE:

THIS _____ DAY OF _____, 2022

BY _____
JENNIFER HOFMEISTER, AICP
DIRECTOR OF PLANNING
CITY OF FORT PIERCE

CITY ATTORNEY

IT IS HEREBY CERTIFIED THAT THE FOREGOING PLAT IS APPROVED AS TO FORM AND LEGAL SUFFICIENCY

THIS _____DAY OF _____, 2022
BY: _____
PETER SWEENY
CITY ATTORNEY
CITY OF FORT PIERCE

CITY COMMISSION CERTIFICATE

STATE OF FLORIDA
COUNTY OF ST. LUCIE

PURSUANT TO THE PROVISIONS OF THE FORT PIERCE CITY COMMISSION **THIS PLAT WAS GIVEN PRELIMINARY APPROVAL BY THE CITY COMMISSION** AT A MEETING HELD

THIS_____ DAY OF _____, 2022

FORT PIERCE CITY COMMISSION

BY: _____
LINDA COX
CITY CLERK

SURVEYORS & MAPPER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE PLAT SHOWN HEREON IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY MADE UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION; THAT SAID SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT PERMANENT REFERENCE MONUMENTS (P.R.M.s), AND MONUMENTS ACCORDING TO SEC. 177.091(9), F.S., HAVE BEEN PLACED AS REQUIRED BY LAW, AND, FURTHER, THAT THE SURVEY DATA COMPLIES WITH ALL THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES, AS AMENDED, AND THE ORDINANCES OF ST. LUCIE COUNTY, FLORIDA.

DATE: _____
_____
RONALD E. STOTLER, P.L.S.
LICENSE NO. 5026
STATE OF FLORIDA
MAGELLAN SURVEYING & MAPPING, INC.
LB No. 7571

SURVEYOR & MAPPER'S NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON THE DATUM NAD 83 (1990 ADJUSTMENT) MEASURED GRID BEARING OF NORTH 00°07'" WEST ALONG WEST LINE OF THE NORTHWEST QUARTER OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA; AND ALL OTHER BEARINGS ARE RELATIVE THERETO.
2. P.R.M. DENOTES PERMANENT REFERENCE MONUMENT (P.R.M. LB No 7571) UNLESS OTHERWISE NOTED
3. P.C.P. DENOTES PERMANENT CONTROL POINTS (P.C.P. LB No 7571)
4. NO BUILDING OR ANY KIND OF CONSTRUCTION OR TREES OR SHRUBS SHALL BE PLACED ON ANY EASEMENT WITHOUT WRITTEN CONSENT OF ALL EASEMENT BENEFICIARIES AND ALL APPLICABLE COUNTY APPROVALS OR PERMITS AS REQUIRED FOR SUCH ENCROACHMENTS.
5. IN THOSE CASES WHERE EASEMENTS OF DIFFERENT TYPES CROSS OR OTHERWISE COINCIDE, DRAINAGE EASEMENTS SHALL HAVE FIRST PRIORITY, UTILITY EASEMENTS SHALL HAVE SECOND PRIORITY, ACCESS EASEMENTS SHALL HAVE THIRD PRIORITY, AND ALL OTHER EASEMENTS SHALL BE SUBORDINATE TO THESE WITH THEIR PRIORITIES BEING DETERMINED BY USE RIGHTS GRANTED.
6. ALL LINES INTERSECTING CIRCULAR CURVES ARE RADIAL UNLESS OTHERWISE NOTED.
7. NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.
8. BUILDING SETBACK LINES SHALL BE AS REQUIRED BY CURRENT CITY OF FORT PIERCE ZONING REGULATIONS
9. DISTANCES ARE GROUND DISTANCES
COORDINATES INFORMATION
GRID DATUM – NAD 83, 1990 ADJUSTED
ZONE – FLORIDA EAST ZONE
LINEAR UNIT – U.S. SURVEY FOOT
COORDINATE SYSTEM– 1983 STATE PLANE
TRANSVERSE MERCATOR PROJECTION
SCALE FACTOR = ~~1.000032451~~

LLC SURVEYOR COUNTY ENGINEER

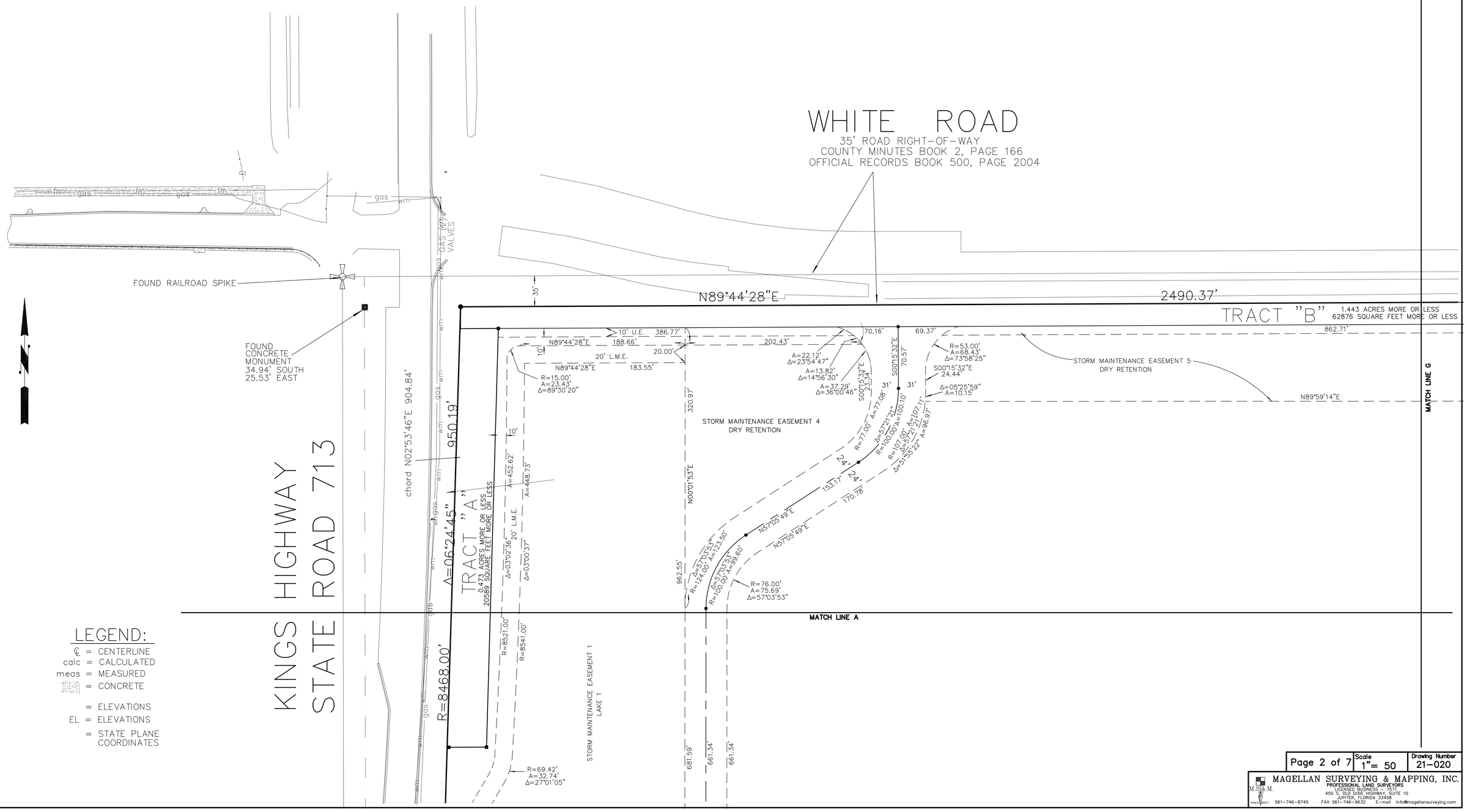
THIS INSTRUMENT WAS PREPARED BY
RONALD E. STOTLER, P.L.S.
FLORIDA SURVEYOR & MAPPER #5026
IN THE OFFICE OF MAGELLAN SURVEYING & MAPPING, INC.
450 SOUTH OLD DIXIE HIGHWAY, SUITE 10
JUPITER, FLORIDA, 33458
PROJECT NUMBER: 21–020

M.S.&M. SINCE 2007
MAGELLAN SURVEYING & MAPPING, INC.
PROFESSIONAL LAND SURVEYORS
LICENSED BUSINESS – 7571
450 S. OLD DIXIE HIGHWAY, SUITE 10
JUPITER, FLORIDA 33458
561–746–8745 FAX 561–746–9632 E–mail info@magellansurveying.com

KINGS HIGHWAY COMMERCE PARK

BEING A PARCEL LYING IN THE NORTH THREE-QUARTERS (3/4) OF THE NORTHWEST QUARTER OF
SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST
CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA

PRELIMINARY PLAT



LEGEND:

℄ = CENTERLINE
calc = CALCULATED
meas = MEASURED
▒▒ = CONCRETE

= ELEVATIONS
EL = ELEVATIONS
= STATE PLANE COORDINATES

Scale 1"= 50

Drawing Number 21-020

MAGELLAN SURVEYING & MAPPING, INC.
PROFESSIONAL LAND SURVEYORS
LICENSED BUSINESS # 7571
450 S. OLD DIXIE HIGHWAY, SUITE 10
JUPITER, FLORIDA 33458
561-746-8745 FAX 561-746-9632 E-mail info@magellansurveying.com

KINGS HIGHWAY COMMERCE PARK

PRELINARY PLAT

BEING A PARCEL LYING IN THE NORTH THREE-QUARTERS (3/4) OF THE NORTHWEST QUARTER OF
SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST
CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA

DETAIL 3:

R=19.00'
A=29.85'
Δ=90°00'19"

A=16.85'
Δ=32°11'11"

A=11.21'
Δ=21°25'02"

A=8.13'
Δ=15°32'01"

WHITE ROAD
35' ROAD RIGHT-OF-WAY
COUNTY MINUTES BOOK 2, PAGE 166
OFFICIAL RECORDS BOOK 500, PAGE 2004

15' SEWER EASEMENT
ORB 2276, PAGE 2280

24" CMP CULVERT
NORTH INVERT 12.9
SOUTH INVERT 13.0

18"CMP CULVERT
NORTH INVERT 12.6
SOUTH INVERT 13.0

CMP CULVERT

DIRT ROAD

18"CMP CULVERT
NORTH INVERT 11.2
SOUTH INVERT 9.1

NORTHEAST CORNER
NORTHWEST QUARTER
SECTION 24

CMP CULVERT

CMP CULVERT
B.M.#2
NAIL & DISC
MAGA 45
EL= 16.56

CMP CULVERT

24" CMP CULVERT
NORTH INVERT 9.0
SOUTH INVERT 10.1

N89°44'28"E

2490.37'

RES MORE OR LESS
RE FEET MORE OR LESS

TRACT "B"

1.443 ACRES MORE OR LESS
62876 SQUARE FEET MORE OR LESS

10' U.E.

862.71'

WOOD POST &
WIRE FENCE typical

R=19.00'
A=29.85'
Δ=90°00'19"

SEE DETAIL 3:

70.52'

49.32'

60.11'

R=55.00'
A=70.18'
Δ=73°06'24"

N00°51'27"W
64.02'

N89°44'33"E
52.10'

R=15.00'
A=15.11'
Δ=32°27'38"

S57°47'54"E
16.35'

R=15.00'
A=15.11'
Δ=57°42'56"

28.34'
N01°51'43"W

30'

30'

4.24'

LIMITS OF COUNTY MAINTENANCE

13.46'

N04°16'41"W 77.87'

N02°08'33"W
66.46'

6.41'

R=493.00'
A=72.03'
Δ=08°22'16"

N10°10'23"W

N06°28'47"W

N08°37'59"W 70.64'

148.74'

155.62'

TRACT "C"
3' ADDITIONAL RIGHT-OF-WAY
0.129 ACRES MORE OR LESS
5611 SQUARE FEET MORE OR LESS

R=507.00'
A=76.39'
Δ=08°37'59"

1929.06'

1147.94'

STORM MAINTENANCE EASEMENT 5
STORM MAINTENANCE EASEMENT 5
DRY RETENTION

1806.50'

PETERS ROAD
50' ROAD RIGHT-OF-WAY
PLAT BOOK 3, PAGE 32

MATCH LINE G

MATCH LINE C

24' 24'

10'

1153.11'

S00°04'58"E

STORM MAINTENANCE EASEMENT 7
DRY RETENTION

EAST LINE
NORTHWEST QUARTER
SECTION 24

831.64'

928.62'

Page 3 of 7	Scale 1"= 50	Drawing Number 21-020

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LEGEND:

℄ = CENTERLINE
calc = CALCULATED
meas = MEASURED
▨ = CONCRETE
= ELEVATIONS
EL = ELEVATIONS
N1121732.623 = STATE PLANE
E851099.141 = COORDINATES

MATCH LINE A

R=76.00'
A=75.69'
Δ=57°03'53"

TAKING PARCEL 113
ORB 3917, PAGE 1057
ORB 3969, PAGE 379

950.19'

Δ=06°24'45"

chord N02°53'46"E 904.84'

CANAL
(BANKS UNDER RENOVATION)

FDOT
STORM
MANHOLE

R=69.42'
A=32.74'
Δ=27°01'05"

N30°17'49"E
50.09'

R=32.00'
A=14.23'
Δ=25°28'26"

206.99'

N04°49'22"E

STORM MAINTENANCE EASEMENT 1
LAKE 1

R=34.00'
A=8.93'
Δ=15°59'37"

S11°10'15"E
58.55'

PERMANENT
EASEMENT
SEE DETAIL 1:

R=68.00'
A=20.79'
Δ=17°31'08"

49.37'
N06°20'53"E

℄ 20'D.E.
29.73'
S8651'14"E

20' L.M.E.

A=266.07'
A=265.07'

chord
S04°06'39"W
623.64'

Δ=02°20'03"
Δ=02°19'57"

R=8468.00'

KINGS HIGHWAY
STATE ROAD 713

TAKING PARCEL 112
(SOUTH PORTION)
ORB 3917, PAGE 899
ORB 3981, PAGE 1816

R=8308.00' Δ=04°18'07" A=623.79'

R=54.33'
A=29.33'
Δ=30°55'23"

R=6531.27'
R=6511.27'

12.61'
20.00'
34.60'
N86°31'56"W
67.21'

R=219.00'
A=12.79'
Δ=03°20'43"

N89°52'40"W
201.43'

Δ=90°07'21"
A=55.05'
R=35.00'

N00°00'01"W 69.85'

R=140.30'
A=41.12'
Δ=16°47'26"

N00°00'01"W
98.03'

R=53.00'
A=83.27'
Δ=90°00'51"

92.79'
N86°31'56"W

R=250.00'
A=26.53'
Δ=06°04'50"

137.05'
S87°23'14"W

128.73'
N89°52'40"W

S89°59'08"W
1056.04'

℄ S. KINGS COMMERCE WAY
48' ACCESS EASEMENT &
DRAINAGE EASEMENT
900.02'

S89°59'08"W

S89°59'48"E

STORM MAINTENANCE EASEMENT 6
DRY RETENTION

STORM

R=8308.00'
Δ=04°49'32"
A=44.48'

3.19'
20.00'

N86°31'56"W
31.03'

R=321.73'
A=50.73'
Δ=09°02'04"

N84°26'00"E
121.26'

N89°52'40"W
51.10'

S39°02'42"W
9.56'

R=54.00'
A=84.82'
Δ=89°59'33"

R=54.00'
A=76.34'
Δ=81°01'41"

MATCH LINE B

24' 24'

R=115.00'
A=33.88'
Δ=16°52'49"

R=91.00'
A=26.81'
Δ=16°52'49"

R=95.00'
A=24.52'
Δ=14°47'19"

S14°45'23"E
28.96'

N16°50'53"W
58.55'

N16°50'53"W
58.55'

N82°00'25"W
80.69'

R=105.00'
A=27.04'
Δ=14°45'22"

N81°58'43"W
54.06'

S00°00'51"E
75.74'

S00°00'19"E
36.35'

6.89'
20'
43.04'
21.01'
38'
24'
14.12'

681.59'
661.34'
661.34'

S00°01'56"W
S00°01'56"W
S00°01'56"W

W. KINGS COMMERCE WAY
48' ACCESS EASEMENT &
DRAINAGE EASEMENT

MATCH LINE F

PARCEL 1
69.697 ACRES MORE OR LESS
3036000 SQUARE FEET MORE OR LESS

DETAIL: 1
PARCEL NO. 802
PERMANENT EASEMENT
ORB 3917, PAGE 899
ORB 3981, PAGE 1816

R=8468.00'
Δ=00°12'15"
A=30.175'
N06°03'39"E
30.175'

30.17'
S89°44'26"W

Δ=00°12'13"
R=8498.00'
A=30.21

℄ 20'D.E.
29.73'
S8651'14"E

R=8468.00'
Δ=00°05'59"
A=14.74'
N06°12'46"E
14.74'

13.70'

POINT OF
REVERSE
CURVATURE

30.19'
N89°44'26"E

DETAIL: 2
PARCEL NO. 801
PERMANENT EASEMENT
ORB 3904, PAGE 1474
ORB 3981, PAGE 1877

R=8308.00'
Δ=00°12'25"
A=60.01'
N02°03'48"E
60.01'

30.02'
N89°51'22"E

29.97'
N02°03'57"E

N89°52'44"E
30.02'

GPS MEASUREMENTS 2592.84' N00°06'58"W
2592.86' MEASURED 2592.85' CERTIFIED RECORDS
N00°07'30"W

WEST LINE
NORTHWEST QUARTER OF
SECTION 24

PRELIMNARY PLAT

KINGS HIGHWAY COMMERCE PARK

BEING A PARCEL LYING IN THE NORTH THREE-QUARTERS (3/4) OF THE NORTHWEST QUARTER OF
SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST
CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA

STORM MAINTENANCE EASEMENT 2

Page 4 of 7 | Scale 1"= 50 | Drawing Number 21-020

MAGELLAN SURVEYING & MAPPING, INC.
PROFESSIONAL LAND SURVEYORS
LICENSED BUSINESS # 7577
450 S. OLD DIXIE HIGHWAY, SUITE 10
JUPITER, FLORIDA 33458
561-746-8745 FAX 561-746-9632 E-mail info@magellansurveying.com

MATCH LINE C

MATCH LINE F

PARCEL 1
69.697 ACRES MORE OR LESS
3036000 SQUARE FEET MORE OR LESS

R=83.00'
A=13.73'
Δ=09°28'47"

R=507.00'
A=76.39'
Δ=08°37'59"

24' 24'

1147.94'

LIMITS OF COUNTY MAINTENANCE

831.64'
928.62'
831.52'

818.13'

℄ E. KINGS COMMERCE WAY
48' ACCESS EASEMENT & DRAINAGE EASEMENT

STORM MAINTENANCE EASEMENT 7
DRY RETENTION

10'

1187.85' 1929.06'

TRACT "C"
3' ADDITIONAL RIGHT-OF-WAY
5611 SQUARE FEET MORE OR LESS

N00°00'00"E

N00°00'00"E

℄ PETERS ROAD
50' ROAD RIGHT-OF-WAY
PER PLAT BOOK 3, PAGE 32

S00°04'58"E

1974.73'

2037.77'

13.51'

R=53.00'
A=83.24'
Δ=89°59'08"

24' 24'

Δ=136°24'27"
R=43.00' A=98.62'

Δ=115°24'32"
A=86.81'

Δ=15°59'55"
A=12.01'

STORM MAINTENANCE EASEMENT 6
DRY RETENTION

1931.79'

℄ S. KINGS COMMERCE WAY
48' ACCESS EASEMENT & DRAINAGE EASEMENT

2184.20'
1128.16'

34.74'

95.49'

239.81'

R=53.18'
A=42.33'
Δ=45°36'19"

24' 24'

N89°59'08"E
125.50'

40.06'

900.02'

S89°59'08"W
730.68'

N00°00'52"W
12.76'

A=29.46'
Δ=31°44'06"

R=54.00'
A=84.82'
Δ=90°00'00"

R=54.00'
A=84.82'
Δ=90°00'00"

R=54.00'
A=84.84'
Δ=90°00'52"

R=50.00'
A=74.55'
Δ=85°25'28"

A=12.87'
Δ=13°52'13"

24' 24'

MATCH LINE D

617.78'

KINGS HIGHWAY COMMERCE PARK

PRELIMINARY PLAT

BEING A PARCEL LYING IN THE NORTH THREE-QUARTERS (3/4) OF THE NORTHWEST QUARTER OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST
CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA

Page 5 of 7	Scale 1"= 50	Drawing Number 21-020

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PRELINARY PLAT

KINGS HIGHWAY COMMERCE PARK

BEING A PARCEL LYING IN THE NORTH THREE-QUARTERS (3/4) OF THE NORTHWEST QUARTER OF
SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST
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Page 6 of 7	Scale 1"= 50	Drawing Number 21-020

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S. KINGS COMMERCE WAY
48' ACCESS EASEMENT & DRAINAGE EASEMENT

2184.20'
1128.16'

900.02'

R=54.00'
A=84.82'
Δ=90°00'00"

S89°59'08"W
730.68'

R=54.00'
A=84.84'
Δ=90°00'52"

24'
24'

239.81'
N89°59'08"E
95.49'
R=53.18'
A=42.33'
Δ=45°36'19"
125.50'
N00°00'52"W
12.76
A=29.46'
Δ=31°44'06"
A=12.87'
Δ=13°52'13"
R=50.00'
A=74.55'
Δ=85°25'28"

34.74'
40.06'

MATCH LINE D

373.92'
373.96'
680.41'
494.50'
617.78'
609.99'
1929.06'

S00°00'00"E
68.71'
S00°00'00"E
61.92'
S00°00'00"E
17.54'
S00°00'00"E
45.12'
S00°00'00"E

R=59.30'
A=20.87'
Δ=20°10'02"
Δ=40°20'03"
R=62.01'
A=43.65'
R=59.30'
A=20.87'
Δ=20°10'02"
R=36.30'
A=14.35'
Δ=22°39'19"
Δ=45°18'37"
R=60.00'
A=47.45'
R=36.30'
A=14.35'
Δ=22°39'19"
R=59.30'
A=20.87'
Δ=20°10'02"
Δ=45°18'37"
R=60.00'
A=47.45'
R=59.30'
A=20.87'
Δ=20°10'02"

48' ACCESS EASEMENT & DRAINAGE EASEMENT

STORM MAINTENANCE EASEMENT 3
LAKE 1

TRACT "C"
3' ADDITIONAL RIGHT-OF-WAY
0.129 ACRES MORE OR LESS
5611 SQUARE FEET MORE OR LESS

S00°04'58"E

WEST RIGHT-OF-WAY
PER ST. LUCIE COUNTY RAX MAP

PETERS ROAD
50' ROAD RIGHT-OF-WAY
PLAT BOOK 3, PAGE 32

MATCH LINE E

PARCEL 3
17.632 ACRES MORE OR LESS
768056 SQUARE FEET MORE OR LESS

R=54.33'
A=41.84'
Δ=44°07'26"

R=54.33'
A=41.84'
Δ=44°07'26"

R=54.37'
A=41.78'
Δ=44°01'38"

982.78'
S89°59'57"E
806.20'

R=35.50'
A=55.76'
Δ=90°00'03"

40'
40'

1926.71'
816.24'

38.81'
S89°59'57"E
Δ=23°40'40"
R=30.90' A=12.77'
Δ=22°32'57"
R=55.85' A=21.98'
S73°45'06"E 7.15'
34.81'
4.00'
Δ=34°49'24"
R=51.85' A=31.51'
A=19.15'
Δ=31°37'05"
Δ=33°36'27"
R=34.70' A=20.35'
Δ=01°58'55" A=1.20'

℄ 20'D.E.
S20°13'03"E
53.20'

1970.85'
825.10'

STORM MAINTENANCE EASEMENT 8
DRY RETENTION

28.12'
N89°50'03"W
221.52'
N00°00'00"W
52.37
20.00'
20' L.M.E.
20.00'
4.25'
N89°50'03"W
221.53'
14.25'
3.00'
30.00'
30'
10'

N89°50'03"W
1129.22'
2215.32'

922.14' calc & meas

TREASURE COAST RV RESORT
PCN 2324-234-0000-000-0
OFFICIAL RECORDS BOOK 2355 PAGE 1059

PCN 2324-244-0001-000-8
OFFICIAL RECORDS BOOK 3808 PAGE 2549

2653.85' meas
2653.77' calc

ANDREWS AVENUE

FOUND
NAIL & DISC
"ILLEGIBLE"

PRELIMINARY PLAT

KINGS HIGHWAY COMMERCE PARK

BEING A PARCEL LYING IN THE NORTH THREE-QUARTERS (3/4) OF THE NORTHWEST QUARTER OF
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Page 7 of 7	Scale 1"= 50	Drawing Number 21-020

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MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4926335 OR BOOK 4688 PAGE 982, Recorded 09/21/2021 02:25:21 PM Doc Tax: $27358.80

Prepared by and return to upon recording:

Bryan W. Sykes, Esq.
Meridian Partners Law P.A.
4923 W. Cypress Street
Tampa, FL 33607

Parcel No.: 2324-210-0000-000-6

Consideration: $3,908,314.10

SPACE ABOVE RESERVED FOR RECORDING INFORMATION

SPECIAL WARRANTY DEED

This **SPECIAL WARRANTY DEED** is executed this 15th day of September, 2021, by **KINGS HIGHWAY COMMERCE PARK, LLC,** a Florida limited liability company, having an address of 18860 Loxahatchee River Road, Jupiter, Florida 33548 (hereinafter, the "Grantor"), to **SCANNELL PROPERTIES #533, LLC,** an Indiana limited liability company, having an address of 8801 River Crossing Boulevard, Suite 300, Indianapolis, Indiana 46240 (hereinafter, the "Grantee"), the foregoing sometimes being referred to herein as the "Parties".

WITNESSETH, that Grantor, for and in consideration of the sum of $10.00 and/or other valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land (the "Property") lying and situate in St. Lucie County, Florida, to-wit:

SEE ATTACHED EXHIBIT A.

SUBJECT TO all easements, restrictions, reservations, and limitations of record, if any, existing as of the date of this conveyance and those permitted exceptions set forth on **Exhibit B** hereof.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

Together with all buildings, fixtures and other improvements as presently located on the Property.

Together with all of Grantor's right, title and interest in and to all strips and gores, any existing or proposed streets, roadways, alleys and/or adjacent rights of way and any land lying in the bed of any street, road or alley, open or proses, adjoining the Property

TO HAVE AND TO HOLD the same in fee simple forever. Grantor hereby covenants with Grantee that Grantor is lawfully seized of the aforesaid land in fee simple, that Grantor has good right and lawful authority to sell and convey said land and Grantor hereby warrants title to said land, and will defend the same against the lawful claims of all persons claiming by, through or under Grantor, but not otherwise.

SIGNATURE PAGE IMMEDIATELY FOLLOWS THIS PAGE

IN WITNESS WHEREOF, Grantor has signed and sealed these presents the day and year first above written.

Witnesses:

Name: Heather Neville

Name: Kaylee Marsillo

GRANTOR:

KINGS HIGHWAY COMMERCE PARK, LLC,
a Florida limited liability company

By: _____
Edward Sasso, Managing Member

STATE OF New York
COUNTY OF Jefferson

Executed and acknowledged before me by means of ☒ physical presence or ☐ online notarization, this 14 day of September, 2021 by Edward Sasso, as the Managing Member of **KINGS HIGHWAY COMMERCE PARK, LLC**, a Florida limited liability company. He ☐ is personally known to me; or ☒ produced Florida Driver License as identification.

(seal) Kelly Butcher
Notary Public, State of New York
Residing in Jefferson County
No. 01BU5075260
My Commission Expires Mar. 31 2023

Notary Public
State of Florida New York

Exhibit A
Legal Description

PARCEL 1 (FEE SIMPLE ESTATE)

The Northwest Quarter of the Northwest Quarter and the West Half of the West Half of the Northeast Quarter of the Northwest Quarter of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida; LESS AND EXCEPTING there from the South 400 feet of
the North 903.20 feet of the East 750 feet of the West 775 feet of said Section 24; LESS right-of-way for Kings Highway and White Road.

Together with the following described Parcel "A":

A parcel of land lying in Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida; more particularly described as follows:
The South 35.30 feet of the North 538.50 feet of the East 750 feet of the West 775 feet of the Northwest Quarter of the Northwest Quarter of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida.

Less the following described Parcel "B":

A parcel of land lying in Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida; more particularly described as follows:
The South 35.30 feet of the North 938.50 feet of the East 750 feet of the West 775 feet of the Northwest Quarter of the Northwest Quarter of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida.

Further LESS AND EXCEPT the lands as more particularly described in Order of Taking recorded September 29, 2016 in Official Records Book 3917, Page 899.

PARCEL 2 (NON-EXCLUSIVE EASEMENT ESTATE)

Together with the non-exclusive easement as created by that certain Grant of Easement - Sewer recorded June 20, 2005 in Official Records Book 2276, Page 2280 as modified by Modification of Easement recorded in Official Records Book 2382, Page 1131, of the Public Records of St. Lucie County, Florida.

Exhibit B
Permitted Exceptions

1. Taxes and assessments for the year 2021 and subsequent years, which are not yet due and payable.

2. Easement in favor of Southern Bell Telephone and Telegraph Company, recorded October 30, 1956 in Deed Book 220, Page 436, with Subordination of Utility Interests recorded in Official Records Book 3837, Page 1758, as to Parcel 1.

3. Terms and conditions of Grant of Easement - Sewer by and between Graham Groves Development, LLC, a Florida limited liability company and Steven L. Craig, as Trustee under Trust Agreement dated May 17, 1985 and Christopher Cook, as Trustee under Trust Agreement dated May 17, 1985, recorded 2276, Page 2280 as modified by Modification of Easement recorded in Official Records Book 2382, Page 1131, as to Parcels 1 and 2.

4. Agreement for Right of Way Easement with Kirco Acquisition, LLC, recorded January 9, 2009 in Official Records Book 3050, Page 1234, as to Parcel 1.

5. Easements as set forth in Order of Taking recorded September 29, 2016 in Official Records Book 3917, Page 899, as to Parcel 1.

NOTE: Notice of Environmental Resource Permit recorded December 1, 2009 in Official Records Book 3149, Page 878.

NOTE: All recording references in this form shall refer to the public records of St. Lucie County, Florida, unless otherwise noted.

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4926340 OR BOOK 4688 PAGE 1005, Recorded 09/21/2021 02:26:59 PM Doc Tax: $20850.90

This instrument was prepared by:
John H. Adair, III, Esq.
Doumar, Allsworth, Laystrom, et al
1177 SE Third Avenue
Fort Lauderdale, FL 33316-1197

Parcel ID Number: 2324-211-0001-000-6, 2324-214-0002-000-2, 2324-211-0001-000-5, 2324-241-0003-000-3

WARRANTY DEED

THIS INDENTURE, Made effective on September 14 15, 2021 A.D., **Between** R.V. DEVELOPMENT, LLC, a Florida limited liability company, whose address is 547 Wash Roberts Ln., McMinnville, TN 37110, **Grantor**, and SCANNELL PROPERTIES #533, LLC, an Indiana limited liability company whose address is: 8801 River Crossing Blvd., Ste 300, Indianapolis, IN 46240, **Grantee**.

WITNESSETH that the Grantor, for and in consideration of the sum of TEN & NO/100 ($10.00) Dollars, and other good and valuable consideration to Grantor in hand paid by Grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said Grantee and Grantee's heirs and assigns forever, the following described land, tenements, hereditaments, improvements (if any), and any appurtenances, situate, lying and being in the County of Saint Lucie, State of Florida, to wit:

SEE LEGAL ATTACHED HERETO AS EXHIBIT "A"

SUBJECT TO:

(1) Comprehensive land use plans, zoning and other land use restrictions, prohibitions and requirements imposed by governmental authority;
(2) Restrictions and matters appearing on the Plat or otherwise common to the subdivision;
(3) Unplatted public utility easements of record; and
(4) Taxes for the 2021 tax year and subsequent years.

and the Grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the Grantor has hereunto set its hand and seal the day and year first above written.

Signed, sealed and delivered
in our presence:

R.V. DEVELOPMENT, LLC,
a Florida limited liability company

Jordan Ramsey
Printed Name: Jordan Ramsey
Witness

By: James A Wynne, III
James A. Wynne III, Manager

Cameron Nathan
Printed Name: Cameron Nathan
Witness

STATE OF FLORIDA)
SS
COUNTY OF BROWARD)

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☑ online notarization, this 14th day of September, 2021, by James A. Wynne III, as Manager of R.V. DEVELOPMENT, LLC, a Florida limited liability company.

JORDAN RAMSEY
Notary Public - State of Florida
Commission # GG922750
Expires on February 12, 2024

NOTARY PUBLIC:
Jordan Ramsey
Print: Jordan Ramsey
State of Florida at Large (Seal)
My Commission Expires: 02/12/2024

_____ Personally Known or ✓ Identification Produced
Type of identification produced: TN Driver's License.

Notarized online using audio-video communication

EXHIBIT "A"
LEGAL DESCRIPTION

Parcel 1
The East Three Quarters (3/4) of the Northeast Quarter (NE 1/4) of the Northwest Quarter (NW 1/4) of Section Twenty-four (24) Township Thirty-five(35) South Range Thirty-nine (39) East, less and excepting therefrom the North 35 feet and less the East 25 feet for road rights of way and less and except parcels conveyed to Earle T. Field, Jr. and Theresa M. Field, his wife in Deed Book 206, page 141 and in Official Records Book 492, page 1228; and less parcel conveyed to Robert Langel and Lillian Langel, his wife in Deed Book 207, page 165, all of the Public Records of St. Lucie County, Florida.

Parcel 2
From the Southeast corner of the Northeast quarter of the Northwest quarter of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida; thence run North 100 feet; thence run West 25 feet to the Point of Beginning; continue West 213.71 feet; thence North 208.71 feet; thence East 213.71 feet; thence South 208.71 feet to the Point of Beginning. Less and except any portion lying in road right of way for Peters Road.

Parcel 3
From the Interior Quarter Section Corner of Section 24, Township 35 South, Range 39 East, run North along the East line of the Northwest 1/4 of said Section 1790.5 feet; thence West 25 feet to the Point of Beginning: from said Point of Beginning run West 155 feet: thence North 150 feet; thence East 155 feet; thence South 150 feet to the Point of Beginning; being a part of the Northeast 1/4 of the Northwest 1/4 of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida.

Parcel 4
The South 60 feet of the East 125 feet of the following described property:
The North 1/2 of NE 1/4 of SE 1/4 of the NW 1/4 of Section 24, Township 35 South, Range 39 East, the same being the North 1/2 of Lot 9, of the NW 1/4, according to the Boston and Florida Atlantic Coast Land Company's Subdivision according to the plat thereof as recorded in Plat Book 3, page 32, of the Public Records of St. Lucie County, Florida.
Less and Except the East 25 feet for Road Right of Way

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4926314 OR BOOK 4688 PAGE 861, Recorded 09/21/2021 02:15:45 PM Doc Tax: $5675.60

Prepared by and return to upon recording:

Bryan W. Sykes, Esq.
Meridian Partners Law P.A.
4923 W. Cypress Street
Tampa, FL 33607

Parcel No.: 2324-211-0002-000-3

Consideration: $810,701.12

SPACE ABOVE RESERVED FOR RECORDING INFORMATION

SPECIAL WARRANTY DEED

This **SPECIAL WARRANTY DEED** is executed this 15th day of September, 2021, by **AUSTRALIAN PROPERTIES, LLC**, a Florida limited liability company, having an address of P.O. Box 14049, Ft. Pierce, Florida 34979 (hereinafter, the "Grantor"), to **SCANNELL PROPERTIES #533, LLC**, an Indiana limited liability company, having an address of 8801 River Crossing Boulevard, Suite 300, Indianapolis, Indiana 46240 (hereinafter, the "Grantee"), the foregoing sometimes being referred to herein as the "Parties".

WITNESSETH, that Grantor, for and in consideration of the sum of $10.00 and/or other valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land lying and situate in St. Lucie County, Florida, to-wit:

SEE ATTACHED EXHIBIT A.

SUBJECT TO all easements, restrictions, reservations, and limitations of record, if any, existing as of the date of this conveyance and those permitted exceptions set forth on **Exhibit B** hereof.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the same in fee simple forever. Grantor hereby covenants with Grantee that Grantor is lawfully seized of the aforesaid land in fee simple, that Grantor has good right and lawful authority to sell and convey said land and Grantor hereby warrants title to said land, and will defend the same against the lawful claims of all persons claiming by, through or under Grantor, but not otherwise.

SIGNATURE PAGE IMMEDIATELY FOLLOWS THIS PAGE

IN WITNESS WHEREOF, Grantor has signed and sealed these presents the day and year first above written.

Witnesses:

Name: Dezzyflerre

Name: TODD BEVAN

GRANTOR:

AUSTRALIAN PROPERTIES, LLC,
a Florida limited liability company

By: _____
George T. Pantuso, Manager

STATE OF Florida
COUNTY OF St. Lucie

Executed and acknowledged before me by means of ☑ physical presence or ☐ online notarization, this 14th day of September, 2021 by George T. Pantuso, as the Manager of **AUSTRALIAN PROPERTIES, LLC**, a Florida limited liability company. He ☑ is personally known to me; or ☐ produced _____ as identification.

Rhonda Vincent
Notary Public
State of Florida

(seal)

RHONDA J. VINCENT
Notary Public - State of Florida
Commission # GG 348412
My Comm. Expires Aug 28, 2023
Bonded through National Notary Assn.

Exhibit A
Legal Description

A parcel of land lying in Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida, more particularly described as follows:

The South 400 feet of the North 903.20 feet of the East 750 feet of the West 775 feet.

Together with the South 35.30 feet of the North 938.50 feet of the East 750 feet of the West 775 feet;

Less the South 35.30 feet of the North 538.50 feet of the East 750 feet of the West 775 feet.

ALL Less any road rights of way and canal rights of way.

Exhibit B
Permitted Exceptions

1. Taxes and assessments for the year 2021 and subsequent years, which are not yet due and payable.

2. General Permit granted to Southern Bell Telephone and Telegraph Company recorded October 30, 1956 in Deed Book 220, Page 436.

3. Annexation Agreement recorded August 11, 1995, in Official Records Book 969, Page 1857.

4. Grant of Easement - Sewer recorded September 20, 2006, in Official Records Book 2660, Page 2731.

5. Terms and conditions of the Fort Pierce Utilities Authority Voluntary Removal of Meter(s)/Services recorded October 29, 2015 in Official Records Book 3803, Page 968.

NOTE: All recording references in this form shall refer to the public records of St. Lucie County, Florida, unless otherwise noted.

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4926337 OR BOOK 4688 PAGE 997, Recorded 09/21/2021 02:26:06 PM Doc Tax: $14918.40

Prepared by and return to upon recording:

Bryan W. Sykes, Esq.
Meridian Partners Law P.A.
4923 W. Cypress Street
Tampa, FL 33607

Parcel No.: -2324-232-0000-000-4

Consideration: $2,131,122.50

SPACE ABOVE RESERVED FOR RECORDING INFORMATION

SPECIAL WARRANTY DEED

This **SPECIAL WARRANTY DEED** is executed this 15th day of September, 2021, by **KINGS HIGHWAY COMMERCIAL SOUTH, LLC,** a Florida limited liability company, having an address of 18860 Loxahatchee River Road, Jupiter, Florida 33548 (hereinafter, the "Grantor"), to **SCANNELL PROPERTIES #533, LLC,** an Indiana limited liability company, having an address of 8801 River Crossing Boulevard, Suite 300, Indianapolis, Indiana 46240 (hereinafter, the "Grantee"), the foregoing sometimes being referred to herein as the "Parties".

WITNESSETH, that Grantor, for and in consideration of the sum of $10.00 and/or other valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land (the "Property") lying and situate in St. Lucie County, Florida, to-wit:

SEE ATTACHED EXHIBIT A.

SUBJECT TO all easements, restrictions, reservations, and limitations of record, if any, existing as of the date of this conveyance and those permitted exceptions set forth on **Exhibit B** hereof.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

Together with all buildings, fixtures and other improvements as presently located on the Property.

Together with all of Grantor's right, title and interest in and to all strips and gores, any existing or proposed streets, roadways, alleys and/or adjacent rights of way and any land lying in the bed of any street, road or alley, open or proses, adjoining the Property

TO HAVE AND TO HOLD the same in fee simple forever. Grantor hereby covenants with Grantee that Grantor is lawfully seized of the aforesaid land in fee simple, that Grantor has good right and lawful authority to sell and convey said land and Grantor hereby warrants title to said land, and will defend the same against the lawful claims of all persons claiming by, through or under Grantor, but not otherwise.

SIGNATURE PAGE IMMEDIATELY FOLLOWS THIS PAGE

IN WITNESS WHEREOF, Grantor has signed and sealed these presents the day and year first above written.

Witnesses:

Name: Heather Neville

KM
Name: Kaylee Marsillo

GRANTOR:

KINGS HIGHWAY COMMERCIAL SOUTH, LLC, a Florida limited liability company

By: _____
Edward A. Sasso, Authorized Representative

STATE OF New York
COUNTY OF Jefferson

Executed and acknowledged before me by means of ☒ physical presence or ☐ online notarization, this 14 day of September, 2021 by Edward A. Sasso, as the Authorized Representative of **KINGS HIGHWAY COMMERCIAL SOUTH, LLC**, a Florida limited liability company. He ☐ is personally known to me; or ☒ produced Florida Driver License as identification.

Notary Public
State of New York

(seal)
Kelly Butcher
Notary Public, State of New York
Residing in Jefferson County
No. 01BU5075260
My Commission Expires Mar. 31 2023

Exhibit A
Legal Description

The North 1/2 of the South 1/2 of the Northwest 1/4 of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida, LESS the East 1118.54 feet and the West 25 feet thereof and LESS that part taken in Stipulated Order of Taking recorded in Official Records Book 3904, Page 1474, of the Public Records of St. Lucie County, Florida;

AND

The North 60 feet of the West 1088.54 feet of the East 1118.54 feet of the South 1/2 of the North 1/2 of the South 1/2 of the Northwest 1/4 of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida.

Exhibit B
Permitted Exceptions

1. Taxes and assessments for the year 2021 and subsequent years, which are not yet due and payable.

2. Easement to Fort Pierce Utilities Authority, recorded June 2, 1988 in Official Records Book 589, Page 1085 and as subordinated by Subordination of City Utility Interests recorded in Official Records Book 3840, Page 174.

3. Easement as set forth in Warranty Deed recorded September 15, 2003 in Official Records Book 1798, Page 2252.

4. Road Improvement Agreement by Kirco Acquisition LLC and St. Lucie County recorded December 5, 2007 in Official Records Book 2912, Page 523.

5. Easements as set forth in that certain Stipulated Order of Taking recorded August 23, 2016 in Official Records Book 3904, Page 1474.

6. Temporary Easement in favor of the State of Florida Department of Transportation recorded August 28, 2019 in Official Records Book 4313, Page 2776.

7. Temporary Easement in favor of the State of Florida Department of Transportation recorded August 28, 2019 in Official Records Book 4313, Page 2778.

NOTE: Notices of Environmental Resource or Surface Water Management Permit recorded in Official Records Book 3277, Page 2605; Official Records Book 4470, Page 849 and Official Records Book 4470, Page 883.

NOTE: All recording references in this form shall refer to the public records of St. Lucie County, Florida, unless otherwise noted.

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4925780 OR BOOK 4687 PAGE 1640, Recorded 09/21/2021 08:44:52 AM Doc Tax: $6300.00

INSTRUMENT PREPARED BY
AND AFTER RECORDING RETURN TO:
BRUCE S. ROSENWATER & ASSOCIATES, P.A.
Bruce S. Rosenwater, Esq.
1601 Forum Place, Suite 602
West Palm Beach, Florida 33401
(561) 688-0991

Tax ID #2324 241 002 0006

SPECIAL WARRANTY DEED 2421 Deters Rd.

THIS SPECIAL WARRANTY DEED, executed this 15th day of September A.D. 2021, by GRADY SAPP, a single man, whose post office address is [redacted] Peters Road, [redacted], Fort Pierce, FL 34945; and JOYCE K. SMITH, a married woman, whose post office address is 1828 Copenhaver RD, Fort Pierce, FL 34945 "Grantor", to SCANNELL PROPERTIES #533, LLC, an Indiana limited liability company, whose post office address is 8801 River Crossing Boulevard, Suite 300, Indianapolis, Indiana 46240 "Grantee".

(Wherever used herein the terms "grantor" and "grantee" shall include singular and plural, heirs, legal representatives, and assigns of individuals. and the successors and assigns of corporations, wherever the context so admits or requires.)

WITNESSETH:

That the Grantor, for and in consideration of the sum of $10.00 and other good and valuable consideration, the receipt whereof is hereby acknowledged, hereby grants, bargains, sells, conveys and confirms unto the Grantee, and their heirs, personal representatives, successors and assigns, in fee simple absolute, all that certain land situate in St. Lucie County, Florida and more particularly described below (the "Property"):

> The North ½ of the NE ¼ of the SE ¼ of the NW ¼, less the South 60 feet of the East 125 feet and less the East 30 feet, Section 24, Township 35 South, Range 39 East, lying and being in Saint Lucie County, Florida.

SUBJECT TO easements, restrictions and reservations of record and to taxes for the year 2021 and thereafter.

TOGETHER WITH all improvements, tenements, hereditaments and appurtenances thereto belonging or appertaining,

TO HAVE AND TO HOLD, the same in fee simple forever.

GRANTOR WILL WARRANT and forever defend the right and title to the above-described property unto the Grantee against all claims of all persons claiming by, through or under Grantor, but not otherwise.

IN WITNESS WHEREOF, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Signature
Printed Name: Joseph Torbush

Grady Sapp

Witness Signature
Printed Name: Louise H. McGuinness

Joyce K. Smith

State of Florida
County of St Lucie

The foregoing instrument was acknowledged before me by means of [X] physical presence or [_] online notarization, this 15th day of September, 2021, by Grady Sapp and Joyce K. Smith, who [_] are personally known or [X] have produced a driver's license as identification.

[Notary Seal]

My Commission Expires:

CHERYL A HOWE
Notary Public - State of Florida
Commission # GG 260038
My Comm. Expires Nov 30, 2022

Notary Public
Print Name: Cheryl A Howe

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4926317 OR BOOK 4688 PAGE 869, Recorded 09/21/2021 02:16:13 PM Doc Tax: $6903.40

This instrument was prepared by:
John H. Adair, III, Esq.
Doumar, Allsworth, Laystrom, et al
1177 SE Third Avenue
Fort Lauderdale, FL 33316-1197

Parcel ID Number: 2324-241-0004-000-0

WARRANTY DEED

THIS INDENTURE, Made effective on September 15, 2021 A.D., **Between** GREAT AMERICAN RV PROPERTIES LLC, a Florida limited liability company, whose address is 547 Wash Roberts Ln., McMinnville, TN 37110, **Grantor**, and SCANNELL PROPERTIES #533, LLC, an Indiana limited liability company whose address is: 8801 River Crossing Blvd., Ste 300, Indianapolis, IN 46240, **Grantee**.

WITNESSETH that the Grantor, for and in consideration of the sum of TEN & NO/100 ($10.00) Dollars, and other good and valuable consideration to Grantor in hand paid by Grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said Grantee and Grantee's heirs and assigns forever, the following described land, tenements, hereditaments, improvements (if any), and any appurtenances, situate, lying and being in the County of Saint Lucie, State of Florida, to wit:

SEE LEGAL ATTACHED HERETO AS EXHIBIT "A"

SUBJECT TO:

(1) Comprehensive land use plans, zoning and other land use restrictions, prohibitions and requirements imposed by governmental authority;
(2) Restrictions and matters appearing on the Plat or otherwise common to the subdivision;
(3) Unplatted public utility easements of record; and
(4) Taxes for the 2021 tax year and subsequent years.

and the Grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the Grantor has hereunto set its hand and seal the day and year first above written.

Signed, sealed and delivered
in our presence:

GREAT AMERICAN RV PROPERTIES LLC,
a Florida limited liability company

Jordan Ramsey
Printed Name: Jordan Ramsey
Witness

By: James A Wynne, III
James A. Wynne III, Managing Member

Cameron Nathan
Printed Name: Cameron Nathan
Witness

STATE OF FLORIDA)
SS
COUNTY OF BROWARD)

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☑ online notarization, this 14th day of September, 2021, by James A. Wynne III, as Managing Member of GREAT AMERICAN RV PROPERTIES LLC, a Florida limited liability company.

JORDAN RAMSEY
Notary Public - State of Florida
Commission # GG922750
Expires on February 12, 2024

NOTARY PUBLIC:
Jordan Ramsey
Print: Jordan Ramsey
State of Florida at Large (Seal)
My Commission Expires: 02/12/2024

_____ Personally Known or ✔ Identification Produced
Type of identification produced: TN Driver's License.

Notarized online using audio-video communication

EXHIBIT "A"
LEGAL DESCRIPTION

Parcel 1:
The West 455.58 feet of the East 1118.54 of the North Half of the North Half of the South Half of the Northwest 1/4 of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida.

Parcel 2:
The West 1088.54 feet of the East 1118.54 of the South 264.18 feet of the South Half of the North Half of the South Half of the Northwest 1/4 of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida.

AND

For the consideration hereinbefore set forth, Grantors do additionally grant and convey unto Grantee and easement and right-of-way for the purpose of ingress and egress across the following described tract of land:

The North 60 feet of the West 1088.54 feet of the East 1118.54 feet of the South 1/2 of the North 1/2 of the South 1/2 of the Northwest 1/4 of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida.

The easement herein granted shall be deemed appurtenant to and run with the ownership of Parcel I and Parcel II and their respective heirs, successors and assigns in title to all or part of Parcel I and Parcel II.

Scannell Properties #533, LLC
8801 Rover Crossing Boulevard Suite 300
Indianapolis, Indiana 46240

October 4, 2021

RE: Kings Highway Commerce Park
Southeast corner of Kings Highway and White Road
Fort Pierce, Florida

To Whom It May Concern:

Scannell Properties #533, LLC, the applicant for the above referenced project, hereby authorizes Jeff H. Iravani, Inc to be our authorized agent to obtain all the required re-zoning, site plan approvals & civil related permits and to sign on our behalf on all applicable applications for the above referenced project.

Sincerely,

Signature: _____

Name: Marc Pfleging

Title: Manager

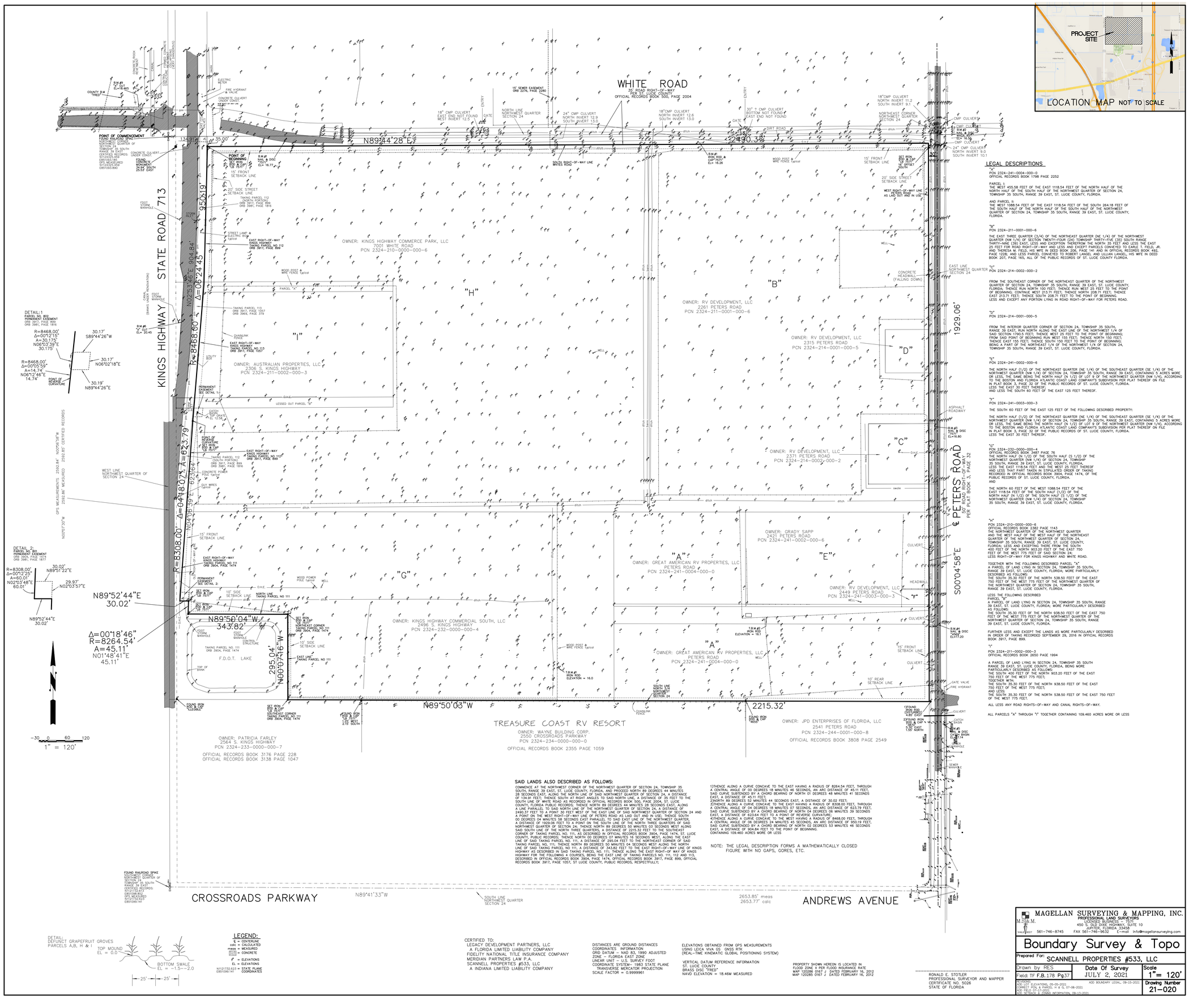
STATE OF INDIANA
COUNTY OF MARION

The foregoing instrument was acknowledged before me this 4th day of October, 2021, by Marc D. Pfleging, the Manager of SCANNELL PROPERTIES #533, LLC, an Indiana limited liability company, and who acknowledged his execution of the foregoing document for and on behalf of said limited liability company.

_____
Notary Public

Seal

JOY R. JACKSON
Notary Public, State of Indiana
Hamilton County
Commission Number 691848
My Commission Expires
November 23, 2024


WHITE ROAD
35' ROAD RIGHT-OF-WAY
PER ST. LUCIE COUNTY
OFFICIAL RECORDS BOOK 500, PAGE 2004
N89°44'28"E
2230.37'
KINGS HIGHWAY STATE ROAD 713
R=8468.00'
Δ=06°24'45"
N02°53'16"E
904.84'
950'±
R=8468.00'
Δ=04°18'07"
A=623.79'
N04°08'39"E
623.64'
R=8308.00'
Δ=00°12'25"
A=30.01'
N02°03'48"E
30.01'
R=8468.00'
Δ=00°05'59"
A=14.74'
N06°12'46"E
14.74'
R=8308.00'
Δ=00°18'46"
R=8264.54'
A=45.11'
N01°48'41"E
45.11'
N89°52'44"E
30.02'
N89°52'44"E
30.02'
N89°50'04"W
343.82'
N00°07'56"W
295.04'
N89°50'03"W
2215.32'
S00°04'58"E
1929.06'
PETERS ROAD
50' ROAD RIGHT-OF-WAY
PER PLAT BOOK 3, PAGE 32
CROSSROADS PARKWAY
N89°41'33"W
2653.85' meas
2653.77' calc
ANDREWS AVENUE
TREASURE COAST RV RESORT
OWNER: WAYNE BUILDING CORP.
2550 CROSSROADS PARKWAY
PCN 2324-234-0000-000-0
OFFICIAL RECORDS BOOK 2355 PAGE 1059
OWNER: KINGS HIGHWAY COMMERCE PARK, LLC
7001 WHITE ROAD
PCN 2324-210-0000-000-6
OWNER: AUSTRALIAN PROPERTIES, LLC
2306 S. KINGS HIGHWAY
PCN 2324-211-0002-000-3
OWNER: RV DEVELOPMENT, LLC
2261 PETERS ROAD
PCN 2324-211-0001-000-6
OWNER: RV DEVELOPMENT, LLC
2315 PETERS ROAD
PCN 2324-214-0001-000-5
OWNER: RV DEVELOPMENT, LLC
2371 PETERS ROAD
PCN 2324-214-0003-000-2
OWNER: GRADY SAPP
2421 PETERS ROAD
PCN 2324-241-0002-000-6
OWNER: GREAT AMERICAN RV PROPERTIES, LLC
PETERS ROAD
PCN 2324-241-0004-000-0
OWNER: RV DEVELOPMENT, LLC
2449 PETERS ROAD
PCN 2324-241-0003-000-3
OWNER: KINGS HIGHWAY COMMERCIAL SOUTH, LLC
2496 S. KINGS HIGHWAY
PCN 2324-232-0000-000-4
OWNER: JPD ENTERPRISES OF FLORIDA, LLC
2541 PETERS ROAD
PCN 2324-244-0001-000-8
OFFICIAL RECORDS BOOK 3808 PAGE 2549
OWNER: PATRICIA FARLEY
2564 S. KINGS HIGHWAY
PCN 2324-233-0000-000-7
OFFICIAL RECORDS BOOK 3176 PAGE 228
OFFICIAL RECORDS BOOK 3138 PAGE 1047
"A"
"B"
"C"
"D"
"E"
"F"
"G"
"H"
"I"
F.D.O.T. LAKE
POINT OF COMMENCEMENT
FOUND RAILROAD SPIKE
NORTHWEST CORNER OF
NORTHWEST QUARTER OF
SECTION 24
TOWNSHIP 35 SOUTH
RANGE 39 EAST
PUBLIC RECORDS
N89°44'28"E 2592.84' MEASURED
N00°07'30"W 2592.86' MEASURED
GPS MEASUREMENTS
POINT OF BEGINNING
SET IRON ROD & CAP
LB 7511
FOUND IRON ROD & CAP
"LB 7511"
FOUND IRON ROD & CAP
"LB 3505"
FOUND IRON ROD & CAP
"LB 2715"
SET IRON ROD & CAP
"LB 3505"
SOUTHEAST CORNER
TAKING PARCEL NO. 111
ORB 3904, PAGE 1474
SOUTH LINE
NORTHWEST
QUARTER
SECTION 24
WEST LINE
NORTHWEST QUARTER OF
SECTION 24
EAST LINE
NORTHWEST QUARTER
SECTION 24
WEST RIGHT-OF-WAY LINE
AS LAID OUT AND IN USE
EAST RIGHT-OF-WAY
KINGS HIGHWAY
TAKING PARCEL NO. 112
ORB 3917, PAGE 899
EAST RIGHT-OF-WAY
KINGS HIGHWAY
TAKING PARCEL NO. 111
ORB 3904, PAGE 1474
TAKING PARCEL 112
NORTH PORTION
ORB 3917, PAGE 899
ORB 3981, PAGE 1816
TAKING PARCEL 112
SOUTH PORTION
ORB 3917, PAGE 899
ORB 3981, PAGE 1816
TAKING PARCEL 113
ORB 3917, PAGE 1057
ORB 3968, PAGE 379
TAKING PARCEL NO. 111
ORB 3904, PAGE 1474
TAKING PARCEL NO. 111
ORB 3904, PAGE 1474
PARCEL "A"
LESSED OUT PARCEL "B"
PERMANENT EASEMENT
SEE DETAIL 1
PERMANENT EASEMENT
SEE DETAIL 2
DETAIL:1
PARCEL NO. 802
PERMANENT EASEMENT
ORB 3917, PAGE 899
ORB 3981, PAGE 1877
DETAIL 2:
PARCEL NO. 801
PERMANENT EASEMENT
ORB 3904, PAGE 1474
ORB 3981, PAGE 1877
DETAIL:
DEFUNCT GRAPEFRUIT GROVES
PARCELS A,B, H & I
TOP MOUND
EL = 0.0
BOTTOM SWALE
EL = -1.5~-2.0
25'
25'
LEGEND:
℄ = CENTERLINE
calc = CALCULATED
meas = MEASURED
CONC = CONCRETE
EL = ELEVATIONS
EL = ELEVATIONS
N1121732.623 = STATE PLANE
E851099.141 = COORDINATES
R.M.#5
NAIL & DISC
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EL=18.77
R.M.#6
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"LB 7511"
EL=18.80
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NAIL & DISC
"LB 7511"
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R.M.#3
IRON ROD
ELEVATION = 18.1
R.M.#2
IRON ROD
ELEVATION = 16.0
R.M.#1
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R.M.#7
IRON ROD & CAP
"LB 7511"
ELEV. = 16.49
R.M.#8
IRON ROD & CAP
"LB 7511"
ELEV. = 16.99
R.M.#9
"X" CUT
EL= 20.45
COUNTY B.M.
"FRED"
EL=18.605
POINT OF
REVERSE
CURVATURE
POINT OF
COMPOUND
CURVATURE

O'ROURKE
ENGINEERING & PLANNING

TRAFFIC ANALYSIS

FOR

Kings Highway Commerce Park
Concurrency

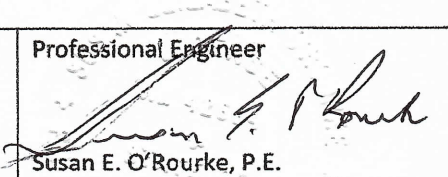
Prepared for:

Mr. Ken Morin
Kings Highway Development Partners, LLC
4923 W. Cypress St.
Tampa, FL 33607

Prepared by:

O'Rourke Engineering & Planning
22 SE Seminole Street
Stuart, Florida 34994
772-781-7918

March 11, 2021
Revised June 4, 2021
Revised July 27, 2021
Revised March 23, 2022
SR21021.0

Prepared by: O'Rourke Engineering & Planning Certificate of Authorization: #26869 22 SE Seminole Street Stuart, Florida 34994 772-781-7918	Professional Engineer  Susan E. O'Rourke, P.E. Date signed and sealed: 3/23/2022 License #: 42684

March 11, 2021

Mr. Ken Morin
Kings Highway Development Partners, LLC
4923 W. Cypress St.
Tampa, FL 33607

Re: Kings Highway Commerce Park – Phase II

Dear Mr. Morin:

O'Rourke Engineering & Planning has completed the analysis of the proposed development located east of Kings Highway and south of White Road in Ft. Pierce, St. Lucie County, Florida. The steps in the analysis and the ensuing results are presented herein.

It has been a pleasure working with you. If you have any questions or comments, please give me a call.

Respectfully submitted,

O'Rourke Engineering & Planning

Susan E. O'Rourke, P.E.
Registered Civil Engineer

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INTRODUCTION

O'Rourke Engineering & Planning was retained to prepare a traffic analysis for the proposed 1,508,000 square feet development consisting of warehousing and office located east of Kings Highway and south of White Road in Ft. Pierce, St. Lucie County, Florida. The purpose of this report is to determine the projects impact on the surrounding roadway system.

In order to make the determination that the project complies with County Concurrency Guidelines, the following analytical steps were taken:

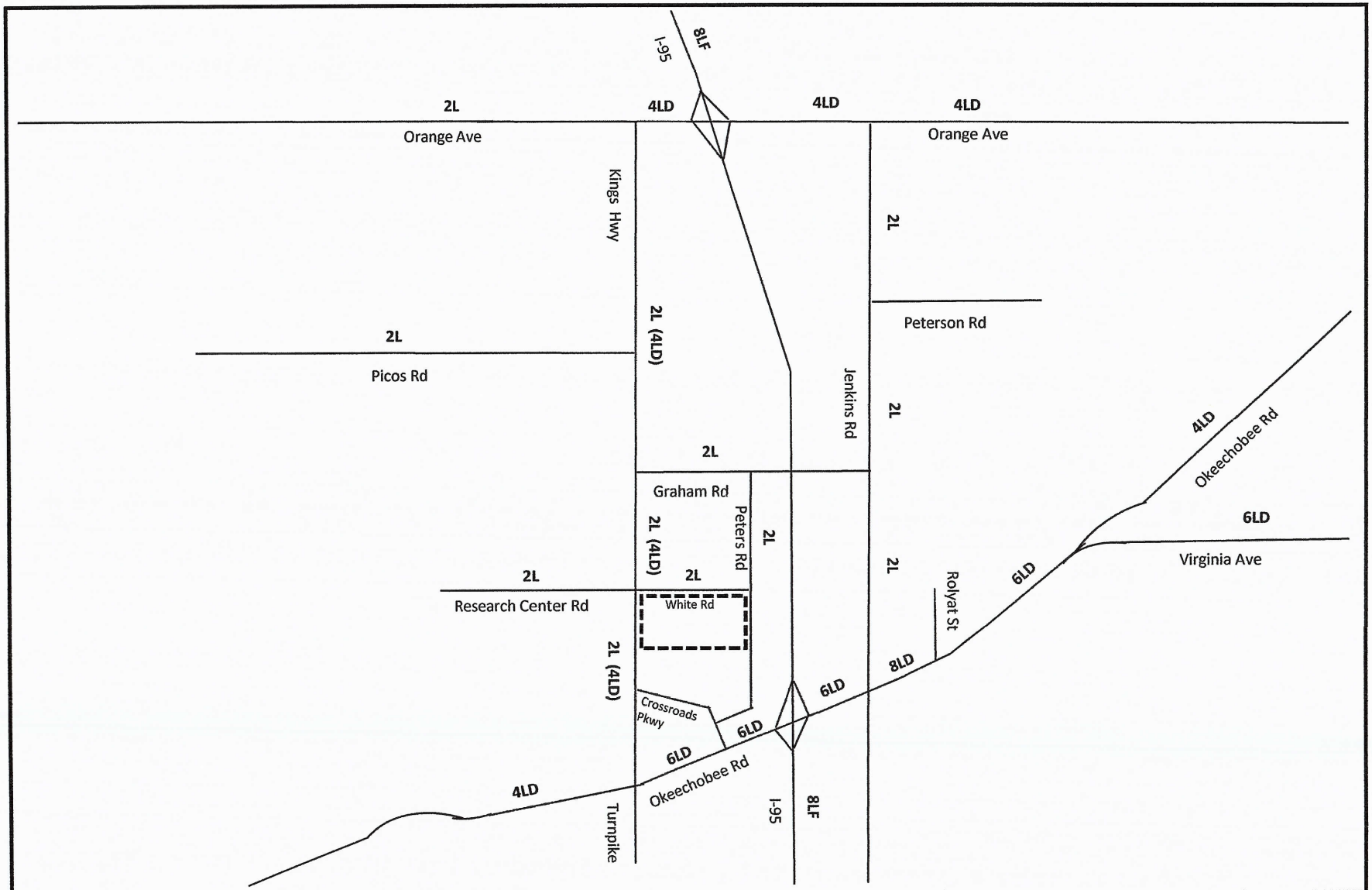
- summary of the project
- summary of existing lane geometries
- summary of the existing traffic volumes
- assessment of project traffic
- determination of impact area
- summary of buildout cumulative traffic volumes
- summary of levels of service with the project traffic added

Each of these steps is outlined herein.

PROJECT DESCRIPTION

The proposed development located east of Kings Highway and south of White Road in Ft. Pierce, St. Lucie County, Florida, will consist of 1,416,000 square feet of warehouse and 92,000 square feet of office. The site is currently vacant. The project location is shown in **Figure 1**. The traffic study is based on the current site plan.

Appendix A includes the project site plan.



NTS

O'ROURKE ENGINEERING & PLANNING

22 Seminole Street
Stuart, Fl, 34994

Job Number: SR20121.0 | Date: 7/27/2021

Legend

= Project Location

2L = Existing Lanes
(4LD) = Committed Lanes

Figure 1

Project Location

Kings Hwy Commerce Park

EXISTING CONDITIONS

The study area is defined as the roadways upon which the project has an impact of 3% of the level of service capacity of the roadway and 1% on the adjacent link. Once the project traffic was assigned, the study area was refined based on the impact percentages.

The study area roadways were defined in terms of existing lane geometrics and existing traffic volumes.

Existing/Proposed Lane Geometrics and Traffic Control

The study area was reviewed to determine the existing number and type of lanes, and the traffic control along the roadway. Each roadway is described below.

- Peters Road is a two-lane local road with a general north/south alignment.
- S. Jenkins Road is a two-lane arterial with a north/south alignment.
- Graham Road is a two-lane local roadway with an east/west alignment.
- Okeechobee Road is a multi-lane divided arterial roadway with an east/west alignment. It is four-lane divided west of Kings Highway and east of Virginia Avenue. It is six-lane divided from Rolyat Street to Virginia Avenue and from Kings Highway to I-95. There is an eight-lane divided section from east of I-95 to Rolyat Street. There are numerous extended turn lanes and freeway auxiliary lanes.
- Orange Avenue is a four-lane divided arterial with an east/ west alignment.
- Kings Highway is a two-lane arterial with a north/south alignment and is under construction in portions and included in the 5-year TIP to be widened to a four-lane divided roadway.

Existing Traffic Volumes/ Service Volume

Traffic volumes were obtained from the St. Lucie County TPO and FDOT. The count data along with the number of lanes and the associated peak hour/peak direction service volumes will be summarized in the upcoming sections of the report. The service volumes were developed based on the functional classification contained in the County Comprehensive Plan and the St. Lucie County Traffic Counts and Level of Service Report. The 2020 FDOT Quality Level of Service and St. Lucie TPO 2021 Level of Service Report were used to establish capacity. These documents are included in **Appendix B.**

PROJECT TRAFFIC

To estimate future traffic generated by the development, the ITE Trip Generation, 10th Edition trip rates for Warehouse (Land Use Code 150) and Office (Land Use Code 710) were applied to estimate the trips generated by the proposed development as it is currently site planned. These calculations are shown in **Tables 1a, 1b, and 1c**.

As shown, the project will generate 3,262 new daily trips. There will be 354 AM peak hour trips with 283 entering the project and 71 trips exiting the project. The project will generate 374 new PM peak hour trips. There will be 90 trips entering the project and 284 trips exiting the project in the PM peak hour.

Table 1 - Trip Generation Kings Highway Commerce Park - Phase II

Table 1a: Daily

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Net New Trips		
					In	Out	In	Out	Total
General Office	710	92,000	Sft	Ln(T) = 0.97Ln(X) + 2.50	50%	50%	490	489	979
Warehousing	150	1,416,000	Sft	T = 1.58(X) + 45.54	50%	50%	1,142	1,141	2,283
TOTALS							**1,632**	**1,630**	**3,262**

Source: ITE 10th Edition Trip Generation Rates

Table 1b: AM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Net New Trips		
					In	Out	In	Out	Total
General Office	710	92,000	Sft	T = 0.94(X) + 26.49	86%	14%	97	16	113
Warehousing	150	1,416,000	Sft	T = 0.17(X)	77%	23%	186	55	241
TOTALS							**283**	**71**	**354**

Source: ITE 10th Edition Trip Generation Rates

Table 1c: PM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Net New Trips		
					In	Out	In	Out	Total
General Office	710	92,000	Sft	Ln(T) = 0.95Ln(X) + 0.36	16%	84%	17	88	105
Warehousing	150	1,416,000	Sft	T = 0.19(X)	27%	73%	73	196	269
TOTALS							**90**	**284**	**374**

Source: ITE 10th Edition Trip Generation Rates

PROJECT DISTRIBUTION/ ASSIGNMENT/IMPACT

The project traffic was distributed by general geographic direction and then assigned to the roadway network.

Distribution/ Assignment – This general distribution led to an assignment of trips based on the anticipated ultimate destinations and the roadway paths used to reach those destinations. The project assignment is shown in **Figure 2.**

Impact – Tables 2a and 2b summarize the project impact as a percent of service volume capacity. Significant is defined as 1% or more on an adjacent link and 3% or more on all other links. As shown, the project is significant on several links.

OTHER PROJECT TRAFFIC/GROWTH RATE

Existing traffic volumes were grown using a 4-year area wide historical growth rate of 2.25%. Other project data includes committed traffic from Creekside, Bent Creek, Celebration Pointe, Whispering Oaks, St. Lucie Commerce Center, Walsh Crossroads, Project Hurricane, Project Hunt, Wawa Kingsgate, Stonemont, and Kings Highway Warehouse. These projects plus a reduced growth rate of 1.5% were applied to estimate background traffic.

Details of the background traffic and growth rate are included in **Appendix C**.

LINK ANALYSIS / REVIEW

The project is significant on several links, these links were analyzed further to ensure they will meet concurrency. **Table 3a and 3b** summarizes the results of the link analysis. As shown, all roadways will operate at acceptable levels of service at project buildout. Jenkins Road exceeds the theoretical capacity, a detailed analysis using ArtPlan was used to demonstrate concurrency.

The detailed analysis is included in **Appendix D.**

INTERSECTION ANALYSIS/SIGNAL WARRANT

The intersection of White Road at Kings Highway was analyzed for the AM and PM peak hours using HCS for unsignalized intersections. As part of the Kings Highway widening project, Research Center Road and White Road will be aligned as an unsignalized intersection that will operate at E for the westbound approach. The FDOT has approved a signal when warranted. The intersection will operate at a level of service D at project build out as a signalized intersection. A signal warrant for the intersection was also conducted using the 8-hour, 4-hour and peak hour warrants. At project buildout the intersection of Kings Highway and White Road would satisfy the 8-hour, 4-hour, and peak hour signal warrants at 70% thresholds.

The intersection data and signal warrant are shown in **Appendix E.** The LOS results are included in the next section of the report.

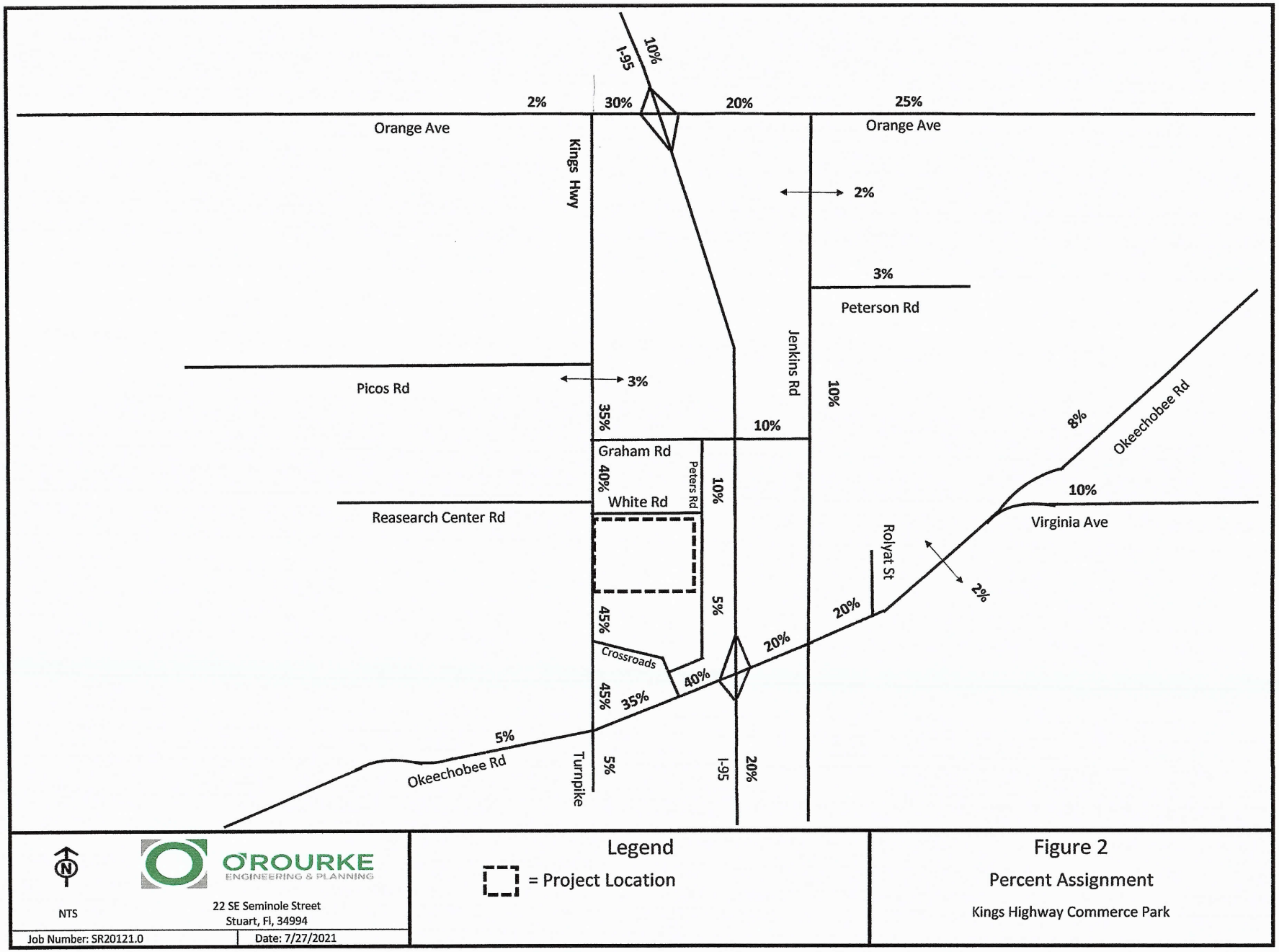

I-95
10%
2%
30%
20%
25%
Orange Ave
Orange Ave
Kings Hwy
2%
3%
Peterson Rd
Jenkins Rd
10%
Picos Rd
3%
35%
10%
Graham Rd
40%
White Rd
Peters Rd
10%
Reasearch Center Rd
8%
Okeechobee Rd
10%
Virginia Ave
Rolyat St
2%
20%
5%
45%
Crossroads
20%
40%
45%
35%
5%
Okeechobee Rd
Turnpike
5%
I-95
20%
NTS
O'ROURKE
ENGINEERING & PLANNING
22 SE Seminole Street
Stuart, Fl, 34994
Job Number: SR20121.0
Date: 7/27/2021
Legend
= Project Location
Figure 2
Percent Assignment
Kings Highway Commerce Park

TABLE 2a - Project Percent Impact - AM

Segment	From	To	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)[2]	Peak Hour Service Capacity (E+C)[1]	Project Volume Peak Direction	% Project of Capacity-Peak Hour	Project Percent Assignment
Peters Rd	Crossroads Pkwy	White Rd	NB	IN	YES	920	14	1.52%	5%
	Crossroads Pkwy	White Rd	SB	OUT	NO	920	4	0.43%	5%
	White Rd	Graham Rd	NB	OUT	NO	920	7	0.76%	10%
	White Rd	Graham Rd	SB	IN	YES	920	28	3.04%	10%
Kings Hwy	Okeechobee Rd	Crossroads Pkwy	NB	IN	YES	1800	127	7.06%	45%
	Okeechobee Rd	Crossroads Pkwy	SB	OUT	NO	1800	32	1.78%	45%
	Crossroads Pkwy	Project Entrance	NB	IN	YES	1800	127	7.06%	45%
	Crossroads Pkwy	Project Entrance	SB	OUT	YES	1800	32	1.78%	45%
	Project Entrance	Graham Rd	NB	OUT	YES	1800	28	1.56%	40%
	Project Entrance	Graham Rd	SB	IN	YES	1800	113	6.28%	40%
	Graham Rd	Picos Rd	NB	OUT	NO	1800	25	1.39%	35%
	Graham Rd	Picos Rd	SB	IN	YES	1800	99	5.50%	35%
	Picos Rd	Orange Ave	NB	OUT	NO	1800	23	1.28%	32%
	Picos Rd	Orange Ave	SB	IN	YES	1800	91	5.06%	32%
Graham Rd	Kings Hwy	Jenkins Rd	EB	OUT	NO	630	7	1.11%	10%
	Kings Hwy	Jenkins Rd	WB	IN	YES	630	28	4.44%	10%
Virginia Ave	Okeechobee Rd	Hartman Rd	EB	OUT	NO	3020	7	0.23%	10%
	Okeechobee Rd	Hartman Rd	WB	IN	NO	3020	28	0.93%	10%
Orange Ave	Jenkins Rd	Hartman Rd	EB	OUT	NO	2100	18	0.86%	25%
	Jenkins Rd	Hartman Rd	WB	IN	YES	2100	71	3.38%	25%
	I-95	Jenkins Rd	EB	IN	NO	2100	57	2.71%	20%
	I-95	Jenkins Rd	WB	OUT	NO	2100	14	0.67%	20%
	Kings Hwy	I - 95	EB	OUT	NO	2100	21	1.00%	30%
	Kings Hwy	I - 95	WB	IN	YES	2100	85	4.05%	30%
	Campbell Rd	Kings Hwy	EB	IN	NO	1070	6	0.56%	2%
	Campbell Rd	Kings Hwy	WB	OUT	NO	1070	1	0.09%	2%
Jenkins Rd	Graham Rd	Peterson Rd	NB	OUT	NO	630	7	1.11%	10%
	Graham Rd	Peterson Rd	SB	IN	YES	630	28	4.44%	10%
	Peterson Rd	Orange Ave	NB	OUT	NO	920	7	0.76%	10%
	Peterson Rd	Orange Ave	SB	IN	YES	920	28	3.04%	10%
Okeechobee Rd	McCarty Rd	Florida Turnpike	EB	IN	NO	3240	14	0.43%	5%
	McCarty Rd	Florida Turnpike	WB	OUT	NO	3240	4	0.12%	5%
	Florida Turnpike	Kings Hwy	EB	IN	NO	2100	14	0.67%	5%
	Florida Turnpike	Kings Hwy	WB	OUT	NO	2100	4	0.19%	5%
	Kings Hwy	I - 95	EB	OUT	NO	4240	28	0.66%	40%
	Kings Hwy	I - 95	WB	IN	NO	4240	113	2.67%	40%
	I - 95	Jenkins Rd	EB	OUT	NO	4240	14	0.33%	20%
	I - 95	Jenkins Rd	WB	IN	NO	4240	57	1.34%	20%
	Jenkins Rd	McNeil Ave	EB	OUT	NO	4040	14	0.35%	20%
	Jenkins Rd	McNeil Ave	WB	IN	NO	4040	57	1.41%	20%
I-95	Midway Rd	Okeechobee Rd	NB	IN	NO	5500	57	1.04%	20%
	Midway Rd	Okeechobee Rd	SB	OUT	NO	5500	14	0.25%	20%
	Orange Ave	Indrio Rd	NB	OUT	NO	7320	7	0.10%	10%
	Orange Ave	Indrio Rd	SB	IN	NO	7320	28	0.38%	10%

(1) FDOT 2020 Service Capacity Tables & St. Lucie TPO

(2) According to the Guidelines prepared by the TPO and modified by the City and County

Two-Way:	354
Net In:	283
Net Out:	71

TABLE 2b - Project Percent Impact - PM

Segment	From	To	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)[2]	Peak Hour Service Capacity (E+C)[1]	Project Volume Peak Direction	% Project of Capacity-Peak Hour	Project Percent Assignment
Peters Rd	Crossroads Pkwy	White Rd	NB	IN	NO	920	5	0.54%	5%
	Crossroads Pkwy	White Rd	SB	OUT	YES	920	14	1.52%	5%
	White Rd	Graham Rd	NB	OUT	YES	920	28	3.04%	10%
	White Rd	Graham Rd	SB	IN	NO	920	9	0.98%	10%
Kings Hwy	Okeechobee Rd	Crossroads Pkwy	NB	IN	NO	1800	41	2.28%	45%
	Okeechobee Rd	Crossroads Pkwy	SB	OUT	YES	1800	128	7.11%	45%
	Crossroads Pkwy	Project Entrance	NB	IN	YES	1800	41	2.28%	45%
	Crossroads Pkwy	Project Entrance	SB	OUT	YES	1800	128	7.11%	45%
	Project Entrance	Graham Rd	NB	OUT	YES	1800	114	6.33%	40%
	Project Entrance	Graham Rd	SB	IN	YES	1800	36	2.00%	40%
	Graham Rd	Picos Rd	NB	OUT	YES	1800	99	5.50%	35%
	Graham Rd	Picos Rd	SB	IN	NO	1800	32	1.78%	35%
	Picos Rd	Orange Ave	NB	OUT	YES	1800	91	5.06%	32%
	Picos Rd	Orange Ave	SB	IN	NO	1800	29	1.61%	32%
Graham Rd	Kings Hwy	Jenkins Rd	EB	OUT	YES	630	28	4.44%	10%
	Kings Hwy	Jenkins Rd	WB	IN	NO	630	9	1.43%	10%
Virginia Ave	Okeechobee Rd	Hartman Rd	EB	OUT	NO	3020	28	0.93%	10%
	Okeechobee Rd	Hartman Rd	WB	IN	NO	3020	9	0.30%	10%
Orange Ave	Jenkins Rd	Hartman Rd	EB	OUT	YES	2100	71	3.38%	25%
	Jenkins Rd	Hartman Rd	WB	IN	NO	2100	23	1.10%	25%
	I-95	Jenkins Rd	EB	OUT	NO	2100	57	2.71%	20%
	I-95	Jenkins Rd	WB	IN	NO	2100	18	0.86%	20%
	Kings Hwy	I - 95	EB	OUT	YES	2100	85	4.05%	30%
	Kings Hwy	I - 95	WB	IN	NO	2100	27	1.29%	30%
	Campbell Rd	Kings Hwy	EB	IN	NO	1070	2	0.19%	2%
	Campbell Rd	Kings Hwy	WB	OUT	NO	1070	6	0.56%	2%
Jenkins Rd	Graham Rd	Peterson Rd	NB	OUT	YES	630	28	4.44%	10%
	Graham Rd	Peterson Rd	SB	IN	NO	630	9	1.43%	10%
	Peterson Rd	Orange Ave	NB	OUT	YES	920	28	3.04%	10%
	Peterson Rd	Orange Ave	SB	IN	NO	920	9	0.98%	10%
Okeechobee Rd	McCarty Rd	Florida Turnpike	EB	IN	NO	3240	5	0.15%	5%
	McCarty Rd	Florida Turnpike	WB	OUT	NO	3240	14	0.43%	5%
	Florida Turnpike	Kings Hwy	EB	IN	NO	2100	5	0.24%	5%
	Florida Turnpike	Kings Hwy	WB	OUT	NO	2100	14	0.67%	5%
	Kings Hwy	I - 95	EB	OUT	NO	4240	114	2.69%	40%
	Kings Hwy	I - 95	WB	IN	NO	4240	36	0.85%	40%
	I - 95	Jenkins Rd	EB	OUT	NO	4240	57	1.34%	20%
	I - 95	Jenkins Rd	WB	IN	NO	4240	18	0.42%	20%
	Jenkins Rd	Virginia Ave	EB	OUT	NO	4040	57	1.41%	20%
	Jenkins Rd	Virginia Ave	WB	IN	NO	4040	18	0.45%	20%
I-95	Midway Rd	Okeechobee Rd	NB	IN	NO	5500	18	0.33%	20%
	Midway Rd	Okeechobee Rd	SB	OUT	NO	5500	57	1.04%	20%
	Orange Ave	Indrio Rd	NB	OUT	NO	7320	28	0.38%	10%
	Orange Ave	Indrio Rd	SB	IN	NO	7320	9	0.12%	10%

(1) FDOT 2020 Service Capacity Tables & St. Lucie TPO

(2) According to the Guidelines prepared by the TPO and modified by the City and County

Two-Way:	374
Net In:	90
Net Out:	284

TABLE 3a - Link Analysis - AM

Segment	From	To	Direction	AADT 2020 (4)	D Factor	Last Count Year from TPO	Peak Hour Volume - Peak Direction from TPO	2022 Peak Hour Directional Volumes	Yearly Growth Rate (from 2022 to 2023)	2023 AM Peak Hour + Growth	AM Peak Hour Committed Projects Directional	2023 Growth + Committed Peak Direction	Peak Hour Service (1 Capacity	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity- Peak Hour	Does Project Satisfy Concurrency?	Project Percent Assignment
Peters Rd	Crossroads Pkwy	White Rd	NB	na	0.562	N/A	43(4)	45	1.50%	46	23	69	920	14	83	1.52%	YES	5%
	White Rd	Graham Rd	SB	na	0.438	N/A	41(4)	43	1.50%	44	13	57	920	28	85	3.04%	YES	10%
Kings Hwy	Okeechobee Rd	Crossroads Pkwy	NB	7900	0.562	2020	363	380	1.50%	385	38	423	1800	127	550	7.06%	YES	45%
	Crossroads Pkwy	Project Entrance	NB	7900	0.562	2020	363	380	1.50%	385	38	423	1800	127	550	7.06%	YES	45%
	Crossroads Pkwy	Project Entrance	SB	7900	0.438	2020	283 (3)	296	1.50%	300	14	314	1800	32	346	1.78%	YES	45%
	Project Entrance	Graham Rd	NB	7900	0.562	2020	363	380	1.50%	385	38	423	1800	28	451	1.56%	YES	40%
	Project Entrance	Graham Rd	SB	7900	0.438	2020	283 (3)	296	1.50%	300	14	314	1800	113	427	6.28%	YES	40%
	Graham Rd	Picos Rd	SB	7000	0.438	2020	283 (3)	231	1.50%	234	14	248	1800	99	347	5.50%	YES	35%
	Picos Rd	Orange Ave	SB	7000	0.438	2020	283 (3)	231	1.50%	234	45	279	1800	91	370	5.06%	YES	32%
Graham Rd	Kings Hwy	Jenkins Rd	WB	3833	0.509	2017	262	293	1.50%	297	0	297	630	7	304	1.11%	YES	10%
Orange Ave	Jenkins Rd	Hartman Rd	WB	14400	0.509	2020	705	737	1.50%	748	68	816	2100	71	887	3.38%	YES	25%
	Kings Hwy	I - 95	WB	19000	0.562	2020	856	895	1.50%	908	144	1052	2100	85	1137	4.05%	YES	30%
Jenkins Rd	Graham Rd	Peterson Rd	SB	9900	0.509	2021	517	529	1.50%	513	101	614	630	28	642	4.44%	YES (5)	10%
	Peterson Rd	Orange Ave	SB	9900	0.509	2021	517	529	1.50%	513	123	636	920	28	664	3.04%	YES	10%

(1) St. Lucie County 2021 Traffic Counts and LOS Report

(2) TPO volumes grown to 2022 using area wide average growth rate.

(3) Calculated using TPO peak hour volumes and D Factors from traffic counts.

(4) Existing 2021 Count

(5) Detailed Analysis used to demonstrate Concurrency

Two-Way: 354
Net In: 283
Net Out: 71
Years Grown: 1
Area Wide Weighted Average Growth Rate (applied to get 2022 traffic volumes): 2.25%

TABLE 3b - Link Analysis - PM

Segment	From	To	Direction	AADT 2020	D Factor	Last Count Year from TPO	Peak Hour Volume - Peak Direction from TPO	2022 Peak Hour Directional Volumes	Yearly Growth Rate (from 2022 to 2023)	2023 PM Peak Hour + Growth	PM Peak Hour Committed Projects Directional	2023 Growth + Committed Peak Direction	Peak Hour Service Capacity (1)	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity- Peak Hour	Does Project Satisfy Concurrency?	Project Percent Assignment
Peters Rd	Crossroads Pkwy	White Rd	SB	na	0.562	N/A	25(4)	26	1.50%	27	24	51	920	14	65	1.52%	YES	5%
	White Rd	Graham Rd	NB	na	0.438	N/A	42(4)	44	1.50%	45	13	58	920	28	86	3.04%	YES	10%
Kings Hwy	Okeechobee Rd	Crossroads Pkwy	SB	7900	0.562	2020	371	388	1.50%	394	43	437	1800	128	565	7.11%	YES	45%
	Crossroads Pkwy	Project Entrance	NB	7900	0.438	2020	289 (3)	302	1.50%	307	38	345	1800	41	386	2.28%	YES	45%
	Crossroads Pkwy	Project Entrance	SB	7900	0.562	2020	371	388	1.50%	394	43	437	1800	128	565	7.11%	YES	45%
	Project Entrance	Graham Rd	NB	7900	0.438	2020	289 (3)	302	1.50%	307	38	345	1800	114	459	6.33%	YES	40%
	Project Entrance	Graham Rd	SB	7900	0.562	2020	371	388	1.50%	394	43	437	1800	36	473	2.00%	YES	40%
	Graham Rd	Picos Rd	NB	7000	0.438	2020	253 (3)	265	1.50%	268	38	306	1800	99	405	5.50%	YES	35%
	Picos Rd	Orange Ave	NB	7000	0.438	2020	253 (3)	265	1.50%	268	114	382	1800	91	473	5.06%	YES	32%
Graham Rd	Kings Hwy	Jenkins Rd	EB	3833	0.509	2017	250	279	1.50%	284	0	284	630	28	312	4.44%	YES	10%
Orange Ave	Jenkins Rd	Hartman Rd	EB	14400	0.509	2020	655	685	1.50%	695	79	774	2100	71	845	3.38%	YES	25%
	Kings Hwy	I - 95	EB	19000	0.562	2020	863	902	1.50%	916	96	1012	2100	85	1097	4.05%	YES	30%
Jenkins Rd	Graham Rd	Peterson Rd	NB	9900	0.509	2021	523	535	1.50%	543	96	639	630	28	667	4.44%	YES (5)	10%
	Peterson Rd	Orange Ave	NB	9900	0.509	2021	523	535	1.50%	543	177	720	920	28	748	3.04%	YES	10%

(1) St. Lucie County 2021 Traffic Counts and LOS Report

(2) TPO volumes grown to 2022 using area wide average growth rate.

(3) Calculated using TPO peak hour volumes and D Factors from traffic counts.

(4) Existing 2021 Count

(5) Detailed Analysis used to demonstrate Concurrency

Two-Way: 374
Net In: 90
Net Out: 284
Years Grown: 1
Area Wide Weighted Average Growth Rate (applied to get 2022 traffic volumes): 2.25%

DRIVEWAY ANALYSIS

The project will have a total of 5 driveways. Driveway 1 will be a directional access driveway on Kings Highway with right-in/left-in/right-out access. Driveways 2, 3, and 4 will be full access driveways located on White Road. Driveway 5 will be a full access driveway located on Peters Road. **Figure 3** shows the driveway volumes for the AM and PM peak hours. These driveways were analyzed using HCS. The analysis shows all 5 driveways will operate at an acceptable level of service at project buildout.

Table 4 summarizes the results. The driveway analysis is shown in **Appendix F.**

Table 4: Intersection Analysis Results

Intersection	2023 with Project				2023 without Project			
	AM		PM		AM		PM	
	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay(s)	LOS
Kings Highway & White Road	EB - 21.3 WB - 25.4 [18.4]	EB - C WB - D B	EB - 23.4 WB - 37.3 [32.1]	EB - C WB - E C	EB - 16.7 WB - 45.1 [12.3]	EB - C WB - E B	EB - 20.3 WB - 51.2 [24.2]	EB - C WB - F C
Kings Highway & Driveway 1	10.0	B	9.7	B		NOT	APPLICABLE	
White Road & Driveway 2	9.4	A	10.0	B				
White Road & Driveway 3	9.1	A	9.5	A				
White Road & Driveway 4	8.8	A	9.0	A				
Peters Road & Driveway 5	EB - 9.5	EB-A	EB - 9.7	EB-A				
Kings Highway & Orange Avenue	54.4	D	70.2 (54.1)	E (D)	54.2	D	68.6 (53.1)	E (D)
Kings Highway & Okeechobee	51.4	D	54.6	D	51.3	D	54.9	D

*LOS D as Signalized

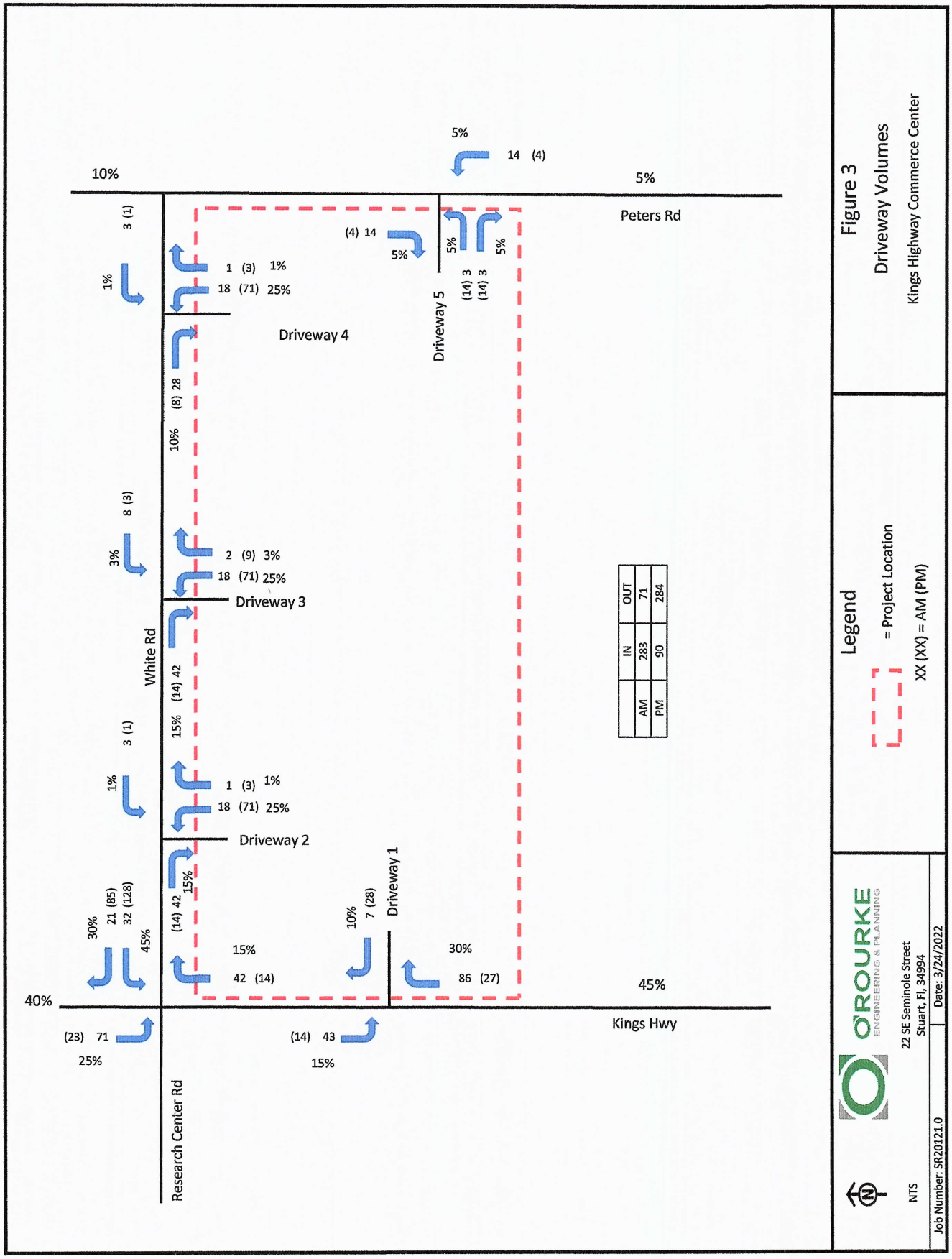
( ) = with restriped dual lefts NB/SB

[ ] = with signal

CONCLUSION

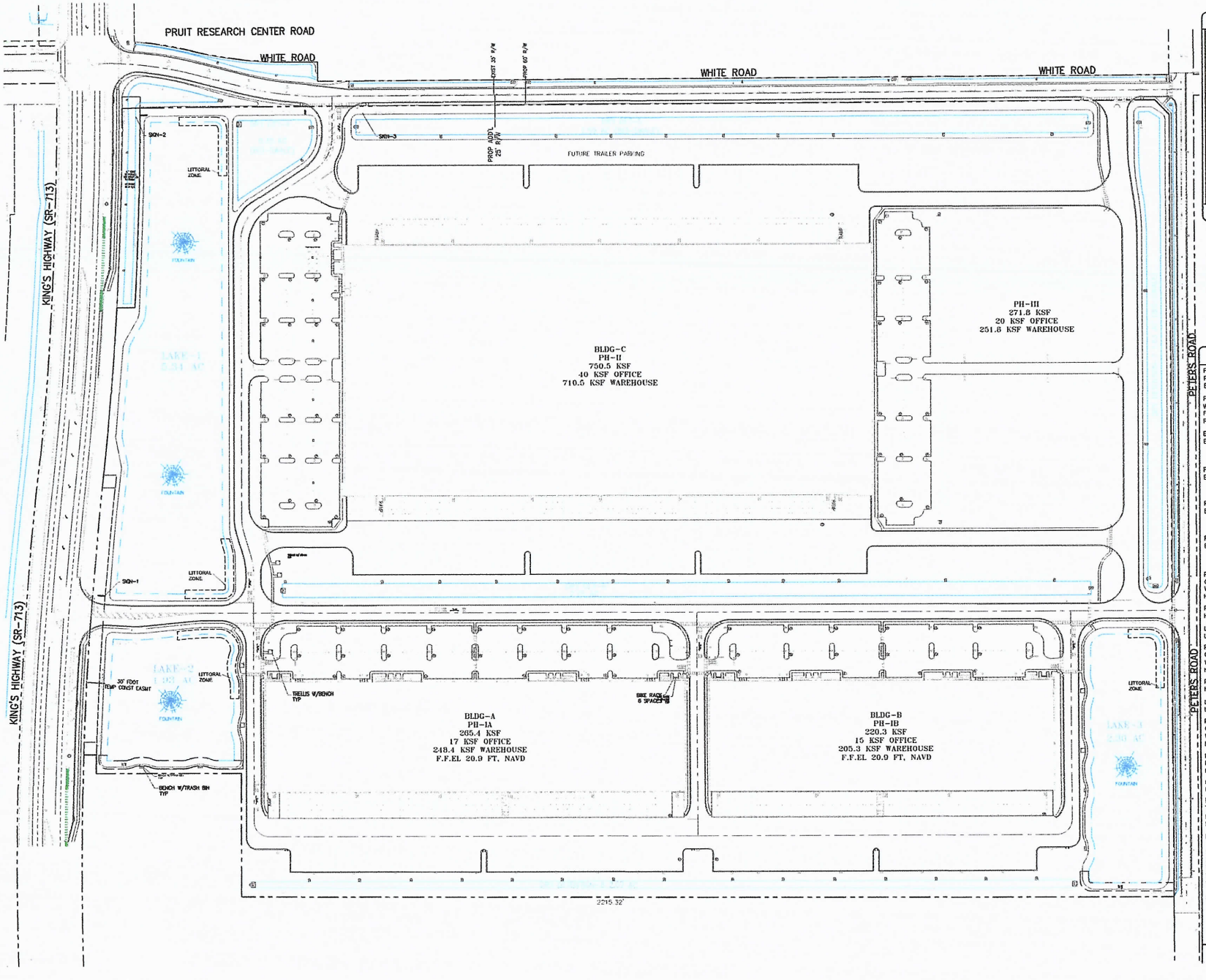
With 354 net new AM peak hour trips and 374 net new PM peak hour trips, all links and intersections operate at acceptable levels of service with the existing roadway network. Therefore, the project meets the requirements for concurrency.

Additionally, with the maximum use/industrial park scenario, level of service is maintained at all links and intersections. The analysis included in **Appendix A** supports this conclusion. Therefore, the project can maintain flexibility if a more traffic intense user than the warehouse use occupies the project.

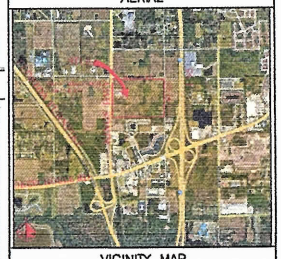

Peters Rd
Kings Hwy
Research Center Rd
White Rd
Driveway 1
Driveway 2
Driveway 3
Driveway 4
Driveway 5
10%
5%
40%
45%
5% 14 (4)
(4) 14 5%
5% 5%
(14) 3
(14) 3
1% 3 (1)
1 (3) 1%
18 (71) 25%
10% (8) 28
3% 8 (3)
2 (9) 3%
18 (71) 25%
15% (14) 42
1% 3 (1)
1 (3) 1%
18 (71) 25%
15% (14) 42
30% 21 (85)
45% 32 (128)
15% 42 (14)
10% 7 (28)
30% 86 (27)
(23) 71 25%
(14) 43 15%
IN OUT
AM 283 71
PM 90 284
Legend
= Project Location
XX (XX) = AM (PM)
Figure 3
Driveway Volumes
Kings Highway Commerce Center
O'ROURKE ENGINEERING & PLANNING
22 SE Seminole Street
Stuart, Fl, 34994
NTS
Job Number: SR20121.0
Date: 3/24/2022

APPENDIX A

SITE PLAN

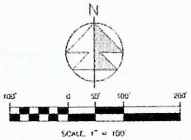


AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E



SITE DATA

PROPOSED USE	OFFICE/WAREHOUSE/DISTRIBUTION		
FUTURE LAND USE	CG/MXD		
EXISTING ZONING	CP-1		
PARCEL AREA	4,768,078 SF	109.46 AC	
WHITE RD PROP R/W	62,812 SF	1.44 AC	
FDOT PROP R/W	20,604 SF	0.47 AC	
PROJECT AREA	4,684,660 SF	107.55 AC	100%
BUILDOUT			
BUILDING AREA	1,508,000 SF		31.6%
OFFICE	92,000 SF		
WAREHOUSE	1,416,000 SF		
PHASE-I			
BUILDING AREA	485,700 SF		
OFFICE	32,000 SF		
WAREHOUSE	453,700 SF		
PHASE-II			
BUILDING AREA	750,500 SF		
OFFICE	40,000 SF		
WAREHOUSE	710,500 SF		
PHASE-III			
BUILDING AREA	271,800 SF		
OFFICE	20,000 SF		
WAREHOUSE	251,800 SF		
PARKING REQ PH-I			254 SP
OFFICE ITE RATE	32,000 SF @ 2.39/KSF		77 SP
WAREHOUSE ITE RATE	453,000 SF @ 0.39/KSF		177 SP
HANDICAP			7 SP
PARKING PROP			532 SP
HANDICAP			16 SP
LOADING REQ			17 SP
LOADING PROP			116 SP
PARKING REQ PH-II			373 SP
OFFICE ITE RATE	40,000 SF @ 2.39/KSF		96 SP
WAREHOUSE ITE RATE	710,500 SF @ 0.39/KSF		277 SP
HANDICAP			8 SP
PARKING PROP			623 SP
HANDICAP			13 SP
LOADING REQ			25 SP
LOADING PROP			144 SP
PARKING REQ PH-III			146 SP
OFFICE ITE RATE	20,000 SF @ 2.39/KSF		48 SP
WAREHOUSE ITE RATE	251,800 SF @ 0.39/KSF		98 SP
HANDICAP			5 SP
PARKING REQ PH-II & III			519 SP
PARKING PROP PH-II & III			623 SP
HANDICAP			13 SP
LOADING REQ			9 SP
LOADING PROP			46 SP
PAVT/SW	1,749,370 SF		37.3%
TOTAL IMPERVIOUS	3,257,370 SF		69.5%
LAKES	416,869 SF		8.9%
PERVIOUS	1,010,042 SF		21.6%
BLDG HEIGHT	65 FT MAX		

SETBACKS	REQ'D	PROP
FRONT	15'	485'
REAR	10'	251.6'
SIDE STREET	10'	58.6'
SIDE	20'	282'

PCN
2324-210-0000-000-6
2324-232-0000-000-4
2324-311-0002-000-2
2324-311-0001-000-4
2324-314-0001-000-5
2324-241-0005-000-3
2324-241-0003-000-7
2324-241-0002-000-8
2324-241-0004-000-0

REVISIONS

REV PER CITY 06-25-21
REV PER JF 06-25-21
REV PER SLC 07-26-21
REV PER FDOT 08-25-21
REV PER FDOT 09-17-21
REV PER FDOA 11-30-21
REV PER SP 01-15-21
REV PH-II 02-22-2022

Jeff Hall Inman, Inc.
Consulting Engineers
1934 COMMERCE LANE, SUITE 5
JUPITER, FLORIDA 33458
TEL: (561) 575-6030
FAX: (561) 575-6088
EMAIL: JHI@bellsouth.net
WEBSITE: www.JHIinc.com

Kings Highway Commerce Park

A-1

Fort Pierce, Florida

Master Site Plan

DRAWN BY	DESIGNED BY	SCALE	DATE
DDI	JHI	1" = 100'	01-22-2021

SEAL

SHEET NO.
MSP-1

APPENDIX B

ST. LUCIE COUNTY 2021 LEVEL OF SERVICE REPORT
&
FDOT 2020 QUALITY LEVEL OF SERVICE

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2021

Roadway Name	Location	STATION ID	AADT	Last Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	667	4,778	2020	750	295	C	0.393	266	C	0.355
GEORGIA AVE	17TH ST to 13TH ST	508	4,723	2019	600	263	C	0.438	267	C	0.445
GEORGIA AVE	13TH ST to 7TH ST	506	2,165	2019	600	133	C	0.222	136	C	0.227
GEORGIA AVE	7TH ST to US 1	504	1,939	2019	600	122	C	0.203	135	C	0.225
GILSON RD	MARTIN C.L. to BECKER RD	111	10,500	2021	710	880	F	1.239	910	F	1.282
GILSON RD	BECKER RD to LAKERIDGE DR	111	10,500	2021	540	880	F	1.63	910	F	1.685
GLADES CUT-OFF RD	RANGE LINE RD to RESERVE BLVD	668	2,967	2017	1,070	209	B	0.195	264	B	0.247
GLADES CUT-OFF RD	RESERVE BLVD to COMMERCE CENTER DR	119	3,634	2016	1,070	336	B	0.314	336	B	0.314
GLADES CUT-OFF RD	CARLTON RD to RANGE LINE RD	668	2,967	2017	390	209	B	0.536	264	C	0.677
GLADES CUT-OFF RD	COMMERCE CENTER DR to MIDWAY RD	940279	3,400	2020	920	187	C	0.203	171	C	0.186
GLADES CUT-OFF RD	MIDWAY RD to JENKINS RD	115	8,500	2021	790	510	D	0.646	540	D	0.684
GLADES CUT-OFF RD	JENKINS RD to SELVITZ RD	113	6,575	2020	830	368	C	0.443	384	C	0.463
GRAHAM RD	KINGS HWY to JENKINS RD	669	3,833	2017	630	262	C	0.416	250	C	0.397
GREEN RIVER PKWY	MARTIN C.L. to CHARLESTON DR	319	5,700	2021	1,070	395	C	0.369	359	B	0.336
GREEN RIVER PKWY	CHARLESTON DR to MELALEUCA BLVD	319	5,700	2021	1,070	395	C	0.369	359	B	0.336
GREEN RIVER PKWY	MELALEUCA BLVD to WALTON RD	319	5,700	2021	1,070	395	C	0.369	359	B	0.336
HARTMAN RD	OKEECHOBEE RD to PETERSON RD	670	6,000	2021	750	286	C	0.381	280	C	0.373
HARTMAN RD	PETERSON RD to DELAWARE AVE	670	6,000	2021	540	286	D	0.53	280	D	0.519
HARTMAN RD	DELAWARE AVE to ORANGE AVE	670	6,000	2021	790	286	C	0.362	280	C	0.354
HEADER CANAL RD	OKEECHOBEE RD to ORANGE AVE	121	570	2019	670	47	B	0.07	57	B	0.085
HILLMOOR DR	US 1 to LENNARD RD	671	7,057	2019	790	366	C	0.463	465	D	0.589
I-95	GATLIN BLVD to ST LUCIE WEST BLVD	941901	80,500	2020	5,500	4,122	C	0.749	3,723	C	0.677
I-95	ST LUCIE WEST BLVD to MIDWAY RD	941904	66,431	2018	5,500	3,736	C	0.679	3,222	B	0.586
I-95	MIDWAY RD to OKEECHOBEE RD	941902	79,206	2018	5,500	5,004	D	0.91	4,063	C	0.739
I-95	OKEECHOBEE RD to ORANGE AVE	940260	60,386	2020	7,320	2,804	B	0.383	2,804	B	0.383

B-1

* Note: A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
*** Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2021

Roadway Name	Location	STATION ID	AADT	Last Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
I-95	ORANGE AVE to INDRIO RD	941905	48,500	2020	7,320	2,470	B	0.337	2,274	B	0.311
INDIAN RIVER DR	CITRUS AVE to ORANGE AVE	945029	6,600	2020	800	310	C	0.388	355	C	0.444
INDIAN RIVER DR	ORANGE AVE to AVENUE A	940003	5,500	2020	750	260	C	0.347	253	C	0.337
INDIAN RIVER DR	AVENUE D to SEAWAY DR	940004	7,200	2020	840	344	C	0.41	405	D	0.482
INDIAN RIVER DR	AVENUE A to AVENUE D	940004	7,200	2020	540	344	C	0.637	405	D	0.75
INDRIO RD	PRIVATE RD to I-95 W RAMP	940128	850	2020	1,080	40	B	0.037	43	B	0.04
INDRIO RD	I-95 W RAMP to I-95 E RAMP	940128	850	2020	3,240	40	B	0.012	43	B	0.013
INDRIO RD	I-95 E RAMP to KOBLEGARD RD	940038	9,800	2020	3,240	480	B	0.148	505	B	0.156
INDRIO RD	KOBLEGARD RD to JOHNSTON RD	940038	9,800	2020	700	480	C	0.686	505	C	0.721
INDRIO RD	JOHNSTON RD to EMERSON AVE	940038	9,800	2020	880	480	C	0.545	505	C	0.574
INDRIO RD	EMERSON RD to SEMINOLE RD	940281	8,600	2020	920	471	C	0.512	397	C	0.432
INDRIO RD	SEMINOLE RD to KINGS HWY	940281	8,600	2020	790	471	D	0.596	397	D	0.503
INDRIO RD	KINGS HWY to SLASH PINE TRL	114	5,909	2020	840	378	C	0.45	370	C	0.44
INDRIO RD	SLASH PINE TRL to US 1	114	5,909	2020	920	378	C	0.411	370	C	0.402
INDRIO RD	US 1 to OLD DIXIE HWY	672	900	2016	750	63	C	0.084	85	C	0.113
JENNINGS RD	US 1 to LENNARD RD	673	4,633	2016	2,100	306	C	0.146	250	C	0.119
JENKINS RD	EDWARDS RD to OKEECHOBEE RD	133	11,500	2021	880	541	C	0.615	593	C	0.674
JENKINS RD	OKEECHOBEE RD to GRAHAM RD	131	9,900	2021	920	517	C	0.562	523	C	0.568
JENKINS RD	GRAHAM RD to PETERSON RD	131	9,900	2021	630	517	C	0.821	523	C	0.83
JENKINS RD	PETERSON RD to ORANGE AVE	131	9,900	2021	920	517	C	0.562	523	C	0.568
JOHNSTON RD	ANGLE RD to L20	674	2,700	2016	1,070	183	B	0.171	177	B	0.165
JOHNSTON RD	L20 to MEADOWOOD DR	675	2,333	2017	1,070	148	B	0.138	144	B	0.135
JOHNSTON RD	MEADOWOOD DR to OLD JOHNSTON RD	675	2,333	2017	1,070	148	B	0.138	144	B	0.135
JOHNSTON RD	OLD JOHNSTON RD to INDRIO RD	675	2,333	2017	1,070	148	B	0.138	144	B	0.135
JOHNSTON RD	INDRIO RD to RUSSOS RD	135	8,424	2020	1,070	477	C	0.446	479	C	0.448

B-2

* Note: A six digit number in the "STATION ID" column identifies segment counted by FDOT
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* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

St. Lucie Transportation Planning Organization

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466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2021

Roadway Name	Location	STATION ID	AADT	Last Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
JOHNSTON RD	RUSSOS RD to INDIAN RIVER C.L.	135	8,424	2020	1,070	477	C	0.446	479	C	0.448
JUANITA AVE	53RD ST to 25TH ST	122	2,176	2017	750	140	C	0.187	128	C	0.171
JUANITA AVE	25TH ST to US 1	120	3,226	2017	750	180	C	0.24	177	C	0.236
KEEN RD	ANGLE RD to JUANITA AVE	129	2,926	2019	630	176	C	0.279	206	C	0.327
KEEN RD	JUANITA AVE to ST LUCIE BLVD	129	2,926	2019	630	176	C	0.279	206	C	0.327
KINGS HWY	OKEECHOBEE RD to CROSSROADS PKWY	940757	7,900	2020	880	363	C	0.413	371	C	0.422
KINGS HWY	CROSSROADS PKWY to GRAHAM RD	940757	7,900	2020	700	363	C	0.519	371	C	0.53
KINGS HWY	GRAHAM RD to PICOS RD	940076	7,000	2020	700	337	C	0.481	324	C	0.463
KINGS HWY	PICOS RD to ORANGE AVE	940076	7,000	2020	880	337	C	0.383	324	C	0.368
KINGS HWY	ORANGE AVE to ANGLE RD	940077	14,100	2020	920	662	C	0.72	666	C	0.724
NGS HWY	ANGLE RD to ST LUCIE BLVD	940751	10,500	2020	880	531	C	0.603	533	C	0.606
NGS HWY	ST LUCIE BLVD to INDRIO RD	940006	13,200	2020	880	744	C	0.845	699	C	0.794
KIRBY LOOP RD	EDWARDS RD to 35TH ST	677	2,400	2021	630	139	C	0.221	129	C	0.205
KITTERMAN RD	OLEANDER AVE to US 1	124	3,482	2018	750	229	C	0.305	208	C	0.277
KITTERMAN RD	US 1 to LENNARD EXT	678	2,233	2017	750	127	C	0.169	129	C	0.172
LENNARD RD	US 1 to MARIPOSA AVE	325	20,078	2019	1,710	1,034	D	0.605	1,068	D	0.625
LENNARD RD	MARIPOSA AVE to MELALEUCA BLVD	325	20,078	2019	1,710	1,034	D	0.605	1,068	D	0.625
LENNARD RD	MELALEUCA BLVD to JENNINGS RD	325	20,078	2019	1,630	1,034	D	0.634	1,068	D	0.655
LENNARD RD	JENNINGS RD to HILLMOOR DR	325	20,078	2019	1,710	1,034	D	0.605	1,068	D	0.625
LENNARD RD	HILLMOOR DR to TIFFANY AVE	325	20,078	2019	1,710	1,034	D	0.605	1,068	D	0.625
LENNARD RD	TIFFANY AVE to WALTON RD	323	5,764	2016	1,710	301	C	0.176	305	C	0.178
LENNARD RD	WALTON RD to S OF SAVANNA CLUB BLVD	679	3,600	2021	790	249	C	0.315	236	C	0.299
LYNGATE DR	VETERANS MEMORIAL PKWY to MORNINGSIDE BLVD	306	10,536	2020	920	659	C	0.716	701	C	0.762
LYNGATE DR	MORNINGSIDE BLVD to US 1	306	10,536	2020	920	659	C	0.716	701	C	0.762
MARIPOSA AVE	LENNARD RD to HALLAHAN ST	166	6,912	2019	880	524	C	0.595	741	C	0.842

B-3

* Note: A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2021

Roadway Name	Location	STATION ID	AADT	Last Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
OHIO AVE	SUNRISE BLVD to COLONIAL RD	686	4,400	2017	540	261	C	0.483	255	C	0.472
OHIO AVE	COLONIAL RD to US 1	686	4,400	2017	750	261	C	0.348	255	C	0.34
OKEECHOBEE RD	OKEECHOBEE C.L. to BLUEFIELD RD	687	11,000	2021	1,580	575	B	0.364	618	B	0.391
OKEECHOBEE RD	BLUEFIELD RD to CARLTON RD	687	11,000	2021	2,000	575	B	0.288	618	B	0.309
OKEECHOBEE RD	CARLTON RD to SNEED RD	940039	7,500	2020	2,100	349	B	0.166	341	B	0.162
OKEECHOBEE RD	IDEAL HOLDING RD to HEADER CANAL RD	940039	7,500	2020	2,100	349	B	0.166	341	B	0.162
OKEECHOBEE RD	SNEED RD to IDEAL HOLDING RD	940039	7,500	2020	2,100	349	B	0.166	341	B	0.162
OKEECHOBEE RD	HEADER CANAL RD to MIDWAY RD	940039	7,500	2020	2,450	349	B	0.142	341	B	0.139
OKEECHOBEE RD	MIDWAY RD to SHINN RD	940039	7,500	2020	3,110	349	B	0.112	341	B	0.11
OKEECHOBEE RD	SHINN RD to MCCARTY RD	940195	5,584	2020	3,240	303	B	0.094	303	B	0.094
OKEECHOBEE RD	MCCARTY RD to FLORIDA'S TURNPIKE	940025	8,600	2020	3,240	391	B	0.121	405	B	0.125
OKEECHOBEE RD	FLORIDA'S TURNPIKE to KINGS HWY	940025	8,600	2020	2,100	391	C	0.186	405	C	0.193
OKEECHOBEE RD	KINGS HWY to CROSSROADS PKWY	940748	22,500	2020	4,240	1,028	C	0.242	1,085	C	0.256
OKEECHOBEE RD	CROSSROADS PKWY to I-95	940106	26,500	2020	4,240	1,213	C	0.286	1,240	C	0.292
OKEECHOBEE RD	I-95 to JENKINS RD	940029	32,000	2020	4,240	1,981	C	0.467	1,713	C	0.404
OKEECHOBEE RD	JENKINS RD to MCNEIL RD	940029	32,000	2020	4,040	1,981	C	0.49	1,713	C	0.424
OKEECHOBEE RD	MCNEIL RD to VIRGINIA AVE	940742	29,500	2020	3,170	1,468	C	0.463	1,531	C	0.483
OKEECHOBEE RD	VIRGINIA AVE to HARTMAN RD	688	12,171	2020	2,100	669	C	0.319	708	C	0.337
OKEECHOBEE RD	HARTMAN RD to 35TH ST	688	12,171	2020	1,630	669	C	0.41	708	C	0.434
OKEECHOBEE RD	35TH ST to 33RD ST	689	15,993	2020	1,630	868	D	0.533	849	D	0.521
OKEECHOBEE RD	33RD ST to 25TH ST	689	15,993	2020	1,630	868	D	0.533	849	D	0.521
OKEECHOBEE RD	25TH ST to GEORGIA AVE	690	13,110	2020	1,630	754	D	0.463	716	C	0.439
OKEECHOBEE RD	GEORGIA AVE to DELAWARE AVE	690	13,110	2020	1,710	754	C	0.441	716	C	0.419
OLD DIXIE HWY	US 1 to SR A1A NORTH	691	5,233	2017	790	407	D	0.515	369	C	0.467
OLD DIXIE HWY	SR A1A NORTH to ST LUCIE BLVD	948521	1,750	2020	750	82	C	0.109	82	C	0.109

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* Note: A six digit number in the "STATION ID" column identifies segment counted by FDOT
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* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2021

Roadway Name	Location	STATION ID	AADT	Last Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
OLD DIXIE HWY	ST LUCIE BLVD to INDRIO RD	227	2,019	2016	790	148	C	0.187	115	C	0.146
OLD DIXIE HWY	INDRIO RD to INDIAN RIVER C.L.	948523	1,350	2020	870	63	C	0.072	63	C	0.072
OLEANDER AVE	BEACH AVE to KITTERMAN RD	692	2,900	2021	540	168	C	0.311	190	C	0.352
OLEANDER AVE	KITTERMAN RD to MIDWAY RD	141	5,500	2021	750	320	C	0.427	320	C	0.427
OLEANDER AVE	MIDWAY RD to WEATHERBEE RD	139	7,055	2020	750	386	D	0.515	418	D	0.557
OLEANDER AVE	WEATHERBEE RD to BELL AVE	139	7,055	2020	580	386	D	0.666	418	D	0.721
OLEANDER AVE	BELL AVE to FARMER'S MARKET RD	240	11,500	2021	580	555	E	0.957	526	D	0.907
OLEANDER AVE	FARMER'S MARKET RD to EDWARDS RD	240	11,500	2021	800	555	D	0.694	526	D	0.658
OLEANDER AVE	EDWARDS RD to WISTERIA AVE	505	9,200	2021	800	558	D	0.698	464	D	0.58
OLEANDER AVE	WISTERIA AVE to GARDENIA AVE	505	9,200	2021	580	558	E	0.962	464	D	0.8
OLEANDER AVE	GARDENIA AVE to VIRGINIA AVE	505	9,200	2021	840	558	D	0.664	464	D	0.552
EANDER AVE	VIRGINIA AVE to SUNRISE BLVD	503	4,553	2019	640	259	C	0.405	269	C	0.42
ORANGE AVE	OKEECHOBEE C.L. to SNEED RD	144	4,600	2021	670	269	C	0.401	256	C	0.382
ORANGE AVE	SNEED RD to HEADER CANAL RD	144	4,600	2021	670	269	C	0.401	256	C	0.382
ORANGE AVE	SHINN RD to CAMPBELL RD	940144	2,700	2020	1,070	148	B	0.138	148	B	0.138
ORANGE AVE	CAMPBELL RD to KINGS HWY	940144	2,700	2020	1,070	148	B	0.138	148	B	0.138
ORANGE AVE	KINGS HWY to I-95	940041	19,000	2020	2,100	856	C	0.408	863	C	0.411
ORANGE AVE	I-95 to JENKINS RD	940035	14,700	2020	2,100	797	C	0.38	750	C	0.357
ORANGE AVE	JENKINS RD to HARTMAN RD	940028	14,400	2020	2,100	705	C	0.336	655	C	0.312
ORANGE AVE	HARTMAN RD to ANGLE RD	940028	14,400	2020	2,100	705	C	0.336	655	C	0.312
ORANGE AVE	ANGLE RD to 25TH ST	945044	10,449	2020	1,710	507	C	0.296	590	C	0.345
ORANGE AVE	25TH ST to 17TH ST	945040	11,700	2020	1,630	534	C	0.328	586	C	0.36
ORANGE AVE	17TH ST to 13TH ST	945040	11,700	2020	1,710	534	C	0.312	586	C	0.343
ORANGE AVE	13TH ST to 10TH ST	945040	11,700	2020	750	534	D	0.712	586	D	0.781
ORANGE AVE	10TH ST to 7TH ST	940155	9,200	2020	600	418	D	0.697	481	D	0.802

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Traffic Counts and Level of Service Report
2021

Roadway Name	Location	STATION ID	AADT	Last Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
US 1	AVENUE H to OLD DIXIE HWY	715	31,500	2021	2,000	1,590	C	0.795	1,584	C	0.792
US 1	OLD DIXIE HWY to AVENUE O	940123	29,000	2020	2,000	1,709	C	0.855	1,336	C	0.668
US 1	AVENUE O to SR A1A NORTH	940123	29,000	2020	2,100	1,709	C	0.814	1,336	C	0.636
US 1	SR A1A NORTH to JUANITA AVE	940010	21,500	2020	2,100	1,222	C	0.582	979	C	0.466
US 1	JUANITA AVE to ST LUCIE BLVD	940010	21,500	2020	2,100	1,222	C	0.582	979	C	0.466
US 1	ST LUCIE BLVD to 25TH ST	940009	20,500	2020	2,100	1,077	C	0.513	1,033	C	0.492
US 1	25TH ST to INDRIO RD	940009	20,500	2020	2,100	1,077	C	0.513	1,033	C	0.492
US 1	INDRIO RD to TURNPIKE FEEDER RD	940107	24,000	2020	2,100	1,164	C	0.554	1,157	C	0.551
US 1	TURNPIKE FEEDER RD to INDIAN RIVER C.L.	940107	24,000	2020	2,100	1,164	C	0.554	1,157	C	0.551
VETERANS MEMORIAL PKWY	PORT ST LUCIE BLVD to LYNGATE DR	329	17,256	2019	2,100	927	C	0.441	973	C	0.463
VETERANS MEMORIAL PKWY	LYNGATE DR to US 1	327	8,400	2021	2,100	429	C	0.204	434	C	0.207
LAGE GREEN DR	US 1 to WALTON RD	716	16,500	2021	2,100	987	C	0.47	1,040	C	0.495
VILLAGE GREEN DR	WALTON RD to TIFFANY AVE	717	4,733	2017	920	254	C	0.276	240	C	0.261
VILLAGE PKWY	DISCOVERY WAY to TRADITION PKWY	718	16,000	2021	2,650	792	C	0.299	806	C	0.304
VILLAGE PKWY	BECKER RD to DISCOVERY WAY	718	16,000	2021	1,710	792	D	0.463	806	D	0.471
VILLAGE PKWY	TRADITION PKWY to WESTCLIFFE LN	719	23,500	2021	1,710	1,294	D	0.757	1,295	D	0.757
VILLAGE PKWY	WESTCLIFFE LN to CROSSTOWN PKWY	720	13,043	2019	1,710	696	C	0.407	689	C	0.403
VIRGINIA AVE	35TH ST to 25TH ST	940032	22,000	2020	3,020	1,075	C	0.356	1,047	C	0.347
VIRGINIA AVE	OKEECHOBEE RD to HARTMAN RD	940030	20,000	2020	3,020	975	C	0.323	939	C	0.311
VIRGINIA AVE	HARTMAN RD to 35TH ST	940030	20,000	2020	3,020	975	C	0.323	939	C	0.311
VIRGINIA AVE	25TH ST to 13TH ST	940033	21,000	2020	3,020	988	C	0.327	1,052	C	0.348
VIRGINIA AVE	13TH ST to 11TH ST	940794	21,500	2020	3,020	1,002	C	0.332	1,002	C	0.332
VIRGINIA AVE	11TH ST to SUNRISE BLVD	940794	21,500	2020	3,170	1,002	C	0.316	1,002	C	0.316
VIRGINIA AVE	SUNRISE BLVD to OLEANDER AVE	940792	21,100	2020	3,020	1,055	C	0.349	985	C	0.326
VIRGINIA AVE	OLEANDER AVE to COLONIAL RD	940034	18,300	2020	3,170	902	C	0.285	882	C	0.278

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* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
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INTERSECTION VOLUME DEVELOPMENT

Copenhaver Road & Project Driveway

AM PEAK HOUR	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 3/11/2021	0	43	0	0	27	0	0	0	0	0	0	0
Peak Season 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
2021 Peak Season Volumes	0	43	0	0	27	0	0	0	0	0	0	0
Annual Growth Rate	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
2024 Background Growth	0	2	0	0	1	0	0	0	0	0	0	0
Traffic % Assignment			30%	70%						30%		70%
Project Traffic Direction			IN	IN						OUT		OUT
Project Traffic			1	2						1		2
2024 Background Traffic	0	45	0	0	28	0	0	0	0	0	0	0
2024 Total Traffic	**0**	**45**	**1**	**2**	**28**	**0**	**0**	**0**	**0**	**1**	**0**	**2**

PM PEAK HOUR	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 3/11/2021	0	41	0	0	25	0	0	0	0	0	0	0
Peak Season 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
2021 Peak Season Volumes	0	41	0	0	25	0	0	0	0	0	0	0
Annual Growth Rate	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
2024 Background Growth	0	2	0	0	1	0	0	0	0	0	0	0
Traffic % Assignment			30%	70%						30%		70%
Project Traffic Direction			IN	IN						OUT		OUT
Project Traffic			2	3						2		3
2024 Background Traffic	0	43	0	0	26	0	0	0	0	0	0	0
2024 Total Traffic	**0**	**43**	**2**	**3**	**26**	**0**	**0**	**0**	**0**	**2**	**0**	**3**

INTERSECTION VOLUME DEVELOPMENT

Graham Road & Copenhaver Road

AM PEAK HOUR	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 3/11/2021	26	2	15	26	11	4	5	153	3	13	82	13
Peak Season 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
2021 Peak Season Volumes	26	2	15	26	11	4	5	153	3	13	82	13
Annual Growth Rate	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
2024 Background Growth	1	0	1	1	1	0	0	7	0	1	4	1
Traffic % Assignment	26%		44%						26%	44%		
Project Traffic Direction	OUT		OUT						IN	IN		
Project Traffic	1		2						1	2		
2024 Background Traffic	27	2	16	27	12	4	5	160	3	14	86	14
2024 Total Traffic	**28**	**2**	**18**	**27**	**12**	**4**	**5**	**160**	**4**	**16**	**86**	**14**

PM PEAK HOUR	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 3/11/2021	6	6	29	10	2	6	4	145	22	23	101	32
Peak Season 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
2021 Peak Season Volumes	6	6	29	10	2	6	4	145	22	23	101	32
Annual Growth Rate	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
2024 Background Growth	0	0	1	0	0	0	0	7	1	1	5	2
Traffic % Assignment	26%		44%						26%	44%		
Project Traffic Direction	OUT		OUT						IN	IN		
Project Traffic	2		3						2	3		
2024 Background Traffic	6	6	30	10	2	6	4	152	23	24	106	34
2024 Total Traffic	**8**	**6**	**33**	**10**	**2**	**6**	**4**	**152**	**25**	**27**	**106**	**34**

TABLE 7 Generalized **Peak Hour Directional** Volumes for Florida's Urbanized Areas

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	830	880	**
2	Divided	*	1,910	2,000	**
3	Divided	*	2,940	3,020	**
4	Divided	*	3,970	4,040	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	370	750	800
2	Divided	*	730	1,630	1,700
3	Divided	*	1,170	2,520	2,560
4	Divided	*	1,610	3,390	3,420

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	150	390	1,000
50-84%	110	340	1,000	>1,000
85-100%	470	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Core Urbanized

Lanes	B	C	D	E
2	2,230	3,100	3,740	4,080
3	3,280	4,570	5,620	6,130
4	4,310	6,030	7,490	8,170
5	5,390	7,430	9,370	10,220
6	6,380	8,990	11,510	12,760

Urbanized

Lanes	B	C	D	E
2	2,270	3,100	3,890	4,230
3	3,410	4,650	5,780	6,340
4	4,550	6,200	7,680	8,460
5	5,690	7,760	9,520	10,570

Freeway Adjustments

Auxiliary Lane	Ramp Metering
+ 1,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
1	Undivided	580	890	1,200	1,610
2	Divided	1,800	2,600	3,280	3,730
3	Divided	2,700	3,900	4,920	5,600

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

APPENDIX C

OTHER PROJECT DATA/GROWTH RATE

AM APPROVED PROJECTS			Kings Highway Commerce			Creekside			43 Bent Creek @ 50% Complete City of Fort Pierce			44 Celebration Pointe @25% Complete City of Fort Pierce			37 Whispering Oaks			Project Hunt		
Road Name	From	To	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W
25th St	Virginia Ave.	Cortez Blvd.	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
	Cortez Blvd.	Edwards Rd.	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
	Edwards Rd.	Bell Ave.	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
Jenkins Rd	Orange	Peterson	3%	6	2	5%	7	21	2%	1	4	30%	9	29	70%	117	32	2%	2	0
	Peterson	Okeechobee	3%	6	2	5%	7	21	2%	1	4	50%	48	15	12%	20	5	5%	4	1
	Okeechobee	Edwards	3%	6	2	5%	7	21	0%	0	0	5%	5	2	5%	8	2	0%	0	0
Orange Ave	Rock Rd	Kings Hwy	2%	1	4	0%	0	0	0%	0	0	5%	5	2	5%	8	2	3%	1	1
	Kings Hwy	I-95	30%	17	59	0%	0	0	5%	3	9	10%	10	3	10%	17	5	40%	7	30
	I-95	Jenkins Rd	20%	11	39	0%	0	0	20%	12	37	25%	24	8	60%	100	27	20%	3	15
	Jenkins Rd	Hartman Rd	25%	14	49	0%	0	0	25%	16	47	5%	5	2	10%	17	5	18%	3	14
	Hartman	Angle Rd	20%	11	39	0%	0	0	35%	65	22	15%	5	14	20%	33	9	18%	3	14
	Angle	25th St	15%	8	30	0%	0	0	33%	61	20	10%	3	10	13%	22	6	0%	0	0
Kings Hwy	Okeechobee Rd	Picos Rd	45%	89	25	5%	21	7	3%	6	2	2%	2	1	2%	3	1	50%	38	9
	Picos Rd	Orange Ave	45%	89	25	5%	21	7	3%	6	2	2%	2	1	2%	3	1	43%	33	7
	Orange Ave	Angle Rd (CR603)	0%	0	0	0%	0	0	2%	4	1	3%	3	1	3%	5	1	0%	0	0
Edwards Rd.	US 1	Oleander	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
	Oleander	25th	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
	25th	Jenkins Rd	0%	0	0	0%	0	0	0%	0	0	5%	2	5	5%	8	2	0%	0	0
Okeechobee Rd	Florida's Turnpike	Kings Hwy	5%	10	3	90%	379	129	0%	0	0	5%	2	5	5%	8	2	5%	1	1
	Kings Hwy	Crossroads Pkwy	35%	69	19	80%	337	114	0%	0	0	5%	2	5	5%	8	2	30%	5	5
	Crossroads Pkwy	I95	40%	79	22	80%	337	114	0%	0	0	5%	2	5	5%	8	2	30%	5	5
	I95	Jenkins Rd	20%	39	11	40%	168	57	0%	0	0	5%	2	5	5%	8	2	10%	2	2
	Jenkins Rd	McNeil Rd	20%	39	11	30%	126	43	0%	0	0	5%	2	5	2%	3	1	11%	2	2
	McNeil Rd	Virginia Ave	20%	39	11	30%	126	43	0%	0	0	0%	0	0	2%	3	1	9%	2	2
Peters Road	Crossroads Pkwy	White Road																		
	White Road	Graham Rd																		
				In	197		In	143		In	62		In	30		In	45		In	76
				Out	55		Out	421		Out	186		Out	96		Out	167		Out	17

AM APPROVED PROJECTS			Wawa Kings Highway			Kings Highway Warehouse			St. Lucie Commerce Center @25% Complete			Walsh Crossroads			Project Hurricane			SUM Directional N/E		SUM Directional S/W		Directional N/E		Directional S/W	
Road Name	From	To	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	Residential	Non-Residential	Residential	Non-Residential	Double Count	Net	Double Count	Net
25th St	Virginia Ave.	Cortez Blvd.	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0	0	0	0	0	0
	Cortez Blvd.	Edwards Rd.	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0	0	0	0	0	0
	Edwards Rd.	Bell Ave.	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0	0	0	0	0	0
Jenkins Rd	Orange	Peterson	0%	0	0	0%	0	0	30%	42	9	0%	0	0	15%	2	5	134	52	85	17	-10	176	-3	98
	Peterson	Okeechobee	0%	0	0	0%	0	0	30%	42	9	0%	0	0	20%	2	7	77	54	45	19	-11	120	-4	60
	Okeechobee	Edwards	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	20	6	25	2	-1	25	0	26
Orange Ave	Rock Rd	Kings Hwy	55.0%	23	23	4%	14	14	90%	127	28	0%	0	0	5%	2	1	13	167	4	70	-3	177	-1	73
	Kings Hwy	I-95	55.0%	23	23	26%	89	89	50%	71	16	0%	0	0	10%	1	4	29	207	17	221	-7	229	-4	233
	I-95	Jenkins Rd	20.0%	8	8	3%	10	10	10%	14	3	0%	0	0	0%	0	0	137	47	72	76	-9	174	-15	133
	Jenkins Rd	Hartman Rd	10.0%	4	4	3%	10	10	5%	7	2	0%	0	0	15%	2	5	37	40	53	84	-8	69	-13	124
	Hartman	Angle Rd	10.0%	4	4	3%	10	10	5%	7	2	0%	0	0	15%	2	5	103	37	45	74	-7	133	-11	108
	Angle	25th St	10.0%	4	4	3%	10	10	5%	7	2	0%	0	0	15%	2	5	86	32	36	51	-6	111	-9	78
Kings Hwy	Okeechobee Rd	Picos Rd	20.0%	8	8	52%	177	178	0%	0	0	30%	2	2	15%	2	5	32	316	11	227	-8	340	-3	235
	Picos Rd	Orange Ave	20.0%	8	8	48%	164	164	30%	9	42	30%	2	2	15%	2	5	32	306	11	254	-8	330	-3	262
	Orange Ave	Angle Rd (CR603)	20.0%	8	8	18%	61	62	10%	3	14	0%	0	0	0%	0	0	12	73	3	84	-3	82	-1	87
Edwards Rd.	US 1	Oleander	0.0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0	0	0	0	0	0
	Oleander	25th	0.0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0	0	0	0	0	0
	25th	Jenkins Rd	0.0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	10	0	7	0	0	10	0	7
Okeechobee Rd	Florida's Turnpike	Kings Hwy	5.0%	2	2	4%	14	14	0%	0	0	5%	0	0	5%	2	1	389	29	136	20	-6	412	-4	152
	Kings Hwy	Crossroads Pkwy	5.0%	2	2	11%	38	38	0%	0	0	5%	0	0	0%	0	0	347	114	121	64	-23	438	-13	173
	Crossroads Pkwy	I95	5.0%	2	2	11%	38	38	0%	0	0	45%	2	3	55%	7	20	347	132	121	90	-26	453	-18	193
	I95	Jenkins Rd	0.0%	0	0	6%	20	20	0%	0	0	0%	0	0	40%	5	14	178	66	64	48	-13	231	-10	102
	Jenkins Rd	McNeil Rd	0.0%	0	0	6%	20	20	0%	0	0	0%	0	0	40%	5	14	131	67	49	48	-13	184	-10	87
	McNeil Rd	Virginia Ave	0.0%	0	0	3%	10	10	0%	0	0	0%	0	0	40%	5	14	130	56	44	37	-11	174	-7	74
Peters Road	Crossroads Pkwy	White Road										0%	0	0	65%	23	8	0	23	0	8	0	23	0	8
	White Road	Graham Rd										0%	0	0	35%	4	13	0	4	0	13	0	4	0	13
				In	42		In	342		In	141		In	7		In	36								
				Out	42		Out	341		Out	31		Out	5		Out	12								

PM APPROVED PROJECTS			Kings Highway Commerce			Creekside			43 Bent Creek @ 50% Complete			44 Celebration Pointe @25% Complete			37 Whispering Oaks			Project Hunt		
Road Name	From	To	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W
25th St.	Virginia Ave.	Cortez Blvd.	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
	Cortez Blvd.	Edwards Rd.	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
	Edwards Rd.	Bell Ave.	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0			
Jenkins Rd	Orange	Peterson	3.0%	2	6	5.0%	25	16	2.0%	4	2	30.0%	30	17	70.0%	117	120	2.0%	0	1
	Peterson	Okeechobee	3.0%	2	6	5.0%	25	16	2.0%	4	2	50.0%	29	50	12.0%	20	21	5.0%	1	3
	Okeechobee	Edwards	3.0%	2	6	5.0%	25	16	0.0%	0	0	5.0%	3	5	5.0%	8	9	0.0%	0	0
Orange Ave	Rock Rd	Kings Hwy	2.0%	1	4	0.0%	0	0	0.0%	0	0	5.0%	3	5	5.0%	8	9	3.0%	2	2
	Kings Hwy	I-95	30.0%	56	20	0.0%	0	0	5.0%	10	6	10.0%	6	10	10.0%	17	17	40.0%	23	8
	I-95	Jenkins Rd	20.0%	37	14	0.0%	0	0	20.0%	39	23	25.0%	14	25	60.0%	100	103	20.0%	11	4
	Jenkins Rd	Hartman Rd	25.0%	47	17	0.0%	0	0	25.0%	48	28	5.0%	3	5	10.0%	17	17	18.0%	10	3
	Hartman	Angle Rd	20.0%	37	14	0.0%	0	0	35.0%	40	67	15.0%	15	9	20.0%	33	34	18.0%	10	3
	Angle	25th St	15.0%	28	10	0.0%	0	0	33.0%	37	64	10.0%	10	6	13.0%	22	22	0.0%	0	0
Kings Hwy	Okeechobee Rd	Picos Rd	45.0%	31	84	5.0%	16	25	3.0%	6	3	2.0%	1	2	2.0%	3	3	50.0%	10	29
	Picos Rd	Orange Ave	45.0%	31	84	5.0%	16	25	3.0%	6	3	2.0%	1	2	2.0%	3	3	43.0%	8	25
	Orange Ave	Angle Rd (CR603)	0.0%	0	0	0.0%	0	0	2.0%	2	4	3.0%	2	3	3.0%	5	5	0.0%	0	0
Edwards Rd.	US 1	Oleander	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0
	Oleander	25th	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0
	25th	Jenkins Rd	0.0%	0	0	0.0%	0	0	0.0%	0	0	5.0%	5	3	5.0%	8	9	0.0%	0	0
Okeechobee Rd	Florida's Turnpike	Kings Hwy	5.0%	3	9	90.0%	280	448	0.0%	0	0	5.0%	5	3	5.0%	8	9	5.0%	3	3
	Kings Hwy	Crossroads Pkwy	35.0%	24	65	80.0%	249	398	0.0%	0	0	5.0%	5	3	5.0%	8	9	30.0%	17	17
	Crossroads Pkwy	I95	40.0%	27	74	80.0%	249	398	0.0%	0	0	5.0%	5	3	5.0%	8	9	30.0%	17	17
	I95	Jenkins Rd	20.0%	14	37	40.0%	124	199	0.0%	0	0	5.0%	5	3	5.0%	8	9	10.0%	6	6
	Jenkins Rd	McNeil Rd	20.0%	14	37	30.0%	93	149	0.0%	0	0	5.0%	5	3	2.0%	3	3	11.0%	6	6
	McNeil Rd	Virginia Ave	20.0%	14	37	30.0%	93	149	0.0%	0	0	0.0%	0	0	2.0%	3	3	9.0%	5	5
Peters Road	Crossroads Pkwy	White Road																		
	White Road	Graham Rd																		
				In	68		In	498		In	193		In	100		In	172		In	19
				Out	186		Out	311		Out	113		Out	57		Out	167		Out	57

Wawa Kings Highway			Kings Highway Warehouse			St. Lucie Commerce Center @25% Complete			Walsh Crossroads			Project Hurricane			SUM Directional N/E		SUM Directional S/W		Directional N/E		Directional S/W	
%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	%	Directional N/E	Directional S/W	Residential	Non-Residential	Residential	Non-Residential	Double Count	Net	Double Count	Net
0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0	0	0	0	0	0
0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0	0	0	0	0	0
						0%	0	0	0%	0	0	0%	0	0	0	0	0	0	0	0	0	0
10.0%	5	5	0.0%	0	0	30.0%	16	59	0%	0	0	15%	2	2	176	25	155	72	-5	195	-14	213
8.0%	4	4	0.0%	0	0	30.0%	16	59	0%	0	0	20%	2	2	77	25	88	73	-5	97	-15	147
0.0%	0	0	0.0%	0	0	0.0%	0	0	0%	0	0	0%	0	0	36	2	29	6	0	38	-1	34
55.0%	28	29	4.0%	9	9	90.0%	47	176	0%	0	0	5%	1	1	11	87	14	220	-3	95	-3	230
55.0%	29	28	58.0%	125	266	50.0%	26	98	0%	0	0	10%	1	1	32	260	33	421	-8	284	-8	445
20.0%	10	10	13.0%	28	60	10.0%	5	20	0%	0	0	0%	0	0	153	92	151	107	-18	227	-21	236
10.0%	5	5	8.0%	17	37	5.0%	3	10	0%	0	0	15%	2	2	68	83	50	73	-17	134	-13	111
10.0%	5	5	8.0%	17	37	5.0%	3	10	0%	0	0	15%	2	2	88	74	110	70	-15	147	-14	166
10.0%	5	5	0.0%	0	0	5.0%	3	10	0%	0	0	15%	2	2	69	37	92	27	-7	99	-5	113
20.0%	10	10	52.0%	112	238	0.0%	0	0	30.0%	6	4	15.0%	2	2	26	171	34	366	-6	190	-8	391
20.0%	10	10	48.0%	104	220	30.0%	59	16	30.0%	6	4	15.0%	2	2	26	219	34	359	-6	239	-8	384
20.0%	10	10	18.0%	39	82	10.0%	20	5	0.0%	0	0	0.0%	0	0	9	69	12	98	-2	75	-3	107
0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0	0	0	0	0	0	0	0
0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0	0	0	0	0	0	0	0
0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	13	0	11	0	0	13	0	11
5.0%	3	3	4.0%	9	9	0.0%	0	0	5%	1	1	5%	1	1	293	19	460	25	-4	308	-5	479
5.0%	3	3	11.0%	24	24	0.0%	0	0	5%	1	1	0%	0	0	262	68	410	109	-14	317	-22	497
5.0%	3	3	11.0%	24	24	0.0%	0	0	45%	9	5	55%	6	6	262	86	410	129	-17	331	-26	513
0.0%	0	0	6.0%	13	13	0.0%	0	0	0%	0	0	40%	4	4	138	37	211	60	-7	167	-12	259
0.0%	0	0	6.0%	13	13	0.0%	0	0	0%	0	0	40%	4	4	102	37	156	60	-7	131	-12	204
0.0%	0	0	3.0%	6	6	0.0%	0	0	0%	0	0	40%	4	4	97	30	153	53	-6	120	-11	195
									50.0%	11	6	65.0%	7	7	0	17	0	13	0	17	0	13
									30.0%	6	4	35.0%	4	4	0	10	0	7	0	10	0	7
	In	51		In	458		In	52		In	12		In	10								
	Out	52		Out	216		Out	196		Out	21		Out	11								

Historical Growth Rate Calculation

Segment	From	To	2015 AADT	2019 AADT	4 Year Historical Growth Rate
Okeechobee Blvd	I-95	McNeil Rd	28,500	33,000	3.73%
	McNeil Rd	Virginia Ave	26,500	30,500	3.58%
Jenkins Rd	Okeechobee Blvd	Orange Ave	9,600	9,200	-1.06%
Kings Hwy	Okeechobee Blvd	Graham Rd	6,300	7,600	4.80%
	Graham Rd	Orange Ave	8,400	7,000	-4.46%
Orange Ave	Kings Hwy	I-95	17,300	19,800	3.43%
	I-95	Jenkins Rd	13,600	15,300	2.99%
Virginia Ave	Okeechobee Blvd	35th St	21,000	21,000	0.00%
		Total	131,200	143,400	2.25%

*Source FDOT Historical Traffic Counts

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0030 - SR 70/VIRGINIA AVE - E OF OKEECHOBEE RD (COUNTY 30)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	21000 C	E 10500	W 10500	9.00	51.00	7.10
2018	21500 C	E 11000	W 10500	9.00	51.30	3.60
2017	20300 C	E 10500	W 9800	9.00	50.90	3.60
2016	22500 C	E 12000	W 10500	9.00	50.90	3.60
2015	21000 C	E 11000	W 10000	9.00	51.00	3.30
2014	20400 C	E 10500	W 9900	9.00	50.80	3.90
2013	21000 C	E 10500	W 10500	9.00	50.80	3.90
2012	21000 C	E 10500	W 10500	9.00	56.80	4.50
2011	23500 C	E 11500	W 12000	9.00	57.20	4.50
2010	22000 C	E 11500	W 10500	10.32	55.40	4.50
2009	22000 C	E 11000	W 11000	10.27	57.35	5.20
2007	16900 C	E 8900	W 8000	10.31	58.74	5.20
2006	20500 C	E 11000	W 9500	10.73	65.89	5.00
2005	22000 C	E 11500	W 10500	10.80	60.70	5.00
2004	20300 C	E 10500	W 9800	10.30	57.70	5.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0041 - SR 68 / ORANGE AVE - W OF SR 9/I-95 (COUNTY 41)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	19800 C	E 10500	W 9300	9.00	54.30	22.40
2018	21000 C	E 10500	W 10500	9.00	55.20	22.40
2017	19000 C	E 9800	W 9200	9.00	56.20	22.40
2016	21300 C	E 11500	W 9800	9.00	57.10	25.00
2015	17300 C	E 8500	W 8800	9.00	56.30	25.00
2014	15700 S	E 8000	W 7700	9.00	54.70	16.40
2013	15500 F	E 7900	W 7600	9.00	57.20	16.40
2012	15700 C	E 8000	W 7700	9.00	57.00	16.40
2011	17900 C	E 9000	W 8900	9.00	56.50	24.40
2010	18600 C	E 9400	W 9200	11.51	57.07	24.40
2009	16300 C	E 8200	W 8100	11.11	58.68	24.40
2008	26000 C	E 13000	W 13000	11.51	54.38	22.30
2007	27000 C	E 13500	W 13500	11.51	58.16	22.30
2006	18100 C	E 8700	W 9400	10.78	56.96	22.30
2005	18800 C	E 9700	W 9100	11.10	56.60	20.90
2004	18000 C	E 9000	W 9000	11.10	60.50	20.90

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0035 - SR 68 / ORANGE AVE - E OF SR 9/I-95 (COUNTY 35)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	15300 C	E 7600	W 7700	9.00	51.00	16.60
2018	13100 C	E 7000	W 6100	9.00	51.30	16.60
2017	15400 C	E 7300	W 8100	9.00	50.90	10.80
2016	13900 C	E 6700	W 7200	9.00	50.90	10.80
2015	13600 C	E 6700	W 6900	9.00	51.00	10.80
2014	12600 F	E 6200	W 6400	9.00	50.80	10.40
2013	12600 C	E 6200	W 6400	9.00	50.80	10.40
2012	13700 C	E 6700	W 7000	9.00	56.80	10.40
2011	12900 C	E 6600	W 6300	9.00	57.20	16.30
2010	13800 C	E 6800	W 7000	10.32	55.40	16.30
2009	12200 C	E 6000	W 6200	10.27	57.35	16.30
2008	13200 C	E 6600	W 6600	10.45	58.06	9.70
2007	15100 C	E 7500	W 7600	10.31	58.74	16.60
2006	12800 C	E 6300	W 6500	10.73	65.89	10.20
2005	13000 C	E 6700	W 6300	10.80	60.70	10.20
2004	12700 C	E 6500	W 6200	10.30	57.70	10.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0742 - SR 70/OKEECHOBEE RD - SW OF SR 70/VIRGINIA AVE (COUNTY 742)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	30500 C	E 14500	W 16000	9.00	51.00	4.60
2018	31500 C	E 16500	W 15000	9.00	51.30	4.60
2017	31500 C	E 15500	W 16000	9.00	50.90	12.00
2016	26000 C	E 15500	W 10500	9.00	50.90	12.00
2015	26500 C	E 11500	W 15000	9.00	51.00	12.00
2014	30000 C	E 15000	W 15000	9.00	50.80	6.10
2013	27000 C	E 12500	W 14500	9.00	50.80	3.80
2012	33000 C	E 16500	W 16500	9.00	56.80	3.80
2008	32500 C	E 16500	W 16000	10.45	58.06	6.70
2007	31500 C	E 15000	W 16500	10.31	58.74	7.40
2006	35500 C	E 18500	W 17000	10.73	65.89	5.00
2005	32500 C	E 16500	W 16000	10.80	60.70	5.70
2004	30000 C	E 15500	W 14500	10.30	57.70	5.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0029 - SR 70 / OKEECHOBEE RD - E OF SR 9/I-95 (COUNTY 29)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	33000 C	E 17000	W 16000	9.00	51.00	11.00
2018	31000 C	E 15000	W 16000	9.00	51.30	4.70
2017	34500 C	E 17500	W 17000	9.00	50.90	12.30
2016	28500 F	E 14000	W 14500	9.00	50.90	12.30
2015	28500 C	E 14000	W 14500	9.00	51.00	12.30
2014	25500 F	E 14000	W 11500	9.00	50.80	4.90
2013	25500 C	E 14000	W 11500	9.00	50.80	4.90
2012	28000 C	E 14000	W 14000	9.00	56.80	4.90
2011	30500 C	E 15500	W 15000	9.00	57.20	10.90
2010	30500 C	E 15500	W 15000	10.32	55.40	10.90
2009	26500 C	E 13000	W 13500	10.27	57.35	10.90
2008	29500 C	E 15500	W 14000	10.45	58.06	6.70
2007	33000 C	E 17000	W 16000	10.31	58.74	5.20
2006	31000 C	E 16000	W 15000	10.73	65.89	16.00
2005	26500 C	E 13500	W 13000	10.80	60.70	16.00
2004	28000 C	E 14000	W 14000	10.30	57.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0757 - SR 713 / KINGS HWY - N OF SR 70/OKEECHOBEE RD (COUNTY 757)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	7600 C	N 3700	S 3900	9.00	54.30	23.40
2018	13600 C	N 6500	S 7100	9.00	55.20	23.90
2017	12800 C	N 6100	S 6700	9.00	56.20	23.90
2016	6400 C	N 3100	S 3300	9.00	57.10	23.90
2015	6300 C	N 3000	S 3300	9.00	56.30	26.90
2014	9100 C	N 3900	S 5200	9.00	54.70	46.50
2013	6000 C	N 3000	S 3000	9.00	57.20	17.40
2012	5400 C	N 2700	S 2700	9.00	57.00	17.40
2011	6200 C	N 3200	S 3000	9.00	56.50	22.90
2010	13500 C	N 6800	S 6700	11.51	57.07	22.90
2009	8000 C	N 4000	S 4000	11.11	58.68	22.90
2008	7400 C	N 3500	S 3900	11.51	54.38	23.20
2007	8900 C	N 4400	S 4500	11.51	58.16	25.50
2006	7300 C	N 3600	S 3700	10.78	56.96	25.50
2005	7900 C	N 3900	S 4000	11.10	56.60	18.10
2004	7200 C	N 3500	S 3700	11.10	60.50	18.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0076 - SR 713/KINGS HWY - S OF SR 68/ORANGE AVE (COUNTY 76)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	7000 C	N 3500	S 3500	9.00	54.30	22.80
2018	9700 C	N 4600	S 5100	9.00	55.20	22.80
2017	9500 C	N 4700	S 4800	9.00	56.20	22.80
2016	9600 C	N 4600	S 5000	9.00	57.10	32.40
2015	8400 C	N 4100	S 4300	9.00	56.30	32.40
2014	7900 C	N 3800	S 4100	9.00	54.70	19.90
2013	7200 C	N 3400	S 3800	9.00	57.20	14.20
2012	7100 C	N 3400	S 3700	9.00	57.00	14.20
2011	8000 C	N 3900	S 4100	9.00	56.50	17.20
2010	8900 C	N 4400	S 4500	11.51	57.07	17.20
2009	8000 C	N 3800	S 4200	11.11	58.68	17.20
2008	10600 C	N 5200	S 5400	11.51	54.38	11.20
2007	11100 C	N 5400	S 5700	11.51	58.16	7.90
2006	10600 C	N 5300	S 5300	10.78	56.96	17.30
2005	9900 C	N 4800	S 5100	11.10	56.60	17.30
2004	9400 C	N 4600	S 4800	11.10	60.50	17.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0273 - CR 611/JENKINS RD - N. OF SR 70/OKEECHOBEE RD (COUNTY 131)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	9200 C	N 4600	S 4600	9.00	51.00	7.80
2018	10000 V	N 4400	S 5600	9.00	51.30	5.80
2017	9900 R	N 4400	S 5500	9.00	50.90	10.00
2016	9700 T	N 4300	S 5400	9.00	50.90	6.20
2015	9600 S	N 4300	S 5300	9.00	51.00	41.80
2014	9600 F	N 4300	S 5300	9.00	50.80	49.50
2013	9600 C	N 4300	S 5300	9.00	50.80	11.90
2012	7100 S	N 3600	S 3500	9.00	56.80	4.80
2011	7100 F	N 3600	S 3500	9.00	57.20	4.80
2010	7100 C	N 3600	S 3500	10.32	55.40	4.80
2009	8500 C	N 4200	S 4300	10.27	57.35	10.70
2008	9100 C	N 4500	S 4600	10.45	58.06	6.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

APPENDIX D

ARTERIAL ANALYSIS

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SOR	**Arterial Name**	Jenkins Road	**Study Period**	**Dir Hr Demand Vol**
Date Prepared	7/28/2021 11:00:15 AM	**From**	Okeechobee Rd	**Modal Analysis**	Auto Only
Agency	O'Rourke Engineering & Planning	**To**	Orange Ave	**Program**	ARTPLAN 2012
Area Type	Other Urbanized	**Peak Direction**	Northbound	**Version Date**	12/12/2012
Arterial Class	1				

File Name	C:\Users\Taylor\Downloads\Jenkins Rd - PM - NB.xap
User Notes	NB - PM Peak Hour

Arterial Data

K	0.09	**PHF**	1	**Control Type**	FullyActuated
D	0.565	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
Orange Ave	90	0.25	3	1	37	26	Yes	ProtPerm	1	275	0.16	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Orange Ave)	10824	9900	748	1	45	50	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Orange Ave)	277	1244	0.890	42.90	D	0.72	37.26	B

Arterial Length	**2.0614**	**Weighted g/C**	**0.25**	**FFS Delay**	**51.58**	**Threshold Delay**	**0.00**	**Auto Speed**	**37.26**	**Auto LOS**	**B**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	510	840	***	***	***
2	1050	1640	***	***	***
3	1680	2460	***	***	***
4	2280	3300	***	***	***
*	510	840	***	***	***
Lanes	**Hourly Volume In Both Directions**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A
Lanes	**Annual Average Daily Traffic**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SOR	**Arterial Name**	Jenkins Road	**Study Period**	**Dir Hr Demand Vol**
Date Prepared	7/28/2021 11:00:15 AM	**From**	Orange Ave	**Modal Analysis**	Auto Only
Agency	O'Rourke Engineering & Planning	**To**	Okeechobee Rd	**Program**	ARTPLAN 2012
Area Type	Other Urbanized	**Peak Direction**	Southbound	**Version Date**	12/12/2012
Arterial Class	1				

File Name	C:\Users\Taylor\Downloads\Jenkins Rd - AM - SB.xap
User Notes	SB - AM Peak Hour

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	FullyActuated
D	0.565	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
Okeechobee Rd	160	0.18	3	2	45	9	Yes	Protected	2	470	0.16	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Okeechobee Rd)	10824	9900	664	1	45	50	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Okeechobee Rd)	322	3056	0.357	57.62	E	0.39	34.80	B

Arterial Length	**2.0614**	**Weighted g/C**	**0.18**	**FFS Delay**	**65.65**	**Threshold Delay**	**0.00**	**Auto Speed**	**34.80**	**Auto LOS**	**B**

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	**	590	620	***	***
2	**	1190	1240	***	***
3	**	1810	1860	***	***
4	**	2430	2480	***	***
*	**	1130	1240	***	***
Lanes	**Hourly Volume In Both Directions**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A
Lanes	**Annual Average Daily Traffic**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A

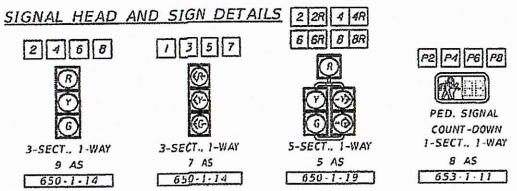
*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

APPENDIX E

INTERSECTION ANALYSIS/SIGNAL WARRANT

Orange & Kings Analysis	E-1 thru E-11
Okeechobee & Kings Analysis	E-12 thru E-22
White & Kings - HCS Analysis	E-23 thru E-34
- Signal Warrant Analysis	E-35 thru E-40

SIGNAL HEAD AND SIGN DETAILS



3-SECT., 1-WAY 9 AS — 650-1-14

3-SECT., 1-WAY 7 AS — 650-1-14

5-SECT., 1-WAY 5 AS — 650-1-19

PED. SIGNAL COUNT-DOWN 1-SECT., 1-WAY 8 AS — 653-1-11

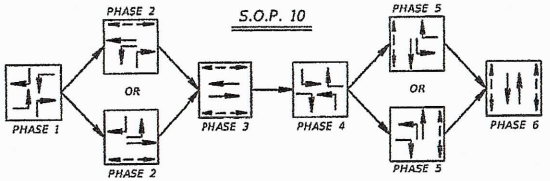
(A) R10-3E (MODIFIED) 9"x15" 8 EA (COST TO BE INCLUDED IN PAY ITEM 665-1-11)

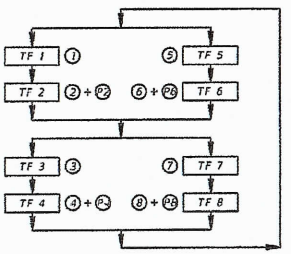
(B) U-TURN YIELD TO RIGHT TURN — R10-16 30"X36"

(X) 8'-6" x 2'-0" **Orange Ave**

(Y) 8'-6" x 2'-0" **Kings Hwy**

S.O.P. 10





REMOVAL ITEMS

632-7-6	1 PI
646-1-60	2 EA
649-26-3	4 EA
670-5-600	1 AS

CONTROLLER OPERATIONS:

1. MAJOR STREET: SR 68 / ORANGE AVENUE
   MINOR STREET: SR 713 / KINGS HWY
2. S.O.P.: AS SHOWN
3. CONTROLLER TIMINGS: AS SHOWN
4. TRAFFIC SIGNAL CONTROLLER: ECONOLITE NEMA TS2 TYPE 1 CABINET

NOTES:

1. ALL PEDESTRIAN SIGNAL HEADS SHALL ALIGN WITH CENTER OF FAR-SIDED END OF CORRESPONDING CROSSWALK.
2. VIDEO DETECTION ZONE SHALL BE 6'X30' PLACED 2' BEHIND STOP BAR FOR ALL LANES.
3. SEE GUIDE SIGN WORKSHEET FOR SIGN X & Y DETAILS.

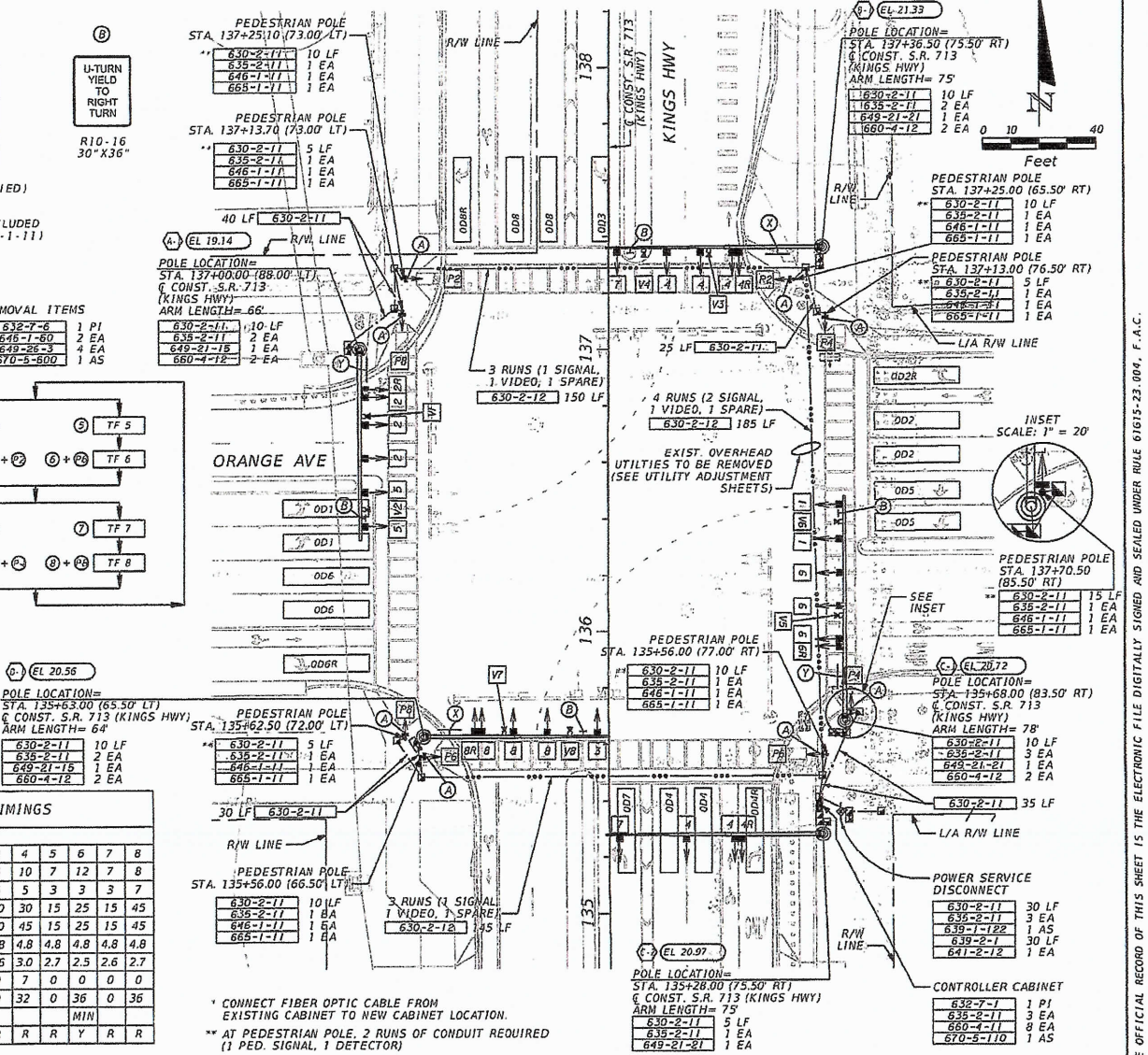
VIDEO DETECTOR CONNECTION CHART

DETECTOR UNIT NO.	CONNECTED TO MOVEMENT NO.	ZONE	DELAY TIME (SEC.)
V-1	2	OD2	
V-1	2R	OD2R	5
V-2	5	OD5	
V-3	4	OD4	
V-3	4R	OD4R	5
V-4	7	OD7	
V-5	6	OD6	
V-5	6R	OD6R	5
V-6	1	OD1	
V-7	8	OD8	
V-7	8R	OD8R	5
V-8	3	OD3	

OD = OCCUPANCY DETECTOR ZONE

CONTROLLER TIMINGS

TIMING FUNCTION									
MOVEMENT NUMBER		1	2	3	4	5	6	7	8
TIMING FUNCTION	MINIMUM GREEN	7	12	5	10	7	12	7	8
	EXTENSION	3	3	5	5	3	3	3	7
	MAXIMUM GREEN 1	15	35	30	30	15	25	15	45
	MAXIMUM GREEN 2	15	35	30	45	15	25	15	45
	YELLOW CLEARANCE	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
	ALL RED	2.5	2.6	2.6	3.0	2.7	2.5	2.6	2.7
	PEDESTRIAN WALK	0	0	0	7	0	0	0	0
	PED. CLEARANCE	0	34	0	32	0	36	0	36
	RECALL		MIN				MIN		
	FLASH	R	Y	R	R	R	Y	R	R



* CONNECT FIBER OPTIC CABLE FROM EXISTING CABINET TO NEW CABINET LOCATION.

** AT PEDESTRIAN POLE, 2 RUNS OF CONDUIT REQUIRED (1 PED. SIGNAL, 1 DETECTOR)

E-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BCC ENGINEERING, INC.
DACHA QUINTANA, P.E. No. 67393
6401 SW 87th AVE, SUITE 200.
MIAMI, FLORIDA 33173
P: (305) 670-2350 F: (305) 670-2351
Certificate of Authorization No. 7184

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 713	ST. LUCIE	230256-7-52-01

SIGNALIZATION PLAN

SHEET NO. T-5

\\core 1/4/2018 4:18:42 PM K:\CADD\230256752O1\Signals\PLANSG01.DGN

TURNING MOVEMENT VOLUME COUNTS

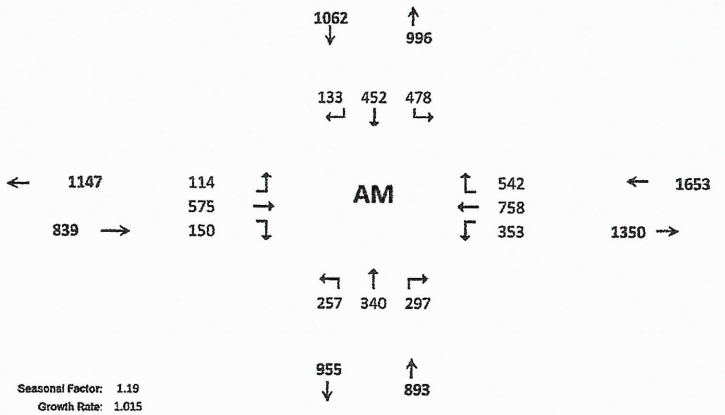
N/S STREET: Kings Hwy **E/W STREET:** Orange Ave **CONTROL:** Signalized

FILENAME:

COUNT DATE: 10/3/2018 **DAY:** Wednesday **CITY:** St Lucie

REPORT DATE: 7/22/2021 **ANALYSIS YEAR:** 2023 (WITHOUT PROJECT)

	Northbound			Southbound			Eastbound			Westbound				
15 Min Period	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15	8	42	30	97	82	15	24	79	10	22	64	77	550	2366
7:15-7:30	9	62	31	107	75	10	16	88	21	36	51	110	616	2337
7:30-7:45	14	50	51	93	67	12	13	82	20	25	46	96	569	2188
7:45-8:00	16	59	32	70	60	13	11	95	23	43	88	121	631	2154
8:00-8:15	12	58	45	81	62	8	4	49	10	20	53	119	521	1974
8:15-8:30	12	48	31	68	67	7	11	42	4	38	44	95	467	
8:30-8:45	10	50	30	93	68	7	9	62	18	28	59	101	535	
8:45-9:00	17	29	28	77	69	10	6	49	12	41	38	75	451	
AM PEAK HOUR IS FROM:			7:00AM TO 8:00AM											
Volumes	47	213	144	367	284	50	64	344	74	126	249	404	2366	
Season Factor	56	253	171	437	338	60	76	409	88	150	296	481	2816	
Growth	60	273	185	470	364	64	82	441	95	162	319	518	3033	
In/Out				-										
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	

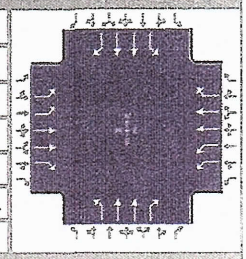


Seasonal Factor: 1.19
Growth Rate: 1.015
Years Grown: 5

SUBPROJECTS															Trips In	Trips Out
Kings Highway Commerce Park															0	0
%	3%	0%	40%	0%	0%	0%	0%	0%	3%	40%	0%	0%				
In/Out	OUT		OUT						IN	IN						
Volume	1	0	7	0	0	0	0	0	2	30	0	0	0	Hunt	76	17
%	30.0%	0.0%	0.0%	0.0%	0.0%	10.0%	10.0%	50.0%	30.0%	0.0%	50.0%	0.0%				
In/Out	IN					IN	OUT	OUT	OUT		IN					
Volume	169	0	0	0	0	56	12	62	37	0	282	0	0	St. Lucie Commerce Center	563	124
%	0.0%	0.0%	2.0%	3.0%	0.0%	0.0%	0%	5%	0.0%	2.0%	5.0%	3.0%				
In/Out			IN	IN				IN		OUT	OUT	OUT				
Volume	0	0	1	1	0	0	0	2	0	3	8	5	0	Whispering Oaks	45	167
%	0.0%	0.0%	3.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	2.0%				
In/Out			IN	IN						OUT		OUT				
Volume	0	0	4	2	0	0	0	0	0	11	0	7	0	Bent Creek	123	371
%	20.0%	0.0%	0.0%	0.0%	10.0%	10.0%	20%	55%	0.0%	30.0%	25.0%	0.0%				
In/Out	IN				IN	IN	OUT	OUT		IN	IN					
Volume	13	0	0	0	6	6	13	35	0	19	16	0	0	Wawa Kings	63	64
%	4.0%	18.0%	26.0%	0.0%	18.0%	0.0%	0.0%	0.0%	4.0%	26.0%	0.0%	0.0%				
In/Out	OUT	OUT	OUT		IN				IN	IN						
Volume	14	61	89	0	62	0	0	0	14	89	0	0	0	Kings Highway Warehouse	342	341
%	0.0%	10.0%	13.0%	0.0%	10.0%	3.0%	13%	52%	0.0%	13.0%	52.0%	0.0%				
In/Out		OUT	OUT		IN	IN	OUT	OUT		IN	IN					
Volume	0	6	7	0	20	6	7	29	0	26	102	0	0	Stonemont	197	55
%	0.0%	0.0%	30.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.0%	0.0%	0.0%				
In/Out			OUT						IN	IN						
Volume	0	0	2	0	0	0	0	0	0	2	0	0	0	Walsh Crossroads	7	5
%	5.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0%	0%	5.0%	10.0%	0.0%	0.0%				
In/Out	OUT		OUT						IN	IN						
Volume	1	0	1	0	0	0	0	0	2	4	0	0	0	Project Hurricane	36	12
%	0.0%	0.0%	2.0%	3.0%	0.0%	0.0%	0.0%	5.0%	0.0%	2.0%	8.0%	3.0%				
In/Out			IN	IN				IN		OUT	OUT	OUT				
Volume	0	0	2	4	0	0	0	6	0	8	31	12	0	Celebration Pointe	121	385
Subtotal	196	67	112	7	88	69	32	134	55	192	439	24	0			
Total	257	340	297	478	452	133	114	575	150	353	758	542	3033			

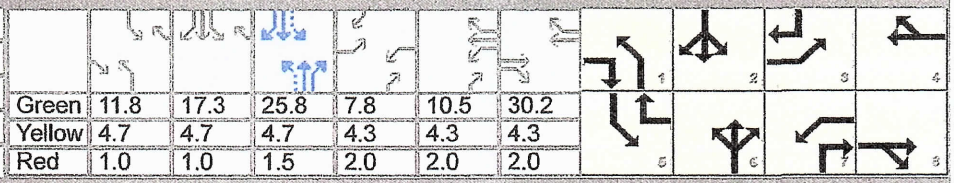
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	SOR	Analysis Date	May 10, 2021	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Orange Ave	File Name	C1.kings hwy.kings.orange.AM.without project.7.2...		
Project Description	Buildout w/out Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	114	575	150	353	758	542	257	340	297	478	452	133

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	11.8	17.3		25.8	7.8	10.5	30.2					
Yellow	4.7	4.7		4.7	4.3	4.3	4.3					
Red	1.0	1.0		1.5	2.0	2.0	2.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	14.1	36.5	30.9	53.3	17.5	32.0	40.5	55.0
Change Period, ($Y+R_c$), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s	7.7	28.2	24.2	35.7	13.8		36.8	
Green Extension Time (g_e), s	0.2	2.1	0.4	3.6	0.0	0.0	0.0	0.0
Phase Call Probability	0.99	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.00	0.69	0.28	0.08	1.00		1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	120	605	158	372	798	111	271	358	313	503	476	140
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1456	1571	1610	1150	1498	1334	1485	1559	1610	1485	1484	1610
Queue Service Time (g_s), s	5.7	26.2	10.6	22.2	33.7	5.3	11.8	14.3	21.6	34.8	15.3	7.9
Cycle Queue Clearance Time (g_c), s	5.7	26.2	10.6	22.2	33.7	5.3	11.8	14.3	21.6	34.8	15.3	7.9
Green Ratio (*g/C*)	0.06	0.22	0.30	0.18	0.34	0.58	0.27	0.18	0.36	0.45	0.35	0.40
Capacity (*c*), veh/h	163	679	484	405	1007	780	318	575	580	491	1035	651
Volume-to-Capacity Ratio (*X*)	0.738	0.892	0.326	0.919	0.792	0.142	0.850	0.623	0.539	1.025	0.460	0.215
Back of Queue (*Q*), ft/ln (95 th percentile)	112.6	491.1	187	349.5	541.6	80.4	287.3	279.5	340.4	801.1	259	139.7
Back of Queue (*Q*), veh/ln (95 th percentile)	3.8	16.7	7.5	11.9	18.4	2.7	9.7	9.4	13.6	27.1	8.7	5.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	65.1	53.3	38.0	56.7	42.1	13.2	48.5	48.5	35.6	35.1	28.5	27.2
Incremental Delay (d_2), s/veh	2.4	11.8	0.1	19.8	3.6	0.0	18.3	5.0	3.6	47.1	1.5	0.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	67.5	65.1	38.1	76.5	45.6	13.2	66.9	53.5	39.1	82.2	30.0	28.0
Level of Service (LOS)	E	E	D	E	D	B	E	D	D	F	C	C
Approach Delay, s/veh / LOS	60.6	E		51.8	D		52.6	D		53.2	D	
Intersection Delay, s/veh / LOS	54.2						D					

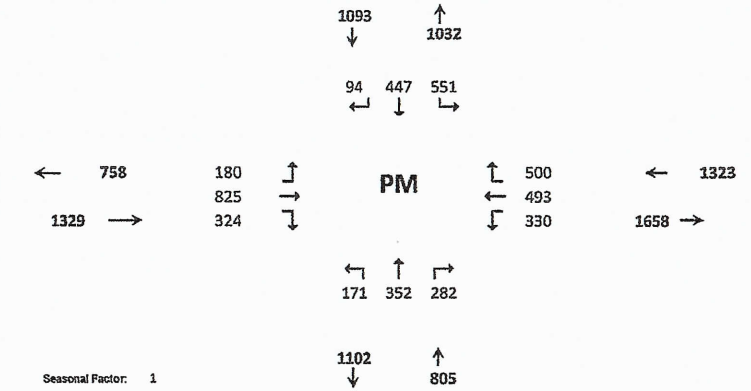
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.45	B	3.23	C	2.59	C
Bicycle LOS Score / LOS	1.22	A	1.54	B	1.26	A	1.41	A

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TURNING MOVEMENT VOLUME COUNTS

N/S STREET: Kings Hwy
E/W STREET: Orange Ave
CONTROL: Signalized
FILENAME:
COUNT DATE: 10/3/2018
DAY: Wednesday
CITY: St Lucie
REPORT DATE: 7/22/2021
ANALYSIS YEAR: 2023 (WITHOUT PROJECT)

15 Min Period lanes	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
4:00-4:15	15	61	37	89	61	7	24	56	6	34	54	82	526	2193
4:15-4:30	17	46	32	109	62	11	12	36	11	37	70	86	529	2233
4:30-4:45	10	57	46	112	77	11	20	48	8	36	44	79	548	2280
4:45-5:00	19	58	38	114	61	21	29	59	15	29	60	87	590	2304
5:00-5:15	17	69	32	75	73	11	20	75	8	27	58	101	566	2279
5:15-5:30	14	64	24	96	60	11	6	86	20	42	59	94	576	
5:30-5:45	16	48	37	127	81	8	8	43	11	26	70	97	572	
5:45-6:00	17	50	42	106	70	9	14	81	6	25	57	88	565	
PM PEAK HOUR IS FROM:			4:45PM TO 5:45PM											
Volumes	66	239	131	412	275	51	63	263	54	124	247	379	2304	
Season Factor	79	284	156	490	327	61	75	313	64	148	294	451	2742	
Growth	85	306	168	528	353	65	81	337	69	159	317	486	2954	
In/Out	0	0	0	-	0	0	0	0	0	0	0	0		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
SUBPROJECTS														
%	3%	0%	40%	0%	0%	0%	0%	0%	3%	40%	0%	0.0%		
In/Out	OUT		OUT						IN	IN				
Volume	2	0	23	0	0	0	0	0	1	8	0	0	0	Hunt
%	30.0%	0.0%	0.0%	0.0%	0.0%	10.0%	10.0%	50.0%	30.0%	0.0%	50.0%	0.0%		
In/Out	IN					IN	OUT	OUT	OUT		IN			
Volume	62	0	0	0	0	21	78	392	235	0	104	0	0	St. Lucie Commerce Center
%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	5.0%	0.0%	2.0%	5.0%	3.0%		
In/Out				IN				IN		OUT	OUT	OUT		
Volume	0	0	0	3	0	0	0	9	0	2	5	3	0	Whispering Oaks
%	0.0%	0.0%	3.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	2.0%		
In/Out			IN	IN						OUT		OUT		
Volume	0	0	12	8	0	0	0	0	0	7	0	5	0	Bent Creek
%	20.0%	0.0%	0.0%	0.0%	10.0%	10.0%	20.0%	55.0%	0.0%	30.0%	25.0%	0.0%		
In/Out	IN				IN	IN	OUT	OUT		IN	IN			
Volume	11	0	0	0	6	6	12	32	0	17	14	0	0	Wawa Kings
%	4.0%	18.0%	26.0%	0.0%	18.0%	0.0%	0.0%	0.0%	4.0%	26.0%	0.0%	0.0%		
In/Out	OUT	OUT	OUT		IN				IN	IN				
Volume	9	39	56	0	82	0	0	0	18	119	0	0	0	Kings Highway Warehouse
%	0.0%	10.0%	13.0%	0.0%	10.0%	3.0%	13.0%	52.0%	0.0%	13.0%	52.0%	0.0%		
In/Out		OUT	OUT		IN	IN	OUT	OUT		IN	IN			
Volume	0	7	9	0	7	2	9	35	0	9	35	0	0	Stonemont
%	0.0%	0.0%	30.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.0%	0.0%	0.0%		
In/Out			OUT							IN				
Volume	0	0	3	0	0	0	0	0	0	3	0	0	0	Walsh Crossroads
%	5.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	10.0%	0.0%	0.0%		
In/Out	OUT		OUT						IN	IN				
Volume	2	0	4	0	0	0	0	0	1	2	0	0	0	Project Hurricane
%	0.0%	0.0%	2.0%	3.0%	0.0%	0.0%	0.0%	5.0%	0.0%	2.0%	8.0%	3.0%		
In/Out			IN	IN				IN		OUT	OUT	OUT		
Volume	0	0	8	12	0	0	0	20	0	5	18	7	0	Celebration Pointe
Subtotal	86	46	114	23	95	29	99	488	255	171	177	14	0	
Total	171	352	282	551	447	94	180	825	324	330	493	500	2954	

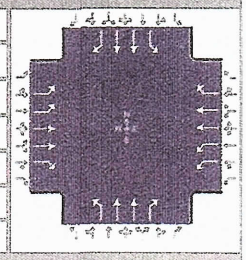


Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 5

	Trips In	Trips Out
Kings Highway Commerce Park	0	0

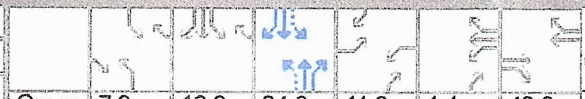
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	May 10, 2021	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Orange Ave	File Name	c1.kingsHwy.kings.orange.PM without.project.7.2...		
Project Description	Buildout without project				

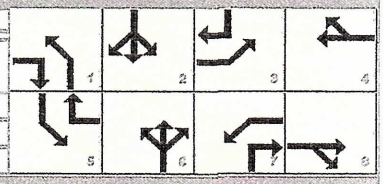


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	180	825	324	330	493	500	171	352	282	551	447	94

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	7.3	19.3	24.8	11.0	1.1	40.0						
Yellow	4.7	4.7	4.7	4.3	4.3	4.3						
Red	1.0	1.0	1.5	2.0	2.0	2.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	17.3	46.3	24.7	53.7	13.0	31.0	38.0	56.0
Change Period, (*Y+R c*), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0
Queue Clearance Time (*g s*), s	10.7	40.1	17.9	20.3	9.3		34.3	
Green Extension Time (*g e*), s	0.3	0.0	0.5	4.8	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.00	1.00	0.01	0.01	1.00		1.00	

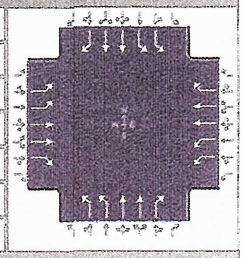
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	189	868	341	347	519	158	180	371	125	580	471	99
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1499	1574	1610	1499	1574	1334	1485	1508	1610	1485	1559	1610
Queue Service Time (*g s*), s	8.7	38.1	24.9	15.9	18.3	8.1	7.3	15.7	8.2	32.3	13.9	5.2
Cycle Queue Clearance Time (*g c*), s	8.7	38.1	24.9	15.9	18.3	8.1	7.3	15.7	8.2	32.3	13.9	5.2
Green Ratio (*g/C*)	0.08	0.29	0.34	0.13	0.34	0.57	0.23	0.18	0.31	0.42	0.36	0.43
Capacity (*c*), veh/h	236	898	544	395	1065	759	265	533	497	448	1108	699
Volume-to-Capacity Ratio (*X*)	0.803	0.967	0.627	0.880	0.487	0.208	0.679	0.695	0.252	1.293	0.424	0.142
Back of Queue (Q), ft/ln (95 th percentile)	176.8	708.7	375.2	311.4	329.6	125.2	165.2	297.1	148.8	1334	250.1	90
Back of Queue (Q), veh/ln (95 th percentile)	6.0	24.1	15.0	10.6	11.2	4.3	5.6	10.0	6.0	45.1	8.4	3.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	63.4	49.4	38.9	59.7	36.7	14.7	49.1	50.0	36.3	36.6	27.4	23.9
Incremental Delay (*d 2*), s/veh	2.4	22.1	1.7	9.2	0.1	0.0	5.7	7.3	1.2	147.8	1.2	0.4
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	65.8	71.4	40.7	68.8	36.8	14.8	54.8	57.3	37.5	184.4	28.6	24.3
Level of Service (LOS)	E	E	D	E	D	B	D	E	D	F	C	C
Approach Delay, s/veh / LOS	63.2	E		44.3	D		53.0	D		106.8	F	
Intersection Delay, s/veh / LOS	68.8						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.69	C	2.45	B	3.10	C	2.59	C
Bicycle LOS Score / LOS	1.64	B	1.33	A	1.05	A	1.44	A

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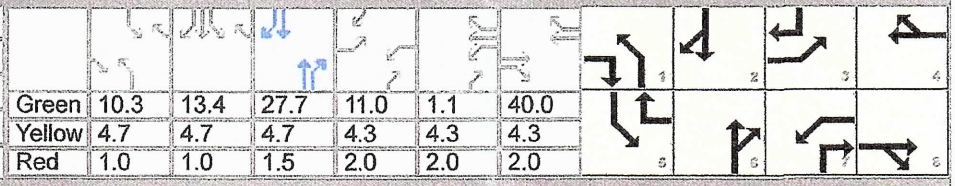
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	May 10, 2021	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Orange Ave	File Name	c1.kingsHwy.kings.orange.PM without dual nbsbl...		
Project Description	Buildout without project with duals NB SB				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	180	825	324	330	493	500	171	352	282	551	447	94

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	10.3	13.4	27.7	11.0	1.1	40.0						
Yellow	4.7	4.7	4.7	4.3	4.3	4.3						
Red	1.0	1.0	1.5	2.0	2.0	2.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phase Duration, s	17.3	46.3	24.7	53.7	16.0	33.9	35.1	53.0
Change Period, ($Y+R_c$), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s	10.7	40.1	17.9	33.9	10.6		28.8	
Green Extension Time (g_e), s	0.3	0.0	0.5	4.9	0.0	0.0	0.6	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.00	1.00	0.01	0.24	1.00		0.73	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	189	868	341	347	519	447	180	371	123	580	471	99
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1499	1574	1610	1499	1574	1334	1442	1508	1610	1485	1559	1610
Queue Service Time (g_s), s	8.7	38.1	24.1	15.9	18.3	31.9	8.6	15.1	7.8	26.8	14.7	5.4
Cycle Queue Clearance Time (g_c), s	8.7	38.1	24.1	15.9	18.3	31.9	8.6	15.1	7.8	26.8	14.7	5.4
Green Ratio (*g/C*)	0.08	0.29	0.36	0.13	0.34	0.55	0.25	0.20	0.33	0.57	0.33	0.41
Capacity (*c*), veh/h	236	898	578	395	1065	732	213	597	531	624	1042	665
Volume-to-Capacity Ratio (*X*)	0.803	0.967	0.590	0.880	0.487	0.612	0.846	0.621	0.232	0.930	0.452	0.149
Back of Queue (Q), ft/ln (95 th percentile)	176.8	708.7	361.1	311.4	329.6	433.3	203.5	282.7	140.4	495.1	262.9	94.2
Back of Queue (Q), veh/ln (95 th percentile)	6.0	24.1	14.4	10.6	11.2	14.7	6.9	9.5	5.6	16.7	8.9	3.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	63.4	49.4	36.5	59.7	36.7	21.5	64.0	46.9	34.1	54.3	29.9	25.7
Incremental Delay (d_2), s/veh	2.4	22.1	1.1	9.2	0.1	1.1	24.6	4.8	1.0	17.6	1.4	0.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	65.8	71.4	37.6	68.8	36.8	22.6	88.6	51.7	35.1	71.9	31.3	26.2
Level of Service (LOS)	E	E	D	E	D	C	F	D	D	E	C	C
Approach Delay, s/veh / LOS	62.4	E		40.4	D		58.5	E		51.3	D	
Intersection Delay, s/veh / LOS	52.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.83	C	2.59	C	2.71	C	2.59	C
Bicycle LOS Score / LOS	1.64	B	1.57	B	1.04	A	1.44	A

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TURNING MOVEMENT VOLUME COUNTS

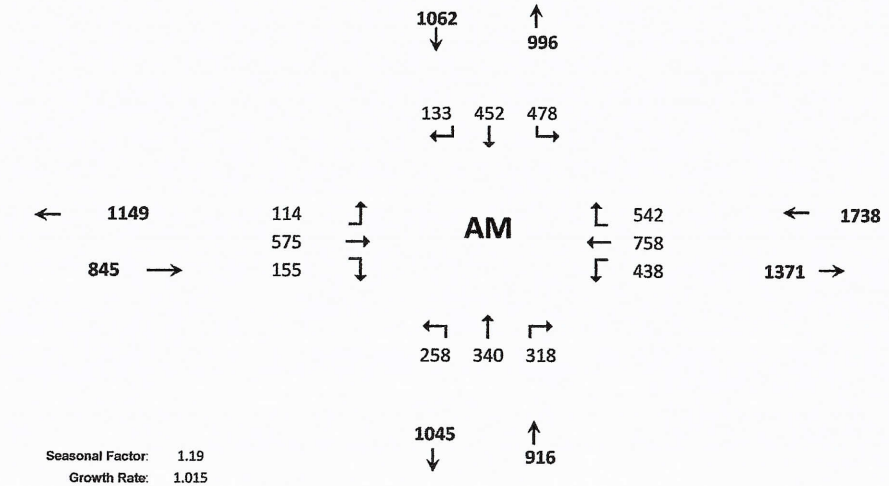
N/S STREET: Kings Hwy **E/W STREET:** Orange Ave **CONTROL:** Signalized

FILENAME:

COUNT DATE: 10/3/2018 **DAY:** Wednesday **CITY:** St Lucie

REPORT DATE: 3/24/2022 **ANALYSIS YEAR:** 2023 (With Project)

15 Min Period	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
7:00-7:15	8	42	30	97	82	15	24	79	10	22	64	77	550	2366
7:15-7:30	9	62	31	107	75	10	16	88	21	36	51	110	616	2337
7:30-7:45	14	50	51	93	67	12	13	82	20	25	46	96	569	2188
7:45-8:00	16	59	32	70	60	13	11	95	23	43	88	121	631	2154
8:00-8:15	12	58	45	81	62	8	4	49	10	20	53	119	521	1974
8:15-8:30	12	48	31	68	67	7	11	42	4	38	44	95	467	
8:30-8:45	10	50	30	93	68	7	9	62	18	28	59	101	535	
8:45-9:00	17	29	28	77	69	10	6	49	12	41	38	75	451	



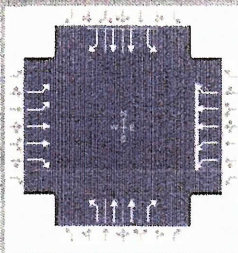
AM PEAK HOUR IS FROM: 7:00AM TO 8:00AM

Volumes	47	213	144	367	284	50	64	344	74	126	249	404	2366		
Season Factor	56	253	171	437	338	60	76	409	88	150	296	481	2816		
Growth	60	273	185	470	364	64	82	441	95	162	319	518	3033		
In/Out	OUT	0	OUT	0	0	0	0	0	IN	IN	0	0			
Percentage	2%	0%	30%	0%	0%	0%	0%	0%	2%	30%	0%	0%	0%		
PROJECT	1	0	21	0	0	0	0	0	6	85	0	0	0	Kings Highway Commerce Park	283	71
SUBPROJECTS															
%	3%	0%	40%	0%	0%	0%	0%	0%	3%	40%	0%	0%			
In/Out	OUT		OUT						IN	IN					
Volume	1	0	7	0	0	0	0	0	2	30	0	0	0	Hunt	76	17
%	30.0%	0.0%	0.0%	0.0%	0.0%	10.0%	10.0%	50.0%	30.0%	0.0%	50.0%	0.0%			
In/Out	IN					IN	OUT	OUT	OUT		IN				
Volume	169	0	0	0	0	56	12	62	37	0	282	0	0	St. Lucie Commerce Center	563	124
%	0.0%	0.0%	2.0%	3.0%	0.0%	0.0%	0%	5%	0.0%	2.0%	5.0%	3.0%			
In/Out			IN	IN				IN		OUT	OUT	OUT			
Volume	0	0	1	1	0	0	0	2	0	3	8	5	0	Whispering Oaks	45	167
%	0.0%	0.0%	3.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	2.0%			
In/Out			IN	IN						OUT		OUT			
Volume	0	0	4	2	0	0	0	0	0	11	0	7	0	Bent Creek	123	371
%	20.0%	0.0%	0.0%	0.0%	10.0%	10.0%	20%	55%	0.0%	30.0%	25.0%	0.0%			
In/Out	IN				IN	IN	OUT	OUT		IN	IN				
Volume	13	0	0	0	6	6	13	35	0	19	16	0	0	Wawa Kings	63	64
%	4.0%	18.0%	26.0%	0.0%	18.0%	0.0%	0.0%	0.0%	4.0%	26.0%	0.0%	0.0%			
In/Out	OUT	OUT	OUT		IN				IN	IN					
Volume	14	61	89	0	62	0	0	0	14	89	0	0	0	Kings Highway Warehouse	342	341
%	0.0%	10.0%	13.0%	0.0%	10.0%	3.0%	13%	52%	0.0%	13.0%	52.0%	0.0%			
In/Out		OUT	OUT		IN	IN	OUT	OUT		IN	IN				
Volume	0	6	7	0	20	6	7	29	0	26	102	0	0	Stonemont	197	55
%	0.0%	0.0%	30.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.0%	0.0%	0.0%			
In/Out			OUT							IN					
Volume	0	0	2	0	0	0	0	0	0	2	0	0	0	Walsh Crossroads	7	5
%	5.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0%	0%	5.0%	10.0%	0.0%	0.0%			
In/Out	OUT		OUT						IN	IN					
Volume	1	0	1	0	0	0	0	0	2	4	0	0	0	Project Hurricane	36	12
%	0.0%	0.0%	2.0%	3.0%	0.0%	0.0%	0.0%	5.0%	0.0%	2.0%	8.0%	3.0%			
In/Out			IN	IN				IN		OUT	OUT	OUT			
Volume	0	0	2	4	0	0	0	6	0	8	31	12	0	Celebration Pointe	121	385
Subtotal	196	67	112	7	88	69	32	134	55	192	439	24	0			
Total	258	340	318	478	452	133	114	575	155	438	758	542	3033			

Seasonal Factor: 1.19
Growth Rate: 1.015
Years Grown: 5

HCS7 Signalized Intersection Results Summary

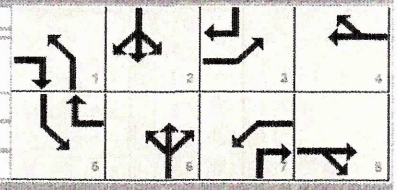
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	WA	Analysis Date	Mar 24, 2022	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Orange Ave	File Name	C3 - HCS - Orange & Kings - AM -WITH PROJEC...		
Project Description	Buildout with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	114	575	155	438	758	542	258	340	318	478	452	133

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.8	17.3	25.8	7.8	10.6	30.2	
Yellow	4.7	4.7	4.7	4.3	4.3	4.3	
Red	1.0	1.0	1.5	2.0	2.0	2.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	14.1	36.5	31.0	53.4	17.5	32.0	40.5	55.0
Change Period, (*Y+R c*), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0
Queue Clearance Time (*g s*), s	7.7	28.2	24.2	35.7	13.8		36.8	
Green Extension Time (*g e*), s	0.2	2.0	0.5	3.6	0.0	0.0	0.0	0.0
Phase Call Probability	0.99	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.00	0.71	0.33	0.09	1.00		1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	120	605	163	461	798	111	272	358	335	503	476	140
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1456	1571	1610	1427	1498	1334	1485	1559	1610	1485	1484	1610
Queue Service Time (*g s*), s	5.7	26.2	11.1	22.2	33.7	5.3	11.8	14.3	23.5	34.8	15.3	7.9
Cycle Queue Clearance Time (*g c*), s	5.7	26.2	11.1	22.2	33.7	5.3	11.8	14.3	23.5	34.8	15.3	7.9
Green Ratio (*g/C*)	0.06	0.22	0.30	0.18	0.34	0.58	0.27	0.18	0.36	0.45	0.35	0.40
Capacity (*c*), veh/h	163	678	483	504	1009	780	317	575	581	490	1035	651
Volume-to-Capacity Ratio (*X*)	0.738	0.892	0.338	0.914	0.791	0.142	0.856	0.623	0.576	1.027	0.460	0.215
Back of Queue (*Q*), ft/ln (95 th percentile)	112.6	491.5	193.1	408.1	540.7	80.4	294.3	279.5	366.1	803.8	259	139.7
Back of Queue (*Q*), veh/ln (95 th percentile)	3.8	16.7	7.7	13.9	18.4	2.7	9.9	9.4	14.6	27.2	8.7	5.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	65.1	53.3	38.2	56.6	42.0	13.2	48.8	48.5	36.1	35.2	28.5	27.2
Incremental Delay (*d 2*), s/veh	2.4	12.0	0.2	16.3	3.5	0.0	19.2	5.0	4.1	47.6	1.5	0.8
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	67.5	65.3	38.3	72.9	45.5	13.2	67.9	53.5	40.2	82.8	30.0	28.0
Level of Service (LOS)	E	E	D	E	D	B	E	D	D	F	C	C
Approach Delay, s/veh / LOS	60.6	E		52.1	D		52.9	D		53.5	D	
Intersection Delay, s/veh / LOS	54.4						D					

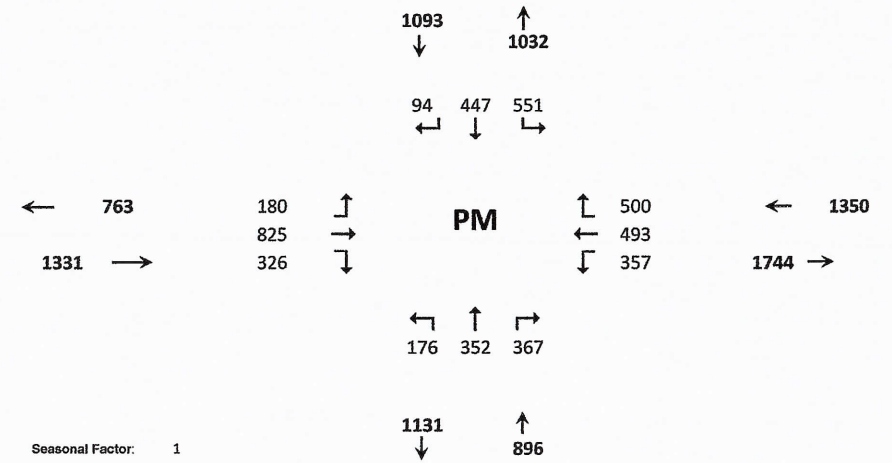
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.45	B	3.23	C	2.59	C
Bicycle LOS Score / LOS	1.22	A	1.62	B	1.28	A	1.41	A

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TURNING MOVEMENT VOLUME COUNTS

Kings Hwy / Orange Ave - PM
2023 (With Project)

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	15	61	37	89	61	7	24	56	6	34	54	82	526	2193
4:15-4:30	17	46	32	109	62	11	12	36	11	37	70	86	529	2233
4:30-4:45	10	57	46	112	77	11	20	48	8	36	44	79	548	2280
4:45-5:00	19	58	38	114	61	21	29	59	15	29	60	87	590	2304
5:00-5:15	17	69	32	75	73	11	20	75	8	27	58	101	566	2279
5:15-5:30	14	64	24	96	60	11	6	86	20	42	59	94	576	
5:30-5:45	16	48	37	127	81	8	8	43	11	26	70	97	572	
5:45-6:00	17	50	42	106	70	9	14	81	6	25	57	88	565	



PM PEAK HOUR IS FROM:	4:45PM TO 5:45PM												
Volumes	66	239	131	412	275	51	63	263	54	124	247	379	2304
Season Factor	79	284	156	490	327	61	75	313	64	148	294	451	2742
Growth	85	306	168	528	353	65	81	337	69	159	317	486	2954
In/Out	OUT	0	OUT	0	0	0	0	0	IN	IN	0	0	
Percentage	2%	0%	30%	0%	0%	0%	0%	0%	2%	30%	0%	0%	0%
PROJECT	6	0	85	0	0	0	0	0	2	27	0	0	120

Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 5

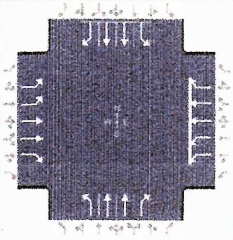
	Trips In	Trips Out
Kings Highway Commerce Park	90	284

SUBPROJECTS

%	3%	0%	40%	0%	0%	0%	0%	0%	3%	40%	0%	0.0%				
In/Out	OUT		OUT						IN	IN						
Volume	2	0	23	0	0	0	0	0	1	8	0	0	0	Hunt	19	57
%	30.0%	0.0%	0.0%	0.0%	0.0%	10.0%	10.0%	50.0%	30.0%	0.0%	50.0%	0.0%				
In/Out	IN					IN	OUT	OUT	OUT		IN					
Volume	62	0	0	0	0	21	78	392	235	0	104	0	0	St. Lucie Commerce Center	208	784
%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	5.0%	0.0%	2.0%	5.0%	3.0%				
In/Out				IN				IN		OUT	OUT	OUT				
Volume	0	0	0	3	0	0	0	9	0	2	5	3	0	Whispering Oaks	172	94
%	0.0%	0.0%	3.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	2.0%				
In/Out			IN	IN						OUT		OUT				
Volume	0	0	12	8	0	0	0	0	0	7	0	5	0	Bent Creek	385	226
%	20.0%	0.0%	0.0%	0.0%	10.0%	10.0%	20.0%	55.0%	0.0%	30.0%	25.0%	0.0%				
In/Out	IN				IN	IN	OUT	OUT		IN	IN					
Volume	11	0	0	0	6	6	12	32	0	17	14	0	0	Wawa Kings	57	58
%	4.0%	18.0%	26.0%	0.0%	18.0%	0.0%	0.0%	0.0%	4.0%	26.0%	0.0%	0.0%				
In/Out	OUT	OUT	OUT		IN				IN	IN						
Volume	9	39	56	0	82	0	0	0	18	119	0	0	0	Kings Highway Warehouse	458	216
%	0.0%	10.0%	13.0%	0.0%	10.0%	3.0%	13.0%	52.0%	0.0%	13.0%	52.0%	0.0%				
In/Out		OUT	OUT		IN	IN	OUT	OUT		IN	IN					
Volume	0	7	9	0	7	2	9	35	0	9	35	0	0	Stonemont	68	186
%	0.0%	0.0%	30.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.0%	0.0%	0.0%				
In/Out			OUT							IN						
Volume	0	0	3	0	0	0	0	0	0	3	0	0	0	Walsh Crossroads	10	11
%	5.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	10.0%	0.0%	0.0%				
In/Out	OUT		OUT						IN	IN						
Volume	2	0	4	0	0	0	0	0	1	2	0	0	0	Project Hurricane	23	37
%	0.0%	0.0%	2.0%	3.0%	0.0%	0.0%	0.0%	5.0%	0.0%	2.0%	8.0%	3.0%				
In/Out			IN	IN				IN		OUT	OUT	OUT				
Volume	0	0	8	12	0	0	0	20	0	5	18	7	0	Celebration Pointe	398	229
Subtotal	86	46	114	23	95	29	99	488	255	171	177	14	0			
Total	176	352	367	551	447	94	180	825	326	357	493	500	3073			

HCS7 Signalized Intersection Results Summary

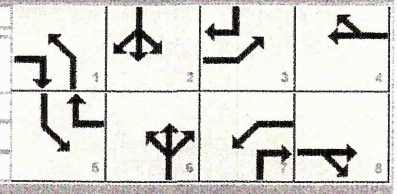
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	WA	Analysis Date	Mar 24, 2022	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Orange Ave	File Name	C3 - HCS - Orange & Kings - PM -WITH PROJEC...		
Project Description	Buildout with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	180	825	326	357	493	500	176	352	367	551	447	94

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

	EB			WB			NB			SB		
Green	10.3	16.3		24.8	11.0	2.4	38.7					
Yellow	4.7	4.7		4.7	4.3	4.3	4.3					
Red	1.0	1.0		1.5	2.0	2.0	2.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	17.3	45.0	26.0	53.7	16.0	31.0	38.0	53.0
Change Period, ($Y+R_c$), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s	10.7	40.6	19.2	20.3	12.3		34.3	
Green Extension Time (g_e), s	0.3	0.0	0.5	4.8	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.00	1.00	0.05	0.01	1.00		1.00	

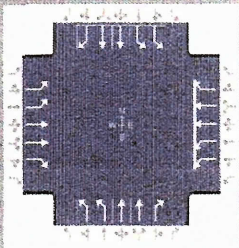
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	189	868	343	376	519	158	185	371	215	580	471	99
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1499	1574	1610	1499	1574	1334	1485	1508	1610	1485	1559	1610
Queue Service Time (g_s), s	8.7	38.6	24.7	17.2	18.3	8.1	10.3	15.7	14.7	32.3	14.7	5.4
Cycle Queue Clearance Time (g_c), s	8.7	38.6	24.7	17.2	18.3	8.1	10.3	15.7	14.7	32.3	14.7	5.4
Green Ratio (*g/C*)	0.08	0.28	0.35	0.14	0.34	0.57	0.25	0.18	0.32	0.42	0.33	0.41
Capacity (*c*), veh/h	236	869	563	423	1065	759	297	534	512	449	1042	665
Volume-to-Capacity Ratio (*X*)	0.803	0.999	0.609	0.889	0.487	0.208	0.624	0.694	0.419	1.293	0.452	0.149
Back of Queue (*Q*), ft/ln (95 th percentile)	176.8	748.1	369.7	336.9	329.6	125.2	288.1	297.1	250.2	1334.2	262.9	94.2
Back of Queue (*Q*), veh/ln (95 th percentile)	6.0	25.4	14.8	11.5	11.2	4.3	9.7	10.0	10.0	45.1	8.9	3.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	63.4	50.7	37.6	59.1	36.7	14.7	45.6	50.0	37.6	36.6	29.9	25.7
Incremental Delay (d_2), s/veh	2.4	30.3	1.4	11.5	0.1	0.0	3.0	7.3	2.5	147.7	1.4	0.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	65.8	81.0	39.0	70.6	36.8	14.8	48.6	57.3	40.1	184.3	31.3	26.2
Level of Service (LOS)	E	F	D	E	D	B	D	E	D	F	C	C
Approach Delay, s/veh / LOS	68.6	E		45.6	D		50.4	D		108.1	F	
Intersection Delay, s/veh / LOS	70.2						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.69	C	2.45	B	3.10	C	2.59	C
Bicycle LOS Score / LOS	1.64	B	1.36	A	1.12	A	1.44	A

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HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	WA	Analysis Date	Mar 24, 2022	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Orange Ave	File Name	C3 - HCS - Orange & Kings - PM -WITH PROJEC...		
Project Description	Buildout with Project with duals NB SB				

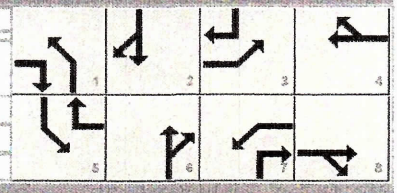


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	180	825	326	357	493	500	176	352	367	551	447	94

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	11.0	12.9	27.5	11.0	2.4	38.7
Yellow	4.7	4.7	4.7	4.3	4.3	4.3
Red	1.0	1.0	1.5	2.0	2.0	2.0

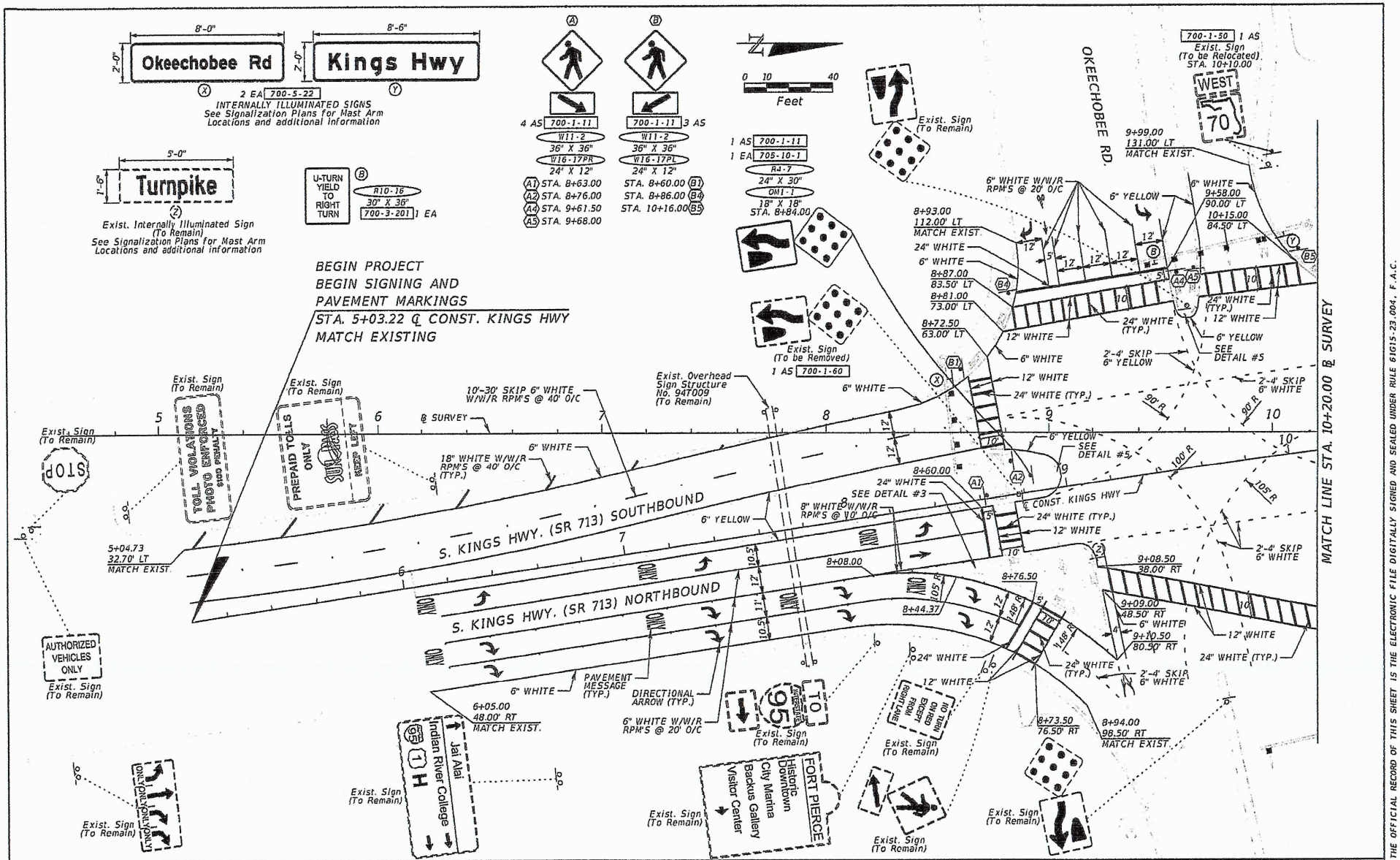


Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phase Duration, s	17.3	45.0	26.0	53.7	16.7	33.7	35.3	52.3
Change Period, ($Y+R_c$), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s	10.7	40.6	19.2	23.7	10.9		28.8	
Green Extension Time (g_e), s	0.3	0.0	0.5	5.3	0.1	0.0	0.8	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.00	1.00	0.05	0.04	0.15		0.19	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	189	868	343	376	519	341	185	371	215	580	471	99
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1499	1574	1610	1499	1574	1334	1442	1508	1610	1485	1559	1610
Queue Service Time (g_s), s	8.7	38.6	24.5	17.2	18.3	21.7	8.9	15.2	14.3	26.8	14.8	5.4
Cycle Queue Clearance Time (g_c), s	8.7	38.6	24.5	17.2	18.3	21.7	8.9	15.2	14.3	26.8	14.8	5.4
Green Ratio (*g/C*)	0.08	0.28	0.35	0.14	0.34	0.55	0.08	0.20	0.34	0.21	0.33	0.41
Capacity (*c*), veh/h	236	869	571	423	1065	733	226	593	544	627	1027	657
Volume-to-Capacity Ratio (*X*)	0.803	0.999	0.601	0.889	0.487	0.465	0.818	0.625	0.395	0.924	0.458	0.151
Back of Queue (*Q*), ft/ln (95 th percentile)	176.8	748.1	366.8	336.9	329.6	311.1	182.4	283.2	242.6	487.5	265.5	95.1
Back of Queue (*Q*), veh/ln (95 th percentile)	6.0	25.4	14.7	11.5	11.2	10.6	6.2	9.6	9.7	16.5	9.0	3.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	63.4	50.7	37.1	59.1	36.7	19.1	63.5	47.1	35.4	54.1	30.5	26.1
Incremental Delay (d_2), s/veh	2.4	30.3	1.3	11.5	0.1	0.2	7.9	4.9	2.1	15.2	1.5	0.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	65.8	81.0	38.3	70.6	36.8	19.2	71.4	52.0	37.6	69.3	32.0	26.6
Level of Service (LOS)	E	F	D	E	D	B	E	D	D	E	C	C
Approach Delay, s/veh / LOS	68.5	E		42.2	D		52.6	D		50.3	D	
Intersection Delay, s/veh / LOS	54.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.83	C	2.59	C	2.85	C	2.59	C
Bicycle LOS Score / LOS	1.64	B	1.51	B	1.12	A	1.44	A

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E-12

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JACOBS ENGINEERING GROUP INC.
3750 NW 87th AVENUE, SUITE 750
MIAMI, FL 33178
PHONE No. (305) 718-0599
CERTIFICATE OF AUTHORIZATION No. 2822
ENGINEER OF RECORD
JAVIER A. CALVO P.E. No. 73792

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

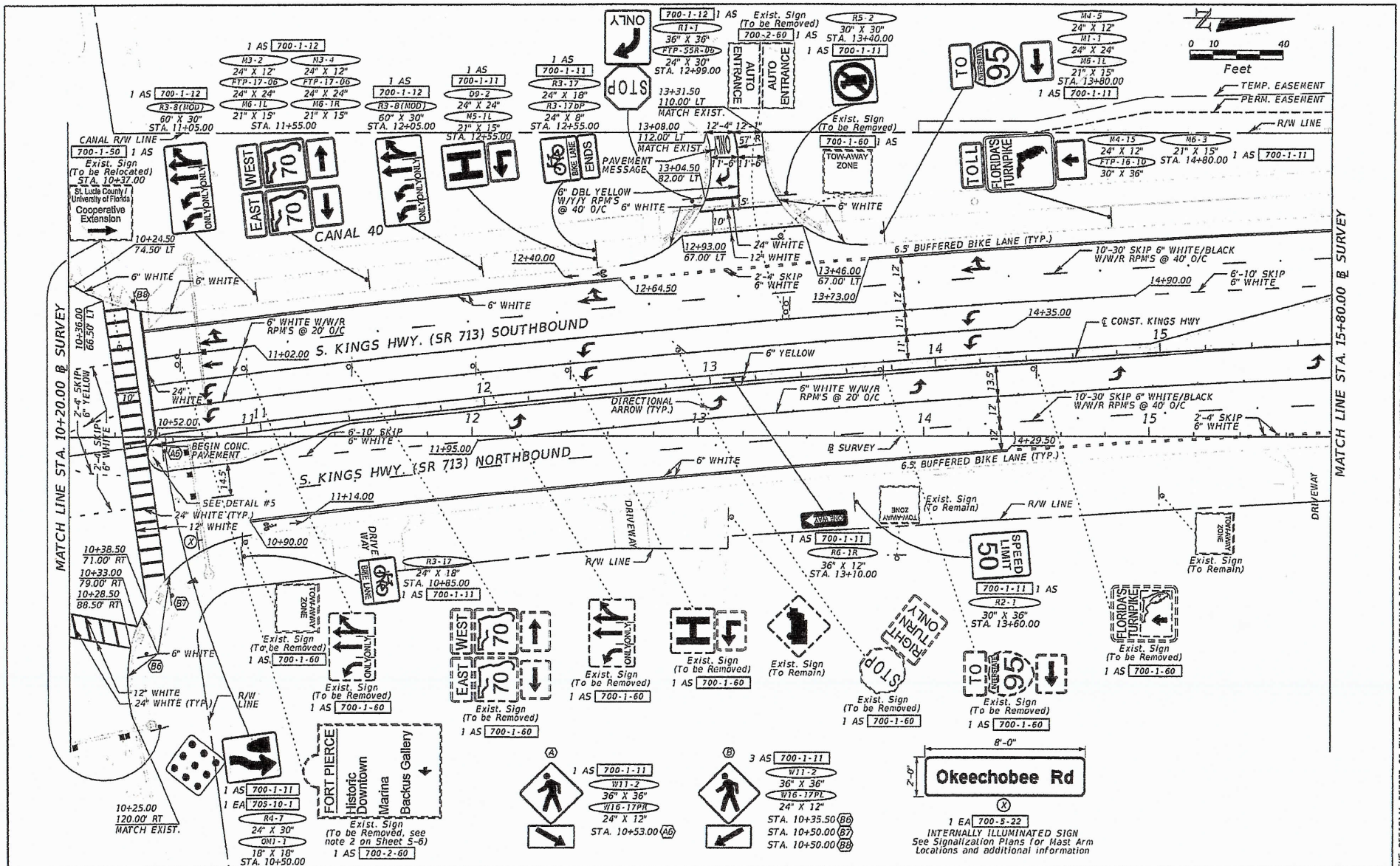
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 713	ST. LUCIE	230256-6-52-01

SIGNING AND PAVEMENT MARKING PLANS

SHEET NO. S-7

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

calvoja 11/21/2017 10:02:11 AM P:\EGY19600_Kings Hwy\700 Cadd Files\230256652\01\signing\plans001.dgn



E-13

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JACOBS ENGINEERING GROUP INC.
3750 NW 87th AVENUE, SUITE 750
MIAMI, FL 33178
PHONE No. (305) 718-0599
CERTIFICATE OF AUTHORIZATION No. 2822
ENGINEER OF RECORD:
JAVIER A. CALVO P.E. No. 73792

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 713	ST. LUCIE	230256-6-52-01

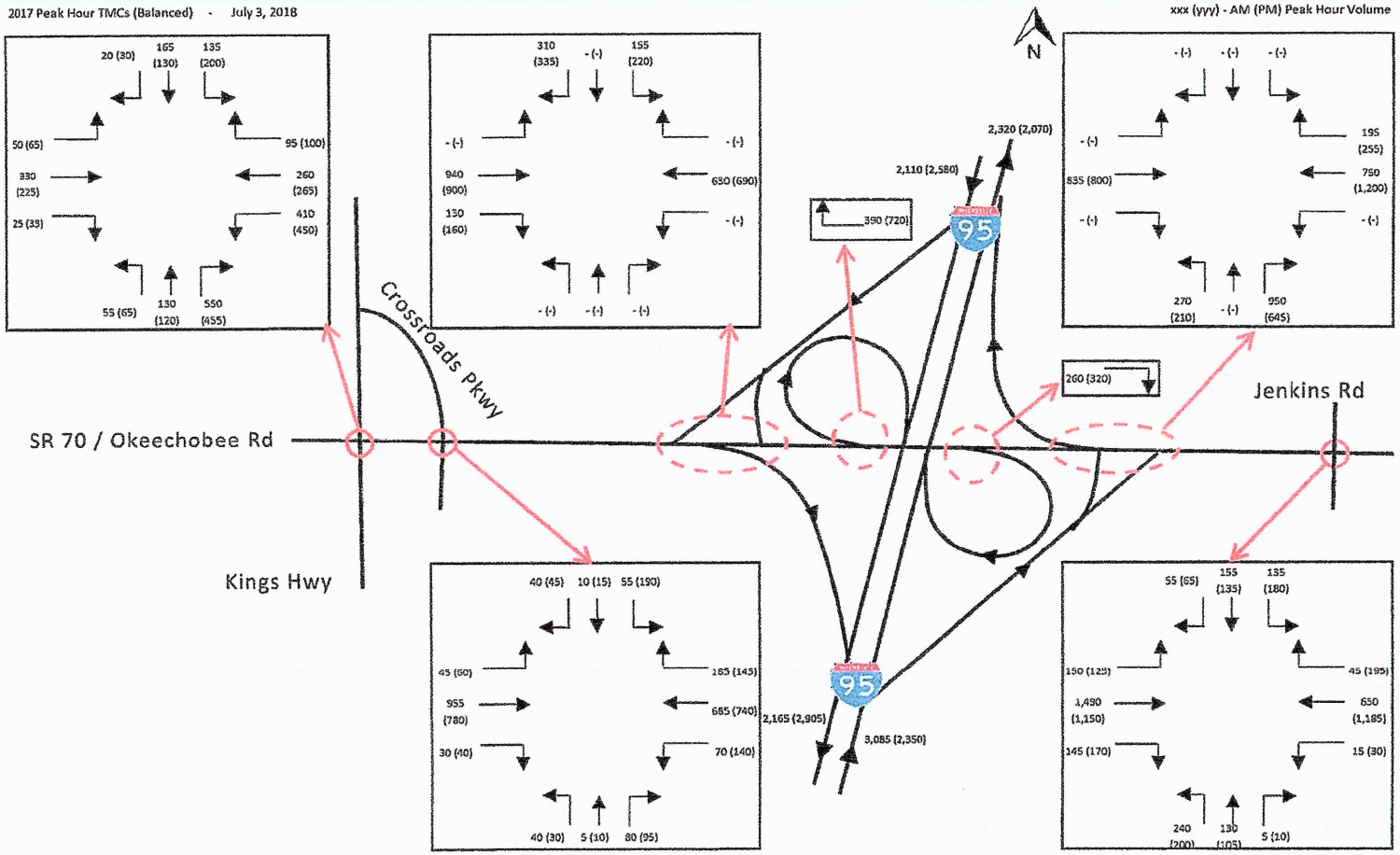
SIGNING AND PAVEMENT MARKING PLANS

SHEET NO. S-8

calvoja 12/27/2017 3:39:57 PM P:\E9\18600_Kings Hwy\700 Cadd Files\230256652O1\signing\plansp02.dgn

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

SR 70/Okeechobee Road Interchange



Estimated 2017 Turning Movement Volumes based on data collected for the Master Plan study in Oct. and Nov. 2017.

TURNING MOVEMENT VOLUME COUNTS

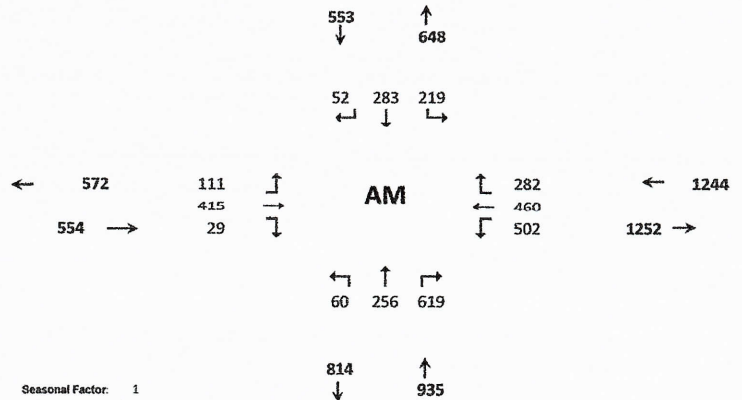
N/S STREET: Kings Hwy **E/W STREET:** Okeechobee Rd **CONTROL:** Signalized

FILENAME: Oct.2017 FDOT Adjusted

COUNT DATE: **DAY:** **CITY:** St Lucie

REPORT DATE: 7/22/2021 **ANALYSIS YEAR:** 2023 without project

15 Min Period	Northbound			Southbound			Eastbound			Westbound				
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15													0	0
7:15-7:30													0	0
7:30-7:45													0	0
7:45-8:00													0	0
8:00-8:15													0	0
8:15-8:30													0	
8:30-8:45													0	
8:45-9:00													0	



AM PEAK HOUR IS FROM:	8:00AM TO 9:00AM													
Volumes	55	130	550	135	165	20	50	330	25	410	260	95	0	
Season Factor	55	130	550	135	165	20	50	330	25	410	260	95	2225	
Growth	60	142	601	148	180	22	55	361	27	448	284	104	2433	
In/Out	OUT	IN	OUT	OUT	OUT	OUT	IN		IN			IN		
Percentage	0%	5%	0%	35%	5%	5%	5%	0%	0%	0%	0%	35%	0%	
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	

Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 6

	Trips In	Trips Out
Kings Highway Commerce Park	0	0

SUBPROJECTS

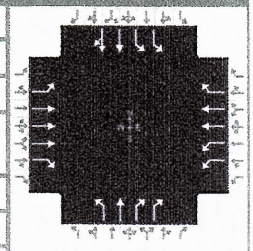
%	0%	5%	0%	30%	5%	5%	5%	0%	0%	0%	0%	30%		
In/Out		IN		OUT	OUT	OUT	IN					IN		
Volume	0	4	0	5	1	1	4	0	0	0	0	23	0	Hunt
%	0.0%	5.0%	0.0%	20.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	20.0%		
In/Out		IN		OUT	OUT	OUT	IN					IN		
Volume	0	28	0	25	6	6	28	0	0	0	0	113	0	St. Lucie Commerce Center
%	0.0%	0.0%	5.0%	1.0%	0.0%	0.0%	0%	5%	0.0%	5.0%	5.0%	1.0%		
In/Out			IN	IN				IN		OUT	OUT	OUT		
Volume	0	0	2	0	0	0	0	2	0	8	8	2	0	Whispering Oaks
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	7.0%	0.0%		
In/Out								IN			OUT			
Volume	0	0	0	0	0	0	0	9	0	0	26	0	0	Bent Creek
%	0.0%	5.0%	0.0%	5.0%	5.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	5.0%		
In/Out		IN		OUT	OUT	OUT	IN					IN		
Volume	0	3	0	3	3	3	3	0	0	0	0	3	0	Wawa Kings
%	0.0%	21.0%	0.0%	11.0%	21.0%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%	11.0%		
In/Out		IN		OUT	OUT	OUT	IN					IN		
Volume	0	72	0	38	72	14	14	0	0	0	0	38	0	Kings Highway Warehouse
%	0.0%	10.0%	13.0%	0.0%	10.0%	3.0%	13%	52%	0.0%	13.0%	52.0%	0.0%		
In/Out		OUT	OUT		IN	IN	OUT	OUT		IN	IN			
Volume	0	6	7	0	20	6	7	29	0	26	102	0	0	Stonemont
%	0.0%	20.0%	0.0%	0.0%	20.0%	0.0%	0.0%	5.0%	0.0%	0.0%	5.0%	0.0%		
In/Out		IN			OUT			IN			OUT			
Volume	0	1	0	0	1	0	0	0	0	0	0	0	0	Walsh Crossroads
%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0%	5%	5.0%	5.0%	5.0%	0.0%		
In/Out			IN					IN	IN	OUT	OUT			
Volume	0	0	2	0	0	0	0	2	2	1	1	0	0	Project Hurricane
%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	5.0%	10.0%	0.0%		
In/Out			IN					IN		OUT	OUT			
Volume	0	0	6	0	0	0	0	12	0	19	39	0	0	Celebration Pointe
%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5%	80%	5.0%	0.0%	80.0%	0.0%		
In/Out	IN					IN	OUT	OUT	OUT		IN			
Volume	7	0	0	0	0	7	21	337	21	0	114	0		Creekside

	Trips In	Trips Out
Hunt	76	17
St. Lucie Commerce Center	563	124
Whispering Oaks	45	167
Bent Creek	123	371
Wawa Kings	63	64
Kings Highway Warehouse	342	341
Stonemont	197	55
Walsh Crossroads	7	5
Project Hurricane	36	12
Celebration Pointe	121	385
Creekside	143	421

Subtotal	0	114	17	71	103	30	56	54	2	54	176	178	0
Total	60	256	619	219	283	52	111	415	29	502	460	282	3287

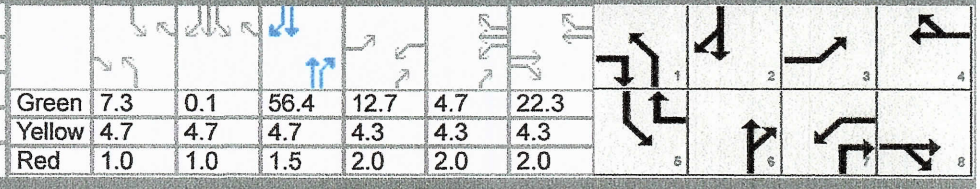
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	SOR	Analysis Date	Jul 26, 2021	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	AM Peak Hour without project	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Okeechobee	File Name	c1.kingsHwy.kings.okeechobee.AM without projec...		
Project Description	Buildout AM without project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	111	415	29	502	460	282	60	256	619	219	283	52

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	7.3	0.1		56.4	12.7	4.7	22.3					
Yellow	4.7	4.7		4.7	4.3	4.3	4.3					
Red	1.0	1.0		1.5	2.0	2.0	2.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	19.0	28.6	30.0	39.5	13.0	62.6	18.8	68.4
Change Period, (*Y+R c*), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0
Queue Clearance Time (*g s*), s	12.8	20.2	25.7	21.4	7.9		12.7	
Green Extension Time (*g e*), s	0.1	2.1	0.0	2.4	0.1	0.0	0.5	0.0
Phase Call Probability	0.99	1.00	1.00	1.00	0.91		1.00	
Max Out Probability	0.00	0.03	1.00	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	117	437	31	528	484	109	63	269	388	231	178	175
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1499	1089	1384	1555	1574	1334	1485	1633	1169	1485	1605	1546
Queue Service Time (*g s*), s	10.8	18.2	2.5	23.7	19.4	8.4	5.9	13.7	11.9	10.7	7.4	8.3
Cycle Queue Clearance Time (*g c*), s	10.8	18.2	2.5	23.7	19.4	8.4	5.9	13.7	11.9	10.7	7.4	8.3
Green Ratio (*g/C*)	0.09	0.16	0.21	0.17	0.24	0.33	0.05	0.40	0.57	0.09	0.44	0.44
Capacity (*c*), veh/h	136	519	292	527	747	442	77	658	1338	279	713	687
Volume-to-Capacity Ratio (*X*)	0.857	0.841	0.104	1.003	0.648	0.248	0.817	0.410	0.290	0.827	0.249	0.255
Back of Queue (*Q*), ft/ln (95 th percentile)	224.3	259	43.8	507.6	352.5	142.4	124.9	247.8	165	214.5	138.4	133.8
Back of Queue (*Q*), veh/ln (95 th percentile)	7.6	8.8	1.5	17.7	12.0	4.8	4.2	8.7	5.6	7.2	4.8	5.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	62.7	57.1	44.5	58.2	48.1	34.1	65.7	22.5	15.4	62.3	17.3	19.5
Incremental Delay (*d 2*), s/veh	5.8	4.3	0.1	40.1	0.4	0.1	7.6	1.9	0.5	2.4	0.8	0.9
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	68.5	61.4	44.6	98.2	48.5	34.2	73.3	24.4	15.9	64.7	18.2	20.4
Level of Service (LOS)	E	E	D	F	D	C	E	C	B	E	B	C
Approach Delay, s/veh / LOS	62.0	E		70.5	E		24.1	C		37.3	D	
Intersection Delay, s/veh / LOS	51.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.82	C	2.31	B	2.96	C	2.57	C
Bicycle LOS Score / LOS	0.81	A	1.41	A	1.68	B	0.97	A

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TURNING MOVEMENT VOLUME COUNTS

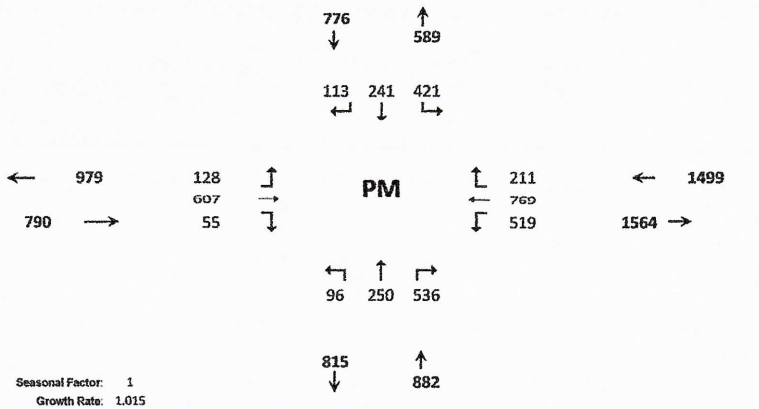
N/S STREET: Kings Hwy **E/W STREET:** Okeechobee Rd **CONTROL:** Signalized

FILENAME:

COUNT DATE: Oct 2017 FDOT Adjusted **DAY:** **CITY:** St Lucie

REPORT DATE: 7/22/2021 **ANALYSIS YEAR:** 2023 Without Project

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15													0	0
4:15-4:30													0	0
4:30-4:45													0	0
4:45-5:00													0	0
5:00-5:15													0	0
5:15-5:30													0	
5:30-5:45													0	
5:45-6:00													0	
PM PEAK HOUR IS FROM:			5:00PM TO 6:00PM											
Volumes	65	120	455	200	130	30	65	225	35	450	265	100	0	
Season Factor	65	120	455	200	130	30	65	225	35	450	265	100	2140	
Growth	71	131	498	219	142	33	71	246	38	492	290	109	2340	
In/Out	OUT	IN	OUT	OUT	OUT	OUT	IN	0	IN	0	0	IN		
Percentage	0%	5%	0%	35%	5%	5%	5%	0%	0%	0%	0%	35%	0%	
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
SUBPROJECTS														
%	0%	5%	0%	30%	5%	5%	5%	0%	0%	0%	0%	30.0%		
In/Out		IN		OUT	OUT	OUT	IN					IN		
Volume	0	1	0	17	3	3	1	0	0	0	0	6	0	Hunt
%	0.0%	5.0%	0.0%	20.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	20.0%		
In/Out		IN		OUT	OUT	OUT	IN					IN		
Volume	0	10	0	157	39	39	10	0	0	0	0	42	0	St. Lucie Commerce Center
%	0.0%	0.0%	5.0%	1.0%	0.0%	0.0%	0.0%	5.0%	0.0%	5.0%	5.0%	1.0%		
In/Out			IN	IN				IN		OUT	OUT	OUT		
Volume	0	0	9	2	0	0	0	9	0	5	5	1	0	Whispering Oaks
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	7.0%	0.0%		
In/Out								IN			OUT			
Volume	0	0	0	0	0	0	0	27	0	0	16	0	0	Bent Creek
%	0.0%	5.0%	0.0%	5.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%		
In/Out		IN		OUT	OUT	OUT	IN					IN		
Volume	0	3	0	3	3	3	3	0	0	0	0	3	0	Wawa Kings
%	0.0%	21.0%	0.0%	11.0%	21.0%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%	11.0%		
In/Out		IN		OUT	OUT	OUT	IN					IN		
Volume	0	96	0	24	45	9	18	0	0	0	0	50	0	Kings Highway Warehouse
%	0.0%	10.0%	13.0%	0.0%	10.0%	3.0%	13.0%	52.0%	0.0%	13.0%	52.0%	0.0%		
In/Out		OUT	OUT		IN	IN	OUT	OUT		IN	IN			
Volume	0	7	9	0	7	2	9	35	0	9	35	0	0	Stonemont
%	0.0%	20.0%	0.0%	0.0%	20.0%	0.0%	0.0%	5.0%	0.0%	0.0%	5.0%	0.0%		
In/Out		IN			OUT			IN			OUT			
Volume	0	2	0	0	2	0	0	1	0	0	1	0	0	Walsh Crossroads
%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5.0%	5.0%	5.0%	0.0%		
In/Out			IN					IN	IN	OUT	OUT			
Volume	0	0	1	0	0	0	0	1	1	2	2	0	0	Project Hurricane
%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	5.0%	10.0%	0.0%		
In/Out			IN					IN		OUT	OUT			
Volume	0	0	20	0	0	0	0	40	0	11	23	0	0	Celebration Pointe
%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5%	80%	5.0%	0.0%	80.0%	0.0%		
In/Out	IN					IN	OUT	OUT	OUT		IN			
Volume	25	0	0	0	0	25	16	249	16	0	398	0	0	Creekside
Subtotal	25	119	38	202	99	81	57	361	17	27	480	101	0	
Total	96	250	536	421	241	113	128	607	55	519	769	211	3947	

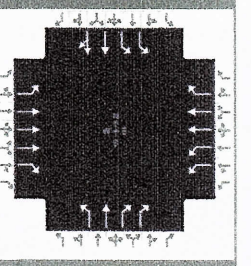


Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 6

	Trips In	Trips Out
Kings Highway Commerce Park	0	0
Hunt	19	57
St. Lucie Commerce Center	208	784
Whispering Oaks	172	94
Bent Creek	385	226
Wawa Kings	57	58
Kings Highway Warehouse	458	216
Stonemont	68	186
Walsh Crossroads	10	11
Project Hurricane	23	37
Celebration Pointe	398	229
Creekside	498	311

HCS7 Signalized Intersection Results Summary

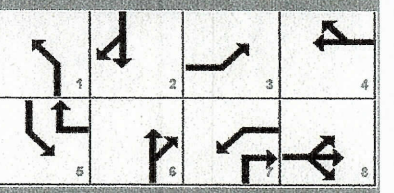
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	SOR	Analysis Date	Jul 26, 2021	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Okeechobee	File Name	c1.kingsHwy.kings.okeechobee.PM without projec...		
Project Description	Buildout PM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	128	607	55	519	769	211	96	250	536	421	241	113

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.3	12.4	34.1	12.2	8.1	25.5
Yellow	4.7	4.7	4.7	4.3	4.3	4.3
Red	1.0	1.0	1.5	2.0	2.0	2.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	1.1	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	18.5	31.8	32.9	46.2	17.0	40.3	35.1	58.3
Change Period, (*Y+R c*), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	2.9	3.0	2.9	3.0	0.0	3.0	0.0
Queue Clearance Time (*g s*), s	12.1	19.9	26.2	36.7	11.4		28.8	
Green Extension Time (*g e*), s	0.1	3.4	0.4	3.2	0.1	0.0	0.6	0.0
Phase Call Probability	0.99	1.00	1.00	1.00	0.98		1.00	
Max Out Probability	0.00	0.06	1.00	0.11	0.00		0.10	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	135	639	58	546	809	35	101	263	301	443	136	237
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1499	1574	1384	1555	1574	1334	1485	1633	1169	1137	887	1498
Queue Service Time (*g s*), s	10.1	17.9	5.0	24.2	34.7	1.9	9.4	19.4	11.7	26.8	13.6	15.4
Cycle Queue Clearance Time (*g c*), s	10.1	17.9	5.0	24.2	34.7	1.9	9.4	19.4	11.7	26.8	13.6	15.4
Green Ratio (*g/C*)	0.27	0.18	0.18	0.19	0.28	0.49	0.08	0.24	0.43	0.21	0.37	0.37
Capacity (*c*), veh/h	195	859	252	591	897	660	120	397	1013	477	330	558
Volume-to-Capacity Ratio (*X*)	0.691	0.743	0.230	0.925	0.903	0.053	0.843	0.662	0.297	0.929	0.411	0.425
Back of Queue (*Q*), ft/ln (95 th percentile)	199.4	335.5	88.5	460.7	601	30.4	195.1	362.7	173.7	399.7	149.5	233.5
Back of Queue (*Q*), veh/ln (95 th percentile)	6.8	11.4	3.1	16.1	20.4	1.0	6.6	12.7	5.9	13.5	5.2	9.3
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	43.3	54.2	48.9	55.7	48.2	18.4	63.5	42.3	25.8	54.3	25.5	29.2
Incremental Delay (*d 2*), s/veh	1.6	1.1	0.2	18.0	8.4	0.0	6.0	8.4	0.7	19.0	3.8	2.4
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	44.9	55.3	49.1	73.8	56.6	18.4	69.4	50.7	26.6	73.3	29.3	31.6
Level of Service (LOS)	D	E	D	E	E	B	E	D	C	E	C	C
Approach Delay, s/veh / LOS	53.2	D		62.4	E		42.6	D		53.8	D	
Intersection Delay, s/veh / LOS	54.9						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.82	C	2.30	B	2.98	C	2.58	C
Bicycle LOS Score / LOS	0.94	A	1.63	B	1.59	B	1.16	A

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TURNING MOVEMENT VOLUME COUNTS

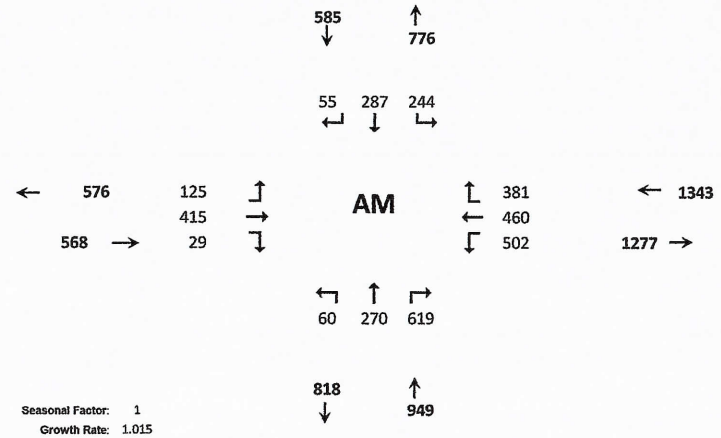
N/S STREET: Kings Hwy **E/W STREET:** Okeechobee Rd **CONTROL:** Signalized

FILENAME: Oct.2017 FDOT Adjusted

COUNT DATE: **DAY:** **CITY:** St Lucie

REPORT DATE: 3/24/2022 **ANALYSIS YEAR:** 2023 - With Project

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15													0	0
7:15-7:30													0	0
7:30-7:45													0	0
7:45-8:00													0	0
8:00-8:15													0	0
8:15-8:30													0	
8:30-8:45													0	
8:45-9:00													0	



AM PEAK HOUR IS FROM: 8:00AM TO 9:00AM

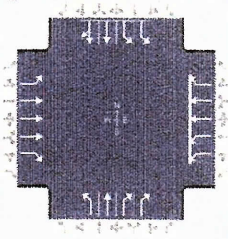
Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 6

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Volumes	55	130	550	135	165	20	50	330	25	410	260	95	0
Season Factor	55	130	550	135	165	20	50	330	25	410	260	95	2225
Growth	60	142	601	148	180	22	55	361	27	448	284	104	2433
In/Out	OUT	IN	OUT	OUT	OUT	OUT	IN					IN	
Percentage	0%	5%	0%	35%	5%	5%	5%	0%	0%	0%	0%	35%	0%
PROJECT	0	14	0	25	4	4	14	0	0	0	0	99	159

SUBPROJECTS	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL		Trips In	Trips Out
%	0%	5%	0%	30%	5%	5%	5%	0%	0%	0%	0%	30%				
In/Out		IN		OUT	OUT	OUT	IN					IN				
Volume	0	4	0	5	1	1	4	0	0	0	0	23	0	Hunt	76	17
%	0.0%	5.0%	0.0%	20.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	20.0%				
In/Out		IN				OUT	IN					IN				
Volume	0	28	0	25	6	6	28	0	0	0	0	113	0	St. Lucie Commerce Center	563	124
%	0.0%	0.0%	5.0%	1.0%	0.0%	0.0%	0%	5%	0.0%	5.0%	5.0%	1.0%				
In/Out			IN	IN				IN		OUT	OUT	OUT				
Volume	0	0	2	0	0	0	0	2	0	8	8	2	0	Whispering Oaks	45	167
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	7.0%	0.0%				
In/Out								IN			OUT					
Volume	0	0	0	0	0	0	0	9	0	0	26	0	0	Bent Creek	123	371
%	0.0%	5.0%	0.0%	5.0%	5.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	5.0%				
In/Out		IN		OUT	OUT	OUT	IN					IN				
Volume	0	3	0	3	3	3	3	0	0	0	0	3	0	Wawa Kings	63	64
%	0.0%	21.0%	0.0%	11.0%	21.0%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%	11.0%				
In/Out		IN		OUT	OUT	OUT	IN					IN				
Volume	0	72	0	38	72	14	14	0	0	0	0	38	0	Kings Highway Warehouse	342	341
%	0.0%	10.0%	13.0%	0.0%	10.0%	3.0%	13%	52%	0.0%	13.0%	52.0%	0.0%				
In/Out		OUT	OUT		IN	IN	OUT	OUT		IN	IN					
Volume	0	6	7	0	20	6	7	29	0	26	102	0	0	Stonemont	197	55
%	0.0%	20.0%	0.0%	0.0%	20.0%	0.0%	0.0%	5.0%	0.0%	0.0%	5.0%	0.0%				
In/Out		IN			OUT			IN			OUT					
Volume	0	1	0	0	1	0	0	0	0	0	0	0	0	Walsh Crossroads	7	5
%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0%	5%	5.0%	5.0%	5.0%	0.0%				
In/Out			IN					IN	IN	OUT	OUT					
Volume	0	0	2	0	0	0	0	2	2	1	1	0	0	Project Hurricane	36	12
%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	5.0%	10.0%	0.0%				
In/Out			IN					IN		OUT	OUT					
Volume	0	0	6	0	0	0	0	12	0	19	39	0	0	Celebration Pointe	121	385
%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5%	80%	5.0%	0.0%	80.0%	0.0%				
In/Out	IN					IN	OUT	OUT	OUT		IN					
Volume	7	0	0	0	0	7	21	337	21	0	114	0		Creekside	143	421
Subtotal	0	*114*	17	71	103	30	56	54	2	54	176	178	0			
Total	60	270	619	244	287	55	125	415	29	502	460	381	2592			

HCS7 Signalized Intersection Results Summary

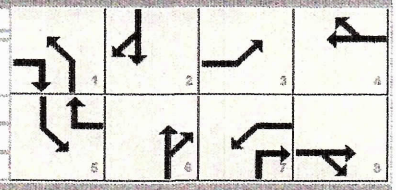
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	WA	Analysis Date	Mar 24, 2022	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Okeechobee	File Name	C3 - HCS - Okeechobee & Kings - AM -WITH PR...		
Project Description	Buildout AM with project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	125	415	29	502	460	381	60	270	619	244	287	55

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

	EB			WB			NB			SB		
Green	7.3	1.4		54.9	14.2	3.2	22.5					
Yellow	4.7	4.7		4.7	4.3	4.3	4.3					
Red	1.0	1.0		1.5	2.0	2.0	2.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	20.5	28.8	30.0	38.3	13.0	61.1	20.1	68.2
Change Period, ($Y+R_c$), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s	14.1	20.1	25.7	21.6	7.9		13.9	
Green Extension Time (g_e), s	0.1	2.3	0.0	2.6	0.1	0.0	0.5	0.0
Phase Call Probability	0.99	1.00	1.00	1.00	0.91		1.00	
Max Out Probability	0.00	0.05	1.00	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	132	437	31	528	484	214	63	284	388	257	183	177
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1499	1089	1384	1555	1574	1334	1485	1633	1169	1485	1628	1543
Queue Service Time (g_s), s	12.1	18.1	2.5	23.7	19.6	17.9	5.9	15.1	12.2	11.9	7.6	8.6
Cycle Queue Clearance Time (g_c), s	12.1	18.1	2.5	23.7	19.6	17.9	5.9	15.1	12.2	11.9	7.6	8.6
Green Ratio (*g/C*)	0.10	0.16	0.21	0.17	0.23	0.33	0.05	0.39	0.56	0.10	0.44	0.44
Capacity (*c*), veh/h	152	524	294	527	720	442	77	641	1314	305	721	684
Volume-to-Capacity Ratio (*X*)	0.868	0.834	0.104	1.003	0.673	0.483	0.817	0.443	0.296	0.841	0.253	0.259
Back of Queue (*Q*), ft/ln (95 th percentile)	249.2	258.1	43.7	507.6	357.2	284.5	124.9	268	170.2	235.2	143.2	137
Back of Queue (*Q*), veh/ln (95 th percentile)	8.5	8.8	1.5	17.7	12.1	9.7	4.2	9.4	5.7	7.9	5.0	5.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	62.0	57.0	44.4	58.2	49.2	37.2	65.7	23.9	16.1	61.7	17.5	19.8
Incremental Delay (d_2), s/veh	7.9	4.0	0.1	40.1	0.6	0.3	7.6	2.2	0.6	2.4	0.8	0.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	69.9	61.0	44.4	98.2	49.8	37.6	73.3	26.1	16.7	64.1	18.3	20.7
Level of Service (LOS)	E	E	D	F	D	D	E	C	B	E	B	C
Approach Delay, s/veh / LOS	62.1	E		68.5	E		25.2	C		38.1	D	
Intersection Delay, s/veh / LOS	51.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.82	C	2.31	B	2.97	C	2.57	C
Bicycle LOS Score / LOS	0.82	A	1.50	A	1.70	B	1.00	A

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TURNING MOVEMENT VOLUME COUNTS

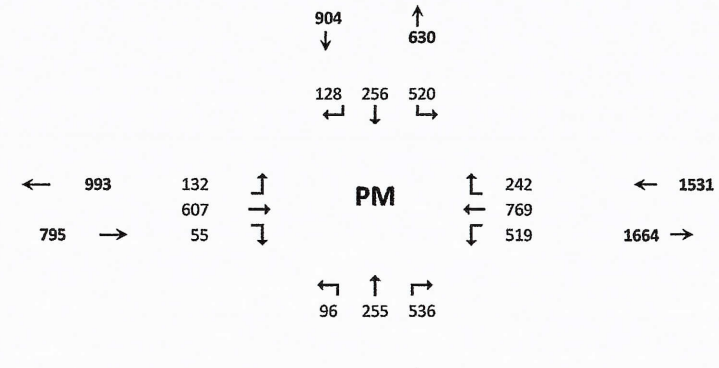
N/S STREET: Kings Hwy **E/W STREET:** Okeechobee Rd **CONTROL:** Signalized

FILENAME:

COUNT DATE: Oct 2017 FDOT Adjusted **DAY:** **CITY:** St Lucie

REPORT DATE: 7/22/2021 **ANALYSIS YEAR:** 2023 - With Project

	Northbound			Southbound			Eastbound			Westbound				
15 Min Period lanes	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15													0	0
4:15-4:30													0	0
4:30-4:45													0	0
4:45-5:00													0	0
5:00-5:15													0	0
5:15-5:30													0	
5:30-5:45													0	
5:45-6:00													0	



PM PEAK HOUR IS FROM: 5:00PM TO 6:00PM

Volumes	65	120	455	200	130	30	65	225	35	450	265	100	0	
Season Factor	65	120	455	200	130	30	65	225	35	450	265	100	2140	
Growth	71	131	498	219	142	33	71	246	38	492	290	109	2340	
In/Out	OUT	IN	OUT	OUT	OUT	OUT	IN	0	0	0	0	IN		
Percentage	0%	5%	0%	35%	5%	5%	5%	0%	0%	0%	0%	35%	0%	
PROJECT	0	5	0	99	14	14	5	0	0	0	0	32	168	

Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 6

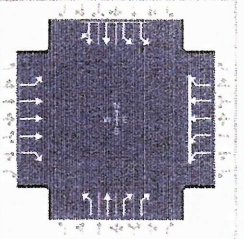
	Trips In	Trips Out
Kings Highway Commerce Park	90	284

SUBPROJECTS

%	0%	5%	0%	30%	5%	5%	5%	0%	0%	0%	0%	30.0%			
In/Out		IN		OUT	OUT	OUT	IN					IN			
Volume	0	1	0	17	3	3	1	0	0	0	0	6	0	Hunt	19	57
%	0.0%	5.0%	0.0%	20.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	20.0%			
In/Out		IN				OUT	IN					IN			
Volume	0	10	0	157	39	39	10	0	0	0	0	42	0	St. Lucie Commerce Center	208	784
%	0.0%	0.0%	5.0%	1.0%	0.0%	0.0%	0.0%	5.0%	0.0%	5.0%	5.0%	1.0%			
In/Out			IN	IN				IN		OUT	OUT	OUT			
Volume	0	0	9	2	0	0	0	9	0	5	5	1	0	Whispering Oaks	172	94
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	7.0%	0.0%			
In/Out								IN			OUT				
Volume	0	0	0	0	0	0	0	27	0	0	16	0	0	Bent Creek	385	226
%	0.0%	5.0%	0.0%	5.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%			
In/Out		IN		OUT	OUT	OUT	IN					IN			
Volume	0	3	0	3	3	3	3	0	0	0	0	3	0	Wawa Kings	57	58
%	0.0%	21.0%	0.0%	11.0%	21.0%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%	11.0%			
In/Out		IN		OUT	OUT	OUT	IN					IN			
Volume	0	96	0	24	45	9	18	0	0	0	0	50	0	Kings Highway Warehouse	458	216
%	0.0%	10.0%	13.0%	0.0%	10.0%	3.0%	13.0%	52.0%	0.0%	13.0%	52.0%	0.0%			
In/Out		OUT	OUT		IN	IN	OUT	OUT		IN	IN				
Volume	0	7	9	0	7	2	9	35	0	9	35	0	0	Stonemont	68	186
%	0.0%	20.0%	0.0%	0.0%	20.0%	0.0%	0.0%	5.0%	0.0%	0.0%	5.0%	0.0%			
In/Out		IN			OUT			IN			OUT				
Volume	0	2	0	0	2	0	0	1	0	0	1	0	0	Walsh Crossroads	10	11
%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5.0%	5.0%	5.0%	0.0%			
In/Out			IN					IN	IN	OUT	OUT				
Volume	0	0	1	0	0	0	0	1	1	2	2	0	0	Project Hurricane	23	37
%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	5.0%	10.0%	0.0%			
In/Out			IN					IN		OUT	OUT				
Volume	0	0	20	0	0	0	0	40	0	11	23	0	0	Celebration Pointe	398	229
%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5%	80%	5.0%	0.0%	80.0%	0.0%			
In/Out	IN					IN	OUT	OUT	OUT		IN				
Volume	25	0	0	0	0	25	16	249	16	0	398	0	0	Creekside	498	311
Subtotal	25	119	38	202	99	81	57	361	17	27	480	101	0			
Total	96	255	536	520	256	128	132	607	55	519	769	242	2508			

HCS7 Signalized Intersection Results Summary

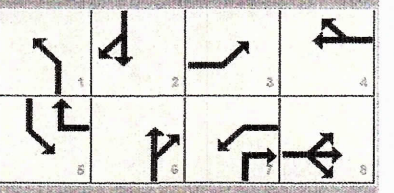
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	WA	Analysis Date	Mar 24, 2022	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Okeechobee	File Name	C3 - HCS - Okeechobee & Kings - PM -WITH PR...		
Project Description	Buildout PM with project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	132	607	55	519	769	242	96	255	536	520	256	128

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

	EB			WB			NB			SB		
Green	11.3	12.5		33.6	12.5	7.8	25.8					
Yellow	4.7	4.7		4.7	4.3	4.3	4.3					
Red	1.0	1.0		1.5	2.0	2.0	2.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	1.1	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	18.8	32.1	32.9	46.2	17.0	39.8	35.2	58.0
Change Period, ($Y+R_c$), s	6.3	6.3	6.3	6.3	5.7	6.2	5.7	6.2
Max Allow Headway (*MAH*), s	3.0	2.9	3.0	2.9	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s	12.4	19.9	26.2	36.6	11.4		28.8	
Green Extension Time (g_e), s	0.2	3.5	0.4	3.3	0.1	0.0	0.7	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	0.98		1.00	
Max Out Probability	0.00	0.06	1.00	0.12	0.00		0.17	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	139	639	58	546	809	67	101	268	301	547	154	251
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1499	1574	1384	1555	1574	1334	1485	1633	1169	1404	942	1489
Queue Service Time (g_s), s	10.4	17.9	5.0	24.2	34.6	3.8	9.4	20.0	11.8	26.8	14.8	16.7
Cycle Queue Clearance Time (g_c), s	10.4	17.9	5.0	24.2	34.6	3.8	9.4	20.0	11.8	26.8	14.8	16.7
Green Ratio (*g/C*)	0.27	0.18	0.18	0.19	0.29	0.50	0.08	0.24	0.43	0.21	0.37	0.37
Capacity (*c*), veh/h	198	870	255	591	897	661	120	392	1006	591	348	551
Volume-to-Capacity Ratio (*X*)	0.701	0.734	0.227	0.925	0.902	0.102	0.843	0.684	0.299	0.926	0.441	0.455
Back of Queue (*Q*), ft/ln (95 th percentile)	204.7	334.2	88.1	460.7	600.9	60.5	195.1	374.9	174.8	466.8	171.4	249.6
Back of Queue (*Q*), veh/ln (95 th percentile)	7.0	11.4	3.1	16.1	20.4	2.1	6.6	13.1	5.9	15.8	6.0	10.0
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	42.9	53.9	48.6	55.7	48.2	18.8	63.5	43.0	26.1	54.2	26.1	30.1
Incremental Delay (d_2), s/veh	1.7	1.1	0.2	18.0	8.4	0.0	6.0	9.3	0.8	16.0	4.0	2.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	44.6	54.9	48.8	73.8	56.6	18.8	69.4	52.3	26.9	70.2	30.1	32.8
Level of Service (LOS)	D	D	D	E	E	B	E	D	C	E	C	C
Approach Delay, s/veh / LOS	52.8	D		61.4	E		43.5	D		53.8	D	
Intersection Delay, s/veh / LOS	54.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.82	C	2.30	B	2.98	C	2.58	C
Bicycle LOS Score / LOS	0.95	A	1.66	B	1.59	B	1.27	A

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TURNING MOVEMENT VOLUME COUNTS

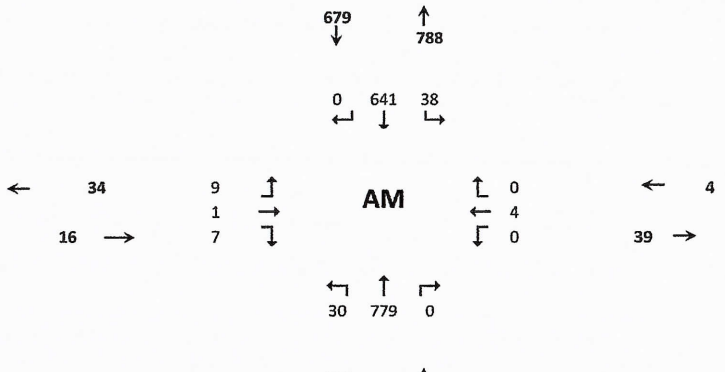
N/S STREET: Kings Highway **E/W STREET:** White Road **CONTROL:** Signalized

FILENAME:

COUNT DATE: 2/12/2019 **DAY:** **CITY:** Ft Pierce

REPORT DATE: 6/2/2021 **ANALYSIS YEAR:** 2023 (WITHOUT PROJECT)

15 Min Period	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
7:00-7:15		91			81								172	701
7:15-7:30		81			76								157	708
7:30-7:45		100			101								201	730
7:45-8:00		90			81								171	672
8:00-8:15		86			93								179	642
8:15-8:30		88			91								179	
8:30-8:45		80			63								143	
8:45-9:00		50			91								141	



AM PEAK HOUR IS FROM:	7:30 AM TO 8:30AM												
Volumes	0	364	0	0	366	0	0	0	0	0	0	0	730
Season Factor	0	364	0	0	366	0	0	0	0	0	0	0	730
Growth	0	386	0	0	388	0	0	0	0	0	0	0	775
In/Out	-					-	-	-	-		-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0

Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 4

															Trips In	Trips Out
SUBPROJECTS														Kings Highway Commerce Park	0	0
%	40%			50%			50%	5%	40%		5%					
In/Out	IN			IN			OUT	OUT	OUT		IN					
Volume	30	0	0	38	0	0	9	1	7	0	4	0	0	Project Hunt	76	17
%		30.0%			30.0%											
In/Out		IN			OUT											
Volume	0	169	0	0	37	0	0	0	0	0	0	0	0	St Lucie Commerce Center	563	124
%		2.0%			2.0%											
In/Out		IN			OUT											
Volume	0	1	0	0	3	0	0	0	0	0	0	0	0	Whispering Oaks	45	167
%		2.0%			2.0%											
In/Out		IN			OUT											
Volume	0	2	0	0	7	0	0	0	0	0	0	0	0	Bent Creek	123	371
%		15.0%			15.0%											
In/Out		IN			OUT											
Volume	0	9	0	0	10	0	0	0	0	0	0	0	0	Wawa Kings	63	64
%		52.0%			52.0%											
In/Out		IN			OUT											
Volume	0	178	0	0	177	0	0	0	0	0	0	0	0	Kings Highway Warehouse	342	341
%		15.0%			15.0%											
In/Out		IN			OUT											
Volume	0	30	0	0	8	0	0	0	0	0	0	0	0	Stonemont	197	55
%		30.0%			30.0%											
In/Out		OUT			IN											
Volume	0	2	0	0	2	0	0	0	0	0	0	0	0	Walsh Crossroads	7	5
%																
In/Out																
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Project Hurricane	36	12
%		2.0%			2.0%											
In/Out		IN			OUT											
Volume	0	2	0	0	8	0	0	0	0	0	0	0	0	Celebration Pointe	121	385
Subtotal	30	393	0	38	253	0	9	1	7	0	4	0	0			
Total	30	779	0	38	641	0	9	1	7	0	4	0	1509			

HCS7 Two-Way Stop-Control Report

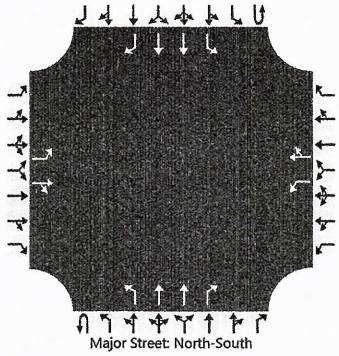
General Information

Analyst	Jean Garcon
Agency/Co.	O'Rourke Engineering
Date Performed	7/27/21
Analysis Year	2023
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Buildout - Comm. (WITHOUT PROJECT)

Site Information

Intersection	Kings Hwy & White Rd
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Kings Hwy
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	1
Configuration		L		TR		L		TR		L	T	R		L	T	R
Volume (veh/h)		9	1	7		0	4	0	0	30	779	0	0	38	641	0
Percent Heavy Vehicles (%)		10	10	10		18	18	18	3	10			3	18		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.70	6.70	7.10		7.86	6.86	7.26		4.30				4.46		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.60	4.10	3.40		3.68	4.18	3.48		2.30				2.38		

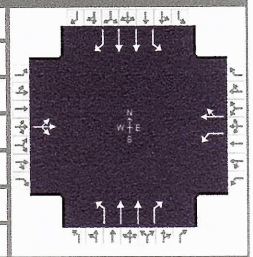
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9		8		0		4		32				40		
Capacity, c (veh/h)		220		348		193		77		861				709		
v/c Ratio		0.04		0.02		0.00		0.05		0.04				0.06		
95% Queue Length, Q_{95} (veh)		0.1		0.1		0.0		0.2		0.1				0.2		
Control Delay (s/veh)		22.1		15.6		23.6		54.3		9.3				10.4		
Level of Service (LOS)		C		C		C		F		A				B		
Approach Delay (s/veh)	19.0				54.3				0.3				0.6			
Approach LOS	C				F											

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HCS7 Signalized Intersection Results Summary

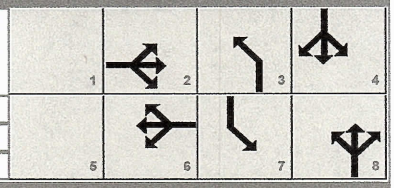
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	Kyle Scherer	Analysis Date	Jul 28, 2021	Area Type	Other
Jurisdiction	St. Lucie	Time Period	AM Peak Hour	PHF	0.92
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	White Rd	File Name	C1 - Kings & White (WITHOUT PROJECT) - AM -...		
Project Description	Kings Hwy Commerce				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	9	1	7	0	4	0	30	779	54	38	641	0

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	24.0	14.0	64.0	0.0	0.0	0.0	
Yellow	4.0	4.0	4.0	0.0	0.0	0.0	
Red	2.0	2.0	2.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2		6	3	8	7	4
Case Number		8.0		6.0	1.1	3.0	1.1	3.0
Phase Duration, s		30.0		30.0	20.0	70.0	20.0	70.0
Change Period, ($Y+R_c$), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (*MAH*), s		0.0		0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s					2.8	24.3	3.1	19.2
Green Extension Time (g_e), s		0.0		0.0	0.0	4.4	0.0	4.4
Phase Call Probability					1.00	1.00	1.00	1.00
Max Out Probability					0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h		18		0	0		33	847	59	41	697	0
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1423		1228	1233		1668	1484	1384	1555	1484	1321
Queue Service Time (g_s), s		0.0		0.0	0.0		0.8	22.3	2.5	1.1	17.2	0.0
Cycle Queue Clearance Time (g_c), s		1.1		0.0	0.0		0.8	22.3	2.5	1.1	17.2	0.0
Green Ratio (*g/C*)		0.20		0.20	0.20		0.65	0.53	0.53	0.65	0.53	0.53
Capacity (*c*), veh/h		330		60			516	1583	738	429	1583	705
Volume-to-Capacity Ratio (*X*)		0.056		0.000	0.000		0.063	0.535	0.080	0.096	0.440	0.000
Back of Queue (*Q*), ft/ln (95 th percentile)		22.8		0	0		13.9	351.2	39.4	18.8	283.7	0
Back of Queue (*Q*), veh/ln (95 th percentile)		0.8		0.0	0.0		0.5	11.9	1.4	0.7	9.6	0.0
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh		38.8		0.0			9.1	18.3	13.6	10.2	17.1	0.0
Incremental Delay (d_2), s/veh		0.3		0.0	0.0		0.0	0.2	0.0	0.0	0.1	0.0
Initial Queue Delay (d_3), s/veh		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		39.2		0.0			9.1	18.5	13.7	10.2	17.1	0.0
Level of Service (LOS)		D					A	B	B	B	B	
Approach Delay, s/veh / LOS	39.2	D		38.6	D		17.8	B		16.8	B	
Intersection Delay, s/veh / LOS	17.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.46	B	1.90	B	1.68	B
Bicycle LOS Score / LOS	0.52	A	0.49	A	1.26	A	1.10	A

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TURNING MOVEMENT VOLUME COUNTS

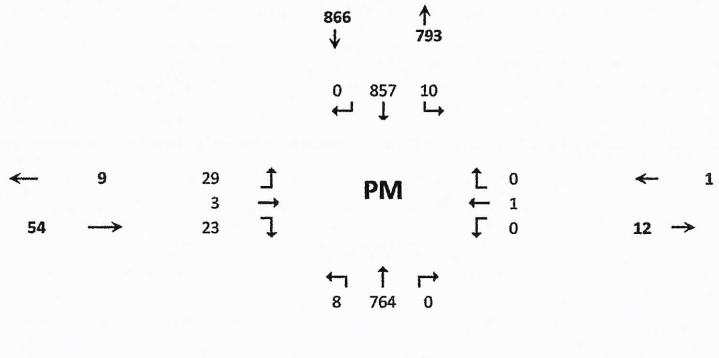
N/S STREET: Kings Highway **E/W STREET:** White Road **CONTROL:** Signalized

FILENAME:

COUNT DATE: 2/12/2019 **DAY:** **CITY:** Ft Pierce

REPORT DATE: 6/2/2021 **ANALYSIS YEAR:** 2023 (WITHOUT PROJECT)

15 Min Period lanes	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
4:00-4:15		88			89								177	813
4:15-4:30		116			111								227	847
4:30-4:45		95			103								198	810
4:45-5:00		85			126								211	802
5:00-5:15		102			109								211	730
5:15-5:30		91			99								190	
5:30-5:45		98			92								190	
5:45-6:00		71			68								139	



PM PEAK HOUR IS FROM: **4:15PM TO 5:15PM**

Volumes	0	398	0	0	449	0	0	0	0	0	0	0	847
Season Factor	0	398	0	0	449	0	0	0	0	0	0	0	847
Growth	0	422	0	0	477	0	0	0	0	0	0	0	899
In/Out	-	0	0	0	0	-	-	-	-	0	-	0	
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0

Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 4

SUBPROJECTS

															Trips In	Trips Out
%	40.0%			50.0%			50.0%	5.0%	40.0%		5.0%					
In/Out	IN			IN			OUT	OUT	OUT		IN					
Volume	8	0	0	10	0	0	29	3	23	0	1	0	0	Project Hunt	19	57
%		30.0%			30.0%											
In/Out		IN			OUT											
Volume	0	62	0	0	235	0	0	0	0	0	0	0	0	St Lucie Commerce Center	208	784
%		2.0%			2.0%											
In/Out		IN			OUT											
Volume	0	3	0	0	2	0	0	0	0	0	0	0	0	Whispering Oaks	172	94
%		2.0%			2.0%											
In/Out		IN			OUT											
Volume	0	8	0	0	5	0	0	0	0	0	0	0	0	Bent Creek	385	226
%		15.0%			15.0%											
In/Out		IN			OUT											
Volume	0	9	0	0	9	0	0	0	0	0	0	0	0	Wawa Kings	57	58
%		52.0%			52.0%											
In/Out		IN			OUT											
Volume	0	238	0	0	112	0	0	0	0	0	0	0	0	Kings Highway Warehouse	458	216
%		15.0%			15.0%											
In/Out		IN			OUT											
Volume	0	10	0	0	10	0	0	0	0	0	0	0	0	Stonemont	68	186
%		30.0%			30.0%											
In/Out		OUT			IN											
Volume	0	3	0	0	3	0	0	0	0	0	0	0	0	Walsh Crossroads	10	11
%																
In/Out																
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Project Hurricane	23	37
%		2.0%			2.0%											
In/Out		IN			OUT											
Volume	0	8	0	0	5	0	0	0	0	0	0	0	0	Celebration Pointe	398	229
Subtotal	8	342	0	10	380	0	29	3	23	0	1	0	0			
Total	8	764	0	10	857	0	29	3	23	0	1	0	1693			

HCS7 Two-Way Stop-Control Report

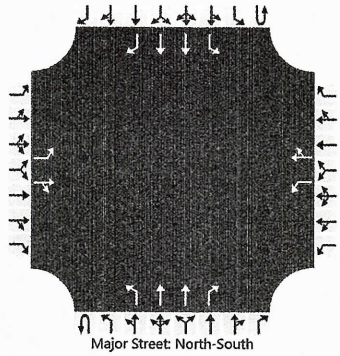
General Information

Analyst	Jean Garcon
Agency/Co.	O'Rourke Engineering
Date Performed	7/27/21
Analysis Year	2023
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Buildout - Kings Comm (without project)

Site Information

Intersection	Kings Hwy & White Rd
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Kings Hwy
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	1
Configuration		L		TR		L		TR		L	T	R		L	T	R
Volume (veh/h)		29	3	23		0	1	0	0	8	764	0	0	10	857	0
Percent Heavy Vehicles (%)		3	3	3		10	10	10	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.70	6.70	7.10		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.60	4.10	3.40		2.23				2.23		

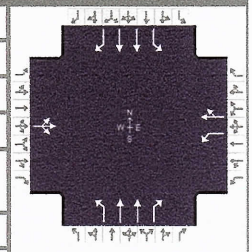
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		31		27		0		1		8				11		
Capacity, c (veh/h)		213		334		215		77		743				809		
v/c Ratio		0.14		0.08		0.00		0.01		0.01				0.01		
95% Queue Length, Q_{95} (veh)		0.5		0.3		0.0		0.0		0.0				0.0		
Control Delay (s/veh)		24.7		16.7		21.7		52.5		9.9				9.5		
Level of Service (LOS)		C		C		C		F		A				A		
Approach Delay (s/veh)	20.9				52.5				0.1				0.1			
Approach LOS	C				F											

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HCS7 Signalized Intersection Results Summary

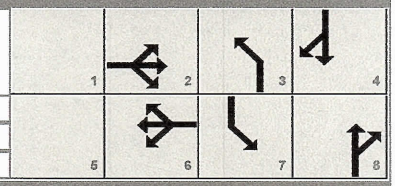
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	Kyle Scherer	Analysis Date	Jul 28, 2021	Area Type	Other
Jurisdiction	St. Lucie	Time Period	PM Peak Hour	PHF	0.92
Urban Street	Kings Hwy	Analysis Year	2023 without project	Analysis Period	1> 7:00
Intersection	White Rd	File Name	C6 - Kings & White (WITHOUT PROJECT) - PM -...		
Project Description	Kings Hwy Commerce				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	29	3	23	0	1	0	8	764	0	10	857	0

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	44.0	14.0	64.0	0.0	0.0	0.0	
Yellow	4.0	4.0	4.0	0.0	0.0	0.0	
Red	2.0	2.0	2.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2		6	3	8	7	4
Case Number		8.0		6.0	2.0	3.0	2.0	3.0
Phase Duration, s		50.0		50.0	20.0	70.0	20.0	70.0
Change Period, ($Y+R_c$), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (*MAH*), s		0.0		0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s					2.7	31.5	3.0	36.8
Green Extension Time (g_e), s		0.0		0.0	0.0	5.0	0.0	4.9
Phase Call Probability					1.00	1.00	1.00	1.00
Max Out Probability					0.00	0.00	0.00	0.01

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h		60		0	0		9	830	0	11	932	0
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1261		1404	0		1485	1484	1208	1358	1484	1321
Queue Service Time (g_s), s		2.7		0.0	0.0		0.7	29.5	0.0	1.0	34.8	0.0
Cycle Queue Clearance Time (g_c), s		4.5		0.0	0.0		0.7	29.5	0.0	1.0	34.8	0.0
Green Ratio (*g/C*)		0.31		0.31			0.10	0.46	0.46	0.10	0.46	0.46
Capacity (*c*), veh/h		436		51			148	1357	552	136	1357	604
Volume-to-Capacity Ratio (*X*)		0.137		0.000	0.000		0.059	0.612	0.000	0.080	0.686	0.000
Back of Queue (*Q*), ft/ln (95 th percentile)		82.5		0	0		15	467.4	0	19.9	539.5	0
Back of Queue (*Q*), veh/ln (95 th percentile)		2.8		0.0	0.0		0.5	15.8	0.0	0.6	18.2	0.0
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh		34.4		0.0			57.0	28.6	0.0	57.2	30.1	0.0
Incremental Delay (d_2), s/veh		0.7		0.0	0.0		0.1	0.6	0.0	0.1	1.2	0.0
Initial Queue Delay (d_3), s/veh		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		35.1		0.0			57.1	29.2	0.0	57.3	31.3	0.0
Level of Service (LOS)		D					E	C		E	C	
Approach Delay, s/veh / LOS	35.1	D		32.9	C		29.5	C		31.6	C	
Intersection Delay, s/veh / LOS	30.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.45	B	1.92	B	1.69	B
Bicycle LOS Score / LOS	0.59	A	0.49	A	1.18	A	1.27	A

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TURNING MOVEMENT VOLUME COUNTS

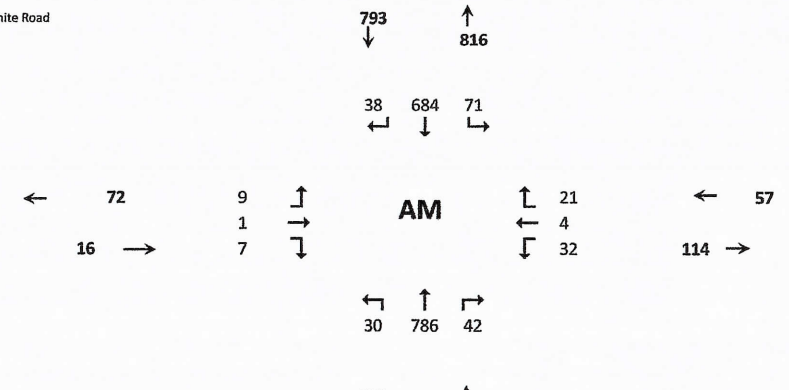
N/S STREET: Kings Highway **E/W STREET:** White Road **CONTROL:** Signalized

FILENAME:

COUNT DATE: 2/12/2019 **DAY:** **CITY:** Ft Pierce **INTERSECTION:** Kings Highway & White Road

REPORT DATE: 3/24/2022 **ANALYSIS YEAR:** 2023 **With Project**

15 Min Period	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
7:00-7:15		91			81								172	701
7:15-7:30		81			76								157	708
7:30-7:45		100			101								201	730
7:45-8:00		90			81								171	672
8:00-8:15		86			93								179	642
8:15-8:30		88			91								179	
8:30-8:45		80			63								143	
8:45-9:00		50			91								141	



AM PEAK HOUR IS FROM: **7:30 AM TO 8:30AM** **723** **859**

Volumes	0	364	0	0	366	0	0	0	0	0	0	0	730	
Season Factor	0	364	0	0	366	0	0	0	0	0	0	0	730	
Growth	0	386	0	0	388	0	0	0	0	0	0	0	775	
In/Out	-	OUT	IN	IN	IN	-	-	-	-	OUT	-	OUT		
Percentage	0%	10%	15%	25%	15%	0%	0%	0%	0%	45%	0%	30%		
PROJECT	0	7	42	71	42	0	0	0	0	32	0	21	216	

Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 4

SUBPROJECTS															Trips In	Trips Out
%	40%					50%	50%	5%	40%		5%					
In/Out	IN					IN	OUT	OUT	OUT		IN					
Volume	30	0	0	0	0	38	9	1	7	0	4	0	0	Project Hunt	76	17
%		30.0%			30.0%											
In/Out		IN			OUT											
Volume	0	169	0	0	37	0	0	0	0	0	0	0	0	St Lucie Commerce Center	563	124
%		2.0%			2.0%											
In/Out		IN			OUT											
Volume	0	1	0	0	3	0	0	0	0	0	0	0	0	Whispering Oaks	45	167
%		2.0%			2.0%											
In/Out		IN			OUT											
Volume	0	2	0	0	7	0	0	0	0	0	0	0	0	Bent Creek	123	371
%		15.0%			15.0%											
In/Out		IN			OUT											
Volume	0	9	0	0	10	0	0	0	0	0	0	0	0	Wawa Kings	63	64
%		52.0%			52.0%											
In/Out		IN			OUT											
Volume	0	178	0	0	177	0	0	0	0	0	0	0	0	Kings Highway Warehouse	342	341
%		15.0%			15.0%											
In/Out		IN			OUT											
Volume	0	30	0	0	8	0	0	0	0	0	0	0	0	Stonemont	197	55
%		30.0%			30.0%											
In/Out		OUT			IN											
Volume	0	2	0	0	2	0	0	0	0	0	0	0	0	Walsh Crossroads	7	5
%																
In/Out																
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Project Hurricane	36	12
%		2.0%			2.0%											
In/Out		IN			OUT											
Volume	0	2	0	0	8	0	0	0	0	0	0	0	0	Celebration Pointe	121	385
Subtotal	30	393	0	0	253	38	9	1	7	0	4	0	0			
Total	30	786	42	71	684	38	9	1	7	32	4	21	991			

HCS7 Two-Way Stop-Control Report

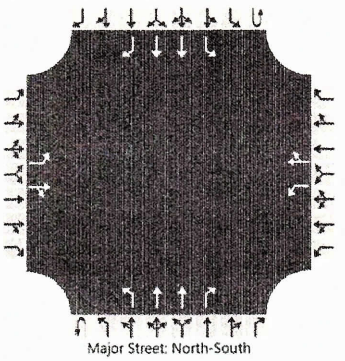
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	AM Peak Hr - with Project
Intersection Orientation	North-South
Project Description	Kings Hwy Commerce Park - Phase II

Site Information

Intersection	Kings Hwy & White Rd
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Kings Hwy
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	1
Configuration		L		TR		L		TR		L	T	R		L	T	R
Volume (veh/h)		9	1	7		32	4	21	0	30	786	42	0	71	684	38
Percent Heavy Vehicles (%)		3	3	3		10	10	10	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.70	6.70	7.10		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.60	4.10	3.40		2.23				2.23		

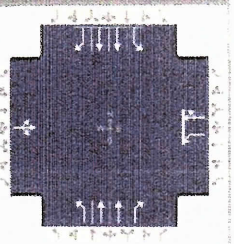
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9		8		34		26		32				75		
Capacity, c (veh/h)		187		309		185		248		841				763		
v/c Ratio		0.05		0.03		0.18		0.11		0.04				0.10		
95% Queue Length, Q_{95} (veh)		0.2		0.1		0.6		0.4		0.1				0.3		
Control Delay (s/veh)		25.2		17.0		28.7		21.2		9.4				10.2		
Level of Service (LOS)		D		C		D		C		A				B		
Approach Delay (s/veh)	21.3				25.4				0.3				0.9			
Approach LOS	C				D											

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HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	WA	Analysis Date	Mar 24, 2022	Area Type	Other
Jurisdiction	St. Lucie	Time Period	AM Peak Hour	PHF	0.92
Urban Street	Kings Hwy	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	White Rd	File Name	C3 - Kings & White (WITH PROJECT) - AM - 202...		
Project Description	Kings Hwy Commerce - With Project				

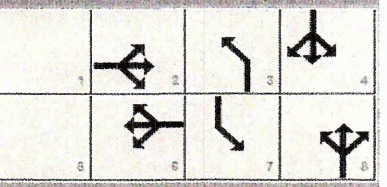


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	9	1	7	32	4	21	30	786	42	71	684	38

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	24.0	14.0		64.0	0.0	0.0	0.0					
Yellow	4.0	4.0		4.0	0.0	0.0	0.0					
Red	2.0	2.0		2.0	0.0	0.0	0.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2		6	3	8	7	4
Case Number		8.0		6.0	1.1	3.0	1.1	3.0
Phase Duration, s		30.0		30.0	20.0	70.0	20.0	70.0
Change Period, (*Y+R c*), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (*MAH*), s		0.0		0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (*g s*), s					2.8	24.6	4.2	20.7
Green Extension Time (*g e*), s		0.0		0.0	0.0	4.7	0.1	4.7
Phase Call Probability					1.00	1.00	1.00	1.00
Max Out Probability					0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h		18		35	27		33	854	46	77	743	41
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1402		1228	1419		1668	1484	1384	1555	1484	1321
Queue Service Time (*g s*), s		0.0		2.9	1.9		0.8	22.6	1.9	2.2	18.7	1.8
Cycle Queue Clearance Time (*g c*), s		1.9		4.7	1.9		0.8	22.6	1.9	2.2	18.7	1.8
Green Ratio (*g/C*)		0.20		0.20	0.20		0.65	0.53	0.53	0.65	0.53	0.53
Capacity (*c*), veh/h		326		286	284		497	1583	738	427	1583	705
Volume-to-Capacity Ratio (*X*)		0.057		0.121	0.096		0.066	0.540	0.062	0.181	0.470	0.059
Back of Queue (*Q*), ft/ln (95 th percentile)		22.8		47.9	36.3		13.9	355.3	30.4	35.9	303.7	28.4
Back of Queue (*Q*), veh/ln (95 th percentile)		0.8		1.7	1.3		0.5	12.0	1.1	1.3	10.3	1.0
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh		38.8		41.1	39.2		9.4	18.3	13.5	10.7	17.4	13.5
Incremental Delay (*d 2*), s/veh		0.3		0.9	0.7		0.0	0.2	0.0	0.1	0.1	0.0
Initial Queue Delay (*d 3*), s/veh		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		39.2		41.9	39.8		9.4	18.6	13.5	10.7	17.5	13.5
Level of Service (LOS)		D		D	D		A	B	B	B	B	B
Approach Delay, s/veh / LOS	39.2	D		41.0	D		18.0	B		16.7	B	
Intersection Delay, s/veh / LOS	18.4						B					

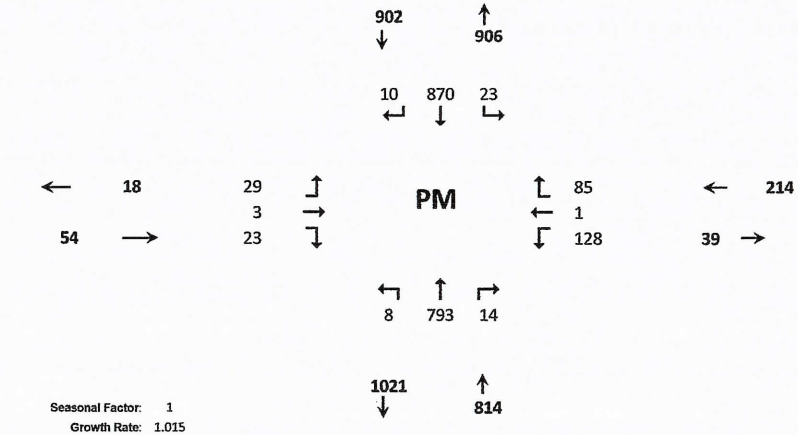
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.46	B	1.90	B	1.68	B
Bicycle LOS Score / LOS	0.52	A	0.59	A	1.26	A	1.20	A

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TURNING MOVEMENT VOLUME COUNTS

N/S STREET: Kings Highway **E/W STREET:** White Road **CONTROL:** Signalized
FILENAME:
COUNT DATE: 2/12/2019 **DAY:** **CITY:** Ft Pierce
REPORT DATE: 3/24/2022 **ANALYSIS YEAR:** 2023 **With Project**

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15		88			89								177	813
4:15-4:30		116			111								227	847
4:30-4:45		95			103								198	810
4:45-5:00		85			126								211	802
5:00-5:15		102			109								211	730
5:15-5:30		91			99								190	
5:30-5:45		98			92								190	
5:45-6:00		71			68								139	



PM PEAK HOUR IS FROM: 4:15PM TO 5:15PM

Volumes	0	398	0	0	449	0	0	0	0	0	0	0	847	
Season Factor	0	398	0	0	449	0	0	0	0	0	0	0	847	
Growth	0	422	0	0	477	0	0	0	0	0	0	0	899	
In/Out	-	OUT	IN	IN	IN	-	-	-	-	OUT	-	OUT		
Percentage	0%	10%	15%	25%	15%	0%	0%	0%	0%	45%	0%	30%		
PROJECT	0	28	14	23	14	0	0	0	0	128	0	85	291	
SUBPROJECTS														
%	40.0%	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	5.0%	40.0%	0.0%	5.0%	0.0%	0.0%	
In/Out	IN	0.0%	0.0%	0.0%	0.0%	IN	OUT	OUT	OUT	0.0%	IN	0.0%	0.0%	
Volume	8	0	0	0	0	10	29	3	23	0	1	0	0	
%		30.0%			30.0%									
In/Out		IN			OUT									
Volume	0	62	0	0	235	0	0	0	0	0	0	0	0	
%		2.0%			2.0%									
In/Out		IN			OUT									
Volume	0	3	0	0	2	0	0	0	0	0	0	0	0	
%		2.0%			2.0%									
In/Out		IN			OUT									
Volume	0	8	0	0	5	0	0	0	0	0	0	0	0	
%		15.0%			15.0%									
In/Out		IN			OUT									
Volume	0	9	0	0	9	0	0	0	0	0	0	0	0	
%		52.0%			52.0%									
In/Out		IN			OUT									
Volume	0	238	0	0	112	0	0	0	0	0	0	0	0	
%		15.0%			15.0%									
In/Out		IN			OUT									
Volume	0	10	0	0	10	0	0	0	0	0	0	0	0	
%		30.0%			30.0%									
In/Out		OUT			IN									
Volume	0	3	0	0	3	0	0	0	0	0	0	0	0	
%														
In/Out														
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	
%		2.0%			2.0%									
In/Out		IN			OUT									
Volume	0	8	0	0	5	0	0	0	0	0	0	0	0	
Subtotal	8	342	0	0	380	10	29	3	23	0	1	0	0	
Total	8	793	14	23	870	10	29	3	23	128	1	85	1190	3166

Seasonal Factor: 1
Growth Rate: 1.015
Years Grown: 4

	Trips In	Trips Out
Kings Highway Commerce Park	90	284
Project Hunt	19	57
St Lucie Commerce Center	208	784
Whispering Oaks	172	94
Bent Creek	385	226
Wawa Kings	57	58
Kings Highway Warehouse	458	216
Stonemont	68	186
Walsh Crossroads	10	11
Project Hurricane	23	37
Celebration Pointe	398	229

HCS7 Two-Way Stop-Control Report

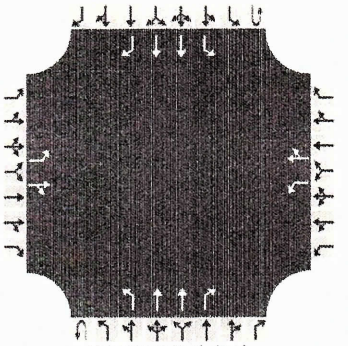
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	PM Peak Hr - with Project
Intersection Orientation	North-South
Project Description	Kings Hwy Commerce Park - Phase II

Site Information

Intersection	Kings Hwy & White Rd
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Kings Hwy
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	1
Configuration		L		TR		L		TR		L	T	R		L	T	R
Volume (veh/h)		29	3	23		128	1	85	0	8	793	14	0	23	870	10
Percent Heavy Vehicles (%)		3	3	3		10	10	10	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.70	6.70	7.10		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.60	4.10	3.40		2.23				2.23		

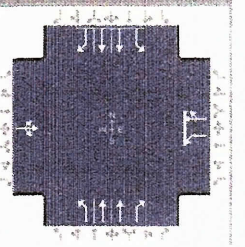
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		31		27		135		91		8				24		
Capacity, c (veh/h)		184		310		201		518		727				778		
v/c Ratio		0.17		0.09		0.67		0.17		0.01				0.03		
95% Queue Length, Q_{95} (veh)		0.6		0.3		4.1		0.6		0.0				0.1		
Control Delay (s/veh)		28.4		17.7		53.3		13.4		10.0				9.8		
Level of Service (LOS)		D		C		F		B		B				A		
Approach Delay (s/veh)		23.4				37.3				0.1				0.2		
Approach LOS		C				E										

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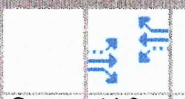
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	WA	Analysis Date	Jul 28, 2021	Area Type	Other
Jurisdiction	St. Lucie	Time Period	PM Peak Hour	PHF	0.92
Urban Street	Kings Hwy	Analysis Year	with project	Analysis Period	1> 7:00
Intersection	White Rd	File Name	C3 - Kings & White (WITH PROJECT) - PM - 202...		
Project Description	Kings Hwy Commerce - with Project				

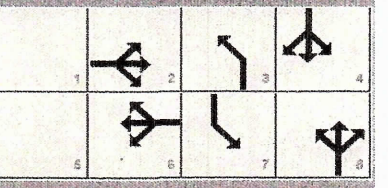


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	29	3	23	128	1	85	8	793	14	23	870	10

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	44.0	14.0	64.0	0.0	0.0	0.0
Yellow	4.0	4.0	4.0	0.0	0.0	0.0
Red	2.0	2.0	2.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2		6	3	8	7	4
Case Number		8.0		6.0	1.1	3.0	1.1	3.0
Phase Duration, s		50.0		50.0	20.0	70.0	20.0	70.0
Change Period, ($Y+R_c$), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (*MAH*), s		0.0		0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s					2.4	33.1	3.2	37.5
Green Extension Time (g_e), s		0.0		0.0	0.0	5.3	0.0	5.2
Phase Call Probability					1.00	1.00	1.00	1.00
Max Out Probability					0.00	0.01	0.00	0.01

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h		60		139	93		9	862	15	25	946	11
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1036		1404	1210		1485	1484	1208	1358	1484	1321
Queue Service Time (g_s), s		3.2		11.8	8.0		0.4	31.1	1.0	1.2	35.5	0.6
Cycle Queue Clearance Time (g_c), s		11.2		23.0	8.0		0.4	31.1	1.0	1.2	35.5	0.6
Green Ratio (*g/C*)		0.31		0.31	0.31		0.56	0.46	0.46	0.56	0.46	0.46
Capacity (*c*), veh/h		365		380	380		293	1357	552	295	1357	604
Volume-to-Capacity Ratio (*X*)		0.164		0.366	0.246		0.030	0.635	0.028	0.085	0.697	0.018
Back of Queue (*Q*), ft/ln (95 th percentile)		89.4		196.2	143.9		6.6	489.3	15.7	20.4	550	10.5
Back of Queue (*Q*), veh/ln (95 th percentile)		3.0		7.8	4.6		0.2	16.5	0.5	0.7	18.6	0.4
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh		37.1		45.6	35.7		18.9	29.1	20.9	18.1	30.3	20.8
Incremental Delay (d_2), s/veh		1.0		2.7	1.5		0.0	0.8	0.0	0.0	1.3	0.0
Initial Queue Delay (d_3), s/veh		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		38.1		48.3	37.2		18.9	29.8	20.9	18.2	31.6	20.8
Level of Service (LOS)		D		D	D		B	C	C	B	C	C
Approach Delay, s/veh / LOS	38.1	D		43.8	D		29.6	C		31.1	C	
Intersection Delay, s/veh / LOS	32.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.45	B	1.92	B	1.69	B
Bicycle LOS Score / LOS	0.59	A	0.87	A	1.22	A	1.30	A

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Table 1: Major Approach Volumes

Time	NB/SB Volumes 2019 Existing	NB/SB Volumes 2023 (2) Background	NB/SB Committed Project Volumes (1)	NB/SB Project Volumes	Total 2023 Volume
6-7 AM	618	676	249	68	993
7-8 AM	701	766	302	96	1164
8-9 AM	647	707	255	92	1054
9-10 AM	602	658	264	82	1004
10-11 AM	583	637	266	84	987
11-12 PM	686	750	307	105	1162
12-1 PM	701	766	344	122	1232
1-2 PM	681	744	275	95	1114
2-3 PM	662	724	293	95	1112
3-4 PM	768	839	399	123	1361
4-5 PM	813	889	331	114	1334
5-6 PM	730	798	287	104	1189
6-7 PM	475	519	138	34	691
7-8 PM	290	317	67	16	400
8-9 PM	260	284	50	10	344
9-10 PM	198	216	46	10	272

Source: FDOT Hourly Volume 2019 - Kings Hwy (Station 0076)
(1) See Committed Project Traffic Table for Project/Hourly Breakdown
(2) 2.25% Growth Rate Applied

Committed Project Traffic - Major Approach

Single-Family Housing	Office	Warehouse	Auto Service Center	Gas Station	WaWa Kings 284 (1)	Bent Creek 184 (1)	Celebration Pointe 127 (1)	Whispering Oaks 56 (1)	Stonemont + Kings Hwy 3083 (1)	Walsh+StLucie Com.+Hunt 422 (1)	Project Hurricane 63 (1)	Total
3.8%	2.2%	6.3%	0.1%	4.8%	14	7	5	2	194	27	0	249
6.7%	7.0%	7.3%	5.7%	6.1%	17	12	9	4	225	31	4	302
6.2%	8.8%	6.0%	9.3%	6.1%	17	11	8	3	185	25	6	255
4.3%	5.4%	6.5%	9.0%	5.5%	16	8	5	2	200	27	6	264
4.8%	5.9%	6.5%	9.7%	5.4%	15	9	6	3	200	27	6	266
5.2%	8.4%	7.6%	10.0%	5.3%	15	10	7	3	234	32	6	307
5.5%	10.4%	8.6%	9.4%	5.9%	17	10	7	3	265	36	6	344
6.0%	8.2%	6.6%	9.3%	5.6%	16	11	8	3	203	28	6	275
6.6%	7.5%	7.0%	8.8%	6.1%	17	12	8	4	216	30	6	293
7.2%	7.4%	10.0%	7.0%	6.6%	19	13	9	4	308	42	4	399
9.0%	10.1%	7.8%	10.2%	6.8%	19	17	11	5	240	33	6	331
8.8%	10.4%	6.6%	7.7%	6.8%	19	16	11	5	203	28	5	287
7.2%	2.4%	2.7%	2.3%	6.1%	17	13	9	4	83	11	1	138
5.2%	1.7%	0.9%	0.8%	4.9%	14	10	7	3	28	4	1	67
4.7%	1.0%	0.6%	0.6%	4.0%	11	9	6	3	18	3	0	50
3.4%	1.0%	0.7%	0.0%	3.3%	9	6	4	2	22	3	0	46

(1) Daily Trips on Link, from Approved Projects Table

Table 2: Daily Trip Generation

Land Use	Directional Split		Net External Trips		
	In	Out	In	Out	Total
General Office	50%	50%	633	633	1,266
Warehousing	50%	50%	1,421	1,421	2,842
TOTALS			**2,054**	**2,054**	**4,108**

Source: ITE 10th Edition Trip Generation Rates

Table 3: Minor Approach Volumes

Hourly	ITE Percent of Daily Traffic Hourly Distribution			External Volumes		Lefts		Rights		Project Hurricane Rights	Total WB Volume (1)
				Kings Highway Commerce Center		Office	Warehouse	Office	Warehouse		
	Office	Warehouse	Auto Service Center	Office	Warehouse	45%	45%	30.0%	30.0%	15.0%	
6-7 AM	2.2%	6.3%	0.1%	14	90	6	41	4	27	0	63
7-8 AM	7.0%	7.3%	5.7%	44	104	20	47	13	31	2	90
8-9 AM	8.8%	6.0%	9.3%	56	85	25	38	17	26	3	86
9-10 AM	5.4%	6.5%	9.0%	34	92	15	41	10	28	3	77
10-11 AM	5.9%	6.5%	9.7%	37	92	17	41	11	28	3	79
11-12 PM	8.4%	7.6%	10.0%	53	108	24	49	16	32	3	99
12-1 PM	10.4%	8.6%	9.4%	66	122	30	55	20	37	3	115
1-2 PM	8.2%	6.6%	9.3%	52	94	23	42	16	28	3	89
2-3 PM	7.5%	7.0%	8.8%	47	99	21	45	14	30	3	90
3-4 PM	7.4%	10.0%	7.0%	47	142	21	64	14	43	2	115
4-5 PM	10.1%	7.8%	10.2%	64	111	29	50	19	33	3	107
5-6 PM	10.4%	6.6%	7.7%	66	94	30	42	20	28	2	97
6-7 PM	2.4%	2.7%	2.3%	15	38	7	17	5	11	1	33
7-8 PM	1.7%	0.9%	0.8%	11	13	5	6	3	4	0	15
8-9 PM	1.0%	0.6%	0.6%	6	9	3	4	2	3	0	10
9-10 PM	1.0%	0.7%	0.0%	6	10	3	5	2	3	0	11

(1) 50% of External Right Trips used in Total

COUNTY: 94
STATION: 0076
DESCRIPTION: SR 713/KINGS HWY - S OF SR 68/ORANGE AVE (COUNTY 7
START DATE: 02/12/2019
START TIME: 2345

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	18	6	9	9	42	11	10	10	6	37	79
0100	11	9	15	15	50	8	8	3	11	30	80
0200	2	12	6	6	26	14	7	7	9	37	63
0300	5	10	7	5	27	7	10	16	10	43	70
0400	5	14	8	18	45	14	24	17	29	84	129
0500	15	34	33	28	110	31	39	42	53	165	275
0600	52	74	89	85	300	52	72	94	100	318	618
0700	91	81	100	90	362	81	76	101	81	339	701
0800	86	88	80	55	309	93	91	63	91	338	647
0900	70	76	63	70	279	93	88	57	85	323	602
1000	59	61	80	82	282	78	65	79	79	301	583
1100	87	85	95	103	370	62	98	81	75	316	686
1200	101	76	91	82	350	77	93	91	90	351	701
1300	101	78	78	78	335	94	81	81	90	346	681
1400	80	75	81	89	325	71	96	74	96	337	662
1500	98	93	77	118	386	67	92	98	125	382	768
1600	88	116	95	85	384	89	111	103	126	429	813
1700	102	91	98	71	362	109	99	92	68	368	730
1800	70	69	63	57	259	67	70	44	35	216	475
1900	37	52	35	48	172	32	36	31	19	118	290
2000	33	39	42	29	143	36	44	14	23	117	260
2100	29	31	28	16	104	21	17	24	32	94	198
2200	19	24	14	27	84	19	10	6	12	47	131
2300	16	14	11	9	50	6	14	14	23	57	107
24-HOUR TOTALS:					5156					5193	10349

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	364	730	366	730	730
P.M.	1545	417	1615	449	1615	847
DAILY	1545	417	1615	449	1615	847

GENERATED BY SPS 5.0.53P

State of Florida Department of Transportation

TRAFFIC SIGNAL WARRANT SUMMARY

City: Stuart
County: 94 – St. Lucie
District: Four

Engineer: Susan O'Rourke
Date: July 28, 2021

Major Street: Kings Highway — Lanes: 2 — Major Approach Speed: 50
Minor Street: White Road — Lanes: 1 — Minor Approach Speed: 35

MUTCD Electronic Reference to Chapter 4: http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? ☑ Yes ☐ No
2. Is the intersection in a built-up area of an isolated community with a population < 10,000? ☐ Yes ☑ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes" ☑ 70% ☑ 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied for eight hours. ☐ Yes ☑ No

Warrant 1 is also satisfied if both Condition A and Condition B are "80%" satisfied (should only be applied after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems). ☐ Yes ☑ No

Condition A - Minimum Vehicular Volume

Condition A is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

100% Satisfied: ☐ Yes ☑ No
80% Satisfied: ☐ Yes ☑ No
70% Satisfied: ☐ Yes ☑ No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100%[a]	80%[b]	70%[c]	100%[a]	80%[b]	70%[c]
1	1	500	400	350	150	120	105
2 or more	1	600	480	420	150	120	105
2 or more	2 or more	600	480	420	200	160	140
1	2 or more	500	400	350	200	160	140

[a] Basic Minimum hourly volume
[b] Used for combination of Conditions A and B after adequate trial of other remedial measures
[c] May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Street	Eight Highest Hours							
	7:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
Major	1,164	1,162	1,232	1,114	1,112	1,361	1,334	1,189
Minor	90	99	115	89	90	115	107	97

Existing Volumes

State of Florida Department of Transportation

TRAFFIC SIGNAL WARRANT SUMMARY

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where Condition A is not satisfied and the traffic volume on a major street is so heavy that traffic on the minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

Applicable:	☑ Yes	☐ No
100% Satisfied:	☐ Yes	☑ No
80% Satisfied:	☑ Yes	☐ No
70% Satisfied:	☑ Yes	☐ No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100%[a]	80%[b]	70%[c]	100%[a]	80%[b]	70%[c]
1	1	750	600	525	75	60	53
2 or more	1	900	720	630	75	60	53
2 or more	2 or more	900	720	630	100	80	70
1	2 or more	750	600	525	100	80	70

[a] Basic Minimum hourly volume

[b] Used for combination of Conditions A and B after adequate trial of other remedial measures

[c] May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Eight Highest Hours								
Street	7:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
Major	1,164	1,162	1,232	1,114	1,112	1,361	1,334	1,189
Minor	90	99	115	89	90	115	107	97

Existing Volumes

Form 750-020-01
TRAFFIC ENGINEERING
10/15

State of Florida Department of Transportation

TRAFFIC SIGNAL WARRANT SUMMARY

City:	Stuart	Engineer:	Susan O'Rourke
County:	94 – St. Lucie	Date:	July 28, 2021
District:	Four		

Major Street:	Kings Highway	Lanes:	2	Major Approach Speed:	50
Minor Street:	White Road	Lanes:	1	Minor Approach Speed:	35

MUTCD Electronic Reference to Chapter 4: http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? ☑ Yes ☐ No
2. Is the intersection in a built-up area of an isolated community with a population < 10,000? ☐ Yes ☑ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes" ☑ Yes ☐ No

WARRANT 2 - FOUR-HOUR VEHICULAR VOLUME

If all four points lie above the appropriate line, then the warrant is satisfied.

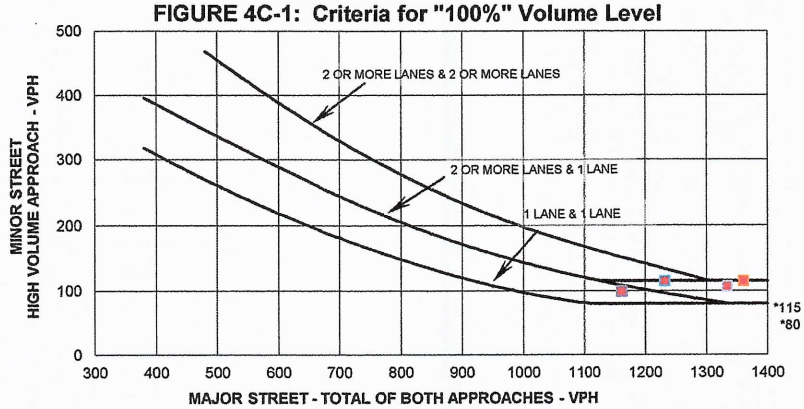
Applicable: ☑ Yes ☐ No
Satisfied: ☑ Yes ☐ No

Plot four volume combinations on the applicable figure below.

100% Volume Level

Four Highest Hours	Volumes	
	Major Street	Minor Street
11:00 AM	1162	99
12:00 PM	1232	115
3:00 PM	1361	115
4:00 PM	1334	107

FIGURE 4C-1: Criteria for "100%" Volume Level



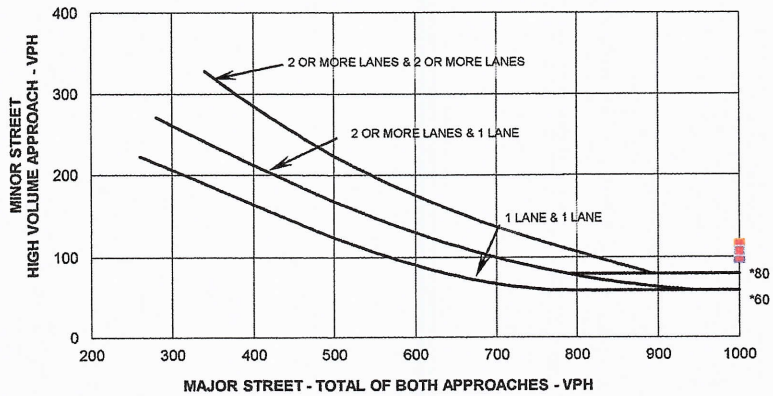
** Note: 115 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 80 vph applies as the lower threshold volume threshold for a minor street approach with one lane.*

70% Volume Level

Four Highest Hours	Volumes	
	Major Street	Minor Street
11:00 AM	1162	99
12:00 PM	1232	115
3:00 PM	1361	115
4:00 PM	1334	107

FIGURE 4C-2: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



** Note: 80 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 60 vph applies as the lower threshold volume threshold for a minor street approach with one lane.*

State of Florida Department of Transportation

TRAFFIC SIGNAL WARRANT SUMMARY

City: Stuart
County: 94 – St. Lucie
District: Four

Engineer: Susan O'Rourke
Date: July 28, 2021

Major Street: Kings Highway — Lanes: 2 — Major Approach Speed: 50
Minor Street: White Road — Lanes: 1 — Minor Approach Speed: 35

MUTCD Electronic Reference to Chapter 4: http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? ☑ Yes ☐ No
2. Is the intersection in a built-up area of an isolated community with a population < 10,000? ☐ Yes ☑ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes" ☑ 70% ☑ 100%

WARRANT 3 - PEAK HOUR

*If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.*

Applicable: ☑ Yes ☐ No
Satisfied: ☑ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
3:00 PM	1361	115

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.
3:00 PM	1361	115

Criteria

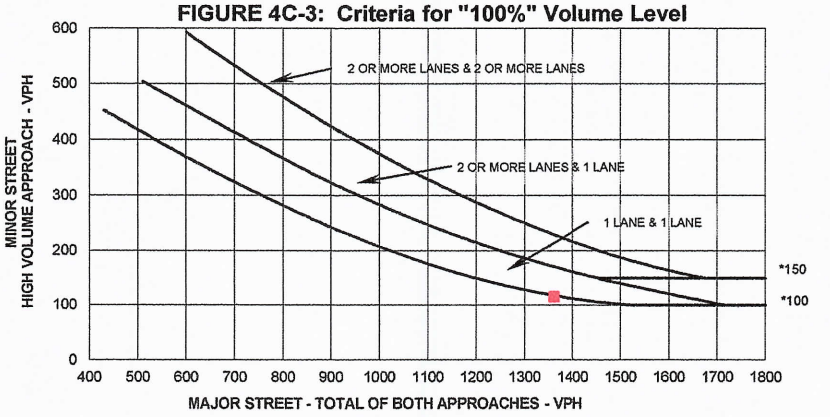
1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		5.0
Fulfilled?: ☑ Yes ☐ No		

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		115
Fulfilled?: ☑ Yes ☐ No		

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		2,071
Fulfilled?: ☑ Yes ☐ No		

Plot volume combination on the applicable figure below.

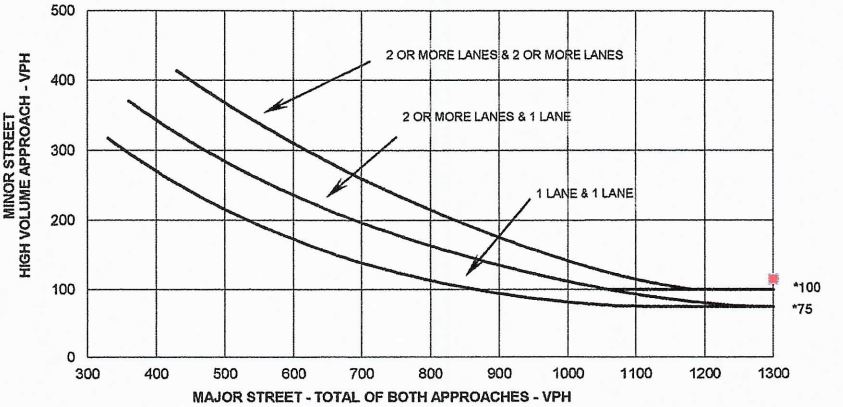
FIGURE 4C-3: Criteria for "100%" Volume Level



** Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.*

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



** Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.*

APPENDIX F

DRIVEWAY ANALYSIS

HCS 2010 Two-Way Stop-Control Report

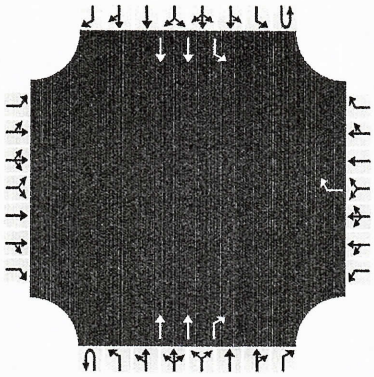
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Buildout

Site Information

Intersection	Kings Hwy & DW 1
Jurisdiction	St. Lucie County
East/West Street	Driveway 1
North/South Street	Kings Highway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	1	0	1	2	0
Configuration								R			T	R		L	T	
Volume, V (veh/h)								7			493	86		43	367	
Percent Heavy Vehicles (%)								3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9						4.1		
Critical Headway (sec)								6.96						4.16		
Base Follow-Up Headway (sec)								3.3						2.2		
Follow-Up Headway (sec)								3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								8						47		
Capacity, c (veh/h)								727						942		
v/c Ratio								0.01						0.05		
95% Queue Length, Q_{95} (veh)								0.0						0.2		
Control Delay (s/veh)								10.0						9.0		
Level of Service, LOS								B						A		
Approach Delay (s/veh)						10.0								1.0		
Approach LOS						B										

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HCS 2010 Two-Way Stop-Control Report

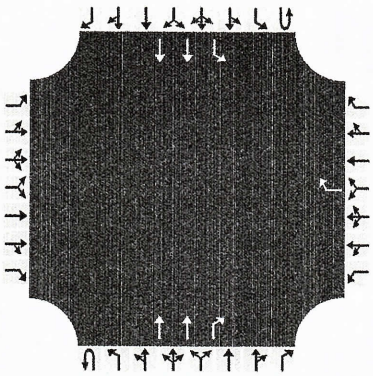
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Buildout

Site Information

Intersection	Kings Hwy & DW 1
Jurisdiction	St. Lucie County
East/West Street	Driveway 1
North/South Street	Kings Highway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	1	0	1	2	0
Configuration								R			T	R		L	T	
Volume, V (veh/h)								28			381	27		14	593	
Percent Heavy Vehicles (%)								3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9						4.1		
Critical Headway (sec)								6.96						4.16		
Base Follow-Up Headway (sec)								3.3						2.2		
Follow-Up Headway (sec)								3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								30						15		
Capacity, c (veh/h)								796						1107		
v/c Ratio								0.04						0.01		
95% Queue Length, Q_{95} (veh)								0.1						0.0		
Control Delay (s/veh)								9.7						8.3		
Level of Service, LOS								A						A		
Approach Delay (s/veh)						9.7								0.2		
Approach LOS						A										

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HCS 2010 Two-Way Stop-Control Report

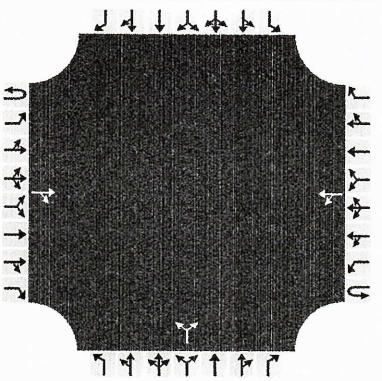
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Buildout

Site Information

Intersection	White Rd & DW 2
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Driveway 2
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			75	42		3	38			18		1				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3					21					
Capacity, c (veh/h)						1452					840					
v/c Ratio						0.00					0.02					
95% Queue Length, Q_{95} (veh)						0.0					0.1					
Control Delay (s/veh)						7.5					9.4					
Level of Service, LOS						A					A					
Approach Delay (s/veh)						0.5				9.4						
Approach LOS										A						

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HCS 2010 Two-Way Stop-Control Report

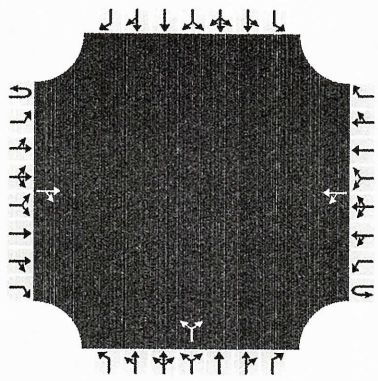
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Buildout

Site Information

Intersection	White Rd & DW 2
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Driveway 2
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			26	14		1	148			71		3				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					80					
Capacity, c (veh/h)						1559					795					
v/c Ratio						0.00					0.10					
95% Queue Length, Q_{95} (veh)						0.0					0.3					
Control Delay (s/veh)						7.3					10.0					
Level of Service, LOS						A					B					
Approach Delay (s/veh)						0.1				10.0						
Approach LOS										B						

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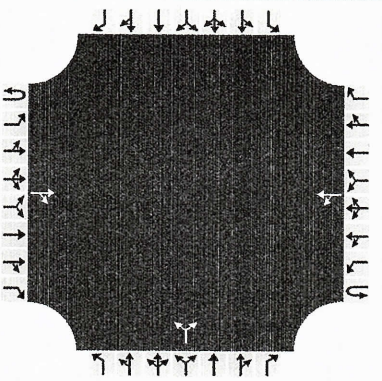
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Buildout

Site Information

Intersection	White Rd & DW 3
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Driveway 3
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			34	42		8	23			18		2				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						9					22					
Capacity, c (veh/h)						1508					897					
v/c Ratio						0.01					0.02					
95% Queue Length, Q_{95} (veh)						0.0					0.1					
Control Delay (s/veh)						7.4					9.1					
Level of Service, LOS						A					A					
Approach Delay (s/veh)						2.0				9.1						
Approach LOS										A						

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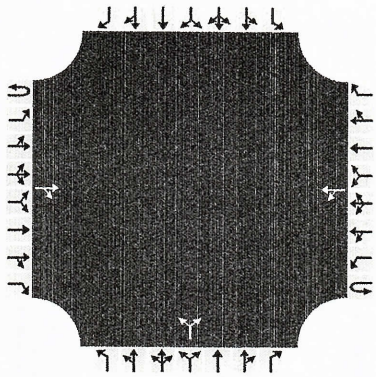
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Buildout

Site Information

Intersection	White Rd & DW 3
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Driveway 3
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			15	14		3	78			71		9				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3					87					
Capacity, c (veh/h)						1575					895					
v/c Ratio						0.00					0.10					
95% Queue Length, Q_{95} (veh)						0.0					0.3					
Control Delay (s/veh)						7.3					9.5					
Level of Service, LOS						A					A					
Approach Delay (s/veh)						0.3				9.5						
Approach LOS										A						

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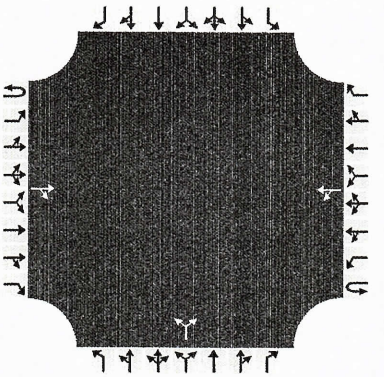
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Buildout

Site Information

Intersection	White Rd & DW 4
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Driveway 4
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			8	28		3	13			18		1				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3					21					
Capacity, c (veh/h)						1565					966					
v/c Ratio						0.00					0.02					
95% Queue Length, Q_{95} (veh)						0.0					0.1					
Control Delay (s/veh)						7.3					8.8					
Level of Service, LOS						A					A					
Approach Delay (s/veh)						1.3				8.8						
Approach LOS										A						

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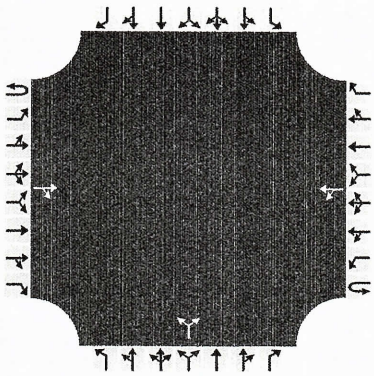
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Buildout

Site Information

Intersection	White Rd & DW 4
Jurisdiction	St. Lucie County
East/West Street	White Road
North/South Street	Driveway 4
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			15	9		1	10			71		3				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					80					
Capacity, c (veh/h)						1582					979					
v/c Ratio						0.00					0.08					
95% Queue Length, Q_{95} (veh)						0.0					0.3					
Control Delay (s/veh)						7.3					9.0					
Level of Service, LOS						A					A					
Approach Delay (s/veh)						0.6				9.0						
Approach LOS										A						

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TURNING MOVEMENT VOLUME COUNTS

N/S STREET: Peters Road **E/W STREET:** Driveway 5 **CONTROL:** Unsignalized

FILENAME:

COUNT DATE: **DAY:** **CITY:** Ft. Pierce **INTERSECTION:** Peters Road & Driveway 5

REPORT DATE: 3/24/2022 **ANALYSIS YEAR:** 2023

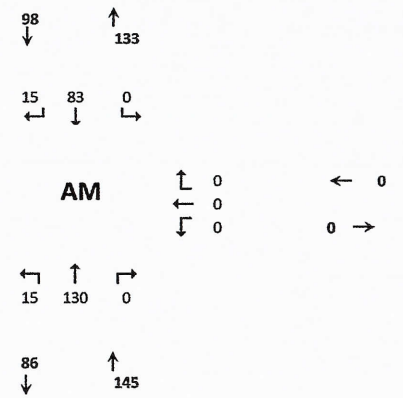
15 Min Period	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
7:00-7:15													0	0
7:15-7:30													0	0
7:30-7:45													0	0
7:45-8:00													0	0
8:00-8:15													0	0
8:15-8:30													0	
8:30-8:45													0	
8:45-9:00													0	

AM PEAK HOUR IS FROM:	7:00AM TO 8:00AM												
Volumes [1]	0	100	0	0	78	0	0	0	0	0	0	0	0
Season Factor	0	100	0	0	78	0	0	0	0	0	0	0	178
Growth	0	107	0	0	83	0	0	0	0	0	0	0	190
In/Out	IN	-	-	-	-	IN	OUT	-	OUT	-	-	-	-
Percentage	5%	0%	0%	0%	0%	5%	5%	0%	5%	0%	0%	0%	0%
PROJECT	15	0	0	0	0	15	3	0	3	0	0	0	0
Committed Traffic [1]		23											

Total	15	130	0	0	83	15	3	0	3	0	0	0	249

Seasonal Factor: 1
Trips In 283
Trips Out 71
Growth Rate: 1.0225
Years Grown: 3

(1) From Page 8, Table 3 - Link Analysis



F-9

Peters Road / Driveway 5 - PM
2023

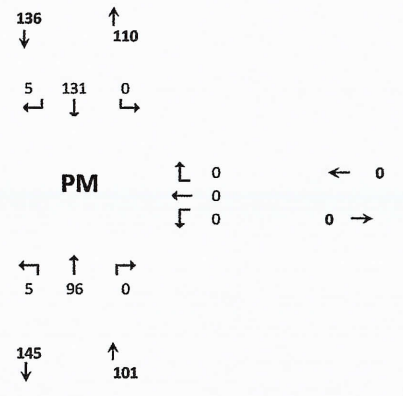
15 Min Period lanes	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
4:00-4:15													0	0
4:15-4:30													0	0
4:30-4:45													0	0
4:45-5:00													0	0
5:00-5:15													0	0
5:15-5:30													0	
5:30-5:45													0	
5:45-6:00													0	

PM PEAK HOUR IS FROM:	4:00PM TO 5:00PM												
Volumes [1]	0	78	0	0	100	0	0	0	0	0	0	0	0
Season Factor	0	78	0	0	100	0	0	0	0	0	0	0	178
Growth	0	83	0	0	107	0	0	0	0	0	0	0	190
In/Out	IN	-	-	-	-	IN	OUT	-	OUT	-	-	-	-
Percentage	5%	0%	0%	0%	0%	5%	5%	0%	5%	0%	0%	0%	0%
Project	5	0	0	0	0	5	14	0	14	0	0	0	0
Committed Traffic [1]		13			24								

Total	5	96	0	0	131	5	14	0	14	0	0	0	264

Seasonal Factor: 1
Growth Rate: 1.0225
Trips In: 90
Trips Out: 284
Years Grown: 3

(1) From Page 8, Table 3 - Link Analysis



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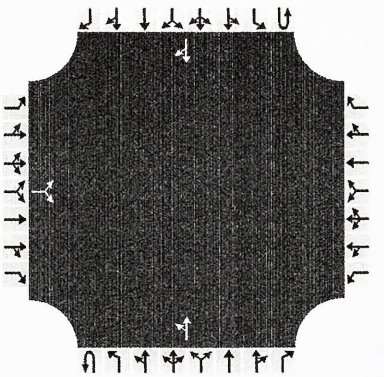
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Buildout

Site Information

Intersection	Peters Rd & DW 5
Jurisdiction	St. Lucie County
East/West Street	Driveway 5
North/South Street	Peters Road
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		3		3						15	130				83	15
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			6							16						
Capacity, c (veh/h)			814							1479						
v/c Ratio			0.01							0.01						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
Control Delay (s/veh)			9.5							7.5						
Level of Service, LOS			A							A						
Approach Delay (s/veh)		9.5								0.8						
Approach LOS		A														

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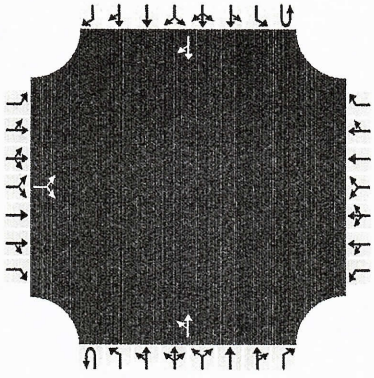
General Information

Analyst	WA
Agency/Co.	O'Rourke Engineering
Date Performed	3/24/2022
Analysis Year	2023
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Buildout

Site Information

Intersection	Peters Rd & DW 5
Jurisdiction	St. Lucie County
East/West Street	Driveway 5
North/South Street	Peters Road
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		14		14						5	96				131	5
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			30							5						
Capacity, c (veh/h)			804							1429						
v/c Ratio			0.04							0.00						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
Control Delay (s/veh)			9.7							7.5						
Level of Service, LOS			A							A						
Approach Delay (s/veh)		9.7								0.4						
Approach LOS		A														

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