

SHEET DESCRIPTION

- 1 COVER SHEET
- 2 GENERAL NOTES
- 3 TYPICAL SECTIONS
- 4 SITE PLAN
- 5 GRADING & DRAINAGE PLAN
- 6 UTILITY PLAN
- 7 DETAILS
- 8 LANDSCAPE PLAN
- 9 IRRIGATION PLAN
- 10 IRRIGATION DETAILS
- 11 LANDSCAPE & IRRIGATION NOTES

HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS

CONSTRUCTION PLANS

FOR

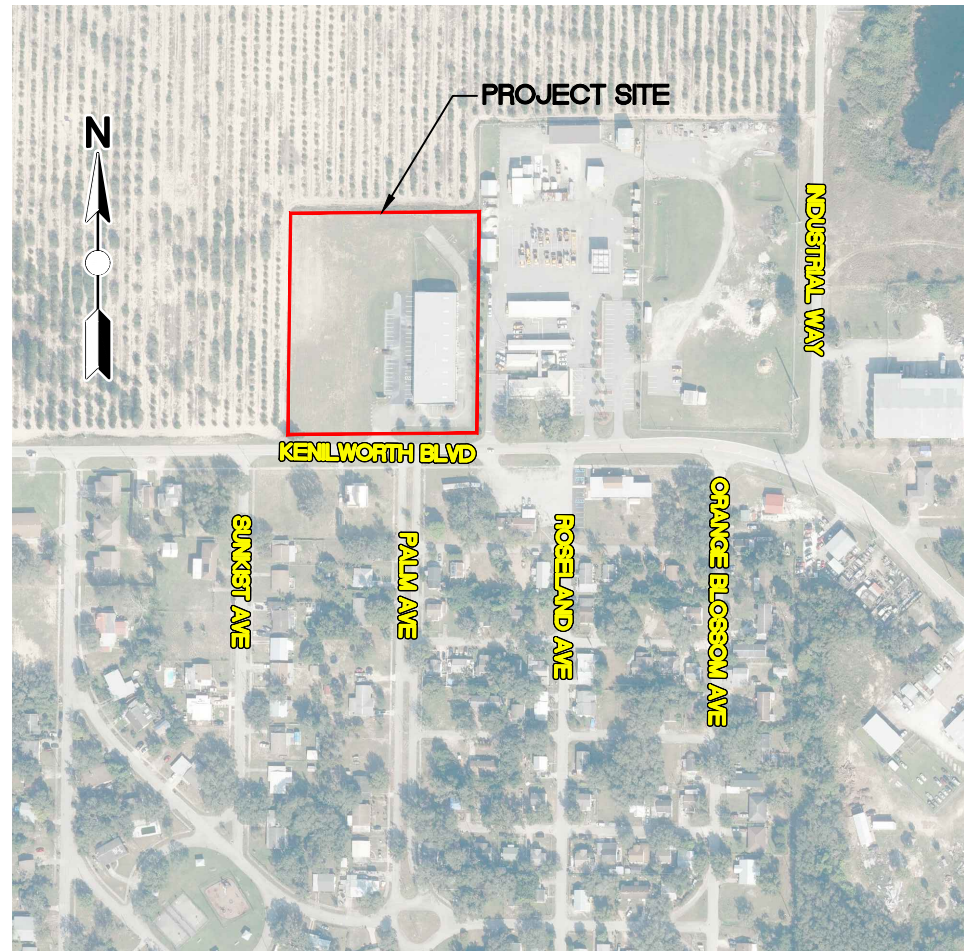
NEW TRAFFIC OPERATIONS BUILDING

HIGHLANDS COUNTY PROJECT NO. 19007

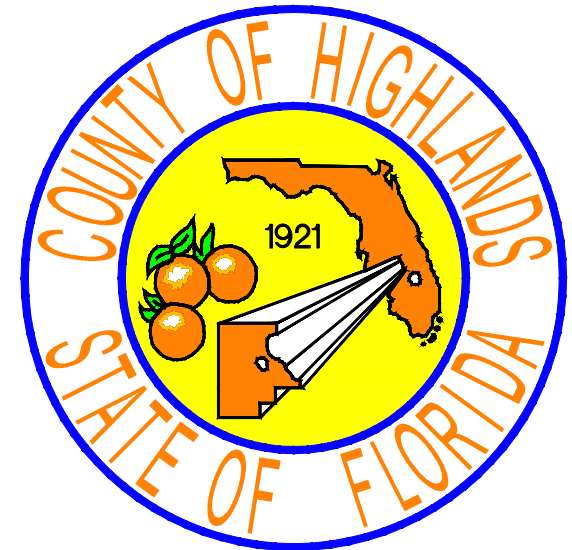
sunshine state
ONE CALL 811
of Florida

DIAL 811
Local No. 1-800-432-4770
Notification # _____
Call 48 hours before you dig.

STATE LAW REQUIRES EXCAVATORS TO CALL 811 BEFORE DIGGING PER THE "UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" CHAPTER 556, FLORIDA STATUTES. FAILURE TO CALL CAN RESULT IN FINES FROM \$250 TO \$5,000.



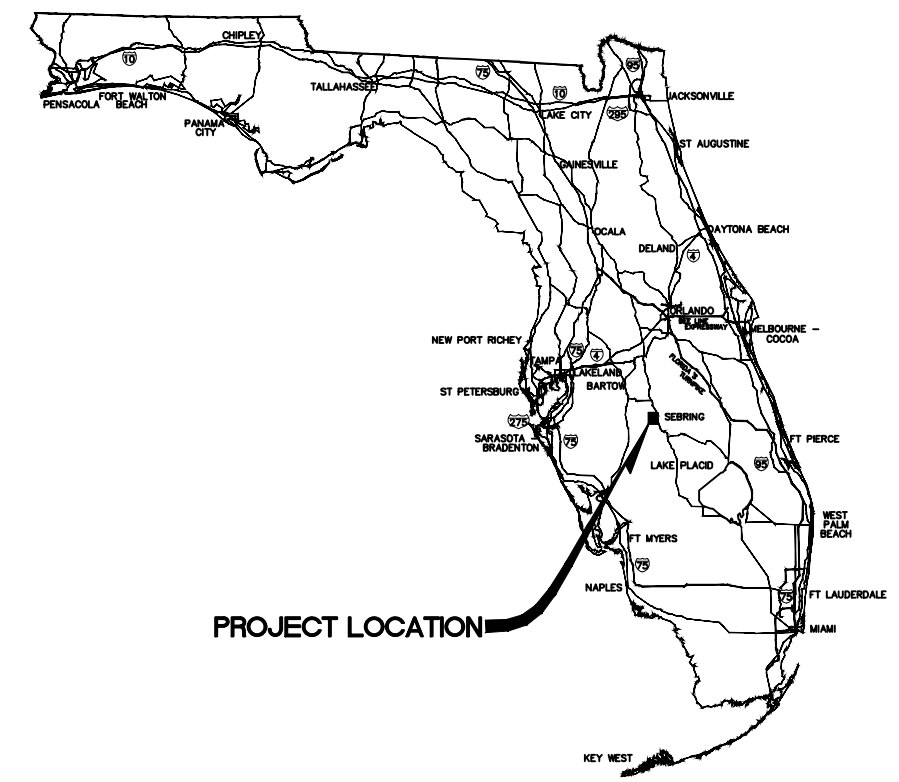
PROJECT LOCATION MAP
(NOT TO SCALE)



CLINTON HOWERTON, JR., P.E.
COUNTY ENGINEER

ENGINEER OF RECORD
J.D. LANGFORD, P.E.

APPENDIX "B"



GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY2021-22 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website:
<http://www.fdot.gov/design/standardplans>

GOVERNING SPECIFICATIONS:

Florida Department of Transportation, January 2022 Standard Specifications for Road and Bridge Construction at the following website:
<http://www.fdot.gov/programmanagement/implemented/SpecBooks>
City of Sebring Municipal Code

PLANS PREPARED BY HIGHLANDS COUNTY ENGINEERING DEPARTMENT

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

REVISIONS			STATUS	DESIGNED BY: J.D. LANGFORD, P.E.	HIGHLANDS COUNTY ENGINEERING DEPARTMENT 505 S. COMMERCER AVENUE SEBRING, FLORIDA 33870		HIGHLANDS COUNTY NEW TRAFFIC OPERATIONS BUILDING COVER	SCALE:	
DATE	BY	DESCRIPTION						HORIZ. N/A	VERT. N/A
			FOR BID	CHECKED BY: J.D. LANGFORD, P.E.	APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402	DATE: 5/1/2023		PROJECT NO.	REV.
				IN CHARGE: J.D. LANGFORD, P.E.				19007	0
<small>G:\PROJECTS\2019\19007 New Traffic Operations Building\All Drawings\19007 New Traffic Operations Building.dwg, 1 COV, Mahoney, Stacey Colors As Black Except Gray Colors.ctb</small>								SHEET 1 OF 11	

SURVEY & STAKEOUT NOTES:

- EXISTING SECTION CORNERS AND 1/4 SECTION CORNERS, AND OTHER LAND MARKERS OR MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE REFERENCED PRIOR TO CONSTRUCTION AND RESET AFTER CONSTRUCTION. THE CONTRACTOR SHALL HAVE THIS WORK DONE BY A REGISTERED PROFESSIONAL LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE (FLORIDA REGISTRATION). ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE COUNTY SURVEYOR, WITHOUT DELAY, BY TELEPHONE.
- BENCHMARK DATA IS NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD 88).
- IF PROVIDED, AND UNLESS OTHERWISE SPECIFIED, THE CONTROL POINT COORDINATES SHOWN ARE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD'83), 2007 ADJUSTMENT.
- GRADES SHOWN ARE THE FINISHED GRADES.

UTILITY & DRAINAGE NOTES:

- EXISTING DRAINAGE STRUCTURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS NOTED OTHERWISE.
- THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
- THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
- THE CONTRACTOR SHALL CALL 811 FOR FIELD LOCATIONS NO LESS THAN 48 HOURS IN ADVANCE OF DIGGING NEAR UNDERGROUND UTILITIES.
- PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
- THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE ENGINEER AND NOTIFY THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND UTILITY ADJUSTMENTS, AS REQUIRED.
- ALL VALVES WITHIN AREA OF CONSTRUCTION OR DISTURBED BY CONSTRUCTION TO BE ADJUSTED TO FINISHED GRADE. REPLACE VALVE COLLARS AND BOXES AS NECESSARY.

PAVEMENT MARKING & SIGNAGE NOTES:

- CROSSWALKS SHALL BE 12" WHITE STRIPES UNLESS NOTED OTHERWISE.
- STOP BARS SHALL BE 24" WHITE STRIPES AND SHALL BE A MINIMUM OF 4' FROM CROSSWALKS AT THE CLOSEST POINT. THE CLOSEST EDGE OF STOP SIGNS SHALL BE 6' FROM EDGE OF PAVEMENT AND PLACED DIRECTLY ADJACENT TO THE STOP BAR.

CLEARING, GRUBBING & LANDSCAPING NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING BRUSH & VEGETATION WITHIN R/W.
- ALL DISTURBED AREA WITHIN THE RIGHT-OF-WAY SHALL BE SODDED WITH "LIKE KIND" SOD. THE AREAS ON WHICH SOD IS TO BE PLACED SHALL BE THOROUGHLY WETTED PRIOR TO AND AFTER PLACEMENT IS COMPLETE. NO ADDITION OF TOP SOIL MATERIAL IS REQUIRED PRIOR TO PLACEMENT.
- ALL SOD MATERIALS SHALL BE SUBJECT TO INSPECTION BY THE ENGINEER PRIOR TO PLACEMENT. ANY SOD WITH NOXIOUS WEEDS AND GRASSES, INCLUDING TROPICAL SODA APPLE SHALL BE REJECTED FOR USE ON THIS PROJECT.

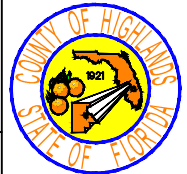
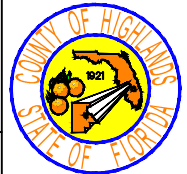
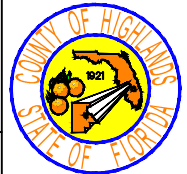
MISCELLANEOUS NOTES:

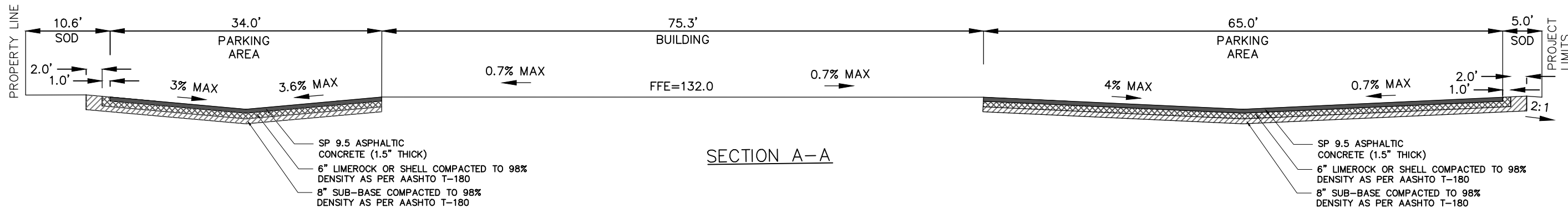
- CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE TO THE ENGINEER, IN CONJUNCTION WITH THE HIGHLANDS COUNTY ENGINEERING DEPARTMENT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- PROPOSED CONCRETE SIDEWALKS SHALL MEET ADA STANDARDS. IT IS RECOMMENDED THAT ALL CROSS SLOPES ARE CONSTRUCTED AT 1.5%.
- EXISTING DRIVEWAYS WITHIN THE LIMITS OF THIS PROJECT ARE TO BE REPLACED AT THE SAME LOCATION AND WIDTH, UNLESS OTHERWISE SHOWN IN THE PLANS.
- THE CONTRACTOR SHALL REMOVE SURVEY STAKES AND EROSION CONTROL ITEMS PRIOR TO THE COMPLETION OF THE CONTRACT.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL CONSTRUCTION PERMITS AND LICENSES. COUNTY SHALL ASSIST CONTRACTOR, WHEN NECESSARY, IN OBTAINING SUCH PERMITS AND LICENSES.
- CONTRACTOR WILL BE REQUIRED TO PROVIDE AND INSTALL POURED CONCRETE PEDESTALS AT ALL GATE CONTROL DEVICES.

UTILITY COMPANIES

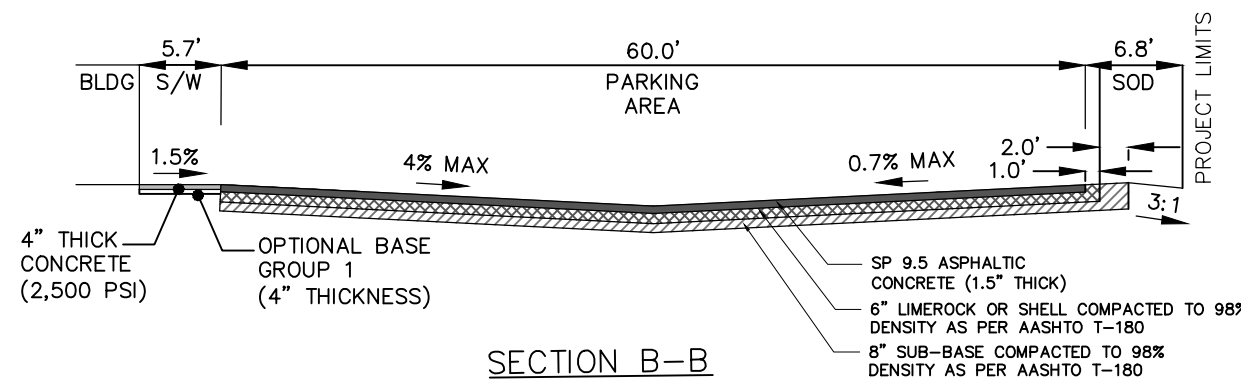
COMCAST 12600 WESTLINKS DR. SUITE #4 FORT MYERS FL, 33913 LYNN DUNDAS CONSTRUCTION SPECIALIST II CELL 239-896-6328	LEVEL 3 COMMUNICATIONS 1025 ELDORADO BLVD, BLDG 13C04 BROOMFIELD, CO 80021 JUDY HENRY 720-888-2061	NETWORK RELATIONS CENTURYLINK 1025 ELDORADO BLVD. BROOMFIELD, CO 80021 877-366-8344 Ext: 2
TECO-PEOPLES GAS 445 KATHLEEN ROAD LAKELAND, FL 33815 JENNIFER LOWERS 863-603-2226	HIGHLANDS COUNTY TRAFFIC 505 SOUTH COMMERCE AVE. SEBRING, FL 33870 EDWARD CARDONA 863-402-6536 Ext:6536	CITY OF SEBRING 368 S. COMMERCE AVE. SEBRING, FLORIDA 33870 BOB BOGGUS (863)471-5100
CENTURY LINK 924 MEMORIAL DRIVE AVON PARK, FL 33825 KEN LUTZ 863-452-3185	DUKE ENERGY 4728 KENILWORTH BLVD SEBRING, FL 33870 MARK MANNER (863) 678-4476	SEBRING GAS SYSTEMS, INC. 3515 U.S. HIGHWAY 27 SEBRING, FLORIDA KATHY SNYDER (863) 385-0194

NEW TRAFFIC OPERATIONS BUILDING			
HIGHLANDS COUNTY PROJECT NO. 19007			
BASE BID			
TASK NO.	ITEM DESCRIPTION	QUANTITY	UNIT
1	MOBILIZATION	1	LS
2	CONSTRUCTION SURVEY STAKING INCLUDING AS-BUILT	1	LS
3	TESTING	1	LS
4	MAINTENANCE OF TRAFFIC	1	LS
5	SEDIMENT BARRIER TEMPORARY	1,354	LF
6	REGULAR EXCAVATION	56.62	CY
7	EMBANKMENT (IN-PLACE)	1,508	CY
8	OPTIONAL BASE GROUP 1 (4" THICKNESS)	85	SY
9	OPTIONAL BASE GROUP 8 (6" THICKNESS)	2,216	SY
10	4" THICK CONCRETE FOR SIDEWALK, BACKFLOW PREVENTOR PAD (2,500 PSI) & GATE CONTROL DEVICES	86	SY
11	6" THICK CONCRETE FOR GENERATOR, BAY ENTRIES, DUMPSTER PAD (4,000 PSI)	78	SY
12	TYPE B STABILIZATION (8" COMPACTED THICKNESS)	3,220	SY
13	TYPE B STABILIZATION (12" COMPACTED THICKNESS)	473	SY
14	SUPERPAVE ASPHALTIC CONCRETE, SP 9.5, 1 1/2" THICK, RAP 30% MAXIMUM	198	TN
15	15" REINFORCED CONCRETE PIPE (RCP)	612	LF
16	18" REINFORCED CONCRETE PIPE (RCP)	121	LF
17	18" MITERED END SECTION	1	EA
18	TYPE "C" INLET	6	EA
19	BACKFLOW PREVENTOR	1	EA
20	1-1/2" PVC (UTILITY PLAN WATER SERVICE) INC. SERVICE TAP	156	LF
21	3/4" PVC (UTILITY PLAN WATER SERVICE)	137	LF
22	PVC TEE (UTILITY PLAN WATER SERVICE)	1	EA
23	4" PVC (INCLUDING CORING OPERATIONS AND CLEAN-OUT)	65	LF
24	8' CHAINLINK FENCE (INCLUDING 24' AUTOMATED GATE AND PEDESTRIAN GATE)	142	LF
25	DETECTABLE WARNING, YELLOW, EMBEDDED	10	SF
26	SINGLE POST SIGN, F & I, R7-8-FL (12" X18") HANDICAP PARKING SIGN	2	AS
27	SINGLE POST SIGN, F & I, R1-1 (30" X30"), STOP SIGN	1	AS
28	CONCRETE PARKING BUMPER	22	EA
29	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6"	453	LF
30	PAINTED PAVEMENT MARKINGS, STANDARD, BLUE, SOLID, 6"	72	LF
31	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE HANDICAP SYMBOL	2	EA
32	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24"	12	LF
33	YELLOW CONCRETE BOLLARDS	3	EA
34	LANDSCAPING	1	LS
35	IRRIGATION	1	LS

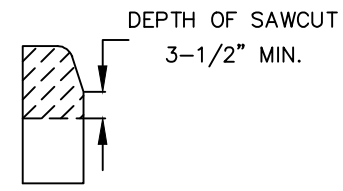
<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		REVISIONS		DATE	BY											<table border="1"> <thead> <tr> <th>STATUS</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; color: red; font-weight: bold;">FOR BID</td> </tr> </tbody> </table>	STATUS	FOR BID	<table border="1"> <tr> <td>DESIGNED BY: J.D. LANGFORD, P.E.</td> <td rowspan="6" style="text-align: center;"> HIGHLANDS COUNTY ENGINEERING DEPARTMENT 505 S. COMMERCE AVENUE SEBRING, FLORIDA 33870 </td> <td rowspan="6" style="text-align: center;">  </td> </tr> <tr> <td>DRAWN BY: STACEY MAHONEY</td> </tr> <tr> <td>CHECKED BY: J.D. LANGFORD, P.E.</td> </tr> <tr> <td>IN CHARGE: J.D. LANGFORD, P.E.</td> </tr> <tr> <td>DATE: 5/1/2023</td> </tr> <tr> <td>APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402</td> </tr> </table>	DESIGNED BY: J.D. LANGFORD, P.E.	HIGHLANDS COUNTY ENGINEERING DEPARTMENT 505 S. COMMERCE AVENUE SEBRING, FLORIDA 33870		DRAWN BY: STACEY MAHONEY	CHECKED BY: J.D. LANGFORD, P.E.	IN CHARGE: J.D. LANGFORD, P.E.	DATE: 5/1/2023	APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402	<table border="1"> <tr> <td colspan="2" style="text-align: center;"> HIGHLANDS COUNTY NEW TRAFFIC OPERATIONS BUILDING GENERAL NOTES </td> </tr> <tr> <td>SCALE: HORIZ. N/A VERT. N/A</td> <td>PROJECT NO. 19007</td> </tr> <tr> <td>REV. 0</td> <td>SHEET 2 OF 11</td> </tr> </table>	HIGHLANDS COUNTY NEW TRAFFIC OPERATIONS BUILDING GENERAL NOTES		SCALE: HORIZ. N/A VERT. N/A	PROJECT NO. 19007	REV. 0	SHEET 2 OF 11
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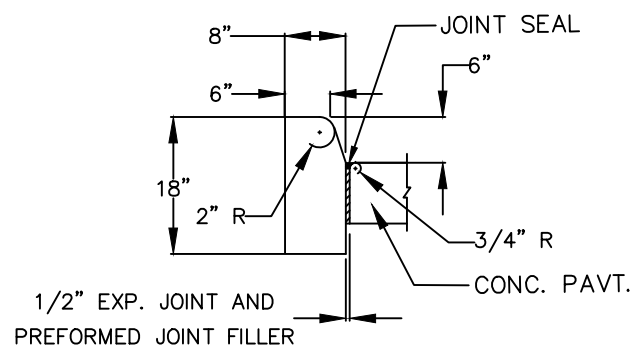
SECTION A-A



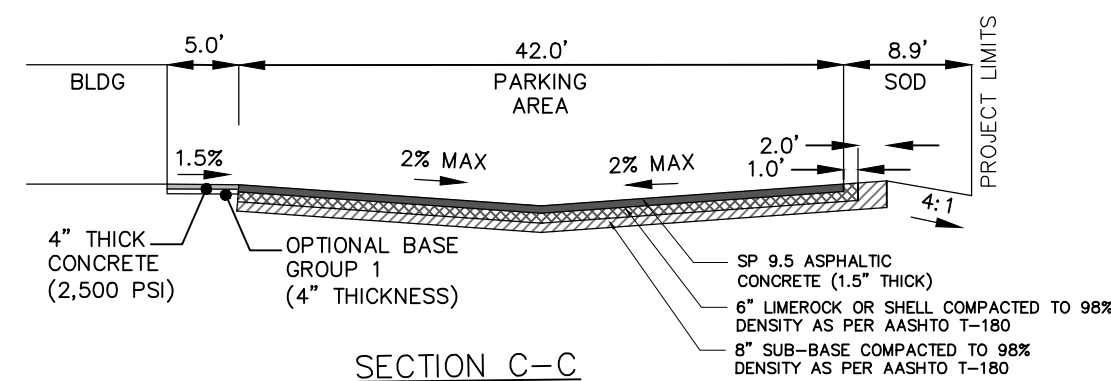
SECTION B-B



CONTRACTION JOINT IN CURB

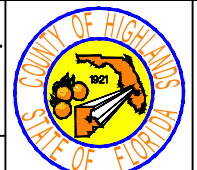


TYPE D CURB



SECTION C-C

NOTE: FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT, CONCRETE SHOWN. EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURBS AND CONCRETE PAVEMENT ONLY.

REVISIONS			STATUS	DESIGNED BY: J.D. LANGFORD, P.E.	DRAWN BY: STACEY MAHONEY	CHECKED BY: J.D. LANGFORD, P.E.	IN CHARGE: J.D. LANGFORD, P.E.	DATE: 5/1/2023	APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402	DATE:	SCALE: HORIZ. N/A VERT. N/A	PROJECT NO. 19007	REV. 0	
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			FOR BID	HIGHLANDS COUNTY ENGINEERING DEPARTMENT 505 S. COMMERCE AVENUE SEBRING, FLORIDA 33870						HIGHLANDS COUNTY NEW TRAFFIC OPERATIONS BUILDING TYPICAL SECTIONS			SHEET 3 OF 11	

PROJECT:

PROJECT AREA = 4,879 S.Y.
 IMPERVIOUS AREA = 3,311 S.Y.
 PERVIOUS AREA = 1,568 S.Y.
 WETLANDS = 0.0 AC.

BUILDING SIZE:

4,696 GFA CONDITIONED SPACE
 5,650 GFA WAREHOUSE/UNCONDITIONED

PARKING CALCULATIONS:

OFFICE ADMIN. SERVICES 1 PER 400 SF GFA
 WAREHOUSE 1 PER 600 SF GFA

OFFICE SPACE:

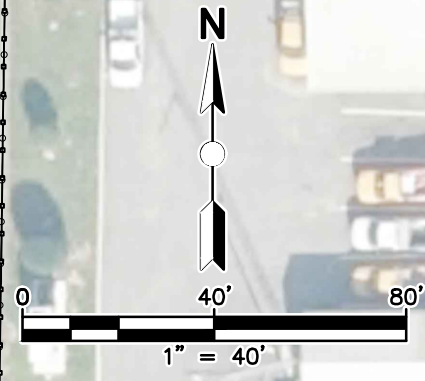
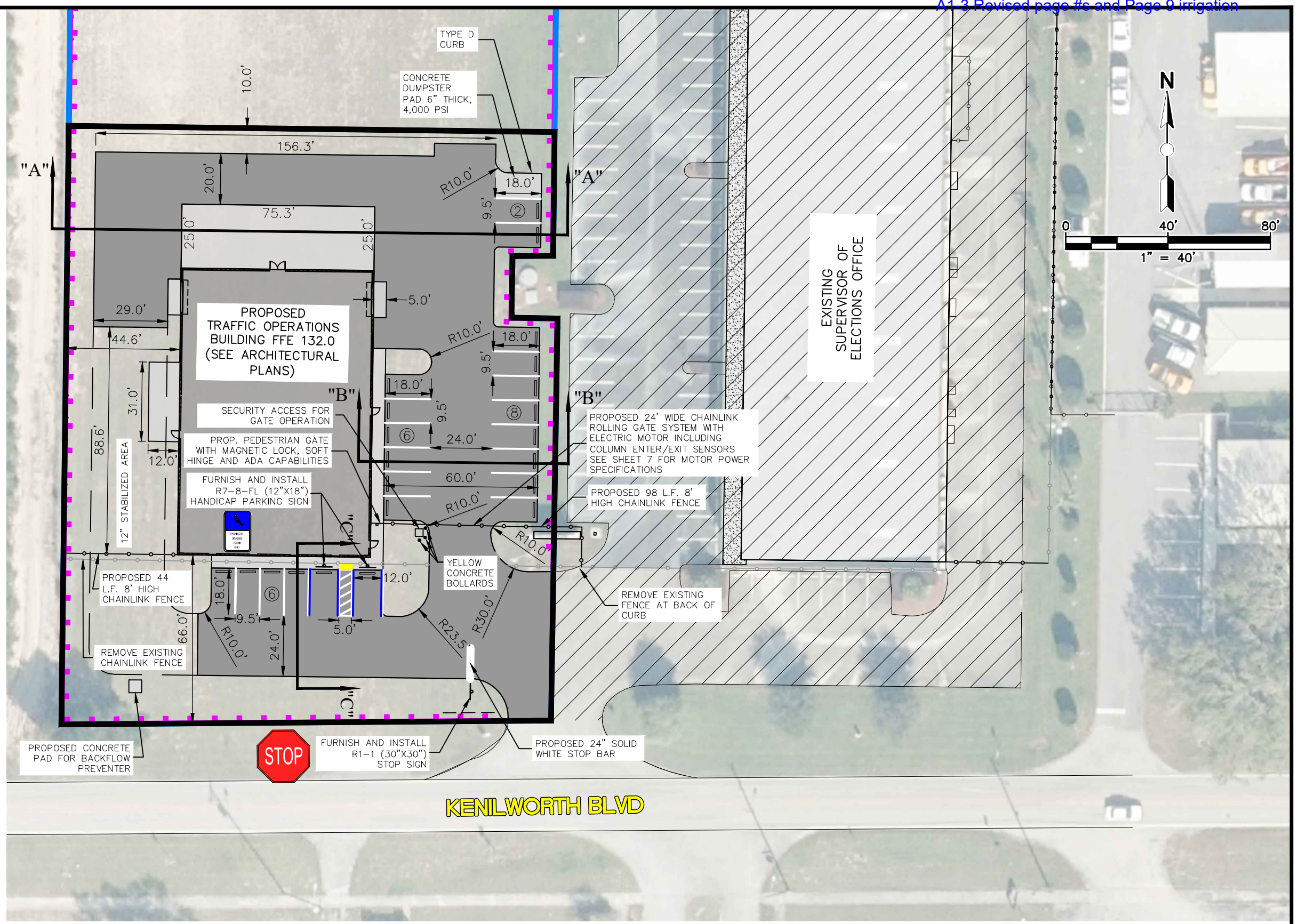
4,696/400 = 11.74 OR 12 SPACES

WAREHOUSE:

5,650/600 = 9.42 OR 10 SPACES
 PARKING SPACES REQUIRED = 22 SPACES
 PARKING SPACES PROVIDED = 22 SPACES

NOTE:

CONTRACTOR TO INSPECT EXISTING ROLLING & PEDESTRIAN GATES AT EASTERN ENTRANCE OF THE SITE TO GAIN A BETTER UNDERSTANDING OF THE POWER, SENSOR, HARDWARE AND MECHANIC NECESSITY FOR THE PROPOSED WESTERN ENTRANCE PRIOR TO BID SUBMISSION.



REVISIONS		
DATE	BY	DESCRIPTION

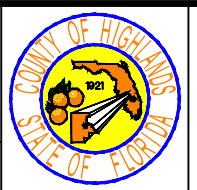
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DESIGNED BY:
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 DRAWN BY:
 STACEY MAHONEY
 CHECKED BY:
 J.D. LANGFORD, P.E.
 IN CHARGE:
 J.D. LANGFORD, P.E.
 DATE:
 5/1/2023

HIGHLANDS COUNTY ENGINEERING DEPARTMENT
 505 S. COMMERCE AVENUE
 SEBRING, FLORIDA 33870

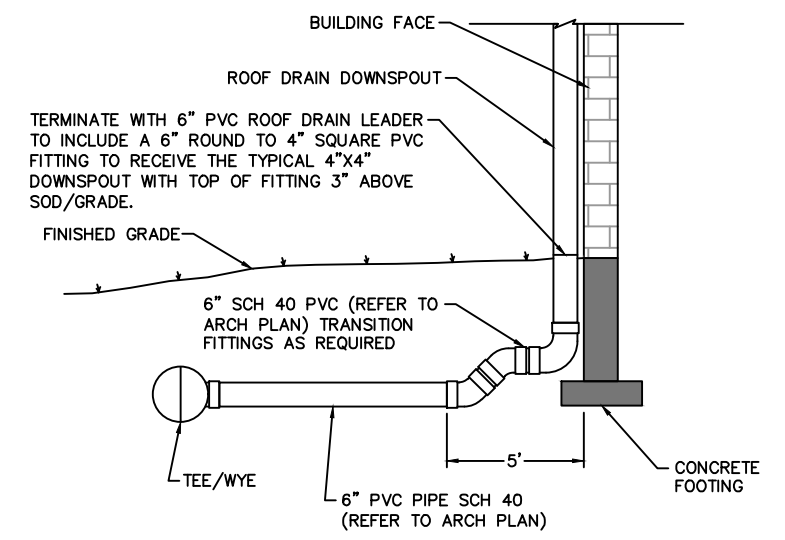
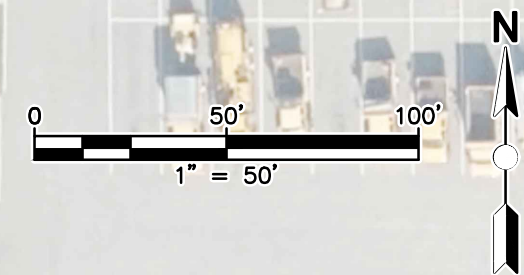
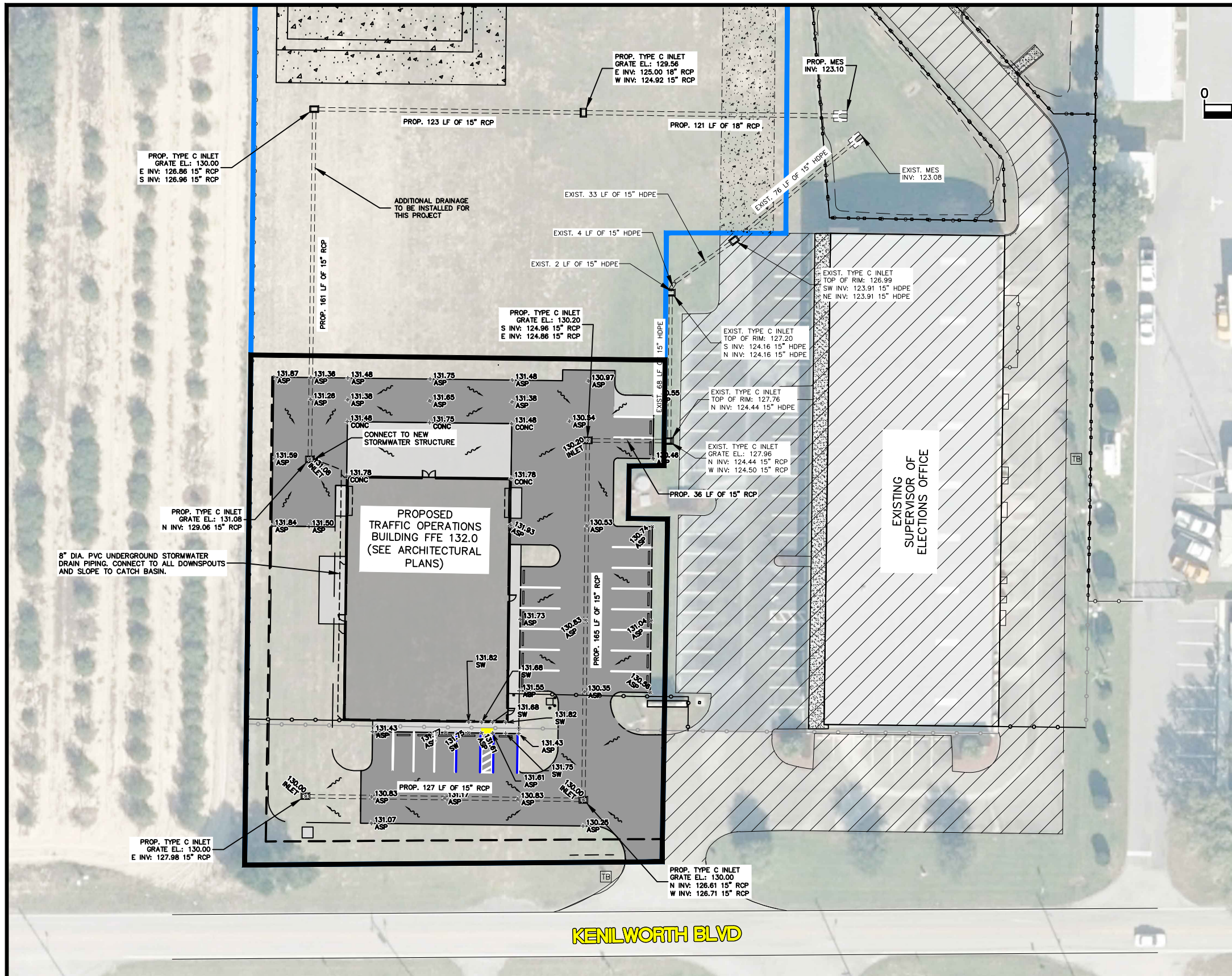
APPROVED BY: JAMES D. LANGFORD, JR., P.E.
 FLORIDA REGISTRATION NO.: 78402

DATE:



HIGHLANDS COUNTY
 NEW TRAFFIC OPERATIONS BUILDING
 SITE PLAN

SCALE: HORIZ. 1"=40' VERT. N/A	
PROJECT NO. 19007	REV. 0
SHEET 4 OF 11	



3 ROOF DRAIN DETAIL
C800 N.T.S.

REVISIONS		
DATE	BY	DESCRIPTION

STATUS
FOR BID

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J.D. LANGFORD, P.E.

DRAWN BY:
STACEY MAHONEY

CHECKED BY:
J.D. LANGFORD, P.E.

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DATE:
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**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870

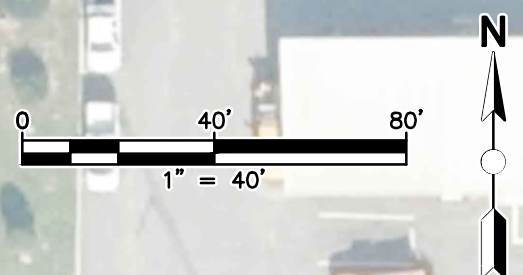
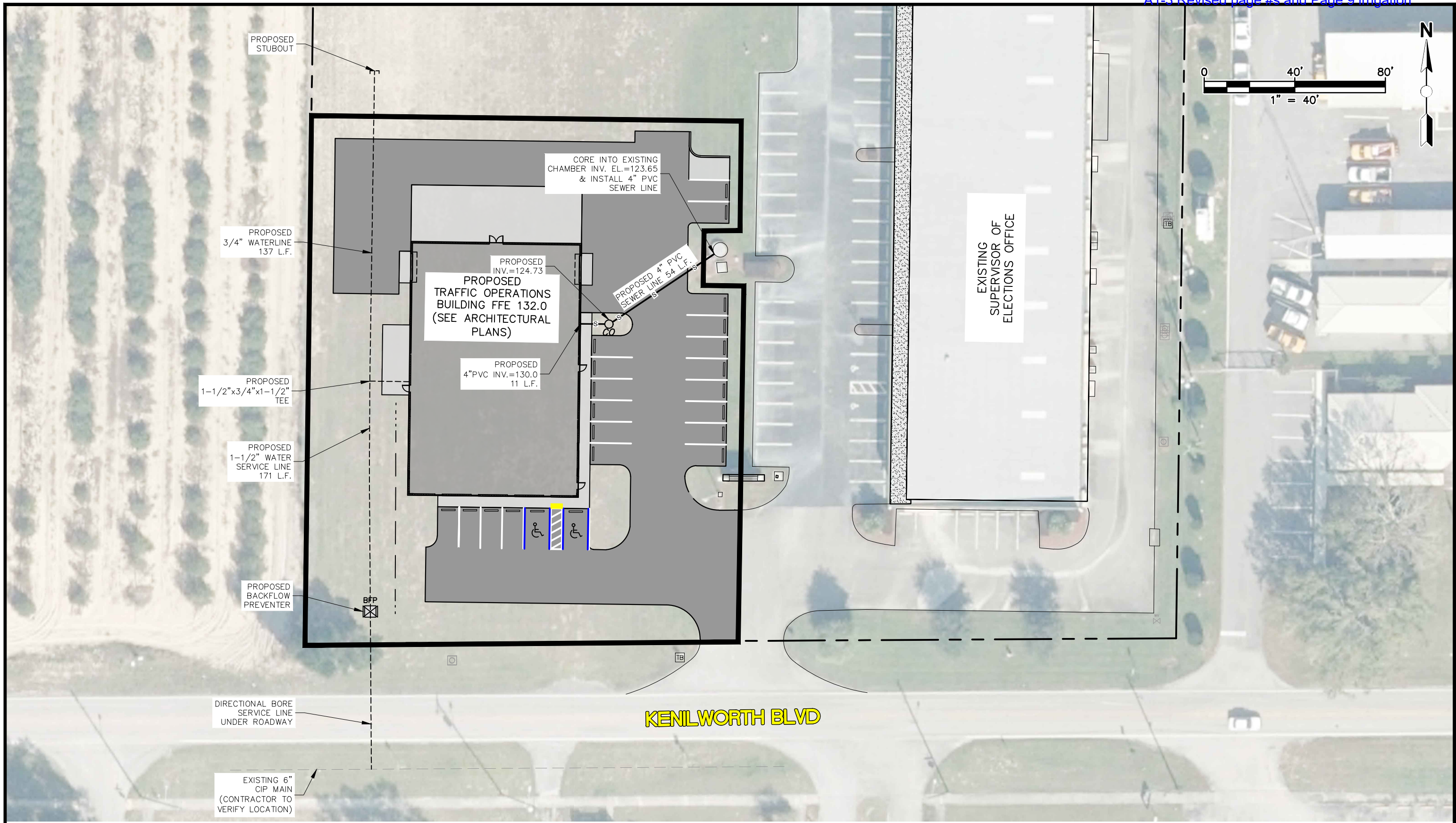
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DATE:



**HIGHLANDS COUNTY
NEW TRAFFIC OPERATIONS BUILDING
GRADING & DRAINAGE PLAN**

SCALE: HORIZ. 1"=50' VERT. N/A	
PROJECT NO. 19007	REV. 0
SHEET 5 OF 11	



KENILWORTH BLVD

REVISIONS		
DATE	BY	DESCRIPTION

STATUS

FOR BID

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J.D. LANGFORD, P.E.

DRAWN BY:
STACEY MAHONEY

CHECKED BY:
J.D. LANGFORD, P.E.

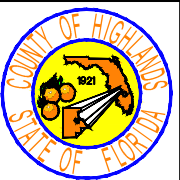
IN CHARGE:
J.D. LANGFORD, P.E.

DATE:
5/1/2023

**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870

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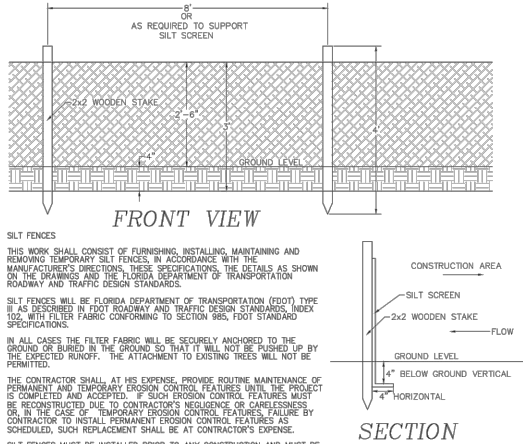
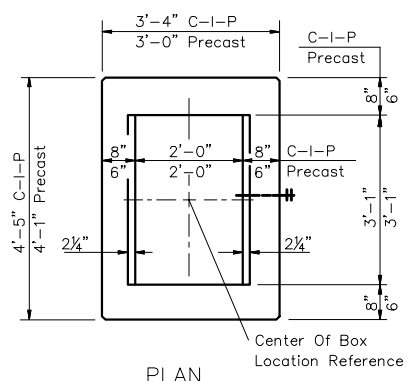


HIGHLANDS COUNTY
NEW TRAFFIC OPERATIONS BUILDING
UTILITY PLAN

SCALE:
HORIZ. 1"=40'
VERT. N/A

PROJECT NO. 19007	REV. 0
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SHEET 6 OF 11



SILT FENCES
 THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING TEMPORARY SILT FENCES, IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS, THESE SPECIFICATIONS, THE DETAILS AS SHOWN ON THE DRAWINGS AND THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS.

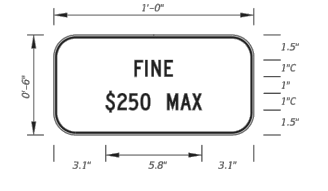
SILT FENCES WILL BE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) TYPE II AS DESCRIBED IN FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX 100, WITH FILTER FABRIC CONFORMING TO SECTION 985, FOOT STANDARD SPECIFICATIONS.

IN ALL CASES THE FILTER FABRIC WILL BE SECURELY ANCHORED TO THE GROUND OR BURIED IN THE GROUND SO THAT IT WILL NOT BE PUSHED UP BY THE EXPECTED RUNOFF. THE ATTACHMENT TO EXISTING TREES WILL NOT BE PERMITTED.

THE CONTRACTOR SHALL, AT HIS EXPENSE, PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETED AND ACCEPTED. IF SUCH EROSION CONTROL FEATURES FAIL BY CONTRACTOR TO INSTALL PERMANENT EROSION CONTROL FEATURES AS SCHEDULED, SUCH REPLACEMENT SHALL BE AT CONTRACTOR'S EXPENSE.

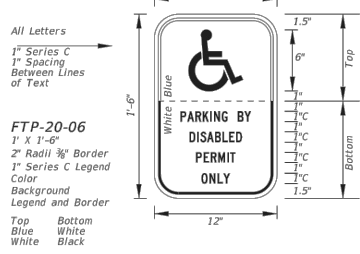
SILT FENCES MUST BE INSTALLED PRIOR TO ANY CONSTRUCTION AND MUST BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

LOCATIONS SHOWN ARE APPROXIMATE. FIELD FITMENT OF SILT SCREENS MAY BE REQUIRED TO GET AROUND OBSTACLES NOT SHOWN ON PLANS.



FTP-22-06
 1' x 6'
 1" Radii 3/8" Border
 1" Series C Legend
 White Background
 Black Legend and Border

Supplemental Panel for the FTP-20-06 and FTP-21-06 signs

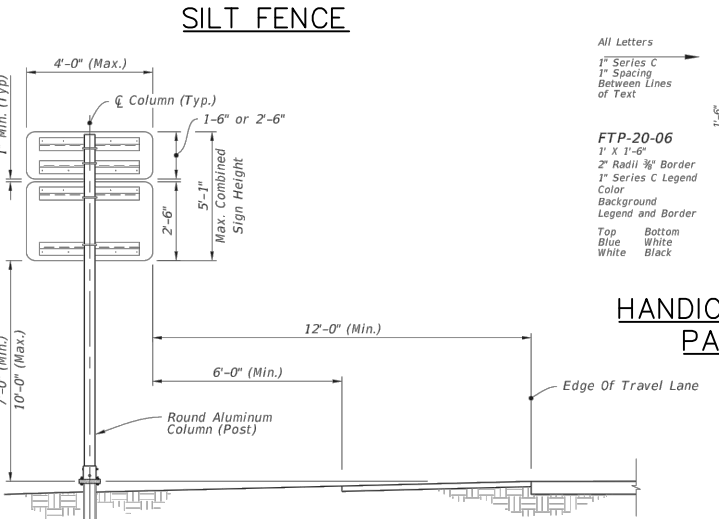


All Letters
 1" Series C
 1" Spacing
 Between Lines of Text

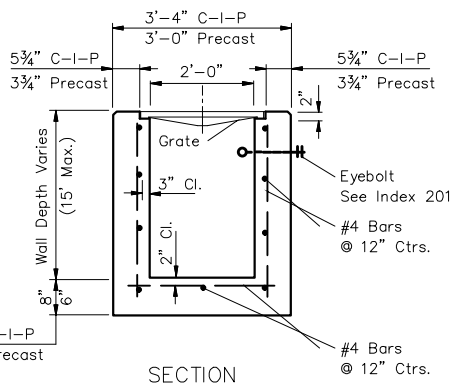
FTP-20-06
 1' x 1'-6"
 2" Radii 3/8" Border
 1" Series C Legend
 Color Background
 Legend and Border

Top Bottom
 Blue White
 White Black

HANDICAP ACCESSIBLE PARKING SIGN



SINGLE COLUMN GROUND SIGN



HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

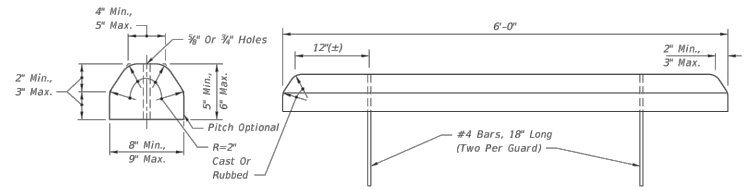
WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING	
			BARS	WWF
0'-15'	A12	0.20	12"	8"

TYPE C

Recommended Maximum Pipe Size:

- 2'-0" Wall - 18" Pipe
- 3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)

TYPE "C" INLET



CONCRETE BUMPER GUARD

VIKING Vehicular Gate Operator (OR EQUIVALENT) Model H-10

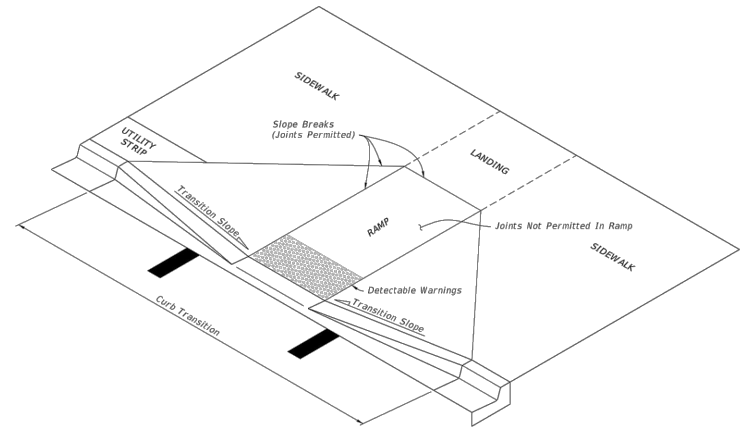
Volts (VAC)	Freq (Hz)	Amps	Phase	Max Gate Weight (lbs)	VOLTS (VAC)
120	50-60	6.00 *	1	2,200	75 40 (1)
240	50-60	1.5	1	2,200	75 40 (1)

* Includes 3 amp load on receptacle

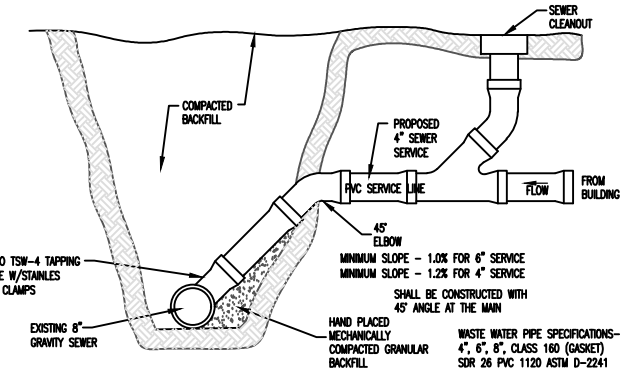
MAIN GATE & SINGLE GATE CONDUIT NOTES

- 11-1/4" schedule 40 PVC pipe from the IT Communication Room to a 10"x8"x6" hinged enclosure to be mounted on the outside of the building and provided by the IT Department.
- 11" schedule 40 PVC raceway from the 10"x8"x6" hinged enclosure to the new motor pad provided by the general contractor.
- 11" schedule 40 PVC raceway from the 10"x8"x6" hinged enclosure to the exist single gate pedestal pad provided by the general contractor. The pedestal and switch devices for exist will be provided by the IT Department.
- 11" schedule 40 PVC raceway from the 10"x8"x6" hinged enclosure to the entrance pedestal pad provided by the general contractor. The pedestal and main gate FOB readers will be provided by the IT Department.
- 11" schedule 40 PVC raceway from the 10"x8"x6" hinged enclosure to inside the latch post of the single gate. The placement of the pipe in the post will be provided by the general contractor. The magnetic lock and FOB reader device for the single gate will be provided by the IT Department.

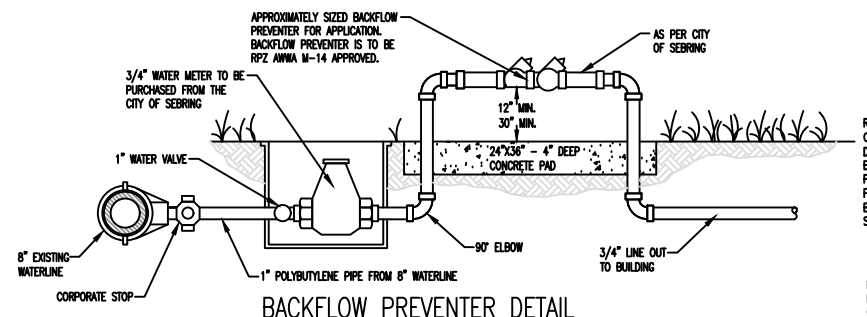
- GENERAL NOTES:**
- Cross Slopes and Grades:**
 - Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this Index are maximums. With approval of the Engineer, provide the minimum feasible slope where the requirements cannot be met.
 - Landings must have cross-slopes less than or equal to 0.02 in any direction.
 - Maintain a single longitudinal slope along each side of the curb ramp.
 - Ramp slopes are not required to exceed 1:5 feet in length.
 - Joints permitted at the location of Slope Breaks. Otherwise locate joints in accordance with Index 522-001. No joints are permitted within the ramp portion of the Curb Ramp.
 - Curb, Curb and Gutter and/or Sidewalk:**
 - Refer to Index 522-001 for concrete thickness and sidewalk details.
 - Remove any existing curb, curb and gutter, or sidewalk to the nearest joint beyond the curb transition or to the extent that no remaining section is less than 5 feet long.
 - Curb Ramp Alpha-Identification:**
 - Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
 - Alpha-identifications CR-I and CR-J are intentionally omitted.
 - Detectable Warnings:**
 - Install detectable warnings in accordance with Specification 527.
 - Place detectable warnings across the full width of the ramp or landing, to a minimum depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.
 - If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.



LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 1 of 7
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DEEP SERVICE CONNECTION



REDUCED PRESSURE BACKFLOW PREVENTERS SHOULD BE INSTALLED WITH A SUGGESTED MINIMUM CLEARANCE OF 12" BETWEEN PORT AND FLOOR GRADE. THEY MUST BE INSTALLED WHERE ANY DISCHARGE WILL NOT BE OBJECTIONABLE AND CAN BE POSITIVELY DRAINED AWAY. THEY SHOULD BE INSTALLED WHERE EASILY ACCESSIBLE FOR TESTING AND MAINTENANCE AND MUST BE PROTECTED FROM FREEZING. LARGER SIZES SHOULD HAVE SUPPORT BLOCKS TO PREVENT FLANGE DAMAGE. THERMAL WATER EXPANSION AND/OR WATER HAMMER DOWN STREAM OF THE BACKFLOW PREVENTER CAN CAUSE EXCESSIVE PRESSURE. EXCESSIVE PRESSURE SITUATIONS SHOULD BE ELIMINATED TO AVOID POSSIBLE DAMAGE TO THE SYSTEM AND ASSEMBLY.

NOTE: BACKFLOW PREVENTER SHOWN IS TYPICAL. OWNER, CONTRACTOR, OR ARCHITECT DISCRETION NEEDED ON ACTUAL TYPE OF PREVENTER FOR SITE. BACKFLOW SHALL BE RPZ ANMA M-14 APPROVED.

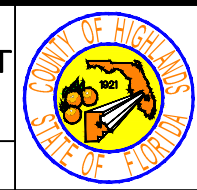
REVISIONS			STATUS
DATE	BY	DESCRIPTION	
			FOR BID

DESIGNED BY: J.D. LANGFORD, P.E.	<p>HIGHLANDS COUNTY ENGINEERING DEPARTMENT 505 S. COMMERCE AVENUE SEBRING, FLORIDA 33870</p> <p>APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402</p>
DRAWN BY: STACEY MAHONEY	
CHECKED BY: J.D. LANGFORD, P.E.	
IN CHARGE: J.D. LANGFORD, P.E.	
DATE: 5/1/2023	

HIGHLANDS COUNTY ENGINEERING DEPARTMENT
 505 S. COMMERCE AVENUE
 SEBRING, FLORIDA 33870

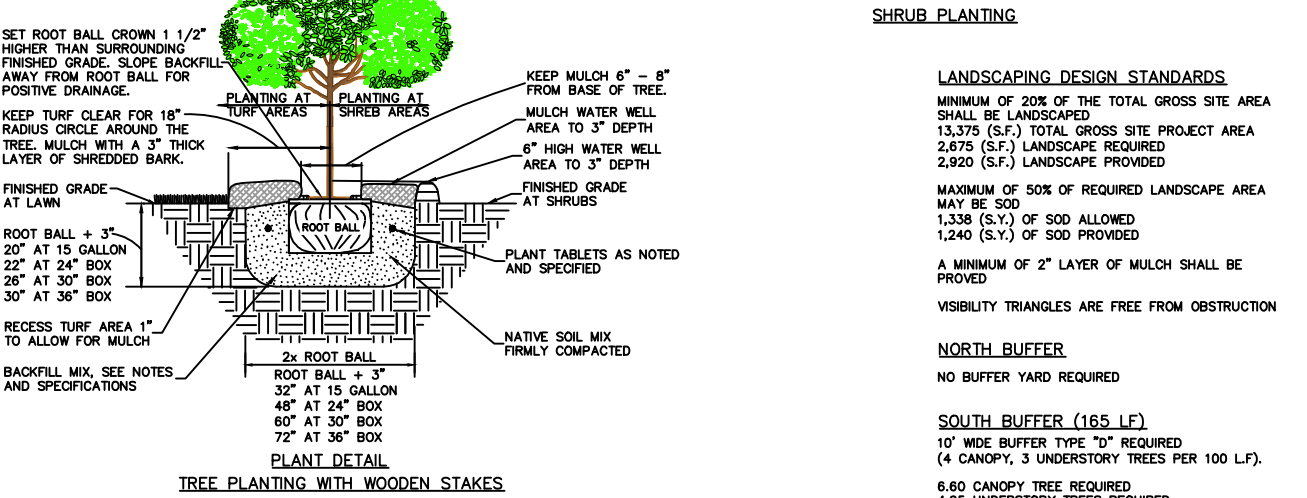
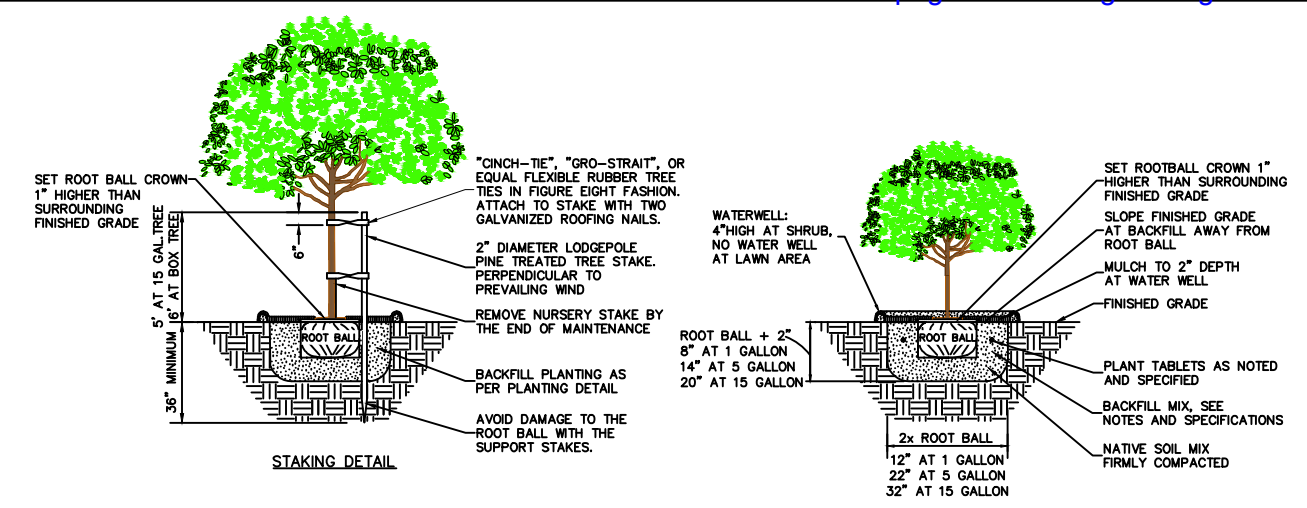
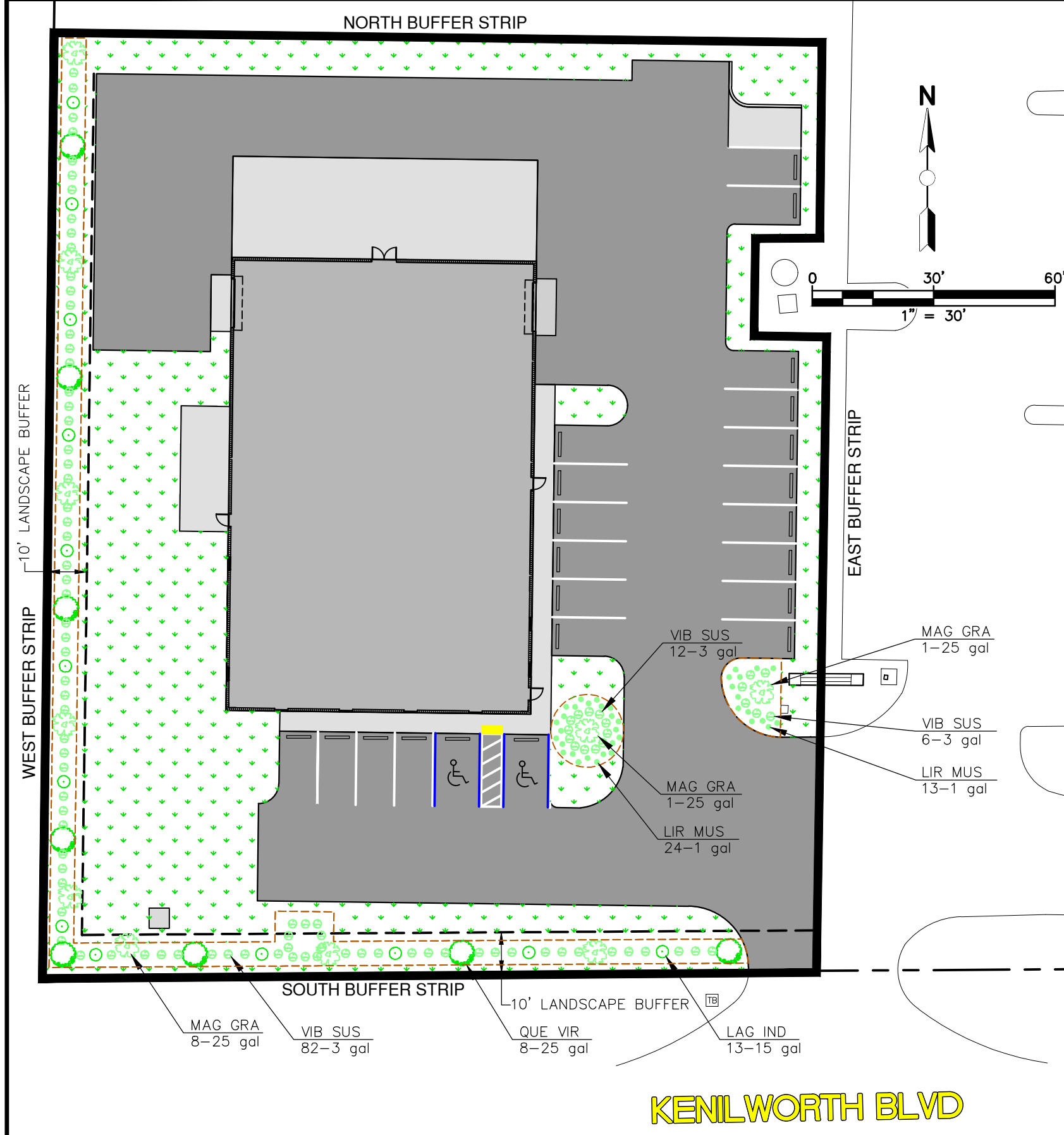
APPROVED BY: JAMES D. LANGFORD, JR., P.E.
 FLORIDA REGISTRATION NO.: 78402

DATE:



HIGHLANDS COUNTY
NEW TRAFFIC OPERATIONS BUILDING
DETAILS

SCALE: HORIZ. N/A VERT. N/A	PROJECT NO. 19007	REV. 0
SHEET 7 OF 11		



PLANT SCHEDULE

TREES	BOTANICAL NAME/COMMON NAME	CONT.	CAL	SIZE	SPACING	QTY.
	QUERCUS VIRGINIANA/SOUTHERN LIVE OAK	25 GAL.	2" CAL.	10' OA	25'	8
	MAGNOLIA GRANDIFLORA/SOUTHERN MAGNOLIA	25 GAL.	2" CAL.	10' OA	25'	10
UNDER STORY TREES						
	LAGERSTROEMIA INDICA/CRAPE MYRTLE	15 GAL.	1.75" CAL.	8' OA	33'	13
SHRUBS						
	VIBURNUM SUSPENSUM/SANDANKWA VIBURNUM	3 GAL.		18"		100
	LIRIOPE MUSCARI 'EMERALD GODDESS'/LIRIOPE	1 GAL.		12"	36" O.C.	37
SOD						
	PASPALUM NOTATUM 'ARGENTINE'/BAHIA GRASS SOD					1,240 SY

LANDSCAPING DESIGN STANDARDS

MINIMUM OF 20% OF THE TOTAL GROSS SITE AREA SHALL BE LANDSCAPED

13,375 (S.F.) TOTAL GROSS SITE PROJECT AREA

2,675 (S.F.) LANDSCAPE REQUIRED

2,920 (S.F.) LANDSCAPE PROVIDED

MAXIMUM OF 50% OF REQUIRED LANDSCAPE AREA MAY BE SOD

1,338 (S.F.) OF SOD ALLOWED

1,240 (S.F.) OF SOD PROVIDED

A MINIMUM OF 2" LAYER OF MULCH SHALL BE PROVIDED

VISIBILITY TRIANGLES ARE FREE FROM OBSTRUCTION

NORTH BUFFER

NO BUFFER YARD REQUIRED

SOUTH BUFFER (165 LF)

10' WIDE BUFFER TYPE "D" REQUIRED (4 CANOPY, 3 UNDERSTORY TREES PER 100 L.F.)

6.60 CANOPY TREE REQUIRED

4.95 UNDERSTORY TREES REQUIRED

CONTINUOUS HEDGE REQUIRED

7 CANOPY TREES PROVIDED (4 SOUTHERN LIVE OAK, 3 SOUTHERN MAGNOLIA)

5 UNDERSTORY TREES REQUIRED (5 CRAPE MYRTLES)

CONTINUOUS HEDGE PROVIDED

REMAINDER OF BUFFER TO BE SOD

WEST BUFFER (215 LF)

10' WIDE BUFFER TYPE "D" REQUIRED (4 CANOPY, 3 UNDERSTORY TREES PER 100 L.F.)

8.60 CANOPY TREE REQUIRED

6.45 UNDERSTORY TREES REQUIRED

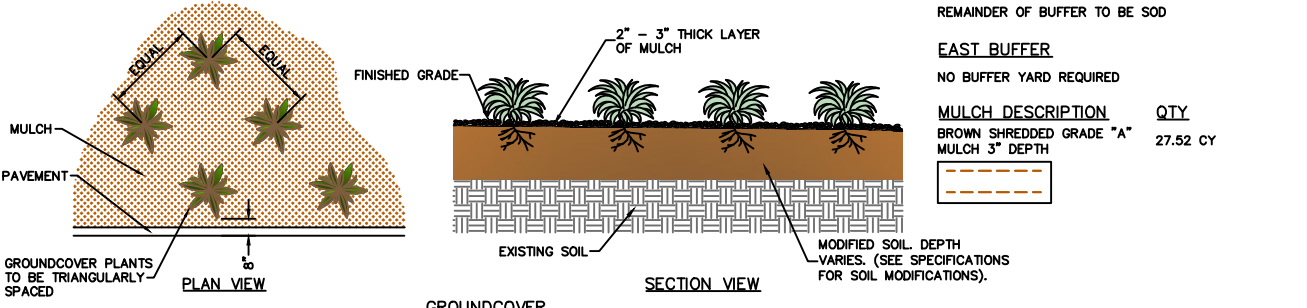
CONTINUOUS HEDGE REQUIRED

9 CANOPY TREES PROVIDED (4 SOUTHERN LIVE OAK, 5 SOUTHERN MAGNOLIA)

8 UNDERSTORY TREES REQUIRED (8 CRAPE MYRTLES)

CONTINUOUS HEDGE PROVIDED

REMAINDER OF BUFFER TO BE SOD



NOTES:

1 - SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSIONS.

2 - SMALL ROOTS (1" OR LESS) THAT GROW AROUND UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOVED AT THE TIME OF PLANTING. (SEE ROOT BALL SHAVING CONTAINER DETAIL).

3 - SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

REVISIONS			STATUS	DESIGNED BY: J.D. LANGFORD, P.E.	DRAWN BY: STACEY MAHONEY	CHECKED BY: J.D. LANGFORD, P.E.	IN CHARGE: J.D. LANGFORD, P.E.	DATE: 5/1/2023
DATE	BY	DESCRIPTION						
			FOR BID	HIGHLANDS COUNTY ENGINEERING DEPARTMENT 505 S. COMMERCIAL AVENUE SEBRING, FLORIDA 33870				

HIGHLANDS COUNTY ENGINEERING DEPARTMENT
 505 S. COMMERCIAL AVENUE
 SEBRING, FLORIDA 33870

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
 FLORIDA REGISTRATION NO.: 78402

DATE:

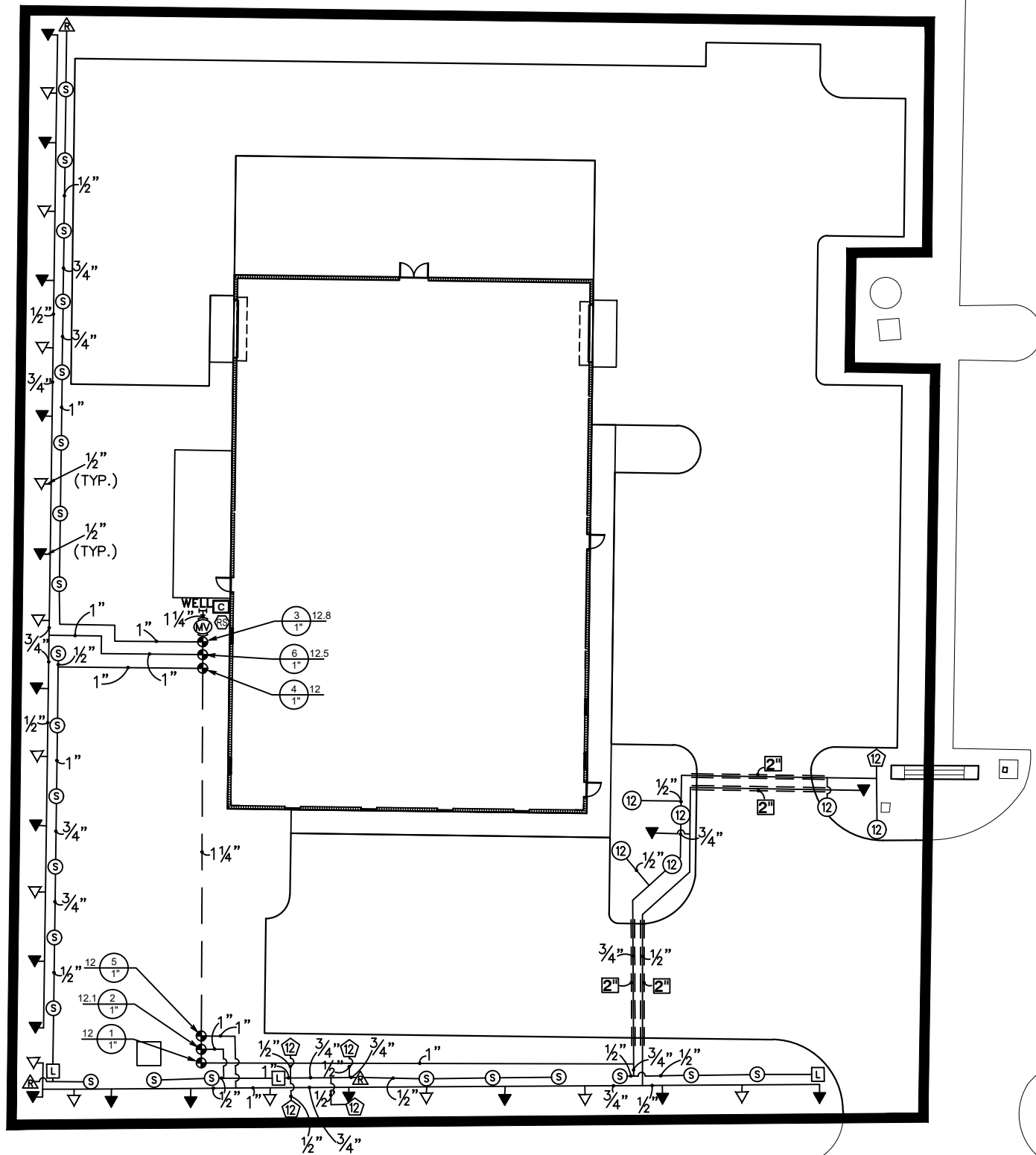
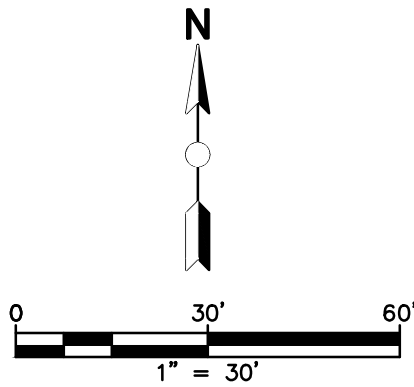
HIGHLANDS COUNTY
 NEW TRAFFIC OPERATIONS BUILDING
 LANDSCAPE PLAN

SCALE:
 HORIZ. 1"=30'
 VERT. N/A

PROJECT NO. 19007

REV. 0

SHEET 8 OF 11



- LEGEND**
- Hunter PROS-12 LCS-515Shrub Spray, 12.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
 - Hunter PROS-12 RCS-515Shrub Spray, 12.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
 - Hunter PROS-12 SS-530Shrub Spray, 12.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
 - Hunter PROS-12 12QShrub Spray, 12.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
 - Hunter PROS-12 12AShrub Spray, 12.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
 - Hunter PROS-04-PCN 10Flood Bubbler, 4.0" pop-up.
 - Hunter PROS-04-PCN 50Flood Bubbler, 4.0" pop-up.
 - Hunter PGV-100G (2) 1"1" Plastic Electric Remote Control Valve, for Residential/Light Commercial Use. Female NPT Inlet/Outlet. Globe Configuration, No Flow Control.
 - Hunter ICV-G 1-1/2"1", 1-1/2", 2", and 3" Plastic Electric Master Valve, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.
 - Hunter PC-400 with (01) PCM-300 Light Commercial & Residential Controller, 7-station expanded module controller, 120 VAC, Outdoor model
 - Hunter WR-CLIK Rain Sensor, install within 1000 ft of controller, in line of sight. 22-28 VAC/VDC 100 mA power from timer transformer. Mount as noted.
- WELL** 4" Screen Well with submersible pump
- Irrigation Lateral Line: PVC Schedule 40 1/2"
 - Irrigation Lateral Line: PVC Schedule 40 3/4"
 - Irrigation Lateral Line: PVC Schedule 40 1"
 - Irrigation Mainline: PVC Schedule 40 1 1/4"
 - Pipe Sleeve: PVC Schedule 40 2"

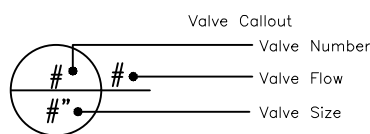
KENILWORTH BLVD

REVISIONS			STATUS	DESIGNED BY: J.D. LANGFORD, P.E.	HIGHLANDS COUNTY ENGINEERING DEPARTMENT 505 S. COMMERCE AVENUE SEBRING, FLORIDA 33870		HIGHLANDS COUNTY NEW TRAFFIC OPERATIONS BUILDING IRRIGATION PLAN		SCALE: HORIZ. 1"=30' VERT. N/A	
DATE	BY	DESCRIPTION					PROJECT NO. 19007	REV. 0		
			FOR BID	DRAWN BY: STACEY MAHONEY	APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402	DATE:			SHEET 9 OF 11	
				CHECKED BY: J.D. LANGFORD, P.E.						
				IN CHARGE: J.D. LANGFORD, P.E.						
				DATE: 5/1/2023						

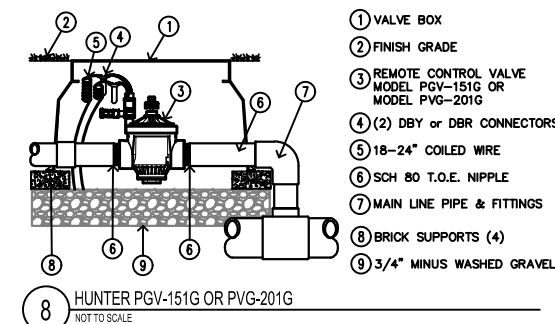
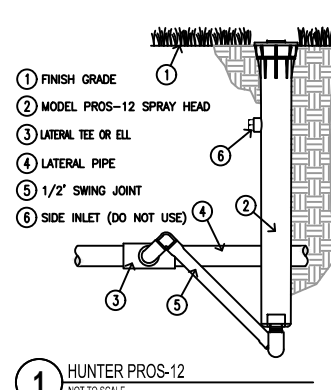
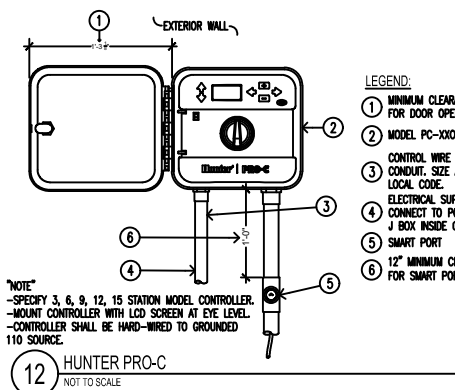
G:\PROJECTS\2019\19007 New Traffic Operations Building\All Drawings\19007 New Traffic Operations Building.dwg, 9 IRRIGATION PLAN, Mahoney, Stacey Colors As Black Except Gray Colors.ctb

IRRIGATION_SCHEDULE

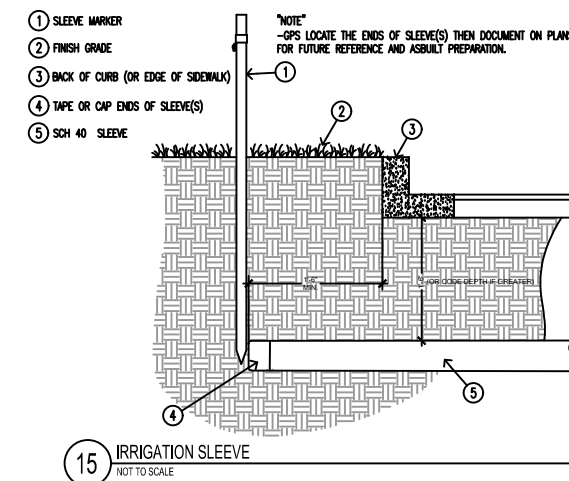
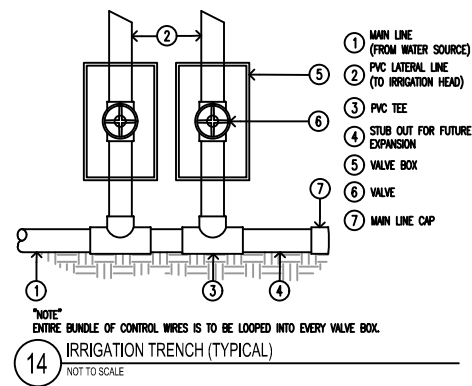
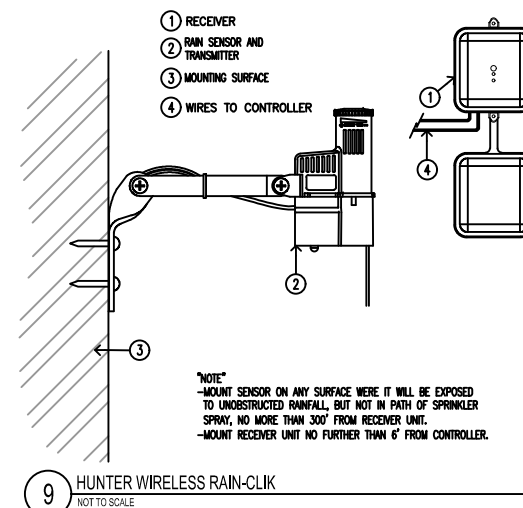
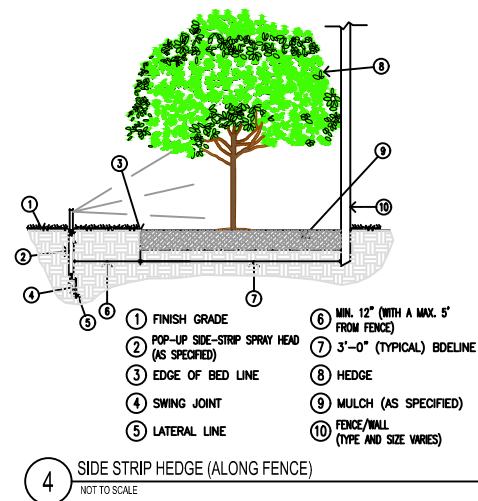
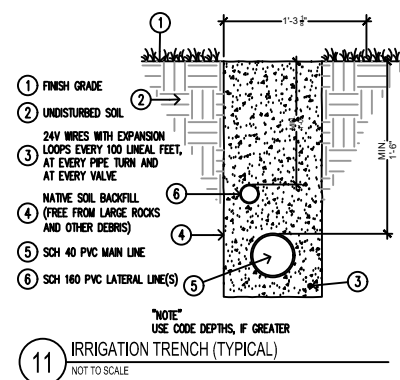
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	ARC	PSL	GPM	RADIUS
L	Hunter PROS-12 LCS-515 Shrub Spray, 12.0" Pop-Up. with UV Resistant Material.	3	LCS	40	0.75	5'x15'
A	Hunter PROS-12 RCS-515 Shrub Spray, 12.0" Pop-Up. with UV Resistant Material.	3	RCS	40	0.75	5'x15'
S	Hunter PROS-12 SS-530 Shrub Spray, 12.0" Pop-Up. with UV Resistant Material.	23	SST	40	1.5	5'x30'
12	Hunter PROS-12 12Q Shrub Spray, 12.0" Pop-Up. with UV Resistant Material.	5	90	40	0.78	13'
12	Hunter PROS-12 12A Shrub Spray, 12.0" Pop-Up. with UV Resistant Material.	6	Adj	40	≤ 2.95	13'
▼	Hunter PROS-04-PCN 10 Flood Bubbler, 4.0" pop-up.	18	360	30	1	1'
▽	Hunter PROS-04-PCN 50 Flood Bubbler, 4.0" pop-up.	13	360	30	0.5	1'
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY				
●	Hunter PGV-100G (2) 1" 1" Plastic Electric Remote Control Valve, for Residential/Light Commercial Use. Female NPT Inlet/Outlet. Globe Configuration, No Flow Control.	6				
MV	Hunter ICV-G 1-1/2" 1", 1-1/2", 2", and 3" Plastic Electric Master Valve, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.	1				
C	Hunter PC-400 with (01) PCM-300 Light Commercial & Residential Controller, 7-station 1 expanded module controller, 120 VAC, Outdoor model	1				
RS	Hunter WR-CLIK Rain Sensor, install within 1000 ft of controller, in 1 line of sight. 22-28 VAC/VDC 100 mA power from timer transformer. Mount as noted.	1				
WELL	4" Screen Well with submersible pump	1				
---	Irrigation Lateral Line: PVC Schedule 40 1/2"	696.6 l.f.				
---	Irrigation Lateral Line: PVC Schedule 40 3/4"	284.7 l.f.				
---	Irrigation Lateral Line: PVC Schedule 40 1"	320.5 l.f.				
---	Irrigation Mainline: PVC Schedule 40 1 1/4"	94.7 l.f.				
---	Pipe Sleeve: PVC Schedule 40 2"	108.4 l.f.				



NOTES:
 -CONTRACTOR TO VERIFY THAT THE WATER SUPPLY WILL SUPPLY APPROXIMATELY 25 GPM @ 40 PSI FOR SPRAY ZONES FOR PROPER SYSTEM OPERATIONS PRIOR TO INSTALLATION. NOTIFY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION IF THIS IS IMPRACTICAL.
 -DO NOT BID OR INSTALL PROJECT WITHOUT SPECIFICATIONS. DOING SO ASSUMES YOU AGREE TO THE SPECIFICATIONS.
 -UNLABELED LATERAL PIPE TO BE THE MINIMUM LATERAL SIZE AT RUN ENDS.



DETAIL



REVISIONS			STATUS		DESIGNED BY:		HIGHLANDS COUNTY ENGINEERING DEPARTMENT		COUNTY OF HIGHLANDS STATE OF FLORIDA		SCALE:	
DATE	BY	DESCRIPTION			J.D. LANGFORD, P.E.		505 S. COMMERCER AVENUE		NEW TRAFFIC OPERATIONS BUILDING		HORIZ. 1"=30'	
			FOR BID		DRAWN BY: STACEY MAHONEY		SEBRING, FLORIDA 33870		IRRIGATION DETAILS <td colspan="2">VERT. N/A</td>		VERT. N/A	
					CHECKED BY: J.D. LANGFORD, P.E.		APPROVED BY: JAMES D. LANGFORD, JR., P.E.		PROJECT NO. 19007		REV. 0	
					IN CHARGE: J.D. LANGFORD, P.E.		DATE: 5/1/2023		FLORIDA REGISTRATION NO.: 78402		SHEET 10 OF 11	

LANDSCAPE GENERAL SPECIFICATIONS

Install landscaping in accordance with all applicable codes regarding materials, methods of work and disposal of waste material. Obtain and pay for all required permits and inspections.

Visit the site and examine the conditions under which the work is to be performed. Do not proceed with the work until all unsatisfactory conditions have been rectified.

Locate and protect all existing underground and overhead utilities, benchmarks, control points and monuments within the work area. Repair made due to damage to any of these items will be made at the contractor's expense. If incorrectly located utilities are encountered, contact the applicable utility company to receive any further instructions or assistance that may be needed.

Take all measures necessary to protect all existing paving, buildings, utilities, etc. on and adjacent to the site. Repair made due to damage to any of these items will be made at the landscape contractor's expense.

It is the responsibility of the contractor to satisfy themselves as to the accuracy of the quantities on the plan. If there are any discrepancies between the plan and the material list this should be addressed prior to bidding and beginning work. In any instance that a discrepancy does occur between the plan and material list, the plan rules. No extra compensation will be allowed on account of discrepancies between the plan and material list.

It is the responsibility of the landscape contractor to review the irrigation plan to assure that the irrigation design is adequate for warranty purposes. If there are any concerns, this should be addressed prior to bidding and beginning work. If no concerns are acknowledged, it is assumed that the irrigation system is adequate and the warranty herein is in full effect.

Square foot, cubic yard and lineal foot quantities do not account for any waste and it is the contractor's responsibility to calculate any extra material necessary to offset this.

It is the responsibility of the contractor to order or provide all material, equipment, labor, etc. necessary to complete the work according to the plans and specifications.

All existing invasive plant materials are to be removed as per applicable code.

The landscape designer has the final say in any and all disputes regarding layout, performance, material, quality, size, grading, etc. The contractor shall take corrective action based on the landscape designer's instructions. Any corrective action made due to any of these items will be made at the landscape contractor's expense.

Warranty all palms, trees and plant materials to remain alive and in healthy condition for a period of one year after acceptance. Plants must be given proper care during this time. This includes maintenance, fertilizing, spraying, and being provided with adequate irrigation as necessary. Replace each palm, tree or plant that is dead or in severely unhealthy condition once within the warranty period of one year. The warranty becomes void in cases of vandalism, fire, flood, freezing or extreme cold not typical for the area, lightning strikes, hurricane force wind, improperly functioning or turned off irrigation or owner negligence. Any replacement desired or required due to any of these unwarranted causes will be at the owner's expense.

LANDSCAPE INSTALLATION SPECIFICATIONS

Treat all areas to receive landscaping with a broad-spectrum herbicide and allow enough time for the herbicide to take full effect prior to beginning any landscape installation.

Treat all landscaping beds with a pre-emergent herbicide prior to beginning any landscape installation.

The landscape contractor shall make sure that all planting beds are free from rocks, trash, waste material and other construction debris prior to landscape installation and shall notify the owner prior to installation so that they may have the site contractor remove their waste.

Install all palms, trees and plant materials in the locations and at the quantity specified on the landscape plans. The owner or their representative must approve any deviations from the landscape plans in advance.

All palms, trees and plant materials shall be planted as per the details shown on the landscape plans. The planting pit shall be twice the diameter of the root ball or pot and shall be backfilled with planting soil and watered in thoroughly.

All palms and trees shall be fertilized using a full spectrum slow release fertilizer according to the manufacturer's recommendations to quantity per tree according to tree size. All plant materials shall be fertilized at the time of installation with a full spectrum slow release fertilizer according to the manufacturer's recommendations.

All burlap, grow bags, wire cages, etc. shall be removed from the root ball of all palms and trees prior to planting.

Stake and guy all palms and trees to ensure they remain in their proper growing positions. All staking and guying should be well marked to prevent tripping hazards or other possible injuries. Staking and guying shall not permit nails, screws, wire, and etc. to penetrate the outer surface of the palm or tree. Any palms or trees damaged due to such practice shall be replaced at the landscape contractor's expense.

All planting areas shall have 3" of grade "A" brown mulch and all palms and trees not located within a planting area shall have a ring of mulch around the base a minimum of 24" in diameter and 3" deep.

Prepare all areas to receive sod to be smooth, free from trash and debris and free draining. Site contractor shall leave the grade + or - 1". Install the sod to form a solid mass with tightly fitting joints that are staggered with each additional course. Tamp or roll the sod once laid to ensure contact with the soil. Sod should be flush with sidewalks, curbs and all other adjacent surfaces. Water the sod thoroughly immediately after installation.

Adhere to all federal, state and local laws regarding the handling and application of herbicides and fertilizers. Follow manufacturer's recommendations regarding mixing ratio and application rate of herbicide.

LANDSCAPE MATERIAL SPECIFICATIONS

All palms, trees and plant materials are to be Florida #1 or better as described in the latest edition of Grades and Standards for Nursery Plants published by the State of Florida Department of Agriculture and Consumer Services.

All palms, trees and plant materials shall be the variety specified in the material list for the landscape plans. All palms, trees and plant materials are to be referred to, ordered and planted according to the "scientific" or "botanical" name. Any errors made when referring to, ordering or planting any material by the "common" name will be corrected at the landscape contractor's expense.

All palms, trees and plant materials are to meet the minimum measurements for each category shown in the material list for the landscape plans regarding height, caliper, spread and container size. In some instances a measurement in one category may need to increase to meet the minimum measurement for another category. This shall be verified prior to beginning work and any necessary increase in size from what is shown in the material list shall be made to meet all minimum measurements for each category. No extra compensation will be allowed to increase one category of measure to meet the minimum measurement of another category once the job has been contracted or has commenced.

The sod shall be of the variety specified in the material list for the landscape plans. All sod should be healthy, well rooted and uniform in both color and density. It shall be free from pests, disease and weeds. All sod shall be delivered on pallets in the square footage typical per pallet with regard to the variety of sod specified. The landscape contractor shall field verify all quantities prior to ordering.

Mulch shall be brown and of the quantity specified in the material list for the landscape plans. This quantity is based on coverage 3" in depth in all planting areas and a 24" ring 3" in depth around all trees located in lawn areas. The landscape contractor shall verify all quantities of mulch on the plan. No extra compensation will be allowed to increase the quantity of mulch to attain a 3" depth once the job has been contracted or has commenced. Mulch shall be grade "A" if not otherwise specified in the material list.

IRRIGATION GENERAL SPECIFICATIONS

Irrigation contractor shall thoroughly review, read and understand both the plans, details and specifications prior to bidding or installing the project. By bidding or installing the project it is assumed the irrigation contractor has read and understands the plans, details and specifications and shall fully adhere to all aspects of them.

Install irrigation system in accordance with all applicable codes and ordinances regarding materials, methods of work and disposal of waste material. Obtain and pay for all required permits and inspections.

Visit the site prior to work commencing and examine the conditions under which the work is to be performed. (e.g., check that the site is to grade, if sleeves have been provided in the locations and sizes specified, power is provided to the locations specified, etc.) Do not proceed with the work until all unsatisfactory conditions have been rectified. Proceeding with work assumes that all conditions are satisfactory and no extra compensation shall be allowed to correct the unsatisfactory conditions.

Locate and protect all existing underground and overhead utilities, benchmarks, control points and monuments within the work area. Repairs made due to damage to any of these items will be made at the irrigation contractor's expense. If incorrectly located utilities are encountered, contact the applicable utility company to receive any further instructions or assistance that may be needed.

Take all measures necessary to protect all existing paving, buildings, utilities, etc. on and adjacent to the site. Repair made due to damage to any of these items will be made at the irrigation contractor's expense.

It is the responsibility of the irrigation contractor to satisfy themselves as to the accuracy of the quantities on the plan. If there are any discrepancies between the plan and the material list this should be addressed prior to beginning work. In any instance that a discrepancy does occur between the plan and material list, the plan rules. No extra compensation will be allowed on account of discrepancies between the plan and material list.

It is the responsibility of the irrigation contractor to satisfy themselves to the installation method of components as depicted in the details or addressed in the specifications. In any instance that a discrepancy does occur between the details and specifications, the more stringent requirement rules. No extra compensation will be allowed on account of discrepancies between the details and specifications.

It is the responsibility of the irrigation contractor to order or provide all material, equipment, labor, etc. necessary to complete the work according to the plans and specifications and to provide a fully functioning automatic irrigation system.

It is the responsibility of the irrigation contractor when retrofitting or expanding an existing system, to include all material, equipment, labor, etc. to bring all non-code, detail or specification compliant portions of the existing system to current code, details and specifications to compliance. Proceeding with work assumes that all corrective actions are included in the bid and no extra compensation shall be allowed to bring these items to current code, details or specifications.

Supply the owner with all instruction sheets, maintenance manuals, and parts sheets covering all of the operating and electrical equipment installed on the job. Also furnish the owner with keys to any locking items installed on the job.

Supply the irrigation designer with a set of as-built plans clearly indicating GPS locations and any changes made to the irrigation plans such as main line routing, valve locations or any other field adjustments that were necessary for a proper installation.

The irrigation designer has the final say in any and all disputes regarding layout, function, performance, material, product, stringency requirements, etc. The irrigation contractor shall take corrective action based on the irrigations designer's instructions. Any corrective action made due to any of these items will be made at the irrigation contractor's expense.

Warranty the irrigation system for a period of one year after acceptance for workmanship and material defects. This includes system adjustments, replacement of any damaged parts or broken pipe, unclogging of emitters and nozzles, cleaning of screens, valve adjustments and all other maintenance items necessary to maintain the system in functioning order. The warranty becomes void in cases of vandalism, fire, lightning strikes or owner negligence for the parts of the irrigation system directly affected. Warranty shall stay fully in effect for all other unaffected portions of the irrigation system. Any repair desired or required due to any of these unwarranted causes will be at the owner's expense.

IRRIGATION INSTALLATION SPECIFICATIONS

Irrigation contractor is responsible for verifying that the water source is capable of providing the gallons per minute (gpm) of volume and pounds per square inch (psi) of pressure required for the irrigation system to function as designed prior to commencing installation. Provide this water source information on the water source data portion of the Irrigation Association field audit submission package or in a similar format showing the flow test result.

Water source shall be equipped with a pressure gauge that reads in 1 psi increments. Water source shall also be equipped with a pressure relief valve that will alleviate pressure on the system due to a possible failure somewhere in the system that allows the water source to run while the system is not. Pressure relief valve shall be pointed away from all electrical equipment and other items that should not be subjected to the blown off water.

Coordinate the irrigation system installation with the landscape contractor and landscaping plan to avoid conflicts between irrigation heads, piping, etc. and palms and tree locations whenever possible.

All piping is to be installed with labels facing. Any piping installed with labels facing down shall be reinstalled correctly at the irrigation contractor's expense.

All main line pipe is to have a minimum cover of 18" of backfill measured from the top of the pipe and all lateral lines are to have a minimum cover of 12" of backfill measured from the top of the pipe unless otherwise specified. Turns and termination in the main line shall be located utilizing at a minimum a GPS WASS system and documented on the plans along with measurements from two fixed points for future locating.

All backfill is to be fine grained and free from stone, rock, etc. larger than 2" in diameter that may damage or cut the pipe. Take care not to damage or deform the pipe when backfilling and compacting.

Assure that all cuts are made squarely and that all pipes and fittings are clean and free from PVC shavings and debris prior to cementing. Be sure to fully engage all joints when cementing. Prime all main line and fittings prior to cementing.

Do not lay marking flags on any hardscape surface such as concrete sidewalks, brick pavers, etc. to avoid causing rust stains. Remove all flags upon conclusion of their usefulness and collect them for future use or properly dispose of them. Irrigation contractor is responsible for the removal or correction of any rust stains caused by the marking flags.

Flush all pipes and body assemblies prior to sprinkler head installation. When installing nozzles or body assemblies while flushing under pressure, start at the heads nearest the valve and work toward the end of the lateral run to force debris toward the end. When retrofitting or expanding an existing irrigation system all existing heads and zones shall be flushed as though they were newly installed. Flush only one zone at a time and allow a minimum of 15 minutes time for the system to flush prior to installing nozzles or body assemblies. If the irrigation contractor is found to be flushing multiple zones at a time or not allowing adequate time for each zone to properly flush, all nozzles and body assemblies shall be removed, flush caps reinstalled on spray heads and the entire system will be required to be flushed again at the irrigation contractor's expense.

All systems shall be voltage checked for each wire run at the clock, between valves, splices, grounding modules and decoders and the voltage shall be recorded on the plans for each item. If an unusual resistance (an ohm load more than 10 percent different than all other wire runs of similar gauge and length) is encountered the irrigation designer shall be notified the problem shall be corrected at the irrigation contractor's expense.

After installation, field adjust the entire system to assure proper 100% head to head coverage and to minimize overspray onto paved surfaces. Assure that all heads are a minimum of 12" from any building and that they are not directly spraying onto the building. Assure that all turf heads are a minimum of 3" from the edge of sidewalks, parking or any other hardscape area that may require an edger for maintenance. Assure that all drip zones are spaced at the designed or specified distances. No extra compensation shall be allowed for readjusting heads or respacing drip zones.

Utilizing at a minimum a GPS WASS system, document all major irrigation component locations. These include valves or valve clusters, any underground sensors, main line turns, wire splices, sleeves, and any other components that might aid in future system maintenance, repairs or modifications.

IRRIGATION MATERIAL SPECIFICATIONS

Irrigation contractor shall use the items specified in the material list or specifications for all bidding, ordering and installation. Do not substitute items or change sizes of irrigation components or piping without prior written consent from the irrigation designer. Unauthorized substitutions or under sizing of components or piping will constitute an immediate failure upon inspection and shall be replaced with the item of the correct size or manufacturer at the irrigation contractor's expense and irrigation contractor shall be responsible for all subsequent future inspections of failed item.

All material shall be installed according to manufacturer's specifications unless otherwise noted. In any instance that a discrepancy does occur between the manufacturer's specifications and the irrigation plans, details and specifications, the more stringent requirement rules.

Securely install the specified controller in the location shown on the irrigation plan or in a location coordinated with the owner or their representative. The owner is responsible for providing all necessary electrical for the controller.

All controllers shall be equipped with a rain sensor device that will override the irrigation cycle of the system when adequate rainfall has occurred. This sensor shall be properly wired into the controller, in the on position, outside the range of the irrigation system and mounted in an area to receive rainfall.

All controllers utilized in coordination with a well must be supplied with an accompanying pump start relay and a control box if single phase or a magnetic starter if three phase. The irrigation contractor shall coordinate the phasing, voltage, disconnect location, amps, etc. with the owner or their representative prior to ordering the pump. The irrigation contractor is responsible for verifying that the well and pump is capable of providing the gallons per minute of volume and pounds per square inch of pressure required for the irrigation system to function as designed prior to commencing installation.

All controllers utilized in coordination with a continually pressurized water source such as a city water meter must be supplied with an accompanying master valve and appropriately sized backflow-preventer that adheres to all local ordinances. The irrigation contractor is responsible for verifying that the water source is capable of providing the gallons per minute of volume and pounds per square inch of pressure required for the irrigation system to function as designed prior to commencing installation.

All valves are to be electric valves of the brand and type specified in the irrigation plan material list and shall be sized according to their location on the plan and their accompanying key. All valves are to be installed in a minimum 12" X 18" green plastic valve box unless otherwise specified. The top of the box is to be flush with finished grade. All valve clusters are to be installed with a capped stub out for ease of future expansion. Number each valve box according to the valve number found on the irrigation plans. Each valve or valve cluster shall also be located utilizing at a minimum a GPS WASS system and documented on the plans for future locating.

All remote valve control wire shall be 14-1 UF direct burial wire for use with 24 VAC applications. Place wire under pipes whenever possible to help avoid accidental cutting. Common wire is to be white. Control wire is to be red. Run two blue wires from the controller to the farthest valve in each direction for spares.

All standard remote control valve wire that utilizes a common wire and multiple hot wires shall be spiced to the electric valves using DBY or DBR splice kits of the appropriate size. All "Two-Wire" valve wire shall be spiced to the Decoders using DBY-6 or DBR-6 splice kits of the appropriate size.

Provide a minimum of 24" expansion coils in the wire at every valve connection, at every sharp turn and at 100' intervals along straight runs of wire.

All irrigation pipes and control wires passing under sidewalks, drives or other paved or hard surfaces shall be placed in a schedule 40 PVC sleeve.

All main line pipe shall be schedule 40 PVC and all lateral pipes shall be class 160 PVC unless specified differently in the irrigation plan material list.

All rotor heads are to be of the brand specified in the irrigation plan material list and the nozzle shall be sized and the head adjusted according to their location on the plan.

All spray heads are to be of the brand specified in the irrigation plan material list and their spray pattern and radius shall match their location found on the plan.

All bubbler heads are to be of the brand specified in the irrigation plan material list and shall be against the rootball of the tree they are intended to water on the uphill side.

All sprinkler heads shall be in a plumb or vertical position as per their detail and all pop up sprinklers shall be affixed to swing joints or funny pipe limited to a length of 18" unless otherwise noted.

IRRIGATION SLEEVE SPECIFICATIONS

Irrigation sleeves shall be schedule 40 PVC pipe. All fittings shall be schedule 40.

All cuts to the irrigation sleeves shall be made squarely and all connections between pipes shall be fully engaged to eliminate any inconsistent gaps at fittings or bell end connections that can cause pipes passing through to catch.

Irrigation sleeves shall be installed a minimum of 18" below the paving they are passing under and shall extend 18" beyond the paving or as per code if more stringent.

Irrigation sleeves shall be installed where shown on the plans. If the irrigation sleeves cannot be installed where shown on the plans, they shall be field adjusted. This adjustment must still allow access to the area the irrigation sleeves were intended to service. This adjustment shall be documented on the plans for future locating of the irrigation sleeves and as-built preparation. Irrigation sleeves shown directly adjacent to each other on the plans shall be placed in a single trench.

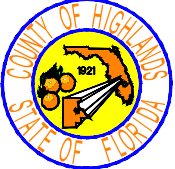
Irrigation sleeves shall be installed at the size shown on the plans. If no size is indicated on the plans, the irrigation sleeve shall be a minimum of twice the diameter of the pipe passing through it. This will allow for adequate room in the irrigation sleeve for the pipe passing through it and any necessary control wires. If it is believed that the diameter of the irrigation sleeve is not sufficient to allow all of the required control wires to pass through along with the piping, an additional irrigation sleeve shall be added at a size sufficient for all necessary control wire to pass through.

The ends of the irrigation sleeves shall be marked with pipe, boards, etc. prior to backfilling the trench for ease of future locating. The ends of the irrigation sleeves shall also be located utilizing at a minimum a GPS WASS system and documented on the plans for future locating in the event the physical marker is removed or destroyed during site work. The GPS locations shall also be documented on the as-builts to aid in locating the irrigation sleeves at any point in the future.

MISC.NOTES

Do not bid or install the project without the landscape and irrigation specifications. Doing so assumes you agree the specifications.

Contractor to verify the water supply will provide approximately 60 GPM @ 40 PSI for spray zones and 55 GPM @ 50 PSI for rotor zones for proper system operation prior to installation. Notify Landscape Architect prior to installation if this is impractical.

REVISIONS			STATUS	DESIGNED BY: J.D. LANGFORD, P.E.	DRAWN BY: STACEY MAHONEY	CHECKED BY: J.D. LANGFORD, P.E.	IN CHARGE: J.D. LANGFORD, P.E.	DATE: 5/1/2023	APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402	DATE:		HIGHLANDS COUNTY NEW TRAFFIC OPERATIONS BUILDING LANDSCAPE & IRRIGATION NOTES	SCALE: HORIZ. 1"=30' VERT. N/A	PROJECT NO. 19007	REV. 0
DATE	BY	DESCRIPTION											SHEET 11 OF 11		
FOR BID															
G:\PROJECTS\2019\19007 New Traffic Operations Building\All Drawings\19007 New Traffic Operations Building.dwg, 11 IRRIGATION NOTES, Mahoney, Stacey Colors As Black Except Gray Colors.ctb															