

# ENZOR ST, IMPERIAL DR, & LOOP RD PAVING IMPROVEMENTS CALLAWAY, FLORIDA

PREPARED FOR:  
CITY OF CALLAWAY



ADDRESS  
6601 EAST HIGHWAY 22  
CALLAWAY, FLORIDA 32404  
PHONE: (850) 871-6000

CITY OFFICIALS:

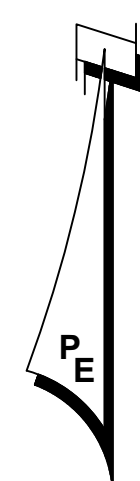
MAYOR	PAMN HENDERSON
COMMISSIONER	SCOTT DAVIS
COMMISSIONER	DAVID GRIGGS
COMMISSIONER	BOB PELLETIER
COMMISSIONER	FRANK MANCINELLI

CITY MANAGER	KEITH "EDDIE" COOK
PUBLIC WORDS DIRECTOR	BILL FRYE
CITY CLERK	JANICE PETERS

PREPARED BY:

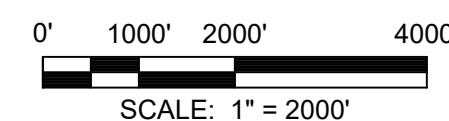


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600 Ohio Avenue Lynn Haven, Florida 32444  
(850)763-5200 www.panhandleengineering.com



CALLAWAY  
LAT ~ N30° 07' 58"  
LONG ~ W85° 35' 13"

VICINITY MAP

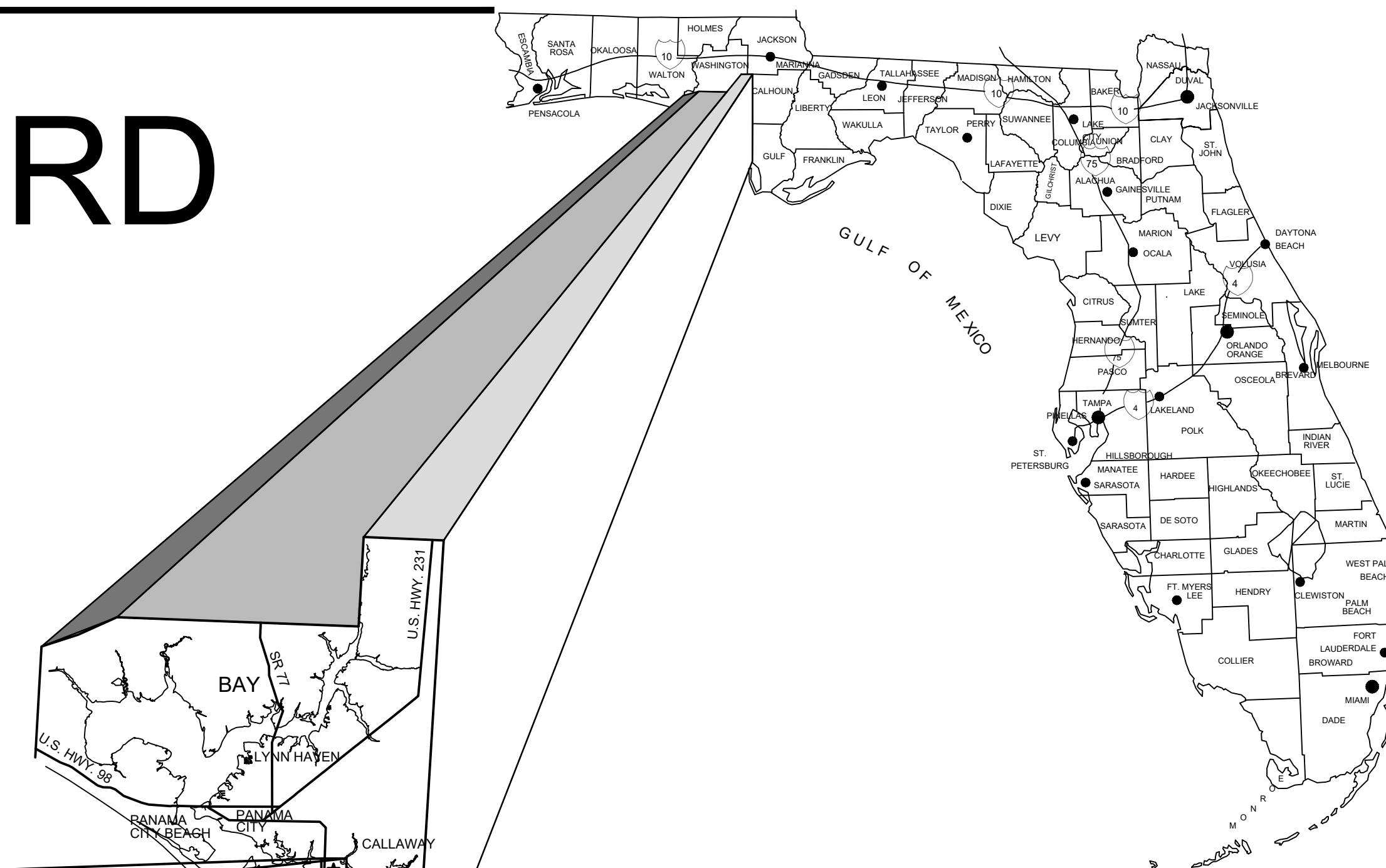


RELEASED FOR BIDDING  
PURPOSES ONLY  
NOT RELEASED FOR  
CONSTRUCTION

APRIL 2022

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ENZOR STREET	2,597	0.49
IMPERIAL DRIVE	500	0.90
LOOP ROAD	645	0.12

KEY SHEET REVISIONS	
DATE	DESCRIPTION



DRAWING INDEX  
No. - TITLE

0(Cvr)  
K1 - KEY SHEET (FOR ALL THREE LOCATIONS)

**PROJECT No. 26038 ~ ENZOR ST**

- E1 - EXISTING CONDITIONS
- E2 - EXISTING CONDITIONS
- E3 - EXISTING CONDITIONS
- E4 - PLAN VIEW
- E5 - PLAN VIEW
- E6 - PLAN VIEW
- E7 - EROSION CONTROL NOTES and DETAILS
- E8 - FDOT MAINTENANCE OF TRAFFIC DETAILS
- E9 - FDOT SIGNAGE DETAILS
- E10 - UTILITY NOTES and TRAFFIC DETAILS
- E11 - TYPICAL SECTIONS and DETAILS
- E12 - GENERAL NOTES

**PROJECT No. 26035 ~ IMPERIAL DRIVE**

- I1 - EXISTING CONDITIONS, DEMOLITION AND EROSION CONTROL PLAN
- I2 - ROADWAY PLAN AND PROFILE
- I3 - UTILITY PLAN
- I4 - GRADING AND DRAINAGE PLAN
- I5 - GRADING AND DRAINAGE PLAN
- I6-I9 - CROSS SECTIONS
- I10 - EROSION CONTROL DETAILS
- I11 - CONSTRUCTION DETAILS
- I12 - UTILITY DETAILS
- I13 - UTILITY DETAILS

**PROJECT No. 26027 ~ LOOP ROAD**

- L1 - EXISTING CONDITIONS AND DEMOLITION PLAN
- L2 - SITE PLAN
- L3 - GRADING AND DRAINAGE PLAN
- L4 - EROSION CONTROL PLAN
- L5 - CONSTRUCTION DETAILS
- L6 - CONSTRUCTION DETAILS
- L7 - STORMWATER POLLUTION PREVENTION PLAN

GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, "STANDARD PLANS", FY 2019-20 AND "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.

FOR DESIGN STANDARDS MODIFICATIONS CLICK ON THE "DESIGN STANDARDS" AT THE FOLLOWING WEB SITE:  
<https://www.fdot.gov/roadway/DS/18/STDs.shtm>

FOR THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CLICK ON THE "SPECIFICATIONS" LINK AT THE FOLLOWING WEB SITE:

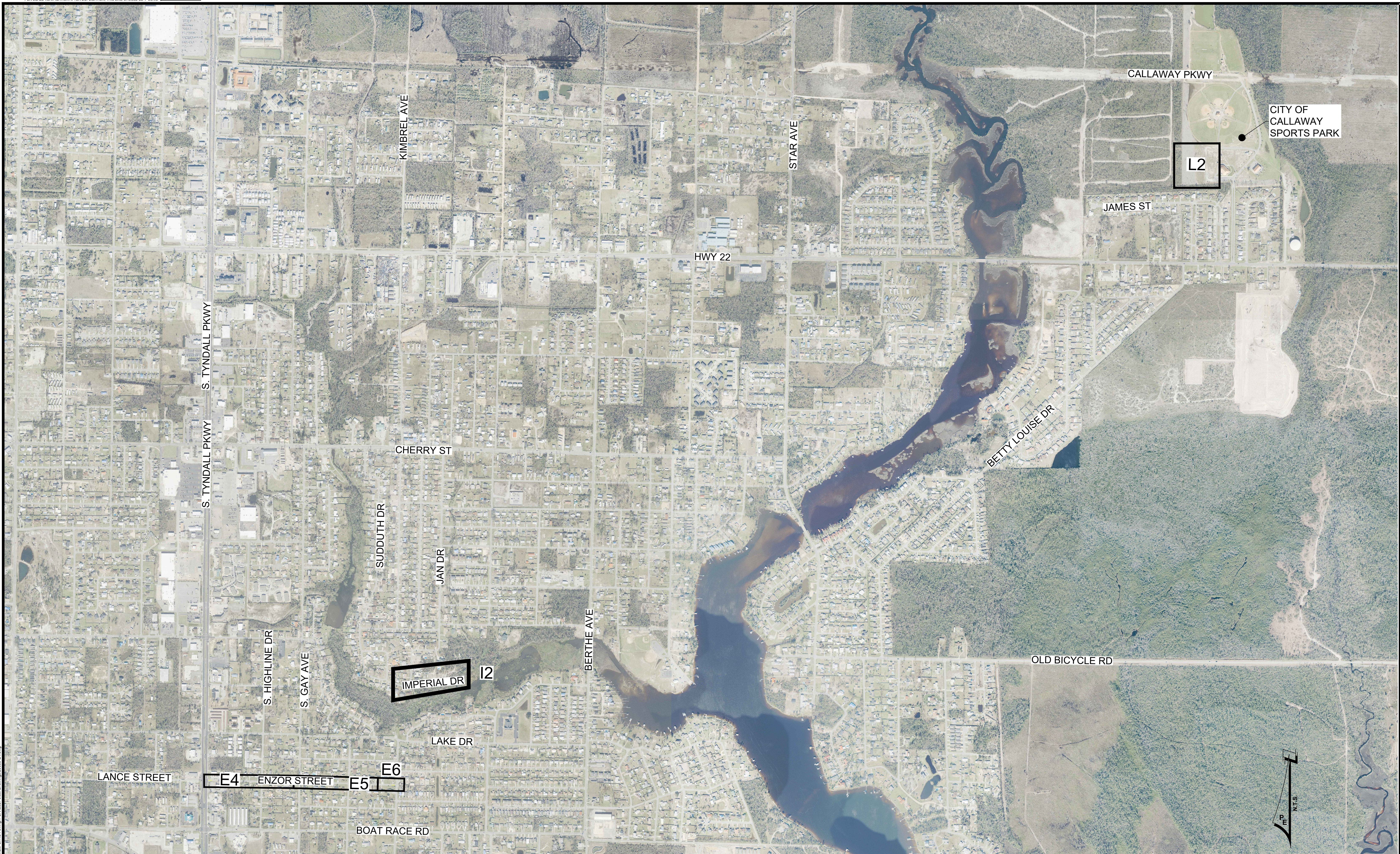
<https://www.fdot.gov/programmanagement/implemented/specbooks/default.shtm>

Always call 811 two full business days before you dig to have underground utilities located and marked.



ENGINEER OF RECORD: CHRIS FOREHAND, P.E. (FL REG NO. 58028)





REV	DATE	BY	REVISIONS

SCALE: AS NOTED
DESIGNED BY: CBF
DRAWN BY: SPL
REVIEWED BY: CBF
ISSUE DATE: APRIL 2022
ACAD FILE NAME: 26038-E1.dwg

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**KEY SHEET  
 ENZOR STREET  
 PAVING IMPROVEMENTS  
 CALLAWAY, FLORIDA**

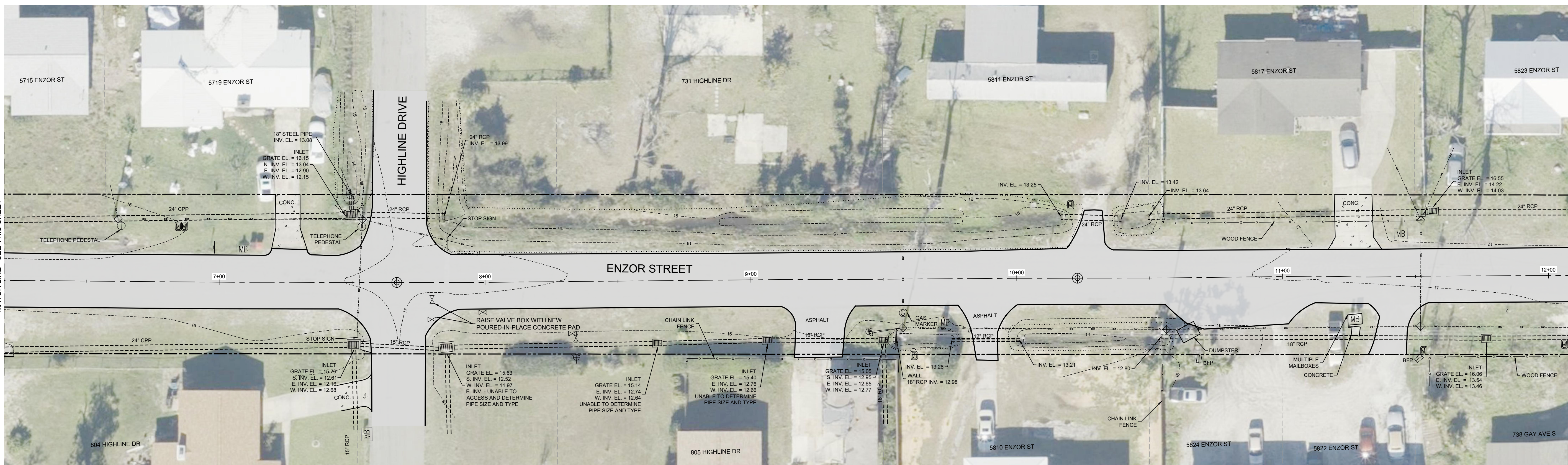
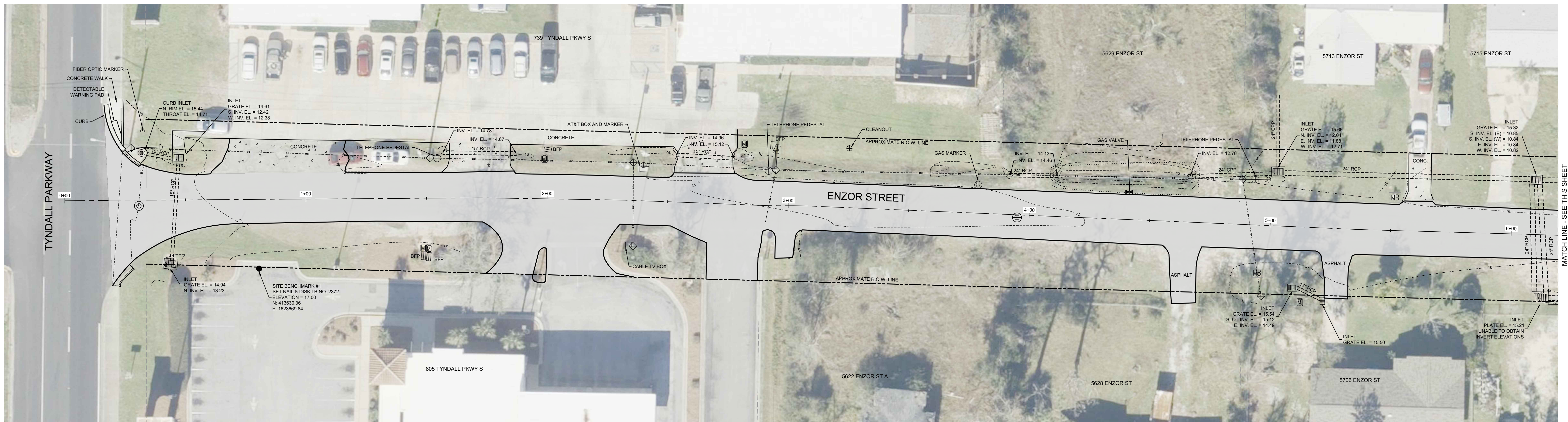
James H. Slonina, P.E. 39197  
 Christopher B. Forehand, P.E. 58028  
 Stephen E. Price, P.E. 71648  
 J. Doug Crook, P.E. 66556

DPR CERTIFICATION #EB-7806

SHEET NUMBER <b>K1</b>
PROJECT NUMBER <b>26038</b>

Date: 4/13/2022 6:56 AM File: P:\26038 Enzor Street Paving\1 CIVIL\DWG\Drawings\26038-E1.dwg





MATCH LINE - SEE THIS SHEET

MATCH LINE - SEE SHEET E2

- LEGEND**
- EX. WATER VALVE
  - EX. FIRE HYDRANT
  - EX. WATER METER
  - EX. SEWER MANHOLE
  - EX. SIGN POLE
  - EX. MAILBOX
  - EX. POWER POLE
  - EX. GUY ANCHOR
  - EX. OVERHEAD UTILITY
  - EX. CONTOUR
  - EX. ASPHALT
  - EX. CONCRETE
  - PRO. ASPHALT

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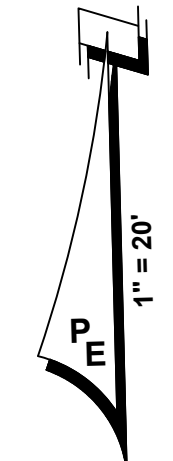
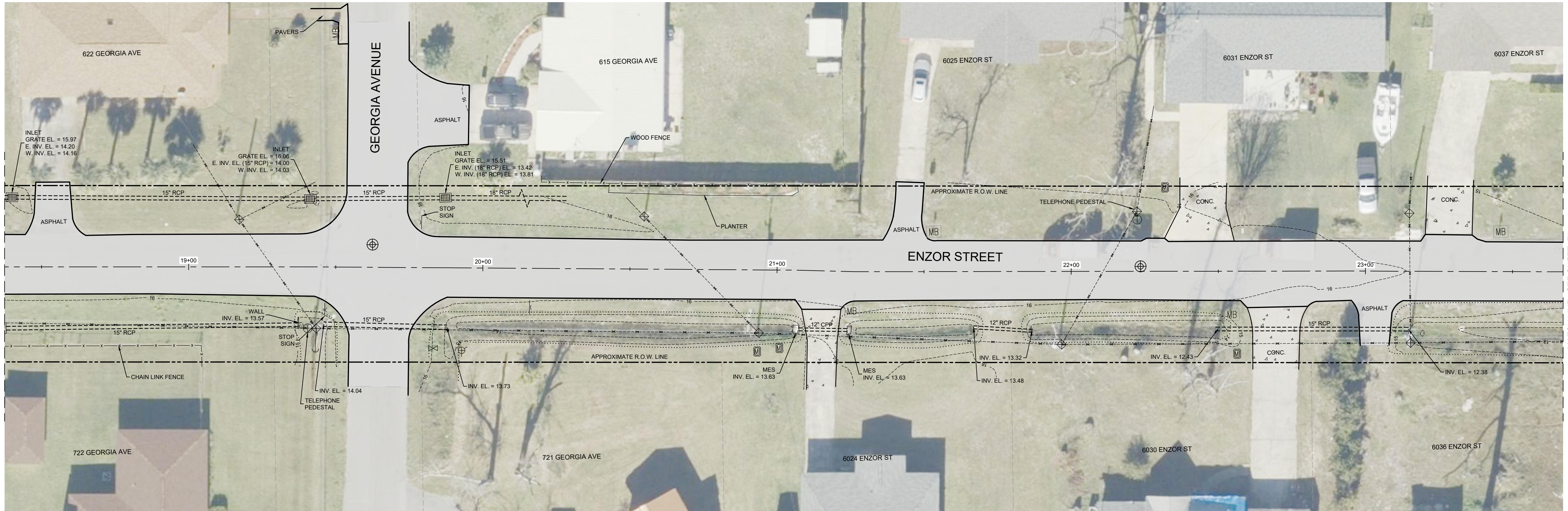
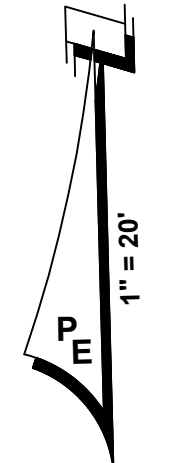
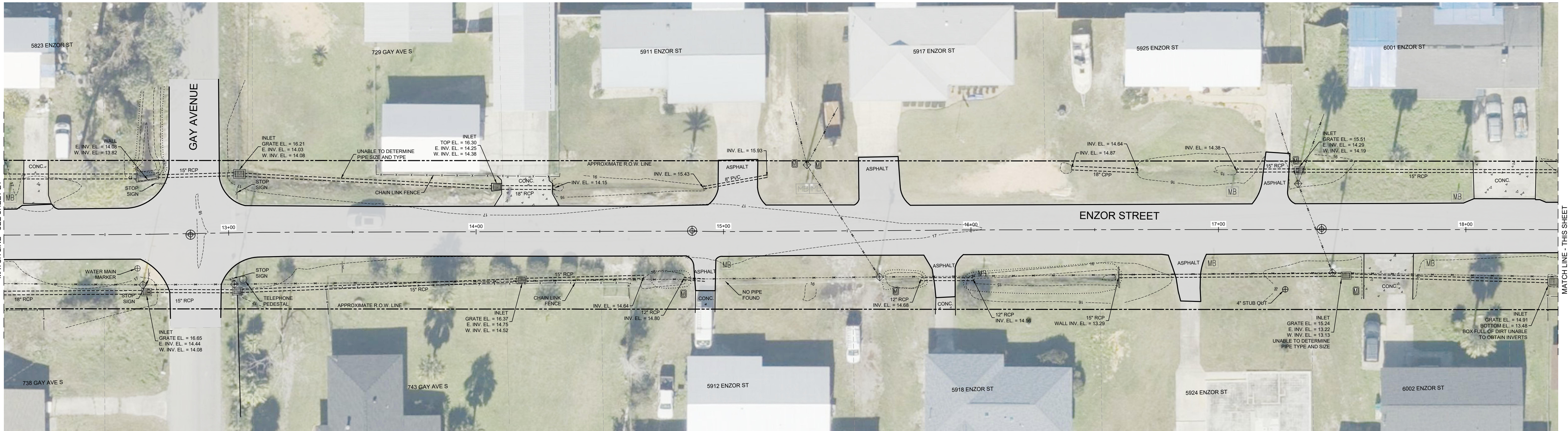
**EXISTING CONDITIONS  
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 PAVING IMPROVEMENTS  
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SHEET NUMBER	<b>E1</b>
PROJECT NUMBER	<b>26038</b>

Date: 4/13/2022 6:57 AM File: P:\26038 Enzor St\26038-Enzor-St.dwg





**LEGEND**

- EX. WATER VALVE
- EX. FIRE HYDRANT
- EX. WATER METER
- EX. SEWER MANHOLE
- EX. SIGN POLE
- EX. MAILBOX
- EX. POWER POLE
- EX. GUY ANCHOR
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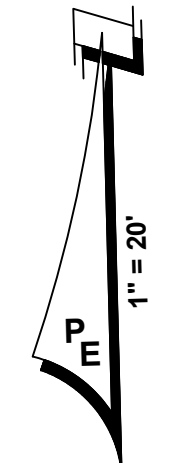
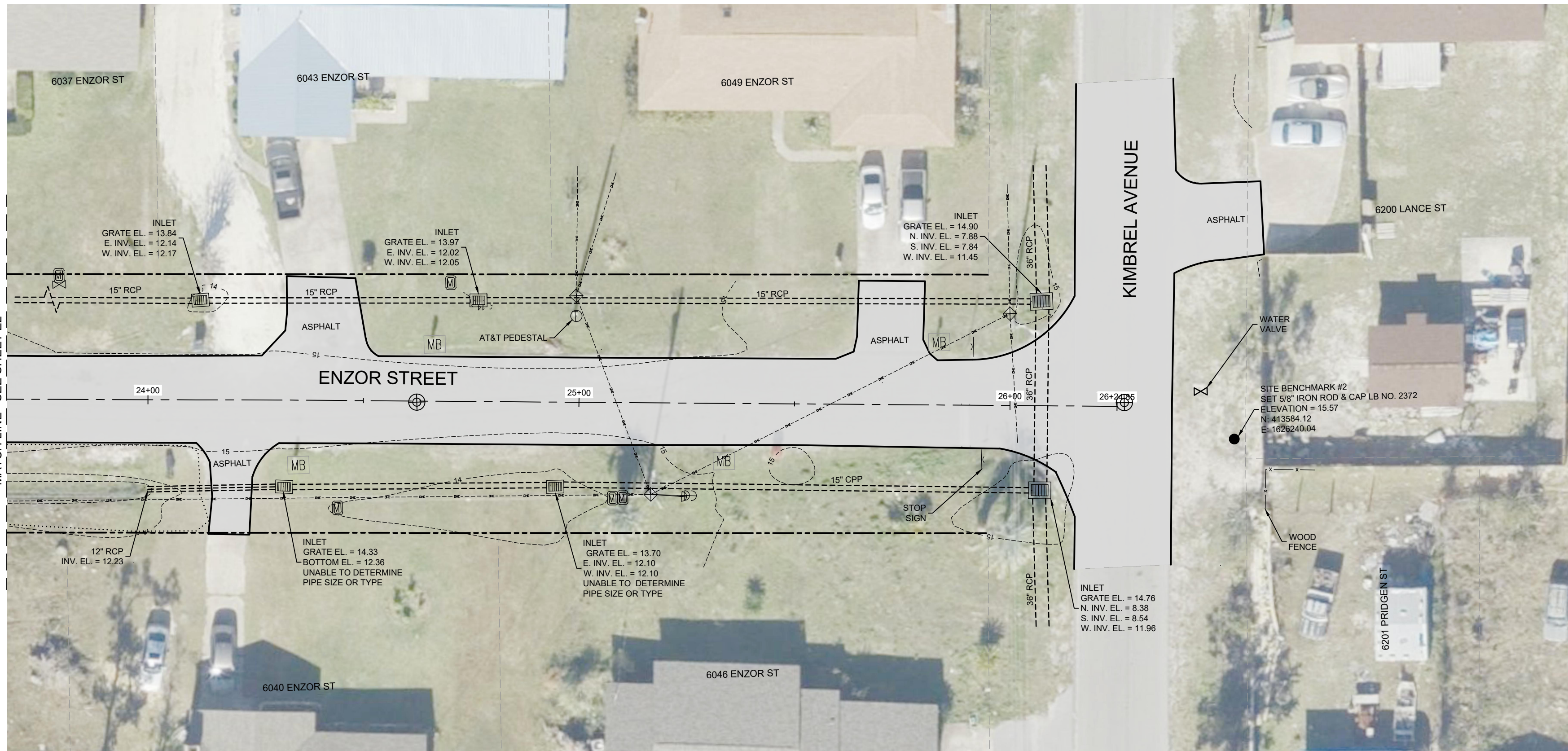
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SHEET NUMBER	<b>E2</b>
PROJECT NUMBER	<b>26038</b>

Date: 4/13/2022 6:57 AM File: P:\26038 Enzor St\26038 E1.dwg

26038 ENZOR STREET PAVING IMPROVEMENTS EXISTING CONDITIONS Sheet E2





**LEGEND**

- ⊠ EX. WATER VALVE
- ▽ EX. FIRE HYDRANT
- EX. WATER METER
- EX. SEWER MANHOLE
- EX. SIGN POLE
- ⊠ EX. MAILBOX
- ⊠ EX. POWER POLE
- ⊠ EX. GUY ANCHOR
- EX. OVERHEAD UTILITY
- EX. CONTOUR
- ▭ EX. ASPHALT
- ▭ EX. CONCRETE
- ▭ PRO. ASPHALT

REV	DATE	BY	REVISIONS

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**EXISTING CONDITIONS  
 ENZOR STREET  
 PAVING IMPROVEMENTS  
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DPR CERTIFICATION #EB-7806

SHEET NUMBER	<b>E3</b>
PROJECT NUMBER	<b>26038</b>

Date: 4/13/2022 6:57 AM File: P:\26038 Enzor St\26038 Enzor St.dwg Path: C:\Users\cbf\AppData\Local\Temp\26038-E1.dwg

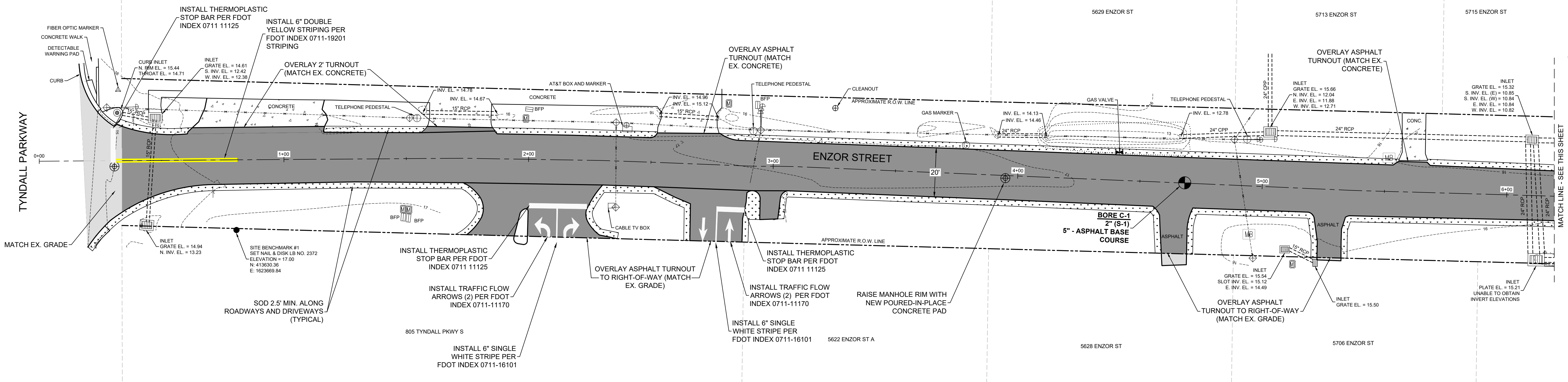
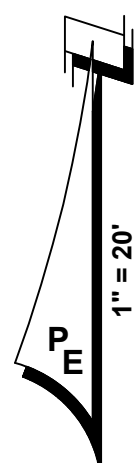


739 TYNDALL PKWY S

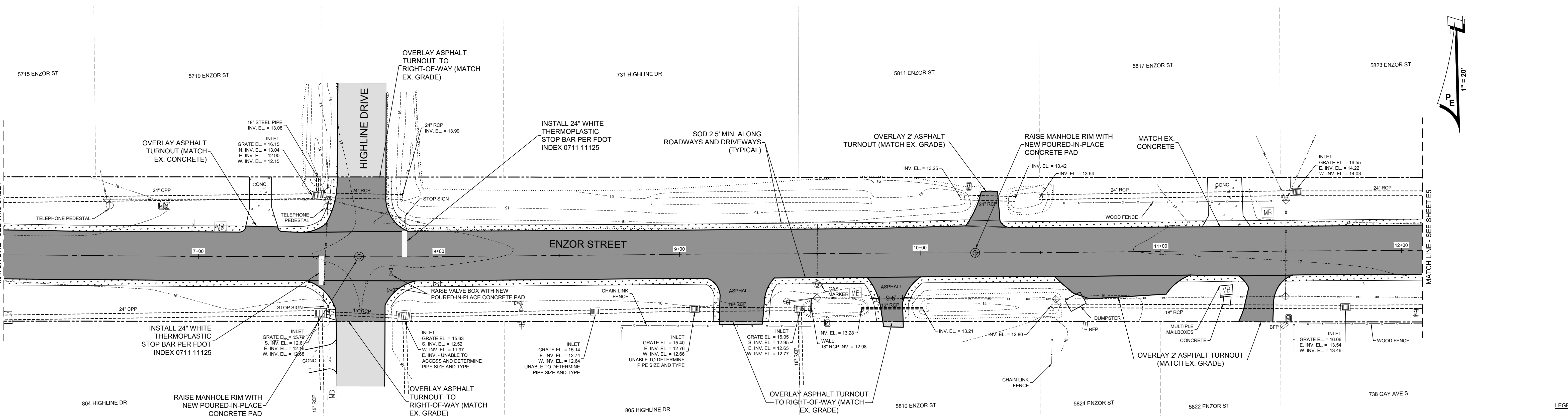
5629 ENZOR ST

5713 ENZOR ST

5715 ENZOR ST



MATCH LINE - SEE THIS SHEET



MATCH LINE - SEE SHEET E5

- LEGEND**
- EX. WATER VALVE
  - EX. FIRE HYDRANT
  - EX. WATER METER
  - EX. SEWER MANHOLE
  - EX. SIGN POLE
  - EX. MAILBOX
  - EX. POWER POLE
  - EX. GUY ANCHOR
  - EX. OVERHEAD UTILITY
  - EX. CONTOUR
  - EX. ASPHALT
  - EX. CONCRETE
  - PRO. ASPHALT

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**PLAN VIEW ENZOR STREET PAVING IMPROVEMENTS CALLAWAY, FLORIDA**

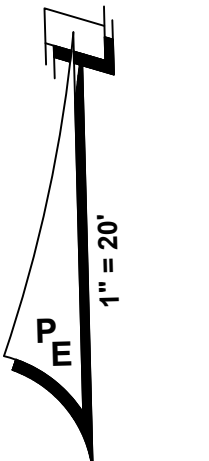
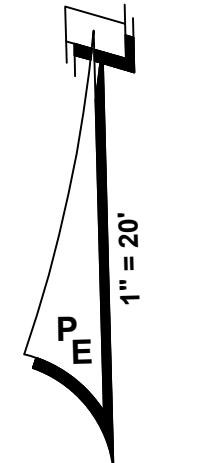
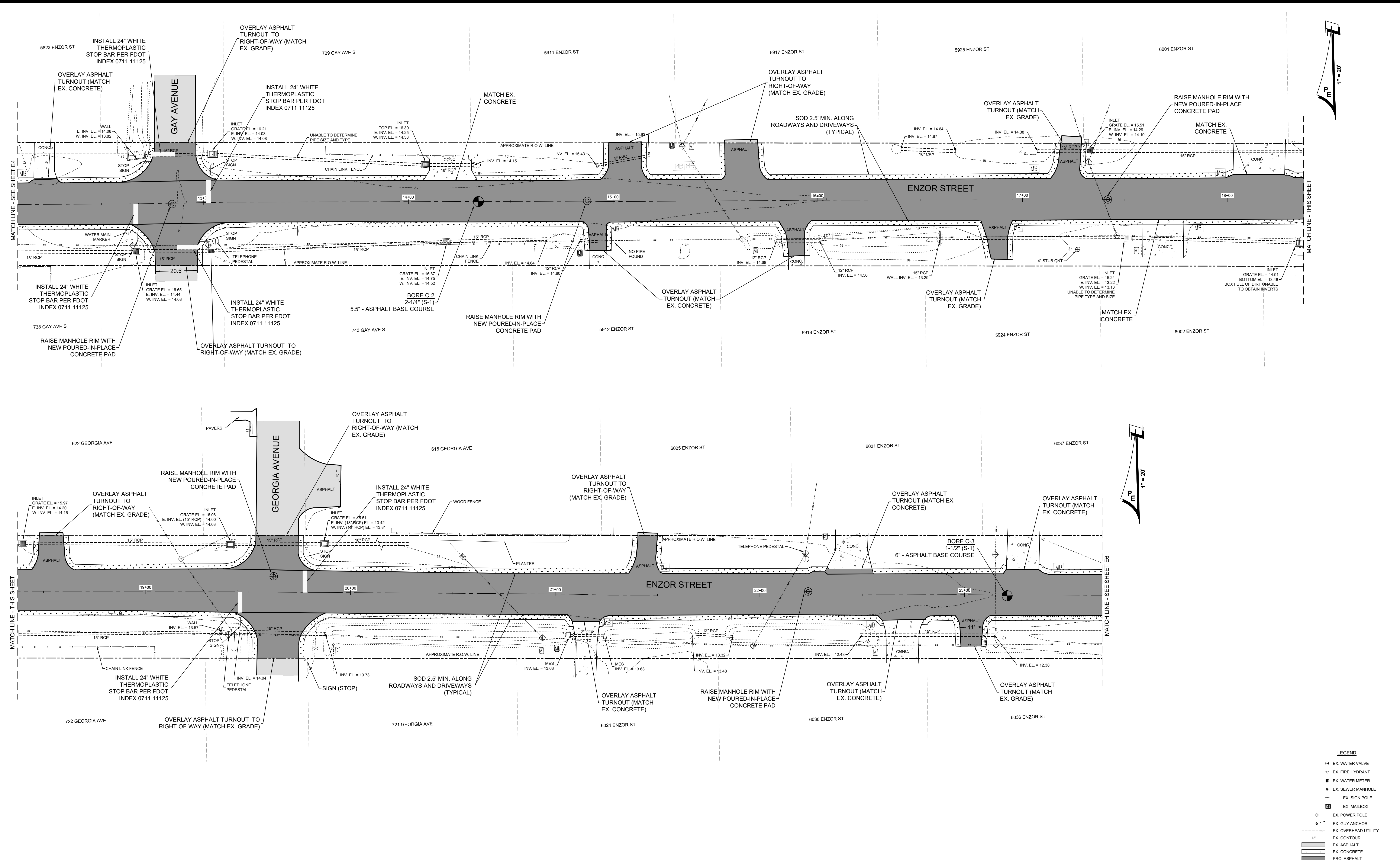
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SHEET NUMBER	<b>E4</b>
PROJECT NUMBER	<b>26038</b>
DPR CERTIFICATION #EB-7806	

Date: 4/13/2022 6:57 AM File: P:\26038 Enzor St\26038-PlanView\1-Civil\2D\Folder\Drawings\26038-E1.dwg

26038 ENZOR STREET PAVING IMPROVEMENTS PLAN VIEW Sheet E4





- LEGEND**
- EX. WATER VALVE
  - EX. FIRE HYDRANT
  - EX. WATER METER
  - EX. SEWER MANHOLE
  - EX. SIGN POLE
  - EX. MAILBOX
  - EX. POWER POLE
  - EX. GUY ANCHOR
  - EX. OVERHEAD UTILITY
  - EX. CONTOUR
  - EX. ASPHALT
  - EX. CONCRETE
  - PRO. ASPHALT

REV	DATE	BY	REVISIONS

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**PLAN VIEW  
 ENZOR STREET  
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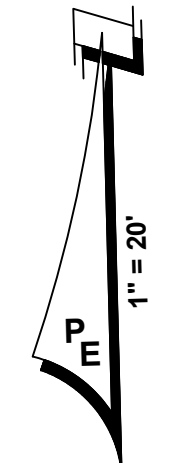
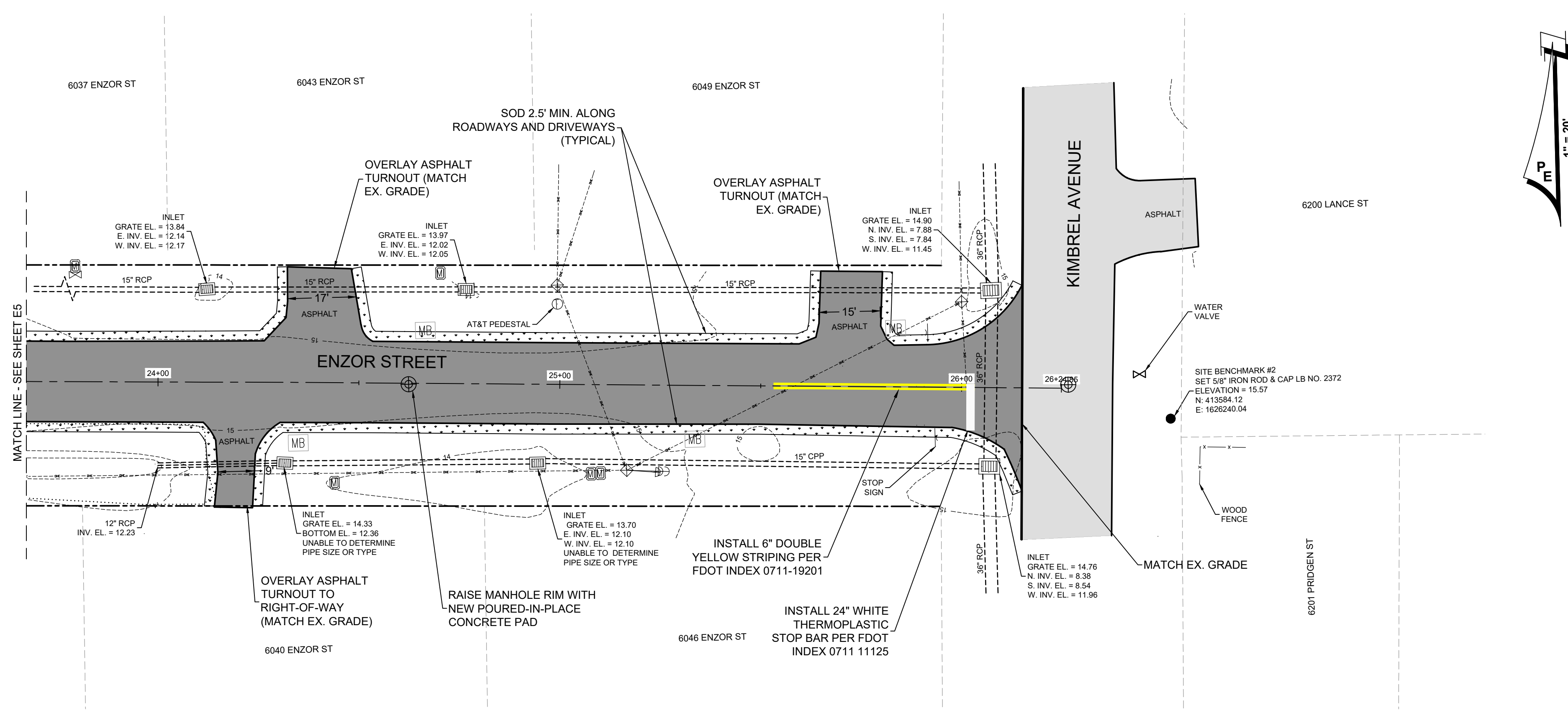
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SHEET NUMBER	<b>E5</b>
PROJECT NUMBER	<b>26038</b>

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26038 ENZOR STREET PAVING IMPROVEMENTS PLAN VIEW SHEET E5





**LEGEND**

- ⊗ EX. WATER VALVE
- ▽ EX. FIRE HYDRANT
- EX. WATER METER
- EX. SEWER MANHOLE
- EX. SIGN POLE
- EX. MAILBOX
- ⊕ EX. POWER POLE
- ⊙ EX. GUY ANCHOR
- EX. OVERHEAD UTILITY
- EX. CONTOUR
- ▨ EX. ASPHALT
- ▩ EX. CONCRETE
- ▧ PRO. ASPHALT

REV	DATE	BY	REVISIONS

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**PLAN VIEW  
 ENZOR STREET  
 PAVING IMPROVEMENTS  
 CALLAWAY, FLORIDA**

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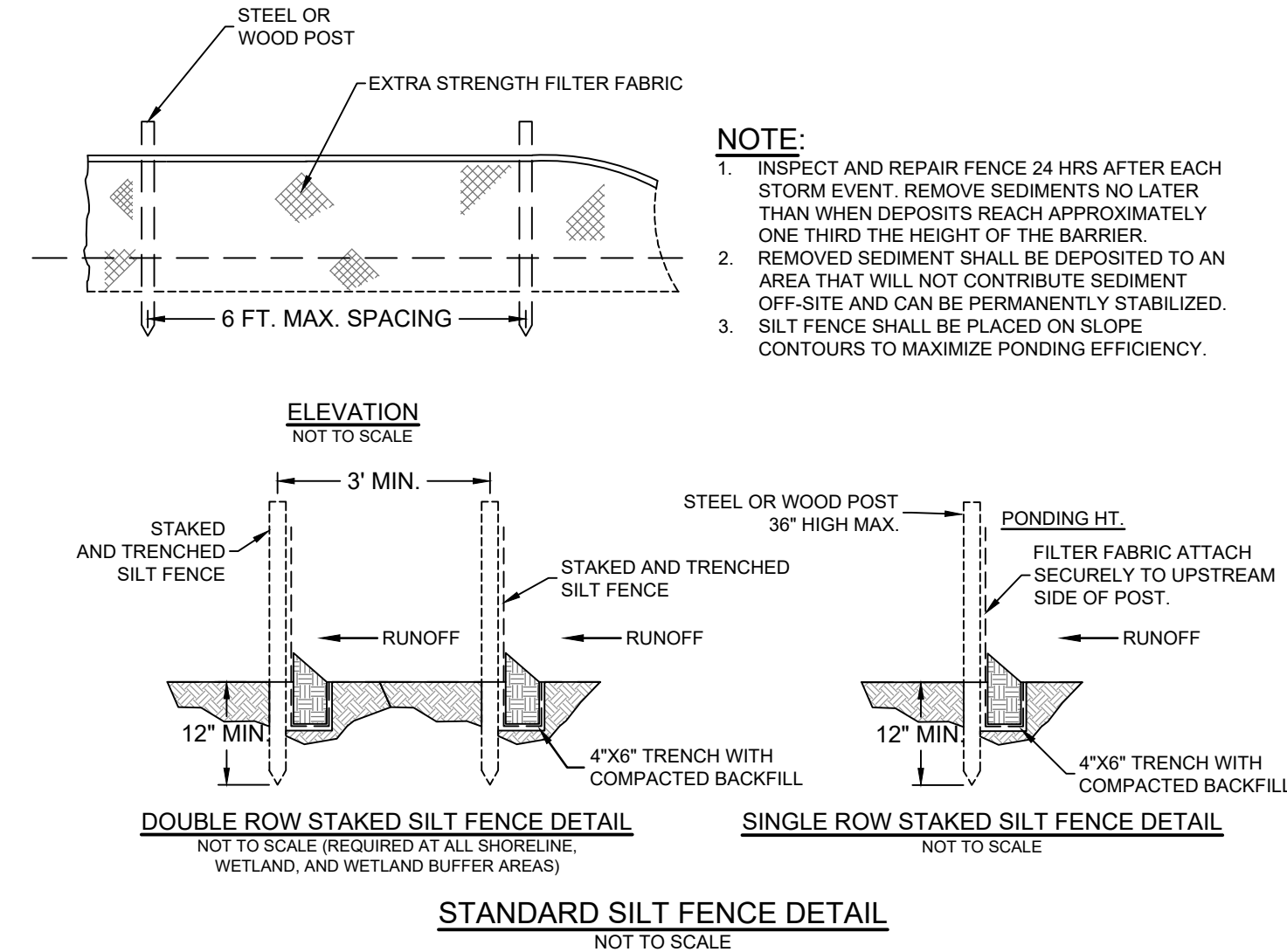
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SHEET NUMBER	<b>E6</b>
PROJECT NUMBER	<b>26038</b>

Date: 4/13/2022 6:57 AM File: P:\26038 Enzor St\26038 Enzor St.dwg Path: I:\CADD\26038 Enzor St.dwg

26038 ENZOR STREET PAVING IMPROVEMENTS PLAN VIEW Sheet E6





**ENVIRONMENTAL SEQUENCE**

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS, DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

**SEQUENCE OF MAJOR ACTIVITIES:**

- THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
  2. INSTALL SILT FENCES AND HAY BALES, AS REQUIRED.
  3. CONSTRUCT SEDIMENTATION BASIN.
  4. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN AT PERMANENT POND LOCATION.
  5. CONTINUE CLEARING AND GRUBBING.
  6. STOCKPILE TOP SOIL IF REQUIRED.
  7. PERFORM PRELIMINARY GRADING ONSITE, AS REQUIRED.
  8. STABILIZE DENuded AREA AND STOCKPILES AS SOON AS PRACTICABLE.
  9. INSTALL UTILITIES, STORM SEWER, CURBS AND GUTTER.
  10. APPLY BASE TO PROJECT.
  11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING.
  12. COMPLETE FINAL PAVING.
  13. REMOVE ACCUMULATED SEDIMENT FROM BASINS.
  14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/ SOD, AS REQUIRED.

**TIMING OF CONTROLS/MEASURES**

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH Dikes/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION AND TURBIDITY CONTROL PLAN.

**DEWATERING NOTES:**

CONTRACTOR SHALL OBTAIN A GENERAL PERMIT FOR DEWATERING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NPDES SECTION. (CONTACT: KEVIN HARGETT, FDPD NW DIST. WASTEWATER SECTION. EMAIL: kevin.hargett@dep.state.fl.us PHONE: 850.595.0687)

CONTRACTOR SHALL PROVIDE A DETAILED DEWATERING PLAN WITH METHODS TIME TABLE & DISCHARGE LOCATION TO ENGINEER FOR APPROVAL BEFORE COMMENCEMENT.

\*DEWATERING EFFLUENT OF UNCONTAMINATED GROUNDWATER SHALL BE DISCHARGED SO AS TO PREVENT NEGATIVE IMPACTS TO PUBLIC HEALTH OR SAFETY, PROPERTY, OR THE WATER RESOURCE. DEWATERING OPERATIONS SHALL BE DIRECTED TO A SEDIMENT CONTROL DEVICE OR NATURAL ATTENUATION AREA PRIOR TO DISCHARGE TO WETLANDS OR OTHER SURFACE WATERS. A SEDIMENT CONTROL DEVICE MEANS A SETTLING POND, EXCAVATED SEDIMENT TRAP OR BASIN, DEWATERING TRAP OR TEMPORARY SEDIMENT CONTROL MEASURE. A NATURAL ATTENUATION AREA MEANS A NORMALLY DRY, GRASSED MEADOW OR OPEN AREA WITH EXISTING VEGETATION THAT IS NOT SUBJECT TO EROSION. IF A NATURAL ATTENUATION AREA IS USED, A MINIMUM 50 FOOT SETBACK SHALL BE MAINTAINED FROM THE RECEIVING WATERS OR WETLANDS, WHEN WATER IS UNAVOIDABLY DISCHARGED TO WETLANDS OR OTHER SURFACE WATERS, THE WATER DISCHARGED SHALL BE DONE IN A MANNER THAT DOES NOT CAUSE EROSION OR OTHER DAMAGE TO ADJACENT LANDS, AND DOES NOT CAUSE OR CONTRIBUTE TO VIOLATIONS OF WATER QUALITY STANDARDS. SETTLING PONDS AND SEDIMENT TRAPS OR BASINS SHALL BE IMPLEMENTED, AT A MINIMUM, IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 11.0, NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT APPLICANT'S HANDBOOK VOLUME 1. IN ADDITION, DEWATERING ACTIVITIES MAY REQUIRE ADDITIONAL PERMITS FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (INDUSTRIAL WASTEWATER) AND THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT (CONSUMPTIVE USE).

PRIOR TO COMMENCEMENT OF CONSTRUCTION DEWATERING ACTIVITIES ANALYTICAL TEST OF UNTREATED GROUNDWATER FOR THE PARAMETERS LISTED IN TABLE 4-1 MUST BE PERFORMED FOR EACH LOCATION.

IF THE ANALYTICAL TESTS ARE WITHIN THE SCREENING VALUES LISTED IN TABLE 4-1 DEWATERING OF THE SITE MAY BEGIN IMMEDIATELY. A SUMMARY REPORT DESCRIBING THE PROPOSED ACTIVITY AND A COPY OF THE TEST REPORT SHOULD BE SENT TO THE LOCAL FDPD OFFICE WITHIN ONE WEEK AFTER DISCHARGE BEGINS.

ADDITIVE SAMPLES AND TESTING MUST BE PROVIDED WITHIN THIRTY DAYS AFTER INITIATION OF THE DISCHARGE AND THEN ONCE EVERY SIX MONTHS FOR THE DURATION OF THE PROJECT.

ALL ANALYTICAL TEST DATA, INCLUDING THIRTY DAY AND SIX MONTH TEST RESULTS SHOULD BE KEPT ON-SITE DURING DISCHARGE AND MADE AVAILABLE TO FDPD, IF REQUESTED.

DURING DEWATERING, APPROPRIATE FABRIC SILT SCREEN OR HAY BALES SHALL BE USED TO PREVENT TURBID DISCHARGES. WHEN POSSIBLE, ESTABLISH A DETENTION AREA TO ALLOW SUSPENDED SOLIDS TO SETTLE PRIOR TO DISCHARGE.

THE CONTRACTOR SHALL SELECT, IMPLEMENT AND OPERATE SUCH EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS IN CHAPTER 62-302 F.A.C.

GROUNDWATER WITHDRAWALS FOR DEWATERING SHALL BE BY ONE OF THE FOLLOWING METHODS:

- A CONVENTIONAL WELL POINT SYSTEM CONSISTING OF ONE OR MORE STAGES OF WELL POINTS INSTALLED NEAR THE PROPOSED EXCAVATION IN LINES OR RINGS, THE WELL POINTS SHALL BE INSTALLED IN VARIABLE SPACINGS AND CONNECTED TO A COMMON HEADER PRESSURIZED BY ONE OR MORE PUMPS.
- VACUUM UNDERDRAIN SYSTEM CONSISTING OF AN UNDERDRAIN PIPE WITH FILTER SOCK COVERING PLACED HORIZONTALLY BELOW THE DESIGN EXCAVATION ELEVATION VIA TRENCHING MACHINE. THE UNDERDRAIN PIPE SHALL BE CONNECTED TO A PUMP WITH THE GROUNDWATER CONVEYED THROUGH THE PIPE AND DISCHARGED FROM THE PUMP.
- VACUUM WELL(S) CONSISTING OF ONE OR MORE STAGES INSTALLED NEAR AN EXCAVATION IN LINES OR RINGS. THE VACUUM WELL(S) SHALL BE CONSTRUCTED WITH SIX INCH OR SMALLER PIPE WITH A SLOTTED SCREEN AREA NEAR THE BOTTOM OF THE WELL, AND CONNECTED TO A COMMON HEADER PUMPED BY ONE OR MORE PUMPS.
- DEWATERING STORMWATER POND OR BASIN BY HYDRAULIC PUMP THROUGH THE EXISTING OR NEW DISCHARGE CONTROL STRUCTURE.

**EROSION CONTROL NOTES:**

1. EROSION CONTROL MEASURES WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT TO RESTRICT ANY TURBID RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
2. CONTROL OF SEDIMENT-LADEN RUNOFF SHALL BE PROVIDED WITH HAY BALES AND/OR GEOTECH STYLE FABRICS. ALL CONTROL MEASURES SHALL BE PROPERLY LOCATED AND CONSTRUCTED TO PREVENT SEDIMENT TRANSPORT. THE MEANS FOR RETAINING THE SEDIMENTS WILL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT IMPROVEMENTS ARE COMPLETE.
3. THE CONTRACTOR IS RESPONSIBLE FOR TREATING ALL ONSITE STORMWATER DRAINAGE AS REQUIRED TO MEET THE CRITERIA OF 62-3 FLORIDA ADMINISTRATIVE CODE, F.A.C. PRIOR TO DISCHARGE.
4. ALL CATCH BASINS, INLETS AND ACCESSSES TO UNDERGROUND STORMWATER SYSTEMS SHALL BE PROTECTED IN ACCORDANCE WITH THE ATTACHED DETAILS.
5. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS AND CONDITIONS OF ANY STORMWATER PERMITS THAT MAY APPLY (FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FLORIDA DEPARTMENT OF TRANSPORTATION, BAY COUNTY, WATER MANAGEMENT DISTRICT, ETC.).

**SWALE NOTE:**

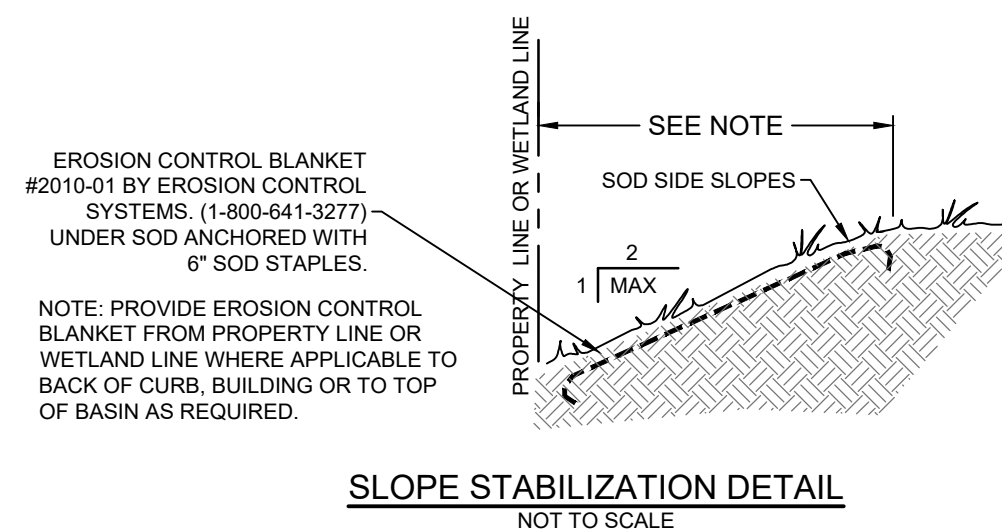
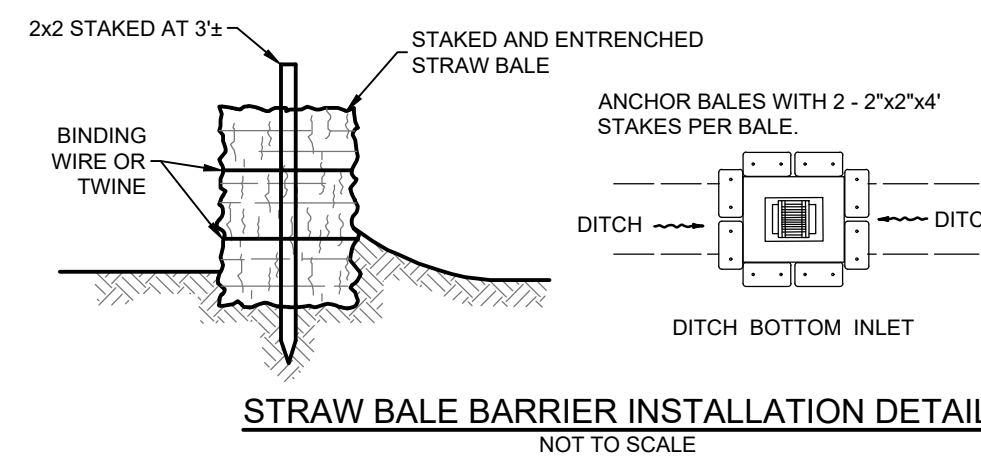
THE SYSTEM OF SWALES SHALL BE CONSTRUCTED BY THE PERMITTEE PRIOR TO RESALE OF INDIVIDUAL LOTS TO THIRD PARTIES.

**EROSION CONTROL NOTES:**

ALL INLETS SHALL HAVE HAY BALES OR SILT FENCE AROUND THEIR PERIMETER. SILT FENCE AND HAY BALES ARE REQUIRED IN ALL AREAS AS DIRECTED BY THE ENGINEER.

**PROTECTED TREES NOTE:**

NO PROTECTED TREES WILL BE IMPACTED UNLESS PERMITTED INDEPENDENTLY.



**NOTE:**  
 AREAS NOT SODDED TO BE STABILIZED WITH HYDROSEEDING.

TABLE 4-1 GROUNDWATER DISCHARGE - SCREENING VALUES	
PARAMETER	SCREENING VALUES FOR DISCHARGE INTO FRESH WATER
TOTAL ORGANIC CARBON (TOC)	10.0 mg/L
PH, STANDARD UNITS	6.0 - 8.5
TOTAL RECOVERABLE MERCURY	0.012 ug/L
TOTAL RECOVERABLE CADMIUM	9.3 ug/L
TOTAL RECOVERABLE COPPER	2.9 ug/L
TOTAL RECOVERABLE LEAD	0.03 ug/L
TOTAL RECOVERABLE ZINC	86.0 ug/L
TOTAL RECOVERABLE CHROMIUM (HEX)	11.0 ug/L
BENZENE	1.0 ug/L
NAPHTHALENE	100.0 ug/L

mg/L = milligrams per liter  
 ug/L = micrograms per liter

REV	DATE	BY	REVISIONS

SCALE: AS NOTED
DESIGNED BY: CBF
DRAWN BY: SPL
REVIEWED BY: CBF
ISSUE DATE: APRIL 2022
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**EROSION CONTROL NOTES and DETAILS**  
**ENZOR STREET**  
**PAVING IMPROVEMENTS**  
**CALLAWAY, FLORIDA**

James H. Slonina, P.E. 39197  
 Christopher B. Forehand, P.E. 58028  
 Stephen E. Price, P.E. 71646  
 J. Doug Crook, P.E. 66556

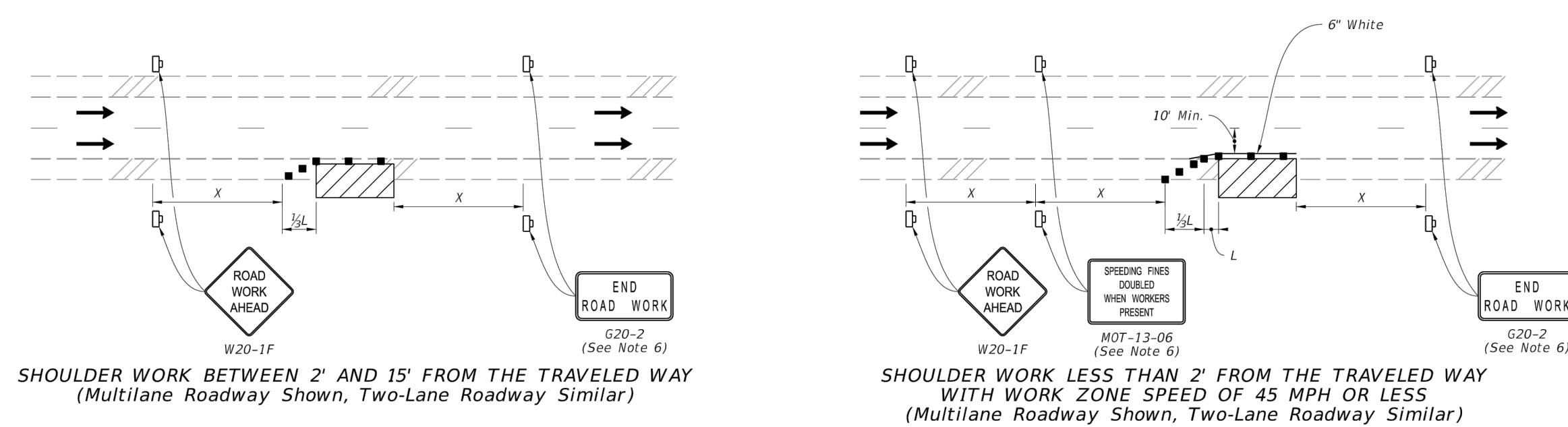
SHEET NUMBER  
**E7**  
 PROJECT NUMBER  
**26038**

DPR CERTIFICATION #EB-7806

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26038 ENZOR STREET PAVING IMPROVEMENTS EROSION CONTROL NOTES and DETAILS Sheet E7





**NOTES:**

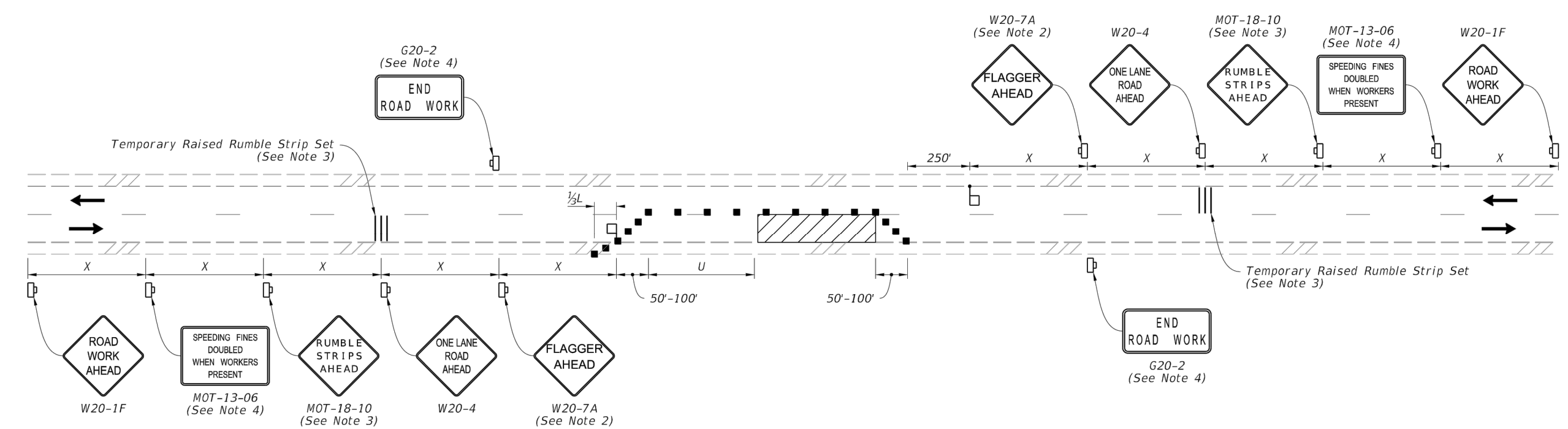
- L = Taper Length  
X = Work Zone Sign Distance  
See Index 102-000 for "L" and "X" values.
- For incidental work (e.g., mowing or litter removal), only the Road Work Ahead sign is required.
- As determined by the Engineer, use a flagger or lane closure to accommodate a significant amount of work vehicle ingress and egress.
- For work less than two feet from the traveled way and work zone speed greater than 45 MPH, use a lane closure.
- This Index may be applied to the medians of divided roadways.
- The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2) along with associated work zone sign distances may be omitted when the temporary condition is in place for 24 hours or less.

**SYMBOLS:**

- Work Space
- Channelizing Device (See Index 102-000)
- Work Zone Sign
- Lane Identification and Direction of Traffic

APPLIES TO TWO-LANE AND MULTILANE ROADWAYS

LAST REVISION 11/01/19	DESCRIPTION:	FDOT FY 2020-21 STANDARD PLANS	WORK ON THE SHOULDER	INDEX 102-010	SHEET 1 of 1
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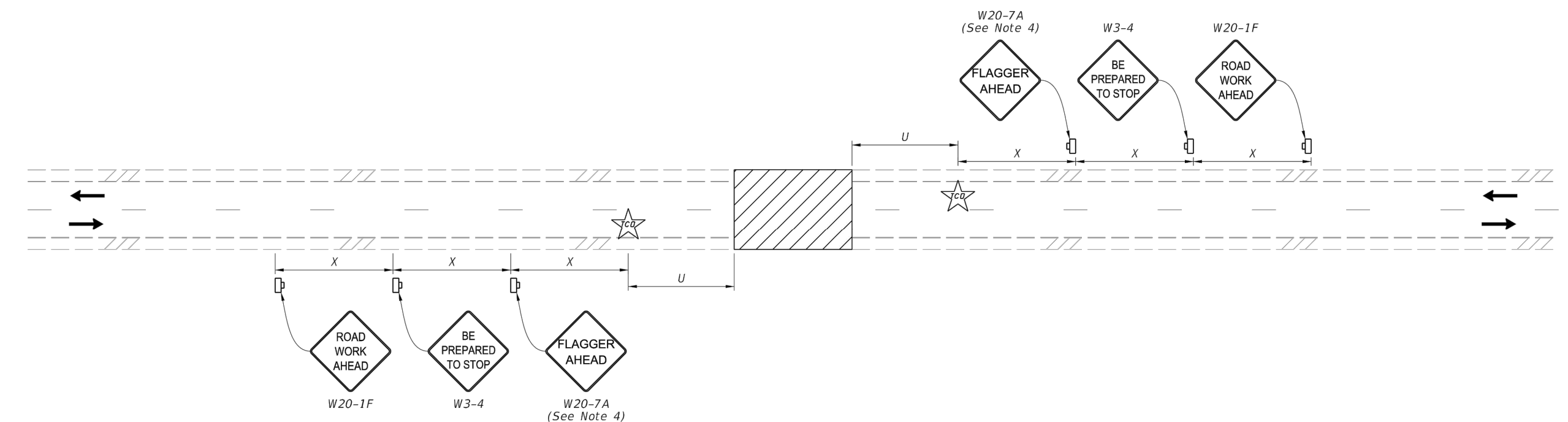
**NOTES:**

- L = Taper Length  
U = Buffer Length  
X = Work Zone Sign Distance  
See Index 102-000 for "L", "U", "X", and channelizing device spacing values.
- Optionally, use "Flagger Ahead" sign with symbol (W20-7) instead of "Flagger Ahead" sign with text (W20-7A).
- Use temporary raised rumble strips in accordance with the Plans. If temporary raised rumble strips are not used, omit "Rumble Strips Ahead" signs (MOT-18-10) and associated work zone sign distance. See Index 102-000 for temporary raised rumble strip details.
- The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign distances, may be omitted when the work zone will be in place for 24 hours or less.

**SYMBOLS:**

- Work Space
- Channelizing Device (See Index 102-000)
- Work Zone Sign
- Lane Identification and Direction of Traffic
- Flagger

LAST REVISION 11/01/19	DESCRIPTION:	FDOT FY 2020-21 STANDARD PLANS	TWO-LANE ROADWAY, LANE CLOSURE USING FLAGGERS	INDEX 102-025	SHEET 1 of 1
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(Two-Lane Roadway Shown, Multilane Roadway Similar)

**NOTES:**

- U = Buffer Length  
X = Work Zone Sign Distance  
See Index 102-000 for "U" and "X" values.
- Do not use this Index for limited access roadways.
- Use this Index for temporary daytime road closures of 5 minutes or less.
- Optionally, use "Flagger Ahead" sign with symbol (W20-7) instead of "Flagger Ahead" sign with text (W20-7A).

**SYMBOLS:**

- Work Space
- Work Zone Sign
- Lane Identification and Direction of Traffic
- Traffic Control Officer

LAST REVISION 11/01/19	DESCRIPTION:	FDOT FY 2020-21 STANDARD PLANS	TEMPORARY ROADWAY CLOSURE	INDEX 102-020	SHEET 1 of 1
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APPLIES TO TWO-LANE AND MULTILANE ROADWAYS

REV	DATE	BY	REVISIONS

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DESIGNED BY: CBF
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**FDOT MAINTENANCE OF TRAFFIC DETAILS**  
 ENZOR STREET  
 PAVING IMPROVEMENTS  
 CALLAWAY, FLORIDA

James H. Slonina, P.E. 39197  
 Christopher B. Forehand, P.E. 58028  
 Stephen E. Price, P.E. 71646  
 J. Doug Crook, P.E. 66556

DPR CERTIFICATION #EB-7806

SHEET NUMBER <b>E8</b>
PROJECT NUMBER <b>26038</b>

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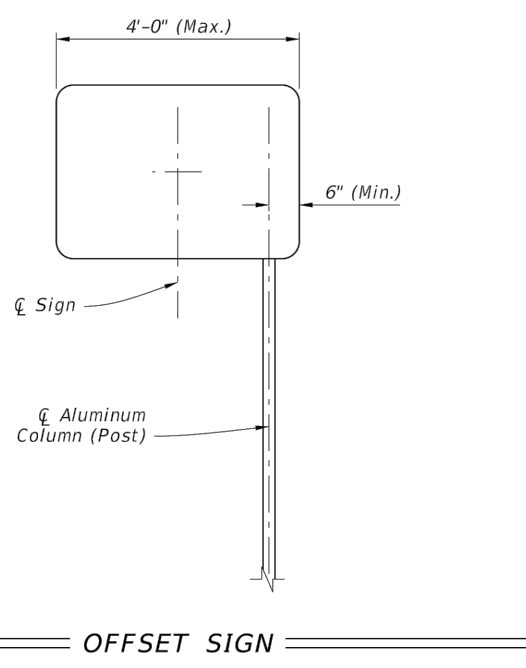
26038 ENZOR STREET PAVING IMPROVEMENTS FDOT MAINTENANCE OF TRAFFIC DETAILS Sheet E8



ALUMINUM COLUMN (POST) SELECTION TABLE (O.D. in.)	H' (FT)												
	8 ft	9 ft	10 ft	11 ft	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft
3 sf	2	2.5	2.5	2.5	3	3	3	3.5	3.5	3.5	3.5	3.5	3.5
4 sf	2.5	2.5	3	3	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5
5 sf	2.5	3	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4
6 sf	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4
7 sf	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4
8 sf	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	4
9 sf	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	4	4
10 sf	3.5	3.5	3.5	3.5	4	4	4	4	4	4	4	4.5	4.5
11 sf	3.5	3.5	3.5	3.5	4	4	4	4	4	4	4	4.5	4.5
12 sf	3.5	3.5	3.5	4	4	4	4	4	4	4	4	4.5	4.5
13 sf	3.5	3.5	4	4	4	4	4	4	4	4	4.5	4.5	4.5
14 sf	3.5	3.5	4	4	4	4	4	4	4	4.5	4.5	4.5	4.5
15 sf	3.5	4	4	4	4	4	4	4.5	4.5	4.5	4.5	4.5	4.5
16 sf	3.5	4	4	4	4	4	4	4.5	4.5	4.5	5	5	5
17 sf	4	4	4	4	4	4	4.5	4.5	4.5	5	5	5	5
18 sf	4	4	4	4	4	4.5	4.5	4.5	5	5	5	5	5
19 sf	4	4	4	4	4	4.5	4.5	4.5	5	5	5	5	5
20 sf	4	4	4	4	4.5	4.5	4.5	5	5	5	5	5	5
21 sf	4	4	4	4	4.5	4.5	5	5	5	5	5	5	5
22 sf	4	4	4	4.5	4.5	4.5	5	5	5	5	5	5	5
23 sf	4	4	4	4.5	4.5	5	5	5	5	5	5	5	5
24 sf	4	4	4.5	4.5	4.5	5	5	5	5	5	5	5	5
25 sf	4	4	4.5	4.5	5	5	5	5	5	5	5	5	5
26 sf	4	4.5	4.5	4.5	5	5	5	5	5	5	5	5	5
27 sf	4	4.5	4.5	4.5	5	5	5	5	5	5	5	5	5
28 sf	4	4.5	4.5	5	5	5	5	5	5	5	5	5	5
29 sf	4.5	4.5	4.5	5	5	5	5	5	5	5	5	5	5
30 sf	4.5	4.5	5	5	5	5	5	5	5	5	5	5	5

FOUNDATION TABLE	Driven Post		Concrete (Class 1)	
	Embedment Depth (ft)	Without Soil Plate	Diameter (ft)	Embedment Depth (ft)
Column (Post) Size	2.0	4.5	2.5	---
2.5	5.0	3.0	---	---
3.0	5.0	3.5	---	---
3.5	6.0	4.5	---	---
4.0	---	---	2.0	3.5
4.5	---	---	2.0	4.0
5.0	---	---	2.0	4.5
6.0	---	---	2.0	5.0
8.0	---	---	2.0	5.5

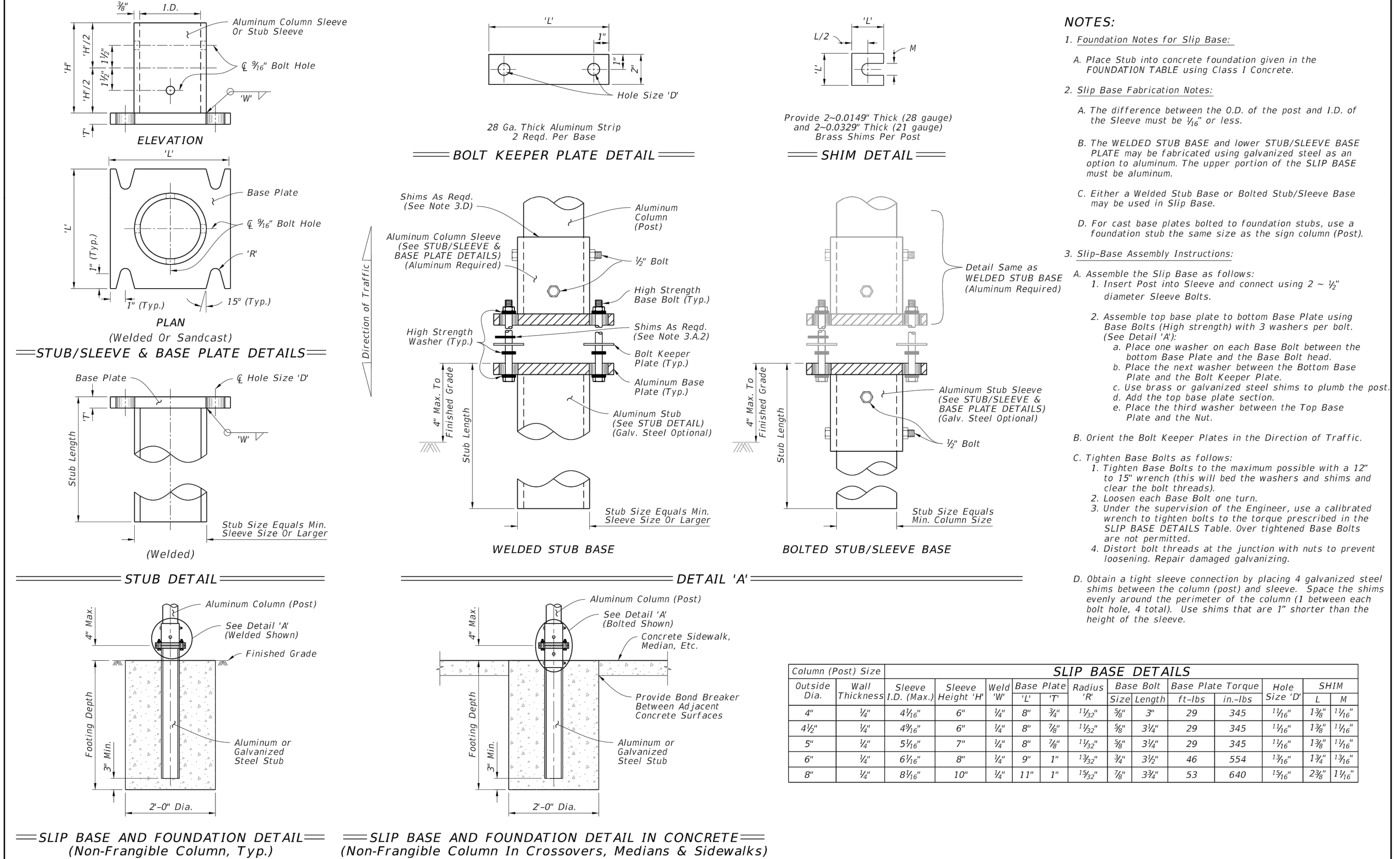
**\* INSTALLING FRANGIBLE COLUMN SUPPORTS:**  
Columns (posts) 3/8" O.D. and less are considered frangible and may be installed either by driving the post or setting the posts in preformed holes. Backfill preformed holes with suitable material tamped in layers not thicker than 6" (to provide adequate compaction) or filled with flowable fill or bagged concrete.



- NOTE:**
- For offset sign placement see Index 700-101.
  - For signs with widths greater than 4' see Index 700-011.
  - Offset signs with driven posts require a soil plate.

COLUMN AND FOUNDATION TABLES

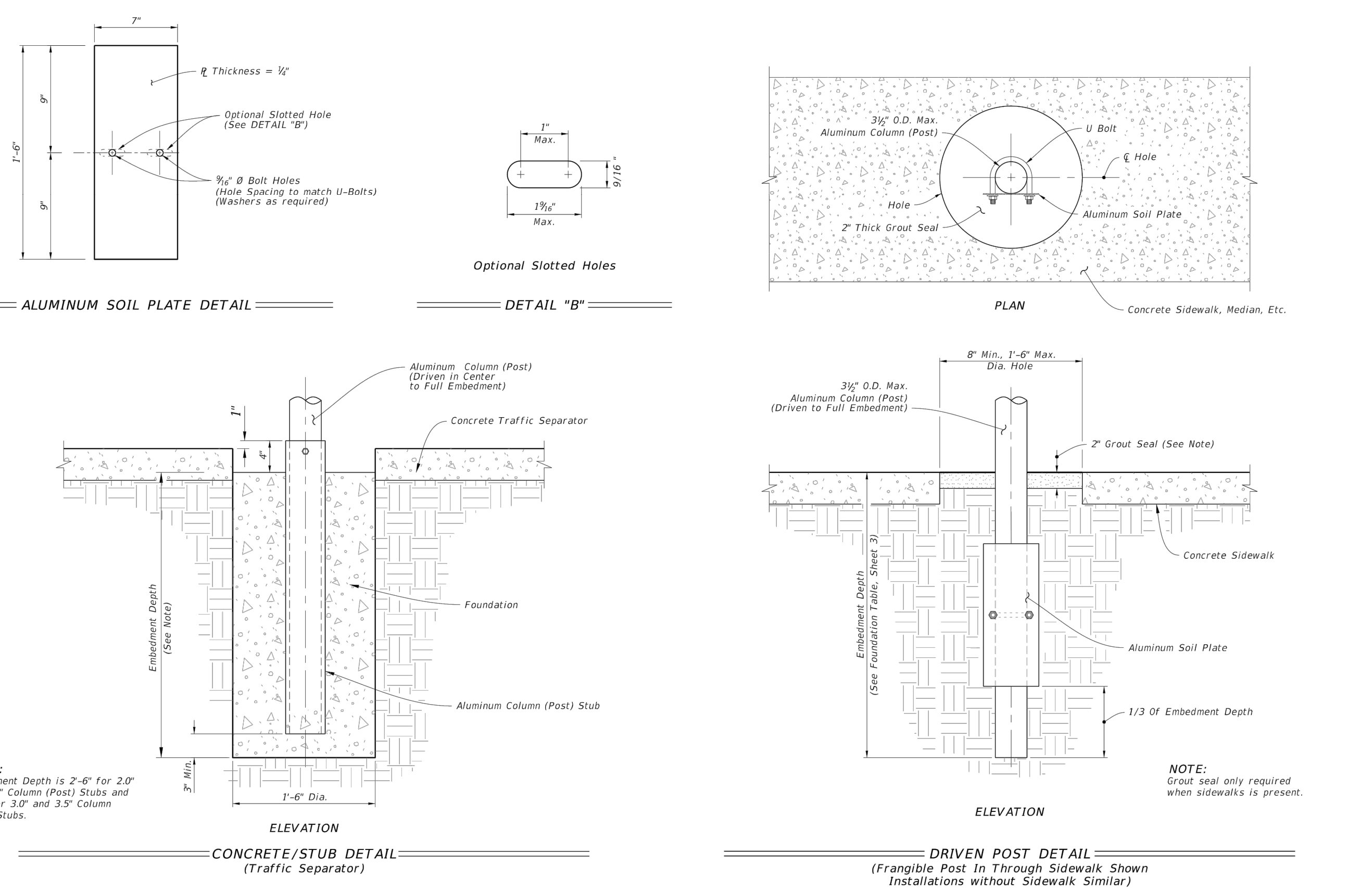
LAST REVISION: 11/01/19	DESCRIPTION: FY 2021-22 STANDARD PLANS	INDEX: 700-010	SHEET: 3 of 10
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- NOTES:**
- Foundation Notes for Slip Base.
    - Place Stub into concrete foundation given in the FOUNDATION TABLE using Class 1 Concrete.
    - Slip Base Fabrication Notes:
      - The difference between the O.D. of the post and I.D. of the Sleeve must be 1/16" or less.
      - The WELDED STUB BASE and lower STUB/SLEEVE BASE PLATE may be fabricated using galvanized steel as an option to aluminum. The upper portion of the SLIP BASE must be aluminum.
      - Either a Welded Stub Base or Bolted Stub/Sleeve Base may be used in Slip Base.
      - For cast base plates bolted to foundation stubs, use a foundation stub the same size as the sign column (Post).
  - Slip-Base Assembly Instructions:
    - Assemble the Slip Base as follows:
      - Insert Post into Sleeve and connect using 2 - 1/2" diameter Sleeve Bolts.
      - Assemble top base plate to bottom Base Plate using Base Bolts (High strength) with 3 washers per bolt. (See Detail 'A').
        - Place one washer on each Base Bolt between the bottom Base Plate and the Base Bolt head.
        - Place the next washer between the Bottom Base Plate and the Bolt Keeper Plate.
        - Use brass or galvanized steel shims to plumb the post.
        - Add the top base plate section.
        - Place the third washer between the Top Base Plate and the Nut.
      - Orient the Bolt Keeper Plates in the Direction of Traffic.
      - Tighten Base Bolts as follows:
        - Tighten Base Bolts to the maximum possible with a 12" to 15" wrench (this will bend the washers and shims and clear the bolt threads).
        - Loosen each Base Bolt one turn.
        - Under the supervision of the Engineer, use a calibrated wrench to tighten bolts to the torque prescribed in the SLIP BASE DETAILS Table. Over tightened Base Bolts are not permitted.
        - Distort bolt threads at the junction with nuts to prevent loosening. Repair damaged galvanizing.
      - Obtain a tight sleeve connection by placing 4 galvanized steel shims between the column (post) and sleeve. Space the shims evenly around the perimeter of the column (I) between each bolt hole (4 total). Use shims that are 1" shorter than the height of the sleeve.

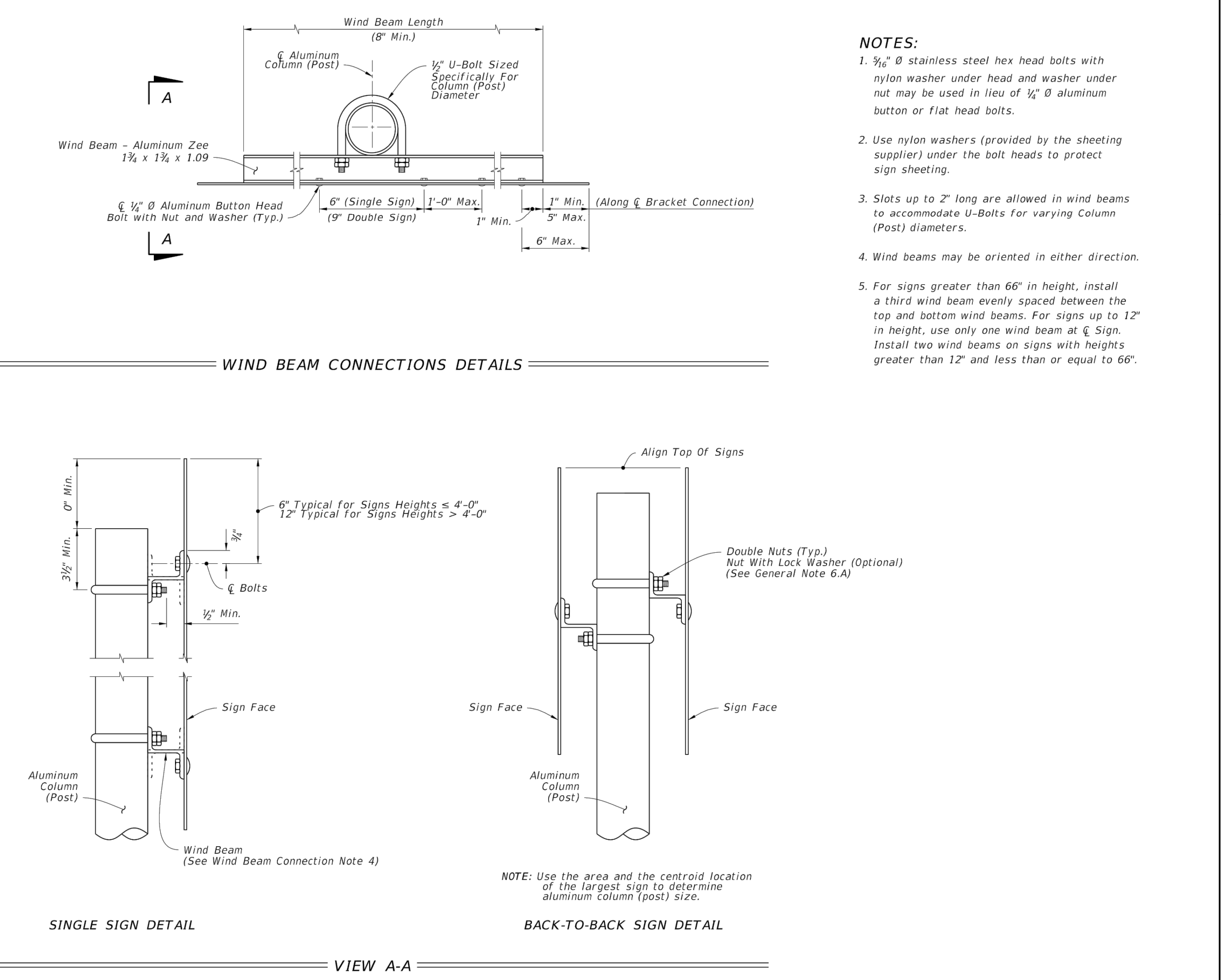
SLIP BASE AND FOUNDATION DETAILS

LAST REVISION: 11/01/20	DESCRIPTION: FY 2021-22 STANDARD PLANS	INDEX: 700-010	SHEET: 4 of 10
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DRIVEN POST, CONCRETE/STUB, AND SOIL PLATE DETAILS

LAST REVISION: 11/01/20	DESCRIPTION: FY 2021-22 STANDARD PLANS	INDEX: 700-010	SHEET: 5 of 10
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WIND BEAM CONNECTION

LAST REVISION: 11/01/20	DESCRIPTION: FY 2021-22 STANDARD PLANS	INDEX: 700-010	SHEET: 6 of 10
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**FDOT SIGNAGE DETAILS**  
 ENZOR STREET  
 PAVING IMPROVEMENTS  
 CALLAWAY, FLORIDA

James H. Slonina, P.E. 39197  
 Christopher B. Forehand, P.E. 58028  
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 J. Doug Crook, P.E. 66556

SHEET NUMBER  
**E9**  
 PROJECT NUMBER  
**26038**

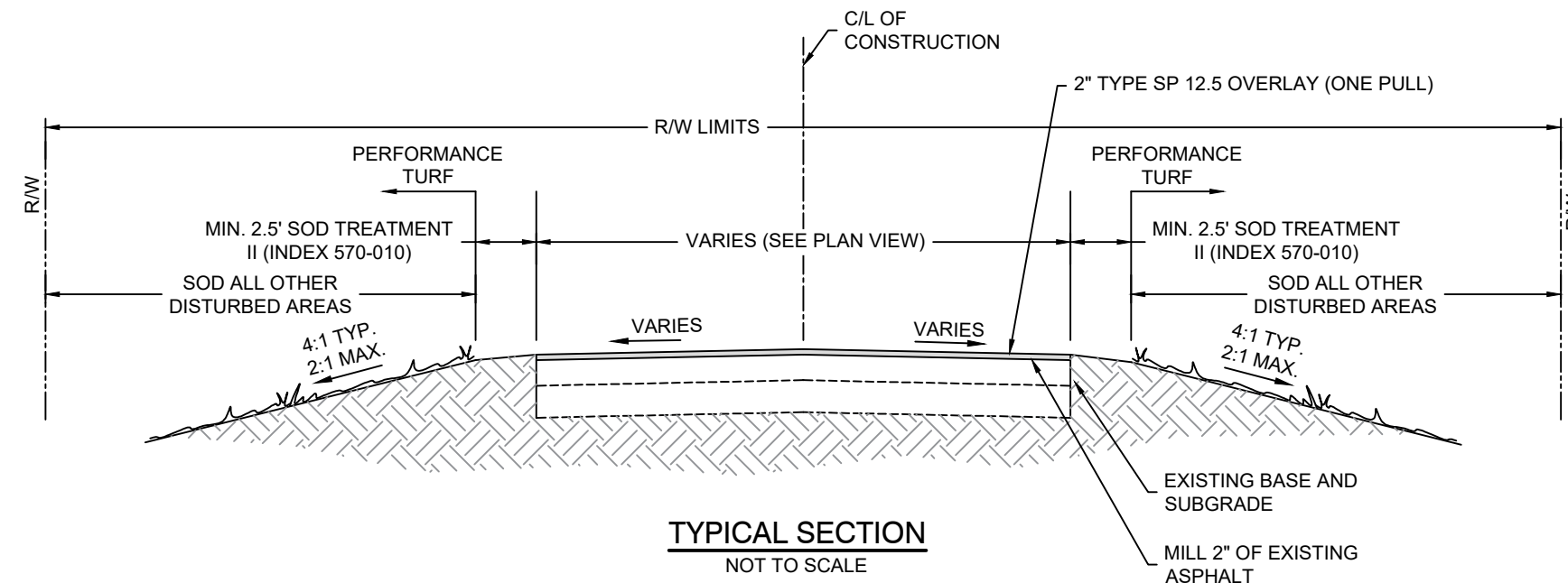
26038 ENZOR STREET PAVING IMPROVEMENTS FDOT SIGNAGE DETAILS Sheet E9

DPR CERTIFICATION #EB-7806



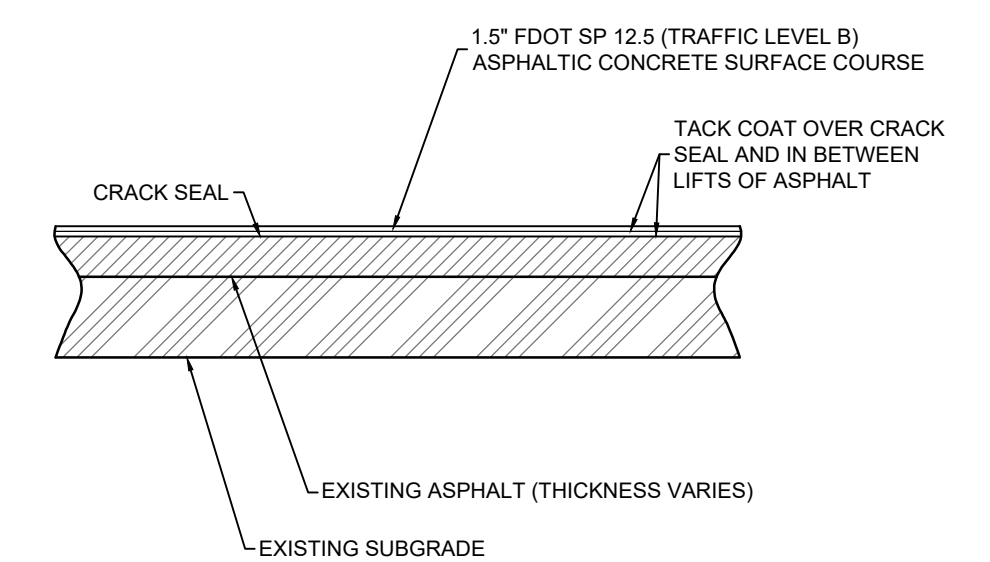






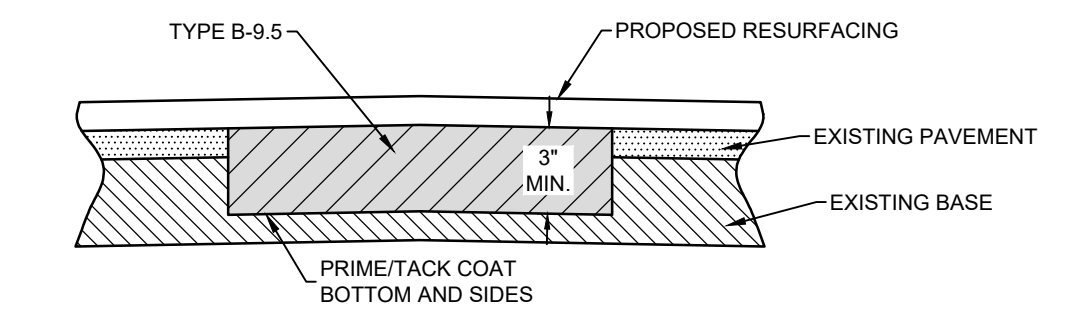
MAINLINE: TYPE SP 12.5 SURFACE COURSE (TRAFFIC LEVEL B) (2")

NOTES: ALL ROADS TO RECEIVE FULL DEPTH RECLAMATION UNLESS NOTED OTHERWISE IN PLANS.



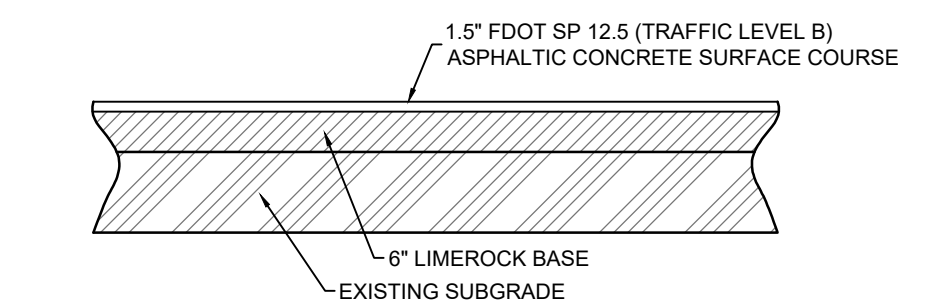
NOTE: PRIOR TO OVERLAYING EXISTING ASPHALT, CONTRACTOR SHALL CRACK SEAL, FULL DEPTH PATCH AND LEVEL ANY DISTRESSED AREAS WITH A SEVERITY LEVEL IDENTIFIED AS MEDIUM OR HIGH USING THE PAVEMENT CONDITION INDEX METHOD.

ASPHALT OVERLAY DETAIL FOR DRIVEWAYS  
NOT TO SCALE

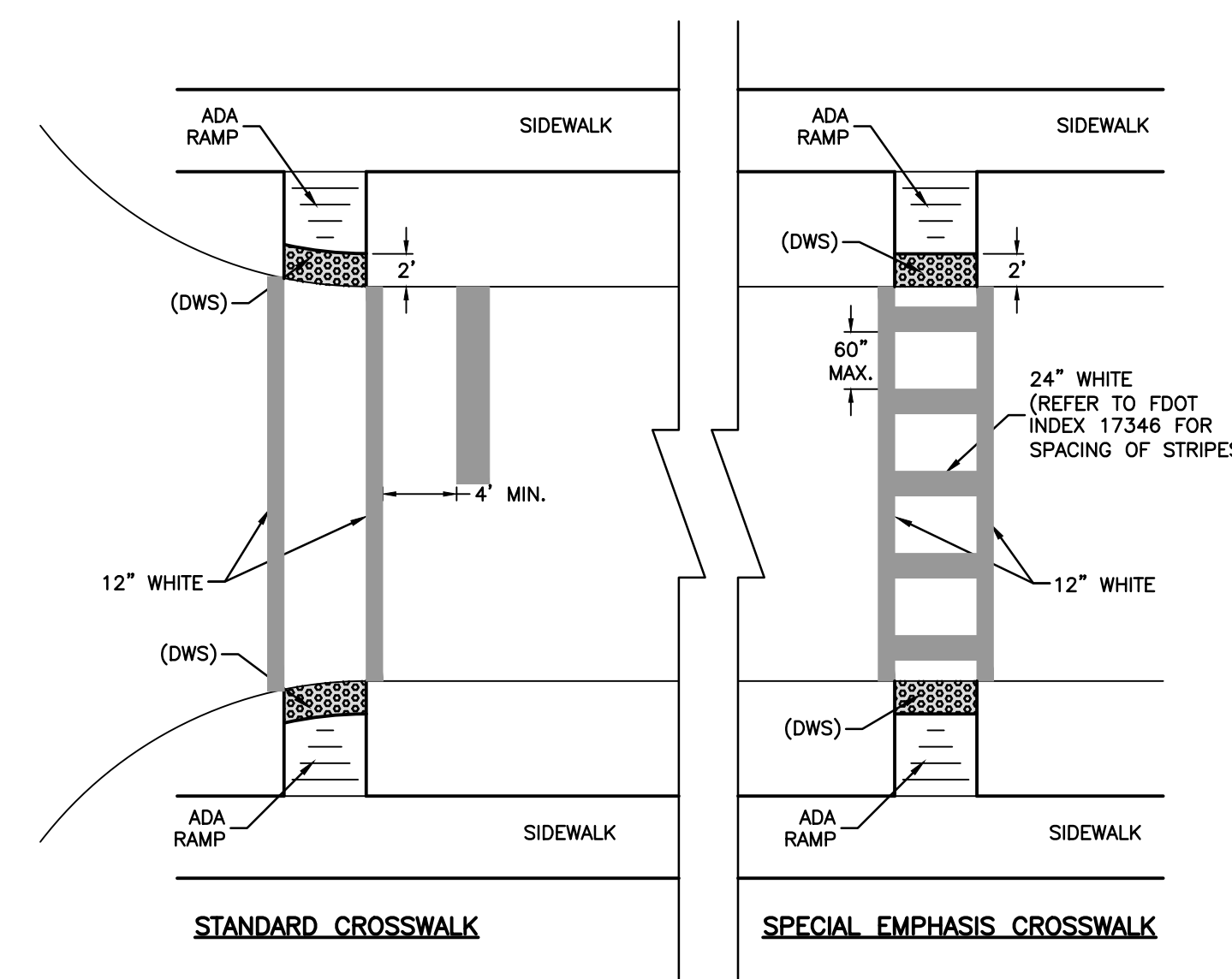
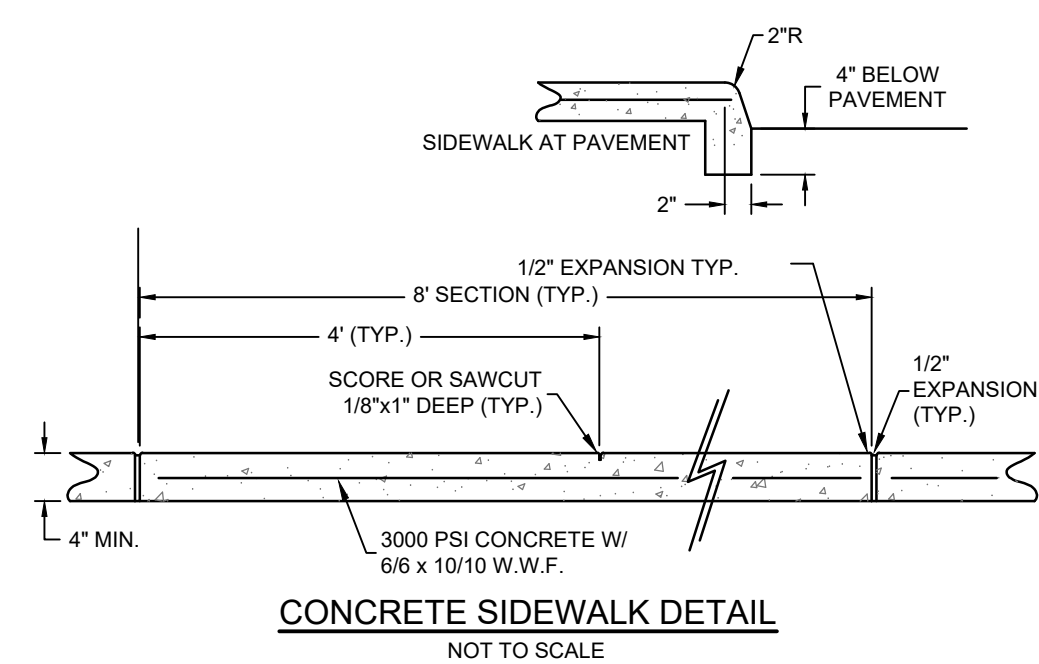


NOTES:  
1. SAW CUT PAVEMENT.  
2. EXCAVATE EXISTING PAVEMENT AND BASE TO DEPTH OF 3" MIN. FROM EXISTING SURFACE BUT TO BOTTOM OF EXISTING ASPHALTIC CONCRETE BASE.  
3. COMPACT BOTTOM OF EXCAVATED AREA AS DIRECTED BY THE ENGINEER.  
4. SPRAY PRIME/TACK COAT ON BOTTOM AND SIDES OF EXCAVATED AREA AT THE MINIMUM RATE OF 0.15 GAL/SY. THE AMOUNT APPLIED SHALL BE SUFFICIENT TO COAT THE SURFACE THOROUGHLY AND UNIFORMLY, WITH NO EXCESS.  
5. REPLACE EXCAVATED AREA WITH TYPE B-9.5 SUPERPAVE ASPHALT BASE, COMPACTED IN LIFTS NOT TO EXCEED 2 INCHES.  
6. REMOVE ALL EXCAVATED MATERIAL FROM SITE.

FULL DEPTH PATCH (FDP) DETAIL  
NOT TO SCALE



NEW PAVEMENT DETAIL FOR DRIVEWAYS NOT CURRENTLY PAVED  
NOT TO SCALE



NOTES:  
1.) INSTALL DETECTABLE WARNING STRIPS (DWS), AT ALL PEDESTRIAN CROSSWALKS, ON ROADWAYS, NOT SINGLE FAMILY RESIDENTIAL DRIVES. (PER FDOT INDEXES 304)  
2.) USE STANDARD CROSSWALK AT STOP LOCATION AND SPECIAL EMPHASIS CROSSWALK AT ALL OTHER LOCATIONS (PER FDOT INDEX 17346).  
3.) (DWS) COLOR TO BE YELLOW EXCEPT PORTIONS OF CRA TO BE RED BRICK.  
4.) (DWS) TO BE CAST-IN-PLACE REPLACEABLE STYLE AS MANUFACTURED BY ADA SOLUTION, INC. ([www.odatile.com](http://www.odatile.com)) UNLESS OTHERWISE APPROVED BY CITY.  
5.) CROSSWALK MINIMUM WIDTHS: INTERSECTION CROSSWALK 6'. MIDBLOCK CROSSWALK 10'.  
6.) ALL STRIPING SHALL BE THERMOPLASTIC

NOTES:  
1. SOD 2.5' MINIMUM ALONG ALL ROADWAYS AND DRIVEWAYS AS SHOWN ON PLANS  
2. ALL DISTURBED AREAS SHALL ALSO BE SODDED  
3. ALL SOD SHALL BE ZOYSIA UNLESS RESIDENT REQUESTS ST. AUGUSTINE

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**TYPICAL SECTIONS and DETAILS**  
**ENZOR STREET**  
**PAVING IMPROVEMENTS**  
**CALLAWAY, FLORIDA**

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DPR CERTIFICATION #EB-7806

SHEET NUMBER	E11
PROJECT NUMBER	26038

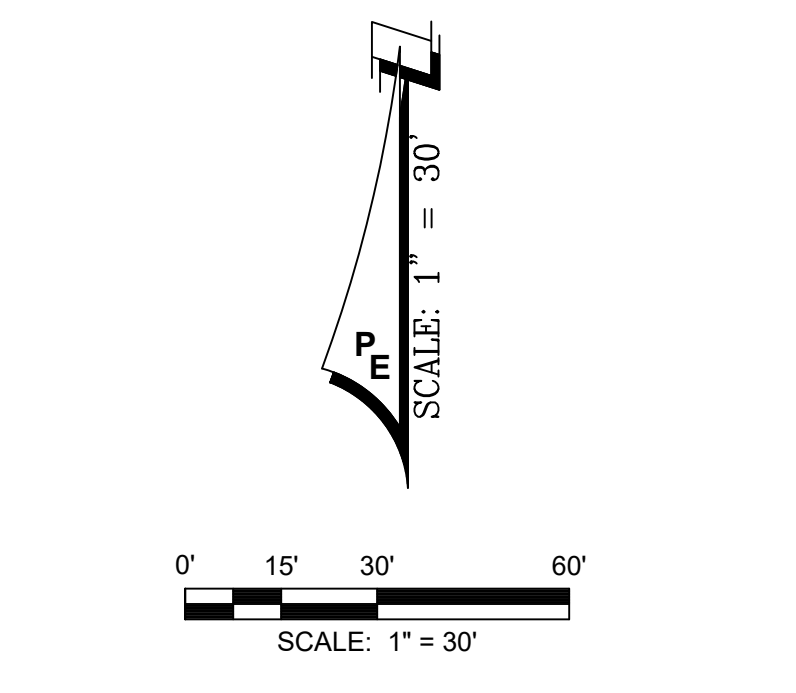
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26038 ENZOR STREET PAVING IMPROVEMENTS TYPICAL SECTIONS and DETAILS Sheet E11









**WARNING: GAS MAIN IN AREA OF CONSTRUCTION**

ELEVATIONS SHOWN HEREIN ARE BASED ON RTK GPS OBSERVATIONS UTILIZING L-NET GLOBAL NAVIGATION SATELLITE SYSTEM REFERENCED TO NAVD 80

ELEVATIONS AND BENCHMARKS SHOWN HEREIN ARE BASED ON THE NOTED ELEVATION REFERENCE. USE OF THE BENCHMARKS FOR VERTICAL CONTROL SHOULD BE PERFORMED IN ACCORDANCE WITH STANDARDS OF PRACTICE FOR PROFESSIONAL SURVEYORS AND MAPPERS AS OUTLINED IN RULE 54.11, FLORIDA ADMINISTRATIVE CODE. PRIOR TO UTILIZING THE BENCHMARKS FOR VERTICAL CONTROL, USER SHALL CAREFULLY PROVIDE BENCHMARKS TO ENSURE THAT THEY HAVE NOT BEEN DISTURBED AND THAT THEY ARE RELATIVE TO EACH OTHER.

COORDINATES SHOWN HEREIN ARE BASED ON RTK GPS OBSERVATIONS UTILIZING L-NET GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) NETWORK REFERENCED TO THE STATE PLANE COORDINATE SYSTEM, FLORIDA NORTH ZONE, NORTH AMERICAN DATUM 1983 (NAD 83), 2011 ADJUSTMENT.

APPROXIMATE UTILITIES, UNDERGROUND UTILITIES AND BURIED PIPES SHOWN HEREIN HAVE BEEN LOCATED AND ARE INDICATED IN THEIR RELATIVE POSITIONS. HOWEVER, THERE MAY EXIST UNDERGROUND UTILITIES AND BURIED PIPES WHICH WERE NOT LOCATED OR OF WHICH WE HAVE NO KNOWLEDGE.

**LEGEND**

- EXISTING MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING STORM INLET
- EXISTING WATER METER
- SIGN
- EXISTING FENCE
- EXISTING FIRE HYDRANT
- EXISTING SPOT GRADE
- EXISTING CONTOURS
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING ASPHALT
- LIMITS OF DEMOLITION

**SURVEY PROVIDED BY:**  
**BUCHANAN & HARPER, INC.**  
 735 WEST 11TH STREET  
 PANAMA CITY, FL 32401  
 PHONE: (850) 763-7427

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**EXISTING CONDITIONS, DEMOLITION AND EROSION CONTROL PLAN**  
**IMPERIAL DRIVE**  
 CALLAWAY, FLORIDA

James H. Slonina, P.E. 39197  
 Christopher B. Forehand, P.E. 58028  
 Stephen E. Price, P.E. 71646  
 J. Doug Crook, P.E. 66556

DPR CERTIFICATION #EB-7806

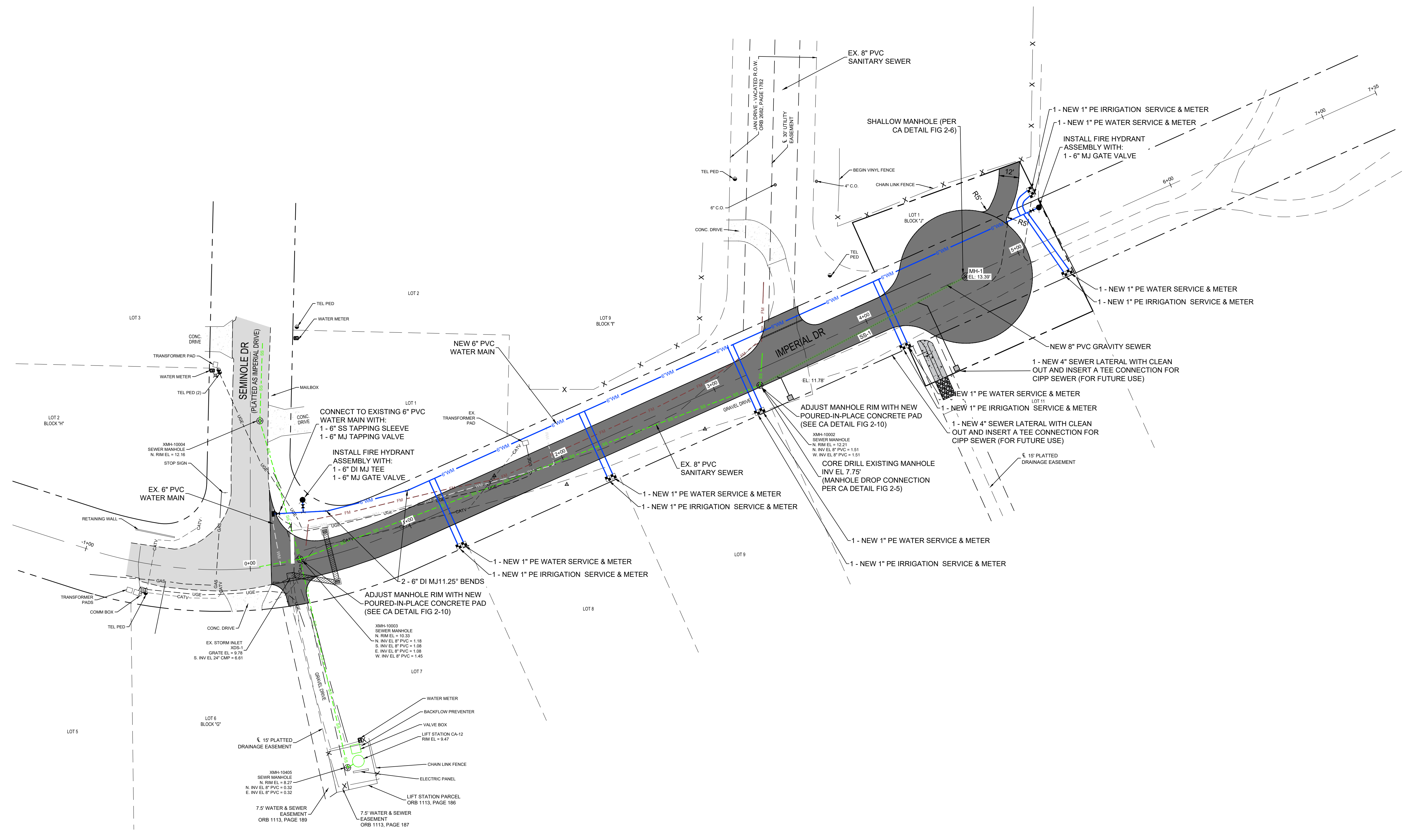
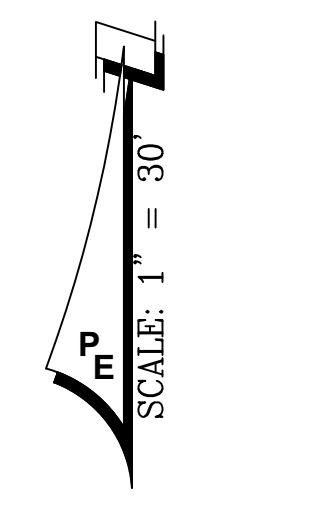
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PROJECT NUMBER	26035

26035 IMPERIAL DRIVE EXISTING CONDITIONS, DEMOLITION AND EROSION CONTROL PLAN Sheet 11





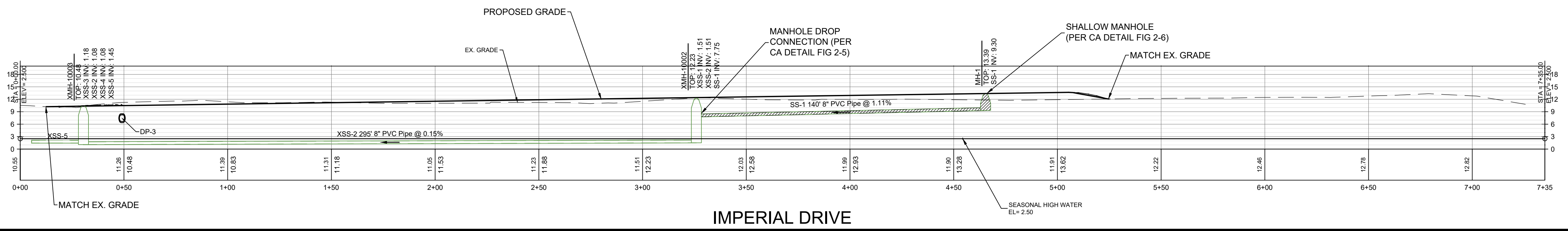




**LEGEND**

- EXISTING MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING STORM INLET
- EXISTING WATER METER
- SIGN
- EXISTING FENCE
- EXISTING FIRE HYDRANT
- EXISTING SPOT GRADE
- EXISTING CONTOURS
- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- EXISTING FORCE MAIN
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- PROPOSED SEWER MAIN
- PROPOSED GATE VALVE
- PROPOSED SLEEVE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- PROPOSED SEWER LATERAL

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**UTILITY PLAN  
 IMPERIAL DRIVE  
 CALLAWAY, FLORIDA**

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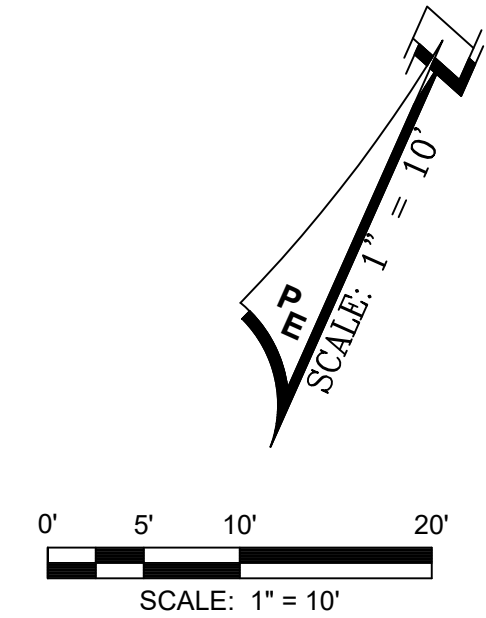
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PROJECT NUMBER	26035

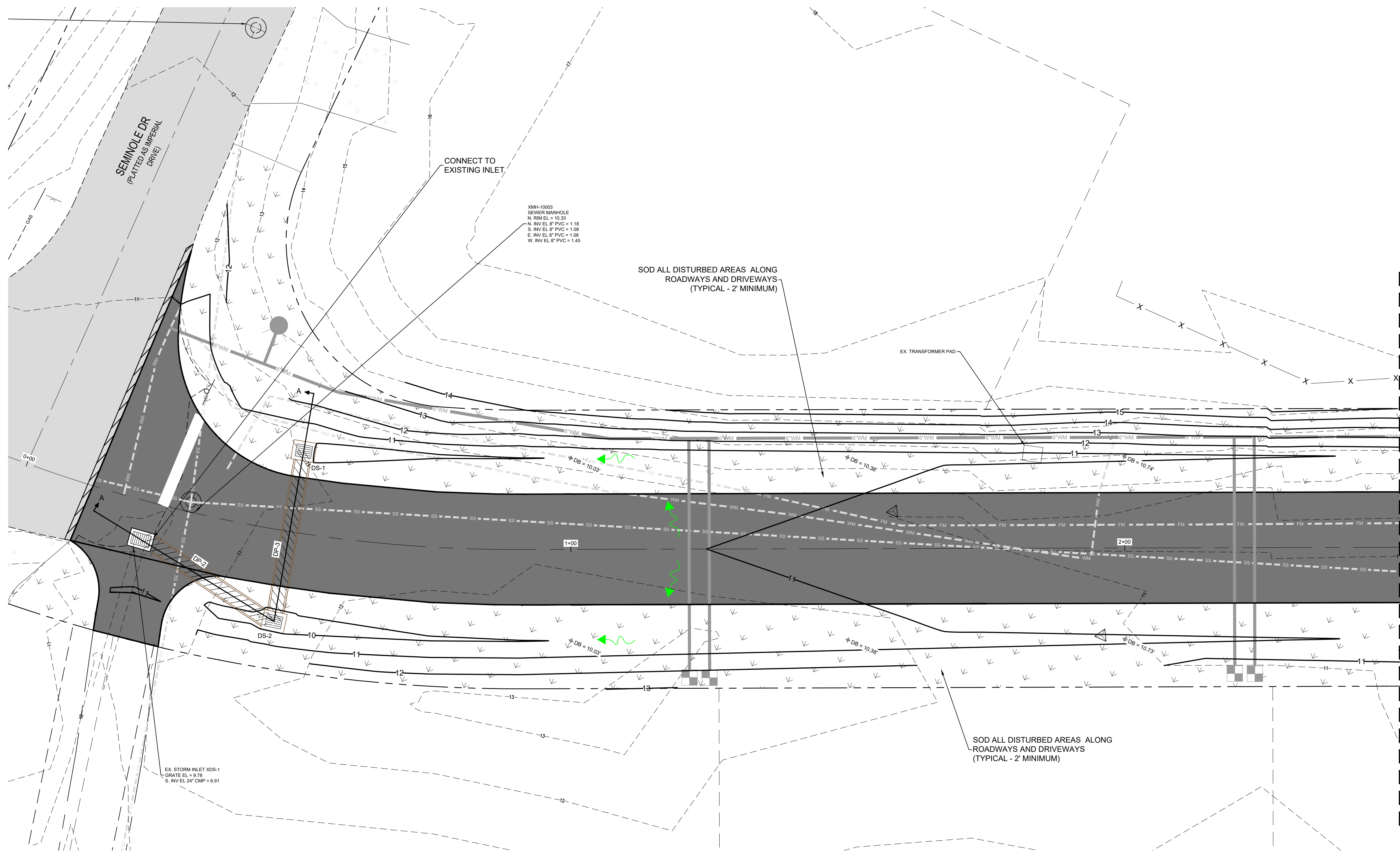
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26035 IMPERIAL DRIVE UTILITY PLAN Sheet 13

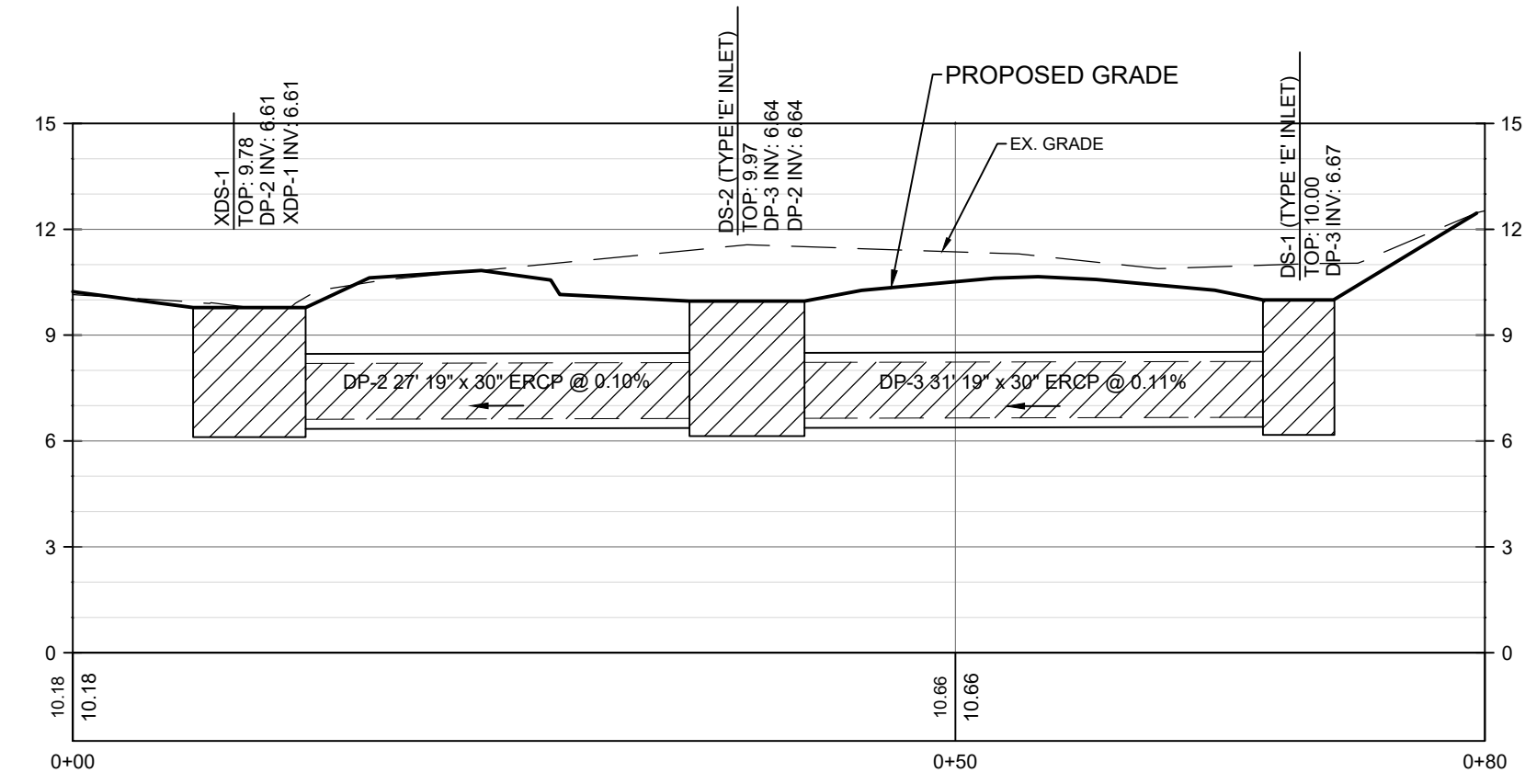




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MATCH LINE - SEE SHEET C5



SECTION A-A

**LEGEND**

- EXISTING MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING STORM INLET
- EXISTING WATER METER SIGN
- EXISTING FENCE
- EXISTING FIRE HYDRANT
- EXISTING SPOT GRADE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE

**NOTES:**  
 1. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS SHALL BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.  
 2. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY UPON IDENTIFICATION OF CONFLICTS.

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**GRADING AND DRAINAGE PLAN**  
**IMPERIAL DRIVE**  
 CALLAWAY, FLORIDA

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 Stephen E. Price, P.E. 71648  
 J. Doug Crook, P.E. 66556

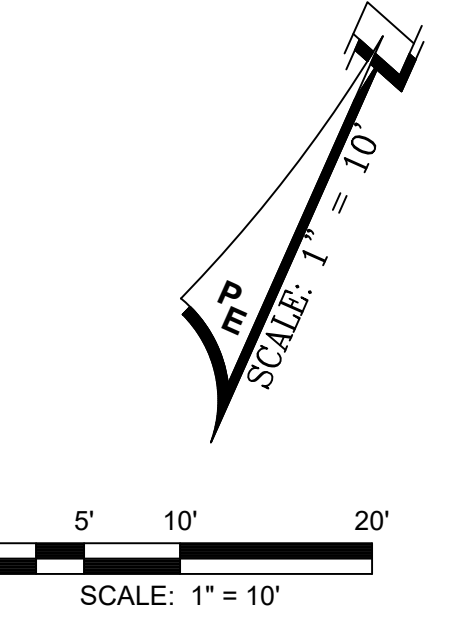
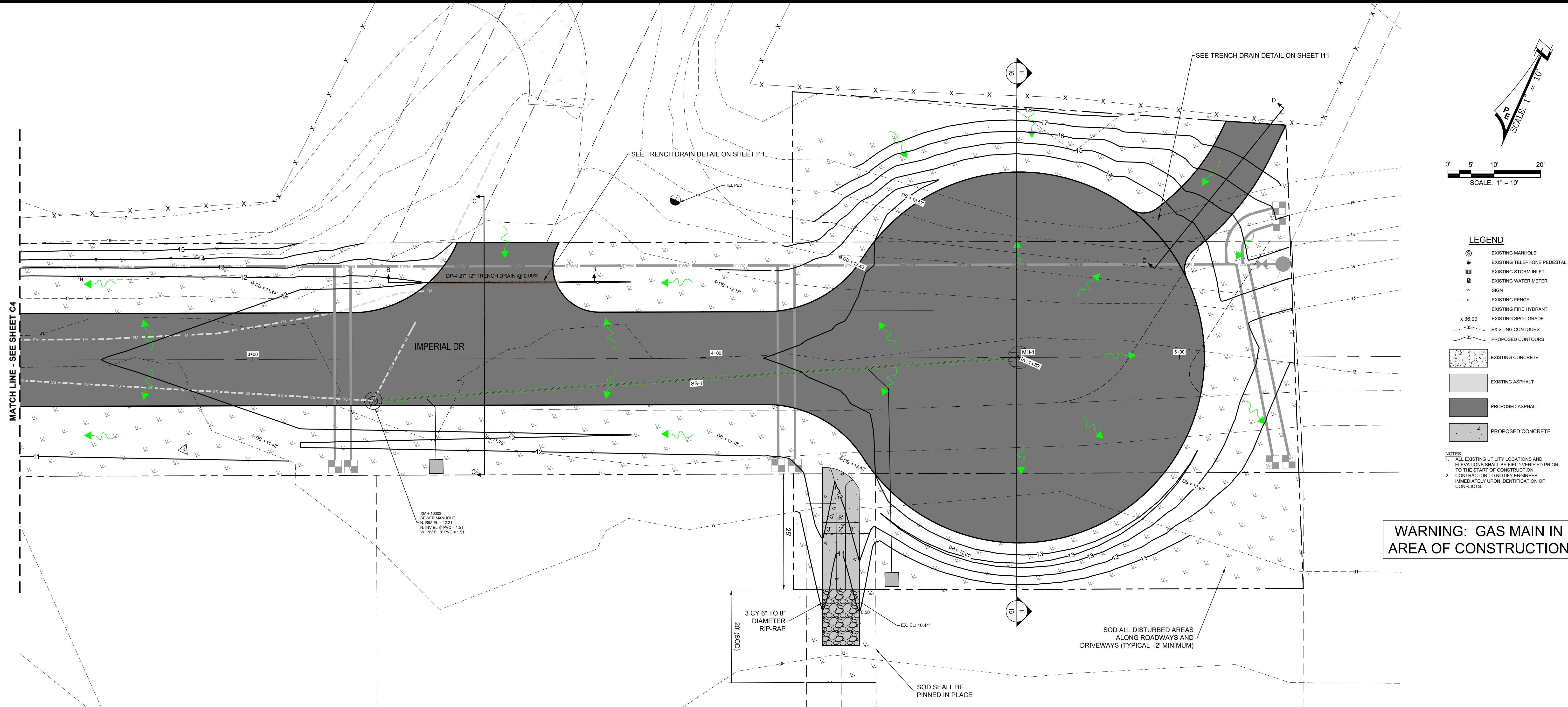
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26035 IMPERIAL DRIVE GRADING AND DRAINAGE PLAN Sheet 14

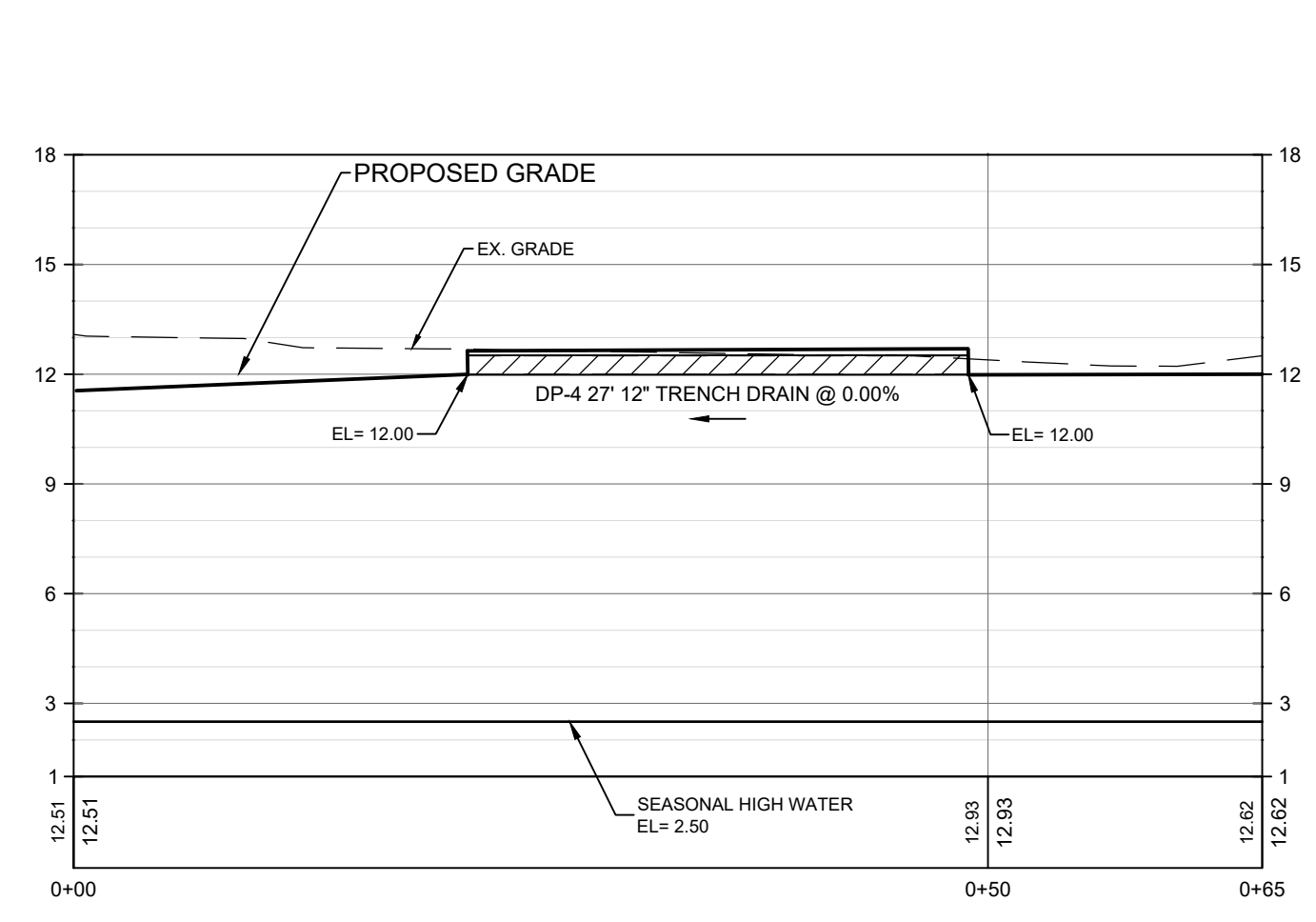




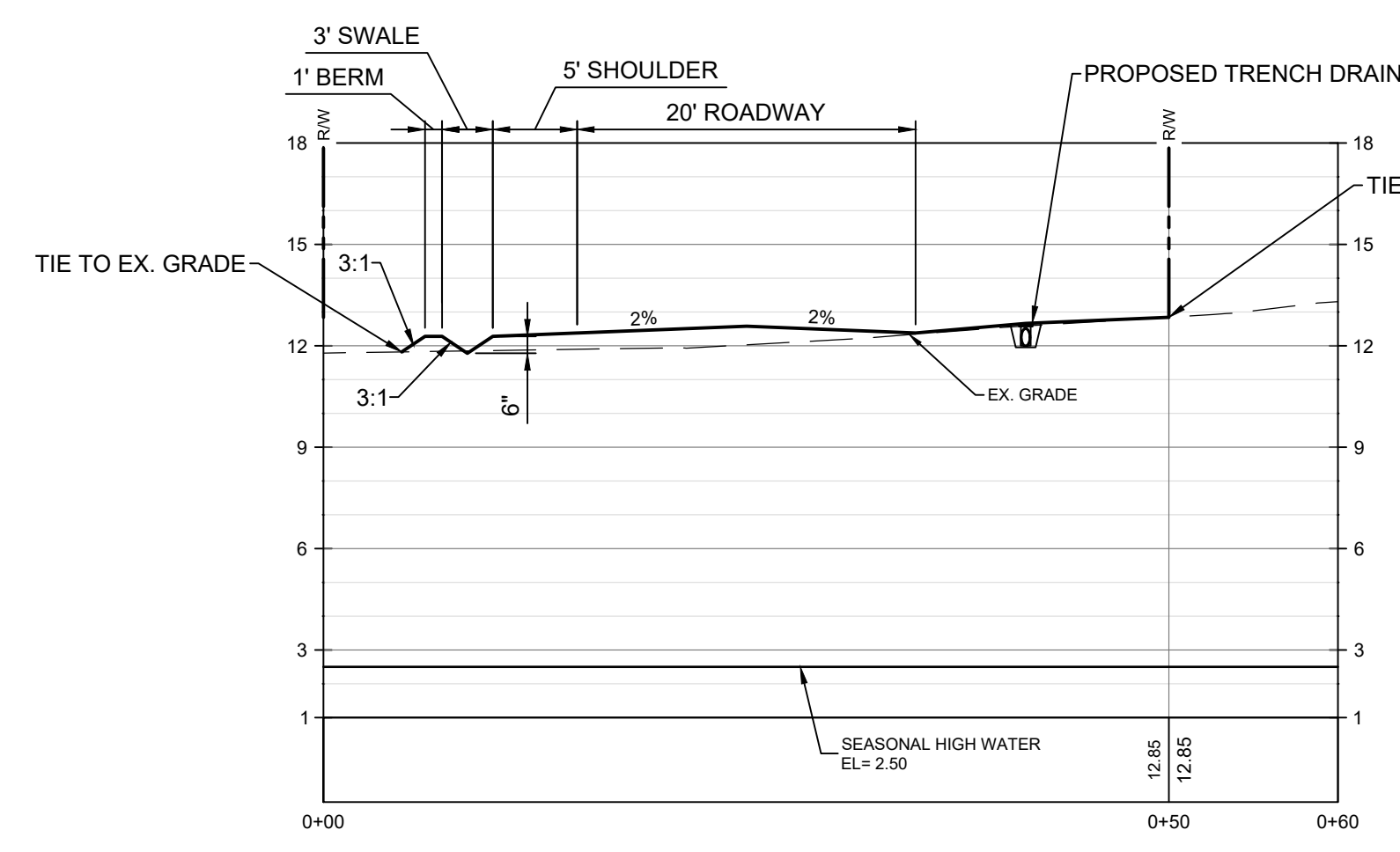
- LEGEND**
- ⊙ EXISTING MANHOLE
  - ⊙ EXISTING TELEPHONE PEDESTAL
  - ⊙ EXISTING STORM INLET
  - ⊙ EXISTING WATER METER
  - ⊙ SIGN
  - x- EXISTING FENCE
  - x- EXISTING FIRE HYDRANT
  - x- EXISTING SPOT GRADE
  - x- EXISTING CONTOURS
  - x- PROPOSED CONTOURS
  - ▨ EXISTING CONCRETE
  - ▨ EXISTING ASPHALT
  - ▨ PROPOSED ASPHALT
  - ▨ PROPOSED CONCRETE

- NOTES**
1. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS SHALL BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.
  2. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY UPON IDENTIFICATION OF CONFLICTS.

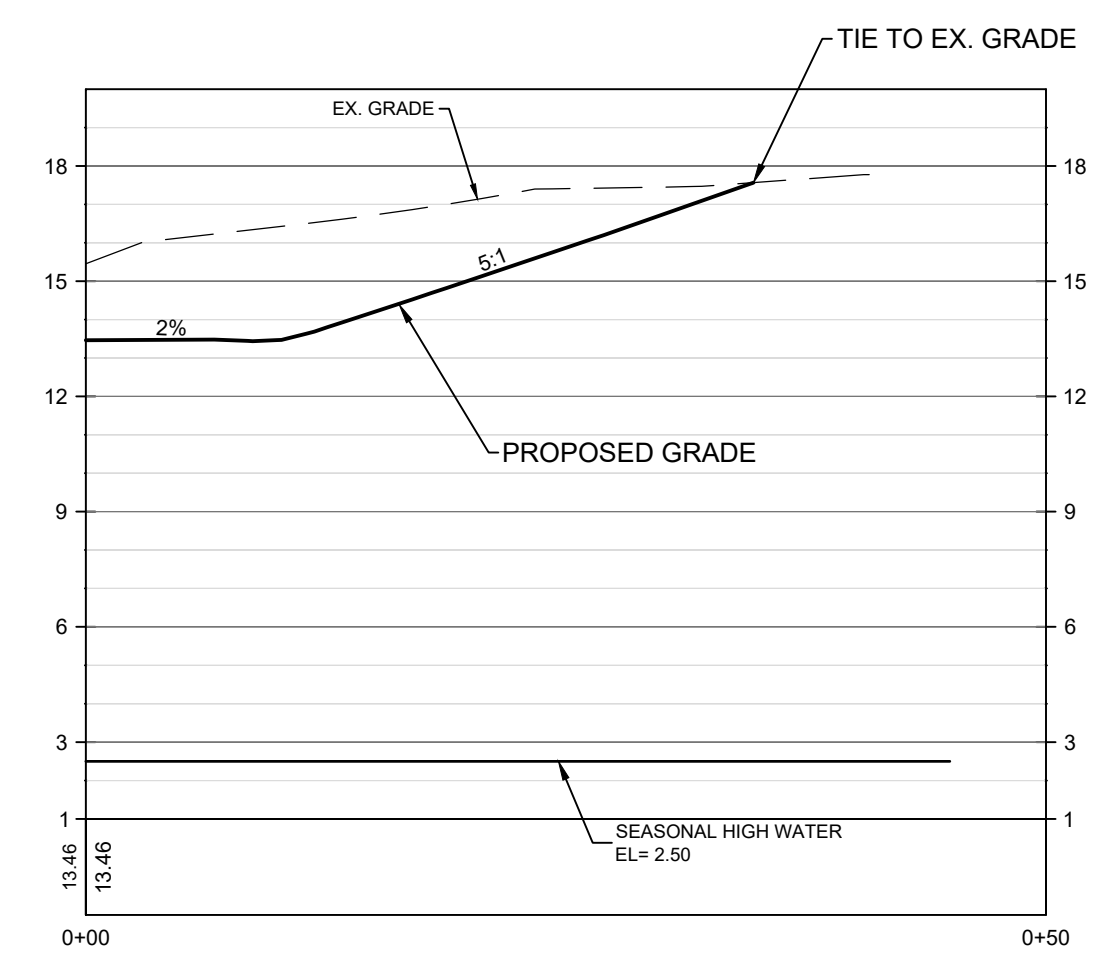
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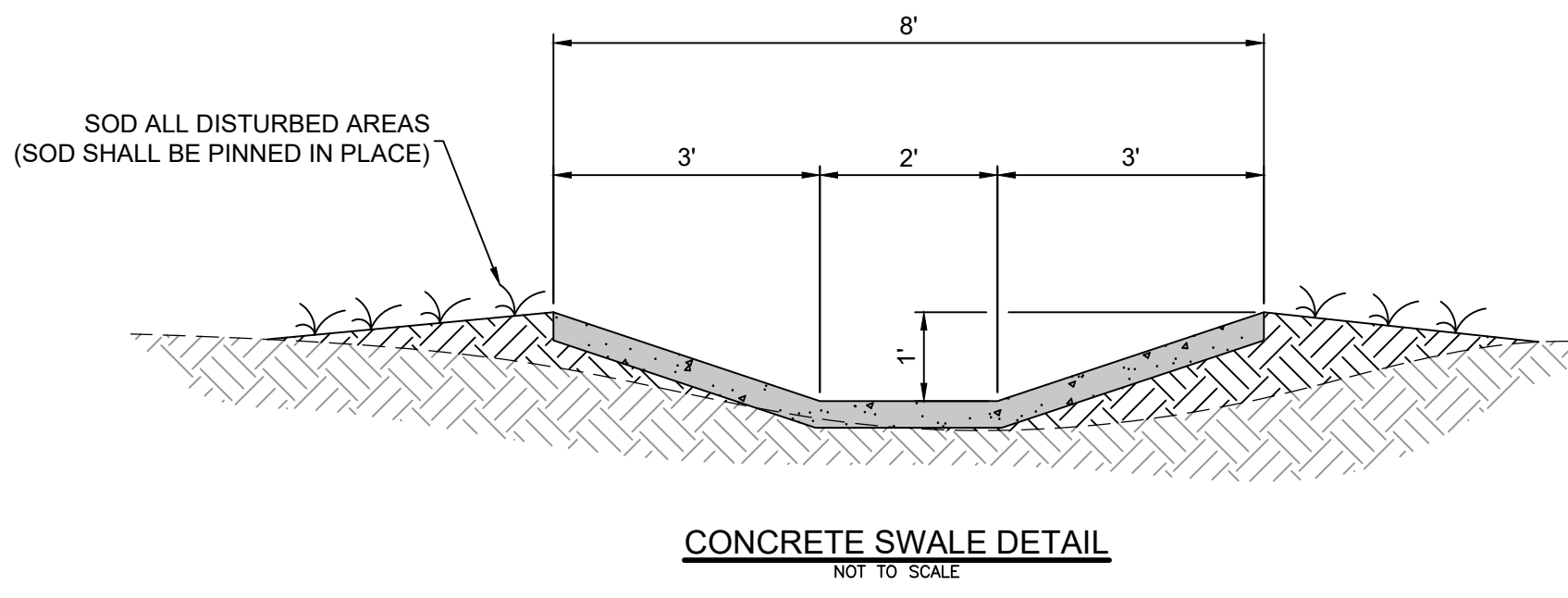
SECTION B-B



SECTION C-C



SECTION D-D



CONCRETE SWALE DETAIL

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**GRADING AND DRAINAGE PLAN**  
**IMPERIAL DRIVE**  
 CALLAWAY, FLORIDA

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 Christopher B. Forehand, P.E. 58028  
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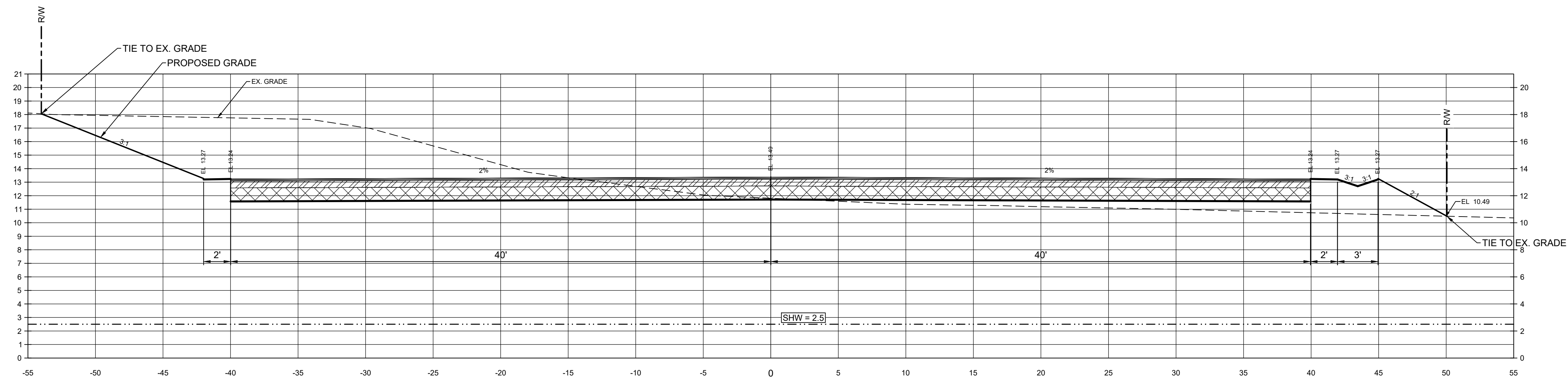
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PROJECT NUMBER	26035

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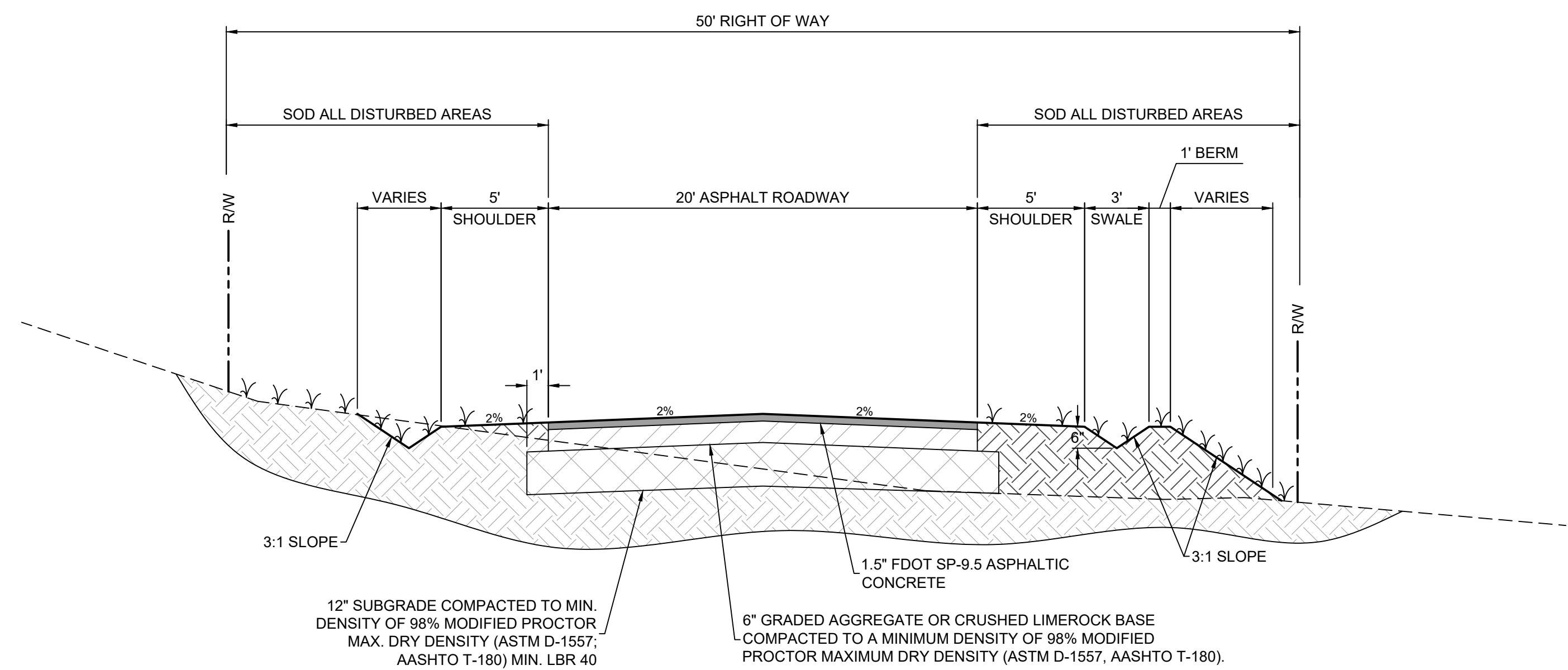
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26035 IMPERIAL DRIVE GRADING AND DRAINAGE PLAN Sheet 15





**F**  
15  
**ROADWAY SECTION 'F'**  
NOT TO SCALE



**TYPICAL SECTION DETAIL**  
NOT TO SCALE

**NOTE:**  
1. PIN ALL SOD WITH 3:1 OR GREATER SLOPE  
2. ALL SOD SHALL BE ZOYSA

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**CROSS SECTIONS**  
**IMPERIAL DRIVE**  
 CALLAWAY, FLORIDA

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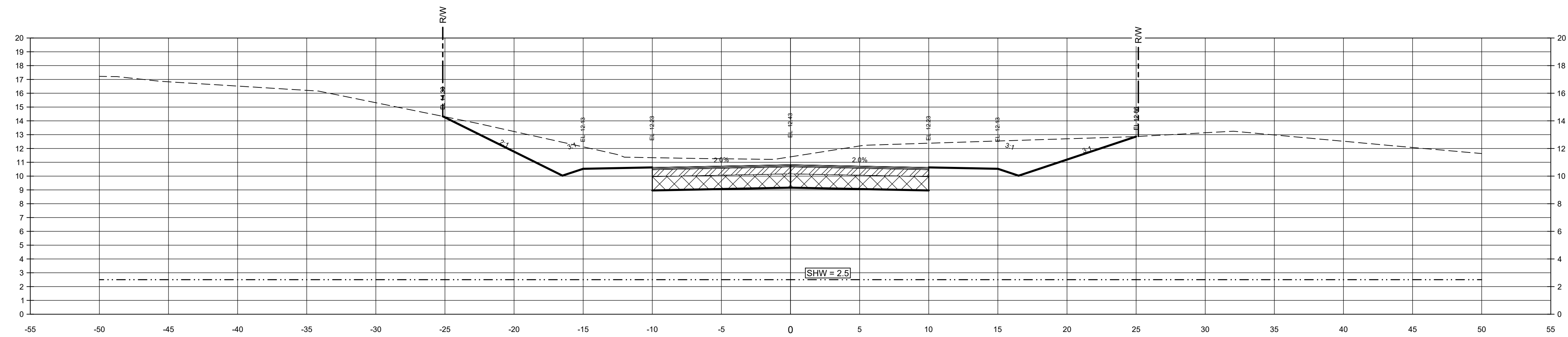
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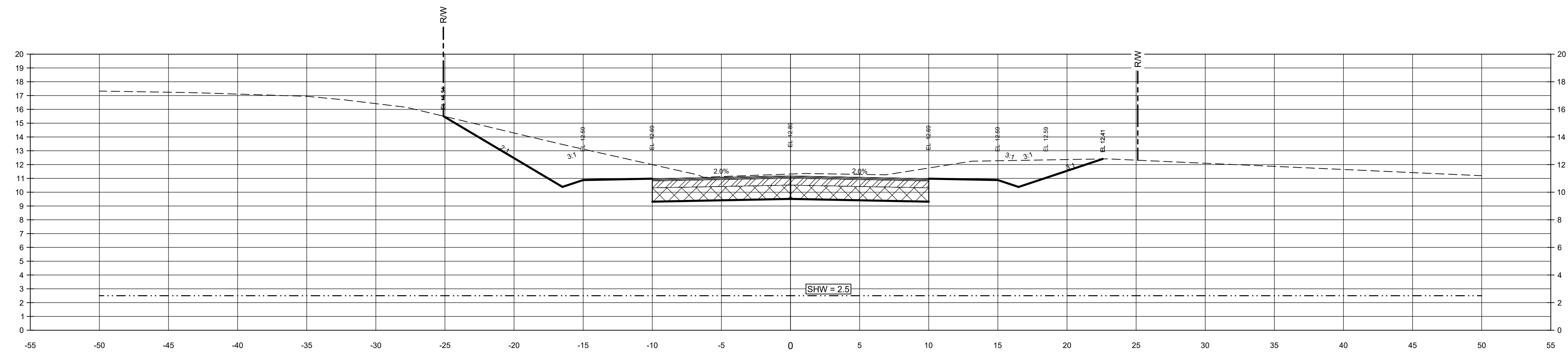
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26035 IMPERIAL DRIVE CROSS SECTIONS Sheet 16

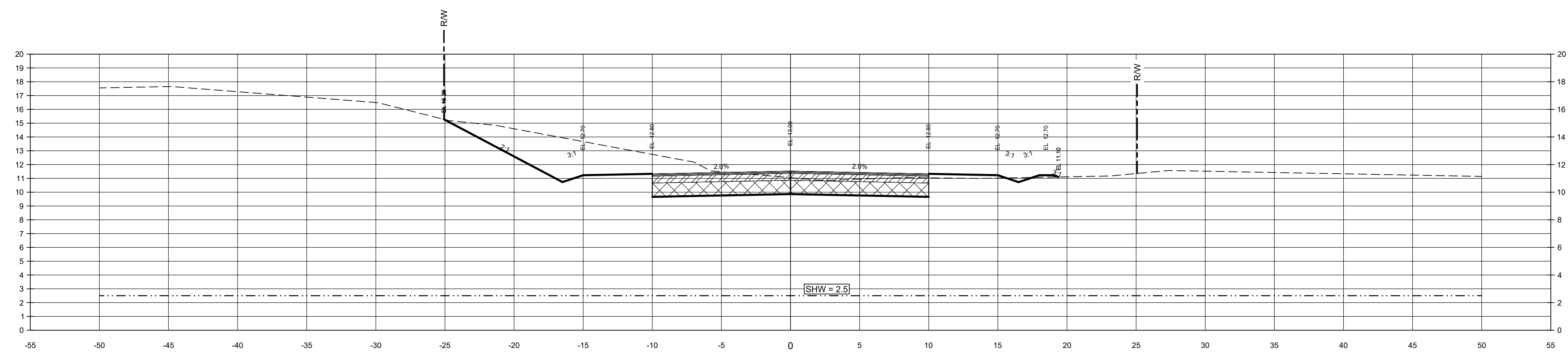




STA 1+00



STA 1+50



STA 2+00

SCALE: 1" = 5'

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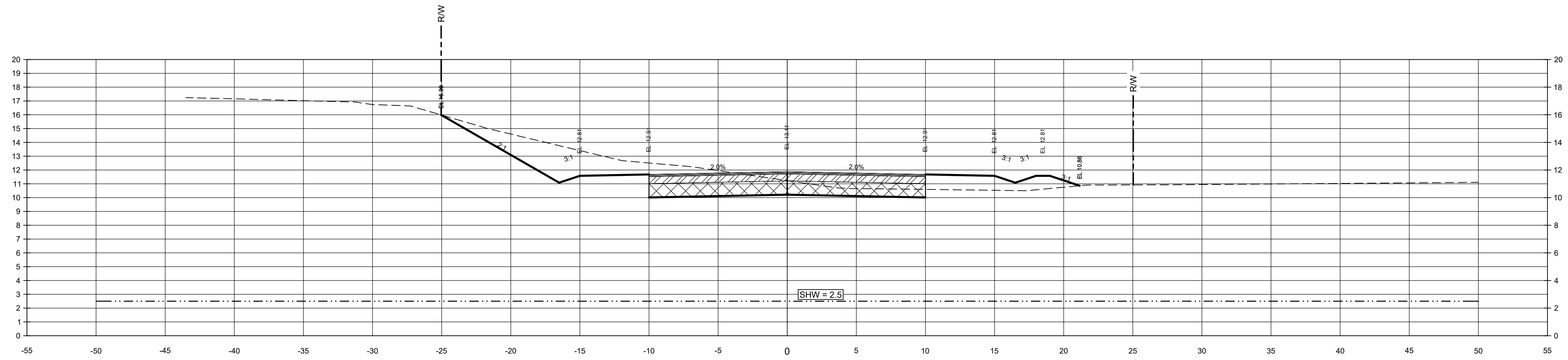
**CROSS SECTIONS**  
**IMPERIAL DRIVE**  
  
 CALLAWAY, FLORIDA

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 Stephen E. Price, P.E. 71648  
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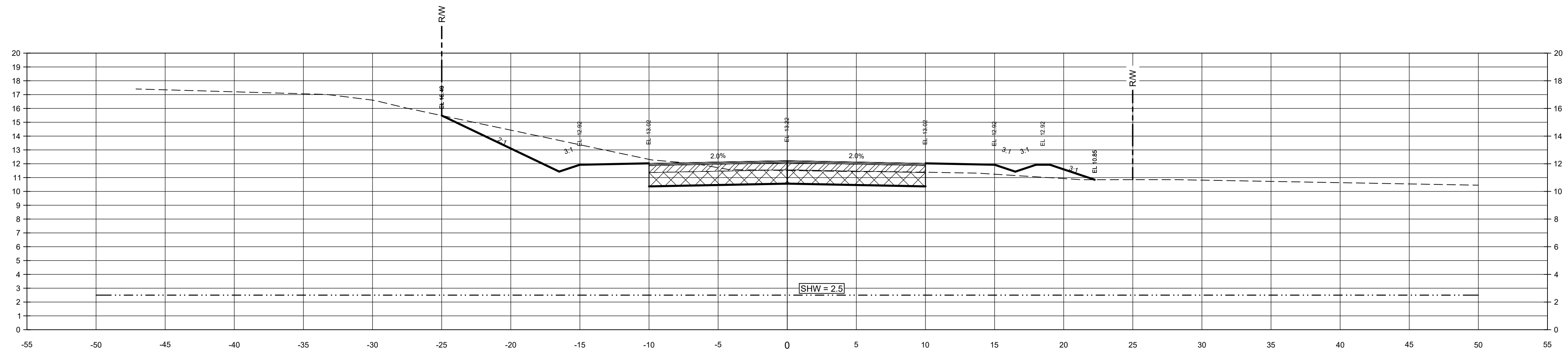
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PROJECT NUMBER	26035

26035 IMPERIAL DRIVE CROSS SECTIONS Sheet 17

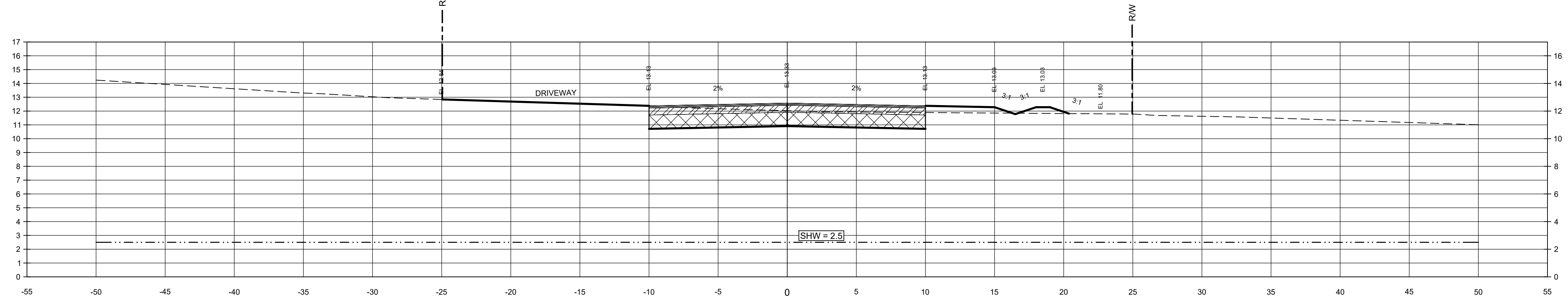




STA 2+50



STA 3+00



STA 3+50

SCALE: 1" = 5'

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**CROSS SECTIONS  
 IMPERIAL DRIVE  
 CALLAWAY, FLORIDA**

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 Christopher B. Forehand, P.E. 58028  
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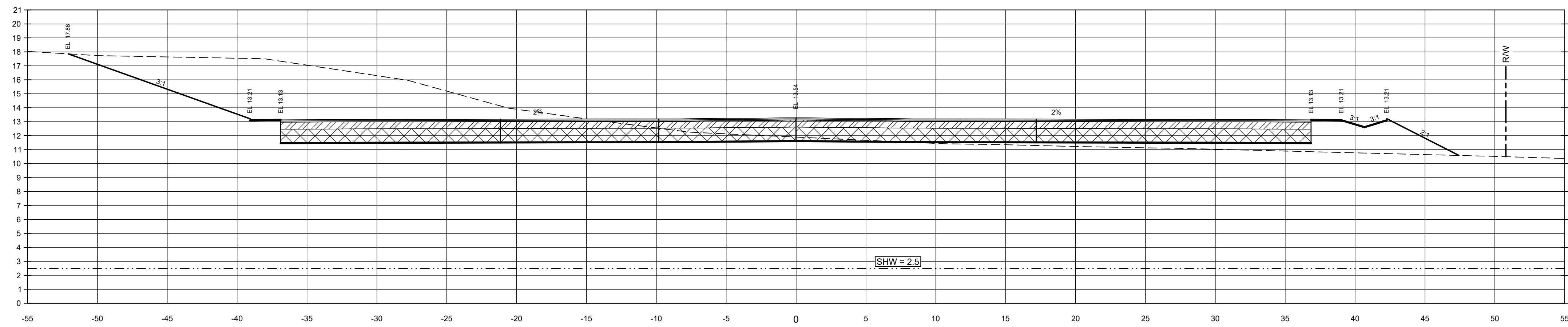
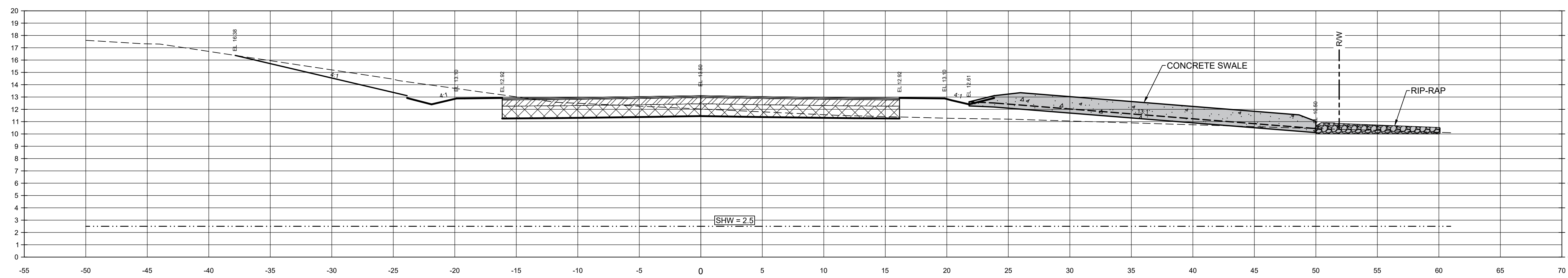
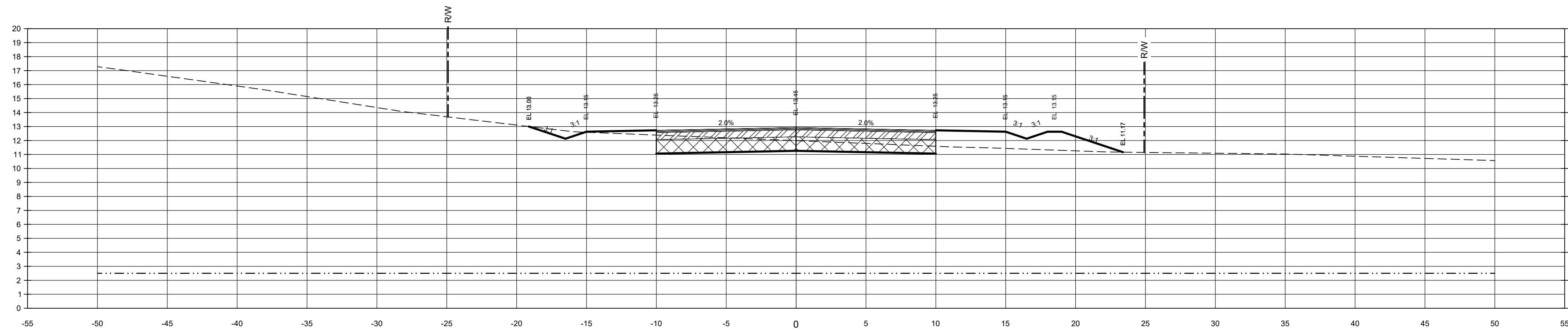
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PROJECT NUMBER <b>26035</b>

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26035 IMPERIAL DRIVE CROSS SECTIONS Sheet 18





SCALE: 1" = 5'

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CROSS SECTIONS  
 IMPERIAL DRIVE  
 CALLAWAY, FLORIDA

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SHEET NUMBER	19
PROJECT NUMBER	26035

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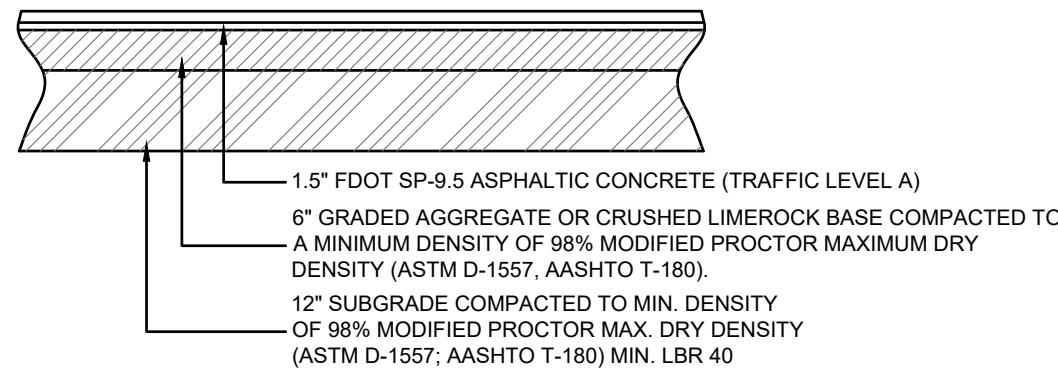
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26035 IMPERIAL DRIVE CROSS SECTIONS Sheet 19



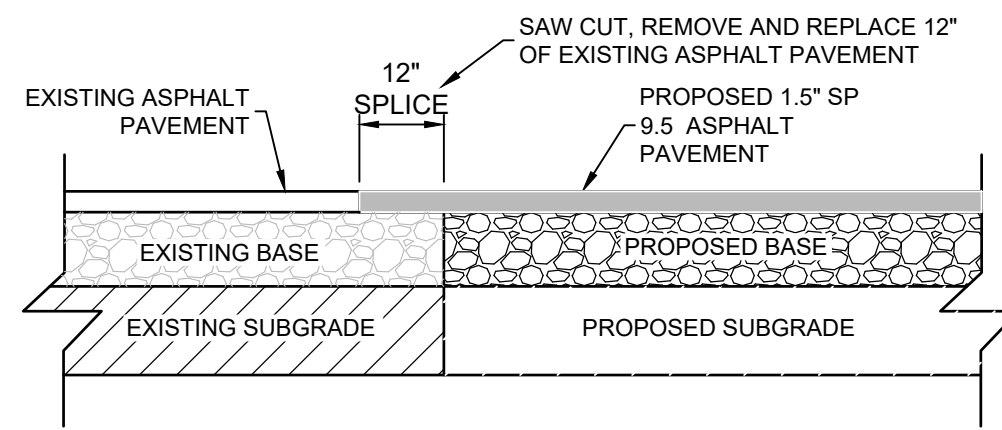






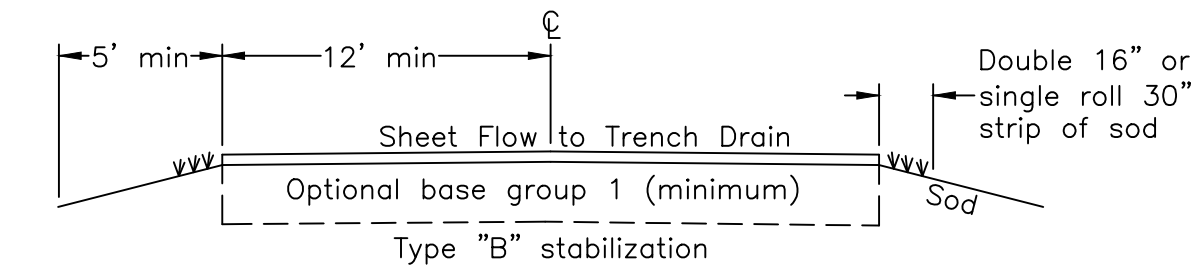
- PAVEMENT NOTES:**
- CLEAR AND GRUB SURFACE SOILS WITHIN THE PAVEMENT PERIMETER AND 1 FT. MIN. BEYOND THE EDGE OF PAVEMENT.
  - FILL MATERIAL SHALL BE CLEAN SANDS TO SLIGHTLY SILTY SANDS CONTAINING NO MORE THE 12% FINER THAN THE U.S. No. 200 MESH SIEVE AND FREE OF ORGANICS OR CLAY.
  - FILL SHALL BE PLACED IN 6" LIFTS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY PER MODIFIED PROCTOR (AASHTO T-180)

**ASPHALT PAVEMENT DETAIL**  
NOT TO SCALE

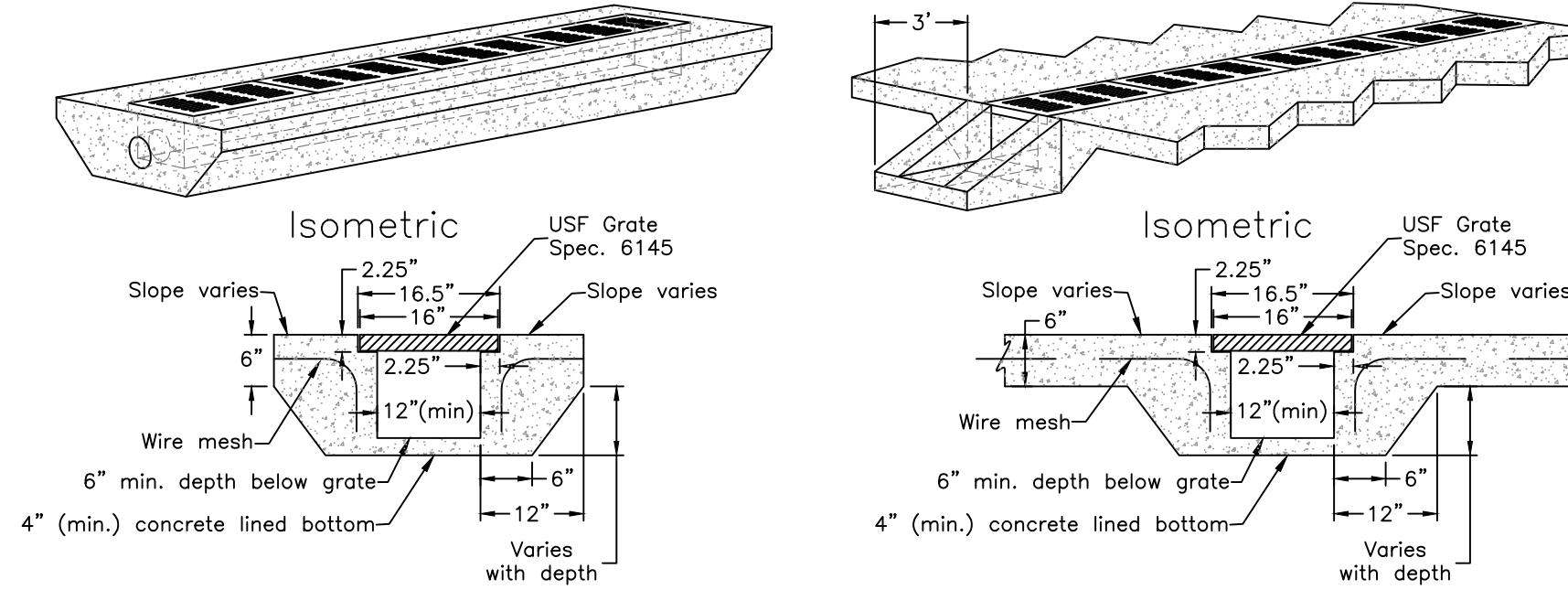


- NOTES:**
- PROVIDE ASPHALT SPLICE AT ALL TRANSITIONS BETWEEN NEW AND EXISTING PAVEMENT SECTIONS.
  - RESTORE EXISTING BASE TO ORIGINAL CONDITION OR BETTER.

**ASPHALTIC PAVEMENT RECONSTRUCTION AND SPLICE DETAIL**  
NOT TO SCALE



**Driveway Cross Section**

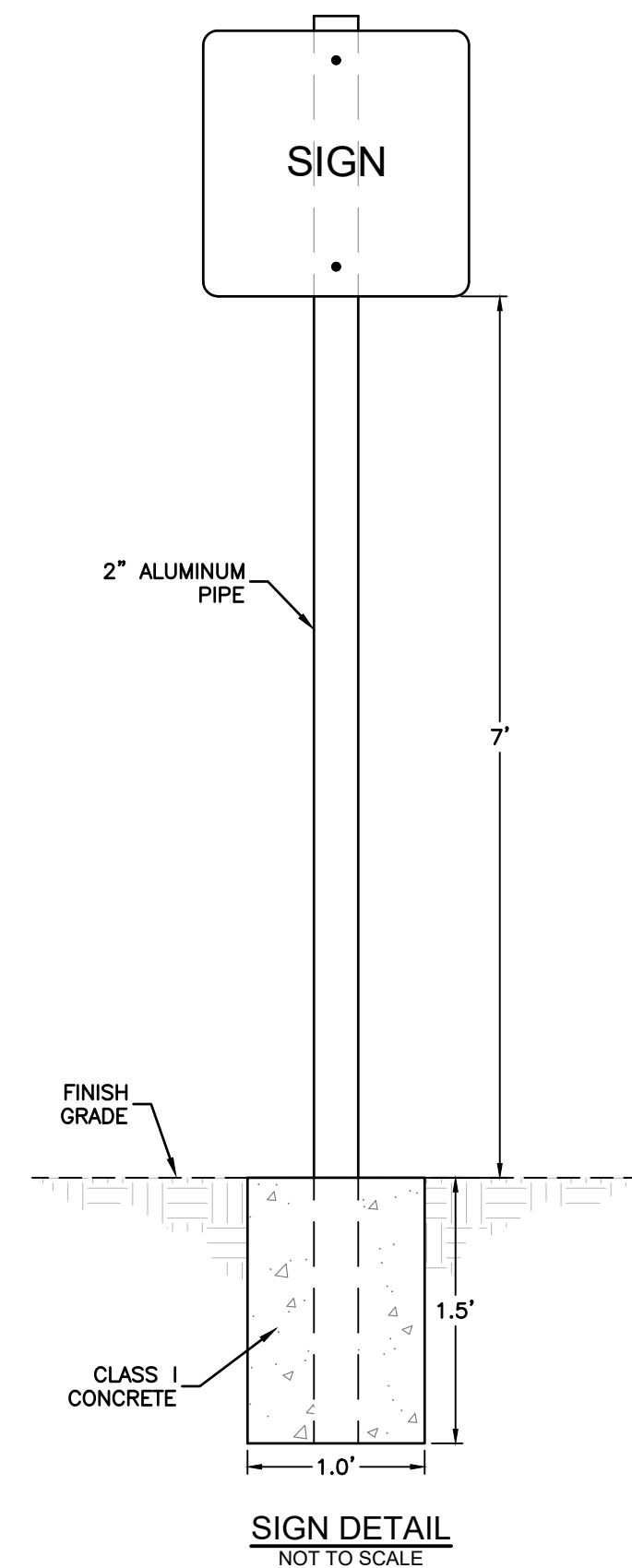


**Typical Section 1**

**Typical Section 2**

- Notes:**
- Concrete dimensions are typical on each side.
  - Concrete to be F.D.O.T. specification Class 1 Portland cement concrete that is 6" thick for commercial driveways or 4" thick for residential driveways.
  - 8" trench width is minimum. Engineer to size based on existing flow conditions.
  - Slope stabilization requirements (slopes noted as verchar):
    - flat to 1:3 - seed and mulch, hydro-seed, sod (type and application rate per F.D.O.T. Index 105)
    - 1:3 to 1:2 - sod lapped and pinned
    - 1:2 to 1:1 - erosion control blanket with seeding
    - 1:1 or greater - retaining wall or armorform
  - All sod placed staggered per F.D.O.T. Index 105.
  - Trench width to be sized based on actual flow conditions.

**CONCRETE DRIVEWAY TRENCH DRAIN DETAIL**  
NOT TO SCALE



**SIGN DETAIL**  
NOT TO SCALE

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**CONSTRUCTION DETAILS**  
**IMPERIAL DRIVE**  
 CALLAWAY, FLORIDA

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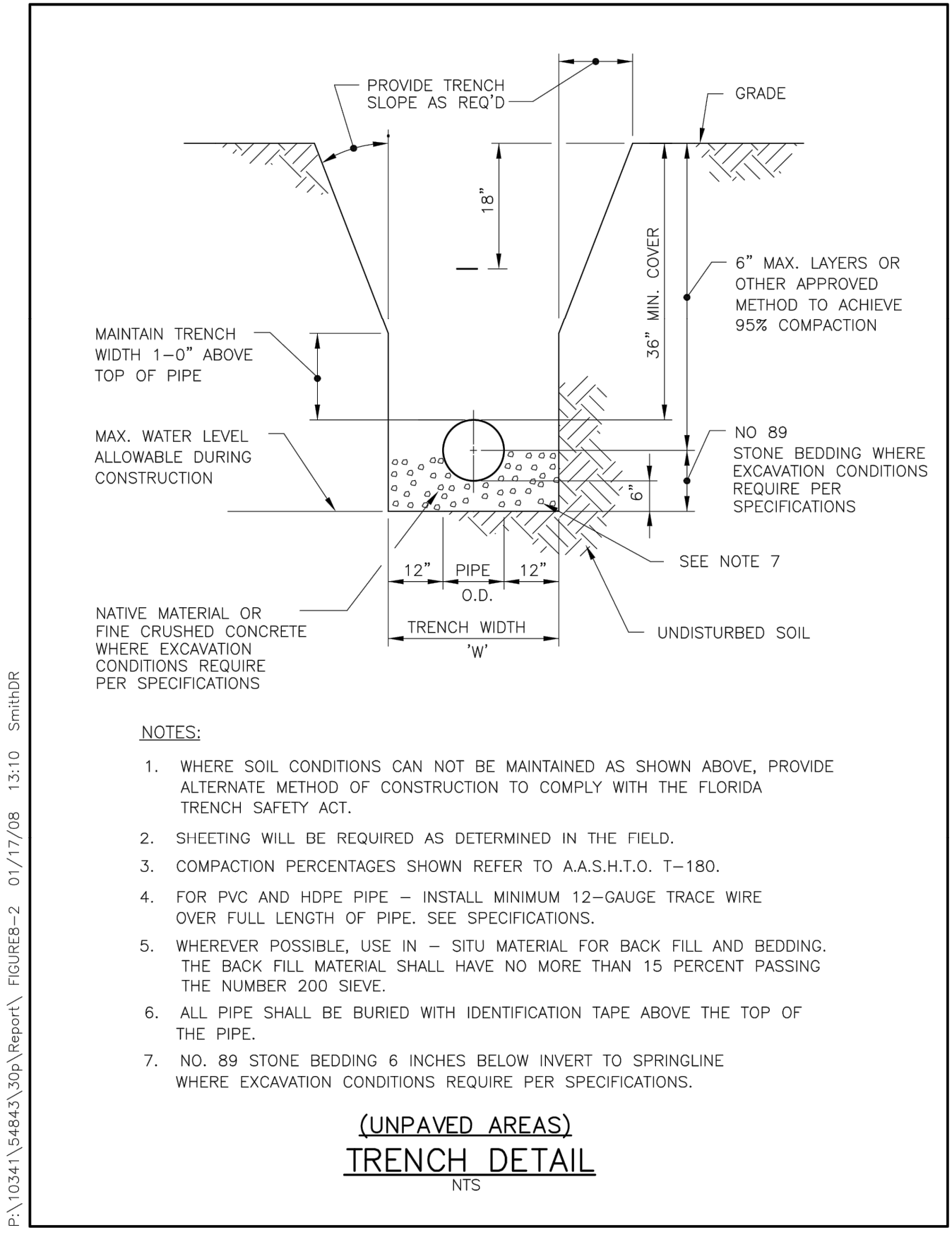
SHEET NUMBER	111
PROJECT NUMBER	26035

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Figure 8-2  
City Of Callaway  
Trench Detail

**LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314**

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)	Water Main 3 ft. minimum	Water Main 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred.	Alternate 3 ft. minimum
Vacuum Sanitary Sewer	Water Main 10 ft. preferred 3 ft. minimum	Water Main 12 inches preferred 6 inches minimum	Alternate 3 ft. minimum
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)	Water Main 10 ft. preferred 6 ft. minimum (3)	Water Main 12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred.	Alternate 6 ft. minimum
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.  
 (2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.  
 (3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.  
 (4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Disclaimer - This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

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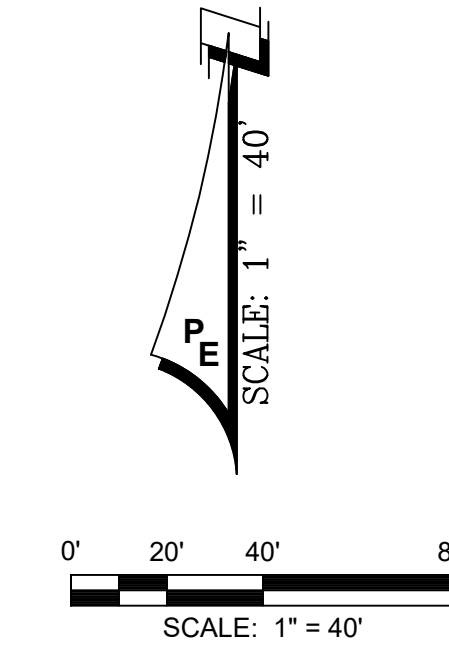
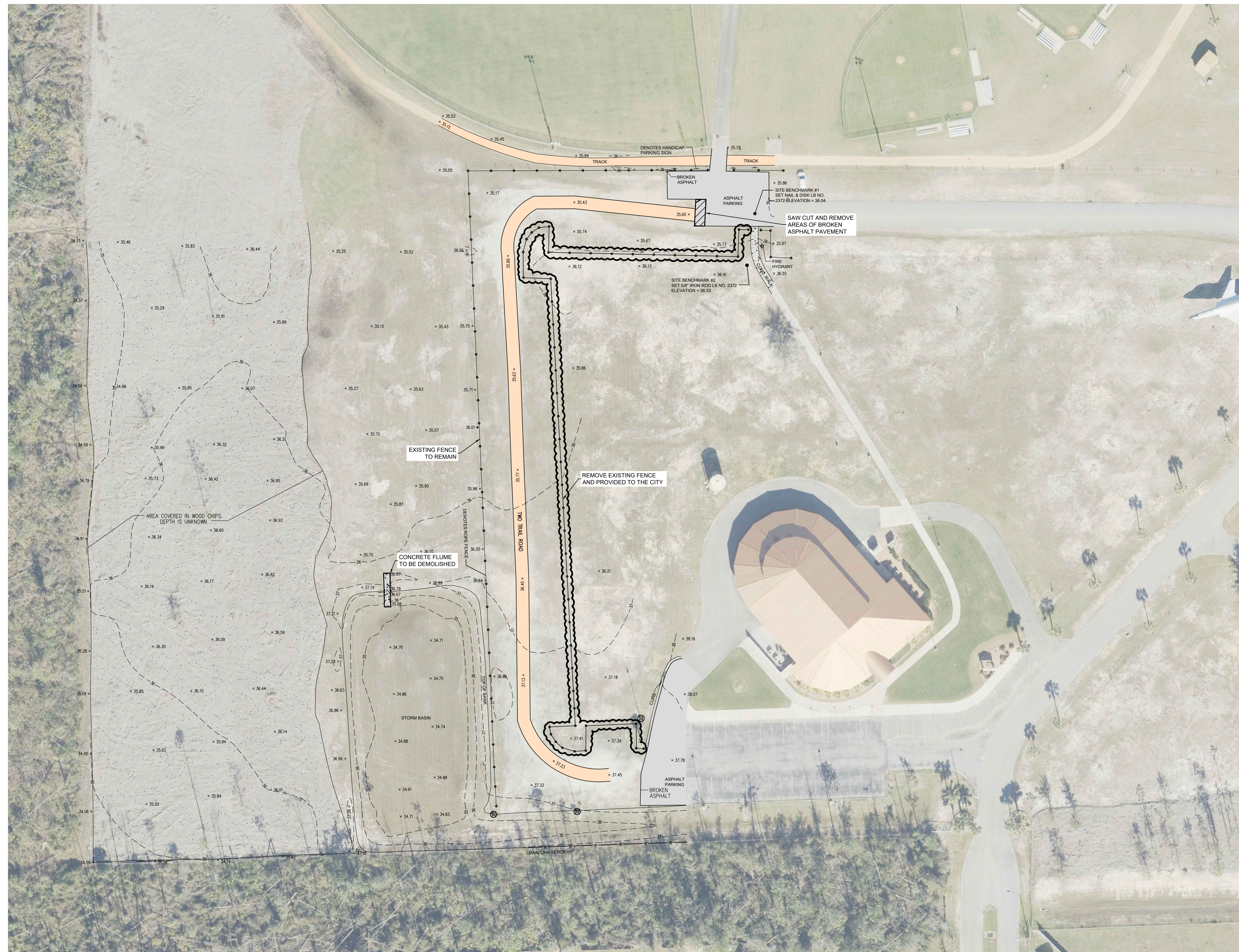
**UTILITY DETAILS  
IMPERIAL DRIVE  
CALLAWAY, FLORIDA**

James H. Slonina, P.E. 39197  
 Christopher B. Forehand, P.E. 58028  
 Stephen E. Price, P.E. 71646  
 J. Doug Crook, P.E. 66556

DPR CERTIFICATION #EB-7806

SHEET NUMBER <b>113</b>
PROJECT NUMBER <b>26035</b>





ELEVATIONS AND BENCHMARKS SHOWN HEREON ARE BASED ON THE NOTED ELEVATION REFERENCE. USE OF THE BENCHMARKS FOR VERTICAL CONTROL SHOULD BE PERFORMED IN ACCORDANCE WITH STANDARDS OF PRACTICE FOR PROFESSIONAL SURVEYORS AND MAPPERS AS OUTLINED IN RULE 5A-17, FLORIDA ADMINISTRATIVE CODE. PRIOR TO UTILIZING THE BENCHMARKS FOR VERTICAL CONTROL, USER SHALL CHECK PROVIDED BENCHMARKS TO ENSURE THAT THEY HAVE NOT BEEN DISTURBED AND THAT THEY ARE RELATIVE TO EACH OTHER.

A REVIEW OF FLOOD INSURANCE RATE MAP NUMBER 120050366H FOR BAY COUNTY, FLORIDA, AND INCORPORATED AREAS, COMMUNITY PANEL NUMBER 12005 0366 H, EFFECTIVE DATE: JUNE 2, 2009, INDICATES THAT THE PROPERTY SHOWN HEREON IS WITHIN ZONE X.

- LEGEND**
- EXISTING MANHOLE
  - EXISTING LIGHT POLE
  - EXISTING POWER POLE
  - EXISTING GUY ANCHOR
  - SIGN
  - EXISTING FENCE
  - EXISTING FIRE HYDRANT
  - EXISTING SPOT GRADE
  - EXISTING SPOT GRADE
  - EXISTING CONTOURS
  - EXISTING CONCRETE TO REMAIN
  - EXISTING ASPHALT TO REMAIN
  - EXISTING ASPHALT TO BE REMOVED
  - EXISTING FENCE TO BE REMOVED

**SURVEY PROVIDED BY:**  
 BUCHANAN & HARPER, INC.  
 735 WEST 11TH STREET  
 PANAMA CITY, FL 32401  
 PHONE: (850) 763-7427

Date: Wednesday, April 13, 2022 7:55:26 AM ID: C:\Users\jdc\OneDrive\Drawings\26027.rvt

REV	DATE	BY	REVISIONS

NOT RELEASED FOR CONSTRUCTION BY: DATE:

SCALE: AS NOTED
DESIGNED BY: JDC
DRAWN BY: JAH
REVIEWED BY: CBF
ISSUE DATE: APRIL 2021
ACAD FILE NAME: 26027.rvt.dwg

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**EXISTING CONDITIONS AND DEMOLITION PLAN**  
 CALLAWAY RECREATIONAL COMPLEX  
 LOOP ROAD  
 CALLAWAY, FLORIDA

James H. Slonina, P.E. 39197  
 James M. Southall, P.E. 39637  
 Christopher B. Forehand, P.E. 58028  
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DPR CERTIFICATION #EB-7806

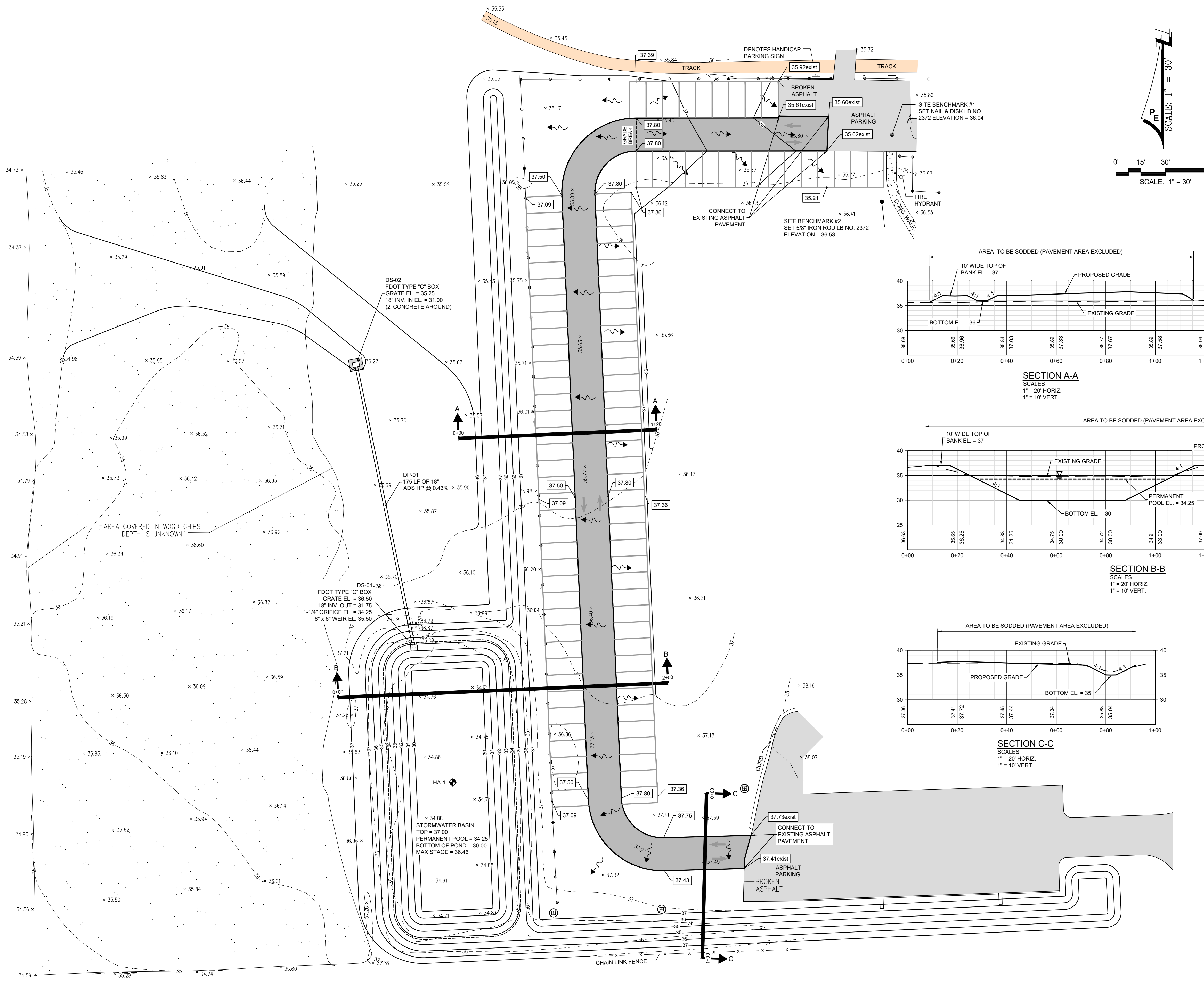
SHEET NUMBER	L1
PROJECT NUMBER	26027

26027 CALLAWAY RECREATIONAL COMPLEX LOOP ROAD EXISTING CONDITIONS AND DEMOLITION PLAN Sheet L1





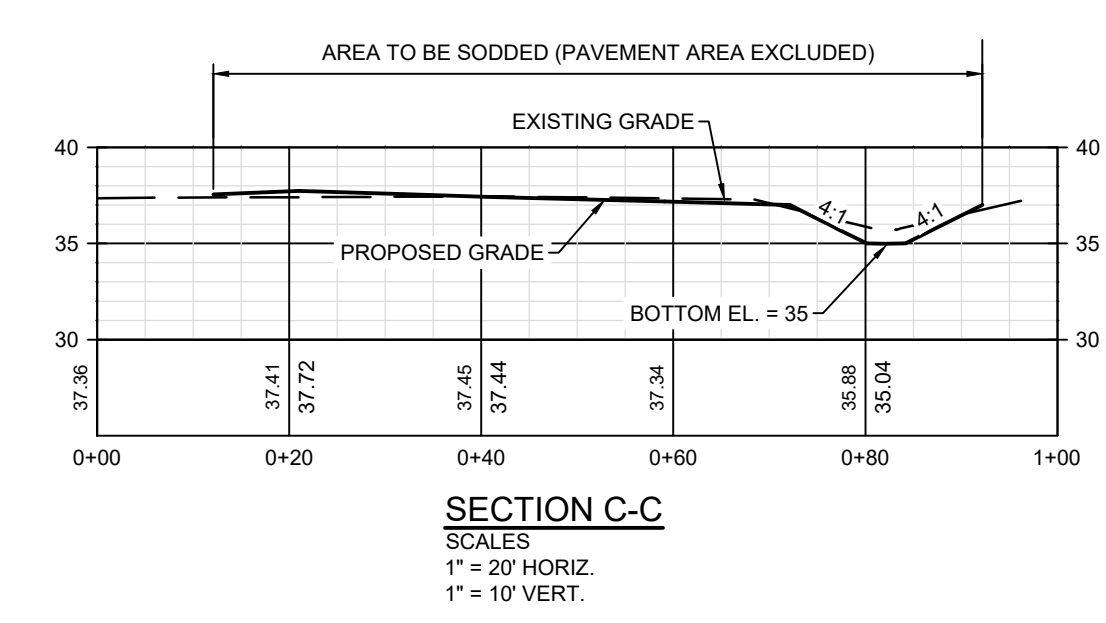
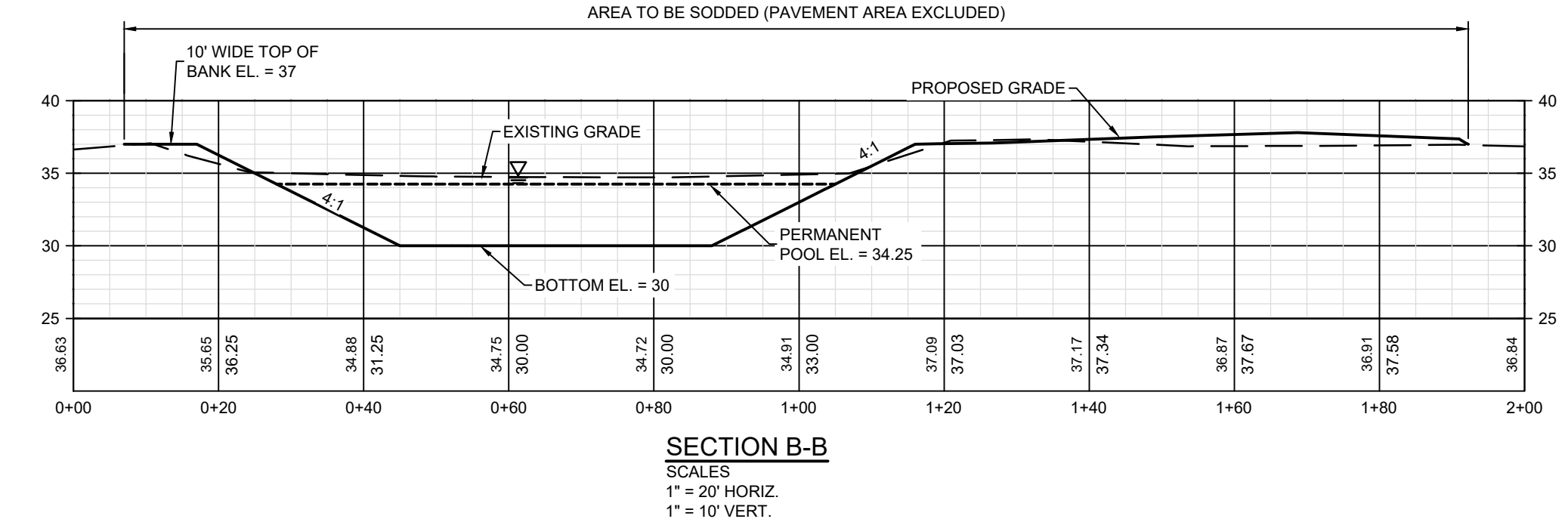
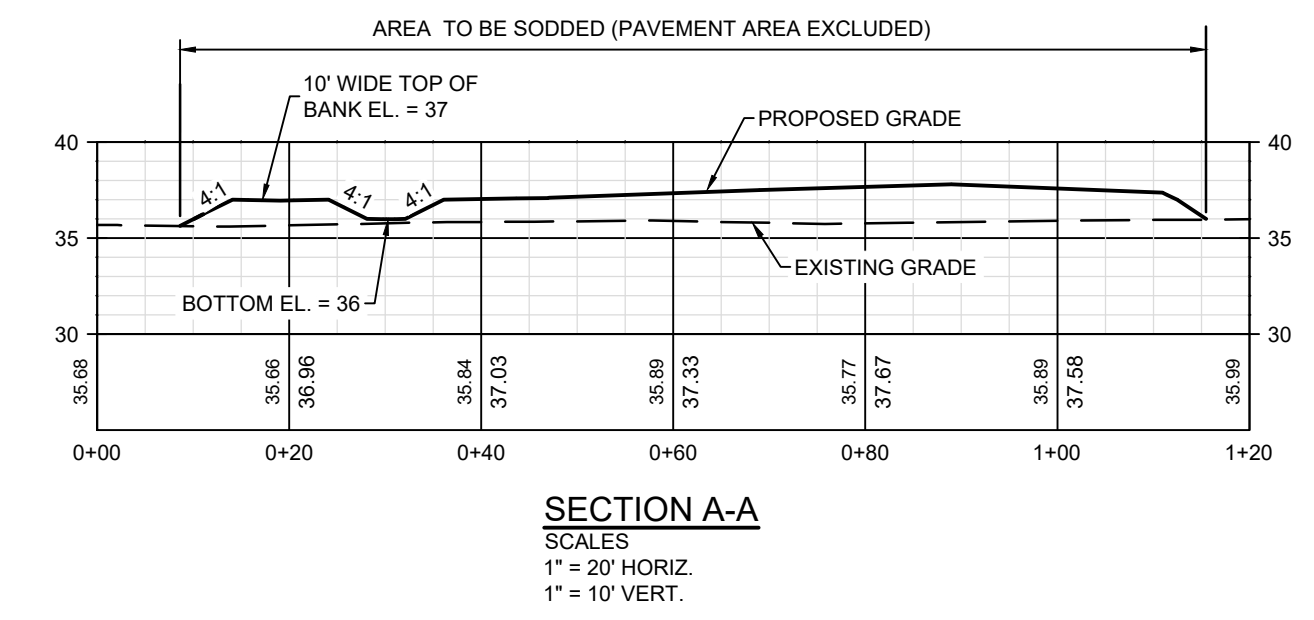




**LEGEND**

- EXISTING MANHOLE
- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- SIGN
- EXISTING FENCE
- EXISTING FIRE HYDRANT
- TEST HOLE AND DESIGNATION
- EXISTING SPOT GRADE
- PROPOSED FINISH GRADE
- PROPOSED GRADE CONTOUR
- EXISTING GRADE CONTOUR
- STORMWATER FLOW ARROW
- GRADE BREAK
- PROPOSED DRAINAGE INLETS
- PROPOSED STORM PIPE
- PROPOSED ASPHALT PAVEMENT
- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE PAVEMENT

**NOTES:**  
 1. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS SHALL BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.  
 2. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY UPON IDENTIFICATION OF CONFLICTS.



**NOTES:**  
 1. "C" INLETS PER FDOT STD. PLANS INDEX 425-052 (SEE DETAILS SHEET L5)  
 2. ALL STORM STRUCTURES TO HAVE 1% SUMPS.  
 3. ALL DISTURBED AREAS SHALL BE SODDED.

Date: Wednesday, April 13, 2022 7:55:34 AM ID: C:\DWGFiles\Drawings\26027.rvt

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**GRADING AND DRAINAGE PLAN**  
**CALLAWAY RECREATIONAL COMPLEX**  
**LOOP ROAD**  
**CALLAWAY, FLORIDA**

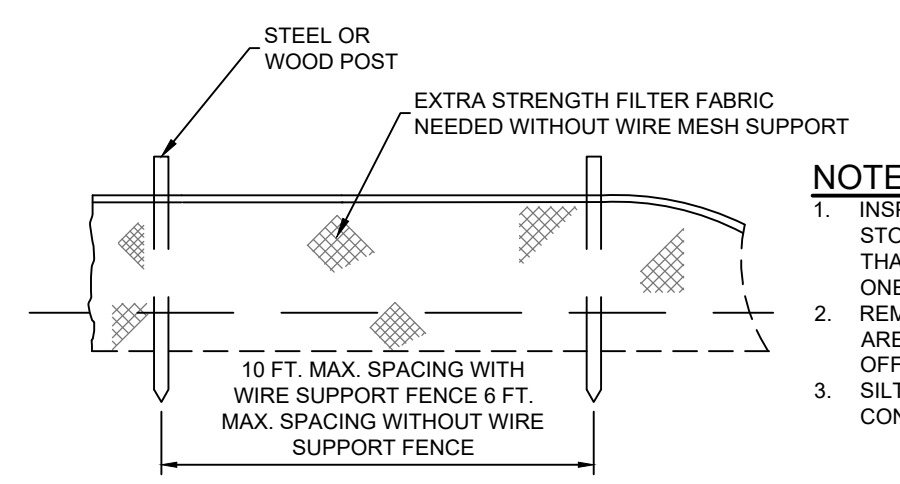
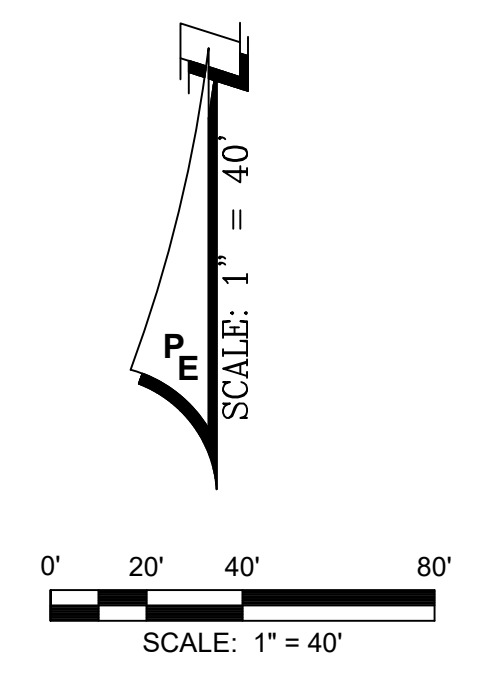
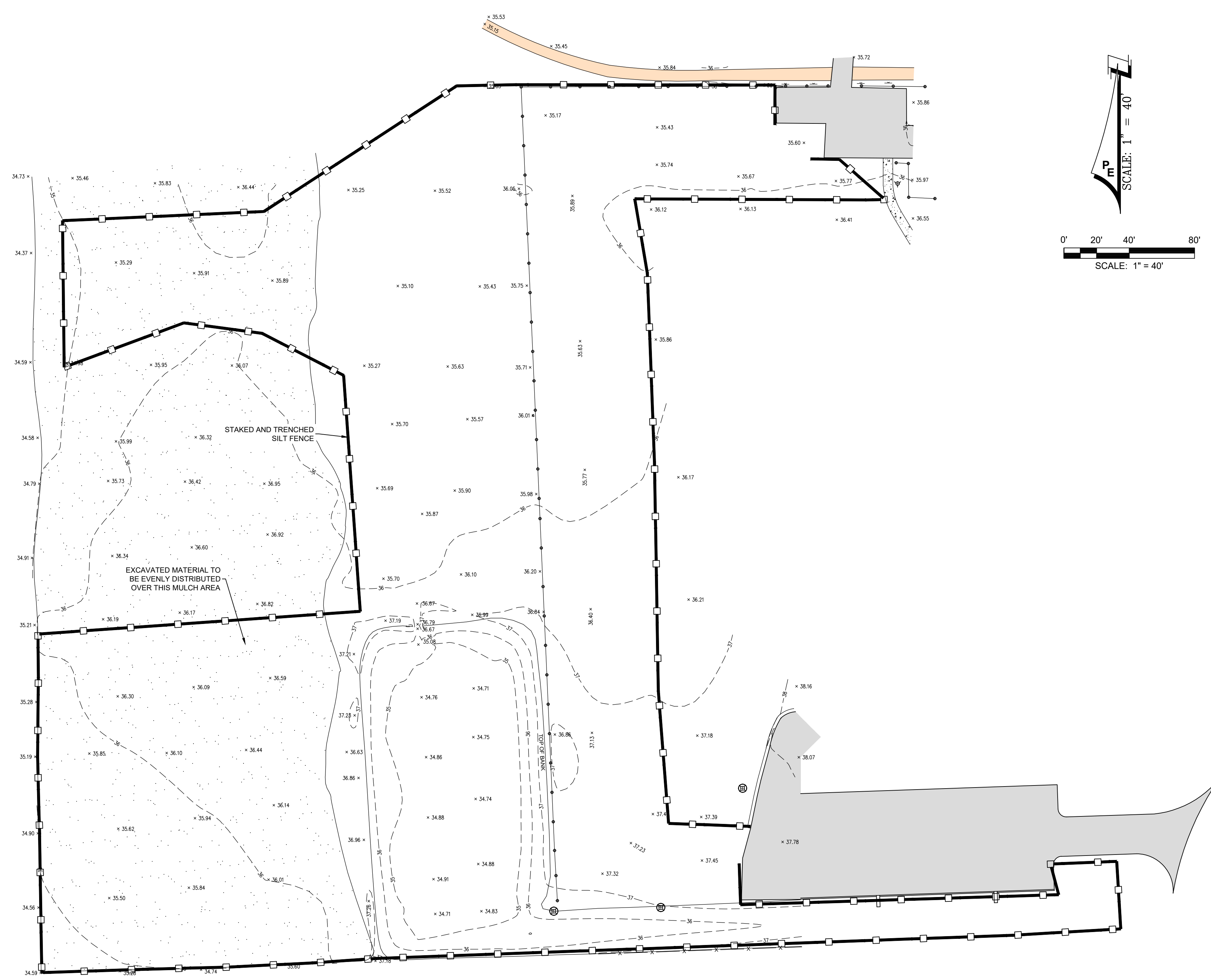
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**JAMES D. CROOK**  
 L.C.E.N.S.E.  
 NO. 66556  
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 PROFESSIONAL ENGINEER

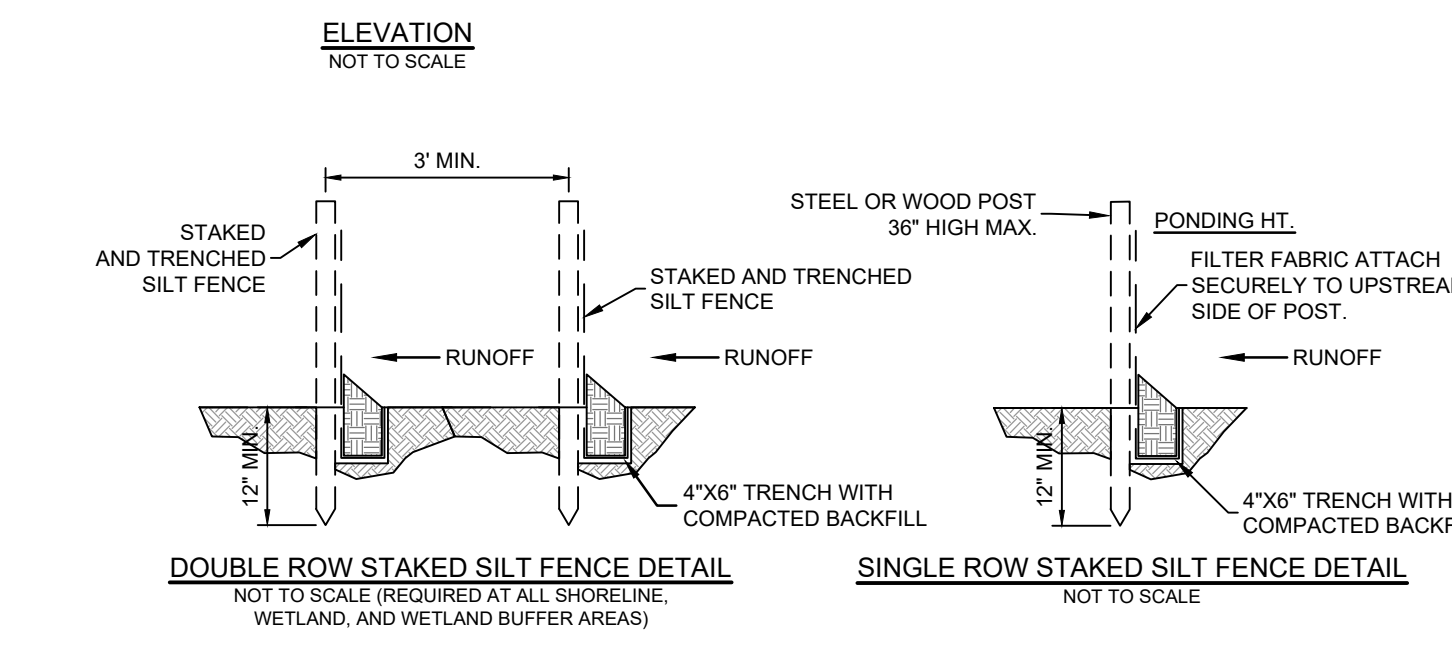
SHEET NUMBER	L3
PROJECT NUMBER	26027

26027 GRADING AND DRAINAGE PLAN LOOP ROAD GRADING AND DRAINAGE PLAN Sheet L3





**NOTE:**  
 1. INSPECT AND REPAIR FENCE 24 HRS AFTER EACH STORM EVENT. REMOVE SEDIMENT NO LATER THAN WHEN DEPOSITS REACH APPROXIMATELY ONE THIRD THE HEIGHT OF THE BARRIER.  
 2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.  
 3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.



**ENVIRONMENTAL SEQUENCE**

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS, DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

**SEQUENCE OF MAJOR ACTIVITIES:**

- 1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 2. INSTALL SILT FENCES AND HAY BALES, AS REQUIRED.
- 3. CONSTRUCT SEDIMENTATION BASIN.
- 4. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN AT PERMANENT POND LOCATION.
- 5. CONTINUE CLEARING AND GRUBBING.
- 6. STOCKPILE TOP SOIL IF REQUIRED.
- 7. PERFORM PRELIMINARY GRADING ON-SITE, AS REQUIRED.
- 8. STABILIZE DENUDEED AREA AND STOCKPILES AS SOON AS PRACTICABLE.
- 9. INSTALL UTILITIES, STORM SEWER, CURBS AND GUTTER.
- 10. APPLY BASE TO PROJECT.
- 11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING.
- 12. COMPLETE FINAL PAVING.
- 13. REMOVE ACCUMULATED SEDIMENT FROM BASINS.
- 14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/ SOD, AS REQUIRED.

**TIMING OF CONTROLS/MEASURES**

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL. IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKES/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION AND TURBIDITY CONTROL PLAN.

**DEWATERING NOTES:**

CONTRACTOR SHALL OBTAIN A GENERAL PERMIT FOR DEWATERING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NPDES SECTION (CONTACT: KEVIN HARGETT, FDEP NW DIST. WASTEWATER SECTION. EMAIL: kevin.hargett@dep.state.us PHONE: 850.595.0687)

CONTRACTOR SHALL PROVIDE A DETAILED DEWATERING PLAN WITH METHODS TIME TABLE & DISCHARGE LOCATION TO ENGINEER FOR APPROVAL BEFORE COMMENCEMENT.

'DEWATERING EFFLUENT OF UNCONTAMINATED GROUNDWATER SHALL BE DISCHARGED SO AS TO PREVENT NEGATIVE IMPACTS TO PUBLIC HEALTH OR SAFETY, PROPERTY, OR THE WATER RESOURCE. DEWATERING OPERATIONS SHALL BE DIRECTED TO A SEDIMENT CONTROL DEVICE OR NATURAL ATTENUATION AREA PRIOR TO DISCHARGE TO WETLANDS OR OTHER SURFACE WATERS. A SEDIMENT CONTROL DEVICE MEANS A SETTLING POND, EXCAVATED SEDIMENT TRAP OR BASIN, DEWATERING TRAP OR TEMPORARY SEDIMENT CONTROL MEASURE. A NATURAL ATTENUATION AREA MEANS A NORMALLY DRY, GRASSED MEADOW OR OPEN AREA WITH EXISTING VEGETATION THAT IS NOT SUBJECT TO EROSION. IF A NATURAL ATTENUATION AREA IS USED, A MINIMUM 50 FOOT SETBACK SHALL BE MAINTAINED FROM THE RECEIVING WATERS OR WETLANDS. WHEN WATER IS UNAVOIDABLY DISCHARGED TO WETLANDS OR OTHER SURFACE WATERS, THE WATER DISCHARGED SHALL BE DONE IN A MANNER THAT DOES NOT CAUSE EROSION OR OTHER DAMAGE TO ADJACENT LANDS, AND DOES NOT CAUSE OR CONTRIBUTE TO VIOLATIONS OF WATER QUALITY STANDARDS. SETTLING PONDS AND SEDIMENT TRAPS OR BASINS SHALL BE IMPLEMENTED, AT A MINIMUM, IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 11.0, NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT APPLICANT'S HANDBOOK VOLUME I. IN ADDITION, DEWATERING ACTIVITIES MAY REQUIRE ADDITIONAL PERMITS FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (INDUSTRIAL WASTEWATER) AND THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT (CONSUMPTIVE USE).

PRIOR TO COMMENCEMENT OF CONSTRUCTION DEWATERING ACTIVITIES ANALYTICAL TEST OF UNTREATED GROUNDWATER FOR THE PARAMETERS LISTED IN TABLE 4-1 MUST BE PERFORMED FOR EACH LOCATION.

IF THE ANALYTICAL TESTS ARE WITHIN THE SCREENING VALUES LISTED IN TABLE 4-1 DEWATERING OF THE SITE MAY BEGIN IMMEDIATELY. A SUBSEQUENT REPORT DESCRIBING THE PROPOSED ACTIVITY AND A COPY OF THE TEST REPORT SHOULD BE SENT TO THE LOCAL FDEP OFFICE WITHIN ONE WEEK AFTER DISCHARGE BEGINS.

ADDITIONAL SAMPLES AND TESTING MUST BE PROVIDED WITHIN THIRTY DAYS AFTER INITIATION OF THE DISCHARGE AND THEN ONCE EVERY SIX MONTHS FOR THE DURATION OF THE PROJECT.

ALL ANALYTICAL TEST DATA, INCLUDING THIRTY DAY AND SIX MONTH TEST RESULTS SHOULD BE KEPT ON-SITE DURING DISCHARGE AND MADE AVAILABLE TO FDEP, IF REQUESTED.

DURING DEWATERING, APPROPRIATE FABRIC SILT SCREEN OR HAY BALES SHALL BE USED TO PREVENT TURBID DISCHARGES. WHEN POSSIBLE, ESTABLISH A DETENTION AREA TO ALLOW SUSPENDED SOLIDS TO SETTLE PRIOR TO DISCHARGE.

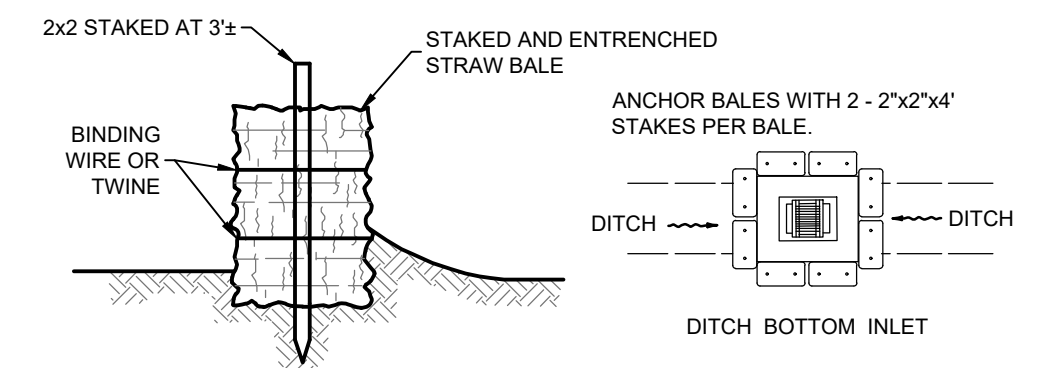
THE CONTRACTOR SHALL SELECT, IMPLEMENT AND OPERATE SUCH EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS IN CHAPTER 62-302 F.A.C.

GROUNDWATER WITHDRAWALS FOR DEWATERING SHALL BE BY ONE OF THE FOLLOWING METHODS:

- A) A CONVENTIONAL WELL POINT SYSTEM CONSISTING OF ONE OR MORE STAGES OF WELL POINTS INSTALLED NEAR THE PROPOSED EXCAVATION IN LINES OR RINGS. THE WELL POINTS SHALL BE INSTALLED IN VARIABLE SPACINGS AND CONNECTED TO A COMMON HEADER PRESSURIZED BY ONE OR MORE PUMPS.
- B) VACUUM UNDERDRAIN SYSTEM CONSISTING OF AN UNDERDRAIN PIPE WITH FILTER SOCK COVERING PLACED HORIZONTALLY BELOW THE DESIGN EXCAVATION ELEVATION VIA TRENCHING MACHINE. THE UNDERDRAIN PIPE SHALL BE CONNECTED TO A PUMP WITH THE GROUNDWATER CONVEYED THROUGH THE PIPE AND DISCHARGED FROM THE PUMP.
- C) VACUUM WELL(S) CONSISTING OF ONE OR MORE STAGES INSTALLED NEAR AN EXCAVATION IN LINES OR RINGS. THE VACUUM WELL(S) SHALL BE CONSTRUCTED WITH SIX INCH OR SMALLER PIPE WITH A SLOTTED SCREEN AREA NEAR THE BOTTOM OF THE WELL, AND CONNECTED TO A COMMON HEADER PUMPED BY ONE OR MORE PUMPS.
- D) DEWATERING STORMWATER POND OR BASIN BY HYDRAULIC PUMP THROUGH THE EXISTING OR NEW DISCHARGE CONTROL STRUCTURE.

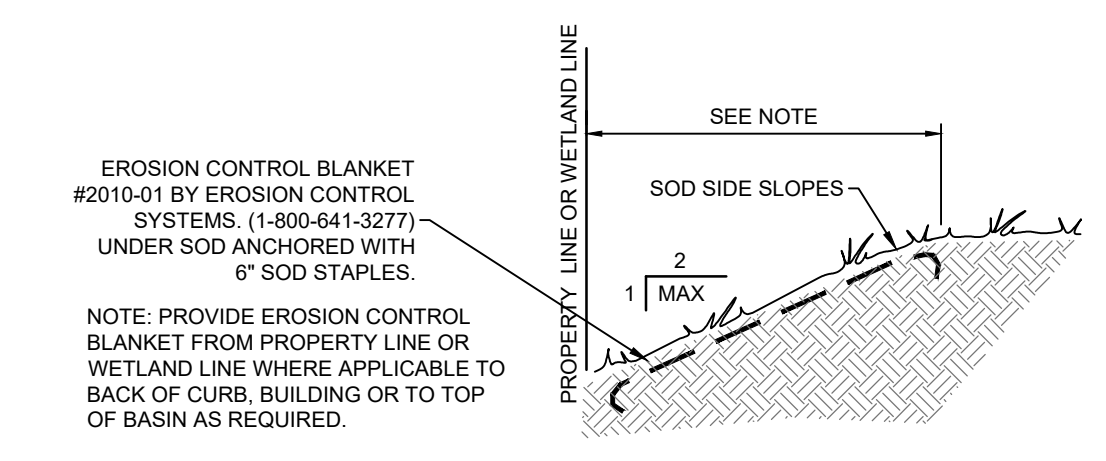
**EROSION CONTROL NOTES:**

- 1. EROSION CONTROL MEASURES WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT TO RESTRICT ANY TURBID RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
- 2. CONTROL OF SEDIMENT-LADEN RUNOFF SHALL BE PROVIDED WITH HAY BALES AND/OR GEOTECH STYLE FABRICS. ALL CONTROL MEASURES SHALL BE PROPERLY LOCATED AND CONSTRUCTED TO PREVENT SEDIMENT TRANSPORT. THE MEANS FOR RETAINING THE SEDIMENTS WILL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT IMPROVEMENTS ARE COMPLETE.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR TREATING ALL ON-SITE STORMWATER DRAINAGE AS REQUIRED TO MEET THE CRITERIA OF 62-3 FLORIDA ADMINISTRATIVE CODE, F.A.C. PRIOR TO DISCHARGE.
- 4. ALL CATCH BASINS, INLETS AND ACCESSSES TO UNDERGROUND STORMWATER SYSTEMS SHALL BE PROTECTED IN ACCORDANCE WITH THE ATTACHED DETAILS.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS AND CONDITIONS OF ANY STORMWATER PERMITS THAT MAY APPLY (FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FLORIDA DEPARTMENT OF TRANSPORTATION, BAY COUNTY, WATER MANAGEMENT DISTRICT, ETC.).
- 6. ALL INLETS SHALL HAVE HAY BALES OR SILT FENCE AROUND THEIR PERIMETER.



**STRAW BALE BARRIER INSTALLATION DETAIL**  
 NOT TO SCALE

**NOTE:**  
 ALL INLETS & STORM STRUCTURES TO HAVE HAY BALES ALL AROUND (SEE DETAILS THIS SHEET).



**SLOPE STABILIZATION DETAIL**  
 NOT TO SCALE

**SLOPE STABILIZATION NOTES**  
 FLAT TO 1:3 - SEED AND MULCH, HYDRO-SEED OR SOD.  
 1:3 TO 1:2 - SOD LAPPED AND PINNED.  
 1:2 TO 1:1 - EROSION CONTROL BLANKET AND SOD.  
 1:1 OR GREATER - RETAINING WALL OR ARMOR FORM.

**NOTE:**  
 AREAS NOT SODDED TO BE STABILIZED WITH HYDROSEEDING. SEE SLOPE STABILIZATION DETAIL THIS SHEET

**TABLE 4-1**  
 GROUNDWATER DISCHARGE - SCREENING VALUES

PARAMETER	SCREENING VALUES FOR DISCHARGE INTO FRESH WATER
TOTAL ORGANIC CARBON (TOC)	10.0 mg/L
PH, STANDARD UNITS	6.0 - 8.5
TOTAL RECOVERABLE MERCURY	0.012 ug/L
TOTAL RECOVERABLE CADMIUM	9.3 ug/L
TOTAL RECOVERABLE COPPER	2.9 ug/L
TOTAL RECOVERABLE LEAD	0.03 ug/L
TOTAL RECOVERABLE ZINC	86.0 ug/L
TOTAL RECOVERABLE CHROMIUM (HEX)	11.0 ug/L
BENZENE	1.0 ug/L
NAPHTHALENE	100.0 ug/L

mg/L = milligrams per liter  
 ug/L = micrograms per liter

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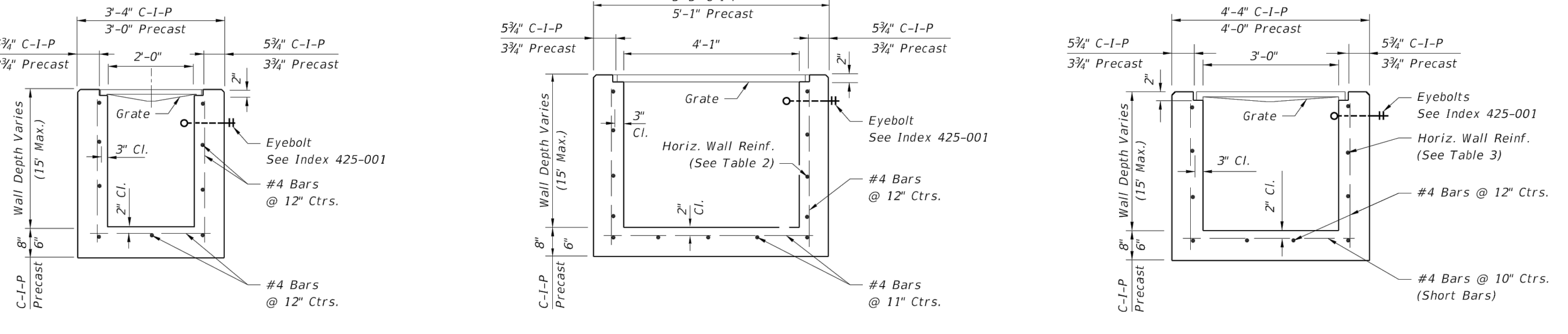
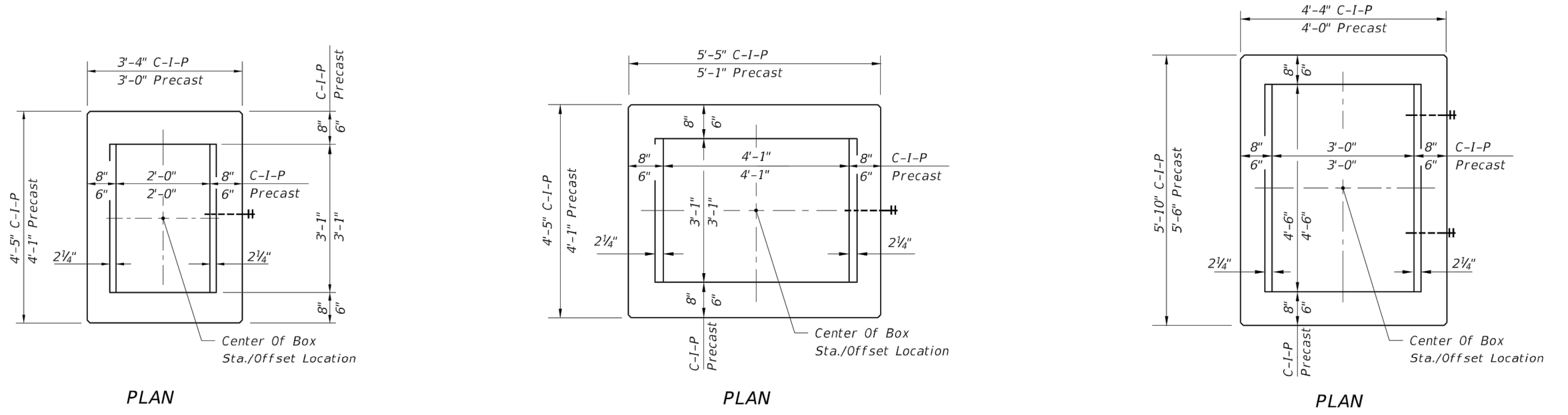
**EROSION CONTROL PLAN**  
**CALLAWAY RECREATIONAL COMPLEX**  
**LOOP ROAD**  
**CALLAWAY, FLORIDA**

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SHEET NUMBER	L4
PROJECT NUMBER	26027
DPR CERTIFICATION	HEB-7806





**HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)**

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

**HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)**

WALL DEPTH	SCHEDULE	AREA (in. <sup>2</sup> /ft.)	MAX. SPACING BARS	WWR
0'-6"	A12	0.20	12"	8"
6'-10"	A6	0.20	6"	5"
10'-13"	A4	0.20	4"	3"
10'-15"	B5.5	0.24	5 1/2"	5"

**HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 3)**

WALL DEPTH	SCHEDULE	AREA (in. <sup>2</sup> /ft.)	MAX. SPACING BARS	WWR
0'-5"	A12	0.20	12"	8"
0'-7.5"	A6	0.20	6"	5"
7.5'-10"	B5.5	0.24	5 1/2"	5"
10'-15"	C6.5	0.37	6 1/2"	6"

**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)

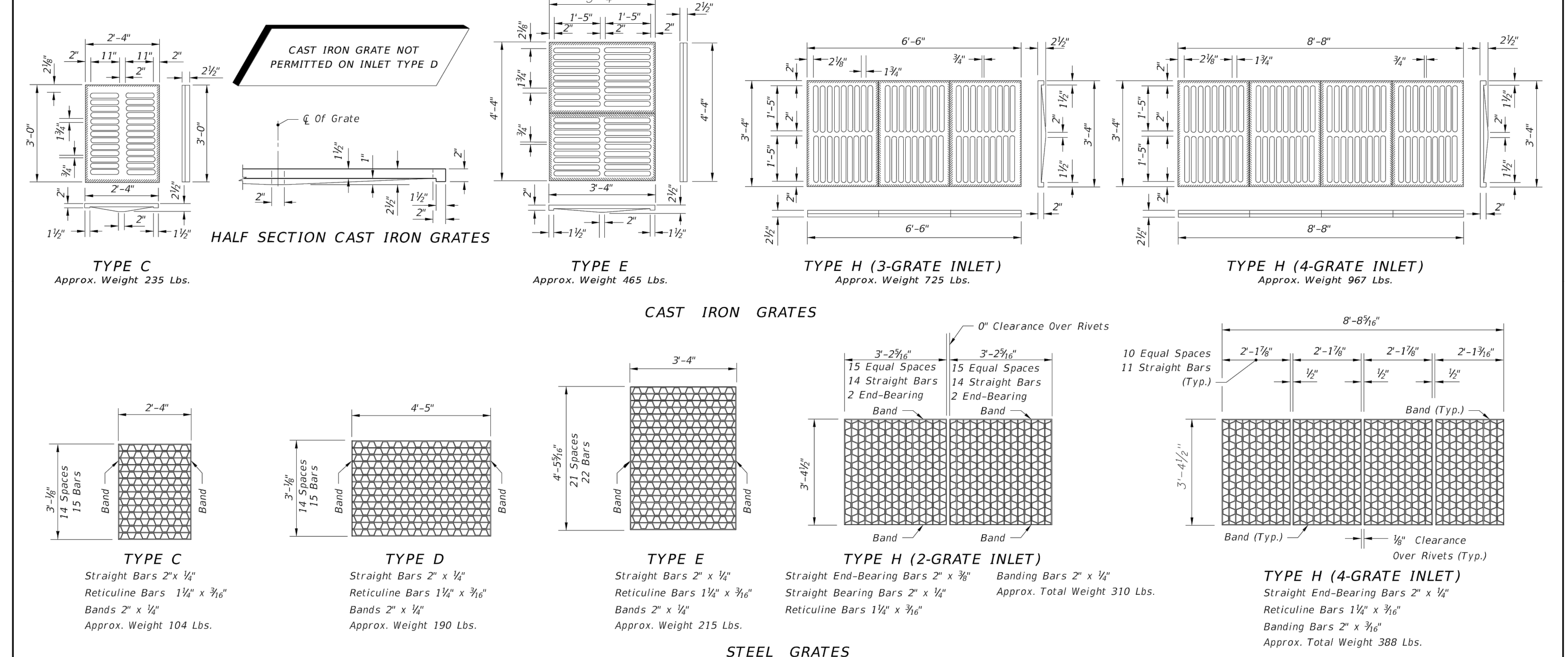
**TYPE D**

Recommended Maximum Pipe Size:  
 3'-1" Wall - 24" Pipe  
 4'-1" Wall - 36" Pipe

**TYPE E**

Recommended Maximum Pipe Size:  
 3'-0" Wall - 24" Pipe  
 4'-6" Wall - 36" Pipe

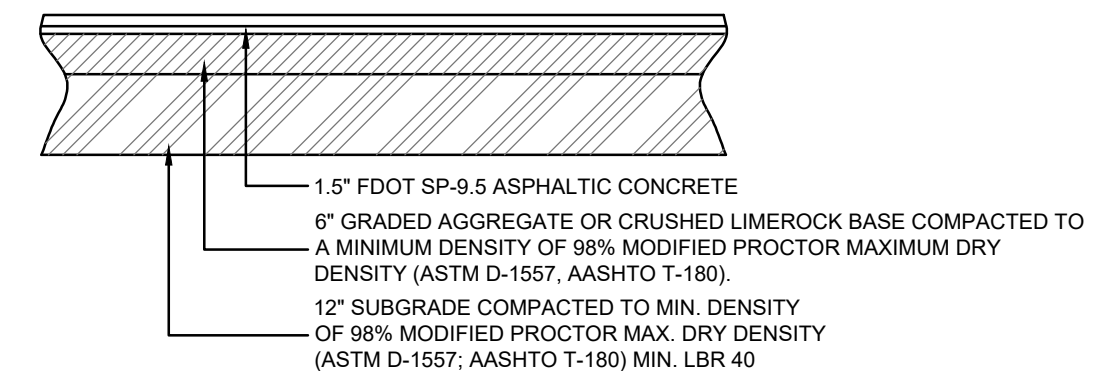
LAST REVISION 11/01/17	DESCRIPTION: FDOT FY 2020-21 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E AND H	INDEX 425-052	SHEET 1 of 7
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**GENERAL NOTES**

- These inlets are suitable for bicycle traffic and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads. These inlets may be placed in areas subject to occasional pedestrian traffic such as landscaped areas and pavement areas where pedestrians can walk around the inlet.
- Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and areas subject to pedestrian shall have traversable slots. The traversable slot modification is not adaptable to inlet Type H. Slots may be constructed at either or both ends as shown on plans. Traversable slots shall not be used in areas subject to occasional bicycle traffic.
- Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dip galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
- Recommended maximum pipe sizes shown are for concrete pipe. Size for other types of pipe must be checked for fit.
- All exposed edges and corners shall be 1/4" chamfer or tool to 1/4" radius.
- Concrete inlet pavement to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans, but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
- Traversable slots constructed in existing inlets shall be paid for as inlets partial. For conversion work and method of payment see TRAVERSABLE SLOT INLET (PARTIAL) FOR EXISTING INLETS.
- Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Performance Turf, SY.
- For supplementary details see Index 425-001.
- All reinforcing is Grade 60 bars with 2" min. cover unless otherwise noted. Bars to be cut or bent for 1/2" clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.

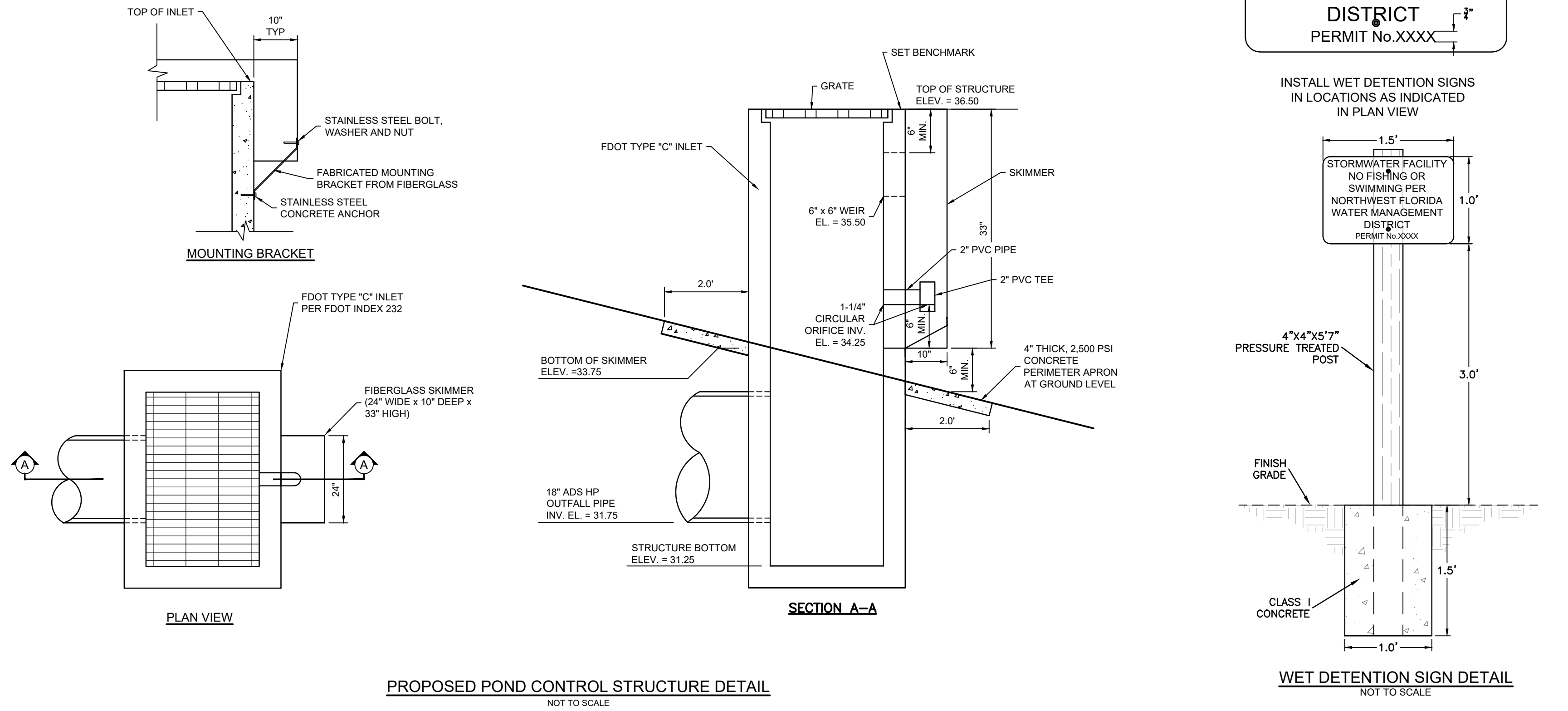
LAST REVISION 11/01/17	DESCRIPTION: FDOT FY 2020-21 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E AND H	INDEX 425-052	SHEET 3 of 7
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**PAVEMENT NOTES:**

- CLEAR AND GRUB SURFACE SOILS WITHIN THE PAVEMENT PERIMETER AND 1 FT. MIN. BEYOND THE EDGE OF PAVEMENT.
- FILL MATERIAL SHALL BE CLEAN SANDS TO SLIGHTLY SILTY SANDS CONTAINING NO MORE THE 12% FINER THAN THE U.S. No. 200 MESH SIEVE AND FREE OF ORGANICS OR CLAY.
- FILL SHALL BE PLACED IN 6" LIFTS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY PER MODIFIED PROCTOR (AASHTO T-180)

**ASPHALT PAVEMENT DETAIL**  
NOT TO SCALE



**PROPOSED POND CONTROL STRUCTURE DETAIL**  
NOT TO SCALE

**WET DETENTION SIGN DETAIL**  
NOT TO SCALE

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 (850)763-5200 Fax (850)769-0730 www.panhandleengineering.com

**CONSTRUCTION DETAILS**  
**CALLAWAY RECREATIONAL COMPLEX**  
**LOOP ROAD**  
**CALLAWAY, FLORIDA**

James H. Slonina, P.E. 39197  
 James M. Southall, P.E. 39837  
 Christopher B. Forehand, P.E. 59028  
 Stephen E. Price, P.E. 71646  
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**JAMES D. CROOK**  
 LICENSE NO. 66556  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

SHEET NUMBER	L5
PROJECT NUMBER	26027

26027 CALLAWAY RECREATIONAL COMPLEX LOOP ROAD CONSTRUCTION DETAILS Sheet L5







**SITE DESCRIPTION**

**PROJECT NAME AND LOCATION:** CALLAWAY SPORTS COMPLEX LOOP ROAD  
CALLAWAY SPORTS COMPLEX  
CALLAWAY, FLORIDA 32403  
LAT 30°09'24" ~ LON 85°32'52"  
SECTION TOWNSHIP RANGE = 09-45-13W

**DEVELOPER NAME AND ADDRESS:** MR. KEITH "EDDIE" COOK, CITY MANAGER, CITY OF CALLAWAY  
4601 HIGHWAY 22  
PANHANDLE CITY, FLORIDA 32044

**DESCRIPTION:** DRAINAGE AND POND IMPROVEMENTS

**SOIL DISTURBING ACTIVITIES WILL INCLUDE:**  
CLEARING AND GRUBBING, EARTHWORK, PAVEMENT AND GRADING, STORM WATER AND UTILITIES.

**RUNOFF CURVE NUMBERS:**

1. PRE-CONSTRUCTION	C=0.56
2. DURING CONSTRUCTION	C=0.57
3. POST-CONSTRUCTION	C=0.59

**SOILS:**  
SEE SOIL BORING REPORT FOR SOILS DATA

**SITE MAPS:**  
\* SEE ATTACHED GRADING FOR PRE & POST DEVELOPMENT GRADES, AREAS OF SOILS DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS, PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORMWATER DISCHARGE POINTS.  
\* SEE ATTACHED EROSION AND TURBIDITY CONTROL PLAN FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES AND TURBIDITY BARRIERS.  
\* SEE GRADING NOTES FOR REQUIREMENTS FOR TEMPORARY AND PERMANENT STABILIZATION.

**SITE AREA:**  
1.) TOTAL AREA OF SITE = 40.0 ACRES  
2.) TOTAL AREA TO BE DISTURBED = APPROX. 3.25 ACRES  
**NAME OF RECEIVING WATERS:** CALLAWAY BAYOU

**CONTROLS**

IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED, TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

**EROSION AND SEDIMENT CONTROLS**

**STABILIZATION PRACTICES**

- HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
  - WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 3:3 PERCENT.
  - IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
  - WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
  - EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO ENSURE AGAINST WASHOUT.

REFER TO EROSION CONTROL DETAILS FOR CONSTRUCTING THE HAY BALE BARRIER. ALSO REFER TO THE EROSION CONTROL PLAN FOR PROPER LOCATION.

- FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
  - WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 3:3 PERCENT.
  - IN MINOR SWALES OF DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.

REFER TO THE EROSION CONTROL DETAILS FOR PROPER CONSTRUCTION OF THE FILTER FABRIC BARRIER.

- BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.
- LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE TO THE INLET.
- STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHOULD BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.
- EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL BE MINIMIZED.
- INLET PROTECTION: INLETS AND CATCH-BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
- DUST CONTROL: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL TREATMENT WITHIN 30 DAYS SHALL BE STABILIZED.
- TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OR APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDING AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
- TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SIMILAR METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX AND AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
- TEMPORARY REGRASSING: IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM 75 PERCENT GOOD GRASS COVER, THE CONTRACTOR SHALL REWORK AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.
- MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
- PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
- PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDING. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDING AND MULCHED OR SODDED.

**SPILL PREVENTION**

**MATERIAL MANAGEMENT PRACTICES**

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF:

**GOOD HOUSEKEEPING**

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT:

- AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
- ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
- THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

**HAZARDOUS PRODUCTS**

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

- PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
- SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

**CONTRACTOR'S CERTIFICATION**

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERAL PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

NAME	TITLE	COMPANY ADDRESS AND PHONE NUMBER	DATE

NOTE TO CONTRACTOR:  
THIS IS THE CONTRACTOR'S CERTIFICATION REQUIRED BY THE STATE OF FLORIDA NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), GENERIC PERMIT FOR STORMWATER DISCHARGE FOR CONSTRUCTION SITES OVER 1 ACRES. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.25 INCHES. IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR. MORE INFORMATION MAY BE OBTAINED AT [WWW.DEP.STATE.FL.US/WATER/STORMWATER/NPDES](http://www.dep.state.fl.us/water/stormwater/npdes)

**CONTROLS**

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN-OFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS PER PLAN AS WELL AS ENSURING THAT PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTOR'S RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

**STORM WATER MANAGEMENT**

STORM WATER DRAINAGE WILL BE PROVIDED BY: ONSITE COLLECTION & ATTENUATION

**ON-SITE IMPROVEMENTS**

SEE SITE, GRADING & DRAINAGE AND UTILITY PLANS.

**TIMING OF CONTROLS/MEASURES**

REFER TO "CONTRACTOR'S RESPONSIBILITY" FOR THE TIMING OF CONTROL/MEASURES.

**CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS**

**CONTROL/MEASURES:**  
IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

FLORIDA ENVIRONMENTAL RESOURCE PERMIT

**POLLUTION PREVENTION PLAN CERTIFICATION**

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNED: \_\_\_\_\_  
NAME (OPERATOR AND/OR RESPONSIBLE AUTHORITY)

DATED: \_\_\_\_\_

**GENERAL**

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS, DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

**SEQUENCE OF MAJOR ACTIVITIES:**

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

- INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- INSTALL SILT FENCES AND HAY BALES, AS REQUIRED.
- CONSTRUCT SEDIMENTATION BASIN.
- CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN AT PERMANENT POND LOCATION.
- CONTINUE CLEARING AND GRUBBING.
- STOCKPILE TOP SOIL IF REQUIRED.
- PERFORM PRELIMINARY GRADING ONSITE, AS REQUIRED.
- STABILIZE DENuded AREA AND STOCKPILES AS SOON AS PRACTICABLE.
- INSTALL UTILITIES, STORM SEWER, CURBS AND GUTTER.
- APPLY BASE TO PROJECT.
- COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING.
- COMPLETE FINAL PAVING.
- REMOVE ACCUMULATED SEDIMENT FROM BASINS.
- WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/ SOD, AS REQUIRED.

**TIMING OF CONTROLS/MEASURES**

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL. IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKES/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION AND TURBIDITY CONTROL PLAN.

**ENDANGERED SPECIES AND CRITICAL HABITAT**

- ARE THERE ENDANGERED SPECIES ON SITE?
- ARE THERE CRITICAL HABITAT ON SITE?

IF YES TO EITHER QUESTION, PLEASE EXPLAIN:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**OTHER CONTROLS**

**WASTE DISPOSAL**

**WASTE MATERIALS**

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT. THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

**HAZARDOUS WASTE**

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

**SANITARY WASTE**

ALL SANITARY WASTE WILL BE COLLECTED FROM THAT PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

**OFFSITE VEHICLE TRACKING**

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEEP AS NEEDED TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH THE TARPULIN.

**INVENTORY FOR POLLUTION PREVENTION PLAN**

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

<input type="checkbox"/> Concrete	<input type="checkbox"/> Fertilizers	<input type="checkbox"/> Wood
<input type="checkbox"/> Asphalt	<input type="checkbox"/> Petroleum Based Products	<input type="checkbox"/> Masonry Blocks
<input type="checkbox"/> Detergents	<input type="checkbox"/> Cleaning Solvents	<input type="checkbox"/> Roofing Materials
<input type="checkbox"/>	<input type="checkbox"/> Paints	<input type="checkbox"/> Metal Studs

**SPILL CONTROL PRACTICES**

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, BAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL REVIEW SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

STABILIZATION REQUIRED: \_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

**MAINTENANCE/INSPECTION PROCEDURES**

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

- NO MORE THAN 10 ACRES OF THE SITE WILL BE DENuded AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
- ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATION OF SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
- ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
- BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
- SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
- THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.
- DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
- A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY CHARGED WITH EROSION AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED. THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
- THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILING OUT THE INSPECTION AND MAINTENANCE REPORT.
- PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

**NON-STORM WATER DISCHARGES**

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

- WATER FROM WATER LINE FLUSHING.
- PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
- UNCONTAMINATED GROUNDWATER (FROM Dewatering EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

FOR NON-STORM WATER DISCHARGES REFER TO THE DEP GENERIC PERMIT FOR DISCHARGE OF NON-CONTAMINATED PRODUCED GROUND WATER. ([http://www.dep.state.fl.us/legal/rules/shored/62-621\(2\).doc](http://www.dep.state.fl.us/legal/rules/shored/62-621(2).doc))

**SPILL CONTROL PRACTICES**

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, BAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL REVIEW SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

STABILIZATION REQUIRED: \_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

**MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE:**

FROM THE SITE DURING THE CONSTRUCTION PERIOD:

- WATER FROM WATER LINE FLUSHING.
- PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
- UNCONTAMINATED GROUNDWATER (FROM Dewatering EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

FOR NON-STORM WATER DISCHARGES REFER TO THE DEP GENERIC PERMIT FOR DISCHARGE OF NON-CONTAMINATED PRODUCED GROUND WATER. ([http://www.dep.state.fl.us/legal/rules/shored/62-621\(2\).doc](http://www.dep.state.fl.us/legal/rules/shored/62-621(2).doc))

**STORM WATER POLLUTION PREVENTION PLAN**

**INSPECTION AND MAINTENANCE REPORT FORM**

**SEDIMENT BASIN**

DEPTH OF SEDIMENT IN BASIN	DEPTH OF SEDIMENT SIDE BASIN	ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT ?	CONDITION OF OUTFALL FROM SEDIMENT BASIN

MAINTENANCE REQUIRED FOR SEDIMENT BASIN: \_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

**OTHER CONTROLS STABILIZED**

CONSTRUCTION ENTRANCE

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD ?	IS THE GRAVEL CLEAN OR IS IT FILLED WITH SEDIMENT?	DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO LEAVE THE SITE ?	IS THE CULVERT BENEATH THE ENTRANCE WORKING? (IF APPLICABLE)

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE: \_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

**STORM WATER POLLUTION PREVENTION PLAN**

**INSPECTION AND MAINTENANCE REPORT FORM**

**STRUCTURAL CONTROLS**

TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.25 INCHES OR MORE

INSPECTOR: \_\_\_\_\_ DATE: \_\_\_\_\_

INSPECTOR'S QUALIFICATIONS: \_\_\_\_\_

DAYS SINCE LAST RAINFALL: \_\_\_\_\_ AMOUNT OF LAST RAINFALL \_\_\_\_\_ INCHES

**STABILIZATION MEASURES**

INSPECTION AREA (DESCRIPTION OF LOCATION)	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED ? (YES/NO)	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED: \_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

**STORM WATER POLLUTION PREVENTION PLAN**

**INSPECTION AND MAINTENANCE REPORT FORM**

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**SEDIMENT BASIN**

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