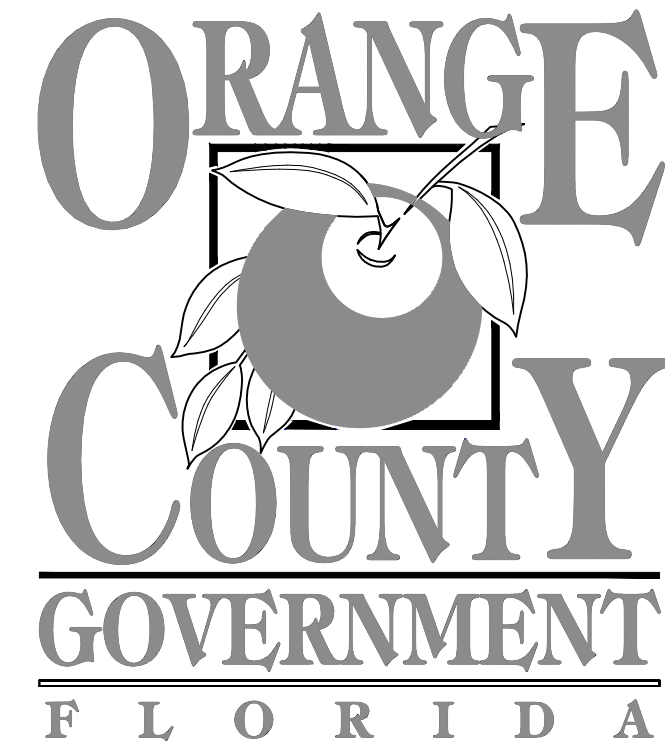


# ORANGE COUNTY UTILITIES

## ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY POND 2 BERM REPAIR CONSTRUCTION LEVEL DRAWINGS SEQ NO. 97160



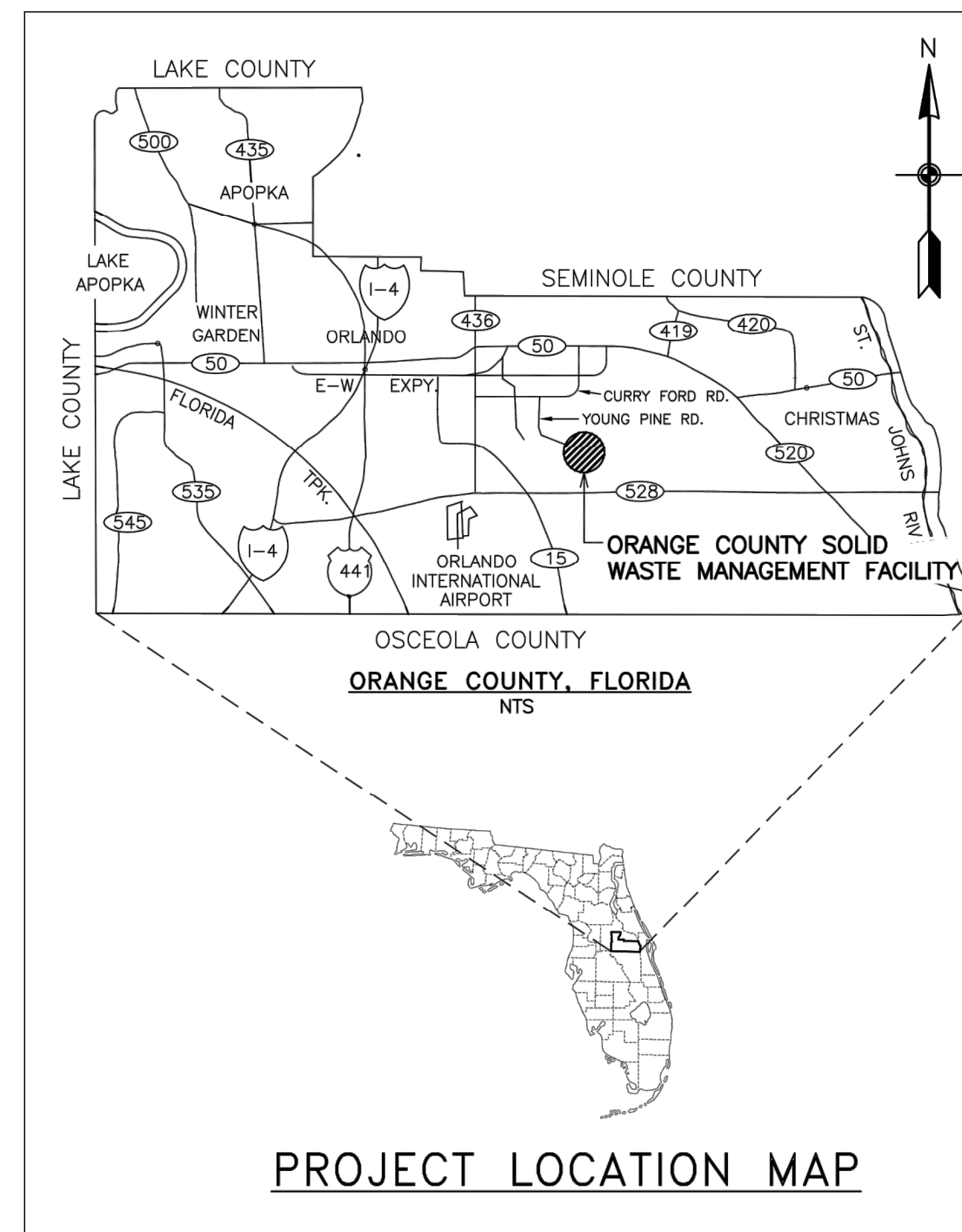
### GOVERNING OFFICIALS:

JERRY L. DEMINGS  
BETSY VANDERLEY  
CHRISTINE MOORE  
MAYRA URIBE  
MARIBEL GOMEZ CORDERO  
EMILY BONILLA  
VICTORIA P. SIPLIN  
AJIT LALCHANDANI  
RAY HANSON  
DAVID GREGORY

ORANGE COUNTY MAYOR  
COMMISSIONER, DISTRICT 1  
COMMISSIONER, DISTRICT 2  
COMMISSIONER, DISTRICT 3  
COMMISSIONER, DISTRICT 4  
COMMISSIONER, DISTRICT 5  
COMMISSIONER, DISTRICT 6  
COUNTY ADMINISTRATOR  
DIRECTOR ORANGE COUNTY UTILITY DEPARTMENT  
MANAGER SOLID WASTE DIVISION

### ORLANDO, FLORIDA

### JANUARY 2019



5901 YOUNG PINE RD  
ORLANDO, FLORIDA 32829

### SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.

5850 SOUTH SEMORAN BLVD.  
ORLANDO, FLORIDA 32822  
PH. (407) 204-3231 FAX. (813) 623-6757  
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892  
WWW.SCSENGINEERS.COM

SCS PROJECT NO. 09216054.04

### INDEX OF DRAWINGS

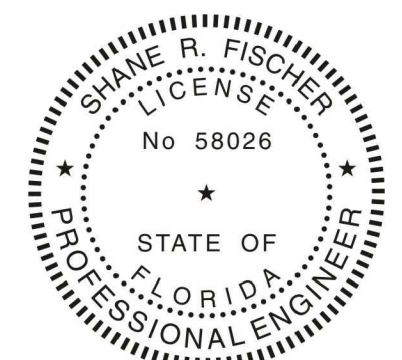
DRAWING NO.	DRAWING TITLE
1	COVER SHEET
2	EXISTING CONDITIONS AERIAL PHOTO (08/15/18) AND GENERAL NOTES
3	EXISTING CONDITIONS AERIAL TOPOGRAPHY (08/15/18)
4	BERM REPAIR PLAN
5	GENERAL DETAILS (1 OF 3)
6	GENERAL DETAILS (2 OF 3)
7	GENERAL DETAILS (3 OF 3)
8	SWPPP DETAILS

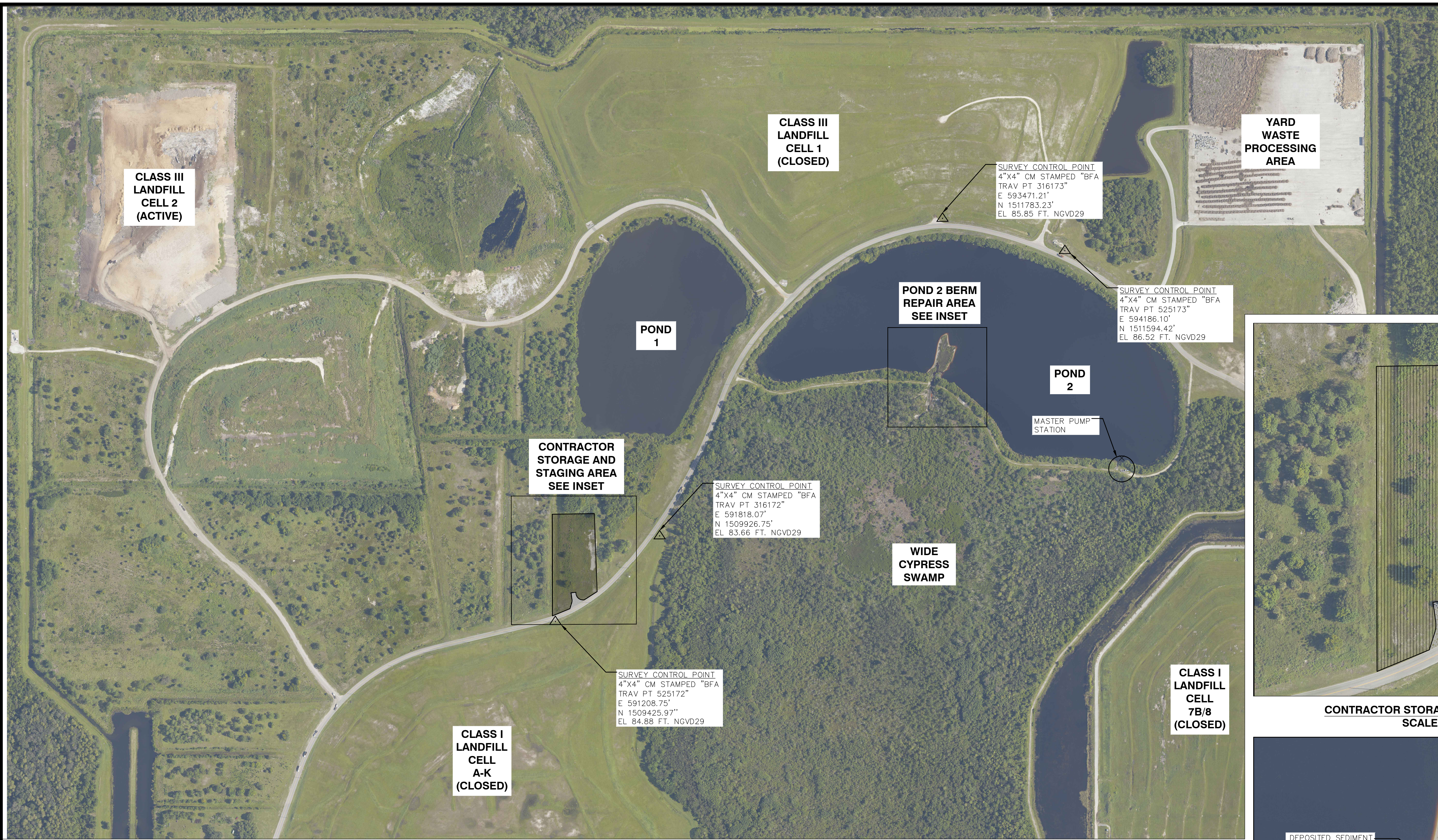
**ISSUED FOR CONSTRUCTION**

DATE: 01/04/2019

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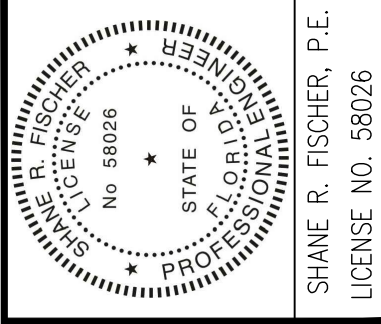
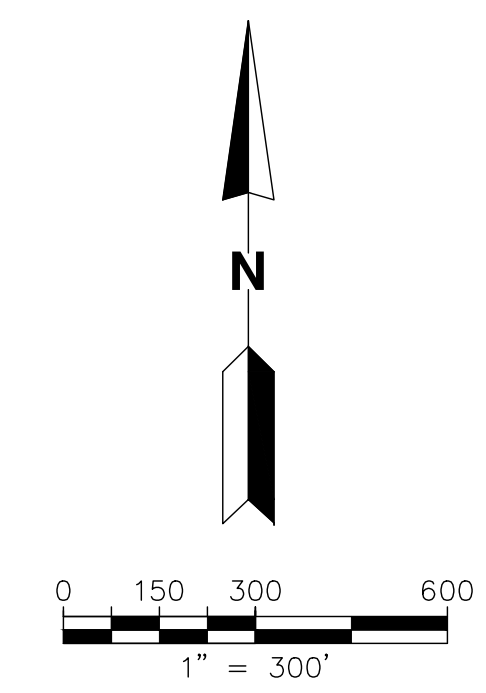
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DATE											
REV	<table border="1"> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td></td></tr> <tr><td>5</td><td></td></tr> </table>	1		2		3		4		5	
1											
2											
3											
4											
5											



SHEET TITLE	EXISTING CONDITIONS AERIAL PHOTO (08/15/19) AND GENERAL NOTES
PROJECT TITLE	ORANGE COUNTY LANDFILL POND 2 BERM REPAIR

ORANGE COUNTY UTILITIES  
SOLID WASTE DIVISION  
ORLANDO, FLORIDA

CLIENT	ORANGE COUNTY UTILITIES SOLID WASTE DIVISION ORLANDO, FLORIDA
SCS ENGINEERS	STEARN, CONRAD AND SCHMIDT CONSULTING ENGINEERS 5850 SOUTH SEMORAN BLVD, ORLANDO, FLORIDA 32822 PH (407) 204-3231 FAX NO. (813) 623-6757 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892
CADD FILE:	EXISTING CONDITIONS
DATE:	JANUARY 2019
SCALE:	AS SHOWN
DRAWING NO.	2
SHEET	2 of 8

**GENERAL NOTES:**

- EXISTING TOPOGRAPHY AND AERIAL PHOTOGRAPHY SUPPLIED BY PICKETT & ASSOCIATES, INC. DATED SEPTEMBER 9, 2018 FOR PROJECT NO. 18193-2. THE IMAGERY AND TOPOGRAPHIC INFORMATION WERE COLLECTED AUGUST 15, 2018.
- HORIZONTAL DATUM IS BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM (EAST ZONE) NAD 1983/90. VERTICAL DATUM IS BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 AND ADJUSTED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BY INCREASING 1.04 FEET.
- PERFORM ALL WORK IN A SAFE MANNER. FOLLOW ALL SAFETY RULES AND WORKMANLIKE GUIDELINES OF OSHA. THE CONTRACTOR IS RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES, OTHER EMPLOYEES, INTRUDERS, AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSON DURING THE COURSE OF THIS PROJECT. INCLUDE ALL COSTS ASSOCIATED WITH COMPLYING WITH OSHA REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT IN THE CONTRACTOR'S BID FORM.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROL OF EROSION AND DUST UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE CONTRACTOR IS RESPONSIBLE FOR MONITORING DOWNSTREAM AND WETLAND CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD AND CLEARING ANY DAMAGE AND SEDIMENT RESULTING FROM CONSTRUCTION.
- THE GENERAL LOCATION OF THE CONTRACTOR'S MATERIAL STAGING AREA IS SHOWN ON THIS DRAWING. THE COUNTY AND THE CONTRACTOR WILL COORDINATE ON THE FINAL BOUNDARIES OF THE EQUIPMENT STAGING AREA, ROAD CROSSINGS, AND ALL DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION GRADES, SEEDED, SODDED, AND/OR MULCHED AS REQUIRED PER THE SPECIFICATIONS.
- CONTRACTOR WILL REMOVE THE SEDIMENT DEPOSITED IN POND 2 AS THEY FEEL NECESSARY TO PERFORM THE WORK. DO NOT EXCAVATE DEEPER THAN THE PERMITTED POND BOTTOM. EL. 65.0' NGVD29 (63.96' NAVD88).
- ANY EXCAVATED SEDIMENT FROM POND 2 OR OTHER AREAS SHALL BE STOCKPILED AT THE CLASS III CELL 2 LANDFILL. VEGETATION REMOVED DURING THE PROJECT SHALL BE STOCKPILED AT THE YARD WASTE PROCESSING AREA.
- KEEP DIRT, DUST, NOISE AND OTHER OBJECTIONABLE NUISANCES TO A MINIMUM.
- THE CONTRACTOR SHALL NOT IMPEDE LANDFILL TRAFFIC OR DISRUPT THE UTILITY SERVICES (I.E. LANDFILL GAS PIPELINE, ELECTRICAL, COMMUNICATIONS). THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC CONTROL (MOT PLAN) IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PROTECT EXISTING UTILITIES, ROADWAYS, MONITORING WELLS, SURVEY BENCHMARKS, ROADWAY SURFACING, AND OTHER SITE FEATURES. DAMAGE TO THESE FEATURES CAUSED BY THE CONTRACTOR SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION AT THE CONTRACTOR'S EXPENSE.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH ORANGE COUNTY'S DESIGN AND CONSTRUCTION STANDARDS, AND COMPLY WITH ALL LOCAL, STATE, FEDERAL, AND OTHER REGULATIONS.
- VERIFY ALL CLEARANCES AND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION. CALL FLORIDA SUNSHINE STATE ONE CALL CENTER AT 811.
- MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR DEWATERING (IF REQUIRED) ALL EXCAVATIONS, FILL AREAS, ETC. IN ORDER TO WORK IN DRY CONDITIONS AND OBTAINING ANY NECESSARY PERMITS.
- THE FACILITY CONTAINS BOTH ACTIVE AND CLOSED LANDFILL CELLS. POND 2 COLLECTS LIQUIDS EMANATING FROM UNLINED LANDFILL CELLS IN ACCORDANCE WITH FDEP NPDES INDUSTRIAL WASTEWATER PERMIT NO. 48-FL0037133. HISTORIC LABORATORY ANALYTICAL DATA FROM THE POND 2 WATER AND THE GROUNDWATER QUALITY INFORMATION CAN BE PROVIDED TO THE CONTRACTOR IF REQUESTED.
- PROVIDE PROPER WARNING SIGNS, BARRICADES, TEMPORARY FENCING, AND OTHER APPROPRIATE SAFETY DEVICES DURING EXECUTION OF THE WORK TO PROVIDE PUBLIC PROTECTION AND SAFETY.
- VERIFY AND PROTECT EXISTING TREES AND NATURAL VEGETATION THAT ARE TO REMAIN UNDISTURBED. CLEAR AND GRUB AREAS INDICATED FOR CONSTRUCTION AND REMOVE ALL ROOTS AND MISCELLANEOUS VEGETATION UNLESS THE INTEGRITY OF THE POND BERM WILL BE HINDERED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR APPLYING AND COMPLYING WITH THE NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES FROM THE FDEP.
- THE CONTRACTOR MAY WORK FROM 7 AM TO 5 PM MONDAYS THROUGH SATURDAYS.

**ISSUED FOR CONSTRUCTION**

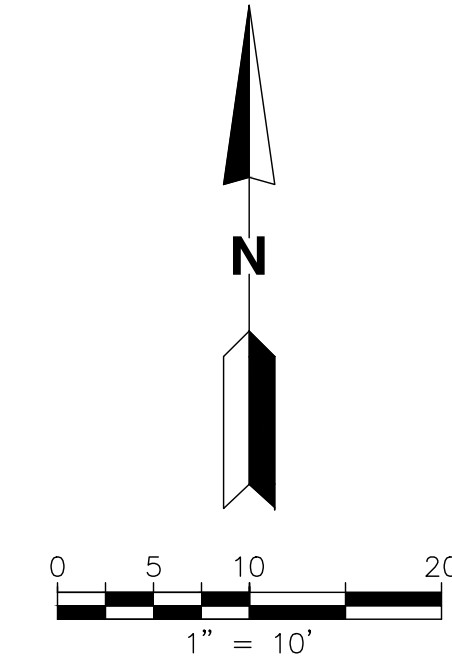
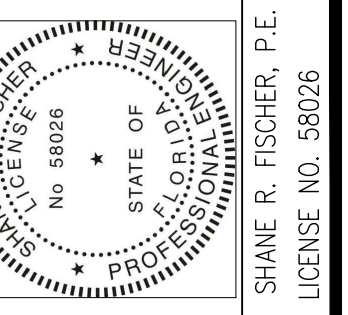
DATE: 01/04/2019



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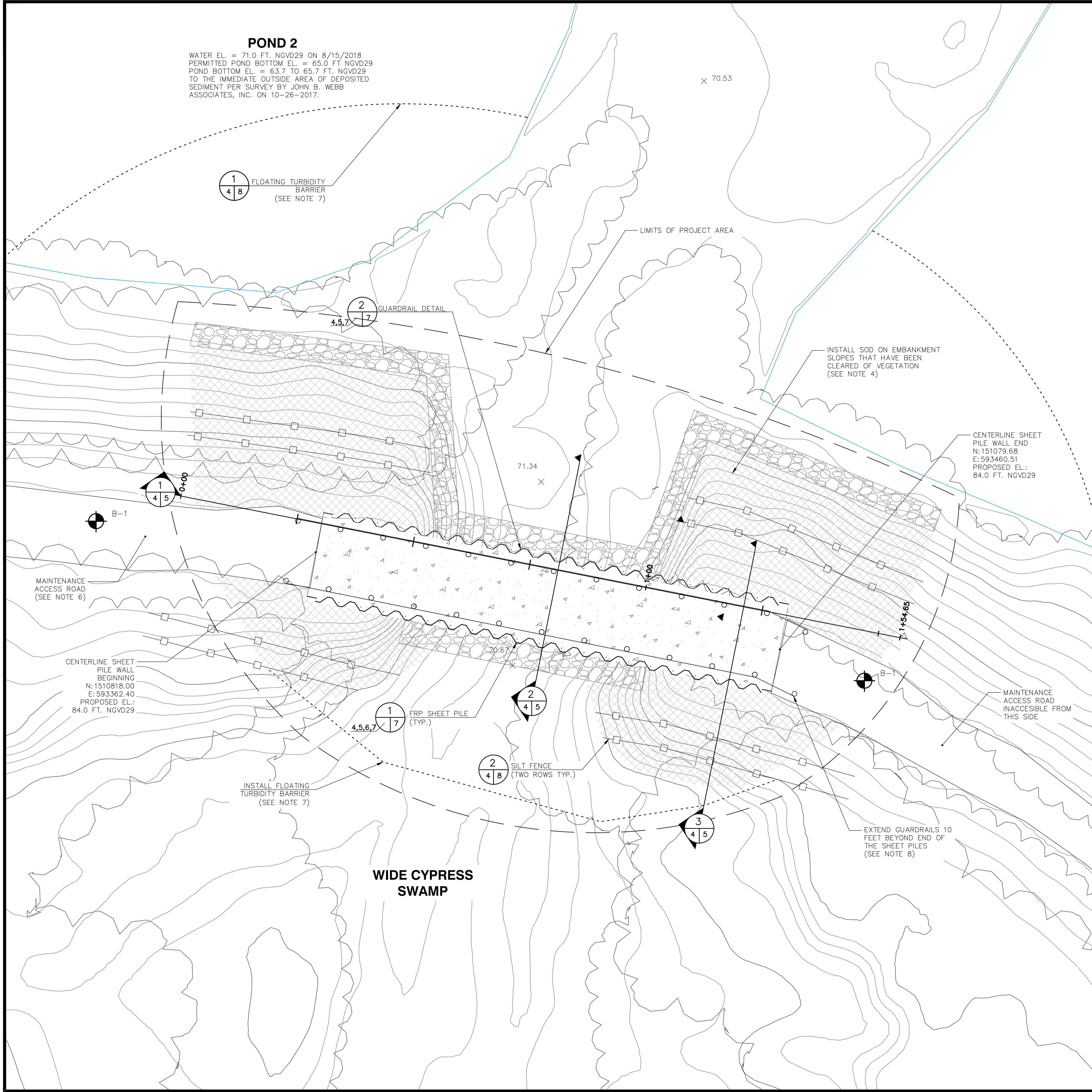
**POND 2**  
 WATER EL. = 71.0 FT. NGVD29 ON 8/15/2018  
 PERMITTED POND BOTTOM EL. = 65.0 FT NGVD29  
 POND BOTTOM EL. = 63.7 TO 65.7 FT. NGVD29  
 TO THE IMMEDIATE OUTSIDE AREA OF DEPOSITED  
 SEDIMENT PER SURVEY BY JOHN B. WEBB  
 ASSOCIATES, INC. ON 10-26-2017.

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- LEGEND:**
- PROPOSED FLOATING TURBIDITY BARRIER (FDOT INDEX NO. 103)
  - PROPOSED SILT FENCE
  - PROPOSED GUARDRAIL (FDOT INDEX NO. 400)
  - PROPOSED SHEET PILE WALL
  - PROPOSED RIPRAP
  - APPROXIMATE PROPOSED LIMITS OF SOD AND EROSION CONTROL MATTING
  - EDGE OF WATER LINE on 8/15/2018
  - ⊙ B-1 GEOTECHNICAL BORING (SEE NOTE 6)
  - EXISTING VEGETATION
  - 78--- EXISTING CONTOURS (MINOR)
  - 80--- EXISTING CONTOURS (MAJOR)

- NOTES:**
1. TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY PICKETT & ASSOCIATES, INC. DATED AUGUST 15, 2018. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). HORIZONTAL DATUM IS BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM (EAST ZONE) NAD83.
  2. WATER ELEVATIONS IN POND 2 AND THE WIDE CYPRESS SWAMP HAVE VARIED HISTORICALLY. THE ENGINEER AND THE COUNTY CANNOT ACCURATELY ESTIMATE THE WATER ELEVATIONS THAT MAY BE ENCOUNTERED DURING THE PERFORMANCE OF THE WORK. WATER ELEVATIONS IN POND 2 TYPICALLY VARY BETWEEN 69 TO 76 FEET NGVD29, BUT HAVE RISEN TO 77 FEET NGVD29 DURING EMERGENCY SITUATIONS. WATER ELEVATIONS IN THE WIDE CYPRESS SWAMP VARY FROM 69 FEET TO 76 FEET NGVD29.
  3. THE ELEVATIONS OF THE POND BOTTOM, WETLANDS, AND BERM SHOWN ARE THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS, AND CONDITIONS OF THESE FEATURES AFFECTING THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE COUNTY IMMEDIATELY WHEN CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED.
  4. THE FINISHED SLOPES SHALL BE NO STEEPER THAN 2.75H:1V FOR THE NORTHERN AND SOUTHERN EMBANKMENT SIDESLOPES, AND 2H:1V EVERYWHERE ELSE. SOD SHALL BE INSTALLED WITH EROSION CONTROL AND PEGS AS REQUIRED BY THE SPECIFICATIONS.
  5. INFORMATION FOR THE TWO GEOTECHNICAL BORINGS CAN BE FOUND IN THE GEOTECHNICAL REPORT PREPARED BY PSI DATED MARCH 7, 2018.
  6. THE POND 2 BERM ACCESS ROAD IS ACCESSIBLE FOR ONE WAY TRAFFIC ONLY FROM THE WEST.
  7. CONTRACTOR WILL ADJUST LOCATION OF TURBIDITY BARRIER BASED ON FIELD CONDITIONS AT THE TIME OF CONSTRUCTION.
  8. ALIGNMENT OF GUARDRAILS BEYOND AREA OF SHEET PILE MUST BE ADJUSTED BASED ON FIELD CONDITIONS AND TOP OF BEAM. GUARDRAILS SHALL BE INSTALLED ALONG TOP OF BERM WHILE PROVIDING GREATEST WIDTH OF ACCESS ROAD.
  9. CONTRACTOR SHALL CLEAR AND GRUB THE VEGETATION ONLY AS NEEDED WITHIN THE PROJECT AREA TO COMPLETE THE WORK AS REQUIRED.
  10. CONTRACTOR SHALL TRIM VEGETATION AS NEEDED ALONG WEST MAINTENANCE ROAD TO ALLOW FOR PROJECT EQUIPMENT AND MATERIAL DELIVERY TO PROJECT SITE.



CHK. BY	DESCRIPTION	DATE	REV

**SHEET TITLE**  
 BERM REPAIR PLAN

**PROJECT TITLE**  
 ORANGE COUNTY LANDFILL  
 POND 2 BERM REPAIR

**CLIENT**  
 ORANGE COUNTY UTILITIES  
 SOLID WASTE DIVISION  
 ORLANDO, FLORIDA

**SCS ENGINEERS**  
 STEARNS, CONRAD AND SCHMIDT  
 CONSULTING ENGINEERS  
 5850 SOUTH SEMORAN BLVD, ORLANDO, FLORIDA 32822  
 PH (407) 204-3231 FAX NO. (813) 623-6757  
 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09216054-04  
 DWN. BY: KMS  
 CHK. BY: SRF  
 C/A. BY: RBC  
 APP. BY: SRF

CADD FILE:  
 BERM REPAIR PLAN

DATE:  
 JANUARY 2019

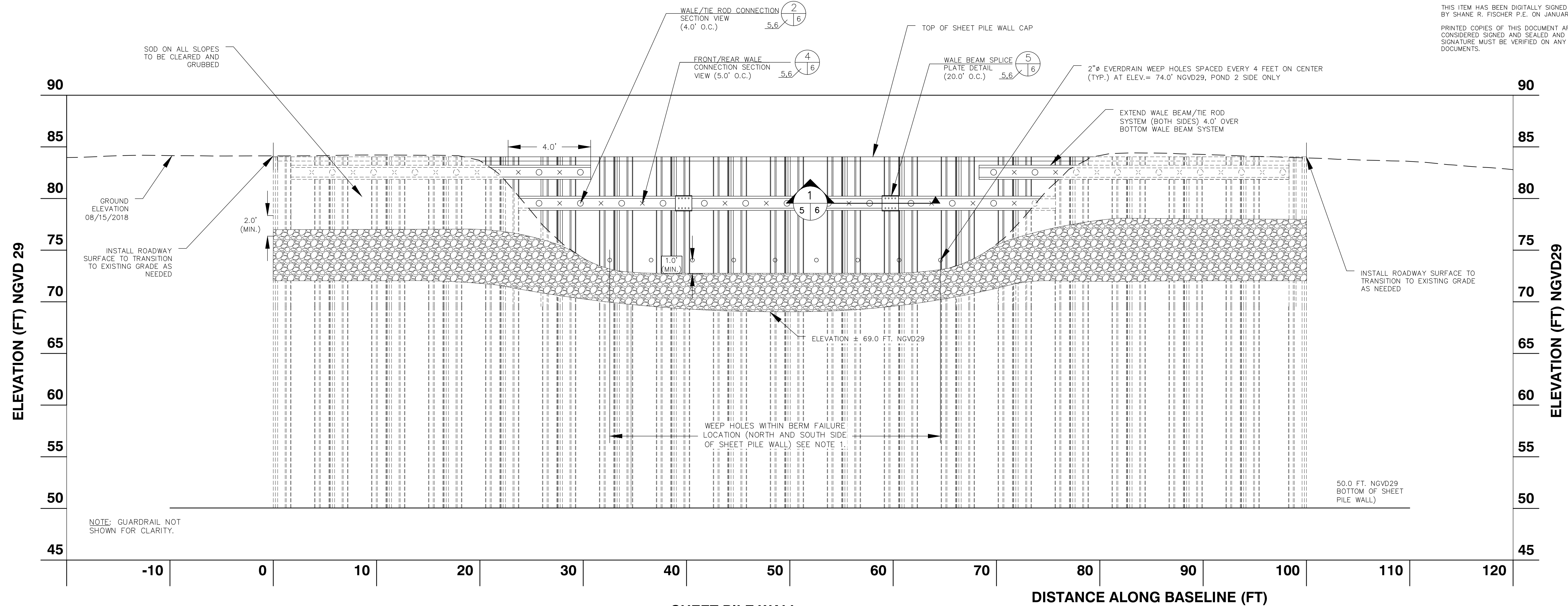
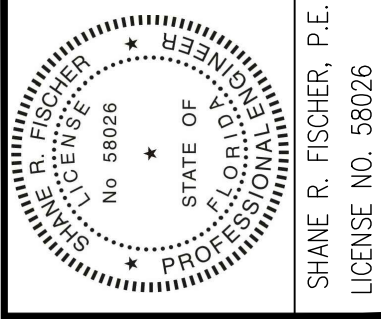
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 AS SHOWN

DRAWING NO.  
**4**

**ISSUED FOR CONSTRUCTION**  
 DATE: 01/04/2019

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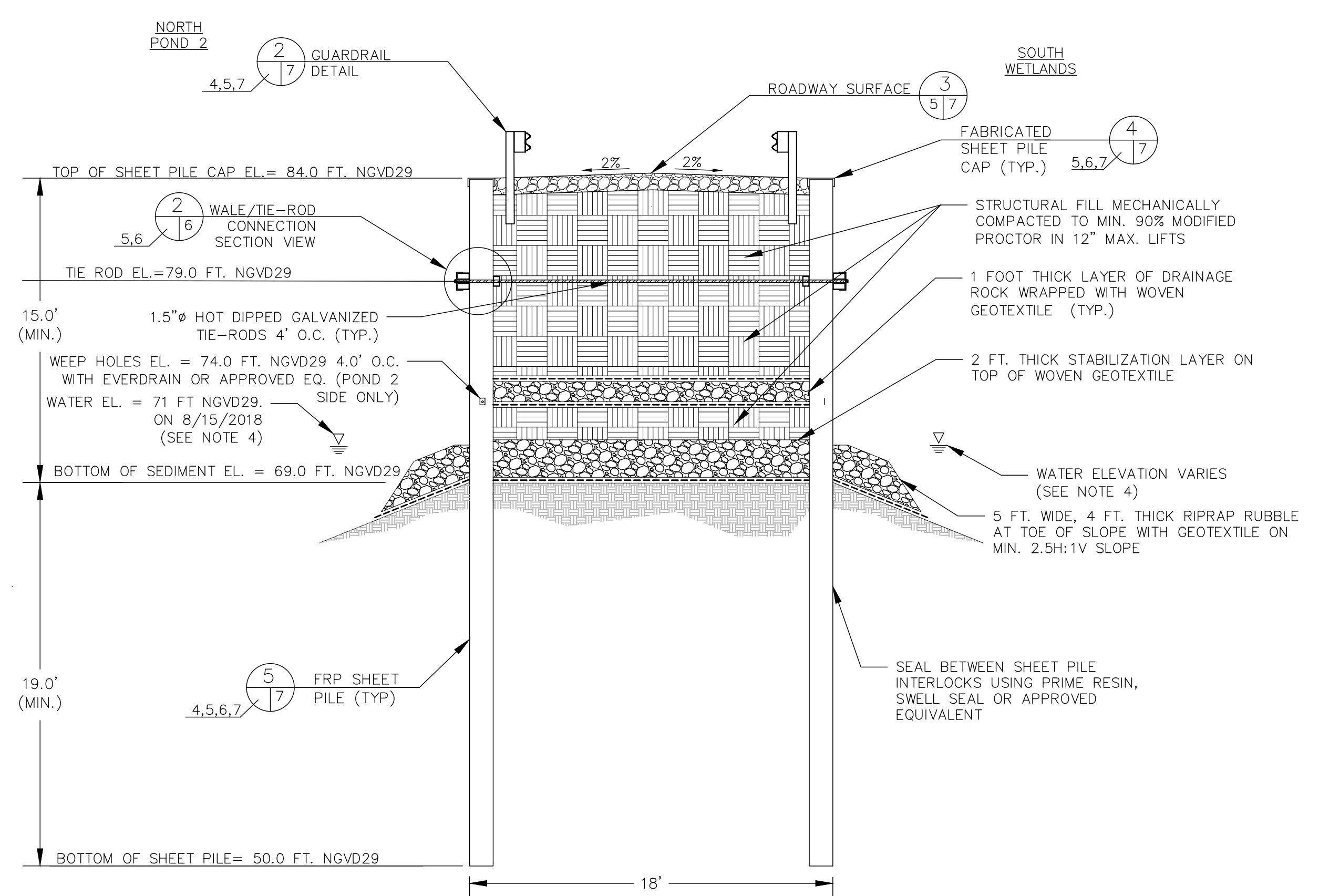
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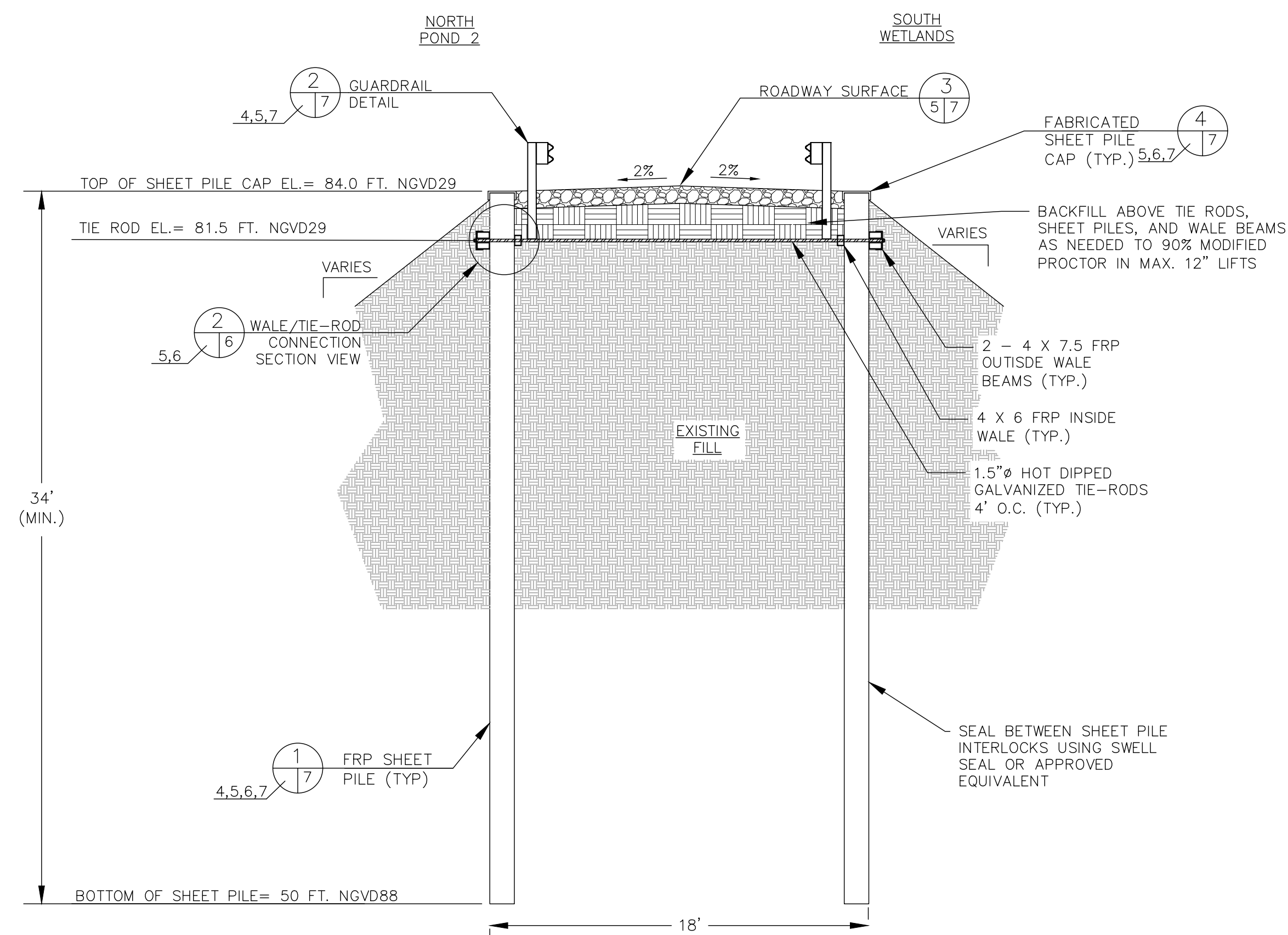
CHK. BY	DESCRIPTION	DATE	REV

SHEET TITLE: **GENERAL DETAILS (1 OF 3)**  
 PROJECT TITLE: **ORANGE COUNTY LANDFILL POND 2 BERM REPAIR**

**SHEET PILE WALL CROSS SECTION**  
 SCALE: 1 INCH = 5 FEET



**SHEET PILE WALL CROSS SECTION**  
 SCALE: 1 INCH = 5 FEET



**SHEET PILE WALL CROSS SECTION IN EMBANKMENT**  
 SCALE: 1 INCH = 5 FEET

- NOTES:**
1. WEEP HOLES ARE TO BE SPACED EVERY 4 FEET ON CENTER AT ELEV. = 74.0 FT. NGVD29 ALONG THE HORIZONTAL ALIGNMENT OF SHEET PILE WALL IN THE AREA INDICATED.
  2. RUBBLE-STONE RIPRAP IS TO BE 4.0 FEET THICK (MIN.) ALONG THE SHEET PILE WALL BY 5.0 FEET IN WIDTH (MIN.) AT THE TOE WITH SHAPED SIDES ALONG ENTIRE HORIZONTAL ALIGNMENT OF THE SHEET PILE WALLS SET AT BOTTOM OF POND/WETLAND.
  3. TIE RODS ESTIMATED LENGTH ARE 20 FEET. FINAL INSTALLED LENGTH WILL BE BASED ON REQUIREMENTS DEFINED IN THE TECHNICAL SPECIFICATIONS.
  4. WATER ELEVATIONS IN POND 2 AND THE WIDE CYPRESS SWAMP HAVE VARIED HISTORICALLY. THE ENGINEER AND THE COUNTY CANNOT ACCURATELY ESTIMATE THE WATER ELEVATIONS THAT MAY BE ENCOUNTERED DURING THE PERFORMANCE OF THE WORK. WATER ELEVATIONS IN POND 2 TYPICALLY VARY BETWEEN 69 TO 76 FEET NGVD29, BUT HAVE RISEN TO 77 FEET NGVD29 DURING EMERGENCY SITUATIONS. WATER ELEVATIONS IN THE WIDE CYPRESS SWAMP CAN VARY FROM 69 FEET TO 76 FEET NGVD29.

CLIENT: **ORANGE COUNTY UTILITIES SOLID WASTE DIVISION**  
 ORLANDO, FLORIDA

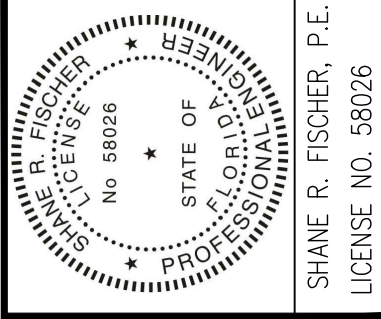
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 CONSULTING ENGINEERS  
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 REG. NO. 09216054.04  
 DWG. BY: KMS  
 CHK. BY: SRF  
 APP. BY: SRF

CADD FILE: **GENERAL DETAILS**  
 DATE: **JANUARY 2019**  
 SCALE: **AS SHOWN**  
 DRAWING NO. **5**  
 SHEET **5** of **8**

**ISSUED FOR CONSTRUCTION**  
 DATE: 01/04/2019

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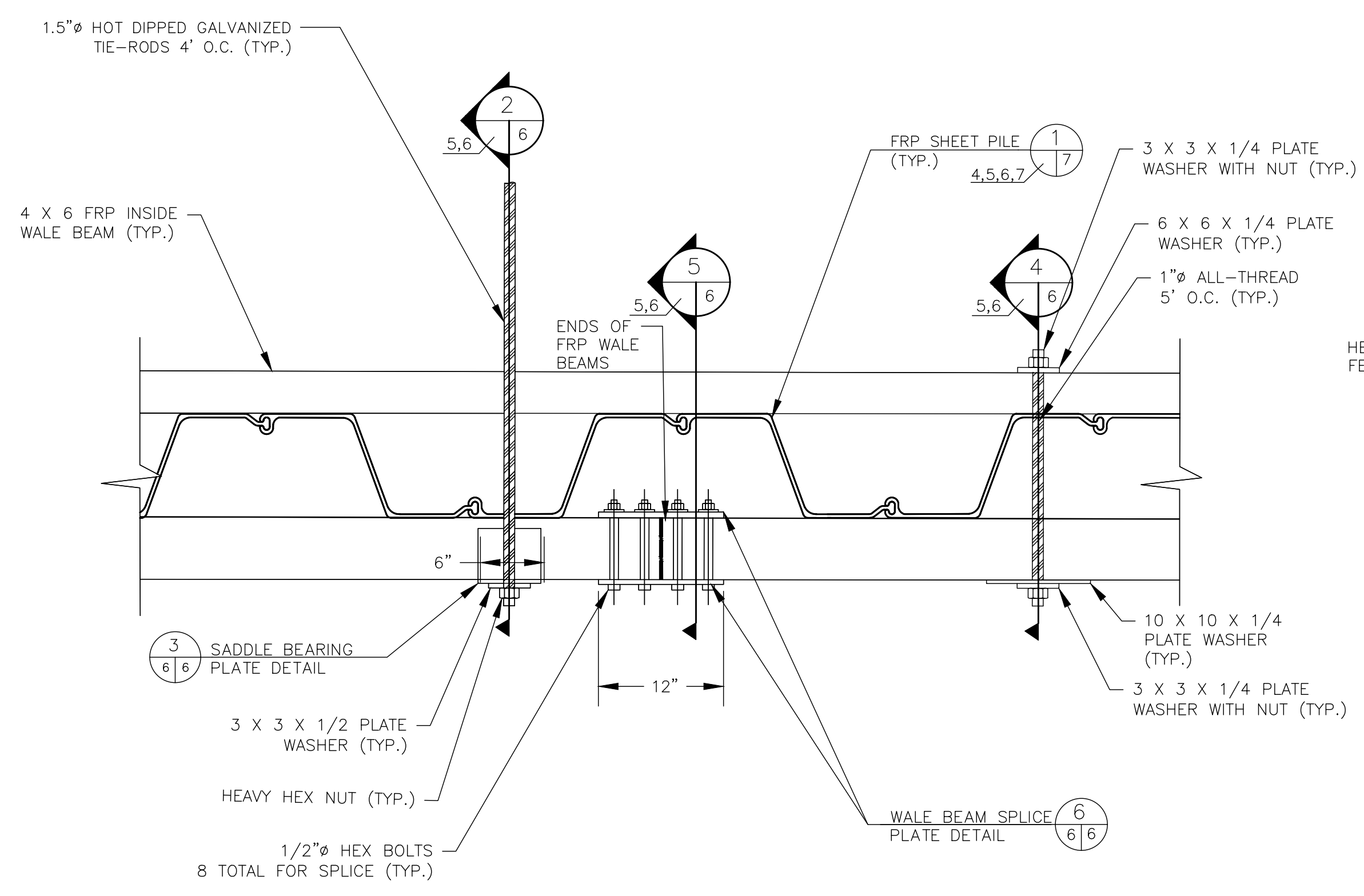
CHK. BY	DESCRIPTION	DATE	REV

**GENERAL DETAILS (2 OF 3)**  
**ORANGE COUNTY LANDFILL POND 2 BERM REPAIR**

**ORANGE COUNTY UTILITIES SOLID WASTE DIVISION**  
**ORLANDO, FLORIDA**

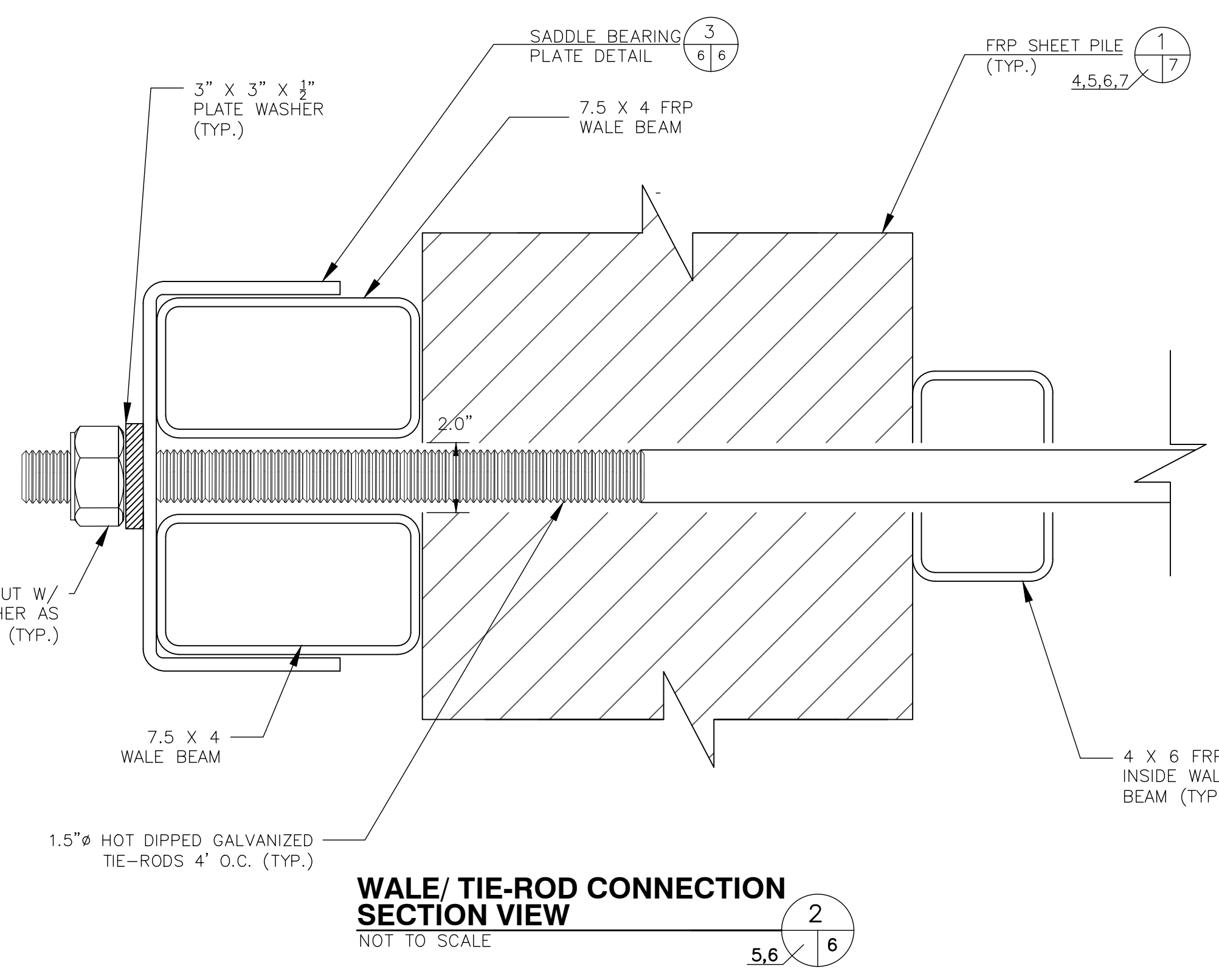
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 PLS. DMB/DJM CHK. BY: SRF APP. BY: SRF

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 DATE: JANUARY 2019  
 SCALE: AS SHOWN  
 DRAWING NO. 6  
 SHEET 6 of 8

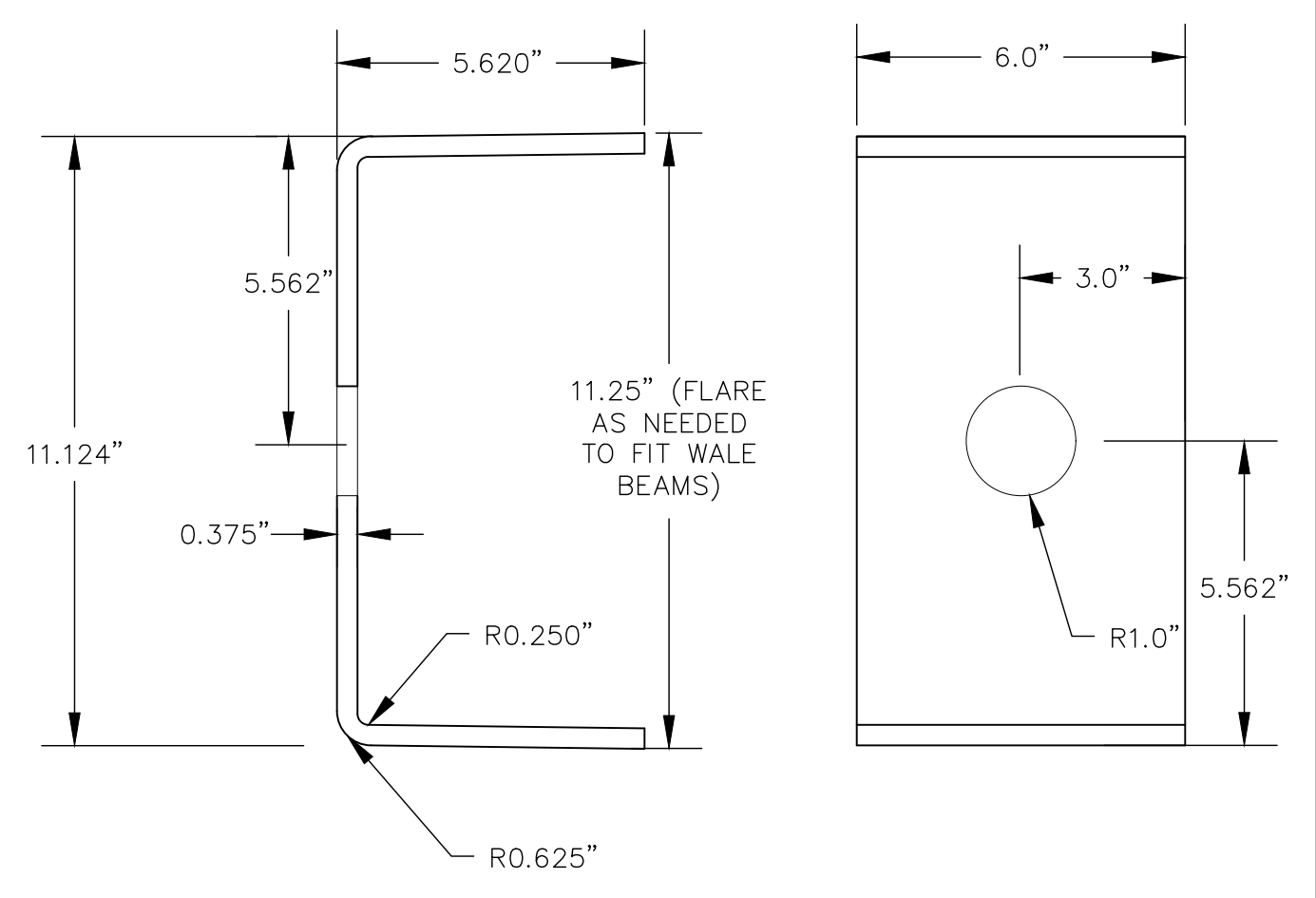


**SHEET PILE WALL PLAN VIEW**  
 NOT TO SCALE

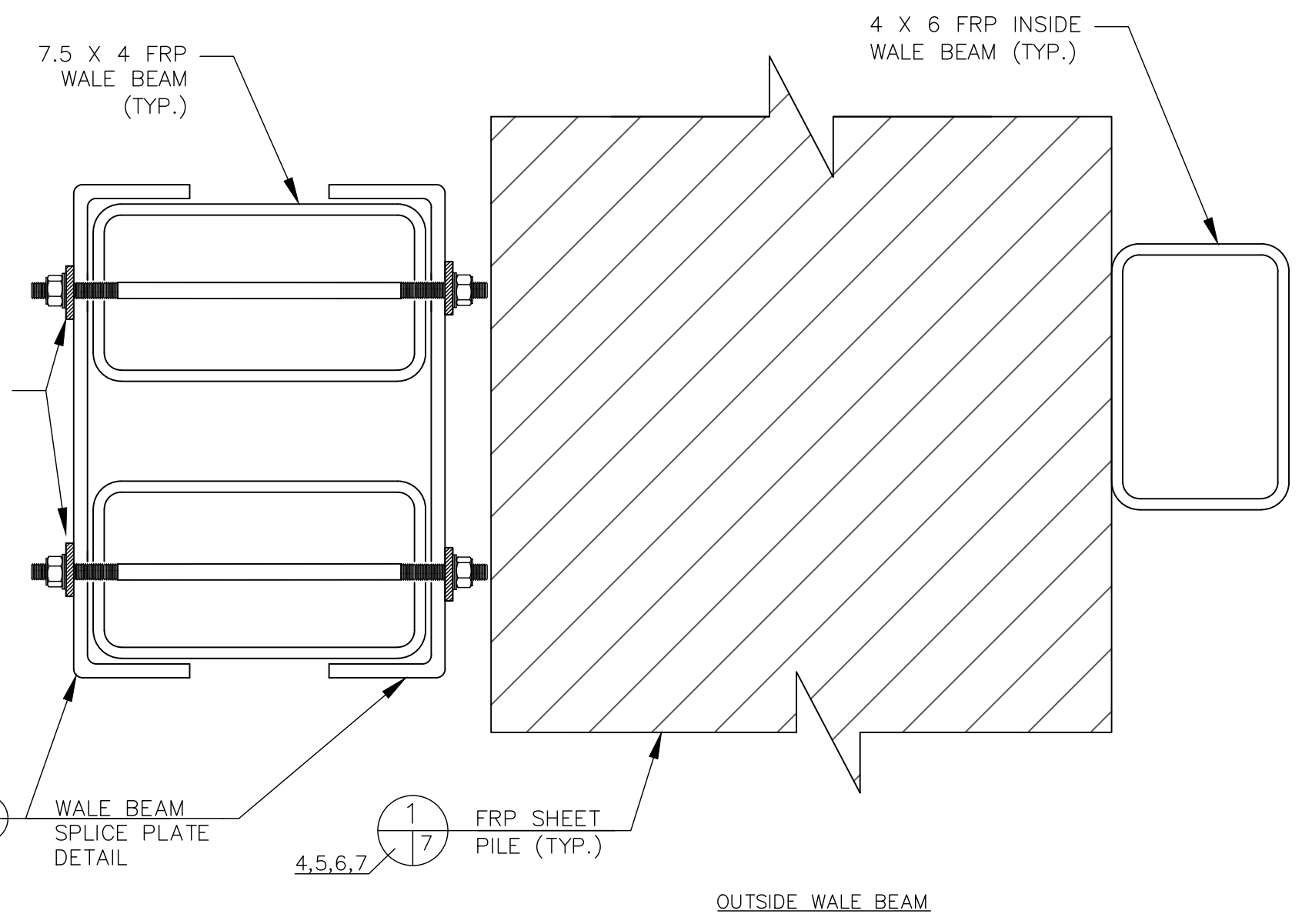
NOTE:  
 1. FABRICATED SHEET PILE CAP NOT SHOWN FOR CLARITY. REFER TO DETAIL 4 SHEET 7.



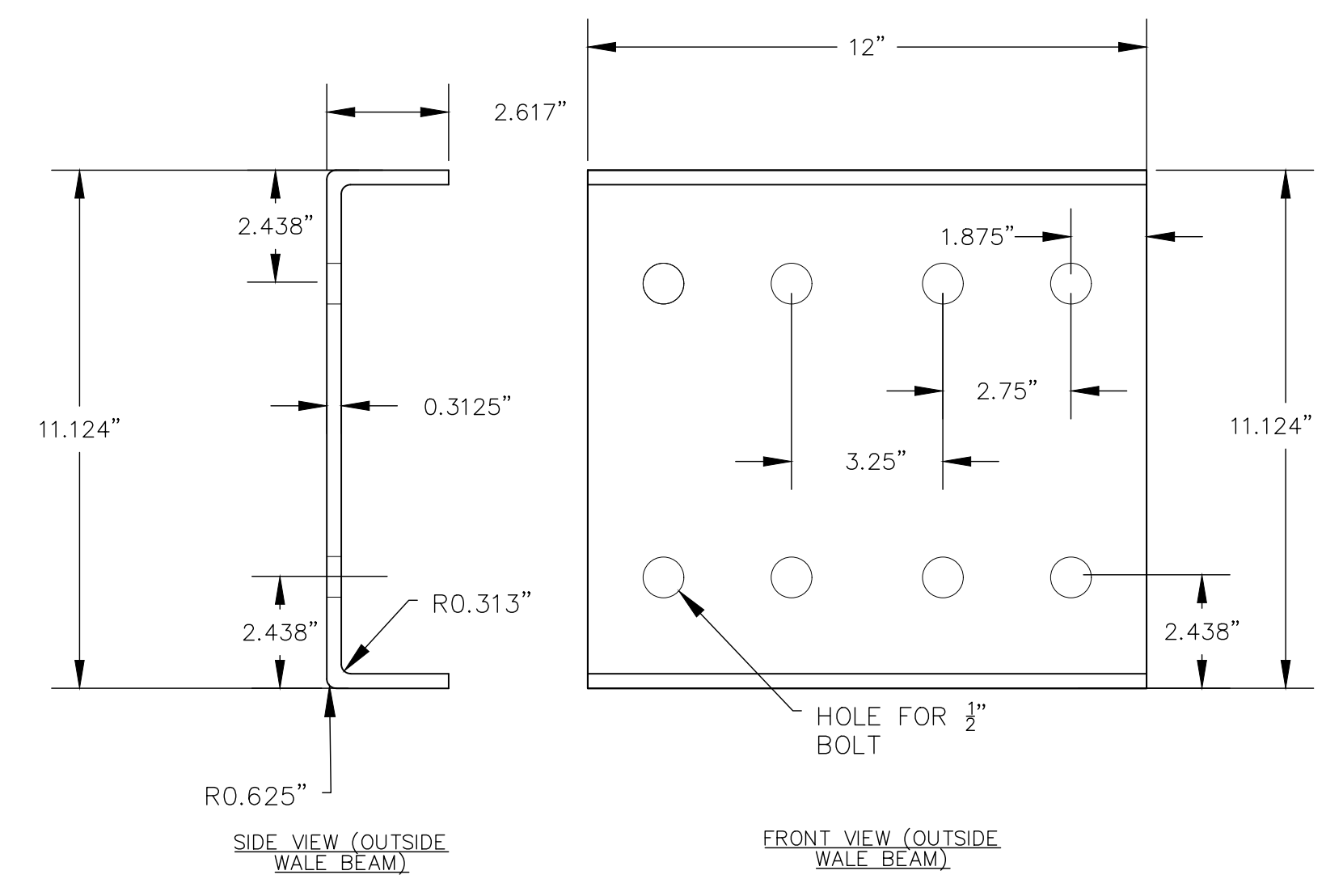
**WALE/TIE-ROD CONNECTION SECTION VIEW**  
 NOT TO SCALE



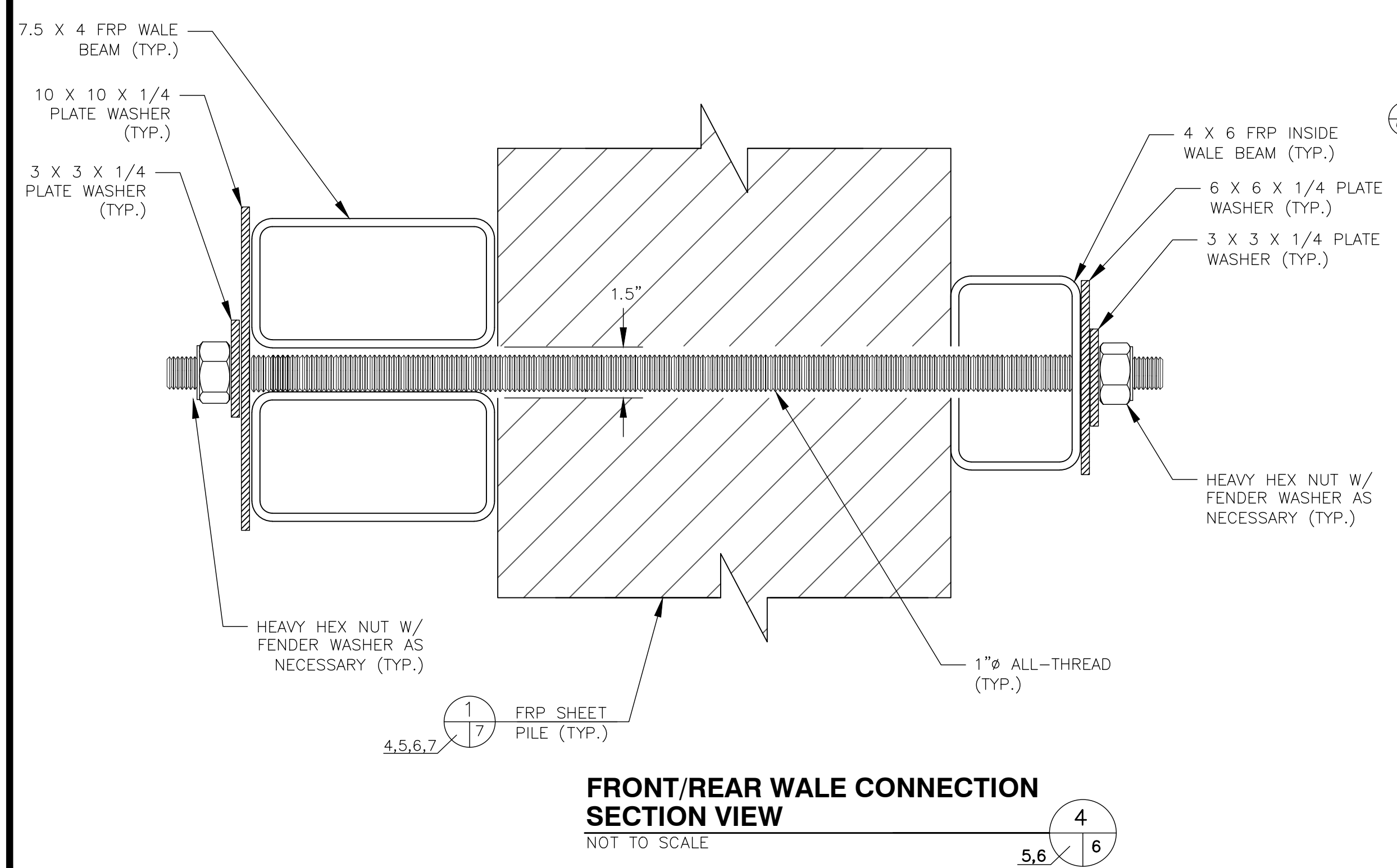
**SADDLE BEARING PLATE DETAIL**  
 NOT TO SCALE



**WALE BEAM SPLICE END - SECTION VIEW DETAIL**  
 NOT TO SCALE



**WALE BEAM SPLICE PLATE DETAIL**  
 NOT TO SCALE

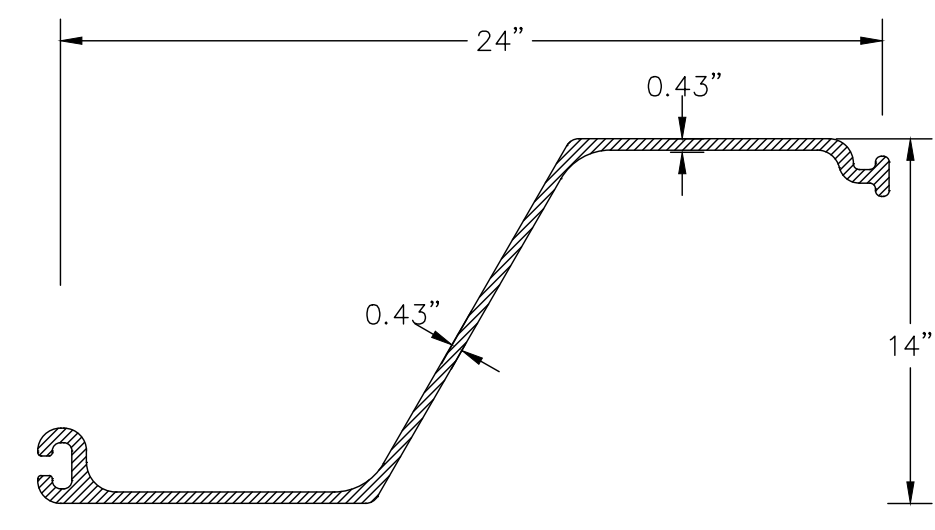
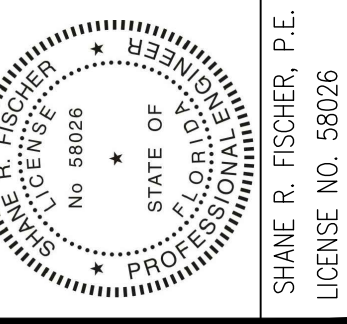


**FRONT/REAR WALE CONNECTION SECTION VIEW**  
 NOT TO SCALE

NOTES:  
 1. THE CONTRACTOR SHALL VERIFY THAT THE DIMENSIONS, SIZES, AND OTHER PROPERTIES OF THESE WALE BEAM AND TIE ROD COMPONENTS ARE APPROPRIATE FOR THIS APPLICATION.

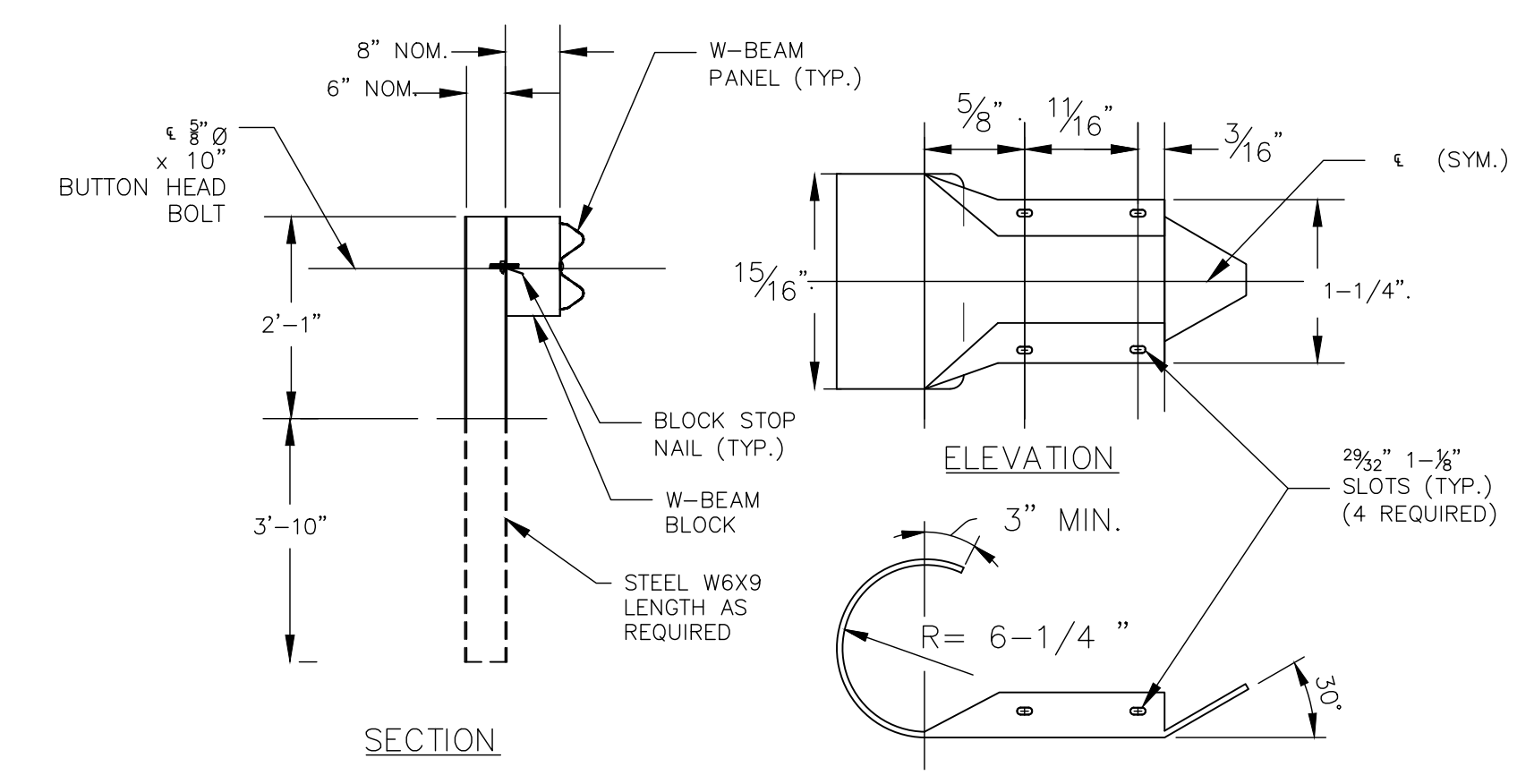
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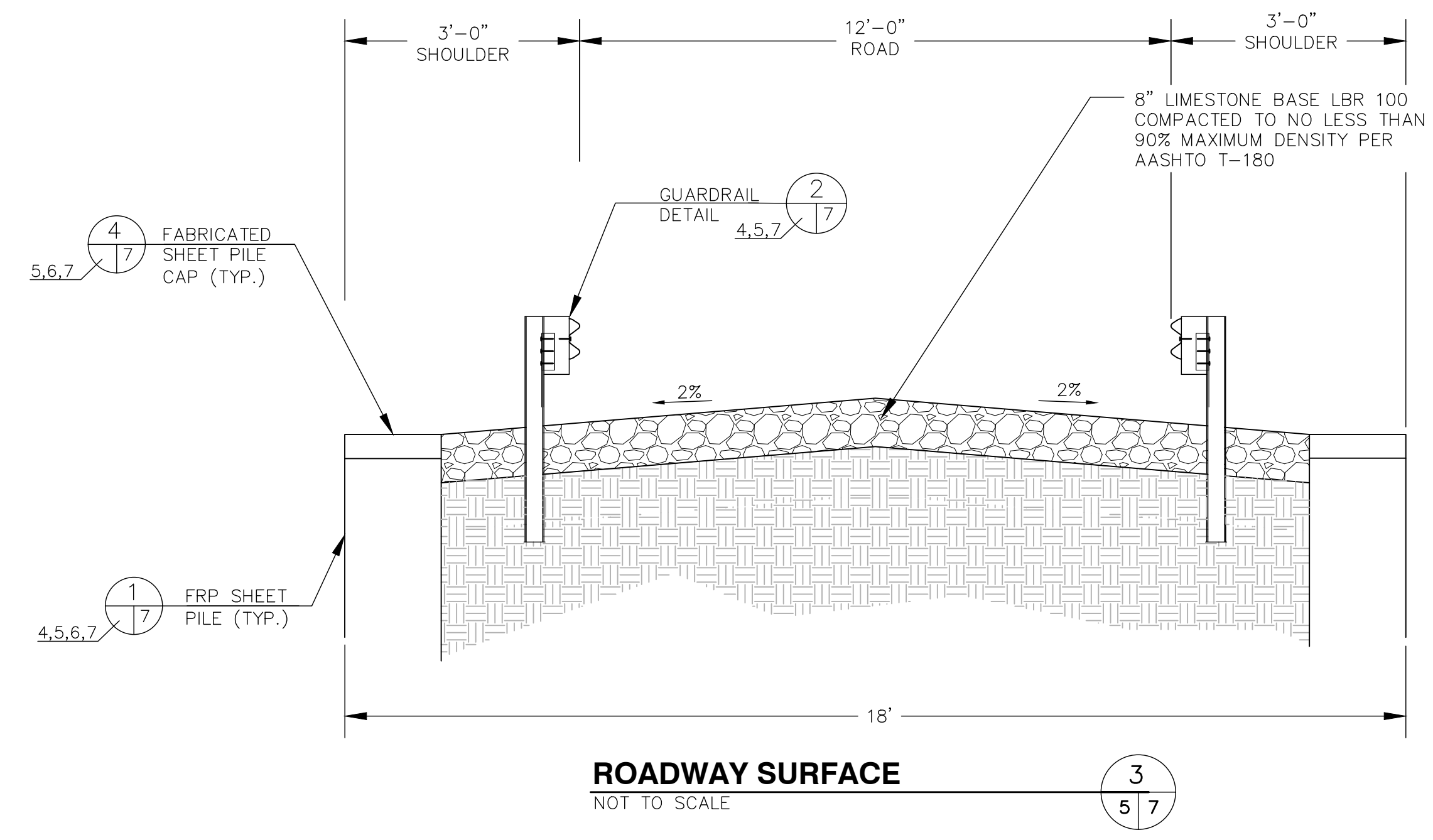
**FRP SHEET PILE (TYP.)**  
 NOT TO SCALE

1  
 4,5,6,7



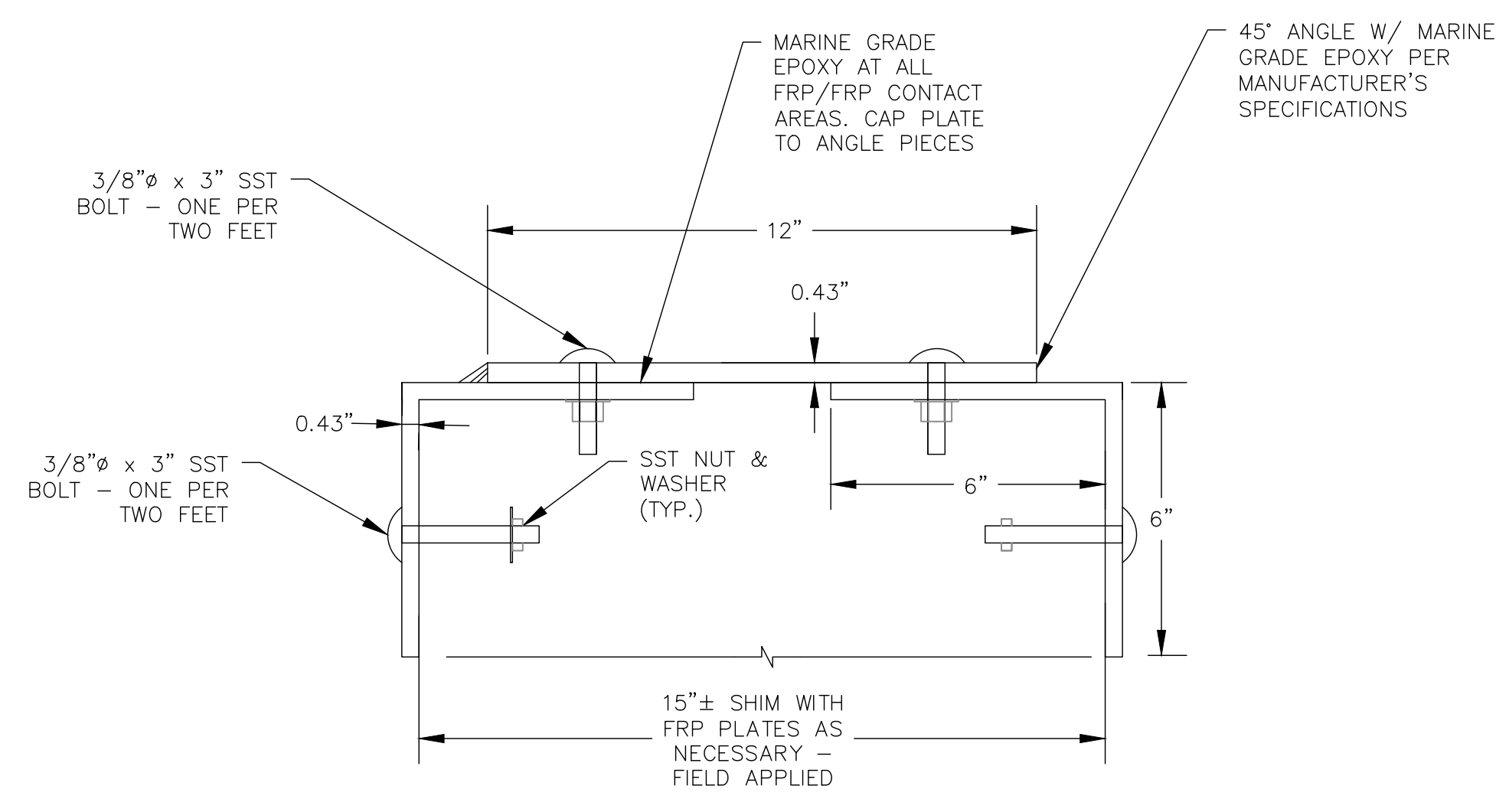
**GUARDRAIL DETAIL**  
 NOT TO SCALE

2  
 4,5,7



**ROADWAY SURFACE**  
 NOT TO SCALE

3  
 5,7



NOTE:  
 SHEET PILE NOT SHOWN FOR CLARITY.

**FABRICATED SHEET PILE WALL CAP SECTION**  
 NOT TO SCALE

4  
 6,7

CHK. BY	DESCRIPTION	DATE	REV

**GENERAL DETAILS (3 OF 3)**  
**ORANGE COUNTY LANDFILL POND 2 BERM REPAIR**

**ORANGE COUNTY UTILITIES SOLID WASTE DIVISION**  
**ORLANDO, FLORIDA**

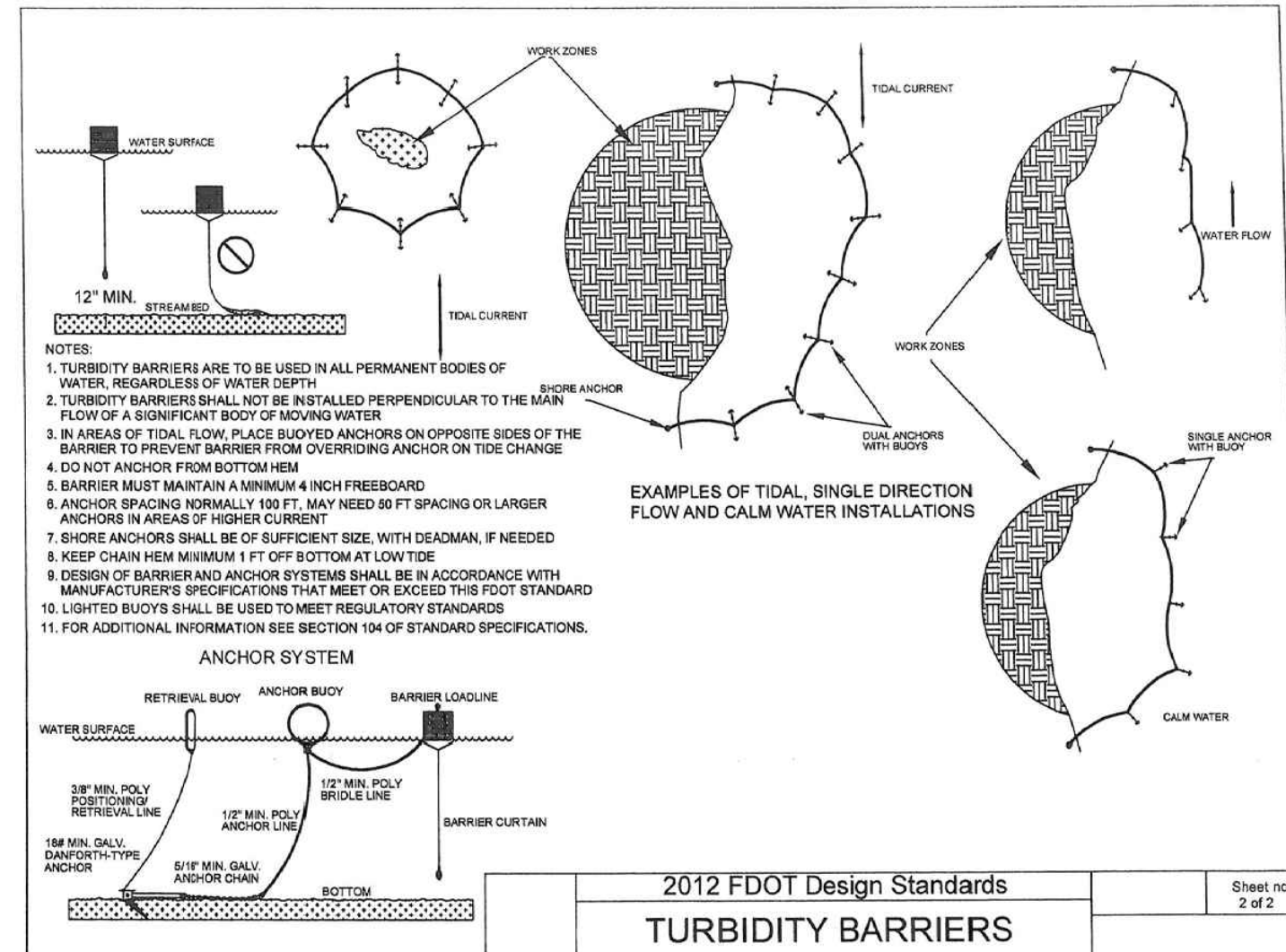
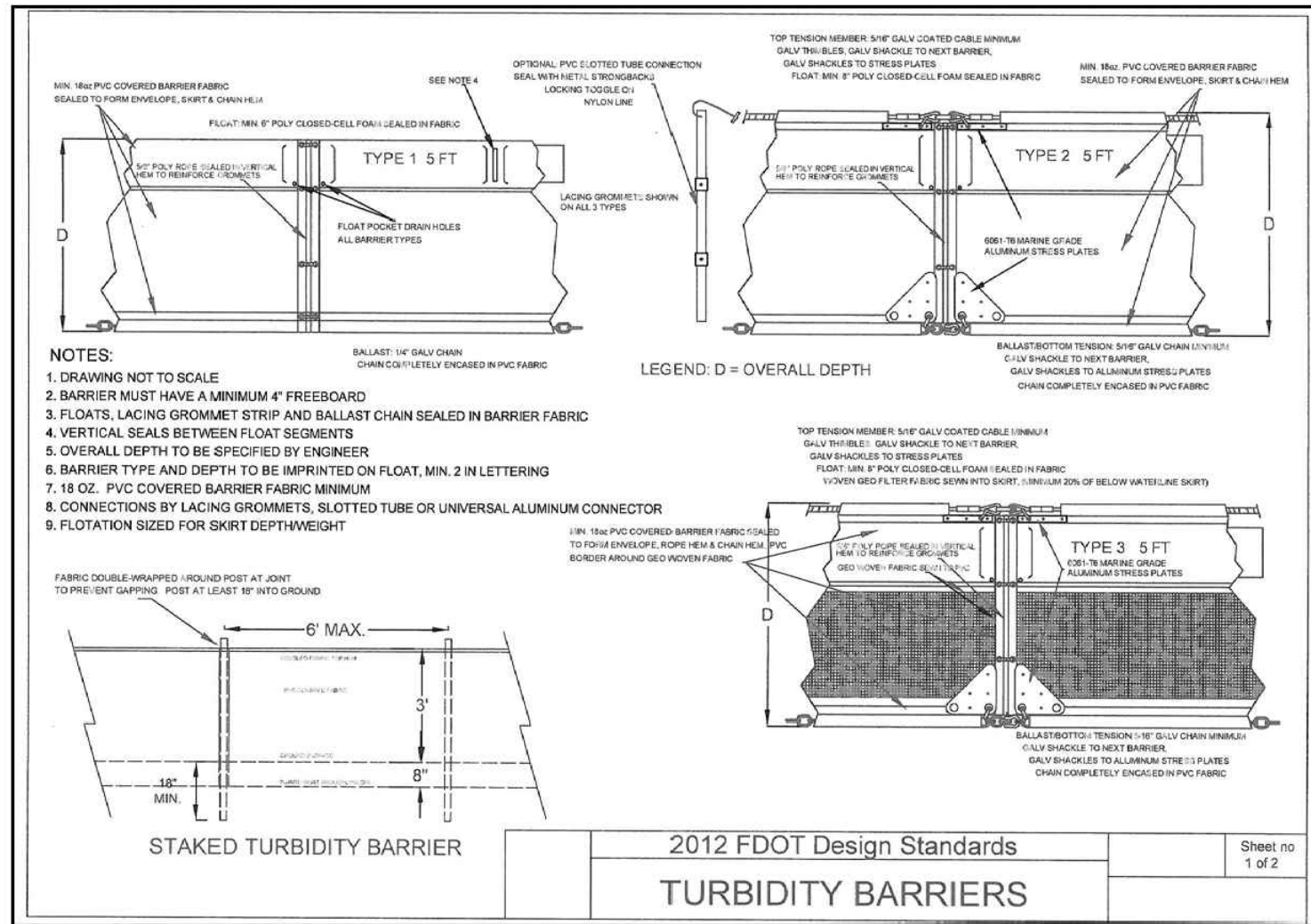
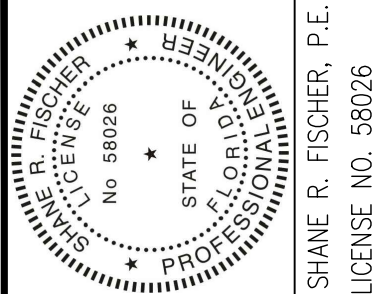
**SCS ENGINEERS**  
 STEARNS, CONRAD AND SCHMIDT  
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 5850 SOUTH SEMORAN BLVD, ORLANDO, FLORIDA 32822  
 PH (407) 204-3231 FAX NO. (813) 623-6757  
 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892  
 PROJ. NO. 09216054.04  
 DWG. BY: KMS  
 CHK. BY: SRF  
 C/A. BY: RBC  
 APP. BY: SRF

CADD FILE:  
 GENERAL DETAILS  
 DATE:  
 JANUARY 2019  
 SCALE:  
 AS SHOWN  
 DRAWING NO.

**ISSUED FOR CONSTRUCTION**

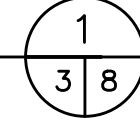
DATE: 01/04/2019

O:\PROJECT\orange county\09216054.04 - pond 2 berm repair\Drawings\4 - GENERAL DETAILS.dwg Jan 04, 2019 - 10:04am Layout Name: SHEET 7 By: 4157dmb



INFORMATION FROM THE FLORIDA DEPARTMENT OF TRANSPORTATION STATE DRAINAGE MANUAL.

**FLOATING TURBIDITY BARRIER**  
 NOT TO SCALE



**STORMWATER POLLUTION PREVENTION PLAN (SWPPP)**

- PROJECT/SITE DESCRIPTION
  - CONSTRUCTION ACTIVITY: THE PROJECT CONSISTS OF CONSTRUCTION OF A SHEET PILE WALL SYSTEM TO REPAIR A WET DETENTION POND BERM.
  - PROJECT LIMITS: THE PROJECT IS LIMITED TO THE SOUTH POND 2 BERM AND IN THE NORTHEAST OF POND 2 FOR THE CONTRACTOR'S STAGING AND STORAGE AREAS.
  - MAJOR SOIL DISTURBING ACTIVITIES:
    - CLEARING & GRUBBING
    - SOIL EXCAVATION
    - INSTALLATION OF SHEET PILE WALL SYSTEM
    - GRADING
    - POND BERM MODIFICATIONS
    - SUBGRADE AND LIMEROCK SURFACING
    - INSTALLATION OF GUARDRAIL
  - TOTAL PROJECT AREA: +/- 0.1 ACRES (SHEET PILE WALL SYSTEM)  
 TOTAL AREA TO BE DISTURBED: +/- 3.5 ACRES (NOT INCLUDING POND)
  - DESCRIPTION OF RUNOFF:
    - RUNOFF COEFFICIENTS BEFORE, DURING, AND AFTER CONSTRUCTION: CN BEFORE: 79 (AVG SITE-CN) CN DURING: VARIES CN AFTER: 94 TO 97 (AVG SITE-CN)
  - DESCRIPTION OF SOIL OR QUALITY OF DISCHARGE: REPORT OF GEOTECHNICAL ENGINEERING SERVICES, ORANGE COUNTY LANDFILL - POND 2 BERM FAILURE, DATED MARCH 7, 2018, PROJECT NUMBER 07571889. WATER QUALITY DATA FOR POND 2 CAN BE PROVIDED UPON REQUEST
- ESTIMATES OF SIZE OF DRAINAGE AREA FOR EACH OUTFALL:
  - LOCATIONS OF DRAINAGE AREAS AND OUTFALLS: DISCHARGE DURING CONSTRUCTION WILL BE TO POND 2 OR TO THE WIDE CYPRESS SWAMP.
  - NAME OF RECEIVING WATERS: THE WIDE CYPRESS SWAMP DISCHARGES TO THE LANDFILL OUTFALL DITCH (L0D-1) WHICH EVENTUALLY DRAINS TO THE LITTLE ECONLOCKHATCHEE RIVER. THE POND 2 PUMP STATION DISCHARGES TO EITHER THE WIDE CYPRESS SWAMP OR THE ORLANDO UTILITIES COMMISSION CURTIS ENERGY FACILITY (D-005) VIA THE PUMP STATION. THESE ARE PERMITTED THROUGH THE FDEP INDUSTRIAL WASTEWATER PERMIT NO. 48-FLO37133.
  - WETLAND AREA: WETLANDS ARE LOCATED IMMEDIATELY SOUTH OF THE POND 2 BERM.
- NARRATIVE

SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS: PRIOR TO THE START OF ANY SOIL DISTURBING ACTIVITIES, SILT FENCE SHALL BE INSTALLED AROUND SOIL STOCKPILES, ERODED AREAS, AND IN BETWEEN THE WETLANDS AND CONSTRUCTION AREA AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. A FLOATING TURBIDITY BARRIER SHALL BE INSTALLED AROUND CONSTRUCTION AREAS WITHIN THE POND 2 LIMITS, BETWEEN SUBSTANTIAL AND FINAL COMPLETION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT FROM THE EROSION MEASURES THAT RECEIVED DRAINAGE DURING CONSTRUCTION UNLESS DIRECTED BY THE COUNTY.

**A. EROSION AND SEDIMENT CONTROLS:**

- STABILIZATION PRACTICES:
  - TEMPORARY SODDING
  - TEMPORARY GRASSING
  - PERMANENT PLANTING, SODDING OR SEEDING
  - TEMPORARY MULCHING
  - ARTIFICIAL COVERING
  - BUFFER ZONES
  - PRESERVATION OF NATURAL RESOURCES
  - OTHER: PAVEMENT
- STRUCTURAL PRACTICES
  - SAND BAGGING
  - SILT FENCES
  - WIND SCREENS
  - SYNTHETIC BALES
  - BERMS
  - ROCK BEDDING AT CONSTRUCTION EXIT
  - TIMBER BEDDING AT CONSTRUCTION EXIT
  - DITCH LINER
  - SEDIMENT TRAPS
  - SEDIMENT BASINS
  - STONE INLET SEDIMENT TRAP
  - STONE OUTLET STRUCTURES
  - CURBS AND GUTTERS
  - STORM SEWERS
  - VELOCITY CONTROL DEVICES
  - TURBIDITY BARRIER
  - RIP RAP
  - OTHER: BERM STABILIZATION WITH RIPRAP

ADDITIONAL EROSION CONTROL MEASURES, TEMPORARY DITCHES AND/OR DIVERSIONS MAY BE REQUIRED TO PERFORM CONSTRUCTION. WHERE SUCH MEASURES ARE REQUIRED THEY SHALL BE CONSTRUCTED AS TO DIRECT RUNOFF FROM DISTURBED AREAS TO APPROPRIATE TEMPORARY CONTROL FEATURES. NO ADDITIONAL PAYMENT SHALL BE MADE FOR ADDITIONAL MEASURES REQUIRED TO CONTROL EROSION.

- DESCRIPTION OF STORMWATER MANAGEMENT: THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE EROSION AND SEDIMENT CONTROL MEASURES DESCRIBED AND PROVIDE ADDITIONAL MEASURES AS NECESSARY. AFTER ANY RAIN EVENT, THE CONTRACTOR WILL REVIEW ALL BMP'S AND REPAIR OR REPLACE BMP'S AS NECESSARY.
- OTHER CONTROLS:

- WASTE DISPOSAL: ANY CONSTRUCTION DEBRIS GENERATED AS A RESULT OF THIS PROJECT SHALL BE DISPOSED AT THE ACTIVE CLASS I OR CLASS III LANDFILLS. THE CONTRACTOR SHALL HAUL CONSTRUCTION-GENERATED DEBRIS OVER THE SCALES AND COORDINATE WITH THE COUNTY. SEDIMENT REMOVED FROM THE POND SHALL BE DISPOSED IN THE CLASS I LANDFILL.
- STAGING AREAS WILL BE LOCATED AS SHOWN ON SHEET 2.
- LOADED TRUCKS WILL BE COVERED WITH TARPS.
- SOIL PREVENTION TRACKING WILL BE INSTALLED AS PER THE SWPPP AND/OR AS DIRECTED BY THE COUNTY.
- OFFSITE VEHICLE TRACKING: LOADED HAUL TRUCKS WILL BE COVERED WITH TARPULIN. EXCESS DIRT ON ROAD WILL BE REMOVED DAILY. THE STABILIZED ROADWAY CROSSING WILL BE CLEARED USING WASHWATER CONTAINMENT.
- SANITARY WASTE: REGULARLY AND ADEQUATE MAINTENANCE SHALL BE PROVIDED TO THE TEMPORARY SANITARY FACILITIES
- FERTILIZERS, PESTICIDES AND TREES: NO FERTILIZERS OR PESTICIDES WILL BE USED AT THE SITE. PROTECT TREES WITHIN THE PROJECT LIMITS TO THE MAXIMUM EXTENT POSSIBLE. REMOVAL OF TREES AND VEGETATION SHALL BE DONE WITH THE COORDINATION OF THE COUNTY AND ENGINEER.
- TOXIC SUBSTANCES: TOXIC SUBSTANCES WILL NOT BE STORED AT THE SITE.
- NON-STORM WATER DISCHARGE (INCLUDING SPILL REPORTING): NO NON-STORMWATER DISCHARGES ARE ANTICIPATED AT THIS TIME. CONTAMINATED SOIL OR GROUNDWATER ENCOUNTERED BEYOND PREVIOUSLY IDENTIFIED AND REPORTED CONTAMINATION, SHALL BE REPORTED IMMEDIATELY TO THE COUNTY PERSONNEL. WHEN DEWATERING IS IMPLEMENTED, THE WATER WILL BE DEPOSITED IN POND 2 AND NOT THE WETLANDS.

(10) EROSION CONTROL DEVICES: LOCATIONS AND TYPES OF ALL EROSION CONTROL DEVICES SHALL BE INSTALLED AS DIRECTED BY PLAN AND/OR BY THE COUNTY. CONTRACTOR SHALL IMPLEMENT THE SWPPP AS PER CONTRACT PLANS. HOWEVER, IT MAY BE REVISED BASED ON ACTUAL FIELD CONDITIONS AT THE TIME WORK IS BEING PERFORMED. MONITORING SHALL BE PERFORMED ON A WEEKLY BASIS AND AFTER A 1/2" STORM EVENT WITH ROUTINE MAINTENANCE AND REPLACEMENT OF ANY DEVICES AS REQUIRED. CONTAINMENT OR REMOVAL OF POLLUTANTS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND/OR FDOT STANDARD SPECIFICATIONS. THE RESPONSIBLE PERSONS FOR MONITORING AND MAINTAINING THE EROSION CONTROL DEVICES SHALL BE:  
 CONTRACTOR: \_\_\_\_\_  
 TELEPHONE: \_\_\_\_\_  
 REMARKS: \_\_\_\_\_

**4. APPROVED STATE, LOCAL PLANS OR STORM WATER PERMITS: (CHECK ALL THAT APPLY)**

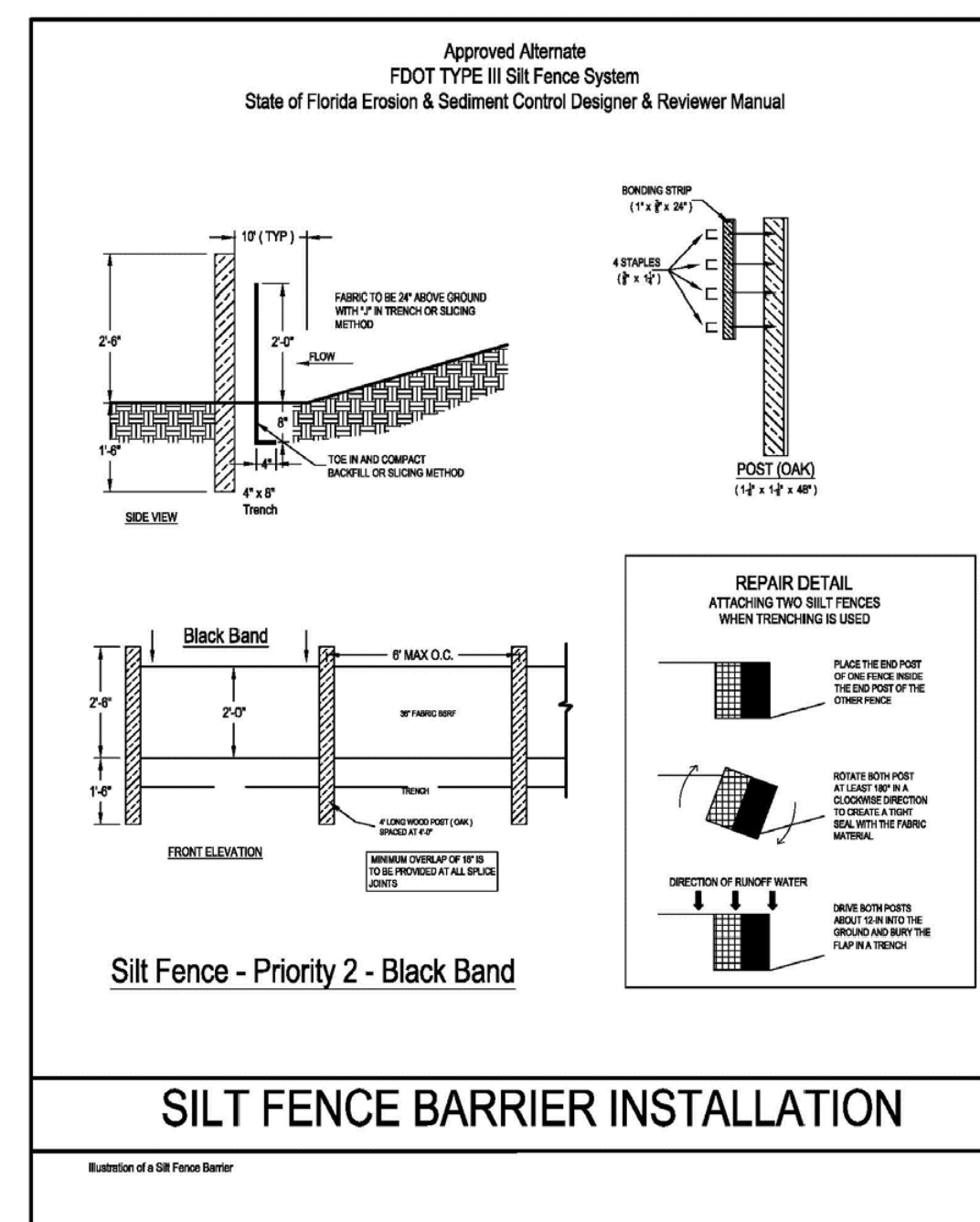
- NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) FOR PROJECTS DISTURBING MORE THAN 1 ACRE. (CONTRACTOR TO OBTAIN)
- ENVIRONMENTAL RESOURCES (ERP) PERMIT FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP)
- INDUSTRIAL WASTEWATER PERMIT FROM THE FDEP
- SOLID WASTE PERMIT FROM THE FDEP
- ORANGE COUNTY SITE APPROVAL PERMIT
- ORANGE COUNTY EASEMENT PERMIT
- ORANGE COUNTY STORMWATER PERMIT
- ORANGE COUNTY TREE REMOVAL PERMIT
- FDEP DEWATERING PERMIT

**5. MAINTENANCE**  
 ALL 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 OF THE HEIGHT OF THE FENCE. PROTECT ALL INLETS SURROUNDING CONSTRUCTION SITE. STREET SWEEPING AND DUST PREVENTION MUST BE IMPLEMENTED DAILY.

- POINTS OF DISCHARGE TO WATERS OF THE UNITED STATES
- POINTS OF DISCHARGE TO MUNICIPAL SEWER SYSTEMS
- DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED
- AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION
- STRUCTURAL CONTROLS
- STORMWATER MANAGEMENT SYSTEMS
- LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE
- STREET SWEEPING AND DUST CONTROL

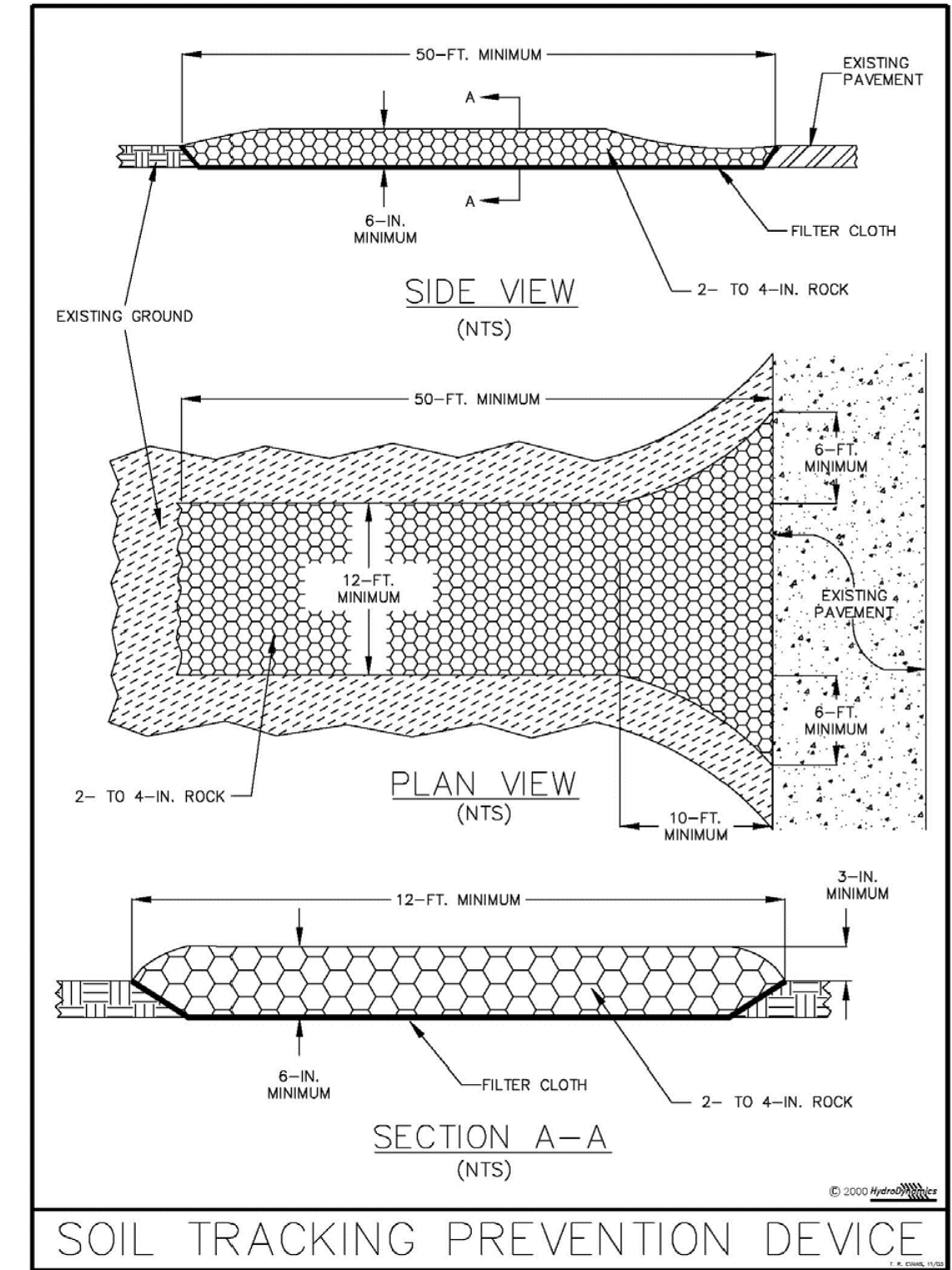
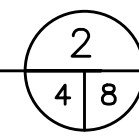
A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. IF REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF THE REPORT REMOVE EXCESS DIRT FROM ALL ROADS ADJACENT TO PROJECT AREA ON A DAILY BASIS.

SEDIMENT FOUND IN DRAINAGE INSPECTION WILL REQUIRE DRAINAGE SYSTEM CLEANING BY CONTRACTOR.



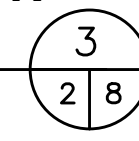
INFORMATION FROM THE FLORIDA DEPARTMENT OF TRANSPORTATION STATE DRAINAGE MANUAL.

**SILT FENCE**  
 NOT TO SCALE



INFORMATION FROM THE FLORIDA DEPARTMENT OF TRANSPORTATION STATE DRAINAGE MANUAL.

**TEMPORARY CONSTRUCTION ENTRANCE**  
 NOT TO SCALE



CHK	BY	DESCRIPTION	DATE	REV

SHEET TITLE	PROJECT TITLE
SWPPP DETAILS	ORANGE COUNTY LANDFILL POND 2 BERM REPAIR

CLIENT	PROJECT TITLE
ORANGE COUNTY UTILITIES SOLID WASTE DIVISION	ORANGE COUNTY LANDFILL POND 2 BERM REPAIR

SCS ENGINEERS	DATE
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 5850 SOUTH SEMORAN BLVD, ORLANDO, FLORIDA 32822 PH (407) 204-3231 FAX NO. (813) 623-6757 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892	JANUARY 2019

CADD FILE:	SCALE:
SWPPP DETAILS	AS SHOWN

DRAWING NO.	SHEET
8	8 of 8

**ISSUED FOR CONSTRUCTION**