

F:\PROJECT\Hillsborough\09215600.00\Task 1100 - General Services\20.0 Phase I-VI Closure\20.1 Phase I-VI Closure Permit\Engineering Drawings\01 SELF Cover.dwg Jan 28, 2022 - 6:41pm Layout Name: COVER SHEET By: 4745ald

HILLSBOROUGH COUNTY SOLID WASTE MANAGEMENT DEPARTMENT

SOUTHEAST COUNTY LANDFILL PHASE I-VI CLOSURE DESIGN

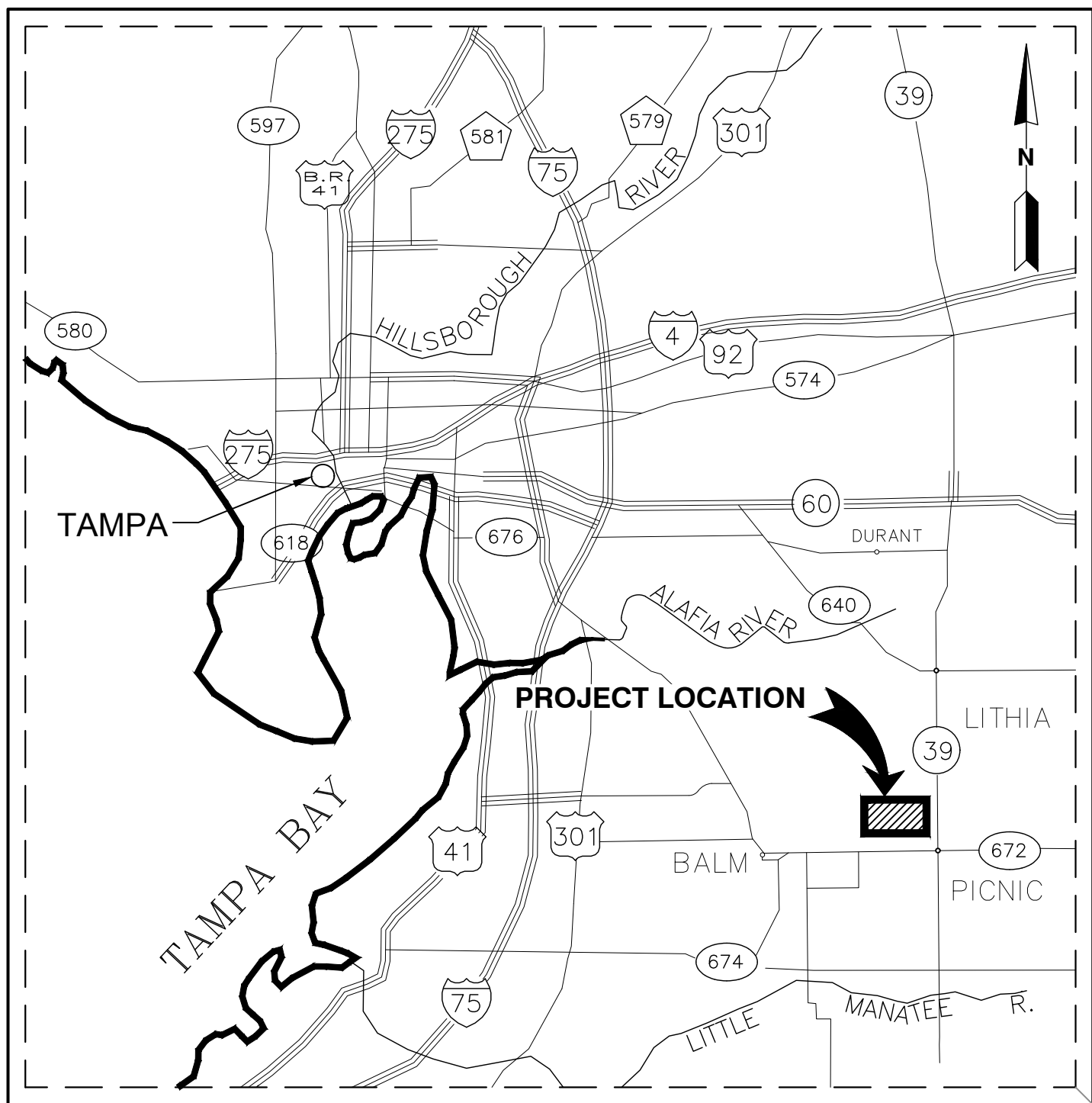
LITHIA, FLORIDA
FEBRUARY 2022



**Hillsborough
County** Florida

BOARD OF COUNTY COMMISSIONERS

HARRY COHEN	- DISTRICT 1
KEN HAGAN	- DISTRICT 2
GWEN MYERS	- DISTRICT 3
STACY WHITE	- DISTRICT 4
MARIELLA SMITH	- DISTRICT 5
PAT KEMP	- DISTRICT 6
KIMBERLY OVERMAN	- DISTRICT 7



LOCATION MAP
NOT TO SCALE

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
3922 COCONUT PALM DRIVE, SUITE 102
TAMPA, FLORIDA 33619
PH. (813) 621-0080 FAX. (813) 623-6757
FIRM REGISTRATION RY 4892
WWW.SCSENGINEERS.COM
SCS PROJECT NO. 09215600.13

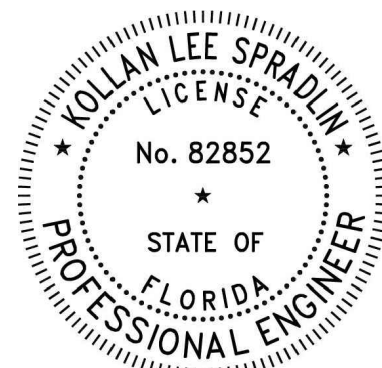
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KOLLAN LEE SPRADLIN
FL PE #82852
DATE: 2022/02/02

GENERAL:

1.

ALL EXCAVATED WASTE SHALL BE DIRECT HAULED BY THE CONTRACTOR TO THE SOUTHEAST COUNTY LANDFILL LOCATED AT 15960 COUNTY ROAD 672 LITHIA, FLORIDA 33547. COORDINATE ANY WASTE DISPOSAL WITH THE LANDFILL OPERATOR, THE COUNTY, AND THE ENGINEER.
2.

HOURS FOR CONSTRUCTION: 7:30 AM TO 5:30 PM MONDAY THROUGH SATURDAY. NO CONSTRUCTION SHALL OCCUR ON SUNDAYS OR HILLSBOROUGH COUNTY HOLIDAYS WITHOUT PRIOR APPROVAL BY THE OWNER AND ENGINEER.
3.

THE CONTRACTOR IS ADVISED THAT NO ACTIVITIES MAY INTERFERE, DISRUPT, BLOCK, OR OTHERWISE CONFLICT WITH LANDFILL OPERATIONS. IF CONFLICTS ARE ANTICIPATED, THEY SHALL BE COORDINATED AND APPROVED BY THE COUNTY AND ENGINEER PRIOR TO DISRUPTION.
4.

THE PROJECT SITE IS A SOLID WASTE CLASS I LANDFILL, AS SUCH, CONDITIONS ARE SUBJECT TO CHANGE WITH TIME. IN PARTICULAR VERTICAL GROUND ELEVATION SHOULD BE EXPECTED (AND ANTICIPATED) TO VARY FROM THOSE SHOWN ON THESE DRAWINGS DUE TO ONGOING SUBSIDENCE RESULTING FROM REFUSE DECOMPOSITION WITHIN THE PROJECT LIMITS. RELATIVE ELEVATION DIFFERENCES IN EXISTING AND PROPOSED ELEVATIONS SHOWN ON THE DRAWINGS SHALL BE ADJUSTED ACCORDINGLY AND THE ENGINEER NOTIFIED. LOCATION OF STRUCTURES SHALL BE PLACED IN ACCORDANCE WITH HORIZONTAL CONTROLS. VERTICAL PLACEMENT OF STRUCTURES SHALL BE IN ACCORDANCE WITH CONSTRUCTION DOCUMENTS, OR AS APPROVED BY THE ENGINEER.
5.

SINCE THE PROJECT SITE IS ON A SOLID WASTE CLASS I LANDFILL, COMBUSTIBLE GAS SHOULD BE EXPECTED (AND ANTICIPATED) ESPECIALLY WHEN EXCAVATING TRENCHES.
6.

ANY AND ALL FINES IMPOSED ON THE COUNTY BY ANY REGULATORY AGENCY DUE TO ACTIONS OF THE CONTRACTOR, AND ALL COSTS ASSOCIATED TO RELIEVE ALL FINES, SHALL BE PAID AND CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO THE COUNTY OR ENGINEER.
7.

EXAMINE AREAS FOR CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. REPORT IN WRITING TO THE ENGINEER ALL CONDITIONS CONTRARY TO THOSE SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN AND ALL OTHER CONDITIONS THAT WILL AFFECT SATISFACTORY EXECUTION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. STARTING WORK CONSTITUTES ACCEPTANCE OF THE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. AFTER SUCH ACCEPTANCE, THE CONTRACTOR SHALL, AT CONTRACTORS EXPENSE, BE RESPONSIBLE FOR CORRECTING ALL UNSATISFACTORY AND DEFECTIVE WORK RESULTING FROM SUCH UNSATISFACTORY CONDITIONS.
8.

INSTALL TEMPORARY BARRIERS, FENCES, BARRICADES, LIGHTS, WARNING SIGNS AND OTHER DEVICES NECESSARY TO PROTECT STRUCTURES, UTILITIES, LANDSCAPING, EXCAVATIONS, AND OTHER ITEMS AS NECESSARY. PROTECT SURVEY BENCHMARKS AND MONUMENTS FROM DISPLACEMENT, IF DISTURBED OR DESTROYED, THEY WILL BE REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE COUNTY.
9.

DEVIATIONS FROM THESE PLANS AND/OR TECHNICAL SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER OR COUNTY MAY CAUSE THE WORK TO BE UNACCEPTABLE AND WILL BE ADJUSTED OR REPAIRED AT THE CONTRACTOR'S EXPENSE.
10.

CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY LICENSES AND PERMITS ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT UNLESS NOTIFIED OTHERWISE IN WRITING BY THE COUNTY.
11.

ACTUAL DIMENSIONS AND LOCATIONS MAY VARY BASED ON FIELD LOCATIONS WITH PRIOR APPROVAL OF THE ENGINEER.
12.

CONTRACTOR SHALL PREPARE AND MAINTAIN THE GEOSYNTHETICS STORAGE AREA IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR UNLOADING AND PROTECTING GEOSYNTHETICS IN STORAGE.
13.

CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF BORROW AND HAUL ROADS USED FOR THE PROJECT. AT COMPLETION OF THE PROJECT, ALL ROADS USED DURING CONSTRUCTION WILL BE LEFT AS GOOD OR BETTER THAN INITIAL CONDITION.
14.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE HANDLING OF LEACHATE WITHIN THE PROJECT AREA, INCLUDING LEACHATE, THAT MAY SEEP OUT OF THE SLOPES DURING CONSTRUCTION.

EARTHWORK:

1.

EXCAVATION IS UNCLASSIFIED AND INCLUDES REMOVAL OF EARTH FILLS, RUBBLE, AND OTHER MATERIALS ENCOUNTERED IN EXCAVATION AND GRADING OPERATIONS TO DEPTH AND EXTENT SHOWN ON DRAWINGS OR SPECIFIED. THE ENGINEER SHALL BE THE FINAL AUTHORITY AND SHALL MAKE THE FINAL DECISION DURING CONSTRUCTION AS TO THE DEPTH AND EXTENT TO WHICH MATERIALS MUST BE REMOVED AND REPLACED.
2.

LIMIT DIRT, DUST, NOISE AND OTHER OBJECTIONABLE NUISANCES PER PERMIT REQUIREMENTS.
3.

THE CONTRACTOR IS RESPONSIBLE FOR ALL SHORING AND BRACING DURING CONSTRUCTION.
4.

THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION QUALITY CONTROL UNLESS OTHERWISE NOTED IN SPECIFICATIONS.
5.

THE COUNTY WILL PROVIDE FOR THE ON-SITE SERVICES OF A CONSTRUCTION QUALITY ASSURANCE (CQA) REPRESENTATIVE OR A COUNTY AUTHORIZED REPRESENTATIVE TO TEST MATERIALS AND MONITOR COMPLIANCE WITH THE REQUIREMENTS OF THESE DRAWINGS AND TECHNICAL SPECIFICATIONS. THE CONTRACTOR WILL AFFORD THESE REPRESENTATIVES ACCESS TO THE JOB SITE FOR THE PERFORMANCE OF THEIR DUTIES.
6.

SOIL BACKFILL MATERIALS (ONLY) SHALL BE FREE OF DELETERIOUS MATERIAL (STICKS, ROOTS, WASTE, ETC.) AND ROCK FRAGMENTS, BOULDERS, OR COBBLES GREATER THAN 1/2 INCH IN SIZE.
7.

ALL SOIL BACKFILL MATERIAL HANDLING (EXCAVATION, HAULING, STOCKPILING, ETC.) WILL BE COMPLETED BY THE CONTRACTOR.

UTILITIES:

1.

THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS SHOWN AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK PRIOR TO CONSTRUCTION. ALL DAMAGE MADE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ALL COORDINATION AND REQUIRED UTILITY COMPANY TEMPORARY PROTECTION SHALL BE AT THE CONTRACTOR'S EXPENSE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE UNINTERRUPTED SERVICE AND REPLACEMENT OF DAMAGED UTILITIES.

SURVEYING:

1.

HORIZONTAL DATUM IS BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 1983/90. VERTICAL DATUM IS BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1929.
2.

SURVEY BENCHMARKS, MONUMENTS AND OTHER REFERENCE POINTS SHALL BE PROTECTED FROM DAMAGE AND DISPLACEMENT. IF DISTURBED OR DESTROYED, THEY WILL BE REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE COUNTY.
3.

ALL REQUESTED SURVEY DATA MUST BE PROVIDED TO THE ENGINEER IN FLORIDA STATE PLANE COORDINATES AND BE SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED SURVEYOR.

SITE EXCAVATION, STOCKPILING, BACKFILLING, COMPACTION, AND GRADING

1.

SOIL USED IN CONSTRUCTION SHALL BE STOCKPILED ON SITE IN AREAS IDENTIFIED BY THE OWNER.
2.

PLACEMENT AND COMPACTION OF SOIL IN THE CONSTRUCTION AREA SHALL BE COMPLETED BY THE CONTRACTOR TO DEPTHS AND DIMENSIONS SHOWN ON PLANS. COMPACTION SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.
3.

RECLAIMED ASPHALT BASE MATERIAL SHALL BE USED AS BACKFILL WHERE INDICATED ON PLAN AND COMPACTED IN LIFTS NO GREATER THAN 6-INCHES USING METHODS AND EQUIPMENT OUTLINED IN SECTION 283 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

EROSION AND SETTLEMENT CONTROL:

1.

INSTALL EROSION AND SEDIMENT CONTROL TO PREVENT SEDIMENTATION AND DAMAGE FROM STORMWATER RUNOFF TO ADJACENT AREAS AS NECESSARY AS DICTATED BY ACTUAL SITE CONDITIONS OR AS DIRECTED BY THE COUNTY OR ENGINEER AND AS SHOWN ON THE DRAWINGS. LOCATIONS WILL BE ADJUSTED TO REFLECT PROJECT PHASING REQUIREMENTS.
2.

CONTRACTOR SHALL INSPECT AND REPAIR, AS NECESSARY, ANY EROSION AND SEDIMENT CONTROL DAILY AND FOLLOWING EACH MEASURABLE RAIN EVENT AS DEFINED BY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM RULES AND REGULATIONS.
3.

CONTRACTOR SHALL MONITOR DOWNSTREAM CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD, CLEARING ANY DEBRIS AND SEDIMENT RESULTING FROM CONSTRUCTION.
4.

ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY THE OWNER OR ENGINEER.
5.

EROSION CONTROL FENCING MUST MEET THE REQUIREMENTS OF THE DEPARTMENT OF TRANSPORTATION, STATE OF FLORIDA STANDARD SPECIFICATIONS. EROSION CONTROL MEASURES WILL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES.
6.

AREAS DISTURBED BEYOND THE LIMITS OF CONSTRUCTION SHALL BE RE-SODDED AT NO COST TO THE COUNTY OR ENGINEER.
7.

THE CONTRACTOR SHALL KEEP ALL SEEDED AND SODDED AREAS WATERED AND IN GOOD CONDITION UNTIL THE CONTRACTOR HAS RECEIVED FINAL PAYMENT INCLUDING THE CERTIFICATE OF FINAL COMPLETION AND ALL SUBCONTRACTOR AFFIDAVITS (FINAL COMPLETION).
8.

THE REPAIR OF ANY EROSION OR SOD RELOCATION NECESSARY PRIOR TO THE SOD BECOMING FIRMLY ROOTED WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9.

BEGIN MAINTENANCE OF SEEDED AND SODDED AREAS IMMEDIATELY AFTER EACH PORTION IS PLANTED AND CONTINUE UNTIL FINAL ACCEPTANCE.
10.

EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE REMOVED BY THE CONTRACTOR WHEN NO LONGER REQUIRED.
11.

EROSION AND CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED TO THE SATISFACTION OF THE ENGINEER. FAILURE TO DO SO WILL RESULT IN STOPPAGE OF WORK UNTIL SAID MEASURES COMPLY WITH ACCEPTABLE STANDARDS. PLACE SILTATION BARRIERS AROUND DROP INLETS AND MAINTAIN UNTIL SOD IS ESTABLISHED.
12.

AT NO TIME WILL STORMWATER RUNOFF WITHIN THE LIMITS OF CONSTRUCTION BE ALLOWED TO DISCHARGE TO THE STORMWATER SYSTEM OR OFFSITE WITHOUT PROPER WATER QUALITY TREATMENT.
13.

THE CONTRACTOR SHALL PLAN CONSTRUCTION ACTIVITIES TO ASSURE THAT THE DISCHARGE OF LEACHATE OR CONTAMINATED STORMWATER OUTSIDE THE LINER AND LEACHATE COLLECTION SYSTEM DOES NOT OCCUR.
14.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL COSTS (INCLUDING INVESTIGATION, SAMPLING TESTING, ANALYSIS ENGINEERING AND REMEDIAL CONSTRUCTION) RELATED TO THE DISCHARGE OF LEACHATE OR CONTAMINATED STORMWATER OUTSIDE THE LINER AND LEACHATE COLLECTION SYSTEM RESULTING FROM INEFFECTIVE CONTROL OF LEACHATE OR STORMWATER DISCHARGE BY CONTRACTOR.

ACCESS AND TRAFFIC CONTROL:

1.

CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN.
2.

THE PRIMARY ACCESS ROAD WILL VARY DEPENDING ON CLOSURE STAGE AND WASTE FILLING OPERATIONS.
3.

ACCESS ROADS MUST BE MAINTAINED DURING THE CONSTRUCTION PERIOD BY THE CONTRACTOR.
4.

CONTRACTOR TO COORDINATE SITE ACCESS WITH THE COUNTY. CONTRACTOR TO PROVIDE SIGNAGE AND SIGNALS OR SIGNAL PERSON(S) SO NORMAL SITE OPERATIONS CAN BE MAINTAINED.

GEOMEMBRANE TIE-IN:

1.

EXTRA CARE SHOULD BE TAKEN WHEN EXCAVATING THE LINER TIE-IN AND ANYTIME EXCAVATION IS REQUIRED IN OR AROUND THE LINER TIE-IN LOCATION. DAMAGE CAUSED BY CONTRACTOR SHALL BE REPAIRED AT CONTRACTORS EXPENSE. DAMAGED LOCATIONS SHALL BE DOCUMENTED AND SURVEYED.
2.

LEACHATE CLEANOUTS AND UTILITY ACCESS EXIST THAT ARE AT OR BELOW GRADE. IF DAMAGED THEY SHALL BE REPAIRED AT CONTRACTORS EXPENSE.
3.

EXISTING TOE DRAINS, LINER, AND CUT-OFF TRENCH TO BE PROTECTED IN PLACE. TOE DRAIN OUTLETS TO BE LOCATED AND EXTENDED OR INSTALLED WHERE MISSING/DAMAGED.

HEALTH AND SAFETY:

1.

THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL SAFETY CODES, ORDINANCES, AND REGULATIONS, INCLUDING THE REQUIREMENTS OF THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND OTHER SUCH SAFETY MEASURES AS MAY BE REQUIRED BY THE ABOVE-MENTIONED REGULATORY AGENCIES AS REQUIRED FOR WORK BEING PERFORMED.
2.

THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF 29 CFR 1910.132 FOR WORKER PERSONAL PROTECTION EQUIPMENT REQUIREMENTS.
3.

ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CONTRACTOR'S HEALTH AND SAFETY PLAN.
4.

THE CONTRACTOR WILL USE A HEALTH AND SAFETY OFFICER FOR CONSTRUCTION OVERSIGHT THAT IS CURRENTLY TRAINED IN ACCORDANCE WITH OSHA REGULATIONS 29 CFR 1910.120. THE HEALTH AND SAFETY OFFICER MUST HAVE COMPLETED THE 8-HOUR MANAGEMENT AND SUPERVISOR TRAINING, 40-HOUR HEALTH AND SAFETY TRAINING COURSE AND NECESSARY REFRESHER COURSES, AND MEDICAL MONITORING. THE CONTRACTOR HEALTH AND SAFETY OFFICER WILL ATTEND ALL MEETINGS REQUIRING CONTRACTOR PRESENCE IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS.

LANDFILL GAS:

1.

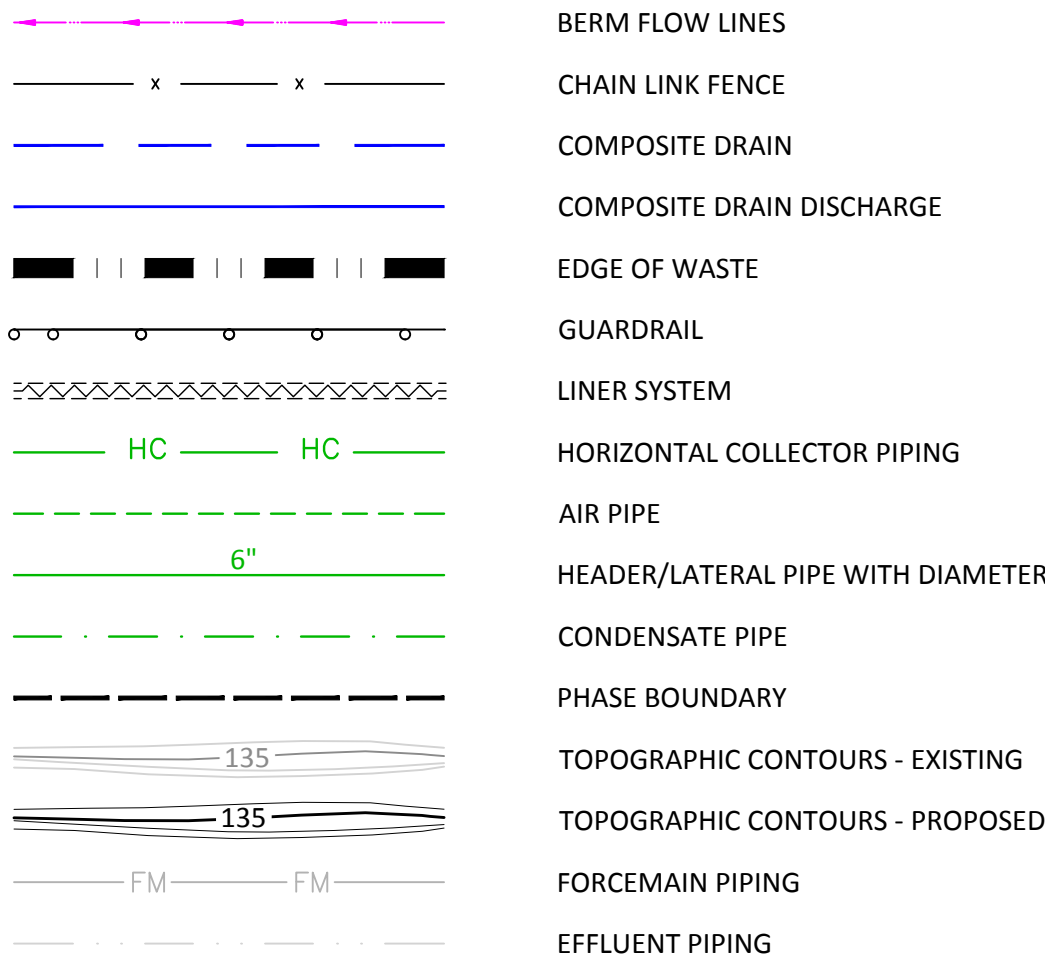
ATTENTION IS DIRECTED TO THE FACT THAT AN ACTIVE LANDFILL GAS COLLECTION SYSTEM AND OTHER FACILITIES WILL BE IN OPERATION DURING THE CONSTRUCTION PERIOD. COUNTY AND OTHER CONTRACTORS WILL BE ACTIVE DURING NORMAL BUSINESS HOURS. THE CONTRACTOR SHALL NOT BLOCK THE PRIMARY ACCESS ROAD, FLARE STATION, OR OTHERWISE HINDER OTHER LANDFILL OPERATION ACTIVITIES WITHOUT PRIOR WRITTEN APPROVAL FROM THE COUNTY.
2.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SITE SAFETY ASSOCIATED WITH THE LANDFILL GAS FLARE WORK AND COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL HEALTH AND SAFETY LAWS, CODES, REGULATIONS, AND ORDINANCES, INCLUDING BUT NOT LIMITED TO THOSE MANDATED BY OSHA.
3.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DEVELOPING AND MAINTAINING A SITE AND PERSONNEL SAFETY PROGRAM TO ADDRESS MONITORING OF CONTRACTOR'S WORK WITHIN AND IMMEDIATELY ADJACENT TO THE EXISTING FLARE STATION, AND THE PROTECTION OF PERSONNEL FROM RELATED HAZARDS, INCLUDING ASPHYXIATION AND POISONING DUE TO THE PRESENCE OF LANDFILL GAS.
4.

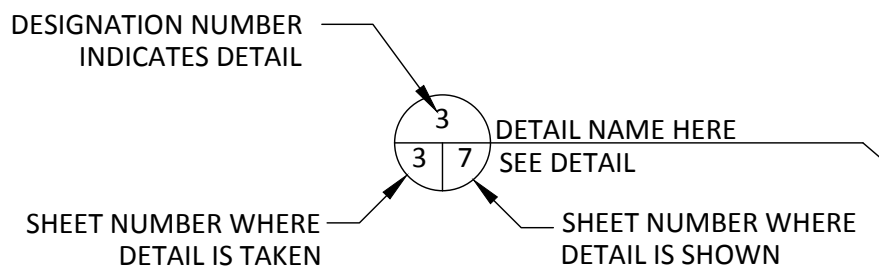
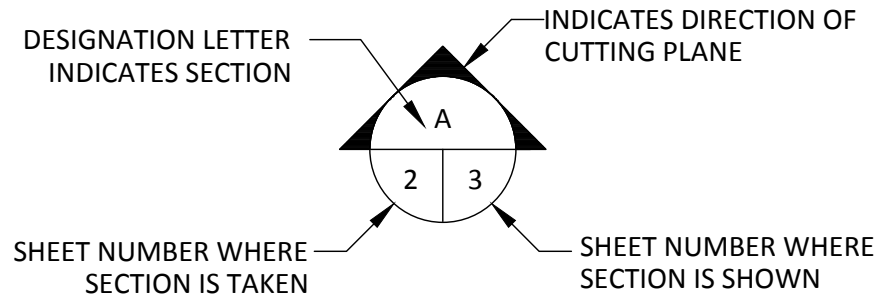
THE CONTRACTOR IS NOT AUTHORIZED TO PERFORM ANY DEMOLITION OF THE EXISTING LANDFILL GAS SYSTEM UNTIL COUNTY AND ENGINEER HAVE COORDINATED WITH CONTRACTOR TO ALLOW FOR CONTINUED OPERATION OF THE LANDFILL GAS SYSTEM.

LINETYPES

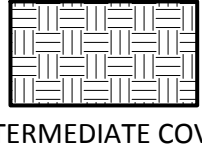
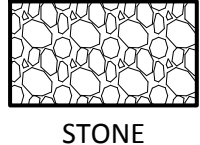
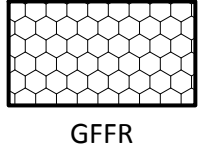
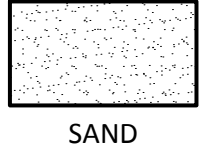
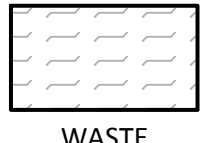
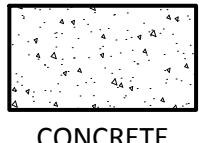
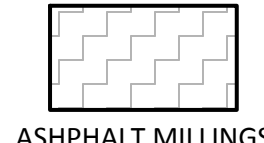


NOTE:
BLACK OR GRAY VERSIONS OF COLORED LINES SHOWN HERE
INDICATE EXISTING CONDITIONS UNLESS OTHERWISE INDICATED.

SECTION AND DETAIL DESIGNATION



INDICATES WHERE
DETAIL IS TAKEN



ABBREVIATIONS

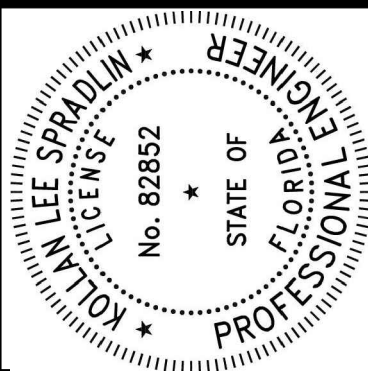
Ø	DIAMETER
AC	ACRES
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
D.I.	DUCTILE IRON
EXIST	EXISTING
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FM	FORCEMAIN
GFFR	GROUT FILLED FABRIC REVETMENT
HDPE	HIGH DENSITY POLYETHYLENE
LBR	LOAD BEARING RATIO
LFG	LANDFILL GAS
LLDPE	LINEAR LOW DENSITY POLYETHYLENE
MAX	MAXIMUM
MES	MITERED END SECTION
MIN	MINIMUM
NAD	NORTH AMERICAN DATUM
OC	ON CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OZ/SY	OUNCE/ SQUARE YARD
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
SED	SEDIMENT
S.S.	STAINLESS STEEL
TYP	TYPICAL

SYMBOLS AND HATCHES

● CO-#	FORCEMAIN CLEAN OUT
■ CS-##	CONDENSATE SUMP
■ GW-16	GROUNDWATER MONITORING POINT
HP	HIGH POINT
● CO-#-#	LEACHATE CLEANOUT
● MP-##	MONITORING POINT
▲	TRAFFIC FLOW INDICATOR
⊙ AR-##	HEADER ACCESS RISER
⊙ AV-##	VALVE - AIR ISOLATION
⊙ CV-##	VALVE - CONDENSATE ISOLATION
⊙ V-##	VALVE - HEADER ISOLATION
⊙ EW-##	LFG EXTRACTION WELLHEAD
⊙ DW-##	DEWATERING WELL
⊙ EW-##	CAISSON WELLHEAD
⊙ HC-##	REMOTE WELLHEAD
⊙ HC-##	HORIZONTAL COLLECTOR WELLHEAD
▲ LCO-#-#	LEACHATE CLEANOUT WELLHEAD
✕	PROPOSED WELL ABANDONMENT

NOTE:
COLORED VERSIONS OF SYMBOLS SHOWN HERE INDICATE PROPOSED BLACK OR GRAY VERSIONS OF SYMBOLS SHOWN HERE INDICATE EXISTING CONDITIONS.

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CHK.	BY	DESCRIPTION	DATE	REV

GENERAL NOTES

SHEET TITLE
PROJECT TITLE

HILLSBOROUGH COUNTY
SOLID WASTE DEPARTMENT
TAMPA, FL 33619

CLIENT

SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892	PROJ. NO.: 09215600.13 DATE: 09/21/2021 DRAWN BY: AID CHECKED BY: SRF SCALE: KLS	Q/A REVIEW BY: RBC APP. BY: KLS
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CADD FILE:
02 - GENERAL NOTES

DATE:
FEBRUARY 2022

DRAWING NO.

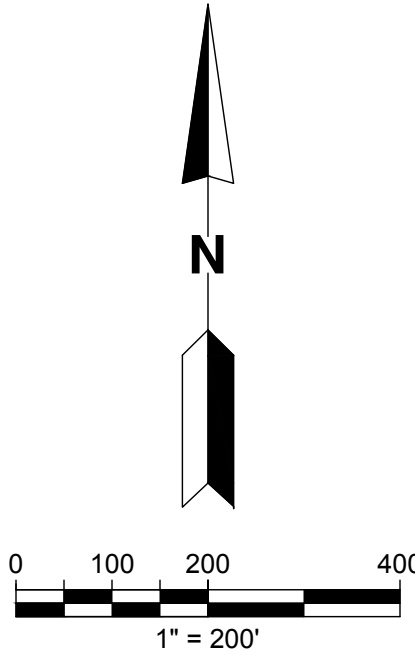
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SHEET 02 of 22

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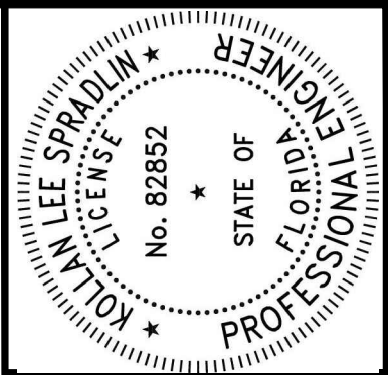


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SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892		CADD FILE: PROJECT SITE		DATE: FEBRUARY 2022		DRAWING NO. 03	
PROJ. NO. 09215600.13	DATE 09/21/2021	OWN. BY KLS	CHK. BY ALD	APP. BY RBC	Q/A/REV BY RBC	SHEET 03 of 22	
CLIENT HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619		SHEET TITLE SITE PLAN		PROJECT TITLE PHASE I-VI CLOSURE DESIGN		CHK. BY	
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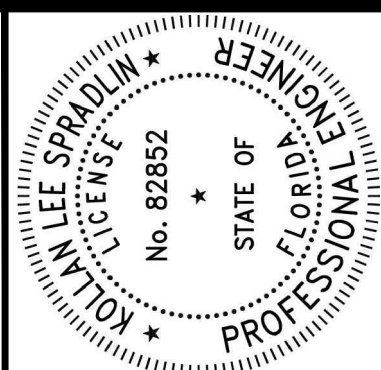
NOTE:

TOPOGRAPHIC SURVEY PROVIDED BY PICKETT AND ASSOCIATES, INC. 475 SOUTH FIRST AVENUE BARTOW, FLORIDA 33830 PHONE: (863)-533-9095. SURVEY PREPARED BY PHOTOGRAMMETRIC AND LIDAR METHODS, FLIGHT DATE JULY 29, 2021.

SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892		CLIENT HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619		SHEET TITLE EXISTING CONDITIONS PROJECT TITLE PHASE I-VI CLOSURE DESIGN		REV <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		DATE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		DESCRIPTION <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		CHK BY <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
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3 CAISSON WELL ABANDONMENT
05 22 SEE DETAIL

HORIZONTAL COLLECTOR VERTICAL ABANDONMENT
SEE DETAIL

[illegible]

EXISTING GCCS

PHASE I-VI CLOSURE DESIGN

**HILLSBOROUGH COUNTY
SOLID WASTE DEPARTMENT
TAMPA, FL 33619**

SCHS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
39922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619
TELEPHONE (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA FIRM REGISTRATION RY-4892
C/OA SWAN RY

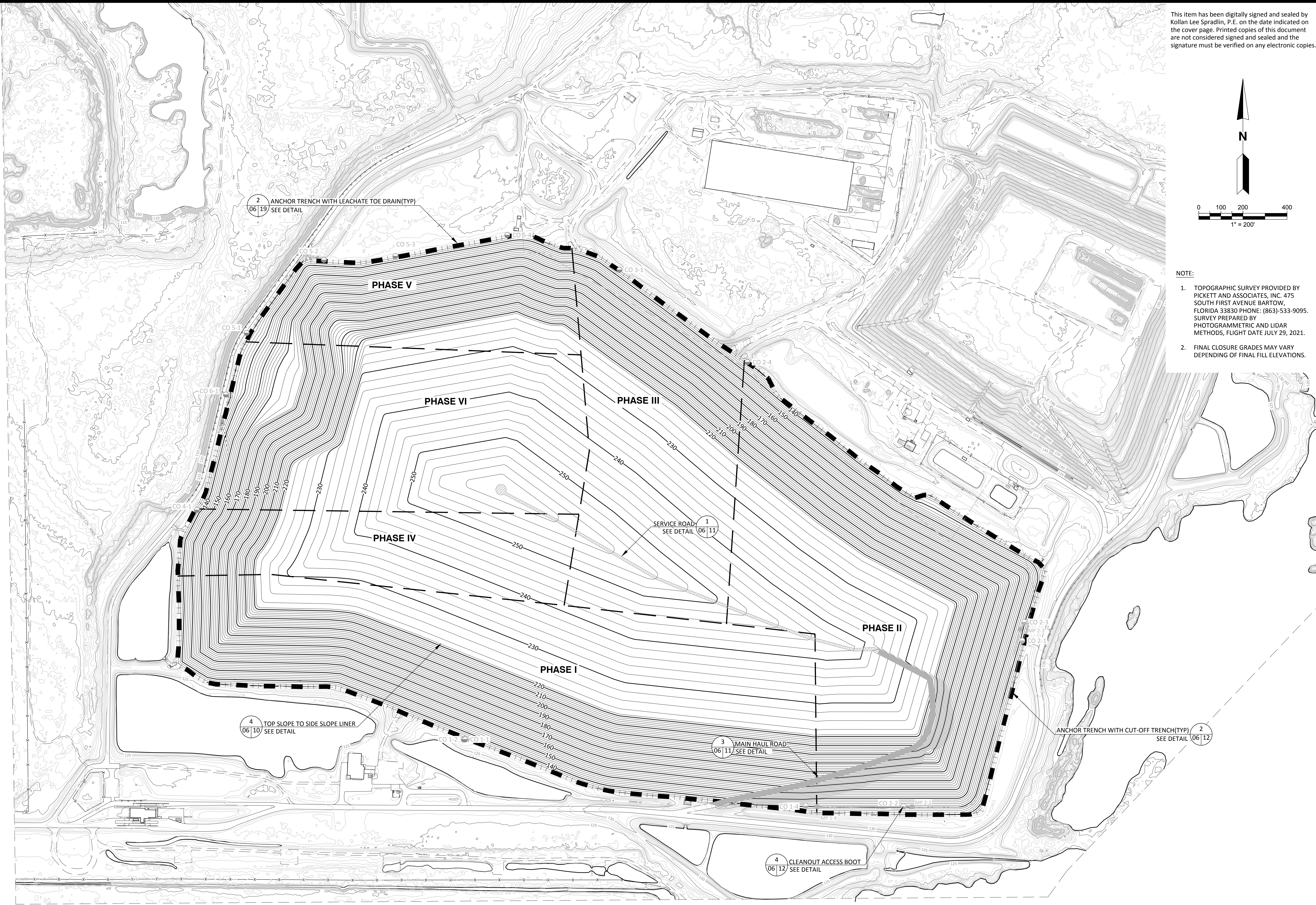
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EXISTING GCCS

DATE:
FEBRUARY 202

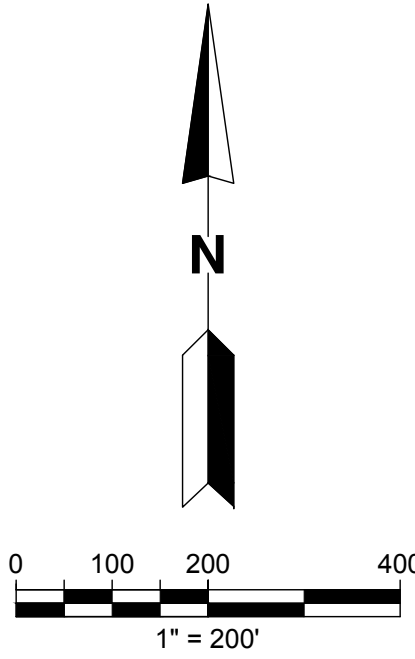
DRAWING NO.

05

SHEET 05 of 5

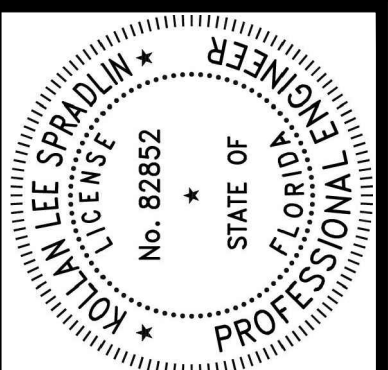


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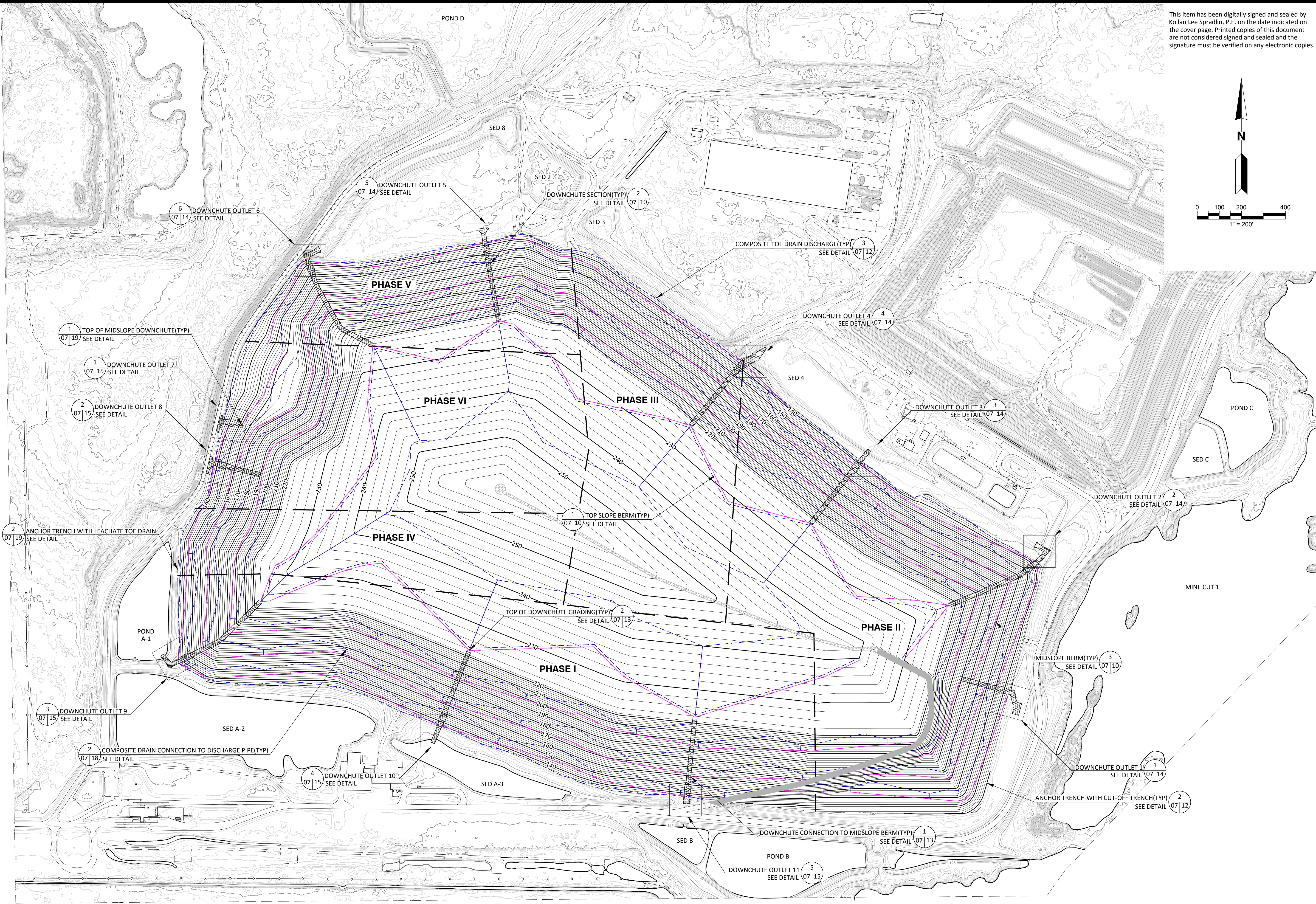


- NOTE:
1. TOPOGRAPHIC SURVEY PROVIDED BY PICKETT AND ASSOCIATES, INC. 475 SOUTH FIRST AVENUE BARTOW, FLORIDA 33830 PHONE: (863)-533-9095. SURVEY PREPARED BY PHOTOGRAMMETRIC AND LIDAR METHODS, FLIGHT DATE JULY 29, 2021.
 2. FINAL CLOSURE GRADES MAY VARY DEPENDING OF FINAL FILL ELEVATIONS.

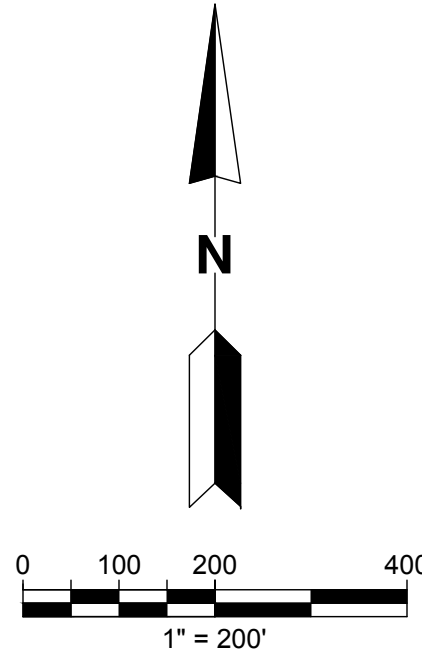
SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892		HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619		SHEET TITLE FINAL COVER DESIGN ELEVATIONS		PROJECT TITLE PHASE I-VI CLOSURE DESIGN	
PROJ. NO. 09215600.13	DWN. BY KLS	CHK. BY SRF	APP. BY KLS	Q/A REVIEW BY RBC	DATE FEBRUARY 2022	DRAWING NO. 06	SHEET 06 of 22
CADD FILE: FINAL COVER				CLIENT HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619			
DATE: FEBRUARY 2022				SHEET TITLE FINAL COVER DESIGN ELEVATIONS		PROJECT TITLE PHASE I-VI CLOSURE DESIGN	
DRAWING NO. 06				REV		DATE	
				CHK. BY		DESCRIPTION	



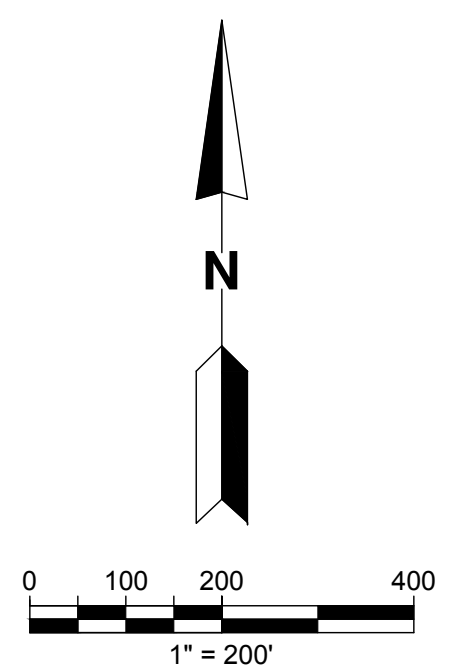
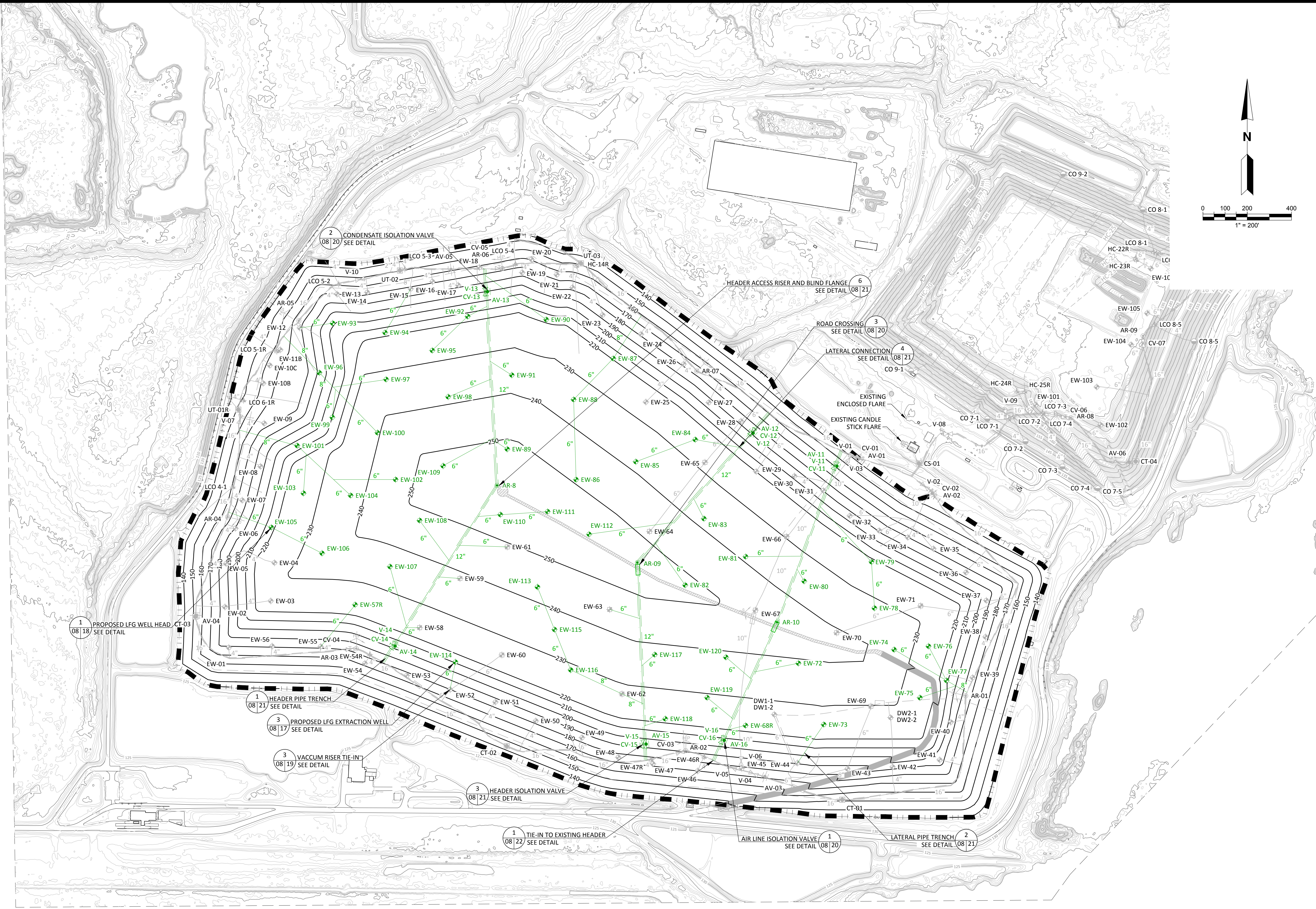
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SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA FIRM REGISTRATION RY-4892

PROJ. NO. 09215600.13
ISS. BY: KLS
OWN. BY: ALD
CHK. BY: SRF
APP. BY: RBC
Q/A/REV BY: KLS

CADD FILE:
PROPOSED GCCS

DATE:
FEBRUARY 2022

DRAWING NO.
08

CLIENT
HILLSBOROUGH COUNTY
SOLID WASTE DEPARTMENT
TAMPA, FL 33619

SHEET
08 of 22

PROPOSED GCCS

PHASE I-VI CLOSURE DESIGN

PROJECT TITLE

PHASE I-VI CLOSURE DESIGN

SHEET TITLE

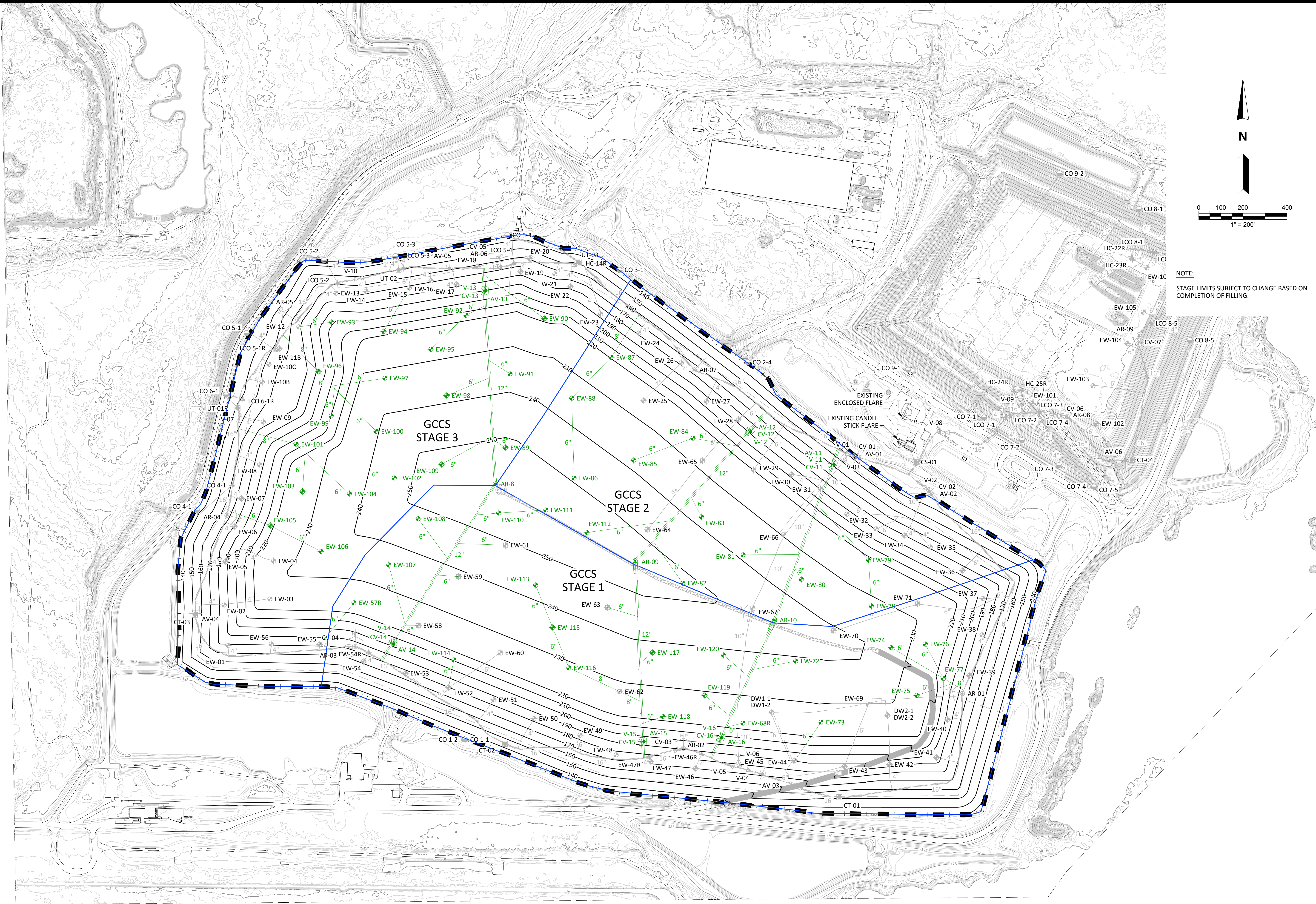
PROPOSED GCCS

REV	DATE	DESCRIPTION	CHK. BY
1			
2			
3			
4			
5			
6			

ENGINEER
LEE SPALIVIN
No. 82852
STATE OF FLORIDA
PROFESSIONAL ENGINEER

08/21

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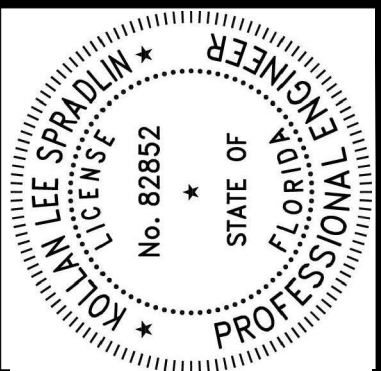


NOTE:
STAGE LIMITS SUBJECT TO CHANGE BASED ON
COMPLETION OF FILLING.

CHK. BY	DESCRIPTION
DATE	REV
SHEET TITLE PROPOSED GCCS STAGING	
PROJECT TITLE PHASE I-VI CLOSURE DESIGN	
CLIENT HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619	
CADD FILE: PROPOSED GCCS	
DATE: FEBRUARY 2022	
DRAWING NO. 09	
SHEET 09 of 22	
SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892	
PROJ. NO. 09215600.13	OWN. BY KLS
DWN. BY KLS	CHK. BY SRF
QA/QC BY RBC	APP. BY KLS

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CHK. BY	DESCRIPTION	DATE	REV

SHEET TITLE	PROJECT TITLE
DETAILS-1	PHASE I-VI CLOSURE DESIGN

CLIENT
HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619

SCS ENGINEERS

STEARNS, CONRAD AND SCHMIDT

CONSULTING ENGINEERS

3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619

PH (813) 621-0080 FAX NO. (813) 623-6757

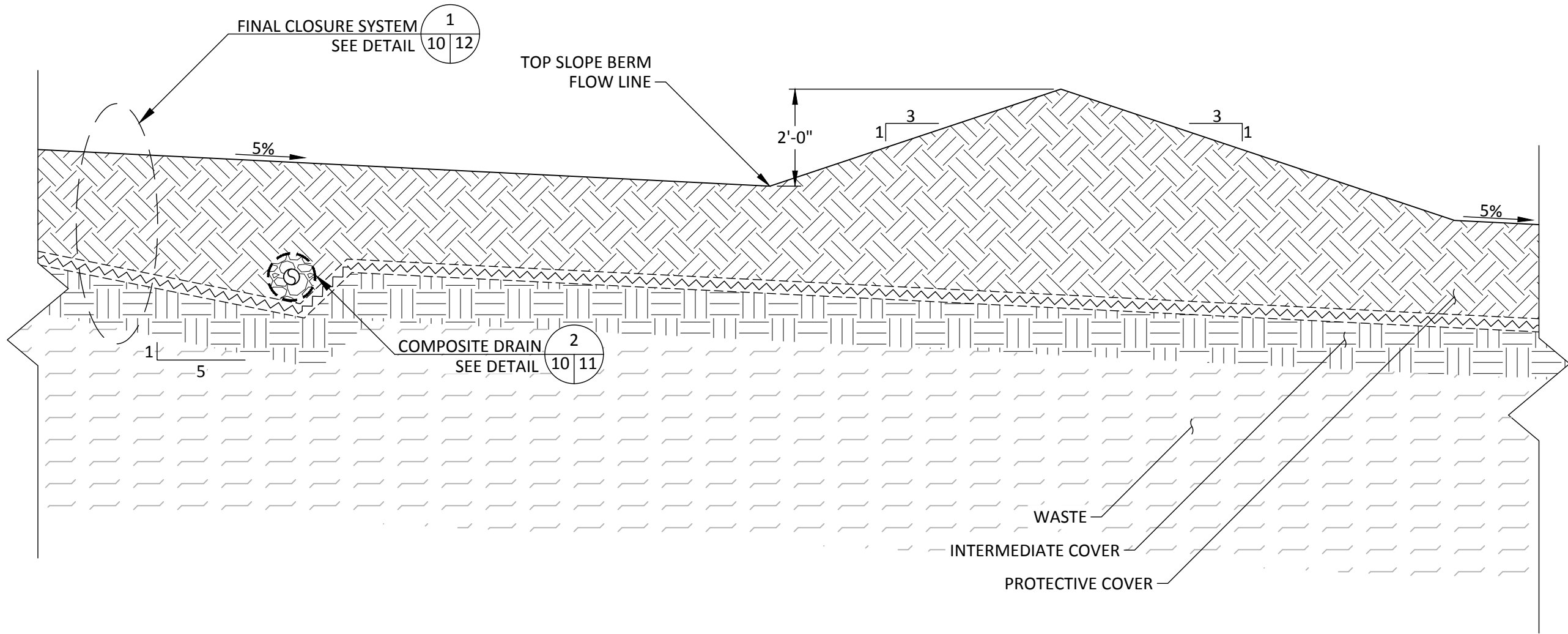
FLORIDA FIRM REGISTRATION RY-4892

PROJ. NO.:	09215600.13	OWN. BY:	ALD	Q/A REVIEW BY:	RBC
DSN. BY:	KLS	CHK. BY:	SRF	APP. BY:	KLS

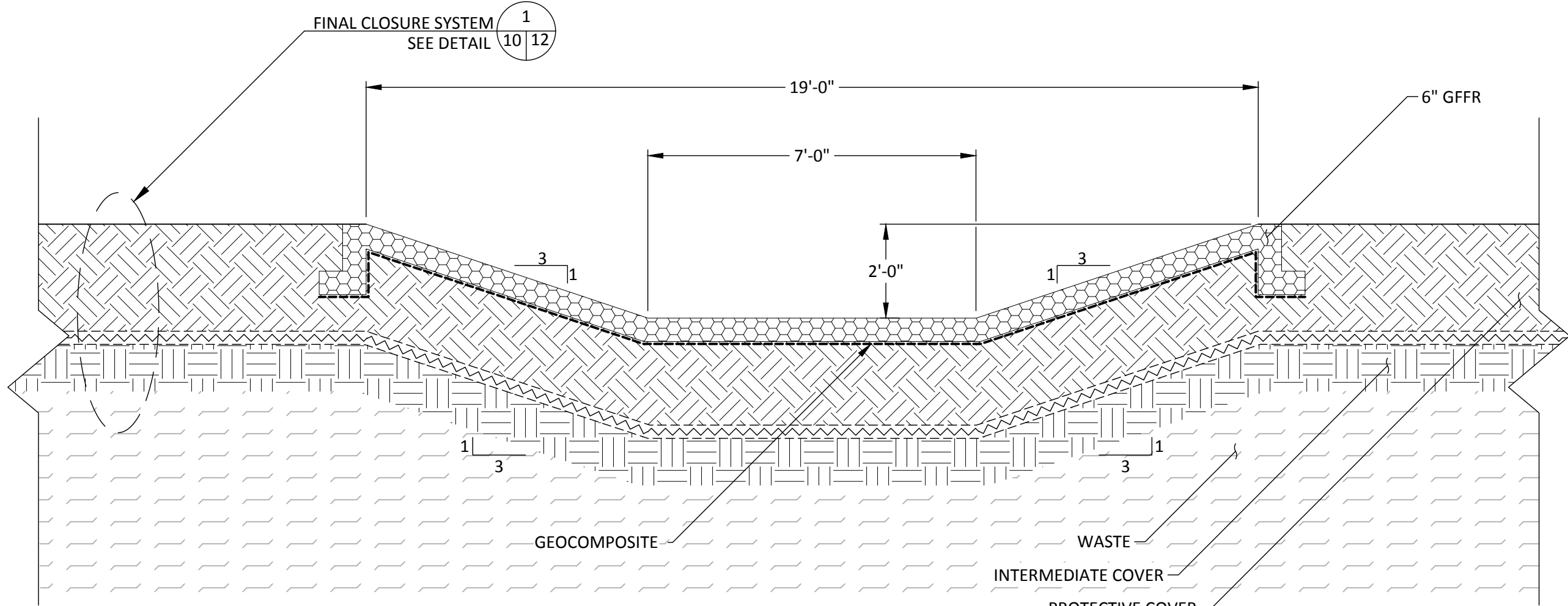
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DETAILS-1

DATE:
FEBRUARY 2022

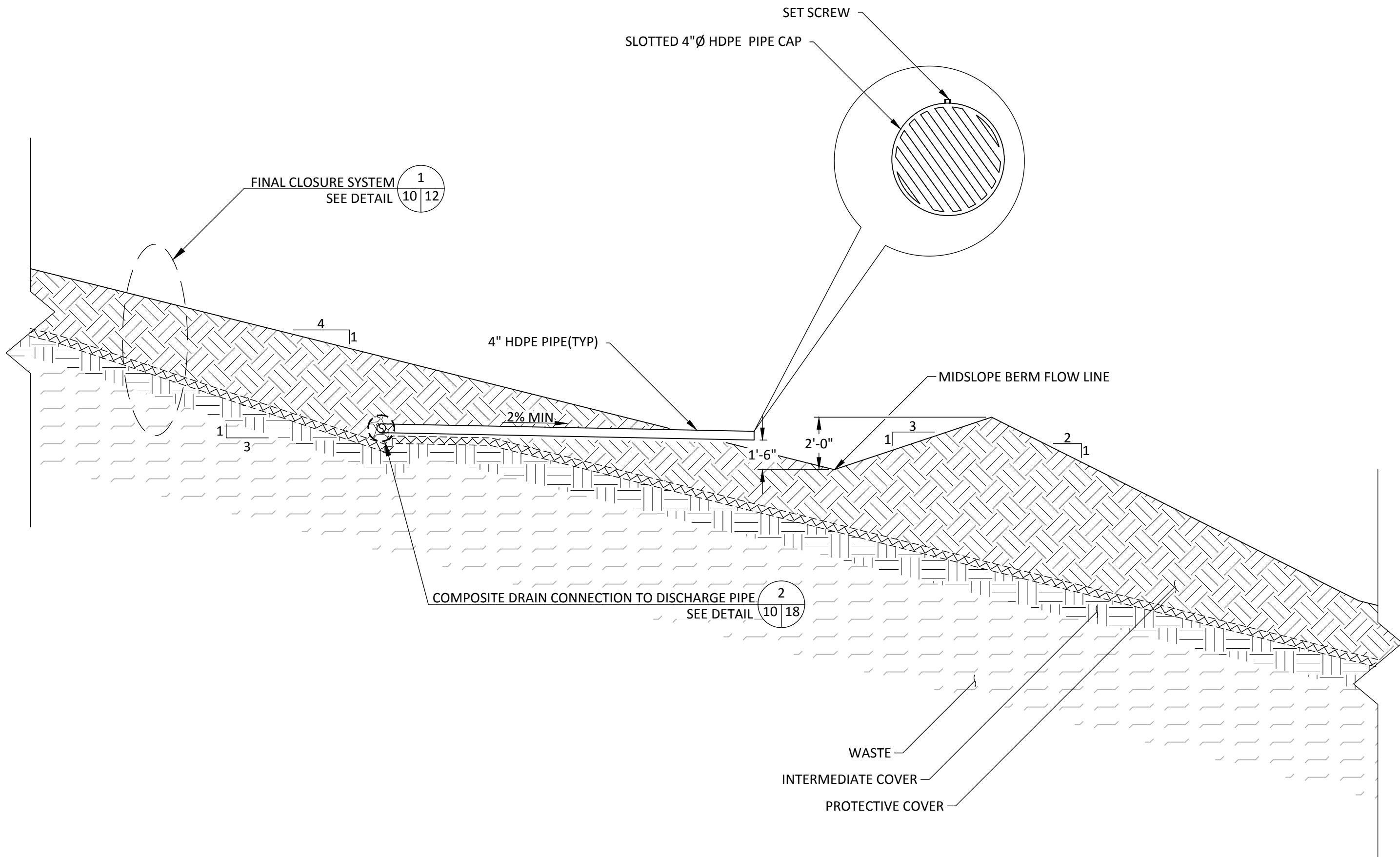
DRAWING NO.
10
SHEET 10 of 22



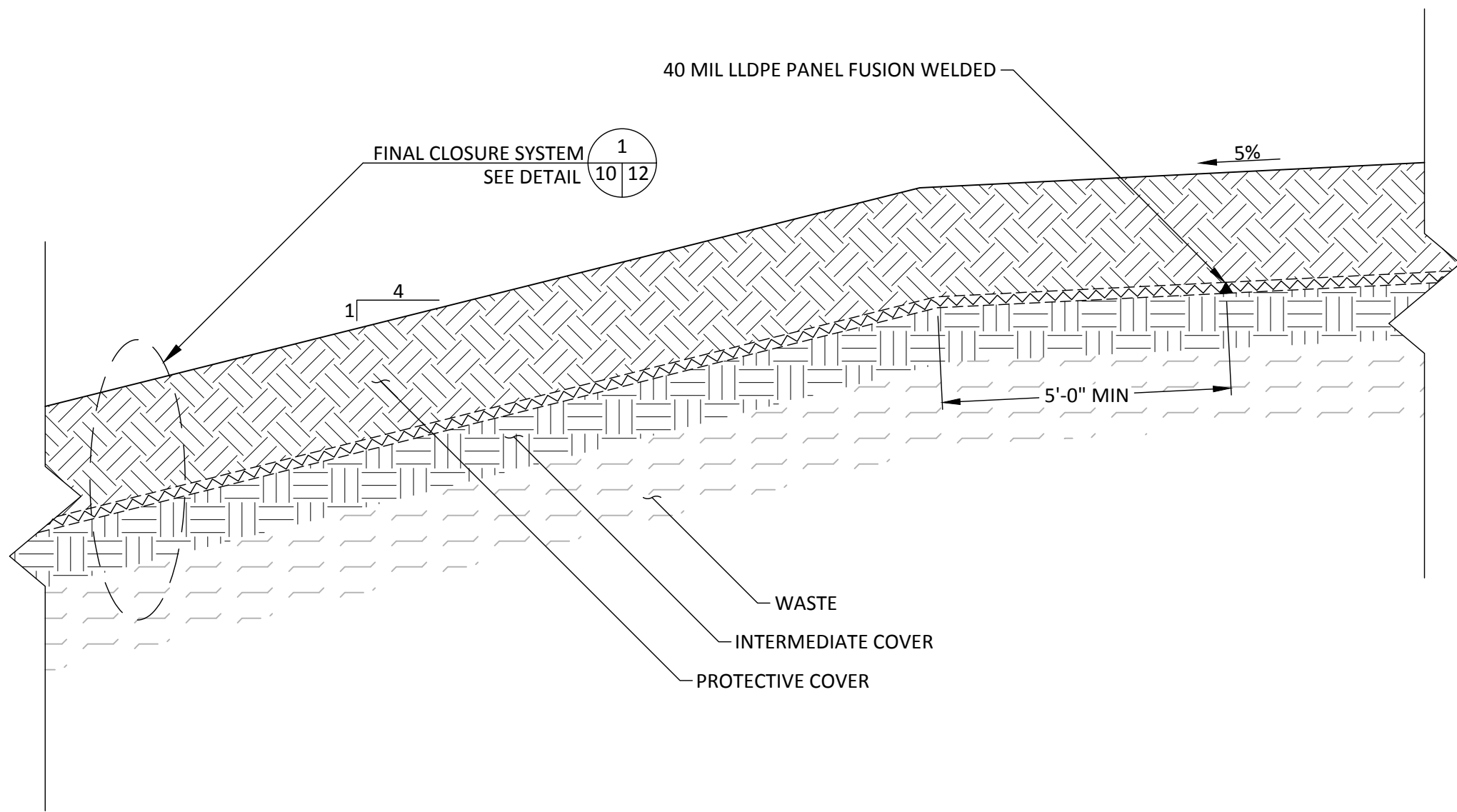
TOP SLOPE BERM DETAIL 1
NOT TO SCALE 07 10



DOWNCHUTE SECTION DETAIL 2
NOT TO SCALE 07 10

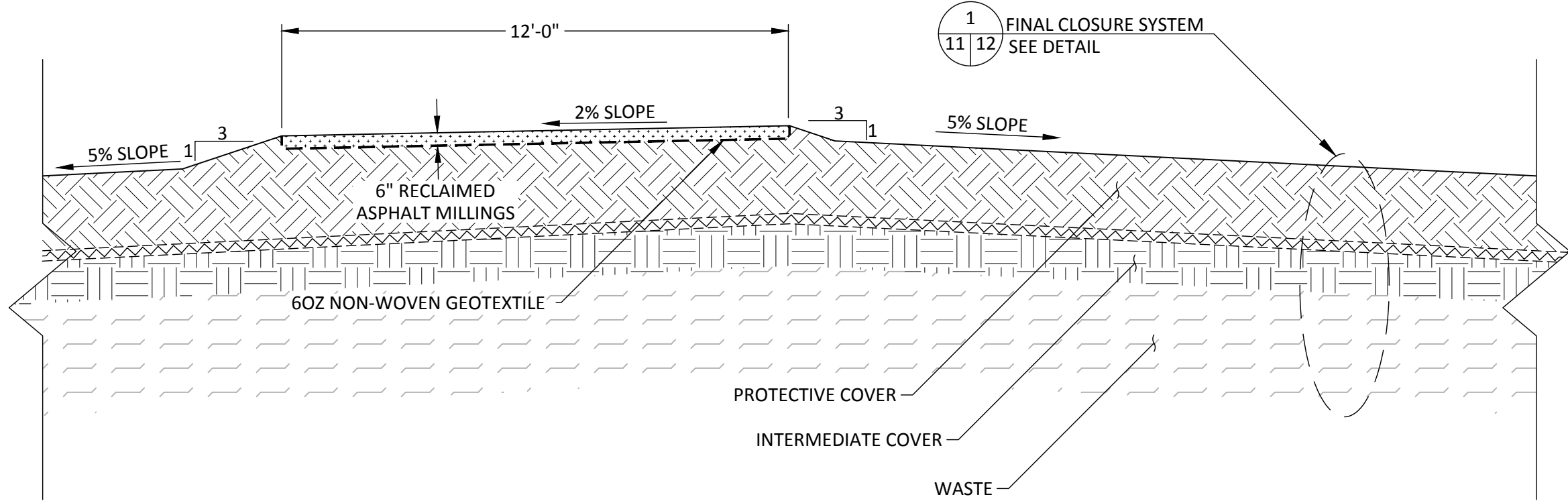


MIDSLOPE BERM DETAIL 3
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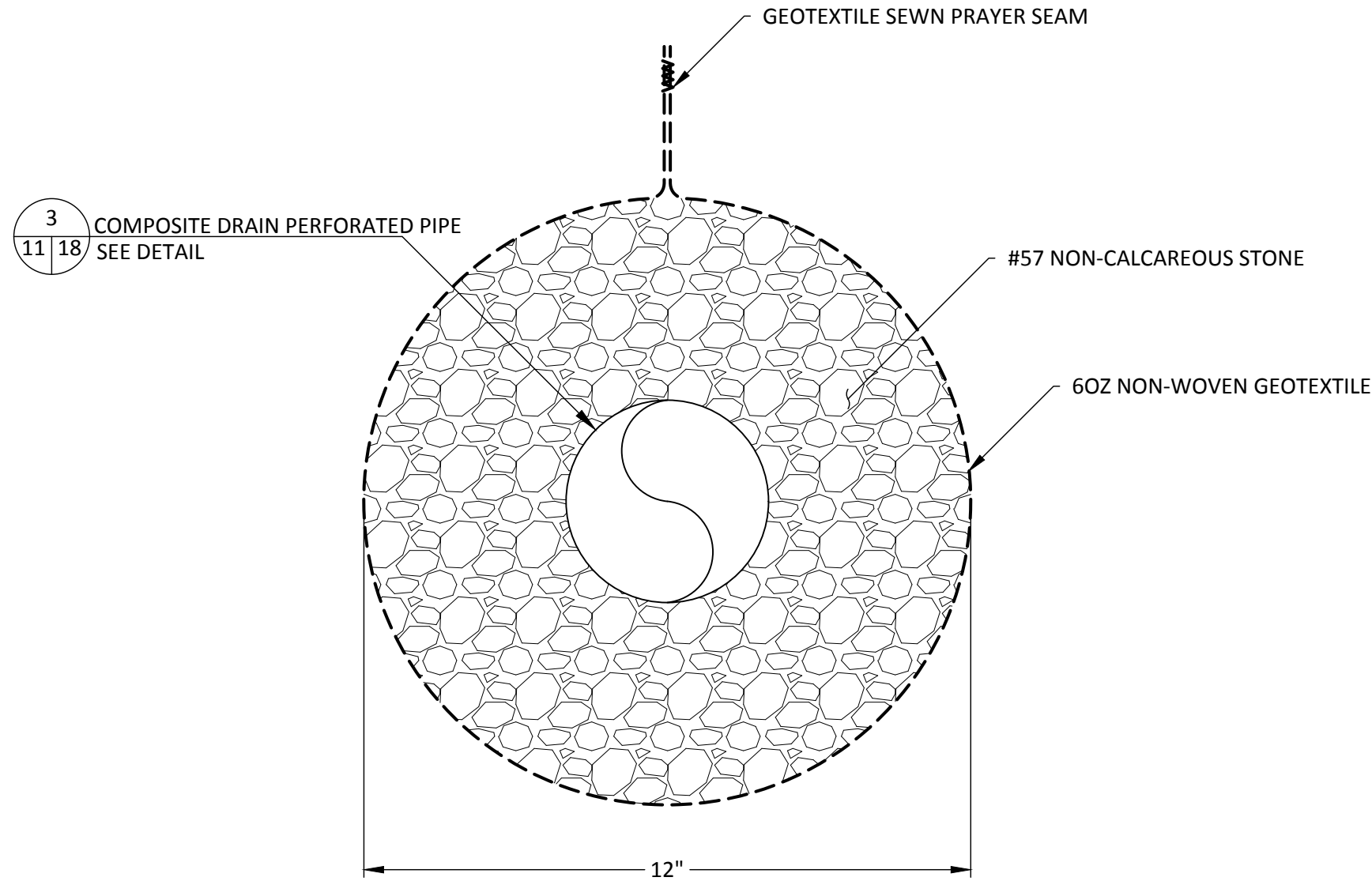
TOP SLOPE TO SIDE SLOPE LINER DETAIL 4
NOT TO SCALE 06 10

F:\PROJECT\Hillsborough\09215600.00\Task 1100 - General Services\20.0 Phase I-VI Closure\20.1 Phase I-VI Closure Permit\Engineering Drawings\DETAILS-2.dwg Jan 28, 2022 - 6:59pm Layout Name: DETAILS-2 By: 4745ald



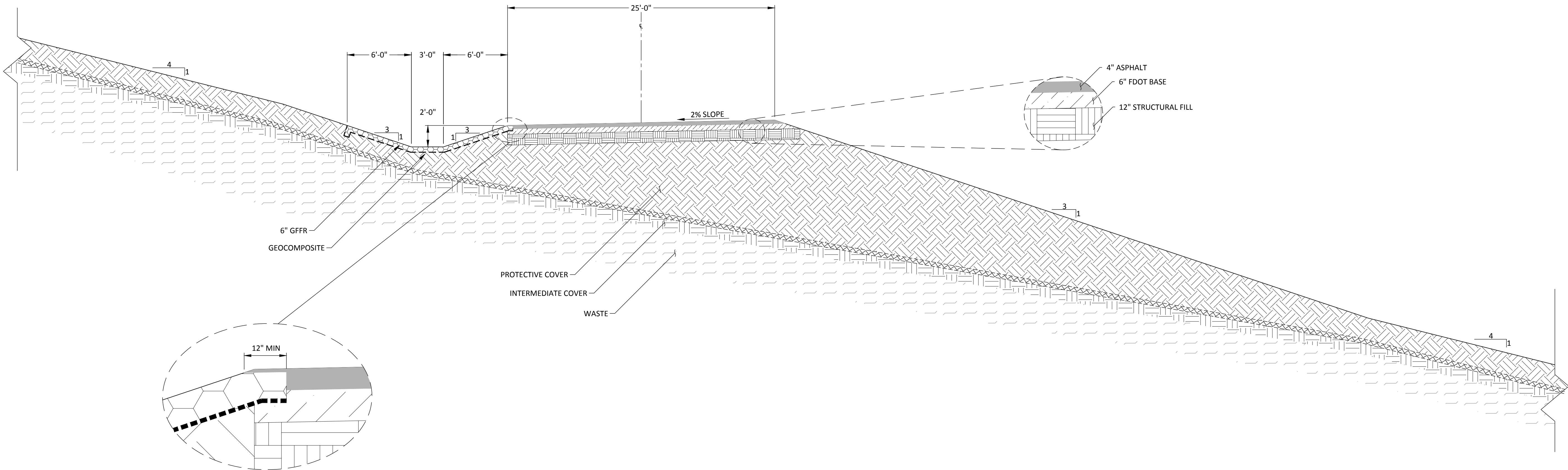
SERVICE ROAD DETAIL
NOT TO SCALE

1
06 11



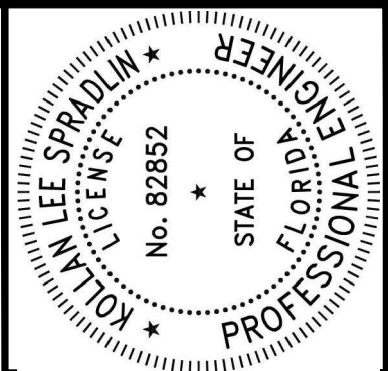
COMPOSITE DRAIN DETAIL
NOT TO SCALE

2
10 11 12 11



MAIN HAUL ROAD DETAIL
NOT TO SCALE

3
06 11



CHK. BY	DESCRIPTION	DATE	REV

SHEET TITLE	PROJECT TITLE
DETAILS-2	PHASE I-VI CLOSURE DESIGN

CLIENT	HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619
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SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892	OWN. BY: ALD CHK. BY: SRF APP. BY: KLS	Q/A/WWW BY: RBC
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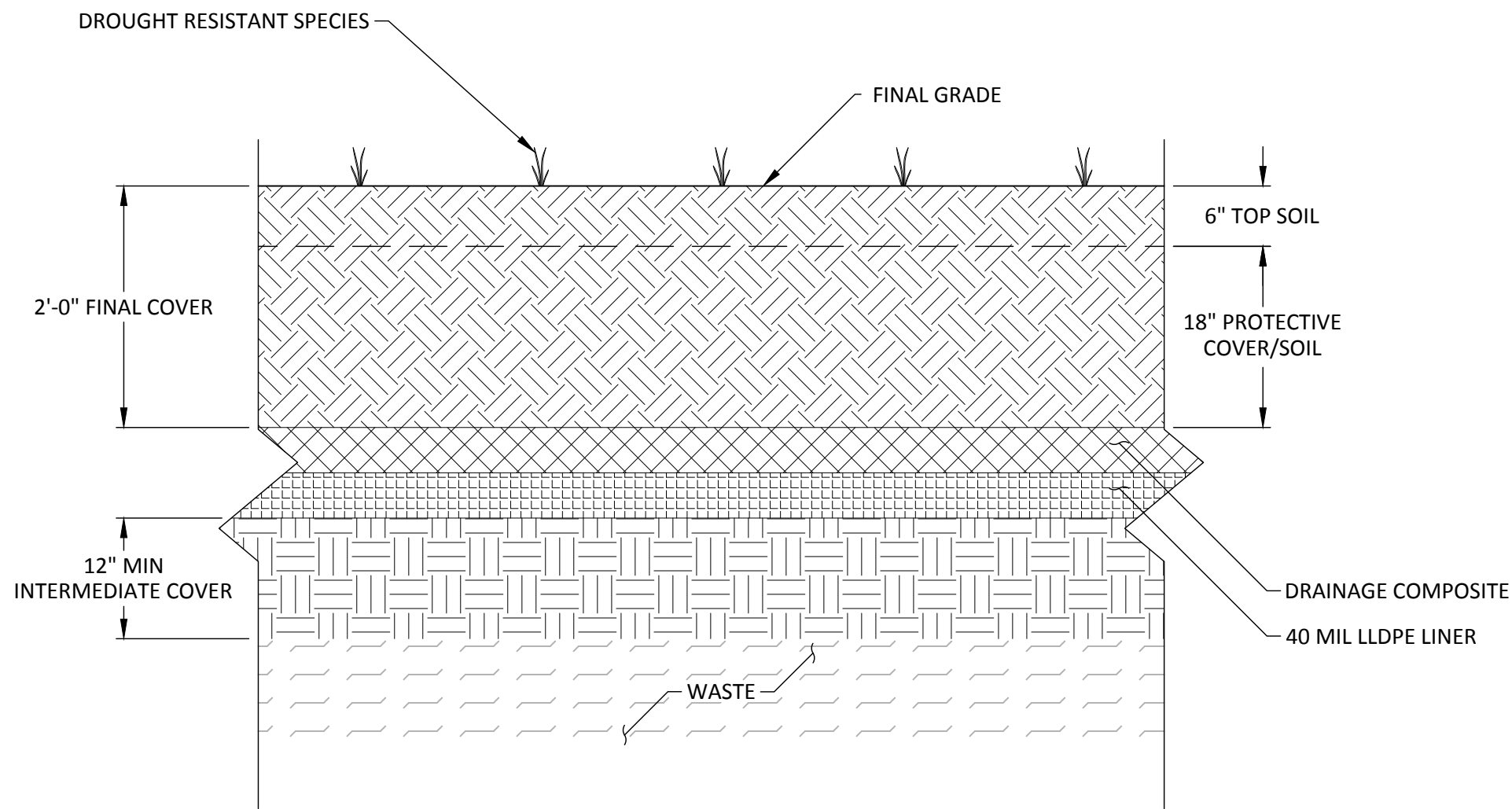
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DETAILS-2

DATE:
FEBRUARY 2022

DRAWING NO.
11

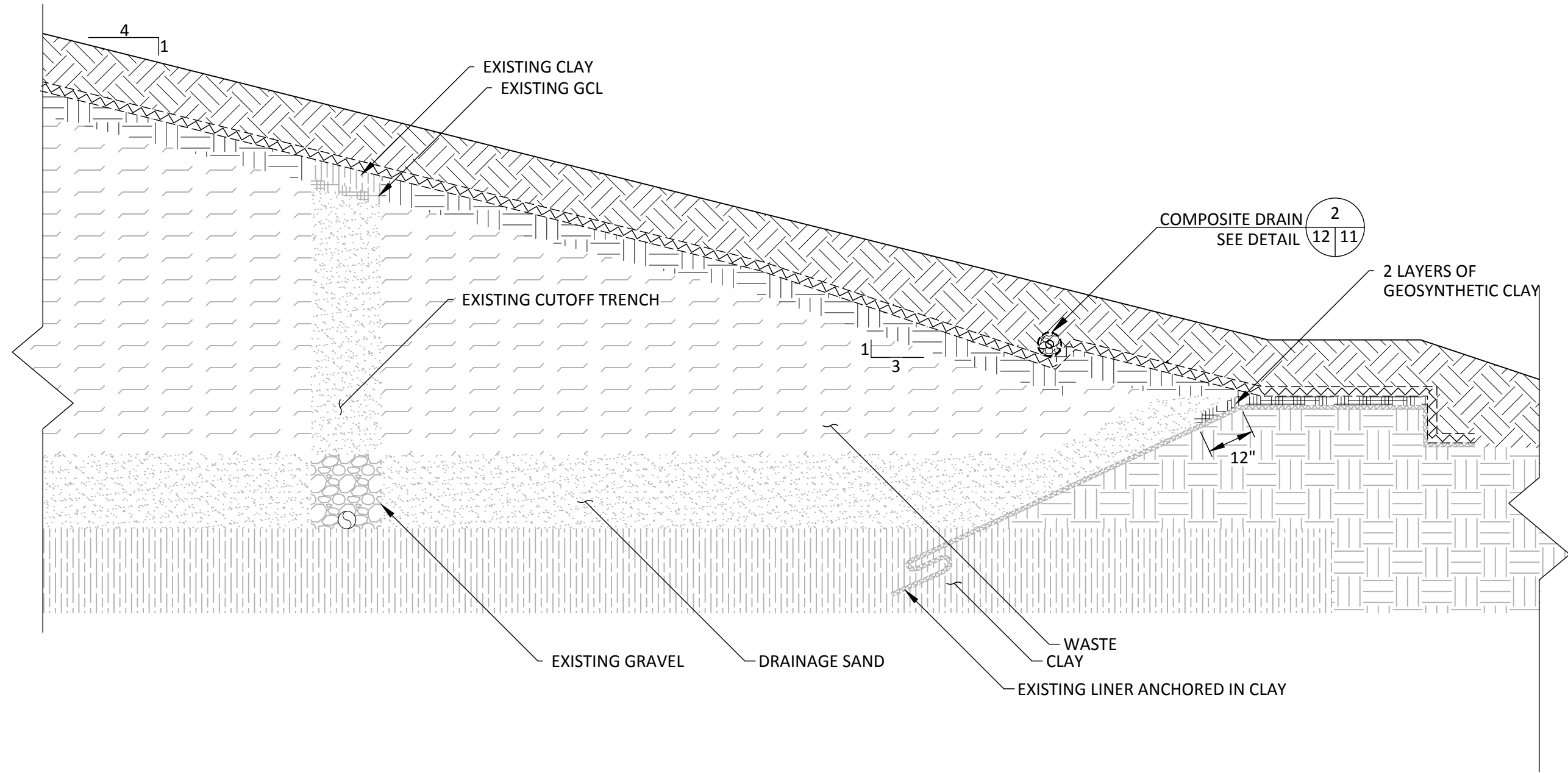
SHEET	11	of	22
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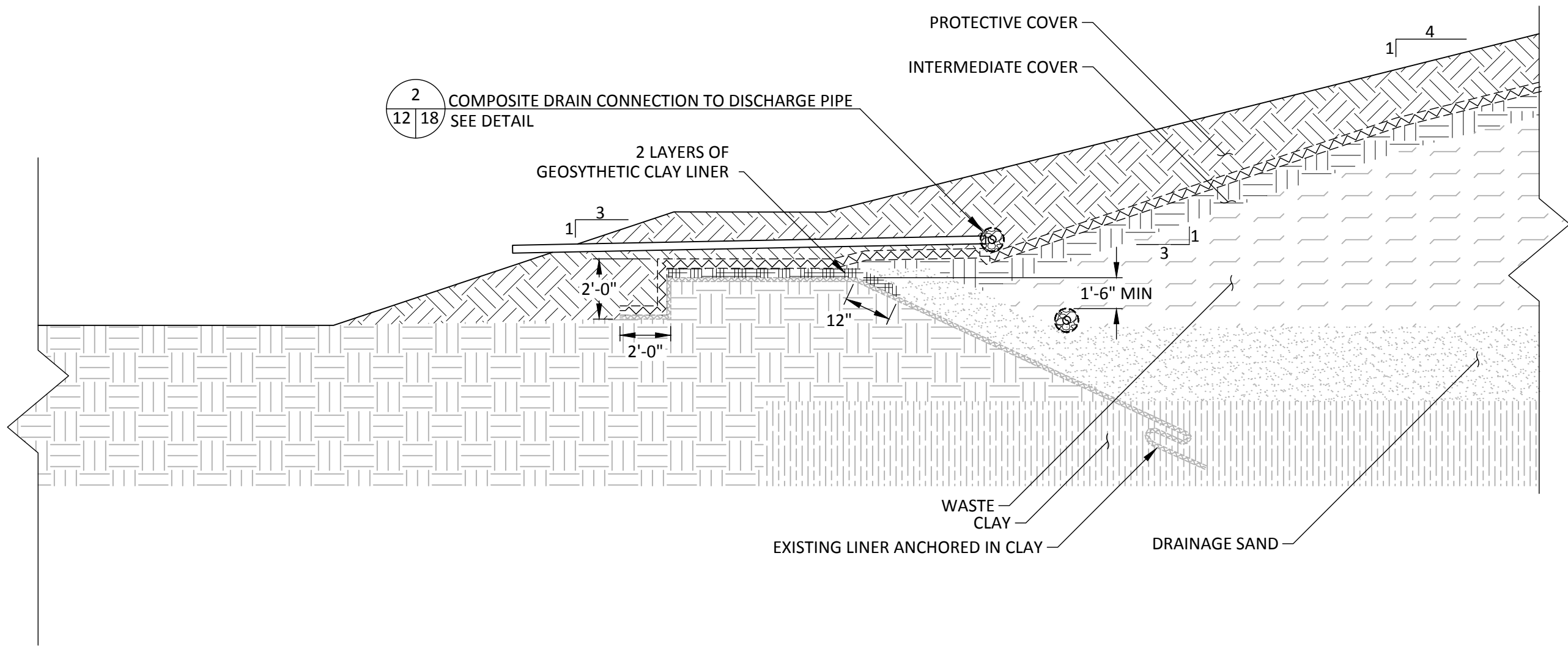
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NOT TO SCALE

10 11 12 12



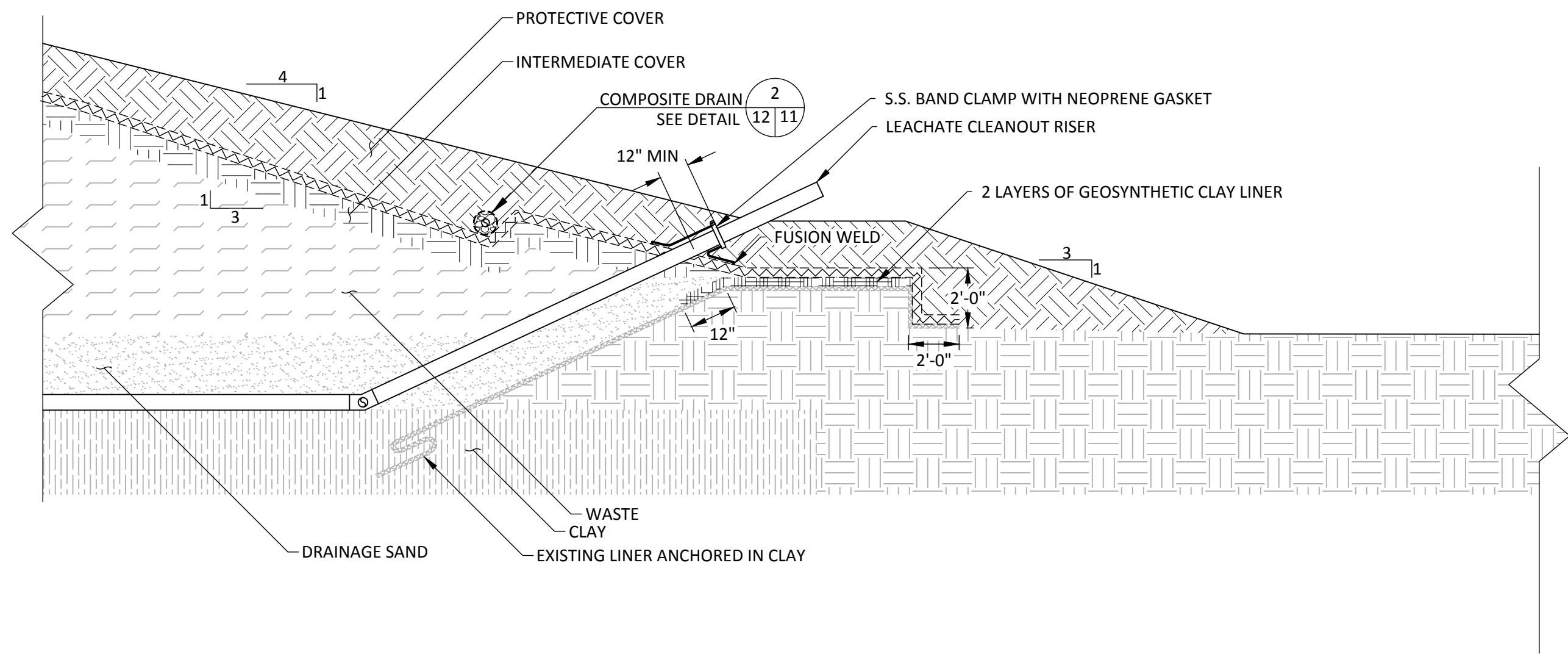
ANCHOR TRENCH WITH CUT-OFF TRENCH DETAIL 2
NOT TO SCALE

07 12



COMPOSITE TOE DRAIN DISCHARGE DETAIL 3
NOT TO SCALE

07 12

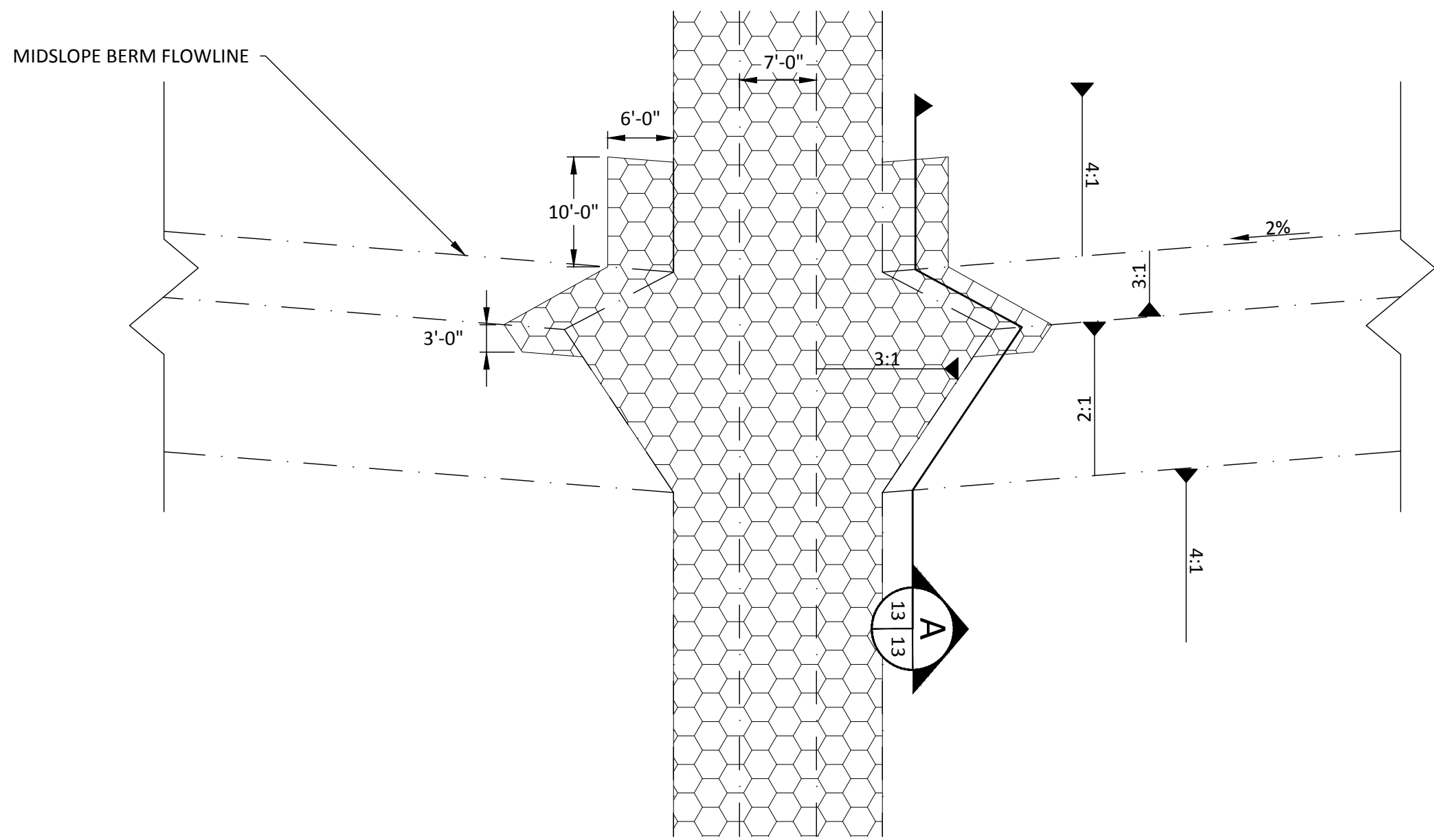


CLEANOUT ACCESS BOOT DETAIL 4
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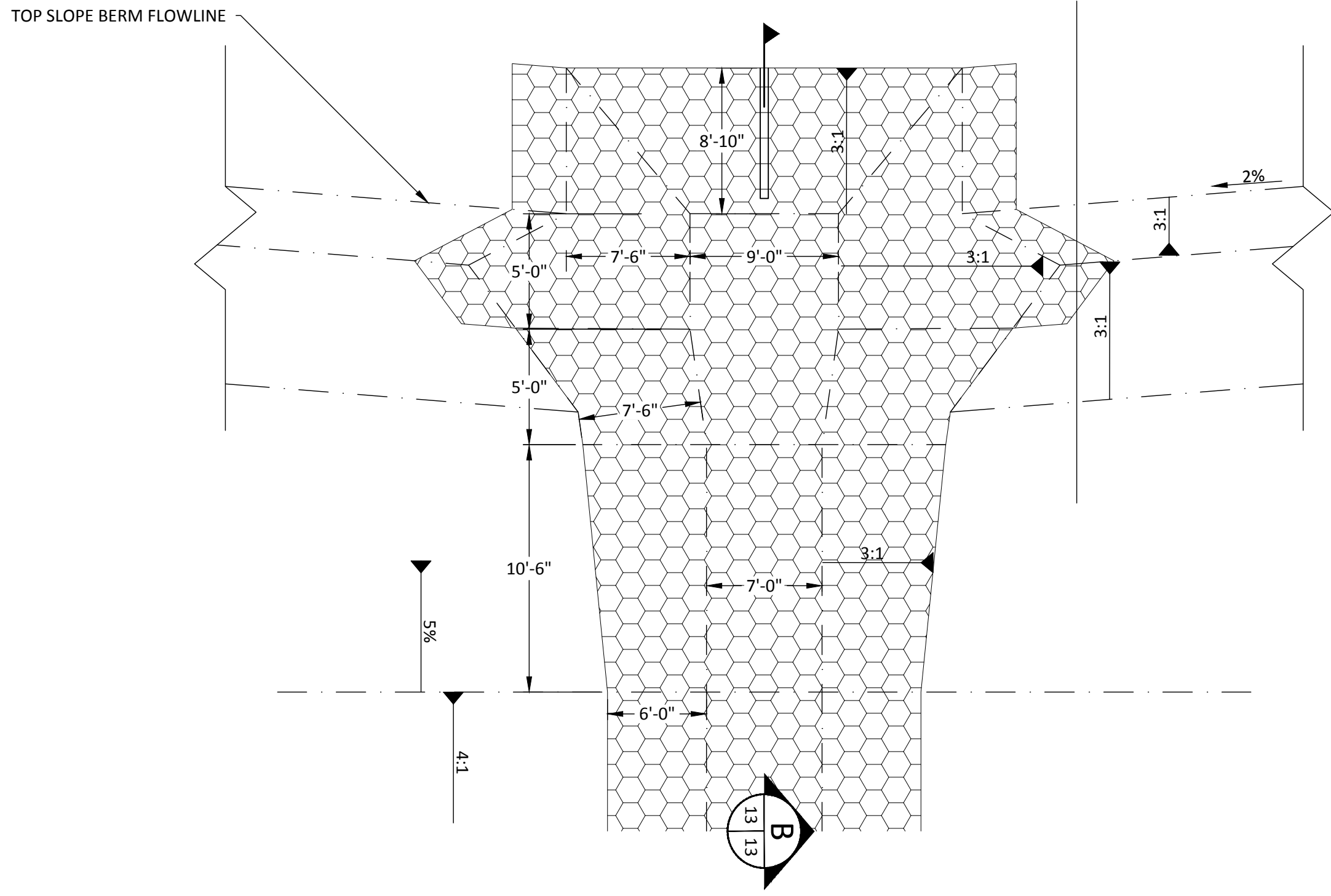
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		CHK. BY	DESCRIPTION	DATE	REV
DETAILS-3					
PHASE I-VI CLOSURE DESIGN					
HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619		CLIENT			
SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892		CADD FILE: DETAILS-3			
DATE: FEBRUARY 2022		DRAWING NO. 12			
SHEET 12 of 22		PROJECT TITLE PHASE I-VI CLOSURE DESIGN			
PROJ. NO.: 09215600.13 ISS. BY: KLS		SHEET TITLE DETAILS-3			
OWN. BY: AID CHK. BY: SRF		SHEET TITLE DETAILS-3			
Q/A REVIEW BY: RBC APP. BY: KLS		SHEET TITLE DETAILS-3			

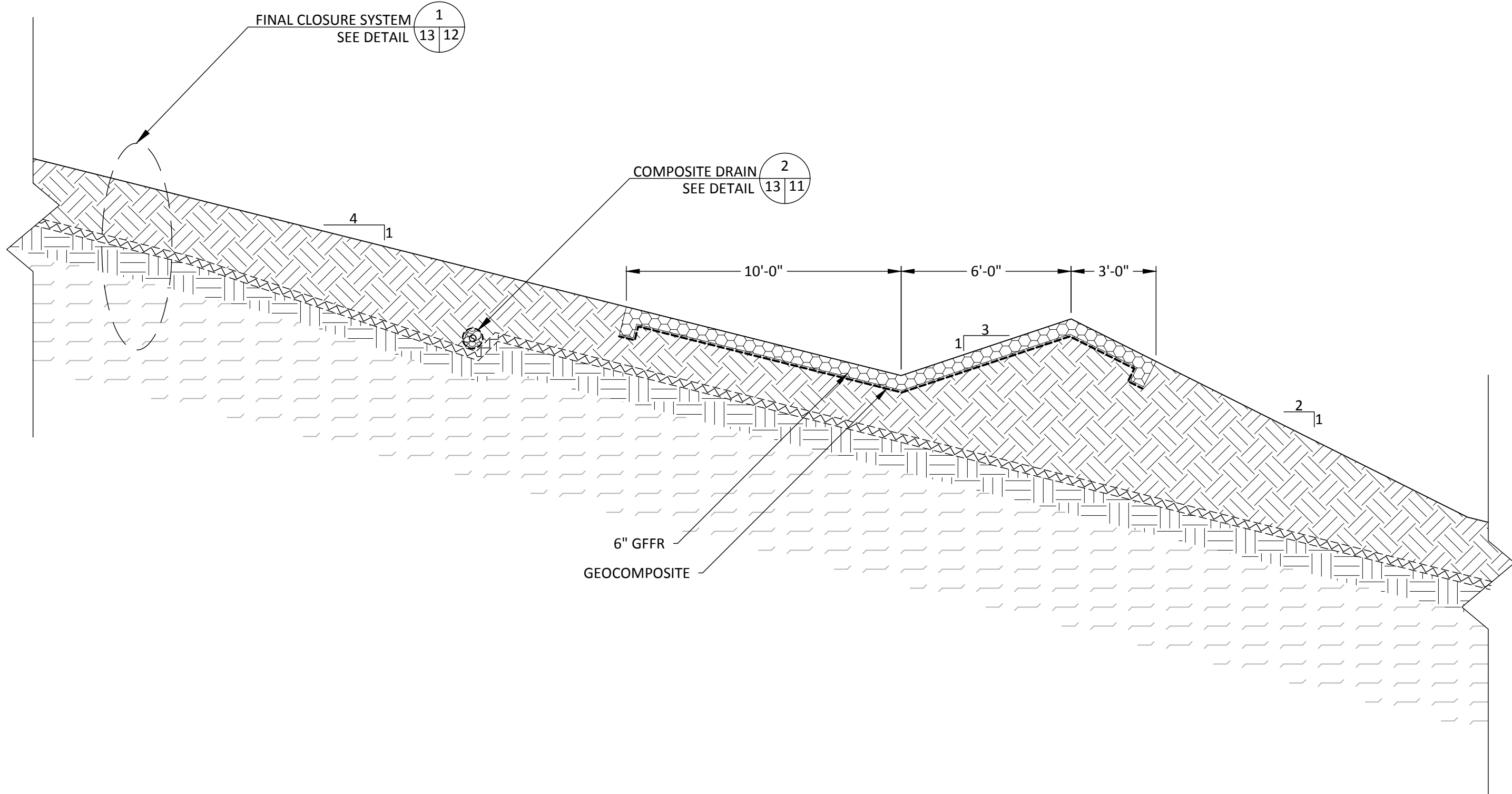
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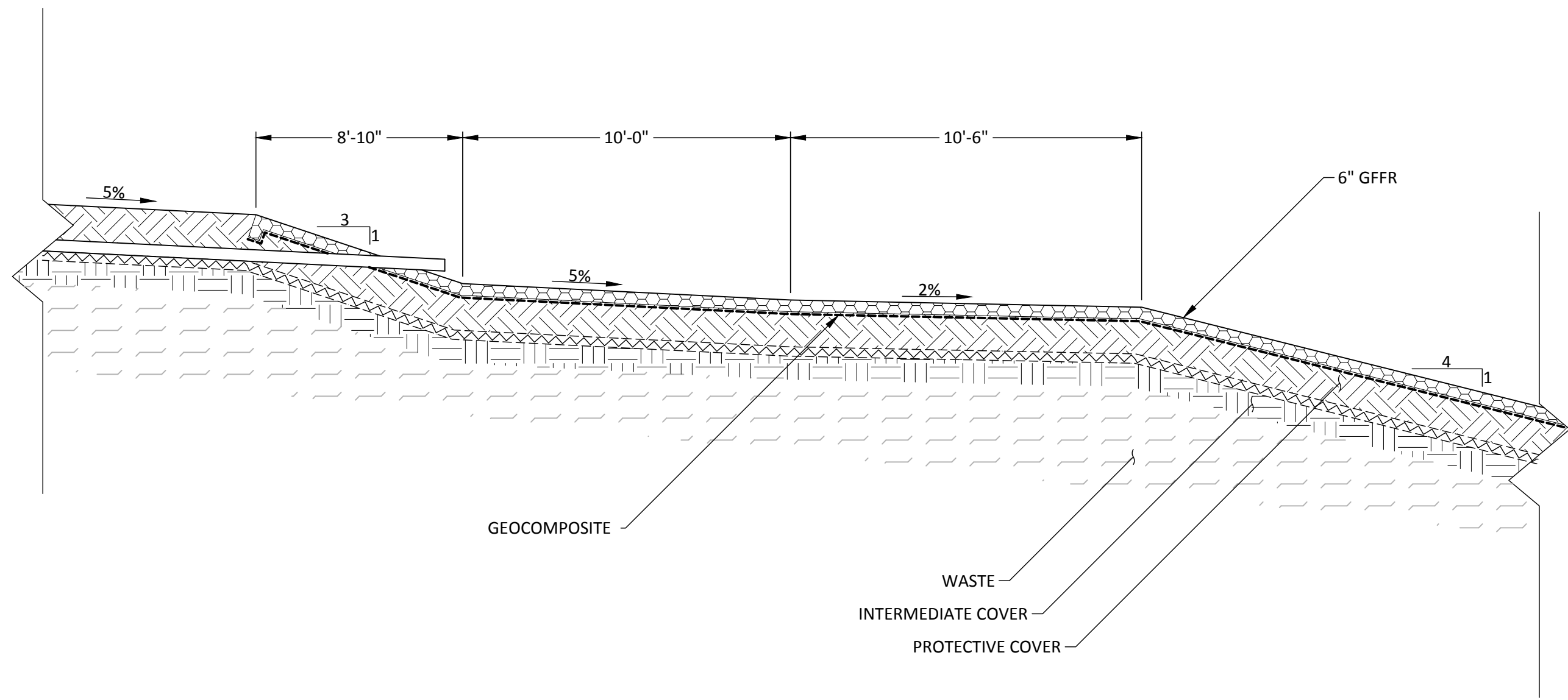
DOWNCHUTE CONNECTION TO MIDSLOPE BERM DETAIL **1**
NOT TO SCALE 07 13



TOP OF DOWNCHUTE GRADING DETAIL **2**
NOT TO SCALE 07 13



SECTION A
NOT TO SCALE 13 13

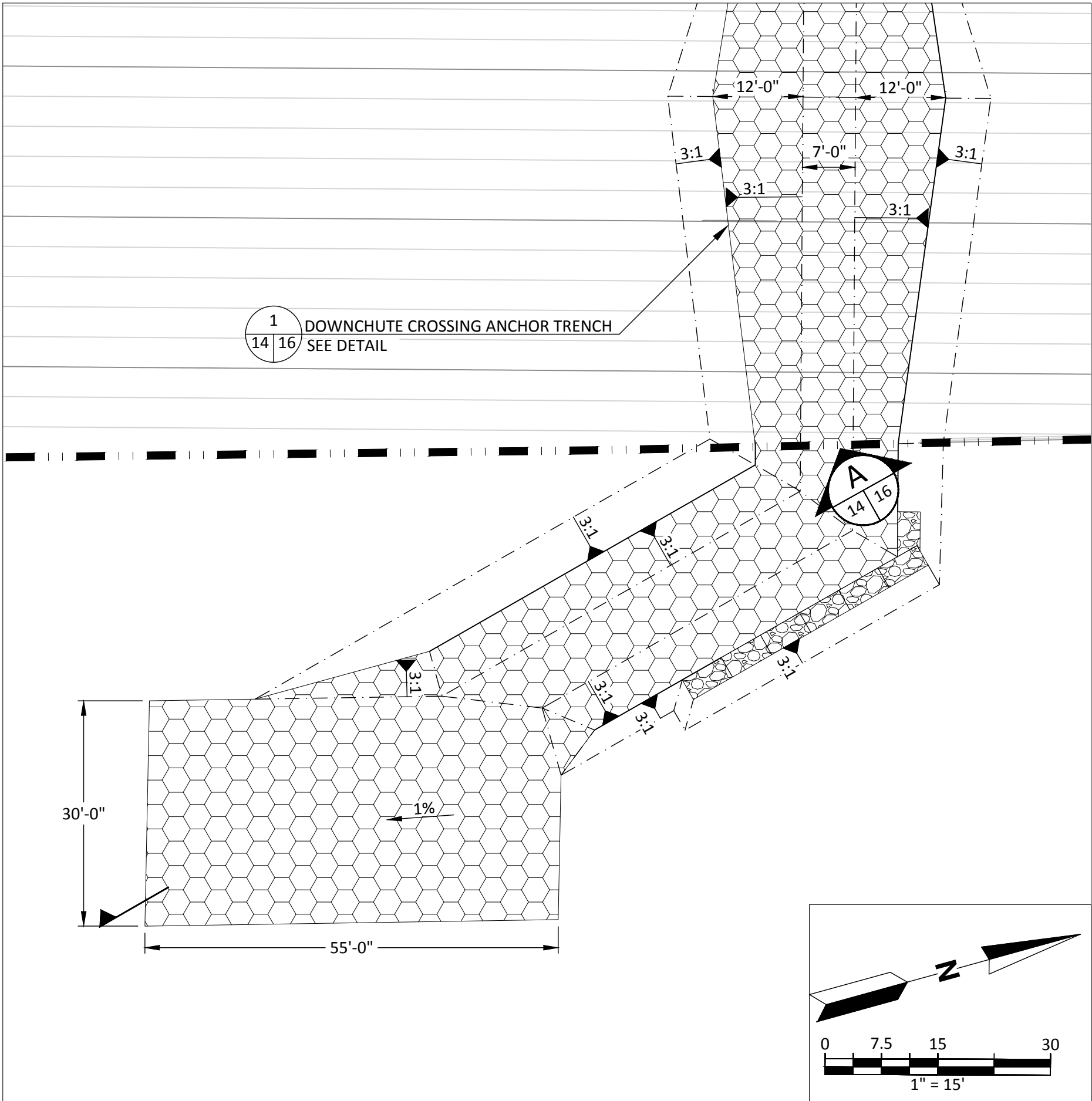


SECTION B
NOT TO SCALE 13 13

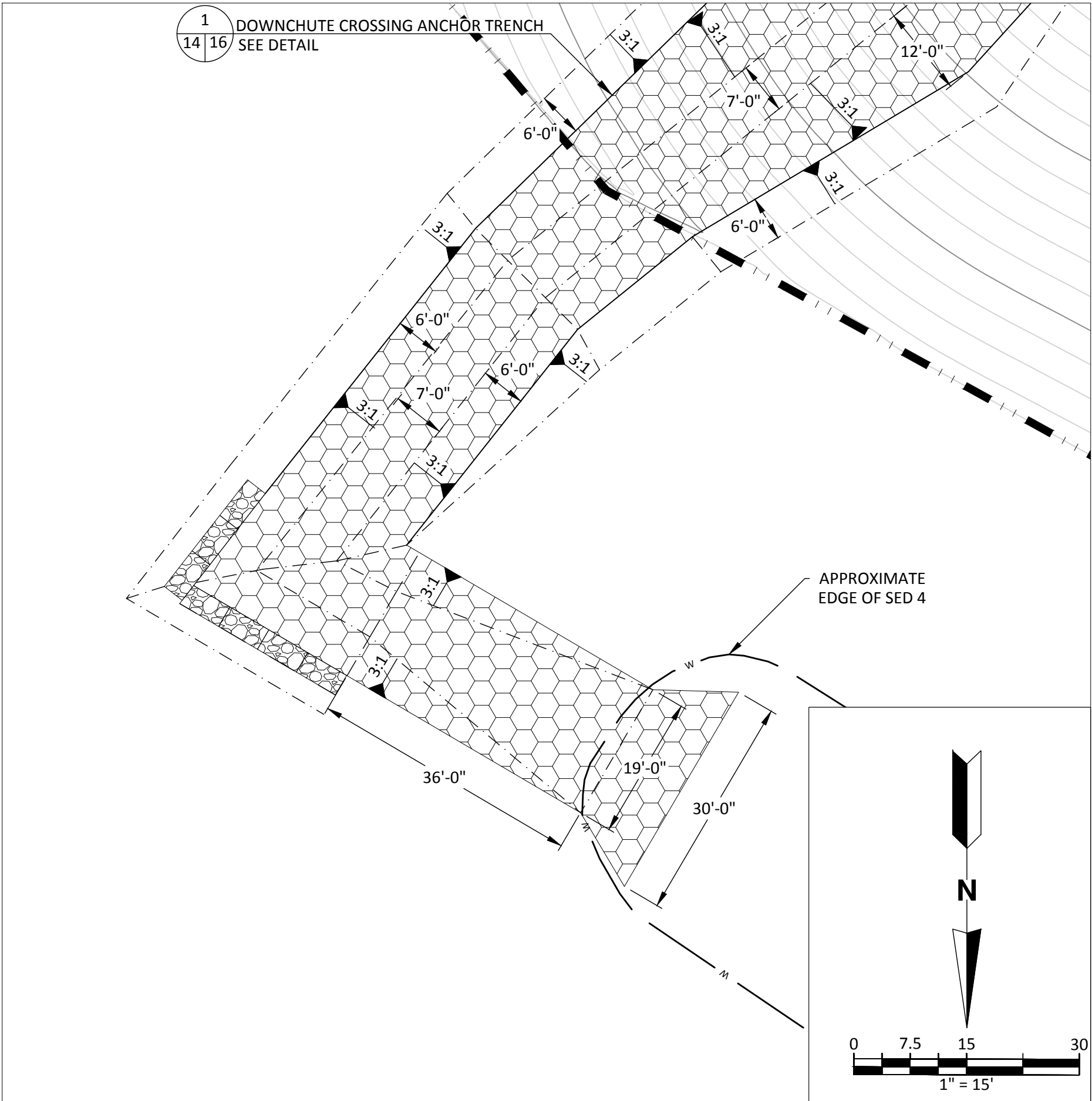
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<div>SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892</div> <div>PROJ. NO.: 15600.13 ISSN: KLS OWN: BY: ALD CHK: BY: SRF APP: BY: KLS</div>		CLIENT		HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619		SHEET TITLE DETAILS-4 PROJECT TITLE PHASE I-VI CLOSURE DESIGN		REV DATE DESCRIPTION CHK. BY	
CADD FILE: DETAILS-4		DATE: FEBRUARY 2022		DRAWING NO. 13		SHEET 13 of 22			
								<div>KOLAN LEE SPRADLIN P.E. LICENSE No. 82852 STATE OF FLORIDA PROFESSIONAL ENGINEER</div>	

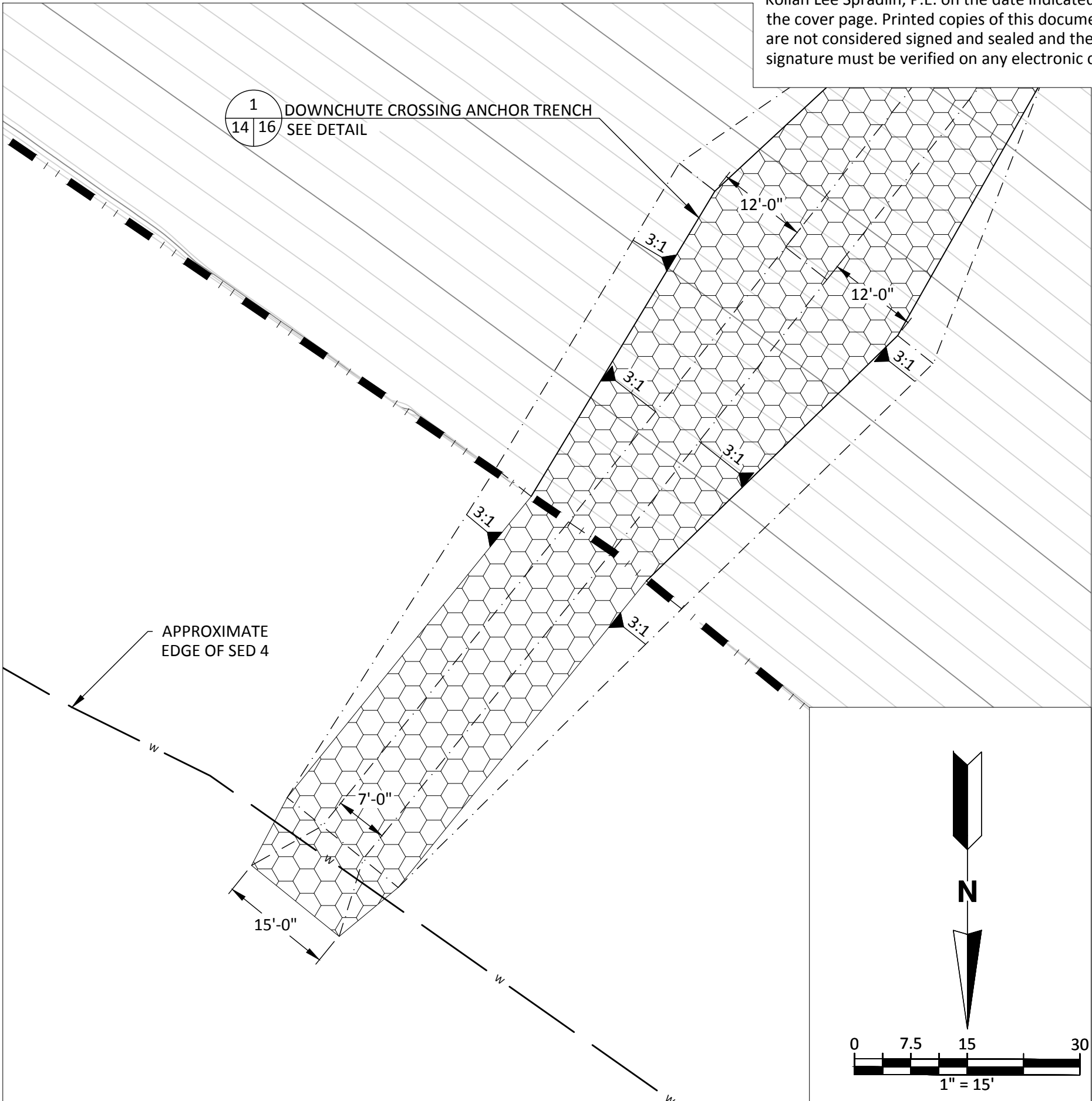
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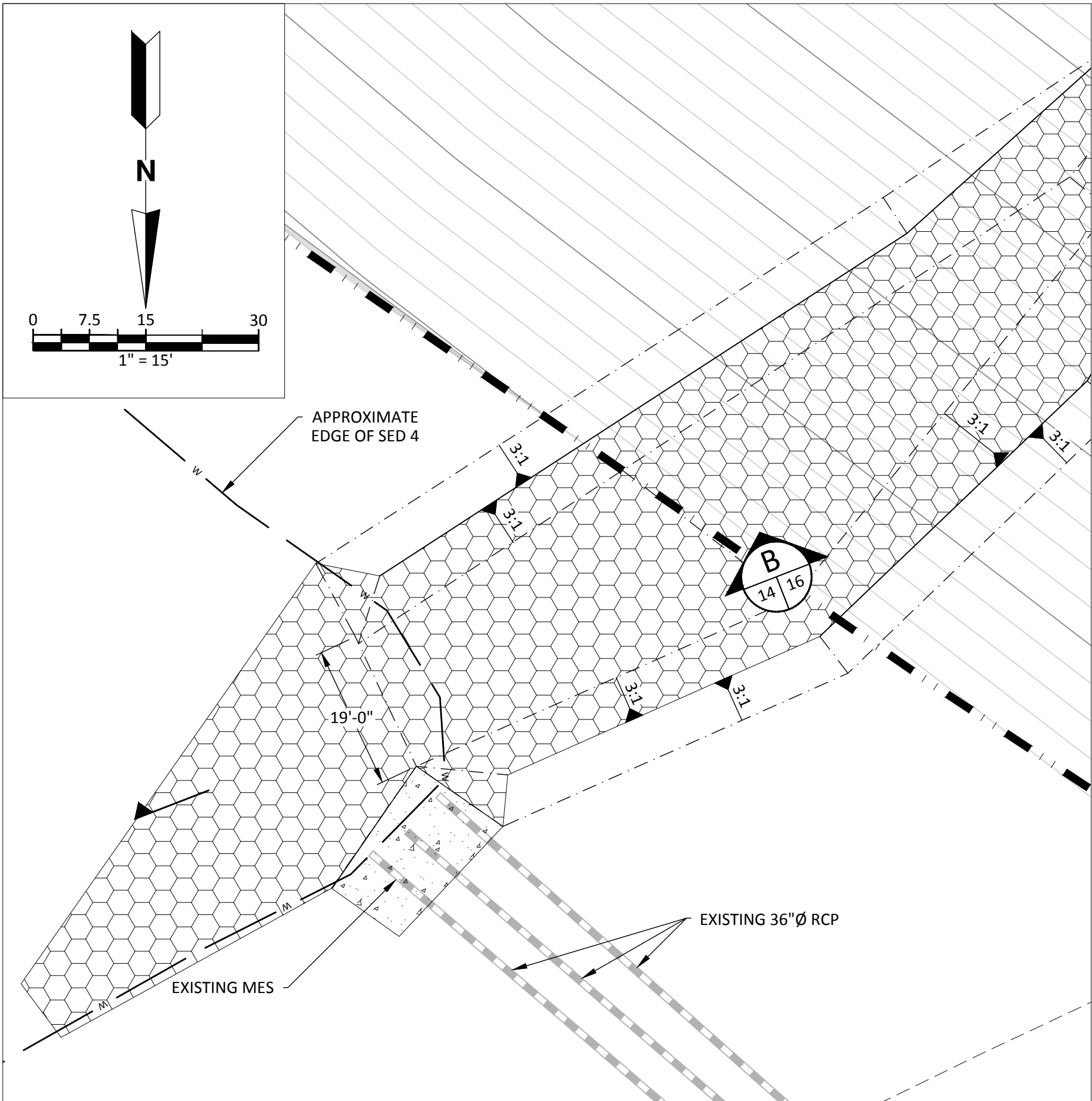
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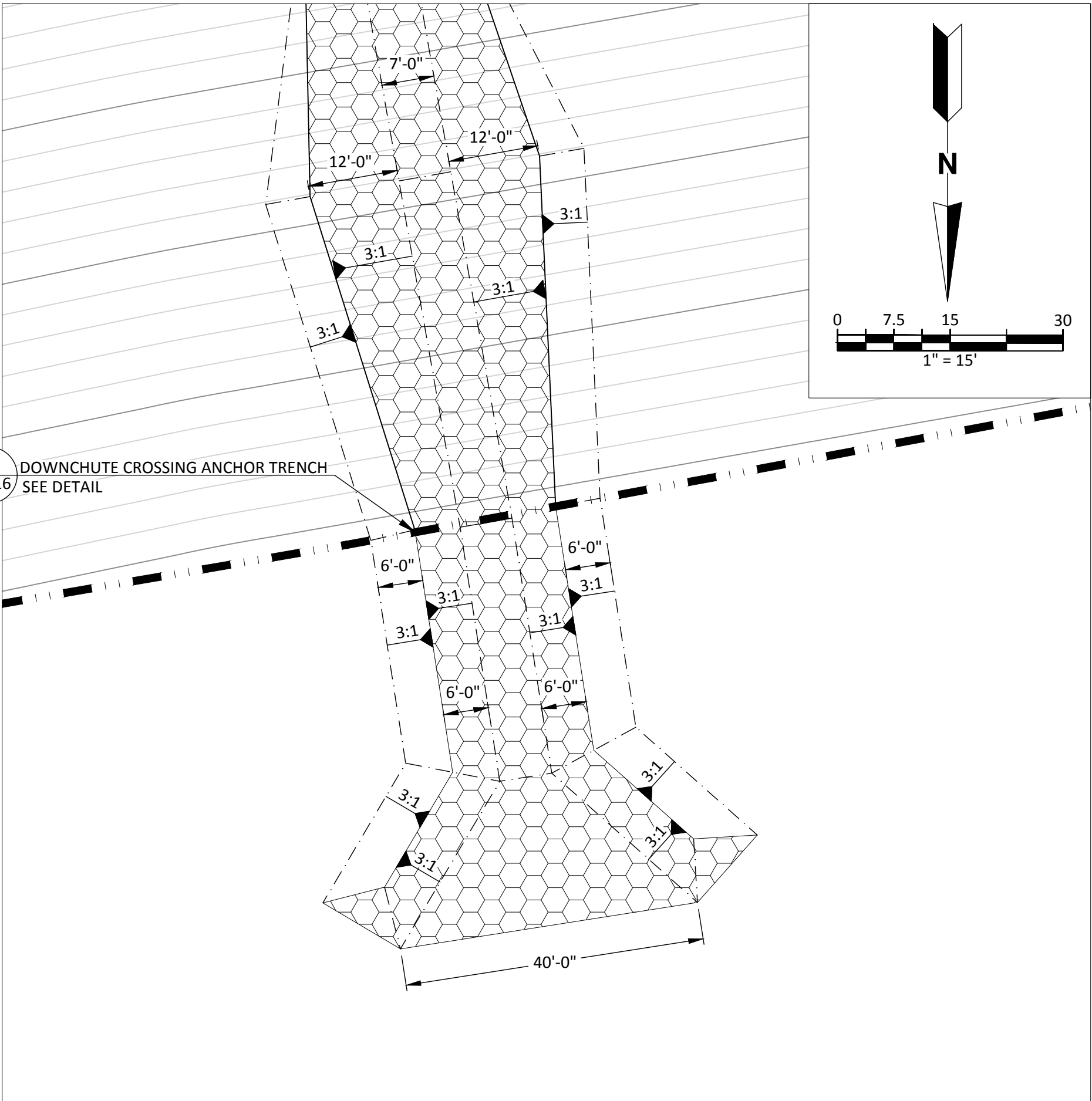
DOWNCHUTE OUTLET 2 DETAIL 2
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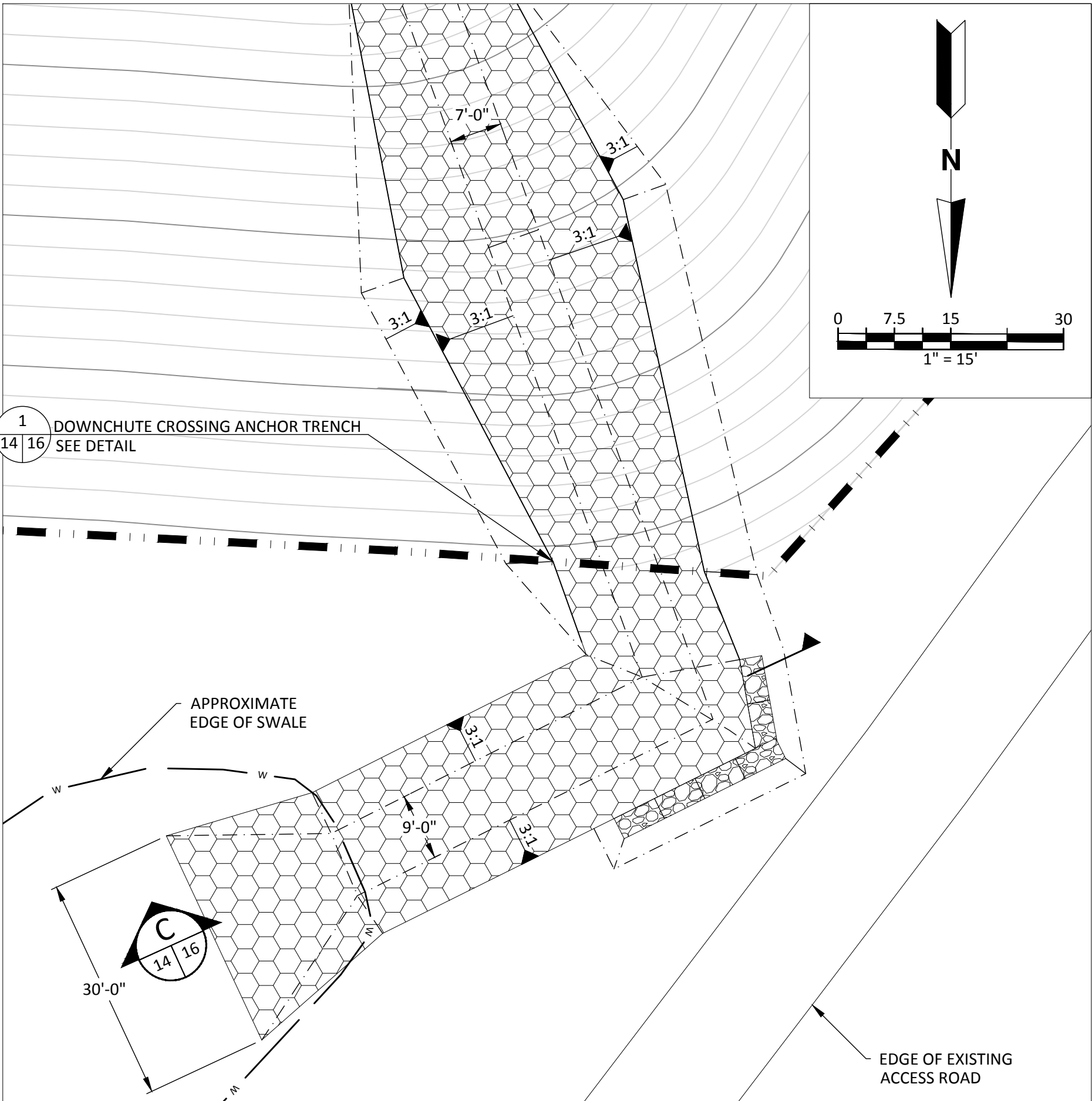
DOWNCHUTE OUTLET 3 DETAIL 3
1" = 15'



DOWNCHUTE OUTLET 4 DETAIL 4
1" = 15'

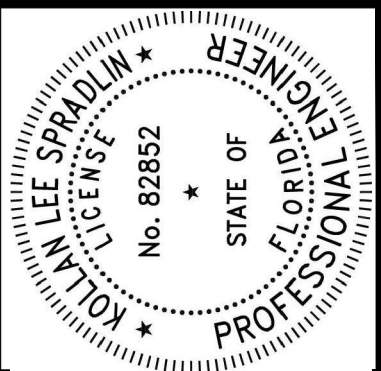


DOWNCHUTE OUTLET 5 DETAIL 5
1" = 15'



DOWNCHUTE OUTLET 6 DETAIL 6
1" = 15'

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CHK. BY	DESCRIPTION	DATE	REV

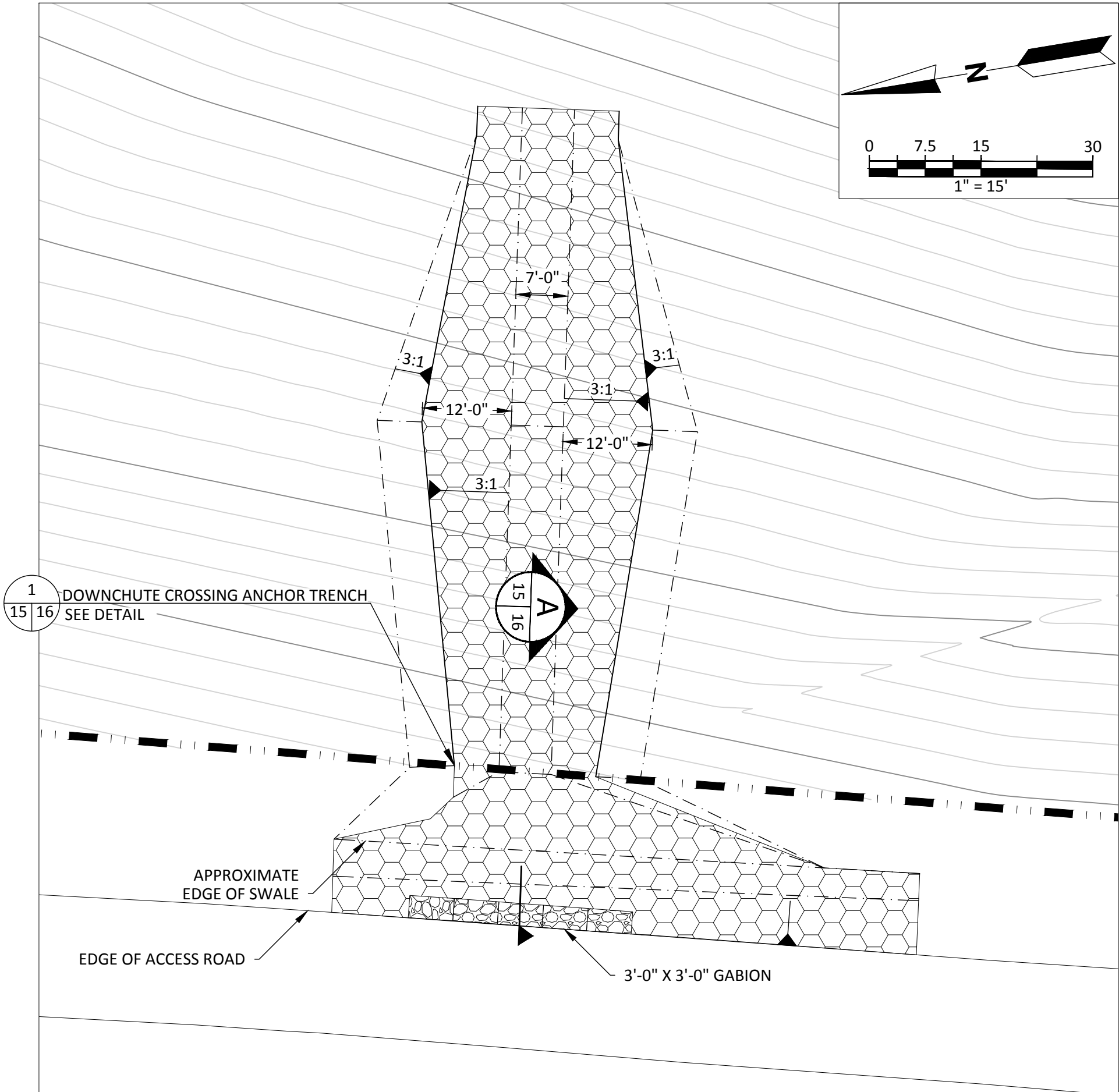
SHEET TITLE	PROJECT TITLE
DETAILS-5	PHASE I-VI CLOSURE DESIGN

CLIENT
HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619

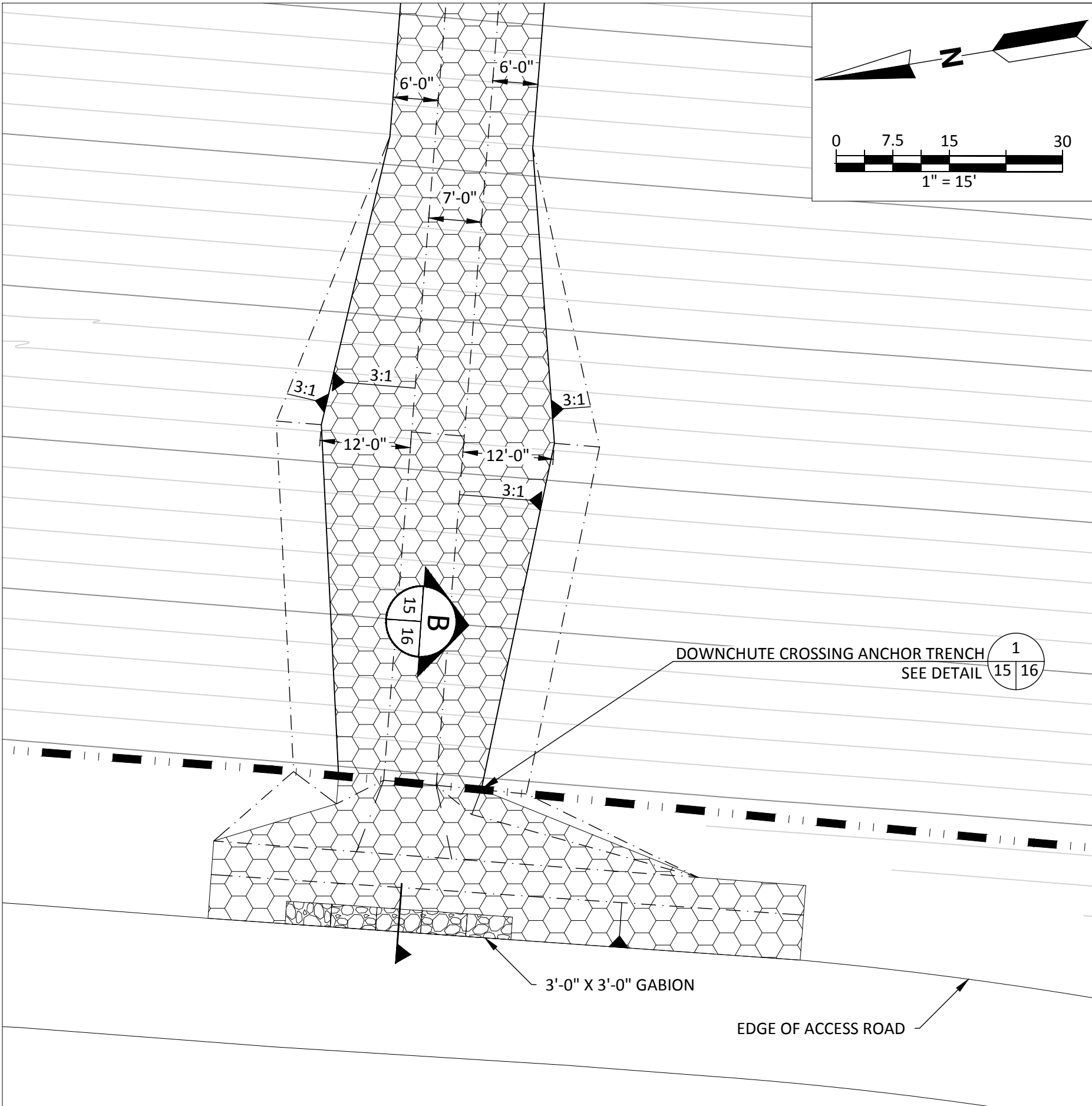
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STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892	09215600.13	OWN. BY: KLS	CHK. BY: SRF	APP. BY: RBC	Q/A REVIEW BY: KLS

CADD FILE:	DATE:	DRAWING NO.
DETAILS-DOWNCHUTE	FEBRUARY 2022	14
SHEET	14	of 22

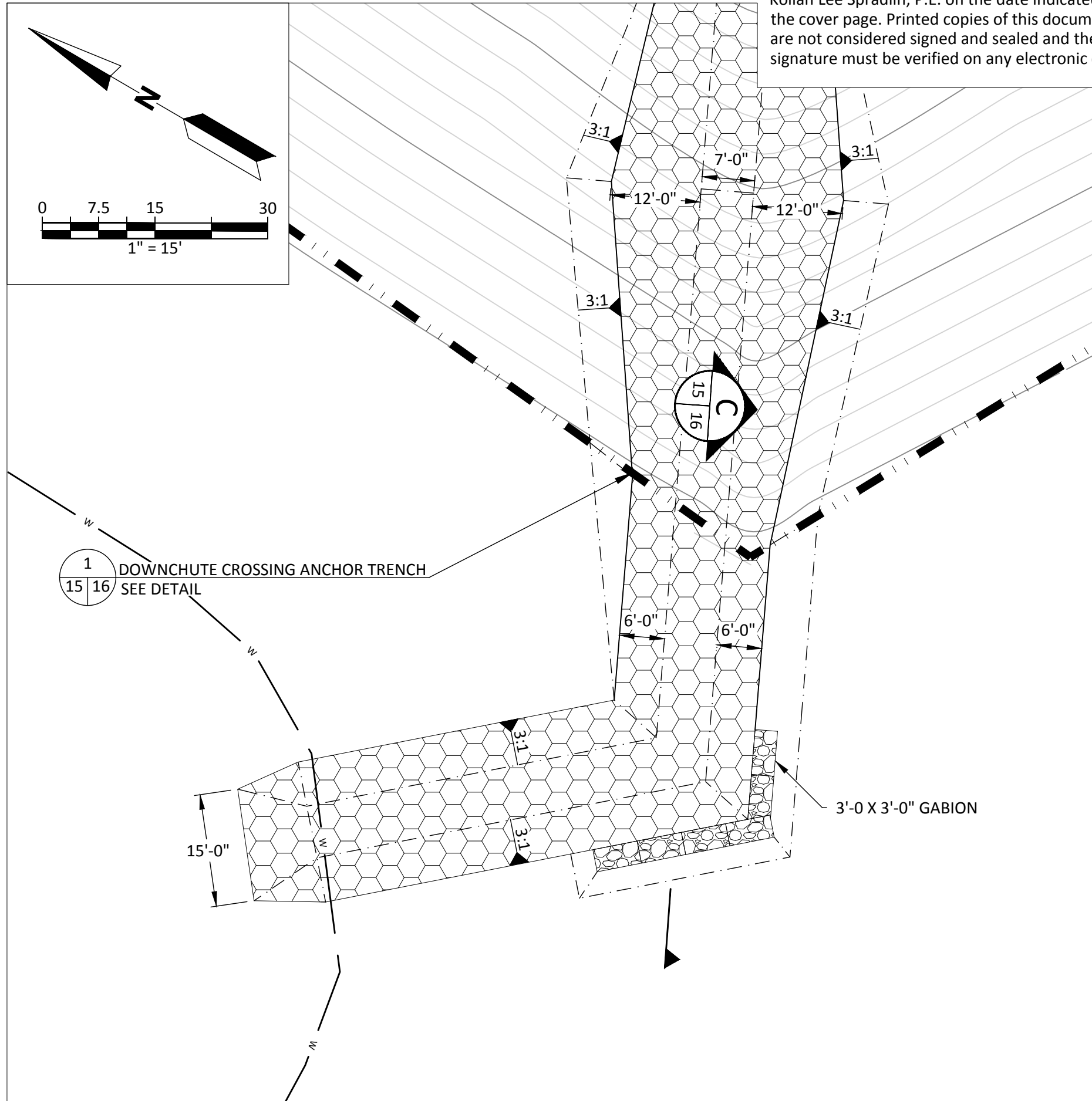
F:\PROJECT\Hillsborough\09215600.00\Task 1100 - General Services\20.0 Phase I-VI Closure\Permit\Engineering Drawings\DETAILS-DOWNCHUTE.dwg Jan 28, 2022 - 6:59pm Layout Name: DETAILS-6 By: 4745old



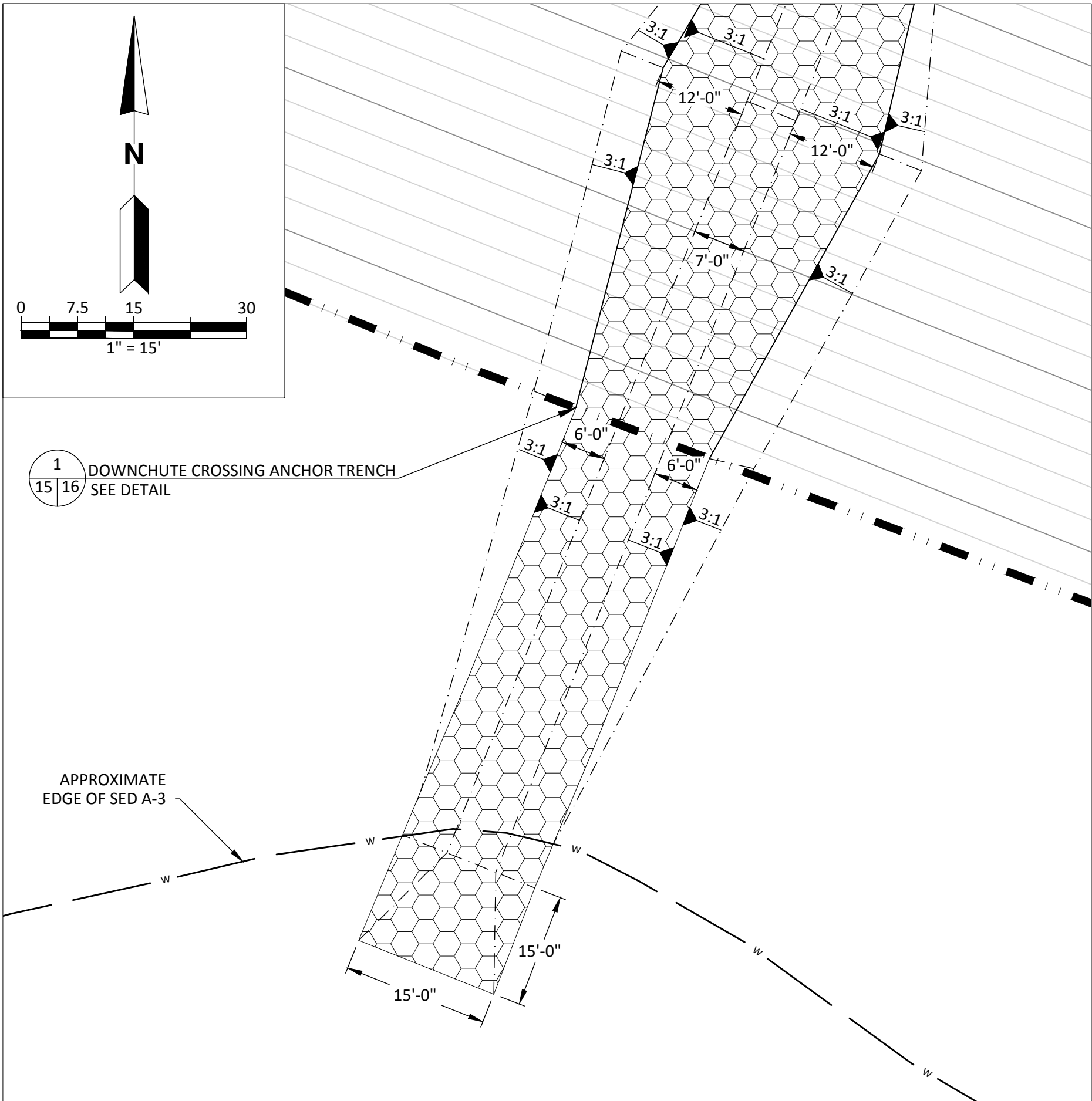
DOWNCHUTE OUTLET 7 DETAIL **1**
1" = 15' 07 15



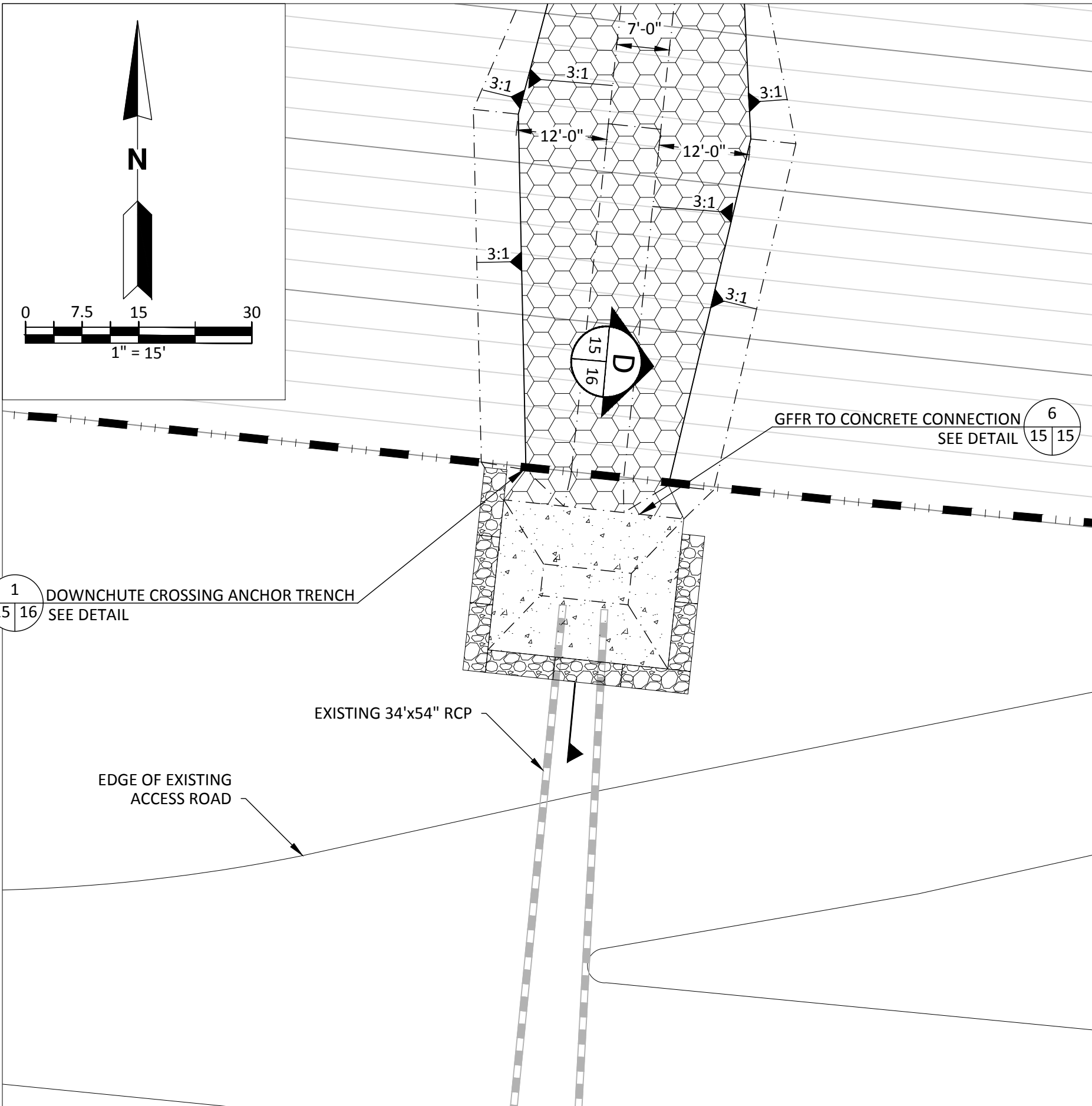
DOWNCHUTE OUTLET 8 DETAIL **2**
1" = 15' 07 15



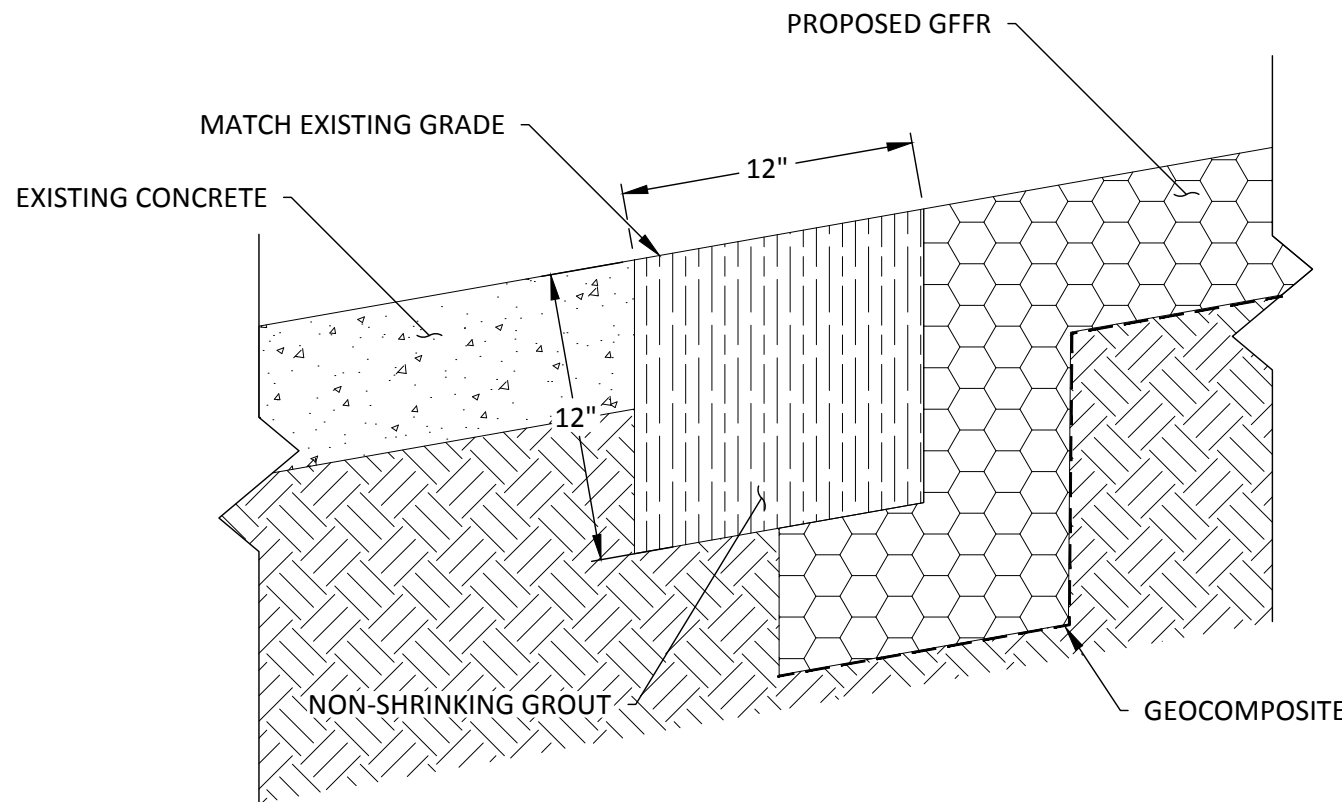
DOWNCHUTE OUTLET 9 DETAIL **3**
1" = 15' 07 15



DOWNCHUTE OUTLET 10 DETAIL **4**
1" = 15' 07 15

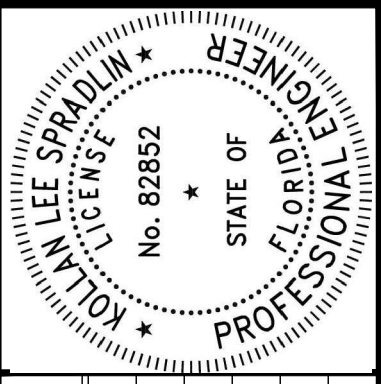


DOWNCHUTE OUTLET 11 DETAIL **5**
1" = 15' 07 15



GFFR TO CONCRETE CONNECTION DETAIL **6**
NOT TO SCALE 15 15

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CHK. BY	DESCRIPTION	DATE	REV

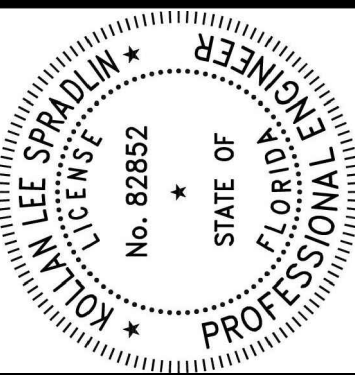
SHEET TITLE	PROJECT TITLE
DETAILS-6	PHASE I-VI CLOSURE DESIGN

CLIENT
HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619

SCS ENGINEERS	OWN. BY	CHK. BY	APP. BY
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892	OWN. BY	CHK. BY	APP. BY
PROJ. NO. 09215600.13	OWN. BY	CHK. BY	APP. BY
DATE: 07/15/2022	OWN. BY	CHK. BY	APP. BY

CADD FILE:	DATE:	DRAWING NO.
DETAILS-DOWNCHUTE	FEBRUARY 2022	15
SHEET	15	of 22

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[illegible]

PROJECT TITLE	DETAILS-7
PHASE I-VI CLOSURE DESIGN	

**HILLSBOROUGH COUNTY
SOLID WASTE DEPARTMENT
TAMPA, FL 33619**

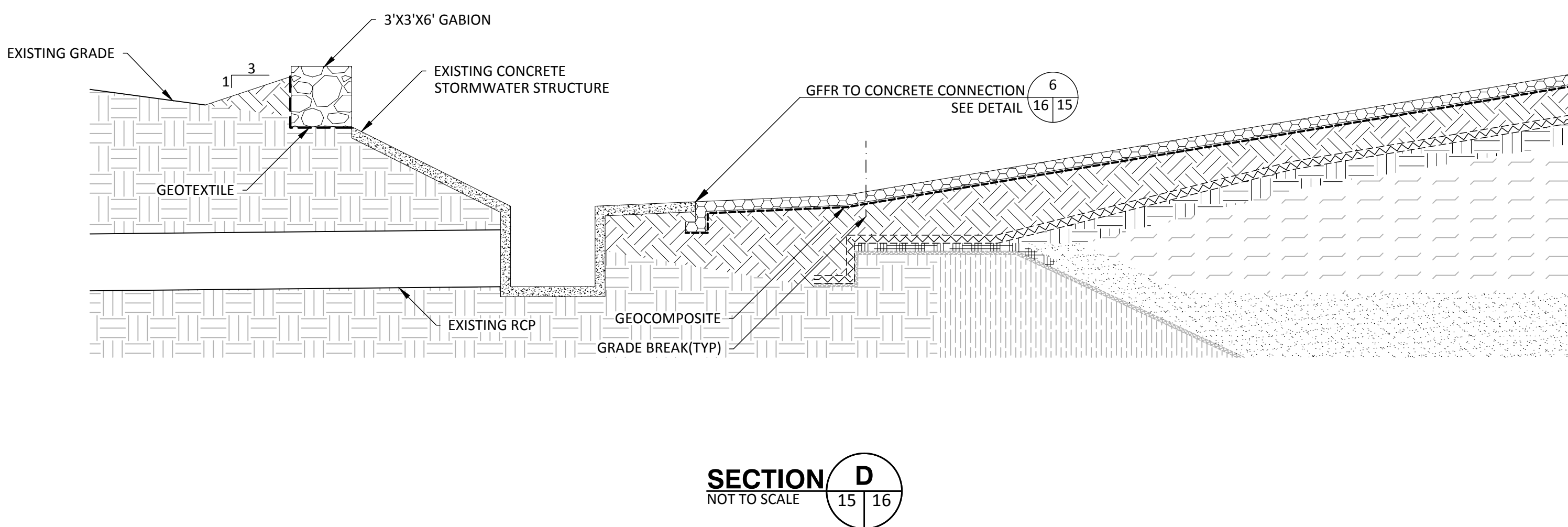
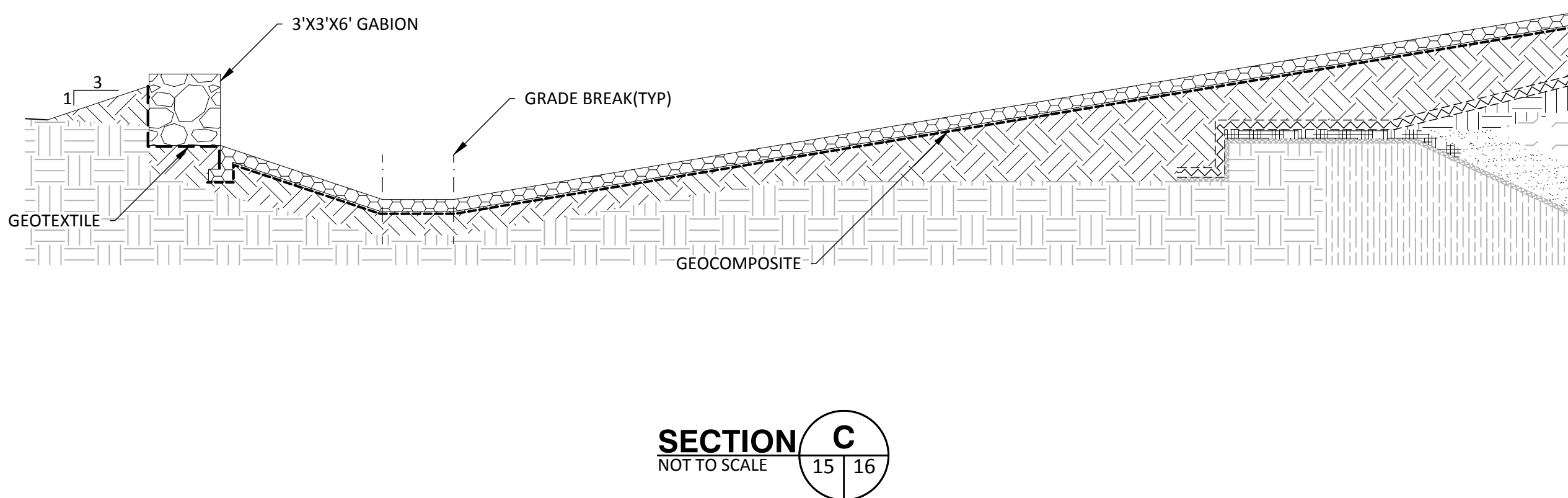
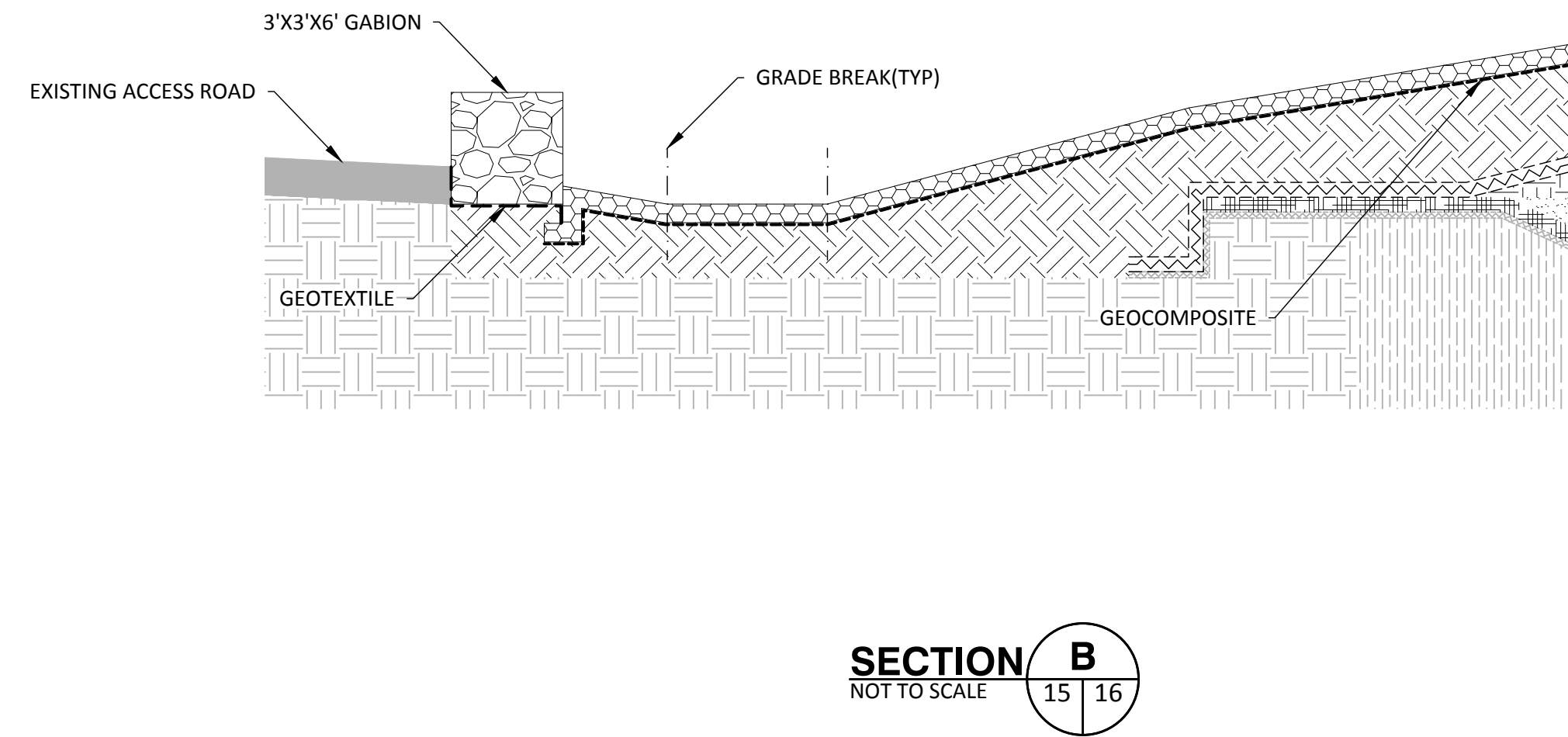
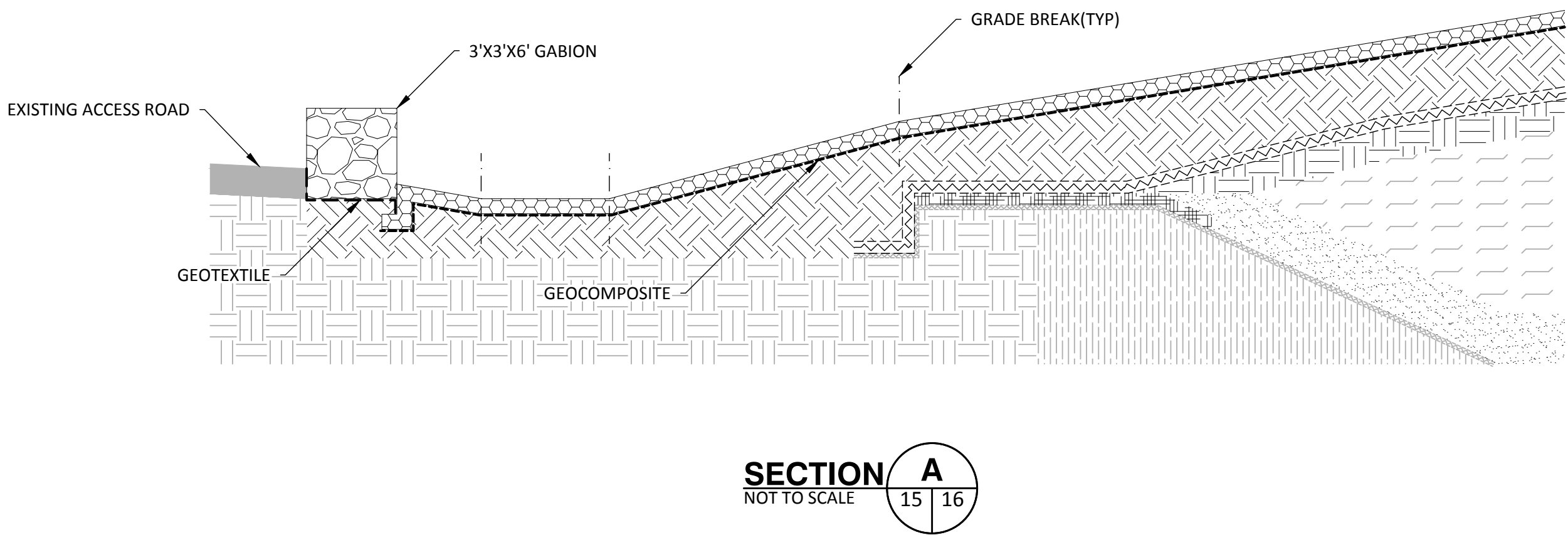
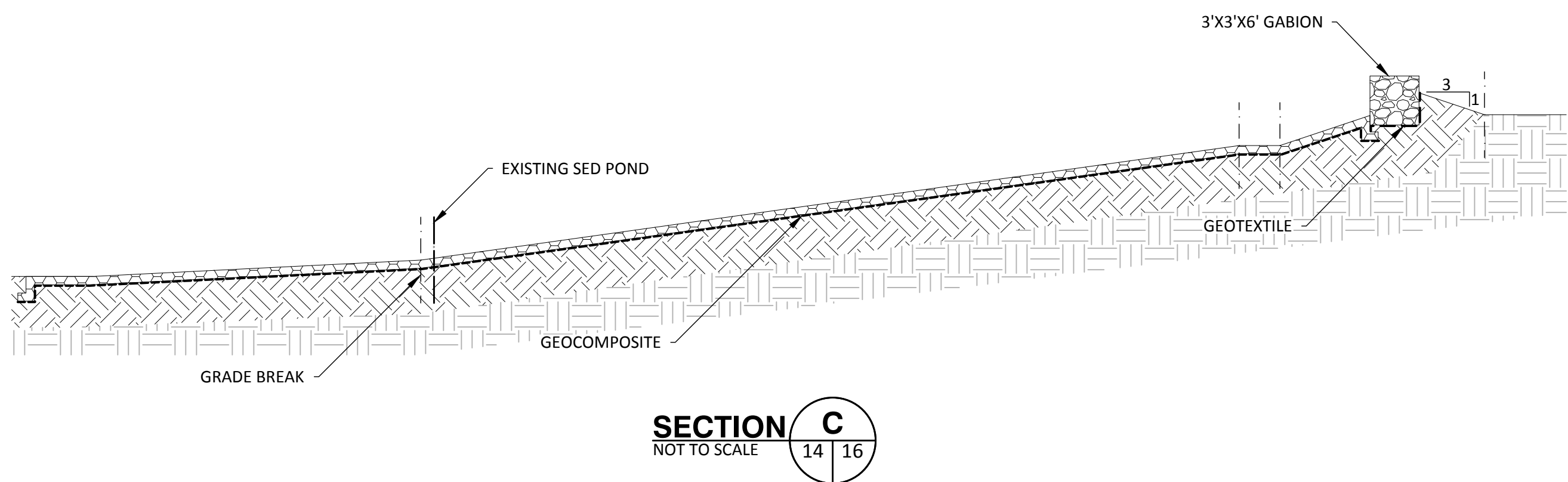
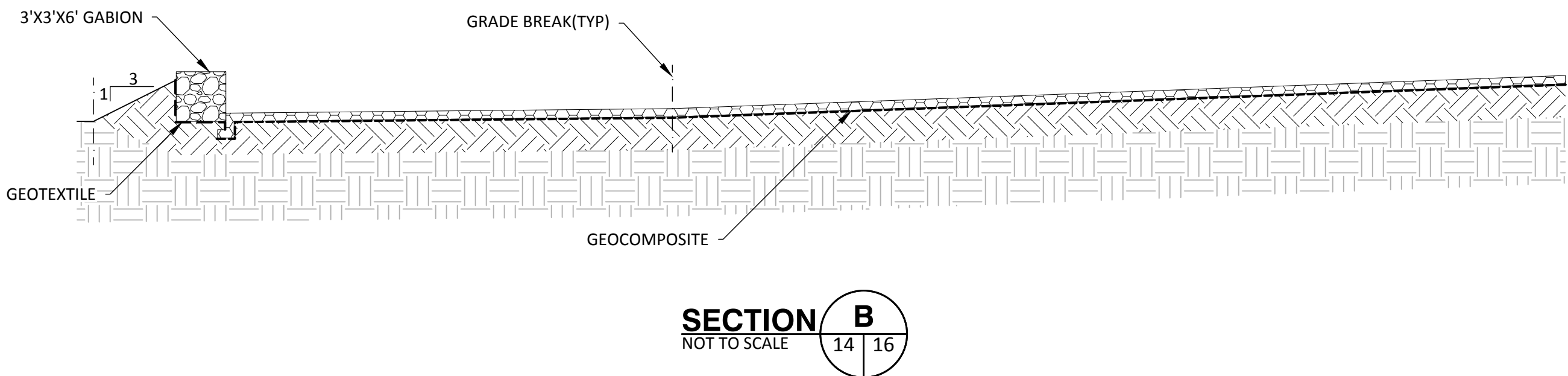
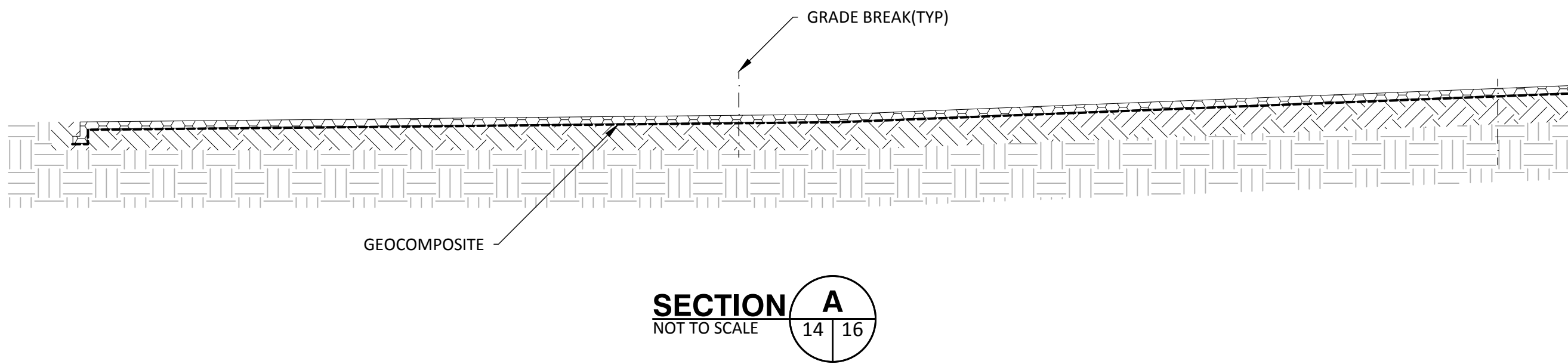
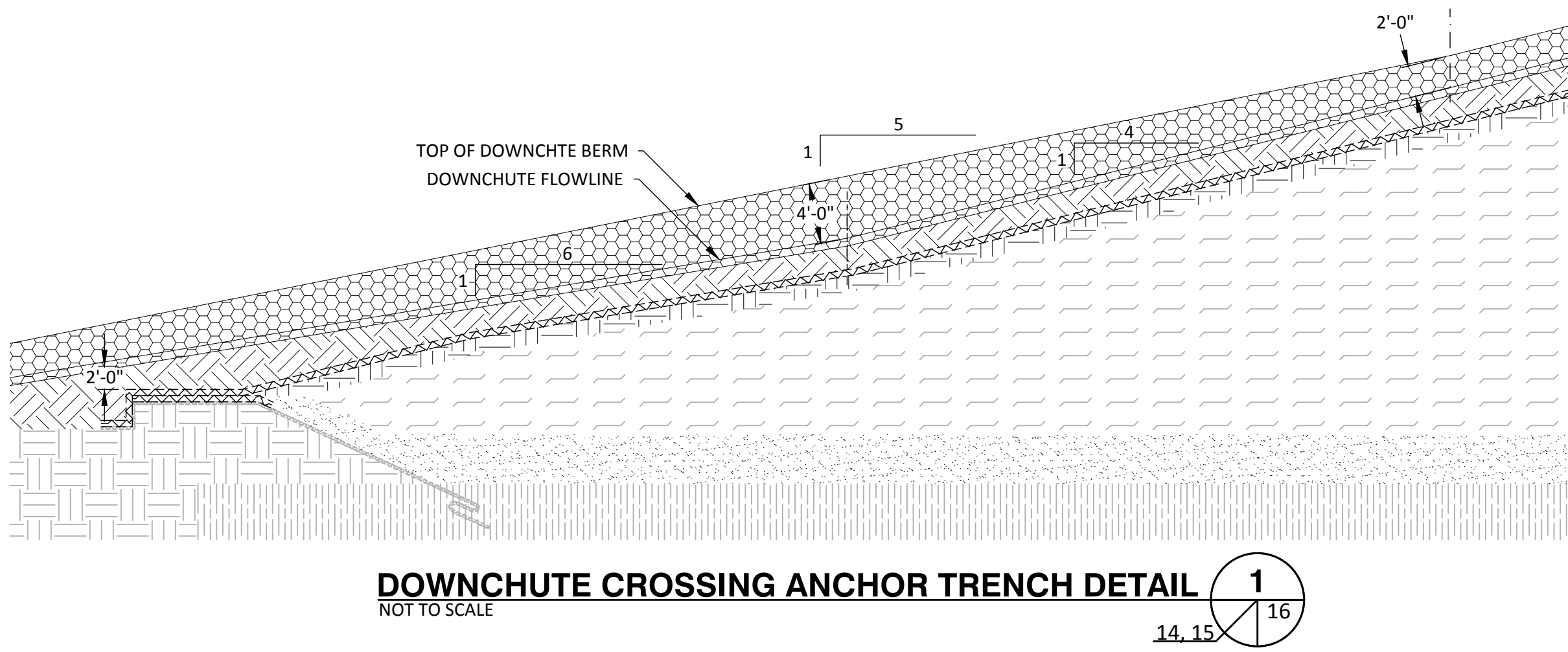
PROJ NO:	90215600.13	DOWN BY:	ALD	Q/A REVIEW BY:	RBC
ISSN BY:	KLS	CHK BY:	SRF	APP BY:	KLS

CADD FILE:
DETAILS-DOWNCHUTE

DATE:
FEBRUARY 2022

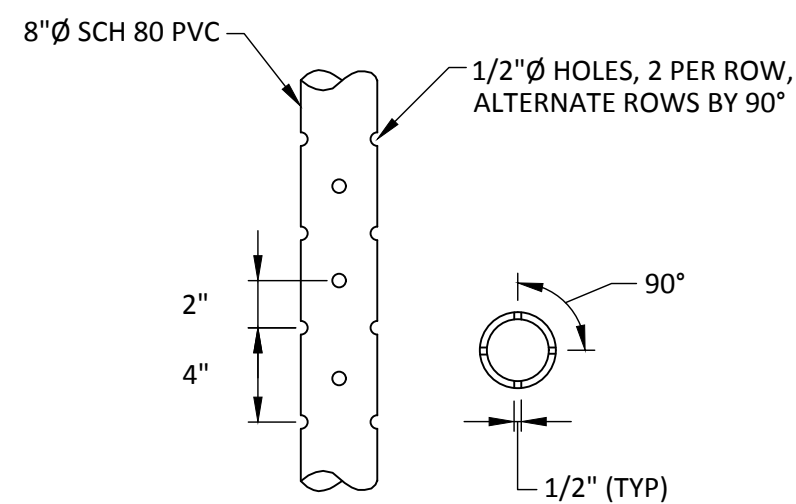
DRAWING NO.
16

SHEET **16** of **22**



Well ID	Intermediate Cover Surface/Linear Elevation	Approx. Top of Sand Grade	Depth of Refuse	Distance from Sand Grade	Well Depth	Perforated Pipe Length	Solid Pipe Length Below Grade	Solid Pipe Length Above Intermediate Surface Grade	Total Solid Pipe Length	Thickness of Gravel Pack
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
EW-57R	223	122	101	0	101	80	20	5	25	83
EW-68R	222	124	98	0	98	77	20	5	25	80
EW-72	237	123	114	0	114	93	20	5	25	96
EW-73	224	124	100	0	100	79	20	5	25	82
EW-74	233	123	110	0	110	89	20	5	25	92
EW-75	224	124	100	0	100	79	20	5	25	82
EW-76	225	124	101	0	101	80	20	5	25	83
EW-77	210	124	86	0	86	65	20	5	25	68
EW-78	231	123	108	0	108	87	20	5	25	90
EW-79	222	124	98	0	98	77	20	5	25	80
EW-80	234	123	111	0	111	90	20	5	25	93
EW-81	237	121	116	0	116	95	20	5	25	98
EW-82	251	121	130	0	130	109	20	5	25	112
EW-83	236	121	115	0	115	94	20	5	25	97
EW-84	224	121	103	0	103	82	20	5	25	85
EW-85	237	120	117	0	117	96	20	5	25	99
EW-86	248	120	128	0	128	107	20	5	25	110
EW-87	217	122	95	0	95	74	20	5	25	77
EW-88	233	120	113	0	113	92	20	5	25	95
EW-89	251	119	132	0	132	111	20	5	25	114
EW-90	215	122	93	0	93	72	20	5	25	75
EW-91	234	120	114	0	114	93	20	5	25	96
EW-92	213	121	92	0	92	71	20	5	25	74
EW-93	196	120	76	0	76	55	20	5	25	58
EW-94	214	120	94	0	94	73	20	5	25	76
EW-95	226	120	106	0	106	85	20	5	25	88
EW-96	181	120	61	0	61	40	20	5	25	43
EW-97	230	119	111	0	111	90	20	5	25	93
EW-98	237	119	118	0	118	97	20	5	25	100
EW-99	209	120	89	0	89	68	20	5	25	71
EW-100	238	120	118	0	118	97	20	5	25	100
EW-101	203	120	83	0	83	62	20	5	25	65
EW-102	244	120	124	0	124	103	20	5	25	106
EW-103	225	121	104	0	104	83	20	5	25	86
EW-104	235	120	115	0	115	94	20	5	25	97
EW-105	215	121	94	0	94	73	20	5	25	76
EW-106	233	121	112	0	112	91	20	5	25	94
EW-107	233	121	112	0	112	91	20	5	25	94
EW-108	246	120	126	0	126	105	20	5	25	108
EW-109	252	119	133	0	133	112	20	5	25	115
EW-110	254	120	134	0	134	113	20	5	25	116
EW-111	257	120	137	0	137	116	20	5	25	119
EW-112	256	120	136	0	136	115	20	5	25	118
EW-113	242	121	121	0	121	100	20	5	25	103
EW-114	210	122	88	0	88	67	20	5	25	70
EW-115	234	122	112	0	112	91	20	5	25	

PROPOSED WELL SCHEDULE

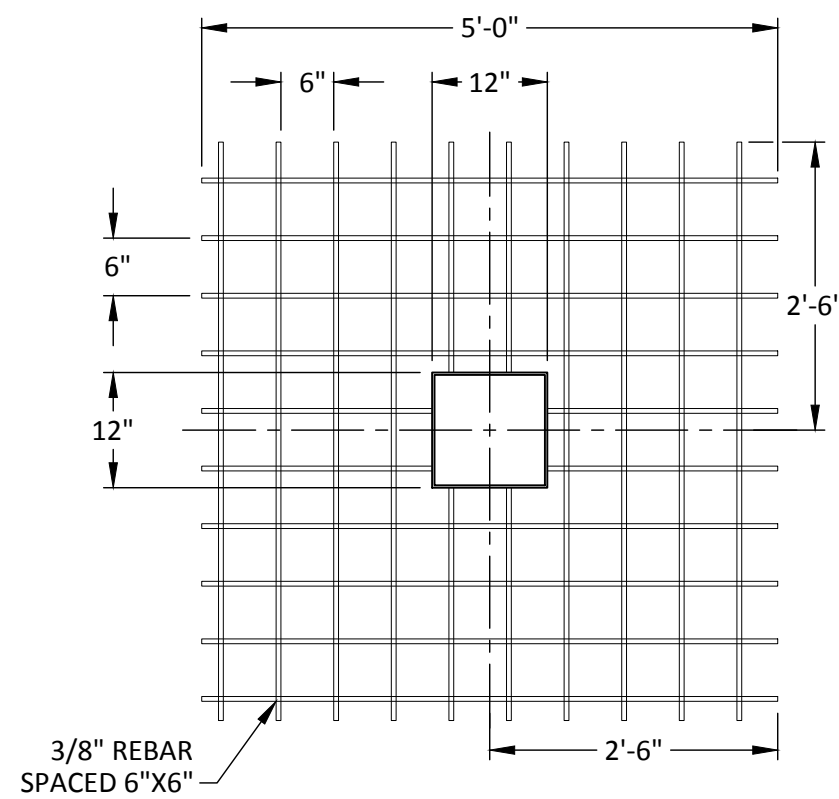


NOTES:

1. PERFORATIONS SPACED 90° APART HORIZONTALLY.
2. PERFORATIONS SPACED 4" APART VERTICALLY.
3. 90° AND 270° ROWS STAGGERED 2" BELOW 0° AND 180° ROWS.

PERFORATED PIPE DETAIL

NOT TO SCALE

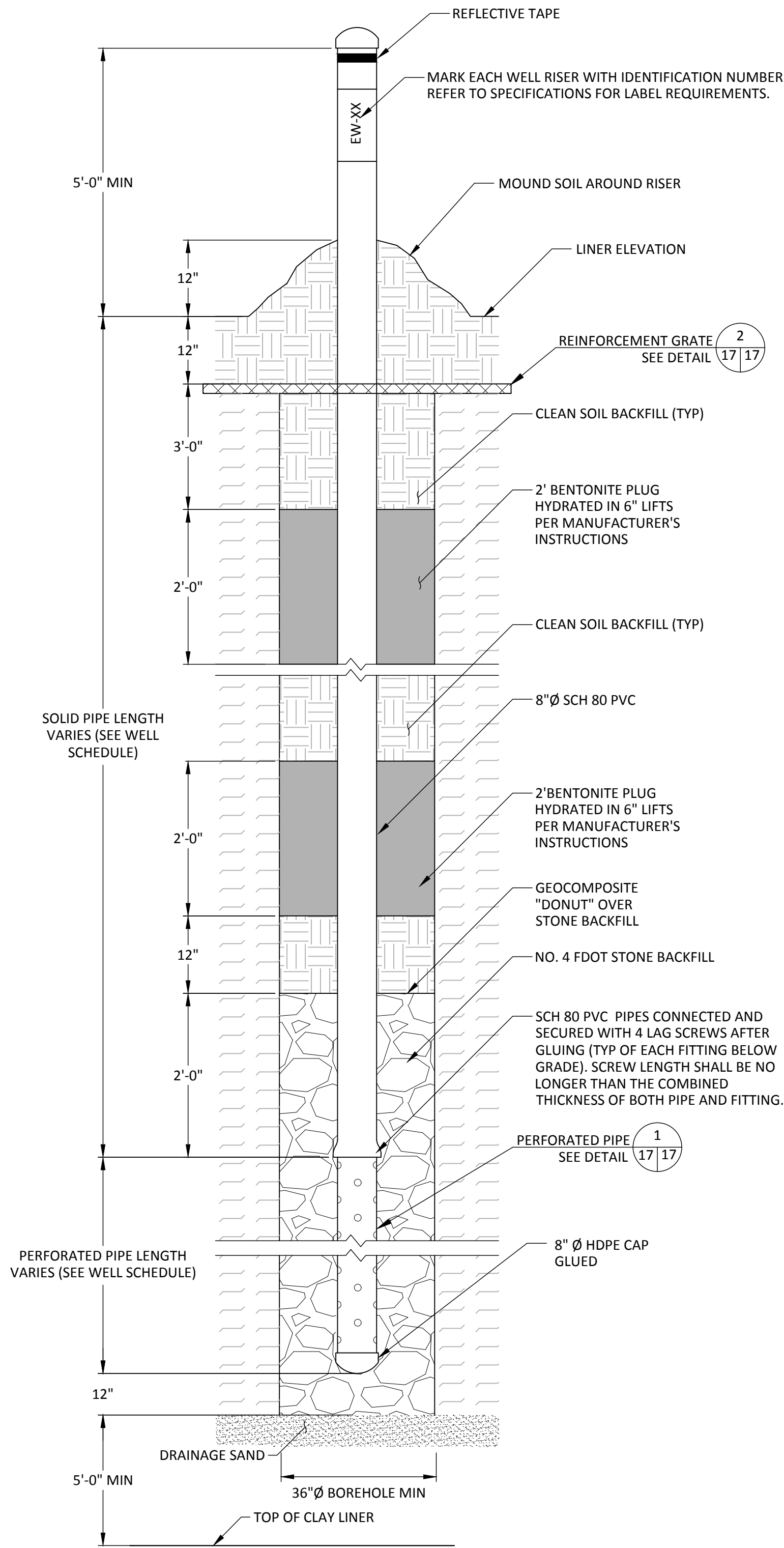


NOTES:

1. WELL BORE REINFORCEMENT GRATE SHALL BE 100% WELDED AND CONFIGURED WITH 3/8" REBAR WITH 6"x6" SPACING. GRATE SHALL HAVE A 12"x12" SQUARE CENTER SPACED CUTOUT FOR WELL CASING.
2. GRATE SHALL BE INSTALLED 12" BELOW LINER ELEVATION.

REINFORCEMENT GRATE DETAIL

NOT TO SCALE



NOTES:

1. INSTALL WELL BORE REINFORCEMENT GRATE ON GRADE AROUND WELL IMMEDIATELY AFTER COMPLETING WELL DRILLING
2. A MINIMUM OF 5' OF SOLID PIPE ABOVE EXISTING GRADE TO BE INSTALLED TO ACCOUNT FOR THE INSTALLATION OF LINER AND COVER SOLID. AFTER FINAL BUILD-OUT IS COMPLETE, 2' OF THE SOLID PIPE WILL BE UNDER FINAL COVER LAYER AND 3' OF THE SOLID PIPE WILL BE ABOVE THE BUILD-OUT ELEVATION.
3. IN SOME AREAS ON THE LANDFILL, WASTE TO ENERGY (WTE) ASH HAS BEEN DISCARDED; THEREFORE, DRILLING DEPTHS MAY BE AFFECTED. THESE AREAS HAVE BEEN AVOIDED FOR NEW WELL LOCATIONS; HOWEVER, DRILLING EQUIPMENT APPROPRIATE FOR DRILLING THROUGH CONCRETE MAY NEED TO BE IMPLEMENTED.

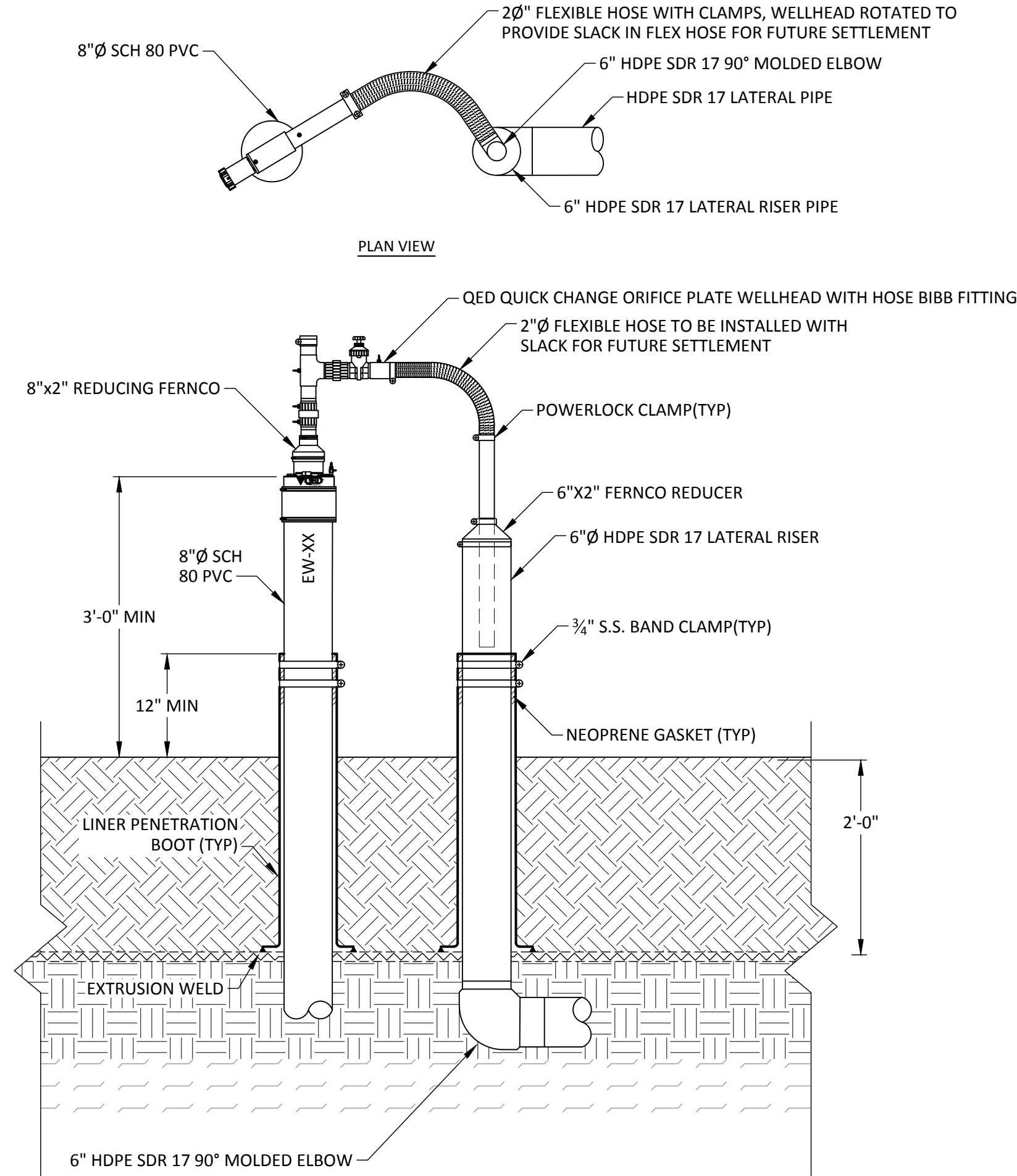
PROPOSED LFG EXTRACTION WELL DETAIL

NOT TO SCALE

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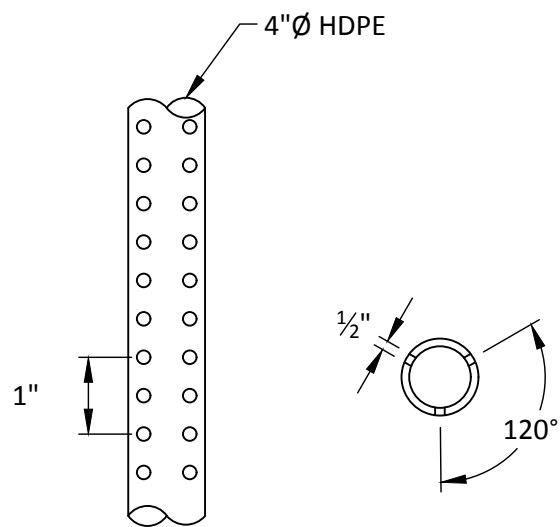
SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892	CLIENT HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619		SHEET TITLE DETAILS-8 PROJECT TITLE PHASE I-VI CLOSURE DESIGN	REV 1 2 3 4 5	DATE 	DESCRIPTION 	CHK BY
	CADD FILE: LFG-DETAILS	DATE: FEBRUARY 2022					
DRAWING NO. 17			SHEET 17 of 22				

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PROPOSED LFG WELL HEAD DETAIL
NOT TO SCALE

1
08 18

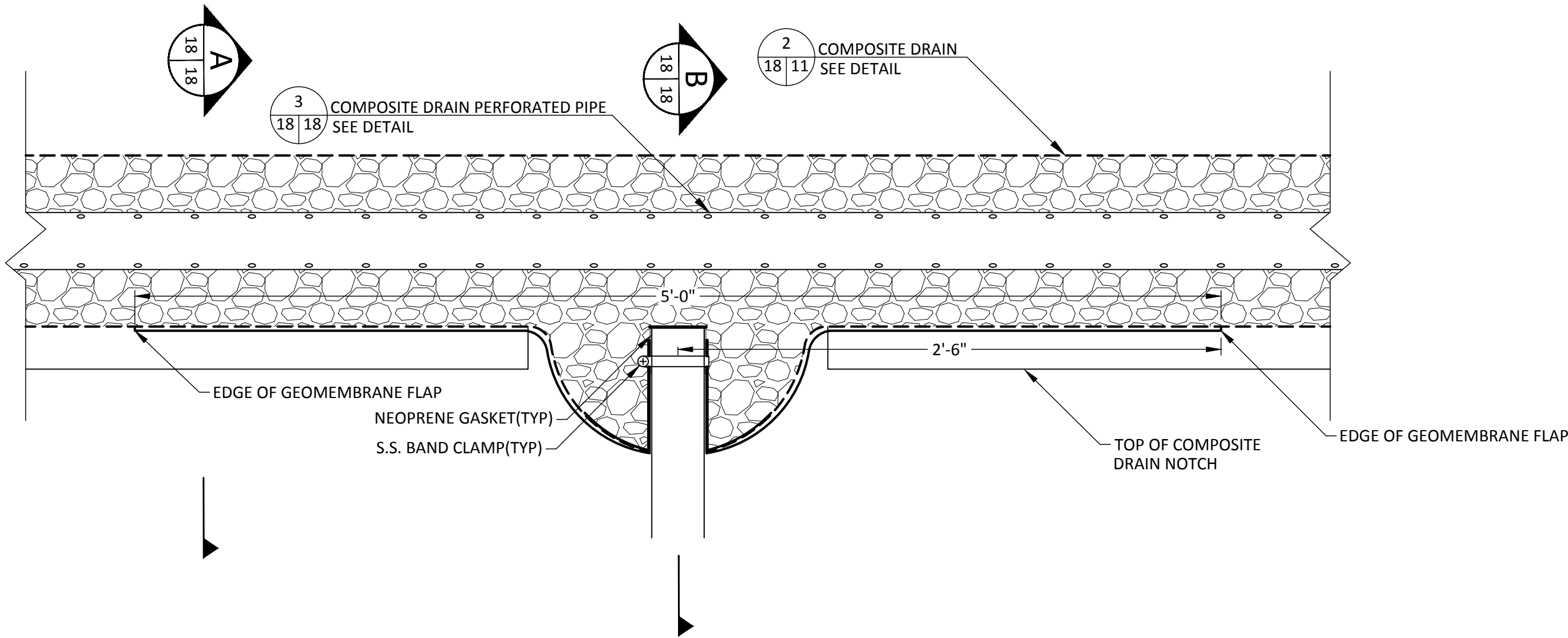


NOTES:

- PERFORATIONS SPACED 120° HORIZONTALLY.
- PERFORATIONS SPACED 4" APART VERTICALLY.
- PIPE SHALL ALWAYS BE PLACED WITH ONE COLUMN OF PERFORATIONS AT THE BOTTOM OF THE PIPE.

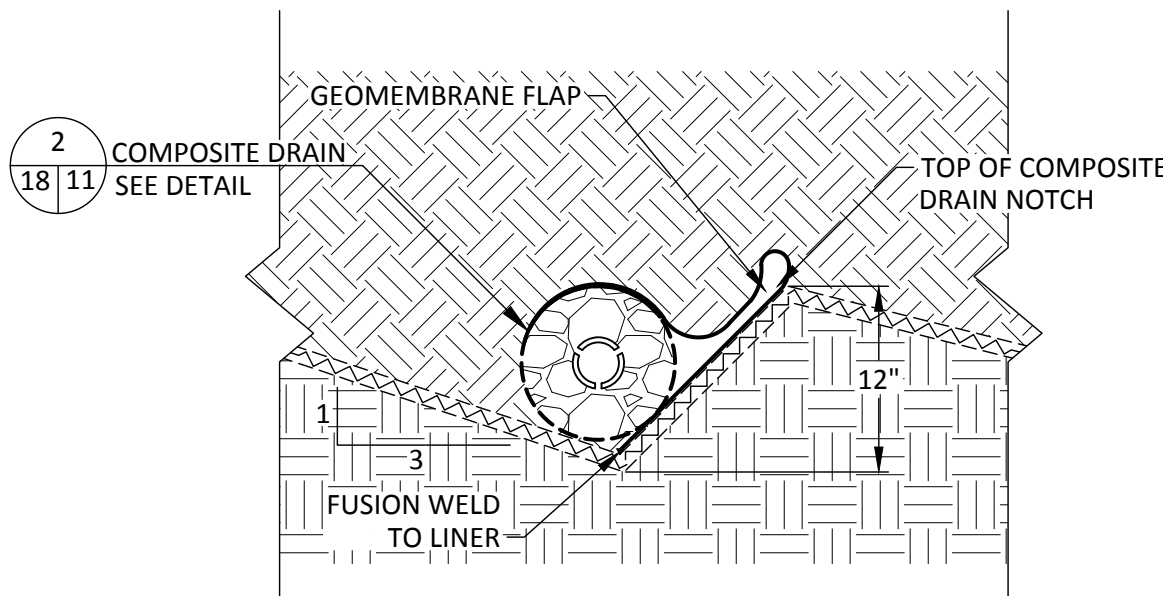
COMPOSITE DRAIN PERFORATED PIPE DETAIL
NOT TO SCALE

3
11 18



COMPOSITE DRAIN CONNECTION TO DISCHARGE PIPE DETAIL
NOT TO SCALE

2
07 12

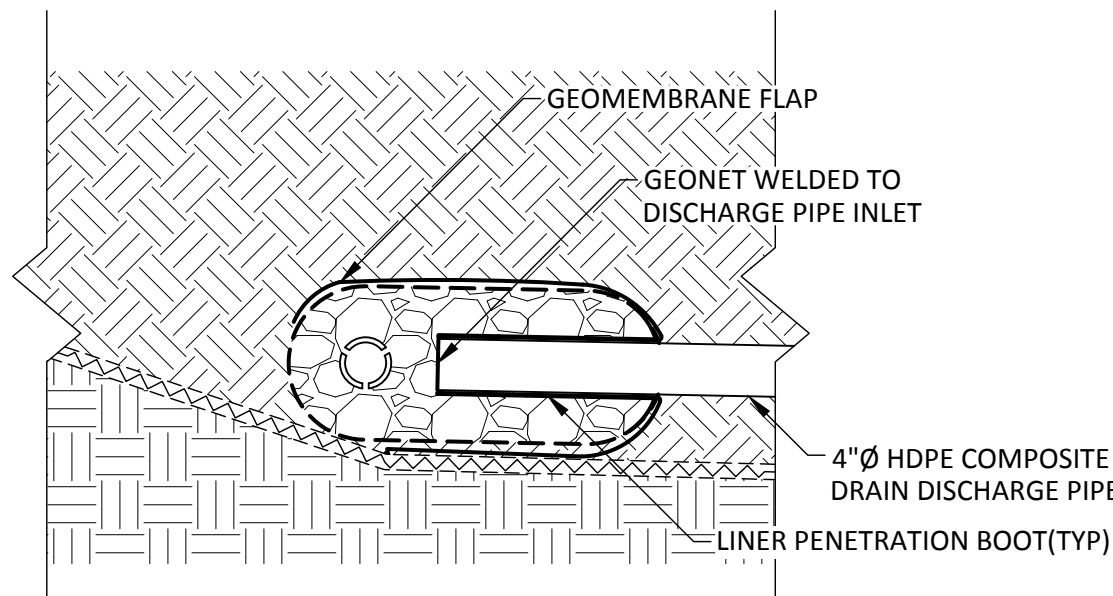


NOTES

- EXAGGERATED FOR ILLUSTRATION PURPOSES.
- TERMINATE UPPER SLOPE COMPOSITE LOWPOINT TO MAKE GEOMEMBRANE FLAP FUSION WELD AND REINSTALL GEOCOMPOSITE DOWNSLOPE OF FLAP.

SECTION A
NOT TO SCALE

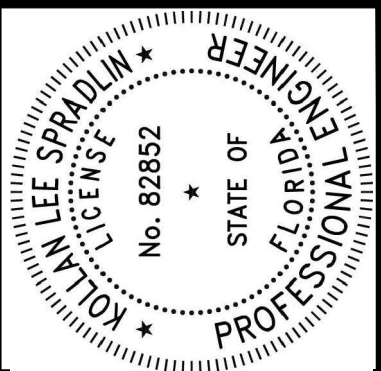
A
18 18



SECTION B
NOT TO SCALE

B
18 18

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CHK. BY	DESCRIPTION	DATE	REV

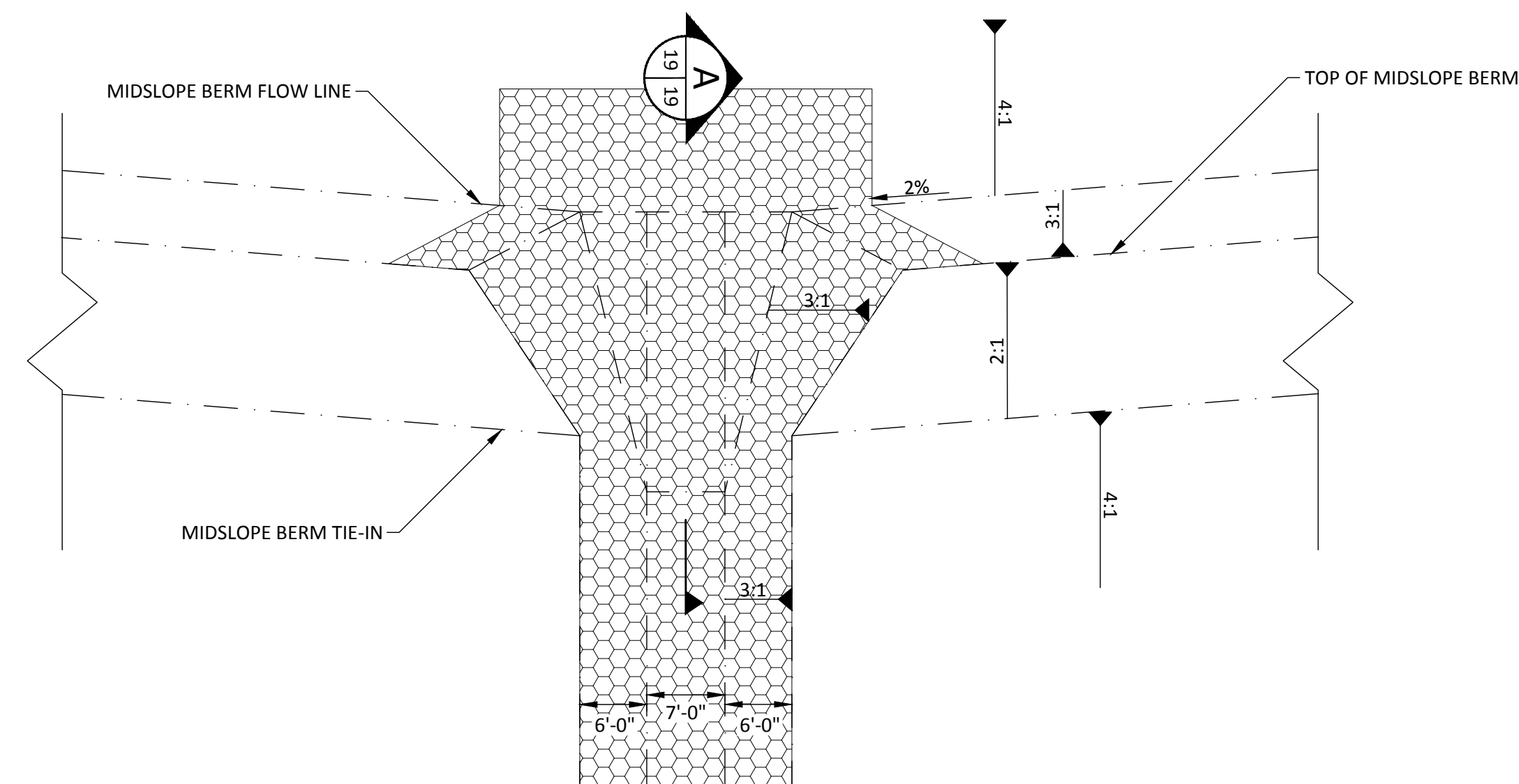
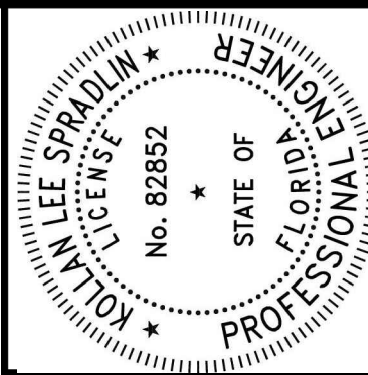
SHEET TITLE	PROJECT TITLE
DETAILS-9	PHASE I-VI CLOSURE DESIGN

CLIENT
HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619

SCS ENGINEERS	OWN. BY	CHK. BY	APP. BY	CLS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892	ALD	SRF	RBC	KLS
PROJ. NO. 09215600.13	DATE 07/12/22	CHK. BY	APP. BY	CLS

CADD FILE: LFG-DETAILS
DATE: FEBRUARY 2022
DRAWING NO. 18
SHEET 18 of 22

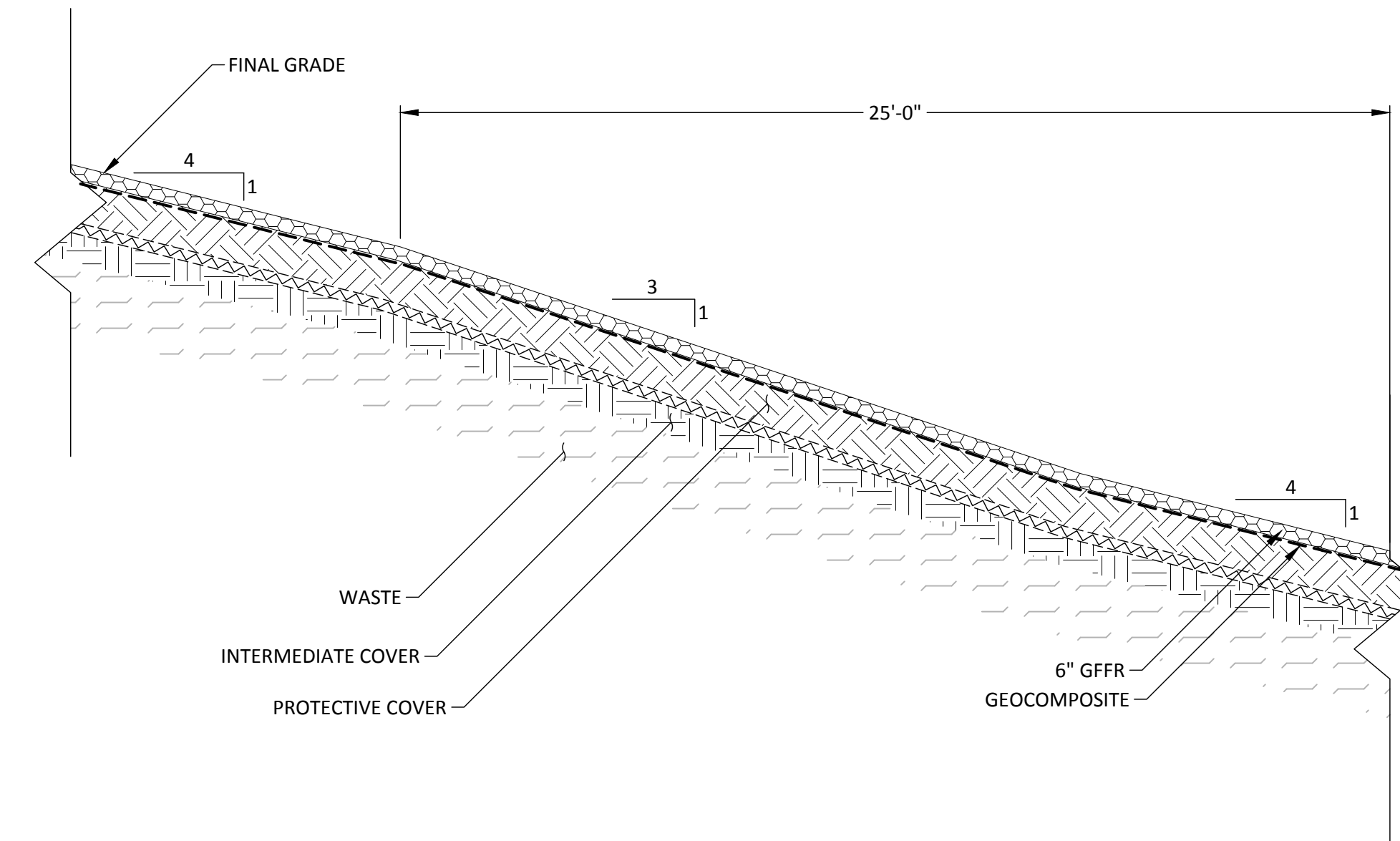
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TOP OF MIDSLOPE DOWNCHUTE DETAIL
NOT TO SCALE

NOT TO SCALE

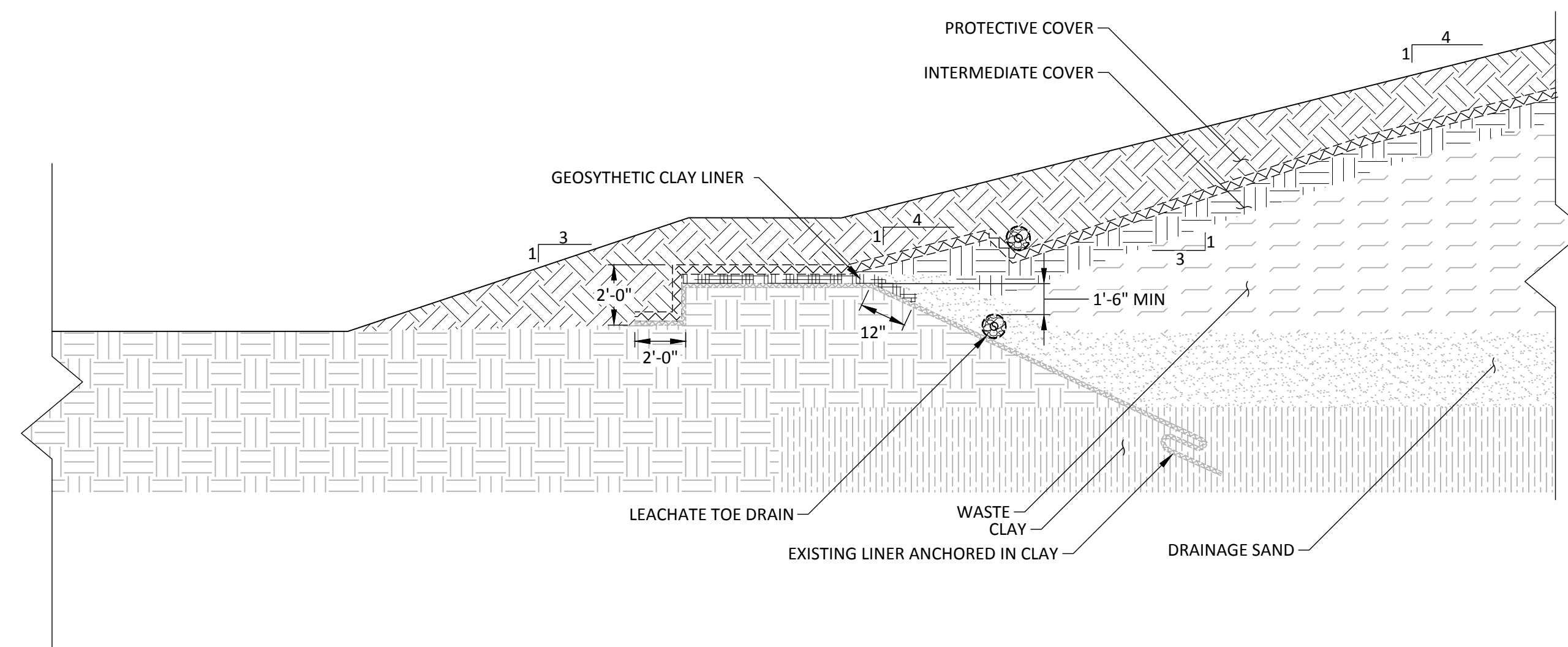
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07 | 19



SECTION
NOT TO SCALE

NOT TO SCALE

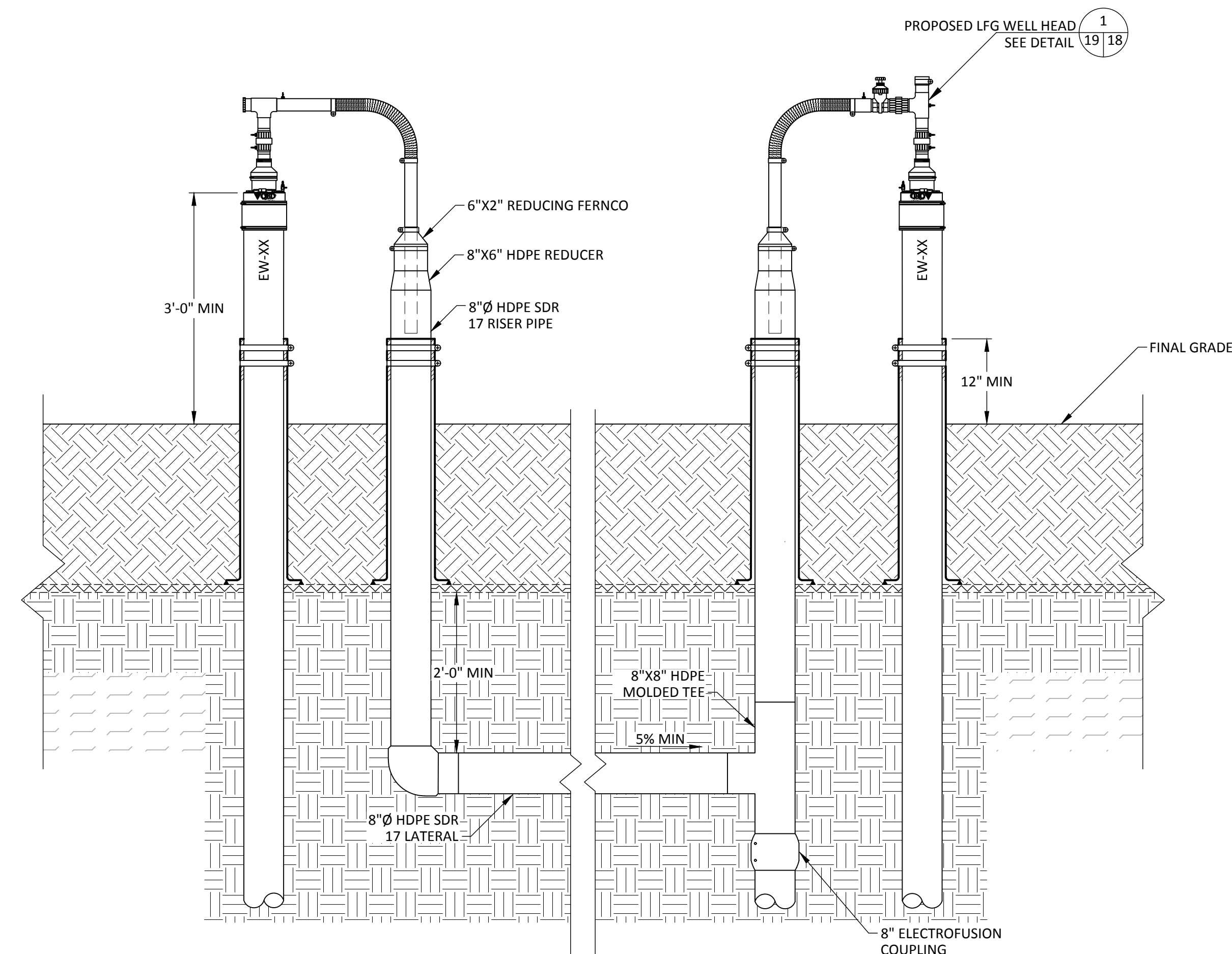
A
19 | 19



ANCHOR TRENCH WITH LEACHATE TOE DRAIN DETAIL


NOT TO SCALE

2



VACCUM RISER TIE-IN DETAIL

WACCU
NOT TO SCALE



CHK. BY	DESCRIPTION	DATE	REV
			△
			△
			△
			△
			△

SHEET TITLE	DETAILS-10
PROJECT TITLE	PHASE I-VI CLOSURE DESIGN

**HILLSBOROUGH COUNTY
SOLID WASTE DEPARTMENT
TAMPA, FL 33619**

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
 3022 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619
 PH (813) 621-0080 FAX NO. (813) 623-3757
 FLORIDA FIRM REGISTRATION RY-4892

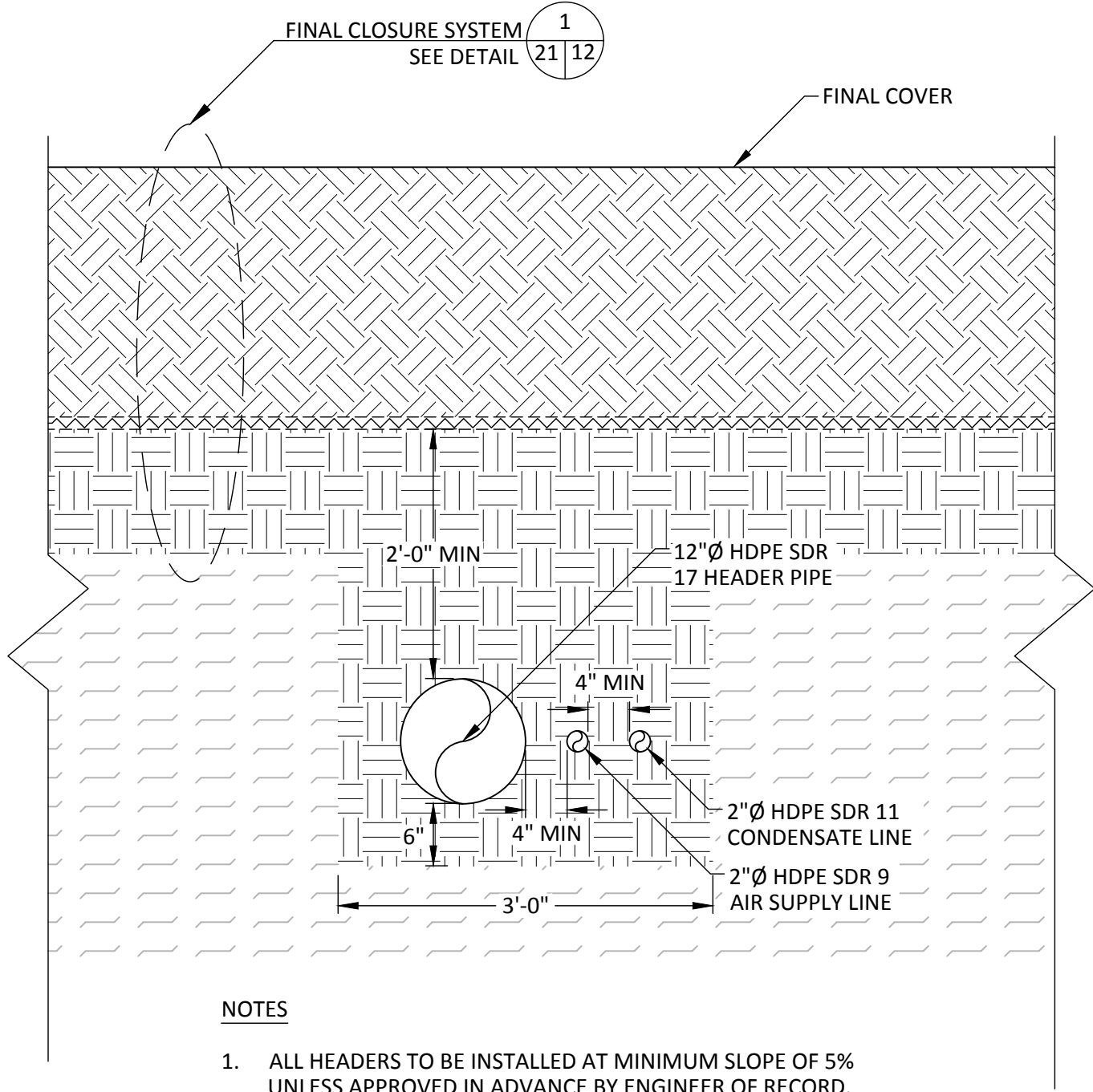
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09215600	CHC: BT	RBC	APP: BT:
DWN BY:	K/S	SGE	C

CADD FILE:
LFG-DETAILS

DATE:
FEBRUARY 2022

DRAWING NO.

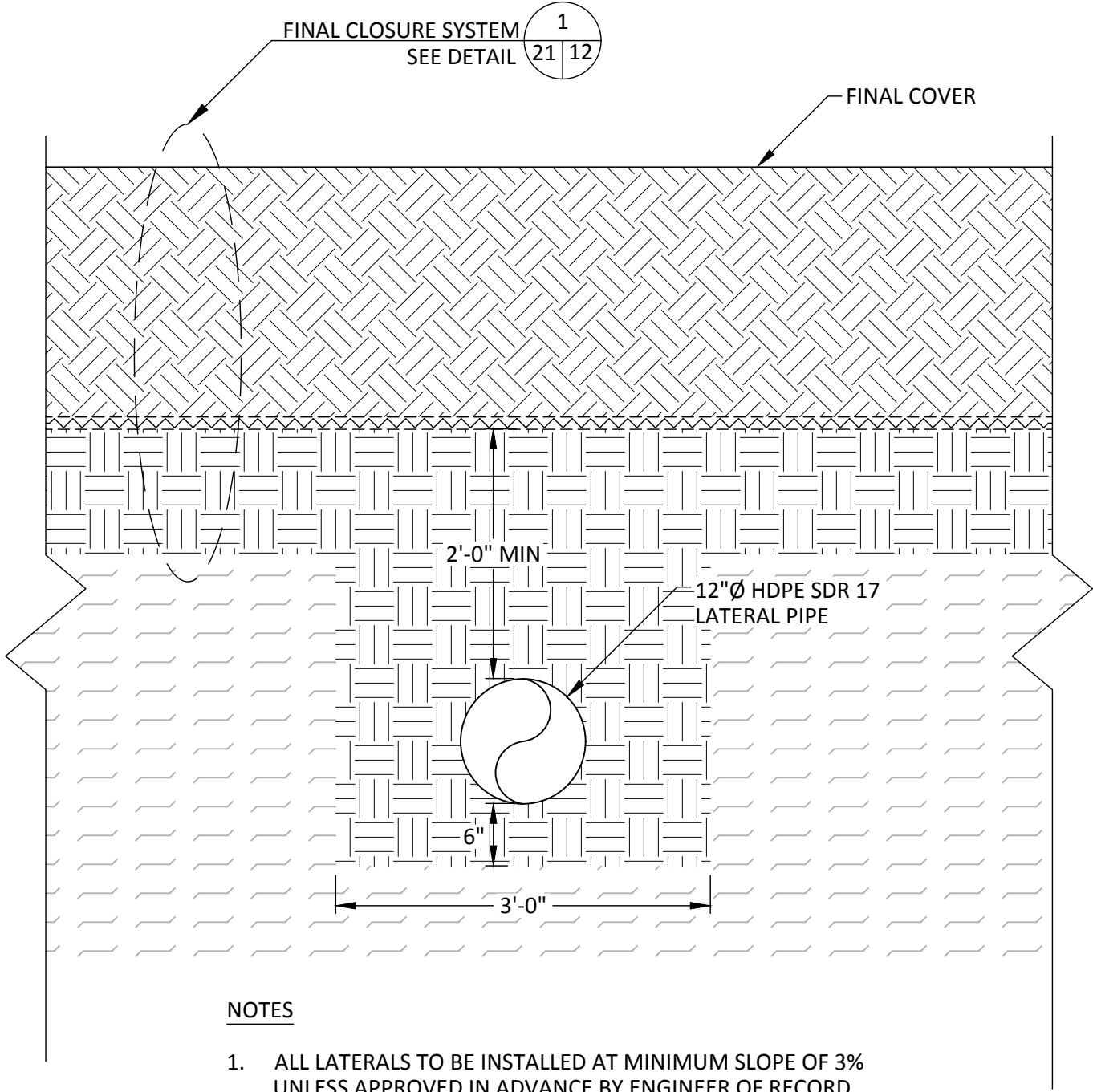
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NOTES

- ALL HEADERS TO BE INSTALLED AT MINIMUM SLOPE OF 5% UNLESS APPROVED IN ADVANCE BY ENGINEER OF RECORD.
- 2" PIPES TO BE INSTALLED ON UPHILL SIDE OF 12" PIPE.

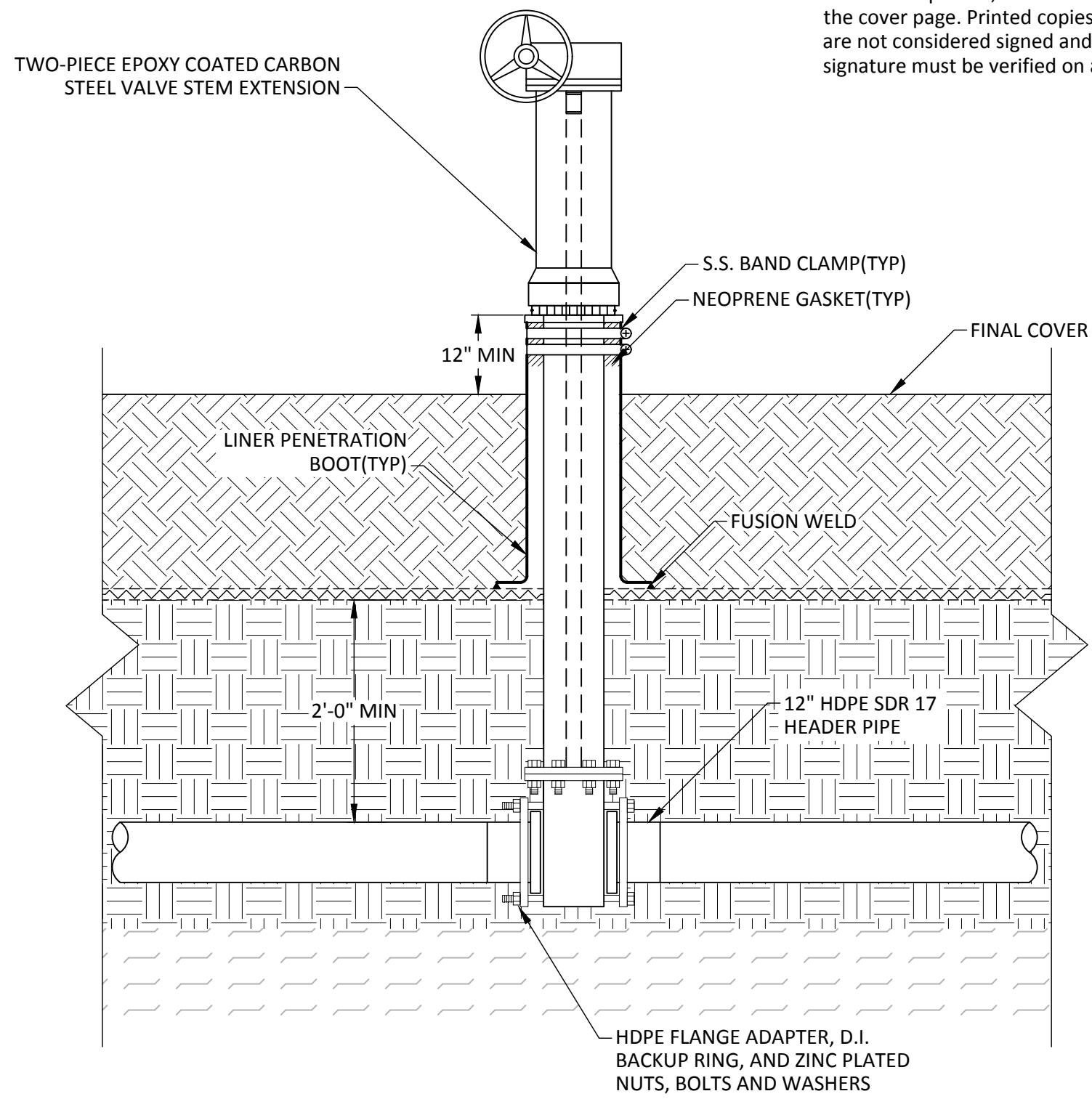
HEADER PIPE TRENCH DETAIL 1
NOT TO SCALE



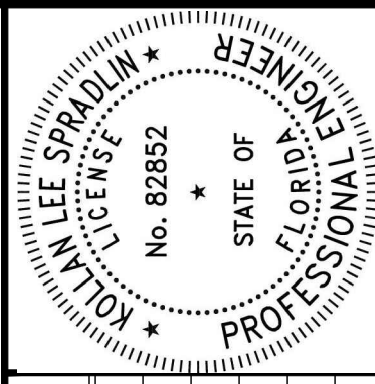
NOTES

- ALL LATERALS TO BE INSTALLED AT MINIMUM SLOPE OF 3% UNLESS APPROVED IN ADVANCE BY ENGINEER OF RECORD.

LATERAL PIPE TRENCH DETAIL 2
NOT TO SCALE



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CHK. BY	DESCRIPTION	DATE	REV

SHEET TITLE	PROJECT TITLE
DETAILS-12	PHASE I-VI CLOSURE DESIGN

CLIENT
HILLSBOROUGH COUNTY SOLID WASTE DEPARTMENT TAMPA, FL 33619

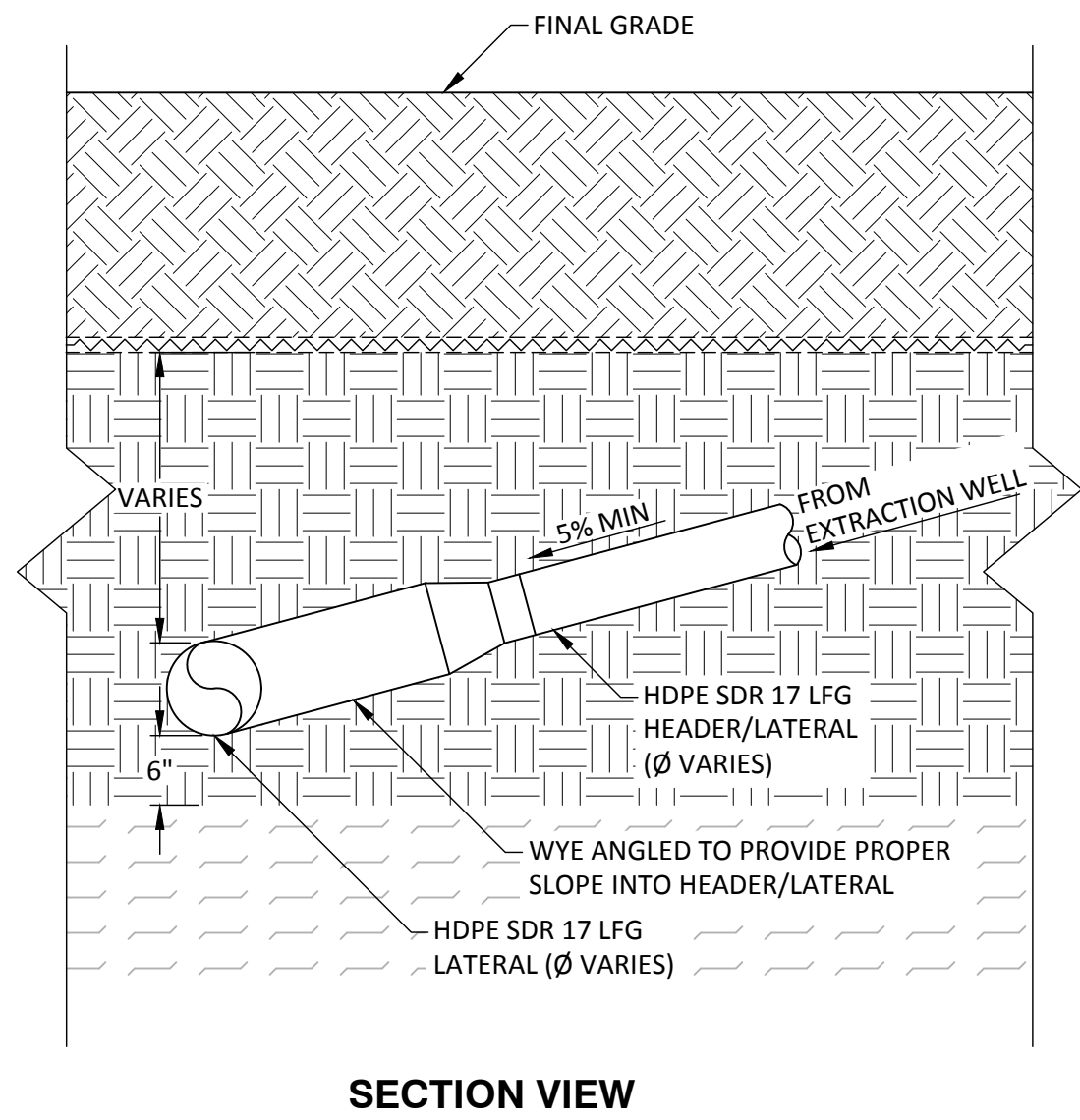
SCS ENGINEERS	OWN. BY	CHK. BY	APP. BY	DATE
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA FIRM REGISTRATION RY-4892	OWN. BY: KLS	CHK. BY: SRF	APP. BY: RBC	DATE: FEBRUARY 2022

CADD FILE:
LFG-DETAILS

DATE:
FEBRUARY 2022

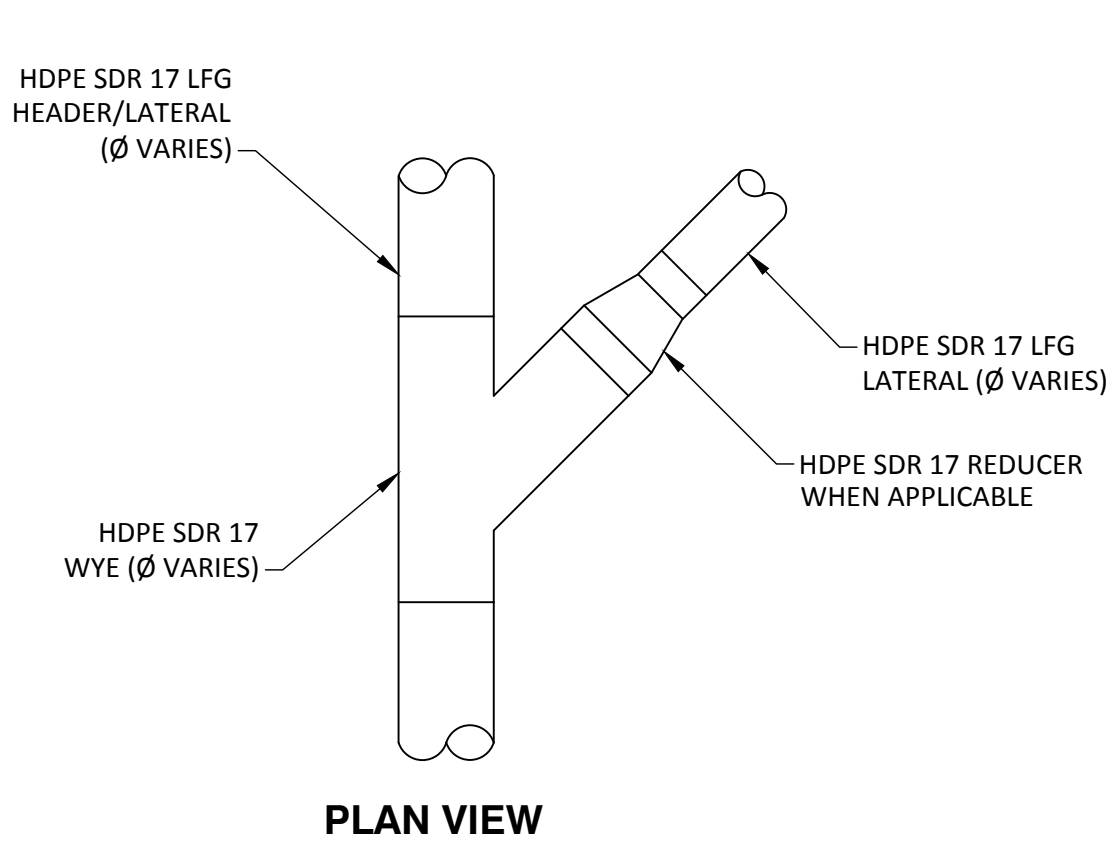
DRAWING NO.
21

SHEET
21 of 22

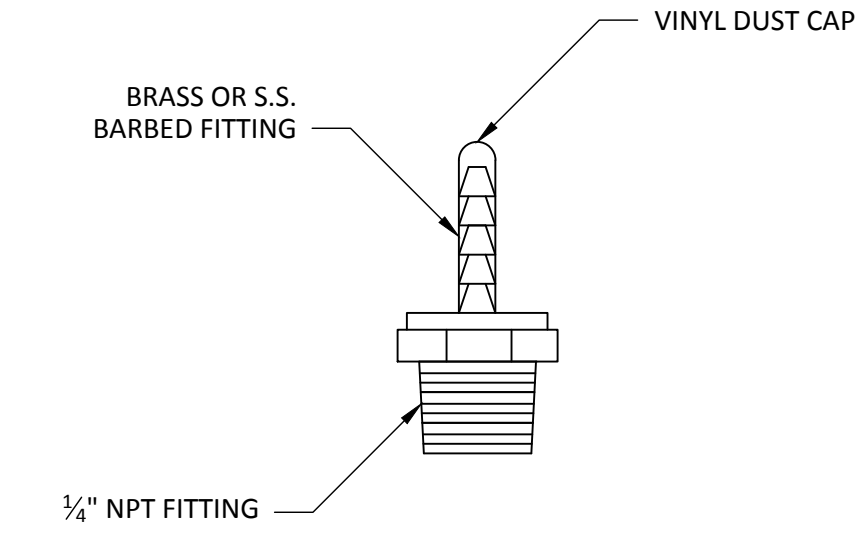


SECTION VIEW

LATERAL CONNECTION DETAIL 4
NOT TO SCALE



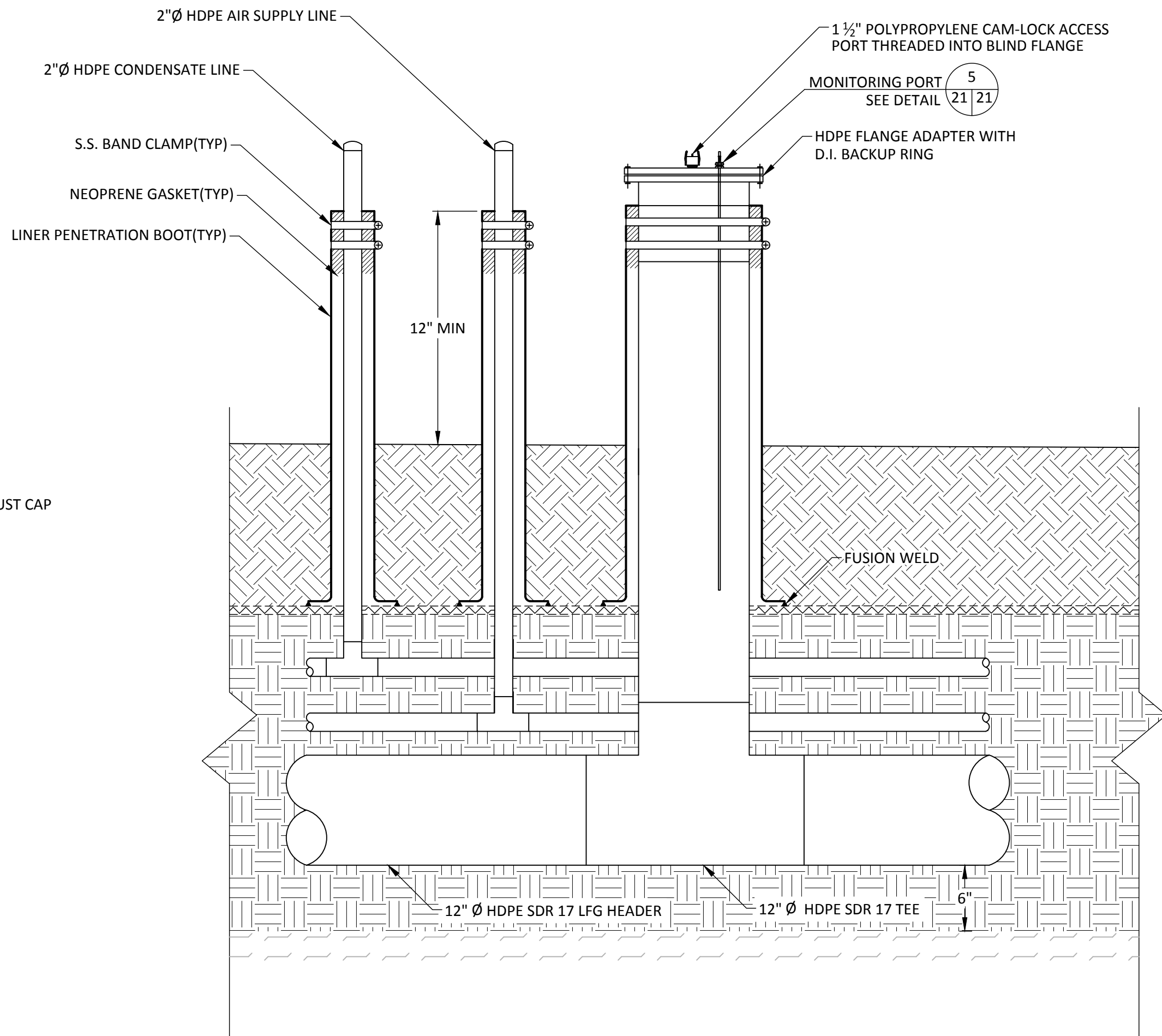
PLAN VIEW



NOTES

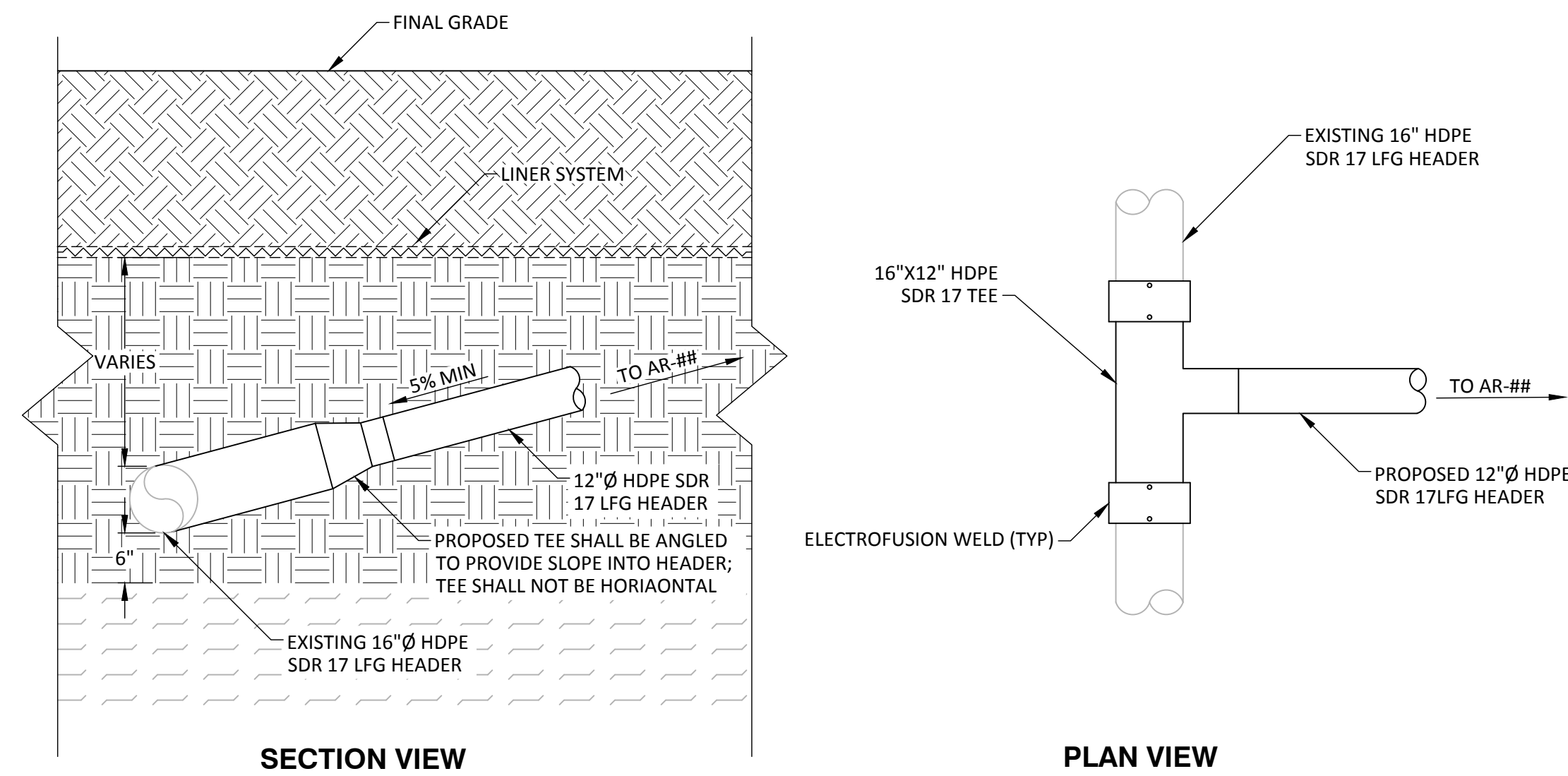
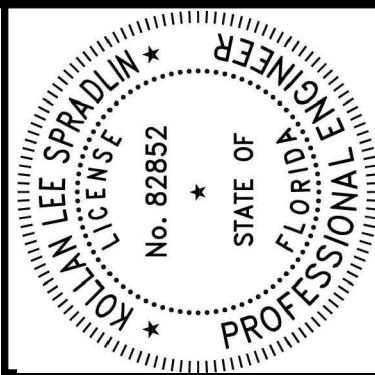
- FITTING TO BE TAPPED INTO ALL WELLHEADS

MONITORING PORT DETAIL 5
NOT TO SCALE

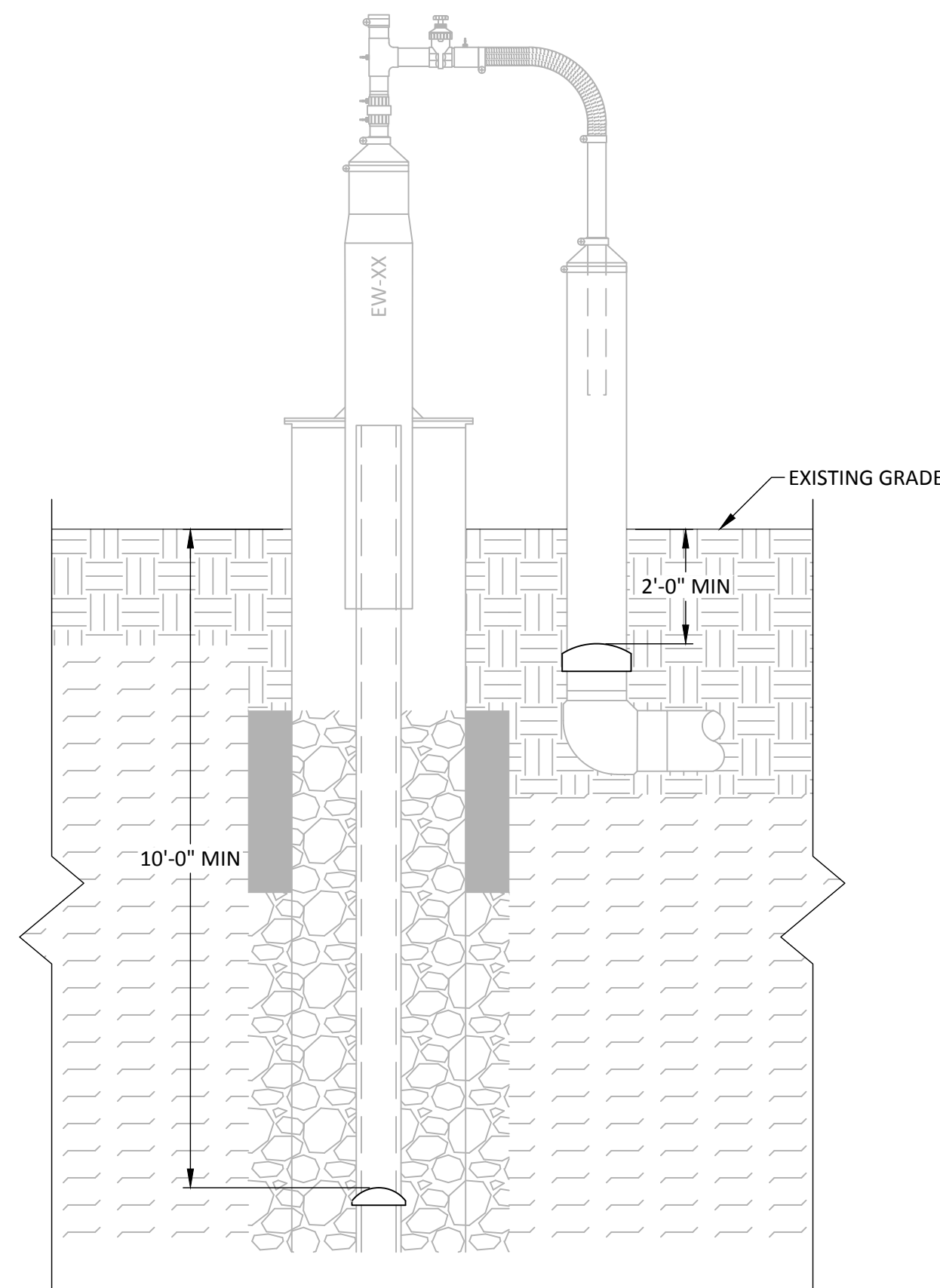


HEADER ACCESS RISER AND BLIND FLANGE DETAIL 6
NOT TO SCALE

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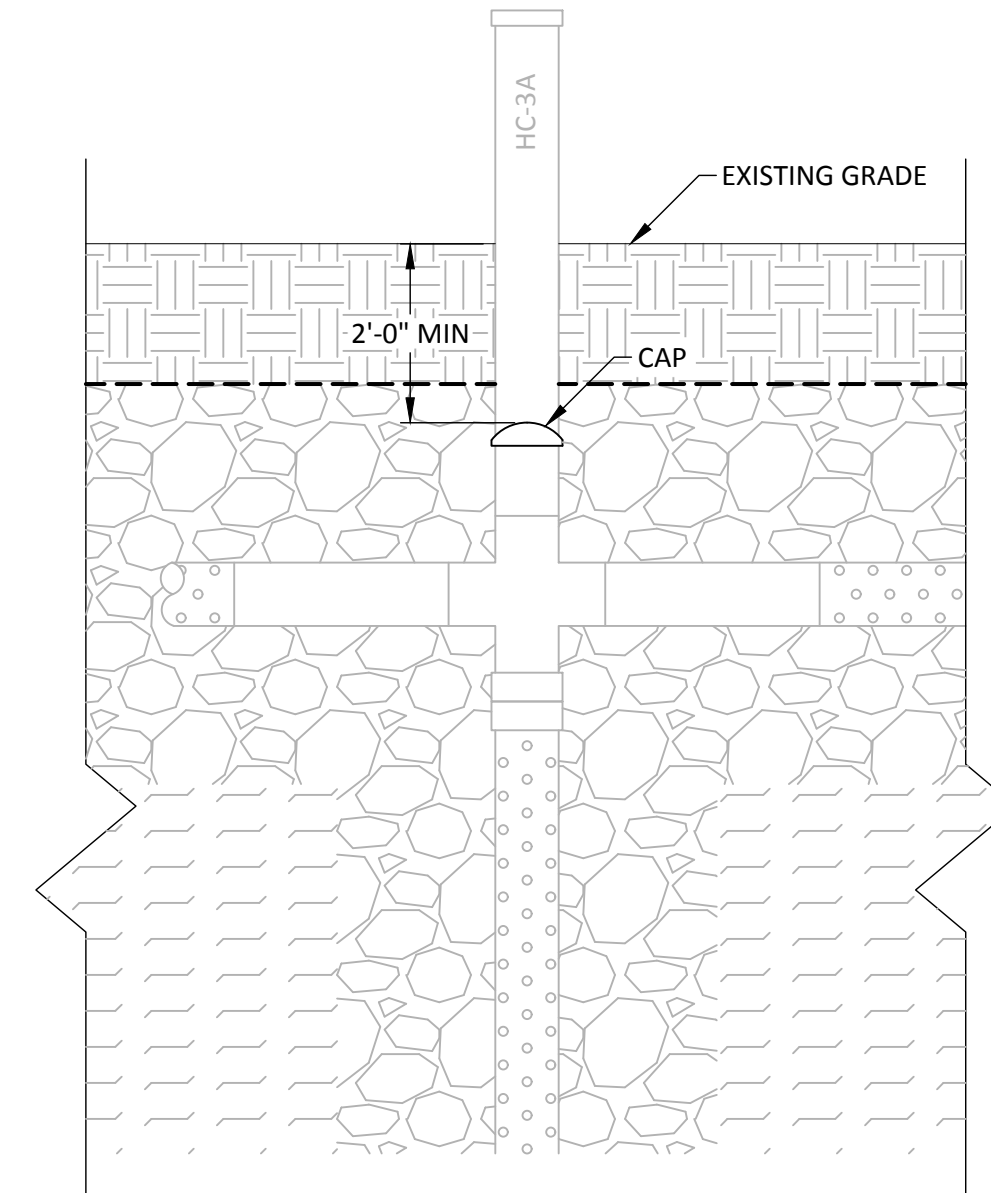


TIE-IN TO EXISTING HEADER DETAIL 1
22



- NOTES**
1. CONTRACTOR TO REMOVE 24"x20" HDPE SDR 17 CAISSON.
 2. CONTRACTOR TO ABANDON PVC WELL A MINIMUM OF 10' BELOW EXISTING GRADE
 3. ALL ABOVE GRADE PIPING SHALL BE REMOVED AND REMAINING BELOW GRADE PIPE SHALL BE CAPPED.
 4. CAPS FOR PVC CASINGS SHALL BE GLUED. CAPS FOR HDPE CASINGS SHALL BE FUSED.

CAISSON WELL ABANDONMENT DETAIL 3
 NOT TO SCALE 08 | 22



- ### NOTES
1. ALL ABOVE GRADE PIPING SHALL BE REMOVED AND REMAINING BELOW GRADE PIPE SHALL BE CAPPED. EXCAVATION SHALL BE BACKFILLED WITH CLEAN SOIL.
 2. CAPS FOR PVC CASINGS SHALL BE GLUED AND SCREWED IN PLACE.
 3. CAPS FOR HDPE CASINGS SHALL BE FUSED.

HORIZONTAL COLLECTOR VERTICAL ABANDONMENT DETAIL

[illegible]

SHEET TITLE	DETAILS-13
PROJECT TITLE	PHASE I-VI CLOSURE DESIGN

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3992 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA FIRM REGISTRATION RY-4892

PROJECT NO.	DOWN BAY	ALD	Q/A REVIEW BY
09215600.13			

DRAWING NO.	CHK. BY	APP. BY	KLS

**HILLSBOROUGH COUNTY
SOLID WASTE DEPARTMENT
TAMPA, FL 33619**

CLIENT

CADD FILE:
LFG-DETAILS

DATE:
FEBRUARY 2022

DRAWING NO.
22

SHEET 22 **of** 22