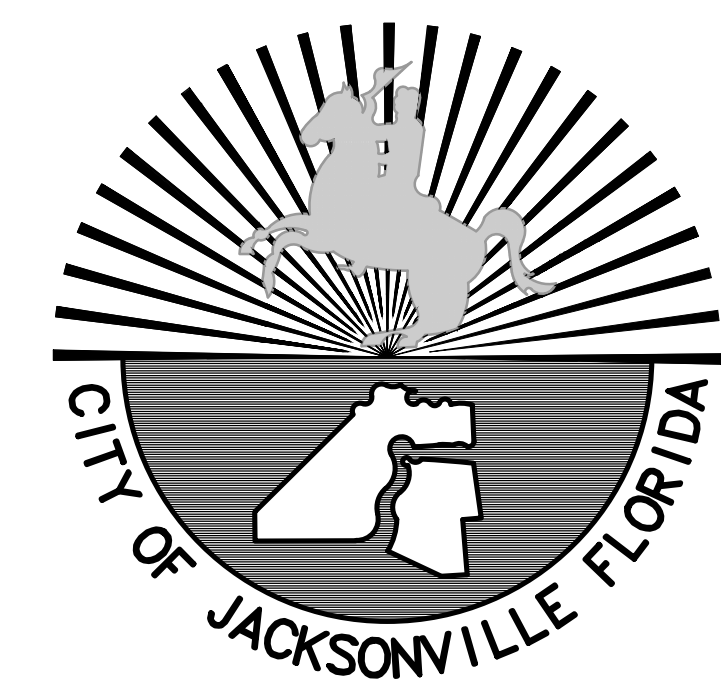


CITY OF JACKSONVILLE, FLORIDA TRAIL RIDGE LANDFILL CONSTRUCTION PHASES 6-14 CLASS I CELL EXPANSION



SOURCE: GOOGLE EARTH, 2013

VICINITY MAP



NOTE:
THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION.
THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

PREPARED BY

**CDM
Smith**

8381 Dix Ellis Trail, Suite 400
Jacksonville, FL 32256
Tel: (904) 731-7109

CITY CONTRACT NO. 6354-13

PROJECT No. 9012-80695

MAYOR

ALVIN BROWN

DIRECTOR OF PUBLIC WORKS

JIM ROBINSON, P.E.

FEBRUARY 2014

PREPARED FOR

**SOLID WASTE DIVISION
1031 SUPERIOR STREET
JACKSONVILLE, FL 32254**

GENERAL NOTES

- ALL ELEVATIONS ARE REFERRED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929.
- LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING HIS WORK.
- CONTRACTOR SHALL VERIFY ALL UTILITIES AND NOTIFY THE AFFECTED UTILITIES 72 HOURS PRIOR TO DIGGING IN ANY PORTION OF THE SITE.
- THE CONTRACTOR SHALL REPLACE ANY MONUMENTS, FENCES, ETC. WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION. COST TO BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION SHALL BE ALLOWED.
- TOPOGRAPHIC SURVEY WAS PERFORMED BY:
ROBERT M. ANGUS ASSOCIATES
14775 OLD ST AUGUSTINE ROAD
JACKSONVILLE, FLA. 32258
904-642-8550
- THE CONTRACTOR SHALL CONTACT THE ENGINEER'S OFFICE IMMEDIATELY UPON FINDING ANY CONFLICTS DURING CONSTRUCTION ON ANY IMPROVEMENTS SHOWN ON THE DRAWINGS.
- EROSION CONTROL AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO BEGINNING ANY DEMOLITION OR CONSTRUCTION. THEY SHALL BE INSTALLED TO THE LIMITS SHOWN IN THE DRAWING, AS REQUIRED IN THE SPECIFICATIONS AND IN ACCORDANCE WITH ALL REGULATORY AGENCY REQUIREMENTS (SEE EROSION CONTROL NOTES).
- EXISTING DRAINAGE STRUCTURES WITHIN CONSTRUCTION LIMITS SHALL BE PRESERVED UNLESS OTHERWISE NOTED.
- ALL HORIZONTAL CONTROL REFERS TO NORTHING AND EASTING UNLESS OTHERWISE NOTED ON PLANS.
- NORTHINGS AND EASTINGS SHOWN ON PLANS ARE FROM CENTERLINE TO CENTERLINE OF STRUCTURE.
- EXISTING UTILITIES AND FACILITIES SHOWN ON THE DRAWINGS WERE LOCATED FROM THE UTILITY OWNER'S RECORDS OF UNDERGROUND FACILITIES. GUARANTEE IS NOT MADE THAT ALL EXISTING FACILITIES ARE SHOWN NOR THAT THOSE FACILITIES SHOWN ARE ENTIRELY ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION WITH EXISTING UTILITIES.
- THE CONTRACTOR SHALL, BY REPAIR OR REPLACEMENT, RETURN TO EQUAL OR BETTER CONDITION ALL PAVEMENT, SIDEWALK, LAWNS, UTILITIES AND OTHER ITEMS DAMAGED BY THIS CONSTRUCTION ACTIVITY.
- DURING CONSTRUCTION OF THE PROPOSED IMPROVEMENTS, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL, PROTECTION, AND REPLACEMENT OF ITEMS ON PRIVATE PROPERTY AND PUBLIC RIGHTS OF WAY SUCH AS SPRINKLERS, FENCES, SOD, SHRUBS, TREES, SURVEYING MARKERS, ETC.
- PRIOR TO EXCAVATING IN THE VICINITY OF A GAS LINE, THE CONTRACTOR SHALL NOTIFY THE GAS UTILITY OWNER IN ACCORDANCE WITH THE REQUIREMENTS OF FLORIDA STATUTES, PROTECTION OF UNDERGROUND PIPELINES F.S. 553.851, CH 17-143.
- ALL CONSTRUCTION SHALL CONFORM TO CITY OF JACKSONVILLE STANDARDS AND SPECIFICATIONS AND TO THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, MOST RECENT EDITIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITIES THAT MAY EXIST, ABOVE OR BELOW GROUND.
- ALL BRUSH, STRIPPINGS OR UNSUITABLE MATERIAL SHALL BE PROPERLY AND LEGALLY DISPOSED OF OFF-SITE AT THE CONTRACTOR'S EXPENSE.
- A DEWATERING PERMIT MAY BE REQUIRED BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT PRIOR TO ANY PUMPING, ETC. AND SHALL BE OBTAINED BY THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, PERMIT AND OPERATION OF AN ADEQUATE DEWATERING SYSTEM TO DEWATER EXCAVATIONS FOR CONSTRUCTION. DEWATERING PLAN TO BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO ANY DEWATERING OR SUBMITTING APPLICATION FOR CONSUMPTIVE USE PERMIT.
- MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO ENSURE THAT ADEQUATE EROSION AND SEDIMENT CONTROL ARE MAINTAINED AT ALL TIMES DURING THE PROJECT (FOR EROSION CONTROL NOTES SEE SHEET G-2)
- ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE CONDITION EXISTING PRIOR TO COMMENCING CONSTRUCTION UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. COSTS TO BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION TO BE ALLOWED.
- INSTALLATION OF ALL STORM SEWERS, INLETS, MANHOLES, AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE SECTIONS OF THE CITY OF JACKSONVILLE STANDARD SPECIFICATIONS, OR AS INDICATED ON THE DRAWINGS.
- THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS SHALL BE STRICTLY OBSERVED BY THE CONTRACTOR. ALL INGRESS, EGRESS AND TRAFFIC PATTERNS ON THE SITE SHALL BE WITHIN THE LIMITS OF CONSTRUCTION OR ON HAUL ROADS SHOWN ON THE DRAWINGS.
- ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III OR STRONGER.
- WATER AND SEWER CROSSING(S):
A. WHERE WATER MAINS MUST PASS OVER STORM, SANITARY AND/OR EFFLUENT REUSE LINES AND A MINIMUM CLEARANCE OF 18" CANNOT BE MAINTAINED, THE WATER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT DUCTILE IRON PIPE 10' EQUIDISTANT EACH SIDE OF THE CROSSING AND PROVIDE A 6" MINIMUM CLEARANCE BETWEEN THE WATER MAIN AND THE OTHER UTILITY.
B. A HORIZONTAL SEPARATION OF 10' MUST BE MAINTAINED BETWEEN POTABLE WATER LINES AND NON-POTABLE LINES. WHEN THIS IS NOT POSSIBLE, REPLACE PVC WITH MECHANICAL JOINT DUCTILE IRON PIPE AND LAY IN SEPARATE TRENCH. IN CASE OF RESTRICTED ACCESS REUSE WATER, A 5' MINIMUM HORIZONTAL SEPARATION IS ACCEPTABLE.
- NO REPRESENTATION IS MADE REGARDING BALANCED EARTHWORK, ANY EXCESS MATERIAL, OR MATERIAL NOT SUITABLE FOR USE AS BACKFILL, OR AS INDICATED ON THE DRAWINGS SHALL BE MOVED TO THE DESIGNATED STOCKPILE AREA TO A SEPARATE STOCKPILE.

- IN AREAS REQUIRING FILL MATERIAL, THE CONTRACTOR WILL STRIP OR OTHERWISE REMOVE ALL VEGETATION SUCH AS BRUSH, HEAVY SODS, HEAVY GROWTH OF GRASS, DECAYED VEGETABLE MATTER, RUBBISH AND ANY OTHER DELETERIOUS MATERIAL BEFORE EMBANKMENT IS STARTED. IMMEDIATELY PRIOR TO THE PLACING OF FILL MATERIALS, THE ENTIRE AREA UPON WHICH FILL IS TO BE PLACED, SHALL BE SCARIFIED.
- ABSOLUTELY NO WORK WILL BE ALLOWED WITHIN ANY CONSERVATION AREA, BUFFER AREA, MITIGATION AREA, OR DESIGNATED WETLAND AREA UNLESS SO SPECIFICALLY DESCRIBED BY THE PLANS AND GRANTED BY REASON OF PERMIT FROM THE GOVERNMENTAL ENTITY HAVING JURISDICTION OVER SAID AREA.

GEOTECHNICAL RECOMMENDATIONS

- OVER-EXCAVATION SHALL BE PERFORMED AS NECESSARY TO REMOVE ANY A-8 (AASHTO M-145) MUCK, PLASTIC MATERIALS, AND OTHER UNSUITABLE MATERIALS AS DIRECTED BY THE ENGINEER. BACKFILL WITH A-3 (AASHTO M-145) SAND. THE SOIL BELOW DRAINAGE STRUCTURES FOUNDATIONS SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 455-31. TO ACHIEVE THE COMPACTION REQUIREMENTS; EXISTING SOILS NOT ALREADY OVER-EXCAVATED AND NOT MEETING COMPACTION REQUIREMENTS SHALL BE EXCAVATED 12 INCHES BELOW FOUNDATIONS AND BACKFILLED WITH A-3 SAND WHICH HAS A MOISTURE CONTENT AT OR BELOW OPTIMUM.
- THE CONTRACTOR SHALL ANTICIPATE THAT DEWATERING WILL BE REQUIRED TO FACILITATE CONSTRUCTION. DEWATERING BY NORMAL PUMPING METHODS IS NOT ANTICIPATED TO BE ADEQUATE FOR PROPER PREPARATION/ COMPACTION OF THE FOUNDATION CONSTRUCTION SOILS EXCAVATION OF STORMWATER PONDS SMF-A AND SMF-B SHALL BE CONDUCTED IN THE WET. ALL FOUNDATIONS SHALL BE CONSTRUCTED IN THE DRY. THE CONTRACTOR SHALL USE EXTENSIVE WELL POINTS, SUMPS, HORIZONTAL WELLS AND/OR OTHER NECESSARY DEWATERING METHODS AS REQUIRED TO DEWATER FOUNDATION AND EXCAVATIONS IN ACCORDANCE WITH SECTION 455-28 AND 455-29.
- CONTRACTOR SHALL REFER TO AND FOLLOW SITE GEOTECHNICAL EXPLORATION REPORT.

UTILITY OWNERS & CONTACTS

- THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANY FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING ITS UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT. THE LOCATION OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION.

UTILITY OWNERS:

JACKSONVILLE ELECTRIC AUTHORITY (JEA)
WILLIAM (BILLY) STEWARD
21 WEST CHURCH STREET T-4
JACKSONVILLE, FL 32202-3139
904-665-4712
MOBILE 904-705-3162

CITY OF JACKSONVILLE DEPT. OF PUBLIC WORKS
DAVID D. HAHN, P.E.
ED BALL BUILDING
HOGAN STREET, 10TH FLOOR
JACKSONVILLE, FL 32202
904-630-4733

BELL SOUTH
JAMES NEAL
301 WEST BAY ST. ROOM 11AA1
JACKSONVILLE, FLORIDA 32202
904-350-2255

MEDIA ONE CABLE
PAUL LARRABE
904-448-3725

TECO PEOPLE'S GAS
JOHN R. CUNNINGHAM
4040 PHILLIPS HIGHWAY
JACKSONVILLE, FL. 32207
904-739-1211

- THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF OTHER UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE OTHER UTILITIES, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND UTILITY ADJUSTMENTS, AS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.

- UTILITIES ARE TO BE ADJUSTED OR RELOCATED BY THE UTILITY COMPANIES UNLESS OTHERWISE NOTED.

CONSTRUCTION NOTES

- CONTRACTOR SHALL SUBMIT A DETAILED WORK PLAN WITHIN 15 DAYS OF NOTICE TO PROCEED WHICH WILL INCLUDE THE DETAILS OF MEANS AND METHODS AND CONSTRUCTION SEQUENCE.
- DUST CONTROL SHALL BE PROVIDED AT ALL TIMES AS NECESSARY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING DEWATERING PERMIT. DEWATERING PLAN TO BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO ANY DEWATERING OR SUBMITTING APPLICATION FOR CONSUMPTIVE USE PERMIT.

SEQUENCE OF CONSTRUCTION

- EROSION CONTROL
- CLEARING AND GRUBBING
- INTERCEPTOR AND PERIMETER DITCHES
- POND & ACCESS ROAD
- PHASE 6

NOTE: THIS SEQUENCE OF CONSTRUCTION IS NOT INTENDED TO SHOW ALL REQUIRED CONSTRUCTION. MANY ACTIVITIES MAY STILL BE REQUIRED THAT ARE NOT SPECIFICALLY IDENTIFIED. SEE SPECIFICATION 01014 IN DIVISION 5 FOR THE DETAILED SEQUENCE OF CONSTRUCTION.

CONTRACTOR MUST AT ALL TIMES MEET THE REQUIREMENTS SET FORTH IN THE FDPER PERMIT AS WELL AS ANY OTHER APPLICABLE LOCAL, STATE, OR FEDERAL REGULATORY REQUIREMENTS.

INDEX OF SHEETS

SHEET NO.	TITLE
GENERAL	
	COVER
G-1	GENERAL NOTES AND INDEX OF SHEETS
G-2	SYMBOLS AND ABBREVIATIONS
CIVIL	
C-1	EXISTING SITE SURVEY KEY MAP
C-1A	EXISTING SITE SURVEY
C-1B	EXISTING SITE SURVEY
C-1C	EXISTING SITE SURVEY
C-1D	EXISTING SITE SURVEY
C-2	HORIZONTAL CONTROL BUILDOUT LANDFILL PHASING PLAN
C-3	BUILDOUT TOP OF SUBGRADE GRADING PLAN
C-4	BUILDOUT TOP OF FINISH GRADING PLAN
C-5	BUILDOUT LEACHATE COLLECTION AND UTILITY PLAN
C-6	REMOVAL AND ABANDONMENT PLAN FOR PERMIT
C-6A	(NOT USED)
C-7	HORIZONTAL CONTROL PLAN PHASE 6
C-8	PHASE 6 TOP OF SUBGRADE GRADING PLAN
C-9	PHASE 6 TOP OF FINISH GRADING PLAN
C-10	PHASE 6 LEACHATE COLLECTION PLAN
C-11	SECTIONS-PHASES 6 & 7
C-12	SECTIONS-PHASES 6 & 7
C-13	SECTIONS-PHASES 6 & 7
C-14	SECTIONS-PHASES 6 & 7
C-15	SECTIONS-PHASES 7 & 8
C-16	SECTIONS-PHASE 8
C-17	SECTIONS-PHASE 9
C-18	SECTIONS-PHASES 9 & 10
C-19	SECTIONS-PHASES 10 & 11
C-20	SECTIONS-PHASE 11
C-21	SECTIONS-PHASE 12
C-22	SECTIONS-PHASES 12 & 13
C-23	SECTIONS-PHASES 13 & 14
C-24	SECTIONS-PHASE 14
C-25	SECTIONS-PHASE 14
C-26	(NOT USED)
C-27	(NOT USED)
C-28	POST SETTLEMENT GRADES - SECTION 4
C-29	BUILDOUT NORTH/SOUTH SECTIONS
C-30	BUILDOUT NORTH/SOUTH SECTIONS
C-31	SITE GRADING BUILDOUT CLOSURE PLAN
C-32	BUILDOUT CLOSURE SECTIONS
C-33	(NOT USED)
C-34	OVERALL GAS MANAGEMENT PLAN
C-35	PROPOSED OPERATIONS ACCESS ROAD PHASE 6
C-36	PROPOSED WASTE FILL SEQUENCE PHASE 6
C-37	PROPOSED WASTE FILL SEQUENCE PHASE 6
C-38	PROPOSED WASTE FILL SEQUENCE PHASE 6
C-39	SEQUENCES
C-40	PROPOSED WASTE FILL SEQUENCE PHASES 1-6
C-41	PROPOSED WASTE FILL SEQUENCE PHASES 7
C-42	PROPOSED WASTE FILL SEQUENCE PHASES 8
C-43	HORIZONTAL CONTROL PLAN PHASE 6 LOOP ROAD
C-44	GRADING PLAN PHASE 6 LOOP ROAD
C-45	LOOP ROAD PROFILE PHASE 6 LOOP ROAD
C-46	LOOP ROAD AUX. PROFILE PHASE 6 LOOP ROAD
C-47	SECTIONS PHASE 6 LOOP ROAD
C-48	SECTIONS PHASE 6 LOOP ROAD
C-49	SECTIONS PHASE 6 LOOP ROAD
C-50	SECTIONS PHASE 6 LOOP ROAD
C-51	SIGNING PLAN PHASE 6 LOOP ROAD
C-52	TYPICAL SECTIONS PHASE 6 LOOP ROAD

INDEX OF SHEETS

SHEET NO.	TITLE
CIVIL DETAILS	
CD-1	CIVIL DETAILS
CD-2	CIVIL DETAILS II
CD-3	CIVIL DETAILS III
CD-4	CIVIL DETAILS-LEACHATE COLLECTION
CD-4A	CIVIL DETAILS-LEACHATE COLLECTION
CD-5	CIVIL DETAILS-LEACHATE COLLECTION
CD-6	CIVIL DETAILS-LEACHATE COLLECTION
CD-7	CIVIL DETAILS-CLOSURE
CD-8	CIVIL DETAILS-CLOSURE
CD-9	CIVIL DETAILS-LEACHATE SYSTEM
CD-10	CIVIL DETAILS
CD-11	CIVIL DETAILS-LEACHATE STORAGE
CD-12	CIVIL DETAILS-GAS MANAGEMENT SYSTEM
CD-13	CIVIL DETAILS-WELLS
CD-14	CIVIL DETAILS-UNDERDRAIN FOR PHASE 6/7
ELECTRICAL	
E-1	ELECTRICAL LEGEND
E-2	ELECTRICAL LEGEND II
E-3	ELECTRICAL SITE PLAN
E-4	ELECTRICAL ONE LINE DIAGRAMS AND TYPICAL RISER DIAGRAMS
E-5	LEACHATE PUMP STATION ELECTRICAL PLAN
ED-1	ELECTRICAL DETAILS I
ED-2	ELECTRICAL DETAILS II
STRUCTURAL	
S-1	STRUCTURAL NOTES AND DETAILS
S-2	VAULT BOX PLAN AND SECTIONS
SD-1	STRUCTURAL STANDARD DETAILS

Xref: [CDM_2436] Images: []
 Last saved by: CHAPMANB Time: 3/19/2012 9:59:21 AM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, BRESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

GENERAL NOTES AND INDEX OF SHEETS

JOHN G. LADNER
P.E. NO. 037969

PROJECT NO. 9012-80695
FILE NAME: G001NOTE

SHEET NO.

G-1

EROSION CONTROL

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTORS 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 SITE BY THE REGULATORY AGENCIES.

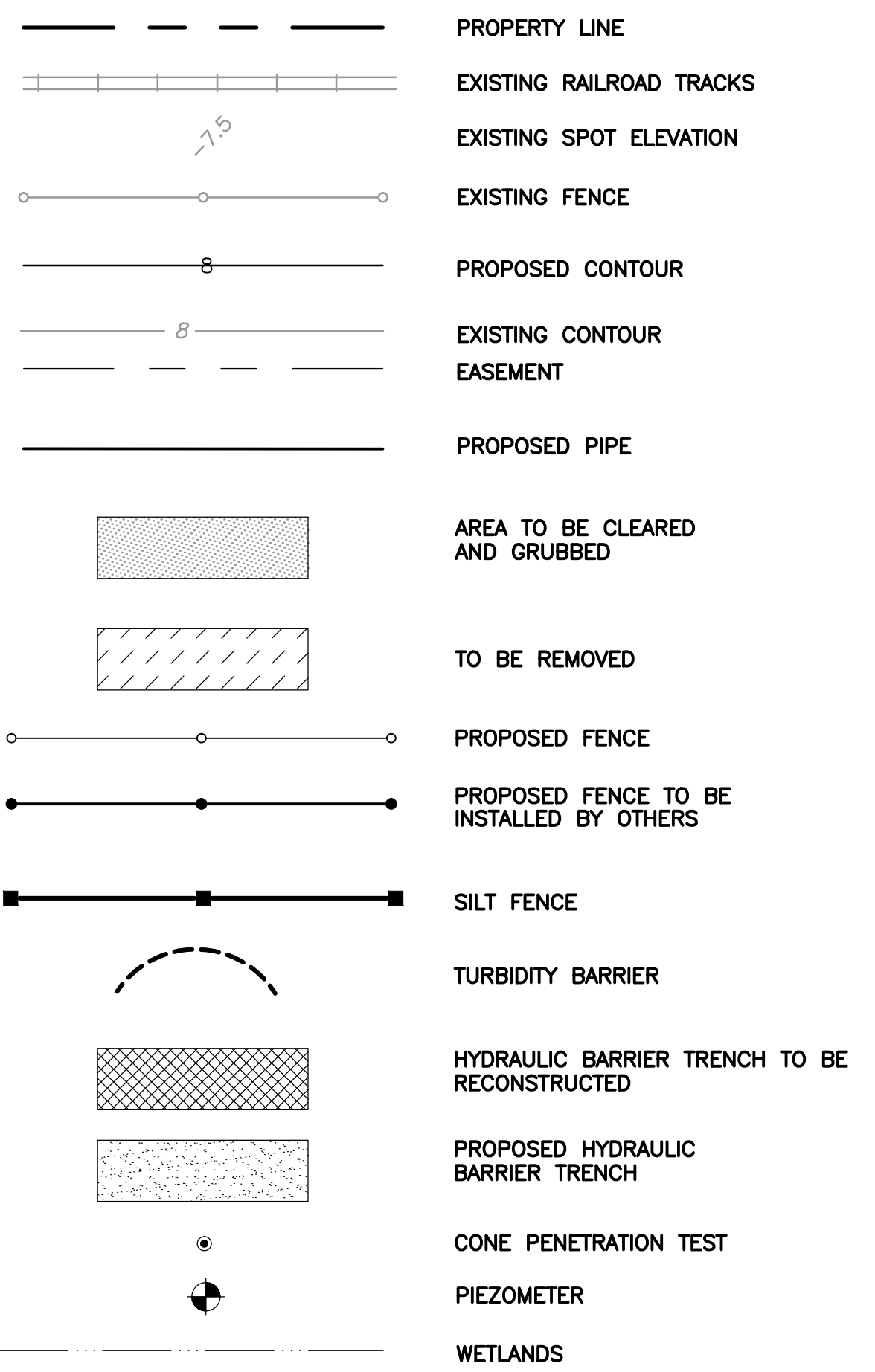
- SEDIMENT BASINS AND TRAPS, PERIMETER DITCHES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP BEFORE ANY LAND-DISTURBING TAKES PLACE TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT.
- ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
- DURING CONSTRUCTION OF THE PROJECT SOIL STOCK PILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTIONS AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- AFTER ANY RAINFALL EVENT ≥ 0.5 INCHES SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE REPAIRED IMMEDIATELY.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- WHENEVER WATER SEEPS FROM A SLOPE FACE ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAIN SYSTEM, DITCH, OR CHANNEL. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT. GRATE INLETS AND CURB INLETS SHALL BE PROTECTED WITH GRATE INLET PROTECTION PCD-1000 AND CURB INLET PROTECTION PRODUCED BY SUNTREE ISLES, INC., OR APPROVED EQUAL.
- BEFORE TEMPORARY OR NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENRICHMENT, CONTROL SEDIMENT TRANSPORT, AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
- STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL 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 NOT EXCEED 1 ACRE. IF THE TOTAL AREA TO BE CLEARED IS EQUAL TO, OR EXCEEDS ONE (1) ACRE, THEN THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARING A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH EPA'S NPDES REGULATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUBMITTING A NOTICE ON INTENT (NOI) TO EPA FORTY-EIGHT (48) HOURS PRIOR TO COMMENCING CONSTRUCTION.
- A NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES APPLIES TO THIS CONTRACT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE NPDES PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING, MONITORING, AND MODIFYING THE NPDES PERMIT AND FOR THE SWPPP FOR CONSTRUCTION ACTIVITIES TO MEET CHANGING PROJECT SITE CONDITIONS. PAYMENT FOR ALL WORK AND MATERIALS NECESSARY FOR PREPARATION, MODIFICATION, SUBMITTAL OF THE NPDES AND/OR SWPPP FOR CONSTRUCTION ACTIVITIES AND FOR IMPLEMENTATION DURING CONSTRUCTION SHALL BE INCLUDED IN THE PERMIT CONFORMANCE AND EROSION CONTROL PAY ITEM (LUMP SUM). NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- WHEN ALL DISTURBED SOILS HAVE BEEN STABILIZED AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED, THIS CONSTITUTES THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITIES. AT THIS TIME THE CONTRACTOR SHALL COMPLETE AND FILE A NOTICE OF TERMINATION (NOT) TO APPROPRIATE PERMITTING AGENCIES.
- TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.
- TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
- TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER AT NO ADDITIONAL COST TO OWNER.
- 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 INSTALLED AND MAINTAINED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.

- PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 3:1 SHALL BE SODDED WITH STAKED SOD.
- THE CONTRACTOR SHALL STAGE THE WORK SUCH THAT THE EXISTING STORMWATER CONVEYANCE IS ALWAYS MAINTAINED AND NO FLOODING IS ALLOWED DURING CONSTRUCTION. DOWATERING, TEMPORARY CHECK DAM, TEMPORARY DRAINAGE STRUCTURES, COFFER DAM, BY-PASS PUMPING AND/OR ANY OTHER MEANS AND METHODS REQUIRED FOR CONSTRUCTION IN THE PROJECT AREA SHALL BE INCLUDED IN THE COST OF PERMIT CONFORMANCE AND EROSION CONTROL - LUMP SUM (LS). NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

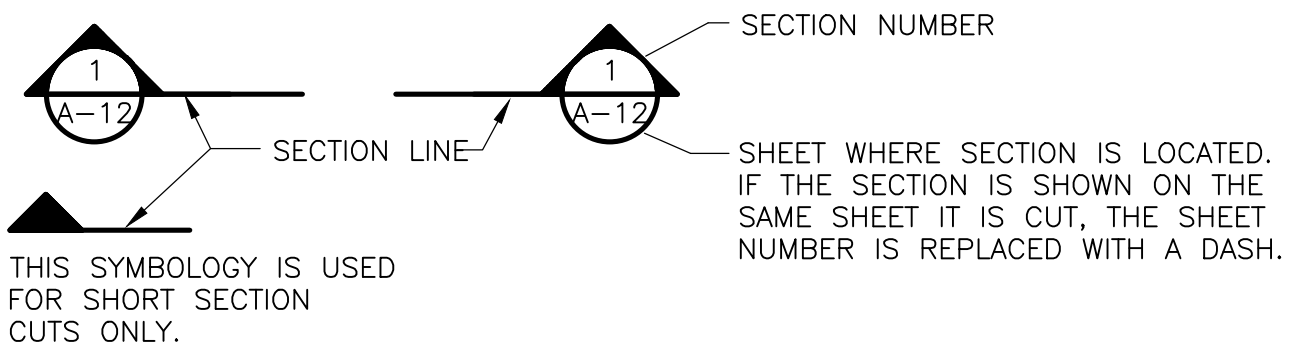
ABBREVIATIONS

ADJUSTABLE	ADJ	NOT TO SCALE	NTS
AHEAD OF STATION	AH	NUMBER	NO
ALUMINUM	AL, ALUM	ON CENTER	OC
ANGLE	<	OPPOSITE	OPP
BACK OF STATION	BK	OPTION	OPT
BALL VALVE	BAV	OPENING	OPNG
BASLINE OF SURVEY	℄	OR EQUAL	O/E
BELOW	BEL	PAVEMENT	PVMT, PAVT
BENCHMARK	BM	PERFORATED	PERF
BETWEEN	BTWN	POINT OF CURVATURE	POC
BITUMINOUS COATED CORRUGATED METAL PIPE	BCCMP	POINT OF TANGENCY	POT
BURIED TELEPHONE	BT	POINT	PT
CENTER LINE OF CONSTRUCTION	℄	POLYETHYLENE PIPE	PP
CENTER TO CENTER	CC	POLYVINYL CHLORIDE	PVC
CONCRETE	CONC	POUND(S)	LB(S)
CONCRETE BOX CULVERT	CBC	PLATE	PL
CONSTRUCT	CONST	PRECAST	PRCST
CORRUGATED METAL PIPE	CMP	PROFILE GRADE LINE	PGL
CENTER (ED)	CTR	PROPOSED DRAINAGE EASEMENT	PDE
CROSS SECTION	X-SEC	RADIUS	RAD, R
DEMOLITION	DEMO	REINFORCED CONCRETE PIPE	RCP
DIAMETER	DIA, DIAM	REQUIRED	REQ'D
DIAGONAL	DIAG	RESTRAINED JOINT	RJ
DIMENSION	DIM	RIGHT	RT, R
DOWNSTREAM	D/S	RIGHT OF WAY	R/W, ROW
DISCHARGE	DISCH	SANITARY SEWER	SAN, S
DITCH BOTTOM INLET	DBI	SECTION	SEC
DRAWING	DWG	SHEET	SH, SHT
DUCTILE IRON PIPE	DIP	SIDEWALK	SDWK, S/W
DUCTILE IRON	DI	SLIP-ON JOINT	SJ
EACH	EA	SQUARE FEET	SQ. FT., SF
ELEVATION	EL, ELEV	STAINLESS STEEL	SS
EDGE OF PAVEMENT	EOP, EP	STANDARD	STD
EXISTING	EXIST	STATION	STA
FIBERGLASS REINFORCED PIPE	FRP	STEEL	STL
FINISH	FIN	STEEL PIPE	SP
FLANGE	FLG	STORM SEWER	SS, STORM
FLARED END SECTION	FES	SYMMETRICAL	SYMM
FLOOR	FL	TANGENT TO CURVE	TC
FURNISHED BY OTHERS	FBO	TEMPORARY CONSTRUCTION EASEMENT	TCE
FEET/FOOT	FT	THICK	THK
GAS MAIN	GM	TIED JOINT	TJ
HEIGHT	HT	TOP OF CURB	TOC
HIGH POINT	HP	TYPICAL	TYP
INSTALL	INST	TEMPORARY	TEMP
LEFT	L, LT	UPSTREAM	U/S
LOW POINT	LP	UTILITY EASEMENT	UE
MATERIAL	MTL	VERIFIED VERTICAL ELEVATION AND HORIZONTAL LOCATION	VVH, VWH
MANHOLE	MH	VERTICAL	VERT
MAXIMUM	MAX	VERTICAL CURVE	VC
MECHANICAL	MECH	WATER	WTR
METAL	MET	WATER LEVEL	WL
MINIMUM	MIN	WATER MAIN	WM
MITERED END SECTION	MES	WEATHERPROOF	WPF
MOUNTED	MTD	WEST	W
NOMINAL	NOM	WITH	W/
NOT IN CONTRACT	NIC		

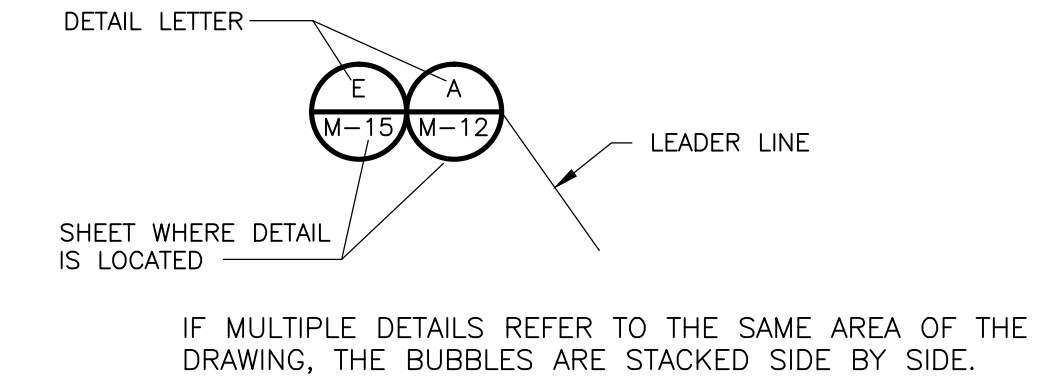
LEGEND:



SECTION CUT SYMBOLS

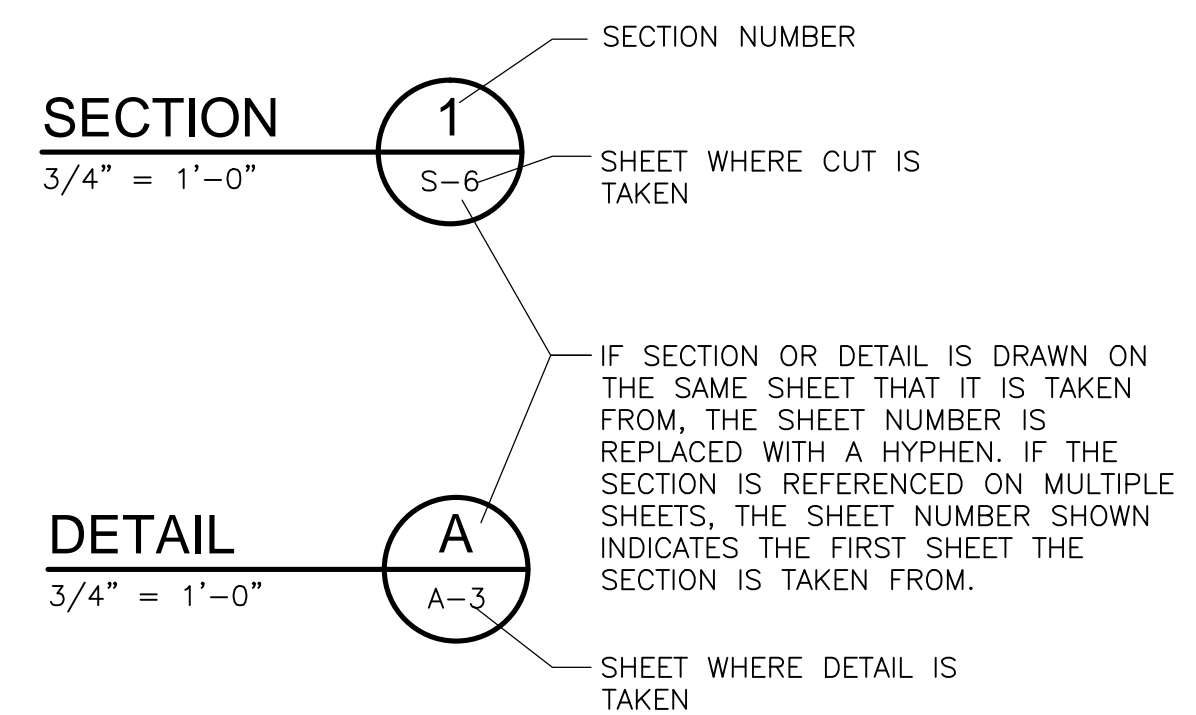


DETAIL CALL OUT SYMBOLS



DRAWING, SECTION AND DETAIL TITLES

SUBTITLE OR DESCRIPTION
PLAN
1/4" = 1'-0"



Xref's: [CDM_2436] Images: []
 Last saved by: CHAPMANBS Time: 1/3/2012 11:15:01 AM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

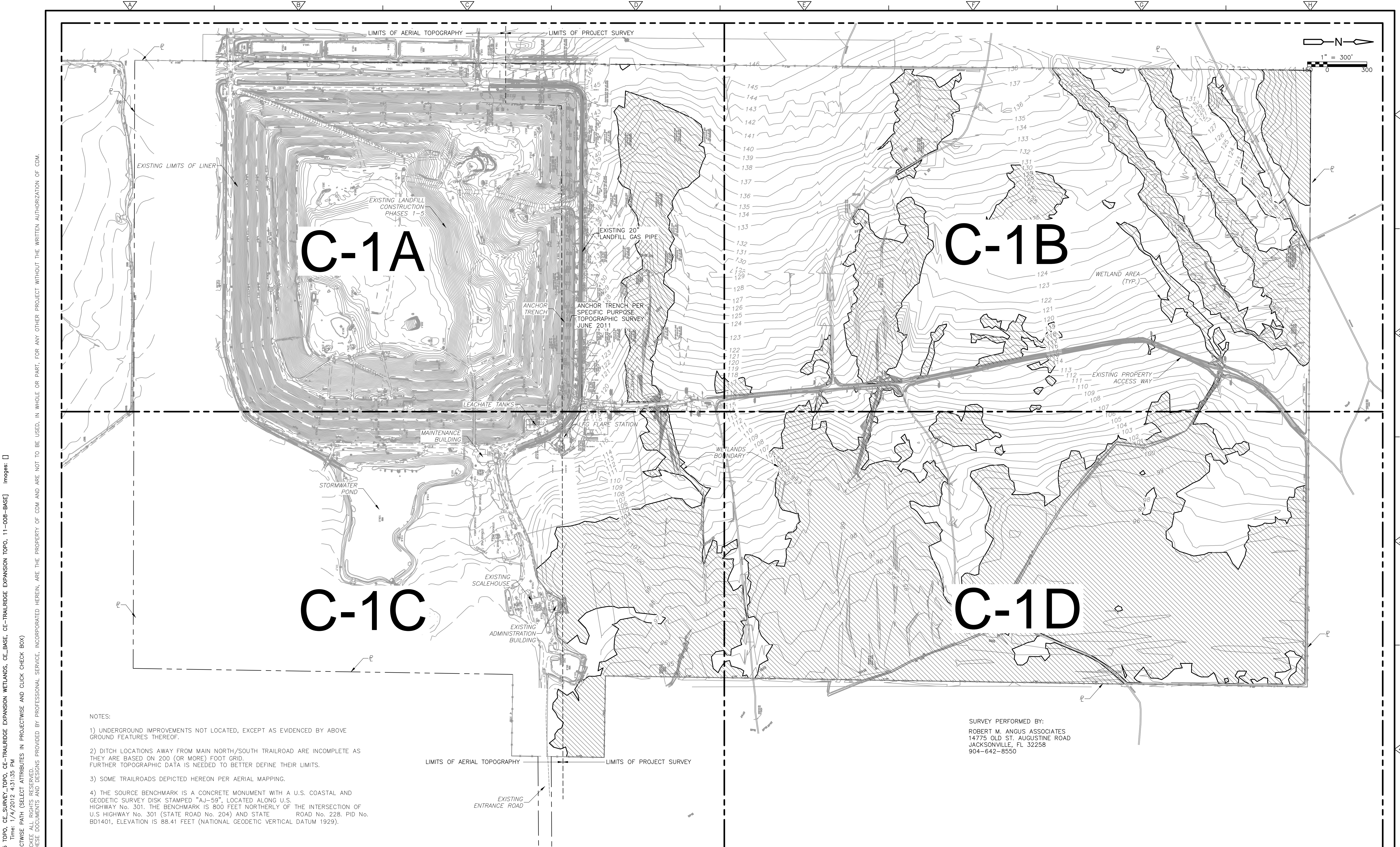
DESIGNED BY:	R. KADAMBALA
DRAWN BY:	B. CHAPMAN
SHEET CHK'D BY:	C. SCOTT
CROSS CHK'D BY:	I. POLEMATIDIS
APPROVED BY:	J. LADNER
DATE:	FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

SYMBOLS AND ABBREVIATIONS

JOHN G. LADNER P.E. NO. 037969
PROJECT NO. 9012-80695 FILE NAME: G002SYMB
SHEET NO. G-2



- NOTES:
- 1) UNDERGROUND IMPROVEMENTS NOT LOCATED, EXCEPT AS EVIDENCED BY ABOVE GROUND FEATURES THEREOF.
 - 2) DITCH LOCATIONS AWAY FROM MAIN NORTH/SOUTH TRAILROAD ARE INCOMPLETE AS THEY ARE BASED ON 200 (OR MORE) FOOT GRID. FURTHER TOPOGRAPHIC DATA IS NEEDED TO BETTER DEFINE THEIR LIMITS.
 - 3) SOME TRAILROADS DEPICTED HEREON PER AERIAL MAPPING.
 - 4) THE SOURCE BENCHMARK IS A CONCRETE MONUMENT WITH A U.S. COASTAL AND GEODETIC SURVEY DISK STAMPED "AJ-59", LOCATED ALONG U.S. HIGHWAY No. 301. THE BENCHMARK IS 800 FEET NORTHERLY OF THE INTERSECTION OF U.S. HIGHWAY No. 301 (STATE ROAD No. 204) AND STATE ROAD No. 228. PID No. BD1401, ELEVATION IS 88.41 FEET (NATIONAL GEODETIC VERTICAL DATUM 1929).

SURVEY PERFORMED BY:
 ROBERT M. ANGUS ASSOCIATES
 14775 OLD ST. AUGUSTINE ROAD
 JACKSONVILLE, FL 32258
 904-642-8550

Xref's: [CDM_2436_EG_IRS_TOPO_CE-TRAILRIDGE_EXPANSION_WETLANDS_CE_BASE_CE-TRAILRIDGE_EXPANSION_TOPO_11-008-BASE] Images: []
 Last saved by: CHAPMANB Time: 1/4/2012 4:31:35 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, DRESSER & MAKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

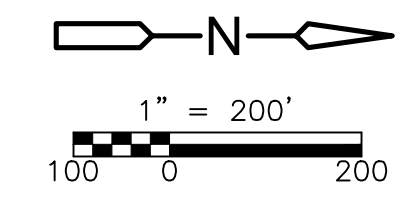
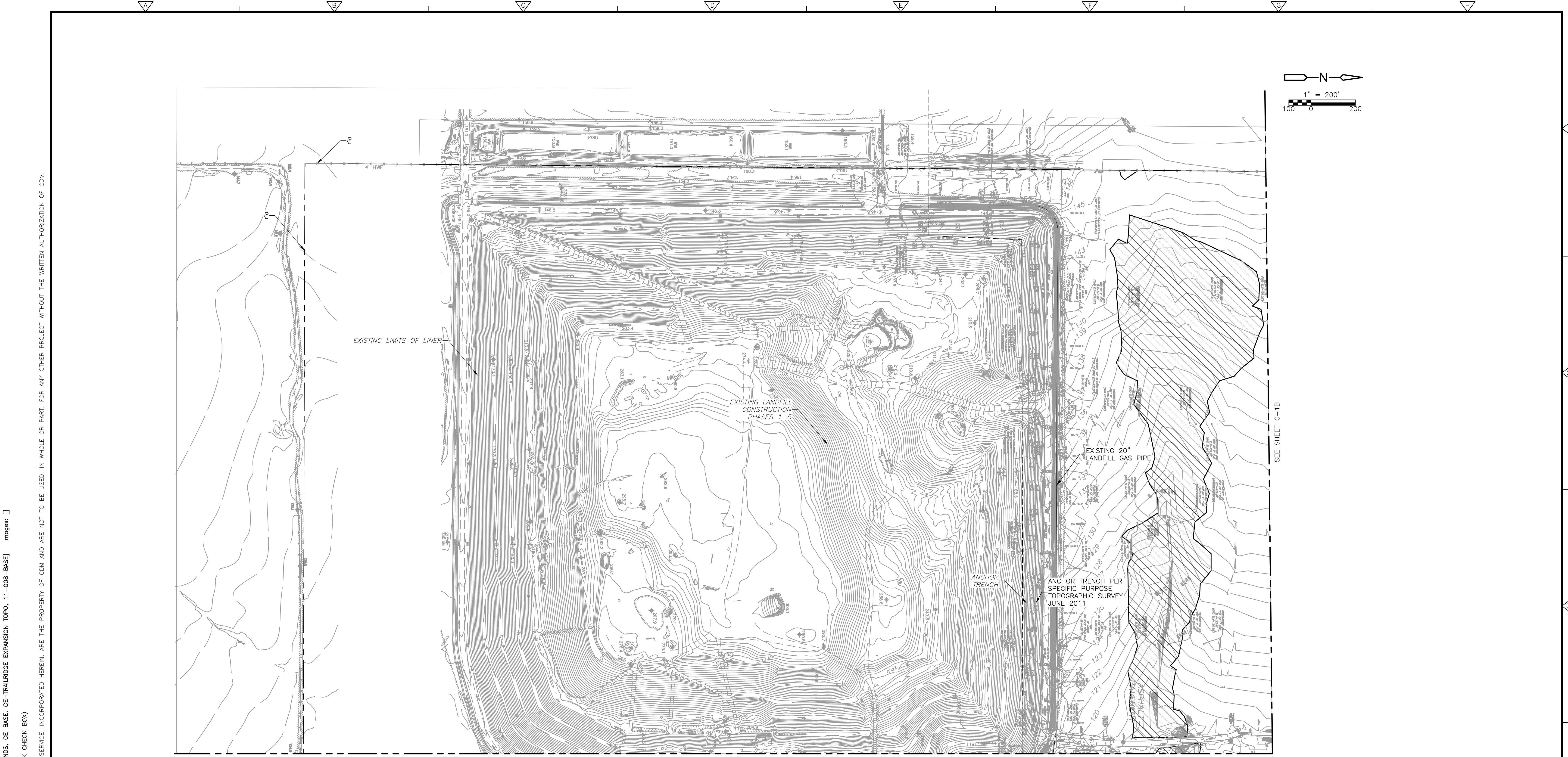
DESIGNED BY: _____
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

EXISTING SITE SURVEY
 KEY MAP
 SHEET NO. C-1

PROJECT NO. 9012-80695
 FILE NAME: C001SGPL
 SHEET NO. C-1



EXISTING LIMITS OF LINER

EXISTING LANDFILL CONSTRUCTION PHASES 1-5

EXISTING 20" LANDFILL GAS PIPE

ANCHOR TRENCH

ANCHOR TRENCH PER SPECIFIC PURPOSE TOPOGRAPHIC SURVEY JUNE 2011

SEE SHEET C-1C

SEE SHEET C-1B

SURVEY PERFORMED BY:
 ROBERT M. ANGUS ASSOCIATES
 14775 OLD ST. AUGUSTINE ROAD
 JACKSONVILLE, FL 32258
 904-642-8550

Xref's: [CDM_2436_EG_IRS_TOPO, CE_SURVEY_TOPO, CE_TRAILRIDGE_EXPANSION_WETLANDS, CE_BASE, CE_TRAILRIDGE_EXPANSION_TOPO, 11-008-BASE] Images: []
 Last saved by: CHAPMANBS Time: 1/4/2012 4:31:35 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

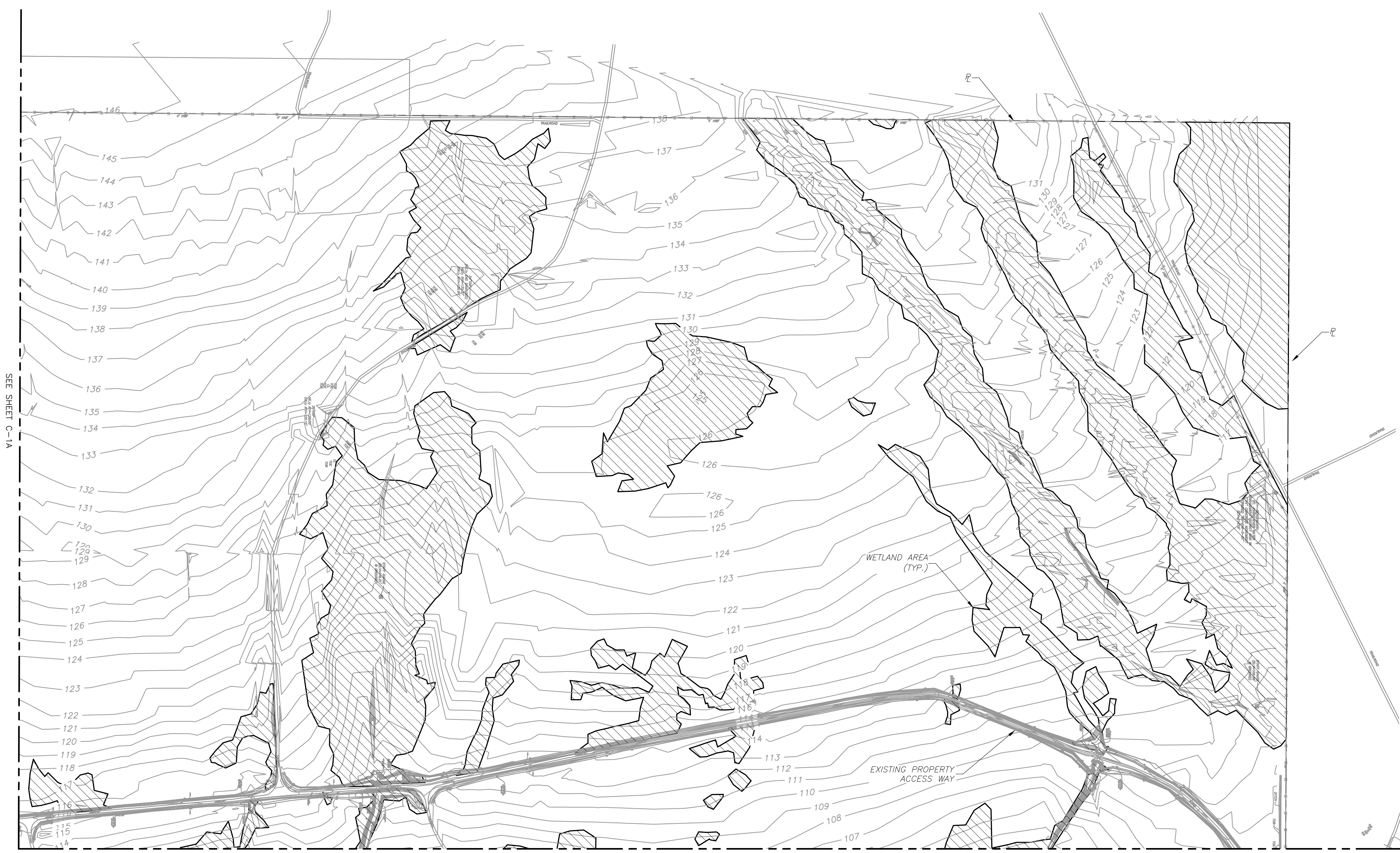
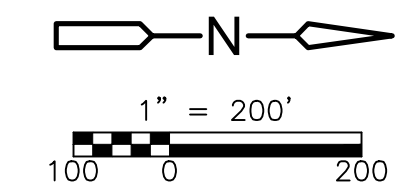
DESIGNED BY: _____
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

EXISTING SITE SURVEY

PROJECT NO. 9012-80695
 FILE NAME: C01ASGPL
 SHEET NO. C-1A



SEE SHEET C-1A

SEE SHEET C-1D

SURVEY PERFORMED BY:
 ROBERT M. ANGUS ASSOCIATES
 14775 OLD ST. AUGUSTINE ROAD
 JACKSONVILLE, FL 32258
 904-642-8550

Xref's: [CDM_2436_EG_IRS_TOPO, CE_SURVEY_TOPO, CE_TRAILRIDGE_EXPANSION_WETLANDS, CE_BASE, CE_TRAILRIDGE_EXPANSION_TOPO, 11-008-BASE] Images: []
 Last saved by: CHAPMANBS Time: 1/4/2012 4:31:35 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER, & MAKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

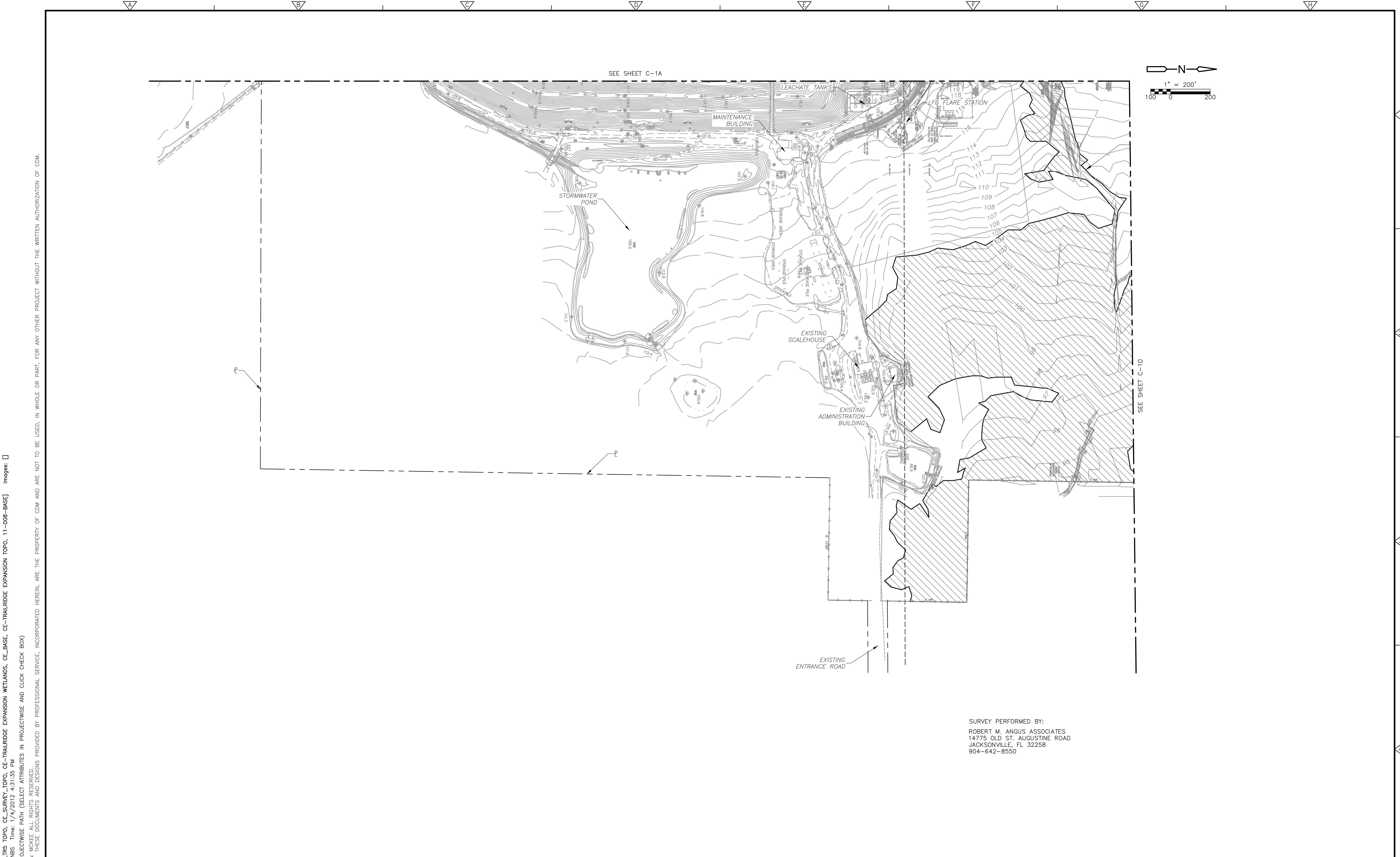
DESIGNED BY: _____
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

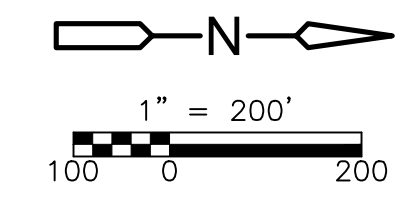
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

EXISTING SITE SURVEY

PROJECT NO. 9012-80695
 FILE NAME: C01BSGPL
 SHEET NO. C-1B



SEE SHEET C-1A



SEE SHEET C-1D

SURVEY PERFORMED BY:
 ROBERT M. ANGUS ASSOCIATES
 14775 OLD ST. AUGUSTINE ROAD
 JACKSONVILLE, FL 32258
 904-642-8550

Xref's: [CDM_2436_EG_IRS_TOPO, CE_SURVEY_TOPO, CE_TRAILRIDGE_EXPANSION_WETLANDS, CE_BASE, CE_TRAILRIDGE_EXPANSION_TOPO, 11-008-BASE] Images: []
 Last saved by: CHAPMANBS Time: 1/4/2012 4:31:35 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

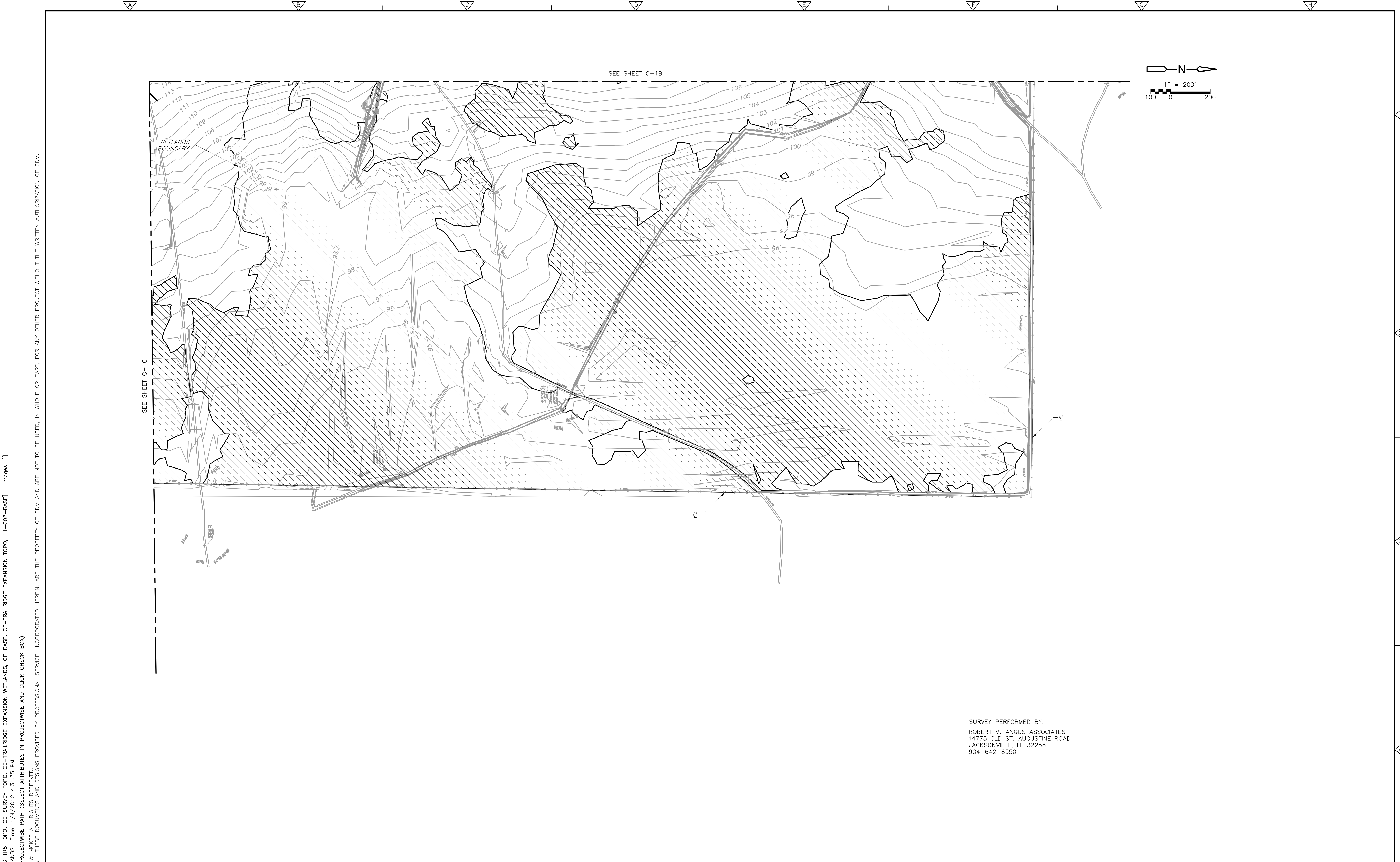
DESIGNED BY: _____
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

EXISTING SITE SURVEY

PROJECT NO. 9012-80695
 FILE NAME: C01CSGPL
 SHEET NO.
C-1C



xref's: [CDM_2436_EG_TRS_TOPO, CE_SURVEY_TOPO, CE_TRAILRIDGE_EXPANSION_WETLANDS, CE_BASE, CE_TRAILRIDGE_EXPANSION_TOPO, 11-008-BASE] Images: []
 Last saved by: CHAPMANBS Time: 1/4/2012 4:31:35 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER, & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

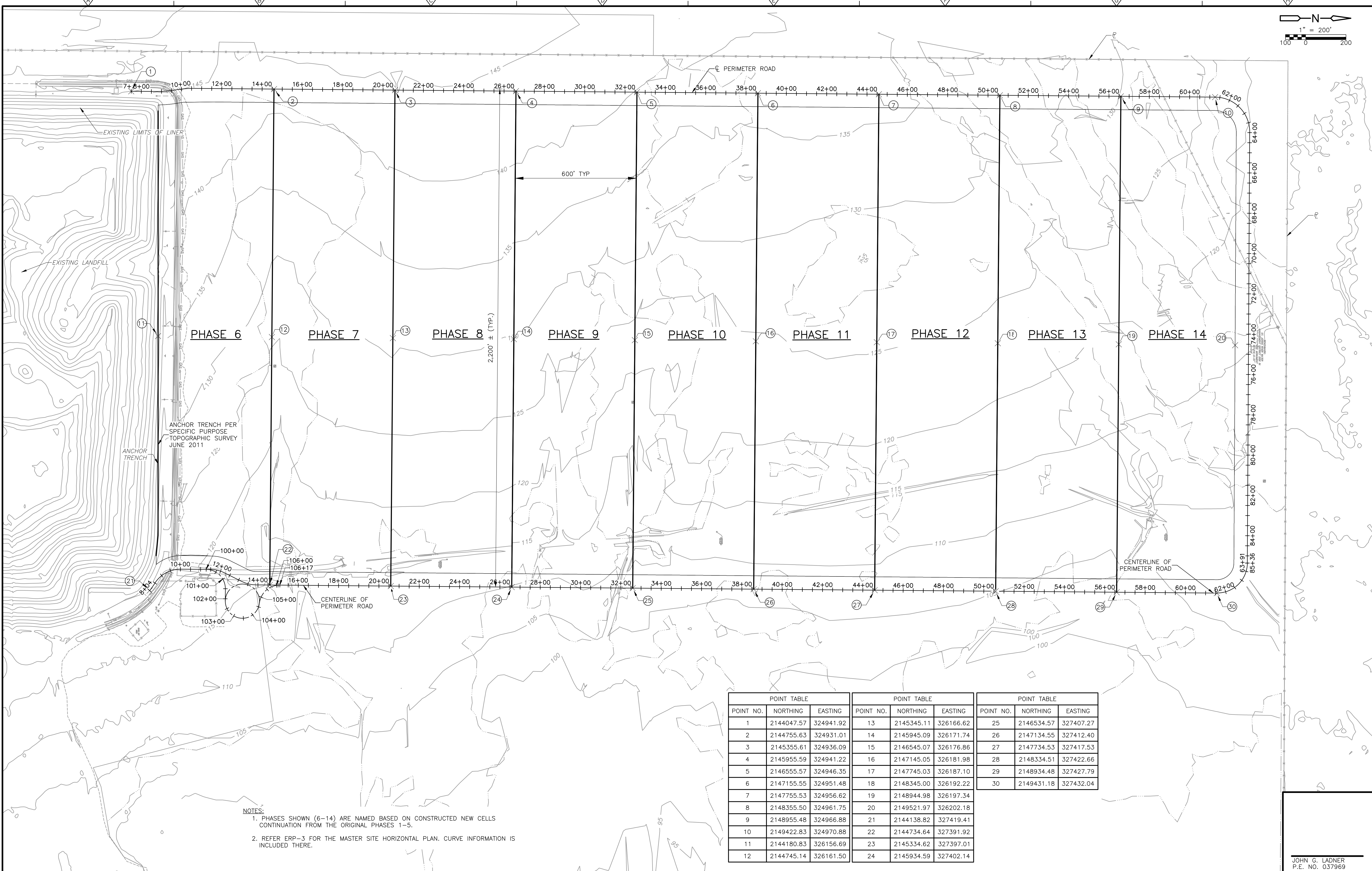
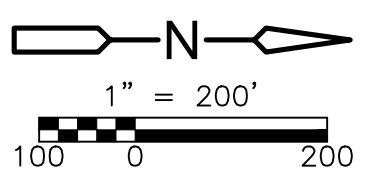
DESIGNED BY: _____
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

EXISTING SITE SURVEY

PROJECT NO. 9012-80695
 FILE NAME: C01DSGPL
 SHEET NO. **C-1D**



- NOTES:**
1. PHASES SHOWN (6-14) ARE NAMED BASED ON CONSTRUCTED NEW CELLS CONTINUATION FROM THE ORIGINAL PHASES 1-5.
 2. REFER ERP-3 FOR THE MASTER SITE HORIZONTAL PLAN. CURVE INFORMATION IS INCLUDED THERE.

POINT TABLE			POINT TABLE			POINT TABLE		
POINT NO.	NORTHING	EASTING	POINT NO.	NORTHING	EASTING	POINT NO.	NORTHING	EASTING
1	2144047.57	324941.92	13	2145345.11	326166.62	25	2146534.57	327407.27
2	2144755.63	324931.01	14	2145945.09	326171.74	26	2147134.55	327412.40
3	2145355.61	324936.09	15	2146545.07	326176.86	27	2147734.53	327417.53
4	2145955.59	324941.22	16	2147145.05	326181.98	28	2148334.51	327422.66
5	2146555.57	324946.35	17	2147745.03	326187.10	29	2148934.48	327427.79
6	2147155.55	324951.48	18	2148345.00	326192.22	30	2149431.18	327432.04
7	2147755.53	324956.62	19	2148944.98	326197.34			
8	2148355.50	324961.75	20	2149521.97	326202.18			
9	2148955.48	324966.88	21	2144138.82	327419.41			
10	2149422.83	324970.88	22	2144734.64	327391.92			
11	2144180.83	326156.69	23	2145334.62	327397.01			
12	2144745.14	326161.50	24	2145934.59	327402.14			

Xref: [CDM_2436_11-008-BASE, CE-TRAILRIDGE EXPANSION TOPO, C-BASE, EG_TR5 TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 12:58:45 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

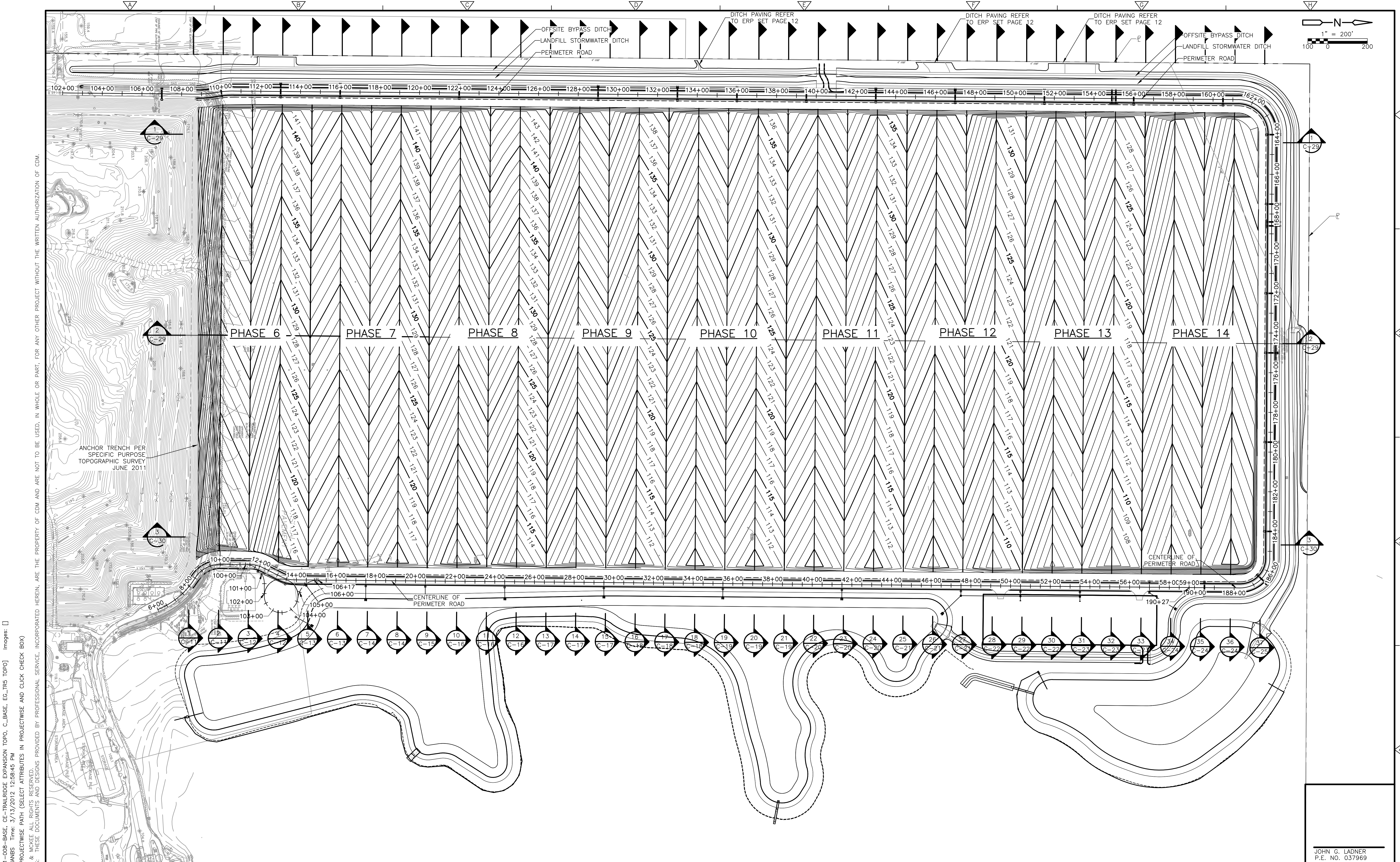
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

HORIZONTAL CONTROL
BUILDOUT LANDFILL PHASING PLAN

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C002STPL
 SHEET NO.
C-2



Xref: [CDM_2436_11-008-BASE_CE-TRAILRIDGE EXPANSION TOPO_C-BASE_EG_TR5 TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 12:58:45 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CAMP, DRESSER & MOCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

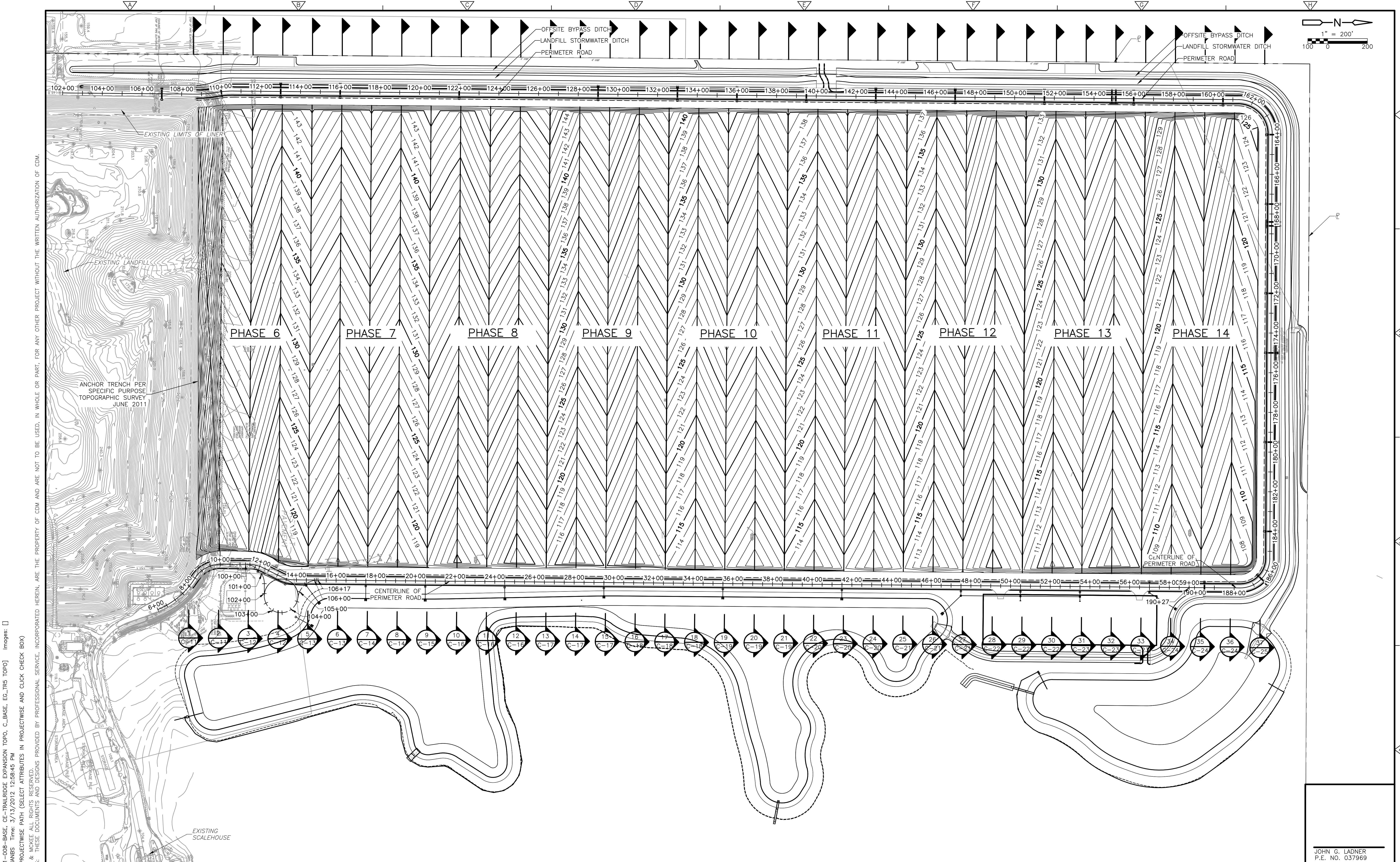
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CDA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PROPOSED BUILDOUT TOP
 OF SUBGRADE GRADING PLAN
 FOR LANDFILL PHASES

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C003STPL
 SHEET NO.
C-3



Xref: [CDM_2436_11-008-BASE_CE-TRAILRIDGE EXPANSION TOPO_C-BASE_EG_TR5 TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 12:58:45 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

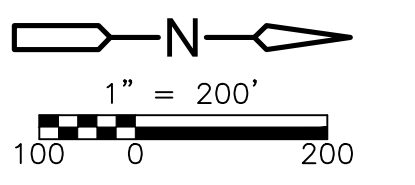
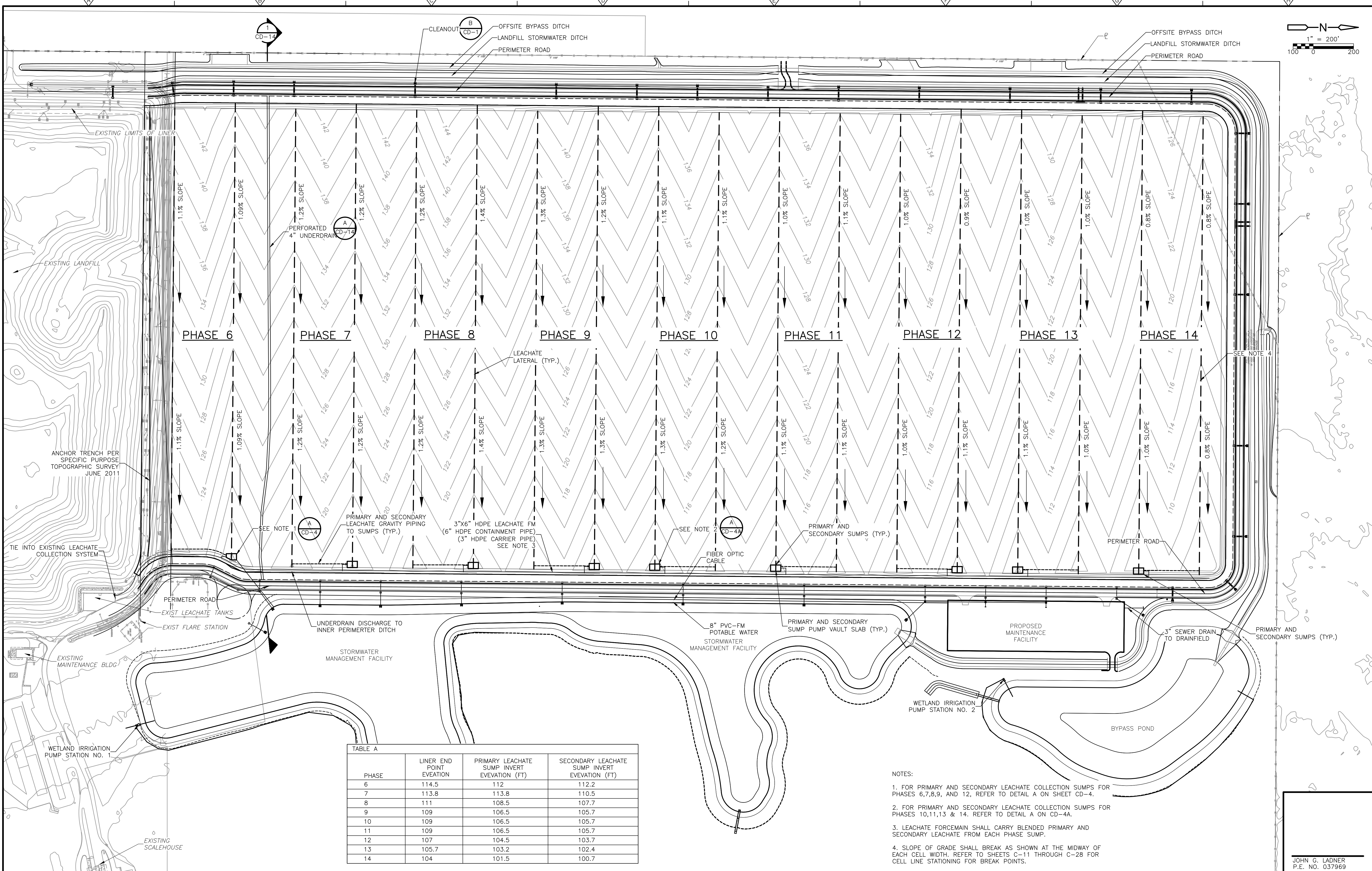
CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CDA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

BUILDOUT TOP
 OF FINISH GRADING PLAN
 FOR LANDFILL PHASES

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C00451PL
 SHEET NO.
C-4

©2011 CDM, DESIGNER & MO/VEE ALL RIGHTS RESERVED. REUSE OF DOCUMENTS, THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.



PHASE	LINER END POINT ELEVATION	PRIMARY LEACHATE SUMP INVERT ELEVATION (FT)	SECONDARY LEACHATE SUMP INVERT ELEVATION (FT)
6	114.5	112	112.2
7	113.8	113.8	110.5
8	111	108.5	107.7
9	109	106.5	105.7
10	109	106.5	105.7
11	109	106.5	105.7
12	107	104.5	103.7
13	105.7	103.2	102.4
14	104	101.5	100.7

- NOTES:
- FOR PRIMARY AND SECONDARY LEACHATE COLLECTION SUMPS FOR PHASES 6,7,8,9, AND 12, REFER TO DETAIL A ON SHEET CD-4.
 - FOR PRIMARY AND SECONDARY LEACHATE COLLECTION SUMPS FOR PHASES 10,11,13 & 14. REFER TO DETAIL A ON CD-4A.
 - LEACHATE FORCEMAIN SHALL CARRY BLENDED PRIMARY AND SECONDARY LEACHATE FROM EACH PHASE SUMP.
 - SLOPE OF GRADE SHALL BREAK AS SHOWN AT THE MIDWAY OF EACH CELL WIDTH. REFER TO SHEETS C-11 THROUGH C-28 FOR CELL LINE STATIONING FOR BREAK POINTS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: L. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-000020

CITY OF JACKSONVILLE
**TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION**

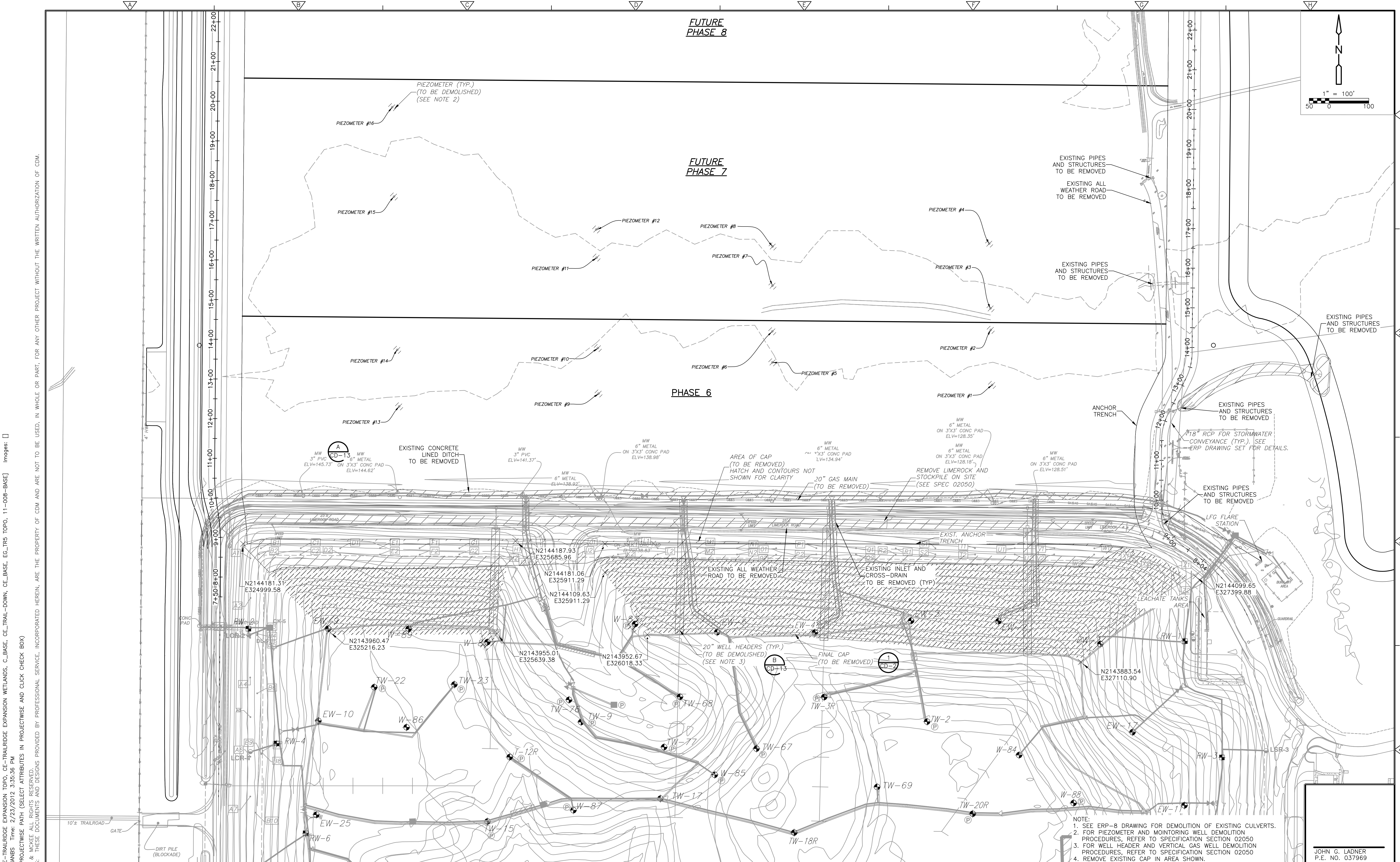
**BUILDOUT LEACHATE
 COLLECTION AND UTILITY
 PLAN**

JOHN G. LADNER
 P.E. NO. 037969

PROJECT NO. 9012-80695
 FILE NAME: C005STPL

SHEET NO.
C-5

FOR PERMIT- NOT FOR CONSTRUCTION



Xref's: [CDM_2436, CE-TRAILRIDGE EXPANSION WETLANDS, C_BASE, CE_TRAIL-DOWN, CE_BASE, EG_TR5 TOPO, 11-008-BASE] Images:
 Last saved by: CHAPMANBS Time: 2/23/2012 3:35:36 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

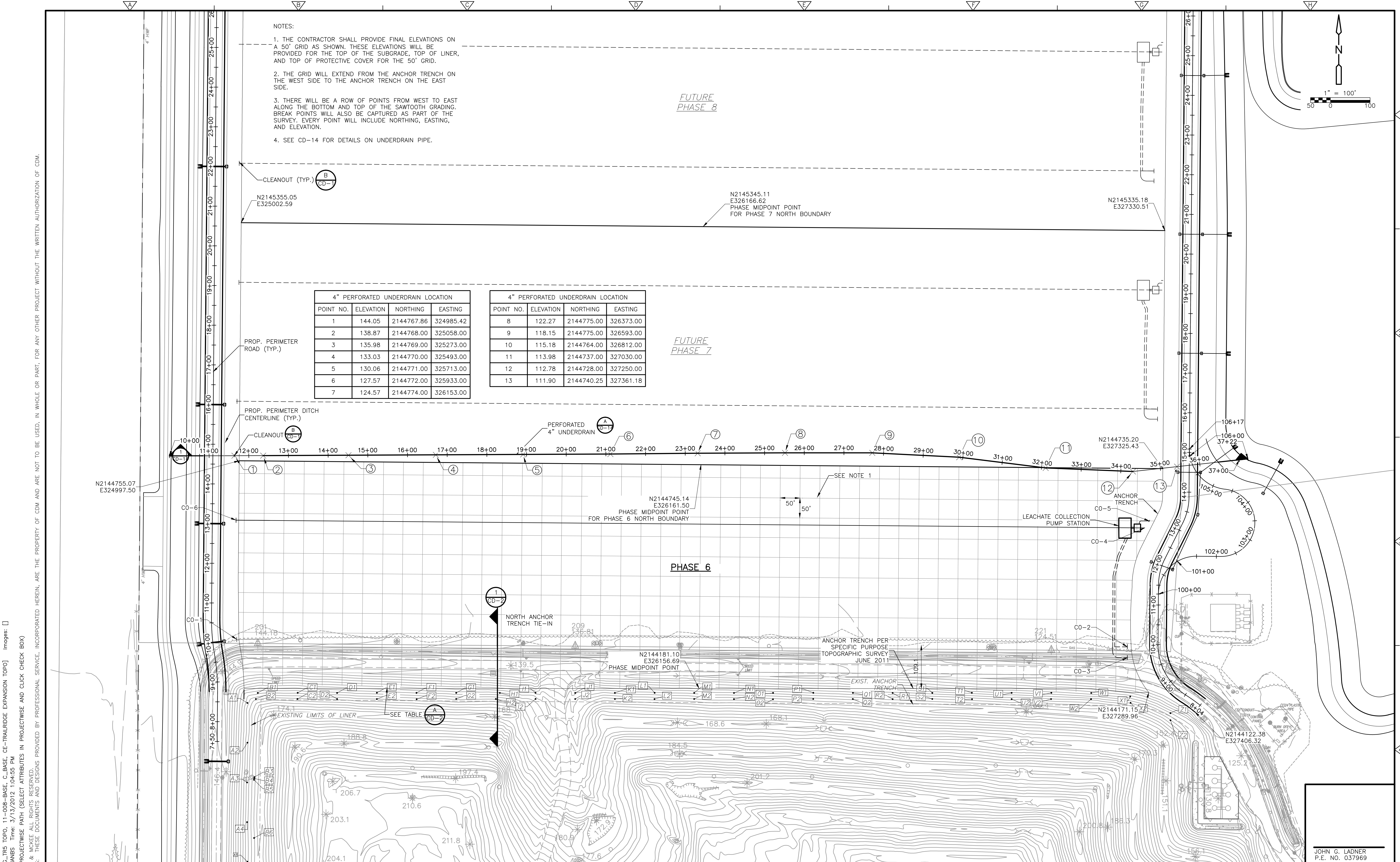
CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CDA NO. ED-0000020

CITY OF JACKSONVILLE
**TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION**

**REMOVAL AND ABANDONMENT
 PLAN FOR PERMIT**

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C006STPL
 SHEET NO.
C-6

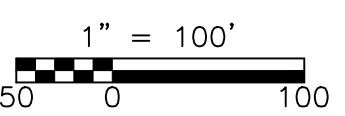
- NOTE:
- SEE ERP-8 DRAWING FOR DEMOLITION OF EXISTING CULVERTS.
 - FOR PIEZOMETER AND MONITORING WELL DEMOLITION PROCEDURES, REFER TO SPECIFICATION SECTION 02050
 - FOR WELL HEADER AND VERTICAL GAS WELL DEMOLITION PROCEDURES, REFER TO SPECIFICATION SECTION 02050
 - REMOVE EXISTING CAP IN AREA SHOWN.



- NOTES:
1. THE CONTRACTOR SHALL PROVIDE FINAL ELEVATIONS ON A 50' GRID AS SHOWN. THESE ELEVATIONS WILL BE PROVIDED FOR THE TOP OF THE SUBGRADE, TOP OF LINER, AND TOP OF PROTECTIVE COVER FOR THE 50' GRID.
 2. THE GRID WILL EXTEND FROM THE ANCHOR TRENCH ON THE WEST SIDE TO THE ANCHOR TRENCH ON THE EAST SIDE.
 3. THERE WILL BE A ROW OF POINTS FROM WEST TO EAST ALONG THE BOTTOM AND TOP OF THE SAWTOOTH GRADING. BREAK POINTS WILL ALSO BE CAPTURED AS PART OF THE SURVEY. EVERY POINT WILL INCLUDE NORTHING, EASTING, AND ELEVATION.
 4. SEE CD-14 FOR DETAILS ON UNDERDRAIN PIPE.

4" PERFORATED UNDERDRAIN LOCATION			
POINT NO.	ELEVATION	NORTHING	EASTING
1	144.05	2144767.86	324985.42
2	138.87	2144768.00	325058.00
3	135.98	2144769.00	325273.00
4	133.03	2144770.00	325493.00
5	130.06	2144771.00	325713.00
6	127.57	2144772.00	325933.00
7	124.57	2144774.00	326153.00

4" PERFORATED UNDERDRAIN LOCATION			
POINT NO.	ELEVATION	NORTHING	EASTING
8	122.27	2144775.00	326373.00
9	118.15	2144775.00	326593.00
10	115.18	2144764.00	326812.00
11	113.98	2144737.00	327030.00
12	112.78	2144728.00	327250.00
13	111.90	2144740.25	327361.18



Xref's: [CDM_2436, EG_IRS TOPO, 11-008-BASE, C-BASE, CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

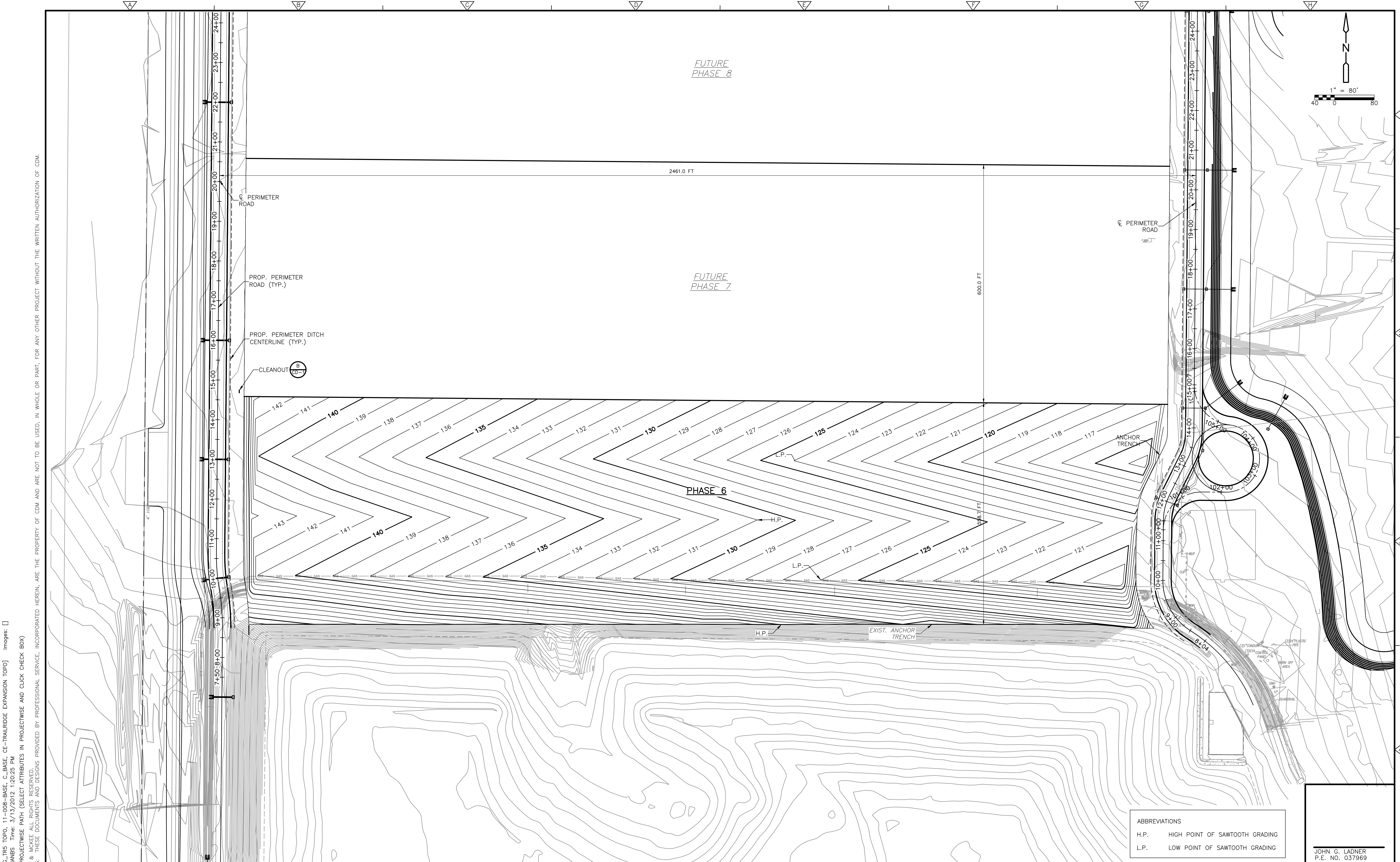
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CDA NO. ED-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

HORIZONTAL CONTROL PLAN
FOR PHASE 6

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C007STPL
 SHEET NO.
C-7



Xref's: [CDM_2436_EG_IRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE_EXPANSION_TOPO] Images: []
 Last saved by: CHAPMANB, Time: 3/13/2012 1:20:25 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, BESSER, & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

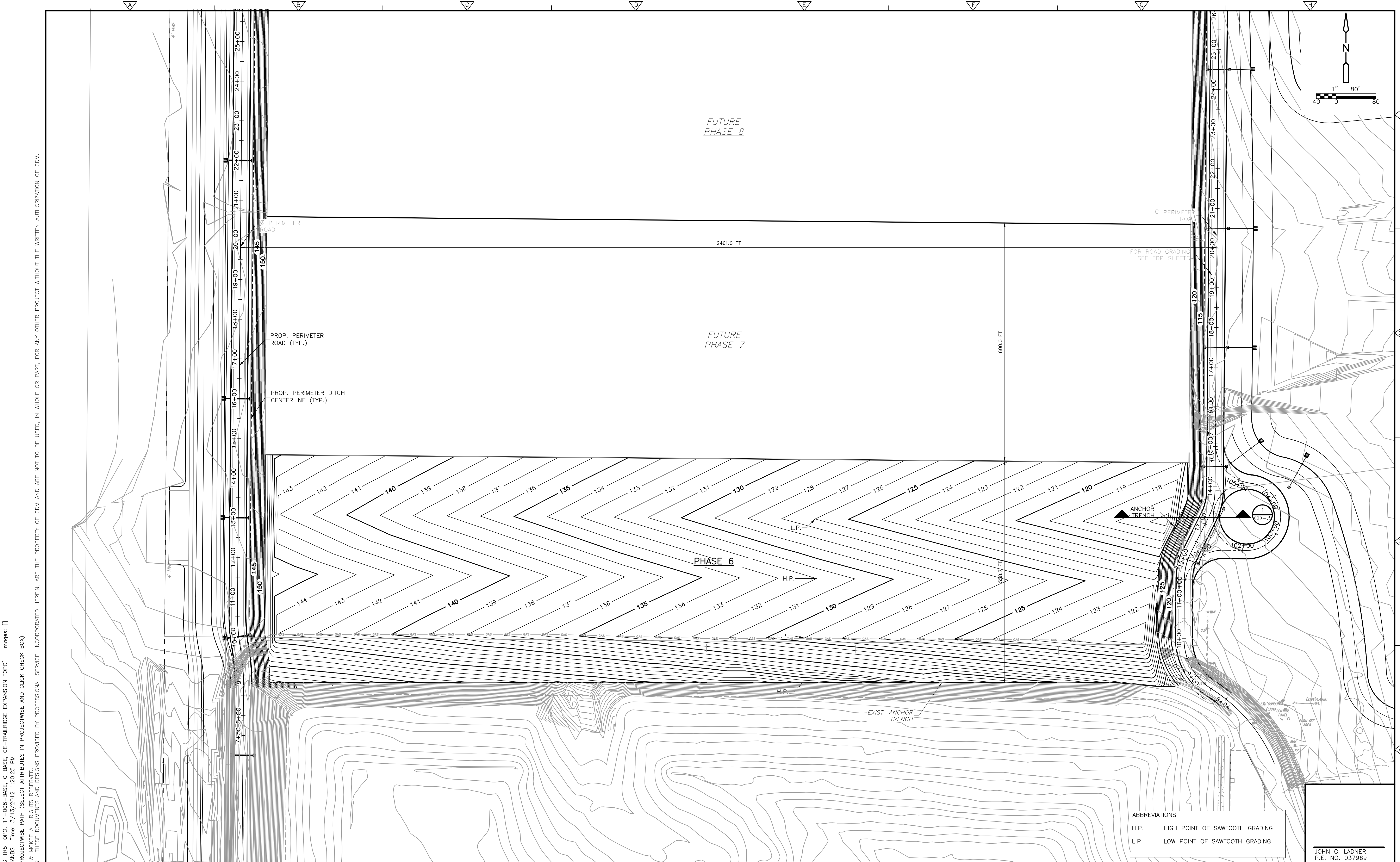
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PHASE 6 TOP
 OF SUBGRADE GRADING PLAN

ABBREVIATIONS

H.P.	HIGH POINT OF SAWTOOTH GRADING
L.P.	LOW POINT OF SAWTOOTH GRADING

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C008STPL
 SHEET NO.
C-8



Xref's: [CDM_2436_EC_IRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:20:25 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, BESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

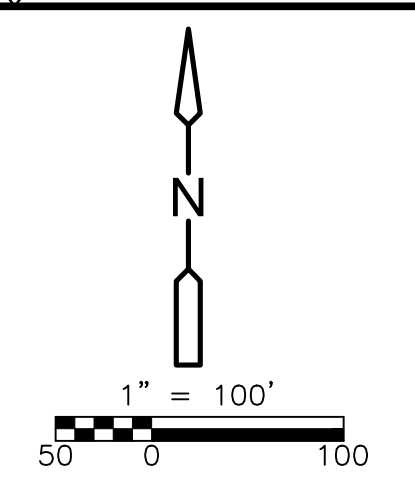
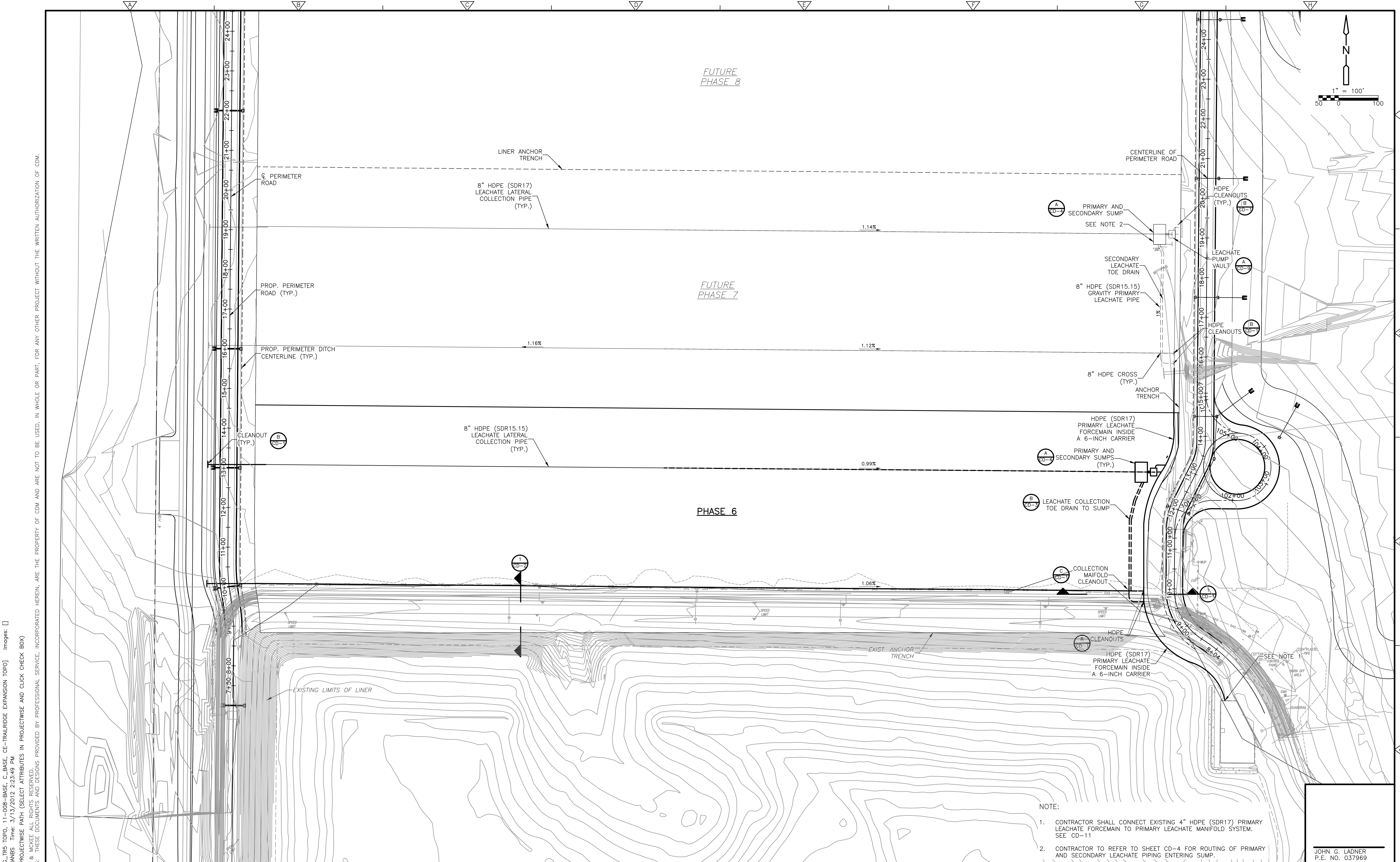
CITY OF JACKSONVILLE
**TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION**

**PHASE 6 TOP
 OF FINISH GRADING PLAN**

ABBREVIATIONS

H.P.	HIGH POINT OF SAWTOOTH GRADING
L.P.	LOW POINT OF SAWTOOTH GRADING

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C009STPL
 SHEET NO.
C-9



- NOTE:
- CONTRACTOR SHALL CONNECT EXISTING 4" HDPE (SDR17) PRIMARY LEACHATE FORCEMAIN TO PRIMARY LEACHATE MANIFOLD SYSTEM. SEE CD-11
 - CONTRACTOR TO REFER TO SHEET CD-4 FOR ROUTING OF PRIMARY AND SECONDARY LEACHATE PIPING ENTERING SUMP.

Xref's: [CDM_2436_EG_IRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE_EXPANSION_TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 2:23:49 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

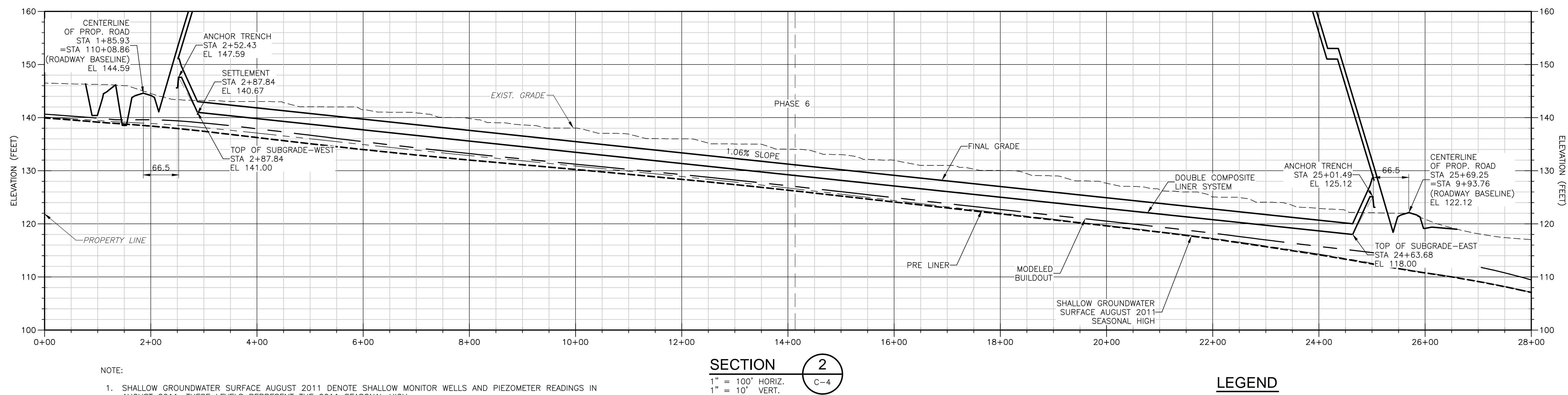
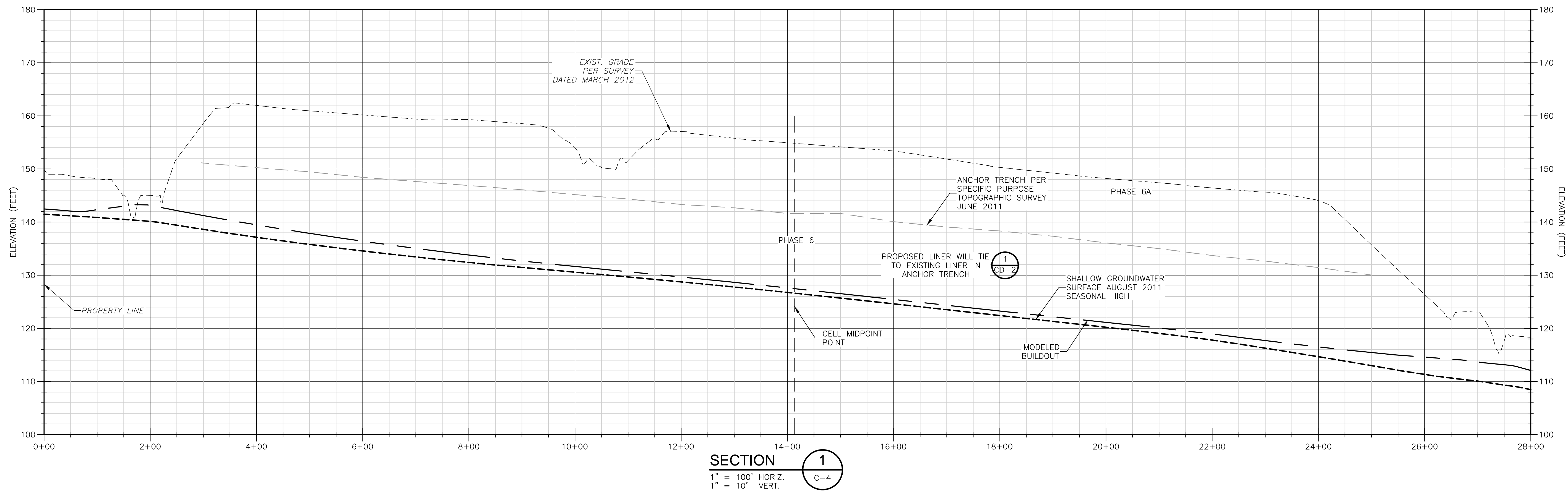
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PHASE 6 LEACHATE
 COLLECTION PLAN

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C010STPL
 SHEET NO.
C-10



NOTE:

1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- — — — — MODELED BUILDOUT
- - - - - PRE-LINER SEASONAL HIGH
- - - - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANBS Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CAMP, BESSER, & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

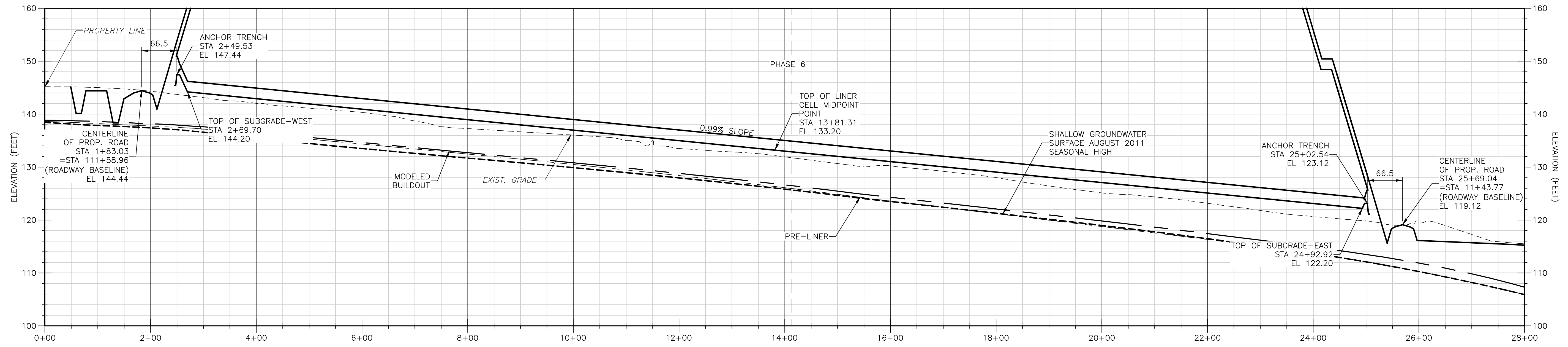
DESIGNED BY: S. NEHRKE
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



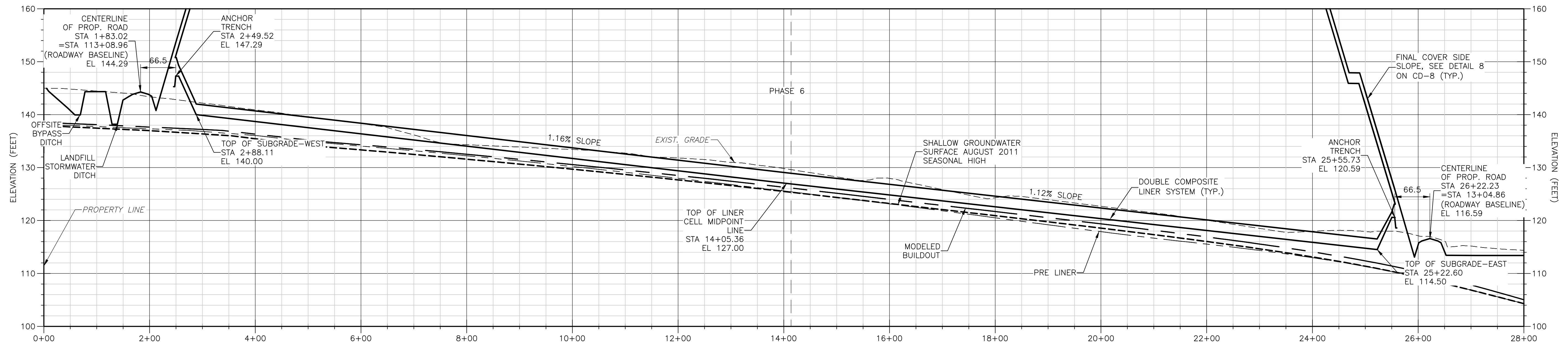
CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

SECTIONS - PHASES 6 & 7
C-11

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C011SCTN.DWG
 SHEET NO.



SECTION 3
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4



SECTION 4
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4

NOTE:

1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- — — — — MODELED BUILDOUT
- - - - - PRE-LINER SEASONAL HIGH
- - - - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANBS Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, BESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

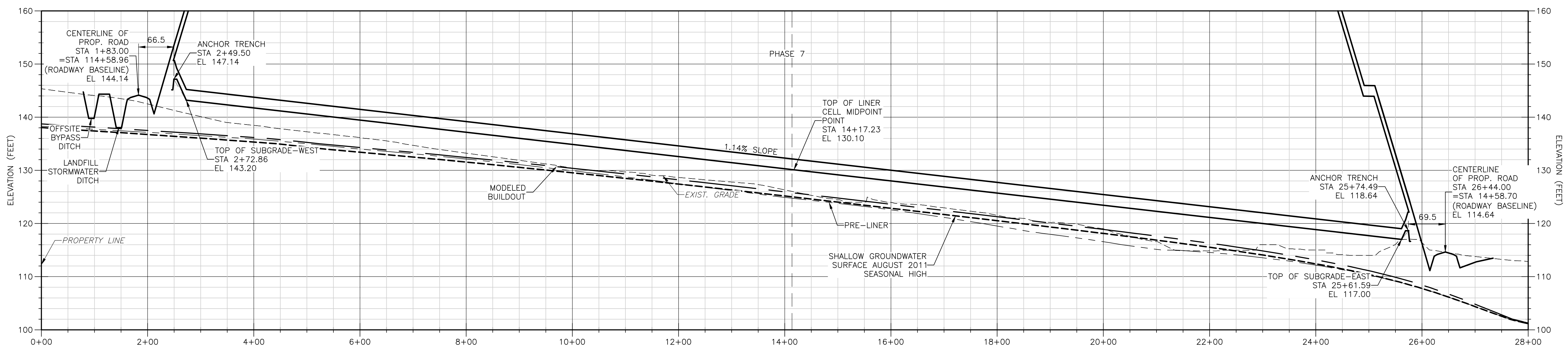
DESIGNED BY: S. NEHRKE
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: L. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



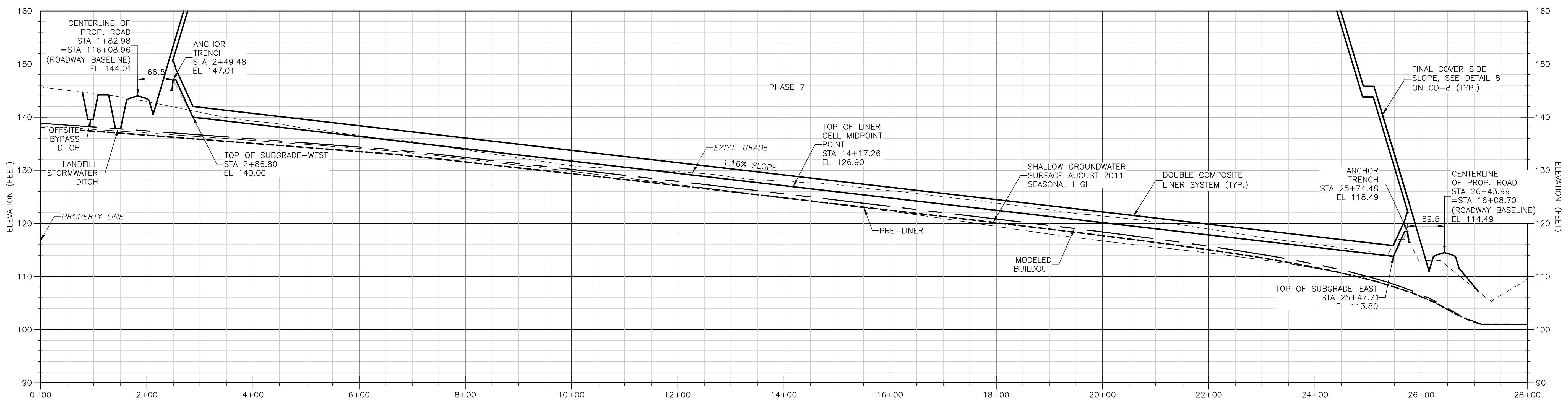
CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

SECTIONS - PHASES 6 & 7
 SHEET NO. **C-12**

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C012SCTN.DWG
 SHEET NO. **C-12**



SECTION 5
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4



SECTION 6
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4

- NOTE:
1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- — — — — MODELED BUILDOUT
- - - - - PRE-LINER SEASONAL HIGH
- - - - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANBS Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

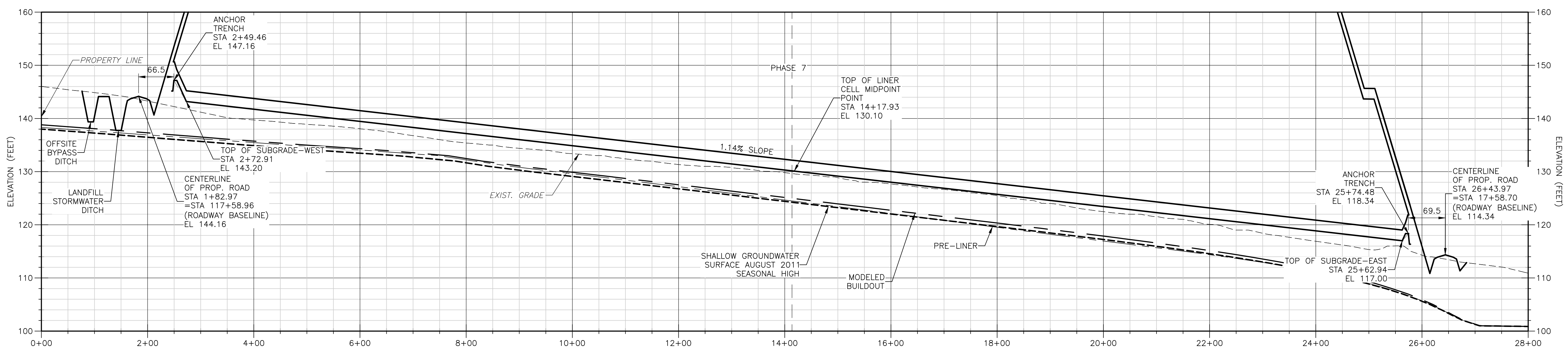
DESIGNED BY: S. NEHRKE
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



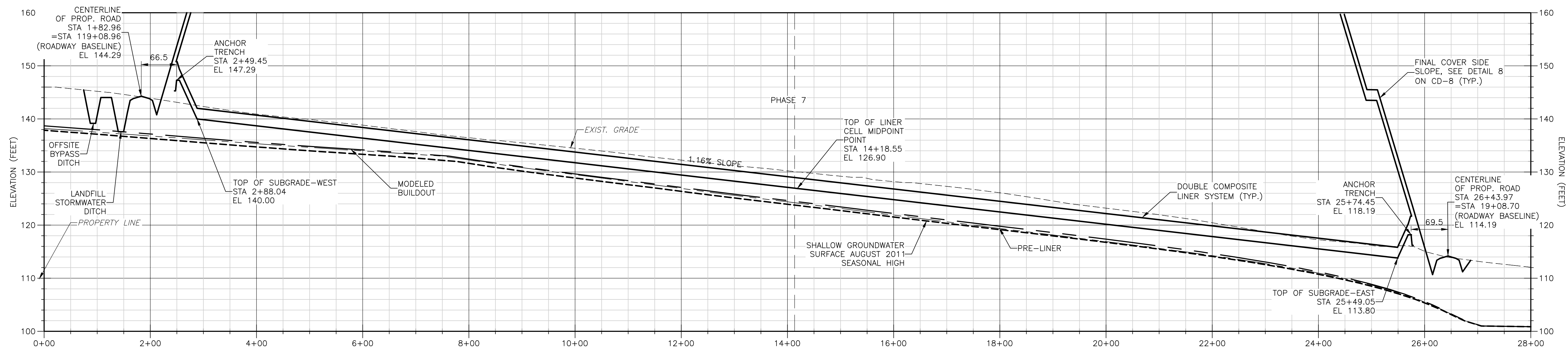
CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

SECTIONS - PHASES 6 & 7
 SHEET NO. **C-13**

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C013SCTN.DWG
 SHEET NO. **C-13**



SECTION 7
 1" = 100' HORIZ.
 1" = 10' VERT.



SECTION 8
 1" = 100' HORIZ.
 1" = 10' VERT.

- NOTE:
1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- — — — — MODELED BUILDOUT
- - - - - PRE-LINER SEASONAL HIGH
- - - - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANBS Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, BESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

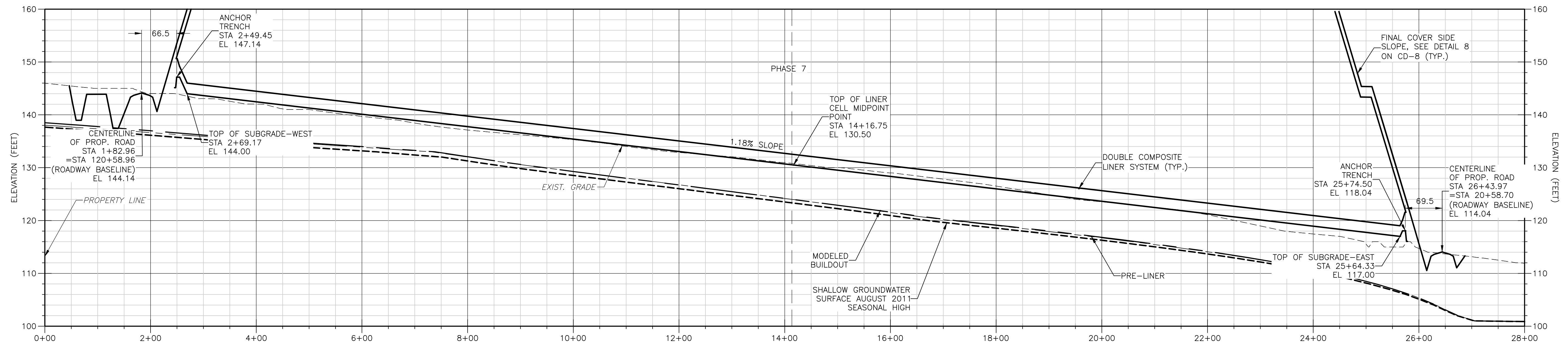
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. NEHRKE
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

SECTIONS - PHASES 6 & 7
 JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C014SCTN.DWG
 SHEET NO.
C-14



SECTION 9
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4

NOTE:

1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- — — — — MODELED BUILDOUT
- - - - - PRE-LINER SEASONAL HIGH
- - - - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANB Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

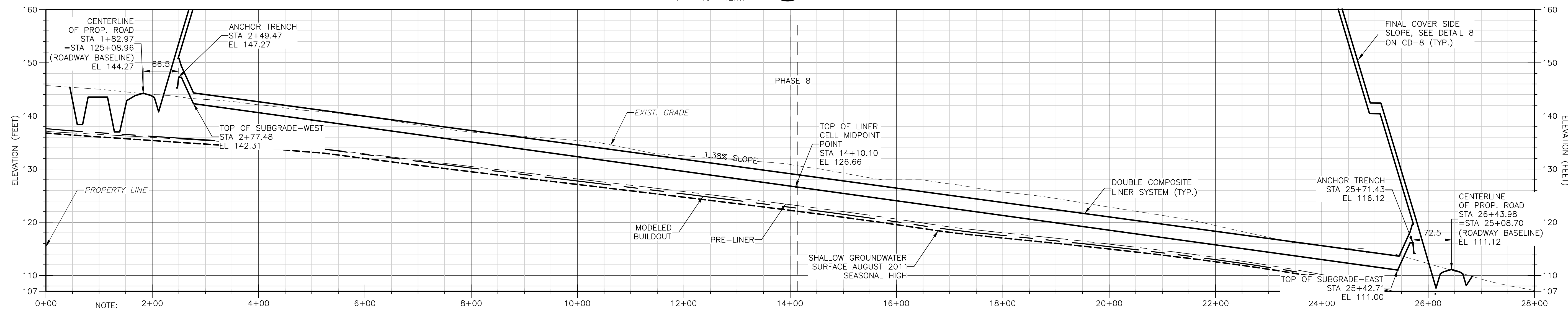
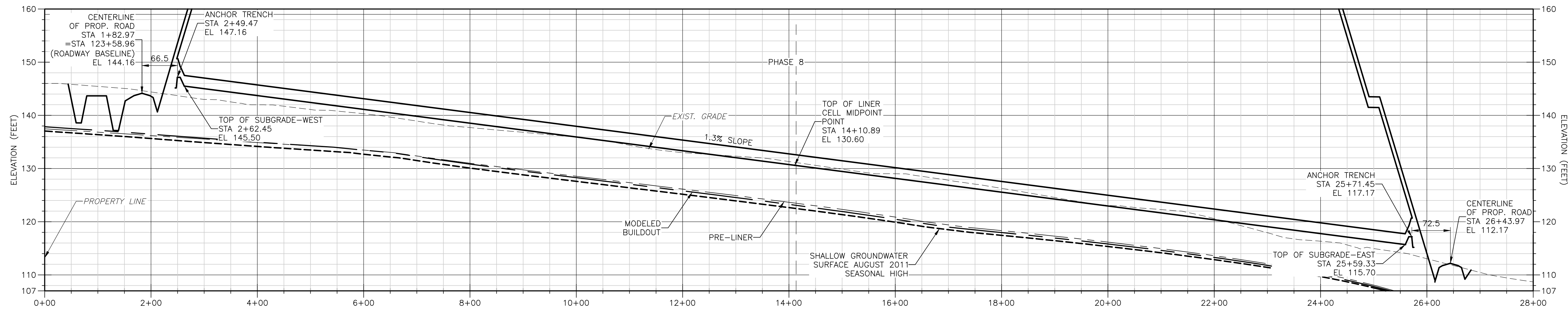
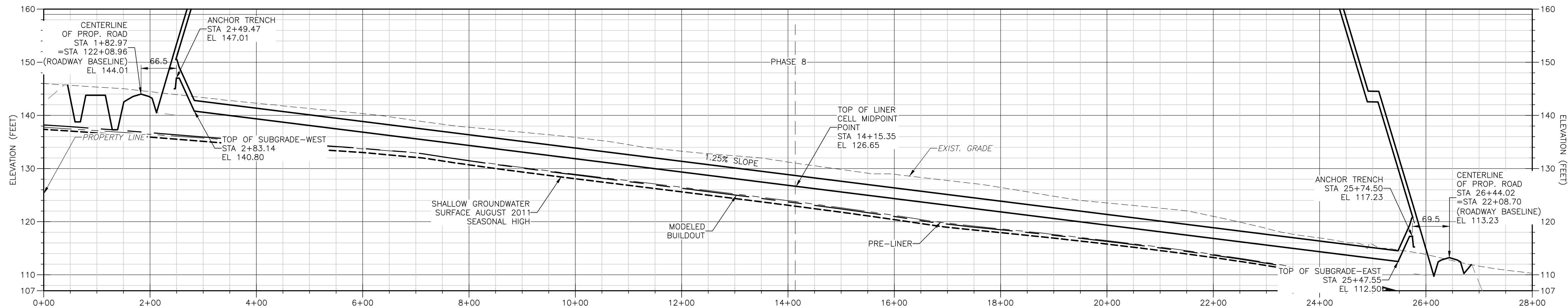
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

SECTIONS - PHASES 7 & 8
 SHEET NO. **C-15**

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C015SCTN.DWG
 SHEET NO. **C-15**



- NOTE:
- SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 - MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 - PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 - FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

	MODELED BUILDOUT
	PRE-LINER SEASONAL HIGH
	SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANB Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS - PHASE 8

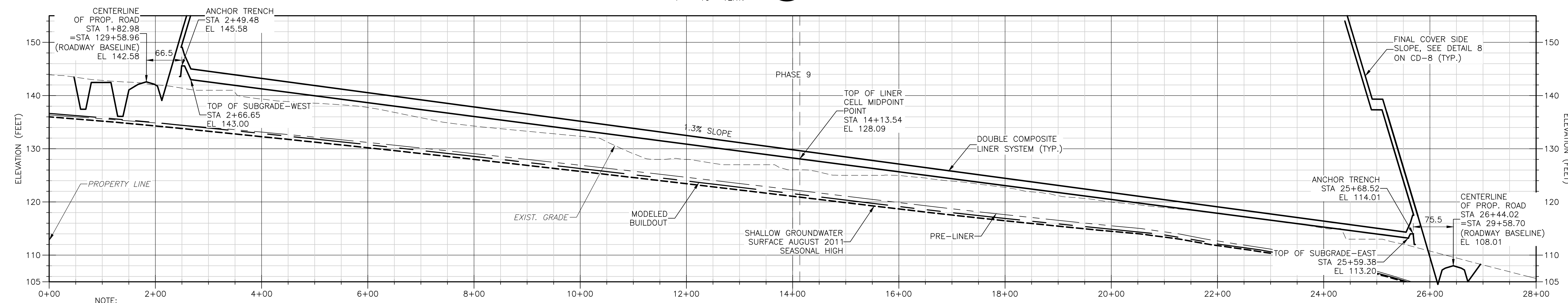
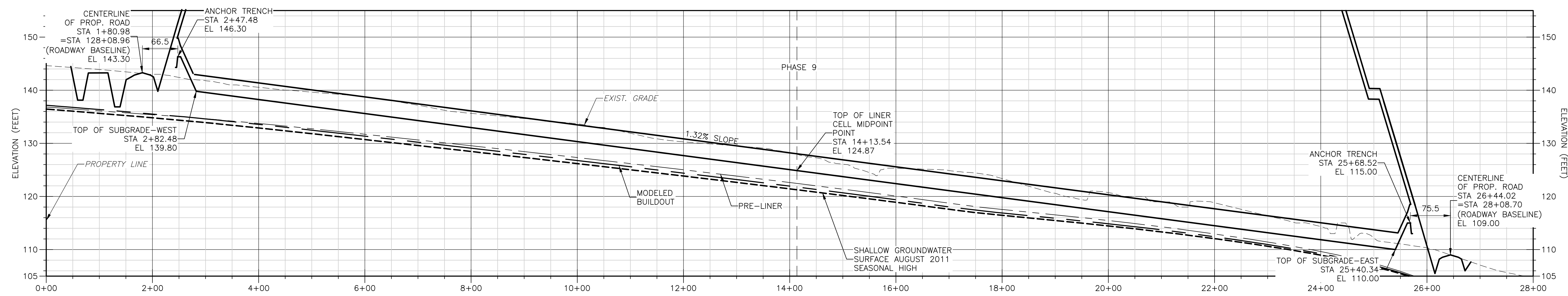
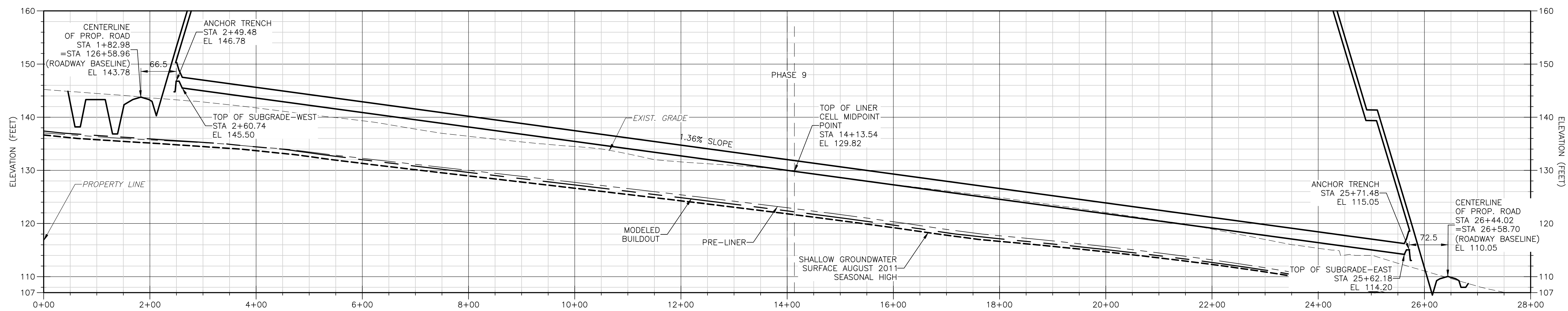
JOHN G. LADNER
P.E. NO. 037969

PROJECT NO. 9012-80695
FILE NAME: C016SCTN.DWG

SHEET NO.

C-16

FOR PERMIT- NOT FOR CONSTRUCTION



- NOTE:
1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- MODELED BUILDOUT
- - - PRE-LINER SEASONAL HIGH
- · - · - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 GROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS - PHASE 9

JOHN G. LADNER
 P.E. NO. 037969

PROJECT NO. 9012-80695
 FILE NAME: C017SCTN.DWG

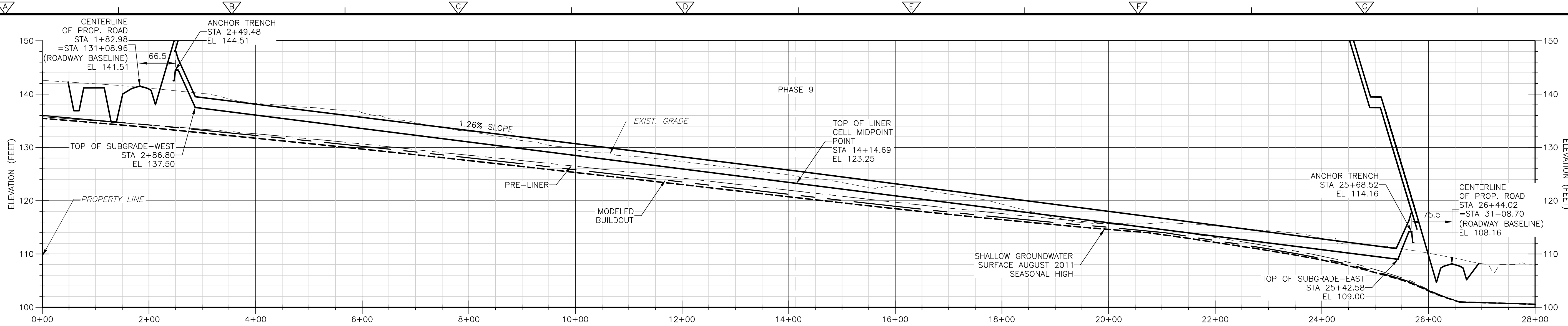
SHEET NO.

C-17

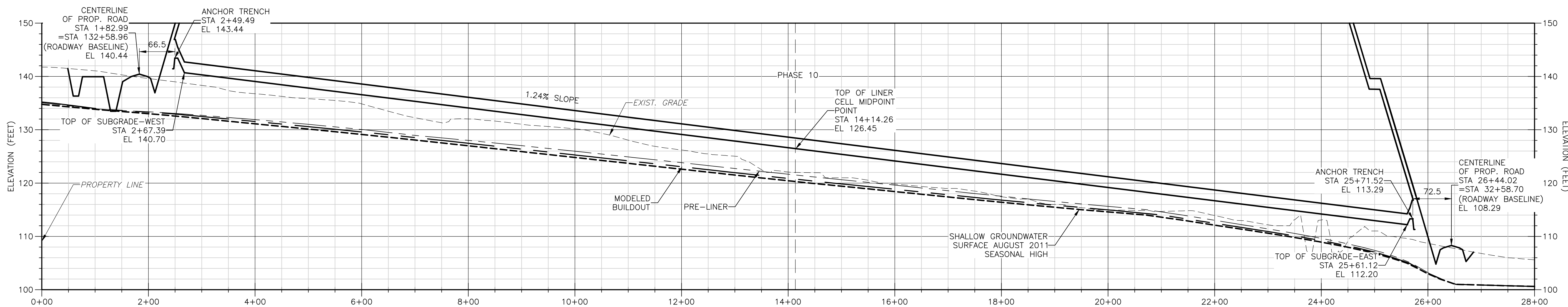
FOR PERMIT - NOT FOR CONSTRUCTION

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANBS Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

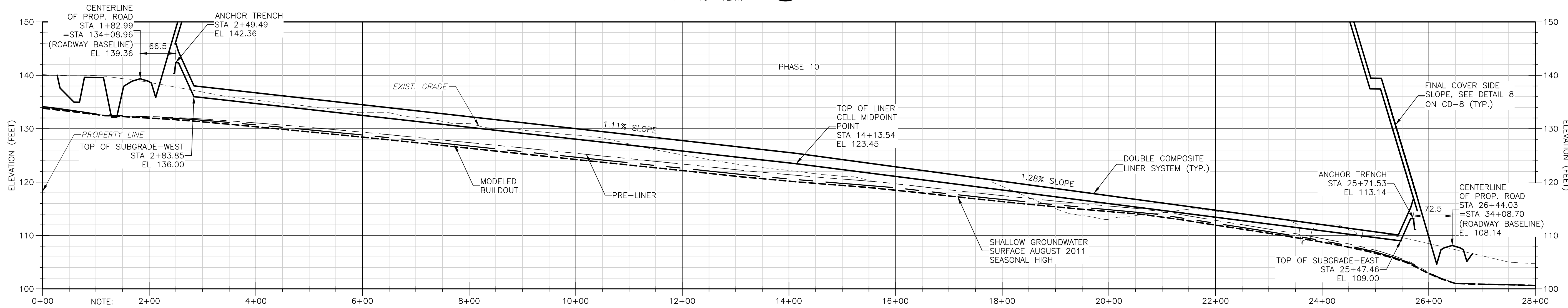
REV. NO.	DATE	DRWN	CHKD	REMARKS



SECTION 16
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4



SECTION 17
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4



SECTION 18
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4

LEGEND

- MODELED BUILDOUT
- PRE-LINER SEASONAL HIGH
- SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANB Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

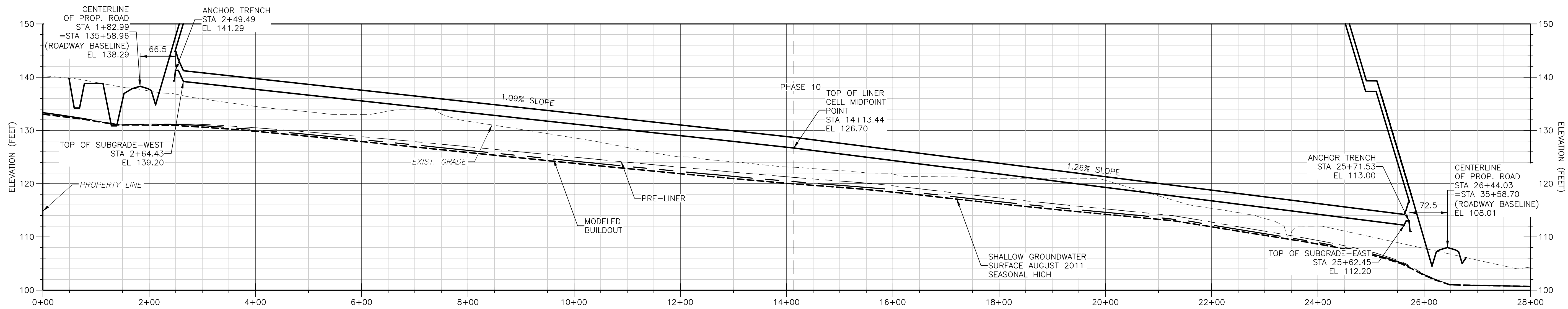
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

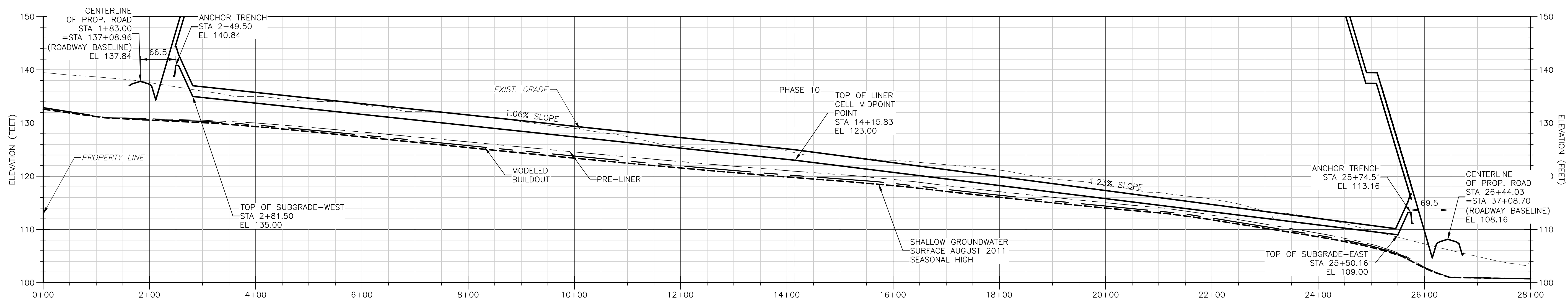


CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

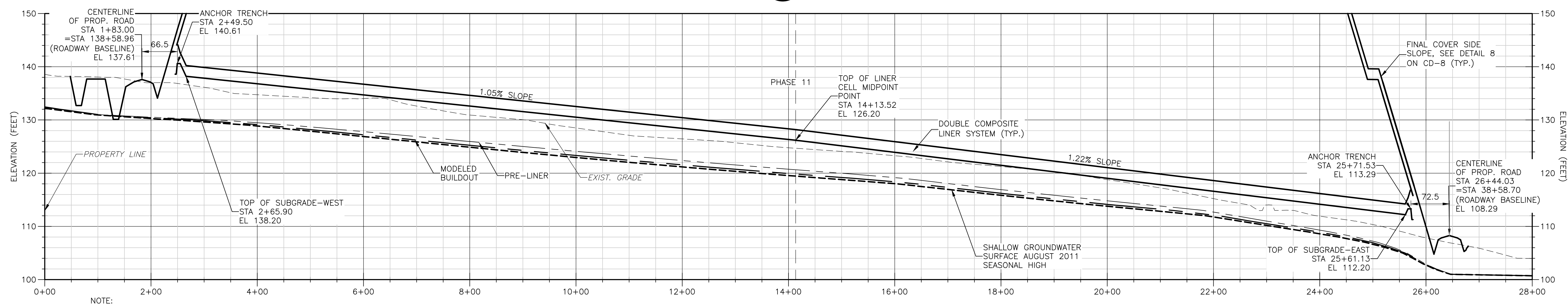
SECTIONS - PHASES 9 & 10
 JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C018SCTN.DWG
 SHEET NO.
C-18



SECTION 19
1" = 100' HORIZ. C-4



SECTION 20
1" = 10' VERT.
1" = 100' HORIZ. C-4



SECTION 21
1" = 100' HORIZ.
1" = 10' VERT. C-4

- NOTE:
1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- MODELED BUILDOUT
- - - PRE-LINER SEASONAL HIGH
- - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANB Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

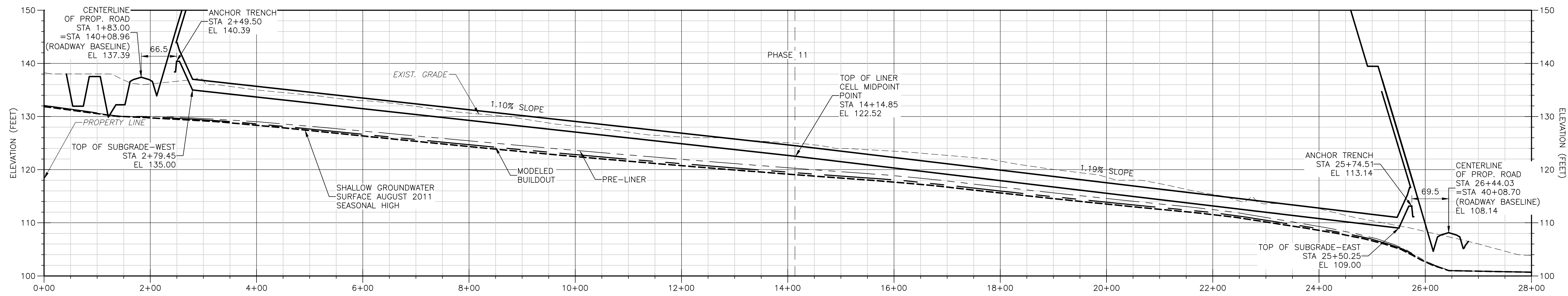
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: L. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



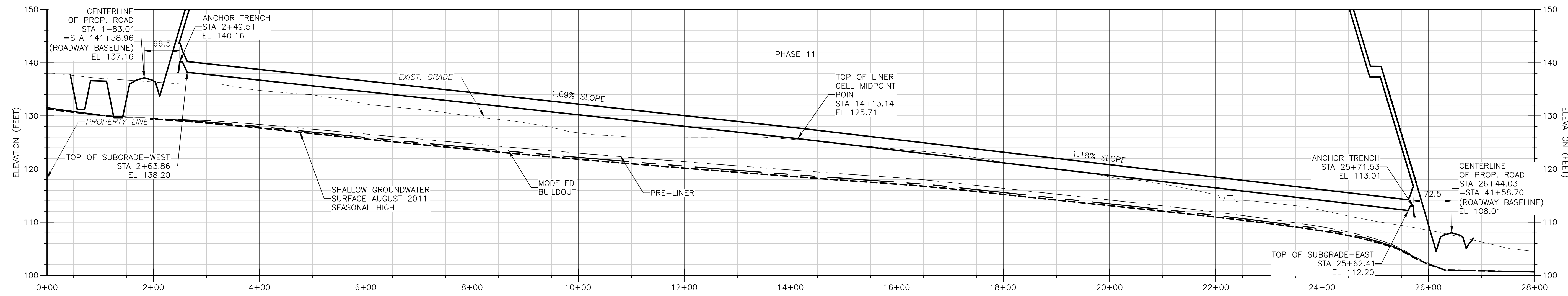
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS - PHASES 10 & 11
 SHEET NO. C-19

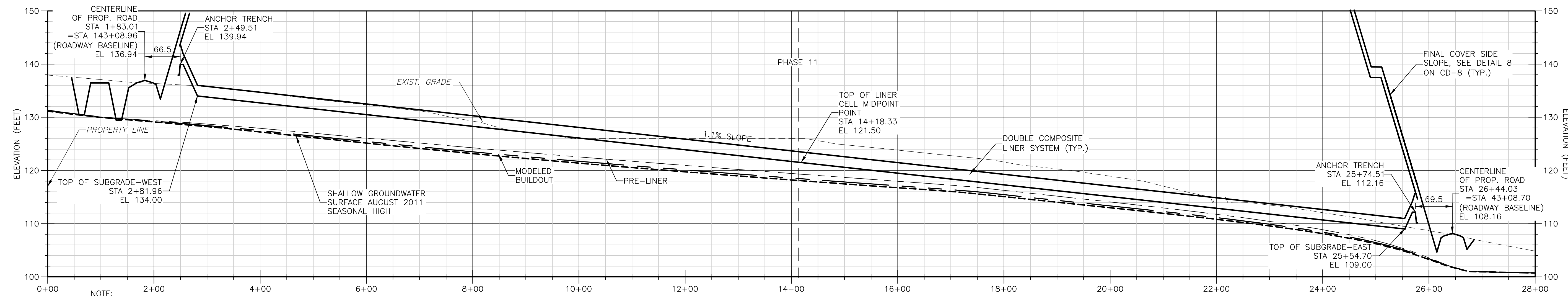
JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C019SCTN.DWG
 SHEET NO. C-19



SECTION 22
 1" = 100' HORIZ.
 1" = 10' VERT.



SECTION 23
 1" = 100' HORIZ.
 1" = 10' VERT.



SECTION 24
 1" = 100' HORIZ.
 1" = 10' VERT.

- NOTE:
1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- MODELED BUILDOUT
- - - PRE-LINER SEASONAL HIGH
- - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

JOHN G. LADNER
 P.E. NO. 037969

PROJECT NO. 9012-80695
 FILE NAME: C020SCTN.DWG

SHEET NO.

C-20

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CDA NO. ED-0000020

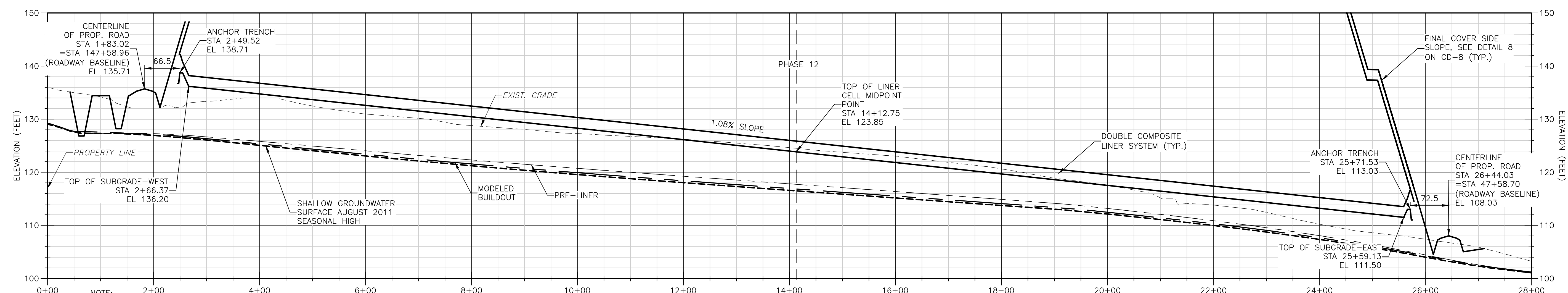
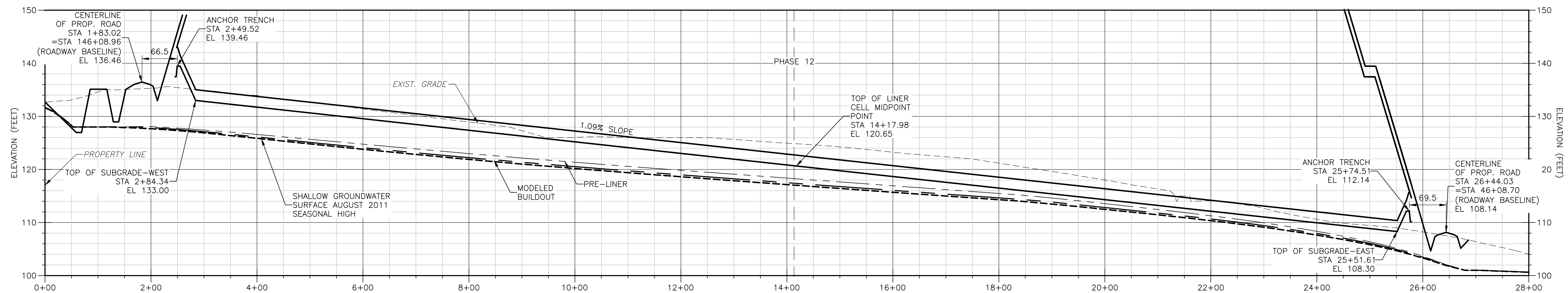
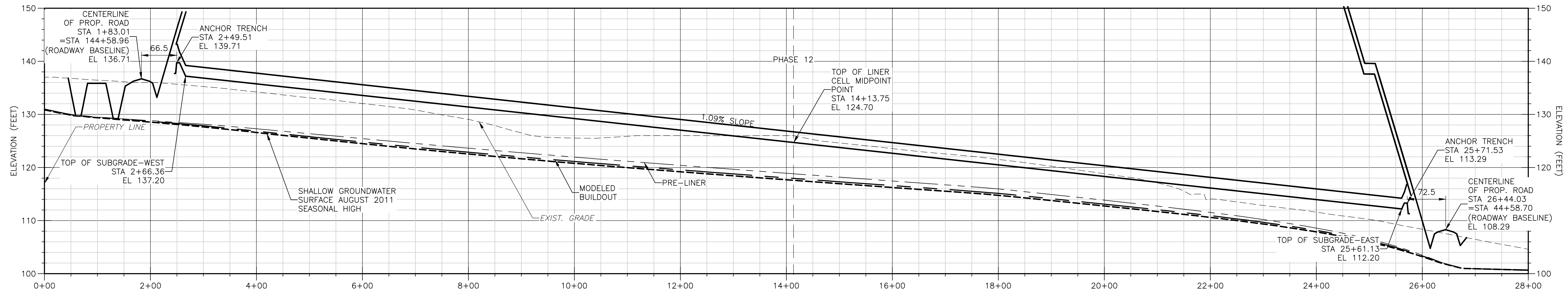
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS - PHASE 11

FOR PERMIT- NOT FOR CONSTRUCTION

Xref: [CDM_2436_C-BASE] Images: []
 Last saved by: CHAPMANBS Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS



- NOTE:
1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

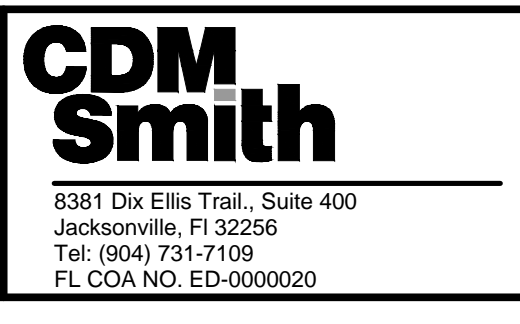
LEGEND

- MODELED BUILDOUT
- - - PRE-LINER SEASONAL HIGH
- - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANBS Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

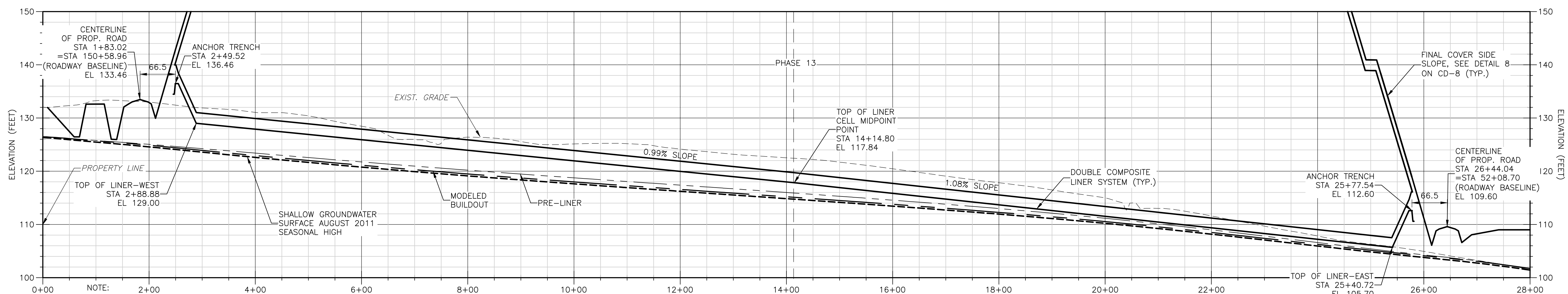
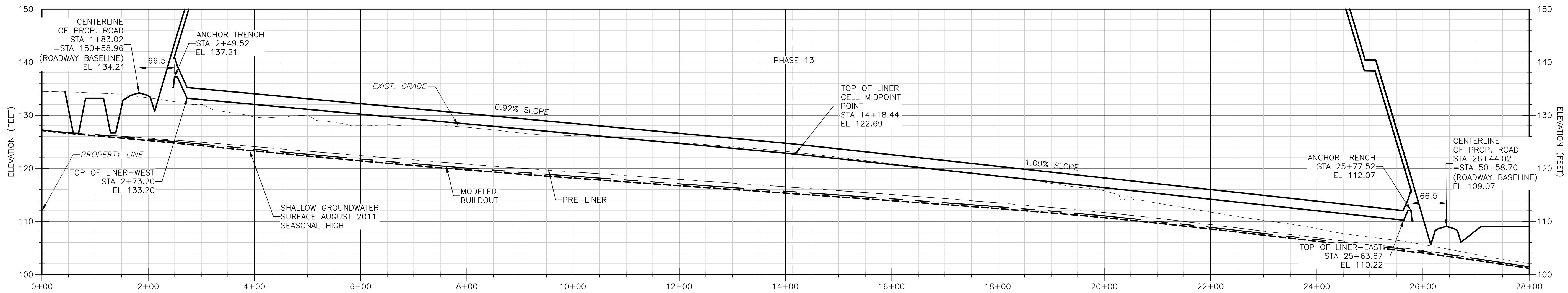
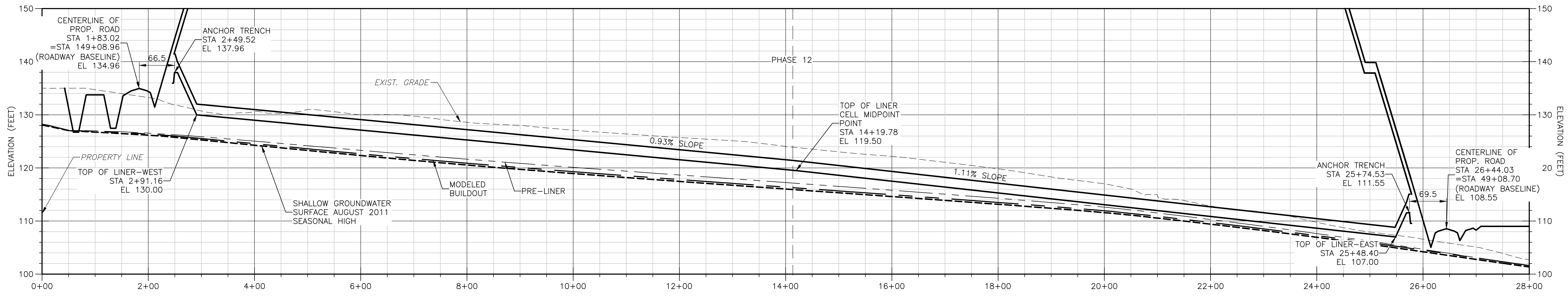
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

SECTIONS - PHASE 12
C-21

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C021SCTN.DWG
 SHEET NO.
C-21



- NOTE:
1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

— — — — —	MODELED BUILDOUT
- - - - -	PRE-LINER SEASONAL HIGH
- - - - -	SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANBS Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

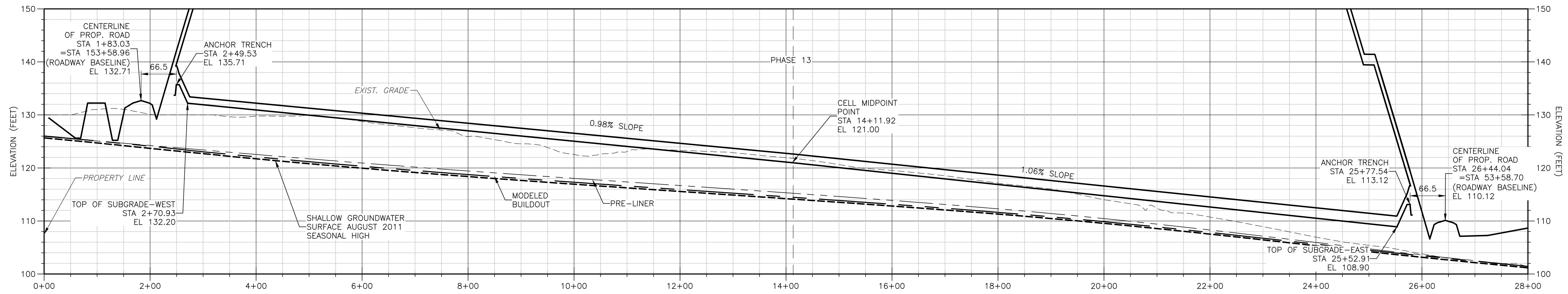
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

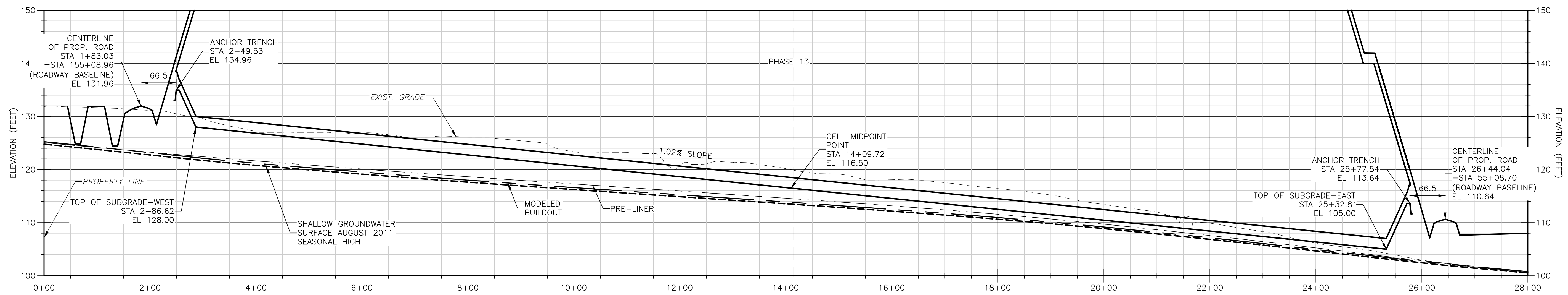


CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

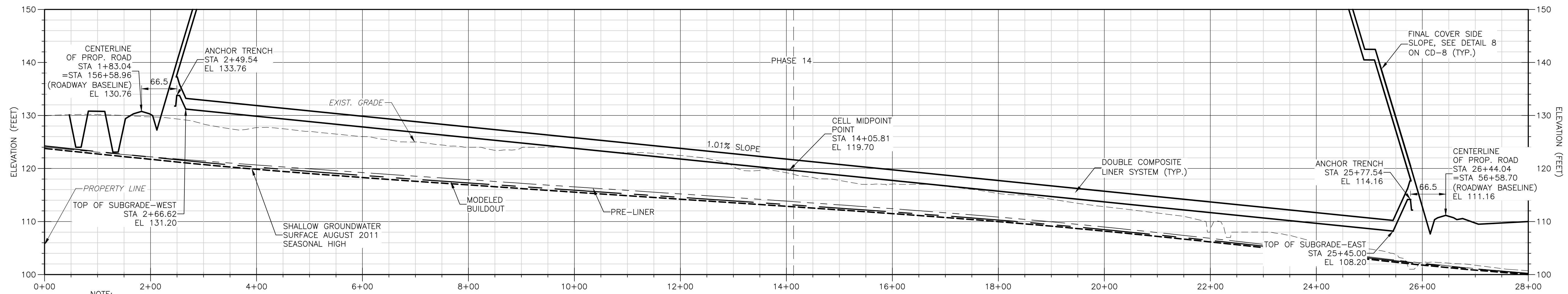
SECTIONS - PHASES 12 & 13
 JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C022SCTN.DWG
 SHEET NO.
C-22



SECTION 31
 1" = 100' HORIZ.
 1" = 10' VERT.



SECTION 32
 1" = 100' HORIZ.
 1" = 10' VERT.



SECTION 33
 1" = 100' HORIZ.
 1" = 10' VERT.

LEGEND

- MODELED BUILDOUT
- - - PRE-LINER SEASONAL HIGH
- - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

- NOTE:
1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

Xref's: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANB Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWSE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: L. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS - PHASES 13 & 14

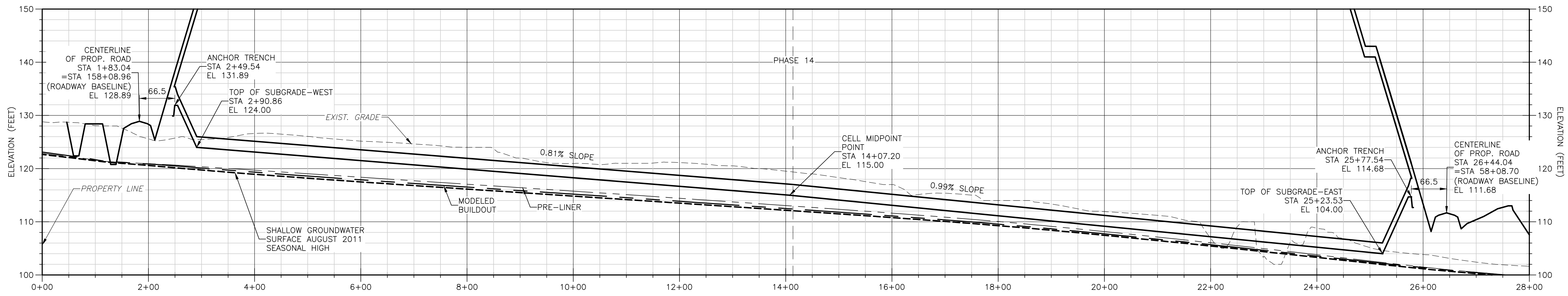
JOHN G. LADNER
 P.E. NO. 037969

PROJECT NO. 9012-80695
 FILE NAME: C023SCTN.DWG

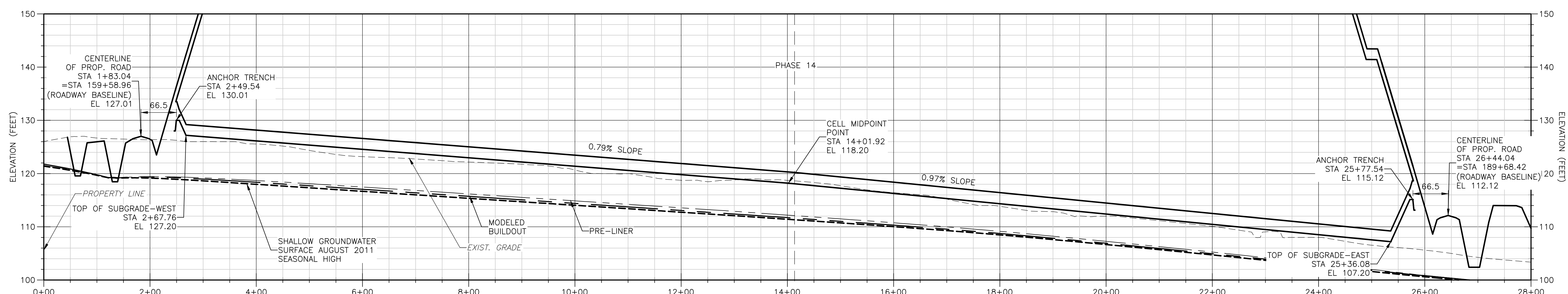
SHEET NO.

C-23

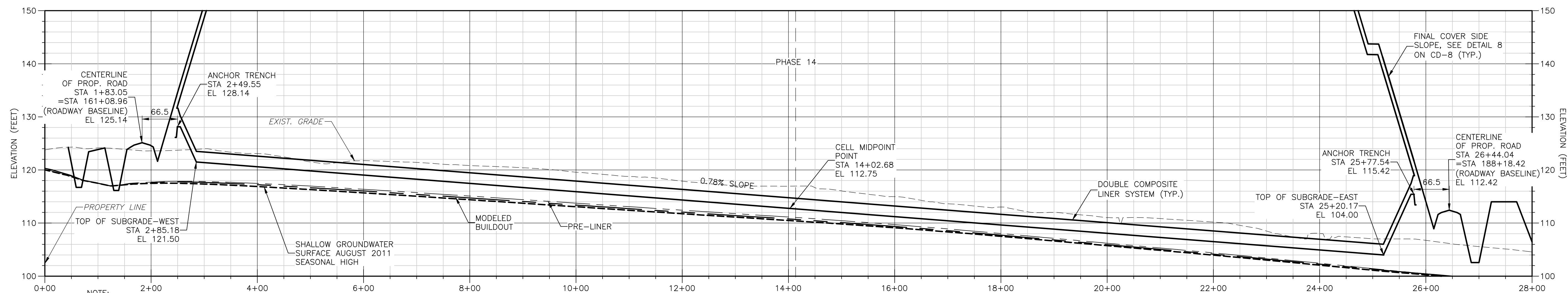
FOR PERMIT - NOT FOR CONSTRUCTION



SECTION 34
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4



SECTION 35
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4



SECTION 36
 1" = 100' HORIZ.
 1" = 10' VERT.
 C-4

- NOTE:
1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
 2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
 3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF LINER INSTALLATION.
 4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- MODELED BUILDOUT
- - - PRE-LINER SEASONAL HIGH
- - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANB Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

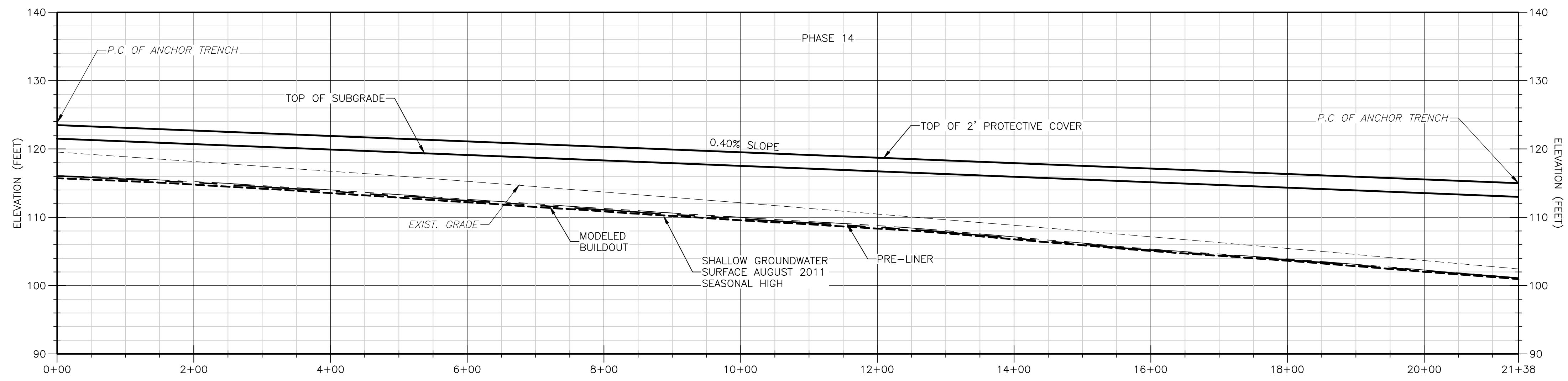
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS - PHASE 14
 SHEET NO. C-24

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C024SCTN.DWG
 SHEET NO. C-24



NORTH EDGE OF
LANDFILL - PHASE 14

SECTION **37**
1" = 100' HORIZ.
1" = 10' VERT. C-4

NOTE:

1. SHALLOW GROUNDWATER SURFACE AUGUST 2011 DENOTE SHALLOW MONITOR WELLS AND PIEZOMETER READINGS IN AUGUST 2011. THESE LEVELS REPRESENT THE 2011 SEASONAL HIGH
2. MODELED BUILDOUT ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH THE STORMWATER SYSTEM IN PLACE AND THE ENTIRE FOOTPRINT LINED. THIS IS A LONG TERM SCENARIO
3. PRE-LINER SEASONAL HIGH ELEVATIONS REPRESENT THE MODELED SHALLOW GROUNDWATER ELEVATIONS WITH A PORTION OF THE STORMWATER SYSTEM BUILT BUT NO LINER INSTALLED. THESE ARE EXPECTED TO BE REPRESENTATIVE OF THE GROUNDWATER LEVELS AT THE TIME OF INSTALLATION.
4. FOR LAYERING ON THE DOUBLE COMPOSITE LINER SYSTEM, SEE DETAIL A ON CD-1.

LEGEND

- — — — — MODELED BUILDOUT
- - - - - PRE-LINER SEASONAL HIGH
- - - - - SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

Xref: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANB Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, BESSER & MAKE ALL RIGHTS RESERVED. THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

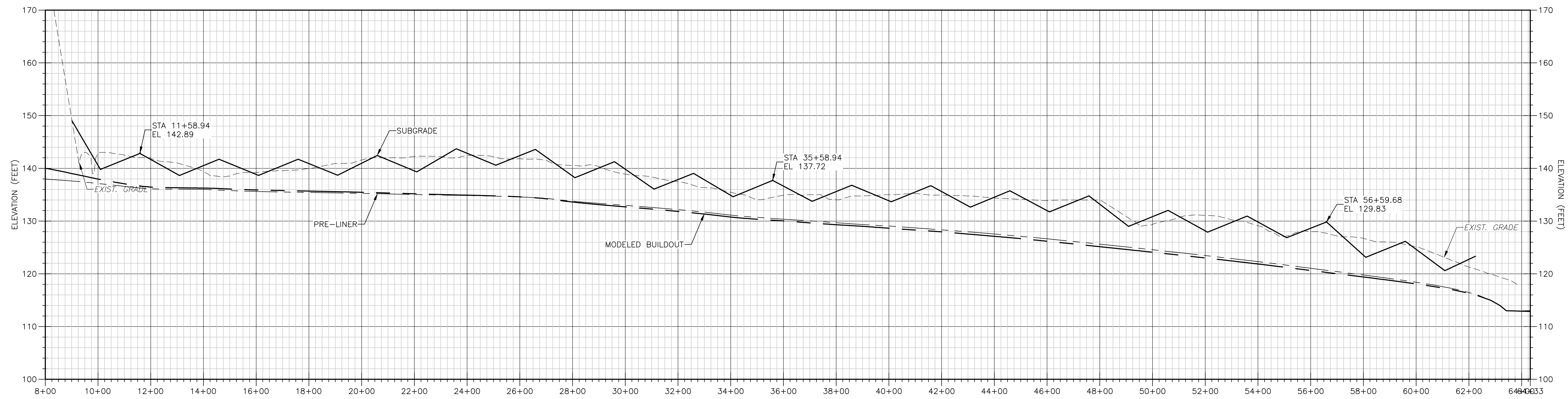


CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

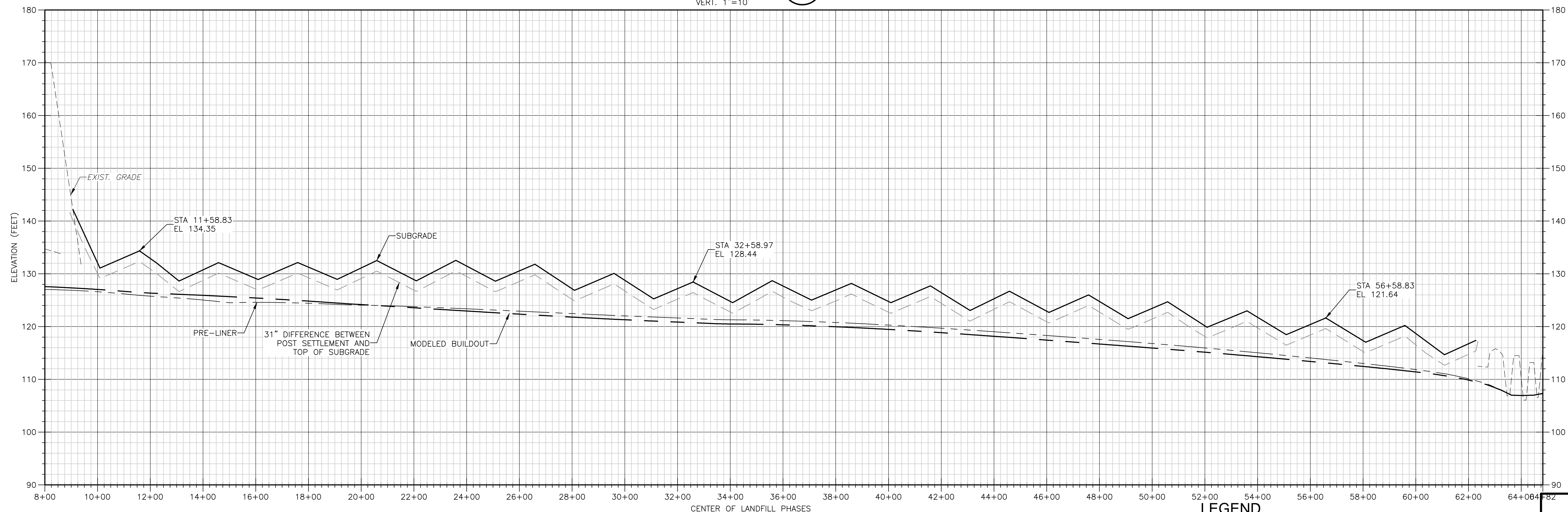
SECTIONS - PHASE 14
 SHEET NO. C-25

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C025SCTN.DWG
 SHEET NO. C-25

©2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.



WEST SIDE OF LANDFILL PHASES
SECTION 1
 HORZ. 1"=200'
 VERT. 1"=10'



CENTER OF LANDFILL PHASES
SECTION 2
 HORZ. 1"=200'
 VERT. 1"=10'

LEGEND

	MODELED BUILDOUT
	PRE-LINER SEASONAL HIGH
	SHALLOW GROUNDWATER SURFACE 8/2011 SEASONAL HIGH

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

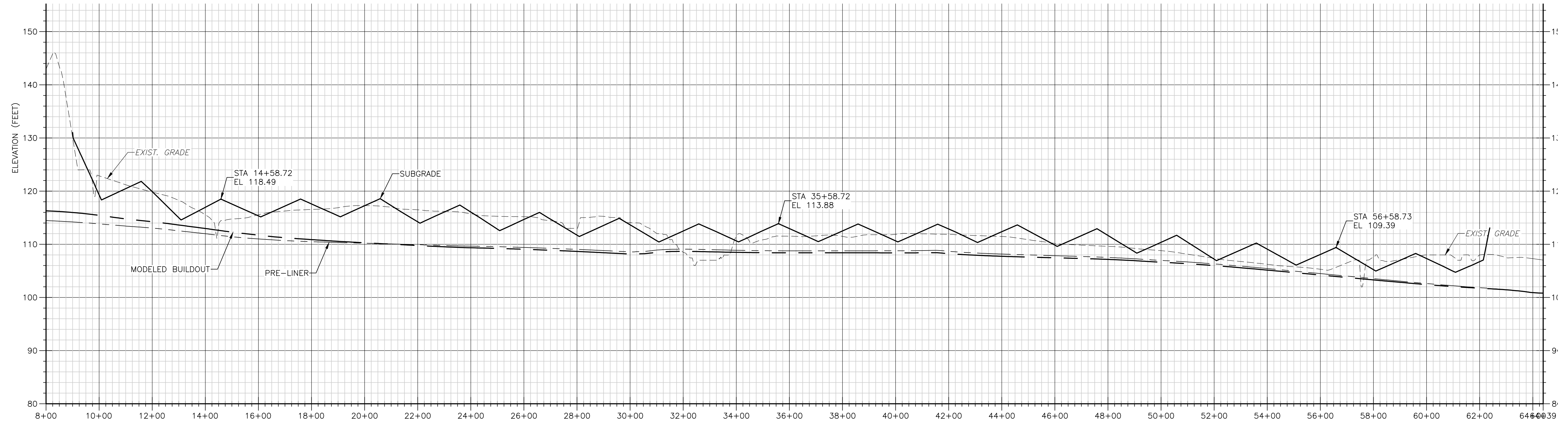
CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

**PROPOSED BUILDOUT
 NORTH / SOUTH SECTIONS**

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C029PBSC
 SHEET NO.
C-29

©2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.



EAST SIDE OF LANDFILL PHASES
SECTION 3
 HORZ. 1"=200'
 VERT. 1"=10'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

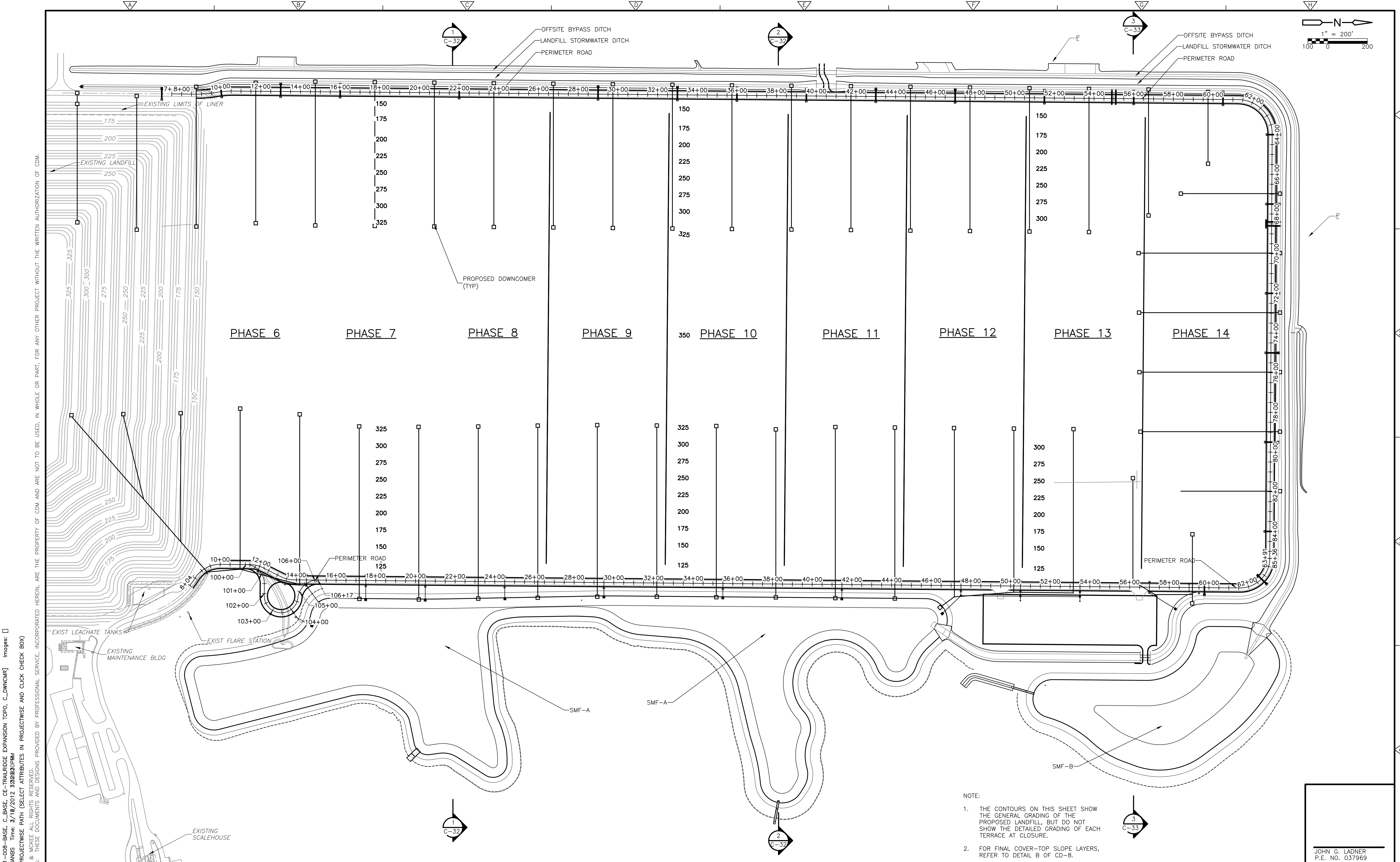


CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PROPOSED BUILDOUT
 NORTH / SOUTH SECTIONS

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C030PBSC
 SHEET NO.
C-30

FOR PERMIT- NOT FOR CONSTRUCTION



Xref: [CDM_2436_11-008-BASE_C-BASE_CE-TRAILRIDGE_EXPANSION_TOPO_C_DWG(CMR) Images: []
 Last saved by: CHAPMANB Time: 3/18/2012 3:32:32PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, DRESSER & MAKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

- NOTE:
- THE CONTOURS ON THIS SHEET SHOW THE GENERAL GRADING OF THE PROPOSED LANDFILL, BUT DO NOT SHOW THE DETAILED GRADING OF EACH TERRACE AT CLOSURE.
 - FOR FINAL COVER-TOP SLOPE LAYERS, REFER TO DETAIL B OF CD-8.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

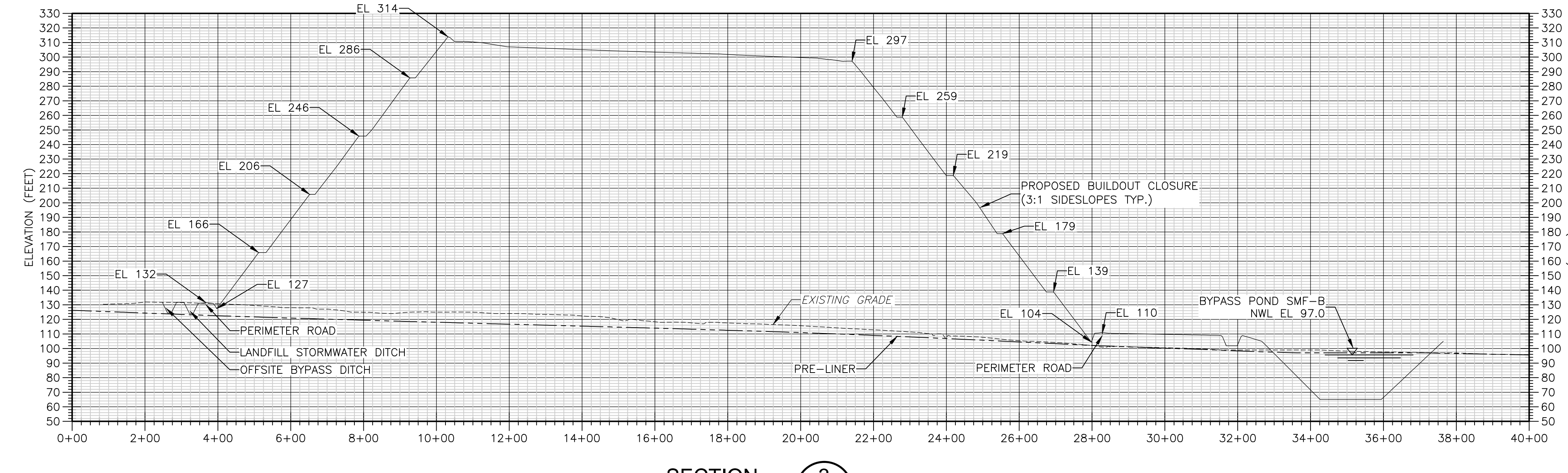
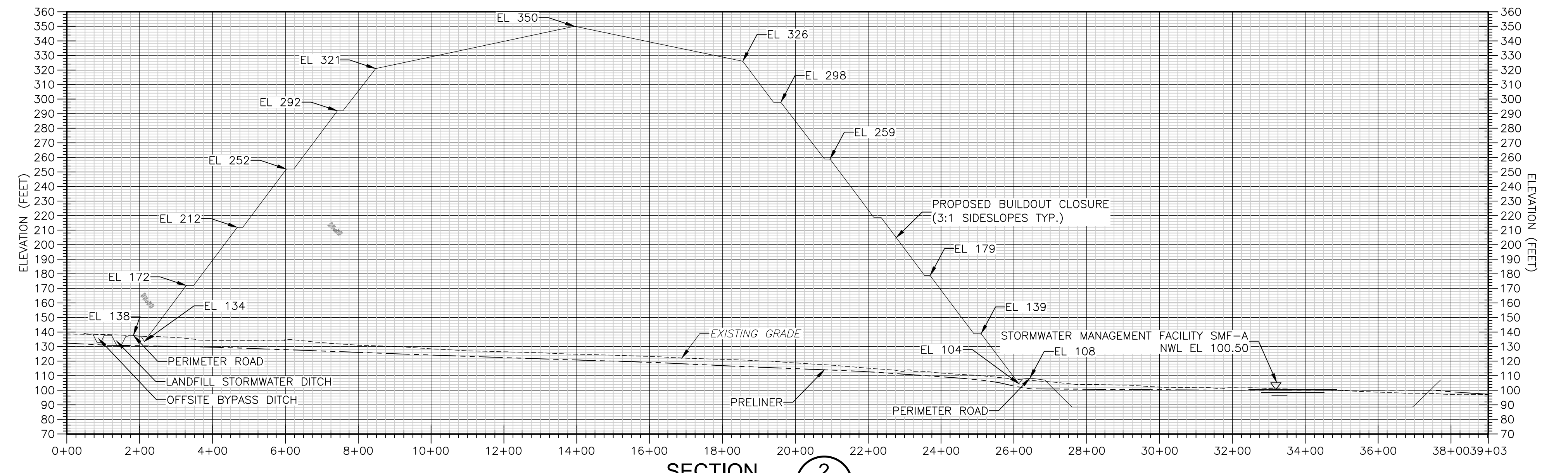
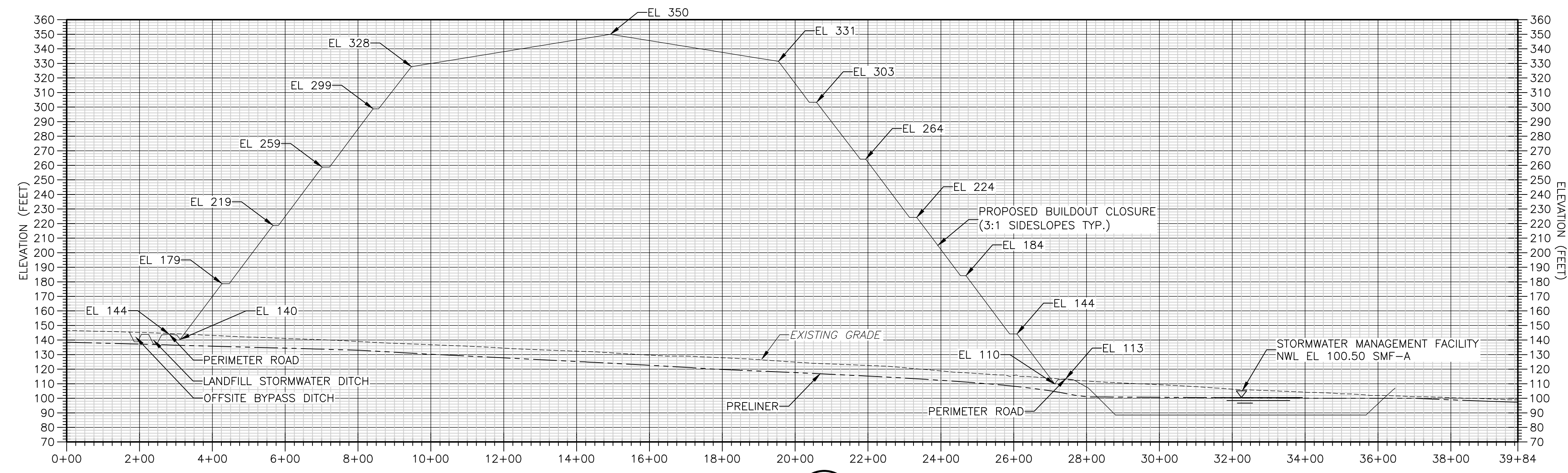
CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CDA NO. ED-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

PROPOSED SITE GRADING
BUILDOUT CLOSURE PLAN

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C031STPL
 SHEET NO.
C-31

Xref: [CDM_2436_11-008-BASE_CE-TRAILRIDGE EXPANSION TOPO_C_BASE] Images: []
 Last saved by: CHAPMANB Time: 3/29/2012 4:28:03PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CAMP, DRESSER, & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.



SMF-B POND	
TOP OF BANK	105.0
100 YR 24 HR	103.52
25 YR 24 HR	102.33

SMF-A POND	
TOP OF BANK	107.0
100 YR 24 HR	105.95
25 YR 24 HR	104.86

REV. NO.	DATE	DRWN	CHKD	REMARKS

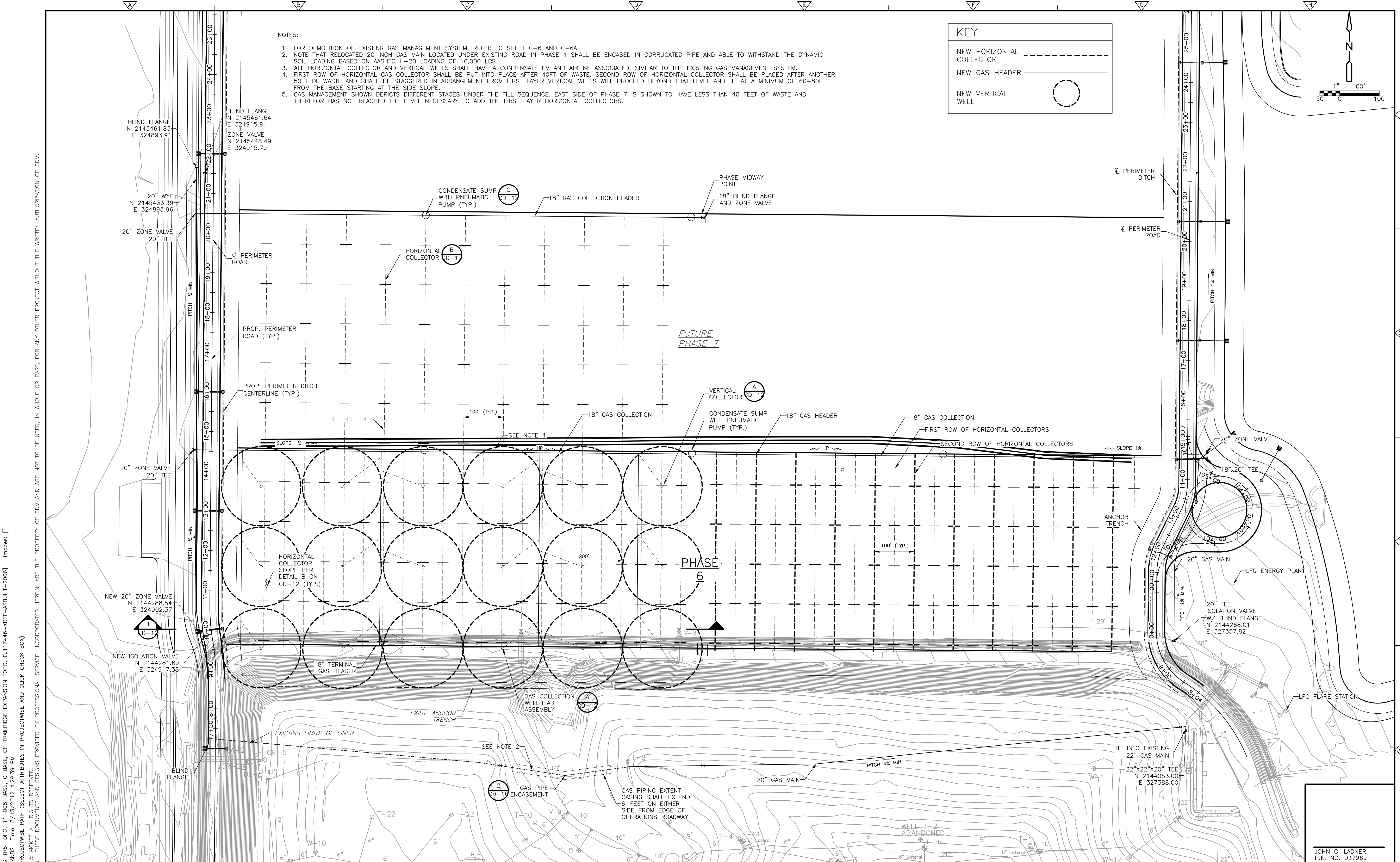
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: A. MULLA SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



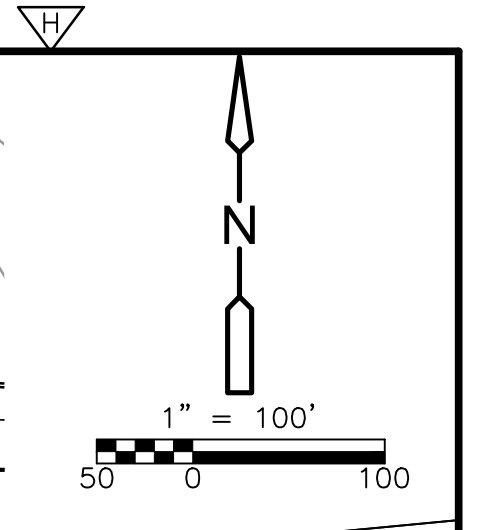
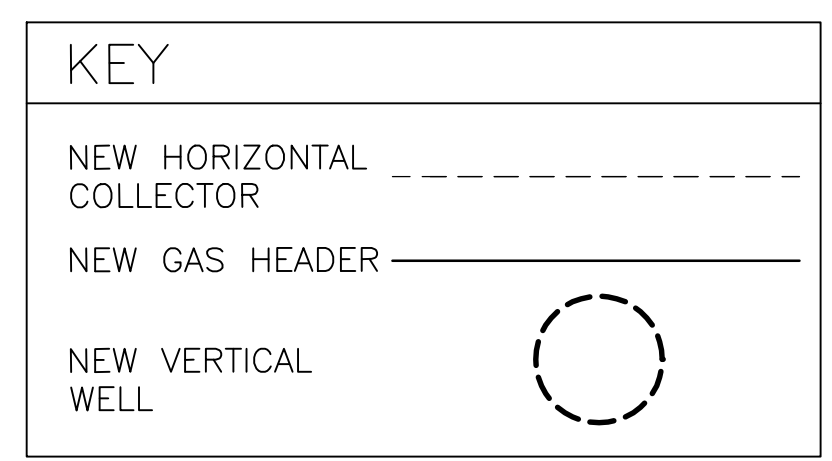
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PROPOSED BUILDOUT CLOSURE
 SECTIONS
 SHEET NO.
C-32

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C032PBSC
 SHEET NO.
C-32



- NOTES:
1. FOR DEMOLITION OF EXISTING GAS MANAGEMENT SYSTEM, REFER TO SHEET C-6 AND C-6A.
 2. NOTE THAT RELOCATED 20 INCH GAS MAIN LOCATED UNDER EXISTING ROAD IN PHASE 1 SHALL BE ENCASED IN CORRUGATED PIPE AND ABLE TO WITHSTAND THE DYNAMIC SOIL LOADING BASED ON AASHTO H-20 LOADING OF 16,000 LBS.
 3. ALL HORIZONTAL COLLECTOR AND VERTICAL WELLS SHALL HAVE A CONDENSATE FM AND AIRLINE ASSOCIATED, SIMILAR TO THE EXISTING GAS MANAGEMENT SYSTEM.
 4. FIRST ROW OF HORIZONTAL GAS COLLECTOR SHALL BE PUT INTO PLACE AFTER 40FT OF WASTE. SECOND ROW OF HORIZONTAL COLLECTOR SHALL BE PLACED AFTER ANOTHER SOFT OF WASTE AND SHALL BE STAGGERED IN ARRANGEMENT FROM FIRST LAYER VERTICAL WELLS WILL PROCEED BEYOND THAT LEVEL AND BE AT A MINIMUM OF 60-80FT FROM THE BASE STARTING AT THE SIDE SLOPE.
 5. GAS MANAGEMENT SHOWN DEPICTS DIFFERENT STAGES UNDER THE FILL SEQUENCE. EAST SIDE OF PHASE 7 IS SHOWN TO HAVE LESS THAN 40 FEET OF WASTE AND THEREFOR HAS NOT REACHED THE LEVEL NECESSARY TO ADD THE FIRST LAYER HORIZONTAL COLLECTORS.



Xref's: [CDM_2436_EG_IRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE EXPANSION TOPO_EJ117446-XREF-ASBUILT-2006] Images: []
 Last saved by: CHAPMANB Time: 3/13/2012 4:29:39 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

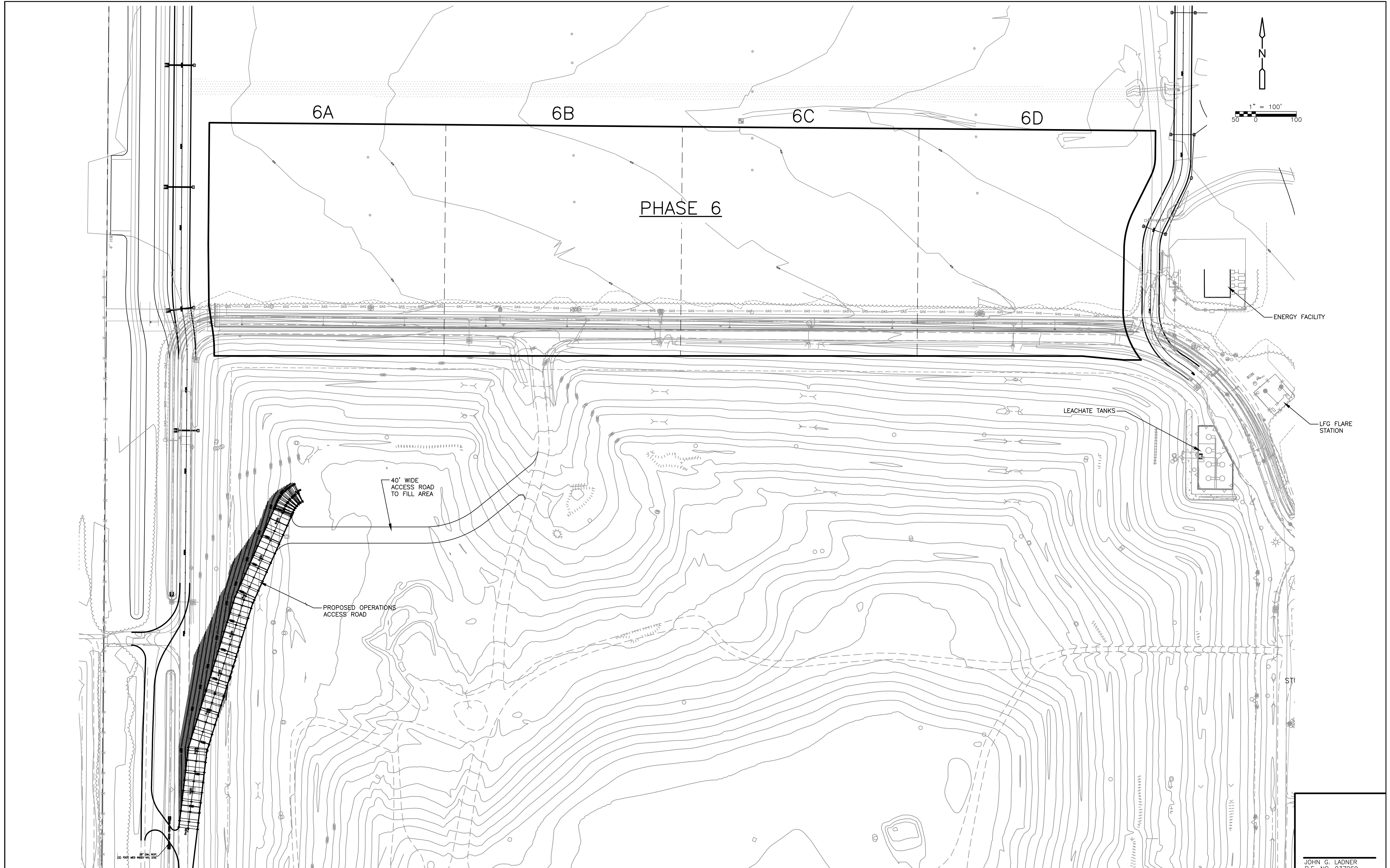
CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CQA NO. ED-0000020

CITY OF JACKSONVILLE
**TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION**

GAS MANAGEMENT SYSTEM

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C034STPL
 SHEET NO.
C-34

FOR PERMIT- NOT FOR CONSTRUCTION



REV. NO.	DATE	DRWN	CHKD	REMARKS

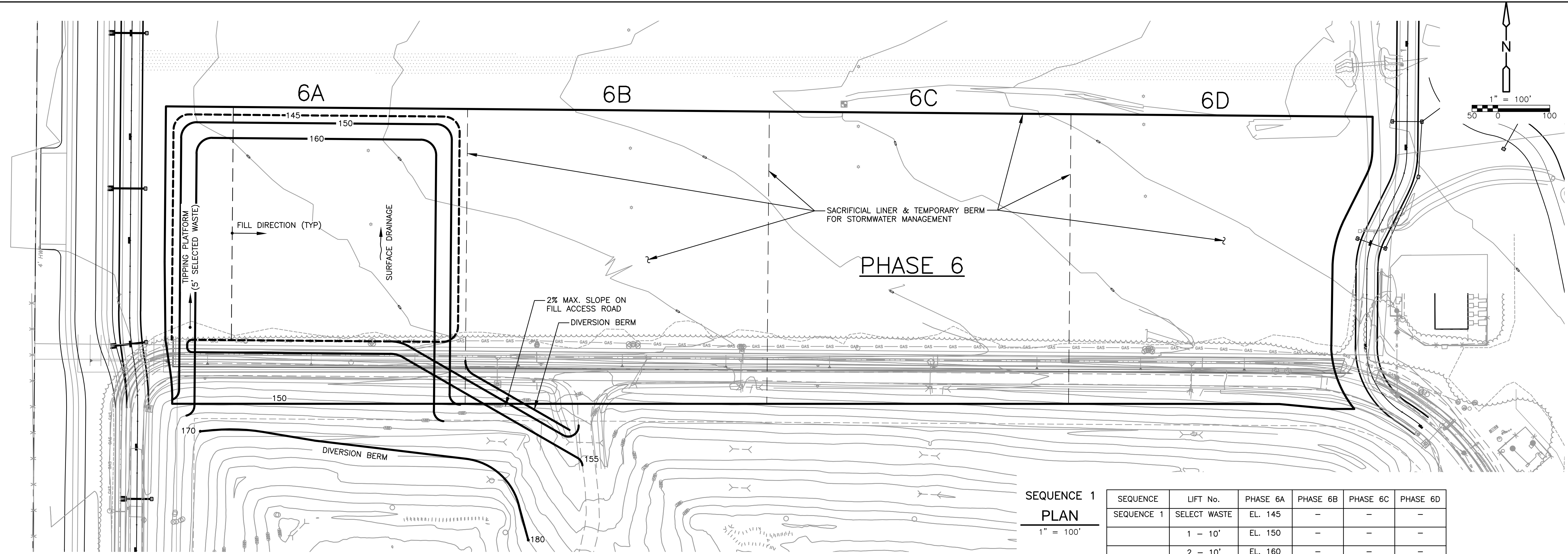
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: NOVEMBER 2013

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

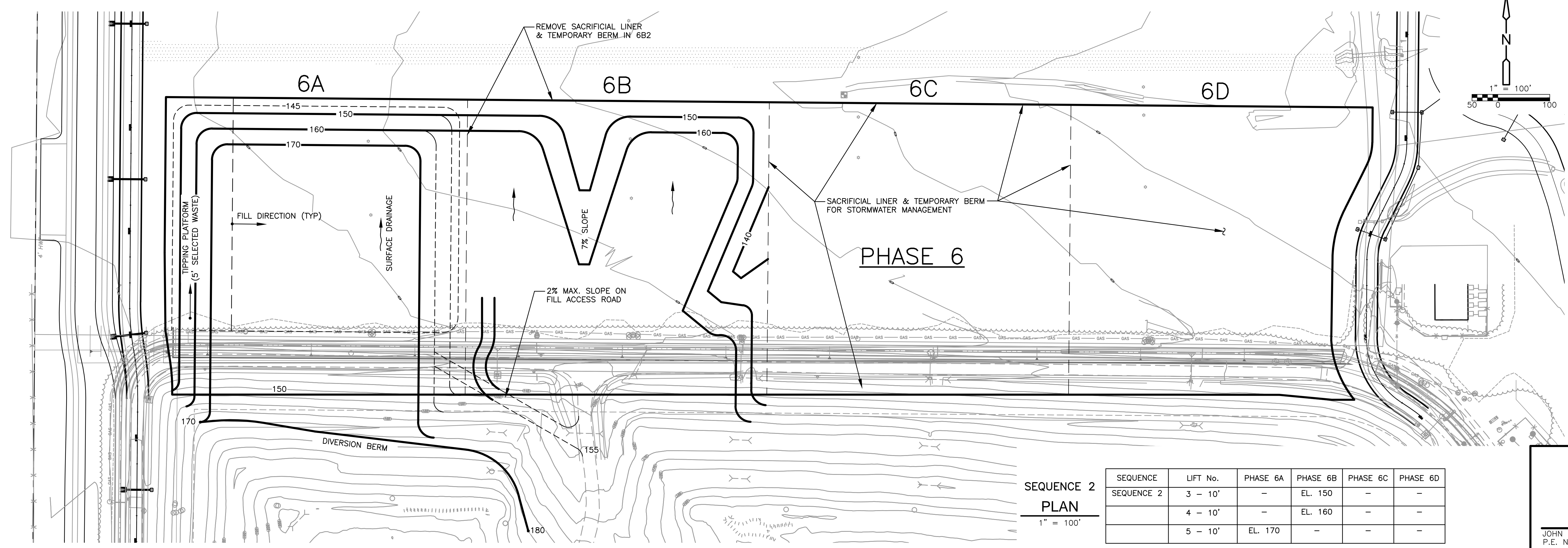
PROPOSED OPERATIONS ACCESS ROAD
 PHASE 6

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C035PWFS
 SHEET NO.
C-35



SEQUENCE 1
PLAN
1" = 100'

SEQUENCE	LIFT No.	PHASE 6A	PHASE 6B	PHASE 6C	PHASE 6D
SEQUENCE 1	SELECT WASTE	EL. 145	-	-	-
	1 - 10'	EL. 150	-	-	-
	2 - 10'	EL. 160	-	-	-



SEQUENCE 2
PLAN
1" = 100'

SEQUENCE	LIFT No.	PHASE 6A	PHASE 6B	PHASE 6C	PHASE 6D
SEQUENCE 2	3 - 10'	-	EL. 150	-	-
	4 - 10'	-	EL. 160	-	-
	5 - 10'	EL. 170	-	-	-

REV. NO.	DATE	DRWN	CHKD	REMARKS

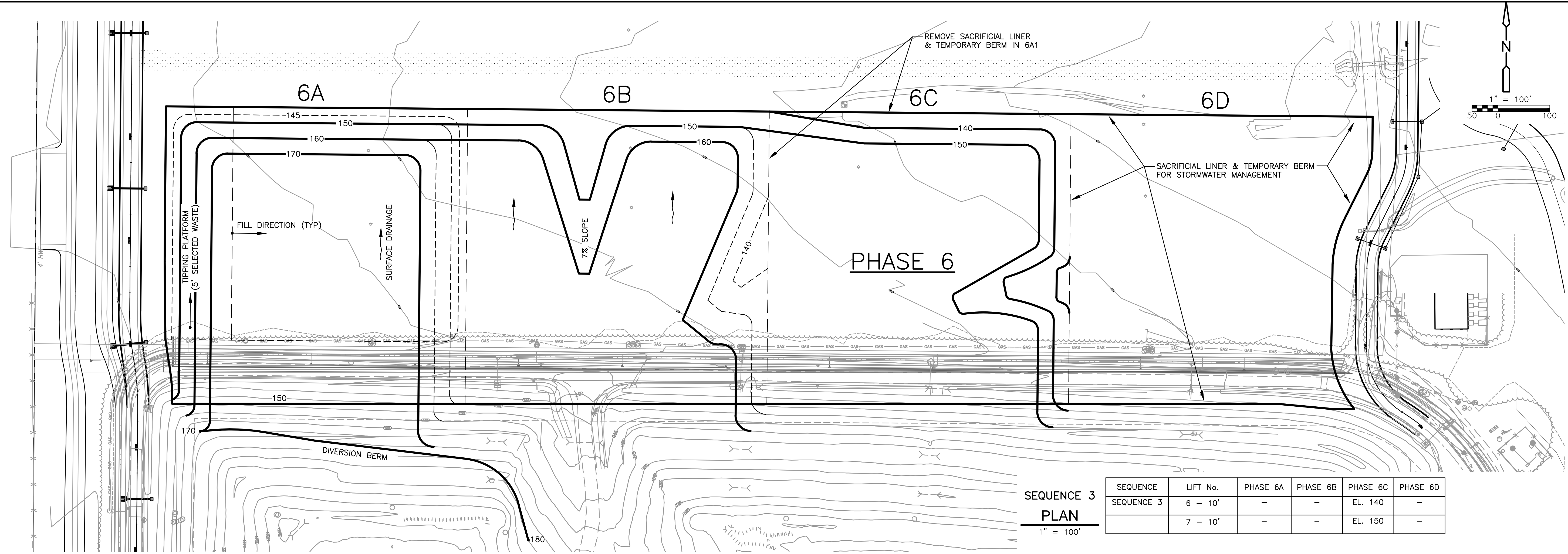
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: NOVEMBER 2013

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

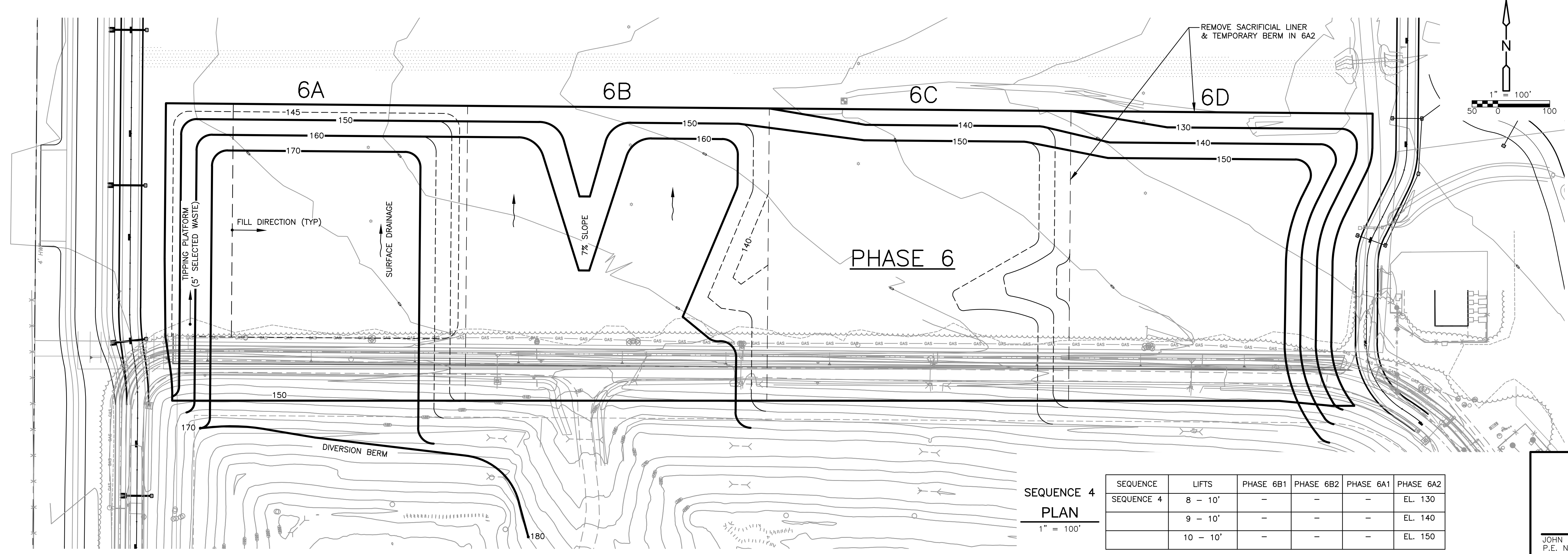
PROPOSED WASTE FILL SEQUENCE
 PHASE 6

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C035PWFS
 SHEET NO.
C-36



SEQUENCE 3
PLAN
1" = 100'

SEQUENCE	LIFT No.	PHASE 6A	PHASE 6B	PHASE 6C	PHASE 6D
SEQUENCE 3	6 - 10'	-	-	EL. 140	-
	7 - 10'	-	-	EL. 150	-



SEQUENCE 4
PLAN
1" = 100'

SEQUENCE	LIFTS	PHASE 6B1	PHASE 6B2	PHASE 6A1	PHASE 6A2
SEQUENCE 4	8 - 10'	-	-	-	EL. 130
	9 - 10'	-	-	-	EL. 140
	10 - 10'	-	-	-	EL. 150

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: NOVEMBER 2013

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-0000020

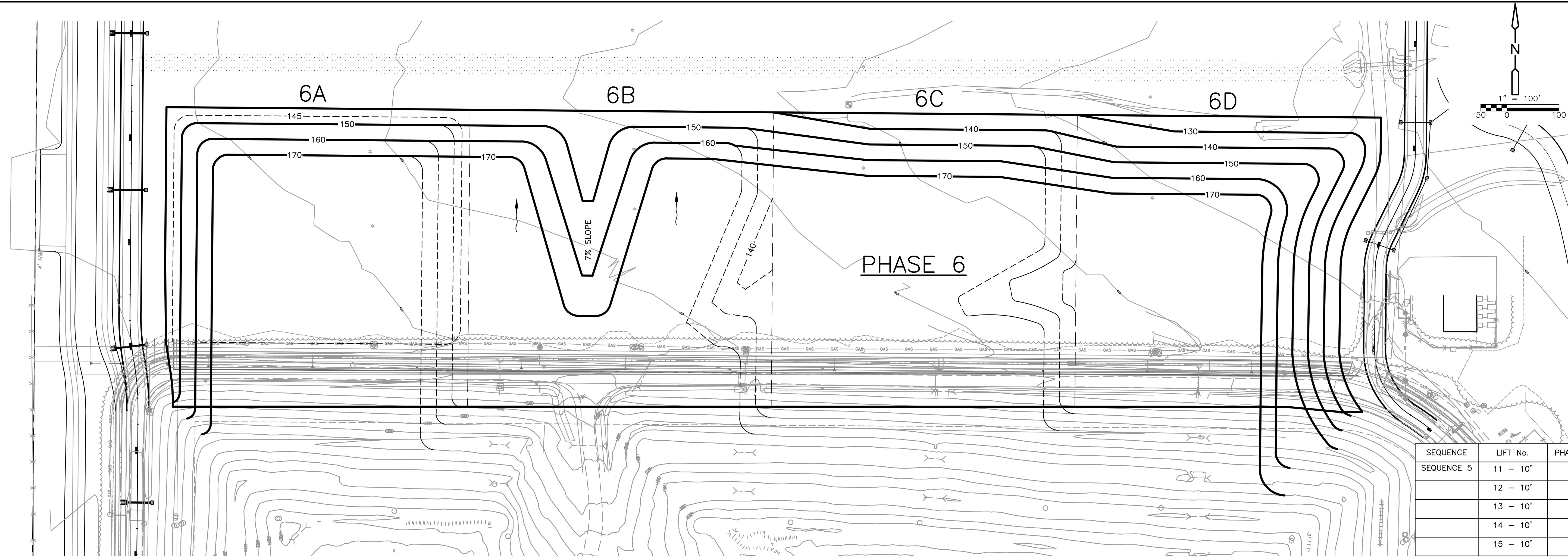
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PROPOSED WASTE FILL SEQUENCE
 PHASE 6

JOHN G. LADNER
 P.E. NO. 037969

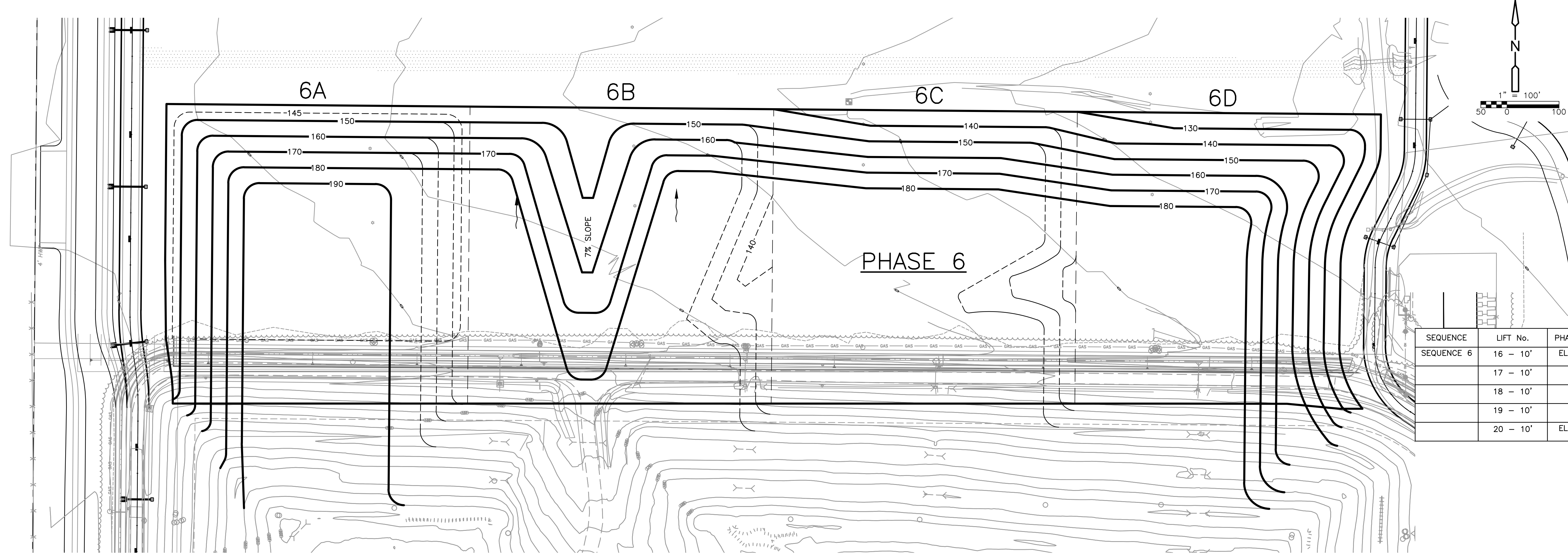
PROJECT NO. 9012-80695
 FILE NAME: C035PWFS

SHEET NO.
C-37



SEQUENCE 5
PLAN
1" = 100'

SEQUENCE	LIFT No.	PHASE 6A	PHASE 6B	PHASE 6C	PHASE 6D
SEQUENCE 5	11 - 10'	-	-	EL. 160	-
	12 - 10'	-	-	-	EL. 160
	13 - 10'	-	EL. 170	-	-
	14 - 10'	-	-	EL. 170	-
	15 - 10'	-	-	-	EL. 170



SEQUENCE 6
PLAN
1" = 100'

SEQUENCE	LIFT No.	PHASE 6A	PHASE 6B	PHASE 6C	PHASE 6D
SEQUENCE 6	16 - 10'	EL. 180	-	-	-
	17 - 10'	-	EL. 180	-	-
	18 - 10'	-	-	EL. 180	-
	19 - 10'	-	-	-	EL. 180
	20 - 10'	EL. 190	-	-	-

REV. NO.	DATE	DRWN	CHKD	REMARKS

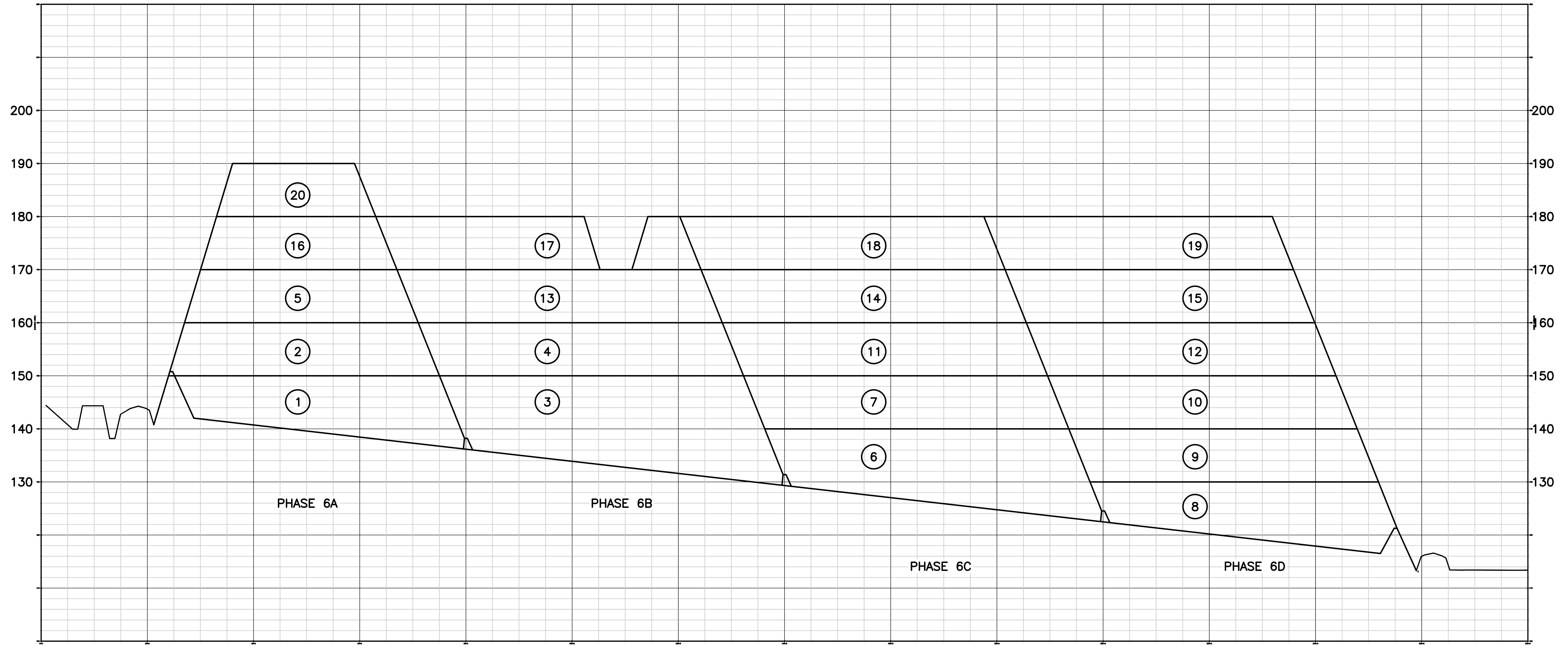
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: NOVEMBER 2013

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PROPOSED WASTE FILL SEQUENCE
 PHASE 6

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C035PWFS
 SHEET NO.
C-38



SECTION **4**
 1" = 100' HORIZ. C-4
 1" = 10' VERT. LINER WEST TO LINER
 EAST IS 2234± FEET

LEGEND
8 LIFT SEQUENCE NUMBER

REV. NO.	DATE	DRWN	CHKD	REMARKS

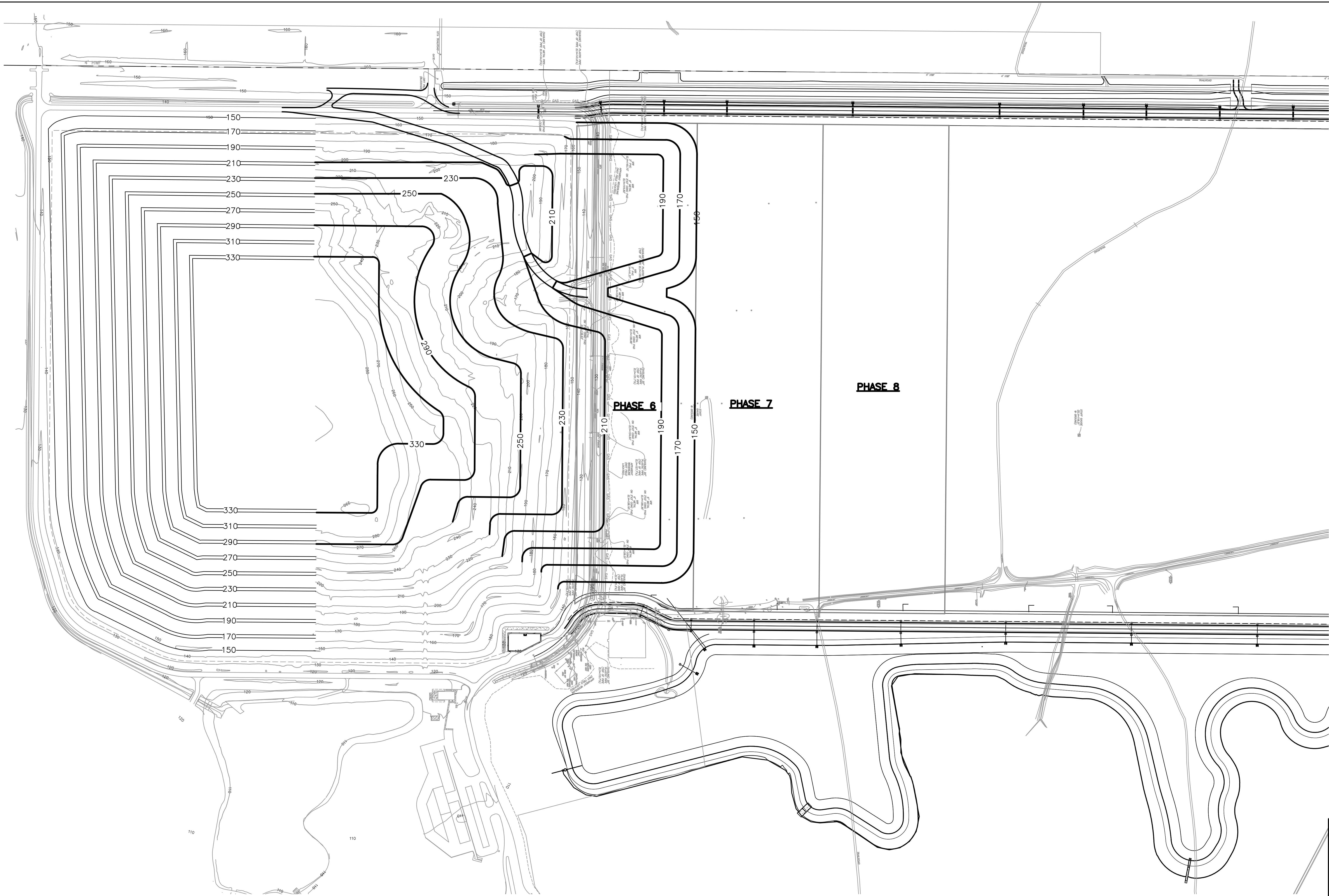
DESIGNED BY: S. NEHRKE
 DRAWN BY: C. SCOTT
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: J. LADNER
 APPROVED BY: M. WHITE
 DATE: NOVEMBER 2013

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SEQUENCES

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: C012SCTN.DWG
 SHEET NO.
C-39



REV. NO.	DATE	DRWN	CHKD	REMARKS

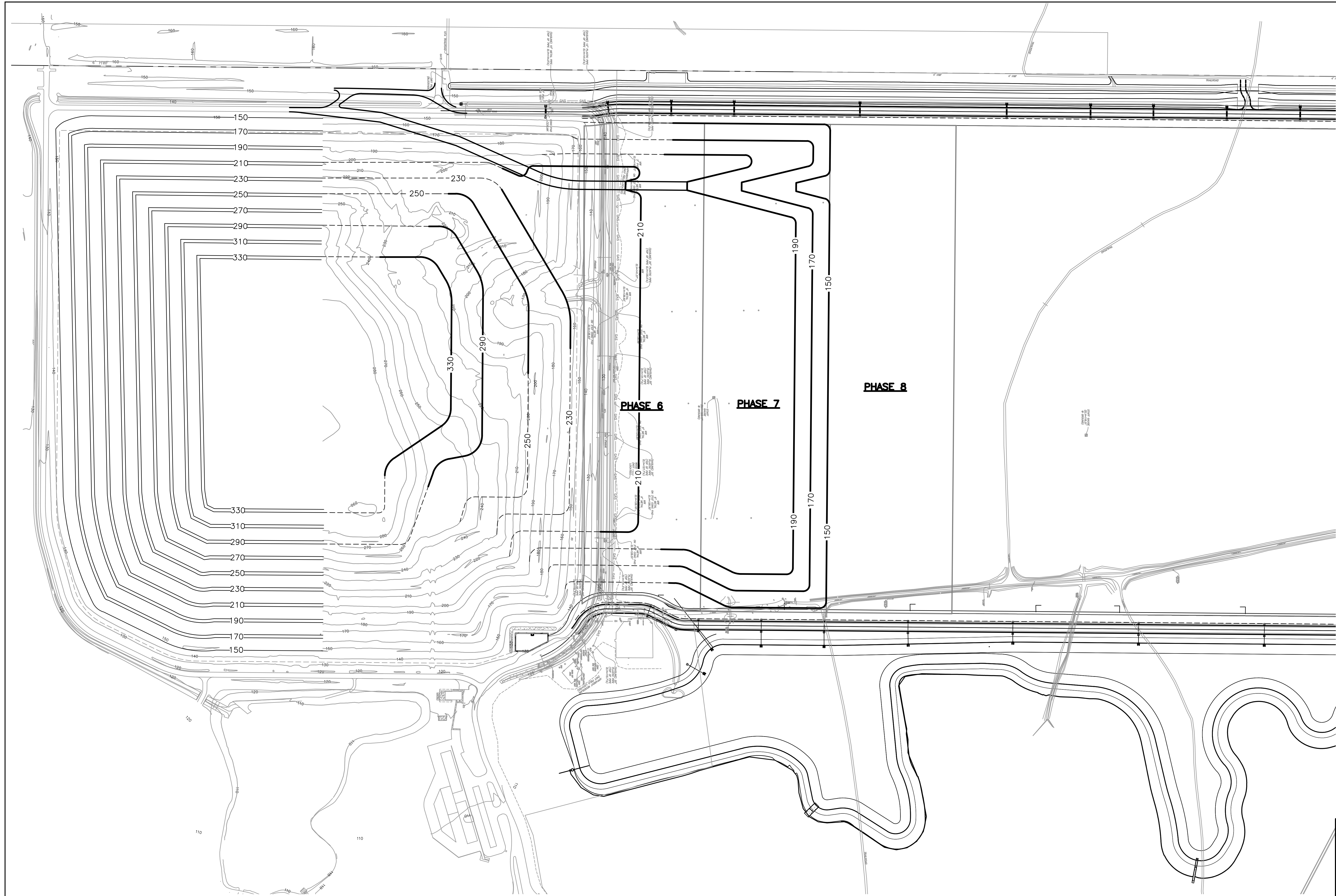
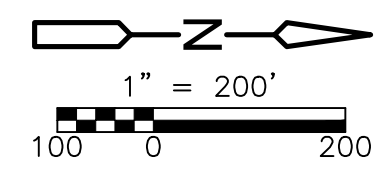
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: NOVEMBER 2013

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PROPOSED WASTE FILL SEQUENCE
 PHASES 1-6

JOHN G. LADNER P.E. NO. 037969
PROJECT NO. 9012-80695
FILE NAME:
SHEET NO.
C-40



REV. NO.	DATE	DRWN	CHKD	REMARKS

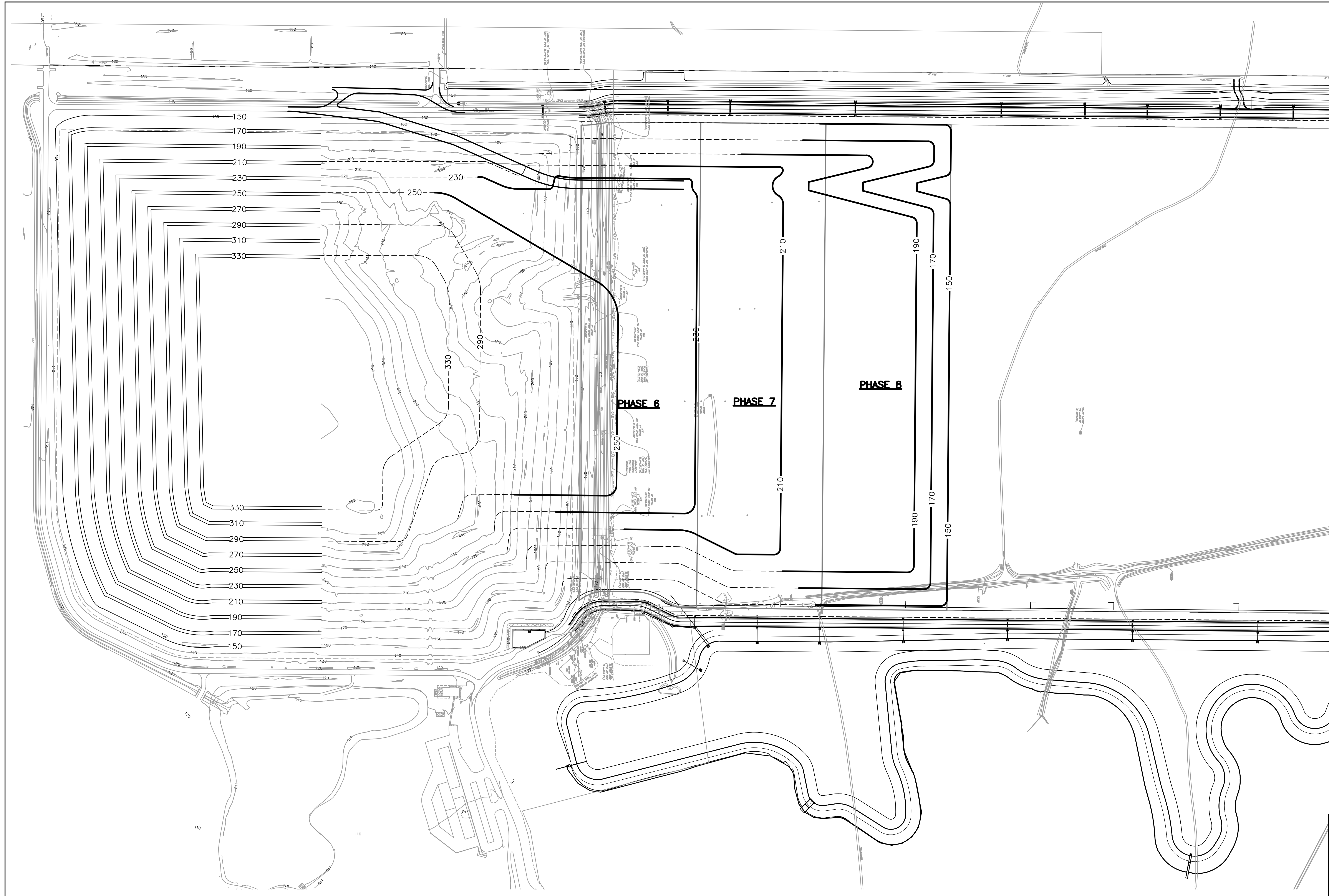
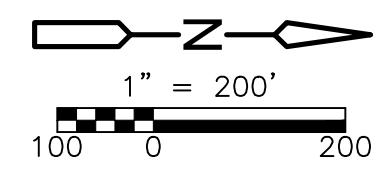
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: NOVEMBER 2013

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PROPOSED WASTE FILL SEQUENCE
 PHASES 7

JOHN G. LADNER P.E. NO. 037969
PROJECT NO. 9012-80695 FILE NAME:
SHEET NO. C-41



REV. NO.	DATE	DRWN	CHKD	REMARKS

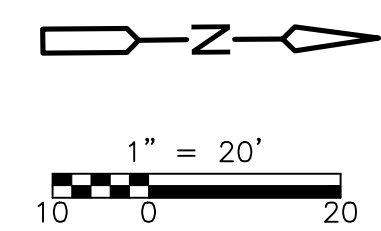
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. SALEH
 APPROVED BY: J. LADNER
 DATE: NOVEMBER 2013

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

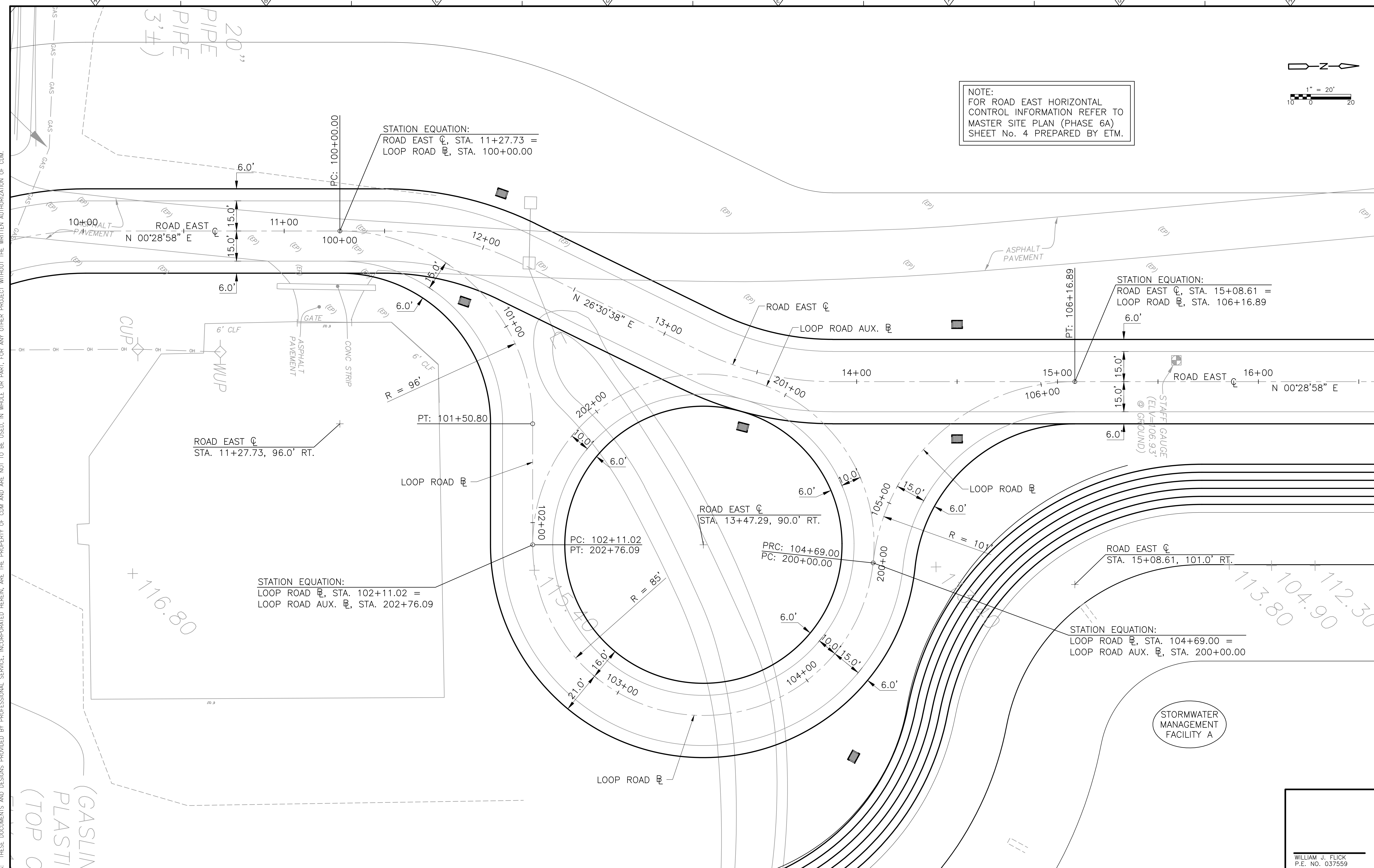
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

PROPOSED WASTE FILL SEQUENCE
 PHASES 8

JOHN G. LADNER P.E. NO. 037969
PROJECT NO. 9012-80695
FILE NAME:
SHEET NO.
C-42



NOTE:
FOR ROAD EAST HORIZONTAL
CONTROL INFORMATION REFER TO
MASTER SITE PLAN (PHASE 6A)
SHEET No. 4 PREPARED BY ETM.



Xref's: [CDM_2436_EC_TRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

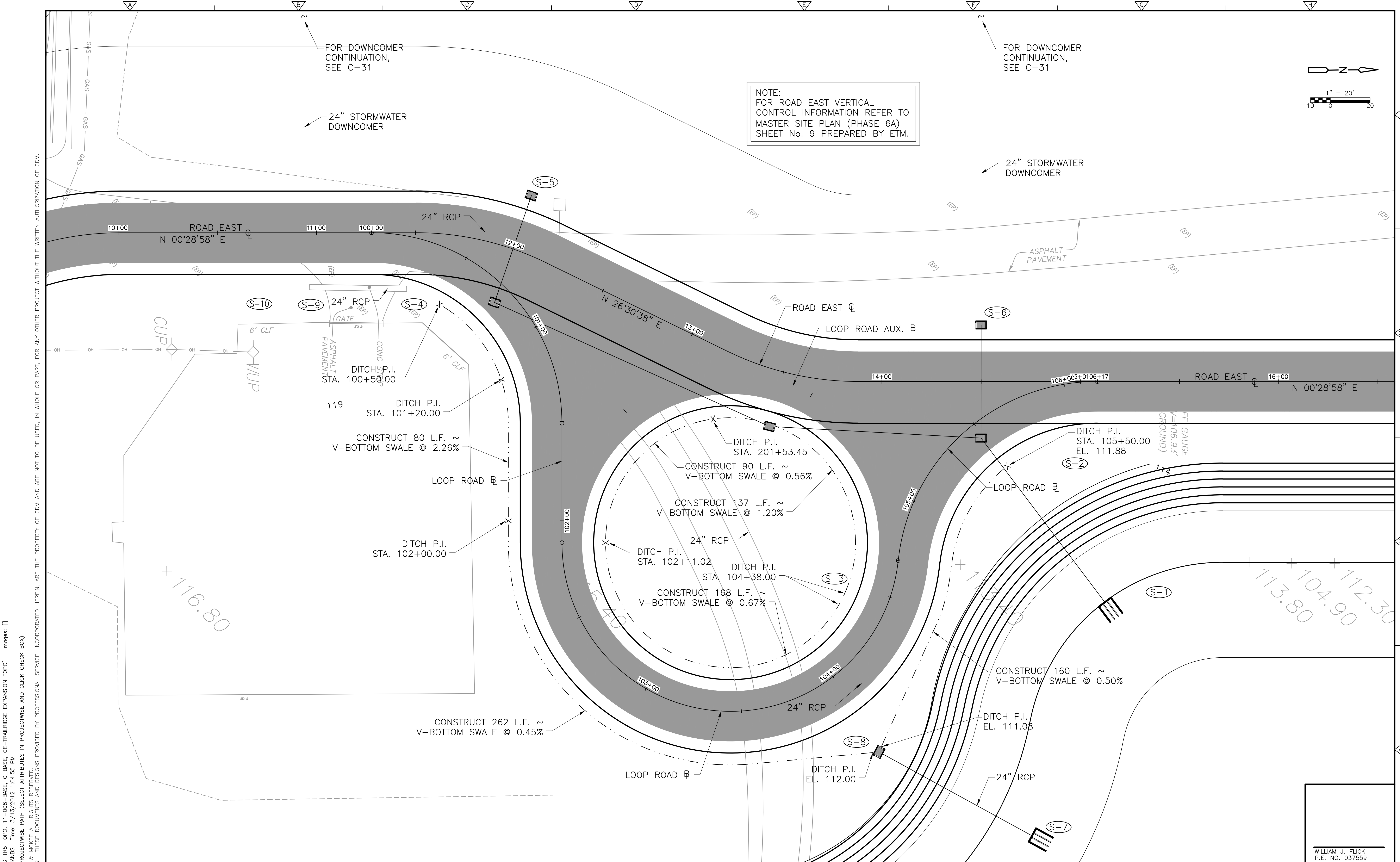
DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

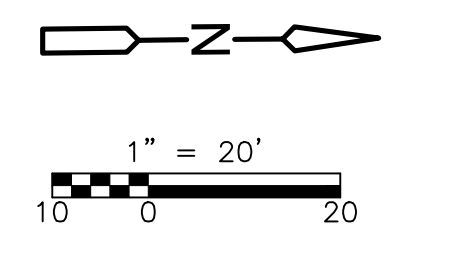
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

HORIZONTAL CONTROL PLAN
 PHASE 6 LOOP ROAD
 SHEET NO. C-43

WILLIAM J. FLICK
 P.E. NO. 037559
 PROJECT NO. 9012-80695
 FILE NAME: C005STPL
 SHEET NO. C-43



NOTE:
 FOR ROAD EAST VERTICAL
 CONTROL INFORMATION REFER TO
 MASTER SITE PLAN (PHASE 6A)
 SHEET No. 9 PREPARED BY ETM.



Xref's: [CDM_2436_EC_TRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

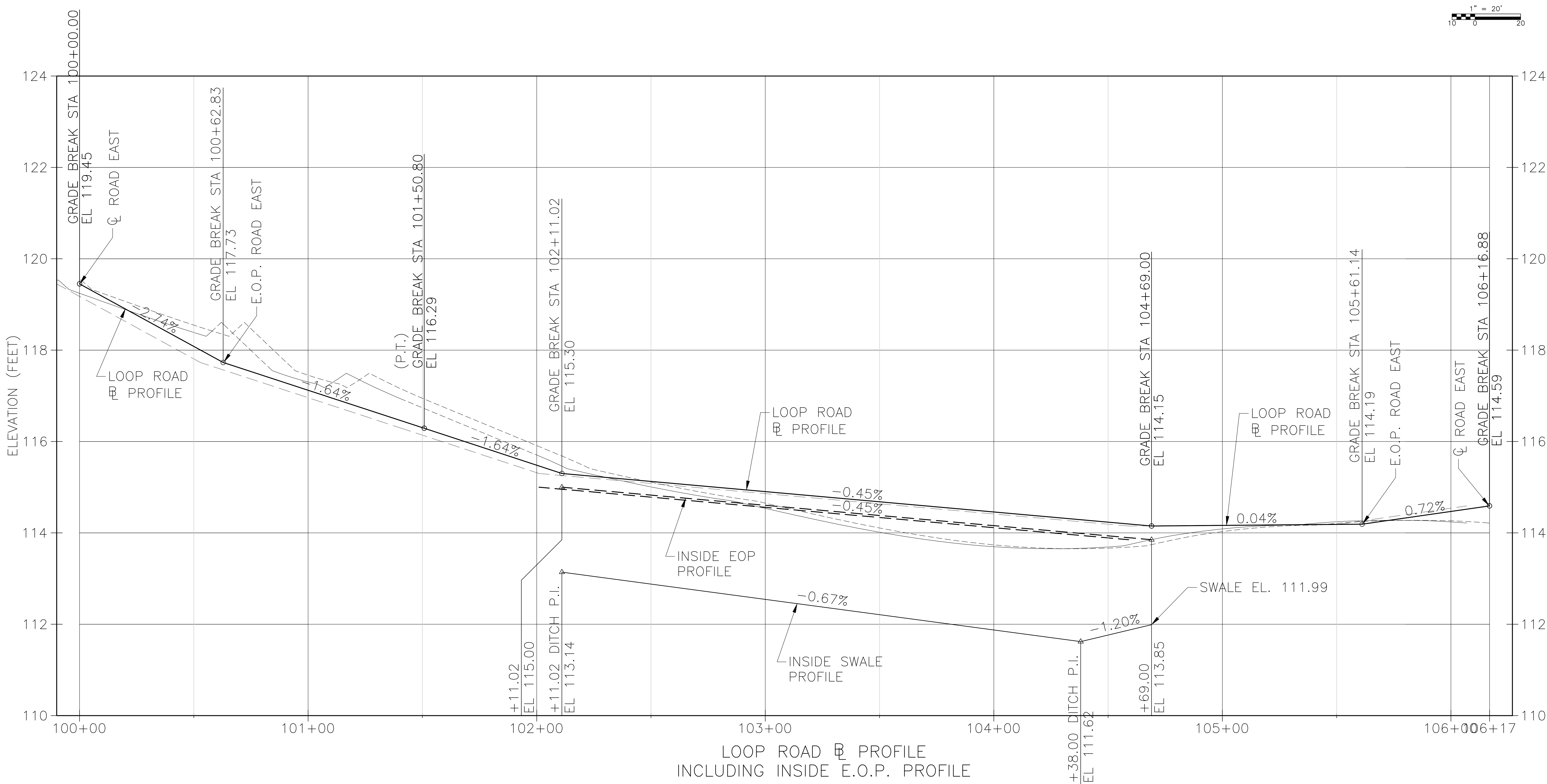
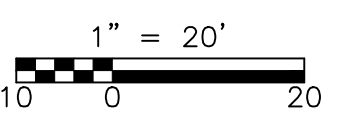
CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

GRADING PLAN
 PHASE 6 LOOP ROAD
 SHEET NO. C-44

WILLIAM J. FLICK
 P.E. NO. 037559
 PROJECT NO. 9012-80695
 FILE NAME: C005STPL
 SHEET NO. C-44

FOR PERMIT- NOT FOR CONSTRUCTION



LOOP ROAD \square PROFILE
INCLUDING INSIDE E.O.P. PROFILE

Xref: [CDM_2436, EC_TRS TOPO, 11-008-BASE, C-BASE, CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

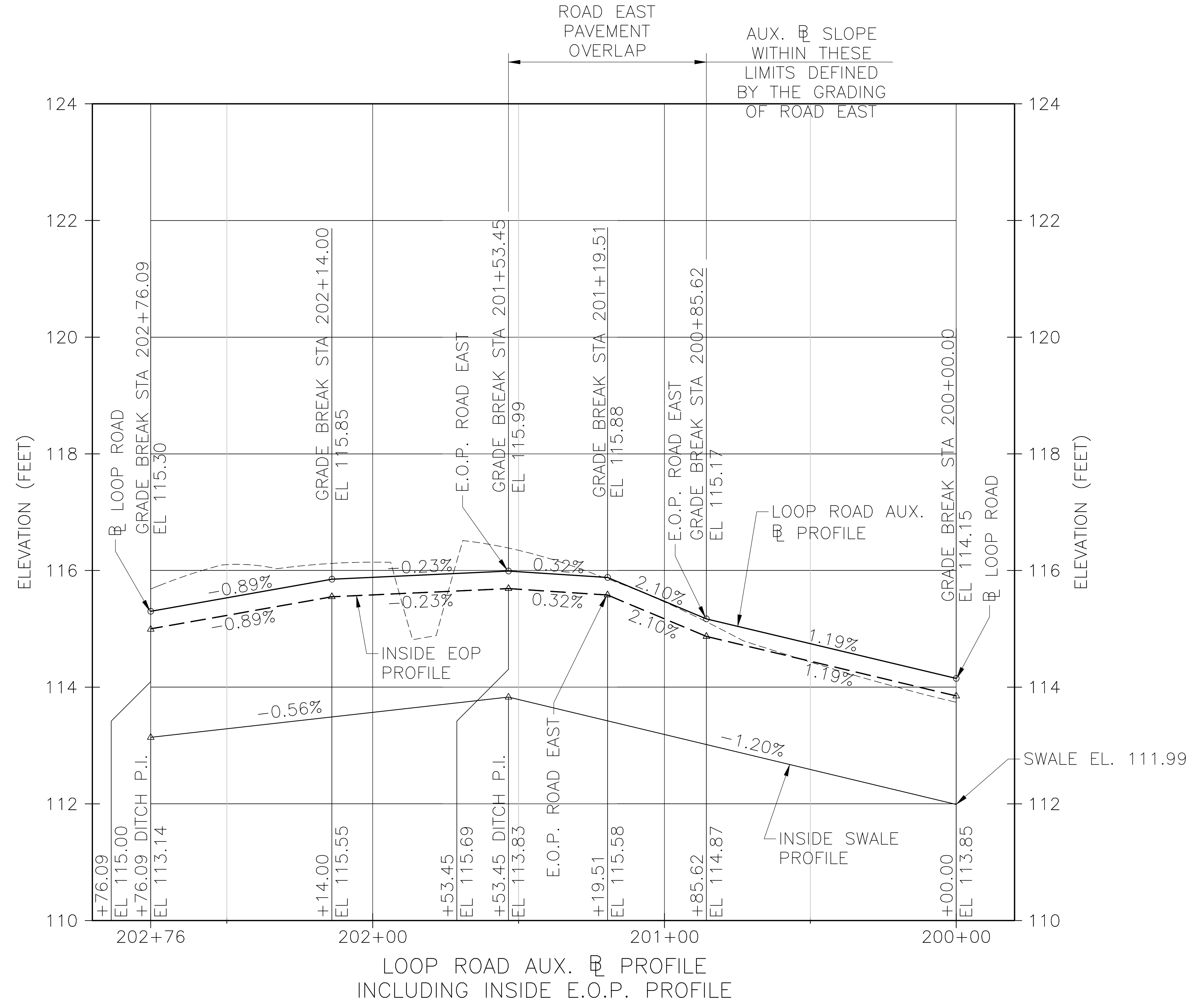
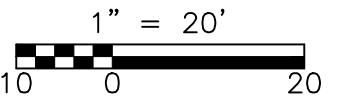
DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

LOOP ROAD PROFILE
 PHASE 6 LOOP ROAD

WILLIAM J. FLICK
 P.E. NO. 037559
 PROJECT NO. 9012-80695
 FILE NAME: C0055TPL
 SHEET NO.
C-45



LOOP ROAD AUX. \square PROFILE
INCLUDING INSIDE E.O.P. PROFILE

Xref's: [CDM_2436_EC_TRS_TOPO_11-008-BASE_C_BASE_CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

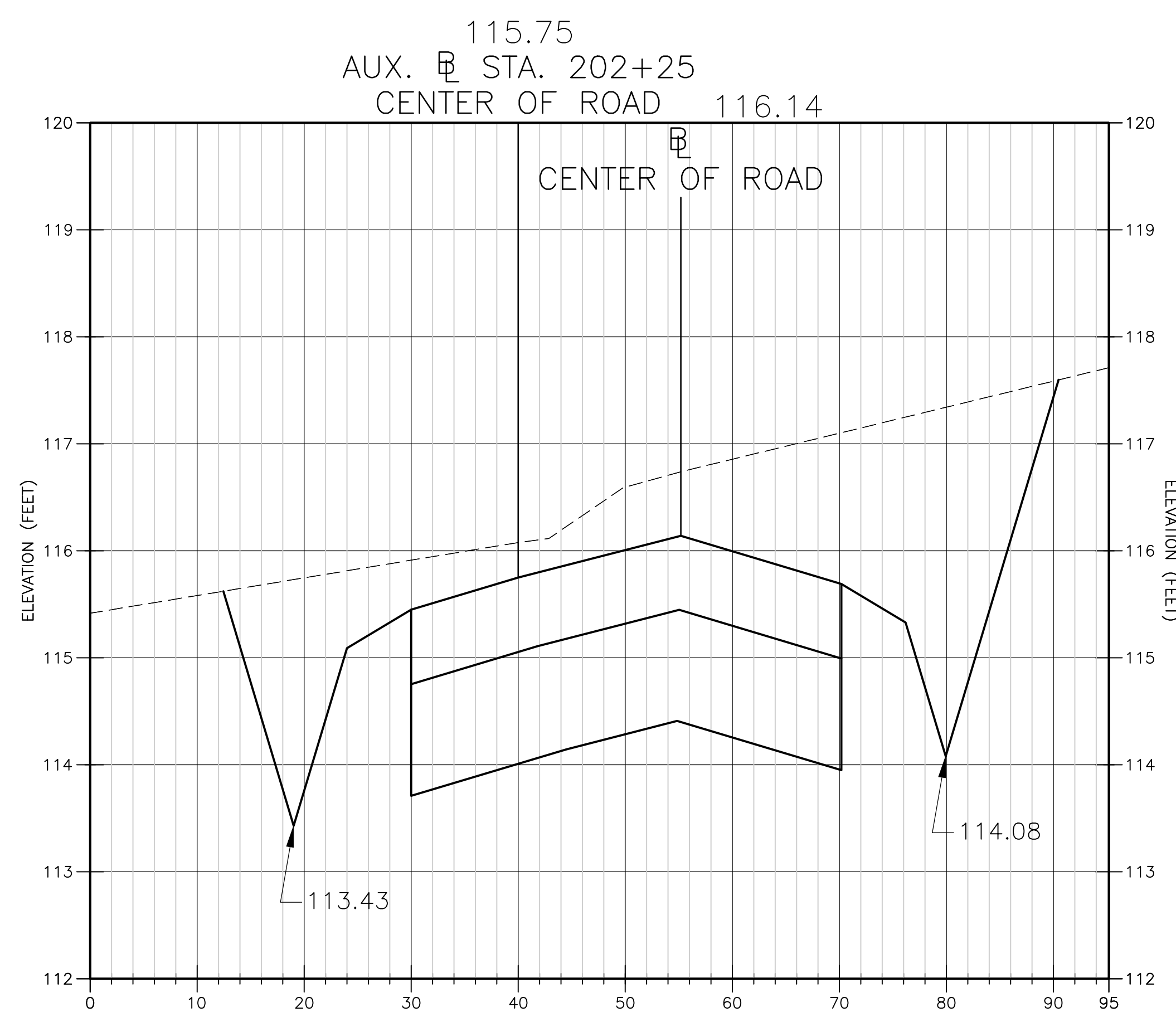
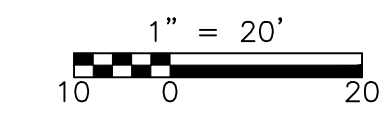
DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

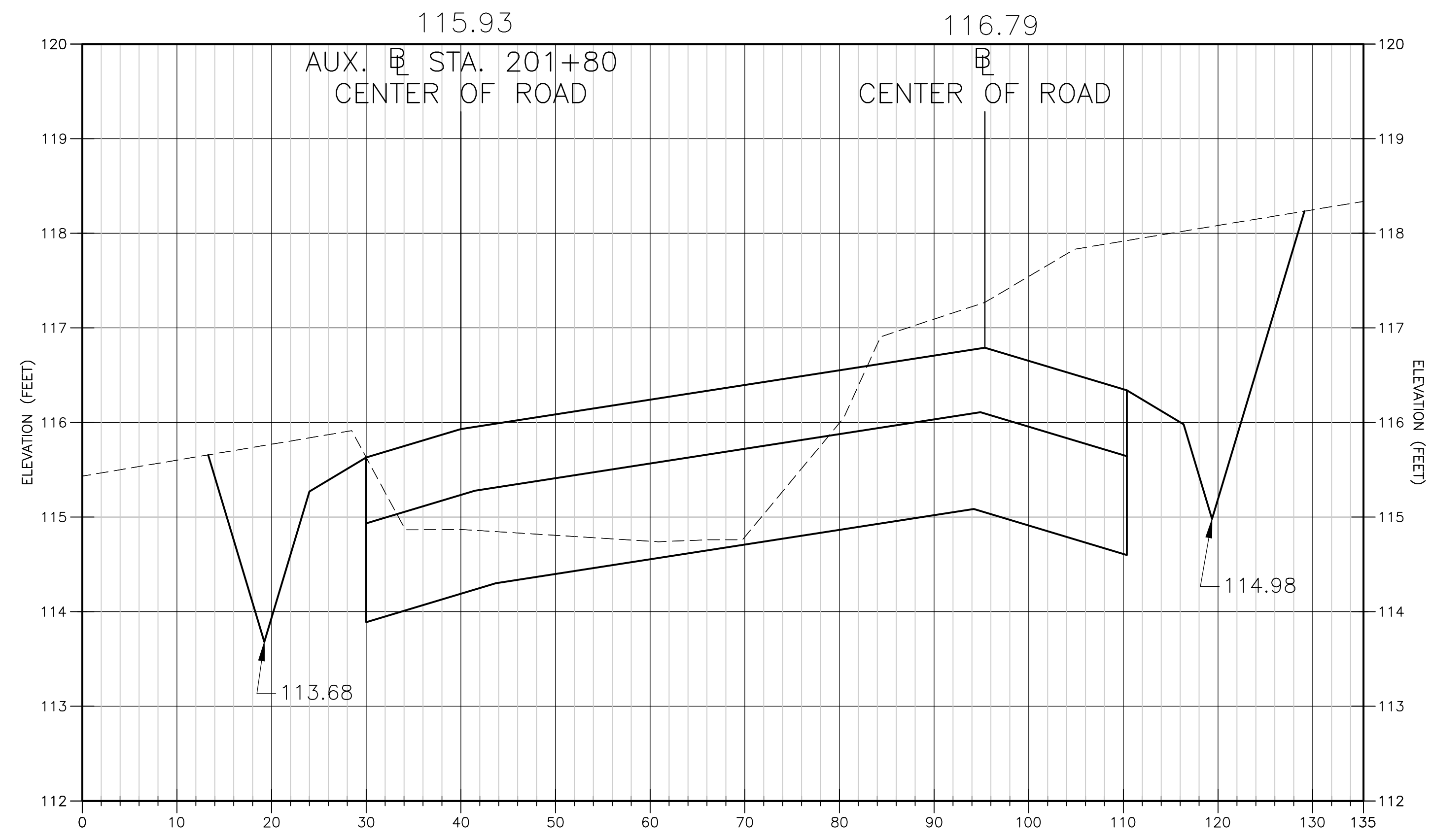
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

LOOP ROAD AUX. PROFILE
 PHASE 6 LOOP ROAD

WILLIAM J. FLICK
 P.E. NO. 037559
 PROJECT NO. 9012-80695
 FILE NAME: C0055TPL
 SHEET NO.
C-46



STATION 101+60



STATION 101+20

Xref: [CDM_2436_EC_TRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, DRESSER & MAKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

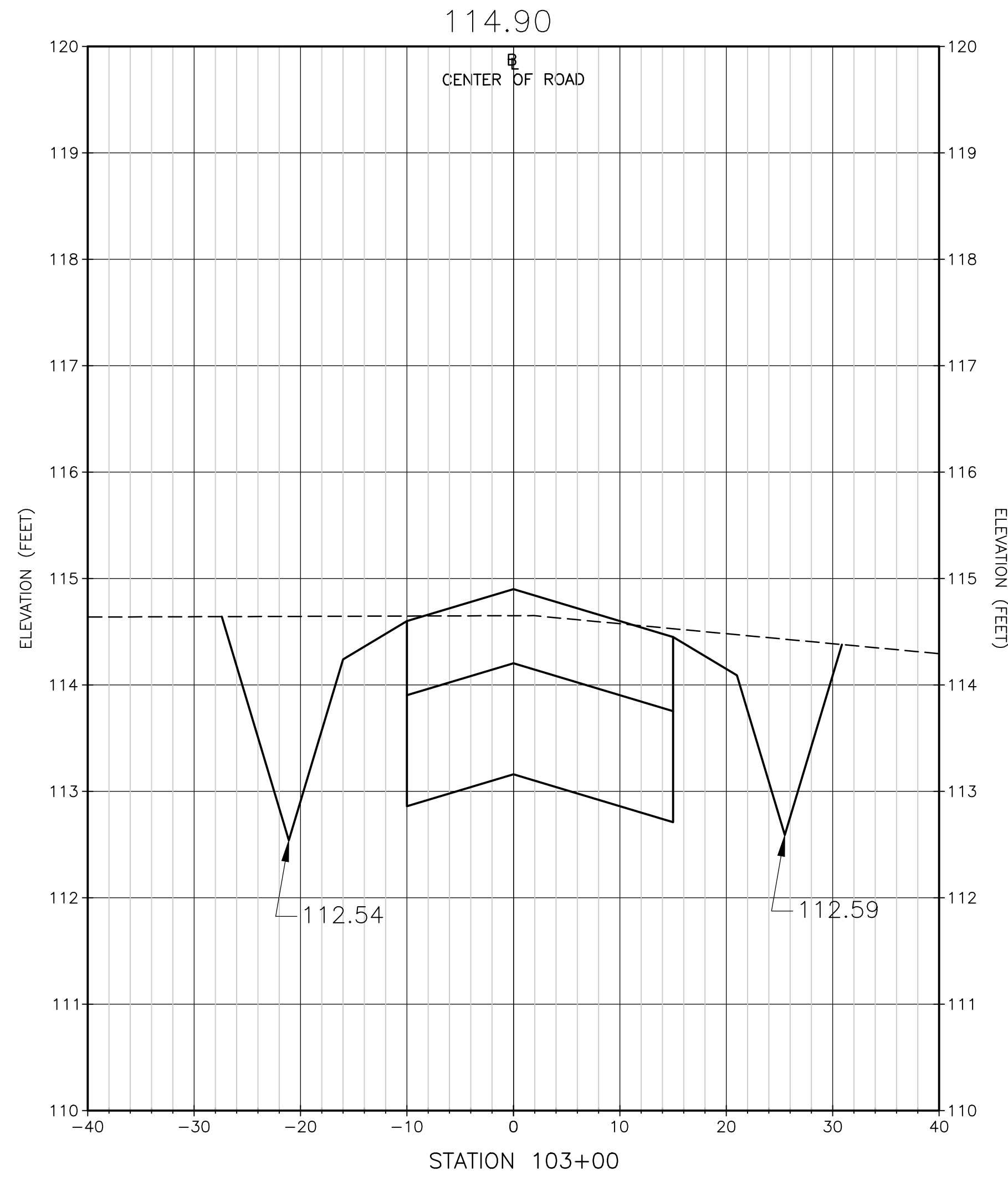
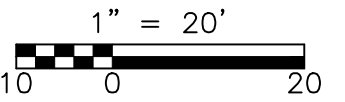
DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

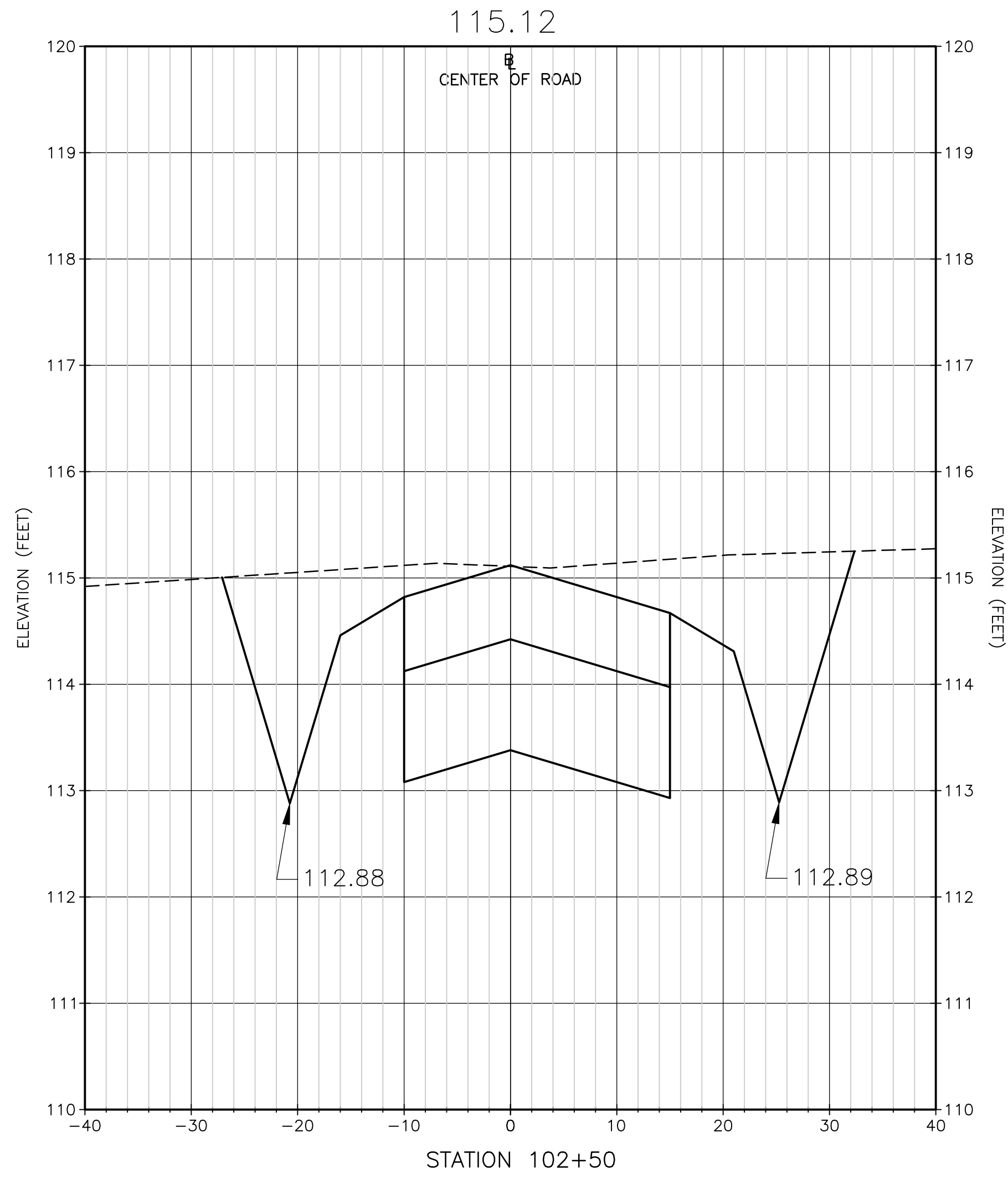
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS
 PHASE 6 LOOP ROAD
 SHEET NO.
C-47

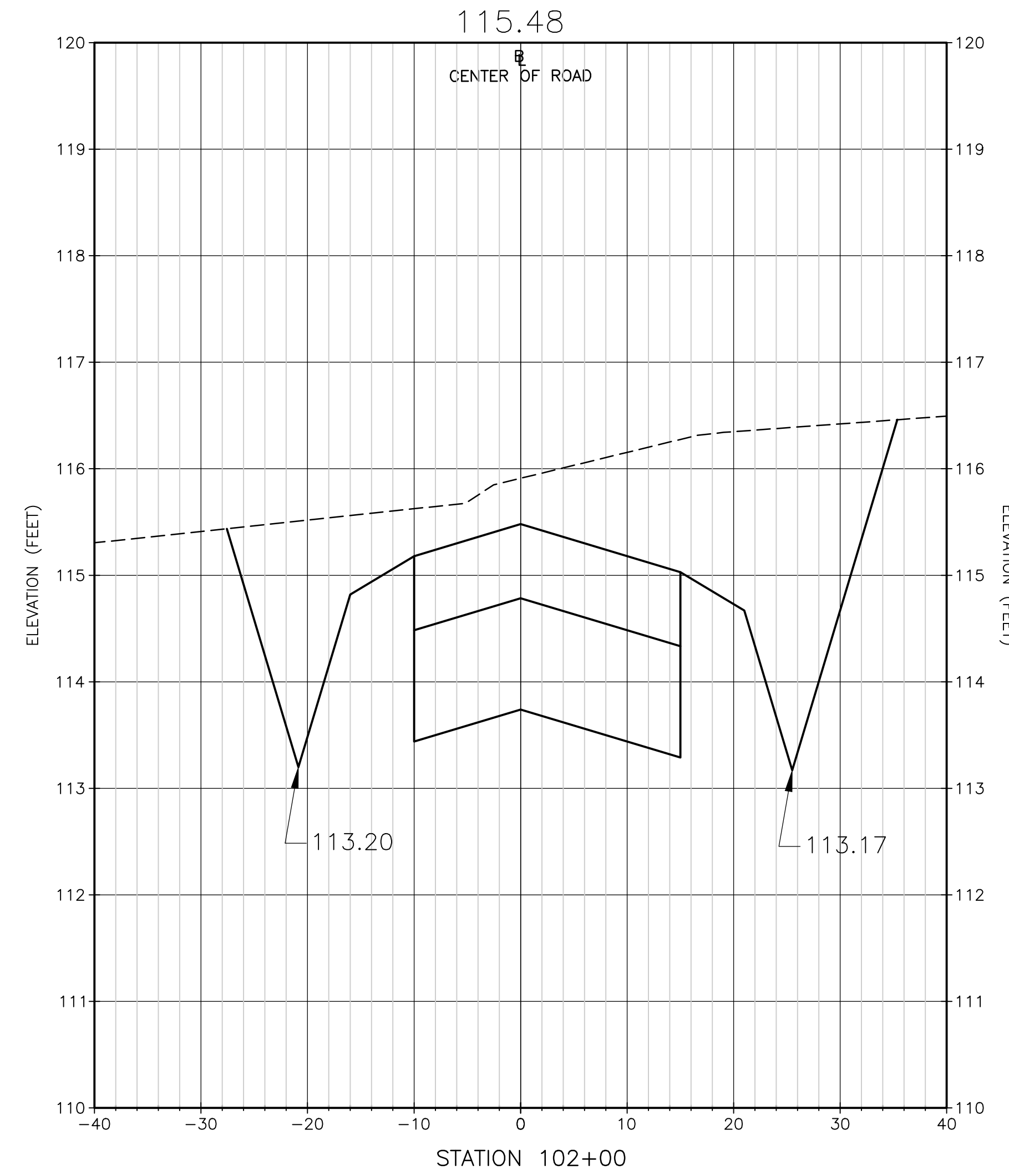
WILLIAM J. FLICK
 P.E. NO. 037559
 PROJECT NO. 9012-80695
 FILE NAME: C0055TPL
 SHEET NO.
C-47



B



B



B

Xref: [CDM_2436_EC_TRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

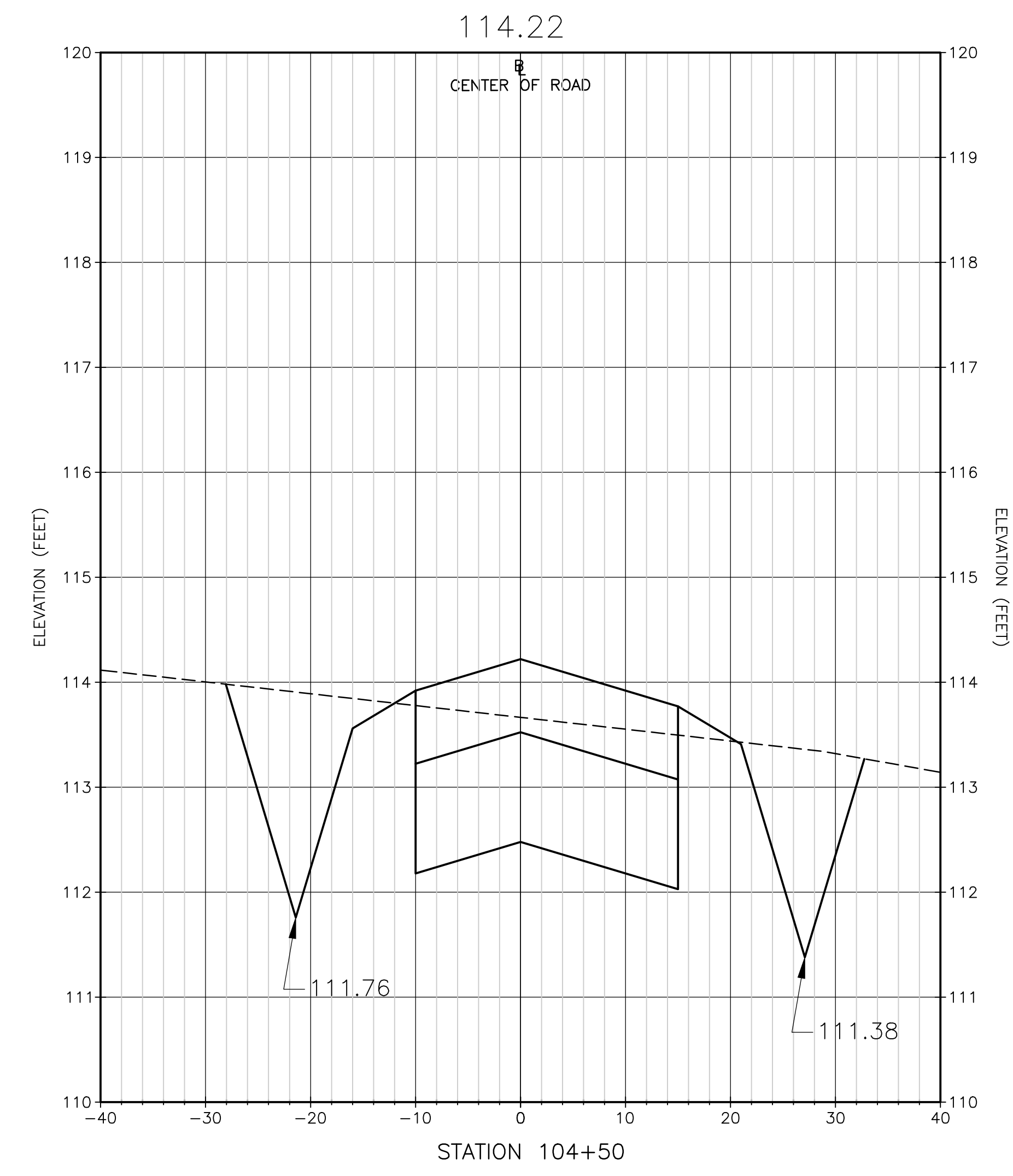
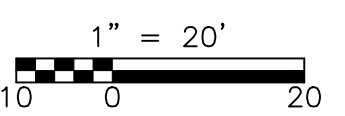
DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

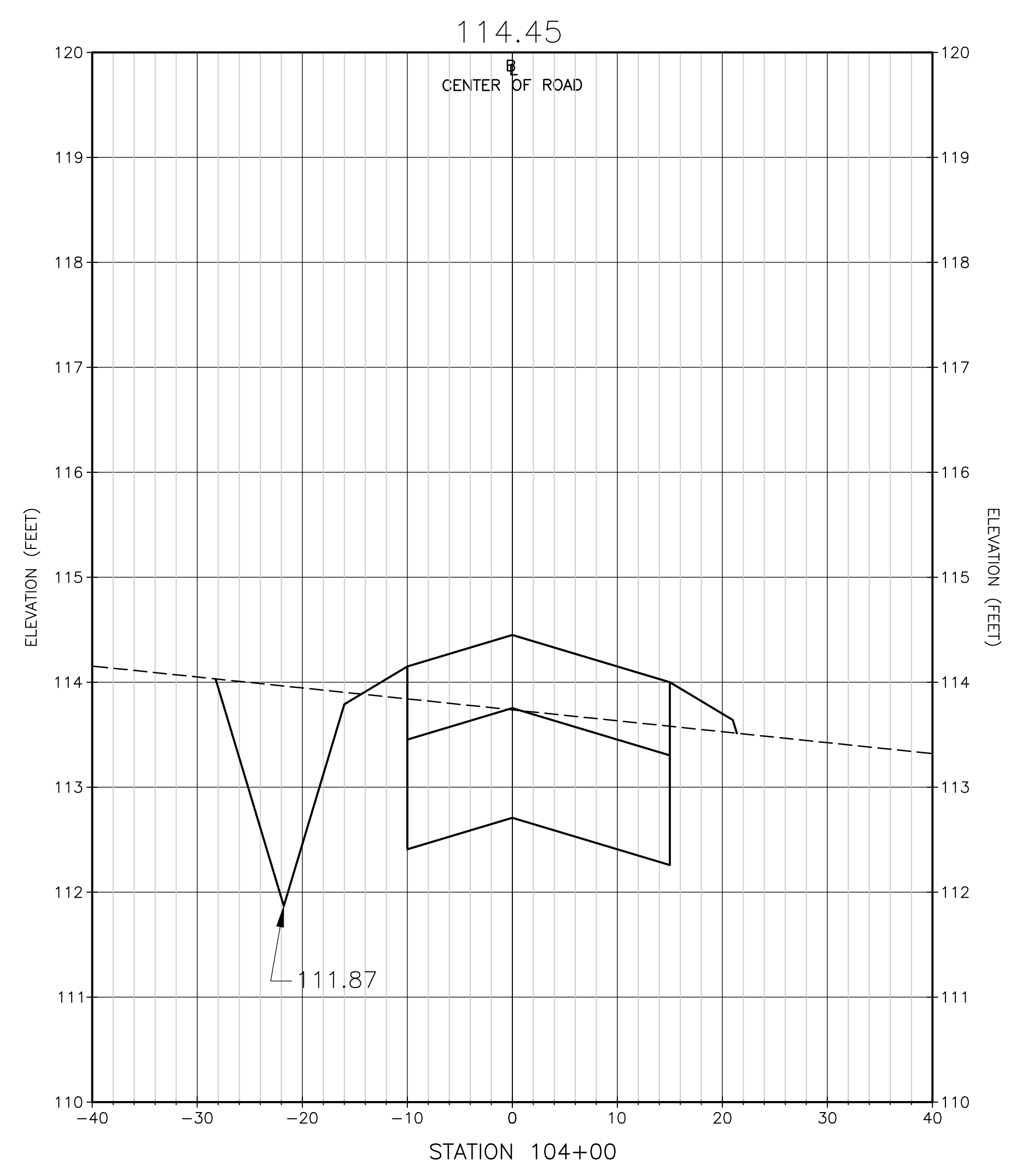
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS
 PHASE 6 LOOP ROAD
 SHEET NO.
C-48

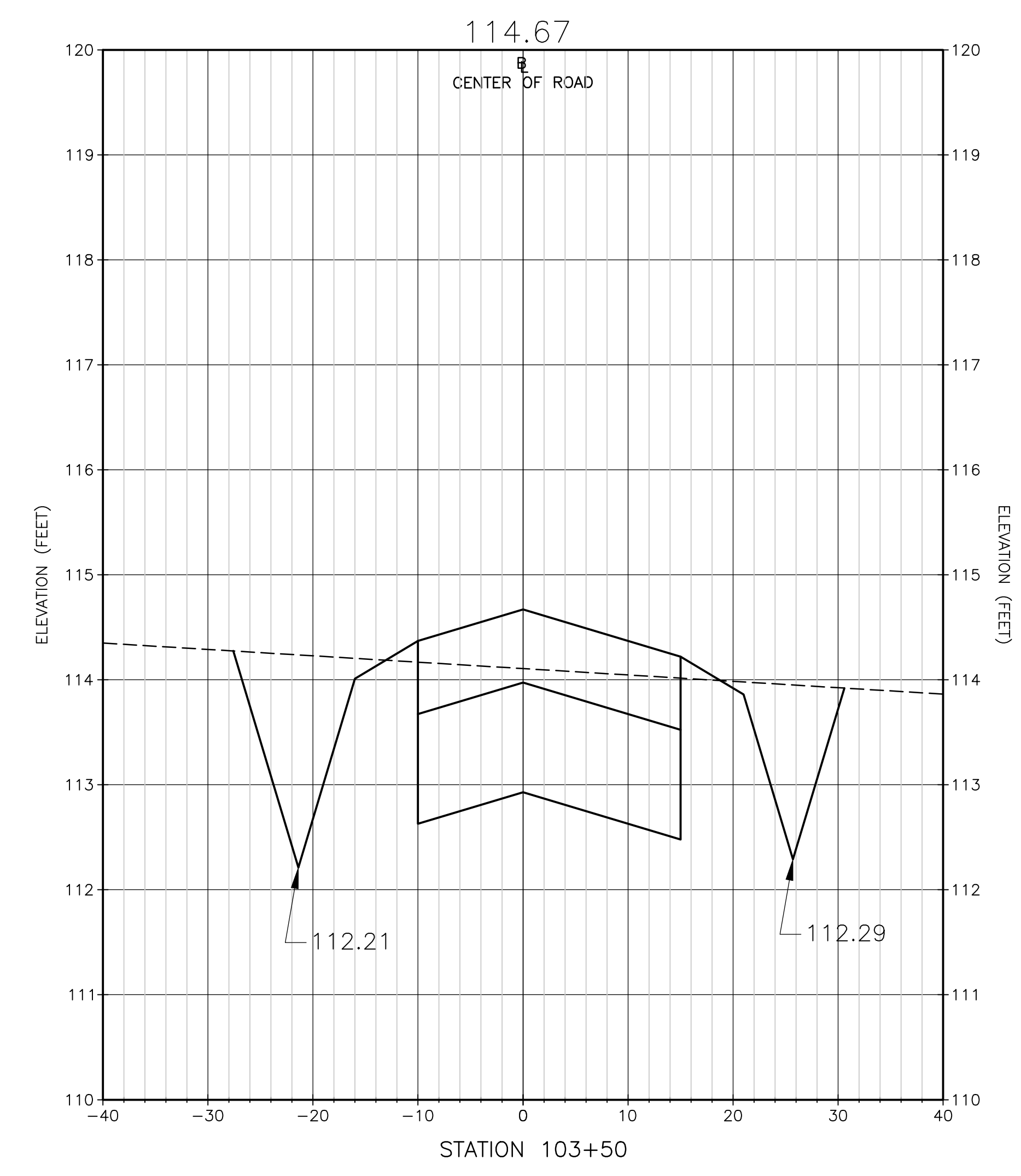
WILLIAM J. FLICK
 P.E. NO. 037559
 PROJECT NO. 9012-80695
 FILE NAME: C0055TPL
 SHEET NO.
C-48



BL



BL



BL

Xref's: [CDM_2436_EC_TRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, DRESSER & MAKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

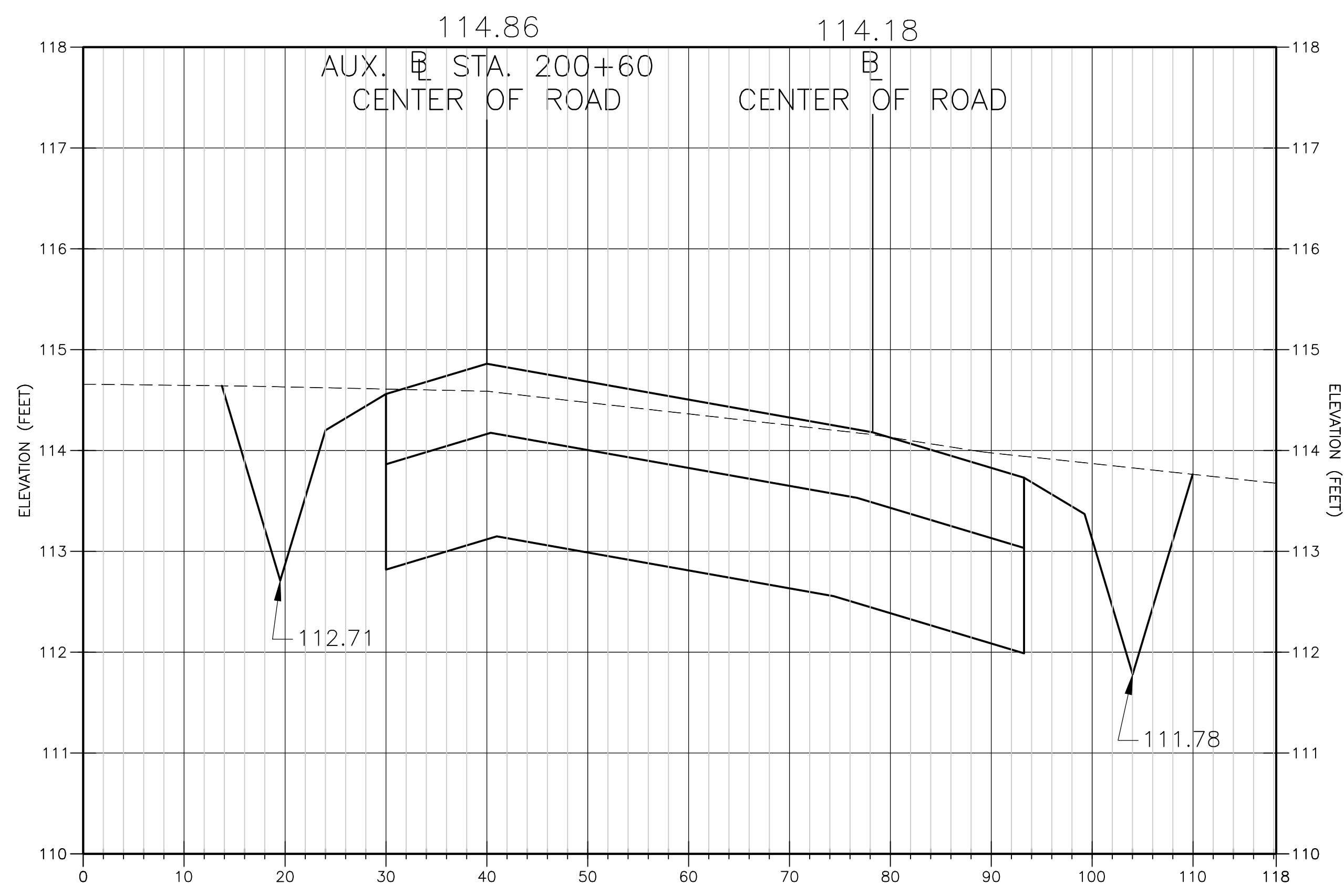
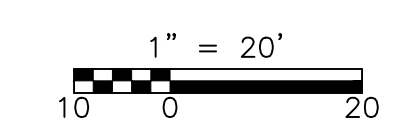
DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

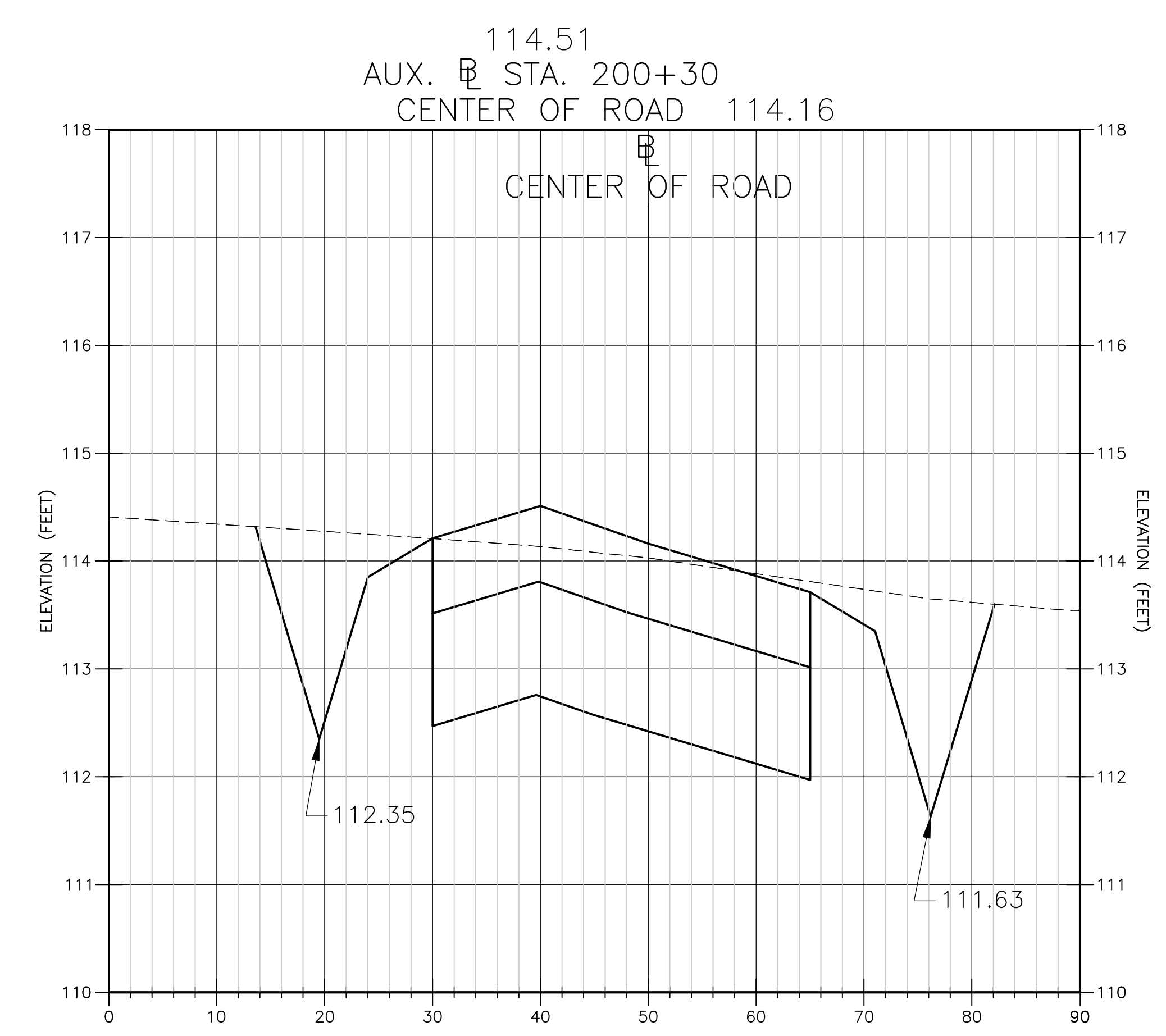
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS
 PHASE 6 LOOP ROAD
 SHEET NO.
C-49

WILLIAM J. FLICK
 P.E. NO. 037559
 PROJECT NO. 9012-80695
 FILE NAME: C005STPL
 SHEET NO.
C-49



STATION 105+30



STATION 105+00

Xref's: [CDM_2436_EC_IRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

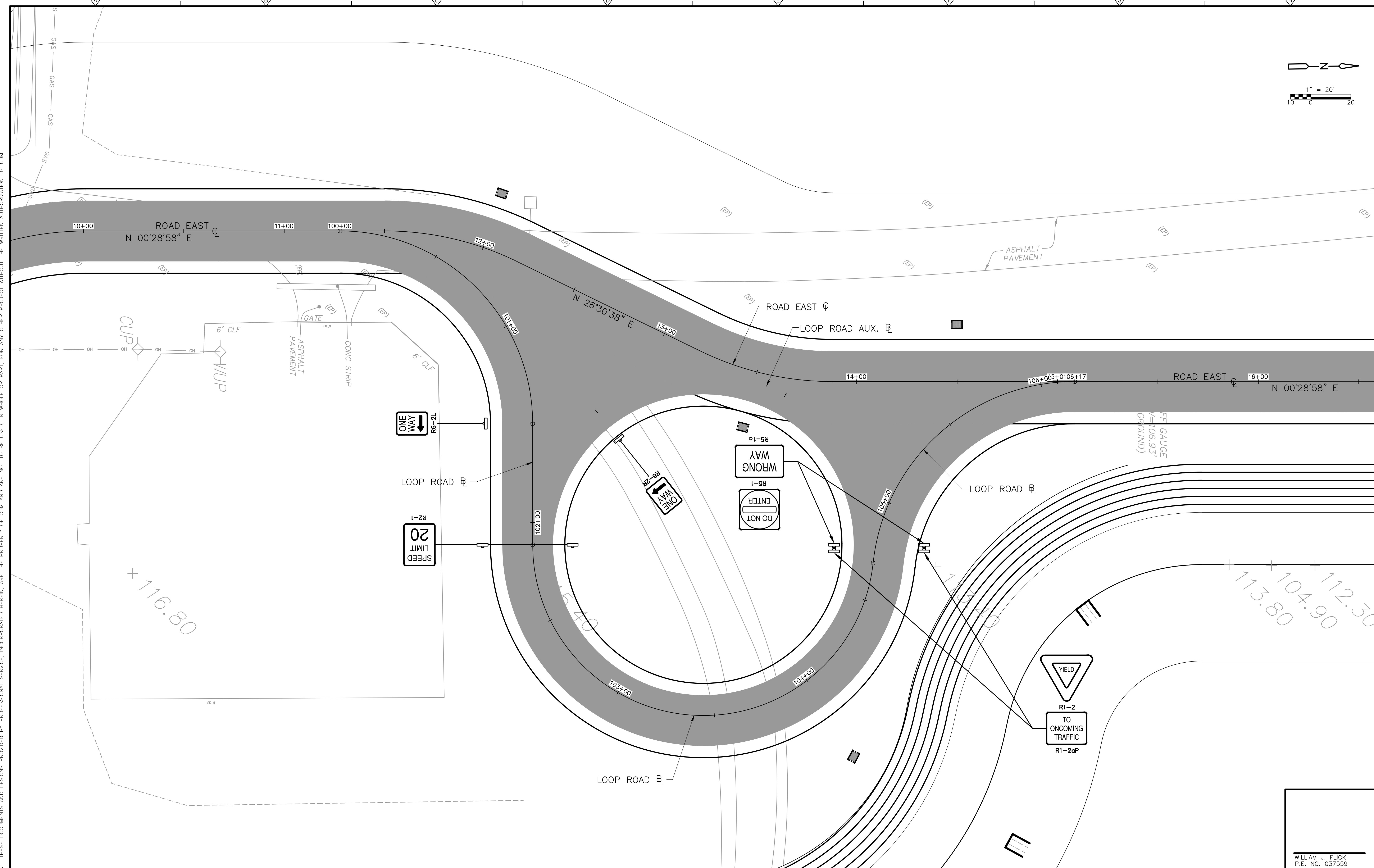
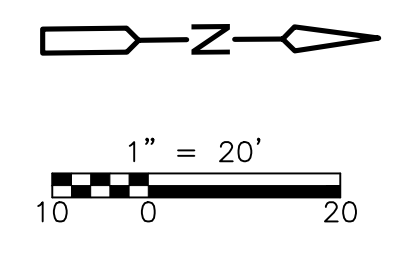
DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

SECTIONS
 PHASE 6 LOOP ROAD
 SHEET NO.
C-50

WILLIAM J. FLICK
 P.E. NO. 037559
 PROJECT NO. 9012-80695
 FILE NAME: C005STPL
 SHEET NO.
C-50



Xref's: [CDM_2436_EC_TRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE EXPANSION TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

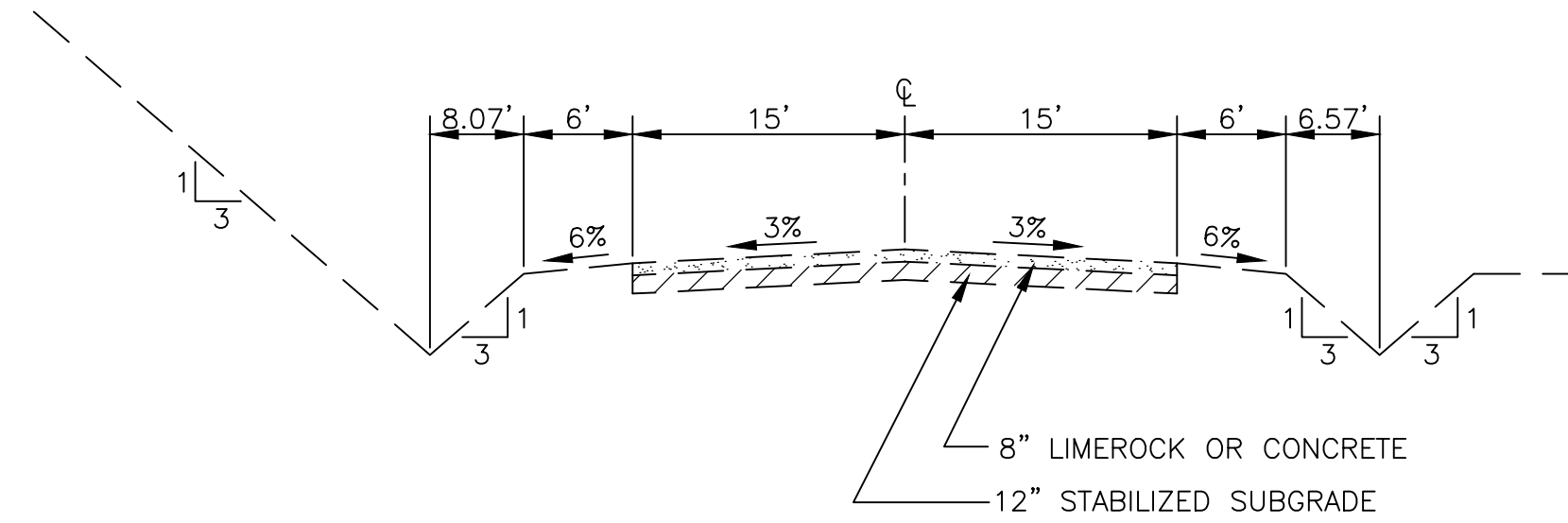
CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

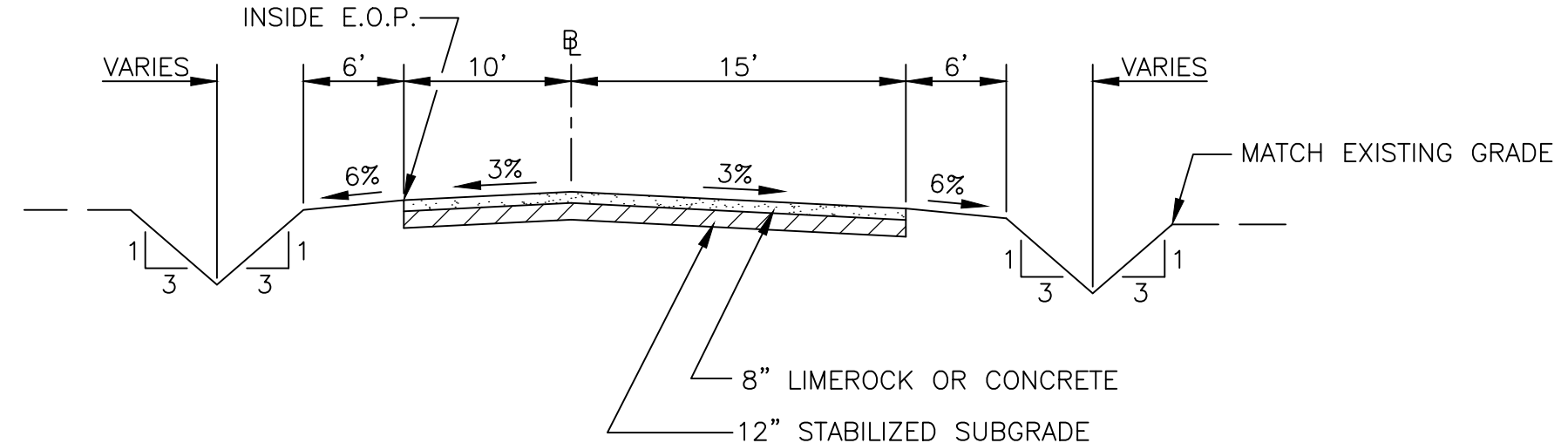
SIGNING PLAN
 PHASE 6 LOOP ROAD

PROJECT NO. 9012-80695 FILE NAME: C005STPL
SHEET NO. C-51

Xref's: [CDM_2436_EC_TRS_TOPO_11-008-BASE_C-BASE_CE-TRAILRIDGE_EXPANSION_TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 1:04:55 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, DRESSER & MAKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.



EXISTING TYPICAL SECTION - ROAD EAST
N.T.S.



TYPICAL SECTION - LOOP ROAD
N.T.S. @ STA. 102+11.02 TO @ STA. 104+69.00
NOTE: E.O.P. = EDGE OF PAVEMENT

REV. NO.	DATE	DRWN	CHKD	REMARKS

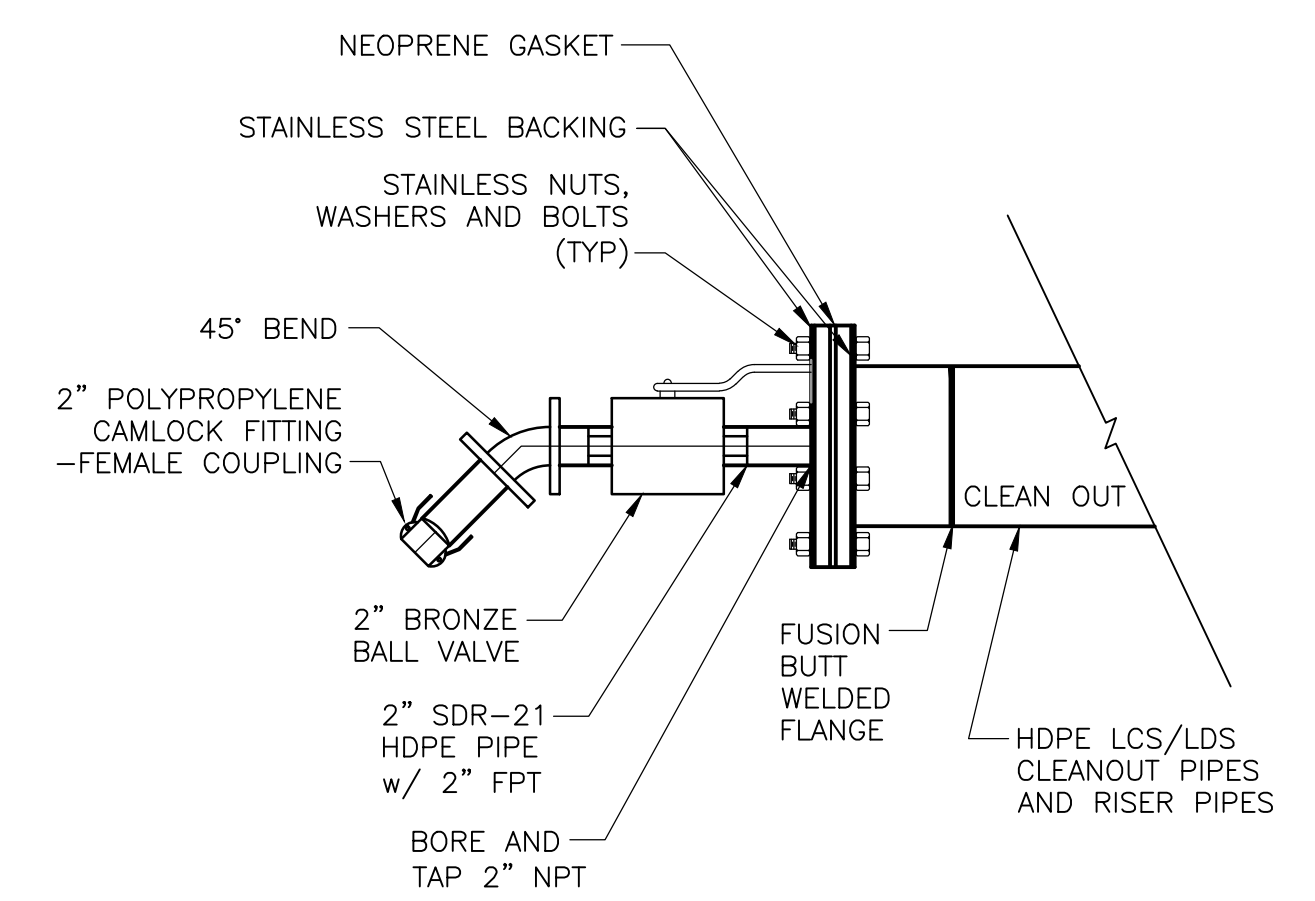
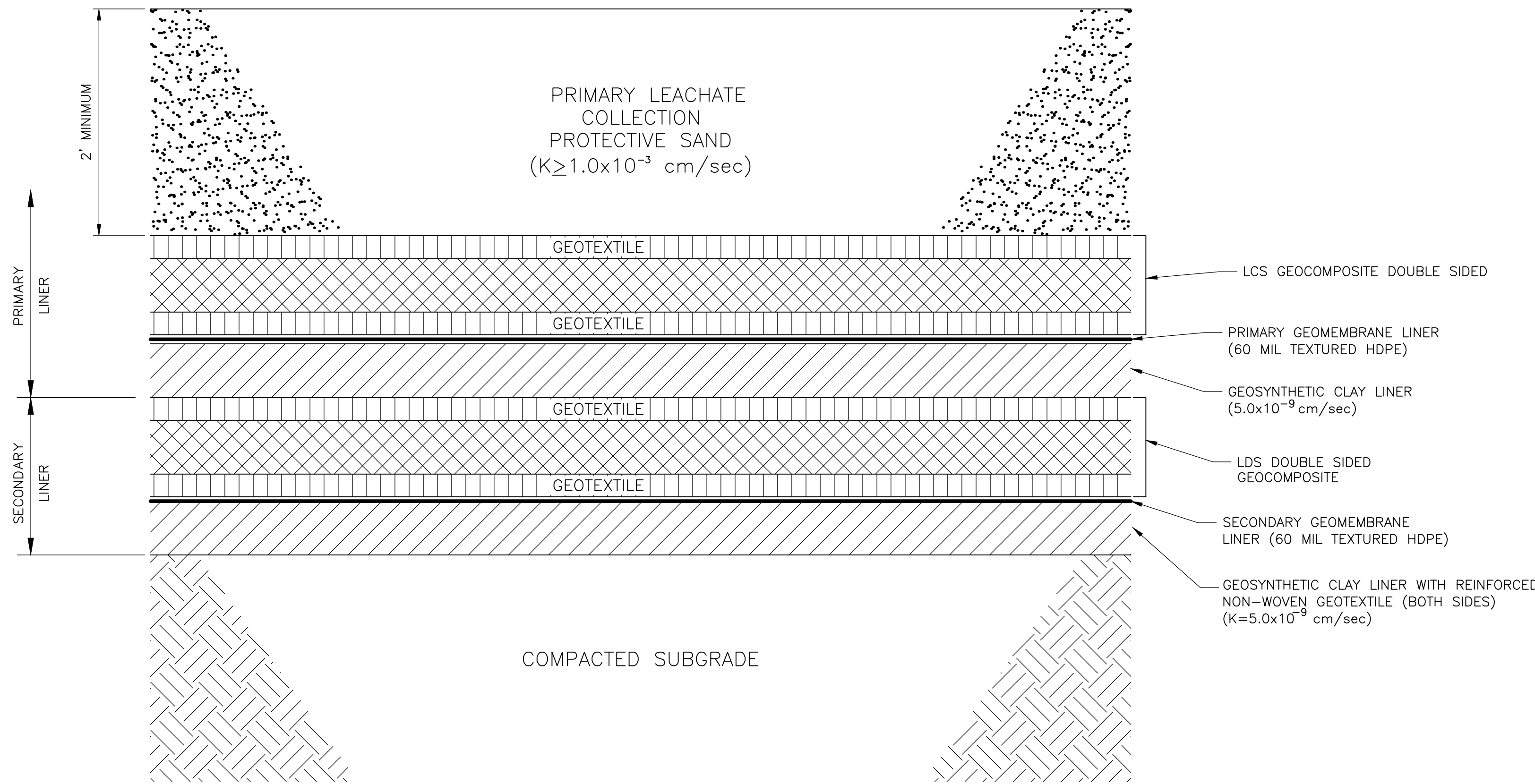
DESIGNED BY: WJF
 DRAWN BY: BTP
 SHEET CHK'D BY: WJF
 CROSS CHK'D BY: SVM
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

TYPICAL SECTIONS
 PHASE 6 LOOP ROAD

WILLIAM J. FLICK
 P.E. NO. 037559
 PROJECT NO. 9012-80695
 FILE NAME: C0055TPL
 SHEET NO.
C-52



- NOTES:**
1. DRILL AND TAP CENTER OF BLIND FLANGE TO 2" FPT. SCREW 2" BRONZE CLOSE NIPPLE INTO BLIND FLANGE. SCREW 2" BRONZE BALL VALVE TO CLOSE NIPPLE. WRAP ALL THREADS WITH PTFE TAPE PRIOR TO ASSEMBLY. USE INTERNAL PIPE WRENCH ONLY. DO NOT DAMAGE PIPE THREADS.
 2. BLIND FLANGE BOLTS SHALL BE TORQUED TO MEET MFR RECOMMENDATION. DO NOT OVERTIGHTEN.

CLEANOUT CAP
DETAIL B
N.T.S.

DOUBLE COMPOSITE LINER SYSTEM
DETAIL A
N.T.S.

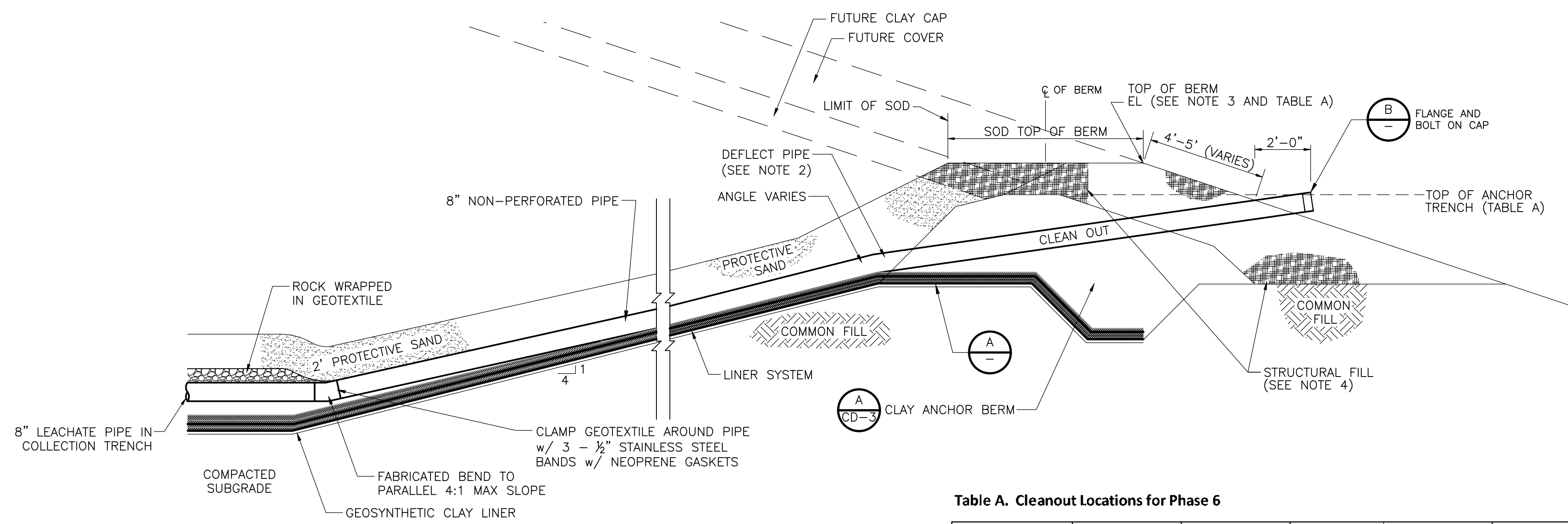


Table A. Cleanout Locations for Phase 6

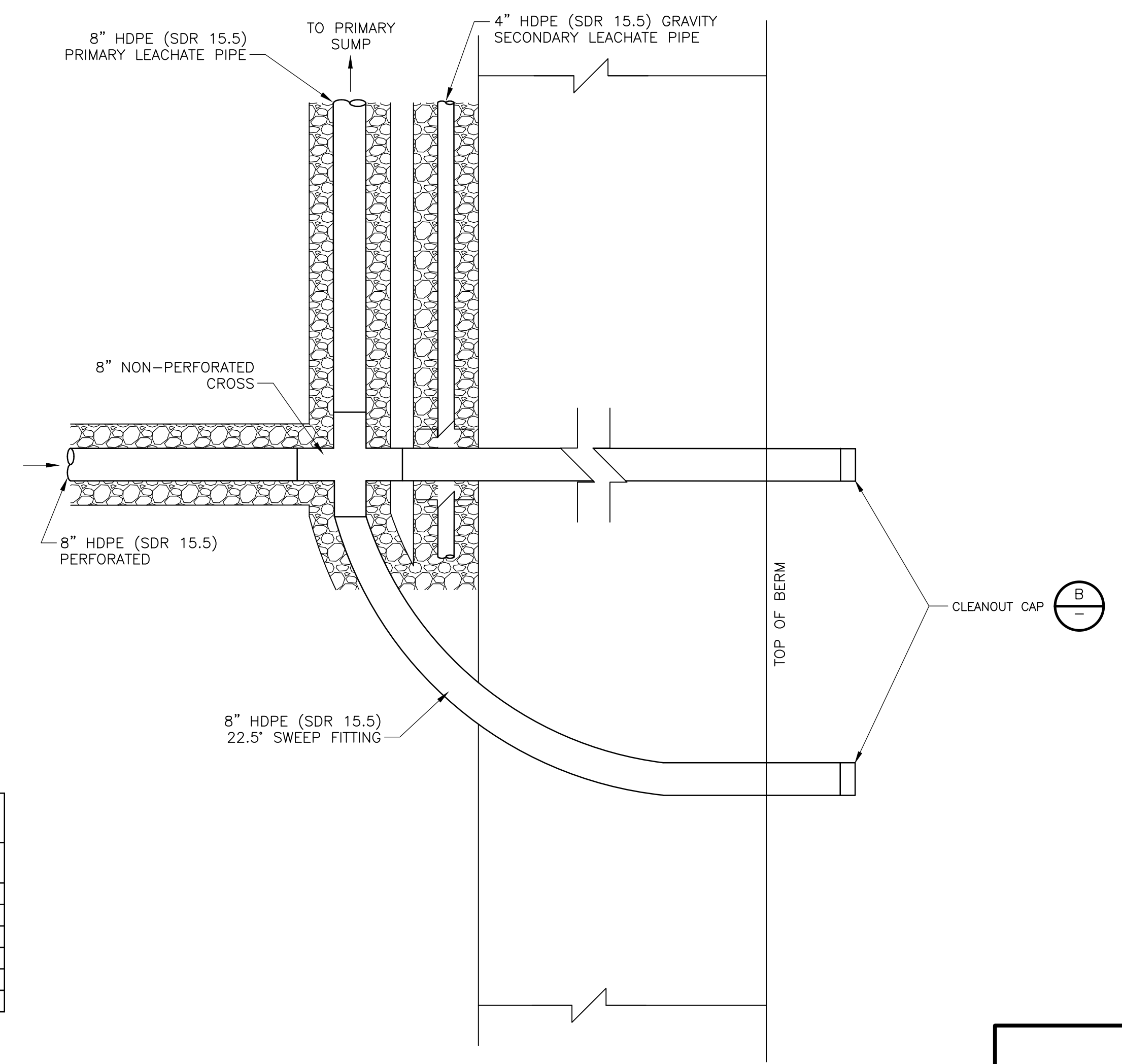
Cleanout ID Name	Section On Sheet C-3	Top of Anchor Trench EL (ft)	Top of Berm EL (ft)	Top of Future Cover EL (ft)	State Plane Coordinates (ft) ¹	
					Northing	Easting
CO-1	2	147.59	148.72	149.88	2,144,305	324,991
CO-2	2	125.12	126.25	127.41	2,144,286	327,236
CO-3	-	125.12	126.25	127.41	2,144,259	327,236
CO-4	4	120.59	121.72	122.88	2,144,586	327,280
CO-5	-	120.59	121.72	122.88	2,144,603	327,291
CO-6	4	147.29	148.42	149.58	2,144,605	324,990

Notes:
¹ Florida State Plane Coordinate System East Zone (HARN83)

*REFER TO CIVIL SHEET C-7 FOR LOCATION OF CLEANOUTS (CO1 THROUGH CO-6) NOTED IN TABLE A.

- NOTES:**
1. PROTECTIVE SAND TO BE PLACED WITHIN 1 FOOT OF LINER ANCHOR TRENCH AND FROM TOP OF BERM.
 2. CLEANOUT PIPE, ANGLE OF DEFLECTION, SHALL BE ADJUSTED BY THE CONTRACTOR TO MEET A PENETRATION DISTANCE OF 4'-5' FROM TOP.
 3. THE TOP OF BERM ELEVATIONS AT CLEANOUT LOCATIONS ARE SHOWN ON TABLE A.
 4. CLAY ANCHOR BERM SHALL BE PROTECTED WITH LOCAL STRUCTURAL FILL. FUTURE TIE IN OF CLAY CAP WITH CLAY ANCHOR BERM IS SHOWN ON DETAIL A, CD-3.

PERIMETER BERM LINER ANCHOR LAYERS/COLLECTION PIPE CLEANOUT
SECTION 1
1" = 3'-0"
C-10



COLLECTION MANIFOLD CLEANOUT PIPING
DETAIL C
N.T.S.
C-10

Xref: [CDM_2436] Images: []
 Last saved by: CHAPMANBS Time: 1/27/2012 4:10:50 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, BESSER, & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

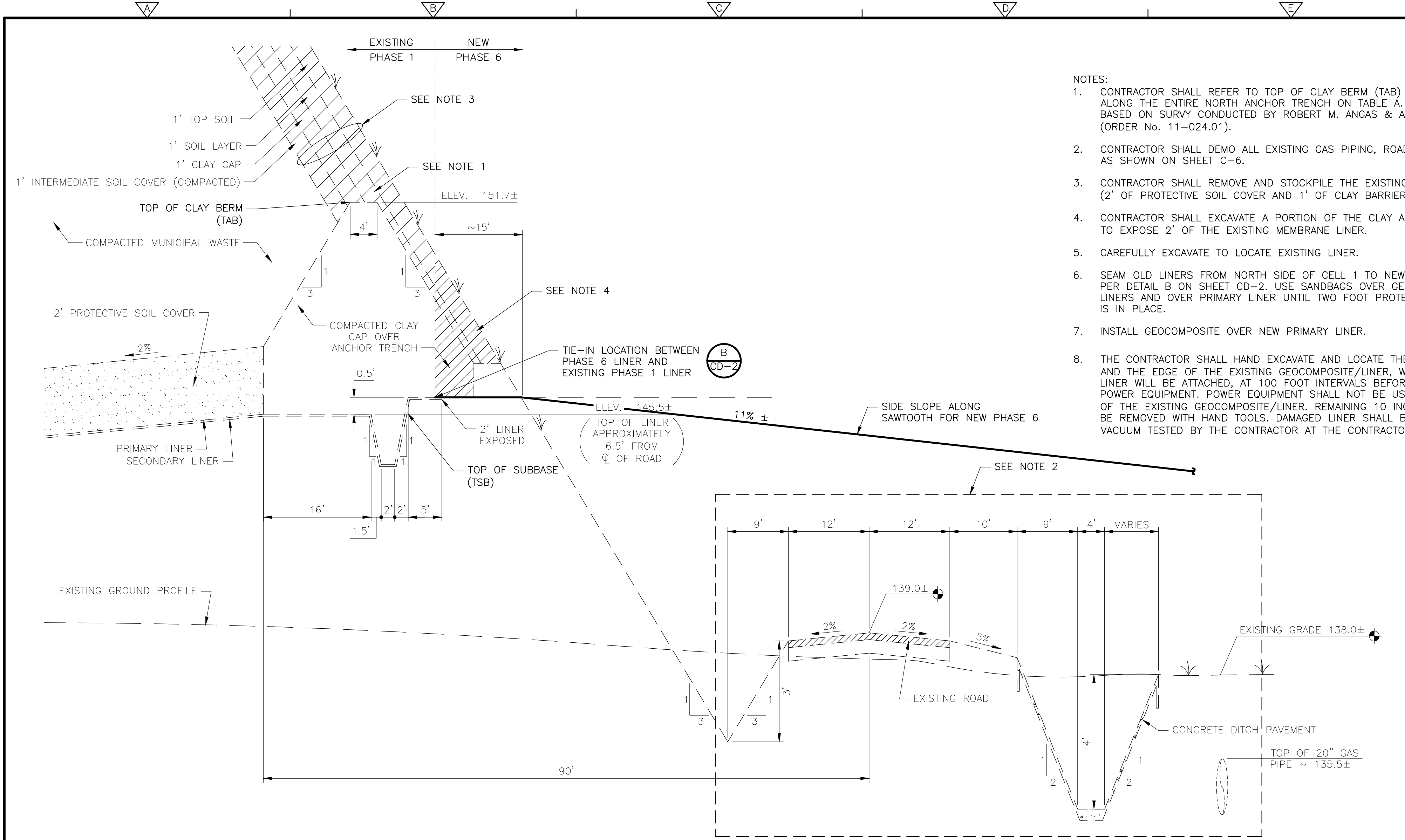
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLAH-SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

CIVIL DETAILS
 SHEET NO.
CD-1

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: CD01SDDT
 SHEET NO.
CD-1



- NOTES:
- CONTRACTOR SHALL REFER TO TOP OF CLAY BERM (TAB) AND TOP OF SUBBASE ALONG THE ENTIRE NORTH ANCHOR TRENCH ON TABLE A. THESE POINTS ARE BASED ON SURVY CONDUCTED BY ROBERT M. ANGAS & ASSOCIATES, INC. IN 2012 (ORDER No. 11-024.01).
 - CONTRACTOR SHALL DEMO ALL EXISTING GAS PIPING, ROAD, CAP, CULVERTS AS SHOWN ON SHEET C-6.
 - CONTRACTOR SHALL REMOVE AND STOCKPILE THE EXISTING CAP (2' OF PROTECTIVE SOIL COVER AND 1' OF CLAY BARRIER LAYER).
 - CONTRACTOR SHALL EXCAVATE A PORTION OF THE CLAY ANCHOR BERM TO EXPOSE 2' OF THE EXISTING MEMBRANE LINER.
 - CAREFULLY EXCAVATE TO LOCATE EXISTING LINER.
 - SEAM OLD LINERS FROM NORTH SIDE OF CELL 1 TO NEW LINER ON PHASE 6 PER DETAIL B ON SHEET CD-2. USE SANDBAGS OVER GEONET BETWEEN LINERS AND OVER PRIMARY LINER UNTIL TWO FOOT PROTECTIVE SAND LAYER IS IN PLACE.
 - INSTALL GEOCOMPOSITE OVER NEW PRIMARY LINER.
 - THE CONTRACTOR SHALL HAND EXCAVATE AND LOCATE THE EXISTING BERM AND THE EDGE OF THE EXISTING GEOCOMPOSITE/LINER, WHERE THE PROPOSED LINER WILL BE ATTACHED, AT 100 FOOT INTERVALS BEFORE PROCEEDING WITH POWER EQUIPMENT. POWER EQUIPMENT SHALL NOT BE USED WITHIN 10 INCHES OF THE EXISTING GEOCOMPOSITE/LINER. REMAINING 10 INCHES OF FILL SHALL BE REMOVED WITH HAND TOOLS. DAMAGED LINER SHALL BE REPAIRED AND VACUUM TESTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

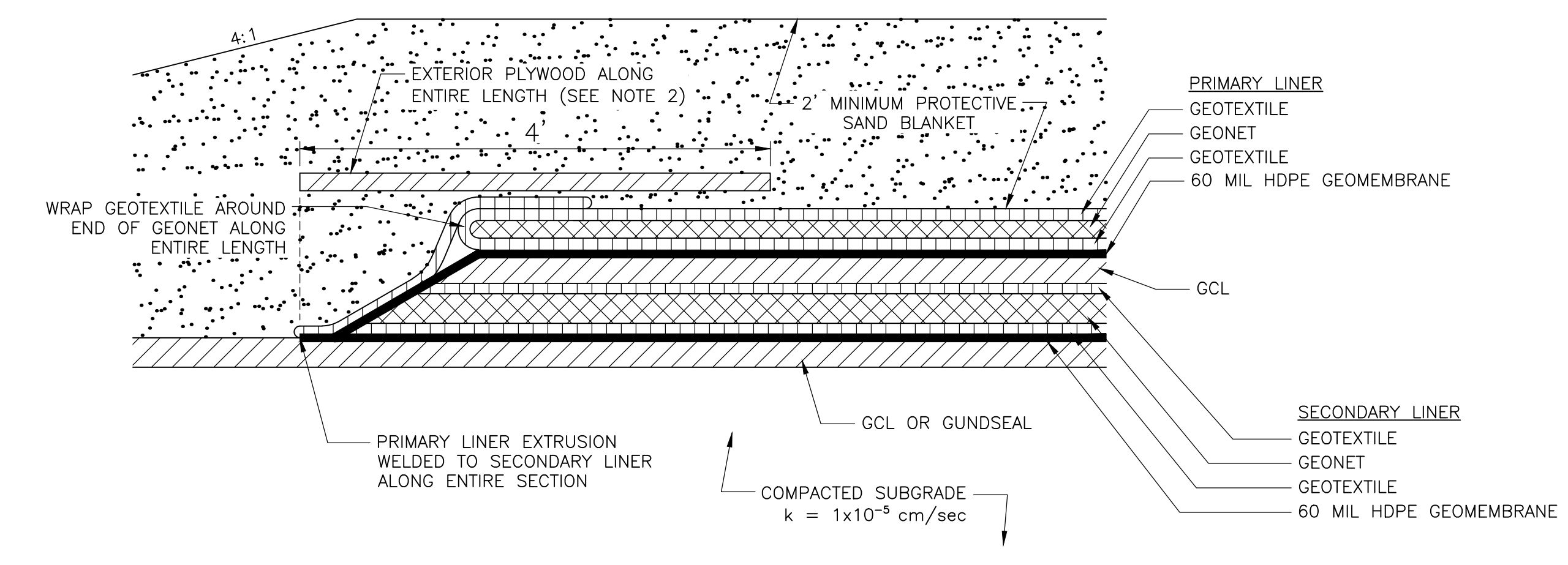
Table A. Phase I North Anchor Trench Tie-in Points

Tie-in ID Name	Description	As-Built Elevation (ft)	State Plane Coordinates (ft) ¹	
			Northing	Eastng
A1	TAB	157.58	2,144,145	325,018
B1	TAB	157.02	2,144,170	325,044
B2	TSB	150.57	2,144,155	325,039
C1	TAB	155.58	2,144,170	325,145
C2	TSB	149.66	2,144,155	325,144
D1	TAB	154.95	2,144,170	325,244
D2	TSB	148.87	2,144,155	325,244
E1	TAB	153.99	2,144,170	325,344
E2	TSB	147.83	2,144,155	325,345
F1	TAB	153.25	2,144,170	325,444
F2	TSB	147.05	2,144,154	325,445
G1	TAB	152.59	2,144,170	325,544
G2	TSB	146.30	2,144,155	325,544
H1	TAB	151.69	2,144,170	325,644
H2	TSB	145.49	2,144,155	325,644
I1	TAB	150.81	2,144,170	325,744
I2	TSB	144.58	2,144,155	325,744
J1	TAB	149.48	2,144,170	325,844
J2	TSB	143.75	2,144,155	325,844
K1	TAB	148.85	2,144,170	325,944
K2	TSB	142.72	2,144,155	325,944
L1	TAB	148.05	2,144,170	326,045
L2	TSB	142.10	2,144,155	326,044
M1	TAB	147.20	2,144,170	326,144
M2	TSB	141.02	2,144,155	326,144
N1	TAB	146.59	2,144,170	326,244
N2	TSB	141.02	2,144,154	326,244
O1	TAB	146.45	2,144,170	326,343
O2	TSB	139.50	2,144,154	326,343
P1	TAB	145.09	2,144,170	326,445
P2	TSB	138.48	2,144,155	326,444
Q1	TAB	144.20	2,144,170	326,544
Q2	TSB	137.74	2,144,155	326,544
R1	TAB	143.16	2,144,170	326,644
R2	TSB	136.74	2,144,154	326,644
S1	TAB	141.80	2,144,170	326,744
S2	TSB	135.49	2,144,155	326,744
T1	TAB	140.70	2,144,170	326,844
T2	TSB	134.42	2,144,154	326,844
U1	TAB	140.12	2,144,170	326,944
U2	TSB	133.11	2,144,154	326,944
V1	TAB	138.40	2,144,170	327,045
V2	TSB	132.08	2,144,175	327,044
W1	TAB	137.67	2,144,170	327,145
W2	TSB	130.86	2,144,154	327,145
X1	TAB	135.60	2,144,161	327,243
X2	TSB	129.45	2,144,145	327,244

Notes:
¹ Florida State Plane Coordinate System East Zone (HARN 83)
² Top of Clay Berm (TAB)
³ Top of Subbase (TSB)

PHASE 6 TIE-IN WITH EXISTING PHASE 1 NORTH ANCHOR TRENCH

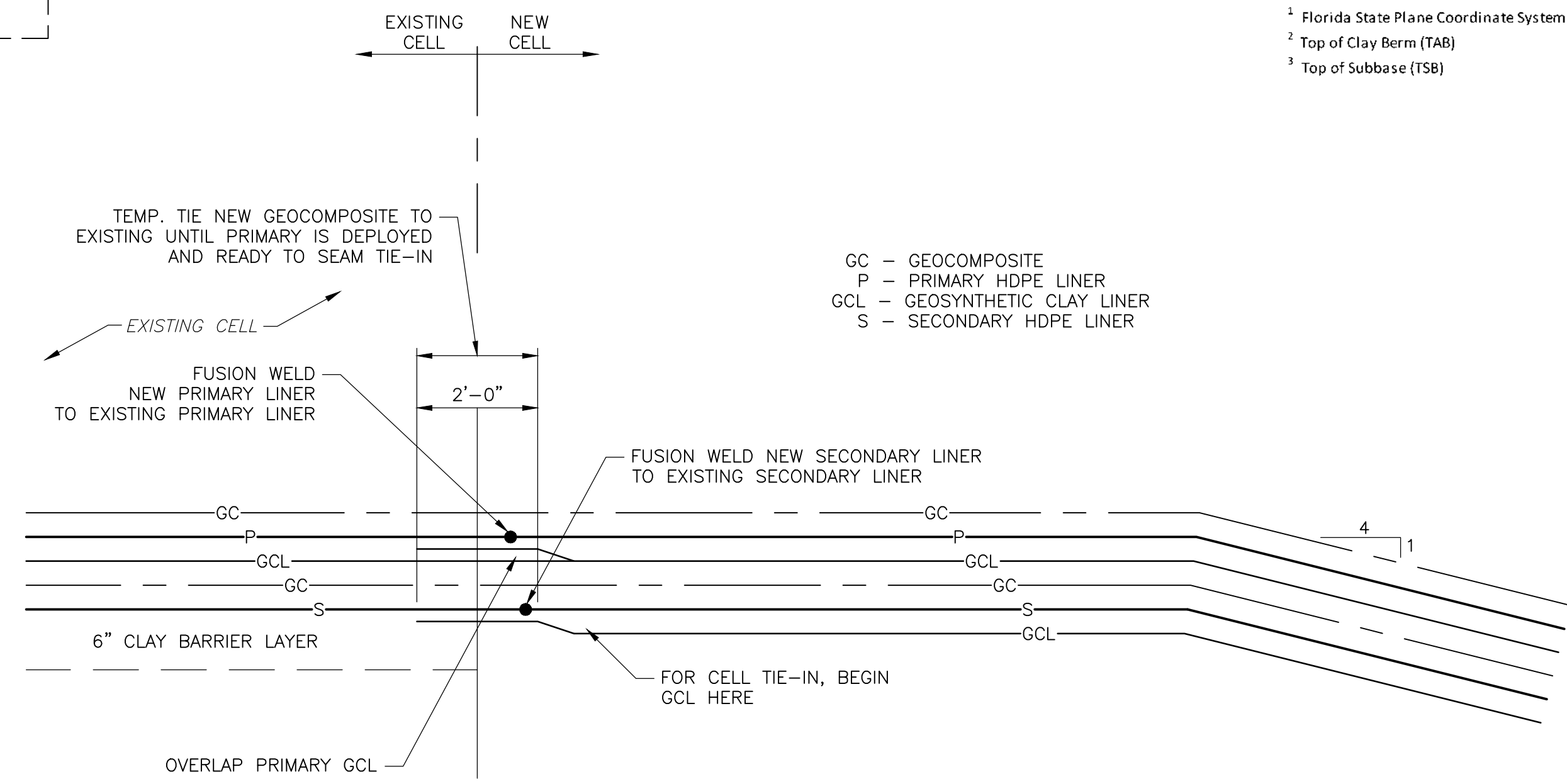
SECTION 1
 1" = 10' HORIZ.
 1" = 2' VERT.



- NOTES:
- THICKNESS OF THE LINER SYSTEMS COMPONENTS HAVE BEEN EXAGGERATED FOR CLARITY PURPOSES ONLY.
 - PLYWOOD SHALL BE 3/4" THICK EXTERIOR GRADE PLYWOOD MEASURING 4'x8'.

TYPICAL PRIMARY AND SECONDARY LINER END TREATMENT BETWEEN NORTH - SOUTH FUTURE PHASES

DETAIL A
 NTS CD-4, CD-4A



- NOTES:
- CONTRACTOR MUST USE SANDBAGS OR OTHER MEANS TO ASSURE THAT GEOCOMPOSITE BETWEEN LINERS DO NOT SHIFT AFTER INSTALLATION. USE SANDBAGS OR OTHER MEANS TO HOLD GEOCOMPOSITE UNTIL PRIMARY LINER AND PROTECTIVE SAND HAVE BEEN PLACED.

TIE-IN FOR LINER SYSTEMS FOR ISOLATION OF PHASE 1 AND PHASE 6

DETAIL B
 1" = 2'-0"

Xref's: [CDM_2436] Images: []
 Last saved by: CHAPMANBS Time: 1/3/2012 1:39:19 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, BESSER, & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

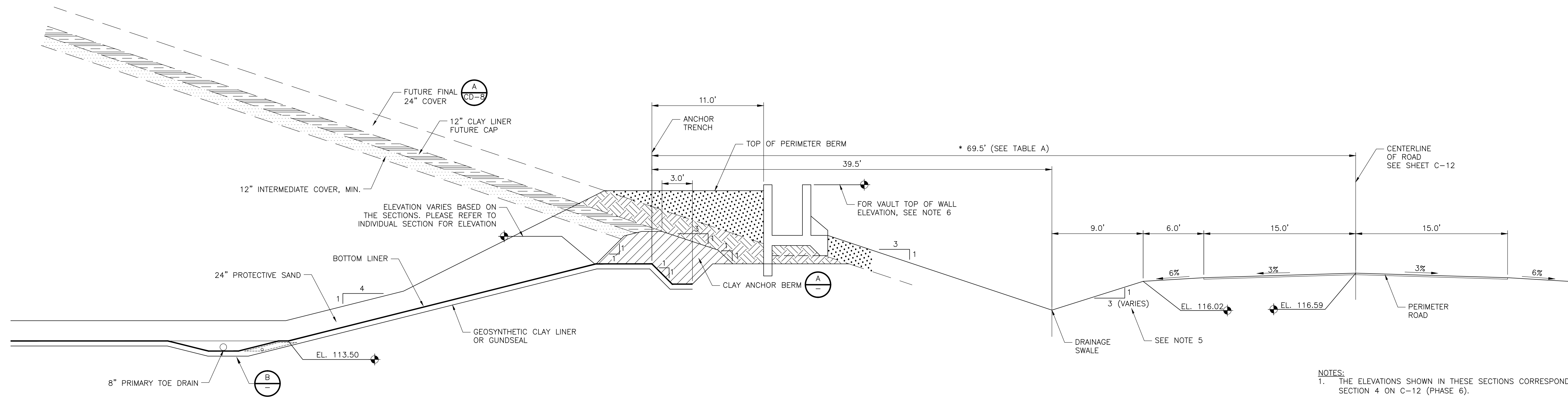
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLA SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CCA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

CIVIL DETAILS II
 JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: CD02SDDT
 SHEET NO. CD-2



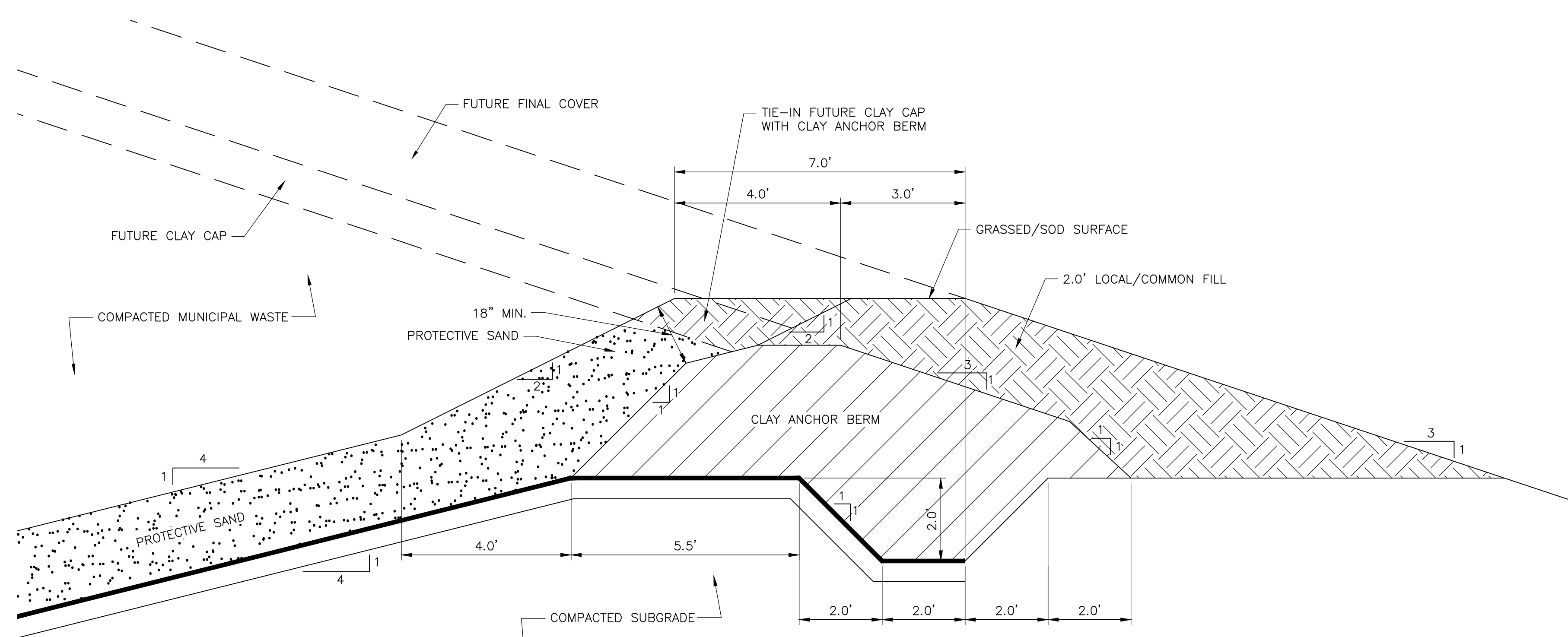
CLAY BERM/CAP CROSS SECTION - PHASE 6 (TYP)

SECTION 1
1" = 5'-0" (C-9)

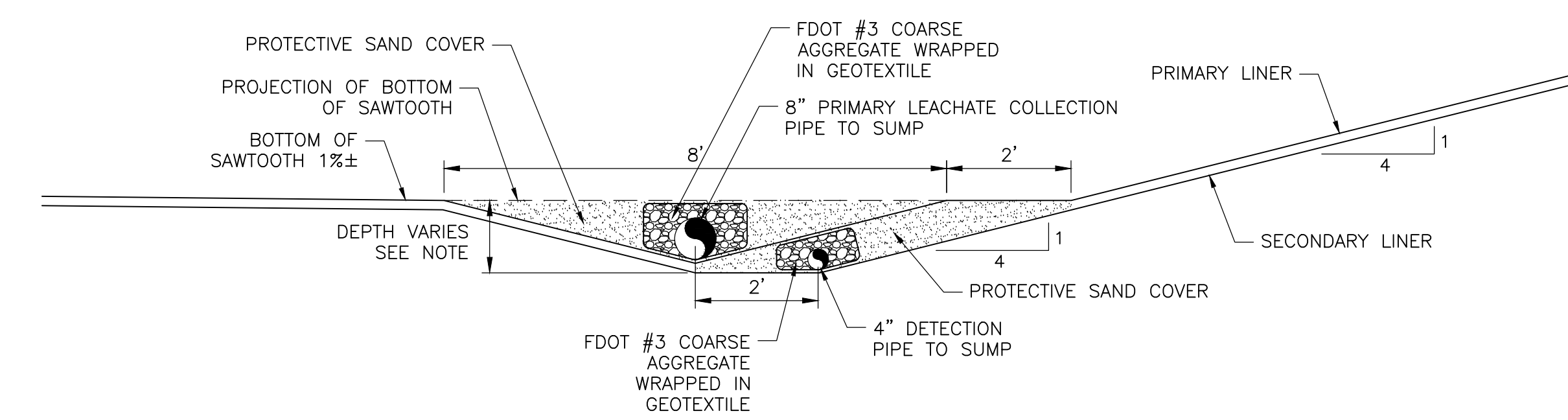
TABLE A

DISTANCE ABOVE CENTERLINE OF ROAD (FEET)	* DISTANCE FROM CENTERLINE OF ROAD TO CLAY ANCHOR BERM	ANCHOR TRENCH DISTANCE TO BACK WALL OF LEACHATE STRUCTURE
3	66.5	11.0
4	69.5	11.0
5	72.5	11.0
6	75.5	11.0

- NOTES:
1. THE ELEVATIONS SHOWN IN THESE SECTIONS CORRESPOND TO SECTION 4 ON C-12 (PHASE 6).
 2. TOP OF ANCHOR TRENCH IS NORMALLY 3' ABOVE \bar{C} OF THE ROAD. IN SOME LOCATIONS IT IS HIGHER.
 3. THE BREAK POINT IN THE BOTTOM LINER TO TRANSITION TO 4:1 SLOPE VARIES IN ELEVATION.
 4. FOR CAP TIE-IN TO CLAY BERM, REMOVE FILL MATERIAL ON TOP OF CLAY BERM AND INSTALL CLAY CAP AS SHOWN ON DETAIL A.
 5. THE SIDE SLOPE BETWEEN THE EDGE OF SHOULDER AND BOTTOM OF DRAINAGE SWALE SHALL BE NO STEEPER THAN 3:1.
 6. FOR ELEVATIONS OF VAULT STRUCTURE FOR PHASE 6, REFER TO STRUCTURAL SHEET S-2.



PERIMETER ANCHOR TRENCH
DETAIL A
1" = 2'-0" (C-9)



NOTES:

1. DEPTH OF PIPE INVERT BELOW PROJECTION OF BOTTOM OF SAWTOOTH VARIES FROM 0" AT HIGHPOINT TO 2'-6" AT SUMP.

LEACHATE COLLECTION TOE DRAIN TO SUMP (TYPICAL)
DETAIL B
1" = 2'-0" (C-10)

REV. NO.	DATE	DRWN	CHKD	REMARKS

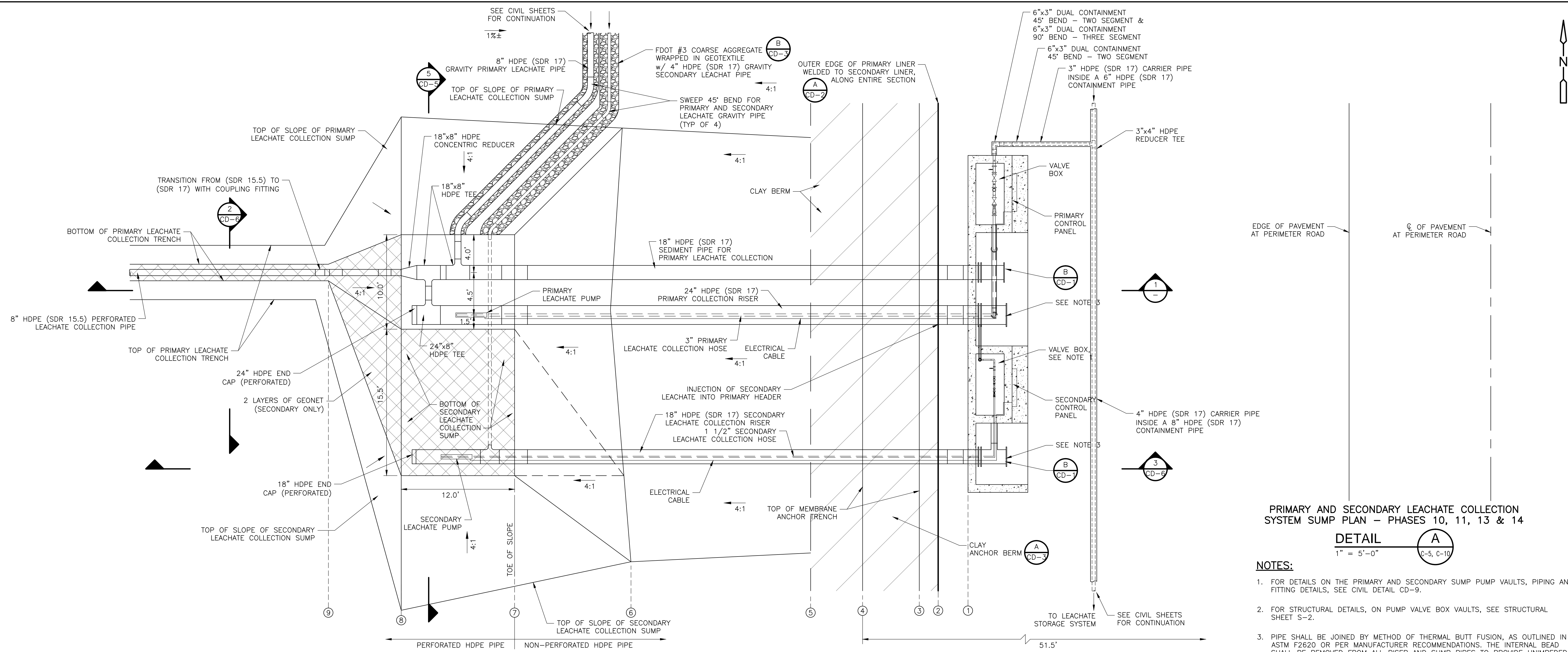
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: I. POLEMATIDIS
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

CIVIL DETAILS III
 CD-3

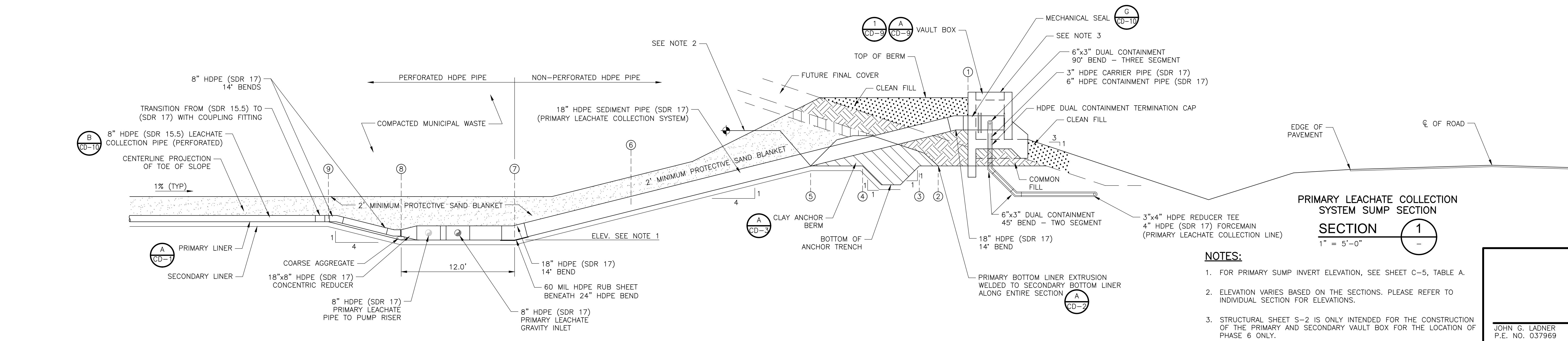
JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: CD03SDDT
 SHEET NO.
 CD-3



PRIMARY AND SECONDARY LEACHATE COLLECTION SYSTEM SUMP PLAN - PHASES 10, 11, 13 & 14

DETAIL A
1" = 5'-0" C-5, C-10

- NOTES:**
- FOR DETAILS ON THE PRIMARY AND SECONDARY SUMP PUMP VAULTS, PIPING AND FITTING DETAILS, SEE CIVIL DETAIL CD-9.
 - FOR STRUCTURAL DETAILS, ON PUMP VALVE BOX VAULTS, SEE STRUCTURAL SHEET S-2.
 - PIPE SHALL BE JOINED BY METHOD OF THERMAL BUTT FUSION, AS OUTLINED IN ASTM F2620 OR PER MANUFACTURER RECOMMENDATIONS. THE INTERNAL BEAD SHALL BE REMOVED FROM ALL RISER AND SUMP PIPES TO PROVIDE UNIMPEDED TRAVEL OF LEACHATE PUMPS. SEE SPEC. 02623 FOR DETAILS.



PRIMARY LEACHATE COLLECTION SYSTEM SUMP SECTION

SECTION 1
1" = 5'-0"

- NOTES:**
- FOR PRIMARY SUMP INVERT ELEVATION, SEE SHEET C-5, TABLE A.
 - ELEVATION VARIES BASED ON THE SECTIONS. PLEASE REFER TO INDIVIDUAL SECTION FOR ELEVATIONS.
 - STRUCTURAL SHEET S-2 IS ONLY INTENDED FOR THE CONSTRUCTION OF THE PRIMARY AND SECONDARY VAULT BOX FOR THE LOCATION OF PHASE 6 ONLY.

REV. NO.	DATE	DRWN	CHKD	REMARKS

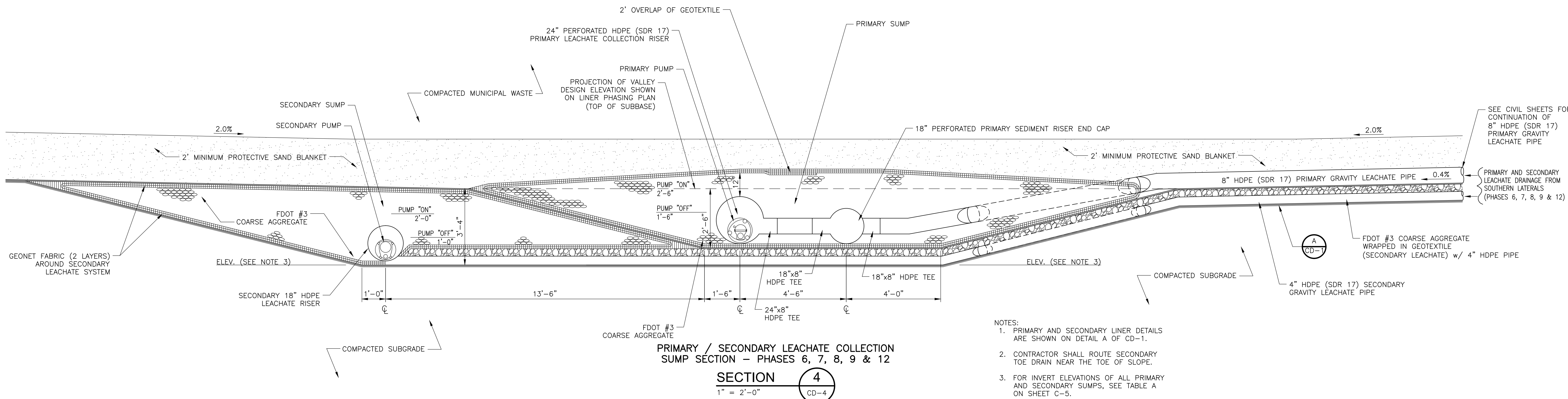
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLA SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

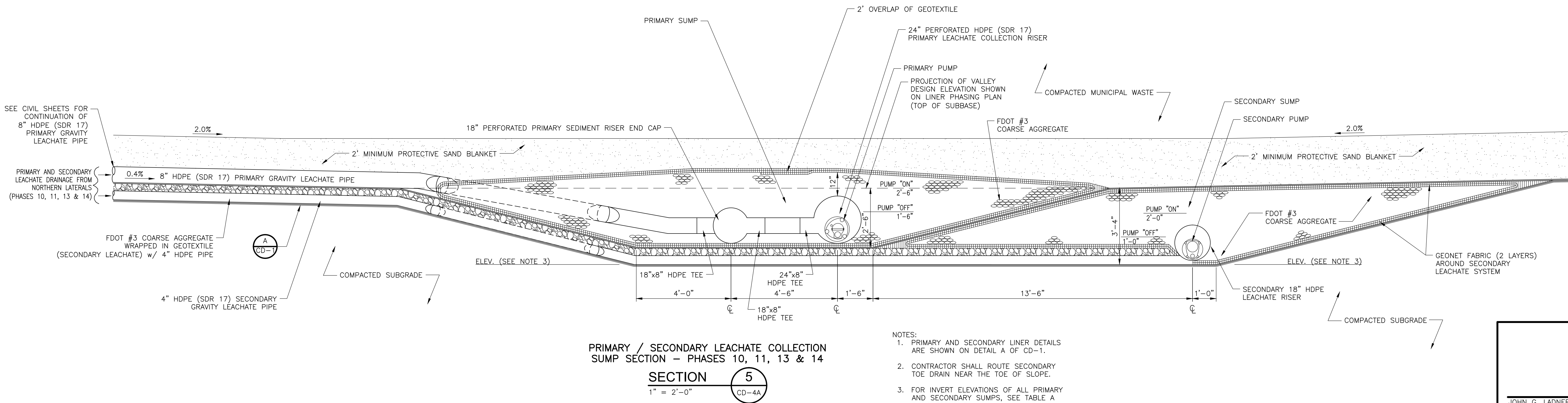
CIVIL DETAILS - LEACHATE COLLECTION

PROJECT NO. 9012-80695
 FILE NAME: CD04ASDDT
 SHEET NO. CD-4A



PRIMARY / SECONDARY LEACHATE COLLECTION
SUMP SECTION - PHASES 6, 7, 8, 9 & 12
SECTION 4
1" = 2'-0"

- NOTES:
1. PRIMARY AND SECONDARY LINER DETAILS ARE SHOWN ON DETAIL A OF CD-1.
 2. CONTRACTOR SHALL ROUTE SECONDARY TOE DRAIN NEAR THE TOE OF SLOPE.
 3. FOR INVERT ELEVATIONS OF ALL PRIMARY AND SECONDARY SUMPS, SEE TABLE A ON SHEET C-5.



PRIMARY / SECONDARY LEACHATE COLLECTION
SUMP SECTION - PHASES 10, 11, 13 & 14
SECTION 5
1" = 2'-0"

- NOTES:
1. PRIMARY AND SECONDARY LINER DETAILS ARE SHOWN ON DETAIL A OF CD-1.
 2. CONTRACTOR SHALL ROUTE SECONDARY TOE DRAIN NEAR THE TOE OF SLOPE.
 3. FOR INVERT ELEVATIONS OF ALL PRIMARY AND SECONDARY SUMPS, SEE TABLE A ON SHEET C-5.

Xref: [CDM_2436] Images: []
 Last saved by: CHAPMANB Time: 2/17/2012 9:31:45 AM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 © 2011 CDM, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

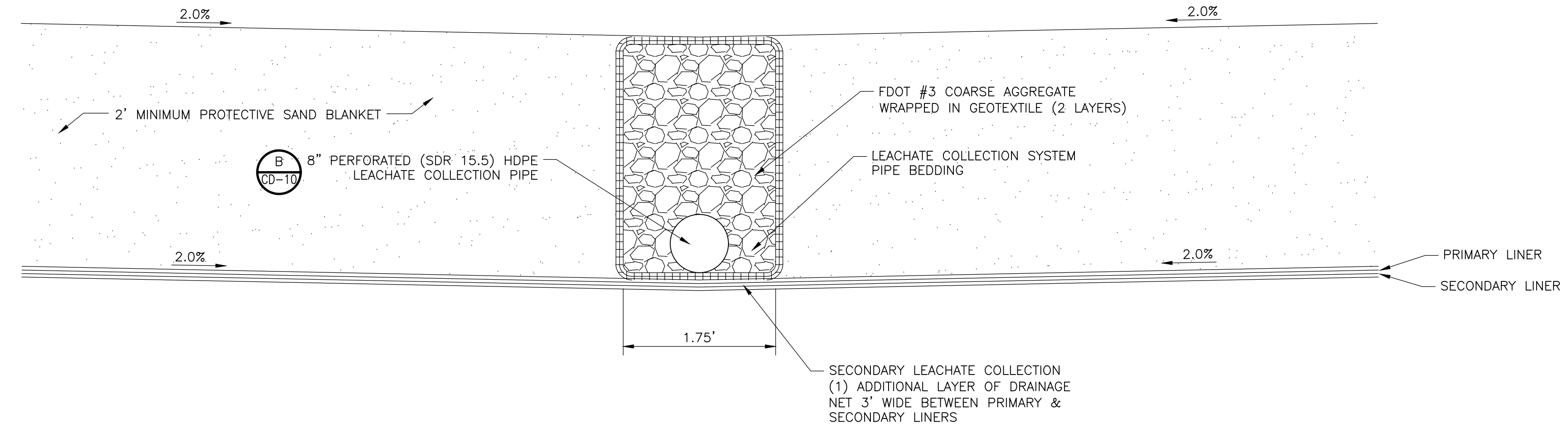
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLAH-SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

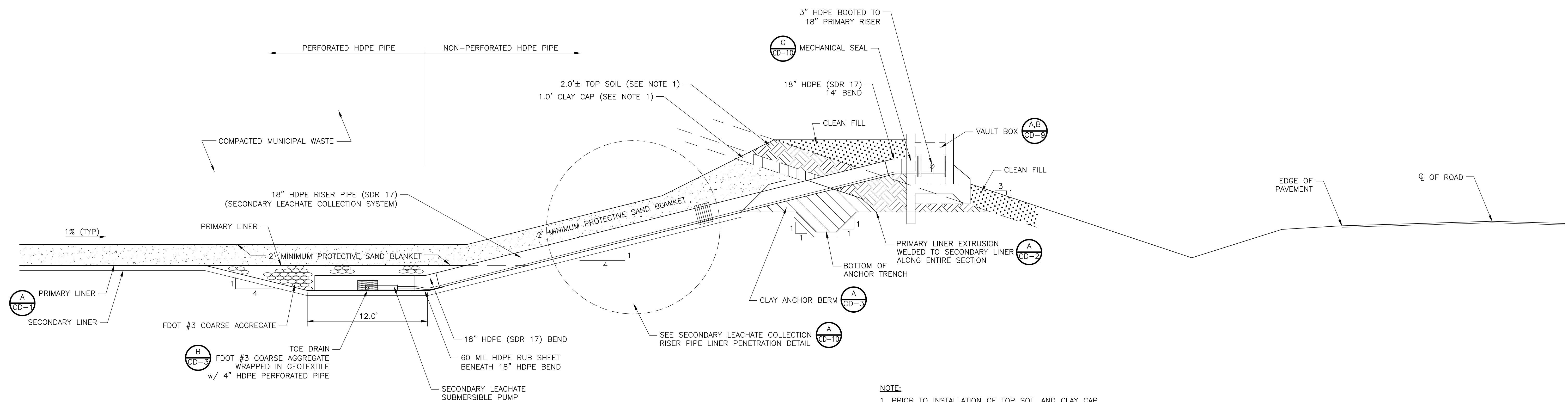
CIVIL DETAILS - LEACHATE COLLECTION
 CD-5

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: CD05SDDT
 SHEET NO. CD-5



LEACHATE COLLECTION/DETECTION PIPES - ALL PHASES

SECTION 2
1" = 1'-0" CD-4, CD-4A



NOTE:
1. PRIOR TO INSTALLATION OF TOP SOIL AND CLAY CAP, AS SHOWN, CONTRACTOR SHALL UTILIZE CLEAN STRUCTURAL FILL, ACCORDINGLY.

SECONDARY LEACHATE COLLECTION SYSTEM SUMP SECTION PHASES ALL PHASES

SECTION 3
1" = 5'-0" CD-4, CD-4A

REV. NO.	DATE	DRWN	CHKD	REMARKS

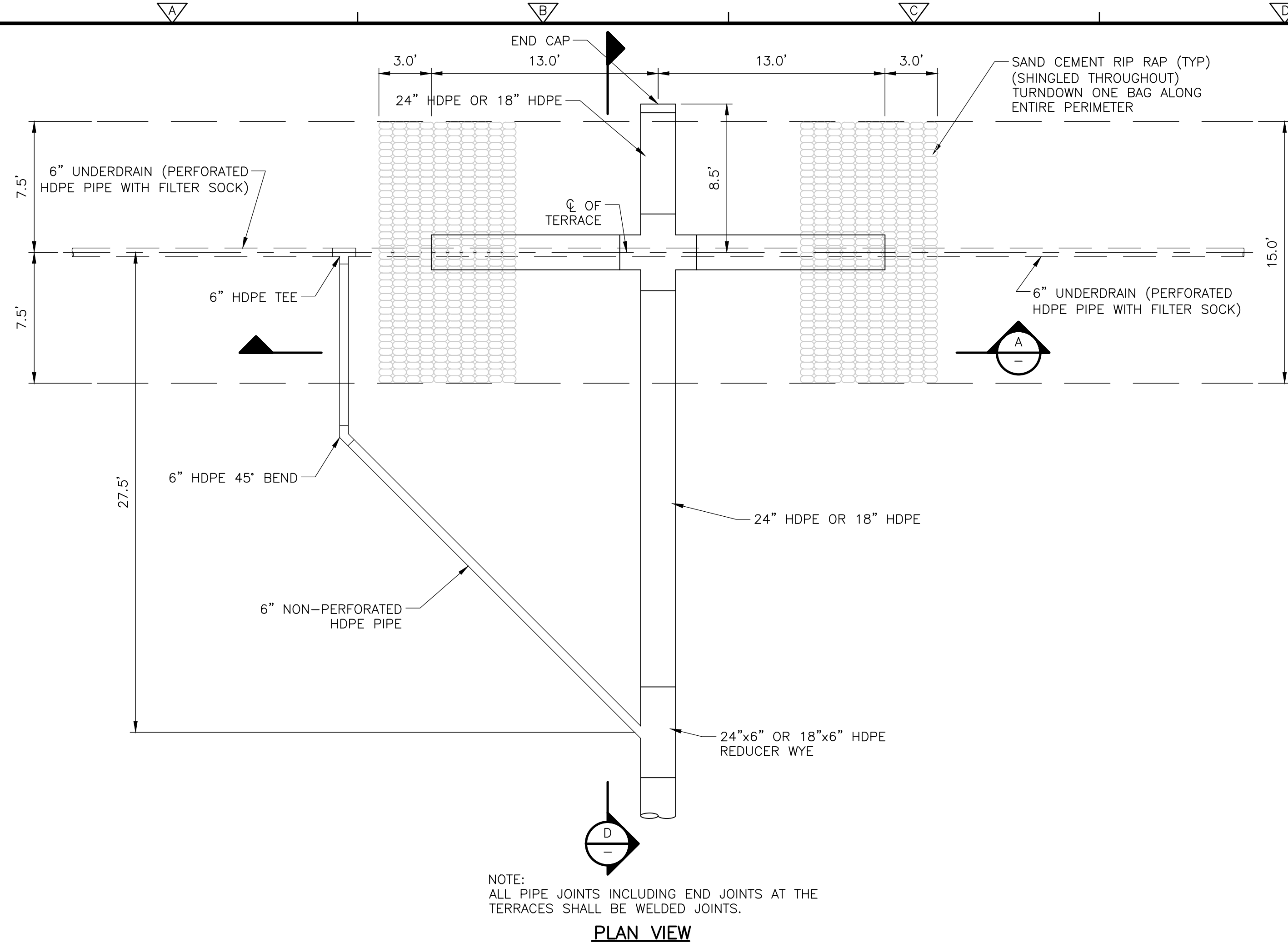
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLAH-SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

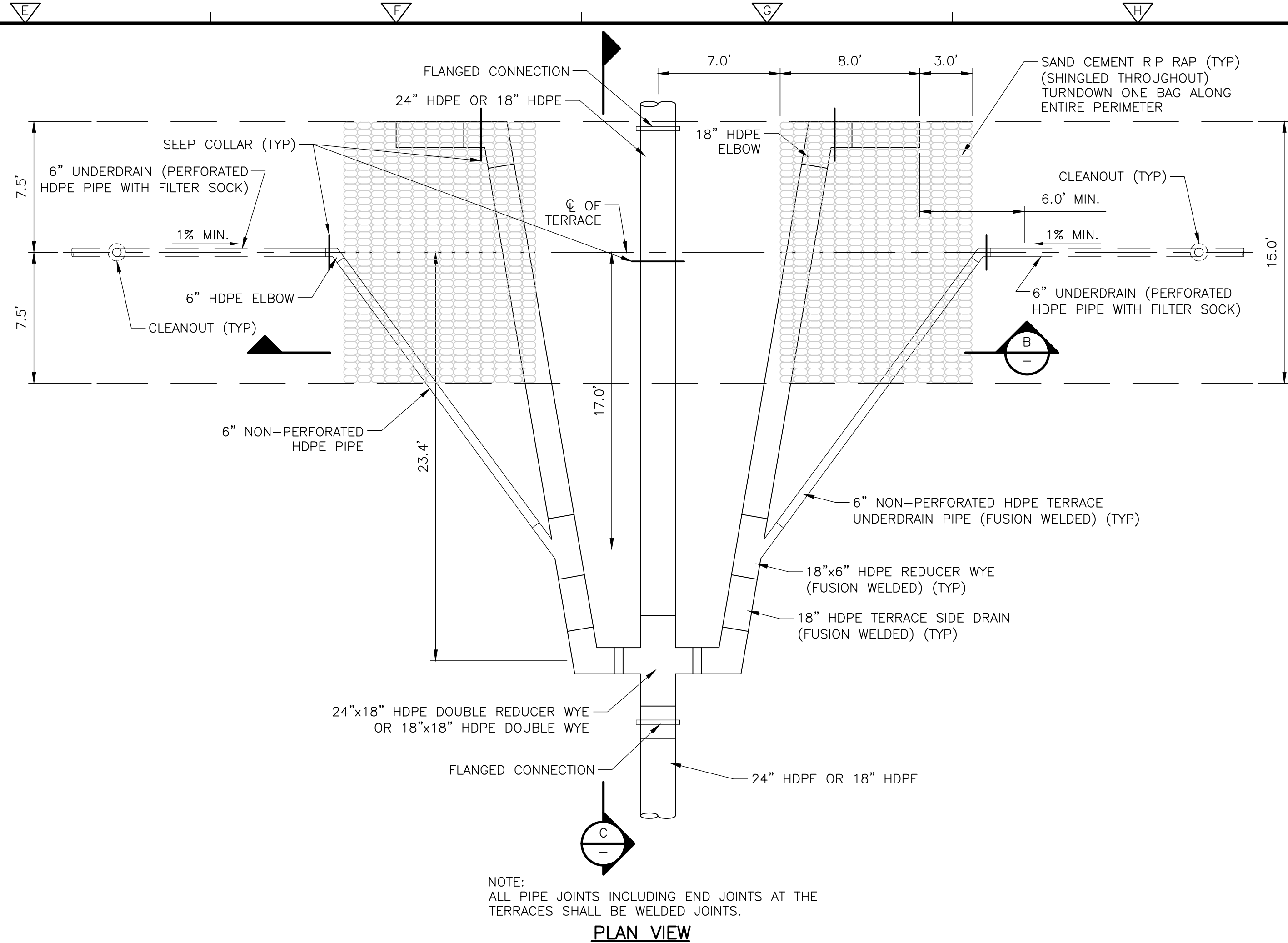
CIVIL DETAILS - LEACHATE COLLECTION

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: CD06SDDT
 SHEET NO. CD-6



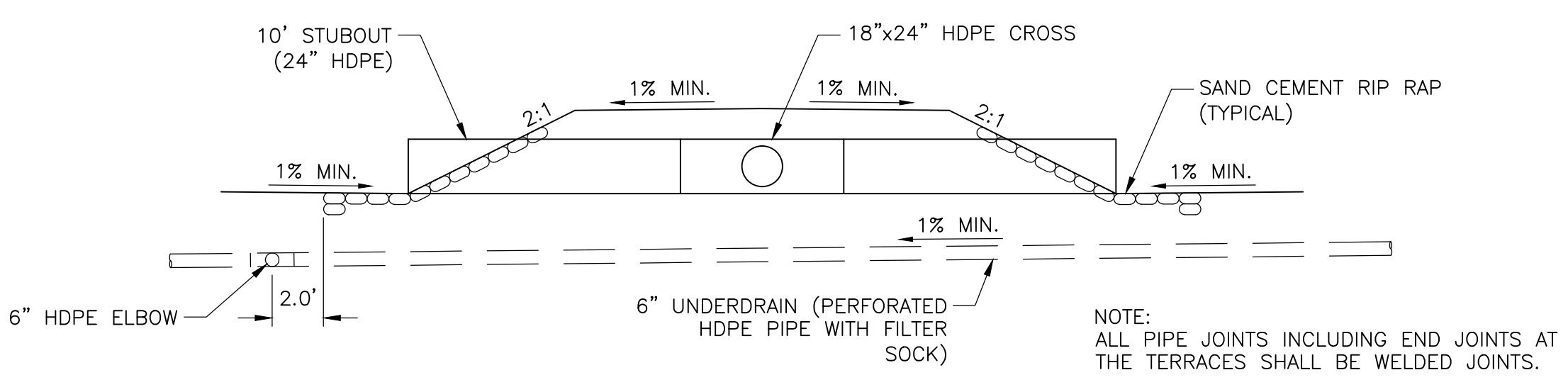
NOTE:
ALL PIPE JOINTS INCLUDING END JOINTS AT THE TERRACES SHALL BE WELDED JOINTS.

PLAN VIEW



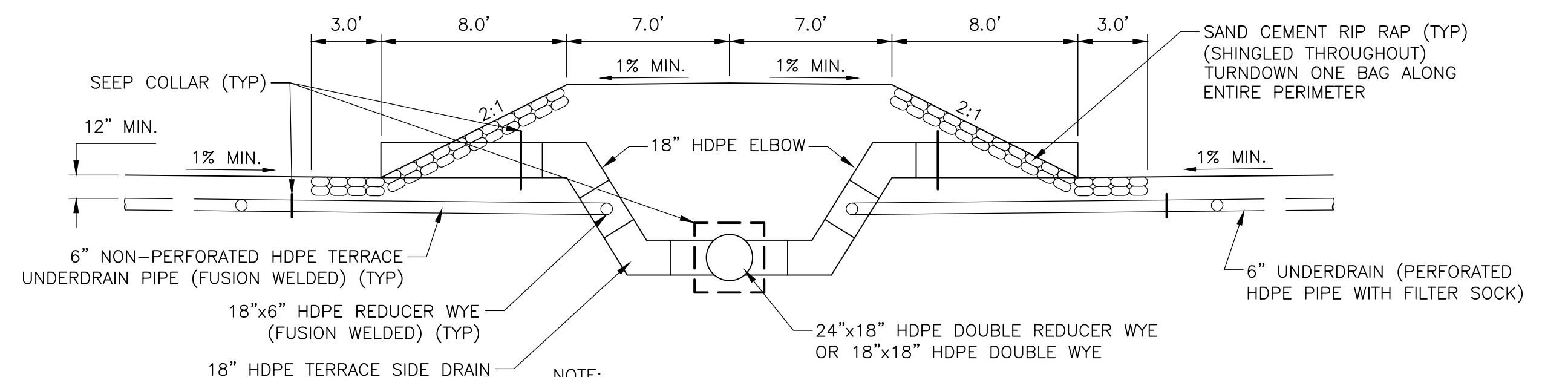
NOTE:
ALL PIPE JOINTS INCLUDING END JOINTS AT THE TERRACES SHALL BE WELDED JOINTS.

PLAN VIEW



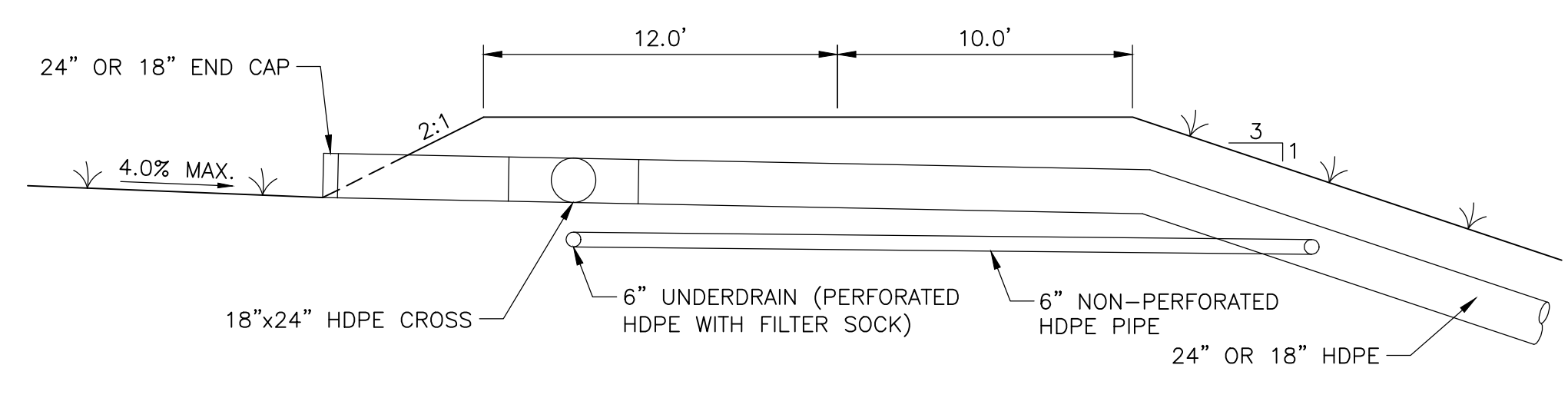
NOTE:
ALL PIPE JOINTS INCLUDING END JOINTS AT THE TERRACES SHALL BE WELDED JOINTS.

SECTION VIEW
TOP TERRACE PIPING
DETAIL A



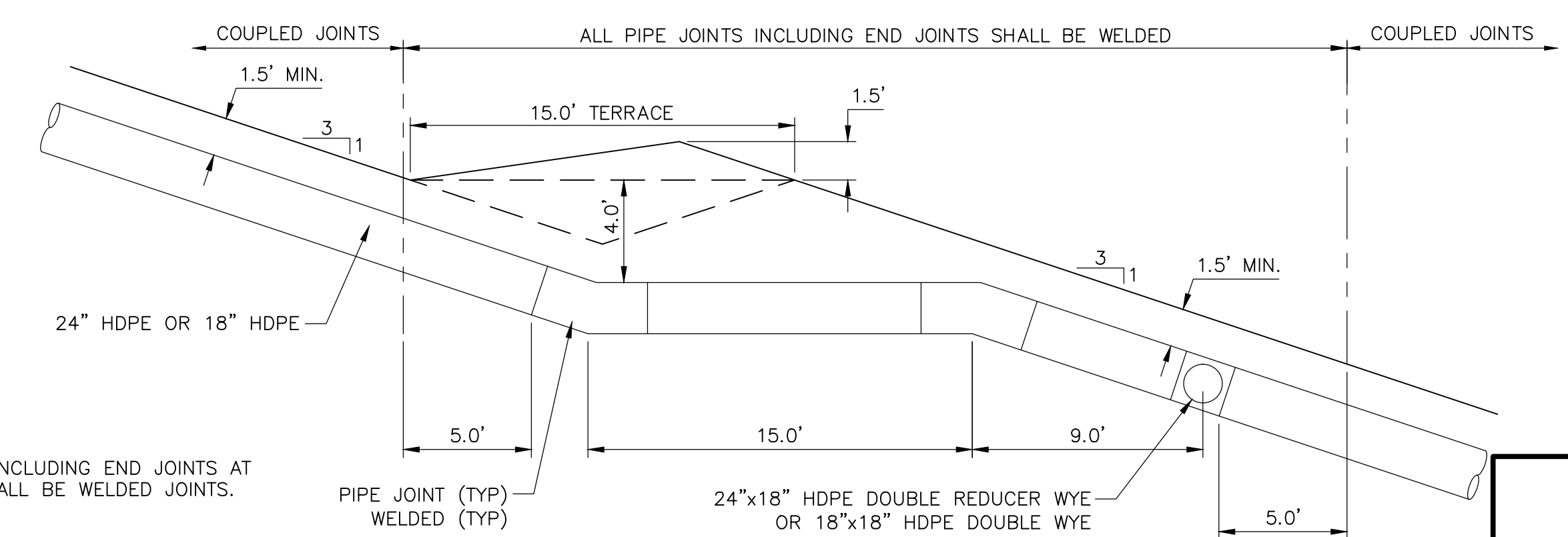
NOTE:
ALL PIPE JOINTS INCLUDING END JOINTS AT THE TERRACES SHALL BE WELDED JOINTS.

SECTION VIEW
INTERMEDIATE TERRACE PIPING
DETAIL B



NOTE:
ALL PIPE JOINTS INCLUDING END JOINTS AT THE TERRACES SHALL BE WELDED JOINTS.

TOP TERRACE PIPING
DETAIL D



NOTE:
ALL PIPE JOINTS INCLUDING END JOINTS AT THE TERRACES SHALL BE WELDED JOINTS.

INTERMEDIATE TERRACE PIPING
DETAIL C

Xref's: [CDM_2436] Images: []
 Last saved by: CHAPMANBS Time: 1/13/2012 1:39:19 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM, DESIGNER & MAKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLA SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

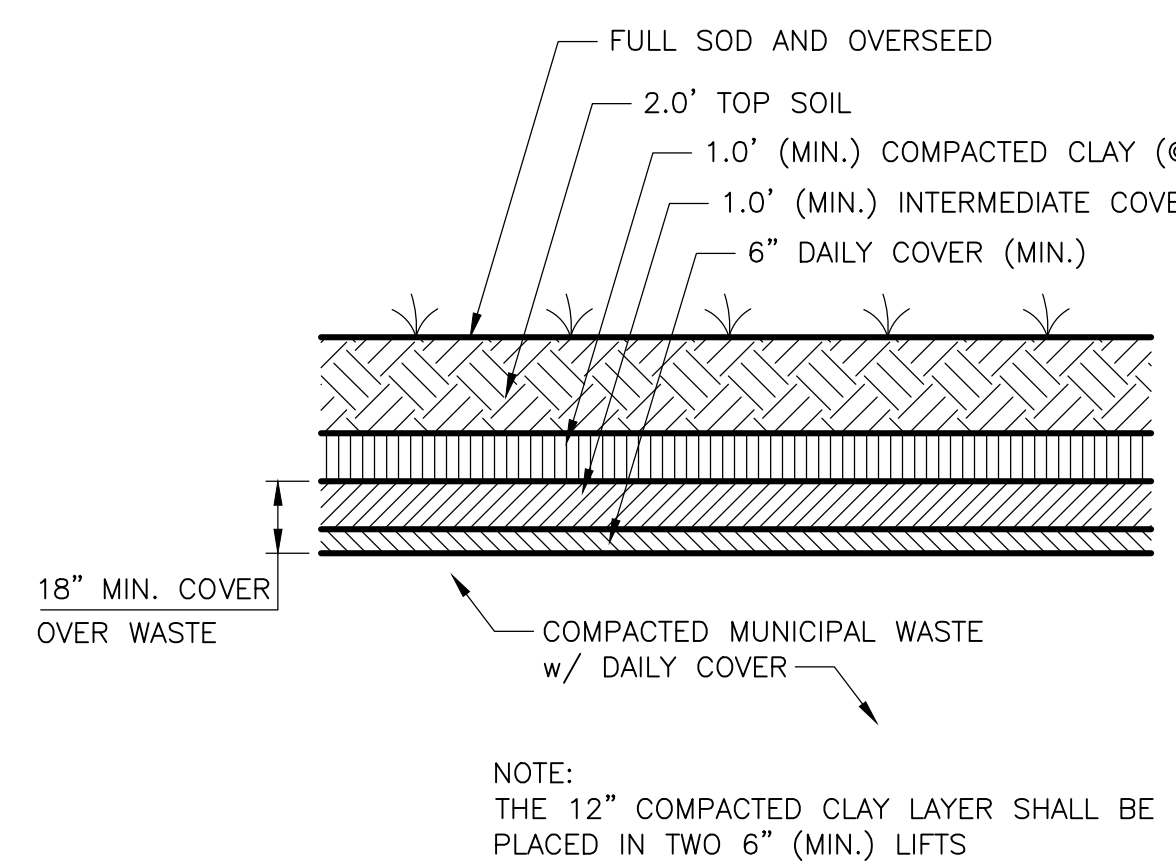


CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

CIVIL DETAILS - CLOSURE
 SHEET NO. CD-7

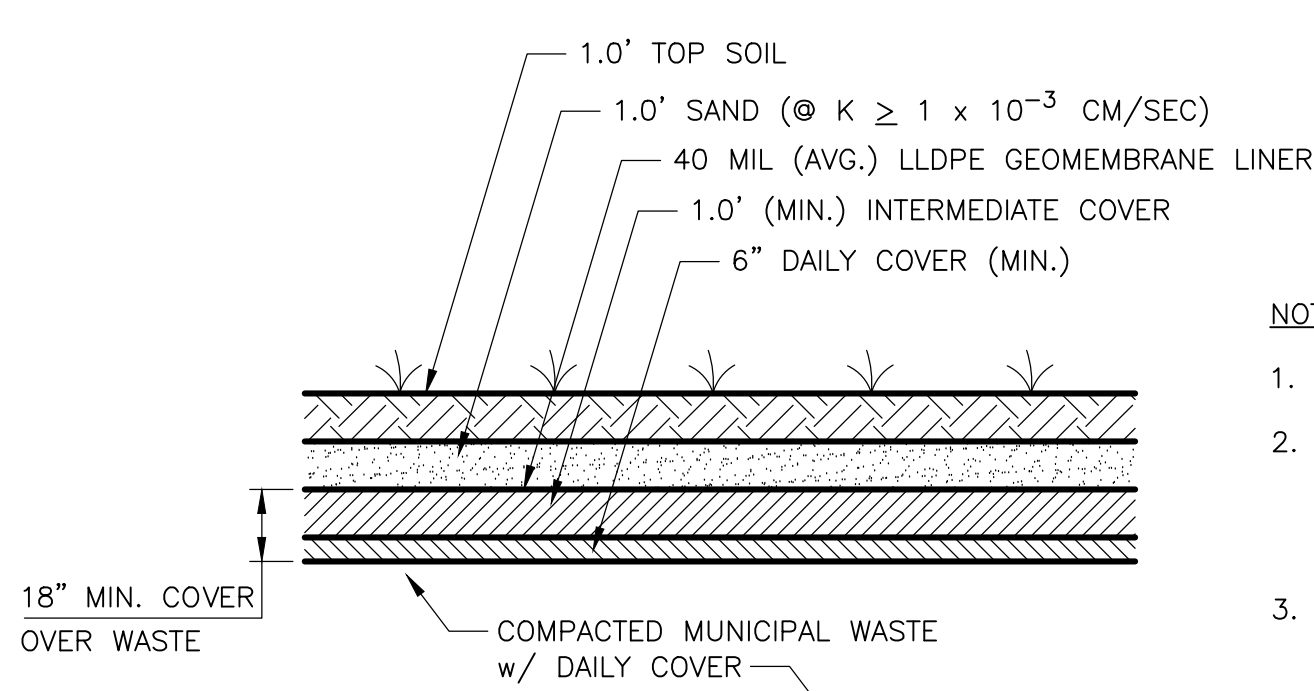
JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: CD07SDDT
 SHEET NO. CD-7

FOR PERMIT - NOT FOR CONSTRUCTION



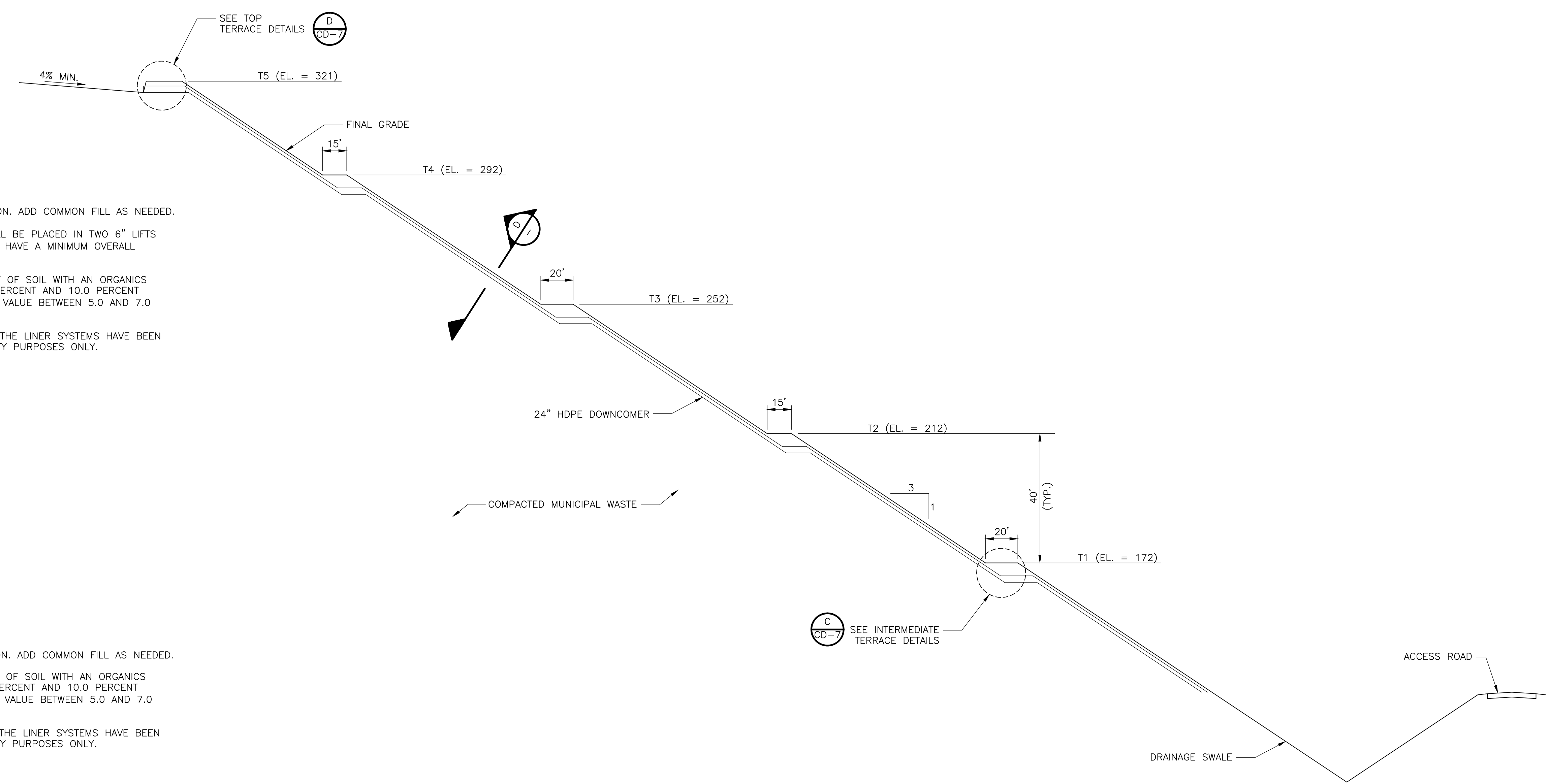
- NOTES:**
1. STRIP EXISTING VEGETATION. ADD COMMON FILL AS NEEDED.
 2. THE 1.0' CLAY CAP SHALL BE PLACED IN TWO 6" LIFTS (COMPACTED) AND SHALL HAVE A MINIMUM OVERALL THICKNESS OF 12".
 3. TOP SOIL SHALL CONSIST OF SOIL WITH AN ORGANICS CONTENT BETWEEN 1.5 PERCENT AND 10.0 PERCENT (ASTM D2974) AND A pH VALUE BETWEEN 5.0 AND 7.0 (ASTM E70).
 4. VERTICAL THICKNESS OF THE LINER SYSTEMS HAVE BEEN EXAGGERATED FOR CLARITY PURPOSES ONLY.

FINAL COVER - SIDE SLOPE UNIT
DETAIL A
 NTS

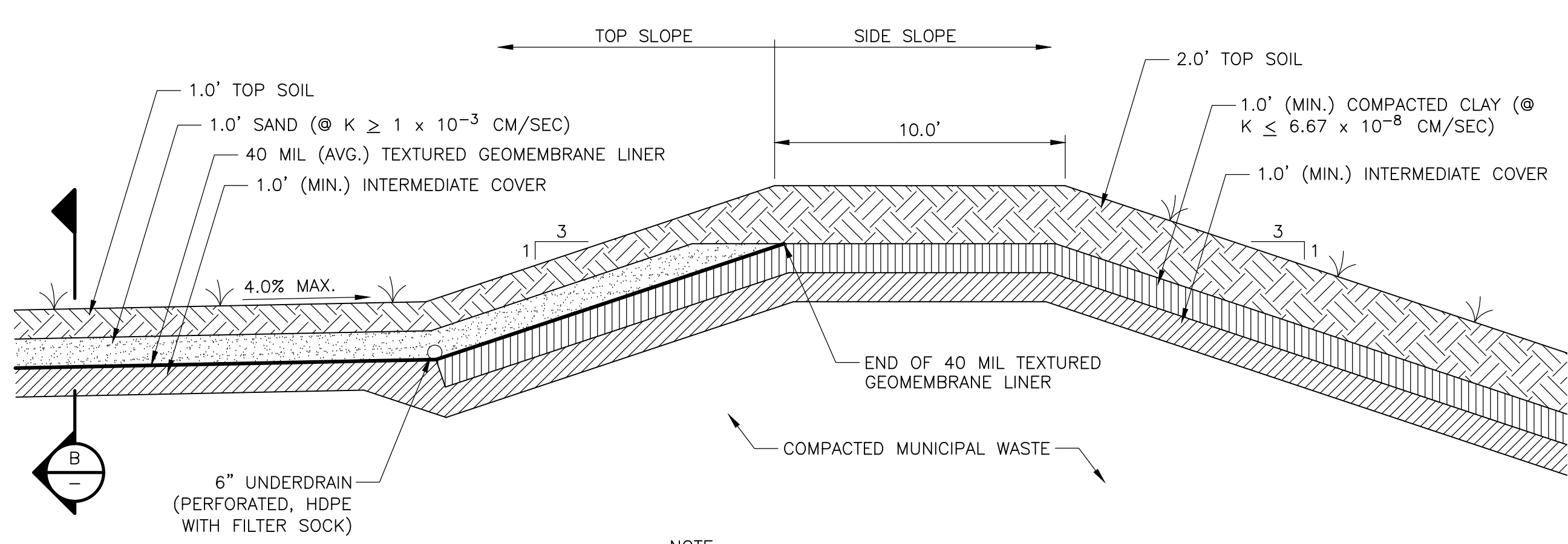


- NOTES:**
1. STRIP EXISTING VEGETATION. ADD COMMON FILL AS NEEDED.
 2. TOP SOIL SHALL CONSIST OF SOIL WITH AN ORGANICS CONTENT BETWEEN 1.5 PERCENT AND 10.0 PERCENT (ASTM D2974) AND A pH VALUE BETWEEN 5.0 AND 7.0 (ASTM E70).
 3. VERTICAL THICKNESS OF THE LINER SYSTEMS HAVE BEEN EXAGGERATED FOR CLARITY PURPOSES ONLY.

FINAL COVER - TOP SLOPE
DETAIL B
 NTS

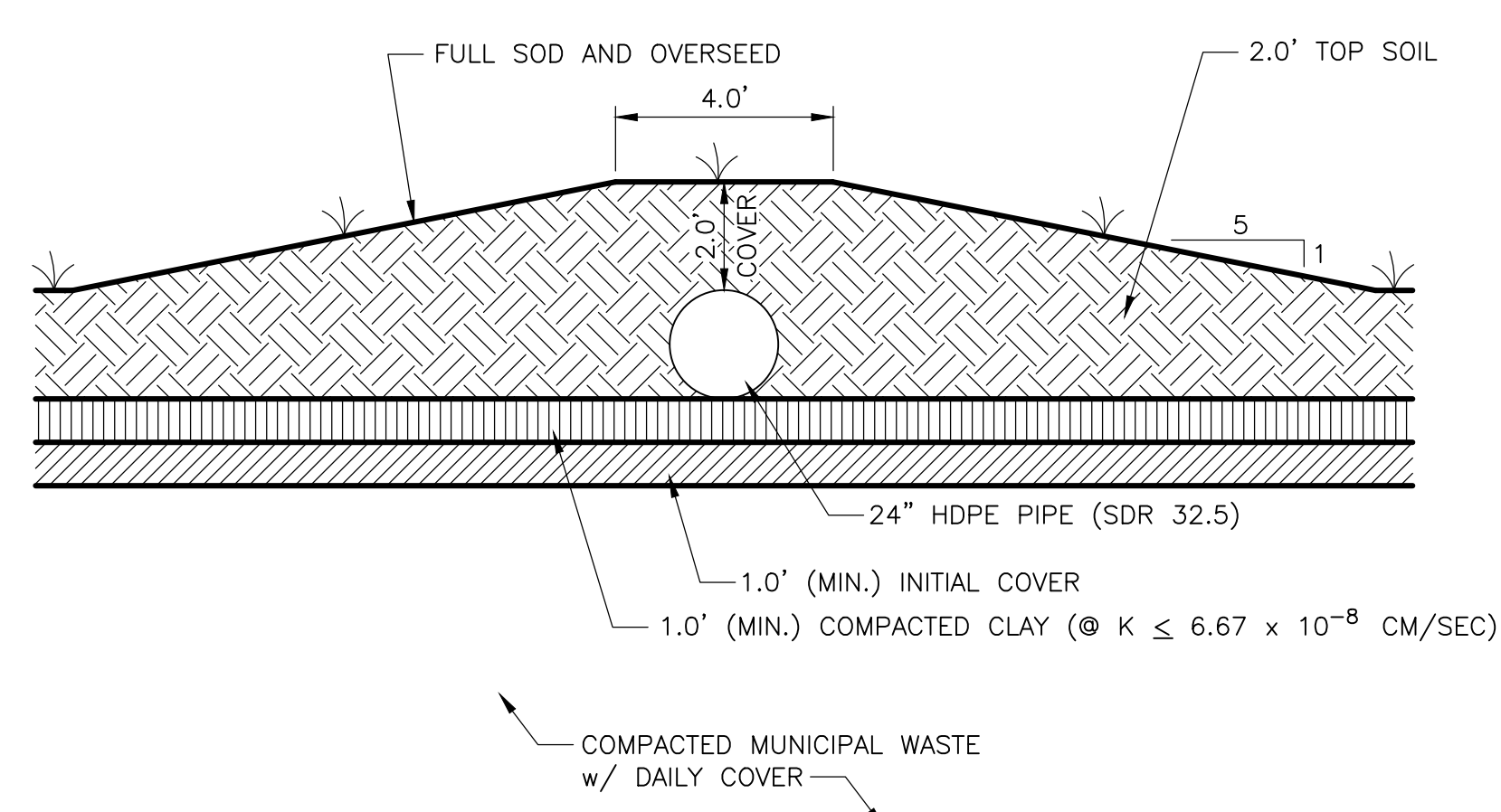


SIDE SLOPE
SECTION 1
 1" = 40' HORIZ.
 1" = 20' VERT.



- NOTE:**
 THE 12" COMPACTED CLAY LAYER SHALL BE PLACED IN TWO 6" (MIN.) LIFTS

TOP TERRACE BERM - TYPICAL CROSS SECTION
DETAIL C
 NTS



- NOTE:**
 THE COMPACTED CLAY LAYER SHALL BE PLACED IN TWO 6" (MIN.) LIFTS

TYPICAL PIPE ENCASEMENT SECTION
DETAIL D
 NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

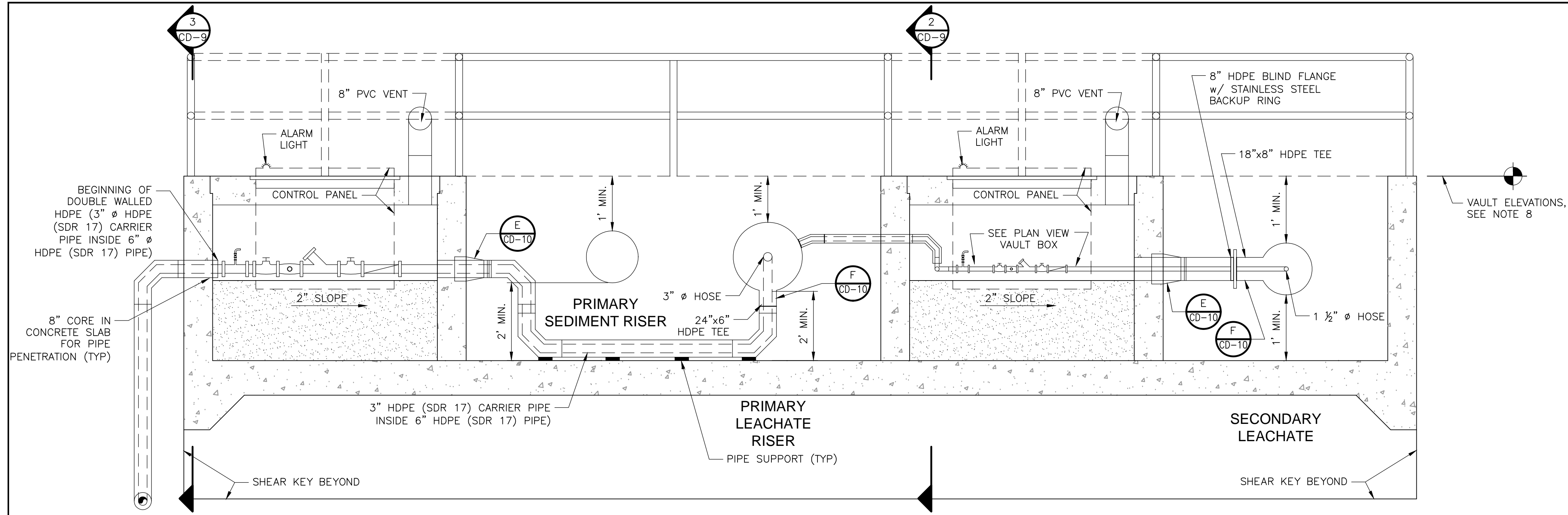
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLA SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109

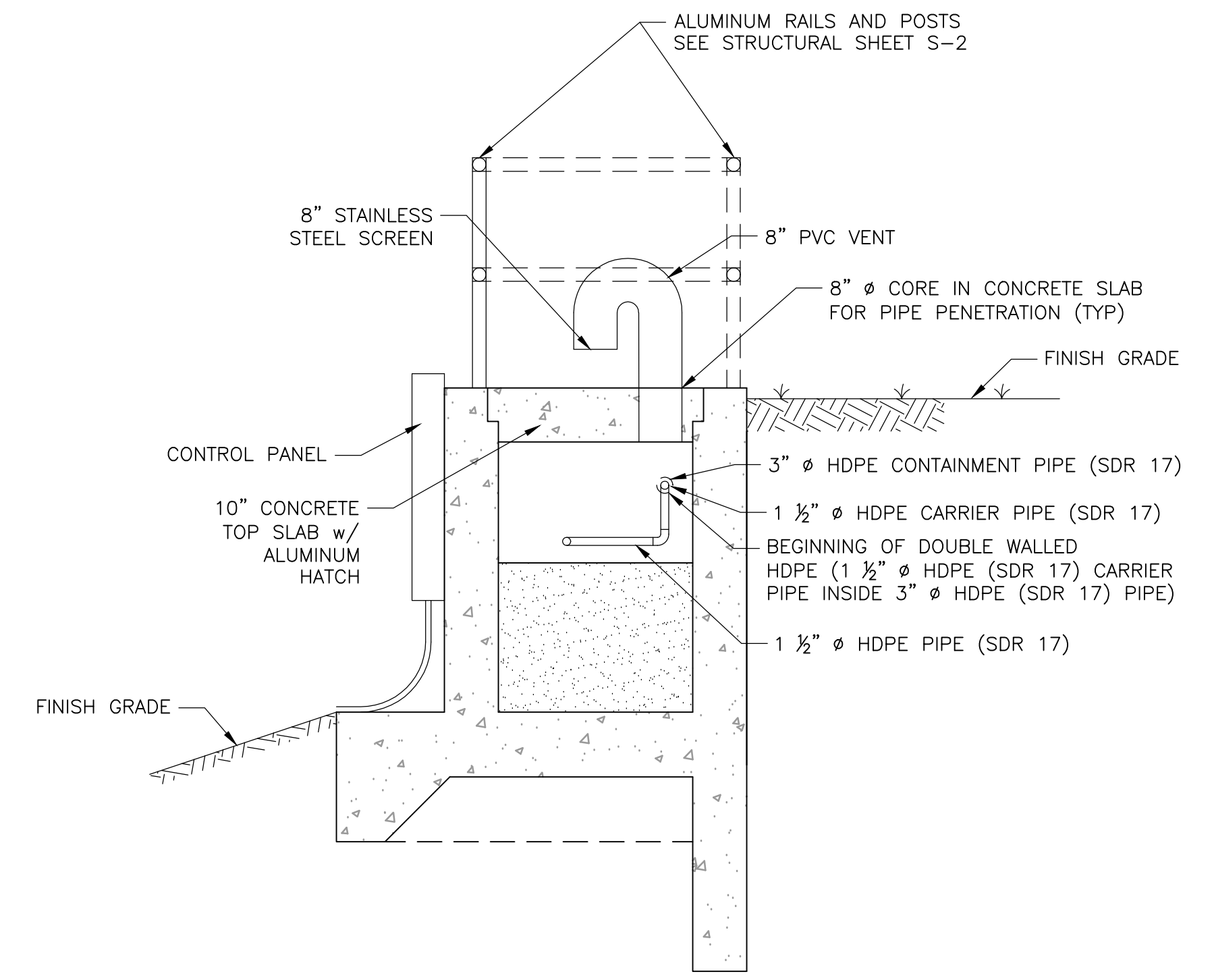
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

CIVIL DETAILS - CLOSURE

JOHN G. LADNER P.E. NO. 037969
PROJECT NO. 9012-80695 FILE NAME: CD08SDDT
SHEET NO. CD-8

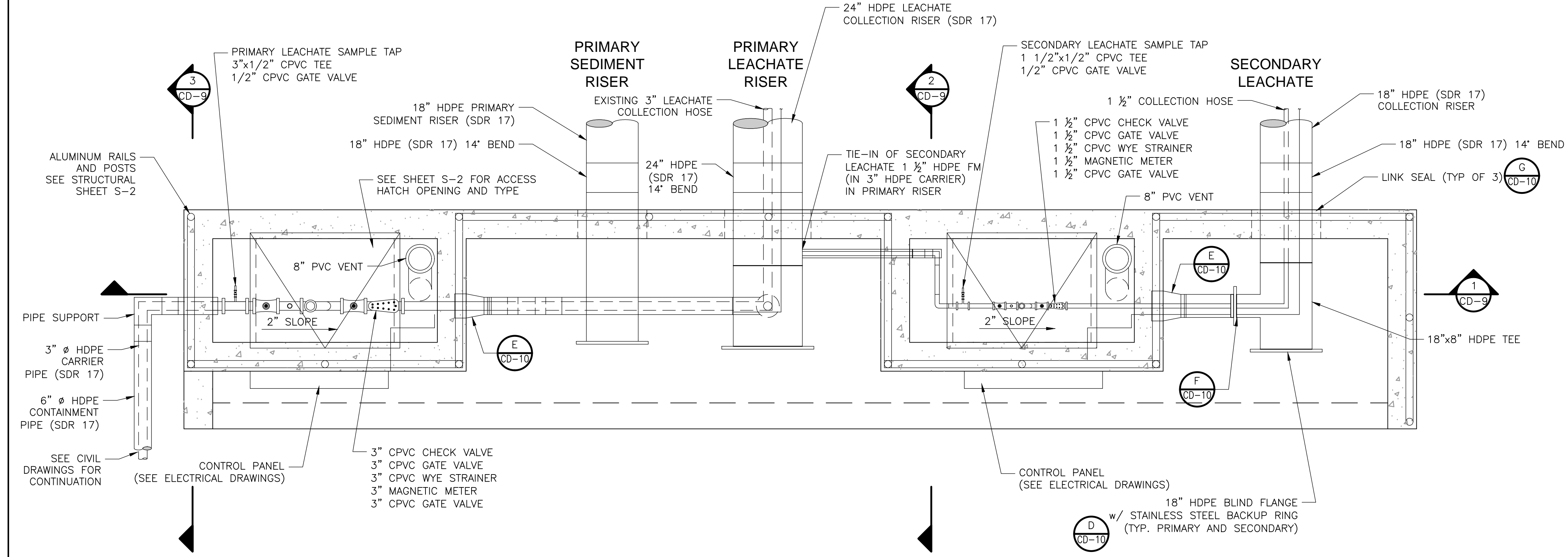


SECTION VIEW
PHASES 6, 7, 8, 9 & 12 VAULT BOX DETAIL
 1/2" = 1'-0" (1) CD-5

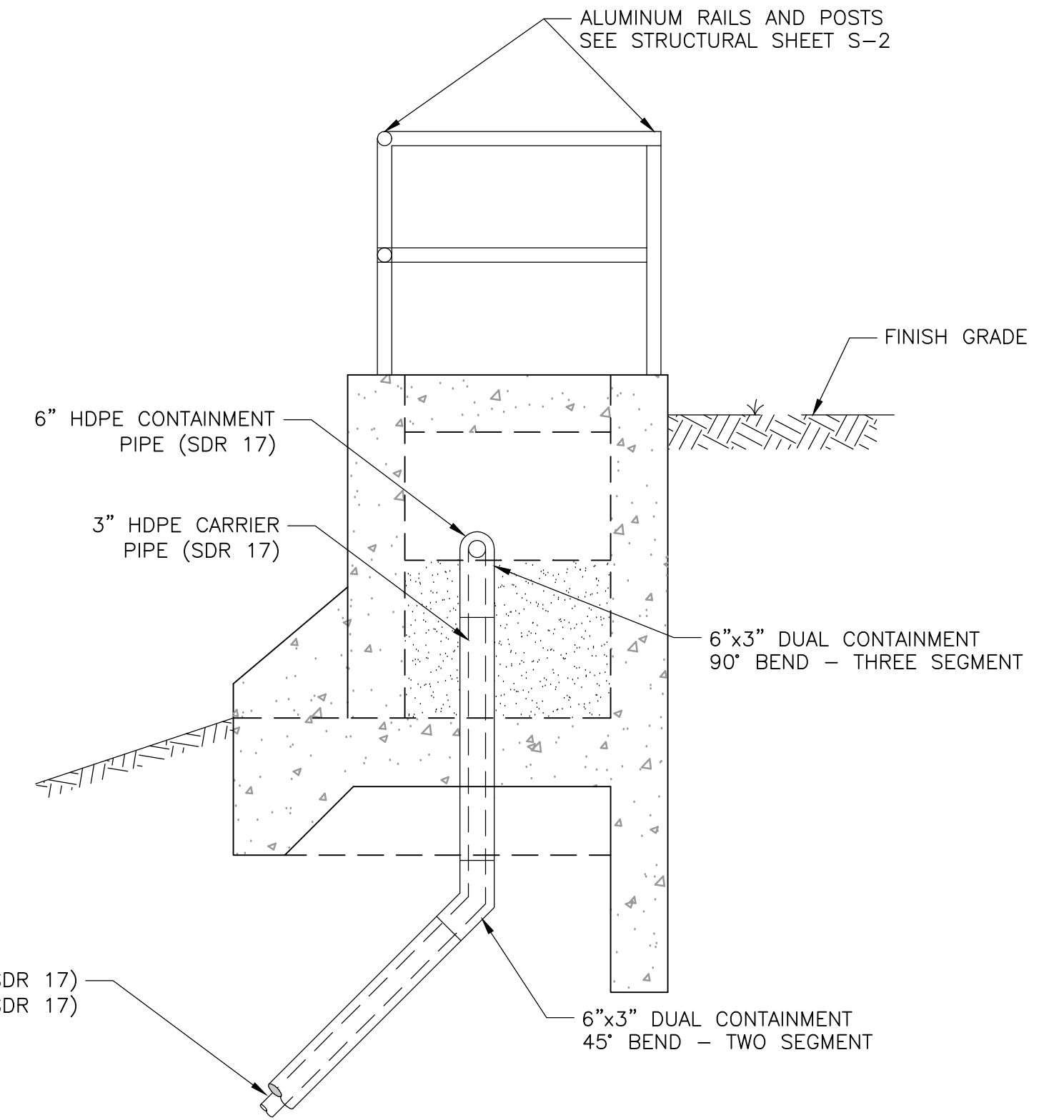


SECTION
 1/2" = 1'-0" (2) -

- NOTES:**
1. THE 18-INCH RISER PIPES FROM THE PRIMARY AND SECONDARY PIPES SHALL BE FIELD ADJUSTED TO MEET FIELD CONDITIONS.
 2. PRIOR TO THE COMPLETION OF FORMWORK AND PLACEMENT OF CONCRETE, THE ENGINEER SHALL INSPECT AND APPROVE THE CONFIGURATION OF THE VAULT BOX.
 3. CONTRACTOR SHALL TEST FORCEMAINS IN ACCORDANCE TO THE SPECIFICATIONS.
 4. CONTRACTOR SHALL PROVIDE ALL NECESSARY SIGNAGE AS NEEDED FOR THE PUMP STATION AND AS SPECIFIED.
 5. CONTRACTOR SHALL PROVIDE NECESSARY PUMP CONTROL PANELS AS SHOWN ON THE ELECTRICAL DRAWINGS.
 6. VAULT BOX DETAIL FOR PHASES 10, 11, 13 & 14 ARE A MIRROR IMAGE FROM WHAT IS SHOWN ON SECTION 1.
 7. FOR STRUCTURAL DIMENSIONS OF VAULT BOX, SEE STRUCTURAL SHEET S-2.
 8. FOR ELEVATIONS OF VAULT STRUCTURE FOR PHASE 6, REFER TO STRUCTURAL SHEET S-2.



PLAN VIEW
PHASES 6, 7, 8, 9 & 12 VAULT BOX DETAIL
 1/2" = 1'-0" (A) CD-5



SECTION
 1/2" = 1'-0" (3) -

- NOTES:**
1. THE 24-INCH RISER PIPES FROM THE PRIMARY AND SECONDARY PIPES SHALL BE FIELD ADJUSTED TO MEET FIELD CONDITIONS.
 2. PRIOR TO THE COMPLETION OF FORMWORK AND PLACEMENT OF CONCRETE, THE ENGINEER SHALL INSPECT AND APPROVE THE CONFIGURATION OF THE VAULT BOX.
 3. CONTRACTOR SHALL TEST FORCEMAINS IN ACCORDANCE TO THE SPECIFICATIONS.
 4. CONTRACTOR SHALL PROVIDE ALL NECESSARY SIGNAGE AS NEEDED FOR THE PUMP STATION AND AS SPECIFIED.
 5. VAULT BOX DETAIL FOR PHASES 10, 11, 13 & 14 ARE A MIRROR IMAGE FROM WHAT IS SHOWN ON DETAIL A.
 6. FOR STRUCTURAL DIMENSIONS OF VAULT BOX, SEE STRUCTURAL SHEET S-2.
 7. FOR ELEVATIONS OF VAULT STRUCTURE FOR PHASE 6, REFER TO STRUCTURAL SHEET S-2.

DESIGNED BY:	R. KADAMBALA
DRAWN BY:	B. CHAPMAN
SHEET CHK'D BY:	J. HOFFMAN
CROSS CHK'D BY:	A. MULLA SALEH
APPROVED BY:	J. LADNER
DATE:	FEBRUARY 2014

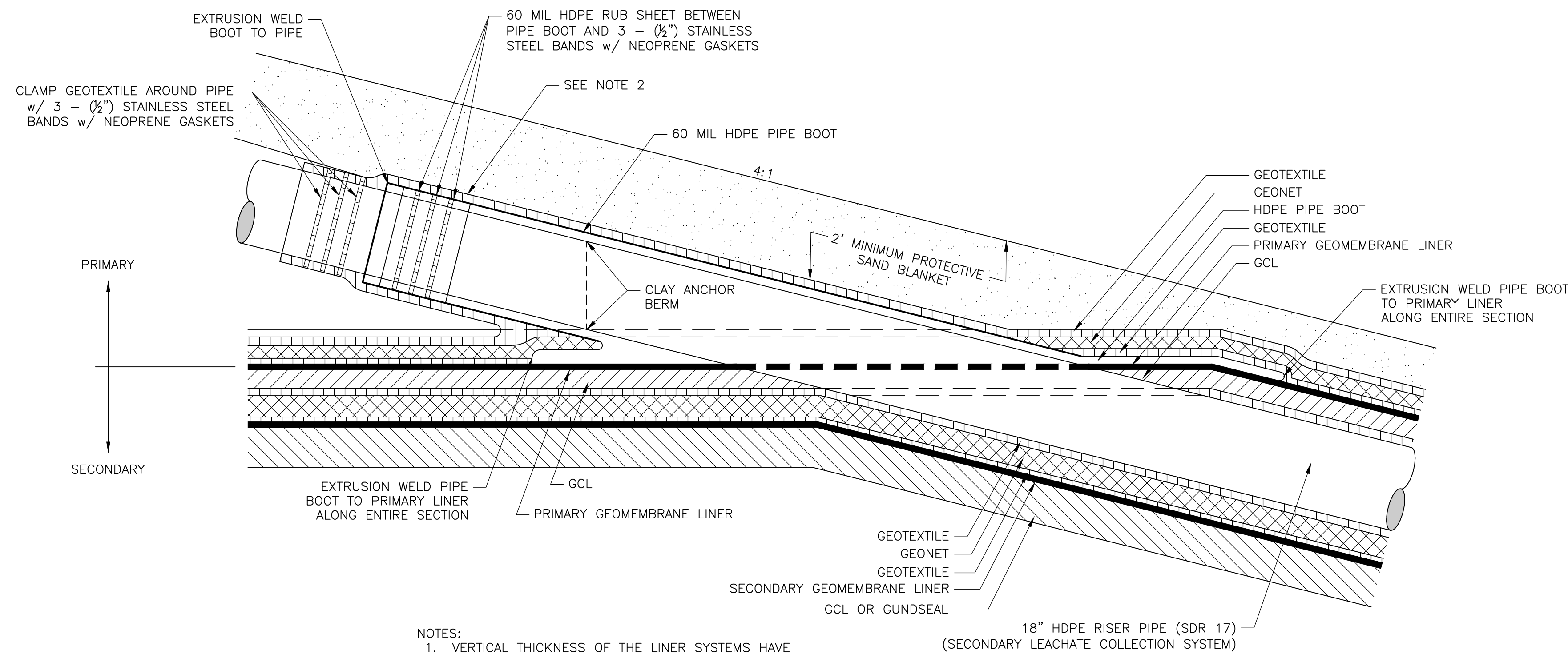
CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

CIVIL DETAILS - LEACHATE SYSTEM

PROJECT NO. 9012-80695
 FILE NAME: CD09SDDT
 SHEET NO. CD-9

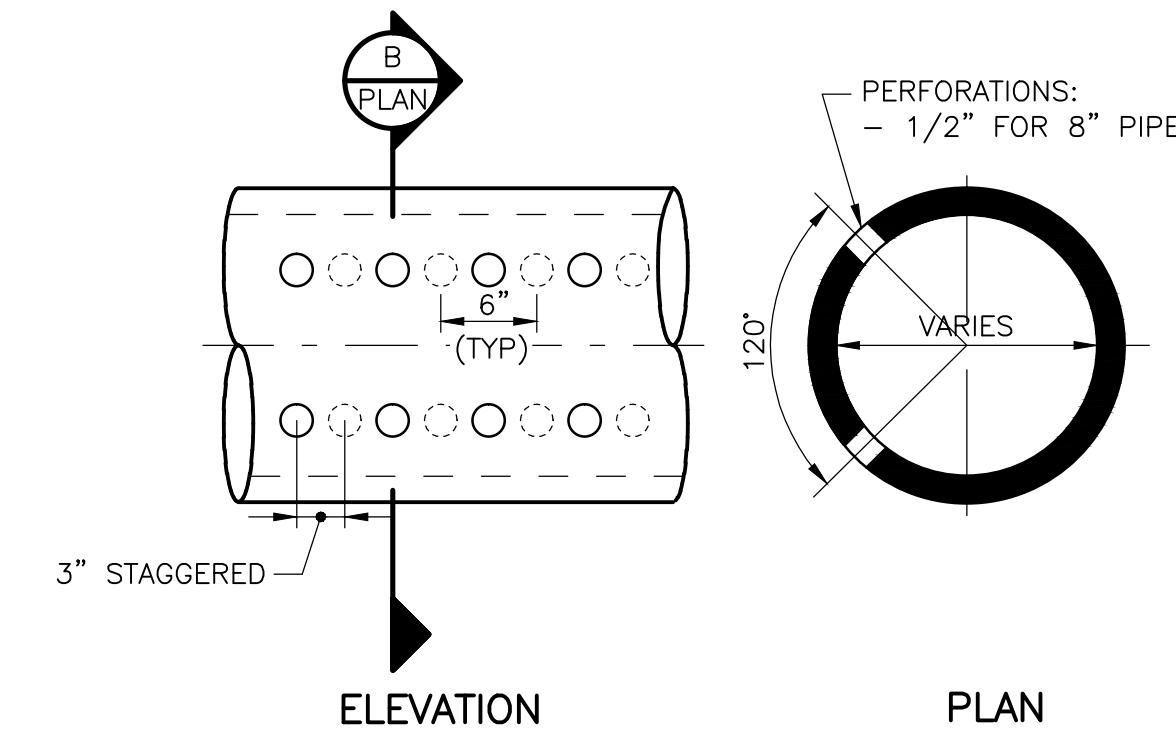
JOHN G. LADNER
 P.E. NO. 037969



NOTES:
 1. VERTICAL THICKNESS OF THE LINER SYSTEMS HAVE BEEN EXAGGERATED FOR CLARITY PURPOSES ONLY.
 2. PIPE BOOT SHALL BE PLACED ±30' FROM THE 18" HDPE (SDR 17) RISER 45° FITTING AND JUST ABOVE THE PRIMARY LINER PENETRATION POINT

SECONDARY LEACHATE COLLECTION RISER PIPE - LINER PENETRATION

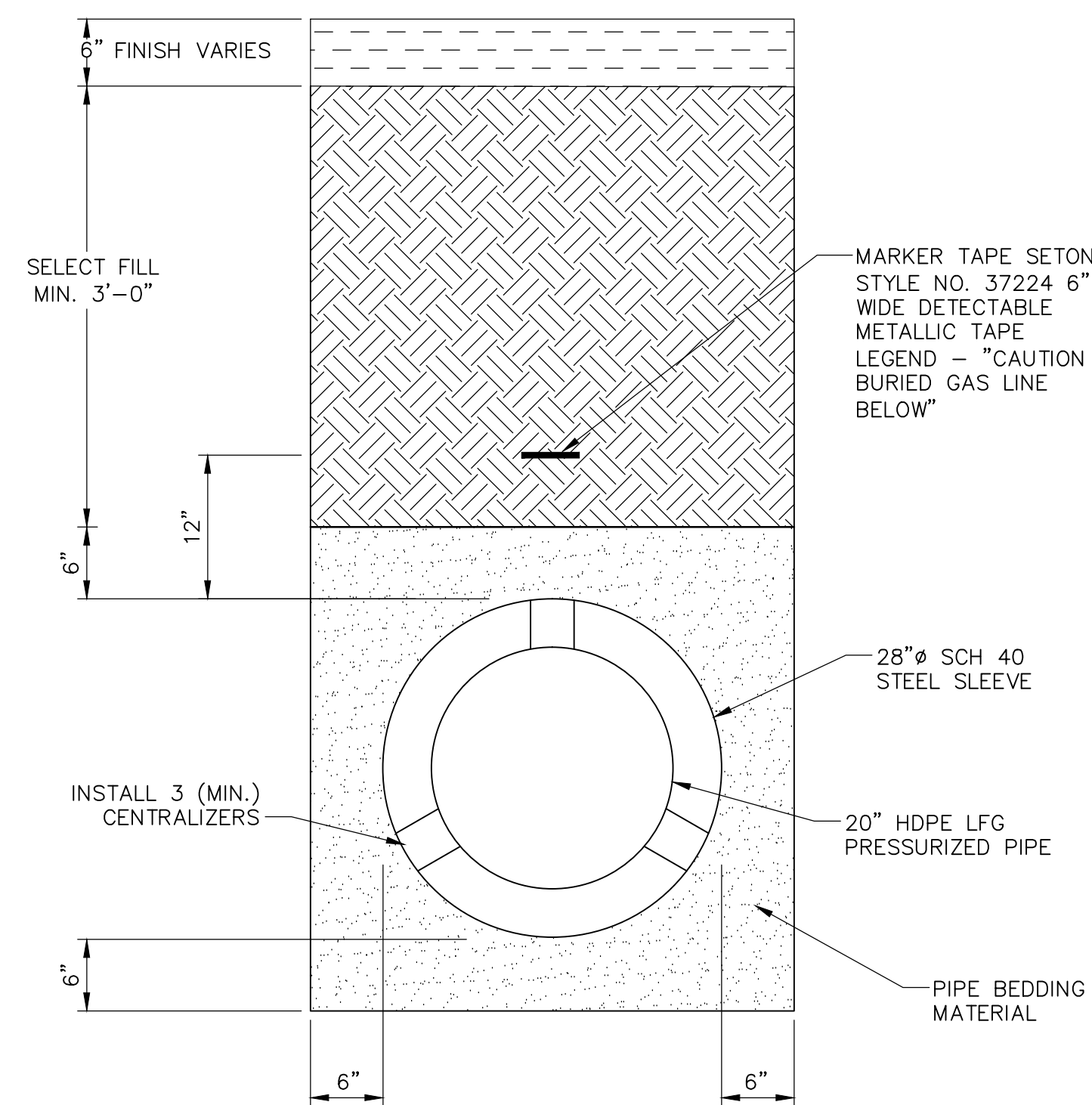
DETAIL A
 N.T.S.



NOTES:
 1. 8" PIPE FOR LEACHATE COLLECTION LATERAL
 2. ALL PERFORATED LEACHATE COLLECTION PIPES SHALL BE SDR-15.5

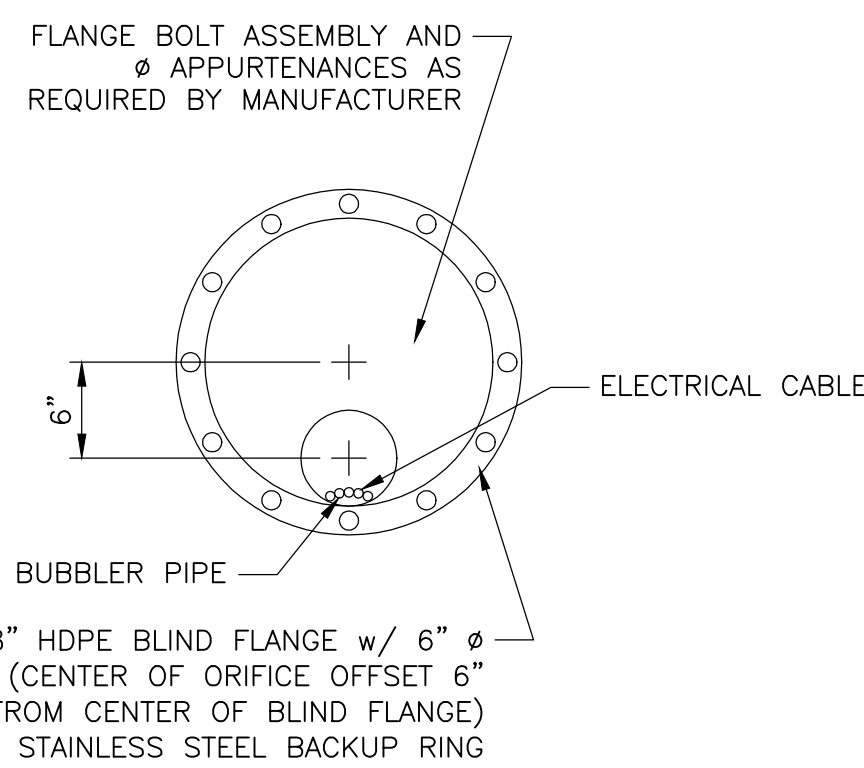
HDPE PERFORATED PIPE

DETAIL B
 1" = 1'-0"



20" GAS MAIN ROAD CROSSING

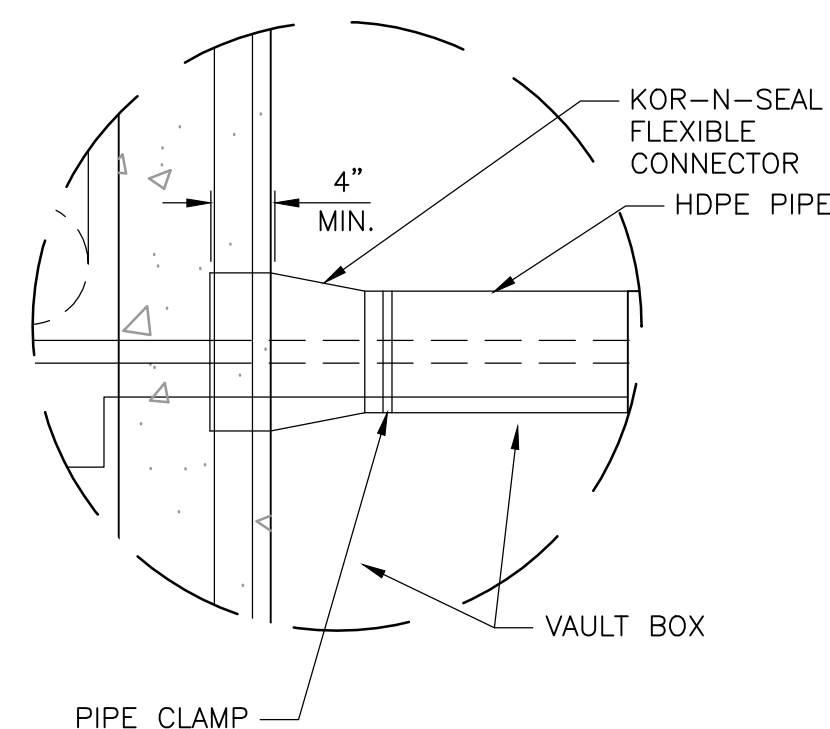
DETAIL C
 N.T.S.



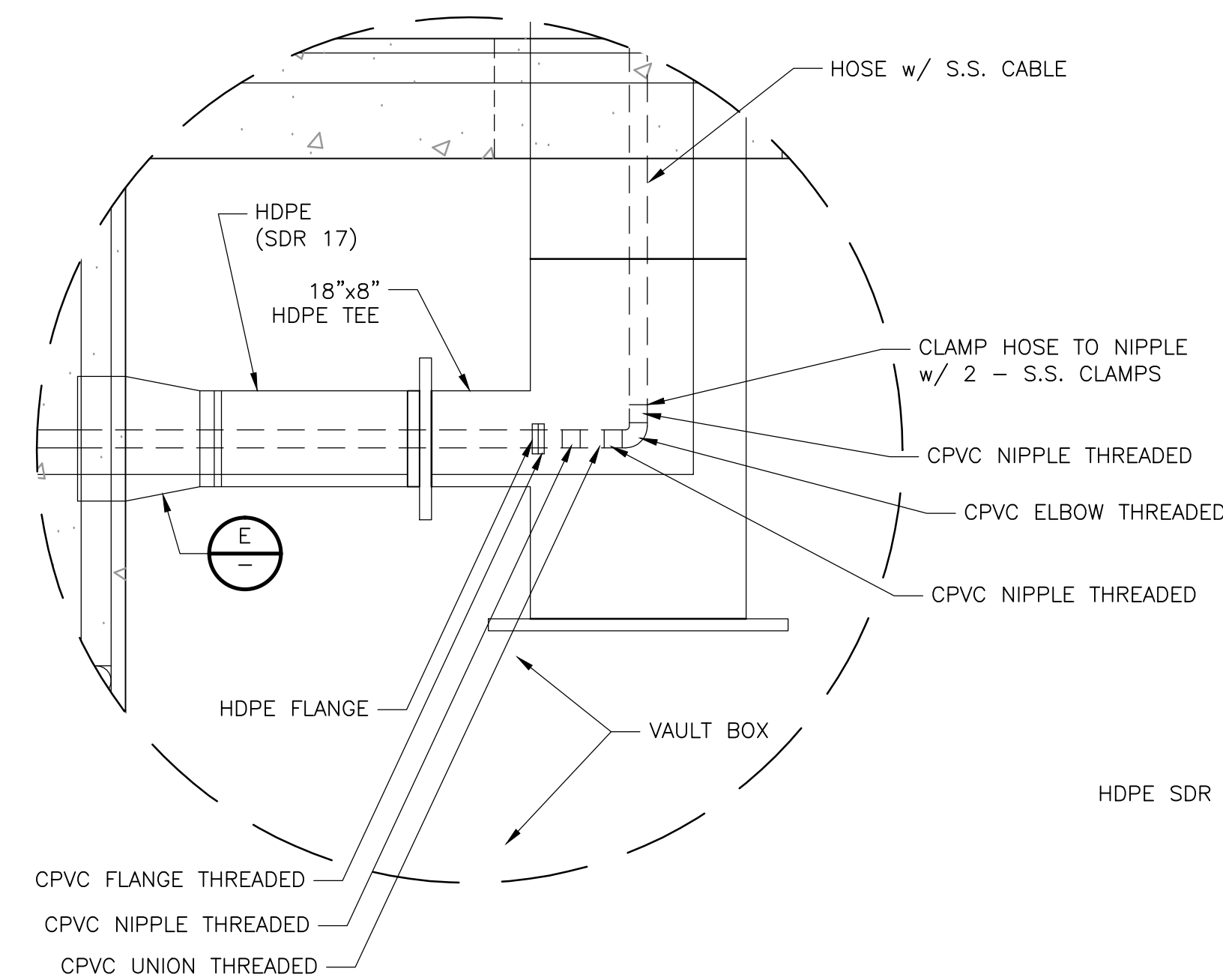
18" FLANGE FOR LEACHATE COLLECTION RISER

N.T.S.

DETAIL D

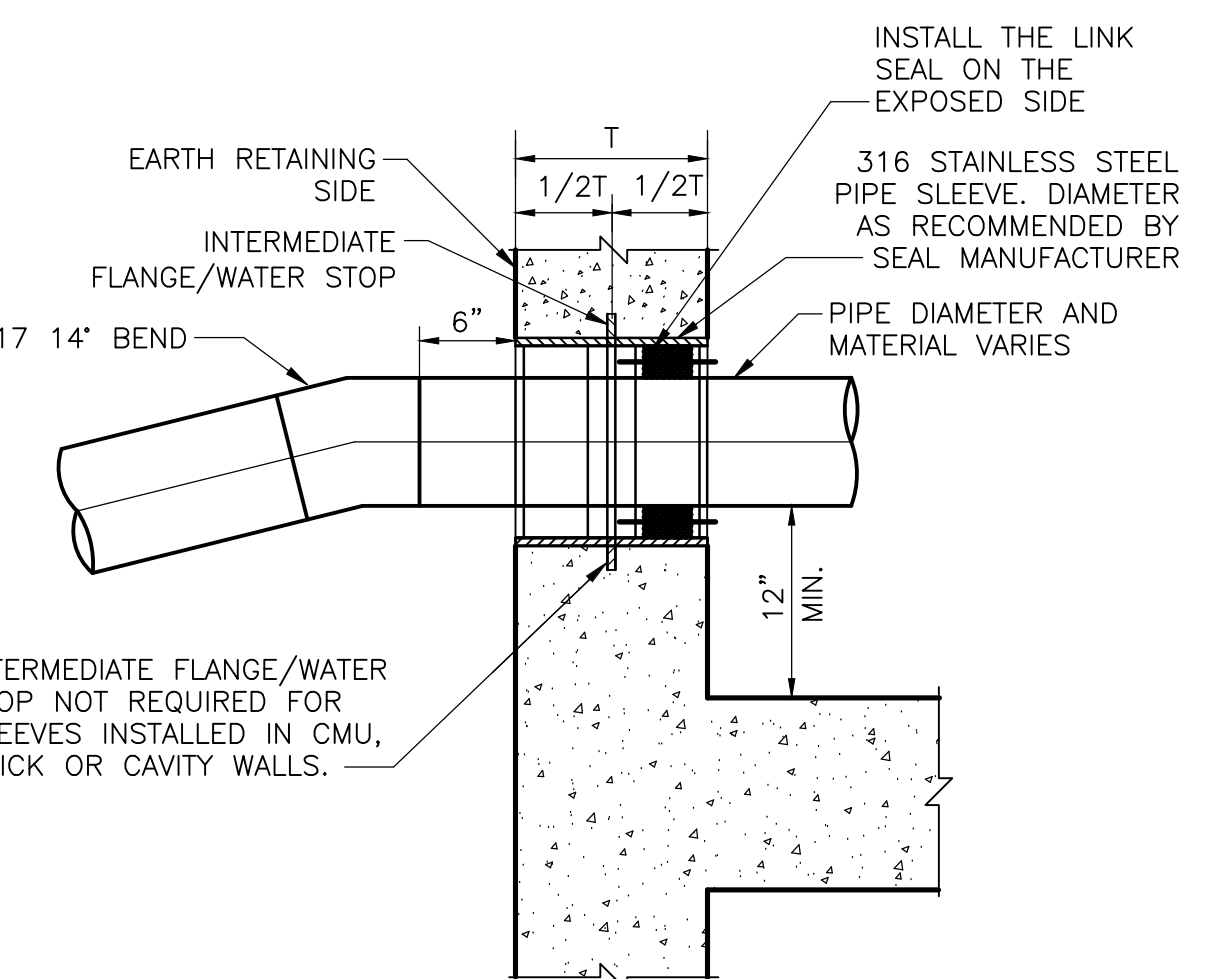


KOR-N-SEAL DETAIL E
 N.T.S.



NOTES:
 1. ALL CPVC PIPE SHALL BE SCHEDULE 80.
 2. SECONDARY LEACHATE PIPING SHALL CONSIST OF A HOSE SIZE OF 1 1/2" PUMP EFFLUENT SIZE AND TRANSITION TO CPVC PIPING INSIDE SECONDARY VAULT.
 3. PRIMARY LEACHATE PIPING SHALL CONSIST OF 3" HOSE SIZE AND TRANSITION TO 3" CPVC PIPING INSIDE THE PRIMARY VAULT.

PRIMARY PIPING DETAIL F
 N.T.S.



WALL SLEEVE WITH MECHANICAL SEAL FOR CONCRETE, BRICK, CMU OR CAVITY WALLS

DETAIL G
 N.T.S.

REV. NO.	DATE	DRWN	CHKD	REMARKS

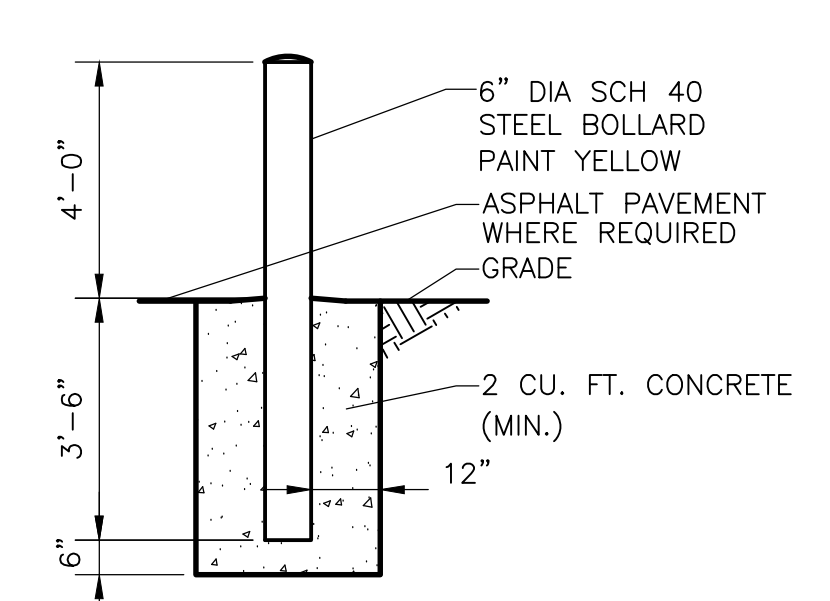
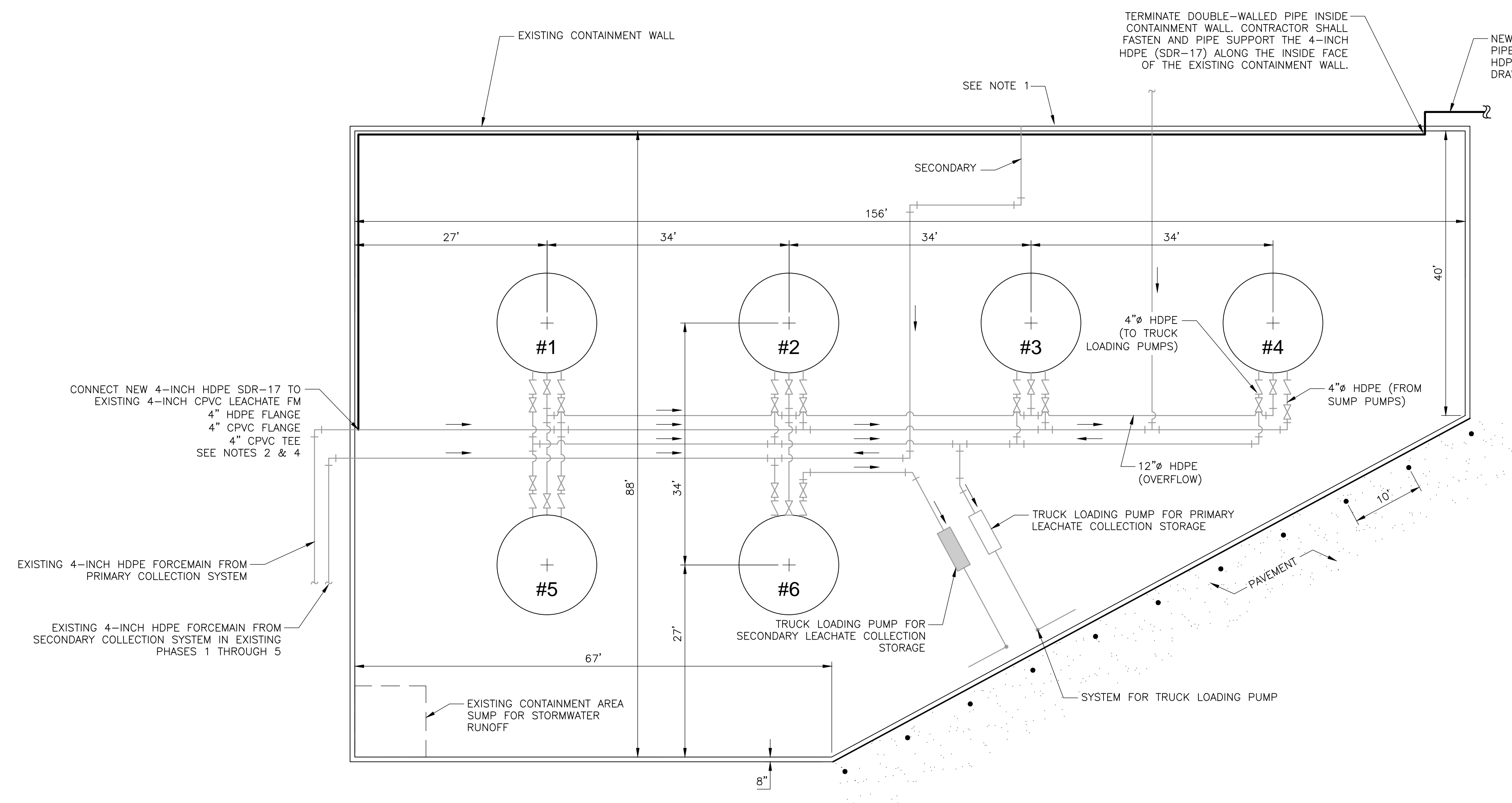
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLA SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109

CITY OF JACKSONVILLE
**TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION**

CIVIL DETAILS

PROJECT NO. 9012-80695
 FILE NAME: CD10SDDT
 SHEET NO. **CD-10**



BOLLARD
DETAIL F
 NTS

NOTES:
 1. BOLLARDS SHALL BE PLACED APPROXIMATELY 2 FEET FROM THE EDGE OF CONCRETE PAD.

NEW LEACHATE FORCEMAIN TIE-IN AT EXISTING LEACHATE STORAGE CONTAINMENT AREA

DETAIL A
 NTS

- NOTES:
1. ALL EXISTING PIPING NOT SHOWN ON THIS DIAGRAM. CONTRACTOR TO COORDINATE ROUTING OF NEW 4-INCH HDPE PIPE INSIDE CONTAINMENT AREA OF THE LEACHATE STORAGE SYSTEM ACCORDINGLY.
 2. CONTRACTOR SHALL COORDINATE WITH LANDFILL OPERATOR FOR SCHEDULING NEW TIE-IN OF 4" HDPE LEACHATE PIPING TO EXISTING 4" CPVC PIPING INSIDE THE LEACHATE CONTAINMENT AREA.
 3. THE NEW 4" FORCEMAIN CONTAINS BOTH PRIMARY AND SECONDARY LEACHATE TOGETHER.
 4. THIS IS AN OPERATING LANDFILL AND LEACHATE COLLECTION OPERATION. CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SEQUENCE FOR REVIEW BY ENGINEER AND SHALL MINIMIZE FLOW OUTAGE TO LESS THAN 2 HOURS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

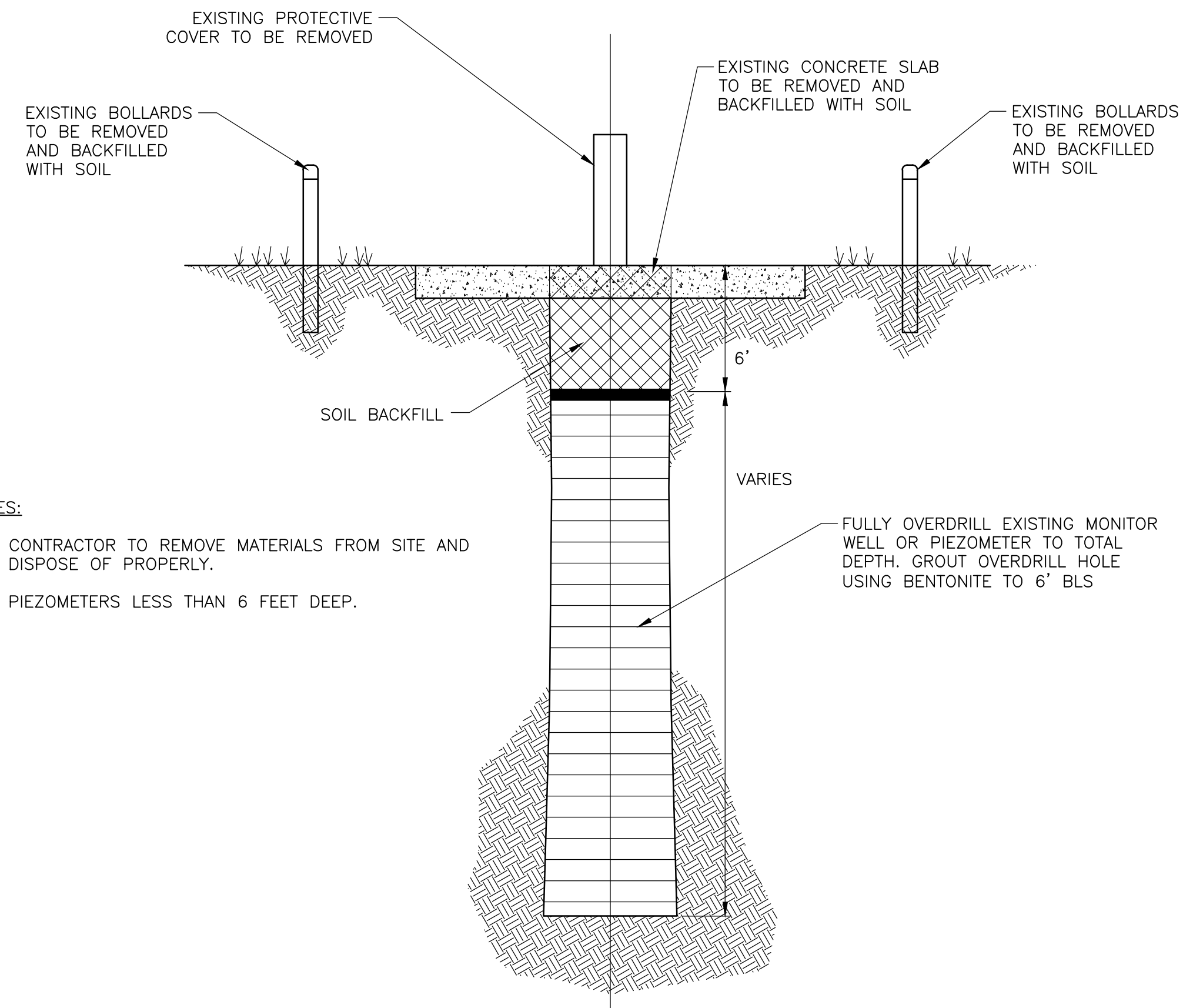
DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLA SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

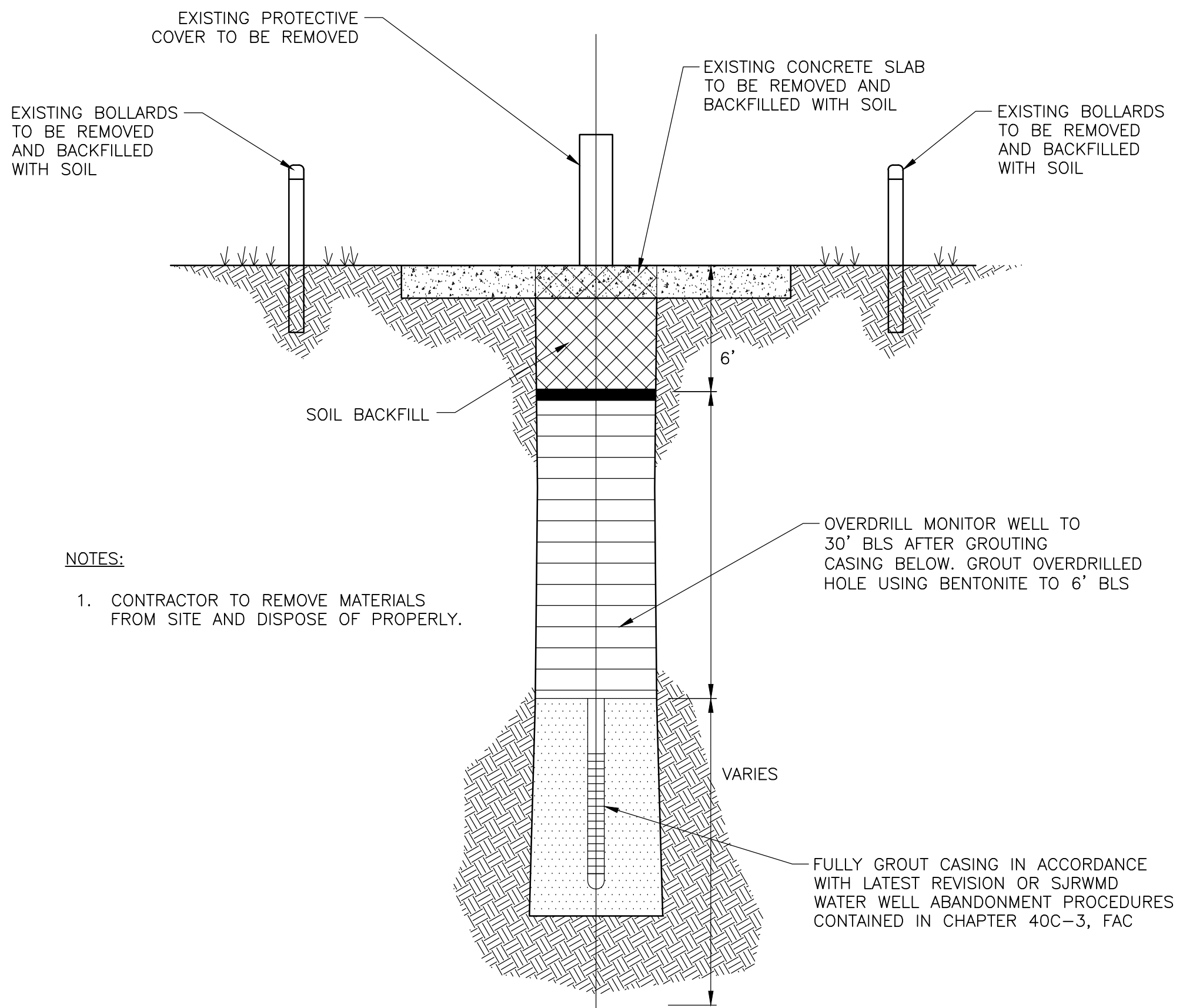
CIVIL DETAILS - LEACHATE STORAGE

JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: CD11SDDT
 SHEET NO.
CD-11



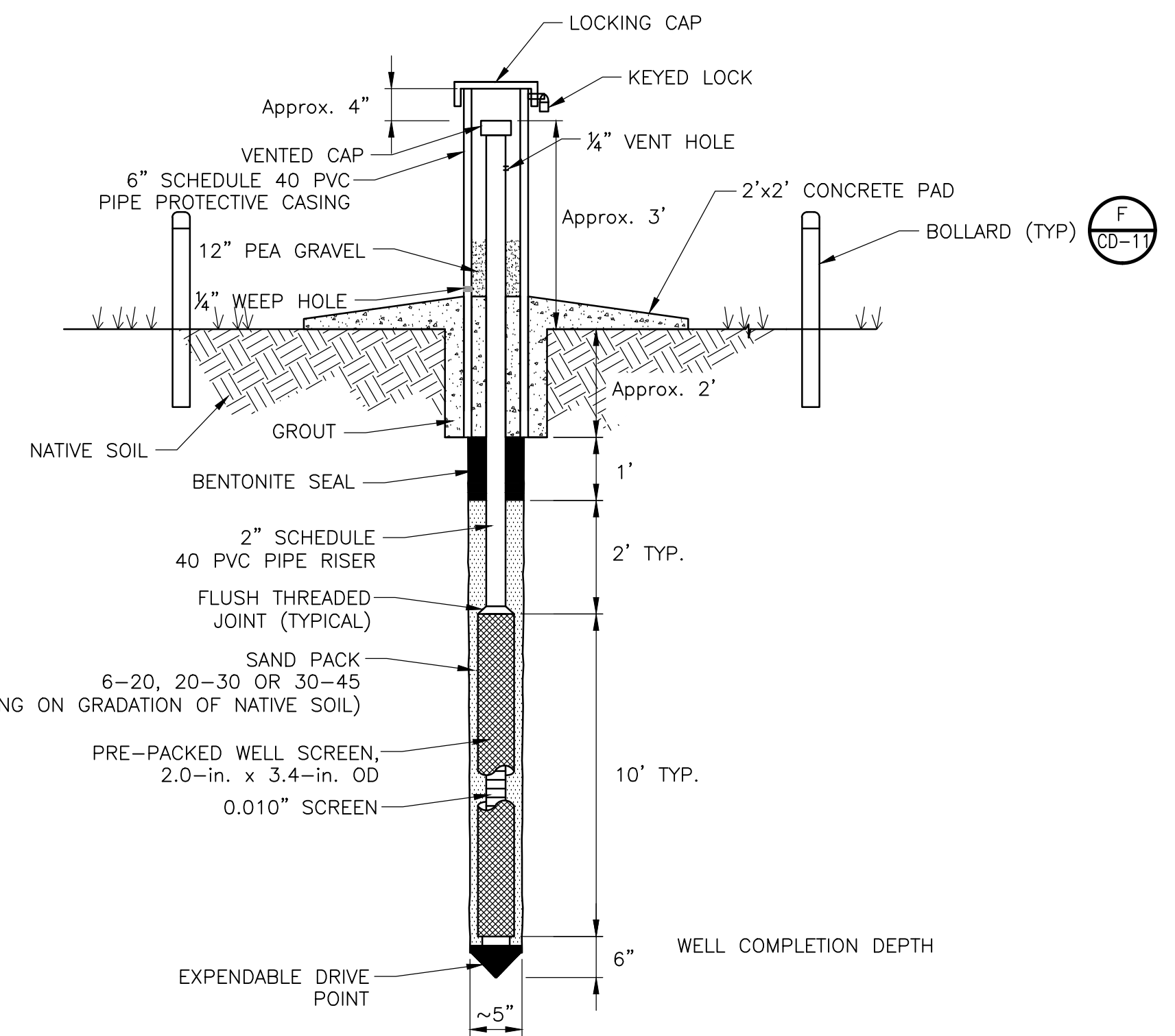
SHALLOW MONITOR WELL AND PIEZOMETER ABANDONMENT
DETAIL A
 NTS

- NOTES:
- CONTRACTOR TO REMOVE MATERIALS FROM SITE AND DISPOSE OF PROPERLY.
 - PIEZOMETERS LESS THAN 6 FEET DEEP.

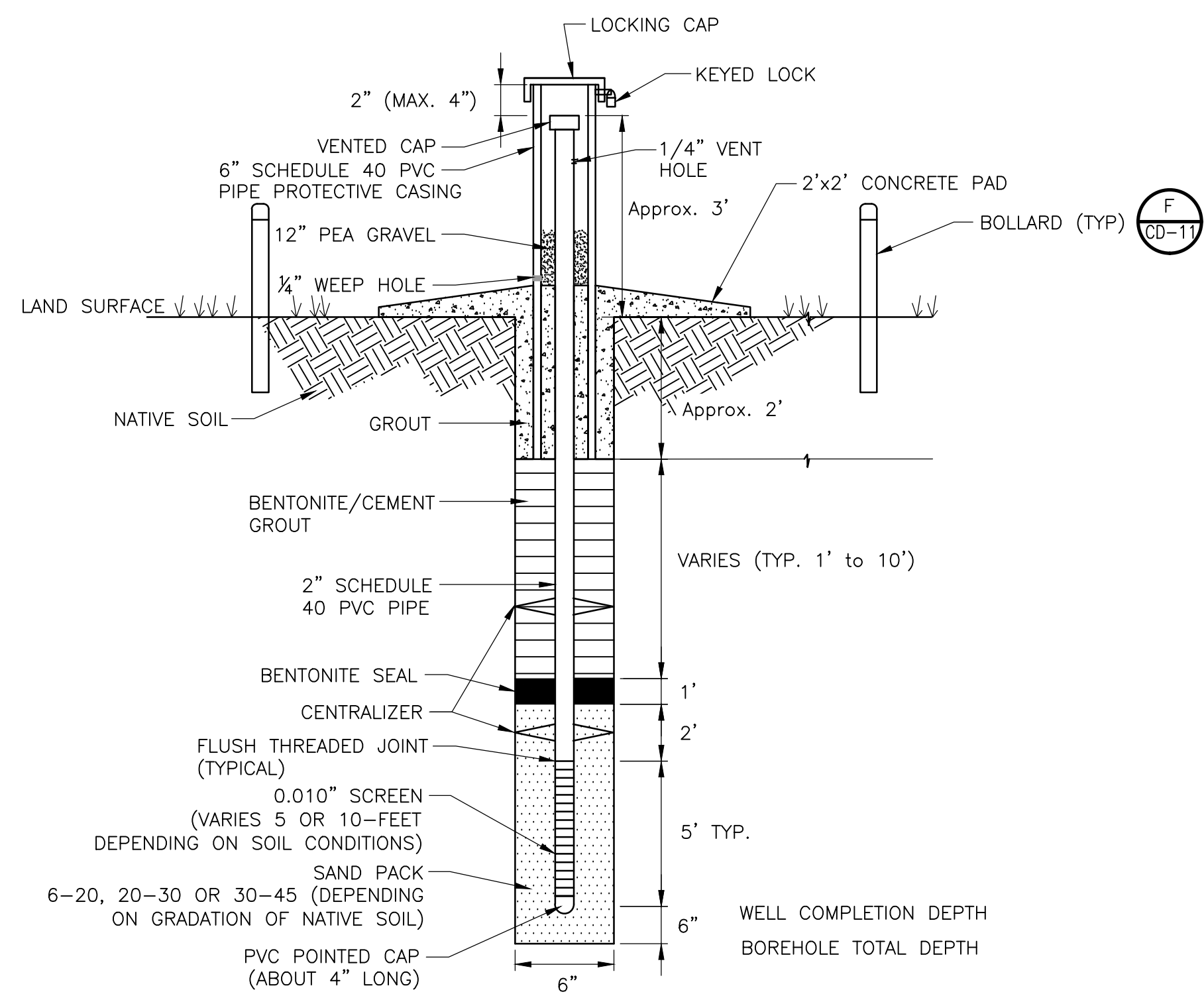


EXISTING INTERMEDIATE AND DEEP WELL ABANDONMENT
DETAIL B
 NTS

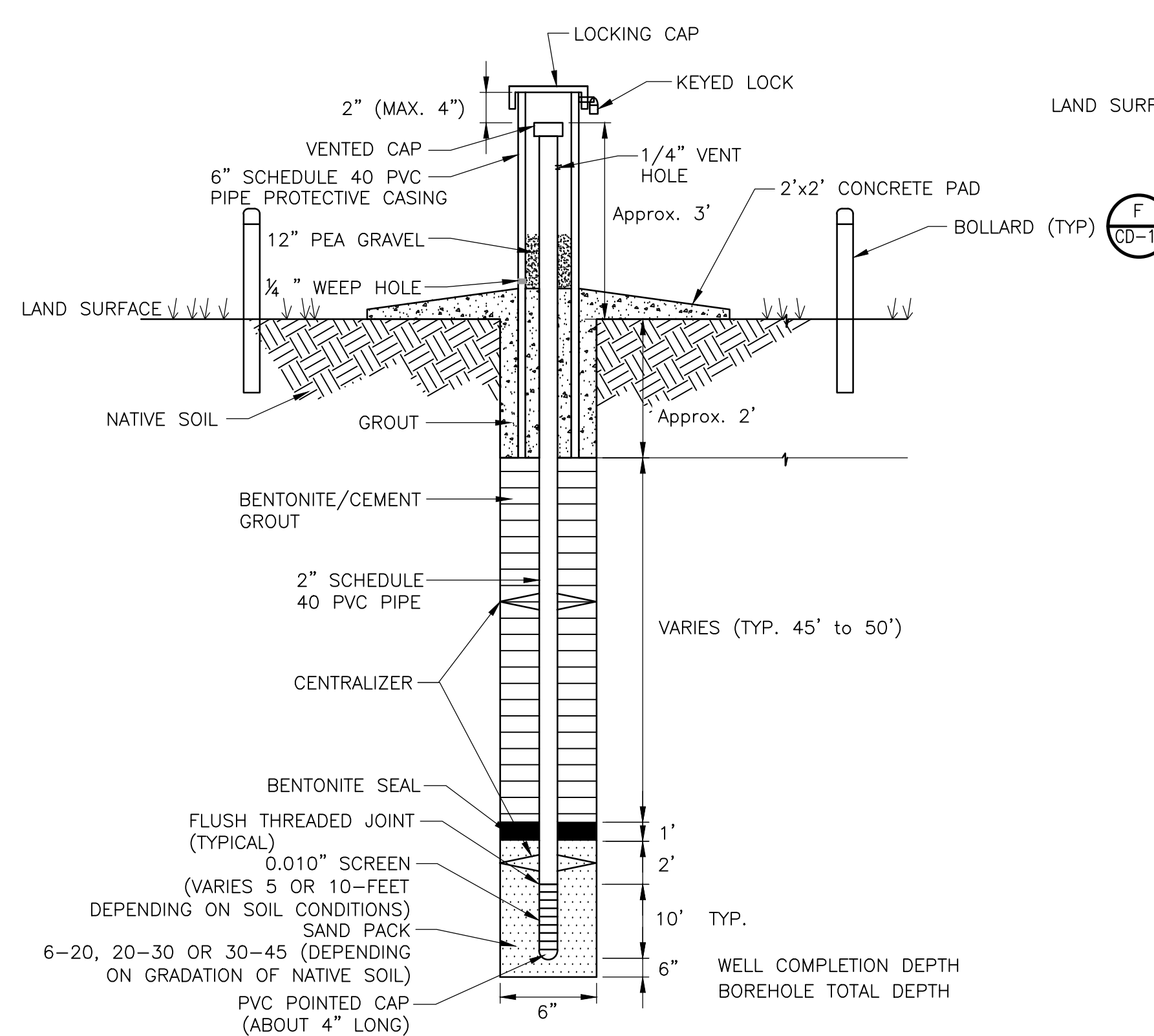
- NOTES:
- CONTRACTOR TO REMOVE MATERIALS FROM SITE AND DISPOSE OF PROPERLY.
 - OVERDRILL MONITOR WELL TO 30' BLS AFTER GROUTING CASING BELOW. GROUT OVERDRILLED HOLE USING BENTONITE TO 6' BLS
 - FULLY GROUT CASING IN ACCORDANCE WITH LATEST REVISION OR SJRWMD WATER WELL ABANDONMENT PROCEDURES CONTAINED IN CHAPTER 40C-3, FAC



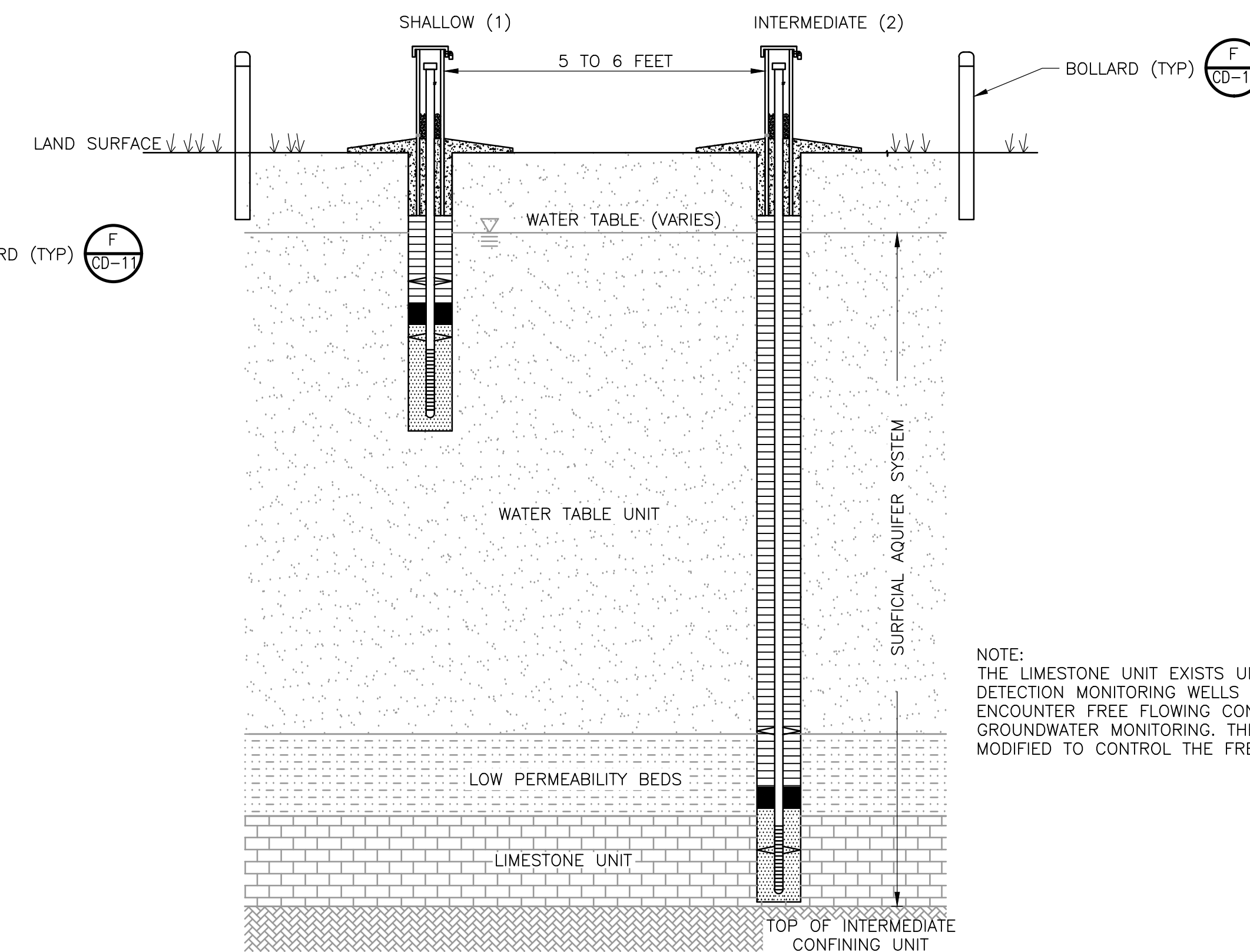
TYPICAL 2" DIAMETER SHALLOW PRE-PACKED MONITOR WELL
DETAIL C
 NTS



TYPICAL 2" DIAMETER SHALLOW MONITORING WELL
DETAIL C
 NTS



TYPICAL 2" DIAMETER INTERMEDIATE MONITORING WELL
DETAIL D
 NTS



- (1) SEE DETAIL C FOR A TYPICAL DETAIL
 (2) SEE DETAIL D FOR A TYPICAL DETAIL

TYPICAL MONITOR WELL CLUSTER INSTALLATION
DETAIL E
 NTS

NOTE:
 THE LIMESTONE UNIT EXISTS UNDER ARTESIAN CONDITIONS. DEEP DETECTION MONITORING WELLS ALONG PHASES 6 THROUGH 11 WILL ENCOUNTER FREE FLOWING CONDITIONS DURING DRILLING AND GROUNDWATER MONITORING. THE WELLHEAD MAY NEED TO BE MODIFIED TO CONTROL THE FREE FLOWING CONDITION.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. KADAMBALA
 DRAWN BY: B. CHAPMAN
 SHEET CHK'D BY: J. HOFFMAN
 CROSS CHK'D BY: A. MULLA SALEH
 APPROVED BY: J. LADNER
 DATE: FEBRUARY 2014

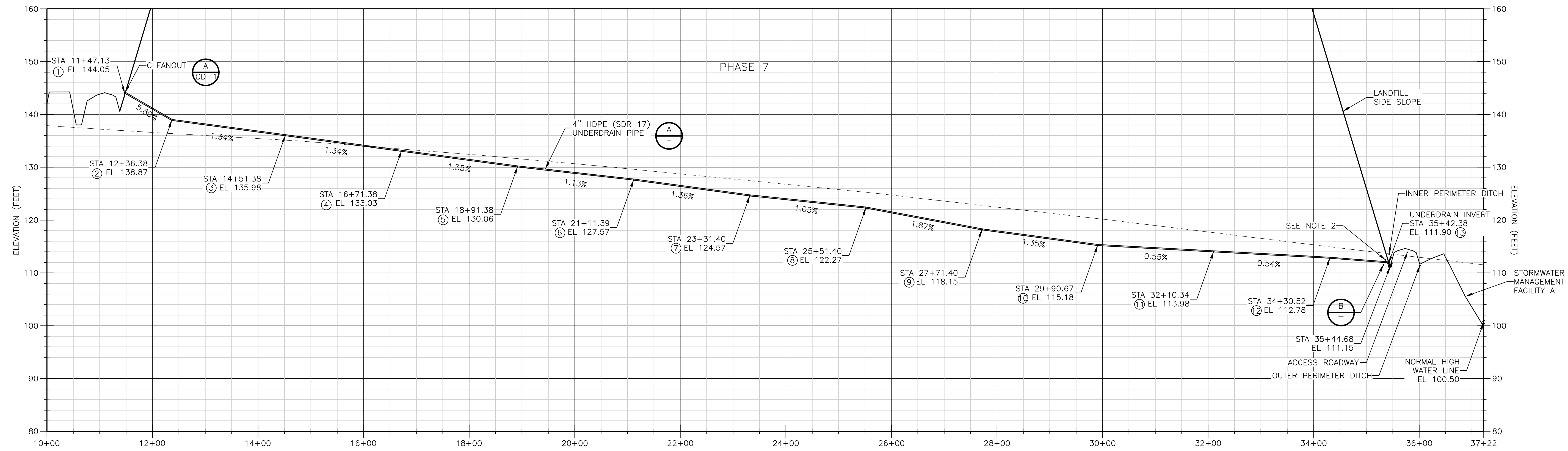


CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

CIVIL DETAILS - WELLS

JOHN G. LADNER P.E. NO. 037969
PROJECT NO. 9012-80695 FILE NAME: CD13SDDT
SHEET NO. CD-13

C-DITCH-ALIGN PROFILE

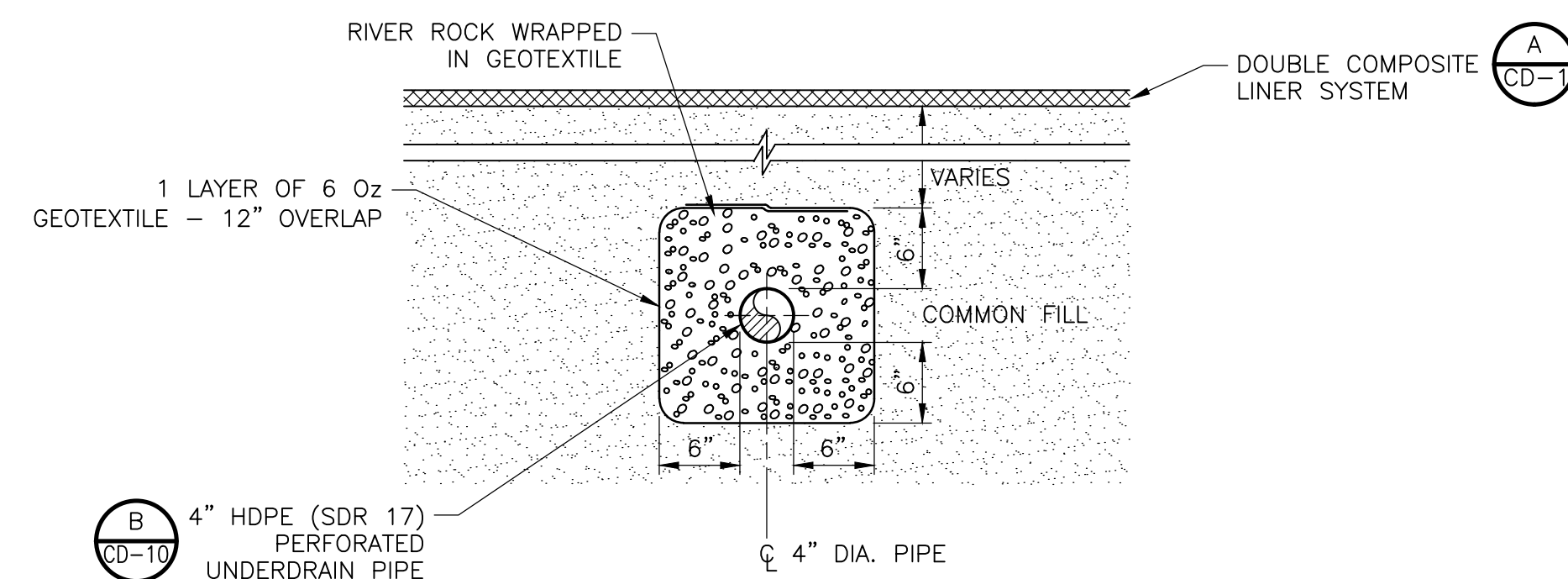


NOTES:

- REFER TO SHEET C-8 FOR UNDERDRAIN PLAN VIEW AND CORRESPONDING NORTHING AND EASTING COORDINATES.
- CONTRACTOR SHALL TIE-IN PIPE 6" ABOVE SWALE INVERT. PROVIDE 6" RIP RAP AT OUTLET IN ACCORDANCE TO DETAIL B.

PHASE 6/7 UNDERDRAIN SECTION 1

1" = 100' HORIZ.
1" = 10' VERT. C-5/C-7

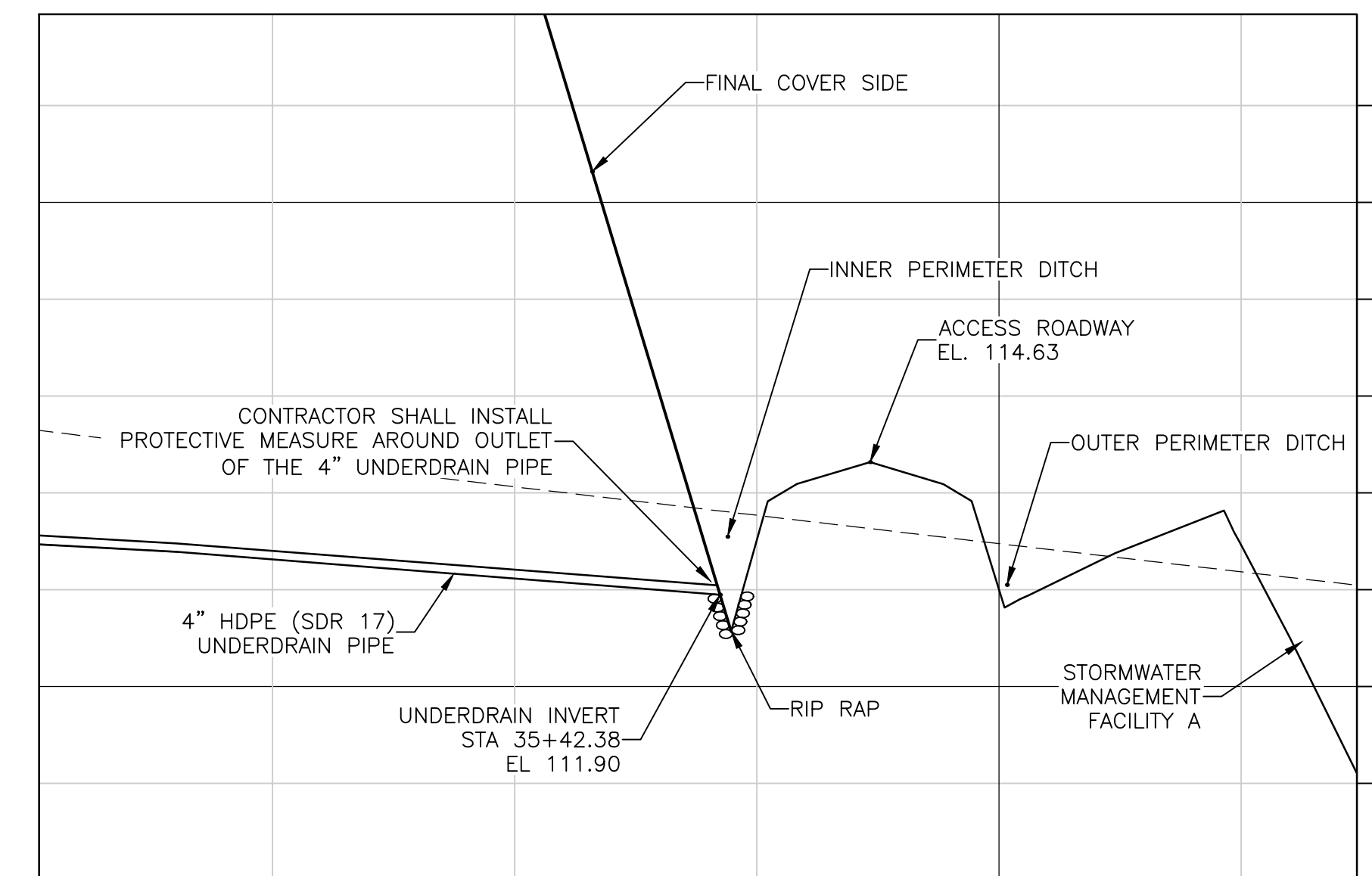


NOTE:

- ALL HDPE CONNECTIONS SHALL BE MACHINE WELDED.

4" UNDERDRAIN DETAIL

DETAIL A
1" = 1'-0"



DETAIL B
1" = 30"

Xref: [CDM_2436_C_BASE] Images: []
 Last saved by: CHAPMANBS Time: 2/24/2012 12:45:57 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, BESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. NEHRKE
 DRAWN BY: C. SCOTT
 SHEET CHK'D BY: C. SCOTT
 CROSS CHK'D BY: J. LADNER
 APPROVED BY: M. WHITE
 DATE: FEBRUARY 2014



CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

CIVIL DETAILS - UNDERDRAIN FOR PHASE 6 / 7

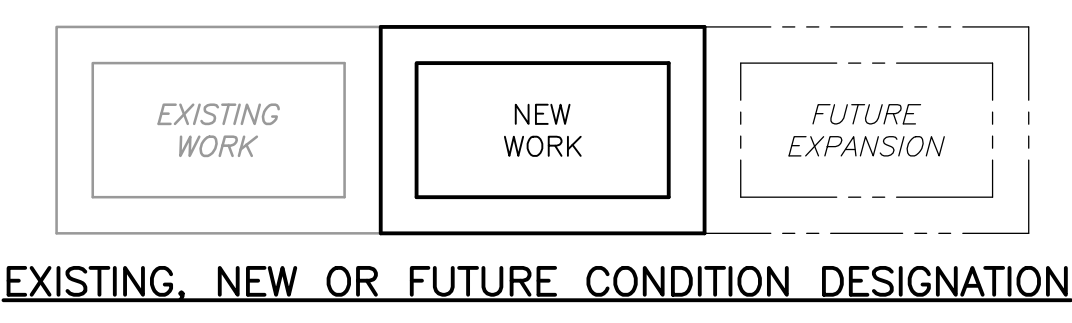
JOHN G. LADNER
 P.E. NO. 037969
 PROJECT NO. 9012-80695
 FILE NAME: CD14SDDT.DWG
 SHEET NO.
CD-14

ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
	CS	MEDIUM VOLTAGE DRAWOUT TYPE POWER CIRCUIT BREAKER CS=CONTROL SWITCH
	CB	LOW VOLTAGE AIR OR MOLDED CASE CIRCUIT BREAKER, 3 POLE UNLESS OTHERWISE NOTED.
	M	COMBINATION MOTOR CIRCUIT PROTECTOR AND MAGNETIC MOTOR STARTER, FULL VOLTAGE NON-REVERSING UNLESS OTHERWISE NOTED: * FVR - FULL VOLTAGE REVERSING * RVNR - REDUCED VOLTAGE NON-REVERSING * RVAT - REDUCED VOLTAGE AUTOTRANSFORMER RVSS - REDUCED VOLTAGE SOLID STATE 2S1W - TWO SPEED, ONE WINDING RS2W - TWO SPEED, TWO WINDING (DIAGRAMMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
	DS	NON-FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE * AMPERE RATING NOTED IF OTHER THAN 30A (DIAGRAMMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
	DF	FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE * AMPERE RATING AND FUSE SIZE AS NOTED * AMPERE RATING NOTED IF OTHER THAN 30A FUSE RATING (DIAGRAMMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
	P	MANUAL MOTOR STARTER WITH THERMAL OVERLOAD HEATER, 1 POLE UNLESS OTHERWISE NOTED "P" INDICATES WITH PILOT LIGHT "2" INDICATES TWO POLE (DIAGRAMMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
		DRAWOUT TYPE EQUIPMENT OR DEVICE
		MEDIUM VOLTAGE CABLE TERMINATION
		MEDIUM VOLTAGE AIR INTERRUPTER SWITCH
		MEDIUM VOLTAGE FUSED AIR INTERRUPTER SWITCH * FUSE RATING
		MEDIUM VOLTAGE FUSED MOTOR CONTROLLER
	T	TRANSFORMER, RATINGS AND CONNECTIONS AS NOTED. UNLESS OTHERWISE NOTED ON THE SINGLE LINE DIAGRAMS, ALL DRY TYPE TRANSFORMERS SERVICING ADMINISTRATIVE AND LABORATORY SPACES SHALL HAVE A K FACTOR OF 4. ISOLATION TRANSFORMERS SHALL HAVE A K-20 RATING
	A TO 5	CURRENT TRANSFORMER * QUANTITY A = PRIMARY AMPERES
	V TO 120	POTENTIAL TRANSFORMER * QUANTITY V = PRIMARY VOLTAGE
	G	GENERATOR, RATINGS AND CONNECTIONS AS NOTED
		AUTOMATIC OR MANUAL TRANSFER SWITCH NO.1 (ATS-1), (MTS-1) "N" INDICATES NORMAL OR PREFERRED SOURCE "S" INDICATES STANDBY OR ALTERNATE SOURCE 100A INDICATES CONTINUOUS CURRENT RATING
	*	VARIABLE SPEED DRIVE CONTROLLER * D.C. = D.C. DRIVE CONTROLLER SCR = SILICON CONTROLLED RECTIFIER VFD = VARIABLE FREQUENCY DRIVE
	#KW	UNIT HEATER - ELECTRIC HEATING COIL AND FAN # - RATING
	U	UNIT HEATER - GAS FIRED, STEAM OR WATER HEATING COIL AND FAN
	M	MOTOR, NUMERAL INDICATES HORSEPOWER
	VS-VV	VOLTMETER WITH SWITCH, 3 PHASE
	AS-AM	AMMETER WITH SWITCH, 3 PHASE

ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION																
		METER * WM - WATTMETER WHM - WATT/ HOUR METER WHDM - WATT/ HOUR DEMAND METER WHDR - WATT/ HOUR DEMAND RECORDER PF - POWER FACTOR METER ETM - ELAPSED TIME METER																
		TRANSDUCER AX - CURRENT TRANSDUCER WX - WATT TRANSDUCER WHX - WATT/ HOUR TRANSDUCER																
		RELAY, NO. AS INDICATED 25 - SYNCHRONISM CHECK RELAY 27 - UNDERVOLTAGE RELAY 32 - DIRECTIONAL POWER RELAY 38 - BEARING PROTECTIVE DEVICE 40 - LOSS OF EXCITATION RELAY 42 - RUNNING CONTACTOR/PILOT RELAY 46 - REVERSE PHASE/PHASE BALANCE/CURRENT RELAY 47 - PHASE SEQUENCE VOLTAGE RELAY 49 - MACHINE OR TRANSFORMER THERMAL RELAY 50/51 - INSTANTANEOUS/TIME OVERCURRENT RELAY 50S - INSTANTANEOUS GROUND 51 - TIME OVERCURRENT RELAY 51G - TIME OVERCURRENT RELAY, GROUNDING RESISTOR TYPE 51N - TIME OVERCURRENT RELAY, RESIDUAL TYPE 51V - TIME OVERCURRENT RELAY WITH VOLTAGE RESTRAINT 51X - AUXILIARY RELAY (TRIPS CB AND ALARMS) 59 - OVERVOLTAGE RELAY 60 - NEGATIVE SEQUENCE VOLTAGE RELAY 62 - TIME DELAY RELAY 63 - OVERPRESSURE RELAY 64 - GENERATOR FIELD CONTROL RELAY 67 - AC DIRECTIONAL OVERCURRENT RELAY 74 - ALARM LATCHING RELAY 83 - AUTOMATIC SELECTIVE CONTROL OR TRANSFER RELAY 86 - LOCKING-OUT RELAY 87 - DIFFERENTIAL PROTECTIVE RELAY B - SUFFIX INDICATES "BUS" G - SUFFIX INDICATES "GENERATOR" GF - GROUND FAULT ST - SHUNT TRIP T - SUFFIX INDICATES "TRANSFORMER" X - SUFFIX INDICATES "AUXILIARY"																
		SPECIAL CAPACITOR * SC - SURGE CAPACITOR PF - POWER FACTOR CORRECTION CAPACITOR																
		TUNED POWER FACTOR CORRECTION CAPACITOR																
		PUSHBUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY CLOSED																
		PUSHBUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY OPEN																
	ES	EMERGENCY STOP PUSHBUTTON WITH RED MUSHROOM HEAD OPERATOR (MAINTAINED CONTACT)																
	PBL	START-STOP PUSHBUTTON CONTROL STATION (MOMENTARY CONTACT) WITH LOCKOUT DEVICE ON STOP																
	PBM	START-STOP PUSHBUTTON CONTROL STATION, MAINTAINED CONTACT WITH LOCKOUT DEVICE ON STOP																
	S/S	OFF/ON SELECTOR SWITCH																
	LR	LOCAL/REMOTE SELECTOR SWITCH																
		3 POSITION SELECTOR SWITCH, MAINTAINED CONTACT O-OPEN X-CLOSED <table border="1"> <thead> <tr> <th>POSITION</th> <th>TOP CONTACT</th> <th>MIDDLE CONTACT</th> <th>BOTTOM CONTACT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>X</td> <td>O</td> <td>O</td> </tr> <tr> <td>B</td> <td>O</td> <td>X</td> <td>O</td> </tr> <tr> <td>C</td> <td>O</td> <td>O</td> <td>X</td> </tr> </tbody> </table>	POSITION	TOP CONTACT	MIDDLE CONTACT	BOTTOM CONTACT	A	X	O	O	B	O	X	O	C	O	O	X
POSITION	TOP CONTACT	MIDDLE CONTACT	BOTTOM CONTACT															
A	X	O	O															
B	O	X	O															
C	O	O	X															
		NAMEPLATE (A/B/C) HOA - HAND/OFF/AUTO HOR - HAND/OFF/REMOTE LOR - LOCAL/OFF/REMOTE RSL - RAISE/STOP/LOWER TOA - TEST/OFF/AUTO																
	GD/VF	GAS DETECTOR / VENTILATION FAILURE ALARM # INDICATES TYPE OF UNIT 1=MASTER, 2=REMOTE																
		MOTOR STARTER COIL, NUMBER AS INDICATED TO DENOTE INTERLOCKING ONLY																
		CONTROL RELAY COIL, NUMBER AS INDICATED																

ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
		PILOT LIGHT, COLOR AS NOTED * R - RED G - GREEN B - BLUE W - WHITE A - AMBER
		PILOT LIGHT, PUSH-TO-TEST TYPE, COLOR AS NOTED ABOVE.
		TIME DELAY RELAY RANGE AS NOTED SETPOINT AS NOTED # NUMBER AS INDICATED * TDE - TIME DELAY AFTER ENERGIZATION ON DELAY TDD - TIME DELAY AFTER DE-ENERGIZATION OFF DELAY
		NOTC - NORMALLY OPEN, TIMED CLOSING WHEN ENERGIZED
		NCTO - NORMALLY CLOSED, TIMED OPENING WHEN ENERGIZED
		NOTO - NORMALLY OPEN, TIMED OPENING WHEN DE-ENERGIZED
		NCTC - NORMALLY CLOSED, TIMED CLOSING WHEN DE-ENERGIZED
		FIELD INSTRUMENT, TAG NO. AS INDICATED * INDICATES INSTRUMENT TYPE DEFINED ON LOOP SHEETS OR P & ID ## INDICATES LOOP NO.
	LS	LIQUID LEVEL (FLOAT) SWITCH
		NORMALLY OPEN, CLOSING ON RISING LEVEL
		NORMALLY CLOSED, OPENS ON RISING LEVEL
		NORMALLY OPEN, CLOSING ON RISING PRESSURE
		NORMALLY CLOSED, OPENS ON RISING PRESSURE
		NORMALLY CLOSED, OPENS ON DROPPING PRESSURE
	TS	TEMPERATURE SWITCH OR THERMOSTAT
		NORMALLY OPEN, CLOSING ON RISING TEMPERATURE
		NORMALLY OPEN, CLOSING ON DROPPING TEMPERATURE
		NORMALLY CLOSED, OPENS ON RISING TEMPERATURE
		NORMALLY CLOSED, OPENS ON DROPPING TEMPERATURE
	FS	FLOW SWITCH (AIR, WATER, ETC.)
		NORMALLY OPEN, CLOSING ON INCREASED FLOW
		NORMALLY CLOSED, OPENS ON INCREASED FLOW
	ZS	POSITION (LIMIT) SWITCH
		NORMALLY OPEN
		NORMALLY OPEN - HELD CLOSED
		NORMALLY CLOSED
		NORMALLY CLOSED - HELD OPEN
	WS	TORQUE SWITCH
		NORMALLY OPEN, CLOSING ON HIGH TORQUE
		NORMALLY CLOSED, OPENS ON HIGH TORQUE
		UTILIZED IN CONJUNCTION WITH OTHER CONTROL SCHEMATIC SYMBOLS TO DEPICT THE PHYSICAL LOCATION OF THE DEVICE # REPRESENTS LOCATION SEE LOCATION LEGEND ON DRAWING
		CONDUCTORS OR CONDUITS CROSSING PATHS BUT NOT CONNECTED
		CONDUCTORS ELECTRICALLY CONNECTED
	S	SOLENOID VALVE

ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
		LIGHTNING ARRESTER
		GROUND OR GROUND ROD
		FUSE, AMPERE RATING AS NOTED
	HTR	STRIP HEATER OR HEATING ELEMENT
		INDUCTOR
	TG	TACHOMETER GENERATOR
		CONTACT, NORMALLY OPEN (NO)
		CONTACT, NORMALLY CLOSED (NC)
		OVERLOAD RELAY HEATER
	K	KEY INTERLOCK
	TB	TERMINAL OR TEST BLOCK
	RTD	RESISTANCE TEMPERATURE DETECTOR
	VE	VIBRATION DETECTOR
	DM	DAMPER MOTOR
	ETM	ELAPSED TIME METER
	M	MOTOR OPERATED VALVE OR GATE
		INDICATES LIMITS OF ELECTRICAL EQUIPMENT OR WIRING ENCLOSURE



GENERAL NOTE
THIS IS A STANDARD LEGEND. SOME SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

NOTES:

- IN GENERAL CONDUIT ROUTING FOR EQUIPMENT AND DEVICES IS NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING ALL CONDUITS WHICH SHALL INCLUDE CONDUITS SHOWN ON ONE-LINE AND RISER DIAGRAMS AND HOME-RUNS SHOWN ON PLAN DRAWINGS. REFER TO SPECIFICATIONS FOR MATERIALS AND INSTALLATION REQUIREMENTS.
- THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUITS REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.
- SWITCHGEAR AND MOTOR CONTROL CENTER COMPARTMENT DESIGNATIONS AS INDICATED BELOW:
BLANK: NOT INTENDED FOR USE. PLATE ONLY
SPACE: EQUIPPED WITH REQUIRED BUS AND HARDWARE FOR THE FUTURE
ADDITION OF BREAKERS AND/OR STARTERS WITHIN THE SIZE AND RANGE SHOWN
SPARE: CONTAINS A COMPLETELY INSTALLED BREAKER AND/OR STARTER OF SIZE AND TYPE INDICATED FOR FUTURE USE.
- INTERPRETATION OF ELECTRICAL DRAWINGS: CIRCUIT IDENTIFICATION, ROUTING, AND SIZES OF CONDUITS AND WIRES ARE SHOWN ON THE FOLLOWING DRAWINGS:
A. POWER ONE LINE DIAGRAMS: POWER, CONTROL AND SIGNAL WIRING REQUIREMENTS FOR ELECTRICAL DISTRIBUTION EQUIPMENT AND UTILIZATION EQUIPMENT POWERED FROM SWITCHGEAR, SWITCHBOARDS, MOTOR CONTROL CENTERS AND MAJOR POWER DISTRIBUTION PANELBOARDS ARE TYPICALLY SHOWN ON THE ONE LINE DIAGRAMS. THE PARAMETERS IDENTIFIED ON THE ONE LINE DIAGRAMS ARE: CIRCUIT IDENTIFICATION, CIRCUIT ORIGIN AND DESTINATION, CONDUIT SIZE, WIRE SIZE AND QUANTITY FOR COMPLETE CIRCUIT LENGTH, AND AUXILIARY DEVICES ASSOCIATED WITH THE CONTROL/PROTECTION OF THE POWERED EQUIPMENT, AND SIZE OF THE GROUNDING ELECTRODE CONDUCTORS.
B. INSTRUMENTATION AND CONTROL RISER DIAGRAMS: POWER, CONTROL, SIGNAL AND DATA HIGHWAY WIRING REQUIREMENTS FOR INSTRUMENTS AND CONTROL DEVICES CONTROLLED/MONITORED FROM INSTRUMENTATION AND CONTROL PANELS SUCH AS RTUS, PLCs, TERMINAL CABINETS, AND REMOTE I/O PANELS ARE TYPICALLY SHOWN ON THE INSTRUMENTATION AND CONTROL ONE LINE DIAGRAMS. THE PARAMETERS IDENTIFIED ON THE ONE LINE DIAGRAMS ARE: CIRCUIT IDENTIFICATION, CIRCUIT ORIGIN AND DESTINATION, CONDUIT SIZE, WIRE SIZE, QUANTITY AND TYPE FOR COMPLETE CIRCUIT LENGTH, AND AUXILIARY DEVICES ASSOCIATED WITH THE CONTROL/PROTECTION OF THE POWERED EQUIPMENT.
- FLOOR PLANS: FOR DETERMINING THE LENGTH OF CIRCUITS LOCATED WITHIN STRUCTURES, FLOOR PLANS SHOW THE LOCATION OF ELECTRICAL DISTRIBUTION EQUIPMENT, CONTROL PANELS, UTILIZATION EQUIPMENT, INSTRUMENTS, ANCILLARY EQUIPMENT AND DEVICES AND THE ANTICIPATED PENETRATION LOCATIONS WHERE CONDUITS EXIT/ENTER THE STRUCTURE. HOMERUNS MAY ALSO BE SHOWN FROM MISCELLANEOUS EQUIPMENT NOT SHOWN ON A ONE LINE OR RISER DIAGRAM.
- SITE PLANS: FOR DETERMINING THE LENGTH OF CIRCUITS EXTERIOR TO STRUCTURES AND TO IDENTIFY THE SPECIFIC REQUIREMENTS OF THE UNDERGROUND CONDUITS OR DUCT BANKS, SITE PLANS SHOW THE GENERAL ROUTING OF UNDERGROUND CONDUITS AND DUCT BANKS WITH SECTIONS INDICATING THE CONDUIT SIZE, ARRANGEMENT AND CIRCUIT ROUTING.
- NOTE THAT CONDUIT SIZE WITHIN STRUCTURE IS INDICATED ON ONE-LINE DIAGRAM AND UNDERGROUND SIZE IS INDICATED ON DUCT BANK SECTIONS.

XREFs: [CDMS_2436] Images: []
 Last saved by: C:\HILLMAN\01218\2014_80042_AM\pww\cadd\ppl\PLM\0012180699\04 Design Services NM_90%09 Electrical\10 CADD\E001XXLG.dwg
 ©2014 CAMP DRESSER & MCKEE ALL RIGHTS RESERVED.
 THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: T. KITE
 DRAWN BY: T. KITE
 SHEET CHK'D BY: M. CAHILL
 CROSS CHK'D BY: S. PERRY
 APPROVED BY: S. PERRY
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-000020

CITY OF JACKSONVILLE

**TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION**

ELECTRICAL LEGEND I

DATE: SPENCER PERRY
PE NO. 62587

PROJECT NO. 9012-80695
FILE NAME: E001XXLG.DWG
SHEET NO. E-1

FOR PERMIT- NOT FOR CONSTRUCTION

XREFs: [CDMS-2436] Images: []
 Last saved by: CARTERRH Time: 2/18/2014 3:36:26 PM
 C:\Users\Carterrh\Desktop\Working Files\Trail Ridge E002XXLG.dwg
 © 2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS, THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

SYMBOL	DESCRIPTION
	INCANDESCENT, COMPACT FLUORESCENT H.I.D., OR LED TYPE LIGHTING FIXTURE "A" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "B" - CONTROLLED BY SWITCH "B" "3" - CIRCUIT NUMBER
	LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	WALL MOUNTED LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	CROSS HATCH INDICATES LIGHTING FIXTURE THAT IS UNSWITCHED AND SHALL REMAIN ON AT ALL TIMES. NOTATIONS SAME AS ABOVE.
	SHADED AREA INDICATES LIGHTING FIXTURE THAT IS EQUIPPED WITH EMERGENCY BACKUP POWER SOURCE. NOTATIONS SAME AS ABOVE.
	POLE MOUNTED AREA TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	POLE MOUNTED ROADWAY TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	EMERGENCY LIGHTING BATTERY UNIT WITH TWO LAMP HEADS "EM" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "3" - SUPERVISORY CIRCUIT * - FIXTURE TAG #
	REMOTE EMERGENCY ADJUSTABLE WALL LIGHTING FIXTURE WITH TWO LAMP HEADS "R-2" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) * - HOME RUN TO BATTERY UNIT INDICATED. CONDUIT SHALL BE 3/4" AND CONTAIN (2) NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND (1) NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE INDICATED.
	COMBINATION BATTERY UNIT AND EXIT SIGN. FILLED QUADRANT REPRESENTS FACE SIDE OF SIGN.
	CEILING MOUNTED EXIT SIGN, NOTATIONS SAME AS ABOVE. WHEN USED, ARROW INDICATES DIRECTION OF EGRESS. FILLED QUADRANT REPRESENTS FACE SIDE OF SIGN. (DOUBLE FACE DOUBLE CHEVRONS SHOWN)
	WALL MOUNTED EXIT SIGN, NOTATIONS SAME AS ABOVE. WHEN USED, ARROW INDICATES DIRECTION OF EGRESS. FILLED QUADRANT REPRESENTS FACE SIDE OF SIGN.
	REMOTE EMERGENCY CEILING LIGHTING FIXTURE. "RH-3" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "3" - SUPERVISORY CIRCUIT * - HOME RUN TO BATTERY UNIT INDICATED. CONDUIT SHALL BE 3/4" AND CONTAIN 2 NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND 1 NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE INDICATED.
	HOME RUN TO DESIGNATED EQUIPMENT. BRANCH CIRCUIT CONDUIT WITH 2 NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND 1 NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE NOTED. NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS. FOR MINIMUM SIZE CONDUIT PERMITTED REFER TO THE SPECIFICATIONS.
	CONDUIT CONCEALED IN WALL, IN SLAB ABOVE, OR ABOVE CEILING.
	CONDUIT CONCEALED IN OR BELOW FLOOR OR UNDERGROUND.
	CONDUIT RUN EXPOSED. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL.
	"X" INDICATES EXPLOSION PROOF CONDUIT SEAL FITTING.
	CONCRETE ENCASED DUCTBANK. WIDTH VARIES, SEE DUCTBANK SECTION/DETAILS FOR REQUIREMENTS AND WIDTH
	CONDUIT STUBBED OUT AND CAPPED
	DENOTES A QUANTITY OF TWO (2) 3-INCH CONDUITS EACH CONTAINING THREE NO. 3/0 AWG CONDUCTORS AND 1 NO. 2 AWG GROUND CONDUCTOR.
	DENOTES A QUANTITY OF TWO INSTRUMENT CABLES. EACH CABLE TO CONSIST OF TWO NO. 16 AWG CONDUCTORS TWISTED TOGETHER AND COVERED WITH A METALLIC SHIELD AND AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
	SAME AS ABOVE EXCEPT CABLE TO CONSIST OF THREE NO. 16 AWG CONDUCTORS TWISTED, SHIELDED AND COVERED WITH AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
	THREE 4-INCH CONDUITS
	FLEXIBLE METAL CONDUIT "WHIP" (3/4" C., 2#12, 1#12G UNLESS OTHERWISE NOTED) FOR LIQUID TIGHT MOTOR CONNECTIONS
	"X" INDICATES CONDUIT SEAL FITTING IN OTHER THAN CODE REQUIRED LOCATIONS.
	INDICATES MOTOR STARTER AND/OR MOTOR CONTROL EQUIPMENT WITHIN THE ENCLOSURE.

SYMBOL	DESCRIPTION
	SINGLE POLE SWITCH "a" INDICATES FIXTURES CONTROLLED.
	DOUBLE POLE SWITCH "a" INDICATES FIXTURES CONTROLLED.
	THREE WAY SWITCH "c" INDICATES FIXTURES CONTROLLED.
	FOUR WAY SWITCH "a" INDICATES FIXTURES CONTROLLED.
	DIMMER SWITCH "a" INDICATES FIXTURES CONTROLLED
	SINGLE POLE SWITCH "OS" INDICATES A PROGRAMMABLE OCCUPANCY SENSOR
	DOUBLE POLE SWITCH "OS" INDICATES PROGRAMMABLE OCCUPANCY SENSOR WITH DUAL RELAYS
	SINGLE POLE SWITCH "DT" INDICATES DUAL TECHNOLOGY PROGRAMMABLE OCCUPANCY SENSOR CAPABLE OF SENSING MOTION AND SOUND
	LIGHTING CONTACTOR WITH NUMBER OF POLES AS INDICATED
	TIME SWITCH
	PUSH BUTTON STATION
	INDICATES ALL LIGHTING FIXTURES WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE TYPE "A" UNLESS OTHERWISE NOTED. SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	LIGHTING PANELBOARD (LP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	POWER PANELBOARD (PP-#) OR DISTRIBUTION PANELBOARD (DP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	LIGHTING CONTACTOR PANELBOARD (LCP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W * GFCI - GROUND FAULT CIRCUIT INTERRUPTER TYPE WP - WEATHERPROOF T - TRANSIENT VOLTAGE SURGE SUPPRESSOR IC - ISOLATED GROUND 4 - CIRCUIT NUMBER
	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W MOUNTED ABOVE COUNTER-TOP OR 42" AFF * NOTATIONS SAME AS ABOVE
	SPECIAL PURPOSE RECEPTACLE * - VOLT RATING "3" - NUMBER OF POLES "60" - AMPERE RATING "4W" - 4 WIRES IN ADDITION TO GROUND
	MULTI-OUTLET ASSEMBLY, SYMBOL DENOTES RECEPTACLE TYPE
	FLUSH FLOOR OUTLET BOX WITH TYPE OUTLET INDICATED
	UNDER FLOOR DUCT SYSTEM WITH TYPE OUTLETS INDICATED
	THREE CELL UNDER FLOOR DUCT SYSTEM JUNCTION BOX
	JUNCTION BOX
	PULL BOX
	TERMINAL CABINET
	OCCUPANCY SENSOR
	PHOTOCELL
	EMERGENCY EYEWASH/SHOWER ALARM STATION WITH FLOW SWITCH(ES)
	INDICATED EQUIPMENT AND MATERIALS TO BE DEMOLISHED
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 12 CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR CORROSION RESISTANT CONSTRUCTION SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL CONFORM TO N.E.C. REQUIREMENTS FOR THE HAZARDOUS AREA CLASSIFICATION SHOWN.

SYMBOL	DESCRIPTION
	GROUND SYSTEM GRID OR LOOP, 36" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED.
	EXOTHERMIC WELD CONNECTION
	3/4" x 10'-0" GROUND ROD. UNLESS SPECIFIED OTHERWISE.
	GROUND ROD TEST WELL STATION (SEE DETAIL SHEET FOR REQUIREMENTS)
COMMUNICATION SYSTEMS	
	TELEPHONE OUTLET FOR DESK TYPE HANDSET K = KEY SYSTEM
	TELEPHONE OUTLET FOR WALL TYPE HANDSET (MOUNT UP 4'-6") K = KEY SYSTEM
	PAGE/PARTY TELEPHONE OUTLET FOR DESK TYPE HANDSET
	PAGE/PARTY TELEPHONE OUTLET FOR WALL TYPE HANDSET, MOUNT UP 4'-6"
	PAGING SPEAKER, WALL MOUNTED H = HORN TYPE W = WIDE ANGLE TYPE
	PAGING SPEAKER, WALL MOUNTED, BI-DIRECTIONAL, HORN TYPE W = WIDE ANGLE TYPE
	PAGING SPEAKER, FLUSH MOUNTED CEILING TYPE
	PAGING SPEAKER, SURFACE MOUNTED CEILING TYPE
	REMOTE WALL MOUNTED VOLUME CONTROL FOR CEILING SPEAKER, MOUNT UP 5'-0"
	PAGING SPEAKER AMPLIFIER ASSEMBLY
	TELEPHONE CABINET OR BACKBOARD AS NOTED
	"C" - DATA INPUT/OUTPUT CABLE OUTLET "P" - PROCESS COMPUTER SYSTEM (CAT6 RJ-45 JACK)
	GAS DETECTOR/VENTILATION FAILURE ALARM, # INDICATES TYPE OF UNIT. 1 = MASTER, 2 = REMOTE
	GAS DETECTION/VENTILATION FAILURE WEATHERPROOF DUAL-LITE BEACON MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
	GAS DETECTION/VENTILATION FAILURE HORN/STROBE MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
	GAS DETECTION/VENTILATION FAILURE HORN, MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
	GAS DETECTION/VENTILATION FAILURE STROBE, MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
SECURITY SYSTEMS	
	SECURITY ALARM CONTROL PANEL
	SECURITY ALARM DOOR SWITCH
	SECURITY ALARM KEY PAD
	SECURITY SYSTEM CARD ACCESS READER
	SECURITY ALARM WINDOW SWITCH
	SECURITY ALARM MOTION DETECTOR
	CLOSED CIRCUIT TV CAMERA
	PAN, TILT, ZOOM CAMERA LENS CONTROLS
	GLASS BREAK DETECTOR
FIRE ALARM SYSTEMS	
	FIRE ALARM HEAT DETECTOR 135 FIXED TEMPERATURE UNLESS OTHERWISE NOTED. "200" - 200 FIXED TEMPERATURE "R" - FIXED TEMPERATURE RATE-OF-RISE TYPE
	FIRE ALARM SMOKE DETECTOR PHOTOELECTRIC TYPE UNLESS OTHERWISE NOTED. "I" - IONIZATION TYPE.
	FIRE ALARM DUCT SMOKE DETECTOR
	FIRE ALARM CONTROL PANEL
	FIRE ALARM VENTILATION PANEL WITH GRAPHIC PANEL
	REMOTE FIRE ALARM ANNUCIATOR PANEL

SYMBOL	DESCRIPTION
	FIRE ALARM MASTER BOX
	FIRE ALARM HORN, MOUNT UP 7'-6"
	FIRE ALARM STROBE, MOUNT UP 6'-8" 15 = CANDELA RATING
	FIRE ALARM HORN AND STROBE LIGHT COMBINATION, MOUNT UP 6'-8" 15 = CANDELA RATING
	FIRE ALARM MANUAL PULL STATION, MOUNT UP 4'-0"
	SPRINKLER VALVE SUPERVISORY SWITCH
	SPRINKLER FLOW ALARM SWITCH
	FIRE ALARM BELL
	WEATHERPROOF HI-INTENSITY FIRE ALARM STROBE LIGHT WITH HORN
	PASSIVE INFRARED DETECTOR
	SMOKE BEAM DETECTOR (RECEIVER)
	SMOKE BEAM DETECTOR (TRANSMITTER)
	FIRE ALARM SMOKE DETECTOR REMOTE INDICATOR AND TEST SWITCH

ABBREVIATIONS	
A	AMPS
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
AMP	AMPERE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BCELP	BAY CITY ELECTRIC LIGHT AND POWER
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CCP	CHEMICAL CONTROL PANEL
CGD	COMBUSTIBLE GAS DETECTOR
CKT	CIRCUIT
CLB	CURRENT LIMITING BREAKER
CLF	CURRENT LIMITING FUSE
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH/CONTROL STATION
CT	CURRENT TRANSFORMER
CU	COPPER
CWS	CONDUIT WALL SEAL
DC	DIRECT CURRENT
DIA	DIAMETER
DIMS	DIMENSION
DMU	DIGITAL METERING UNIT
DN	DOWN
EC	EMPTY CONDUIT
ELEC	ELECTRICAL

SYMBOL WHERE THERE IS A DETAIL

DETAIL SHEET NO. WHERE THERE IS A DETAIL

SYMBOL WHERE DETAIL IS DRAWN

DETAIL SYMBOL SHEET NO. WHERE THERE IS A DETAIL

SYMBOL WHERE THERE IS A SECTION

SECTION SHEET NO. WHERE SECTION IS TAKEN

SYMBOL WHERE SECTION IS DRAWN

SECTION SYMBOL SHEET NO. WHERE SECTION IS TAKEN

GENERAL NOTE

THIS IS A STANDARD LEGEND. SOME SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

ABBREVIATIONS (CONTINUED)	
ELEV	ELEVATION
EM	EMERGENCY
ENCL	ENCLOSURE OR ENCLOSED
EQUIP	EQUIPMENT
EW	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
FO	FIBER OPTIC
FU	FUSE
GEN	GENERATOR
G, GND	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GRS	GALVANIZED RIGID STEEL
HACR	HEATING & AIR CONDITIONING RATED
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HT	HEIGHT
HZ	HERTZ
INSTR	INSTRUMENT
kcml	1000 CIRCULAR MILS
KVA	KILOVOLT AMPERES
KW	KILOWATTS
LA	LIGHTNING ARRESTER
LTG	LIGHTING
LP	LIGHTING PANEL
LV	LOW VOLTAGE
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MPZ	MINI POWER ZONE
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
N	NEUTRAL
NC	NORMALLY CLOSED
NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OH	OVERHEAD
OL	OVERLOAD
PB	PULL BOX
PCP	PUMP CONTROL PANEL
PH	PHASE
PMH	POWER MANHOLE
PMT	PAD MOUNTED
PNL	PANEL OR PANELBOARD
PR	PAIR
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RECP	RECEPTACLE
REQD	REQUIRED
QTY	QUANTITY
SA	SURGE ARRESTER
SEC	SECONDS OR SECONDARY
SH	SHIELDED OR SPACE HEATER
SHH	SIGNAL HANDHOLE
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
SV	SOLENOID VALVE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
T	TRANSFORMER
TC	TIME TO CLOSE OR TRAY CABLE
TEL	TELEPHONE
TO	TIME TO OPEN
TS	TWISTED SHIELDED OR THERMAL SWITCH
TTB	TELEPHONE TERMINAL BOARD
TYP	TYPICAL
UG	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPS
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS, WIDTH, WITH, WIRE
WP	WEATHERPROOF
XP	EXPLOSION PROOF
XFMR	TRANSFORMER

DATE:
SPENCER PERRY
PE NO. 62587

PROJECT NO. 9012-80695
FILE NAME: E002XXLG.DWG

SHEET NO.
E-2

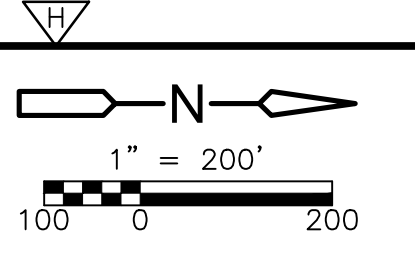
DESIGNED BY: T. KITE
 DRAWN BY: T. KITE
 SHEET CHK'D BY: M. CAHILL
 CROSS CHK'D BY: S. PERRY
 APPROVED BY: S. PERRY
 DATE: FEBRUARY 2014

8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL OCA NO. ED-0000020

CITY OF JACKSONVILLE

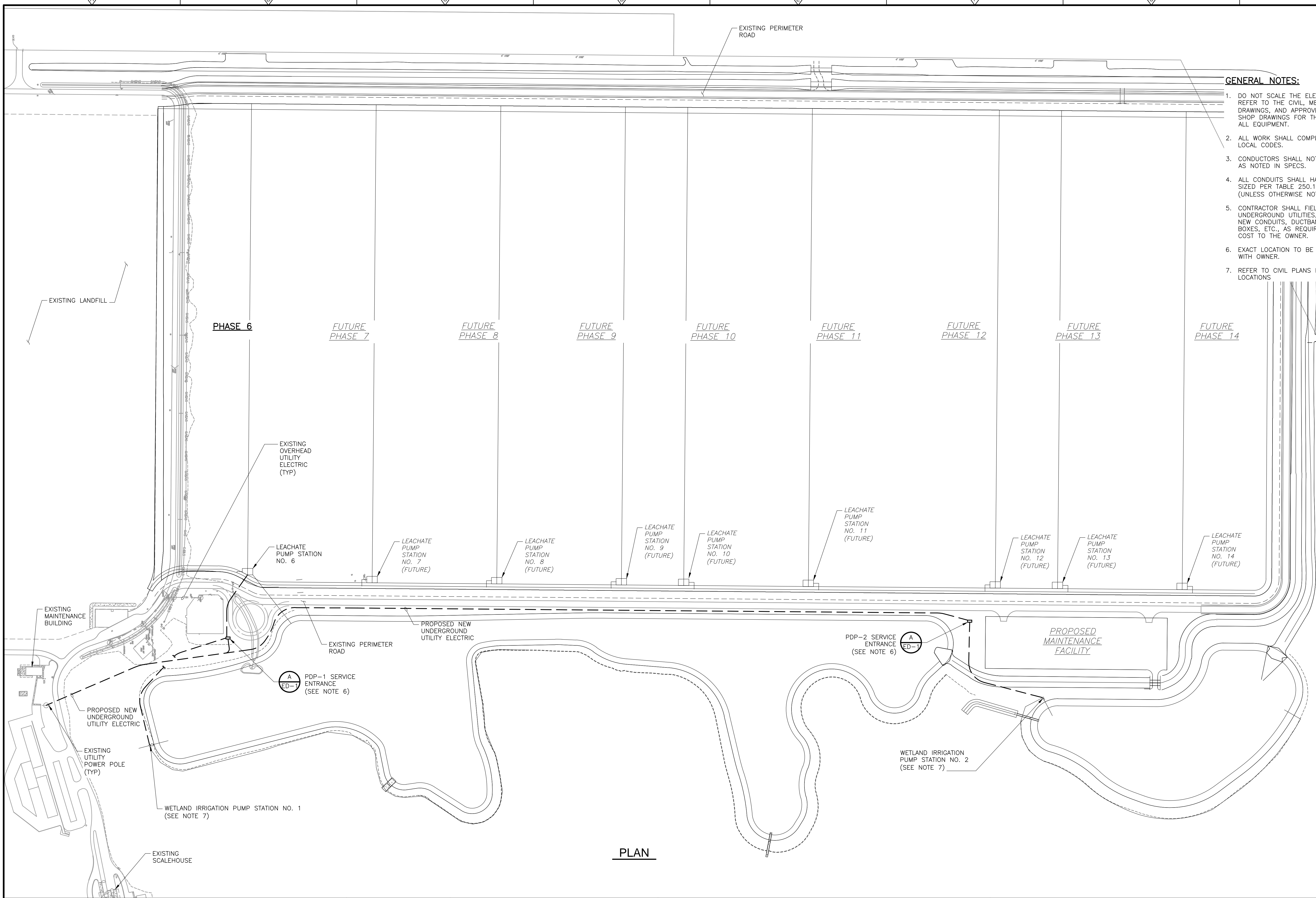
**TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION**

ELECTRICAL LEGEND II



GENERAL NOTES:

1. DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO THE CIVIL, MECHANICAL, STRUCTURAL DRAWINGS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT.
2. ALL WORK SHALL COMPLY WITH NEC AND LOCAL CODES.
3. CONDUCTORS SHALL NOT BE SPLICED EXCEPT AS NOTED IN SPECS.
4. ALL CONDUITS SHALL HAVE A BOND WIRE SIZED PER TABLE 250.122 OF THE NEC (UNLESS OTHERWISE NOTED).
5. CONTRACTOR SHALL FIELD VERIFY EXISTING UNDERGROUND UTILITIES, PIPING, ETC. REROUTE NEW CONDUITS, DUCTBANK, MANHOLES, PULL BOXES, ETC., AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
6. EXACT LOCATION TO BE COORDINATED IN FIELD WITH OWNER.
7. REFER TO CIVIL PLANS FOR ALL EQUIPMENT LOCATIONS



PLAN

Xref's: [CDM_2436_11-008-BASE_CE-TRAILRIDGE EXPANSION TOPO_C-BASE_EG_TR5 TOPO] Images: []
 Last saved by: CHAPMANBS Time: 3/13/2012 12:58:45 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CDM SMITH & ASSOCIATES, INC. ALL RIGHTS RESERVED.
 THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

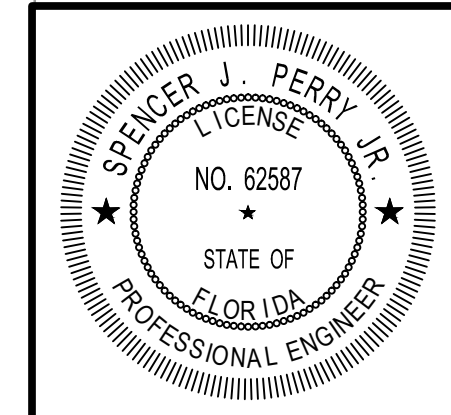
DESIGNED BY: T. KITE
 DRAWN BY: T. KITE
 SHEET CHK'D BY: M. CAHILL
 CROSS CHK'D BY: S. PERRY
 APPROVED BY: S. PERRY
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-0000020

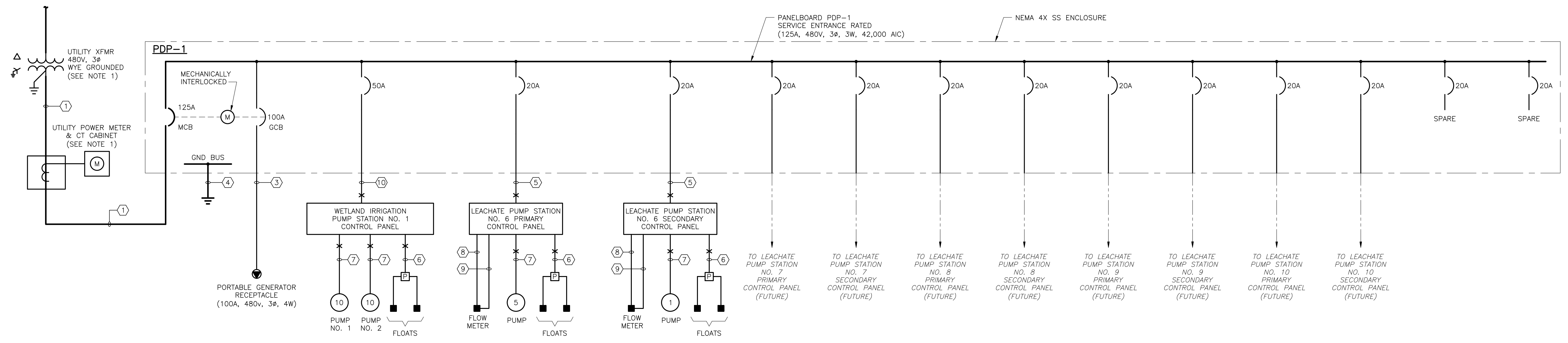
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

ELECTRICAL SITE PLAN
 SHEET NO. E-3

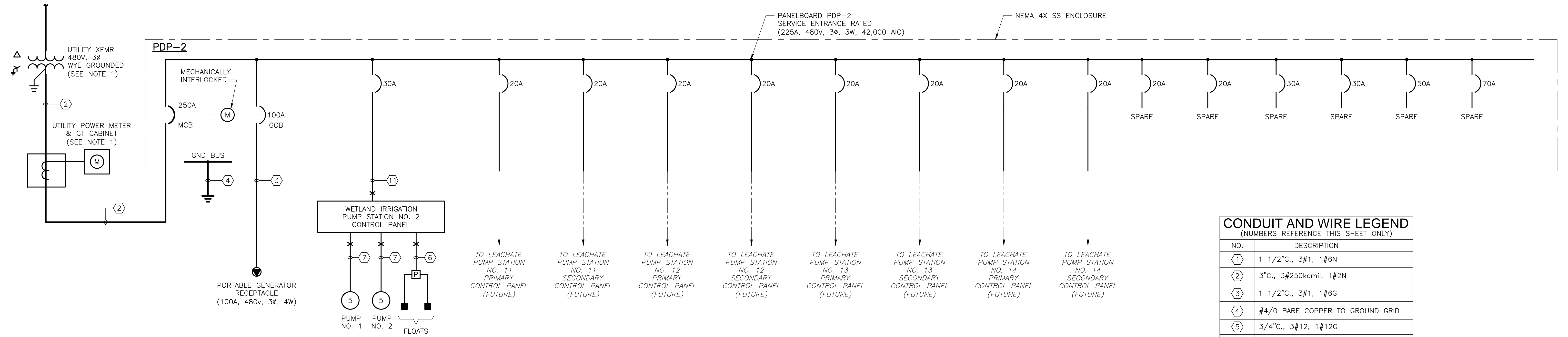
DATE: SPENCER PERRY
 PE NO. 62587
 PROJECT NO. 9012-80695
 FILE NAME: E003PSST.dwg
 SHEET NO. E-3



NOTE:
 1. COORDINATE WITH JEA FOR ALL UTILITY REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

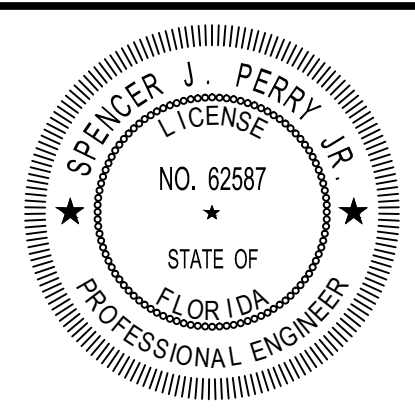


**PDP-1
 ONE LINE DIAGRAM**



**PDP-2
 ONE LINE DIAGRAM**

CONDUIT AND WIRE LEGEND (NUMBERS REFERENCE THIS SHEET ONLY)	
NO.	DESCRIPTION
①	1 1/2" C., 3#1, 1#6N
②	3" C., 3#250kcmil, 1#2N
③	1 1/2" C., 3#1, 1#6G
④	#4/0 BARE COPPER TO GROUND GRID
⑤	3/4" C., 3#12, 1#12G
⑥	1 1/2" C., FLOAT CABLES PER MFR
⑦	1 1/2" C., SUBMERSIBLE PUMP CABLE(S) PER MFR.
⑧	3/4" C., 2#12, 1#12G
⑨	3/4" C., 1-2/C#16 TS
⑩	1 1/2" C., 3#4, 1#8G
⑪	1" C., 3#8, 1#10G



DATE: SPENCER PERRY
 PE NO. 62587

PROJECT NO. 9012-80695
 FILE NAME: E004GED1.DWG
 SHEET NO.

E-4

XREFs: [CDMS_2436] Images: []
 Last saved by: C:\MILLMAN\time\2714\2014_307555.PM
 pw:\gocp\pp\CPM_XM\9012\80695\04 Design Services NM_90%09 Electrical\10 CADD\E004GED1.dwg
 ©2014 CDM SMITH, INC. ALL RIGHTS RESERVED.
 THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

DESIGNED BY: T. KITE
 DRAWN BY: T. KITE
 SHEET CHK'D BY: M. CAHILL
 CROSS CHK'D BY: S. PERRY
 APPROVED BY: S. PERRY
 DATE: FEBRUARY 2014

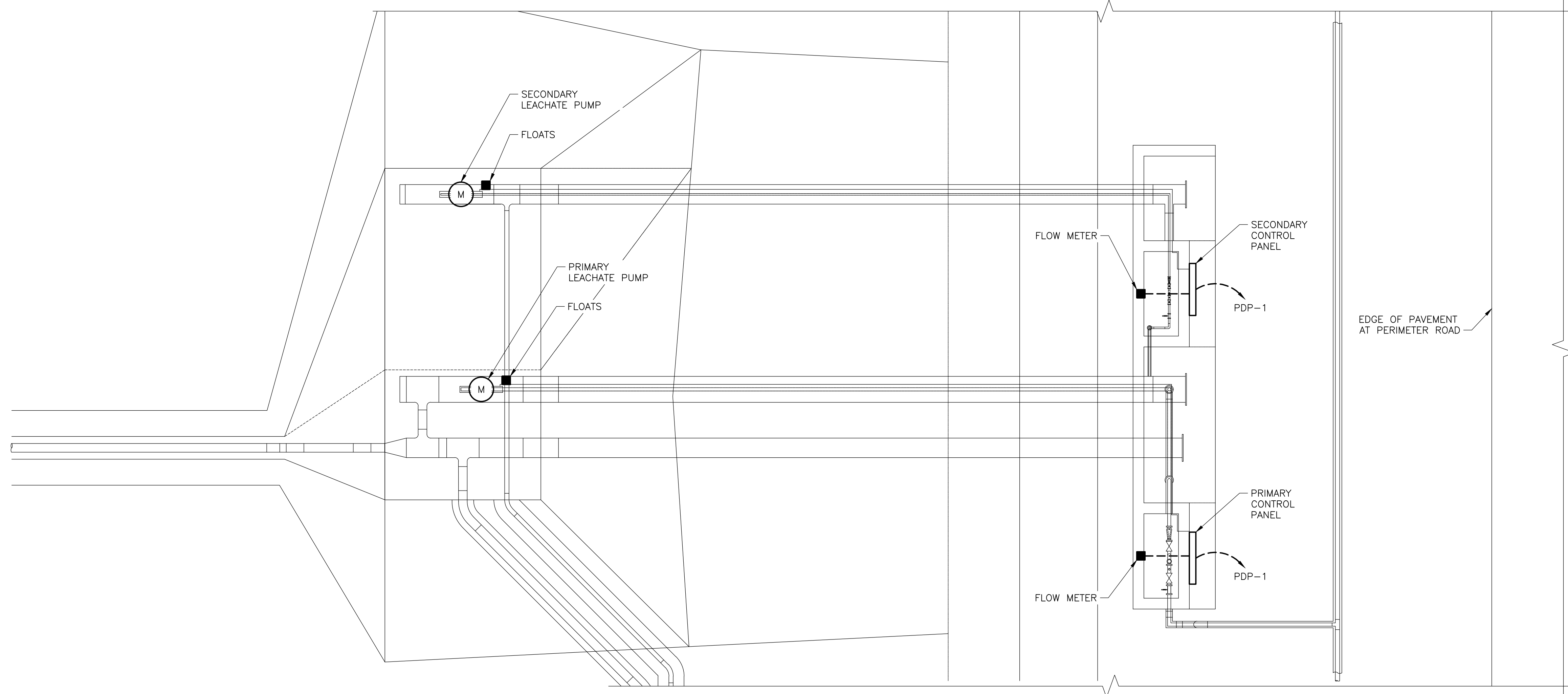


CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

**ELECTRICAL ONE LINE POWER DIAGRAMS
 AND TYPICAL RISER DAIGRAMS**

REV. NO.	DATE	DRWN	CHKD	REMARKS

NOTE:
1. REFER TO CIVIL FOR ALL EQUIPMENT LOCATIONS.



LEACHATE PUMP STATION 6
PLAN
1" = 5'-0"

XREFs: [CDMS_24316] Images: []
 Last saved by: CAHILL, M. Time: 2/14/2014 3:09:13 PM
 pw:\cadd\proj\PPM_XM1\9012\80695\04 Design Services NM_90%09 Electrical\10 CADD\E005PSPL1.dwg
 © 2014 CDM SMITH & MCKEE ALL RIGHTS RESERVED.
 THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

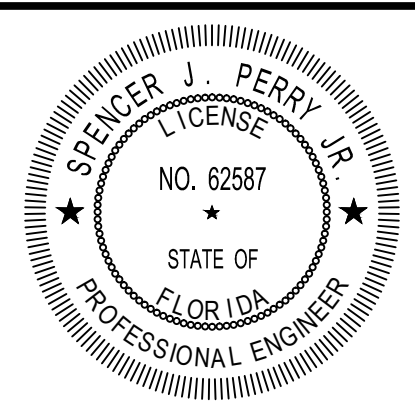
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: T. KITE
 DRAWN BY: T. KITE
 SHEET CHK'D BY: M. CAHILL
 CROSS CHK'D BY: S. PERRY
 APPROVED BY: S. PERRY
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

LEACHATE PUMP STATION
 ELECTRICAL PLAN

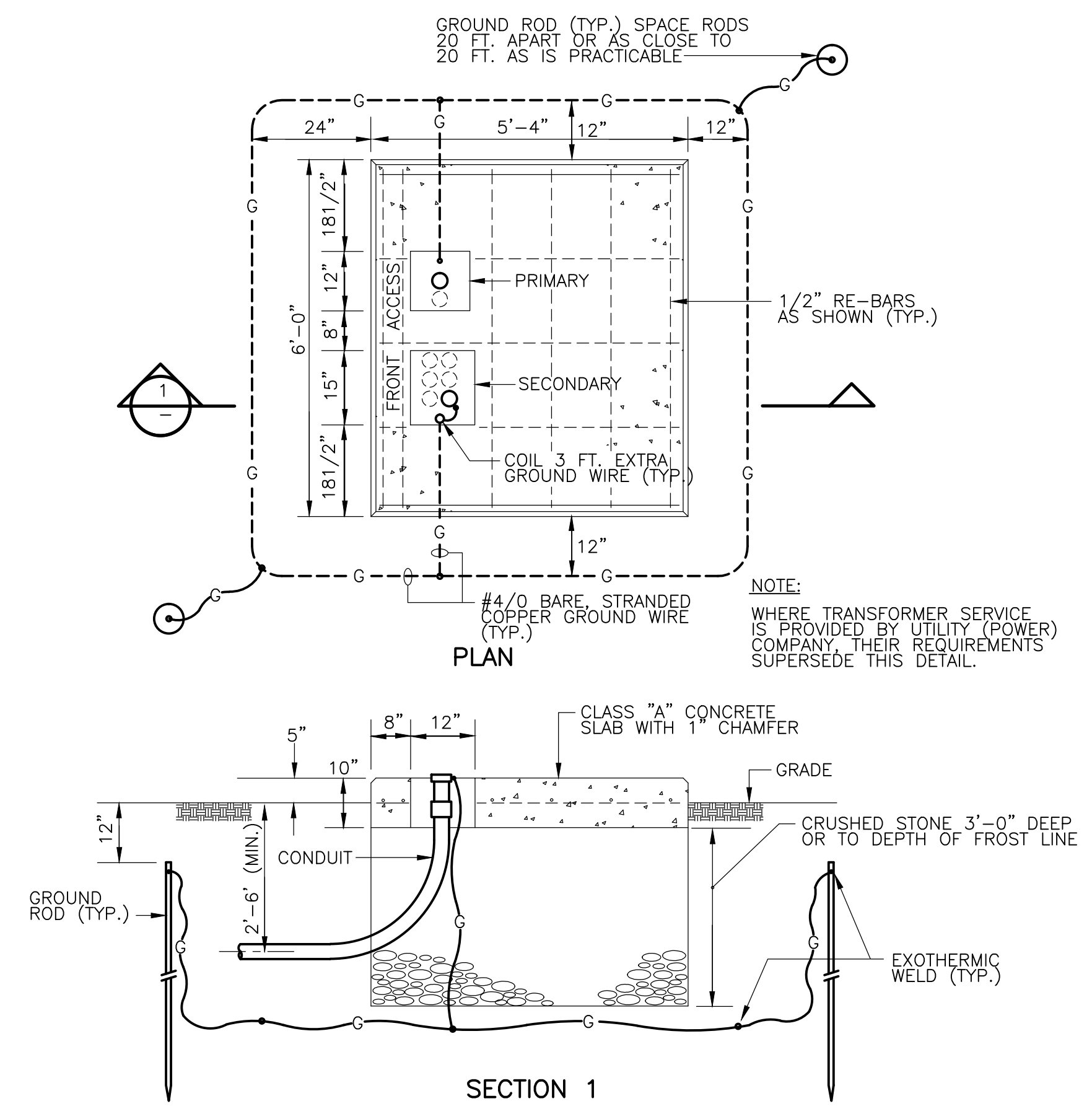


DATE:
 SPENCER PERRY
 PE NO. 62587

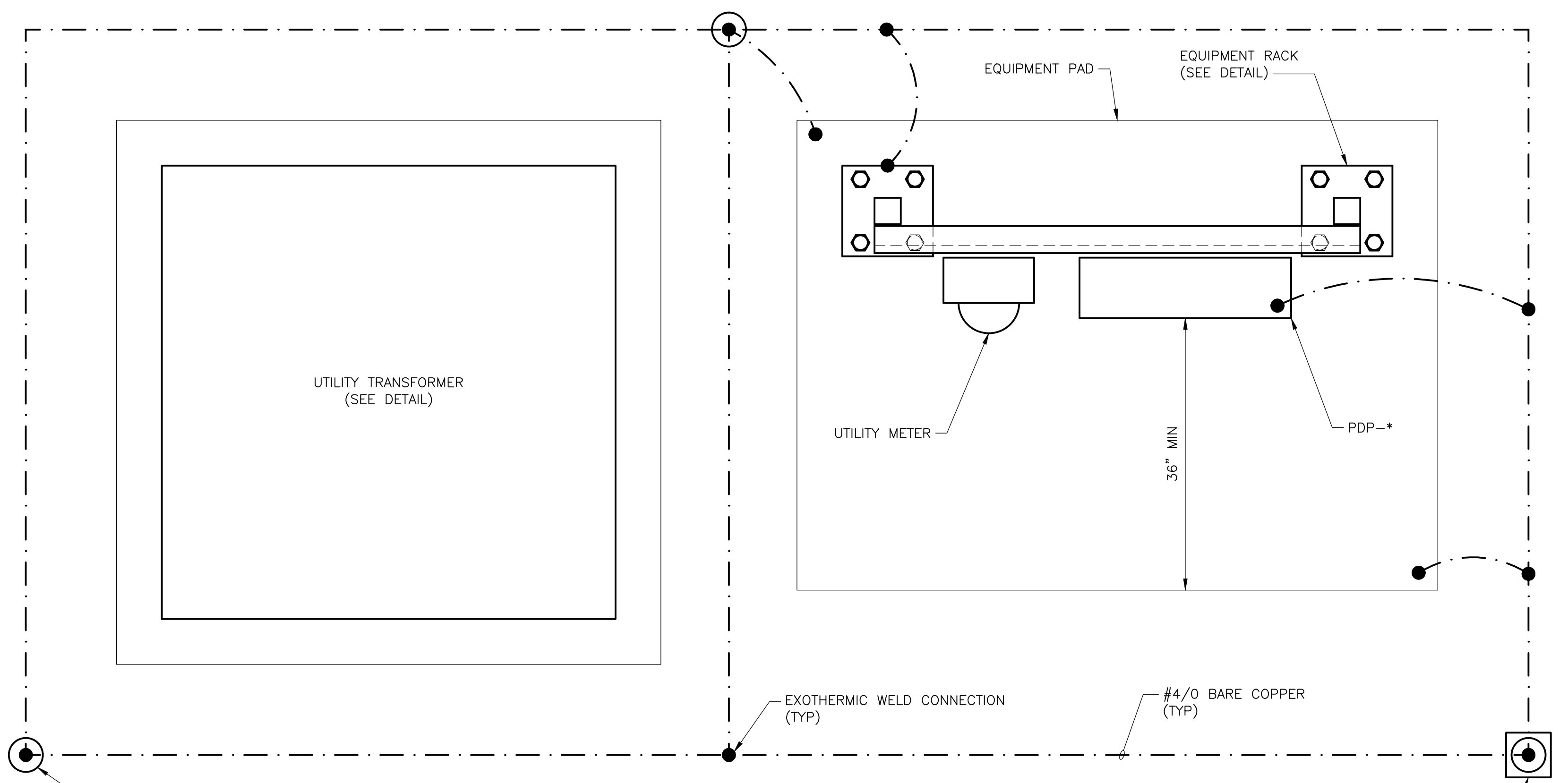
PROJECT NO. 9012-80695
 FILE NAME: E005PSPL1.DWG

SHEET NO.
E-5

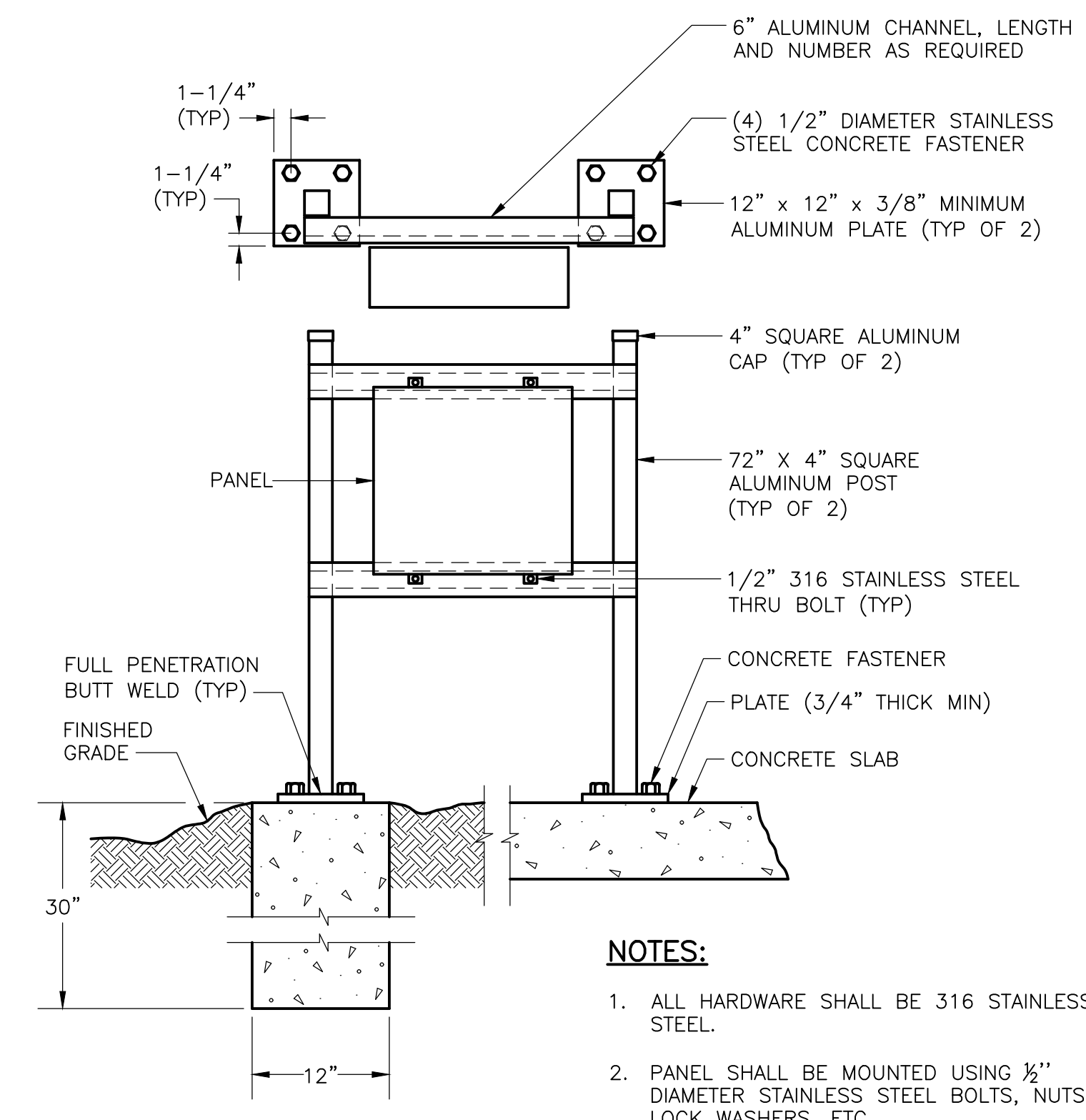
XREFs: [CDMS_2436] Images: []
 Last saved by: C:\Users\jkm\Documents\10/11/2013 2:16:15 PM
 pw:\loc\pwp\CPN_XMT\9012\80695\04 Design Services NM_60%09 Electrical\10 CADD\ED01XXDT.dwg
 © 2012 CDM SMITH & MCKEE ALL RIGHTS RESERVED.
 THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.



PAD-MOUNTED UTILITY TRANSFORMER FOUNDATION
DETAIL
 NTS

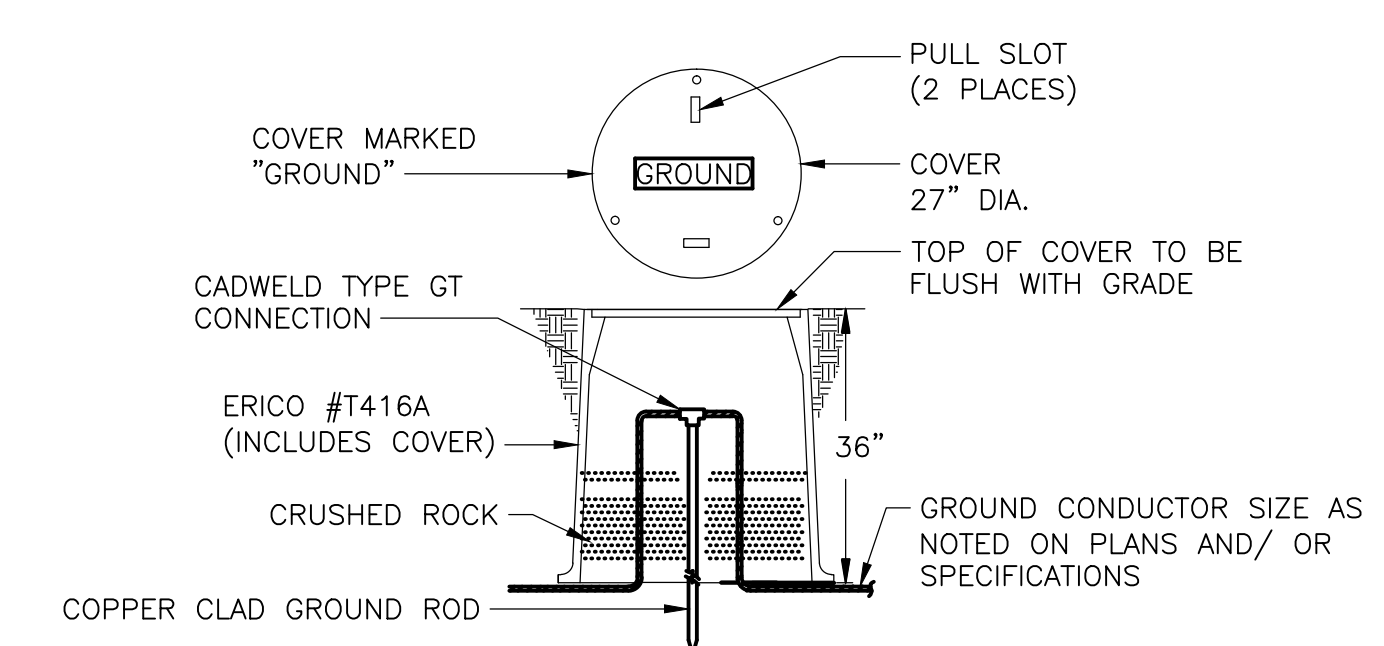


TYPICAL SERVICE ENTRANCE
DETAIL
 1"=1'-0" A
 E-3



PANEL MOUNTING
DETAIL
 NTS

- NOTES:**
1. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
 2. PANEL SHALL BE MOUNTED USING 1/2" DIAMETER STAINLESS STEEL BOLTS, NUTS, LOCK WASHERS, ETC.



- NOTE:**
1. TO IMPROVE SYSTEM RESISTANCE, ERICO GEM MAY BE USED AS A BACKFILL MATERIAL IN AN AUGERED HOLE

GROUND ROD TEST WELL
DETAIL
 NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

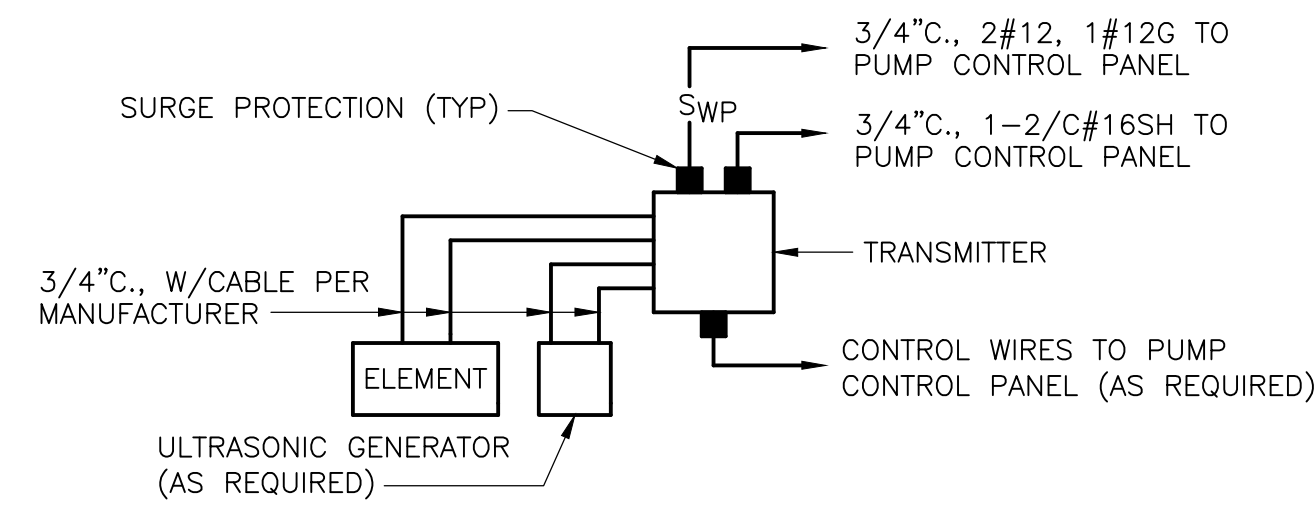
DESIGNED BY: T. KITE
 DRAWN BY: T. KITE
 SHEET CHK'D BY: M. CAHILL
 CROSS CHK'D BY: S. PERRY
 APPROVED BY: S. PERRY
 DATE: FEBRUARY 2014



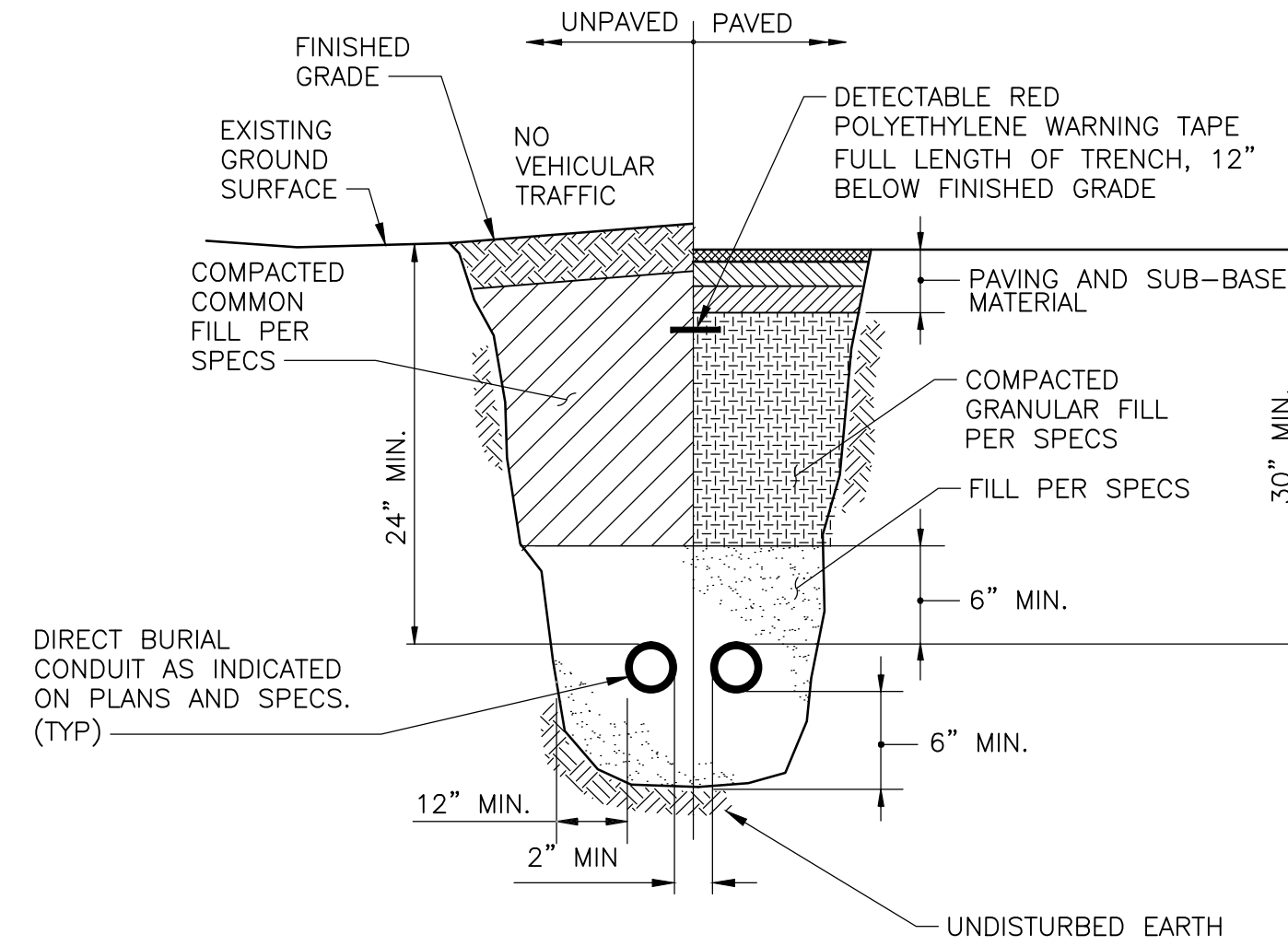
CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

ELECTRICAL DETAILS I
 SHEET NO. ED-1

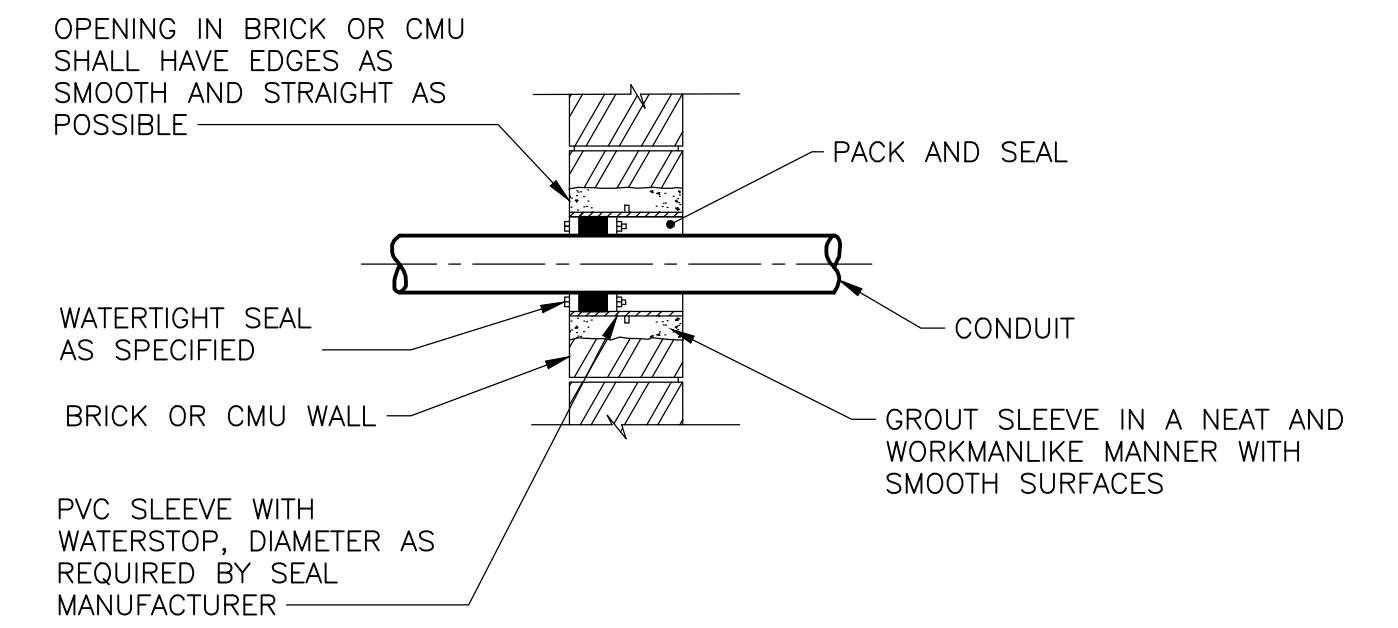
PROJECT NO. 9012-80695
 FILE NAME: ED01XXDT.DWG
 DATE: SPENCER PERRY
 PE NO. 62587
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER



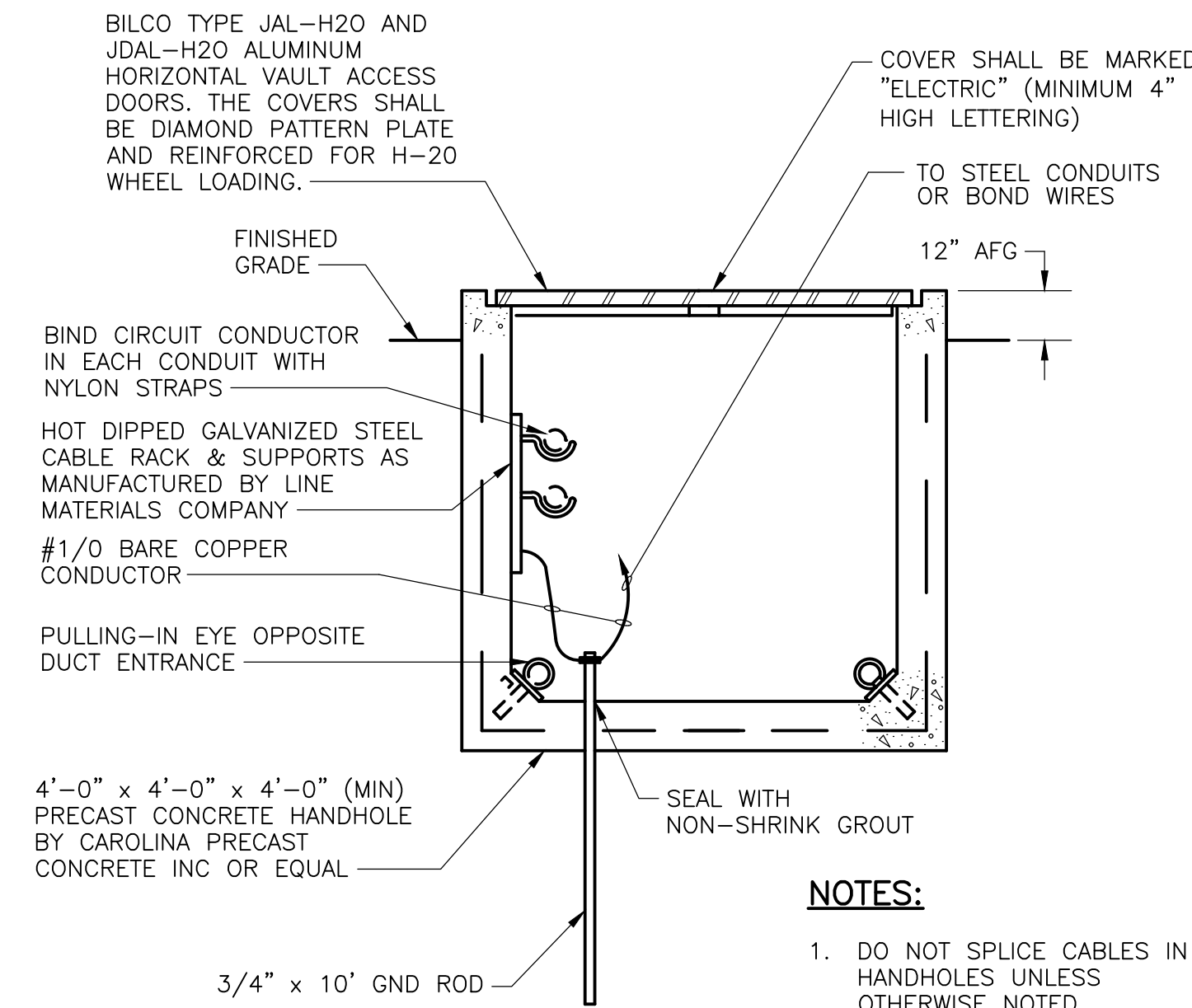
TYPICAL FLOW METER / TRANSMITTER
DETAIL
NTS



TYPICAL DIRECT BURIED CONDUIT INSTALLATION
DETAIL
NTS



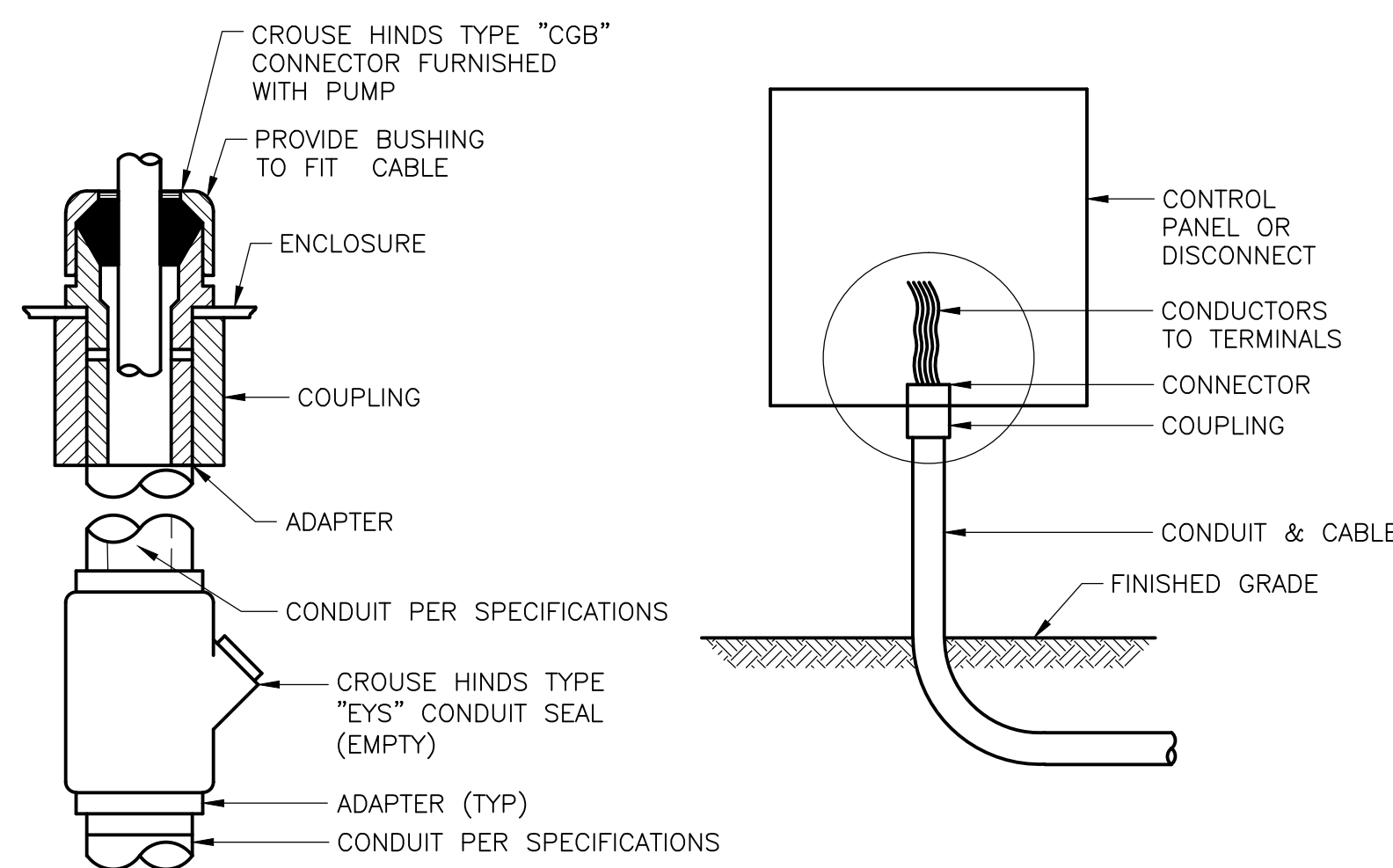
WATERTIGHT CONDUIT PENETRATION
DETAIL
NTS



ELECTRICAL HANDHOLE
DETAIL
NTS

NOTES:

- DO NOT SPLICE CABLES IN HANDHOLES UNLESS OTHERWISE NOTED.
- ALL MOUNTING HARDWARE SHALL BE 316 SS.
- HANDHOLES TO BE PLACED ON 6" BASE OF NO. 57 STONE.



WATER-TIGHT CONNECTION
DETAIL
NTS

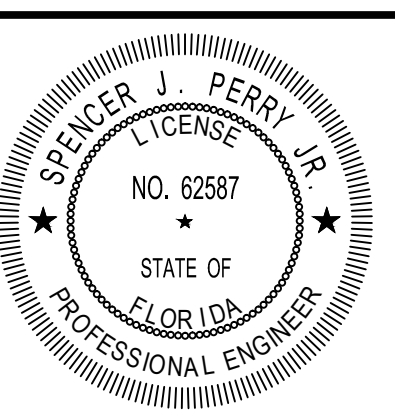
XREFs: [CDMS_2436] Images: []
 Last saved by: rdtro Date: 07/25/2013 10:34:45 AM
 pw:\loc\pwp\PLM\AM\9012\80695\04 Design Services NM_60%09 Electrical\10 CADD\ED02XXDT.dwg
 ©2012 CDM SMITH & MCKEE ALL RIGHTS RESERVED.
 THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

DESIGNED BY: T. KITE
 DRAWN BY: T. KITE
 SHEET CHK'D BY: M. CAHILL
 CROSS CHK'D BY: S. PERRY
 APPROVED BY: S. PERRY
 DATE: FEBRUARY 2014

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

ELECTRICAL DETAILS II



DATE:
 SPENCER PERRY
 PE NO. 62587

PROJECT NO. 9012-80695
 FILE NAME: ED02XXDT.DWG

SHEET NO.

ED-2

GENERAL NOTES

DESIGN CRITERIA:

CODES:

- FLORIDA BUILDING CODE 2010
- OTHER STRUCTURES: ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"

DESIGN LOADS:

LIVE LOADS:

- ELEVATED SLABS 200 PSF
- PROCESS SLABS ON GRADE 200 PSF

SUPERIMPOSED DEAD LOADS:

- ROOFS AS NOTED
- FLOORS AS NOTED

WIND DESIGN DATA:

- ULTIMATE DESIGN WIND SPEED, V_{ULT} (3-SECOND GUST): 130 MPH
- NOMINAL DESIGN WIND SPEED, V_{ASD} : 101 MPH
- RISK CATEGORY: III/IV
- WIND EXPOSURE CATEGORY: C
- ENCLOSURE CLASSIFICATION: ENCLOSED
- INTERNAL PRESSURE COEFFICIENT: ± 0.18

CONCRETE 28-DAY STRENGTH:

- COLUMNS, BEAMS, SLABS, WALLS, FOOTINGS 4500 PSI

REINFORCING STEEL:

- ALL BARS ASTM A615, GRADE 60
- WELDED WIRE FABRIC ASTM A185

FOUNDATIONS:

- ALLOWABLE BEARING PRESSURE FOR SPREAD FOOTINGS OVER SUBSURFACE PREPARED AS PER SPECIFICATIONS: 2500 PSF

GENERAL CONDITIONS:

ALL STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, HVAC, PLUMBING, MECHANICAL, CIVIL, ELECTRICAL AND SHOP DRAWINGS AND SPECIFICATIONS.

THE CONTRACTOR SHALL REVIEW AND VERIFY DIMENSIONS SHOWN IN ALL PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FACILITY, SHOULD DISCREPANCIES APPEAR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING TO OBTAIN ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH THE WORK.

FOR ALL ITEMS EMBEDDED IN OR PASSED THROUGH CONCRETE, THE CONTRACTOR SHALL INITIALLY REFER TO MECHANICAL, HEATING AND VENTILATION DRAWINGS FOR TYPE, SIZE, LOCATION AND SPECIAL INSTALLATION REQUIREMENTS FOR THESE ITEMS.

THE CONTRACTOR SHALL TAKE ANY AND ALL NECESSARY MEASURES TO PROTECT EXISTING STRUCTURES FROM DAMAGE WHEN WORKING IN AND AROUND EXISTING STRUCTURES PERFORMING WORK SUCH AS DEMOLITION, FOUNDATION EXCAVATION AND OTHERS.

SIZE AND LOCATION OF EQUIPMENT PADS AND ANCHOR BOLTS SHALL BE PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.

ANY EQUIPMENT THAT MAY INDUCE VIBRATION TO THE STRUCTURE SHALL BE ADEQUATELY ISOLATED FROM THE STRUCTURES.

ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.

STANDARD DETAILS APPLY TO ALL SIMILAR SITUATIONS ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.

UNLESS OTHERWISE NOTED, ALL PIPES UNDER SOIL SUPPORTED STRUCTURAL SLABS AND FOOTINGS SHALL BE ENCASED IN CONCRETE AS SHOWN ON THE STRUCTURAL DRAWINGS. PIPES SHALL BE PRESSURE TESTED BEFORE ENCASING.

CONCRETE:

ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318 REQUIREMENTS.

ALL CONCRETE SHALL BE AIR-ENTRAINED WITH 4500 PSI COMPRESSIVE STRENGTH AT 28 DAYS UNLESS OTHERWISE NOTED.

WATER REDUCING AGENT SHALL BE IN ACCORDANCE WITH ASTM C494.

ALL CONCRETE SURFACES EXPOSED TO AIR, UNLESS OTHERWISE NOTED IN SPECIFICATIONS, SHALL BE TREATED WITH AN APPROPRIATE CURING COMPOUND AS SOON AS CEMENT FINISHING IS COMPLETED OR FORMS ARE REMOVED.

ALL EXPOSED CORNERS OF CONCRETE SHALL HAVE A MINIMUM CHAMFER OF $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.

THE CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVAL FOR THE LOCATION OF CONSTRUCTION JOINTS THAT ARE NOT SHOWN ON THE DRAWING.

REINFORCING STEEL:

REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60 REQUIREMENTS.

ALL ACCESSORIES SHALL BE IN CONFORMANCE WITH ACI 315 REQUIREMENTS. REINFORCING STEEL SHALL HAVE THE FOLLOWING CLEAR COVER UNLESS OTHERWISE NOTED:

- CONCRETE CAST AGAINST EARTH 3"
- FORMED SURFACES IN CONTACT WITH SOIL, SEWAGE, WATER OR EXPOSED TO WEATHER 2"
- FORMED SURFACES NOT EXPOSED TO WEATHER OR IN CONTACT WITH SOIL:
 - SLABS, WALLS AND JOISTS 1"
 - BEAMS AND COLUMNS 1"

LAP SPLICES SHALL BE AS SHOWN ON THE DRAWINGS. FOR LAP SPLICES NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVAL.

THE CONTRACTOR SHALL PREPARE PLACING DRAWINGS AND SCHEDULES IN CONFORMANCE WITH ACI 315 REQUIREMENTS.

FLOATATION CONSIDERATION:

STRUCTURES WERE DESIGNED TO BE NON-BUOYANT AFTER THE STRUCTURE IS PLACED INTO SERVICE. THEREFORE, THE STRUCTURE MAY BE BUOYANT DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL PROTECT ALL STRUCTURES (NEW AND EXISTING) FROM FLOATATION DURING CONSTRUCTION, REGARDLESS OF GROUNDWATER LEVELS, UNTIL STRUCTURES ARE PLACED IN OPERATION.

STRUCTURAL ALUMINUM:

DESIGN, FABRICATION, ERECTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST "ALUMINUM DESIGN MANUAL" (ADM) SPECIFICATIONS AND DESIGN DRAWINGS.

ALL STRUCTURAL ALUMINUM:

- ALUMINUM EXTRUDED PIPE - ASTM B429, ALLOY 6063-T6
- ALUMINUM EXTRUDED SHAPE - ASTM B221, ALLOY 6061-T6
- ALUMINUM SHEET AND PLATE - ASTM B209, ALLOY 6061-T6
- ALUMINUM ALLOY ROLLED THREAD PLATE - ASTM B209, ALLOY 6061-T6
- ALUMINUM CASTING - ASTM B26/B36M, ALLOY 443.0-F

SHOP AND ERECTION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH THE LATEST ANS D1.2/D1.2M "STRUCTURAL WELDING CODE - ALUMINUM".

WHERE ALUMINUM CONTACTS A DISSIMILAR METAL, APPLY TO THE DISSIMILAR METAL A HEAVY BRUSH COAT OF ZINC-CHROMATE PRIMER FOLLOWED BY TWO COATS OF ALUMINUM METAL PAINT.

WHERE ALUMINUM CONTACTS MASONRY OR CONCRETE, APPLY A HEAVY COAT OF BITUMASTIC OR EPOXY PAINT.

GEOTECHNICAL REPORT:

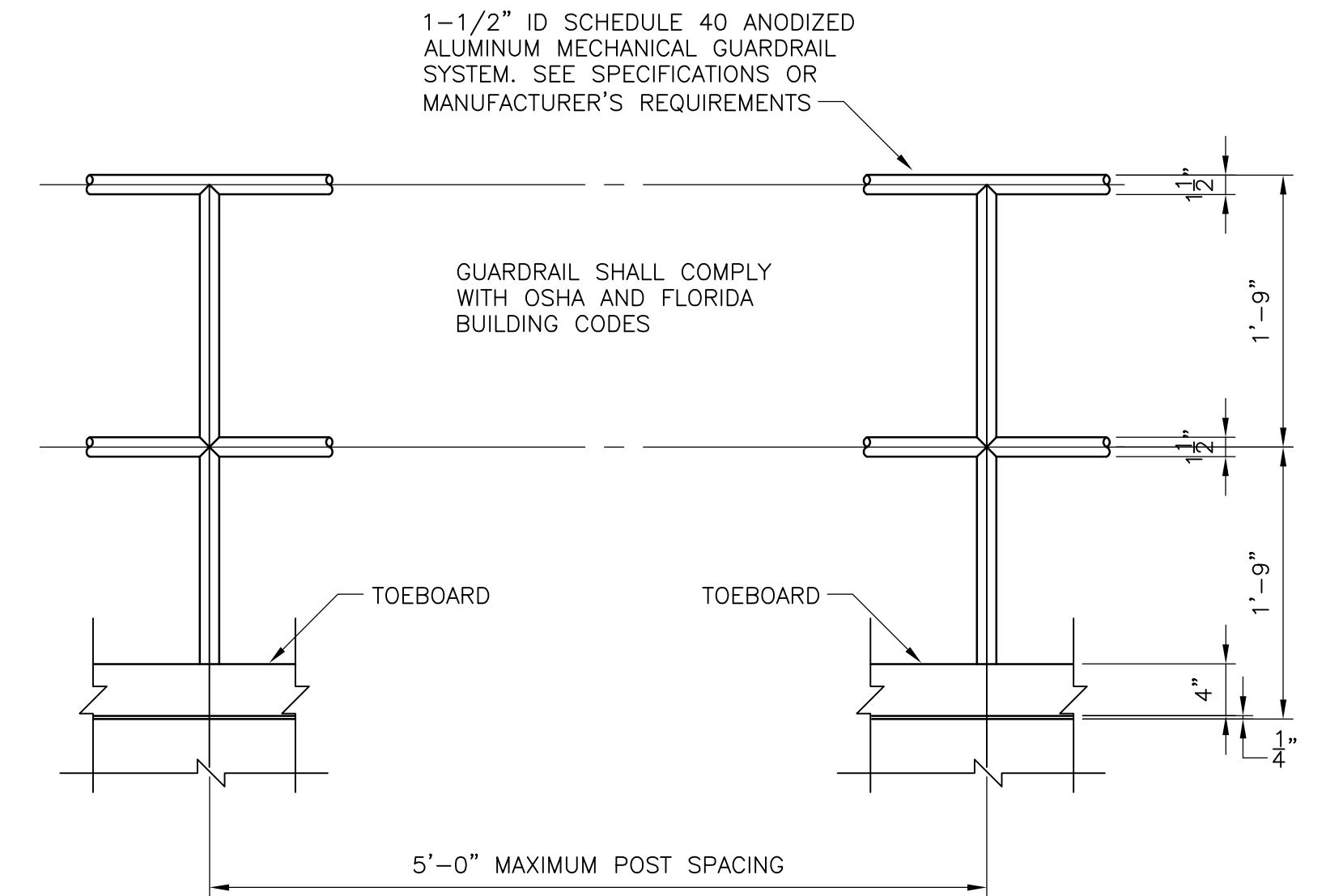
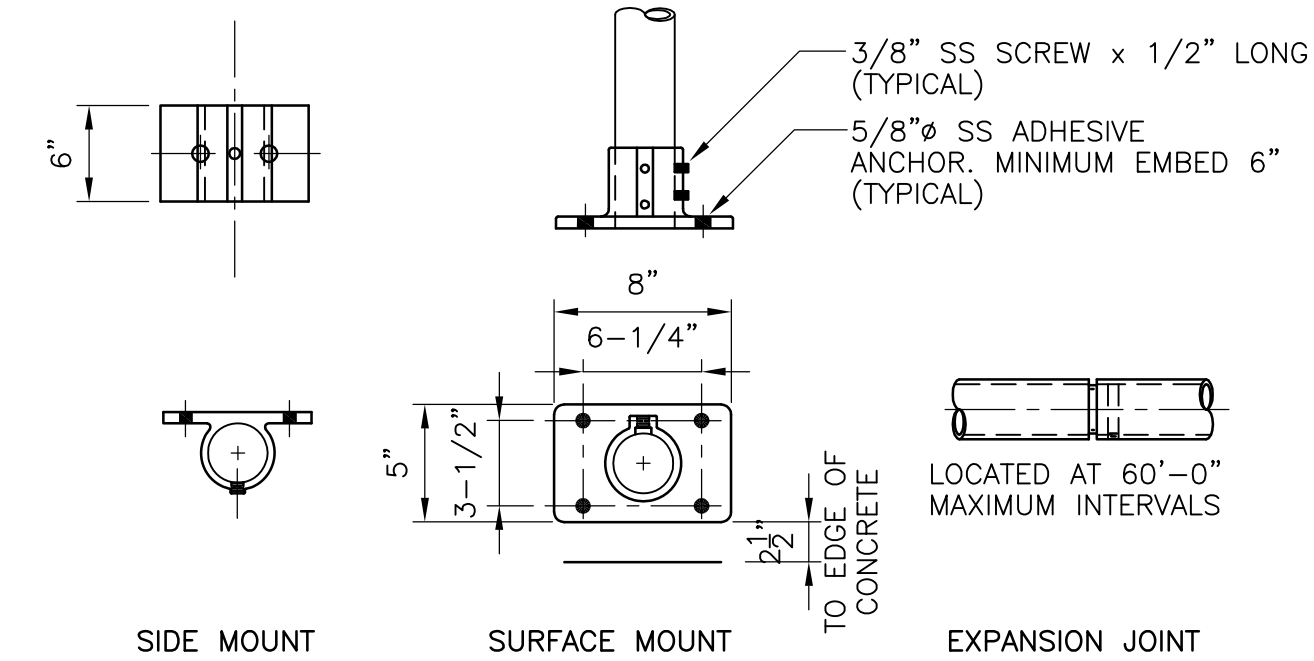
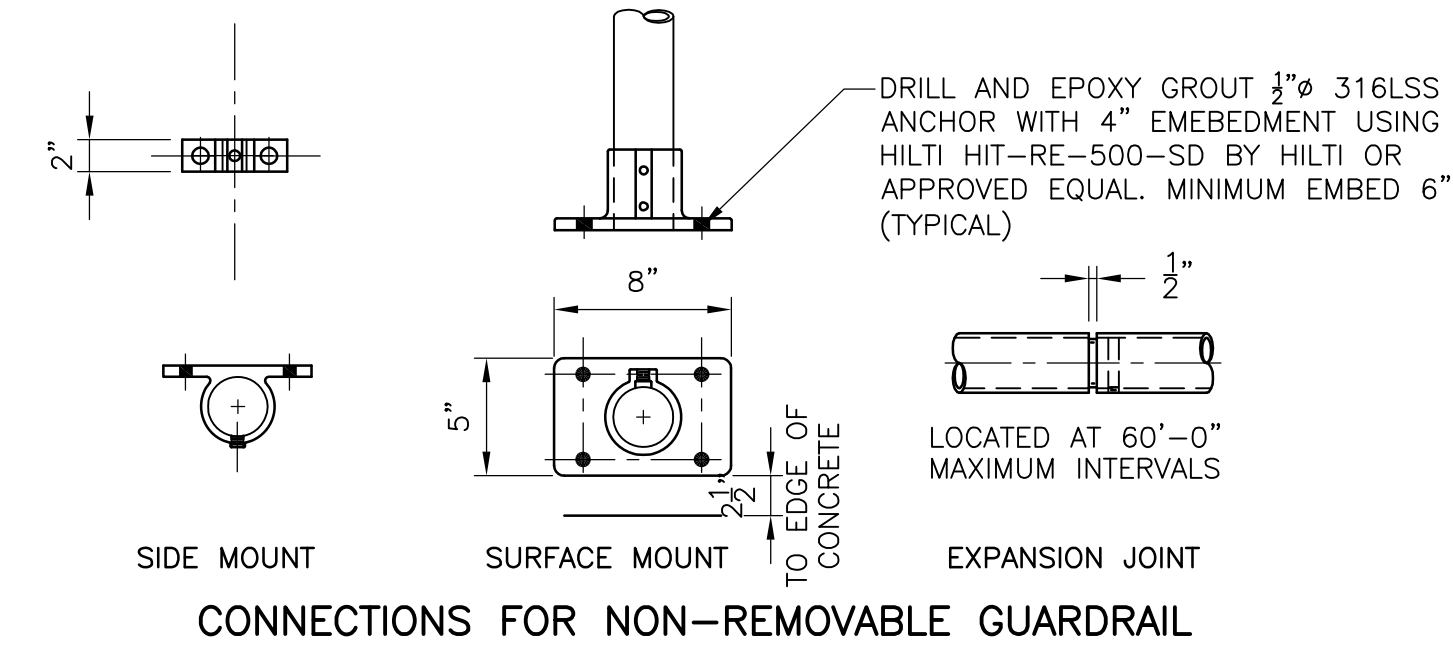
GEOTECHNICAL MEMO PREPARED BY CDM SMITH, DATED OCTOBER, 2013.

ABBREVIATIONS:

AL	BUILDING	MIN	MINIMUM
BLDG	BOTTOM	MISC	MISCELLANEOUS
BOT	CENTER TO CENTER	NF	NEAR FACE
CC	CONTROL JOINT	NTS	NOT TO SCALE
CJ	CONCRETE MASONRY UNIT	OC	ON CENTER
CMU	CONCRETE	PCJ	PARTIAL CONTRACTION JOINT
CONC	CONSTRUCTION JOINT	PL	PLATE
CONT JT	CONTINUOUS	PLF	POUNDS PER LINEAR FOOT
DIA	DIAMETER	PROJ	PROJECTION
DWG	DRAWING	PSF	POUNDS PER SQUARE FOOT
EF	EACH FACE	PSI	POUNDS PER SQUARE INCH
EJ	EXPANSION JOINT	REINF	REINFORCEMENT
EL	ELEVATION	SPECS	SPECIFICATIONS
EW	EACH WAY	SS	STAINLESS STEEL
FF	FAR FACE	STD	STANDARD
FTG	FOOTING	T&B	TOP AND BOTTOM
HORIZ	HORIZONTAL	T/STRUCTURE	TOP OF STRUCTURE
HP	HIGH POINT	TYP	TYPICAL
ID	INSIDE DIAMETER	UNO	UNLESS OTHERWISE NOTED
LP	LOW POINT	VERT	VERTICAL
MAT'L	MATERIAL	WSTP	WATERSTOP
MAX	MAXIMUM	WWF	WELDED WIRE FABRIC

NOTE:

THESE ABBREVIATIONS ARE FOR USE ON STRUCTURAL DRAWINGS ONLY.



GUARDRAIL
DETAIL A
1" = 1'-0"

GUARDRAIL NOTES:

- ALUMINUM EMBEDDED IN CONCRETE SHALL BE PAINTED WITH ONE SHOP COAT OF HEAVY BITUMASTIC.
- ALUMINUM SHAPES IN CONTACT WITH CONCRETE SHALL BE SEPARATED BY A 1/32" NEOPRENE GASKET OR ANY CASE WHERE TWO DIFFERENT METALS ARE TO BE IN CONTACT. A NEOPRENE GASKET SHALL BE PROVIDED.
- HANDRAILS, GUARDRAILS, POSTS, BRACKETS AND MOUNTINGS SHALL MEET THE FLORIDA BUILDING CODE AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) LOADING REQUIREMENTS.
- TOP OF ALL GUARDRAILS SHALL BE 42" HIGH ABOVE THE FINISH FLOOR OR WALKWAY. THE CLEAR DISTANCE BETWEEN THE TOP AND INTERMEDIATE RAILS MEASURED AT RIGHT ANGLES TO THE RAILS SHALL NOT EXCEED 21".

© 2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

DESIGNED BY: R. NYSTROM	DRWN	CHKD	REMARKS
DRAWN BY: P. SCHIAVO			
SHEET CHK'D BY: R. NYSTROM			
CROSS CHK'D BY: R. MAPLES			
APPROVED BY: D. FRIIS			
DATE: NOVEMBER 2013			

CDM Smith
8381 Dix Ellis Trail, Suite 400
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CDA No. ED-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

STRUCTURAL NOTES AND DETAILS

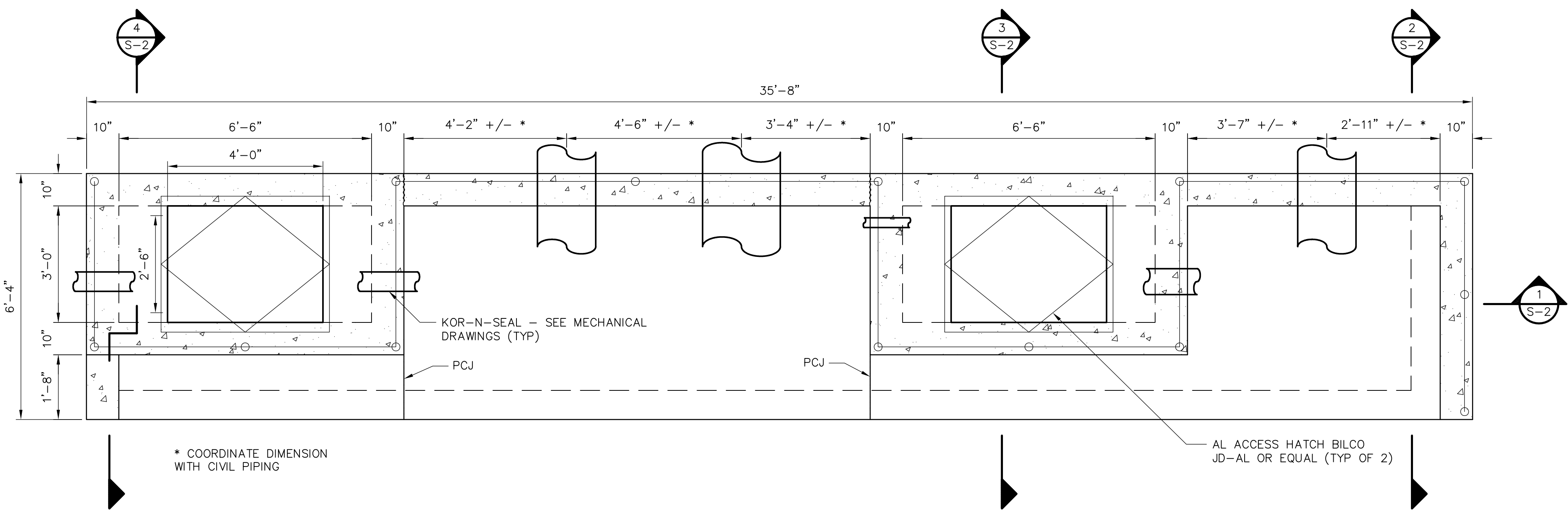
DONNA FRIIS
P.E. NO. 57454

PROJECT NO. 9012-80695
FILE NAME: S001STNT

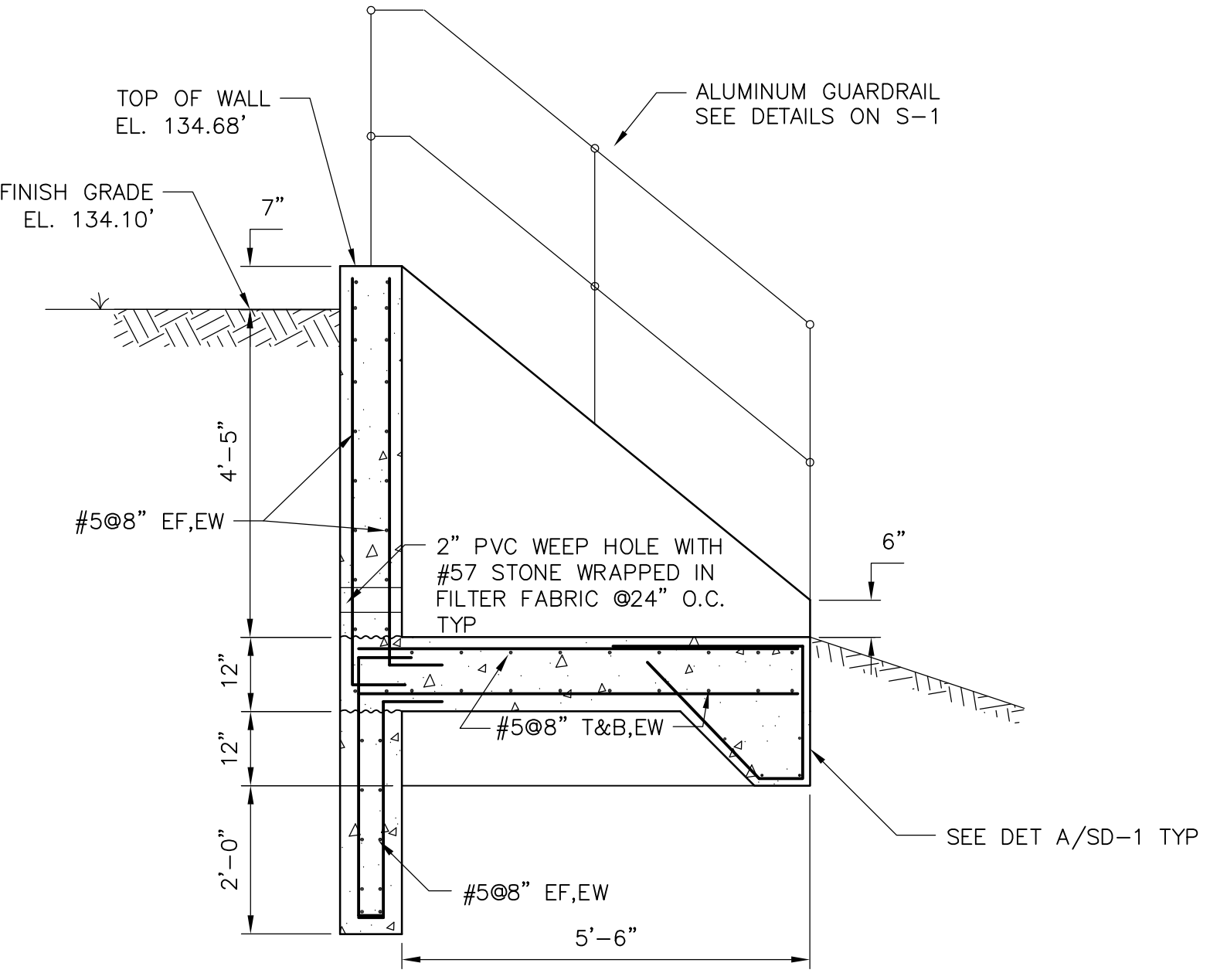
SHEET NO.

S-1

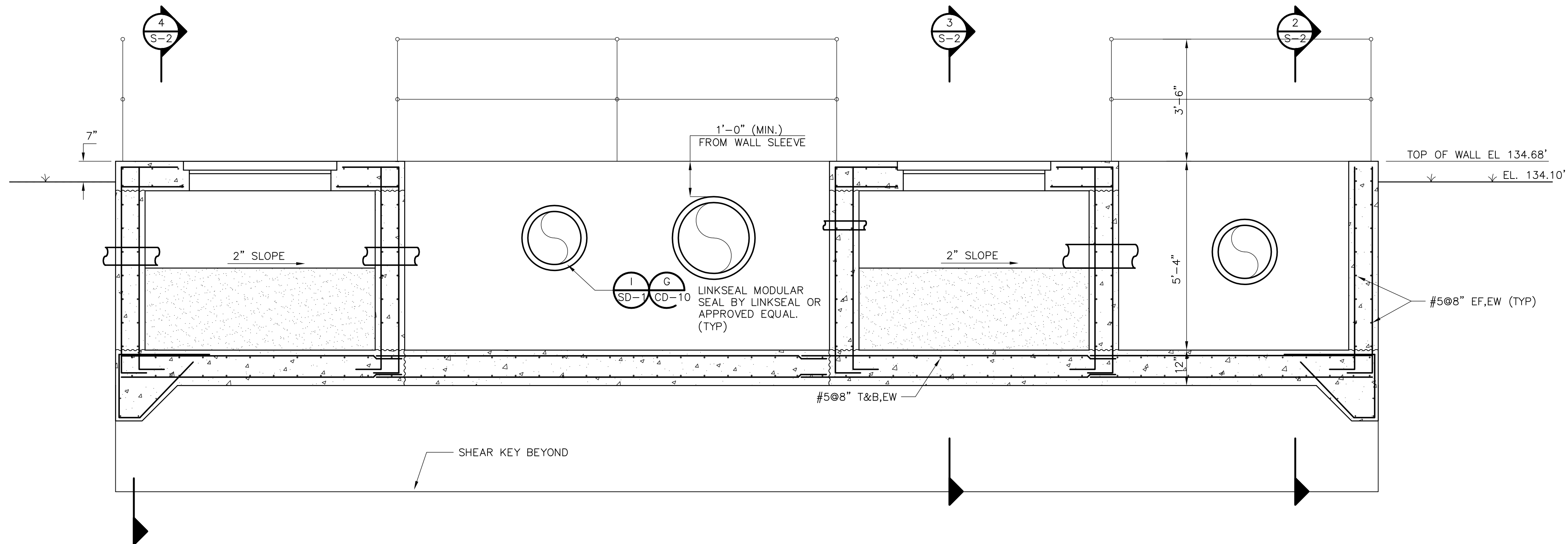
FOR PERMIT- NOT FOR CONSTRUCTION



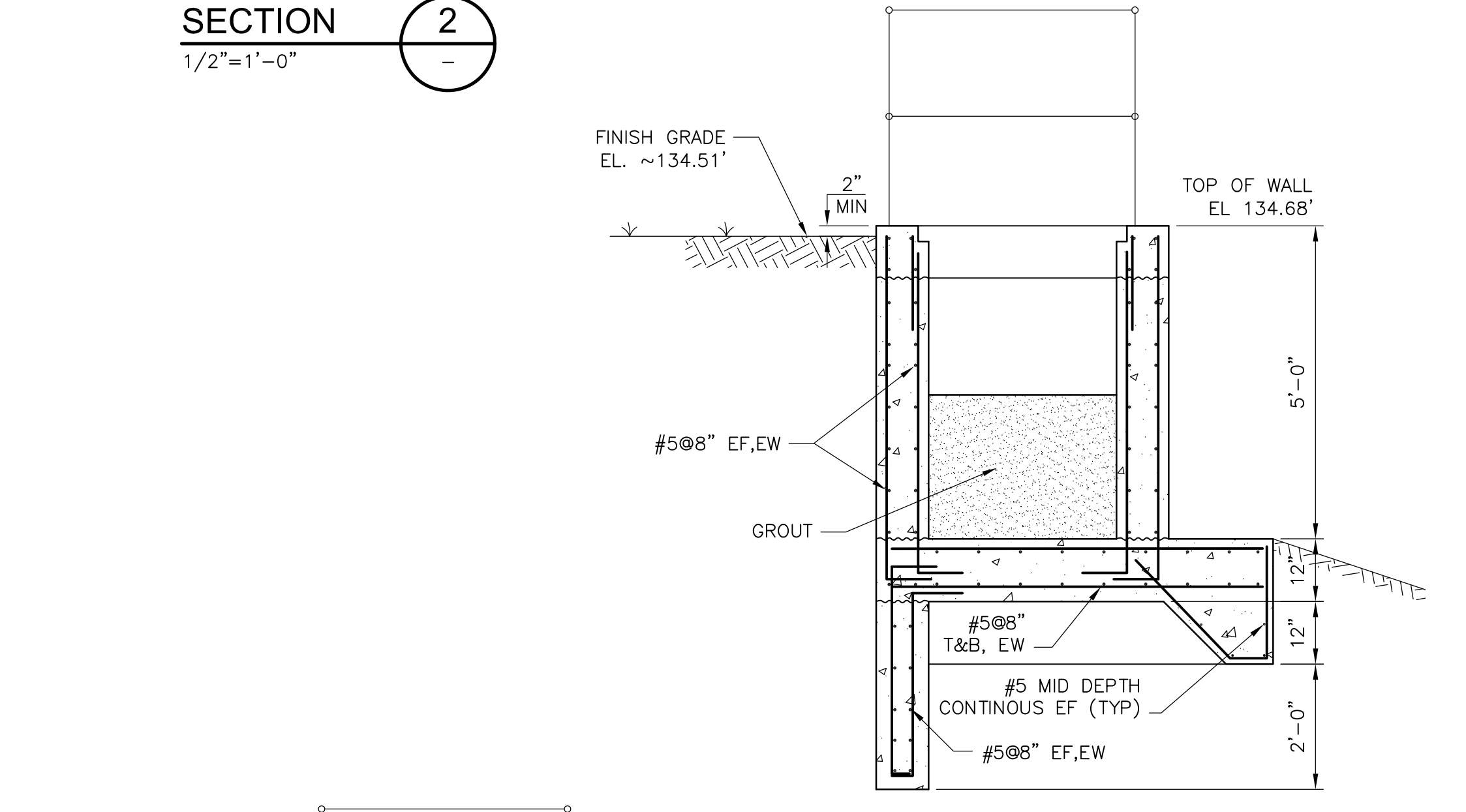
PHASE 6 VAULT BOX DETAIL
PLAN
 1/2" = 1'-0"



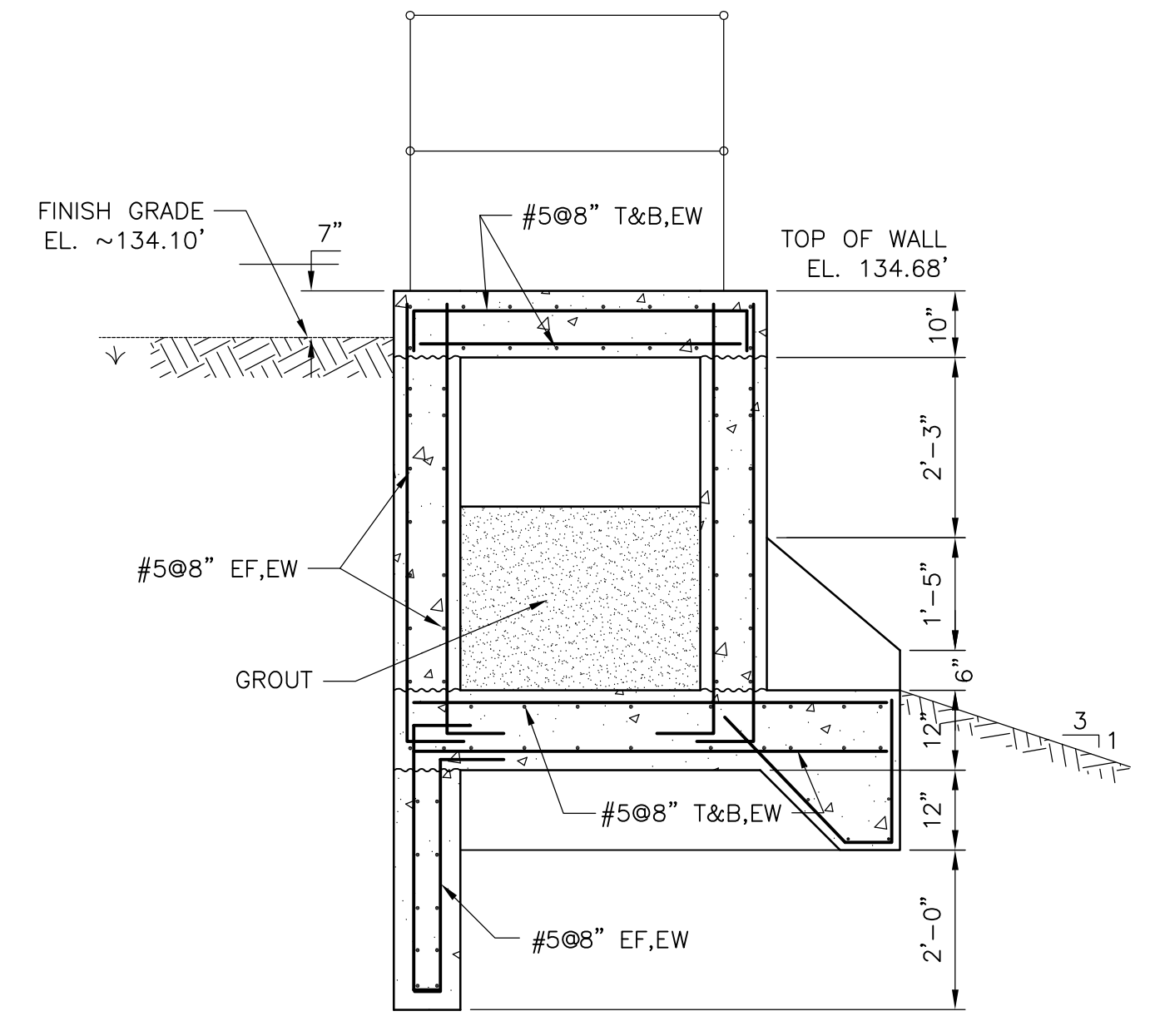
SECTION 2
 1/2" = 1'-0"



PHASE 6 VAULT BOX DETAIL
SECTION 1
 1/2" = 1'-0"



SECTION 3
 1/2" = 1'-0"



SECTION 4
 1/2" = 1'-0"

Xref: [CDM_2436] Images: []
 Last saved by: CHAPMANBS Time: 1/3/2012 1:39:19 PM
 PLEASE UPDATE THE PROJECTWISE PATH (SELECT ATTRIBUTES IN PROJECTWISE AND CLICK CHECK BOX)
 ©2011 CAMP, DRESSER & MOORE ALL RIGHTS RESERVED.
 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NYSTROM
 DRAWN BY: T. PACE
 SHEET CHK'D BY: R. NYSTROM
 CROSS CHK'D BY: R. MAPLES
 APPROVED BY: D. FRIIS
 DATE: NOVEMBER 2013

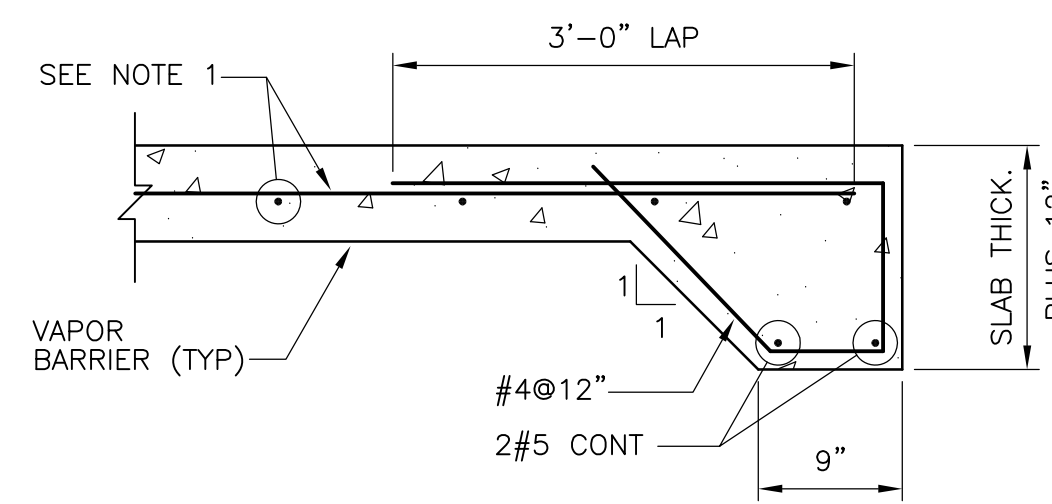


CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASES 6-14
CLASS 1 CELL EXPANSION

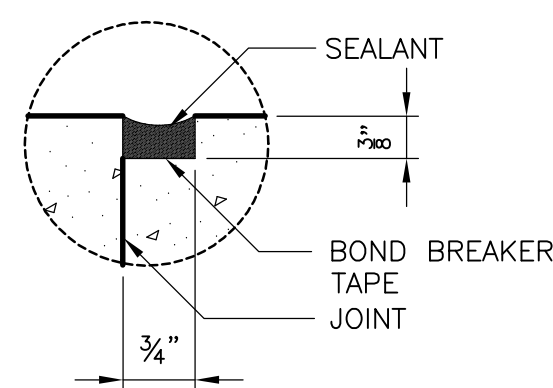
**VAULT BOX
 PLAN AND SECTIONS**

DONNA FRIIS
 P.E. NO. 57454
 PROJECT NO. 9012-80695
 FILE NAME: S002SDDT
 SHEET NO.
S-2

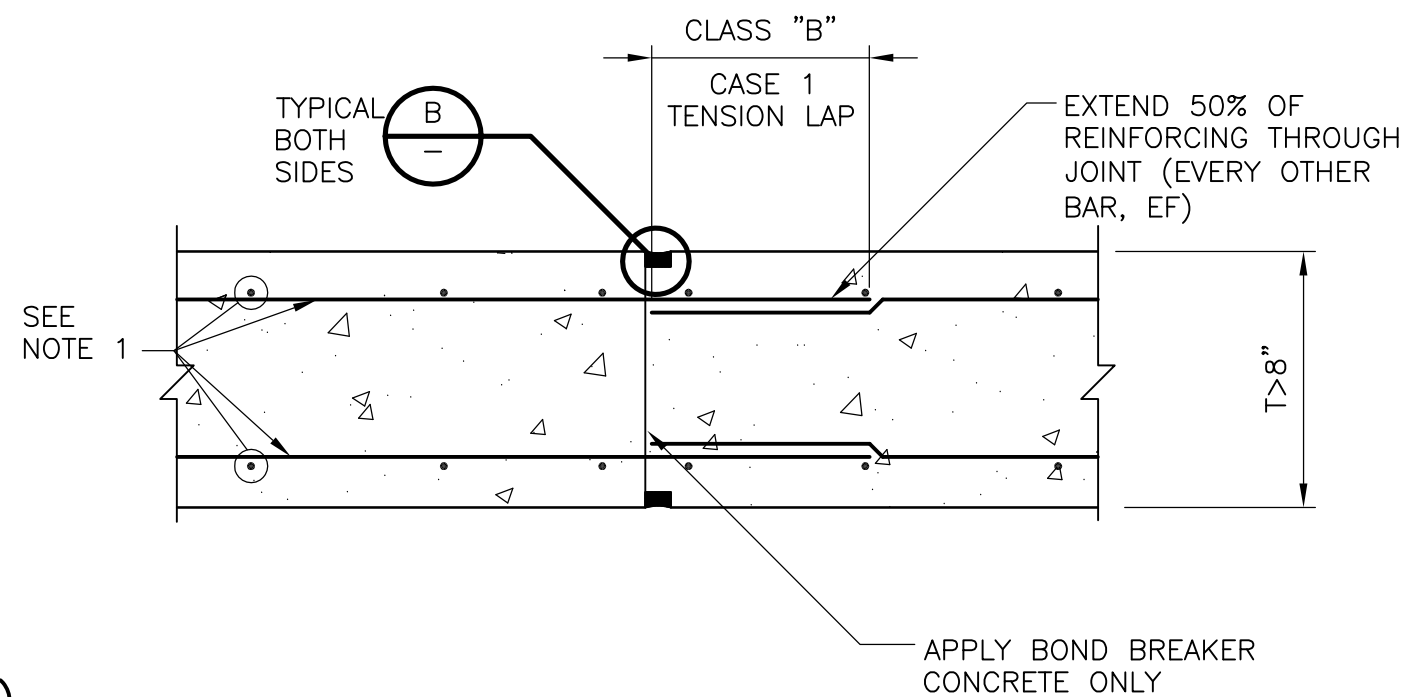
FOR PERMIT- NOT FOR CONSTRUCTION



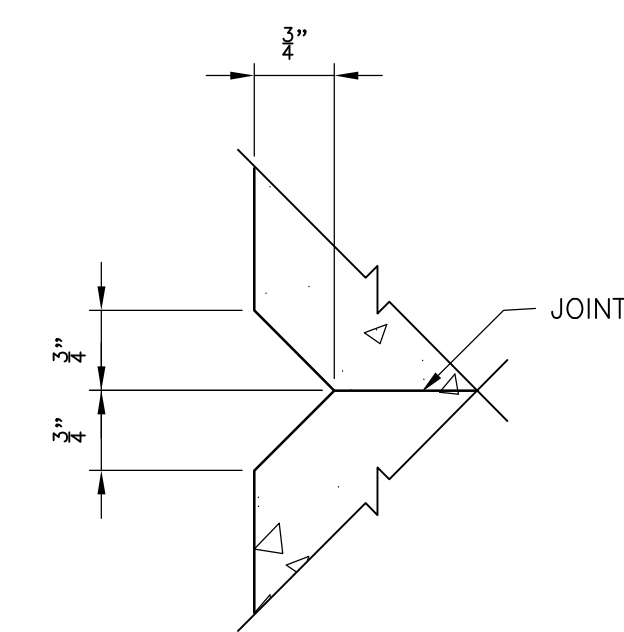
THICKENED EDGE SLAB
DETAIL A
NTS



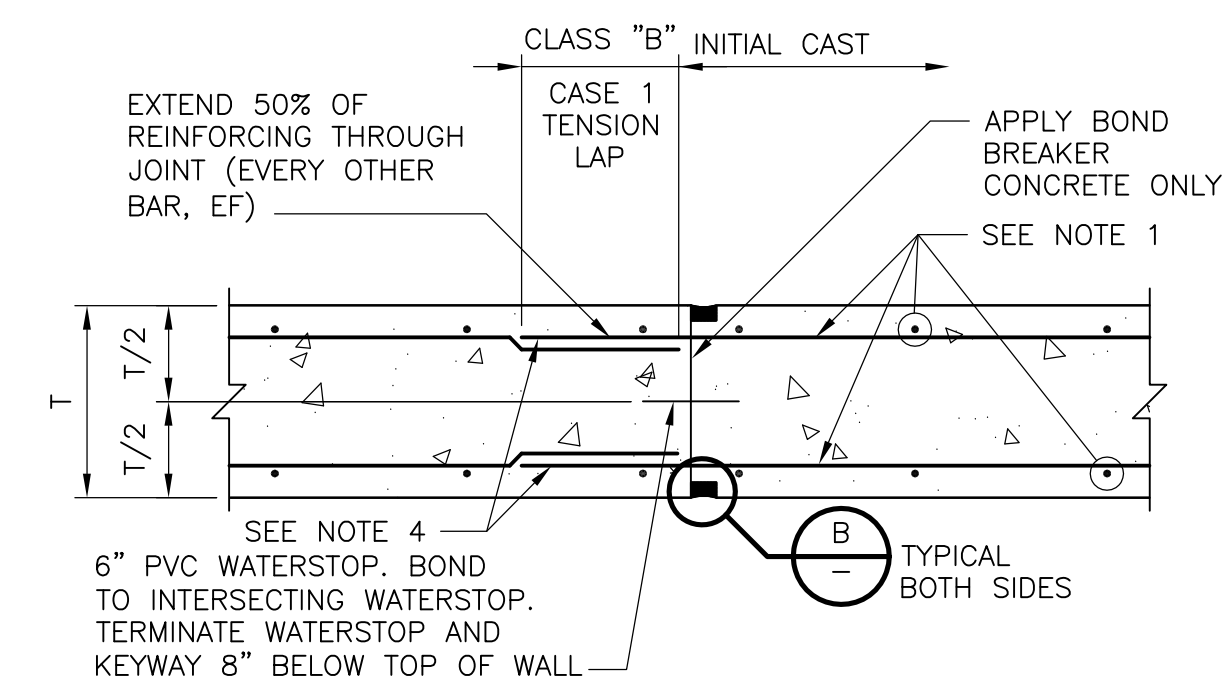
PARTIAL CONTRACTION JOINT SEALANT (PCJ)
DETAIL B
NTS



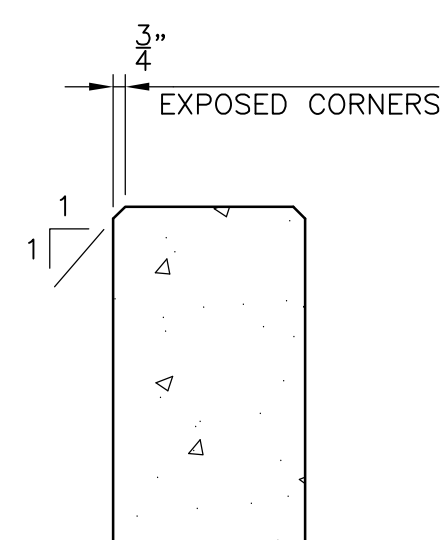
BASE SLAB PARTIAL CONTRACTION JOINT
DETAIL C
NTS



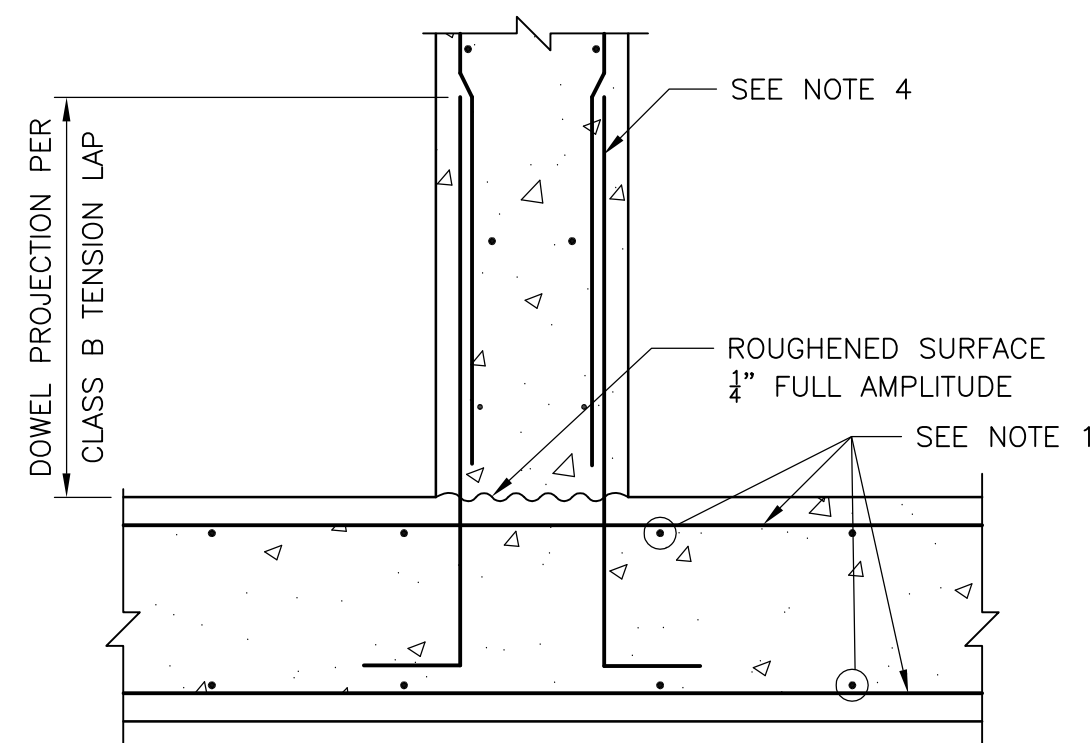
PARTIAL CONTRACTION JOINT CHAMFER
DETAIL D
NTS



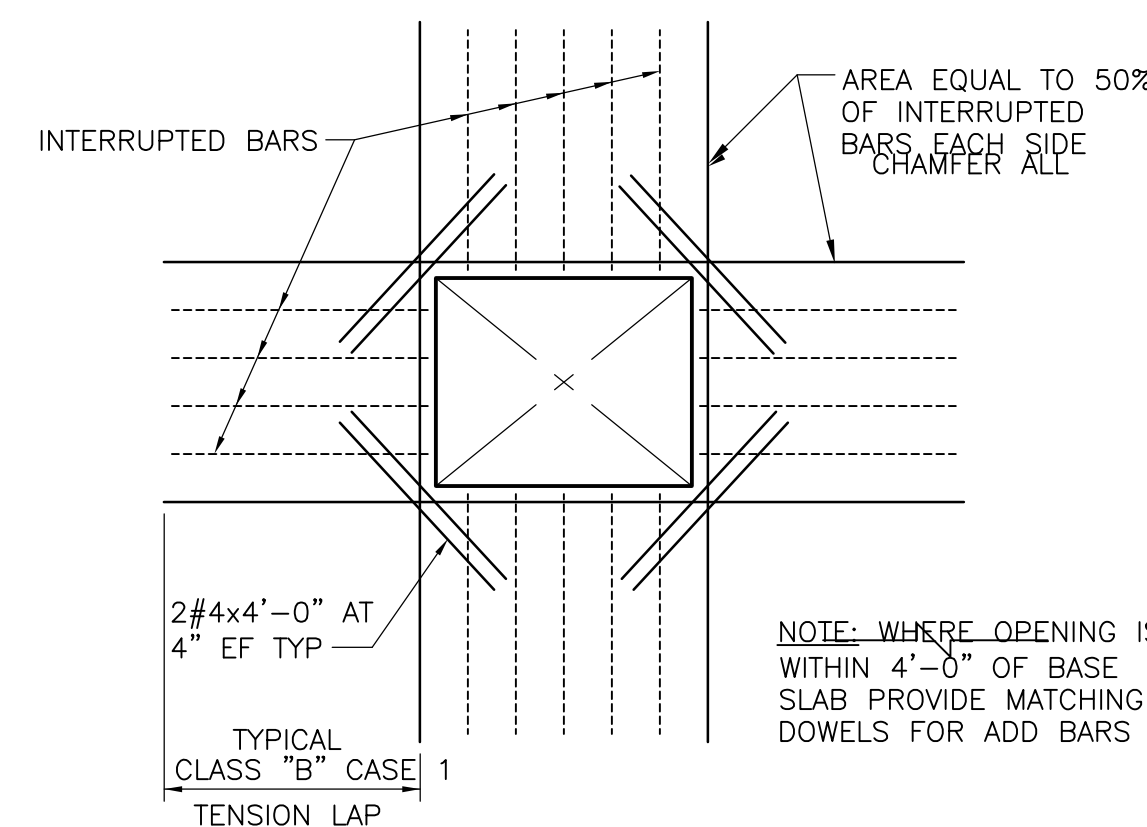
WALL PARTIAL CONTRACTION JOINT
DETAIL E
NTS



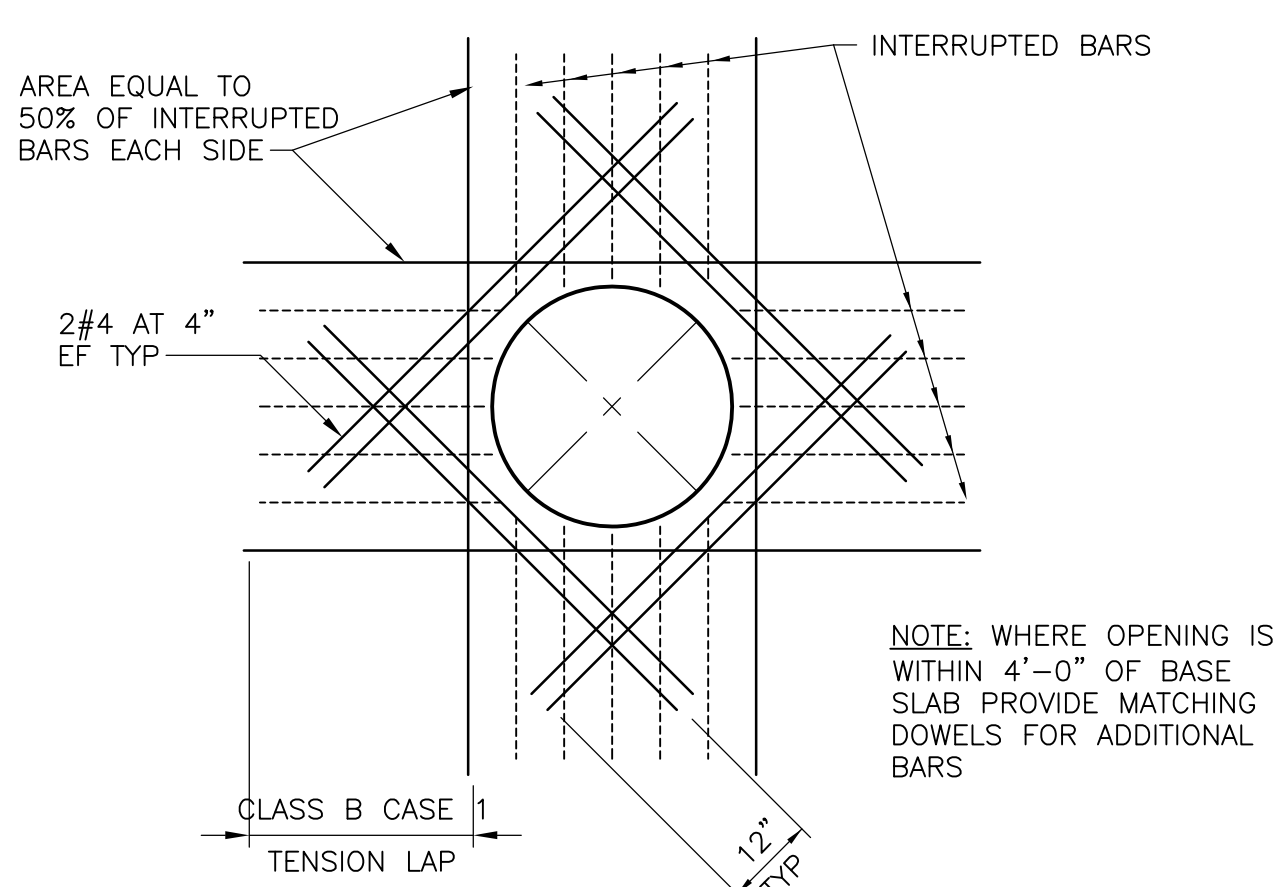
CHAMFER
DETAIL F
NTS



WALL BASE CONSTRUCTION JOINT
DETAIL G
NTS



REINFORCEMENT AT
RECTANGULAR OPENINGS GREATER THAN 6"
DETAIL H
NTS



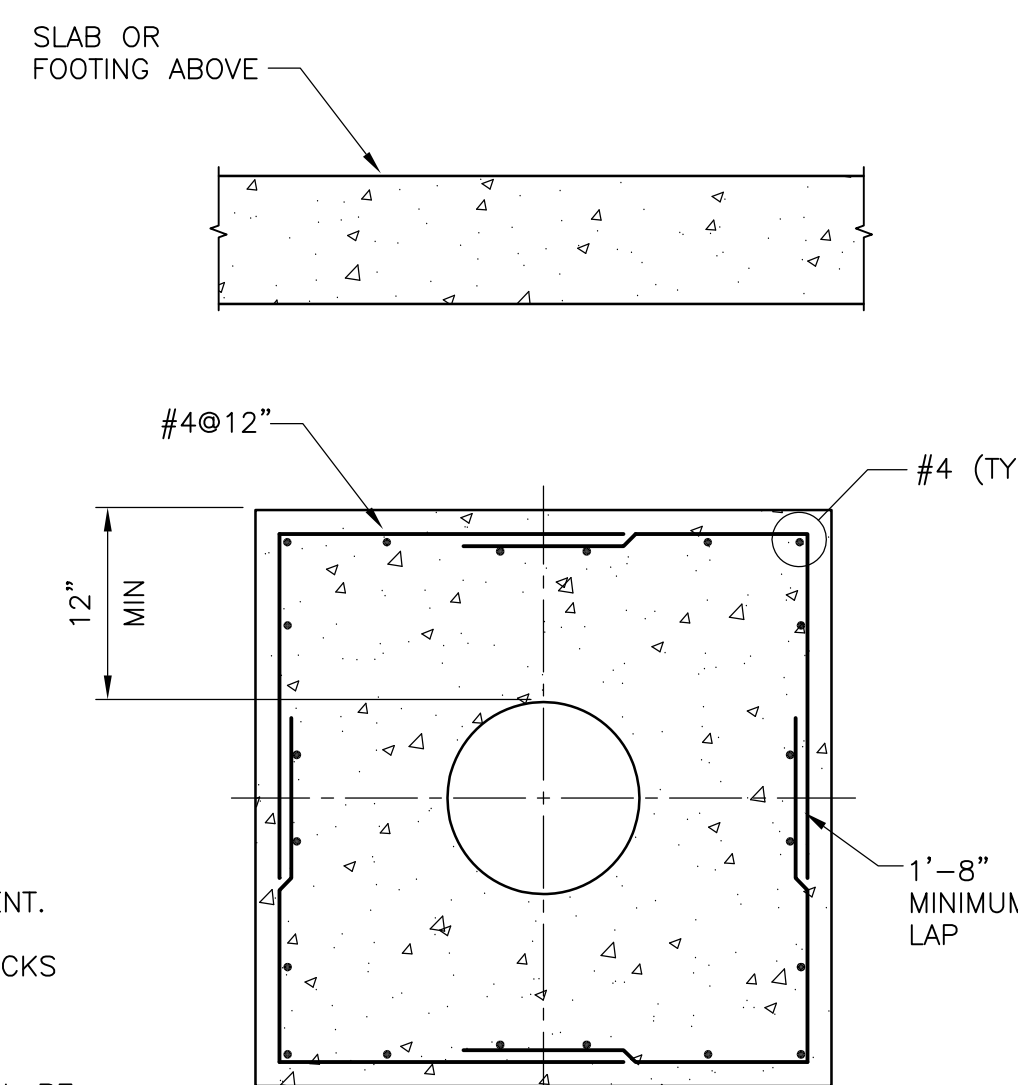
REINFORCEMENT AT
CIRCULAR OPENINGS GREATER THAN 6"
DETAIL I
NTS

NOTES:

1. BASIC SLAB/WALL/BASE REINFORCING AS SHOWN ON DESIGN DRAWINGS
2. SIZE & SPACING OF BAR TO MATCH WALL/BASE REINFORCEMENT AS SHOWN ON DESIGN DRAWINGS
3. FOR ADDITIONAL BARS AT CORNERS AND INTERSECTIONS SEE DESIGN DRAWINGS
4. FOR DOWEL SIZE & SPACING SEE DESIGN DRAWINGS

PIPE ENCASUREMENT NOTES:

1. ALL PIPE SHALL BE PRESSURE TESTED BEFORE CONCRETE PLACEMENT.
2. ALL BELOW GRADE PIPES SHALL BE SUPPORTED ON CONCRETE BLOCKS PRIOR TO CASTING OF CONCRETE BEDDING. SIZE AND SPACING OF CONCRETE BLOCK SUPPORTS SHALL BE PER PIPE MANUFACTURER.
3. FOR ALL PIPES 12-INCH DIAMETER AND LARGER, ENCASEMENT SHALL BE CAST IN TWO POURS. INITIAL CAST SHALL BE CURED FOR 12 HR. BEFORE CASTING THE SECOND POUR.
4. ENCASE ALL PIPES BELOW SLABS AND FOOTINGS. EXTEND ENCASEMENT 5'-0" BEYOND EDGE OF SLAB OR FOOTING.
5. ENCASEMENT FOR 6" DIAMETER AND SMALLER PIPES SHALL BE 6" MINIMUM. FOR PIPE DIAMETERS GREATER THAN 6", ENCASEMENT SHALL BE 12" MINIMUM.



PIPE ENCASUREMENT
DETAIL J
NTS

CLASS B TENSION LAP SPLICE LENGTHS IN WALLS AND SLABS (INCHES)

BAR SIZE	f'c=4000 psi	
	TOP BARS	OTHER BARS
3	15	12
4	20	15
5	29	23
6	40	31
7	65	50
8	81	62
8*	49	37
9*	60	46
10*	74	57

TENSION DEVELOPMENT LENGTHS IN WALLS AND SLABS (INCHES)

BAR SIZE	f'c=4000 psi	
	TOP BARS	OTHER BARS
3	12	12
4	15	12
5	22	17
6	31	24
7	50	38
8	62	48
8*	37	29
9*	46	36
10*	57	44

NOTES:

1. MINIMUM BAR SPACING = 8" INCHES ON CENTER.
2. MINIMUM CONCRETE COVER = 1", EXCEPT AS NOTED BY * . * INDICATES MINIMUM CONCRETE COVER = 2".
3. A TOP BAR IS A HORIZONTAL BAR WHERE MORE THAN 12" OF FRESH CONCRETE IS CAST DIRECTLY BELOW THE BAR. WHERE HORIZONTAL WALL REINFORCEMENT IS UNIFORMLY SPACED IN A VERTICAL PLANE AT 12" MAXIMUM SPACING, LENGTHS MAY BE AS FOR "OTHER BARS".

LAP SPLICE AND DEVELOPMENT LENGTHS
BLACK REINFORCING STEEL

© 2011 CAMP, DRESSER & MCKEE ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NYSTROM
 DRAWN BY: P. SCHIAVO
 SHEET CHK'D BY: D. FRIIS
 CROSS CHK'D BY: R. MAPLES
 APPROVED BY: D. FRIIS
 DATE: NOVEMBER 2013

CDM Smith
 8381 Dix Ellis Trail, Suite 400
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL CDA NO. ED-0000020

CITY OF JACKSONVILLE
 TRAIL RIDGE LANDFILL PHASES 6-14
 CLASS 1 CELL EXPANSION

STRUCTURAL STANDARD DETAILS
 SHEET NO.
 SD-1

DONNA FRIIS
 P.E. NO. 57454
 PROJECT NO. 9012-80695
 FILE NAME: S001STD1