



CITY OF KNOXVILLE

**BID DOCUMENTS FOR**

**Name of Project:** Northwest Greenway Connector Project

**Project Number:** 17C-G-0628

**Bid Date & Time:** November 18, 2020 @ 11:00 a.m.

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**BIDDER IDENTIFICATION:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

License Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Classification: \_\_\_\_\_ License Limit: \_\_\_\_\_

**SUBCONTRACTORS:**

• Plumbing (if applicable): \_\_\_\_\_

License #: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Classification: \_\_\_\_\_

• HVAC (if applicable): \_\_\_\_\_

License #: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Classification: \_\_\_\_\_

• Electrical (if applicable): \_\_\_\_\_

License #: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Classification: \_\_\_\_\_

• Masonry (if applicable): \_\_\_\_\_

License #: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Classification: \_\_\_\_\_

\_\_\_\_\_ has complied with the instructions to bidders and has fully completed all bid forms without any qualifying statement.

BID PROPOSAL  
CITY OF KNOXVILLE, TENNESSEE

**Northwest Greenway Connector  
Project No. 17C-G-0628**

TO THE PURCHASING AGENT  
CITY OF KNOXVILLE, TENNESSEE

\_\_\_\_\_ hereby propose(s) to furnish all material, labor, and appliances and do all work required to complete the Contract for the Northwest Greenway Connector Project, Project No. 17C-G-0628, located in the City of Knoxville, Tennessee, in a workmanlike manner and in accordance with the plans of the Department of Engineering and specifications herewith attached.

Bidder further agrees that in case of failure to sign a delivered contract within thirty (30) days, the certified check or bid bond accompanying this bid and the proceeds thereof shall be the property of the City of Knoxville if the City chooses to retain said bid bond or check.

**BID SCHEDULE**

ITEM NO.	DESCRIPTION	UNITS	TOTAL QUANTITY	PRICE PER UNIT	TOTAL PRICE PER ITEM
1.10	Mobilization of Forces, Supplies and Equipment	LS	1	_____	_____
2.20	Tree Removal	LS	1	_____	_____
3.10	Removal of Structures and Obstructions	LS	1	_____	_____
3.20	Relocation of Fire Department Warning Signal	LS	1	_____	_____
4.20	Common Excavation	CY	4,972	_____	_____
5.10	Mineral Aggregate Base, Class A, Grade D	TON	927	_____	_____
5.30	Maintenance Stone (4" Depth)	TON	292	_____	_____
5.40	No. 57 Stone	TON	175	_____	_____
7.10	Tack Coat	GAL	214	_____	_____
9.20	Bituminous Plant Mix, Grading B-M	TON	360	_____	_____
9.30	Bituminous Plant Mix, Grading C	TON	9	_____	_____
9.50	Bituminous Plant Mix, Grading C-S	TON	170	_____	_____
10.30	Saw Cutting Asphalt Pavement	LF	1,030	_____	_____

ITEM NO.	DESCRIPTION	UNITS	TOTAL QUANTITY	PRICE PER UNIT	TOTAL PRICE PER ITEM
12.62	6" Concrete Combined Curb & Gutter, Type 6-30	LF	970		
13.10	Concrete Sidewalks (4")	SF	1,800		
13.15	Concrete Curb Ramps	SF	343		
13.16	Cast-In-Place Tactile Warning System	EA	2		
13.20	Concrete Driveways (6")	SF	760		
13.21	Concrete Driveways (6"), High Early Strength	SF	760		
20.14	18" R.C.P.	LF	390		
20.15	18" C.M.P.	LF	60		
20.16	24" R.C.P.	LF	690		
22.12	No. 12 Catch Basin, >4' - 8' Depth	EA	7		
22.33	"U" Type Endwall for 18" R.C.P.	EA	3		
22.40	Junction Box (60" Round)	EA	1		
22.42	Adjustment of Existing Structure (Drop Inlet)	EA	1		
22.43	Straight Type Endwall for 18" R.C.P.	EA	2		
24.10	Adjustment of Sanitary Sewer Structure (Manhole)	EA	1		
24.20	Adjustment of Sanitary Sewer Lateral	EA	10		
25.10	Rip Rap, Class A-1	TON	1,689		
25.30	Rip Rap, Class A-3	TON	151		
26.10	Top Soil (Placing and Spreading, 4" Thick)	SY	7,435		
26.15	Top Soil (Furnishing and Spreading, 4" Thick)	SY	2,330		
27.10	Permanent Seeding (With Mulch)	SY	8,000		
27.15	Permanent Seeding (Without Mulch)	SY	290		
27.20	Temporary Seeding (With Mulch)	SY	16,000		
28.10	Sodding	SY	1,600		
29.10	Erosion Control Blanket (TDOT Type I)	SY	290		
30.11	Root Pruning	LS	1		
30.12	Tree Protection Fencing	LF	740		
31.10	Temporary Slope Drains (8")	LF	53		

ITEM NO.	DESCRIPTION	UNITS	TOTAL QUANTITY	PRICE PER UNIT	TOTAL PRICE PER ITEM
31.20	Silt Barriers (Silt Fences)	LF	1,373		
31.21	Silt Barriers (Silt Fences With Backing)	LF	114		
31.22	Silt Barriers (12" Sediment Tube)	LF	802		
31.23	Silt Barriers (18" Sediment Tube)	LF	2,211		
31.70	Catch Basin Protection, Type B	EA	1		
31.72	Catch Basin Protection, Type D	EA	7		
33.10	Guard Rail - W-Beam	LF	380		
33.45	Terminal Anchor TDOT Type 13	EA	6		
33.55	Terminal Anchor TDOT Type 21	EA	1		
33.65	GR Terminal (In-Line) MASH TL3	EA	2		
34.20	Flexible Drums (Channelizing)	EA	106		
34.30	Signage (Construction)	SF	179		
34.40	Temporary Barricades (Type III)	LF	21		
36.50	Geotextile Fabric for Erosion Stabilization	SY	1,691		
63.10	Permanent Signage	LS	1		
64.10	Box Tube Safety Rail (Powder Coat Black)	LF	1,302		
81.10	Redi-Rock Retaining Wall	SF	1,845		
TOTAL BID				\$	

TOTAL BID (In Words):

# INDEX

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## TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD ROADWAY DRAWINGS

DWG. NO.	REV.	DESCRIPTION
RD-A-1	02-20-20	STANDARD ABBREVIATIONS
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-5	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
D-CB-12LP	02-20-20	LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 12LP CATCH BASIN (FOR USE WITH 6" NON-MOUNTABLE CURB)
D-CB-12RB	02-20-20	STANDARD PRECAST 60" AND 72" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12S	02-20-20	STANDARD RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-42S	02-20-20	STANDARD 32" X 32" SQUARE CONCRETE NO. 42 CATCH BASIN
D-CB-99	02-20-20	MISCELLANEOUS DETAILS FOR RECTANGULAR STRUCTURES
D-CB-99R	02-20-20	MISCELLANEOUS DETAILS FOR ROUND STRUCTURES
D-CB-99RA	02-20-20	BILL OF STEEL FOR ROUND CATCH BASIN LIDS
D-PE-1	06-28-19	TYPE "A" CONCRETE ENDWALLS FOR ROUND PIPE
D-PE-4	06-28-19	STRAIGHT CONCRETE ENDWALLS (PIPE SIZES 18" TO 30")
D-PE-18A	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 18" PIPE, BILL OF STEEL AND PRECAST NOTES
D-JBS-2	02-20-19	STANDARD 4' X 4' SQUARE CONCRETE NO. 2 JUNCTION BOX
RP-D-15	01-07-19	DETAILS OF STANDARD CONCRETE DRIVEWAYS
RP-D-16	01-07-19	DETAILS OF LOWERED STANDARD CONCRETE DRIVEWAYS
RP-SC-1	06-28-19	6" SLOPING CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-VC-11	06-28-19	VERTICAL CONCRETE CURBS AND GUTTERS 6" AND 7" DEPTH
S-F-1	06-28-19	HIGH VISIBILITY FENCE
MM-CR-1	06-28-19	DETECTABLE WARNING SURFACE PLACEMENT ON CURB RAMPS
MM-PM-1		SIGNING AND PAVEMENT MARKINGS AT INTERSECTION CROSSINGS FOR SHARED-USE PATHS
MM-BPR-1		BIKE AND PEDESTRIAN SAFETY RAIL
S-GR31-1	06-28-19	GUARDRAIL DETAILS
S-GR31-1A	06-28-19	GUARDRAIL AND BLOCK-OUT DETAILS
S-GR31-1B		GUARDRAIL FASTENING HARDWARE
S-GR31-1C		GUARDRAIL GENERAL NOTES AND POST DETAILS
S-GRT-2P	06-28-19	EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL
S-GRT-3	06-28-19	TYPE 21 GUARDRAIL END TERMINAL
S-GRA-4	06-28-19	IN-LINE GUARDRAIL ANCHOR

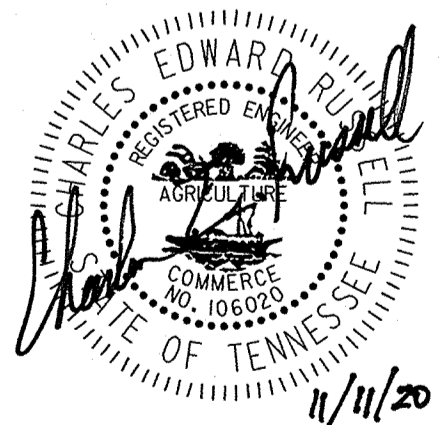
## TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD TRAFFIC OPERATIONS DRAWINGS

DWG.	REV.	DESCRIPTION
T-S-9	06-10-14	STANDARD LAYOUT GROUND MOUNTED SIGNS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-16	07-02-15	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-17	07-11-17	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-19	07-11-17	STANDARD STEEL SIGN SUPPORTS
T-S-20	07-11-17	SIGN DETAILS

PROJECT No.	YEAR	SHEET No.	
17C-G-0628	2020	1A	
REVISIONS			
No.	DATE	BY	BRIEF DESCRIPTION
1	11/11/20	CR	ADDED SHEET 11B. ADDED RP-VC-11. DELETED RP-VC-10 & MM-BPR-2.

## CITY OF KNOXVILLE STANDARD CONSTRUCTION DRAWINGS

DWG. NO.	REV. DATE	TITLE
COK-1	05-05-06	AREA DRAIN
COK-5		STORM PIPE BEDDING AND BACKFILL
COK-6	03-26-08	CONCRETE SIDEWALKS
COK-10	03-19-15	TYPE 'B' CAST IRON FRAME, GRATE, AND INLET FOR COK-9 AND FOR TDOT CATCH BASINS, Nos. 10, 12, 14, 16 AND 17
COK-13	12-29-16	CURB CUTS AND TACTILE WARNING SYSTEMS



CITY OF KNOXVILLE DEPARTMENT OF ENGINEERING	DRAWN: AJG DESIGNED: CR DATE: 10-05-2020 CHECKED: ARH APPROVED: ARH
<b>INDEX OF SHEETS AND STANDARD ROADWAY DRAWINGS</b> NORTHWEST GREENWAY CONNECTOR PROJECT	

PROJECT No.	YEAR	SHEET No.	
17C-G-0628	2020	2	
REVISIONS			
No.	DATE	BY	BRIEF DESCRIPTION
1	11/11/20	CR	ADDED ITEM 24.20, DELETED ITEM 33.15, REVISED QUANTITY FOR ITEM 64.10.

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1.10	MOBILIZATION OF FORCES, SUPPLIES AND EQUIPMENT	L.S.	1
(1) 2.20	TREE REMOVAL	L.S.	1
(2) 3.10	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	1
3.20	RELOCATION OF FIRE DEPARTMENT WARNING SIGNAL	L.S.	1
4.20	COMMON EXCAVATION	C.Y.	4972
(3) 5.10	MINERAL AGGREGATE BASE, CLASS A, GRADE D	TON	927
(4) 5.30	MAINTENANCE STONE (4" DEPTH)	TON	292
5.40	NO. 57 STONE	TON	175
7.10	TACK COAT	GAL	214
9.20	BITUMINOUS PLANT MIX, GRADING B-M	TON	360
9.30	BITUMINOUS PLANT MIX, GRADING C	TON	9
9.50	BITUMINOUS PLANT MIX, GRADING C-S	TON	170
10.30	SAW CUTTING ASPHALT PAVEMENT	L.F.	1030
(5) 12.62	6" CONCRETE COMBINED CURB & GUTTER, TYPE 6-30	L.F.	970
13.10	CONCRETE SIDEWALKS (4")	S.F.	1800
13.15	CONCRETE CURB RAMPS	S.F.	343
(6) 13.16	CAST-IN-PLACE TACTILE WARNING SYSTEM	EACH	2
13.20	CONCRETE DRIVEWAYS (6")	S.F.	760
13.21	CONCRETE DRIVEWAYS (6") (HIGH EARLY STRENGTH)	S.F.	760
(5) 20.14	18" RCP	L.F.	390
20.15	18" CMP	L.F.	60
20.16	24" RCP	L.F.	690
22.12	NO. 12 CATCH BASIN, >4' - 8' DEPTH	EACH	7
22.33	"U" TYPE ENDWALL FOR 18" RCP	EACH	3
22.40	JUNCTION BOX (60IN ROUND)	EACH	1
22.42	ADJUSTMENT OF EXISTING STRUCTURE (DROP INLET)	EACH	1
22.43	STRAIGHT TYPE ENDWALL FOR 18" RCP	EACH	2
(7) 24.10	ADJUSTMENT OF SANITARY SEWER STRUCTURE (MANHOLE)	EACH	1
24.20	ADJUSTMENT OF SANITARY SEWER LATERAL	EACH	10
(8) 25.10	RIP RAP, CLASS A-1	TON	1689
25.30	RIP RAP, CLASS A-3	TON	151
26.10	TOPSOIL (PLACING AND SPREADING) (4" THICK)	S.Y.	7435
26.15	TOPSOIL (FURNISHING AND SPREADING) (4" THICK)	S.Y.	2330
27.10	PERMANENT SEEDING (WITH MULCH)	S.Y.	8000
27.15	PERMANENT SEEDING (WITHOUT MULCH)	S.Y.	290
27.20	TEMPORARY SEEDING (WITH MULCH)	S.Y.	16000
28.10	SODDING	S.Y.	1600
29.10	EROSION CONTROL BLANKET (TDOT TYPE I)	S.Y.	290
30.11	ROOT PRUNING	L.S.	1
30.12	TREE PROTECTION FENCING	L.F.	740

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
31.10	TEMPORARY SLOPE DRAINS (8")	L.F.	53
31.20	SILT BARRIERS (SILT FENCES)	L.F.	1373
31.21	SILT BARRIERS (SILT FENCES WITH BACKING)	L.F.	114
31.22	SILT BARRIERS (12 INCH SEDIMENT TUBE)	L.F.	802
31.23	SILT BARRIERS (18 INCH SEDIMENT TUBE)	L.F.	2211
31.70	CATCH BASIN PROTECTION, TYPE B	EACH	1
31.72	CATCH BASIN PROTECTION, TYPE D	EACH	7
(9) 33.10	GUARD RAIL - W - BEAM	L.F.	380
33.45	TERMINAL ANCHOR TDOT TYPE 13	EACH	6
33.55	TERMINAL ANCHOR TDOT TYPE 21	EACH	1
33.65	GR TERMINAL (IN-LINE) MASH TL3	EACH	2
34.20	FLEXIBLE DRUMS (CHANNELIZING)	EACH	106
34.30	SIGNAGE (CONSTRUCTION)	S.F.	179
34.40	TEMPORARY BARRICADES (TYPE III)	L.F.	21
(10) 36.50	GEOTEXTILE FABRIC FOR EROSION STABILIZATION	S.Y.	1691
63.10	PERMANENT SIGNAGE	L.S.	1
(12) 64.10	BOX TUBE SAFETY RAIL (POWDER COAT BLACK)	L.F.	1302
(11) 81.10	REDI-ROCK RETAINING WALL	SF	1845

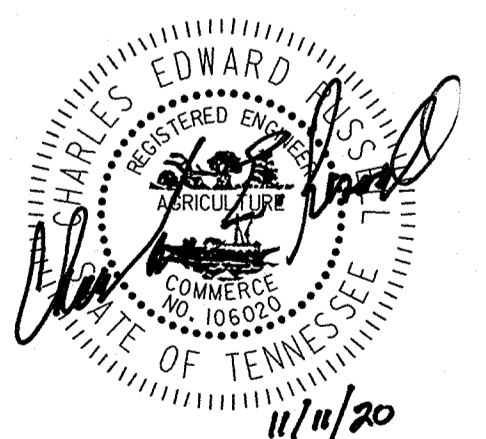
**FOOTNOTES:**

- 15 TREES RANGING FROM 12" - 36" DIAMETER TO BE REMOVED.
- ITEMS TO BE REMOVED ARE INDICATED ON SHEETS NOS. 4A-9A. INCLUDES REMOVAL AND DISPOSAL OF PIPES, PAVEMENTS, SIDEWALK, CURB AND GUTTER, FENCES, AND VEGETATION.
- INCLUDES AGGREGATE BASE UNDER ASPHALT DRIVEWAYS, ASPHALT REPAIR IN ROADWAY, AND CURB AND GUTTER.
- TO BE USED AT DRIVEWAYS AND EDGE OF ROADWAY TO PROVIDE ACCESS AND STABILITY DURING CONSTRUCTION.
- INCLUDES 2" MINERAL AGGREGATE BASE.
- INCLUDES 4" MINERAL AGGREGATE BASE.
- INCLUDES 106 TONS FOR STORMWATER DITCH, 994 TONS FOR TYPE 1 CULVERT PROTECTIONS, AND 589 TONS FOR ROCK CHECK DAMS.
- TO BE USED AT TEMPORARY CONSTRUCTION EXITS.
- INCLUDES THE COST OF GUARDRAIL REMOVAL.
- INCLUDES 276 SY FOR TEMPORARY CONSTRUCTION EXITS, 1044 SY FOR TYPE 1 CULVERT PROTECTIONS, AND 371 SY FOR ROCK CHECK DAMS.
- INCLUDES COST OF ALL MATERIALS AND LABOR TO CONSTRUCT RETAINING WALL.
- INCLUDES 956 LF ALONG INDEPENDENT GREENWAY AND 346 LF ON TOP OF RETAINING WALL.

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SEE STD. DWG. NO. T-S-19

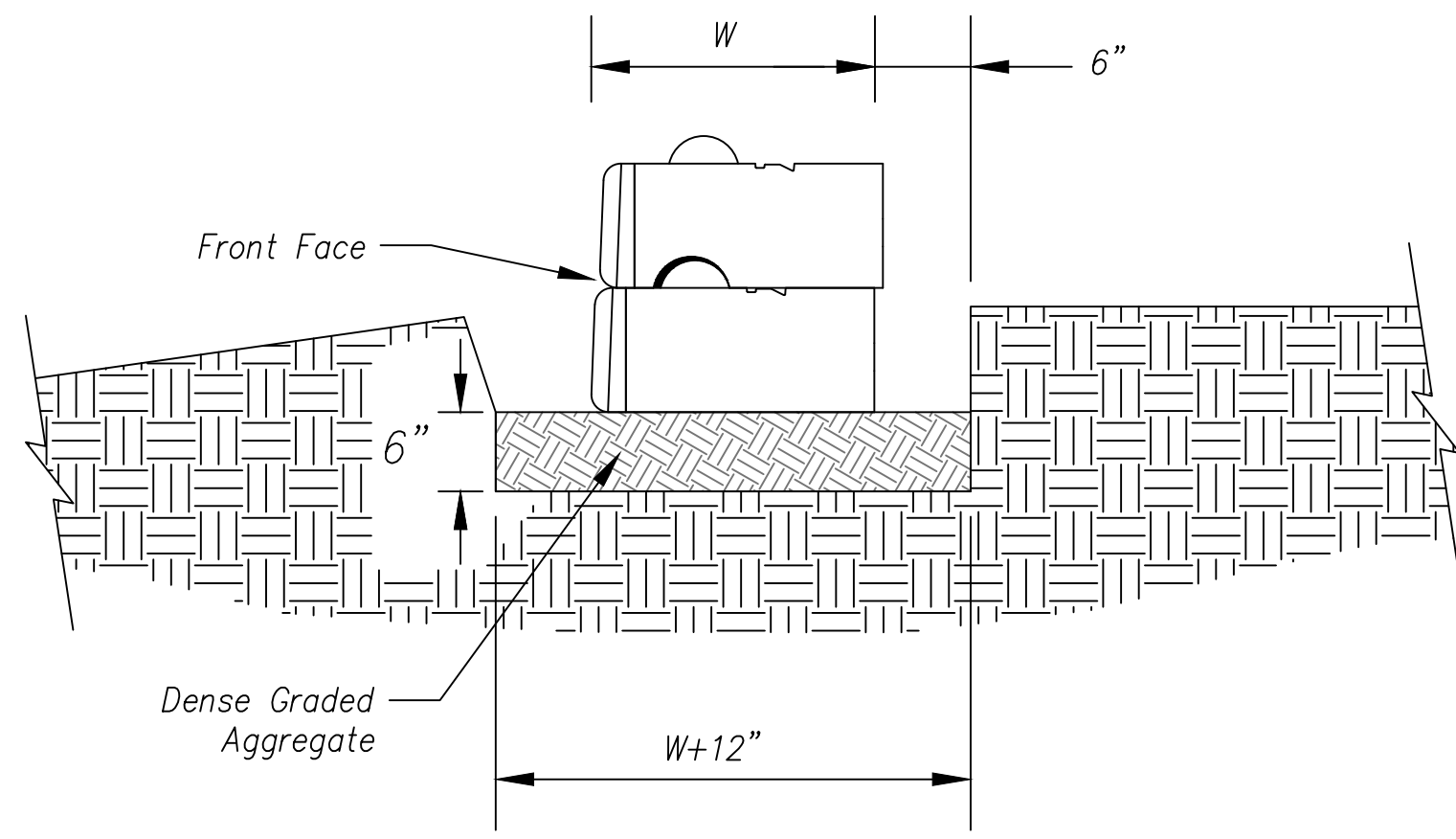
SIGN NO	LEGEND	SHEET NO	SIZE				SIGN FACE				STEEL DESIGN (BREAK-AWAY)				
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU. YD.	REIN STEEL LBS.	
1		5A	18"	18"	-	-	BLACK	YELLOW (REF.)	0.080" SHEET ALUMINUM	P8	H = 9'-6"	-	-	-	
2		6A	18"	18"	-	-	BLACK	YELLOW (REF.)	0.080" SHEET ALUMINUM	P8	H = 10'-0"	-	-	-	
3		9A	18"	18"	-	-	BLACK	YELLOW (REF.)	0.080" SHEET ALUMINUM	P8	H = 10'-0"	-	-	-	



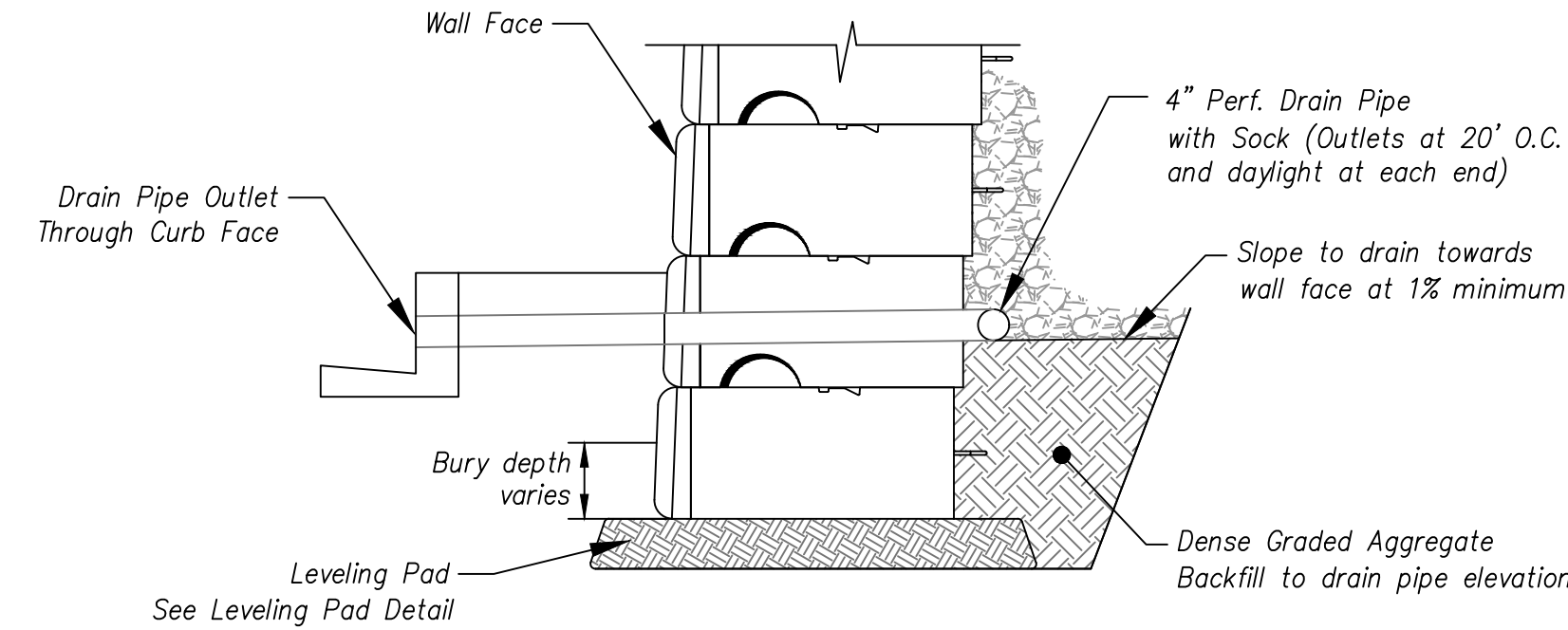
CITY OF KNOXVILLE DEPARTMENT OF ENGINEERING	DRAWN: AJKG DESIGNED: CR DATE: 10-05-2020
ESTIMATED QUANTITIES AND SIGN SCHEDULE	CHECKED: ARH APPROVED: ARH
NORTHWEST GREENWAY CONNECTOR PROJECT	

PROJECT No.	YEAR	SHEET No.	
17C-G-0628	2019	11	
REVISIONS			
No.	DATE	BY	BRIEF DESCRIPTION
1	3/30/20	JEE	REVISED PER BARGE COMMENTS
2	9/16/20	JEE	REVISED PER CITY COMMENTS
3	11/12/20	JEE	REVISED PER CITY COMMENTS

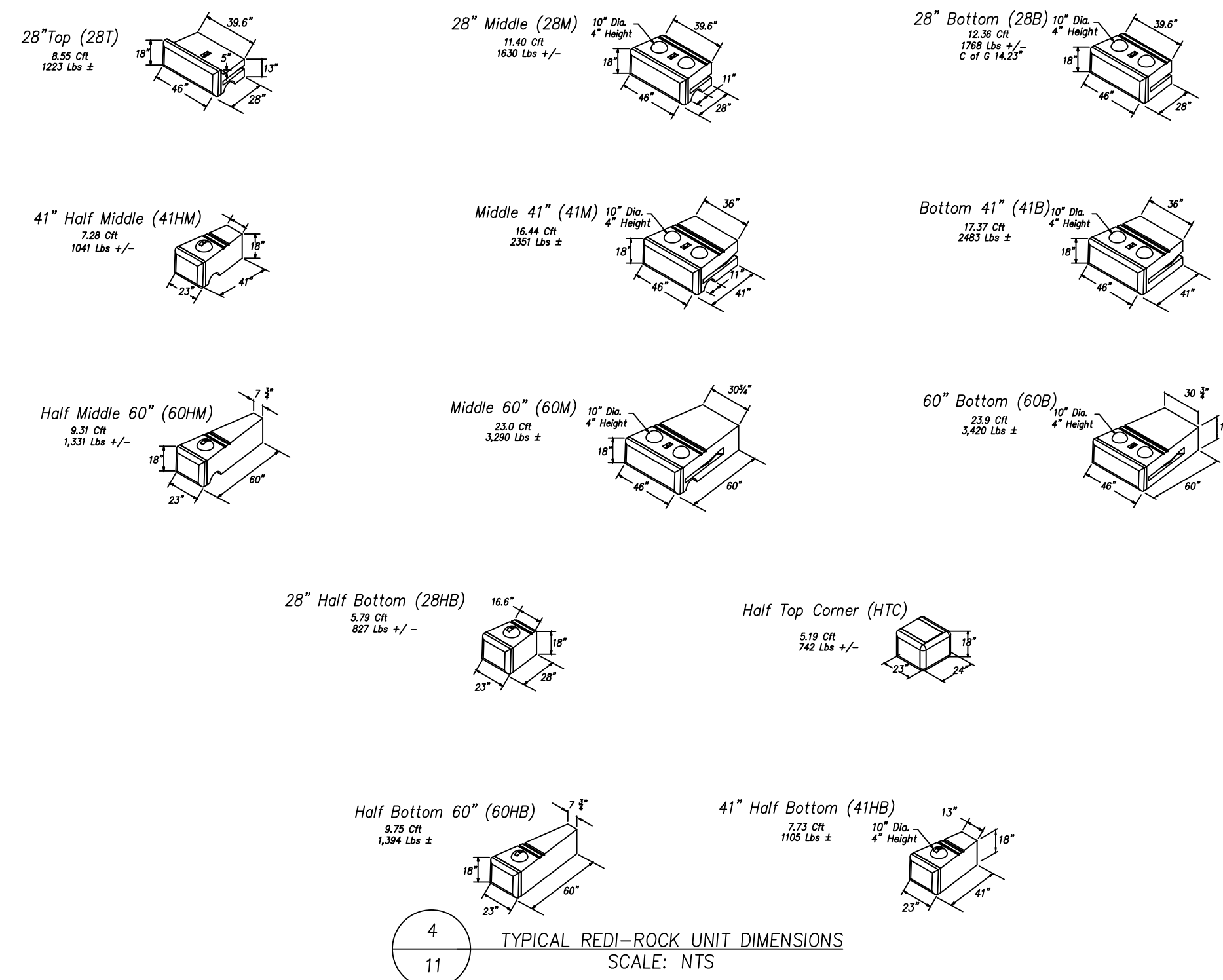
**GEOS**  
**GEOServices, LLC-Geotechnical and Materials Engineers**  
 5550 North Lee Highway  
 Cleveland, Tennessee 37391  
 Office: 423-614-8471  
 Fax: 423-614-8470



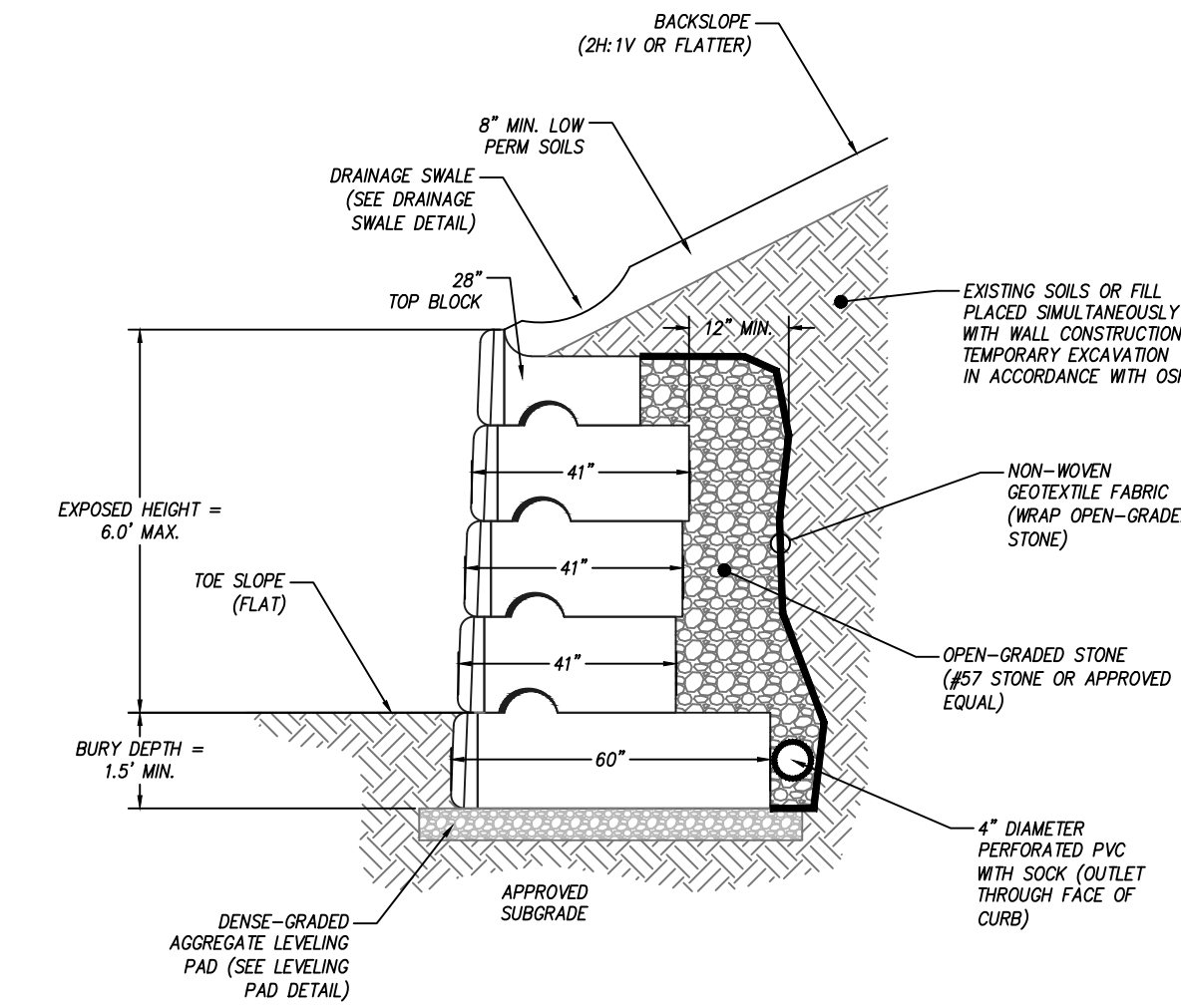
1 TYPICAL LEVELING PAD DETAIL  
 SCALE: NTS



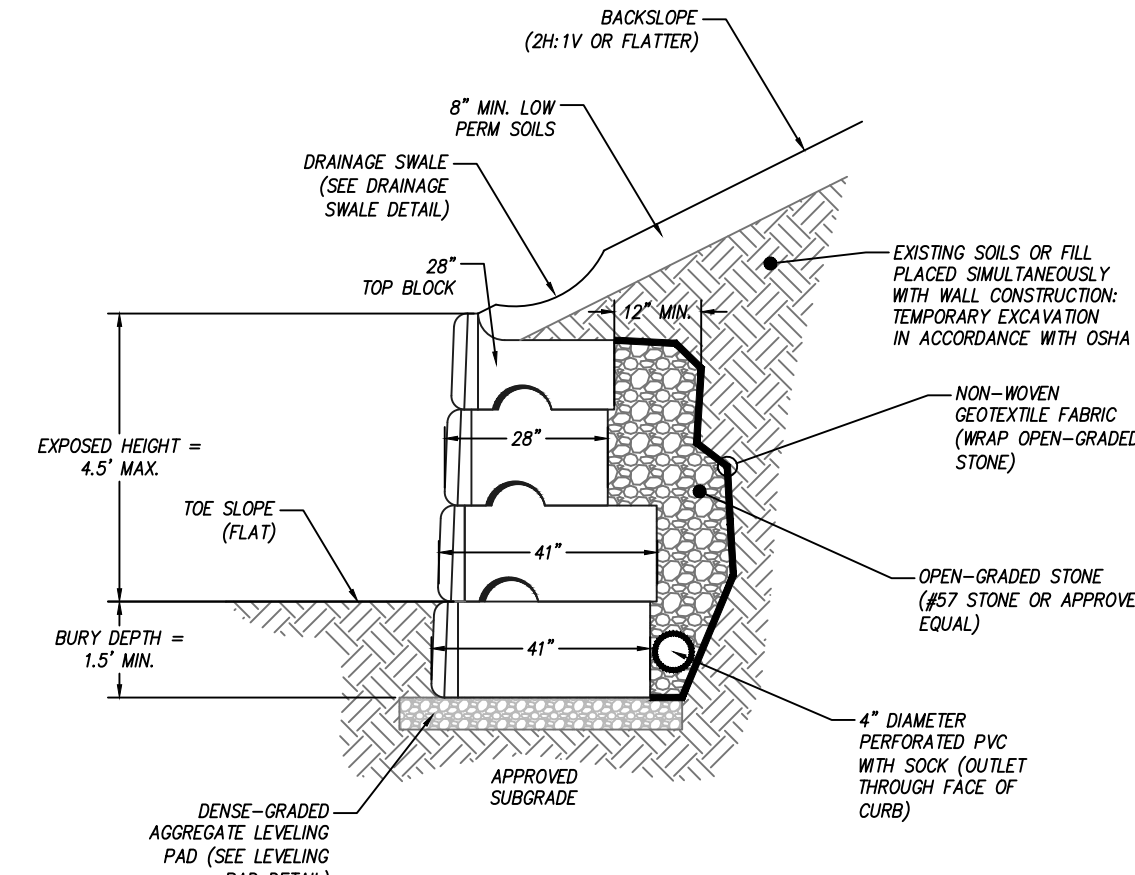
2 TYPICAL DRAIN DETAILS  
 SCALE: NTS



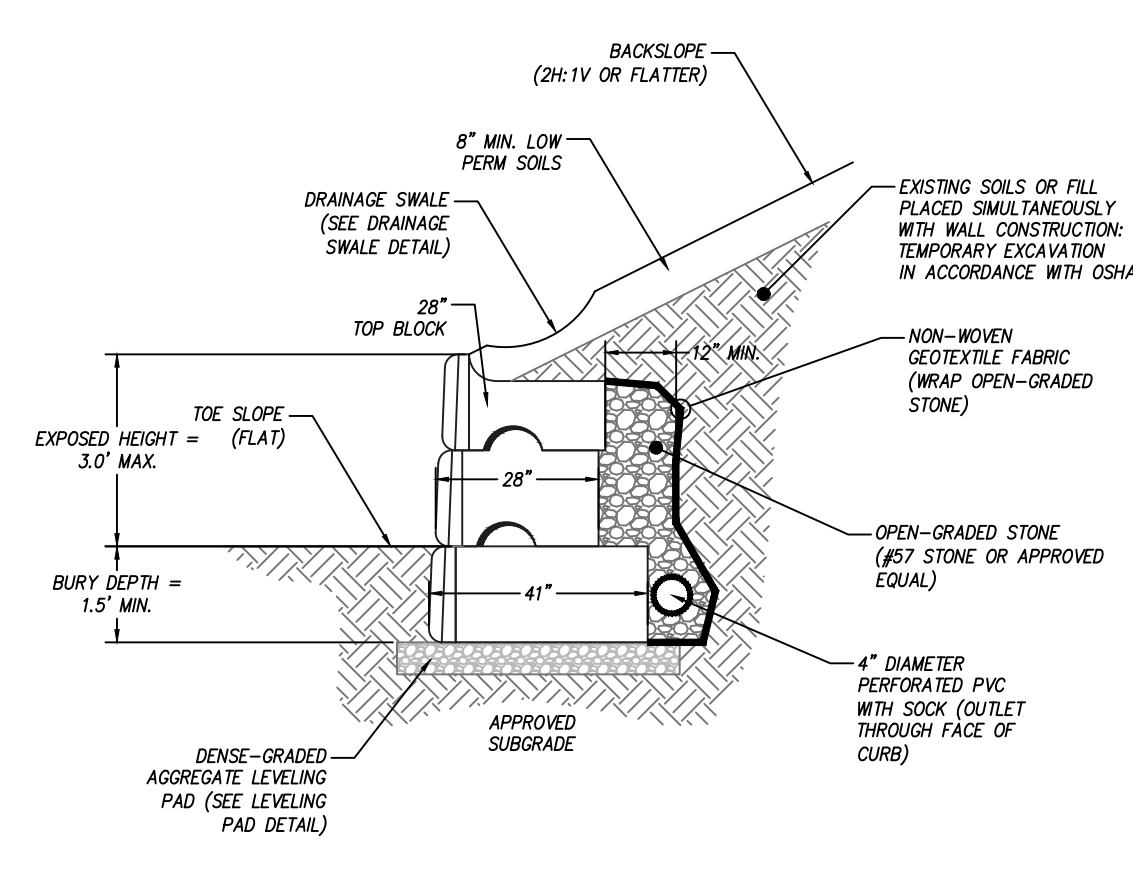
4 TYPICAL REDI-ROCK UNIT DIMENSIONS  
 SCALE: NTS



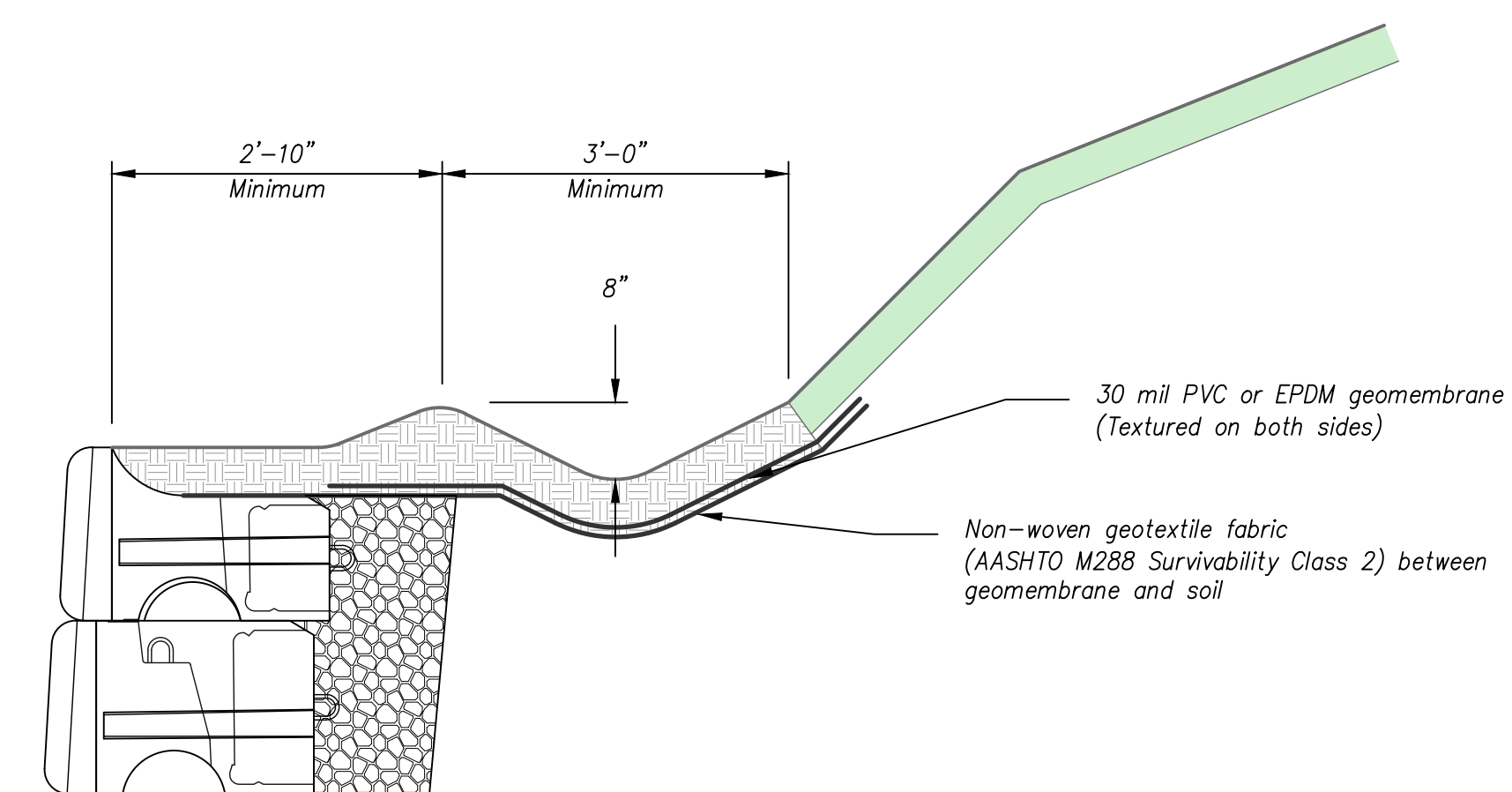
6 TYPICAL RETAINING WALL CROSS-SECTION (MAX. H = 7.5 FEET)  
 SCALE: NTS



7 TYPICAL RETAINING WALL CROSS-SECTION (MAX H = 6.0 FEET)  
 SCALE: NTS



8 TYPICAL RETAINING WALL CROSS-SECTION (MAX. H = 4.5 FEET)  
 SCALE: NTS



8 TYPICAL DRAINAGE SWALE DETAIL  
 SCALE: NTS



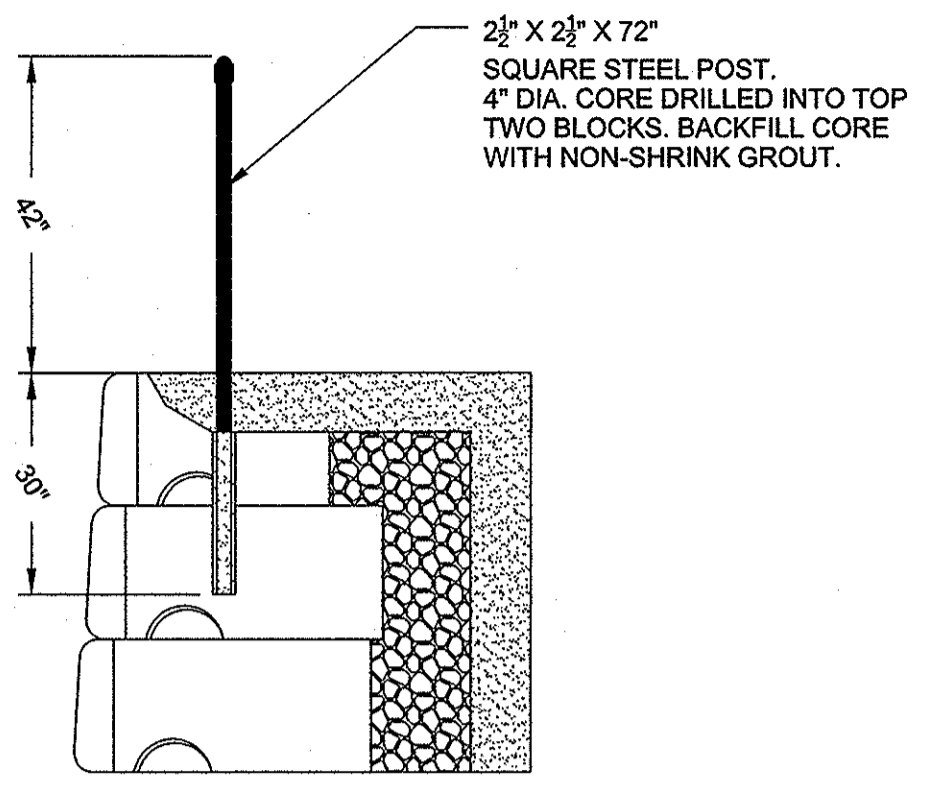
CITY OF KNOXVILLE  
 DEPARTMENT OF ENGINEERING

NORTHWEST GREENWAY  
 CONNECTOR PROJECT  
 RETAINING WALLS  
 SCALE: AS SHOWN

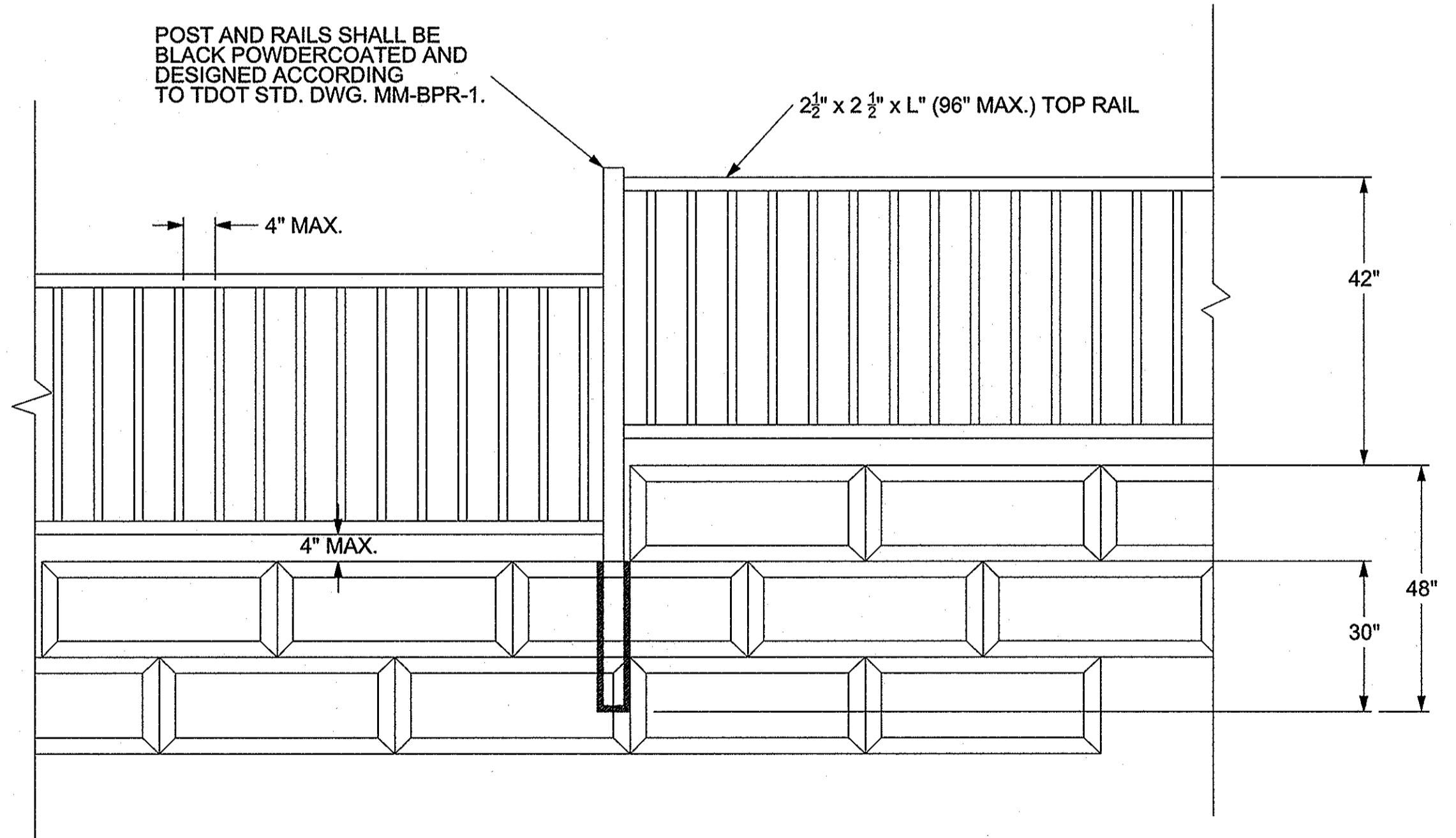
DESIGNED: JEE  
 DATE: 03-16-20  
 CHECKED: JRW  
 APPROVED: JRW

PROJECT No. 17C-G-0628	YEAR 2020	SHEET No. 11B	
<b>REVISIONS</b>			
No.	DATE	BY	BRIEF DESCRIPTION
1	11/11/20	CR	ADDED SHEET.

- NOTE:
1. IF POST SPACING IS SUCH THAT THE POST IS IN AN AIR VOID, GROUT AS PER REDIROCK SPECIFICATIONS.
  2. AT THE FOUR ENDS, THE POST SHALL BE CENTERED ON THE HTC BLOCK.
  3. FOR WALL #1, BEGIN AT STATION 0+03.
  4. WALL TEXTURE SHALL BE COBBLESTONE.
  5. SEE DETAIL BELOW FOR RAIL INSTALLATION AT WALL STEP-UP.



RAIL INSTALLATION DETAIL



RAIL DETAIL AT WALL STEP-UP

**RETAINING WALL RAILING DETAILS**  
NTS



CITY OF KNOXVILLE DEPARTMENT OF ENGINEERING	DRAWN: AJG DESIGNED: CR DATE: 10-05-2020
<b>RETAINING WALL RAIL DETAILS</b> NORTHWEST GREENWAY CONNECTOR PROJECT	CHECKED: ARH APPROVED: ARH

11/11/2020 F:\1861361231\36123021\_04\_CADD\CIVIL\11B\_PLOT\11B\_RetainingWall1Detail.s.dgn