

Bluff Stabilization
At 1025 Hardy Road, Painesville
KS Project No. 24072

BID DATE: February 5, 2025 at 2:00pm

DATE OF ADDENDUM: January 31, 2025

ADDENDUM NUMBER: 02

TO THE DRAWINGS AND SPECIFICATIONS FOR:

Bluff Stabilization at 1025 Hardy Road

TO ALL BIDDERS:

THIS ADDENDUM, MODIFYING THE ORIGINAL CONTRACT DOCUMENTS, SHALL BE TAKEN INTO ACCOUNT IN PREPARING PROPOSALS, AND IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS.

CLARIFICATIONS AND QUESTIONS

If we cannot meet the construction deadline should we still submit a bid with a new completion date?

No bids will be considered unless they can meet the contract completion date.

Sheet 4 appears to show the light pedestals within the rock drain channel. Is this correct or should the edge of the channel be offset to outside of the pedestal foundations?

The rock channel should be offset to the east from the edge of the pedestal foundations.

Sheet 4; it appears that the 10ft wide drainage channel dead-ends at the Redi-Rock wall. Is that the case or does it discharge into the new 4" PVC? If so what is this transition intended to look like?

The rock channel discharges into the existing catch basin. The modular block wall has been revised to include freestanding blocks to prevent interference with the existing catch basin.

Sheet 4 shows to seed and mulch existing slope with native flowering plants. 02 09 30 - 2.1.1 calls to seed with ODOT 659.09. Is that the intent of the note and is it the entire existing slope East of the stairs or only disturbed areas?

Seeding and mulching is only required in disturbed areas.

Sheet 6 section A-A shows the 4" perf PVC connected to the existing storm drains. Are these to tie to the existing 12" in 2 places? If so is there a section showing the elevation of the 12" where the 4" crosses and what does that connection look like?

The note requiring the 4-inch PVC pipe to be connected to the existing storm drain has been removed from Sheet 6. The 4" PVC pipes for the modular block wall footer drain are a separate system. See the revised Sheet 6.

Sheet 9 shows a penetration collar I assume for the existing 12" to pass through (in 2 places). What elevation are the existing 12" in these areas and is there a detail on how you would like the 12" sectioned and coupled back together?

There are three existing 12-inch pipes within the project area but only the drain pipe east of the walking path will penetrate the new sheet piling. The existing pipe will need to be temporarily cut to install the sheet piling and will need to be reconnected with a Fernco (or approved equal) coupler.

The concrete footer for the Redi-Rock foundation detail calls for #5 bar 12" OC both ways with a doweled expansion joint. Is that the correct detail for the application?

This is the correct detail.

For the concrete modular block wall: Spec 32321 - 2.5 calls for the drainage pipe to be 4" 3-hole perforated HDPE Sheet 4/11 calls for 4" perforated PVC behind the wall. Sheet 4/11 calls for 4" perforated PVC daylight to the lake - should this be solid and / or HDPE? Sheet 6/11 Notes calls for 6" corrugated, perforated plastic with geotextile.

The Redi-Rock drainpipe can be either the HDPE pipe from the spec or a perforated 4" PVC pipe as shown on the drawings. The pipes that daylight to the lake shall be solid. This has been updated on Sheet 4.

For the Rock Drain Channel: Sheet 4/11 shows 4" PVC. Sheet 6/11 shows 4" Perforated PVC. Sheet 8/11 shows 4" PVC pipe. Please clarify size, type and if geotextile/sock is required for both drainage pipe applications.

The Rock channel drainpipe behind the sheet piling should be a 4" perforated PVC pipe. Sheets 4 and 8 have been revised to specify perforated drain pipe. All perforated pipes shall be geotextile wrapped.

Sheets 3 & 4 of 11 shows details of existing Catch Basin 40530 which is within the limits of the proposed Redi-Rock Wall. The rim of the catch basin exists at 584.10 but the sub grade of the Redi-Rock wall footing is 582.34. What is to take place here? Is the catch basin to be removed/abandoned? What, if anything, is to happen with the existing 4" from this catch basin that ties into the existing 12" PVC outfall?

The new rock channel shall drain into the existing catch basin. The concrete modular block wall in this area has been revised to include freestanding blocks with a shorter foundation to avoid conflict. The drain stone behind the concrete modular block wall will be omitted in this area. The block count on Sheet 10 has been updated.

Sheet 6/11 Section A-A shows the waler on the "Northern" face of the sheet pile wall 5ft below top of sheet within the temporary excavation limits bolted to the face of the sheets. Sheet 8/11 Waler Sheet Pile Connection Detail shows the waler beam mounted on the Land Side which would be the "South" side. Please clarify.

Sheet 8 has been updated, the “water side” and “land side” labels were corrected. The design intent is for the water to be on the “water side” of the sheet piling.

Sheet 6/11 shows the limits of excavation only on the water side of the sheets. Should there be excavation limits defined on the Land Side of the sheets to allow for installation of the water bolts? Should any fill installed on the Land Side be premium? If so what fill material should be used?

The detail on Sheet 8 has been updated to allow welding the water beam to the sheet pile, no excavation should be required on the land side of the sheet piling.

The 28-T Redi-Rock top block appears to be formed to accept a surface treatment (5" CIP concrete cap). Sheet 6/11 Section A-A appears to show a level surface. Is there to be a surface treatment added or just the installed blocks as cast?

The 5-inch recess on the 28-T block should be covered with the 6-inch soil lift over the gravel backfill.

When I calculate the length of the sheet pile wall using the location points on sheet 5 I come up with approximately 175 linft of wall but if I scale the elevation view on sheet 7 and/or count sheets and multiply by the sheet width of 28.5" I come up with approximately 185 linft.

Can you clarify which is correct?

There are 35 pairs or about 166.25 linear feet of sheet piling.

Could you please confirm the exact linear footage of the redi-rock wall with the footer and the linear footage of the sheetpile wall for the Hardy project?

There are 35 pairs or about 166.25 linear feet of sheet piling. The concrete modular block wall is approximately 257 linear feet long along the front face.

SPECIFICATIONS

No changes to the Specifications have been made.

DRAWINGS

Sheet 4: Proposed Site Plan
Sheet 5: Location Map
Sheet 6: Sections
Sheet 7: Elevation View
Sheet 8: Details
Sheet 10: Details

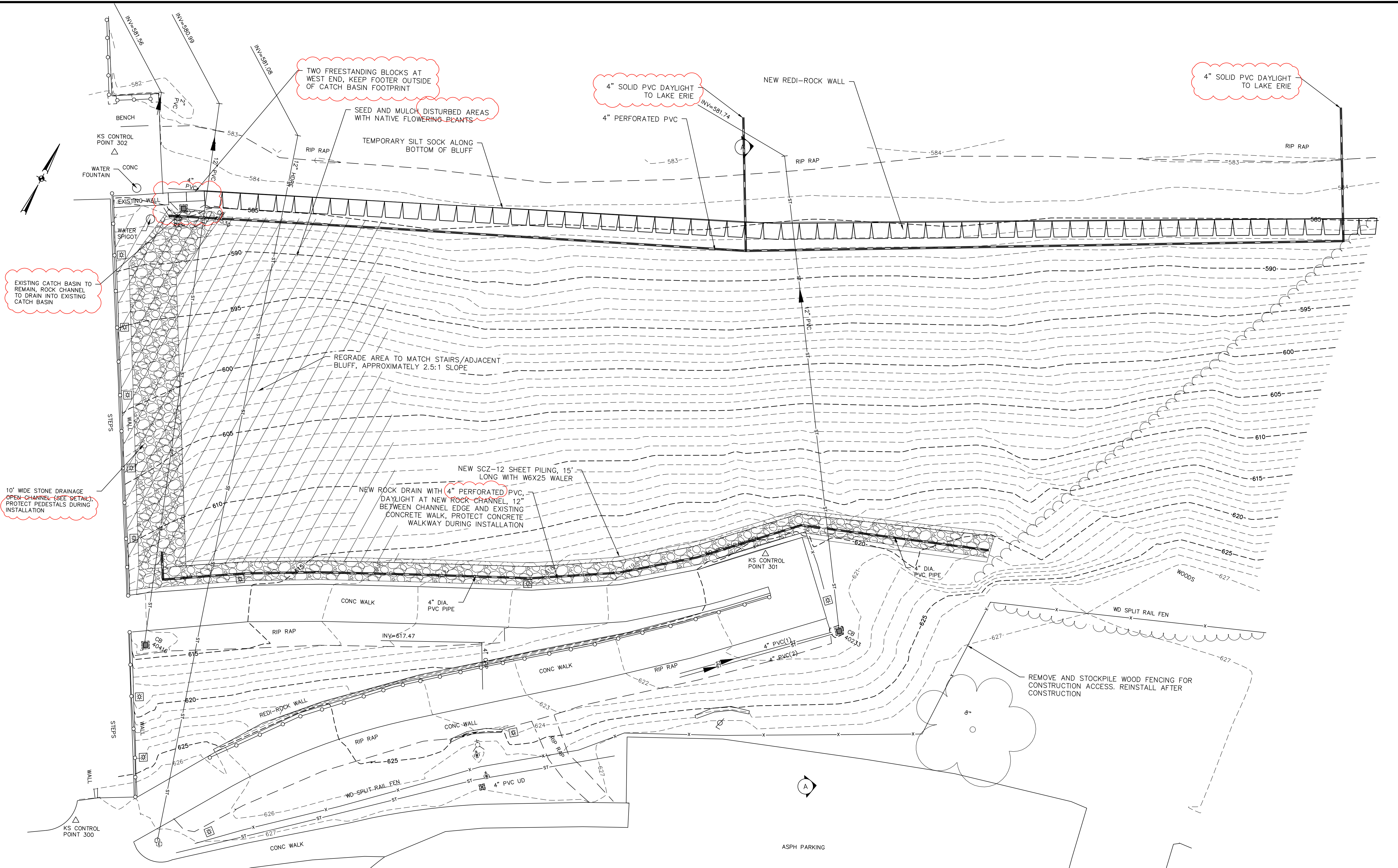
END OF ADDENDUM

Preparer: KS Associates, Inc.

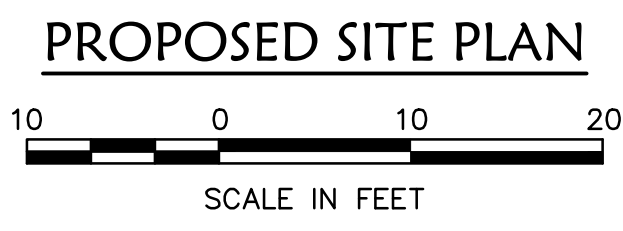
ATTACHMENTS

1. 24072 Updated Drawing Sheets

R:\24000\24072 Lake Metro\paris FTP\CIVIL\3DCURRENT DRAWINGS\24072.3 Proposed Site Plan.dwg, Plotted: Jan 31, 2025 - 11:16am



- NOTES**
1. VERTICAL DATUM IS IGLD85.
 2. THE CONTRACTOR SHALL PROTECT ALL EXISTING WALKWAYS DURING CONSTRUCTION OPERATIONS. ANY DAMAGED AREAS SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
 3. THE CONTRACTOR SHALL STOCKPILE MATERIAL FROM REGRADING OPERATIONS AT A LOCATION DESIGNATED BY THE OWNER.



DATE	DESCRIPTION	BY

REVISIONS

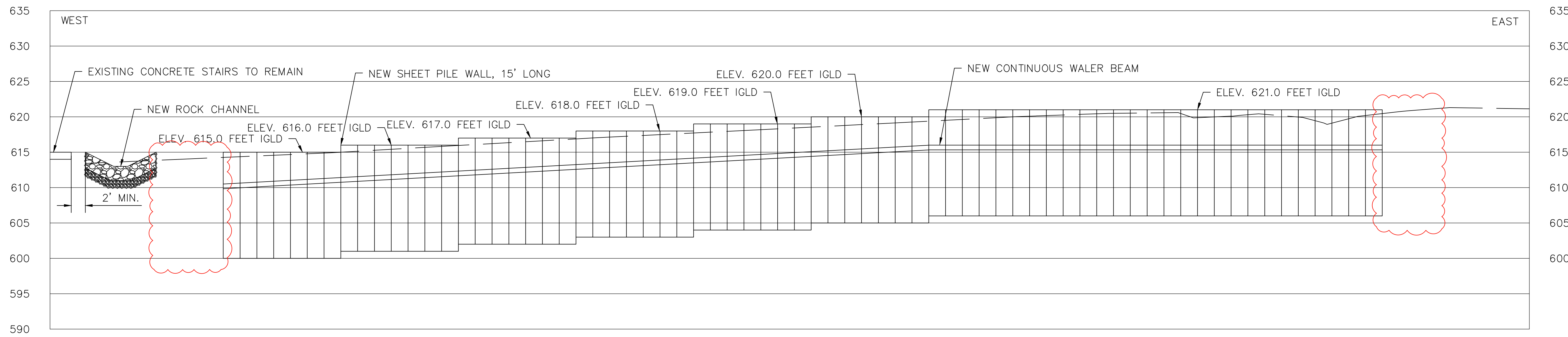
DATE	BY	DESCRIPTION
10/09/24	DJP	
	MFC	
	CIVIL_3D	
	F.B.	

KS Associates, Inc.
 260 Burns Road, Suite 100
 Elyria, OH 44035
 P 440 365 4730
 F 440 365 4790
 www.ksassociates.com

PROPOSED SITE PLAN
BLUFF STABILIZATION
AT PAINESVILLE PARK
 LAKE COUNTY
 1025 HARDY ROAD,
 PAINESVILLE TOWNSHIP, OHIO 44077

SHEET 4	OF 11
JOB NO. 24072	

R:\24072\24072 Lake Metro\paris FTP\CIVIL\3D\CURRENT DRAWINGS\24072-4 Sections.dwg, Plotted: Jan 31, 2025 - 11:18am



NOTES

- 1. VERTICAL DATUM IS IGLD85.

ELEVATION VIEW



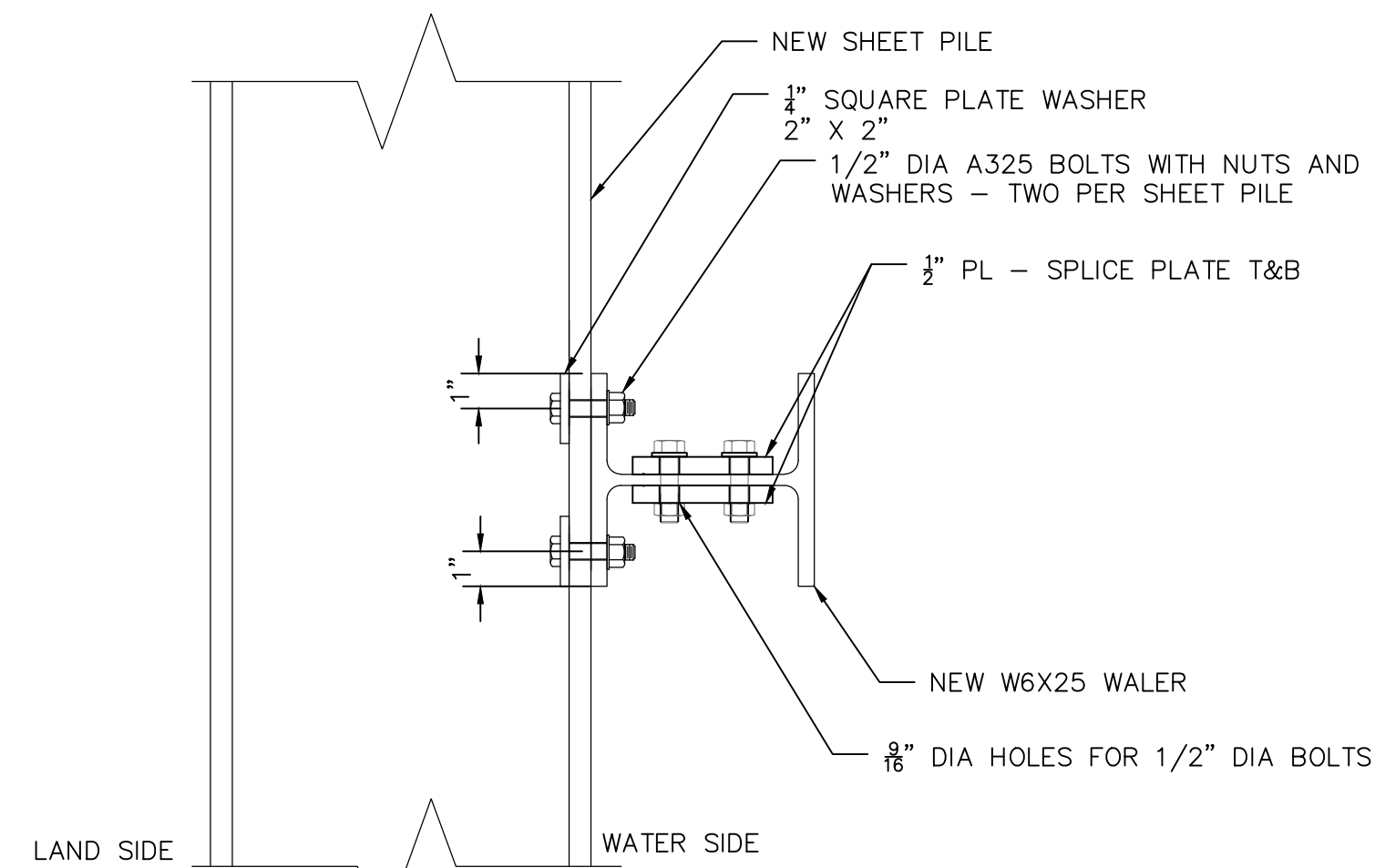
DATE	DESCRIPTION	BY

REVISIONS	
DATE: 10/09/24	
DRAWN BY: DDP	
CHK'D BY: MPC	
DWG. NAME: ELEVATION VIEW	
PATH: CIVIL_3D	
F.B.	

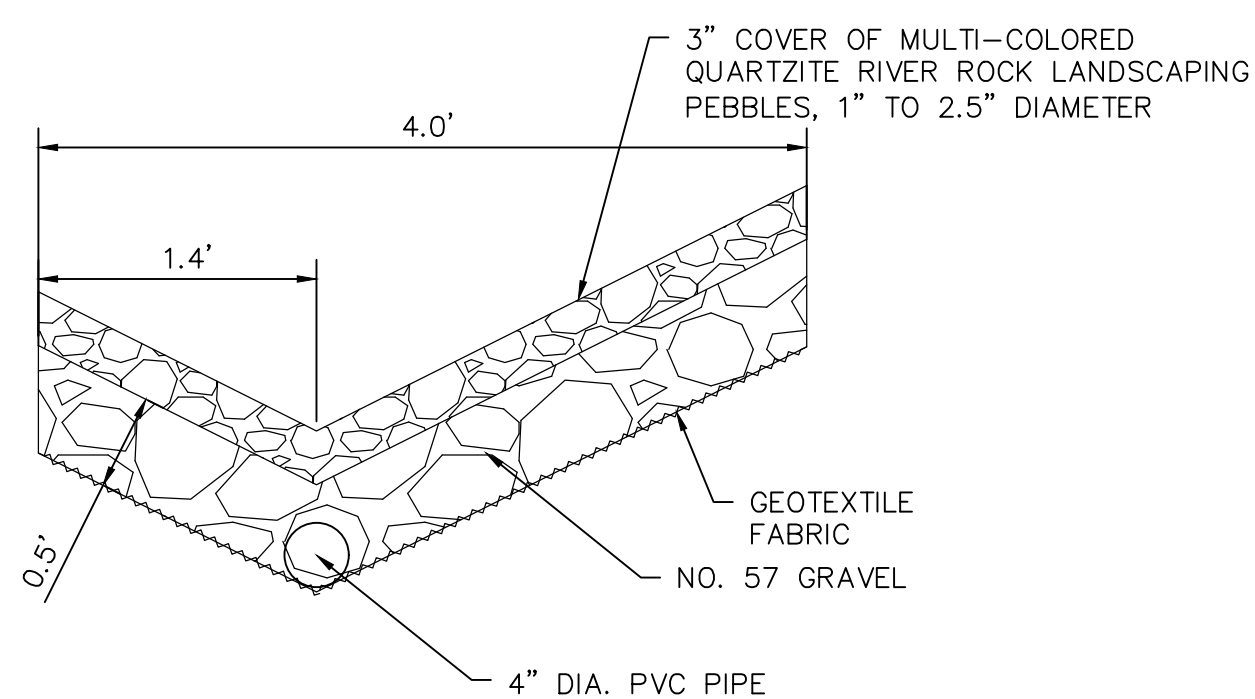
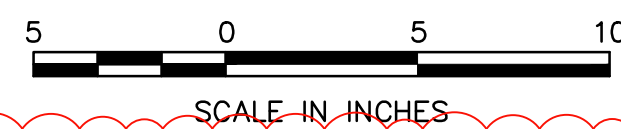
KS ASSOCIATES, Inc.
 260 Burns Road, Suite 100
 Elyria, OH 44035
 P 440 365 4730
 F 440 365 4790
www.ksassociates.com

ELEVATION VIEW
BLUFF STABILIZATION
AT PAINESVILLE PARK
 LAKE COUNTY
 1025 HARDY ROAD,
 PAINESVILLE TOWNSHIP, OHIO 44077

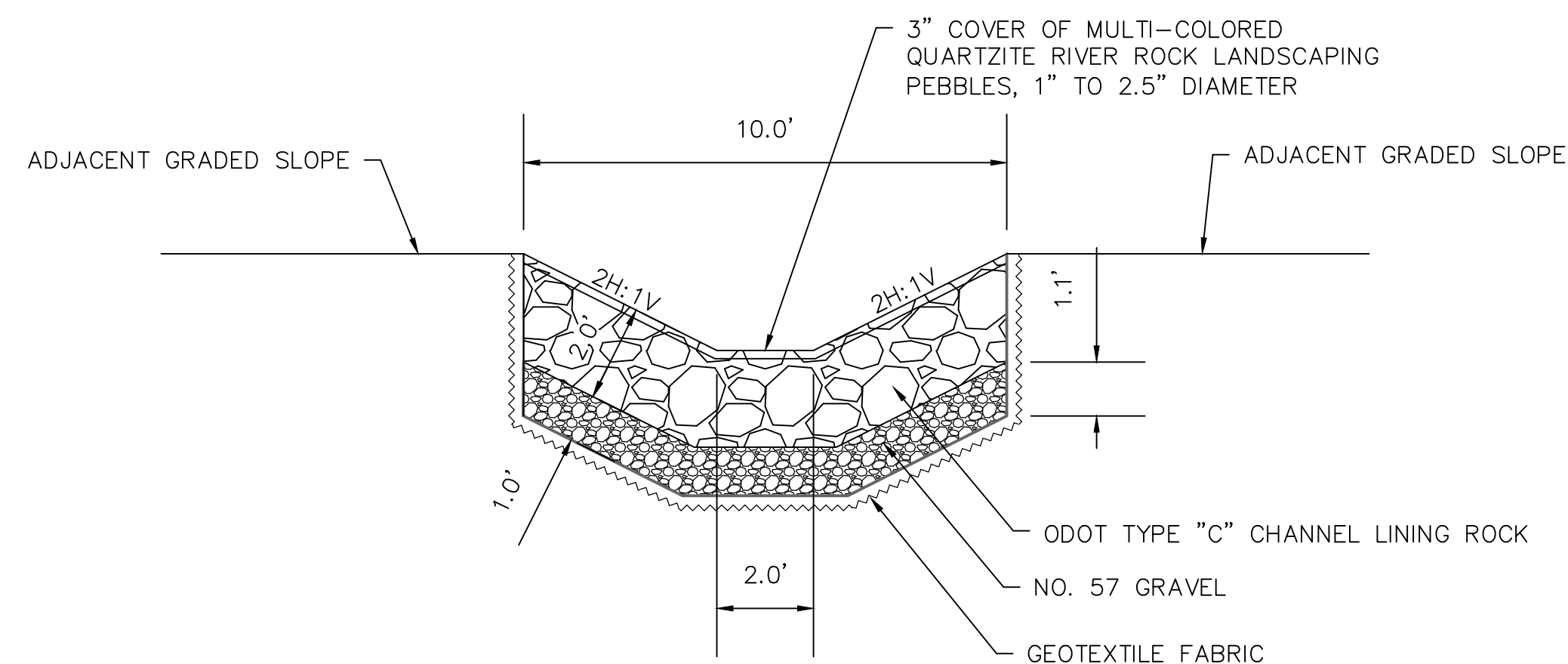
SHEET 7	OF 11
JOB NO. 24072	



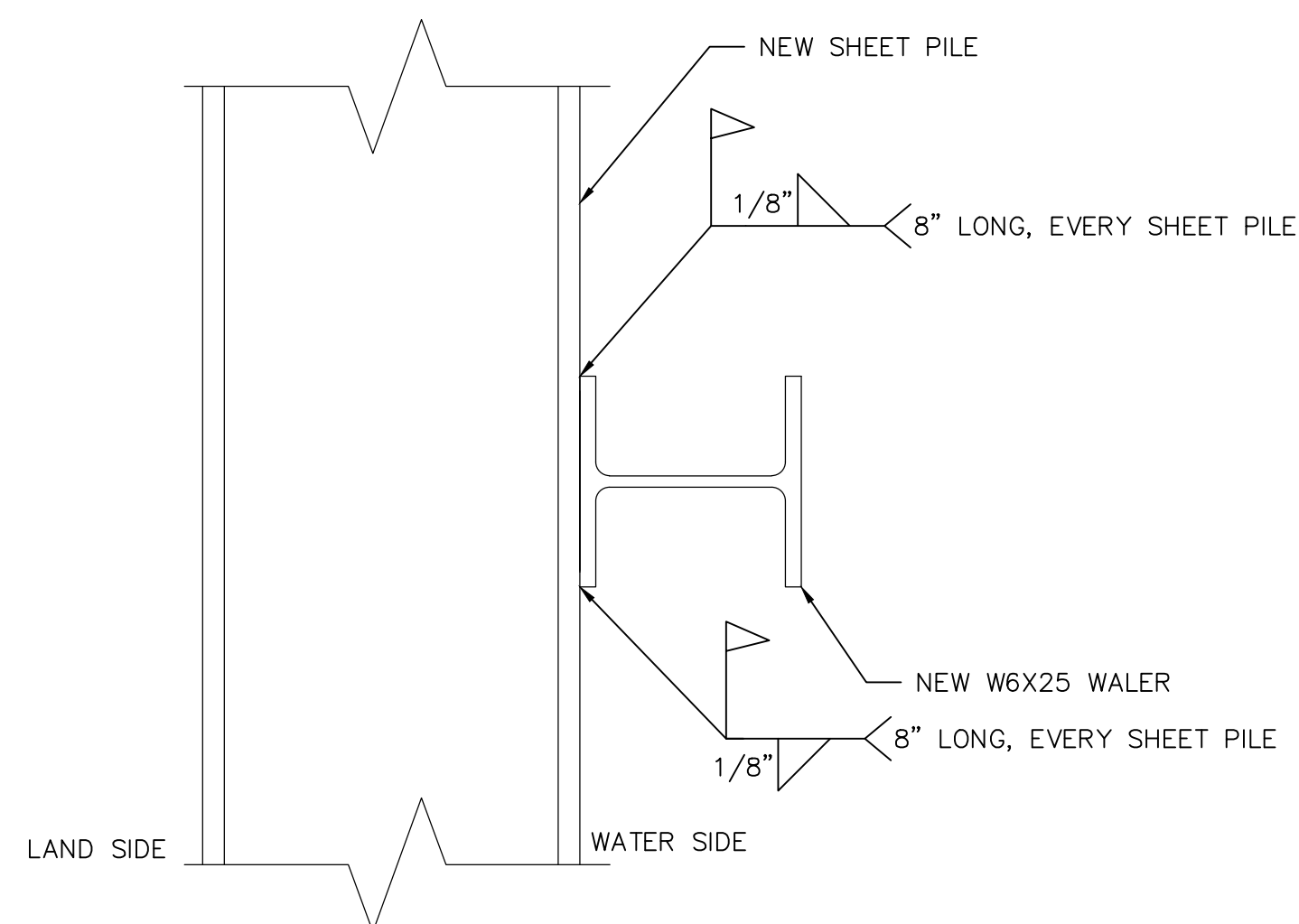
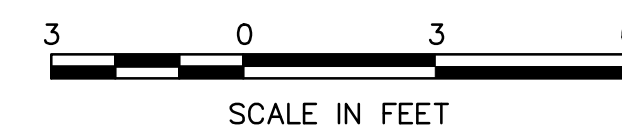
WALER SHEET PILE CONNECTION DETAIL



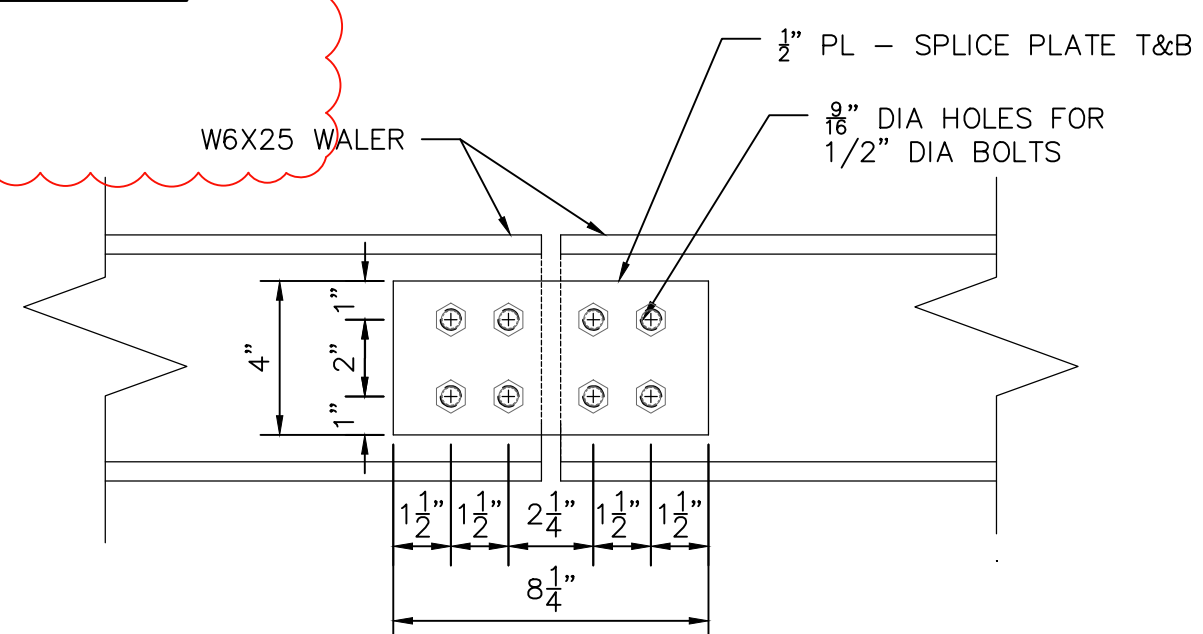
SHEET PILE ROCK DRAIN DETAIL



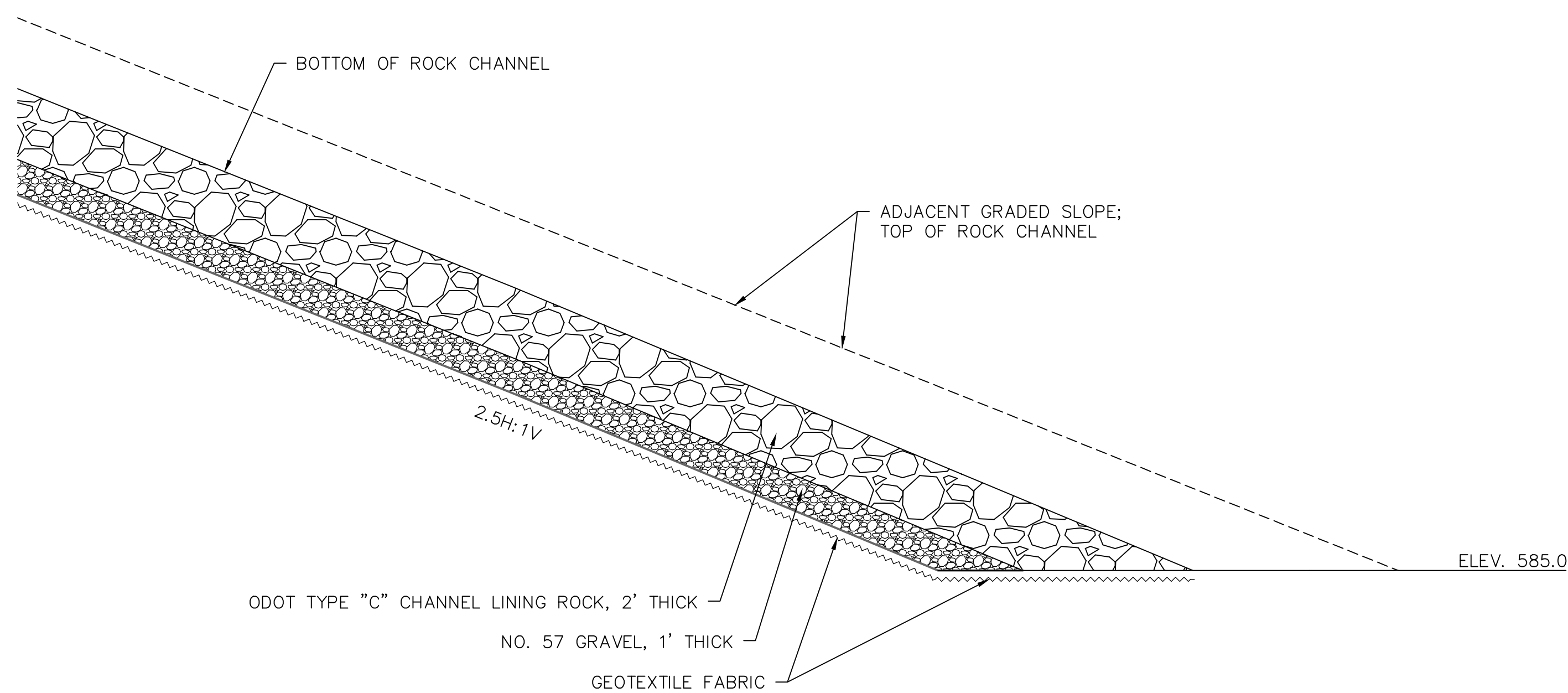
ROCK CHANNELS DETAIL 1



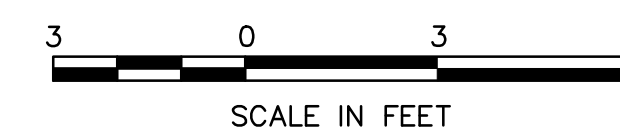
WALER SHEET PILE ALTERNATE CONNECTION DETAIL



WALER SPLICE DETAIL



ROCK CHANNELS DETAIL 2



NOTES

1. VERTICAL DATUM IS IGLD85.
2. THE CONTRACTOR MAY EITHER BOLT OR WELD THE WALER BEAM TO THE SHEET PILING.

DATE	DESCRIPTION	BY

REVISIONS	

DATE: 10/09/24
 DRAWN BY: DDP
 CH'D BY: MPC
 DWS. NAME: DETAILS
 PATH: CIVIL_3D
 F.B.:

KS ASSOCIATES, Inc.
 260 Burns Road, Suite 100
 Elyria, OH 44035
 P 440 365 4730
 F 440 365 4790
 www.ksassociates.com

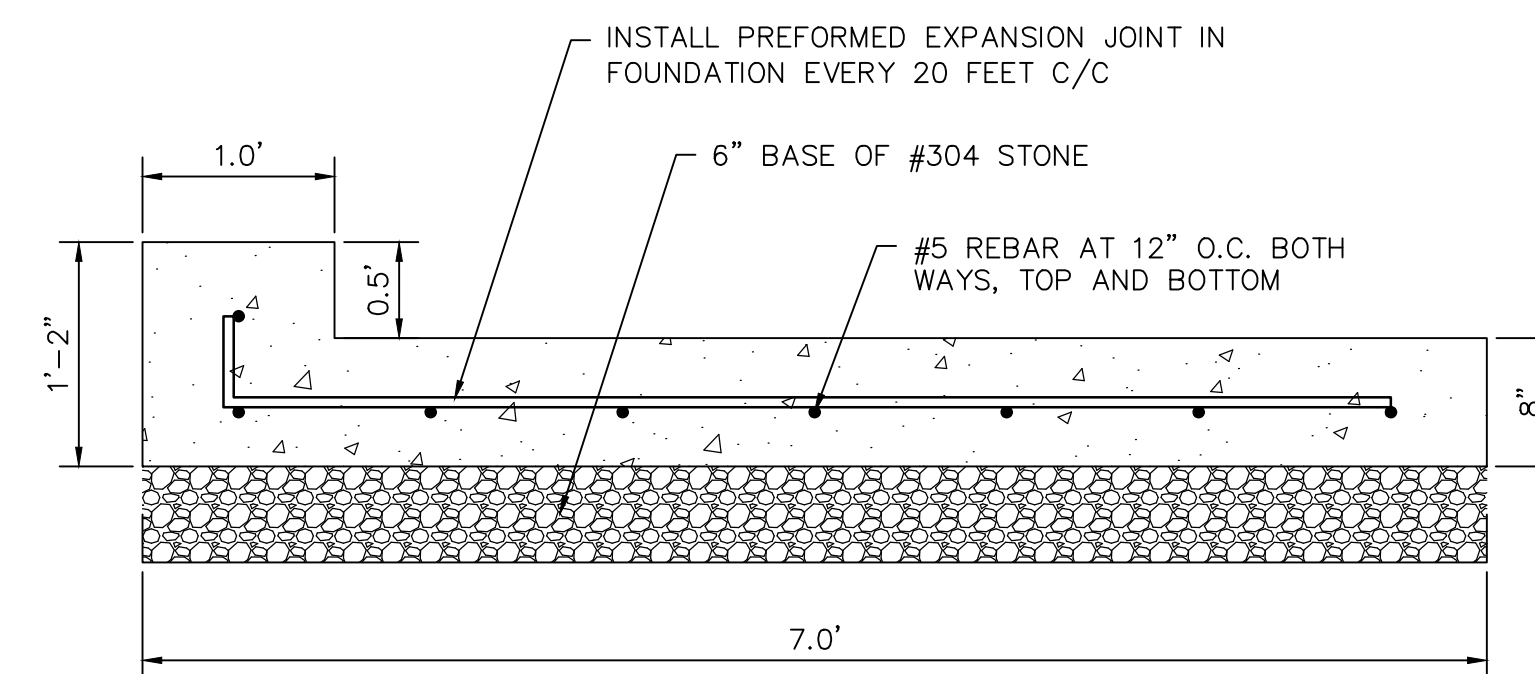
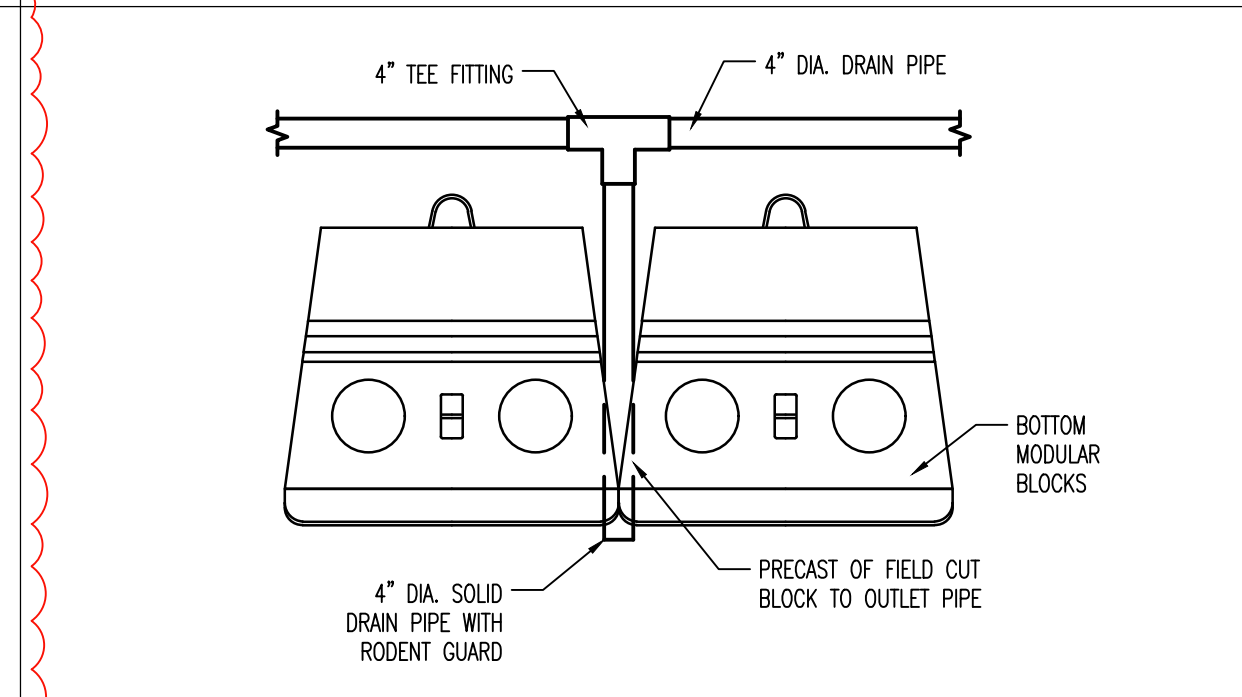
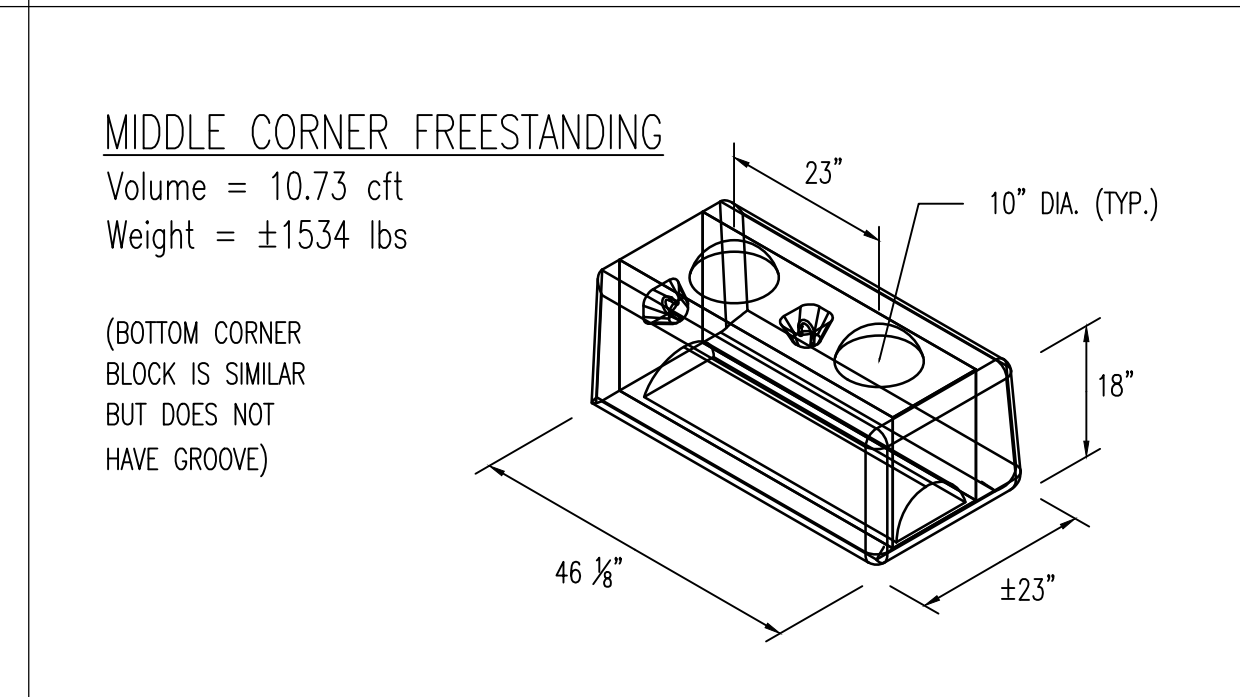
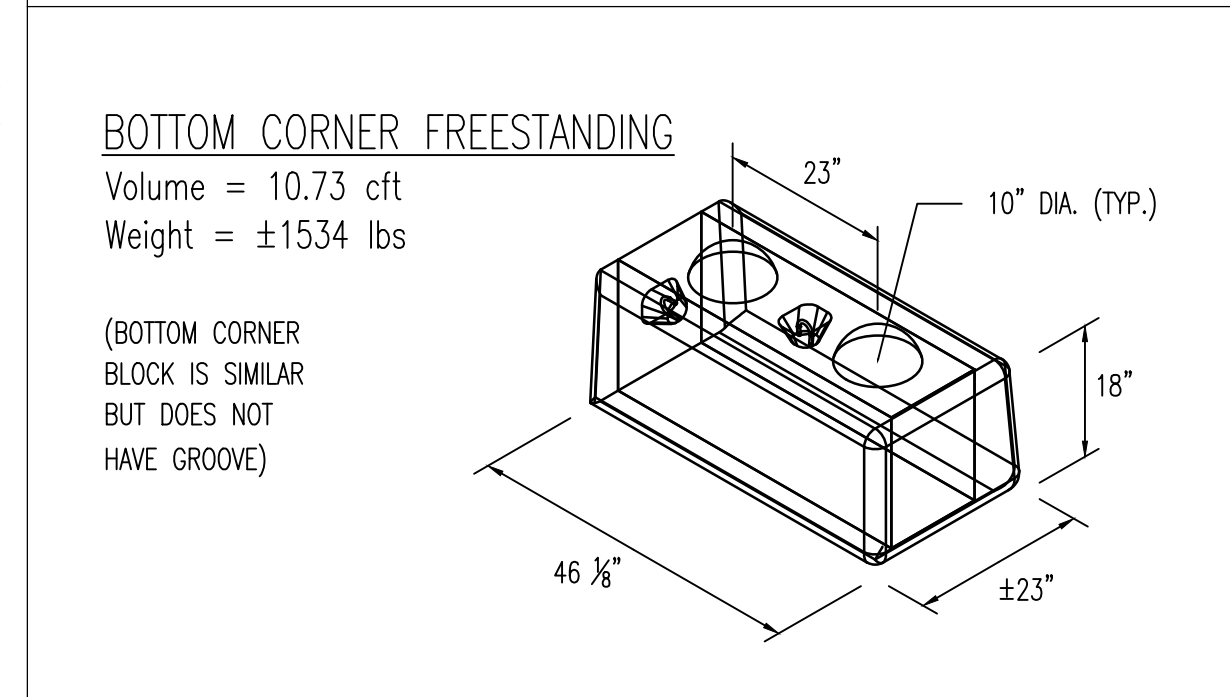
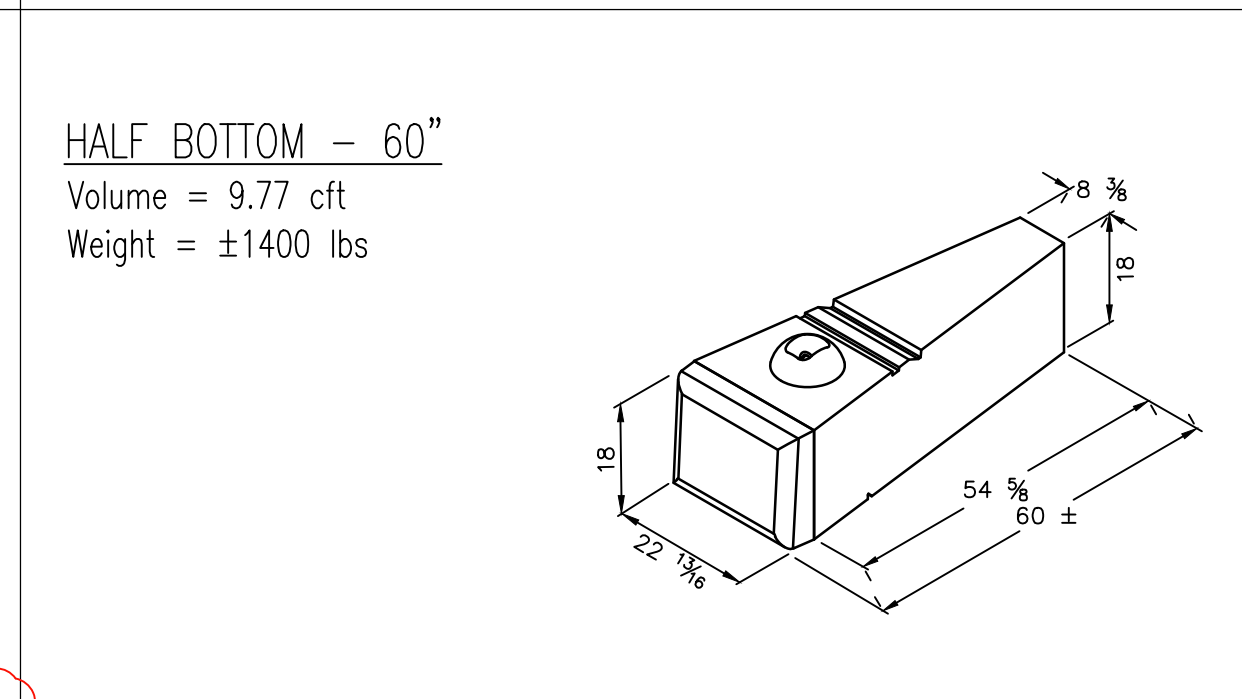
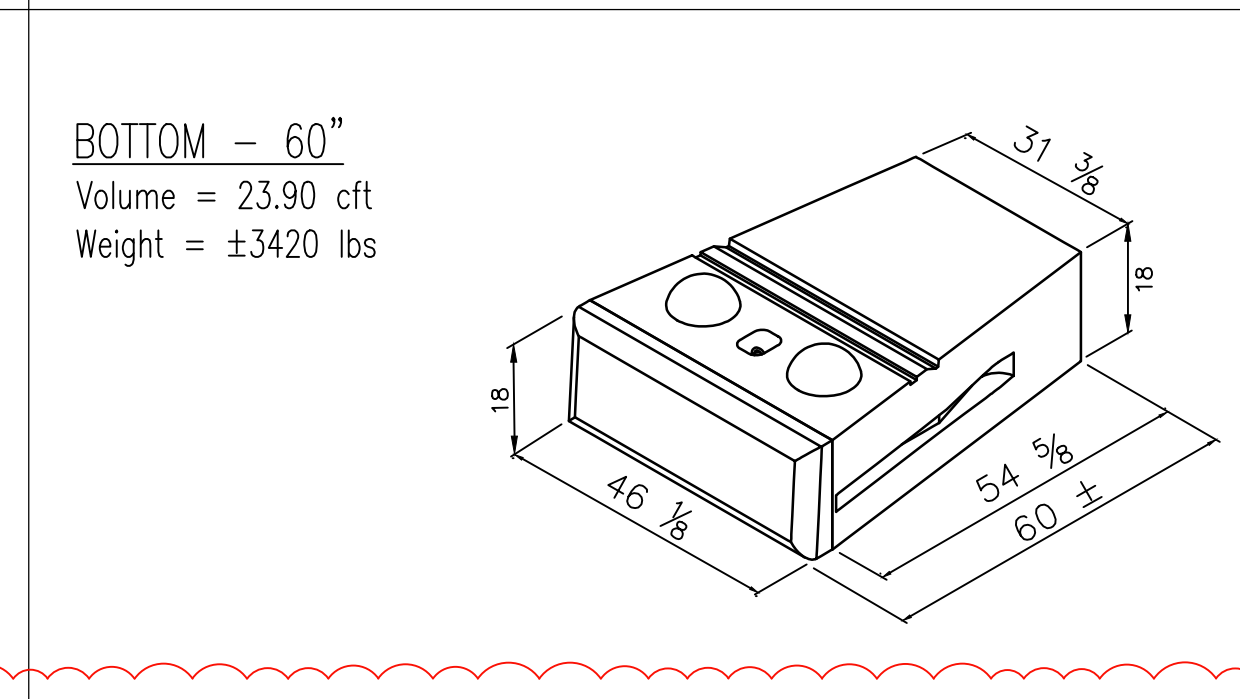
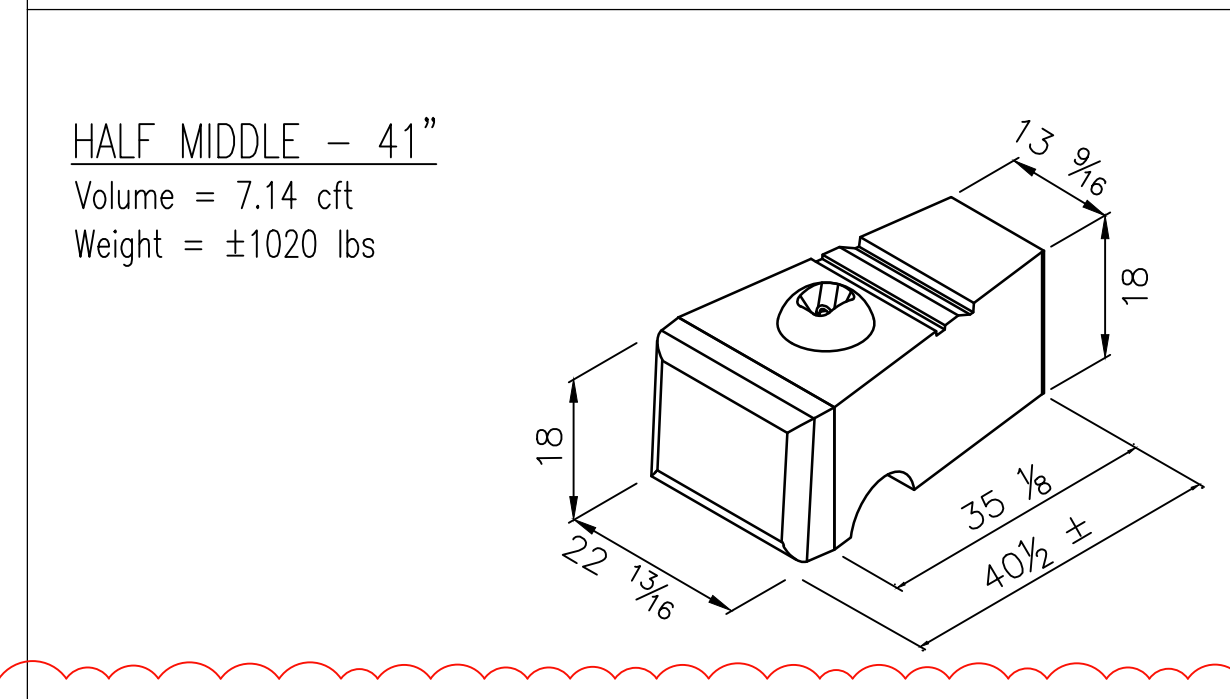
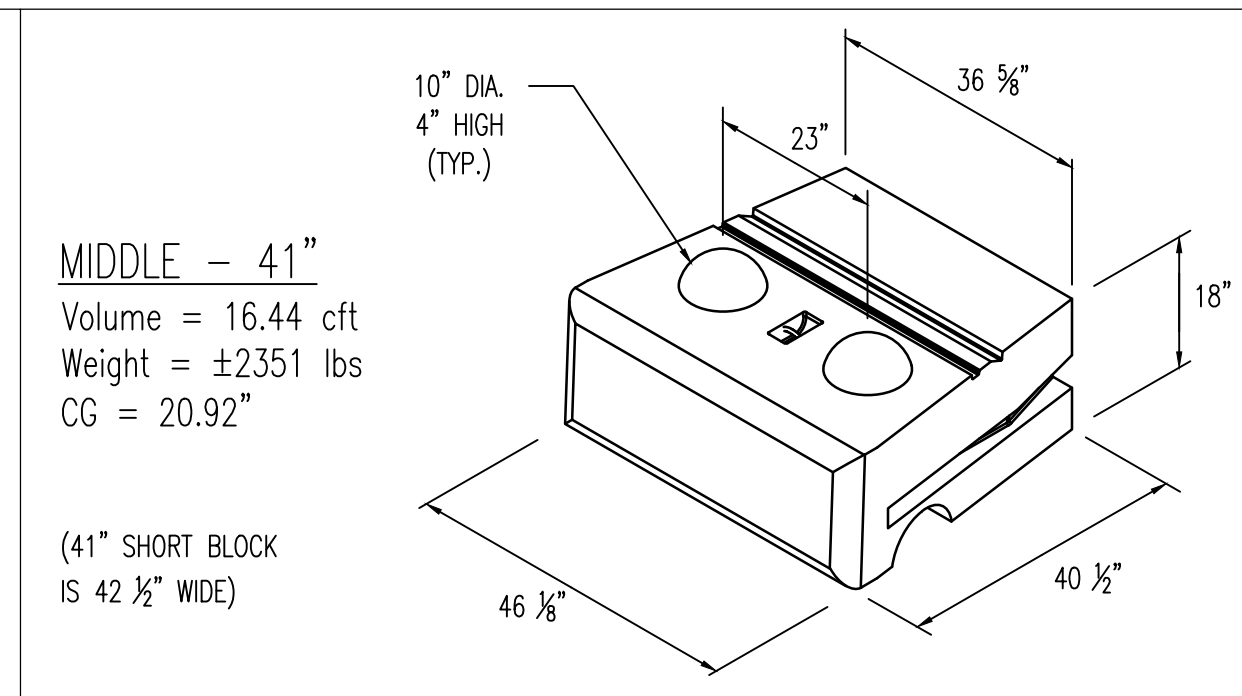
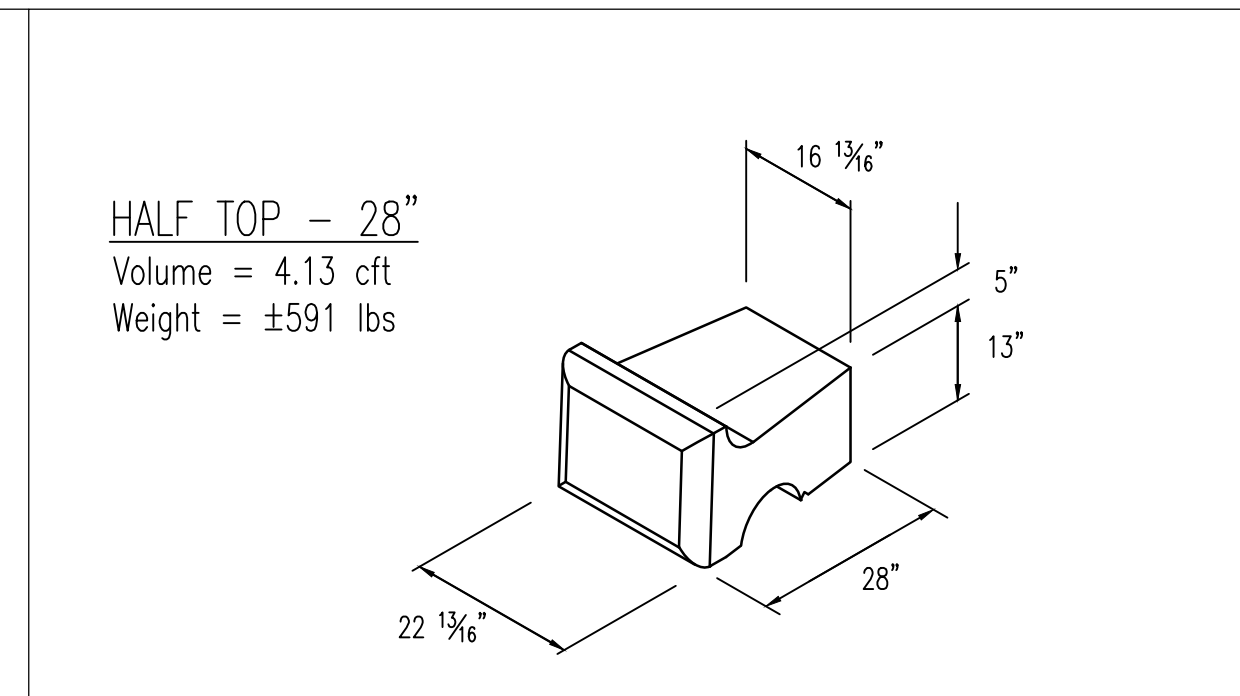
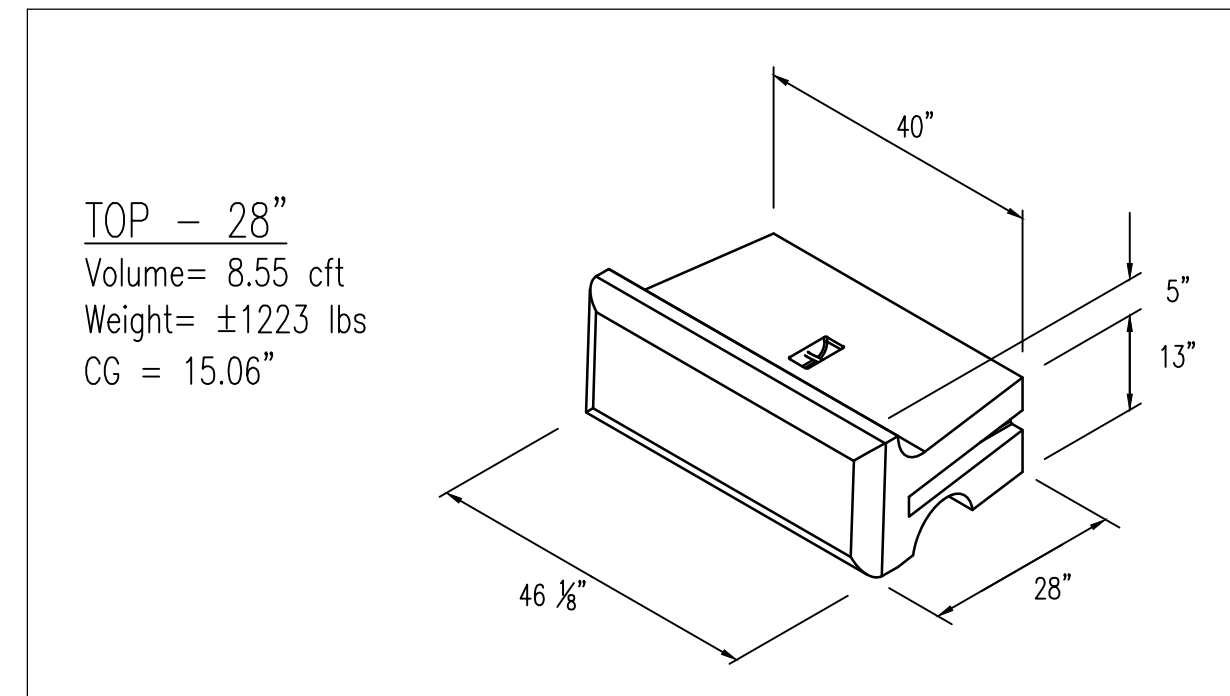
KS ASSOCIATES

DETAILS
BLUFF STABILIZATION
AT PAINESVILLE PARK
 LAKE COUNTY
 1025 HARDY ROAD,
 PAINESVILLE TOWNSHIP, OHIO 44077

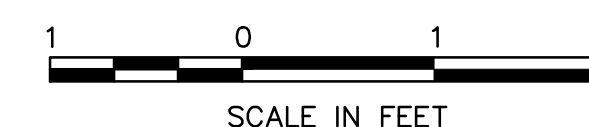
SHEET	8	OF	11
JOB NO.	24072		

GRAVITY BLOCK RETAINING WALL NOTES:

- THE BLOCKS SHOWN ARE REDI-ROCK DESIGNATIONS AND DIMENSIONS. THE CONTRACTOR MAY USE AN APPROVED EQUAL.
- THE SECTIONS SHOWN ARE REPRESENTATIVE WALL SECTIONS. THE WALL HEIGHTS, ELEVATIONS, FOOTER WIDTH, TOE SLOPES AND BACK SLOPES VARY ACCORDING TO THE ELEVATION PLAN AND SITE PLAN, RESPECTIVELY. SECTIONS AND DETAILS APPLY TO SAME AND SIMILAR CONDITIONS UNLESS SPECIFICALLY NOTED OTHERWISE.
- UPON EXCAVATION, WHERE UNSUITABLE SOILS ARE FOUND, SUBCUT TO DEPTH REQUIRED AND REPLACE WITH SUITABLE COMPACTED STRUCTURAL FILL TO ACHIEVE THE REQUIRED BEARING CAPACITY. THE STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY.
- APPROXIMATE LIMITS OF EXCAVATION VARIES WHERE SUBCUT IS REQUIRED. ACTUAL LIMITS AND SIDE SLOPES SHALL BE DETERMINED BY OSHA REGULATIONS AND MATCH FIELD CONDITIONS AS DETERMINED BY THE CONTRACTOR.
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL STATE, COUNTY, AND CITY REGULATIONS AND CODES AS WELL AS OSHA STANDARDS.
- THE RETAINING WALLS SHALL BE CONSTRUCTED WITH REDI-ROCK (OR AN APPROVED EQUAL PRODUCT) 28" AND 41" DEEP UNITS USING 5.1° BATTER.
- ALL WALLS ARE DESIGNED AS GRAVITY STRUCTURES. NO GEOGRID REINFORCEMENT IS REQUIRED.
- THE WALL SHALL BE BACKFILLED AT A MINIMUM 1H:2V EXTENDING OFF THE BACK OF THE BOTTOM UNIT WITH SELECT GRANULAR PER AASHTO LRFD 2012.
- 6" DIAMETER CORRUGATED PERFORATED PLASTIC DRAIN PIPE WRAPPED WITH A GEOTEXTILE FABRIC INSTALLED AS LOW AS POSSIBLE, OUTLET THROUGH WALL FACE AT THE CENTER OF EACH RETAINING WALL AND/OR INTO ONSITE DRAINAGE SYSTEM.
- TO PREVENT PONDING OF WATER, POSITIVE DRAINAGE SHALL BE PROVIDED AT THE TOP AND BOTTOM OF THE WALL. INSPECT EXCAVATION SLOPES FOR ACTIVE SEEPAGE AND PLACE ADDITIONAL DRAINS WHERE SEEPAGE OCCURS.
- SEE CONTRACT PLANS FOR FENCE/RAILING INSTALLATION DETAILS. KS ASSOCIATES INC. SHALL NOT BE RESPONSIBLE FOR ANY ADDITIONAL LOADING APPLIED TO THE RETAINING WALLS AS A RESULT OF FENCING OR TRAFFIC BARRIERS.
- ALL AVAILABLE MEANS AND METHODS SHALL BE USED TO KEEP EXCAVATION FOR THE RETAINING WALLS WITHIN THE CONSTRUCTION LIMITS SHOWN ON THE PLANS. EXCAVATION SLOPES SHALL BE DETERMINED BY OSHA REGULATIONS AND IN-SITU SOIL CONDITIONS.
- DURING WALL EXCAVATION, BENCH CUT AS REQUIRED TO FACILITATE BACKFILL OPERATION AND BOND BETWEEN THE IN-SITU MATERIAL AND BACKFILL MATERIAL.
- FAT CLAYS AND SHALES ARE OF CONCERN WITH REGARDS TO THEIR POTENTIAL VOLUME CHANGES. ALL FAT CLAY WITHIN A 1H:1V INFLUENCE AREA IN THE FOUNDATION SOIL SHALL BE REMOVED DOWN TO FROST AND REPLACED WITH ADEQUATE SOIL PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS AND DEPTHS OF EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. IF CONFLICTS EXIST THE ENGINEER SHALL BE CONTACTED IMMEDIATELY. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING CONDUITS AND SERVICES WITH THE UTILITY PROVIDER.
- DO NOT BRING HEAVY COMPACTION OR PAVING EQUIPMENT WITHIN 3 FEET OF THE BACK OF THE RETAINING WALL. ONLY HAND OPERATED COMPACTION EQUIPMENT (E.G. TAMPER, PLATE COMPACTOR, SHEEP'S FOOT ROLLER) SHALL BE USED WITHIN 3 FEET OF THE BACK OF THE RETAINING WALL UNITS.
- SEE MANUFACTURERS INFORMATION FOR ADDITIONAL DETAILS ON THE RETAINING WALL SYSTEM. THE MANUFACTURER INFORMATION SHALL ACCOMPANY THE CONSTRUCTION PLANS.



REDI-ROCK FOUNDATION DETAIL



GRAVITY BLOCK RETAINING WALL KEY/COUNT

28M	28" MIDDLE BLOCK:	0	28T	28" TOP BLOCK:	62
41M	41" MIDDLE BLOCK:	62	H41M	41" HALF MIDDLE BLOCK:	1
60B	60" BOTTOM BLOCK:	63	FS	FREESTANDING BLOCK:	2
			FST	FREESTANDING TOP BLOCK:	2

NOTE: CONTRACTOR SHALL CONFIRM ALL QUANTITIES.

DATE:	DRAWN BY:	CHK'D BY:	DWS. NAME:	PATH:	F.B.:	DESCRIPTION
10/09/24	DJP	MPC	REDIROCK DETAILS	CIVIL_3D		
REVISIONS						
<p>KS Associates, Inc. 260 Burns Road, Suite 100 Elyria, OH 44035 P 440 365 4730 F 440 365 4790 www.ksassociates.com</p>						
<p>REDIROCK DETAILS BLUFF STABILIZATION AT PAINESVILLE PARK LAKE COUNTY 1025 HARDY ROAD, PAINESVILLE TOWNSHIP, OHIO 44077</p>						
SHEET						10
OF						11
JOB NO.						24072