

KNOPF RESIDENCE HILLSIDE IMPROVEMENTS Mercer Island, WA.

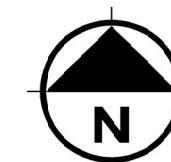
PERMIT SET AUGUST 21, 2019

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING	IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
SCALE: NO SCALE	CHK BY: DJ
	DRW BY: GF
	REF:



ADDRESS: 9507 SE 43rd STREET, MERCER ISLAND, WA. 98040

VICINITY MAP
SCALE: NTS



SITE PLAN
SCALE: NTS



LEGAL DESCRIPTION

SW ¼ OF NE QUARTER OF SECTION 18T 24N R 05 E W.M.
PARCEL NO'S: 0046100014, 1824059125, 1824059135,
0046100011 & 004610TRCT

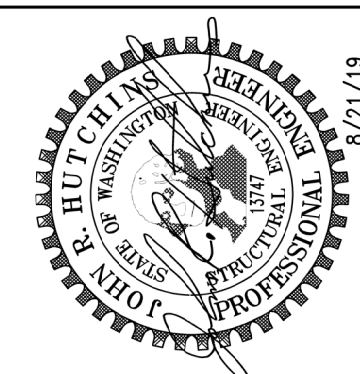
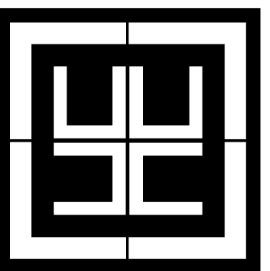
SHEET INDEX:

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- S1 HILLSIDE IMPROVEMENTS PLAN
- S2 HILLSIDE IMPROVEMENTS DETAILS
- S3 HILLSIDE IMPROVEMENTS DETAILS



Know what's below.
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KNOPF RESIDENCE
9507 SE 43rd Street
MERCER ISLAND WA. 98040
COVER SHEET, VICINITY MAP,
AND DRAWING INDEX

JOB NO. 19023.00

DATE: 8.21.19

SHEET: 1 OF 8

DWG.# G1

PERMIT SET

CIVIL GENERAL NOTES:

- SITE ADDRESS: 9507 SE 43rd STREET MERCER ISLAND WA 98040
- ELEVATIONS ARE IN FEET AND ARE REFERRED TO NAVD88
- OWNER WILL OBTAIN AND PAY FOR FEDERAL AND LOCAL ENVIRONMENTAL AND CONSTRUCTION PERMITS. ALL OTHER PERMITS WHICH MAY BE REQUIRED SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR, WHO SHALL COMPLY WITH ALL CONDITIONS OF THESE PERMITS.
- MATERIALS AND INSTALLATION SHALL COMPLY WITH INTERNATIONAL BUILDING CODE, 2015 EDITION, WITH CURRENT LOCAL AMENDMENTS, AND ALL OTHER APPLICABLE CODES, RULES AND REGULATIONS.
- THE GEOTECHNICAL REPORTS ARE DATED JANUARY 13, 2016 AND JANUARY 4, 2019 BY PANGEO. THE CONTRACTOR SHALL THOROUGHLY FAMILIARIZE ITSELF WITH THE CONTENTS THEREOF AND ALL EARTHWORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE RECOMMENDATIONS OF THESE REPORTS.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE STARTING WORK.
- EXISTING UTILITY LINES IN SERVICE OR OTHER SITE FEATURES WHICH ARE DAMAGED DUE TO THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE AND SHALL BE INSPECTED AND ACCEPTED BY THE ENGINEER.
- COORDINATE AND ARRANGE FOR ALL UTILITY SERVICE INTERRUPTIONS WITH APPROPRIATE UTILITY AND WITH OWNER.
- ALL DISTURBED AREAS OTHER THAN SPECIFIED CONTRACT WORK AREAS SHALL BE RETURNED TO THEIR PRECONSTRUCTION CONDITION PRIOR TO CONTRACT COMPLETION AND ACCEPTANCE.
- THIS PROJECT IS NOT A BALANCED EARTHWORK PROJECT. BOTH IMPORT AND EXPORT OF SOIL AND ROCK MATERIALS WILL BE REQUIRED.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL FACILITIES AS REQUIRED TO PREVENT EROSION AND TO INSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE NATURAL OR PUBLIC DRAINAGE SYSTEM OR ADJACENT WATERS.
- SURVEY INFORMATION AND UNDERGROUND UTILITY LOCATIONS USED IN THE PREPARATION OF THESE DRAWINGS WERE FURNISHED BY OTHERS. HARBOR CONSULTING ENGINEERS DOES NOT ASSUME RESPONSIBILITY FOR THEIR COMPLETENESS OR ACCURACY. LOCATIONS OF EXISTING UTILITIES SHOULD BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF THESE LOCATIONS AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES WHICH MAY BE AFFECTED BY ITS WORK.
- COPIES OF ALL ENVIRONMENTAL PERMITS WILL BE FURNISHED TO THE CONTRACTOR, WHO SHALL COMPLY WITH ALL CONDITIONS OF THESE PERMITS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF SAFE WORKING CONDITIONS AND SHALL INSTALL AND MAINTAIN SHORING AND BRACING NECESSARY TO PROTECT WORKERS, EXISTING STRUCTURES, UTILITIES AND OTHER IMPROVEMENTS AND EXCAVATIONS AGAINST LOSS OF GROUND OR CAVING EMBANKMENTS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVAL OF SHORING AND BRACING AS REQUIRED.
- THE OWNER'S PREMISES WILL BE OCCUPIED AND IN SERVICE DURING PROGRESS OF THE WORK. CONTRACTOR SHALL MINIMIZE THE EFFECTS OF ITS WORK ON NORMAL ACTIVITIES ADJACENT TO THE PROJECT SITE AND SHALL COORDINATE ALL SCHEDULES AND WORK WITH THE OWNER.
- CONSTRUCTION DEBRIS SHALL NOT BE STORED OR BURNED ON SITE. DEBRIS SHALL BE REMOVED DAILY AND SHALL NOT BE ALLOWED TO ENTER THE WATER.
- ALL APPROVED DEVIATIONS FROM THESE PLANS SHALL BE RECORDED ON A SET OF 'AS-BUILT' DRAWINGS, SUBMITTED TO THE OWNER'S REPRESENTATIVE AS THE PROJECT PROGRESSES AND SHALL BE SUMMARIZED ON ONE FULL-SIZE SET OF AS-BUILT REPRODUCIBLE DRAWINGS PRIOR TO PROJECT COMPLETION AND ACCEPTANCE.
- A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

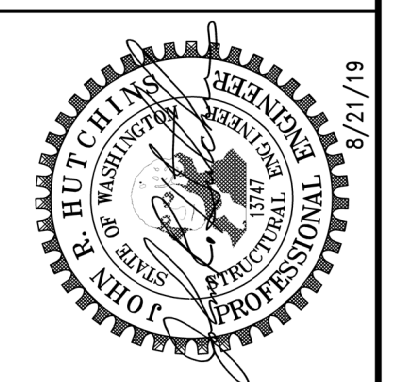
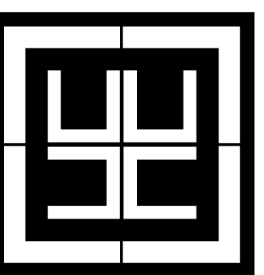
VERIFY SCALE

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SCALE:	NIS
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KNOPF RESIDENCE
 9507 SE 43rd Street
 MERCER ISLAND WA, 98040
CIVIL GENERAL NOTES

JOB NO.	19023.00
DATE:	8.21.19
SHEET:	2 OF 8
DWG.#	C1



LEGEND					
(ALL SYMBOLS MAY NOT BE USED ON THE DRAWINGS)					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
1.	FIRE HYDRANT	18.	INDICATES OBSERVED GROUNDWATER SEEPAGE IN 2017.	32.	30" SD STORM DRAIN LINE WITH SIZE
2.	WATER METER	19.	INDICATES EXISTING CATCH BASIN.	33.	SANITARY SEWER LINE
3.	WATER VALVE W/ VALVE BOX	20.	INDICATES EXISTING CULVERT WITH IDENTIFYING NUMBER BELOW DRIVEWAY.	34.	6" SS SANITARY SEWER LINE WITH SIZE
4.	WATER MANHOLE	21.	INDICATES TECCO MESH INSTALLED ON SLOPES GREATER THAN 60%.	35.	GAS MAIN
5.	MONITORING WELL	22.	EXISTING FEATURES	36.	TREE
6.	ELECTRICAL UTILITY HATCH	23.	PROPOSED FEATURES	37.	EXISTING SPOT ELEVATIONS
7.	POWER VAULT	24.	PROPERTY LINE	38.	PROPOSED SPOT ELEVATIONS
8.	LIGHT POLE	25.	TELEPHONE CONDUIT	39.	SWALE
9.	GUY WIRE AND ANCHOR	26.	BUILDING	40.	INDICATES: C.O.M.I. MAPPED TYPE 2 PERENNIAL WATER COURSE.
10.	CATCH BASIN	27.	FENCE	41.	INDICATES: R.W. THORPE 2006 SURVEYED TYPE 2 PERENNIAL WATER COURSE.
11.	GAS VALVE	28.	FIRE PROTECTION		
12.	GAS METER	29.	WATER MAIN		
13.	TELEPHONE MANHOLE	30.	UNDERGROUND ELECTRICAL LINE		
14.	SIGN POST	31.	STORM DRAIN LINE		
15.	CONTROL POINT				
16.	INDICATES EXISTING ASPHALT PAVING.				
17.	INDICATES PROPERTY LINE BOUNDARY.				

PERMIT SET

POST CONSTRUCTION SOIL MANAGEMENT PLAN

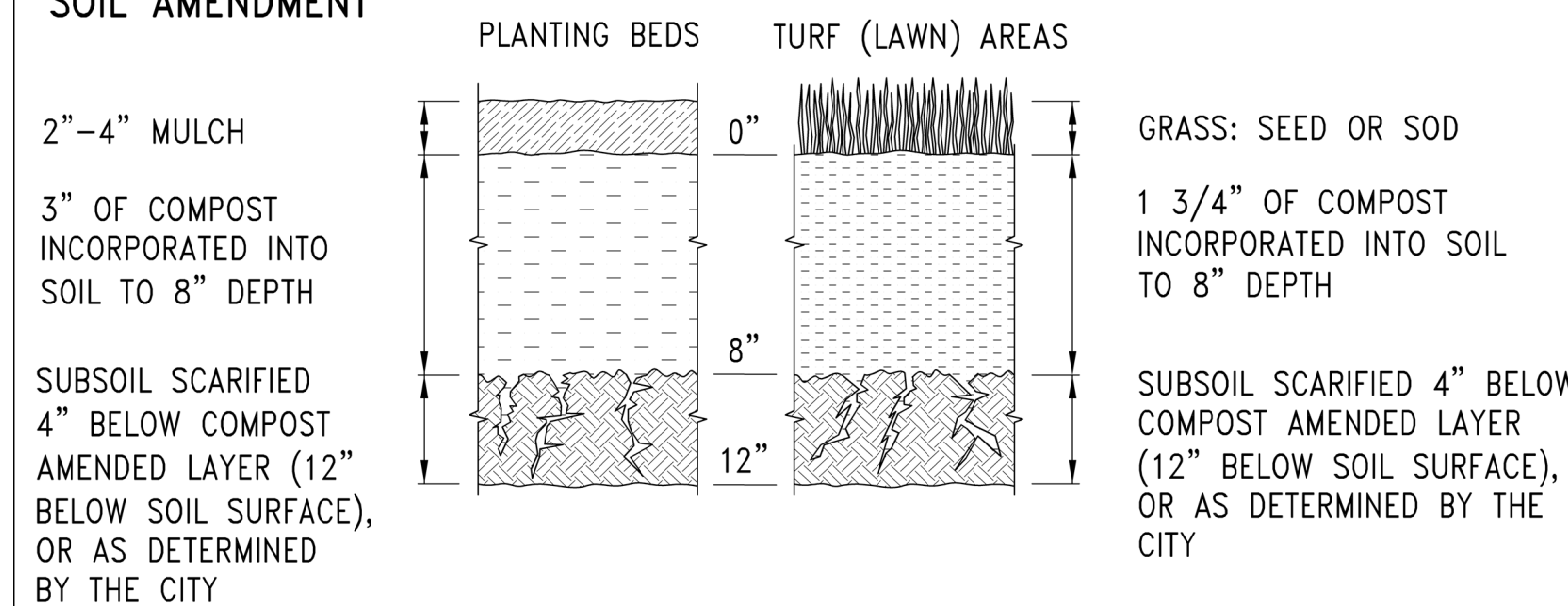
AT THE END OF PROJECT, ALL AREAS DISTURBED AND NOT COVERED WITH A HARD SURFACE MUST BE AMENDED PER THE SOIL AMENDMENT DETAIL BELOW AND PROBED TO 12-INCHES AT THE SITE FINAL INSPECTION.

- > LABEL ALL AREAS DISTURBED AND NOT COVERED WITH A HARD SURFACE WITHIN THE SITE AS ONE OF THE FOLLOWING: SA (SOIL AMENDMENT AREA) or ND (NON-DISTURBED AREA). SEE DEFINITIONS BELOW.
- > AN ESTIMATE OF THE VOLUME OF COMPOST REQUIRED IS AUTOMATICALLY CALCULATED ON THE SITE AND DRAINAGE CONTROL SUMMARY SHEET REQUIRED ON THE DRAINAGE AND WASTEWATER CONTROL PLAN (DWC PLAN). THE ACTUAL VOLUME OF COMPOST REQUIRED WILL BE DETERMINED IN THE FIELD.

DEFINITIONS:

- **NON-DISTURBED AREA:** VEGETATED AREAS THAT WILL NOT BE SUBJECT TO LAND DISTURBING ACTIVITY DO NOT REQUIRE SOIL AMENDMENT IF THEY ARE FENCED AND CONTINUOUSLY PROTECTED THROUGHOUT CONSTRUCTION. THE FENCING MUST BE IN PLACE AT THE FIRST GROUND DISTURBANCE INSPECTION. THIS WILL BE MONITORED BY THE BUILDING DEPARTMENT SITE INSPECTOR. NO DISTURBANCE, INCLUDING VEHICLE TRAFFIC OR MATERIAL STORAGE, IS ALLOWED IN THESE AREAS UNTIL FINAL INSPECTION. LABEL THESE AREAS AS (ND) IN THE PLAN VIEW.
- **SOIL AMENDMENT AREA (SA):** VEGETATED OR COMPOST AREAS (TURF AND LANDSCAPE) MUST BE AMENDED PER THE SOIL AMENDMENT DETAIL AND THE SUBSOIL MUST BE LOOSENEED SO IT WILL PROBE TO A DEPTH OF 12 INCHES PRIOR TO SITE FINAL INSPECTION. THIS INCLUDES AREAS IMPACTED BY CLEARING AND GRADING, STOCKPILING, SITE ACCESS, PATHWAYS AND MATERIALS OR EQUIPMENT STORAGE. LABEL THESE AREAS AS (SA) IN THE PLAN VIEW.

SOIL AMENDMENT



NOTES:

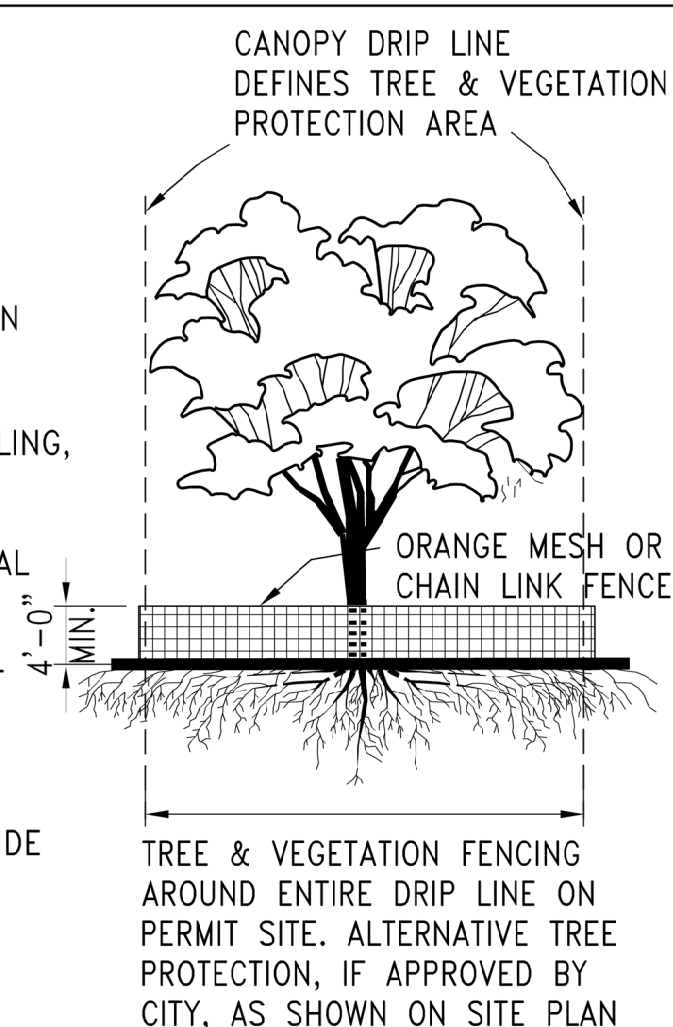
1. POST CONSTRUCTION SOIL AMENDMENT IS REQUIRED ON ALL AREAS NOT COVERED BY IMPERVIOUS SURFACE WHERE SOIL IS DISTURBED DURING CONSTRUCTION.
2. SOIL AMENDMENT MUST PASS A 12 INCH MINIMUM PROBE TEST.

SYMBOL: (SA) AREA REQUIRING SOIL AMENDMENT (ND) NON-DISTURBED AREA (SOIL AMENDMENT NOT REQUIRED)

TREE & VEGETATION PROTECTION

TREE PROTECTION FENCING

1. MUST BE INSTALLED PRIOR TO DEMOLITION OR GROUND DISTURBANCE
2. KEPT IN PLACE FOR THE DURATION OF CONSTRUCTION
3. NO SOIL DISTURBANCE OR ACTIVITY ALLOWED WITHIN FENCED AREA, SUCH AS MATERIAL STORAGE/STOCKPILING, PARKING, EXCAVATION, DUMPING, OR WASHING
4. MODIFICATIONS OF THESE REQUIREMENTS BY APPROVAL OF BUILDING DEPARTMENT PLANNER ONLY
5. IF ROOTS GREATER THAN 2 INCH FOUND OUTSIDE OF FENCING, PROTECT BY HAND EXCAVATION AND, IF NECESSARY, CUT CLEANLY AND KEEP MOIST
6. USE 3 INCHES OR DEEPER WOOD CHIP MULCH OUTSIDE FENCED AREAS TO PROTECT FEEDER ROOTS

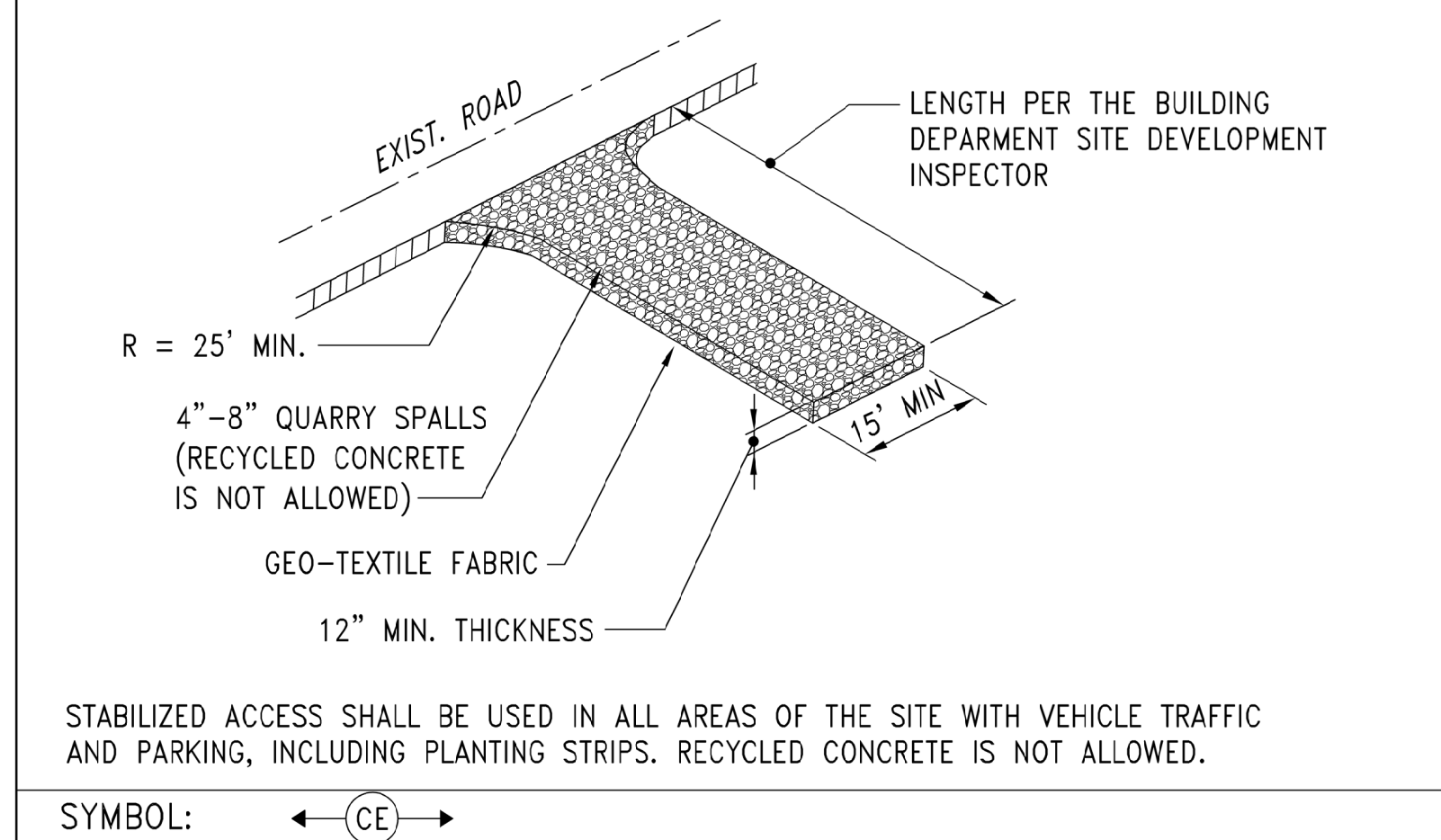


VEGETATION PROTECTION

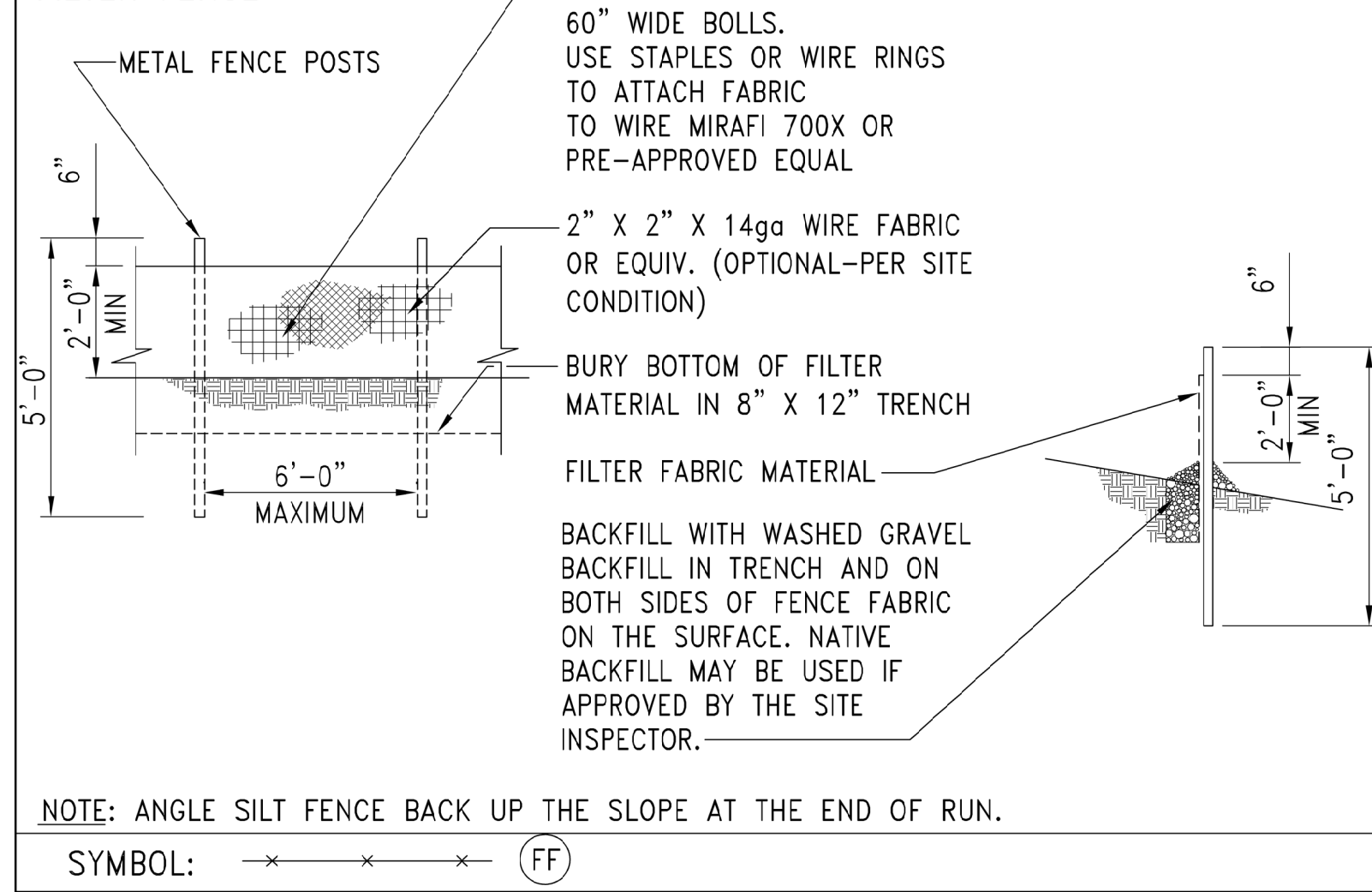
1. MINIMIZE CONSTRUCTION ZONE
2. PROTECT VEGETATION OUTSIDE CONSTRUCTION ZONE WITH FENCING AS SHOWN
3. USE 3 INCHES OR DEEPER WOOD CHIP MULCH OUTSIDE FENCED AREAS TO PROTECT FEEDER ROOTS

SYMBOL: (VEG) LINK TO MORE TREE PROTECTION INFORMATION:

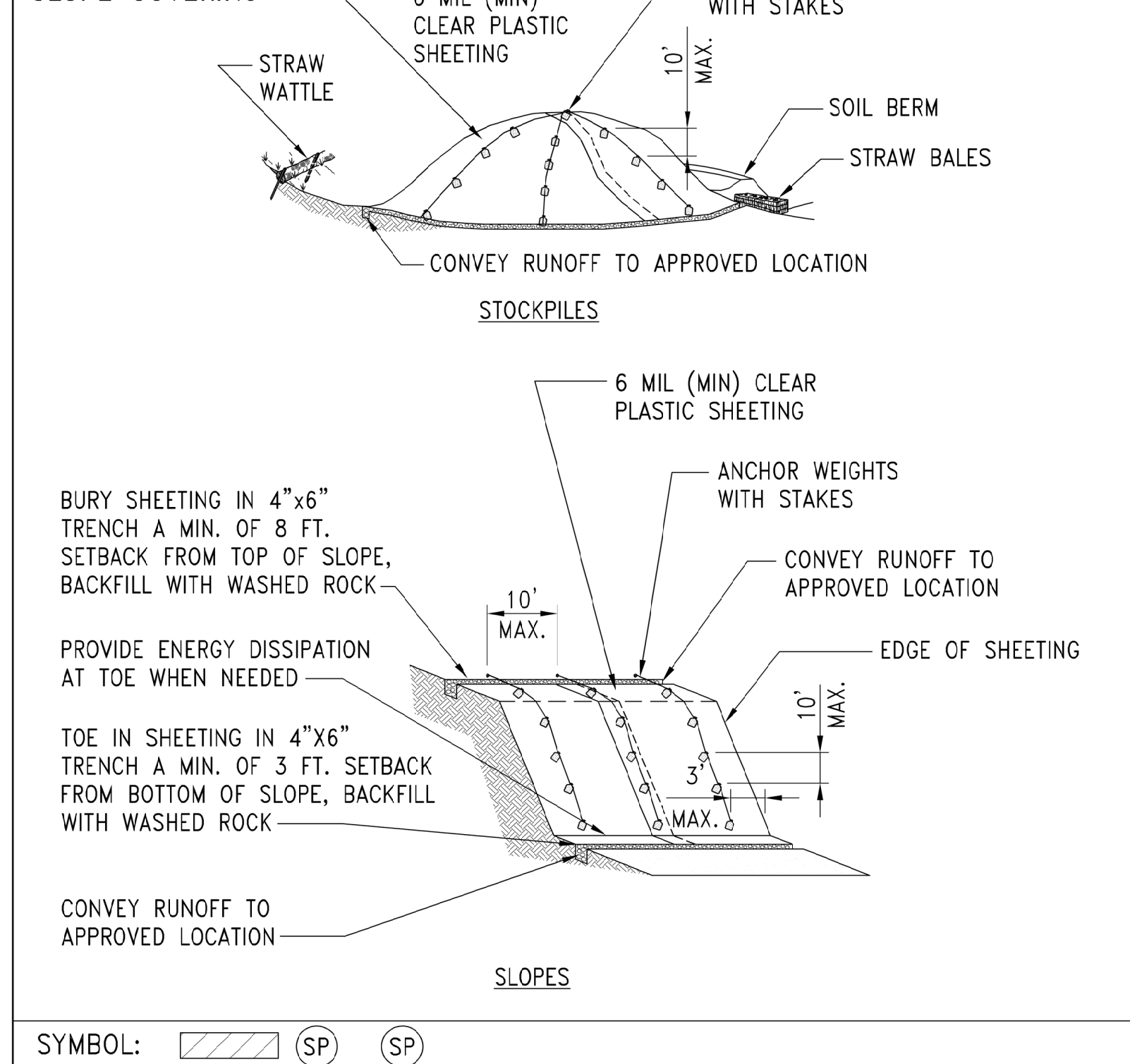
STABILIZED CONSTRUCTION ACCESS



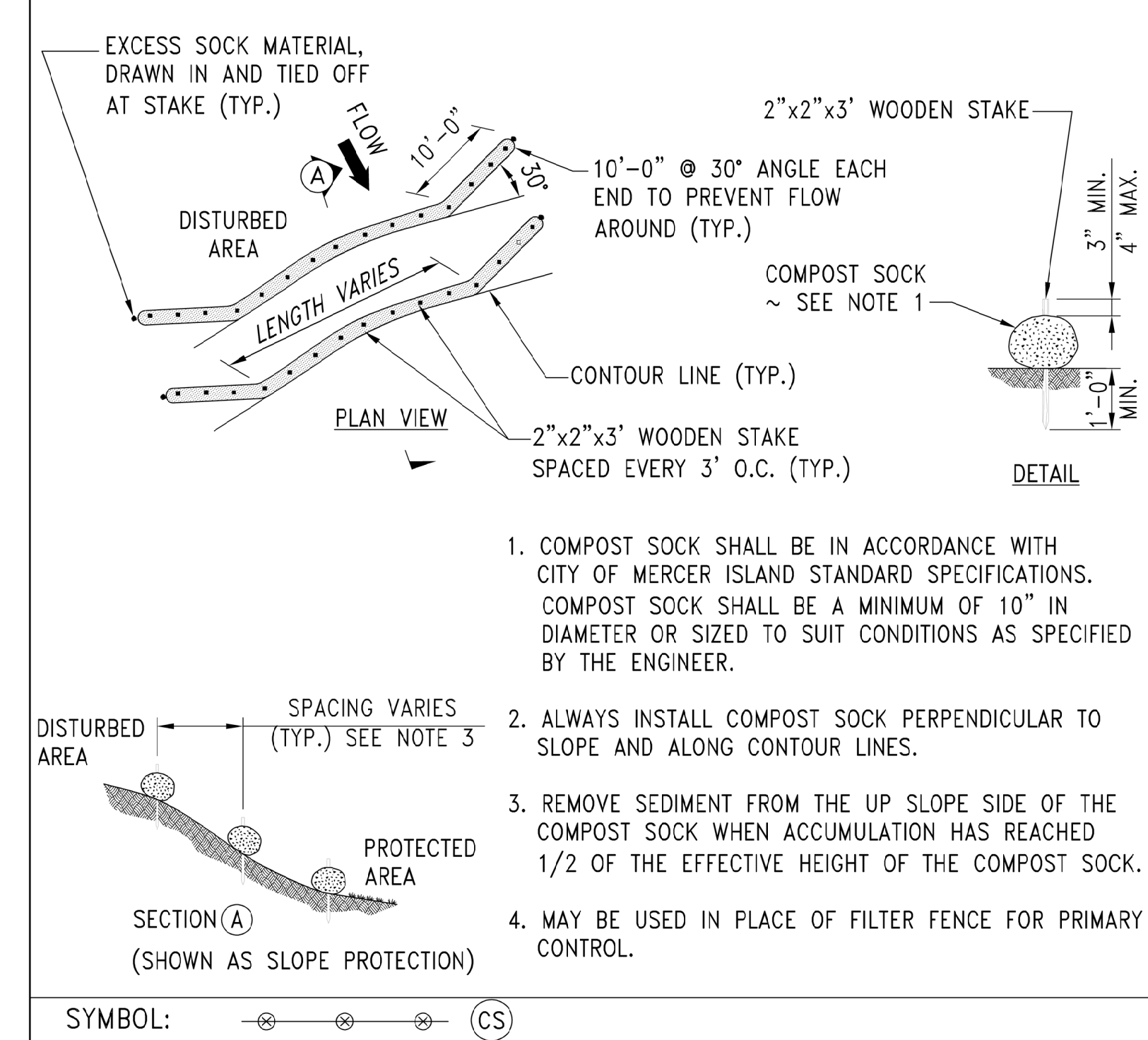
FILTER FENCE



STOCKPILE AND EXPOSED SLOPE COVERING



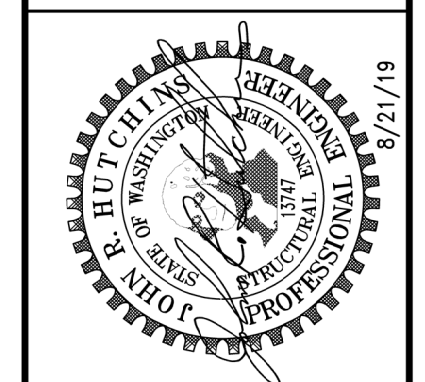
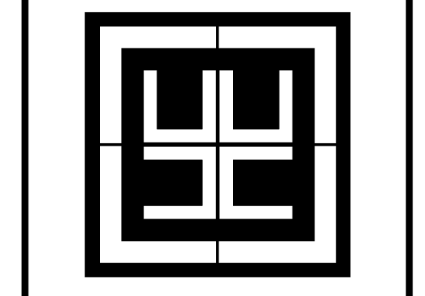
COMPOST SOCK



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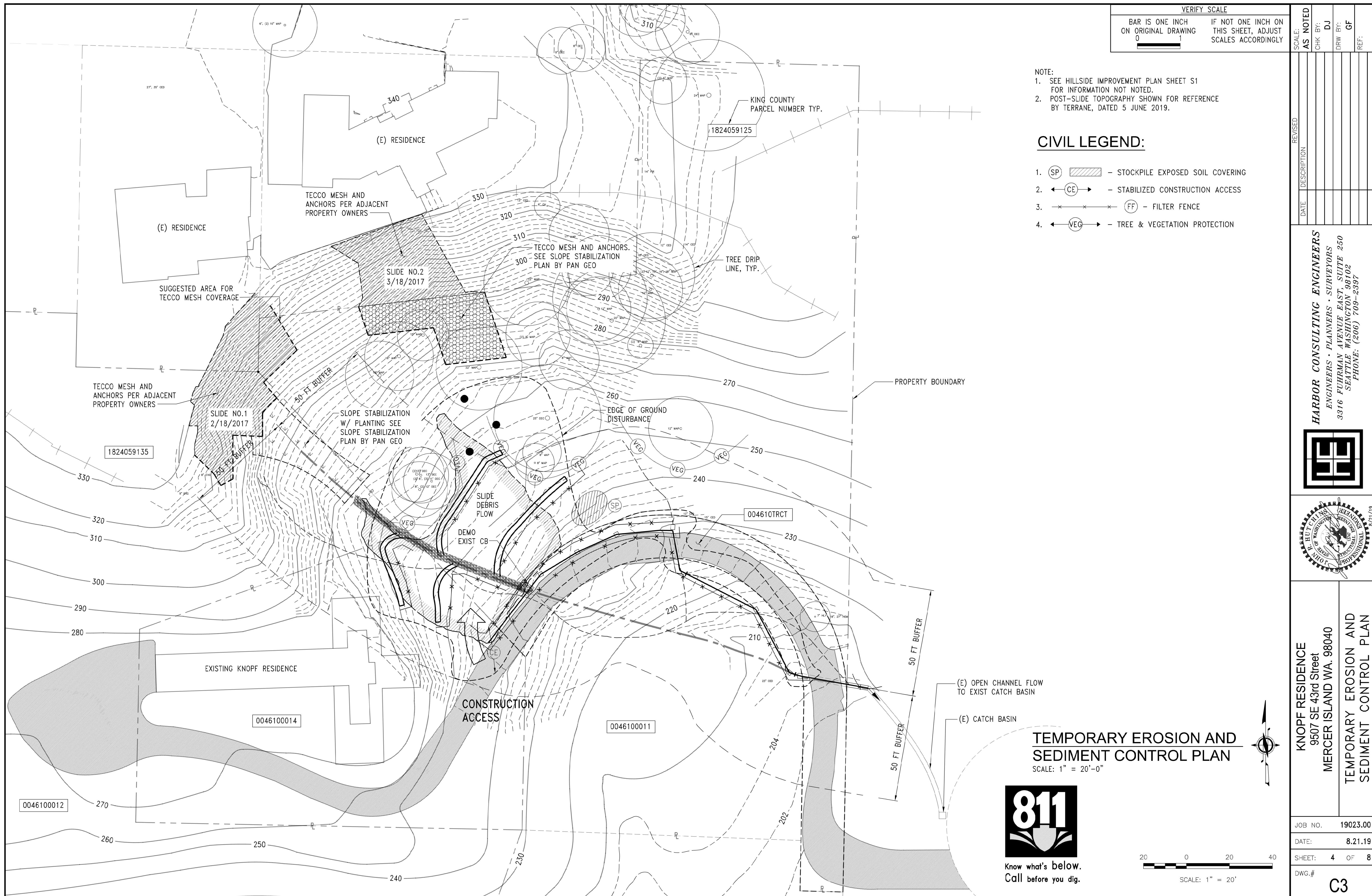
TEMPORARY EROSION AND SEDIMENT CONTROL DETAILS

JOB NO.	19023.00
DATE:	8.21.19
SHEET:	3 OF 8
DWG.#	



C2

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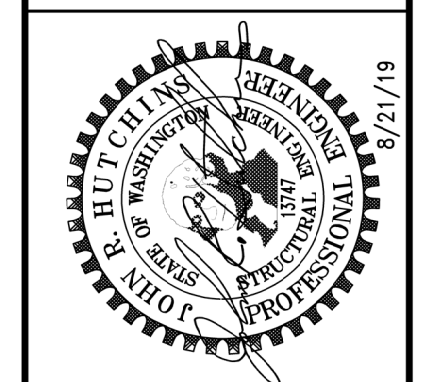
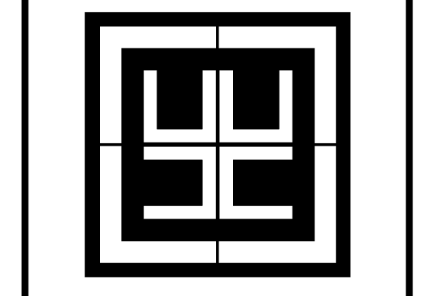
NOTE:
 1. SEE HILLSIDE IMPROVEMENT PLAN SHEET S1 FOR INFORMATION NOT NOTED.
 2. POST-SLIDE TOPOGRAPHY SHOWN FOR REFERENCE BY TERRANE, DATED 5 JUNE 2019.

CIVIL LEGEND:

- (SP) [diagonal hatching] - STOCKPILE EXPOSED SOIL COVERING
- [dashed line with arrows] (CE) - STABILIZED CONSTRUCTION ACCESS
- [line with 'x' markers] (FF) - FILTER FENCE
- [line with 'V' markers] (VEG) - TREE & VEGETATION PROTECTION

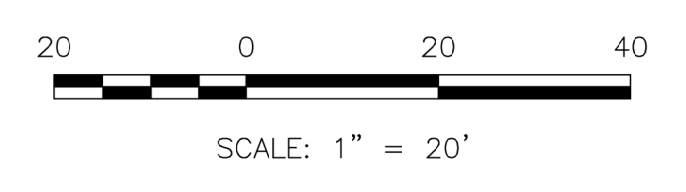
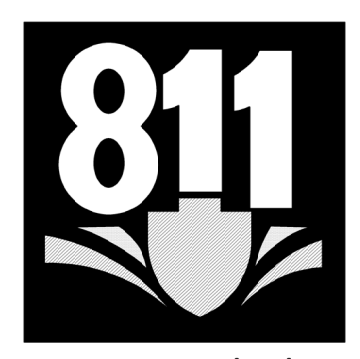
DATE	DESCRIPTION	REVISED

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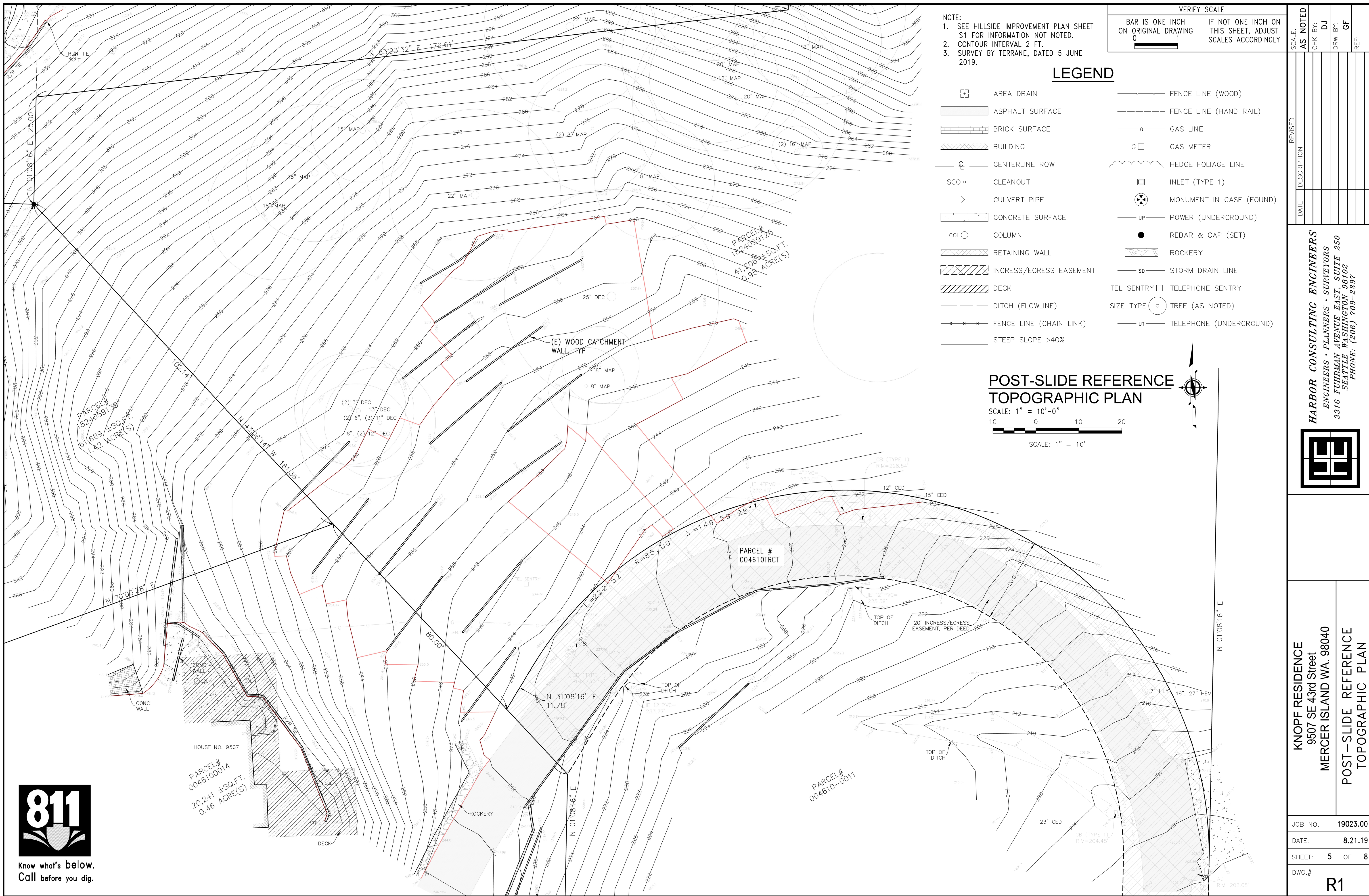
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TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN
 SCALE: 1" = 20'-0"



JOB NO.	19023.00
DATE:	8.21.19
SHEET:	4 OF 8
DWG.#	C3

PERMIT SET



NOTE:
 1. SEE HILLSIDE IMPROVEMENT PLAN SHEET S1 FOR INFORMATION NOT NOTED.
 2. CONTOUR INTERVAL 2 FT.
 3. SURVEY BY TERRANE, DATED 5 JUNE 2019.

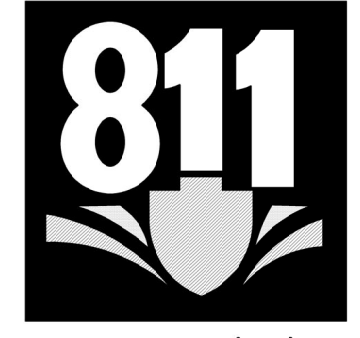
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LEGEND

- AREA DRAIN
- ASPHALT SURFACE
- BRICK SURFACE
- BUILDING
- CENTERLINE ROW
- CLEANOUT
- CULVERT PIPE
- CONCRETE SURFACE
- COLUMN
- RETAINING WALL
- INGRESS/EGRESS EASEMENT
- DECK
- DITCH (FLOWLINE)
- FENCE LINE (CHAIN LINK)
- STEEP SLOPE >40%
- FENCE LINE (WOOD)
- FENCE LINE (HAND RAIL)
- GAS LINE
- GAS METER
- HEDGE FOLIAGE LINE
- INLET (TYPE 1)
- MONUMENT IN CASE (FOUND)
- POWER (UNDERGROUND)
- REBAR & CAP (SET)
- ROCKERY
- STORM DRAIN LINE
- TELEPHONE SENTRY
- TELEPHONE (UNDERGROUND)
- TREE (AS NOTED)

POST-SLIDE REFERENCE TOPOGRAPHIC PLAN

SCALE: 1" = 10'-0"
 10 0 10 20
 SCALE: 1" = 10'



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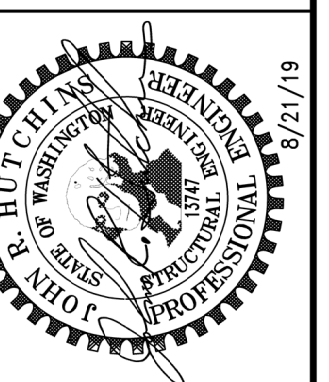
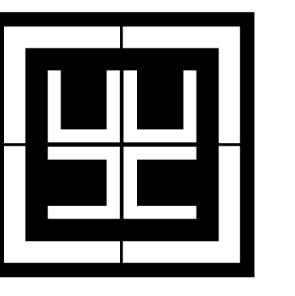
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DATE:	DESCRIPTION:	REVISED:				
<p>HARBOR CONSULTING ENGINEERS ENGINEERS • PLANNERS • SURVEYORS 3316 FUHRMAN AVENUE EAST, SUITE 250 SEATTLE, WASHINGTON 98102 PHONE: (206) 709-2397</p>						
<p>KNOPF RESIDENCE 9507 SE 43rd Street MERCER ISLAND WA, 98040</p> <p>POST-SLIDE REFERENCE TOPOGRAPHIC PLAN</p>						
JOB NO.	19023.00					
DATE:	8.21.19					
SHEET:	5 OF 8					
DWG.#	R1					
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DATE	DESCRIPTION	REVISED

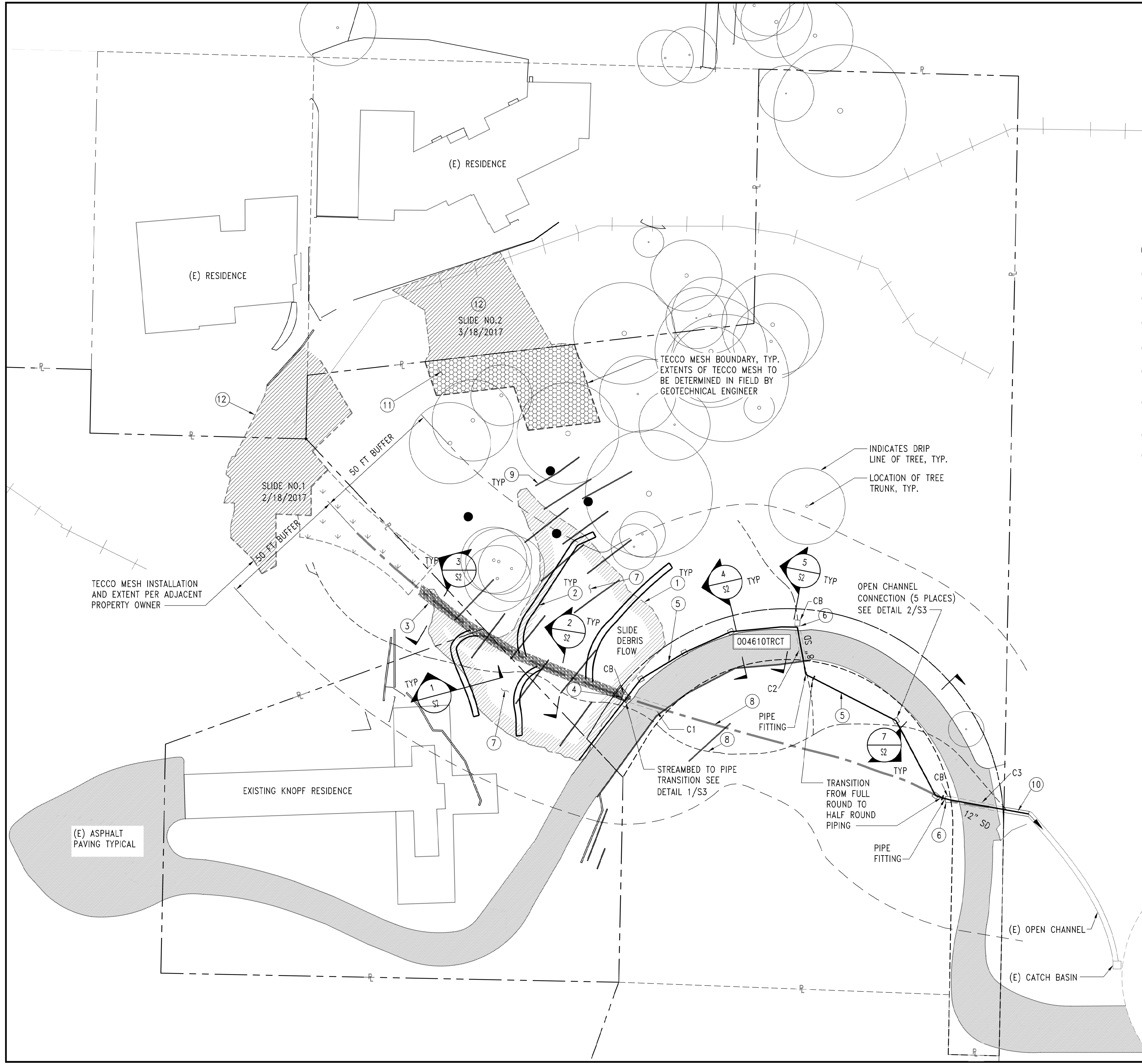
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KNOPF RESIDENCE
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HILLSIDE IMPROVEMENTS PLAN

JOB NO. 19023.00
 DATE: 8.21.19
 SHEET: 6 OF 8
 DWG.# S1

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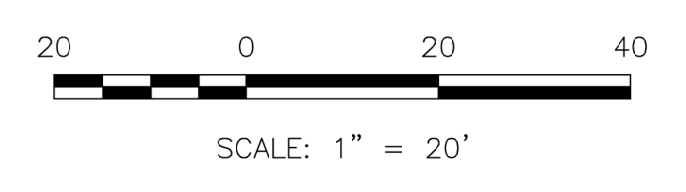
KEY SYMBOLS FOR WORK ITEMS:

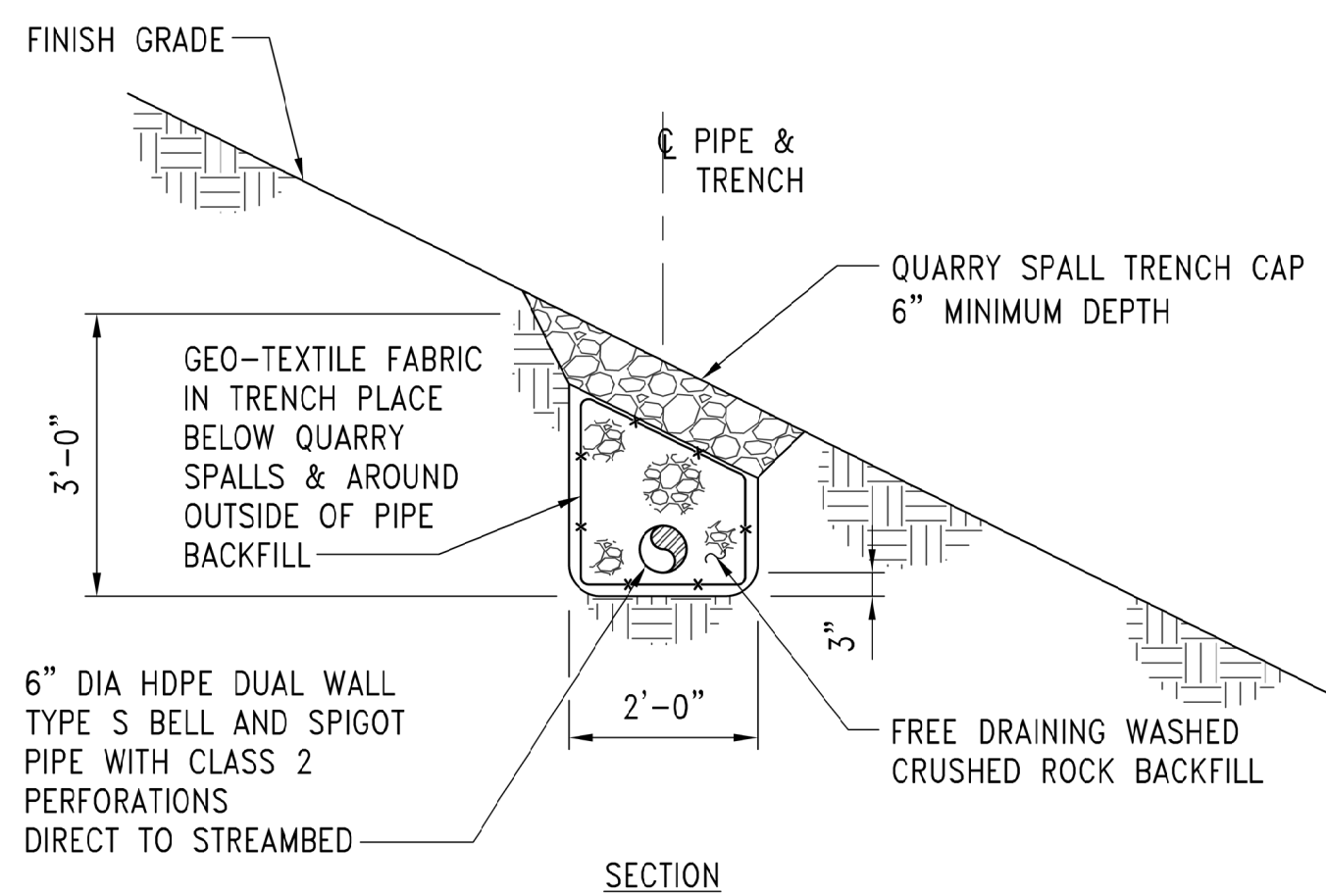
- ① - REMOVE AND DISPOSE OF SLIDE DEBRIS SOILS AS REQUIRED TO INSTALL GROUND WATER COLLECTION SYSTEM. APPROXIMATELY 75 CY.
- ② - PERFORATED PIPE IN CRUSHED ROCK TRENCH WITH GEO-TEXTILE FOR GROUND WATER AND SURFACE RUNOFF COLLECTION AND DISCHARGE TO STREAM BED.
- ③ - LINE REESTABLISHED STREAM BED AND EXPOSED EXISTING STREAM BED WITH QUARRY SPALLS.
- ④ - REDIRECT STREAM BED FROM CATCH BASIN TO OPEN CHANNEL. REMOVE CATCH BASIN AND PLUG CULVERT.
- ⑤ - MANUFACTURED 12" HALF ROUND OPEN CHANNEL.
- ⑥ - RAISE CATCH BASIN RIM ELEVATION TO 3" BELOW PAVEMENT AND REPLACE WITH INCLINED SCREEN. CLEAN CATCH BASIN AND CULVERT.
- ⑦ - INSTALL LANDSCAPE ROCKERIES AND NATIVE PLANTINGS IN SLIDE AREA. SEE PLANTING PLAN BY NORTHWEST ENVIRONMENTAL CONSULTING.
- ⑧ - RE-ALIGN STREAM TO OPEN CHANNEL.
- ⑨ - REMOVE TEMPORARY EMERGENCY CATCHMENT WALLS.
- ⑩ - INSTALL 12" DIA HALF-ROUND PIPE FOR STREAM TO DOWN SLOPE DISCHARGE LOCATION.
- ⑪ - INSTALL TECCO MESH SLOPE STABILIZATION. SEE SLOPE STABILIZATION PLAN FOR DETAILS
- ⑫ - TECCO MESH SLOPE STABILIZATION PERFORMED BY ADJACENT PROPERTY OWNERS

NOTE
 1. TECCO MESH IS MANUFACTURED BY GEOBRUGG WWW.GEOBRUGG.COM TELEPHONE: 1-505-771-4080

TOPOGRAPHY NOT SHOWN FOR CLARITY. SEE SHEET R1 FOR POST SLIDE TOPOGRAPHY.

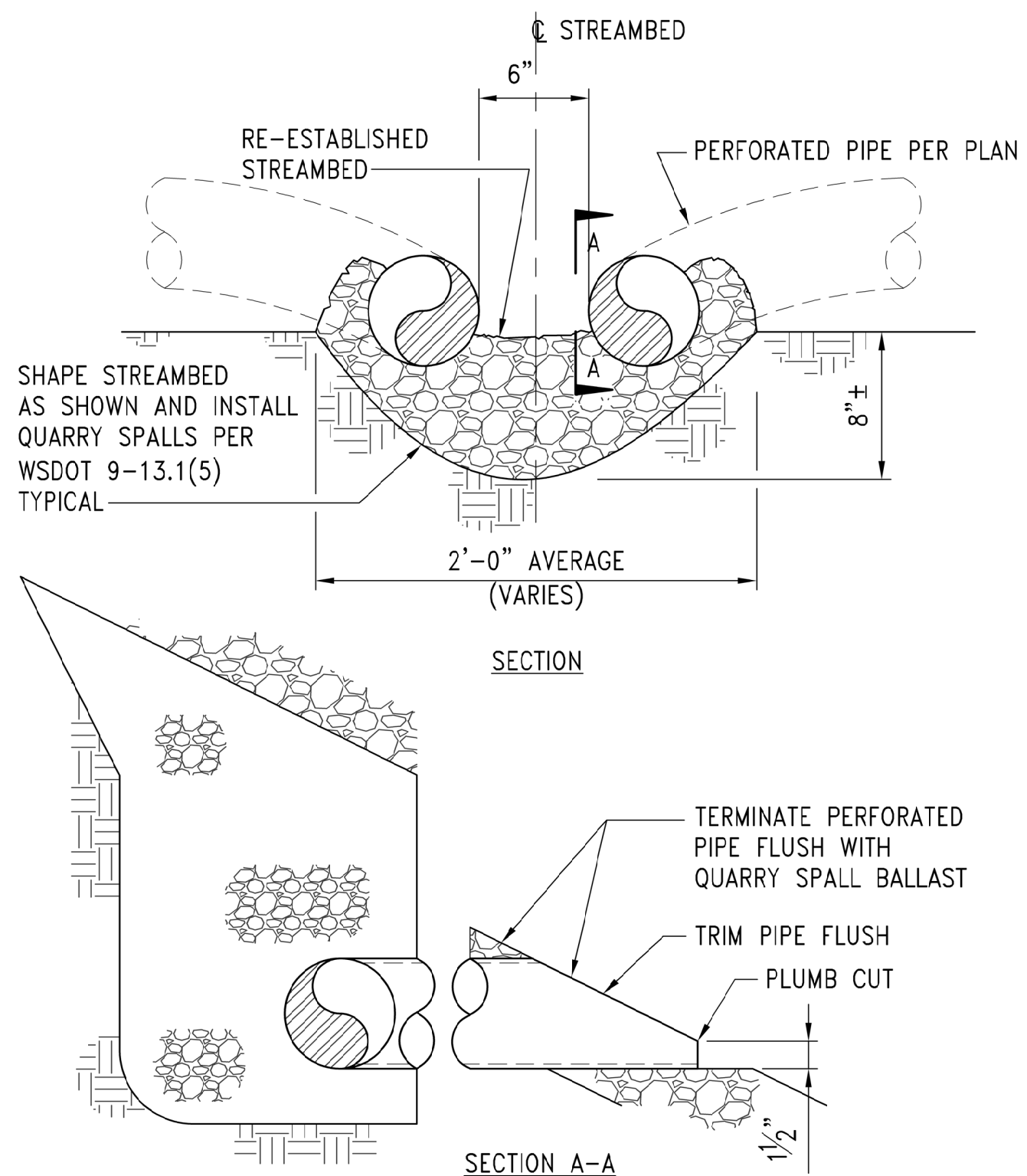
HILLSIDE IMPROVEMENTS PLAN
 SCALE: 1" = 20'-0"





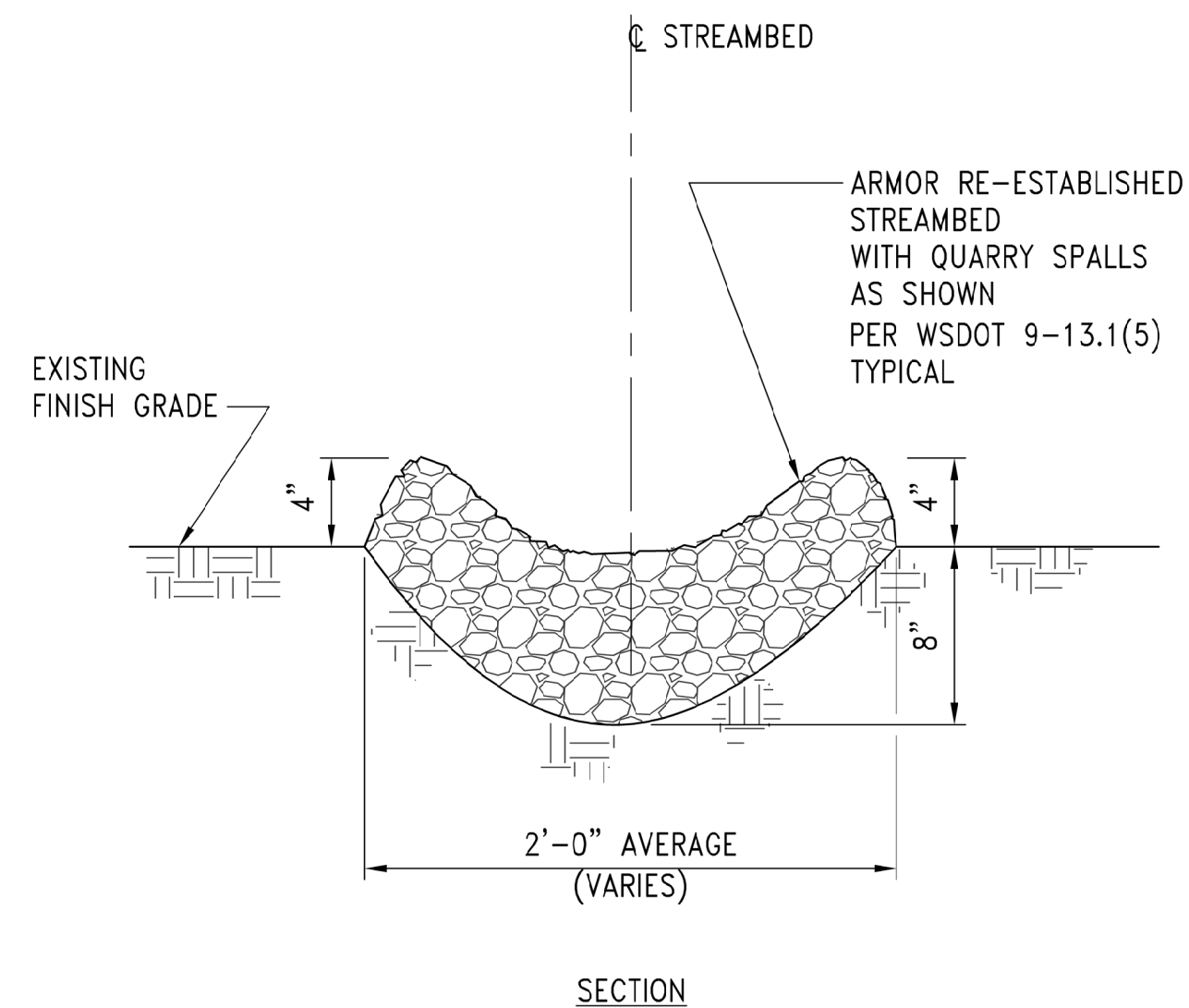
TYP GROUND WATER COLLECTION TRENCH

SCALE: 1/2" = 1'-0"



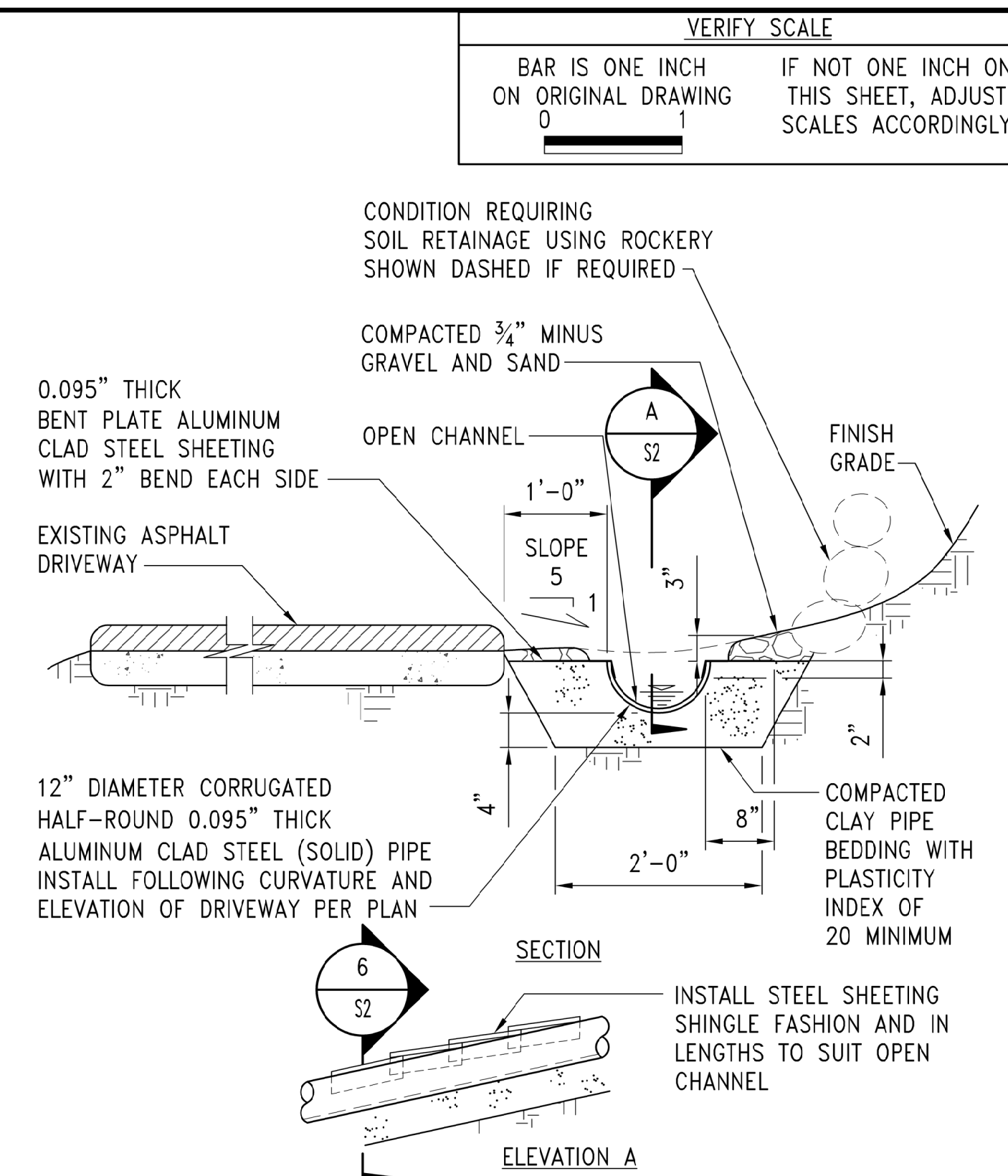
TYP STREAMBED W/ GROUND WATER COLLECTION PIPE TERMINATION

SCALE: 1 1/2" = 1'-0"



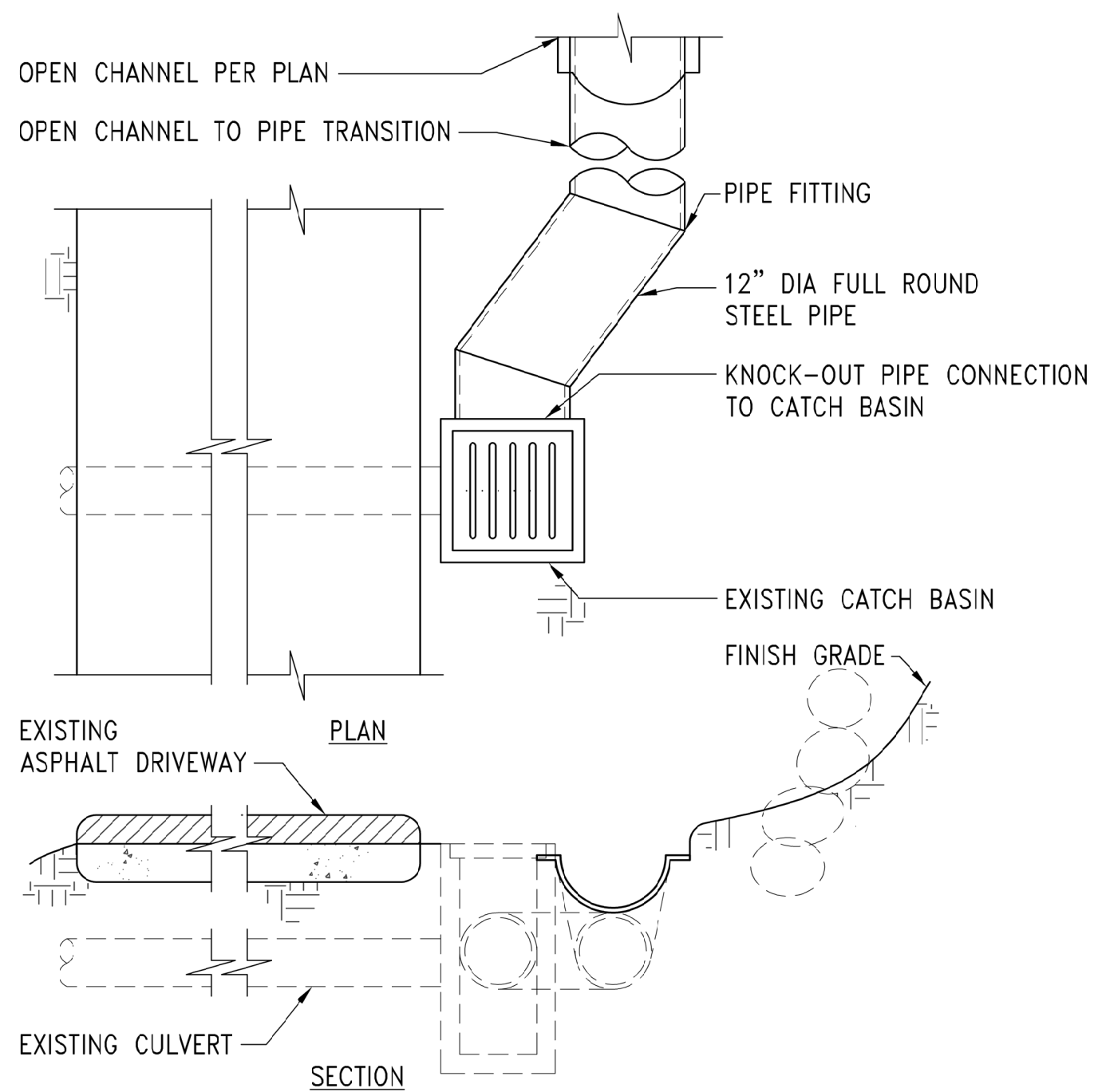
TYP EXISTING STREAMBED ARMORING

SCALE: 1 1/2" = 1'-0"



TYP OPEN CHANNEL UP SLOPE OF DRIVEWAY

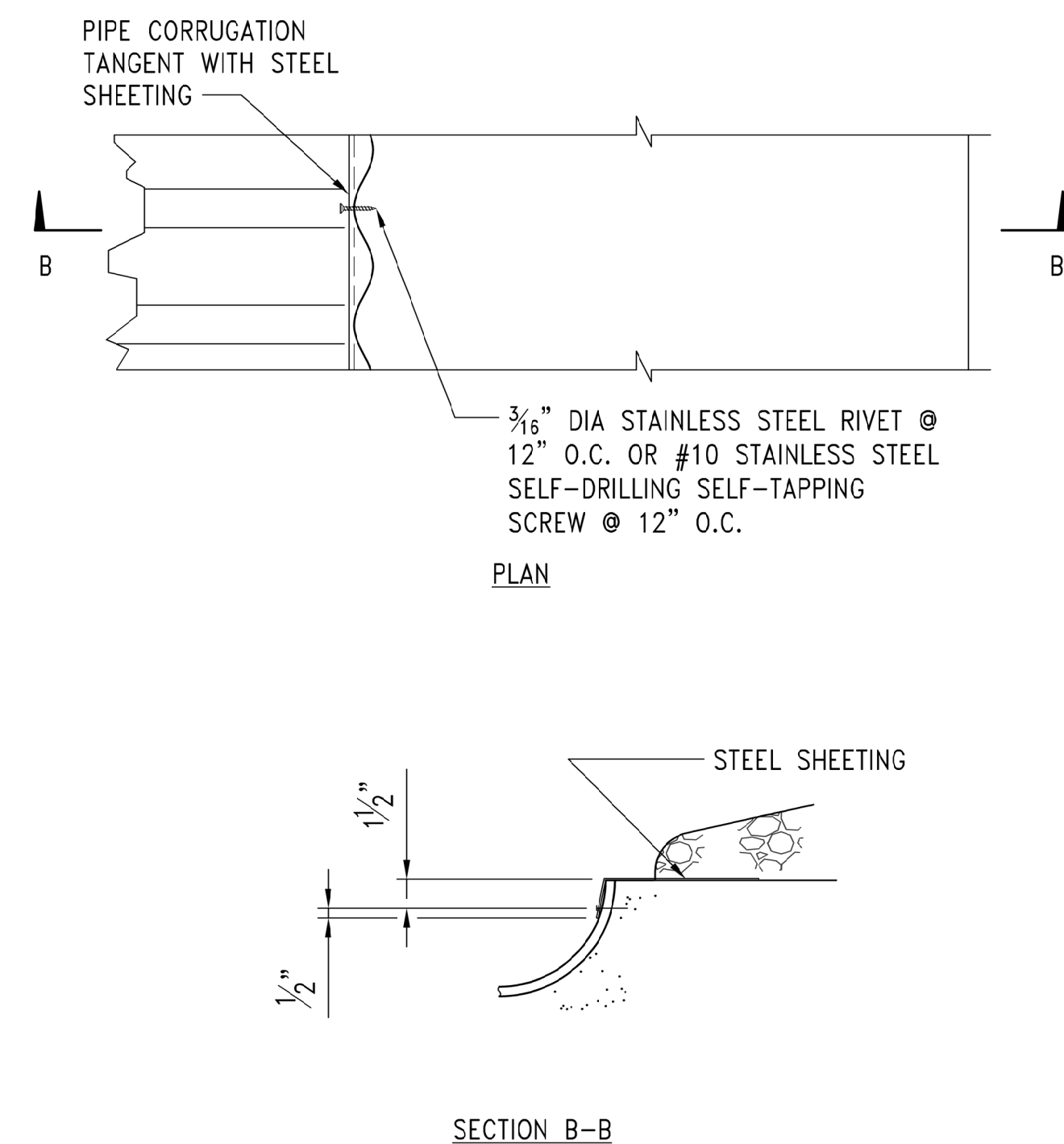
SCALE: 3/4" = 1'-0"



NOTE:
1. SEE DETAIL 4/S2 FOR INFORMATION NOT NOTED
2. RAISE CATCH BASIN LID ELEVATION AS REQUIRED

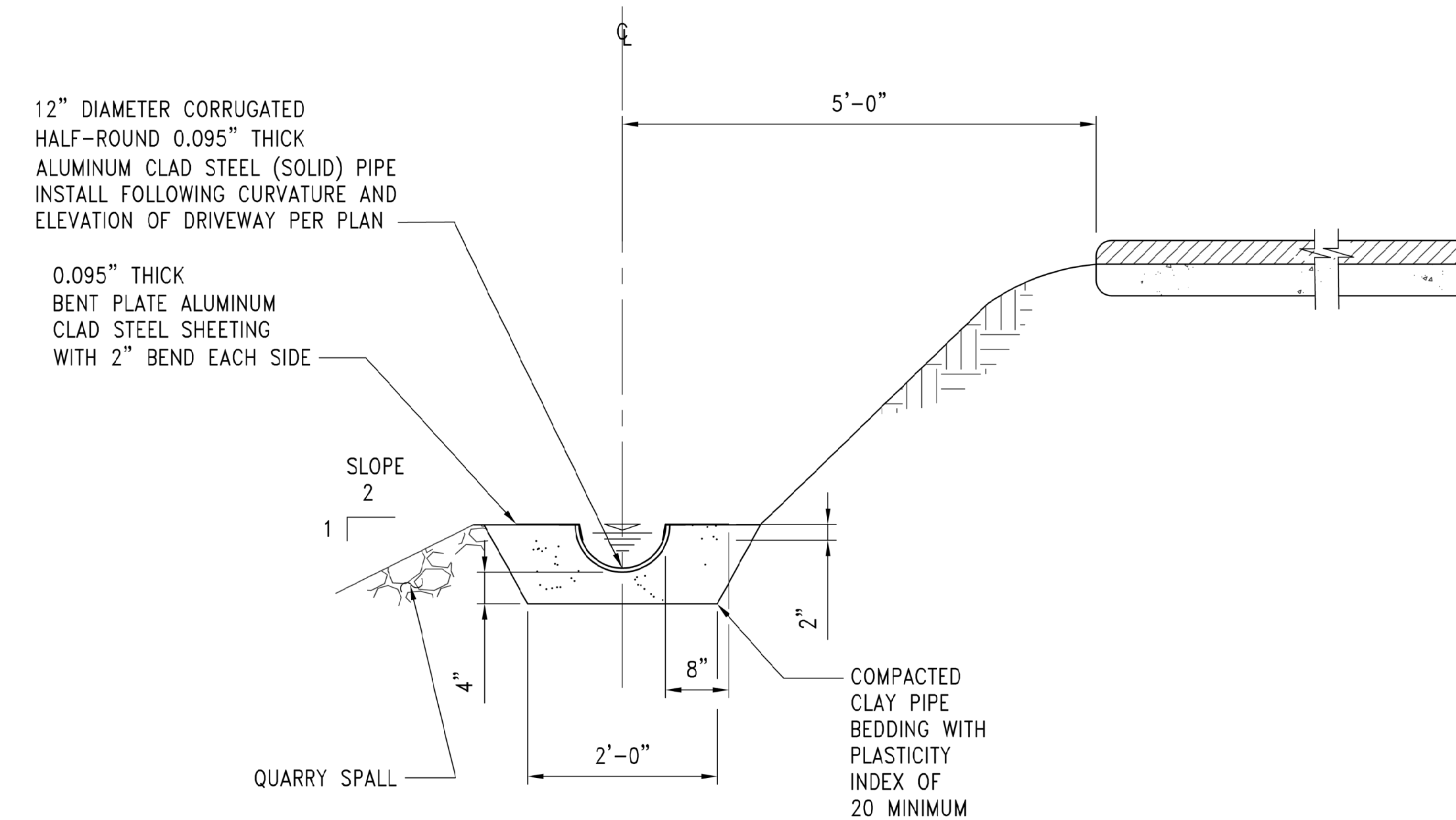
TYP CATCH BASIN CONNECTION

SCALE: 3/4" = 1'-0"



TYP PIPE EDGE ARMORING CONNECTION

SCALE: 1 1/2" = 1'-0"

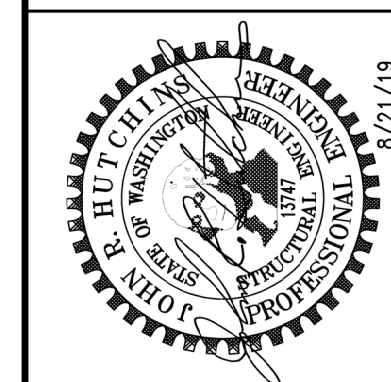
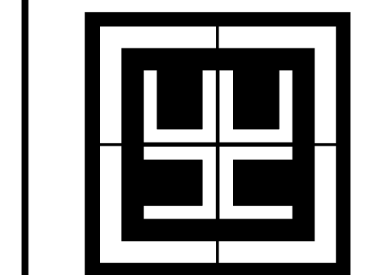


TYP OPEN CHANNEL DOWN SLOPE OF DRIVEWAY

SCALE: 3/4" = 1'-0"

DATE	DESCRIPTION	REVISED

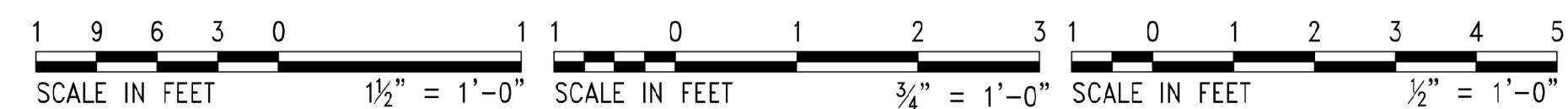
HARBOR CONSULTING ENGINEERS
ENGINEERS • PLANNERS • SURVEYORS
3316 FUHRMAN AVENUE EAST, SUITE 250
SEATTLE WASHINGTON 98102
PHONE: (206) 709-2397



KNOPF RESIDENCE
9507 SE 43rd Street
MERCER ISLAND WA. 98040
HILLSIDE IMPROVEMENTS DETAILS



JOB NO. 19023.00
DATE: 8.21.19
SHEET: 7 OF 8
DWG.# S2

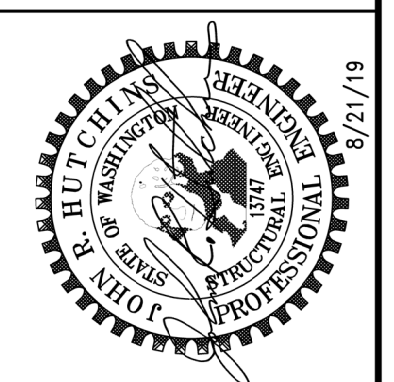
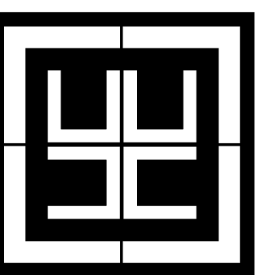


PERMIT SET

VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SCALE:	AS NOTED
CHK BY:	DJ
DRW BY:	TL
REF:	

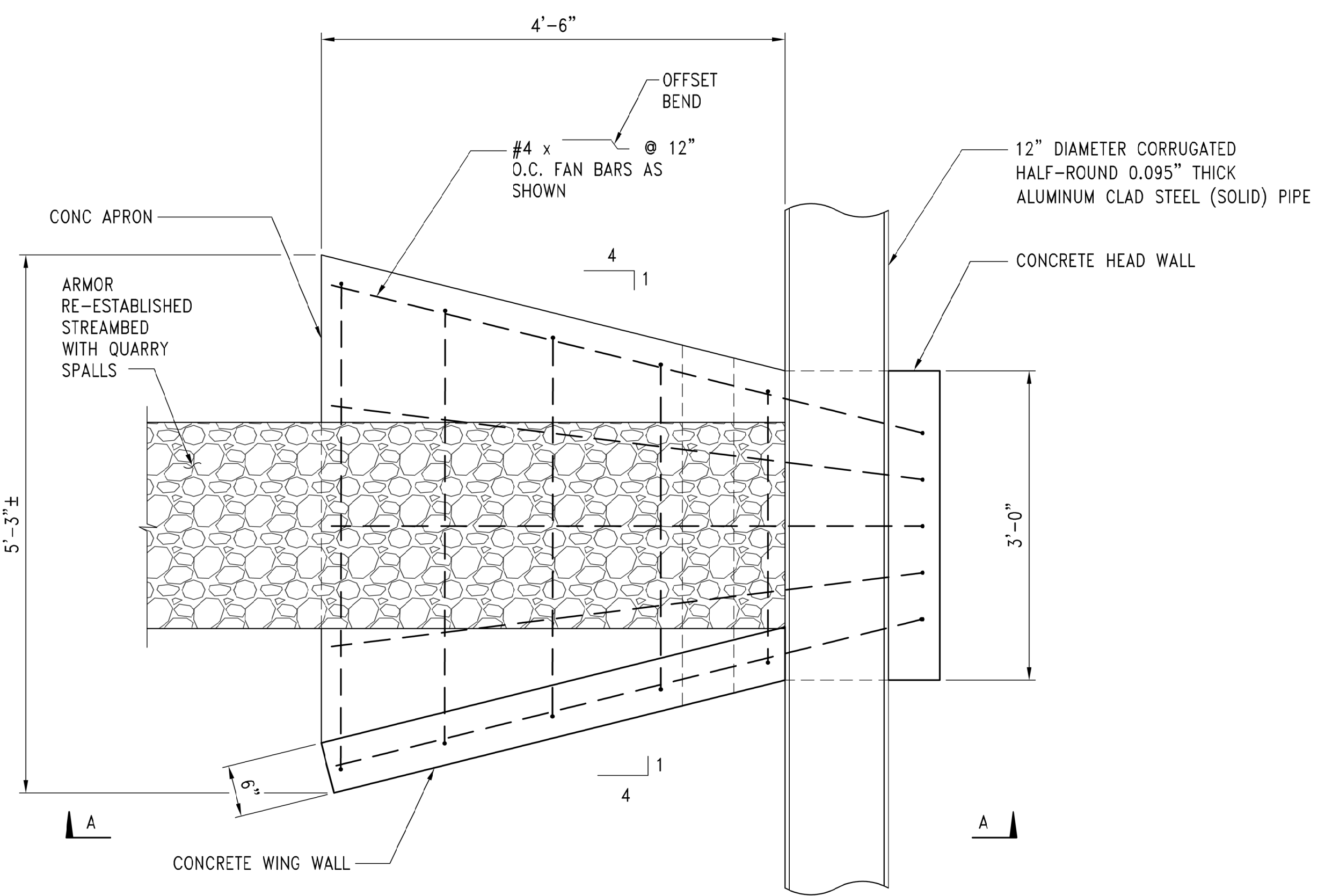
HARBOR CONSULTING ENGINEERS
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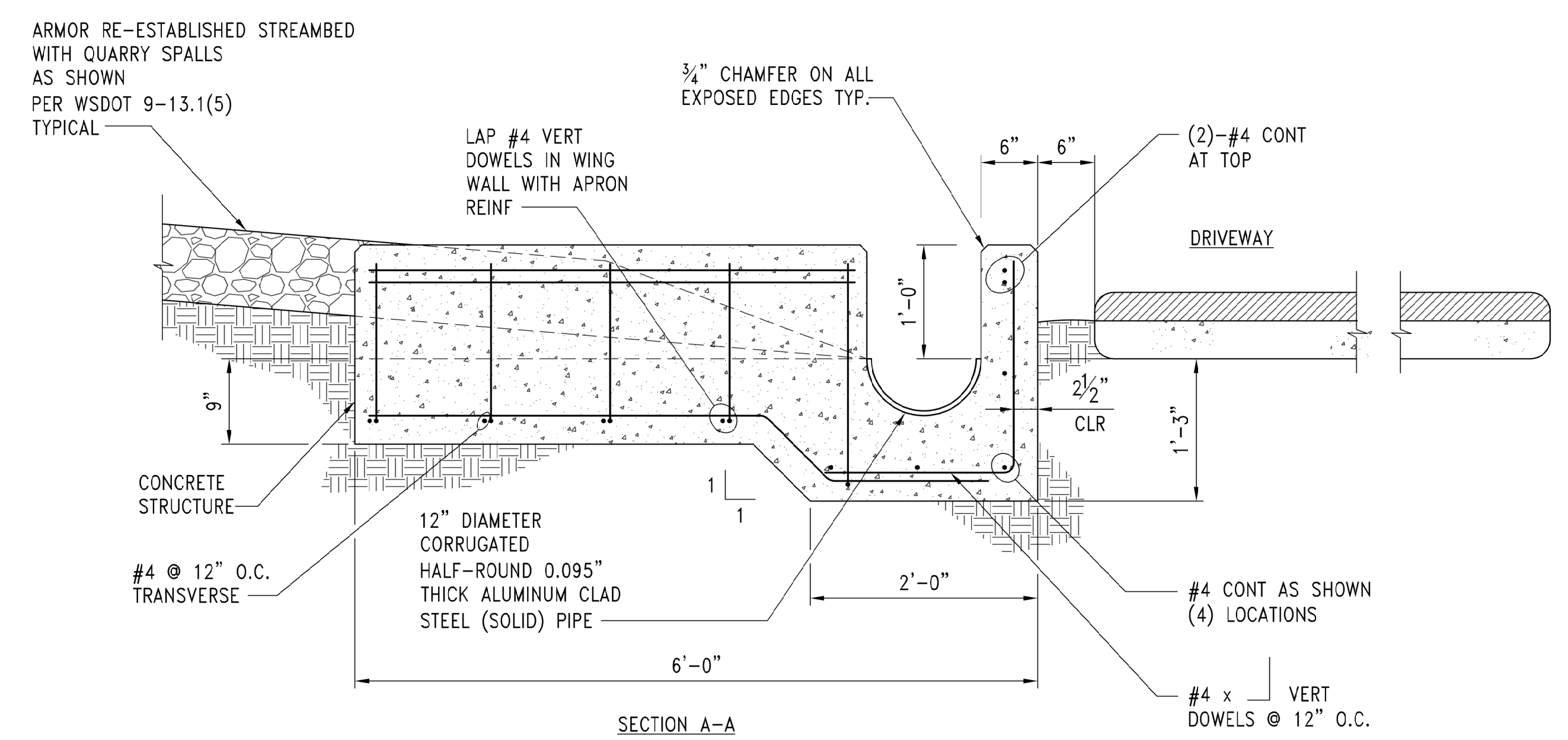
KNOPF RESIDENCE
 9507 SE 43rd Street
 MERCER ISLAND WA, 98040
 HILLSIDE IMPROVEMENTS DETAILS

JOB NO.	19023.00
DATE:	8.21.19
SHEET:	8 OF 8
DWG.#	S3

PERMIT SET



PLAN

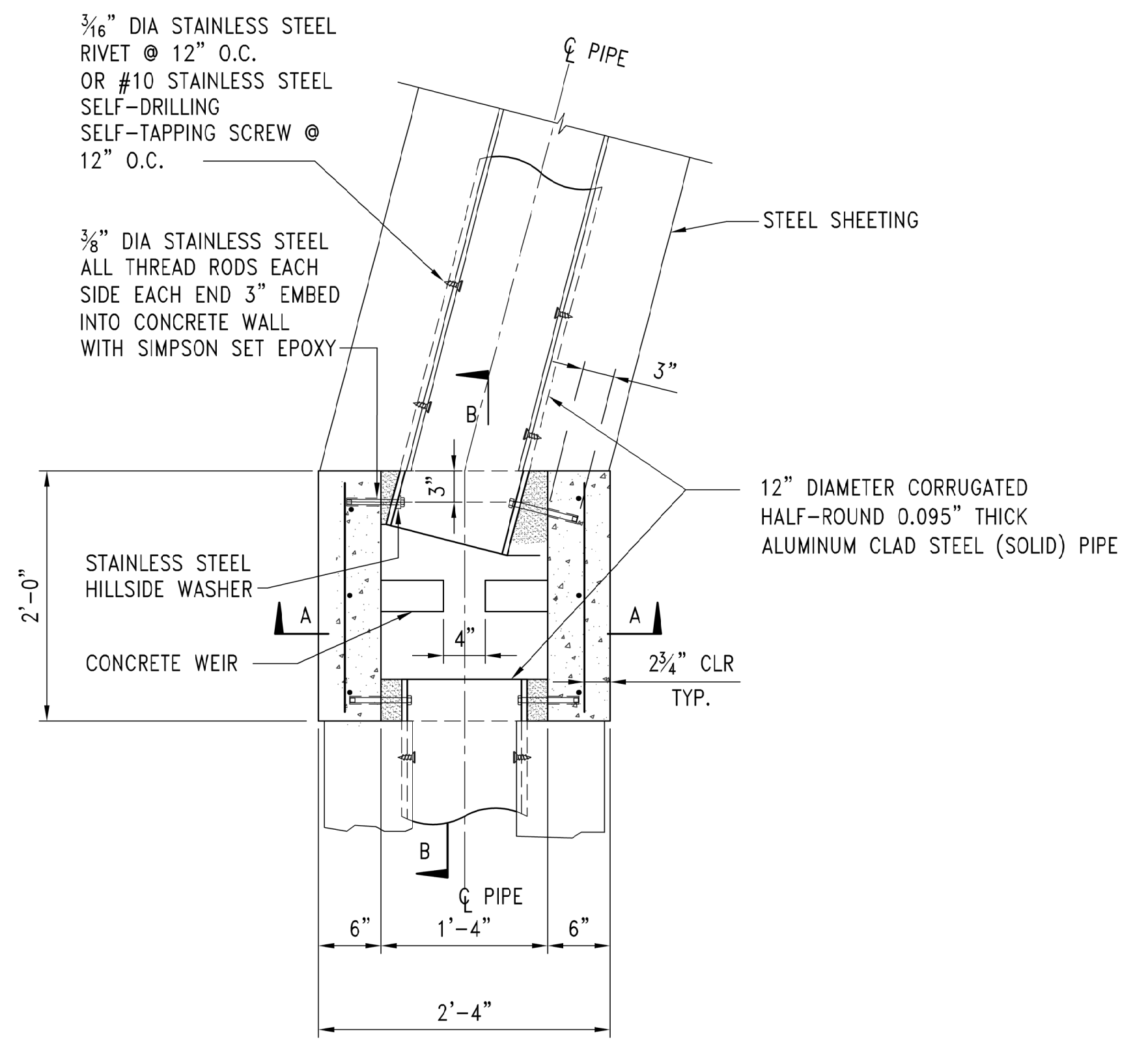


SECTION A-A

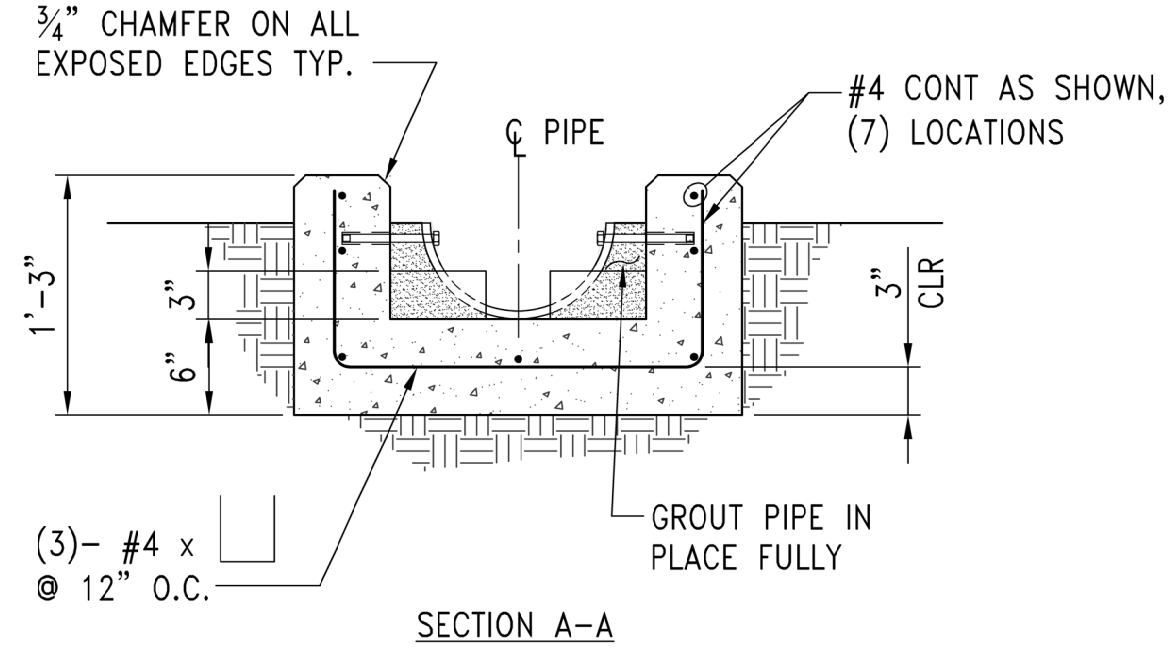
STREAMBED TO PIPE TRANSITION

SCALE: 1" = 1'-0"

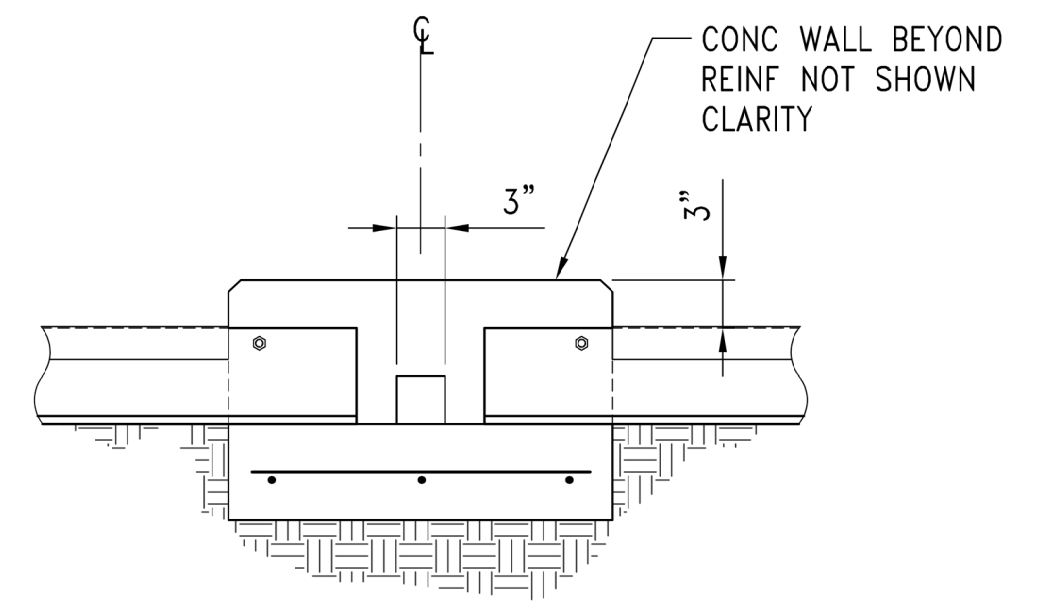
1



PLAN



SECTION A-A



SECTION B-B

TYP. OPEN CHANNEL CONNECTION

SCALE: 1" = 1'-0"

2

