

SHEET INDEX

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GREENWAY DRIVE DRAINAGE IMPROVEMENTS 2

FINAL DESIGN PLANS

HOWARD COUNTY, MARYLAND STORMWATER MANAGEMENT DIVISION CAPITAL PROJECT NUMBER D-1175

GENERAL INFORMATION


- THE SUBJECT PROPERTIES ARE ZONED R-20 PER COMPREHENSIVE ZONING PLAN AND THE COMP-LITE ZONING AMENDMENTS.
- THERE ARE NO BURIAL GROUNDS OR CEMETERY SITES LOCATED ON THE PROJECT SITE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY CONTAINED HEREIN PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS IN ADVANCE OF ANY WORK BEING DONE.
- THE CONTRACTOR SHALL NOTIFY "MSS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE COORDINATES SHOWN HEREON ARE BASED ON HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NUMBERS 17 HA & 17 ID WERE USED FOR THIS SITE.
- WATER IS PUBLIC.
- SEWER IS PUBLIC.
- EXISTING UTILITIES ARE BASED ON FIELD SURVEYS AND AVAILABLE RECORD DRAWINGS.
- THE WETLAND DELINEATION FOR THIS PROJECT WAS PERFORMED BY KCI TECHNOLOGIES, INC. NO WETLANDS ARE LOCATED WITHIN THIS PROJECT.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH ONE FOOT CONTOUR INTERVALS PREPARED BY AB CONSULTANTS, INC., IN JULY 2014 AND MAY 2015.
- ALL WORK SHALL CONFORM TO THE MDE BEST MANAGEMENT PRACTICES FOR WETLANDS AND WATERWAYS AS LISTED IN THE REQUIREMENTS OF THE NONTIDAL WETLANDS AND WATERWAYS PERMIT APPROVED ON 01/28/2019 (MDE TRACKING # 201862054/18-NT-3348).
- NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
- OBSTRUCTIONS SHOWN ON THIS DRAWING ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND KCI TECHNOLOGIES, INC. DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION GIVEN. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN THE PLANS AND THE FIELD CONDITIONS, THE CONTRACTOR MUST VERIFY SUCH INFORMATION TO HIS OWN SATISFACTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE PROPOSED PROJECT IS LOCATED ALONG GREENWAY DRIVE, SOUTH OF ST. JOHN'S LANE.
- HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS PROJECT MANAGER IS CHRISTINE LOWE, P.E. (410) 313-0522.
- BUREAU OF UTILITY CONTACTS: (410) 313-4900 (WATER AND SANITARY)
COMCAST: (410) 497-0232
VERIZON: (301) 282-4508
BGE: (410) 470-7863 (GAS)
BGE: (410) 470-7868 (ELECTRIC)
- THE STREAM IS NOT TIER II. THE STREAM IS IMPAIRED FOR SEDIMENT.
- A ROADSIDE TREE PERMIT WAS ISSUED BY THE MARYLAND DEPARTMENT OF NATURAL RESOURCES ON OCTOBER 5, 2020.
- AN ALTERNATIVE COMPLIANCE (WP-20-107) WAS APPROVED ON OCTOBER 1, 2020 FROM SECTION 16.155(A)(1), MAKING THE PROJECT EXEMPT FROM SDP SUBMITTAL AND SECTION 16.120(I)(V), THAT ALLOWS THE USE OF THE AREA IN THE LOD AS THE NET TRACT AREA IN FOREST CONSERVATION CALCULATIONS. THE ALTERNATIVE COMPLIANCE IS SUBJECT TO THE FOLLOWING CONDITIONS:
THE ALTERNATIVE COMPLIANCE PLAN EXHIBIT SHALL SERVE AS THE SUBSTITUTE FOR A SITE DEVELOPMENT PLAN FOR DEVELOPMENT. NO DISTURBANCE IS PERMITTED BEYOND THE 0.21-ACRE LIMIT OF DISTURBANCE AS SHOWN ON THE ALTERNATIVE COMPLIANCE EXHIBIT UNLESS IT CAN BE SUFFICIENTLY DEMONSTRATED BY THE APPLICANT TO BE JUSTIFIED.

SPECIAL CONTRACTOR NOTES

- 100-YEAR FLOODPLAIN ELEVATION IS SHOWN ON THE PLANS.
- NO STOCKPILE OF ANY MATERIAL IS ALLOWED IN THE 100-YEAR FLOODPLAIN.
- IN-STREAM WORK AT THE 18" RCP OUTFALL IS PROHIBITED FROM MARCH 1 TO MAY 31, INCLUSIVE. STREAM CLASSIFICATIONS: USE IV-P
- CONTRACTOR SHALL CONTINUALLY MONITOR WEATHER FORECASTS DURING WORK ACTIVITIES AND SCHEDULE WORK DURING FAVORABLE CONDITIONS.
- THE CONTRACTOR SHALL EXERCISE CARE IN ACTIVITIES INVOLVING EITHER CUT AND FILL OR GRADING. REMNANTS OF CONSTRUCTION MATERIALS FROM THE SITE. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITIONS.
- PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, PHOTOGRAPHS OF THE PROPOSED WORK AREA AND ACCESS SHALL BE TAKEN.
- ALL TREES TO BE REMOVED SHALL BE CUT AT THE BASE WITH A SAW AND NOT PUSHED OVER. TREE STUMPS MAY BE LEFT IN PLACE, UNLESS OTHERWISE DIRECTED ON THE PLANS.
- ALL MATERIAL SHALL BE REMOVED AND DISPOSED OF OFFSITE UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PAY CLOSE ATTENTION TO PEDESTRIANS WALKING NEAR THE WORK SITE.
- WORKING HOURS ARE 7AM TO 5PM MONDAY THROUGH FRIDAY.
- CONTRACTOR MAY SPECIFY CAST-IN-PLACE DRAINAGE BOXES IF NECESSARY DURING CONSTRUCTION. THESE CHANGES MUST FIRST BE APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS PROJECT MANAGER.
- THE CONTRACTOR IS TO PROVIDE TRUCK TRAFFIC SIGNS AS NECESSARY.
- TREE PRUNING IN FRONT OF 3010 AND 3014 GREENWAY DRIVE, ELLICOTT CITY: PRUNE THE ROOTS OF ONE (1) 48" RED OAK AND ONE (1) 36" WILLOW OAK UNDER THE SUPERVISION OF A CERTIFIED ARBORIST.

AS-BUILT CERTIFICATION

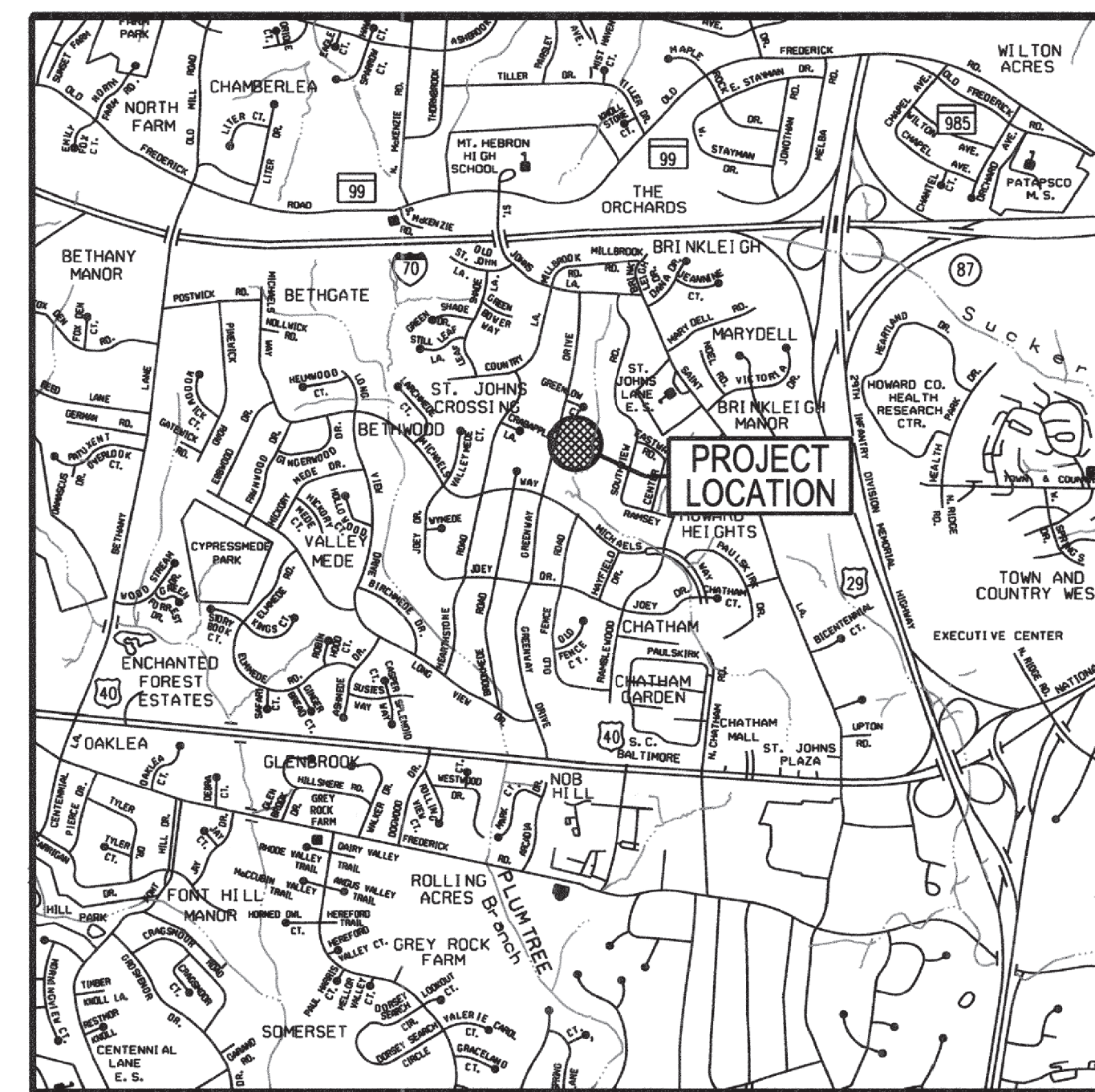
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.


20903
09-30-2021

SIGNATURE
PE NO.
DATE

LEGEND

4.30	EX. CONTOUR	FP	100-YEAR FLOODPLAIN
SD	EX. STORM DRAIN	LOD	LIMIT OF DISTURBANCE
S	EX. SANITARY SEWER		PROPOSED STORM DRAIN
W	EX. WATER LINE		PROPOSED CURB & GUTTER
G	EX. GAS LINE		PROPOSED INLET
T	EX. OVERHEAD TELEPHONE		RIPRAP OUTFALL PROTECTION
	EX. WOODS LINE		FULL DEPTH PATCH
	EX. TREE		ORANGE SAFETY FENCE
	EX. MANHOLE		SILT FENCE
	EX. UTILITY POLE		FLEXIBLE PIPE
	EX. EASEMENT		PUMP
	PROPERTY LINE		FILTER BAG
	EDGE OF WATER		SANDBAG DIVERSION
WUS	WATERS OF THE U.S.		
SB	75' STREAM BUFFER		
WB	25' WETLAND BUFFER		




VICINITY MAP
SCALE: 1" = 2000'
ADC MAP COORD. 5052/K7

DESIGNATION	PID	NORTHING	EASTING	ELEVATION
17 HA	N/A	590,619.889	1,360,443.4375	4.37.547
17 ID	N/A	589,445.668	1,360,778.492	4.21.164

- SITE ANALYSIS DATA CHART
- TOTAL PROJECT AREA: 0.21 ACRES.
 - DISTURBED AREA: 0.21 ACRES (9,336 SF).
 - PROPOSED USE FOR THE SITE: DRAINAGE IMPROVEMENTS
 - APPLICABLE DPZ FILE REFERENCES: PB07-073, PB08-056, PB09-028A.

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT"

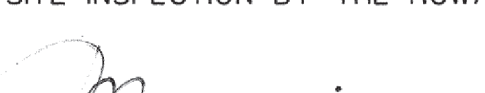

P.E. • 20903
10-14-20

SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE)
DATE

JAMES G. KESTER, PE

DEVELOPER'S CERTIFICATE

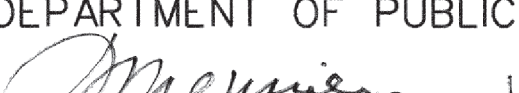
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE THE BEGINNING OF THE PROJECT. I/ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT"


10/20/2020

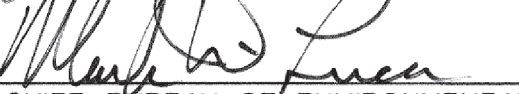
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE)
DATE

Thomas J. Mounier


DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD


10/19/20

DIRECTOR OF PUBLIC WORKS
DATE



10/19/20

CHIEF, BUREAU OF ENVIRONMENTAL SERVICES
DATE


10/19/20

CHIEF, STORMWATER MANAGEMENT DIVISION
DATE

DEPARTMENT OF RECREATION AND PARKS, HOWARD COUNTY, MD


10/20/2020


DIRECTOR OF RECREATION AND PARKS
DATE

PERMIT INFORMATION CHART

SUBDIVISION NAME BRINKLEIGH	SECTION/AREA 5, 6	PARCEL # 389, 445
PLAT* or L/F 25, 56, 73	GRID • ZONING 0022 R20	TAX MAP NO. ELECT. DISTR. CENSUS TRACT 17 02 602202
WATER CODE PUBLIC	SEWER CODE PUBLIC	


THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.


OWNER:
HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS
9801 BROKEN LAND PARKWAY
COLUMBIA, MD 21046
410-313-6444


10/20/20

HOWARD_SCD
DATE

EP-19-12




10-14-20

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20903. EXPIRATION DATE: JULY 18, 2021

NO.	REVISIONS DESCRIPTION	DATE

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818
www.kci.com



GREENWAY DRIVE DRAINAGE IMPROVEMENTS 2
 CAPITAL PROJECT D-1175
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 STORMWATER MANAGEMENT DIVISION
 9801 BROKEN LAND PARKWAY
 COLUMBIA, MD 21046
 PAPER: 389, 445 TAX MAP 17
 ZONING R20 ELECTION DISTRICT 02 GRIDBLOCK 0022

TITLE SHEET

SCALE: AS SHOWN
DATE: OCTOBER 2020
KCI JOB NO.: 171705999.031
CAPITAL PROJECT NO.: D-1175
PERMIT ISSUE:
CONSTRUCTION ISSUE:

AS-BUILT 09/30/21

SHEET NO.: 1 OF 11

PLOTTED: 10:33 PM on Wednesday, October 14, 2020
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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20903, EXPIRATION DATE: JULY 18, 2021

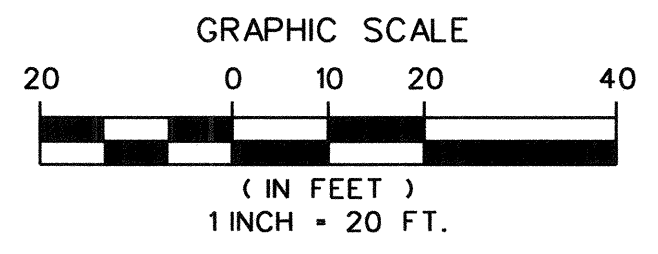
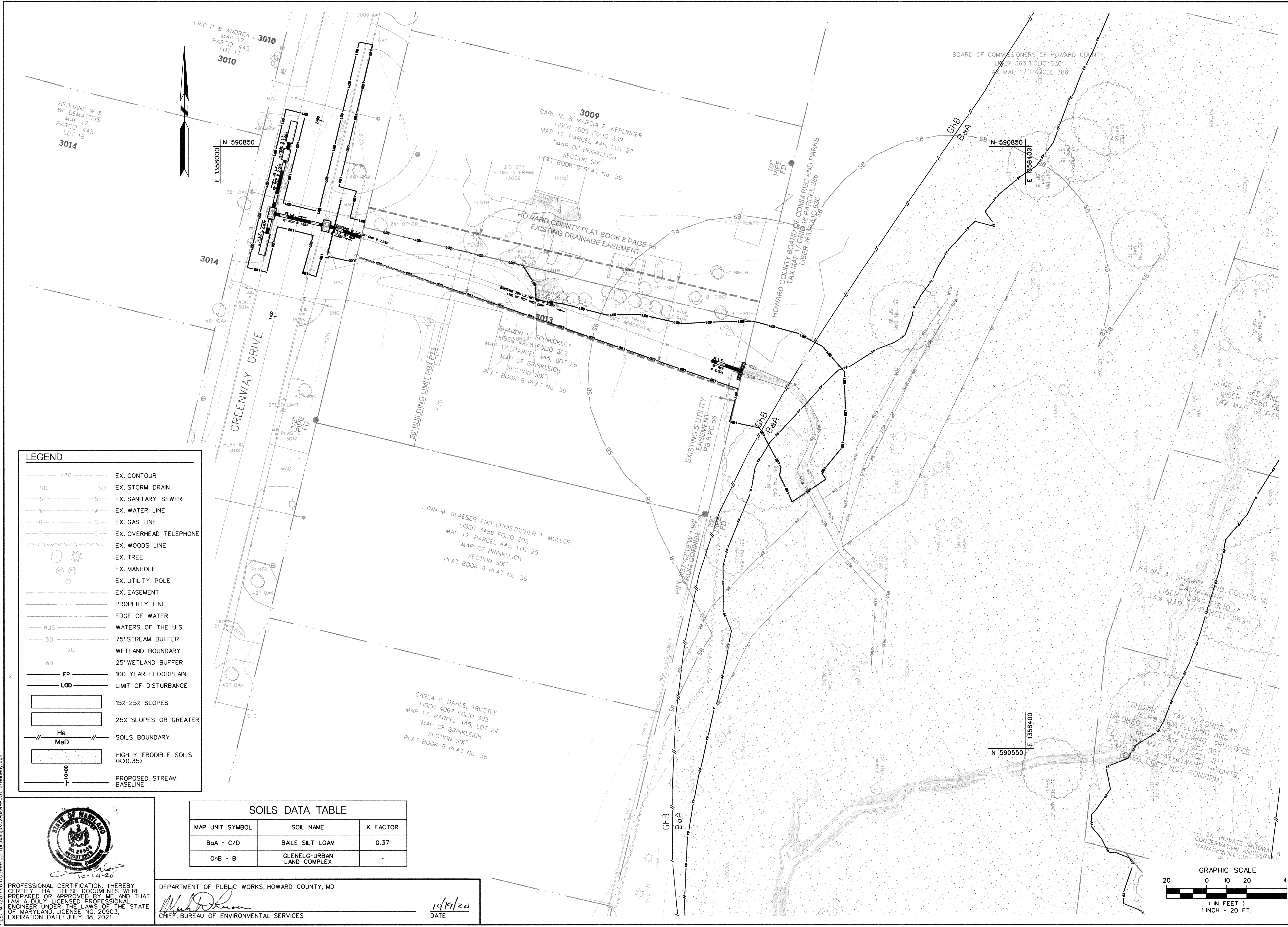
10-14-20

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

10/19/20
 DATE

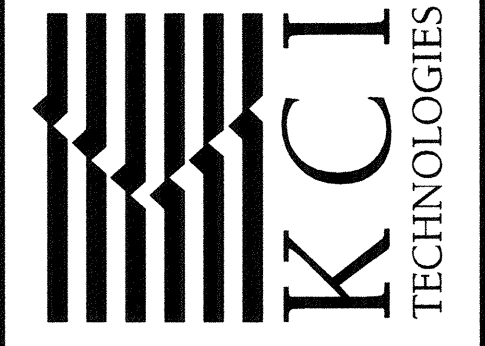
SOILS DATA TABLE		
MAP UNIT SYMBOL	SOIL NAME	K FACTOR
BoA - C/D	BAILE SILT LOAM	0.37
ChB - B	GLENELG-URBAN LAND COMPLEX	-

LEGEND	
4.30	EX. CONTOUR
SD	EX. STORM DRAIN
S	EX. SANITARY SEWER
W	EX. WATER LINE
G	EX. GAS LINE
T	EX. OVERHEAD TELEPHONE
(Symbol)	EX. WOODS LINE
(Symbol)	EX. TREE
(Symbol)	EX. MANHOLE
(Symbol)	EX. UTILITY POLE
(Symbol)	EX. EASEMENT
(Symbol)	PROPERTY LINE
(Symbol)	EDGE OF WATER
WUS	WATERS OF THE U.S.
SB	75' STREAM BUFFER
WB	WETLAND BOUNDARY
FP	25' WETLAND BUFFER
LOD	100-YEAR FLOODPLAIN
(Symbol)	LIMIT OF DISTURBANCE
(Symbol)	15%-25% SLOPES
(Symbol)	25% SLOPES OR GREATER
Ha	SOILS BOUNDARY
MaD	SOILS BOUNDARY
(Symbol)	HIGHLY ERODIBLE SOILS (K>0.35)
(Symbol)	PROPOSED STREAM BASELINE



NO.	REVISIONS DESCRIPTION	DATE

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 www.kci.com



GREENWAY DRIVE
 DRAINAGE IMPROVEMENTS 2
 CAPITAL PROJECT D-1175
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 STORMWATER MANAGEMENT DIVISION
 9801 BROKEN LAND PARKWAY
 COLUMBIA, MD 21046
 PARCELS 389, 445 TAX MAP 17
 ZONING R20 ELECTION DISTRICT 02 GRIDBLOCK 0022

ENVIRONMENTAL RESOURCES MAP

SCALE:	1"=20'
DATE:	OCTOBER 2020
KCIJOB NO.:	171705999.031
CAPITAL PROJECT NO.:	D-1175
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

ERIC P & ANDREA L SWAN
MAP 17,
PARCEL 445,
LOT 17

STRUCTURE SCHEDULE							
STRUCTURE NO.	STRUCTURE TYPE	CENTER OF STRUCTURE COORDINATES		TOP OF CURB	INVERT IN	INVERT OUT	STD. NO.
		NORTHING	EASTING				
I-8	TYPE A-5 INLET PRECAST	590810.57	1358052.61	425.2052	421.39	421.1930	D-4.02
I-9	TYPE A-5 INLET PRECAST	590817.04	1358025.37	425.6070	422.07	421.8287	D-4.02
I-10	TYPE A-5 INLET PRECAST	590845.92	1358032.50	426.1015	422.79	422.5967	D-4.02
I-11	TYPE A-10 INLET PRECAST	590801.51	1358021.54	425.6068	-89	422.153	D-4.03
I-12	TYPE A-10 INLET PRECAST	590857.08	1358035.25	426.3038	-13	422.89	D-4.03
H-1	TYPE C ENDWALL	590738.34	1358258.93	-	-	415.9894	D-5.21

NOTE: USE MD STANDARD DETAIL MD-374.65 FOR 2" DEPRESSION AT INLETS I-10 AND I-11.

CLEAN & LINE 18" RCP		
FROM	TO	LINEAR FEET
I-8	H-1	217

NOTE: PROVIDE CIPP LINING PER MANUFACTURER SPECIFICATIONS.

LEGEND

- 4.30 EX. CONTOUR
- SD EX. STORM DRAIN
- S EX. SANITARY SEWER
- W EX. WATER LINE
- G EX. GAS LINE
- T EX. OVERHEAD TELEPHONE
- EX. WOODS LINE
- EX. TREE
- EX. MANHOLE
- EX. UTILITY POLE
- EX. EASEMENT
- PROPERTY LINE
- EDGE OF WATER
- WUS WATERS OF THE U.S.
- SB 75' STREAM BUFFER
- WB WETLAND BOUNDARY
- 25' WETLAND BUFFER
- FP 100-YEAR FLOODPLAIN
- LOO LIMIT OF DISTURBANCE
- PROPOSED STORM DRAIN
- PROPOSED CURB & GUTTER
- PROPOSED INLET
- RIPRAP OUTFALL PROTECTION
- FULL DEPTH PATCH
- WOODY RIFFLE LOGS
- RESIDENTIAL DRIVEWAY ENTRANCE

NO.	REVISIONS DESCRIPTION	DATE

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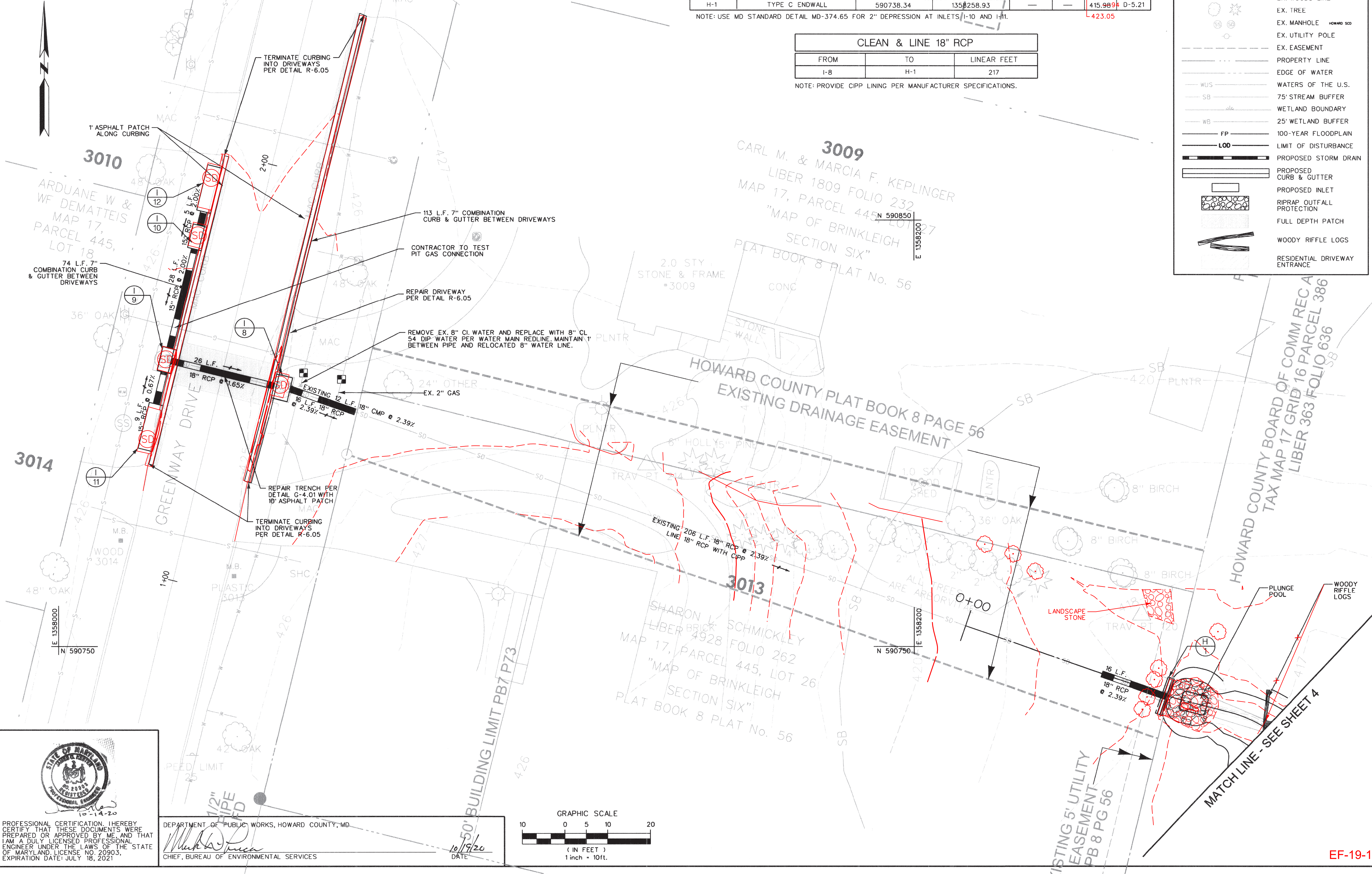


GREENWAY DRIVE
DRAINAGE IMPROVEMENTS 2
CAPITAL PROJECT D-1175
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
9801 BROCKEN LAND PARKWAY
COLUMBIA, MD 21046
PARCELS 389, 445 TAX MAP 17
ZONING R20 ELECTION DISTRICT 02 GRIDBLOCK 0022

STORMWATER MANAGEMENT PLAN

SCALE: 1"=10'
DATE: OCTOBER 2020
KCIJOB NO.: 171705999.031
CAPITAL PROJECT NO.: D-1175
PERMIT ISSUE:
CONSTRUCTION ISSUE:

AS-BUILT
09/30/21
SHEET NO.: 3 OF 11

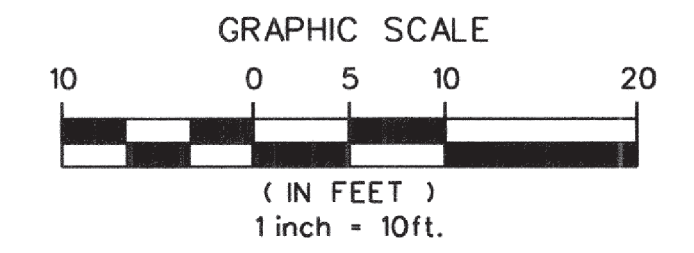


PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20903, EXPIRATION DATE: JULY 18, 2021.

STATE OF MARYLAND
DEPARTMENT OF PUBLIC WORKS
PROFESSIONAL ENGINEER

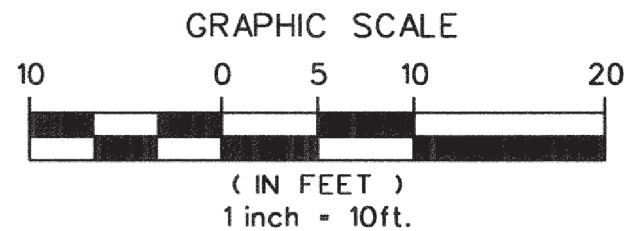
10-14-20

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
10/19/20
DATE



PLOTTED: 03:53 PM on Wednesday, October 14, 2020
FILE: W:\2017\171705999.031\Drawings\03-PSW-P02-Greenway.dwg

LEGEND	
---	EX. CONTOUR
SD	EX. STORM DRAIN
S	EX. SANITARY SEWER
W	EX. WATER LINE
G	EX. GAS LINE
T	EX. OVERHEAD TELEPHONE
---	EX. WOODS LINE
○	EX. TREE
○	EX. MANHOLE
○	EX. UTILITY POLE
- - -	EX. EASEMENT
---	PROPERTY LINE
---	EDGE OF WATER
WUS	WATERS OF THE U.S.
SB	75' STREAM BUFFER
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FP	100-YEAR FLOODPLAIN
LOD	LIMIT OF DISTURBANCE
---	PROPOSED STORM DRAIN
---	PROPOSED CURB & GUTTER
---	PROPOSED INLET
---	RIPRAP OUTFALL PROTECTION
---	FULL DEPTH PATCH
---	WOODY RIFFLE LOGS



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DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
Michael D. P... [Signature]
 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES
 DATE: 10/17/20

NO.	REVISIONS DESCRIPTION	DATE

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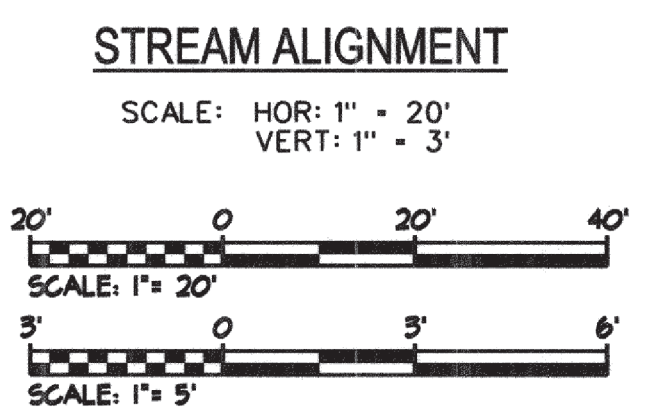
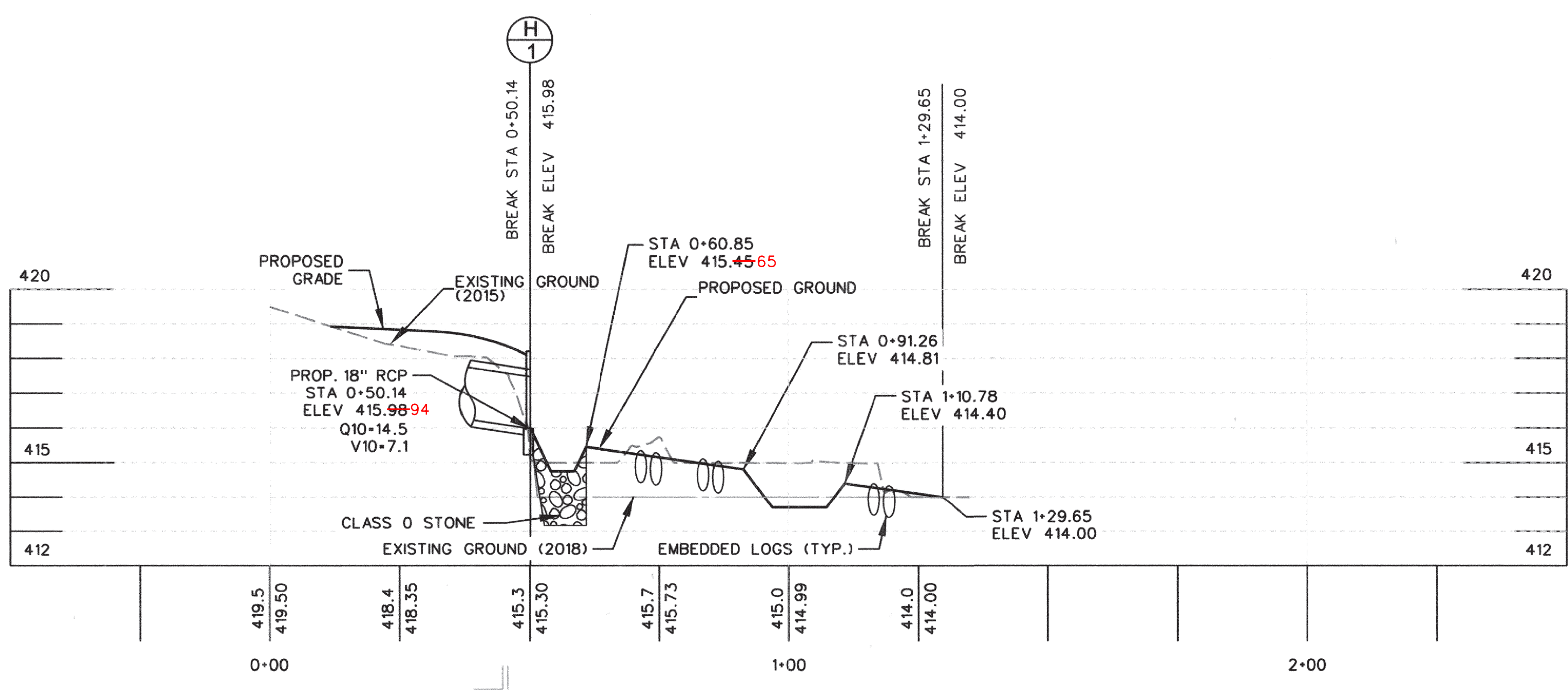
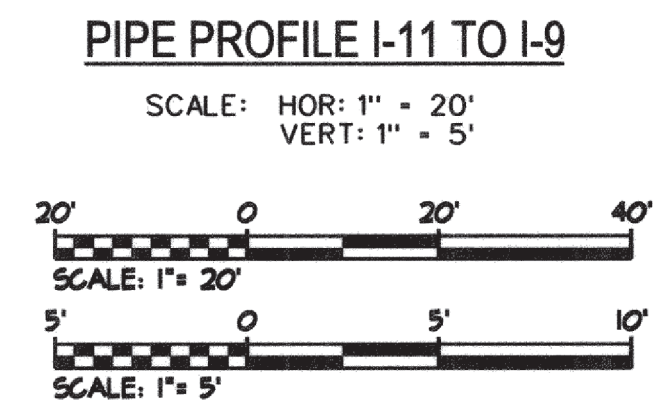
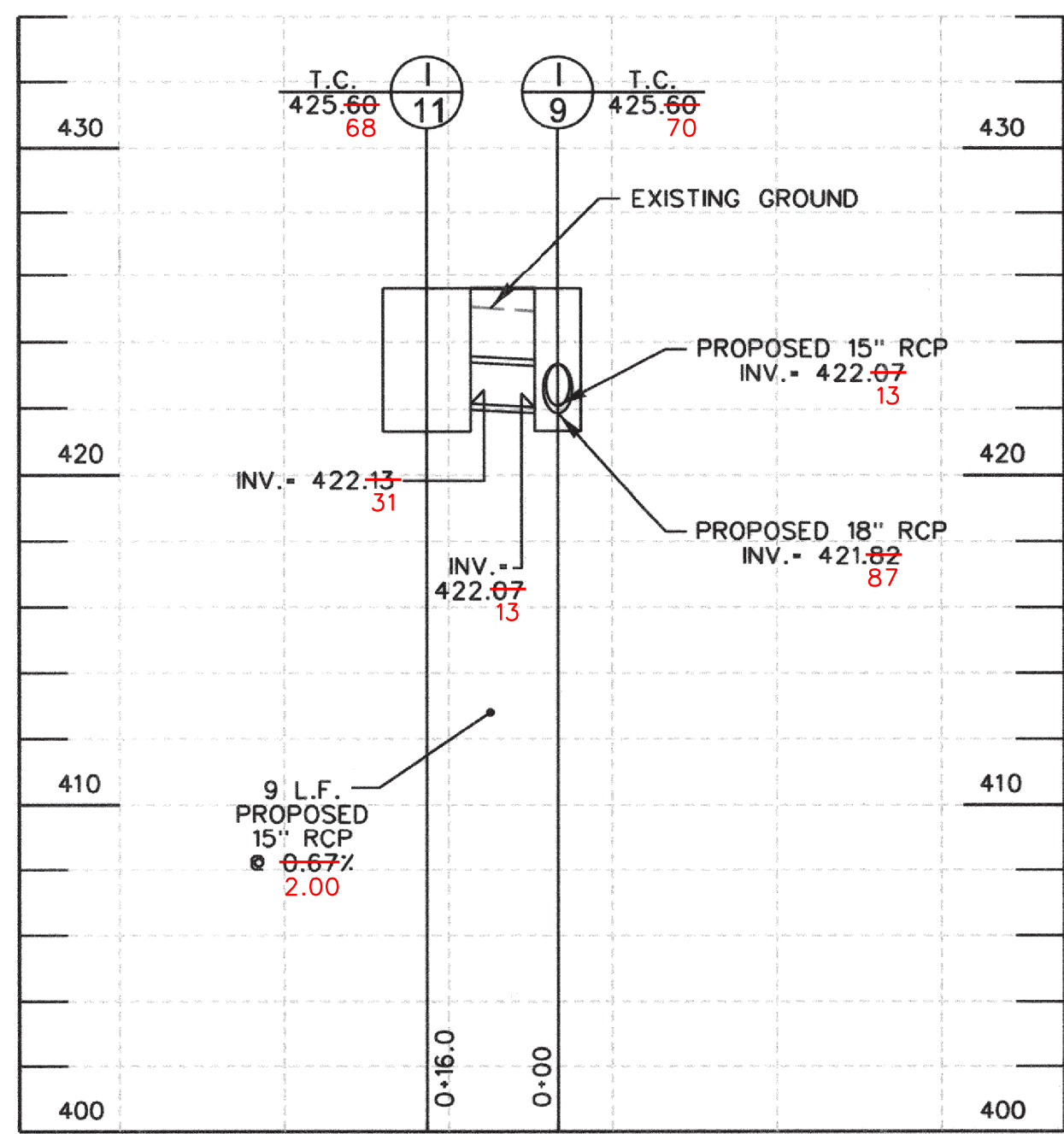
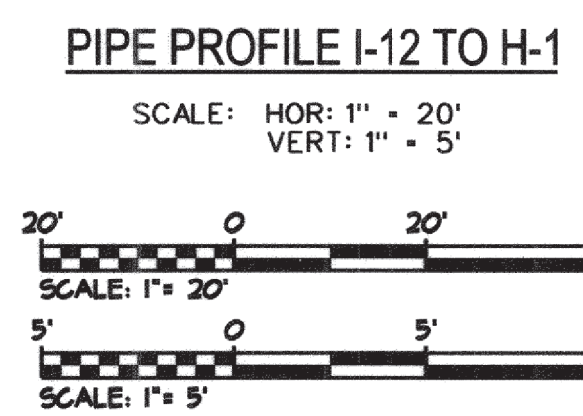
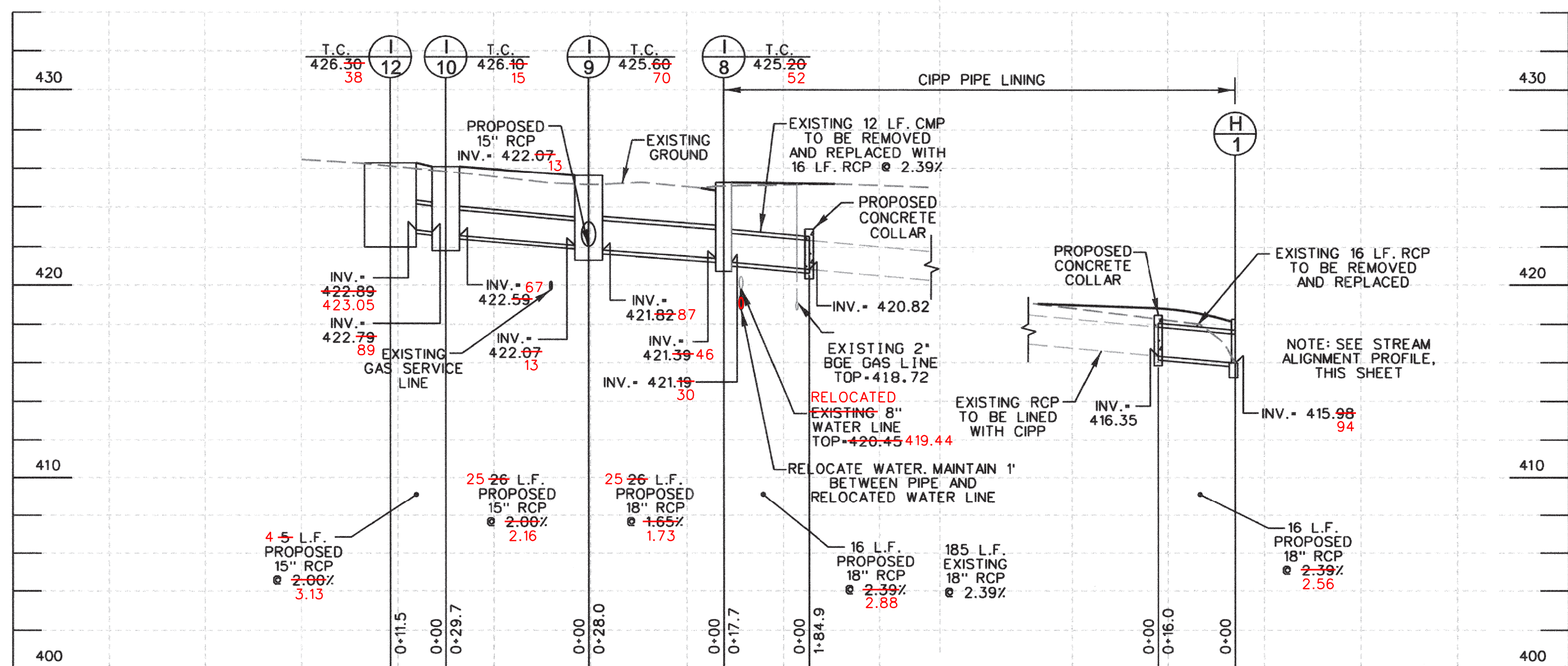
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SCALE:	1" = 10'
DATE:	OCTOBER 2020
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CAPITAL PROJECT NO.:	D-1175
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

AS-BUILT
09/30/21
 SHEET NO.: 4 OF 11

EP-19-12

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FILE: M:\2017\171705999\03\Drawings\05-PSW-P004_Greenway.dgn

16-14-20

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DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD

Michael D. Russo
CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

10/17/20
DATE

NO.	REVISIONS DESCRIPTION	DATE

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818
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GREENWAY DRIVE
DRAINAGE IMPROVEMENTS 2

CAPITAL PROJECT D-1175

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
9801 BROKEN LAND PARKWAY
COLUMBIA, MD 21046

PARCELS 389, 445 TAX MAP 17
ZONING R20 ELECTION DISTRICT 02 GRIDBLOCK 0022

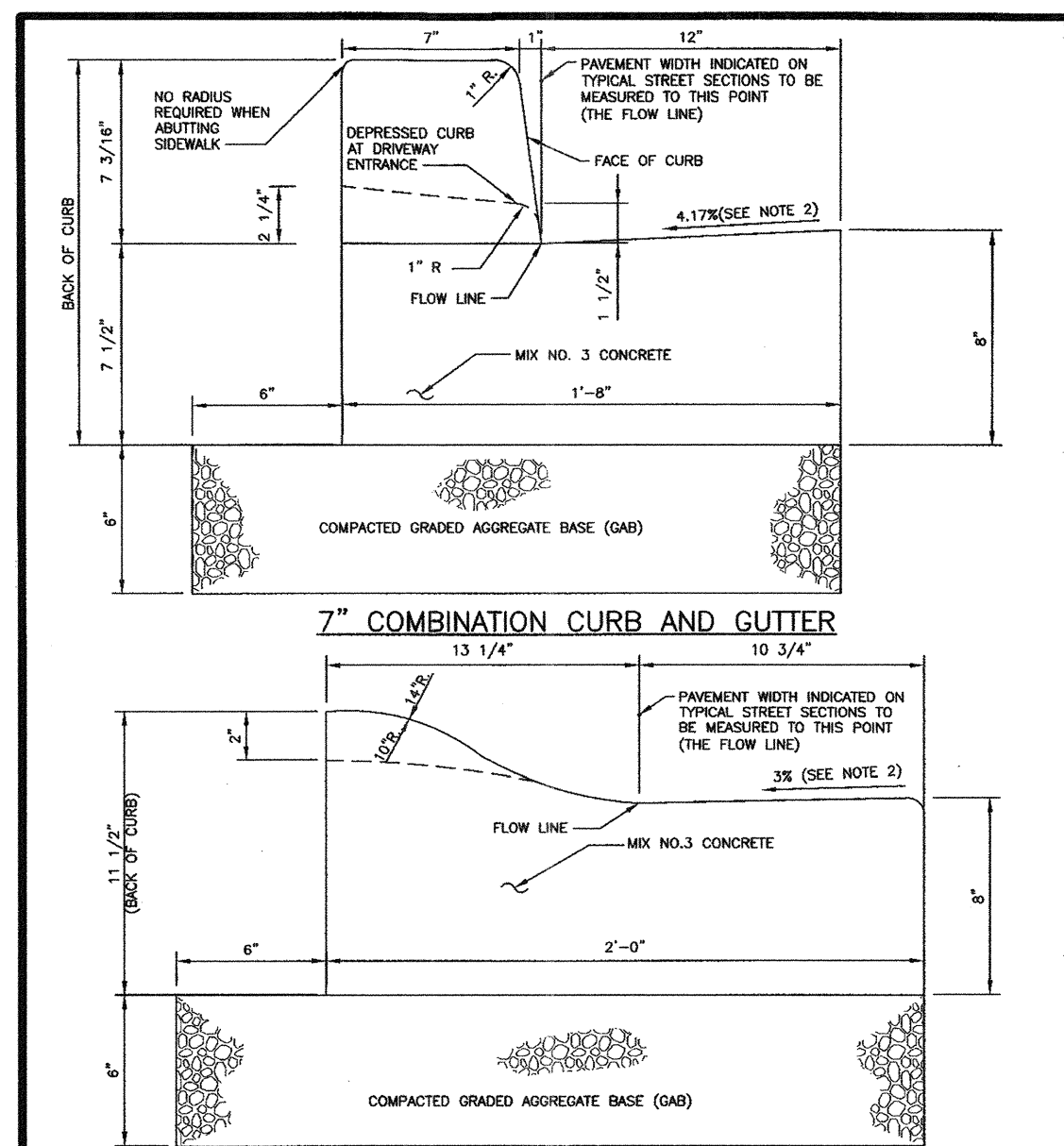
PROFILES & DETAILS

SCALE:	AS SHOWN
DATE:	OCTOBER 2020
KCI JOB NO.:	171705999.031
CAPITAL PROJECT NO.:	D-1175
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

AS-BUILT
09/30/21

EP-19-12

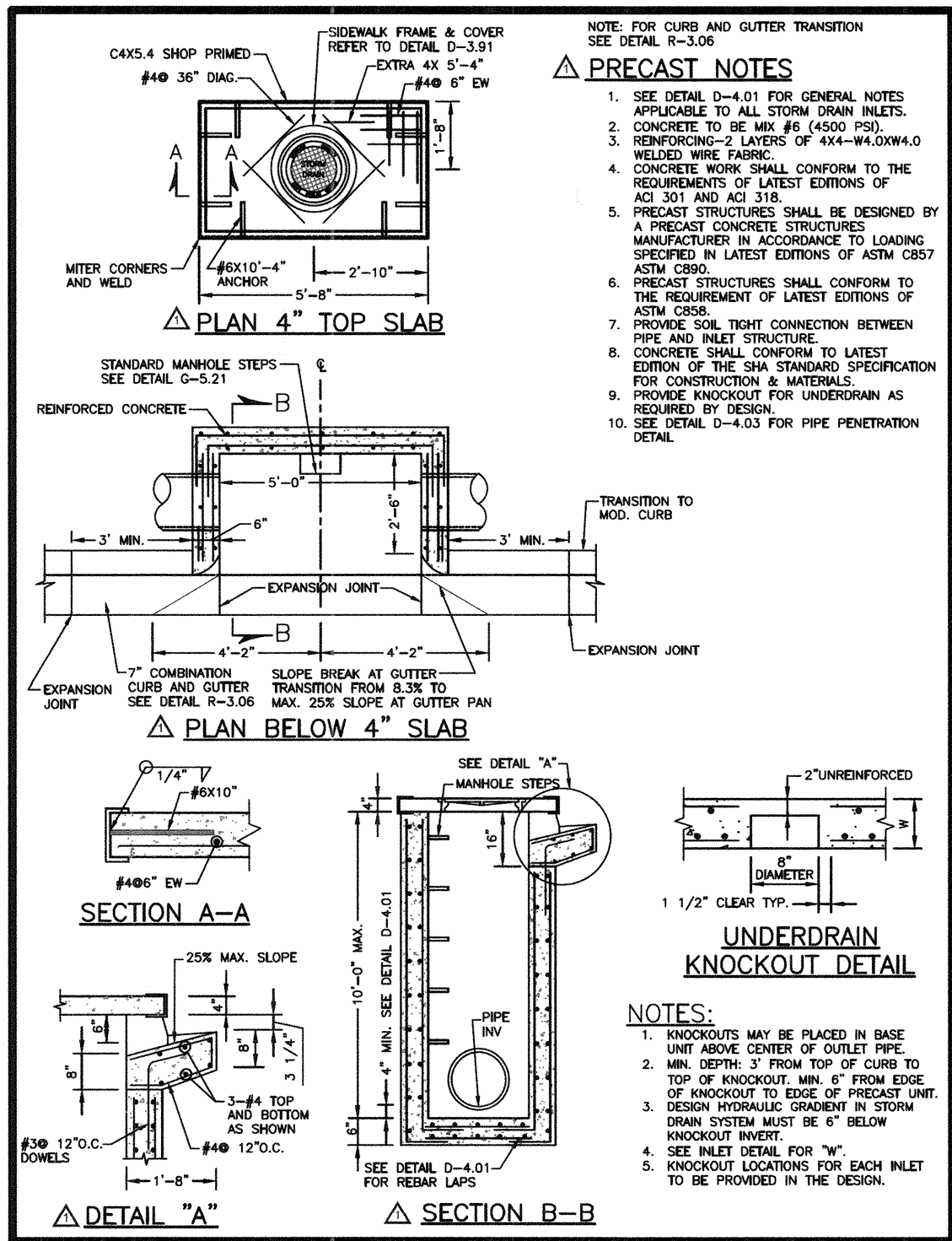
SHEET NO.: 5 OF 11



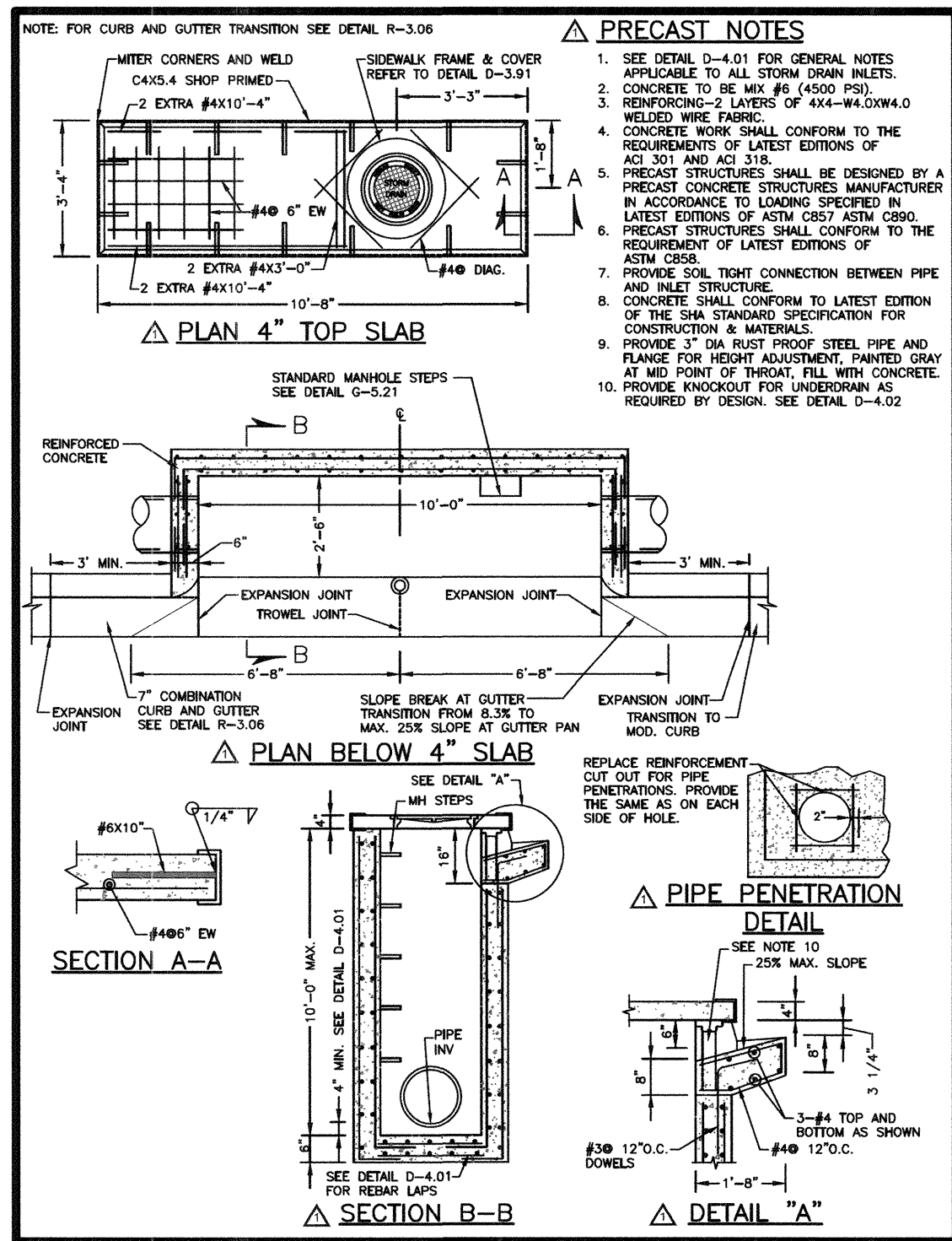
NOTE: MODIFIED COMBINATION CURB AND GUTTER

1. A REVERSE GUTTER PAN SHALL HAVE A GUTTER SLOPE OF 4.17% AWAY FROM THE FLOW LINE, AND SHALL NOT BE USED WHERE THIS DRAINAGE CREATES A HAZARDOUS CONDITION.
2. GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OF THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB & GUTTER.
3. A MINIMUM OF TWO (2) FEET OF COMPACTED STABILIZED EARTH, OR EQUIVALENT, SHALL SUPPORT THE ENTIRE BACK OF CURB.
4. POSITIVE DRAINAGE SHALL BE PROVIDED BOTH BEHIND THE CURB AND ALONG THE GUTTER AND FLOW LINE.

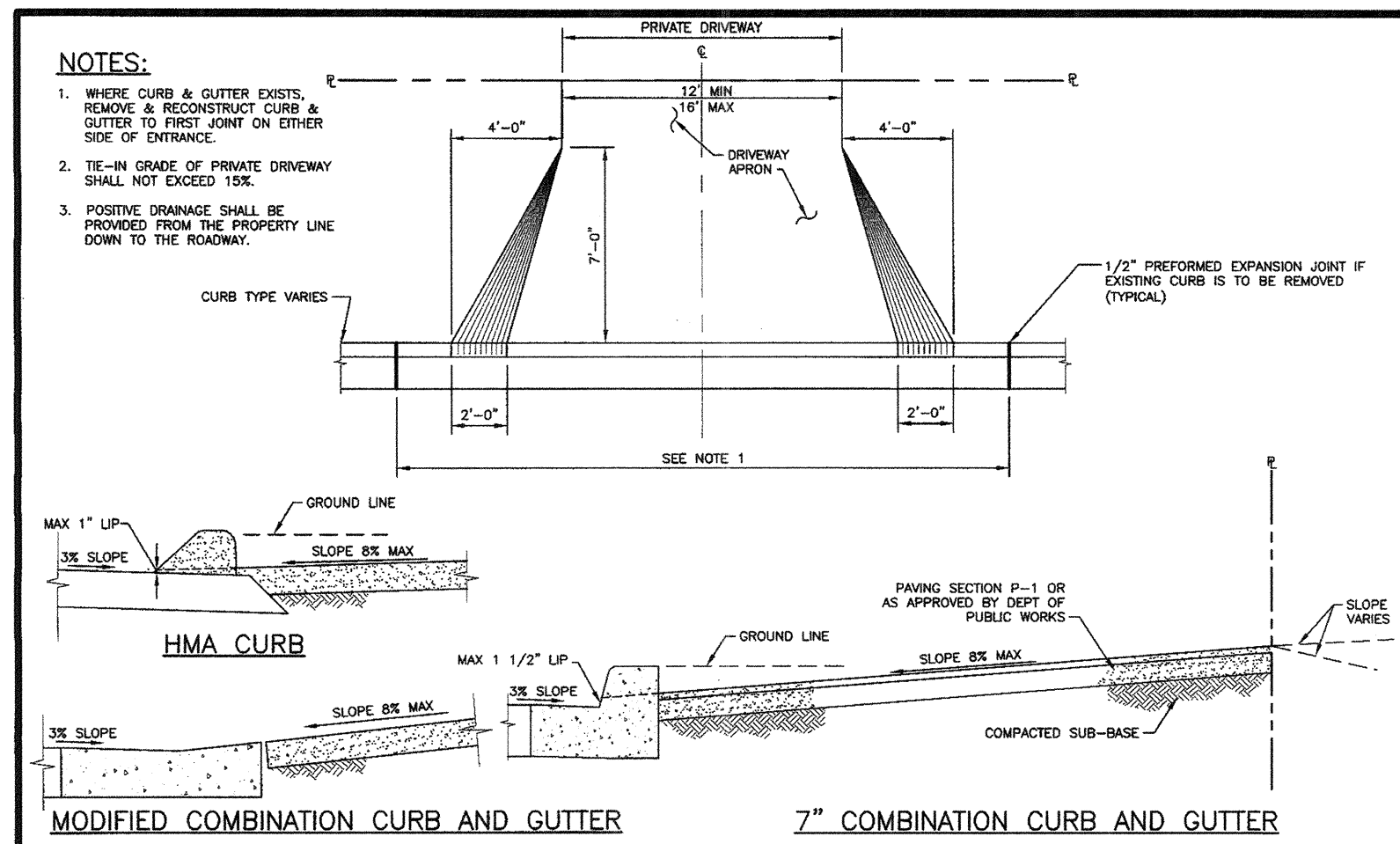
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>[Signature]</i> DATE: 5/7/2017 TITLE: Chief, Bureau of Engineering	CURB AND GUTTER 7" & Modified	Detail R-3.01
--	----------------------------------	------------------



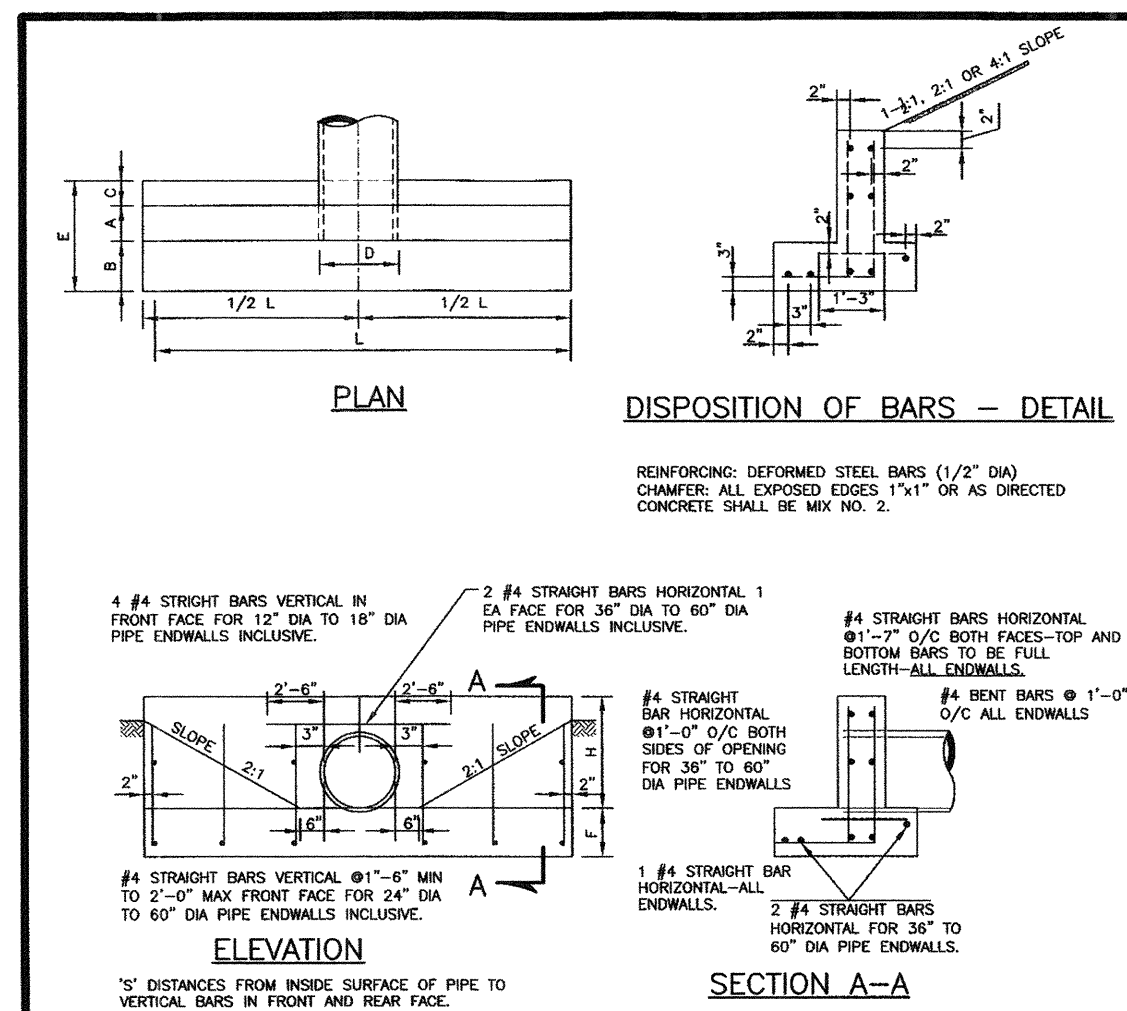
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>[Signature]</i> DATE: 5/7/2017 TITLE: Chief, Bureau of Engineering	TYPE A-5 INLET ≤10' Depth	Detail D-4.02
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HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>[Signature]</i> DATE: 5/7/2017 TITLE: Chief, Bureau of Engineering	TYPE A-10 INLET ≤10' Depth	Detail D-4.03
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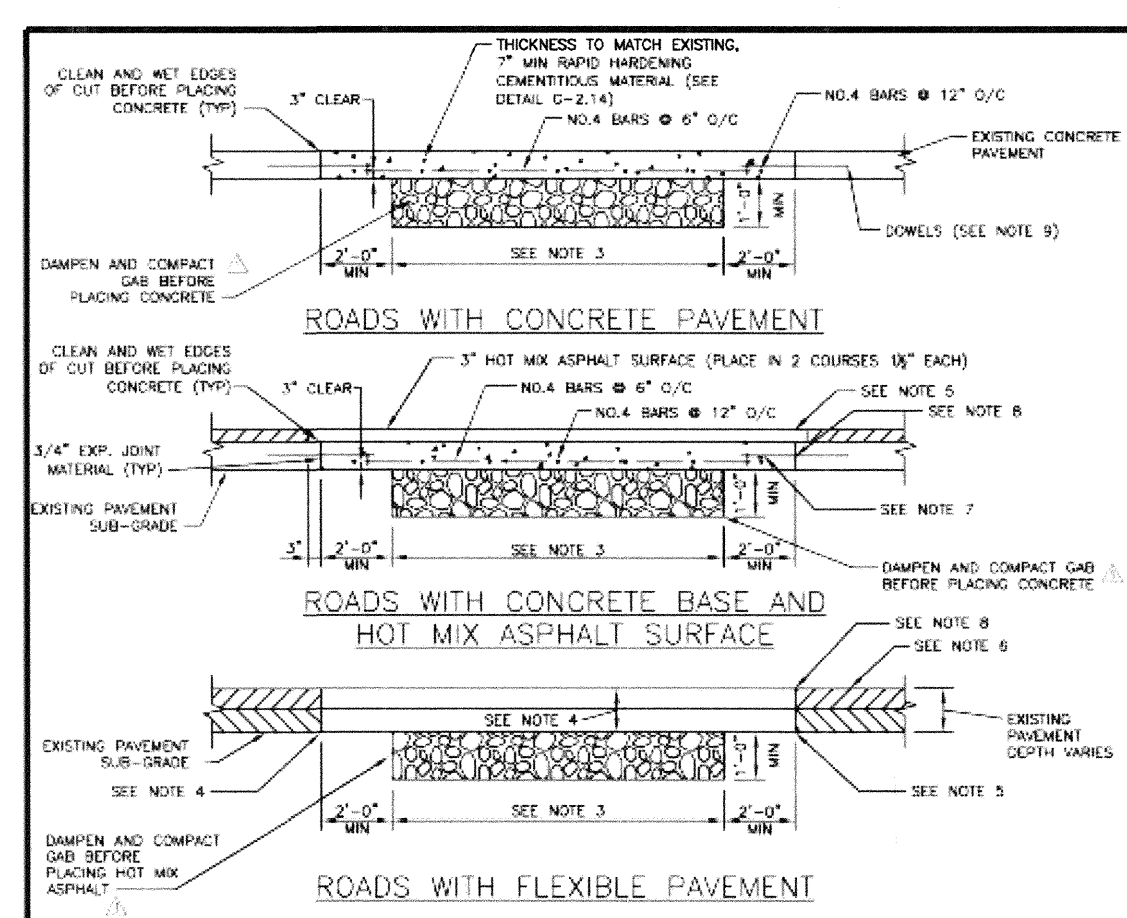


HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>[Signature]</i> DATE: 5/7/2017 TITLE: Chief, Bureau of Engineering	RESIDENTIAL DRIVEWAY ENTRANCE Closed Section Roadway without Sidewalk	Detail R-6.05
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OPENING INCHES SQ. FT.	DIMENSIONS						QUANTITIES CONCRETE CY. LBS.	
	A	B	C	E	F	H		
12	10.75	9"	8"	1'-0"	8"	1'-0"	1.51	41
16	17.25	9"	8"	1'-0"	8"	1'-0"	2.77	47
18	17.75	9"	8"	1'-0"	8"	1'-0"	3.14	34
21	24.00	9"	8"	1'-0"	8"	1'-0"	5.11	70
24	33.75	9"	8"	1'-0"	8"	1'-0"	7.56	80
27	33.80	9"	8"	1'-0"	8"	1'-0"	10.02	88
30	43.91	9"	8"	1'-0"	8"	1'-0"	12.32	98
33	53.94	9"	8"	1'-0"	8"	1'-0"	15.48	105
36	7.07	12"	10"	3'-0"	12"	4'-0"	8.16	182
39	9.29	12"	10"	3'-0"	12"	4'-0"	9.28	208
48	12.51	12"	10"	3'-0"	12"	5'-0"	16.08	244
54	15.80	12"	10"	3'-0"	12"	5'-0"	21.25	275
60	18.84	12"	10"	3'-0"	12"	5'-0"	26.81	304
72	28.21	12"	10"	3'-0"	12"	7'-0"	41.11	461

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>[Signature]</i> DATE: 5/7/2017 TITLE: Chief, Bureau of Engineering	Type 'C' Endwall Circular Pipe	Detail D-5.21
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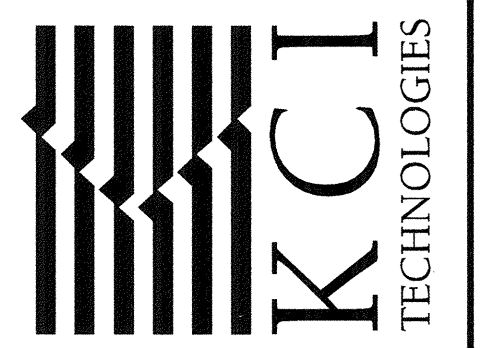
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>[Signature]</i> DATE: 5/7/2017 TITLE: Chief, Bureau of Engineering	Utility Trench Roadway Repaving	Detail G-4.01
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DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
[Signature]
 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES
 DATE: 10/15/20

NO.	REVISIONS DESCRIPTION	DATE

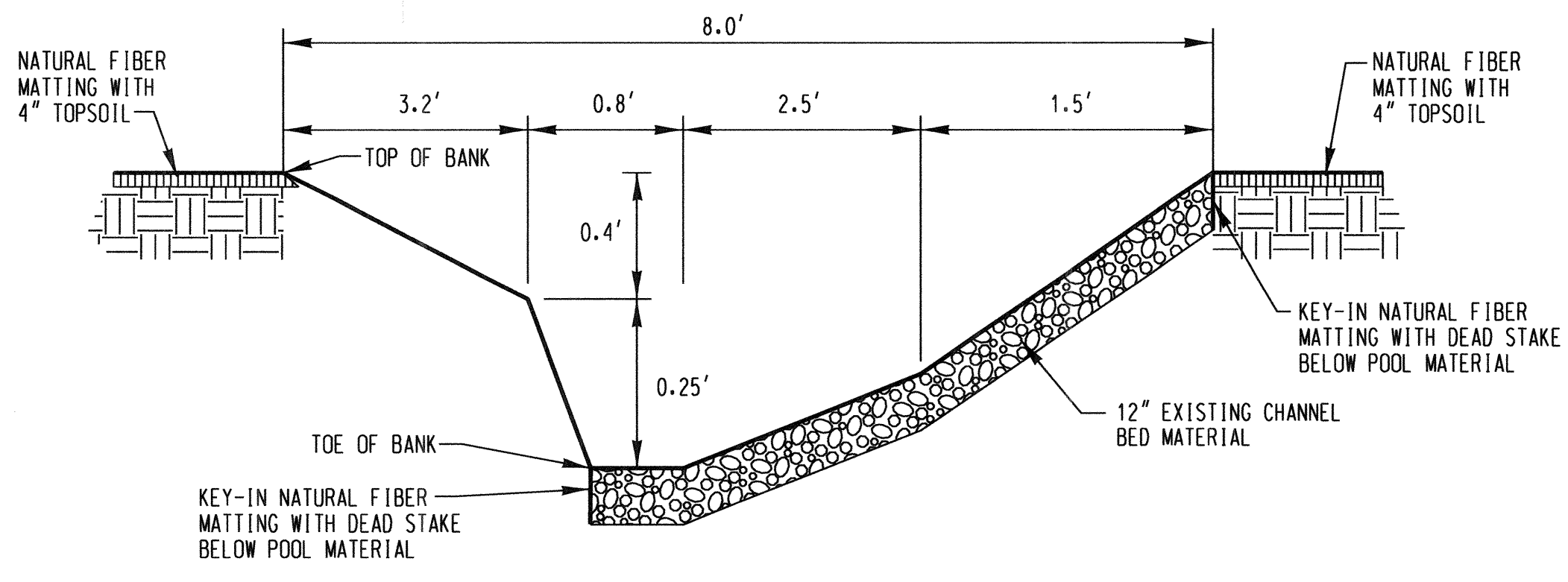
936 RIDGEBROOK ROAD
 SPARKS, MARYLAND 21152
 TELEPHONE: (410) 316-7800
 FAX: (410) 316-7818
 www.kci.com



GREENWAY DRIVE
 DRAINAGE IMPROVEMENTS 2
 CAPITAL PROJECT D-1175
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 STORMWATER MANAGEMENT DIVISION
 9801 BROKEN LAND PARKWAY
 COLUMBIA, MD 21046
 PARCELS 389, 445 TAX MAP 17
 ZONING R20 ELECTION DISTRICT 02 GRIDBLOCK 0022

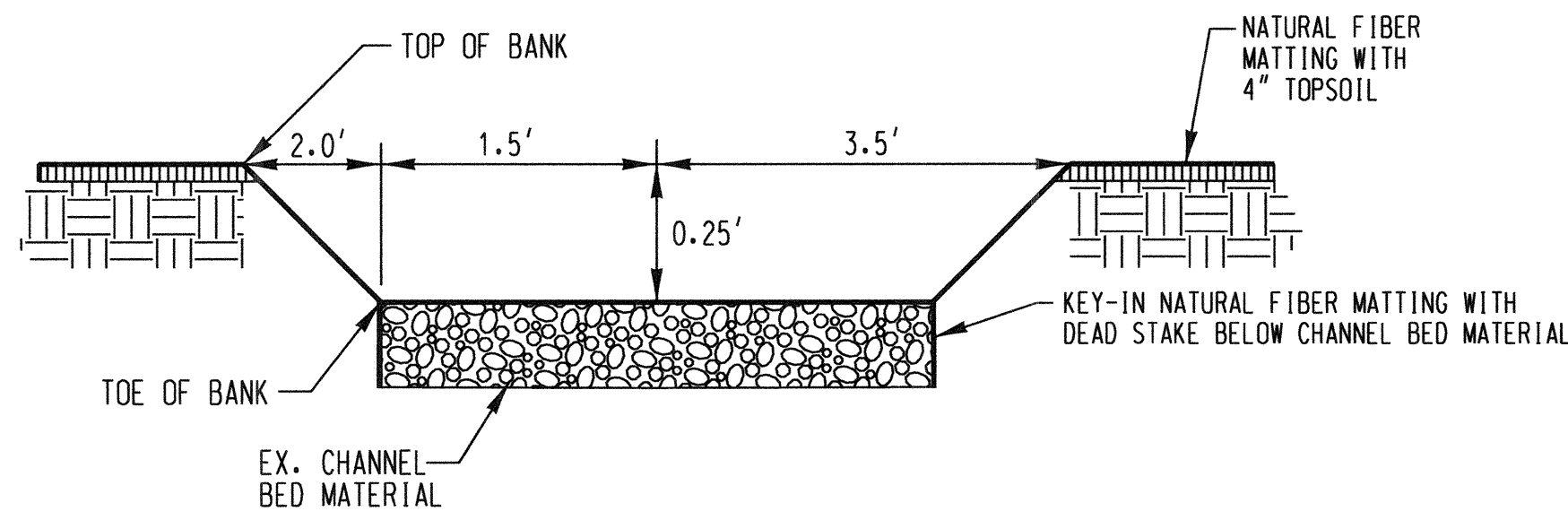
STORMWATER
 MANAGEMENT
 DETAILS

SCALE:	AS SHOWN
DATE:	OCTOBER 2020
KCI JOB NO.:	17105999.031
CAPITAL PROJECT NO.:	D-1175
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

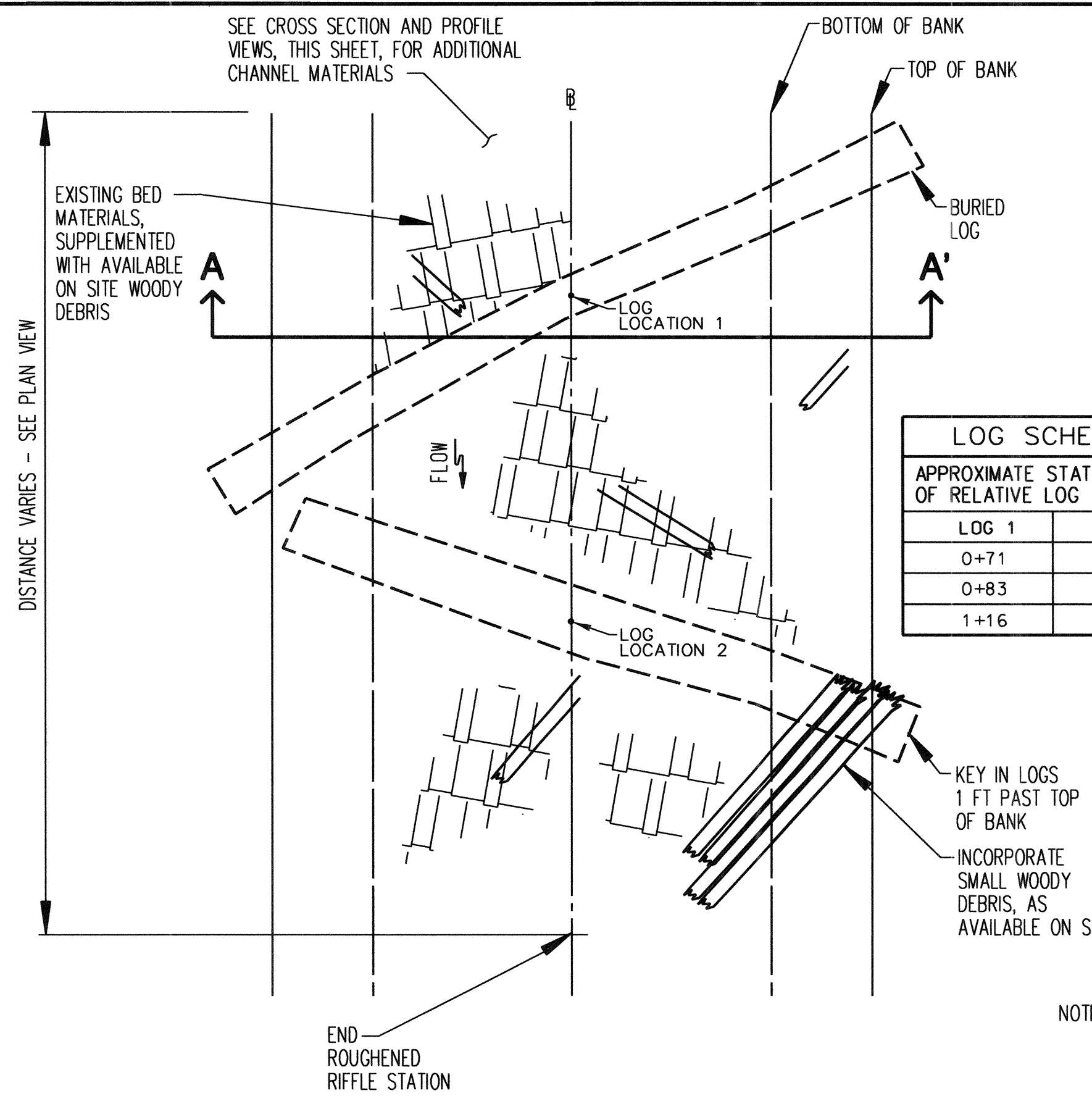


TYPICAL POOL LEFT CROSS SECTION
NOT TO SCALE

NOTE: POOL RIGHT IS A MIRROR IMAGE OF POOL LEFT



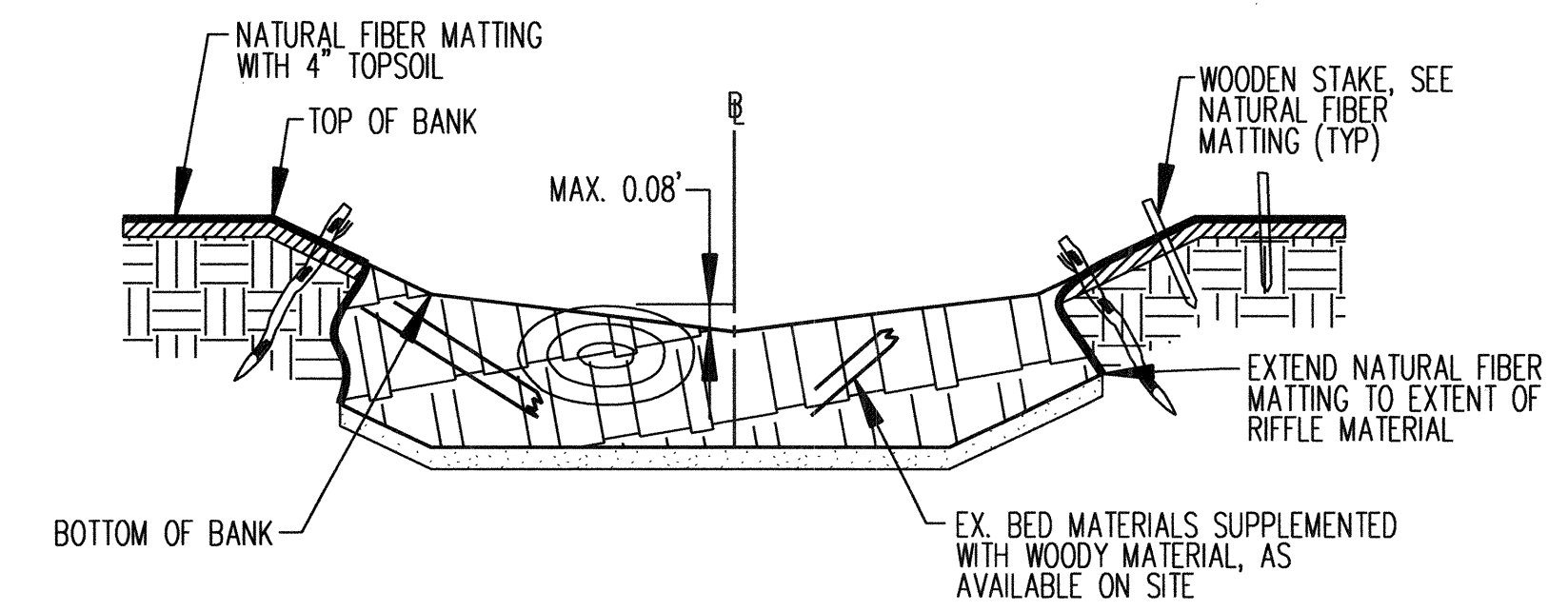
TYPICAL RIFFLE CROSS SECTION
NOT TO SCALE



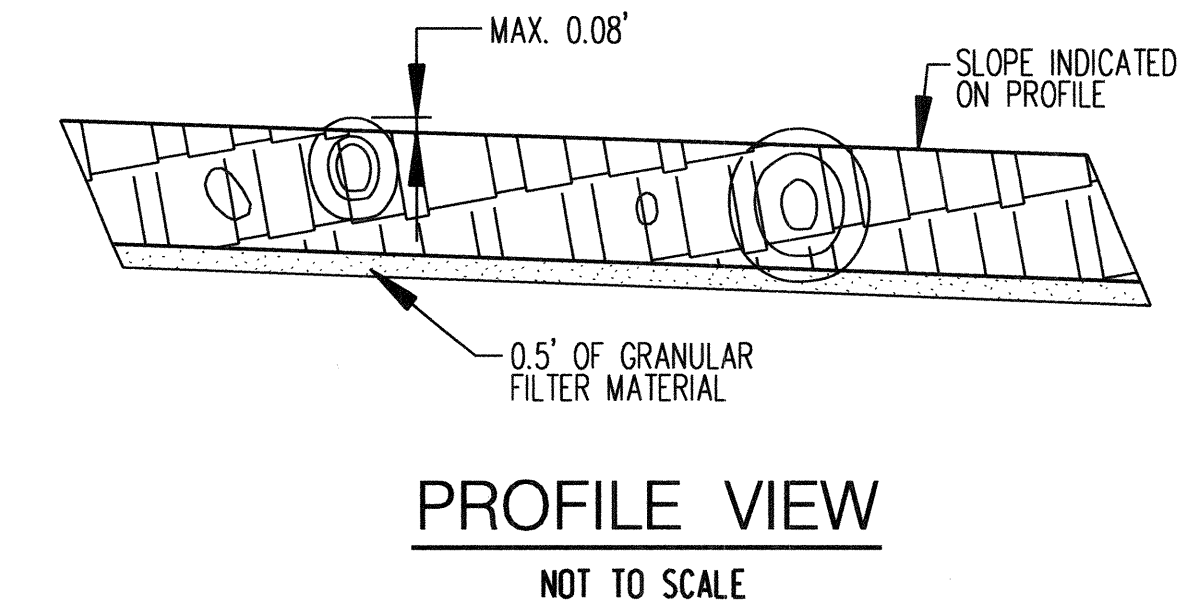
LOG SCHEDULE	
APPROXIMATE STATION A OF RELATIVE LOG PLACEMENT	
LOG 1	LOG 2
0+71	0+75
0+83	0+85
1+16	1+20

PLAN VIEW
NOT TO SCALE

ROUGHENED WOODY RIFFLE DETAILS
NOT TO SCALE

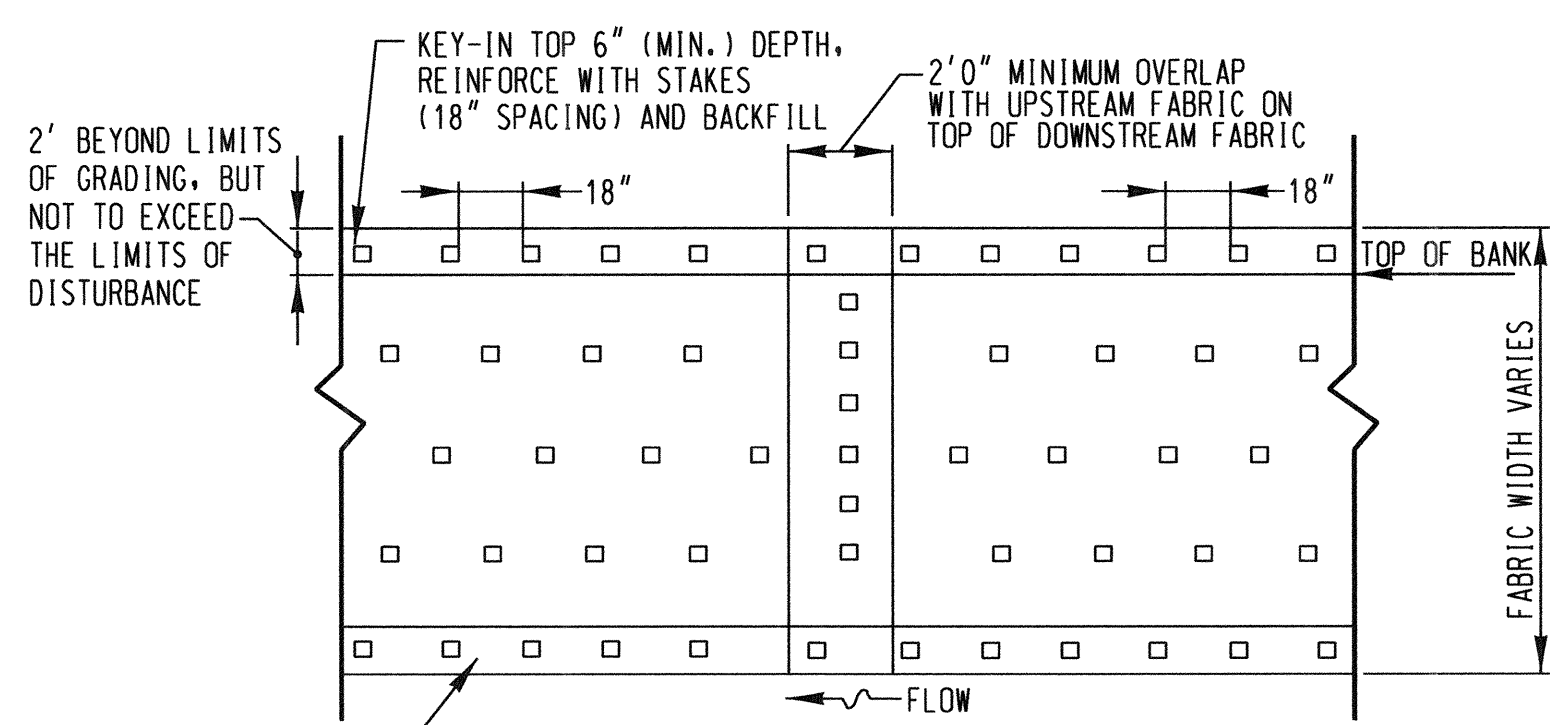


CROSS SECTION VIEW A-A'
NOT TO SCALE



PROFILE VIEW
NOT TO SCALE

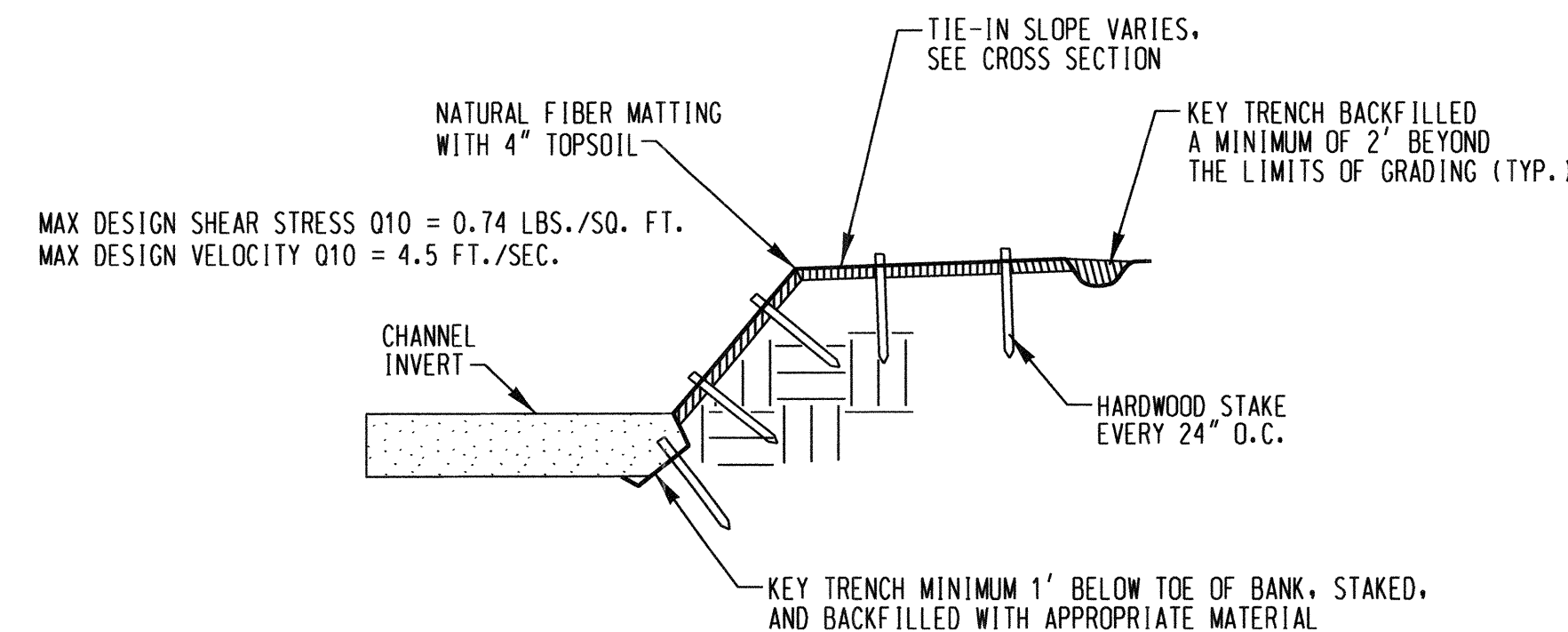
- NOTES:
1. MAXIMUM HEIGHT IS RELATIVE TO PROPOSED CROSS SECTION ELEVATION AT EDGE OF EXPOSED LOG OR BOULDERS.
 2. EXACT LOCATION OF LOGS AND STONES WILL VARY BASED ON MATERIAL AND STRUCTURE LENGTH AND SHOULD BE AT THE DIRECTION OF THE ENGINEER.
 3. THIS GRAPHIC IS A REPRESENTATION OF HOW THE ROUGHENED WOODY RIFFLE WILL BE INTEGRATED WITH BOULDERS, LOGS, AND EXISTING BED MATERIALS. ROUGHENED WOODY RIFFLES OF SHORTER OR LONGER LENGTHS SHOULD BE REDUCED OR ADDED AS DIRECTED BY THE ENGINEER.
 4. LOGS SHALL BE SALVAGED FROM ON-SITE CLEARING ACTIVITIES AND OF A DIAMETER OF 0.5' TO 1.5' AS APPROVED BY THE ENGINEER.
 5. THE MAXIMUM PROTRUSION HEIGHT WITHIN THE CHANNEL IS 0.08'. PROTRUSION CAN INCREASE BEYOND 0.3' BETWEEN THE BOTTOM AND TOP OF BANK EXTENTS.



TYPICAL PLAN VIEW NATURAL FIBER MATTING AND REINFORCED NATURAL FIBER MATTING
NOT TO SCALE

NOTES:

1. NATURAL FIBER MATTING TO BE ROLLED LENGTHWISE ALONG STREAMBANK EXTENDING TO THE BOTTOM OF TOE PROTECTION AND A MINIMUM OF TWO FEET PAST THE LIMITS OF GRADING. IF MORE THAN ONE ROLL IS REQUIRED, MID-BANK OVERLAP SHOULD BE A MINIMUM OF ONE FOOT AND SECURELY FASTENED WITH STAKES.
 2. NATURAL FIBER MATTING IS TO BE INSTALLED ON ALL GRADED BANK SLOPES STEEPER THAN 3H:1V THAT ARE NOT PROTECTED BY STONE TOE OR IMBRICATED BANK PROTECTIONS.
 3. NATURAL FIBER MATTING, MATTING FOR THE BANK TREATMENT AREAS SHALL CONSIST OF A MACHINE PRODUCED MAT OF DEGRADABLE NATURAL FIBERS AND SHALL MEET THE FOLLOWING MINIMUM SPECIFICATIONS:
MATERIAL: WOVEN COIR FIBER YARN OR TWINE
THICKNESS: 0.20 IN.
WEIGHT: 20 OZ/SY (700 GRAMS/SM)
FLOW VELOCITY: 8 FT./SEC. (2.4 M/SEC.)
SHEAR STRESS: 2 LBS./SQ. FT. (96 Pa)
LONGEVITY: 2 YEARS
 4. REINFORCED NATURAL FIBER MATTING. MATTING SHALL CONSIST OF A DOUBLE-LAYERED BIODEGRADABLE FABRIC: A BOTTOM LAYER OF JUTE FABRIC AND A TOP LAYER OF HIGH STRENGTH COIR MATTING, CONNECTED TOGETHER. REINFORCED NATURAL FIBER MATTING SHALL MEET THE FOLLOWING MINIMUM SPECIFICATIONS:
MATERIALS: WOVEN COIR FIBER (TOP LAYER) AND JUTE FABRIC (BOTTOM LAYER)
THICKNESS: 0.30 IN.
WEIGHT: 28 OZ/SY (900 GRAMS/SM)
FLOW VELOCITY: 10 FT./SEC. (3.0 M/SEC.)
SHEAR STRESS: 3 LBS./SQ. FT. (144 Pa)
LONGEVITY: 3 YEARS
 5. MATTING STAKES. STAKES FOR SECURING THE MATTING ALONG OTHER PORTIONS OF THE MATTING MATERIAL ABOVE THE TOE TRENCH AND FOR THE KEY-IN TRENCH AT THE TOP OF THE SLOPE SHALL CONSIST OF 1-1/2" X 1-1/2" HARDWOOD STAKES, 18-INCHES IN LENGTH, TAPERED AT THE BOTTOM END FOR EASY INSERTION INTO THE SOIL AND FLAT AT THE TOP END FOR HAMMERING.
SHEAR STRESS: 4.5 PSF
FLOW VELOCITY: 12 FT./SEC.
LIFE EXPECTANCY: 3 YEARS IN REINFORCED NATURAL FIBER MATTING
- ALL MATTING SHALL BE PULLED TIGHT AND SHALL NOT BE LOOSE OR SAGGING.



NATURAL FIBER MATTING CROSS SECTION
NOT TO SCALE

DETAIL D-4-2 PLUNGE POOL

STANDARD SYMBOL

PP

3:1 SIDE SLOPE

PLAN VIEW

SEE STREAM ALIGNMENT PROFILE, SHEET 5 OF 11 FOR DIMENSIONS

NONWOVEN GEOTEXTILE

SECTION A-A'

6 IN

18 IN

4 IN

20 (3 FT MAX.)

TOEWALL FOR PERMANENT PLUNGE POOLS

CONSTRUCTION SPECIFICATIONS

1. USE SPECIFIED CLASS OF RIPRAP.
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCHING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE.
3. PREPARE THE SUBGRADE FOR THE PLUNGE POOL TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EMBED THE GEOTEXTILE A MINIMUM OF 4 INCHES AND EXTEND THE GEOTEXTILE A MINIMUM OF 6 INCHES BEYOND THE EDGE OF THE SCOUR HOLE.
5. STONE FOR THE PLUNGE POOL MAY BE PLACED BY EQUIPMENT. CONSTRUCT TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. DELIVER AND PLACE THE STONE FOR THE PLUNGE POOL IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENEOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE STONE FOR THE PLUNGE POOL IN A MANNER TO PREVENT DAMAGE TO THE GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. AT THE PLUNGE POOL OUTLET, PLACE THE STONE SO THAT IT MEETS THE EXISTING GRADE.
7. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

GREENWAY DRIVE
DRAINAGE IMPROVEMENTS 2

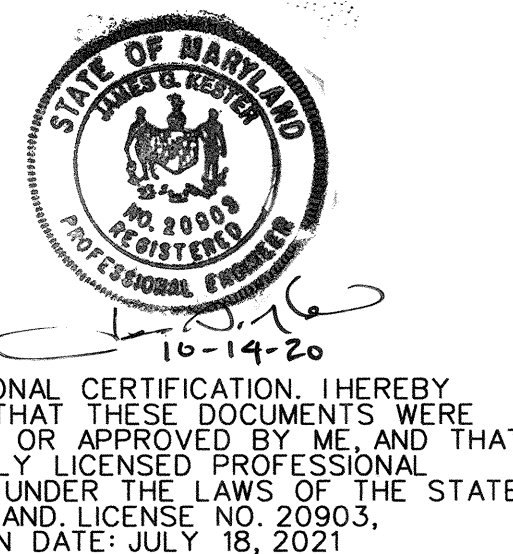
CAPITAL PROJECT D-1175

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
9801 BROOKEN LANE PARKWAY
COLUMBIA, MD 21046

PARCELS 899, 445 TAX MAP 17
ZONING R20 ELECTION DISTRICT 02 GRID/BLOCK 0022

STREAM DETAILS

SCALE:	NOT TO SCALE
DATE:	OCTOBER 2020
KCI JOB NO.:	171705999.031
CAPITAL PROJECT NO.:	D-1175
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	



PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 20903, EXPIRATION DATE: JULY 18, 2021

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD

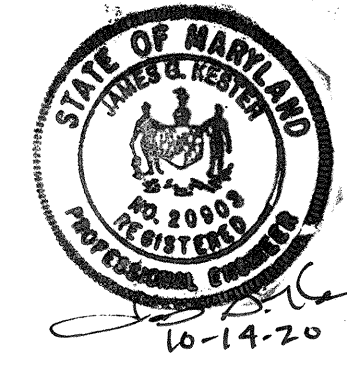
Michael P. Ryan
CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

10/19/20
DATE

ERIC P & ANDREA L SWAN
MAP 17,
PARCEL 445,
LOT 17

ARDUANE W &
WF DEMATTEIS
MAP 17,
PARCEL 445,
LOT 18

3014



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20903, EXPIRATION DATE: JULY 18, 2021.

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
Michael DePina
CHIEF, BUREAU OF ENVIRONMENTAL SERVICES
DATE: 10/19/20

SEQUENCE OF CONSTRUCTION:
GENERAL

- 3 DAYS 1. OBTAIN GRADING PERMIT. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777. CONTRACTOR SHALL COORDINATE AN ON-SITE PRE-CONSTRUCTION MEETING THAT SHALL INCLUDE COUNTY PROJECT MANAGER, THE CONTRACTOR, AND THE ENGINEER.
2. INSTALL ALL SEDIMENT CONTROLS BEFORE COMMENCEMENT OF WORK.
3. MARK LOD PRIOR TO PRE-CONSTRUCTION MEETING.
4. PLACE ORANGE CONSTRUCTION FENCE ALONG LOD AS SHOWN PRIOR TO COMMENCEMENT OF WORK.
- 1 WEEK 5. CONSTRUCT H-1 AND ASSOCIATED 18" RCP AT OUTFALL LOCATION DURING HOAA 3-DAY DRY PERIOD. PLACE PUMP-AROUND PER DETAIL 1.2 AS SHOWN ON THE PLAN, AND PERFORM STREAM WORK PER PLANS.
- 1 DAY 6. CONSTRUCT WATER MAIN RELOCATION PER REDLINE PLAN.
- 2 WEEKS 7. CONSTRUCT GREENWAY DRIVE STORM DRAIN SYSTEM. LIMIT CONSTRUCTION OF PIPE TO THAT WHICH CAN BE BACKFILLED AND STABILIZED AT THE END OF EACH WORK DAY TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ADJACENT AREAS. SEE STORM DRAIN SYSTEM NOTES 2, 4, AND 6.
8. ONCE AN INLET IS CONSTRUCTED, PLACE SAME DAY STABILIZATION AS SHOWN ON SHEETS 8 AND 9.
9. CONSTRUCT CURB AND GUTTER AND PAVEMENT PATCHES. WITH PERMISSION OF INSPECTOR, PERFORM GRADING.
- 1 DAY 10. CLEAN 18" RCP FROM I-8 TO H-1. ONCE PIPE IS DRY, PERFORM CIPP LINING DURING NOAA 3-DAY DRY PERIOD.
- 1 DAY 11. AT PROJECT COMPLETION, REMOVE ANY REMAINING SEDIMENT AND/OR DEBRIS FROM THE WORK AREA.
- 1 DAY 12. ONCE WORK IS COMPLETE, OBTAIN PERMISSION FROM INSPECTOR BEFORE REMOVAL OF CONTROLS.
- 2 DAYS 13. WHEN THE PROJECT AREA IS FULLY STABILIZED, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE AREAS DISTURBED BY THIS PROCESS.

STORM DRAIN SYSTEM NOTES

1. CONTRACTOR SHALL MINIMIZE THE IMPACT ON EXISTING UTILITIES AND OTHER EXISTING FEATURES, SPECIFICALLY EXISTING LANDSCAPE FEATURES.
2. CONTRACTOR SHALL CAUTION THE EQUIPMENT OPERATORS TO TAKE EXTRA CARE WHILE DRIVING WITHIN THE PROJECT AREA.
3. EXCAVATION SHALL BE LIMITED TO WHAT CAN BE BACKFILLED AND STABILIZED AT THE END OF THE WORK DAY.
4. EXCAVATED MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF PIPE EXCAVATION TRENCH.
5. IF EXCAVATION FOR PIPES REQUIRES THE REMOVAL OF STANDING WATER, IT SHALL BE PUMPED TO A PST OR OTHER SUITABLE DEVICE PRIOR TO DISCHARGE DOWNSTREAM.
6. CONTRACTOR SHALL UTILIZE STOCKPILE AREA AS NOTED ON PLANS, AS NEEDED.
7. INSTALLATION OF INLET PROTECTION MAY BE WAIVED UPON CONCURRENCE OF PERMANENT STABILIZATION BY THE SEDIMENT CONTROL INSPECTOR.
8. TEST PIT GAS SERVICE LINE BETWEEN I-8 AND I-10.

LEGEND

---	EX. CONTOUR
---SD---	EX. STORM DRAIN
---S---	EX. SANITARY SEWER
---W---	EX. WATER LINE
---G---	EX. GAS LINE
---T---	EX. OVERHEAD TELEPHONE
---	EX. WOODS LINE
---	EX. TREE
---	EX. MANHOLE
---	EX. UTILITY POLE
---	EX. EASEMENT
---	PROPERTY LINE
---	EDGE OF WATER
WUS	WATERS OF THE U.S.
SB	75' STREAM BUFFER
---	WETLAND BOUNDARY
WB	25' WETLAND BUFFER
FP	100-YEAR FLOODPLAIN
LOD	LIMIT OF DISTURBANCE
---	PROPOSED STORM DRAIN
---	PROPOSED CURB & GUTTER
---	PROPOSED INLET
---	FULL DEPTH PATCH
OSF	ORANGE SAFETY FENCE
SF	SILT FENCE
---	FLEXIBLE PIPE
⊗	PUMP
FB	FILTER BAG
---	SANDBAG DIVERSION
---	MULCH ACCESS PATH
---	SAME-DAY TEMPORARY SLOPE STABILIZATION
---	PERMANENT SOIL STABILIZATION WITH SEED MIX (SHEET 11)
---	STOCKPILE AREA
B	HYDROLOGIC SOIL GROUP
---	RESIDENTIAL DRIVEWAY ENTRANCE

DATE	
NO.	REVISIONS DESCRIPTION

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818
WWW.KCI.COM

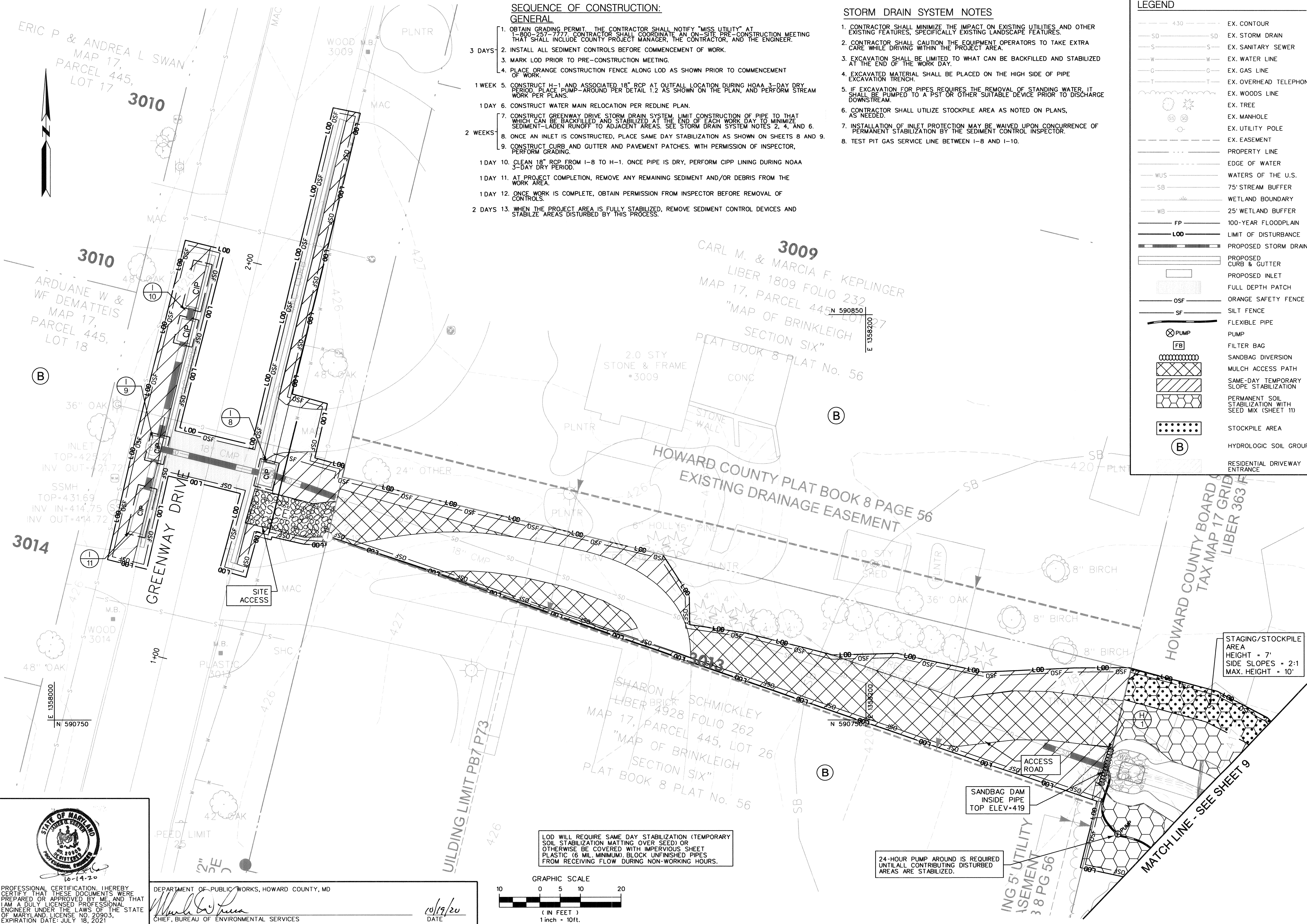
GREENWAY DRIVE
DRAINAGE IMPROVEMENTS 2

CAPITAL PROJECT D-1175
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
3801 BROCKEN LAND PARKWAY
COLUMBIA, MD 21046

PARCELS 389, 445 TAX MAP 17
ZONING R20 ELECTION DISTRICT 02 GRIDBLOCK 0022

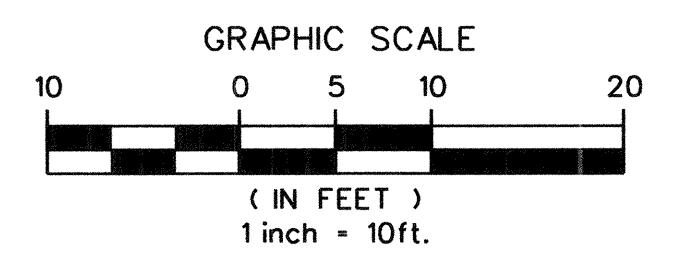
EROSION & SEDIMENT CONTROL PLAN

SCALE: 1"=10'
DATE: OCTOBER 2020
KCI JOB NO.: 171705999.031
CAPITAL PROJECT NO.: D-1175
PERMIT ISSUE:
CONSTRUCTION ISSUE:



LOD WILL REQUIRE SAME DAY STABILIZATION (TEMPORARY SOIL STABILIZATION MATTING OVER SEED) OR OTHERWISE BE COVERED WITH IMPERVIOUS SHEET PLASTIC (6 MIL. MINIMUM). BLOCK UNFINISHED PIPES FROM RECEIVING FLOW DURING NON-WORKING HOURS.

24-HOUR PUMP AROUND IS REQUIRED UNTIL ALL CONTRIBUTING DISTURBED AREAS ARE STABILIZED.

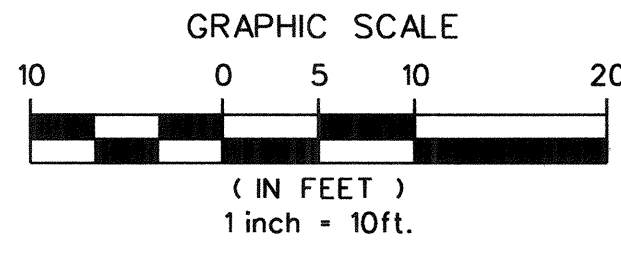
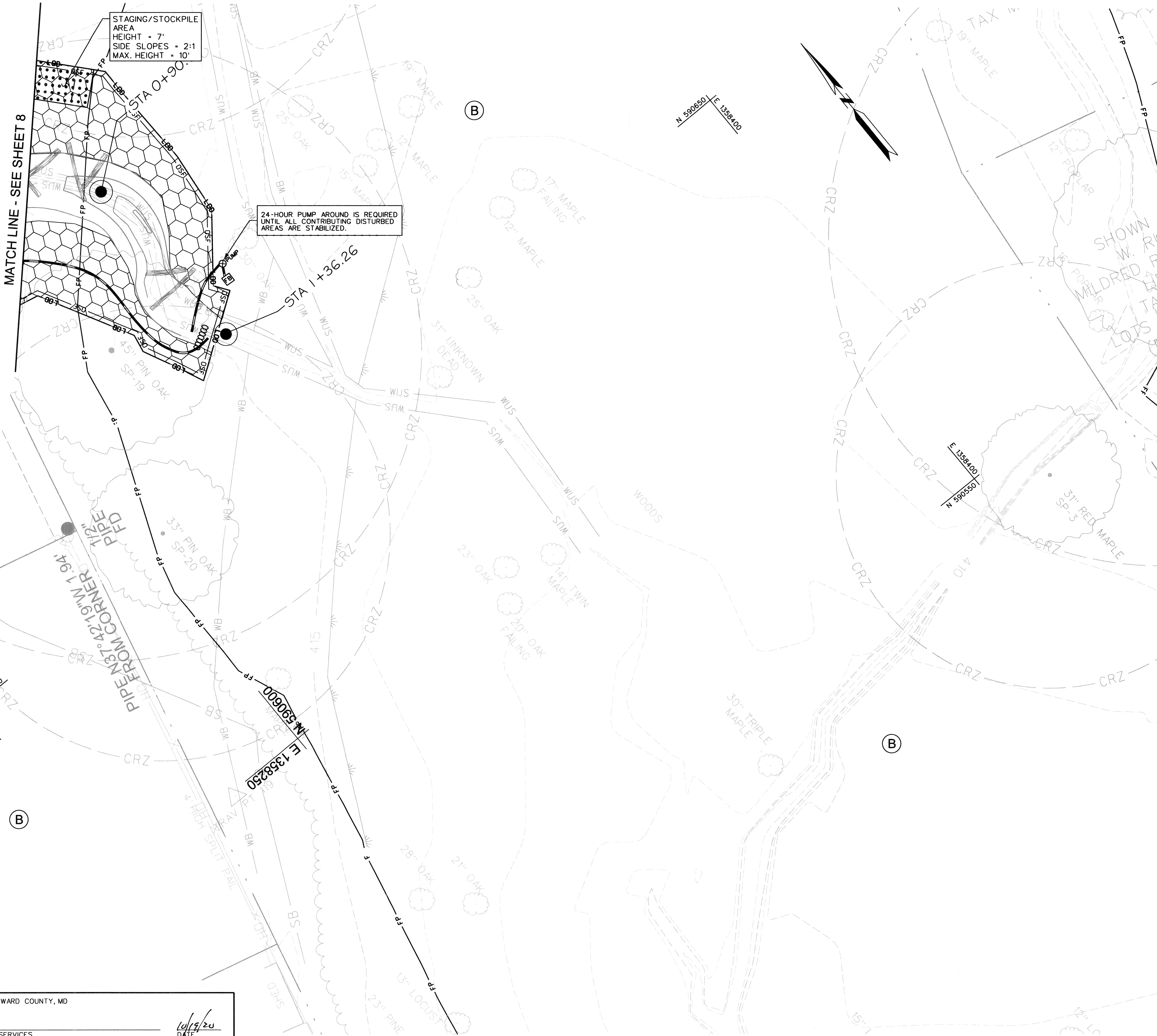


PLOT DATE: 10/03/20 on Wednesday, October 14, 2020
FILE: M:\2017\171705999\Drawings\03_P23_P2023_Greenway.dgn

LEGEND

- 4.30 --- EX. CONTOUR
- SD---SD EX. STORM DRAIN
- S---S EX. SANITARY SEWER
- W---W EX. WATER LINE
- G---G EX. GAS LINE
- T---T EX. OVERHEAD TELEPHONE
- EX. WOODS LINE
- EX. TREE
- EX. MANHOLE
- EX. UTILITY POLE
- EX. EASEMENT
- PROPERTY LINE
- EDGE OF WATER
- WUS --- WATERS OF THE U.S.
- SB --- 75' STREAM BUFFER
- WB --- WETLAND BOUNDARY
- 25' WETLAND BUFFER
- FP --- 100-YEAR FLOODPLAIN
- LOD --- LIMIT OF DISTURBANCE
- PROPOSED STORM DRAIN
- PROPOSED CURB & GUTTER
- PROPOSED INLET
- FULL DEPTH PATCH
- OSF --- ORANGE SAFETY FENCE
- SF --- SILT FENCE
- FLEXIBLE PIPE
- PUMP
- FB --- FILTER BAG
- SANDBAG DIVERSION
- MULCH ACCESS PATH
- SAME-DAY TEMPORARY SLOPE STABILIZATION
- PERMANENT SOIL STABILIZATION WITH SEED MIX (SHEET 11)
- STOCKPILE AREA
- (B) --- HYDROLOGIC SOIL GROUP

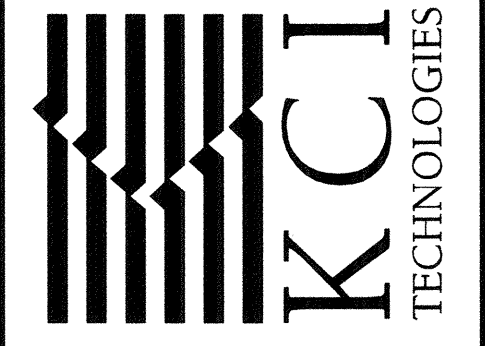
LOD WILL REQUIRE SAME DAY STABILIZATION (TEMPORARY SOIL STABILIZATION MATTING OVER SEED) OR OTHERWISE BE COVERED WITH IMPERVIOUS SHEET PLASTIC (6 MIL. MINIMUM), BLOCK UNFINISHED PIPES FROM RECEIVING FLOW DURING NON-WORKING HOURS.



DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
 [Signature]
 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES
 DATE: 10/19/20

NO.	REVISIONS DESCRIPTION	DATE

936 RIDGEBROOK ROAD
 SPARKS, MARYLAND 21152
 TELEPHONE: (410) 316-7800
 FAX: (410) 316-7818
 WWW.KCI.COM



GREENWAY DRIVE
 DRAINAGE IMPROVEMENTS 2
 CAPITAL PROJECT D-1175
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 STORMWATER MANAGEMENT DIVISION
 9801 BROKEN LAND PARKWAY
 COLUMBIA, MD 21046
 PARCELS 389, 445 TAX MAP 17
 ZONING R20 ELECTION DISTRICT 02 GRIDBLOCK 0022

EROSION & SEDIMENT CONTROL PLAN

SCALE:	1" = 10'
DATE:	OCTOBER 2020
KCI JOB NO.:	171705999.031
CAPITAL PROJECT NO.:	D-1175
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

