INDEX OF SHEETS

SHEET NO

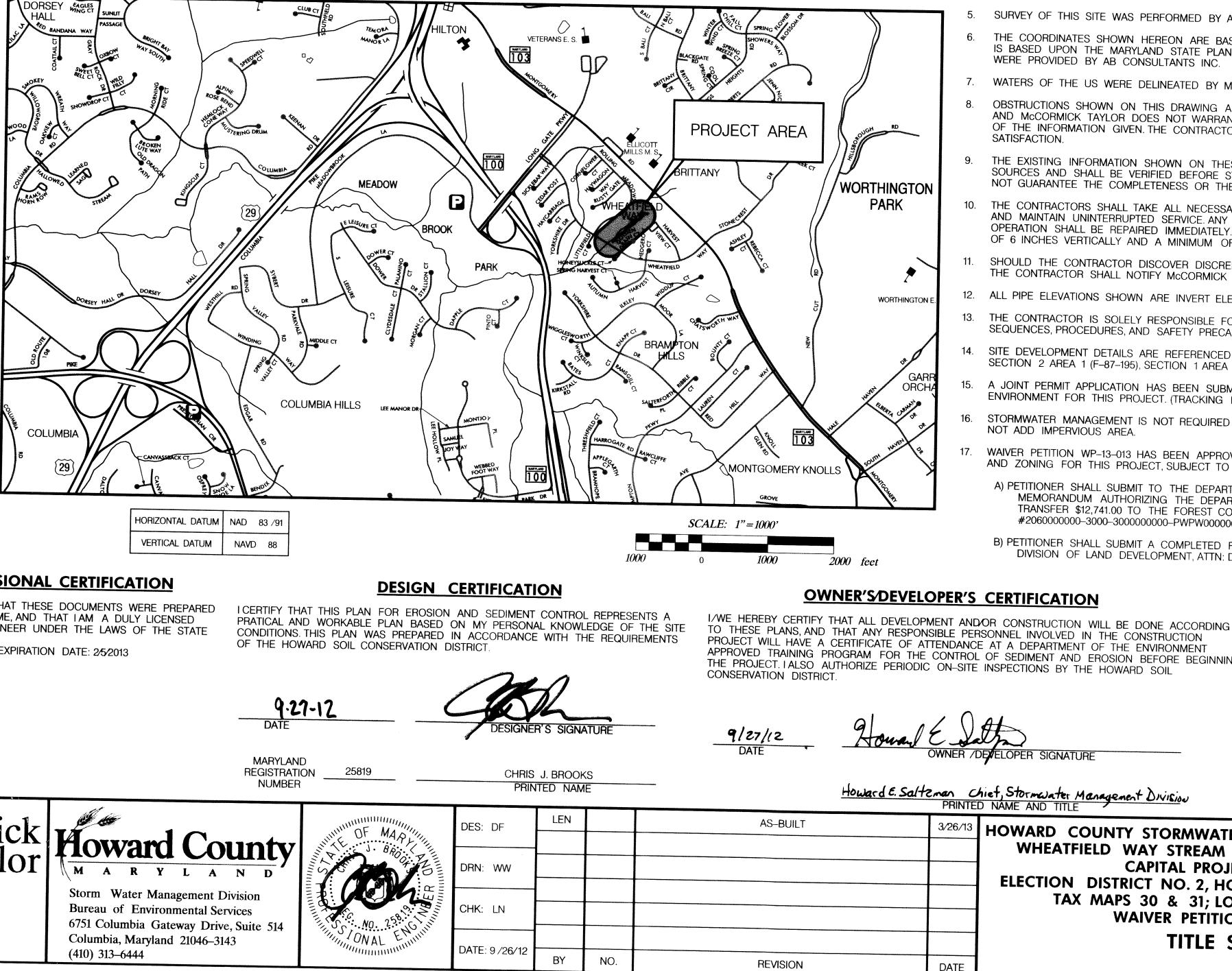
MANAGEMENT DIVISION

1	TITLE SHEET
2	GEOMETRY SHEET
-4	SITE PLANS
6	STREAM STABILIZATION DETAILS
-8	EROSION AND SEDIMENT CONTROL PLANS
9	EROSION AND SEDIMENT CONTROL NOTES
0	EROSION AND SEDIMENT CONTROL DETAILS
-12	LANDSCAPE PLANS
3	LANDSCAPE NOTES & DETAILS
4	PROFILE SHEET
-23	CROSS SECTIONS

TITLE

LEGEND

PROPOSED MEDIAN BARRIER	<u> </u>
ELECTRICAL HAND BOX - SIGNALS	H.B.
FLOW LINE — — — — — — — — — — — — — — — — — — —	
STATE, COUNTY OR CITY LINES	
PROPOSED TRAFFIC BARRIER	
EXISTING TRAFFIC BARRIER	
EXISTING FENCE LINE ———————— RIGHT OF WAY LINE —————————————————————	
BASE OR SURVEY LINE	
TRAVERSE POINT	\bigtriangleup
APPROXIMATE LIMITS OF CUT AND/OR FILL	
PROPOSED MAJOR CONTOUR	
PROPOSED MINOR CONTOUR	
LIMIT OF DISTURBANCE ————————	—— L60 ——
EXISTING MAJOR CONTOURS — — — — — —	annun and 90-menter annun
EXISTING MINOR CONTOURS	
EXISTING PIPE/CULVERT — — — — — — — — — — — — — — — — — — —	
EXISTING DROP INLET	
WATERS OF THE US	WUS
HEDGE /TREE LINE — — — — — — — — — — — — — — — — — — —	
BUSH /TREE	\odot
CONIFEROUS TREE	*
LIGHT POLE ——————————	-¢-



DEPARTMENT OF RECREATION AND PARKS, HOWARD COUNTY, MD ~ MI CII **PROFESSIONAL CERTIFICATION** 5 DIRECTOR OF RECREATION AND PARKS DATE 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 REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT OF MARYLAND. AND MEETS TECHNICAL REQUIREMENTS. LICENSE NO. 25819, EXPIRATION DATE: 2/5/2013 THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. LOLALIA DATE SOIL CONSERVATION DISTRICT 812-12-019 DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND **McCormick** Engineers & Planners Since 1946 Taylor C al torecca 928/12 DIRECTOR OF PUBLIC WORKS DATE CHIEF BUREAU OF 509 South Exeter Street ENVIRONMENTAL SERVICES 4th Floor Baltimore, Maryland 21202

(410) 662–7400

HOWARD COUNTY Capital Project #D-1158

Wheatfield Way Stream Rehabilitation Project

Storm Water Management Division Bureau Of Environmental Services

GENERAL NOTES

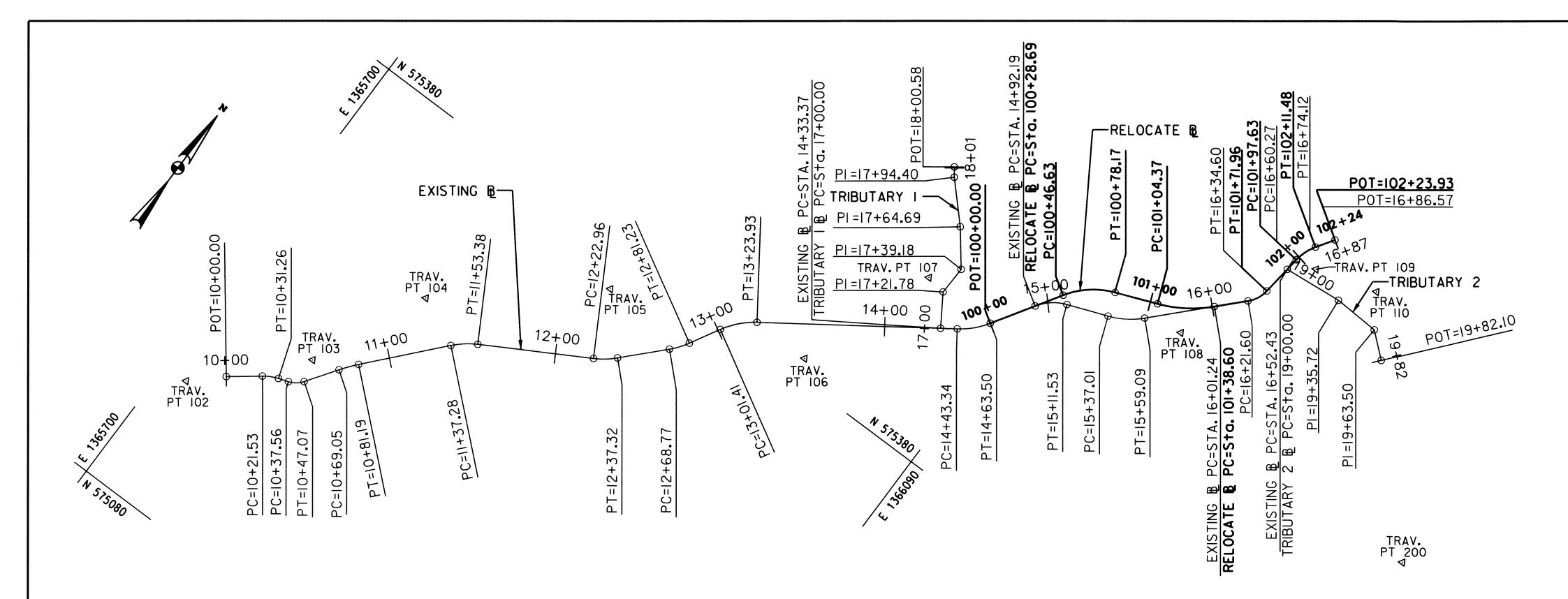
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MDSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST FIVE (5) WORKING DAYS PRIOR TO ANY WORK BEING DONE.
- THIS PLAN IS PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL
- 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 PRIOR TO THE START OF WORK.
- SURVEY OF THIS SITE WAS PERFORMED BY AB CONSULTANTS, INC-OCTOBER 2011.
- THE COORDINATES SHOWN HEREON ARE BASED ON HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM BENCHMARKS SHOWN HEREON WERE PROVIDED BY AB CONSULTANTS INC.
- WATERS OF THE US WERE DELINEATED BY MCCORMICK TAYLOR SEPTEMBER 2011
- OBSTRUCTIONS SHOWN ON THIS DRAWING ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND MCCORMICK TAYLOR DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY SUCH INFORMATION TO HIS OWN SATISFACTION
- THE EXISTING INFORMATION SHOWN ON THESE PLANS WAS TAKEN FROM THE BEST AVAILABLE SOURCES AND SHALL BE VERIFIED BEFORE STARTING CONSTRUCTION. HOWARD COUNTY DOES NOT GUARANTEE THE COMPLETENESS OR THE CORRECTNESS OF THE SHOWN INFORMATION.
- 10. THE CONTRACTORS SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTORS'S OPERATION SHALL BE REPAIRED IMMEDIATELY ALL UTILITIES SHALL HAVE A CLEARANCE BY A MINIMUM OF 6 INCHES VERTICALLY AND A MINIMUM OF 5 FEET HORIZONTALLY.
- SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY MCCORMICK TAYLOR IMMEDIATELY TO RESOLVE THE SITUATION.
- 12. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- 13. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- SITE DEVELOPMENT DETAILS ARE REFERENCED FROM THE AS-BUILT PLANS FOR LONG GATE SECTION 2 AREA 1 (F-87-195), SECTION 1 AREA 2 (F-86-095), SECTION 1 AREA 4 (F-87-050).
- 15. A JOINT PERMIT APPLICATION HAS BEEN SUBMITTED TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR THIS PROJECT. (TRACKING NUMBER 201260617)
- STORMWATER MANAGEMENT IS NOT REQUIRED FOR THIS PROJECT SINCE THIS PROJECT WILL NOT ADD IMPERVIOUS AREA.
- WAIVER PETITION WP-13-013 HAS BEEN APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PLANNING 17 AND ZONING FOR THIS PROJECT, SUBJECT TO THE FOLLOWING CONDITIONS:
 - A) PETITIONER SHALL SUBMIT TO THE DEPARTMENT OF PLANNING AND ZONING A COPY OF THE MEMORANDUM AUTHORIZING THE DEPARTMENT OF FINANCE, BUREAU OF ACCOUNTING, TO TRANSFER \$12,741.00 TO THE FOREST CONSERVATION FUND- SECTION 16.1211, SAP ACCT. #206000000-3000-3000000000-PWPW0000000000-432521.
 - B) PETITIONER SHALL SUBMIT A COMPLETED FOREST CONSERVATION DATA SUMMARY TO THE DPZ, DIVISION OF LAND DEVELOPMENT, ATTN: DAVE BOELLNER.

PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING

ELOPER SIGNATURE

Howard E. Salteman Chief, Stormwater Management Division PRINTED NAME AND TITLE

6/13	HOWARD COUNTY STORMWATER MANAGEMENT EVALUATION	SCALE
	WHEATFIELD WAY STREAM REHABILITATION PROJECT	
	CAPITAL PROJECT# D-1158	AS
	ELECTION DISTRICT NO. 2, HOWARD COUNTY MARYLAND	SHOWN
	TAX MAPS 30 & 31; LOTS 61, 190, 240 & 241	
	WAIVER DETITION W/D 10 010	SHEET
	WAIVER PETITION WP-13-013	UNLLI
	TITLE SHEET	
		<u>1</u> OF <u>23</u>
TE		

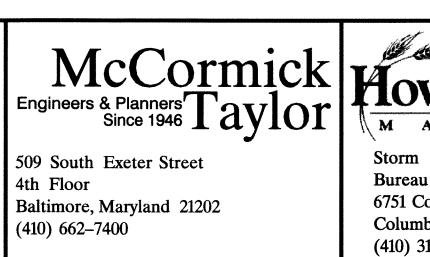


TRAVE	RSE CONTR	OL COORI	DINATE	s [BASE	LINE CON	ITROL	COOR	DINATE	S			BASE	LINE CON	TROL COO	RDINATE	S	
POINT	NORTHING	EASTING	ELEVAT		E CONSTRUCTION	POINT	NORTHING	EAS	TING	STATION	BEARING A	H RADIUS	E CONSTRUCTION	POINT	NORTHING	EASTING	STATION	BEARING AH	RADIUS
102	575158.7505	1365715.3043	384.5	0		POT=	575454.0806	136605	56.2177	17+00.00	N 33° 01'4	7" W		POT=	575474.3373	1366078.1552	100+00.00	N 31° 53'45" E	
103	575213.9993	1365768.2559	379.9)]		PI =	575472.3438	136604	14.3439	17+21.78				PC=	575513.9280	1366102.7943	100+46.63		
104	575284.0341	1365799.9742	380.8	3		PI =	575472.3438	136604	14.3439	17+21.78	N I* 25'50	* E		PC=	575513.9280	1366102.7943	100+46.63	N 31° 53'45" E	
105	575354.6783	1365884.5649	383.3	0		PI =	575489.7379	136604	4.7783	17+39.18				PI =	575527.7772	1366111.4132	100+62.94		
106	575391.1709	1366002.2352	388.4	5	Tributary I	PI =	575489.7379	136604	14.7783	17+39.18	N 38° 06'4	I ⁻ W		CC =	575487.5092	1366145.2448			50 . 00'
107	575474.2927	1366032.4350	387.3	<u> </u>		PI =	575509.8084	136602	9.0345	17+64.69				PT=	575533 . 879I	1366126.5410	100+78.17	N 68° 01'58°E	
108	575538.2346	1366172.4106	393.0	9		PI =	575509.8084	136602	9.0345	17+64.69	N 43° 52'3	D* W		PC=	575543.6821	1366150.8441	101+04.37		
109	575617.2403	1366213.9381	391.8			PI =	575531.2234	136600	8.4443	17+94.40				PC=	575543.6821	1366150.8441	101+04.37	N 68° 01'58°E	
110	575628.1179	1366250.9227	395.7	9		PI =	575531.2234	136600	8.4443	17+94.40	N 36° 31'40)" W		Pl =	575550.1835	1366166.9621	101+21.75		
200	575508.3660	1366360.1137	401.8	<u>4</u> L		POT=	575536.1874	136600	4.7674	18+00.58				CC =	575617.8739	1366120.9180			80.00'
													Relocate	PT=	575562.7864	1366178.9297	101+38 . 60	N 43° 31'08" E	
	EXISTING CURVE DATA								PC=	575577.5502	1366192.9494	101+58.96							
											CENTER			PC=	575577.5502	1366192.9494	101+58.96	N 43° 31'08" E	
				JRVE NO.	DELTA	Dc	R	1		E		OF CURVE		PI =	575582.4365	1366197.5894	101+65.70		
				<u>C-I</u>	18° 34'24'	190* 59'09		4.91'	9.72'	0.4	575164.5967	1365768.3233		= <u>22</u>	575591.3221	1366178.4465			20.00'
				<u>C-2</u>	36° 19'33'	381* 58'19		4.92′	9.51'	0.79	575209.1700	1365759.4975		PT=	575589.1345	1366198.3265	101+71.96	N 6° 16'47" E	
				<u>C-3</u>	6° 57'17"	57° 17'45'		6.08'	12.14'	0.18	575162.1399	1365866.7197		PC=	575614.6502	1366201.1343	101+97.63		
				<u>C-4</u>	18° 27'37°	114° 35'30		8.13'	16.11'	0.66	575237.2756	1365866.3844		PC=	575614.6502	1366201.1343	101+97.63	N 6° 16'47°E	
				<u>C-5</u>	16° 27'21"	II4° 35'30	1	7.23'	14.36'	0.52	575358.6818	1365876.4766		<u>PI =</u>	575621.6582	1366201.9055	102+04.68		
				<u>C-6</u>	14° 16'28"	II4° 35'30		6.26'	12.46'	0.39	575381.5029	1365898.1073		= <u>22</u>	575611.3687	1366230.9543			30.00'
				<u>C-7</u>	25° 48′29°	II4° 35'30		11.46'	22.52'	1.3	575350.3521	1365995.2520		PT=	575627.5892	1366205.7176	102+11.48	N 32° 43'49°E	
				<u>C-8</u>	23° 06'13°	114° 35'30		10.22'	20.16'	1.03	575500.7561	1366035.7047	L	POT=	575638.0614	1366212.4484	102+23.93		
				<u>C-9</u>	36° 55'38°	190° 59'09		10.02'	19.34'	1.63	575482.8453								
				<u>C-10</u>	25° 18'14"	114° 35'30	1	11.22'	22.08'	1.24	575566.6475	1366113.6447		BASE	LINE CON	TROL COO	RDINATE	5	
				<u>C-II</u>	37° 14'21"	286° 28'44		6.74'	13.00'	1.1	575591.3221	1366178.4465		Τ					
			L	C-12	26° 27'0I*	190° 59'09	30. 00′	7.05'	13.85′	0.82	575611.3686	1366230.9543		POINT	NORTHING	EASTING	STATION	BEARING AH	RADIUS
						Dr			DATA		79			POT=	575606.8524	1366200.2762	19+00.00	N 84° 19'28' E	4
			ļ		r	KE	LOCATE C	UKVE						PI =	575610.3852	1366235.8232	19+35.72		
			CL	JRVE NO.	DELTA	Dc	R	Т	L	Ε	CENTER	R OF CURVE	Tributary 2	PI =	575610.3852	1366235.8232	19+35.72	S 87° 12'42" E	
				C-13	36° 08'13'	II4° 35'30	50.00 [,]	16.31	31.54'	2.59	575487 5092	1366145.2448		<u>PI =</u>	575609.0341	1366263.5651	19+63.50		

ATES		BAS	ELINE CON	NTROL	COOR	RDINATI	ES			BASE	LINE CON	TROL COO	RDINATES	5	
		POINT	NORTHING	EAS	TING	STATION	BEARING	AH RADIUS		POINT	NORTHING	EASTING	STATION	BEARING AH	RADIUS
84.50		POT=	575454.0806	136605	56.2177	17+00.00	N 33° 01'4	7" W		POT=	575474.3373	1366078.1552	100+00.00	N 31° 53'45"E	
79.91		PI =	575472.3438	136604	4.3439	17+21.78				PC=	575513.9280	1366102.7943	100+46.63		
80.83		PI =	575472.3438	136604	4.3439	17+21.78	N I* 25'50	D* E		PC=	575513.9280	1366102.7943	100+46.63	N 31° 53'45"E	
83.30		PI =	575489.7379	136604	4.7783	17+39.18				PI =	575527.7772	1366111.4132	100+62.94		
88.45	Tributary I	PI =	575489.7379	136604	4.7783	17+39.18	N 38° 06'4	11" W		CC =	575487.5092	1366145.2448			50.00'
87.30		PI =	575509.8084	136602	9.0345	17+64.69				PT=	575533.8791	1366126.5410	100+78.17	N 68° 01'58" E	
93.09		PI =	575509.8084	136602	9.0345	17+64.69	N 43° 52'3	0" W		PC=	575543.6821	1366150.8441	101+04.37		
91.80		PI = 575531.2234 1366008.4443 17+94.40	PC=	575543.6821	1366150.8441	101+04.37	N 68° 01'58°E								
95.79		PI =	575531.2234	136600	8.4443	17+94.40	N 36° 31'4	0" W		PI =	575550.1835	1366166.9621	101+21.75		
01.84		POT=	575536.1874	136600	4.7674	18+00.58				CC =	575617.8739	1366120.9180			80.00'
									Relocate	PT=	575562.7864	1366178.9297	101+38.60	N 43° 31'08" E	
		F	XISTING C	IIRVE	ΠΔΤΔ					PC=	575577.5502	1366192.9494	101+58.96		
										PC=	575577.5502	1366192.9494	101+58.96	N 43° 31'08" E	
CURVE NO.	DELTA	Dc	R	T	L	Ε	CENTE	R OF CURVE		PI =	575582.4365	1366197.5894	101+65.70		
C-1	18° 34'24"	190* 59'0	9 • 30.00′	4.91'	9.72'	0.4	575164.5967	1365768.3233		CC =	575591.3221	1366178.4465			20.00'
C-2	36° 19'33"	381* 58'1	9• 15.00'	4.92'	9.51′	0.79	575209.1700	1365759.4975		PT=	575589.1345	1366198.3265	101+71.96	N 6° 16'47"E	
C-3	6° 57'17"	57* 17'4	5 • 100.00'	6.08′	12.14'	0.18	575162.1399	1365866.7197		PC=	575614.6502	1366201.1343	101+97.63		
C-4	18° 27'37°	II4° 35′3	0• 50.00 ⁷	8.13'	16.11'	0.66	575237.2756	1365866.3844		PC=	575614.6502	1366201.1343	101+97.63	N 6° 16'47"E	
C-5	16° 27'21"	114° 35'3	0• 50.00 ⁷	7.23'	14.36'	0.52	575358.6818	1365876.4766		PI =	575621.6582	1366201.9055	102+04.68		
C-6	14° 16'28"	114° 35'3	0• 50.00′	6.26'	12.46'	0.39	575381.5029	1365898.1073		CC =	575611.3687	1366230.9543			30.00 [,]
C-7	25° 48′29'	114* 35'3	0 • 50.00′	11.46'	22.52'	1.3	575350.3521	1365995.2520		PT=	575627.5892	1366205.7176	102+11.48	N 32° 43'49° E	
C-8	23° 06'13*	II4° 35'3	0 * 50.00′	10.22'	20.16'	1.03	575500.7561	1366035.7047		POT=	575638.0614	1366212.4484	102+23.93		
C-9	36° 55'38'	190° 59'0	9 • 30.00′	10.02'	19.34'	1.63	575482.8453	1366118.7854							
C-10	25° 18'14'	II4° 35'3	0* 50.00 ⁷	11.22'	22.08'	1.24	575566.6475	1366113.6447		RASE	INE CON	TROL COO		2	
C-11	37° 14'21"	286° 28'4	14 [•] 20.00′	6.74'	13.00'	1.1	575591.3221	1366178.4465							
C-12	26° 27'0I*	190° 59′0	9 • 30.00′	7.05′	13.85'	0.82	575611.3686	1366230.9543	E CONSTRUCTION	POINT	NORTHING	EASTING	STATION	BEARING AH	RADIUS
										POT=	575606.8524	1366200.2762	19+00.00	N 84° 19'28' E	
		RI	ELOCATE C	CURVE	DATA					PI =	575610.3852	1366235.8232	19+35.72		
						F	OFNITC		Tributary 2	PI =	575610.3852	1366235.8232	19+35.72	S 87° 12'42" E	
CURVE NO.	DELTA	Dc	R				LENIE	R OF CURVE		PI =	1	1366263.5651			

RELOCATE CURVE DATA								
CURVE NO.	DELTA	Dc	R	Т	L	E	CENTE	R OF CURVE
C-13	36° 08'13"	114° 35′30'	50.00'	16.31	31.54'	2.59	575487.5092	1366145.2448
C-14	24° 30′50°	71° 37′11*	80.00 [,]	17.38'	34.23'	1.87	575617.8739	1366120.9180
C-15	37° 14'21"	286* 28'44*	20.00 [,]	6.74'	13.00'	I . I	575591.3221	1366178.4465
C-16	26° 27'01"	190° 59'09"	30.00 [,]	7.05′	13.85'	0.82	575611.3687	1366230.9543

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 28/12 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES



Storr Bure 6751 Colu

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oward County	WITTE AND AND				
	S Z Z	DRN: WW			
	PF				
orm Water Management Division reau of Environmental Services		CHK: LN			
51 Columbia Gateway Drive, Suite 514 lumbia, Maryland 21046–3143	I ON AL ENGLISH			<i></i>	
0) 313–6444		DATE: 9/26/12	BY	NO.	REVISION

PI = 575609.034I

1366263.5651 19+63.50

POT= 575597.0497 |366277.7990 |9+82.10

S 49° 54'14° E

CONSTRUCTION	POINT	NORTHING	EASTING	STATION	BEARING AH	RADIUS
	POT=	575175.1406	1365732.9329	10+00.00	N 52° 15'34" E	
	PC=	575188.3204	1365749.9607	10+21.53		
	PC=	575188.3204	1365749.9607	10+21.53	N 52° 15'34° E	
	PI = CC =	575191.3230 575164.5967	1365753.8399 1365768.3233	10+26.44		30.00'
	PT=	575192.9336	1365758.4735	10+31.26	N 70° 49'57°E	50.00
	PC=	575195.0015	1365764.4225	10+37.56		
	PC=	575195.0015	1365764.4225	10+37.56	N 70° 49'57°E	
	PI =	575196.6172	1365769.0707	10+42.48		
	CC = PT=	575209.1700 575200.6724	1365759.4975 1365771.8584	10+47.07	N 34° 30'25" E	15.00'
	PC=	575218.7905	1365784.3139	10+69.05	N 54 50 25 L	
	PC=	575218.7905	1365784.3139	10+69.05	N 34° 30'25" E	
	PI =	575223.7980	1365787.7563	10+75.13		
	= 22	575162.1399	1365866.7197			100.00'
	PT= PC=	575228.3518 575270.3815	1365791.7797	10+81.19 11+37.28	N 41° 27'42°E	
	PC=	575270.3815	1365828.9144 1365828.9144	II+37 . 28	N 41° 27'42" E	
	PI =	575276.4706	1365834.2942	11+45.40		
	CC =	575237.2756	1365866.3844			50.00'
	PT=	575280.5428	1365841.3254	11+53.38	N 59° 55'19" E	
	PC=	575315.4147	1365901.5356	12+22.96		
	PC= PI =	575315.4147 575319.0382	1365901.5356 1365907.7920	12+22.96 12+30.19	N 59° 55'19" E	
	CC =	575358.6818	1365876.4766	12 . 30113		50.00'
	PT=	575324.2856	1365912.7657	12+37.32	N 43° 27'58 E	
Existing	PC=	575347.1067	1365934.3964	12+68.77		
	PC=	575347.1067	1365934.3964	12+68.77	N 43° 27'58°E	
	PI = CC =	575351.6507 575381.5029	1365938.7034	12+75.03		50.00'
	PT=	575357.1164	1365898.1073 1365941.7570	12+81.23	N 29° 11'29° E	50.00
	PC=	575374.7386	1365951.6023	13+01.41		
	PC=	575374.7386	1365951.6023	13+01.41	N 29° 11'29" E	
	PI =	575384.7389	1365957.1893	13+12.87		
	<u> </u>	575350.3521	1365995.2520	17.07.07		50.00'
	PT= PC=	575391.3094 575459.7987	1365966.5728 1366064.3839	13+23.93 14+43.34	N 54° 59′58°E	
	PC=	575459.7987	1366064.3839	14+43.34	N 54° 59′58 E	
	PI =	575465.6606	1366072.7553	14+53.56		
	= 33	575500.7561	1366035.7047			50.00'
	PT=	575474.3373	1366078.1552	14+63.50	N 31° 53'45" E	
	PC= PC=	575498.6966 575498.6966	1366093.3151	14+92.19 14+92.19	N 3I* 53'45" E	
	PI =	575507.2008	1366093.3151 1366098.6076	14+92.19	N JI 3343 E	
	CC =	575482.8453	1366118.7854			30.00 [,]
	PT=	575510.8194	1366107.9478	15+11.53	N 68° 49'23°E	
	PC=	575520.0241	1366131.7072	15+37.01		
	PC=	575520.0241	1366131.7072	15+37.01	N 68° 49'23" E	
	PI = CC =	575524.0787 575566.6475	1366142.1732 1366113.6447	15+48.23		50.00'
	PT=	575532.2178	1366149.9020	15+59.09	N 43° 31'08" È	
	PC=	575577.5502	1366192.9494	16+21.60		
	PC=	575577.5502	1366192.9494	16+21.60	N 43° 31′08° E	
	PI =	575582.4365	1366197.5894	16+28.34		
	CC = PT=	575591.3221 575589 1344	1366178.4465	16+34.00	N 6° 16'47°E	20.00'
	PT= PC=	575589.1344 575614.6502	1366198.3265 1366201.1343	16+34.60 16+60.27	10 10 41 E	
	PC=	575614.6502	1366201.1343	16+60.27	N 6° 16'47"E	
	PI =	575621.6582	1366201.9055	16+67.32		
	CC =	575611.3686	1366230.9543			30.00'
	PT=	575627.5892 575638.0614	1366205.7175	16+74.12 16+86.57	N 32° 43'49' E	
	POT=		1366212.4484			

CAPITAL PROJECT #D–1158 ION DISTRICT NO. 2, HOWARD COUNTY MARYLAND TAX MAPS 30 & 31; LOTS 61, 190, 240 & 241	1" = 40'
WAIVER PETITION #WP-13-013	SHEET

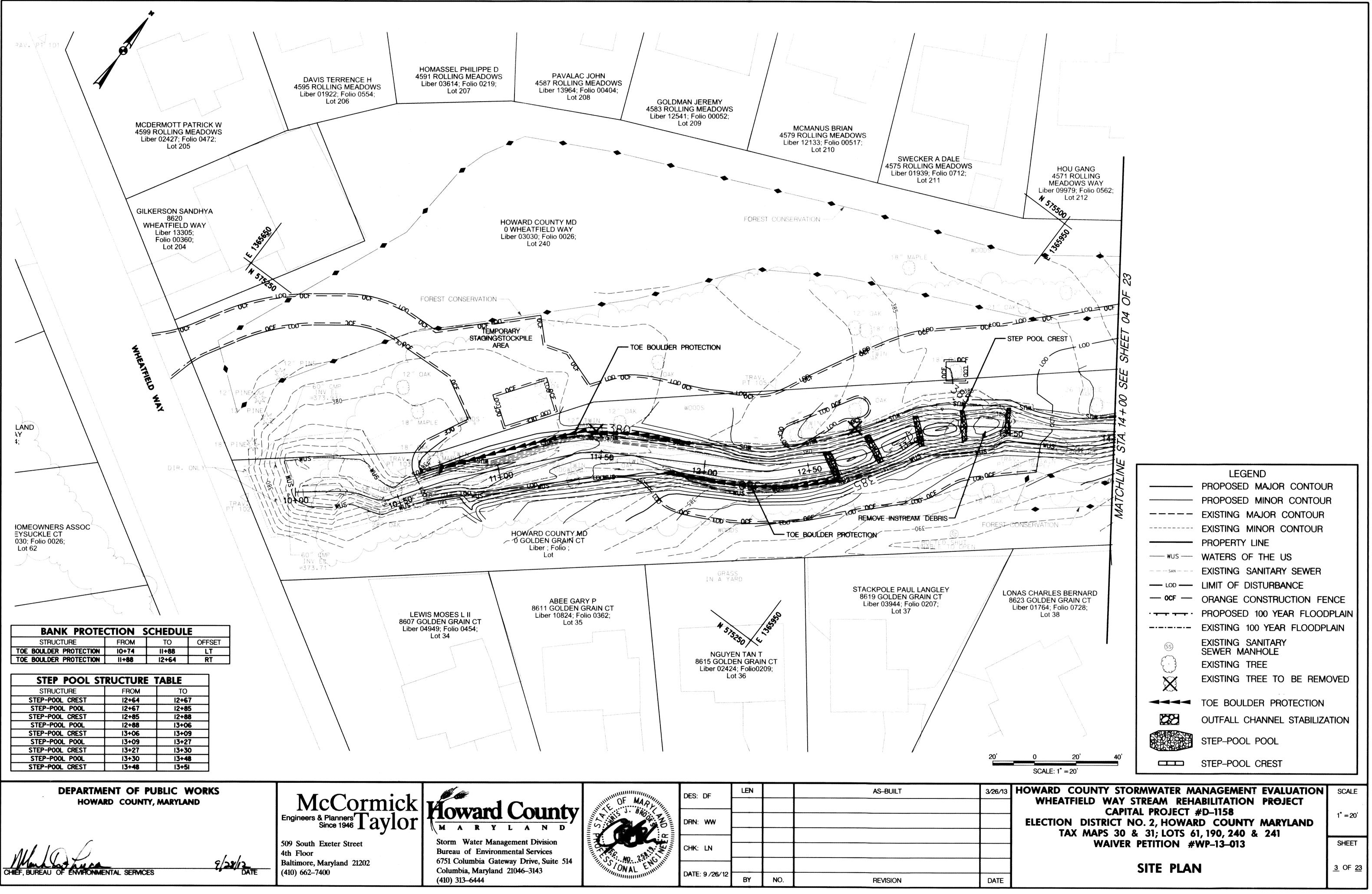
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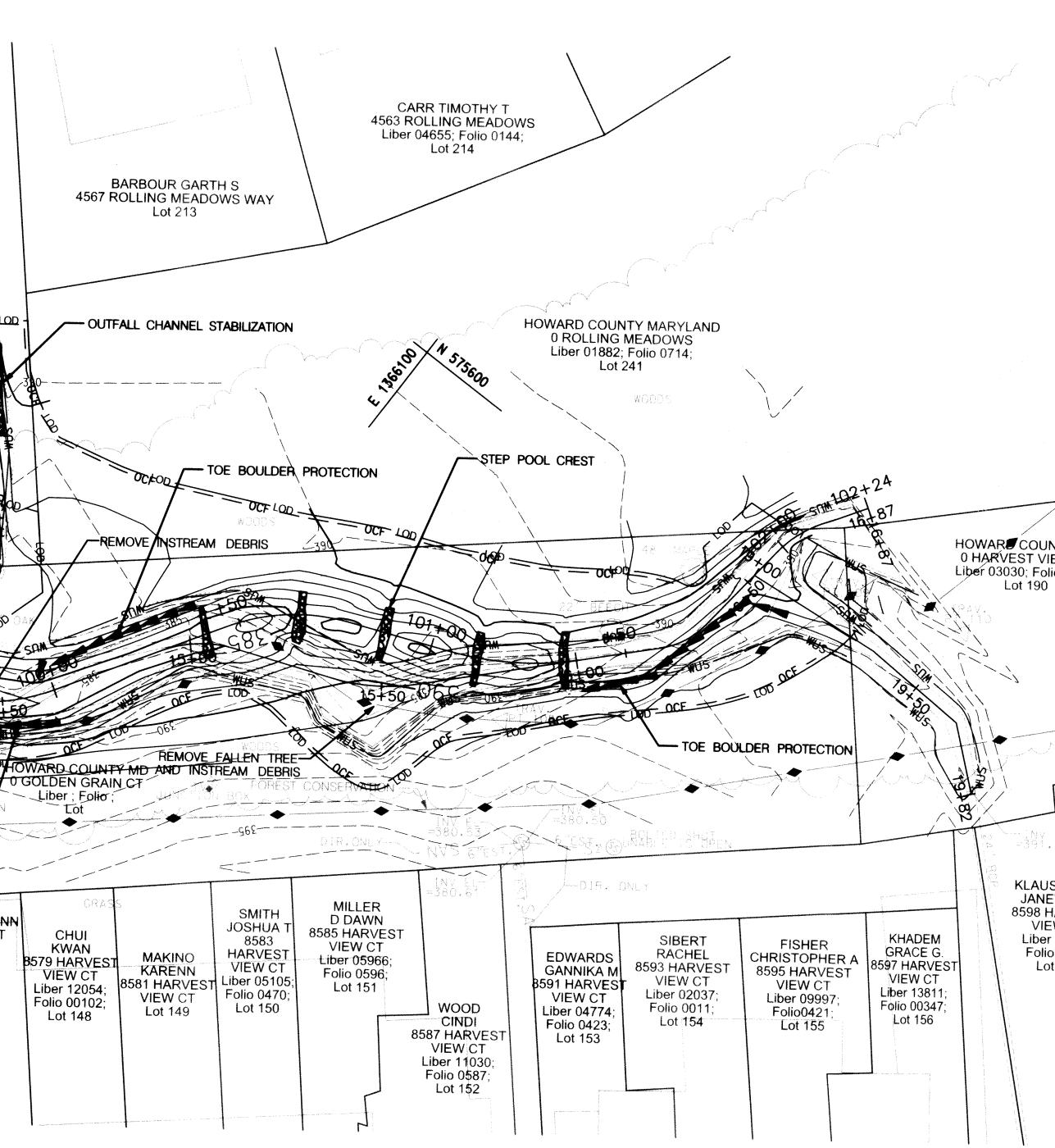
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STEP-POOL POOL IOI+15 IOI+36 STEP-POOL CREST IOI+36 IOI+39 DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND MARCA OUTY, MARYLAND MARCA CHIEF, BUREAU OF ENVIRONMENTAL SERVICES	McCormick Engineers & Planners Taylot Since 1946 Taylot 509 South Exeter Street 4th Floor Baltimore, Maryland 21202 (410) 662–7400	Howa M A R Storm Water Bureau of En 6751 Columbia Columbia, Ma (410) 313-6444

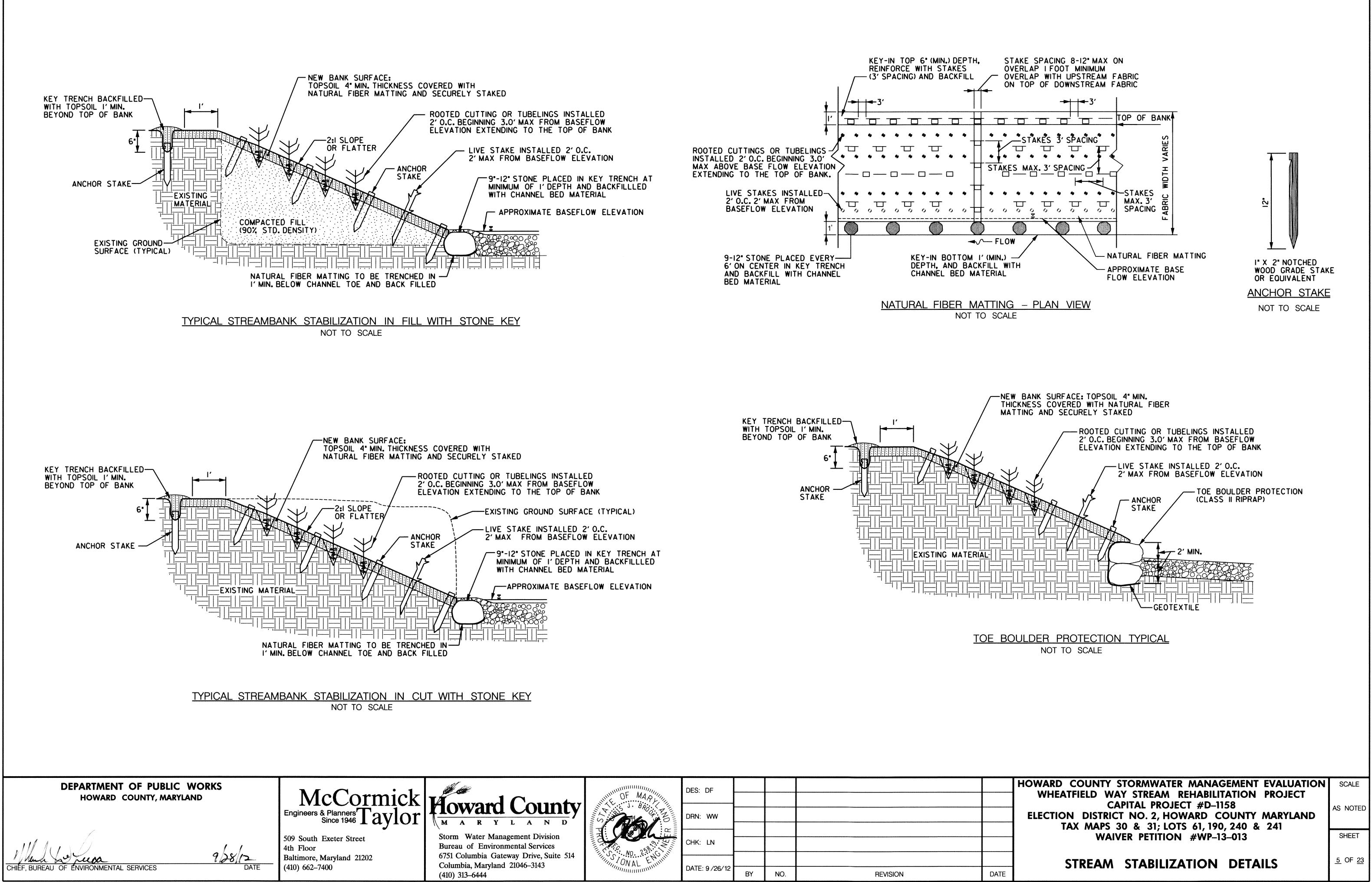


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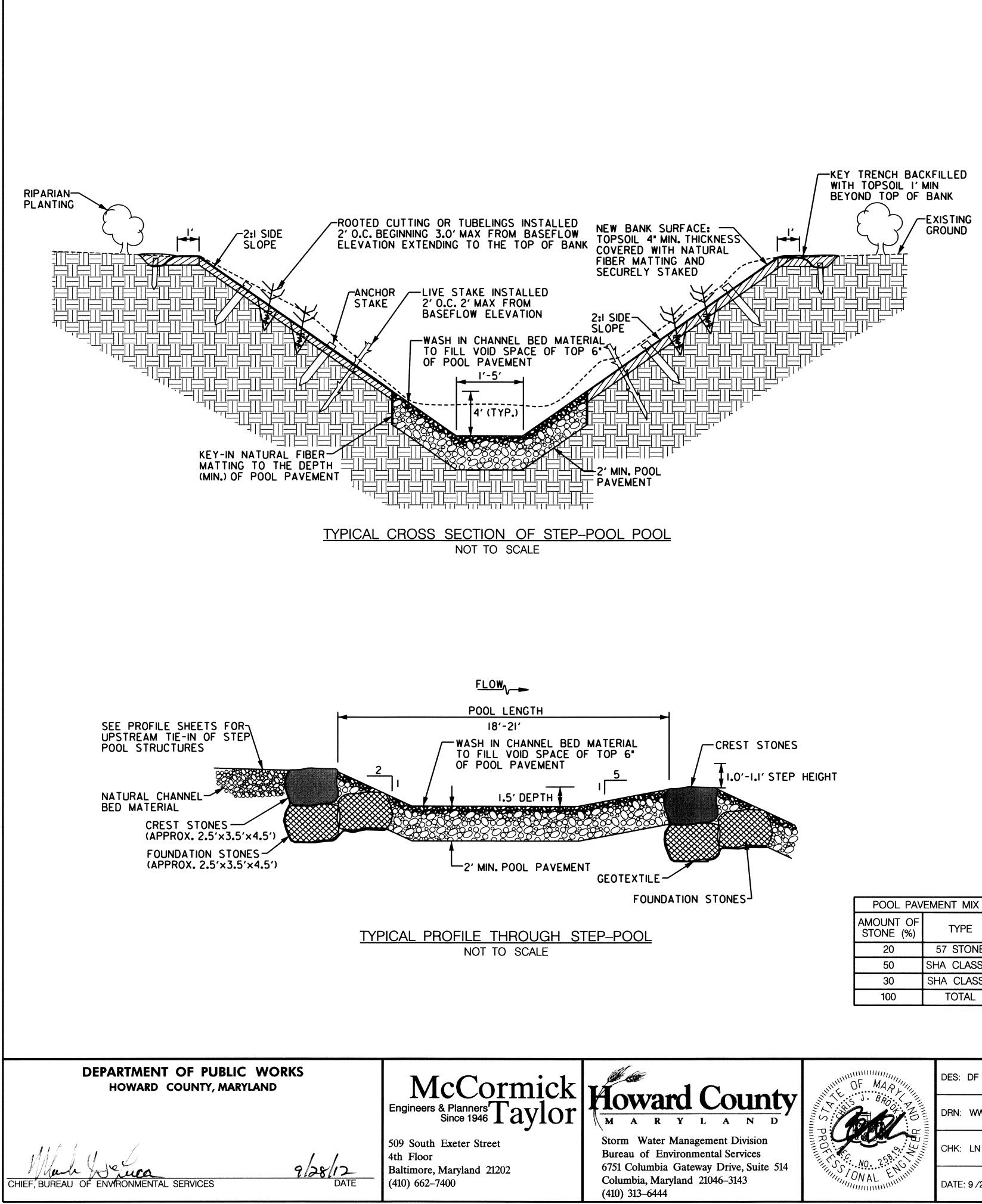
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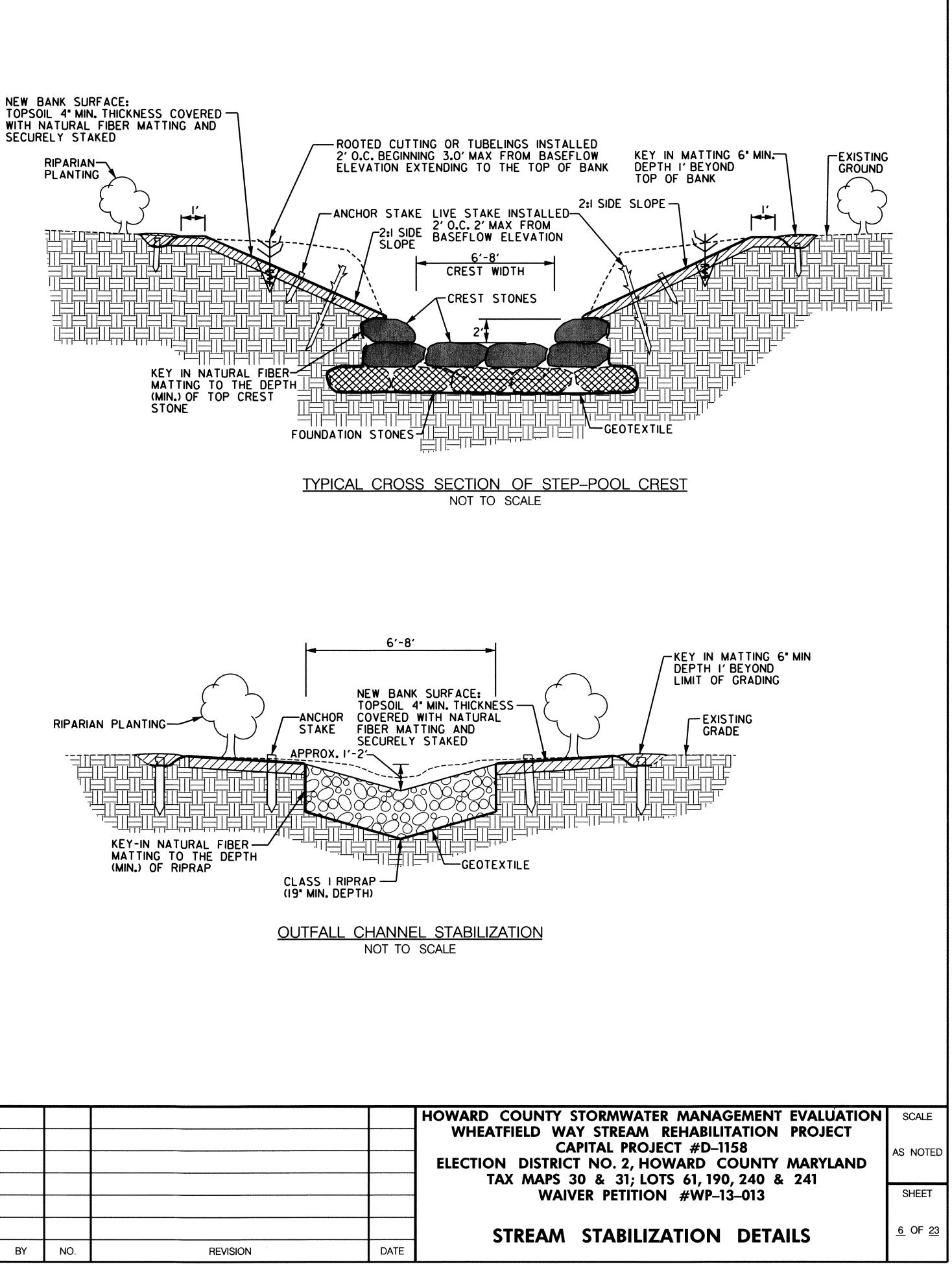
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0 20' 40'		
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OWARD COUNTY STO	ORMWATER MANAGEMENT EVALUATION	N SCALE
WILAIFIELD WAT	STREAM REHABILITATION PROJECT	
CAPIT		- 4° 00' -
ELECTION DISTRICT	NO. 2, HOWARD COUNTY MARYLAND	1" = 20'
ELECTION DISTRICT N TAX MAPS 30	NO. 2, HOWARD COUNTY MARYLAND & 31; LOTS 61, 190, 240 & 241 PETITION #WP-13-013	1 = 20 SHEET
ELECTION DISTRICT N TAX MAPS 30	NO. 2, HOWARD COUNTY MARYLAND & 31; LOTS 61, 190, 240 & 241	

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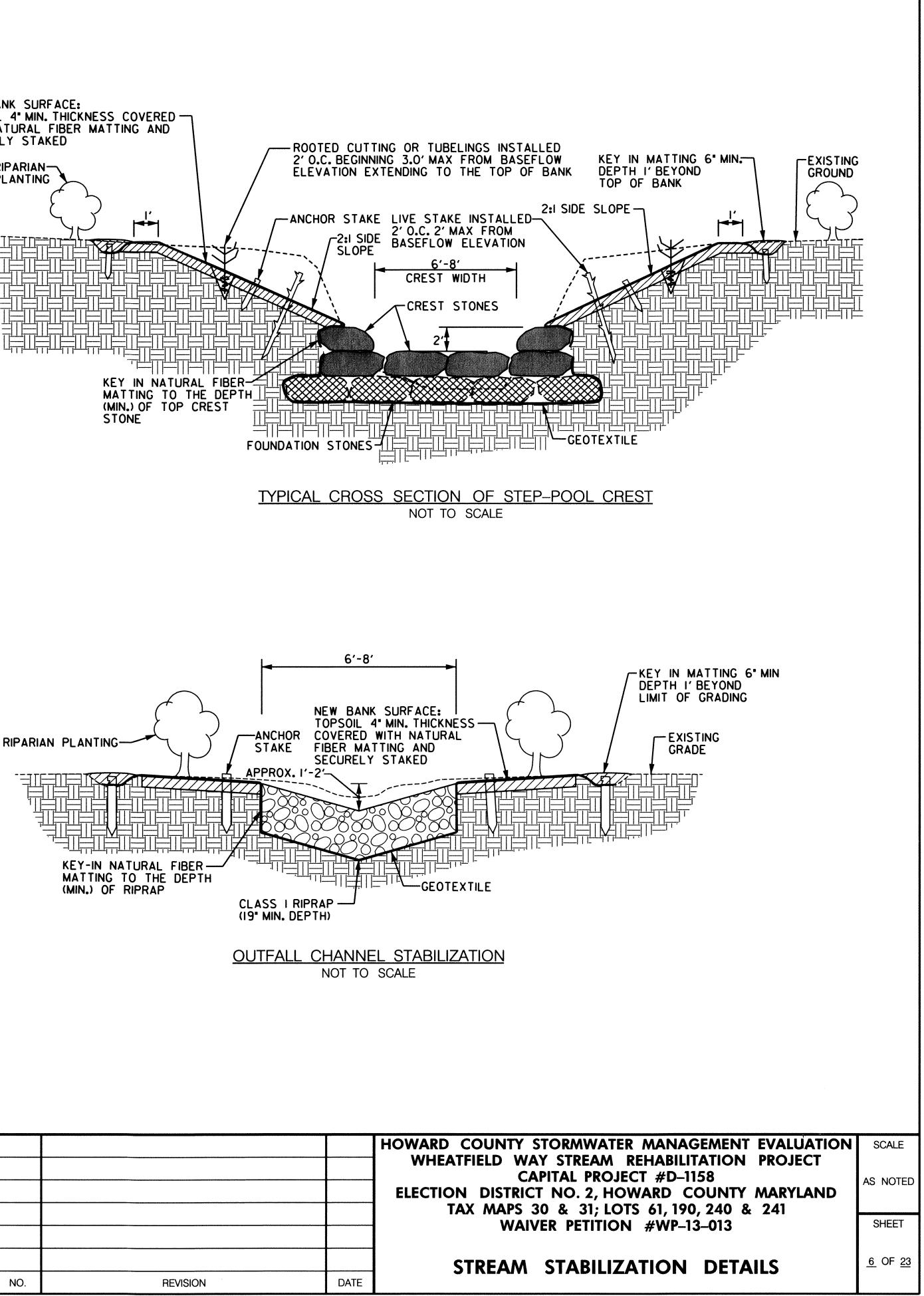


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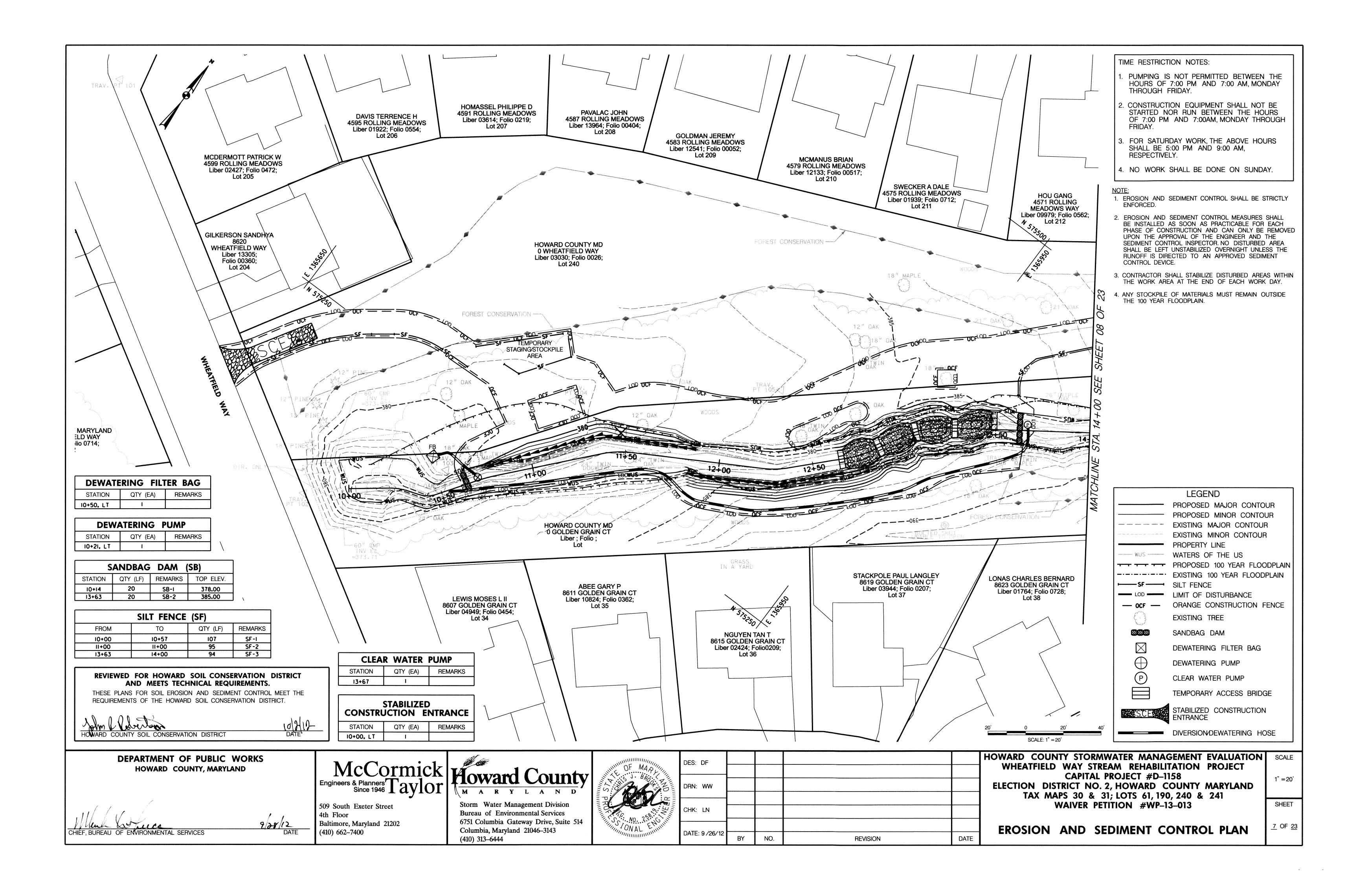




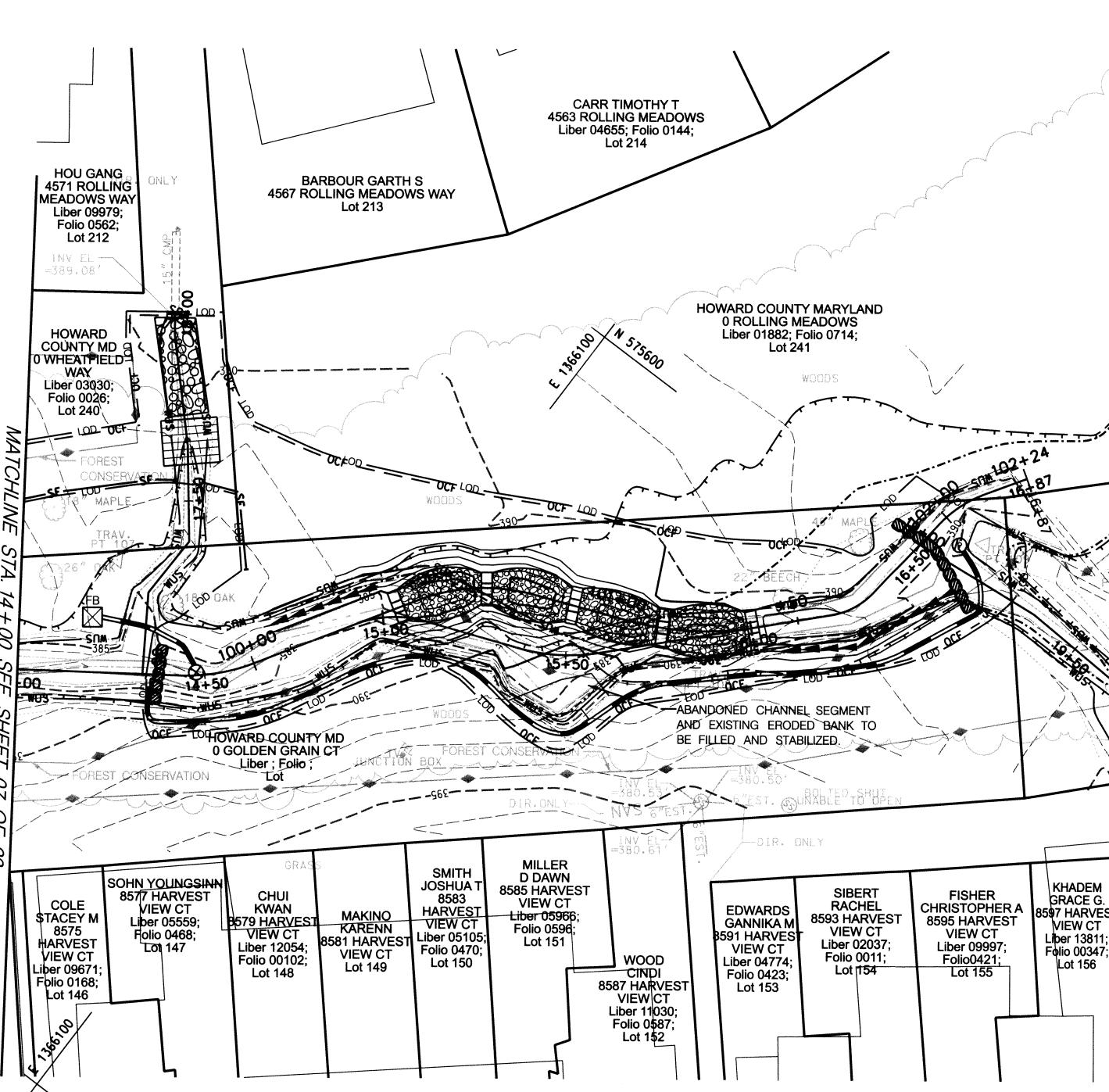
POOL PAV	EMENT MIX
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20	57 STONE
50	SHA CLASS 0
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SANDBAG DAM SB Image: Sama Sama Sama Sama Sama Sama Sama Sam	LIVE STA. 14+00 SEE SHEET OF OF 23 COLE STACEY M MARVEST Liber 09671; Folio 0168; Lot 146 W W STACEY M MARVEST V STACEY M STACEY M ST	AST HARVEST Lot 147 AST HARVEST Lot 148 CHU VIEW CT Liber 1506 CHU VIEW CT Liber 1506 CHU VIEW CT Liber 1506 CHU VIEW CT Liber 1506 CHU VIEW CT Liber 12054; Folio 0468; Lot 148 CHU VIEW CT Liber 12054; Folio 0408; Lot 148 CHU KWAN CHU KWAN CHU KWAN CHU KWAN CHU KWAN CHU KAR CHU KWAN CHU KAR CH
Much 2/28/2 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES DATE	McCormick Engineers & Planners Taylor 509 South Exeter Street 4th Floor Baltimore, Maryland 21202 (410) 662–7400	Howard Coun M A R Y L A N Storm Water Management Division Bureau of Environmental Services 6751 Columbia Gateway Drive, Suite Columbia, Maryland 21046–3143 (410) 313–6444



		TIME RESTRICTION NOTES:
		1. PUMPING IS NOT PERMITTED BETWEEN THE HOURS OF 7:00 PM AND 7:00 AM, MONDAY THROUGH FRIDAY.
4563 Libe	CARR TIMOTHY T ROLLING MEADOWS ar 04655; Folio 0144; Lot 214	2. CONSTRUCTION EQUIPMENT SHALL NOT BE STARTED NOR RUN BETWEEN THE HOURS OF 7:00 PM AND 7:00AM, MONDAY THROUGH FRIDAY.
G NLY NG ONLY NAY 9; 2:		3. FOR SATURDAY WORK, THE ABOVE HOURS SHALL BE 5:00 PM AND 9:00 AM, RESPECTIVELY.
		4. NO WORK SHALL BE DONE ON SUNDAY. <u>NOTE:</u> 1. EROSION AND SEDIMENT CONTROL SHALL BE STRICTLY
	HOWARD COUNTY MARYLAND 0 ROLLING MEADOWS Liber 01882; Folio 0714; Lot 241	ENFORCED. 2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICABLE FOR EACH
	woods	PHASE OF CONSTRUCTION AND CAN ONLY BE REMOVED UPON THE APPROVAL OF THE ENGINEER AND THE SEDIMENT CONTROL INSPECTOR. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS THE RUNOFF IS DIRECTED TO AN APPROVED SEDIMENT
		CONTROL DEVICE. 3. CONTRACTOR SHALL STABILIZE DISTURBED AREAS WITHIN THE WORK AREA AT THE END OF EACH WORK DAY.
PLE WOODS JOCK 1	dep A MAPL A MAPL OAA	4. ANY STOCKPILE OF MATERIALS MUST REMAIN OUTSIDE THE 100 YEAR FLOODPLAIN. ARVEST VIEW CT 03030; Folio 0026;
	227 BEECH	Lot 190
581 - 15+20 100+80 100+80		
14+50 0CC 100 -065 WOODS	ABANDONED CHANNEL SEGMENT AND EXISTING ERODED BANK TO	
OGLIDEN GRAIN CT 0 GOLDEN GRAIN CT Liber; Folio; CONSERVATION Liber; Folio; Liber; Folio; Conservation	BE FILLED AND STABILIZED.	INV EL
DIR.ONLY-	INV EL-DIR. ONLY	KLAUSMEYER JANET P L/E 8598 HARVEST
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Liber 05559; Folio 0468; Lot 147 Liber 12054; Lot 148 Lot 148 Liber 05105; VIEW CT Solio 0468; Liber 12054; Liber 12054; Liber 05966; KARENN VIEW CT Solio 0468; Liber 05105; Lot 150 Lot 149 Lot 150 Lot 150	WOOD VIEW CT VIEW CT VIEW CT Liber 09997; Folio 00347; WOOD Liber 04774; Folio 0011; Folio0421; Lot 155 Lot 156	Lot 157 PROPOSED MINOR CONTOUR EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR PROPERTY LINE
	VIEW CT Liber 11030; Folio 0587; Lot 152	WUS WATERS OF THE US WUS PROPOSED 100 YEAR FLOODPLAIN EXISTING 100 YEAR FLOODPLAIN
		SF
		EXISTING TREE
		(P) CLEAR WATER PUMP (E) TEMPORARY ACCESS BRIDGE
		20' 0 20' 40' DIVERSION/DEWATERING HOSE
OF MANUE	DES: DF	SCALE: 1" = 20' HOWARD COUNTY STORMWATER MANAGEMENT EVALUATION SCALE
Howard County M A R Y L A N D	DRN: WW	WHEATFIELD WAY STREAM REHABILITATION PROJECT CAPITAL PROJECT #D-1158 ELECTION DISTRICT NO. 2, HOWARD COUNTY MARYLAND
Storm Water Management Division Bureau of Environmental Services	CHK: LN	TAX MAPS 30 & 31; LOTS 61, 190, 240 & 241 WAIVER PETITION #WP-13-013 SHEET
6751 Columbia Gateway Drive, Suite 514 Columbia, Maryland 21046–3143 (410) 313–6444	DATE: 9 /26/12 BY NO. REVISION	EROSION AND SEDIMENT CONTROL PLAN B OF 23 DATE B OF 23

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HOWARD SOIL CONSERVATION DISTRICT TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RE-DISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED. SEEDBED PREPARATION: - LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS

SOIL AMENDMENTS: - APPLY 600 LBS/ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.).

BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SEEDING: - FOR PERIODS MARCH 1 - APRIL 30 AND FROM AUGUST 15 - OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ. FT.). FOR THE PERIOD MAY 1 - AUGUST 14, SEED WITH 3 LBS / ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 FT.). FOR THE PERIOD NOVEMBER 16 - FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS/ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: - APPLY 1-1/2 TO 2 TONS/ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED WEED-FREE, SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING, ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL. NO ASPHALT EMULSION SHALL BE USED FOR ANCHORING. ONLY A NON-TOXIC, LATEX BACKING MATERIAL IS ALLOWED.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT AND MDE PERMIT (TRACKING NUMBER 201260617).
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST FIVE (5) DAYS PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (410) 313-1880 A MINIMUM OF 5 DAYS PRIOR TO THE START OF ANY CONSTRUCTION. THE CONTRACTOR SHALL ALSO NOTIFY THE HOWARD COUNTY BUREAU OF UTILITIES (410) 313-4900 AND MARYLAND DEPARTMENT OF ENVIRONMENT INSPECTOR AT (301) 665-2850, FIVE (5) DAYS BEFORE ANY LAND DISTURBING ACTIVITY. 2.
- ORANGE HIGH VISIBILITY FENCE SHALL BE MANUALLY INSTALLED WHERE INDICATED ON THE PLANS. THIS SHALL BE COMPLETED BY AND INSPECTED AT THE PRECONSTRUCTION MEETING. (1 DAY)

THE CONTRACTOR SHALL COORDINATE AN ON-SITE PRE-CONSTRUCTION MEETING WHICH SHALL INCLUDE, BUT NOT BE LIMITED TO, THE COUNTY PROJECT MANAGER, THE ENGINEER, A REPRESENTATIVE FROM THE DEPARTMENT OF RECREATION AND PARKS, A REPRESENTATIVE FROM THE BUREAU OF UTILITIES AND A REPRESENTATIVE FROM HOWARD COUNTY CONSTRUCTION INSPECTION. (1 DAY)

PHASE 1

- CONSTRUCT THE FOLLOWING PERIMETER CONTROLS AS SHOWN ON THE PLAN: STABILIZED CONSTRUCTION ENTRANCE AND SILT FENCE, CLEARING ONLY THE AREA NEEDED TO INSTALL THE E&S CONTROLS. (1 DAY) 5.
- WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, INSTALL THE TEMPORARY ACCESS BRIDGE AND STREAM DIVERSION/PUMP AROUND WHICH INCLUDES THE SANDBAG, PUMP AND DIVERSION HOSES FOR THE UPSTREAM/NORTHERN STREAM REACH, DEWATER ALL WORK AREAS AS NEEDED TO A DEWATERING FILTER BAG. (1 DAY)
- REMOVE IN CHANNEL DEBRIS. COMMENCE IN STREAM CONSTRUCTION AND GRADING. STABILIZE ALL DISTURBED AREAS AT THE END OF EACH WORK DAY AND REMOVE THE STREAM DIVERSION/PUMP AROUND. COMPLETE CHANNEL GRADING FROM UPSTREAM TO DOWNSTREAM. (5 DAYS) 7.
- CONSTRUCT OUTFALL CHANNEL STABILIZATION. CONTRACTOR SHALL BE AWARE OF WEATHER FORECAST FOR RAIN PREDICTION AND SHALL ONLY PERFORM WORK WITHIN OUTFALL CHANNEL UNDER DRY WEATHER FORECAST. (1 DAY)
- 9. INSTALL LANDSCAPING PER PLAN. (1 DAY)
- 10. STABILIZE TEMPORARY CONSTRUCTION ACCESS AND GRADE TO FINAL ELEVATIONS REMOVING ALL RUTS. (1 DAY) PHASE 2
- 11. WHEN AREAS ARE FULLY STABILIZED, AND UPON PERMISSION FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, RESET THE REMAINING SEDIMENT CONTROL DEVICES FOR PHASE 2. (1 DAY)
- 12. COMMENCE IN STREAM CONSTRUCTION AND GRADING, REMOVE IN CHANNEL DEBRIS. STABILIZE ALL DISTURBED AREAS AT THE END OF EACH WORK DAY AND REMOVE THE STREAM DIVERSION/PUMP AROUND. COMPLETE CHANNEL GRADING FROM UPSTREAM TO DOWNSTREAM. (10 DAYS)
- 13. INSTALL LANDSCAPING PER PLAN. (1 DAY)
- 14. STABILIZE TEMPORARY CONSTRUCTION ACCESS AND GRADE TO FINAL ELEVATIONS REMOVING ALL RUTS. (1 DAY)
- 15. WHEN AREAS ARE FULLY STABILIZED, AND UPON PERMISSION FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE THE REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE ANY DISTURBED AREAS. (1 DAY)

IN-CHANNEL PUMPING NOTES

- 1. AT THE END OF EACH WORK DAY, THE WORK AREA MUST BE STABILIZED AND THE PUMP AROUND REMOVED FROM THE CHANNEL. REFER TO THE DETAILS AND SPECIFICATIONS FOR MCWC 1.2: PUMP-AROUND PRACTICE INCLUDED ON THE PLANS.
- 2. THE CONTRACTOR SHALL USE A PUMP AND DIVERSION HOSES TO ACCOMMODATE A 3 INCH DISCHARGE DIAMETER AND THE FLOWS ANTICIPATED DURING CONSTRUCTION IN THE CHANNEL SECTION.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING A CONSTRUCTION PHASE DEWATERING SYSTEM, INCLUDING A TEMPORARY SYSTEM OF PUMPS, DRAINAGE DITCHES AND, SANDBAG/ STONE DIVERSIONS, AS REQUIRED TO REMOVE WATER FROM ANY SOURCE, INCLUDING GROUND WATER, AND MAINTAIN WORKABLE, DRY CONDITIONS IN THE WORK AREA.
- 4. THE CONTRACTOR SHALL NOTE THAT THE WATERWAY LOCATED WITHIN THE PROJECT LIMITS IS CLASSIFIED AS USE IV-P WATERS. INSTREAM WORK IS PROHIBITED MARCH 1 THROUGH MAY 31, INCLUSIVE DURING ANY YEAR.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS. THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. arever a HOWARD COUNTY SOIL CONSERVATION DISTRICT McCormick He DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Engineers & Planners Taylor Since 1946 M 509 South Exeter Street 4th Floor Baltimore, Maryland 21202 928/12 Colu DATE (410) 662–7400 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

EROSION AND SEDIMENT CONTROL – GENERAL NOTES HOWARD SOIL CONSERVATION DISTRICT PERMANANT SEEDING NOTES DEFINITION APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- 1. PREFERRED APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 LBS/ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING. APPLY 400 LBS/ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ. FT).
- 2. ACCEPTABLE APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 1000 LBS/ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 - APRIL 30, AND AUGUST 1 - OCTOBER 15, SEED WITH 60 LBS / ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 - JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS/ACRE (0.05 LBS/100 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 - FEBRUARY 28, PROTECT SITE BY: OPTION 1 - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION 2 - USE SOD. OPTION 3 - SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING, ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL, NO ASPHALT EMULSION SHALL BE USED FOR ANCHORING, ONLY A NON-TOXIC, LATEX TACKING MATERIAL IS ALLOWED.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

HOWARD COUNTY CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1. B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 7. SITE ANALYSIS:

TOTAL AREA OF SITE	0.80 ACRES	NOTE:
AREA DISTURBED	0.80 ACRES	
AREA TO BE ROOFED OR PAVED	0 ACRES	
AREA TO BE VEGETATIVELY STABILIZED	0.80 ACRES	B. PLA
TOTAL CUT	319.36 CU. YDS.	SEC
TOTAL FILL	259.96 CU. YDS.	
OFFSITE WASTE/BORROW AREA LOCATION	SEE NOTE 12	V. TOPSOIL APPL

- 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTH OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORK DAY, WHICHEVER IS SHORTER.
- 12. OFFSITE WASTE / BORROW SITE SHALL HAVE AN APPROVED SEDIMENT CONTROL PLAN AND PERMIT.

		DES: DF					HOWARD COUNTY STORMWATER MANAGEMENT EVALUATION	SCALE
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1 I		DRN: WW					ELECTION DISTRICT NO. 2, HOWARD COUNTY MARYLAND	SCALE
MARYLAND							TAX MAPS 30 & 31; LOTS 61, 190, 240 & 241	
Storm Water Management Division							WAIVER PETITION #WP-13-013	SHEET
Bureau of Environmental Services		CHK: LN						1
6751 Columbia Gateway Drive, Suite 514	No. 23 NO.	-					EROSION AND SEDIMENT	0.05.00
Columbia, Maryland 21046–3143	ONAL ENMINIE	DATE: 9 /26/12						<u>9</u> OF <u>23</u>
(410) 313-6444			BY	NO.	REVISION	DATE	CONTROL NOTES	1

I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:

A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS. C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

A. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1-1/2" IN DIAMETER.

B. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

C. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTURBED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES. III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

A. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:

: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST. AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL

PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION -SECTION VEGETATIVE STABILIZATION METHODS AND MATERIALS.

PLICATION

STANDARD AND SPECIFICATIONS FOR TOPSOIL

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE. SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

A. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION -SECTION - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

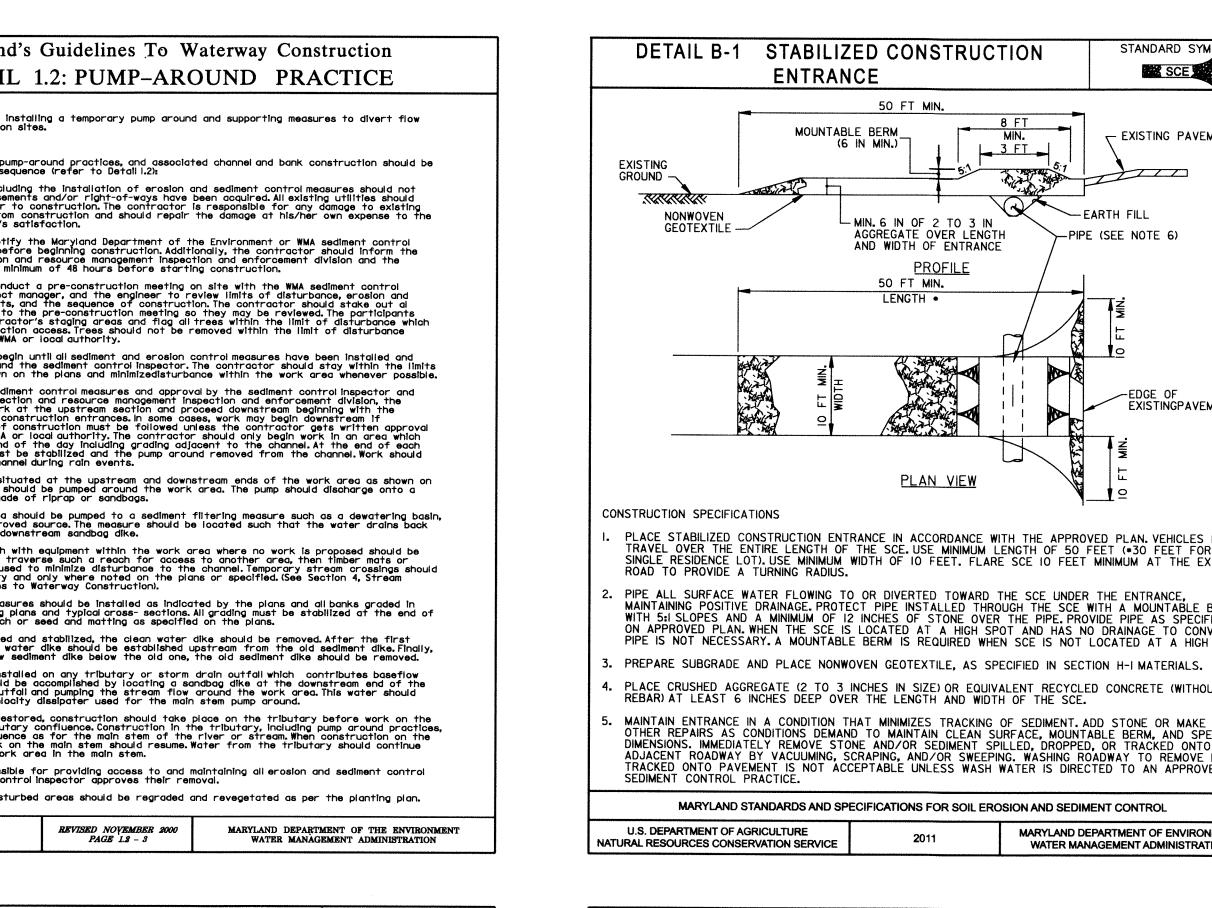
IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

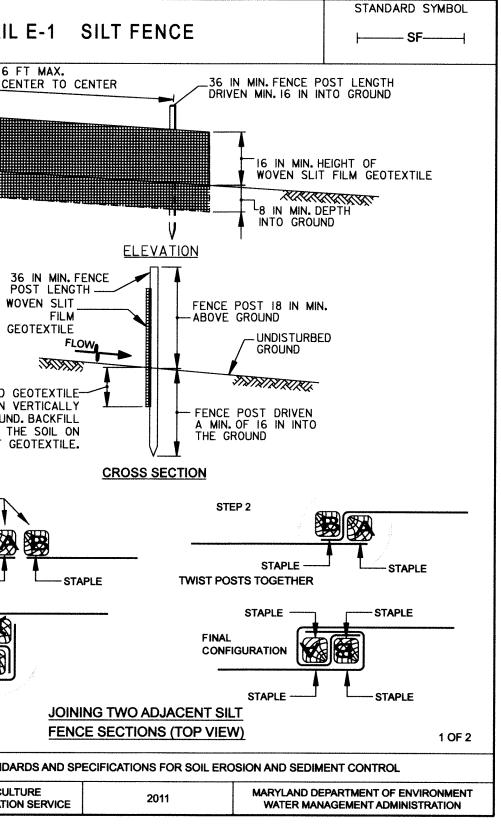
- 1. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
- 2. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
- 3. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED. 4. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME AS ELAPSED (14 DAYS MIN,) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

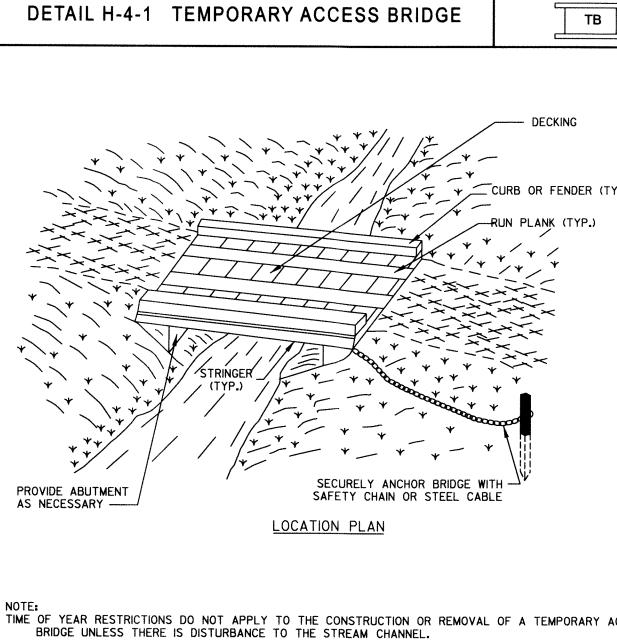
A. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS. B. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.

C. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4'' - 8'' LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. D. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

	Maryland's Guidelines To Waterway Construction DETAIL 1.2: PUMP-AROUND PRACTION		Maryland DETAII
			DESCRIPTION The work should consist of it
			around instream construction IMPLEMENTATION SEQUENCE
	PLAN VIEW		Sediment control measures, pu completed in the following sed
	approved stream	on pumps	I. Construction activities inclu begin until all necessary easen be marked in the field prior utilities that may result from county's or utility company's
	dewatering device		county's or utility company's 2. The contractor should noti- inspector at least 5 days bet
	discharge hoses	- intake hose	provider of local utilities a m
	P dewatering pump	TIOSE	3. The contractor should cond inspector, the county project sediment control requirements limits of disturbance prior to
			will be removed for construct without approval from the WM
	tion d Lintake hose	flow	 Construction should not be approved by the engineer and of the disturbance as shown
		ip-hole	5. Upon installation of all sedir the local environmental protec contractor should beam work
	or po (12"	to 18" deep	contractor should begin work establishment of stabilized co appropriate. The sequence of for deviations from the WMA
	pumps should discharge onto a stable velocity work area 2' di length not to exceed that which can be	la.)	can be completed by the end work day,the work area must not be conducted in the chan
	dissipator made of rip rap completed in one day or sandbags		6. Sandbag dikes should be sith the plans, and stream flow sit stable velocity dissipater mad
			7.Water from the work area sediment bag, or other approv into the channel below the do
	SECTION A-A		8. Traversing a channel reach avoided. If equipment has to t
			similar measures should be use be used only when necessary Crossings, Maryland Guidelines
	impervious sheeting		 All stream restoration measi accordance with the grading i each day with seed and mulch
	work area		10. After an area is completed sediment flush, a new clean w upon establishment of a new
			II. A pump around must be inst to the work area. This should
	cross section of sandbag dike		tributary or storm drain out discharge onto the same veloc i2.if a tributary is to be res main stem reaches the tribut
			main stem reaches the tribut should follow the same sequer tributary is completed, work of to be pumped around the worl
			13. The contractor is responsible devices until the sediment con
	T		14. After construction, all distu
	TEMPORARY INSTREAMREVISED NOVEMBER 2000MARYLAND DEPARTMENT OF WATER MANAGEMENT AICONSTRUCTION MEASURESPAGE 1.2 - 3WATER MANAGEMENT AI	THE ENVIRONMENT DMINISTRATION	TEMPORARY INSTREAM CONSTRUCTION MEASURES
		ANDARD SYMBOL	
	DETAIL E-1 SILT FENCE	SF	DETAIL
			6
	NSTRUCTION SPECIFICATIONS USE WOOD POSTS 134 X 134 %%2000CH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARI		
1.	ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIG THAN I POUND PER LINEAR FOOT.		
2.	USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6	5 FEET APART.	TRIK
3.	USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-I MATERIALS AND FAS SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP	TEN GEOTEXTILE AND MID-SECTION	
4.	PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE		V
	INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THIN SECTION H-I MATERIALS.		-
5.	EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL SOIL ON BOTH SIDES OF FABRIC.	AND COMPACT THE	F W
6.	WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST WITH THIS DETAIL.	IN ACCORDANCE	G
7.	EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLO 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROU		
8.	THE SILT FENCE. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE		EMBED MIN. OF 8 IN INTO THE GROUN
	REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCUR FENCE.	IS, REINSTALL	AND COMPACT T BOTH SIDES OF C
			STEP 1
		2050	
	MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CON	2 OF 2	
	U.S. DEPARTMENT OF AGRICULTURE 0014 MARYLAND DEPARTMENT		STAPLE
NATU	IRAL RESOURCES CONSERVATION SERVICE 2011 WATER MANAGEMEN		STEP 3
\/I P**			
:VIE	WED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.		
	PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE		
JUIR	EMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.		MARYLAND STANDA
	A DI to		U.S. DEPARTMENT OF AGRICUL
0	10/2/12	·	NATURAL RESOURCES CONSERVATIO
l b c	OUNTY SOIL CONSERVATION DISTRICT DATE		
phr.	OUNTY SOIL CONSERVATION DISTRICT		
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	DEPARTMENT OF PUBLIC WORKS		Storm





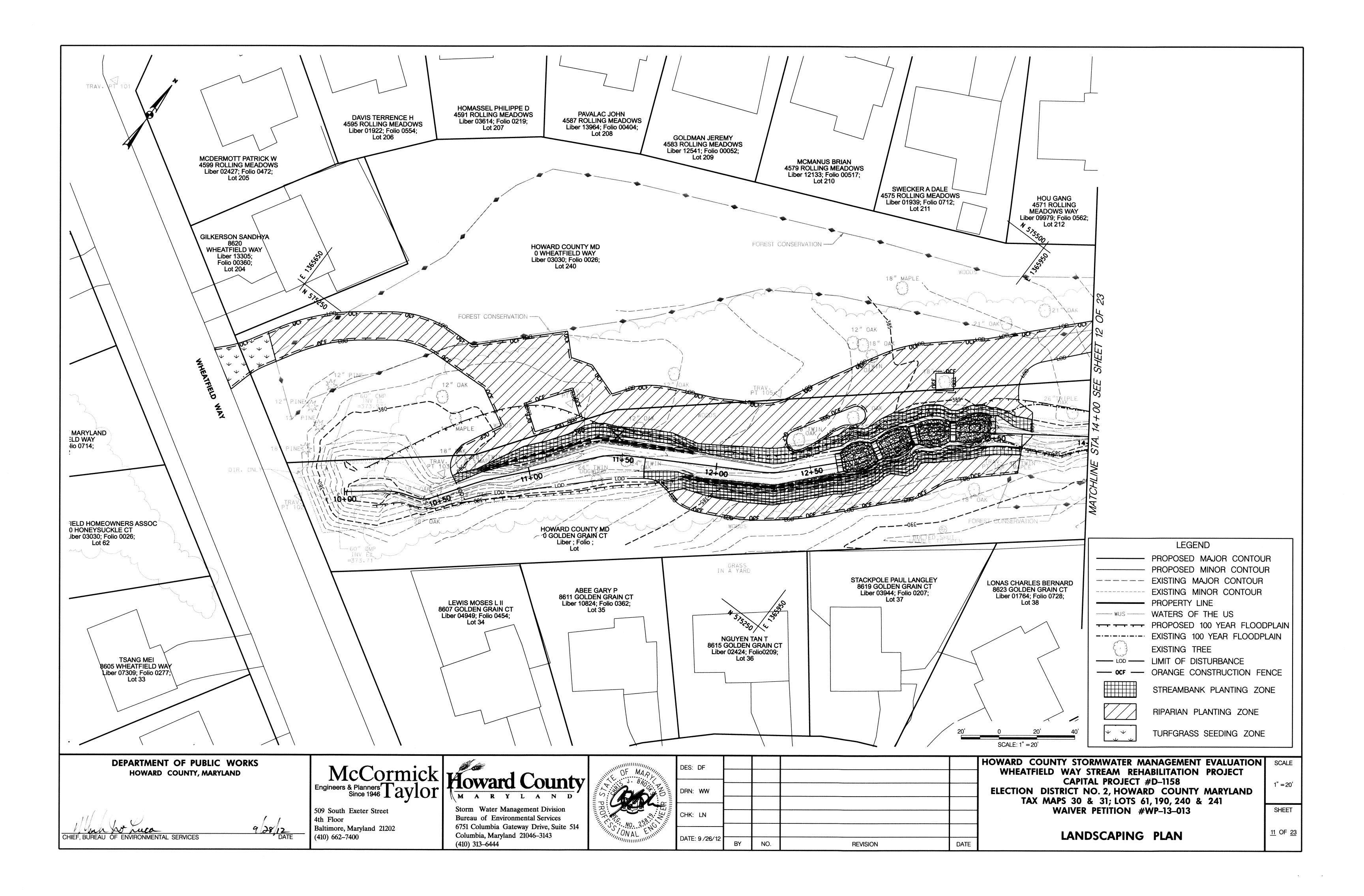


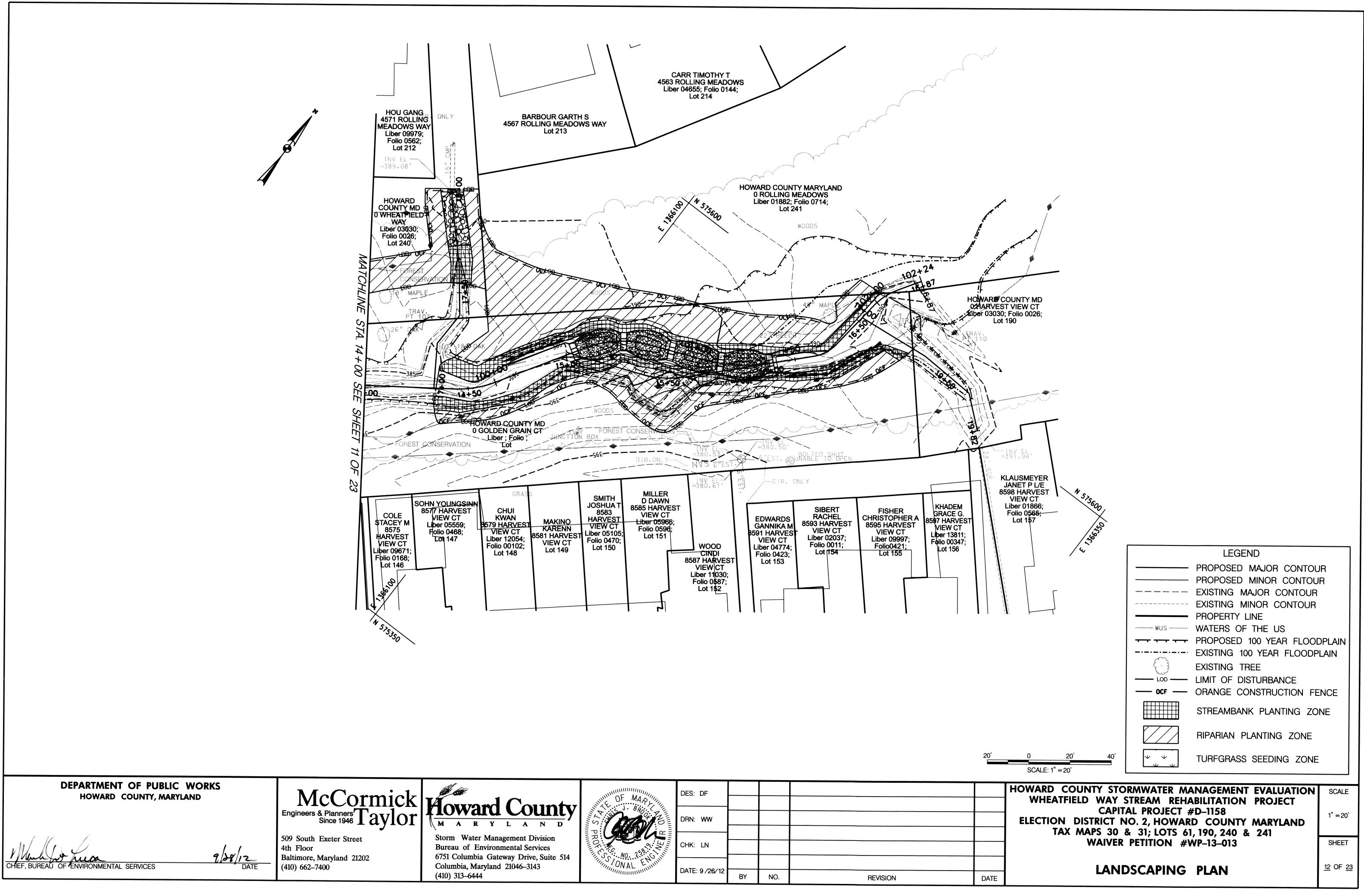
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MARYLAND STANDARDS AND SPI	ECIFICATIONS FOR SOIL E	ROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRON WATER MANAGEMENT ADMINISTRAT

DATE

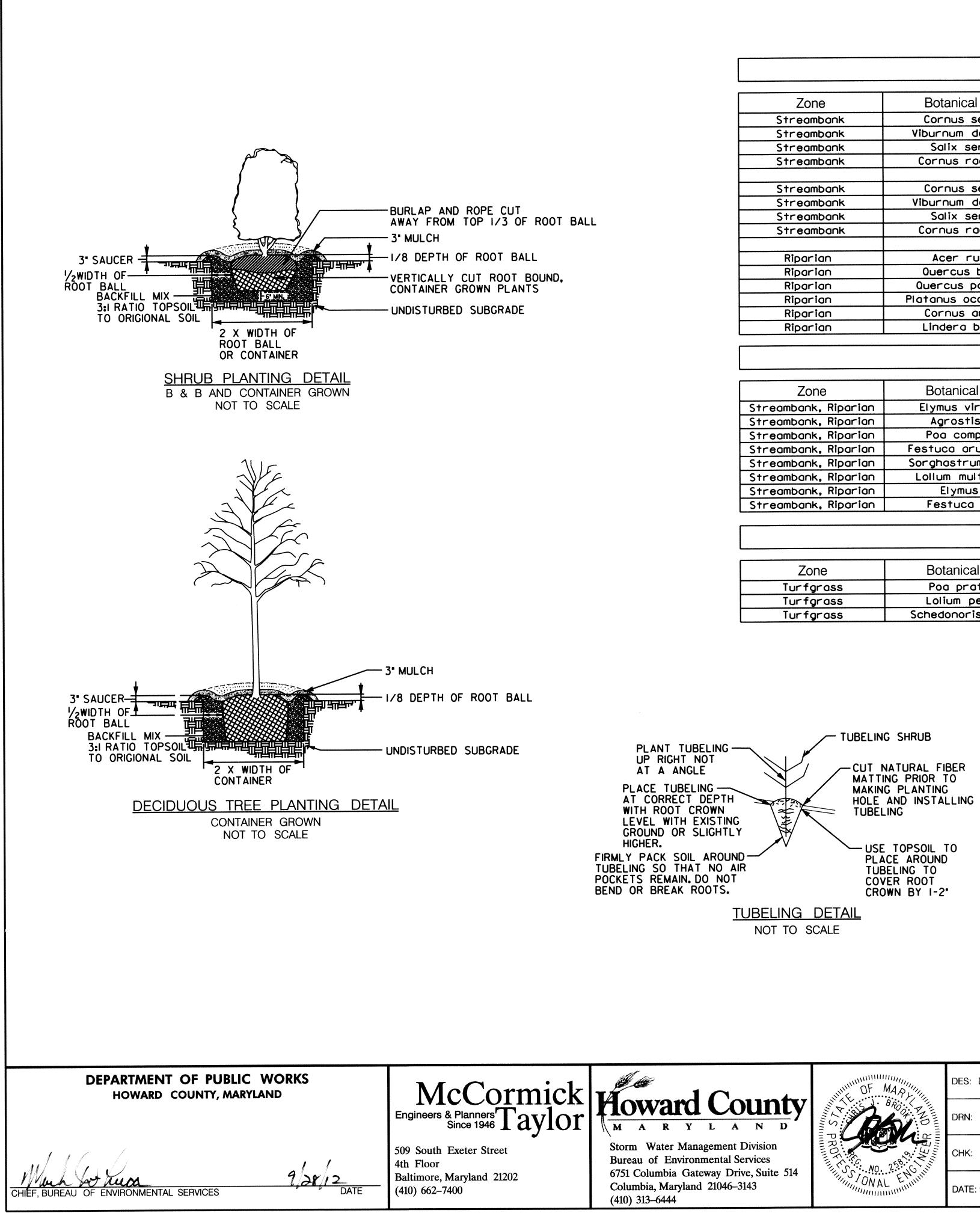
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oward County	NUT CF MAP				
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rm Water Management Division	PR				
eau of Environmental Services		CHK: LN	*****		
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) 313–6444	·/////////////////////////////////////	DATE: 9 /26/12	BY	NO.	REVISION

STANDARD SYMBOL	DETAIL F-4 FILTER BAG]
		-
STING PAVEMENT		
	FLOW	
ILL NOTE 6)		
	PUMP DISCHARGE HOSE I2 IN MIN. MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES	
	STRAP SLOPE SLOPE 5% MAX.	
DGE OF XISTINGPAVEMENT	ELEVATION FILTER BAG -8 IN MIN.	
	CONSTRUCTION SPECIFICATIONS I. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.	
	2. PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.	
N. VEHICLES MUST	3. CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.	
30 FEET FOR A AT THE EXISTING	4. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY, RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE	
NTRANCE, MOUNTABLE BERM PE AS SPECIFIED	DEVICE. 5. USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL	
AGE TO CONVEY, A D AT A HIGH SPOT. MATERIALS.	GRAB TENSILE 250 LB ASTM D-4632	
RETE (WITHOUT	PUNCTURE ISO LB ASTM D-4833 FLOW RATE 70 GAL/MIN/FT ASTM D-4491 PERMITTIVITY (SEC ⁻¹) I.2 SEC ⁻¹ ASTM D-491	
NE OR MAKE ERM, AND SPECIFIED RACKED ONTO	UV RESISTANCE 70% STRENGTH & 500 HOURS ASTM D-4751 APPARENT OPENING SIZE (AOS) 0.15-0.18 MM ASTM D-4632 SEAM STRENGTH 90%	
TO REMOVE MUD AN APPROVED	 REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED. 	
NTROL	MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
NT OF ENVIRONMENT TADMINISTRATION	U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 WATER MANAGEMENT ADMINISTRATION	
ANDARD SYMBOL		1
	DETAIL H-4-1 TEMPORARY ACCESS BRIDGE	
	CONSTRUCTION SPECIFICATIONS	
ECKING	I. CONSTRUCT TEMPORARY BRIDGE STRUCTURE AT OR ABOVE THE BANK ELEVATION TO PREVENT IMPACTS FROM FLOATING MATERIALS AND DEBRIS.	
	2. PLACE ABUTMENTS PARALLEL TO, AND ON, STABLE BANKS.	
FENDER (TYP.)	 CONSTRUCT BRIDGE TO SPAN ENTIRE CHANNEL UNLESS OTHERWISE INDICATED ON APPROVED PLAN. USE STRINGERS CONSISTING OF LOGS, SAWN TIMBER, PRESTRESSED CONCRETE BEAMS, METAL BEAMS, OR OTHER APPROVED MATERIALS. 	
NK (TYP.)	 SELECT DECKING MATERIALS TO PROVIDE SUFFICIENT STRENGTH TO SUPPORT THE ANTICIPATED LOAD. PLACE ALL DECKING MEMBERS PERPENDICULAR TO THE STRINGERS, BUTT TIGHTLY, AND SECURELY 	
*	FASTEN. DECKING MATERIALS MUST BE BUTTED TIGHTLY TO PREVENT ANY SOIL MATERIAL TRACKED ONTO THE BRIDGE FROM FALLING INTO THE WATERWAY BELOW.	
	6. SECURELY FASTEN OPTIONAL RUN PLANKING FOR THE LENGTH OF THE SPAN. PROVIDE A RUN PLANK FOR EACH TRACK OF THE EQUIPMENT WHEELS. ALTHOUGH RUN PLANKS ARE OPTIONAL, THEY MAY BE NECESSARY TO PROPERLY DISTRIBUTE LOADS.	
<	7. INSTALL CURBS THE ENTIRE LENGTH OF THE OUTER SIDES OF THE DECK TO PREVENT SEDIMENT FROM ENTERING THE STREAM CHANNEL.	
	 ANCHOR BRIDGE SECURELY AT ONLY ONE END USING STEEL CABLE OR CHAIN. ANCHORING AT ONLY ONE END WILL PREVENT CHANNEL OBSTRUCTION IN THE EVENT THAT FLOODWATERS FLOAT THE BRIDGE. 	
	ACCEPTABLE ANCHORS ARE LARGE TREES, LARGE BOULDERS, OR DRIVEN STEEL POSTS. ANCHOR MUST BE SUFFICIENT TO PREVENT THE BRIDGE FROM FLOATING DOWNSTREAM.	
	9. AREAS DISTURBED DURING BRIDGE INSTALLATION AND\OR REMOVAL MUST NOT BE LEFT UNSTABILIZED OVERNIGHT UNLESS THE RUNOFF IS DIRECTED TO AN APPROVED SEDIMENT CONTROL DEVICE.	
	10. STABILIZE APPROACH TO BRIDGE AND KEEP FREE OF EROSION. CLEAN SEDIMENT FROM DECKING AND CURBS DAILY BY SCRAPING, SWEEPING, AND/OR VACUUMING. ENSURE THAT DECKING AND CURBS REMAIN TIGHTLY BUTTED WITHOUT GAPS. REMOVE DEBRIS TRAPPED BY BRIDGE. MAINTAIN AREAS ADJACENT TO	
	CROSSING TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.	
	II. AFTER THE TEMPORARY CROSSING IS NO LONGER NEEDED, REMOVE IT WITHIN 14 CALENDAR DAYS. IF SUBJECT TO THE USE DESIGNATION CLOSURE, REMOVE AT THE END OF CLOSURE PERIOD. PROTECT STREAM BANKS DURING BRIDGE REMOVAL AND STABILIZE ALL DISTURBED AREAS WITH EROSION CONTROL	
EMPORARY ACESS	MATTING. ACCOMPLISH REMOVAL OF THE BRIDGE AND CLEAN UP OF THE AREA WITHOUT CONSTRUCTION EQUIPMENT WORKING IN THE WATERWAY CHANNEL. STORE ALL REMOVED MATERIALS IN AN APPROVED STAGING AREA.	
I OF 2	2 OF 2	
TROL T OF ENVIRONMENT ADMINISTRATION	MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOLUCES CONSERVATION SERVICE 2011 WATER MANAGEMENT ADMINISTRATION	
	NATURAL RESOURCES CONSERVATION SERVICE	l
	HOWARD COUNTY STORMWATER MANAGEMENT EVALUATION WHEATFIELD WAY STREAM REHABILITATION PROJECT	S
	CAPITAL PROJECT #D-1158	NC SI
	ELECTION DISTRICT NO. 2, HOWARD COUNTY MARYLAND TAX MAPS 30 & 31; LOTS 61, 190, 240 & 241	
	WAIVER PETITION #WP-13-013	S
	EROSION AND SEDIMENT	10
DATE	CONTROL DETAIL SHEET	



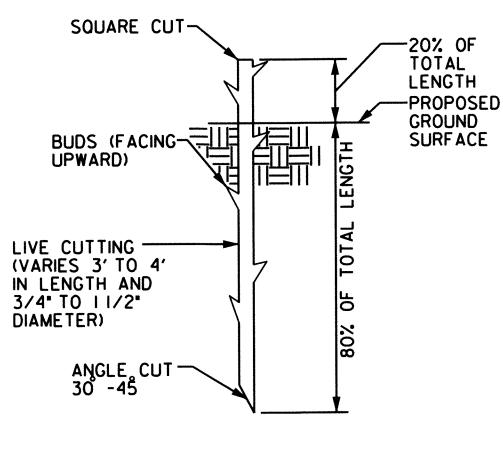


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Water Management Division of Environmental Services	PROTICE AS 258	CHK: LN			
olumbia Gateway Drive, Suite 514 Dia, Maryland 21046–3143 13–6444	IONAL ENUM	DATE: 9 /26/12	BY	NO.	REVISION



		Planting Schedule	}		
Zone	Botanical Name	Common Name	Size	Comment	Quantity
Streambank	Cornus sericea	Red Osier Dogwood	3'-4' Live Stake	Plant 2' 0. C.	257
Streambank	Viburnum dentatum	Southern Arrowwood	3'-4' Live Stake	Plant 2' 0. C.	257
Streambank	Salix sericea	Silky Willow	3'-4' Live Stake	Plant 2' 0. C.	257
Streambank	Cornus racemosa	Gray Dogwood	3'-4' Live Stake	Plant 2' 0. C.	257
Streambank	Cornus sericea	Red Osier Dogwood	I" Dia. X 8-12" Deep Tubeling	Plant 2' 0. C.	100
Streambank	Viburnum dentatum	Southern Arrowwood	I' Dia. X 8-12' Deep Tubeling	Plant 2' 0. C.	100
Streambank	Salix sericea	Silky Willow	I' Dia. X 8-12' Deep Tubeling	Plant 2' 0. C.	100
Streambank	Cornus racemosa	Gray Dogwood	I' Dia. X 8-12' Deep Tubeling	Plant 2' 0. C.	100
Piperion	Acer rubrum	Red Maple	5'-7' HT, 7 GAL Cont.	Plant 12' 0.C.	25
Riparian Riparian	Quercus bicolor	Swamp White Oak	5'-7' HT, 7 GAL Cont.	Plant 12' 0.C.	25
Riparian	Ouercus palustris	Pin Oak	5'-7' HT, 7 GAL Cont.	Plant 12' 0.C.	25
Riparian	Platanus occidentalis	American Sycamore	5'-7' HT, 7 GAL Cont.	Plant 12' 0.C.	25
Riparian	Cornus amomum	Silky Dogwood	3'-4' HT, 3 GAL. Cont.	Plant 8' 0.C.	55
Riparian	Lindera benzoin	Spice Bush	3'-4' HT, 3 GAL. Cont.	Plant 8' 0.C.	55
		Riparian Seed Mix			
7	Detecical Name	·	T	Seeding Bate	Quantity (lbs
Zone	Botanical Name	Common Name	Percent Mix	Seeding Rate	Quantity (Ibs
Streambank, Riparian	Elymus virginicus	Common Name Virginia Wildrye	Percent Mix 5	30 lbs per acre	Quantity (Ibs
Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba	Common Name Virginia Wildrye Redtop	Percent Mix 5 5	30 lbs per acre 30 lbs per acre	Quantity (Ibs
Streambank, Riparian Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba Poa compressa	Common Name Virginia Wildrye Redtop Canada Bluegross	Percent Mix 5 5 5	30 lbs per acre30 lbs per acre30 lbs per acre	Quantity (Ibs
Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba Poa compressa Festuca arundinacea	Common Name Virginia Wildrye Redtop Conada Bluegrass Trident tall Fescue	Percent Mix 5 5 5 10	30 lbs per acre30 lbs per acre30 lbs per acre30 lbs per acre30 lbs per acre	Quantity (Ibs
Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba Poa compressa Festuca arundinacea Sorghastrum nutans	Common Name Virginia Wildrye Redtop Conada Bluegrass Trident tall Fescue Indian Grass	Percent Mix 5 5 5 10 5	30 lbs per acre30 lbs per acre	Quantity (lbs
Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba Poa compressa Festuca arundinacea Sorghastrum nutans Lollum multiflorum	Common Name Virginia Wildrye Redtop Canada Bluegrass Trident tall Fescue Indian Grass Annual Ryegrass	Percent Mix 5 5 10 5 25	30 lbs per acre30 lbs per acre	Quantity (lbs
Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba Poa compressa Festuca arundinacea Sorghastrum nutans Lollum multiflorum Elymus sp.	Common Name Virginia Wildrye Redtop Canada Bluegrass Trident tall Fescue Indian Grass Annual Ryegrass Saint Perennial Ryegrass	Percent Mix 5 5 10 5 25 20	30 Ibs per ocre30 Ibs per ocre	Quantity (lbs
Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba Poa compressa Festuca arundinacea Sorghastrum nutans Lollum multiflorum	Common Name Virginia Wildrye Redtop Canada Bluegrass Trident tall Fescue Indian Grass Annual Ryegrass	Percent Mix 5 5 10 5 25	30 lbs per acre30 lbs per acre	Quantity (lbs
Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba Poa compressa Festuca arundinacea Sorghastrum nutans Lollum multiflorum Elymus sp. Festuca rubra	Common Name Virginia Wildrye Redtop Canada Bluegrass Trident tall Fescue Indian Grass Annual Ryegrass Saint Perennial Ryegrass	Percent Mix 5 5 5 10 5 25 20 25 TOTAL MIX	30 Ibs per ocre30 Ibs per ocre	
Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba Poa compressa Festuca arundinacea Sorghastrum nutans Lollum multiflorum Elymus sp. Festuca rubra	Common Name Virginia Wildrye Redtop Canada Bluegrass Trident tall Fescue Indian Grass Annual Ryegrass Saint Perennial Ryegrass Creeping Red Fescue	Percent Mix 5 5 5 10 10 5 25 20 25 TOTAL MIX X	30 lbs per acre30 lbs per acre	19.0
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Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian Streambank, Riparian	Elymus virginicus Agrostis alba Poa compressa Festuca arundinacea Sorghastrum nutans Lollum multiflorum Elymus sp. Festuca rubra	Common Name Virginia Wildrye Redtop Canada Bluegrass Trident tall Fescue Indian Grass Annual Ryegrass Saint Perennial Ryegrass Creeping Red Fescue	Percent Mix	30 Ibs per acre 30 Ibs per acre	

Zone	Botanical Name	Common Name	Percent Mix	Seeding Rate	Quantity (lbs.)
Turfgrass	Poa pratengis	Kentucky Blue Grass	33	50 lbs per acre	
Turfgrass	Lolium perenne	Perennial Rye Grass	33	50 lbs per acre	
Turfarass	Schedonoris phoenix	Tall Fescue	34	50 lbs per acre	
Z			TOTAL MIX		1.0

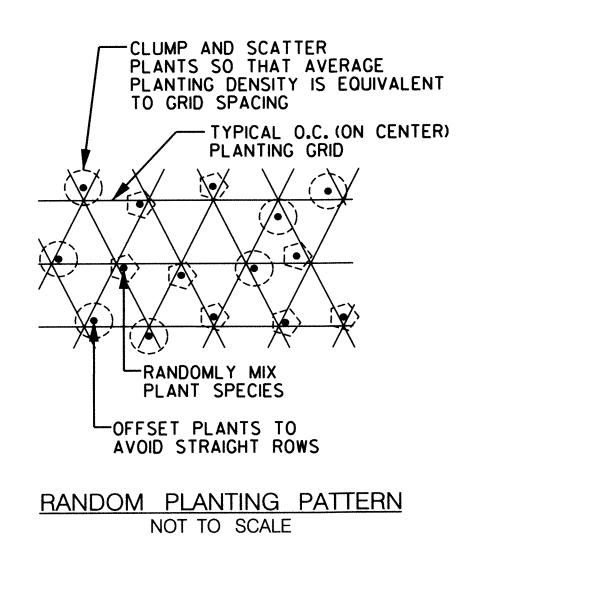


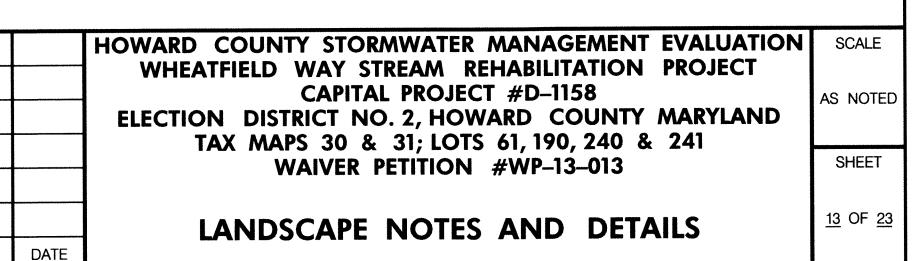
LIVE STAKE

NOTE: I. LIVE STAKES MUST BE INSTALLED WHILE DORMANT (LATE FALL TO EARLY SPRING). DO NOT ALLOW THEM TO DRY OUT.

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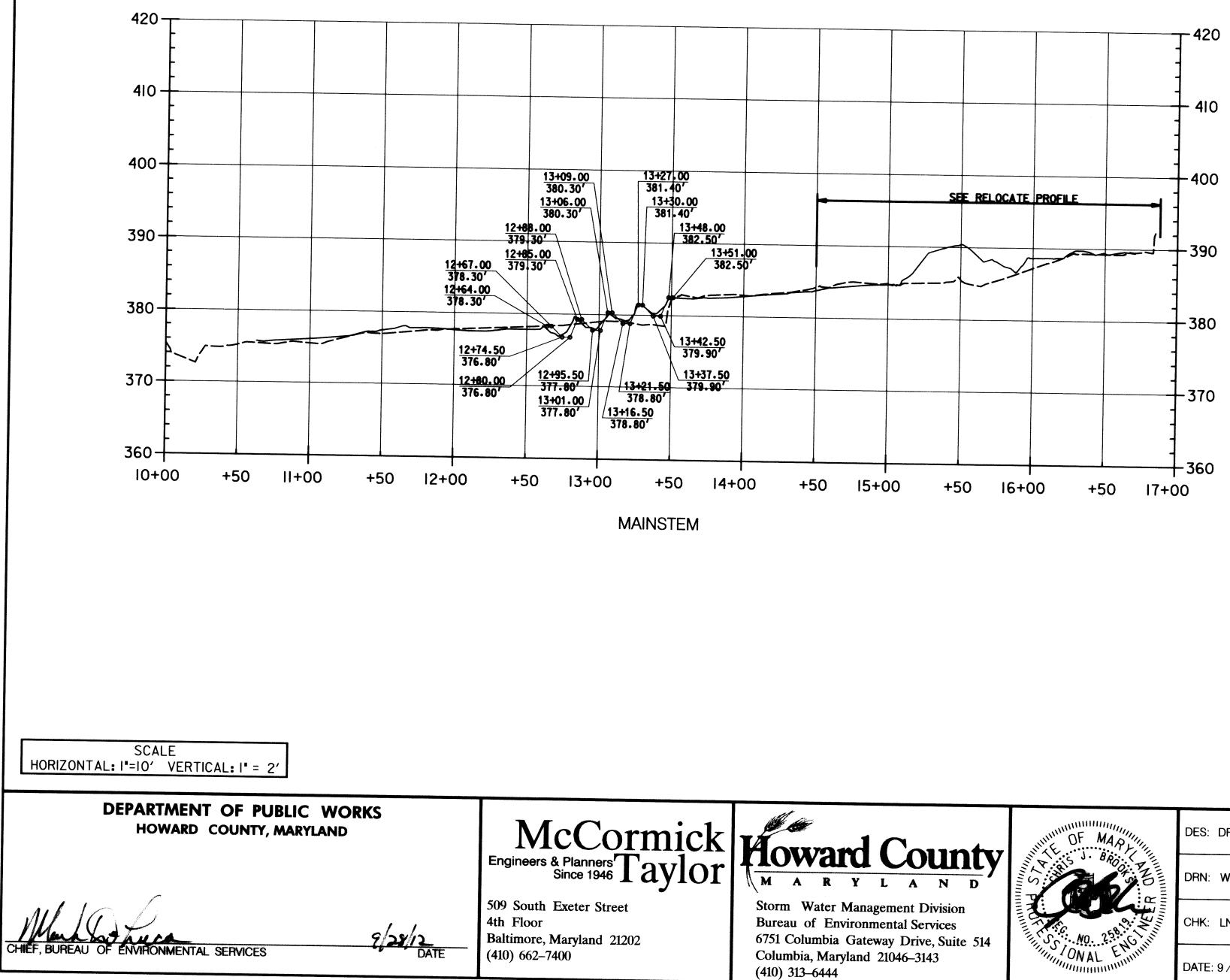




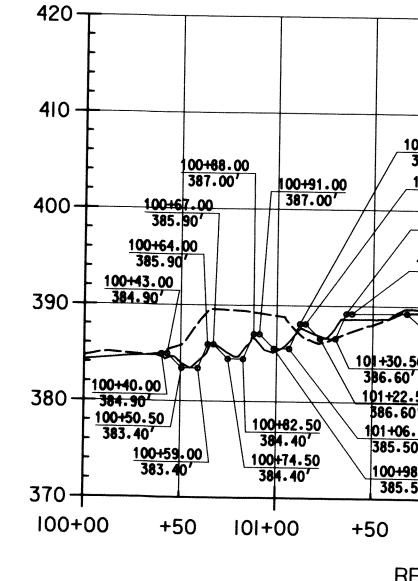
STEP-PC)OL	PRO	FILE	ELEV	ATI	ON	S	
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LOCATION	PROPOSED ELEV. (FT)	AS-BUILT
CREST I	389.2	38
POOL I	386.6	38
CREST 2	388.1	38
POOL 2	385.5	38
CREST 3	387.0	380
POOL 3	384.4	384
CREST 4	385.9	385
POOL 4	383.4	383
CREST 5	384.9	384
CREST 6	382.5	382
POOL 6	379.9	380
CREST 7	381.4	381
POOL 7	378.8	379
CREST 8	380.3	
POOL 8	377.8	380
CREST 9	379.3	377
POOL 9		379
CREST 10	376.8	376
	378.3	378

NOTE: AS-BUILT PROFILE SHOWN DEPICTS THE CENTERLINE OF THE CONSTRUCTED STEP-POOL SYSTEM. REFER TO THE STEP-POOL ELEVATION TABLE FOR PROPOSED STRUCTURE COMPARISON. CRESTS AND POOLS ARE DESIGNATED I TO IO, STARTING AT THE UPSTREAM PROJECT LIMIT AND EXTENDING DOWN STREAM.

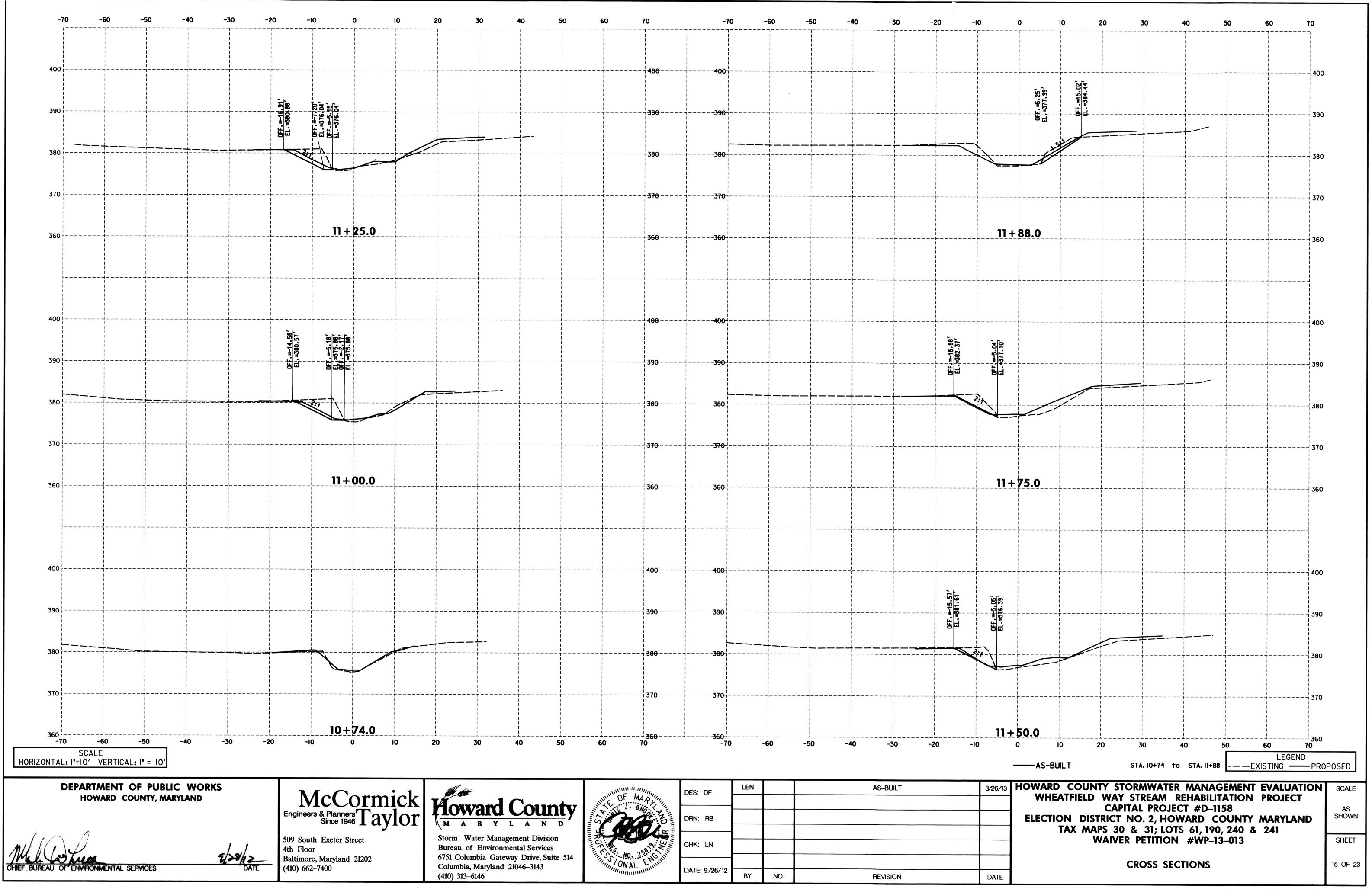


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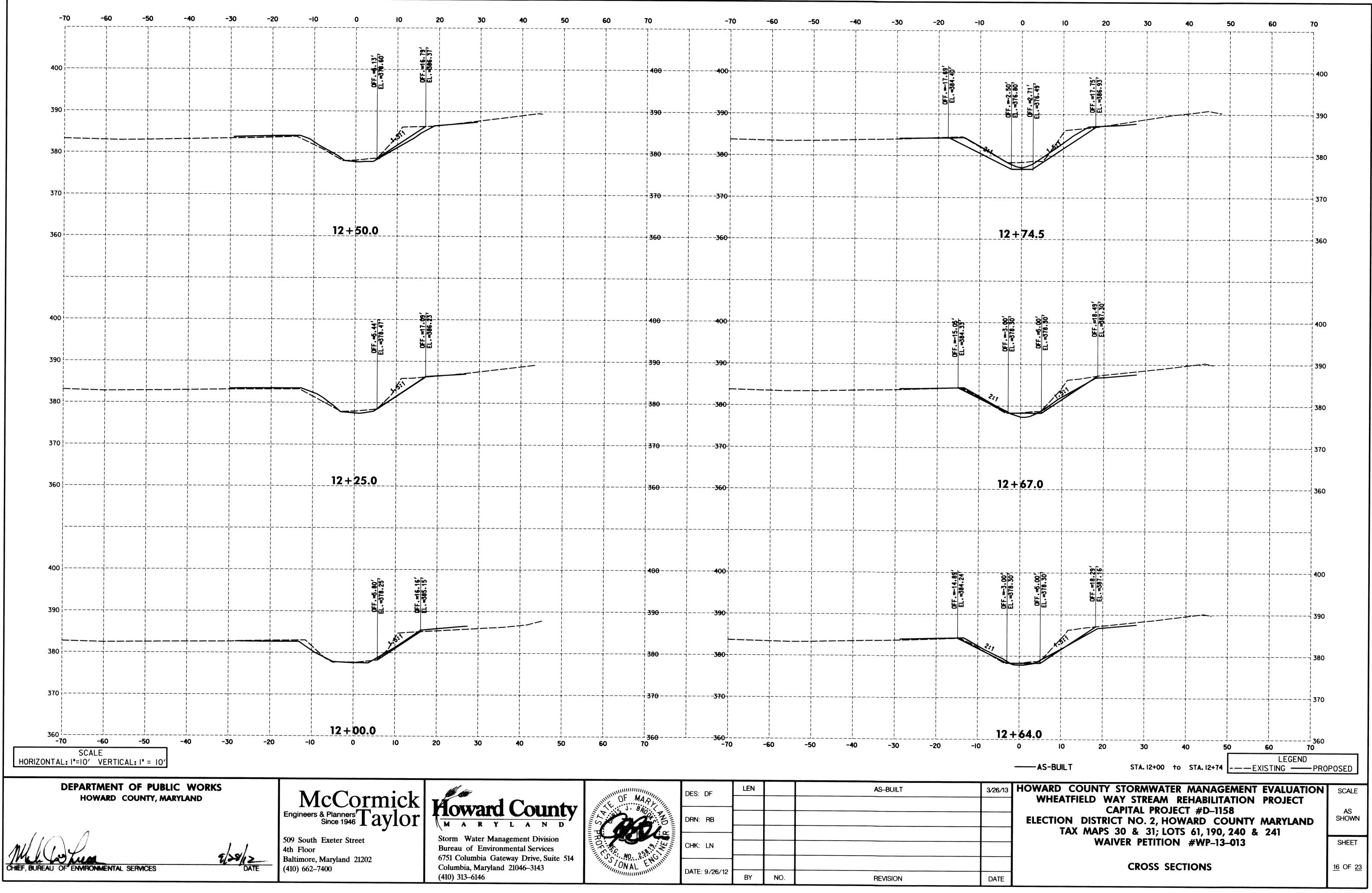


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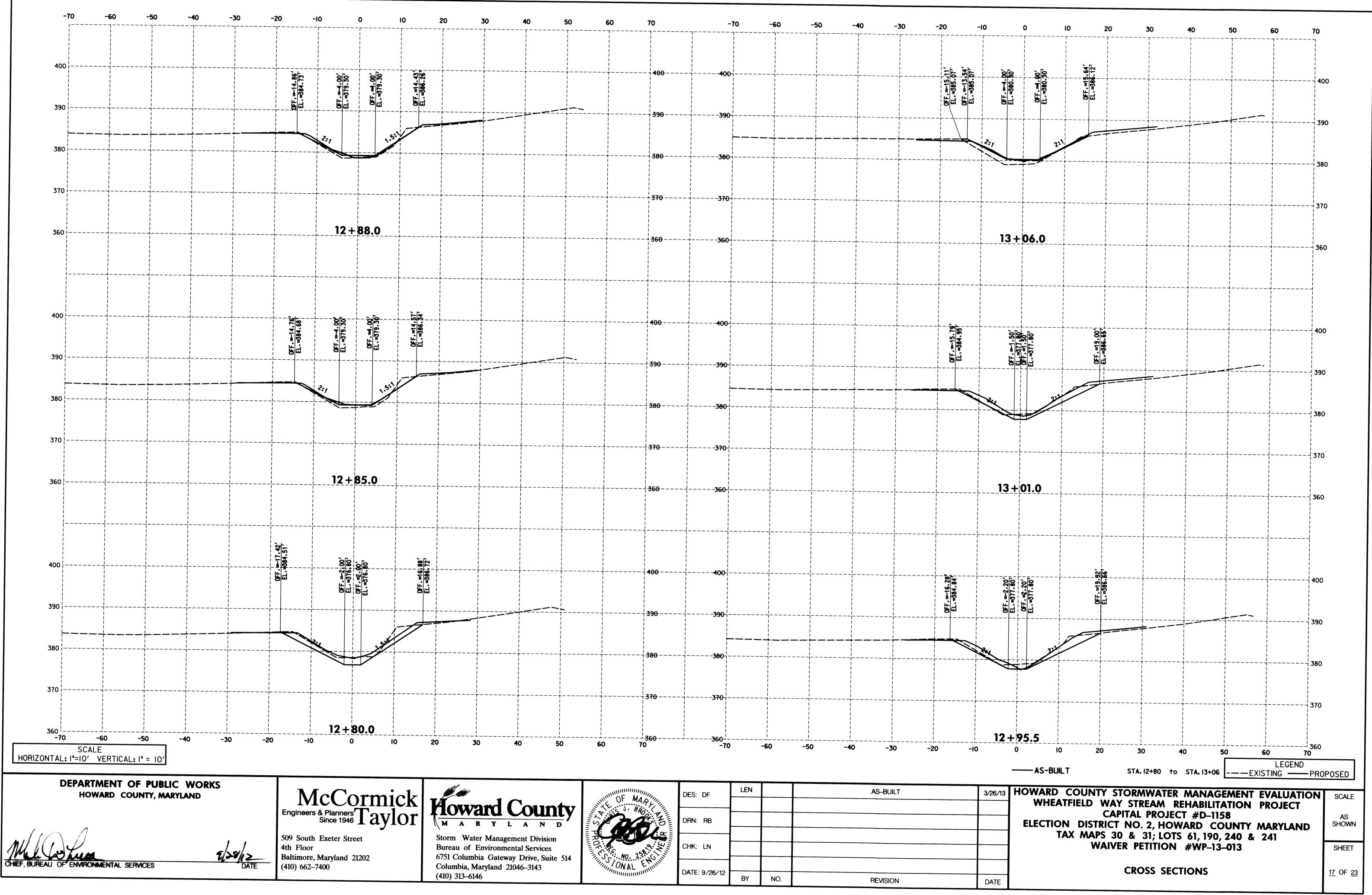
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WAIVER PETITION #WP-13-013	SHEET
ATE PROFILE SHEET	<u>14</u> OF <u>23</u>



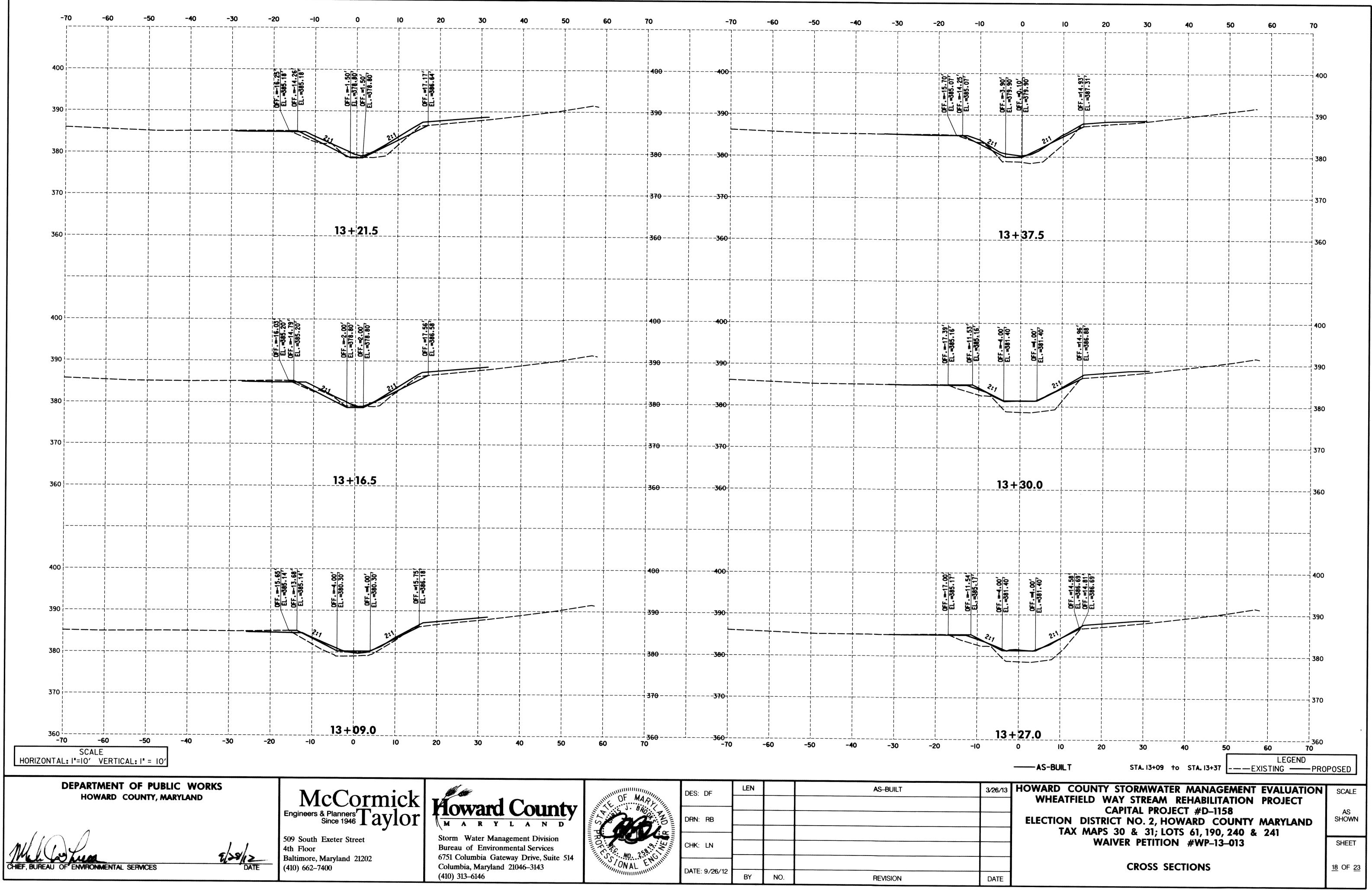
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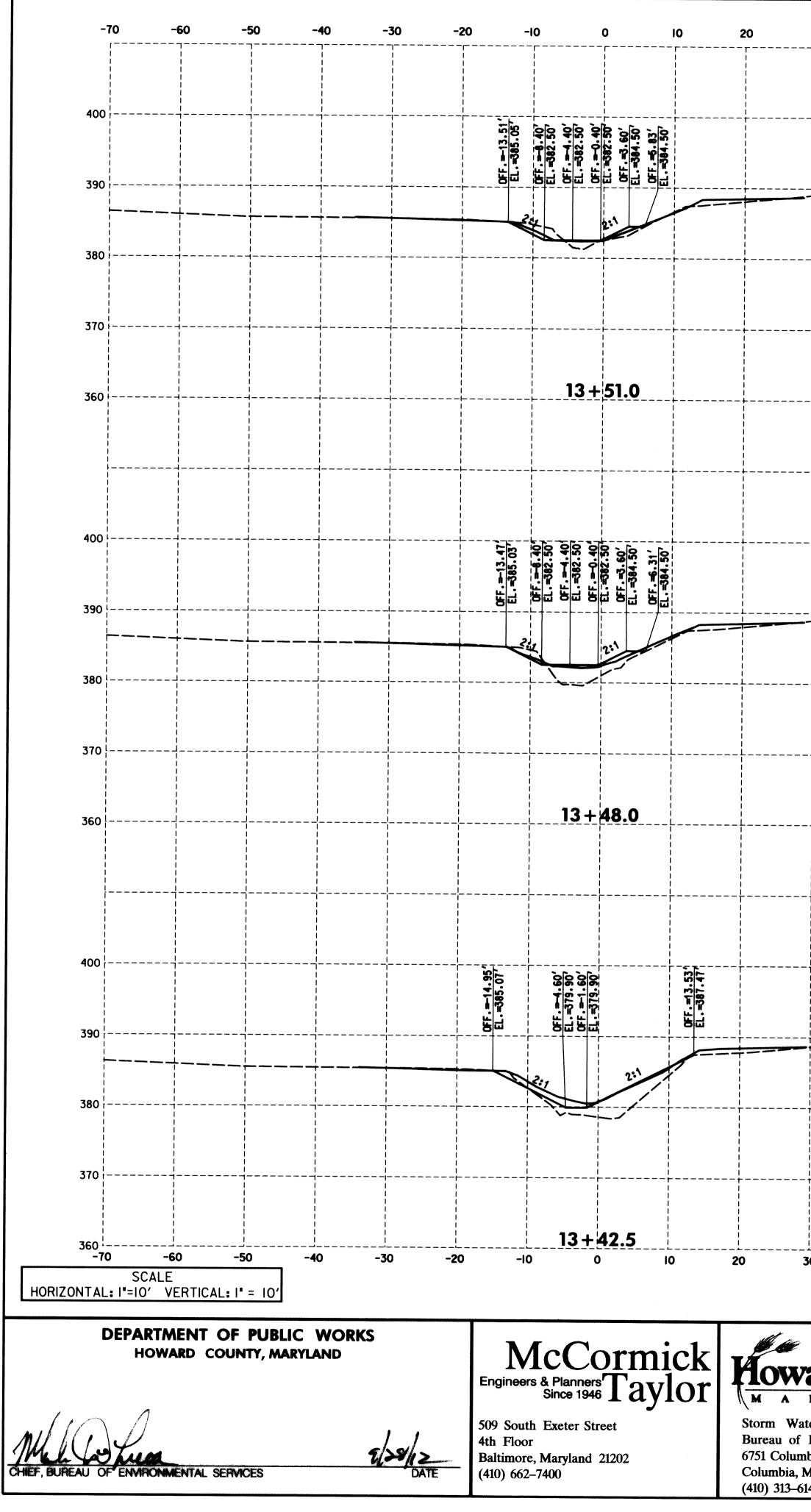
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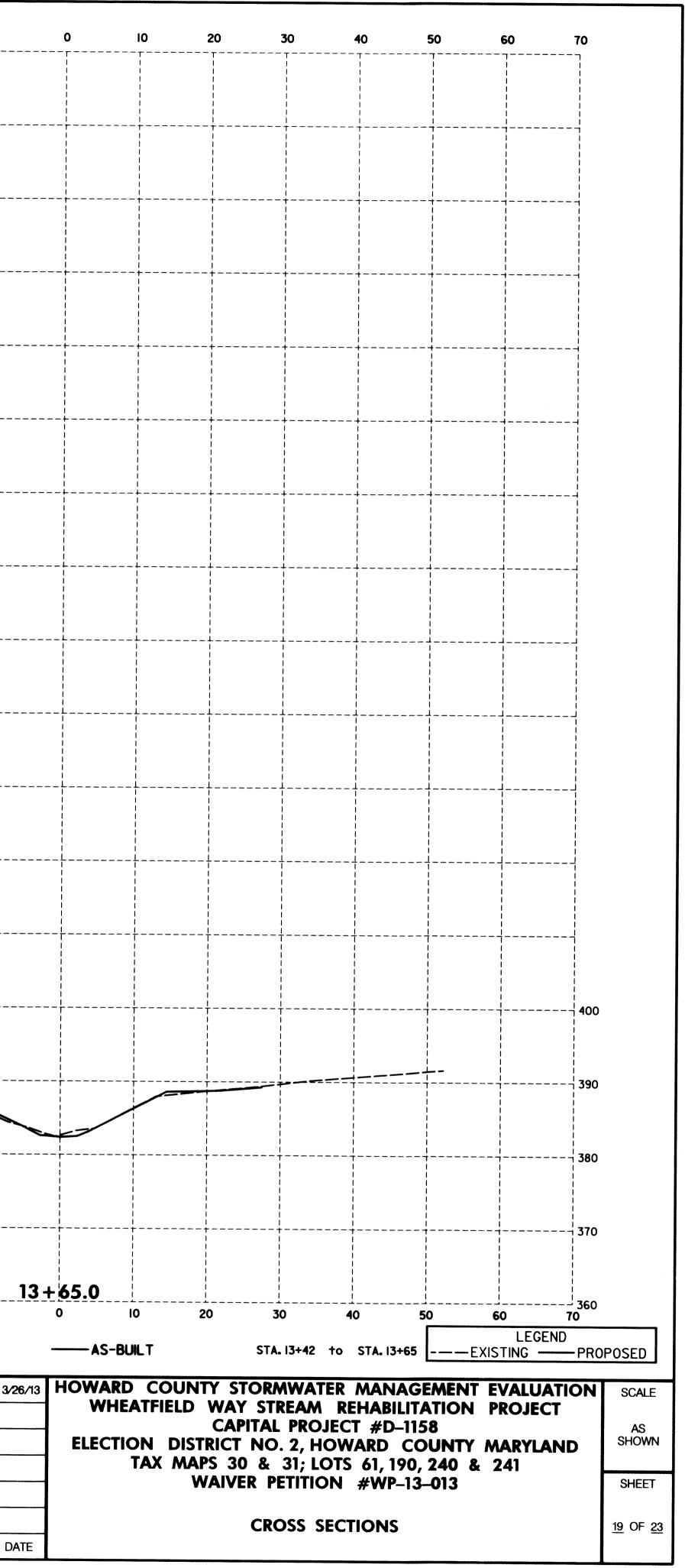


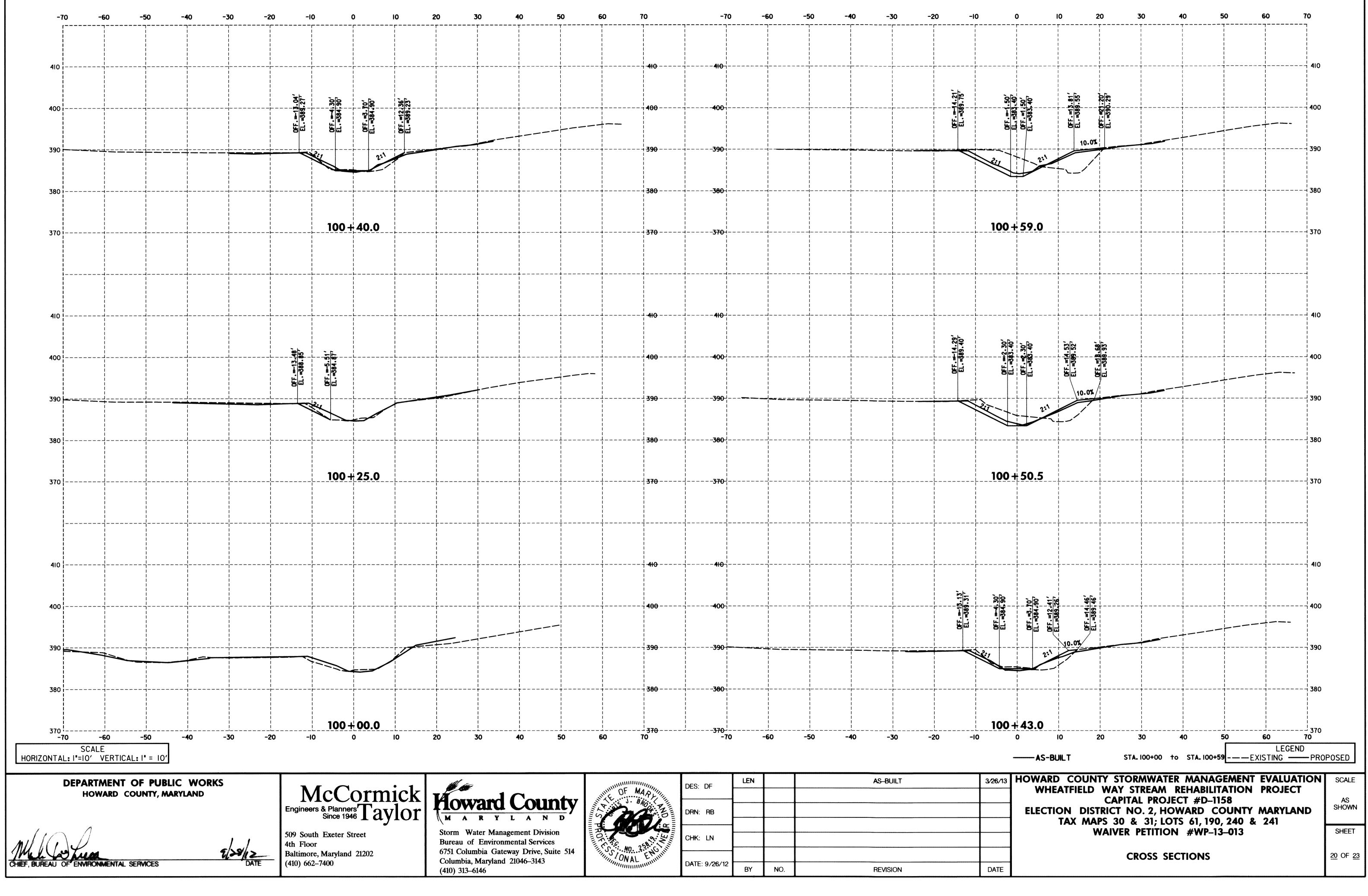
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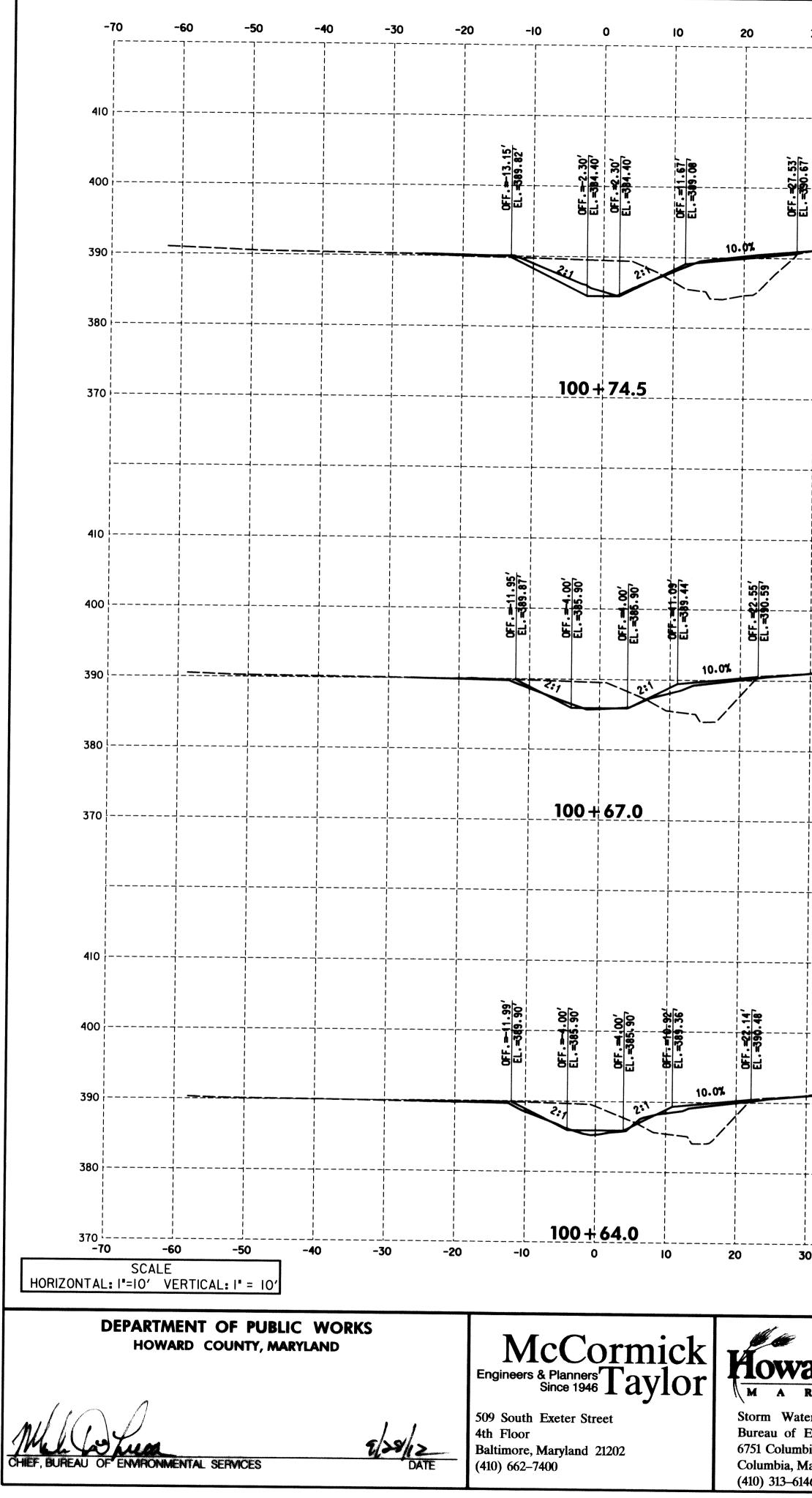
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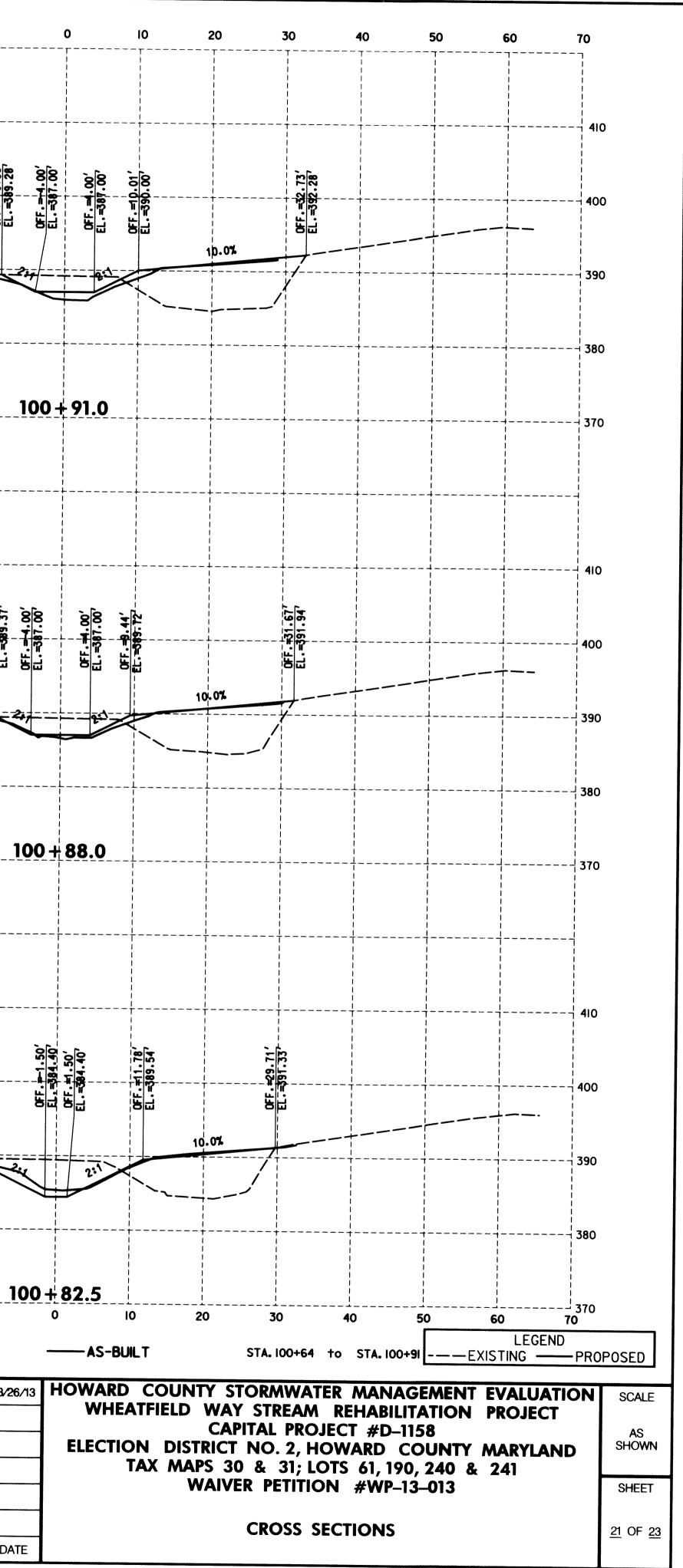
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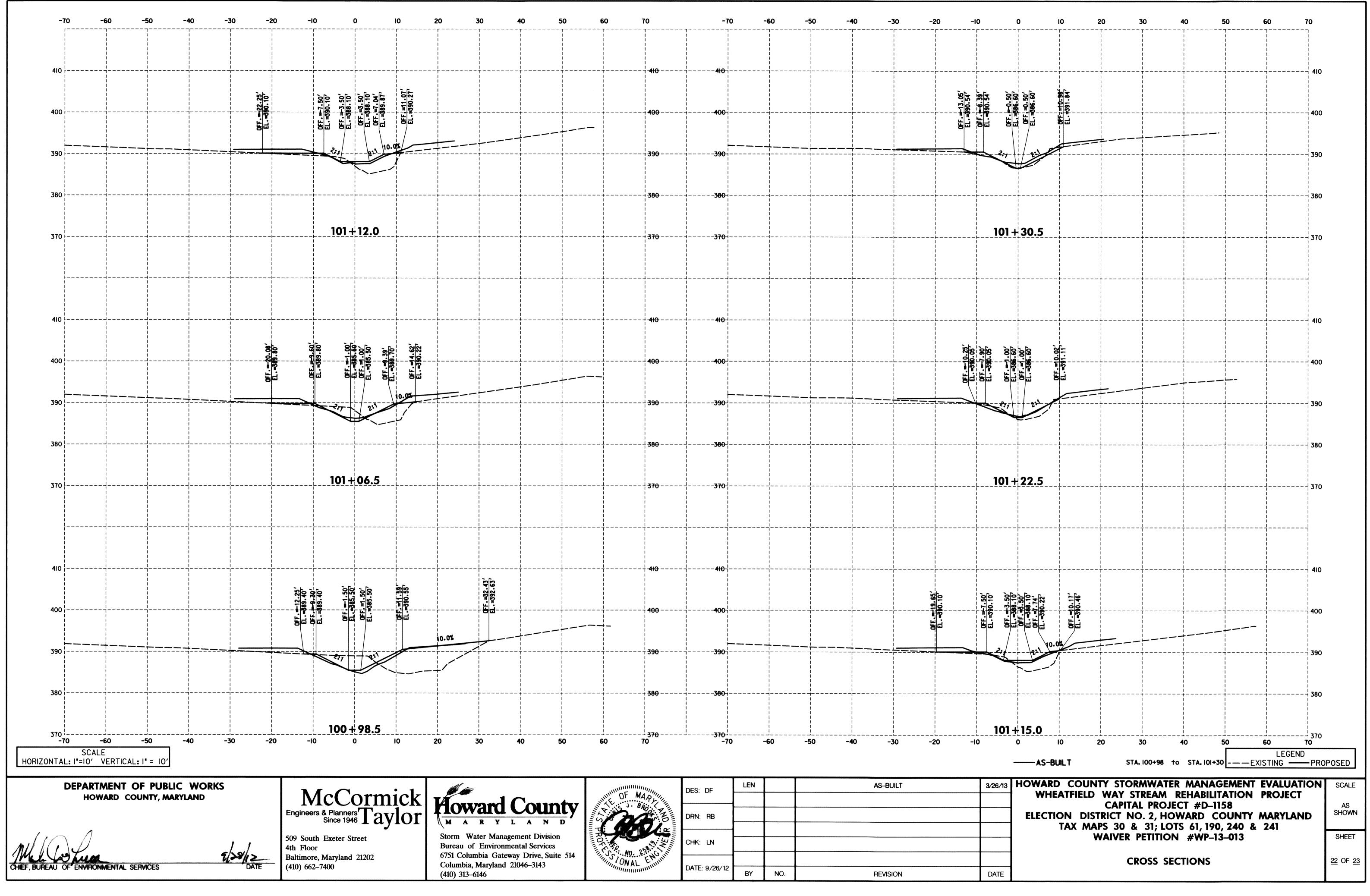
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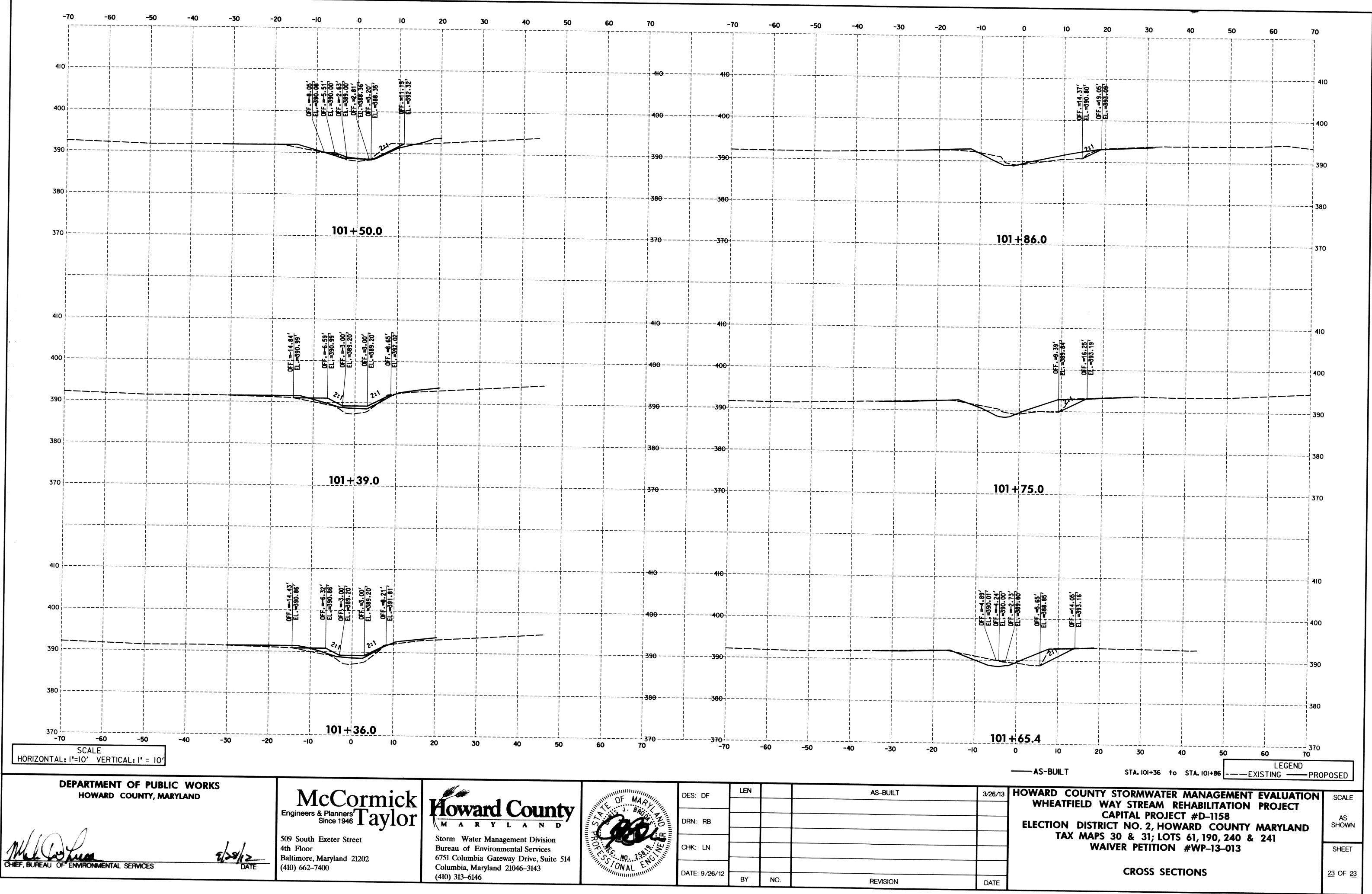
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