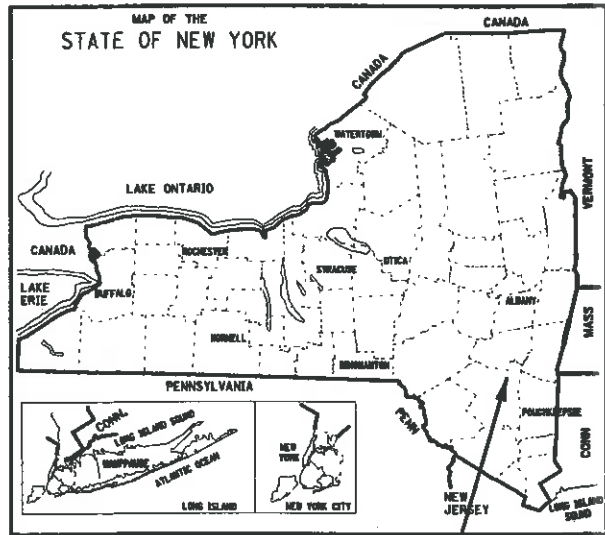


DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON



PROJECT LOCATION



TRAILHEAD CONSTRUCTION PROJECT:
ASHOKAN RAIL TRAIL, TOWN OF OLIVE

CONSTRUCTION PLANS

THE LATEST REVISIONS OF THE STANDARD SHEETS MAINTAINED BY THE NYS DEPARTMENT OF TRANSPORTATION, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS, SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL BE SUBJECT TO THE APPLICABLE STANDARD SHEET(S) UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.

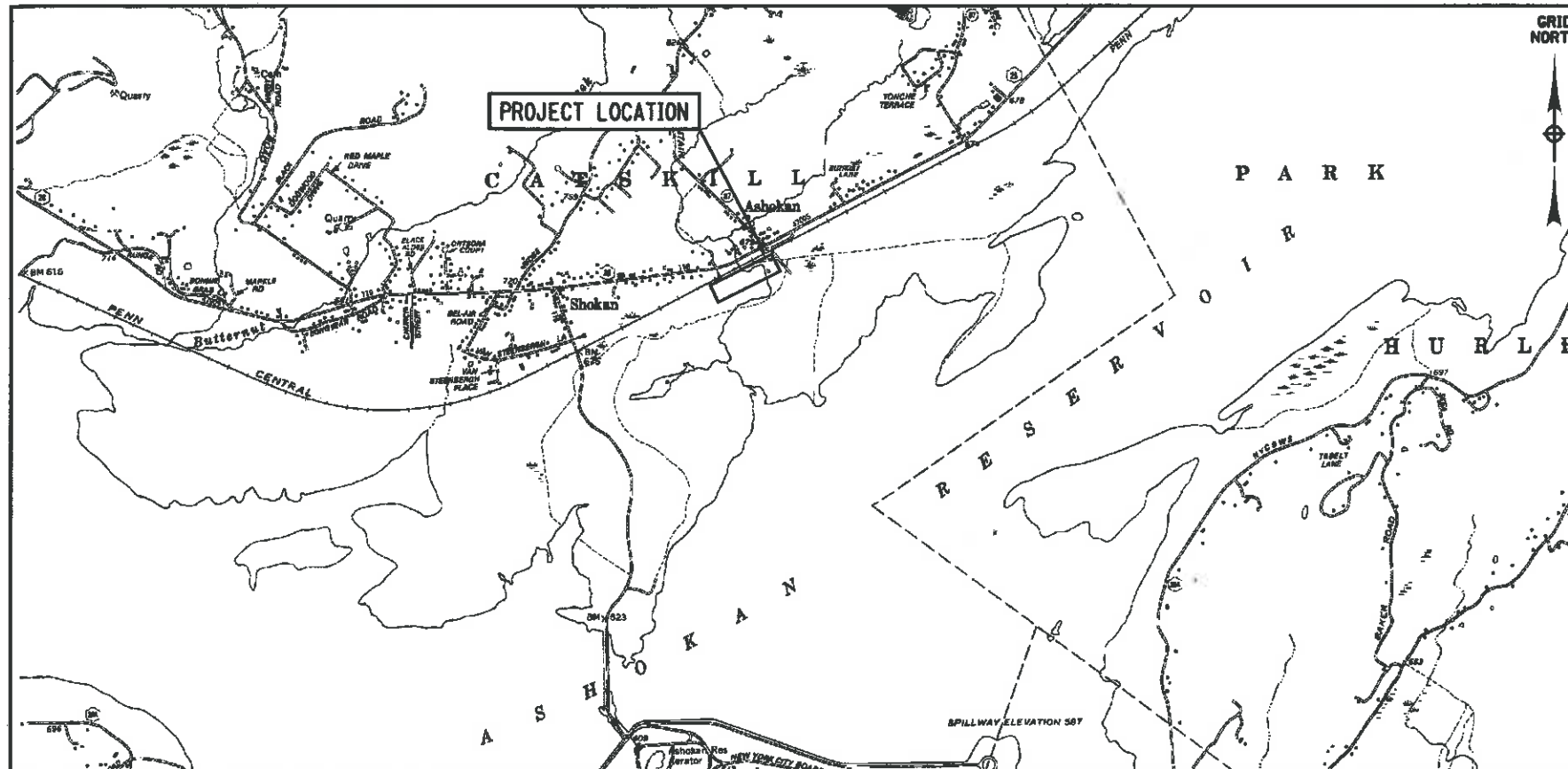
ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (AS CUSTOMARY) REFERENCED IN THE CONTRACT PROJECT "PROPOSAL" EXCEPT AS MODIFIED BY THESE PLANS OR BY CHANGES SET FORTH IN THE CONTRACT PROJECT "PROPOSAL."

LOCATION: ASHOKAN RAIL TRAIL TRAILHEAD

NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PROJECT DESCRIPTION:

CONSTRUCTION OF A TRAILHEAD ON NY ROUTE 28 IN THE TOWN OF OLIVE. INCLUDED IS A NEW PARKING LOT, TRAILHEAD AMENITIES AND STORMWATER MANAGEMENT PRACTICES



PROJECT LOCATION

RECOMMENDED BY

CHARLES LIANG
NEW YORK CITY DEPARTMENT OF
ENVIRONMENTAL PROTECTION

DATE

PREPARED BY



JACK GORTON
HVEA ENGINEERS
N.Y.S. P.E. #094589



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(845) 838-3600
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ASHOKAN RAIL TRAIL TRAILHEAD

COUNTY: ULSTER

FED. ROAD REG. NO.	STATE	SHEET NO.
8	N.Y.	1



CAPITAL PROJECT
IDENTIFICATION NO.

INDEX ON SHEET NO. 2

ALIGNMENT		TOPOGRAPHY (MISCELLANEOUS)		UTILITIES	
ABBR.	DESCRIPTION	ABBR.	DESCRIPTION	ABBR.	DESCRIPTION
AH	AHEAD	ABUT	ABUTMENT	E	ELECTRIC
AZ	AZIMUTH	AOBE	AS ORDERED BY ENGINEER	EMH	ELECTRIC MANHOLE
BK	BACK	ASPH	ASPHALT	G	GAS
BL	BASELINE	BDY	BOUNDARY	GP	GUY POLE
BRG	BEARING	BLDG	BUILDING	GSB	GAS SERVICE BOX (HOUSE LINE)
CL	CENTERLINE	BM	BENCH MARK	GV	GAS VALVE (MAIN LINE)
CS	CURVE TO SPIRAL	CC	CENTER TO CENTER	HYD	HYDRANT
e	SUPERELEVATION RATE (CROSS SLOPE)	CONC	CONCRETE	LP	LIGHT POLE
EQ	EQUALITY	CONST	CONSTRUCTION	LPG	LOW PRESSURE GAS
EXT	EXTERNAL	CR	COUNTY ROAD	PP	POWER POLE
HCL	HORIZONTAL CONTROL LINE	D	DEED DISTANCE	SA	SANITARY SEWER
HSD	HEADLIGHT SIGHT DISTANCE	DM	DIRECT MEASUREMENT	SMH	SANITARY MANHOLE
L	LENGTH OF CIRCULAR CURVE	DWY	DRIVEWAY	ST	STORM SEWER
LS	LENGTH OF SPIRAL	EP	EDGE OF PAVEMENT	T	TELEPHONE
LVC	LENGTH OF VERTICAL CURVE	ES	EDGE OF SHOULDER	TCB	TRAFFIC CONTROL BOX
E	CENTER CORRECTION OF VERTICAL CURVE	FEE	FEE ACQUISITION	TELBOX	TELEPHONE BOX
ML	MAIN LINE	FEE WO/A	FEE ACQUISITION WITHOUT ACCESS	TEL P	TELEPHONE POLE
PC	POINT OF CURVATURE	FP	FENCE POST	TMH	TELEPHONE MANHOLE
PI	POINT OF INTERSECTION	FD	FOUNDATION	CTV	CABLE TELEVISION
POL	POINT ON LINE	FL	FENCE LINE	W	WATER
PSD	PASSING SIGHT DISTANCE	GAR	GARAGE	WSB	WATER SERVICE BOX (HOUSE LINE)
PT	POINT OF TANGENT	GR	GRAVEL	WV	WATER VALVE (MAIN LINE)
PVC	POINT OF VERTICAL CURVE	HO	HOUSE	SUBSURFACE EXPLORATION	
PVI	POINT OF VERTICAL INTERSECTION	HWY	HIGHWAY		
PVT	POINT OF VERTICAL TANGENT	IP	IRON PIN OR IRON PIPE	ABBR.	DESCRIPTION
R	RADIUS	MB	MAILBOX	REPLACE ABBREVIATION "AB" WITH:	
SC	SPIRAL TO CURVE	MON	MONUMENT	AH	HAND AUGER
SSD	STOPPING SIGHT DISTANCE	N&W	NAIL AND WASHER	CP	CONE PENTROMETER
ST	SPIRAL TO TANGENT	OG	ORIGINAL GROUND	DA	2¼ INCHES CASED DRILL HOLE
STA	STATION	O/H	OVERHEAD	DM	DRILLING MUD
T	TANGENT LENGTH	P	PARCEL	DN	4 INCHES CASED DRILL HOLE
TGL	THEORETICAL GRADE LINE	PAV'T	PAVEMENT	FH	HOLLOW FLIGHT AUGER
TS	TANGENT TO SPIRAL	PE	PERMANENT EASEMENT	PA	POWER AUGER
VC	VERTICAL CURVE	PED POLE	PEDESTRIAN POLE	PH	PROBE
TOPOGRAPHY (DRAINAGE)		PL	PROPERTY LINE	PT	PERCOLATION TEST HOLE
		POR	PORCH	RP	1 INCH SAMPLER (RETRACTABLE PLUG)
ABBR.	DESCRIPTION	RR	RAILROAD	TO BE DEFINED AT THE TIME OF EXPLORATION	
BB	BOTTOM OF BANK (STREAM)	RTE	ROUTE	SP	SEISMIC POINT
BC	BOTTOM OF CURB	ROW	RIGHT OF WAY	TP	TEST PIT
BO	BOTTOM OF OPENING	RW	RETAINING WALL	ABBREVIATION "C" IN CATEGORIES: DA, DM, DN, AND FH WITH:	
CAP	CORRUGATED ALUMINUM PIPE	SH	STATE HIGHWAY	B	BRIDGE
CB	CATCH BASIN	SHLDR	SHOULDER	C	CUT
CIP	CAST IRON PIPE	SPK	SPIKE	D	DAM
CL STRM	CENTERLINE OF STREAM	ST	STREET	F	FILL
CMP	CORRUGATED METAL PIPE	STK	STAKE	K	CULVERT
CP	CONCRETE PIPE	STY	STORY	W	WALL
CSP	CORRUGATED STEEL PIPE	SW	SIDEWALK	X	TO BE USED IF ONE OF THE ABOVE CANNOT BE DEFINED AT THE TIME THE EXPLORATION IS MADE
CULV	CULVERT	TE	TEMPORARY EASEMENT		
DIA	DIAMETER	TO	TEMPORARY OCCUPANCY		
DMH	DRAINAGE MANHOLE	U/G	UNDERGROUND		
DS	DRAINAGE STRUCTURE PIPE	WW	WING WALL		
D'XING	DITCH CROSSING				
EHW	EXTREME HIGH WATER				
EL	ELEVATION				
ELEV	ELEVATION				
ELW	EXTREME LOW WATER				
ES	END SECTION				
HW	HEADWALL				
INV	INVERT				
MH	MANHOLE				
MHW	MEAN HIGH WATER				
OHW	ORDINARY HIGH WATER				
OLW	ORDINARY LOW WATER				
RCP	REINFORCED CONCRETE PIPE				
SICPP	SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE				
TB	TOP OF BANK (STREAM)				
TC	TOP OF CURB				
TG	TOP OF GRATE				
VCP	VITRIFIED CLAY PIPE				

STANDARD SYMBOL (PLANS)	ITEM PAYMENT UNIT: ESTIMATE OF QUANTITIES SHEET	EQUIVALENT NOMENCLATURE: (SPECS/PROPOSAL)
"	-	INCHES
'	LF	LINEAR FEET
m [∞]	MI	MILES
M ⁺ Δ	SF	SQUARE FEET
YDΔ	SY	SQUARE YARD
AC	AC	ACRES
YD ⁺	CY	CUBIC YARD
GAL	GAL	GALLON
LB	LB	POUND
TON	TON	TON

INDEX		TOTAL NUMBER OF SHEETS: 37
SHEET NUMBER	DESCRIPTION	DRAWING NUMBER
1	TITLE SHEET	COVER
2	INDEX AND ABBREVIATIONS	INDEX
3-4	LEGEND, LINE AND POINT SYMBOLOGY	LEG-1 TO LEG-2
5	TYPICAL SECTIONS	TYP-1
6	GENERAL NOTES	GNN-1
7-8	TRAFFIC CONTROL PLANS	TCP-1 TO TCP-2
9	HORIZONTAL LAYOUT	HLT-1
10	ELEVATION LAYOUT	ELT-1
11-13	MISCELLANEOUS DETAILS	MSD-1 TO MSD-3
14-15	EROSION CONTROL NOTES	ECN-1 TO ECN-2
16-20	EROSION CONTROL DETAILS	ECD-1 TO ECD-5
21	EROSION CONTROL PLANS	ECP-1
22	GENERAL PLAN	GNP-1
23	SIGN TABLE	SDT-1
24	PAVEMENT MARKING PLANS	PMP-1
25-32	STORMWATER MANAGEMENT DETAILS	SMD-1 TO SMD-8
33	DRAINAGE TABLES	DRT-1
34-35	DRAINAGE DETAILS	DRD-1 TO DRD-2
36	DRAINAGE PLANS	DRP-1
37	ESTIMATE OF QUANTITIES	EQQ-1

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					INDEX	DRAWING NO. IND-01
						SHEET NO. 2
	COUNTY: ULSTER					NYSDOT REGION: 8
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					<div><div>BEACON, NEW YORK 12508 (845) 638-3600 www.hveapc.com</div></div>	<div></div>

ALIGNMENT		
STYLE	NAME	DESCRIPTION
	AC	CONTROL (CENTERLINE)
	AD_P	DETOUR
	AT_P	TRANSITION CONTROL
BRIDGE		
	BR	RAIL
	BSHT	SHEET PILING
CONTROL		
	CB	BASELINE
	CBPR	BASELINE, PROJECTION
DRAINAGE		
	DCP	CULVERT PIPE
	DCP_P	CULVERT PIPE (DIR)
	DDG_P	DITCH, GRASS LINED
	DDP_P	DITCH, PAVED INVERT
	DDS_P	DITCH, STONE LINED
	DFL_P	FLOW LINE
	DSSD	SLOTTED DRAIN
	DUD_P	UNDERDRAIN
ENVIRONMENTAL		
	EBLHS	BALE, STRAW
	ECT	CURTAIN, TURBIDITY
	EDMC	DAM, COFFER
	EDMEC_P	DAM, EARTHEN CHECK
	EDMGSC_P	DAM, GRAVEL BAG/SAND BAG CHECK
	EDMPC_P	DAM, PREFABRICATED CHECK
	EDMSC_P	DAM, STONE CHECK
	EFNS	FENCE, SILT
	EFNSV	FENCE, SILT & VEGETATION
	EFNV	FENCE, VEGETATION
	EWAA_P	WETLAND, ADJACENT AREA
	EWF	WETLAND, FEDERAL
	EWFS	WETLAND, FEDERAL AND STATE
	EWM	WETLAND, MITIGATION AREA
	EWS	WETLAND, STATE

1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED).
2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.).
3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES.
4. PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER (0.015 in ON B SIZE DRAWINGS).
5. MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHOULD BE LABELED ON THE PLANS.
6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.

LANDSCAPE		
STYLE	NAME	DESCRIPTION
	LABL	AREA, BRUSH LINE
	LAHR	AREA, HEDGE ROW
	LAPB	AREA, PLANTING BED
	LAWA	AREA, WOODED AREA OUTLINE
	LAW	AREA, WATERS EDGE
	LCUT_P	CUT LIMIT
	LFILL_P	FILL LIMIT
	LFNC	FENCE
	LTRC	TREE ROW, CONIFEROUS
	LTRD	TREE ROW, DECIDUOUS
	LWH	WALL, H PILE
	LWR	WALL, RETAINING
	LWS	WALL, STONE
ROW MAPPING		
	MDL	DEED LINE
	MEE	EASEMENT, EXISTING
	MEP_P	EASEMENT, PERMANENT
	MEPA_P	EASEMENT, PERMANENT, APPROX.
	MET_P	EASEMENT, TEMPORARY
	META_P	EASEMENT, TEMPORARY, APPROX.
	MF_P	FEE ACQUISITION, W/ ACCESS
	MFA_P	FEE ACQUISITION, APPROXIMATE
	MFS_P	FEE ACQUISITION, SHAPE
	MFWOA_P	FEE ACQUISITION, W/O ACCESS
	MHA	HISTORICAL, ACQUISITION
	MHB	HIGHWAY BOUNDARY
	MHBA	HIGHWAY BOUNDARY, APPROX.
	MHBW	HWY BOUNDARY, FACE OF WALL
	MHBWOA	HIGHWAY BOUNDARY, W/O ACCESS
	MJC	JURISDICTION, CITY
	MJCY	JURISDICTION, COUNTY
	MJHD	JURISDICTION, HISTORIC DISTRICT
	MJLL	JURIS., (GREAT, MILITARY) LOT LINE
	MJN	JURISDICTION, NATION
	MJPB	JURISDICTION, PUBLIC LANDS
	MJS	JURISDICTION, STATE
	MJT	JURISDICTION, TOWN
	MJV	JURISDICTION, VILLAGE
	MPL	PROPERTY LOT LINE
	MPLA	PROPERTY LOT LINE, APPROXIMATE
	MSL	SUB LOT LINE

ROADWAY		
STYLE	NAME	DESCRIPTION
	RCZ_P	CLEAR ZONE
	RG	GUIDE RAIL, MISCELLANEOUS
	RGB	GUIDE RAIL, BOX BEAM
	RGBM	GUIDE RAIL, BOX BEAM, MEDIAN
	RGC	GUIDE RAIL, CABLE
	RCCB	GUIDE RAIL, CONCRETE BARRIER
	RGP_P	GUIDE POST
	RGW	GUIDE RAIL, W BEAM
	RGWM	GUIDE RAIL, W BEAM, MEDIAN
	RPB	PARKING BUMPER
	RRC	RAIL ROAD, CATENARY
	RRER	RAIL ROAD, 3RD RAIL
	RRPLS_P	RAIL, PHOTO, LARGE SCALE
	RRPSS	RAIL, PHOTO, SMALL SCALE
	RRS	RUMBLE STRIP
	RRSLS_P	RAIL, SURVEY, LARGE SCALE
	RRSSS	RAIL, SURVEY, SMALL SCALE
SIGNS		
	SBLB	BILLBOARDS
	SM	MULTIPLE POST
	SSO	STRUCTURE, OVERHEAD
	SSOC	STRUCTURE, OVHD. CANTILEVER
STRIPING		
	STB•	BROKEN LINE
	STDB•	DOUBLE BROKEN LINE
	STDLD•	DOTTED LINE LONG
	STDS•	DOTTED LINE SHORT
	STFB•	FULL BARRIER LINE
	STH•	HATCH LINE
	STPB•	PARTIAL BARRIER LINE
	STRCT	ROUNDABOUT, CAT TRACKS
	STRYL	ROUNDABOUT, YIELD LINE
	STSB	STOP BAR
	STSE•	SOLID, EDGE
	STXL	X WALK, LADDER LINE
	STXLB	X WALK, LADDER BAR LINE
• = W (WHITE) OR Y (YELLOW)		
TRAFFIC CONTROL		
	TCSW	SIGNAL, SPAN WIRE

TRAFFIC WORK ZONE		
	TWZBT_P	BARRIER, TEMPORARY
	TWZBTWL_P	BARRIER, TEMPORARY, W/ WARNING LIGHTS
	TWZCD_P	CHANNELIZING DEVICE
	TWZPMRC_P	PAVEMENT MARKING REMOVAL OR COVERING
UTILITIES		
	UC	CONDUIT, UNDERGROUND
	UCH	CONDUIT, HANGING
	UCO	CONDUIT, OVERHEAD
	UE	ELECTRIC LINE, UNDERGROUND
	UEH	ELECTRIC LINE, HANGING
	UEO	ELECTRIC LINE, OVERHEAD
	UETO	ELECTRIC TRANSMISSION, OVERHEAD
	UESS	ELECTRIC, SUBSTATIONS
	UFO	FIBER OPTIC, UNDERGROUND
	UFOH	FIBER OPTIC, HANGING
	UFOO	FIBER OPTIC, OVERHEAD
	UG	GAS, UNDERGROUND
	UGH	GAS, HANGING
	UGO	GAS, OVERHEAD
	UIC	INFORM CABLE, UNDERGROUND
	UICH	INFORM CABLE, HANGING
	UO	OIL LINE, UNDERGROUND
	UOH	OIL LINE, HANGING
	UPBP	POLE, BRACE, PUSH BRACE
	UPGW	POLE, GUY WIRE
	USA	SANITARY SEWER, UNDERGROUND
	USAH	SANITARY SEWER, HANGING
	USAF	SANITARY SEWER, FORCE MAIN, UGND
	USAFH	SANITARY SEWER, FORCE MAIN, HANG
	UT	TELEPHONE, UNDERGROUND
	UTH	TELEPHONE, HANGING
	UTO	TELEPHONE, OVERHEAD
	UTV	CABLE TV, UNDERGROUND
	UTVH	CABLE TV, HANGING
	UTVO	CABLE TV, OVERHEAD
	UUU	UNKNOWN, UNDERGROUND
	UUH	UNKNOWN, HANGING
	UUO	UNKNOWN, OVERHEAD
	UW	WATER LINE, UNDERGROUND
	UWH	WATER LINE, HANGING
	UWO	WATER LINE, OVERHEAD

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

PIN

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

CONTRACT NUMBER

LEGEND

DRAWING NO. LEG-01
SHEET NO. 3

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ENGINEERS

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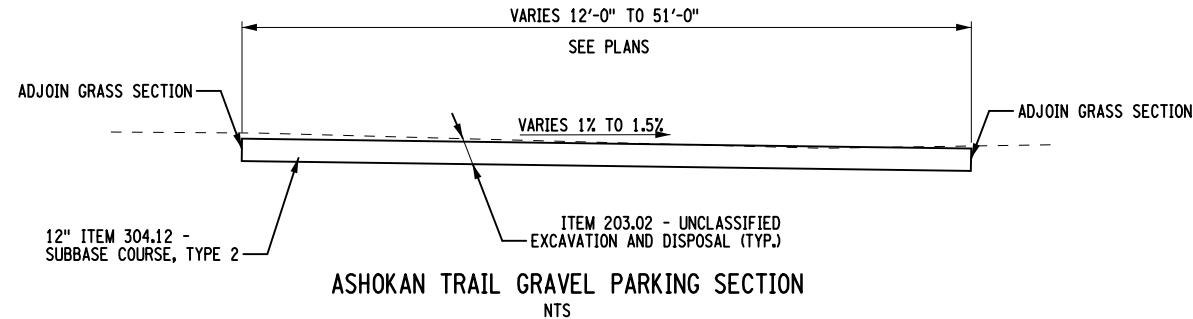
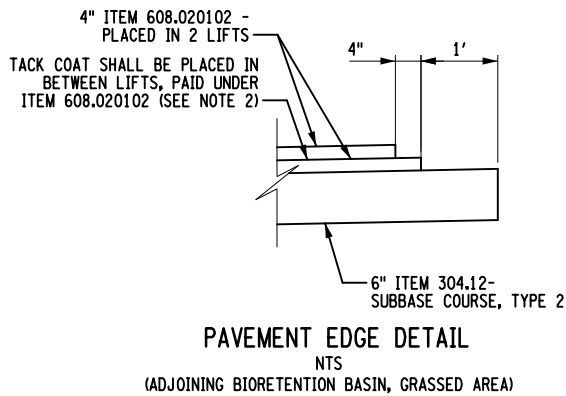
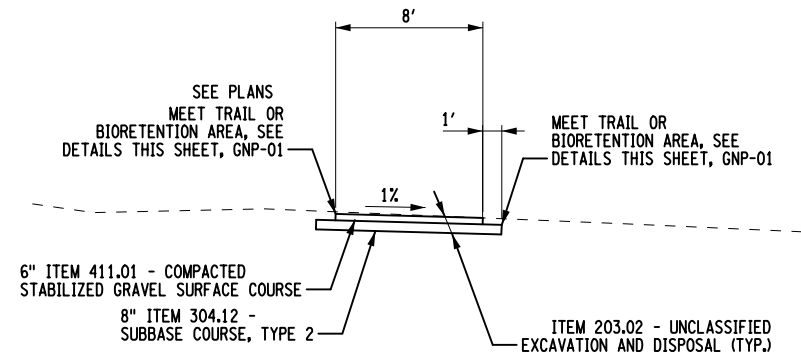
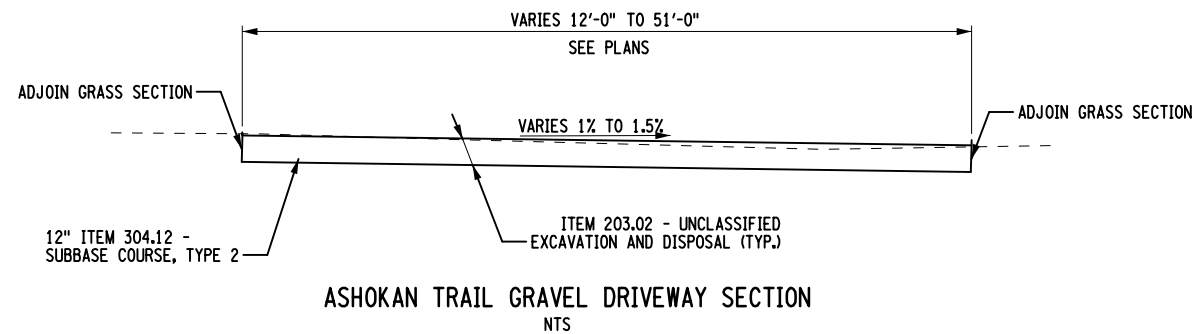
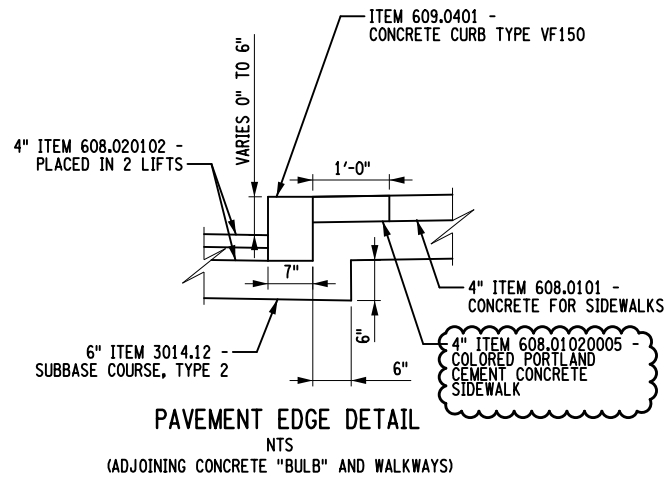
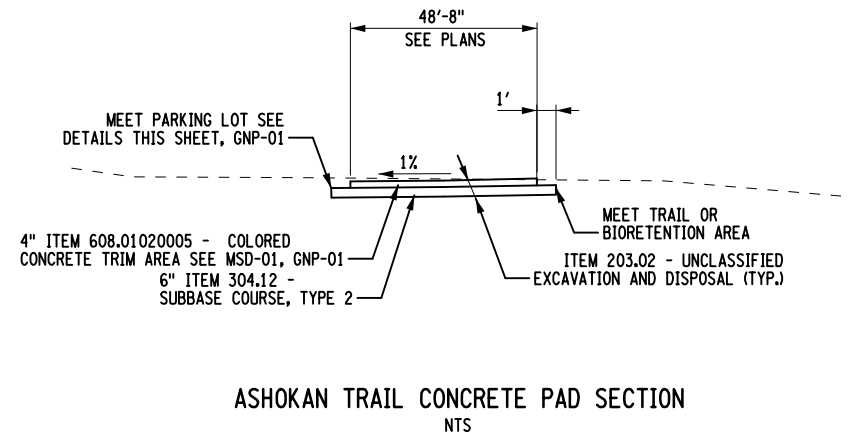
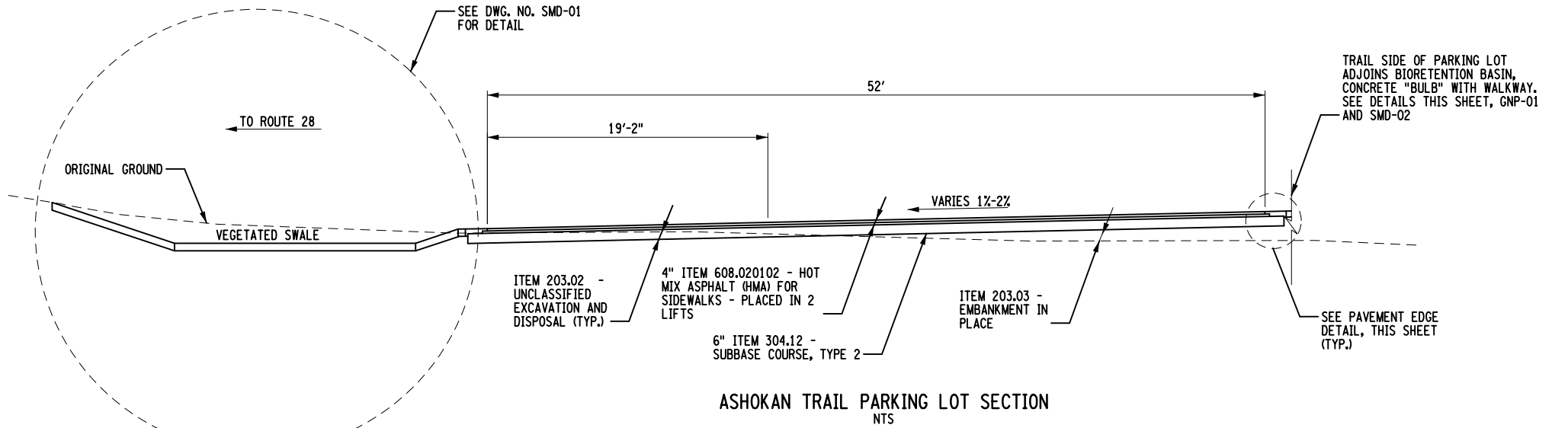
ALIGNMENT			DRAINAGE			ITS			ROW MAPPING			SIGNS			UTILITIES				
CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION		
	ACC	CENTER OF CURVATURE		DINV	INVERT		IANT P	ANTENNAS		MDL1P	DEED LINE, TYPE 1		S	SINGLE POST		UEB	ELECTRIC, BOX		
	ACOGO	COGO		DS	STRUCTURE, RECTANGULAR		IASCTS	ACCOU. SPEED/COUNT SNSR.S		MDL2P	DEED LINE, TYPE 2		S.P	SINGLE POST, PROPOSED		UEM	ELECTRIC, METER		
	ACS	CURVE TO SPIRAL		DSI	STRUCTURE, INVERT		ICABPAD	CABINET & PAD		MDL3P	DEED LINE, TYPE 3		SB.P	BACK TO BACK, PROPOSED		UEMH	ELECTRIC, MANHOLE		
	ADPL_P	DETOUR, POINT OF INTERSECT.		DSM	STRUCTURE, MANHOLE		ICCTV	CCTV SITE		MDL4P	DEED LINE, TYPE 4		SDEL	DELINEATORS		UEPT	ELECTRIC, POLE, TRANS.		
	ADPL_P	DETOUR, POINT ON LINE		DSMTXX_P	STRUCTURE, MANHOLE, TYPE "XX" "XX" = 48, 60, 72, 96		ICDPD	CDPD TRANSCEIVER		MDL5P	DEED LINE, TYPE 5		SPM	PARKING METER		UGM	GAS, METER		
	AEQN	EQUATION		DSMTXX_P	STRUCTURE, MANHOLE, TYPE "XX" "XX" = 48, 60, 72, 96		ICELLT	CELL PHONE TOWER		MEEP	EASEMENT, EXISTING		SRM	REFERENCE MARKERS		UGMH	GAS, MANHOLE		
	AEQNAHD	EQUATION AHEAD		DSR	STRUCTURE, ROUND		ICJB	CONDUIT JACK OR BORING		MEPAP_P	EASEMENT, PERM., APPROX.		SRSC3	SHLD, CTY, 123 DIG.		UGLM	GAS, LINE MARKER		
	AEQNBK	EQUATION BACK		DST"X"CB P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R		ICNTLCAB	CONTROLLER CABINET		MEPP_P	EASEMENT, PERM., BACK LINE		SRSC4	SHLD, CTY, 4 DIG.		UGP	GAS/FUEL PUMP		
	AEVT	EVENT STATION		DST"X"CB P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R		ICPB	COMMUNICATION PULL BOX		MEPSP_P	EASEMENT, PERM., SHAPE		SRSCT2	SHLD, CTY TOUR, 1-2 DIG.		UGV	GAS, VALVE		
	APC	POINT OF CURVATURE		DST"X" P	STRUCTURE, RECT., TYPE "X" "X" = I, K, L, M, O, P, U		ICTD	CONDUIT TURNING DOWN		MFAP_P	FEE ACQUISITION, APPROX.		SRSCT4	SHLD, CTY TOUR, 3-4 DIG.		UGVT	GAS, VENT		
	APCC	POINT OF COMPOUND CURVATURE					ICTU	CONDUIT TURNING UP		MFP_P	FEE ACQUISITION, BACK LINE		SRS1	SHLD, INTERSTATE		ULP	LIGHTING, POLE		
	API	POINT OF INTERSECTION	ENVIRONMENTAL				ICVTRT	COMM. VEH. ROAD TRANSCEIVER		MFSP_P	FEE ACQUISITION, SHAPE		SRSN2	SHLD, NATIONAL, 2 DIG.		ULPM	LIGHTING, POLE, MEDIAN		
	APOB	POINT OF BEGINNING								IDEFAULT	DEFAULT		MHBAP	HIGHWAY BNDRY., APPROX.		SRSN3	SHLD, NATIONAL, 3 DIG.		ULPP
	APOC	POINT OF CURVATURE		EIOP_P	STR., INLET, OUTLET PROT.		IEZR	E-ZPASS READER		MHBCP	HISTORICAL, BLDG. CORNERS		SRSS2	SHLD, STATE, 2 DIG.		UMFC	MISC. FILLER CAP		
	APOE	POINT OF END		EIPGB_P	STR., INLET PROT., GRAVEL BAG		IEZTR	TRANSMITTAL READER		MHBP	HIGHWAY BNDRY, PT.		SRSS3	SHLD, STATE, 3 DIG.		UOLM	OIL, LINE MARKER		
	APOL	POINT ON LINE		EIPHS_P	STR., INLET PROT., HAY/STRAW		IFOXCAB	FIBER OPTIC X-CONNECT CABINET		MJCP	PT., JURIS. CITY		SRSS4	SHLD, STATE, 4 DIG.		UP	POLE, WITH UTILITY		
	APOS	POINT ON SPIRAL		EIPHS_P	STR., INLET PROT., HAY/STRAW		IFUSSPL	FUSION SPLICE		MPBC	PT., BUILDING CORNER	TRAFFIC CONTROL				UPD	POLE, DEAD (NO UTILITY)		
	APOT	POINT ON TANGENT		EIPP_P	STR., INLET PROT., PREFAB.		IHARADV	HAR ADVISORY SIGN		MPCC	PT., CROSS CUT					TCBJ	BOX, JUNCTION		UPL
	APOVC	POINT ON VERTICAL CURVE		EIPP_P	STR., INLET PROT., PREFAB.		IHARST	HAR SITE		MPDH	PT., DRILL HOLE		TCBP	BOX, PULL BOX		USMH	SANITARY SEWER MANHOLE		
	APOVT	POINT ON VERTICAL TANGENT		EIPSF_P	STR., INLET PROT., SILT FENCE		ILC	LOAD CENTER		MPF	PT., FENCE LOCATION		TCBS	BOX, SPLICE		UTB	TELEPHONE, BOOTH		
	APORC	POINT ON REVERSE CURVE					IMECSPL	MECHANICAL SPLICE		MPF	PT., FENCE LOCATION		TCBS	BOX, SPLICE		UTLM	TELEPHONE, LINE MARKER		
	APT	POINT OF TANGENCY		ERCB	RISER, CONCRETE BOX		IMSCS	PORT. SPEED & COUNT SENSOR		MPIP	PT., IRON PIPE		TCMC	MICROCOMPUTER CABINET		UTMH	TELEPHONE, MANHOLE		
	APVC	POINT OF VERTICAL CURVATURE		ETRS_P	TRAP, SEDIMENT		IMSCTS	MICRO SPEED & COUNT SENSOR		MPM	PT., MONUMENT		TCPP	PED POLE		UTVLM	CABLE TV, LINE MARKER		
	APVCC	POINT OF VERT. CMPND CURVE		EWFG	WETLAND FLAG		IMT	MICROWAVE TRANSCEIVER		MPMM	PT., MONUMENT, MISC.		TCSH	SIGNAL HEADS		UTVPB	CABLE TV, PULL BOX		
	APVI	POINT OF VERT. INTERSECTION	GEOTECHNICAL				IOVHVS	PERM. OVERHEAD VMS		MPN	PT., NAIL		TCSP	SIGNAL POLE		UUB	UNKNOWN, BOX		
	APVRC	POINT OF VERT. REVERSE CURVE					GDH	DRILL HOLE		IPASCS	PORT. ACCOU. SPD & CNT. SENSOR		MPRS	PT., RAILROAD SPIKE	TRAFFIC WORK ZONE				UUB
	APVT	POINT OF VERTICAL TANGENCY	LANDSCAPE				IPEDS	PEDESTRIAN SIGNAL HEAD		MPST	PT., SPIKE		TWZAP_P	ARROW PANEL					UUMH
	ASC	SPIRAL TO CURVE					IPSS	PAVEMENT SURFACE SENSOR		MPST	PT., STAKE		TWZAPC_P	ARROW PANEL, CAUTION MODE		UUPB	UNKNOWN, PULL BOX		
	ASPI	SPIRAL POINT OF INTERSECTION		IPVMS	PERM. VMS		MPST	PT., STAKE		TWZAPT_P	ARROW PANEL, TRAILER OR SUPPORT		UUVL	UNKNOWN, VALVE					
	ASTS	SPIRAL TO SPIRAL		IRM	RAMP METER		MPST	PT., STAKE		TWZBCD_P	BARRICADE (TYPE III)		UUVT	UNKNOWN, VENT					
	AST	SPIRAL TO TANGENT		IRWIS	RDWY WEATHER INFO. SENSOR		MPST	PT., STAKE		TWZCMS_P	CHANGEABLE MESSAGE SIGN (PVMS)		UJ	UNKNOWN, WELL					
	ATS	TANGENT TO SPIRAL		ISP	SOLAR PANEL		MPST	PT., STAKE		TWZFLG_P	FLAGGER		UWFH	WATER, FIRE HYDRANT					
	AVEVT	VERTICAL EVENT POINT		ISST	SPREAD SPECT. TRANSCEIVER		MPST	PT., STAKE		TWZFT_P	FLAG TREE		UWM	WATER, METER					
	AVHIGH	VERTICAL HIGH POINT		ITDB	TELEPHONE DEMARCATION BLK		MPST	PT., STAKE		TWZIA_P	IMPACT ATTENUATOR / CRASH CUSHION (TEMPORARY)		UWMH	WATER, MANHOLE					
	AVLOW	VERTICAL LOW POINT		ITP	SUBSURFACE TEMP. PROBE		MPST	PT., STAKE		TWZLUM_P	LUMINAIRE (TEMPORARY)		UWV	WATER, VALVE					
BRIDGE				IVTRT	VEHICLE TO RDWY TRANSCEIVER		MPST	PT., STAKE		TWZSDT_P	SYMBOL, DIRECTION OF TRAFFIC		UWW	WATER, WELL					
				IWIND	WEIGHT IN MOTION DETECTOR		MPST	PT., STAKE		TWZSDTD_P	SYMBOL, DIRECTION OF TEMPORARY TRAFFIC DETOUR								
	BSC	BRIDGE, SCUPPER		IWVR	WIRELESS VIDEO REPEATER		MPST	PT., STAKE		TWZSGN_P	SIGN (TEMPORARY)	1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED) AS EITHER LINEAR (ROADWAY GUIDANCE, SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY MARKERS, ETC.) SYMBOLS. 2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDANCE, SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY MARKERS, ETC.) SYMBOLS. 3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURE CORRESPONDING PROPOSED FEATURES. 4. PROPOSED FEATURE SYMBOLOLOGY IS IDENTICAL TO EXISTING SYMBOLOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR FEATURES IS THICKER (0.015 IN ON B SIZE DRAWINGS). 5. MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET A UNIQUE SYMBOLOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT TRAVEL WAY) AND SHOULD BE LABELED ON THE PLANS. 6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED AND NOT HAVE CORRESPONDING EXISTING FEATURES.							
CONTROL				IWVRC	WIRELESS VIDEO RECEIVER		MPST	PT., STAKE		TWZSIG_P	SIGNAL, TRAFFIC OR PEDESTRIAN (TEMPORARY)								
				IWVTT	WIRELESS VIDEO TRANSMITTER		MPST	PT., STAKE		TWZWL_P	WARNING LIGHT								
	CBP	BASELINE, POINT		MPST	PT., STAKE		MPST	PT., STAKE		TWZWV_P	WORK VEHICLE								
	CBPOL	BASELINE, POINT ON LINE		MPST	PT., STAKE		MPST	PT., STAKE		TWZWVA_P	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR								
	CBSP	BASELINE, SPUR POINT	ROADWAY																
	CBTP	BASELINE, TIE POINT																	
	CPBM	BENCHMARK																	
	CPH	POINT, HORIZ. PHOTOGRAMMETRY																	
	CPSM	POINT, SURVEY MARKER, PERM.	ROADWAY																
	CPSV	POINT, VERT., PHOTOGRAMMETRY																	
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:						PIN						BRIDGES		CULVERTS		ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED		CONTRACT	

1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED).
2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.).
3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES.
4. PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER (0.015 in ON B SIZE DRAWINGS).
5. MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHOULD BE LABELED ON THE PLANS.
6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER				
COUNTY: ULSTER		NYSOT REGION: 8		LEGEND						
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.										
					BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com					
					DRAWING NO. LEG-02 SHEET NO. 4					

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USER = k1a

DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON



ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT	NOTES:
201.06	CLEARING AND GRUBBING	LS				1. EXCESS MATERIAL STRIPPED FROM THE AREA MAY BE USED AS EMBANKMENT AND TOPSOIL IF APPROVED BY THE EIC.
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY				2. TACK COAT SHALL MEET THE REQUIREMENTS OF NYSDOT SPECIFICATIONS SECTION 407.
203.03	EMBANKMENT IN PLACE	CY				
304.12	SUBBASE COURSE, TYPE 2	CY				
411.01	STABILIZED GRAVEL SURFACE COURSE	CY				
608.0101	CONCRETE FOR SIDEWALKS AND DRIVEWAYS	CY				
608.01020005	COLORED PORTLAND CEMENT CONCRETE SIDEWALK	CY				
608.020102	HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS, AND VEGETATION CONTROL STRIPS	TON				
609.0401	CONCRETE CURB TYPE VF150	LF				
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:			PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED
						CONTRACT NUMBER
						DRAWING NO. TYP-01
			COUNTY: ULSTER	NYSDOT REGION: 8		SHEET NO. 5
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						HVEA ENGINEERS BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com
						NYC Environmental Protection

GENERAL NOTES:

CONSTRUCTION AND MATERIALS SPECIFICATIONS: STANDARD SPECIFICATIONS,
CONSTRUCTION AND MATERIALS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
OFFICE OF ENGINEERING WITH CURRENT ADDITIONS AND MODIFICATIONS.

1. THE CONTRACTOR IS TO VISIT THE SITE BEFORE BIDDING TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO JUDGE FOR HIMSELF THE EXTENT AND NATURE OF THE WORK TO BE DONE UNDER THIS CONTRACT. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR BECAUSE OF THE CONTRACTOR'S FAILURE TO INCLUDE IN HIS BID ALL ITEMS AND MATERIALS WHICH HE IS REQUIRED TO FURNISH IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS ADVISED THAT HE MUST HAVE IN HIS POSSESSION, A SET OF CONTRACT PLANS/PROPOSAL FOR IDENTIFICATION PURPOSES WHEN CONDUCTING THIS SITE VISIT.
2. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT DUE TO THE NATURE OF CONSTRUCTION PROJECTS, THE EXACT EXTENT OF CONSTRUCTION WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT OF WORK. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTION AND INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH FIELD CONDITIONS.
3. THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD, ALL CONDITIONS AND DIMENSIONS. DIMENSIONS OF THE EXISTING STRUCTURES SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE ORIGINAL CONSTRUCTION DRAWINGS AND LIMITED FIELD SURVEY AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL SUCH FIELD MEASUREMENTS TO ASSURE PROPER FIT OF THE FINISHED WORK, AND THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY IF FIELD CONDITIONS AND DIMENSIONS DIFFER FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR SHALL USE THE FIELD CONDITIONS AND DIMENSIONS AND MAKE THE APPROPRIATE CHANGES TO THOSE SHOWN ON THE PLANS AS APPROVED BY THE ENGINEER. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS MADE SHALL BE INDICATED ON THE SHOP DRAWINGS SUBMITTED FOR REFERENCE OF THE REVIEWER.
4. THE CONTRACTOR SHOULD NOTE THAT ADDITIONAL WORK MAY BE REQUIRED AS THE CONTRACT PROGRESSES, WHICH IS NOT SHOWN OR NOTED ON THE PLANS. THIS WORK SHALL BE PERFORMED BY THE CONTRACTOR AS ORDERED BY THE ENGINEER, AND PAID IN ACCORDANCE WITH SECTION 109-05 OF THE SPECIFICATIONS.
5. WORK PERTAINING TO MODIFICATIONS, AS MAY BE REQUIRED, DUE TO ANY DIFFERENCE BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN BY THE DETAILS AND DIMENSIONS ON THE CONTRACT PLANS, WILL BE PAID AT THE UNIT BID PRICE FOR THE ACTUAL QUANTITIES OF MATERIALS USED OR FOR THE WORK PERFORMED, AS INDICATED BY THE VARIOUS ITEMS IN THE CONTRACT.
6. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO THE EXISTING FACILITY CAUSED BY HIS OPERATIONS WHICH IS NOT INCLUDED AS PART OF THE INTENDED WORK. ALL DAMAGE TO THE EXISTING FACILITY WHICH IS NOT PART OF THE INTENDED WORK SHALL BE REPAIRED BY THE CONTRACTOR WITHOUT COST TO THE COUNTY, AND TO THE SATISFACTION OF THE ENGINEER.
7. THE CONTRACTOR SHALL RESTORE LAWNS, DRIVEWAYS, CULVERTS, SIGNS AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD A CONDITION AS BEFORE BEING DISTURBED AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS, AND/OR HEDGES NOT SPECIFICALLY CALLED OUT TO BE REMOVED ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR WILL PROTECT EXISTING PROPERTY LINE ORNAMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.

9. LOCATION OF PUBLIC AND/OR PRIVATE UTILITIES, INDICATED AS EXISTING AND/OR TO BE CONSTRUCTED AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THEIR EXACT LOCATION SHALL BE DETERMINED IN THE FIELD. ADDITIONAL UTILITY LINES, WHETHER ABANDONED OR IN SERVICE, MAY EXIST, AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OPERATIONS AND TAKE THE NECESSARY PRECAUTIONS TO PREVENT INTERFERENCE WITH OR DAMAGE TO THESE OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION.
10. IN THE EVENT THAT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE CAUSING AN INTERRUPTION IN SAID SERVICE, HE SHALL IMMEDIATELY COMMENCE WORK TO RESTORE SERVICE AND MAY NOT CEASE HIS WORK OPERATION UNTIL SERVICE IS RESTORED.
11. THE METHOD OF EXCAVATION AND/OR DEMOLITION IN THE IMMEDIATE VICINITY OF UNDERGROUND UTILITIES SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. HAND DIGGING MAY BE REQUIRED.
12. THE CONTRACTOR SHALL PROTECT HIS WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REGULATIONS.
13. THE CONTRACTOR IS ADVISED THAT ADDITIONAL NOTES WILL BE FOUND ON SUBSEQUENT SHEETS OF THE CONTRACT PLANS AND SUCH NOTES, WHILE PERTAINING TO THE SPECIFIC SHEETS THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES USED HEREIN.
14. THE HORIZONTAL COORDINATE SYSTEM IS BASED ON NEW YORK STATE PLANE.
- 15a. ALL WORK TO BE PERFORMED UNDER THIS CONTRACT WILL BE WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) IN ACCORDANCE WITH SECTION 105-15 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR IS TO ASSURE HIMSELF THAT ALL WORK IS BEING PERFORMED WITHIN THE ROW, INCLUDING BUT NOT LIMITED TO VEHICLE ACCESS; STORAGE OF EQUIPMENT, MATERIALS, DEBRIS AND WASTE; LANDSCAPING; VEGETATION REMOVAL AND MANAGEMENT; GRADING, SEEDING AND THE INSTALLATION OF TURF; AND THE INSTALLATION OF ANY FENCES OR PROTECTIVE BARRIER.
- 15b. IF THE CONTRACTOR IS UNABLE TO IDENTIFY THE LIMITS OF THE RIGHTS-OF-WAY WHEN THE CONTRACTOR CALLS FOR WORK IN THOSE VICINITIES, THE CONTRACTOR MUST CONTACT THE PROJECT ENGINEER FOR DEFINITIVE BOUNDARY DETERMINATIONS BEFORE ANY WORK MAY BE INITIATED AT THOSE LOCATIONS (STANDARD SPECIFICATIONS SECTIONS 105-10 AND 625).
- 15c. IN ACCORDANCE WITH SECTION 107-10 OF THE STANDARD SPECIFICATIONS, RELEASES FOR ANY NON-ESSENTIAL CONTRACT WORK OUTSIDE OF THE EXISTING RIGHTS-OF-WAY, INCLUDING PLANTINGS, LANDSCAPING OR DRIVEWAY ENHANCEMENT, WILL BE PROVIDED BY THE PROJECT ENGINEER AND IN NO INSTANCE ARE TO BE SECURED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT INVADE UPON PRIVATE PROPERTIES, LANDS OR BUILDINGS OUTSIDE OF THE RIGHTS-OF-WAY FOR ANY REASON WITHOUT FIRST SECURING WRITTEN PERMISSION FROM THE PROPERTY OWNER (STANDARD SPECIFICATIONS SECTIONS 105-15, 107-10).
- 15d. THE CONTRACTOR WILL BE HELD LIABLE FOR ANY DAMAGES DONE. ANY SUCH INJURIES OR DAMAGES SHALL BE SATISFACTORILY REPAIRED OR ITEMS REPLACED AT THE CONTRACTOR'S EXPENSE (STANDARD SPECIFICATIONS SECTION 107-08 AND 107-13).
16. ANY SILT FENCE AND VEGETATION PROTECTION BARRIER SHOWN BEYOND THE HIGHWAY BOUNDARY IS FOR PLAN CLARITY ONLY. ALL SILT FENCE AND VEGETATION PROTECTION BARRIER WILL BE PLACED WITHIN THE HIGHWAY BOUNDARY.
17. ALL EXCESS EXCAVATED MATERIAL FROM WITHIN THE PROJECT RIGHT-OF-WAY IS DEEMED A REGULATED MATERIAL AS PER THE NYCDEP AND SHALL NOT BE REMOVED FROM THE PROJECT RIGHT-OF-WAY. THIS MATERIAL IS NOT CONSIDERED HAZARDOUS, AND SPECIAL HANDLING PROVISIONS WILL NOT BE REQUIRED.

SUITABLE LOCATIONS CAN BE USED AS EMBANKMENT IN PLACE. LOCATIONS FOR DISPOSING THE EXCESS EXCAVATED MATERIAL NOT USED AS FILL SHALL BE APPROVED BY THE ENGINEER.

THE COST OF TRANSPORTING THIS MATERIAL TO SUITABLE DISPOSAL SITES AS DIRECTED BY THE ENGINEER SHALL BE INCLUDED WITHIN THE BID PRICE FOR ITEM 203.02 UNCLASSIFIED EXCAVATION AND DISPOSAL. NO ADDITIONAL PAYMENTS FOR EXCAVATING, TRANSPORTING, STOCKPILING OR PROCESSING THE MATERIAL SHALL BE MADE. NO SPECIAL TREATMENT OF THE SOIL WILL BE NECESSARY OTHER THAN THE REQUIREMENTS OF SECTION 209 OF THE NYSDOT STANDARD SPECIFICATIONS.

BASED ON FIELD OBSERVATIONS, THERE MAY BE RAILROAD TIES LOCATED THROUGHOUT THE LENGTH OF THIS PROJECT. WOOD TREATED WITH CREOSOTE, SUCH AS RAILROAD TIES, MUST BE DISPOSED OF AS HOUSEHOLD WASTE, OR AS CONSTRUCTION AND DEMOLITION (C&D) DEBRIS IN A PERMITTED C&D DEBRIS LANDFILL, OR BURNED IN A PERMITTED MUNICIPAL SOLID WASTE OR HAZARDOUS WASTE COMBUSTION FACILITY. THESE TIES SHALL BE REMOVED FROM THE SITE AND WILL BE PAID FOR UNDER ITEM 203.02. THE COST OF TRANSPORTING THIS MATERIAL TO SUITABLE DISPOSAL SITES SHALL BE INCLUDED WITHIN THE BID PRICE FOR ITEM 203.02. NO ADDITIONAL PAYMENT FOR EXCAVATING, TRANSPORTING, STOCKPILING OR PROCESSING THE MATERIAL SHALL BE MADE.

18. ENDANGERED SPECIES NOTES:

TREE PROTECTION FOR ENDANGERED SPECIES

THE AREA BENEATH THE DRIP LINE OF ALL TREES WITH A TRUNK DIAMETER OF 3 INCHES OR GREATER LOCATED OUTSIDE OF THE PROJECT CLEARING LIMITS OR IN PROXIMITY TO STAGING AND STOCKPILING AREAS SHALL NOT BE DISTURBED. DISTURBANCE INCLUDES REMOVING TREES, STOCKPILING MATERIAL, STORING EQUIPMENT, OR DRIVING AND PARKING VEHICLES BENEATH THE DRIP LINE OF TREES. ADDITIONAL TREES REQUIRING PROTECTION MAY BE DESIGNATED BY THE ENGINEER-IN-CHARGE (EIC). THE CONTRACTOR SHALL SUBMIT A PLAN TO THE EIC FOR APPROVAL SHOWING THE PROPOSED STAGING, STORAGE AND STOCKPILE AREAS FOR EACH SITE PRIOR TO PLACEMENT OF ANY EQUIPMENT OR MATERIALS AT THE SUBJECT AREA.

19. TREE REMOVAL PROHIBITION

REMOVAL OF TREES NOT SPECIFIED FOR REMOVAL WITH A TRUNK DIAMETER OF 3 INCHES OR GREATER IS PROHIBITED, UNLESS COORDINATED AND APPROVED BY THE ENGINEER-IN-CHARGE.

20. TIME OF YEAR CUTTING RESTRICTIONS FOR INDIANA BAT AND NORTHERN LONG-EARED BAT.

IN ORDER TO PREVENT ANY DIRECT TAKINGS OF INDIANA BAT (MYOTIS SODALIS), A FEDERAL AND STATE LISTED ENDANGERED SPECIES AND NORTHERN LONG-EARED BAT (MYOTIS SEPTENTRIONALIS), A FEDERAL AND STATE LISTED THREATENED SPECIES, THE CONTRACTOR'S ATTENTION IS HEREBY DIRECTED TO THE FACT THAT TREE CUTTING SHALL ONLY BE PERFORMED FROM NOVEMBER 1 THROUGH MARCH 31. TIME OF YEAR TREE CUTTING RESTRICTIONS APPLY TO TREES THAT ARE 3 INCHES OR GREATER DIAMETER AT BREAST HEIGHT (DBH).

21. MIGRATORY BIRD PROTECTION NOTE UNDER THE MIGRATORY BIRD TREATY ACT (MBTA), IT IS UNLAWFUL BY ANY MEANS OR MANNER TO INTENTIONALLY TAKE, CAPTURE, OR KILL ANY MIGRATORY BIRD UNLESS A PERMIT IS FIRST SECURED. VIOLATIONS OF MBTA REGULATIONS ARE SUBJECT TO PENALTIES OF UP TO \$15,000 AND SIX MONTHS IMPRISONMENT.

PROTECTED MIGRATORY BIRDS INCLUDE ALL WATERFOWL, HERONS, HAWKS, OWLS, EAGLES AND SONGBIRDS, INCLUDING SWALLOWS ROBINS, AND EASTERN PHOEBES. THEIR FEATHERS, NESTS, AND EGGS ARE ALSO PROTECTED UNDER THE MBTA.

EXEMPT FROM THE MBTA ARE ROCK DOVES (DOMESTIC PIGEONS), HOUSE SPARROWS (ENGLISH SPARROWS), EUROPEAN STARLINGS, AND MONK PARAKEETS. NON-NATIVE HUMAN-INTRODUCED BIRD SPECIES ARE NOT PROTECTED BY MBTA. ALTHOUGH THESE SPECIES ARE NOT PROTECTED UNDER THE MBTA, THEY SHOULD STILL BE TREATED AS HUMANELY AS POSSIBLE. IF ANY BIRD NESTS ARE ENCOUNTERED PRIOR TO OR DURING WORK CONTACT THE ENGINEER-IN-CHARGE (EIC) IMMEDIATELY.

AREAS SCHEDULED FOR WORK FROM APRIL 15 TO AUGUST 15 (THE PERIOD IN WHICH NESTS ARE TYPICALLY FOUND WITH EGGS OR UNFLEDGED CHICKS) SHALL BE INSPECTED FOR BIRD NESTING ACTIVITY PRIOR TO COMMENCING ANY WORK ACTIVITY. IF THE NEST(S) IS DETERMINED TO BE OCCUPIED, AVOID DISTURBING, DAMAGING OR REMOVING THE NEST UNTIL THE YOUNG ARE FLEDGED (LEAVE THE NEST). AT NO TIME SHOULD THE NESTS OF HAWKS, FALCONS OR EAGLES BE DESTROYED, AS THESE SPECIES RETURN TO THE SAME NEST SITE YEAR AFTER YEAR AND REUSE THE SAME NEST AFTER FLEDGING OCCURS (OF SPECIES OTHER THAN HAWKS, FALCONS OR EAGLES), AND ALL NESTING ACTIVITY IS BELIEVED TO HAVE CEASED (TYPICALLY INDICATED BY ADULT BIRDS MOVING TO AND FROM THE NEST), THEN THE NEST(S) CAN BE PRESUMED TO BE UNOCCUPIED AND CAN BE REMOVED SO THAT WORK MAY PROCEED. UNOCCUPIED NEST(S) SHOULD BE REMOVED AS QUICKLY AS POSSIBLE TO PREVENT BIRDS FROM BEGINNING A SECOND NEST BROOD AT THE SAME LOCATION.

FROM AUGUST 16 TO APRIL 14 NESTS CAN BE PRESUMED TO BE UNOCCUPIED AND CAN BE REMOVED AFTER CONFIRMING THAT THE NEST IS INDEED INACTIVE.

IF THERE ARE ANY QUESTIONS REGARDING HOW TO PROCEED WITH NESTING MIGRATORY BIRDS, IMMEDIATELY CONTACT THE EIC. NO NESTS OF PROTECTED MIGRATORY BIRDS SHALL BE REMOVED OR DISTURBED IN ANY WAY WITHOUT PERMISSION FROM THE EIC.

22. THE CONTRACTOR SHALL NOTE THAT THERE IS AN ACTIVE CONTRACT TO CONSTRUCT THE ASHKAN TRAIL FROM NYS ROUTE 28A TO BASIN ROAD OVERPASS. WHILE IT IS INTENDED FOR A MAJORITY OF THE WORK TO BE COMPLETE PRIOR TO THE BEGINNING OF THIS CONTRACT, THE POSSIBILITY EXISTS THAT WORK MAY OVERLAP. THE CONTRACTOR SHALL COORDINATE THEIR WORK EFFORTS WITH THE TRAIL CONTRACTOR TO NOT DISTURB THE TRAIL PROJECT AND BE PREPARED TO RELOCATE HIS/HER OPERATIONS TO ALLOW THE TRAIL CONTRACTOR TO COMPLETE THEIR WORK TO THE MAXIMUM EXTENT POSSIBLE. THE TRAILHEAD SITE IS CURRENTLY BEING UTILIZED AS A STAGING AREA, AND ACTUAL FIELD CONDITIONS MAY VARY FROM THE PLANS. THE CONTRACTOR SHALL NOT HAVE CAUSE FOR ANY DELAY CLAIMS AS A RESULT OF FAILURE TO PROPERLY COORDINATE WITH THE TRAIL CONTRACTOR.

PLEASE NOTE THAT ANY CHANGES TO THE APPROVED SWPPP SHALL BE SUBMITTED TO THE D.E.P. FOR REVIEW AFTER THE ENGINEER HAS ACCEPTED IT AND PRIOR TO CONSTRUCTION.

UTILITY QUALITY LEVEL DESCRIPTION:
QUALITY LEVEL A - THE HIGHEST DEGREE OF ACCURACY; THE UTILITY INFORMATION ON THE CONTRACT PLANS HAS BEEN LOCATED AND VERIFIED BY EXCAVATION, WHEN APPROPRIATE. (SHOWN AS QLA)
QUALITY LEVEL B - SUBSURFACE GEOPHYSICAL LOCATING TECHNIQUES (IE. UNDERGROUND CAMERAS, RADAR, SONAR, TONE OUTS, ETC.) AND EXISTING RECORD PLANS HAVE BEEN USED TO LOCATE UTILITIES. NO EXCAVATIONS WERE PERFORMED. (SHOWN AS QLB)
QUALITY LEVEL C - RECORD INFORMATION PROVIDED BY UTILITY OWNERS WAS PLOTTED ON THE CONTRACT PLANS. DEPTHS WERE NOT FIELD VERIFIED. PHYSICAL SURFACE FEATURES LIKE MANHOLES, VALVE BOXES, AND HYDRANTS HAVE BEEN FIELD LOCATED. (SHOWN AS QLC)
QUALITY LEVEL D - EXISTING CITY AND UTILITY COMPANY RECORDS WERE USED TO LOCATE SUBSURFACE UTILITIES. (SHOWN AS QLD)
THE UTILITY QUALITY LEVEL FOR THE PROJECT AREA IS D.

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER		
	COUNTY: ULSTER				NYSDOT REGION: 8			
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.								

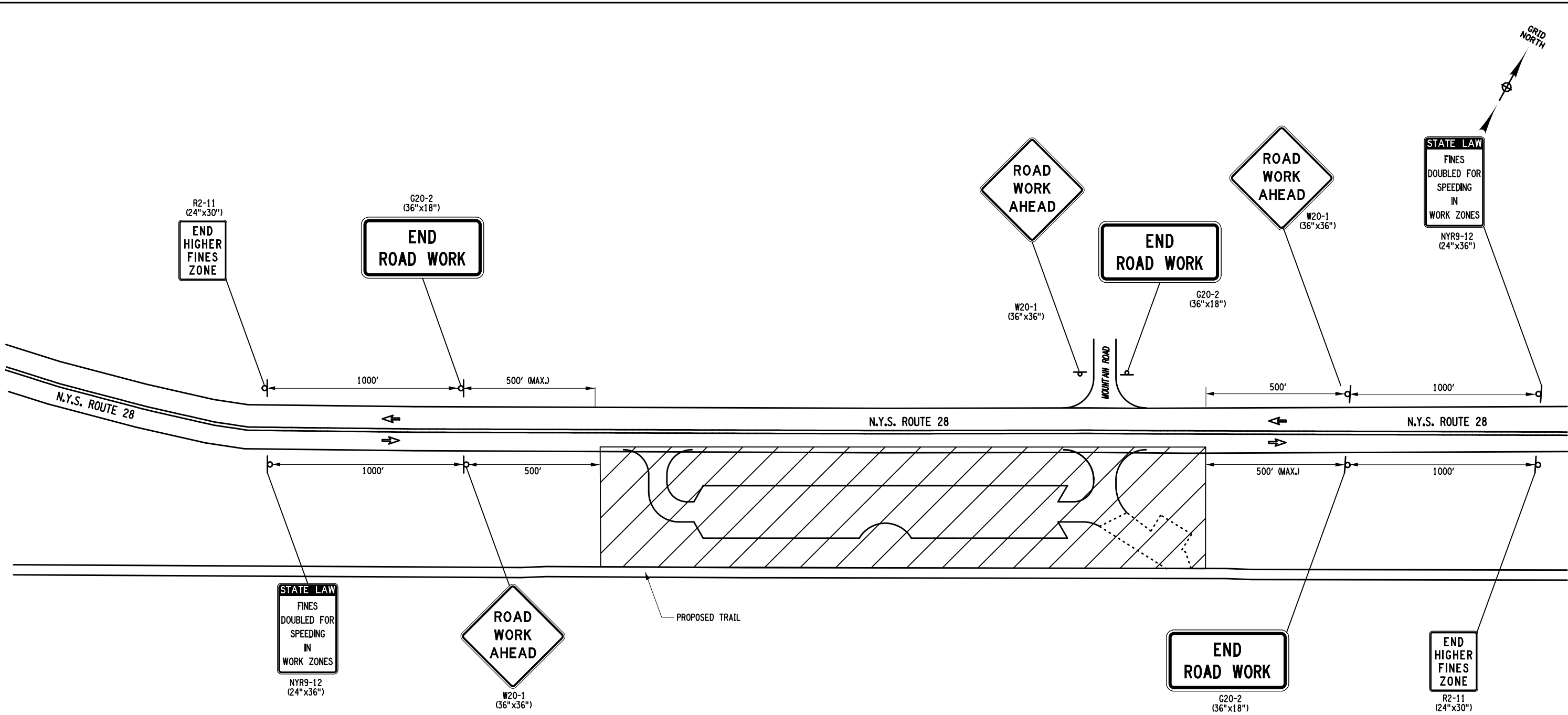


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USER = k1a

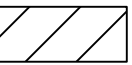
DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON




- NOTES:
1. ALL SIGNS SHALL BE IN CONFORMANCE WITH THE MUTCD AND NYS SUPPLEMENT.
 2. PLACEMENT OF SIGNS SHALL BE IN CONFORMANCE WITH THE APPLICABLE NYSDOT STANDARD SHEETS.
 3. ADDITIONAL WORK ZONE SIGNAGE SHALL BE PLACED IN ORDANCE WITH THE NYSDOT STANDARD SHEETS FOR THE TYPE OF CLOSURE (LANE OR SHOULDER) BEING UTILIZED BY THE CONTRACTOR.

ADVANCED SIGNING PLAN FOR WORK BEYOND SHOULDER
NTS


LEGEND

 WORK SPACE


 SIGN, TEMPORARY

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER	
					TRAFFIC CONTROL PLAN		DRAWING NO. TCP-01
	COUNTY: ULSTER				NYSDOT REGION: 8		

 HVEA
ENGINEERS

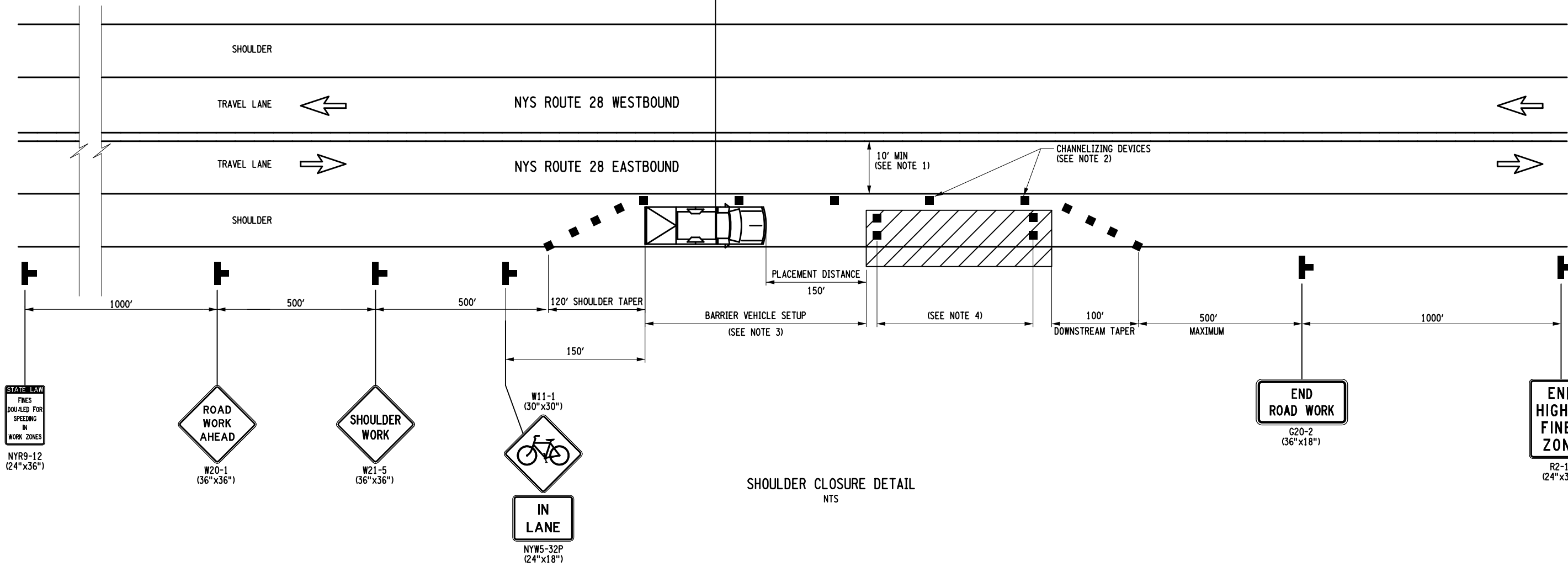
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Environmental
Protection

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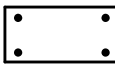
DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON




- NOTES:**
1. WHEN THE MINIMUM LANE WIDTH OF 10' CANNOT BE MAINTAINED DUE TO A SHOULDER CLOSURE, USE THE DETAIL FOR SHORT OR INTERMEDIATE TERM STATIONARY FLAGGING OPERATION.
 2. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL NOT EXCEED 40' IN THE ACTIVE WORK SPACE.
 3. BARRIER VEHICLES SHALL BE REQUIRED (AS PER 619 STANDARD SPECIFICATIONS, TABLE NY1-A) FOR EVERY PAVED SHOULDER OR LANE CLOSURE HAVING A WIDTH OF 8' OR GREATER THAT IS CLOSED.
 4. TRANSVERSE DEVICES SHALL BE REQUIRED (AS PER 619 STANDARD SPECIFICATIONS) WHEN A PAVED SHOULDER HAVING A WIDTH OF 8' OR GREATER IS CLOSED FOR A DISTANCE GREATER THAN 1500'.

LEGEND

 WORK SPACE

 ARROW PANEL, CAUTION MODE


 WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR

AFFIX SEAL: ON:	ALTERED BY: ON:


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER			
									DRAWING NO. TCP-02
									SHEET NO. 8

COUNTY: ULSTER	NYSDOT REGION: 8
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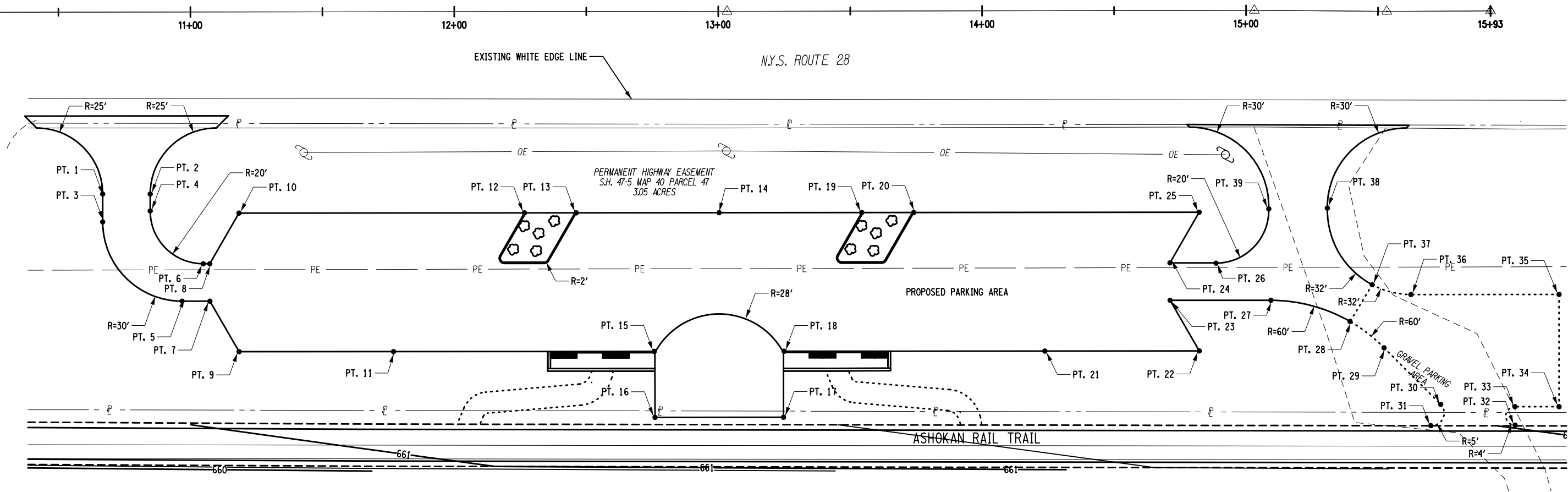


Environmental
Protection

FILE NAME = 8193_oph_hct_01.dgn
DATE/TIME = 29-May-2019 16:35
USER = kta

DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON

HORIZONTAL LAYOUT							
POINT NO.	NORTHING	EASTING	ELEVATION	POINT NO.	NORTHING	EASTING	ELEVATION
1	1144486.6089	574097.4377	663.500	21	1144596.9668	574442.1387	663.106
2	1144497.8392	574113.4459	663.500	22	1144623.7580	574494.1440	663.112
3	1144477.2133	574102.2686	663.046	23	1144635.7289	574475.5290	663.083
4	1144489.1548	574116.3688	663.092	24	1144648.3226	574469.0412	662.935
5	1144464.2931	574142.7494	663.099	25	1144670.4291	574470.1008	662.849
6	1144480.5724	574143.4157	662.814	26	1144656.2969	574484.5202	663.443
7	1144469.1062	574152.0923	663.034	27	1144653.2364	574509.5134	664.053
8	1144481.7000	574145.6044	662.807	28	1144659.8073	574539.8524	663.454
9	1144457.1354	574170.7072	663.100	29	1144656.8064	574555.9009	663.159
10	1144503.8064	574146.6640	662.528	30	1144647.6176	574584.7576	662.444
11	1144483.9263	574222.7000	663.100	31	1144638.7389	574585.1404	661.897
12	1144553.3426	57424.8203	662.472	32	1144653.4431	574613.3933	662.128
13	1144562.3492	574260.3034	662.472	33	1144659.6659	574610.1876	662.595
14	1144587.1177	574308.3824	662.472	34	1144667.3262	574625.0572	662.652
15	1144529.1882	574310.5713	663.100	35	1144705.1076	574605.5937	663.424
16	1144507.0776	574322.2235	663.120	36	1144679.4102	574555.7117	663.584
17	1144529.3816	574365.5186	663.495	37	1144676.0211	574540.9239	663.885
18	1144551.7048	574354.2791	663.103	38	1144694.019	574512.5888	665.546
19	1144611.8858	574356.4605	662.472	39	1144683.621	574492.957	665.190
20	1144620.8925	574373.9436	662.472				



AFFIX SEAL: ON:	ALTERED BY: ON:

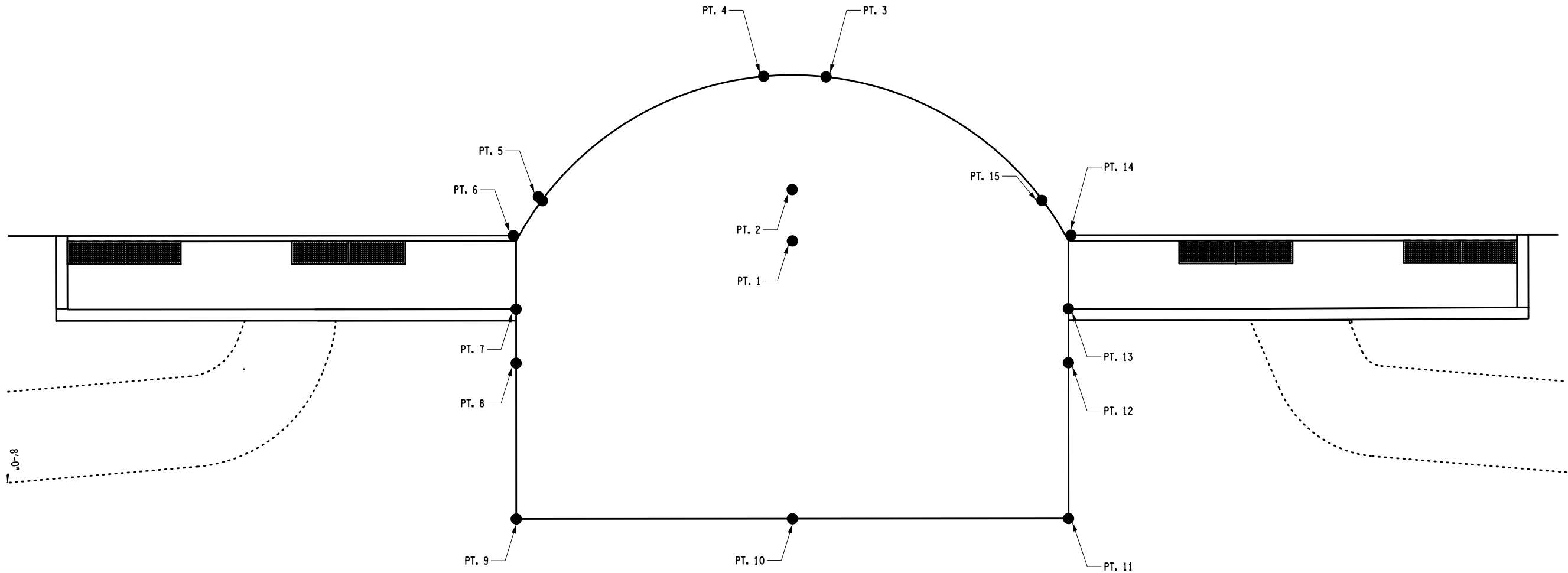
PARKING LOT HORIZONTAL LAYOUT
NTS

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					HORIZONTAL LAYOUT	DRAWING NO. HLT-01
						SHEET NO. 9
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					HVEA ENGINEERS BEACON, NEW YORK 12508 (845) 638-3600 www.hvespc.com	NYC Environmental Protection

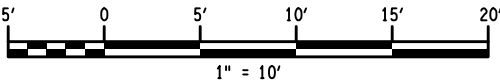
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USER = k1a

DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON

ELEVATION LAYOUT			
POINT NO.	ELEVATION	POINT NO.	ELEVATION
1	663.115	9	663.120
2	663.096	10	663.046
3	662.756	11	663.495
4	662.716	12	663.493
5	662.566	13	663.043
6	663.100	14	663.103
7	662.466	15	663.643
8	662.896		



CONCRETE "BULB" PAD ELEVATION LAYOUT
NTS

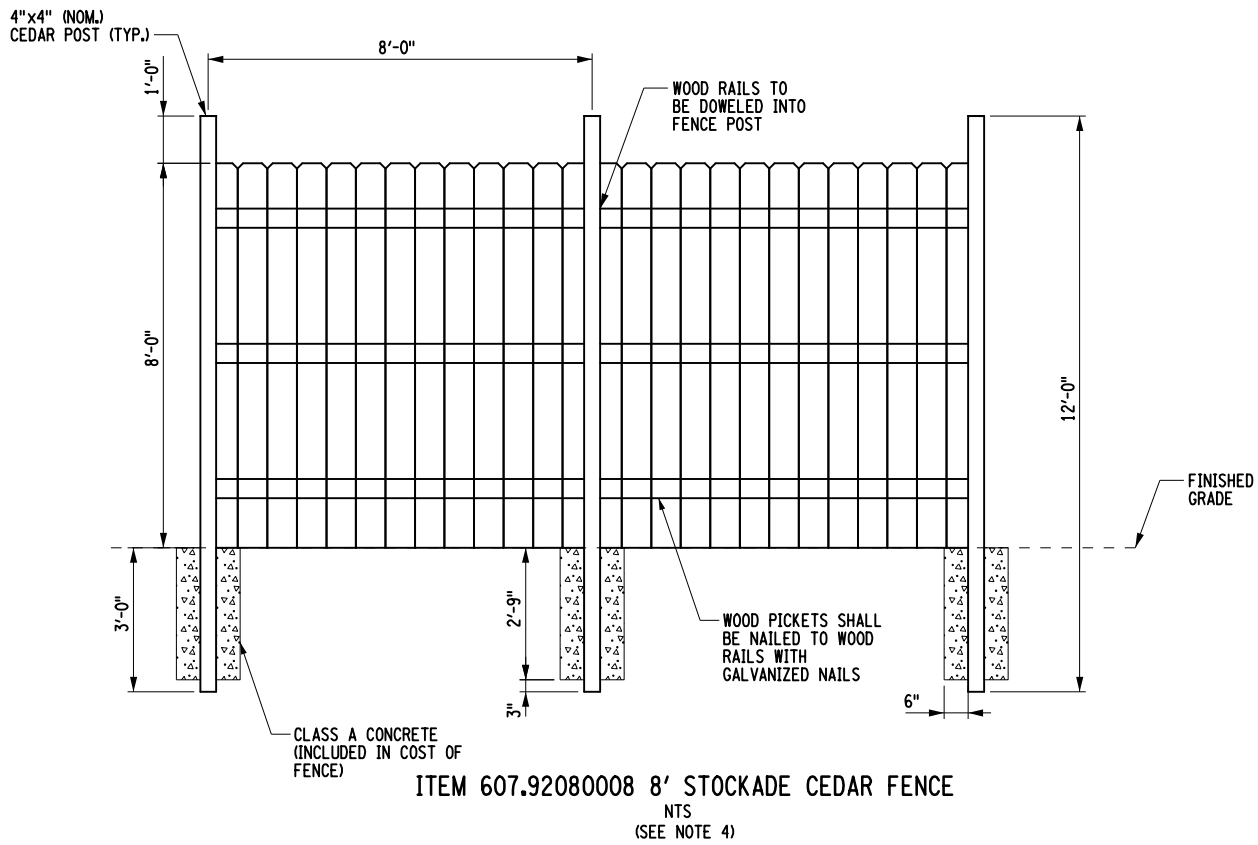


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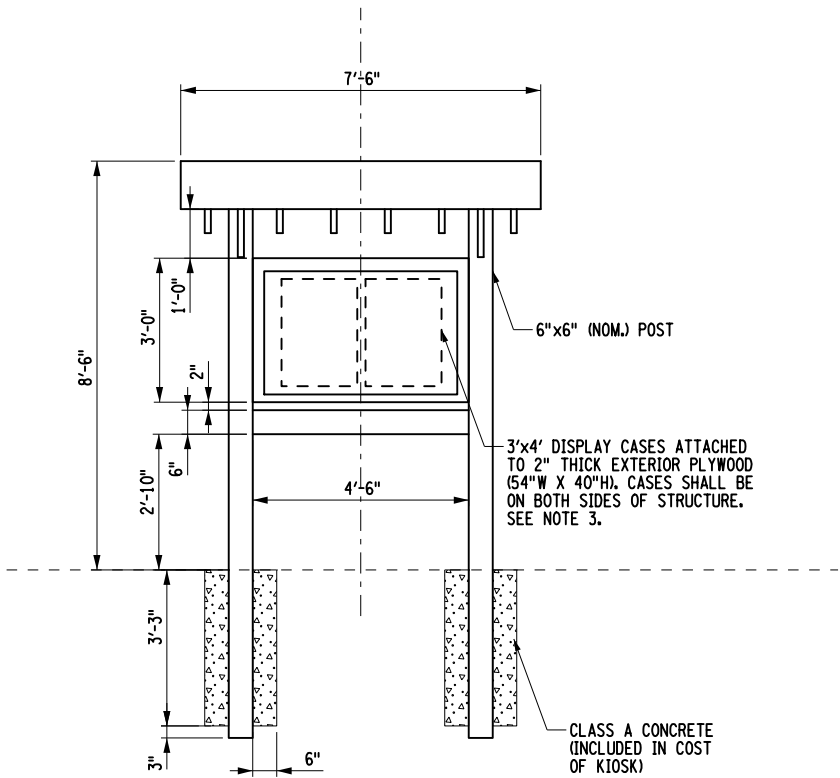
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					HVEA ENGINEERS BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com		NYC Environmental Protection	

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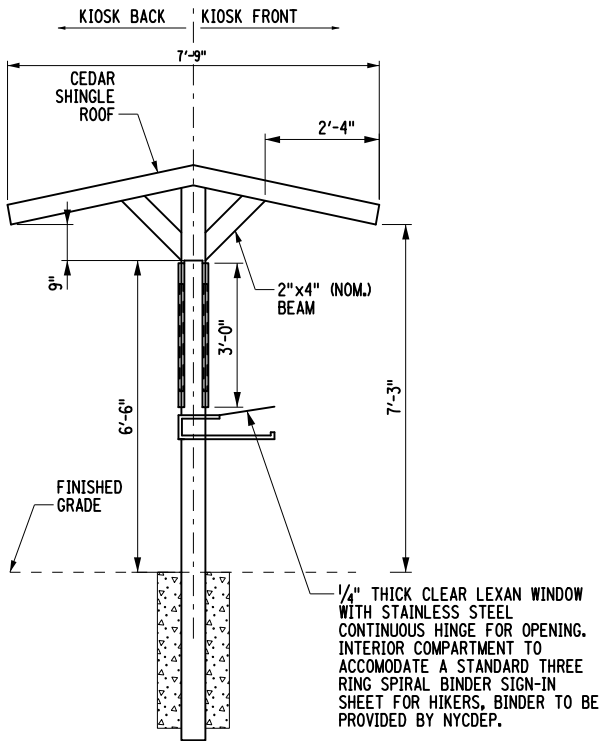
DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON



ITEM 607.92080008 8' STOCKADE CEDAR FENCE
NTS
(SEE NOTE 4)

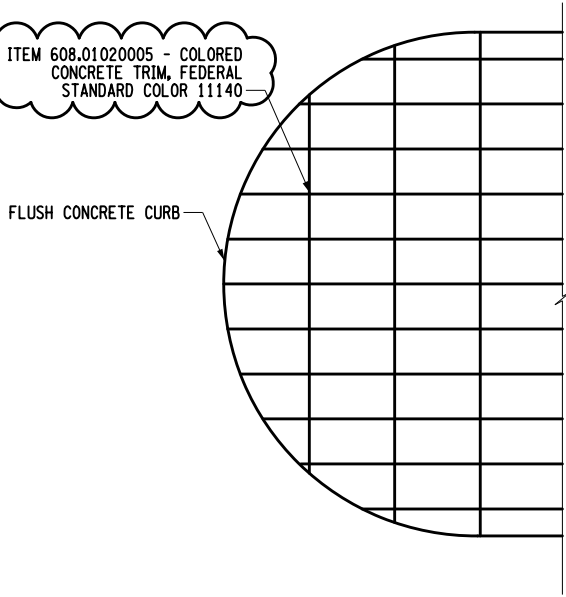


FRONT VIEW



SIDE VIEW

ITEM 615.10010208 KIOSK TYPE 2
NTS
(SEE NOTES 1-3)



CONCRETE SIDEWALK "BULB" AREA
NTS

NOTES:

1. THE COST OF ALL LABOR AND MATERIALS NECESSARY TO FABRICATE AND INSTALL THE KIOSK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 615.10010208. SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED BY ENGINEER PRIOR TO FABRICATION.
2. THE WOOD TO BE USED FOR FABRICATION OF KIOSK SHALL BE NATURALLY ROT-RESISTANT, INCLUDING CEDAR, REDWOOD OR CYPRESS. ALL EXPOSED AND CUT EDGES OF WOOD ARE TO BE SEALED. WOOD SHALL BE LEFT NATURAL COLOR AND TREATED IF NECESSARY.
3. DISPLAY CASE FOR KIOSK TYPE 2 SHALL BE BASED ON OPTIMA INC., OUTDOOR ENCLOSED BOARDS-NON ILLUMINATED MODEL NUMBER UV-402, OR APPROVED EQUAL.
4. SPECIAL SPECIFICATION DOCUMENTATION FOR ITEM 607.9208008 CONTAINS ACCEPTANCE GUIDANCE FOR MATERIALS, DIMENSIONS AND PROPER INSTALLATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED

MISCELLANEOUS DETAILS

CONTRACT NUMBER

DRAWING NO. MSD-01

SHEET NO. 11

PROJECT MANAGER J. GORTON

CHECK L. BACH

DRAFTING K. FISCHER

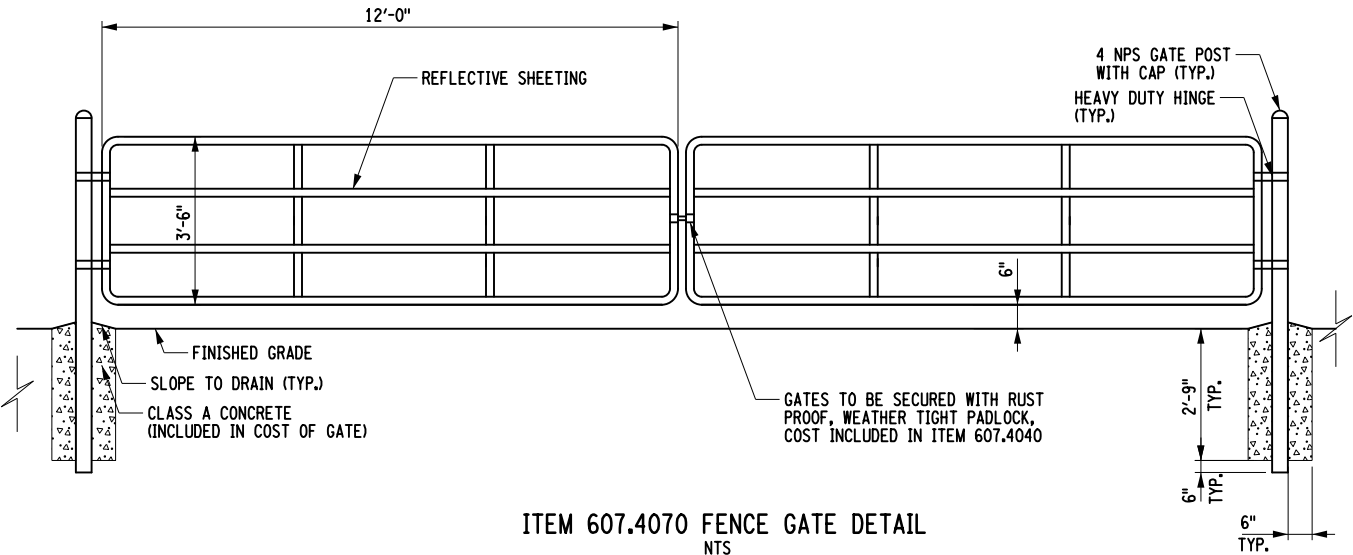
CHECK L. BACH

DESIGN C. DREYER

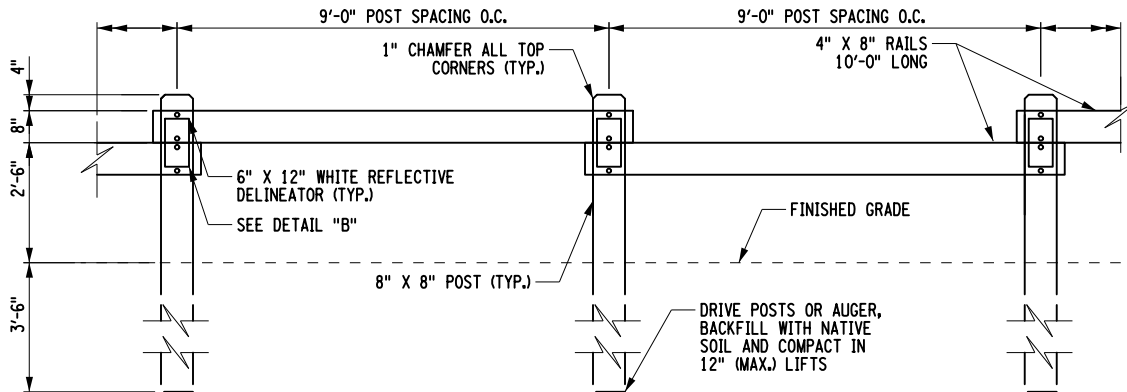
JOB MANAGER J. GORTON

DESIGN SUPERVISOR J. GORTON

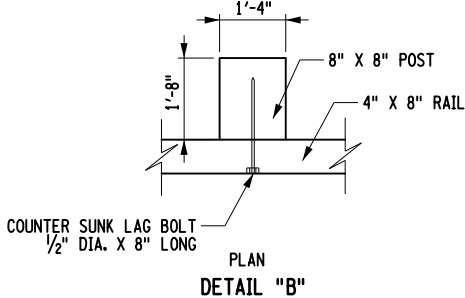
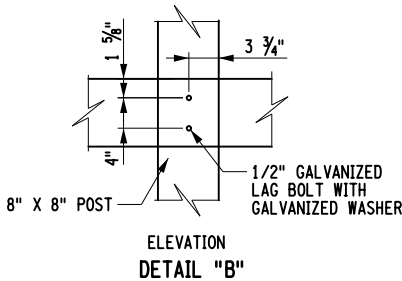
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DATE/TIME = 29-May-2019 16:36
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ITEM 607.4070 FENCE GATE DETAIL
NTS
(SEE NOTE 2)



ITEM 607.96010010 DECORATIVE TIMBER BARRIER
NTS



TIMBER GUIDE RAIL NOTES:

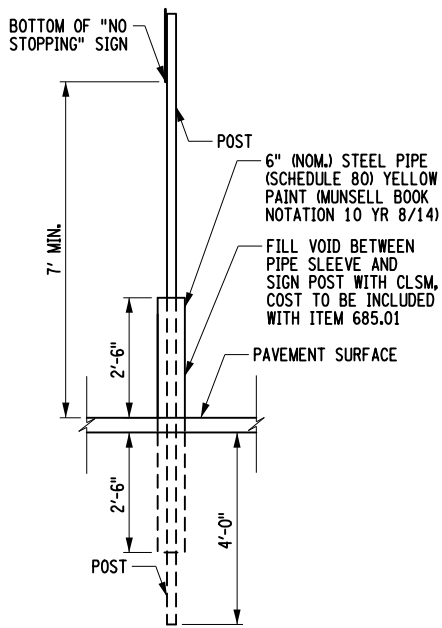
1. DRIVE POSTS OR AUGER, BACKFILL WITH NATIVE SOIL AND COMPACT EVERY 12".
2. ALL TIMBER #1 S4S SOUTHERN PINE, PRESSURE TREATED: ANPA-C14, WOOD FOR USE IN HIGHWAY CONSTRUCTION.
3. TYP. POST: 8" X 8" X 7'-0" - TYP RAIL: 4" X 8" X 9'-0".
4. ALL HOLES SHALL BE PRE-DRILLED PRIOR TO LAG BOLT INSTALLATION.

NOTES:

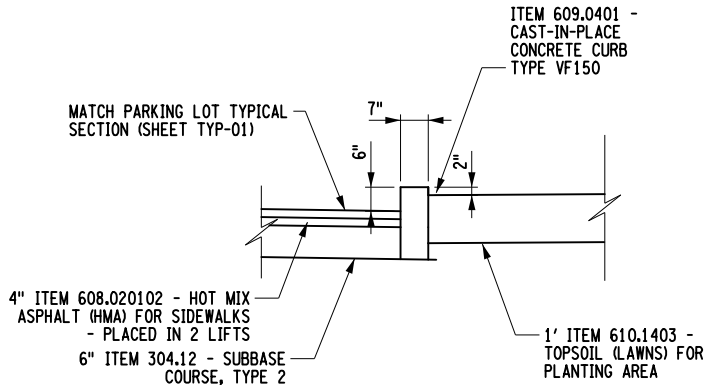
1. STEEL PIPE AND TYPE A SIGN POST REQUIRED FOR "RESERVED PARKING" SIGN INSTALLED IN PARKING SPACE SHALL BE INCLUDED IN BID PRICE FOR ITEM 645.81, TYPE A SIGN POST.
2. DIMENSIONS SHOWN IN DETAIL ARE APPROXIMATE. CONTRACTOR SHALL FIELD MEASURE EXISTING ACCESS GATES ALONG THE RESERVOIR AND COORDINATE WITH NYCDEP FOR DETAILS. SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED BY ENGINEER PRIOR TO FABRICATION OF GATE ITEM 607.4040
3. DIMENSIONS ARE APPROXIMATE. SPECIAL SPECIFICATION DOCUMENTATION FOR ITEM 615.51220101 CONTAINS ACCEPTANCE GUIDANCE FOR MATERIALS, DIMENSIONS AND PROPER INSTALLATION

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

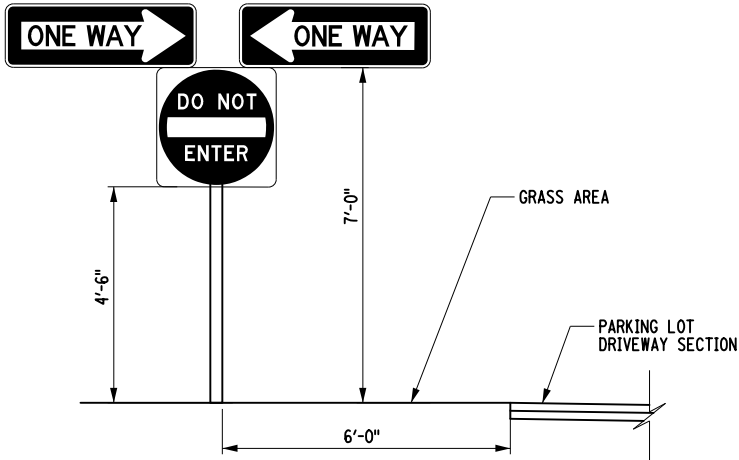
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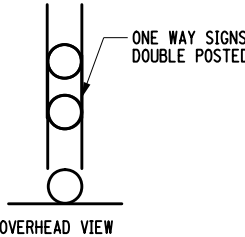
"RESERVED PARKING" SIGN
INSTALLED IN PARKING SPACE
NTS
(SEE NOTE 1)



CURB INSTALLATION FOR PLANTING BEDS
NTS



HEIGHT AND LATERAL INSTALLATION



OVERHEAD VIEW

ONE WAY DRIVEWAY SIGNING DETAIL;
OVER AND UNDER POSTING
NTS



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ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED

MISCELLANEOUS DETAILS

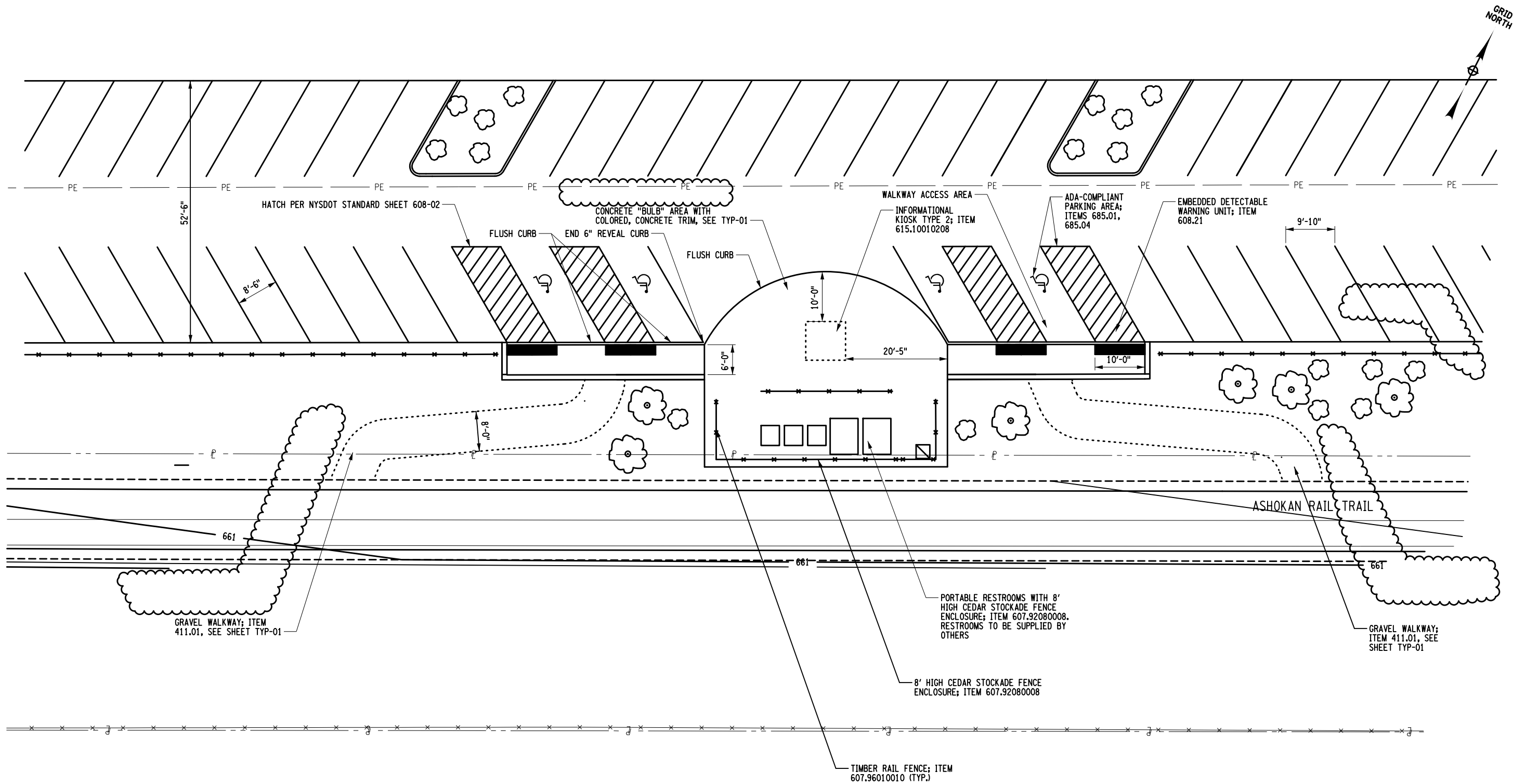
CONTRACT NUMBER

DRAWING NO. MSD-02

SHEET NO. 12

FILE NAME = 8193_cph_msd_03.dgn
DATE/TIME = 29-May-2019 16:36
USER = Kto

DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON



AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					MISCELLANEOUS DETAILS	DRAWING NO. MSD-03
						SHEET NO. 13
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					HVEA ENGINEERS BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com	
COUNTY: ULSTER NYSDOT REGION: 8					NYC Environmental Protection	

GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES:

1. THE CONTRACTOR WILL BE REQUIRED TO PERFORM ALL CONSTRUCTION OPERATIONS IN A MANNER SO AS TO MINIMIZE SOIL EROSION AND ENSURE SEDIMENT CONTROL. EROSION CONTROL MEASURES ARE ITEMS WHICH MINIMIZE THE EROSION OF SOIL. SEDIMENT CONTROL MEASURES ARE ITEMS WHICH KEEP SEDIMENT FROM LEAVING THE PROJECT SITE. EFFECTIVE SOIL EROSION AND SEDIMENT CONTROL CAN BE ACCOMPLISHED BY LIMITING THE AREA OF UNPROTECTED SOIL. PROTECTED IS DEFINED AS HAVING TEMPORARY OR PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES IN PLACE. PERIMETER SEDIMENT CONTROL MEASURES ALONE ARE NOT CONSIDERED ADEQUATE PROTECTION.
2. TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AS PER DETAILS AND SPECIFICATIONS. THE COST OF MAINTAINING AND REMOVING TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INCLUDED IN THE BID PRICE OF THE ITEM USED. IN ACCORDANCE WITH SECTION 209-3.01A, THE CONTRACTOR SHALL INSPECT ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES AT A MINIMUM ONCE EVERY SEVEN (7) CALENDAR DAYS AND AFTER EACH RUNOFF EVENT TO DETERMINE IF THE PRACTICE IS FUNCTIONING AS INTENDED.
3. PERIMETER SEDIMENT CONTROL MEASURES AND VEGETATION PROTECTION FENCE SHALL BE PLACED PRIOR TO STARTING CLEARING AND GRUBBING OPERATIONS. THESE MEASURES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE PERMANENTLY PROTECTED WITH EROSION CONTROL MEASURES.
4. TEMPORARY STOCKPILES OF SOIL SHALL BE PROTECTED AS PER THE SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS. AT A MINIMUM TEMPORARY STOCKPILES SHALL BE RINGED WITH SILT FENCE (OR SEDIMENT FILTER LOG). STOCKPILES AND AREA OF STOCKPILES LEFT INACTIVE SHALL BE STABILIZED IN ACCORDANCE WITH EXPOSED SOIL CRITERIA TABLE.
5. ANY ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL MEASURES USED TO SUPPLEMENT THE PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE TECHNICAL REQUIREMENTS CONTAINED IN THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL," LATEST EDITION. ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED AS PER SECTION 107-12 OF THE STANDARD SPECIFICATIONS.
6. THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ALL ENVIRONMENTAL PERMITS ISSUED FOR THIS PROJECT. THESE PLANS REFLECT THE PROVISIONS AND REQUIREMENTS OF SAID PERMIT(S). PERMIT(S) WILL BE AVAILABLE FROM THE ENGINEER-IN-CHARGE (EIC) PRIOR TO THE START OF CONSTRUCTION.
7. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT DIRECT OR INDIRECT CONTAMINATION OF ALL WATER BODIES (INCLUDING WETLANDS) BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, CONCRETE LEACHATE, SLURRY OR ANY OTHER POLLUTANT ASSOCIATED WITH CONSTRUCTION AND CONSTRUCTION PROCEDURES. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE OR SLURRY SHALL BE ALLOWED TO ESCAPE DIRECTLY OR INDIRECTLY INTO ANY WATER BODIES (INCLUDING WETLANDS), NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS, OR OTHER DEVICES BE ALLOWED TO ESCAPE DIRECTLY OR INDIRECTLY INTO ANY WATER BODIES (INCLUDING WETLANDS).
8. ANY DEBRIS OR EXCESS MATERIALS FROM CONSTRUCTION OF THIS PROJECT SHALL BE IMMEDIATELY AND COMPLETELY REMOVED FROM THE STREAM BED AND WITHIN 50' OF THE WATERS EDGE OF ALL WATER BODIES (INCLUDING WETLANDS) AND SHALL BE DISPOSED OF AWAY FROM WETLANDS, WATER COURSES, OR OTHER BODIES OF WATER.
9. ALL DREDGED AND EXCAVATED MATERIAL SHALL BE DISPOSED OF AND BE PROTECTED SO THAT IT CANNOT DIRECTLY OR INDIRECTLY RE-ENTER ANY WATER BODY OR WETLAND AREA. ALL DE-WATERING OPERATIONS INVOLVING TURBID WATER SHALL BE ACCOMPLISHED BY PUMPING TO THE TEMPORARY SEDIMENT BASIN, A VEGETATED AREA (NOT INCLUDING WETLANDS) OR A MANUFACTURED SEDIMENT CONTROL SYSTEM. DE-WATERING OPERATIONS OF TURBID WATER SHALL NOT DIRECTLY OR INDIRECTLY DISCHARGE TO ANY WATER BODIES (INCLUDING WETLANDS) UNLESS THE WATER BEING DISCHARGED IS AS FREE AND CLEAR OF SEDIMENT AS THE ADJACENT STREAM OR WATER BODY. LOCATIONS AND DESIGNS NOT SHOWN ON THE PLANS SHALL BE APPROVED BY THE EIC AND THE REGIONAL CONSTRUCTION ENVIRONMENTAL COORDINATOR.
10. TEMPORARY CHECK DAMS SHALL BE INSTALLED IMMEDIATELY FOLLOWING DITCH EXCAVATING OPERATIONS. TEMPORARY CHECK DAMS SHALL REMAIN IN PLACE UNTIL NEW SLOPES AND DITCHES HAVE BEEN PERMANENTLY PROTECTED WITH EROSION CONTROL MEASURES. PERMANENT CHECK DAMS, AS SPECIFIED IN THE PLANS, SHALL BE INSTALLED ONLY AFTER NEW SLOPES HAVE BEEN PERMANENTLY PROTECTED WITH EROSION CONTROL MEASURES.
11. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT ANY POINT WHERE CONSTRUCTION EQUIPMENT WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A MAINTAINED ROADWAY.
12. THE WIDTH OF CLEARING FOR HAUL ROADS SHALL BE LIMITED TO 20 FT.
13. SLOPES CONSTRUCTED TO STEEPER THAN A 1V:3H WILL RECEIVE ITEM 209.190201, ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE B, INTERMEDIATE, UNLESS OTHERWISE SHOWN IN THE PLANS.

STABILIZED CONSTRUCTION ENTRANCE NOTE:

A QUANTITY FOR STABILIZED CONSTRUCTION ENTRANCES (ITEM 209.22) IS INCLUDED IN THIS CONTRACT. THE STABILIZED CONSTRUCTION ENTRANCE SHOULD BE INSTALLED AT BOTH PROPOSED ENTRY/EXIT POINTS FROM NYS ROUTE 28. ANY SEDIMENT TRACKED ONTO NYS ROUTE 28 FROM THE PROJECT LOCATION SHALL BE CLEANED FROM THE ROADWAY IMMEDIATELY. CLEANING SEDIMENT TRACKED ONTO THE ROADWAY ADJACENT TO THE STABILIZED CONSTRUCTION ENTRANCE SHALL ALSO BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 209.22.

EROSION AND SEDIMENT CONTROL PROJECT STAGING:

THE CONTRACTOR WILL BE REQUIRED TO PERFORM ALL CONSTRUCTION OPERATIONS IN A MANNER THAT MINIMIZES SOIL EROSION AND PREVENTS SEDIMENTATION ON LANDS ADJACENT TO OR AFFECTED BY THE WORK, AND TAKE MEASURES TO MAINTAIN WATER QUALITY OF RECEIVING WATER BODIES (INCLUDING WETLANDS).

THE AREA OF DISTURBANCE SHALL BE LIMITED TO AN AREA NO GREATER THAN FIVE ACRES AT ANY ONE TIME.

IF THE PROPOSED WORK WILL RESULT IN GREATER THAN FIVE ACRES OF DISTURBANCE AT ONE TIME, THE CONTRACTOR WILL NOT BE ALLOWED TO DISTURB A NEW SECTION OF THE PROJECT UNTIL ALL DISTURBED AREAS ASSOCIATED WITH THE CURRENT SECTION HAVE BEEN STABILIZED, UNLESS OTHERWISE APPROVED BY THE ENGINEER-IN-CHARGE. THE ENGINEER-IN-CHARGE IN CONSULTATION WITH THE REGIONAL CONSTRUCTION ENVIRONMENTAL COORDINATOR SHALL DETERMINE WHEN STABILIZATION HAS BEEN ACHIEVED.

ALTERATIONS TO THE CONTRACT PLANS AND CONSTRUCTION SEQUENCING THAT WOULD RESULT IN GREATER THAN FIVE ACRES OF DISTURBANCE AT ONE TIME WILL REQUIRE NOTIFICATION TO NYSDEC AND AMENDMENT OF THE PROJECT SWPPP. IF THE CONTRACT PLANS AND CONSTRUCTION SEQUENCING IS ALTERED, NOTIFICATION TO NYSDEC MUST OCCUR 14 CALENDAR DAYS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY INFORMATION THAT AMENDS THE SWPPP. THE DEPARTMENT IS RESPONSIBLE FOR NOTIFYING NYSDEC.

DUE TO DATE RESTRICTIONS ON CUTTING TREES FOR THE ENDANGERED INDIANA BAT, TREE CUTTING (NOT INCLUDING GRUBBING) IS NOT ALLOWED TO OCCUR IN AREAS THAT ARE OUTSIDE OF THE AREA ACTIVELY BEING WORKED ON.

"DISTURBED" IS DEFINED AS WORK THAT RESULTS IN SOIL EXPOSURE.

"STABILIZED" IS DEFINED AS HAVING TEMPORARY OR PERMANENT EROSION AND SEDIMENT CONTROL MEASURES IN PLACE, INCLUDING, BUT NOT LIMITED TO, EROSION CONTROL MEASURES THAT COVER EXPOSED SOIL TO MINIMIZE SOIL FROM ERODING. PERIMETER SEDIMENT CONTROL MEASURES ALONE ARE NOT CONSIDERED ADEQUATE STABILIZATION.

PRIOR TO BEGINNING ANY DISTURBANCE ACTIVITIES ON A "SECTION" OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT A PLAN SHOWING THE LIMITS OF DISTURBANCE, INCLUDING THE AMOUNT OF AREA TO BE DISTURBED, AN EROSION AND SEDIMENT CONTROL PLAN THAT SUPPLEMENTS THE CONTRACT'S EROSION AND SEDIMENT CONTROL PLAN, AND A PROGRESS SCHEDULE FOR THE ACCOMPLISHMENT OF TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL WORK FOR REVIEW AND APPROVAL BY THE ENGINEER-IN-CHARGE. THE CONTRACTOR'S EROSION AND SEDIMENT CONTROL PLAN SHALL INCLUDE MEASURES THAT MINIMIZE EROSION AND CONTROL SEDIMENT FOR STORAGE AND STAGING AREAS WITHIN THE RIGHT-OF-WAY. THE CONTRACTOR'S EROSION AND SEDIMENT CONTROL PLAN SHALL BE PREPARED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS AND GUIDANCE CONTAINED IN THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", LATEST EDITION.

TEMPORARY STABILIZATION MEASURES:

1. WHEN LAND DISTURBANCES IN A PARTICULAR AREA ARE NECESSARY AND WORK WILL BE ONGOING, TEMPORARY MULCHING AND SEEDING MUST BE PERFORMED ON AREAS WHICH WILL BE EXPOSED FOR MORE THAN 14 DAYS. TEMPORARY MULCH MUST BE PERFORMED ON AREAS WHICH WILL BE EXPOSED FOR MORE THAN 7 DAYS AND LESS THAN 14 DAYS. SEE EXPOSED SOIL CRITERIA TABLE THIS SHEET. TEMPORARY MULCHING WILL BE PAID UNDER ITEM 209.100101. TEMPORARY SEED AND MULCH WILL BE PAID UNDER ITEM 209.1003.
2. TEMPORARY SEEDINGS MAY BE NECESSARY ON DISTURBED AREAS WHERE FINAL GRADING IS COMPLETE, WHEN PREPARING FOR A TEMPORARY SHUTDOWN, OR TO PROVIDE COVER WHEN PERMANENT SEEDING ARE LIKELY TO FAIL DUE TO MID-SUMMER HEAT AND DROUGHT. THE INTENT IS TO PROVIDE TEMPORARY PROTECTIVE COVER DURING TEMPORARY SHUTDOWN OF CONSTRUCTION AND/OR WHILE WAITING FOR OPTIMAL PLANTING TIME.
3. THE CONTRACTOR SHOULD BE MINDFUL OF ANTICIPATED STORM EVENTS. DISTURBED AREAS THAT WILL BE EXPOSED LESS THAN 7 DAYS SHOULD RECEIVE TEMPORARY MULCHING TO DISTURBED AREAS SUSCEPTIBLE TO EROSION AND MOVEMENT OF SEDIMENT FROM THE SITE PRIOR TO RAIN EVENT.
4. TEMPORARY STOCKPILE AREAS SHALL BE RINGED WITH SILT FENCE. STOCKPILES SHOULD BE SEEDED AND MULCHED IN ACCORDANCE WITH NOTE 1 ABOVE.
5. ALL TEMPORARY STABILIZATION TIMEFRAMES SHALL BE IN ACCORDANCE WITH THE SPDES GENERAL PERMIT AND AS SPECIFIED IN THE NYSDEC NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
6. TEMPORARY STRAW MULCH WILL BE APPLIED AT 2 TONS/ACRE (2-3 BALES PER 1000 SQFT) APPLICATION RATE.

EXPOSED SOIL CRITERIA FOR TEMPORARILY EXPOSED AREA

CRITERIA	REQUIRED ACTION
PRIOR TO ANY ANTICIPATED PRECIPITATION OR AOB#	TEMPORARY MULCH (ITEM 209.100101)
NO WORK ON EXPOSED SOIL AREA(S) FOR 7 OR MORE CONSECUTIVE DAYS	ITEM 209.2103, SOIL STABILIZER, CLASS IV, TYPE C
NO WORK ON EXPOSED SOIL AREA(S) FOR 14 OR MORE CONSECUTIVE DAYS	ROUGHEN SURFACE (TRACK) OF BARE SOIL ON SOIL SLOPES 3H:1V OR STEEPER PRIOR TO OTHER REQUIRED ACTIONS. TEMPORARY SEED AND MULCH (ITEM 209.1003), AND SOIL STABILIZER, CLASS IV, TYPE C, ITEM 209.2103 (ITEM 209.2103 MAY BE USED IN LIEU OF MULCH UNDER ITEM 209.1003) OR PERMANENT STABILIZATION - PLACEMENT OF TOPSOIL (ITEM 610.1402) AS SPECIFIED AND TURF ESTABLISHMENT (ITEM 610.1601), AND 209 ITEMS AS SHOWN ON THE TYPICAL OR DETAILS IN THE CONTRACT PLANS.

NOTES

1. ALL AREAS SHALL BE BROUGHT TO FINAL GRADE AND TRIMMED AS SOON AS POSSIBLE.
2. MAINTENANCE OF MULCHED AREAS SHALL INCLUDE RE-MULCHING OF AREAS IN WHICH SOIL BECOMES EXPOSED TO VIEW. ANY AREAS THAT BECOME SETTLED OR GULLIED DURING MULCHING OPERATIONS SHALL BE RE-GRADED.
3. MAINTENANCE OF TEMPORARY SEEDED AREAS SHALL INCLUDE RE-SEEDING AS NEEDED TO ESTABLISH A SATISFACTORY STAND OF GRASS. THERE SHALL BE NO ADDITIONAL PAYMENT FOR RESEEDING.
4. THE USE OF TEMPORARY SEED AND MULCH (ITEM 209.1003), AS AN EFFECTIVE EROSION CONTROL METHOD MUST BE APPLIED PRIOR TO OCTOBER 15 AND AFTER MARCH 31.
5. DEPENDING ON WEATHER CONDITIONS, WATERING MAY BE NEEDED TO ESTABLISH TEMPORARY SEED. WATERING SHALL BE APPLIED AS SPECIFIED IN THE SUB-SECTION 610-3.10 OF THE STANDARD SPECIFICATION. WATER SHALL BE PAID UNDER ITEM 610.19.
6. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE CONTRACT. THERE SHALL BE NO ADDITIONAL PAYMENT FOR MAINTENANCE OF EROSION CONTROL MEASURES.
7. THE CONTRACTOR SHALL MAINTAIN A HYDRO-MULCHER ON SITE AT ALL TIMES WITH THE CAPABILITY TO APPLY A SOIL STABILIZER MEETING THE MATERIAL REQUIREMENTS OF SECTION 713-07 OF THE NYSDOT STANDARD SPECIFICATIONS.


INSPECTION AND MAINTENANCE FOR COMPLIANCE WITH THE NYSDEC SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY PERMIT NO. GP-0-15-002:


1. THE OWNER OR OPERATOR OF THE CONSTRUCTION ACTIVITY SHALL HAVE A TRAINED CONTRACTOR (AS DEFINED IN THE GENERAL PERMIT) INSPECT THE EROSION AND SEDIMENT CONTROL PRACTICES AND POLLUTION PREVENTION MEASURES BEING IMPLEMENTED WITHIN THE ACTIVE WORK AREA DAILY TO ENSURE THAT THEY ARE BEING MAINTAINED IN EFFECTIVE OPERATING CONDITIONS AT ALL TIMES. IF DEFICIENCIES ARE IDENTIFIED, THE CONTRACTOR SHALL BEGIN IMPLEMENTING CORRECTIVE ACTIONS WITHIN ONE BUSINESS DAY AND SHALL COMPLETE THE CORRECTIVE ACTIONS IN A REASONABLE TIME FRAME.
2. THE QUALIFIED INSPECTOR SHALL PERFORM INSPECTIONS ON A WEEKLY BASIS UNLESS OTHERWISE NOTIFIED BY THE NYSDEC OR NYCDEP, IF THE OWNER RECEIVES AUTHORIZATION IN ACCORDANCE WITH PART II.C.3 OF THE GENERAL PERMIT TO DISTURB GREATER THAN 5 ACRES OF SOIL AT ANY ONE TIME. THE QUALIFIED INSPECTOR SHALL CONDUCT AT LEAST TWO SITE INSPECTIONS WEEKLY EVERY SEVEN CALENDAR DAYS. THE TWO INSPECTIONS SHALL BE SEPARATED BY A MINIMUM OF TWO FULL CALENDAR DAYS.
3. THE QUALIFIED INSPECTOR SHALL PREPARE AN INSPECTION REPORT SUBSEQUENT TO EACH AND EVERY INSPECTION. AT A MINIMUM, THE INSPECTION REPORT SHALL INCLUDE AND/OR ADDRESS THE FOLLOWING:
 - DATE AND TIME OF INSPECTION
 - NAME AND TITLE OF PERSON PERFORMING INSPECTION
 - A DESCRIPTION OF THE WEATHER AND SOIL CONDITIONS
 - A DESCRIPTION OF THE CONDITION OF THE RUNOFF AT ALL POINTS OF DISCHARGE FROM THE CONSTRUCTION SITE.
 - A DESCRIPTION OF ALL EROSION AND SEDIMENT CONTROL PRACTICES AND POLLUTION PREVENTION MEASURES THAT NEED REPAIR OR MAINTENANCE
 - IDENTIFICATION OF ALL EROSION AND SEDIMENT CONTROL PRACTICES AND POLLUTION PREVENTION MEASURES THAT WERE NOT INSTALLED PROPERLY OR ARE NOT FUNCTIONING AS DESIGNED AND NEED TO BE REINSTALLED OR REPLACED
 - DESCRIPTION AND SKETCH OF AREAS WITH ACTIVE SOIL DISTURBANCE ACTIVITY, AREAS THAT HAVE BEEN DISTURBED BUT ARE INACTIVE AT THE TIME OF THE INSPECTION, AND AREAS THAT HAVE BEEN STABILIZED (TEMPORARY AND/OR FINAL) SINCE THE LAST INSPECTION
 - CURRENT PHASE OF CONSTRUCTION OF ALL POST-CONSTRUCTION SMP'S AND IDENTIFICATION OF ALL CONSTRUCTION THAT IS NOT IN CONFORMANCE WITH THE SWPPP AND TECHNICAL STANDARDS
 - CORRECTIVE ACTIONS THAT MUST BE TAKEN TO CORRECT IDENTIFIED DEFICIENCIES
 - IDENTIFICATION AND STATUS OF ALL CORRECTIVE ACTIONS THAT WERE REQUIRED BY PREVIOUS INSPECTION
 - DIGITAL PHOTOGRAPHS WITH DATE STAMP THAT CLEARLY SHOW THE CONDITION OF THE PRACTICES THAT HAVE BEEN IDENTIFIED AS NEEDING MAINTENANCE AS WELL AS PHOTOGRAPHS OF PREVIOUS DEFICIENCIES THAT HAVE BEEN CORRECTED.
4. WITHIN ONE BUSINESS DAY OF THE COMPLETION OF AN INSPECTION, THE QUALIFIED INSPECTOR SHALL NOTIFY THE OWNER OR OPERATOR AND APPROPRIATE SUBCONTRACTOR OF ANY CORRECTIVE ACTIONS THAT NEED TO BE TAKEN. THE CONTRACTOR OR SUBCONTRACTOR SHALL BEGIN IMPLEMENTING THE CORRECTIVE ACTIONS WITHIN ONE BUSINESS DAY OF THIS NOTIFICATION AND SHALL COMPLETE THE CORRECTIVE ACTIONS IN A REASONABLE TIME FRAME.
5. ALL INSPECTION REPORTS SHALL BE SIGNED BY THE QUALIFIED INSPECTOR. INSPECTION REPORTS SHALL BE MAINTAINED ON SITE WITH THE SWPPP. INSPECTIONS SHALL CONTINUE IN ACCORDANCE WITH THE PERMIT UNTIL FINAL STABILIZATION OF THE ENTIRE SITE AND THE NOTICE OF TERMINATION IS FILED WITH THE NYSDEC.

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER	
						EROSION CONTROL NOTES	DRAWING NO. ECN-1
							SHEET NO. 14
	COUNTY: ULSTER				NYSOT REGION: 8		

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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POLLUTION PREVENTION MEASURES:

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A PROJECT SPECIFIC SAFETY AND HEALTH PLAN IN ACCORDANCE WITH SECTION 107-05, SAFETY AND HEALTH REQUIREMENTS. THE SAFETY AND HEALTH PLAN SHALL SPECIFICALLY ADDRESS SPILL PREVENTION AND A RESPONSE PLAN. THE PLAN SHALL DETAIL THE STEPS NEEDED TO BE FOLLOWED IN THE EVENT OF AN ACCIDENTAL SPILL AND SHALL IDENTIFY CONTACT NAMES AND PHONE NUMBERS OF PEOPLE AND AGENCIES THAT MUST BE NOTIFIED. THE PLAN SHOULD INCLUDE NYSDEC'S SPILL REPORTING AND INITIAL NOTIFICATION REQUIREMENTS.

THE PLAN SHALL INCLUDE SAFETY DATA SHEETS (MSDS) FOR MATERIAL TO BE STORED ON SITE. ALL WORKERS ON-SITE WILL BE REQUIRED TO BE TRAINED ON SAFE HANDLING AND SPILL PREVENTION PROCEDURES FOR ALL MATERIALS USED DURING CONSTRUCTION. REGULAR TAILGATE SAFETY MEETINGS SHALL BE HELD AND ALL WORKERS THAT ARE EXPECTED ON THE SITE DURING THE WEEK SHALL BE REQUIRED TO ATTEND. AGENDA, TOPICS AND SIGN-IN SHEETS SHALL BE PROVIDED TO THE E.I.C.. MATERIAL REGARDING PROPER HANDLING, SPILL RESPONSE, SPILL KIT LOCATION, AND EMERGENCY ACTIONS TO BE TAKEN SHOULD BE DISTRIBUTED TO ALL CONSTRUCTION PERSONNEL AND/OR POSTED.

ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS, THAT OCCUR ON-SITE SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT CONFORMS TO ALL APPLICABLE FEDERAL AND STATE REGULATIONS THAT DOES NOT CAUSE A CONTAMINATION OF STORMWATER. GOOD HOUSEKEEPING AND PREVENTATIVE MEASURES WILL BE TAKEN TO ENSURE THAT THE SITE WILL BE KEPT CLEAN, WELL ORGANIZED, AND FREE OF DEBRIS.

1. ALL STATE AND FEDERAL REGULATIONS SHALL BE FOLLOWED FOR THE STORAGE, HANDLING, APPLICATION, USAGE AND DISPOSAL OF PESTICIDES, FERTILIZERS, AND PETROLEUM PRODUCTS.

2. ALL VEHICLES, EQUIPMENT, AND PETROLEUM PRODUCT STORAGE/DISPENSING AREA WILL BE OBSERVED REGULARLY DURING SITE INSPECTIONS TO DETECT ANY LEAKS OR SPILLS, AND TO IDENTIFY MAINTENANCE NEEDS TO PREVENT LEAKS AND SPILLS. ON-SITE FUELING TANKS AND PETROLEUM PRODUCT STORAGE CONTAINERS SHALL CONTAIN SECONDARY CONTAINMENT. SPILL PREVENTION MEASURES, SUCH AS DRIP PANS, WILL BE USED WHEN CONDUCTING MAINTENANCE AND REPAIR OF VEHICLES AND EQUIPMENT. IN ORDER TO PERFORM EMERGENCY REPAIRS ON SITE, TEMPORARY PLASTIC WILL BE PLACED BENEATH AND, IF RAINING, OVER THE VEHICLE. CONTAINMENT SURFACES SHALL BE CLEANED IMMEDIATELY FOLLOWING AN DISCHARGES OR SPILL INCIDENT. CONTAMINATED SOIL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL CURRENT FEDERAL AND STATE REGULATIONS. THE NYSDEC, NYCDEP AND COUNTY WILL BE NOTIFIED IF ANY SPILLS OVER THE REPORTABLE LIMIT OCCUR. THE NYSDEC GUIDANCE ON SPILL REQUIREMENTS ARE CONTAINED IN THE TECHNICAL FIELD GUIDANCE, SPILL REPORTING AND INITIAL NOTIFICATION REQUIREMENTS (ALSO CONTAINED IN THE PROJECT SPECIFIC SWPPP).

3. ANY CHEMICALS STORED IN THE CONSTRUCTION AREAS WILL CONFORM TO THE APPROPRIATE MANUFACTURERS RECOMMENDATIONS AND OR THE APPROPRIATE FEDERAL/STATE REGULATIONS. ALL CHEMICALS SHALL HAVE COVER, CONTAINMENT, AND PROTECTION PROVIDED ON-SITE, PER ALL FEDERAL AND NEW YORK STATE DEC REGULATIONS. APPLICATION OF AGRICULTURAL CHEMICALS, INCLUDING FERTILIZERS AND PESTICIDES, SHALL BE CONDUCTED IN A MANNER AND AT APPLICATION RATES THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO STORMWATER RUNOFF. MANUFACTURER'S RECOMMENDATION FOR APPLICATION RATES AND PROCEDURES SHALL BE FOLLOWED.

4. ALL DEWATERING FROM OPEN CUT EXCAVATIONS SHALL BE DISCHARGED INTO A CONTROLLED CONVEYANCE SYSTEM. CHANNELS AND DISCHARGE POINTS SHALL BE STABILIZED PRIOR TO USE FOR DISCHARGE.

5. DUST RELEASED FROM ON-SITE GRADING OPERATIONS WILL BE CONTROLLED USING STANDARDS AND SPECIFICATIONS FOR DUST CONTROL FROM THE BLUE BOOK (ALSO CONTAINED IN THE PROJECT SPECIFIC SWPPP).

6. PROCESS WATER AND SLURRY RESULTING FROM CONCRETE WORK WILL BE PREVENTED FROM ENTERING SURFACE WATERS, JURISDICTIONAL WETLANDS, AND ANY CLOSED DRAINAGE FACILITY. SEE DWG. NO. ECD-03.

7. PORTABLE SANITARY FACILITIES WILL BE FIRMLY SECURED, REGULARLY MAINTAINED, AND EMPTIED WHEN NECESSARY.

8. LITTER AND TRASH SHALL BE CLEANED AND DISPOSED OF IN SECURE CLEARLY MARKED DUMPSTERS OR TRASH RECEPTACLES. SITE IS TO BE CLEANED DAILY OF DEBRIS AND DISPOSED OF ON A DAILY BASIS.

REPORTING OF SPILLS, DISCHARGES AND/OR CONTAMINATED SOILS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ANY FINDINGS OF SPILLS, LEAKS OR PETROLEUM PRODUCTS, CONTAMINATED SOILS, BURIED DRUMS OF UNKNOWN SUBSTANCES, OR ANY POTENTIALLY HAZARDOUS MATERIALS TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC), WITHIN TWO (2) HOURS OF THE DISCOVERY. NOTIFICATION MUST BE MADE BY CALLING THE NYSDEC SPILLS HOTLINE AT 800-457-7362.

2. NO FUEL STORAGE, EXCEPT FOR WHAT IS NECESSARY FOR ONE DAY OF WORK, WILL BE ALLOWED ON CITY PROPERTY. SPILL CONTROL KITS CONTAINING ABSORBENTS MUST BE KEPT ON SITE AT ALL TIMES WHENEVER WORK IS CONDUCTED ON CITY PROPERTY. NO RELEASING, DUMPING, SPILLING OR OVERNIGHT STORAGE OF ANY PETROLEUM-BASED OIL, HYDRAULIC FLUID, FUELS OR CHEMICALS SHALL BE PERMITTED ON CITY PROPERTY. ALL SPILLS AND RELEASES MUST BE IMMEDIATELY REPORTED TO THE DEP POLICE AT 914-593-7500 OR 888-426-7433.

PERMANENT STABILIZATION MEASURES:

1. PERMANENT STABILIZATION MEASURES SHOULD BE PERFORMED AS SOON AS POSSIBLE AFTER COMPLETION OF GRADING. WAITING UNTIL ALL DISTURBED AREAS ARE READY FOR PERMANENT STABILIZATION IS UNACCEPTABLE.

2. EXPOSED DISTURBED AREAS ADJACENT TO A CONVEYANCE THAT PROVIDE RAPID DISCHARGE FROM SITE SHALL BE COVERED WITH PLASTIC OR GEOTEXTILE TO PREVENT SOIL LOSS UNTIL IT CAN BE STABILIZED (THIS WORK TO BE INCLUDED IN THE BID PRICE FOR VARIOUS 209 ITEMS. NO ADDITIONAL PAYMENT WILL BE MADE TO PROTECT UNSTABILIZED SURFACES FROM EROSION SUSCEPTIBLE TO RAPID DISCHARGE FROM SITE.)

3. PERMANENT SEEDING SHOULD OPTIMALLY BE UNDERTAKEN IN THE SPRING FROM MARCH THROUGH MAY, AND IN LATE SUMMER AND EARLY FALL FROM SEPTEMBER TO OCTOBER 15. WHEN SEEDING IS IMPRACTICABLE, AN APPROPRIATE TEMPORARY MULCH SHALL BE APPLIED. PERMANENT SEEDING MAY BE UNDERTAKEN DURING THE SUMMER IF ADEQUATE WATERING WILL BE PROVIDED. PAYMENT FOR WATERING WILL BE MADE UNDER TURF ESTABLISHMENT ITEM.

4. ALL SLOPES STEEPER THAN A 1V:3H AND 1V:3H SLOPES ADJACENT TO BIORETENTION PRACTICES WILL REQUIRE ROLLED EROSION CONTROL PRODUCTS (RECP) UNLESS OTHERWISE NOTED ON DETAILS AND IN PLANS. INSTALLATION OF RECP WILL IMMEDIATELY FOLLOW FINISHED GRADING.

5. SEEDBED MUST BE SEEDED WITHIN 24 HOURS OF DISTURBANCE OR SCARIFICATION WILL BE NECESSARY PRIOR TO SEEDING.

6. ANY SEEDING METHOD MAY BE USED THAT WILL PROVIDE UNIFORM APPLICATION OF SEED TO THE AREA AND RESULT IN A RELATIVELY GOOD SEED TO SOIL CONTACT. SEE SECTION 610-2.03 AND 610-3.03 FOR SEEDING APPLICATION RATES/TYPE.

SOIL RESTORATION:

1. SOIL RESTORATION WILL BE PERFORMED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL LISTED BELOW. SOIL RESTORATION SHOULD BE PERFORMED DURING PERIODS OF RELATIVELY LOW TO MODERATE SUBSOIL MOISTURE, THE ASPHALT AND GRANULAR SUBBASE SHOULD BE EXCAVATED AND DISPOSED OF. ALL OTHER VEGETATED AREAS (OUTSIDE PRACTICES) IN THE PROJECT IMPACT AREA WILL RECEIVE 6" OF TOPSOIL AND TURF ESTABLISHMENT TO MEET RESTORATION REQUIREMENTS.

2. APPLY 3" ITEM 610.10 COMPOST OVER SUBSOIL. THE COMPOST SHALL BE WELL DECOMPOSED (MATURED AT LEAST 3 MONTHS), WEED FREE, ORGANIC MATTER. IT SHALL BE AEROBICALLY COMPOSTED, POSSESS NO OBJECTIONABLE ODORS, AND CONTAIN LESS THAN 1%, BY DRY WEIGHT, OF MAN-MADE FOREIGN MATTER. ALL BIOSOLIDS COMPOST PRODUCED IN NEW YORK STATE (OR APPROVED FOR IMPORTATION) MUST MEET THE NYS DEC'S 6 NYCRR PART 360 (SOLID WASTE MANAGEMENT FACILITIES) REQUIREMENTS. THE PART 360 REQUIREMENTS ARE EQUAL TO OR MORE STRINGENT THAN 40 CFR PART 503 WHICH ENSURE SAFE STANDARDS FOR PATHOGEN REDUCTIONS AND HEAVY METALS CONTENT.

3. TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT MOUNTED RIPPER, TRACTOR MOUNTED DISC, OR TILLER, TO MIX AND CIRCULATE AIR AND COMPOST INTO THE SUBSOIL. THE COST OF TILLING COMPOST INTO THE SUBSOIL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 610.10.

4. ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE.

5. APPLY 6" ITEM 610.1402 TOPSOIL. SEED AND MULCH IMMEDIATELY AFTER PLACING TOPSOIL (AND/OR ANY OTHER STABILIZATION MEASURES INDICATED ON THE CONTRACT PLANS OR IN THE SPECIFICATION) .

6. AT THE END OF THE PROJECT AN INSPECTOR SHOULD BE ABLE TO PUSH 3/8" METAL BAR 12 INCHES INTO THE SOIL JUST WITH BODY WEIGHT. THE AREA SHOULD BE KEPT FREE OF VEHICULAR AND FOOT TRAFFIC AND SHOULD NOT BE USED BY THE CONTRACTOR TO STORE MATERIALS EQUIPMENT.

WINTER STABILIZATION NOTES:

1. AN ENHANCED EROSION AND SEDIMENT CONTROL PLAN TO MANAGE RUNOFF AND SEDIMENT DURING CONSTRUCTION ACTIVITIES HAS BEEN CONSIDERED AND INCORPORATED INTO THE SWPPP TO THE EXTENT PRACTICAL AND NECESSARY. IF DURING THE COURSE OF CONSTRUCTION, IT BECOMES APPARENT THAT A WINTER SHUTDOWN WILL BE NECESSARY AND COMPLETION OF WORK LEFT UNDONE WILL BE COMPLETED IN THE NEXT CONSTRUCTION SEASON, TEMPORARY STABILIZATION WITH TEMPORARY SEEDING AND MULCHING MUST BE PERFORMED TO ALLOW FOR ESTABLISHMENT OF VEGETATIVE COVER. UNDER NO CIRCUMSTANCES SHALL ROADSIDE OPEN DITCHES BE LEFT UNDISTURBED OVER THE SHUTDOWN WITHOUT A SUBSTANTIAL VEGETATIVE COVER. IN ACCORDANCE WITH SECTION 108-01, THE EIC SHOULD NOT APPROVE ANY SCHEDULE THAT DOES NOT PROVIDE ADEQUATE TIME TO ALLOW FOR ESTABLISHMENT OF VEGETATION IN DISTURBED AREAS (INCLUDING ROADSIDE DITCHES) PRIOR TO WINTER MONTHS.

STREAM PROTECTION NOTES:

1. JUST WEST OF THE PROJECT LIMITS (100' BUFFER SHOWN ON CONTRACT PLANS FOR SPATIAL AWARENESS) A NYSDEC PROTECTED STREAM FLOWS GENERALLY SOUTH AND IS ROUTED UNDER NYS ROUTE 28 AND THE ASHOKAN RAIL TRAIL VIA CONCRETE CULVERTS. NO DISTURBANCES ARE ALLOWED WITHIN 50' HORIZONTALLY FROM THE MEAN HIGH WATER LINE. TEMPORARY CONSTRUCTION FENCING ALONG WITH PERIMETER SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AT THE LIMITS OF DISTURBANCE WHERE INDICATED ON THE PLANS. UNDER NO CIRCUMSTANCES WILL DISTURBANCES (INCLUDING STOCKPILING, STAGING OR STORAGE OF ANY MATERIALS) BE ALLOWED ON THE GRASSY BUFFER BETWEEN THE STREAM BANK AND THE TEMPORARY CONSTRUCTION FENCING SHOWN ON THE PLANS. IF DISTURBANCES ARE NECESSARY BEYOND THE LIMITS INDICATED ON THE PLANS A NYSDEC PROTECTION OF WATERS PERMIT MAY BE REQUIRED. NO WORK SHOULD BE PERFORMED BEYOND THE LIMITS INDICATED WITHOUT FIRST CONTACTING THE E.I.C..

NYC WATER SUPPLY WATERSHED NOTES:

THE FOLLOWING CONTRACT INFORMATION PERTAINS TO ALL NOTES IN THIS SECTION:

WEST OF HUDSON:
NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCDEP)
BUREAU OF WATER SUPPLY, STORMWATER PROGRAM, WEST OF HUDSON
71 SMITH AVENUE
KINGSTON, NY 12401
CHARLES LAING CLAING@DEP.NYC.GOV, (845) 340-7218, FAX (845) 338-1326

THE CONTRACTOR IS REQUIRED TO STAY WITHIN THE RIGHT-OF-WAY. THE CONTRACTOR WILL NOT DEPOSIT ANY DEBRIS ON NYCDEP OWNED LANDS. PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL PROVIDE THE ENGINEER-IN-CHARGE (EIC) WITH A DETAILED WORK SCHEDULE FOR THE WORK LOCATED IN THE NYC WATER SUPPLY WATERSHED. THE EIC SHALL SUBMIT THE SCHEDULE TO THE NYCDEP WEST OF HUDSON CONTACTS PROVIDED ABOVE, UNLESS OTHERWISE NOTED.

THE EIC WILL NOTIFY THE NYCDEP CONTACTS AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF WORK IN THE NYC WATER SUPPLY WATERSHED.

NYC EQUIPMENT SANITIZING NOTES TO PREVENT THE SPREAD OF AQUATIC INVASIVE SPECIES:

BOATS AND OTHER EQUIPMENT, INCLUDING, BUT NOT LIMITED TO, PLATFORMS, WATER PUMPING EQUIPMENT, WATER STORAGE TANKS, AND TRAILERS AND TRUCKS THAT CARRY SUCH STORAGE TANKS, THAT ARE PLACED IN WATERBODIES LOCATED IN THE NYC WATERSHED MUST BE DISINFECTED USING HIGH TEMPERATURE PRESSURE WASHER (STEAM POWER WASHER) PRIOR TO THE START OF WORK AND PRIOR TO LEAVING THE WORK SITE. THE MINIMUM EQUIPMENT OPERATING SPECIFICATIONS ARE 160 DEGREES FAHRENHEIT, 700 PSI, 2 GALLONS PER MINUTE. ALL EQUIPMENT AND TANKS MUST BE COMPLETELY DEWATERED PRIOR TO DISINFECTION, ANY DEBRIS FOUND ON TRAILERS, ETC. MUST BE REMOVED BEFORE BEING DISINFECTED. THE ENTIRE SURFACE AREA (INTERIOR AND EXTERIOR) OF THE TANK AND EQUIPMENT, INCLUDING, BUT NOT LIMITED TO, ANY AREA THAT COMES IN CONTACT WITH WATER SHALL BE DISINFECTED BY DIRECT CONTACT WITH A HIGH TEMPERATURE PRESSURE WASHER. DISINFECTION BETWEEN SITES IS NOT REQUIRED WHEN TRAVELING FROM ONE LOCATION TO ANOTHER IN A DOWNSTREAM DIRECTION ON THE SAME STREAM (EXCEPT FOR THE ESOPUS CREEK - SEE BELOW).

THE FOLLOWING DISINFECTING OPTIONS CAN BE USED:
THE CONTRACTOR WILL BE RESPONSIBLE FOR PROPERLY DISINFECTING THE EQUIPMENT USING THEIR OWN HIGH TEMPERATURE PRESSURE WASHER (REQUIREMENTS NOTED ABOVE). EQUIPMENT SHALL BE PROPERLY DISINFECTED BY A THIRD PARTY ENTITY THAT SPECIALIZES IN HIGH TEMPERATURE PRESSURE WASHING OPERATIONS (REQUIREMENTS NOTED ABOVE). DISINFECTING OPERATIONS MUST OCCUR WITHIN 75 MILES OF THE NYC WATER SUPPLY WATERSHED, BUT NOT LOCATED ON NEW YORK CITY OWNED LAND.



DISINFECTING OPERATIONS ARE PROHIBITED ON LOCATIONS WHERE THE RUNOFF FROM DISINFECTING OPERATIONS WOULD ENTER A STREAM OR WATERBODY.

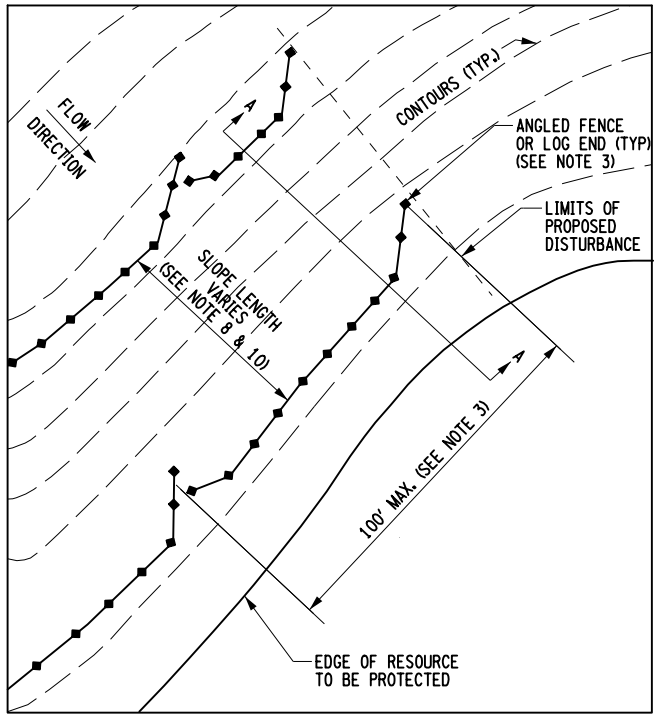
THERE IS NO SEPARATE PAYMENT FOR DISINFECTING EQUIPMENT.

PRIOR TO PLACING ANY BOATS OR OTHER EQUIPMENT IN A WATERBODY THAT IS LOCATED IN THE NYC WATER SUPPLY WATERSHED, THE EIC SHALL CONTACT THE NYCDEP LAND MANAGEMENT OFFICE NEAR THE RESERVOIR OF INTEREST 14 CALENDAR DAYS PRIOR TO PERFORMING DISINFECTING OPERATIONS TO ARRANGE FOR A NYCDEP REPRESENTATIVE TO BE PRESENT DURING DISINFECTING OPERATIONS.

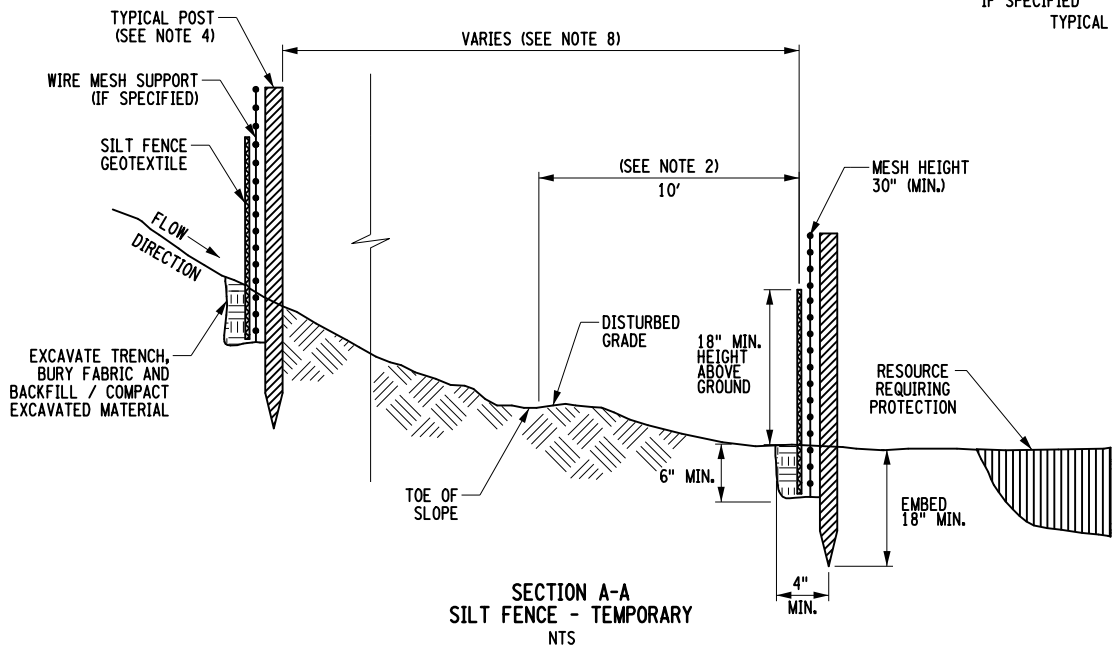
CONTACT NUMBERS ARE:
ASHOKAN RESERVOIR: (845) 657-2663
RONDOUT RESERVOIR: (845) 985-0386
ALL EAST OF HUDSON RESERVOIRS: (914) 232-1309

ANY ITEM THAT IS DISINFECTED AND MOVED BEYOND THE SHORE OF THE WATERBODY WHERE WORK IS LOCATED SHALL BE DISINFECTED AGAIN PRIOR TO REUSE IN THE WATERBODY.

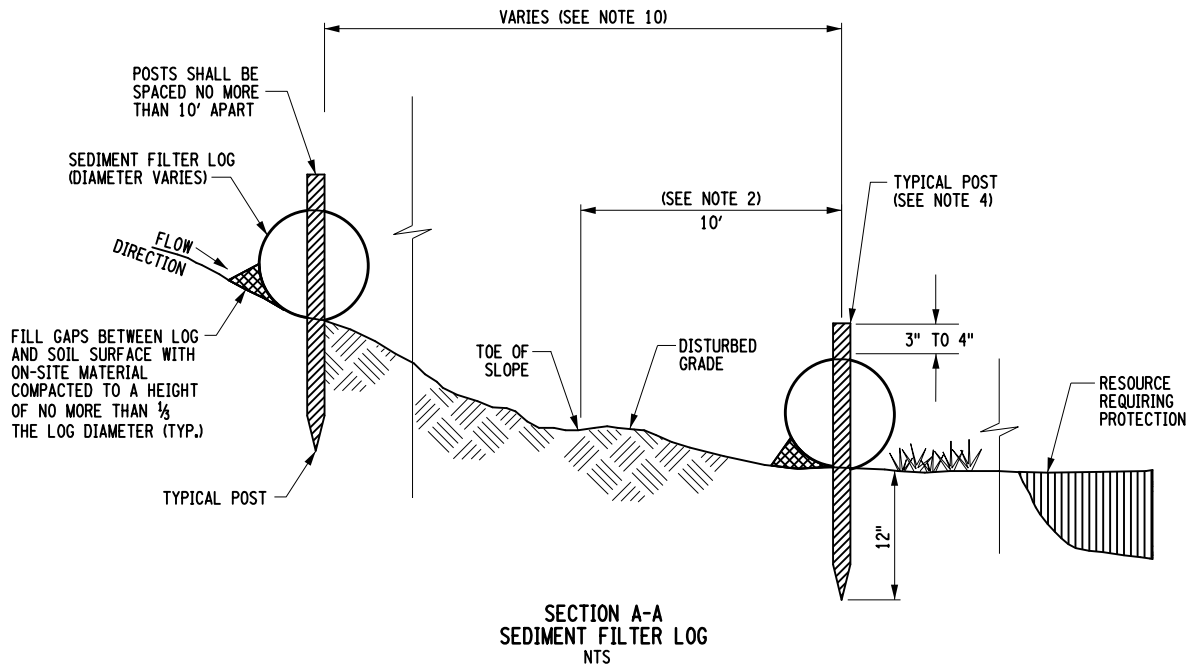
AFFIX SEAL: ON:		ALTERED BY: ON:						
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:			PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER	
						EROSION CONTROL NOTES	DRAWING NO. ECN-2 SHEET NO. 15	
		COUNTY: ULSTER	NYSDOT REGION: 8					
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.								
				BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com				



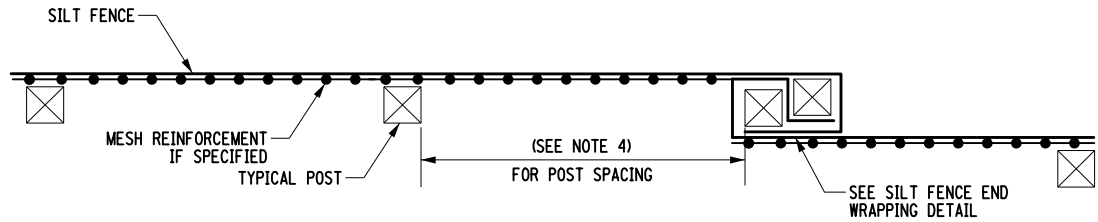
PLAN
EXAMPLE LAYOUT OF SILT FENCE OR SEDIMENT FILTER LOG
NTS



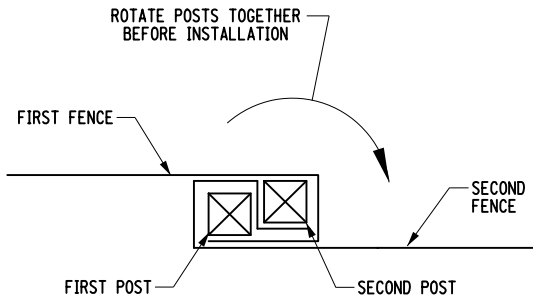
SECTION A-A
SILT FENCE - TEMPORARY
NTS



SECTION A-A
SEDIMENT FILTER LOG
NTS



PLAN
SILT FENCE PLACEMENT
NTS



SILT FENCE END WRAPPING DETAIL
NTS

APPLICATION NOTES

- THE PRIMARY PURPOSE OF A SILT FENCE OR SEDIMENT FILTER LOG IS TO INTERCEPT SEDIMENT LADEN RUNOFF BY IMPOUNDING WATER BEHIND THE FENCE OR LOG SO THAT SEDIMENT FALLS OUT OF SUSPENSION.
- IDENTIFY ONSITE AND OFFSITE RESOURCES THAT NEED TO BE PROTECTED USING THE SILT FENCE OR SEDIMENT FILTER LOG (E.G. WETLANDS, PONDS, WATERWAYS OR ENVIRONMENTALLY SENSITIVE AREAS). SILT FENCE OR SEDIMENT FILTER LOGS ARE TYPICALLY USED WITH EROSION OR SEDIMENT CONTROL MEASURES, SUCH AS MULCH AND/OR ROLLED EROSION CONTROL FABRIC.
- SILT FENCE OR SEDIMENT FILTER LOGS SHALL NOT BE USED IN OR ACROSS A FLOWING CHANNEL, OR AREAS OF CONCENTRATED FLOW. DO NOT USE SILT FENCE OR SEDIMENT FILTER LOGS AS A PERIMETER CONTROL, TO DEFINE PROPERTY LINES, OR TO DELINEATE A RESOURCE.

GENERAL NOTES

- SILT FENCE OR SEDIMENT FILTER LOGS SHALL BE INSTALLED ON A LINE OF EQUAL ELEVATION (CONTOUR). IT MAY BE INSTALLED AT INTERMEDIATE POINTS UP SLOPES AS WELL AS AT THE BOTTOM.
- FOR LOCATIONS THAT WARRANT PLACEMENT OF SILT FENCE OR SEDIMENT FILTER LOGS AT THE BASE OF SLOPES, SILT FENCE OR SEDIMENT FILTER LOGS SHALL BE PLACED A MINIMUM OF 10 FEET FROM THE TOE OF THE SLOPE, TO PROVIDE ADEQUATE AREA FOR SEDIMENT STORAGE AND FACILITATE MAINTENANCE OF THE SEDIMENT CONTAINMENT AREA.
- THE ENDS OF A ROW OF SILT FENCE OR SEDIMENT FILTER LOGS SHALL BE ANGLED UP SLOPE TO PREVENT CHANNELIZED FLOW FROM BEING CONVEYED PAST THE ENDS OF THE FENCE. A SECTION OF SILT FENCE OR SEDIMENT FILTER LOGS SHOULD NOT EXCEED 100 FEET IN LENGTH.
- WOOD POSTS FOR SILT FENCE SHALL HAVE A CROSS-SECTION AREA OF 3.5 SQUARE INCHES OR STEEL POSTS SHALL BE "T" OR "U" SHAPE AND 1.33 POUNDS/FEET (MINIMUM) FOR STEEL. SPACING FOR THE PROVIDED SILT FENCE POSTS SHALL BE AS DESIGNATED ON THE DEPARTMENT APPROVED LIST FOR SILT FENCE. THE LENGTH OF SILT FENCE POSTS SHALL BE 40 INCHES. WOOD POSTS FOR SEDIMENT FILTER LOGS SHALL BE NOMINAL 2x2. THE LENGTH OF FILTER LOG POSTS SHALL BE 16" GREATER THAN THE DIAMETER OF THE LOG.
- THE BOTTOM EDGE OF SILT FENCE SHALL BE BURIED A MINIMUM OF 6" BELOW GROUND. THE FENCE SHALL BE INSTALLED WITH THE POSTS ON THE DOWNSLOPE SIDE OF THE FABRIC.
- WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED AND FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS, OR THE END POSTS OF TWO SECTIONS SHALL BE WRAPPED AS SHOWN IN THE DETAIL FOR SILT FENCE END WRAPPING.
- SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE ABOVE GROUND HEIGHT OR WHEN BULGES DEVELOP IN THE FABRIC. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
- THE FOLLOWING ARE MAXIMUM SLOPE LENGTHS (DISTANCE BETWEEN ROWS) FOR SILT FENCE INSTALLATION:

SILT FENCE MAXIMUM SLOPE LENGTH (FEET)			
SLOPE	STEEPNESS	STANDARD**	REINFORCED***
*5-10%	20:1 TO 10:1	125	250
10-20%	10:1 TO 5:1	100	150
20-33%	5:1 TO 3:1	60	80
33-50%	3:1 TO 2:1	40	70
> 50%	> 2:1	20	30

* FOR SLOPES LESS THAN 5% SILT FENCE IS NOT REQUIRED UNLESS IN SENSITIVE AREAS OR HIGHLY ERODIBLE SOILS.

** STANDARD SILT FENCE IS FABRIC ROLLS STAPLED TO WOODEN POSTS DRIVEN 18 INCHES INTO THE GROUND.

*** REINFORCED SILT FENCE IS FABRIC PLACED AGAINST WELDED WIRE MESH WITH ANCHORED STEEL POSTS DRIVEN 18 INCHES INTO THE GROUND.

- INSTALLATION OF SILT FENCE OR SEDIMENT LOG, INCLUDING EXCAVATION, BACKFILL, AND COMPACTION OF SOIL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM.
- SEDIMENT FILTER LOG POSTS SHALL BE SPACED NO MORE THAN 10 FEET APART. ENDS OF LOGS SHALL BE OVERLAPPED BY 24 INCHES AND STAKED SIDE BY SIDE. THE MAXIMUM SLOPE LENGTH (DISTANCE BETWEEN ROWS) SHALL NOT EXCEED THE FOLLOWING LIMITS:

DIA. (IN.)	SLOPE %						
	2	5	10	20	25	33	50
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35

MAINTENANCE NOTES

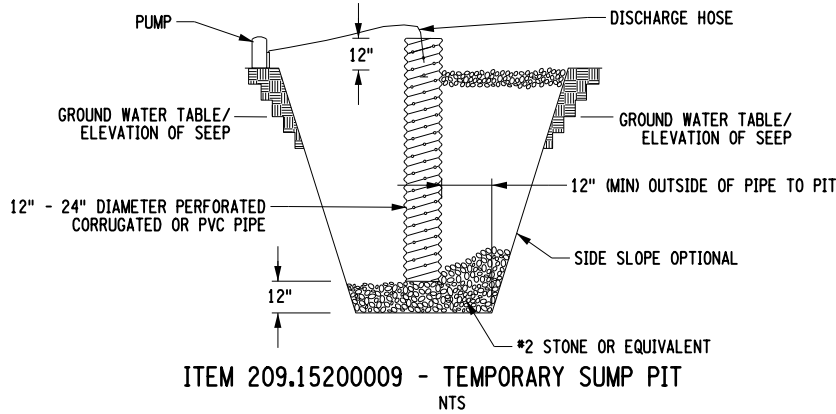
- MEASURES SHALL BE INSPECTED ONCE EVERY SEVEN CALENDAR DAYS, AND AFTER EACH RUNOFF EVENT AND DAILY DURING PROLONGED RAINFALL.
- SEDIMENT SHALL BE REMOVED WHEN THE ACCUMULATION REACHES ONE-HALF OF THE MEASURED HEIGHT.
- DAMAGED FILTER LOGS WILL BE REPAIRED IN A MANNER REQUIRED BY THE MANUFACTURER OR REPLACED WITHIN 24 HOURS OF INSPECTION NOTIFICATION.
- TRAFFIC WILL NOT BE ALLOWED TO CROSS FILTER LOGS.
- BIODEGRADABLE FILTER LOGS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE FILTER LOGS AFTER ONE YEAR. POLYPROPYLENE FILTER LOGS SHALL BE REPLACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- COST OF ALL MAINTENANCE/AND OR REPLACEMENT DUE TO DAMAGE AND DEGRADATION WILL BE INCLUDED IN THE UNIT BID PRICE ITEM 209.2301

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					EROSION CONTROL DETAILS	DRAWING NO. ECD-01
						SHEET NO. 16
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					HVEA ENGINEERS BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com	
COUNTY: ULSTER NYSOT REGION: 8					NYC Environmental Protection	

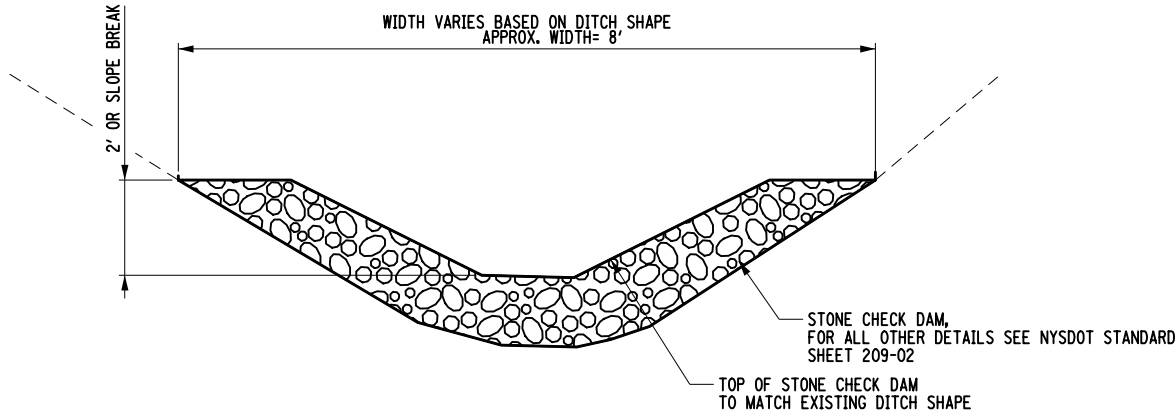
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USER = kta

DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON



NOTES:

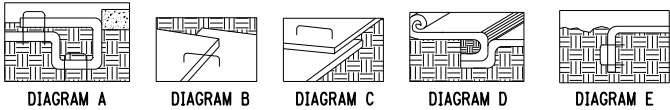
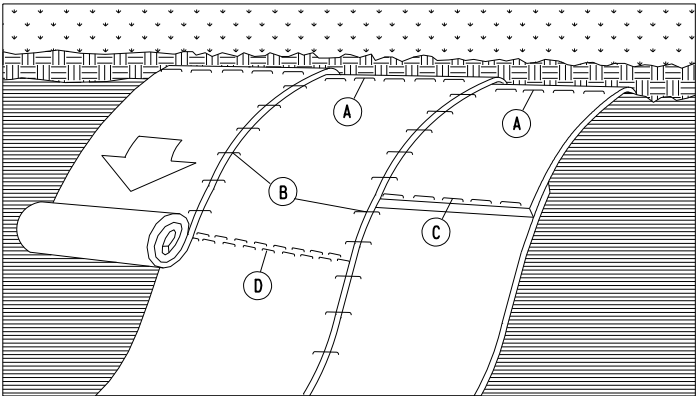
1. TEMPORARY SUMP PITS SHALL BE USED, AOE, IF IN THE EVENT SUBSURFACE SEEPS ARE ENCOUNTERED AND CREATE DIFFICULTIES IN CONSTRUCTING ANY ELEMENTS ASSOCIATED WITH THE ASHOKAN STATION TRAILHEAD PARKING AREA. AOE, DISCHARGE FROM THE TEMPORARY SUMP PIT MAY BE OUTLETTED TO STORMWATER CONVEYANCES MEASURES THAT DIRECTLY DISCHARGE FROM THE SITE WHEN DISCHARGE IS FREE AND CLEAR OF SEDIMENT. THERE IS A NYSDEC STREAM CLASSIFIED AS CLASS A, WITH A STANDARD A(T) ON THE WESTERN LIMITS OF THE PROJECT. WITH PERMISSION FROM THE ENGINEER, DISCHARGE MAY BE PUMPED DIRECTLY TO THE STREAM IF THE DISCHARGE IS AS FREE AND CLEAR OF SEDIMENT AS THE STREAM ITSELF. OTHERWISE, DISCHARGE SHALL BE PUMPED DIRECTLY TO THE TEMPORARY SEDIMENT BASIN.
2. PIT DIMENSIONS ARE OPTIONAL.
3. THE STANDPIPE SHOULD BE CONSTRUCTED BY PERFORATING A 12" TO 24" DIAMETER CORRUGATED OR PVC PIPE.
4. A BASE OF 2" AGGREGATE SHOULD BE PLACED IN THE PIT TO A DEPTH OF 12", AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHOULD BE BACKFILLED WITH 2" AGGREGATE.
5. THE STANDPIPE SHOULD EXTEND 12" TO 18" ABOVE THE LIP OF THE PIT.
6. IF DISCHARGE IS TO BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, THE STANDPIPE SHOULD BE WRAPPED WITH FILTERCLOTH BEFORE INSTALLATION. IF DESIRED, 1/4" TO 1/2" HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE PRIOR TO ATTACHING THE FILTERCLOTH.
7. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ADEQUATE MEASURES ARE EMPLOYED AT THE DISCHARGE POINT TO PROTECT AGAINST EROSION. ALL WORK REQUIRED TO INSTALL, MAINTAIN DURING OPERATION AND REMOVE ARE INCLUDED IN THE UNIT BID PRICE FOR ITEM 209.15200009. WORK INCLUDES BUT IS NOT LIMITED TO ANY ADJUSTMENTS AOE TO ENHANCE PERFORMANCE AND REDUCE TURBIDITY OF DISCHARGE AND PROTECT THE DISCHARGE POINT FROM EROSION, HOWEVER, SEPARATE PAYMENT WILL BE MADE WHEN THE USE OF A GEOTEXTILE FABRIC SEDIMENT COLLECTION BAG (ITEM 209.11000001) IS DEEMED NECESSARY BY THE ENGINEER.



CHECK DAM, STONE- PERMANENT
ITEM 209.1106
NTS

PERMANENT STONE CHECK DAM NOTES

1. PERMANENT CHECK DAMS ARE TO BE INSTALLED IN EXISTING ERODED DITCH LINE.
2. EXACT LOCATION AND SPACING OF CHECK DAMS TO BE DETERMINED IN THE FIELD AND APPROVED BY THE EIC.



ROLLED EROSION CONTROL PRODUCT, CLASS II, TYPE B - INTERMEDIATE
ITEM 209.190201
NTS

NOTES:

1. PREPARE THE SOIL SURFACE INCLUDING RAKING, SEEDING AND FERTILIZING.
2. BEGIN THE INSTALLATION PROCESS BY DIGGING A TRENCH 6" DEEP BY 6" DEEP WIDE AT THE TOP OF BLANKET OVER THE UP-SLOPE PORTION OF THE TRENCH. SECURE THE BLANKET AT THE BOTTOM OF THE TRENCH WITH STAPLES PLACED 12" APART. BACKFILL AND COMPACT THE TRENCH. APPLY SEED AND FOLD THE REMAINING 12" OF BLANKET OVER THE SOIL, SECURE WITH A ROW OF STAPLES PLACED 12" APART ACROSS THE WIDTH OF THE BLANKET. (SEE DIAGRAM A).
3. ROLL THE BLANKET VERTICALLY DOWN THE SLOPE. SECURE USING THE APPROPRIATE STAPLE PATTERN AS RECOMMENDED BY THE MANUFACTURER.
4. PARALLEL BLANKETS MUST BE OVERLAPPED BY A MINIMUM 4" AND SECURED WITH A ROW OF STAPLES PLACED APPROXIMATELY 3' -0" APART (SEE DIAGRAM B).
5. ADDITIONAL VERTICAL BLANKETS CAN BE JOINED USING A MINIMUM 4" OVERLAPPING (SHINGLE STYLE) IN THE DIRECTION OF WATER FLOW. CONNECT THE BLANKETS BY USING STAPLES APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET (SEE DIAGRAM C).
6. FOR MAXIMUM PERFORMANCE A CHECK SLOT SHOULD BE PLACED AT 25' - 40' INTERVALS. A 6" X 6" WIDE TRENCH IS MADE. THE BLANKET IS PLACED AT THE BOTTOM OF THE TRENCH AND COVERED WITH APPROXIMATELY 2" OF SOIL. THE BLANKET IS ROLLED OVER COMPACTED SOIL AND SECURED WITH STAPLES PLACED 4" APART. A SECOND ROW SHOULD BE PLACED 4" BELOW IN A STAGGERED PATTERN. BACKFILL AND COMPACT THE TRENCH. APPLY SEED AND CONTINUE WITH THE GENERAL INSTALLATION (SEE DIAGRAM D).
7. THE END OF THE BLANKET MUST BE SECURED IN A 6" X 6" TRENCH WITH A ROW OF STAPLES PLACED AT 12" INTERVALS (SEE DIAGRAM E).
8. ALL SLOPES STEEPER THAN 3:1 (H:V), OR 33.3% SHALL BE IMMEDIATELY STABILIZED WITH ROLLED EROSION CONTROL PRODUCT (SEE TYPICALS AND DETAILS FOR LOCATIONS). SLOPES THAT ARE 3H:1V WITHIN BIORETENTION PRACTICES WILL ALSO RECEIVE RECP IN ACCORDANCE WITH THIS DETAIL.

MAINTENANCE

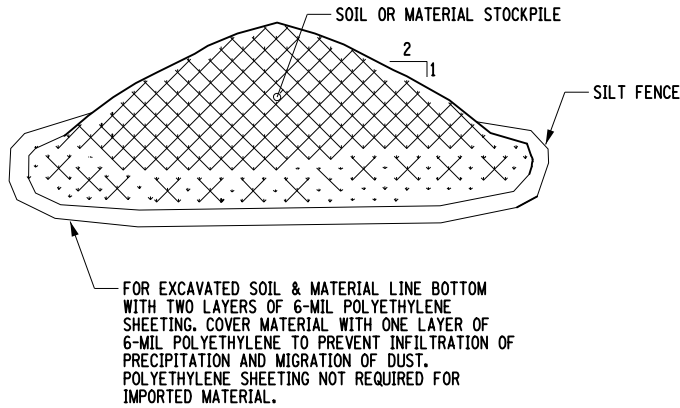
1. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 80% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 2 CALENDAR DAYS. ANY MAINTENANCE PERFORMED TO ENSURE THE PRACTICE FUNCTIONS AS INTENDED WILL BE INCLUDED IN THE UNIT BID PRICE ITEM 209.190201.

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER	
COUNTY: ULSTER	NYSOT REGION: 8				EROSION CONTROL DETAILS	DRAWING NO. ECD-02	
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					HVEA ENGINEERS	BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com	NYC Environmental Protection

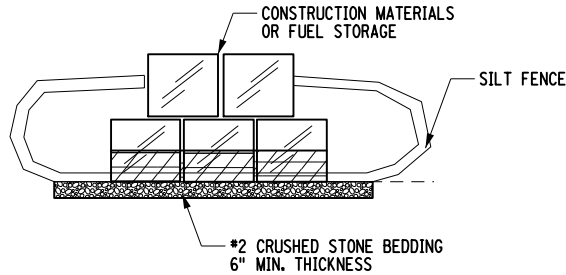
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USER = kta

DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON



EXCAVATED AND IMPORTED SOIL AND MATERIAL STOCKPILE

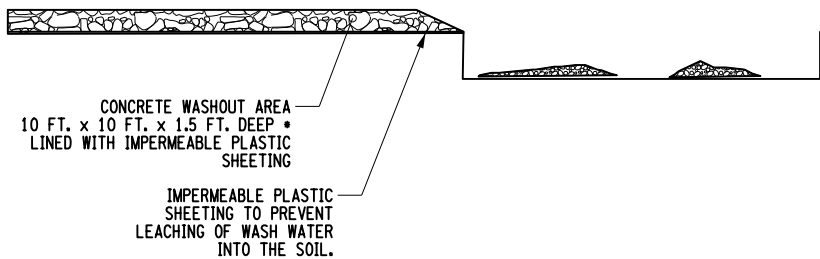
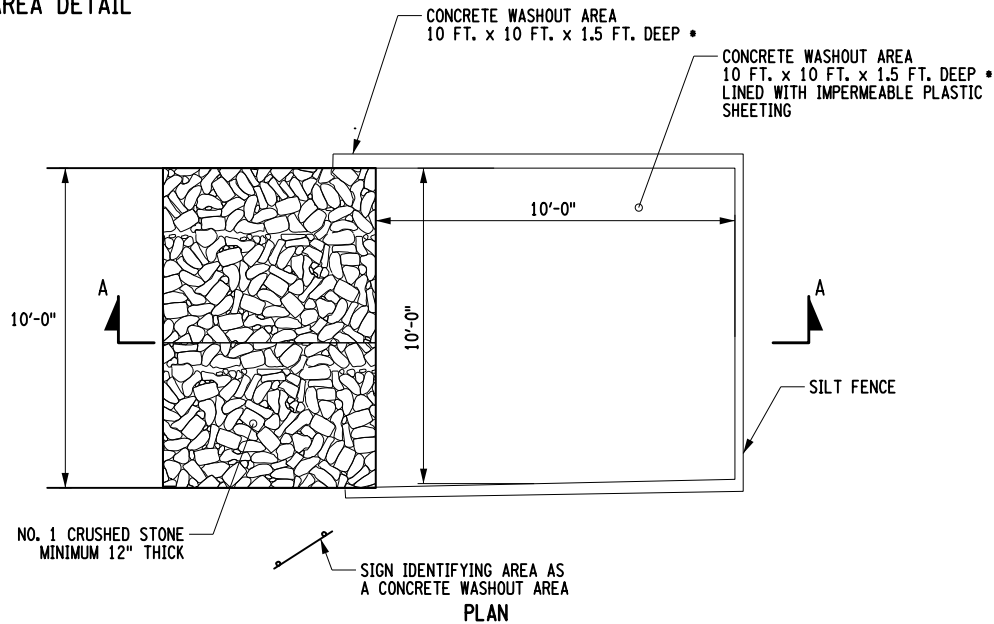
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE. THE AREA SHALL NOT BE WITHIN THE DRIPLINE OR CANOPY OF EXISTING TREES. THE LOCATION SHALL BE AS NOTED ON THE DRAWINGS. DREDGED OR EXCAVATED MATERIALS SHALL BE PLACED UPON SILT FENCE FABRIC.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2(H) TO 1(V).
3. FILTER LOGS SHALL BE PLACED FIVE (5)-FEET DOWNSLOPE OF EACH PILE. UPON COMPLETION OF SOIL STOCKPILING, TOPSOIL SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH IF NOT TO BE DISTURBED/UTILIZED WITHIN FOURTEEN (14) DAYS.



FUEL, EQUIPMENT, OR MATERIAL STORAGE AREA

1. AREA CHOSEN FOR STORAGE OPERATIONS SHALL BE DRY AND STABLE. THE AREA SHALL NOT BE WITHIN THE DRIPLINE OR CANOPY OF TREES. THE LOCATION SHALL BE AS NOTED ON THE DRAWINGS.
2. NO STOCKPILE AREA SHALL BE LOCATED WITHIN FIFTY (50) FEET OF SURFACE WATER, FLOODPLAIN, SLOPE, DRAINAGE FACILITY OR ROADWAY.
3. IF STABLE SURFACE NOT AVAILABLE, THE TOP SIX (6) INCHES OF NATIVE MATERIAL SHALL BE EXCAVATED FROM THE MATERIAL/FUEL STORAGE AREA AND STOCKPILED TO REUSE FOR RESTORATION OF THIS AREA. IN THE AREA EXCAVATED, PLACE SEPARATION FABRIC AND SIX (6) INCHES OF #2 CRUSHED STONE BEDDING, SEE SPECIFICATIONS, IF APPROVED BY THE ENGINEER, USE OF EXISTING GRAVEL AREAS MAY BE USED IN LIEU OF EXCAVATION, STONE, AND FABRIC.
4. FILTER LOGS SHALL BE PLACED FIVE (5) FEET DOWN SLOPE OF STORAGE AREA.
5. REMOVE ALL MATERIALS INCLUDING STONE AND FABRIC WHEN NEED FOR STORAGE IS OVER. RESTORE TO ORIGINAL GRADE WITH STOCKPILED EXCAVATED SOIL (NO FOREIGN DEBRIS).

CONSTRUCTION STOCKPILE/STORAGE AREA DETAIL
NTS



SECTION A-A

CONCRETE WASHOUT AREA
NTS



NOTES:

1. COST FOR CONCRETE WASHOUT AND THE COST TO MAINTAIN THEIR FUNCTION AS INTENDED ARE INCLUDED IN VARIOUS ITEMS FOR CONCRETE.
2. UNDER NO CIRCUMSTANCES SHALL WASH WATER BE ALLOWED TO INFILTRATE INTO THE SOIL. THIS INCLUDES THE WASHING OF TOOLS, MIXERS, CHUTES, AND ANY OTHER SURFACES THAT HAVE BEEN IN CONTACT WITH FRESH CONCRETE.
3. WASH FACILITY SHALL BE LOCATED A MINIMUM OF 100 FT. FROM ANY DRAINAGE STRUCTURE INCLUDING DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS, AND ANY OTHER SURFACE WATERS AND AS APPROVED BY NYCDEP.

MAINTENANCE:

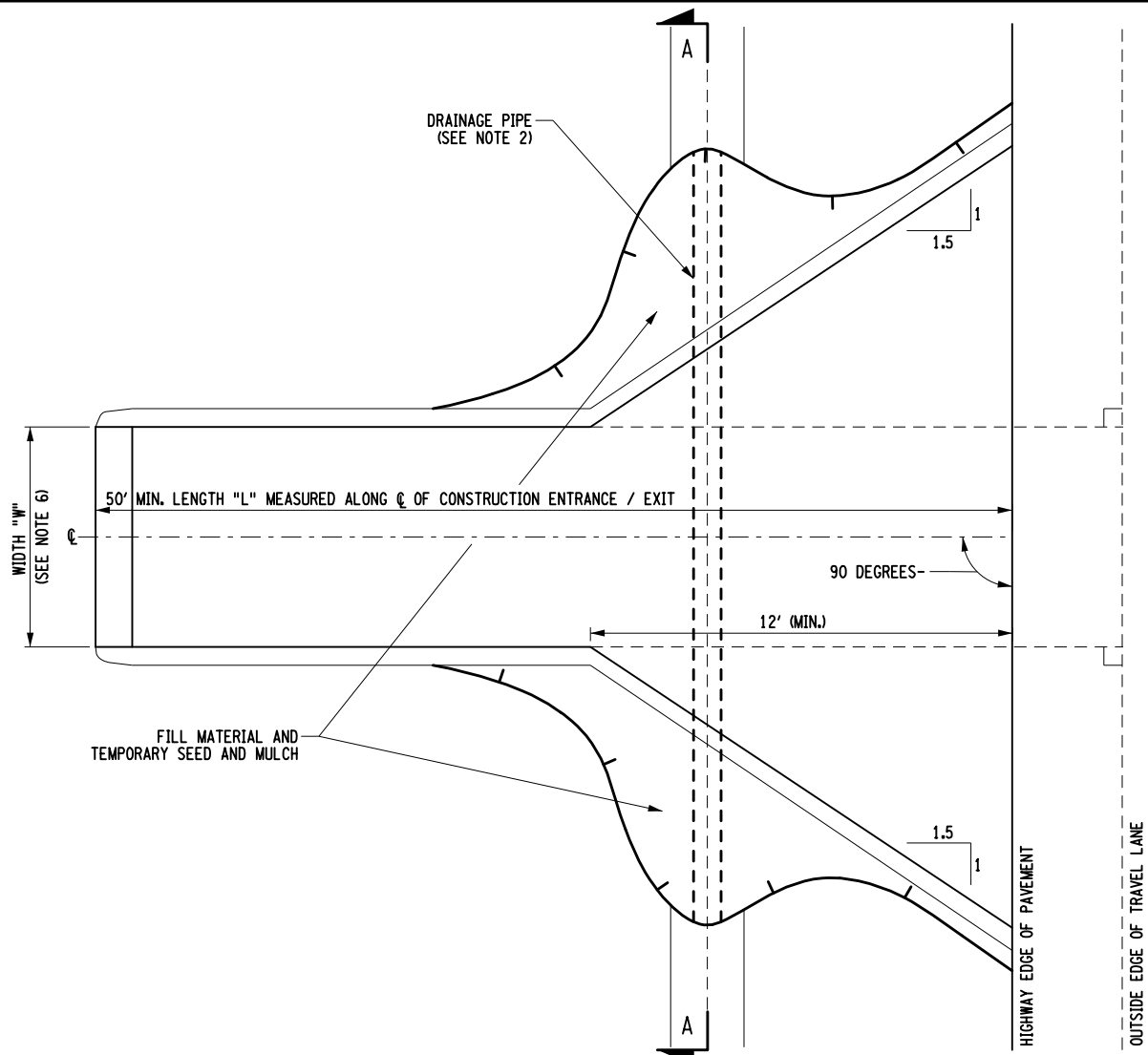
1. ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING FACILITIES SHALL BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. EXCESS RAINWATER THAT HAS ACCUMULATED OVER HARDENED CONCRETE SHOULD BE PUMPED TO A STABILIZED AREA, SUCH AS A GRASS FILTER STRIP OR THE TEMPORARY SEDIMENT BASIN.
2. ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 75% OF THE STORAGE CAPACITY OF THE STRUCTURE IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL AND PROPERLY DISPOSED OF OFFSITE.
3. DISPOSE OF THE HARDENED MATERIAL OFF-SITE IN A CONSTRUCTION/DEMOLITION LANDFILL. ON-SITE DISPOSAL MAY BE ALLOWED IF APPROVED BY THE NYCDEP. IN THAT CASE, THE MATERIAL SHOULD BE DISPOSED OF AS REQUIRED BY THE NYCDEP BUT MUST AT A MINIMUM BE COVERED WITH A MINIMUM OF 2 FEET OF CLEAN COMPACTED EARTH/FILL THAT IS PERMANENTLY STABILIZED TO PREVENT EROSION.
4. THE PLASTIC LINER SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.
5. INSPECT THE PROJECT SITE FREQUENTLY TO ENSURE THAT NO CONCRETE DISCHARGES ARE TAKING PLACE IN NON-DESIGNATED AREAS.

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					EROSION CONTROL DETAILS	DRAWING NO. ECD-03 SHEET NO. 18
	COUNTY: ULSTER NYSOT REGION: 8					
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					<div><div>BEACON, NEW YORK 12508 (845) 638-3000 www.hveapc.com</div></div>	<div></div>

FILE NAME = 8193_oph_ecd_04.dgn
DATE/TIME = 29-May-2019 16:36
USER = K1a

DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON



TYPICAL CONSTRUCTION ENTRANCE / EXIT PLAN
(CUT/DITCH AND FILL SECTIONS)
NTS

APPLICATION NOTES:

THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE/EXIT IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY OR STREETS.

GENERAL NOTES:

MODIFICATIONS MAY BE REQUIRED TO MATCH FIELD CONDITIONS.

PROPOSED DRAINAGE PIPES SHALL BE SIZED WITH SUFFICIENT CAPACITY TO CARRY DITCH FLOWS (12" MIN.). ALTERNATIVE WAYS OF TRANSPORTING DITCH DRAINAGE ACROSS CONSTRUCTION ENTRANCE / EXIT MAY BE PROPOSED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER.

DRAINAGE PIPES OVER 20" DIA. THAT ARE NOT BEHIND A ROADSIDE BARRIER SHALL INCLUDE SAFETY END SECTIONS OR GRATING TO ENSURE TRAVERSABILITY.

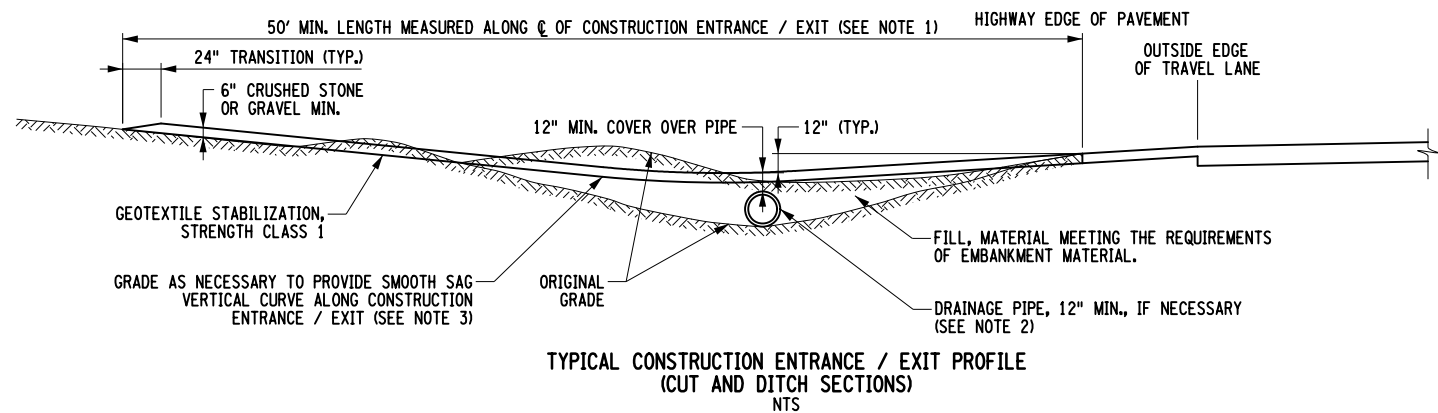
THE CONTRACTOR SHALL GRADE TO PREPARE AND SMOOTH ORIGINAL GROUND, PLACE GEOTEXTILE OVER THE ENTIRE AREA THEN PLACE 6" OF #3 CRUSHED STONE OR GRAVEL ENTRANCE MATERIAL UP TO THE EDGE OF PAVEMENT.

LAYOUT DRIVEWAY OPENING PER TAPER METHOD OF LAYOUT FOR A MINOR COMMERCIAL DRIVEWAY ON STANDARD SHEET 608-03.

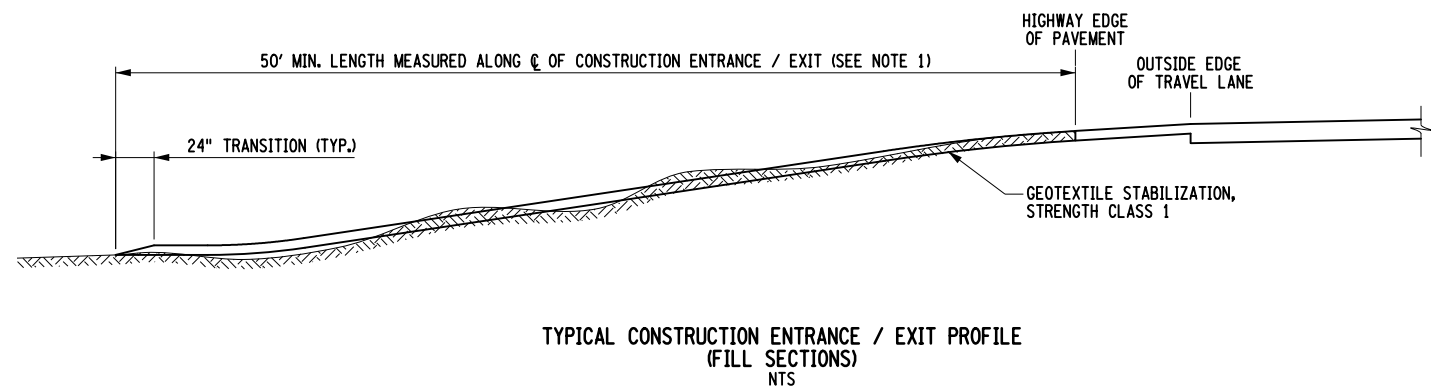
DETERMINE DRIVEWAY WIDTH "W" FROM THE MINOR COMMERCIAL DRIVEWAY CLASSIFICATION OF TABLE 1 ON STANDARD SHEET 608-03.

MAINTENANCE NOTES:

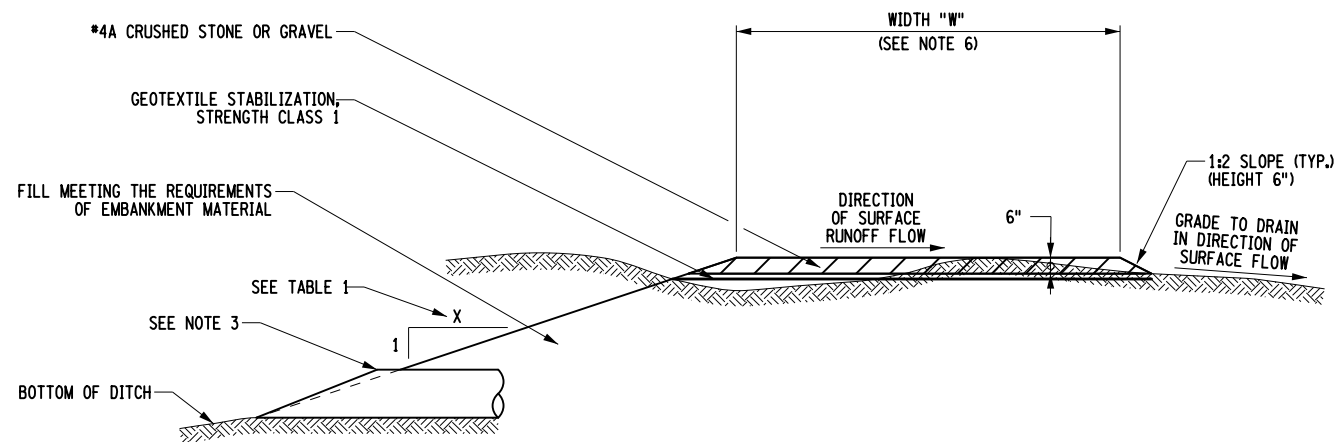
1. THE ACCESS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL AGGREGATE. ALL SEDIMENT SPILLED, DROPPED, OR WASHED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
2. WHEN NECESSARY, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERCOURSES.
3. INSPECT THE CONSTRUCTION ENTRANCE / EXIT AT LEAST WEEKLY FOR SEDIMENT ACCUMULATION WITHIN THE STONE SURFACE AND FOR GENERAL SURFACE CONDITION.
4. COST OF MAINTENANCE WILL BE INCLUDED IN THE UNIT PRICE BID ITEM 209.22.



TYPICAL CONSTRUCTION ENTRANCE / EXIT PROFILE
(CUT AND DITCH SECTIONS)
NTS



TYPICAL CONSTRUCTION ENTRANCE / EXIT PROFILE
(FILL SECTIONS)
NTS

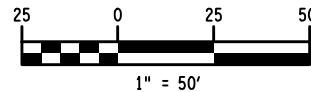


TYPICAL CONSTRUCTION ENTRANCE / EXIT SECTION A - A
NTS

TABLE 1	
X	HIGHWAY SPEED CONDITION
2	ALL SPEEDS - PROTECTED BY BARRIER
3	< 50 MPH
6	≥ 50 MPH

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
COUNTY: ULSTER	NYSOT REGION: 8					
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						
HVEA ENGINEERS BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com						EROSION CONTROL DETAILS DRAWING NO. ECD-04 SHEET NO. 19
NYC Environmental Protection						



1. PRIOR TO BEGINNING WORK THE CONTRACTOR, ALL SUBCONTRACTORS PERFORMING SOIL DISTURBING ACTIVITIES (INCLUDING CONSTRUCTION OF STORMWATER MANAGEMENT PRACTICES, INSTALLATION OF TEMPORARY EROSION CONTROL MEASURES AND ANY SUBCONTRACTORS PERFORMING AND PERMANENT STABILIZATION), ENGINEER-IN-CHARGE, ALL INDIVIDUALS PERFORMING CONSTRUCTION INSPECTION (ALONG WITH THE INDIVIDUAL PERFORMING WEEKLY SPDES INSPECTIONS), THE COUNTY AND NYCDEP PERSONNEL WILL HAVE A PRE-CONSTRUCTION MEETING TO DISCUSS PERMIT REQUIREMENTS, IMPORTANT NATURAL RESOURCES IN THE AREA AND THE SENSITIVE NATURE OF PERFORMING EARTH DISTURBING ACTIVITIES WITHIN THE NYC WATERSHED WILL BE DISCUSSED. THE MAINTENANCE OF THE TEMPORARY EROSION CONTROL MEASURES TO PROTECT ADJACENT RESOURCES IN ACCORDANCE WITH ALL ENVIRONMENTAL PERMITS WILL ALSO BE DISCUSSED. THE ROLE AND RESPONSIBILITY OF ALL PARTIES INVOLVED WILL BE CLEARLY OUTLINED IN ORDER TO PROTECT THESE RESOURCES.
2. CONSTRUCTION SEQUENCING ON THESE PLANS INDICATE THE INTENDED ORDER OF CONSTRUCTION OPERATIONS IN ORDER TO MINIMIZE THE AMOUNT OF DISTURBED AREA AT ANY GIVEN TIME. ORDER OF CONSTRUCTION SHOULD BE PROGRESSED BY THE CONTRACTOR IN A SIMILAR FASHION. IN ACCORDANCE WITH SECTION 107-12 OF THE NYS DOT STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A PROPOSED PLAN OF EROSION AND SEDIMENT CONTROL OPERATIONS TO MATCH THEIR INTENDED SCHEDULE. THE PLAN SHALL INCLUDE A CONSTRUCTION/PROGRESS SCHEDULE SHOWING THE ORDER IN WHICH THE CONTRACTOR PROPOSES TO CARRY ON THE WORK, THE DATE ON WHICH THE WORK WILL START, THE MAJOR ITEMS OF WORK, THE CRITICAL FEATURES AND THE COMPLETION DATE FOR EACH TASK. NO RELATED WORK SHALL BEGIN UNTIL THE EROSION AND SEDIMENT CONTROL PLAN HAS BEEN APPROVED BY THE ENGINEER. AS CONDITIONS CHANGE DURING CONSTRUCTION OR WORK IS NOT PROGRESSED IN ACCORDANCE WITH THE SCHEDULE, THE CONTRACTOR SHALL REGULARLY SUBMIT A PROGRESS SCHEDULE UPDATE IN ACCORDANCE WITH SECTION 108-01 AND AN UPDATED EROSION AND SEDIMENTATION CONTROL PLAN.
3. INSTALL PERIMETER SEDIMENT CONTROL MEASURES ALONG WITH TEMPORARY CONSTRUCTION FENCING SHOWN ON PLANS. INSTALL CONSTRUCTION ENTRANCE/EXIT TO PROJECT LOCATION FROM NYS ROUTE 28.
4. EXCAVATE BIORETENTION BASIN TO APPROXIMATE FINISHED GRADE ELEVATION WITHOUT INSTALLING PLANTING SOIL AND UNDERDRAIN. TEMPORARILY STABILIZE BIORETENTION BASIN. INSTALL DS 1-2 AND OUTLET PIPE. INSTALL OUTLET PROTECTION AT OUTLET OF END SECTION. INSTALL OUTLET CONTROL STRUCTURE WITH TEMPORARY OUTLET CONFIGURATION.
5. INSTALL DS 1-1 IN ACCORDANCE WITH CONTRACT PLANS. INSTALL STONE CHECK DAM AT OUTLET OF DS 1-1 ACROSS ENTIRE FLOW PATH OF BASIN.
6. INSTALL DS 1-5, DS 1-6, AND DS 1-7 ALONG ROUTE 28. CONNECT DS 1-6 OUTLET PIPE TO DS 1-2. INSTALL DS 1-4 AND STORM DRAIN ALONG WITH THE OUTLET PIPE FROM DS 1-4.
7. EXCAVATE SHALLOW WETLAND AND WET SWALE AREAS TO APPROXIMATE FINISHED GRADE. INSTALL DS 1-3 AND STORM DRAIN TO STREAM. TEMPORARILY STABILIZE SHALLOW WETLAND CONSTRUCT SLOPES FROM BIORETENTION BASIN TO ADJACENT ASHOKAN RAILTRAIL AND PERMANENTLY STABILIZE SLOPES BETWEEN THE BIORETENTION BASIN ON ONE SIDE OF THE GRAVEL PATHS AND THE LAND ON THE OTHER SIDE OF THE PATHS AND TRAIL IN ACCORDANCE WITH CONTRACT PLANS.
8. EXCAVATE FOR AND INSTALL SUBBASE FOR ASHOKAN STATION TRAILHEAD AND EXCAVATE FOR AND INSTALL UNDERDRAIN UD-3 AND UD-4.
9. INSTALL SEWER MANHOLE AND SEWER PIPE. INSTALL ELECTRICAL CONDUIT.
10. POUR CONCRETE PAD. INSTALL BENCHES AND AMENITIES.
11. EXCAVATE/INSTALL BIORETENTION UNDERDRAIN UD-1 AND UD-2, SOIL PLANTING MATERIAL AND DS 1-2. INSTALL PLANTINGS AND MULCH FOR BIORETENTION. INSTALL STONE DIAPHRAGM, TIMBER RAIL FENCE AND GRASS FILTER STRIP BETWEEN PARKING AREA AND BIORETENTION.
12. EXCAVATE/INSTALL SHALLOW WETLAND AND SOIL PLANTING MATERIAL. INSTALL PLANTINGS AND MULCH FOR SHALLOW WETLAND AREA.
13. PERFORM SOIL RESTORATION IN ACCORDANCE WITH THE CONTRACT PLANS. CONFIGURE OUTLET STRUCTURE TO PERMANENT CONDITION. PERMANENTLY STABILIZE WET SWALE AREA.
14. REMOVE CONSTRUCTION ENTRANCE/EXIT TO PROJECT LOCATION FROM NYS ROUTE 28. PLACE ASPHALT TO FINISHED GRADE.
15. PERFORM STRIPING.
16. UPON COMPLETION OF FINAL STABILIZATION (AS DEFINED IN THE GENERAL PERMIT), REMOVE ANY TEMPORARY/PERIMETER SEDIMENT CONTROL MEASURES BY HAND AND THE DISTURBED AREA SHALL BE SEEDED AND MULCHED.
17. CONSTRUCTION SHALL PROGRESS TO COMPLETED CONDITION WITHOUT INTERRUPTION UNTIL FINAL STABILIZATION IS ACHIEVED.

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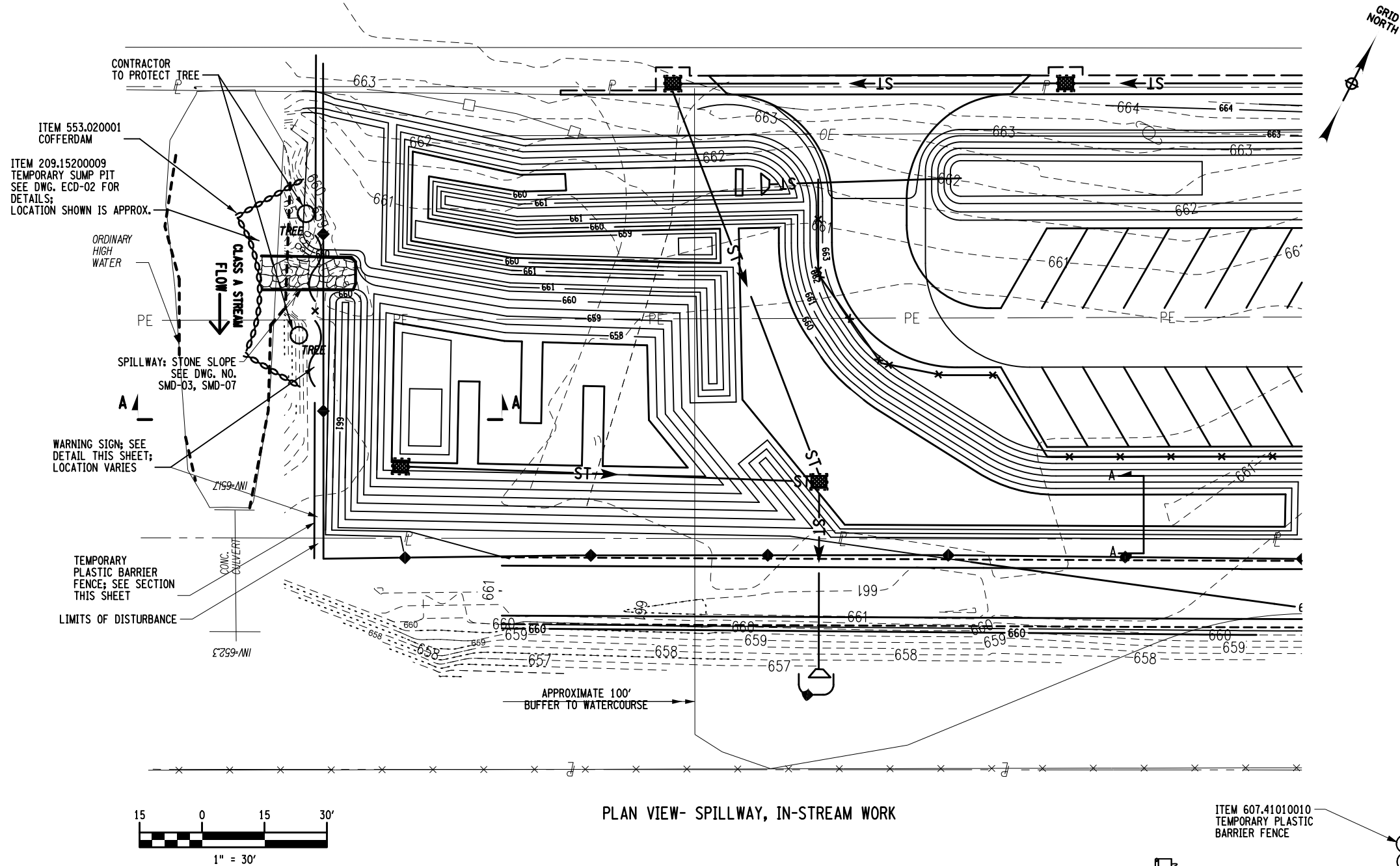
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DATE/TIME = 29-May-2019 16:36
USER = kta

DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON

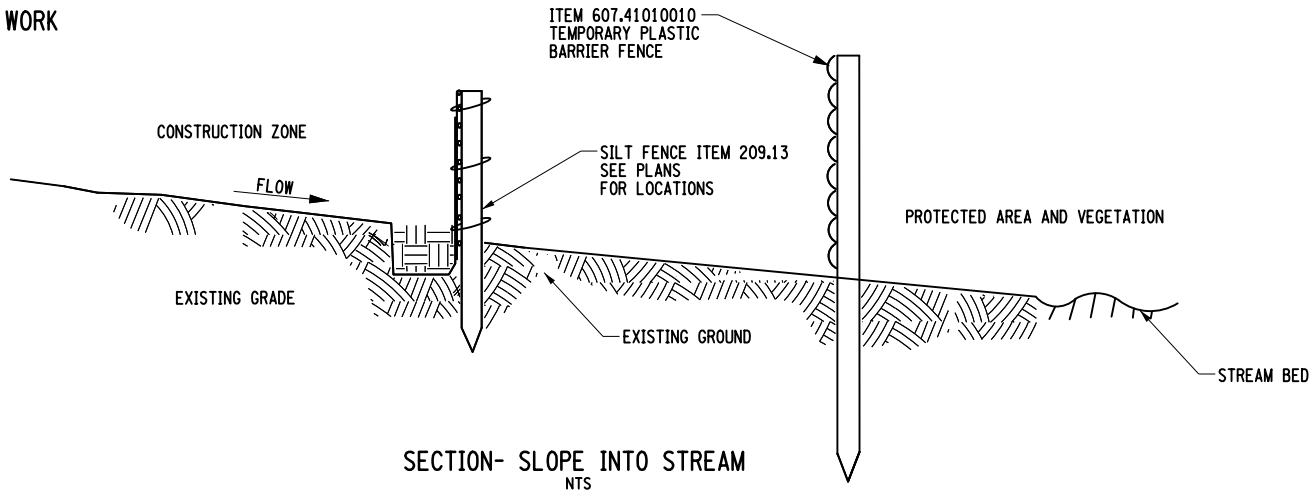
AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	
COUNTY: ULSTER NYSDOT REGION: 8	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



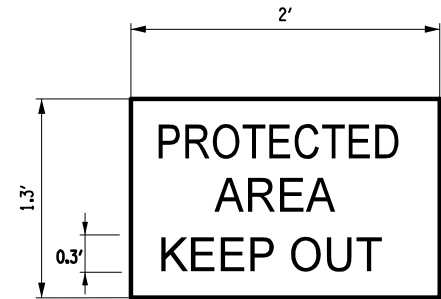
PLAN VIEW- SPILLWAY, IN-STREAM WORK



SECTION- SLOPE INTO STREAM
NTS

NOTES:

1. ALL IN-STREAM WORK TO BE IN COMPLIANCE WITH NYSDEC PERMIT.
2. NO MACHINERY SHALL BE USED WITHIN STREAM, COFFERDAM TO BE PLACED BY HAND.
3. ALL COFFERDAMS WILL BE INSPECTED DAILY TO ASSURE PROPER PERFORMANCE AND STABILITY AS VIBRATION FROM CONSTRUCTION EQUIPMENT CAN CAUSE DISTURBANCE OF STRUCTURES.
4. ANY UNDERMINED OR SETTLED AREAS SHALL BE RESTORED IMMEDIATELY.
5. ANY HOLES, LEAKS, OR TORN AREAS IN THE GEOMEMBRANES OR FABRIC SHALL BE REPAIRED IMMEDIATELY.
6. ANY SHIFTING, MOVEMENT, OR SETTLING OF THE COFFERDAM SHALL BE ADDRESSED IMMEDIATELY TO PROTECT WORKERS IN THE CONSTRUCTION AREA.
7. INSPECT THE INTERIOR DEWATERING SYSTEM AND ENSURE THAT THE SYSTEM IS DISCHARGING CLEAN WATER, OR IS BEING PUMPED TO APPROPRIATE SEDIMENT CONTROL FACILITY PRIOR TO RETURNING TO THE WATER RESOURCE.
8. REPAIR OR REPLACE ANY LOSS OF ROCK RIPRAP OR FILL THAT MAY OCCUR AND ASSURE THE TOP OF THE COFFERDAM IS LEVEL WITHOUT ANY LOW SPOTS DUE TO SETTLING.
9. UPON COMPLETION OF THE CONSTRUCTION WORK, REMOVE ALL EXCESS MATERIAL, ACCUMULATED SEDIMENT AND DEBRIS FROM THE WORK ARE, AND REMOVE THE COFFERDAM IN ACCORDANCE WITH THE SITE STABILIZATION PLAN.
10. SEE SPECIFICATION FOR WARNING SIGN (SIZE, LETTERING, AND MOUNTING INTERVALS).
11. TREE/VEGETATION PROTECTION BARRIER SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS.




WARNING SIGN DETAIL




SECTION A-A PROFILE, STREAM PROTECTION

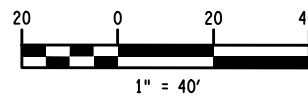
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS: 		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					DEWATERING PLAN	
						SHEET NO. 22
	COUNTY: ULSTER				NYSOT REGION: 8	

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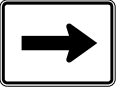





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ITEM 611.0411 (EA) AND 611.0452 (EA) PLANT DECIDUOUS SHRUB; ITEM 611.0211 (EA) AND ITEM 611.0171 (EA) PLANT DECIDUOUS TREE					
LOCATION	ITEM	SIDE	SHEET #	DESCRIPTION	# OF TREES
PLANTING BED NORTH	611.0452	WEST	GNP-01	BOTTLEBRUSH BUCKEYE; AESCULUS PARVIFLORA	2
PLANTING BED NORTH	611.0452	EAST	GNP-01	BOTTLEBRUSH BUCKEYE; AESCULUS PARVIFLORA	3
TOTAL 611.0452:					5
PLANTING BED NORTH	611.0411	EAST	GNP-01	WINTERBERRY; ILEX VERTICILLATA	3
PLANTING BED NORTH	611.0411	WEST	GNP-01	WINTERBERRY; ILEX VERTICILLATA	2
TOTAL 611.0411:					5

AFFIX SEAL: ON:		ALTERED BY: ON:							
		AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:			PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
								LANDSCAPE TABLE	DRAWING NO. LT-01
									SHEET NO. 24
				COUNTY: ULSTER		NYS DOT REGION: 8			
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.									
						BEACON, NEW YORK 12508 (845) 638-3000 www.hvesapc.com			



SIGN INSTALLATION TABLE					
DESIGNATION & COLOR (SEE NOTE 2)	LOCATION	TEXT	ITEM	SIZE	PAYMENT AREA (SEE NOTE 3)
				AREA (SEE NOTE 3)	TOTAL PAYMENT AREA
RS-068 (BROWN)	1-1; 1-2; 1-3; 1-4		645.5102	24" X 24"	4.0 SF
				4.0 SF	16.0 SF
M6-1R (BROWN)	1-1		645.5102	21"x15"	2.2 SF
				2.2 SF	2.2 SF
M6-1L (BROWN)	1-2		645.5102	21"x15"	2.2 SF
				2.2 SF	2.2 SF
M5-1L (BROWN)	1-3		645.5102	21"x15"	2.2 SF
				2.2 SF	2.2 SF
M5-1R (BROWN)	1-4		645.5102	21"x15"	2.2 SF
				2.2 SF	2.2 SF
R5-1	1-5; 1-15		645.5202	30" X 30"	6.3 SF
				6.3 SF	18.9 SF
R1-1	1-25		645.5202	30" X 30"	6.3 SF
				5.0 SF	6.3 SF

SIGN INSTALLATION TABLE					
DESIGNATION & COLOR (SEE NOTE 2)	LOCATION	TEXT	ITEM	SIZE	PAYMENT AREA (SEE NOTE 3)
				AREA (SEE NOTE 3)	TOTAL PAYMENT AREA
NYP1-7	1-6; 1-8; 1-11; 1-13		645.5102	12" x 18"	1.5 SF
				1.5 SF	6.0 SF
R7-8	1-7; 1-9; 1-10; 1-12		645.5102	12" x 18"	1.5 SF
				1.5 SF	6.0 SF
R7 8P	1-7; 1-9; 1-10; 1-12		645.5102	18" x 9"	1.2 SF
				1.2 SF	4.8 SF
R6-1L	1-14; 1-15		645.5102	36" X 12"	3.0 SF
				3.0 SF	6.0 SF
R6-1R	1-14; 1-15		645.5102	36" X 12"	3.0 SF
				3.0 SF	6.0 SF
CUSTOM	1-16; 1-17; 1-18; 1-19; 1-20	NYCDEP PERMIT HOLDER PARKING		SIGN TO BE PROVIDED BY NYCDEP	
CUSTOM	1-21, 1-22; 1-23	Recreation by Permit		SIGN TO BE PROVIDED BY NYCDEP	
CUSTOM	1-24	Gate E-5		SIGN TO BE PROVIDED BY NYCDEP	

NOTES:

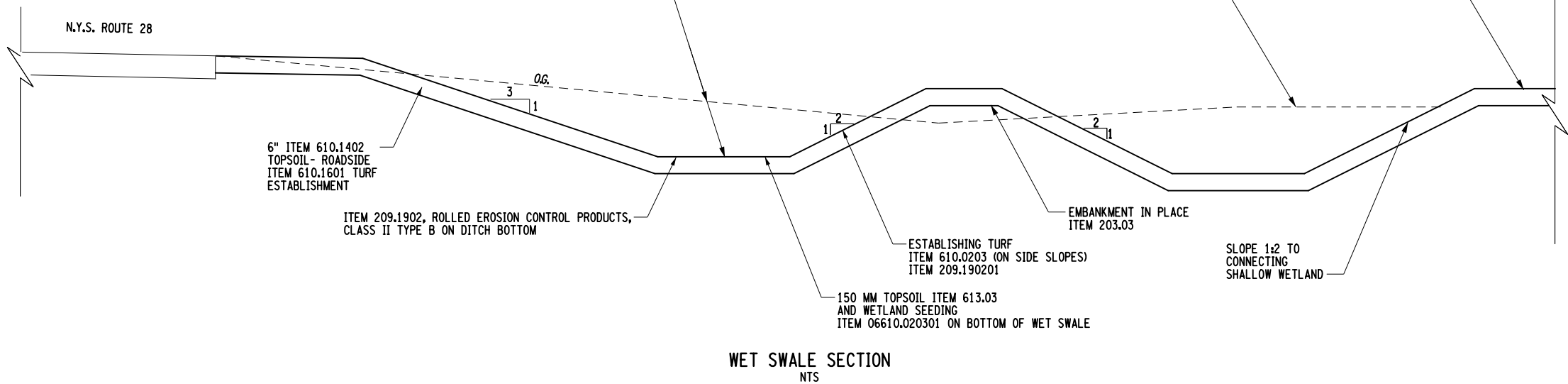
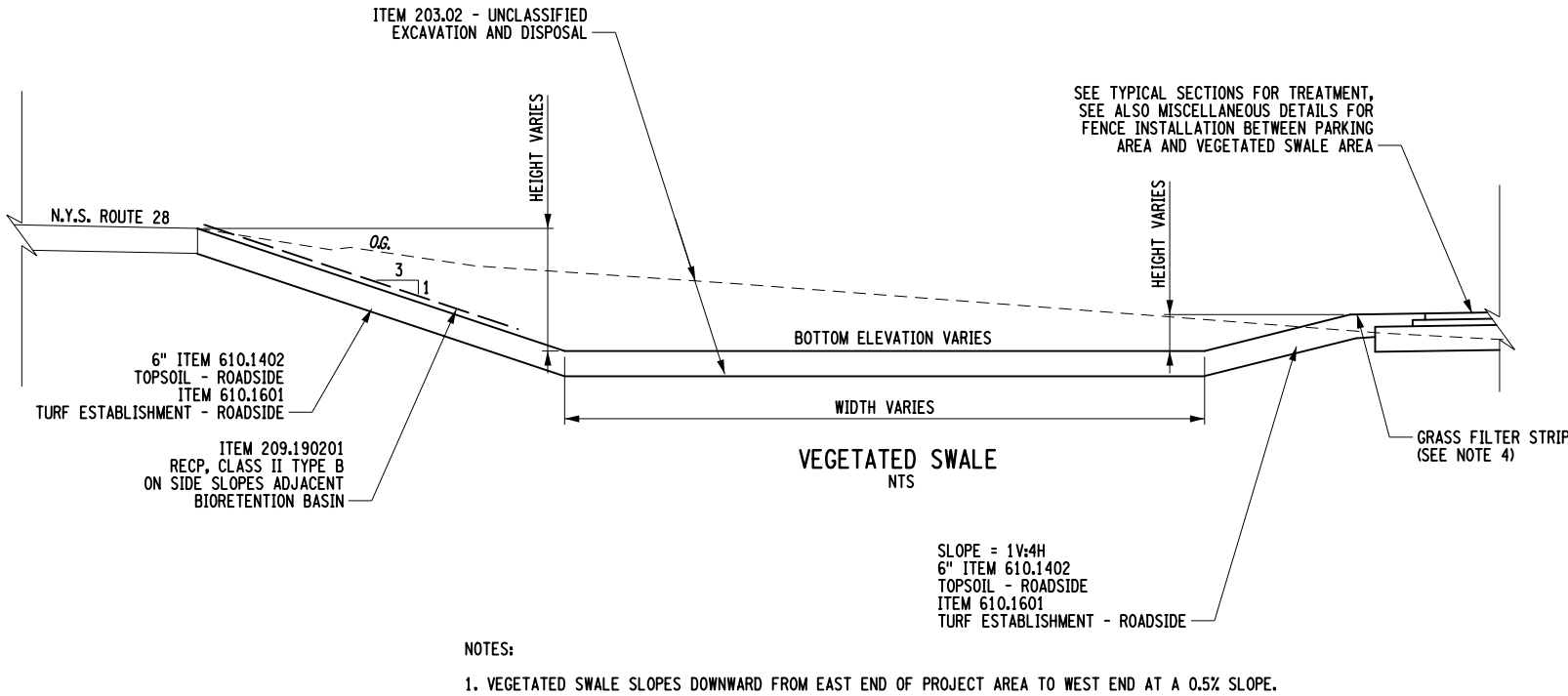
- SIGN LOCATIONS AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL INSTALL NEW SIGNS AND RELOCATE EXISTING SIGNS IN ACCORDANCE WITH THE MUTCD AND NYS SUPPLEMENT.
- THE COLOR IS ONLY SHOWN WHEN THERE IS AN OPTION THAT MUST BE SPECIFIED.
- THE AREA AND PAYMENT AREA FOR SIGNS ARE FROM THE APPLICABLE STANDARD SHEETS OR SIGN FACE LAYOUT.
- FOR SIGNS THAT ARE TO BE PROVIDED BY NYCDEP, THE CONTRACTOR SHALL COORDINATE WITH NYCDEP FOR PRODUCTION OF SIGN FACES.

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					SIGN TABLE	DRAWING NO. SGT-01
						SHEET NO. 25
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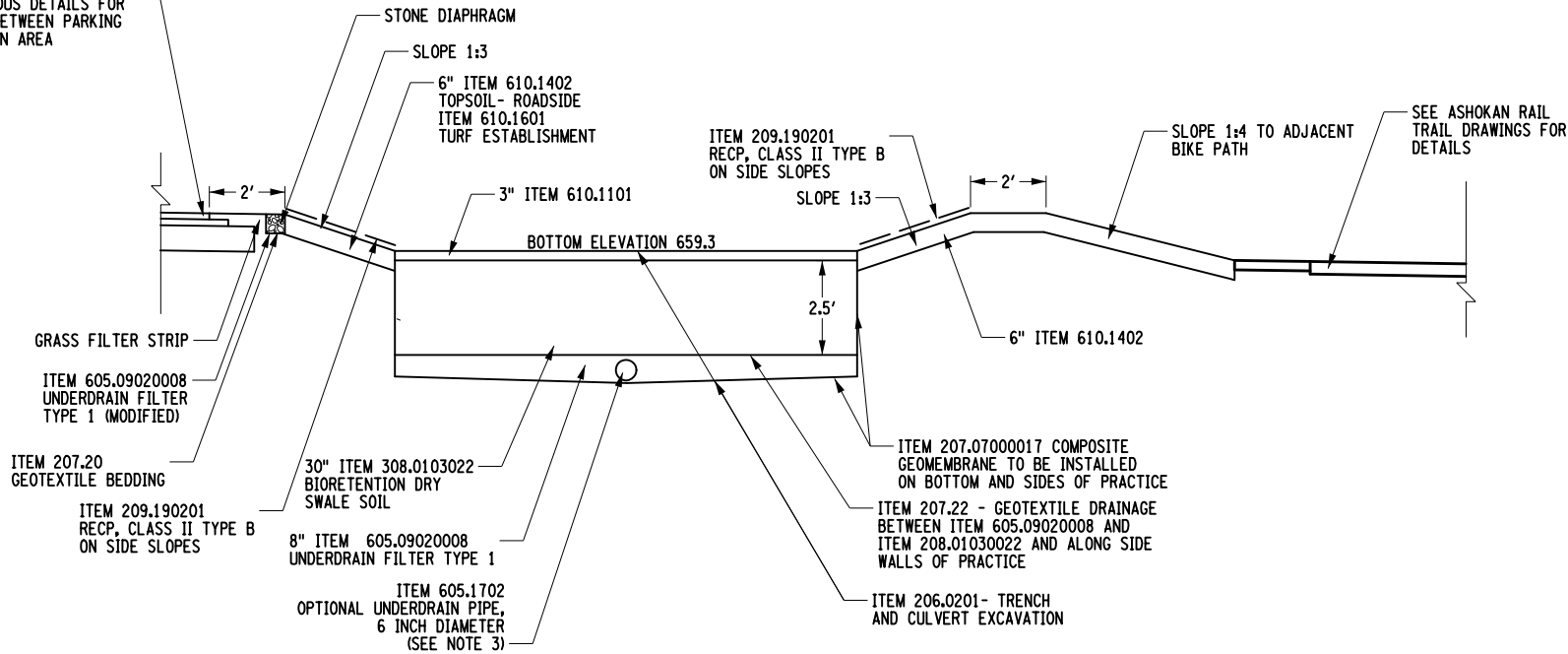


MAINTENANCE PLAN FOR STORMWATER MANAGEMENT PRACTICES		
FACILITIES TO BE MAINTAINED	MAINTENANCE REQUIREMENTS	ENTITY RESPONSIBLE FOR MAINTENANCE
BIORETENTION BASIN	<div>1. MOW FILTER STRIP AT LEAST TWICE A YEAR. ENSURE RUNOFF ENTERS BIORETENTION PRACTICE VIA SHEET FLOW AND EASILY ENTERS PRACTICE WITHOUT GETTING CONCENTRATED. CLEAR EDGE OF PAVEMENT AND ENTIRE WIDTH OF GRASS FILTER STRIP OF ANY GRIT, GRASS CLIPPINGS OR DEBRIS THAT MAY BE PREVENTING CLEAR PATHWAY FOR SHEET FLOW FROM THE PARKING AREA. SPARSELY VEGETATED AREAS SHOULD BE RESEEDED. RILLING MAY REQUIRE TOPSOIL PLACEMENT ALONG WITH RE-SEEDING AND TEMPORARY STABILIZATION UNTIL VEGETATION IS ESTABLISHED.</div> <div>2. REMOVE SEDIMENT BUILD UP WITHIN THE BOTTOM OF THE PRACTICE WHEN 10% OF THE STORAGE VOLUME HAS BEEN EXCEEDED. REMOVE TRASH OR OTHER DEBRIS ACCUMULATING IN THE PRACTICE AT LEAST ANNUALLY.</div> <div>3. VEGETATION WITHIN THE PRACTICE REQUIRES REGULAR MAINTENANCE: PULLING WEEDS, REMOVING DEAD AND DISEASED PLANTS, ADDING/REPLACING PLANTS TO FILL IN AREAS THAT ARE NOT WELL VEGETATED. THE OWNER SHOULD BE FAMILIAR WITH THE PLANTS THAT HAVE BEEN INITIALLY PLANTED. ANY PLANTS OR WEEDS THAT ARE NOT PART OF THE PLANTING PLAN SHOULD BE ELIMINATED, PREFERABLY BY HAND PULLING. ANY REPLACEMENT PLANTS SHOULD BE NATIVE. REFER TO TABLE H.5 IN APPENDIX H OF THE NYSDEC STORMWATER MANAGEMENT DESIGN MANUAL FOR A LISTING OF NATIVE PLANTS FOR STORMWATER MANAGEMENT AREAS. VEGETATION THAT WAS INTENDED TO BE PRESENT SHOULD BE PRUNED AND THINNED IN ACCORDANCE DOCUMENT NA-FR-01-95 FROM THE USDA FOREST SERVICE. THIS DOCUMENT IS ATTACHED IN THE SWPPP.</div> <div>4. MULCH SHOULD APPLIED TWICE PER YEAR (IF NECESSARY, BUT AT LEAST ANNUALLY) IN THE LATE SPRING AND DURING LEAF FALL. ADD OR REMOVE AS REQUIRED TO MAINTAIN APPROXIMATELY 3" DEEP LAYER OF MULCH. MULCH LAYER AROUND STEMS OR TREE TRUNKS SHOULD BE INSPECTED. MULCH SHOULD NOT BE PLACED WITHIN SEVERAL INCHES OF THE STEMS OR TREE TRUNKS TO EXPOSE THE BASE OF THE TRUNK.</div> <div>5. STONE DIAPHRAGM SHOULD BE INSPECTED ANNUALLY AND REPLACED AS NEEDED. REPLACEMENT OF STONE WILL BE REQUIRED WHEN VOIDS WITHIN THE STONE BECOME FILLED WITH SEDIMENT.</div> <div>6. OUTLET STRUCTURE AND OUTLET PIPE SHOULD BE INSPECTED ANNUALLY FOR BLOCKAGES. ANY BLOCKAGES SHOULD BE REMOVED IMMEDIATELY.</div> <div>7. CHECK FOR EVIDENCE OF STANDING WATER AND ENSURE DEWATERING BETWEEN STORMS MONTHLY.</div>	NYCDEP CONTACT PERSON: CHARLES P. LAING ADDRESS: 71 SMITH AVENUE KINGSTON, NY 12401 PHONE: 845-340-7218 FAX: 845-338-1326 EMAIL: CLAING@DEP.NYC.GOV
OPEN CHANNEL DITCHES GRASSED SWALES	<div>1. INSPECTED ANNUALLY AND/OR AFTER MAJOR STORM EVENT, ANY OBSTRUCTION THAT DECREASES THE CARRYING CAPACITY OF THE DITCH SHOULD BE REMOVED IMMEDIATELY.</div> <div>2. REMOVAL OF SEDIMENT BUILD-UP WITHIN THE BOTTOM OF THE CHANNEL WHEN 25% OF THE ORIGINAL WQV HAS BEEN EXCEEDED.</div> <div>3. PERIODICALLY REMOVE DEBRIS AND LITTER.</div> <div>4. MOW VEGETATION AS REQUIRED DURING THE GROWING SEASON TO MAINTAIN GRASS HEIGHTS IN THE 4" TO 6" RANGE.</div>	NYCDEP CONTACT PERSON: CHARLES P. LAING EMAIL: CLAING@DEP.NYC.GOV
WET SWALES	<div>1. REMOVAL OF SEDIMENT BUILD-UP WITHIN THE BOTTOM OF THE CHANNEL OR FILTER STRIP WHEN 25% OF THE ORIGINAL WQV HAS BEEN EXCEEDED.</div> <div>2. ANNUAL INSPECTION OF THE PEA GRAVEL DIAPHRAGM. STONE SHOULD BE REPLACED AS NECESSARY IF SEDIMENT FILLS THE VOIDS IN THE STONE.</div>	NYCDEP CONTACT PERSON: CHARLES P. LAING EMAIL: CLAING@DEP.NYC.GOV
SHALLOW WETLAND	<div>1. INSPECTED BIANNUALLY AND/OR AFTER MAJOR STORM EVENT.</div> <div>2. SEDIMENT REMOVAL FROM FOREBAY EVERY FIVE TO SIX YEARS OR WHEN 50% FULL.</div> <div>3. SEDIMENT SHOULD BE REMOVED WHEN 10% OF THE POND CAPACITY IS LOST.</div> <div>4. PERIODICALLY REMOVE DEBRIS AND LITTER.</div> <div>5. MOW AT LEAST ANNUALLY, PREFERABLY AFTER AUGUST.</div> <div>6. INLET AND OUTLET STRUCTURES SHOULD BE REPLACED AS NECESSARY.</div>	NYCDEP CONTACT PERSON: CHARLES P. LAING EMAIL: CLAING@DEP.NYC.GOV



AFFIX SEAL: ON:	ALTERED BY: ON:																				
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	<table><tr><td></td><td>PIN</td><td>BRIDGES</td><td>CULVERTS</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>COUNTY: ULSTER</td><td>NYSOT REGION: 8</td><td></td><td></td></tr></table>		PIN	BRIDGES	CULVERTS													COUNTY: ULSTER	NYSOT REGION: 8		
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.																					
STORMWATER MANAGEMENT DETAILS																					
ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED																					
CONTRACT NUMBER																					
DRAWING NO. SMD-01																					
SHEET NO. 27																					
<div><div>HVEA ENGINEERS</div><div>BEACON, NEW YORK 12508 (845) 638-3600 www.hveapc.com</div><div>NYC Environmental Protection</div></div>																					

SEE TYPICAL SECTIONS FOR TREATMENT,
SEE ALSO MISCELLANEOUS DETAILS FOR
FENCE INSTALLATION BETWEEN PARKING
AREA AND BIORETENTION AREA



SECTION A-A
BIORETENTION BASIN

BIORETENTION BASIN TABLE OF PLANTINGS						
ITEM #	COMMON/BOTANICAL NAME	PLANT SIZE	ROOT TYPE	BALL SIZE	QUANTITY	NOTE
	MINOR DECIDUOUS TREES					
611.0211	RED SUNSET MAPLE, ACER RUBRUM "FRANKSRED"	1.5 INCH CAL	BALL AND BURLAP	3 FT DIAM	8	PLANT IN CLUMP FORM
611.0211	HERITAGE BIRCH, BETULA NIGRA "CULLY"	1.25 INCH CAL	BALL AND BURLAP	3 FT DIAM	8	
611.0211	PIN OAK, QUERCUS PALUSTRIS	1.25 INCH CAL	BALL AND BURLAP	3 FT DIAM	9	
	DECIDUOUS SHRUBS					
611.0411	WINTERBERRY, ILEX VERTICILLATA		CONTAINER GROWN	* 3 CONTAINER	14	
611.0411	ELDERBERRY, SAMBUCUS CANADENSIS		CONTAINER GROWN	* 3 CONTAINER	14	
611.0411	ARROWWOOD VIBURNUM, VIBURNUM DENTATUM		CONTAINER GROWN	* 3 CONTAINER	14	
611.0411	SILKY DOGWOOD, CORNUS AMOMIUM		CONTAINER GROWN	* 3 CONTAINER	14	
	HERBACEOUS PLANTS					
611.0711	CARDINAL FLOWER, LOBELIA CARDINALIS		CONTAINER GROWN	* 1 CONTAINER	191	
611.0711	MARSH HIBISCUS, HIBISCUS MOSCHEUTOS		CONTAINER GROWN	* 1 CONTAINER	192	
611.0711	PICKERELWEED, PONTDERIA CORDATA		CONTAINER GROWN	* 1 CONTAINER	192	

NOTE:

1. PRIOR TO PLANTING, THE CONTRACTOR SHALL PROVIDE LAYOUT TO BE APPROVED BY THE ENGINEER.
2. PLANTING SHALL ONLY BE ALLOWED DURING SEASONS INDICATED ON TABLE 611-1 OF THE NYSDOT STANDARD SPECIFICATION OR AOE ON RECOMMENDATION FROM THE NURSERY FOR ANY SPECIFIC PLANTING TO PROVIDE HIGHEST SURVIVAL RATE.
3. SEE DWG. NO. SMD-4 TO SMD-6 FOR MORE DETAIL ON PLANTINGS.

ITEM		DESCRIPTION	UNIT	NOTES:	NOTES:									
203.02		UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	1. MULCH SHALL MEET THE REQUIREMENTS OF SECTION 713-05 OF THE NYSDOT SPECIFICATIONS AND SHALL ALSO BE STANDARD LANDSCAPE STYLE, SINGLE OR DOUBLE, SHREDDED HARDWOOD MULCH OR CHIPS. THE MULCH LAYER SHALL ALSO BE WELL AGED (STOCKPILED OR STORED FOR AT LEAST 12 MONTHS), UNIFORM IN COLOR, AND FREE OF OTHER MATERIALS, SUCH AS WEED SEEDS, SOIL, ROOTS, ETC.. MULCH SHALL BE APPLIED TO A DEPTH OF THREE INCHES. GRASS CLIPPINGS SHOULD NOT BE USED AS THE MULCH LAYER. 2. BIORETENTION AND DRY SWALE SOIL SHALL MEET THE MATERIAL REQUIREMENTS LISTED IN THE SPECIFICATION. THE SOIL SHALL BE FREE OF STONES, STUMPS, ROOTS, BRUSH, SEEDS FROM NOXIOUS WEEDS OR OTHER WOODY MATERIAL OVER 1" DIAMETER. PLACEMENT OF BIORETENTION AND DRY SWALE SOIL SHALL BE DONE IN LIFTS OF 12 INCHES TO 18 INCHES. THE SOIL SHALL BE LOOSELY COMPACTED, SUCH AS BY TAMPING LIGHTLY WITH A DOZER OR BACKHOE BUCKET. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE BIORETENTION AREA AND DRY SWALE SOIL THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO PLANTING OR MAINTENANCE OPERATIONS. 3. INSTALL UNDERDRAIN PIPE ALONG APPROXIMATE CENTERLINE OF BIORETENTION PRACTICE. STONE SHOULD BE PLACED TO A DEPTH OF 8" ALONG UNDERDRAIN PIPE. STONE SHOULD BE PLACED TO A DEPTH OF 6" ALONG EDGES TO CHANNELIZE RUNOFF FILTERING THROUGH SOIL MEDIA. 4. MAINTAIN SLOPE OF ADJACENT PARKING AREA THROUGH THE GRASS FILTER TO THE SLOPE BREAK. PLACE TOPSOIL (ITEM 610.1402) TO TOP OF SUBBASE AND ESTABLISH VEGETATION UNDER ITEM 610.1601 BETWEEN STONE DIAPHRAGM AND EDGE OF PAVEMENT. 5. SEE DWG. NO. SMD-1 FOR MAINTENANCE PLAN OF STORMWATER MANAGEMENT PRACTICES. 6. 12" HEIGHT IS FROM BOTTOM OF PRACTICE TO EDGE OF PAVEMENT FINISHED GRADE.				7. COMPOSITE GEOMEMBRANE IMPERMEABLE LINER SHOULD BE INSTALLED ON THE BOTTOM AND SIDE SLOPES OF THE BIORETENTION PRACTICE. COMPOSITE GEOMEMBRANE SHALL BE INSTALLED WITH A MAXIMUM OF ONE FIELD SEAM PARALLEL TO THE LENGTH, IN MINIMUM LENGTHS OF 100 FEET. WHERE THE AREA TO BE COVERED IS 35 FEET OR LESS IN WIDTH, THE COMPOSITE GEOMEMBRANE SHALL BE INSTALLED WITH NO FIELD SEAMS PARALLEL TO THE LENGTH, IN MINIMUM LENGTHS OF 100 FEET.						
206.0201		TRENCH AND CULVERT EXCAVATION	CY											
207.07000017		COMPOSITE GEOMEMBRANE	SF											
207.20		GEOTEXTILE BEDDING	SY											
207.22		GEOTEXTILE DRAINAGE	SY											
208.01030022		BIORETENTION AND DRY SWALE SOIL	CY											
209.190201		RECP, CLASS II TYPE B, INTERMEDIATE	SY											
605.09020008		UNDERDRAIN FILTER TYPE 1 (MODIFIED)	CY											
605.1702		OPTIONAL UNDERDRAIN PIPE, 6 INCH DIAMETER	LF											
610.1101		MULCH FOR PLANTING TYPE A, B & D - WOOD CHIPS AND SHREDDED BARK	CY											
610.1402		TOPSOIL - ROADSIDE	CY											
610.1601		TURF ESTABLISHMENT - ROADSIDE	SY											
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:				PIN		BRIDGES		CULVERTS		ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED		CONTRACT NUMBER		
										STORMWATER MANAGEMENT DETAILS		DRAWING NO. SMD-02		
												SHEET NO. 28		
		COUNTY: ULSTER		NYSDOT REGION: 8										
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JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON

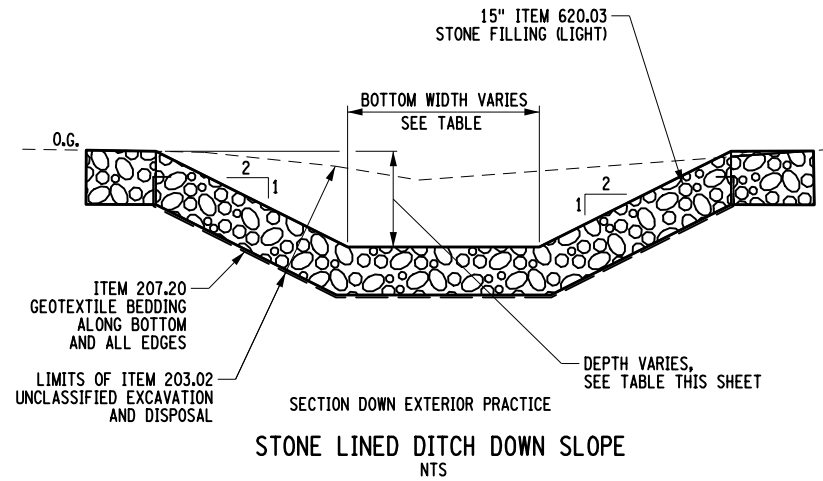
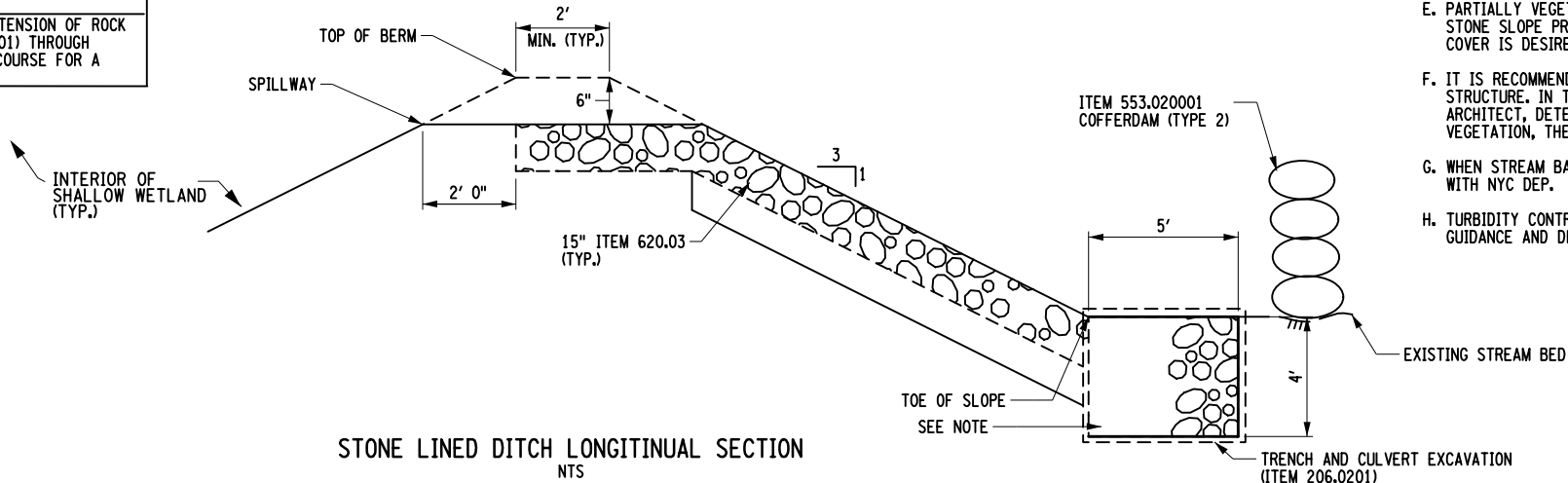
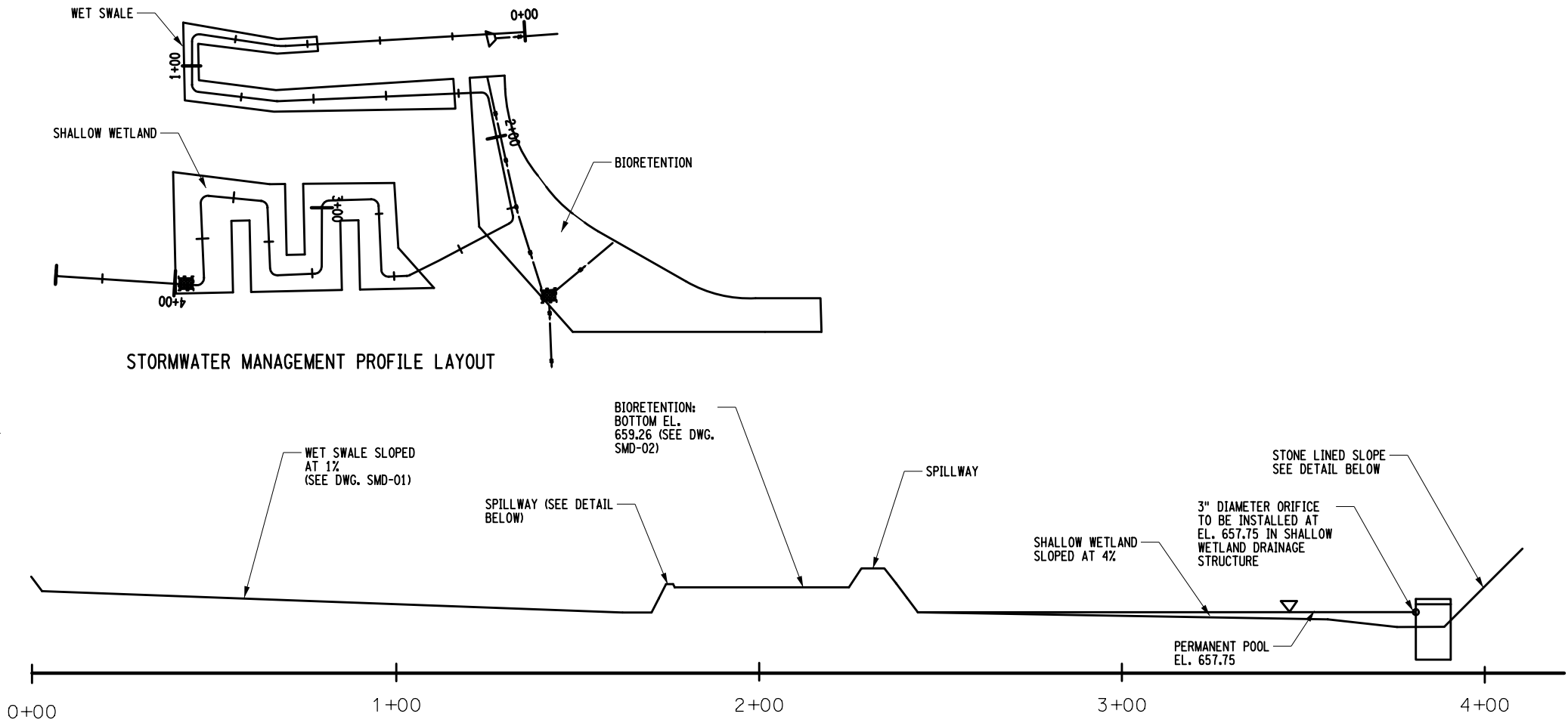




TABLE OF STONE LINED DITCHES			
LOCATION	BOTTOM WIDTH (FT)	DEPTH (FT)	REMARKS
FROM EMERGENCY SPILLWAY OF WET SWALE TO BIORETENTION	3.0	1.0	INSTALL STONE LINED DITCH TO BOTTOM OF SHALLOW WETLAND AND PLACE STONE FOR A LENGTH OF 5' FROM THE TOE OF THE SLOPE LEVEL WITH THE BOTTOM OF THE POND.
FROM EMERGENCY SPILLWAY OF BIORETENTION TO SHALLOW WETLAND	5.0	1.0	INSTALL STONE LINED DITCH TO BOTTOM OF SHALLOW WETLAND AND PLACE STONE FOR A LENGTH OF 5' FROM THE TOE OF THE SLOPE LEVEL WITH THE BOTTOM OF THE WETLAND.
OUTLET DS 1-2	6.0	1.0	INSTALL STONE LINED DITCH AS EXTENSION OF ROCK OUTLET PROTECT (SEE DETAIL DRD-01) THROUGH 100' FOOT BUFFER AREA TO WATERCOURSE FOR A LENGTH OF 15'.
OUTLET DS 1-4	6.0	1.0	INSTALL STONE LINED DITCH AS EXTENSION OF ROCK OUTLET PROTECT (SEE DETAIL DRD-01) THROUGH 100' FOOT BUFFER AREA TO WATERCOURSE FOR A LENGTH OF 15'.



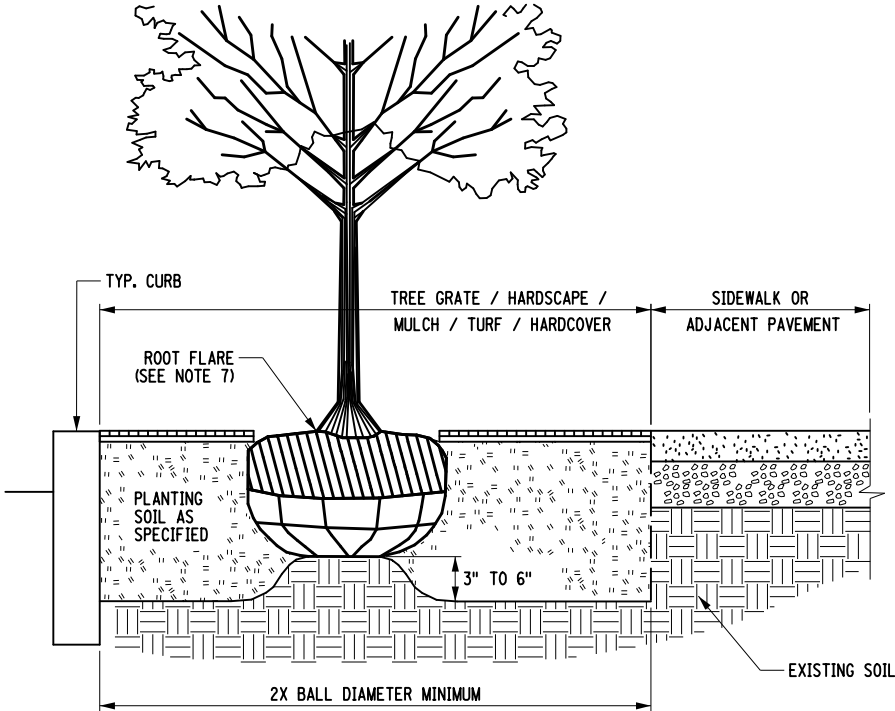
- NOTES:
- TOE OF SLOPE TO BE LABELED IN PLAN VIEW.
 - A STONE FILL ANCHORAGE TRENCH IS REQUIRED WHENEVER STONE FILL IS USED AS STREAM BANK PROTECTION WITH SOIL AT TOE OF SLOPE.
 - THE STONE FILL ANCHORAGE TRENCH SHOULD BE MODIFIED IN SPECIAL CASES BASED ON ANTICIPATED SCOUR CONDITIONS OR ROCK BEING LOCATED AT EXISTING GROUND OR STEAM BED AT THE LOCATION. ANY MODIFICATIONS ARE SUBJECT TO APPROVAL BY NYC DEP.
 - ON SLOPES BENEATH SUPERSTRUCTURES, PLACE SELECT GRANULAR FILL SLOPE PROTECTION (STRUCTURAL) OR OTHER APPROVED MATERIAL FROM UPPER LIMIT OF STREAM BED PROTECTION TO FACE OF SUBSTRUCTURE.
 - PARTIALLY VEGETATED STONE SLOPE PROTECTION DETAIL MAY BE USED INSTEAD OF TYPICAL STONE SLOPE PROTECTION AT THE DESIGNERS OPTION, WHERE GREATER AREA OF VEGETATED COVER IS DESIRED.
 - IT IS RECOMMENDED THAT THE TOP SOIL BE REPLACED BY FINE STONE FILL BENEATH THE STRUCTURE. IN THE EVENT THAT THE DESIGNER, IN CONSULTATION WITH THE LANDSCAPE ARCHITECT, DETERMINES THAT SUFFICIENT SUNLIGHT WILL REACH THE AREA TO SUPPORT VEGETATION, THE SOIL DETAIL MAY BE RETAINED AND SHADE-TOLERANT VEGETATION USED.
 - WHEN STREAM BANK PROTECTION REQUIRES EXTRA HEAVY STONE FILL, COORDINATE DETAILS WITH NYC DEP.
 - TURBIDITY CONTROL MAY BE REQUESTED BY THE REGION TO SATISFY PERMIT CONDITIONS. FOR GUIDANCE AND DETAILS, REFER TO SOIL EROSION AND SEDIMENT CONTROL STANDARD SHEETS.

AFFIX SEAL: ON:	ALTERED BY: ON:

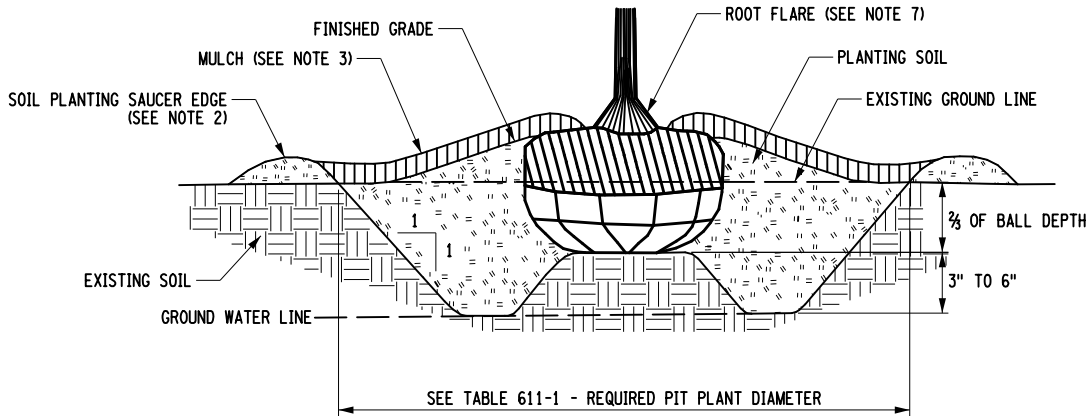
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER	
					STORMWATER MANAGEMENT DETAILS	DRAWING NO. SMD-03 SHEET NO. 29	
		COUNTY: ULSTER	NYSOT REGION: 8				
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 BEACON, NEW YORK 12508 (845) 638-3000 www.hveapc.com							

LANDSCAPE GENERAL NOTES:

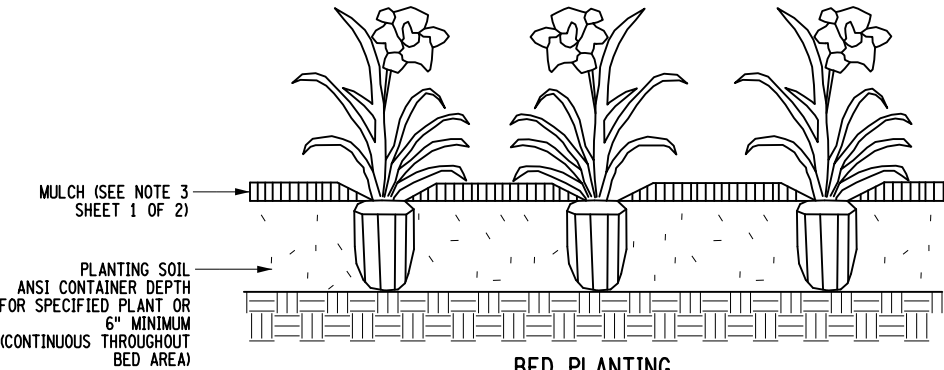
- ESTABLISHING TURF:
1. COMMERCIAL SEED MIX CONTAINING DESIRED SEED SPECIES MAY BE SUBSTITUTED. SEED MAY ALSO BE ADDED TO A COMMERCIAL MIX, BY THE PACKAGER, TO ENSURE THE INCLUSION OF ALL DESIRED SPECIES. SOME MIXES MAY BE APPROVED THAT OMIT A SMALL NUMBER OF SPECIES. HOWEVER, IF ANY SUBSTITUTIONS OR VARIATIONS ARE DESIRED, ALL MIXES MUST BE PRESENTED TO THE LANDSCAPE ARCHITECT, PRIOR TO APPLICATION, FOR APPROVAL OF PERCENTAGES OF THE DIFFERENT SPECIES. VERIFY SEED QUANTITY WITH ENGINEER IN CHARGE PRIOR TO ORDERING.
2. GROUND PREPARATION FOR ESTABLISHING TURF WILL BE METHOD 1 UNLESS OTHERWISE SPECIFIED.
3. FERTILIZER FOR ESTABLISHING TURF WILL BE 10-0-4 UNLESS OTHERWISE SPECIFIED.
- PLANTING OF TREES:
5. PLANTING BALL - ON B&B MATERIAL, BURLAP AND WIRE BASKET OR OTHER CONTAINER SHALL BE REMOVED FROM THE UPPER HALF OF THE ROOT BALL AND DISPOSED OF.
6. HEIGHT OF PLANTING SAUCER SHALL BE 3".
7. MULCH SHALL BE A MAXIMUM OF 3" DEEP AND TAPERED DOWN TO LEAVE THE ROOT FLARE EXPOSED. WHEN PLANTING ON SLOPES, DOWNHILL SIDE MUST BE STABILIZED APPROPRIATELY OR SEEDING ON DOWNHILL SIDE MAY BE SPECIFIED.
8. MATERIALS FOR PROTECTION OF PLANTS SHALL BE A COMMERCIALLY AVAILABLE PRODUCT OR SYSTEM FOR SUPPORTING OF TREES.
9. ALL TAGS, LABELS, ETC. SHALL BE REMOVED FROM THE PLANTS.
10. THE ROOT FLARE SHALL BE VISIBLE AND LEVEL WITH SURROUNDING SOIL.
11. TREES AND SHRUBS SHALL BE PLANTED IN THE FOLLOWING APPROPRIATE SEASONS:
SPRING: DECIDUOUS= MARCH 1 TO APRIL 30
EVERGREEN= MARCH 1 TO APRIL 30
FALL: DECIDUOUS= OCTOBER 1 TO NOVEMBER 30
EVERGREEN= AUGUST 15 TO SEPTEMBER 30
12. ALL BALLED AND BURLAPPED TRESS, REQUIRING THE USE OF MACHINERY FOR HANDLING, SHALL BE LIFTED FROM THE BOTTOM OF THE BALL ONLY. STRAPS OR ROPES ARE NOT TO BE ATTACHED TO THE TIED BALL OR WIRED BASKET FOR LIFTING. ANY TWINE AROUND THE TRUNK OF THE TREE AT THE TOP OF THE BALL IS TO BE BUT AFTER STABILIZING THE BALL WITH BACKFILLING. CONTRACTOR IS TO LEAVE REMOVED WIRE BASKET TOPS NEXT TO EACH TREE THAT HAS BEEN PLANTED UNTIL INSPECTOR HAS APPROVED INSTALLATION.
13. MULCH SHALL BE PLACED AT A DEPTH OF 3 INCHES IN PLANT PITS AND ON PLANTING BEDS WHERE SPECIFIED ON CONTRACT PLANS.
14. ALL PLANT MATERIAL MUST BE INSPECTED FOR VARIETY, SIZE, AND QUALITY PRIOR TO PLANTING. PRE-TAGGING AT THE NURSERY IS AT THE STATES OPTION. WHEN TAGGING IS NOT FEASIBLE, PLANTS DELIVERED FOR ON SITE INSPECTION SHALL BE ARRANGED SO THAT TRUNKS, TOPS AND BRANCHING PATTERN CAN BE INSPECTED AND MEASUREMENTS CAN BE CONVENIENTLY MADE. A 2 BUSINESS DAY NOTICE IS REQUIRED PRIOR TO DELIVERIES TO MAKE ARRANGEMENTS FOR PROPER INSPECTION.
15. TREES SHALL BE STREET TREE QUALITY. THE TREES SHALL HAVE STRAIGHT TRUNKS WITH A MINIMUM DEVIATION FORM THE VERTICAL WHICH IS CHARACTERISTIC OF THE SPECIES, WITH WELL BRANCHED, SYMMETRICAL TOPS, LOWER MOST BRANCHES SHALL BE TRIMMED TO A HEIGHT OF 6 INCHES.
16. CONTAINER GROWN MATERIAL SHALL MEET THE FOLLOWING:
A. CONTAINERS MAY BE USED FOR THIS ITEM. THE SIZE OF THE ROOT BALL FOR PLANTS GROWN IN CONTAINERS MAY BE 25% LESS IN DIAMETER AND DEPTH THAN THAT SPECIFIED FOR B&B PLANTS. DIMENSIONS MAY VARY PROVIDING EQUIVALENT ROOT VOLUME IS MAINTAINED.
B. IN ORDER TO DISRUPT CIRCLING ROOTS, RESULTING FROM PLANTS BEING CONTAINER GROWN, ALL CONTAINER GROWN MATERIAL SHALL HAVE THEIR ROOT BALLS CUT, VERTICALLY, APPROXIMATELY 3 INCHES DEEP, IN 4 PLACES AT 90 DEGREE INTERVALS, EVENLY SPACED.
17. FOR THE FALL PLANTING SEASON, THE FOLLOWING PLANTS SHALL HAVE A MINIMUM 4 INCH INCREASE IN BALL SIZE, AND SHALL BE HARDENED OFF AND DORMANT: QUERCUS VARIETIES.
18. ALL PLANT MATERIAL (TO INCLUDE TREES, SHRUBS, PERENNIALS, GROUNDCOVERS, AND VINES) SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN GOOD, HEALTHY AND FLOURISHING CONDITION FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE.
19. CONTAINER GROWN PLANTS SHALL NOT BE POT-BOUND. PLANTS WITH NUMEROUS ROOTS ENCIRCLING THE PERIMETER OF THE CONTAINER WILL BE REJECTED.
20. SPECIFIED PLANT SIZES ARE MINIMUMS. LARGER SIZES ARE ACCEPTABLE AS LONG AS THE BALL OR POT SIZE MEETS THE MINIMUM SIZE FOR THE PLANT SIZE AS RECOMMENDED IN THE CURRENT EDITION OF AMERICAN STANDARD OF NURSERY STOCK.
21. NO FERTILIZER WILL BE ADDED TO PLANTING SOIL FOR FALL PLANTINGS.
22. MINIMUM CONTAINER VOLUMES SHALL BE AS DEFINED BY THE CURRENT EDITION OF AMERICAN STANDARD FOR NURSERY STOCK.



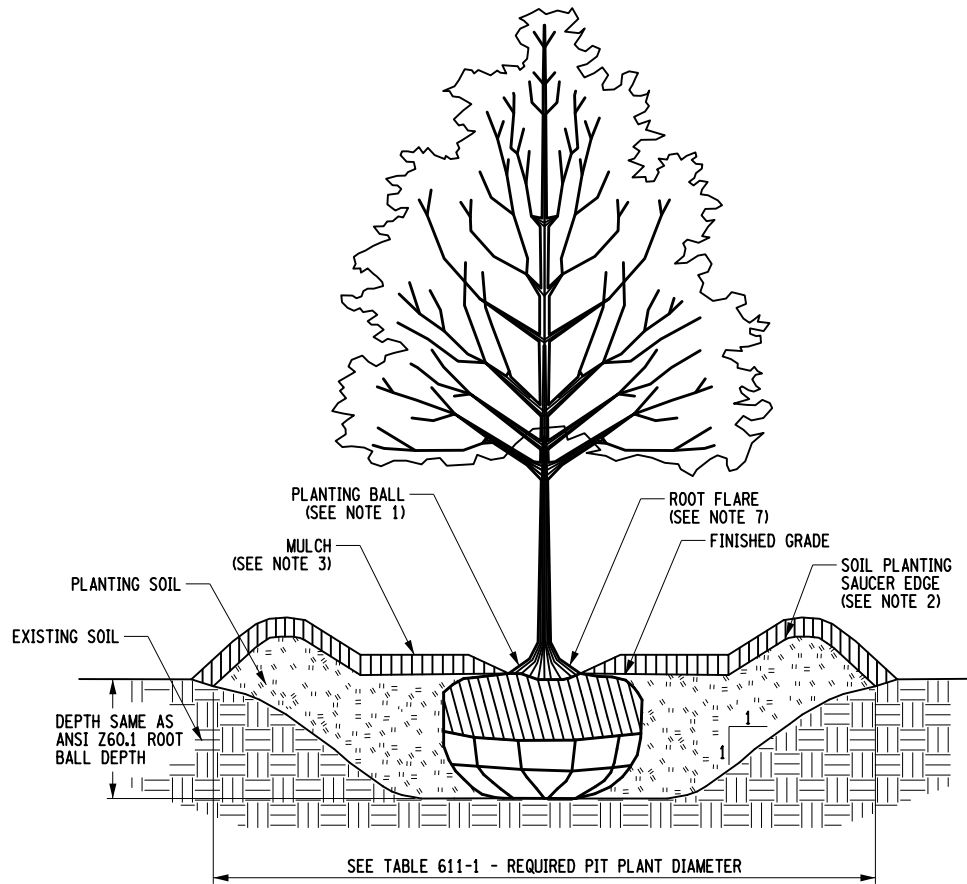
PLANTING NEXT TO PAVEMENT OR CURB
NTS



TREE PLANTING IN HEAVY - CLAY SOILS
NTS

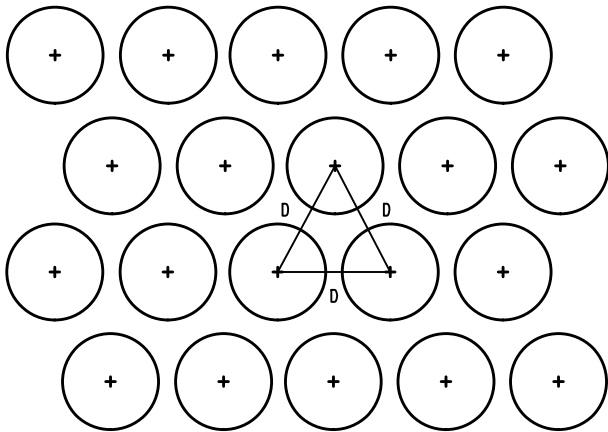


BED PLANTING
NTS



GENERAL TREE PLANTING
NTS

REQUIRED PLANT PIT DIAMETER	
ROOT SPREAD / ROOT BALL DIAMETER	PLANT PIT DIAMETER
UNDER 2'-0"	3X THE ROOT SPREAD OR ROOT BALL DIAMETER
FROM 2'-0" TO 4'-0"	2.5X THE ROOT SPREAD OR ROOT BALL DIAMETER
OVER 4'-0"	2X THE ROOT SPREAD OR ROOT BALL DIAMETER



NOTE:
D = DIMENSION OF SPECIFIED PLANT
SPACING (SHRUB OR GROUND COVER)
TYPICAL BED PLANT SPACING
NTS

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
COUNTY: ULSTER	NYSOT REGION: 8					
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						
STORMWATER MANAGEMENT DETAILS						DRAWING NO. SMD-04 SHEET NO. 30
HVEA ENGINEERS BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com						NYC Environmental Protection

FILE NAME = 8193_cph_smd_05.dgn
DATE/TIME = 29-May-2019 16:36
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DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON

LANDSCAPE GENERAL NOTES:

TEMPORARY SEED AND MULCH:

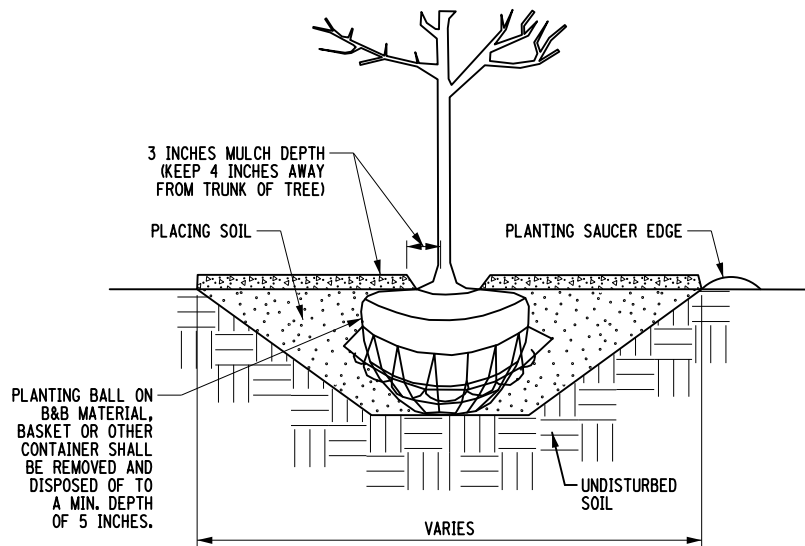
1. SEE "SPECIAL NOTES" IN CONTRACT PLANS FOR TEMPORARY SEED MIX.

2. APPLICATION OF TEMPORARY SEED AND MULCH (ITEM 209.1003) SHALL INCLUDE THE APPLICATION OF MULCH ANCHORAGE. MULCH ANCHORAGE (TYPE A) SHALL BE APPLIED IN ACCORDANCE WITH SUB-SECTION 713-12. PAYMENT SHALL BE INCLUDED UNDER THE APPROPRIATE TEMPORARY MULCH OR TEMPORARY SEED AND MULCH ITEM NUMBER.

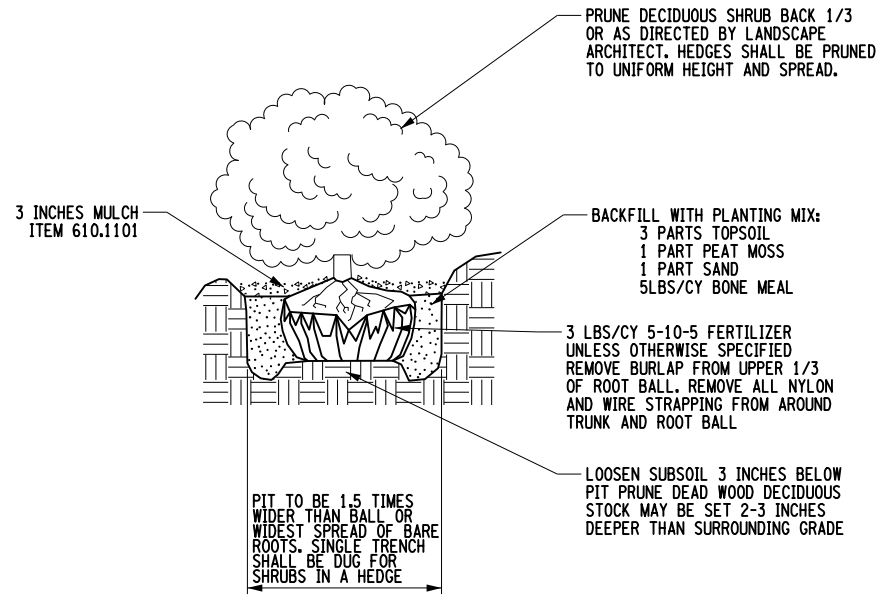
3. SEEDING IS RESTRICTED TO THE FOLLOWING SEASONS:

ANNUAL RYEGRASS= MARCH 1 TO SEPTEMBER 30

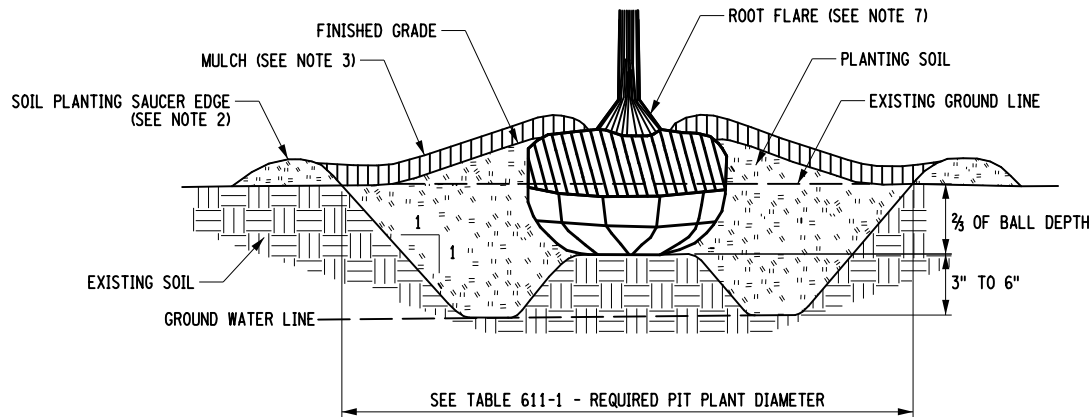
WINTER RYEGRASS= MARCH 1 TO APRIL 1 OR SEPTEMBER 1 TO NOVEMBER 30



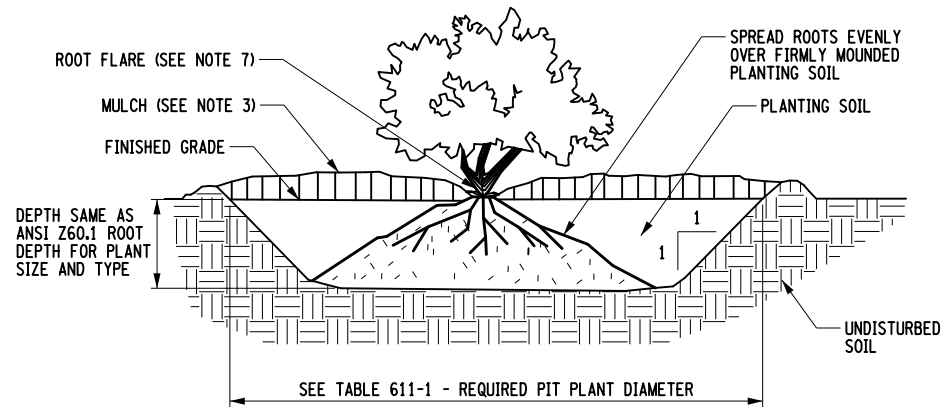
GENERAL TREE PLANTING
NTS



BALLED AND BURLAPPED SHRUB PLANTING
NTS



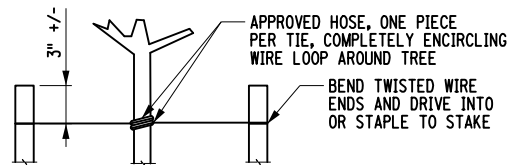
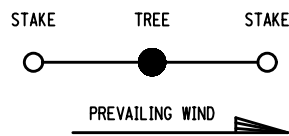
TREE PLANTING IN HEAVY - CLAY SOILS
NTS



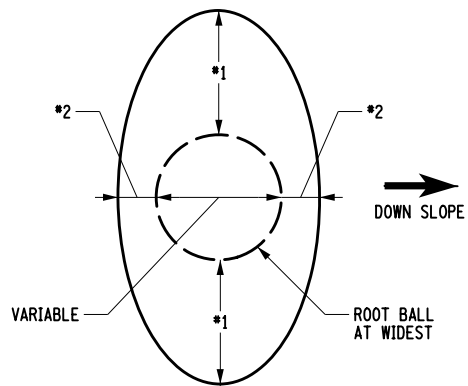
BARE ROOT SHRUB PLANTING
NTS

AFFIX SEAL: ON:	ALTERED BY: ON:

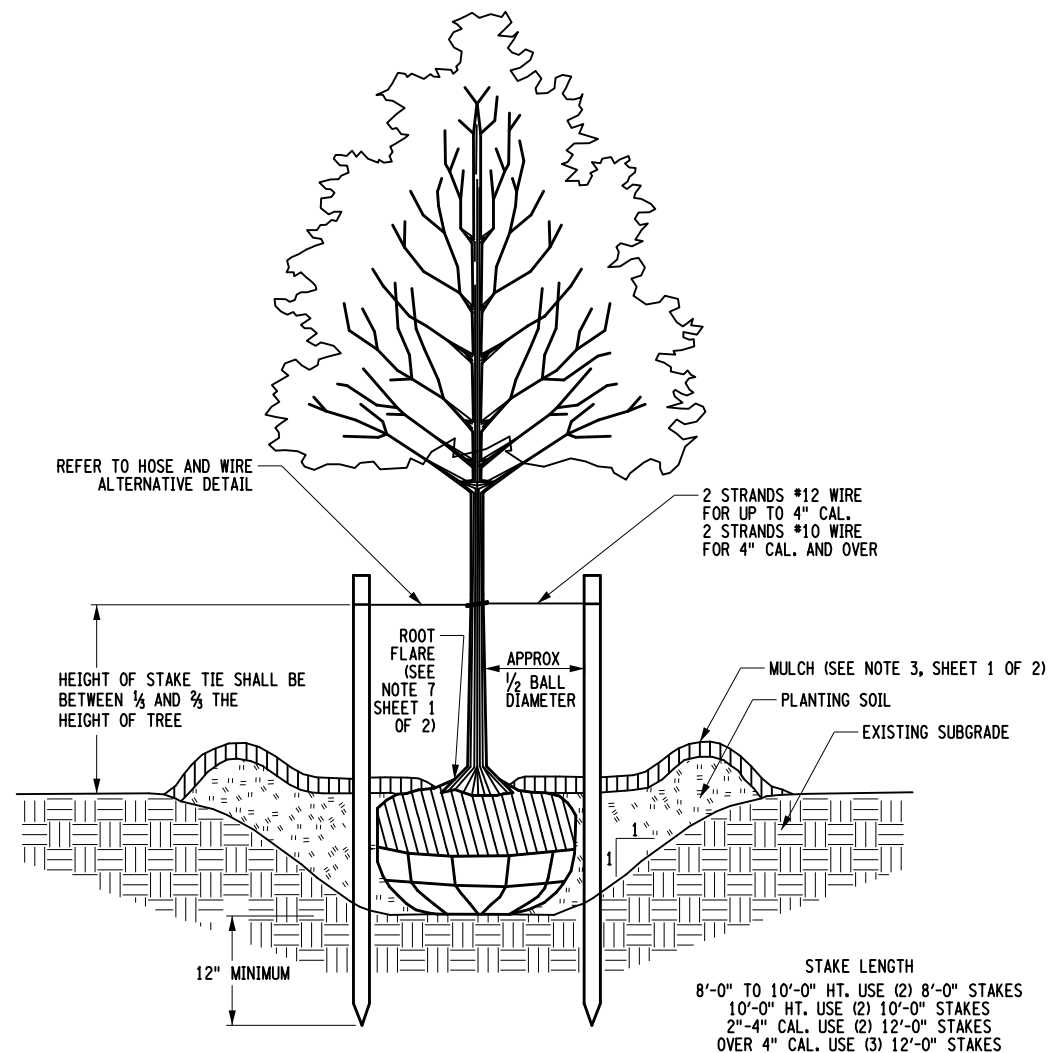
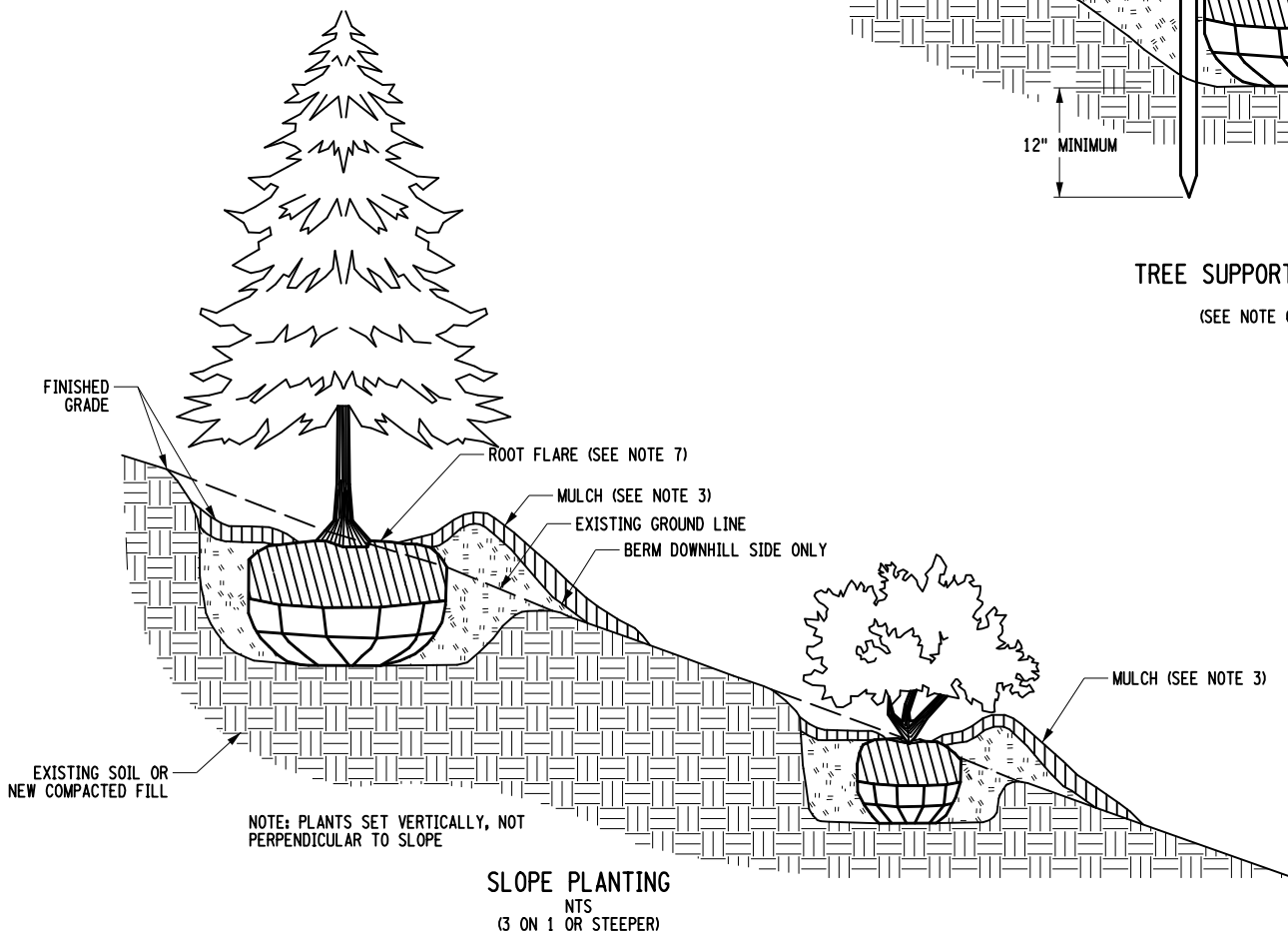
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER	
COUNTY: ULSTER NYSOT REGION: 8					STORMWATER MANAGEMENT DETAILS	DRAWING NO. SMD-05	
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					HVEA ENGINEERS	BEACON, NEW YORK 12508 (845) 638-3000 www.hveapc.com	NYC Environmental Protection



HOSE AND WIRE ALTERNATIVE
NTS



ELONGATED SLOPE PIT
NTS



TREE SUPPORT (WHEN SPECIFIED)
 NTS
 (SEE NOTE 6, SHEET 1 OF 2)

ROOT SPREAD / ROOT BALL DIAMETER	PLANT PIT DIAMETER
UNDER 2'-0"	3X THE ROOT SPREAD OR ROOT BALL DIAMETER
FROM 2'-0" TO 4'-0"	2.5X THE ROOT SPREAD OR ROOT BALL DIAMETER
OVER 4'-0"	2X THE ROOT SPREAD OR ROOT BALL DIAMETER


NOTES:

1. PLANTING BALL - ON B&B MATERIAL, BURLAP AND WIRE BASKET OR OTHER CONTAINER SHALL BE REMOVED FROM THE UPPER HALF OF THE ROOT BALL AND DISPOSED OF.
2. HEIGHT OF PLANTING SAUCER SHALL BE 3".
3. MULCH SHALL BE A MAXIMUM OF 3" DEEP AND TAPERED DOWN TO LEAVE THE ROOT FLARE EXPOSED. WHEN PLANTING ON SLOPES, DOWNHILL SIDE MUST BE STABILIZED APPROPRIATELY OR SEEDING ON DOWNHILL SIDE MAY BE SPECIFIED.
4. MATERIALS FOR PROTECTION OF PLANTS SHALL BE A COMMERCIALY AVAILABLE PRODUCT OR SYSTEM FOR SUPPORTING OF TREES.
5. ALL TAGS, LABELS, ETC. SHALL BE REMOVED FROM THE PLANTS.
6. THIS DETAIL SHOWS ONE ABOVE GROUND TREE SUPPORT METHOD. ANY OTHER METHOD MUST USE COMMERCIALY AVAILABLE PRODUCTS INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
7. THE ROOT FLARE SHALL BE VISIBLE AND LEVEL WITH SURROUNDING SOIL.


AFFIX SEAL: ON:	ALTERED BY: ON:

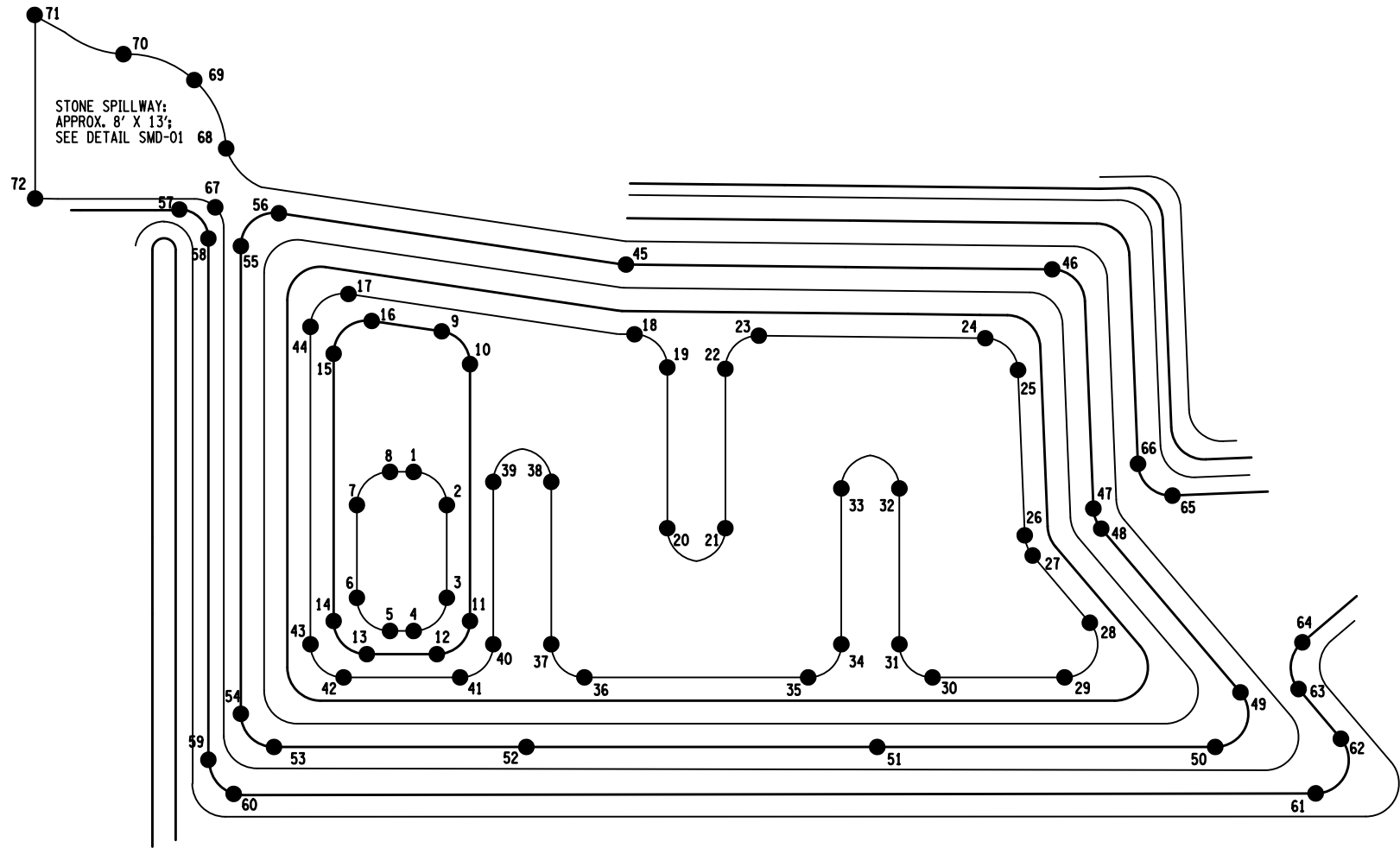
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					STORMWATER MANAGEMENT DETAILS	DRAWING NO. SMD-06
						SHEET NO. 32
	COUNTY: ULSTER					NYS DOT REGION: 8

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SHALLOW WETLAND LAYOUT
NTS

ESTABLISHING TURF IN WETLAND AREAS- WETLAND SEED MIX		
LOCATION	QUANTITY (SF)	ITEM
SHALLOW WETLAND AREA	1167	610.02030106

NOTES:

1. WHEN THE SHALLOW WETLAND AREA IS DEWATERED, TOPSOIL AND WETLAND SEEDING SHALL BE APPLIED TO THE SHALLOW WETLAND BOTTOM AREA AND SIDE SLOPES SHALL RECEIVE PERMANENT TREATMENT.

SHALLOW WETLAND ELEVATION TABLE							
POINT NO.	NORTHING	EASTING	ELEVATION	POINT NO.	NORTHING	EASTING	ELEVATION
1	1144399.90	574032.07	656.50	34	1144401.60	574071.39	657.50
2	1144399.01	574034.75	656.50	35	1144398.90	574070.39	657.50
3	1144390.26	574038.95	656.50	36	1144389.64	574051.56	657.50
4	1144387.59	574038.04	656.50	37	1144390.64	574048.87	657.50
5	1144385.96	574034.76	656.50	38	1144404.83	574042.02	657.50
6	1144386.83	574032.09	656.50	39	1144402.47	574037.48	657.50
7	1144395.51	574027.81	656.50	40	1144388.47	574044.39	657.50
8	1144398.25	574028.71	656.50	41	1144385.81	574043.45	657.50
9	1144411.68	574028.86	657.00	42	1144380.60	574032.96	657.50
10	1144410.67	574031.24	657.00	43	1144381.52	574030.23	657.50
11	1144389.43	574041.63	657.00	44	1144407.70	574017.37	657.50
12	1144386.59	574040.61	657.00	45	1144423.54	574039.78	659.00
13	1144383.27	574033.78	657.00	46	1144439.49	574073.40	659.00
14	1144384.25	574031.09	657.00	47	1144422.28	574085.41	659.00
15	1144406.58	574020.16	657.00	48	1144421.13	574086.67	659.00
16	1144409.35	574021.69	657.00	49	1144413.21	574104.94	659.00
17	1144410.55	574018.67	657.50	50	1144409.35	574105.36	659.00
18	1144418.86	574043.90	657.50	51	1144395.74	574077.40	659.00
19	1144417.95	574046.66	657.50	52	1144382.53	574050.32	659.00
20	1144404.08	574053.43	657.50	53	1144372.72	574030.77	659.00
21	1144406.14	574058.06	657.50	54	1144373.57	574027.41	659.00
22	1144420.01	574051.15	657.50	55	1144411.10	574009.02	659.00
23	1144422.80	574052.11	657.50	56	1144414.15	574010.34	659.00
24	1144431.73	574071.02	657.50	57	1144411.50	574004.03	660.00
25	1144431.08	574073.94	657.50	58	1144410.34	574007.05	660.00
26	1144417.50	574081.14	657.50	59	1144369.31	574027.19	660.00
27	1144416.56	574082.15	657.50	60	1144368.11	574030.32	660.00
28	1144412.71	574091.03	657.50	61	1144409.47	574114.61	660.00
29	1144409.07	574091.14	657.50	62	1144413.35	574114.55	660.00
30	1144402.87	574078.43	657.50	63	1144416.56	574107.27	660.00
31	1144403.81	574075.82	657.50	64	1144419.52	574106.38	660.00
32	1144417.34	574069.29	657.50	65	1144426.04	574090.22	660.00
33	1144415.03	574064.54	657.50	66	1144427.00	574087.39	660.00

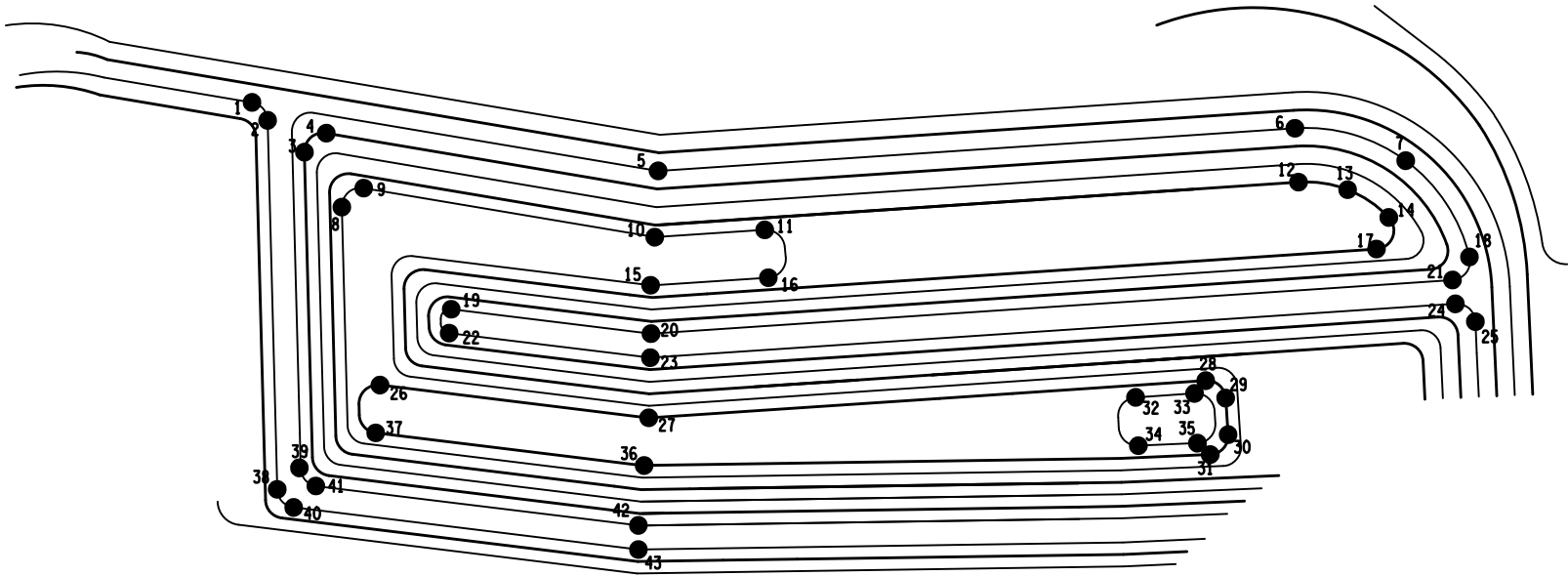
SPILLWAY ELEVATION TABLE			
POINT NO.	NORTHING	EASTING	ELEVATION
67	1144412.63	574006.67	659.50
68	1144418.49	574000.86	659.50
69	1144418.21	573999.13	659.50
70	1144415.59	573993.97	659.50
71	1144415.14	573988.76	659.50
72	1144406.85	573993.27	659.50

AFFIX SEAL: ON:	ALTERED BY: ON:
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AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER				
					STORMWATER MANAGEMENT DETAILS	DRAWING NO. SMD-07 SHEET NO. 33				
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FILE NAME = 8193_cph_smd_08.dgn
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JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON



WET SWALE LAYOUT
NTS

ELEVATION TABLE							
POINT NO.	NORTHING	EASTING	ELEVATION	POINT NO.	NORTHING	EASTING	ELEVATION
1	1144451.39	573991.60	661.50	23	1144445.93	574030.87	661.50
2	1144450.34	573993.93	661.50	24	1144477.72	574089.70	661.50
3	1144448.99	573997.91	661.00	25	1144476.89	574092.56	661.50
4	1144451.87	573999.18	661.00	26	1144434.65	574012.08	659.00
5	1144460.38	574025.15	661.00	27	1144441.30	574033.00	659.00
6	1144485.66	574071.96	662.00	28	1144463.26	574073.59	659.00
7	1144486.94	574082.27	662.00	29	1144462.50	574076.23	659.00
8	1144446.15	574002.64	659.50	30	1144460.65	574077.21	659.00
9	1144449.00	574003.93	659.50	31	1144457.82	574076.46	659.00
10	1144455.22	574027.17	659.50	32	1144459.98	574069.55	658.50
11	1144460.33	574036.56	659.50	33	1144461.88	574073.13	658.50
12	1144481.71	574074.15	660.00	34	1144456.37	574071.47	658.50
13	1144482.85	574077.72	660.00	35	1144458.25	574075.08	658.50
14	1144482.55	574081.14	660.00	36	1144437.31	574034.21	659.00
15	1144451.45	574028.53	659.50	37	1144430.76	574013.15	659.00
16	1144453.82	574038.61	659.50	38	1144423.46	574007.08	661.50
17	1144478.90	574081.42	660.00	39	1144425.74	574008.08	661.50
18	1144482.47	574089.26	661.50	40	1144422.29	574009.51	661.50
19	1144442.80	574014.50	661.50	41	1144424.76	574010.55	661.50
20	1144447.68	574030.23	661.50	42	1144432.97	574036.28	661.50
21	1144479.33	574088.70	661.50	43	1144430.96	574036.79	661.50
22	1144440.91	574015.10	661.50				

ESTABLISHING TURF IN WETLAND AREAS- WETLAND SEED MIX		
LOCATION	QUANTITY (SF)	ITEM
WET SWALE AREA	982	610.02030106

- NOTES:
- WHEN THE WET SWALE AREA IS DEWATERED, TOPSOIL AND WETLAND SEEDING SHALL BE APPLIED TO THE SWALE BOTTOM AREA AND SIDE SLOPES SHALL RECEIVE PERMANENT TREATMENT.

AFFIX SEAL: ON:	ALTERED BY: ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER				
					STORMWATER MANAGEMENT DETAILS	DRAWING NO. SMD-08 SHEET NO. 34				
	COUNTY: ULSTER NYS DOT REGION: 8									
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					<div><div>NYC</div><div>Environmental Protection</div></div>					

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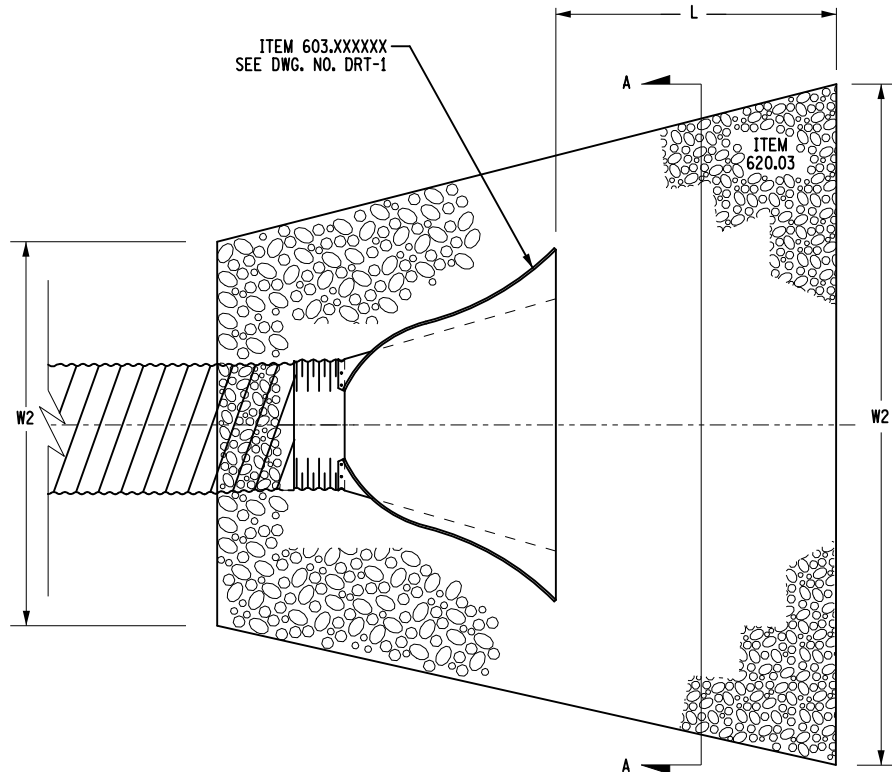
DRAINAGE TABLE									
ID. NO. (DS/DP)	LOCATION (COORDINATES/ STATION, OFFSET)		T.G. ELEV.	FRAME TYPE	STR. TYPE	PIPE INVERT		PROPOSED WORK	
						INLET	OUTLET		
1-1	1144503.26	574122.15				660.95	660.85	INSTALL 43.5 FT OF 15" SICPP WITH GALVANIZED STEEL END SECTION AND CUT OFF WALL FOR END SECTION AND OUTLET TO WET SWALE (OUTLET INVERT ELEVATION =660.73, SEE DWG. NO. DRD-01). BACKFILL WITH SELECT GRANULAR FILL.	
1-2	1144422.61	574124.79	659.76	PARALLEL BAR FRAME 12 PCB	U	1. 655.56 2. 655.66 3. 651.50-W 4. 656.60-N SEE NOTE 1 BELOW	656.20	INSTALL RECTANGULAR TYPE U STRUCTURE WITH PARALLEL BAR GRATE. INSTALL 43.4 FT OF 15" SICPP AND CONNECT TO DS 1-3. CONNECT BIORETENTION UNDERDRAIN TO STRUCTURE. BACKFILL WITH SELECT GRANULAR FILL.	
1-3	1144383.73	574032.63	657.80	PARALLEL BAR FRAME 12 PCB	U	652.00	651.50	INSTALL RECTANGULAR TYPE U STRUCTURE WITH PARALLEL BAR GRATE. INSTALL 28.0 FT OF 15" SICPP WITH GALVANIZED STEEL END SECTION AND CUT OFF WALL FOR END SECTION (OUTLET INVERT ELEVATION = 653.10, SEE DWG. NO. DRD-01). BACKFILL WITH SELECT GRANULAR FILL.	
1-4	1144558.38	574315.00	661.55	GRATE	MH 48	1. 657.55 2. 657.55 SEE NOTE 2 BELOW	656.75	INSTALL ROUND MANHOLE TYPE 48 WITH GRATE. INSTALL 87.0 FT OF 12" SICPP WITH GALVANIZED STEEL END SECTION AND CUT OFF WALL FOR END SECTION (OUTLET ELEVATION = 656.00, SEE DWG. NO. DRD-01). CONNECT UD-3 AND UD-4 TO STRUCTURE (SEE DWG. NO. DRD-01). BACKFILL WITH SELECT GRANULAR FILL.	
1-5	1144622.41	574281.00	666.25	PARALLEL BAR FRAME 12 PCB	U	659.00	658.80	INSTALL RECTANGULAR TYPE U STRUCTURE WITH PARALLEL BAR GRATE. INSTALL 167.4 FT OF 12" SICPP BETWEEN DS 1-5 AND DS 1-6. BACKFILL WITH SELECT GRANULAR FILL.	
1-6	1144544.27	574129.05	665.20	PARALLEL BAR FRAME 12 PCB	U	658.75	658.70	INSTALL RECTANGULAR TYPE U STRUCTURE WITH PARALLEL BAR GRATE. INSTALL 90.2 FT OF 12" SICPP BETWEEN DS 1-6 AND DS 1-7. BACKFILL WITH SELECT GRANULAR FILL.	
1-7	1144501.05	574045.09	663.75	PARALLEL BAR FRAME 12 PCB	U	658.25	657.80	INSTALL RECTANGULAR TYPE U STRUCTURE WITH PARALLEL BAR GRATE. INSTALL 108.2 FT OF 12" SICPP BETWEEN DS 1-7 AND DS 1-2. BACKFILL WITH SELECT GRANULAR FILL.	

AFFIX SEAL: ON:	ALTERED BY: ON:

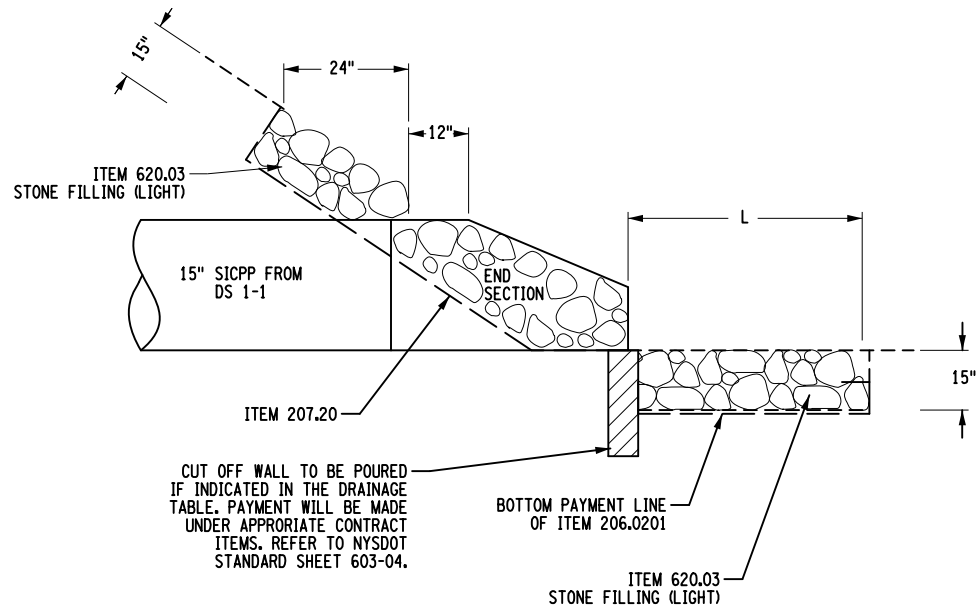
ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT	NOTES:		
203.07	SELECT GRANULAR FILL	CY	604.302192	RECTANGULAR DRAINAGE STRUCTURE TYPE U FOR PARALLEL BAR #12 PCB FRAME	LF	1. ELEVATION (1) IS INVERT ELEVATION OF UNDERDRAIN FROM THE NORTH. ELEVATION (2) IS INVERT ELEVATION OF UNDERDRAIN FROM THE EAST. 2. ELEVATION (1) IS INVERT ELEVATION OF UNDERDRAIN FROM THE EAST. ELEVATION (2) IS INVERT ELEVATION OF UNDERDRAIN FROM THE WEST.		
206.0201	TRENCH AND CULVERT EXCAVATION	CY	604.4048	ROUND PRECAST CONCRETE MANHOLE TYPE 48	LF			
206.05	TEST PIT EXCAVATION	EA	620.03	STONE FILLING (LIGHT)	CY			
207.20	GEOTEXTILE BEDDING	SY	655.0903	PARALLEL BAR FRAME 12 PCB & PARALLEL BAR GRATE 12 PCB	EA			
552.17	SHIELDS AND SHORING	SF	655.1201	MANHOLE FRAME AND GRATE	EA			
555.0105	CONCRETE FOR STRUCTURES, CLASS A	CY						
603.171116	GALVANIZED STEEL END SECTIONS - PIPE (2-2/3" X 1/2" CORRUGATIONS) 15 INCH DIAMETER, 16 GAUGE (FOR 12" SICPP)	EA						
603.171216	GALVANIZED STEEL END SECTIONS - PIPE (2-2/3" X 1/2" CORRUGATIONS) 18 INCH DIAMETER, 16 GAUGE (FOR 15" SICPP)	EA						
603.9812	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER	LF						
603.9815	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 15 INCH DIAMETER	LF						
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:				PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER
							DRAINAGE TABLE	DRAWING NO. DRT-01
								SHEET NO. 35
		COUNTY: ULSTER						NYSOT REGION: 8
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						BEACON, NEW YORK 12508 (845) 638-3000 www.hvesapc.com		

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CHECK L. BACH
PROJECT MANAGER J. GORTON

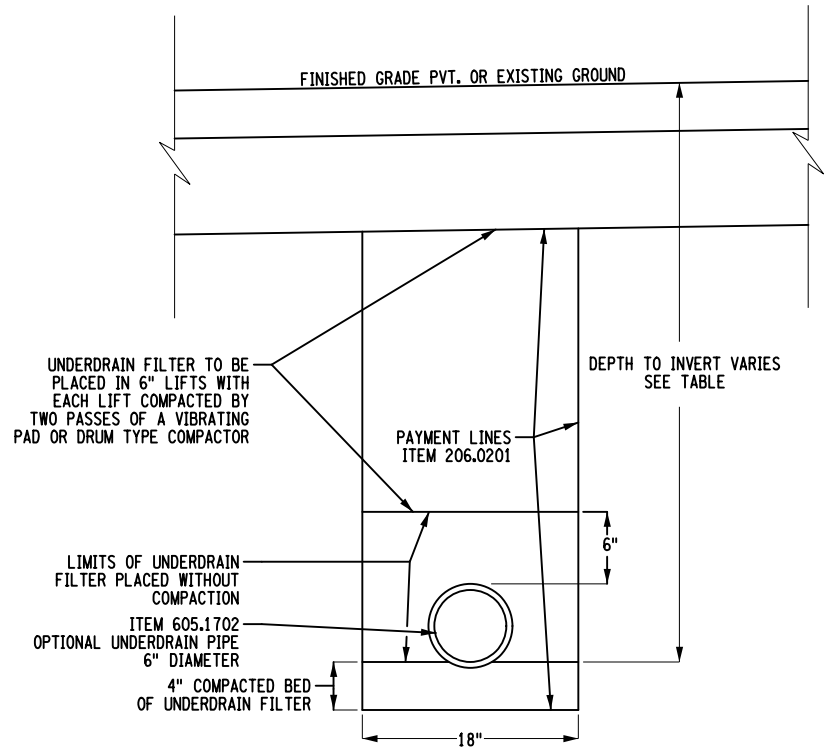


OUTLET RIP-RAP PROTECTION
PLAN VIEW



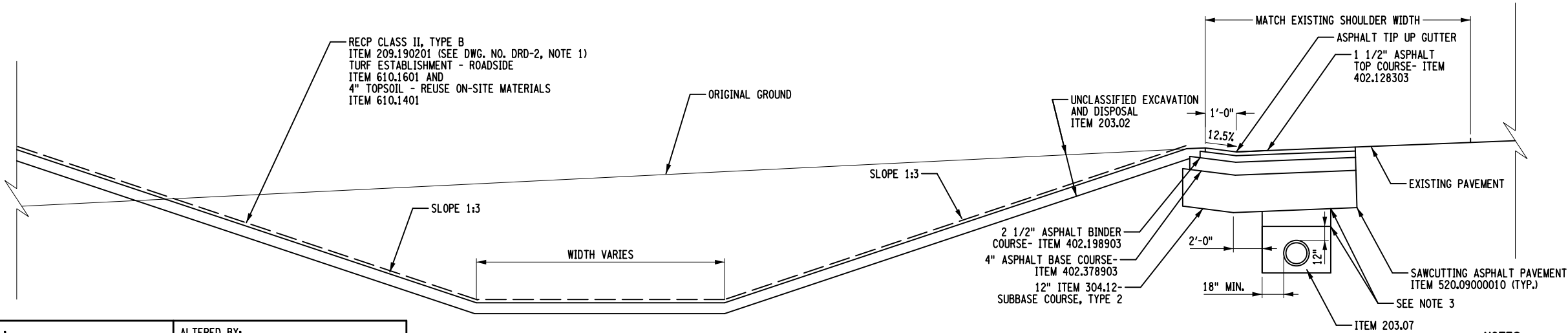
OUTLET RIP-RAP PROTECTION FROM DS 1-1 INTO WET SWALE
ELEVATION VIEW
NTS

TABLE OF OUTLET PROTECTION				
ID NO.	LENGTH	WIDTH	DEPTH	SIZE
DS 1-1	5'	6.25'	15"	<1 FT
DS 1-2	15'	6'	15"	<1 FT
DS 1-4	15'	6'	15"	<1 FT



NOTES:
1. DEPTH TO INVERT VARIES. SEE TABLE THIS SHEET.

TABLE OF PROPOSED UNDERDRAIN			
UD ID NO.	OUTLETS TO STRUCTURE	DEPTH AT BEGINNING	DEPTH AT OUTLET
UD-1	DS 1-2	30"	43"
UD-2	DS 1-2	30"	43"
UD-3	DS 1-4	30"	51"
UD-4	DS 1-4	30"	51"



PROPOSED ASPHALT TIP UP GUTTER DETAIL
NTS
(SEE TABLE FOR LOCATIONS)

PROPOSED ASPHALT TIP UP GUTTER LOCATION TABLE		
LOCATION	SIDE	COMMENT
STA 11+21 RT TO STA 14+68	LT	INSTALL TIP UP GUTTER TO CONVEY WATER QUALITY STORM EVENT

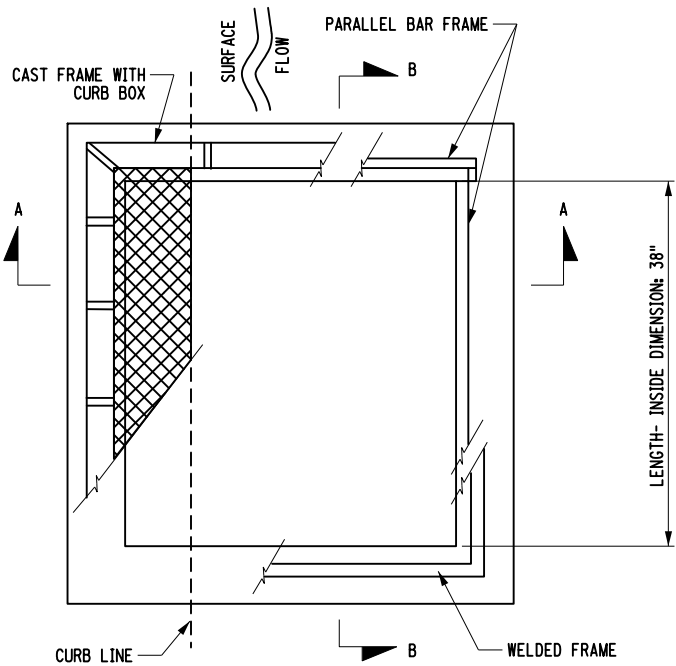
NOTES:
1. THE TRENCH SHALL BE BACKFILLED ABOVE ITEM 203.07 LIMIT WITH SUITABLE MATERIAL. IF MATERIAL EXCAVATED FROM THE TRENCH IS DEEMED "UNSUITABLE" BY THE ENGINEER, IT SHALL BE DISPOSED OF AS PER SECTION 206-3.01. BACKFILL OF THE TRENCH SHALL BE DONE WITH SUITABLE MATERIAL CONFORMING TO SECTION 203-3.01D. THE COST OF THIS MATERIAL, REGARDLESS OF THE SOURCE, SHALL BE INCLUDED IN ITEM 206.0201.

AFFIX SEAL: ON:	ALTERED BY: ON:

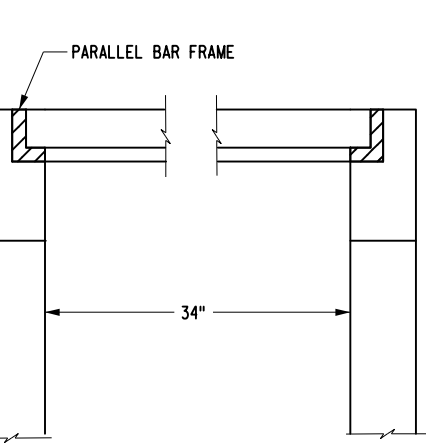
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					DRAINAGE DETAILS	DRAWING NO. DRD-01 SHEET NO. 36
		COUNTY: ULSTER	NYSDOT REGION: 8			
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						
					HVEA ENGINEERS	BEACON, NEW YORK 12508 (845) 638-3000 www.hvespc.com
					NYC Environmental Protection	

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DATE/TIME = 29-May-2019 16:36
USER = k1a

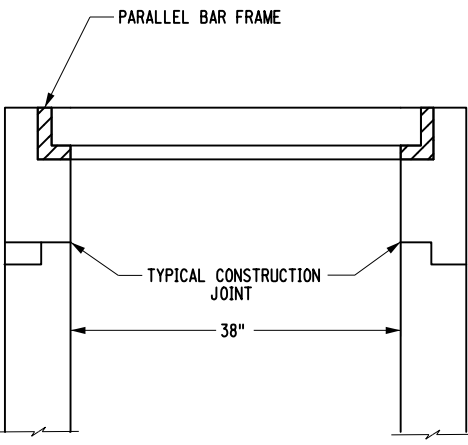
DESIGN SUPERVISOR J. GORTON
JOB MANAGER J. GORTON
DESIGN C. DREYER
CHECK L. BACH
DRAFTING K. FISCHER
CHECK L. BACH
PROJECT MANAGER J. GORTON



RECTANGULAR DRAINAGE STRUCTURE
TYPE U- PLAN VIEW
NTS



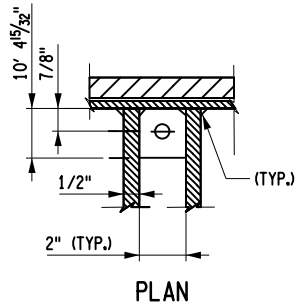
SECTION A-A
RECTANGULAR DRAINAGE STRUCTURE
TYPE U
NTS



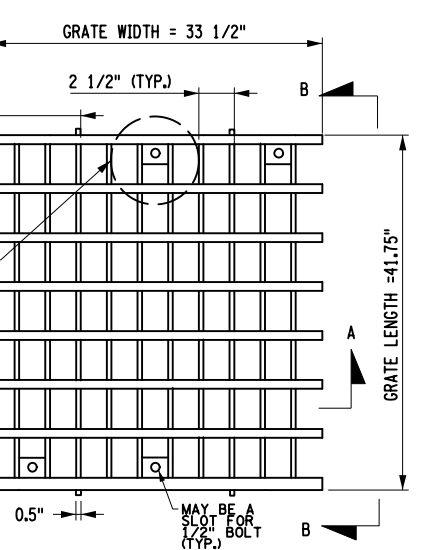
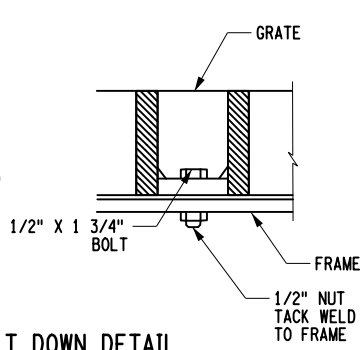
SECTION B-B
RECTANGULAR DRAINAGE STRUCTURE
TYPE U
NTS

- NOTES:
1. WELDS ON INSIDE OF FRAME AND OUTSIDE OF GRATE SHALL BE GRATE SHALL BE GROUND SMOOTH.
 2. THE SIDES OF PARALLEL BAR FRAMES WHICH ARE DIRECTLY OVER A STRUCTURE WALL SHALL HAVE ONE STIRRUP OR STUD WELDED TO THE FRAME AT EACH END NEAR THE CORNERS, SIDES OF PARALLEL BAR FRAMES WHICH ARE NOT DIRECTLY OVER WALLS SHALL HAVE SHEAR STUD ANCHORS AS SHOWN.
 3. FRAMES AND GRATES SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH SECTION 719-01 AFTER ALL CUTTING, WELDING, BONDING, AND CLEANING.
 4. GRATES ARE DESIGNED FOR 16 KIPS WHEEL LOAD (HS 20 LOADING).
 5. WHEN PARALLEL BAR GRATES WITH CROSS BARS ARE SPECIFIED ON THE CONTRACT PLANS, NO OTHER OPTIONS ARE PERMITTED EXCEPT AS SHOWN, TOP SURFACES OF BEARING BARS AND CROSS BARS SHALL BE FLUSH.
 6. GRATE SHALL BE BOLTED TO PARALLEL BAR FRAME (SEE BOLT-DOWN DETAIL) WITH TWO BOLTS, ONE ON EACH END, BOLTS SHALL BE CORROSION RESISTANT, MONEL METAL OR TYPE 316 STAINLESS STEEL.
 7. LONGITUDINAL BARS FOR 12PCB GRATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A529 GRADE 50.
 8. MAY LEAVE A GAP OF 1/2" ON BOTTOM TO PREVENT BLOWOUT DURING GALVANIZING.

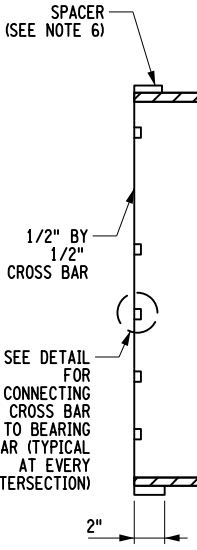
DRAINAGE STRUCTURE TABLE			
ID	T.G. EL.	OPENING (TOP)	OPENING SIZE
DS 1-2	659.76	N: OPENING Ø 657.60	12"
		N(UD): OPENING Ø 656.06	6"
		S: OPENING Ø 652.85	15"
		W: OPENING Ø 652.75	15"
DS 1-3	658.00	E(UD): OPENING Ø 656.06	6"
		W: OPENING Ø 653.25	15"
		W: OPENING Ø 657.75	3"
		S: OPENING Ø 657.25	12"
DS 1-4	661.55	S: OPENING Ø 657.25	12"
DS 1-5	666.25	W: OPENING Ø 659.00	12"
DS 1-6	665.20	E: OPENING Ø 658.75	12"
		W: OPENING Ø 658.80	12"
DS 1-7	663.75	E: OPENING Ø 658.70	12"
		S: OPENING Ø 658.25	12"



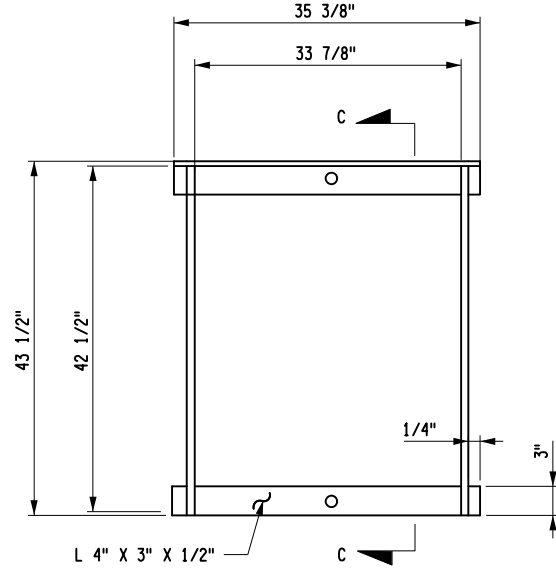
BOLT DOWN DETAIL
FOR PARALLEL BAR GRATES
IN PARALLEL BAR FRAMES
NTS



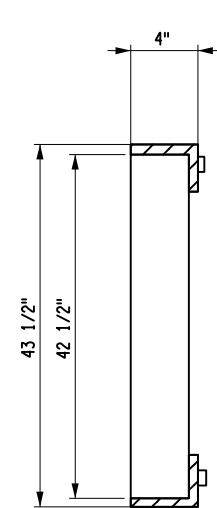
PARALLEL BAR GRATE
(SHOWN WITH CROSS BARS)
NTS



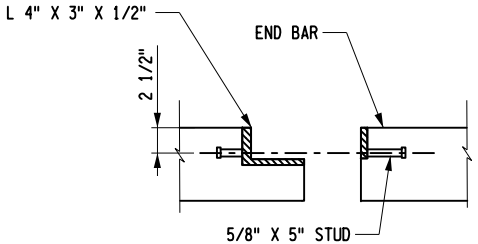
SECTION B-B
PARALLEL BAR GRATE
NTS



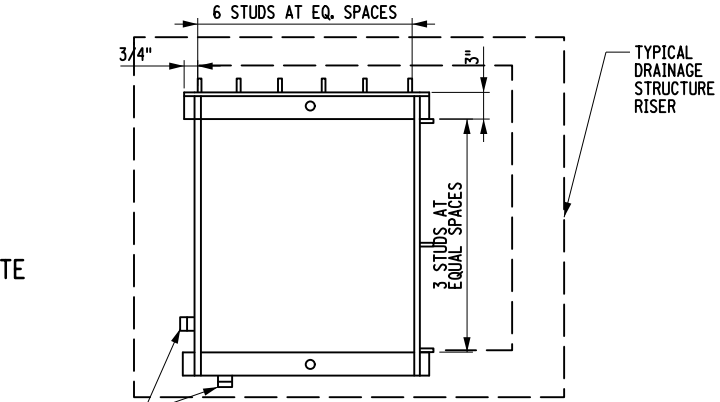
PARALLEL BAR FRAME
NTS



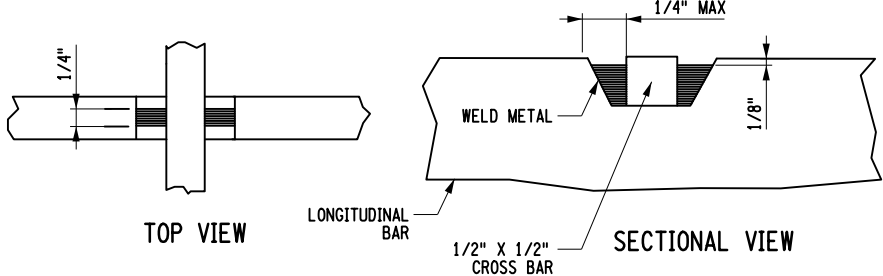
SECTION C-C
PARALLEL BAR GRATE
NTS



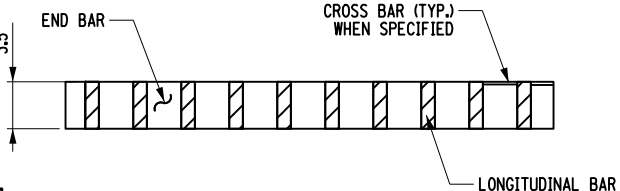
SHEAR STUD DETAIL
FOR PARALLEL BAR FRAME
NTS



SHEAR STUD ANCHORS AND STIRRUPS
FOR PARALLEL BAR FRAME
NTS



DETAIL FOR CONNECTION CROSS BAR
TO LONGITUDINAL BAR
NTS



SECTION A-A
PARALLEL BAR GRATE
NTS

AS-BUILT REVISIONS	PIN
DESCRIPTION OF ALTERATIONS:	
COUNTY: ULSTER	NYSOT REGION: 8

BRIDGES	CULVERTS

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER

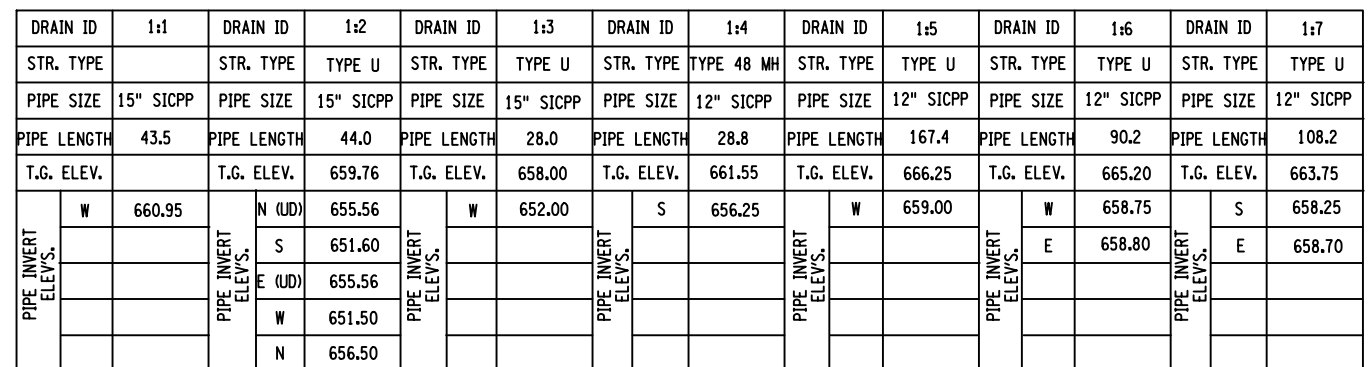
DRAINAGE DETAILS	DRAWING NO. DRD-02



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(845) 638-3000
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AFFIX SEAL: ON:		ALTERED BY: ON:																																																																																																																																																	
				<table border="1"> <tr> <td>PIP</td><td></td><td></td><td></td><td>PIP</td><td></td><td></td><td></td><td>PIP</td><td></td><td></td><td></td><td>PIP</td><td></td><td></td><td></td><td>PIP</td><td></td><td></td><td></td><td>PIP</td><td></td><td></td><td></td><td>PIP</td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>												PIP				PIP				PIP				PIP				PIP				PIP				PIP																																																																																																											
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AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
					ESTIMATE OF QUANTITIES	DRAWING NO. EQQ-01
						SHEET NO. 39
	COUNTY: ULSTER					NYSDOT REGION: 8
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					<div><div>HVEA ENGINEERS</div><div>BEACON, NEW YORK 12508 (845) 638-3600 www.hvespc.com</div></div>	<div><div>NYC</div><div>Environmental Protection</div></div>

ESTIMATE OF QUANTITIES SUMMARY				
ITEM	DESCRIPTION	QUANTITY	UNIT	
201.06	CLEARING AND GRUBBING	1	LS	
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	3,475	CY	
203.03	EMBANKMENT IN PLACE	400	CY	
203.07	SELECT GRANULAR FILL	240	CY	
206.0201	TRENCH AND CULVERT EXCAVATION	1,700	CY	
207.07000017	COMPOSITE GEOMEMBRANE	3,856	SF	
207.20	GEOTEXTILE BEDDING	325	SY	
208.01030022	BIORETENTION AND DRY SWALE SOIL	220	CY	
208.01040022	LABORATORY TESTING FOR SOIL PHOSPHORUS CONCENTRATION	2	EACH	
209.100101	MULCH - TEMPORARY	9,000	SY	
209.1003	SEED AND MULCH - TEMPORARY	9,000	SY	
209.1106	CHECK DAM, STONE-PERMANENT	3	EACH	
209.13	SILT FENCE-TEMPORARY	1,200	LF	
209.1901	ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE A, INTERMEDIATE	1,000	SY	
209.190201	ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE B,INTERMEDIATE	1,700	SY	
209.2103	SOIL STABILIZERS, CLASS IV TYPE C	9,000	SY	
209.22	CONSTRUCTION ENTRANCE	600	SY	
304.12	SUBBASE COURSE, TYPE 2	708	CY	
402.128303	12.5 F3 TOP COURSE HMA, 80 SERIES COMPACTION	12	TON	
402.198903	19 F9 BINDER COURSE HMA, 80 SERIES COMPACTION	20	TON	
402.378903	37.5 F9 BASE COURSE HMA, 80 SERIES COMPACTION	31	TON	
411.01	STABILIZED GRAVEL SURFACE COURSE	45	CY	
520.09000010	SAW CUTTING ASPHALT CONCRETE	622	LF	
552.17	SHIELDS AND SHORING	1,750	SF	
603.171116	GALVANIZED STEEL END SECTIONS-PIPE (2-2/3" X 1/2" CORRUGATIONS) 15 INCH DIAMETER, 16 GAUGE	2	EACH	
603.171216	GALVANIZED STEEL END SECTIONS-PIPE (2-2/3" X 1/2" CORRUGATIONS) 18 INCH DIAMETER, 16 GAUGE	3	EACH	
603.9812	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER	420	LF	
603.9815	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 15 INCH DIAMETER	130	LF	
603.99220015	POLYVINYL CHLORIDE PIPE, SANITARY SEWER GRAVITY, 6 IN. DIA	85	LF	
604.302192	RECTANGULAR DRAINAGE STRUCTURE TYPE U FOR PARALLEL BAR #12 PCB FRAME	40	LF	
604.4048	ROUND PRECAST CONCRETE MANHOLE TYPE 48	7	LF	
605.09020008	UNDERDRAIN FILTER TYPE 1 (MODIFIED)	330	CY	
605.1702	OPTIONAL UNDERDRAIN PIPE, 6 INCH DIAMETER	750	LF	
607.4070	OPTIONAL FENCE GATE (DOUBLE LEAF 24 FEET OPENING 4 FEET HIGH)	1	EACH	
607.41010010	TEMPORARY PLASTIC BARRIER FENCE	200	LF	
607.92080008	STOCKADE FENCE 8 FOOT HIGH	70	LF	
607.96010010	DECORATIVE TIMBER RAIL	357	LF	
608.01020005	COLORLED PORTLAND CEMENT CONCRETE SIDEWALK	21	CY	
608.020102	HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS ,AND VEGETATION CONTROL STRIPS	578	TON	
608.21	EMBEDDED DETECTABLE WARNING UNITS	9	SY	
609.0401	CAST-IN-PLACE CONCRETE CURB TYPE VF150	297	LF	
610.10	COMPOST	90	CY	
610.1101	MULCH FOR PLANTING TYPE A, B & D - WOOD CHIPS AND SHREDDED BARK	35	CY	
610.1402	TOPSOIL - ROADSIDE	435	CY	
610.1601	TURF ESTABLISHMENT - ROADSIDE	3,100	SY	
610.19	WATERING VEGETATION	300	MGAL	
610.22	MOWING LIMITS MARKERS	10	EACH	
611.0211	PLANTING - MINOR DECIDUOUS TREES - SIZE AS SPECIFIED BALL & BURLAP, FIELD POTTED OR FIELD BOXED	25	EACH	
611.0411	PLANTING DECIDUOUS SHRUBS - AS SPECIFIED BALL & BURLAP, FIELD POTTED OR FIELD BOXED	61	EACH	
611.0452	PLANTING - DECIDUOUS SHRUBS - 3 FOOT HEIGHT/SPREAD CONTAINER OR BOX GROWN	5	EACH	
611.0711	PLANTING - HERBACEOUS PLANTS - AS SPECIFIED CONTAINER GROWN	575	EACH	
611.20	POST-PLANTING CARE	850	SY	
614.060104	TREE REMOVAL OVER 4 INCHES TO 6 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	2	EACH	
615.10010208	KIOSK STRUCTURE (NOT MANUFACTURED) TYPE 2	1	EACH	
620.03	STONE FILLING (LIGHT)	60	CY	
625.01	SURVEY OPERATIONS	1	LS	
645.5102	GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF, WITH Z-BARS	77	SF	
645.5202	GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF, WITH Z-BARS, HIGH-VISIBILITY SHEETING	19	SF	
645.81	TYPE A SIGN POSTS	27	EACH	
647.31	RELOCATE SIGN PANEL, SIGN PANEL ASSEMBLY SIZE I (UNDER 30 SQUARE FEET)	3	EACH	
655.05020010	FRAMES AND COVERS FOR SANITARY SEWER MANHOLES	2	EACH	
655.0903	PARALLEL BAR FRAME 12 PCB & PARALLEL BAR GRATE 12 PCB	5	EACH	
655.1201	MANHOLE FRAME AND GRATE	1	EACH	
664.40600006	PRECAST SANITARY SEWER MANHOLE (60 INCH DIAM.)	15	LF	
670.2003	GALVANIZED STEEL CONDUIT, 2"	184	LF	
685.01	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 15 MILS	1,850	LF	
685.04	WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS - 15 MILS	4	EACH	
697.03	FIELD CHANGE PAYMENT	30,000	DC	
699.040001	MOBILIZATION	1	LS	