Γ			SHEE	T NUM.					PA	RT.		ITEM	GRAND		SEE	LATED AZ CKED
		3		8	9	13	15		01/STR/BR	1	ITEM	EXT	TOTAL	UNIT	DESCRIPTION SHEET NO.	CALCUL
															ROADWAY	
		LS							LS		201	11000	LS		CLEARING AND GRUBBING	
					269				269		202	23000	269	SY	PAVEMENT REMOVED	
				400				1	400		202	38000	400	FT	GUARDRAIL REMOVED	
				4					4		202	42000	4	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	1
						3			3		203	10000	3	CY	EXCAVATION	
		1				215			215		203	20000	215	CY	EMBANKMENT	1
					507	210			507		204	10000	507		SUBGRADE COMPACTION	
		1													EROSION CONTROL	
		856							856		659	10000	856	SY	SEEDING AND MULCHING	1
		43							43		659	14000	43		REPAIR SEEDING AND MULCHING	1
		0.12							0.12		659	20000	0.12	TON	COMMERCIAL FERTILIZER	1
		0.18							0.18		659	31000	0.18	ACRE	LIME	1
		4.6							4.6		659	35000	4.6	MGAL	WATER	4
						+ +			2,000		832	30000	2,000	EACH	EROSION CONTROL	>
														271077		AR
		88							88		605	31100	88	FT	DRAINAGE AGGREGATE DRAINS	Ξ
												01100		, ,		Σ
															PAVEMENT	
					46			<u> </u>	46		252	01500	46		FULL DEPTH PAVEMENT SAWING	S
0					47				47		301	56000	47		ASPHALT CONCRETE BASE, PG64-22, (449)	1 _
D -					49				49		304	20000	49		AGGREGATE BASE	
N		 <u> </u>			64				64		407	10000	64	GAL	TACK COAT	A W
•		1			48				48		411	10000	48	CY	STABILIZED CRUSHED AGGREGATE	ER
\(\sum_{\psi}\)					34				34		441	70000	34	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	Z
23					22				22		441	70300	22	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	Ш
		1						1							TRAFFIC CONTROL	5
M M				7					7		621	00100	7	EACH	TRAFFIC CONTROL RPM	1
202				7				1	7	1	621	54000	3		RAISED PAVEMENT MARKER REMOVED	1
2/2				0.08				 	0.08		642	00104	0.08		EDGE LINE, 6", TYPE 1	1
3/2				0.04					0.04		642	00300	0.04		CENTER LINE, TYPE 1	
															STRUCTURE 20 FOOT SPAN AND UNDER (HIG-134-0782)	1
——————————————————————————————————————							LS		LS		202	11000	LS		STRUCTURE REMOVED	1
\(\sigma\)							2		2		202	20010	2	EACH	HEADWALL REMOVED	1
dgr							39		39	 	202	23500	39		WEARING COURSE REMOVED	1
							LS	1	LS		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	1
000		1					LS		LS		503	21301	LS		UNCLASSIFIED EXCAVATION, AS PER PLAN 15	
32																1
038							4,070		4,070		509	10000	4,070		EPOXY COATED STEEL REINFORCEMENT	1
\s\							46		46		511	46510	46		CLASS QC1 CONCRETE, FOOTING	1
							1		1		511	46610	1		CLASS QC1 CONCRETE, HEADWALL	1
She							68	<u> </u>	68	1 1	512	10100	68		SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	1
<u> </u>		1					367		367		512	33000	367	SY	TYPE 2 WATERPROOFING	
» D D							56		56		601	32110	56	CY	ROCK CHANNEL PROTECTION, TYPE B WITH AGGREGATE FILTER	
- Ro							96		96 360		611	96321	96 360		14' X 7' CONDUIT, TYPE A, 706.05, AS PER PLAN 15	1
, 		1					360		360			10000	360		PRECAST GRAVITY AND SEMIGRAVITY RETAINING WALL	8
——————————————————————————————————————		1					7	1	7		851 851	11000 14000	7		NATURAL SOIL	ထ့
22							2		2		851	14000	2	DAY	ON-SITE ASSISTANCE	\
0 7							LS		LS		851	15000	LS		WALL DRAINAGE SYSTEM	4
134							LS		LS		851	15500	LS		PGSRW INSPECTION AND COMPACTION TESTING	ကိ
		1														
32-1		1		-						+ +						G
638																王
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+ 0																G
																22

800 DATED SEE PROPOSAL 832 DATED 7/15/2022 851 DATED 1/21/2022 878 DATED 1/21/2022 902 DATED 7/19/2019 940 DATED 4/17/2015

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING

VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT

DESIGN DATA

CAST-IN-PLACE STRUCTURES:

CONCRETE CLASS QC1 - 4.0 KSI

REINFORCING STEEL - ASTM A615, A616, OR A617 (Fy = 60 KSI)

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS
PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN
OBTAINED FROM PLANS OF THE EXISTING STRUCTURE
AND FROM FIELD OBSERVATIONS AND MEASUREMENTS.
CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY
SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE.
THE CONTRACTOR IS REFERRED TO C&MS, SECTIONS
102.05, 105.02, AND 513.04*. BASE CONTRACT
BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER,
THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK
BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT
HAVE BEEN VERIFIED IN THE FIELD.

HEADWALL ANCHOR DOWELS

ANCHOR PER CMS 510 WITH NONSHRINK, NONMETALLIC GROUT CONFORMING TO CMS 705.20 AND TO A DEPTH SPECIFIED ON SHEET 4/5, PAYMENT FOR DOWEL HOLES, GROUT AND INSTALLATION SHALL BE INCLUDED WITH ITEM 511.

THREADED INSERTS OR NON-PROTRUDING MECHANICAL
CONNECTORS CAPABLE OF DEVELOPING AT LEAST 125
PERCENT OF THE SPECIFIED YIELD STRENGTH OF THE
REINFORCEMENT SHOWN ARE AN ACCEPTABLE ALTERNATIVE
TO RESIN BONDING. MAINTAIN A MINIMUM COVER OF 3
INCHES AT THE BOTTOM OF THE CULVERT SLAB. MECHANICAL
CONNECTORS SHALL HAVE AN "L-SHAPED" BAR INSIDE THE
CULVERT WITH A MINIMUM HORIZONTAL LENGTH OF 12
INCHES. THE DEPARTMENT WILL CONSIDER PAYMENT FOR
INSERTS OR MECHANICAL CONNECTORS AS INCIDENTAL TO
ITEM 611.

ESTIMATED QUANTITIES (UI/STR/BR)						
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION		
202	11000	LS		STRUCTURE REMOVED		
202	20010	2	EACH	HEADWALL REMOVED		
202	23500	39	SY	WEARING COURSE REMOVED		
503	11100	LS		COFFERDAMS AND EXCAVATION BRACING		
503	21301	LS		UNCLASSIFIED EXCAVATION, AS PER PLAN		
509	10000	4070	 LB	EPOXY COATED REINFORCING STEEL		
309	10000	4070	LD	EFOXT COATED REINFORCING STEEL		
511	46510	46	CY	CLASS QC1 CONCRETE, FOOTING		
511	46610	1	CY	CLASS QC1 CONCRETE, HEADWALL		
512	10100	68	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
512	33000	367	SY	TYPE 2 WATERPROOFING		
601	32110	56	CY	ROCK CHANNEL PROTECTION, TYPE B WITH AGGREGATE FILTER		
		······)			
611	96321	96	FT	14' X 7' CONDUIT, TYPE A, 706.05, AS PER PLAN		

PRECAST GRAVITY AND SEMIGRAVITY RETAINING WALL

(A) - SEAL ENTIRE CONCRETE SURFACE AREA

PGSRW INSPECTION AND COMPACTION TESTING

NATURAL SOIL

ON-SITE ASSISTANCE

WALL DRAINAGE SYSTEM

 $F \subseteq T \mid M \land T \in D$ $O \mid I \land N \mid T \mid T \mid F \subseteq (O1/STR/RR)$

PRECAST FORESLOPE WALLS

851

851

851

10000

11000

14000

15000

15500

360

LS

LS

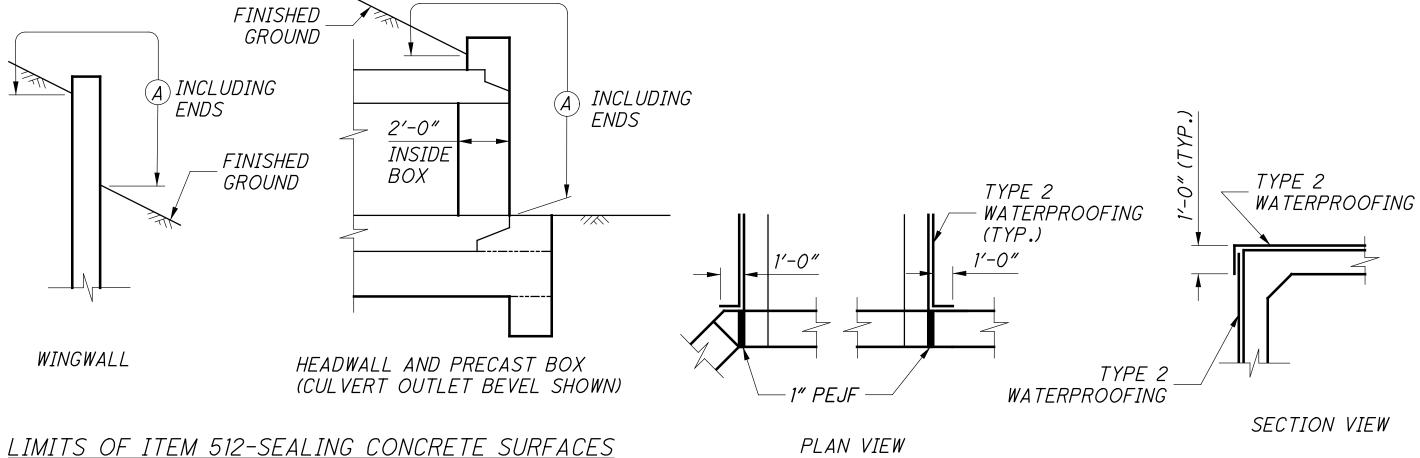
IF THE CONTRACTOR CHOOSES AN APPROVED PGSRW SYSTEM THAT UTILIZES A PRECAST FORESLOPE WALL IN ACCORDANCE WITH SS851, THE DEPARTMENT WILL PAY FOR ALL COSTS ASSOCIATED WITH THE PRECAST FORESLOPE INCLUDING CONCRETE REINFORCEMENT AT THE UNIT BID PRICE FOR ITEM 511 - CLASS QC1 CONCRETE, HEADWALL AS SHOWN IN THE ESTIMATED QUANTITIES. THE DEPARTMENT WILL NON-PERFORM PAYMENT FOR ITEM 509 FOR ALL PLAN REINFORCEMENT SHOWN IN THE FORESLOPE WALL WHEN APPROVED PRECAST FORESLOPE WALLS ARE PROVIDED. IF THE CONTRACTOR CHOOSES TO CAST THE PLAN SPECIFIED FORESLOPE WALL ON THE ITEM 611 CULVERT SEGMENT AT THE FABRICATOR FACILITY, THE DEPARTMENT WILL PAY FOR CONCRETE AND REINFORCEMENT ACCORDING TO THE PLAN QUANTITIES WITH NO ADJUSTMENTS.

PRECAST FOOTINGS

IF THE CONTRACTOR CHOOSES AN APPROVED PGSRW SYSTEM THAT UTILIZES A PRECAST FOOTING IN ACCORDANCE WITH SS851, THE DEPARTMENT WILL PAY FOR ALL COSTS ASSOCIATED WITH THE PRECAST FOOTING INCLUDING CONCRETE REINFORCEMENT AT THE UNIT BID PRICE FOR ITEM 511 - CLASS QC1 CONCRETE, FOOTING AS SHOWN IN THE ESTIMATED QUANTITIES. THE DEPARTMENT WILL NON-PERFORM PAYMENT FOR ITEM 509 FOR ALL PLAN REINFORCEMENT SHOWN IN THE FOOTINGS WHEN APPROVED PRECAST FOOTINGS ARE PROVIDED.

ITEM 611 - 14' X 7' CONDUIT, TYPE A, 706.05, AS PER PLAN

CMS 611 SHALL APPLY EXCEPT THAT THE PROPOSED 14' X 7' BOX CULVERT SHALL BE AS REQUIRED IN SUPPLEMENTAL SPECIFICATION 940.



<u>WATERPROOFING DETAILS</u>

NERAL NOTES AND ESTIMATED QUAN BRIDGE NO. HIG-134-0782 VER UNT OF LITTLE NORTH FORK WHITE OAK

DATE: 10/24/2022 DATE: 12/5/2022

CHECKED:

MCM

HIG-134-7.82

2/5

