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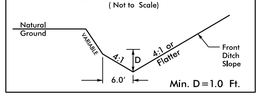
8/17/99

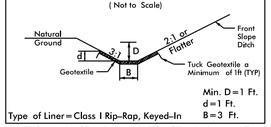
REVISIONS

DETAIL A
SPECIAL CUT DITCH wHINGE
(Not to Scale)



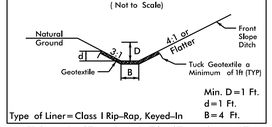
FROM –L– STA. 176+50 TO STA. 177+00 RT
FROM –L– STA. 192+50 TO STA. 193+45 LT
FROM –L– STA. 196+00 TO STA. 203+00 RT

DETAIL B
SPECIAL BASE DITCH
(Not to Scale)



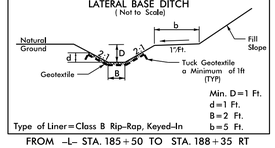
FROM –L– STA. 202+50 TO STA. 203+50 LT

DETAIL C
SPECIAL BASE DITCH
(Not to Scale)



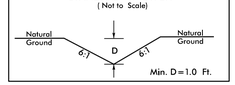
FROM –L– STA. 175+50 TO STA. 176+00 LT

DETAIL D
LATERAL BASE DITCH
(Not to Scale)



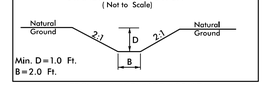
FROM –L– STA. 185+50 TO STA. 188+35 RT

DETAIL E
STANDARD 'V' DITCH
(Not to Scale)



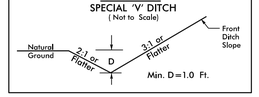
FROM –L– STA. 178+60 LT

DETAIL F
STANDARD BASE DITCH
(Not to Scale)



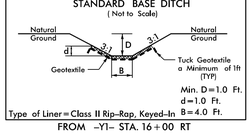
FROM –L– STA. 177+35 LT

DETAIL G
SPECIAL 'V' DITCH
(Not to Scale)



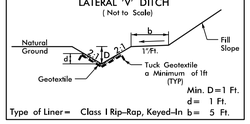
FROM –Y1– STA. 11+65 TO STA. 12+65 RT
FROM –Y1– STA. 10+76.50 TO STA. 12+65 LT
FROM –L– STA. 184+50 TO STA. 185+50 RT
FROM –L– STA. 194+00 TO STA. 194+88 RT
FROM –TMP–DR1– STA. 13+00 TO STA. 13+50 RT

DETAIL H
STANDARD BASE DITCH
(Not to Scale)



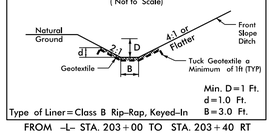
FROM –Y1– STA. 16+00 RT

DETAIL I
LATERAL 'V' DITCH
(Not to Scale)



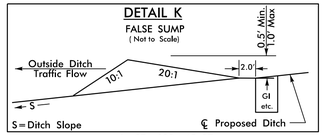
FROM –L– STA. 175+76 TO STA. 176+50 RT

DETAIL J
SPECIAL BASE DITCH
(Not to Scale)



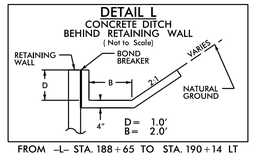
FROM –L– STA. 203+00 TO STA. 203+40 RT

DETAIL K
FALSE SUMP
(Not to Scale)



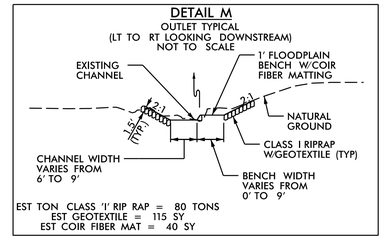
–L– STA. 182+45 RT
–L– STA. 184+20 RT
–Y1– STA. 15+80 LT

DETAIL L
CONCRETE DITCH
BEHIND RETAINING WALL
(Not to Scale)



FROM –L– STA. 188+65 TO STA. 190+14 LT
FROM –L– STA. 189+68 TO STA. 190+66 RT

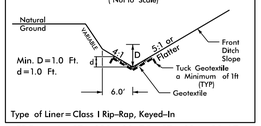
DETAIL M
OUTLET TYPICAL
(LT TO RT LOOKING DOWNSTREAM)
NOT TO SCALE



EST TON CLASS 'I' RIP RAP = 80 TONS
EST GEOTEXTILE = 115 SY
EST COIR FIBER MAT = 40 SY

FROM –L– STA. 188+37 TO STA. 189+08 RT

DETAIL N
SPECIAL CUT DITCH wHINGE
(Not to Scale)



Type of Liner=Class I Rip–Rap, Keyed–In

FROM –L– STA. 183+00 TO STA. 184+00 LT

DETAIL
(NOT TO SCALE)

SKEWED MULTI–BARREL CULVERT LOW FLOW CHANNEL AND FLOOD PLAIN

*NOTES:

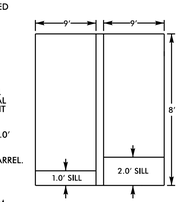
1) NATIVE MATERIAL IN THE CULVERT SHALL PROVIDE A CONTINUOUS LOW FLOW CHANNEL. NATIVE MATERIAL CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE THE STREAM OR FLOODPLAIN AT THE PROJECT SITE DURING CONSTRUCTION. ONLY MATERIAL THAT IS EXCAVATED FROM THE STREAM BED MAY BE USED TO LINE THE LOW FLOW CULVERT BARREL. RIP–RAP MAY BE USED TO SUPPLEMENT THE NATIVE MATERIAL IN THE HIGH FLOW CULVERT BARREL(S). IF RIP–RAP IS USED TO LINE THE HIGH FLOW CULVERT BARREL(S), NATIVE MATERIAL SHOULD BE PLACED ON TOP TO FILL VOIDS AND PROVIDE A FLAT SURFACE FOR ANIMAL PASSAGE. NATIVE MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS.

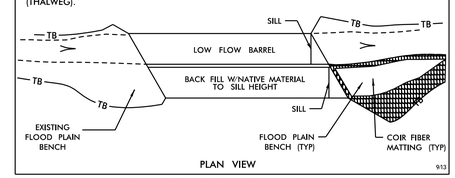
2) PROPOSED CULVERT EXTENSION WILL BE BURIED 1.0'

3) FLOODPLAIN BENCH TO BE INSTALLED AT THE OUTLET OF THE PROPOSED RCBC IN THE RIGHT BARREL.

4) SILLS ARE TO BE 1.0' WIDE, CAST SEPARATELY AND ATTACHED BY DOWELS.

5) TOP OF LOW FLOW SILL SHOULD MATCH STREAM BED ELEVATION IN LOW FLOW CHANNEL OF STREAM (THALWEG).





PLAN VIEW

913

FROM –L– STA. 188+23 TO 188+67 RT

PROJECT REFERENCE NO.	SHEET NO.
HB-0003	2D-1
R/W SHEET NO.	

HYDRAULICS ENGINEER
5/14/2024

DocuSigned by:
Matthew L. Harvey
DocuSign Envelope ID: 6C678498-28DA-420E-B672-290C14E1DD88

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Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

5/13/2024
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USER:HeLee