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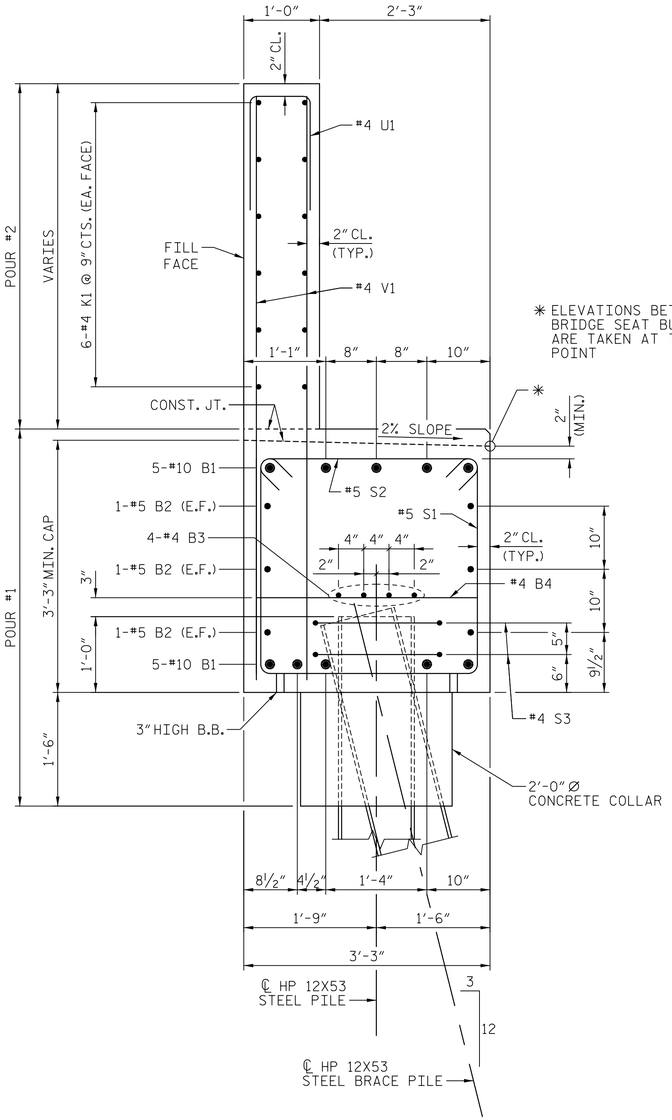
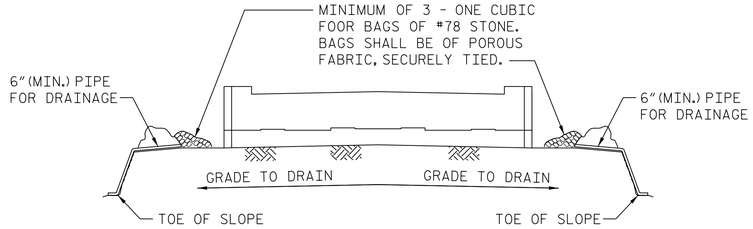


SECTION "A-A"

✳ ELEVATIONS BETWEEN BRIDGE SEAT BUILD-UPS ARE TAKEN AT THIS POINT

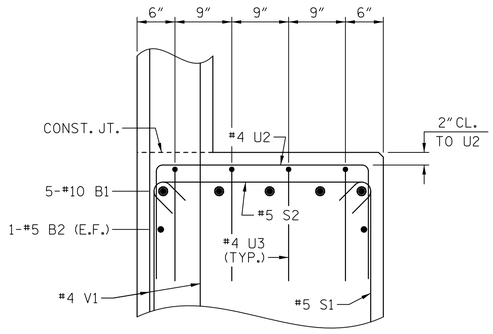


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

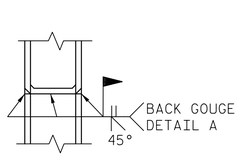
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR EFFECTIVENESS.

NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE FOR THE SEVERAL PAY ITEMS.

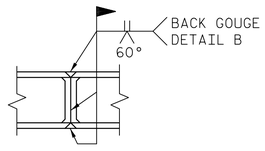
TEMPORARY DRAINAGE AT END BENT



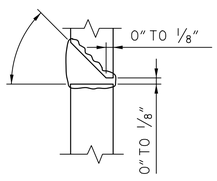
BRIDGE SEAT SECTION



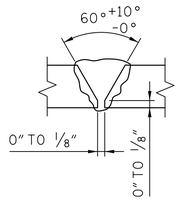
**PILE VERTICAL



**PILE HORIZONTAL OR VERTICAL



DETAIL A

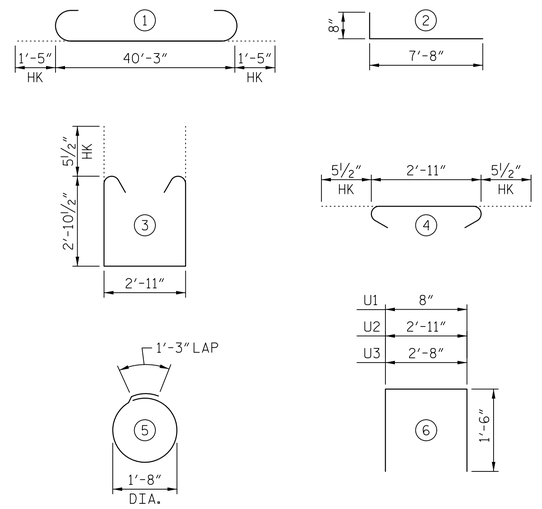


DETAIL B

**POSITION OF PILE DURING WELDING.

PILE SPLICE DETAILS

BAR TYPE



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

END BENT 2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	#10	①	43'-1"	1854
B2	6	#5	STR	40'-3"	252
B3	8	#4	STR	21'-4"	114
B4	11	#4	STR	2'-11"	21
H1	52	#4	②	8'-4"	289
K1	24	#4	STR	21'-4"	342
K2	8	#4	STR	2'-7"	14
S1	64	#5	③	9'-7"	640
S2	64	#5	④	3'-10"	256
S3	12	#4	⑤	6'-6"	52
U1	35	#4	⑥	3'-8"	86
U2	8	#4	⑥	5'-11"	32
U3	8	#4	⑥	5'-8"	30
V1	70	#4	STR	7'-5"	347
V2	44	#4	STR	8'-9"	257

TOTAL REINFORCING STEEL 4586 LBS.

CLASS A CONCRETE

POUR #1 (CAP, COLLARS & LOWER WINGWALLS) 19.1 C.Y.

POUR #2 (BACKWALL & UPPER WINGWALL) 10.1 C.Y.

TOTAL = 29.2 C.Y.

HP 12x53 STEEL PILES

NO. = 6 LIN. FT. = 330

NOTES:

FOR OTHER NOTES, SEE "FOUNDATION LAYOUT" SHEET AND "LOCATION SKETCH" SHEET.

THE CONCRETE IN THE SHADED AREA OF THE WING SHALL BE POURED AFTER THE PARAPET AND END POST ARE CAST IF SLIP FORMING IS USED.

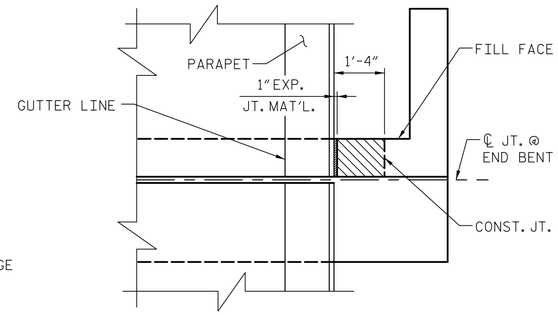
STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.

BACKWALL SHALL BE PLACED BEFORE APPLYING THE EPOXY PROTECTIVE COATING.

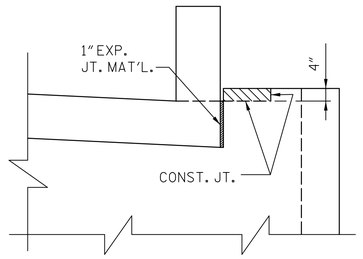
THE TOP SURFACE OF THE END BENT CAP, EXCEPT THE BRIDGE SEAT BUILDUPS, SHALL BE SLOPED TRANSVERSELY FROM THE FILL FACE TO THE BACK FACE AT THE RATE OF 2%.

THE TOP SURFACE AREAS OF THE END BENTS CAPS SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, EXCEPT THE MEMBRANE CURING COMPOUND METHOD SHALL NOT BE USED.

INSTALL THE 4" Ø DRAIN PIPE THROUGH THE WINGWALL AS REQUIRED FOR REINFORCED BRIDGE APPROACH FILLS, SEE THE ROADWAY PLANS, REINFORCING STEEL IN THE WINGWALL MAY BE SHIFTED AS NECESSARY TO CLEAR THE DRAIN PIPE.



PLAN



ELEVATION

BLOCKOUT IN WINGWALL DETAILS

PROJECT NO. U-2707

FORSYTH COUNTY

STATION: 90+25.00 -L-

SHEET 3 OF 3 BRIDGE NO. 656

AECOM
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(919) 854-6200 www.aecom.com
AECOM License No. P-0342

NORTH CAROLINA PROFESSIONAL SEAL 033674 ENGINEER JOHN C. MORRISON
DocuSigned by: John L. Morrison
1/12/2016

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT 2
SECTIONS AND DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-39
						TOTAL SHEETS 86

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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CHECKED BY : JCM DATE : 11/2015

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