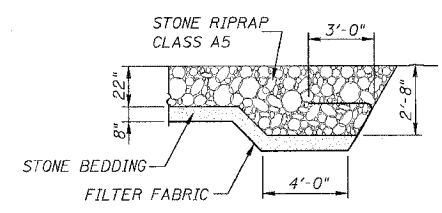
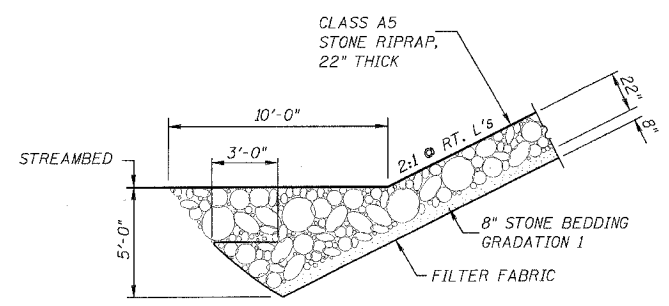


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 788 (C.H. 24/ C.H. 16)	03-00075-00-BR, WASH. 03-00082-00-BR, CLIN.	WASHINGTON CLINTON	22	12

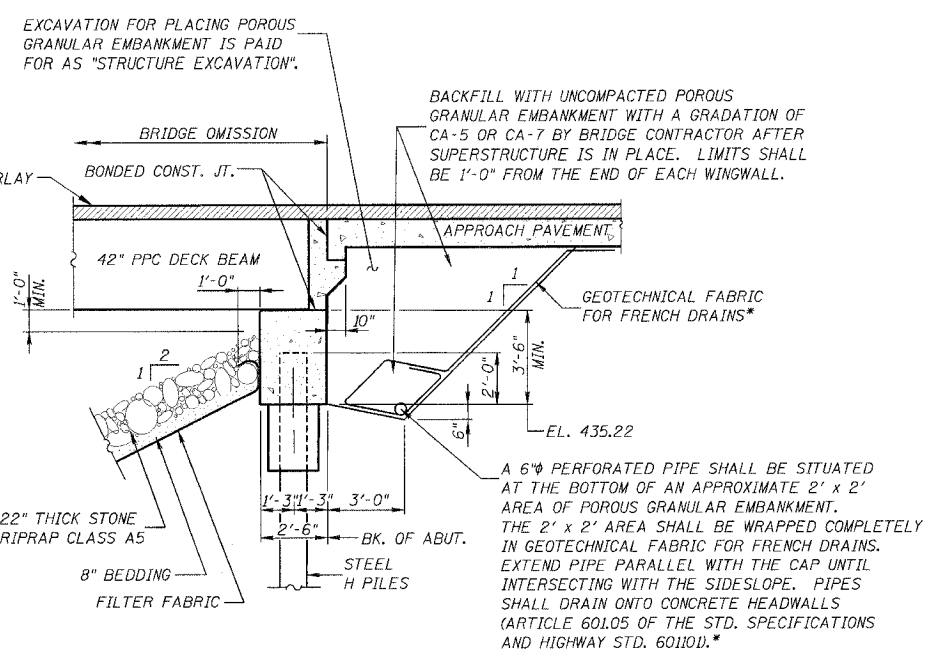
126NWS-5215.DGN FEB. 21, 2006



RIPRAP FLANK DETAIL



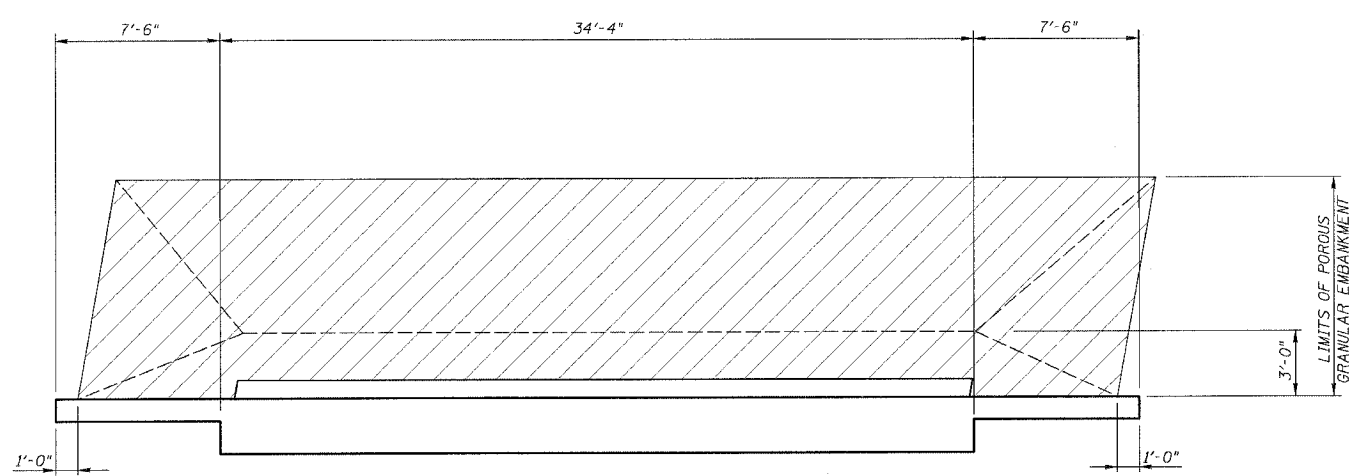
STONE RIPRAP ANCHOR DETAIL



SECTION THRU INTEGRAL ABUTMENT

(ALL HORIZONTAL DIMENSIONS SHOWN ARE AT RIGHT ANGLES UNLESS OTHERWISE NOTED.)

* INCLUDED IN THE COST OF POROUS GRANULAR EMBANKMENT.



PLAN SHOWING LIMITS OF POROUS GRANULAR EMBANKMENT AT ABUTMENT

GENERAL NOTES

- THE CONTRACTOR SHALL DRIVE ONE (1) TEST PILE, AT EACH ABUTMENT AND PIER, IN PERMANENT LOCATIONS AS DIRECTED BY THE ENGINEER BEFORE ORDERING REMAINING PILES.
- KEYWAY SURFACES SHALL BE CLEANED TO REMOVE FORM OIL OR OTHER BOND BREAKING MATERIAL PRIOR TO SHIPMENT OF BEAMS. CLEANING SHALL BE DONE BY SANDBLASTING THE KEYWAY AREAS BETWEEN THE TOP OF THE BEAM AND THE BOTTOM EDGE OF THE KEY.
- CLASS SI CONCRETE SHALL BE USED THROUGHOUT EXCEPT IN THE DECK BEAMS.
- A CALCIUM NITRIDE CORROSION INHIBITOR, AS COVERED IN THE SPECIAL PROVISIONS, SHALL BE USED IN THE CONCRETE FOR PRECAST PRESTRESSED CONCRETE DECK BEAMS.
- IN ADDITION TO ALL OTHER REQUIREMENTS OF SECTION 512 OF THE STANDARD SPECIFICATIONS, SPLICES FOR STEEL HP PILES SHALL DEVELOP FULL CAPACITY OF THE STEEL'S CROSS SECTIONAL AREA OF THE PILE FOR TENSION, SHEAR AND BENDING FORCES. ONE APPROVED METHOD OF ACHIEVING THIS REQUIREMENT IS FULL PENETRATION BUTT WELDING OF THE ENTIRE CROSS SECTION. OTHER TYPES OF SPLICES MEETING THE FULL CAPACITY REQUIREMENT MAY BE ALLOWED SUBJECT TO THE APPROVAL OF THE ENGINEER. ANY PROPOSAL BY THE CONTRACTOR TO USE AN ALTERNATE SPLICE METHOD MUST INCLUDE ADEQUATE DOCUMENTATION DEMONSTRATING THAT THE FULL TENSION, SHEAR AND BENDING CAPACITIES WILL BE MET. APPROPRIATE WELDER QUALIFICATIONS WILL BE REQUIRED FOR THE POSITIONS AND PROCESSES USED IN SPLICING ALL PILES. NONDESTRUCTIVE TESTING OF COMPLETED WELDS WILL BE LIMITED TO VISUAL INSPECTION.
- BITUMINOUS CONCRETE SURFACE COURSE OVERLAY FOR THE BRIDGE DECK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 582 OF THE STANDARD SPECIFICATIONS.
- WATERPROOFING MEMBRANE SYSTEM FOR THE BRIDGE SHALL BE IN ACCORDANCE WITH MATERIAL AND CONSTRUCTION REQUIREMENTS OF SECTION 581 OF THE STANDARD SPECIFICATIONS.
- PORTLAND CEMENT MORTAR FAIRING COURSE SHALL BE APPLIED ALONG THE PRECAST PRESTRESSED CONCRETE DECK BEAMS IN ACCORDANCE WITH SECTION 583 OF THE STANDARD SPECIFICATIONS.
- ALL REINFORCEMENT FOR PIERS AND ABUTMENTS SHALL BE EPOXY COATED A.A.S.H.T.O. M-284.
- LAYOUT OF SLOPE PROTECTION SYSTEM MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. M-31 OR M-322, GRADE 60.
- DECK BEAMS SHALL BE CLEANED TO SATISFACTION OF ENGINEER BEFORE PLACING WATERPROOFING MEMBRANE SYSTEM.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUB.	TOTAL
REMOVAL OF EXISTING STRUCTURES	EACH			1
PRECAST PRESTRESSED CONCRETE DECK BEAMS (42" DEPTH)	SQ. FT.	10,494		10,494
CONCRETE STRUCTURES	CU. YD.		188.2	188.2
REINFORCEMENT BARS, EPOXY COATED	POUND		17,120	17,120
FURNISHING STEEL PILES HP12x63	FOOT		564	564
FURNISHING STEEL PILES HP14x89	FOOT		650	650
DRIVING STEEL PILES	FOOT		1,214	1,214
TEST PILE STEEL HP12x63	EACH		2	2
TEST PILE STEEL HP14x89	EACH		2	2
METAL SHOES	EACH		26	26
WATERPROOFING MEMBRANE SYSTEM	SQ. YD.	1,167		1,167
PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	3,180		3,180
STEEL BRIDGE RAIL, TYPE SM	FOOT	640		640
NAME PLATES	EACH			1
CHANNEL EXCAVATION	CU. YD.			2,471
STONE RIPRAP, CLASS A5	SQ. YD.			820
FILTER FABRIC	SQ. YD.			820
STRUCTURE EXCAVATION	CU. YD.		339	339
POROUS GRANULAR EMBANKMENT	CU. YD.		112	112
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	163		163
UNDERWATER STRUCTURE EXCAVATION PROTECTION-LOCATION 1	EACH		1	1
UNDERWATER STRUCTURE EXCAVATION PROTECTION-LOCATION 2	EACH		1	1

GENERAL NOTES, DETAILS & TOTAL BILL OF MATERIAL
F.A.S. 788 (C.H. 24/C.H. 16)
OVER CROOKED CREEK
SECTION 03-00075-00-BR
WASHINGTON COUNTY
SECTION 03-00082-00-BR
CLINTON COUNTY

DESIGNED:	L.D.G.
CHECKED:	B.G.H.
DRAWN:	K.H.L.
CHECKED:	L.D.G.

H.M. & G. INC.