

INSTRUMENT LIST (PROVIDED BY UMASS)

INSTRUMENT	LOCATION	MODEL	QUANTITY	DTL. SHEET
CABLING	ALL		5000 FT	
CASING	PILES	6400	4	67
CRACKMETER	ABUTMENT	4420	6	68
PRESSURE CELL	ABUTMENT	4810	18	67
PRESSURE CELL	WING WALL	4815	4	90
PRESSURE CELL	TEMP. CORRECTION	4810	1	68
STRAIN GAGE	GIRDERS	4050	24	68,75
STRAIN GAGE	PIER	4200	8	92
STRAIN GAGE	PILES	4000	64	67
TILTMETER	ABUTMENT	6160 MEMS	2	68
TILTMETER	PILES	6150 MEMS	20	67

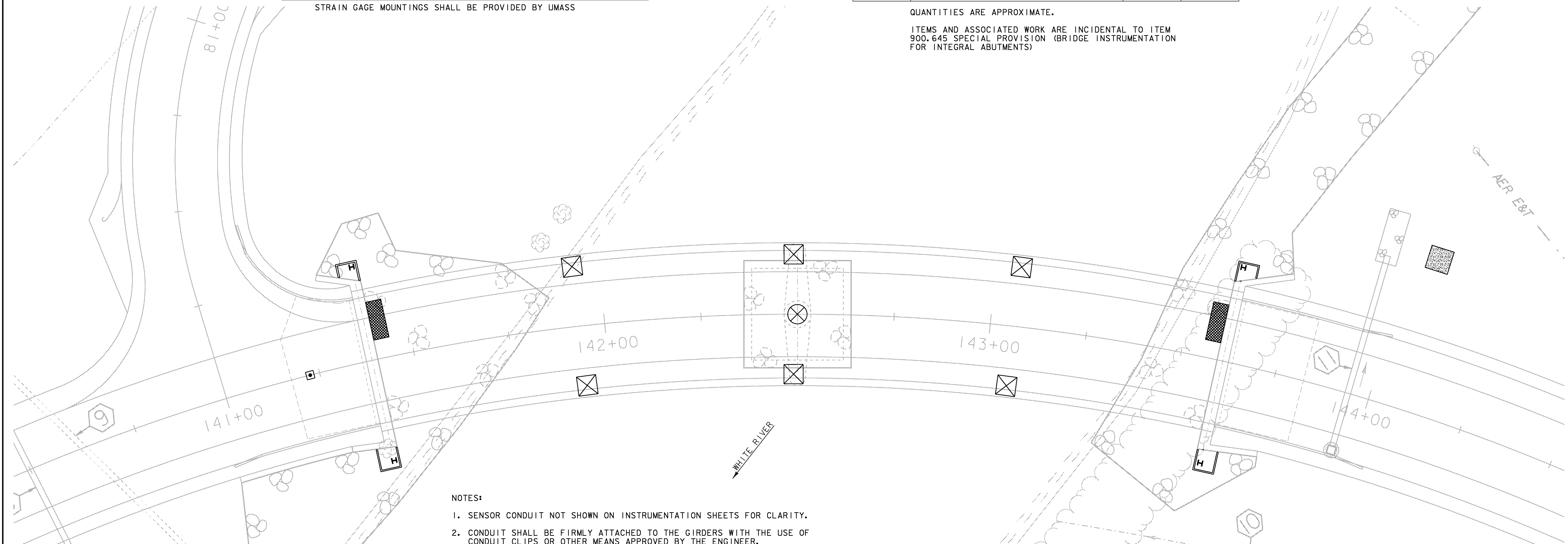
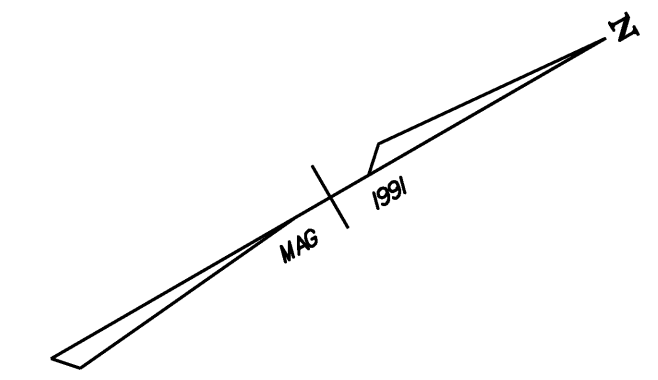
STRAIN GAGE MOUNTINGS SHALL BE PROVIDED BY UMASS

INSTRUMENTATION ITEMS (PROVIDED BY CONTRACTOR)

ITEM	DESCRIPTION	QUANTITY	UNITS
505.20	HP 14 X 117	80	LF
506.60	STRUCTURAL STEEL	1800	LB
507.15	REINFORCING STEEL	250	LB
541.25	CONCRETE, CLASS B	6	CY
541.58	MORTAR, TYPE IV	0.5	CY
604.55	CAST IRON COVER WITH FRAME	4	EACH
678.21	CONDUIT (2" PVC)	2000	LF
	ELECTRICAL BOX	3	EACH
	PRESSURE TYPE ROUND MANHOLE	4	EACH
	EPOXY, WELDS, MISC. ATTACHMENT HARDWARE		

QUANTITIES ARE APPROXIMATE.

ITEMS AND ASSOCIATED WORK ARE INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (BRIDGE INSTRUMENTATION FOR INTEGRAL ABUTMENTS)



NOTES:

1. SENSOR CONDUIT NOT SHOWN ON INSTRUMENTATION SHEETS FOR CLARITY.
2. CONDUIT SHALL BE FIRMLY ATTACHED TO THE GIRDERS WITH THE USE OF CONDUIT CLIPS OR OTHER MEANS APPROVED BY THE ENGINEER.
3. CONDUIT INSTALLATION SHALL INCLUDE ALL JOINTS AND ELBOWS REQUIRED AND ALL NON-WIRED CONDUIT SHALL BE INSTALLED WITH A PULL CORD.
4. THE INSTALLATION OF GIRDER GAGES AND ROUTING OF CABLING THROUGH CONDUIT SHALL BE PERFORMED AFTER THE GIRDER CROSS FRAMES HAVE BEEN INSTALLED AND PRIOR TO THE DECK POUR OR ABUTMENT BACKFILL.
5. CONTRACTOR SHALL PROVIDE TELEPHONE AND ELECTRIC SERVICE TO ENCLOSURE LOCATION. ENCLOSURE AND ELECTRIC SERVICE SHALL BE GROUNDED. ELECTRIC SERVICE SHALL TERMINATE IN 4 OUTLET GFI PROTECTED BOX.
6. TELEPHONE SERVICE SHALL TERMINATE IN STANDARD RECEPTACLE WITHIN THE ENCLOSURE.
7. THERE SHOULD BE NO WELDING OF GAGES, BOXES OR ATTACHMENTS TO GIRDERS IN THE FIELD. ANY WELDING THAT OCCURS ON THE PILES IN THE FIELD SHALL ADHERE TO SUBSECTION 506.10.
8. THE FINAL LOCATION OF ALL GAGES, ENCLOSURES AND CONDUIT PLACED IN THE FIELD SHALL BE APPROVED BY THE RESIDENT ENGINEER AND UMASS.
9. ELECTRICAL BOXES SHALL BE NEMA TYPE 4X WATERPROOF, LOCKING ENCLOSURES INCLUDING ALUMINUM SUBPANEL. TWO ENCLOSURES SHALL BE WALL MOUNTABLE WITH MINIMUM INTERIOR DIMENSIONS OF 60" x 36" x 13". ONE ENCLOSURE SHALL BE FLOOR MOUNTABLE WITH MINIMUM INTERIOR DIMENSIONS OF 60" x 36" x 18".

	CONCRETE PAD WITH FLOOR MOUNTABLE ELECTRICAL BOX (FOR DATA COLLECTOR AND TELEPHONE)
	REFERENCE PILE AND ENCLOSURE
	REFERENCE PRESSURE CELL BLOCK STA. 141+22.50, 3' BELOW APPROACH SLAB
	ELECTRICAL BOX ATTACHED TO ABUTMENT
	STRAIN GAGES ON GIRDERS (GROUP OF 4)
	STRAIN GAGES ON PIER (TWO GROUPS OF 4)

INSTRUMENTATION LAYOUT SHEET

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4 (21)
FILE NAME: /78f238/str5/sf238monitor	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: T. FILLBACH	CHECKED BY: C. ALLEN
sf238ipl.i	SHEET 66 OF 144