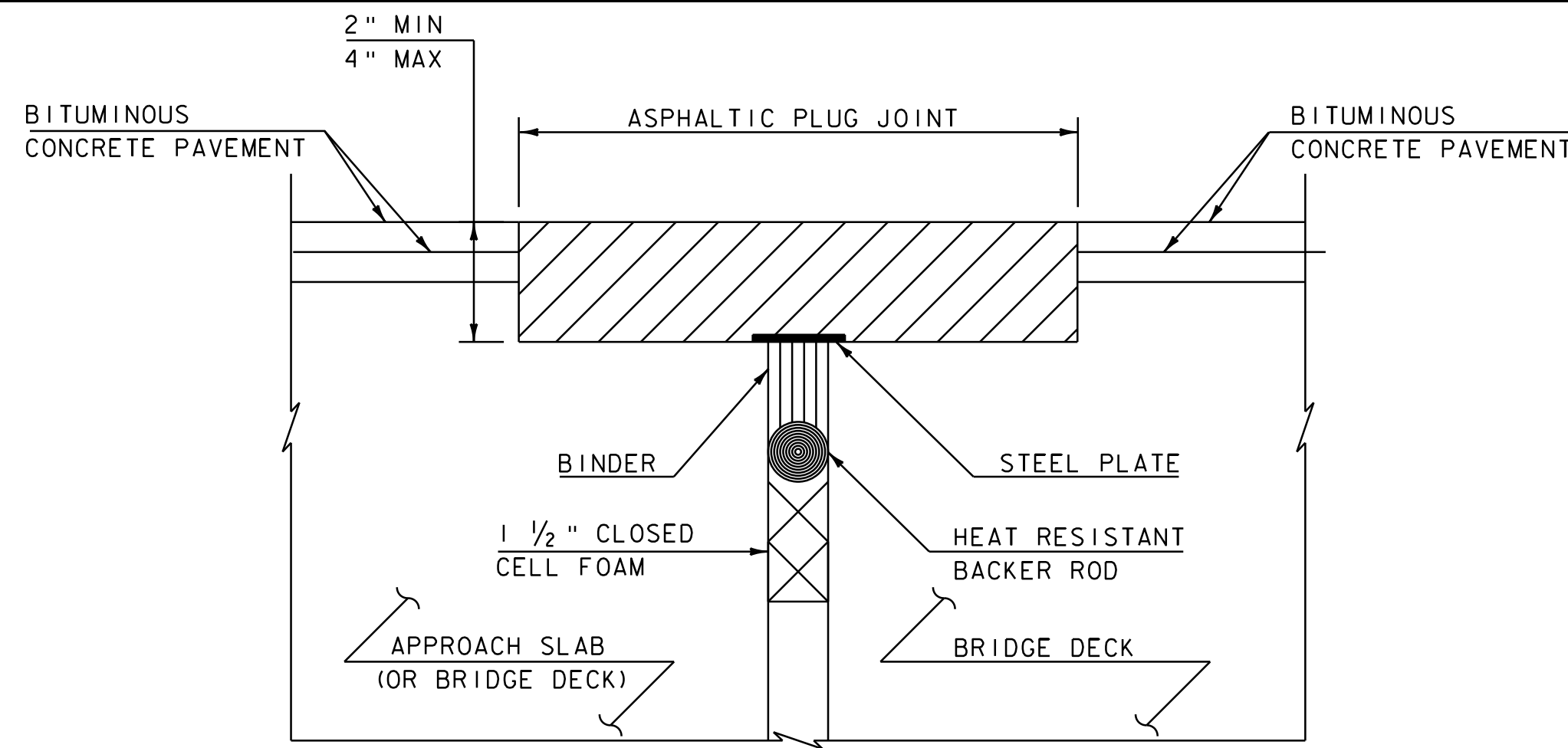


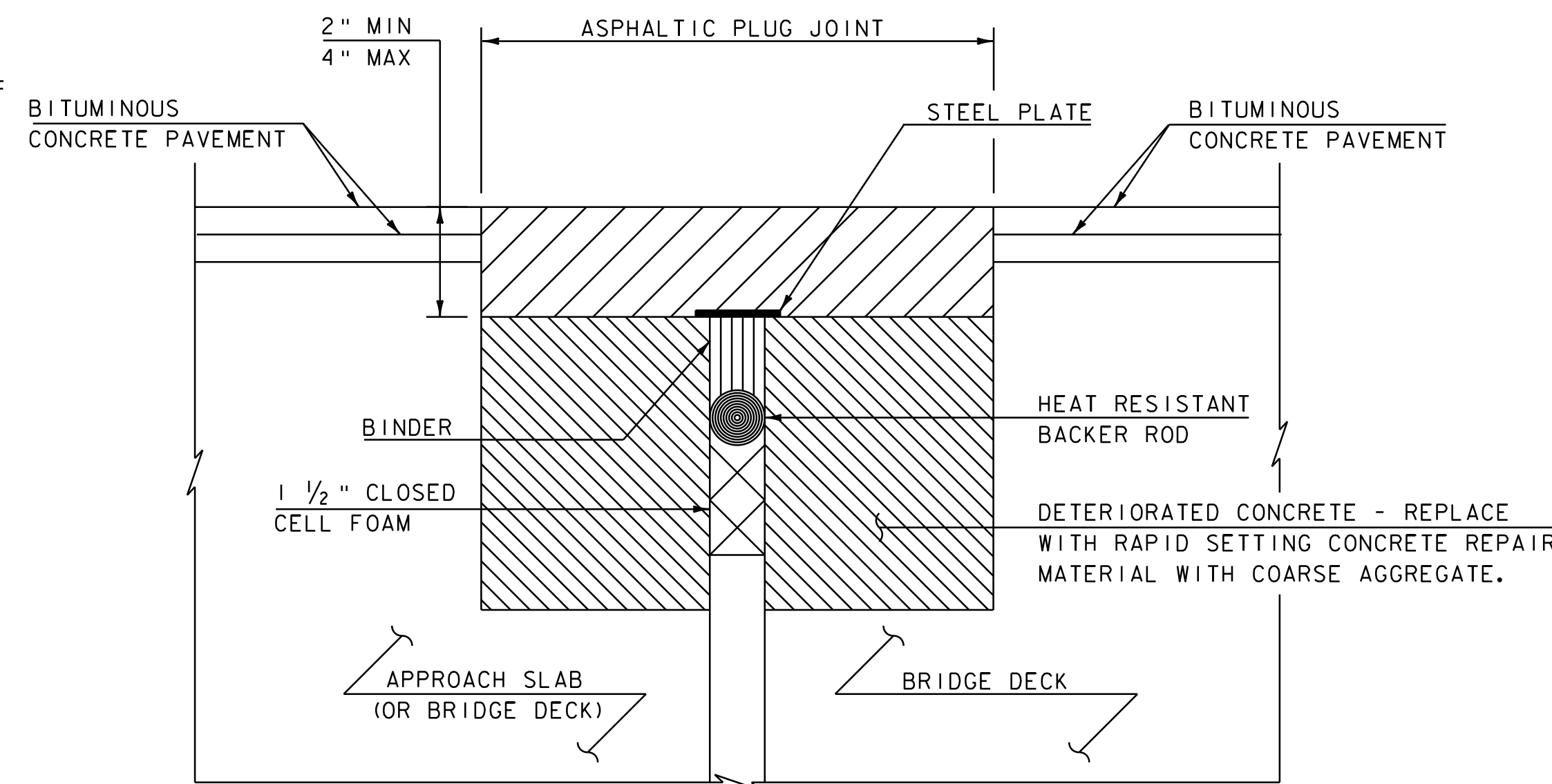
ASPHALTIC PLUG-TYPE JOINT DETAIL

(NOT TO SCALE)



ASPHALTIC PLUG-TYPE JOINT DETAIL
REMOVAL OF < 2" DETERIORATED CONCRETE

(NOT TO SCALE)



ASPHALTIC PLUG-TYPE JOINT DETAIL
REMOVAL OF > 2" DETERIORATED CONCRETE

(NOT TO SCALE)

ASPHALTIC PLUG JOINT NOTES

- I. INSTALLATION
 - A. LOCATE THE JOINT CENTRALLY OVER THE DECK OVERLAY EXPANSION GAP OR FIXED JOINT MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
 - B. REMOVE THE BITUMINOUS CONCRETE PAVEMENT FULL DEPTH AS SHOWN ON THE PLANS. THE PAVEMENT SHALL BE DRY AND SAW CUT TO THE LIMITS REQUIRED TO PLACE THE JOINT. A PNEUMATIC HAMMER AND CHISEL MAY BE USED ADJACENT TO THE CURB ONLY WHEN SAW CUTTING IS NOT POSSIBLE.
 - C. BLAST CLEAN THE JOINT AREA OF DEBRIS, ASPHALT AND SHEET MEMBRANE. THOROUGHLY DRY THE JOINT AREA WITH COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
 - D. REPAIR SPALLED AND DEFECTIVE CONCRETE WITH AN APPROVED MATERIAL AS AGREED UPON BY THE ENGINEER.
 - E. PLACE PROPERLY SIZED HEAT RESISTANT BACKER ROD IN THE MOVEMENT GAP ALLOWING FOR 1" +/- OF BINDER ABOVE THE ROD.
 - F. HEAT AND PLACE THE BINDER MATERIAL AS RECOMMENDED BY THE MANUFACTURER.
 - G. PLACE 1/4" THICK BY 8" WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE THE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRESTAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER. THE STEEL PLATES MAY BE OMITTED WHERE THE ENGINEER DETERMINES THAT THE APPROACH SLAB OR BRIDGE DECK WILL PROVIDE INADEQUATE SUPPORT AND WHERE VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.
 - H. HEAT AND MIX THE BINDER MATERIAL AND AGGREGATE AS RECOMMENDED BY THE MANUFACTURER.
- I. INSTALLATION OF MATERIAL, COMPACTION, AND TOP COATING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
- J. IMMEDIATELY AFTER TOP COATING, CAST AN ANTI-SKID MATERIAL OVER THE JOINT TO REDUCE THE RISK OF TRACKING.
- K. ONCE THE JOINT REACHES 82 DEG C (180 DEG F) +/-, WATER MAY BE USED TO EXPEDITE THE COOLING PROCESS.
- L. PROTECT JOINT FROM TRAFFIC UNTIL THE MATERIAL HAS COOLED TO 51 DEG C (125 DEG F) +/-.
2. WEATHER LIMITATIONS. (APPLY BINDER MATERIAL ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL OR AS RECOMMENDED BY THE MANUFACTURER):
 - A. THE AMBIENT AIR TEMPERATURE IS AT LEAST 10 DEG C (50 DEG F) AND RISING.
 - B. THE ROAD SURFACE IS DRY.
 - C. WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.

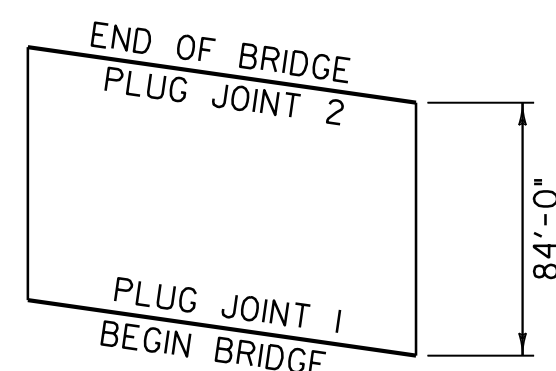
NOTES:

1. UPON ENCOUNTERING UP TO 2" AVERAGE OF DETERIORATED CONCRETE, THE CONTRACTOR SHALL REMOVE THE DETERIORATED MATERIAL AND REPLACE IT WITH THE ASPHALTIC PLUG JOINT MATERIAL AS DIRECTED BY THE RESIDENT ENGINEER.
2. REMOVAL OF THE DETERIORATED CONCRETE WILL NOT BE PAID SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO THE UNIT BID PRICE FOR THE ITEM 516.10. THE ADDITIONAL PLUG JOINT MATERIAL BELOW THE DESIGN DEPTH TO REPLACE THE DETERIORATED CONCRETE WILL BE CONSIDERED INCIDENTAL TO THE UNIT BID PRICE FOR THE ITEM 516.10.

NOTES:

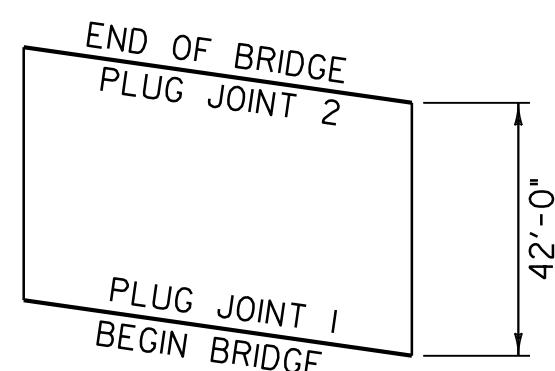
1. UPON ENCOUNTERING GREATER THAN 2" AVERAGE OF DETERIORATED CONCRETE, THE CONTRACTOR SHALL REMOVE THE DETERIORATED MATERIAL AND REPLACE IT WITH RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE FORMED TO EXISTING ELEVATION.
2. REMOVAL OF THE DETERIORATED CONCRETE WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 580.20 "RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE".
3. REINFORCING STEEL NOT SHOWN FOR CLARITY.

JOINT	STATION	LENGTH
1	209+33	20' - 0"
2	210+17	20' - 0"
BRIDGE #84		40' - 0"
TOTAL LENGTH OF JOINT		

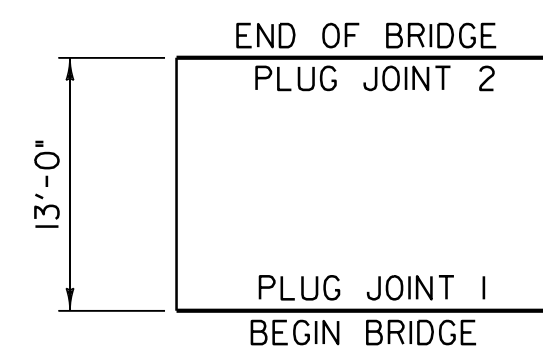


WORCESTER BRIDGE #84
FIELD STA. 209+75 (MM 3.973)
COLD PLANE AND PAVE

JOINT	STATION	LENGTH
1	26+50	28' - 0"
2	26+92	28' - 0"
BRIDGE #1		56' - 0"
TOTAL LENGTH OF JOINT		



ELMORE BRIDGE #1
FIELD STA. 26+73 (MM 0.506)
COLD PLANE AND PAVE



ELMORE BRIDGE #2
FIELD STA. 94+39 (MM 1.788)
COLD PLANE AND PAVE

JOINT	STATION	LENGTH
1	94+33	23' - 0"
2	94+46	23' - 0"
BRIDGE #2		46' - 0"
TOTAL LENGTH OF JOINT		

BRIDGE #	516.10 BRIDGE EXPANSION JOINT, ASPHALT PLUG	580.20 RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE
	LF	CF
WORCESTER 84	40	10
ELMORE 1	56	10
ELMORE 2	46	10
SUBTOTAL	142	30
ROUNDING	3	5
TOTAL	145	35

DETAILS ARE NOT TO SCALE

**ASPHALTIC
PLUG JOINT
DETAIL
SHEET**

PROJECT NAME: WORCESTER-ELMORE
PROJECT NUMBER: STP 2209(1)S

FILE NAME: 99c170.dgn
PROJECT LEADER: CDL
DESIGNED BY: CDL
PLOT FILE: 99c170_6.i

PLOT DATE: 23-SEP-2011 5:24
DRAWN BY: SJL
CHECKED BY: EPD
SHEET 6 OF 36