

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9415	02-00055-00-RP	RANDOLPH	35	2
CITY OF CHESTER		PROJECT NO. M-5014(008)		
CONTRACT NO. 97274		JOB NO. C98-304-06		
FEDERAL AID PROJECT				

### MIXTURE REQUIREMENTS: HOT-MIX ASPHALT PROJECT

ROUTE	FAU 9415
SECTION	02-00055-00-RP
MUNICIPALITY	CHESTER
CONTRACT	97274

DESCRIPTION: BUENA VISTA STREET

20 YR. ESAL'S: ADT = LESS THAN 100

LOCATION(S)	SIDEROAD INTERSECTION RETURNS (BUT JOINTS)
MIXTURE USE	INCIDENTAL
AC/PG	PG 64-22
RAP % (MAX)	10%
DESIGN AIR VOIDS	4.0% @ Ndes = 70
MIX COMPOSITION (GRADATION MIXTURE)	IL - 9.5mm or IL 12.5mm
FRICTION AGG	MIXTURE C

### EARTHWORK SCHEDULE

1. Location	2. Earth Excavation (Special) Cubic Yards	3. Earth Excavation Adjusted for Shrinkage Cubic Yards	4. Embankment Furnished Excavation Cubic Yards	5. Earthwork Balance Waste (+) or Shortage (-) Cubic Yards
Sta. 16+18 to 35+50	200	0	600	-600
				+200
<b>Total</b>	<b>200</b>	<b>0</b>	<b>600</b>	<b>-600</b>
				+200

Columns 1, 2, & 4 Location from cross sections:  
Cut = Earth Excavation (Special) Fill = Embankment

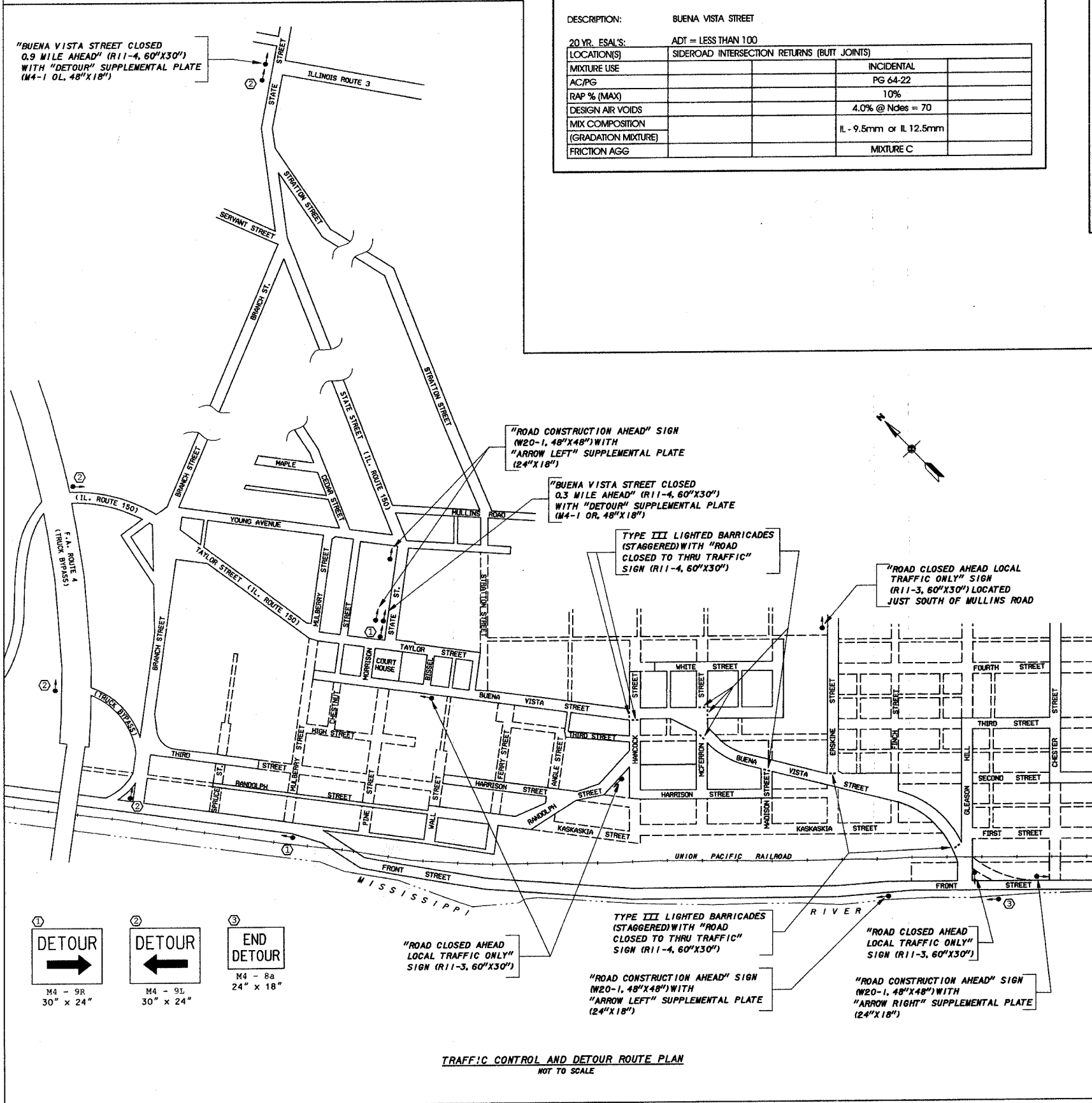
Columns 3  
Quantity of earth excavation (cut) adjusted for a Shrinkage factor of 100% - All waste

Columns 5  
Earthwork required:  
(-) = Quantity of Fill or Embankment needed (Furnished Excavation) - 600 Cu. Yds.  
(+) = Quantity to be wasted. - 200 Cu. Yds.

Pay Items:  
EARTH EXCAVATION (SPECIAL) - 200 CU. YDS.  
FURNISHED EXCAVATION - 600 CU. YDS.

### SUMMARY OF QUANTITIES

CODE NUMBER	ITEM	UNIT	TOTAL
20200410	EARTH EXCAVATION (SPECIAL)	CU YD	200
20400800	FURNISHED EXCAVATION	CU YD	600
20800150	TRENCH BACKFILL	CU YD	1,000
25000900	SEEDING, CLASS 1 (SPECIAL)	ACRE	1.1
25100630	EROSION CONTROL BLANKET	SQ YD	3,000
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	200
28000300	TEMPORARY DITCH CHECKS	EACH	10
28000400	PERIMETER EROSION BARRIER	FOOT	1,000
28000500	INLET AND PIPE PROTECTION	EACH	5
30200650	PROCESSING MODIFIED SOIL 12"	SQ YD	6,080
31001500	LIME	TON	190
35100100	AGGREGATE BASE COURSE, TYPE A	TON	1,520
35800100	PREPARATION OF BASE	SQ YD	1,540
35800200	AGGREGATE BASE REPAIR	TON	100
40600982	HOT-MIX ASPHALT REMOVAL - BUTT JOINT	SQ YD	170
40800010	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	150
40800030	AGGREGATE (PRIME COAT)	TON	8
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	300
42000301	PORTLAND CEMENT CONCRETE PAVEMENT 4" (JOINTED)	SQ YD	4,960
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	254
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	8,112
42400800	DETECTABLE WARNINGS	SQ FT	40
44000100	PAVEMENT REMOVAL	SQ YD	4,820
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	146
44000400	GUTTER REMOVAL	FOOT	2,201
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	246
44000600	SIDEWALK REMOVAL	SQ FT	6,009
44002500	GUTTER OUTLET REMOVAL	EACH	5
45200100	JOINT OR CRACK ROUTING (PC CONCRETE PAVEMENT AND SHOULDER)	FOOT	860
45200300	JOINT OR CRACK FILLING	POUND	200
50104400	CONCRETE HEADWALL REMOVAL	EACH	3
50105210	REMOVE EXISTING CULVERTS	FOOT	744
54010202	PRECAST CONCRETE BOX CULVERT 2' X 2'	FOOT	8
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1
54244405	FLUSH INLET BOX FOR MEDIAN, STANDARD 542546	EACH	1
54248515	CONCRETE COLLAR	EACH	3
55019500	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"	FOOT	36
55019600	STORM SEWERS, TYPE 1 REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 15"	FOOT	135
55019700	STORM SEWERS, TYPE 1 REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 18"	FOOT	325
55019900	STORM SEWERS, TYPE 1 REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 24"	FOOT	847
60237000	INLETS, TYPE A, TYPE 15 FRAME AND LID	EACH	1
60246541	INLET BOX, SPECIAL, NO. 1	EACH	4
60246542	INLET BOX, SPECIAL, NO. 2	EACH	6
60246543	INLET BOX, SPECIAL, NO. 3	EACH	6
60246544	INLET BOX, SPECIAL, NO. 4	EACH	1
60260100	INLETS TO BE ADJUSTED	EACH	2
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	3
60500060	REMOVING INLETS	EACH	3
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	105
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	3,584
63200310	GUARDRAIL REMOVAL	FOOT	820
67100100	MOBILIZATION	L SUM	1
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1
72000100	SIGN PANEL - TYPE 1	SQ FT	103
72900210	METAL POST - TYPE B	EACH	15
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	4,906
78001150	PAINT PAVEMENT MARKING - LINE 12"	FOOT	648
78001180	PAINT PAVEMENT MARKING - LINE 24"	FOOT	156
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1
XX000717	STORM SEWER CONNECTION, SPECIAL	EACH	3
XX000841	DOUBLE GUTTER OUTLET, SPECIAL	EACH	1



### STRUCTURAL DESIGN DATA

DESIGN PERIOD - 20 YEARS  
 STRUCTURAL DESIGN TRAFFIC: YEAR 2027  
 PV = 1700 SJ = 100 MU = 200  
 ROAD/STREET CLASSIFICATION: CLASS III  
 PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
 P = 50% S = 50% M = 50%  
 TRAFFIC FACTOR - TF = 1.257  
 MINIMUM SOIL SUPPORT: IBR = 7.1

.. USE PCC PAVEMENT 8" (JOINTED - 15 FT. MAX. TRANSVERSE JOINT SPACING) ON AGGREGATE BASE COURSE, TYPE A (4")

CITY OF CHESTER  
 RANDOLPH COUNTY, ILLINOIS  
 IMPROVEMENTS TO BUENA VISTA STREET  
 SUMMARY OF QUANTITIES, STRUCTURAL DESIGN DATA, EARTHWORK SCHEDULE,  
 MIXTURE REQUIREMENTS, DETOUR ROUTE PLAN AND  
 TRAFFIC CONTROL AND DETOUR ROUTE PLAN

REVISED 03/15/07

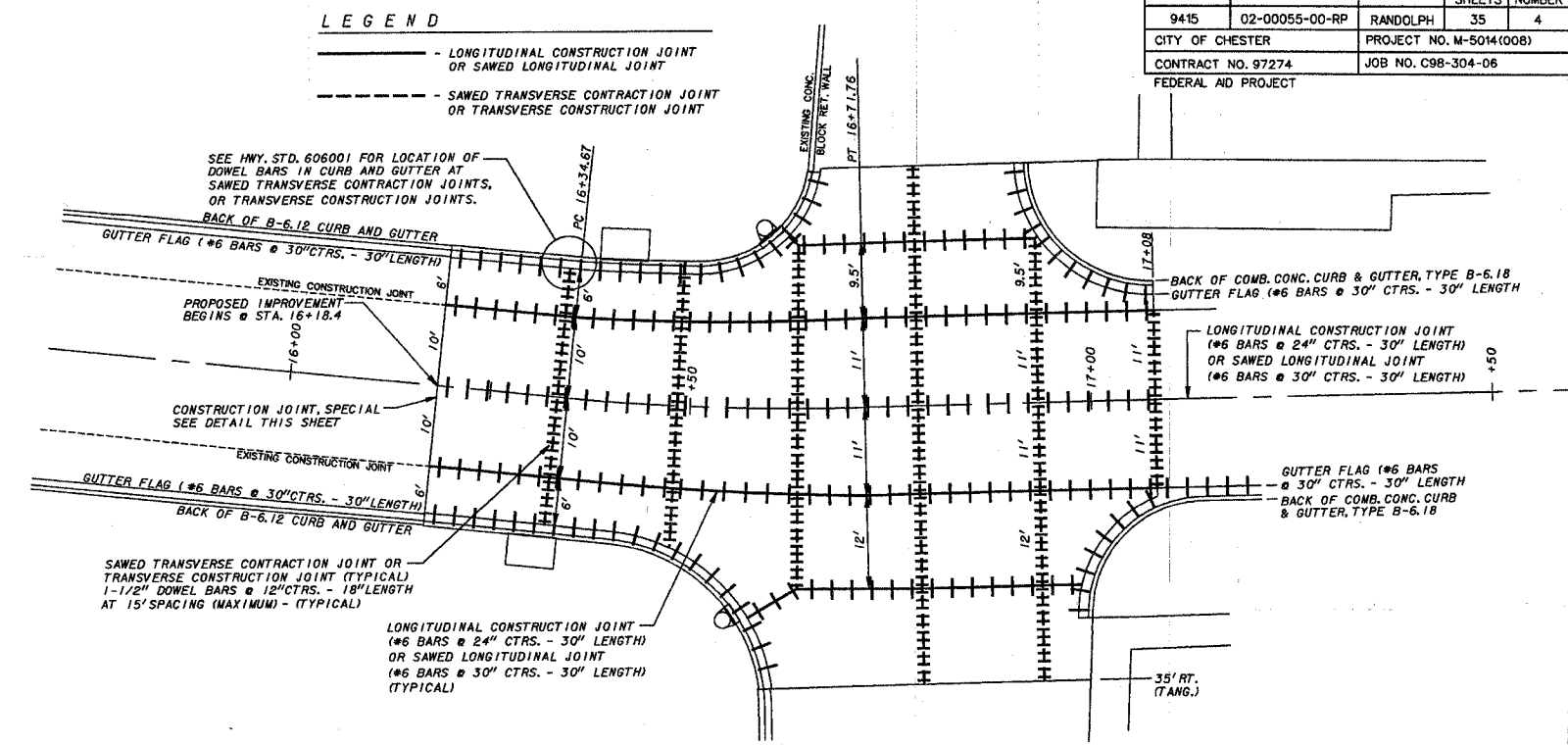
Revised 4-18-07

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CONTRACT NO. 97274		JOB NO. C98-304-06		
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**SIGNAGE SCHEDULE**

EXISTING LOCATION STATION, OFFSET	PROPOSED LOCATION STATION, OFFSET	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	TOTAL SQ. FT.
16+97, 38'RT	16+97, 36'RT			1											1	1
19+54, 41'LT	N/A														1	1
20+01, 22'LT	19+95, 32'LT				1										1	1
20+22, 25'LT	20+08, 22'LT			1											1	1
21+11, 11'RT	21+26, 22'RT			1											1	1
22+81, 33'RT	N/A														1	1
25+20, 28'RT	25+20, 25'RT			1											1	1
25+54, 17'RT	25+64, 17'RT														1	1
26+80, 17'RT	26+60, 17'RT														1	1
28+57, 45'LT	28+52, 29'LT			1											1	1
30+57, 21'LT	30+60, 23'LT														1	1
32+36, 17'RT	N/A														1	1
34+03, 19'RT	34+05, 19'RT				1										1	1
35+70, 25'LT	35+69, 22'LT			1											1	1
36+75, 20'LT	36+75, 20'LT														1	1
37+50, 19'RT	37+50, 19'RT														1	1
37+50, 19'RT	37+75, 20'LT														1	1
38+40, 20'RT	38+52, 28'RT			1											1	1
<b>TOTALS</b>		2	2	6	1	1	1	1	1	2	1	1	1	1	15	16
<b>TOTAL SIGN FACE AREA (SQ. FT.)</b>		10.0	10.0	37.5	9.0	9.0	8.0	6.25	6.25	6.25	10.0	5.55	4.5	N/A	N/A	103.3

\* This sign and post will be removed and reinstalled by the City of Chester  
 \*\* These existing signs and posts shall be removed by the Contractor and delivered to the Chester Street Department, 802 Servant Street and shall become the property of the City of Chester. The cost of performing this work shall not be paid for separately, but shall be included in the contract.



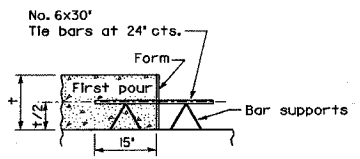
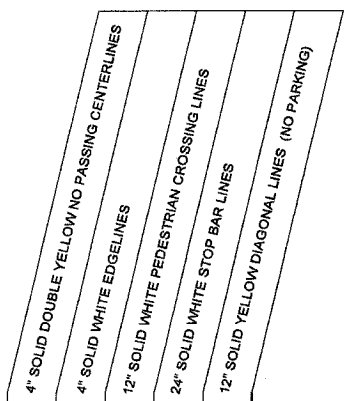
PER ARTICLE 606.07 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE CURB AND GUTTER MAY BE CONSTRUCTED MONOLITHICALLY WITH THE PCC PAVEMENT. IF MONOLITHIC CONSTRUCTION IS PERFORMED, THE BARS BETWEEN THE CURB & GUTTER AND THE PCC PAVEMENT CAN BE ELIMINATED.

Revised 4-18-07

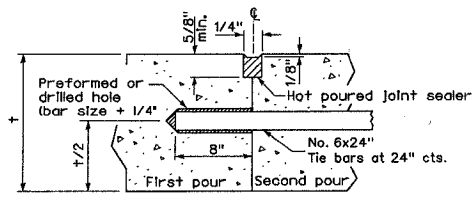
**PAVEMENT MARKING SCHEDULE**

LOCATION (STATION)	OFFSET *	FOOT	FOOT	FOOT	FOOT	FOOT
16+18 To 38+68	CENTERLINE	2,250				
17+08 To 19+78	11.17'LT		270			
16+58 To 17+00	27'RT and 32'RT			84		
16+80 To 17+00	36'RT				20	
17+08 To 19+30	LEFT					210
20+08 To 20+64	13.58'LT and 18.58'LT				108	
20+13 To 20+30	22'LT					20
21+01 To 21+21	30'RT To 22'RT					24
24+97 To 25+15	22'RT To 25'RT					18
28+36 To 29+18	13.58'LT and 18.58'LT				140	
28+57 To 28+79	29'LT To 22'LT					24
35+65 To 36+25	13.58'LT and 18.58'LT				106	
35+73 To 35+85	22'LT					22
38+54 To 38+68	23'LT To CENTERLINE					28
McFERRON STREET	CENTERLINE	68				
<b>TOTALS</b>		4,638	270	438	156	210

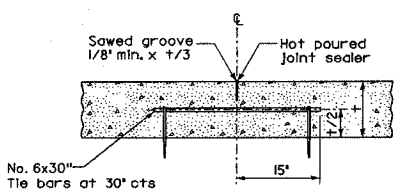
\* ALL OFFSETS ARE TO CENTER OF STRIPE



**LONGITUDINAL CONSTRUCTION JOINT**  
(TIE BAR FORMED IN PLACE)

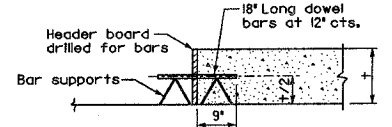


**LONGITUDINAL CONSTRUCTION JOINT**  
(TIE BAR GROUTED IN PLACE)

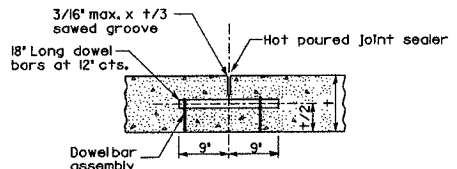


**SAWED LONGITUDINAL JOINT**

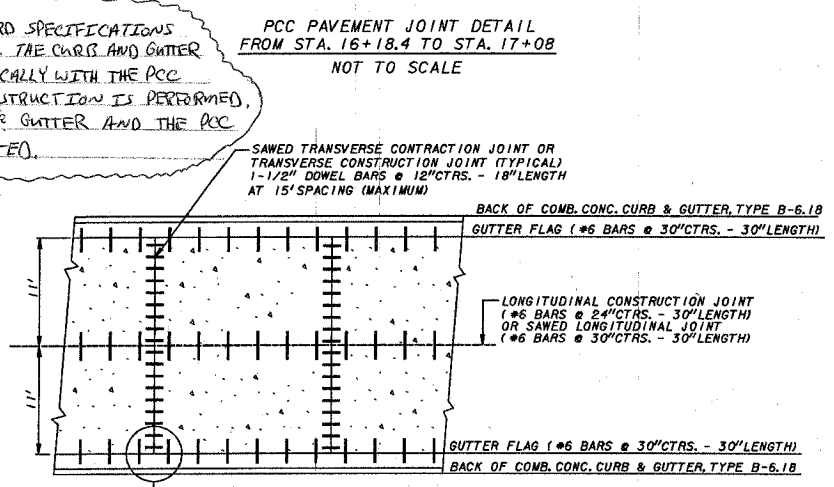
DOWEL BAR TABLE	
PAVEMENT THICKNESS	DOWEL BAR DIAMETER
8"	1-1/2"



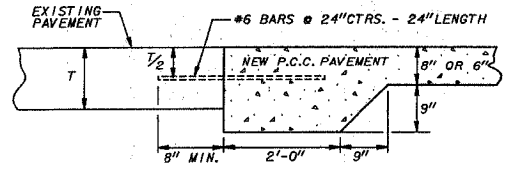
**TRANSVERSE CONSTRUCTION JOINT**



**SAWED TRANSVERSE CONTRACTION JOINT**



**DETAIL OF REINFORCEMENT FOR PCC PAVEMENT**  
FROM STA. 17+08 TO STA. 35+50  
NOT TO SCALE



**DETAIL OF CONSTRUCTION JOINT, SPECIAL**  
NOT TO SCALE  
TO BE CONSTRUCTED AT ALL LOCATIONS WHERE NEW CONCRETE PAVEMENT ABUTS EXISTING CONCRETE AND FLEXIBLE PAVEMENT.

NOTE: CONTRACTOR TO SAW EDGE OF EXISTING PAVEMENT TO THE SATISFACTION OF THE ENGINEER TO PROVIDE ACCEPTABLE CONSTRUCTION JOINT. #6 BARS SHALL BE DRILLED AND GROUTED INTO PLACE AS SHOWN. THE EDGE OF THE PROPOSED PAVEMENT SHALL BE CONSTRUCTED AS SHOWN. DELETE #6 BARS WHERE NEW PAVEMENT ABUTS EXISTING FLEXIBLE PAVEMENT.