

FOR UTILITY LOCATION PURPOSES, THIS PROJECT IS LOCATED IN THE N.E. AND S.E. QUARTERS OF SECTION 14, TOWNSHIP 5 NORTH, RANGE 10 WEST OF THE THIRD PRINCIPAL MERIDIAN.

AGENCIES KNOWN TO HAVE UNDERGROUND FACILITIES WITHIN THE LIMITS OF THIS IMPROVEMENT ARE SHOWN BELOW (MEMBERS OF JULIE, PHONE (800) 892-0123, ARE INDICATED BY \*).

\* AMEREN ILE  
700 OAKWOOD AVENUE  
P.O. BOX 478  
ALTON, IL 62002  
(618) 463-4043 (GAS)  
(618) 463-4051 (ELECTRIC)

CITY OF ALTON  
PUBLIC WORKS DEPARTMENT  
#2 EMMA L. KAUS LANE  
ALTON, IL 62002  
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\* ILLINOIS AMERICAN WATER CO.  
4436 INDUSTRIAL DRIVE  
P.O. BOX 186  
ALTON, IL 62002  
(618) 466-2131

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS FEDERAL AID HIGHWAY PEDESTRIAN OVERPASS

F.A.P. ROUTE 304 / US 67  
SECTION 06-00224-00-BR  
PROJECT TE-00D8(109)  
CITY OF ALTON  
MADISON COUNTY  
JOB C-98-392-06

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	MADISON	54	1

FEDERAL AID PROJECT  
\* 06-00224-00-BR  
CONTRACT NO. 97326

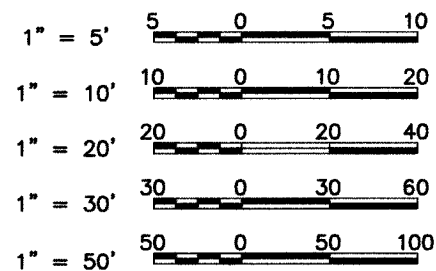
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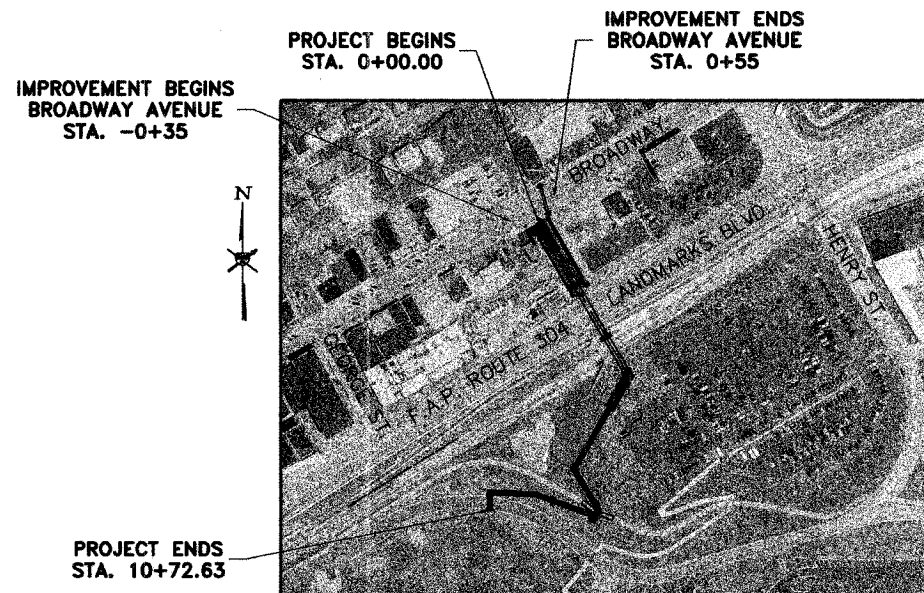
## HIGHWAY STANDARDS

SEE SHEET NO. 2

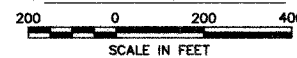
### SCALES



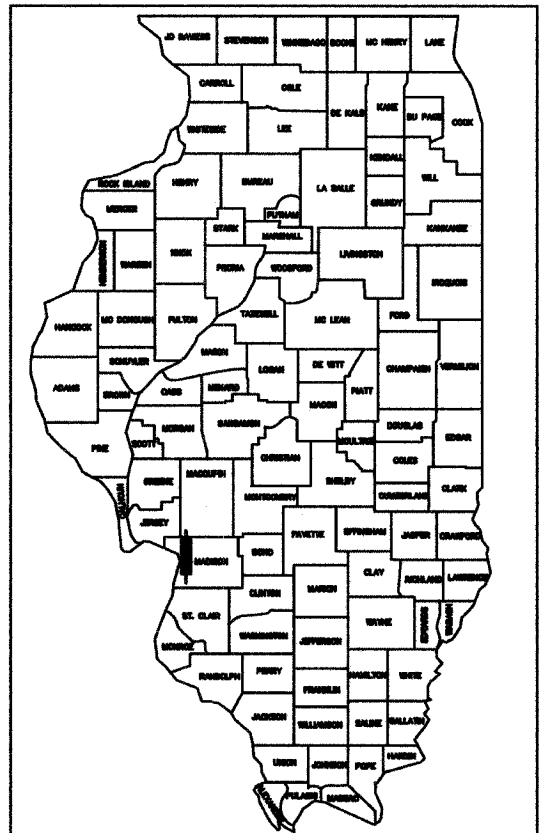
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS THE ABOVE SCALES MAY BE USED.



### LOCATION MAP



LATITUDE 38°-53'-21"  
LONGITUDE 90°-10'-58"  
UPRR MP 257.79; SPRINGFIELD SUBDIVISION  
NSRR MP A-0.37; T & E LINE SUBDIVISION  
NET LENGTH OF IMPROVEMENT BROADWAY AVENUE = 90 FEET = 0.017 MILES  
TOTAL NET LENGTH OF PROJECT = 1,072.63 FEET = 0.203 MILES



LOCATION OF SECTION INDICATED THIS:-

ILLINOIS DEPARTMENT OF TRANSPORTATION

Approved APR 09 2008  
*Donna E. Janda*  
City of Alton, Mayor

Passed 6/4/08  
*[Signature]*  
District #8 Engineer of Local Roads & Streets

Releasing for Bid Based on Limited Review 6/4/08  
*[Signature]*  
Deputy Director of Highways/Region #5 Engineer



*Larry D. Anderson*

DATE SIGNED 4/09/08  
EXPIRATION DATE 11/30/09



Sheppard Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS & LAND SURVEYORS

216 Market Street  
Alton, Illinois 62002  
P.O. Box 2  
618/482-0755

10 Central Industrial Dr  
Northgate Center  
Granite City, IL 62040  
618/877-8700

**GENERAL NOTES**

- THIS PROJECT SHALL BE CONSTRUCTED ACCORDING TO THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 AND THE SPECIAL PROVISIONS OF THE PROJECT CONTRACT.
- EXCEPT WHERE DESIGNATED OTHERWISE, THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM OFFICE RECORD INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED APPROXIMATE.
- ALL ELEVATIONS REFER TO NATIONAL GEODETIC SURVEY (N.G.S.) DATUM.
- ANY REFERENCES TO "STANDARDS" THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARD OF THE DEPARTMENT AS SHOWN BELOW.
- PROPOSED ELEVATIONS SHOWN ON THE PLANS AS ± ARE APPROXIMATE. EXACT ELEVATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD IF APPLICABLE. ELEVATIONS SHALL BE DETERMINED PRIOR TO FABRICATION OF THE DRAINAGE STRUCTURES.
- FOR SIMPLICITY, STORM SEWER LENGTHS SHOWN ON THE PLANS ARE FROM CENTER TO CENTER OF STRUCTURES. ACTUAL PIPE REQUIRED WILL BE LESS. MEASUREMENT FOR PAYMENT PURPOSES SHALL BE ACCORDING TO ARTICLE 550.09 OF THE STANDARD SPECIFICATIONS.
- IF A PROTECTIVE COAT IS APPLIED TO THE PAVEMENT, IT SHALL ALSO BE APPLIED TO ALL GUTTER FLAGS, FACE OF CURB, AND MEDIAN SURFACES.
- DUE TO THE NATURE OF THE PROJECT SITE, THE PLANS DO NOT THOROUGHLY SHOW ALL EXISTING ITEMS AND TOPOGRAPHIC FEATURES. THEREFORE, THE CONTRACTOR SHALL PERFORM A THOROUGH INSPECTION OF THE PROJECT SITE DURING THE BIDDING PROCESS TO FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS THAT WILL BE ENCOUNTERED IN PERFORMING THE WORK. FAILURE TO DO SO WILL NOT BE CONSIDERED AS GROUNDS FOR ADDITIONAL COMPENSATION FOR UNFORESEEN ADVERSE CONDITIONS ENCOUNTERED DURING THE PROGRESS OF THE WORK.
- PLAN QUANTITIES FOR HOT-MIX ASPHALT ITEMS WERE CALCULATED BASED ON USING 112 LBS. / SQ. YD. / IN.
- RAILROAD REVIEW AND APPROVAL OF SHORING, ERECTION, DEMOLITION AND FALSEWORK IS REQUIRED. ALLOW A MINIMUM OF FOUR WEEKS FOR THE REVIEW AND APPROVAL OF EACH SUBMITTAL. (SECTION 3.5 UPRR GRADE SEPARATION GUIDELINES) THE UNION PACIFIC RAILROAD'S GRADE SEPARATION GUIDELINES CAN BE FOUND ON ITS WEBSITE AT: [HTTP://WWW.UPRR.COM/ABOUTUP/OPERATIONS/SPECS/INDEX.SHTML](http://www.uprr.com/aboutup/operations/specs/index.shtml)
- THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES. (SECTION 5.7 UPRR GRADE SEPARATION GUIDELINES)
- THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION. (SECTION 5.2.1 UPRR GRADE SEPARATION GUIDELINES)
- THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD. (SECTION 4.5.1 UPRR GRADE SEPARATION GUIDELINES)
- ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING. (SECTION 4.4.2 UPRR GRADE SEPARATION GUIDELINES)
- ALL DEMOLITIONS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD'S DEMOLITION GUIDELINES. (SECTION 4.4.3 UPRR GRADE SEPARATION GUIDELINES)
- ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS. (SECTION 4.4.4 UPRR GRADE SEPARATION GUIDELINES)
- RAILROAD REQUIREMENTS DO NOT ALLOW WORK WITHIN 50 FEET OF TRACK CENTERLINE WHEN A TRAIN PASSES THE WORK SITE AND ALL PERSONNEL MUST CLEAR THE AREA WITHIN 25 FEET OF THE TRACK CENTERLINE AND SECURE ALL EQUIPMENT.
- FALSE-WORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES. (SECTION 4.4.1; 4.4.5; 5.3 UPRR GRADE SEPARATION GUIDELINES)
- ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING. (PLAN NO. 711100 SHEET 3 UPRR GRADE SEPARATION GUIDELINES)
- FOR RAILROAD COORDINATION PLEASE REFER TO THE RAILROAD MINIMUM REQUIREMENTS AS PART OF SPECIAL PROVISIONS.
- THE C/L SHOWN ON THE PLANS FOR BROADWAY AVENUE WAS BASED ON SPLITTING THE EXISTING PAVEMENT FROM FACE OF CURB TO FACE OF CURB.
- ALL WORK ON, OVER AND AROUND NORFOLK SOUTHERN RIGHT-OF-WAY SHALL BE PERFORMED ACCORDING TO THE RAILWAY'S "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILROAD INTERESTS".

**GENERAL LEGEND**

	CENTERLINE OF PROPOSED IMPROVEMENT		EXISTING INLET
	EXISTING RIGHT-OF-WAY LINE		EXISTING PIPE CULVERT
	PROPOSED RIGHT-OF-WAY LINE		EXISTING SANITARY SEWER
	TEMPORARY CONSTRUCTION EASEMENT		EXISTING STORM SEWER
	PROPERTY LINE		EXISTING WATER LINE
	SECTION LINE		EXISTING GAS LINE
	1/2 SECTION LINE		EXISTING TELEPHONE LINE
	IRON PIPE FOUND		EXISTING FIBER OPTIC CABLE
	IRON PIPE SET		EXISTING ELECTRIC CABLE
	MONUMENT FOUND		EXISTING PIPE LINE
	PROPOSED R.O.W. MONUMENT		SURFACE TO BE REMOVED
	FENCE		18" TREE
	EDGE OF EXISTING FEATURES		SOIL BORING LOCATION
	CONSTRUCTION LIMITS		PROPOSED DITCH
	UTILITY POLE		PROPOSED MANHOLE
	UTILITY POLE W/ DOWN GUY		PROPOSED INLET
	LIGHT POLE		PROPOSED STORM SEWER
	GAS METER		PROPOSED END SECTION
	WATER METER		PROPOSED RIP RAP
	FIRE HYDRANT		SETTLEMENT PLATFORM
	WATER OR GAS VALVE		INCLINOMETER
	TELEPHONE PEDESTAL		PIEZOMETER
	EXISTING SIGN		EXISTING SPOT ELEVATION
	PROPOSED SIGN		PROPOSED SPOT ELEVATION
	MAIL BOX		PROPOSED DEPRESSED CURB
	EXISTING MANHOLE		PROPOSED INCIDENTAL BITUMINOUS SURFACING
	CONTROL POINT		

**COMMITMENTS**  
NONE

**HIGHWAY STANDARDS**

280001-04	701011-01
424001-05	701101-01
515001-02	701106-01
542546	701301-02
601101	701501-04
602401-01	701606-05
602701-01	701801-03
604001-02	701901
606001-03	720001
606101-03	720006-01
701001-01	720011
701006-02	729001

**MIX DESIGNS**

MIXTURE USE	INCIDENTAL
AC/PG	PG 64-22
RAP% (MAX.)	10%
DESIGN AIR VOIDS	4.0% @ NDES=70
MIX COMPOSITION	---
FRICTION AGG.	MIX C

**ABBREVIATIONS**

T.C.	- TOP OF CURB
E.P.	- EDGE OF PAVEMENT
F.L.	- FLOW LINE
RD MH	- RESTRICTED DEPTH MANHOLE
PRCF	- PRECAST REINFORCED CONCRETE FLARED
F. & G.	- FRAME AND GRATE
O.L.	- OPEN LID
C.L.	- CLOSED LID
SS1	- STORM SEWER TYPE 1
SS1WMQ	- STORM SEWER TYPE 1, WATER MAIN QUALITY PIPE
PC1	- PIPE CULVERT TYPE 1
T.B.	- TRENCH BACKFILL
C.L.S.M.	- CONTROLLED LOW-STRENGTH MATERIAL
CUT	- EARTH EXCAVATION QUANTITY SHOWN ON CROSS SECTIONS
FILL	- EMBANKMENT QUANTITY SHOWN ON CROSS SECTIONS

**SURVEY CONTROL POINTS**

CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP #106	6,334.1310	4,908.6060	439.77	CHISELED "X" IN PAVEMENT
CP #107	6,505.5640	4,817.5580	462.31	CHISELED "X" IN PAVEMENT
CP #108	6,450.8770	4,726.2270	463.05	CHISELED "X" IN PAVEMENT
CP #126	6,110.8400	4,916.9690	437.57	ALUM. TAB ON STRUCTURE - C.O.E.
CP #127	6,159.0090	4,943.1880	434.92	ALUM. TAB ON STRUCTURE - C.O.E.
CP #130	6,074.4739	4,883.7639	446.06	REBAR w/ SMS CAP
CP #155	6,466.3178	4,751.9521	461.96	CHISELED "X" IN PAVEMENT
CP #156	6,437.2315	4,704.9626	463.10	IRON PIPE
CP #160	6,382.4346	4,801.8775	447.67	CHISELED "X" IN PAVEMENT
CP #161	6,365.9899	4,776.9671	448.52	3/4" REBAR
CP #164	6,217.8071	4,729.3718	441.25	CHISELED "X" IN PAVEMENT

**SITE BENCHMARK**

B.M. #	NORTHING	EASTING	ELEVATION	DESCRIPTION
B.M. #105	5,725.4252	4,966.5071	435.97	ALUM. TAB ON STRUCTURE - C.O.E.

REVISIONS

**SMS** Sheppard, Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS AND LAND SURVEYORS  
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171 Central Industrial Drive, Granite City, IL 62040, 618-977-9700. Email: [mail@smsengineers.com](mailto:mail@smsengineers.com)  
DESIGN FIRM # 184-00892

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
GENERAL NOTES, LEGEND & CONTROL POINTS

SUMMARY OF QUANTITIES

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
				100% LOCAL + FED SFY - 1B	100% LOCAL + FED X932-2A	100% LOCAL + FED Y030-1E
				SIDEWALK	BRIDGE	LIGHTING
* A2001116	TREE, ACER RUBRUM OCTOBER GLORY (OCTOBER GLORY RED MAPLE) 2" CALIPER BALLED AND BURLAPPED	EACH	5	5		
* A2002416	TREE, BETULA NIGRA HERITAGE (HERITAGE RIVER BIRCH) 2" CALIPER BALLED AND BURLAPPED	EACH	12	12		
* B2006316	TREE, SYRINGA RETICULATA IVORY SILK (IVORY SILK JAPANESE TREE LILAC) 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	5	5		
* C2011636	SHRUB, VIBURNUM CARLESII (KOREAN SPICE VIBURNUM), 3' HEIGHT, BALLED AND BURLAPPED	EACH	37	37		
* K1003679	MULCH	CU YD	31	31		
LR420029	PORTLAND CEMENT CONCRETE PAVEMENT 8" (SPECIAL)	SQ YD	30	30		
XX001249	ORNAMENTAL FENCE	FOOT	267.5		267.5	
XX002176	CONCRETE STEP REMOVAL	L SUM	1	1		
XX002258	STRUCTURES TO BE ADJUSTED	EACH	1	1		
* XX006604	SHRUB - EUONYMUS ALATUS 'TIMBER CREEK' (CHICAGO FIRE BURNING BUSH), 3' HEIGHT, BALLED AND BURLAPPED	EACH	53	53		
X0321781	MECHANICAL SPLICE	EACH	112		112	
X0322208	TEMPORARY STORM SEWER PLUGS	EACH	3	3		
* X0322508	PEDESTRIAN TRUSS SUPERSTRUCTURE	SQ FT	3,727		3,727	
X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	380		380	
X0350800	BOLLARDS	EACH	9	9		
X0696000	BRIDGE DRAINAGE SYSTEM	L SUM	1		1	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1		1	
20200100	EARTH EXCAVATION	CU YD	220	220		
20400800	FURNISHED EXCAVATION	CU YD	7,563	7,563		
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	742		742	
20800150	TRENCH BACKFILL	CU YD	230	230		
* 21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	4,756	4,756		
* 21101630	TOPSOIL FURNISH AND PLACE, 8"	SQ YD	255	255		
* 25000115	SEEDING, CLASS 1B	ACRE	1	1		
* 25000350	SEEDING, CLASS 7	ACRE	1	1		
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	90	90		
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	90	90		
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	90	90		
* 25000700	AGRICULTURAL GROUND LIMESTONE	TON	2	2		
* 25100115	MULCH, METHOD 2	ACRE	0.1	0.1		
* 25100630	EROSION CONTROL BLANKET	SQ YD	4,555	4,555		
* 25400100	PERENNIAL PLANTS	UNIT	8.45	8.45		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	100	100		
28000400	PERIMETER EROSION BARRIER	FOOT	1,134	1,134		
28000500	INLET AND PIPE PROTECTION	EACH	1	1		
* 28000700	MULCH, METHOD 1	ACRE	1	1		
31100300	SUB-BASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	30	30		
35100500	AGGREGATE BASE COURSE, TYPE A 6"	SQ YD	126	126		
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	14	14		
42001200	PAVEMENT FABRIC	SQ YD	30	30		
42001300	PROTECTIVE COAT	SQ YD	1,077	1,077		
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	403	403		
42400420	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH, SPECIAL	SQ FT	5,689	5,689		
42400440	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH, SPECIAL	SQ FT	2,692	2,692		
42400800	DETECTABLE WARNINGS	SQ FT	50	50		
44000100	PAVEMENT REMOVAL	SQ YD	447	447		
44000300	CURB REMOVAL	FOOT	137	137		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	21	21		
44000600	SIDEWALK REMOVAL	SQ FT	1,192	1,192		
50102400	CONCRETE REMOVAL	CU YD	17.6		17.6	
50200100	STRUCTURE EXCAVATION	CU YD	1,026		1,026	
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	12		12	
50300225	CONCRETE STRUCTURES	CU YD	623.5		623.5	
50300254	RUBBED FINISH	SQ FT	2,204		2,204	
50300285	FORM LINER TEXTURED SURFACE	SQ FT	5,185		5,185	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	94,470		94,470	
50900605	HANDRAIL REMOVAL	FOOT	36		36	
51100100	SLOPE WALL 4 INCH	SQ YD	113		113	
51201610	FURNISHING STEEL PILES HP12X63	FOOT	985		985	
51202305	DRIVING PILES	FOOT	985		985	
51203610	TEST PILE STEEL HP12X63	EACH	2		2	
51204650	PILE SHOES	EACH	30		30	
51500100	NAME PLATES	EACH	1		1	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	44		44	
54244405	FLUSH INLET BOX FOR MEDIAN, STANDARD 542546	EACH	1		1	
55100500	STORM SEWER REMOVAL 12"	FOOT	12		12	
58700300	CONCRETE SEALER	SQ FT	190		190	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	214		214	
60100915	PIPE DRAINS 6"	FOOT	125		125	
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4		4	
60244240	GRADED INLET, SPECIAL	EACH	4		4	
60500050	REMOVING CATCH BASINS	EACH	1		1	
60606005	CONCRETE CURB, TYPE B	FOOT	91		91	
60601005	CONCRETE CURB, TYPE B (SPECIAL)	FOOT	5		5	
60602500	CONCRETE GUTTER, TYPE A	FOOT	71		71	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	11		11	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	13		10	1
67100100	MOBILIZATION	L SUM	1		1	
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1		1	

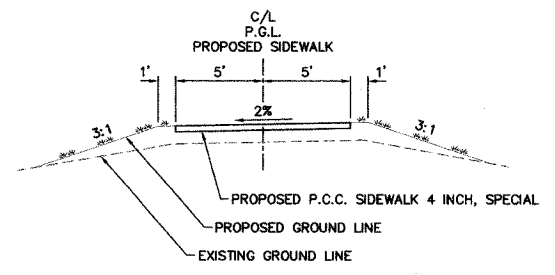
SUMMARY OF QUANTITIES

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
				100% LOCAL + FED SFY - 1B	100% LOCAL + FED X932-2A	100% LOCAL + FED Y030-1E
				SIDEWALK	BRIDGE	LIGHTING
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5			
72000100	SIGN PANEL - TYPE 1	SQ FT	24		24	
* 72900100	METAL POST - TYPE A	FOOT	94		94	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	566		566	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	71.4		71.4	
* 81012300	CONDUIT IN TRENCH, 1" DIA., PVC	FOOT	850			850
* 81012500	CONDUIT IN TRENCH, 1-1/2" DIA., PVC	FOOT	200			200
* 81100200	CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA., GALVANIZED STEEL	FOOT	600			600
* 81100300	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	700			700
* 81200210	CONDUIT EMBEDDED IN STRUCTURE, 1" DIA., PVC	FOOT	80			80
* 81200220	CONDUIT EMBEDDED IN STRUCTURE, 1-1/2" DIA., PVC	FOOT	80			80
* 81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12"x12"x6"	EACH	39			39
* 81400100	HANDHOLE	EACH	1			1
* 81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	8,000			8,000
* 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1,100			1,100
* 82500505	LIGHTING CONTROLLER, SPECIAL	EACH	1			1
* X007551	FIXTURE TYPE SA	EACH	29			29
* X007552	FIXTURE TYPE SB	EACH	26			26
* X007553	FIXTURE TYPE SC	EACH	4			4
* X007554	TREE, CARPINUS BETULUS 'FASTIGIATA' (COLUMNAR EUROPEAN HORNBEAM) 3.5" CALIPER, BALLED AND BURLAPPED	EACH	6		6	
* Y005532	COMBINED SEWER REMOVAL 20"	FOOT	201		201	
* Y007555	COMBINED SEWER, PVC, 21"	FOOT	215		215	
* X007556	SIDEWALK CONNECTOR	SQ YD	64			64

\* SPECIALTY ITEM

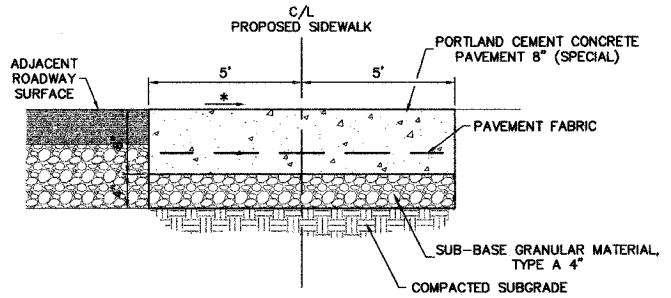
TYPICAL SECTION

SCALE: 1" = 5'



TYPICAL SECTION - CONCRETE SIDEWALK

NOT TO SCALE

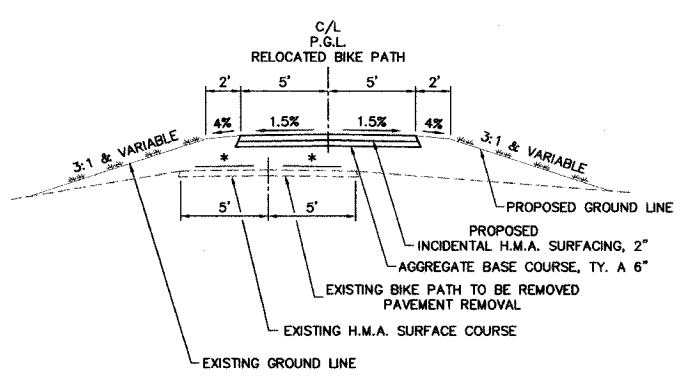


NOTE: PCC PAVEMENT 8" (SPECIAL) SHALL BE TEXTURED AND COLORED. SEE SPECIAL PROVISIONS.

\*MATCH EXIST. SLOPE, 2% MAXIMUM

TYPICAL SECTION

SCALE: 1" = 5'



\* VARIES

**SMS** Sheppard, Morgan & Schwaab, Inc.  
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10 Central Industrial Drive, Granite City, IL 62040, 618/877-4700 E-mail: ms@granitecityengr.com  
DESIGN FIRM # 184-000992  
ENGINEERS

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
SUMMARY OF QUANTITIES; TYPICAL SECTIONS

EARTHWORK SCHEDULE						
LOCATION STATION	EARTH EXCAVATION (CUT) (CU. YD.)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE * (CU. YD.)	EMBANKMENT (FILL) (CU. YD.)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU. YD.)	FURNISHED EXCAVATION (CU. YD.)	TOPSOIL FURNISH AND PLACE 6" (SQ. YD.)
0+00 TO 2+05	185	139	27	+112	-112	746.4
3+65 TO 10+43.48	35	26	7,701	-7675	+7675	4009.2
<b>TOTAL</b>	<b>220</b>	<b>165</b>	<b>7,728</b>	<b>-7563</b>	<b>7,563</b>	<b>4,755.6</b>
* ASSUME SHRINKAGE FACTOR = 25%						

SEWER SCHEDULE							
LOCATION STATION	COMBINED SEWER PVC, 21" (FOOT)	MANHOLES, TYPE A, 4' DIAMETER TYPE 1 FRAME, CLOSED LID (EACH)	COMBINED SEWER REMOVAL 20" (FOOT)	STORM SEWER REMOVAL 12" (FOOT)	FLUSH INLET BOX FOR MEDIAN, STD. 542546 (EACH)	GRATED INLET, (SPECIAL) (EACH)	TEMPORARY STORM SEWER PLUGS (EACH)
BROADWAY AVENUE							
LT. -0+21							1
LT. -0+75							1
0+03.47 TO 2+04.02			200.6				
4.51' LT. 0+05.47		1					
0+05.47 TO 0+42.88	44						
18.65' RT. 0+42.88		1					
0+42.88 TO 1+91.11	148.2						
8.14' RT. 0+81.04						1	
8.14' LT. 0+81.04						1	
LT. 0+86				12			
LT. 1+85.25						1	
18.65' RT. 1+91.11		1					
1+91 TO 2+02.02	23						
2.37' LT. 2+02.02		1					1
8.14' RT. 4+92.73						1	
8.14' LT. 4+92.73						1	
<b>TOTAL</b>	<b>215.2</b>	<b>4</b>	<b>200.6</b>	<b>12</b>	<b>1</b>	<b>4</b>	<b>3</b>

SIDEWALK SCHEDULE				
LOCATION STATION	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH (SQ. FT.)	DETECTABLE WARNINGS (SQ. FT.)	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH SPECIAL (SQ. FT.)	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH SPECIAL (SQ. FT.)
BROADWAY AVENUE				
RT. -0+32		10		
RT. 0+20 TO 0+35	60	10		
LT. 0+36.5 TO 0+51.50	60	10		
LT. 0+00.5 TO 0+10.50	136.9			
0+10.50 TO 0+72.54				1,467
RT. 0+11 TO 0+47.5	146			
4+23.54 TO 4+92.55				1,225
4+92.55 TO 6+59.71			5,689	
10+41.50		20		
<b>TOTAL</b>	<b>402.9</b>	<b>50</b>	<b>5,689</b>	<b>2,692</b>

TRENCH BACKFILL	
LOCATION STATION	TRENCH BACKFILL (CU. YD.)
LT. 0+00.50 TO 0+10.50	82.8
LT. 0+10.50 TO 0+67.30	54.4
LT. 0+10.50 TO RT. 0+35	92.8
<b>TOTAL</b>	<b>230</b>

REMOVAL SCHEDULE							
LOCATION STATION	PAVEMENT REMOVAL (SQ. YD.)	SIDEWALK REMOVAL (SQ. FT.)	COMB. CURB AND GUTTER REMOVAL (FOOT)	CONCRETE STEP REMOVAL (L. SUM)	CURB REMOVAL (FOOT)	HANDRAIL REMOVAL (FOOT)	REMOVING CATCH BASINS (EACH)
BROADWAY AVENUE							
RT. 0+20 TO 0+35		55			15		
LT. 0+36.5 TO 0+51.50		55			15		
WALKWAY							
0+00.50 TO 0+10.50		140					
0+10.50 TO 0+79.34		861.9					
LT. 1+10 TO 2+04	90						
19' RT. 0+79.50 TO 0+94.50						18.3	
27' RT. 0+79.50 TO 0+94.50				1		17.3	
RT. 0+79.14 TO 0+93.78			10				
LT. 0+80 TO 0+86							1
LT. 0+86							
0+94 TO 1+10		80					
RT. 1+11 TO 1+59	23						
RT. 1+73 TO 2+00	9						
LT. 4+63.50 TO 5+41	161.3				102		
LT. 5+03.50					5		
10+43.48			11				
BIKE TRAIL RELOCATION							
0+30 TO 1+50	133.3						
PARK MAIN ROADWAY							
10+45.63 TO 10+72.63	30						
<b>TOTAL</b>	<b>446.6</b>	<b>1,191.9</b>	<b>21</b>	<b>1</b>	<b>137</b>	<b>35.6</b>	<b>1</b>

PAVEMENT MARKING SCHEDULE			
LOCATION STATION	THERMOPLASTIC PAVEMENT MARKING - LINE 4"		PAVEMENT MARKING REMOVAL (SQ. FT.)
	WHITE	YELLOW	
BROADWAY AVENUE			
RT. -0+08			2.7
RT. -0+08 TO 0+13			7
RT. 0+13			2.7
RT. 0+25 TO LT. 0+41.5	*186		
RT. 0+30.5 TO LT. 0+46.5	*186		
0+33			29.5
0+38			29.5
BIKE TRAIL RELOCATION			
0+30 TO 0+86			56
RT. 0+56	*15		
0+96 TO 1+50			54
LT. 1+00	*15		
PARK MAIN ROADWAY			
10+45.57 TO 10+72.63	54		110
<b>SUBTOTAL</b>	<b>456</b>	<b>110</b>	
<b>TOTAL</b>	<b>566</b>	<b>71.4</b>	

\*PLACE 3 ROWS OF LINE 4"

EROSION CONTROL SCHEDULE							
LOCATION STATION	PERIMETER EROSION BARRIER (FOOT)	TEMPORARY EROSION CONTROL SEEDING (POUND)	MULCH METHOD 1 (ACRE)	EROSION CONTROL BLANKET (SQ. YD.)	INLET AND PIPE PROTECTION (EACH)	SEEDING, CLASS 7 (ACRE)	SEEDING, CLASS 1B (ACRE)
LT. 0+10 TO 0+86				93.8			
RT. 0+10 TO 0+86				131.9			
0+10 TO 2+05		16	0.2			0.2	0.2
0+86 TO 1+10				57.8			
LT. 0+95 TO RT. 1+12	49				1		
LT. 1+77 TO RT. 1+77	57						
RT. 3+66 TO LT. 6+25	387						
3+65 TO 10+43.48		84	0.8			0.8	0.8
3+65 TO 10+00				4,271.8			
RT. 5+04 TO RT. 5+67	85						
RT. 5+76 TO RT. 9+11	141						
RT. 9+46 TO 10+43	133						
LT. 1+24 (B. TRAIL RELOC.) TO LT. 10+43	282						
<b>TOTAL</b>	<b>1,134</b>	<b>100</b>	<b>1</b>	<b>4,555.3</b>	<b>1</b>	<b>1</b>	<b>1</b>

CURB AND GUTTER SCHEDULE				
LOCATION STATION	CONCRETE CURB, TYPE B (FOOT)	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (FOOT)	CONCRETE GUTTER, TYPE A (FOOT)	CONCRETE CURB, TYPE B (SPECIAL) (FOOT)
LT. 1+10 TO 1+81.24			71.2	
LT. 4+63.50 TO 5+41	91			
LT. 5+00.92				5
PARK MAIN ROADWAY				
10+43.48		11		
<b>TOTAL</b>	<b>91</b>	<b>11</b>	<b>71.2</b>	<b>5</b>

PAVING SCHEDULE					
LOCATION STATION	AGGREGATE BASE COURSE TYPE A 6" (SQ. YD.)	INCIDENTAL HOT-MIX ASPHALT RESURFACING (TON)	PORTLAND CEMENT CONCRETE PAVEMENT 8" (SPECIAL) (SQ. YD.)	SUB-BASE GRANULAR MATERIAL, TYPE A 4" (SQ. YD.)	PAVEMENT FABRIC (SQ. YD.)
10+45.57 TO 10+72.63			30	30	30
BIKE TRAIL RELOCATION					
0+30 TO 1+50	126	14			
<b>TOTAL</b>	<b>126</b>	<b>14</b>	<b>30</b>	<b>30</b>	<b>30</b>

PIPE DRAINS 6"	
LOCATION STATION	PIPE DRAINS 6" (FOOT)
8.14' LT. 0+81.04 TO 8.14' RT. 0.81.04	16.3
8.14' RT. 0+81.04 TO 18.65' RT. 0+81.04	18.4
RT. 1+71.04	16
8.14' RT. 4+92.73 TO 8.14' LT. 4+92.73	16.3
8.14' LT. 4+92.73 TO 62.93' LT. 5+00.92	58.1
<b>TOTAL</b>	<b>125.1</b>

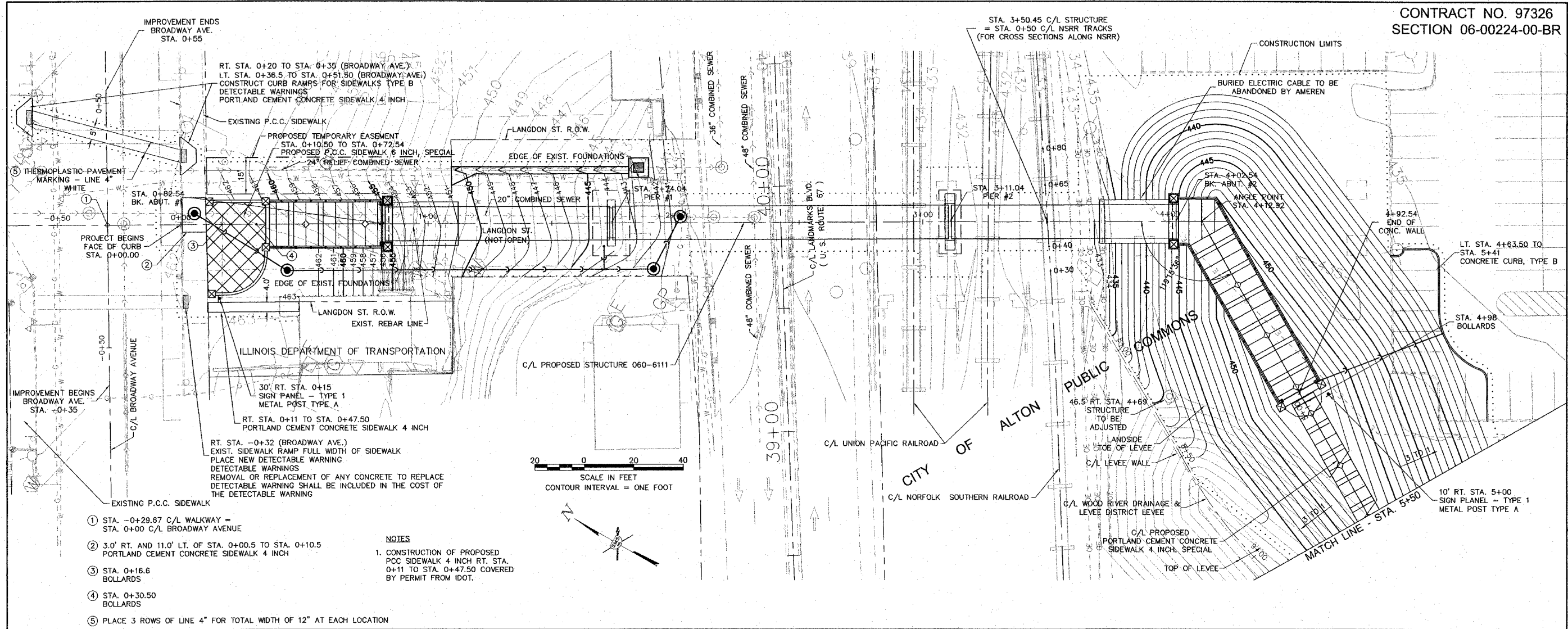
SIGN SCHEDULE			
LOCATION STATION	SIGN PANEL TYPE 1 (SQ. FT.)	METAL POST TYPE A (FOOT)	REMARKS
30' RT. 0+15	3	10.5	"STOP WALK BIKE"; 24"x18" BLACK LETTERS ON WHITE BACKGROUND
10' LT. 5+00	3	11	"STOP WALK BIKE"; 24"x18" BLACK LETTERS ON WHITE BACKGROUND
11' LT. 7+60	3	9	"STOP WALK BIKE"; 24"x18" BLACK LETTERS ON WHITE BACKGROUND
9' RT. 8+15	3	10.5	"STOP WALK BIKE"; 24"x18" BLACK LETTERS ON WHITE BACKGROUND
11' LT. 10+00	3	11.5	"STOP WALK BIKE"; 24"x18" BLACK LETTERS ON WHITE BACKGROUND
BIKE TRAIL RELOCATION			
10' RT. 0+00	2.25	10.5	W3-1 "STOP AHEAD"; 18"x18"
8.75' RT. 0+56	2.25	10	R1-1 "STOP"; 18"x18"
10' LT. STA. 1+00	2.25	10.5	R1-1 "STOP"; 18"x18"
10' LT. STA. 1+50	2.25	10	W3-1 "STOP AHEAD"; 18"x18"
<b>TOTAL</b>	<b>24</b>	<b>93.5</b>	

REVISIONS	

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10 General Industrial Drive, Camille, IL 62300 618/877-8700 E-mail: mail@smsengineers.com  
DESIGN FIRM # 184-000992

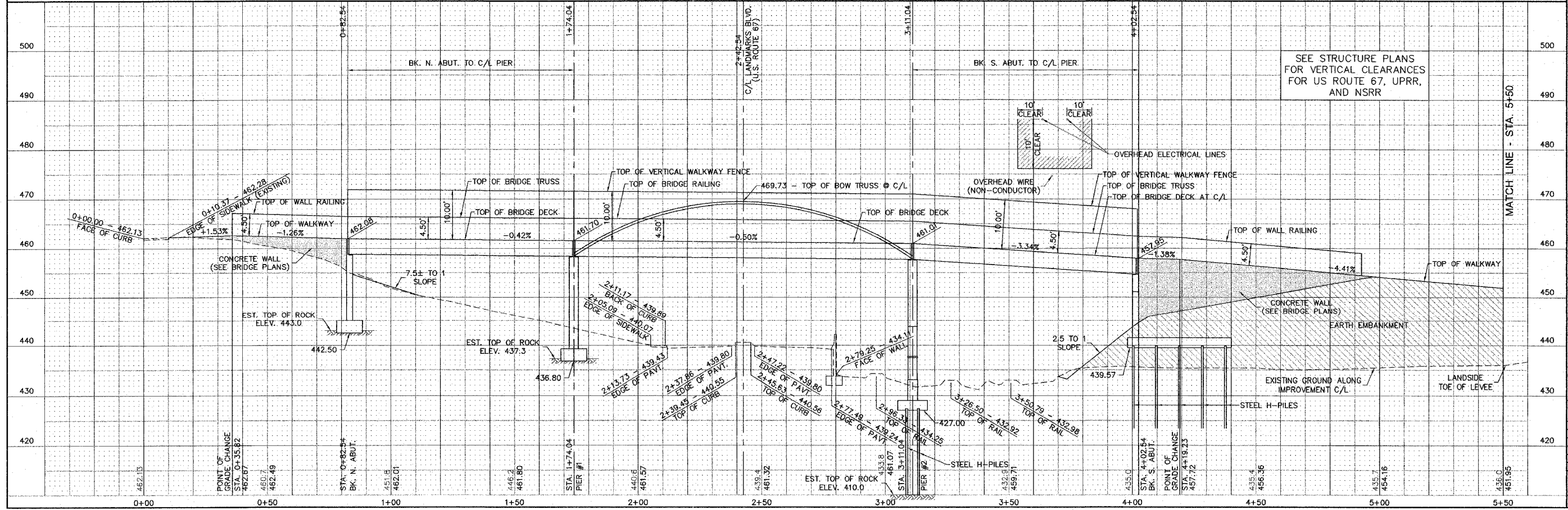
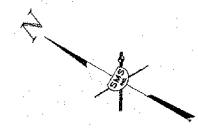
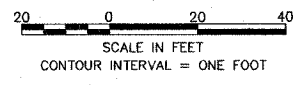
ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
SCHEDULES

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- STA. -0+29.67 C/L WALKWAY = STA. 0+00 C/L BROADWAY AVENUE
- 3.0' RT. AND 11.0' LT. OF STA. 0+00.5 TO STA. 0+10.5 PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH
- STA. 0+16.6 BOLLARDS
- STA. 0+30.50 BOLLARDS
- PLACE 3 ROWS OF LINE 4" FOR TOTAL WIDTH OF 12" AT EACH LOCATION

**NOTES**  
1. CONSTRUCTION OF PROPOSED PCC SIDEWALK 4 INCH RT. STA. 0+11 TO STA. 0+47.50 COVERED BY PERMIT FROM IDOT.

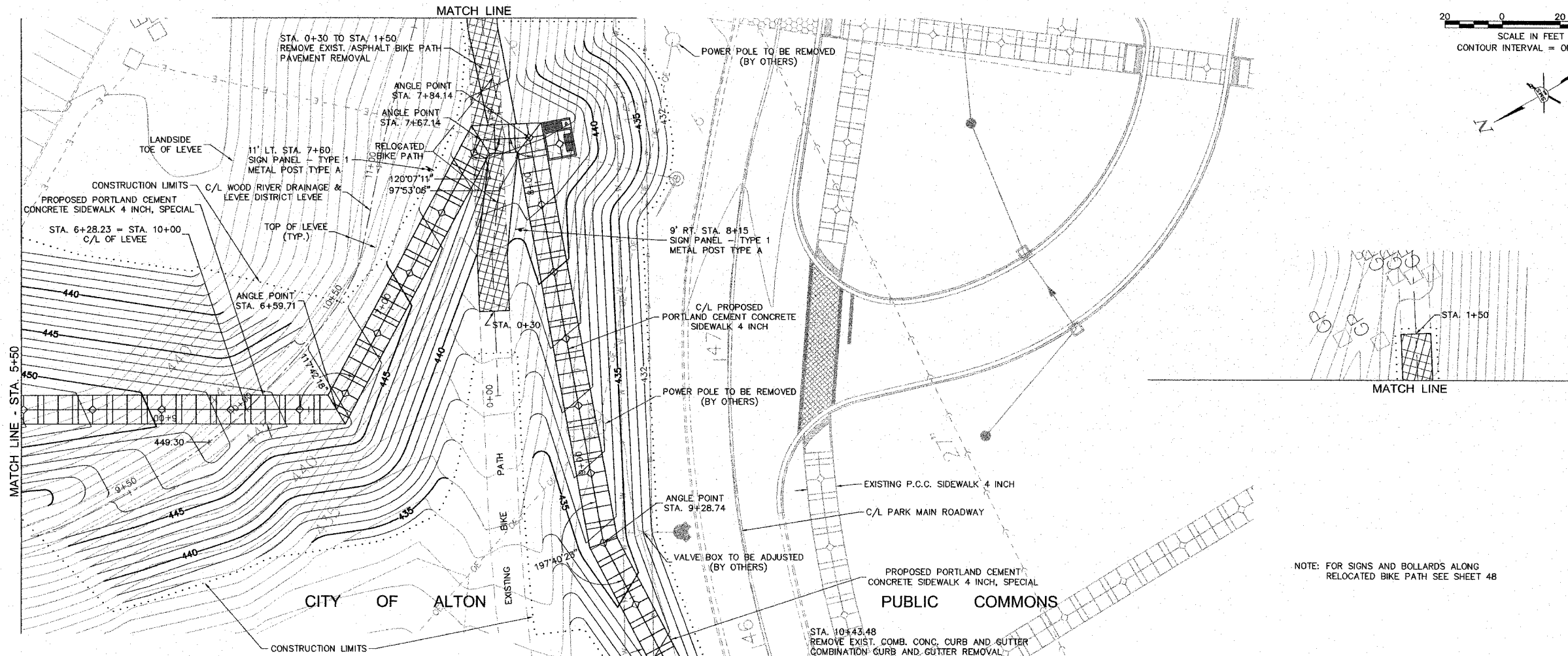
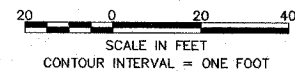


**REVISIONS**

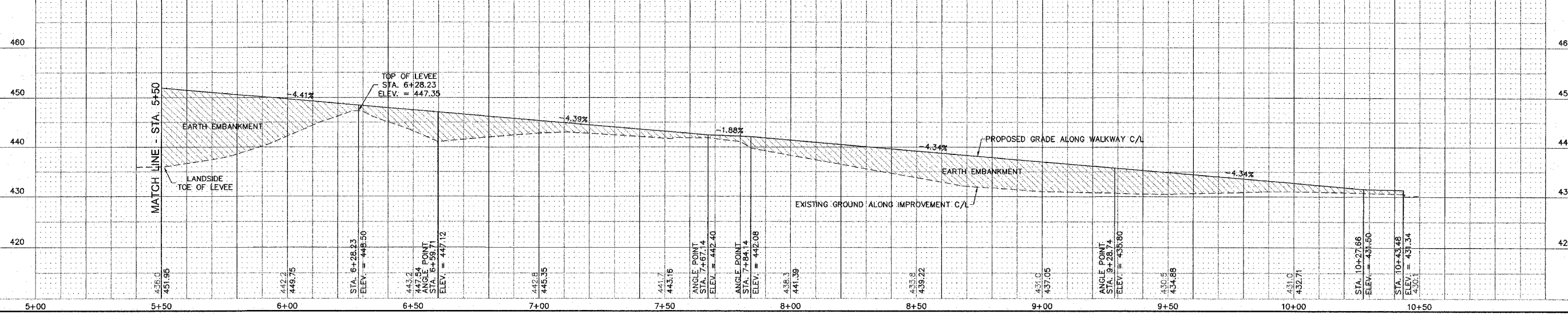
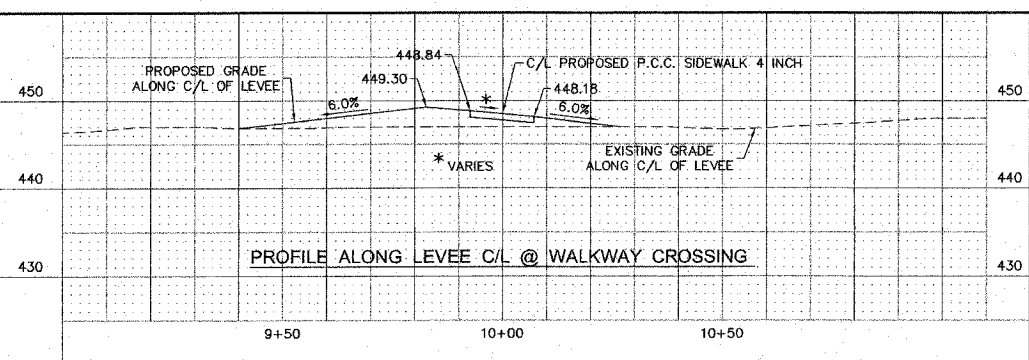
**SMS ENGINEERS**  
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115 Market Street, 8th Floor, Alton, IL 62002, 618-482-2755, E-mail: mail@smsengineers.com  
10 Central Industrial Drive, Granite City, IL 62040, 618-977-8700, E-mail: mail@smsengineers.com  
DESIGN FIRM # 184-000992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
PLAN AND PROFILE

DWG. NO. C-4  
PEDESTRIAN P-P AT #1.DWG  
REF. BK. 5030 PG. 1  
JOB NO. 406924.1  
DSN. BY: CLS  
DWN. BY: CAD  
CHK. BY: CLS  
DATE: MARCH 31, 2008  
SCALE: 1" = 20' HORZ.  
1" = 10' VERT.  
SHEET 5 OF 54



NOTE: FOR SIGNS AND BOLLARDS ALONG RELOCATED BIKE PATH SEE SHEET 48



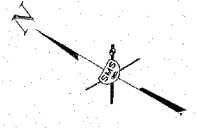
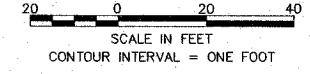
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CONSULTING ENGINEERS AND LAND SURVEYORS  
215 Market Street, P.O. Box E, Alton, IL 62002, 618462-3765, E-mail: mail@smsengineers.com  
10 Central Industrial Drive, Granite City, IL 62040, 618977-9700, E-mail: mail@smsengineers.com  
DESIGN FIRM # 184-000992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
PLAN AND PROFILE

DWG. NO. C-5
PEDESTRIAN P-P ALT #1.DWG
REF. BK. 5030 PG. 1
JOB NO. 406924.1
DSN. BY: CLS
DWN. BY: CAD
CHK. BY: CLS
DATE: MARCH 31, 2008
SCALE: 1" = 20' HORZ.
1" = 10' VERT.
SHEET 6 OF 54

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NO.	DESCRIPTION

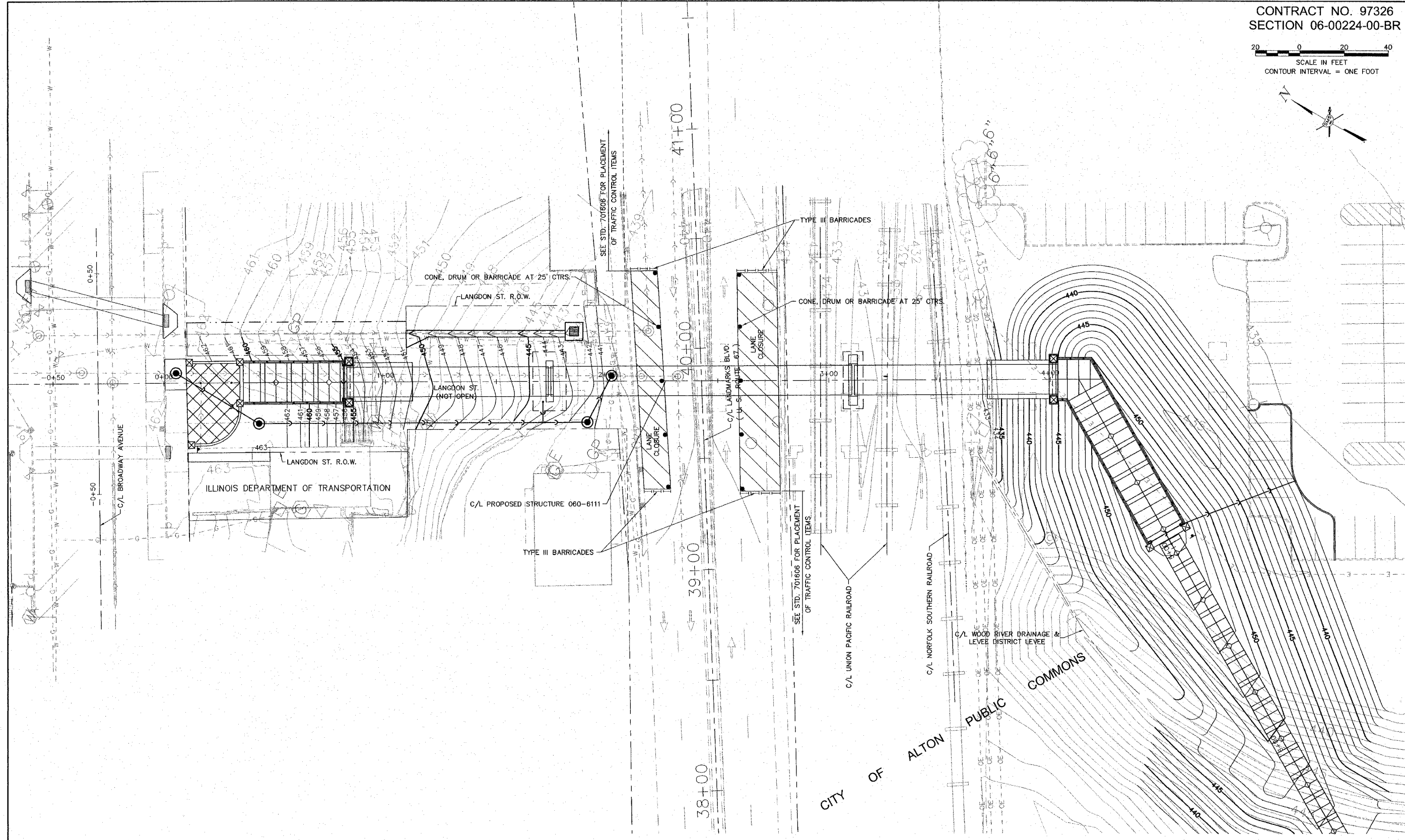
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CONSULTING ENGINEERS AND LAND SURVEYORS  
210 Market Street, P.O. Box E, Alton, IL 62002, 618482-9795, E-mail: mail@smsengineers.com  
10 Canaloua Drive, Sarnia, Ont., Canada, N6C 0G0, 519377-9700, E-mail: mail@smsengineers.com  
DESIGN FIRM # 184-000992



ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
TRAFFIC CONTROL PLAN

DWG. NO. C-6  
TRAFFIC CONTROL DWG  
REF. BK. 6030 PG. 1  
JOB NO. 408924-1  
DSN. BY: CLS  
DWN. BY: CAD  
CHK. BY: CLS  
DATE: MARCH 31, 2008

SCALE: 1" = 20'  
SHEET 7 OF 54



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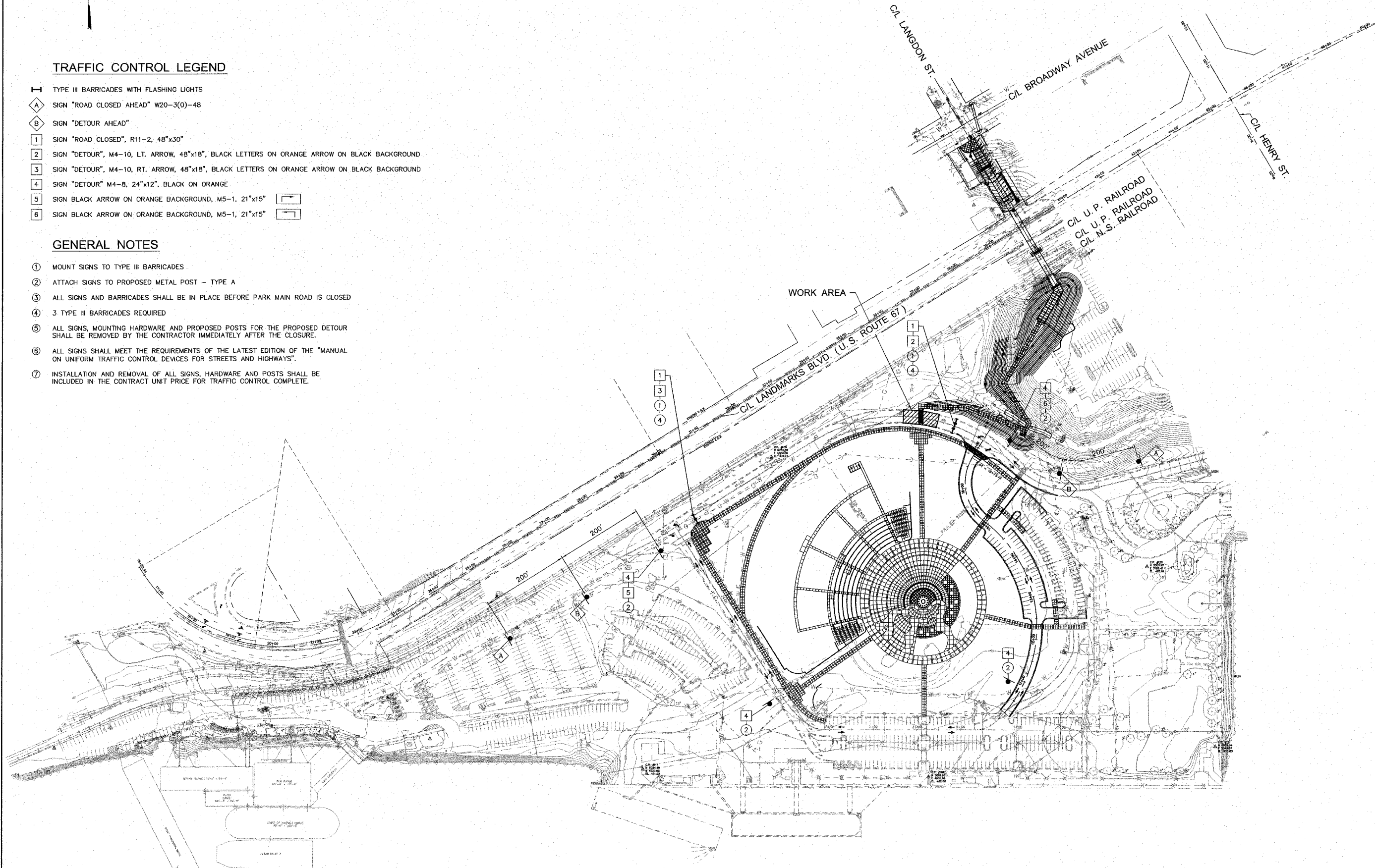


**TRAFFIC CONTROL LEGEND**

- I TYPE III BARRICADES WITH FLASHING LIGHTS
- A SIGN "ROAD CLOSED AHEAD" W20-3(0)-48
- B SIGN "DETOUR AHEAD"
- 1 SIGN "ROAD CLOSED", R11-2, 48"x30"
- 2 SIGN "DETOUR", M4-10, LT. ARROW, 48"x18", BLACK LETTERS ON ORANGE ARROW ON BLACK BACKGROUND
- 3 SIGN "DETOUR", M4-10, RT. ARROW, 48"x18", BLACK LETTERS ON ORANGE ARROW ON BLACK BACKGROUND
- 4 SIGN "DETOUR" M4-8, 24"x12", BLACK ON ORANGE
- 5 SIGN BLACK ARROW ON ORANGE BACKGROUND, M5-1, 21"x15"
- 6 SIGN BLACK ARROW ON ORANGE BACKGROUND, M5-1, 21"x15"

**GENERAL NOTES**

- 1 MOUNT SIGNS TO TYPE III BARRICADES
- 2 ATTACH SIGNS TO PROPOSED METAL POST - TYPE A
- 3 ALL SIGNS AND BARRICADES SHALL BE IN PLACE BEFORE PARK MAIN ROAD IS CLOSED
- 4 3 TYPE III BARRICADES REQUIRED
- 5 ALL SIGNS, MOUNTING HARDWARE AND PROPOSED POSTS FOR THE PROPOSED DETOUR SHALL BE REMOVED BY THE CONTRACTOR IMMEDIATELY AFTER THE CLOSURE.
- 6 ALL SIGNS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- 7 INSTALLATION AND REMOVAL OF ALL SIGNS, HARDWARE AND POSTS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR TRAFFIC CONTROL COMPLETE.



REVISIONS

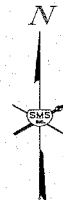
**SMS** Sheppard, Morgan & Schwaab, Inc.  
ENGINEERS  
CONSULTING ENGINEERS AND LAND SURVEYORS  
215 Market Street, P.O. Box E, Alton, IL 62002 618-462-3755 E-mail: ms@smsengineers.com  
10 Central Industrial Drive, Granite City, IL 62040 618-777-9700 E-mail: ms@smsengineers.com  
DESIGN FIRM # 184-000992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
TRAFFIC CONTROL PLAN  
PARK : MAIN ROADWAY

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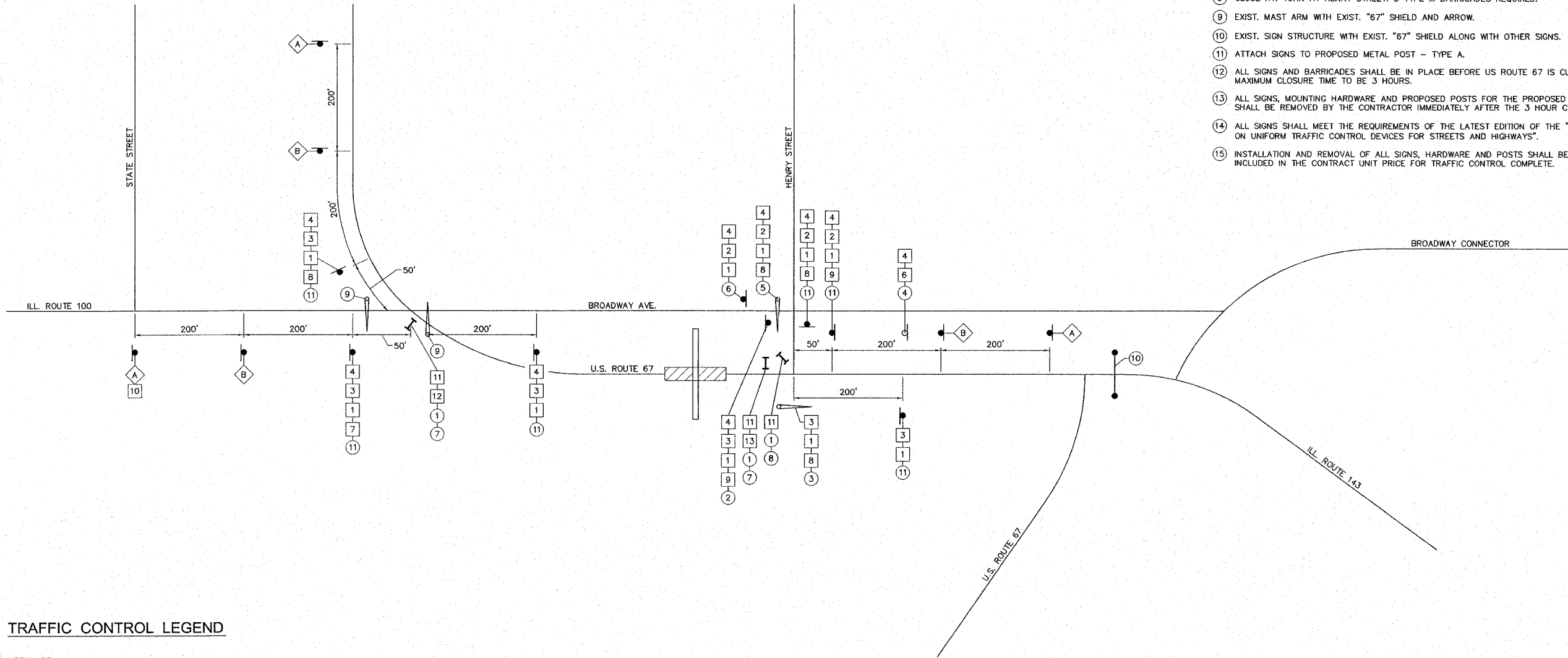
NOT TO SCALE



CONTRACT NO. 97326  
SECTION 06-00224-00-BR

**GENERAL NOTES**

- 1 MOUNT SIGNS TO TYPE 3 BARRICADES.
- 2 MOUNT SIGNS TO STREET SIGN POST NEAR CORNER.
- 3 MOUNT SIGNS TO EXIST. MAST ARM.
- 4 EXIST. SIGNS ON WOOD POST. ADD "DETOUR" SIGN TO TOP ABOVE. EXIST. SIGNS "NORTH" AND "67" SHIELD. COVER EXIST. ARROW BELOW. EXIST. "67" SHIELD WITH PROPOSED "RIGHT TURN ARROW".
- 5 MOUNT SIGNS TO EXISTING MAST ARM POST.
- 6 MOUNT SIGNS TO EXISTING METAL POST WITH EXISTING "PARKING" SIGN.
- 7 4 TYPE III BARRICADES REQUIRED.
- 8 CLOSE RT. TURN AT HENRY STREET. 3 TYPE III BARRICADES REQUIRED.
- 9 EXIST. MAST ARM WITH EXIST. "67" SHIELD AND ARROW.
- 10 EXIST. SIGN STRUCTURE WITH EXIST. "67" SHIELD ALONG WITH OTHER SIGNS.
- 11 ATTACH SIGNS TO PROPOSED METAL POST - TYPE A.
- 12 ALL SIGNS AND BARRICADES SHALL BE IN PLACE BEFORE US ROUTE 67 IS CLOSED. MAXIMUM CLOSURE TIME TO BE 3 HOURS.
- 13 ALL SIGNS, MOUNTING HARDWARE AND PROPOSED POSTS FOR THE PROPOSED DETOUR SHALL BE REMOVED BY THE CONTRACTOR IMMEDIATELY AFTER THE 3 HOUR CLOSURE.
- 14 ALL SIGNS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- 15 INSTALLATION AND REMOVAL OF ALL SIGNS, HARDWARE AND POSTS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR TRAFFIC CONTROL COMPLETE.



**TRAFFIC CONTROL LEGEND**

- WORK AREA
- TYPE III BARRICADE WITH FLASHING LIGHTS
- SIGN "ROAD CLOSED AHEAD" W20-3(0)-48
- SIGN "DETOUR AHEAD" W20-2
- SIGN U.S. ROUTE SIGN, "67" SHIELD, M1-4, 24"x24", BLACK NUMERALS ON WHITE SHIELD ON BLACK BACKGROUND, NO BORDER
- SIGN "NORTH" M3-1, 24"x12", BLACK ON WHITE
- SIGN "SOUTH" M3-3, 24"x12", BLACK ON WHITE
- SIGN "DETOUR" M4-8, 24"x12", BLACK ON ORANGE
- SIGN BLACK ARROW ON WHITE BACKGROUND, M5-1, 21"x15"
- SIGN BLACK ARROW ON WHITE BACKGROUND, M5-1, 21"x15"
- SIGN BLACK ARROW ON WHITE BACKGROUND, M6-3, 21"x15"
- SIGN BLACK ARROW ON WHITE BACKGROUND, M6-1, 21"x15"
- SIGN BLACK ARROW ON WHITE BACKGROUND, M6-1, 21"x15"
- SIGN BLACK ARROW ON ORANGE BACKGROUND, M5-1, 21"x15"
- SIGN "ROAD CLOSED" R11-2, 48"x30"
- SIGN "DETOUR", M4-10, LT. ARROW, 48"x18", BLACK LETTERS ON ORANGE ARROW ON BLACK BACKGROUND
- SIGN "DETOUR", M4-10, RT. ARROW, 48"x18", BLACK LETTERS ON ORANGE ARROW ON BLACK BACKGROUND

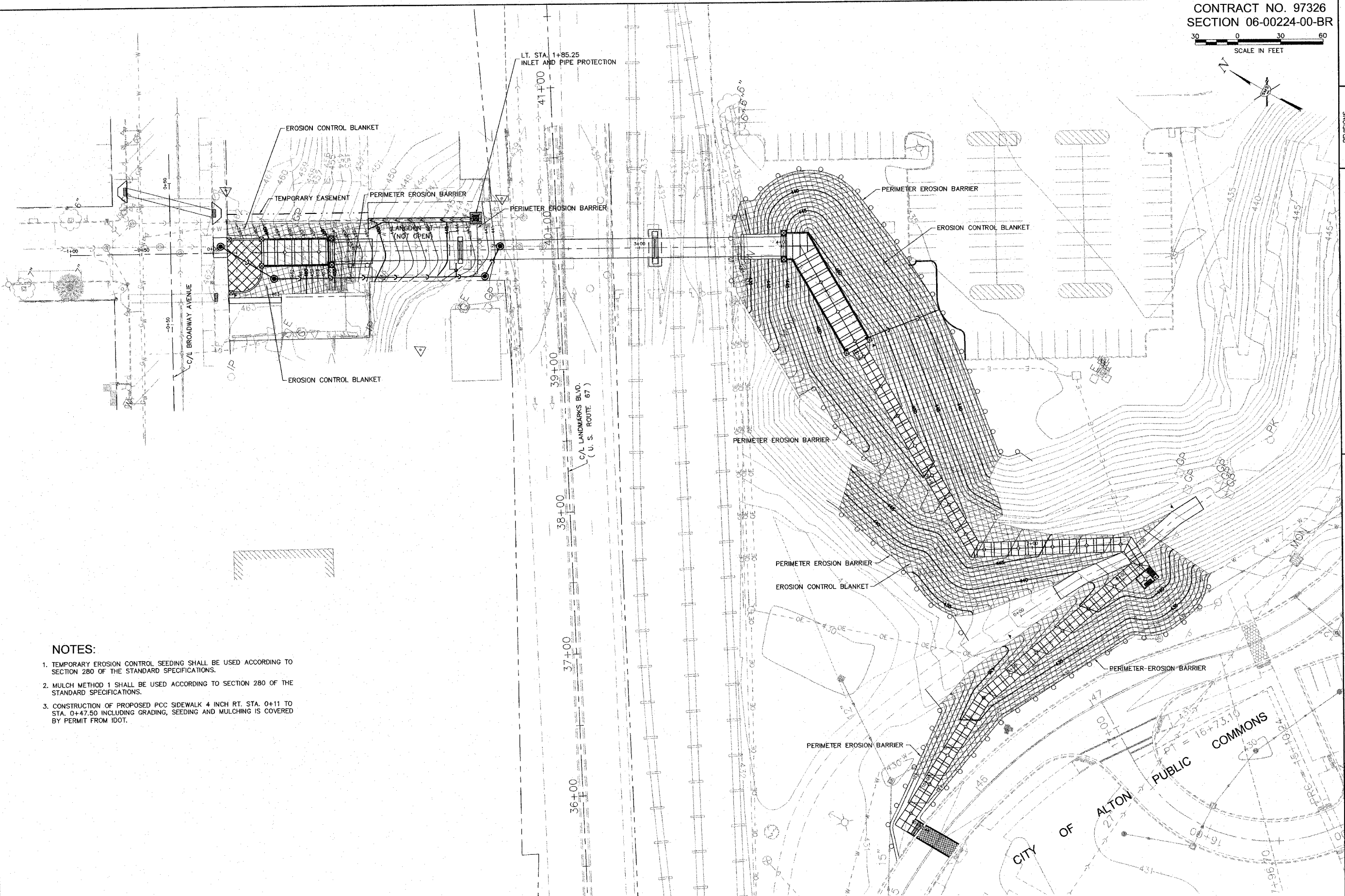
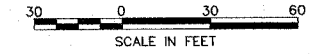
REV'S

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CONSULTING ENGINEERS AND LAND SURVEYORS  
215 Market Street, P.O. Box E, Alton, IL 62002 618462-5755 E-mail: [mail@smsengineers.com](mailto:mail@smsengineers.com)  
20 Central Industrial Drive, Granite City, IL 62040 618477-8700 E-mail: [mail@smsengineers.com](mailto:mail@smsengineers.com)  
375 S. N. F.W. # 184-1007552

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
TRAFFIC CONTROL PLAN  
U.S. ROUTE 67 CLOSURE AND DETOUR

DWG. NO. C-8  
TRAFFIC CONTROL US 67.DWG  
REF. BK. 5031 PG. --  
JOB NO. 406924.1  
DSN. BY: LA  
DWN. BY: CAD  
CHK. BY: LA  
DATE: MARCH 31, 2008

SCALE: NOT TO SCALE  
SHEET 9 OF 54



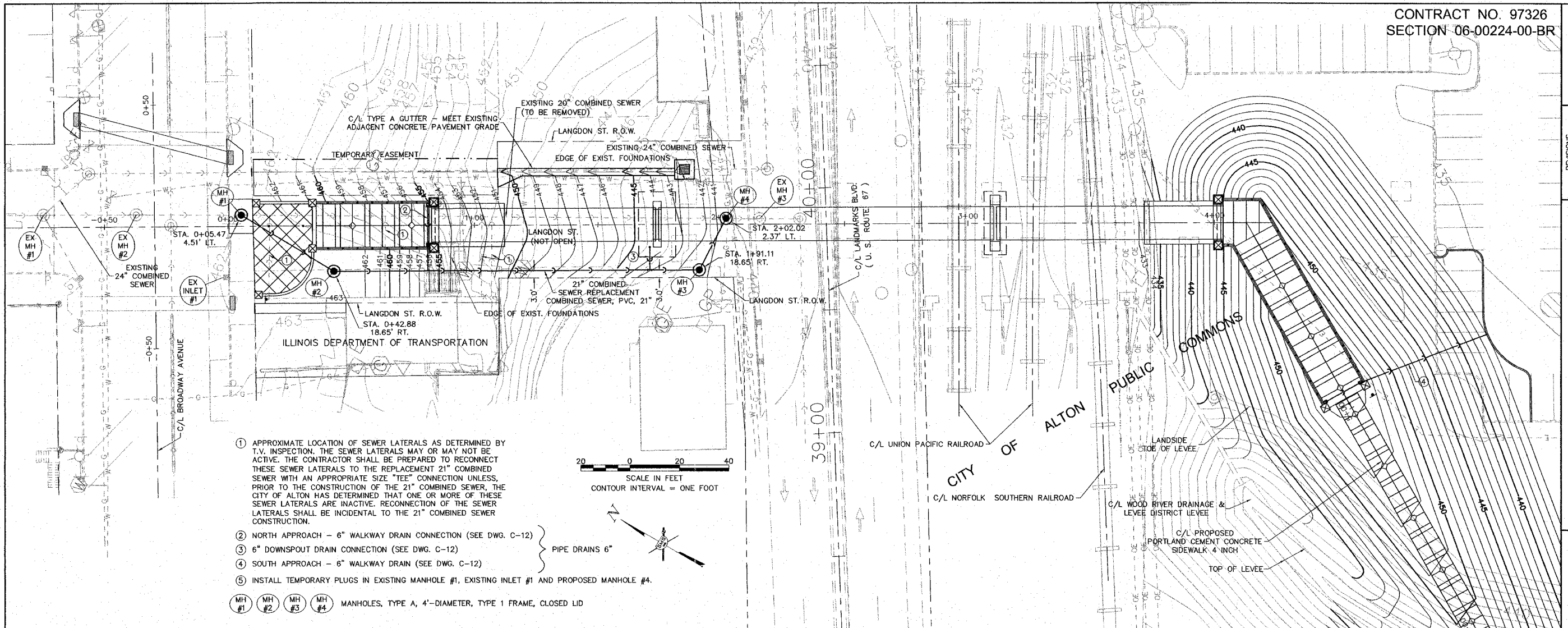
- NOTES:**
1. TEMPORARY EROSION CONTROL SEEDING SHALL BE USED ACCORDING TO SECTION 280 OF THE STANDARD SPECIFICATIONS.
  2. MULCH METHOD 1 SHALL BE USED ACCORDING TO SECTION 280 OF THE STANDARD SPECIFICATIONS.
  3. CONSTRUCTION OF PROPOSED PCC SIDEWALK 4 INCH RT. STA. 0+11 TO STA. 0+47.50 INCLUDING GRADING, SEEDING AND MULCHING IS COVERED BY PERMIT FROM IDOT.

NO.	DATE	DESCRIPTION

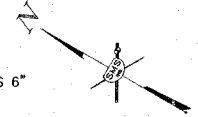
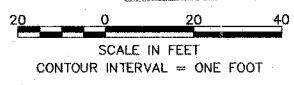
**SMS ENGINEERS**  
Sheppard, Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS AND LAND SURVEYORS  
215 Market Street, P.O. Box E, Alton, IL 62002 618/465-9755 E-mail: mail@smsengineers.com  
10 Central Industrial Drive, Granite City, IL 62040 618/877-8700 E-mail: mail@smsengineers.com  
DESIGN FIRM # 184-000992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
EROSION CONTROL PLAN

DWG. NO. C-9  
EROSION CONTROL.DWG  
REF. BK. 5030 PG. 1  
JOB NO. 406924.1  
DSN. BY: LA  
DWN. BY: CAD  
CHK. BY: LA  
DATE: MARCH 31, 2008  
SCALE: 1" = 30'  
SHEET 10 OF 54

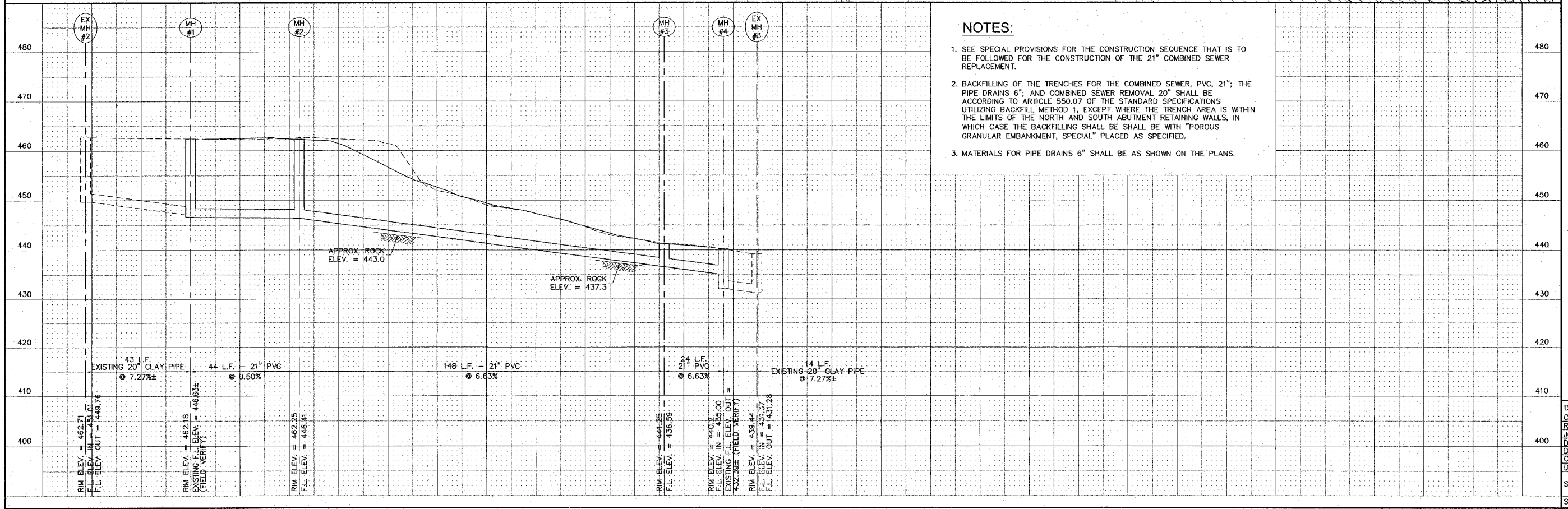


- ① APPROXIMATE LOCATION OF SEWER LATERALS AS DETERMINED BY T.V. INSPECTION. THE SEWER LATERALS MAY OR MAY NOT BE ACTIVE. THE CONTRACTOR SHALL BE PREPARED TO RECONNECT THESE SEWER LATERALS TO THE REPLACEMENT 21" COMBINED SEWER WITH AN APPROPRIATE SIZE "TEE" CONNECTION UNLESS, PRIOR TO THE CONSTRUCTION OF THE 21" COMBINED SEWER, THE CITY OF ALTON HAS DETERMINED THAT ONE OR MORE OF THESE SEWER LATERALS ARE INACTIVE. RECONNECTION OF THE SEWER LATERALS SHALL BE INCIDENTAL TO THE 21" COMBINED SEWER CONSTRUCTION.
  - ② NORTH APPROACH - 6" WALKWAY DRAIN CONNECTION (SEE DWG. C-12)
  - ③ 6" DOWNSPOUT DRAIN CONNECTION (SEE DWG. C-12)
  - ④ SOUTH APPROACH - 6" WALKWAY DRAIN (SEE DWG. C-12)
  - ⑤ INSTALL TEMPORARY PLUGS IN EXISTING MANHOLE #1, EXISTING INLET #1 AND PROPOSED MANHOLE #4.
- MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID



**NOTES:**

1. SEE SPECIAL PROVISIONS FOR THE CONSTRUCTION SEQUENCE THAT IS TO BE FOLLOWED FOR THE CONSTRUCTION OF THE 21" COMBINED SEWER REPLACEMENT.
2. BACKFILLING OF THE TRENCHES FOR THE COMBINED SEWER, PVC, 21"; THE PIPE DRAINS 6"; AND COMBINED SEWER REMOVAL 20" SHALL BE ACCORDING TO ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS UTILIZING BACKFILL METHOD 1, EXCEPT WHERE THE TRENCH AREA IS WITHIN THE LIMITS OF THE NORTH AND SOUTH ABUTMENT RETAINING WALLS, IN WHICH CASE THE BACKFILLING SHALL BE WITH "POROUS GRANULAR EMBANKMENT, SPECIAL" PLACED AS SPECIFIED.
3. MATERIALS FOR PIPE DRAINS 6" SHALL BE AS SHOWN ON THE PLANS.



REVISIONS

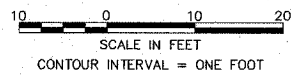
**SMS** Sheppard, Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS AND LAND SURVEYORS

**ENGINEERS**

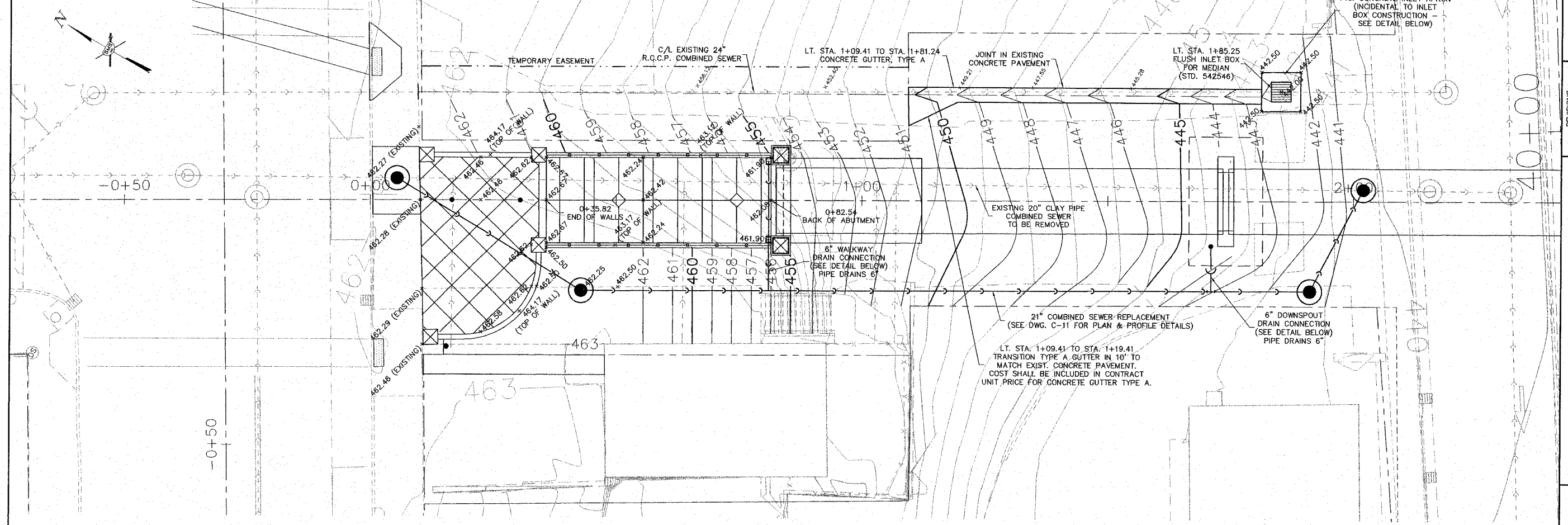
215 Market Street, P.O. Box E, Alton, IL 62002 618462-2955 E-mail: mail@smsengr.com  
9 Central Industrial Drive, Granite City, IL 62040 918677-9700 E-mail: mail@smsengr.com  
DESIGN FIRM # 184-000992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
COMBINED SEWER REPLACEMENT  
PLAN / PROFILE

S:\land projects\ALTON (06/24-1)\dwg\Combined Sewer.dwg 5/15/2008 9:45:23 AM jman 1/20



CONTRACT NO. 97326  
SECTION 06-00224-00-BR

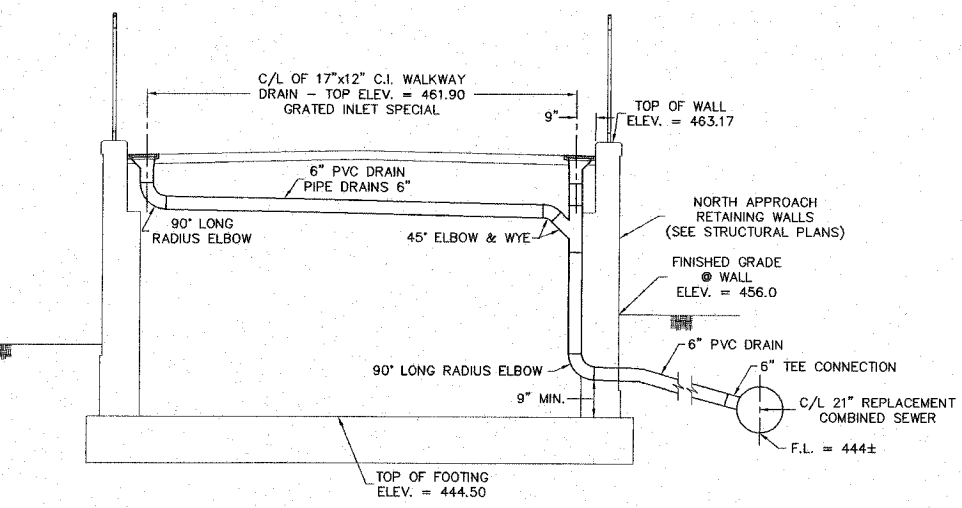


NO.	DESCRIPTION

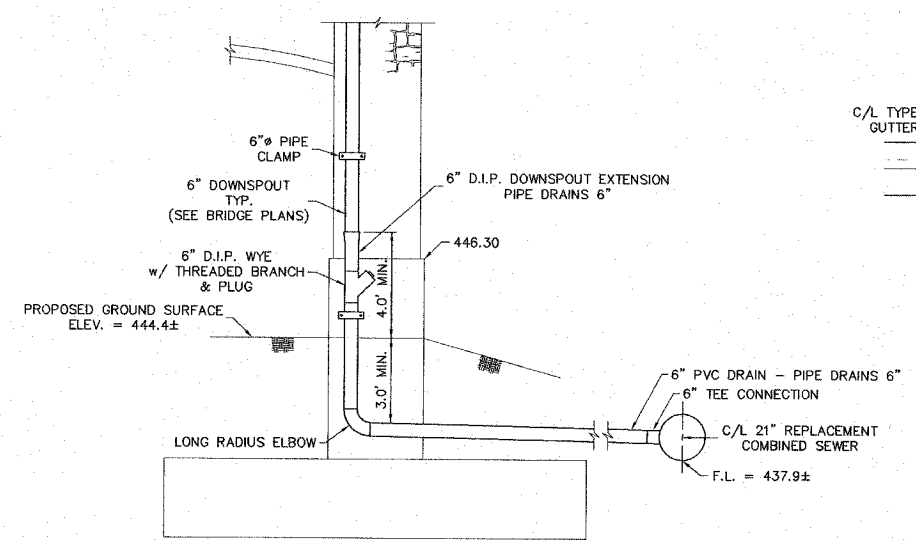
**SMS** Sheppard, Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS AND LAND SURVEYORS  
213 Market Street, P.O. Box 6, Alton, IL 62802 618425-9755 E-mail: sms@smsengineers.com  
10 Central Industrial Drive, Granite City, IL 62040 618977-4700 E-mail: mail@granitecity.com  
DESIGN FIRM # 184-000992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
DETAILED GRADING AND DRAINAGE PLAN  
NORTH APPROACH

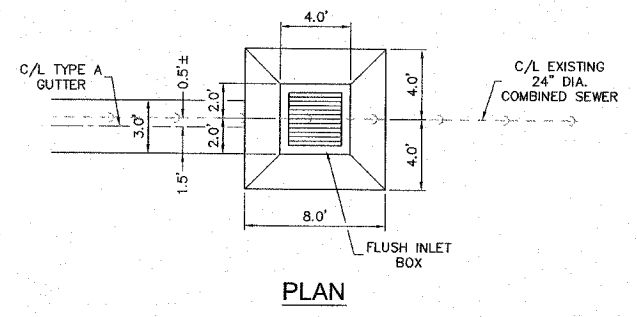
DWG. NO. C-11  
GRADING PLAN.DWG  
REF. BK. 5030 PG. 1  
JOB NO. 406924.1  
DSN. BY: CLS  
DWN. BY: CAD  
CHK. BY: CLS  
DATE: MARCH 31, 2008  
SCALE: 1" = 10'  
SHEET 12 OF 54



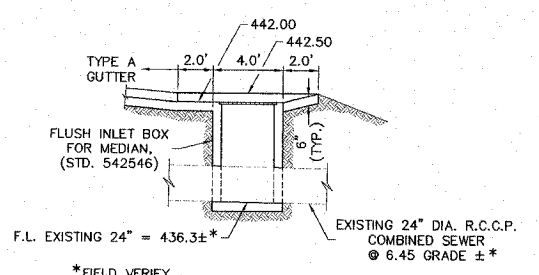
**SECTION DETAIL - WALKWAY DRAIN @ STA. 0+81.04**  
NOTE: MINIMUM SLOPE ON 6" DRAIN = 2.0%



**SECTION DETAIL - DOWNSPOUT DRAIN @ STA. 1+71.04**  
NOTE: MINIMUM SLOPE ON 6" DRAIN = 2.0%



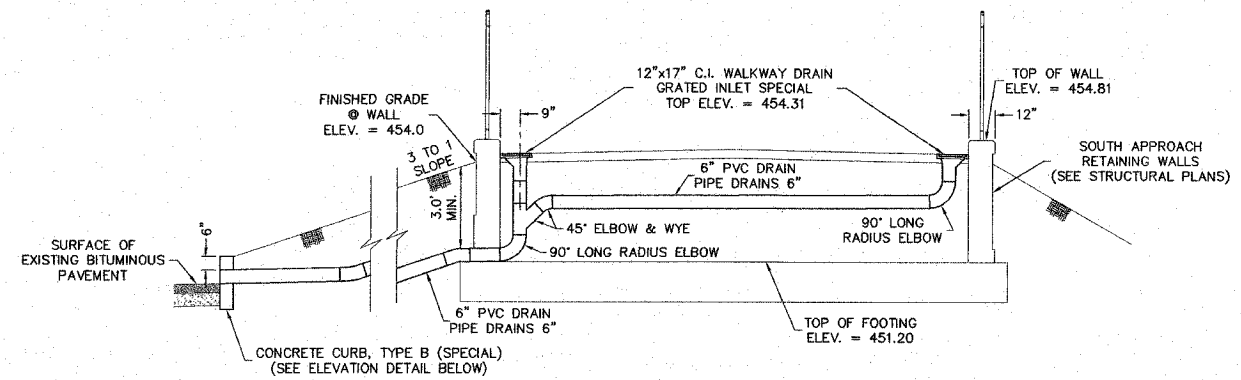
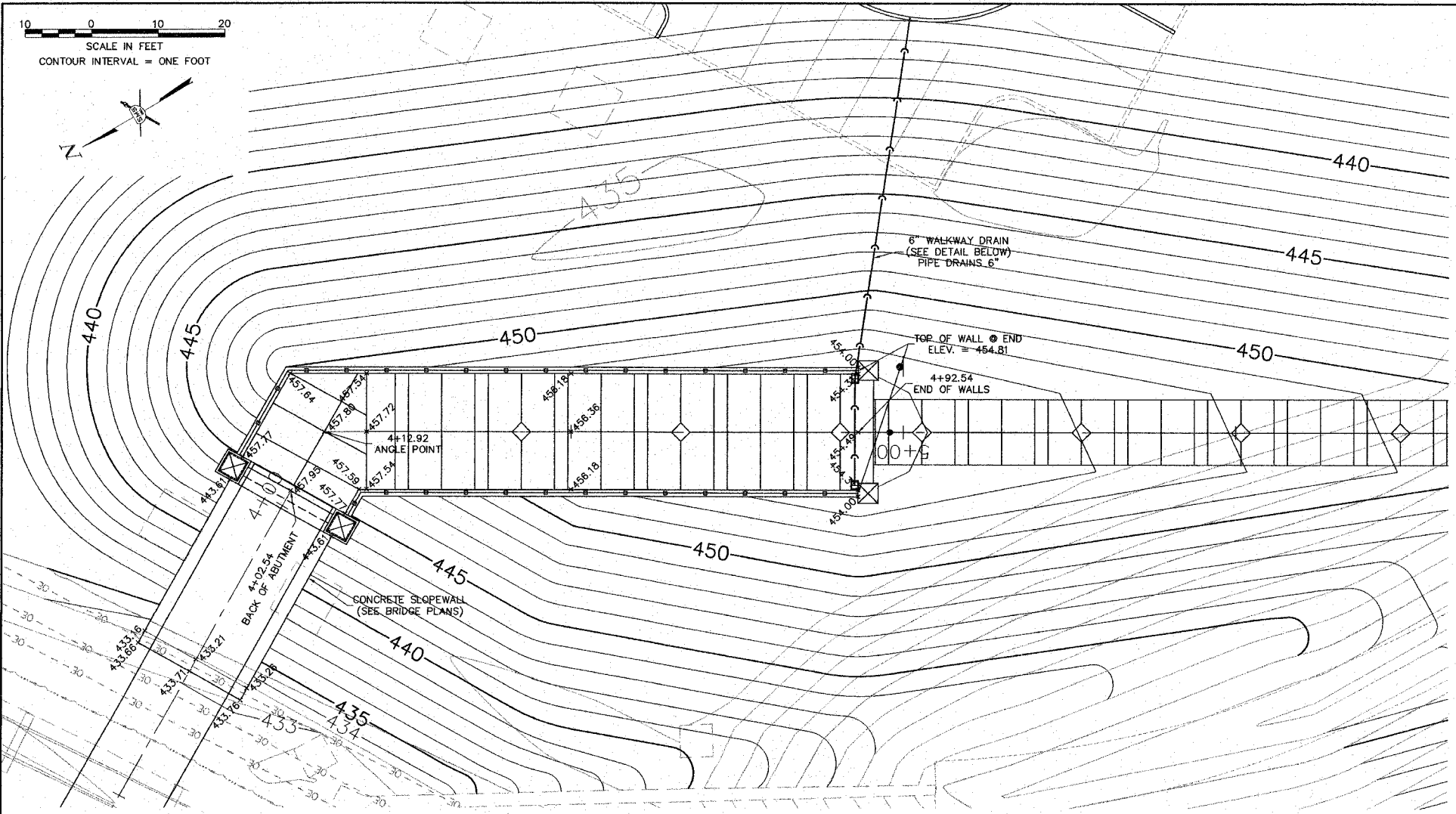
**PLAN**



**ELEVATION**

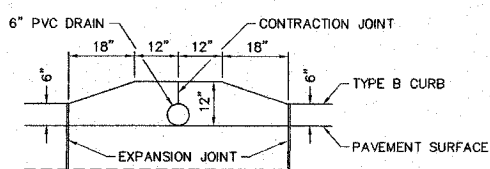
**FLUSH INLET BOX**  
SCALE: 1" = 5"

10 0 10 20  
SCALE IN FEET  
CONTOUR INTERVAL = ONE FOOT



SECTION DETAIL - WALKWAY DRAIN @ STA. 4+92.73

NOTE: MINIMUM SLOPE ON 6" DRAIN = 2.0%



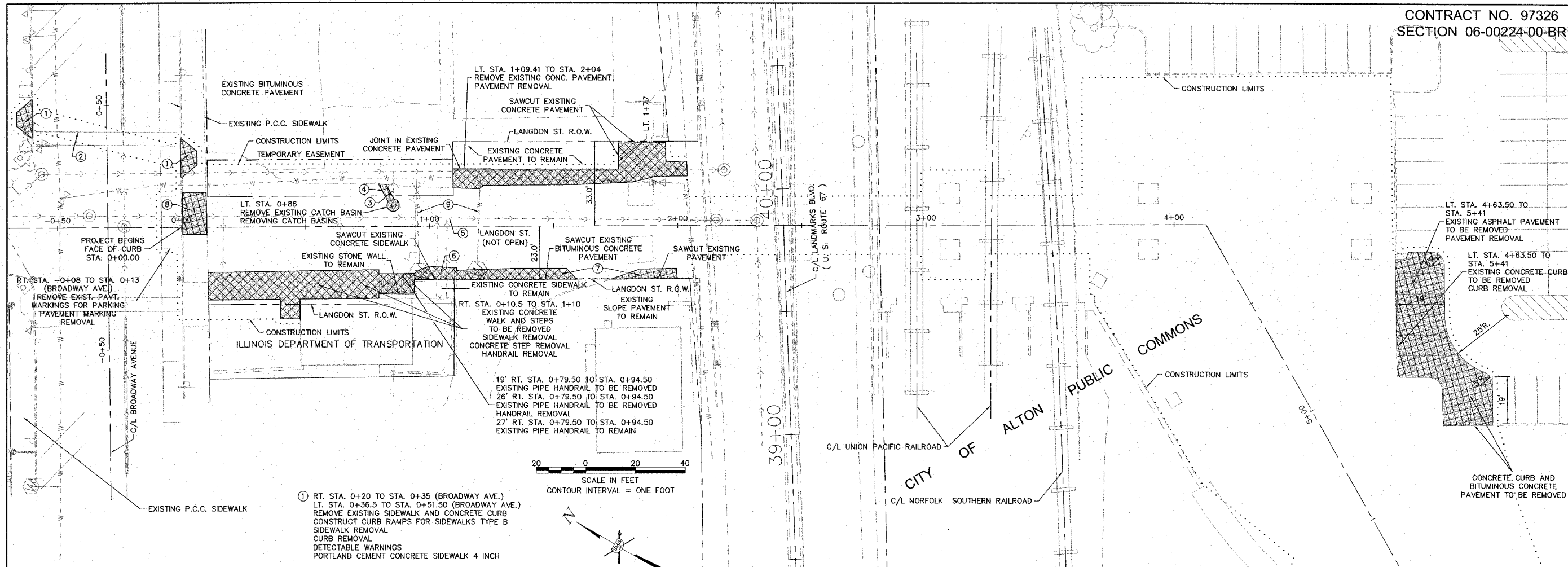
ELEVATION DETAIL - TYPE B CURB SPECIAL

NO.	DESCRIPTION

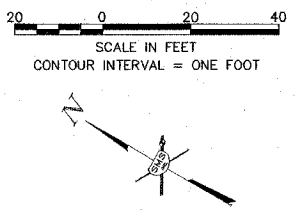
**SMS ENGINEERS**  
Sheppard, Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS AND LAND SURVEYORS  
215 Market Street, P.O. Box E, Alton, IL 62002, 618462-9795 E-mail: [mail@smsengineers.com](mailto:mail@smsengineers.com)  
17 Central Industrial Drive, Granite City, IL 62040, 618671-9700 E-mail: [mail@smsegr.com](mailto:mail@smsegr.com)  
DESIGN FIRM # 184-00992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
DETAILED GRADING AND DRAINAGE PLAN  
SOUTH APPROACH

S:\alton\proj\alton\406924.1\dwg\grading\Plan.dwg, 5/15/2006 2:18:38 PM, jman, 1:10



- ① RT. STA. 0+20 TO STA. 0+35 (BROADWAY AVE.)  
LT. STA. 0+36.5 TO STA. 0+51.50 (BROADWAY AVE.)  
REMOVE EXISTING SIDEWALK AND CONCRETE CURB  
CONSTRUCT CURB RAMPS FOR SIDEWALKS TYPE B  
SIDEWALK REMOVAL  
CURB REMOVAL  
DETECTABLE WARNINGS  
PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH
- ② STA. 0+33 AND STA. 0+38 (BROADWAY AVE.)  
REMOVE EXIST. PAVT. MARKINGS FOR CROSSWALK  
PAVEMENT MARKING REMOVAL
- ③ LT. STA. 0+86  
REMOVE EXIST. 12" CONC. STORM SEWER  
PLUG 1" AT EXIST. 24" CONC. STORM SEWER  
USING CLASS SI CONC. COST TO BE INCLUDED  
IN STORM SEWER REMOVAL 12"
- ④ LT. STA. 0+80 TO LT. STA. 0+86  
REMOVE EXISTING CONCRETE CURB AND GUTTER  
COMBINATION CURB AND GUTTER REMOVAL
- ⑤ LT. STA. 0+05 TO STA. 2+02  
EXISTING 20" DIA. COMBINED SEWER  
TO BE REMOVED  
20" COMBINED SEWER REMOVAL
- ⑥ RT. STA. 0+94 TO STA. 1+10  
REMOVE EXISTING SIDEWALK  
SIDEWALK REMOVAL
- ⑦ RT. STA. 1+11 TO STA. 1+59 AND STA. 1+73 TO STA. 2+00  
REMOVE EXISTING BITUMINOUS PAVEMENT  
PAVEMENT REMOVAL
- ⑧ 3.0' RT. AND 11.0' LT. OF STA. 0+00.5 TO STA. 0+10.5  
REMOVE EXISTING SIDEWALK  
SIDEWALK REMOVAL
- ⑨ EXISTING WATER SERVICES TO BE ADJUSTED  
BY ILLINOIS AMERICAN WATER CO.

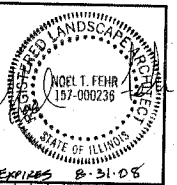


NO.	REVISIONS

**SMS ENGINEERS**  
Sheppard, Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS AND LAND SURVEYORS  
215 Market Street, P.O. Box E, Alton, IL 62002 618462-9765 E-mail: mail@smsengineers.com  
10 Central Industrial Drive, Granite City, IL 62040 618477-8700 E-mail: mail@graniteengineers.com  
DESIGN FIRM # 184-000992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
DEMOLITION PLAN

S:\and projects\ALTON\_406924\_1\img\Demolition Plan.dwg, 5/15/2008 8:51:43 AM, J:\man, 1/20



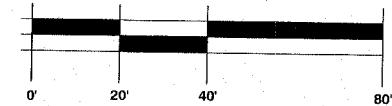
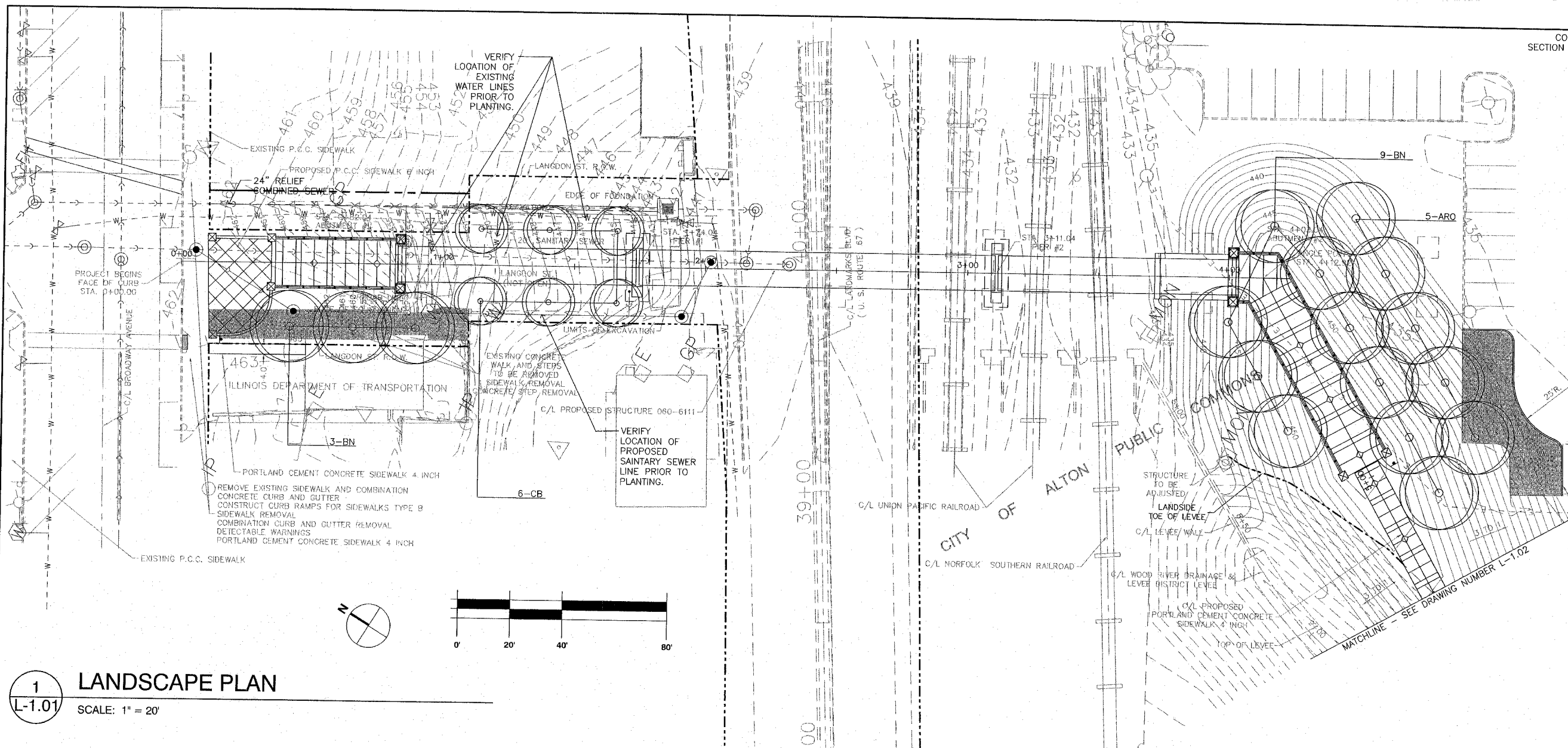
EXPIRES 8-31-05

REVISIONS

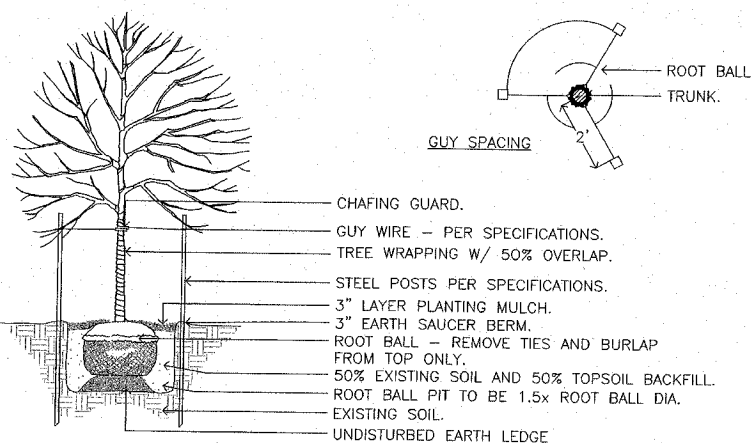
PLANNING DESIGN STUDIO  
PLANNING • URBAN DESIGN • LANDSCAPE ARCHITECTURE  
727 North First Street, Suite 360  
Saint Louis, Missouri, 63102  
Phone (314) 241-3600 Fax (314) 241-3601

**PDS**

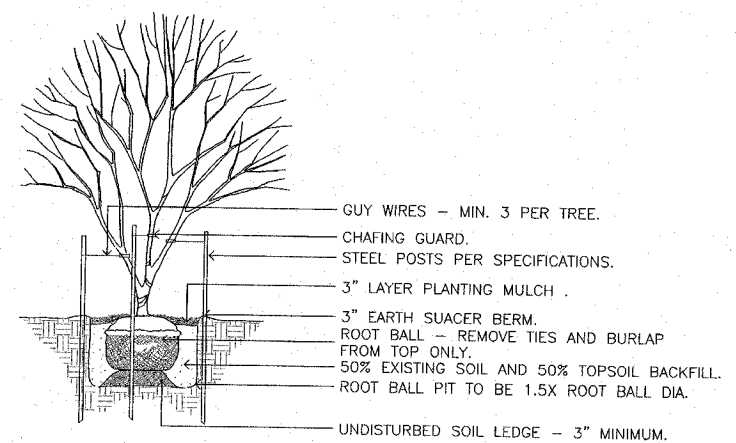
ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
LANDSCAPE PLAN AND DETAILS



**1 LANDSCAPE PLAN**  
L-1.01 SCALE: 1" = 20'



**2 Deciduous Tree Planting**  
L-1.01 NTS



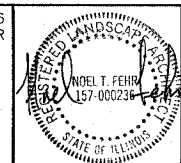
**3 Ornamental Tree Planting**  
L-1.01 NTS

LANDSCAPE PLAN NOTES

- ENTIRE AREA WITHIN CONSTRUCTION LIMITS IS TO BE SEEDED EXCEPT AREAS TO BE MULCHED AS PART OF LANDSCAPE PLANTINGS.
- REFER TO DRAWING NUMBER L-1.01 AND L-1.02 FOR LANDSCAPE PLANTING DETAILS AND PLANT SCHEDULE.
- ALL MULTI-STEM TREES SPECIFIED SHALL BE 3 TRUNK MINIMUM, WITH A 2" MINIMUM CALIPER FOR EACH TRUNK.
- ALL PLANTS SHALL CONFORM TO UPPER RANGE LIMITS FOR CALIPER AND HEIGHT DIMENSIONS LISTED IN ANSI 260.1-2004 FOR SIZE GRADE SPECIFIED.
- UNDERGROUND FACILITY STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORD INFORMATION AND, THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. VERIFICATION OF LOCATION OF ALL UNDERGROUND STRUCTURES AND FACILITIES EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- DO NOT DISTURB EXISTING UTILITIES. PROTECT FROM DAMAGE DURING CONSTRUCTION AND PLANTING.
- CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AND OBTAIN FIELD LOCATIONS FOR ALL UTILITIES TO REMAIN ON SITE.
- SEE PLAN AND PROFILE SHEETS FOR PROPOSED UTILITY INFORMATION.
- PLANTS TO BE LOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY LANDSCAPE ARCHITECT. CONTRACTOR TO STAKE OUT THE LOCATION FOR ALL PLANTS AND OUTLINES FOR PLANTING BEDS ON THE GROUND AND OBTAIN APPROVAL BEFORE ANY EXCAVATION OR PLANTING IS MADE. MAKE ADJUSTMENTS IN LOCATIONS AND OUTLINES AS DIRECTED.

DWG. NO.	L-1.01
LANDSCAPE.DWG	
REF. BK.	PG.
JOB NO.	J0615
DSN. BY:	LAF
DWN. BY:	JRH
CHK. BY:	DKB
DATE:	MAR. 14, 2008

SCALE: AS SHOWN  
SHEET 16 OF 64



EXPIRES 9-31-08

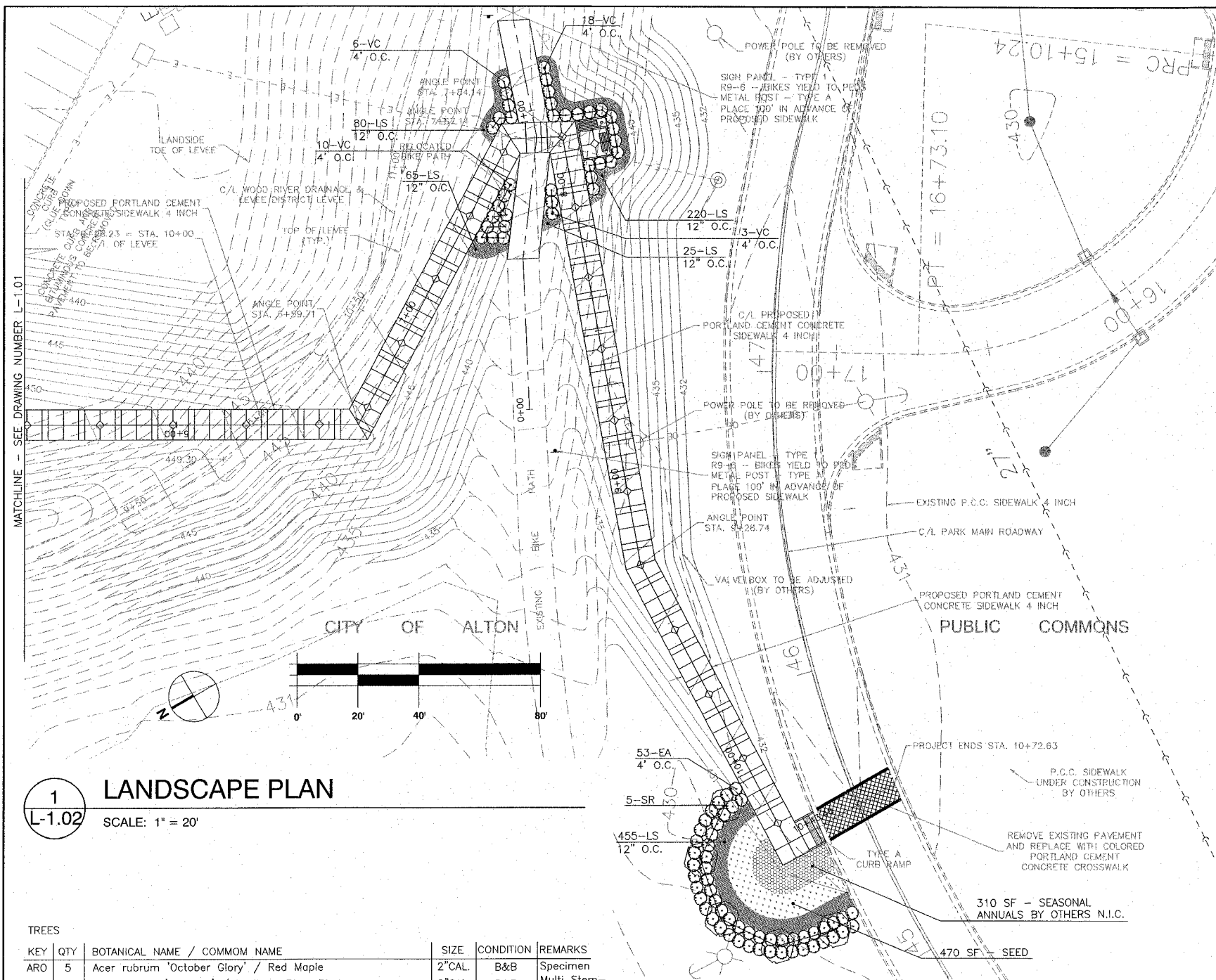
REVISIONS

PLANNING DESIGN STUDIO  
727 North First Street, Suite 360  
Saint Louis, Missouri 63102  
Phone (314) 241-3600 Fax (314) 241-3601

**PDS**

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
LANDSCAPE PLAN AND DETAILS

DWG. NO. L-1.02  
LANDSCAPE.DWG  
REF. BK. PG.  
JOB NO. JO615  
DSN. BY: LAF  
DWN. BY: JRH  
CHK. BY: DKB  
DATE: MAR. 14, 2008  
SCALE: AS SHOWN  
SHEET 17 OF 54



**1**  
L-1.02  
**LANDSCAPE PLAN**  
SCALE: 1" = 20'

TREES

KEY	QTY	BOTANICAL NAME / COMMON NAME	SIZE	CONDITION	REMARKS
ARO	5	Acer rubrum 'October Glory' / Red Maple	2" CAL.	B&B	Specimen
BN	12	Betula nigra 'Heritage' / Heritage River Birch	2" CAL.	B&B	Multi Stem - See Note 3
CB	6	Carpinus betulus 'Fastigiata' / Columnar European Hornbeam	3.5" CAL.	B&B	
SR	5	Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	2" CAL.	B&B	

SHRUBS

KEY	QTY	BOTANICAL NAME / COMMON NAME	SIZE	CONDITION
EA	53	Euonymus alatus 'Timber Creek' / Chi. Fire Burning Bush	36"	B&B
VC	37	Viburnum carlesii / Koreanspice Viburnum	36"	B&B

GROUNDCOVERS / PERENNIALS

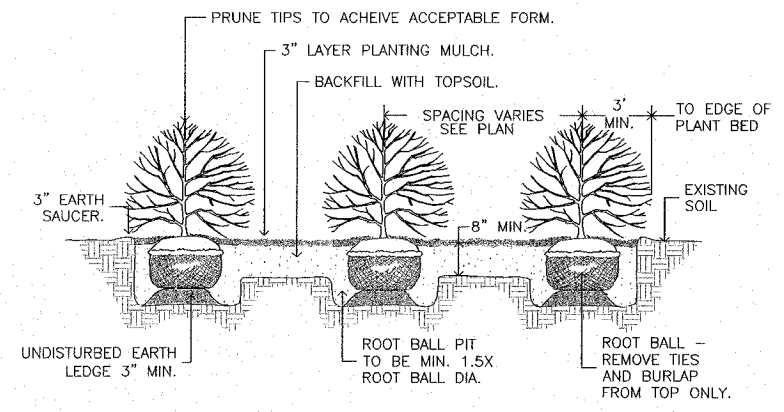
KEY	QTY	BOTANICAL NAME / COMMON NAME	SIZE	CONDITION
LS	8.45	Liriope spicata / Creeping Lilyturf	1 Quart	CONT.

NOTE: PERENNIAL QUANTITIES GIVEN IN UNITS. 1 UNIT=100 PLANTS.

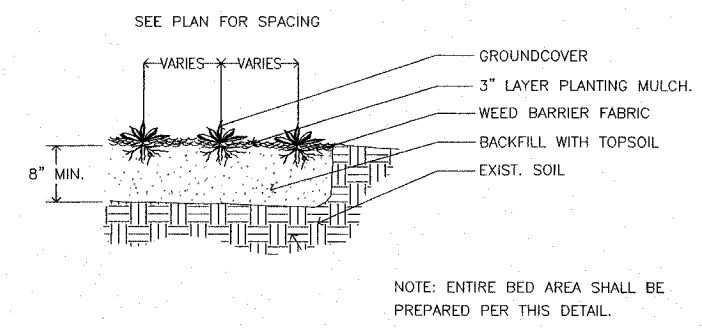
**2**  
L-1.02  
**Plant Schedule**  
NTS

- LANDSCAPE PLAN NOTES**
- ENTIRE AREA WITHIN CONSTRUCTION LIMITS IS TO BE SEEDED EXCEPT AREAS TO BE MULCHED AS PART OF LANDSCAPE PLANTINGS.
  - REFER TO DRAWING NUMBER L-1.01 AND L-1.02 FOR LANDSCAPE PLANTING DETAILS AND PLANT SCHEDULE.
  - ALL MULTI-STEM TREES SPECIFIED SHALL BE 3 TRUNK MINIMUM, WITH A 2" MINIMUM CALIPER FOR EACH TRUNK.
  - ALL PLANTS SHALL CONFORM TO UPPER RANGE LIMITS FOR CALIPER AND HEIGHT DIMENSIONS LISTED IN ANSI 260.1-2004 FOR SIZE GRADE SPECIFIED.
  - UNDERGROUND FACILITY STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORD INFORMATION AND, THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. VERIFICATION OF LOCATION OF ALL UNDERGROUND STRUCTURES AND FACILITIES EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
  - DO NOT DISTURB EXISTING UTILITIES. PROTECT FROM DAMAGE DURING CONSTRUCTION AND PLANTING.
  - CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AND OBTAIN FIELD LOCATIONS FOR ALL UTILITIES TO REMAIN ON SITE.
  - SEE PLAN AND PROFILE SHEETS FOR PROPOSED UTILITY INFORMATION.
  - PLANTS TO BE LOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY LANDSCAPE ARCHITECT. CONTRACTOR TO STAKE OUT THE LOCATION FOR ALL PLANTS AND OUTLINES FOR PLANTING BEDS ON THE GROUND AND OBTAIN APPROVAL BEFORE ANY EXCAVATION OR PLANTING IS MADE. MAKE ADJUSTMENTS IN LOCATIONS AND OUTLINES AS DIRECTED.

**3**  
L-1.02  
**Shrub Planting**  
NTS

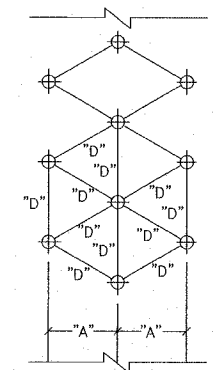


**4**  
L-1.02  
**Groundcover & Perennial Planting**  
NTS



FOR USE WITH ALL PLANT TYPES SPACED EQUIDISTANTLY

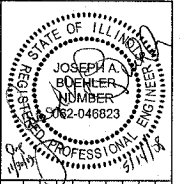
SPACING "D"	ROW "A"	NO. OF PLANTS/SF	AREA UNIT
10" O.C.	8.66"	1.66	1 sq. ft.
12" O.C.	10.4"	1.15	
15" O.C.	13.0"	7.38	10 sq. ft.
18" O.C.	15.6"	5.12	
24" O.C.	20.8"	2.9	
30" O.C.	26.0"	1.85	
36" O.C.	30.0"	1.28	
4' O.C.	4.33'	4.61	100 sq. ft.
6' O.C.	5.2'	3.2	
8' O.C.	6.93'	1.8	
10' O.C.	8.66'	1.16	



**5**  
L-1.02  
**Plant Spacing Chart**  
NTS

⊕ = PLANT  
"A" = ROW SPACING  
"D" = PLANT SPACING





**LIGHT FIXTURE SCHEDULE**

MARK	MANUFACTURER	CATALOG	LAMPS	FINISH	MOUNTING	REMARKS
SA	Antique Street Lamps	BLC1 BCL3L 100M MACS 277 ANBK TYPE V DISTRIBUTION	1 100W MH	Black	Ground	TYPE V DISTRIBUTION
SB*	ANP	200GLCL GUPTIC 32WPL-E22 (3") 277V (SEE DETAIL)	1 F32PL	Black	Post	See Detail
SC	Kim	AFL16 100MH 277 BLP HDS FHBLP W/2 WEB BLP	1 100W MH	Black	Wall	

\* EQUIVALENT FIXTURES AS MANUFACTURED BY "BASELIGHT & SPERO" WILL BE ACCEPTABLE UPON APPROVAL OF SPECIFIC MODEL NUMBER BY ENGINEER.

LOAD	MOUNTED EXTERIOR PHASE/WIRE: 3/4						LOCATION-PARKING LOT MAINS: 400A MCB						AMPS: 400	
	LOAD, KW	REC	O/M	A	P	CIR	REC	O/M	A	P	CIR	LOAD, KW	LOAD	
Parking Lot (Existing)				40	3	1	A	2	3	40			Parking Lot (Existing)	
						3	B	4						
						5	C	6						
Parking Lot (Existing)				40	3	7	A	8	3	60			XFMR	
						9	B	10						
						11	C	12						
Pedestrian Walk	20	1		13*		A	14	1	20					
Pedestrian Walk	20	1		15*		B	15	1	20					
Pedestrian Walk	20	1		17*		C	18	1	20					
Pedestrian Walk	20	1		19*		A	20	1	20					
Spare	20	1		21*		B	22	1	20					
SUB-TOTAL, CL, KW	0.00	0.00	0.00								0.00	0.00	0.00	SUB-TOTAL, CL, KW

\* ADD NEW 20 AMP SINGLE POLE BREAKER TO EXISTING SIEMENS PANEL.

**KEYED NOTES (THIS SHEET ONLY):**

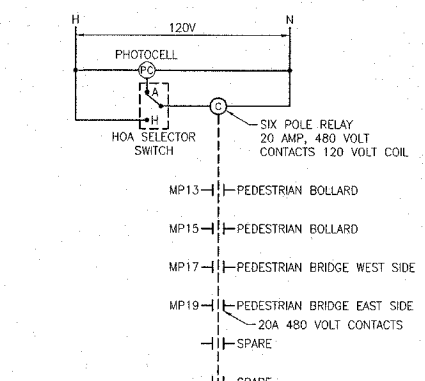
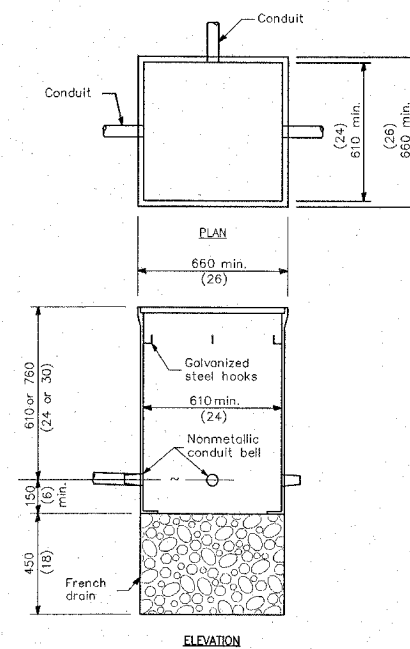
- SEE "IN-SIDEWALK" BASE DETAIL LEAVE 4" CLEARANCE BETWEEN BASE EDGE AND CHEEK WALL.
- BASE DEPTH SHALL BE 18" DEEP TO AVOID PENETRATING LEVEE SOIL.
- ROUTE CONDUIT BELOW CONCRETE TO AVOID PENETRATING LEVEE SOIL.
- EXISTING PANEL MP. ADD (5) 20 AMP, SINGLE POLE BREAKERS TO EXISTING 277/480 VOLT THREE PHASE PANEL.
- EXISTING 120/208 VOLT PANEL. ADD (1) 20 AMP, SINGLE POLE BREAKER FOR RELAY AND PHOTOCELL POWER.
- BASE MOUNTED RELAY CONTROLLER.
- SEE "NEXT TO SIDEWALK BASE" DETAIL.
- EXISTING EQUIPMENT.

**ELECTRIC ENGINEERING SYMBOLS**

- ⊙ WALL MOUNTED FIXTURE
- ⊙ BOLLARD
- CONDUIT CONCEALED IN FLOOR/BELOW SLAB/BELOW GRADE
- ||||| WIRE IN CONDUIT LEFT TO RIGHT 1 GROUND, 1 NEUTRAL, 3 HOTS
- ⊞ HAND HOLE
- ⊞ PANELBOARD - WALL MOUNTED
- ⊞ ELECTRIC METER
- ⊞ BASE MOUNTED CONTROLLER
- ① KEYED NOTE

**GENERAL NOTE:**

- ALL CONDUCTORS SHALL BE #8 AWG.
- DO NOT PENETRATE EXISTING LEVEE SOIL FOR INSTALLATION FIXTURES & CONDUITS.



**LIGHTING CONTROL SCHEMATIC**  
NO SCALE

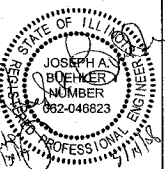
**COMPOSITE CONCRETE HANDHOLE**  
NO SCALE

**PEDESTRIAN OVERPASS LIGHTING - AREA "A"**  
SCALE: 1" = 20'-0"

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.

**HORNER & SHIRIN, INC.**  
ENGINEERS  
5200 OAKLAND AVE. • ST. LOUIS, MO 63110-1490  
314-531-4321 • FAX 314-531-6966  
www.HornerShirin.com

DWG. NO. E1  
PEDESTRIAN P-P ALT #1 DWG  
REF. BK. 5030 PG. 1  
JOB NO. 4069241  
DSN. BY: JAB  
DWN. BY: JAD  
CHK. BY: JAB  
DATE: 03/28/08  
SCALE: 1" = 20'  
SHEET 18 OF 54



**KEYED NOTES (THIS SHEET ONLY):**

- 1 SEE "IN-SIDEWALK BASE" DETAIL DRAWING SHEET 20 OF 54.
- 2 SEE DETAIL ON DRAWING E3 SHEET 20 OF 54 FOR MOUNTING HEIGHT, CONCEAL CONDUIT TO BRIDGE DECK.
- 3 SEE DETAIL ON DRAWING E3 SHEET 20 OF 54 FOR MOUNTING HEIGHT OF WEATHERPROOF JUNCTION BOX. LEAVE 12" PIGTAIL FOR FUTURE. SURFACE GALVANIZED-RIGID STEEL CONDUIT ON BRIDGE STRUCTURE. PAINT CONDUIT TO MATCH BRIDGE STRUCTURE.
- 4 SEE ABUTMENT DETAIL ON DRAWING E3 SHEET 20 OF 54.
- 5 MOUNT FIXTURES ON EVERY FORTH FENCE POST. SEE DETAIL ON DRAWING E3 SHEET 20 OF 54 TYPICAL.

**GENERAL NOTE:**

- ALL CONDUCTORS SHALL BE #8 AWG.
- DO NOT PENETRATE EXISTING LEVEL SOIL FOR INSTALLATION FIXTURES & CONDUITS.

**ELECTRIC ENGINEERING SYMBOLS**

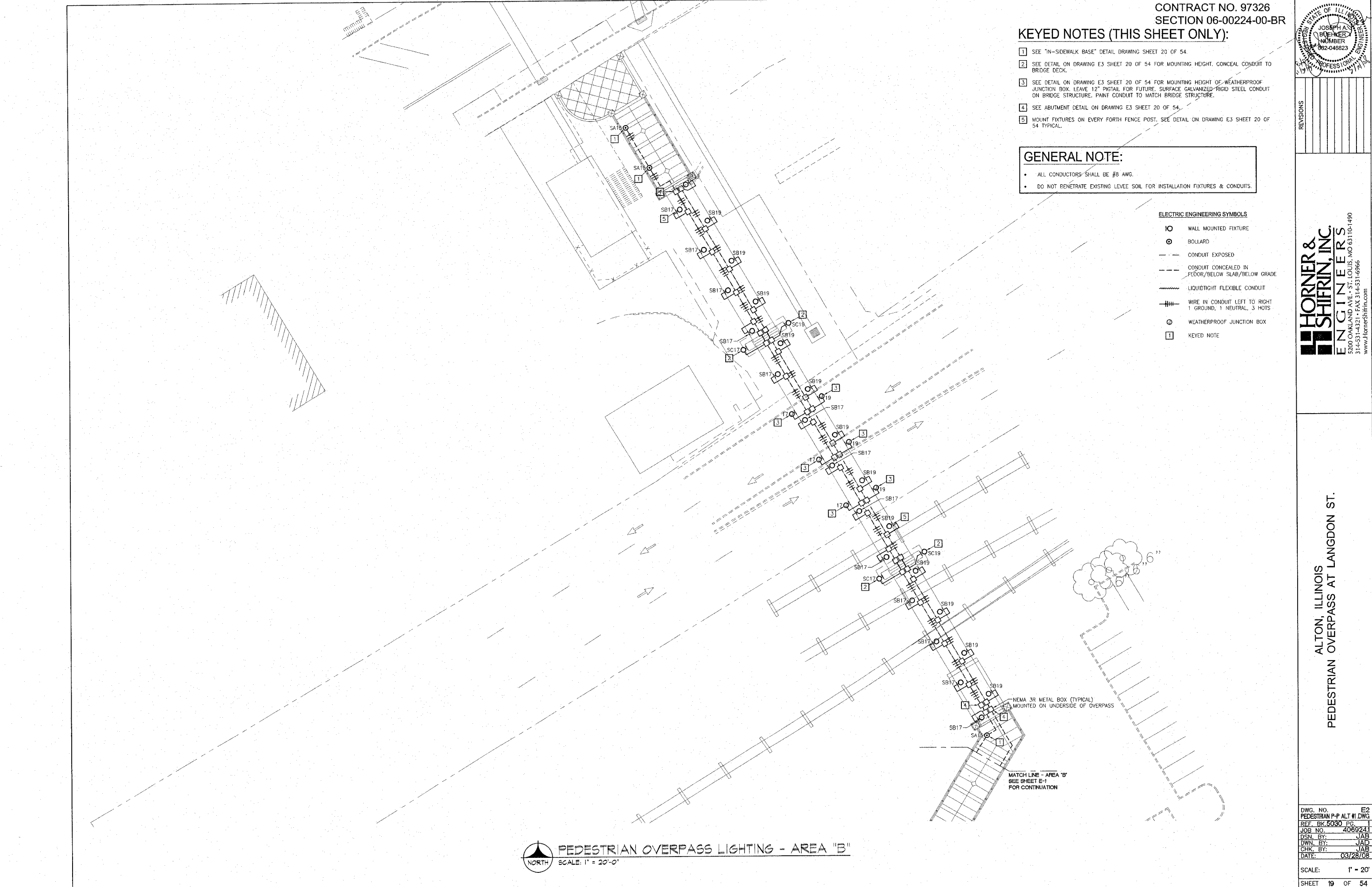
- WALL MOUNTED FIXTURE
- ⊙ BOLLARD
- CONDUIT EXPOSED
- - - CONDUIT CONCEALED IN FLOOR/BELOW SLAB/BELOW GRADE
- ~~~~~ LIQUIDTIGHT FLEXIBLE CONDUIT
- |||| WIRE IN CONDUIT LEFT TO RIGHT  
1 GROUND, 1 NEUTRAL, 3 HOTS
- ⊙ WEATHERPROOF JUNCTION BOX
- 1 KEYED NOTE

REVISIONS

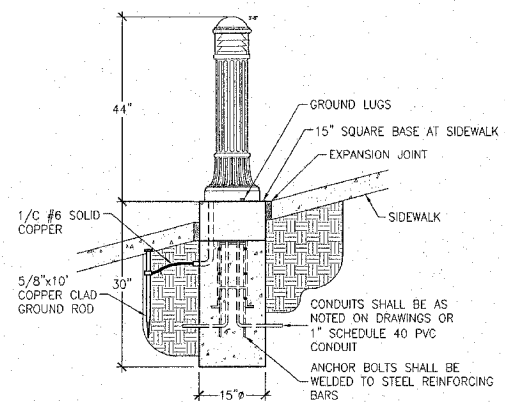
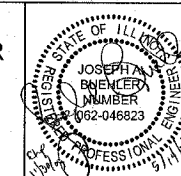
**HORNER & SHIRIN, INC.**  
ENGINEERS  
5200 OAKLAND AVE. • ST. LOUIS, MO 63110-1490  
314-531-4321 • FAX 314-531-6966  
www.HornerShirin.com

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.

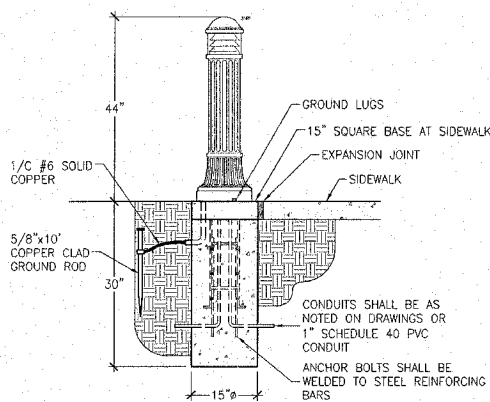
DWG. NO.	E2
PEDESTRIAN P-P ALT #1 DWG	
REF. BK 5030 PG.	1
JOB NO.	4069241
DSN. BY:	JAB
DWN. BY:	JAB
CHK. BY:	JAB
DATE:	03/28/08
SCALE:	1" = 20'
SHEET	19 OF 54



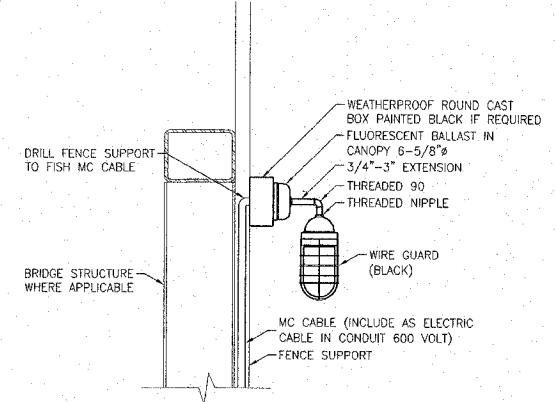
**PEDESTRIAN OVERPASS LIGHTING - AREA "B"**  
SCALE: 1" = 20'-0"



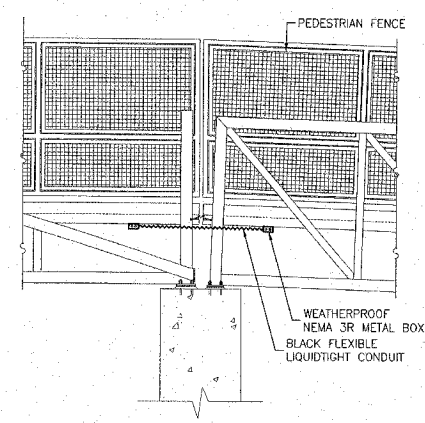
**FIXTURE SA "IN SIDEWALK" MOUNTING DETAIL**  
NO SCALE



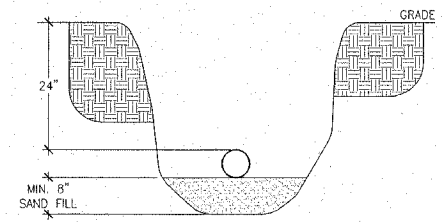
**FIXTURE SA "NEXT TO SIDEWALK" MOUNTING DETAIL**  
NO SCALE



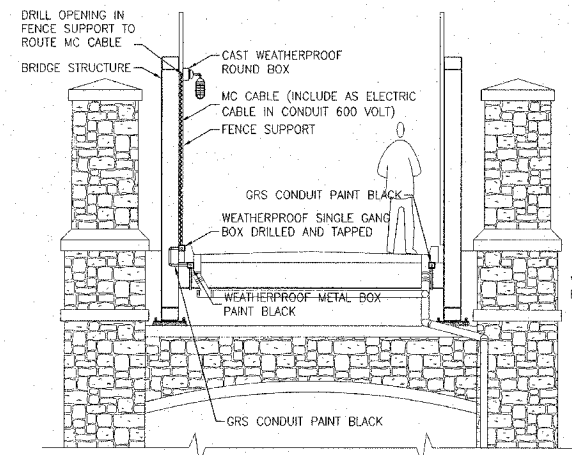
**FIXTURE SB DETAIL**  
NO SCALE



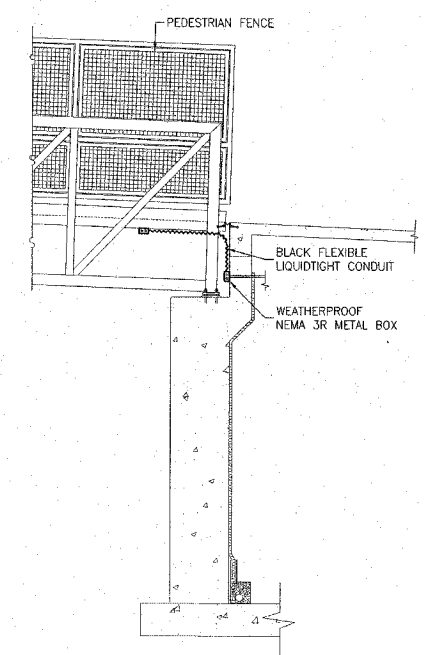
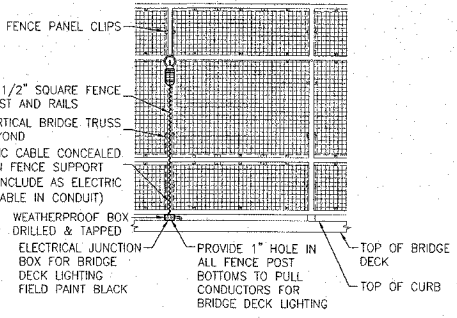
**PIER CONDUIT DETAIL**  
NO SCALE



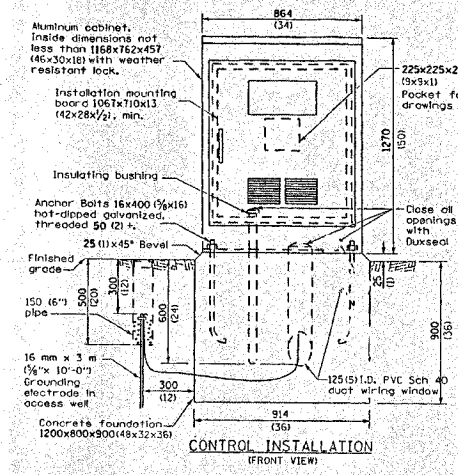
**TYPICAL CONDUIT BURIAL DETAIL**  
NO SCALE  
DO NOT PENETRATE LEVEE FOR INSTALLATION. ALL CONDUIT INSTALLED IN FILL. IF LESS THAN 24\"/>



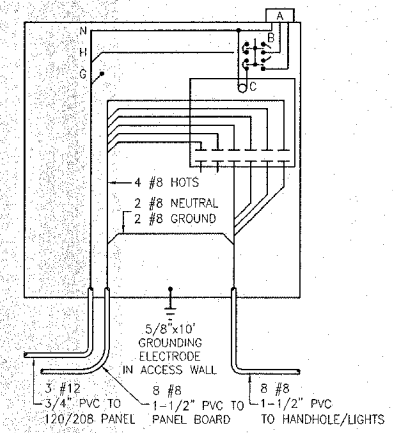
**FIXTURE SB BRANCH CIRCUIT DETAIL**  
NO SCALE



**ABUTMENT CONDUIT DETAIL**  
NO SCALE



**CONTROL INSTALLATION**  
FRONT VIEW

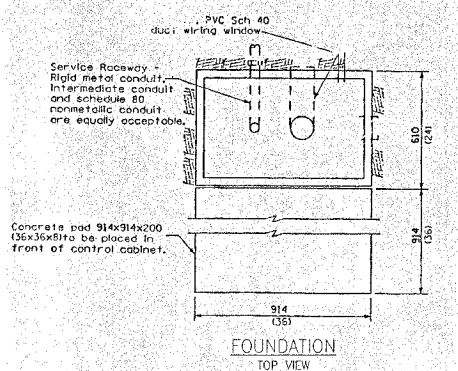


**MATERIALS:**

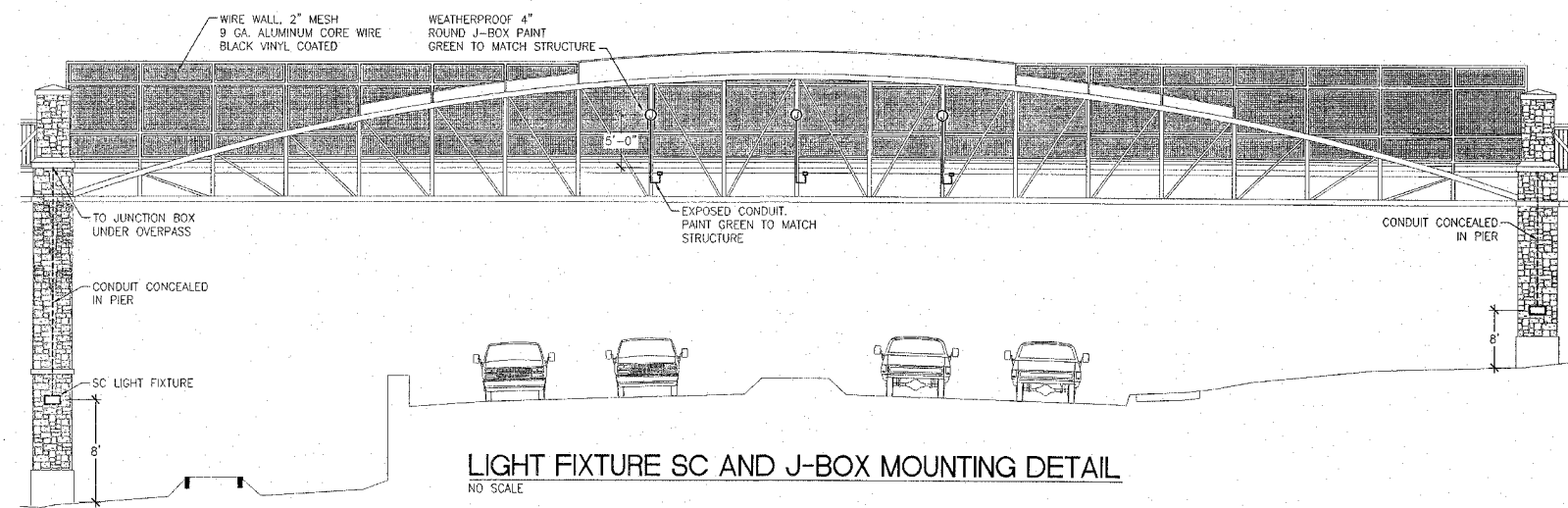
- A. PHOTOCELL W/ INTEGRAL SURGE ARRESTER.
- B. THREE POSITION SELECTOR SWITCH HAND/OFF/AUTO.
- C. SIX POLE RELAY 120 VOLT COIL 20 AMP, 480 VOLT CONTACTS.

**GENERAL NOTES:**

1. WIRING SHALL BE PANEL BOARD FASHION. ALL BENDS SHALL BE RIGHT ANGLES. ALL RUNS SHALL VERTICAL OR PARALLEL TO PANEL BOARD. WIRES SHALL BE GROUPED OR LACED.
2. ALL CONTROL INSTALLATION COMPONENTS SHALL BE U.L. LISTED.
3. RACEWAYS SHALL TERMINATE 75 (3) ABOVE TOP OF CONCRETE FOUNDATION.
4. LABEL EQUIPMENT GROUND BUSS AND NEUTRAL BUSS.
5. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.



**BASE MOUNTED RELAY CONTROLLER**  
NO SCALE



**LIGHT FIXTURE SC AND J-BOX MOUNTING DETAIL**  
NO SCALE

REVISIONS

**HORNER & SHIFRIN, INC.**  
ENGINEERS  
5300 OAKLAND AVE. - ST. LOUIS, MO 63110-4490  
314-531-4321 - FAX 314-531-6966  
www.HornerShifrin.com

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.

Benchmark: BM 108 a chiseled "X" on an existing foundation o/s 62.10' Rt., Sta. 0+10.73 Pedestrian Walkway, Elev. 463.05  
Existing Structure: None. Existing substructure units exist below ground in the vicinity of the north abutment, pier 1 and pier 2.  
Traffic Control: See special provision.

INDEX OF SHEETS

- 1 General Plan
- 2 General Notes, Details & Total Bill of Mat'ls
- 3 Superstructure
- 4 Superstructure Details
- 5 Fence & Rub Rail Details
- 6 Bridge Drainage System Details
- 7-8 North Abutment Plan & Details
- 9-10 North Retaining Wall Plan & Details
- 11 North Abutment & Retaining Wall Form Liner Details
- 12-15 South Abutment Plan & Details
- 16-17 South Retaining Wall Plan & Details
- 18 South Abutment & Retaining Wall Form Liner Details
- 19 Pier 1 Plan & Details
- 20 Pier 2 Plan & Details
- 21 Pile Details
- 22 Ornamental Fence Details
- 23-26 Boring Logs

STATION 2+42.54  
BUILT 200\_ BY  
CITY OF ALTON  
SEC. 06-00224-00-BR  
LOADING H-10 TRUCK  
STRUCTURE NO. 060-6111

NAME PLATE  
See Std. 515001

DESIGN SPECIFICATIONS

2002 AASHTO &  
1997 AASHTO Guide Specification for Design  
of Pedestrian Bridges

DESIGN STRESSES

f'c = 3500 p.s.i.  
fy = 60,000 p.s.i. (Reinforcement)  
Structural Steel = See Special Provisions  
Max. Allowable Bearing Pressure = 30 k.s.f.  
(Rock @ N. Abut. and Pier 1)  
Max. Allowable Bearing Pressure = 2 k.s.f.  
(Soil for north and south retaining walls)

LOADING

Pedestrian Live Load = 85 PSF  
Vehicle Live Load = H-10  
Allow 25#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = B  
Acceleration Coefficient (A) = 0.100g  
Site Coefficient (S) = 1.0

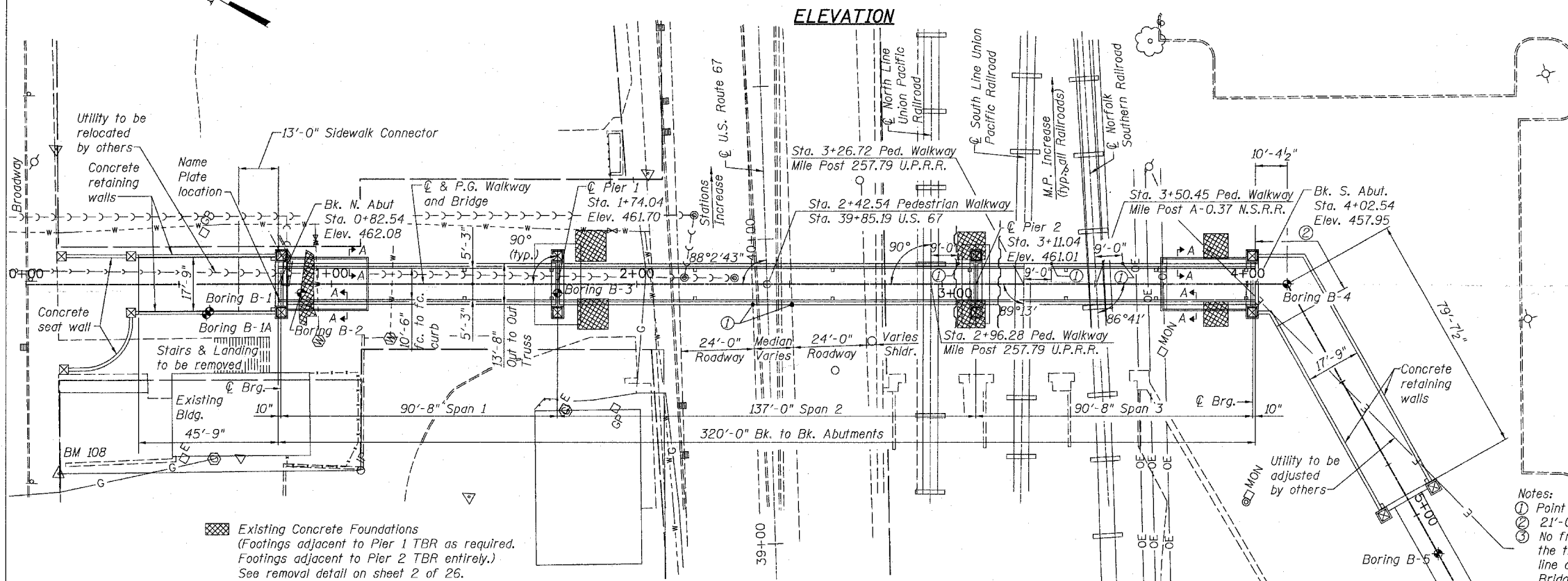
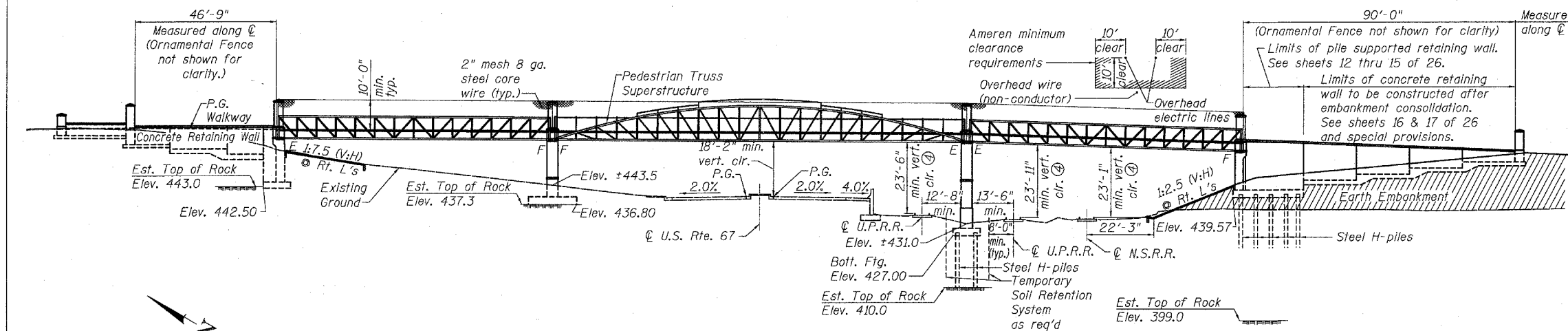
Notes:

- ① Point of minimum vertical clearance.
- ② 21'-0" Sidewalk Connector measured along the centerline.
- ③ No free fall deck drains will be permitted in the span over the tracks or within 10 feet of cross arms of a railroad pole line or within US 67 roadway limits. See sheet 6 of 26 for Bridge Drainage System.
- ④ The minimum railroad vertical clearances were calculated 9 feet from the centerline of the railroad as shown in the plan view.
- ⑤ See sheet 2 of 26 for sloped wall details and Section A-A.
- ⑥ Truss manufacturer shall camber truss to provide min. vertical clearances and profile grade as shown with an allowance for dead load deflection.
- ⑦ The substructure is designed per AASHTO & based on assumed truss dead loads shown below:

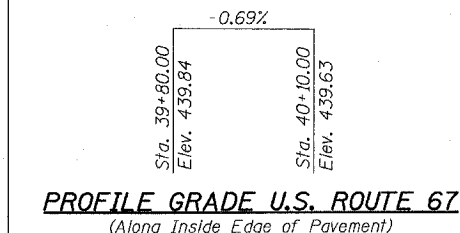
Total superstructure dead load (Spans 1 & 3): 157,500 pounds  
Total superstructure dead load (Span 2): 235,500 pounds  
Total superstructure dead load at abutment: 78,750 pounds  
Total superstructure dead load at piers: 196,500 pounds

GENERAL PLAN

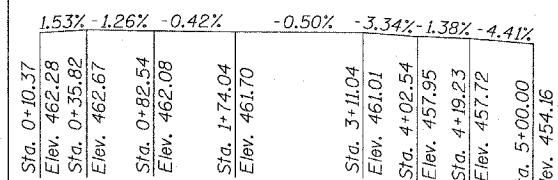
ALTON PEDESTRIAN WALKWAY OVER  
UNION PACIFIC RAILROAD, NORFOLK  
SOUTHERN RAILROAD AND US ROUTE 67  
SECTION 06-00224-00-BR  
MADISON COUNTY  
STA. 2+42.54  
STRUCTURE NO. 060-6111



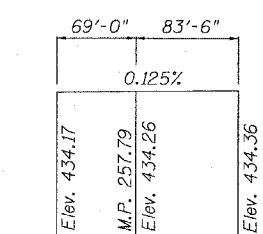
PLAN



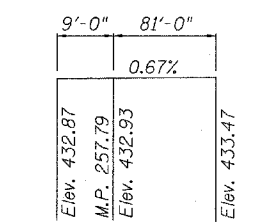
PROFILE GRADE U.S. ROUTE 67  
(Along Inside Edge of Pavement)



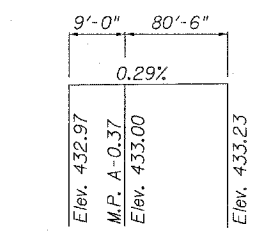
PROFILE GRADE WALKWAY  
(Along Centerline of Walkway)



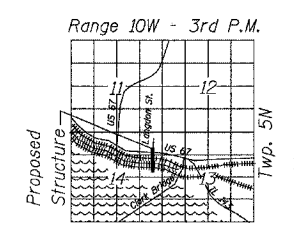
PROFILE GRADE  
NORTH LINE UNION  
PACIFIC RAILROAD  
(Looking North)  
Along top of south rail



PROFILE GRADE  
SOUTH LINE UNION  
PACIFIC RAILROAD  
(Looking North)  
Along top of north rail



PROFILE GRADE  
NORFOLK SOUTHERN  
RAILROAD  
(Looking North)  
Along top of north rail

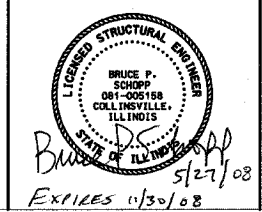


LOCATION SKETCH

APPROVED  
FOR STRUCTURAL ADEQUACY ONLY  
Relief E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES

Plans Prepared By:  
Oates Associates, Inc.

I certify the structural  
design of the abutments,  
piers and retaining walls  
for the required loadings.



REVISIONS

Eastport Business Center 1  
100 Linter Court, Suite 1  
Columbia, Illinois 62224  
Phone: 618 345-2200  
Fax: 618 345-2200  
www.oatesassociates.com



ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.

DWG. NO. S1  
6111-01-GENPLNSHT.  
REF. BK. PG.  
JOB NO. 28053  
DSN. BY: JGS  
DWN. BY: JGS  
CHK. BY: DGL  
DATE: 3/28/08

SCALE:  
SHEET 21 OF 26

**GENERAL NOTES**

No field welding is permitted except as specified in contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 in. (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

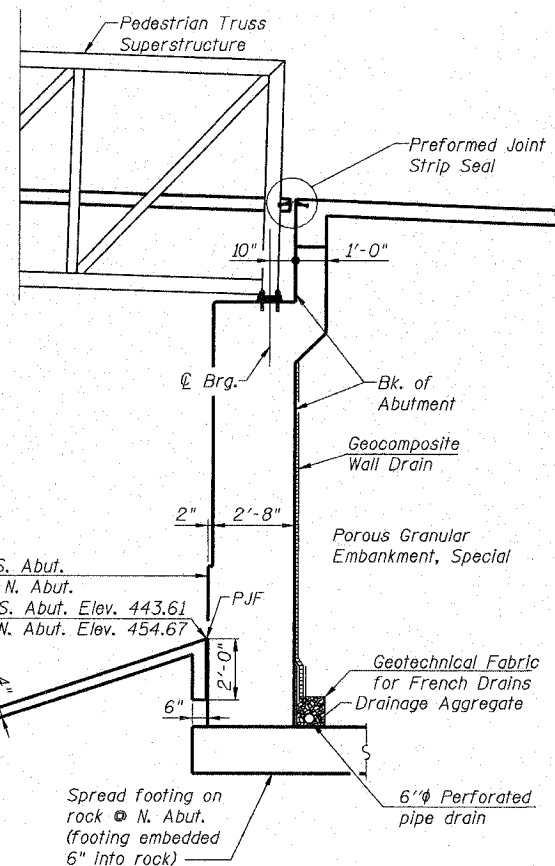
Bridge bearing seat elevations are subject to revision based on the approved pedestrian truss superstructure shop drawings. Contractor shall verify all dimensions and elevations with final approved shop drawings.

Bridge Seat Sealer shall be applied to the entire length and width of the abutment and pier seats.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat of the truss shall be green. The underdeck, Steel Railing, Type SM, and all lighting elements shall have a final finish coat of black. Color samples shall be submitted to the Engineer for approval by the City prior to painting the structure. See special provision for "Cleaning and Painting New Metal Structures". Cost is included with each individual pay item.

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

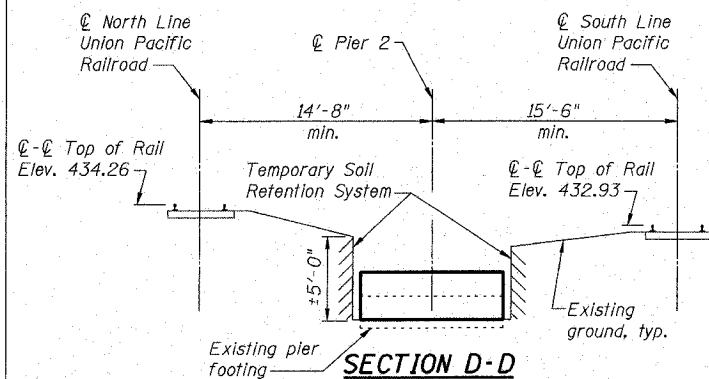
Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.



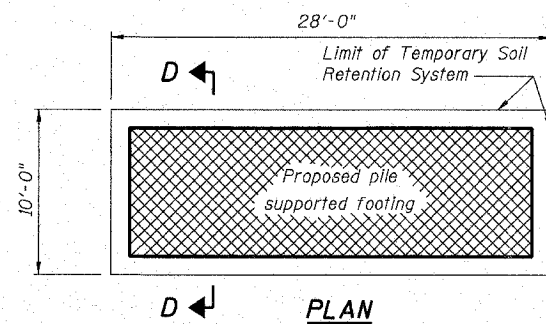
**SECTION THRU ABUTMENT**

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	--	742	742
Concrete Removal	Cu. Yd.	--	17.6	17.6
Structure Excavation	Cu. Yd.	--	1,026	1,026
Rock Excavation for Structures	Cu. Yd.	--	12	12
Concrete Structures	Cu. Yd.	--	623.5	623.5
Rubbed Finish	Sq. Ft.	--	2,204	2,204
Form Liner Textured Surface	Sq. Ft.	--	5,185	5,185
Reinforcement Bars, Epoxy Coated	Pound	--	94,470	94,470
Steel Railing, Type SM	Foot	646	--	646
Slope Wall 4 Inch	Sq. Yd.	--	113	113
Furnishing Steel Piles HP12x63	Foot	--	985	985
Driving Piles	Foot	--	985	985
Test Pile Steel HP12x63	Each	--	2	2
Pile Shoes	Each	--	30	30
Name Plates	Each	1	--	1
Preformed Joint Strip Seal	Foot	44	--	44
Bridge Seat Sealer	Sq. Ft.	--	190	190
Geocomposite Wall Drain	Sq. Yd.	--	214	214
Mechanical Splice	Each	--	112	112
Pedestrian Truss Superstructure	Sq. Ft.	3,727	--	3,727
Temporary Soil Retention System	Sq. Ft.	--	380	380
Bridge Drainage System	L. Sum	--	1	1
Ornamental Fence	Foot	267.5	--	267.5
Sidewalk Connector	Sq. Yd.	64	--	64



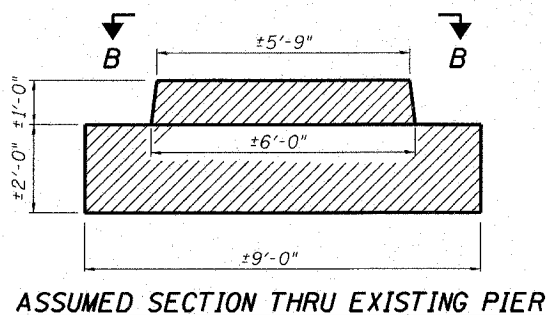
**SECTION D-D**



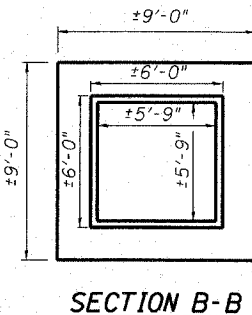
**PLAN**

**LIMITS OF TEMPORARY SOIL RETENTION SYSTEM AT PIER 2**

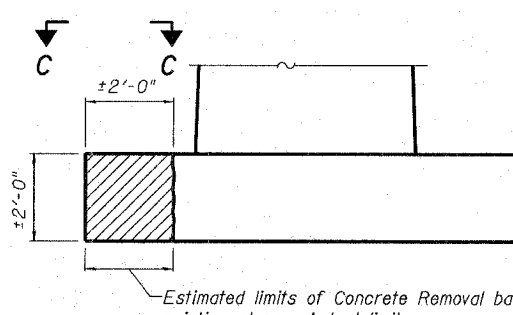
Because of the unknown depth of the footing removal, a cantilevered sheet piling design may not be feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer. The system shall be designed in accordance with applicable railroad requirements.



**ASSUMED SECTION THRU EXISTING PIER**



**SECTION B-B**

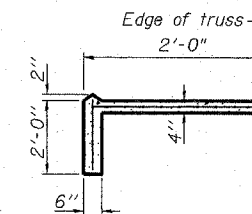


**ASSUMED SECTION THRU PIER**

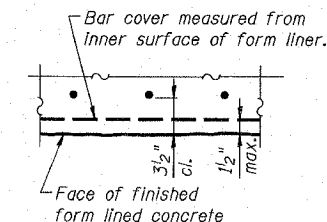
Estimated limits of Concrete Removal based on existing plans. Actual limits may vary and shall be approved by the Engineer prior to removal. Concrete footing is reinforced. Existing bridge plans are available at the request to the Engineer.

**CONCRETE REMOVAL SKETCH PIER 1**

(One footing shown, other similar.)



**SECTION A-A**  
(Typ. each side slope wall)



**FORM LINER DETAILS SHOWING BAR CLEARANCE REQUIREMENTS**

(At locations where the form liner meets the ground line, the form liner pattern shall be extended to 1'-0" min. below grade.)

**GENERAL NOTES, DETAILS & TOTAL BILL OF MATERIALS  
ALTON PEDESTRIAN WALKWAY OVER UNION PACIFIC RAILROAD, NORFOLK SOUTHERN RAILROAD AND US ROUTE 67  
SECTION 06-00224-00-BR  
MADISON COUNTY  
STA. 2+42.54  
STRUCTURE NO. 060-6111**

**CONCRETE REMOVAL SKETCH PIER 2**

(One footing shown, other similar.)

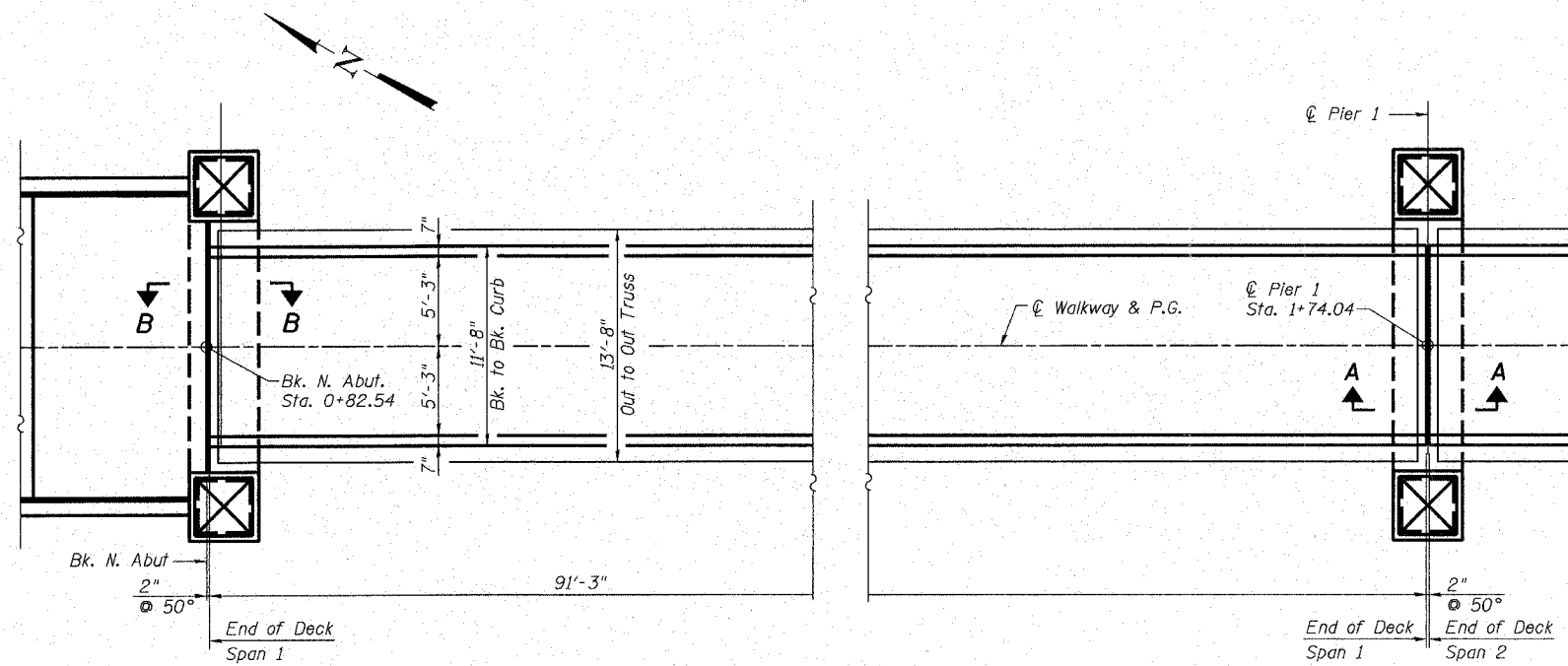
REVISIONS

Eastport Business Center 1  
100 Linder Court, Suite 1  
Cullman, Illinois 62224  
Phone: 618-345-2200  
Fax: 618-345-2233  
e-mail: cullman@earthlink.net  
www.cullmanassociates.com

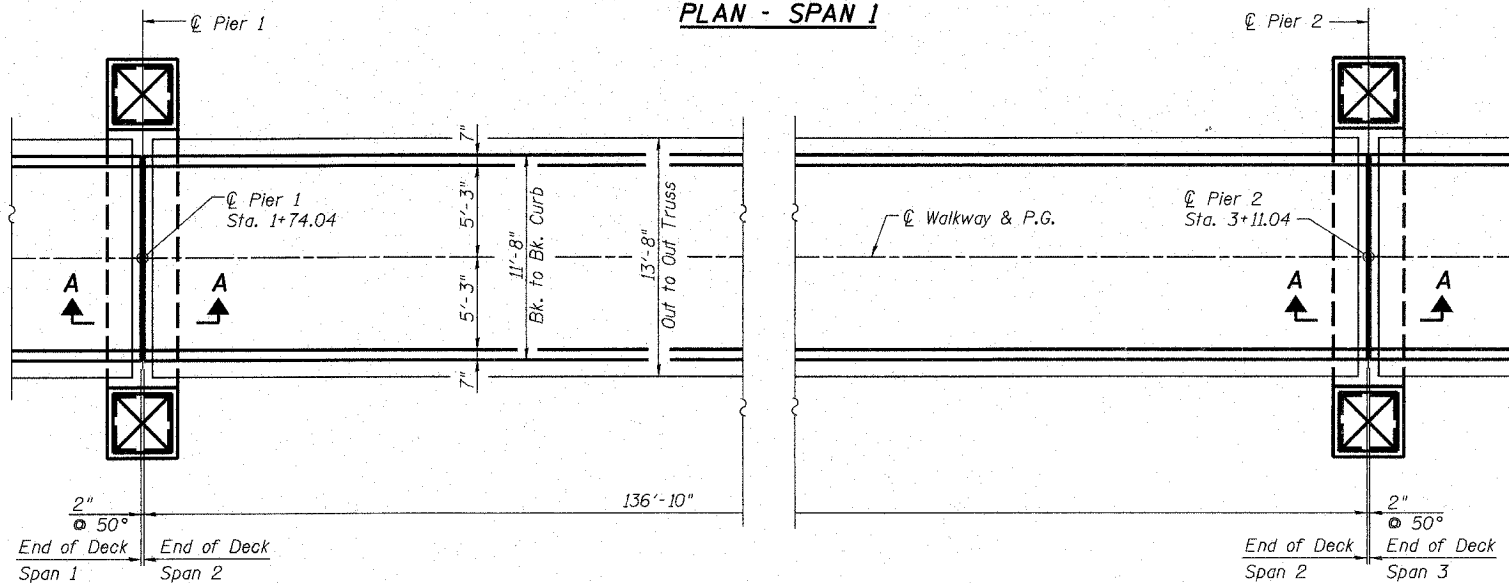


ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.

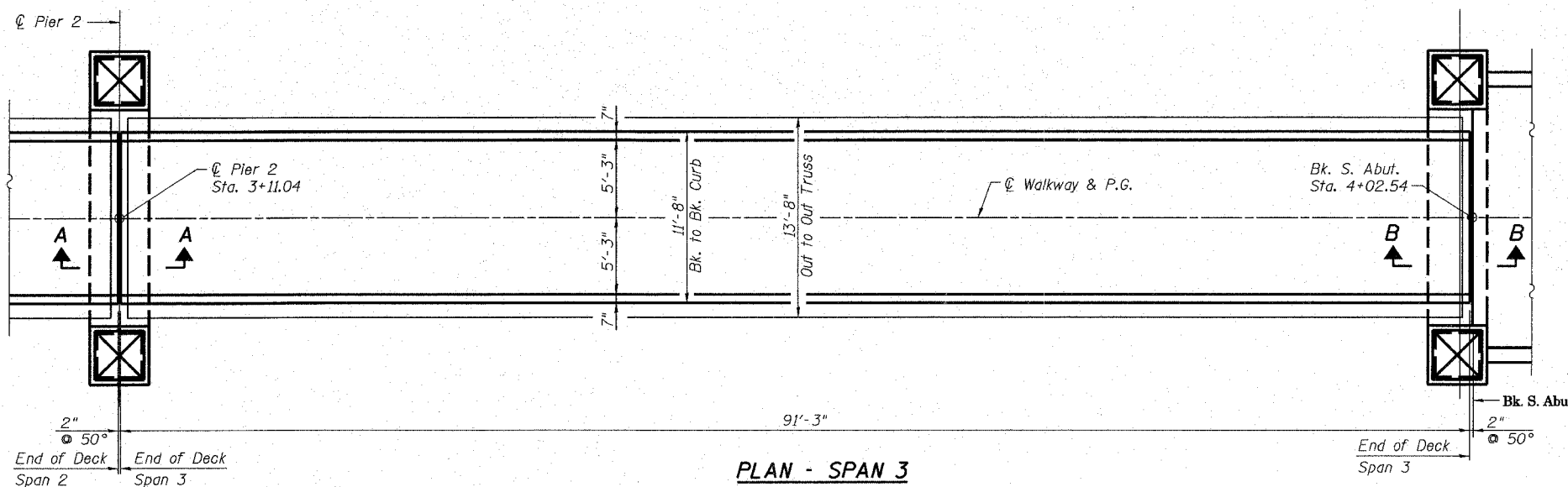
DWG. NO.	S2
6111-02-GENERAL NOTES.DWG	
REF. BK.	PG.
JOB NO.	28053
DSN. BY:	JCS
OWN. BY:	JCS
CHK. BY:	DGL
DATE:	3/28/08
SCALE:	
SHEET	22 OF 54



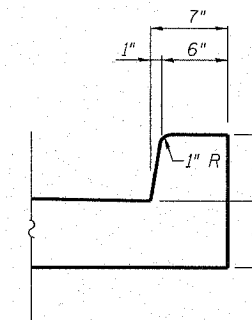
PLAN - SPAN 1



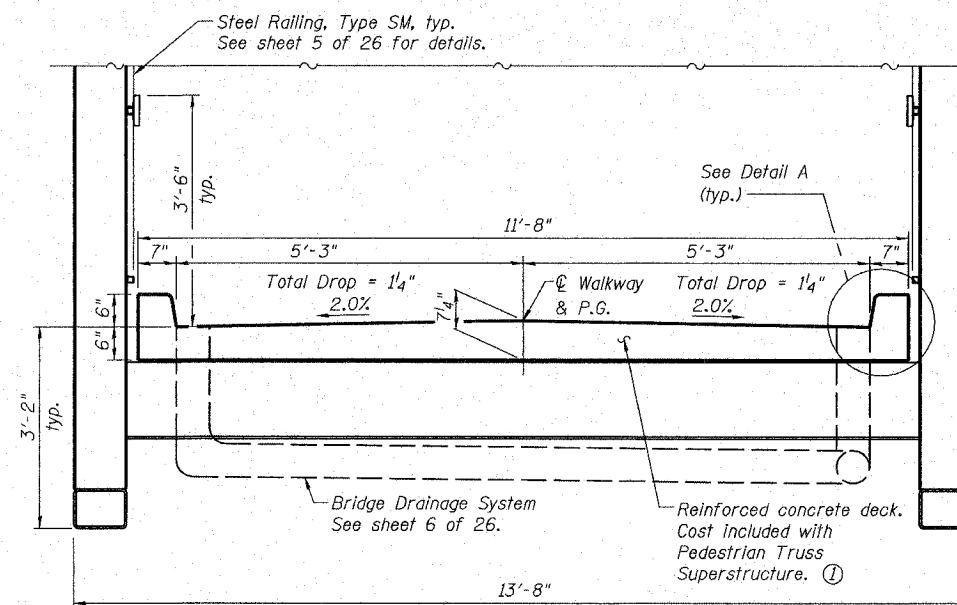
PLAN - SPAN 2



PLAN - SPAN 3



DETAIL A



SECTION THRU DECK

(Looking South)

- Notes:
- ① Truss manufacturer shall provide the reinforced concrete deck design. Reinforcement shall be epoxy coated. Contractor shall place the concrete deck after trusses are set. Cost included with Pedestrian Truss Superstructure.
  - ② See sheet 4 of 26 for Sections A-A & B-B.

**SUPERSTRUCTURE**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

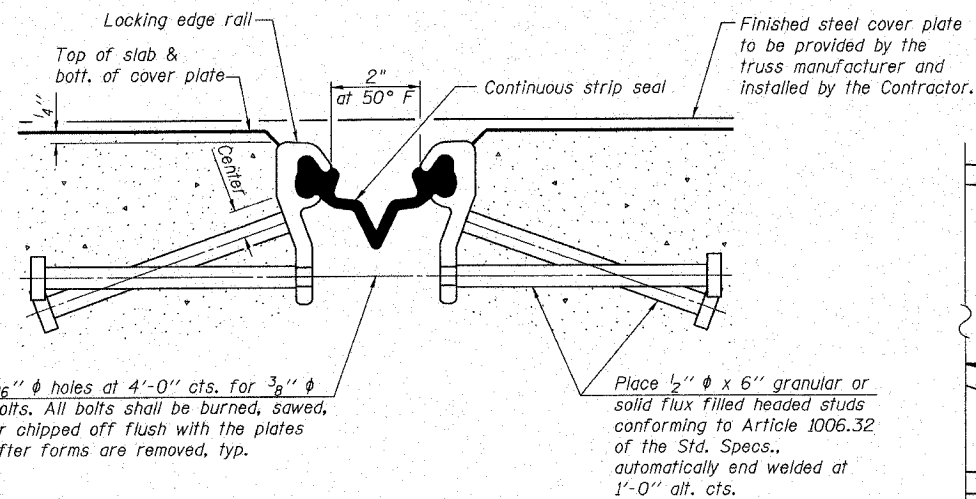
NO.	DESCRIPTION

Engelhard Business Center 1  
 100 Luntz Court, Suite 1  
 Calverton, Illinois 62234  
 Phone: 618 342-2200  
 Fax: 618 342-2200  
 e-mail: calverton@engels.com  
 web-site: www.engels.com

**ENGELS ASSOCIATES**  
 Consulting Engineers

ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.

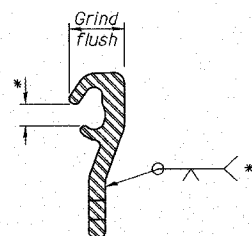
\* Omit weld at seal opening.



**SECTION THRU STRIP SEAL JOINT**



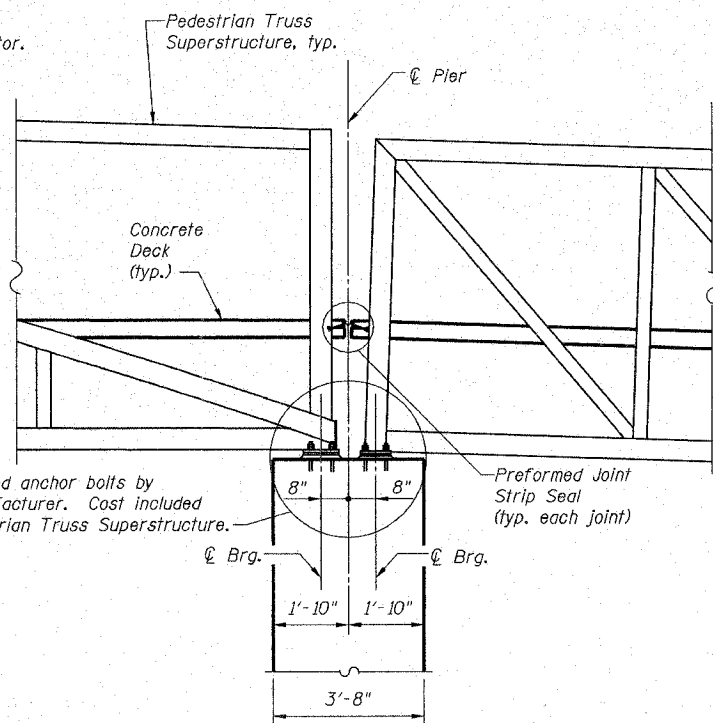
**LOCKING EDGE RAIL**



**LOCKING EDGE RAIL SPLICE**

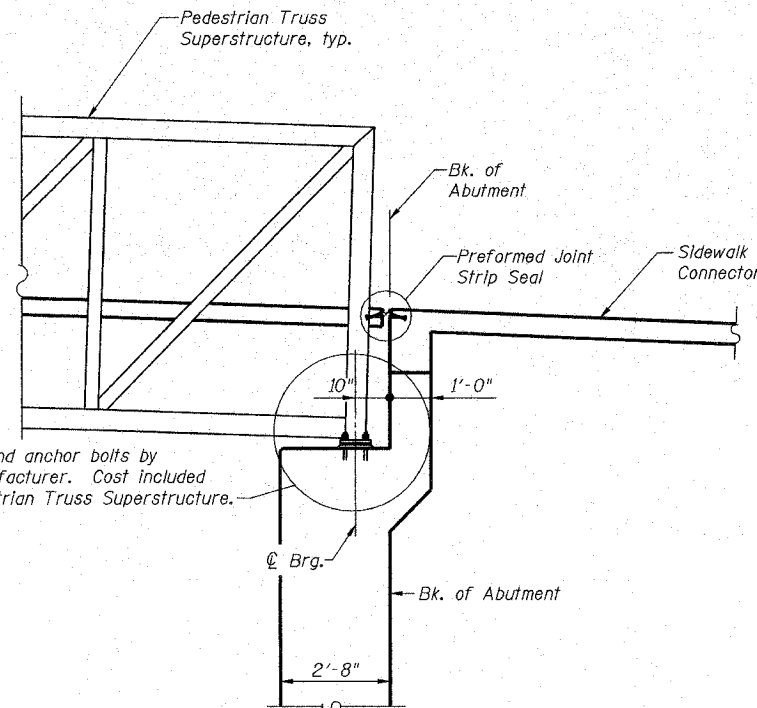
**Notes:**

- ① The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.
- ② The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.
- ③ The inside of the Locking Edge Rail groove shall be free of weld residue.
- ④ Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.
- ⑤ The manufacturer's recommended installation methods shall be followed.
- ⑥ Strip Seal Joint rails shall be installed below the cover plate.



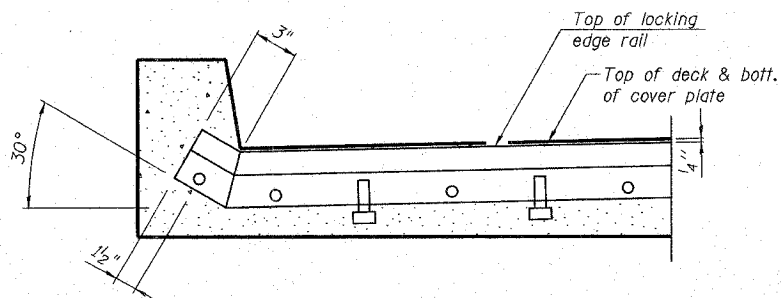
**SECTION A-A**

(Steel Railing, Type SM not shown for clarity.)



**SECTION B-B**

(Steel Railing, Type SM not shown for clarity.)



**TYPICAL END TREATMENTS AT JOINTS**

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	44

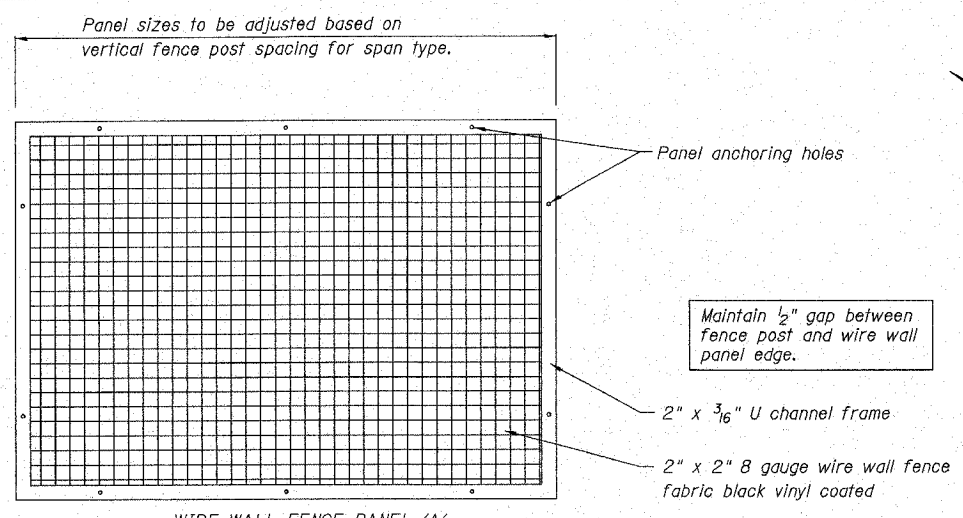
**SUPERSTRUCTURE DETAILS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

REVISIONS

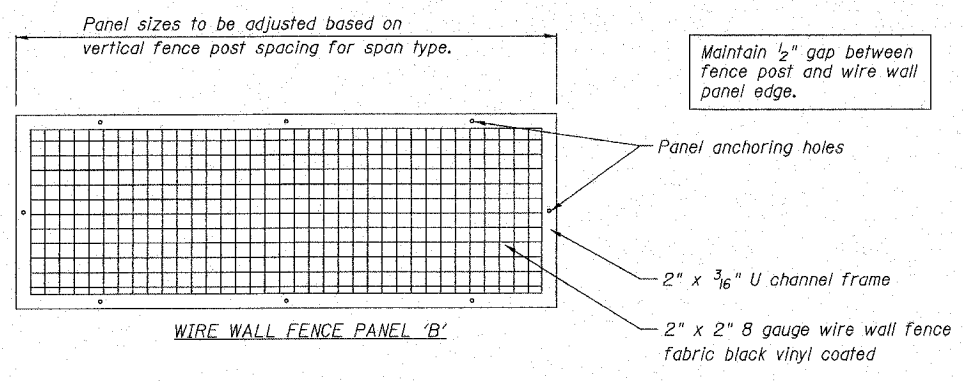
Eastport Business Center 1  
 100 Lerner Court, Suite 1  
 Collinsville, Illinois 62234  
 Phone: 618 345-7233  
 Fax: 618 345-7233  
 e-mail: info@oatesassociates.com  
 web-site: www.oatesassociates.com

**OATES ASSOCIATES**  
 Consulting Engineers

ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.

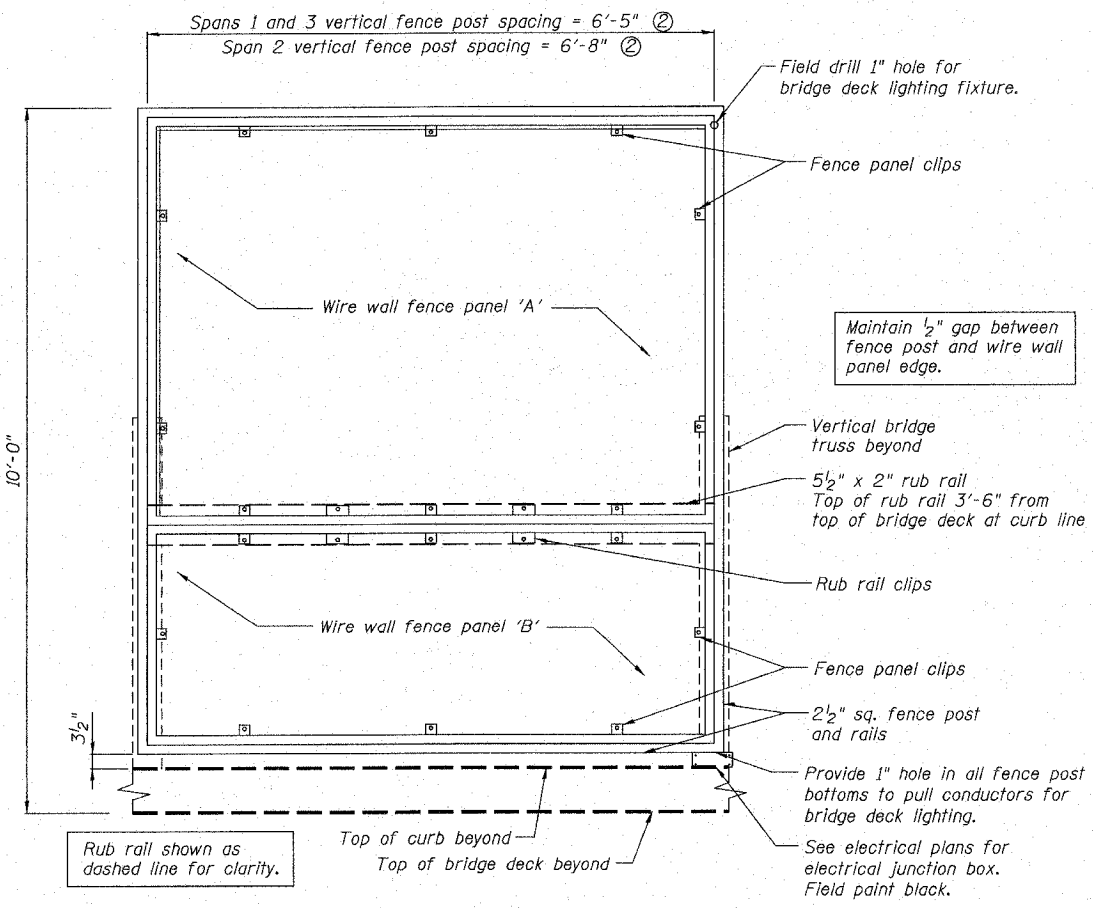


WIRE WALL FENCE PANEL 'A'

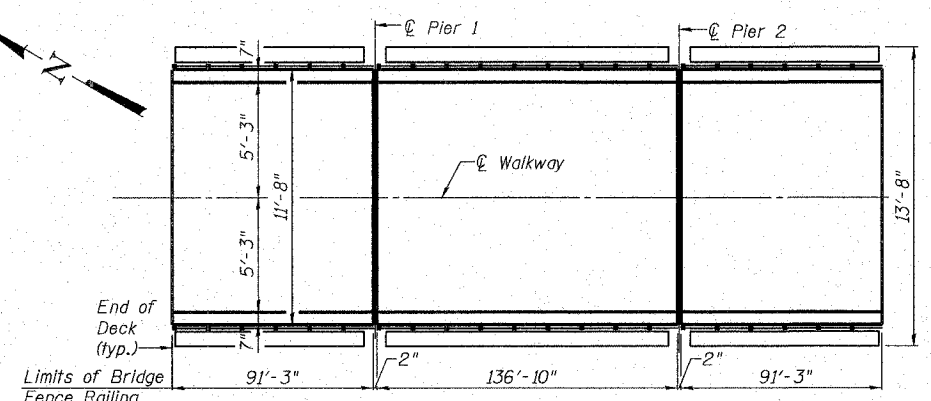


WIRE WALL FENCE PANEL 'B'

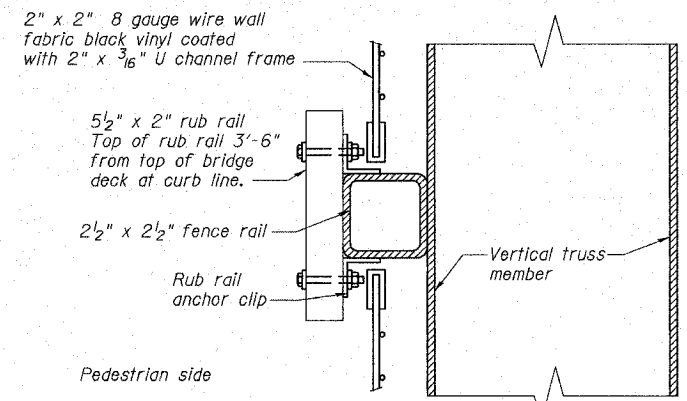
WIRE WALL FENCE PANEL ELEVATIONS



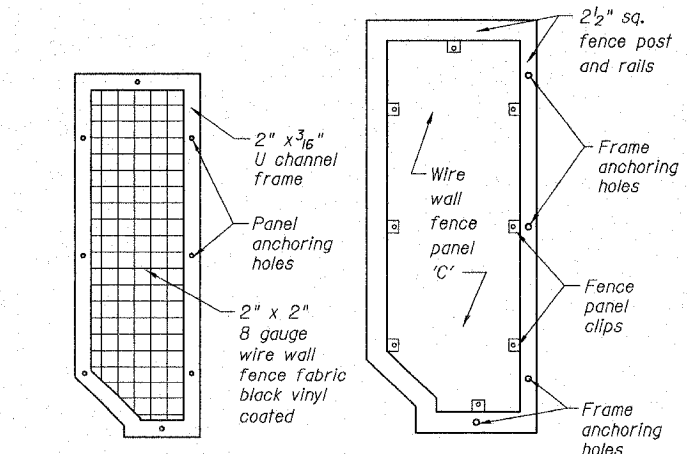
FENCE FRAME ELEVATION FROM PEDESTRIAN SIDE



PLAN VIEW

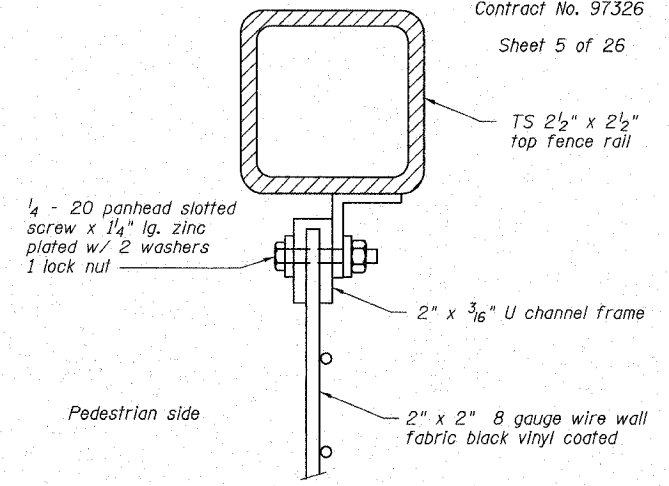


SECTION • RUB RAIL ATTACHMENT

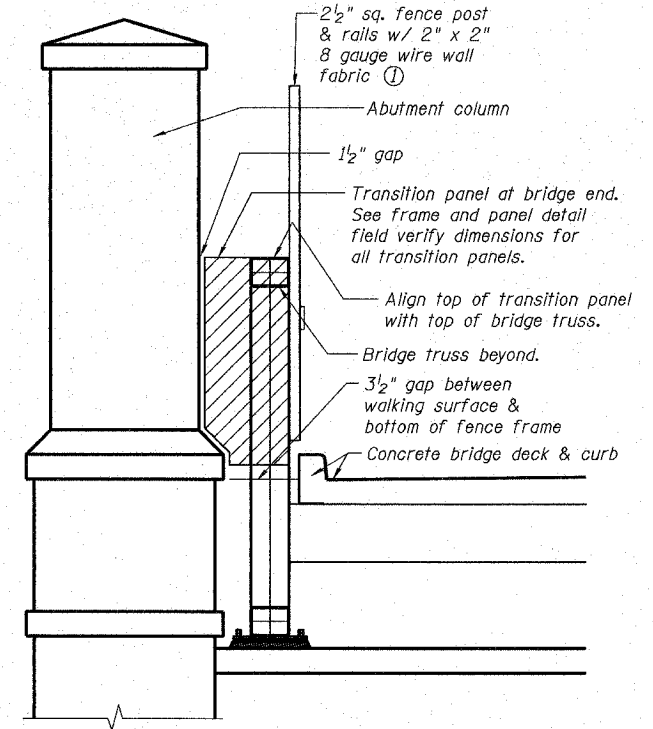


WIRE WALL FENCE PANEL 'C' FENCE FRAME ELEVATION

FENCE FRAME & FENCE PANEL ELEVATIONS FROM BRIDGE END



SECTION • WIREWALL ATTACHMENT



COLUMN/FENCE FRAME & PANEL ELEVATIONS FROM BRIDGE END

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	646

- Notes:  
 ① Fence panels should extend 6" past end posts at abutments.  
 ② Adjust all end fence panels at piers to provide a continuous 2" gap between fence panels of bridge spans.

FENCE & RUB RAIL DETAILS  
 ALTON PEDESTRIAN WALKWAY OVER  
 UNION PACIFIC RAILROAD, NORFOLK  
 SOUTHERN RAILROAD AND US ROUTE 67  
 SECTION 06-00224-00-BR  
 MADISON COUNTY  
 STA. 2+42.54  
 STRUCTURE NO. 060-6111

REVISIONS

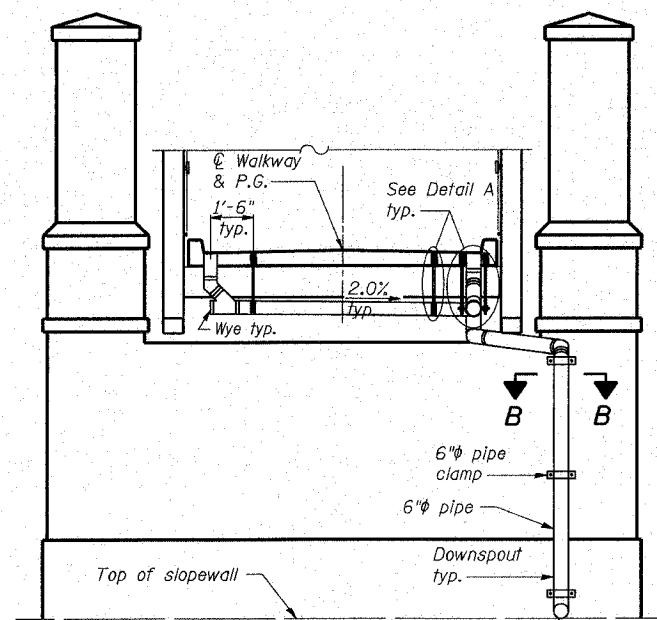
NO.	DESCRIPTION

Export Business Center 1  
 100 Lerner Court, Suite 1  
 Collinsville, Illinois 62234  
 Phone: 618 345-2200  
 Fax: 618 345-7233  
 e-mail: info@oatesassociates.com  
 web-site: www.oatesassociates.com

OATES ASSOCIATES  
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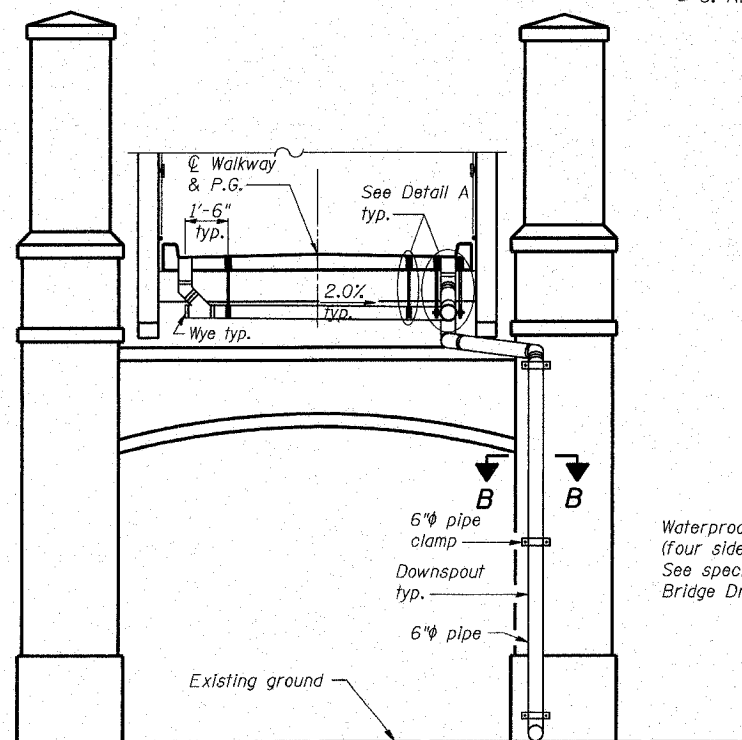
ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.





**ELEVATION OF SOUTH ABUTMENT**

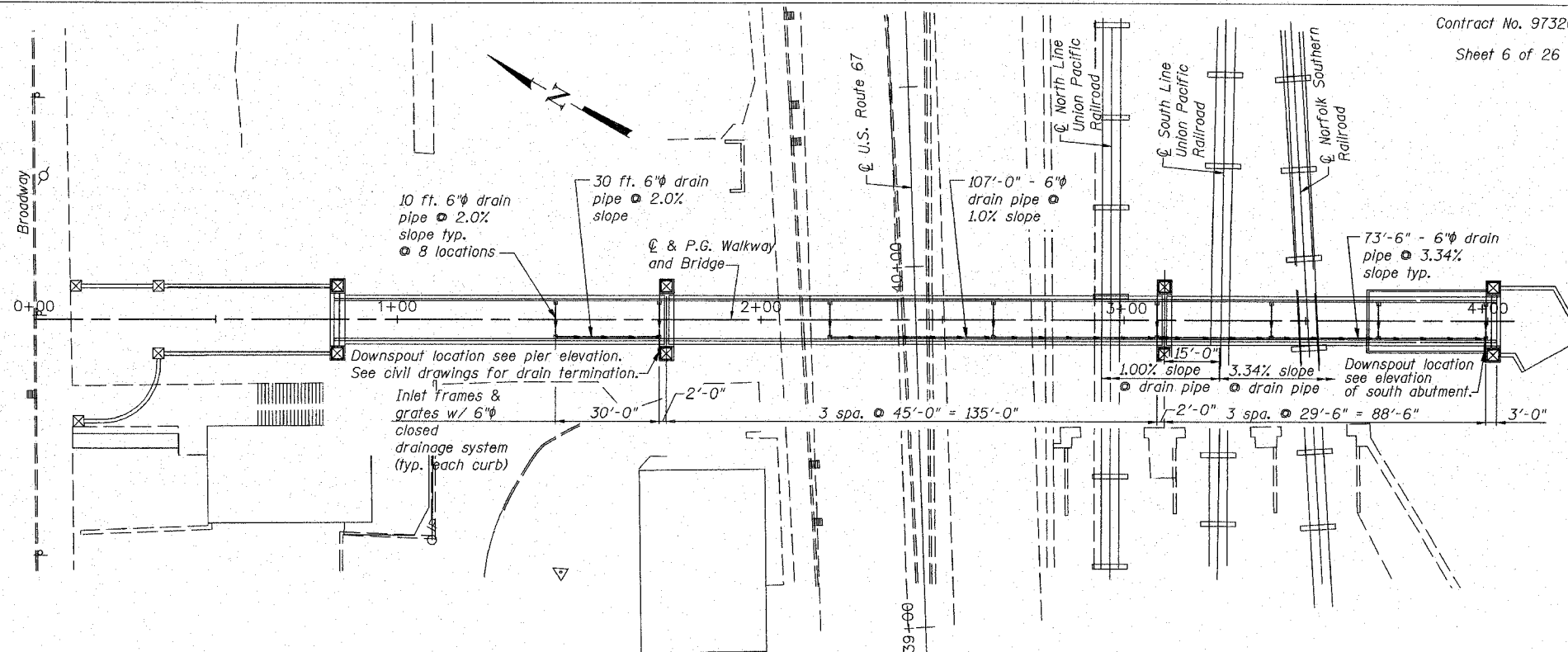
(Looking South)



**ELEVATION OF PIER 1**

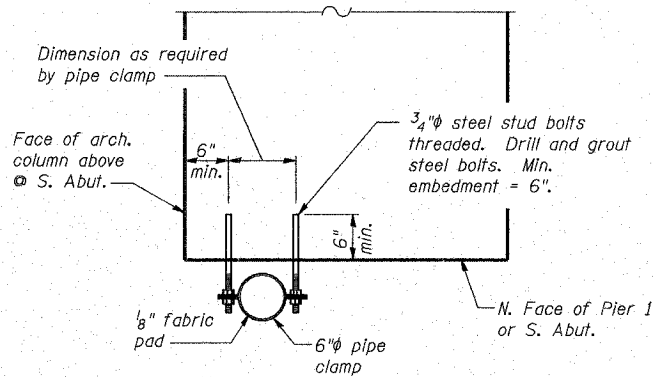
(Looking South)

See civil drawings for pipe outlet.



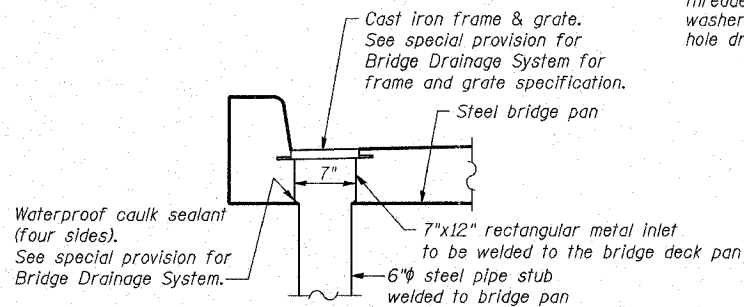
**BRIDGE DRAINAGE SYSTEM LAYOUT**

(Pipe drain lengths are for information only. Final lengths may vary based on final layout of deck drains. Locations to be coordinated with truss manufacturer.)

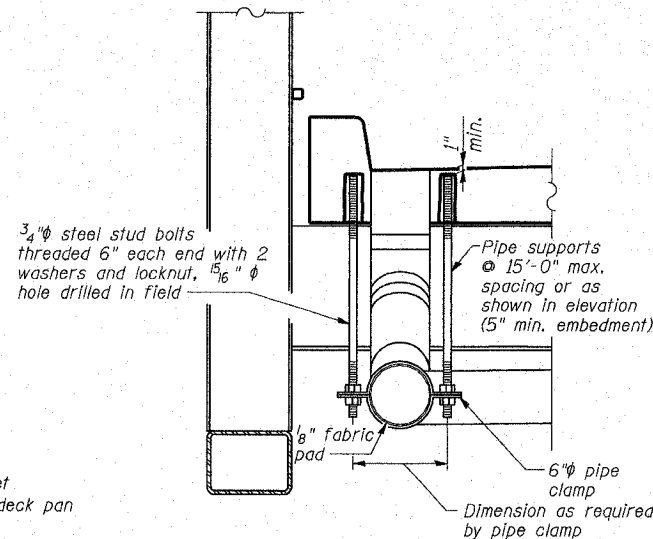


**SECTION B-B**

(Typical along length of pipe)



**TYPICAL DRAIN GRATE AND BOX**



**DETAIL A**

(Typ. each connection)

**BILL OF MATERIAL**

Item	Unit	Quantity
Bridge Drainage System	L. Sum	1

- Notes:
- The exterior surfaces of the floor drain collection system shall be painted with the finish coat as defined in the Special Provisions or approved equal to match the truss. Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 psi minimum.
  - Contractor shall verify the locations of the floor drains, electrical conduit and equipment to coordinate any conflicts with the truss framing members prior to ordering any material. Contractor shall verify final pipe lengths prior to ordering materials.
  - Prior to ordering the drain grates and boxes, the Contractor shall submit product specifications and details to the Engineer for written approval.

**BRIDGE DRAINAGE SYSTEM DETAILS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

REVISIONS


Engsoft Business Center 1  
 100 Linder Court, Suite 1  
 Collinsville, Illinois 62234  
 Phone: 618 345-2500  
 Fax: 618 345-7233  
 e-mail: collinsville@engsoft.com  
 www: www.engsoft.com

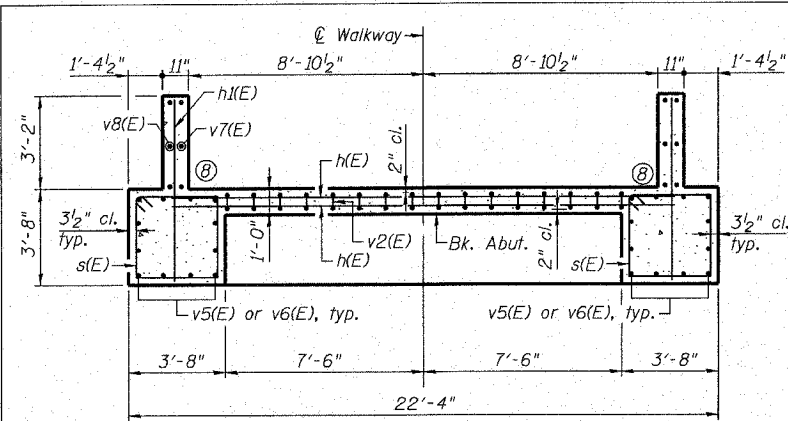
**DATES ASSOCIATES**  
 Consulting Engineers

ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.

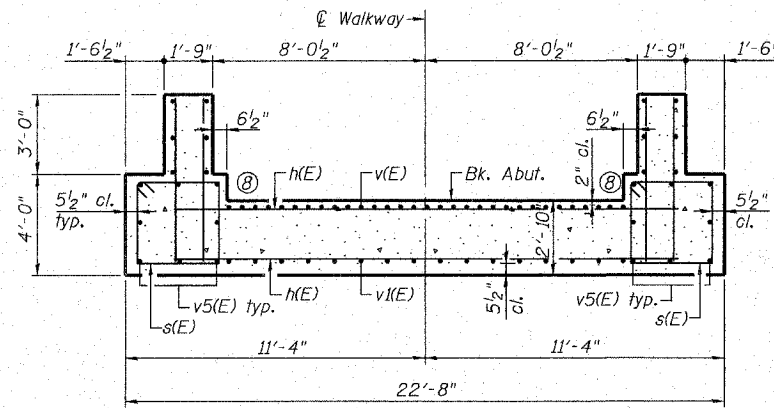
**BILL OF MATERIAL**

(North Abutment and wingwalls)

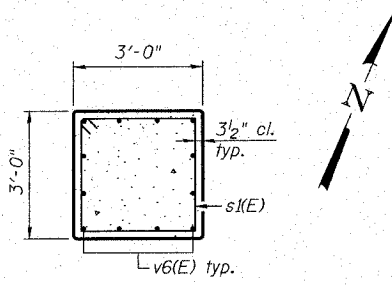
Bar	No.	Size	Length	Shape
h(E)	39	#5	19'-0"	—
h1(E)	70	#5	6'-6"	—
n(E)	19	#8	6'-9"	└
n1(E)	16	#6	4'-9"	└
n2(E)	24	#6	4'-5"	└
n3(E)	12	#5	4'-3"	└
s(E)	38	#4	13'-1"	□
s1(E)	18	#4	10'-5"	□
t(E)	14	#5	23'-4"	—
t1(E)	6	#5	20'-5"	—
v(E)	19	#8	13'-8"	—
v1(E)	16	#6	13'-8"	—
v2(E)	16	#5	7'-6"	—
v3(E)	16	#5	7'-10"	└
v4(E)	16	#5	2'-8"	└
v5(E)	24	#6	18'-3"	—
v6(E)	24	#6	10'-10"	—
v7(E)	6	#5	13'-8"	—
v8(E)	6	#5	18'-5"	—
v9(E)	6	#5	6'-8"	└
w(E)	42	#6	8'-8"	—
w1(E)	8	#6	6'-2"	—
Structure Excavation			Cu. Yd.	148
Rock Excavation for Structures			Cu. Yd.	4
Concrete Structures			Cu. Yd.	72.3
Reinforcement Bars, Epoxy Coated			Pound	6,080



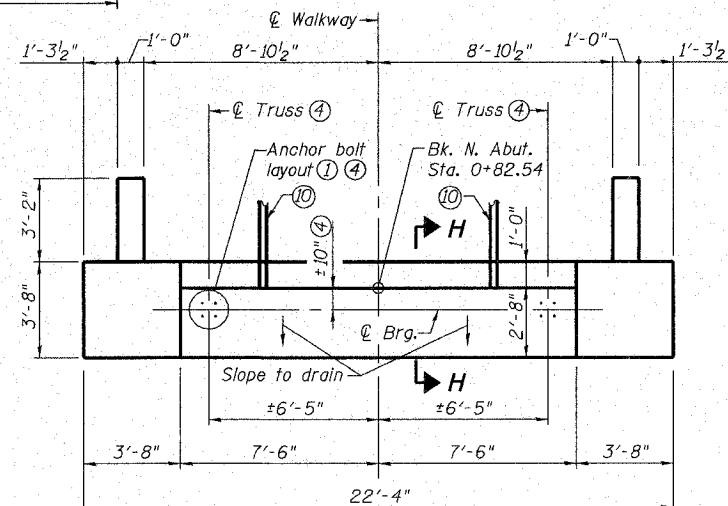
**SECTION A-A**



**SECTION B-B**

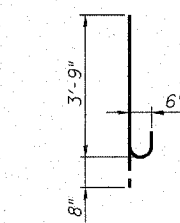


**SECTION C-C**

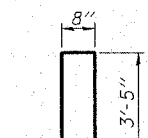


**ABUTMENT PLAN**

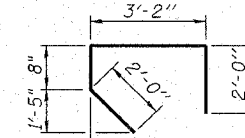
(Foundation & columns not shown for clarity)



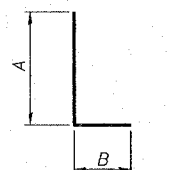
**BAR n2(E)**



**BAR v2(E)**



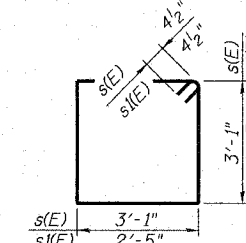
**BAR v3(E)**



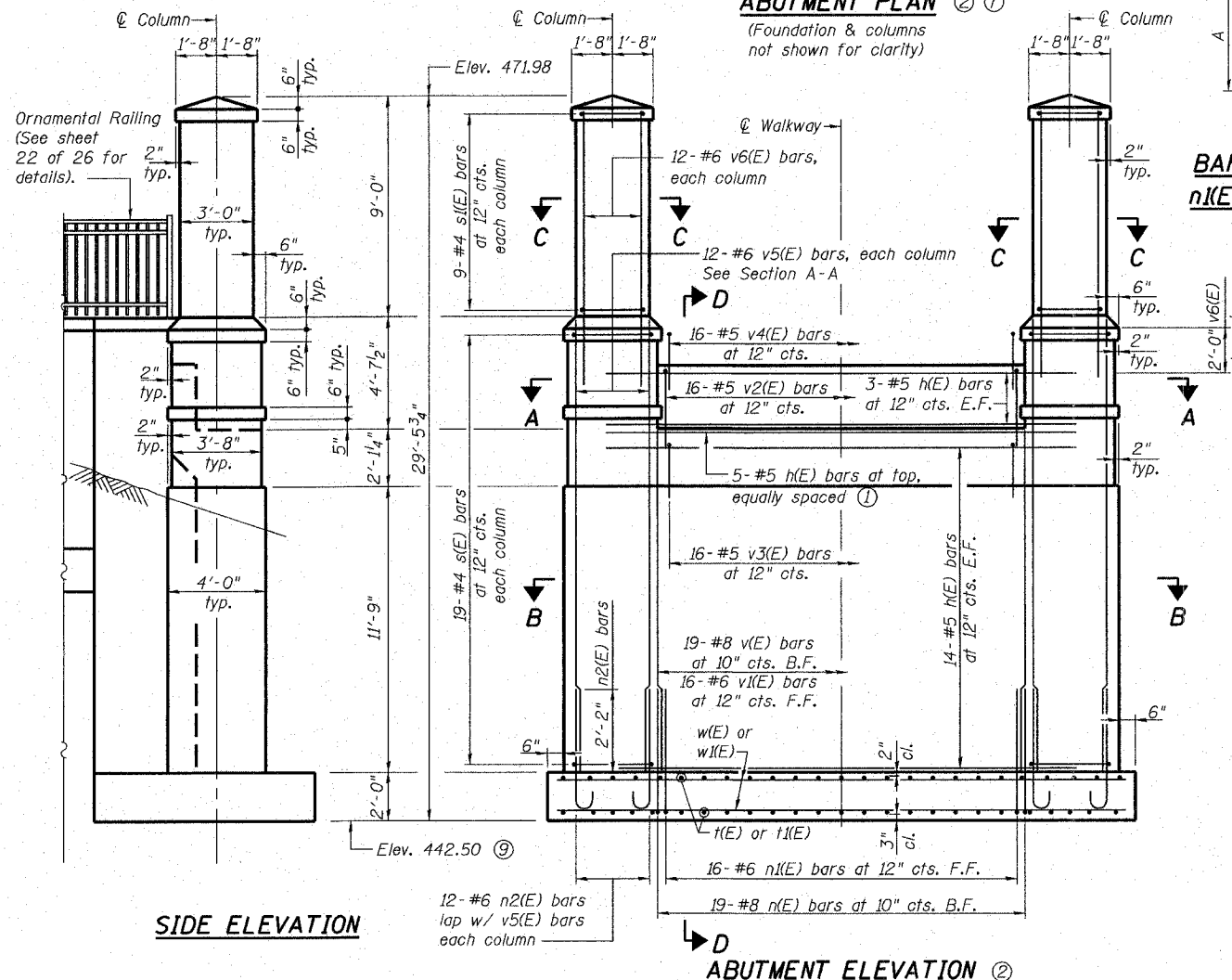
**BARS h(E), n(E), n1(E), n3(E), v4(E) & v9(E)**

**A & B DIMENSIONS**

Bar	A	B
n(E)	5'-5"	1'-4"
n1(E)	3'-9"	1'-0"
n3(E)	3'-5"	10"
v4(E)	1'-10"	10"
v9(E)	6'-0"	8"

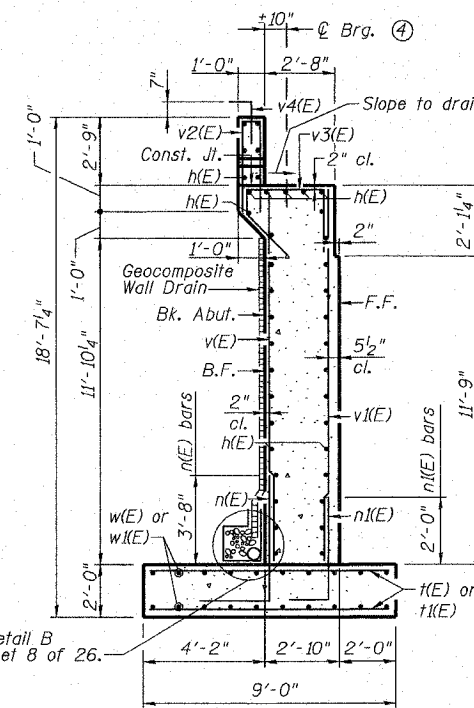


**BARS s(E) & s1(E)**



**SIDE ELEVATION**

**ABUTMENT ELEVATION**



**SECTION D-D**

**Notes:**

- Space reinforcement in cap to miss anchor bolts.
- For details of foundation, see sheet 8 of 26.
- See sheet 11 of 26 for limits of Form Liner Textured Surface and Rubbed Finish.
- Final truss, brg, bearings, anchor bolt sizes, embedment, and layout to be determined by truss manufacturer. Pre-engineered truss shop drawings shall be approved prior to construction of the piers. Contractor shall verify all dimensions and elevations with final approved shop drawings. See special provisions.
- All edges shall have 1/2" chamfer unless noted otherwise.
- B.F. denotes back face. F.F. denotes front face. E.F. denotes each face.
- Architectural bumpouts on columns not shown for clarity in plan view. Dimensions to face of column at abutment seat.
- For details of wingwalls, corner bars and Section H-H, see sheet 8 of 26.
- The bottom of footing elevation shall be adjusted to ensure a minimum embedment of 6 inches in non-weathered rock. The rock excavation shall be made with near-vertical sides at the plan dimensions to allow the sides and base of the embedded portion of the footing to be cast against undisturbed rock surfaces.
- Electrical conduit to be cast through abutment backwall. See electrical plans for details.

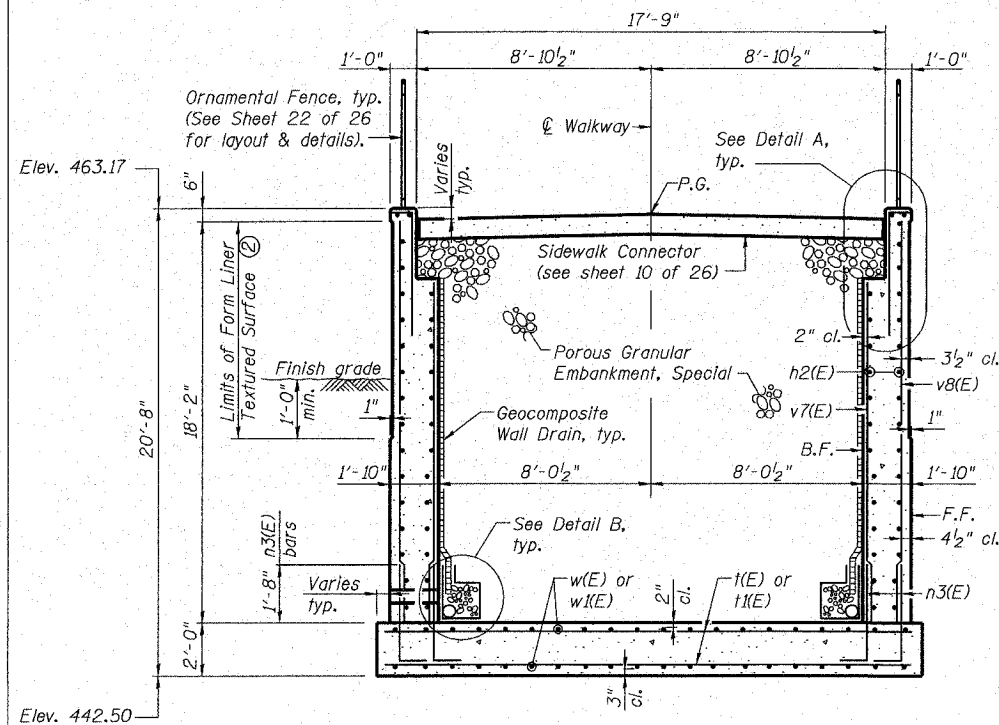
**NORTH ABUTMENT PLAN**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

REVISIONS

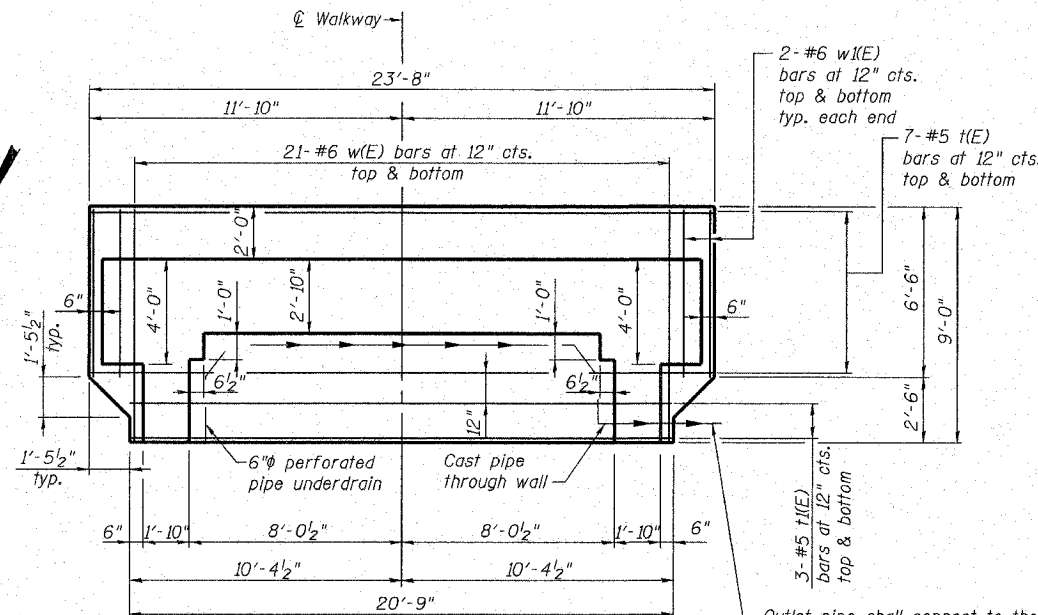
Support Business Center 1  
 100 Lantz Court, Suite 1  
 California, Illinois 62234  
 Phone: 618 342-2200  
 Fax: 618 342-2200  
 www.catesassociates.com



ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.

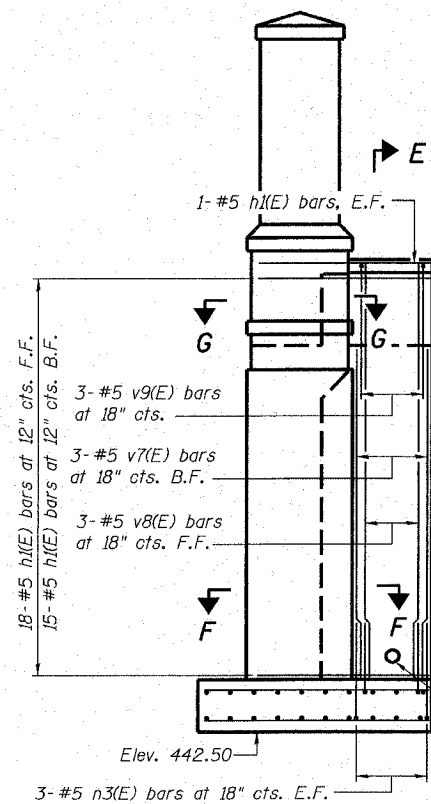


**SECTION E-E**

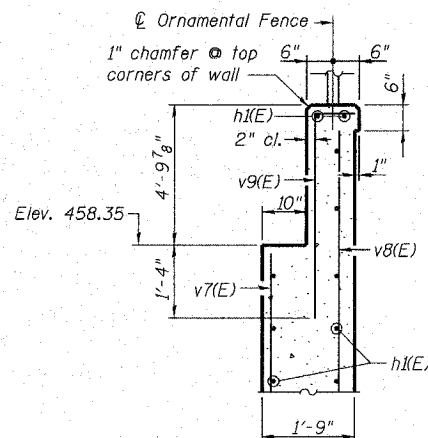


**FOOTING PLAN**

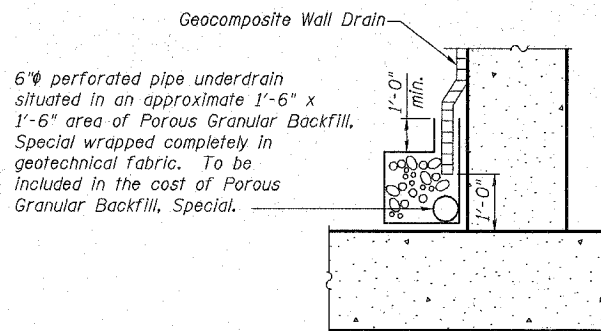
Outlet pipe shall connect to the storm sewer drain discharging into the sewer line. The drain pipe shall connect into the top of the storm sewer line to prevent backup of the storm drainage into the pipe underdrains. Provisions shall be made to allow the connection of the pipe underdrains from the retaining walls located north of the abutment. See sheet 9 of 26.



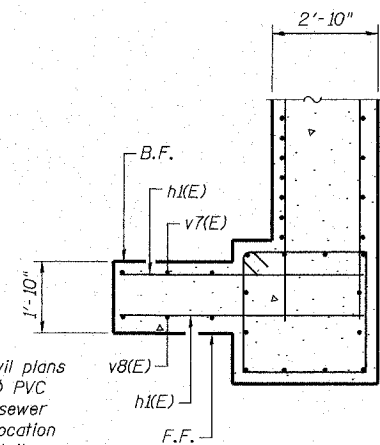
**WINGWALL ELEVATION**  
(East wall shown, west wall sim.)



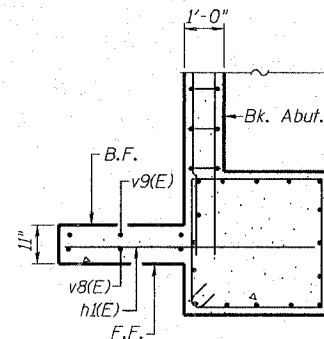
**DETAIL A**



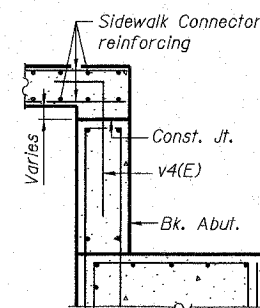
**DETAIL B**



**SECTION F-F** ⑤  
West wingwall shown.  
East wingwall opp. hand.



**SECTION G-G** ⑤  
West wingwall shown.  
East wingwall opp. hand.



**SECTION H-H**

**Notes:**

- ① See sheet 7 of 26 for Bill of Materials and bar bending details.
- ② See sheet 11 of 26 for limits of Form Liner Textured Surface and Rubbed Finish.
- ③ All edges shall have 1/2" chamfer unless noted otherwise.
- ④ B.F. denotes back face.  
F.F. denotes front face.  
E.F. denotes each face.
- ⑤ For details of abutment and columns, see sheet 7 of 26.
- ⑥ Space reinforcement in wall cap to avoid fence inserts.

**NORTH ABUTMENT DETAILS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

NO.	DESCRIPTION

Expert Business Center /  
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Columbia, Illinois 62224  
Phone: 618 345-2200  
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e-mail: cates@csassociates.com  
web-site: www.csassociates.com

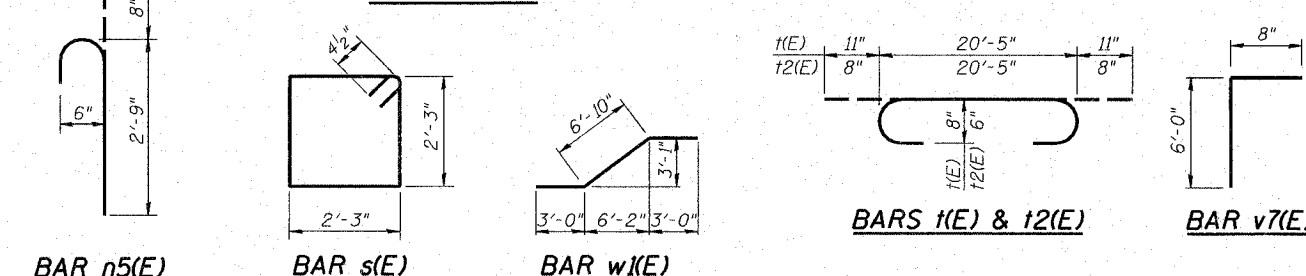
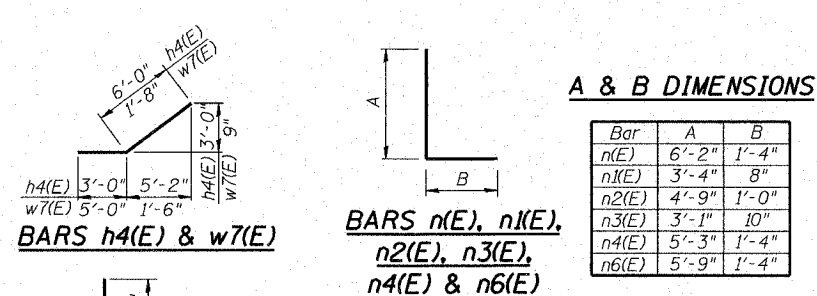
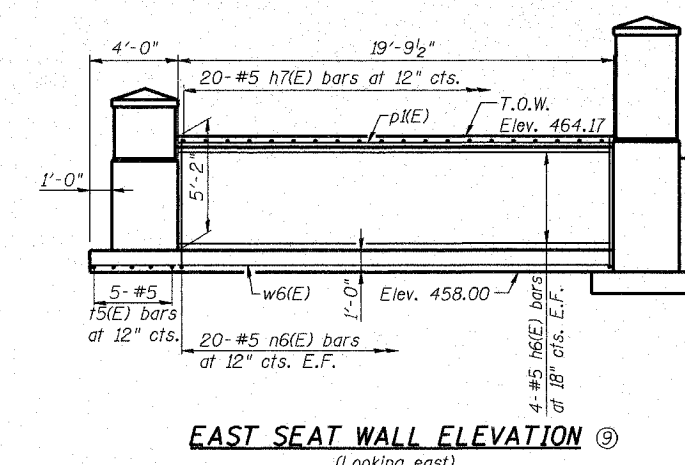
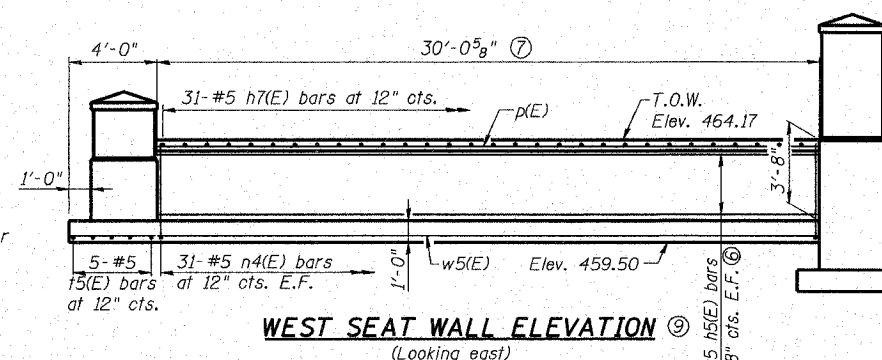
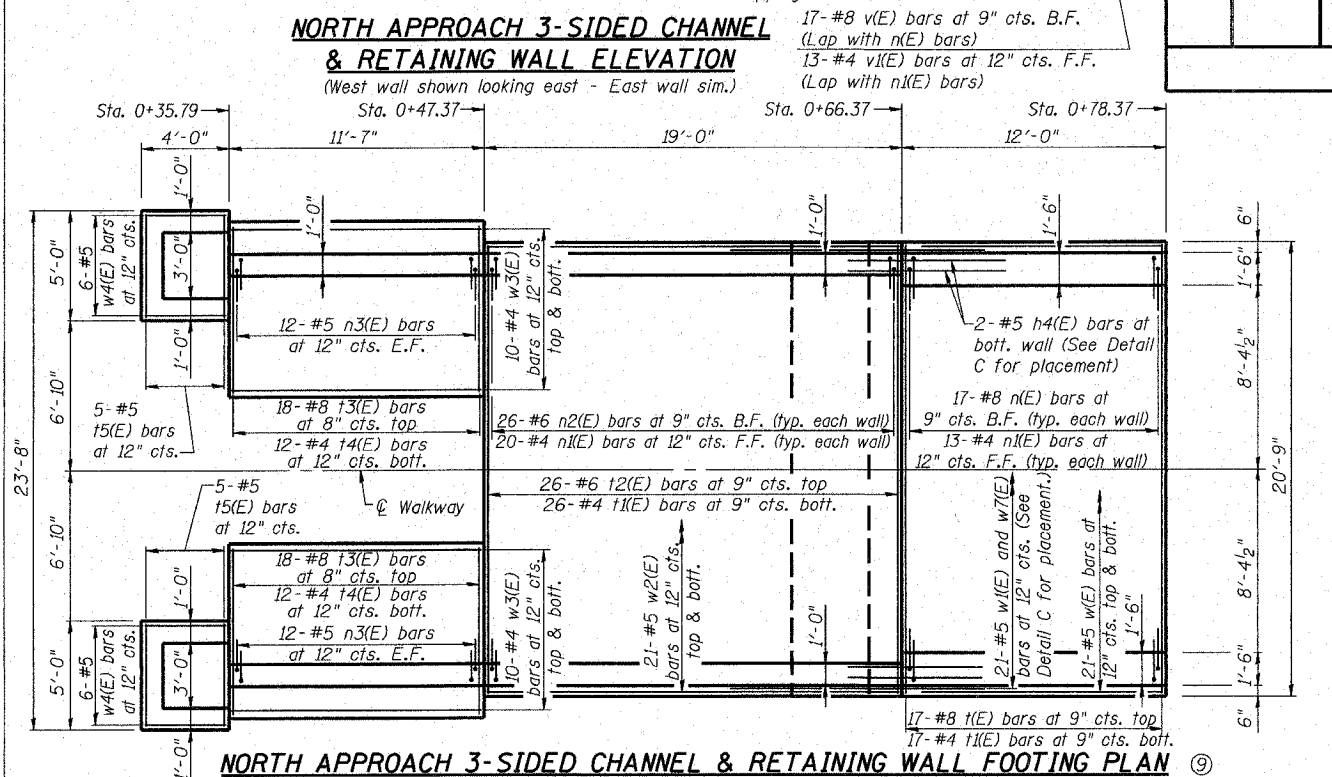
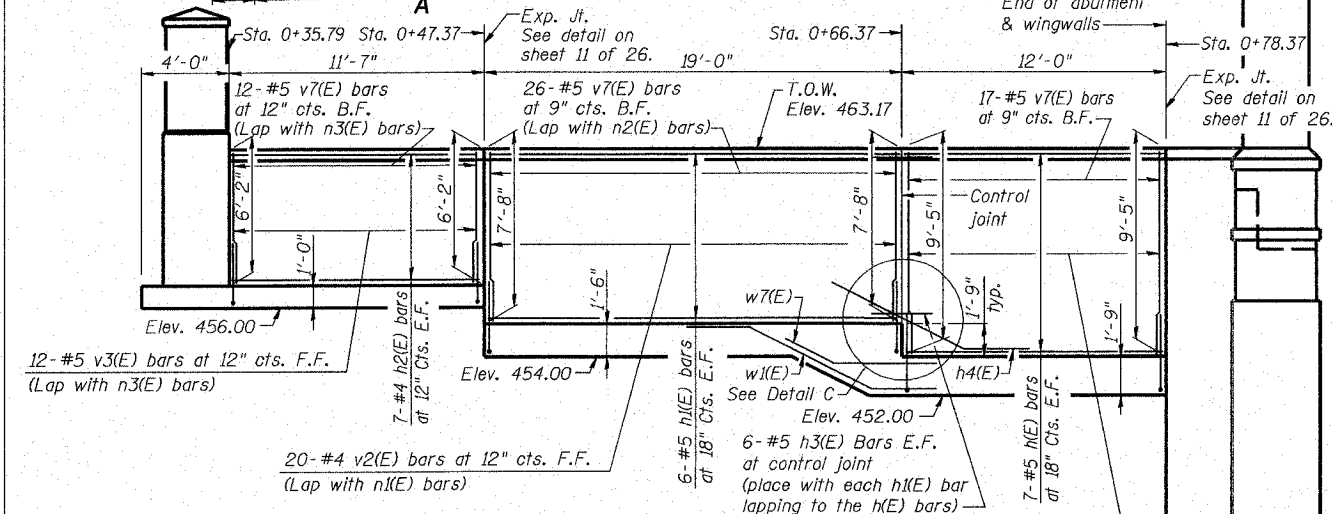
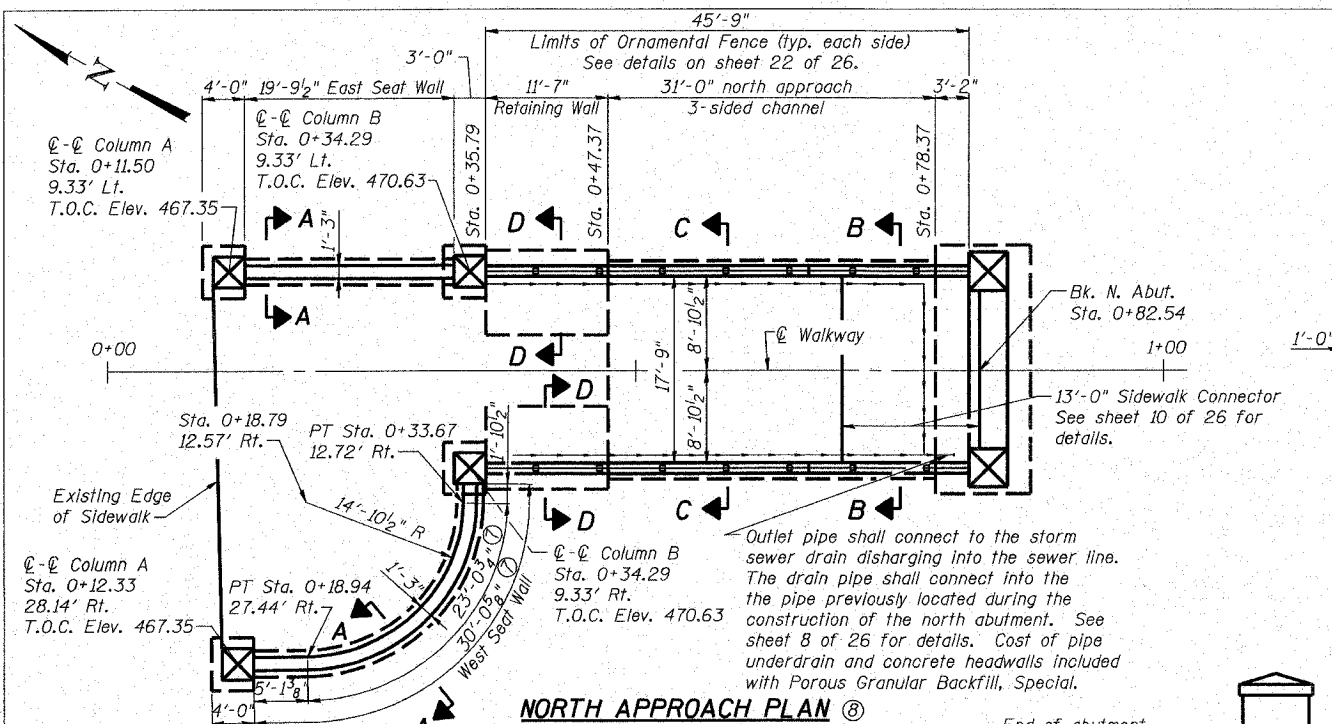
**CATES ASSOCIATES**  
Consulting Engineers

**ALTON, ILLINOIS**  
**PEDESTRIAN OVERPASS AT LANGDON ST.**

**BILL OF MATERIAL**

(North approach 3-sided channel, retaining walls, columns and seat walls.)

Bar	No.	Size	Length	Shape
h(E)	28	#5	11'-8"	---
h1(E)	24	#5	18'-8"	---
h2(E)	28	#4	11'-3"	---
h3(E)	24	#5	4'-8"	---
h4(E)	4	#5	9'-0"	---
h5(E)	6	#5	29'-8"	---
h6(E)	8	#5	19'-5"	---
h7(E)	51	#5	0'-11"	---
n(E)	34	#8	7'-6"	L
n1(E)	66	#4	4'-0"	L
n2(E)	52	#6	5'-9"	L
n3(E)	48	#5	3'-11"	L
n4(E)	62	#5	6'-7"	L
n5(E)	48	#6	3'-5"	L
n6(E)	40	#5	7'-1"	L
p(E)	3	#4	29'-8"	---
p1(E)	3	#4	19'-5"	---
s(E)	44	#4	9'-9"	□
t(E)	17	#8	22'-3"	---
t1(E)	43	#4	20'-5"	---
t2(E)	26	#6	21'-9"	---
t3(E)	36	#8	8'-8"	---
t4(E)	24	#4	8'-8"	---
t5(E)	20	#5	4'-8"	---
v(E)	34	#8	4'-3"	---
v1(E)	26	#4	8'-6"	---
v2(E)	40	#4	7'-0"	---
v3(E)	24	#5	5'-6"	---
v4(E)	24	#6	12'-10"	---
v5(E)	12	#6	7'-8"	---
v6(E)	12	#6	6'-2"	---
v7(E)	110	#5	6'-8"	---
w(E)	42	#5	13'-5"	---
w1(E)	21	#5	12'-10"	---
w2(E)	42	#5	18'-8"	---
w3(E)	40	#4	11'-3"	---
w4(E)	24	#5	3'-8"	---
w5(E)	3	#5	29'-8"	---
w6(E)	3	#5	19'-5"	---
w7(E)	21	#5	6'-8"	---
Structure Excavation			Cu. Yd.	382
Concrete Structures			Cu. Yd.	105.9
Reinforcement Bars, Epoxy Coated			Pound	12,500
Sidewalk Connector			Sq. Yd.	25



- Notes:
- Space reinforcement in wall cap to miss fence inserts.
  - For Sections A-A, B-B, C-C, D-D, Detail C & Sidewalk Connector Plan, see sheet 10 of 26.
  - See sheet 11 of 26 for limits of Form Liner Textured Surface and Rubbed Finish.
  - All edges shall have 1/2" chamfer unless noted otherwise.
  - E.F. denotes each face. F.F. denotes front face. B.F. denotes back face. T.O.W. denotes top of wall. T.O.C. denotes top of column.
  - Bend p(E), h5(E) and w5(E) bars as required to achieve equal spacing in the top of the seat wall.
  - Measured along the B.F. of the seat wall.
  - Architectural bumpouts on columns not shown for clarity.
  - Bar n5(E) to be cast with the column footing not shown for clarity. Bars shown in column detail on sheet 10 of 26.

**NORTH ABUTMENT RETAINING WALL PLAN AND DETAILS**  
ALTON PEDESTRIAN WALKWAY OVER UNION PACIFIC RAILROAD, NORFOLK SOUTHERN RAILROAD AND US ROUTE 67  
SECTION 06-00224-00-BR  
MADISON COUNTY  
STA. 2+42.54  
STRUCTURE NO. 060-6111

REVISIONS

Alton, Illinois  
PEDESTRIAN OVERPASS AT LANGDON ST.

DWG. NO. S9  
6111-09-NABUTDLSHT1.DGN  
REF. BK. PG.  
JOB NO. 26053  
DSN. BY: JCS  
CHK. BY: DGL  
DATE: 3/28/08

SCALE: SHEET 29 OF 54

Contract Business Center 1  
100 Lamer Court, Suite 1  
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web site: www.oatesassociates.com

**OATES ASSOCIATES**  
Consulting Engineers

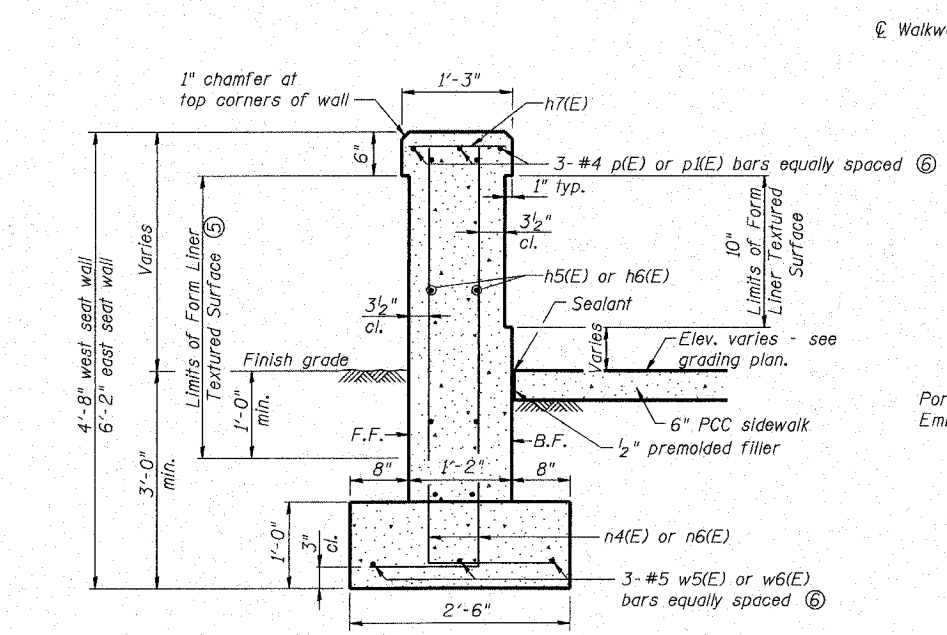
REVISIONS

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100 Lantz Court, Suite 1  
Columbia, Illinois 62224  
Phone: 618 345-2200  
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e-mail: oates@oatesassociates.com  
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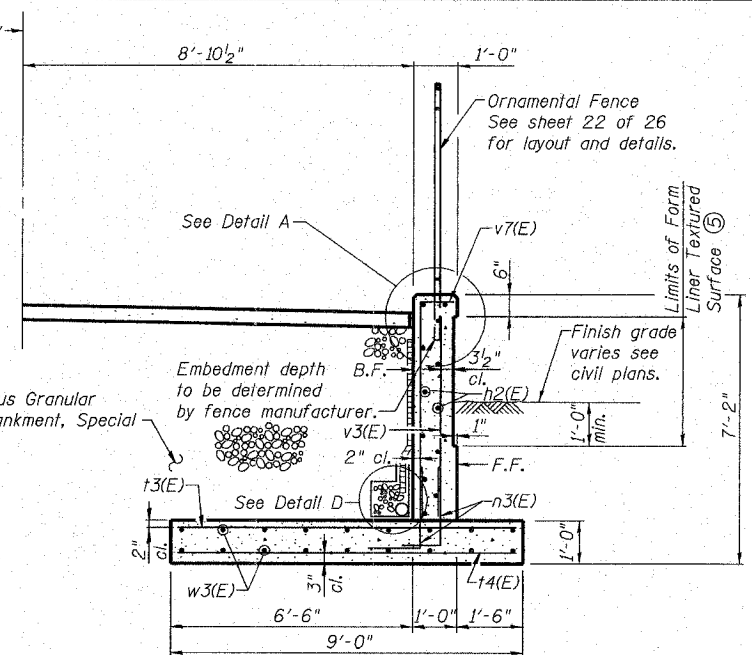


ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.

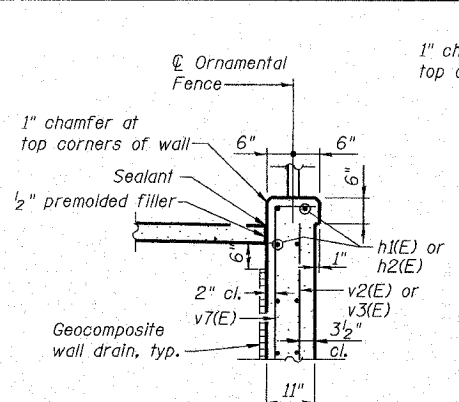
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6111-10-MABUTDLSHT2.DGN  
REF. BK. PG.  
JOB NO. 26053  
DSN. BY: JCS  
DWN. BY: JCS  
CHK. BY: DGL  
DATE: 3/28/08  
SCALE:  
SHEET 30 OF 54



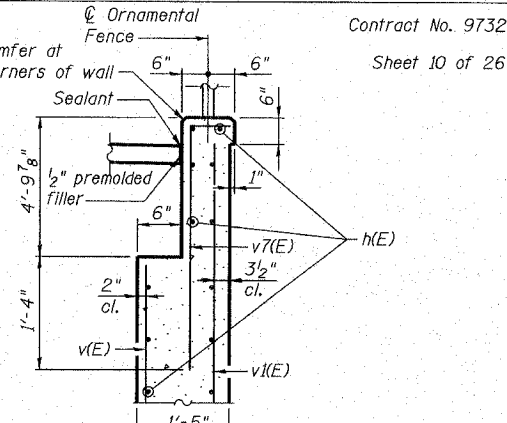
SECTION A-A



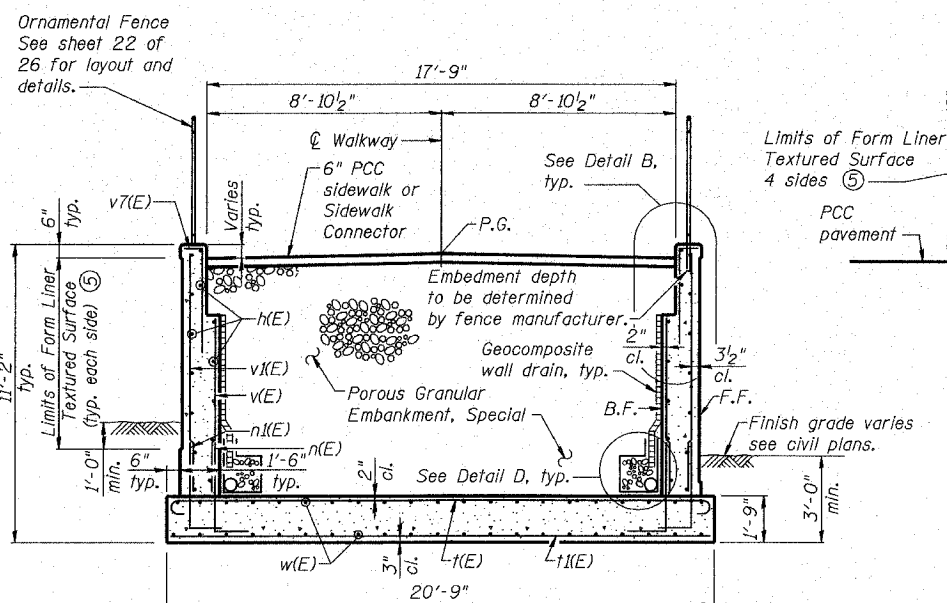
SECTION D-D



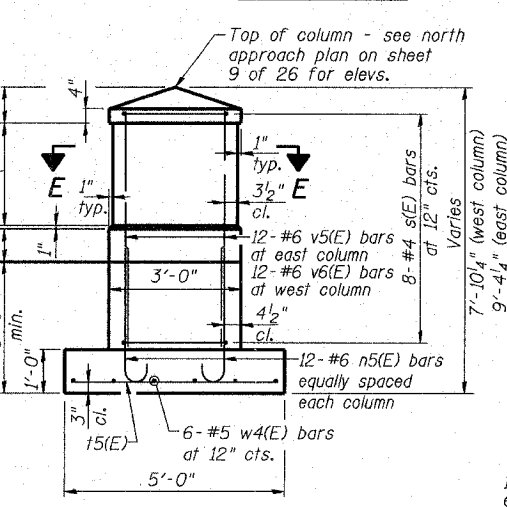
DETAIL A



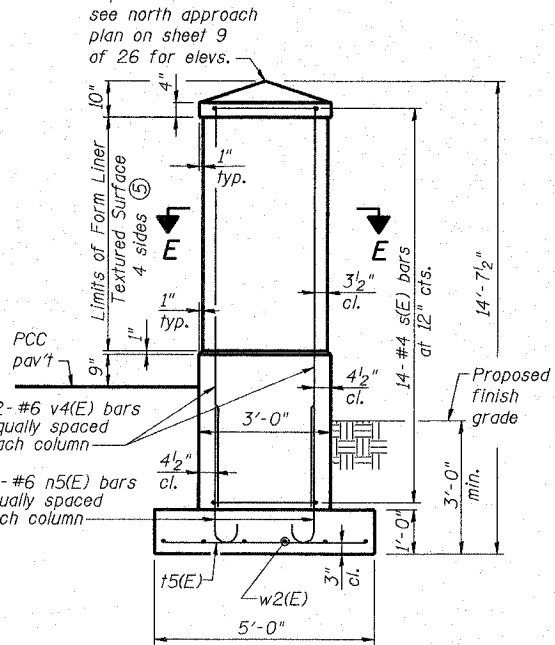
DETAIL B



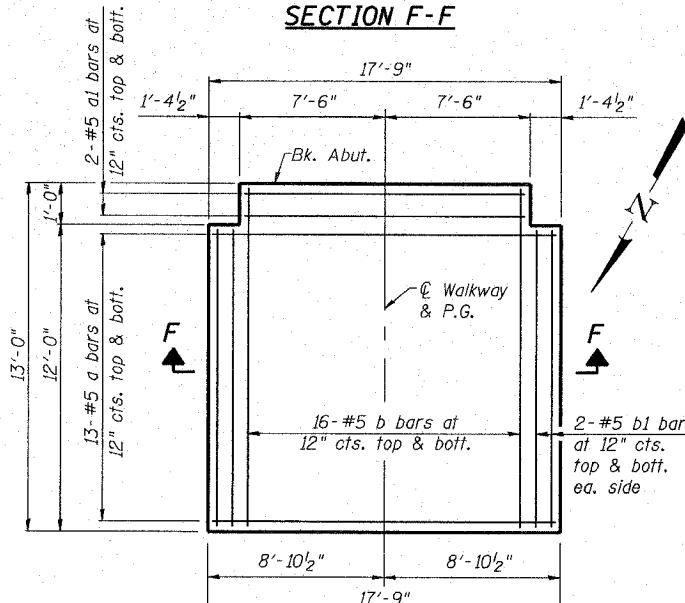
SECTION B-B



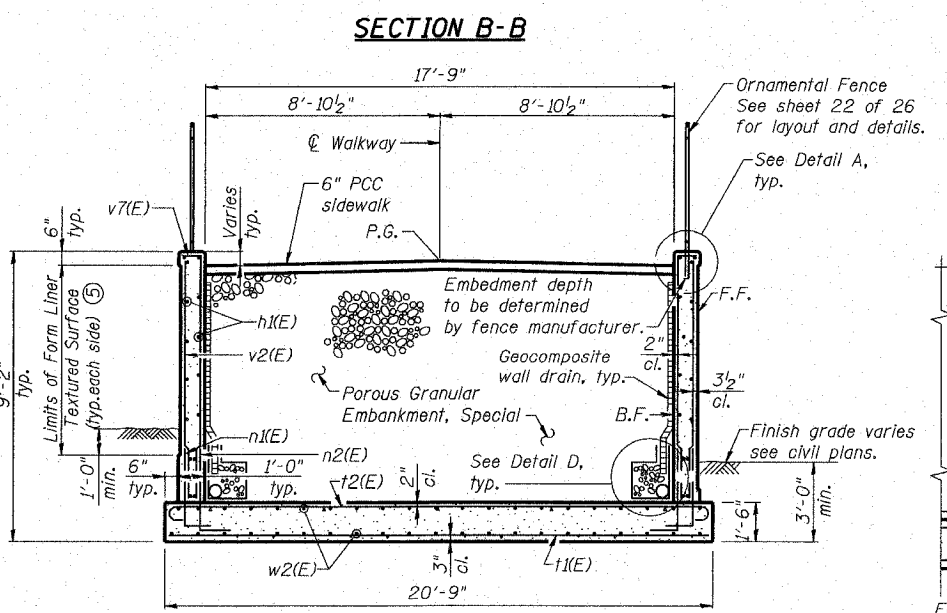
COLUMN A



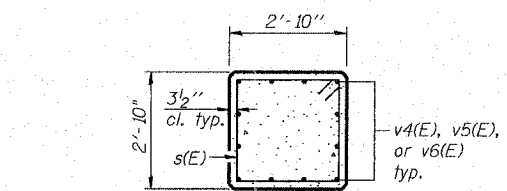
COLUMN B



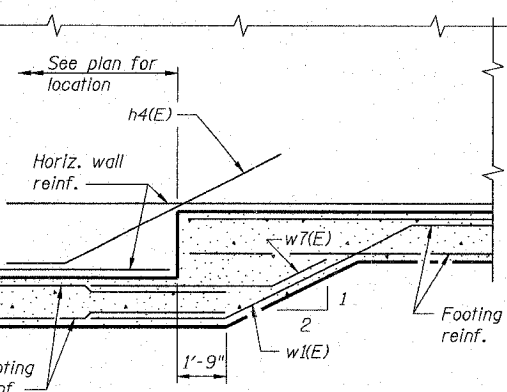
SIDEWALK CONNECTOR PLAN



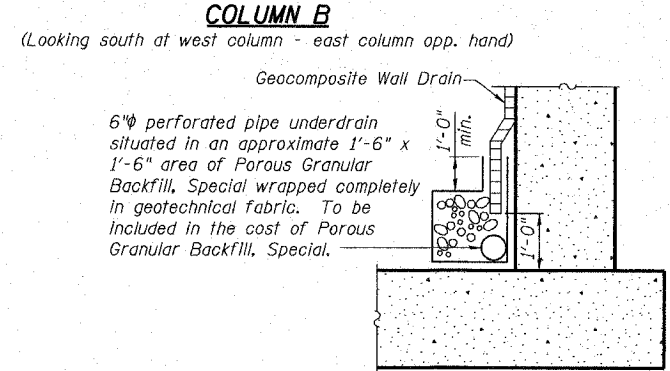
SECTION C-C



SECTION E-E



DETAIL C



DETAIL D

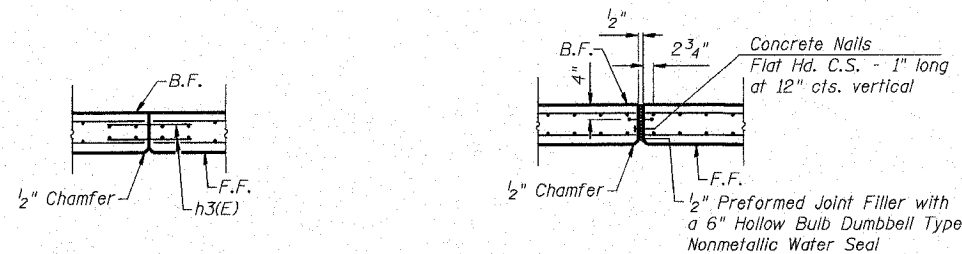
- Notes:
- Space reinforcement in cap to miss fence inserts.
  - All edges shall have 1/2" chamfer unless noted otherwise.
  - B.F. denotes back face. F.F. denotes front face.
  - Cost of reinforcement bars for the connector pavement is included in Sidewalk Connector.
  - See sheet 11 of 26 for limits of Form Liner Textured Surface Rubbed Finish, and expansion & control joint details.
  - Bend p(E), h5(E) and w5(E) bars as required to achieve equal spacing.

**BILL OF MATERIAL** ④

(For North Sidewalk Connector)  
(For Information Only)

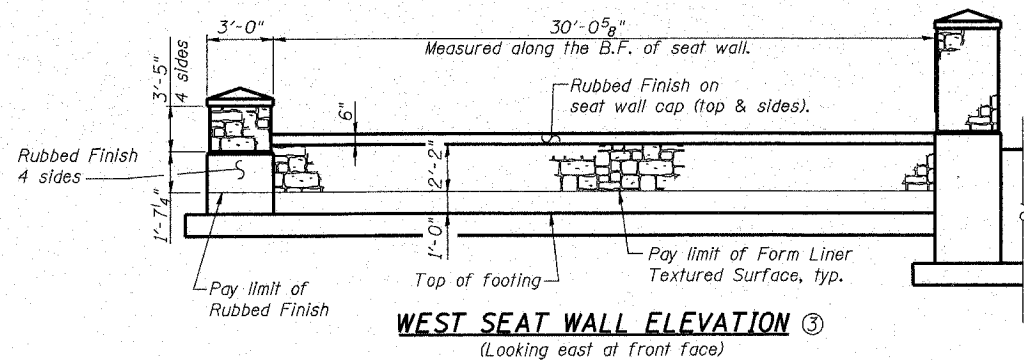
Bar	No.	Size	Length	Shape	
a	26	#5	17'-4"		
a1	4	#5	14'-8"		
b	32	#5	12'-8"		
b1	8	#5	11'-8"		
Reinforcement Bars				Pound	1,050

**NORTH ABUTMENT  
RETAINING WALL DETAILS  
ALTON PEDESTRIAN WALKWAY OVER  
UNION PACIFIC RAILROAD, NORFOLK  
SOUTHERN RAILROAD AND US ROUTE 67  
SECTION 06-00224-00-BR  
MADISON COUNTY  
STA. 2+42.54  
STRUCTURE NO. 060-6111**

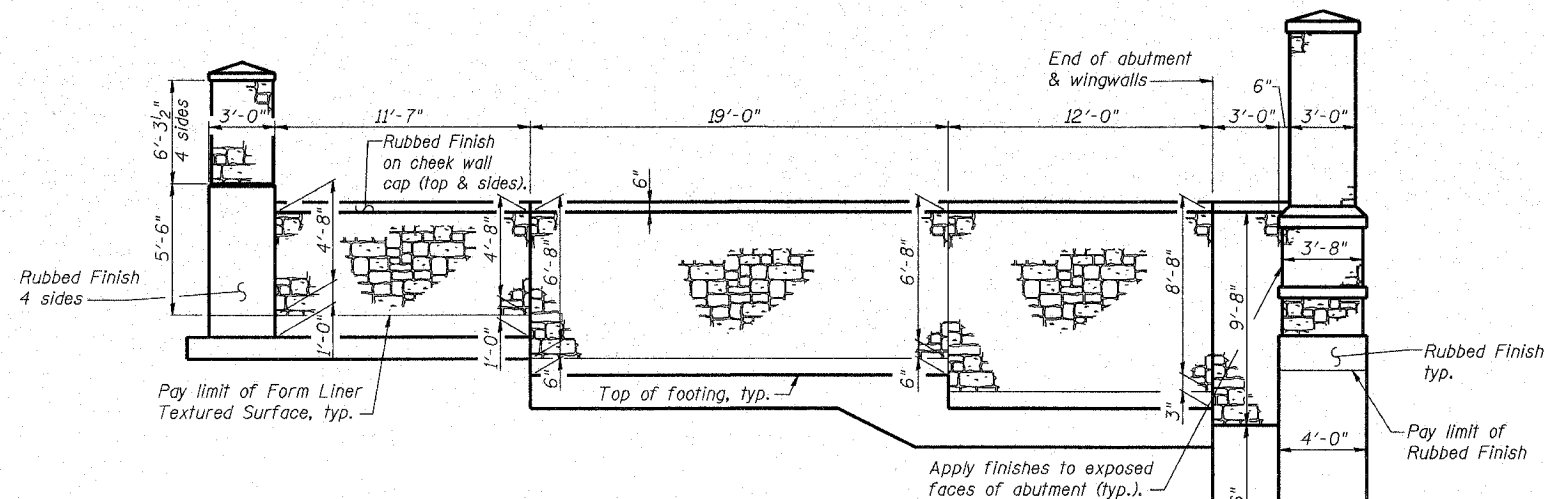


**CONTROL JOINT**

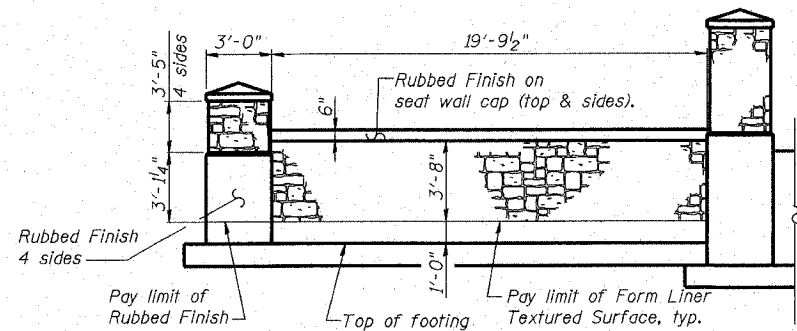
**EXPANSION JOINT**



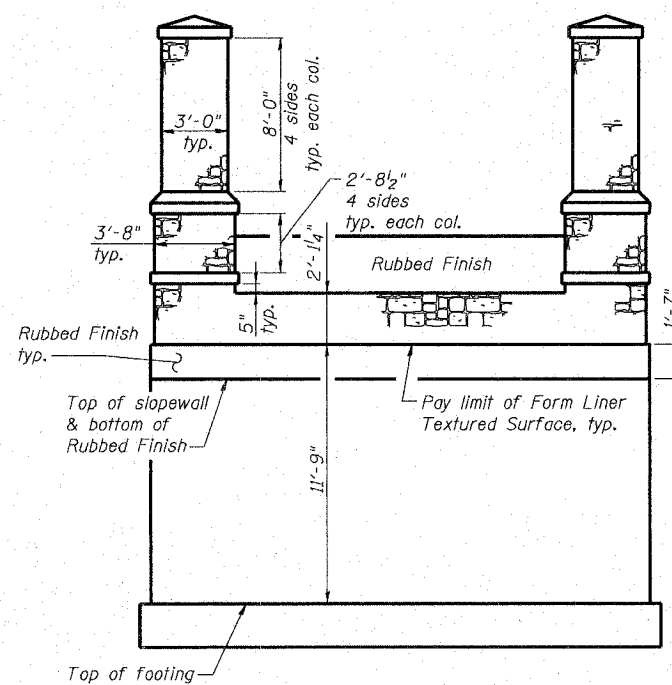
**WEST SEAT WALL ELEVATION** ③  
(Looking east at front face)



**NORTH APPROACH ELEVATION**  
(West wall shown - East wall opposite hand)  
Looking at the front face.



**EAST SEAT WALL ELEVATION** ③  
(Looking west at front face)



**ABUTMENT ELEVATION**  
(front face shown)

Limits of Form Liner Textured Surface

**BILL OF MATERIAL**

(For North Abutment and Retaining Walls)

Item	Unit	Quantity
Form Liner Textured Surface	Sq. Ft.	1,268
Rubbed Finish	Sq. Ft.	512

**NORTH ABUTMENT & RETAINING WALL  
FORM LINER DETAILS  
ALTON PEDESTRIAN WALKWAY OVER  
UNION PACIFIC RAILROAD, NORFOLK  
SOUTHERN RAILROAD AND US ROUTE 67  
SECTION 06-00224-00-BR  
MADISON COUNTY  
STA. 2+42.54  
STRUCTURE NO. 060-6111**

**Notes:**

- Concrete Form Liner Textured Surface required as shown in elevation views. See special provisions for Form Liner Textured Surface specifications.
- Architectural bump outs and column caps shall have a Rubbed Finish.
- See sheet 10 of 26 for Form Liner Textured Surface limits on inside face of seat wall.
- B.F. denotes back face.  
F.F. denotes front face.

NO.	DESCRIPTION

Englewood Business Center I  
100 Lantier Court, Suite 1  
Cullman, Illinois 62224  
Phone: 618 345-2500  
Fax: 618 345-7233  
e-mail: info@oatesassociates.com  
www: www.oatesassociates.com

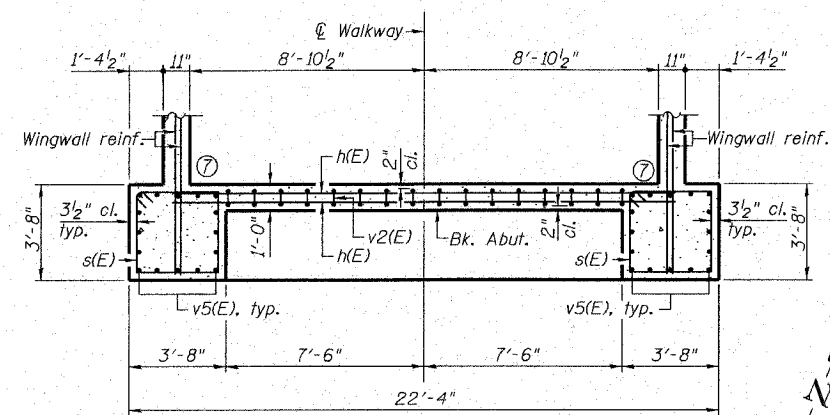
**OATES ASSOCIATES**  
Consulting Engineers

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.

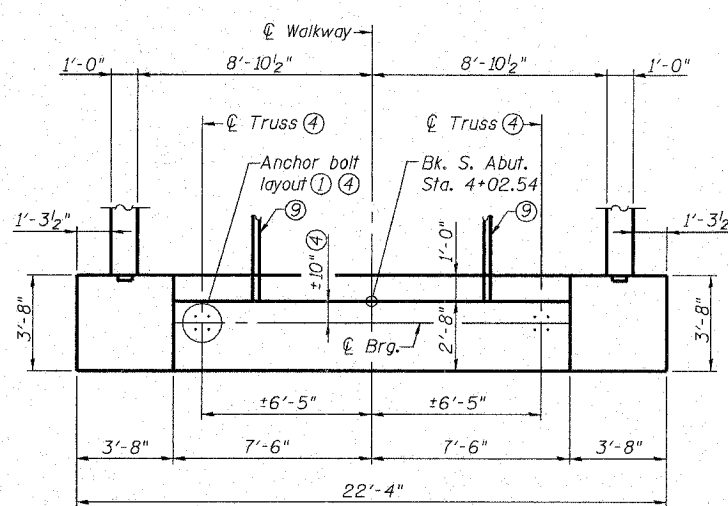
**BILL OF MATERIAL**

(South Abutment and wingwalls)

Bar	No.	Size	Length	Shape
h(E)	43	#6	19'-0"	
h1(E)	80	#6	5'-2"	
h2(E)	42	#5	7'-7"	
h3(E)	42	#5	4'-2"	
h4(E)	42	#5	18'-4"	
h5(E)	42	#5	15'-2"	
h6(E)	84	#5	4'-4"	
n(E)	31	#7	6'-2"	
n1(E)	16	#6	5'-3"	
n2(E)	32	#6	4'-11"	
n3(E)	80	#9	9'-7"	
n4(E)	29	#5	5'-8"	
s(E)	34	#5	13'-3"	
s1(E)	18	#4	10'-5"	
t(E)	11	#8	25'-2"	
t1(E)	18	#8	23'-8"	
t2(E)	20	#8	22'-3"	
t3(E)	24	#8	13'-10"	
t4(E)	11	#8	23'-4"	
t5(E)	18	#8	21'-10"	
t6(E)	20	#8	20'-5"	
t7(E)	12	#8	12'-11"	
v(E)	31	#7	12'-0"	
v1(E)	16	#6	12'-0"	
v2(E)	16	#5	7'-6"	
v3(E)	16	#5	7'-10"	
v4(E)	16	#5	2'-8"	
v5(E)	32	#6	16'-1"	
v6(E)	24	#6	10'-4"	
v7(E)	80	#9	12'-0"	
v8(E)	29	#5	15'-8"	
v9(E)	29	#5	6'-0"	
w(E)	4	#8	4'-8"	
w1(E)	44	#8	28'-7"	
w2(E)	44	#8	17'-1"	
w3(E)	88	#8	7'-8"	
Sidewalk Connector		Sq. Ft.	39	
Concrete Structures		Cu. Yd.	125.3	
Reinforcement Bars, Epoxy Coated		Pound	29,160	
Furnishing Steel Piles HP12x63		Foot	765	
Driving Piles		Foot	765	
Test Pile Steel HP12x63		Each	1	
Pile Shoes		Each	18	

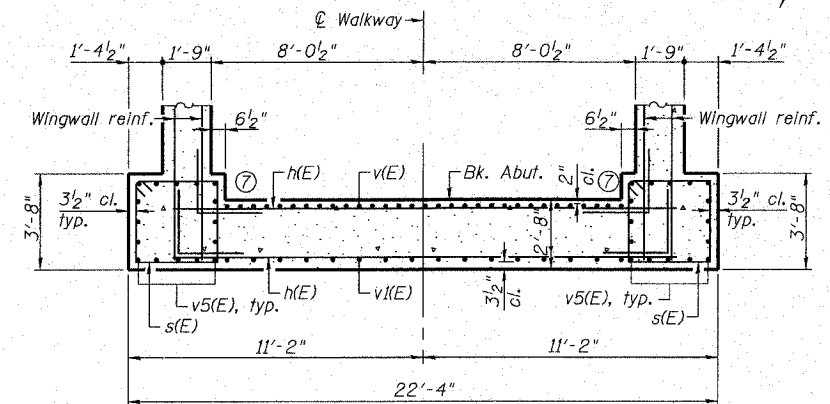


**SECTION A-A (8)**

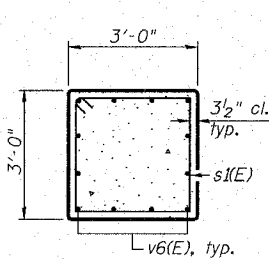


**ABUTMENT PLAN (2) (8)**

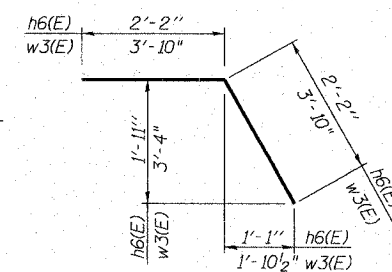
(Foundation not shown for clarity)



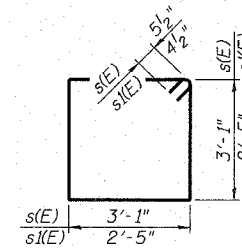
**SECTION B-B**



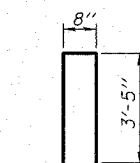
**SECTION C-C**



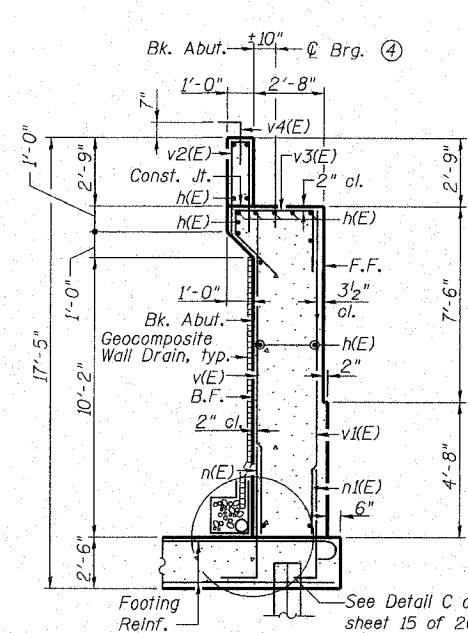
**BARS h6(E) & w3(E)**



**BARS s(E) & s1(E)**



**BAR v2(E)**



**SECTION D-D (2)**

See Detail C on sheet 15 of 26.

**A & B DIMENSIONS**

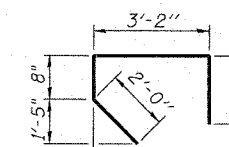
Bar	A	B
h1(E)	2'-7"	2'-7"
n(E)	5'-0"	1'-2"
n1(E)	4'-3"	1'-0"
n3(E)	8'-0"	1'-7"
n4(E)	4'-10"	10"
v4(E)	1'-10"	10"
v9(E)	5'-4"	8"

**BARS h1(E), n(E), n1(E), n3(E), n4(E), v4(E) & v9(E)**

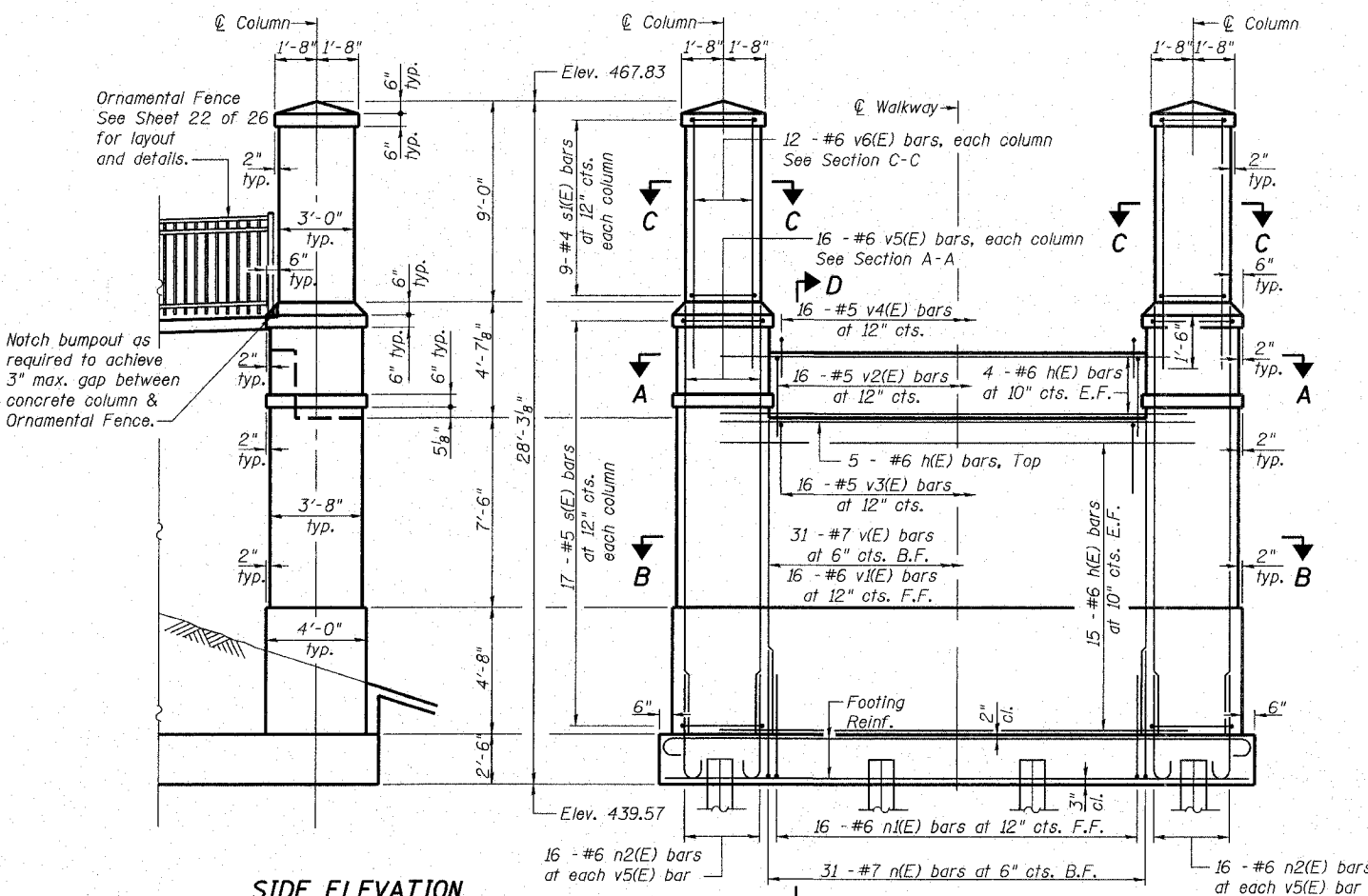
**C, D, E & F DIMENSIONS**

Bar	C	D	E	F
n2(E)	6"	8"	4'-3"	---
t(E)	8"	11"	23'-4"	11"
t1(E)	8"	11"	21'-10"	11"
t2(E)	8"	11"	20'-5"	11"
t3(E)	8"	11"	12'-11"	---
w1(E)	8"	11"	27'-8"	---

**BARS n2(E), t(E), t1(E), t2(E), t3(E) & w1(E)**



**BAR v3(E)**



**SIDE ELEVATION**

**ABUTMENT ELEVATION (2)**

**Notes:**

- Space reinforcement in cap to miss anchor bolts.
- For details of foundation, see sheet 14 of 26.
- See sheet 18 of 26 for limits of Form Liner Textured Surface and Rubbed Finish.
- Final truss, brg, bearings and anchor bolt sizes, embedment, and layout to be determined by truss manufacturer. Pre-engineered truss shop drawings shall be approved prior to construction of the abutments. Contractor shall verify all dimensions and elevations with final approved shop drawings. See special provisions.
- All edges shall have 1/2" chamfer unless noted otherwise.
- B.F. denotes back face. F.F. denotes front face. E.F. denotes each face.
- For details of wingwalls and corner bars, see sheet 13 of 26.
- Architectural bump outs on columns not shown for clarity in plan view. Dimensions to face of column at abutment seat.
- Electrical conduit to be cast through abutment backwall. See electrical plans for conduit locations and details.

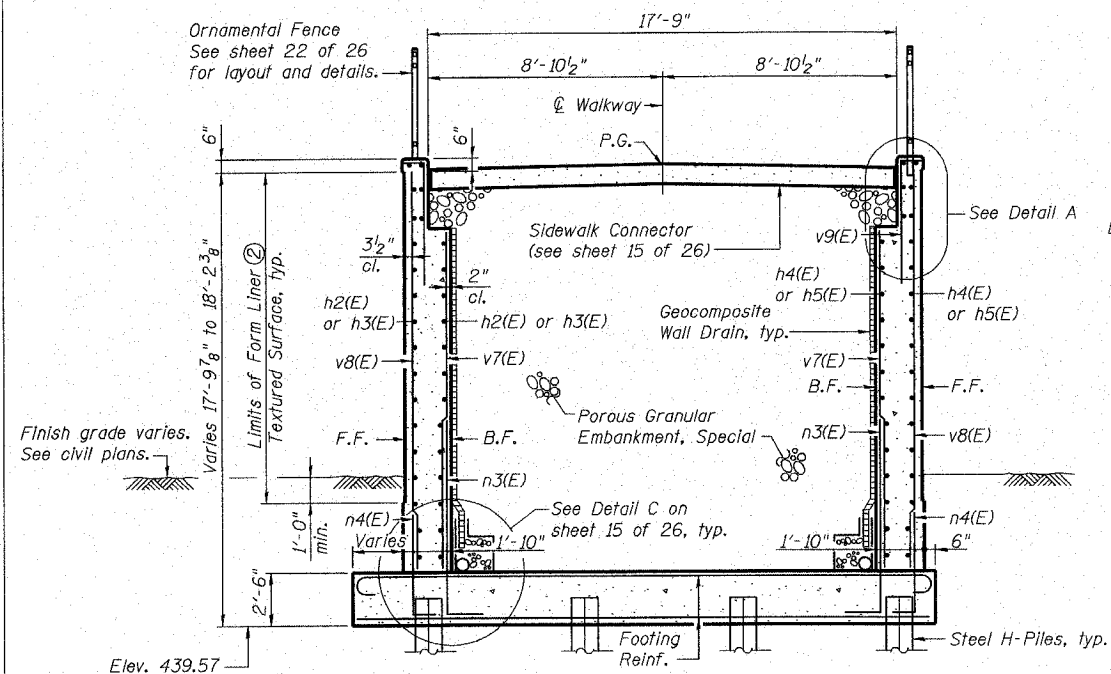
**SOUTH ABUTMENT PLAN**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

REVISIONS

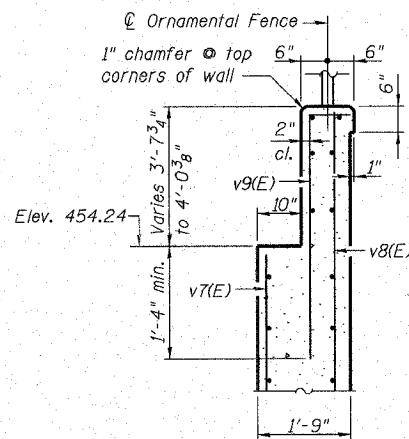

Easton Business Center 1  
 100 Lantz Court, Suite 1  
 Collinsville, Illinois 62234  
 Phone: 618 345-2200  
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 www.eastonassociates.com



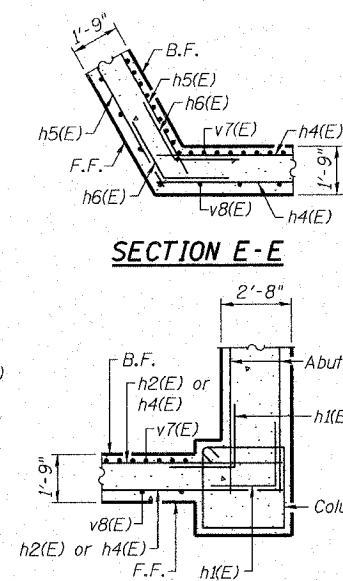
ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.



SECTION D-D (looking north)

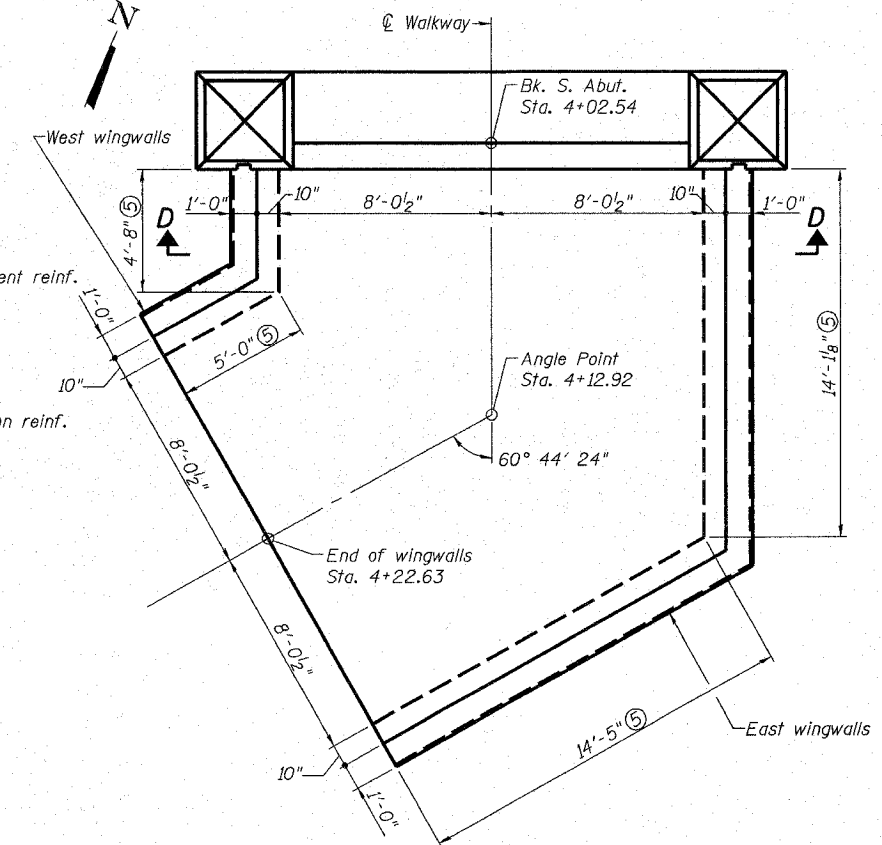


DETAIL A

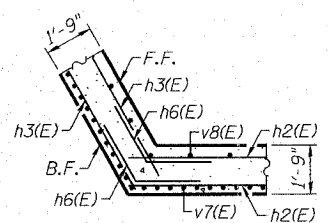


SECTION E-E

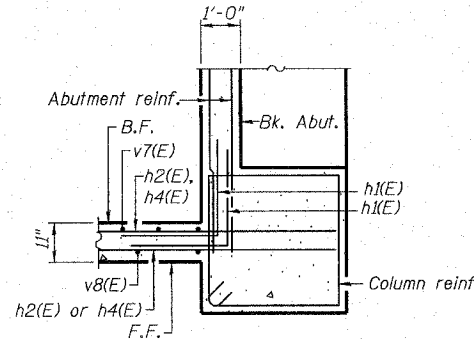
SECTION F-F



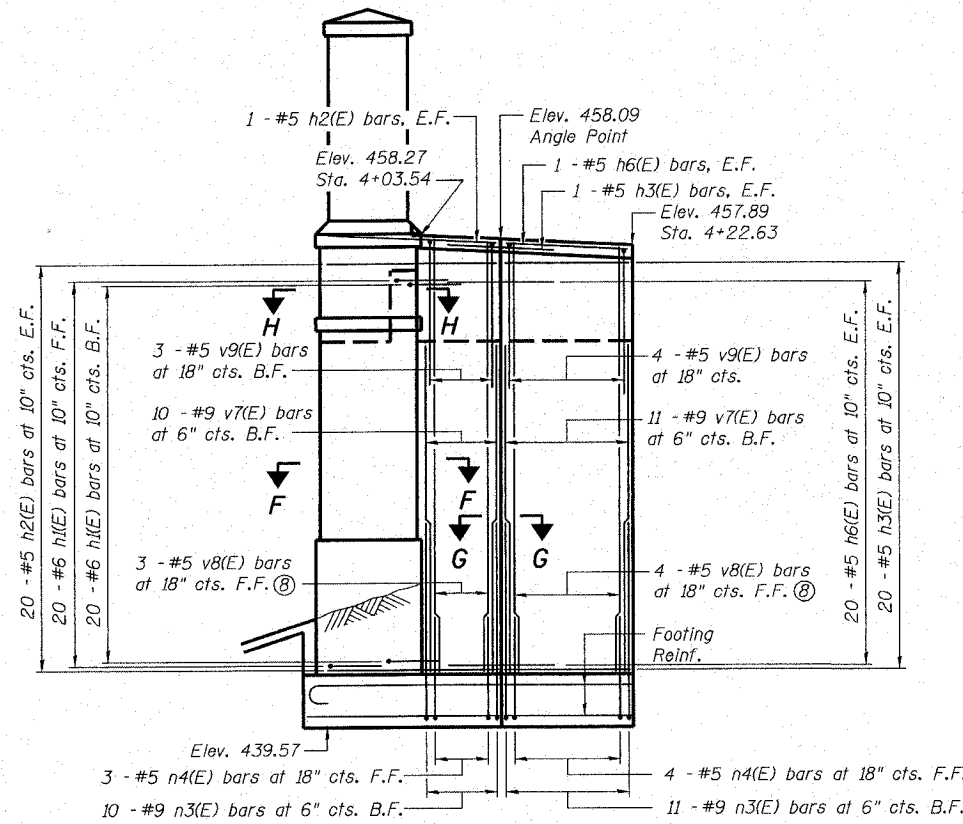
WINGWALL PLAN (Foundation and Ornamental Fence not shown for clarity)



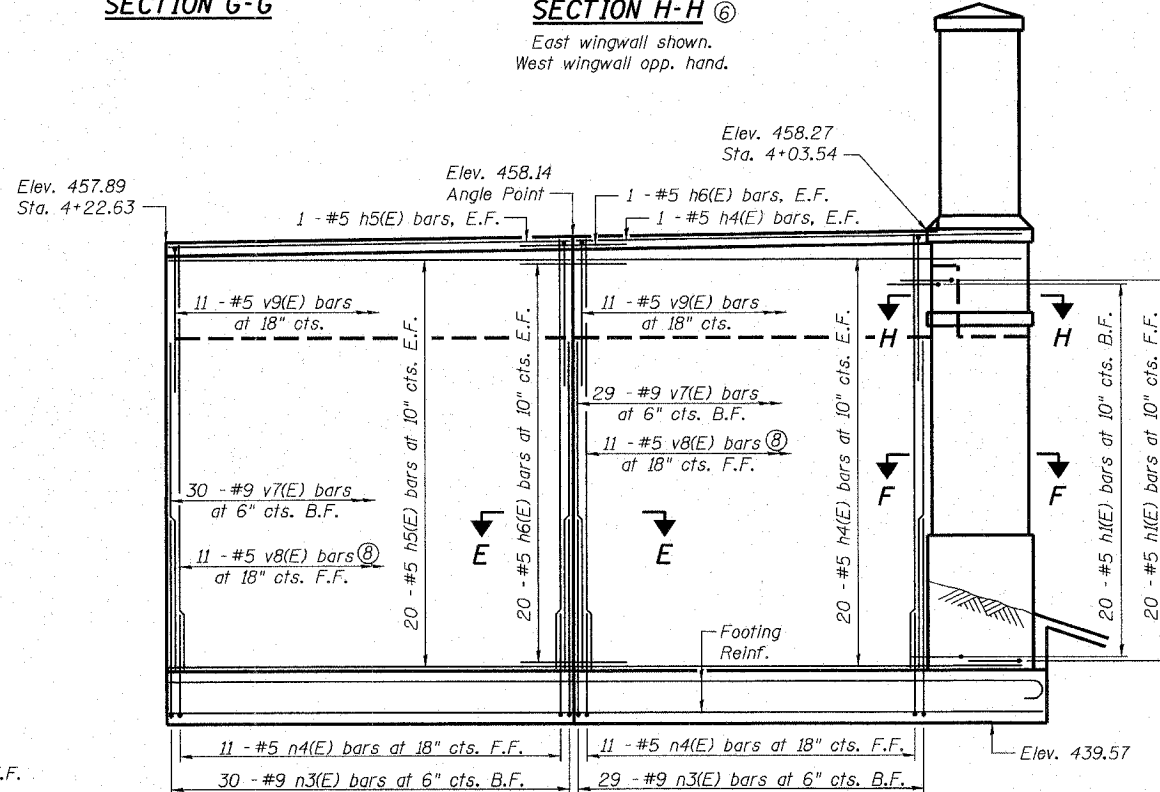
SECTION G-G



SECTION H-H



WEST WINGWALL ELEVATION (Steel H-Piles and Ornamental Fence not shown for clarity)



EAST WINGWALL ELEVATION (Steel H-Piles and Ornamental Fence not shown for clarity)

- Notes:
- For details of foundation, see sheet 14 of 26.
  - See sheet 18 of 26 for limits of Form Liner Textured Surface and Rubbed Finish.
  - All edges shall have 1/2" chamfer unless noted otherwise.
  - B.F. denotes back face. F.F. denotes front face. E.F. denotes each face.
  - Measured along back face of wall.
  - For details of abutment and columns, see sheet 12 of 26.
  - For bar bending details and Bill of Materials, see sheet 12 of 26.
  - Adjust v8(E) bars to hold 2" clear cover between bars and top of cheek wall and vary lap length between v8(E) and n4(E) bars.

**SOUTH ABUTMENT DETAILS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

REVISIONS


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 Collinsville, Illinois 62234  
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 Fax: 618 345-7233  
 e-mail: info@geopart.com  
 web-site: www.geopart.com

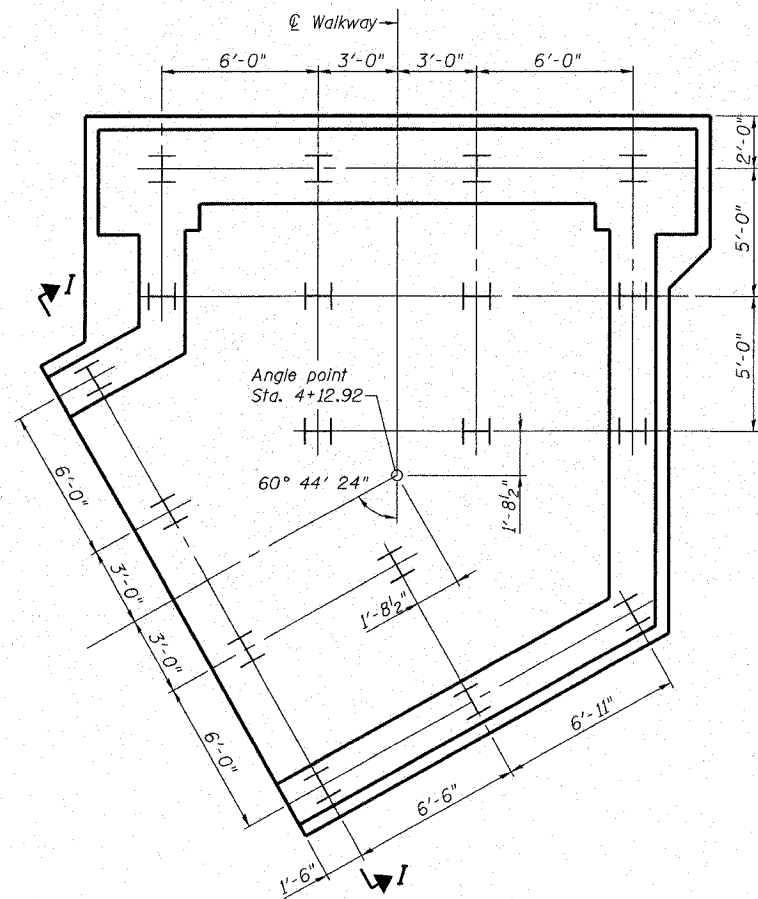
**GATES ASSOCIATES**  
 Consulting Engineers

**ALTON, ILLINOIS**  
**PEDESTRIAN OVERPASS AT LANGDON ST.**

DWG. NO. S13  
 6111-13-SOUTHABTSH2.DGN  
 REF. BK. PG.  
 JOB NO. 26053  
 DSN. BY: DGL  
 DWN. BY: DGL  
 CHK. BY: NEL  
 DATE: 3/28/08

SCALE:  
 SHEET 33 OF 54

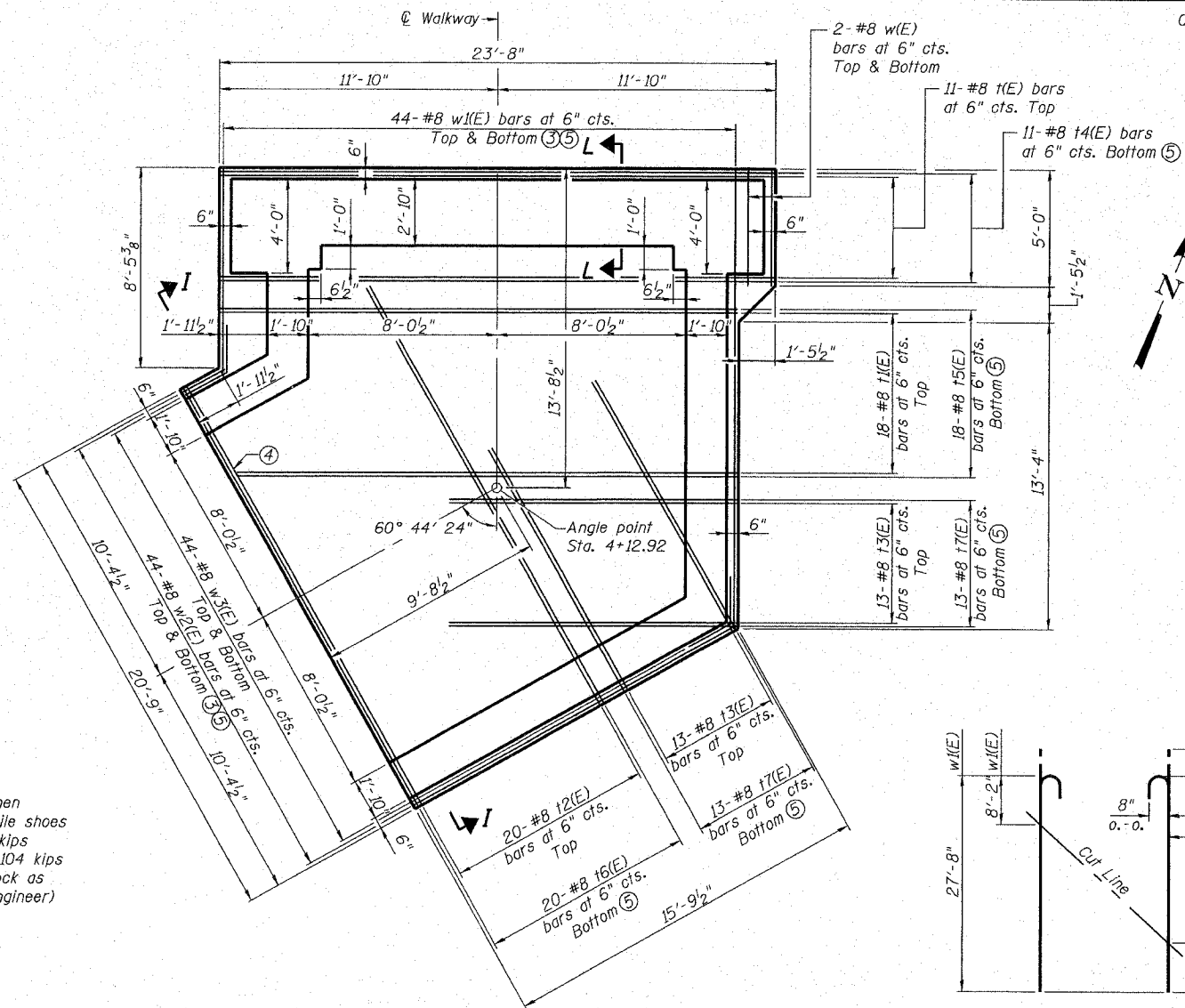




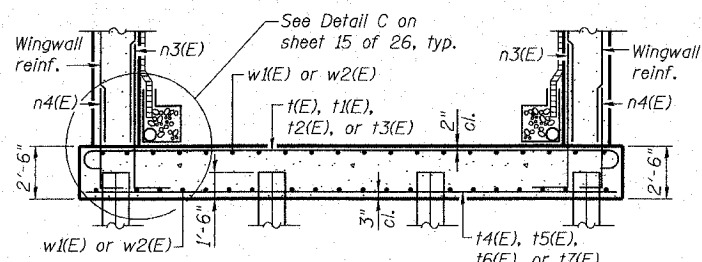
**PILE PLAN**

**PILE DATA**

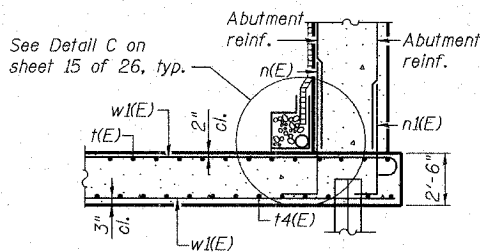
Type: HP12x63 coated w/ bitumen to Elev. 405.0 and w/ pile shoes  
Nominal Required Bearing: 497 kips  
Allowable Resistance Available: 104 kips  
Est. Length: 45' (embed into rock as directed by the Engineer)  
No. Production Piles: 17  
No. Test Piles: 1



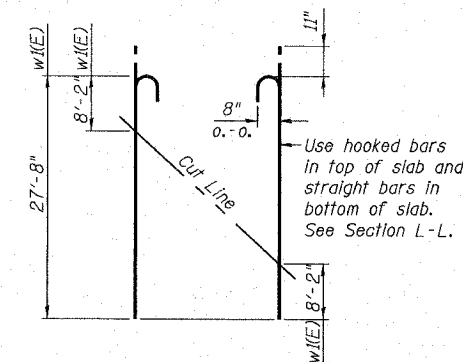
**FOOTING PLAN**



**SECTION I-I**



**SECTION L-L**



**FIELD CUTTING DIAGRAM**

Order bars full length. Cut to fit as shown for top of slab and use remainder of bars in bottom of slab.

**SOUTH ABUTMENT DETAILS  
ALTON PEDESTRIAN WALKWAY OVER  
UNION PACIFIC RAILROAD, NORFOLK  
SOUTHERN RAILROAD AND US ROUTE 67**

**SECTION 06-00224-00-BR**

**MADISON COUNTY**

**STA. 2+42.54**

**STRUCTURE NO. 060-6111**

- Notes:
- ① For details of wingwalls, see sheet 13 of 26.
- ② For details of abutment and columns, see sheet 12 of 26.
- ③ See Field Cutting Diagram.
- ④ Bend or cut in field to fit.
- ⑤ Space bottom reinforcement to miss piles. Minimum bar spacing of 3" cts.
- ⑥ For bar bending details and Bill of Materials, see sheet 12 of 26.
- ⑦ Bars n1(E) thru n4(E) to be cast with footing. Bars billed in abutment and wingwall elevation views for clarity.

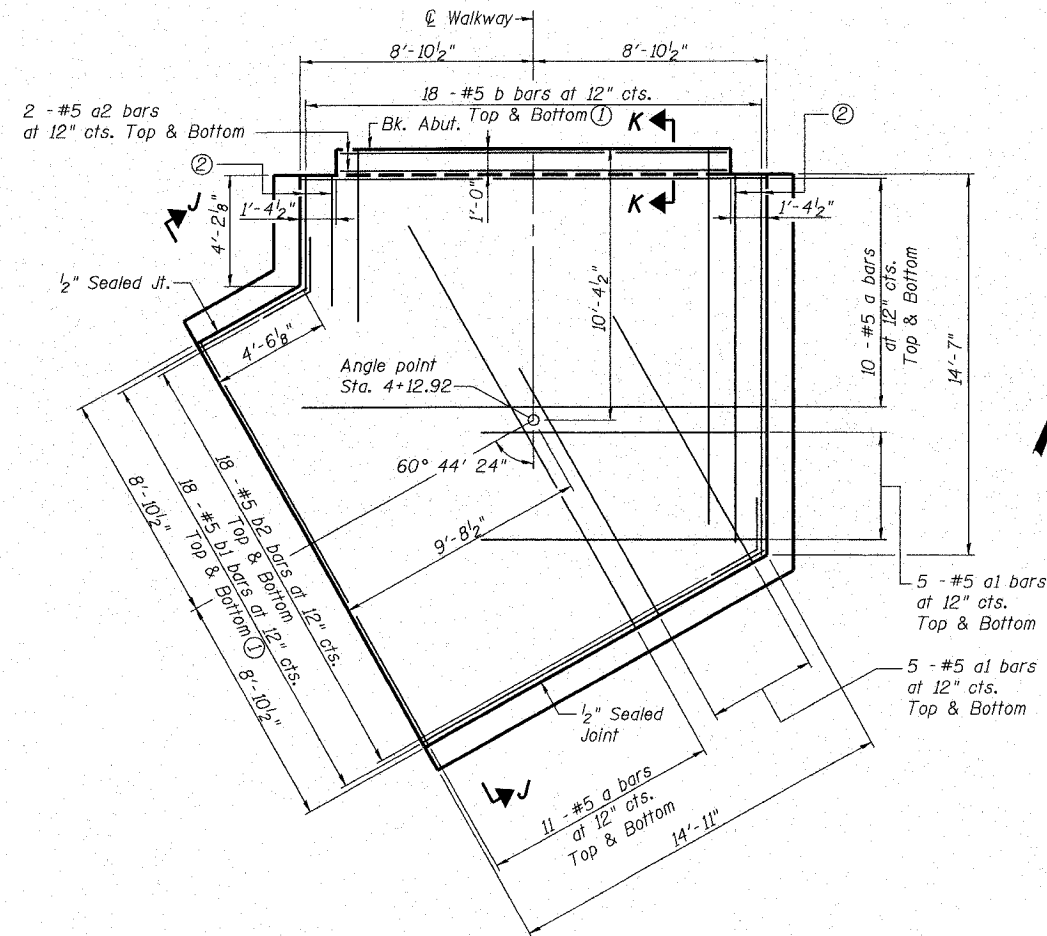
REVISIONS

Esport Business Center 1  
108 Linder Court, Suite 1  
Columbia, Illinois 62224  
Phone 618 345-2200  
Fax 618 345-2233  
e-mail: oates@oatesinc.com  
web-site: www.oatesinc.com

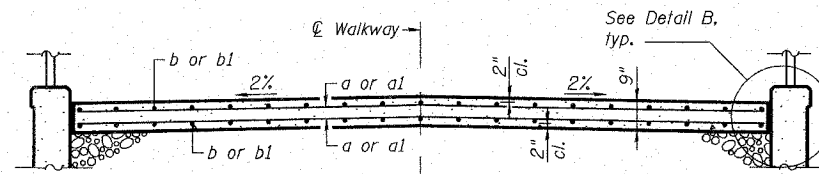


**ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.**

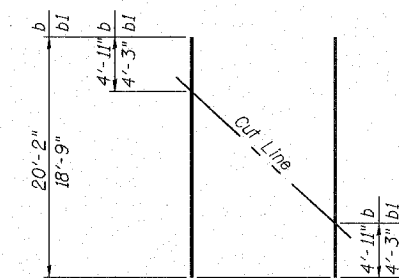
DWG. NO. S14  
6111-14-SOUTHABTSH3.DGN  
REF. BK. PG.  
JOB NO. 26053  
DSN. BY: DGL  
DWN. BY: DGL  
CHK. BY: NEL  
DATE: 3/28/08



**SIDEWALK CONNECTOR PLAN**

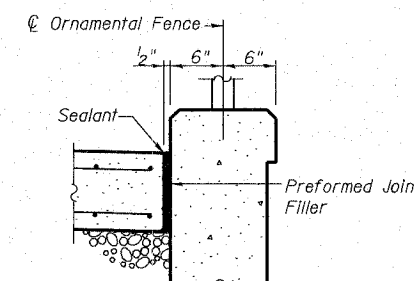


**SECTION J-J**

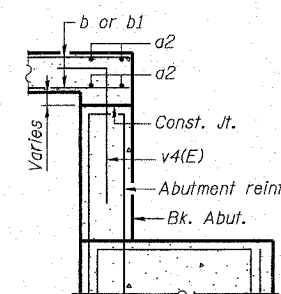


**FIELD CUTTING DIAGRAM**

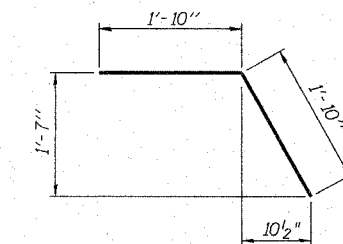
Order bars full length. Cut to fit as shown for top of slab and use remainder of bars in bottom of slab.



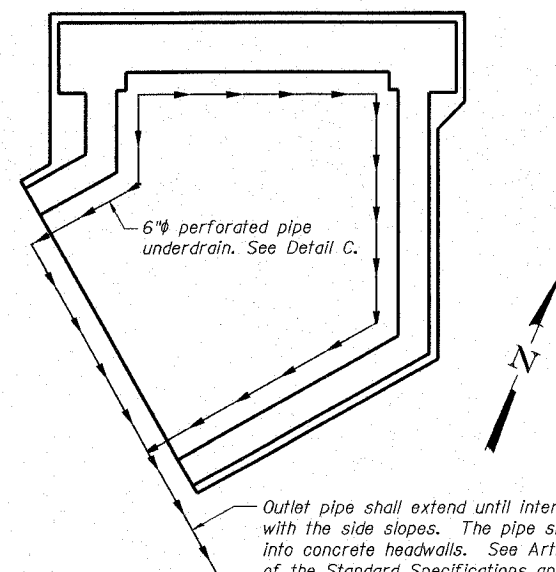
**DETAIL B**



**SECTION K-K**

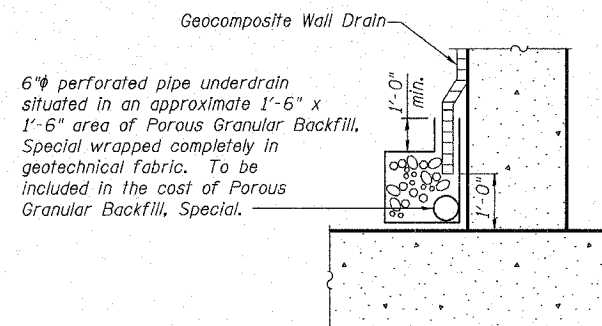


**BAR b2**



**PIPE UNDERDRAIN LAYOUT**

Outlet pipe shall extend until intersecting with the side slopes. The pipe shall drain into concrete headwalls. See Article 601.05 of the Standard Specifications and Highway Standard 601101. To be included in the cost of Porous Granular Backfill, Special.



**DETAIL C**

**BILL OF MATERIAL**

(For South Sidewalk Connector)  
(For Information Only)

Bar	No.	Size	Length	Shape	
a	42	5	17'-4"	—	
a1	20	5	10'-3"	—	
a2	4	5	14'-8"	—	
b	18	5	20'-2"	—	
b1	18	5	18'-9"	—	
b2	36	5	3'-8"	—	
Reinforcement Bars				Pound	1,900

**Notes:**

- See Field Cutting Diagram.
- Bend or cut in field to fit.
- Cost of reinforcement bars for the connector pavement is included in Sidewalk Connector.

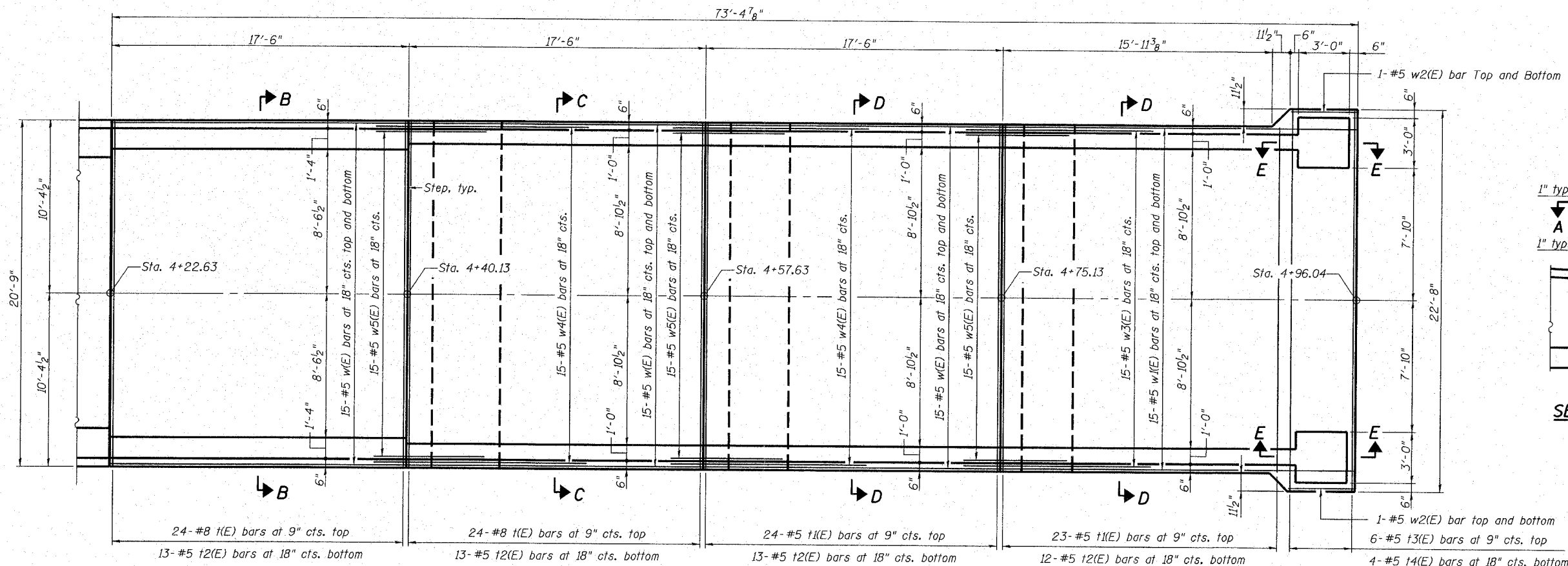
**SOUTH ABUTMENT DETAILS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

NO.	DESCRIPTION

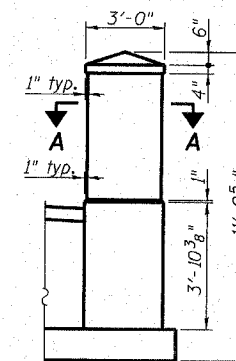
Export Business Center 1  
100 Center Court, Suite 1  
Columbia, IL 62204  
Phone: 618-362-2200  
Fax: 618-362-2200  
www.datesassociates.com  
**DATES ASSOCIATES**  
Consulting Engineers

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.

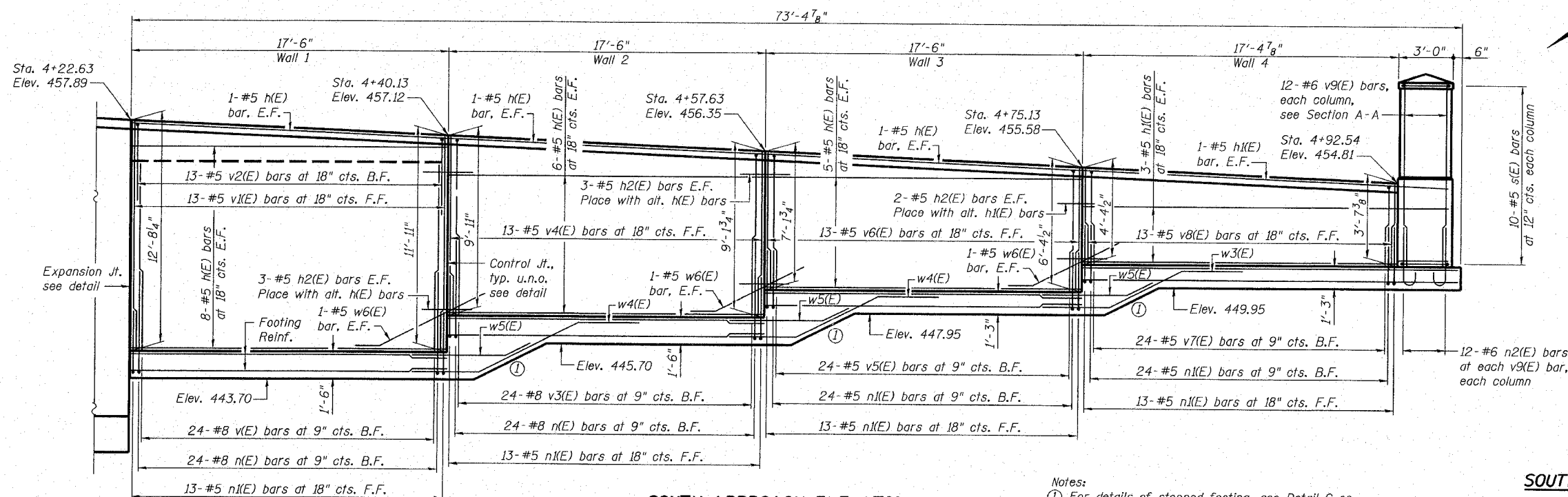
DWG. NO. S15	6111-XX-SOUTHABT3.DGN
REF. BK.	PG.
JOB NO.	26053
DSN. BY:	DGL
DWN. BY:	DGL
CHK. BY:	NEL
DATE:	3/28/08
SCALE:	
SHEET	35 OF 54



**SOUTH APPROACH FOOTING PLAN** ⑥

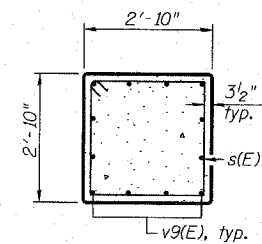


**SECTION E-E**



**SOUTH APPROACH ELEVATION**

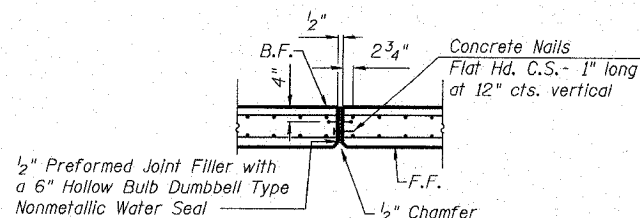
(North wall shown. South wall similar.  
Bar callouts for one wall.)



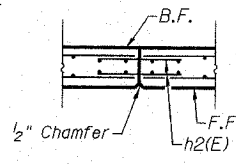
**SECTION A-A**

**SOUTH ABUTMENT RETAINING WALL  
PLAN AND DETAILS  
ALTON PEDESTRIAN WALKWAY OVER  
UNION PACIFIC RAILROAD, NORFOLK  
SOUTHERN RAILROAD AND US ROUTE 67  
SECTION 06-00224-00-BR  
MADISON COUNTY  
STA. 2+42.54  
STRUCTURE NO. 060-6111**

- Notes:
- ① For details of stepped footing, see Detail C on sheet 17 of 26.
  - ② See sheet 18 of 26 for limits of Form Liner Textured Surface and Rubbed Finish.
  - ③ All edges shall have 1/2" chamfer unless noted otherwise.
  - ④ B.F. denotes back face. F.F. denotes front face. E.F. denotes each face.
  - ⑤ For bar bending details and bill of materials, see sheet 17 of 26.
  - ⑥ Bars n(E) thru n2(E) to be cast with footing. Bars billed in south approach elevation view for clarity.
  - ⑦ For sections B-B, C-C & D-D, see sheet 17 of 26.



**EXPANSION JOINT**



**CONTROL JOINT**

NO.	DESCRIPTION

Eastport Business Center 1  
100 Linter Court, Suite 1  
Columbia, MD 21046  
Phone: 410-346-2200  
Fax: 410-346-2201  
www.eastport.com

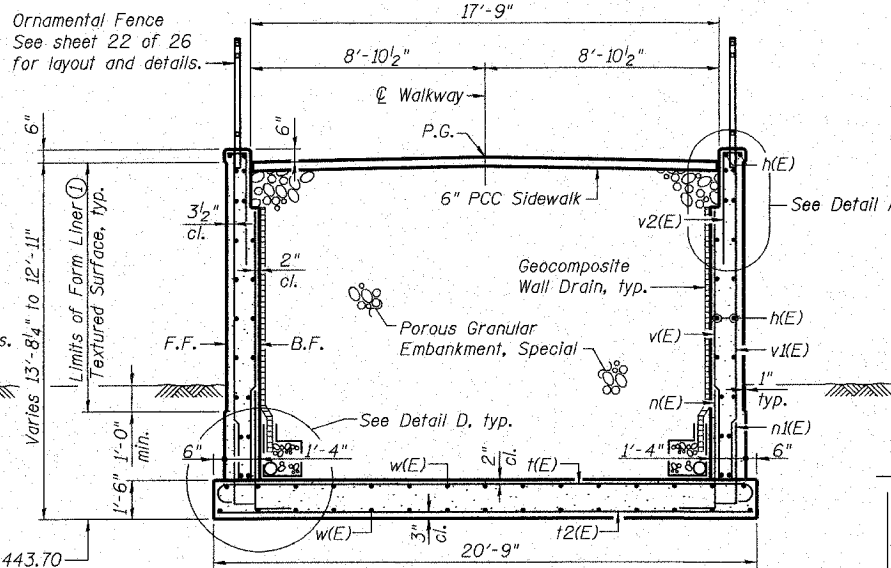
CAITES ASSOCIATES  
Consulting Engineers

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.

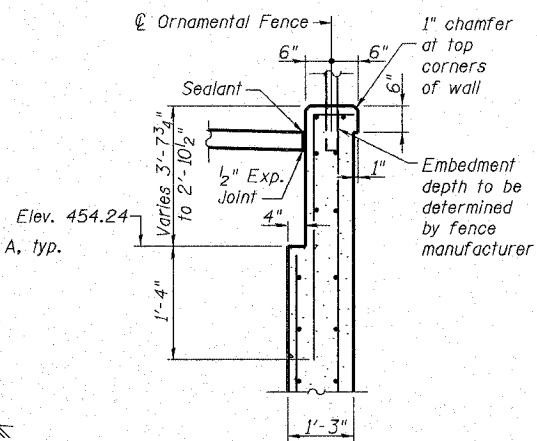
**BILL OF MATERIAL**

(South Abutment Retaining Walls and Columns)

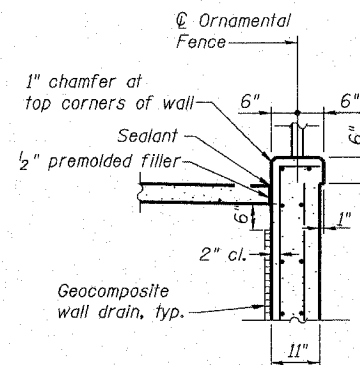
Bar	No.	Size	Length	Shape
h(E)	88	#5	17'-2"	
h1(E)	16	#5	20'-0"	
h2(E)	32	#5	3'-8"	
n(E)	96	#5	7'-0"	
n1(E)	200	#5	4'-7"	
n2(E)	24	#6	3'-8"	
s(E)	20	#5	9'-11"	
t(E)	48	#8	22'-3"	
t1(E)	47	#5	21'-7"	
t2(E)	51	#5	20'-5"	
t3(E)	6	#5	23'-6"	
t4(E)	4	#5	22'-3"	
v(E)	48	#8	8"-10"	
v1(E)	26	#5	11'-9"	
v2(E)	26	#5	5'-5"	
v3(E)	48	#8	9'-7"	
v4(E)	26	#5	8'-11"	
v5(E)	48	#5	6'-10"	
v6(E)	26	#5	6'-2"	
v7(E)	48	#5	4'-1"	
v8(E)	26	#5	3'-5"	
v9(E)	24	#6	9'-1"	
w(E)	90	#5	17'-4"	
w1(E)	30	#5	20'-7"	
w2(E)	4	#5	3'-8"	
w3(E)	15	#5	11'-2"	
w4(E)	30	#5	11'-11"	
w5(E)	45	#5	7'-3"	
w6(E)	12	#5	7'-1"	
Structure Excavation			Cu. Yd.	293
Concrete Structures			Cu. Yd.	150.8
Reinforcement Bars, Epoxy Coated			Pound	16,730



**SECTION B-B**



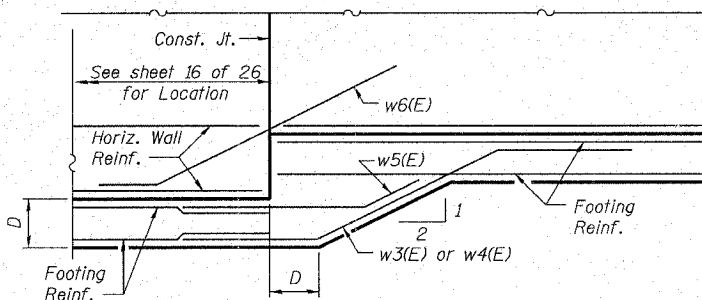
**DETAIL A**



**DETAIL B**

**A & B DIMENSIONS**

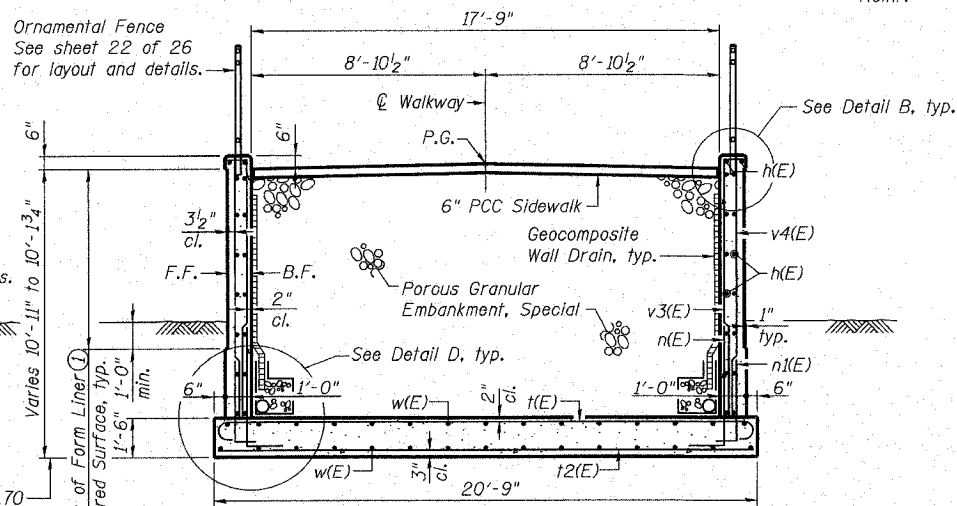
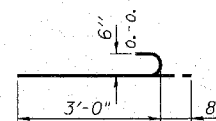
Bar	A	B
n(E)	5'-8"	1'-4"
n1(E)	3'-9"	10"
v2(E)	4'-9"	8"
v3(E)	8'-11"	8"
v5(E)	6'-2"	8"
v7(E)	3'-5"	8"



**DETAIL C**

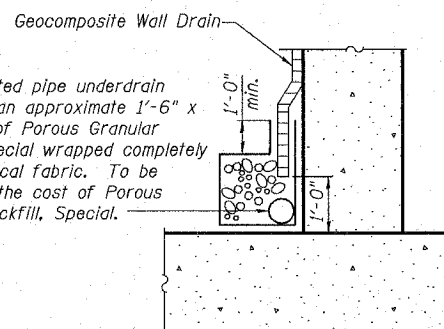
**BAR n2(E)**

**BARS n(E), n1(E), v2(E), v3(E), v5(E) & v7(E)**

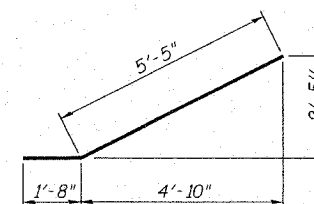


**SECTION C-C**

6" φ perforated pipe underdrain situated in an approximate 1'-6" x 1'-6" area of Porous Granular Backfill, Special wrapped completely in geotechnical fabric. To be included in the cost of Porous Granular Backfill, Special.



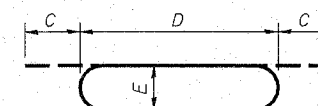
**DETAIL D**



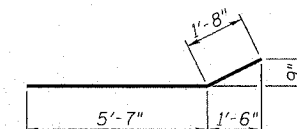
**BAR w6(E)**

**C, D & E DIMENSIONS**

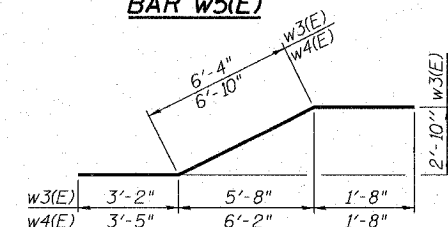
Bar	C	D	E
t(E)	11"	20'-5"	8"
t1(E)	7"	20'-5"	5"
t3(E)	7"	22'-4"	5"



**BARS t(E), t1(E) & t3(E)**

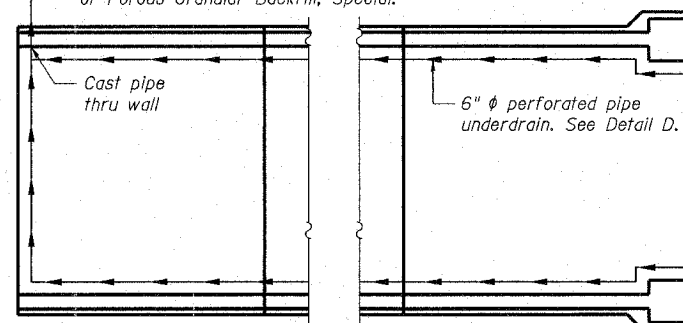


**BAR w5(E)**

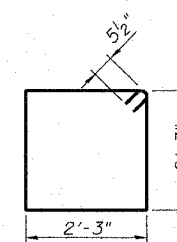


**BARS w3(E) & w4(E)**

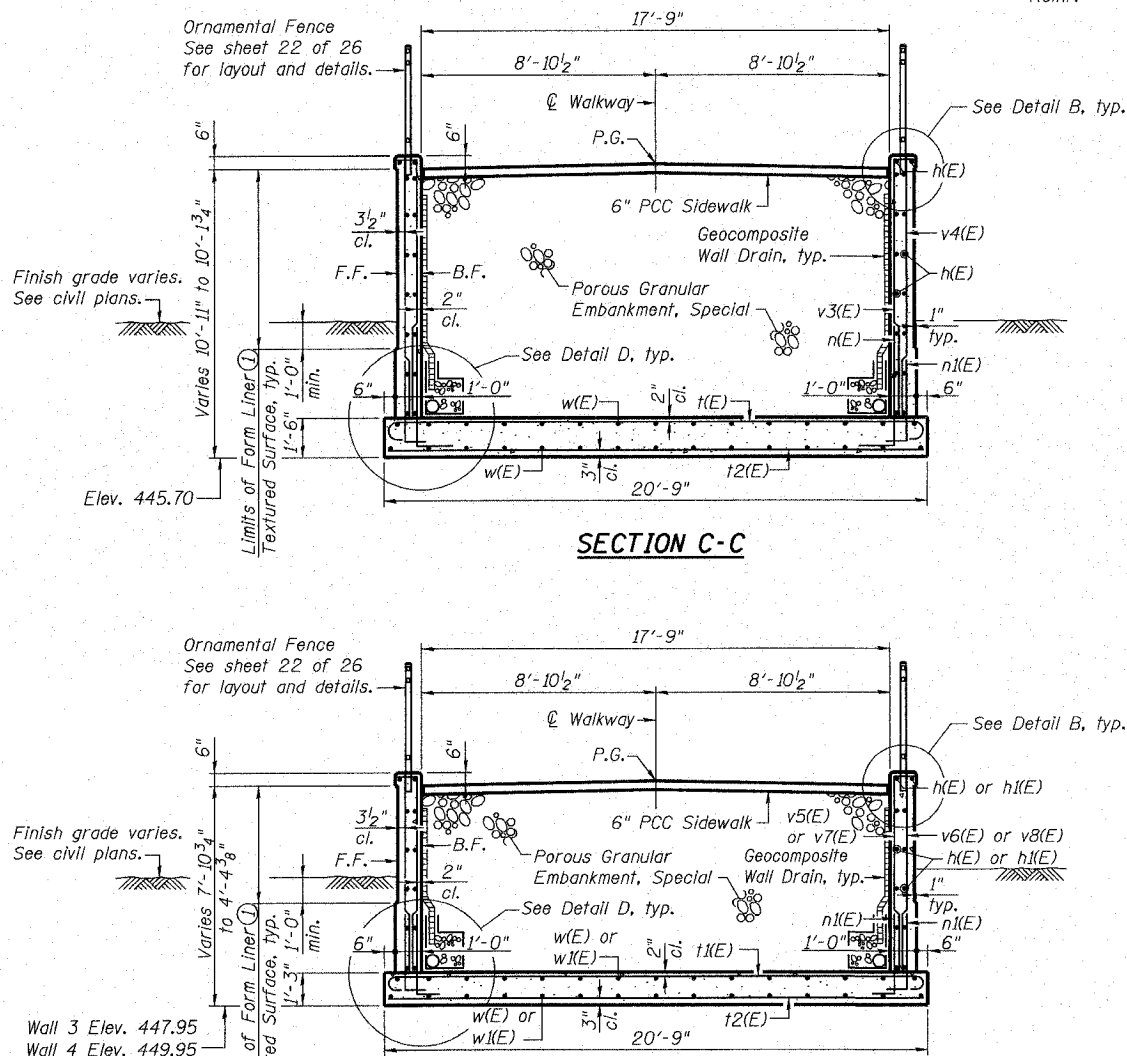
Outlet pipe shall extend until intersecting with the side slopes. The pipe shall drain into concrete headwalls. See Article 601.05 of the Standard Specifications and Highway Standard 601101. To be included in the cost of Porous Granular Backfill, Special.



**PIPE UNDERDRAIN LAYOUT**



**BAR s(E)**



**SECTION D-D**

- Notes:
- See sheet 18 of 26 for limits of Form Liner Textured Surface and Rubbed Finish.
  - All edges shall have 1/2" chamfer unless noted otherwise.
  - B.F. denotes back face. F.F. denotes front face.

**SOUTH ABUTMENT RETAINING WALL  
PLAN AND DETAILS  
ALTON PEDESTRIAN WALKWAY OVER  
UNION PACIFIC RAILROAD, NORFOLK  
SOUTHERN RAILROAD AND US ROUTE 67  
SECTION 06-00224-00-BR  
MADISON COUNTY  
STA. 2+42.54  
STRUCTURE NO. 060-6111**

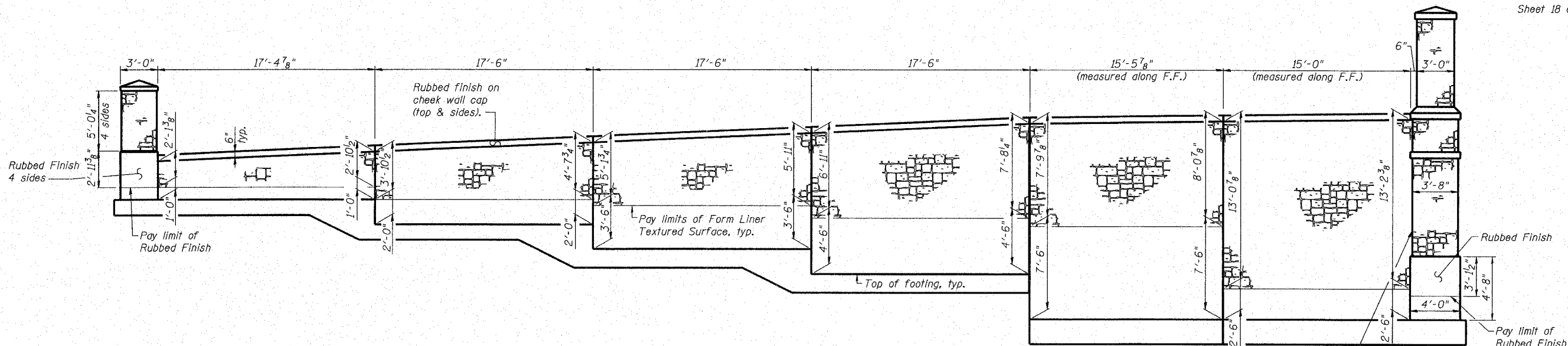
REVISIONS

No.	Description

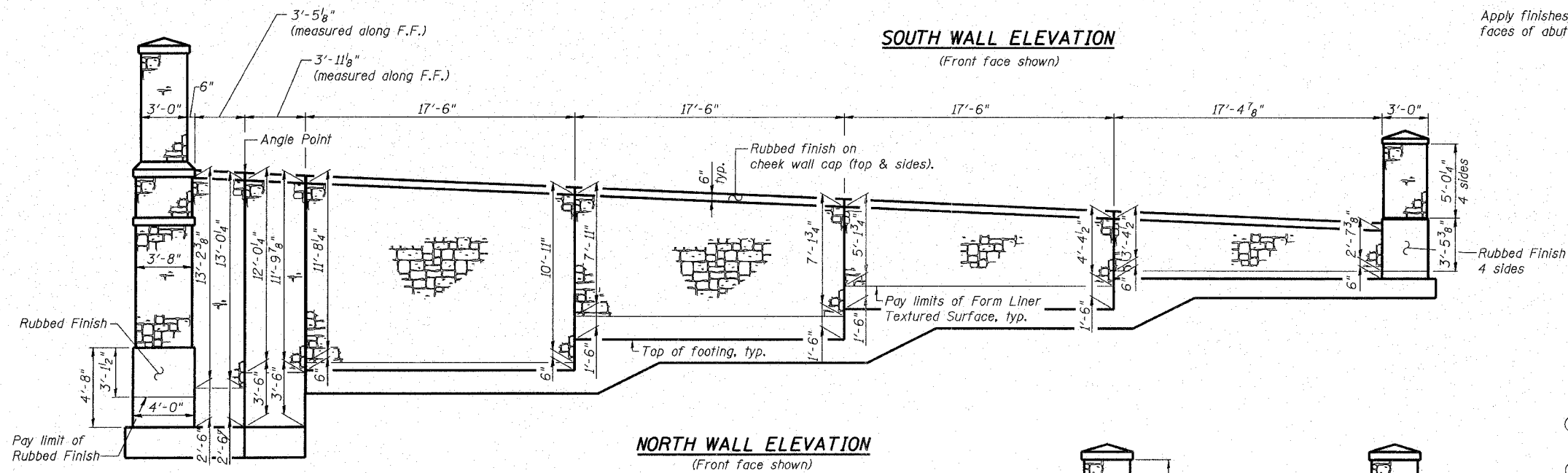
Support Business Center 1  
100 Lister Court, Suite 1  
Cullman, Illinois 62224  
Phone: 618-342-2500  
Fax: 618-342-7233  
e-mail: info@oatesassociates.com  
www: www.oatesassociates.com

**OATES ASSOCIATES**  
Consulting Engineers

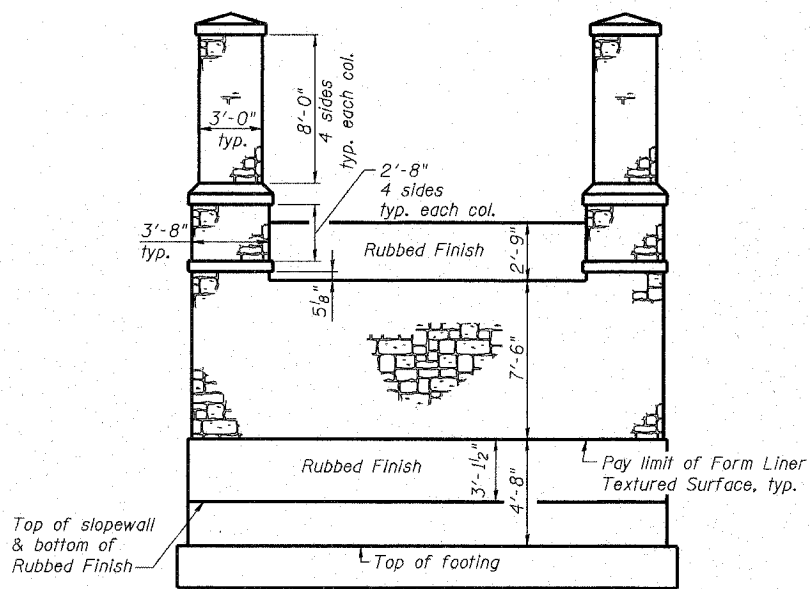
ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.



**SOUTH WALL ELEVATION**  
(Front face shown)




**NORTH WALL ELEVATION**  
(Front face shown)



**ABUTMENT ELEVATION**  
(front face shown)

Apply finishes to exposed faces of abutment (typ.)

 Limits of Form Liner Textured Surface

- Notes:
- ① Form Liner Textured Surface required as shown in elevation views. See special provisions for Form Liner Textured Surface specifications.
  - ② Architectural bumpouts and column caps shall have a Rubbed Finish.
  - ③ F.F. denotes front face.

**BILL OF MATERIAL**

(For South Abutment and Retaining Walls)

Item	Unit	Quantity
Form Liner Textured Surface	Sq. Ft.	2,053
Rubbed Finish	Sq. Ft.	680

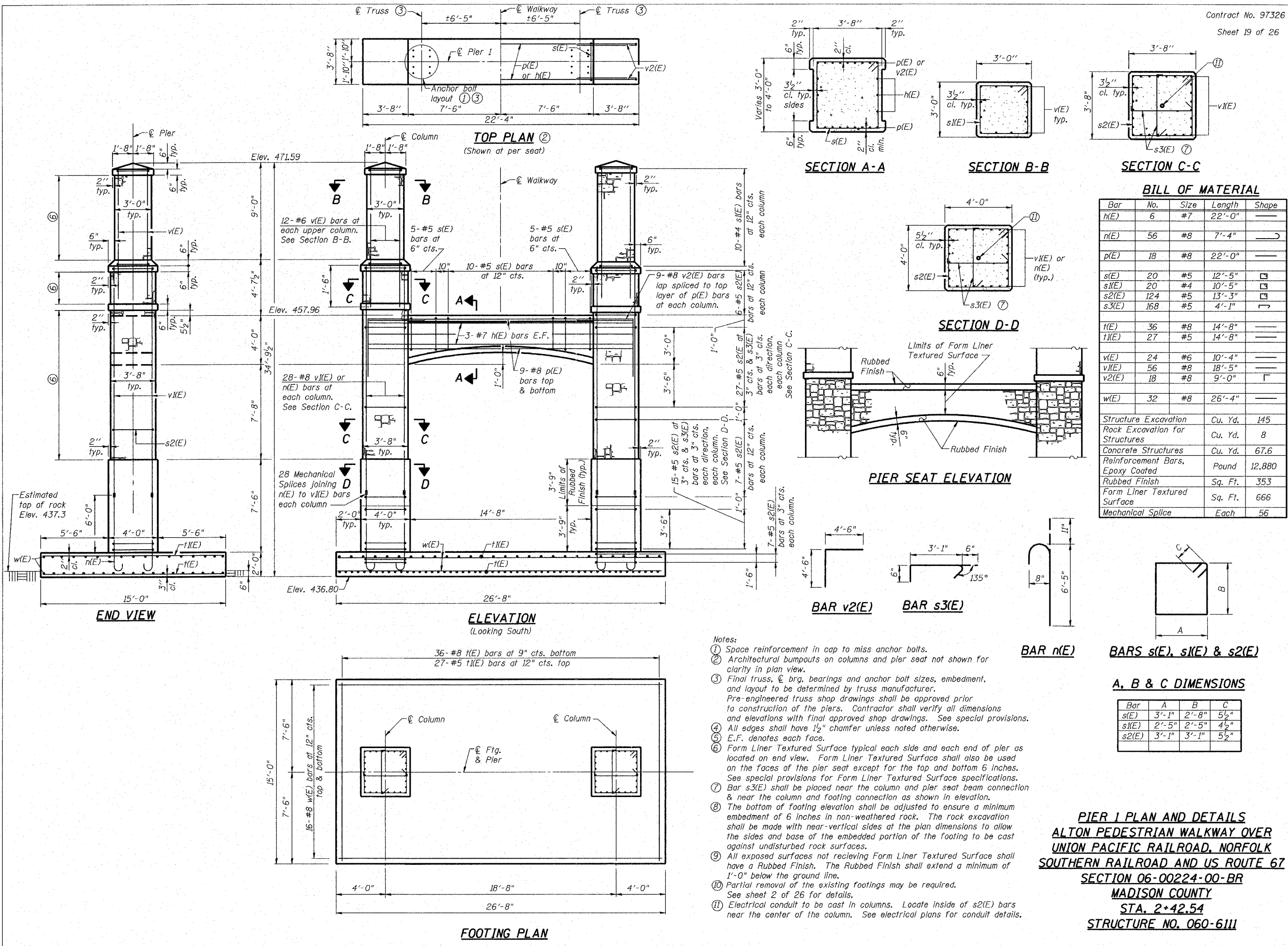
**SOUTH ABUTMENT & RETAINING WALL**  
**FORM LINER DETAILS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

NO.	DATE	DESCRIPTION

Eastport Business Center 1  
100 Lumber Court, Suite 1  
Collinsville, Illinois 62234  
Phone: 618 342-2200  
Fax: 618 342-2202  
www.catesassociates.com



ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.



### BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	6	#7	22'-0"	—
n(E)	56	#8	7'-4"	—
p(E)	18	#8	22'-0"	—
s(E)	20	#5	12'-5"	□
s1(E)	20	#4	10'-5"	□
s2(E)	124	#5	13'-3"	□
s3(E)	168	#5	4'-1"	┘
t(E)	36	#8	14'-8"	—
t1(E)	27	#5	14'-8"	—
v(E)	24	#6	10'-4"	—
v1(E)	56	#8	18'-5"	—
v2(E)	18	#8	9'-0"	┘
w(E)	32	#8	26'-4"	—

Structure Excavation	Cu. Yd.	145
Rock Excavation for Structures	Cu. Yd.	8
Concrete Structures	Cu. Yd.	67.6
Reinforcement Bars, Epoxy Coated	Pound	12,880
Rubbed Finish	Sq. Ft.	353
Form Liner Textured Surface	Sq. Ft.	666
Mechanical Splice	Each	56

- Notes:
- Space reinforcement in cap to miss anchor bolts.
  - Architectural bumpouts on columns and pier seat not shown for clarity in plan view.
  - Final truss,  $\phi$  brg, bearings and anchor bolt sizes, embedment, and layout to be determined by truss manufacturer. Pre-engineered truss shop drawings shall be approved prior to construction of the piers. Contractor shall verify all dimensions and elevations with final approved shop drawings. See special provisions. All edges shall have 1/2" chamfer unless noted otherwise. E.F. denotes each face.
  - Form Liner Textured Surface typical each side and each end of pier as located on end view. Form Liner Textured Surface shall also be used on the faces of the pier seat except for the top and bottom 6 inches. See special provisions for Form Liner Textured Surface specifications.
  - Bar s3(E) shall be placed near the column and pier seat beam connection & near the column and footing connection as shown in elevation.
  - The bottom of footing elevation shall be adjusted to ensure a minimum embedment of 6 inches in non-weathered rock. The rock excavation shall be made with near-vertical sides at the plan dimensions to allow the sides and base of the embedded portion of the footing to be cast against undisturbed rock surfaces.
  - All exposed surfaces not receiving Form Liner Textured Surface shall have a Rubbed Finish. The Rubbed Finish shall extend a minimum of 1'-0" below the ground line.
  - Partial removal of the existing footings may be required. See sheet 2 of 26 for details.
  - Electrical conduit to be cast in columns. Locate inside of s2(E) bars near the center of the column. See electrical plans for conduit details.

**PIER 1 PLAN AND DETAILS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

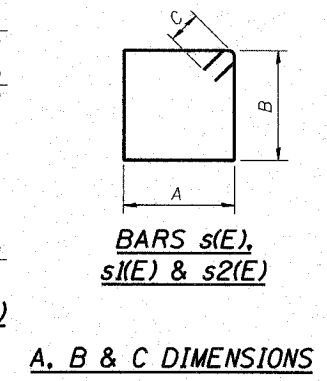
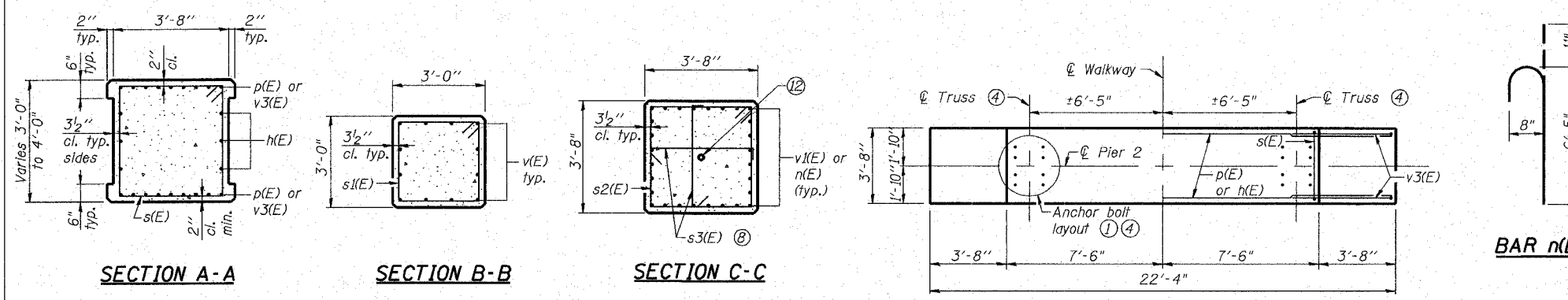
REVISIONS

No.	Description

Geopoint Business Center 1  
 100 Lantz Court, Suite 1  
 Collinsville, Illinois 62224  
 Phone: 618 342-2200  
 Fax: 618 342-2201  
 e-mail: info@geopointinc.com  
 web-site: www.geopointinc.com

**GATES ASSOCIATES**  
 Consulting Engineers

ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.



**A, B & C DIMENSIONS**

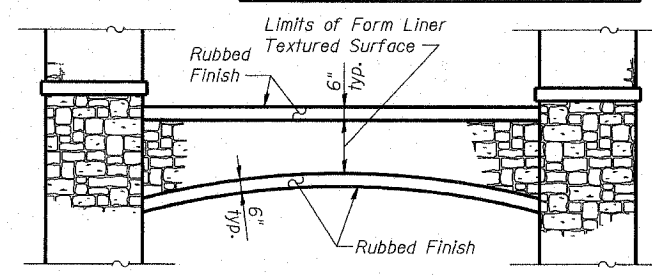
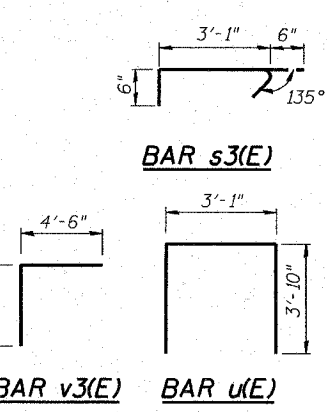
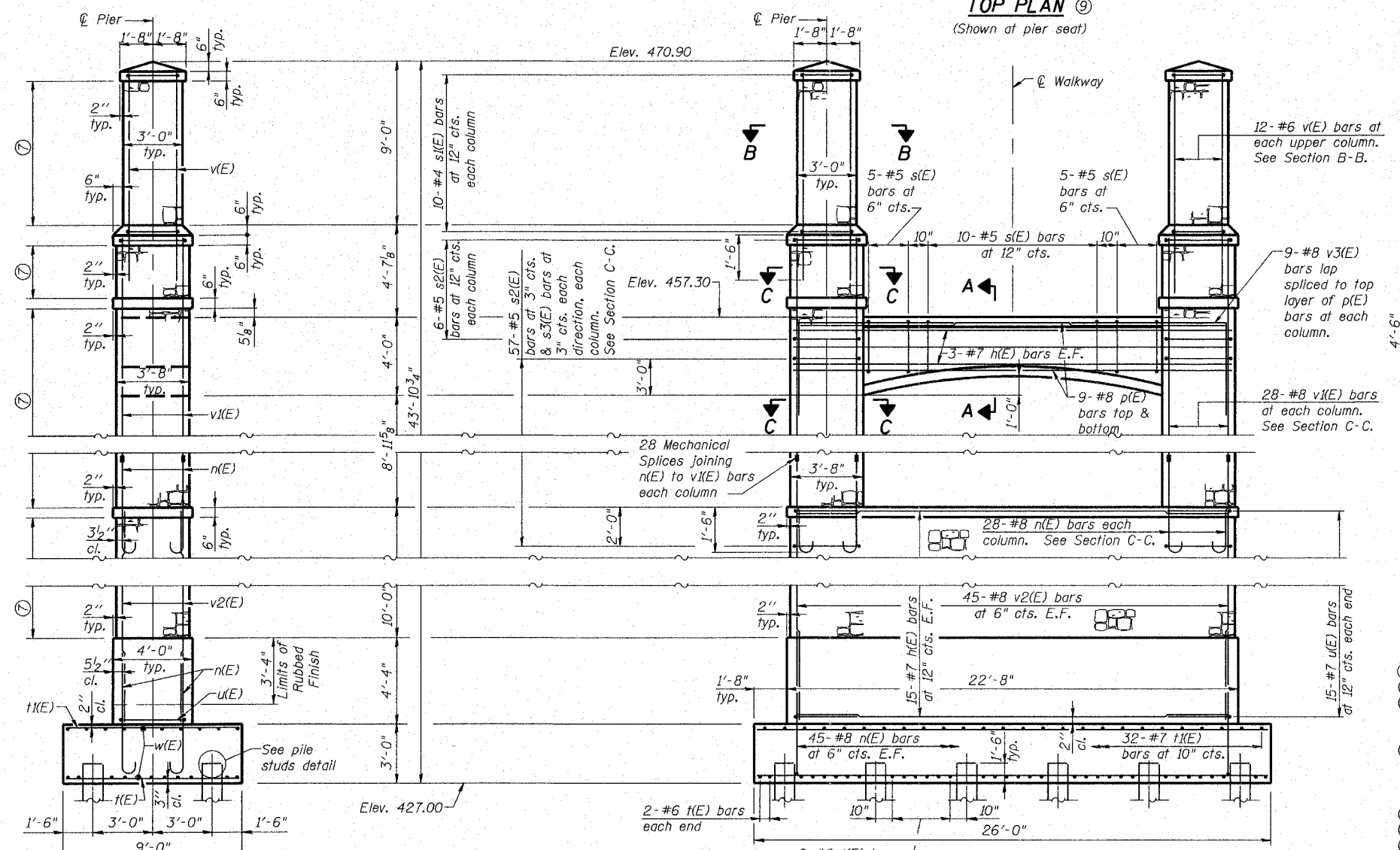
Bar	A	B	C
s(E)	3'-1"	2'-8"	5 1/2"
s1(E)	2'-5"	2'-5"	4 1/2"
s2(E)	3'-1"	3'-1"	5 1/2"

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	36	#7	22'-0"	—
n(E)	146	#8	7'-4"	⌋
p(E)	18	#8	22'-0"	—
s(E)	20	#5	12'-5"	⊠
s1(E)	20	#4	10'-5"	⊠
s2(E)	126	#5	13'-3"	⊠
s3(E)	228	#5	4'-1"	⌋
t(E)	34	#6	8'-8"	—
t1(E)	32	#7	8'-8"	—
u(E)	30	#7	10'-9"	⌋
v(E)	24	#6	10'-4"	—
v1(E)	56	#8	11'-11"	—
v2(E)	90	#8	14'-2"	—
v3(E)	18	#8	9'-0"	⌋
w(E)	21	#6	25'-8"	—

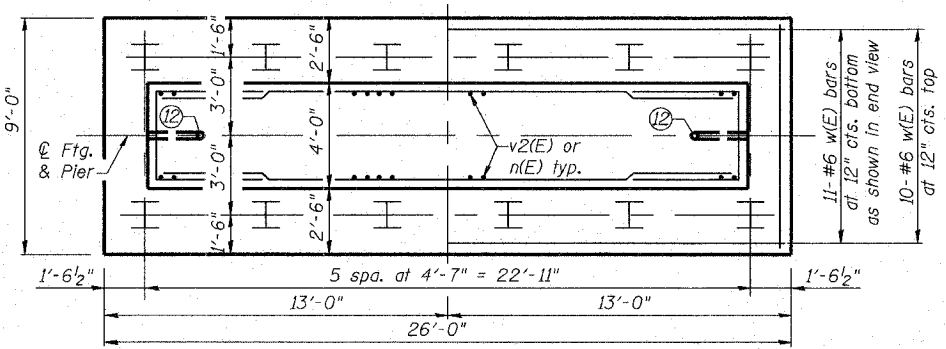
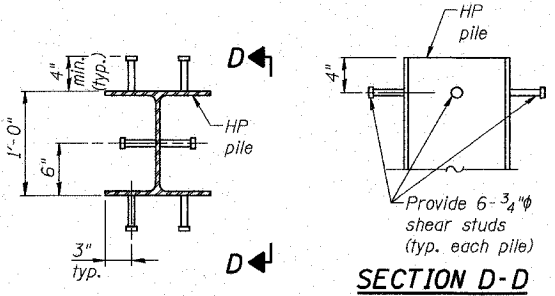
  

Structure Excavation	Cu. Yd.	58
Concrete Structures	Cu. Yd.	10.16
Reinforcement Bars, Epoxy Coated	Pound	17,120
Furnishing Steel Piles HP12x63	Foot	220
Driving Piles	Foot	220
Test Pile Steel HP12x63	Each	1
Pile Shoes	Each	12
Rubbed Finish	Sq. Ft.	456
Form Liner Textured Surface	Sq. Ft.	1,198
Mechanical Splice	Each	56



- Notes:**
- Space reinforcement in cap to miss anchor bolts.
  - For details of piles, see sheet 21 of 26.
  - All exposed surfaces not receiving Form Liner Textured Surface shall have a Rubbed Finish. The Rubbed Finish shall extend a minimum of 1'-0" below the ground line.
  - Final truss, brg. bearings and anchor bolt sizes, embedment, and layout to be determined by truss manufacturer. Pre-engineered truss shop drawings shall be approved prior to construction of the piers. Contractor shall verify all dimensions and elevations with final approved shop drawings. See special provisions.
  - All edges shall have 1/2" chamfer unless noted otherwise.
  - E.F. denotes each face.
  - Form Liner Textured Surface typical each side and each end of pier as located on end view. Form Liner Textured Surface shall also be used on the faces of the pier seat. See special provisions for Form Liner Textured Surface specifications.
  - Bar s3(E) shall be placed as shown in elevation.
  - Architectural bumpouts on columns and pier seat not shown for clarity in plan view.
  - Test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.
  - Complete removal of the existing footings is required. See sheet 2 of 26.
  - Electrical conduit to be cast in column & crash wall. Locate inside of s2(E) bars near the center of the column. See electrical plans for conduit location and details.

**PILE DATA**  
 Type: HP 12x63 with pile shoes  
 Nominal Required Bearing: 497 kips  
 Allowable Resistance Available: 166 kips  
 Est. Length: 20' (embed into rock as directed by the Engineer)  
 No. Production Piles: 11  
 No. Test Piles: 1



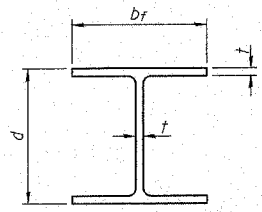
**PIER 2 PLAN AND DETAILS**  
**ALTON PEDESTRIAN WALKWAY OVER UNION PACIFIC RAILROAD, NORFOLK SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

**REVISIONS**

No.	Description

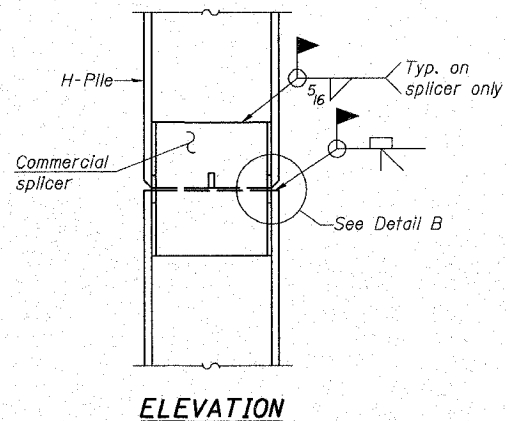
Eastport Business Center 1  
 100 Lantz Court, Suite 1  
 Calumet, Illinois 62724  
 Phone: 618 345-2200  
 Fax: 618 345-2200  
 www.eastportbusinesscenter.com  
**GATES ASSOCIATES**  
 Consulting Engineers

**ALTON, ILLINOIS**  
**PEDESTRIAN OVERPASS AT LANGDON ST.**

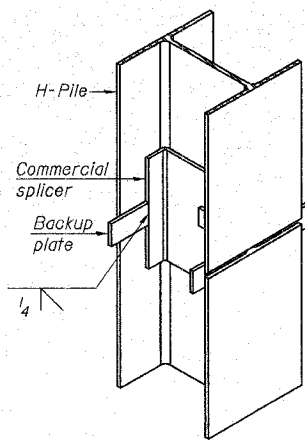


**STEEL PILE TABLE**

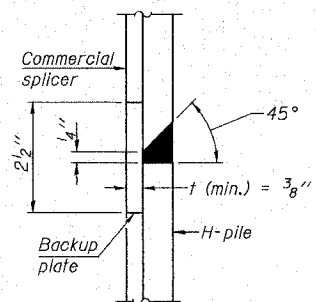
Designation	Depth <i>d</i>	Flange width <i>b<sub>f</sub></i>	Web and Flange thickness <i>t</i>	Encasement diameter <i>A</i>
HP 14x117	14 1/4"	14 7/8"	1 5/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 6/8"	12 1/4"	5/8"	24"
x63	12"	12 6/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 6/8"	1/16"	24"
HP 8x36	8"	8 6/8"	7/16"	18"



**ELEVATION**

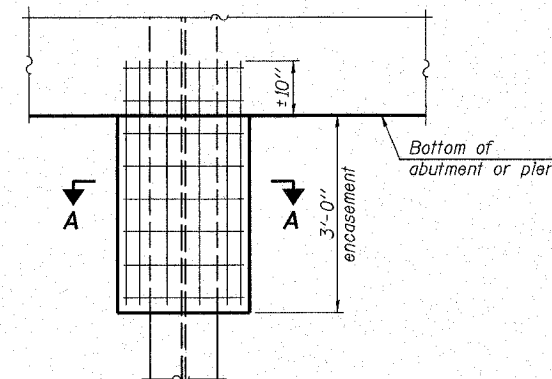


**ISOMETRIC VIEW**



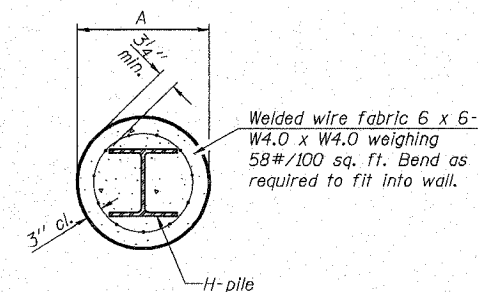
**DETAIL "B"**

**WELDED COMMERCIAL SPLICE**



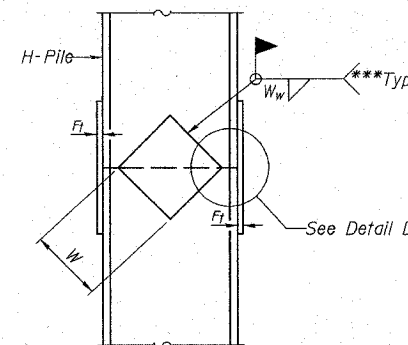
**ELEVATION**

**PILE ENCASEMENT**

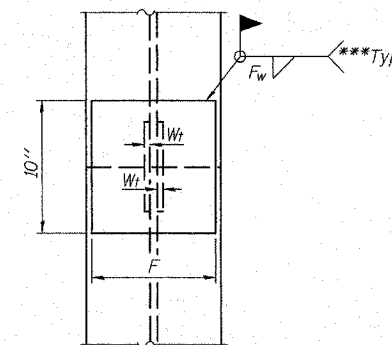


**SECTION A-A**

Note:  
Forms for encasement may be omitted when soil conditions permit.

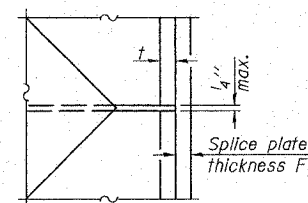


**ELEVATION**



**END VIEW**

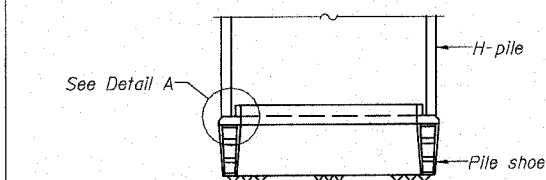
Designation	F	F <sub>t</sub>	F <sub>w</sub>	W	W <sub>t</sub>	W <sub>w</sub>
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 8/8"	1 1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 8/8"	1 1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5 8/8"	1 1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 8/8"	1 1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5 8/8"	1 1/2"
x74	10"	7/8"	1/16"	6 1/2"	5 8/8"	1 1/2"
x63	10"	5/8"	1/2"	6 1/2"	1 1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1 1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1 1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1 1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1 1/2"	3/8"



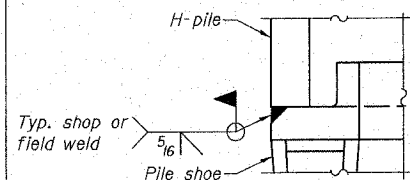
**DETAIL D**

**WELDED PLATE FIELD SPLICE**

Note:  
The steel H-piles shall be according to AASHTO M270 Grade 50.

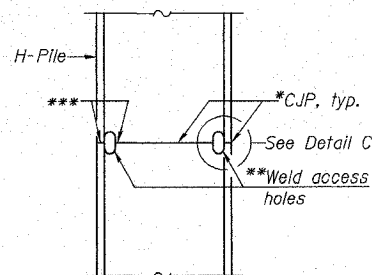


**ELEVATION**



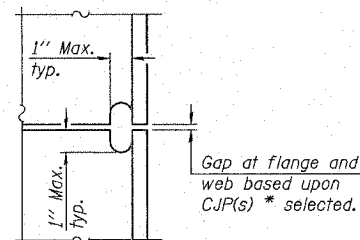
**DETAIL A**

**H-PILE SHOE ATTACHMENT**



**ELEVATION**

**COMPLETE PENETRATION WELD SPLICE**



**DETAIL C**

\*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

\*\*Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

\*\*\*Interrupt welds 1/4" from end of each pile.

**PILE DETAILS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

NO.	DATE	DESCRIPTION

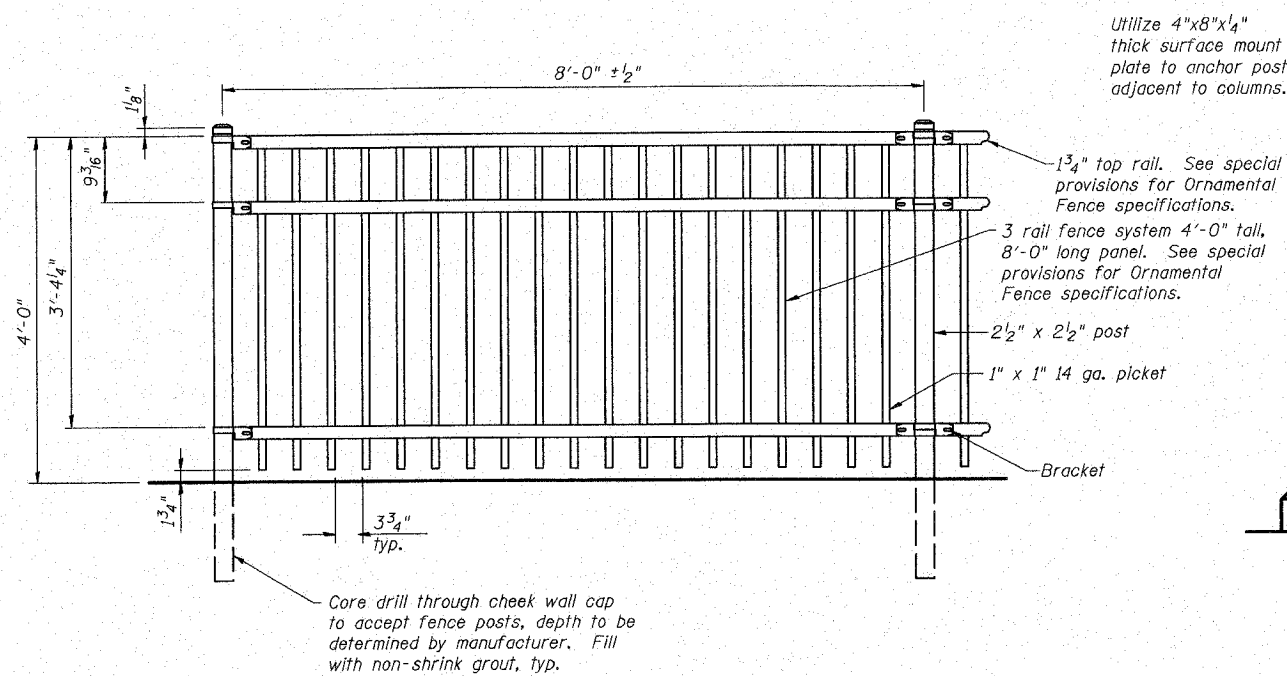
Eastport Business Center 1  
 100 Lerner Court, Suite 1  
 Collinsville, Illinois 62234  
 Phone: 618 345-2500  
 Fax: 618 345-7233  
 e-mail: info@altonassociates.com  
 www: www.altonassociates.com

**GATES ASSOCIATES**  
 Consulting Engineers

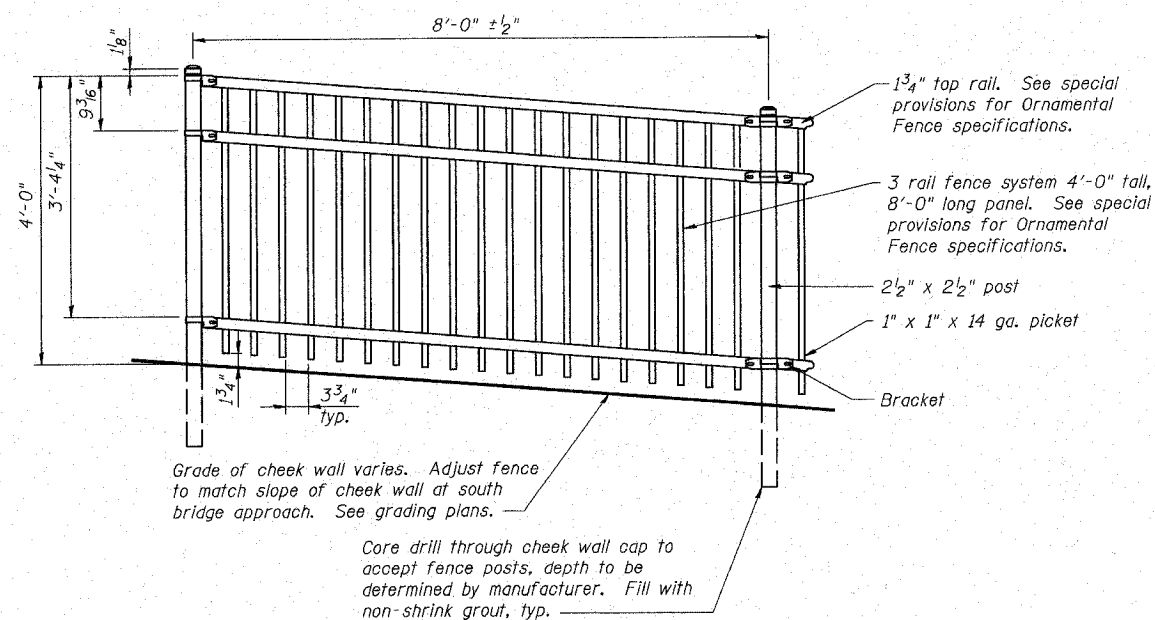
ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.

DWG. NO.	S21
REF. BK.	PG.
JOB NO.	26053
DSN. BY:	JCS
DWN. BY:	JCS
CHK. BY:	DCL
DATE:	3/28/08
SCALE:	
SHEET	41 OF 54

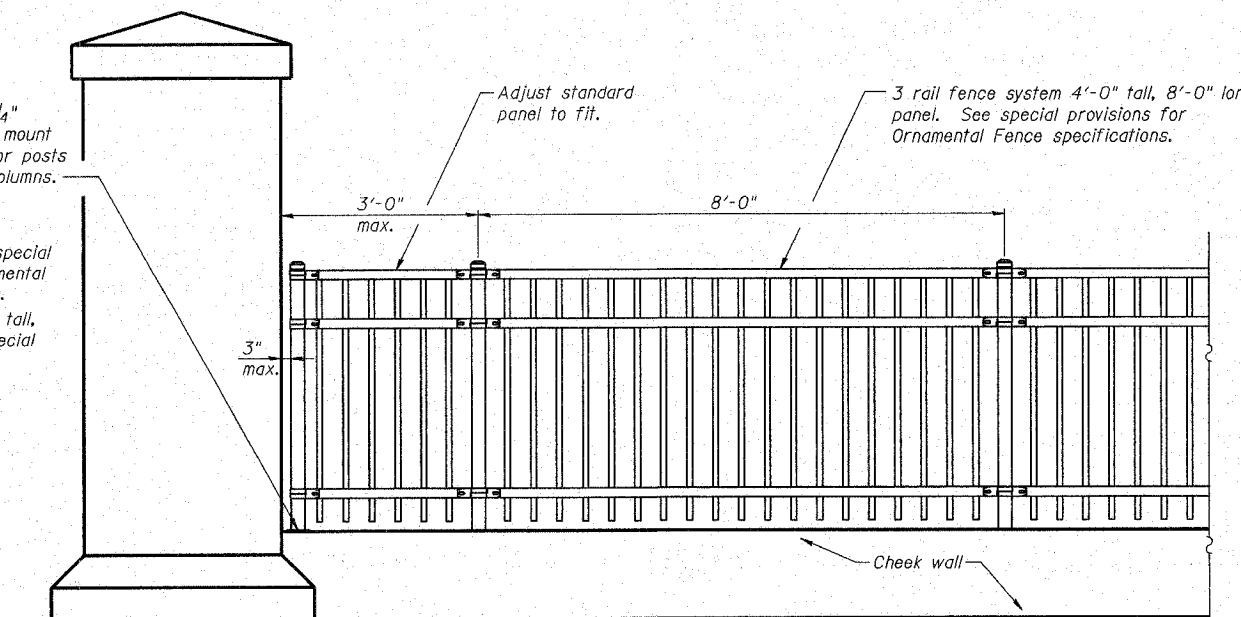
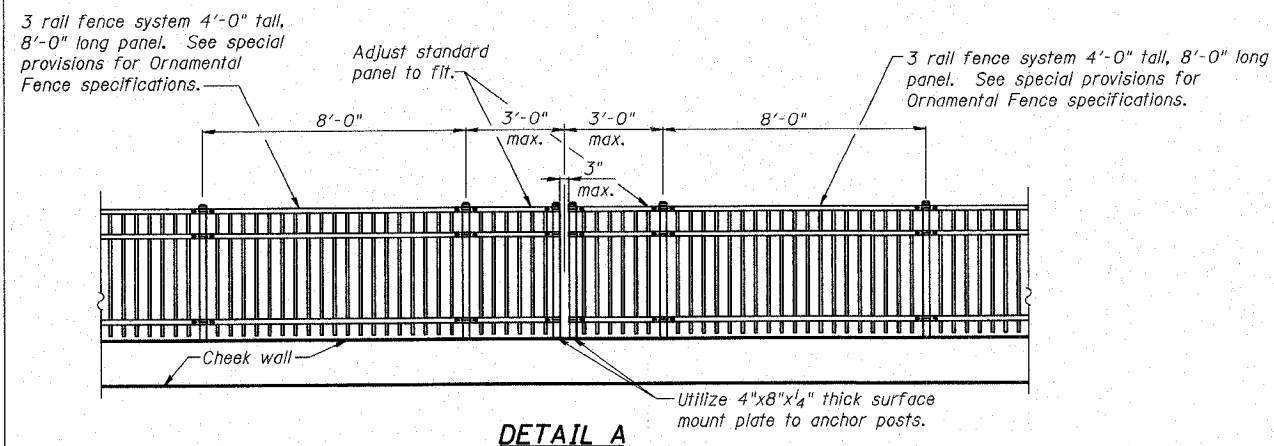




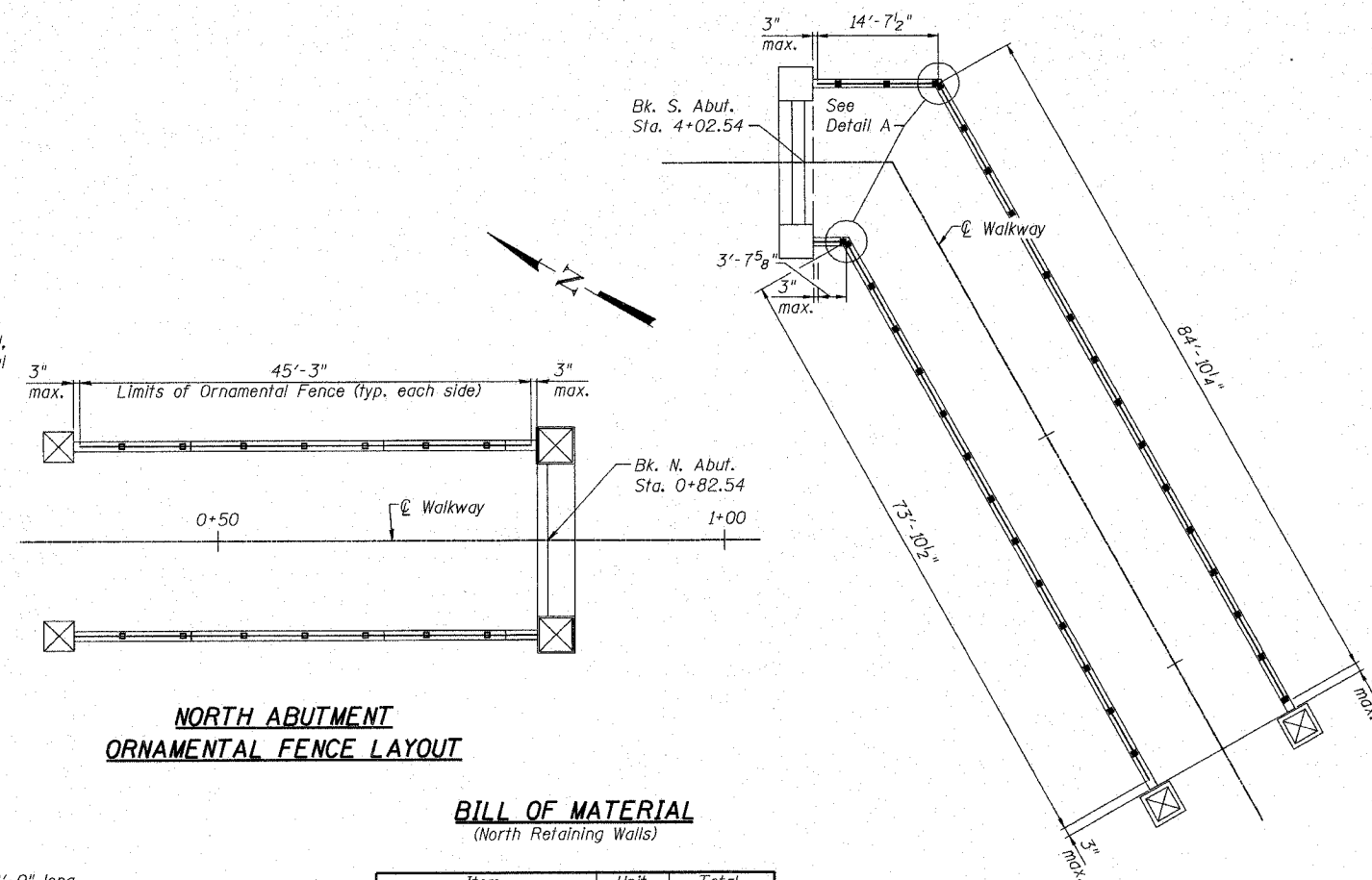
**TYPICAL ORNAMENTAL FENCE PANEL AT NORTH APPROACH**



**TYPICAL ORNAMENTAL FENCE PANEL AT SOUTH APPROACH**



**TYPICAL ORNAMENTAL FENCE AT ARCHITECTURAL COLUMNS**



**NORTH ABUTMENT ORNAMENTAL FENCE LAYOUT**

**BILL OF MATERIAL (North Retaining Walls)**

Item	Unit	Total
Ornamental Fence	Foot	90.5

**BILL OF MATERIAL (South Retaining Walls)**

Item	Unit	Total
Ornamental Fence	Foot	177.0

**SOUTH ABUTMENT ORNAMENTAL FENCE LAYOUT**

**ORNAMENTAL FENCE DETAILS  
ALTON PEDESTRIAN WALKWAY OVER  
UNION PACIFIC RAILROAD, NORFOLK  
SOUTHERN RAILROAD AND US ROUTE 67  
SECTION 06-00224-00-BR  
MADISON COUNTY  
STA. 2+42.54  
STRUCTURE NO. 060-6111**

REVISIONS

NO.	DESCRIPTION

Equipart Business Center 1  
100 Lander Court, Suite 1  
Cullman, AL 35956-1224  
Phone: 810-345-2220  
Fax: 810-345-2220  
www.commissionaires.com

**COMMISSIONAIRES**  
Consulting Engineers

**ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.**

DWG. NO. S22  
6111-22-ORNMENTFNCVSH1.DGN  
REF. BK. PG.  
JOB NO.  
DSN. BY: JGS  
DWN. BY: JGS  
CHK. BY: DGL  
DATE: 3/28/08  
SCALE:  
SHEET 42 OF 54



### SOIL BORING LOG

Page 1 of 1

Date 09/25/07

ROUTE FAP 304 US Route 67 DESCRIPTION Alton Pedestrian Overpass LOGGED BY SCI

SECTION 06-00224-00-BR LOCATION Alton, SEC. 14, TWP. 5N, RNG. 10W

COUNTY Madison DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO.	DELT				U	M	Surface Water Elev.	ft
Station	P				CS	O	Stream Bed Elev.	ft
BORING NO.	T				W	S	Groundwater Elev.:	
Station	H				S	Qu	First Encounter	ft
Offset	S						Upon Completion	ft
Ground Surface Elev.							After	Hrs.
		(ft)	(6")	(tsf)	(%)			
FILL: Brown, low plastic silty clay (A-6)								
	5							
	4	9.0						
	4	P						
Trace rock and/or concrete fragments								
FILL: Broken concrete and limestone fragments		50/2"						
Limestone and/or concrete								
Auger refusal at 6 feet on limestone (possible boulder or possible rock/concrete wall). Boring offset and drilled at B-1A.								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)



### SOIL BORING LOG

Page 1 of 1

Date 09/25/07

ROUTE FAP 304 US Route 67 DESCRIPTION Alton Pedestrian Overpass LOGGED BY SCI

SECTION 06-00224-00-BR LOCATION Alton, SEC. 14, TWP. 5N, RNG. 10W

COUNTY Madison DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO.	DELT				U	M	Surface Water Elev.	ft
Station	P				CS	O	Stream Bed Elev.	ft
BORING NO.	T				W	S	Groundwater Elev.:	
Station	H				S	Qu	First Encounter	ft
Offset	S						Upon Completion	ft
Ground Surface Elev.							After	Hrs.
		(ft)	(6")	(tsf)	(%)			
FILL: Brown, low plastic silty clay (A-6)								
FILL: Cinders		50/3"		12				
Trace brick fragments								
FILL: Concrete and brick, some sand								
FILL: Brown, low plastic sandy clay (A-6), trace brick, concrete, limestone								
SILTY CLAY: Brown, low plastic (A-7)								
	4							
	4	1.5		23				
	5	S/15						
CLAYEY SILT: Brown, low plastic (A-4)								
	3							
	4	0.4		33				
	5	B						
Boring terminated at 15 feet.								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

REVISIONS

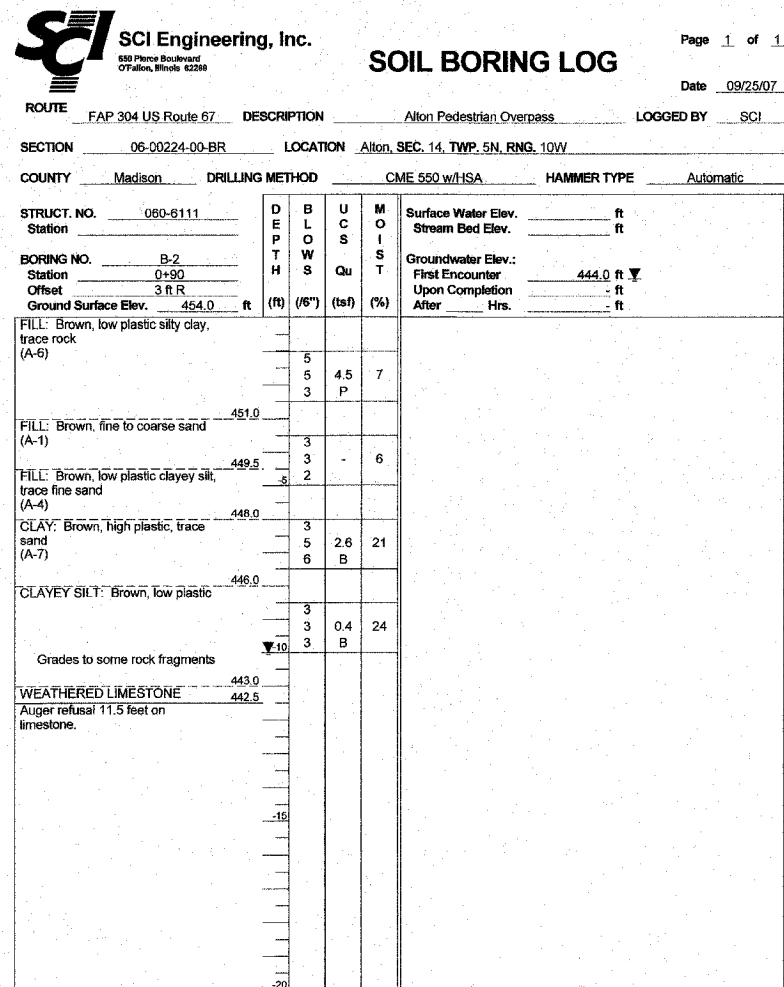
Capitol Business Center I  
 100 Luther Court, Suite 1  
 Collinsville, Illinois 62234  
 Phone: 618 246-2300  
 Fax: 618 246-2300  
 e-mail: scie@scieassociates.com  
 web-site: www.scieassociates.com

GATES ASSOCIATES  
Consulting Engineers

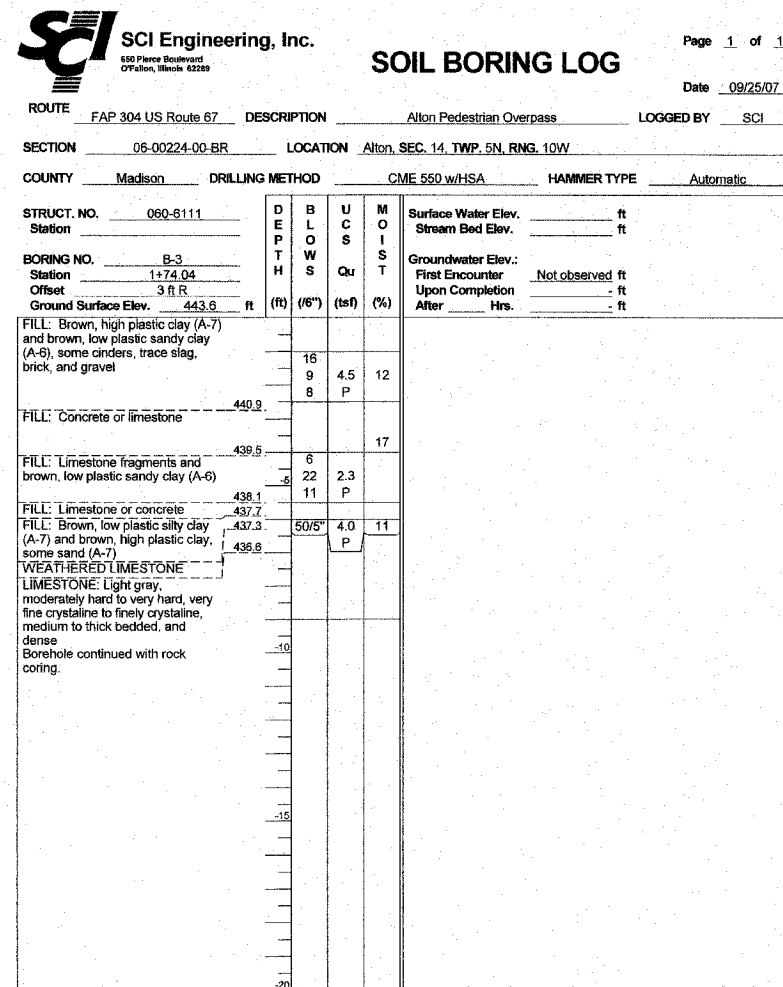
ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.

**BORING LOGS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

DWG. NO.	S23
6111-23-BORESH1.DGN	
REF. BK.	PG.
JOB NO.	
DSN. BY:	NEL
DWN. BY:	NEL
CHK. BY:	JGS
DATE:	1/9/07
SCALE:	
SHEET	43 OF 54



The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)



The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

REVISIONS

Esport Business Center I  
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 Phone: 618 345-2500  
 Fax: 618 345-7233  
 e-mail: info@scie.com  
 www.scie.com



ALTON, ILLINOIS  
 PEDESTRIAN OVERPASS AT LANGDON ST.

**BORING LOGS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**

DWG. NO.	S24
6111-24-BORESHT2.DGN	
REF. BK.	PG.
JOB NO.	26053
DSN. BY:	NEL
DWN. BY:	NEL
CHK. BY:	JGS
DATE:	1/9/07
SCALE:	
SHEET	44 OF 54

**SCI Engineering, Inc.** **ROCK CORE LOG** Page 1 of 1  
 699 Parma Boulevard  
 O'Fallon, Illinois 62268 Date 09/25/07

ROUTE	DESCRIPTION	LOGGED BY	DEPTH (ft)	RECOVERY (%)	RECOVERED (%)	CORE TIME (min/ft)	STRENGTH (tsf)
FAP 304 US Route 67	Alton Pedestrian Overpass	SCI					
SECTION 06-00224-00-BR	LOCATION Alton, SEC. 14, TWP. 5N, RNG. 10W						
COUNTY Madison	CORING METHOD Rotary, surface set diamond bit						
STRUCT. NO. 060-6111	CORING BARREL TYPE & SIZE NX conv dbl bbl split inner						
Station	Core Diameter 1.9 in						
BORING NO. B-3	Top of Rock Elev. 436.6 ft						
Station 1+74.04	Begin Core Elev. 434.6 ft						
Offset 3 ft R							
Ground Surface Elev. 443.6 ft							
LIMESTONE: Light gray, moderately hard to very hard, very fine crystalline to finely crystalline, medium to thick bedded, and dense (continued)				100	90		36.0
Auger refusal at 9 feet on limestone.			424.6				

Color pictures of the cores  Yes  No  
 Cores will be stored for examination until \_\_\_\_\_  
 The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
 BBS, form 138 (Rev. 8-99)

**SCI Engineering, Inc.** **SOIL BORING LOG** Page 1 of 1  
 699 Parma Boulevard  
 O'Fallon, Illinois 62268 Date 09/24/07

ROUTE	DESCRIPTION	LOGGED BY	DEPTH (ft)	BL (ft)	LC (ft)	UC (ft)	MOIST (%)	SWR (ft)	STB (ft)	GW (ft)	HT (ft)	BS (ft)	QU (tsf)	MT (%)
FAP 304 US Route 67	Alton Pedestrian Overpass	SCI												
SECTION 06-00224-00-BR	LOCATION Alton, SEC. 14, TWP. 5N, RNG. 10W													
COUNTY Madison	DRILLING METHOD CME 550 w/HSA													
STRUCT. NO. 060-6111	Surface Water Elev. _____ ft													
Station	Stream Bed Elev. _____ ft													
BORING NO. B-4	Groundwater Elev.: _____ ft													
Station 4+12.92	First Encounter 412.0 ft													
Offset 0 ft Centerline	Upon Completion _____ ft													
Ground Surface Elev. 435.0 ft	After _____ Hrs.													
FILL: Gray, low plastic sandy (cinders) clay, trace gravel (A-6)	414.5													
	11													
	9	4.5	12											
	9	P												
FILL: Concrete	432.0													
FILL: Brown, low plastic sandy (cinders) clay, trace slag and gravel (A-6)	431.5													
	8													
	35	2.5	15											
	430.5	P												
FILL: Limestone	430.0													
FILL: Brown, low plastic sandy (cinders) clay, trace brick, gravel (A-6)	429.5													
	2													
	2	2.5	12											
	3	P												
FILL: Concrete or limestone	427.0													
FILL: Brown, low plastic sandy clay (A-6)	426.2													
	2	1.3	17											
	3	P												
	10													
Grades to trace gravel, concrete														
	4													
	2	0.2	24											
	2	B												
FILL: Brown and gray, high plastic clay (A-7)	422.0													
	8													
	5	2.5	22											
	6	S/15												
	15													
GRAVEL & CLAYEY SAND: Brown, fine to coarse (A-1)	401.5													
	24													
	33	-	6											
	35	50/4"												
Becomes brown and greenish gray and grades to trace concrete fragments	399.0													
	4													
	7	3.1	21											
	7	B												
FILL: Brown, low plastic clayey silt (A-4)	418.5													
	3													
	4	2.3	24											
	6	S/15												
	20													
Auger refusal on limestone at 36 feet.														

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Peritrometer)  
 AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

**BORING LOGS**  
**ALTON PEDESTRIAN WALKWAY OVER**  
**UNION PACIFIC RAILROAD, NORFOLK**  
**SOUTHERN RAILROAD AND US ROUTE 67**  
**SECTION 06-00224-00-BR**  
**MADISON COUNTY**  
**STA. 2+42.54**  
**STRUCTURE NO. 060-6111**


Eastport Business Center /  
 100 Lantz Court, Suite 1  
 Cambridge, MA 02142  
 Phone: 617-552-2200  
 Fax: 617-552-2201  
 www.vtcinc.com

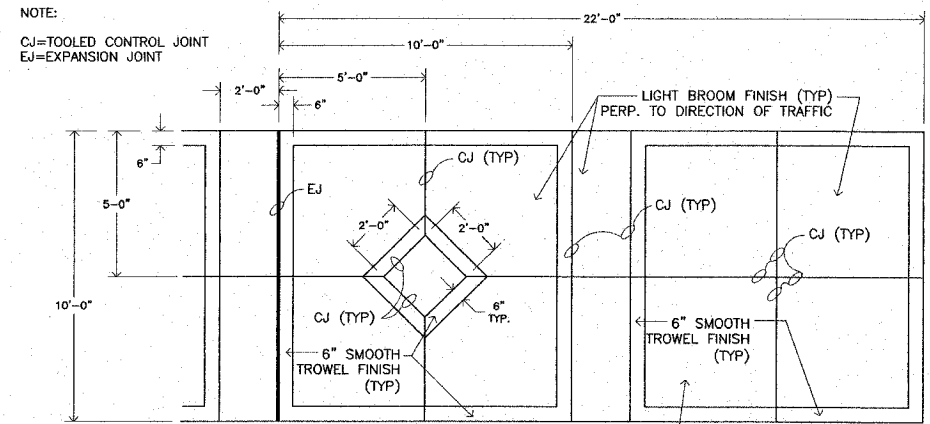


**ALTON, ILLINOIS**  
**PEDESTRIAN OVERPASS AT LANGDON ST.**

DWG. NO.	S25
REF. BK.	6111-25-BORESHTJ.DGN
JOB NO.	28053
DSN. BY:	NEL
DWN. BY:	NEL
CHK. BY:	JGS
DATE:	1/9/07

SCALE:  
 SHEET 45 OF 54



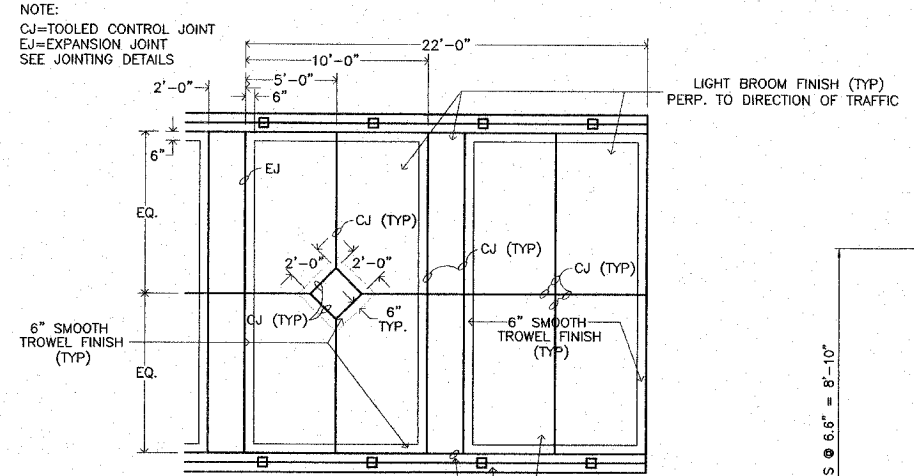


NOTE:  
CJ=TOOLED CONTROL JOINT  
EJ=EXPANSION JOINT

NOTES:  
1. CONTROL & EXPANSION JOINTS ARE TO BE SPACED ACCORDINGLY WITH THE WIDTH OF THE SIDEWALK. SEE THIS SHEET FOR JOINTING STANDARDS.  
2. EXPANSION JOINTS ARE NOT TO EXCEED 36' SPACINGS

**DETAIL: Typical P.C.C. Walk (10' Width)-Plan**  
Not to Scale

TO BE USED: PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH, SPECIAL

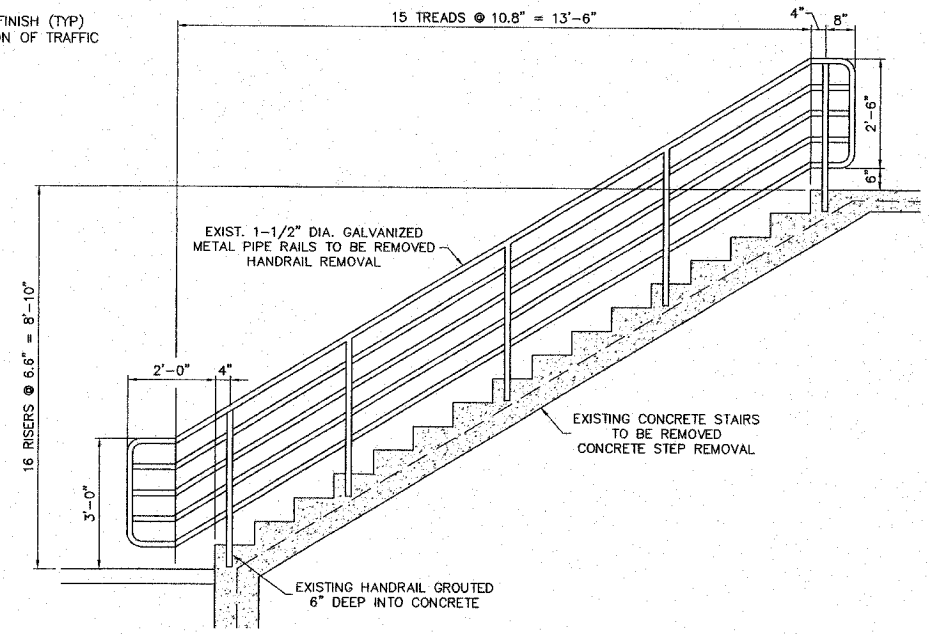


NOTE:  
CJ=TOOLED CONTROL JOINT  
EJ=EXPANSION JOINT  
SEE JOINTING DETAILS

NOTES:  
1. CONTROL & EXPANSION JOINTS ARE TO BE SPACED ACCORDINGLY WITH THE WIDTH OF THE SIDEWALK. SEE JOINTING DETAILS.  
2. EXPANSION JOINTS ARE NOT TO EXCEED 24' SPACINGS AND SHOULD BE LOCATED ON 2'-0" BAND.

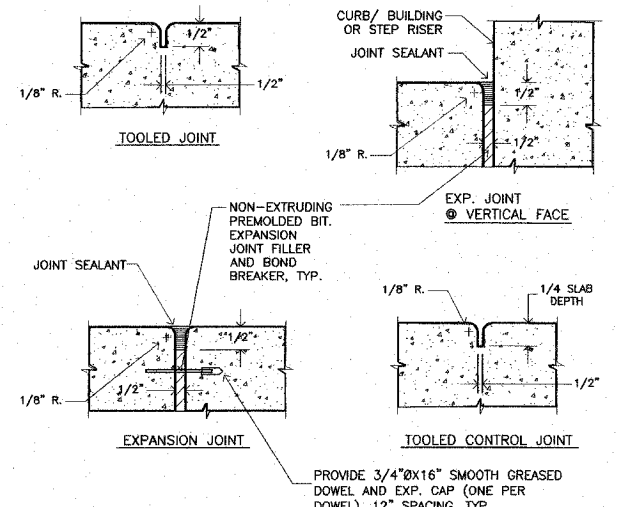
**DETAIL: Typical P.C.C. Walk (Bridge Approaches)-Plan**  
Not to Scale

TO BE USED: PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH, SPECIAL

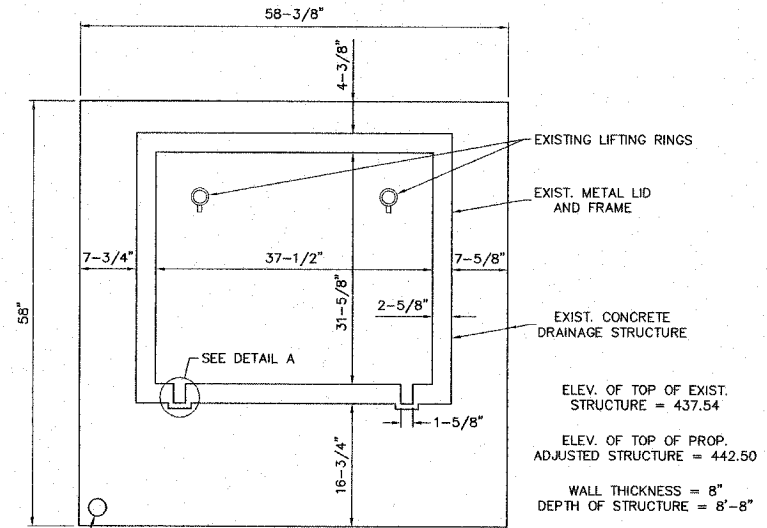


**DETAIL: Concrete Step Removal  
Handrail Removal**  
Scale: 1/2" = 1'-0"

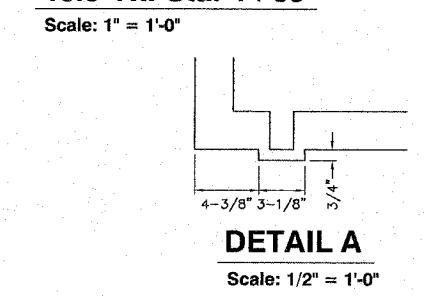
NOTES:  
1. THE WIDTH OF THE EXIST. CONC. STAIRS IS 8 FT.  
2. THE EXIST. PIPE HANDRAIL 26' RT. STA. 0+79.50 TO STA. 0+94.50 CONSISTS OF TWO RAILS WITH POSTS EMBEDDED IN THE EXIST. CONC. STAIRS. THESE SHALL BE REMOVED AND PAID FOR AS HANDRAIL REMOVAL.  
3. THE EXIST. PIPE HANDRAIL 27' RT. STA. 0+79.50 TO STA. 0+94.50 SHALL REMAIN IN PLACE.  
4. THE BOLTED CONNECTION BETWEEN THE HANDRAIL AT 26' RT. STA. 0+79.50 AND 27' RT. STA. 0+79.50 SHALL BE REMOVED. THE CONNECTION CONSISTS OF 2 RAILS. THIS WORK SHALL BE PAID FOR AS HANDRAIL REMOVAL.



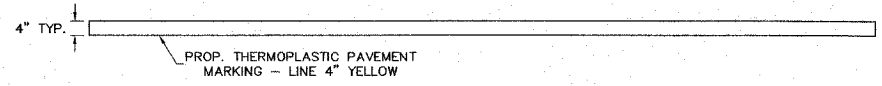
**DETAIL: P.C.C. Jointing**  
Not to Scale



**DETAIL: Structures To Be Adjusted  
46.5' Rt. Sta. 4+69**  
Scale: 1" = 1'-0"



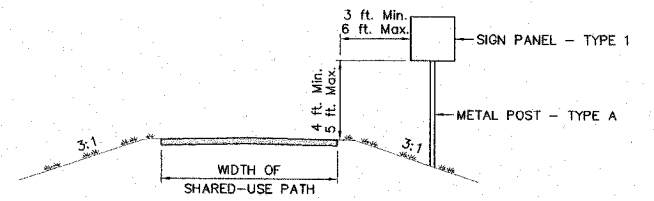
NOTES:  
1. THE CONTRACTOR SHALL REMOVE THE FRAME AND LID AND USE IN ADJUSTED STRUCTURE.  
2. THE CONTRACTOR SHALL REMOVE THE TOP OF THE STRUCTURE IN SUCH A METHOD TO USE THE EXISTING VERTICAL REINFORCEMENT. THE CONTRACTOR SHALL SPlice NEW REINFORCEMENT TO THE EXISTING REINFORCEMENT TO ADJUST THE STRUCTURE TO THE PROPOSED ELEVATION. THE CONTRACTOR SHALL PLACE NEW REINFORCEMENT BARS IN THE TOP OF THE SLAB TO THE SIZE AND SPACING AS THE EXISTING. CLASS SI CONCRETE SHALL BE USED.  
3. THIS WORK SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS TO ADJUST THE STRUCTURE TO THE PROPOSED GRADE.  
4. THIS WORK SHALL BE PAID FOR AS STRUCTURES TO BE ADJUSTED.



**DETAIL: Pavement Marking, Relocated Bike Trail**  
Not to Scale

TO BE USED: STA. 0+30 TO STA. 0+86  
STA. 0+96 TO STA. 1+50

NOTE: DO NOT STRIPE ACROSS CONCRETE SIDEWALK



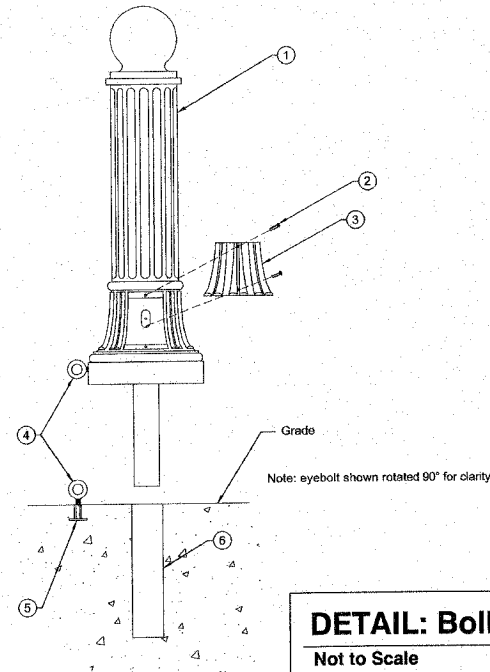
**DETAIL: Sign Placement on Shared-Use Paths  
TO BE USED: Bike Trail Relocation**  
Not to Scale

REVISIONS

**SMS** Sheppard, Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS AND LAND SURVEYORS  
215 North Street, P.O. Box E, Alton, IL 62002, 618/462-0185 E-mail: sms@smsengineers.com  
10 Central Industrial Drive, Granite City, IL 62040, 618/877-5070 E-mail: mgs@smsengineers.com  
DESIGN FIRM # 184-000992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
DETAILS

Item Qty	Catalog# / Part#	Ref#	Description	Mat#
1 1		110409	BCA BC13 REM/LCK (Eyebolt type) WELDMENT	CA
2 2	SC-10210		SCRW 1/4-20X1" BTN HD SOC CAP SS	SS
3 1	DR-09618	105749	Capitol bollard Base door machined	CA
4 2	SC-10548		SCRW 1/2-13x1 1/2" EYE 304 SS	SS
5 1		108902	CONCRETE ANCHOR 1/2 - 13 x 1-3/4	HDGS
6 1	PI-10077-15		PIPE STL 3" SCH 40 x 15' Cut Length	STL

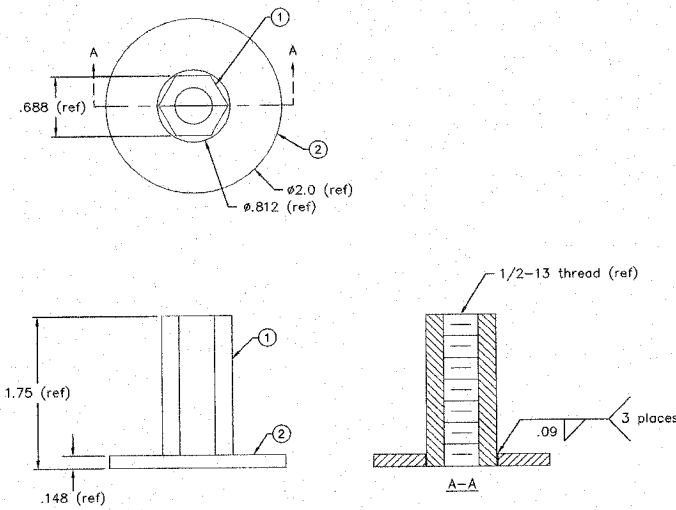


**DETAIL: Bollard - Non-Lighted**

Not to Scale

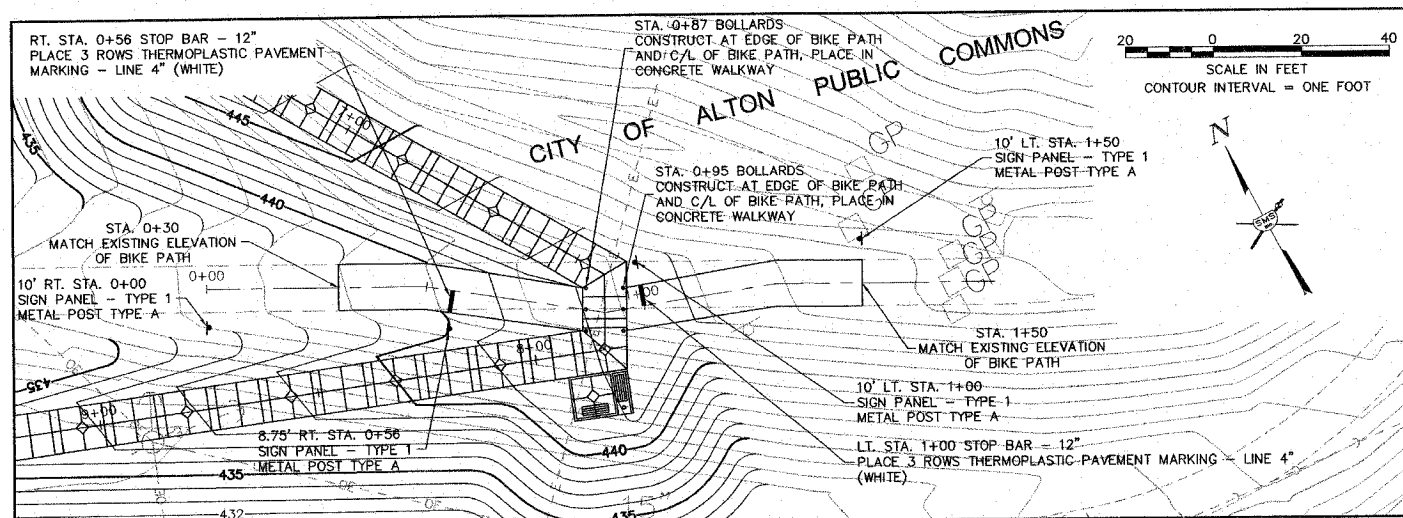
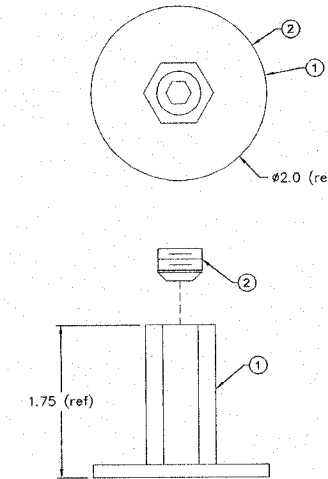
TO BE USED: STA. 0+16.6  
STA. 0+30.5  
STA. 4+98  
STA. 0+87 (3 EACH)  
STA. 0+95 (3 EACH)

Item Qty	Catalog# / Part#	Ref#	Part # / Description	Mat#
1 1	NU-10036	-	Nut, coupling, 1/2-13 x 1.75	HDGS
2 1	WA-10019	-	Washer, 3/4 for anchor bolt	HDGS

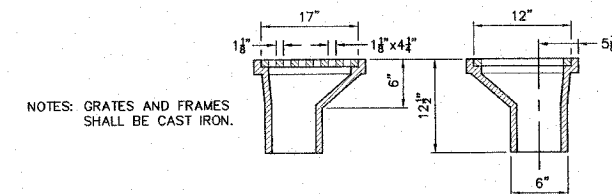
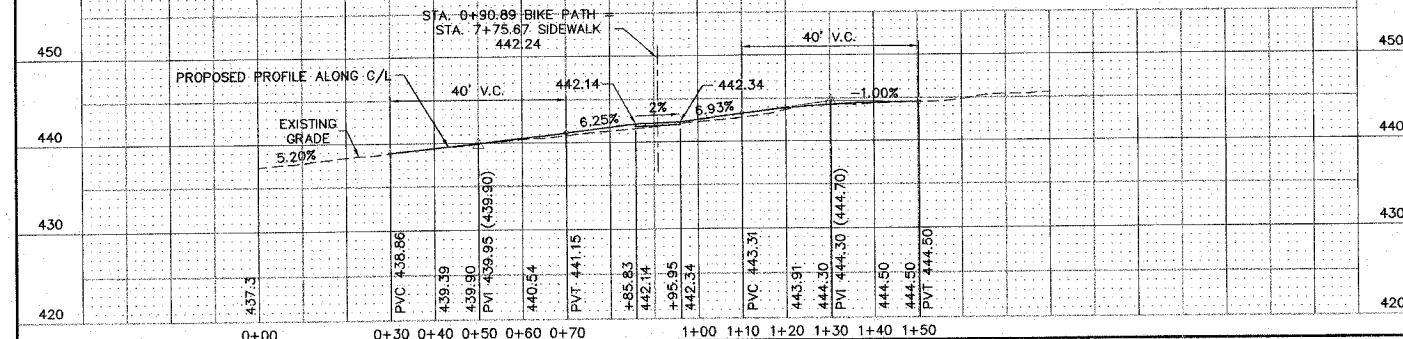


MI-10120

Item Qty	Catalog# / Part#	Ref#	Part # / Description	Mat#
1 1	MI-10120	108901	Concrete anchor weldment, 1/2-13 x 1.75	HDGS
2 1	SC-10088	-	Screw 1/2-13 x .375 socket set screw	SS



**PROFILE ALONG RELOCATED BIKE PATH**



**DETAIL: GRATED INLET SPECIAL**

Not to Scale

REVISIONS

**SMS ENGINEERS**  
Sheppard, Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS AND LAND SURVEYORS  
218 North State, P.O. Box E, Alton, IL 62002, 618462-3765, E-mail: sms@smsengineers.com  
40 Central Street, Cambridge, IL 62840, 618377-5700, E-mail: msj@smsengineers.com  
DESIGN FIRM # 184-000992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
DETAILS

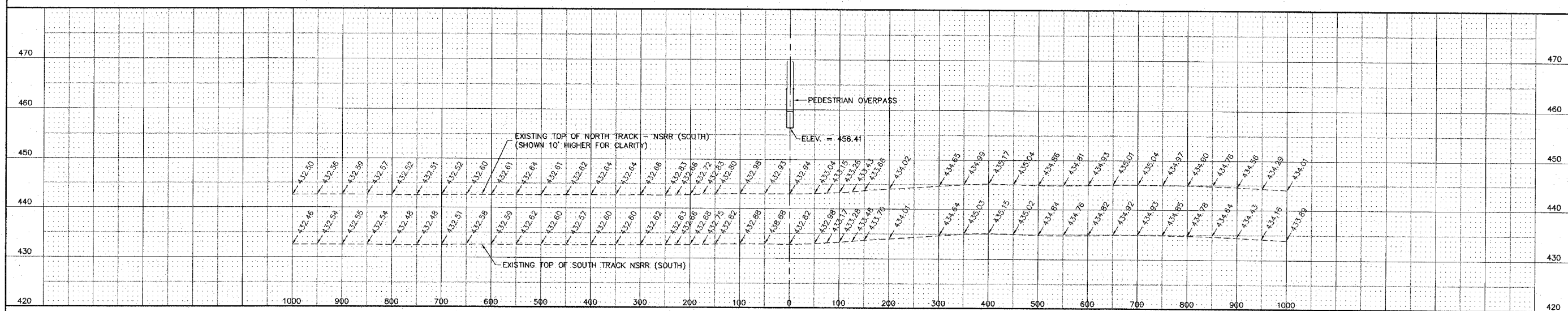
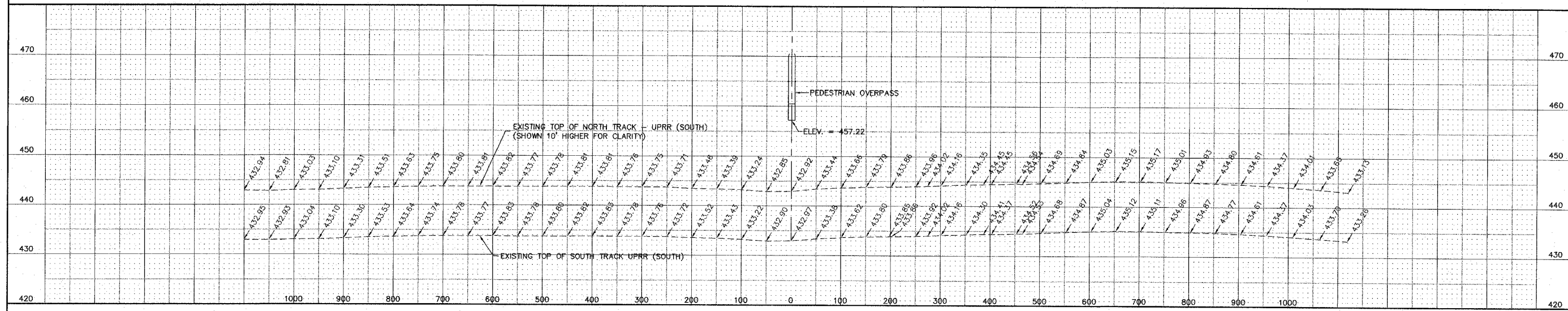
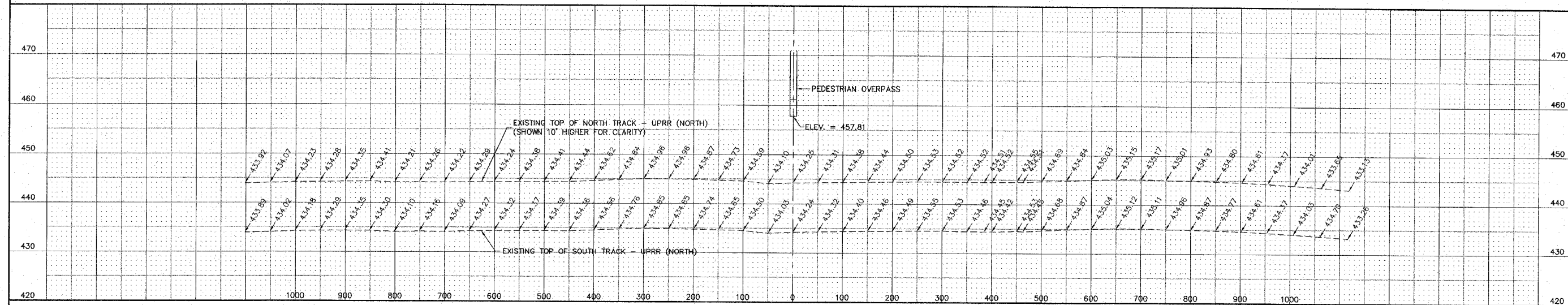
DWG. NO. C-15
DETAILS.DWG
REF. BK. 5030 PG. 1
JOB NO. 406924.1
DSN. BY: CLS
DWN. BY: CAD
CHK. BY: CLS
DATE: MARCH 31, 2008
SCALE: AS SHOWN
SHEET 48 OF 54

REVISIONS

**SMS ENGINEERS**  
Sheppard, Morgan & Schwaab, Inc.  
CONSULTING ENGINEERS AND LAND SURVEYORS  
213 Maple Street, P.O. Box E, Alton, IL 62002 618/662-0785 Email: sms@smsengineers.com  
10 Central Expressway, Suite 200, Alton, IL 62002 618/667-4300 Email: mms@smsengineers.com  
DESIGN FIRM # 784-006992

ALTON, ILLINOIS  
PEDESTRIAN OVERPASS AT LANGDON ST.  
RAILROAD TRACK PROFILES

DWG. NO. C-16  
RAILROAD PROFILES.DWG  
REF. BK. 5030 PG. 1  
JOB NO. 406924.1  
DSN. BY: LA  
DWN. BY: CAD  
CHK. BY: LA  
DATE: MARCH 31, 2008  
SCALE: 1" = 100' HORZ.  
1" = 10' VERT.  
SHEET 49 OF 54



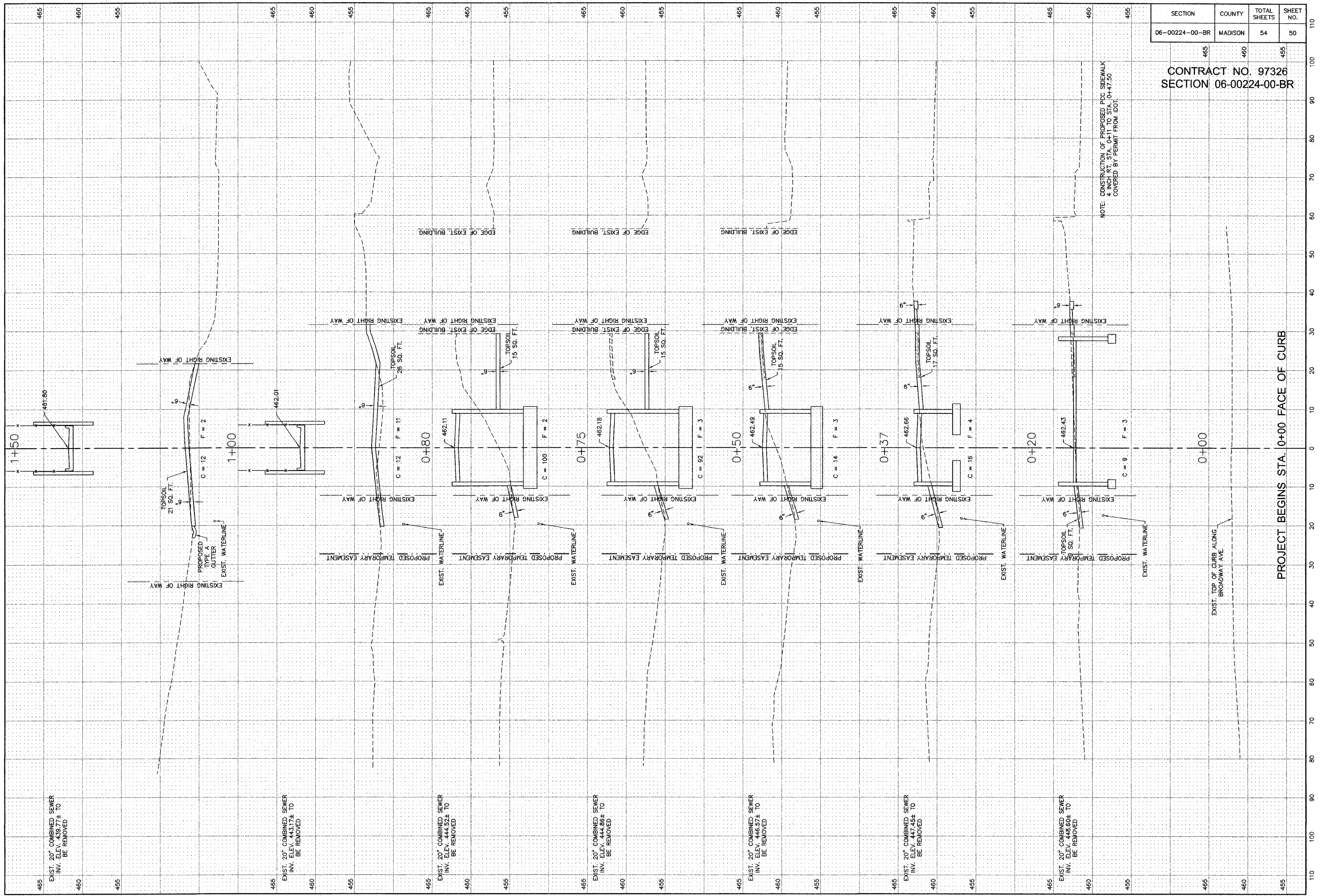
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\\pwr-prod\pawlaton\40824\1\dwg\pawlaton\_xcads.dwg, 4/2/2008 1:40:00 PM, 1:10

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00224-00-BR	MADISON	54	50

CONTRACT NO. 97326  
SECTION 06-00224-00-BR



NOTE: CONSTRUCTION OF PROPOSED PCC SIDEWALK  
4 INCH RT. STA. 0+11 TO STA. 0+47.50  
COVERED BY PERMIT FROM IDOT.

PROJECT BEGINS STA. 0+00 FACE OF CURB

EXIST. TOP OF CURB ALONG  
BROADWAY AVE.

EXIST. 20" COMBINED SEWER  
INV. ELEV. 439.77± TO  
BE REMOVED

EXIST. 20" COMBINED SEWER  
INV. ELEV. 439.77± TO  
BE REMOVED

EXIST. 20" COMBINED SEWER  
INV. ELEV. 439.77± TO  
BE REMOVED

EXIST. 20" COMBINED SEWER  
INV. ELEV. 439.77± TO  
BE REMOVED

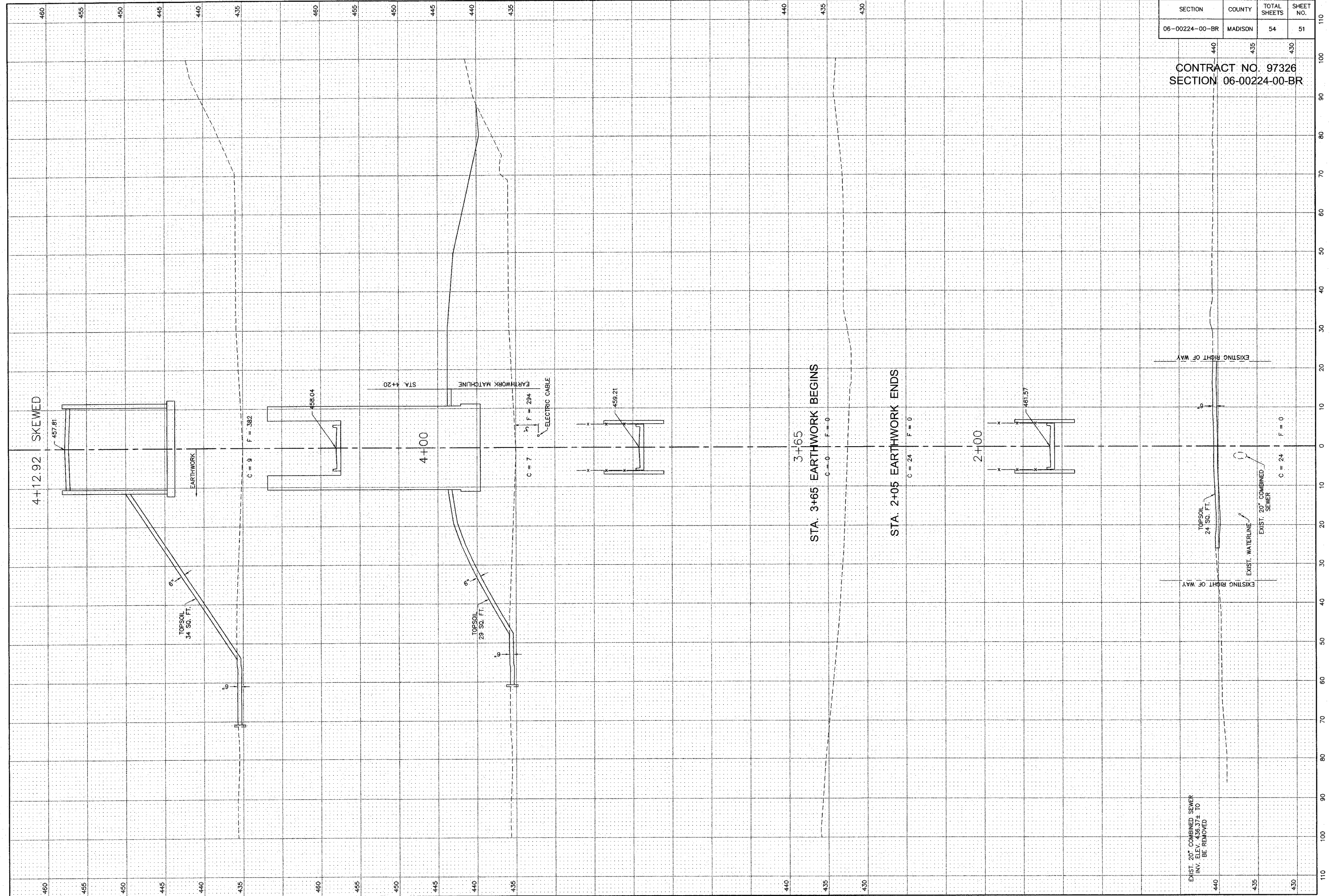
EXIST. 20" COMBINED SEWER  
INV. ELEV. 439.77± TO  
BE REMOVED

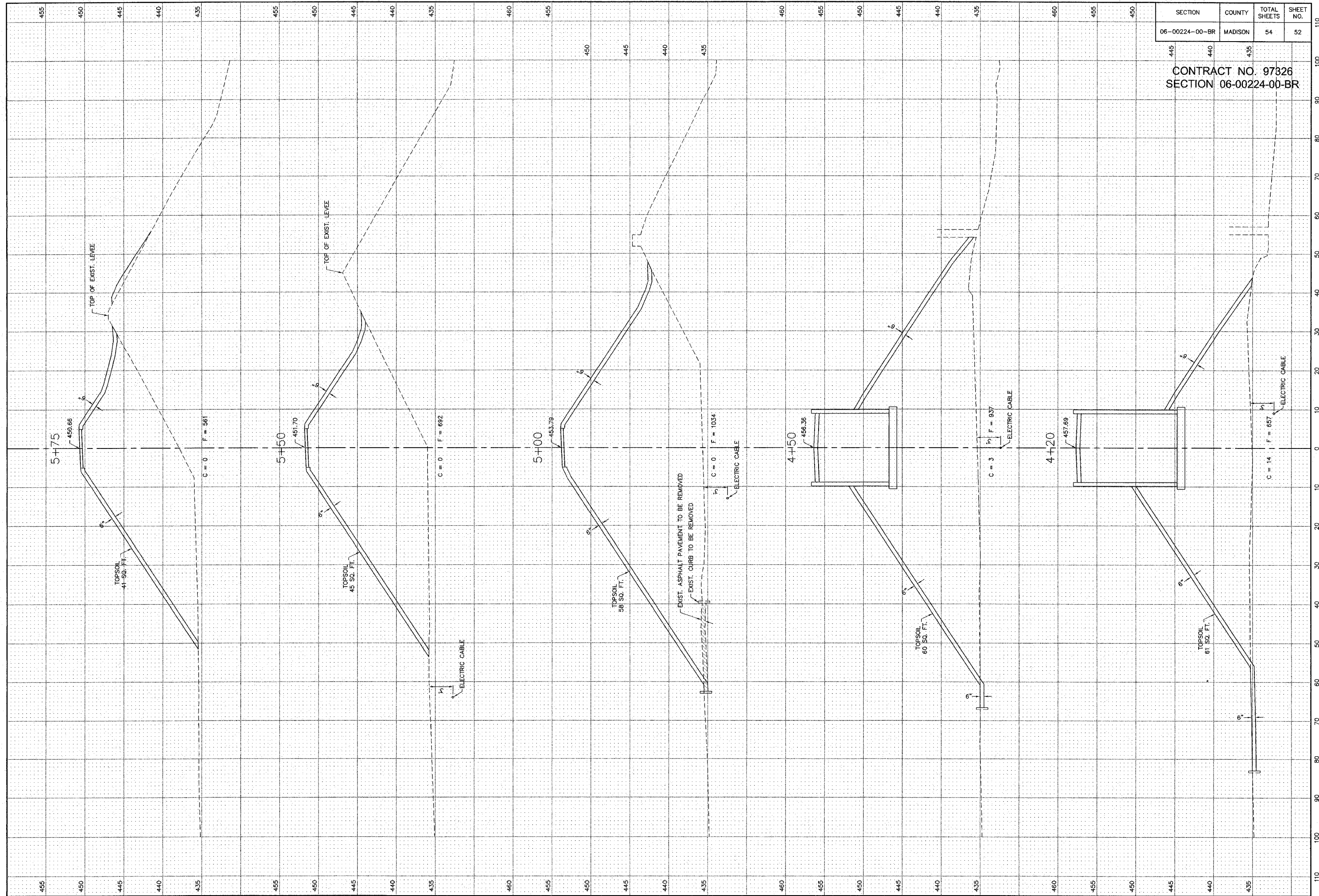
EXIST. 20" COMBINED SEWER  
INV. ELEV. 439.77± TO  
BE REMOVED

EXIST. 20" COMBINED SEWER  
INV. ELEV. 439.77± TO  
BE REMOVED

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00224-00-BR	MADISON	54	51

CONTRACT NO. 97326  
SECTION 06-00224-00-BR



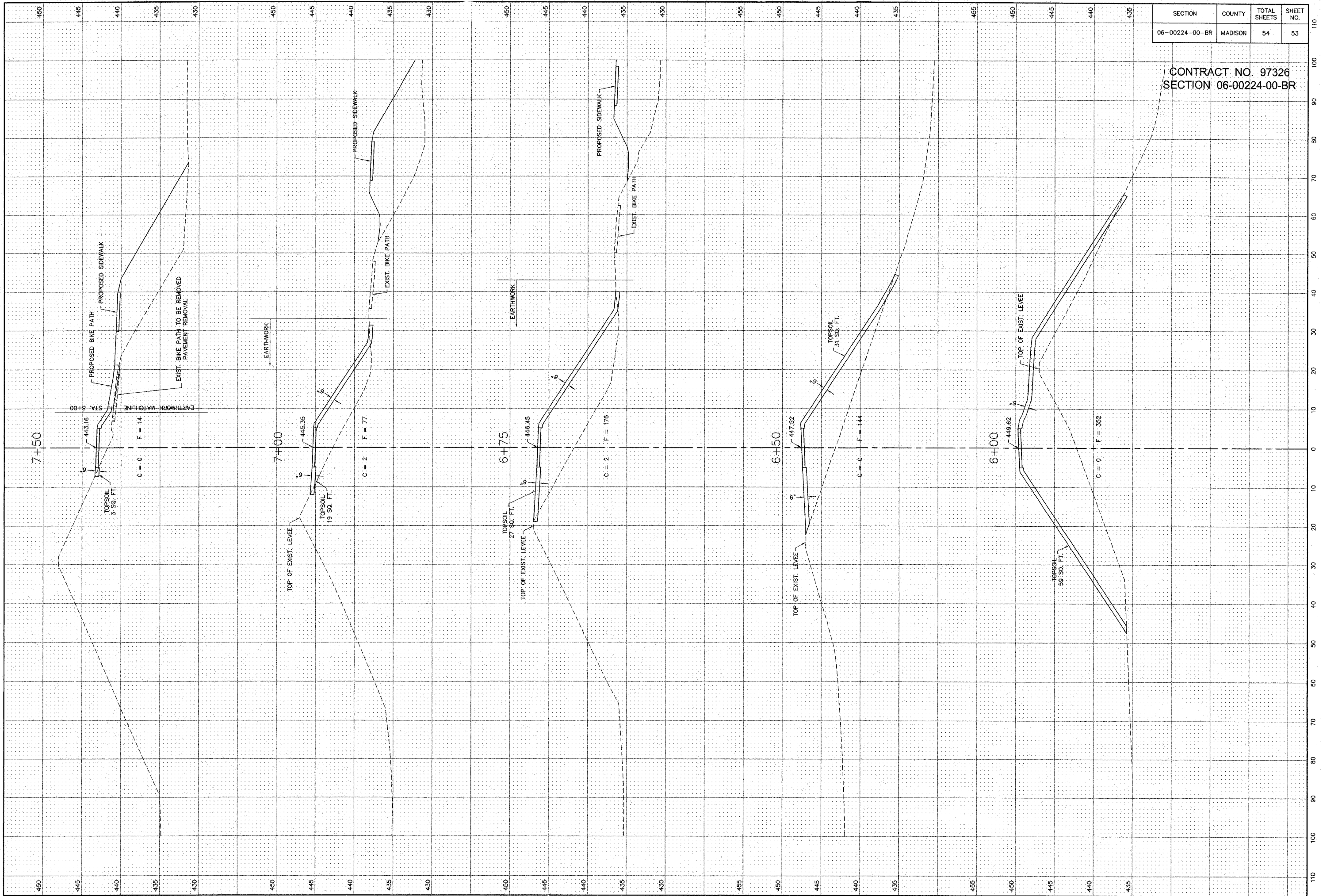


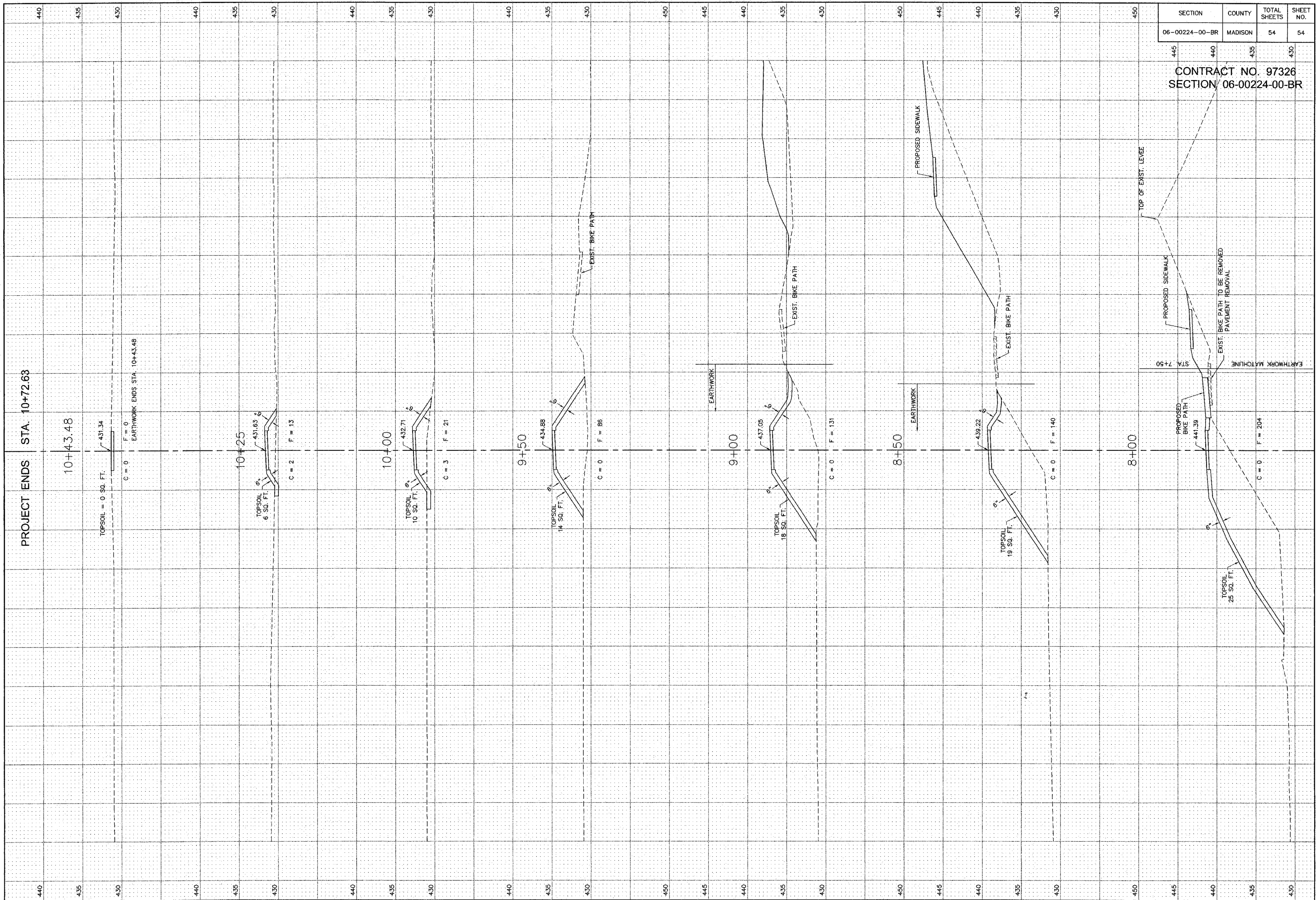
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00224-00-BR	MADISON	54	52

CONTRACT NO. 97326  
SECTION 06-00224-00-BR

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00224-00-BR	MADISON	54	53

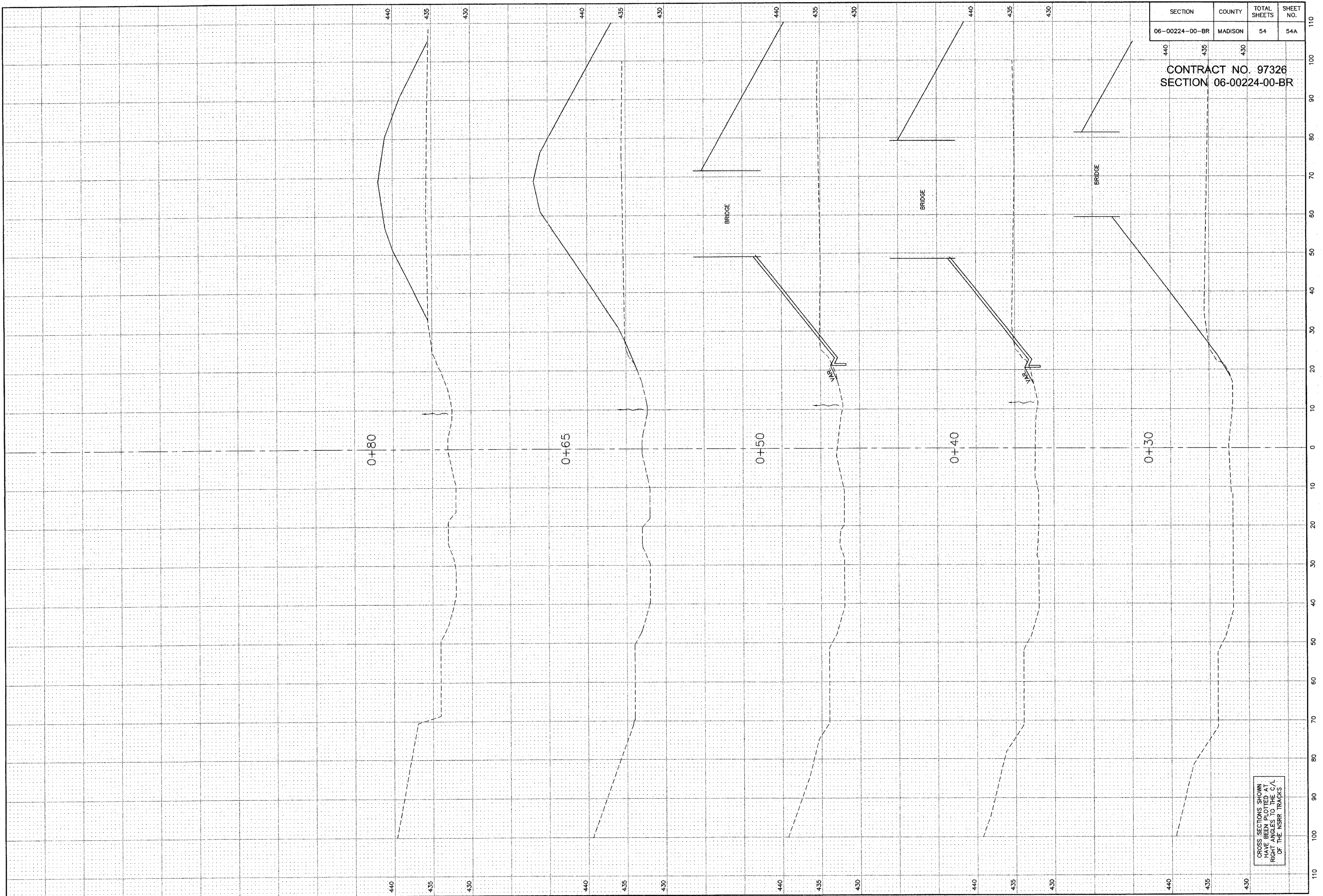
CONTRACT NO. 97326  
SECTION 06-00224-00-BR





SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00224-00-BR	MADISON	54	54A

CONTRACT NO. 97326  
SECTION 06-00224-00-BR



CROSS SECTIONS SHOWN  
HAVE BEEN PLOTTED AT  
RIGHT ANGLES TO THE C/L  
OF THE NSRR TRACKS