

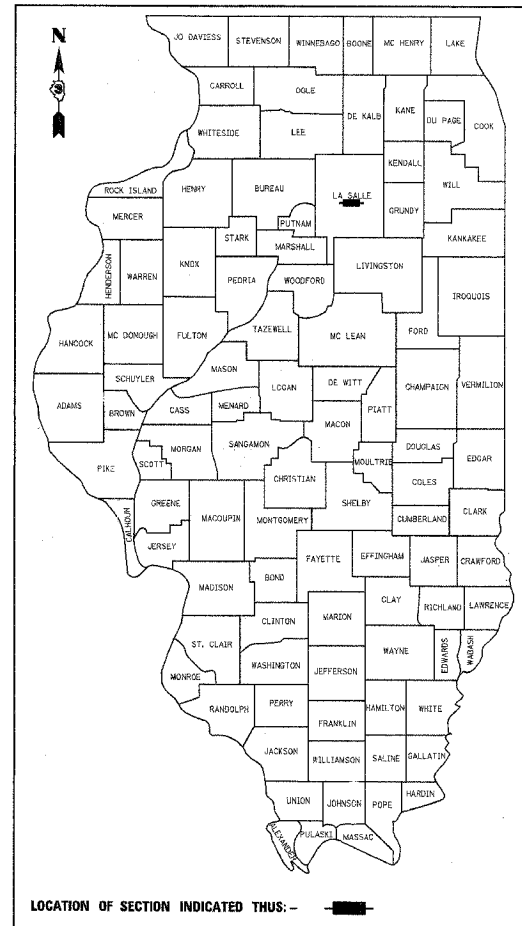
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PLANS FOR PROPOSED**  
**FEDERAL AID HIGHWAY**  
**F.A.P. 627 (IL-71)**  
**SECTION (1)BR**  
**PROJECT ACBRF-0627(010)**  
**LaSALLE COUNTY**  
**C93-133-03**

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	1 BR	LaSALLE	46	1
ILLINOIS				

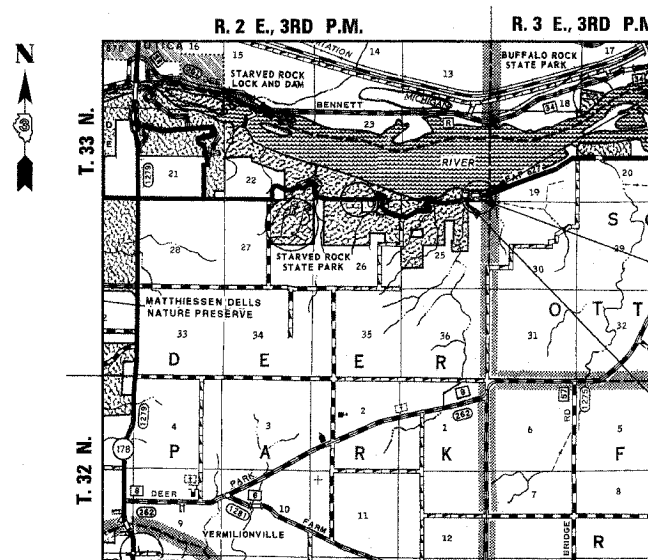
P 93-040-00  
D 93-012-03

CONTRACT NO. 66364

INDEX OF SHEETS	
SHEET NO.	TITLE
1.	COVER SHEET
2.	GENERAL NOTES & STANDARDS
3.-4.	SUMMARY OF QUANTITIES
5.-6.	SCHEDULES
7.	TYPICAL SECTIONS
8.	ENTRANCE DETAILS
9.-10.	MAINTENANCE OF TRAFFIC
11.	PLAN AND PROFILE SHEET
12.	EROSION CONTROL PLAN
13.	GUARDRAIL AND SHOULDER WIDENING DETAIL
14.	APPROACH PAVEMENT DETAILS
15.-34.	S.N. 050-0244 BRIDGE PLANS
35.-40.	EXISTING BRIDGE PLANS
41.-42.	MISCELLANEOUS DETAILS
43.	RESURFACING DETAILS
44.-46.	STATION CROSS SECTIONS



REMOVAL AND REPLACEMENT OF S.N. 050-0142  
CARRYING IL 71 OVER UNNAMED STREAM.



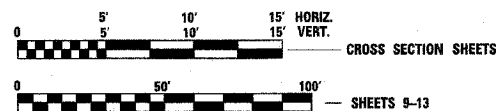
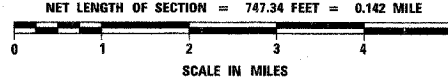
IMPROVEMENT ENDS  
STA. 18+00.00

STA. 14+08 - SPECIAL BRIDGE DESIGN  
TWO SPAN COMPOSITE 24" WIDE FLANGE  
BEAM BRIDGE ON INTEGRAL ABUTMENTS  
AND PILE BENT PIER ON STEEL H-PILES  
SET IN ROCK. SKEW=20°  
80'-0" BK-BK. ABUTS, 33'-0" ROADWAY  
PROPOSED S.N. 050-0244

IMPROVEMENT BEGINS  
STA. 10+52.66

**LOCATION PLAN**

GROSS LENGTH OF SECTION = 747.34 FEET = 0.142 MILE  
NET LENGTH OF SECTION = 747.34 FEET = 0.142 MILE



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.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123

PROJECT ENGR.: DAVE BROVIK UNIT CHIEF: SCOTT FERGUSON  
DISTRICT 3 TELEPHONE # (815) 434-6131

**CONTRACT NO. 66364**

4440 ASH GROVE  
SPRINGFIELD, IL 62707  
(217) 793-8900  
oasinc@famvid.com

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS



*Gary J. Cartwright* 7-22-05  
ILLINOIS PROFESSIONAL NO. 43406

EXPIRES 11-30-05

2004 ADT = 1,275  
P.C. = 94.8% S.U. = 4.2% M.U. = 1.0%  
DESIGN DESIGNATION - RURAL MINOR ARTERIAL

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED SEP 6 20 05  
[Signature]  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
October 14, 20 05  
Mike Hine  
ENGINEER OF DESIGN AND ENVIRONMENT  
October 14, 20 05  
[Signature]  
DEPUTY DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	2
ILLINOIS				

CONTRACT NO. 66364

**GENERAL NOTES**

THE THICKNESS OF BITUMINOUS MIXTURES SHOWN IN THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

AGGREGATE (PRIME COAT): FA 20 MAY BE USED IN ADDITION TO THE GRADATIONS LISTED IN THE SECOND PARAGRAPH OF ARTICLE 1003.03(C).

THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED. THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED SHALL BE DETERMINED BY THE ENGINEER.

ON EXISTING PAVEMENT WHICH MAY BE SUPERELEVATED, THE NEW BITUMINOUS PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH THE CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF BITUMINOUS SHOULDER REMOVAL.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB NUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05 TONS/C.Y.
BITUMINOUS MAT (PRIME COAT)	0.08 GAL./S.Y.
AGGREGATE PRIME COAT	0.002 TONS/S.Y.
BITUMINOUS CONCRETE SURF CSE	112 LBS./S.Y./IN
SHORT TERM PAVEMENT MARKINGS	10 FT./100 FT. APPL.
MIX FOR CRACKS, JTS & FLGWYS	0.0003 TONS/S.Y.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

THE BITUMINOUS SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SAW CUT THE BITUMINOUS SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE BITUMINOUS SURFACE.

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

**COMMITMENTS**

TEMPORARY FENCING WILL BE PLACED NEAR WETLANDS TO ENSURE THAT CONSTRUCTION ACTIVITIES DO NOT ENCRONCH ON THE TWO CLOSEST SITES.

NO TREE CLEARING SHOULD OCCUR BETWEEN APRIL 1 AND NOVEMBER 15 TO AVOID ANY IMPACTS TO THE INDIANA BATS.

THE CONTRACTOR'S GROUND ACTIVITIES WITHIN 50 FEET OF THE RIVER WILL BE PROHIBITED BETWEEN SUNSET AND SUNRISE BETWEEN DECEMBER 31 AND JUNE 1 TO AVOID DISTURBING ANY RIVER OTTERS.

**STANDARDS**

- 280001-02 TEMPORARY EROSION CONTROL SYSTEMS
- 420001-06 PAVEMENT JOINTS
- 420401-05 BRIDGE APPROACH PAVEMENT
- 420701-01 PAVEMENT FABRIC
- 482001 BITUMINOUS SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
- 482011-01 BIT. SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING & RESURFACING PROJECTS
- 515001-02 NAME PLATE FOR BRIDGES
- 630001-05 STEEL PLATE BEAM GUARDRAIL
- 630201-03 PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 630301-03 SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS
- 631031-05 TRAFFIC BARRIER TERMINAL TYPE 6
- 635001 DELINEATORS
- 635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-01 REFLECTOR MARKER AND MOUNTING DETAILS
- 701006-02 OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO PAVEMENT EDGE FOR SPEEDS > 45 MPH
- 701011-01 OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY FOR SPEEDS > 45 MPH
- 701201-02 LANE CLOSURE, 2L, 2W, DAY ONLY ON-ROAD TO 600 mm (24") OFF-ROAD FOR SPEEDS > 45 MPH
- 701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701306-01 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS - DAY ONLY FOR SPEEDS > 45 MPH
- 701321-08 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701326-02 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS > 45 MPH
- 702001-05 TRAFFIC CONTROL DEVICES
- 704001-02 TEMPORARY CONCRETE BARRIER
- 720011 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 781001-02 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- 000001-04 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 780001-01 TYPICAL PAVEMENT MARKINGS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

REVIEWED BY: Steven B. Anderson  
ACTING DISTRICT STUDIES AND PLANS ENGINEER  
DATE: SEPTEMBER 1, 2005

EXAMINED BY: Habert K. Johnson  
DISTRICT CONSTRUCTION ENGINEER  
Henrietta R. Lane  
DISTRICT MATERIALS ENGINEER  
James A. Anderson  
DISTRICT OPERATIONS ENGINEER

**GENERAL NOTES & STANDARDS**  
IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. RTE. 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62707 (217) 793-8600 oasinc@famvid.com	<b>OZYURT AND STONE, Inc.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: GNOLDGN DATE: 07-20-05
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	3
ILLINOIS				

CONTRACT NO. 66364

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	% FED. % STATE	
				% FED. % STATE	% FED. % STATE
				CONSTRUCTION TYPE	
				ROADWAY 80% FED. 20% ST. X071-2A	STRUCTURE 80% FED. 20% ST. X071-2A
20101000	TEMPORARY FENCE	FOOT	327	327	
20200100	EARTH EXCAVATION	CU YD	145	145	
20300100	CHANNEL EXCAVATION	CU YD	390	390	
20400800	FURNISHED EXCAVATION	CU YD	153	153	
20700220	POROUS GRANULAR EMBANKMENT	CU YD	120		120
25000200	SEEDING, CLASS 2	ACRE	0.18	0.18	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	18	18	
25000500	PHOSPHOROUS FERTILIZER NUTRIENT	POUND	18	18	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	18	18	
25100105	MULCH METHOD 1	ACRE	0.18	0.18	
25100115	MULCH METHOD 2	ACRE	0.18	0.18	
28000250	TEMPORARY EROSION CONTROL SEEDINGS	POUND	18	18	
28000400	PERIMETER EROSION BARRIER	FOOT	1268	1268	
28100109	STONE RIPRAP, CLASS A5	SQ YD	385		385
28200200	FILTER FABRIC	SQ YD	385		385
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	213	213	
40600300	AGGREGATE (PRIME COAT)	TON	6	6	
40600985	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	375	375	
40600990	TEMPORARY RAMP	SQ YD	130	130	
40800040	INCIDENTAL BITUMINOUS SURFACING	TON	2	2	
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	229	229	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	44	44	
44000100	PAVEMENT REMOVAL	SQ YD	301	301	
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	124	124	
48202600	BITUMINOUS SHOULDERS SUPERPAVE 8"	SQ YD	599	599	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50200100	STRUCTURE EXCAVATION	CU YD	285		285
50300100	FLOOR DRAINS	EACH	4		4
50300225	CONCRETE STRUCTURES	CU YD	65.6		65.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	104.8		104.8
50300260	BRIDGE DECK GROOVING	SQ YD	294		294
50300300	PROTECTIVE COAT	SQ YD	360		360

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	% FED. % STATE	
				% FED. % STATE	% FED. % STATE
				CONSTRUCTION TYPE	
				ROADWAY 80% FED. 20% ST. X071-2A	STRUCTURE 80% FED. 20% ST. X071-2A
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	1296		1296
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	30190		30190
51201400	FURNISHING STEEL PILES HP10X42	FOOT	216		216
51201600	FURNISHING STEEL PILES HP12X53	FOOT	108		108
51500100	NAME PLATES	EACH	1		1
* 63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	312.5	312.5	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	410	410	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	5	
67100100	MOBILIZATION	L SUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70106700	TEMPORARY RUMBLE STRIP	EACH	6	6	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	256	256	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2990	2990	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	190	190	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	48	48	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	700	700	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	650	650	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1215	1215	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	560	560	

\* SPECIALTY ITEMS

**SUMMARY OF QUANTITIES**  
 IL. RTE. 71 OVER UNNAMED STREAM  
 F.A.P. RTE. 627 - SECTION 1BR  
 LaSALLE COUNTY  
 STA. 14+08.00  
 STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL. 62707 (217) 793-8600 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: SUM001.DGN DATE: 07-20-05
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	6

ILLINOIS  
CONTRACT NO. 66364

### PAVEMENT MARKING SCHEDULE

LOCATION	SHORT TERM		TEMPORARY			PERMANENT				RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	RAISED REFLECTIVE PAVEMENT MARKER		
	YELLOW	WHITE	YELLOW 4"	WHITE 4"	YELLOW 6"	PAINT		THERMOPLASTIC	PREFORMED, PLASTIC TYPE B				
						YELLOW 4"	WHITE 4"	YELLOW 6"	WHITE 4"			YELLOW 4" EACH	YELLOW 6" EACH
RT. STA. 10+81 TO STA. 17+63 (STAGE I)													
LT. STA. 11+34 TO STA. 12+00 (STAGE II)													
LT. STA. 16+83 TO STA. 17+62 (STAGE II)													
STA. 10+52.66 TO STA. 18+00	144		1495		190								
LT. & RT. STA. 10+52.66 TO STA. 18+00		112		1495									
STA. 13+36.67 TO STA. 14+76.70						280		40					
LT. & RT. STA. 13+36.67 TO STA. 14+76.70							280						
LT. & RT. STA. 10+52.66 TO STA. 13+36.67									568				
LT. & RT. STA. 14+76.70 TO STA. 18+00									647				
STA. 10+52.66 TO STA. 13+36.67										568	70		
STA. 14+76.70 TO STA. 18+00										647	80		
STA. 10+90 TO STA. 13+30												4	
STA. 14+90 TO STA. 17+30												4	
STA. 14+10											1		
TOTALS	144	112	1495	1495	190	280	280	40	1215	1215	150	1	8

TOTALS

144

112

1495

1495

190

280

280

40

1215

1215

150

1

8

### GUARDRAIL SCHEDULE

LOCATION	GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)	TRAFFIC BARRIER TERMINAL, TYPE 6	STEEL PLATE BEAM GUARDRAIL, TYPE A	TERMINAL MARKER-DIRECT APPLIED	GUARDRAIL MARKERS, TYPE A	BARRIER WALL MARKERS, TYPE B
	FOOT	EACH	EACH	FOOT	EACH	EACH	EACH
S.N. 050-0244							
SOUTHWEST QUADRANT	102	1	1	125	1	2	
NORTHWEST QUADRANT	102	1	1	37.5	1	1	
NORTHEAST QUADRANT	103	1	1	75	1	2	
SOUTHEAST QUADRANT	103	1	1	75	1	2	
WESTBOUND PARAPET							2
EASTBOUND PARAPET							2
TOTALS	410	4	4	312.5	4	7	4

### EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	ESTIMATED SUITABLE STRUCTURE EXCAVATION	SUITABLE STRUCT. EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT (FOR INFORMATION ONLY)	EARTHWORK BALANCE WASTE (+) SHORTAGE (-)**
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
STA. 10+52.66 TO STA. 18+00	145	109			360	-251
WEST ABUTMENT			65	49	0	+49
EAST ABUTMENT			65	49	0	+49
TOTALS	145	109	130	98	360	-153

\*\*FURNISHED EXCAVATION

### TEMPORARY MAINTENANCE OF TRAFFIC SCHEDULE

LOCATION	TRAFFIC CONTROL & PROTECTION STD. 701321	TRAFFIC CONTROL & PROTECTION STD. 701306	TRAFFIC CONTROL & PROTECTION STD. 701326	TEMPORARY BRIDGE TRAFFIC SIGNALS	WORK ZONE PAVEMENT MARKING REMOVAL	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3	TEMPORARY RUMBLE STRIP	TEMPORARY BITUMINOUS BASE COURSE 8"
	EACH	L SUM	L SUM	EACH	SQ FT	FOOT	FOOT	EACH	EACH	EACH	SQ YD
STAGE I CONSTRUCTION	0.5	0.5	0.5	1		700		2		6	520
STAGE II CONSTRUCTION	0.5	0.5	0.5		48		650		2		
TOTALS	1	1	1	1	48	700	650	2	2	6	520

### SCHEDULES

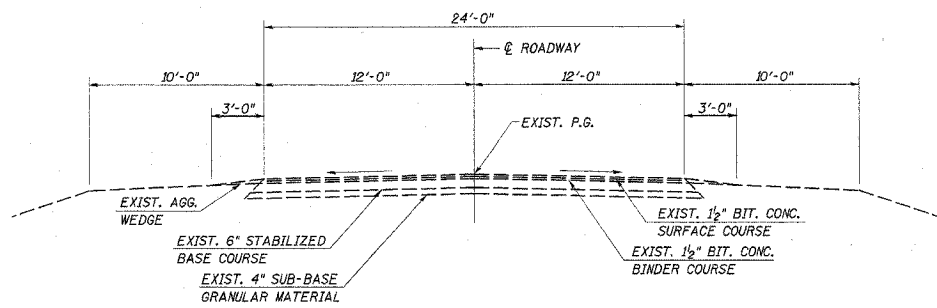
IL. RTE. 71 OVER UNNAMED STREAM  
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4440 ASH GROVE  
SPRINGFIELD, IL 62707  
(217) 793-8600  
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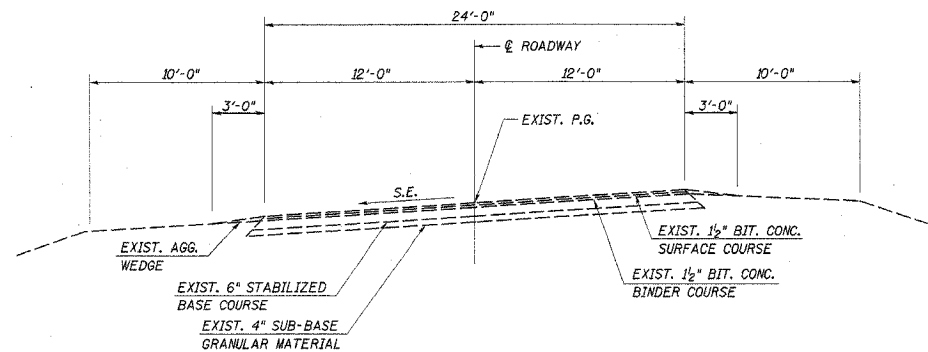
**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

JOB NO.: 0306.4  
FILE: SCHED02.DGN  
DATE: 07-20-05

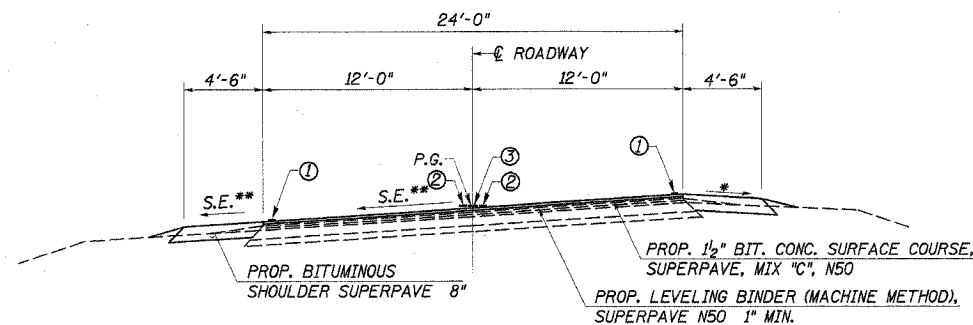
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	7
ILLINOIS			CONTRACT NO. 66364	



**EXISTING TYPICAL SECTION**



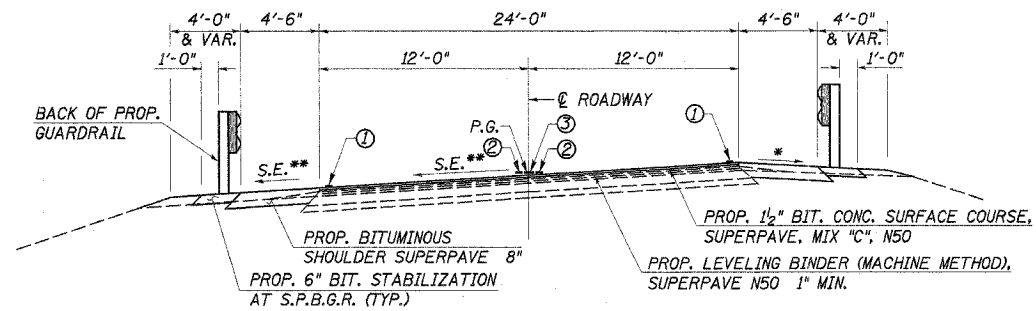
**EXISTING TYPICAL SECTION**



**PROPOSED TYPICAL SECTION**

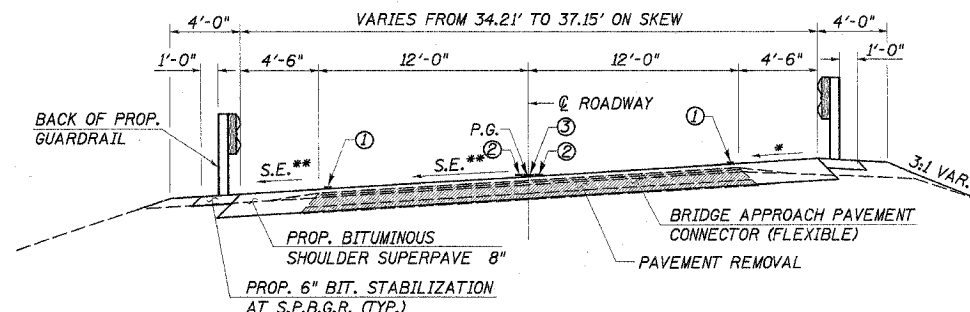
RT. STA. 10+52.66 TO STA. 11+73.90  
 LT. STA. 10+52.66 TO STA. 12+40.50  
 RT. STA. 16+06.00 TO STA. 16+77.70  
 LT. STA. 15+99.50 TO STA. 16+77.70

- ① EDGE LINE (4" SOLID WHITE)
- ② NO PASSING LINE (4" SOLID YELLOW)
- ③ CENTERLINE (6" SKIP-DASH YELLOW)



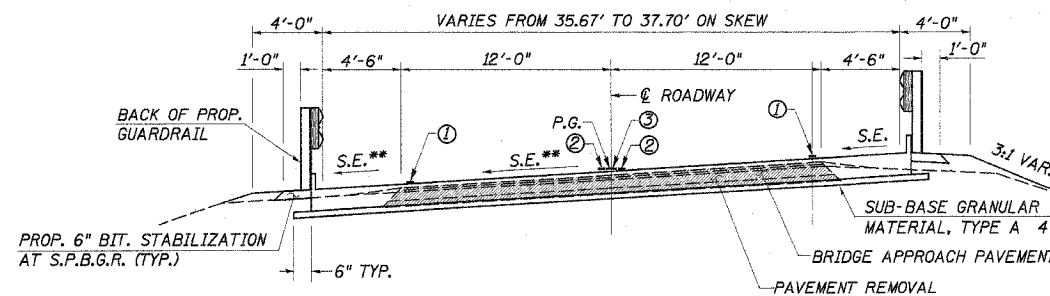
**PROPOSED TYPICAL SECTION**

RT. STA. 11+73.90 TO STA. 13+39.13  
 LT. STA. 12+40.50 TO STA. 13+23.91  
 RT. STA. 14+88.13 TO STA. 16+06.00  
 LT. STA. 14+79.10 TO STA. 15+99.50



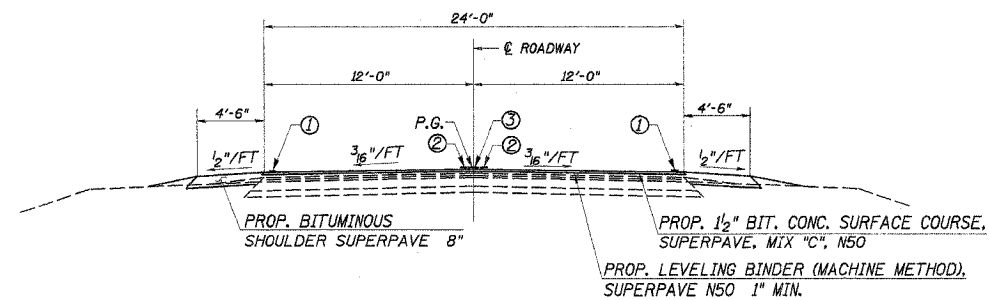
**PROPOSED TYPICAL SECTION**

LT. STA. 13+23.91 TO STA. 13+29.85  
 RT. STA. 13+39.13 TO STA. 13+45.19  
 LT. STA. 14+72.86 TO STA. 14+79.10  
 RT. STA. 14+82.36 TO STA. 14+88.13



**PROPOSED TYPICAL SECTION**

LT. STA. 13+29.85 TO STA. 13+60.70  
 RT. STA. 12+45.19 TO STA. 13+74.68  
 LT. STA. 14+42.51 TO STA. 14+72.86  
 RT. STA. 14+53.21 TO STA. 14+82.36



**PROPOSED TYPICAL SECTION**

LT. & RT. STA. 16+77.70 TO 18+00.00

\* - NOTE SHOULDER SLOPE TRANSITION  
 RIGHT BITUMINOUS SHOULDER SLOPE TRANSITION  
 FROM EXISTING AT STA. 10+52.66 TO -2.0% AT RT. STA. 11+40.70  
 FROM -2.0% AT RT. STA. 11+40.7 TO +6.0%(S.E.) AT RT. STA. 13+39.13  
 FROM +6.0%(S.E.) AT RT. STA. 14+82.36 TO -4.0% AT RT. STA. 16+77.70

\*\* - NOTE SUPER ELEVATION SLOPE  
 S.E. = 6.0% AND VARIES  
 SEE SHEET 11 FOR S.E. TRANSITION

**BITUMINOUS MIXTURE TABLE**

	SUPERPAVE BINDER	SUPERPAVE LEVELING BINDER	SUPERPAVE SURFACE	SUPERPAVE BASE COURSE AND SHOULDERS
PG GRADE	PG64-22	PG64-22	PG64-22	PG64-22
MAX. % RAP ALLOWABLE**	25%	25%	15%	25%
DESIGN AIR VOIDS	4.0% N50	4.0% N50	4.0% N50	3.0% N50
MIXTURE COMPOSITION	IL 19.0	IL 9.5	IL 12.5 OR IL 9.5	IL 19.0
FRICTION AGGREGATE			MIXTURE C	
PLANT CONTROL LIMITS	CLASS I	CLASS I	CLASS I	NON-CLASS I
DENSITY CONTROL LIMITS	CORES/ NUCLEAR	SATISFACTION OF THE ENGINEER	CORES/ NUCLEAR	*

\* MATERIAL SHALL BE COMPACTED TO 93-97 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT THE BOTTOM LIFT SHALL BE COMPACTED TO A MINIMUM OF 90.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

\*\* IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

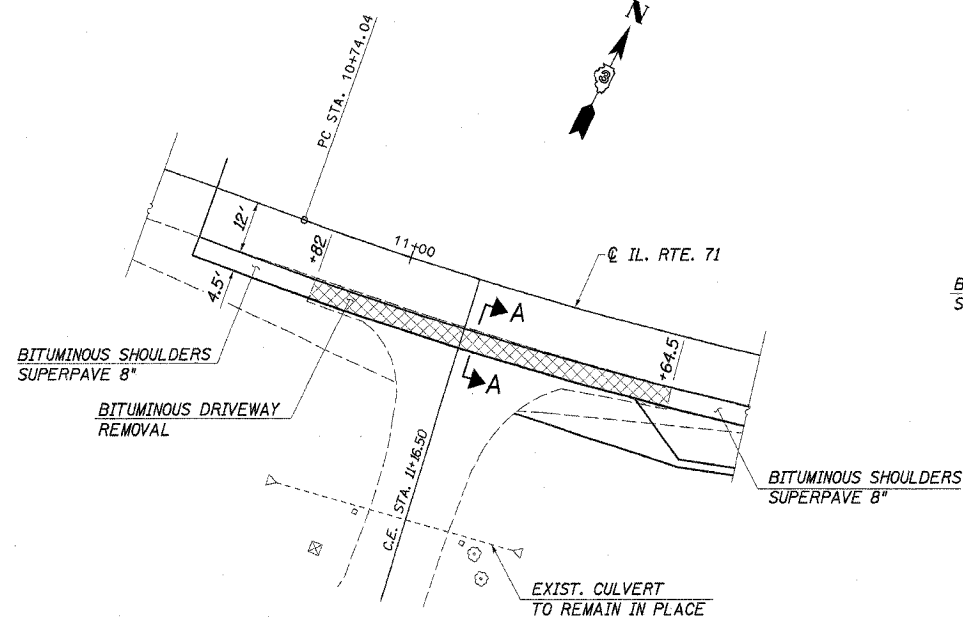
**TYPICAL SECTIONS**

IL. RTE. 71 OVER UNNAMED STREAM  
 F.A.P. RTE. 627 - SECTION 1BR  
 LaSALLE COUNTY  
 STA. 14+08.00  
 STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62707 (217) 798-8600 oasinc@famvid.com	<b>OZURT AND STONE, Inc.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: TYPOLDGN DATE: 07-20-05
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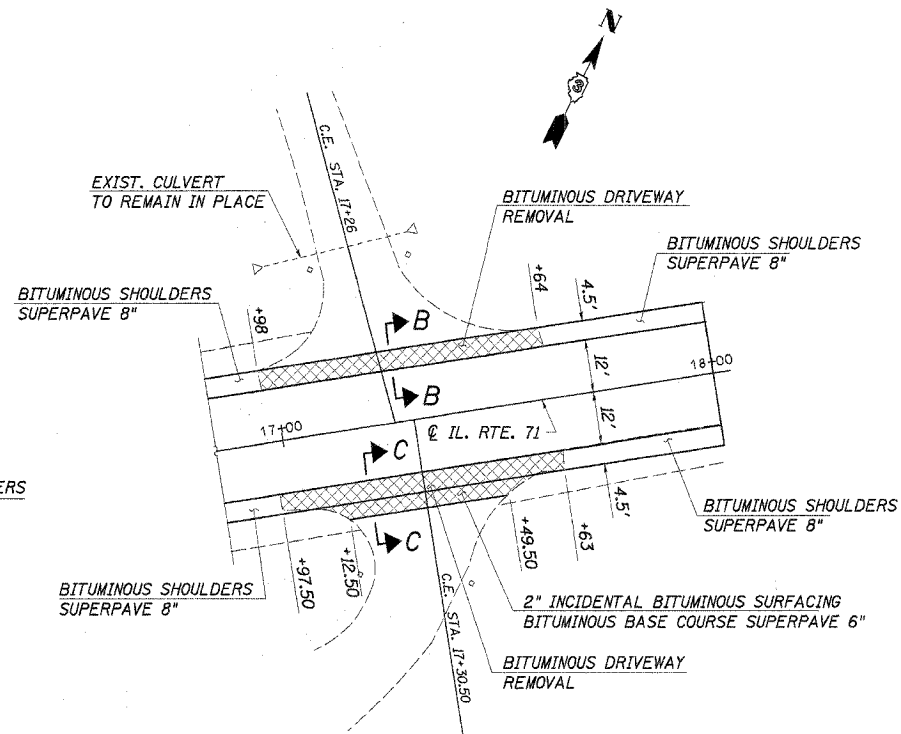
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	8
		ILLINOIS		

CONTRACT NO. 66364



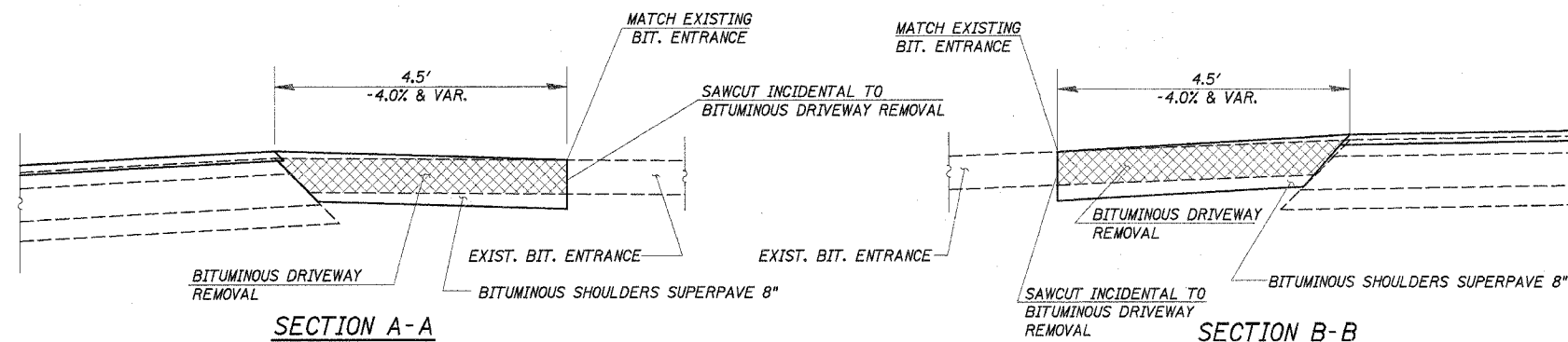
**PARK ACCESS ENTRANCE DETAIL**

RT. STA. 11+16.50



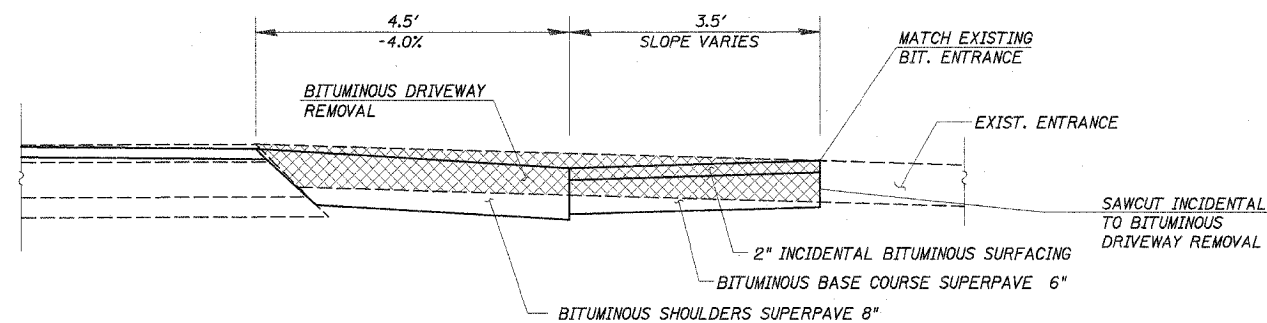
**PARK ACCESS ENTRANCE DETAIL**

LT. STA. 17+26  
RT. STA. 17+30.5



**SECTION A-A**

**SECTION B-B**



**SECTION C-C**

**ENTRANCE DETAILS**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. RTE. 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE  
SPRINGFIELD, IL 62707  
(217) 793-8600  
oasinc@tamvid.com

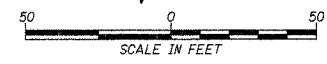
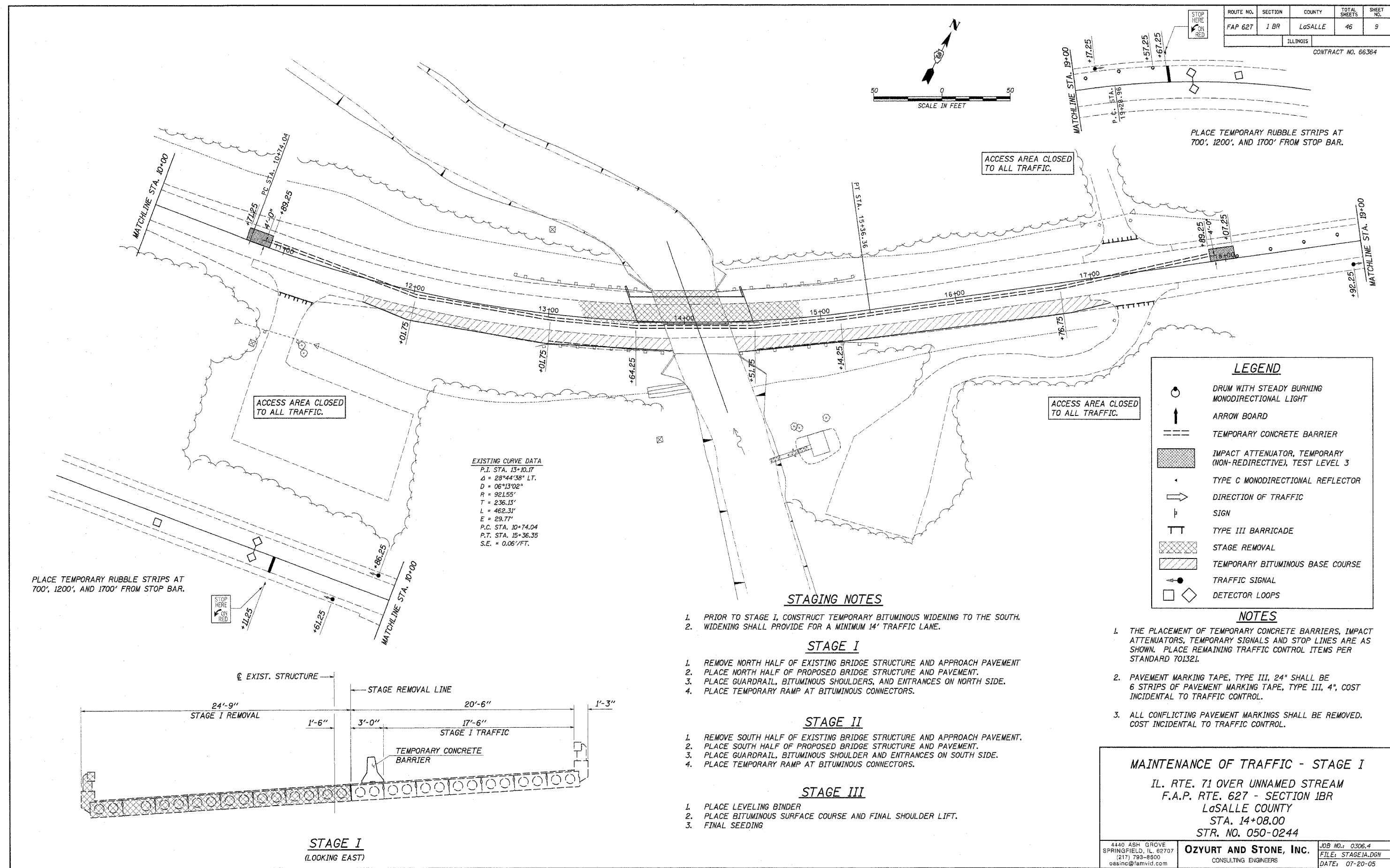
**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

JOB NO.: 0306.4  
FILE: ENTDET01.DGN  
DATE: 07-20-05



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	9
ILLINOIS				

CONTRACT NO. 66364



PLACE TEMPORARY RUBBLE STRIPS AT 700', 1200', AND 1700' FROM STOP BAR.

ACCESS AREA CLOSED TO ALL TRAFFIC.

ACCESS AREA CLOSED TO ALL TRAFFIC.

ACCESS AREA CLOSED TO ALL TRAFFIC.

PLACE TEMPORARY RUBBLE STRIPS AT 700', 1200', AND 1700' FROM STOP BAR.

**EXISTING CURVE DATA**  
 P.I. STA. 13+10.17  
 $\Delta = 28^{\circ}44'38''$  LT.  
 $D = 06^{\circ}13'02''$   
 $R = 921.55'$   
 $T = 236.13'$   
 $L = 462.31'$   
 $E = 29.77'$   
 P.C. STA. 10+74.04  
 P.T. STA. 15+36.35  
 $S.E. = 0.06'/FT.$

LEGEND	
	DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT
	ARROW BOARD
	TEMPORARY CONCRETE BARRIER
	IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3
	TYPE C MONODIRECTIONAL REFLECTOR
	DIRECTION OF TRAFFIC
	SIGN
	TYPE III BARRICADE
	STAGE REMOVAL
	TEMPORARY BITUMINOUS BASE COURSE
	TRAFFIC SIGNAL
	DETECTOR LOOPS

**STAGING NOTES**

1. PRIOR TO STAGE I, CONSTRUCT TEMPORARY BITUMINOUS WIDENING TO THE SOUTH.
2. WIDENING SHALL PROVIDE FOR A MINIMUM 14' TRAFFIC LANE.

**STAGE I**

1. REMOVE NORTH HALF OF EXISTING BRIDGE STRUCTURE AND APPROACH PAVEMENT
2. PLACE NORTH HALF OF PROPOSED BRIDGE STRUCTURE AND PAVEMENT.
3. PLACE GUARDRAIL, BITUMINOUS SHOULDERS, AND ENTRANCES ON NORTH SIDE.
4. PLACE TEMPORARY RAMP AT BITUMINOUS CONNECTORS.

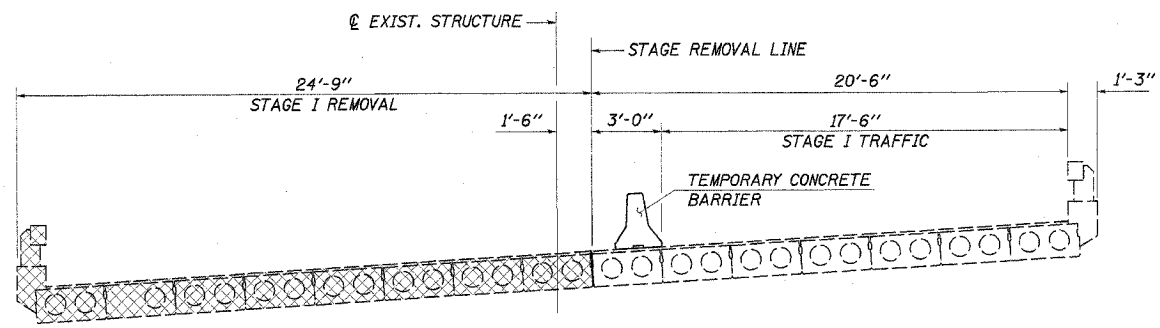
**STAGE II**

1. REMOVE SOUTH HALF OF EXISTING BRIDGE STRUCTURE AND APPROACH PAVEMENT.
2. PLACE SOUTH HALF OF PROPOSED BRIDGE STRUCTURE AND PAVEMENT.
3. PLACE GUARDRAIL, BITUMINOUS SHOULDER AND ENTRANCES ON SOUTH SIDE.
4. PLACE TEMPORARY RAMP AT BITUMINOUS CONNECTORS.

**STAGE III**

1. PLACE LEVELING BINDER
2. PLACE BITUMINOUS SURFACE COURSE AND FINAL SHOULDER LIFT.
3. FINAL SEEDING

- NOTES**
1. THE PLACEMENT OF TEMPORARY CONCRETE BARRIERS, IMPACT ATTENUATORS, TEMPORARY SIGNALS AND STOP LINES ARE AS SHOWN. PLACE REMAINING TRAFFIC CONTROL ITEMS PER STANDARD 70132L.
  2. PAVEMENT MARKING TAPE, TYPE III, 24" SHALL BE 6 STRIPS OF PAVEMENT MARKING TAPE, TYPE III, 4", COST INCIDENTAL TO TRAFFIC CONTROL.
  3. ALL CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED. COST INCIDENTAL TO TRAFFIC CONTROL.



**STAGE I**  
(LOOKING EAST)

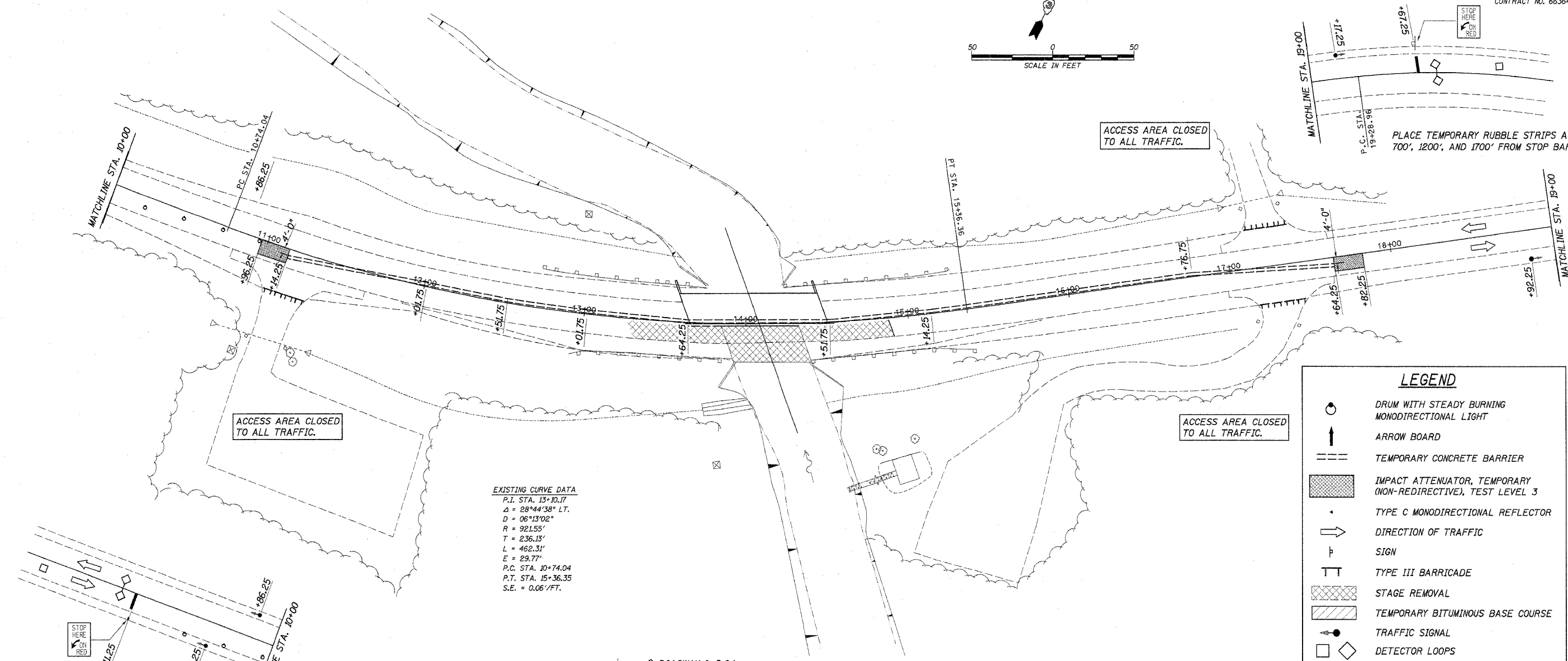
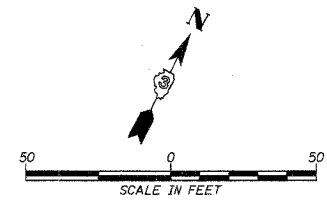
**MAINTENANCE OF TRAFFIC - STAGE I**

IL. RTE. 71 OVER UNNAMED STREAM  
 F.A.P. RTE. 627 - SECTION 1BR  
 LaSALLE COUNTY  
 STA. 14+08.00  
 STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62707 (217) 793-8500 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: STAGE1A.DGN DATE: 07-20-05
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	10
ILLINOIS				

CONTRACT NO. 66364



**EXISTING CURVE DATA**  
 P.I. STA. 13+10.17  
 $\Delta = 28^{\circ}44'38''$  LT.  
 $D = 06^{\circ}13'02''$   
 $R = 921.55'$   
 $T = 236.13'$   
 $L = 462.31'$   
 $E = 29.77'$   
 P.C. STA. 10+74.04  
 P.T. STA. 15+36.35  
 $S.E. = 0.06'/FT.$

ACCESS AREA CLOSED TO ALL TRAFFIC.

ACCESS AREA CLOSED TO ALL TRAFFIC.

ACCESS AREA CLOSED TO ALL TRAFFIC.

PLACE TEMPORARY RUBBLE STRIPS AT 700', 1200', AND 1700' FROM STOP BAR.

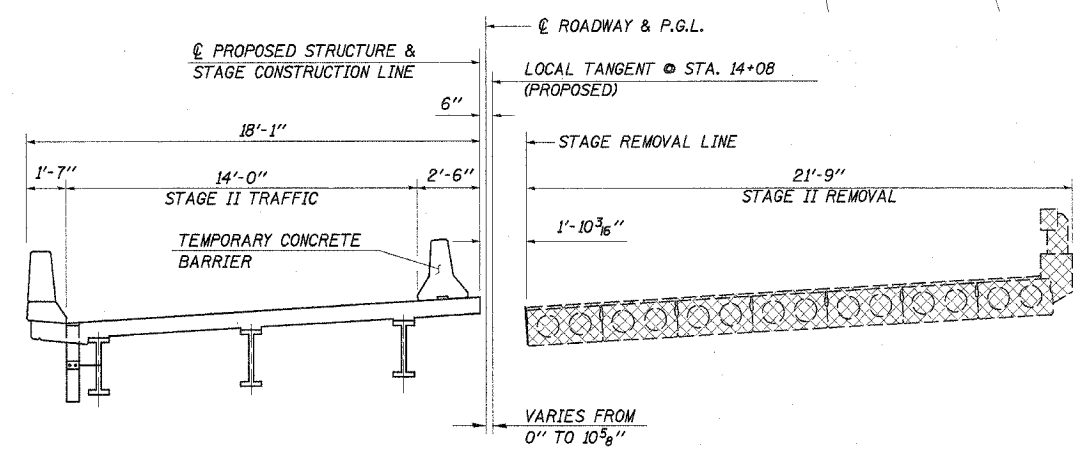
PLACE TEMPORARY RUBBLE STRIPS AT 700', 1200', AND 1700' FROM STOP BAR.

**LEGEND**

- DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT
- ARROW BOARD
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3
- TYPE C MONODIRECTIONAL REFLECTOR
- DIRECTION OF TRAFFIC
- SIGN
- TYPE III BARRICADE
- STAGE REMOVAL
- TEMPORARY BITUMINOUS BASE COURSE
- TRAFFIC SIGNAL
- DETECTOR LOOPS

**NOTES**

1. THE PLACEMENT OF TEMPORARY CONCRETE BARRIERS, IMPACT ATTENUATORS, TEMPORARY SIGNALS AND STOP LINES ARE AS SHOWN. PLACE REMAINING TRAFFIC CONTROL ITEMS PER STANDARD 701321.
2. PAVEMENT MARKING TAPE, TYPE III, 24" SHALL BE 6 STRIPS OF PAVEMENT MARKING TAPE, TYPE III, 4", COST INCIDENTAL TO TRAFFIC CONTROL.
3. ALL CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED. COST INCIDENTAL TO TRAFFIC CONTROL.



**STAGE II**  
(LOOKING EAST)

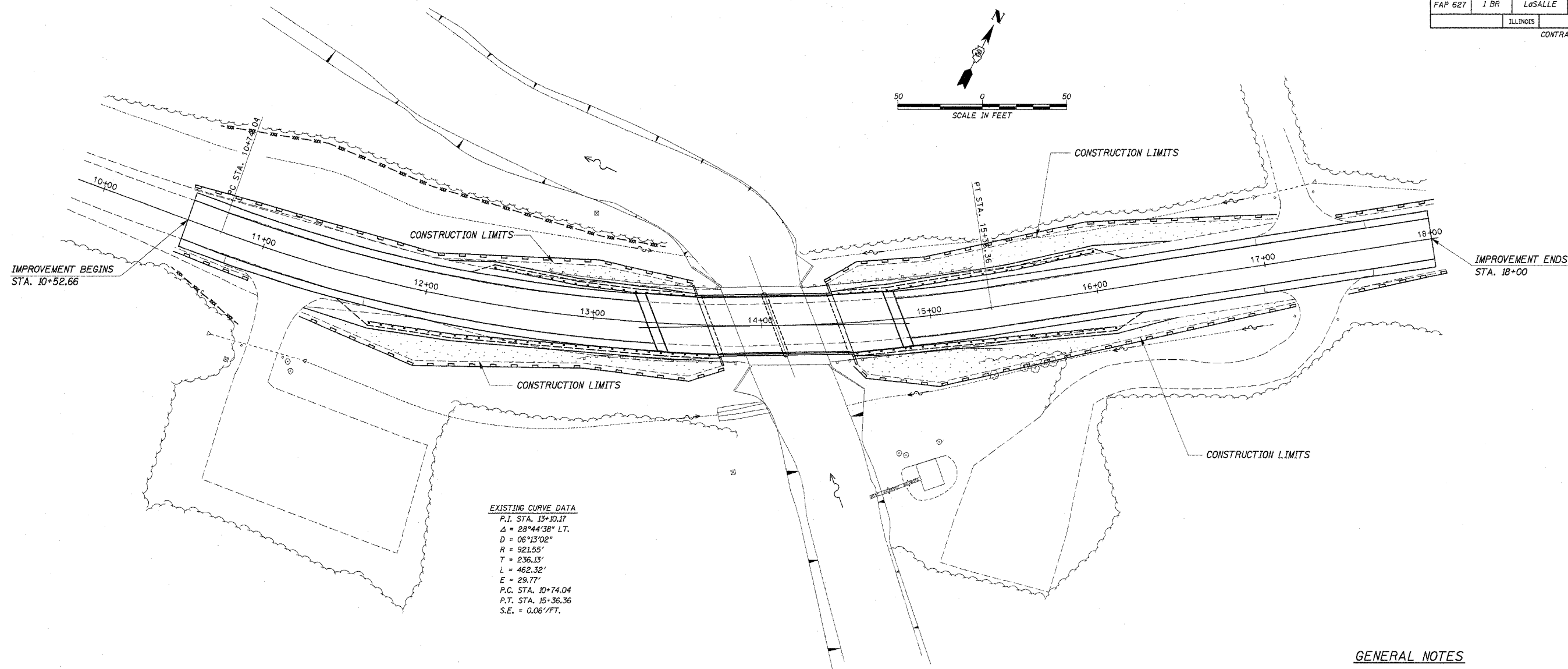
**MAINTENANCE OF TRAFFIC - STAGE II**  
 IL. RTE. 71 OVER UNNAMED STREAM  
 F.A.P. RTE. 627 - SECTION 1BR  
 LaSALLE COUNTY  
 STA. 14+08.00  
 STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62707 (217) 798-8800 oasinc@famvid.com	<b>OZYURT AND STONE, Inc.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: STAGE2A.DGN DATE: 07-20-05
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LoSALLE	46	12

ILLINOIS  
CONTRACT NO. 66364



**EXISTING CURVE DATA**  
P.I. STA. 13+10.17  
Δ = 28°44'38" LT.  
D = 06°13'02"  
R = 921.55'  
T = 236.13'  
L = 462.32'  
E = 29.77'  
P.C. STA. 10+74.04  
P.T. STA. 15+36.36  
S.E. = 0.06'/FT.

**LEGEND FOR STORM WATER POLLUTION PREVENTION PLAN**

ITEM	SYMBOL
PERIMETER EROSION BARRIER	
TEMPORARY EROSION CONTROL SEEDINGS	
TEMPORARY FENCE	

**ESTIMATED QUANTITIES  
TEMPORARY**

ITEM	UNIT	QUANTITY
PERIMETER EROSION BARRIER	FOOT	1268
TEMPORARY EROSION CONTROL SEEDINGS	POUND	18
MULCH, METHOD 1	ACRE	0.18
TEMPORARY FENCE	FOOT	327

**ESTIMATED QUANTITIES  
PERMANENT**

ITEM	UNIT	QUANTITY
SEEDING, CLASS 2	ACRE	0.18
NITROGEN FERTILIZER NUTRIENTS	POUND	18
PHOSPHORUS FERTILIZER NUTRIENTS	POUND	18
POTASSIUM FERTILIZER NUTRIENTS	POUND	18
MULCH, METHOD 2	ACRE	0.18
* STONE RIPRAP, CLASS A5	SQ YD	385

\*SEE SHEET 15 OF 40 FOR  
PLACEMENT OF STONE RIPRAP.

**GENERAL NOTES**

THESE ITEMS ARE ESTIMATED ONLY AND THERE WILL BE NO ADJUSTMENT IN UNIT PRICE DUE TO A CHANGE IN PLAN QUANTITY.

ALL ITEMS SHALL BE CONSTRUCTED AS SHOWN ON THIS SHEET, ON STANDARD 280001, AND AS DIRECTED BY THE ENGINEER.

**EROSION CONTROL PLAN**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. RTE. 627 - SECTION 1BR  
LoSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

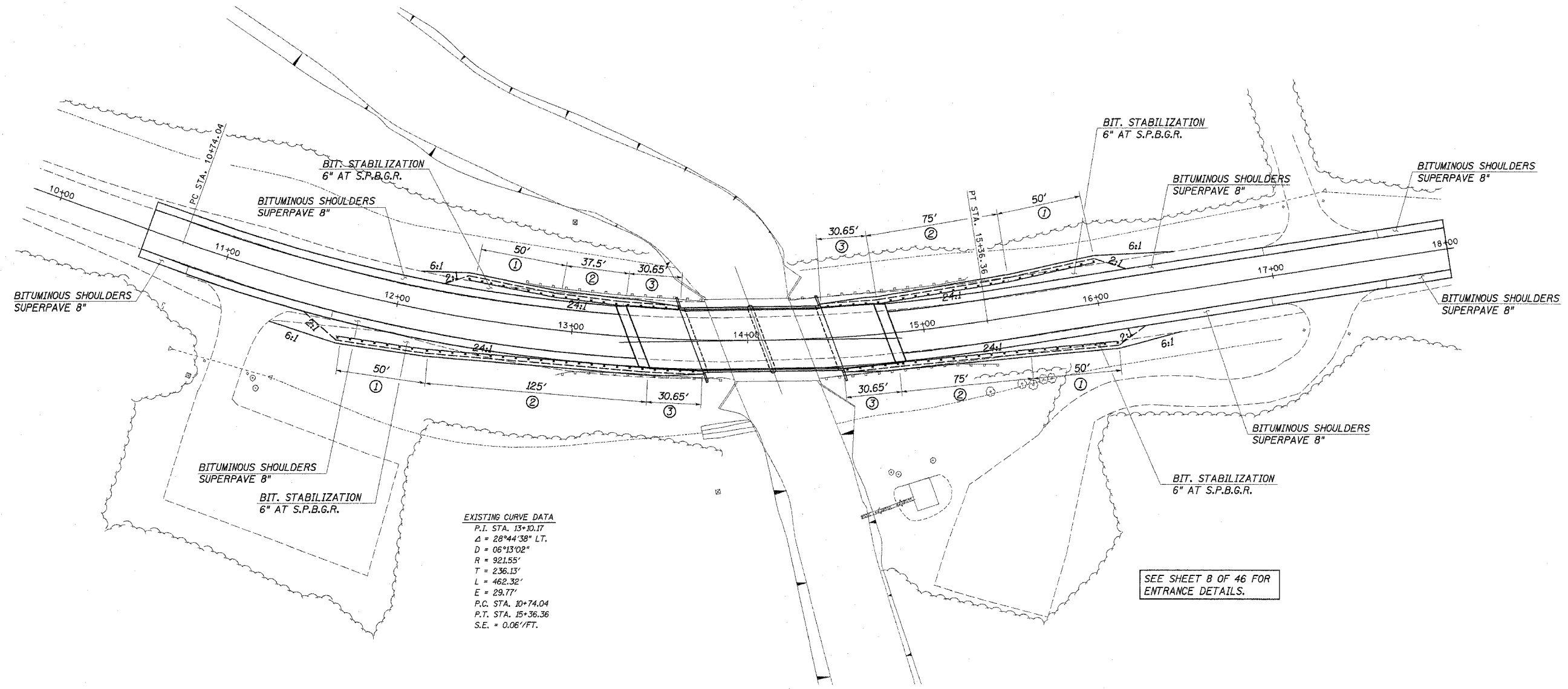
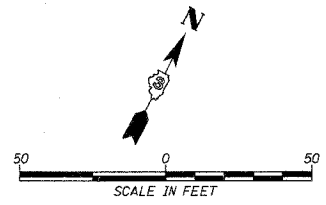
4440 ASH GROVE  
SPRINGFIELD, IL 62707  
(217) 798-8800  
oasinc@famvid.com

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

JOB NO.: 0306.4  
FILE: ECPOLDGN  
DATE: 07-20-05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	13

ILLINOIS  
CONTRACT NO. 66364



**EXISTING CURVE DATA**  
P.I. STA. 13+10.17  
 $\Delta = 28^{\circ}44'38''$  LT.  
 $D = 06^{\circ}13'02''$   
 $R = 921.55'$   
 $T = 236.13'$   
 $L = 462.32'$   
 $E = 29.77'$   
P.C. STA. 10+74.04  
P.T. STA. 15+36.36  
S.E. = 0.06'/FT.

**LEGEND**

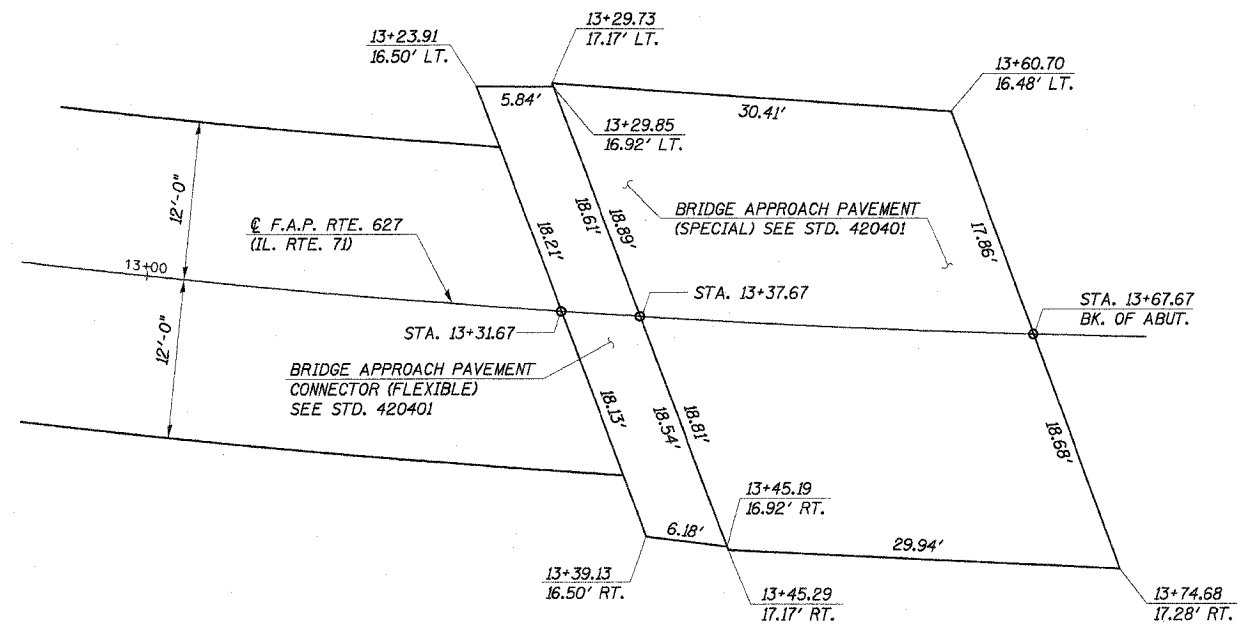
- ① TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)  
(USE APPLICABLE PORTIONS OF STD. 630301 FOR SHOULDER WIDENING.)
- ② STEEL PLATE BEAM GUARDRAIL, TYPE A
- ③ TRAFFIC BARRIER TERMINAL, TYPE 6

**GUARDRAIL AND SHOULDER WIDENING DETAIL**  
IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. RTE. 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

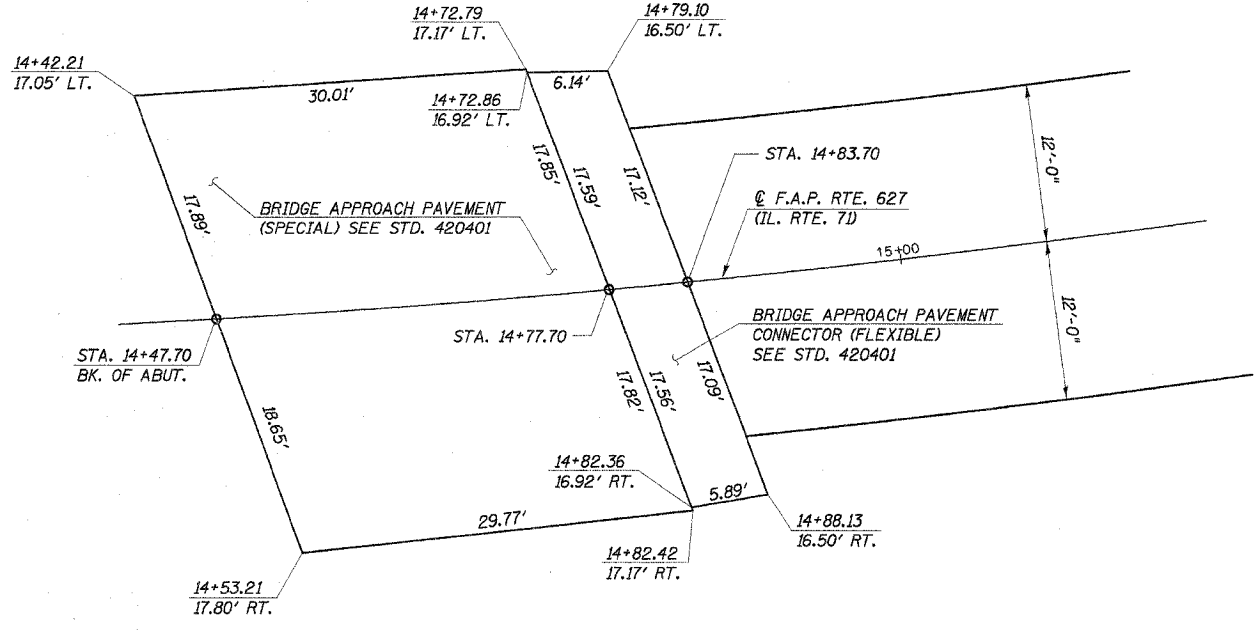
4440 ASH GROVE SPRINGFIELD, IL. 62707 (217) 793-8600 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: GR-SHLDR.DGN DATE: 07-20-05
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	14
ILLINOIS				

CONTRACT NO. 66364



WEST APPROACH



EAST APPROACH

APPROACH PAVEMENT SCHEDULE		
LOCATION	BRIDGE APPROACH PAVEMENT (SPECIAL)	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)
	SQ YD	SQ YD
WEST APPROACH	114	22
EAST APPROACH	115	22
TOTAL	229	44

**APPROACH PAVEMENT DETAILS**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. RTE. 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62707 (217) 793-8600 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: DET01.DGN DATE: 07-20-05
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

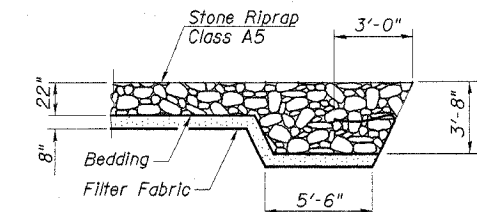
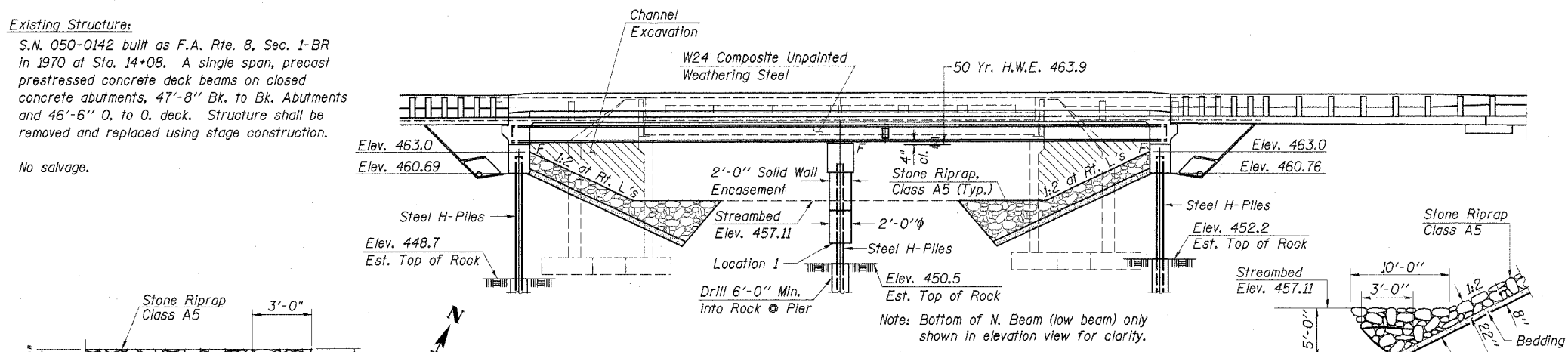
**Bench Mark:**

Chiseled square on S.E. wingwall of Bridge  
S.N. 050-0142, Elev. 469.31

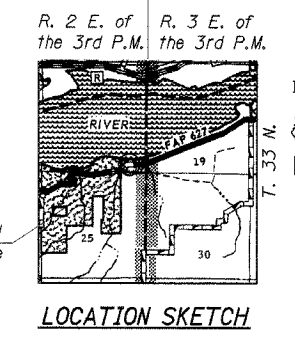
**Existing Structure:**

S.N. 050-0142 built as F.A. Rte. 8, Sec. 1-BR  
in 1970 at Sta. 14+08. A single span, precast  
prestressed concrete deck beams on closed  
concrete abutments, 47'-8" Bk. to Bk. Abutments  
and 46'-6" O. to O. deck. Structure shall be  
removed and replaced using stage construction.

No salvage.



SECTION A-A



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	1BR	LaSALLE	46	15
ILLINOIS				
CONTRACT NO. 66364 Sheet 1 of 20				

**INDEX OF SHEETS**

1. General Plan and Elevation
2. General Notes, Total Bill of Material & Miscellaneous Details
3. Stage Construction Details
- 4.-5. Top of Slab Elevations
- 6.-8. Superstructure Details
- 9.-10. Structural Steel Plan and Details
11. Anchor Bolt Details
- 12-14. Abutment Details
15. Pier Details
16. Bar Splicer Assembly Details
17. Temporary Concrete Barrier
- 18.-19. Soil Boring & Rock Core Log
20. Cantilever Forming Bracket Details

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.038 g  
Site Coefficient (S) = 1.0

**DESIGN SPECIFICATIONS**

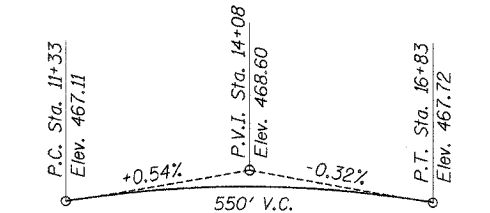
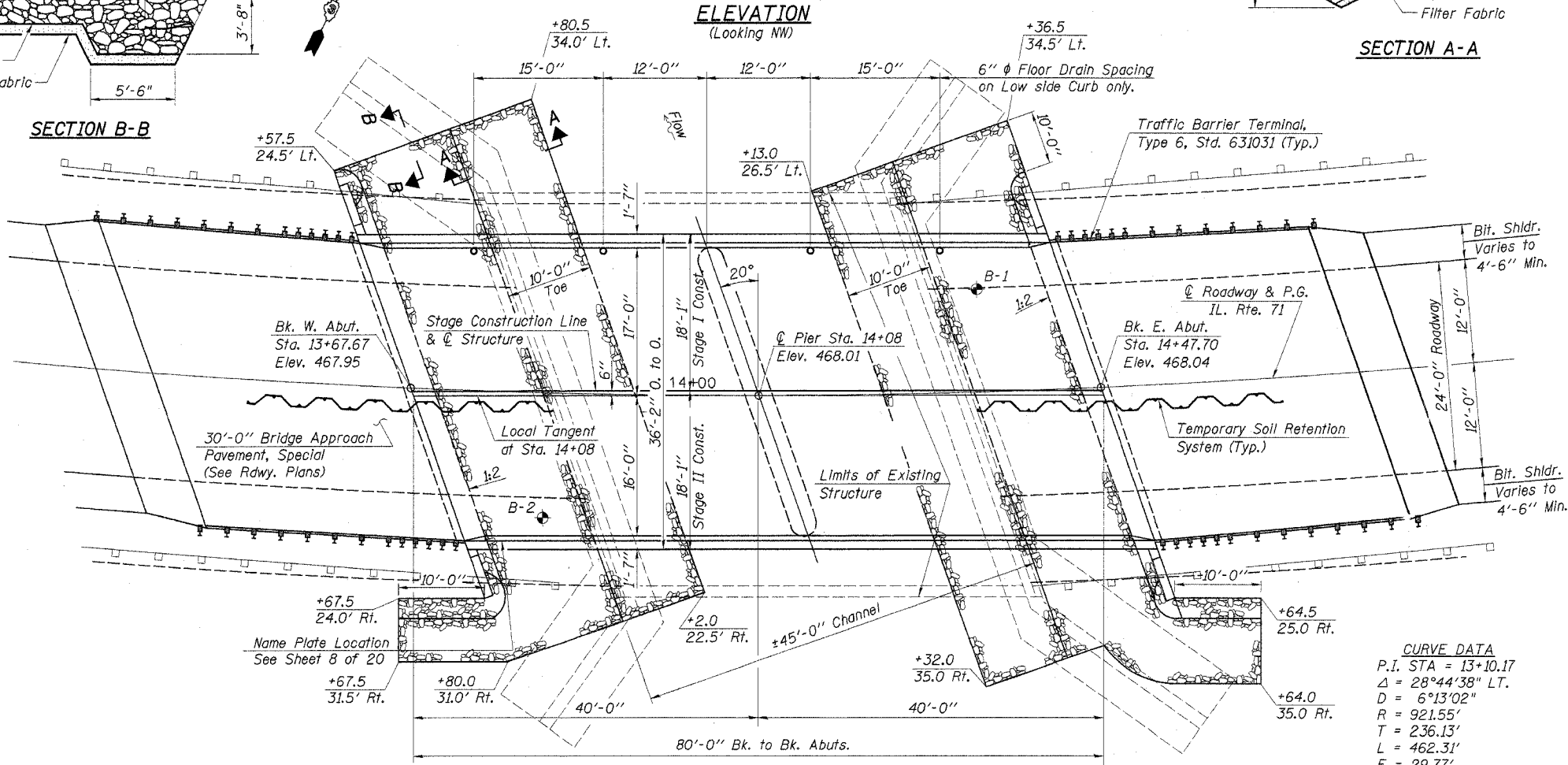
2002 AASHTO

**DESIGN STRESSES**

Field Units:  
f'c = 3,500 psi (Sub. & Super)  
fy = 60,000 psi (Reinf.)  
fy = 50,000 psi AASHTO M270 GR 50W  
Structural Steel

**LOADING HS20-44**

Allow 50 lbs/Sq. Ft. for future wearing surface



PROFILE GRADE

**WATERWAY INFORMATION**

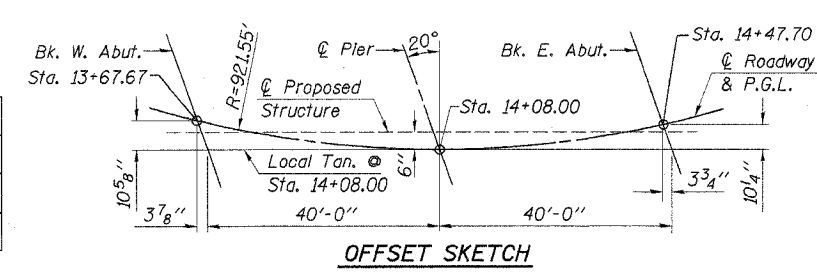
Drainage Area = 5.51 Sq. Mi. Low Grade Elev. 465.87 @ Sta. 4+95.73

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	1917	276	336	463.9	1.1	0.8	465.0	464.7
Base	100	2206	278	338	463.9	1.6	1.1	465.5	465.0
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	2893	281	342	464.0	3.8	1.5	467.8	465.5

**CURVE DATA**

P.I. STA = 13+10.17  
Δ = 28°44'38" LT.  
D = 6°13'02"  
R = 921.55'  
T = 236.13'  
L = 462.31'  
E = 29.77'  
P.C. STA. 10+74.04  
P.T. STA. 15+36.35  
S.E. = 0.06'/ft.

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.



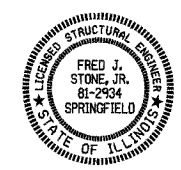
**APPROVED**

FOR STRUCTURAL ADEQUACY ONLY

*Paul E. Adams*  
ENGINEER OF BRIDGES AND STRUCTURES

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

*Fred J. Stone Jr.* (7-22-05)  
ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/06)



**GENERAL PLAN & ELEVATION**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@tamvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: GPE.DGN DATE: 08-31-04
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	16
ILLINOIS				

CONTRACT NO. 66364  
Sheet 2 of 20

### GENERAL NOTES

Fasteners shall be high strength bolts (AASHTO M 164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or 2 in painted areas). Bolts  $\frac{7}{8}$ "  $\phi$ , open holes  $\frac{15}{16}$ "  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = 38,470 Pound

All structural steel shall be AASHTO M 270 Grade 50W.

Field welding of construction accessories to beams will not be permitted.

Anchor bolts shall be set before bolting diaphragms over supports.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material.

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

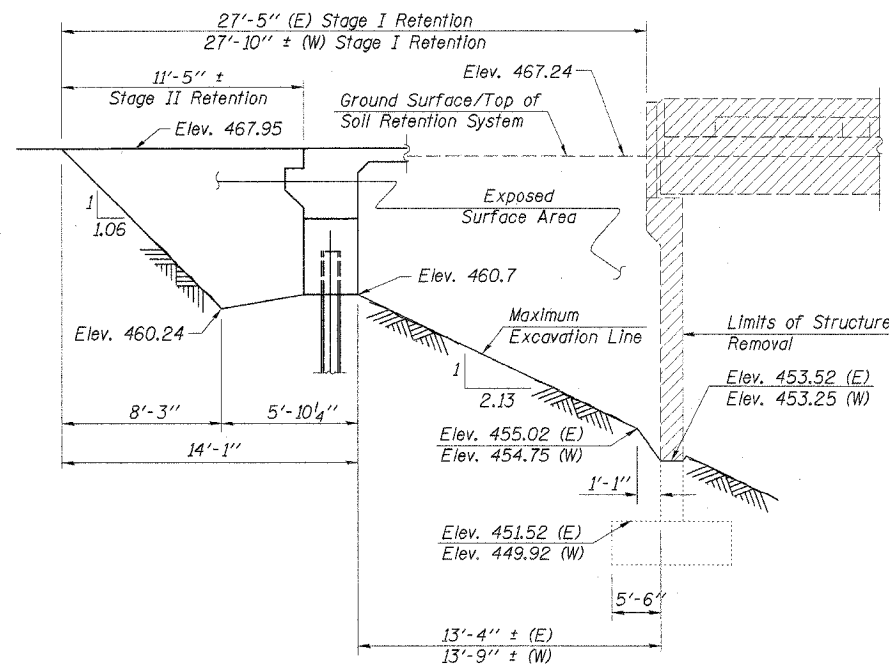
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Bearing seat surfaces shall be constructed and adjusted to the designed elevations within a tolerance of  $\frac{1}{8}$ ". Adjustment shall be made either by grinding the surface or by shimming the bearing. Two  $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

AASHTO M 270 Grade 50W structural steel shall only be painted, at the ends of the beams, for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M 300, Type 1. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".

All Construction joints shall be bonded.

Excavation behind existing abutment walls shall be done before removing the existing superstructure. The Contractor shall sawcut the existing abutments at the stage removal line before stage I removal.



### TEMPORARY SOIL RETENTION SYSTEM

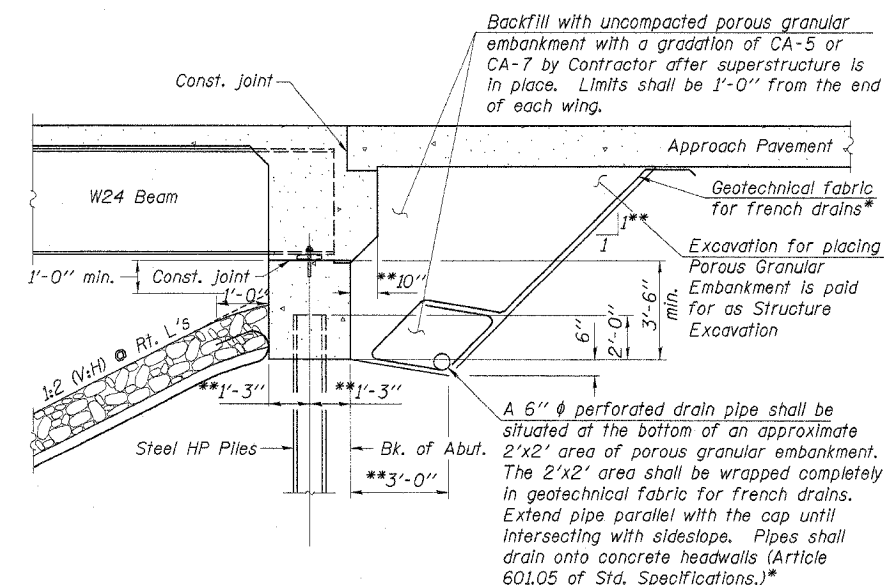
(Slopes and distances shown along alignment of sheeting.)

A Cantilevered sheet piling design does not appear 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.

STATION 14+08.00  
BUILT 200\_ BY  
STATE OF ILLINOIS  
F.A.P. RTE. 627-SEC IBR  
LOADING HS20  
STR. NO. 050-0244

### LETTERING FOR NAME PLATE

SEE STD. 515001



### SECTION THRU INTEGRAL ABUTMENT

\*Included in cost of Porous Granular Embankment.

\*\*At Rt. L's

### TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		285	285
Furnishing Steel Piles HP10x42	Foot		216	216
Furnishing Steel Piles HP12x53	Foot		108	108
Setting Piles in Rock	Each		18	18
Concrete Structures	Cu. Yd.		65.6	65.6
Furnishing and Erecting Structural Steel	L. Sum	1		1
Reinforcement Bars, Epoxy Coated	Pound	22,450	7,740	30,190
Concrete Superstructure	Cu. Yd.	104.8		104.8
Name Plates	Each			1
Stone Riprap, Class A5	Sq. Yd.			385
Filter Fabric for Use with Riprap	Sq. Yd.			385
Bridge Deck Grooving	Sq. Yd.	294		294
Protective Coat	Sq. Yd.	360		360
Floor Drains	Each	4		4
Bar Splicers	Each	309	49	358
Porous Granular Embankment	Cu. Yd.		120	120
Underwater Structure Excavation	Each		1	1
Protection - Location 1	Each		1	1
Temporary Soil Retention System	Sq. Ft.		415	415
Stud Shear Connectors	Each	1,296		1,296

### GENERAL NOTES, TOTAL BILL OF MATERIAL, & MISCELLANEOUS DETAILS

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION IBR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

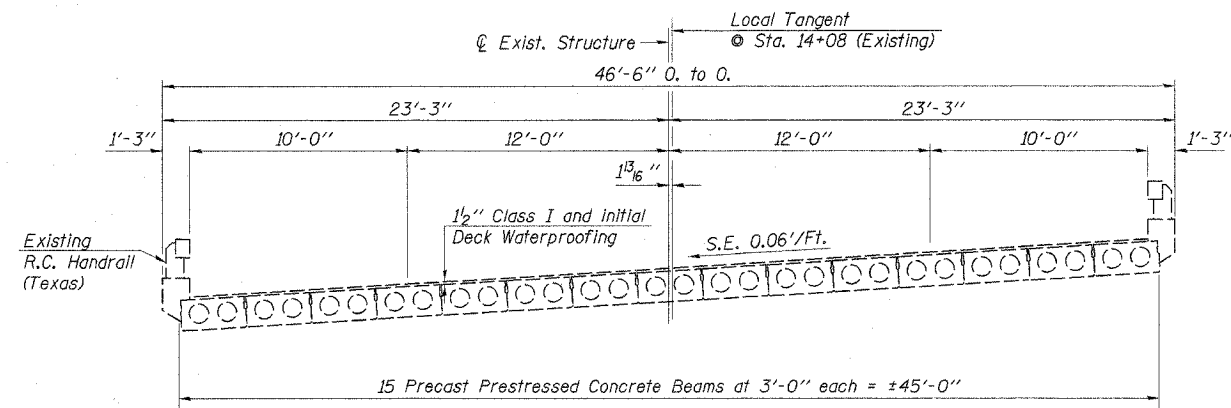
4440 ASH GROVE  
SPRINGFIELD, IL 62711  
(217) 793-8800  
oastinc@famvid.com

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

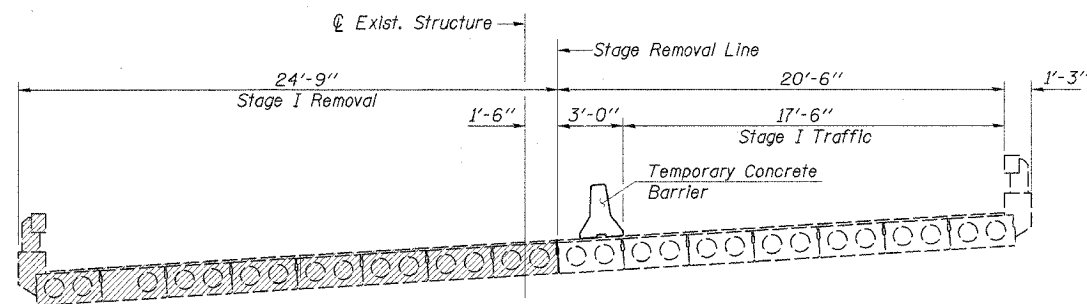
JOB NO.: 0306.4  
FILE: gn01.dgn  
DATE: 08-31-04



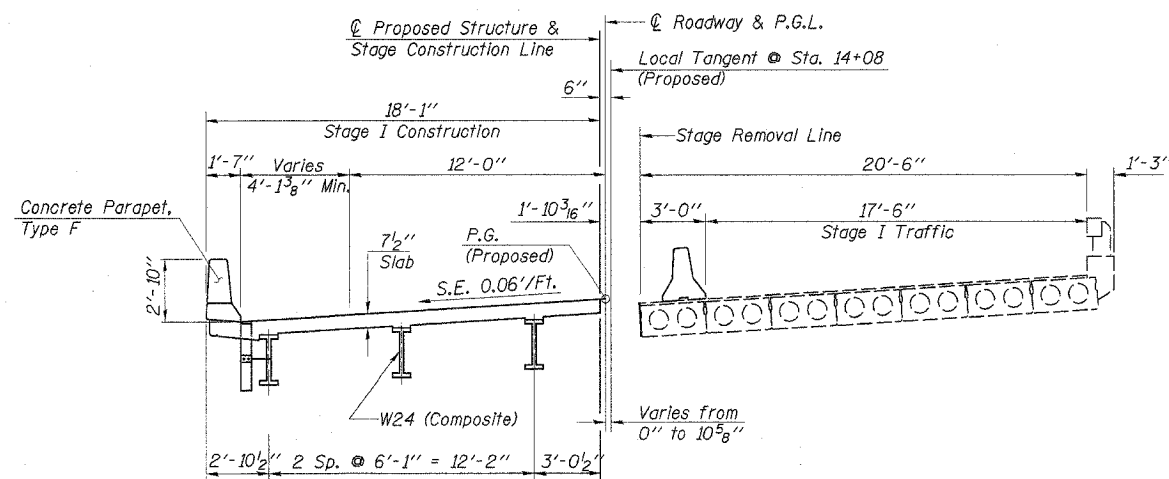
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	1BR	LaSALLE	46	17
ILLINOIS			CONTRACT NO. 66364	
Sheet 3 of 20				



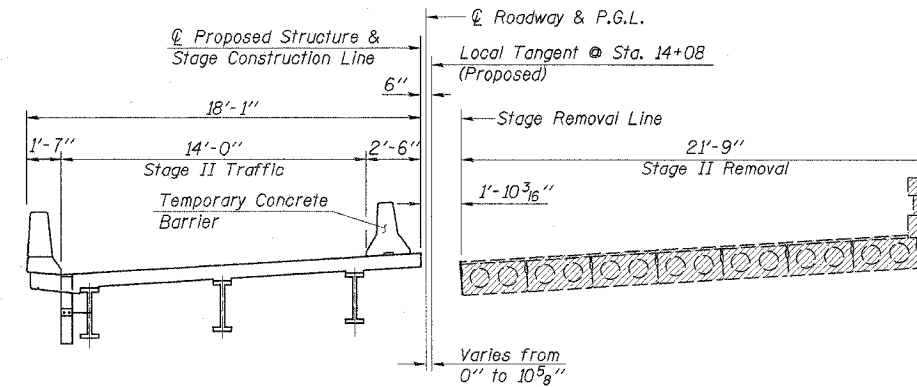
**EXISTING CROSS SECTION**



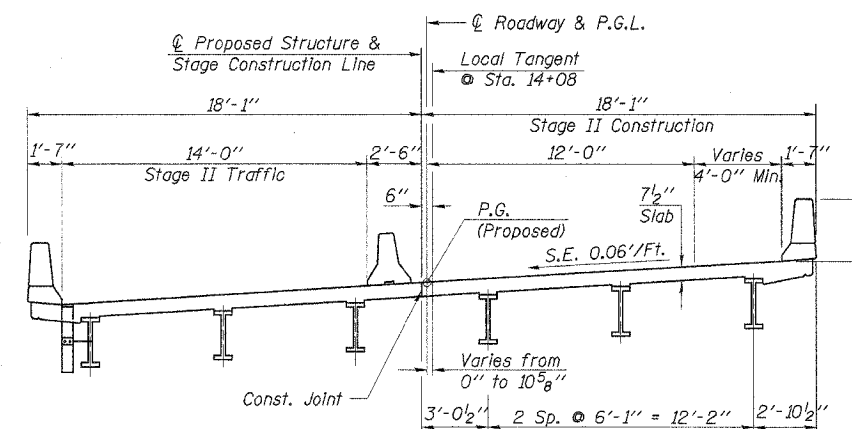
**STAGE I REMOVAL**



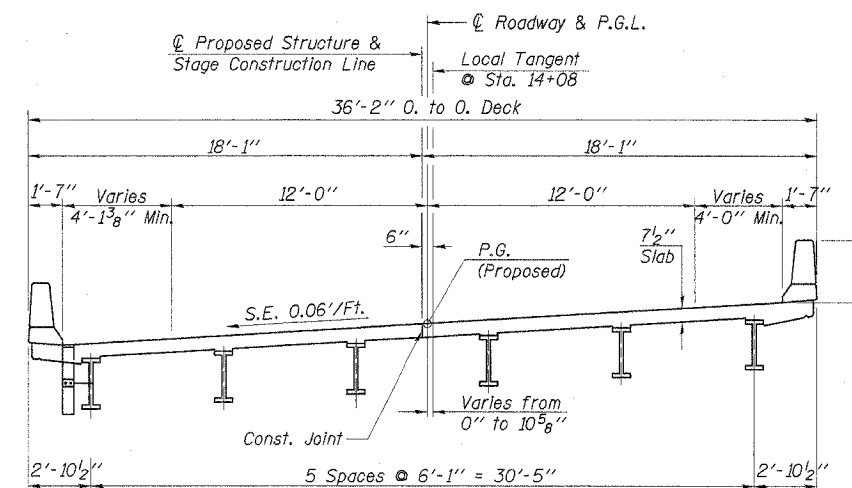
**STAGE I CONSTRUCTION**



**STAGE II REMOVAL**



**STAGE II CONSTRUCTION**



**PROPOSED CROSS SECTION**

Note: All Deck Cross Section Views are looking Northeast.

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

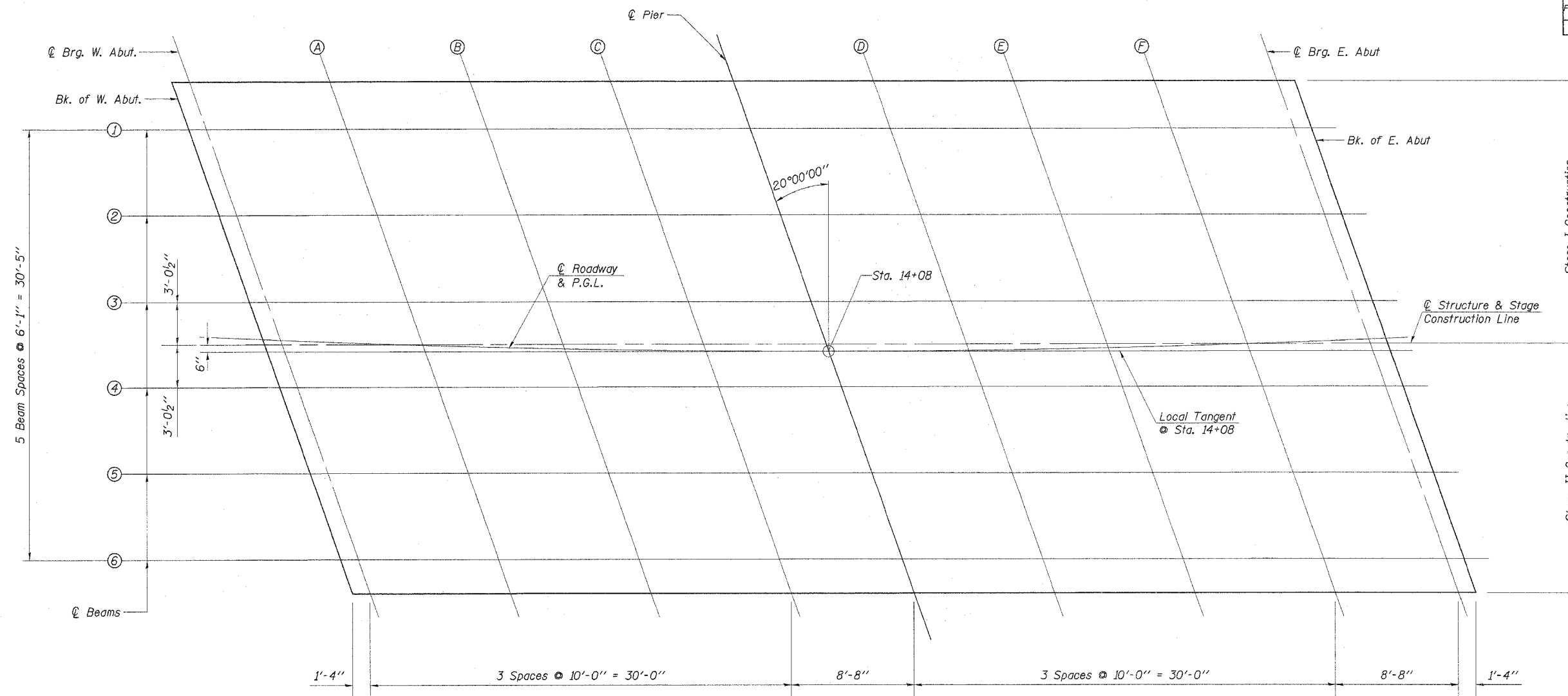
**STAGING DETAILS**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

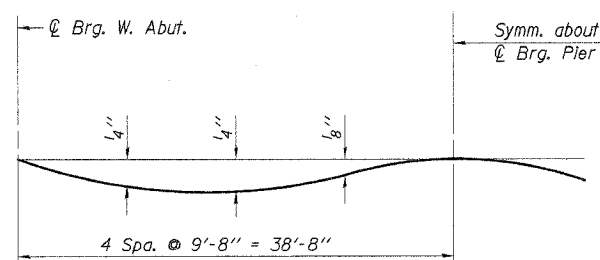
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 993-8600 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: STAGING.DGN DATE: 08-31-04
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	1BR	LaSALLE	46	18

ILLINOIS  
CONTRACT NO. 66364  
Sheet 4 of 20



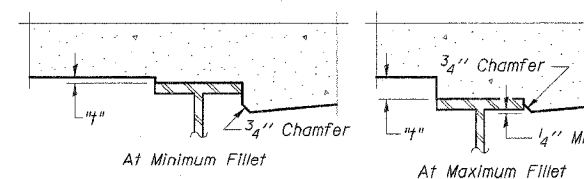
**PLAN**



**DEAD LOAD DEFLECTION DIAGRAM**

(Includes weight of concrete only.)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheet 5 of 20.



**FILLET HEIGHTS**

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheet 5 of 20, minus slab thickness, equals the fillet heights "t" above top flange of beams.

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

<b>TOP OF SLAB ELEVATIONS</b>	
IL. RTE. 71 OVER UNNAMED STREAM F.A.P. ROUTE 627 - SECTION 1BR LaSALLE COUNTY STA. 14+08.00 STR. NO. 050-0244	
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8800 oasinc@tamvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS
JOB NO.: 0306-4 FILE: SLABOLDGN DATE: 08-31-04	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	19
ILLINOIS				

CONTRACT NO. 66364  
Sheet 5 of 20

**BEAM 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1361.529	-14.555	467.067	467.067
☉ Brg. W. Abut.	1362.879	-14.621	467.066	467.066
A	1373.033	-15.056	467.057	467.074
B	1383.196	-15.380	467.054	467.074
C	1393.364	-15.594	467.055	467.064
☉ Brg. Pier	1402.183	-15.690	467.061	467.061
D	1412.356	-15.698	467.072	467.082
E	1422.528	-15.596	467.087	467.108
F	1432.697	-15.383	467.108	467.123
☉ Brg. E. Abut.	1441.507	-15.109	467.130	467.130
Bk. E. Abut.	1442.858	-15.060	467.134	467.134

**BEAM 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1364.071	-8.588	467.430	467.430
☉ Brg. W. Abut.	1365.412	-8.650	467.429	467.429
A	1375.501	-9.058	467.421	467.438
B	1385.597	-9.355	467.419	467.439
C	1395.699	-9.544	467.421	467.430
☉ Brg. Pier	1404.459	-9.618	467.428	467.428
D	1414.564	-9.602	467.440	467.450
E	1424.668	-9.476	467.456	467.477
F	1434.768	-9.240	467.478	467.493
☉ Brg. E. Abut.	1443.518	-8.947	467.501	467.501
Bk. E. Abut.	1444.860	-8.895	467.505	467.505

**BEAM 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1366.580	-2.614	467.793	467.793
☉ Brg. W. Abut.	1367.912	-2.672	467.792	467.792
A	1377.936	-3.053	467.785	467.802
B	1387.967	-3.325	467.784	467.804
C	1398.003	-3.488	467.788	467.796
☉ Brg. Pier	1406.705	-3.541	467.795	467.795
D	1416.743	-3.500	467.808	467.818
E	1426.780	-3.351	467.826	467.846
F	1436.811	-3.093	467.848	467.864
☉ Brg. E. Abut.	1445.502	-2.781	467.872	467.872
Bk. E. Abut.	1446.835	-2.726	467.876	467.876

**☉ STRUCTURE & STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1367.822	0.376	467.974	467.974
☉ Brg. W. Abut.	1369.150	0.319	467.973	467.973
A	1379.142	-0.048	467.968	467.985
B	1389.140	-0.307	467.967	468.987
C	1399.143	-0.457	467.971	467.980
☉ Brg. Pier	1407.817	-0.500	467.979	467.979
D	1417.822	-0.448	467.992	468.002
E	1427.825	-0.287	468.010	468.031
F	1437.823	-0.017	468.034	468.049
☉ Brg. E. Abut.	1446.485	0.304	468.058	468.058
Bk. E. Abut.	1447.813	0.360	468.062	468.062

**☉ ROADWAY & P.G.L.**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1367.666	0.000	467.952	467.952
☉ Brg. W. Abut.	1369.018	0.000	467.954	467.954
A	1379.018	0.000	467.970	467.987
B	1389.018	0.000	467.985	468.005
C	1399.018	0.000	467.998	468.007
☉ Brg. Pier	1407.999	0.000	468.009	468.009
D	1417.999	0.000	468.019	468.030
E	1427.999	0.000	468.028	468.048
F	1437.999	0.000	468.035	468.050
☉ Brg. E. Abut.	1446.388	0.000	468.039	468.039
Bk. E. Abut.	1447.699	0.000	468.040	468.040

**BEAM 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1369.056	3.367	468.156	468.156
☉ Brg. W. Abut.	1370.380	3.312	468.155	468.155
A	1380.340	2.958	468.150	468.167
B	1390.306	2.712	468.150	468.169
C	1400.277	2.574	468.154	468.163
☉ Brg. Pier	1408.922	2.542	468.162	468.162
D	1418.894	2.606	468.176	468.186
E	1428.863	2.779	468.195	468.215
F	1438.828	3.059	468.219	468.234
☉ Brg. E. Abut.	1447.460	3.390	468.243	468.243
Bk. E. Abut.	1448.784	3.447	468.247	468.247

**BEAM 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1371.500	9.355	468.519	468.519
☉ Brg. W. Abut.	1372.816	9.303	468.519	468.519
A	1382.712	8.975	468.514	468.531
B	1392.615	8.755	468.515	468.535
C	1402.521	8.641	468.521	468.530
☉ Brg. Pier	1411.109	8.630	468.530	468.530
D	1421.016	8.718	468.545	468.555
E	1430.919	8.913	468.565	468.585
F	1440.817	9.215	468.589	468.604
☉ Brg. E. Abut.	1449.392	9.564	468.615	468.615
Bk. E. Abut.	1450.707	9.625	468.619	468.619

**BEAM 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1373.913	15.349	468.883	468.883
☉ Brg. W. Abut.	1375.221	15.301	468.882	468.882
A	1385.054	14.999	468.879	468.896
B	1394.893	14.803	468.881	468.901
C	1404.735	14.714	468.888	468.897
☉ Brg. Pier	1413.268	14.724	468.898	468.898
D	1423.110	14.834	468.914	468.924
E	1432.948	15.051	468.934	468.955
F	1442.780	15.376	468.960	468.975
☉ Brg. E. Abut.	1451.298	15.743	468.986	468.986
Bk. E. Abut.	1452.604	15.806	468.991	468.991

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

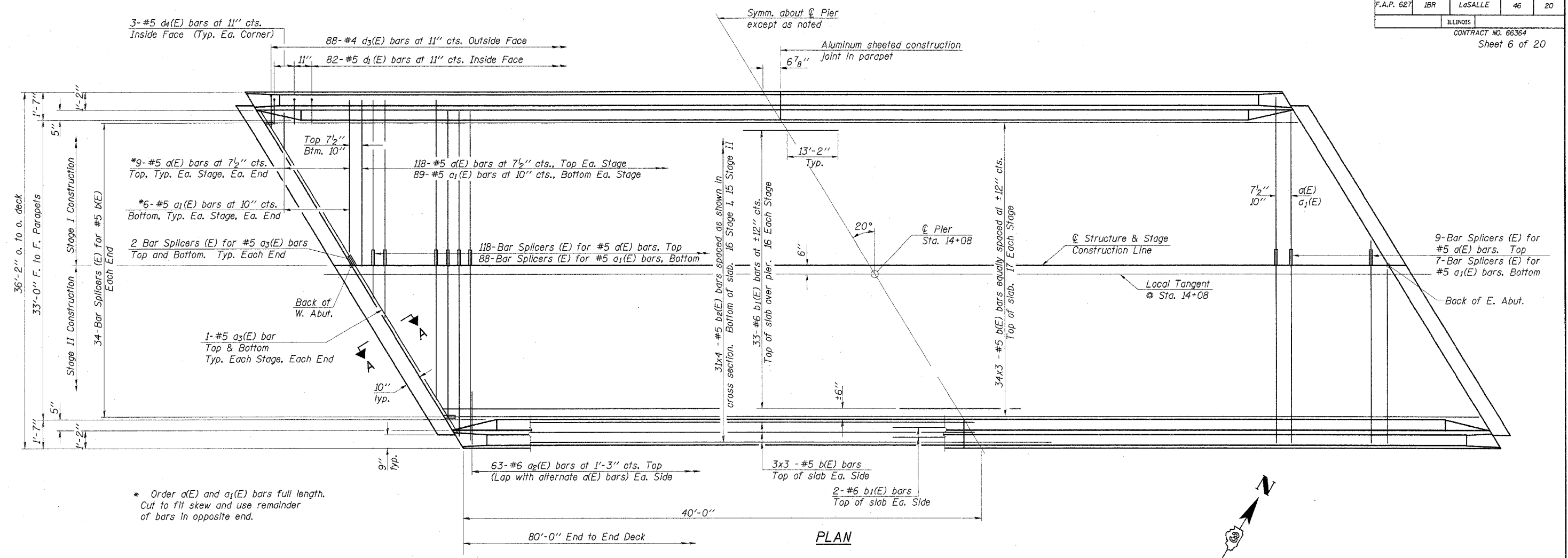
PI-E 3-1-94

**TOP OF SLAB ELEVATIONS**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

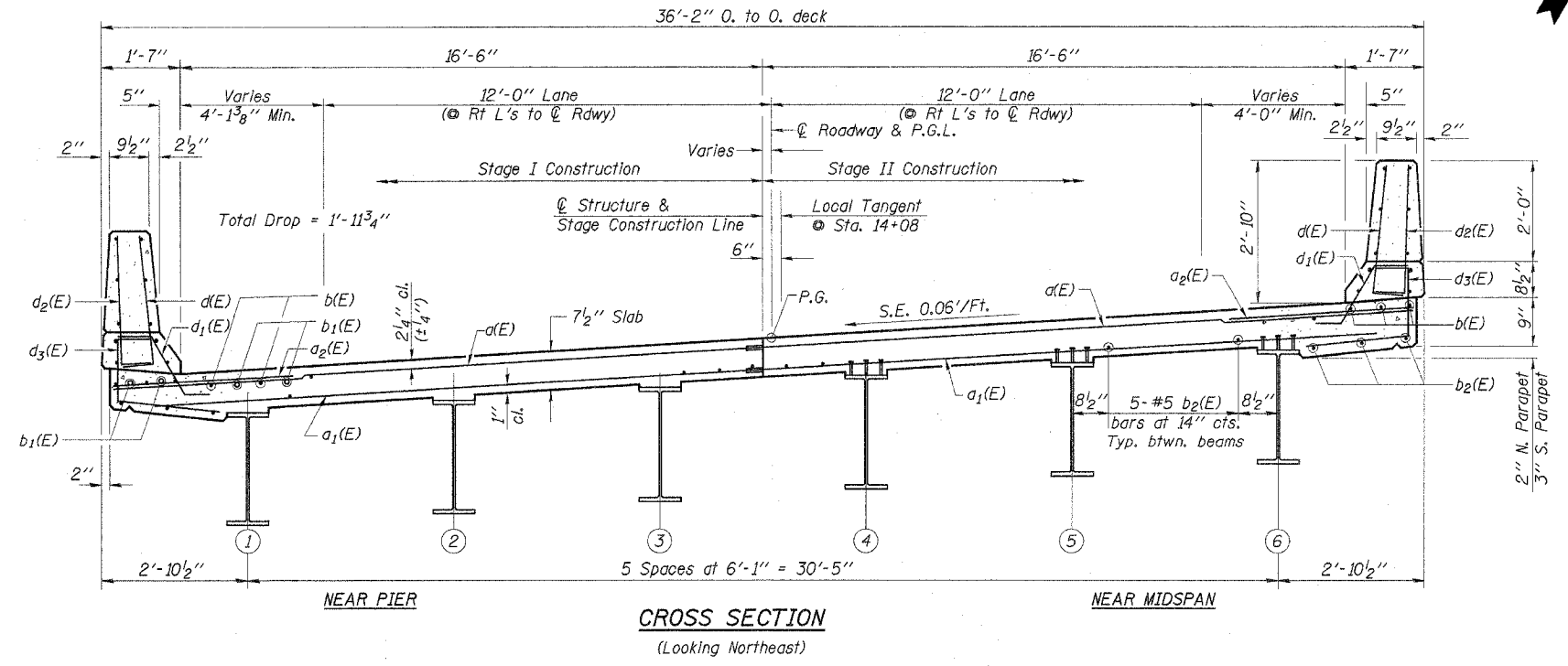
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-6800 castinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: SLAB02.DGN DATE: 08-31-04
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	1BR	LaSALLE	46	20
ILLINOIS			CONTRACT NO. 66364	
Sheet 6 of 20				



\* Order d(E) and a1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

Notes:  
 See Sheet 8 of 20 for superstructure details and Bill of Material.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.  
 See Sheet 8 of 20 for parapet reinforcement.  
 See Sheet 8 of 20 for Section A-A.  
 See Sheet 16 of 20 for Bar Splicer Details.



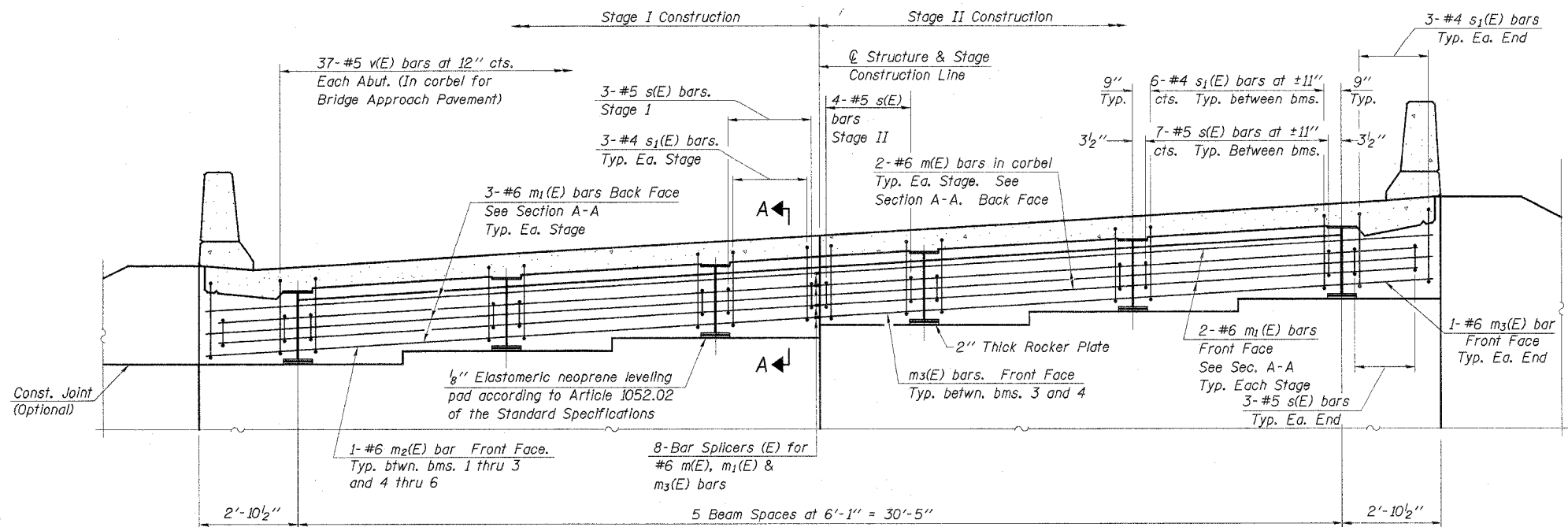
DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.
SI-2-R	9-01-03

Work this Sheet with Sheets 7 & 8 of 20

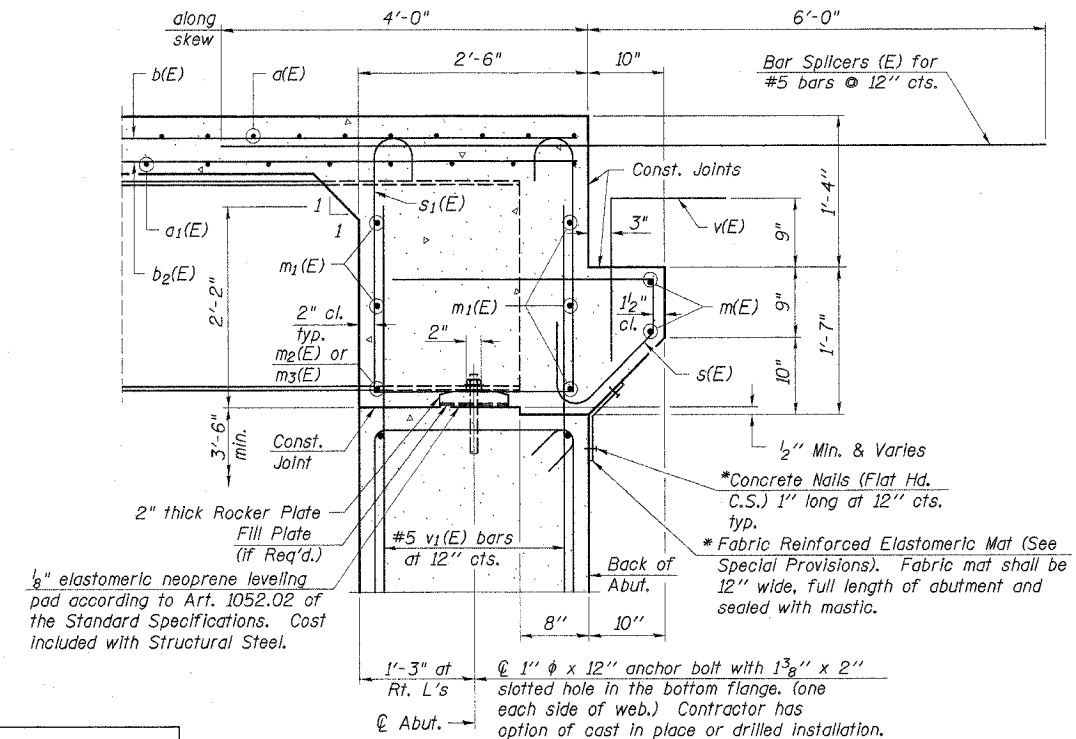
**SUPERSTRUCTURE DETAILS**

IL. RTE. 71 OVER UNNAMED STREAM  
 F.A.P. ROUTE 627 - SECTION 1BR  
 LaSALLE COUNTY  
 STA. 14+08.00  
 STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 cesino@tamvig.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: SUPEROLDGN DATE: 08-31-04
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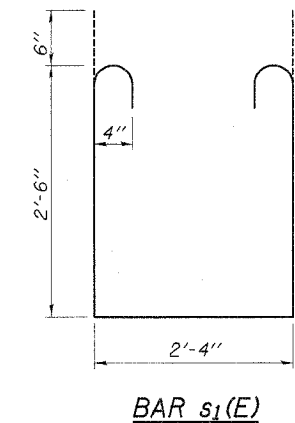
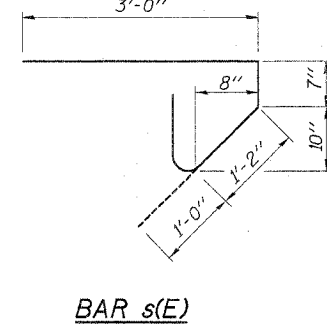
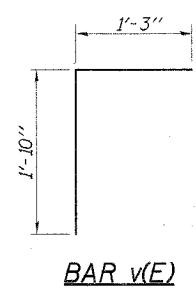


**DIAPHRAGM ELEVATION AT ABUTMENT**  
 (Dimensions are at Rt. angles to Stage Const. Line)  
 (East Abutment shown. West Abutment opposite hand)



**SECTION A-A**

Dimensions at right angles to abutment, except as shown.  
 \* Cost included with Concrete Superstructure.



Notes:  
 Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 20.  
 Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 20.  
 The s(E) and s<sub>1</sub>(E) bars shall be placed parallel to the beams.  
 For anchor bolt details see sheet 11 of 20.

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

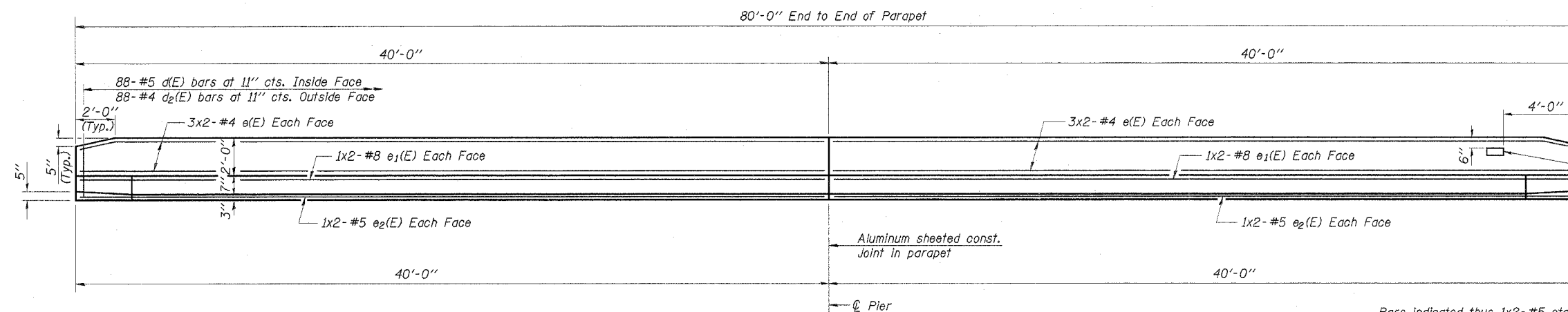
SI-DS2 9-01-03

Work this Sheet with Sheets 6 & 8 of 20

<b>SUPERSTRUCTURE DETAILS</b>	
IL. RTE. 71 OVER UNNAMED STREAM F.A.P. ROUTE 627 - SECTION 1BR LaSALLE COUNTY STA. 14+08.00 STR. NO. 050-0244	
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8800 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS
JOB NO.: 0306-4 FILE: SUPER02.DGN DATE: 08-31-04	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	22
ILLINOIS				

CONTRACT NO. 66364  
Sheet 8 of 20



**INSIDE ELEVATION OF PARAPET**

Locate Name Plate on the Inside face of the West corner of the South Parapet.

Bars indicated thus 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.

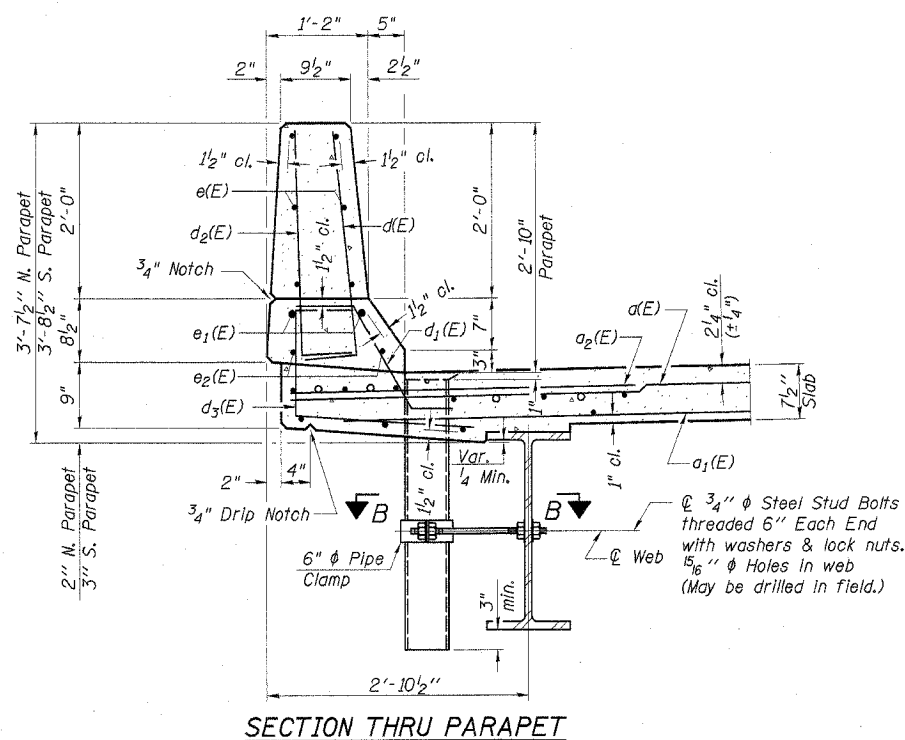
**MIN. BAR LAPS**

- #4 ..... 1'-4"
- #5 ..... 1'-8"
- #8 ..... 3'-5"

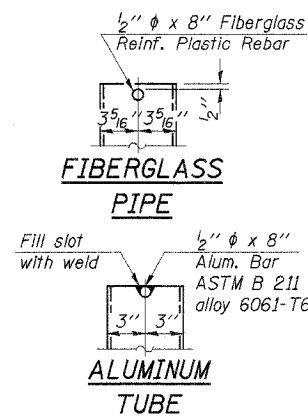
**SUPERSTRUCTURE BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	254	#5	17'-7"	—
a1(E)	190	#5	17'-0"	—
a2(E)	126	#6	4'-0"	—
a3(E)	8	#5	19'-0"	—
b(E)	120	#5	27'-8"	—
b1(E)	37	#6	26'-4"	—
b2(E)	124	#5	21'-3"	—
c(E)	176	#5	3'-0"	—
c1(E)	162	#5	2'-7"	—
c2(E)	176	#4	3'-0"	—
c3(E)	176	#4	4'-0"	—
c4(E)	12	#5	2'-6"	—
d(E)	48	#4	20'-7"	—
d1(E)	16	#8	21'-9"	—
d2(E)	16	#5	20'-9"	—
m(E)	8	#6	18'-0"	—
m1(E)	20	#6	19'-0"	—
m2(E)	8	#6	6'-0"	—
m3(E)	4	#6	2'-10"	—
s(E)	82	#5	5'-9"	—
s1(E)	72	#4	8'-4"	—
v(E)	74	#5	3'-1"	—
Reinforcement Bars, Epoxy Coated		Pound	22,450	
Concrete Superstructure		Cu. Yds.	104.8	
Protective Coat		Sq. Yd.	360	
Bar Splicers		Each	309	
Floor Drains		Each	4	
Name Plates		Each	1	
Bridge Deck Grooving		Sq. Yd.	294	

Reinforcement bars designated (E) shall be epoxy coated.

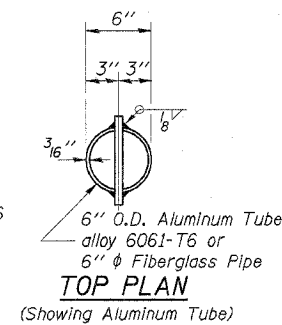


**SECTION THRU PARAPET**

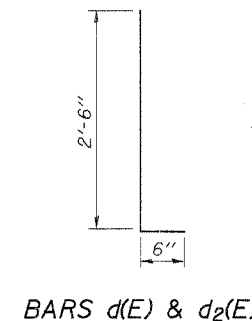


**FIBERGLASS PIPE**

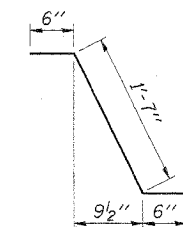
**ALUMINUM TUBE**



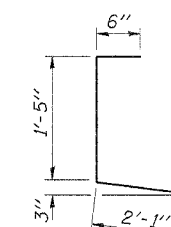
**TOP PLAN (Showing Aluminum Tube)**



**BARS d(E) & d2(E)**



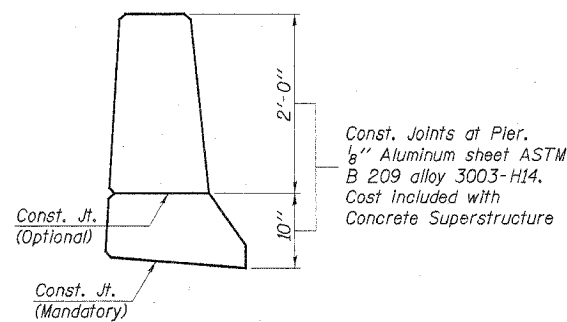
**BAR d1(E)**



**BAR d3(E)**



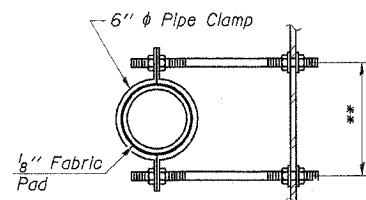
**BAR d4(E)**



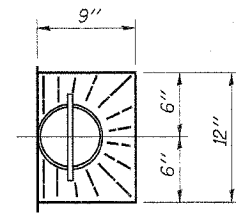
**PARAPET JOINT DETAILS**

Notes:  
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

\*\*Dimension as required by Pipe Clamp



**SECTION B-B**



**TOP PLAN**

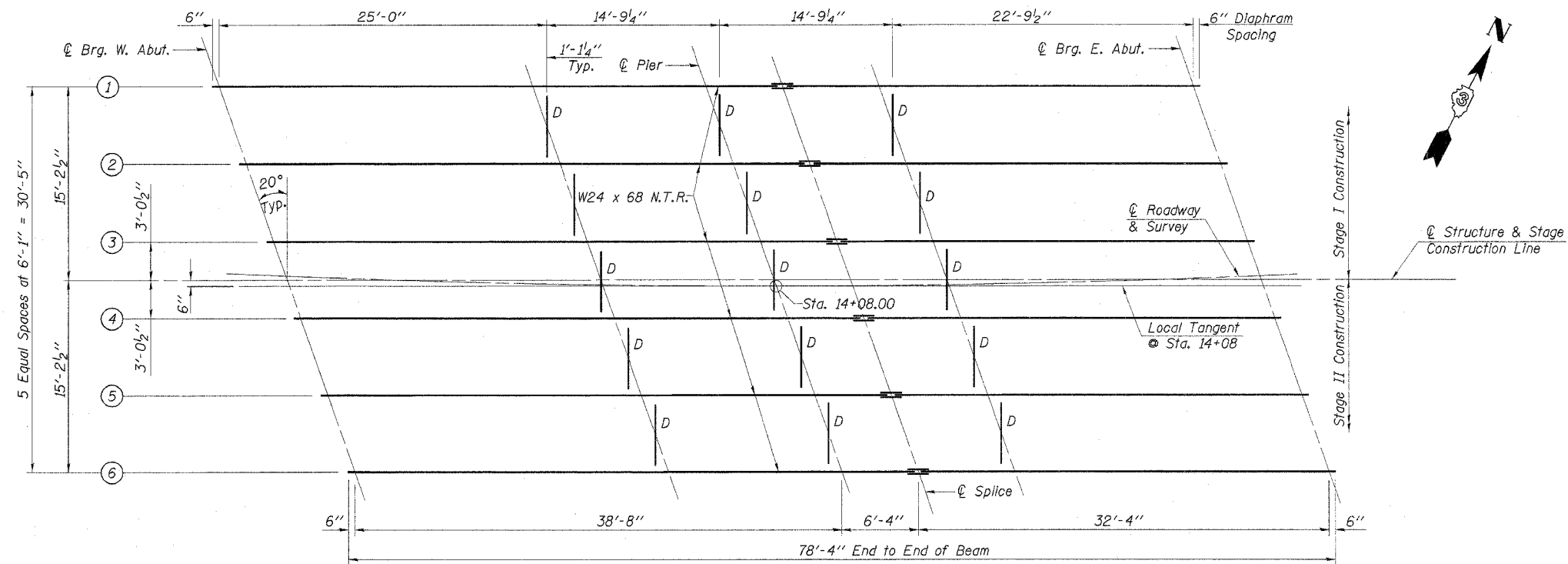
DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.
S-2-D	9-01-03

Work this sheet with Sheets 6 and 7 of 20.

**SUPERSTRUCTURE DETAILS**  
IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

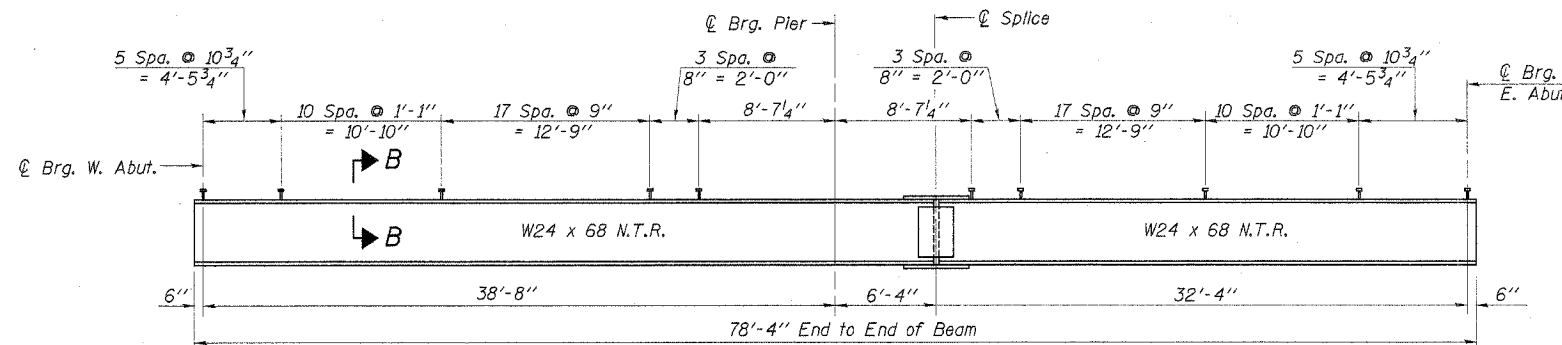
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-6800 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: SUPER03.DGN DATE: 08-31-04
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	23
ILLINOIS			CONTRACT NO. 66364	
			Sheet 9 of 20	



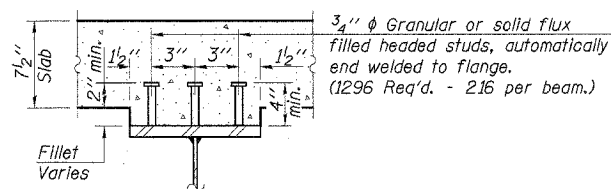
**TOP OF BEAM ELEVATIONS**  
(For Fabrication Only)

	℄ Brg. W. Abut.	℄ Brg. Pier	℄ Splice	℄ Brg. E. Abut.
Beam 1	466.35	466.36	466.36	466.42
Beam 2	466.72	466.72	466.73	466.79
Beam 3	467.08	467.10	467.10	467.16
Beam 4	467.44	467.47	467.47	467.53
Beam 5	467.81	467.83	467.84	467.90
Beam 6	468.17	468.20	468.20	468.28

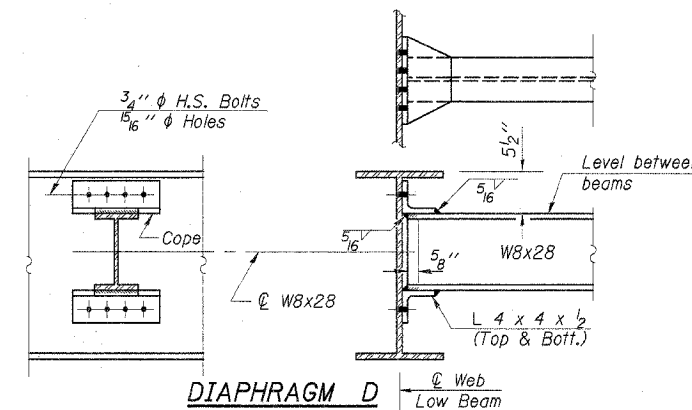


**BEAM ELEVATION**

Note: N.T.R. Indicates that Notch Toughness Requirements are applicable.

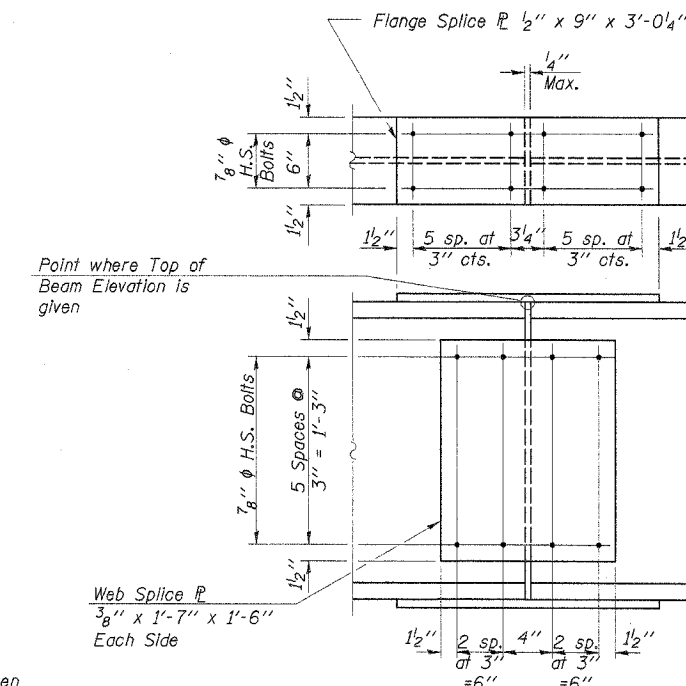


**SECTION B-B**  
Typical Shear Connector Detail



**DIAPHRAGM D**  
15 Required

Note: Two hardened washers shall be required over all oversize holes for diaphragms.  
1/2" Vertical x 1 1/8" slotted holes in top and bottom connection angles at the south side of beam 3 only, except at the pier. Provide 5/16" R washers for the slotted holes. The bolts for the slotted holes in angles at beam 3 shall only be finger tightened prior to the deck slab pouring of Stage II Construction then fully tightened after completion of Stage II pour.



**DETAIL OF SPLICE**  
N.T.R.

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

**STRUCTURAL STEEL**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION IBR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 993-8600 osainc@amvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: STEEL0LDGN DATE: 08-31-04
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	24

ILLINOIS  
CONTRACT NO. 66364  
Sheet 10 of 20

	0.4 Sp. 1	Pier
	0.6 Sp. 2	
$I_s$	(in <sup>4</sup> ) 1,830	1,830
$I_c$	(in <sup>4</sup> ) 6,039	
$I_c (sn)$	(in <sup>4</sup> ) 4,546	
$S_s$	(in <sup>3</sup> ) 154	154
$S_c (n)$	(in <sup>3</sup> ) 251.8	
$S_c (sn)$	(in <sup>3</sup> ) 227.8	
$M$	(k/ft.) 0.665	1.120
$M\ell$	(k) 69	187
$s\ell$	(k/ft.) 0.455	
$Ms\ell$	(k) 56	
$M\ell$	(k) 201	98
$M (Imp)$	(k) 62	30
$5_3[M\ell + M(Imp)]$	(k) 438	213
$Ma$	(k) 732	520
$Mu$	(k) 1231	
$fs\ell$ non-comp (k.s.i.)	5.4	14.6
$fs\ell$ (comp) (k.s.i.)	2.9	
$fs_3(\ell + Imp)$ (k.s.i.)	20.8	16.6
$fs$ (Overload) (k.s.i.)	29.1	31.2
$fs$ (Total) (k.s.i.)		40.6
$VR$	(k) 40.5	

	Abut.	Pier
$R\ell$	(k) 16.7	52.6
$R\ell$	(k) 29.1	34.2
$Imp.$	(k) 8.7	10.3
$R$ (Total)	(k) 54.5	97.1

$I_s$  and  $S_s$  are the moment of inertia and section modulus of the steel section used in computing  $fs$  (Total & Overload).

$I_{c(n)}$  and  $S_{c(n)}$  are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

$I_{c(sn)}$  and  $S_{c(sn)}$  are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads.

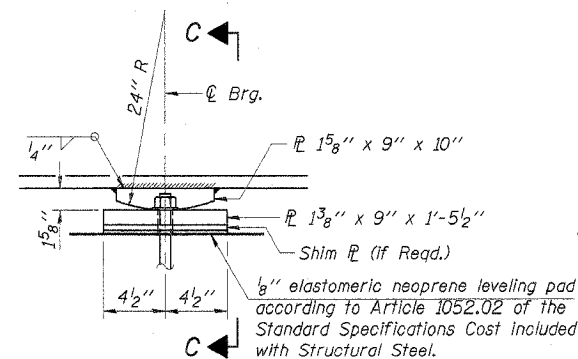
$VR$  is the maximum Live Load + Impact shear range in span.

$Ma$  (Applied Moment) =  $1.3[M\ell + Ms\ell + 5_3(M\ell + M(Imp))]$ .

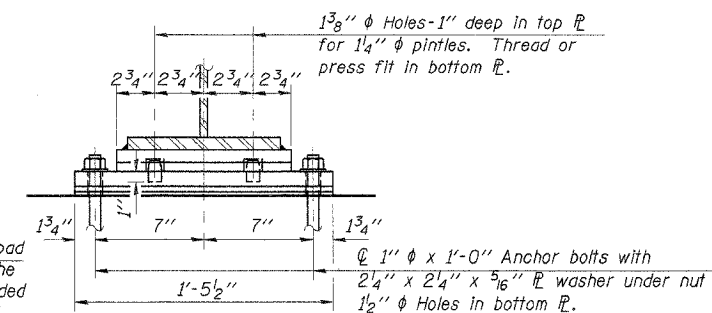
The Plastic Moment capacity ( $Mu$ ) is computed according to AASHTO 10.48.1 and 10.50.1.1.

$fs$  (Overload) is the sum of the stresses due to  $M\ell + Ms\ell + 5_3(M\ell + M(Imp))$ .

$fs$  (Total) (Non-compact section) is the sum of the stresses due to  $1.3[M\ell + Ms\ell + 5_3(M\ell + M(Imp))]$ .

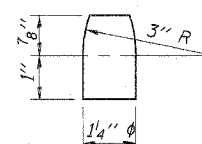


ELEVATION AT PIER

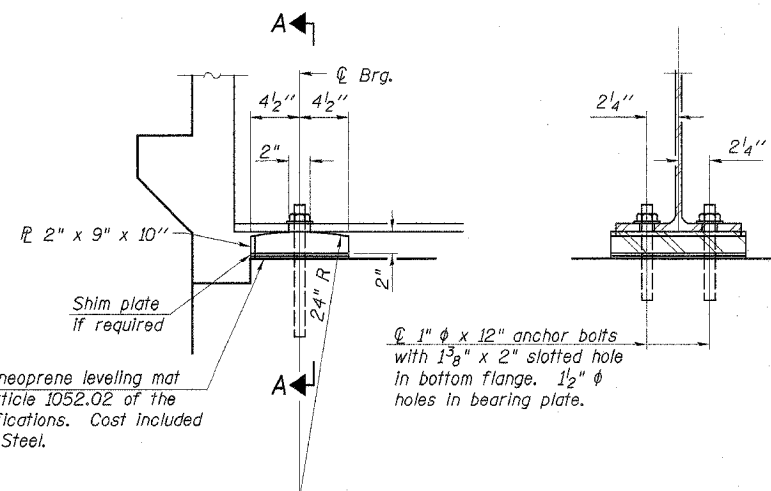


SECTION C-C

BEARING AT PIER  
6 Required



PINTLE

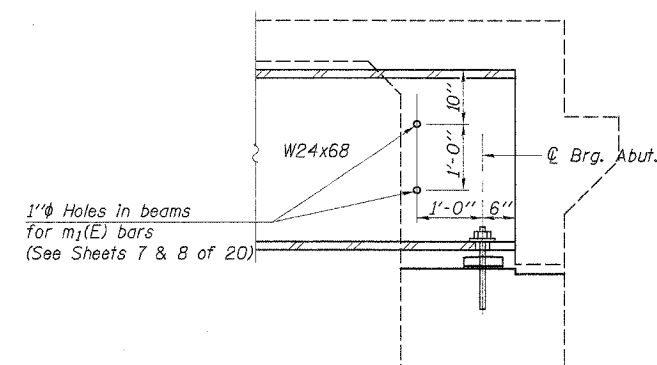


ELEVATION AT ABUTMENT

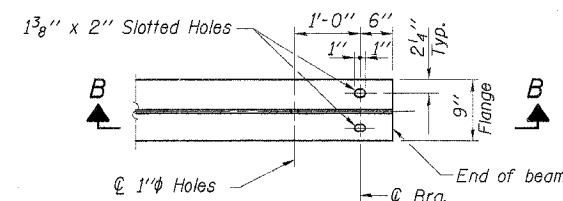
SECTION A-A

BEARING AT ABUTMENTS  
12 Required

Notes: Anchor bolts at bearings may be built into the masonry.  
See sheet 11 of 20 for Anchor Bolt Installation.



SECTION B-B



END OF BEAM DETAILS

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

<b>STRUCTURAL STEEL</b>	
IL. RTE. 71 OVER UNNAMED STREAM F.A.P. ROUTE 627 - SECTION IBR LaSALLE COUNTY STA. 14+08.00 STR. NO. 050-0244	
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS
JOB NO.: 0306.4 FILE: STEEL02.DGN DATE: 08-31-04	

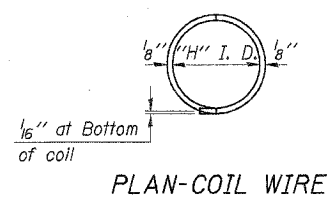
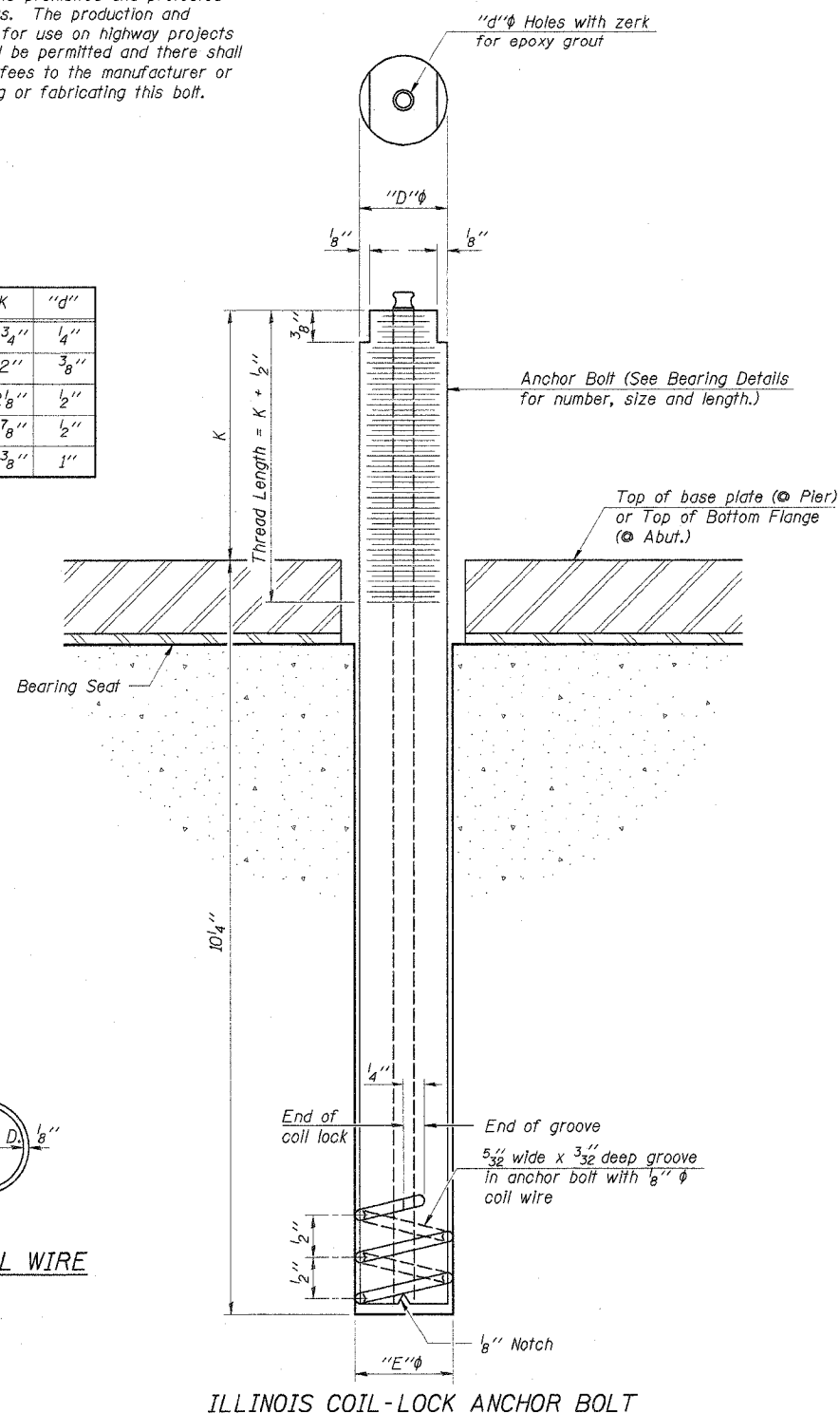


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	25

ILLINOIS  
CONTRACT NO. 66364  
Sheet 11 of 20

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1/8"	3/16"	1 3/4"	1/4"
1 1/4"	3/8"	1/16"	2"	3/8"
1 1/2"	5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 3/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



PLAN-COIL WIRE

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

ABB-1 4-30-99

STANDARDS\GENERAL\BPLAN.DGN 1:1 7-17-98

### MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.

The coil wire shall be made of any suitable soft steel wire. The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed. The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

### INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

### ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

- The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer of the type specified.
  2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
W. Abut	A 307
Pier	A 307
E. Abut	A 307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

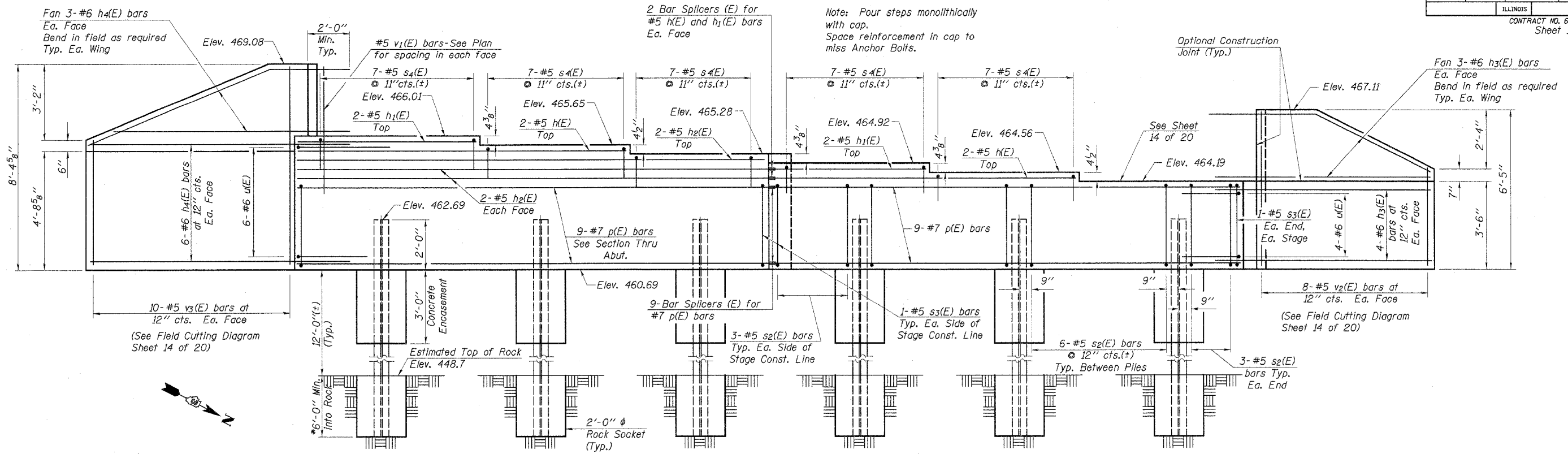
### ANCHOR BOLT DETAILS

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION IBR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 osinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306-4 FILE: ABOLT.DGN DATE: 08-31-04
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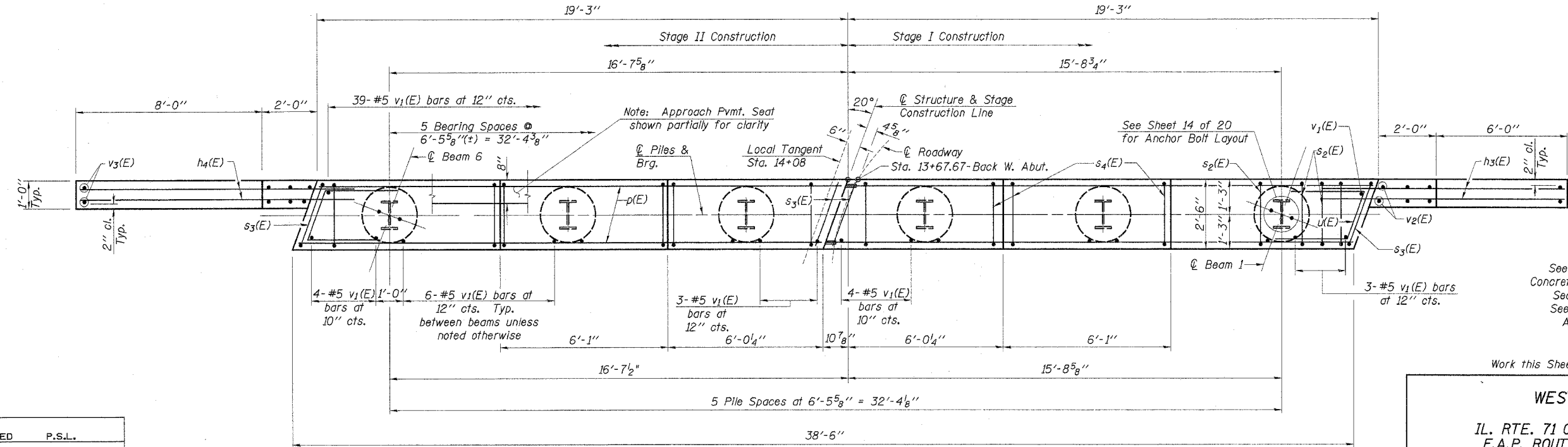
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	26

ILLINOIS  
CONTRACT NO. 66364  
Sheet 12 of 20



**ELEVATION**

\*Concrete included in price for setting piles in rock. See Special Provisions.



**PLAN**

See Sheet 14 of 20 for Concrete Encasement Details & Section Thru Abutment  
See Sheet 11 of 20 for Anchor Bolt Details

Work this Sheet with Sheet 14 of 20

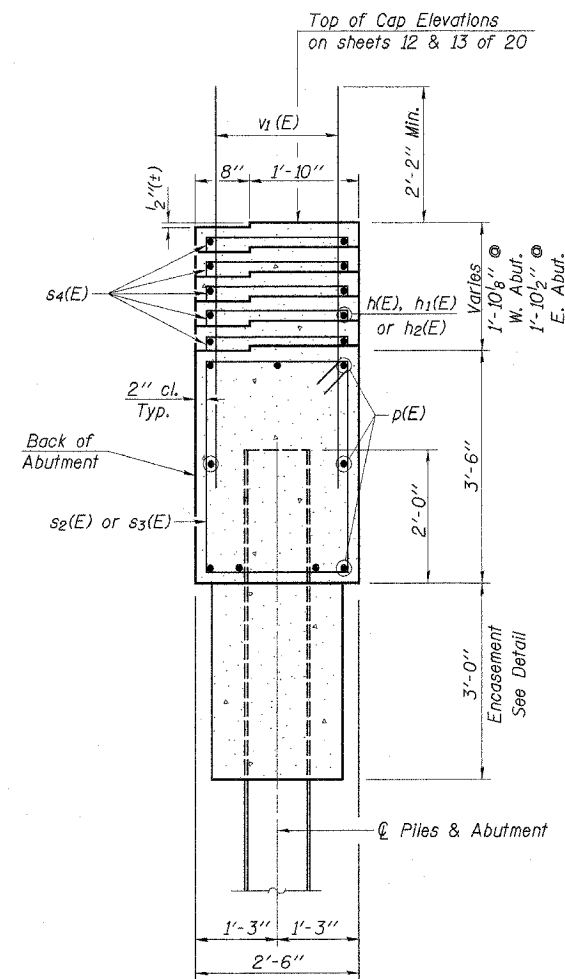
DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

**WEST ABUTMENT**

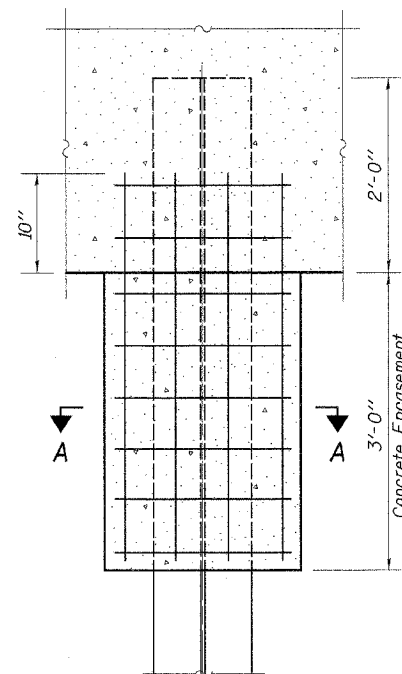
IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION IBR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-6900 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: ABUT02.DGN DATE: 08-31-04
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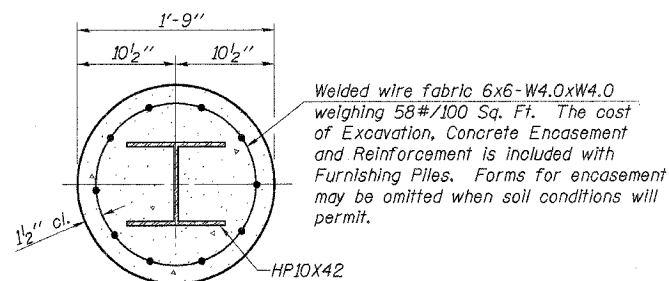




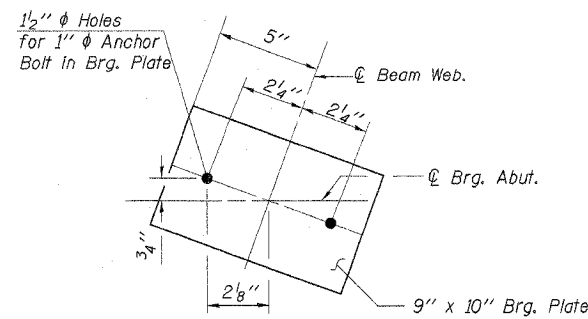
**SECTION THRU ABUTMENT**



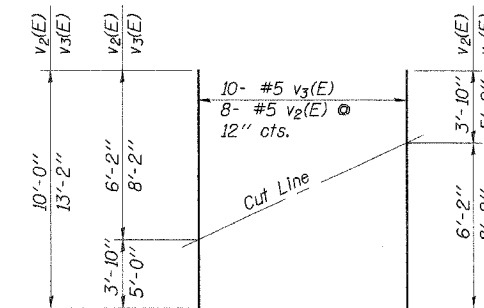
**SECTION A-A  
ENCASEMENT DETAIL**



**SECTION A-A  
ENCASEMENT DETAIL**



**TYPICAL ANCHOR BOLT LAYOUT**



**FIELD CUTTING DIAGRAM**

Order  $v_2(E)$  and  $v_3(E)$  bars full length. Cut as shown and use remainder of bars in opposite face.

**ABUTMENT PILE DATA**

Type: Steel HP10X42  
Capacity: Set Piles in Rock (See Note A)  
Est. Length: 20' at W. Abut.  
16' at E. Abut.  
No. Required: 12

Note A: Precore through the existing earth and rock as shown. Piles shall be grouted into the rock with Class SI concrete. Precored holes shall be clean at the time of placement and grouting. See Special Provisions.

**WEST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h(E)$	4	#5	11'-10"	—
$h_1(E)$	4	#5	6'-1"	—
$h_2(E)$	6	#5	19'-0"	—
$h_3(E)$	14	#6	9'-10"	—
$h_4(E)$	18	#6	11'-10"	—
$p(E)$	18	#7	19'-0"	—
$s_2(E)$	36	#5	11'-7"	□
$s_3(E)$	4	#5	11'-11"	□
$s_4(E)$	35	#5	4'-2"	□
$u(E)$	10	#6	7'-3"	▭
$v_1(E)$	77	#5	4'-4"	—
$v_2(E)$	8	#5	10'-0"	—
$v_3(E)$	10	#5	13'-2"	—
Concrete Structures	Cu. Yd.		20.0	
Reinforcement Bars, Epoxy Coated	Pound		2,730	
Structure Excavation	Cu. Yd.		138	
Furnishing Steel Piles HP10X42	Foot		120	
Setting Piles in Rock	Each		6	
Bar Splicers	Each		13	

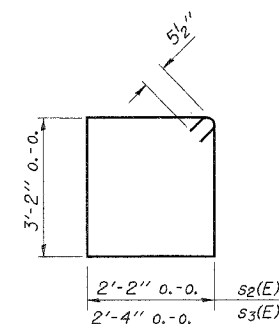
**EAST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h(E)$	4	#5	11'-10"	—
$h_1(E)$	4	#5	6'-1"	—
$h_2(E)$	6	#5	19'-0"	—
$h_3(E)$	14	#6	9'-10"	—
$h_4(E)$	18	#6	11'-10"	—
$p(E)$	18	#7	19'-0"	—
$s_2(E)$	36	#5	11'-7"	□
$s_3(E)$	4	#5	11'-11"	□
$s_4(E)$	35	#5	4'-2"	□
$u(E)$	10	#6	7'-3"	▭
$v_1(E)$	77	#5	4'-4"	—
$v_2(E)$	8	#5	10'-0"	—
$v_3(E)$	10	#5	13'-2"	—
Concrete Structures	Cu. Yd.		20.1	
Reinforcement Bars, Epoxy Coated	Pound		2,730	
Structure Excavation	Cu. Yd.		138	
Furnishing Steel Piles HP10X42	Foot		96	
Setting Piles in Rock	Each		6	
Bar Splicers	Each		13	

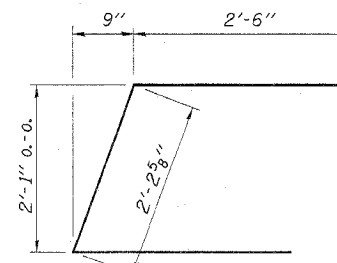
Reinforcement designated (E) shall be epoxy coated.

**Notes:**

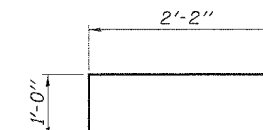
Pour steps monolithically with the cap.  
Space reinforcement in cap to miss anchor bolts.



**BARS  $s_2(E)$  and  $s_3(E)$**



**BAR  $u(E)$**



**BAR  $s_4(E)$**

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

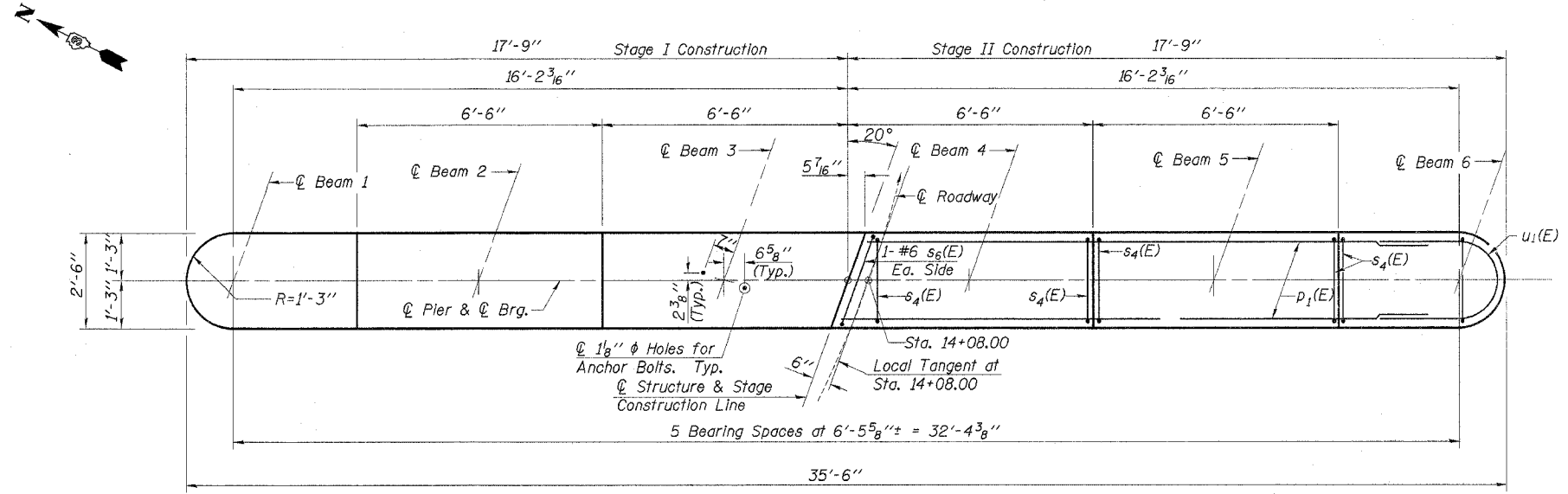
**ABUTMENT DETAILS**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION IBR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE  
SPRINGFIELD, IL 62711  
(217) 793-8600  
osainc@famvia.com

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

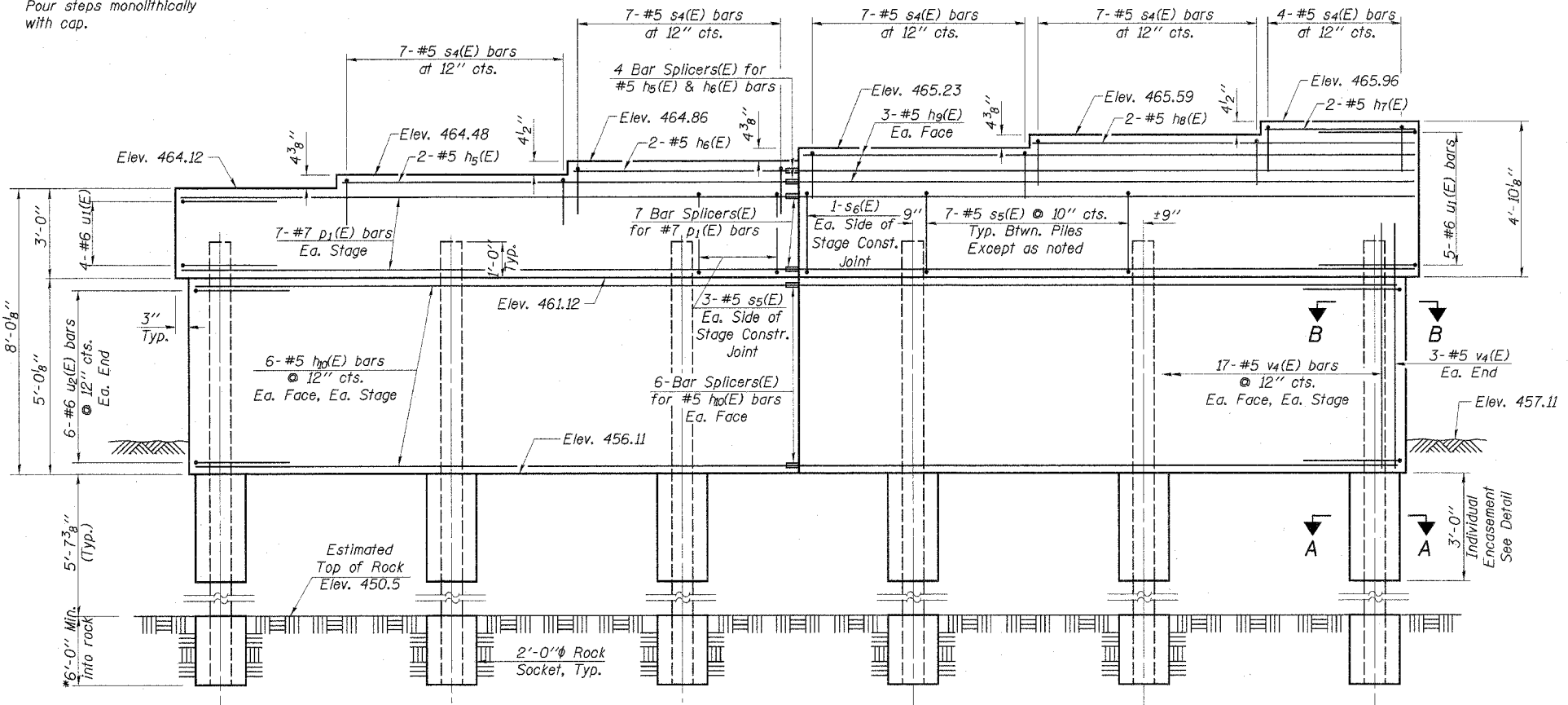
JOB NO.: 0306.4  
FILE: ABUT03.DGN  
DATE: 08-31-04



**TOP PLAN**

Notes: Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.

See Sheet 11 of 20 for Anchor Bolt Details



**ELEVATION**  
(Looking Northeast)

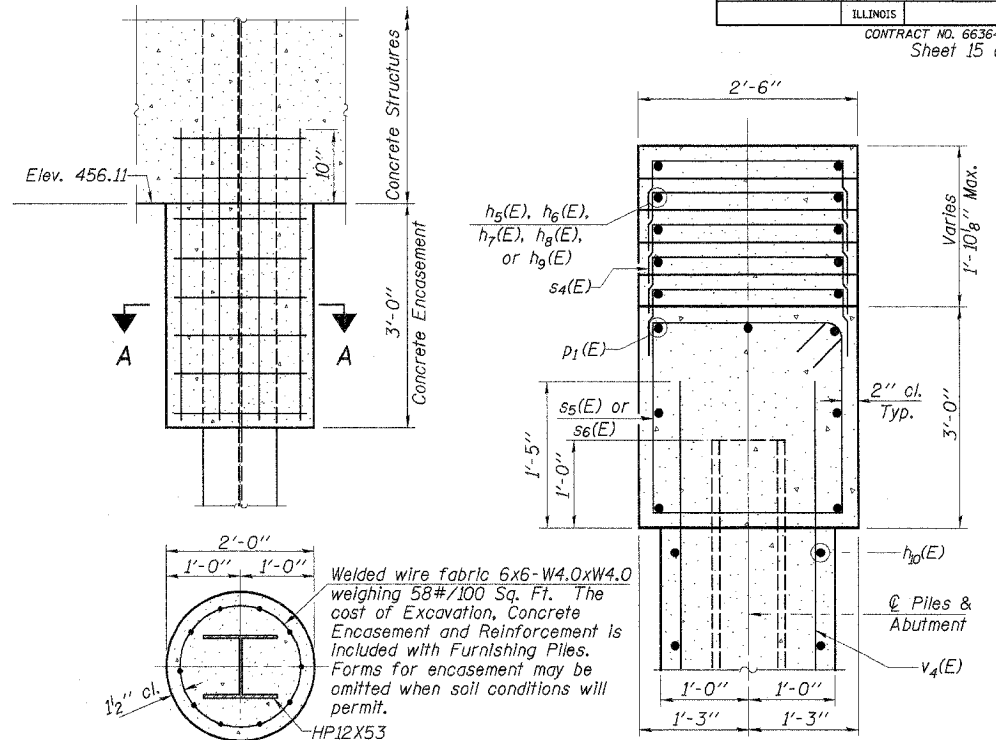
\*Concrete included in price for setting piles in rock. See Special Provisions.

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

**Pile Data**

Type	Steel HP12x53
Capacity	Set piles in Rock (See Note A)
Est. Length	18 Feet
No. Required	6

Note A: Precore through the existing earth and rock as shown. Piles shall be grouted into the rock with class SI concrete. Precored holes shall be clean at the time of placement and grouting. See Special Provisions.

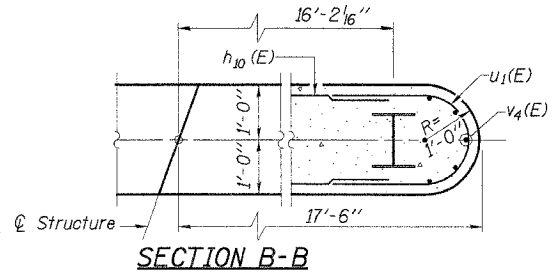


**SECTION A-A**  
**PILE ENCASEMENT DETAIL**

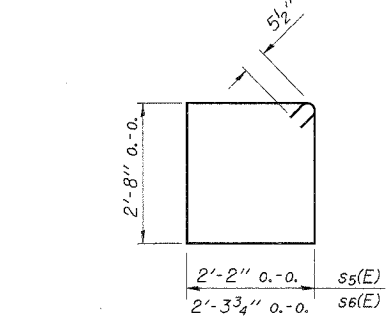
**SECTION THRU PIER**  
At Rt. L's  
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h5(E)	2	#5	12'-2"	—
h6(E)	2	#5	5'-9"	—
h7(E)	2	#5	3'-4"	—
h8(E)	2	#5	8'-8"	—
h9(E)	6	#5	15'-11"	—
h10(E)	24	#5	15'-8"	—
p1(E)	14	#7	16'-0"	—
s4(E)	32	#5	4'-2"	□
s5(E)	34	#5	10'-7"	□
s6(E)	2	#5	10'-11"	□
u1(E)	9	#6	8'-5"	U
u2(E)	12	#6	7'-8"	U
v4(E)	74	#5	6'-3"	—
Bar Splicers			Each	23
Structure Excavation			Cu. Yd.	9
Concrete Structures			Cu. Yd.	25.5
Reinforcement Bars, Epoxy Coated			Pound	2280
Furnishing Steel Piles HP12X53			Foot	108
Setting Piles in Rock			Each	6
Underwater Structure Excavation Protection Location 1			Each	1

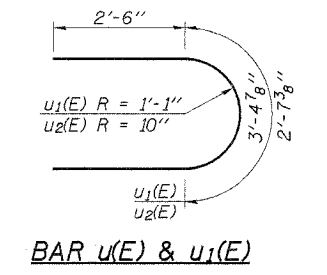
Reinforcement bars designated (E) shall be epoxy coated



**SECTION B-B**



**BARS s5(E) and s6(E)**



**BAR u1(E) & u2(E)**

**PIER**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@amvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: PIER01.DGN DATE: 08-31-04
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### NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_t$
- ② Minimum \*Pull-out Strength (Tension in kips) =  $1.25 \times f_{s_{allow}} \times A_t$

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.

$f_{s_{allow}}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)

$A_t$  = Tensile stress area of lapped reinforcement bars.

\* = 28 day concrete

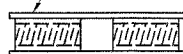
The diameter of this part is equal or larger than the diameter of bar spliced.

#### ROLLED THREAD DOWEL BAR



**\*\* ONE PIECE**

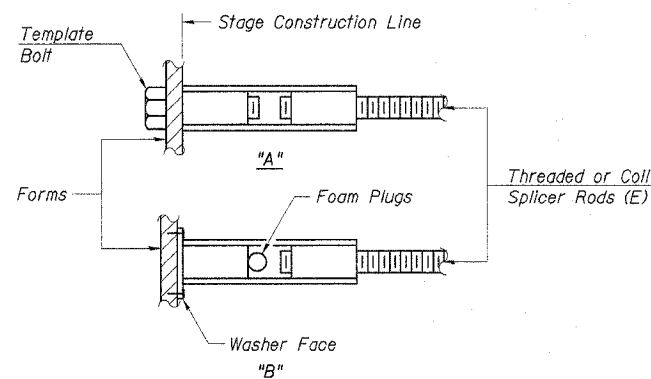
Wire Connector



**WELDED SECTIONS**

### BAR SPLICER ASSEMBLY ALTERNATIVES

\*\* Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



### INSTALLATION AND SETTING METHODS

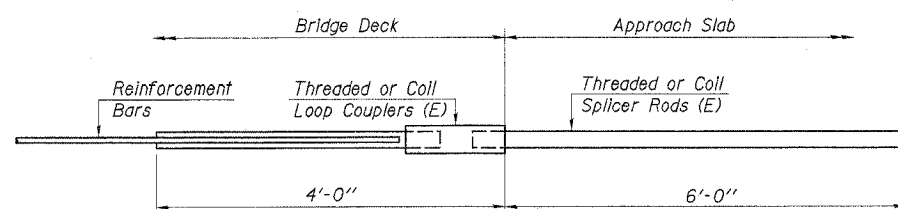
"A": Set bar splicer assembly by means of a template bolt.

"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.

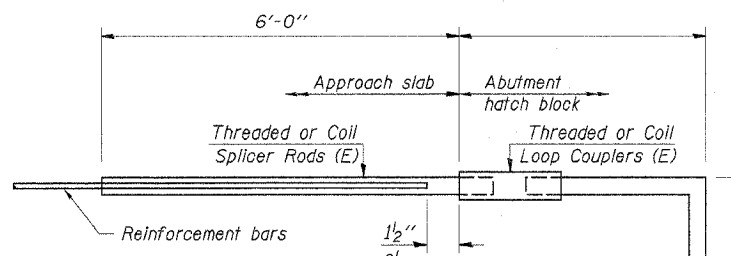
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



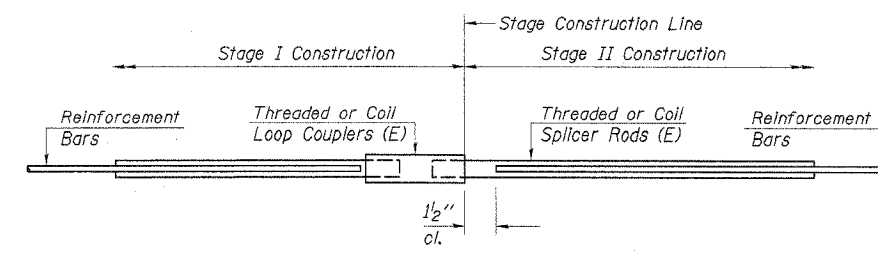
### FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 68



### FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =



### STANDARD

Bar Size	No. Assemblies Required	Location
#5	225	Deck
#6	16	Abut. Diaphragm
#7	18	Abutments
#7	7	Pier Cap
#5	12	Pier Wall
#5	4	Pier Cap
#5	8	Abut. Cap

### BAR SPLICER ASSEMBLY DETAILS

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION IBR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE  
SPRINGFIELD, IL 62711  
(217) 793-8600  
oesinc@famvid.com

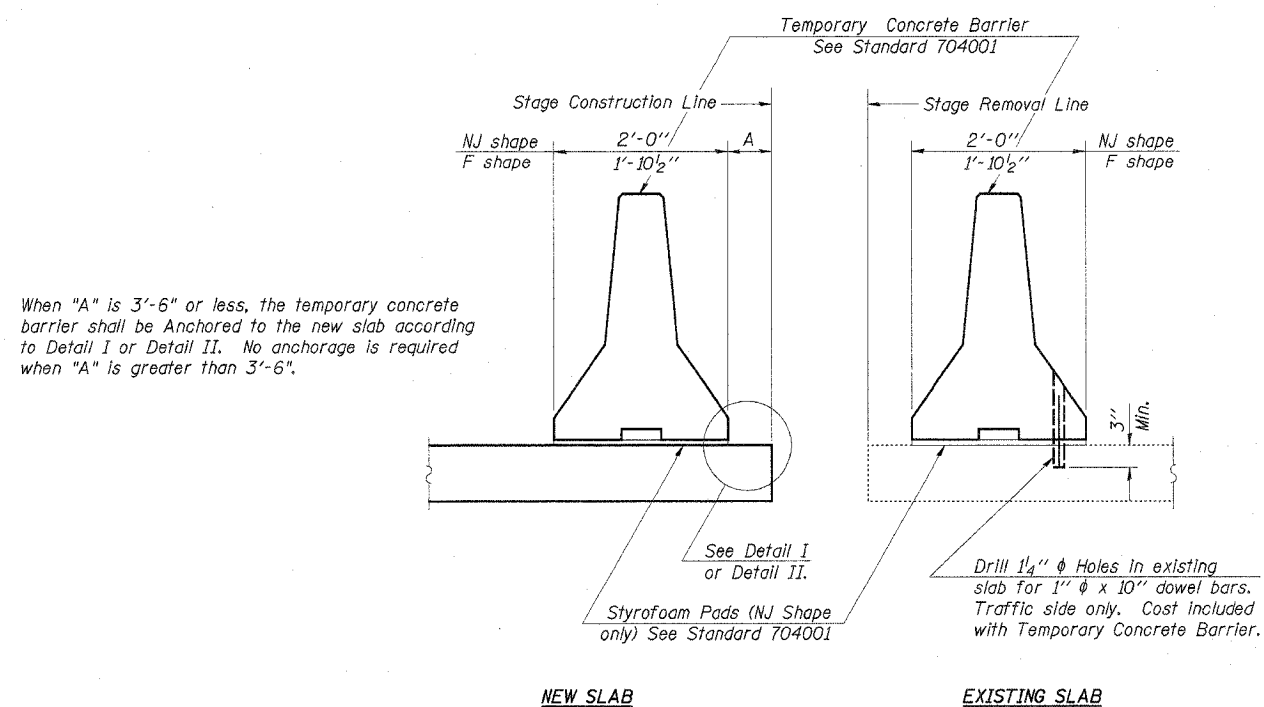
**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

JOB NO.: 0306.4  
FILE: SPLICE.DGN  
DATE: 08-31-04

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.
<b>BSD-1</b>	9-01-03

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	31

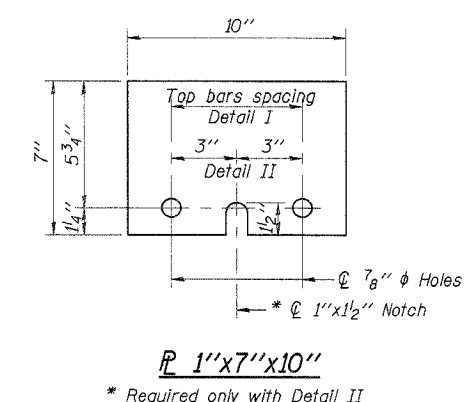
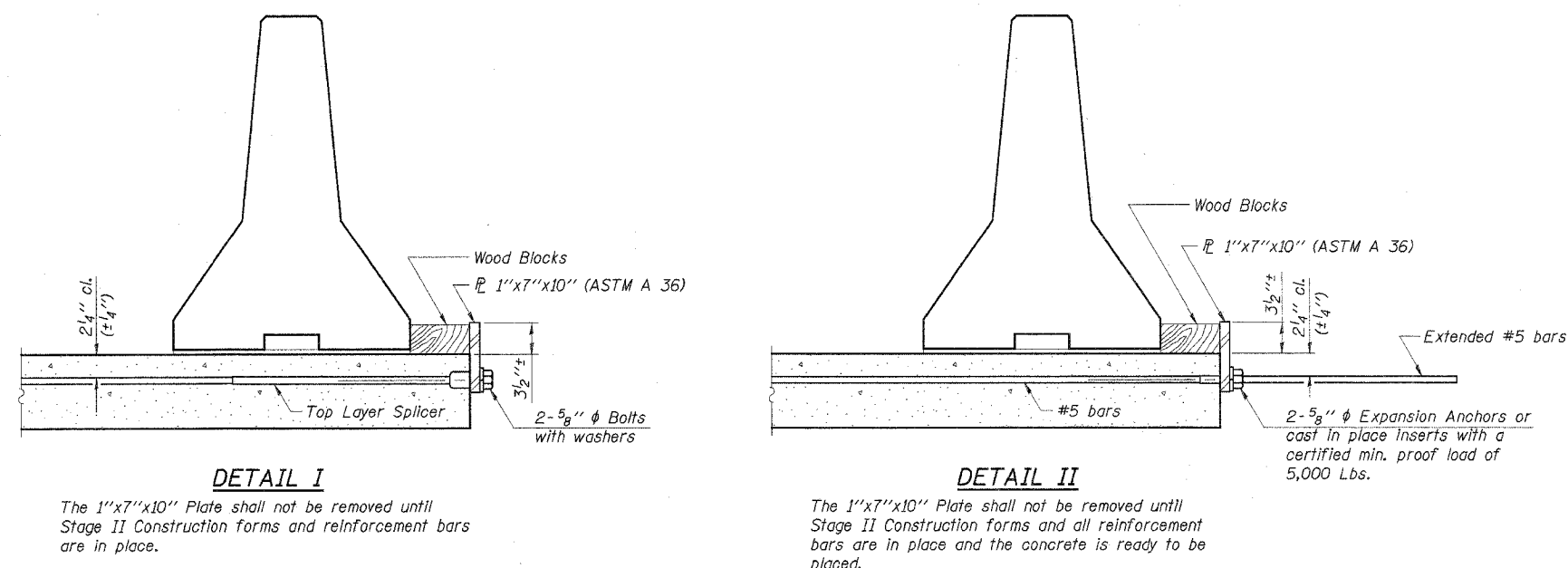
ILLINOIS  
CONTRACT NO. 66364  
Sheet 17 of 20



**NOTES**

Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1"x7"x10" steel PL to the concrete slab with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.  
Cost of anchorage is included with Temporary Concrete Barrier.



DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.
R-27	10-31-02

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION 1BR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 993-8600 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: BARRIER.DGN DATE: 08-31-04
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	32

CONTRACT NO. 66364  
Sheet 18 of 20



### SOIL BORING LOG

Page 1 of 1

ROUTE FAP 627(IL71) DESCRIPTION IL 71 OVER ARMSTRONG BROOK NEAR THE EAST ENTRANCE TO STARVED ROCK PARK LOGGED BY K.W.  
DATE 11/1/01

SECTION I-BR LOCATION SE 1/4, SEC. 24, TWP. 33N, RNG. 2E, 3<sup>rd</sup> PM

COUNTY LASALLE DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 050-0142 DEPTH (ft) 14+08  
Station 14+08  
BORING NO. 1 EAST ABUT. Core Diameter 2.1 in  
Station 14+32 Top of Rock Elev. 452.23 ft  
Offset 15.608 LT Begin Core Elev. 447.23 ft  
Ground Surface Elev. 488.73 ft

DEPTH (ft)	DESCRIPTION	U.C.S. (tsf)	M.O.S.T. (%)	WATER CONTENT (%)
0	AUGERED SHOULDER STONE Over Brown SILTY CLAY LOAM			
1	Medium to Stiff Brown SILTY CLAY LOAM with GRAVEL	1.0	16.2	
2	Very Soft Brown LOAM with GRAVEL	0.2	12.9	
3	Loose Saturated & Weathered White Rounded SAND (ST. PETER SANDSTONE)	15.0		
15	TOP of Dense White ST. PETER SANDSTONE ANCELL GROUP ORDOVICIAN SYSTEM	100/	18.5	
18				
20	Borehole continued with rock			

Color pictures of the cores Yes  
Cores will be stored for examination until 2004  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
BBS, form 137 (Rev. 8-99)

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.



### ROCK CORE LOG

Page 1 of 2

ROUTE FAP 627(IL71) DESCRIPTION IL 71 OVER ARMSTRONG BROOK NEAR THE EAST ENTRANCE TO STARVED ROCK PARK LOGGED BY K.W.  
DATE 11/1/01

SECTION I-BR LOCATION SE 1/4, SEC. 24, TWP. 33N, RNG. 2E, 3<sup>rd</sup> PM

COUNTY LASALLE CORING METHOD 5' DOUBLE BARREL

STRUCT. NO. 050-0142 CORING BARREL TYPE & SIZE 5' DOUBLE BARREL  
Station 14+08  
BORING NO. 1 EAST ABUT. Core Diameter 2.1 in  
Station 14+32 Top of Rock Elev. 452.23 ft  
Offset 15.608 LT Begin Core Elev. 447.23 ft  
Ground Surface Elev. 488.73 ft

DEPTH (ft)	RECOVERY (%)	RECOVERY (min)	RECOVERY (max)	RECOVERY (avg)	STRENGTH (tsf)
0	96	81			37.1
1	72	0			89.9
2	96	86			33.7
3	75	7			18.0

Color pictures of the cores Yes  
Cores will be stored for examination until 2004  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
BBS, form 138 (Rev. 8-99)



### ROCK CORE LOG

Page 2 of 2

ROUTE FAP 627(IL71) DESCRIPTION IL 71 OVER ARMSTRONG BROOK NEAR THE EAST ENTRANCE TO STARVED ROCK PARK LOGGED BY K.W.  
DATE 11/1/01

SECTION I-BR LOCATION SE 1/4, SEC. 24, TWP. 33N, RNG. 2E, 3<sup>rd</sup> PM

COUNTY LASALLE CORING METHOD 5' DOUBLE BARREL

STRUCT. NO. 050-0142 CORING BARREL TYPE & SIZE 5' DOUBLE BARREL  
Station 14+08  
BORING NO. 1 EAST ABUT. Core Diameter 2.1 in  
Station 14+32 Top of Rock Elev. 452.23 ft  
Offset 15.608 LT Begin Core Elev. 447.23 ft  
Ground Surface Elev. 488.73 ft

DEPTH (ft)	RECOVERY (%)	RECOVERY (min)	RECOVERY (max)	RECOVERY (avg)	STRENGTH (tsf)
4	5	13	7		132.6
14					
15					
16					
17					
18					
19					
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100					

Color pictures of the cores Yes  
Cores will be stored for examination until 2004  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
BBS, form 138 (Rev. 8-99)

SOIL BORING & ROCK CORE LOG  
IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION IBR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE  
SPRINGFIELD, IL 62711  
(217) 793-8600  
oasinc@famvid.com

OZYURT AND STONE, INC.  
CONSULTING ENGINEERS

JOB NO.: 0306-4  
FILE: boringLdgn  
DATE: 08-31-04





### SOIL BORING LOG

Page 1 of 1

Date 11/6/01

ROUTE FAP 627(IL71) DESCRIPTION IL 71 OVER ARMSTRONG BROOK NEAR THE EAST ENTRANCE TO STARVED ROCK PARK LOGGED BY K.W.

SECTION I-BR LOCATION SE 1/4, SEC. 24, TWP. 33N, RNG. 2E, 3<sup>rd</sup> PM

COUNTY LASALLE DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 050-0142 DEPT W S Qu T  
Station 14+08  
BORING NO. 2 WEST ABUT. B L O S M  
Station 13+80 T W S Qu T  
Offset 15.50R RT H S Qu T  
Ground Surface Elev. 488.23 ft (ft) (#) (in) (min) (in) (min) (in)

DEPTH (ft)	DESCRIPTION	DEPT	W	S	Qu	T	MOISTURE (%)	UCS (psi)
0	Surface Water Elev. <u>458.70</u> ft							
0	Stream Bed Elev. _____ ft							
0	Groundwater Elev. _____ ft							
0	First Encounter Upon Completion After _____ Hrs.							
0	Gray Fine to Coarse SAND	100						18.0
0	TOP OF ROCK Dense White to Gray Weathered ST. PETER SANDSTONE (continued)	5"						18.0
458.73	Stiff Brown SILTY CLAY LOAM with GRAVEL	2	1.5	12.8				15.0
443.23	Borehole continued with rock coring.	100						
442.23	Stiff Brown LOAM to CLAY LOAM with GRAVEL including COAL, CHERT SHALE, SANDSTONE	1	14.1					
453.73	Very Soft LOAM with GRAVEL (AS ABOVE)	1	0.2	18.3				
450.23	Very Soft Black/Dark Olive Gray LOAM to CLAY LOAM with Traces of White SAND & Shell	1	0.2	29.2				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (S-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)



### ROCK CORE LOG

Page 1 of 2

Date 11/6/01

ROUTE FAP 627(IL71) DESCRIPTION IL 71 OVER ARMSTRONG BROOK NEAR THE EAST ENTRANCE TO STARVED ROCK PARK LOGGED BY K.W.

SECTION I-BR LOCATION SE 1/4, SEC. 24, TWP. 33N, RNG. 2E, 3<sup>rd</sup> PM

COUNTY LASALLE CORING METHOD \_\_\_\_\_

STRUCT. NO. 050-0142 CORING BARREL TYPE & SIZE 5' DOUBLE BARREL  
Station 14+08  
BORING NO. 2 WEST ABUT. Core Diameter 2.1 in  
Station 13+80 Top of Rock Elev. 448.73 ft  
Offset 15.50R RT Begin Core Elev. 443.23 ft  
Ground Surface Elev. 488.23 ft

DEPTH (ft)	DESCRIPTION	RECOVERY (%)	ROD (%)	RECOVERY (min)	STRENGTH (tsf)
443.23	ST. PETER SANDSTONE, Light Gray to White, Very, Poorly to Firmly Cemented, Very Abrasive	35	20		62.9
	RECOVERY & ROD ARE POOR DUE TO THE POORLY CEMENTED SANDSTONE WASHING OR FALLING OUT OF THE CORE BARREL				
	Qu MOISTURE CONTENT FOR RUN 1 = 6.4%				
	Qu MOISTURE CONTENTS FOR RUN 3 = 10.3% & 9.5%				
418.23	End of Boring	0	0		
40		77	40		65.8
40		38	0		35.2

Color pictures of the cores Yes  
Cores will be stored for examination until 2004  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
BBS, form 138 (Rev. 8-99)



### ROCK CORE LOG

Page 2 of 2

Date 11/6/01

ROUTE FAP 627(IL71) DESCRIPTION IL 71 OVER ARMSTRONG BROOK NEAR THE EAST ENTRANCE TO STARVED ROCK PARK LOGGED BY K.W.

SECTION I-BR LOCATION SE 1/4, SEC. 24, TWP. 33N, RNG. 2E, 3<sup>rd</sup> PM

COUNTY LASALLE CORING METHOD \_\_\_\_\_

STRUCT. NO. 050-0142 CORING BARREL TYPE & SIZE 5' DOUBLE BARREL  
Station 14+08  
BORING NO. 2 WEST ABUT. Core Diameter 2.1 in  
Station 13+80 Top of Rock Elev. 448.73 ft  
Offset 15.50R RT Begin Core Elev. 443.23 ft  
Ground Surface Elev. 488.23 ft

DEPTH (ft)	DESCRIPTION	RECOVERY (%)	ROD (%)	RECOVERY (min)	STRENGTH (tsf)
443.23	ST. PETER SANDSTONE, Light Gray to White, Very, Poorly to Firmly Cemented, Very Abrasive	35	20		62.9
	RECOVERY & ROD ARE POOR DUE TO THE POORLY CEMENTED SANDSTONE WASHING OR FALLING OUT OF THE CORE BARREL				
	Qu MOISTURE CONTENT FOR RUN 1 = 6.4%				
	Qu MOISTURE CONTENTS FOR RUN 3 = 10.3% & 9.5% (continued)				
418.23	End of Boring	0	0		

Color pictures of the cores Yes  
Cores will be stored for examination until 2004  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
BBS, form 138 (Rev. 8-99)

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

SOIL BORING & ROCK CORE LOG  
IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION IBR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE  
SPRINGFIELD, IL 62711  
(217) 793-8600  
casinc@famvid.com

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

JOB NO.: 0306.4  
FILE: boring2.dgn  
DATE: 08-31-04

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 627	IBR	LaSALLE	46	34
ILLINOIS				

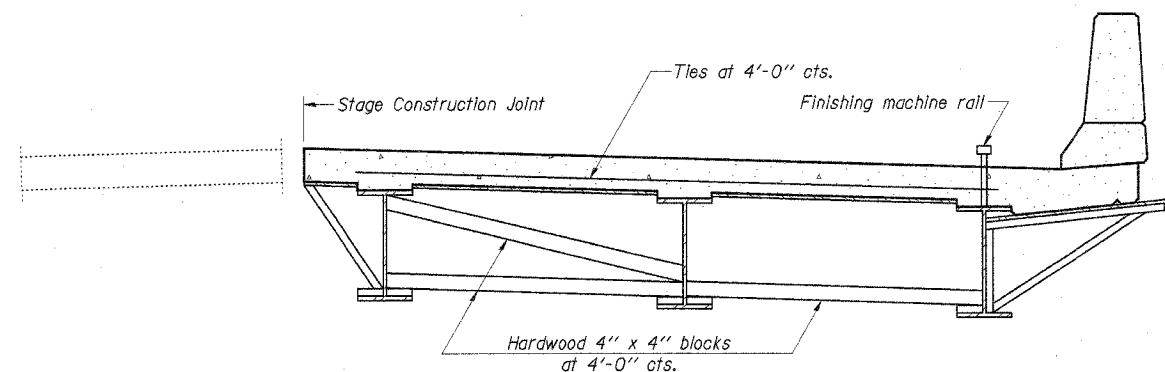
CONTRACT NO. 66364  
Sheet 20 of 20

When cantilever forming brackets are used, the work shall be done according to Article 503.06, except as modified below and in the details shown on this sheet.

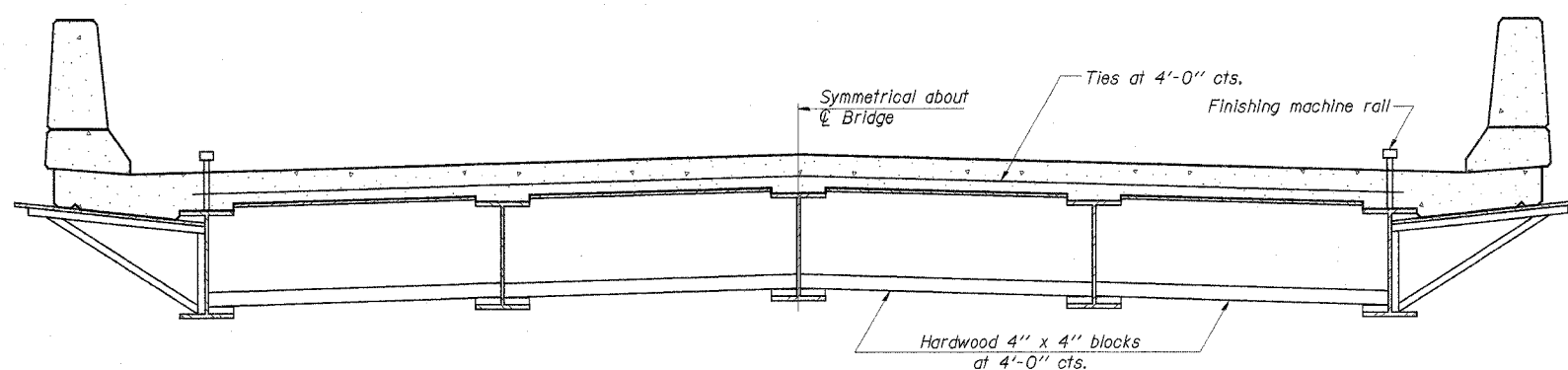
The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



**FORM BRACES FOR  
STAGE CONSTRUCTION**



**FORM BRACES FOR  
STANDARD CONSTRUCTION**

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

**SB-1**      9-01-03

**CANTILEVER FORMING BRACKET DETAILS**

IL. RTE. 71 OVER UNNAMED STREAM  
F.A.P. ROUTE 627 - SECTION IBR  
LaSALLE COUNTY  
STA. 14+08.00  
STR. NO. 050-0244

4440 ASH GROVE  
SPRINGFIELD, IL 62711  
(217) 793-8600  
oasinc@famvid.com

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

JOB NO.: 0306.4  
FILE: BRACKET.DGN  
DATE: 08-31-04

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	PROJECT	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
1-BR	LA SALLE	44	14		

B.M. #1 on S.W. Corner of Hub Rail 40' Pt.  
Sta. 14+07 Elev. 700.00

Exist. Struct. To be removed after New Bridge is Built. No Salvage.  
Built as Sec. I-B, Sta. 14+33, F.A. Pt. (S.B.I.-7A) in 1919  
Reinforced Concrete slab bridge 38'-1" fl to fl abutments, 22'-0" wide on reinforced concrete closed abutments.

STATION 14+08  
BUILT 19 BY  
STATE OF ILLINOIS  
SBI RT. 74 SEC. I-BR  
LOADING HS 20

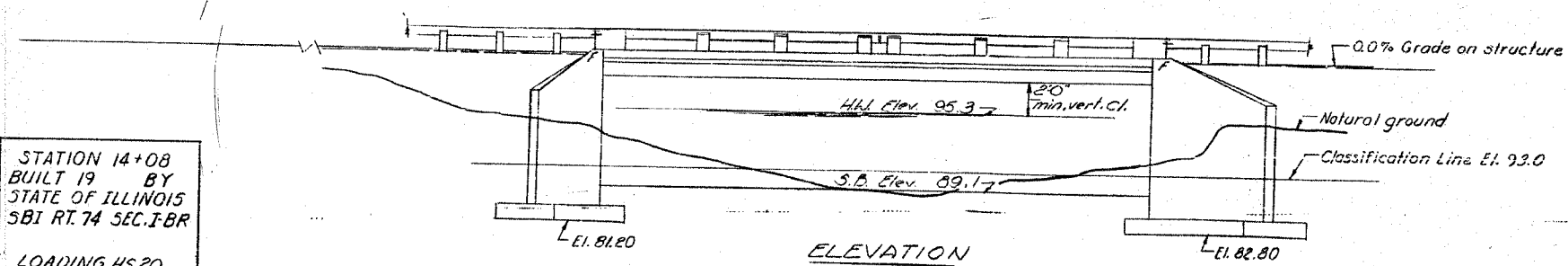
NAME PLATE  
See Std 2113-1

HORIZONTAL CURVE DATA

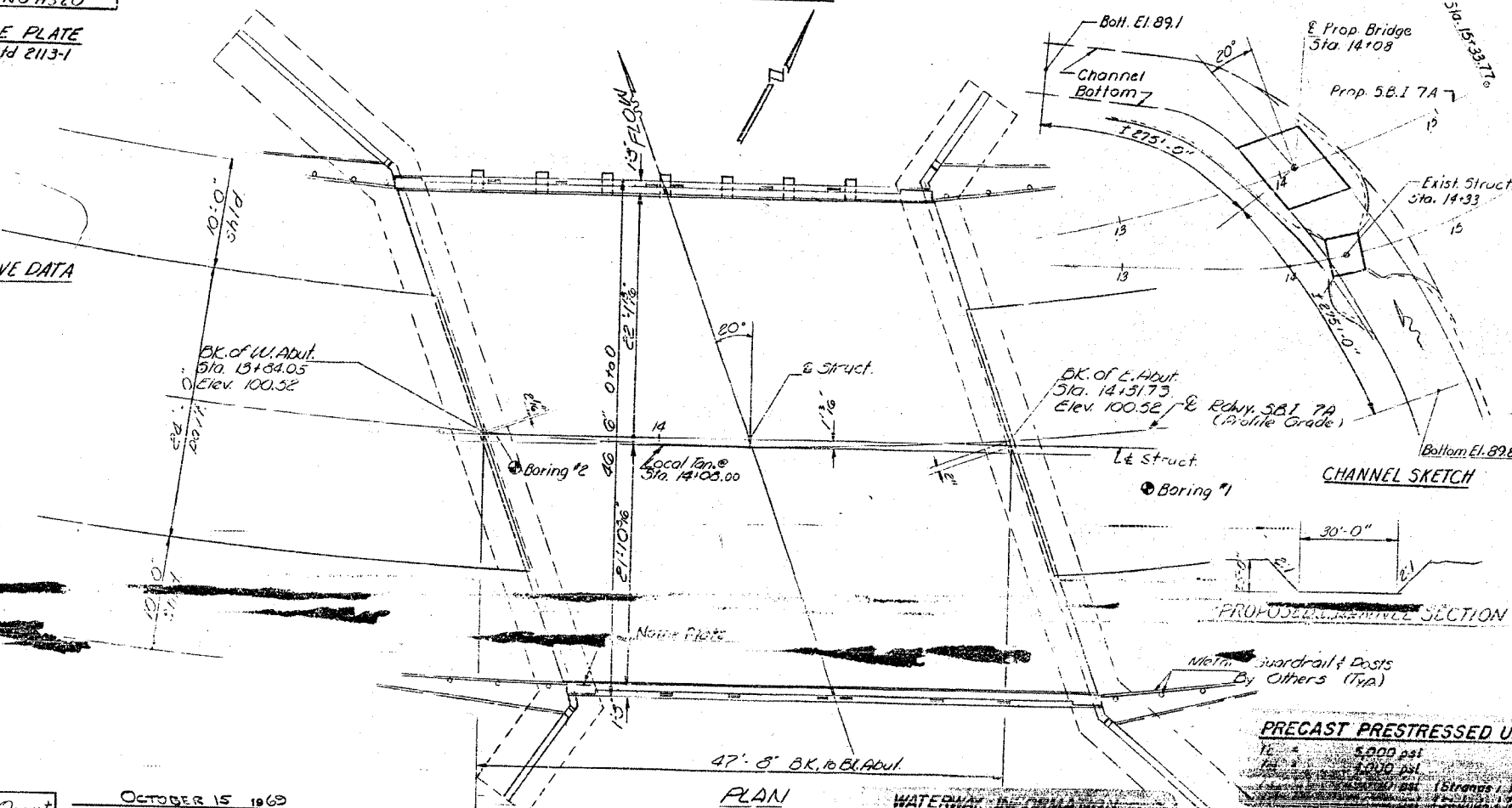
P.I. Sta. 13+07.53  
Δ = 28° 40'  
D = 6° 12'  
T = 236.13'  
R = 924.13'  
L = 462.27'  
E = 29.69'  
SE = 0.064  
PC = Sta. 10+17.40  
PT = Sta. 15+33.77

DESIGNED	George E. Ogquist
CHECKED	V. J. ...
DRAWN	D.A. Williams Sr.
CHECKED	

OCTOBER 15 1969  
EXAMINED  
PASSED  
APPROVED



ELEVATION



PLAN

WATERWAY INFORMATION

Drainage Area	3470 Acres
Character	rolling hills, mostly cultivated
Required Opening	100' x 10' x 10'
Present Opening	38'-1" x 22'-0" Sq. Ft.
Proposed Opening	47'-8" x 10' Sq. Ft.
Ordinary Water Elev.	95.0
Low Water Elev.	89.0
High Water Elev.	100.0

PRECAST PRESTRESSED UNITS

Yc	5,000 psi
Yt	1,000 psi
fc	20,000 psi (Reinf.)
Yc	75 psi (Substructure)
n	10

DESIGN STRESSES

fc	20,000 psi (Reinf.)
Yc	75 psi (Substructure)
n	10

LOADING HS 20-44 Max Soil Pressure = 2.33 Tons/sq. ft.

**GENERAL NOTES**

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Handrail concrete shall be used in the rail and rail posts. Rail shall be poured in separate operation from interior rail posts.

Backfill shall be placed behind the abutment after the deck beams have been placed and grouted. See Article 502.11 of the Standard Specifications.

An alternate strand pattern using Extra High Strength Prestressing strand (270 k.s.f.) is permitted.

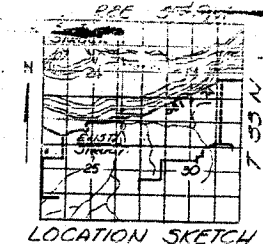
Protective Coat shall not be applied to surfaces to which Coal Tar Interlayer Protective Coat is applied.

The back surfaces of the abutments and wings shall be waterproofed above the tops of the footings.

Note: Roadway elevations are on top of 1/2" Class I Surface.

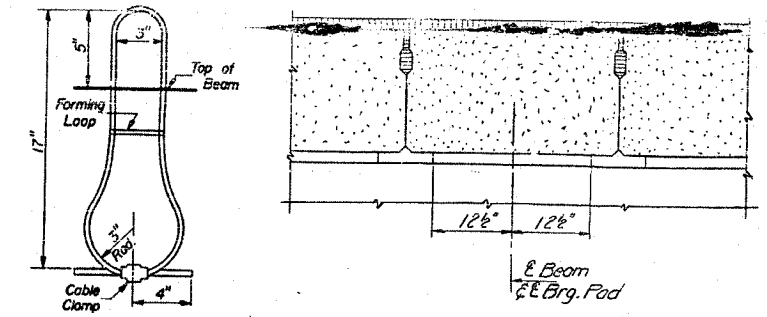
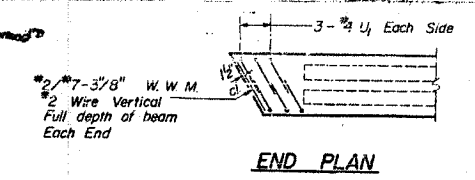
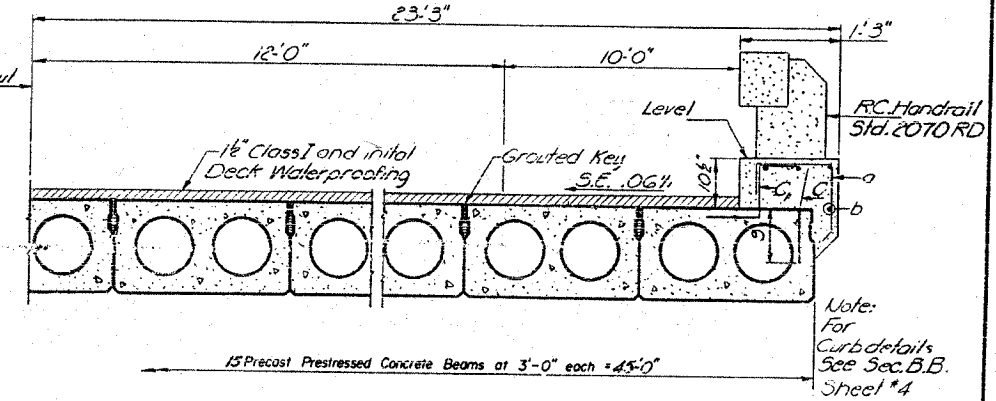
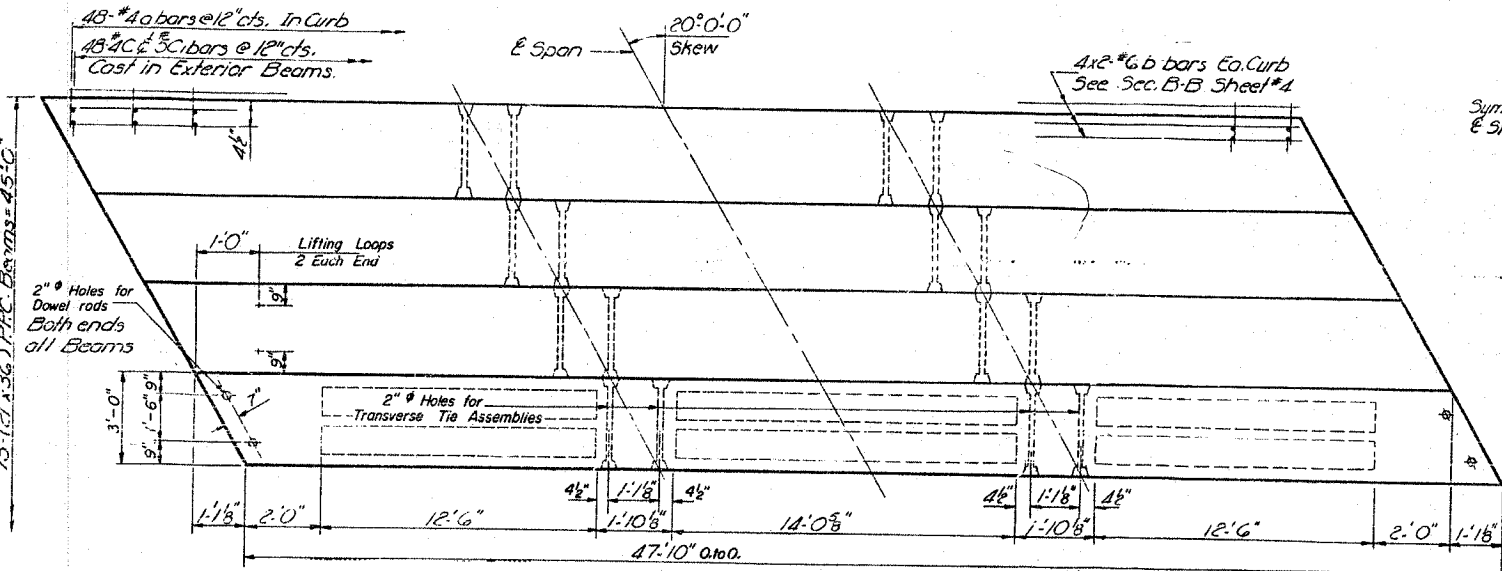
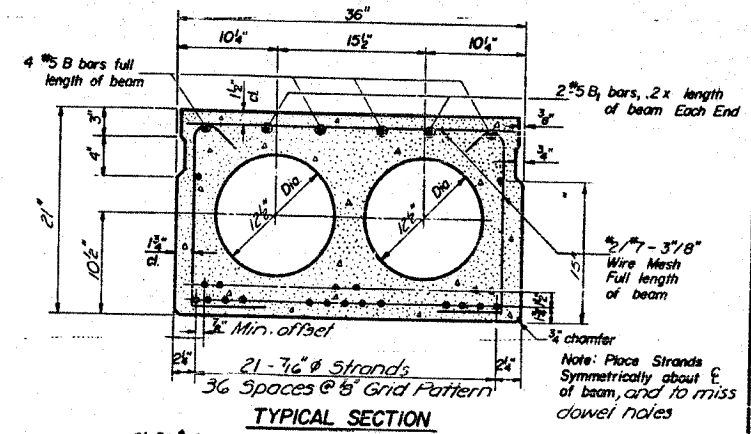
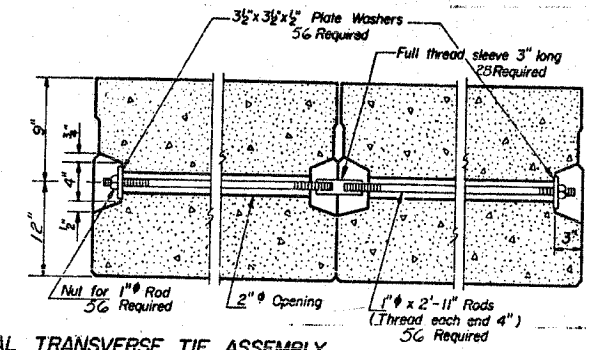
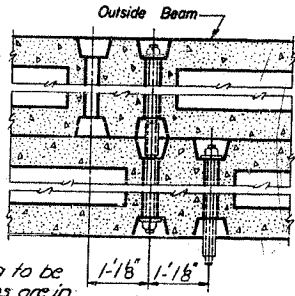
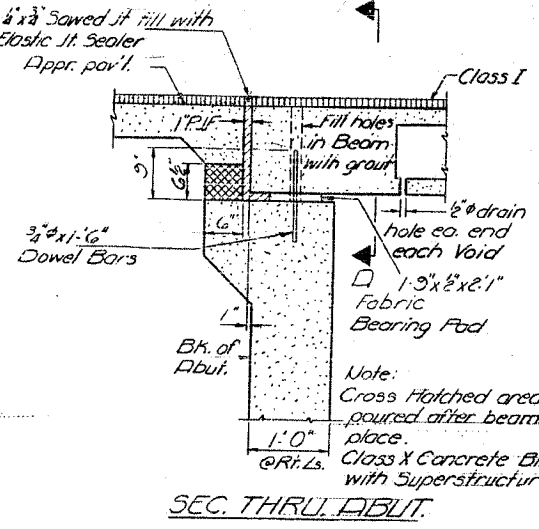
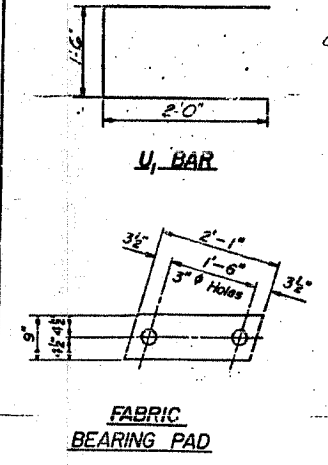
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Bituminous Conc. Surface Course, Class I	Tons	20		20
Removal of Existing Structures	Each			1
Class A Excavation for Structures	Cu. Yds			70
Class B Excavation for Structures	Cu. Yds			820
Handrail Concrete	Cu. Yds	3.0		3.0
Class A Concrete	Cu. Yds	9.7	213.6	223.3
Precast Prestressed Conc. Deck Beams (21")	Sq. Ft.	2153		2153
Name Plates	Sq.			1
Coal Tar Interlayer Protective Coat	Sq. Yds			235
Reinforcement Bars	Lbs.	3340	23,330	26,670
Protective Coat	Sq. Yds	50		50
Channel Excavation	Cu. Yds			418



SBI RT. 74 OVER ARMSTRONG CROOK  
SBI RT. 74 (11-71) SEC. I-BR  
LASALLE COUNTY  
STATION 14+0800

PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
8	I-BR LA SALLE	44	15
SHEET NO. C			
6 SHEETS			



**GENERAL NOTES**

1. The nominal diameter shall be 7/8" and the nominal cross-sectional area shall be 0.109 sq. in. Lifting loops shall be 3/8" diameter, 6x19 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 3,000 lbs.

2. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside beam shall be filled with grout after transverse tie assembly is in place.

3. Longitudinal shear keys shall be packed with a very dry mix of 2-1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into the sub-structure and the anchor dowels shall be grouted in place.

4. Steel for dowel rods, transverse tie rods shall be SAE 1020 or ASTM A-506 Grade 70-80.

5. After fabrication the transverse tie assemblies (tie rods, nuts, washers and sleeves) shall be hot-dipped galvanized in accordance with A.S.T.M. Designation: A 153.

6. Cost of reinforcement and accessories cast into the beam, of bearing pads, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

**BILL OF MATERIAL**

NO.	SIZE	QTY.	UNIT	TOTAL
a	3/8"	#4	3'-3"	
b	1/2"	#6	24'-6"	
c	3/8"	#4	1'-6"	
d	3/8"	#5	2'-3"	
Precast Prestressed Concrete Deck Beams (21)				Sq. Ft. 2153
Class X Concrete				Cu. Yds. 9.7
Reinforcement Bars				Lbs. 810

DESIGNED James E. Conquest  
CHECKED [Signature]  
DRAWN [Signature]  
CHECKED [Signature]

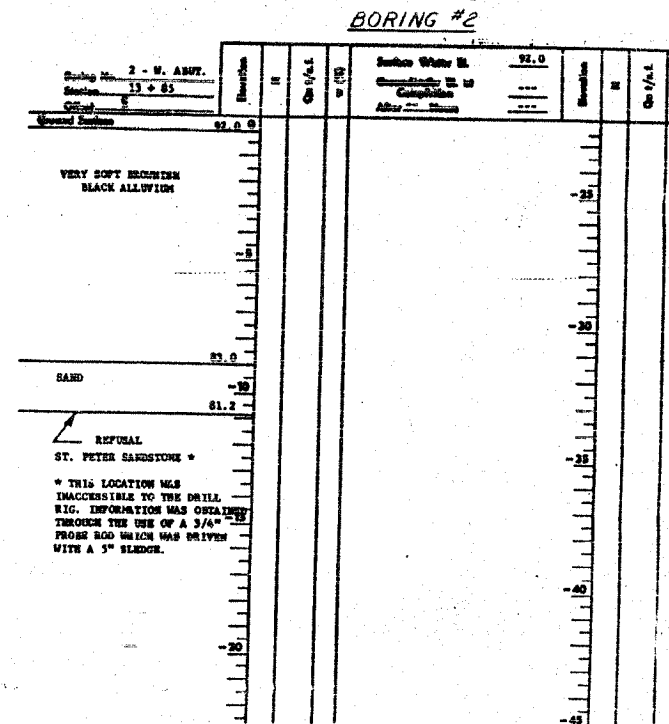
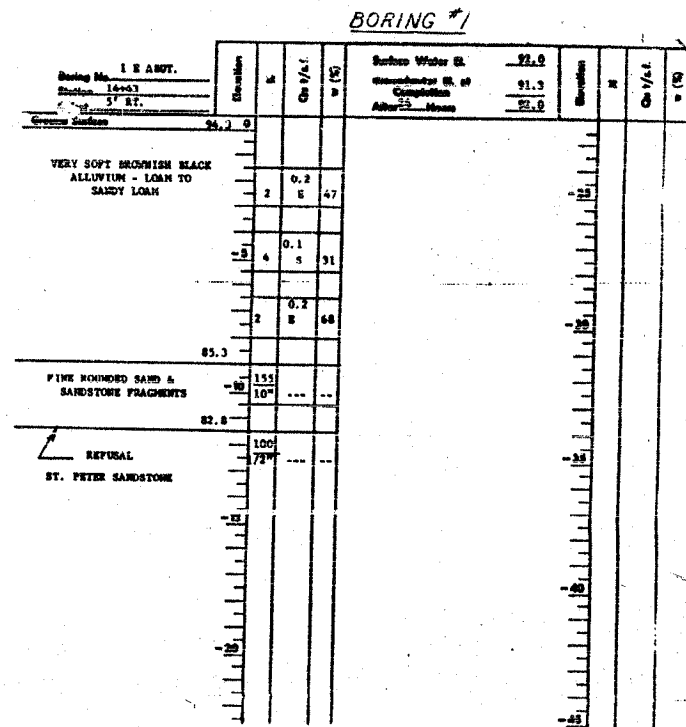
OCT 15 1962  
EXAMINED [Signature]  
PASSED [Signature]  
APPROVED [Signature]

\* Not included in Reinforcement Bar Total

SUPERSTRUCTURE  
SBLRT 7A SEC. I-BR  
LA SALLE COUNTY  
37A, 14-08-00

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

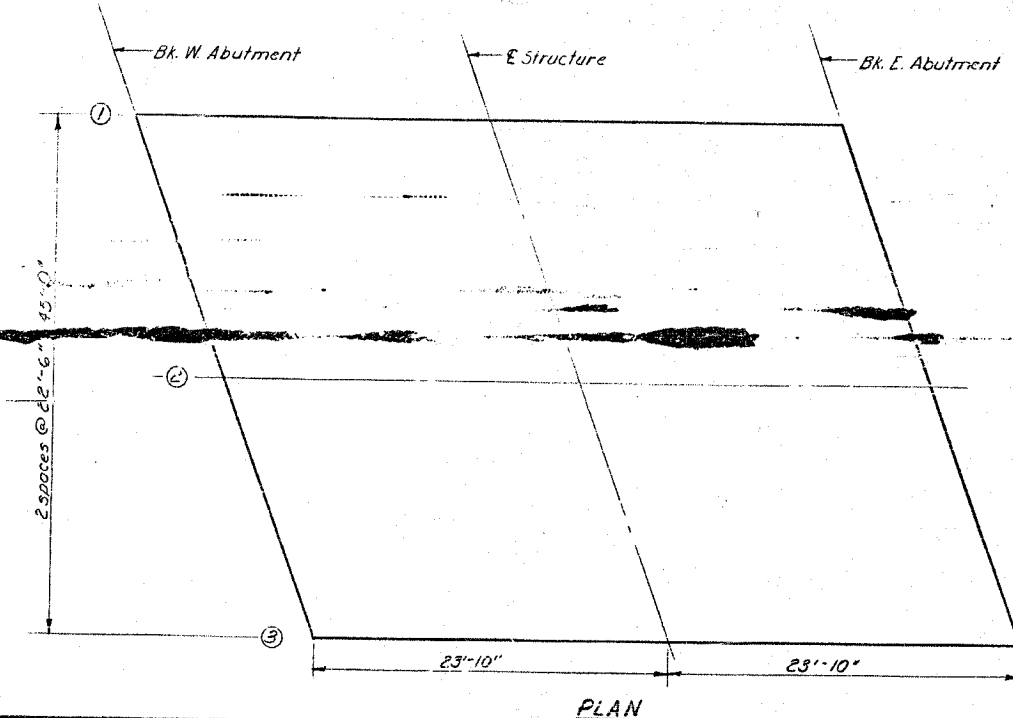
ROUTE NO.	DISTRICT	COUNTY	TOTAL SHEETS	SHEET NO.
1-BR	LASALLE	44	16	37
6 SHEETS				



**DECK ELEVATIONS (Top of Class I Surface)**

Location	Beam	Station	Offset	Theoretical Grade Elevations
Bk. W. Abutment & Structure	① Sledge Deck	1375.123	-22.080	99.195
		1399.549	-22.613	99.163
		1423.986	-22.510	99.169
Bk. W. Abutment & Structure	② Sledge Deck	1384.106	0.158	100.529
		1407.945	-0.151	100.511
		1431.784	0.155	100.529
Bk. W. Abutment & Structure	③ Sledge Deck	1392.667	22.479	101.869
		1415.942	22.384	101.863
		1439.207	22.509	101.893

N-Standard Penetration Test - Blows per foot to drive 2"  
O.D. Split Spoon Sampler 12" with 140# hammer falling 30"  
Qu-Unconfined Compressive Strength - 1/sf  
w-Water Content - percentage of oven dry weight - %  
Type failure  
B-Bulge Failure  
S-Shear Failure  
E-Estimated Value  
R-Penitrometer

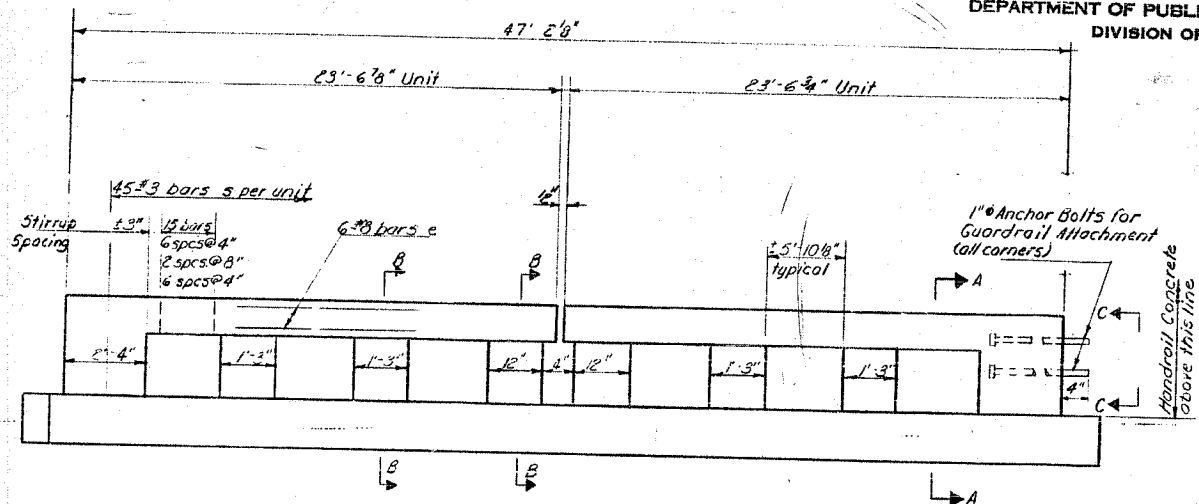


DESIGNED: James E. Oppert  
CHECKED: J. S. F. L. L.  
DRAWN: Bev Robinson  
EXAMINED: [Signature]  
PASSED: [Signature]  
APPROVED: Richard H. [Signature]

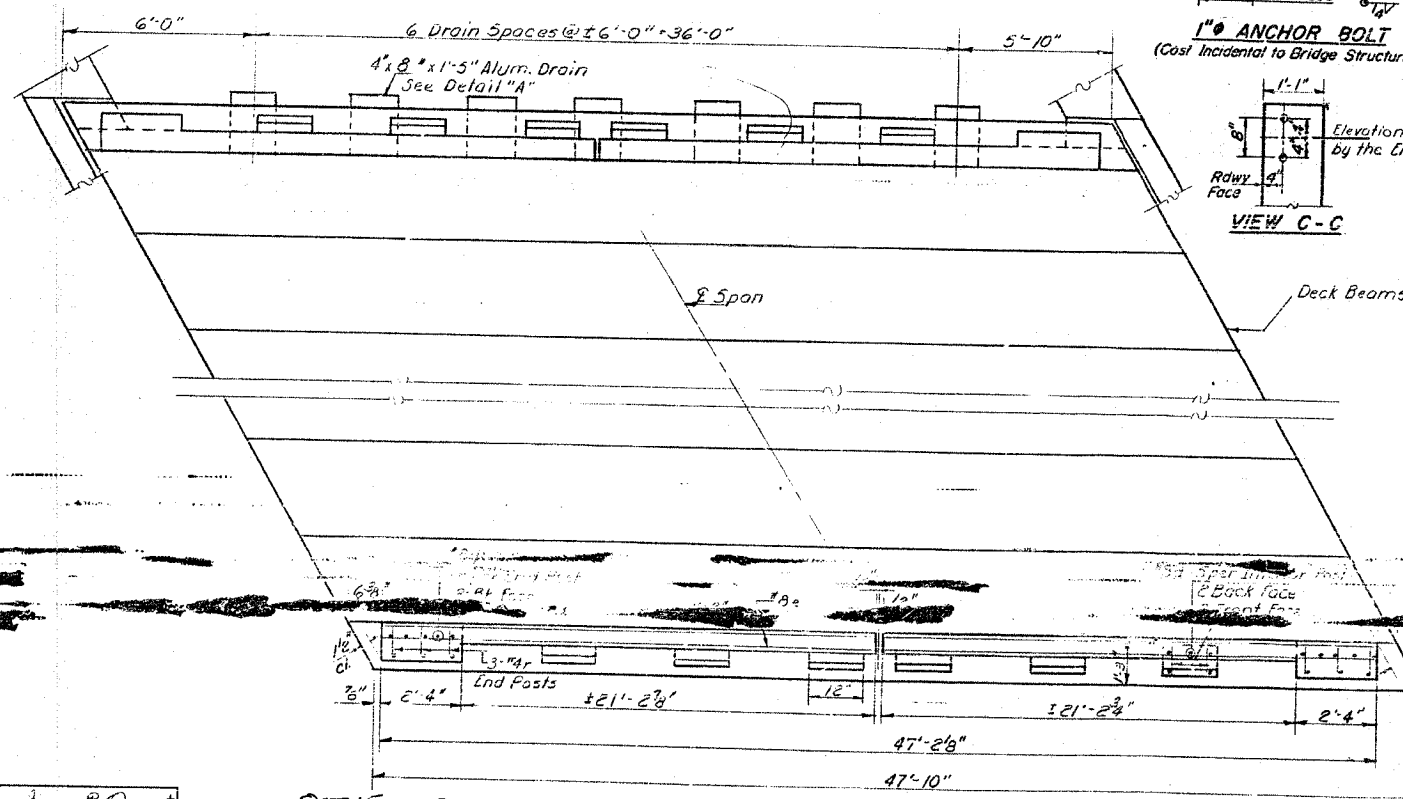
OCT. 15 1965

TOP OF SLAB ELEVATIONS AND BORINGS  
S.B.T. RT. 7A SEC. I-BR  
LASALLE COUNTY  
STA. 14+08

PROJECT NO.	DATE	TOTAL SHEETS	SHEET NO.
P.A. 8	FBR LASALLE	44	17
DESIGNED BY	DATE	APPROVED BY	DATE



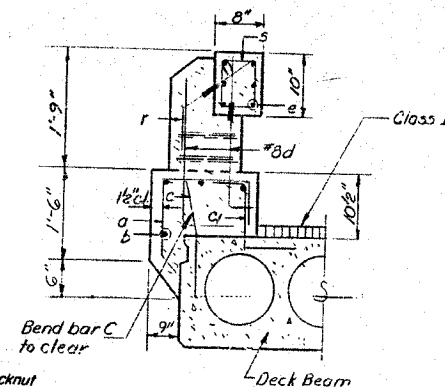
ELEVATION OF RAIL  
Use Standard Railing Details #2070 RD. as Modified



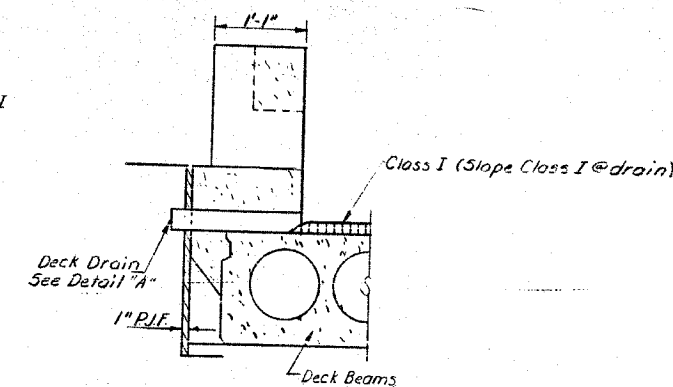
PLAN OF RAIL

Note: Curb Reinforcement details and quantities shown on sheet #2

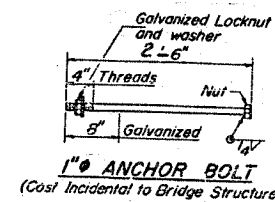
Note: Aluminum Drains are required only on North (Low side) edge of deck.



SECTION B-B

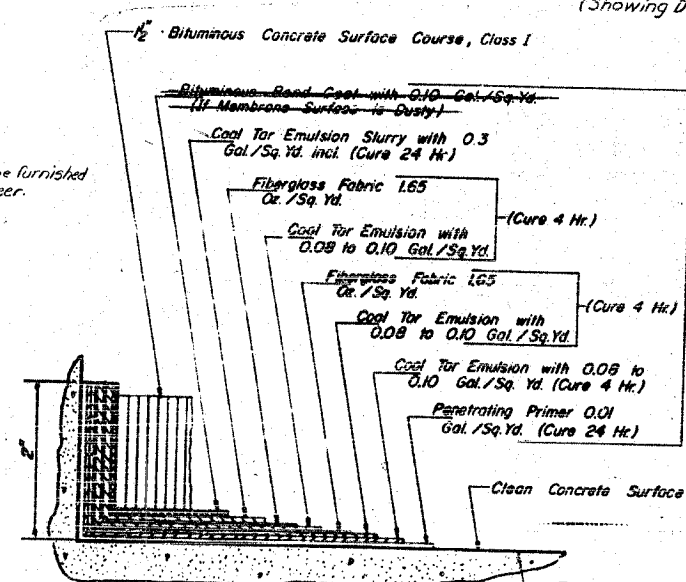


SECTION A-A  
(Showing Deck Drain)



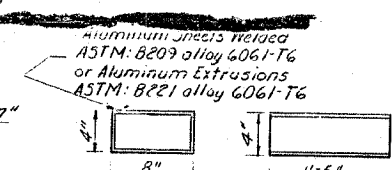
Elevation to be furnished by the Engineer.

VIEW C-C

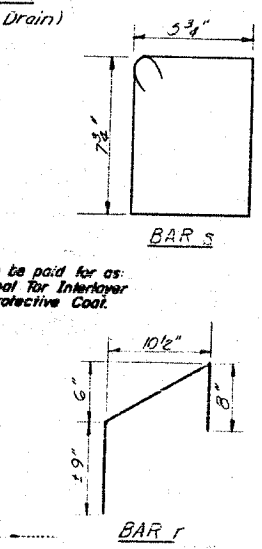


DETAIL OF DECK SURFACING

To be paid for as: Coal Tar Interlayer Protective Coat.



DETAIL A  
Cost of Aluminum Drains shall be incidental to Class I Concrete



HANDRAIL FILL OF MATERIAL

1	96	#8	3'-2"	L
2	24	#4	2'-5"	L
r	36	#4	2'-6"	L
s	180	#3	2'-11"	L
Reinforcement Bars				Lbs. 2530
Handrail Concrete				Cu. Yd. 3.0

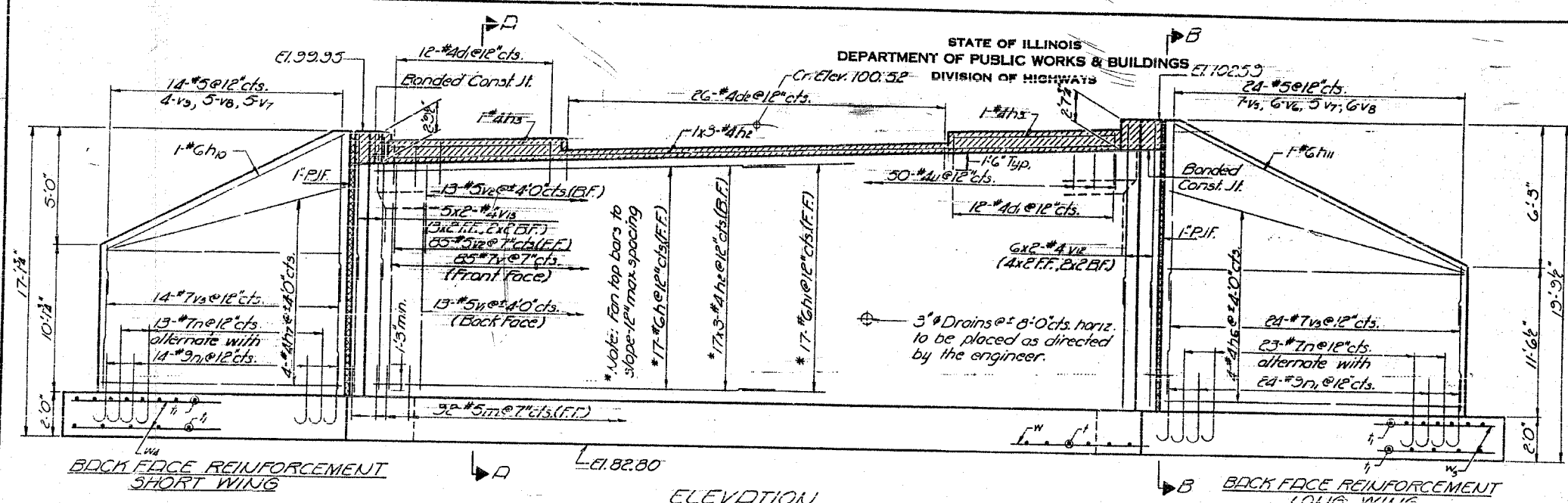
HANDRAIL AND SUPERSTRUCTURE DETAILS  
S.B.I. RT. 7A SEC. I-BR  
LA SALLE COUNTY  
STA. 14+08.00

DESIGNED: James C. Coyne  
CHECKED: James C. Coyne  
DRAWN: Bev Robinson  
OCT 15 1969  
EXAMINED: [Signature]  
PASSED: [Signature]  
APPROVED: Richard H. Galterman



DATE	BY	NO.	TOTAL SHEETS	SHEET NO.
1-28	BR	LASALLE	44	19
6 SHEETS				

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

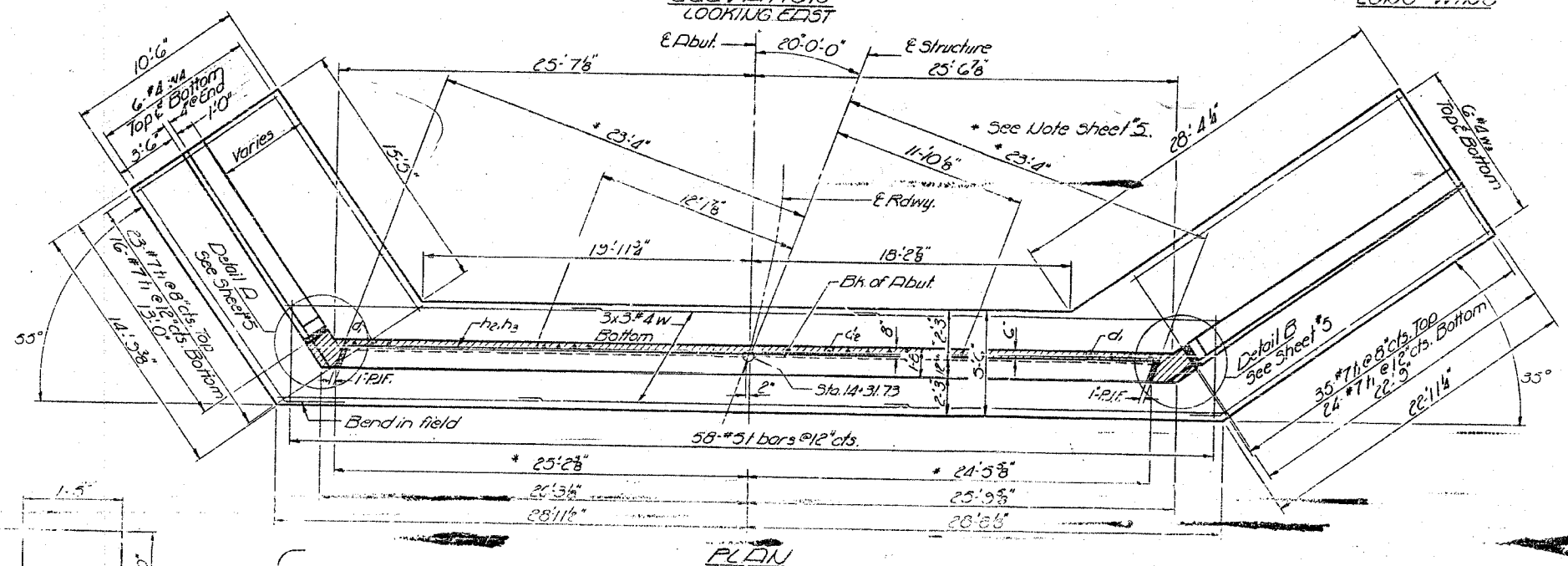


Note: For Sections A-A and B-B  
See Sheet # 5

BACK FACE REINFORCEMENT  
SHORT WING

BACK FACE REINFORCEMENT  
LONG WING

ELEVATION  
LOOKING EAST



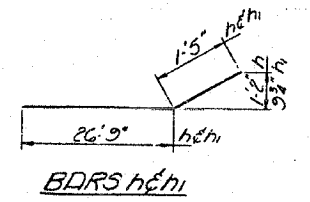
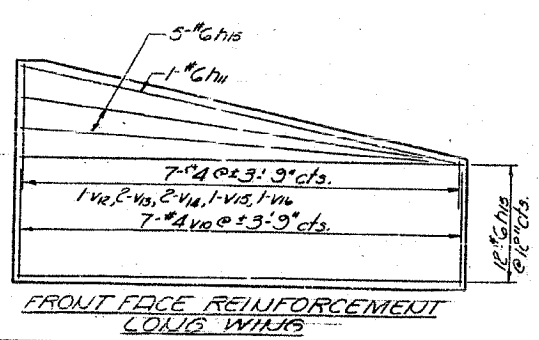
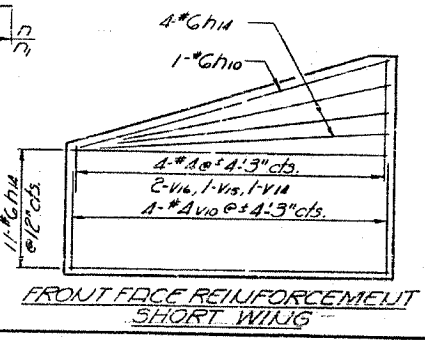
PLAN

TWO ABUTMENTS - BILL OF MATERIAL

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
d1	18	#4	3'-3"		v	170	#7	12'-0"	
d2	52	#4	1'-11"		v1	26	#5	12'-0"	
h	34	#6	28'-2"		v2	196	#5	5'-6"	
h1	34	#6	28'-2"		v3	74	#7	8'-0"	
h2	108	#4	18'-3"		v4	5	#5	12'-3"	
h3	4	#4	12'-0"		v5	11	#5	10'-6"	
h4	4	#4	18'-0"		v6	18	#5	9'-0"	
h5	5	#4	15'-3"		v7	20	#5	7'-6"	
h6	4	#4	22'-6"		v8	16	#5	6'-0"	
h7	4	#4	12'-9"		v9	4	#5	4'-6"	
h8	2	#6	18'-8"		v10	22	#4	8'-0"	
h9	2	#6	17'-0"		v11	1	#4	12'-5"	
h10	2	#6	15'-3"		v12	24	#4	10'-6"	
h11	2	#6	23'-4"		v13	27	#4	9'-6"	
h12	17	#6	18'-0"		v14	6	#4	7'-6"	
h13	19	#6	15'-9"		v15	4	#4	6'-0"	
h14	17	#6	22'-2"		v16	1	#4	4'-6"	
h15	17	#6	22'-2"		v17	18	#2	20'-0"	
h16	17	#6	22'-2"		v18	23	#2	18'-3"	
m	162	#3	5'-8"		v19	12	#4	20'-6"	
n	70	#7	7'-6"		v20	12	#4	25'-0"	
n1	74	#9	4'-9"		v21	12	#4	15'-6"	
					Class A Concrete Cu.Yds. 213.0				
					Reinforcement Bars Lbs. 23,330				

DESIGNED James E. Oppert  
CHECKED [Signature]  
DRAWN James E. Oppert  
CHECKED [Signature]

EXAMINED OCT 15 1960  
PASSED [Signature]  
APPROVED [Signature]

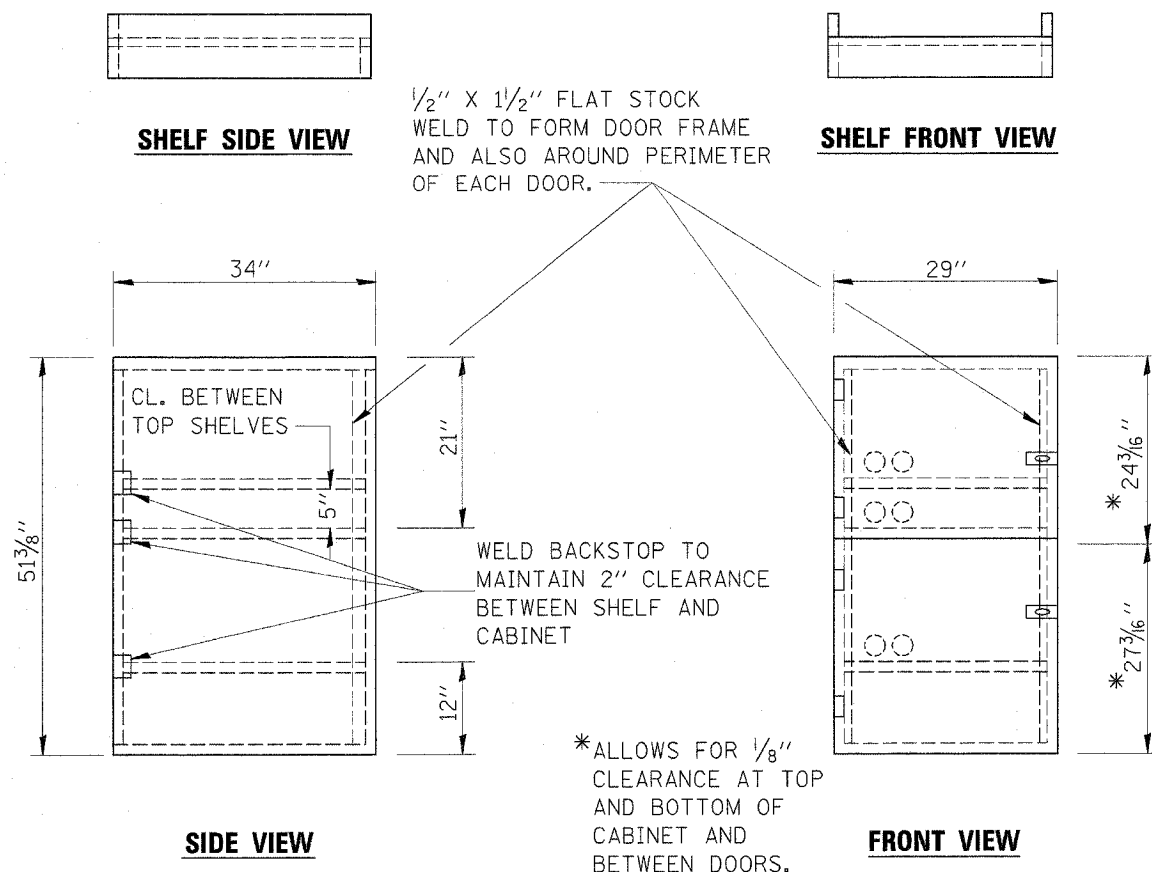


EAST ABUTMENT  
S.B.I. RT. 7A SEC. 18R  
LA SALLE COUNTY  
STA. 14+08

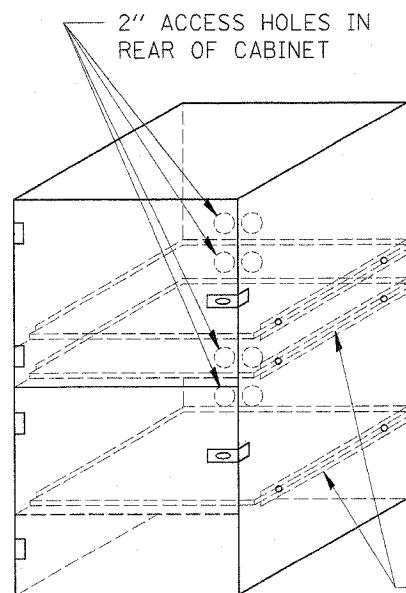


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	41

ILLINOIS CONTRACT NO. 66364



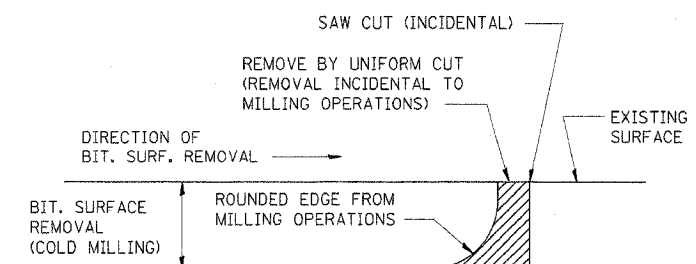
- NOTES:
1. USE 16 GAUGE STEEL FOR CABINET.
  2. THE TOP SHELF SHALL SLIDE IN OR OUT WITH THE TOP DOOR OPEN.
  3. ALL HINGES AND HASPS WILL BE WELDED TO THE CABINET.
  4. ALL EDGES SHALL BE GROUND SMOOTH.
  5. TWO (2" DIA.) ACCESS HOLES WILL BE REQUIRED FOR EACH SHELF.
  6. CABINET SHALL BE PAINTED WITH TWO COATS OF FLAT PAINT.
  7. 2 EACH MATCHING KEY PADLOCKS, WITH 3 KEYS PROVIDED, MASTER MODEL 3 T OR EQUIVALENT.
  8. 4 EACH PLAIN STEEL, NON-REMOVABLE PIN, NO HOLE 4"X4" SQUARE CORNER HINGES TO BE WELDED ON.
  9. 2 EACH EXTRA HEAVY, PLAIN STEEL, FIXED STAPLE, NO HOLE, 7 1/4 " HASPS TO BE WELDED ON.



FLAT STOCK DIMENSIONS VARY DEPENDING ON TYPE OF ROLLER ASSEMBLY.

**LOCKABLE COMPUTER CABINET**

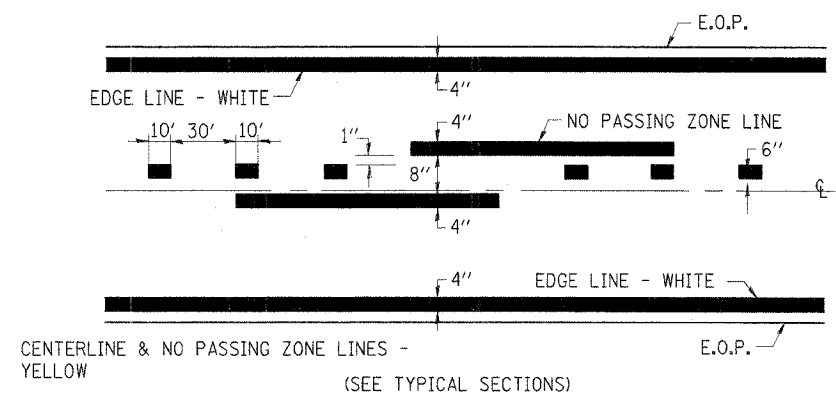
**670-1**



NOTE: WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

**BITUMINOUS DETAIL AT BUTT JOINTS**

**406-8**



**PAVEMENT MARKING**

**780-8**

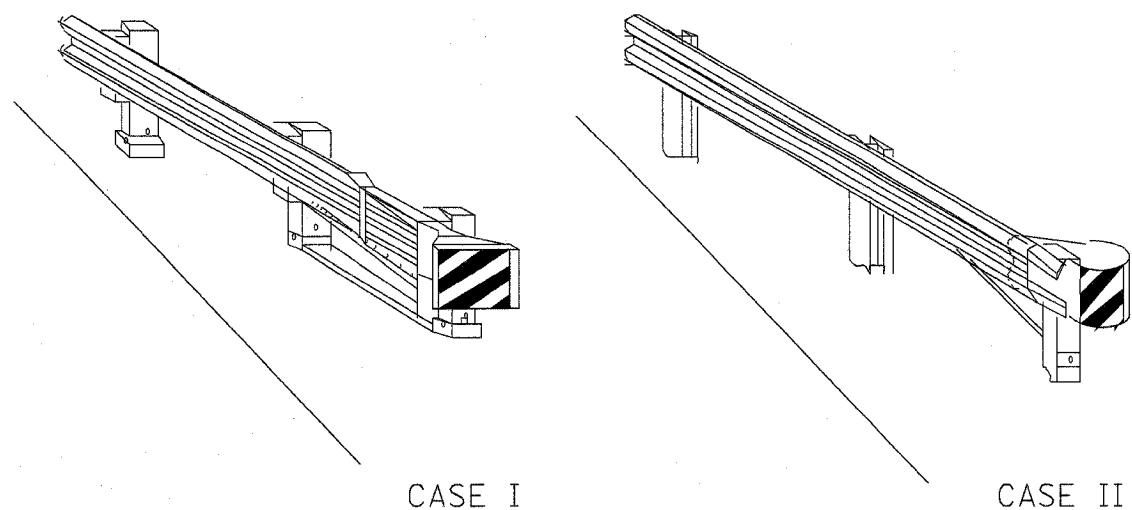
**MISCELLANEOUS DETAILS**

IL. RTE. 71 OVER UNNAMED STREAM  
 F.A.P. RTE. 627 - SECTION 1BR  
 LaSALLE COUNTY  
 STA. 14+08.00  
 STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62707 (217) 793-8900 oasinc@tamvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: DET02.DGN DATE: 07-20-05
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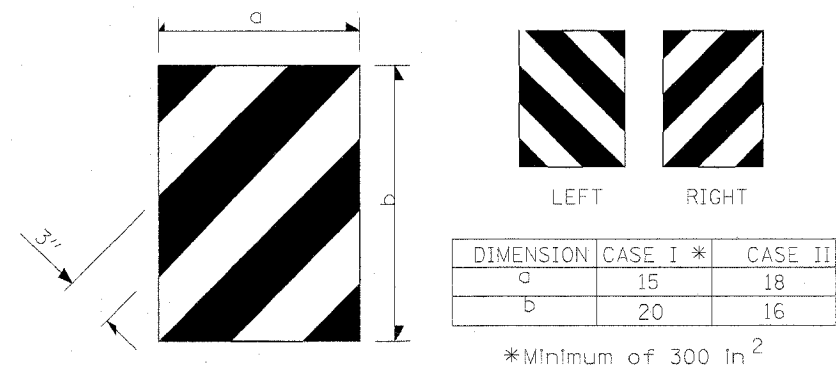
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LaSALLE	46	42
ILLINOIS				

CONTRACT NO. 66364



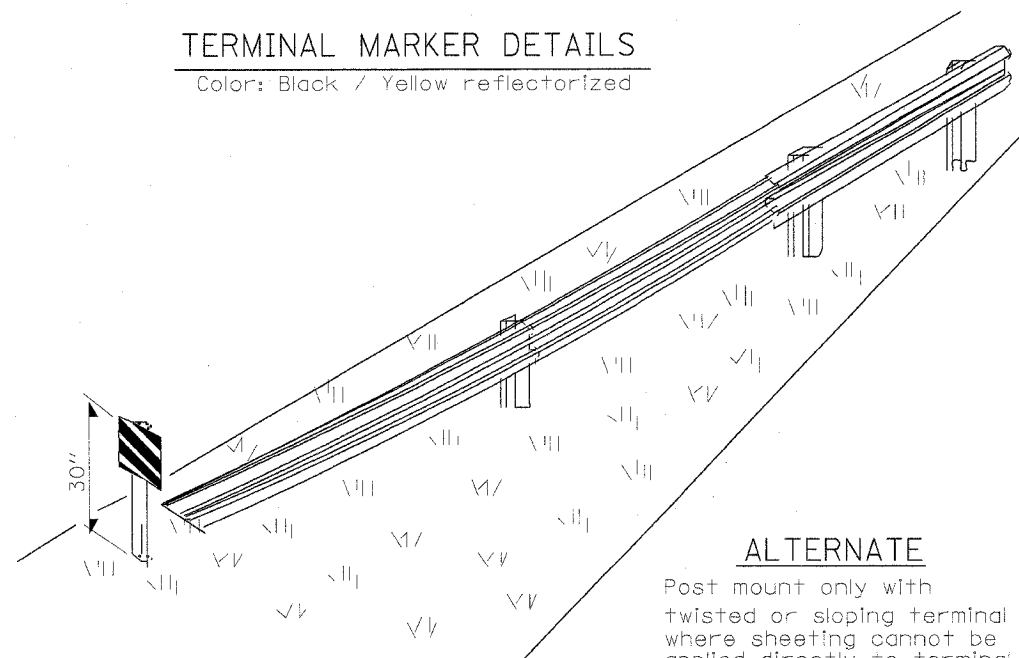
CASE I

CASE II



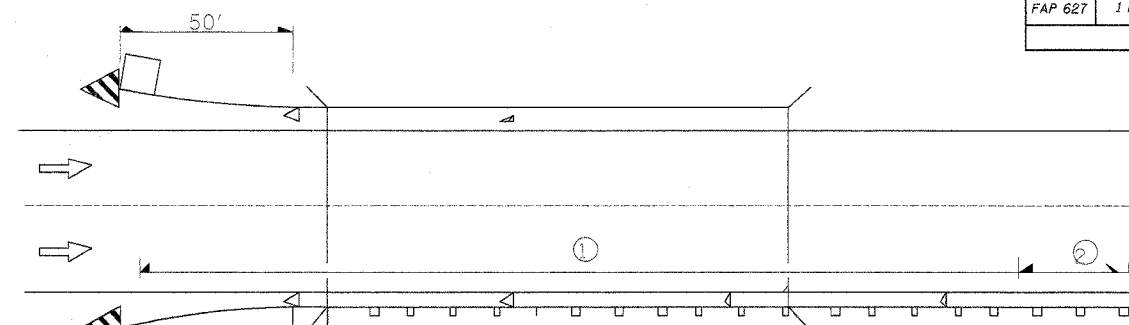
**TERMINAL MARKER DETAILS**

Color: Black / Yellow reflectorized



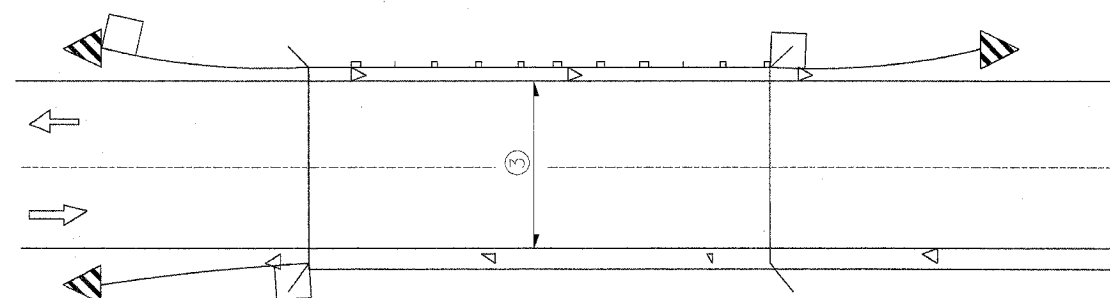
**ALTERNATE**

Post mount only with twisted or sloping terminal where sheeting cannot be applied directly to terminal.



① Spacing 80 ft max. for first 400 ft or curve spacing shown in Standard 635001, whichever is less (min. 4 reflectors regardless of length).  
 ② After 400 ft, transition to normal delineator spacing shown in Standard 635001, and continue as required.

ONE-WAY TRAFFIC

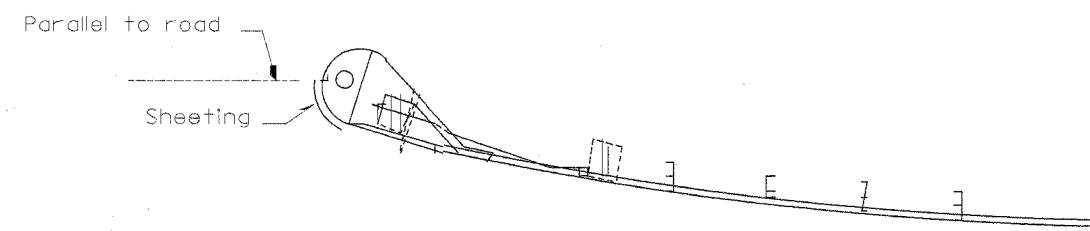


③ Bidirectional silver/silver should be used in lieu of monodirectional silver on both sides of two-lane bridges where the pavement is less than 24" wider than the pavement approaching the bridge.

- ◁ Monodirectional silver
- ◄ Monodirectional amber
- ▤ Terminal Marker - Black/Yellow Left or Right as appropriate

TWO-WAY TRAFFIC

**GUARDRAIL / BARRIER WALL / BRIDGE RAIL REFLECTORS**



SHEETING POSITION: CASE II

**REFLECTOR AND TERMINAL MARKER PLACEMENT**

635-1

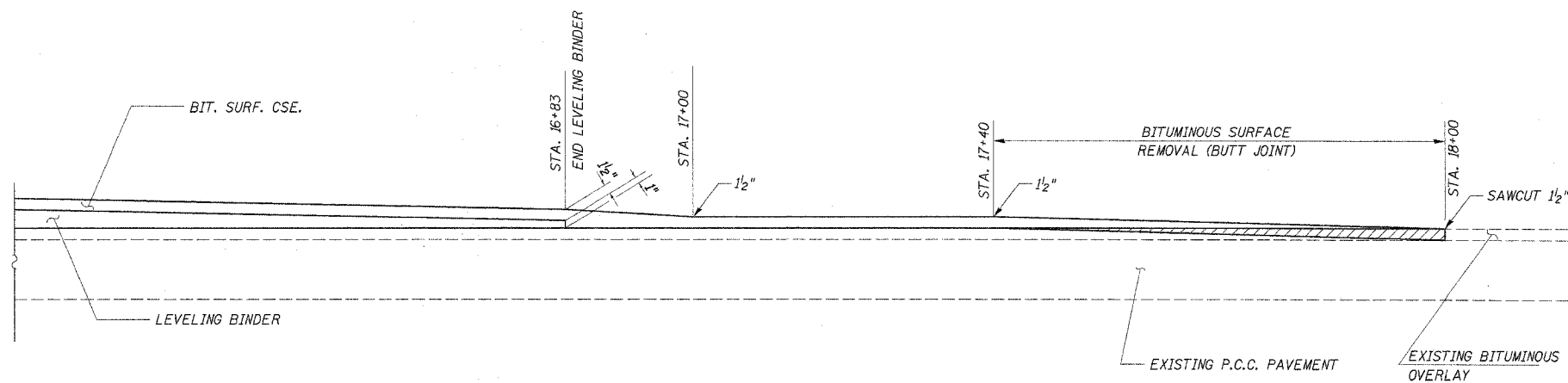
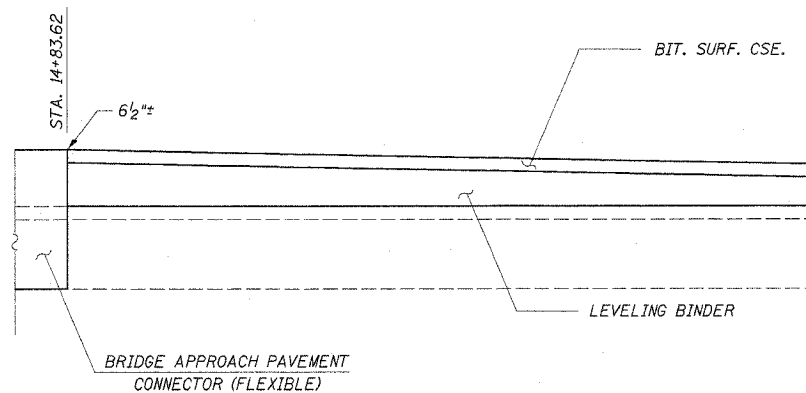
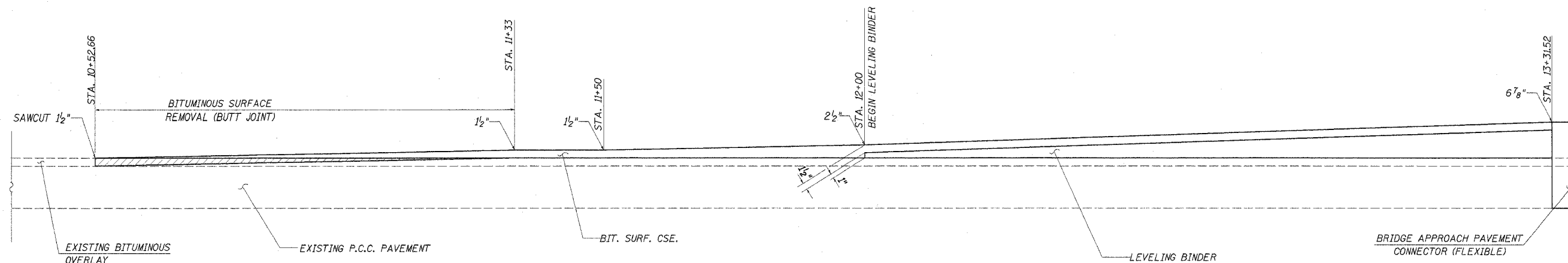
**MISCELLANEOUS DETAILS**

IL. RTE. 71 OVER UNNAMED STREAM  
 F.A.P. RTE. 627 - SECTION 1BR  
 LaSALLE COUNTY  
 STA. 14+08.00  
 STR. NO. 050-0244

4440 ASH GROVE SPRINGFIELD, IL 62707 (217) 793-8600 oasinc@tamvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: DET04.DGN DATE: 07-20-05
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 627	1 BR	LoSALLE	46	43

ILLINOIS  
CONTRACT NO. 66364



**RESURFACING DETAILS**  
 IL. RTE. 71 OVER UNNAMED STREAM  
 F.A.P. RTE. 627 - SECTION 1BR  
 LoSALLE COUNTY  
 STA. 14+08.00  
 STR. NO. 050-0244

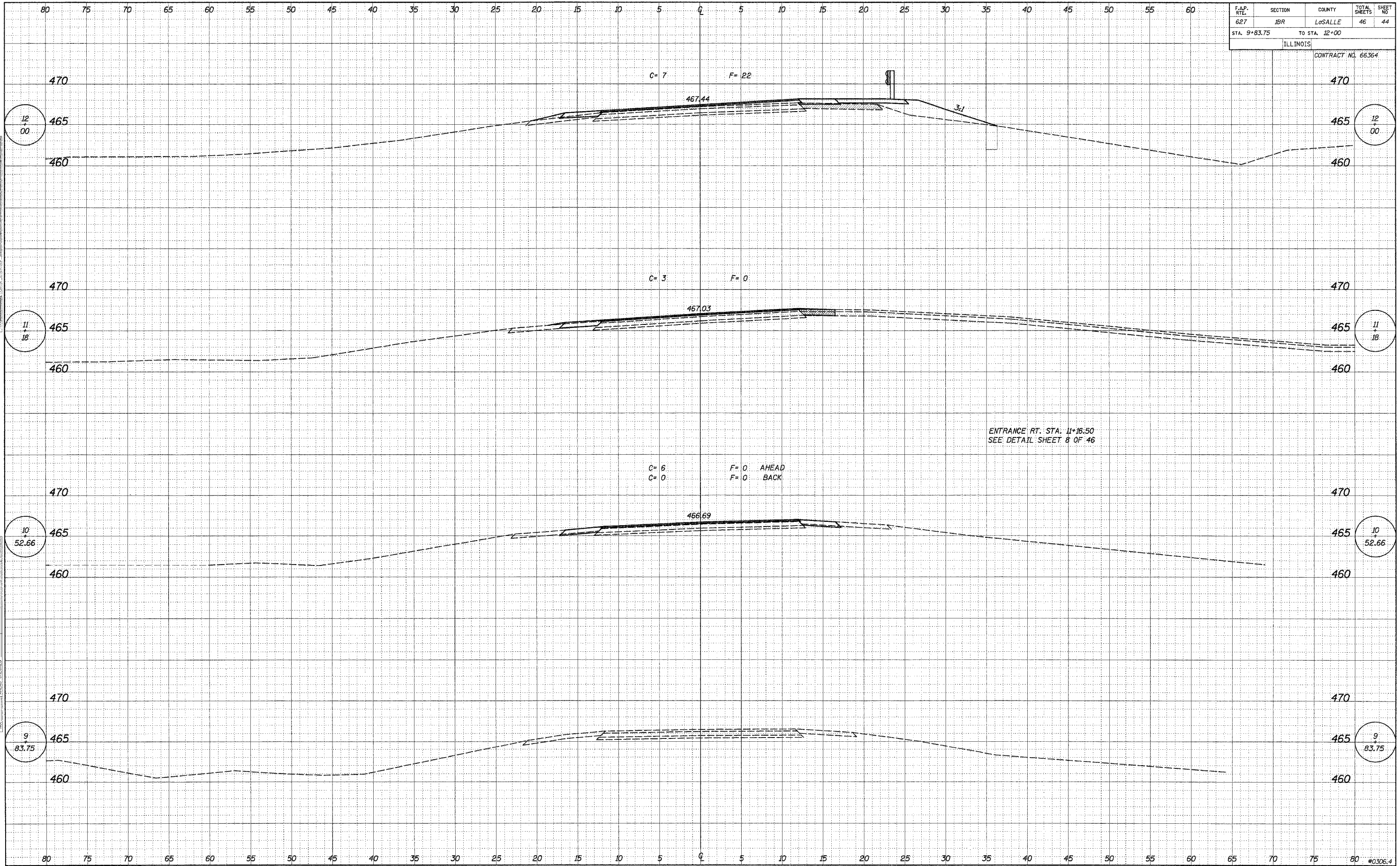
4440 ASH GROVE SPRINGFIELD, IL 62707 (217) 793-8600 oasinc@famvid.com	<b>OZYURT AND STONE, INC.</b> CONSULTING ENGINEERS	JOB NO.: 0306.4 FILE: det03.dgn DATE: 07-20-05
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F.A.P. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
627	JBR	LaSALLE	46	44
STA. 9+83.75 TO STA. 12+00			ILLINOIS	

CONTRACT NO. 66364

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEY \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEY \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_

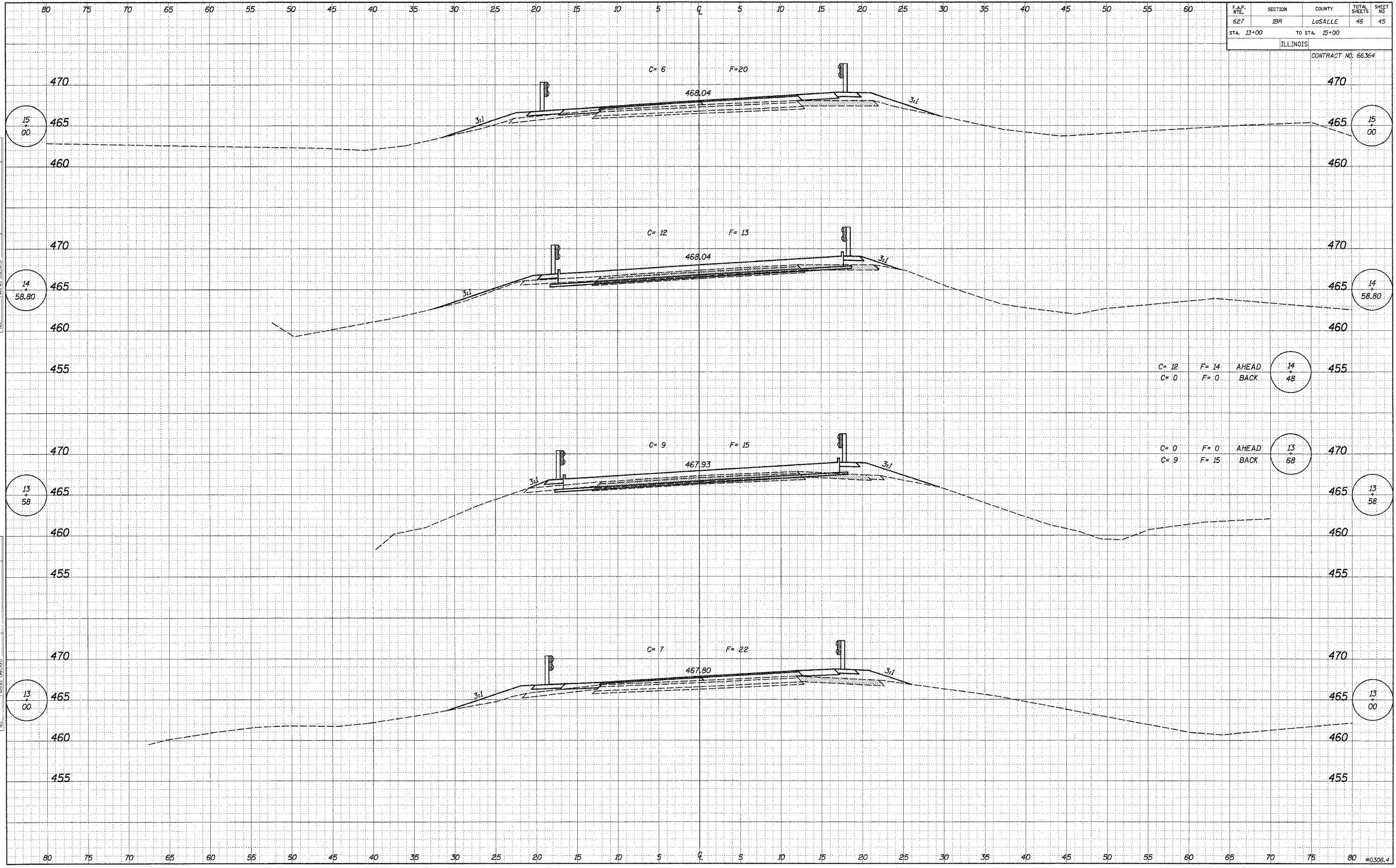


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
627	1BR	LOGSALLE	46	45
STA. 13+00		TO STA. 15+00		
ILLINOIS				

CONTRACT NO. 66364

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_



F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
627	1BR	LaSALLE	46	46
STA. 16+00		TO STA. 18+00		
ILLINOIS				

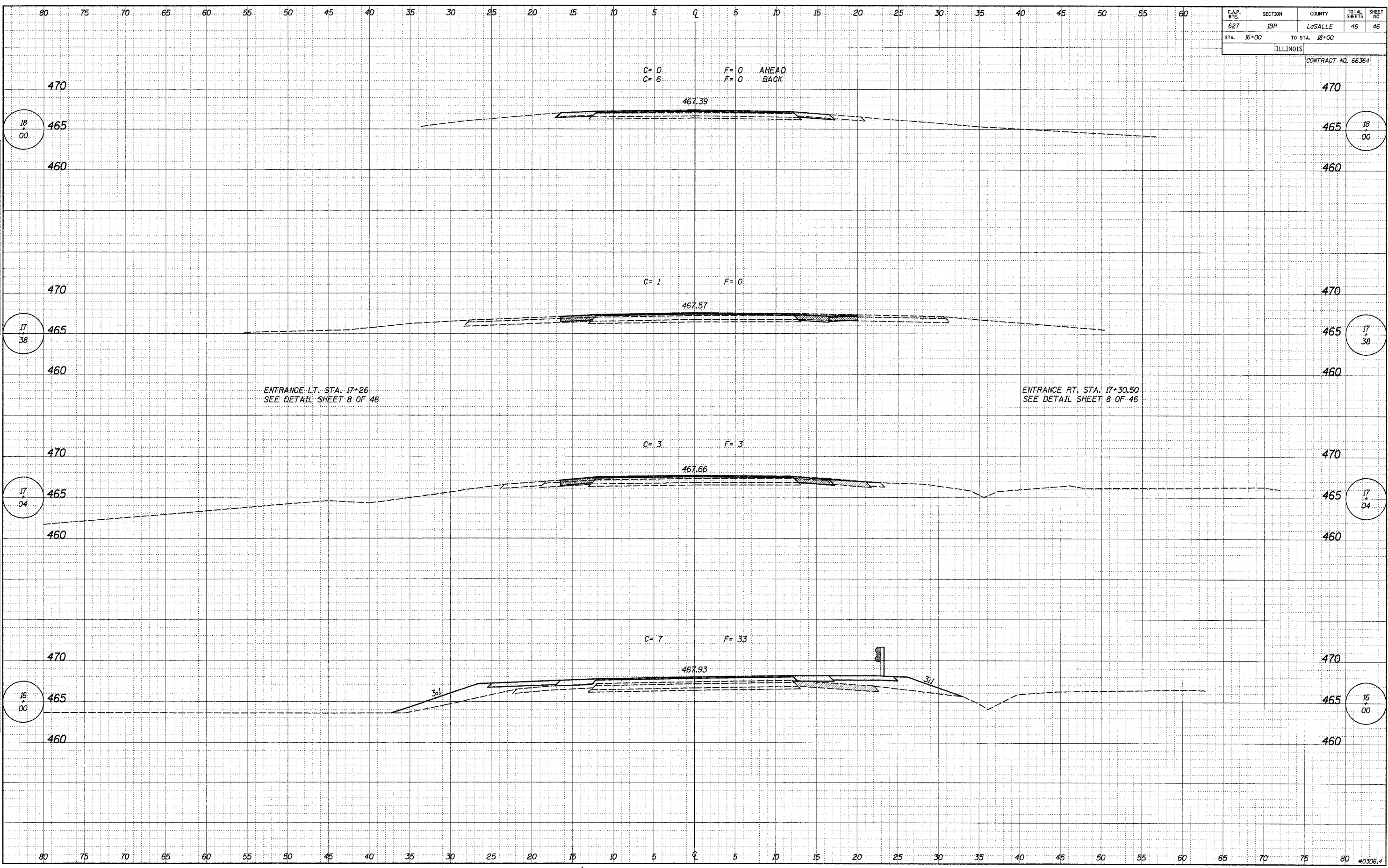
CONTRACT NO. 66364

C= 0      F= 0 AHEAD  
 C= 6      F= 0 BACK

C= 1      F= 0

C= 3      F= 3

C= 7      F= 33



DATE: \_\_\_\_\_

BY: \_\_\_\_\_

NO. \_\_\_\_\_

ORIGINAL SURVEY

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

NO. \_\_\_\_\_

FINAL SURVEY

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

NO. \_\_\_\_\_

AREAS CHECKED

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

NO. \_\_\_\_\_

ORIGINAL SURVEY

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

NO. \_\_\_\_\_

FINAL SURVEY

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

NO. \_\_\_\_\_

AREAS CHECKED