

**NOTES:**

- EXISTING PILING TO BE REMOVED AS NECESSARY TO ACCOMMODATE THE INSTALLATION OF DRAINAGE STRUCTURES AND STORM SEWERS. COST IS INCLUDED IN THE UNIT BID PRICE OF "REMOVAL OF EXISTING STRUCTURES NO. 1" & "REMOVAL OF EXISTING STRUCTURES NO. 2". SEE ALSO SHEET 1 OF 4 EXISTING REMOVAL GRADINGS PLANS.
- CORE DRILL AND CONNECT TO EXISTING REINFORCED CONCRETE CULVERT. CONSTRUCTION COST SHALL BE INCLUDED IN THE COST TO CONSTRUCT THE STORM SEWER.

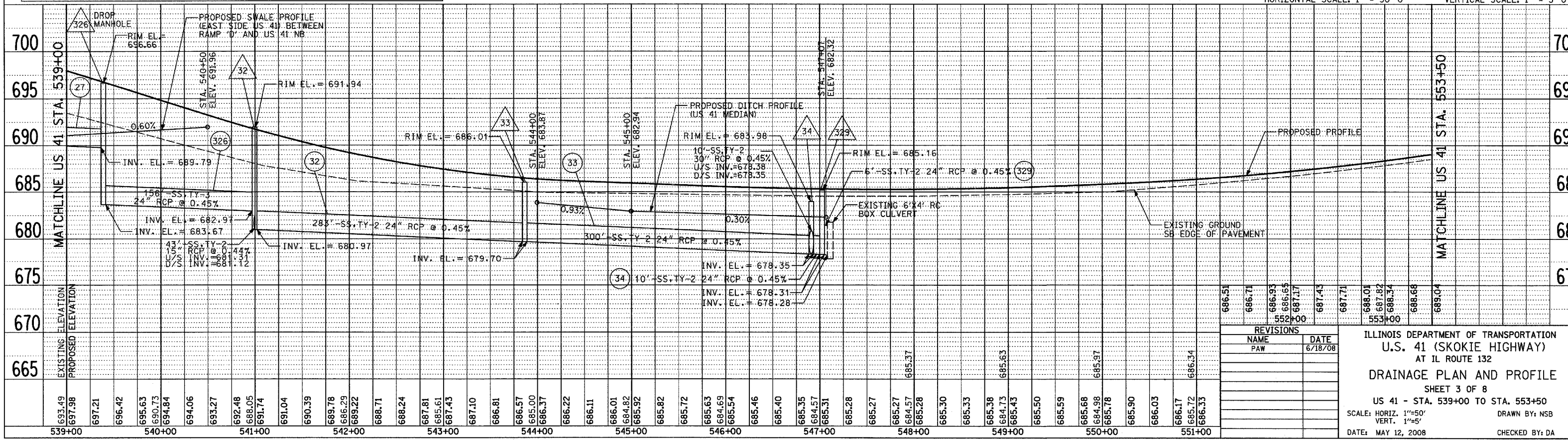
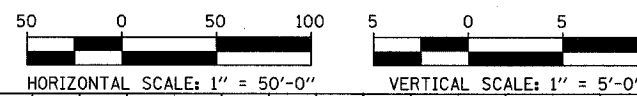
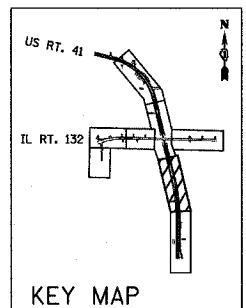
33' X 38.5' - 2.5' DEEP STONE RIPRAP CLASS 4, WITH FILTER FABRIC. SEE DETAILS.

SEE STRUCTURAL DRAWINGS FOR BOX CULVERT AND HEADWALL DETAILS

EXISTING WETLAND SITE #2

**LEGEND:**

- XY PROPOSED STORM SEWER NUMBER (X=SHEET NO., Y=PIPE NO.)
- △ XY PROPOSED STRUCTURE NUMBER (X=SHEET NO., Y=STRUCTURE NO.)
- XY PROPOSED PIPE UNDERDRAINS 6" (X=SHEET NO., Y=PIPE NO.)
- SHEET FLOW



REVISIONS		
NO.	NAME	DATE
1	PAW	6/18/08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**U.S. 41 (SKOKIE HIGHWAY)**  
 AT IL ROUTE 132  
**DRAINAGE PLAN AND PROFILE**  
 SHEET 3 OF 8  
 US 41 - STA. 539+00 TO STA. 553+50  
 SCALE: HORIZ. 1"=50'  
 VERT. 1"=5'  
 DATE: MAY 12, 2008  
 DRAWN BY: NSB  
 CHECKED BY: DA

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 PLAN SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_  
 CAD FILE NAME \_\_\_\_\_

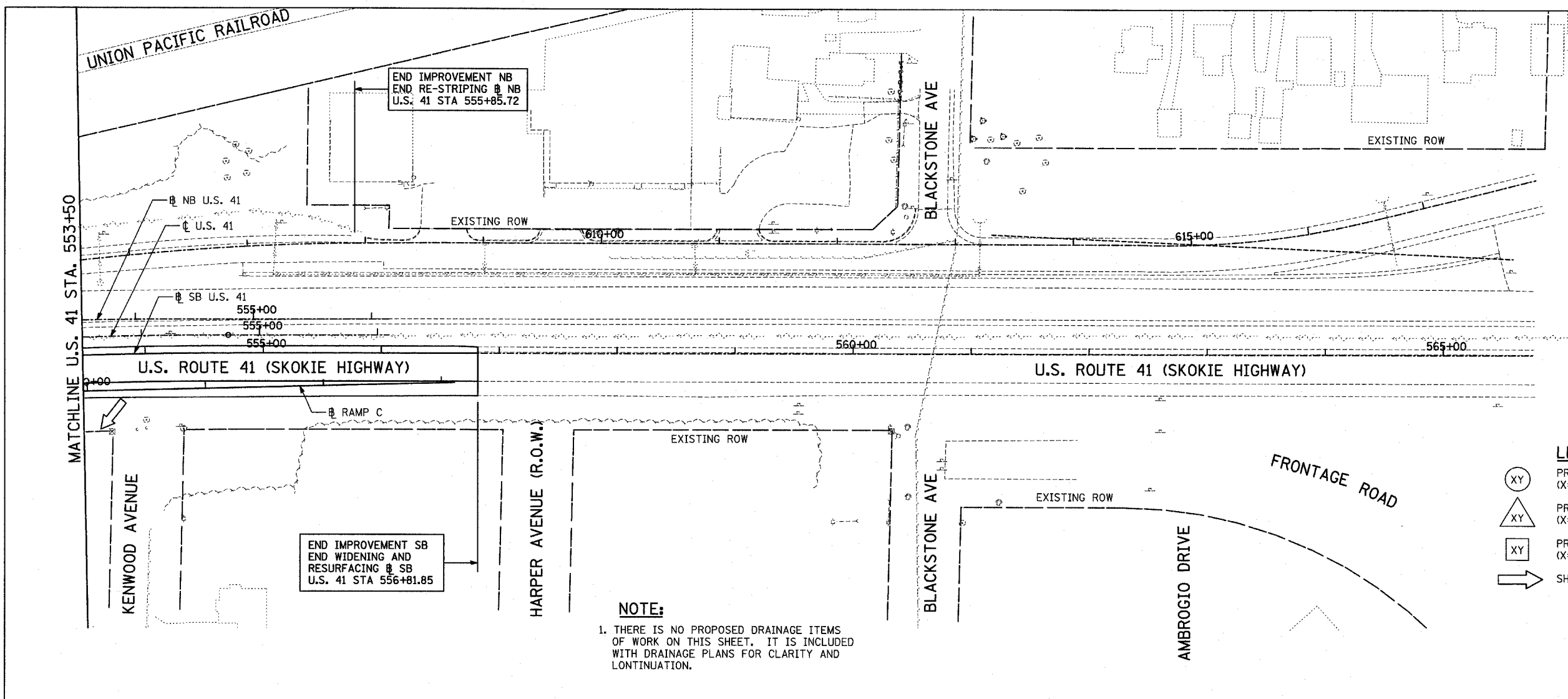
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 BY: \_\_\_\_\_  
 PROFILE SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_  
 STRUCTURE NOTATION CHRG \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	02
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-404-99	ILLINOIS	FED. AID PROJ. NO.		
• 125X-HB-(1&2) R-1		CONTRACT # 60		



PLAN	SURVEYED	DATE
NOTE BOOK NO.	BY	
	CHECKED	
	DATE	

PROFILE	SURVEYED	DATE
NOTE BOOK NO.	BY	
	CHECKED	
	DATE	

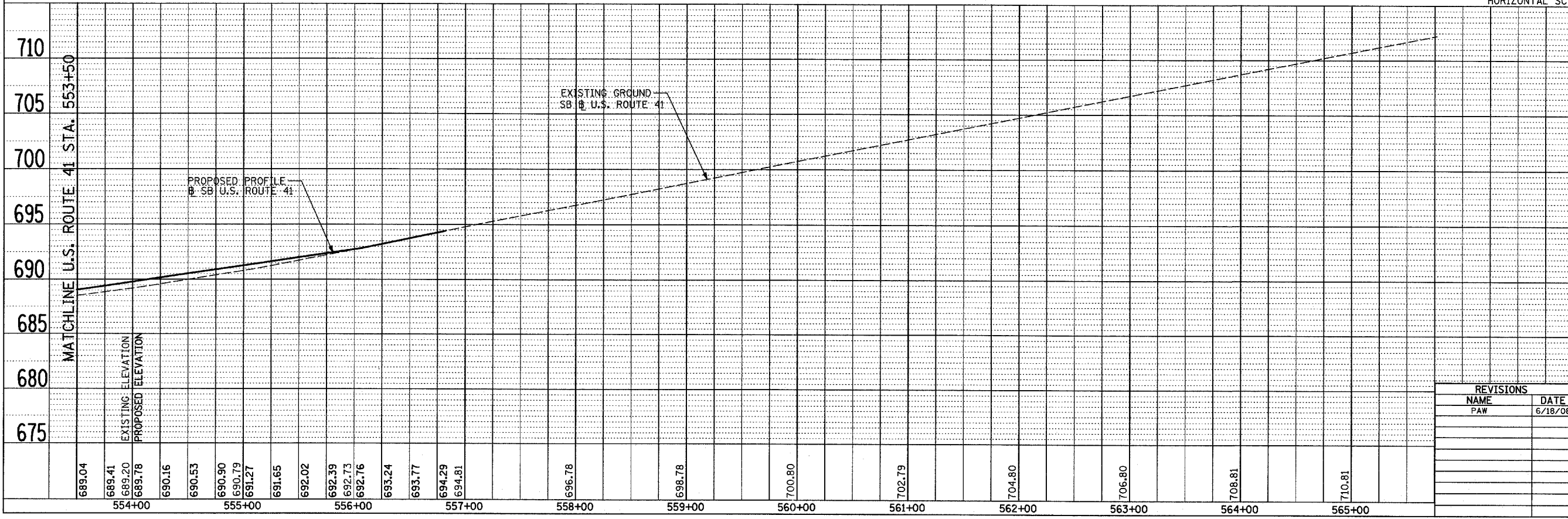
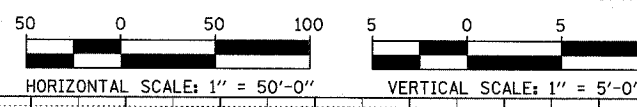
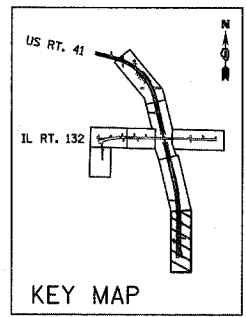


END IMPROVEMENT NB  
END RE-STRIPING @ NB  
U.S. 41 STA 555+85.72

END IMPROVEMENT SB  
END WIDENING AND  
RESURFACING @ SB  
U.S. 41 STA 556+81.85

**NOTE:**  
1. THERE IS NO PROPOSED DRAINAGE ITEMS OF WORK ON THIS SHEET. IT IS INCLUDED WITH DRAINAGE PLANS FOR CLARITY AND LONTINUATION.

- LEGEND:**
- (XY) PROPOSED STORM SEWER NUMBER (X=SHEET NO., Y=PIPE NO.)
  - (XY) PROPOSED STRUCTURE NUMBER (X=SHEET NO., Y=STRUCTURE NO.)
  - (XY) PROPOSED PIPE UNDERDRAINS 6" (X=SHEET NO., Y=PIPE NO.)
  - ➔ SHEET FLOW



REVISIONS	
NAME	DATE
PAW	6/18/08

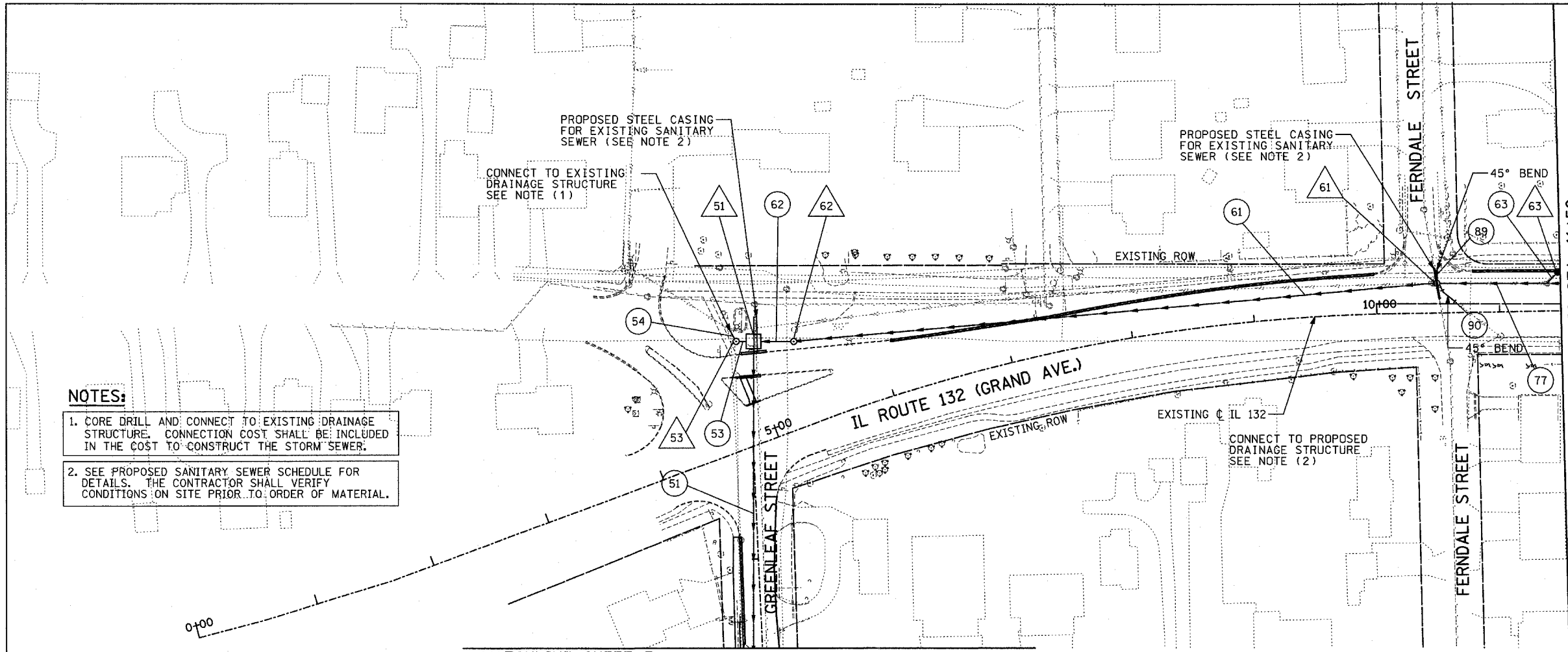
ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
DRAINAGE PLAN AND PROFILE  
SHEET 4 OF 8  
US 41 - STA. 553+50 TO STA. 556+81.85  
SCALE: HORIZ. 1"=50'  
VERT. 1"=5'  
DATE: MAY 12, 2008  
DRAWN BY: NSB  
CHECKED BY: DA



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	.	LAKE	469	104
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-404-99	ILLINOIS	FED. AID PROJ. NO.	CONTRACT # 601	
• 125X-HB-(1&2) R-1				

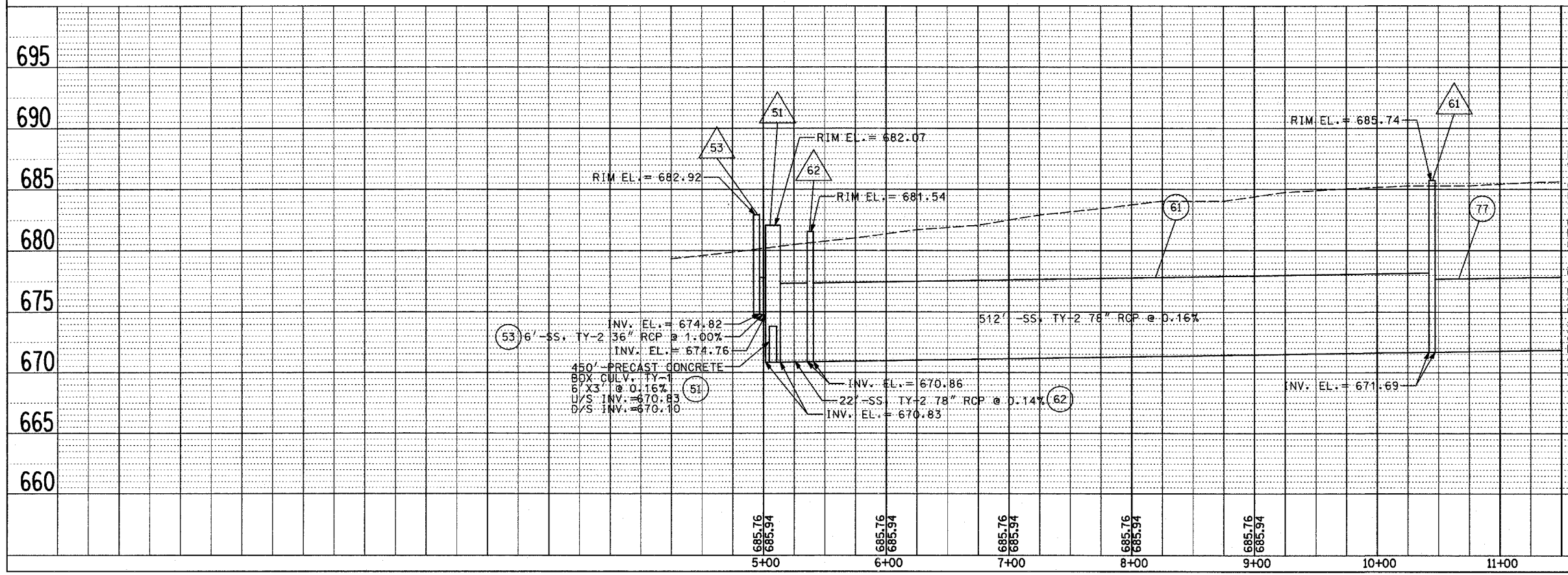
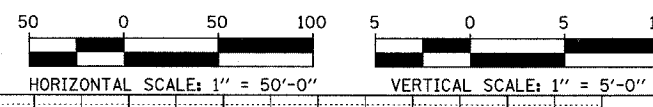
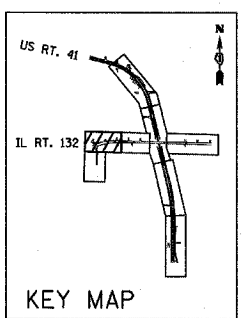
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	PLOTTED	
	CHECKED	
	BY	
	NO.	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	DATE	



- NOTES:**
1. CORE DRILL AND CONNECT TO EXISTING DRAINAGE STRUCTURE. CONNECTION COST SHALL BE INCLUDED IN THE COST TO CONSTRUCT THE STORM SEWER.
  2. SEE PROPOSED SANITARY SEWER SCHEDULE FOR DETAILS. THE CONTRACTOR SHALL VERIFY CONDITIONS ON SITE PRIOR TO ORDER OF MATERIAL.

- LEGEND:**
- (XY) PROPOSED STORM SEWER NUMBER (X=SHEET NO., Y=PIPE NO.)
  - △(XY) PROPOSED STRUCTURE NUMBER (X=SHEET NO., Y=STRUCTURE NO.)
  - (XY) PROPOSED PIPE UNDERDRAINS 6" (X=SHEET NO., Y=PIPE NO.)
  - SHEET FLOW



REVISIONS	
NAME	DATE
PAW	6/18/08

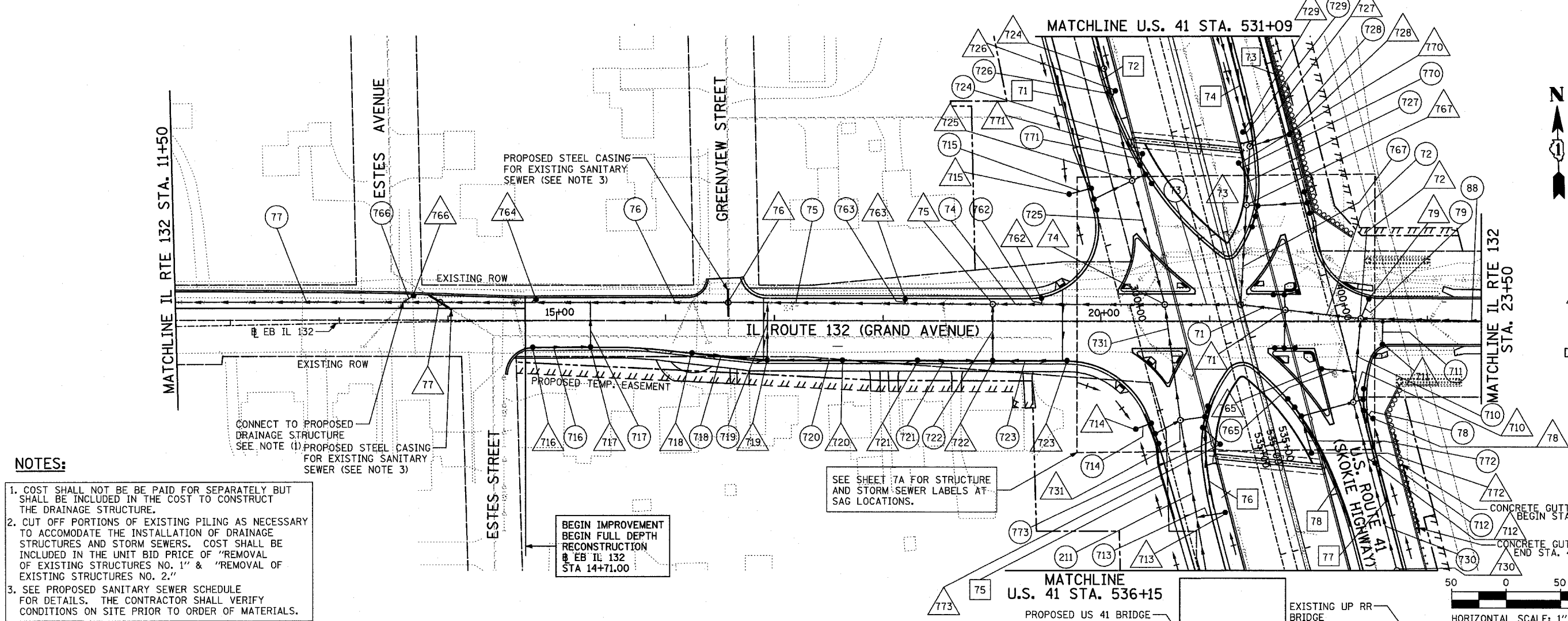
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 DRAINAGE PLAN AND PROFILE  
 SHEET 6 OF 8  
 IL 132 - BOP TO STA. 11+50  
 SCALE: HORIZ. 1"=50'  
 VERT. 1"=5'  
 DATE: MAY 12, 2008  
 DRAWN BY: NSB  
 CHECKED BY: DA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	105
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJ. NO.	
125X-HB-(1&2) R-1		CONTRACT # 606		

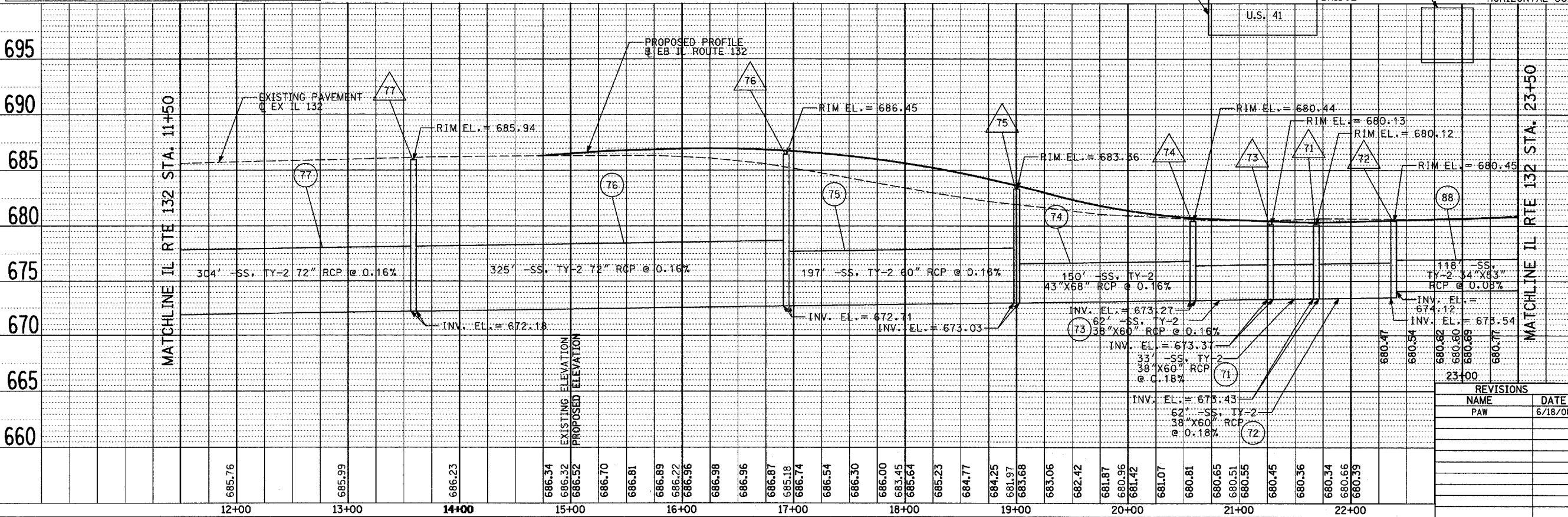
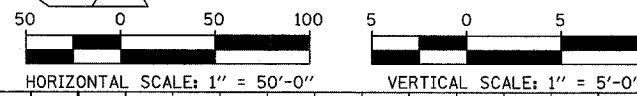
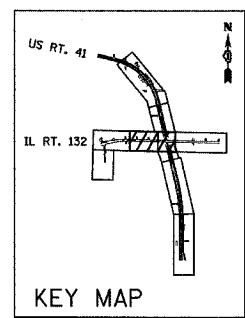
DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY

- NOTES:**
- COST SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST TO CONSTRUCT THE DRAINAGE STRUCTURE.
  - CUT OFF PORTIONS OF EXISTING PILING AS NECESSARY TO ACCOMMODATE THE INSTALLATION OF DRAINAGE STRUCTURES AND STORM SEWERS. COST SHALL BE INCLUDED IN THE UNIT BID PRICE OF "REMOVAL OF EXISTING STRUCTURES NO. 1" & "REMOVAL OF EXISTING STRUCTURES NO. 2."
  - SEE PROPOSED SANITARY SEWER SCHEDULE FOR DETAILS. THE CONTRACTOR SHALL VERIFY CONDITIONS ON SITE PRIOR TO ORDER OF MATERIALS.



- LEGEND:**
- (XY) PROPOSED STORM SEWER NUMBER (X=SHEET NO., Y=PIPE NO.)
  - (XY) PROPOSED STRUCTURE NUMBER (X=SHEET NO., Y=STRUCTURE NO.)
  - (XY) PROPOSED PIPE UNDERDRAINS 6" (X=SHEET NO., Y=PIPE NO.)
  - SHEET FLOW

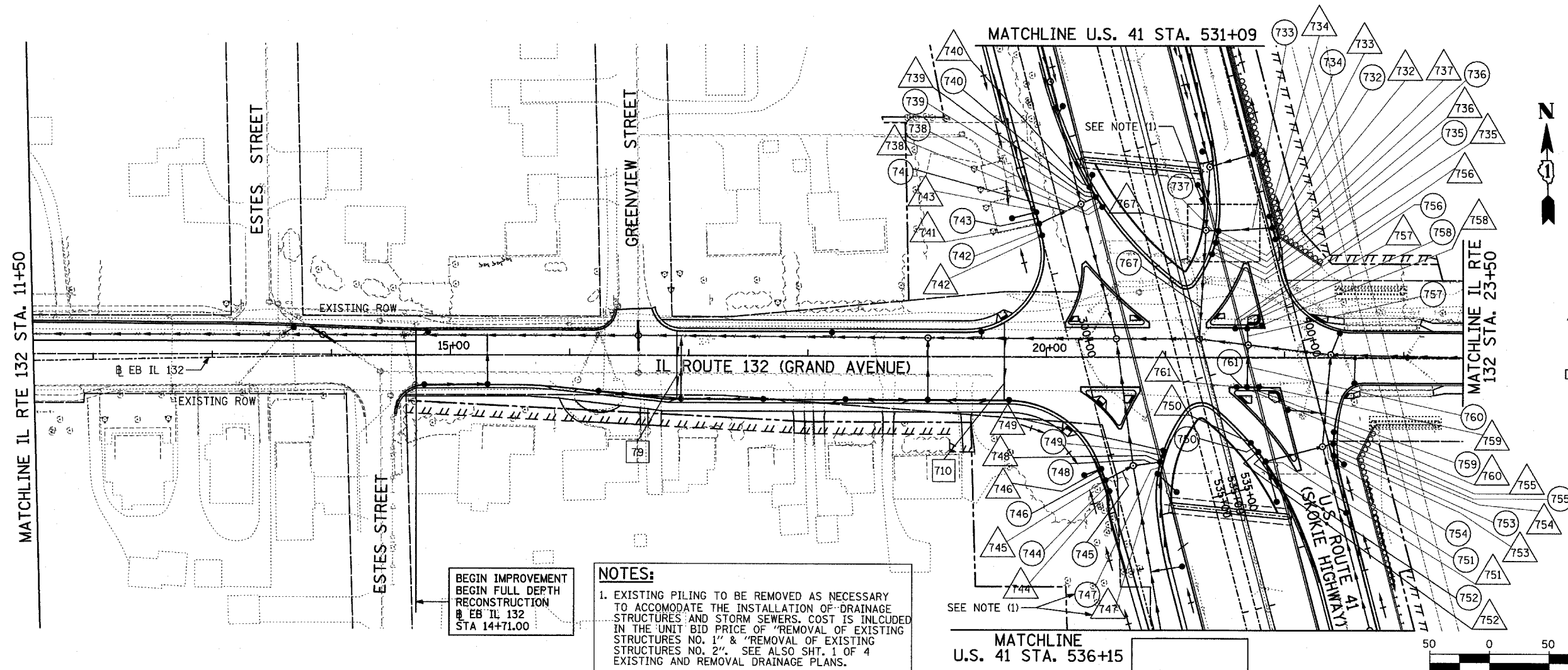


REVISIONS	
NAME	DATE
PAW	6/18/08

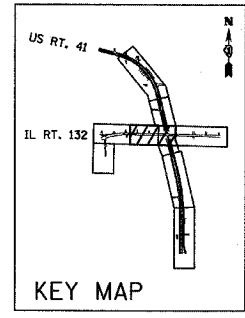
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 DRAINAGE PLAN AND PROFILE  
 SHEET 7 OF 8  
 IL 132 - STA. 11+50 TO STA. 23+50  
 SCALE: HORIZ. 1"=50'  
 VERT. 1"=5'  
 DATE: MAY 12, 2008  
 DRAWN BY: NSB  
 CHECKED BY: DA

PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNED	
NO.	CHKD	
	BY	
	DATE	

PROFILE	SURVEYED	DATE
NOTE BOOK	ALIGNED	
NO.	CHKD	
	BY	
	DATE	



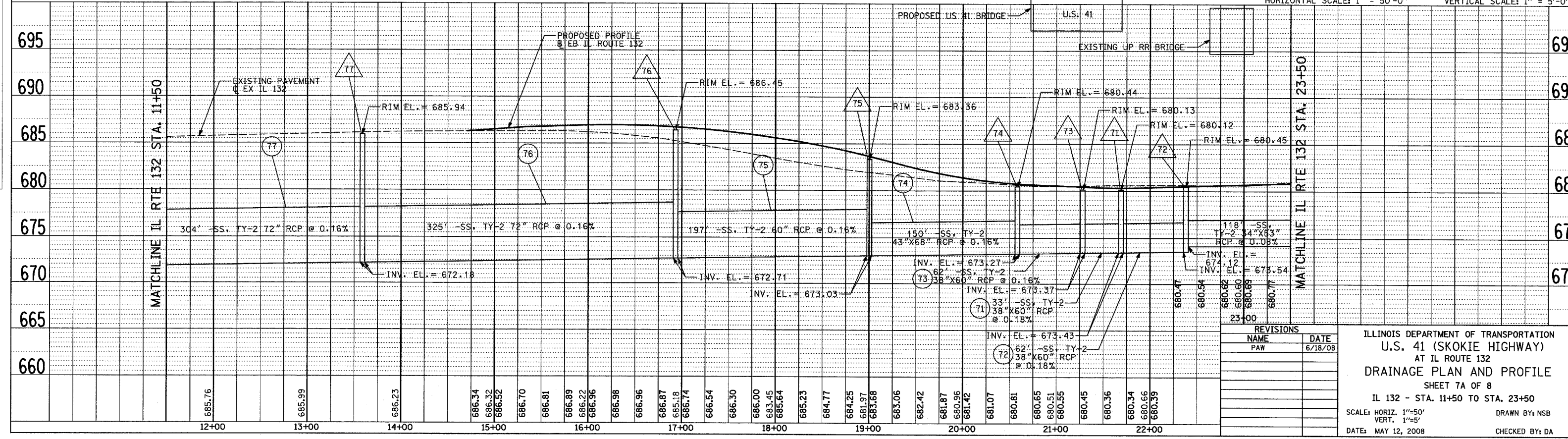
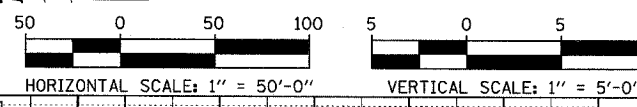
- LEGEND:**
- (XY) PROPOSED STORM SEWER NUMBER (X=SHEET NO., Y=PIPE NO.)
  - △(XY) PROPOSED STRUCTURE NUMBER (X=SHEET NO., Y=STRUCTURE NO.)
  - (XY) PROPOSED PIPE UNDERDRAINS 6" (X=SHEET NO., Y=PIPE NO.)
  - SHEET FLOW



**NOTES:**

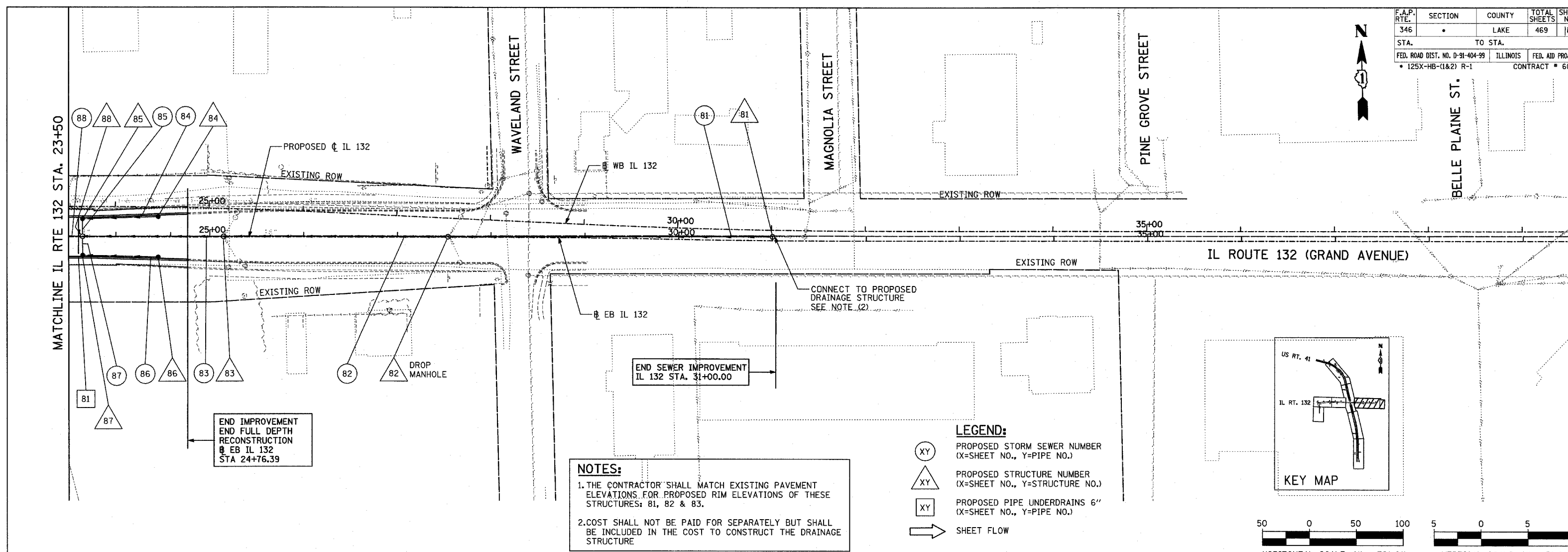
1. EXISTING PILING TO BE REMOVED AS NECESSARY TO ACCOMMODATE THE INSTALLATION OF DRAINAGE STRUCTURES AND STORM SEWERS. COST IS INCLUDED IN THE UNIT BID PRICE OF "REMOVAL OF EXISTING STRUCTURES NO. 1" & "REMOVAL OF EXISTING STRUCTURES NO. 2". SEE ALSO SHT. 1 OF 4 EXISTING AND REMOVAL DRAINAGE PLANS.

BEGIN IMPROVEMENT  
BEGIN FULL DEPTH  
RECONSTRUCTION  
EB IL 132  
STA 14+71.00



REVISIONS		DATE
NAME		
PAW		6/18/08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**U.S. 41 (SKOKIE HIGHWAY)**  
 AT IL ROUTE 132  
**DRAINAGE PLAN AND PROFILE**  
 SHEET 7A OF 8  
 IL 132 - STA. 11+50 TO STA. 23+50  
 SCALE: HORIZ. 1"=50'  
 VERT. 1"=5'  
 DATE: MAY 12, 2008  
 DRAWN BY: NSB  
 CHECKED BY: DA

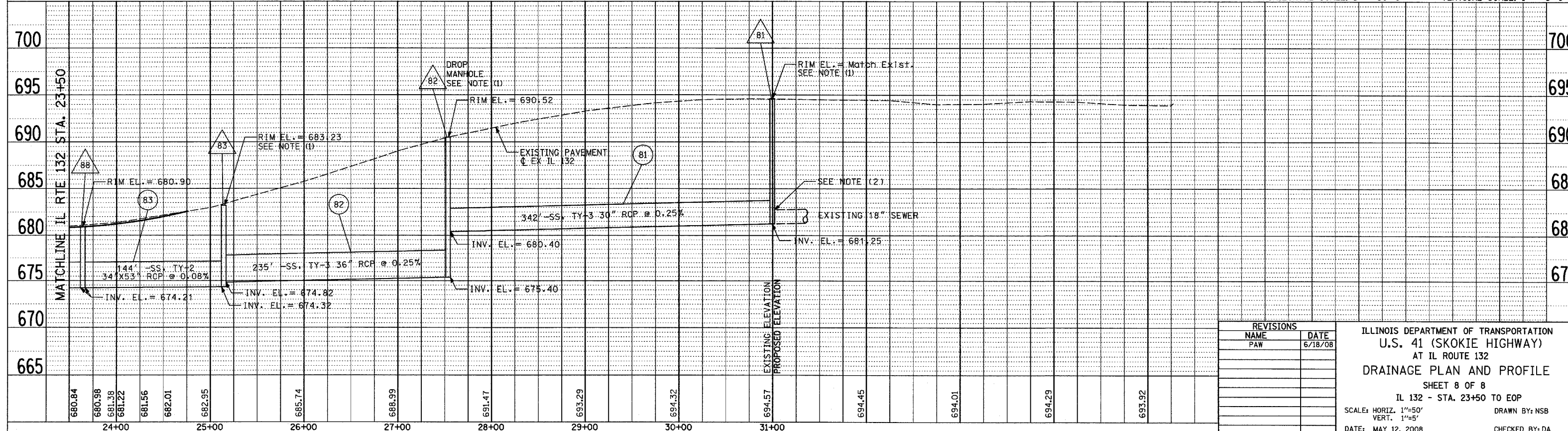
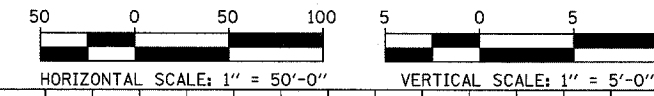
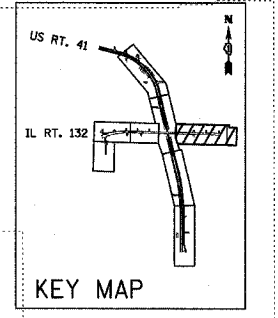


END IMPROVEMENT  
END FULL DEPTH  
RECONSTRUCTION  
EB IL 132  
STA 24+76.39

END SEWER IMPROVEMENT  
IL 132 STA. 31+00.00

- NOTES:**
1. THE CONTRACTOR SHALL MATCH EXISTING PAVEMENT ELEVATIONS FOR PROPOSED RIM ELEVATIONS OF THESE STRUCTURES: 81, 82 & 83.
  2. COST SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST TO CONSTRUCT THE DRAINAGE STRUCTURE

- LEGEND:**
- (XY) PROPOSED STORM SEWER NUMBER (X=SHEET NO., Y=PIPE NO.)
  - △XY PROPOSED STRUCTURE NUMBER (X=SHEET NO., Y=STRUCTURE NO.)
  - XY PROPOSED PIPE UNDERDRAINS 6" (X=SHEET NO., Y=PIPE NO.)
  - ➔ SHEET FLOW



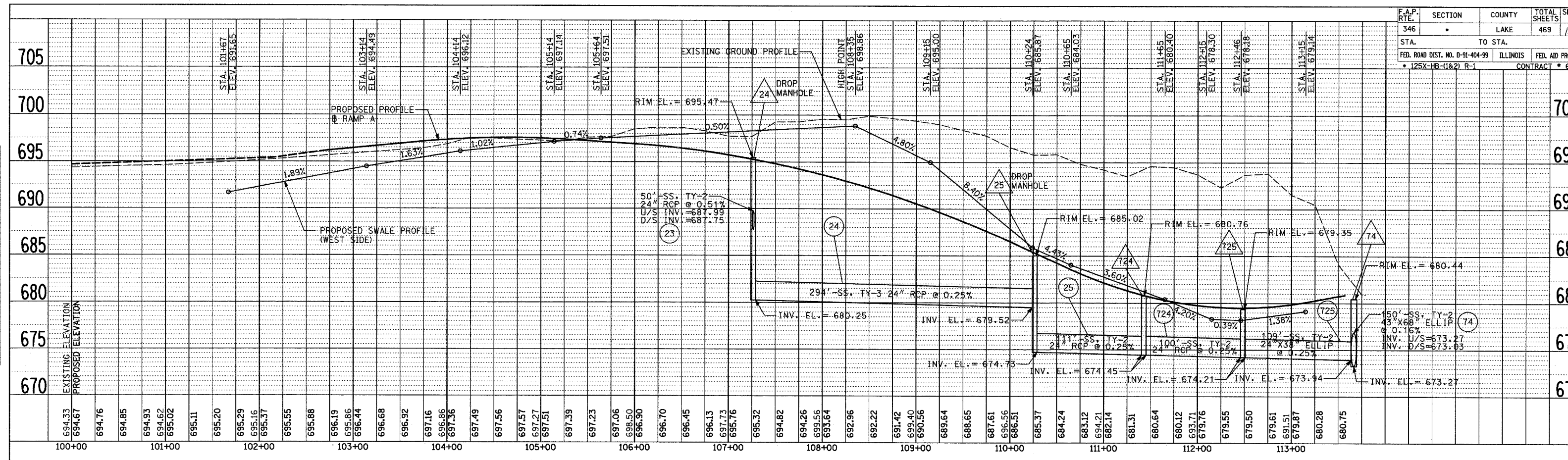
REVISIONS	
NAME	DATE
PAW	6/18/08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
DRAINAGE PLAN AND PROFILE  
SHEET 8 OF 8  
IL 132 - STA. 23+50 TO EOP  
SCALE: HORIZ. 1"=50'  
VERT. 1"=5'  
DATE: MAY 12, 2008  
DRAWN BY: NSB  
CHECKED BY: DA

PLAN  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
NOTE BOOK NO. \_\_\_\_\_  
CADD FILE NAME \_\_\_\_\_

PROFILE  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
NOTE BOOK NO. \_\_\_\_\_  
CADD FILE NAME \_\_\_\_\_

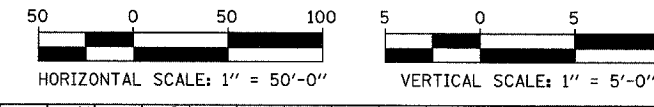
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 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
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 NO. \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
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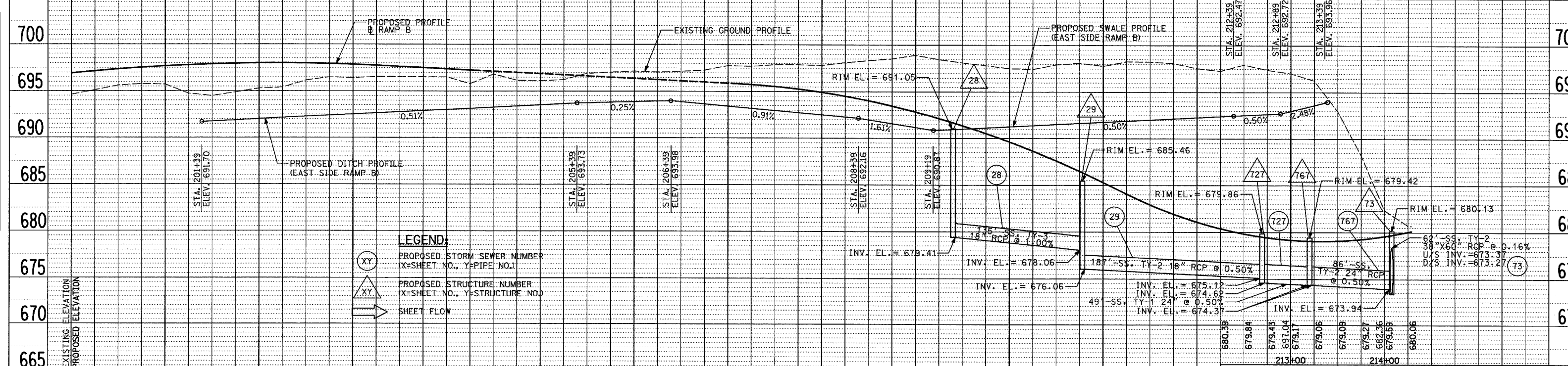
SEE ROADWAY PLAN SHEETS 1-2 OF 8 FOR RAMP A PLAN

**RAMP A**

NOTE: DASHED PROFILE INDICATES ELEVATIONS ARE CONTROLLED BY MAINLINE PROFILE



DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 FILE NAME: \_\_\_\_\_



**LEGEND:**  
 (XY) PROPOSED STORM SEWER NUMBER (X=SHEET NO., Y=PIPE NO.)  
 (XY) PROPOSED STRUCTURE NUMBER (X=SHEET NO., Y=STRUCTURE NO.)  
 SHEET FLOW

SEE ROADWAY PLAN SHEETS 1-2 OF 8 FOR RAMP B PLAN

**RAMP B**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132

**PROPOSED DRAINAGE PROFILE**  
 RAMP A AND RAMP B

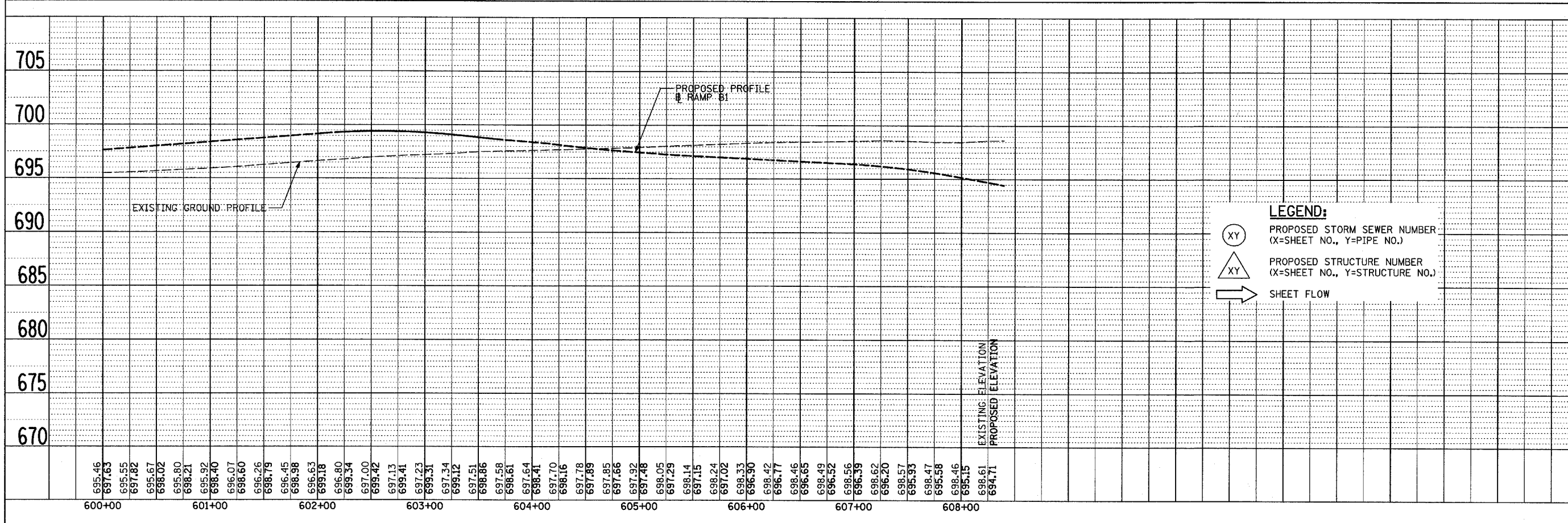
SCALE: HORIZ. 1"=50'  
 VERT. 1"=5'

DATE: MAY 12, 2008

DRAWN BY: NSB  
 CHECKED BY: DA



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	109
STA.	TO STA.		FED. ROAD DIST. NO. D-91-404-99	ILLINOIS
			FED. AID PROJ. NO. 125X-HB-(1&2) R-1	CONTRACT # 608

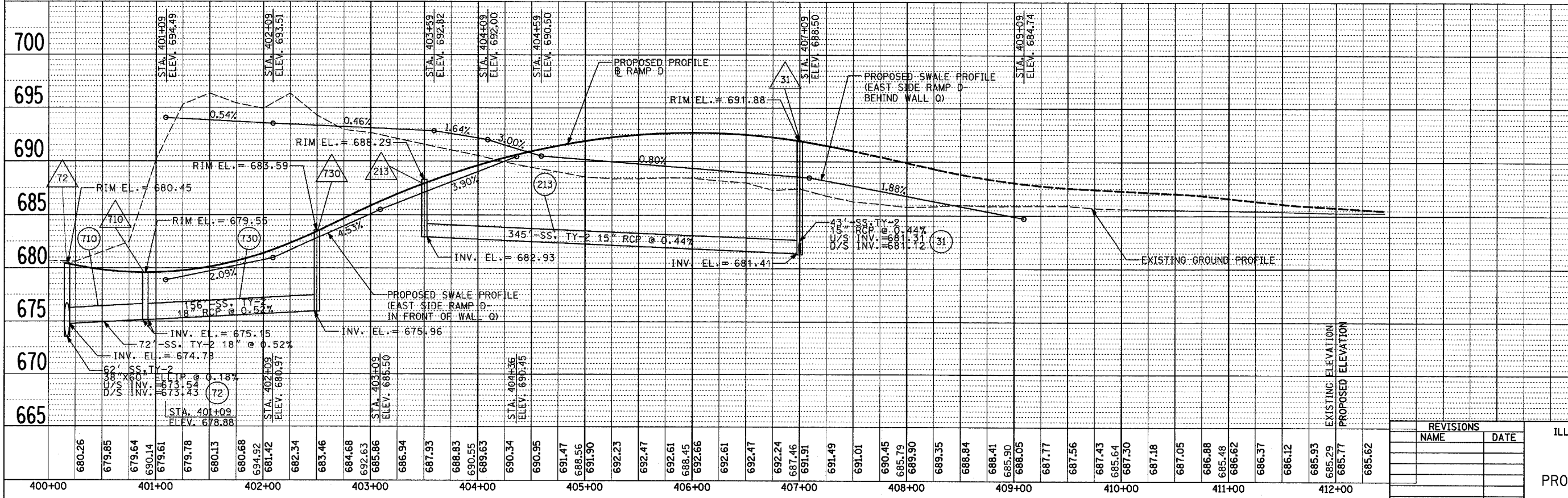
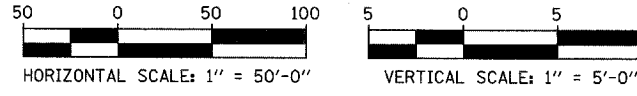


PLAN	SURVEYED	PLOTTED	CHECKED
NOTE BOOK NO.	DATE	BY	DATE

SEE ROADWAY PLAN SHEETS 1-2 OF 8 FOR RAMP B1 PLAN

RAMP B1

NOTE: DASHED PROFILE INDICATES ELEVATIONS ARE CONTROLLED BY MAINLINE PROFILE



PROFILE	SURVEYED	PLOTTED	CHECKED
NOTE BOOK NO.	DATE	BY	DATE

SEE ROADWAY PLAN SHEETS 2-3 OF 8 FOR RAMP D PLAN

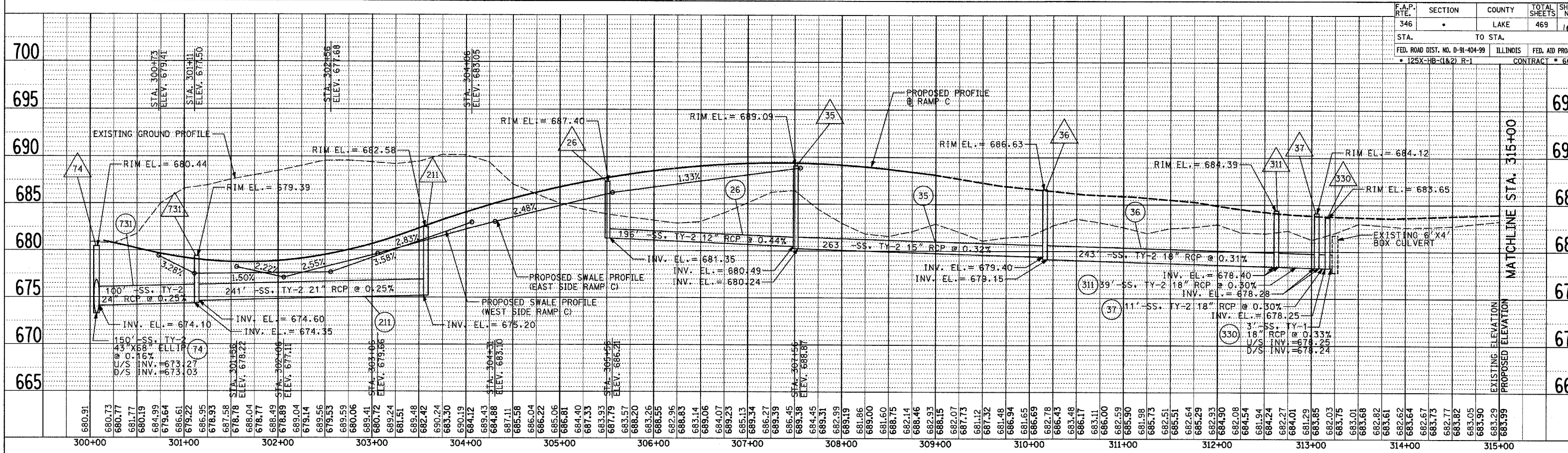
RAMP D

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
**PROPOSED DRAINAGE PROFILE**  
 RAMP B1 AND RAMP D

SCALE: HORIZ. 1"=50'  
 VERT. 1"=5'  
 DATE: MAY 12, 2008

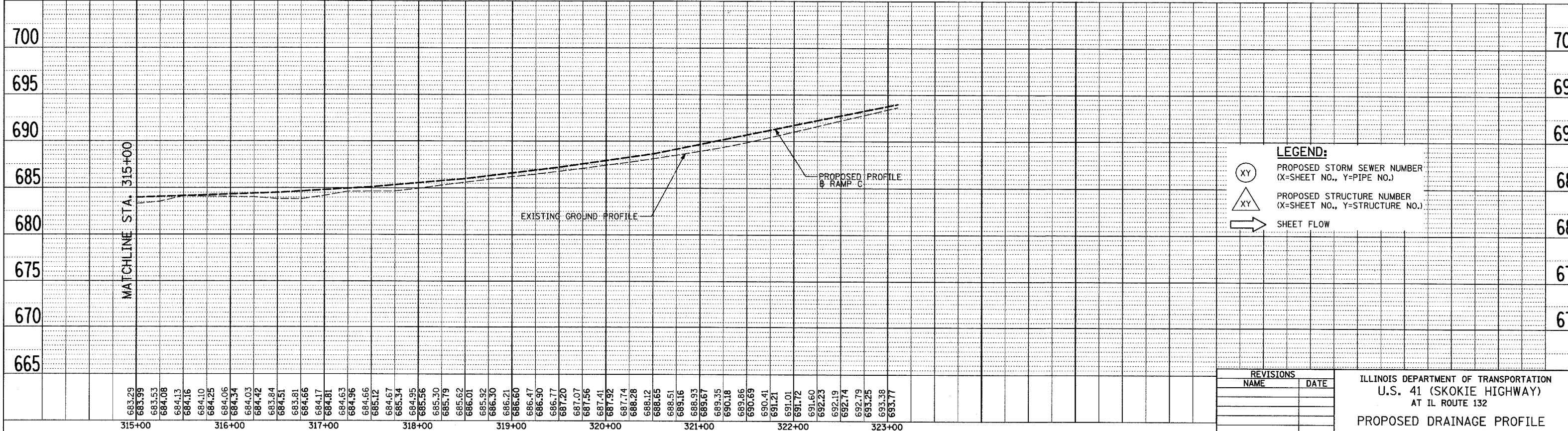
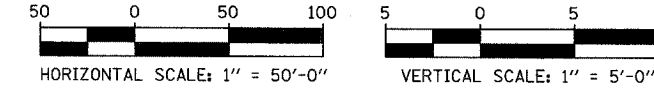
DRAWN BY: NSB  
 CHECKED BY: DA



SEE ROADWAY PLAN SHEETS 2-3 OF 8 FOR RAMP C PLAN

RAMP C

NOTE: DASHED PROFILE INDICATES ELEVATIONS ARE CONTROLLED BY MAINLINE PROFILE



**LEGEND:**

- (XY) PROPOSED STORM SEWER NUMBER (X=SHEET NO., Y=PIPE NO.)
- (XY) PROPOSED STRUCTURE NUMBER (X=SHEET NO., Y=STRUCTURE NO.)
- SHEET FLOW

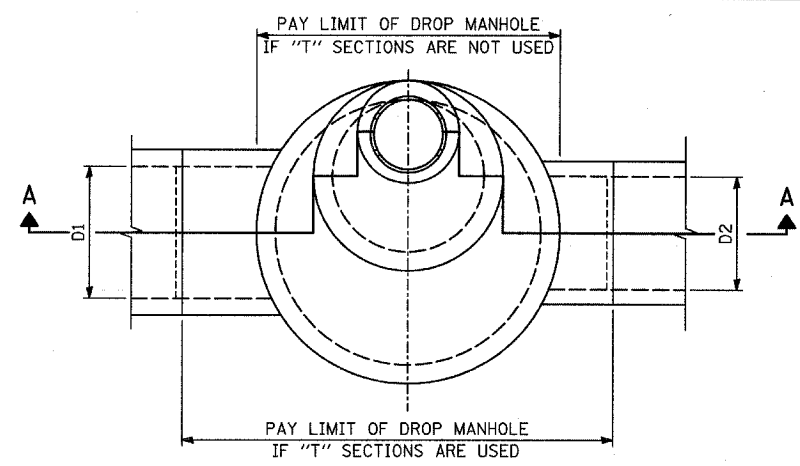
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
**PROPOSED DRAINAGE PROFILE**  
 RAMP C  
 SCALE: HORIZ. 1"=50'  
 VERT. 1"=5'  
 DATE: MAY 12, 2008  
 DRAWN BY: NSB  
 CHECKED BY: DA

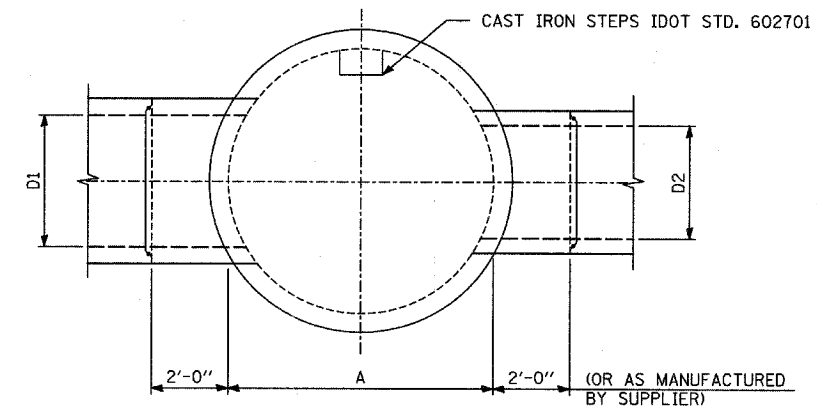
SEE ROADWAY PLAN SHEETS 2-3 OF 8 FOR RAMP C PLAN

RAMP C

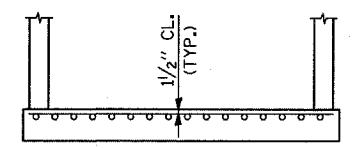
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHE NO.
346		LAKE	469	11
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-404-99	ILLINOIS	FED. AID PROJ. NO.		
• 125X-HB-(1&2) R-1		CONTRACT # 60		



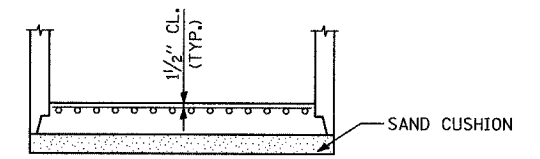
PLAN VIEW



SECTIONAL PLAN

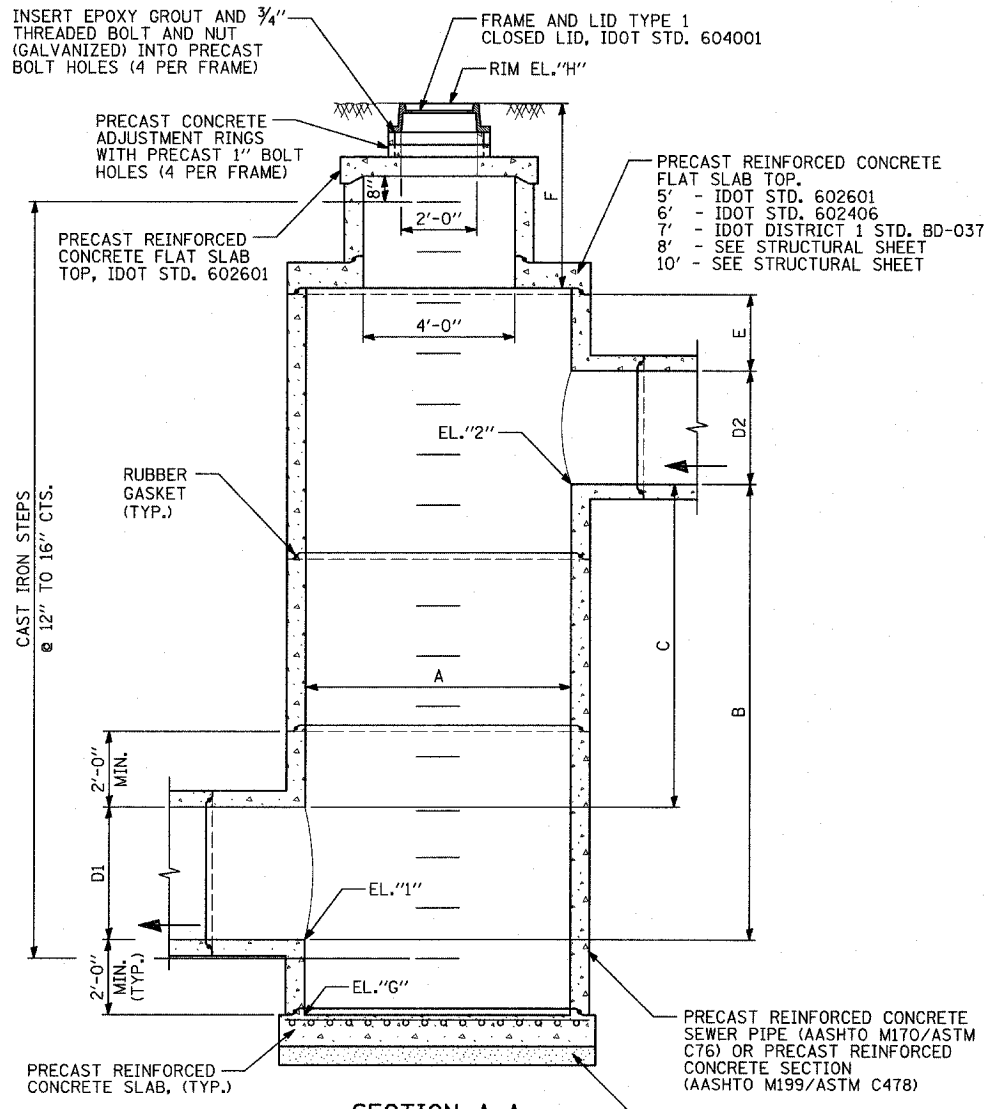


REINFORCED CAST-IN-PLACE CLASS X CONCRETE



PREFABRICATED REINFORCED CONCRETE SLAB WHEN THE PRECAST REINFORCED CONCRETE SECTIONS ALTERNATE IS USED WITH SAND CUSHION

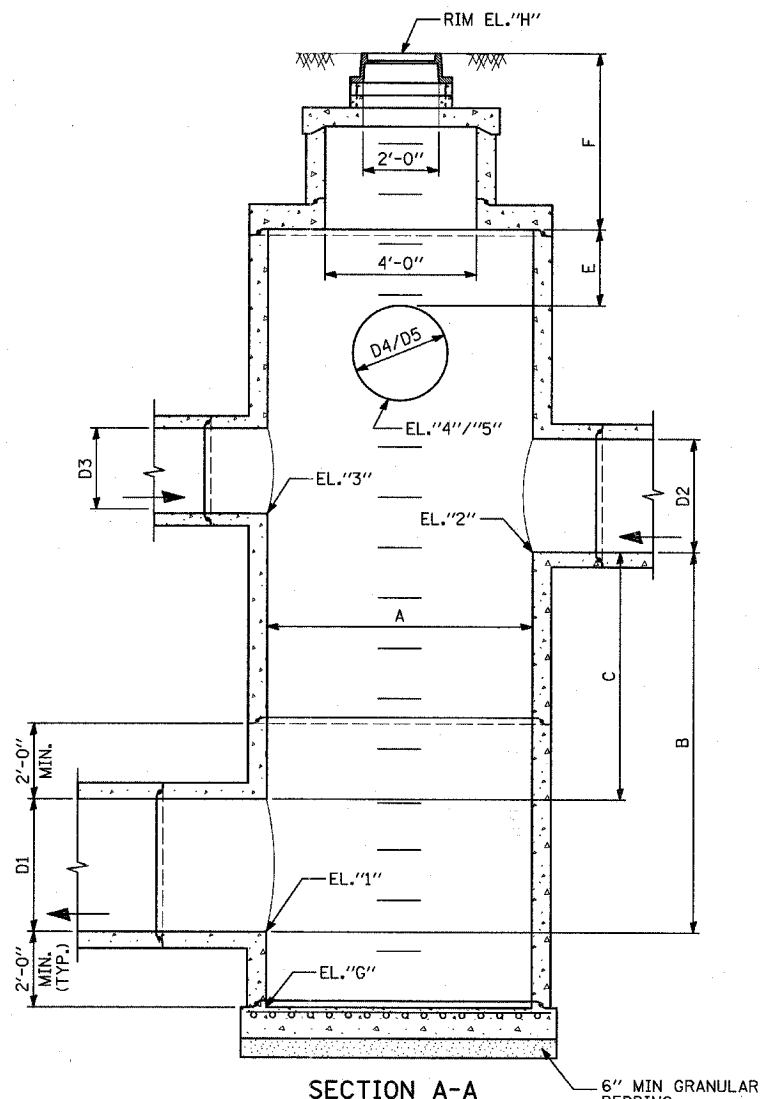
ALTERNATE BOTTOM SLAB



SECTION A-A

DROP MANHOLE TYPE 1

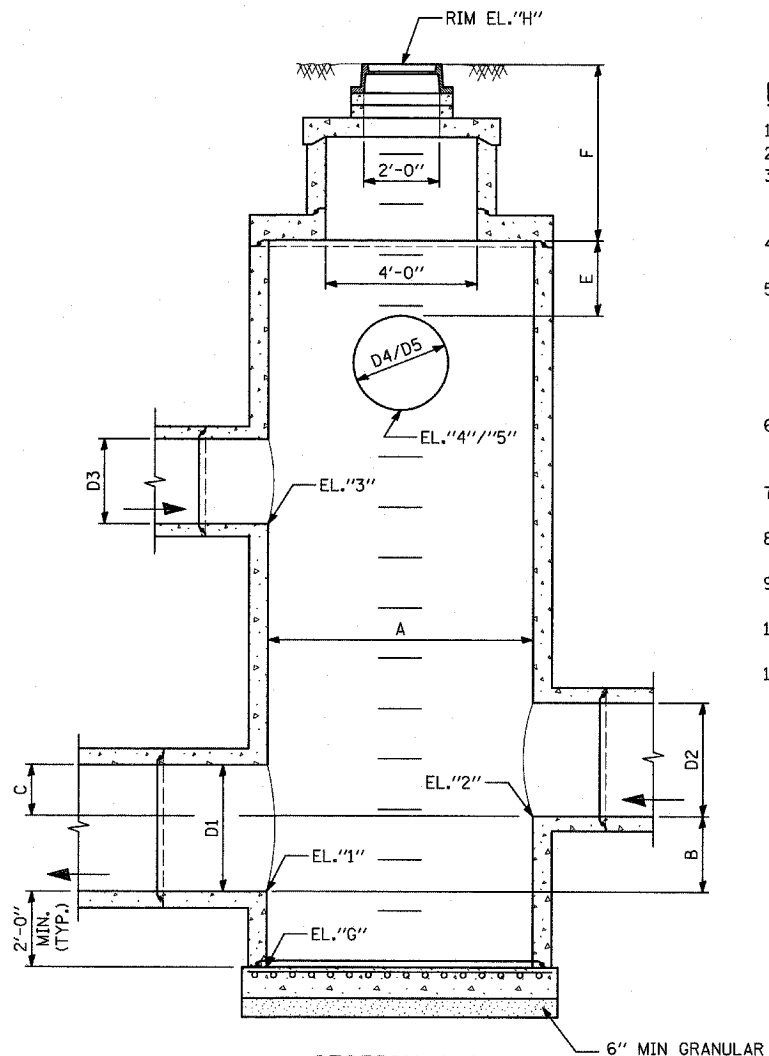
(SEE NOTE 11)



SECTION A-A

DROP MANHOLE TYPE 2

(SEE NOTE 9 & 11)



SECTION A-A

DROP MANHOLE TYPE 3

(SEE NOTES 10 & 11)

NOTES:

- 1) ALL DIMENSIONS ARE INSIDE DIMENSIONS.
- 2) UTILIZE PIPE "T" SECTIONS WHENEVER AVAILABLE.
- 3) PRESET PIPE OPENINGS IN PRECAST REINFORCED CONCRETE SECTIONS IF "T" SECTIONS AND SPECIAL FITTINGS ARE NOT AVAILABLE.
- 4) ROTATE FLAT SLAB AND MANHOLE RISER SO STEPS AVOID STORM SEWER OPENINGS.
- 5) CAST IRON STEPS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ARTICLE 1006.14 OF THE STANDARD SPECIFICATIONS. STEPS SHALL BE EMBEDDED INTO THE WALL A MINIMUM OF THREE (3) INCHES. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.
- 6) JOINT CONFIGURATION AND DIMENSIONS OF FLAT SLAB TOP SHALL MATCH AND FIT THE RISER JOINT DETAIL.
- 7) LIFTING DEVICES SHALL BE APPROVED BY THE ENGINEER.
- 8) ALL WORK SHALL BE AS PER AASHTO REQUIREMENTS. ASTM IS LISTED AS SUPPLEMENTARY.
- 9) SIMILAR TO TYPE 1, ALSO WITH SEWERS D3, D4 AND D5.
- 10) SIMILAR TO TYPE 1, ALSO WITH SEWERS D3, D4, D5 AND LOWER D2.
- 11) DROP MANHOLE TYPE 1 AND TYPE 3 ARE NOT USED ON THIS PROJECT.

**SCHEDULE NOTE:**  
 (1) INVERT ELEVATION, SIZE AND DEPTH INDICATED, IS ASSUMED BASED ON A 6" DEPTH FROM RIM TO PIPE INVERT. THEREFORE DUE TO LACK OF FIELD SURVEY DATA, THE CONTRACTOR SHALL VERIFY INFORMATION IN FIELD PRIOR TO ORDER OF MATERIAL. THE COST OF THIS FIELD VERIFICATION SHALL BE INCLUDED WITH THE COST OF CONSTRUCTION OF A DROP MANHOLE.

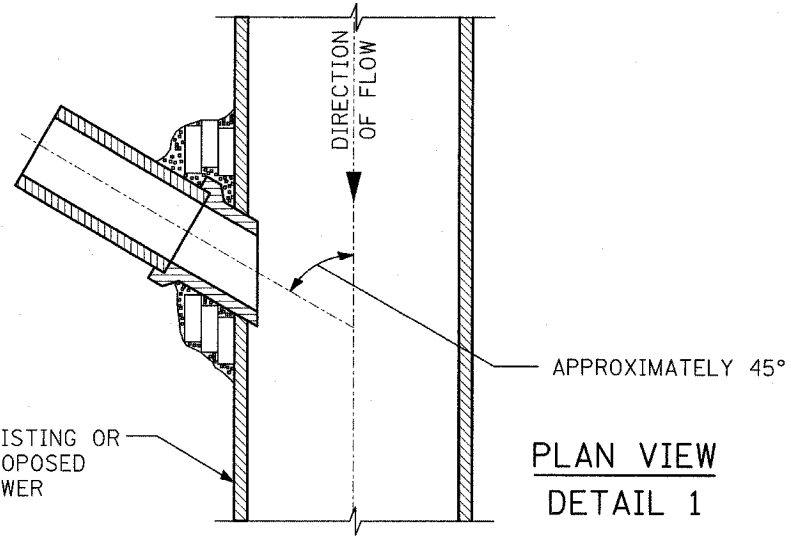
STRUCT NUMBER	TYPE	LOCATION	STATION	OFFSET	DIMENSIONS										ELEVATIONS (FT)							
					A (FT)	B (FT)	C (FT)	D1 (IN)	D2 (IN)	D3 (IN)	D4 (IN)	D5 (IN)	E (FT)	F (FT)	1	2	3	4	5	G	H	
24	2	RAMP A	107+26.35	21.81 LT	6	7.50	5.50	24	24	-	-	-	2	3.72	680.25	687.75	-	-	-	678.25	695.47	
25	2	RAMP A	110+26.38	38.8 LT	6	4.79	2.79	24	24	-	12	12	2	2.89	674.73	679.52	-	679.40	680.13	672.73	685.02	
82	2	IL 132	27+53.91	0.5 LT	7	5.00	2.00	36	30	-	12(1)	12(1)	2	4.02(1)	675.40	680.40	-	684.50(1)	684.50(1)	673.40	690.52	
326	2	NB US 41	539+39.35	3.0 RT	7	6.12	4.12	24	24	-	12	-	2	3.71	683.67	689.79	-	690.95	-	681.67	696.66	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
**DRAINAGE STRUCTURE DETAILS**  
**DROP MANHOLE**  
 SCALE: NONE  
 DATE: MAY 12, 2008  
 DRAWN BY: NSB  
 CHECKED BY: DA

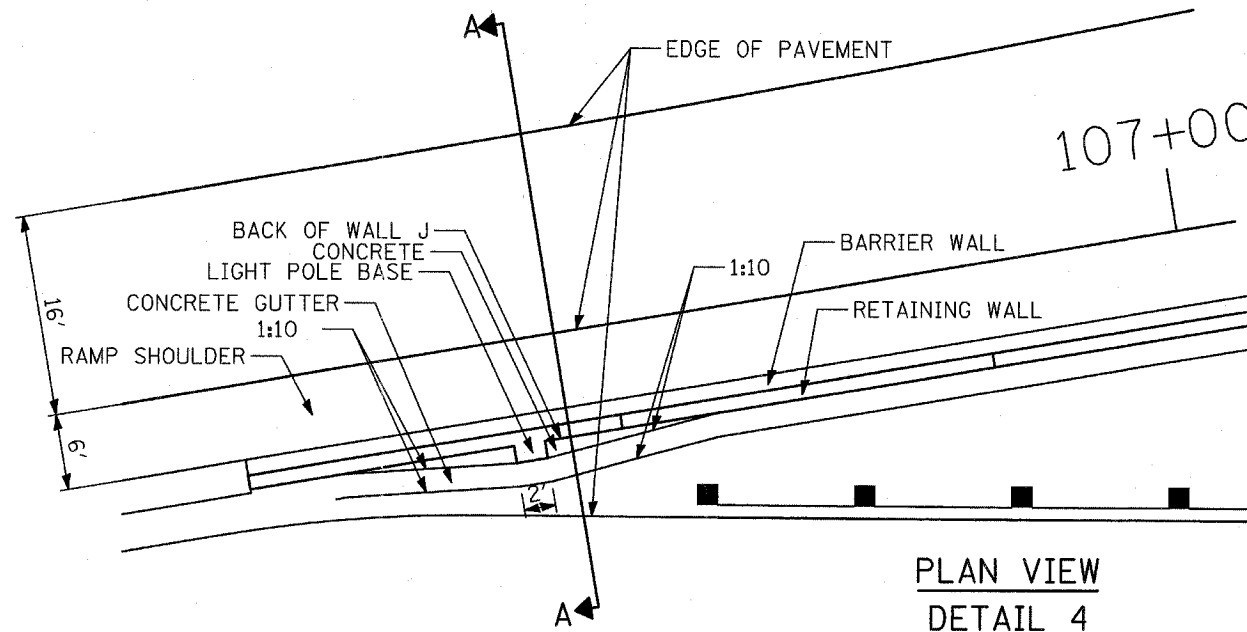
**DETAIL OF PROPOSED STORM SEWER CONNECTIONS TO EXISTING/PROPOSED SEWER**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	112
STA.	TO STA.		FED. ROAD DIST. NO. D-91-404-99	ILLINOIS
			FED. AID PROJ. NO.	CONTRACT # 608

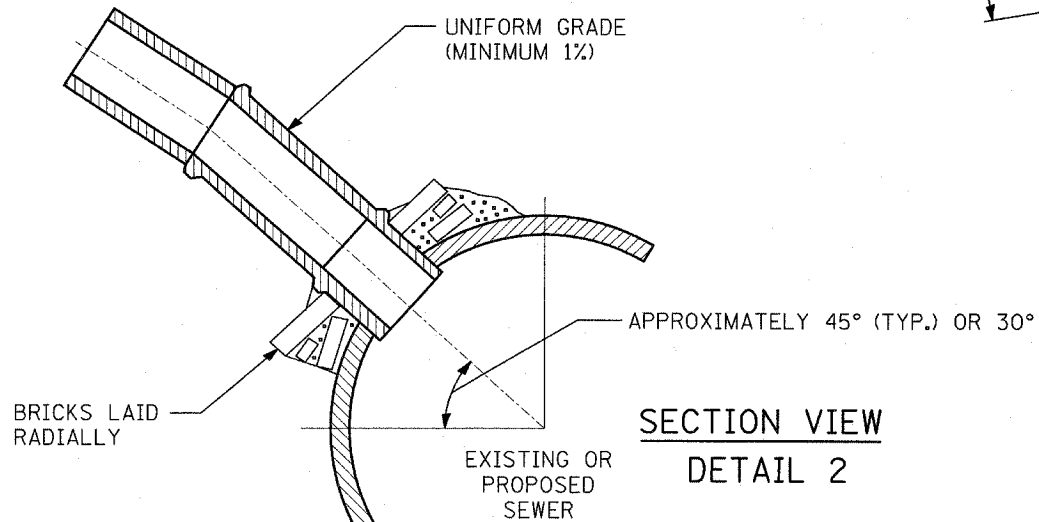


**PLAN VIEW  
DETAIL 1**

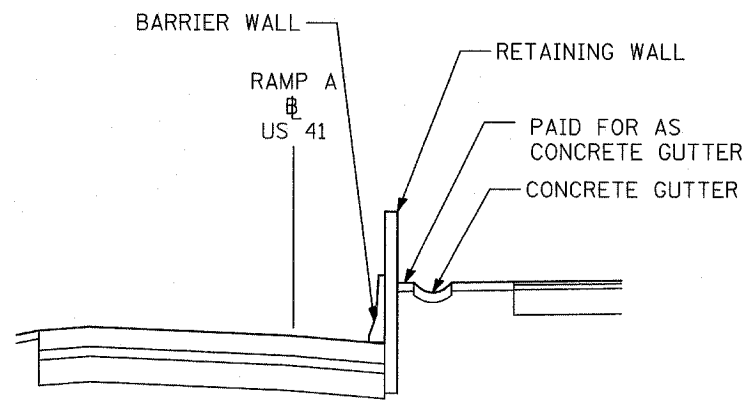
**DETAIL OF PROPOSED CONCRETE GUTTER ALONG LIGHT POLE BASE**



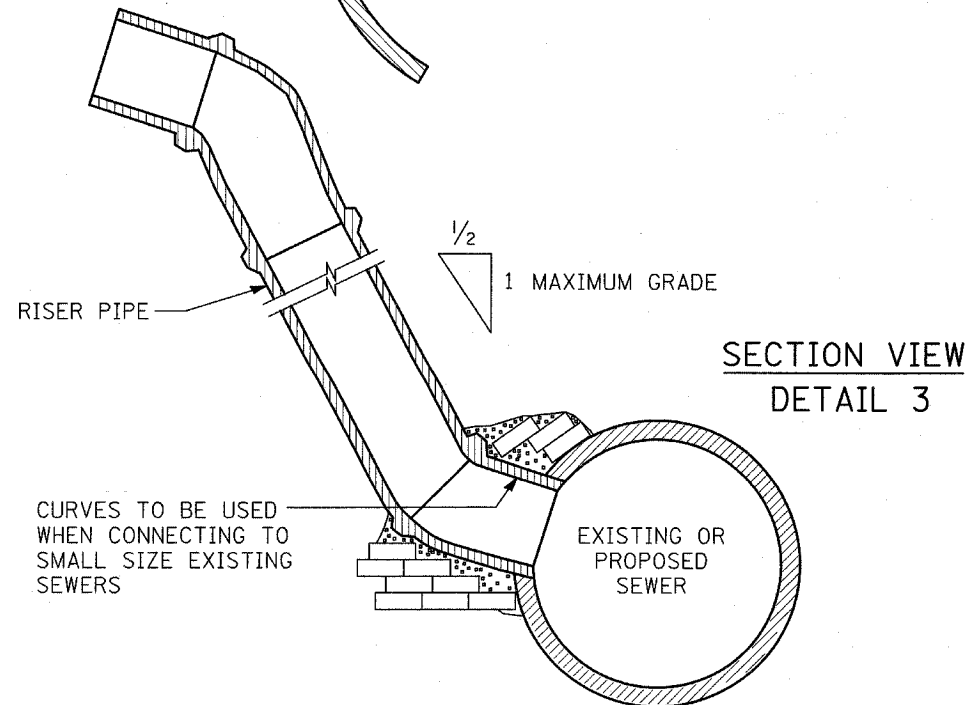
**PLAN VIEW  
DETAIL 4**



**SECTION VIEW  
DETAIL 2**



**SECTION A-A VIEW  
DETAIL 4**



**SECTION VIEW  
DETAIL 3**

**NOTES:**

**DESCRIPTION:**

ALL CATCH BASIN CONNECTIONS SHALL BE 12 INCH STORM SEWER PIPE, UNLESS SHOWN OR SPECIFIED OTHERWISE ON PLAN SHEETS.

**CONSTRUCTION METHODS:**

1. CONNECTION TO PROPOSED STORM SEWER: WHERE A STORM SEWER CONNECTION IS TO BE MADE TO A PROPOSED STORM SEWER, A "Y" BRANCH SECTION OR A SECTION WITH AN OPENING MADE IN THE PIPE AT THE TIME IT IS MANUFACTURED OF THE PROPER DIAMETER SHALL BE INSTALLED IN THE SEWER AT THE JUNCTION PROVIDING THE TYPE OF PIPE USED IS MANUFACTURED WITH "Y" BRANCHES OR WITH OPENING MADE IN THE PIPE.

THE JUNCTION OF THE PROPOSED STORM SEWER CONNECTION WITH THE PROPOSED STORM SEWER SHALL BE CONSTRUCTED AS FOLLOWS:

- a. SIMILAR TO DETAIL 1 AND DETAIL 2 ABOVE EXCEPT NO BRICK WILL BE REQUIRED IF SECTIONS WITH "Y" BRANCHES OR SECTIONS WITH OPENINGS MADE IN THE PIPE ARE USED.
- b. SAME AS DETAIL 3 ABOVE.

2. CONNECTION TO EXISTING SEWER: WHERE A STORM SEWER CONNECTION IS TO BE MADE TO AN EXISTING SEWER, A CIRCULAR OPENING SHALL BE MADE IN THE EXISTING SEWER OF THE SAME SIZE AS THE EXTERNAL DIAMETER OF THE PROPOSED STORM SEWER CONNECTION.

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE INJURED BY THE CONTRACTOR IN MAKING THIS CIRCULAR OPENING. THE CONTRACTOR SHALL REPLACE THIS SECTION OF PIPE WITH A PIPE EQUAL TO AND SIMILAR IN ALL RESPECTS TO THE TO THE PIPE IN THE EXISTING SEWER. THE CONTRACTOR SHALL DO THIS WORK IN A CAREFUL WORKMANLIKE MANNER WITHOUT EXTRA COMPENSATION.

THE JOINT BETWEEN THE EXISTING SEWER AND THE PROPOSED SEWER SHALL BE COMPLETELY SEALED WITH BRICK AS SHOWN ABOVE. BRICK GRADE SW, OR CONCRETE BUILDING BRICK GRADE A, SHALL BE LAID IN MORTAR THE SAME AS SPECIFIED FOR BRICK MASONRY UNDER ARTICLE 612.05 OF THE STANDARD SPECIFICATIONS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
**DETAILS OF STORM SEWER CONNECTIONS TO SEWER AND CONCRETE GUTTER ALONG LIGHT POLE BASE**

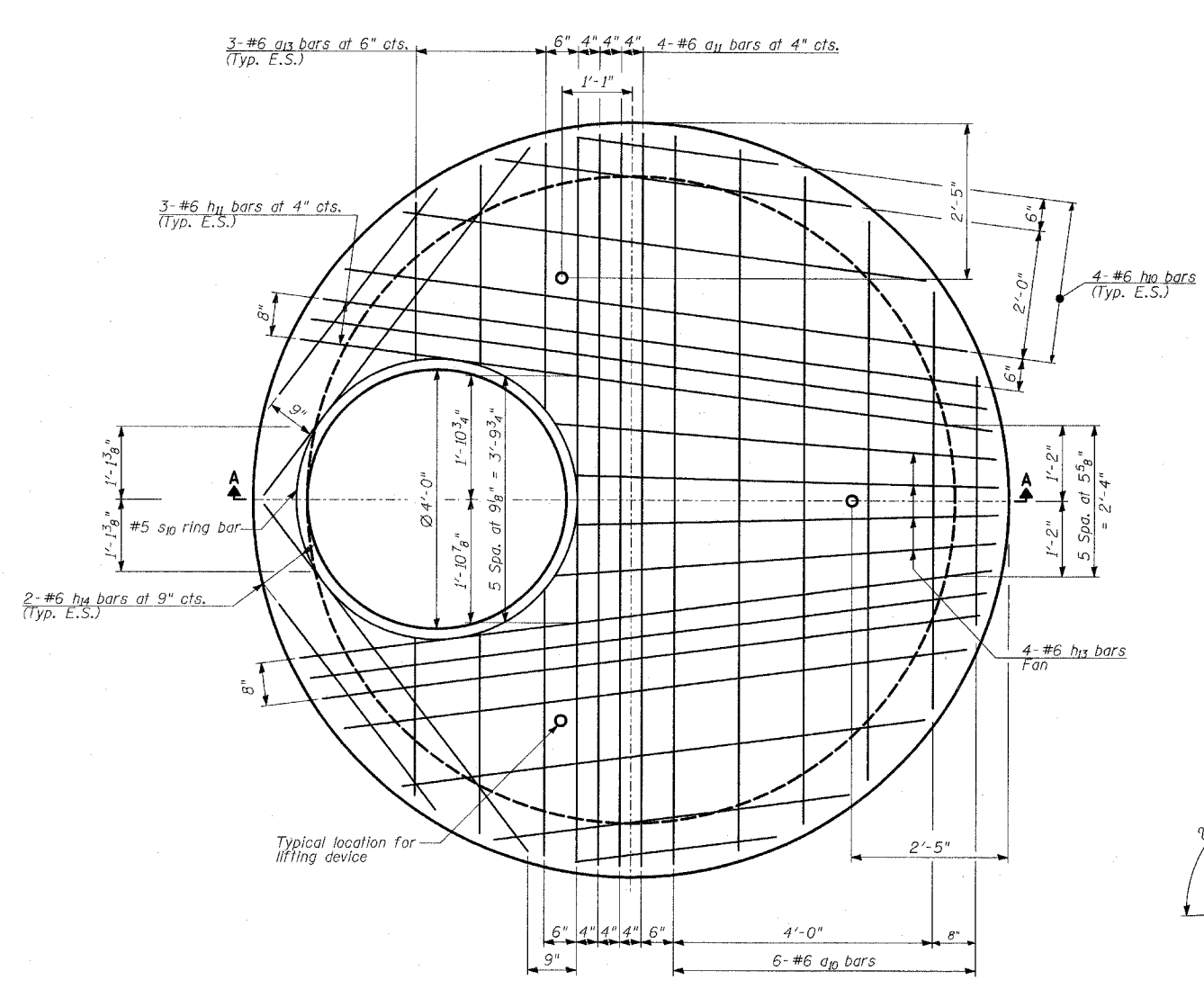
SCALE: NONE DRAWN BY: NSB  
DATE: MAY 12, 2008 CHECKED BY: DA

DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
BY	
NO. OF SHEETS	
CADD FILE NAME	

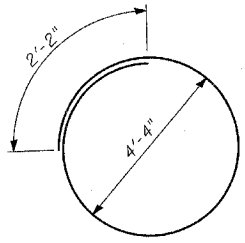
DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
BY	
NO. OF SHEETS	
STRUCTURE NOTATIONS	

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 GRADES CHECKED \_\_\_\_\_  
 ALIGNMENT CHECKED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 P.T. OF WAY CHECKED \_\_\_\_\_  
 SADD FILE NAME \_\_\_\_\_

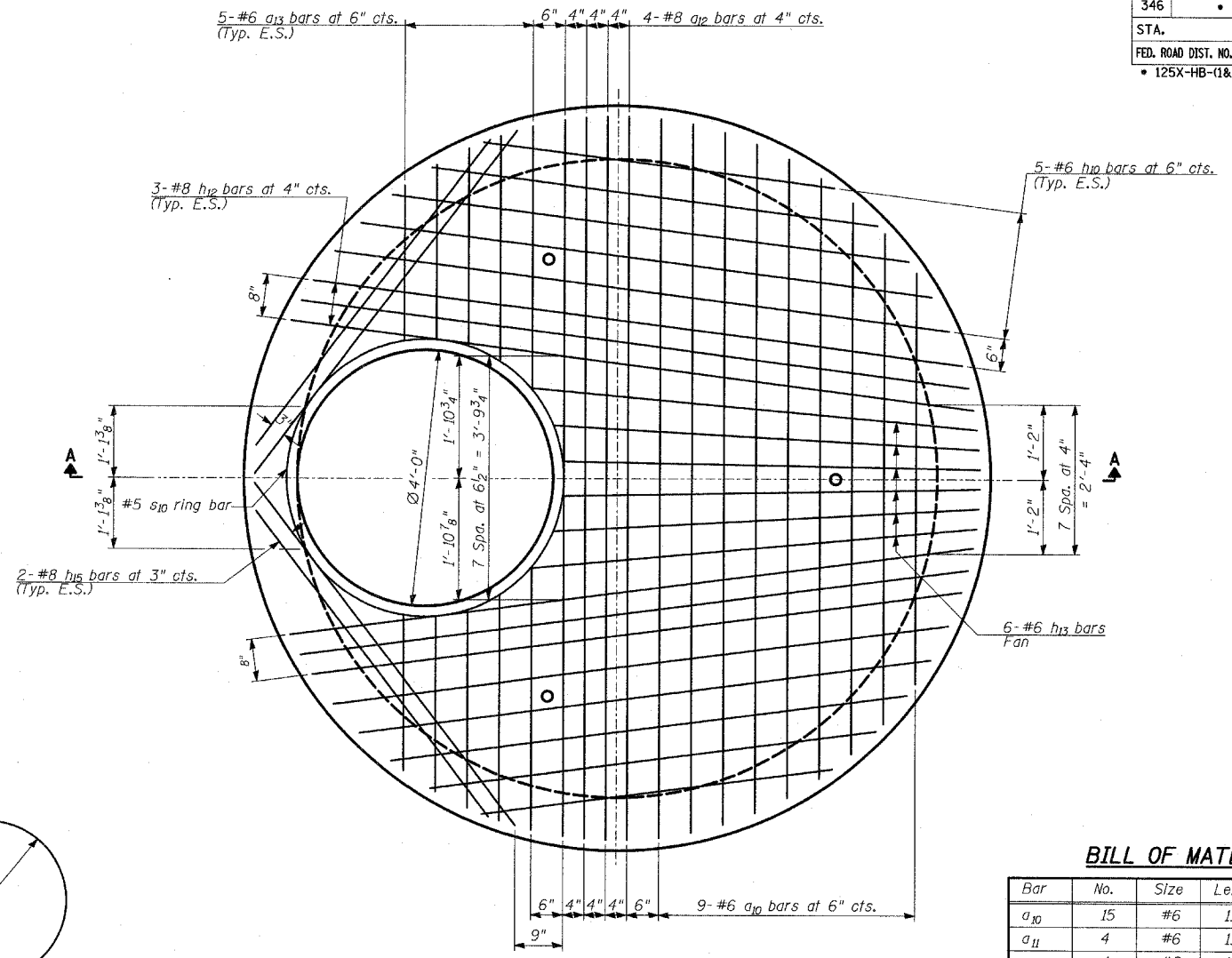
DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 PROFILE SURVEYED \_\_\_\_\_  
 GRADES CHECKED \_\_\_\_\_  
 P.M. NOTED \_\_\_\_\_  
 STRUCTURE NOTATION CHKD \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_



**ROOF SLAB - PLAN**  
(Top Reinforcement Bars)



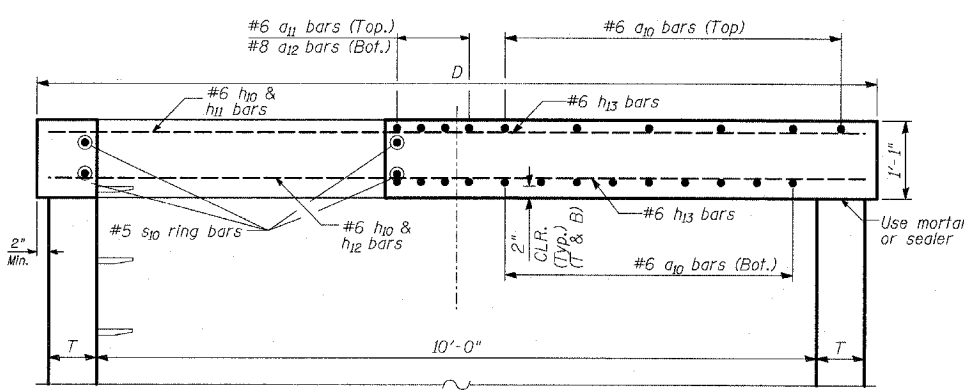
**s10 BAR**



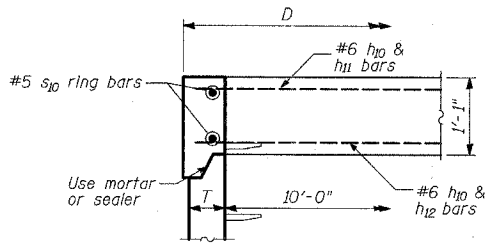
**ROOF SLAB - PLAN**  
(Bottom Reinforcement Bars)

**BILL OF MATERIAL**

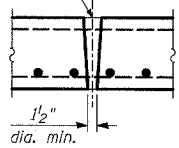
Bar	No.	Size	Length	Shape
a10	15	#6	11'-3"	—
a11	4	#6	11'-4"	—
a12	4	#8	11'-4"	—
a13	16	#6	4'-2"	—
h10	18	#6	9'-8"	—
h11	6	#6	10'-9"	—
h12	6	#8	10'-9"	—
h13	10	#6	7'-0"	—
h14	4	#6	6'-9"	—
h15	4	#8	6'-9"	—
s10	2	#5	15'-9"	○
Reinforcement Bars			POUND	1,330
Concrete Structure			CU. YARD	3.89



**SECTION A-A**



**ALTERNATE JOINT CONFIGURATION**



**LIFTING HOLE TYPICAL**  
(3 required per slab)

**NOTES:**

- Bar lengths are based on a wall thickness "T" of 8". Any changes on wall thickness will require modifications to the bar lengths.
- Bars to be cut as needed.
- Precast flat slab top shall conform to articles 505.01 thru 505.05 of Standard Specifications except that the concrete strength shall be 3500 psi after 28 days. Reinforcement bars shall conform to the requirements of article 1006.10. Only Grade 60 reinforcement bars will be permitted.
- Joint Configuration and dimensions of flat slab top shall match and fit the riser joint detail.
- Lifting devices shall be approved by the Engineer.
- Quantities for "Reinforcement Bars" and "Concrete Structures" are shown for constructibility purposes only and shall not be paid for separately.



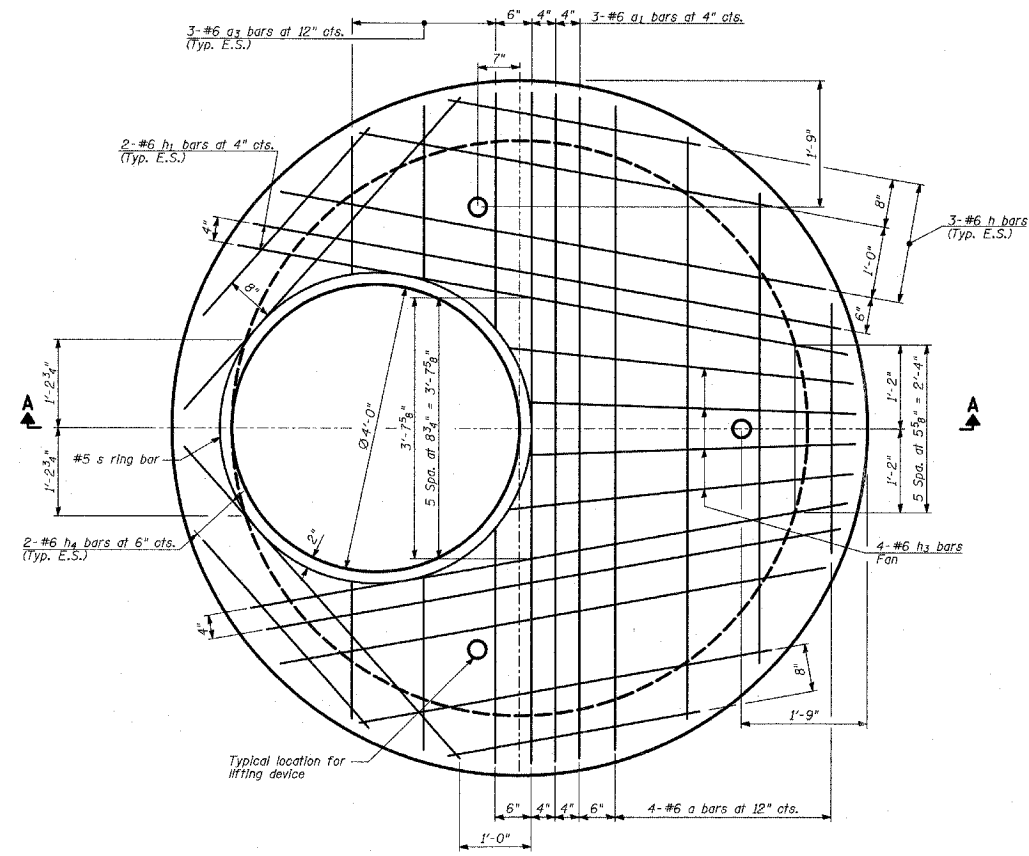
Signed Spiros Pantazis, S.E., Il. Lic. No. 081-006448 For drawings 1 thru 15 of 15  
 Expires 11-30-2008.  
 Date \_\_\_\_\_

REVISIONS	
NAME	DATE

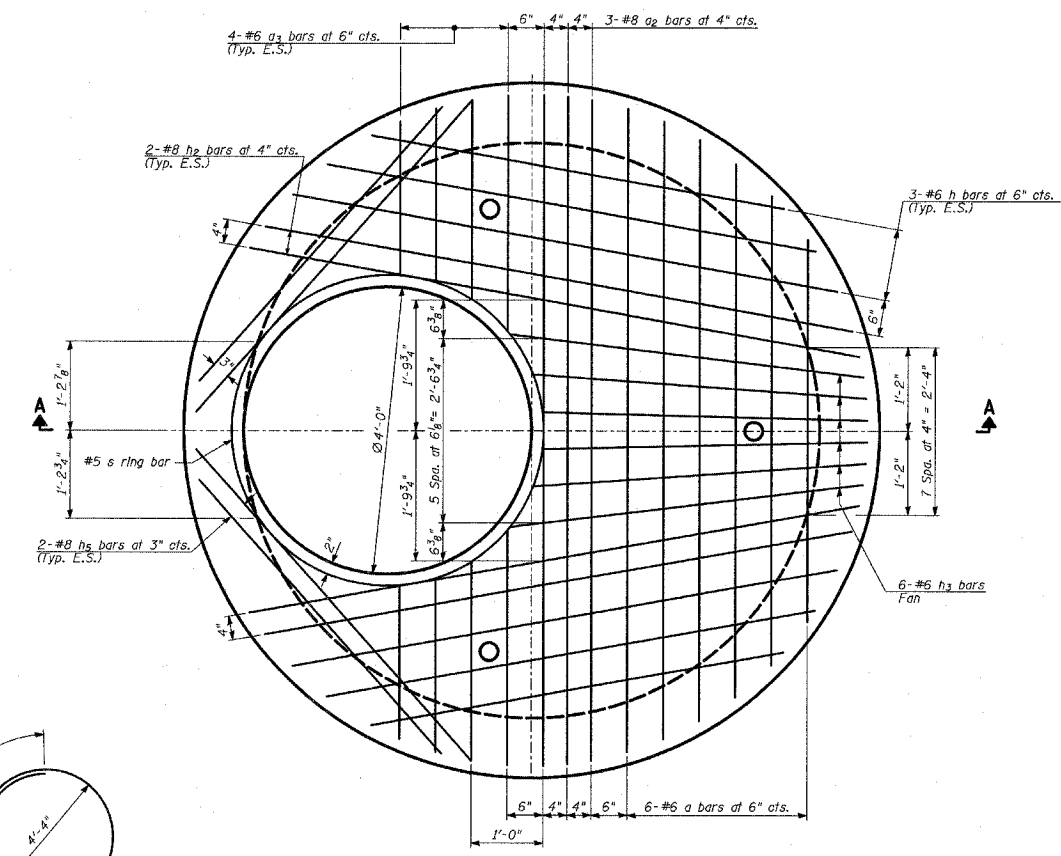
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132

PRECAST REINFORCED CONCRETE  
 FLAT SLAB TOP - 10' DIAMETER

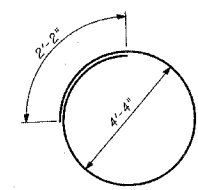
SCALE: NONE  
 DATE: MAY 12, 2008  
 DRAWN BY: SNB  
 DESIGNED BY: TD  
 CHECKED BY: MI



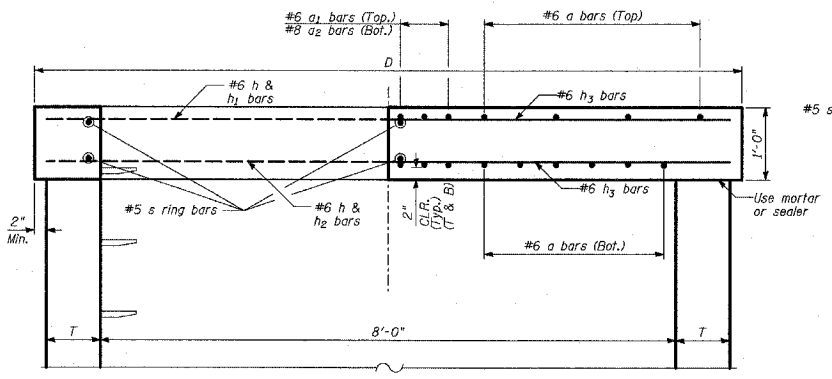
**ROOF SLAB - PLAN**  
(Top Reinforcement Bars)



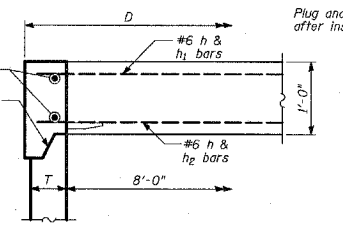
**ROOF SLAB - PLAN**  
(Bottom Reinforcement Bars)



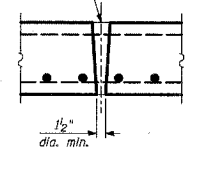
**BAR s**



**SECTION A-A**



**ALTERNATE JOINT CONFIGURATION**



**LIFTING HOLE TYPICAL**  
(3 required per slab)

**NOTES:**

- Bar lengths are based on a wall thickness "T" of 8". Any changes on wall thickness will require modifications to the bar lengths.
- Bars to be cut as needed.
- Precast flat slab top shall conform to articles 505.01 thru 505.05 of Standard Specifications except that the concrete strength shall be 3500 psi after 28 days. Reinforcement bars shall conform to the requirements of article 1005.10. Only Grade 60 reinforcement bars will be permitted.
- Joint Configuration and dimensions of flat slab top shall match and fit the riser joint detail.
- Lifting devices shall be approved by the Engineer.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a	10	#6	8'-11"	—
a1	3	#6	9'-4"	—
a2	3	#8	9'-4"	—
a3	14	#6	3'-3"	—
h	12	#6	7'-8"	—
h1	4	#6	8'-7"	—
h2	4	#8	8'-7"	—
h3	10	#6	4'-11"	—
h4	4	#6	5'-10"	—
h5	4	#8	5'-10"	—
s	2	#5	15'-9"	○
Reinforcement Bars		POUND	810	
Concrete Structure		CU. YARD	2.25	

PLAN	DATE
BY	
REVISIONS	
NO.	

PROFILE	DATE
BY	
REVISIONS	
NO.	



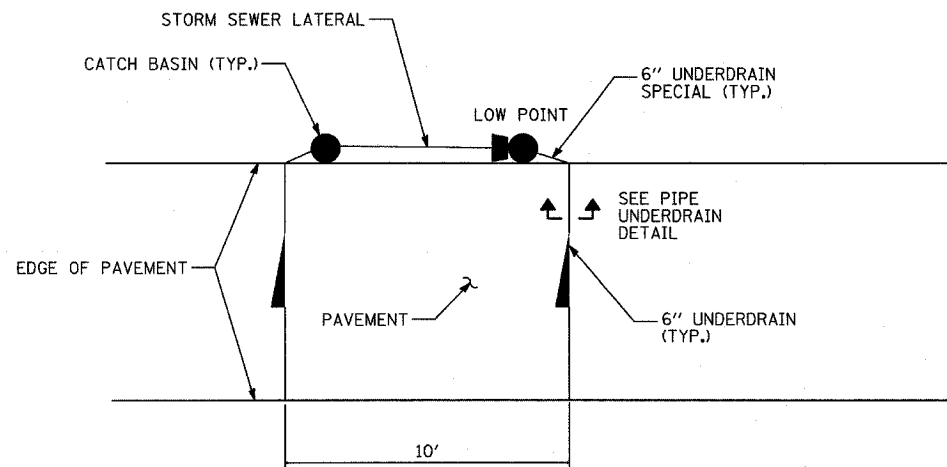
Signed Spiros Pantazis, S.E., Il. Lic. No. 081-006448 For drawings 1 thru 15 of 15  
Expires 11-30-2008.  
Date \_\_\_\_\_

REVISIONS	
NAME	DATE

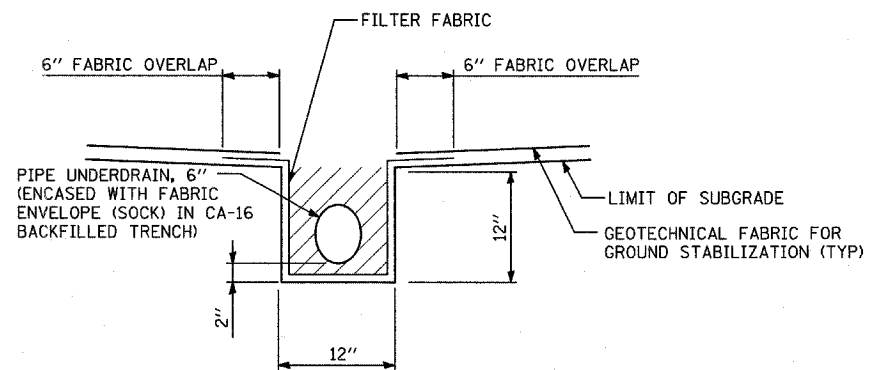
ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132

**PRECAST REINFORCED CONCRETE  
FLAT SLAB TOP - 8' DIAMETER**

SCALE: NONE  
DATE: MAY 12, 2008  
DRAWN BY: SNB  
DESIGNED BY: TD  
CHECKED BY: MI



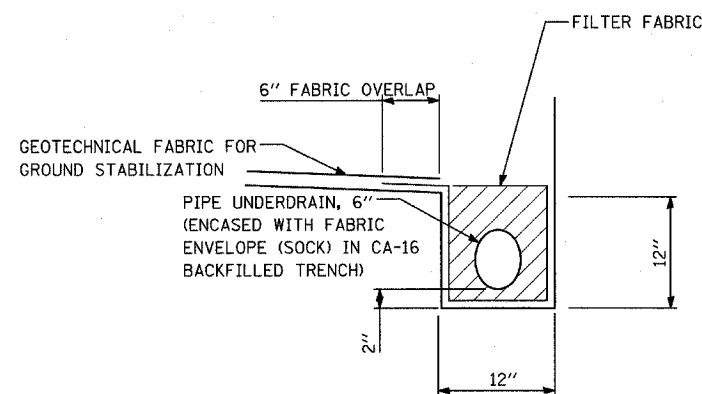
**PIPE UNDERDRAIN 6'', AT ROADWAY SAGS**



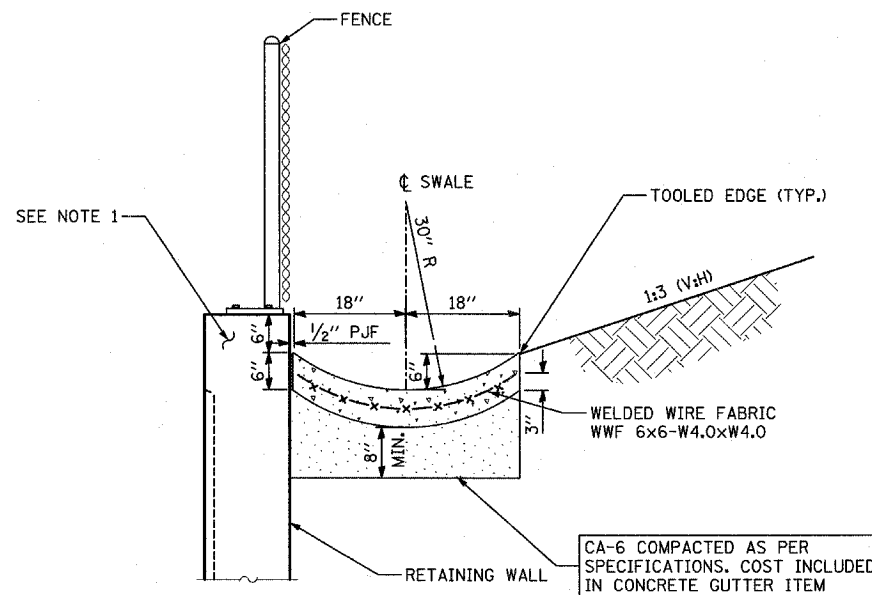
**PIPE UNDERDRAIN DETAIL AT ROADWAY SAGS**

**NOTES:**

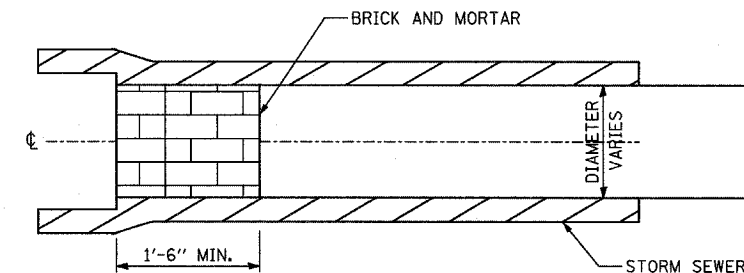
- (1) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION SHALL BE PLACED SUCH THAT IT EXTENDS TO THE EDGE OF THE TRENCH AND OVERLAPS THE FILTER FABRIC BY A MINIMUM OF 6". AT NO TIME SHALL THE GEOTECHNICAL FABRIC FOR GROUND STABILIZATION BE OVER OR COVER THE UNDERDRAIN TRENCH.
- (2) NO CONSTRUCTION TRAFFIC SHALL BE ALLOWED ON THE TRENCH UNTIL A MINIMUM OF 12" OF COMPACTED SUB-BASE IS PROVIDED.
- (3) THE PIPE UNDERDRAIN TRENCH SHALL BE LINED WITH FILTER FABRIC ON THE BOTTOM AND SIDES OF THE TRENCH. THE TOP OF THE TRENCH MUST NOT BE COVERED WITH ANY FABRIC.
- (4) FILTER FABRIC, FABRIC ENVELOPE, AND CA-16 AGGREGATE ARE INCLUDED IN THE UNIT COST OF PIPE UNDERDRAIN, 6".
- (5) CONTRACTOR SHALL FLUSH PIPE UNDERDRAIN WITH WATER TO INSURE UNDERDRAIN IS FUNCTIONING PROPERLY PRIOR TO THE PLACEMENT OF STABILIZED SUB-BASE. PRIOR TO COMMENCING THIS WORK, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH HIS APPROACH AND METHODS FOR COMPLETING THIS WORK, FOR THE ENGINEER'S REVIEW AND APPROVAL. THE COST OF FLUSHING THE PIPE IS INCLUDED IN THE UNIT COST OF PIPE UNDERDRAIN, 6".



**PIPE UNDERDRAIN DETAIL AT EDGE OF PAVEMENT**



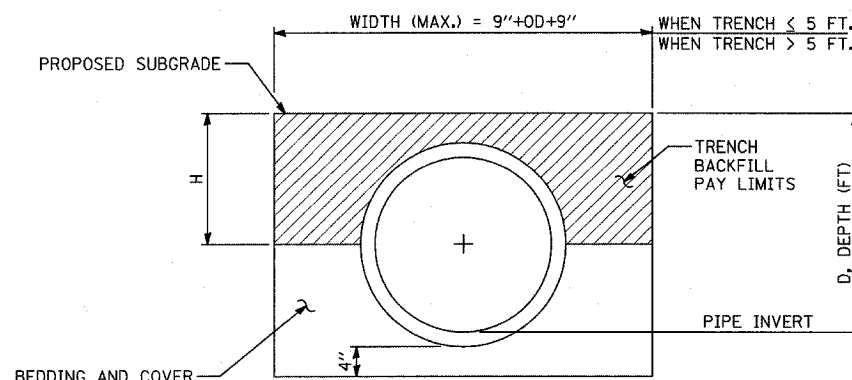
**CONCRETE GUTTER**



**STORM SEWER PLUG**

**NOTES:**

1. THIS WORK CONSISTS OF FURNISHING BRICKS AND MORTAR AS SHOWN AND AS DIRECTED BY THE ENGINEER AT LOCATIONS SHOWN IN THE PLANS TO PLUG THE EXISTING AND/OR PROPOSED STORM SEWER LATERAL STUBS. THIS PLUG WILL BE REMOVED BY OTHERS FOR FUTURE EXTENSION OF THE STORM SEWER.
2. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, PER ARTICLE 550.05.



**TRENCH BACKFILL DETAIL**

**NOTES:**

1. A MINIMUM 6" DEPTH SHALL BE MAINTAINED WHEN CONCRETE GUTTER IS PROPOSED ALONG A BARRIER WALL.
2. LIMITS ARE SHOWN ON STRUCTURAL WALLS "J" AND "Q" DETAILS SHEET 1 OF 2.

REVISIONS	
NAME	DATE
PAW	6/17/08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132

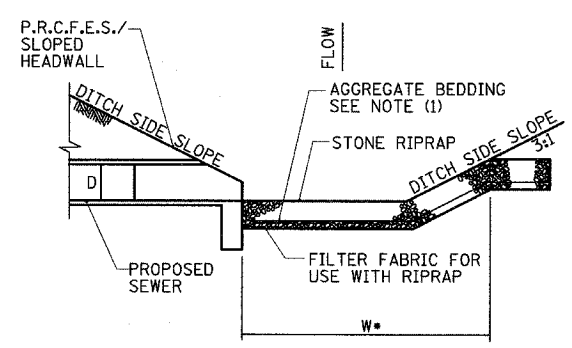
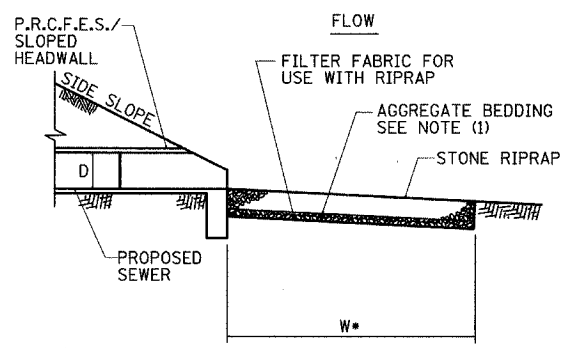
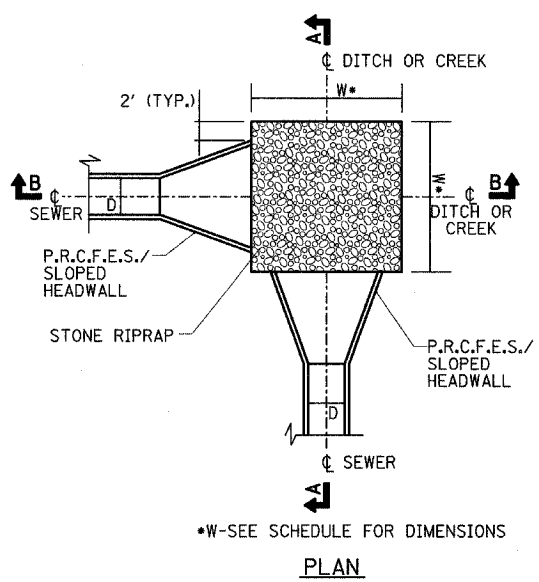
**DRAINAGE DETAILS**

SCALE: NONE

DRAWN BY: BK

DATE: MAY 12, 2008

CHECKED BY: DA



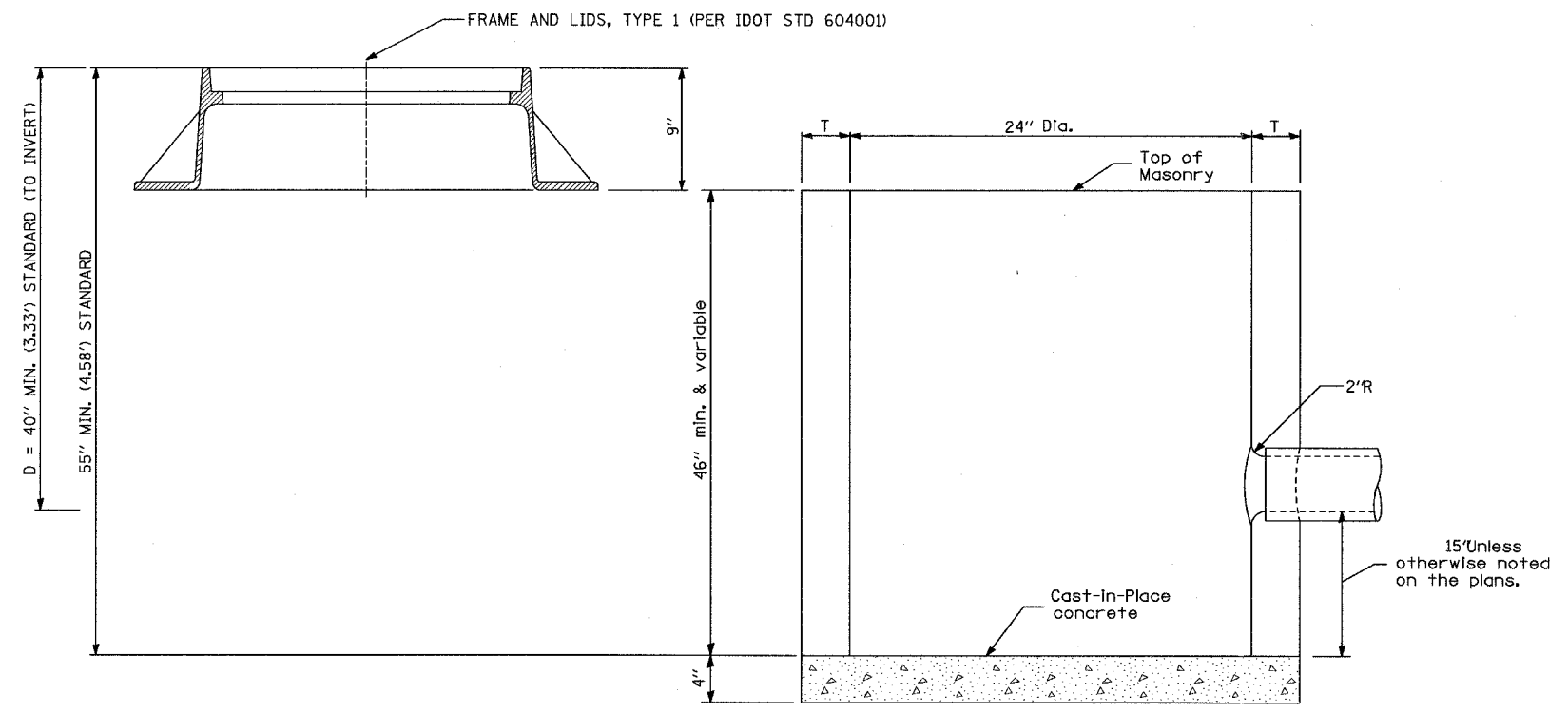
**RIPRAP DETAILS**

PIPE DIAM. (IN)	*RIPRAP DIMENSION (FT)	STONE RIPRAP CLASS	AREA (SY)
72" x 48"	33' x 38'-5"	4	142
30"	10' x 14'-2"	4	16

- NOTES:**
1. THE COST OF AGGREGATE BEDDING SHALL BE INCLUDED IN THE COST OF RIPRAP PER SQUARE YARD.

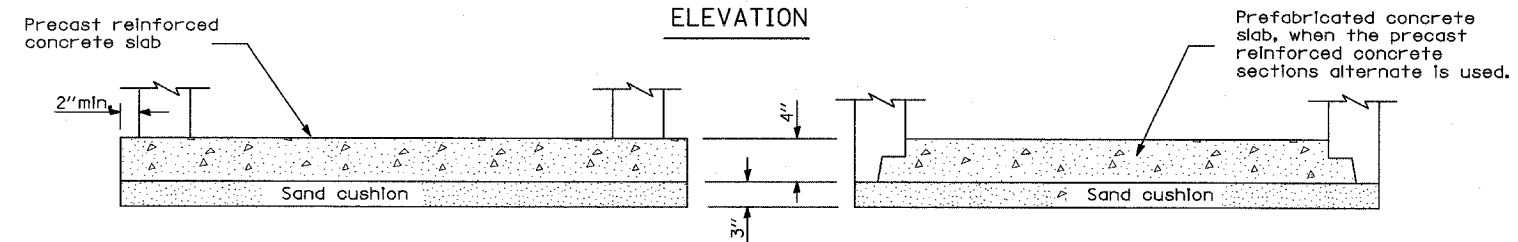
- LEGEND:**
- P.R.C.F.E.S.=PRECAST REINFORCED CONCRETE FLARED END SECTION
  - D=SEWER DIAMETER

**CATCH BASIN TYPE C (SPECIAL)**



ALTERNATE MATERIALS FOR WALLS	T (min)
Precast Reinforced Concrete Section	3"
Concrete Masonry Unit	5"
Cast-In-Place Concrete	6"
Brick Masonry	8"

TYPE	STRUCTURE NUMBER	RIM ELEVATION	INVERT ELEVATION	'D'
C-SPECIAL	714	677.11	674.76	2.35' (<3.33' STD.)



REVISIONS	
NAME	DATE
AZ	6/17/08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**U.S. 41 (SKOKIE HIGHWAY)**  
 AT IL ROUTE 132

**DRAINAGE DETAILS**

SCALE: NONE  
 DATE: MAY 12, 2008  
 DRAWN BY: AZ  
 CHECKED BY: DA







DRAINAGE STRUCTURE SCHEDULE

Table with columns: STRUCTURE NUMBER, STATION, OFFSET, BASELINE, STRUCTURE TYPE (MH, CB), DIA., FRAME & LID, TOP OF FRAME, N INV., E INV., S INV., W INV.

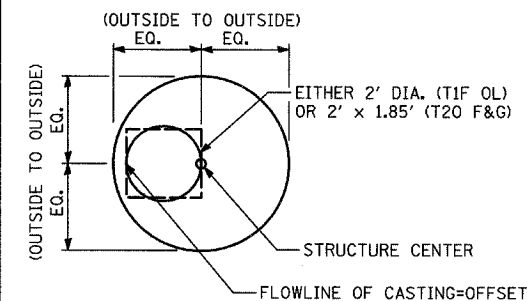
STORM SEWER SCHEDULE

Table with columns: PIPE NUMBER, UPSTREAM STATION, DOWNSTREAM STATION, TYPE, DIA. (IN), LENGTH (FT), SLOPE (%), T.B. (CU.YD)

Table with columns: F.A.P. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., STA. TO STA., FED. ROAD DIST. NO., ILLINOIS, FED. AID PROJECT, CONTRACT #

NOTES:

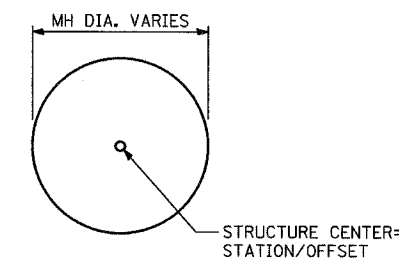
- (1) INDICATES MANHOLE, TYPE A, 6' DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE.
(2) INDICATES SEWER LATERAL WITH 45° CONNECTION. SEE SHEET "DETAIL OF STORM SEWER CONNECTIONS TO SEWER."
(3) INDICATES SEWER LATERAL WITH 30° CONNECTION. SEE SHEET "DETAIL OF STORM SEWER CONNECTIONS TO SEWER."
(4) INDICATES SEWER LATERAL WITH 60° CONNECTION. SEE SHEET "DETAIL OF STORM SEWER CONNECTIONS TO SEWER."
(5) INDICATES CATCH BASIN TYPE C, SPECIAL.
(6) INDICATES STRUCTURE WITH FLAT SLAB TOP, IDOT STANDARD 602601.
(7) FES: FLARED END SECTION. SIZE NOTED IN SCHEDULE IS GIVEN IN INCHES.
(8) SEE THE DRAINAGE & UTILITY PLANS FOR LOCATION OF ALL STRUCTURES.
(9) CATCH BASIN STATIONS ARE MEASURED TO CENTER OF STRUCTURE.
(10) CATCH BASIN OFFSETS ARE MEASURED TO FLOWLINE OF CASTING. (SEE BELOW)
(11) FLOWLINE OF CASTING IS LOCATED AT C OF STRUCTURE FOR CATCH BASINS LOCATED IN SWALE AND GORE AREAS.



CATCH BASIN

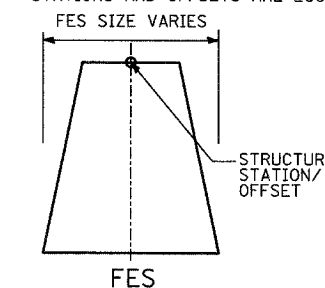
(PRECAST REINFORCED CONCRETE SECTION)

- (12) MANHOLE STATIONS AND OFFSETS ARE MEASURED TO CENTER OF STRUCTURE. (SEE BELOW)



MANHOLE

- (15) FLARED END SECTION AND SLOPED HEADWALL STATIONS AND OFFSETS ARE LOCATED AS SHOWN.



- (16) INDICATES A DRAINAGE STRUCTURE, TYPE I IDOT STANDARD 602101-01.
(17) PROPOSED STORM SEWER (WATERMAIN REQUIREMENTS) FOR STATED SIZE.
(18) THE CONTRACTOR SHALL VERIFY THE ELEVATION IN THE FIELD PRIOR TO ORDER OF MATERIAL. THE EXISTING SURVEY (I.E. MEASURE DOWNS) IS NOT AVAILABLE.

Table with columns: REVISIONS, NAME, DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION U.S. 41 (SKOKIE HIGHWAY) AT IL ROUTE 132

DRAINAGE SCHEDULE PROPOSED STRUCTURES PROPOSED STORM SEWERS

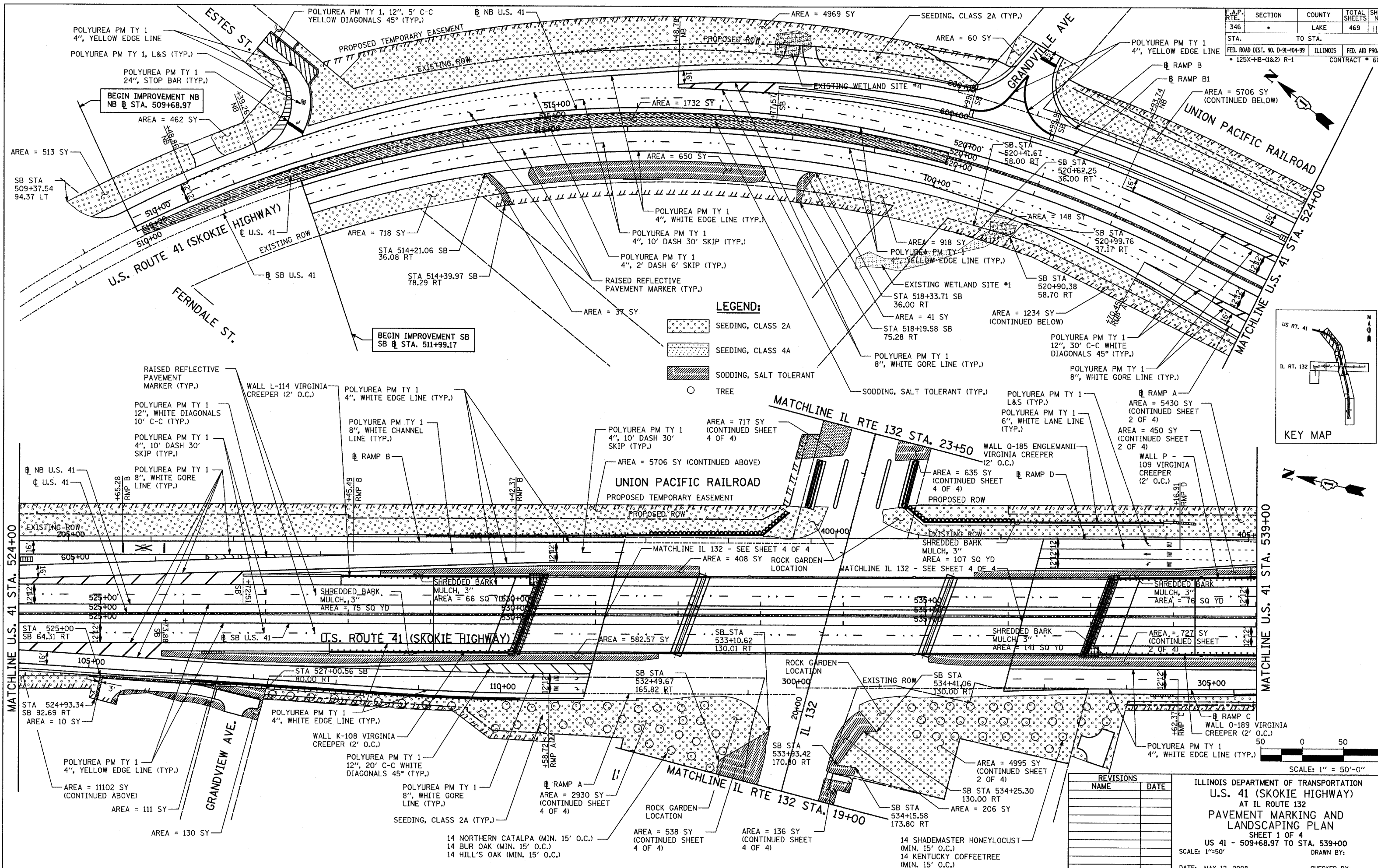
SCALE: NONE DRAWN BY: NSB DATE: MAY 12, 2008 CHECKED BY: DA



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	117
STA.	TO STA.		ILLINOIS	
FED. ROAD DIST. NO. D-91-404-99			FED. AID PROJ. NO.	
125X-HB-(1&2) R-1			CONTRACT # 608	

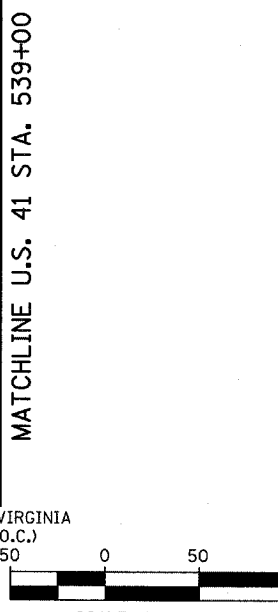
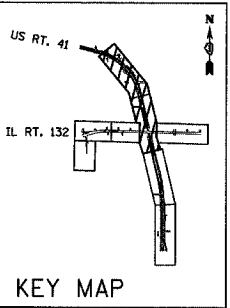
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	PLOTTED	
	CHECKED	
	REV. OF	
	BY	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	REV. OF	
	BY	
	NO.	



**LEGEND:**

- SEEDING, CLASS 2A
- SEEDING, CLASS 4A
- SODDING, SALT TOLERANT
- TREE



REVISIONS	
NAME	DATE

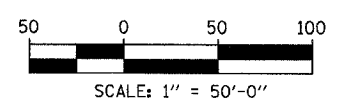
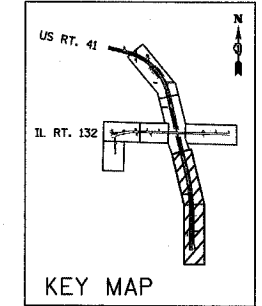
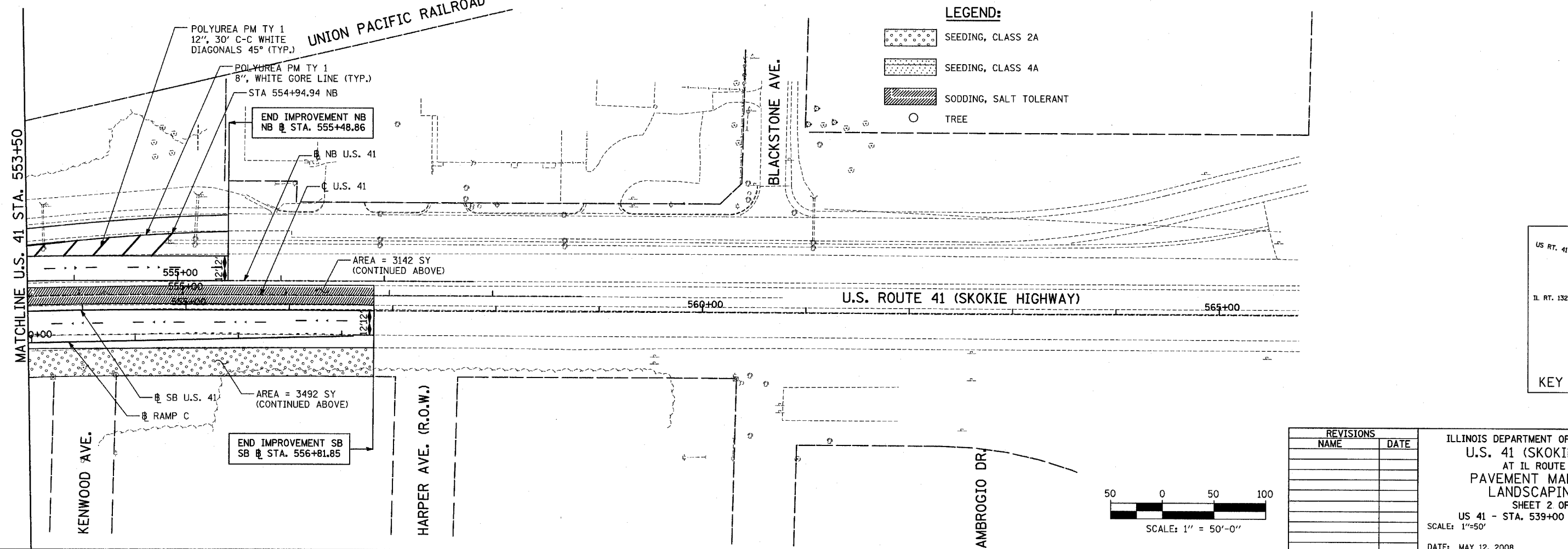
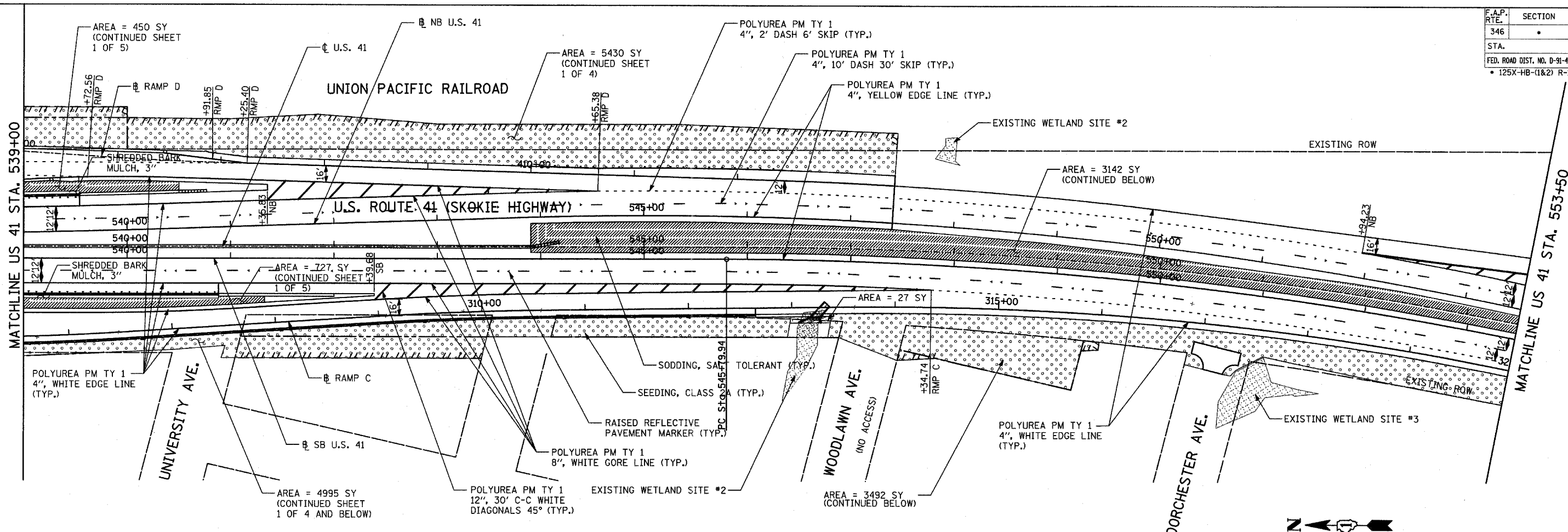
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**U.S. 41 (SKOKIE HIGHWAY)**  
 AT IL ROUTE 132  
**PAVEMENT MARKING AND LANDSCAPING PLAN**  
 SHEET 1 OF 4  
 US 41 - 509+68.97 TO STA. 539+00  
 SCALE: 1"=50'  
 DATE: MAY 12, 2008  
 DRAWN BY:  
 CHECKED BY:

- 14 NORTHERN CATALPA (MIN. 15' O.C.)
- 14 BUR OAK (MIN. 15' O.C.)
- 14 HILL'S OAK (MIN. 15' O.C.)
- 14 SHADEMASTER HONEYLOCUST (MIN. 15' O.C.)
- 14 KENTUCKY COFFEE TREE (MIN. 15' O.C.)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	118
STA.	TO STA.		FED. ROAD DIST. NO. D-91-404-99	FED. AID PROJ. NO.
			ILLINOIS	CONTRACT # 608
* 125X-HB-(1&2) R-1				

PLAN	SURVEYED	DATE
	PLOTTED	
	NOTED	
	REVISIONS	
	NO. OF WAY CHECKED	
	CADD FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTED	
	REVISIONS	
	NO. OF WAY CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	







REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 PAVEMENT MARKING AND  
 LANDSCAPING PLAN  
 SHEET 2 OF 4  
 US 41 - STA. 539+00 TO 556+81.85  
 SCALE: 1"=50' DRAWN BY:  
 DATE: MAY 12, 2008 CHECKED BY:

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	119
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-404-99	ILLINOIS	FED. AID PROJEC		
• 125X-HB-(1&2) R-1		CONTRACT • 608		

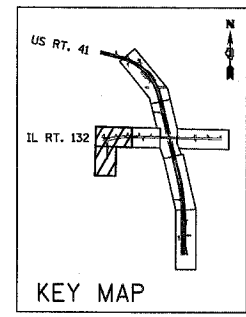


**LEGEND:**

-  SEEDING, CLASS 2A
-  SEEDING, CLASS 4A
-  SODDING, SALT TOLERANT
-  TREE

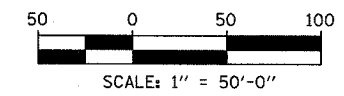
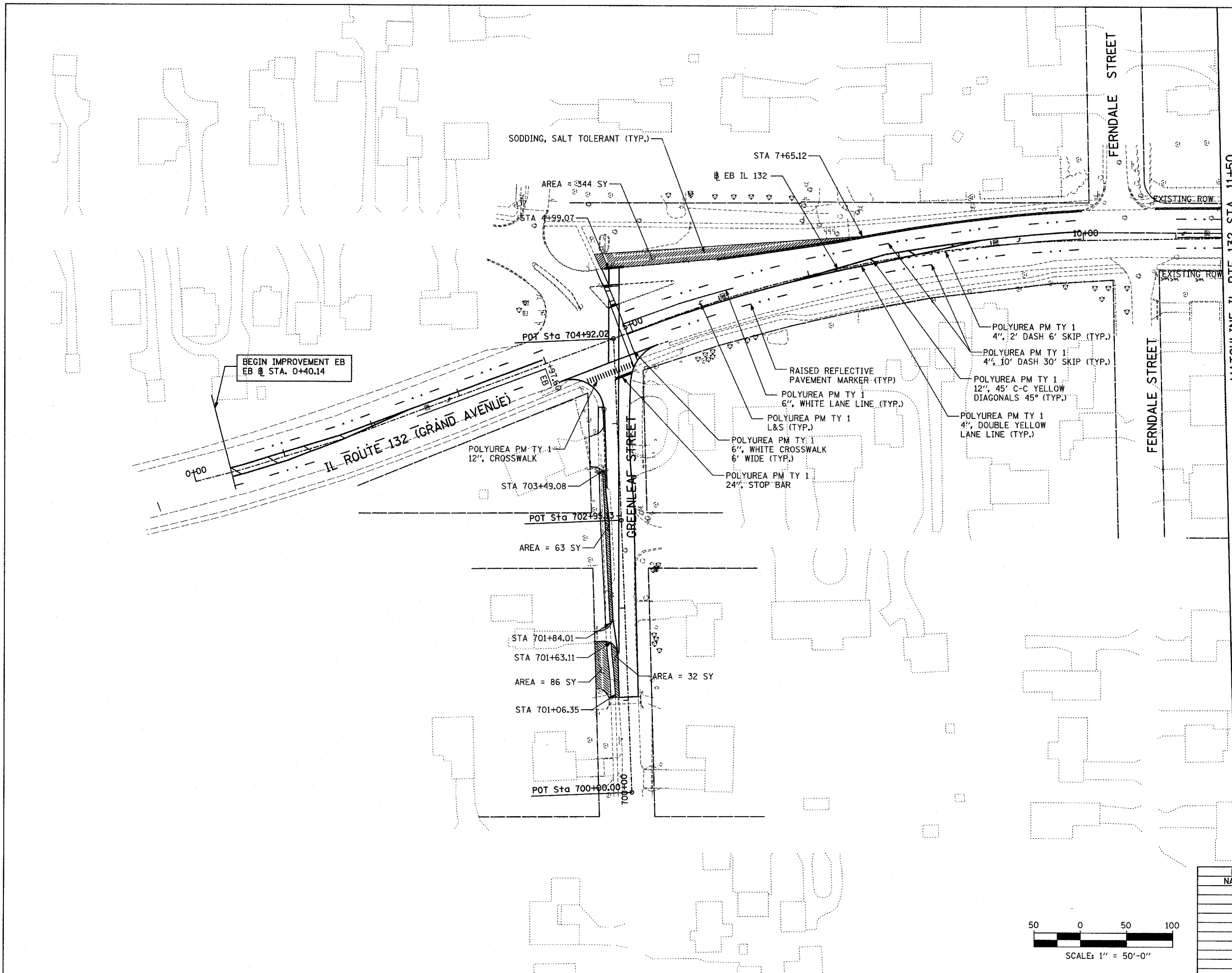
MATCHLINE IL RTE 132 STA. 11+50

NOTE:  
REPLACE EXISTING PAVEMENT MARKINGS REMOVED DURING STAGING



PLAN	SURVEYED	DATE
	PLOTTED	
	REVISIONS	
	NOTE BOOK	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	REVISIONS	
	NOTE BOOK	
	STRUCTURE NOTATIONS	



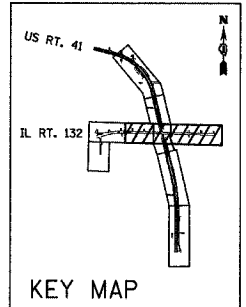
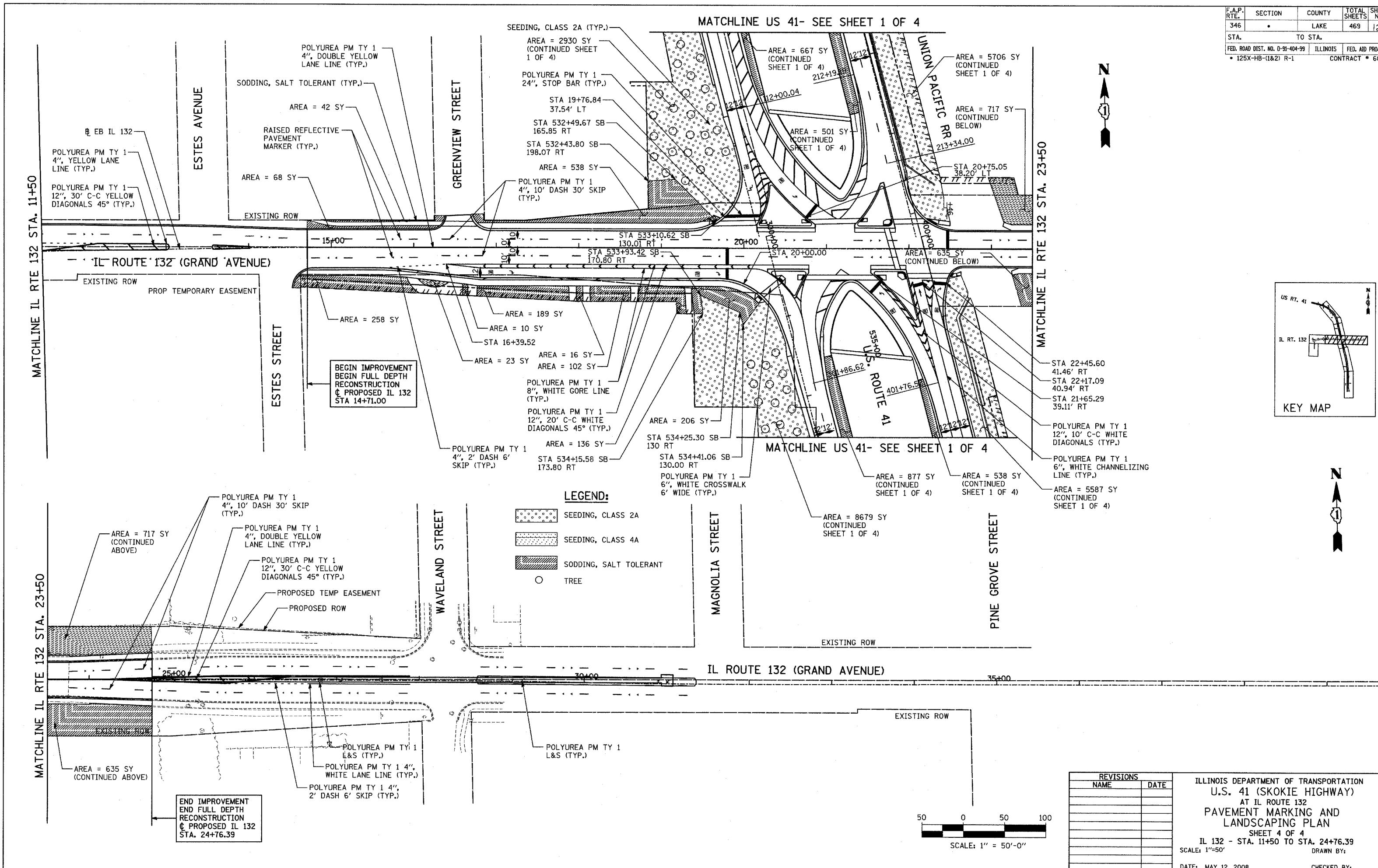
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 PAVEMENT MARKING AND  
 LANDSCAPING PLAN  
 SHEET 3 OF 4  
 GREENLEAF STREET  
 IL 132 - STA. 4+25.12 TO STA. 11+50  
 SCALE: 1"=50'  
 DATE: MAY 12, 2008  
 DRAWN BY:  
 CHECKED BY:

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	120
STA. TO STA.		ILLINOIS		FED. AID PROJ. NO.
				* 125X-HB-(1&2) R-1
			CONTRACT # 608	

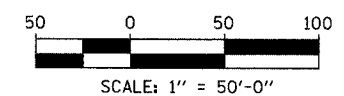
DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY



**LEGEND:**

- SEEDING, CLASS 2A
- SEEDING, CLASS 4A
- SODDING, SALT TOLERANT
- TREE



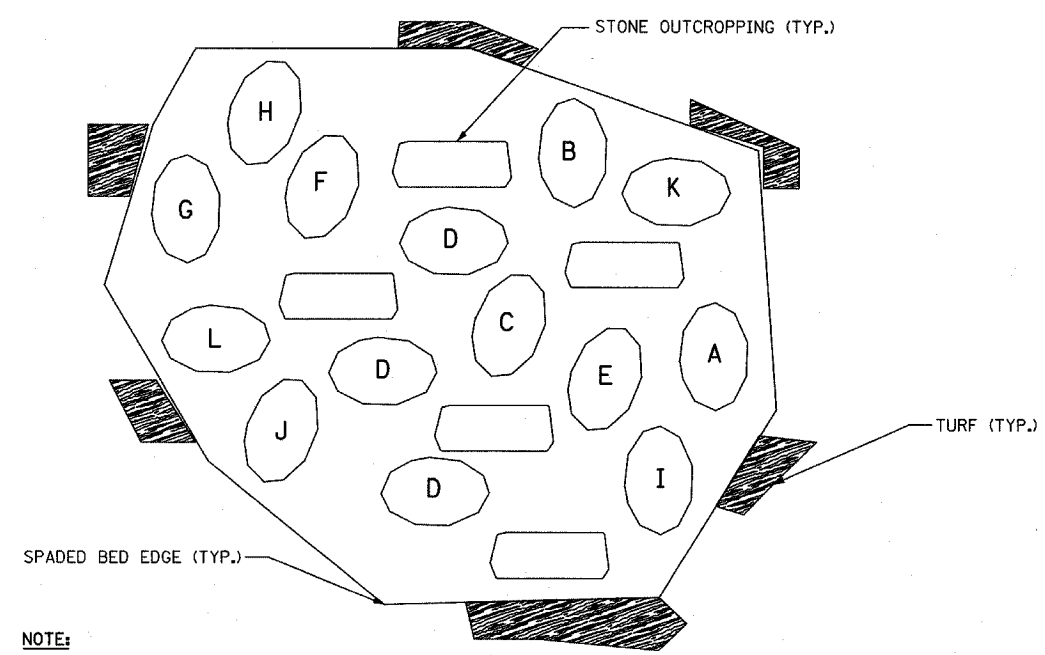
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 PAVEMENT MARKING AND  
 LANDSCAPING PLAN  
 SHEET 4 OF 4  
 IL 132 - STA. 11+50 TO STA. 24+76.39  
 SCALE: 1"=50'  
 DATE: MAY 12, 2008  
 DRAWN BY:  
 CHECKED BY:



### ROCK GARDEN PLANTING

(APPROX. 20' x 25')

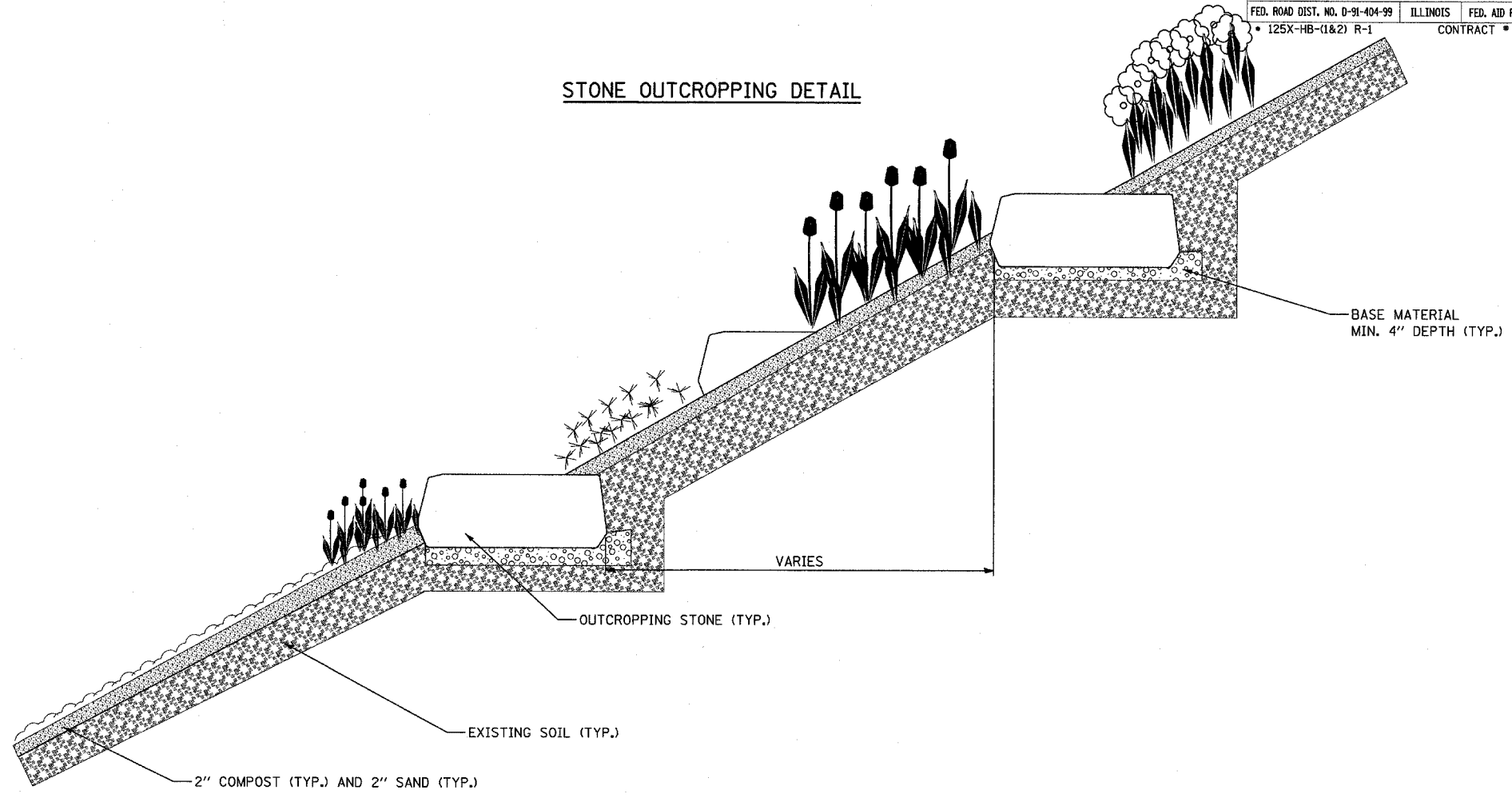


**NOTE:**  
ROCK GARDEN DIMENSIONS WILL VARY IN SIZE ACCORDING TO THE STONE OUTCROPPING LAYOUT. QUANTITIES OF PLANT WILL REMAIN THE SAME AT ALL FOUR LOCATIONS.

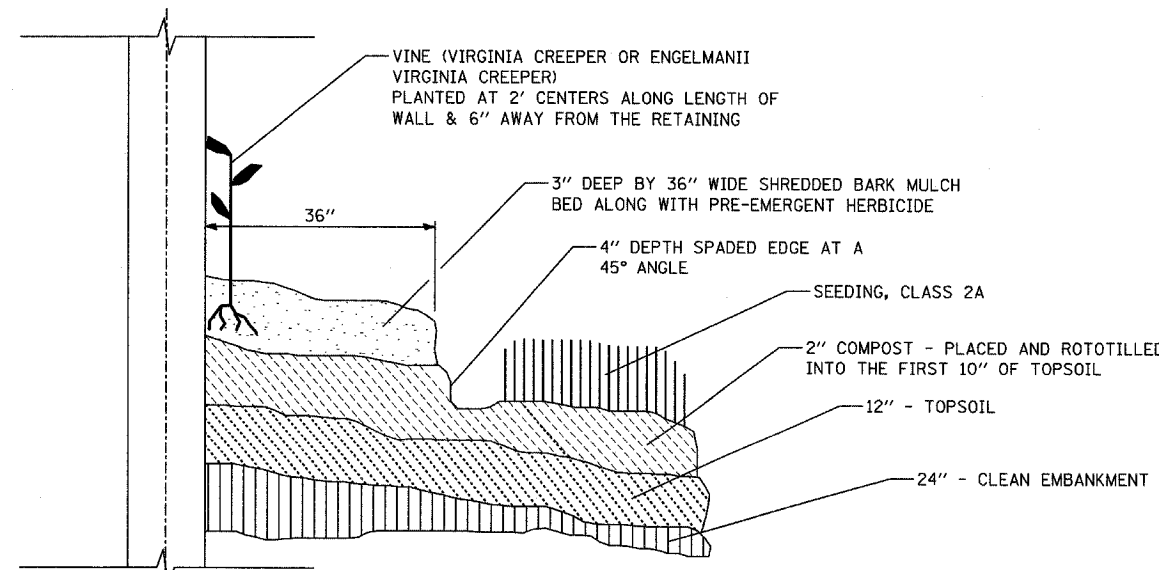
### PLANT LEGEND

LETTER	PLANT DESCRIPTION	QUANTITY	SPACING
A	ASTER AZUREUS (SKY BLUE ASTER)	15	12" O.C.
B	BAPTISIA AUSTRALIS (FALSE INDIGO)	16	12" O.C.
C	BOLTONIA ASTEROIDES 'NANA' (WHITE DOLL'S DAISY)	20	12" O.C.
D	CERATOSTIGMA PLUMBAGINOIDES (BLUE PLUMBAGO)	31	15" O.C.
E	ECHINACEA 'CBG GONE 2' (PIXIE MEADOWBRITE HYBRID CONEFLOWER)	20	12" O.C.
F	HEMEROCALLIS 'CHICAGO SUNRISE' (CHICAGO SUNRISE DAYLILY)	20	12" O.C.
G	HEMEROCALLIS 'PREPPY PINK' (PREPPY PINK DAYLILY)	20	12" O.C.
H	PANICUM VIRGATUM 'ROTSTRAHLBUSCH' (RED FOUNTAINBUSH SWITCH GRASS)	9	18" O.C.
I	RUDBECKIA 'VIETTE'S LITTLE SUZY' (DWARF BLACK-EYED SUSAN)	20	12" O.C.
J	SALVIA NEMEROSA 'MAY NIGHT' (MAY NIGHT SALVIA)	20	12" O.C.
K	SCHIZACHYRIUM SCOPARIUM 'CAROUSEL' (CAROUSEL PPAF LITTLE BLUESTEM)	9	18" O.C.
L	SPOROBOLUS HETEROLEPIS (PRAIRIE DROPSEED)	9	18" O.C.

### STONE OUTCROPPING DETAIL



### VINE PLANTING DETAIL



- NOTES:**
- SEE LANDSCAPE PLANS FOR SPECIFIC LOCATION OF VINES.
  - COMPOST AND TOPSOIL SHALL BE THOROUGHLY ROTOTILLED TO A DEPTH OF 10" PRIOR TO PLANTING.
  - THE CONTRACTOR SHALL ORDER MATERIAL FOR PARTHENOISSUS SP. (VIRGINIA CREEPER) VINES IMMEDIATELY FOLLOWING EXECUTION OF THE CONTRACT TO ASSURE AVAILABILITY OF THE PLANT MATERIAL FOR SPRING PLANTING AT THE CONCLUSION OF THE CONTRACT.
  - MULCH BED SHALL BE PLACED OVER ROTOTILLED COMPOST/TOPSOIL AS SHOWN IN VINE PLANTING DETAIL AND ACCORDING TO IDOT STANDARD SPECIFICATION 253.11 EXCEPT THAT NO WEED BARRIER FABRIC IS REQUIRED. COST OF MULCH COVER IS INCLUDED WITH PAYMENT FOR "VINE-PARTHENOISSUS QUINQUEFOLIA (VIRGINIA CREEPER), 1-GALLON POT" AND FOR "VINE-PARTHENOISSUS QUINQUEFOLIA ENGELMANII (ENGELMANII VIRGINIA CREEPER), 1-GALLON POT."
  - PRE-EMERGENT HERBICIDE SHALL BE PLACED IN MULCHED BEDS ACCORDING TO THE SPECIAL PROVISION.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132

LANDSCAPING DETAILS  
U.S. 41 (SKOKIE HIGHWAY)

SCALE: NONE DRAWN BY: AZ  
DATE: MAY 12, 2008 CHECKED BY: AB

PLAN SURVEYED PLOTTED CHECKED BY: DATE  
NOTE BOOK NO. RT. OF WAY CHECKED CADD FILE NAME

PROFILE SURVEYED PLOTTED CHECKED BY: DATE  
NOTE BOOK NO. STRUCTURE NOTATIONS CHK'D



M1-4  
24''X24''  
OR  
36''X36''



M2-1  
30''X15''



M3-1  
24''X12''



M3-3  
24''X12''



M5-1L  
21''X15''



M5-2L  
21''X15''



M6-1  
21''X15''



R1-1  
30''X30''



R2-1  
36''X48''



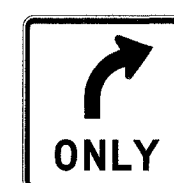
R2-1  
30''X36''



R3-2  
30''X30''



R5-1  
36''X36''



R3-5R  
30''X30''



R5-1A  
36''X24''



R6-1L  
36''X12''



R6-1R  
36''X12''



R8-8  
24''X30''



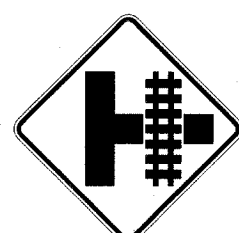
R10-11a  
24''X24''



W4-1R  
36''X36''



W1-6  
36''X18''



W10-3  
36''X36''



W12-2  
36''X36''



W13-2  
36''X48''



W14-1  
30''X30''

PLAN  
SURVEYED  
PLOTTED  
CHECKED  
BY  
DATE  
NOTE BOOK NO.  
CADD FILE NAME

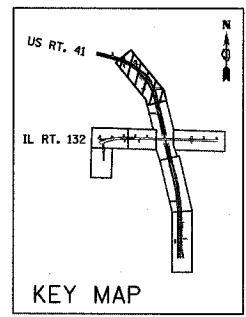
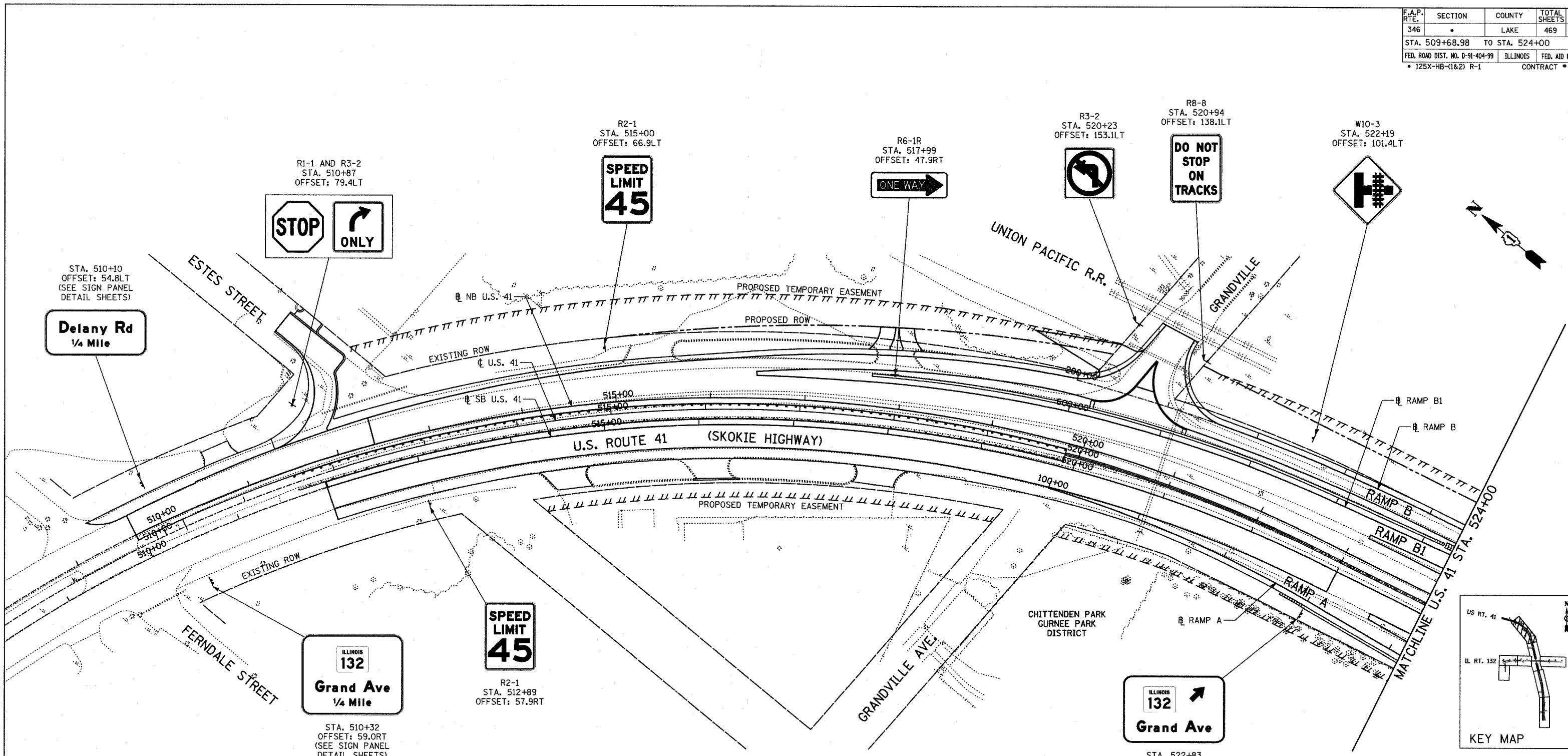
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PLOTTED  
CHECKED  
BY  
DATE  
NOTE BOOK NO.  
STRUCTURE NOTATIONS CHKD

REVISIONS	
NAME	DATE

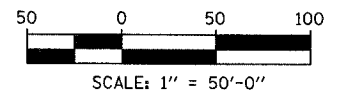
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	122
STA. 509+68.98		TO STA. 524+00		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJEC	
• 125X-HB-(1&2) R-1		CONTRACT • 608		

PLAN	SURVEYED	DATE
	BY	
	DATE	
	BY	
	DATE	
	BY	
	DATE	
	BY	
	DATE	

PROFILE	SURVEYED	DATE
	BY	
	DATE	
	BY	
	DATE	
	BY	
	DATE	
	BY	
	DATE	



- NOTES:**
1. ALL STATIONS CALLED CALLOUT ARE FROM THE U.S. 41 CENTERLINE UNLESS OTHERWISE NOTED.
  2. ALL OFFSETS ARE TO THE SIGN PANEL EDGE UNLESS OTHERWISE NOTED.
  3. ALL SIGNS SHALL BE GROUND MOUNTED UNLESS OTHERWISE NOTED.
  4. FOR ALL STANDARD SIGNS, SEE THE SIGNING LEGEND FOR SIGN DIMENSIONS.
  5. FOR ALL GUIDE SIGNS, SEE SIGN PANEL DETAILS FOR SIGN DIMENSIONS.
  6. FOR OVERHEAD SIGNS, SEE CANTILEVER SIGN STRUCTURE SHEETS FOR STRUCTURE DIMENSIONS.
  7. BOXES DENOTE THAT THE SIGN PANELS DEPICTED WILL BE ATTACHED TO THE SAME POST STRUCTURE.



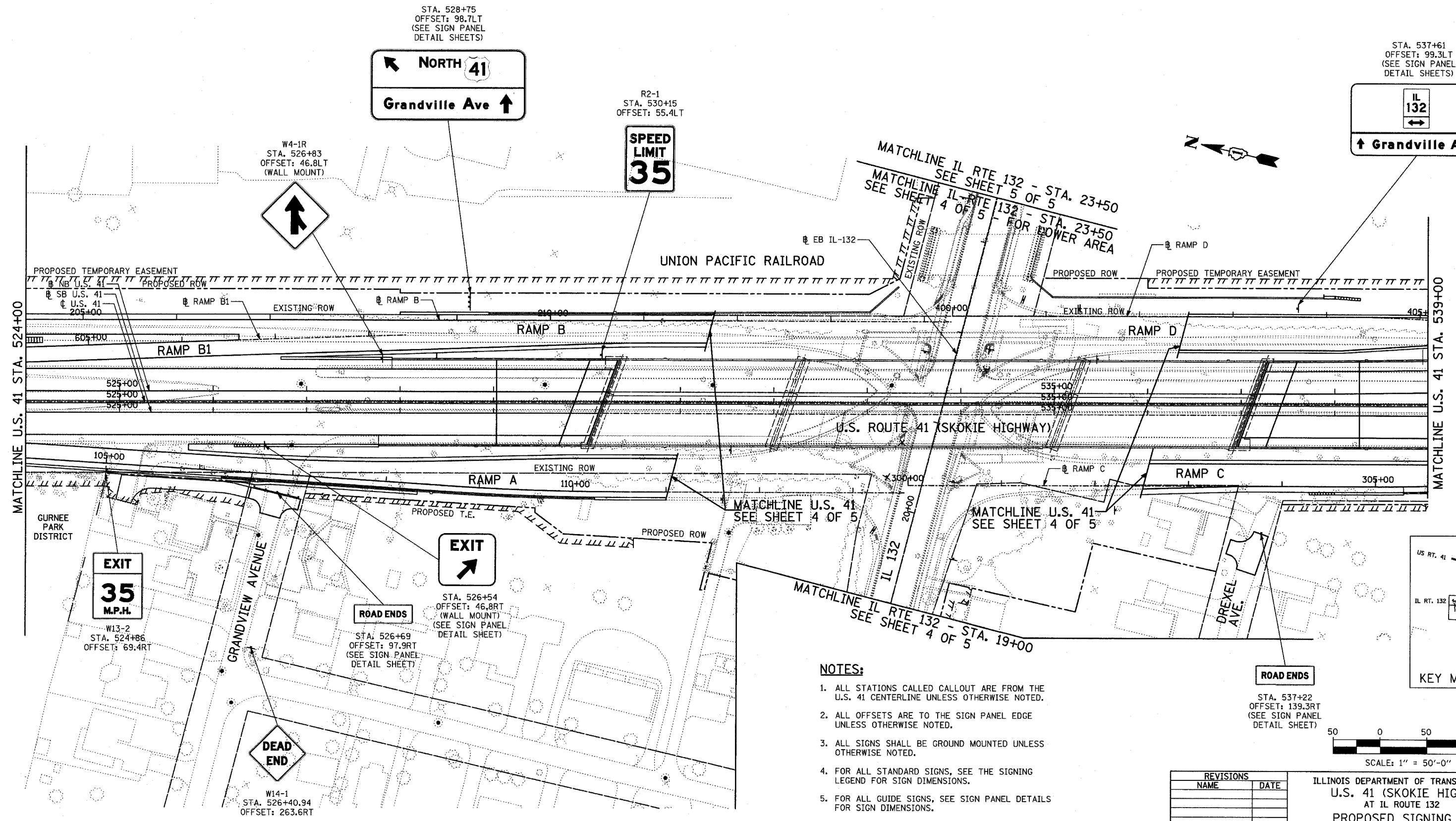
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**U.S. 41 (SKOKIE HIGHWAY)**  
 AT IL ROUTE 132  
**PROPOSED SIGNING PLAN**  
 SHEET 1 OF 5  
 US 41 - STA. 509+68.98 TO STA. 524+00  
 SCALE: 1"=50' DRAWN BY: JDF  
 DATE: MAY 12, 2008 CHECKED BY: AB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	•	LAKE	469	127
STA. 524+00		TO STA. 539+00		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJ. NO. 125X-HB-(1&2) R-1	
			CONTRACT # 608	

PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	CADD FILE NAME	

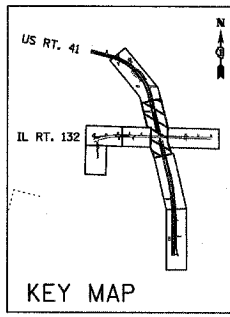
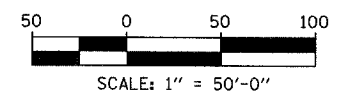
PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	STRUCTURE NOTATIONS CHKD	



- NOTES:**
1. ALL STATIONS CALLED CALLOUT ARE FROM THE U.S. 41 CENTERLINE UNLESS OTHERWISE NOTED.
  2. ALL OFFSETS ARE TO THE SIGN PANEL EDGE UNLESS OTHERWISE NOTED.
  3. ALL SIGNS SHALL BE GROUND MOUNTED UNLESS OTHERWISE NOTED.
  4. FOR ALL STANDARD SIGNS, SEE THE SIGNING LEGEND FOR SIGN DIMENSIONS.
  5. FOR ALL GUIDE SIGNS, SEE SIGN PANEL DETAILS FOR SIGN DIMENSIONS.
  6. FOR OVERHEAD SIGNS, SEE CANTILEVER SIGN STRUCTURE SHEETS FOR STRUCTURE DIMENSIONS.
  7. BOXES DENOTE THAT THE SIGN PANELS DEPICTED WILL BE ATTACHED TO THE SAME POST STRUCTURE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
**PROPOSED SIGNING PLAN**  
 SHEET 2 OF 5  
 US 41 - STA. 524+00 TO STA. 539+00  
 SCALE: 1"=50'  
 DATE: MAY 12, 2008  
 DRAWN BY: JDF  
 CHECKED BY: AB



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	124
STA. 539+00		TO STA. 553+50		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJ. NO.	
* 125X-HB-(1&2) R-1		CONTRACT * 608		

STA. 553+39  
 OFFSET: 88.1LT  
 (SEE SIGN PANEL DETAIL SHEETS)  
 (STRADDLE THE EXISTING DRAINAGE DITCH)



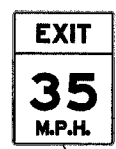
STA. 543+91  
 OFFSET: 88.9LT  
 (TO CENTER OF SIGN STRUCTURE FOUNDATION)  
 (SEE SIGN PANEL DETAIL SHEETS)  
 (SEE CANTILEVER SIGN DETAIL SHEETS)



R2-1  
 STA. 546+43  
 OFFSET: 82.3LT



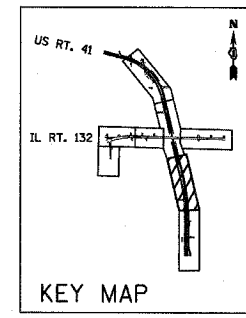
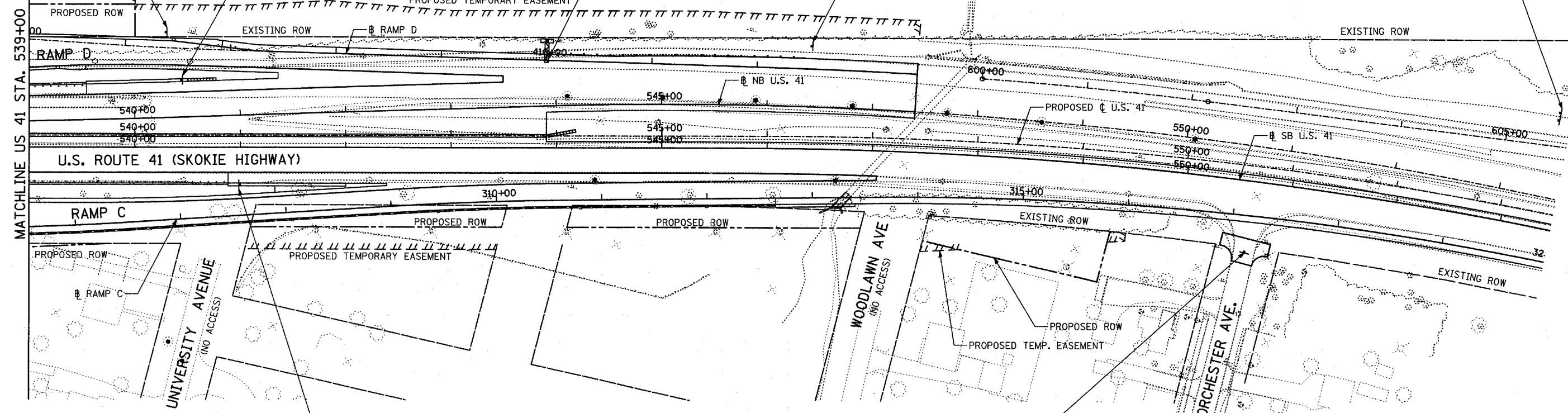
W13-2  
 STA. 540+30  
 OFFSET: 94.3LT



W4-1R  
 STA. 540+50  
 OFFSET: 52.7LT  
 (WALL MOUNT)



UNION PACIFIC RAILROAD



**NOTES:**

1. ALL STATIONS CALLED CALLOUT ARE FROM THE U.S. 41 CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL OFFSETS ARE TO THE SIGN PANEL EDGE UNLESS OTHERWISE NOTED.
3. ALL SIGNS SHALL BE GROUND MOUNTED UNLESS OTHERWISE NOTED.
4. FOR ALL STANDARD SIGNS, SEE THE SIGNING LEGEND FOR SIGN DIMENSIONS.
5. FOR ALL GUIDE SIGNS, SEE SIGN PANEL DETAILS FOR SIGN DIMENSIONS.
6. FOR OVERHEAD SIGNS, SEE CANTILEVER SIGN STRUCTURE SHEETS FOR STRUCTURE DIMENSIONS.
7. BOXES DENOTE THAT THE SIGN PANELS DEPICTED WILL BE ATTACHED TO THE SAME POST STRUCTURE.

**ROAD ENDS**

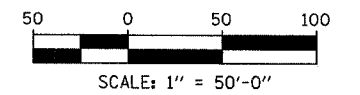
STA. 550+62  
 OFFSET: 82.91RT  
 (SEE SIGN PANEL DETAIL SHEET)



W14-1  
 STA. 550+35  
 OFFSET: 358.5RT



STA. 540+99  
 OFFSET: 46.8RT  
 (WALL MOUNT)  
 (SEE SIGN PANEL DETAIL SHEETS)



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 PROPOSED SIGNING PLAN  
 SHEET 3 OF 5  
 U.S. 41 - STA. 539+00 TO STA. 553+50  
 SCALE: 1"=50' DRAWN BY: JDF  
 DATE: MAY 12, 2008 CHECKED BY: AB

PLAN	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	FILED	
	REVISIONS	
	NO. OF SHEETS	
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PROFILE	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	FILED	
	REVISIONS	
	NO. OF SHEETS	
	CADD FILE NAME	

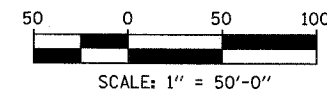
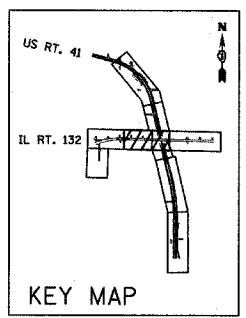
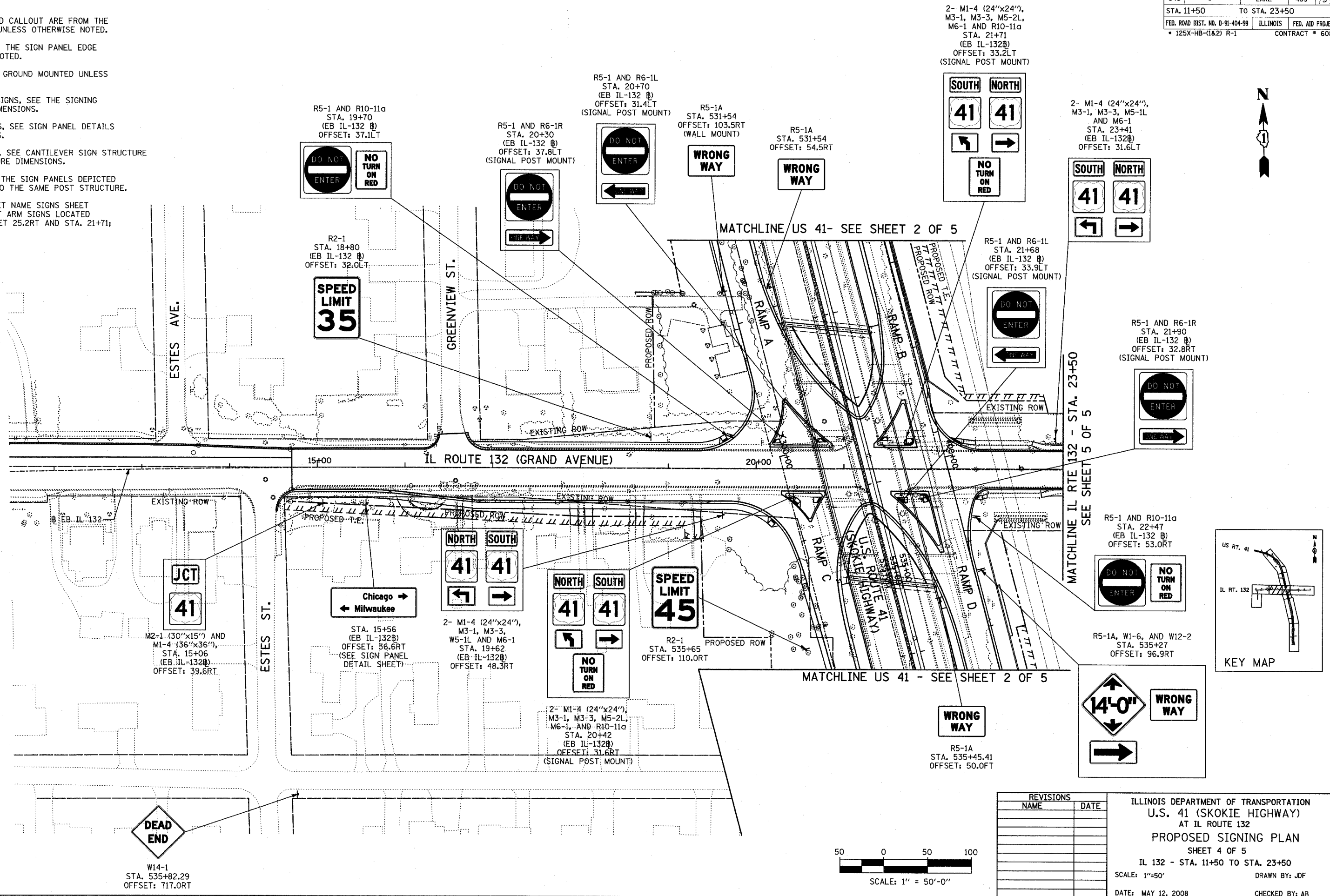
**NOTES:**

1. ALL STATIONS CALLED CALLOUT ARE FROM THE U.S. 41 CENTERLINE UNLESS OTHERWISE NOTED.
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5. FOR ALL GUIDE SIGNS, SEE SIGN PANEL DETAILS FOR SIGN DIMENSIONS.
6. FOR OVERHEAD SIGNS, SEE CANTILEVER SIGN STRUCTURE SHEETS FOR STRUCTURE DIMENSIONS.
7. BOXES DENOTE THAT THE SIGN PANELS DEPICTED WILL BE ATTACHED TO THE SAME POST STRUCTURE.
8. SEE MAST ARM STREET NAME SIGNS SHEET FOR DETAILS OF MAST ARM SIGNS LOCATED AT STA. 20+67; OFFSET 25.2RT AND STA. 21+71; OFFSET 27.4LT.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	125
STA. 11+50		TO STA. 23+50		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJ. NO.	
125X-HB-(1&2) R-1		CONTRACT # 608		

DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY



REVISIONS	
NAME	DATE

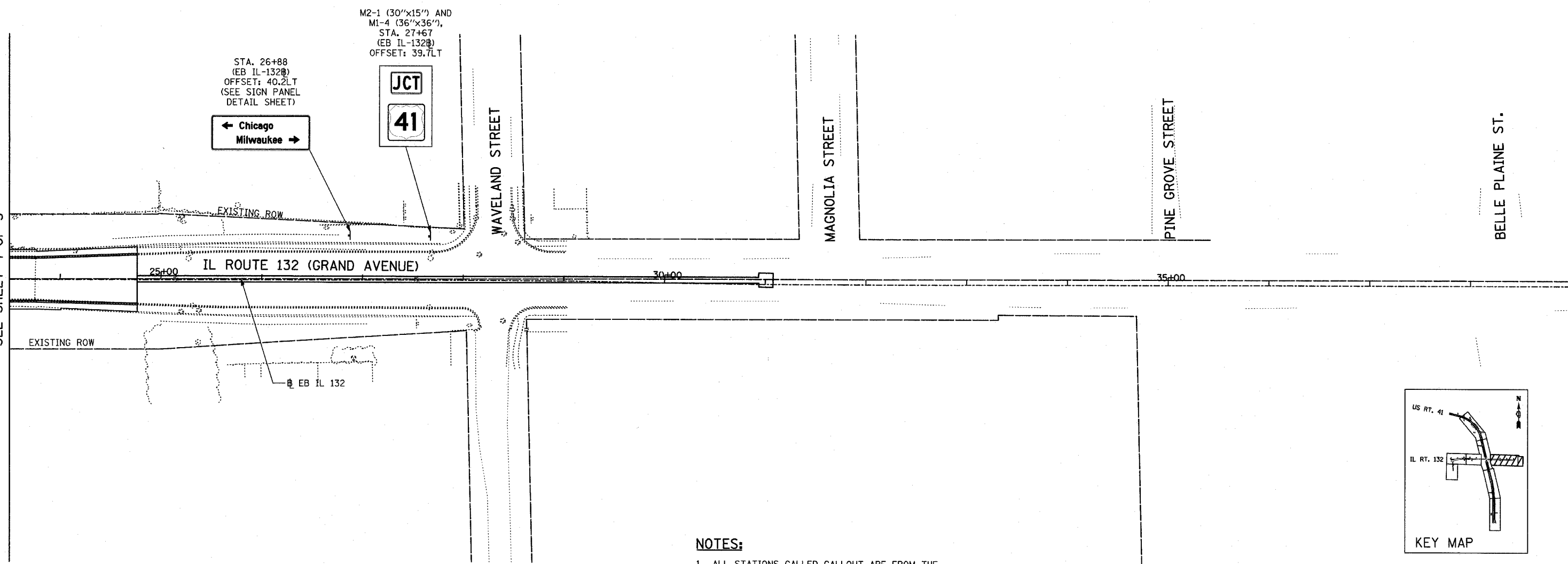
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
**PROPOSED SIGNING PLAN**  
 SHEET 4 OF 5  
 IL 132 - STA. 11+50 TO STA. 23+50  
 SCALE: 1"=50'  
 DATE: MAY 12, 2008  
 DRAWN BY: JDF  
 CHECKED BY: AB

**DEAD END**  
 W14-1  
 STA. 535+82.29  
 OFFSET: 717.0RT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	.	LAKE	469	126
STA. 23+50		TO STA. 39+00		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJ. NO.	
• 125X-HB-(1&2) R-1		CONTRACT # 608		



MATCHLINE IL RTE 132 - STA. 23+50  
SEE SHEET 4 OF 5



← Chicago  
Milwaukee →

M2-1 (30"x15") AND  
M1-4 (36"x36"),  
STA. 27+67  
(EB IL-132@)  
OFFSET: 39.7LT

STA. 26+88  
(EB IL-132@)  
OFFSET: 40.2LT  
(SEE SIGN PANEL  
DETAIL SHEET)

IL ROUTE 132 (GRAND AVENUE)

WAVELAND STREET

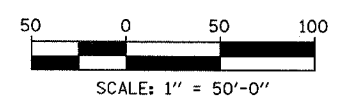
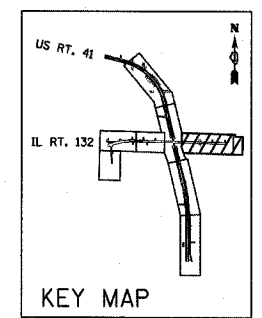
MAGNOLIA STREET

PINE GROVE STREET

BELLE PLAINE ST.

**NOTES:**

1. ALL STATIONS CALLED CALLOUT ARE FROM THE U.S. 41 CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL OFFSETS ARE TO THE SIGN PANEL EDGE UNLESS OTHERWISE NOTED.
3. ALL SIGNS SHALL BE GROUND MOUNTED UNLESS OTHERWISE NOTED.
4. FOR ALL STANDARD SIGNS, SEE THE SIGNING LEGEND FOR SIGN DIMENSIONS.
5. FOR ALL GUIDE SIGNS, SEE SIGN PANEL DETAILS FOR SIGN DIMENSIONS.
6. FOR OVERHEAD SIGNS, SEE CANTILEVER SIGN STRUCTURE SHEETS FOR STRUCTURE DIMENSIONS.
7. BOXES DENOTE THAT THE SIGN PANELS DEPICTED WILL BE ATTACHED TO THE SAME POST STRUCTURE.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
**PROPOSED SIGNING PLAN**  
SHEET 5 OF 5  
IL 132 - STA. 23+50 TO STA. 39+00  
SCALE: 1"=50' DRAWN BY: JDF  
DATE: MAY 12, 2008 CHECKED BY: AB

PLAN	SURVEYED	DATE
	PLOTTED	
	RT. OF WAY CHECKED	
	CADD FILE NAME	
NO.		

PROFILE	SURVEYED	DATE
	PLOTTED	
	BLM. NOTED	
	STRUCTURE NOTATIONS CHK'D	
NO.		

### PROPOSED SIGNING SCHEDULE

SIGN NO.	ALIGNMENT	SIGN INFORMATION						SUPPORT INFORMATION					SIGN DESCRIPTION	
		PROP. STATION	OFFSET	TYPE	WIDTH (FT)	HEIGHT (FT)	AREA (FT)	TYPE	POST QUANTITY	POST LENGTH (FT)	BASE FOR TELES. STEEL (EACH)	STRUCTURAL STEEL SIGN SUPPOR-BREAKAWAY (POUND)		CONCRETE FOUNDATIONS (CY)
1	U.S. 41 CENTERLINE	510+10	54.8' LT	3	12.0	5.5	66.0	BREAKAWAY POST						"DELANY ROAD; 1/4 MILE"
2	U.S. 41 CENTERLINE	510+32	59.0' RT	3	12.0	9.5	114.0	BREAKAWAY POST						"IL-132; GRAND AVE ;1/4 MILE"
3	U.S. 41 CENTERLINE	510+87	79.4' LT	1	3.0	3.0	9.0	TELESCOPING STEEL	1	18.5				R1-1
4	U.S. 41 CENTERLINE	510+87	79.4' LT	1	3.0	3.0	9.0	MOUNTED WITH ABOVE						R3-2
5	U.S. 41 CENTERLINE	512+89	57.9' RT	2	3.0	4.0	12.0	WOOD SIGN SUPPORT	1	16.0				R2-1
6	U.S. 41 CENTERLINE	515+00	66.9' LT	2	3.0	4.0	12.0	WOOD SIGN SUPPORT	1	16.0				R2-1
7	U.S. 41 CENTERLINE	517+99	47.9' LT	1	3.0	1.0	3.0	TELESCOPING STEEL	1	13.0				R6-1R
8	U.S. 41 CENTERLINE	520+23	153.1' LT	1	3.0	3.0	9.0	TELESCOPING STEEL	1	15.0				R3-2
9	U.S. 41 CENTERLINE	520+55	72.2' RT	1	2.0	2.0	4.0	GROUND						WETLAND DO NOT ENTER
10	U.S. 41 CENTERLINE	520+94	138.1' LT	2	3.0	4.0	12.0	TELESCOPING STEEL	1	16.0				R8-8
11	U.S. 41 CENTERLINE	522+19	101.4' LT	1	3.0	3.0	9.0	TELESCOPING STEEL	1	15.0				W10-3
12	U.S. 41 CENTERLINE	522+83	68.0' RT	3	12.0	8.0	96.0	BREAKAWAY POST						"IL-132; 45 DEG. UP ARROW; GRAND AVE"
13	U.S. 41 CENTERLINE	524+86	69.4' RT	2	3.0	4.0	12.0	WOOD SIGN SUPPORT	1	16.0				W13-2
14	U.S. 41 CENTERLINE	526+41	263.6' RT	1	2.5	2.5	6.3	TELESCOPING STEEL	1	14.5				W14-1
15	U.S. 41 CENTERLINE	526+54	46.8' RT	3	5.5	5.0	27.5	TELESCOPING STEEL	1	12.0				"EXIT; 45 DEG. UP ARROW"
16	U.S. 41 CENTERLINE	526+69	97.9' RT	1	4.5	1.5	6.8	TELESCOPING STEEL	1	13.5				"ROAD ENDS"
17	U.S. 41 CENTERLINE	526+83	46.8' LT	1	2.5	2.5	6.3	TELESCOPING STEEL	1	9.5				W4-1R
18	U.S. 41 CENTERLINE	528+75	98.7' LT	3	18.5	8.5	157.3	BREAKAWAY POST						"135 DEG. UP ARROW ; NORTH U.S. 41; GRANDVILLE AVE"
19	U.S. 41 CENTERLINE	530+15	55.4' LT	2	3.0	4.0	12.0	WOOD SIGN SUPPORT	1	16.0				R2-1
20	U.S. 41 CENTERLINE	531+54	103.5' RT	1	3.0	2.0	6.0	TELESCOPING STEEL	1	9.0				R5-1A
21	U.S. 41 CENTERLINE	531+54	54.5' RT	1	3.0	2.0	6.0	TELESCOPING STEEL	1	14.0				R5-1A
22	U.S. 41 CENTERLINE	535+27	96.9' RT	1	3.0	3.0	9.0	TELESCOPING STEEL						W12-2
23	U.S. 41 CENTERLINE	535+27	96.9' RT	1	3.0	2.0	6.0	MOUNTED WITH ABOVE						R5-1A
24	U.S. 41 CENTERLINE	535+27	96.9' RT	1	3.0	1.5	4.5	MOUNTED WITH ABOVE	1	17.5				W1-6
25	U.S. 41 CENTERLINE	535+45	50.0' RT	1	3.0	2.0	6.0	TELESCOPING STEEL	1	14.0				R5-1A
26	U.S. 41 CENTERLINE	535+65	110.0' RT	2	3.0	4.0	12.0	WOOD SIGN SUPPORT	1	16.0				R2-1
27	U.S. 41 CENTERLINE	535+82	717.0' RT	1	2.5	2.5	6.3	TELESCOPING STEEL	1	14.5				W14-1
28	U.S. 41 CENTERLINE	537+22	139.3' RT	1	4.5	1.5	6.8	TELESCOPING STEEL	1	13.5				"ROAD ENDS"
29	U.S. 41 CENTERLINE	537+61	99.3' LT	3	10.0	5.5	55.0	BREAKAWAY POST						"90 DEG. UP ARROW; GRANDVILLE AVE; 180 AND 0 DEG. UP ARROWS WITH IL-132; GRAND AVE"
30	U.S. 41 CENTERLINE	540+30	94.3' LT	2	3.0	4.0	12.0	WOOD SIGN SUPPORT	1	16.0				W13-2
31	U.S. 41 CENTERLINE	540+50	52.7' LT	1	2.5	2.5	6.3	TELESCOPING STEEL	1	9.5				W4-1R
32	U.S. 41 CENTERLINE	540+99	46.8' RT	3	5.6	5.0	28.0	TELESCOPING STEEL	1	8.5				"EXIT; 45 DEG. UP ARROW"
33	U.S. 41 CENTERLINE	543+91	70.0' LT	3	16.0	10.5	168.0	OVERHEAD						"IL-132; 45 DEG. UP ARROW; GRAND AVE; GRANDVILLE AVE" SEE CANTILEVER STRUCTURE SHEETS FOR DETAILS
34	U.S. 41 CENTERLINE	546+43	82.3' LT	2	3.0	4.0	12.0	WOOD SIGN SUPPORT	1	16.0				R2-1
35	U.S. 41 CENTERLINE	547+75	104.0' LT	1	2.0	2.0	4.0	GROUND						WETLAND DO NOT ENTER
36	U.S. 41 CENTERLINE	550+35	358.5' RT	1	2.5	2.5	6.3	TELESCOPING STEEL	1	14.5				W14-1
37	U.S. 41 CENTERLINE	550+62	82.9' RT	1	4.5	1.5	6.8	TELESCOPING STEEL	1	13.5				"ROAD ENDS"
38	U.S. 41 CENTERLINE	550+78	81.4' RT	1	2.0	2.0	4.0	GROUND						WETLAND DO NOT ENTER
39	U.S. 41 CENTERLINE	553+39	88.1' LT	3	15.5	12.0	186.0	BREAKAWAY POST						"IL-132; GRAND AVE; GRANDVILLE AVE; 1/4 MILE"
40	EB IL-132 BASELINE	15+06	39.6' RT	1	3.0	3.0	9.0	TELESCOPING STEEL	1	15.8				M1-4
41	EB IL-132 BASELINE	15+06	39.6' RT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						M2-1
42	EB IL-132 BASELINE	15+56	36.6' RT	2	7.0	2.5	17.5	TELESCOPING STEEL	1	14.5				"CHICAGO; 0 DEG UP ARROW; 180 DEG UP ARROW; MILWAUKEE"
43	EB IL-132 BASELINE	18+80	32.0' LT	2	3.0	4.0	12.0	WOOD SIGN SUPPORT	1	16.0				R2-1
44	EB IL-132 BASELINE	19+62	48.3' RT	1	2.0	2.0	4.0	WOOD SIGN SUPPORT	1	17.3				M1-4
45	EB IL-132 BASELINE	19+62	48.3' RT	1	2.0	2.0	4.0	MOUNTED WITH ABOVE						M1-4
46	EB IL-132 BASELINE	19+62	48.3' RT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						M5-1L
47	EB IL-132 BASELINE	19+62	48.3' RT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						M6-1
48	EB IL-132 BASELINE	19+62	48.3' RT	1	2.0	1.0	2.0	MOUNTED WITH ABOVE						M3-1
49	EB IL-132 BASELINE	19+62	48.3' RT	1	2.0	1.0	2.0	MOUNTED WITH ABOVE						M3-3
50	EB IL-132 BASELINE	19+70	37.1' LT	1	3.0	3.0	9.0	TELESCOPING STEEL	1	18.5				R5-1
51	EB IL-132 BASELINE	19+70	37.1' LT	1	2.0	3.0	6.0	MOUNTED WITH ABOVE						R10-11A
52	EB IL-132 BASELINE	20+30	37.8' LT	1	3.0	3.0	9.0	SIGNAL POST						R5-1
53	EB IL-132 BASELINE	20+30	37.8' LT	1	3.0	1.0	3.0	MOUNTED WITH ABOVE						R6-1R

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 ALIGNED \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 RT. OF WAY CHECKED \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 PLOTTED FILE NAME \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 PROFILE SURVEYED \_\_\_\_\_  
 GRADES CHECKED \_\_\_\_\_  
 G.M. NOTED \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 STRUCTURE NOTATIONS CHECKED \_\_\_\_\_

REVISIONS	
NAME	DATE
AZ	6/17/08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132

**PROPOSED SIGNING SCHEDULE**  
 1 OF 2

SCALE: NONE DRAWN BY: JDF  
 DATE: MAY 12, 2008 CHECKED BY: AB



PROPOSED SIGNING SCHEDULE

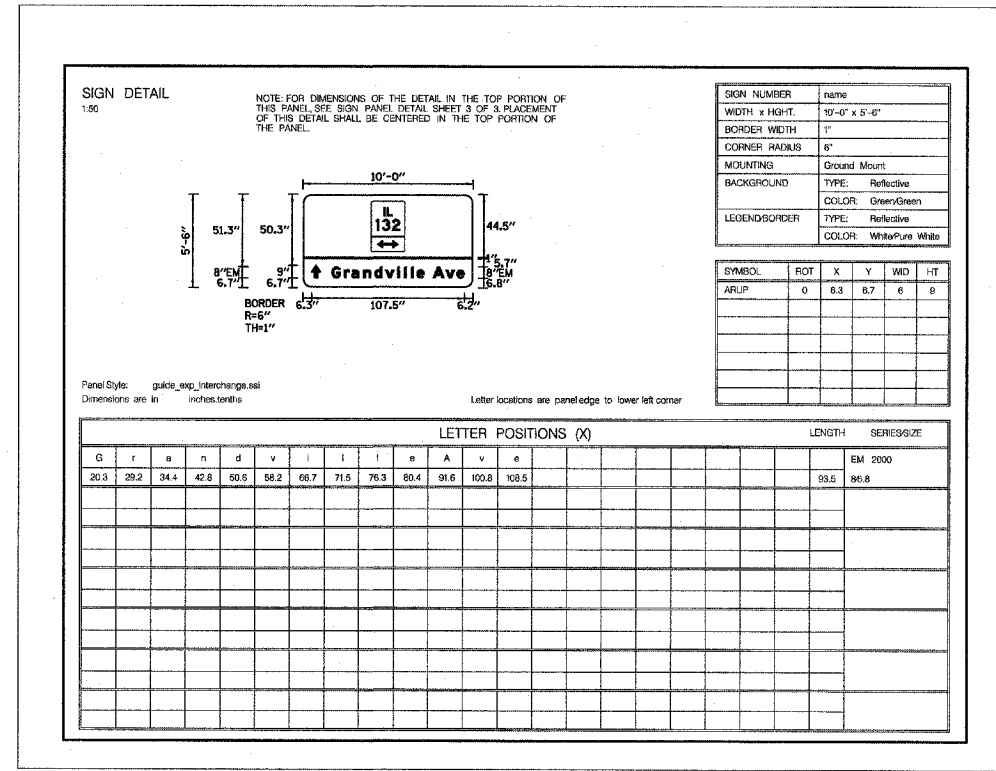
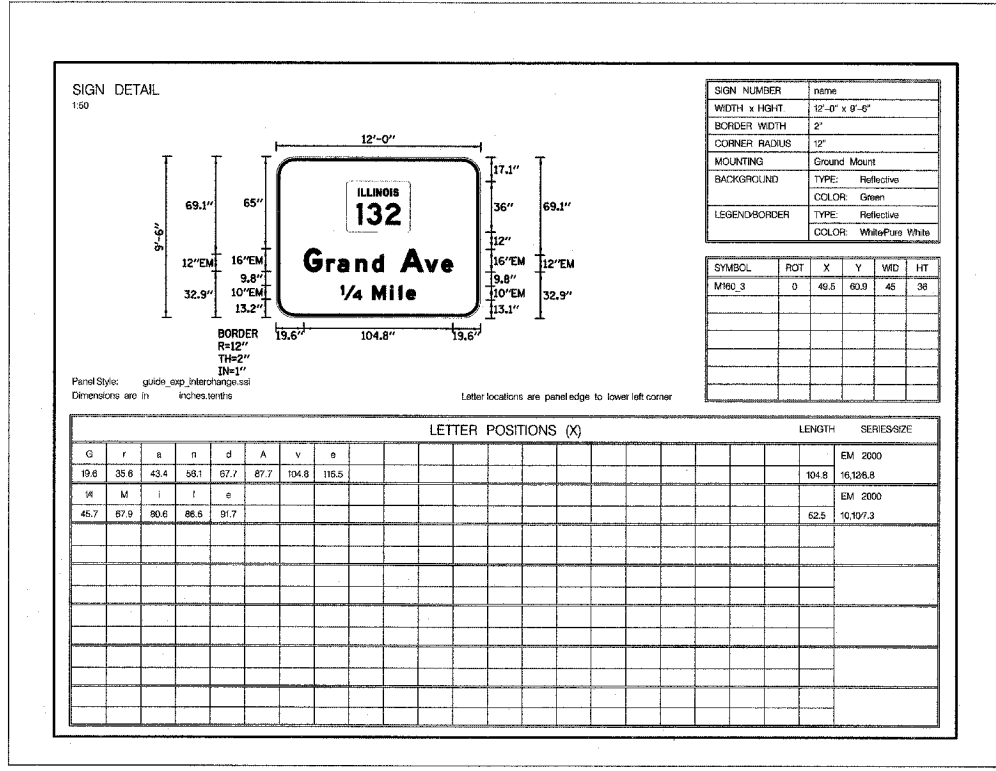
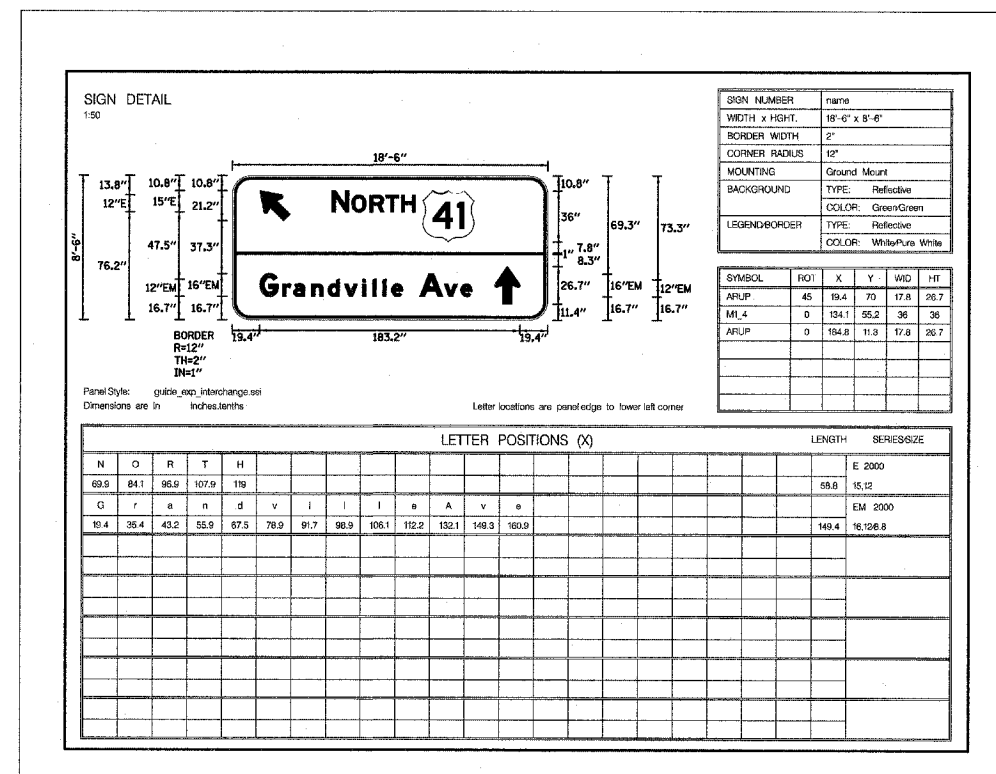
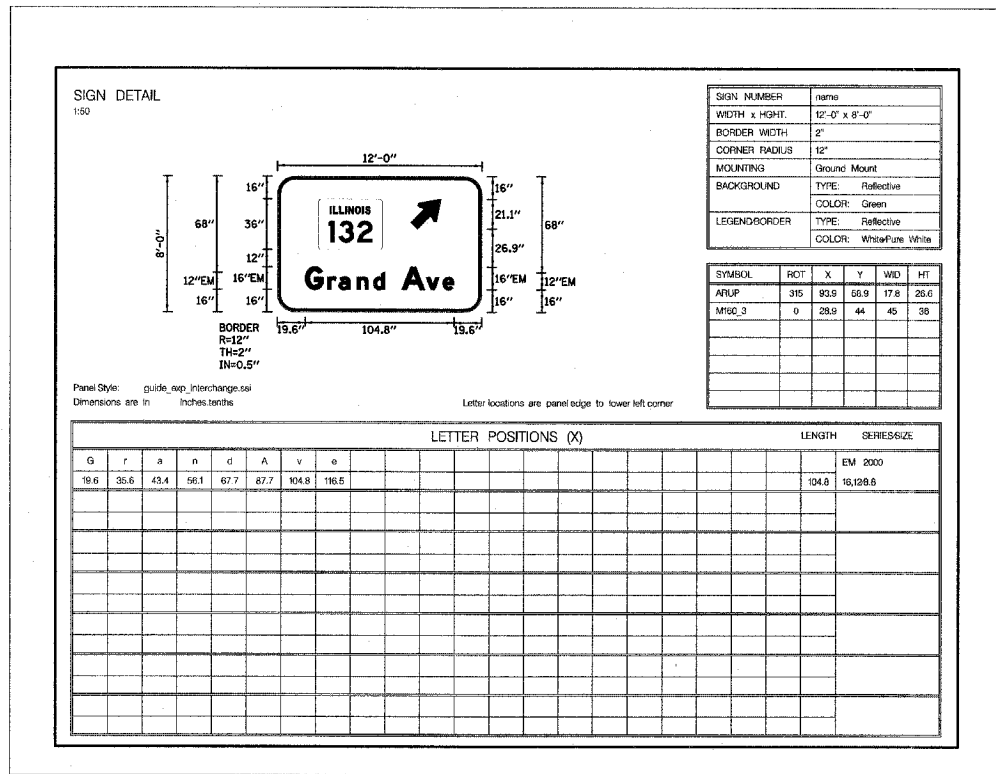
SIGN NO.	ALIGNMENT	SIGN INFORMATION						SUPPORT INFORMATION				SIGN DESCRIPTION		
		PROP. STATION	OFFSET	TYPE	WIDTH (FT)	HEIGHT (FT)	AREA (FT)	TYPE	POST QUANTITY	POST LENGTH (FT)	BASE FOR TELES. STEEL (EACH)		STRUCTURAL STEEL SIGN SUPPOR-BREAKAWAY (POUND)	CONCRETE FOUNDATIONS (CY)
54	EB IL-132 BASELINE	20+42	31.6' RT	1	2.0	3.0	6.0	SIGNAL POST						R10-11A
55	EB IL-132 BASELINE	20+42	31.6' RT	1	2.0	2.0	4.0	MOUNTED WITH ABOVE						M1-4
56	EB IL-132 BASELINE	20+42	31.6' RT	1	2.0	2.0	4.0	MOUNTED WITH ABOVE						M1-4
57	EB IL-132 BASELINE	20+42	31.6' RT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						M5-2L
58	EB IL-132 BASELINE	20+42	31.6' RT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						M6-1
59	EB IL-132 BASELINE	20+42	31.6' RT	1	2.0	1.0	2.0	MOUNTED WITH ABOVE						M3-1
60	EB IL-132 BASELINE	20+42	31.6' RT	1	2.0	1.0	2.0	MOUNTED WITH ABOVE						M3-3
61	EB IL-132 BASELINE	20+70	31.4' LT	1	3.0	2.0	6.0	SIGNAL POST						"US Rte 41"
62	EB IL-132 BASELINE	20+70	31.4' LT	1	3.0	1.0	3.0	MOUNTED WITH ABOVE						R5-1
63	EB IL-132 BASELINE	21+68	33.9' LT	1	3.0	3.0	9.0	SIGNAL POST						R6-1L
64	EB IL-132 BASELINE	21+68	33.9' LT	1	3.0	1.0	3.0	MOUNTED WITH ABOVE						R5-1
65	EB IL-132 BASELINE	21+71	33.2' LT	1	2.0	3.0	6.0	SIGNAL POST						R6-1L
66	EB IL-132 BASELINE	21+71	33.2' LT	1	2.0	2.0	4.0	MOUNTED WITH ABOVE						R10-11A
67	EB IL-132 BASELINE	21+71	33.2' LT	1	2.0	2.0	4.0	MOUNTED WITH ABOVE						M1-4
68	EB IL-132 BASELINE	21+71	33.2' LT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						M1-4
69	EB IL-132 BASELINE	21+71	33.2' LT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						M6-1
70	EB IL-132 BASELINE	21+71	33.2' LT	1	2.0	1.0	2.0	MOUNTED WITH ABOVE						M5-2L
71	EB IL-132 BASELINE	21+71	33.2' LT	1	2.0	1.0	2.0	MOUNTED WITH ABOVE						M3-1
72	EB IL-132 BASELINE	21+90	32.8' RT	1	3.0	2.0	6.0	SIGNAL POST						M3-3
73	EB IL-132 BASELINE	21+90	32.8' RT	1	3.0	1.0	3.0	MOUNTED WITH ABOVE						"US Rte 41"
74	EB IL-132 BASELINE	22+47	53.0' RT	1	3.0	3.0	9.0	TELESCOPING STEEL	1	18.5				R5-1
75	EB IL-132 BASELINE	22+47	53.0' RT	1	2.0	3.0	6.0	MOUNTED WITH ABOVE						R6-1R
76	EB IL-132 BASELINE	23+41	31.6' LT	1	2.0	2.0	4.0	WOOD SIGN SUPPORT						R5-1
77	EB IL-132 BASELINE	23+41	31.6' LT	1	2.0	2.0	4.0	MOUNTED WITH ABOVE						R10-11A
78	EB IL-132 BASELINE	23+41	31.6' LT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						M1-4
79	EB IL-132 BASELINE	23+41	31.6' LT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						M1-4
80	EB IL-132 BASELINE	23+41	31.6' LT	1	2.0	1.0	2.0	MOUNTED WITH ABOVE						M5-1L
81	EB IL-132 BASELINE	23+41	31.6' LT	1	2.0	1.0	2.0	MOUNTED WITH ABOVE						M6-1
82	EB IL-132 BASELINE	26+88	40.2' LT	2	7.0	2.5	17.5	TELESCOPING STEEL	1	14.5				M3-1
83	EB IL-132 BASELINE	27+67	39.6' RT	1	3.0	3.0	9.0	TELESCOPING STEEL	1	15.8				M3-3
84	EB IL-132 BASELINE	27+67	39.6' RT	1	1.8	1.3	2.2	MOUNTED WITH ABOVE						"180 DEG. UP ARROW; CHICAGO; 0 DEG UP ARROW; MILWAUKEE"
														M1-4
														M2-1

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PLAN  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PROFILE  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 NO. \_\_\_\_\_

REVISIONS	
NAME	DATE
ANNA ZYSMAN	6-17-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 PROPOSED SIGNING SCHEDULE  
 2 OF 2  
 SCALE: NONE  
 DATE: MAY 12, 2008  
 DRAWN BY: JDF  
 CHECKED BY: AB



DATE  
BY  
SURVEYED  
GRADES CHECKED  
ALIGNED CHECKED  
RT. OF WAY CHECKED  
NOTE BOOK NO.  
PLAN

DATE  
BY  
SURVEYED  
GRADES CHECKED  
ALIGNED CHECKED  
RT. OF WAY CHECKED  
NOTE BOOK NO.  
PROFILE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
SIGN PANEL DETAILS  
SHEET 1 OF 3  
SCALE: NOT TO SCALE  
DATE: MAY 12, 2008  
DRAWN BY: JDE  
CHECKED BY: AB

SIGN DETAIL  
1:60



SIGN NUMBER	name
WIDTH x HGHT.	16'-0" x 10'-6"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGENDBORDER	TYPE: Reflective
	COLOR: White/Pure White

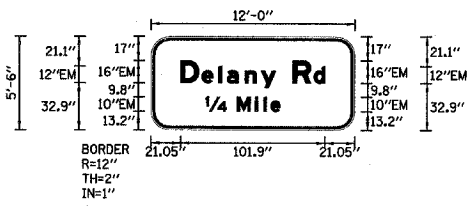
SYMBOL	ROT	X	Y	WID	HT
ARUP	315	150.7	87.8	17.8	26.6
M160_3	0	73.5	73	45	36

Panel Style: guide\_exp\_interchange.ssi  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE				
G	r	a	n	d	A	v	e				EM 2000				
43.6	59.5	67.4	80.1	91.7	111.7	128.8	140.5			104.8	16,126.8				
G	r	a	n	d	v	i	l	i	e	A	v	e		EM 2000	
20.1	36.1	43.9	56.6	68.3	79.7	92.4	99.6	106.9	113	132.9	150.1	161.7		149.5	16,126.8

SIGN DETAIL  
1:60



SIGN NUMBER	name
WIDTH x HGHT.	12'-0" x 5'-6"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground Mount
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGENDBORDER	TYPE: Reflective
	COLOR: White/Pure White

SYMBOL	ROT	X	Y	WID	HT

Panel Style: guide\_exp\_interchange.ssi  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
D	e	l	a	n	y	R	d				EM 2000
21	36	47.6	53.8	66.6	77.9	100.1	115			101.9	16,126.8
1/4	M	i	l	e							EM 2000
38.8	60.9	73.6	79.6	84.7						52.6	10,107.3

SIGN DETAIL  
1:60



SIGN NUMBER	name
WIDTH x HGHT.	15'-6" x 12'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground Mount
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGENDBORDER	TYPE: Reflective
	COLOR: White/Pure White

SYMBOL	ROT	X	Y	WID	HT
M160_3	0	70.5	89.9	45	36

Panel Style: guide\_exp\_supplemental.ssi  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE				
G	r	a	n	d	A	v	e				EM 2000				
40.5	56.6	64.4	77.1	88.8	108.7	125.8	137.5			104.8	16,126.8				
G	r	a	n	d	v	i	l	i	e	A	v	e		EM 2000	
18.3	34.2	42	54.8	66.4	77.8	90.5	97.8	106	111.1	131	148.2	159.8		149.5	16,126.8
1/4	M	i	l	e							EM 2000				
66.7	88.9	101.6	107.6	112.7						52.5	10,107.3				

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
SIGN PANEL DETAILS  
SHEET 2 OF 3

SCALE: NOT TO SCALE  
DATE: MAY 12, 2008  
DRAWN BY: JOE...  
CHECKED BY: AB...

PLAN  
DATE  
BY  
SURVEYED  
PLOTTED  
CHECKED  
NOTE BOOK  
NO. OF WAY CHECKED  
CADD FILE NAME

PROFILE  
DATE  
BY  
SURVEYED  
PLOTTED  
CHECKED  
NOTE BOOK  
NO. OF WAY CHECKED  
STRUCTURE NOTATIONS CHKD

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLAN NOTE BOOK: \_\_\_\_\_  
 ALIGNED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 NO. \_\_\_\_\_

**SIGN DETAIL**  
130

SIGN NUMBER	name
WIDTH x HIGHT.	7'-0" x 2'-6"
BORDER WIDTH	1"
CORNER RADIUS	1.88"
MOUNTING	Ground Mount
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/Pure White

SYMBOL	ROT	X	Y	WID	HT
ARLP	90	9	18	5	9
ARLP	270	66	5	5	9

Panel Style: guide\_exp\_supplemental  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE
C	h	i	c	e	g	o				D	2000
24	29.3	34	35.9	38.9	44.3	48.6				28.4	94.4
M	i	l	w	s	u	k	a	e		D	2000
21.7	27.7	29.0	31.5	38.8	43.8	48	52.3	55.4		38.3	94.4

**SIGN DETAIL**  
130

SIGN NUMBER	name
WIDTH x HIGHT.	5'-6" x 5'-0"
BORDER WIDTH	1.5"
CORNER RADIUS	8"
MOUNTING	Ground/Wall Mount
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/Pure White

SYMBOL	ROT	X	Y	WID	HT
ARMED	45	21.5	7.5	18.8	29.5

Panel Style: guide\_exp\_gonal  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE
E	X	I	T							EM	2000
14.5	25.1	38	42.6							37	12

**SIGN DETAIL**  
130

NOTE: THIS DETAIL SHALL BE PLACED IN THE TOP PORTION OF OF SIGN PANEL LOCATED ON SIGN PANEL DETAIL SHEET 1 OF 3. PLACEMENT OF THIS DETAIL SHALL BE CENTERED IN THE TOP PORTION OF THE PANEL.

SIGN NUMBER	name
WIDTH x HIGHT.	2'-0" x 3'-0"
BORDER WIDTH	0.5"
CORNER RADIUS	1"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Black

SYMBOL	ROT	X	Y	WID	HT
ARLP	90	4.3	2.7	5	7.5
ARLP	270	11.8	2.7	5	7.5

Panel Style: guide\_exp\_gonal  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE
I	L									D	2000
5	11.3									6.1	6
1	3	2								D	2000
3.8	6	15								16.9	8

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PROFILE NOTE BOOK: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 NO. \_\_\_\_\_

**SIGN DETAIL**  
130

SIGN NUMBER	name
WIDTH x HIGHT.	7'-0" x 2'-6"
BORDER WIDTH	1"
CORNER RADIUS	1.88"
MOUNTING	Ground Mount
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/Pure White

SYMBOL	ROT	X	Y	WID	HT
ARLP	270	66	18	6	9
ARLP	90	9	6	6	9

Panel Style: guide\_exp\_supplemental  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE
C	h	i	o	a	g	o				D	2000
31.0	36.9	41.5	43.5	47.5	51.8	55.4				28.4	64.4
M	i	l	w	a	u	k	a	e		D	2000
24	30	32.1	33.8	41	45.5	50.3	54.6	58.7		38.3	64.4

**SIGN DETAIL**  
130

SIGN NUMBER	name
WIDTH x HIGHT.	4'-6" x 1'-6"
BORDER WIDTH	0.63"
CORNER RADIUS	1.13"
MOUNTING	Ground/Wall Mount
BACKGROUND	TYPE: Reflective
	COLOR: Orange
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red/Black

SYMBOL	ROT	X	Y	WID	HT
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Panel Style: mg/akonyast  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE
R	O	A	D	E	N	D	S			D	2000
5.8	10.8	15.8	21.8	28.9	33.8	39.2	44.1			42.4	6

**SIGN DETAIL**  
112

SIGN NUMBER	name
WIDTH x HIGHT.	2'-0" x 3'-0"
BORDER WIDTH	0.5"
CORNER RADIUS	1"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Pure White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red/Black

SYMBOL	X	Y	WID	HT
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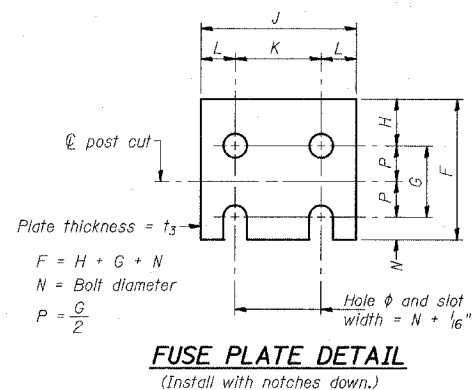
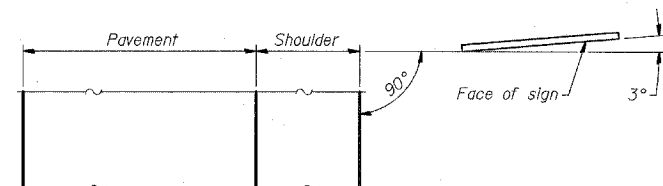
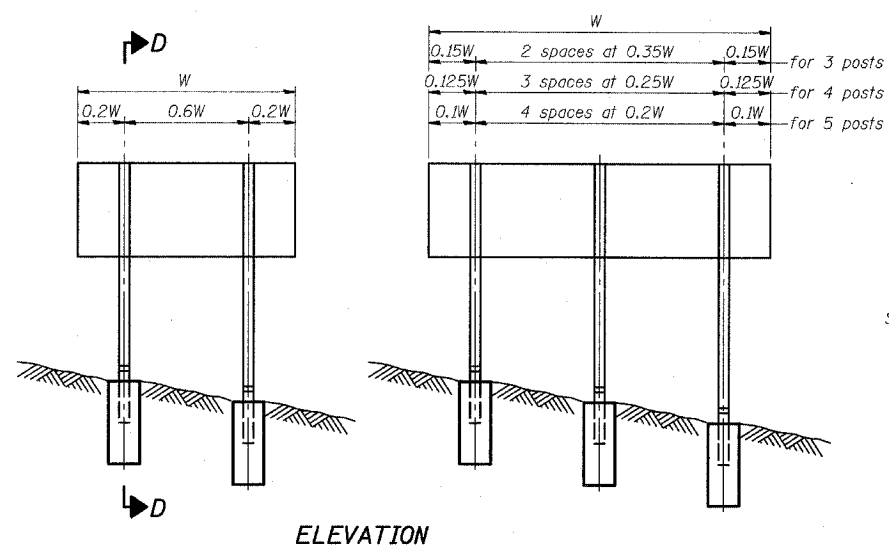
Panel Style: misc.asi  
Dimensions are in inches tenths  
Letter spacings are to start of next letter

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE
W	E	T	L	A	N	D				C4	
3.2	3.3	2.2	2.3	2.1	2.8	2.6	2.2	3.2		17.7	
D	O	N	O	T						C4	
5.5	2.6	2.3	1	2.6	2.6	2	5.5			13.1	
E	N	T	E	R						C4	
5.5	2.3	2.5	2.3	2.3	2.2	8.8				11.7	

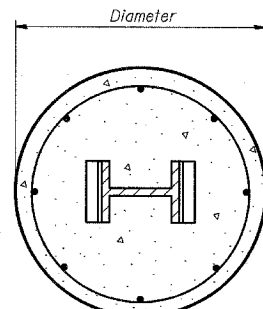
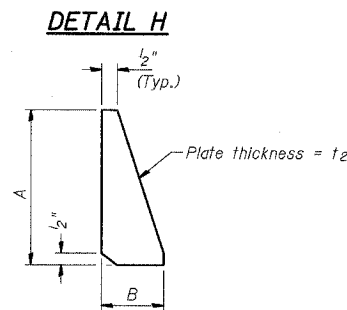
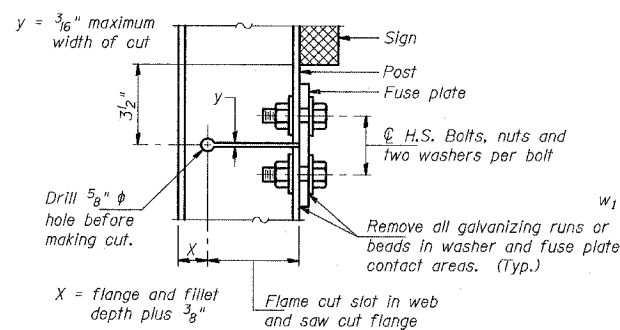
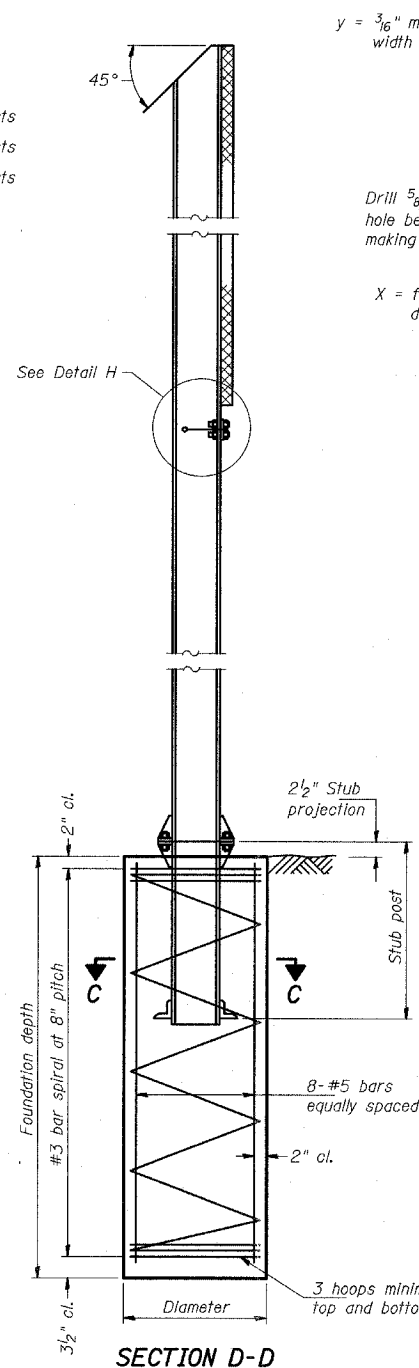
REVISIONS	
NAME	DATE

DATE  
BY  
SURVEYED  
PLOTTED  
CHECKED  
R.I. OF DAY CHECKED  
CADD FILE NAME  
NO.

DATE  
BY  
SURVEYED  
PLOTTED  
CHECKED  
R.I. OF DAY CHECKED  
STRUCTURE NOTATIONS CHKD  
NO.



N = Bolt Diameter	G	H
1/2"	2"	1 1/8"
5/8"	2 1/4"	1 1/4"
3/4"	2 1/2"	1 3/8"
7/8"	2 3/4"	1 1/2"
1"	3"	1 5/8"
1 1/8"	3 1/4"	1 3/4"



**GENERAL NOTES**

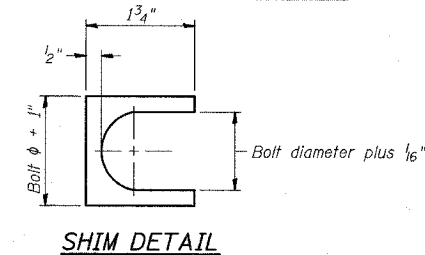
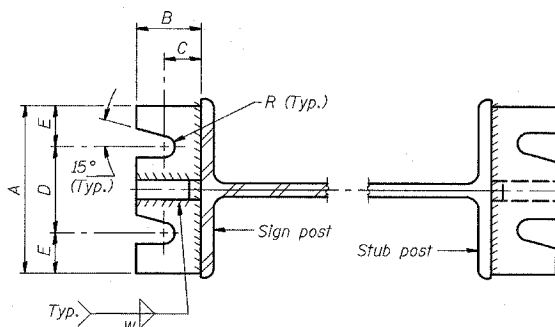
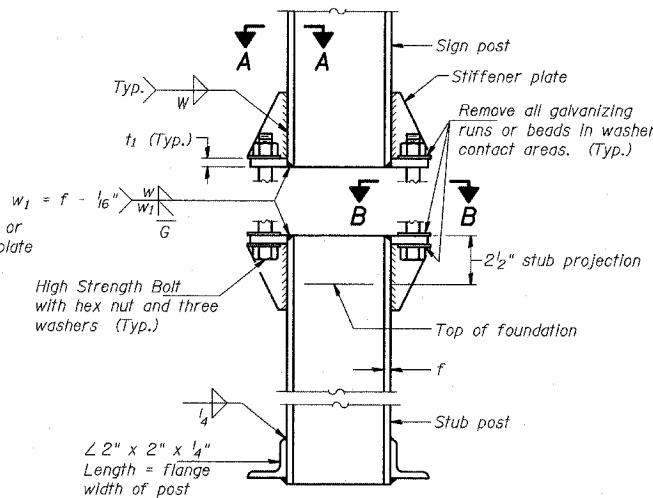
Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05, and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

DESIGN STRESSES:  
Structural steel - 20,000 p.s.i.  
Reinforcing steel - 20,000 p.s.i.  
Concrete - 1,400 p.s.i.  
Footing soil pressure - 2,000 p.s.f.

After fabrication, the post, fuse plate and upper 6" (Minimum) of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

Work this sheet with Base Sheet BAW-A-2.



Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

NUMBER	REVISION	DATE

BAW-A-1 7/1/2006

REVISIONS	
NAME	DATE

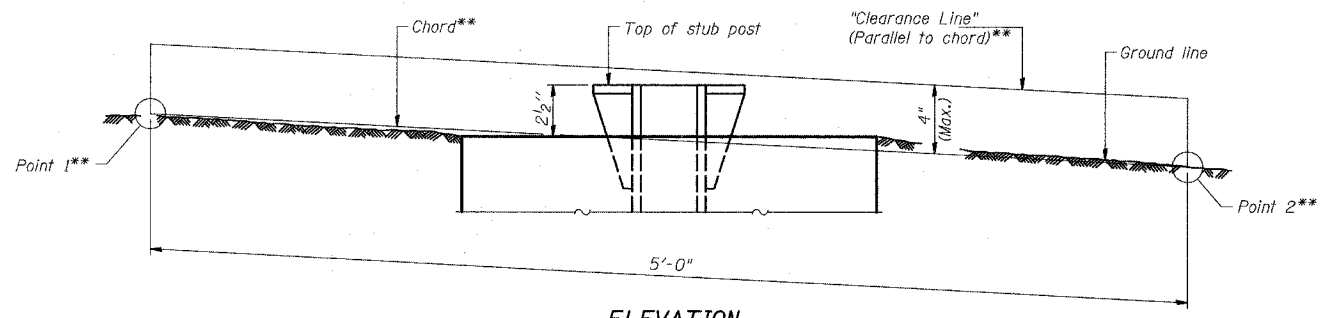
ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
BREAK-AWAY WIDE FLANGE  
STEEL SIGN POST DETAILS

SCALE: AS NOTED DRAWN BY: JDF  
DATE: MAY 12, 2008 CHECKED BY: AB

POST	CONCRETE FOUNDATION TABLE								POST TO STUB POST CONNECTION DATA										FUSE PLATE DATA			
	Foundation			Reinforcement				Stub Post Length	Bolt Size	A	B	C	D	E	t <sub>1</sub>	t <sub>2</sub>	R	W	J	K	L	t <sub>3</sub>
	Diameter	*Minimum Depth	Concrete (cu. yds.) ①	Vertical Bars Length	Bar Spirals Diameter	Bar Spirals Length	lbs. ②															
W6x9	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-3"	5/8" x 3 1/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	1 1/2"	1 1/4"	4"	2 1/4"	7/8"	1/4"
W6x15	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	5/8" x 3 1/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	1 1/2"	1 1/4"	6"	3 1/2"	1 1/4"	3/8"
W8x18	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	3/4" x 3 3/4"	6"	2 1/2"	3/4"	3 1/4"	1 3/8"	1"	1/2"	1 1/2"	5/16"	5 1/4"	2 3/4"	1 1/4"	3/8"
W10x22	2'-6"	6'-6"	1.18	6'-3"	2'-2 1/2"	105'-0"	92	3'-0"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1/2"	1 1/2"	5/16"	5 3/4"	2 3/4"	1 1/2"	1/2"
W10x26	2'-6"	7'-0"	1.27	6'-9"	2'-2 1/2"	112'-0"	98	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	5/32"	3/8"	5 3/4"	2 3/4"	1 1/2"	5/8"
W12x26	2'-6"	7'-9"	1.41	7'-6"	2'-2 1/2"	119'-0"	107	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	5/32"	3/8"	6 1/2"	3 1/2"	1 1/2"	5/8"
W14x30	3'-0"	7'-3"	1.90	7'-0"	2'-8 1/2"	145'-0"	113	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	5/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W14x38	3'-0"	8'-0"	2.09	7'-9"	2'-8 1/2"	153'-0"	122	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	17/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W16x45	3'-0"	8'-6"	2.23	8'-3"	2'-8 1/2"	162'-0"	130	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	17/32"	3/8"	7"	3 1/2"	1 3/4"	1/2"

\*Dimensional changes required for varying site conditions shall be approved by the Engineer.

POST	FUSE PLATE BOLT SIZE												
	Sign Depth												
	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"
W6x9	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	5/8" x 1 3/4"	5/8" x 1 3/4"	5/8" x 1 3/4"	5/8" x 1 3/4"	5/8" x 1 3/4"	5/8" x 1 3/4"	5/8" x 1 3/4"	5/8" x 1 3/4"	5/8" x 1 3/4"	5/8" x 1 3/4"
W6x15	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	7/8" x 2"	7/8" x 2"	7/8" x 2"	7/8" x 2"
W8x18	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"
W10x22	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	1" x 2 1/2"	1" x 2 3/4"
W10x26	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"
W12x26	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"
W14x30	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	1" x 2 3/4"	1" x 2 3/4"
W14x38	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	1" x 2 3/4"	1" x 2 3/4"
W16x45	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	1" x 2 3/4"	1" x 2 3/4"



**ELEVATION**  
**GROUND LINE & STUB POST**

\*\*For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

- ① Quantity includes all concrete necessary for one foundation.
- ② Includes reinforcement bars and spiral hooping for one foundation.

NUMBER	REVISION	DATE

BAW-A-2 7/1/2006

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
BREAK-AWAY WIDE FLANGE  
STEEL SIGN POST TABLES

SCALE: AS NOTED DRAWN BY: JDF  
DATE: MAY 12, 2008 CHECKED BY: AB

PLAN SURVEYED BY DATE  
 PLOTTED BY DATE  
 CHECKED BY DATE  
 NOTE BOOK NO. OF WAY CHECKED  
 CAD FILE NAME

PROFILE SURVEYED BY DATE  
 PLOTTED BY DATE  
 CHECKED BY DATE  
 NOTE BOOK NO. OF WAY CHECKED  
 STRUCTURE NOTATIONS CHK'D

### GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:  
 Field Units  
 $f_c = 3,500$  p.s.i.  
 $f_y = 60,000$  p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.

All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W\*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.

The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

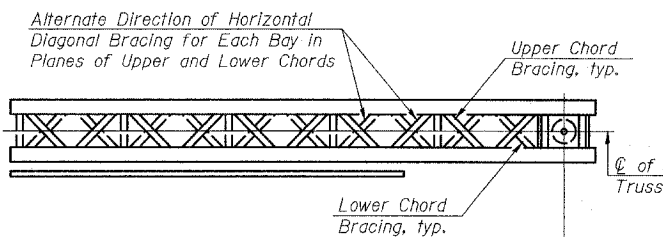
ANCHOR RODS: Shall conform to AASHTO M314 Gr. 105 with a minimum Charpy V-Notch (CVN) energy of 15 lb.-ft. at 10° F.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

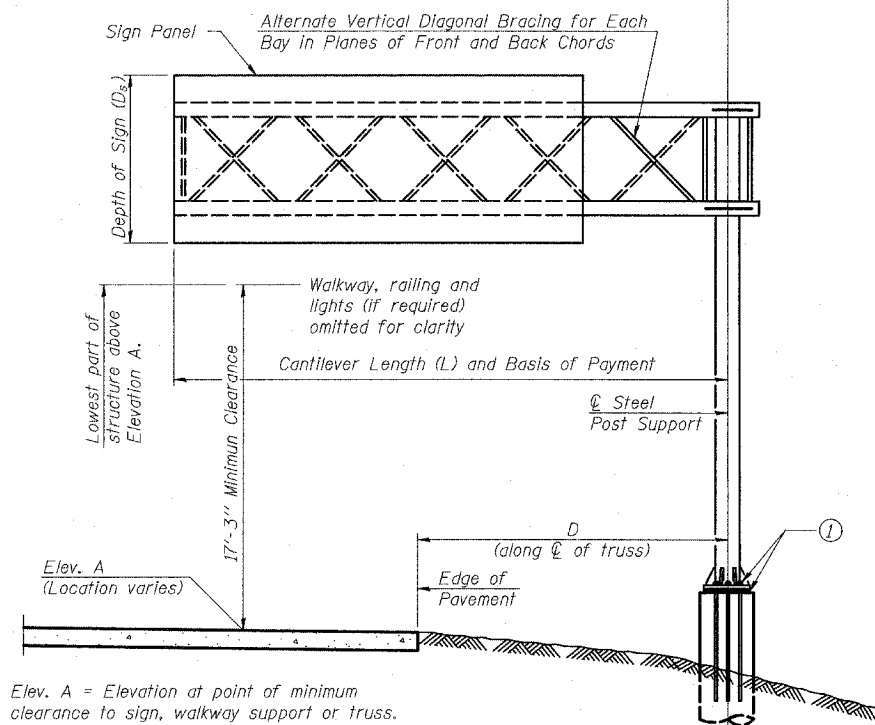
\* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.



**TYPICAL PLAN**  
(Walkway not shown)

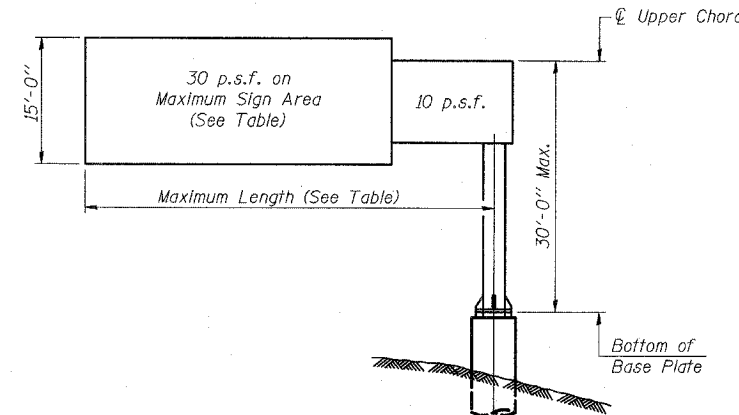
Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	D <sub>s</sub>	Total Sign Area
1C049U041R----	543+93.18	I-C-A	20.75'	687.40	12.75'	10.5'	168 SQ FT

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	170 Sq. Ft.	25 Ft.
II-C-A	340 Sq. Ft.	30 Ft.
III-C-A	400 Sq. Ft.	40 Ft.



**TYPICAL ELEVATION**  
Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.



### DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards. Installations not within dimensional limits shown require special analysis for all components.

- ① After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

Note:

Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of the trusses.

### TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A	Foot	20.75'
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A	Foot	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	5.0

NUMBER	REVISION	DATE

REVISIONS	
NAME	DATE

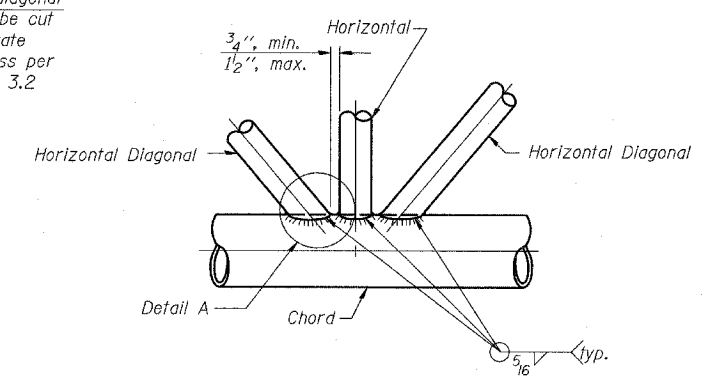
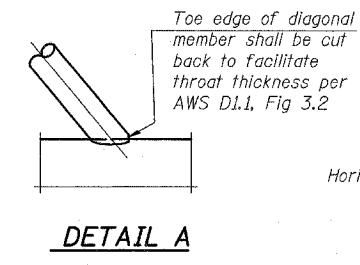
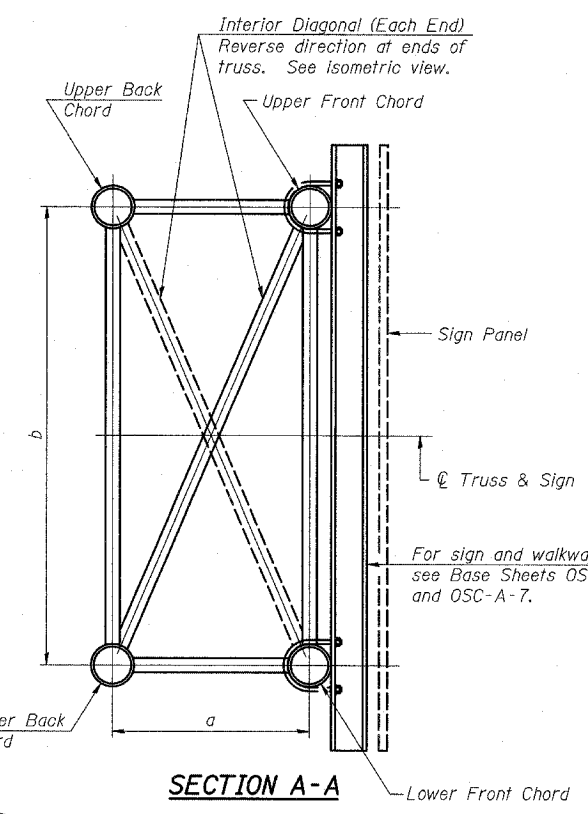
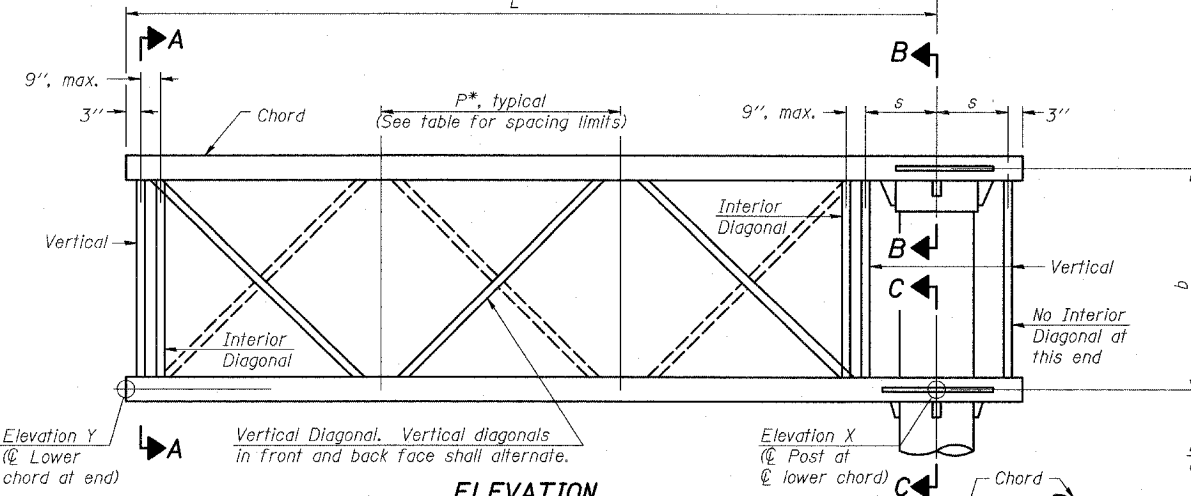
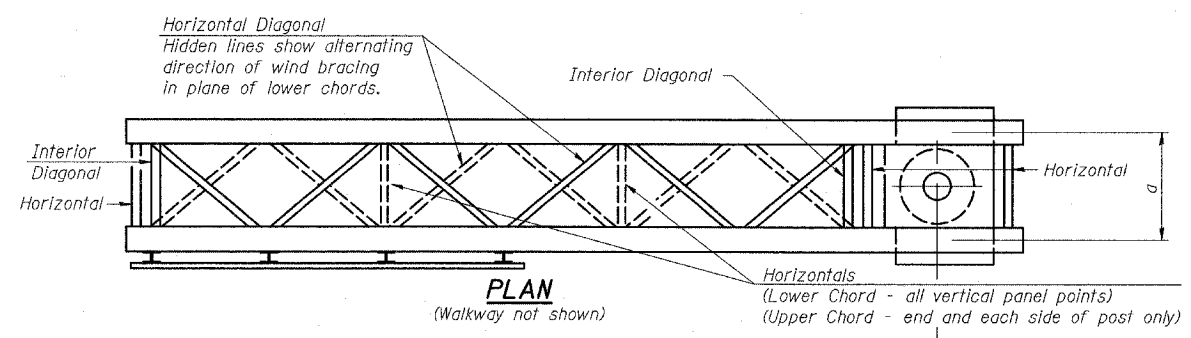
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132

CANTILEVER SIGN STRUCTURES  
 GENERAL PLAN & ELEVATION  
 ALUMINUM TRUSS & STEEL POST

SCALE: N.T.S. DRAWN BY: JF, MAF  
 DATE: MAY 12, 2008 CHECKED BY: MAF

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 ALIGNED \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 FILE NO. \_\_\_\_\_

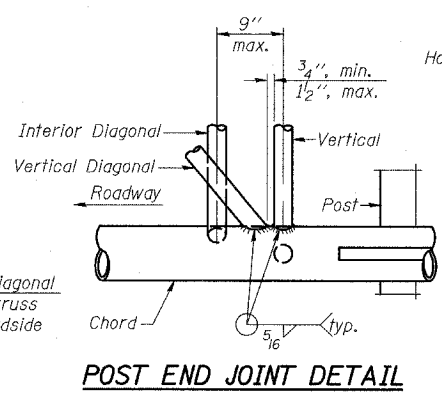
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 SURVEYED \_\_\_\_\_  
 GRADES CHECKED \_\_\_\_\_  
 ELEV. NOTED \_\_\_\_\_  
 STRUCTURE NOTATIONS CHECKED \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 FILE NO. \_\_\_\_\_



Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
1C049U041R----	543+93.18	I-C-A	20.75'	5	3.83'

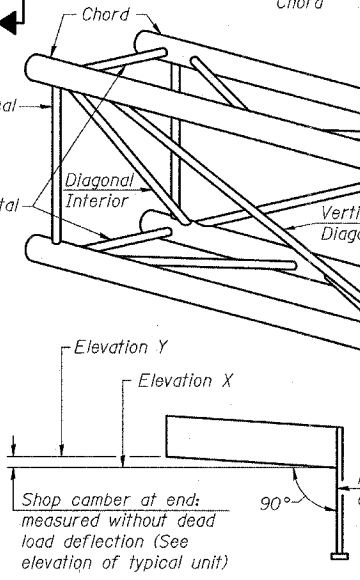
**TYPICAL TRUSS UNIT**  
For Section B-B and Section C-C, see Base Sheet OSC-A-3.

Note: There are twice as many horizontal diagonals as there are vertical diagonals.



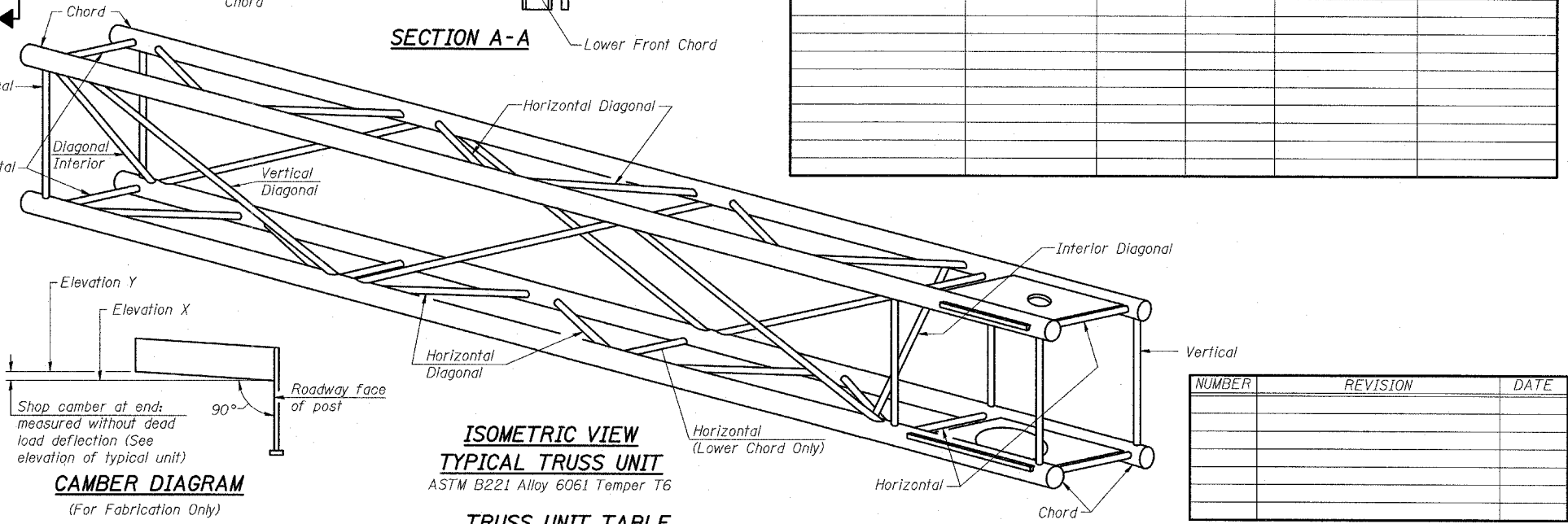
**SHOP CAMBER TABLE**

Unit Length (L)	Shop Camber at End
15'	1 1/2"
16'-17'	1 3/4"
18'-20'	2"
21'-22'	2 1/4"
23'-25'	2 1/2"
26'-27'	2 3/4"
28'-30'	3"
31'-32'	3 1/4"
33'-35'	3 1/2"
36'-37'	4"
38'-40'	4 1/2"



**CAMBER DIAGRAM**  
(For Fabrication Only)

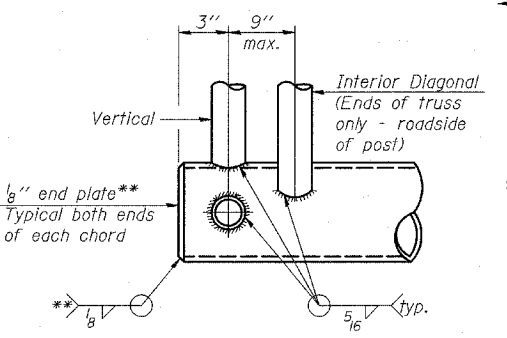
**ISOMETRIC VIEW TYPICAL TRUSS UNIT**  
ASTM B221 Alloy 6061 Temper T6



**TRUSS UNIT TABLE**

Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord O.D.		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals O.D.	
					Wall	Wall	Wall	Wall
I-C-A	24"	54"	16"	36" min. to 48" max.	5"	5/16"	2 1/2"	5/16"
II-C-A	36"	66"	21"	42" min. to 54" max.	6 1/2"	5/16"	3 1/4"	5/16"
III-C-A (35' Max.)	36"	84"	21"	48" min. to 66" max.	7"	3/8"	3 1/2"	3/8"
III-C-A (>35' to 40')	36"	84"	21"	48" min. to 66" max.	8"	3/8"	3 1/2"	3/8"

\*P =  $\frac{L-s-3"}{\# \text{ Panels}}$



**CANTILEVER END JOINT DETAIL**  
\*\* Contractor may alternatively use standard aluminum drive-fit cap to close ends.

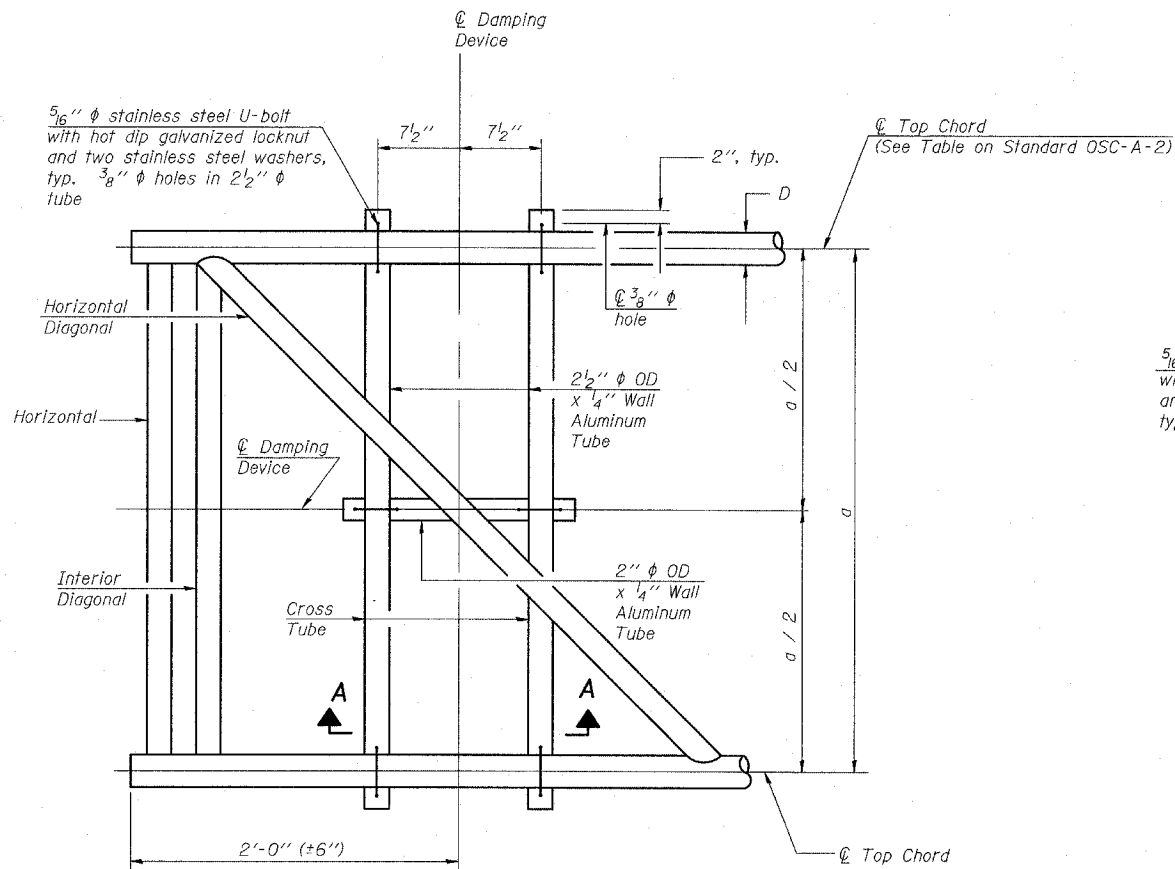
NUMBER	REVISION	DATE

**REVISIONS**

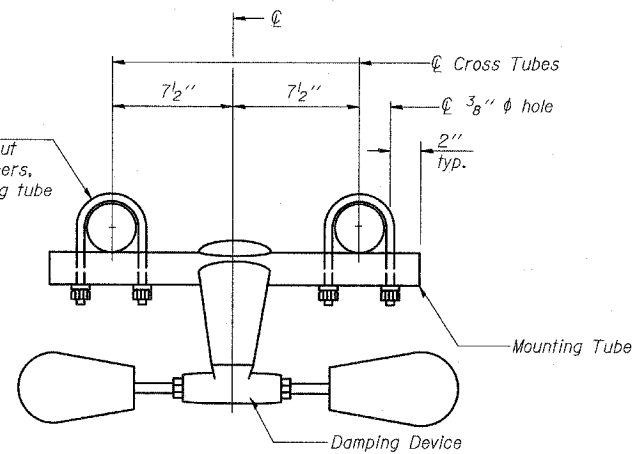
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
CANTILEVER SIGN STRUCTURES  
TRUSS DETAILS  
ALUMINUM TRUSS & STEEL POST  
SCALE: N.T.S. DRAWN BY: JF, AF  
DATE: MAY 12, 2008 CHECKED BY: MAF

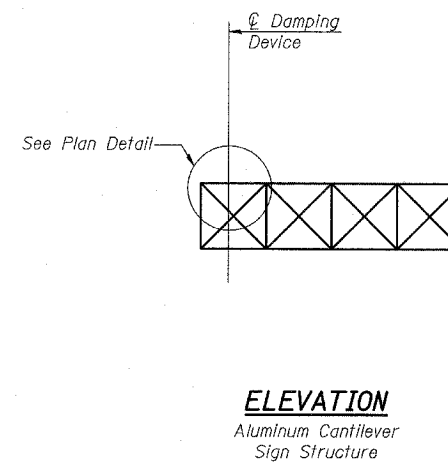




**PLAN DETAIL**



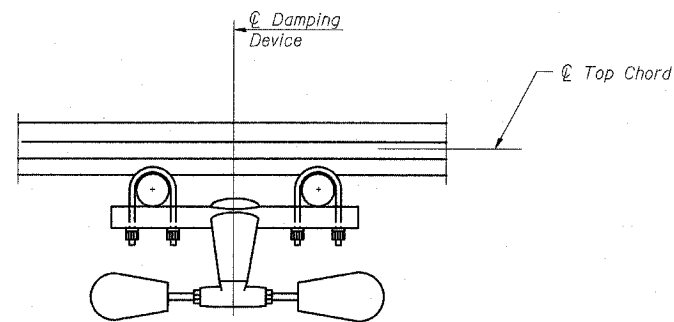
**TRUSS DAMPING DEVICE CONNECTION DETAIL**



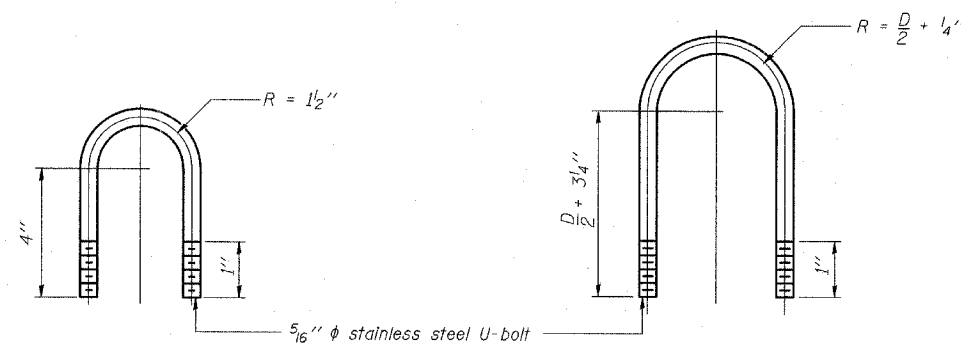
**GENERAL NOTES**

Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum-29" minimum between ends of weights)

Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6



**SECTION A-A**



**DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL**  
(Typical)

**TOP CHORD TO CROSS TUBE U-BOLT DETAIL**  
(Typical)

OSC-A-D

6/01/2007

REVISIONS	
NAME	DATE

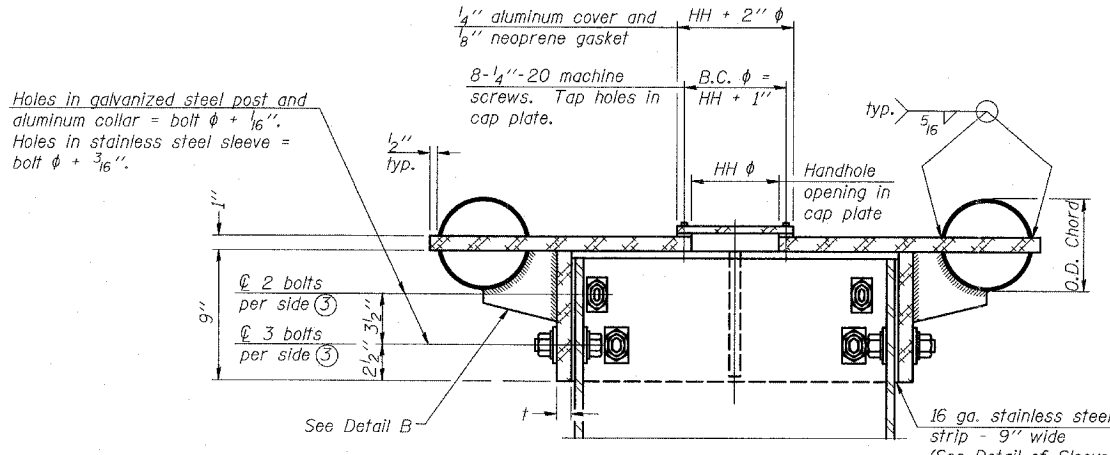
ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
CANTILEVER SIGN STRUCTURE  
DAMPING DEVICE

SCALE: N.T.S.

DRAWN BY: JF, AF

DATE: MAY 12, 2008

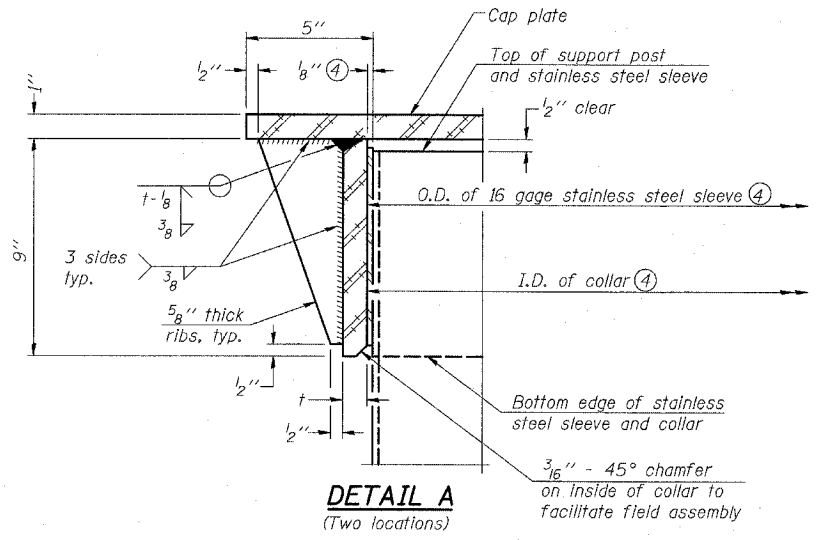
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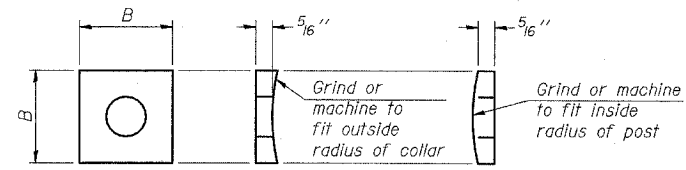
④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 1/8" (+1/16"). Maximum gap between post and collar at any location equals 1/8" before tightening bolts.

**SECTION B-B**

Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

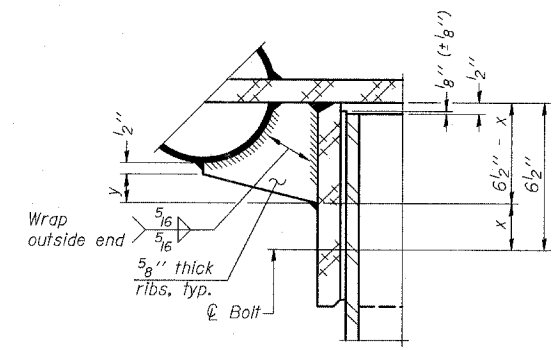


**DETAIL A**  
(Two locations)



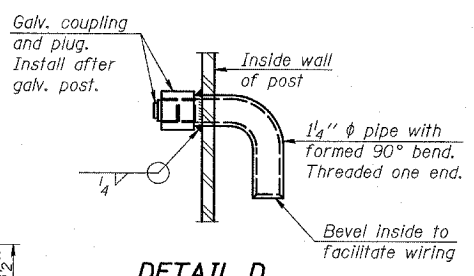
**CONTOURED WASHERS**

Bolt Size	Contoured Washers	
	Hole Dia.	B
7/8"	1"	2 1/2"
1"	1 1/8"	3"
1 1/4"	1 3/8"	3 1/4"



**DETAIL B**

Two locations  
(For details not shown, see Detail C)

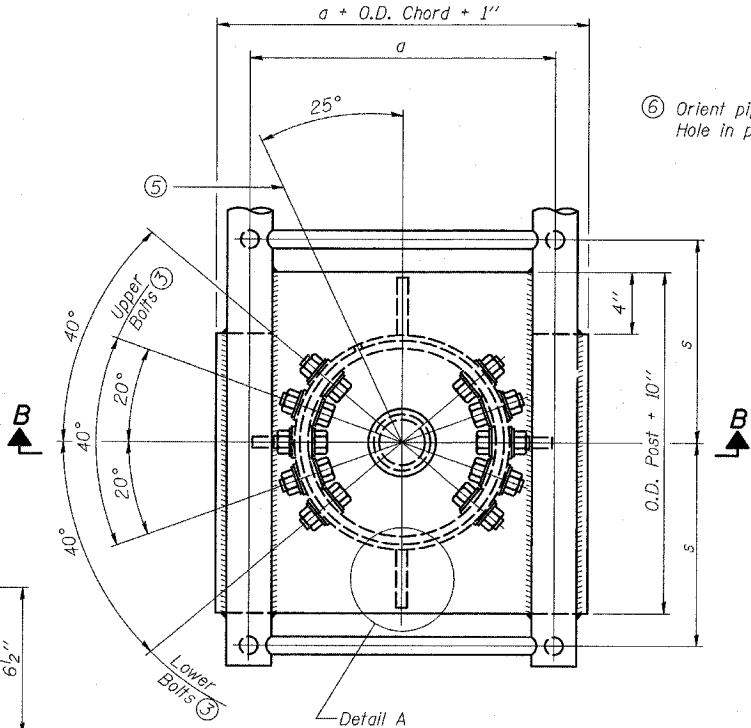


**DETAIL D**

**DETAIL OF STAINLESS STEEL SLEEVE**

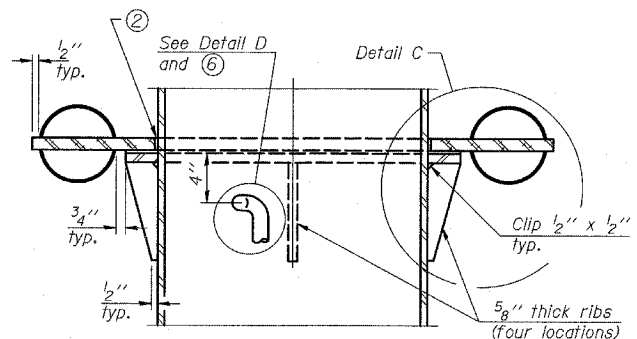
Weld to post after galvanizing. (Prepare post surface to insure tight, uniform fit and allow welding.) Welds to be 1/2" long at 6" cts. along top edge and at 1/4" opening.

NUMBER	REVISION	DATE

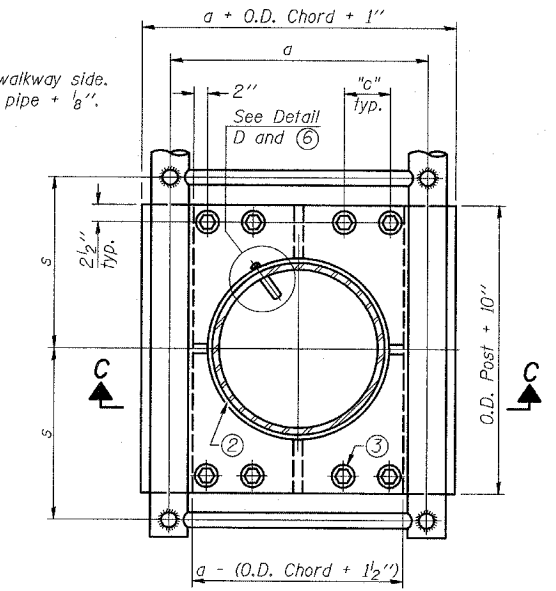


**PLAN VIEW - TOP OF COLUMN**

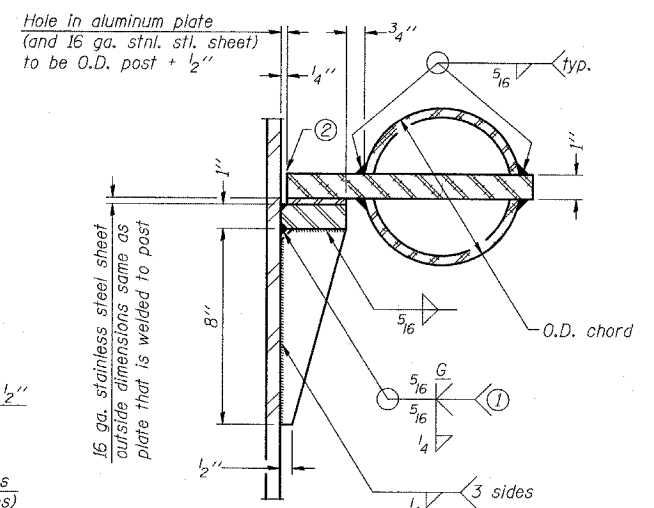
⑤ Optional full penetration weld in collar. (Two locations maximum....(180° apart)....X-ray or UT 100%)



**SECTION C-C**



**SECTION THRU POST ABOVE LOWER CHORDS**



**DETAIL C**

- ① Grind top if required to fully seat aluminum plate and stainless steel sheet.
- ② After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Cantilever.

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-A	16" φ (83#/')	7/8"	3 1/4"	8"	5/8"	1 3/4"	2 1/4"
II-C-A	24" φ (125#/')	1"	3 1/2"	12"	7/8"	2"	1 1/4"
III-C-A (35' max.)	24" φ (125#/')	1 1/4"	3 1/2"	12"	7/8"	2"	1"
III-C-A (>35' to 40')	24" φ (171#/')	1 1/4"	3 1/2"	12"	7/8"	2"	1"

③ Upper and lower connection bolts in collar and bolts at lower chord connection shall be high strength with matching locknuts. Connection bolts shall have 2 stainless steel flat washers each.

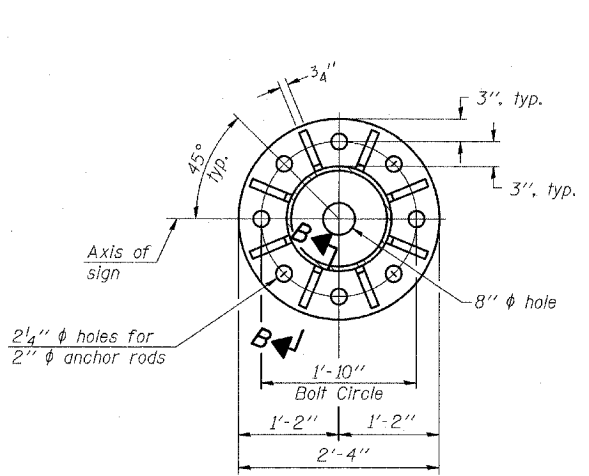
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
CANTILEVER SIGN STRUCTURES  
JUNCTURE DETAILS  
ALUMINUM TRUSS & STEEL POST  
SCALE: N.T.S. DRAWN BY: JF, AF  
DATE: MAY 12, 2008 CHECKED BY: MAF

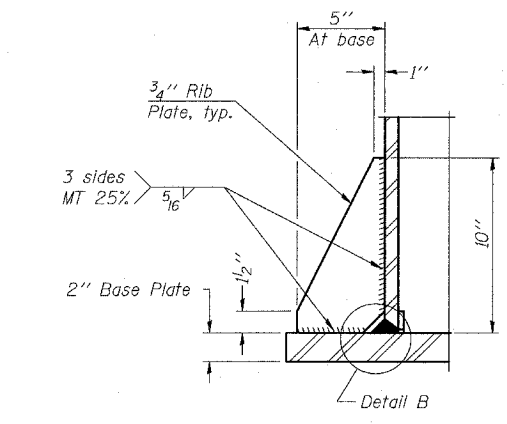
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REVISIONS  
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ALIGNED  
PLOTTED  
NOTE BOOK  
NO.  
FILE NAME

DATE  
BY  
REVISIONS  
CHECKED  
GRADES  
PLOTTED  
NOTE BOOK  
NO.  
STRUCTURE NOTATIONS CHECKED

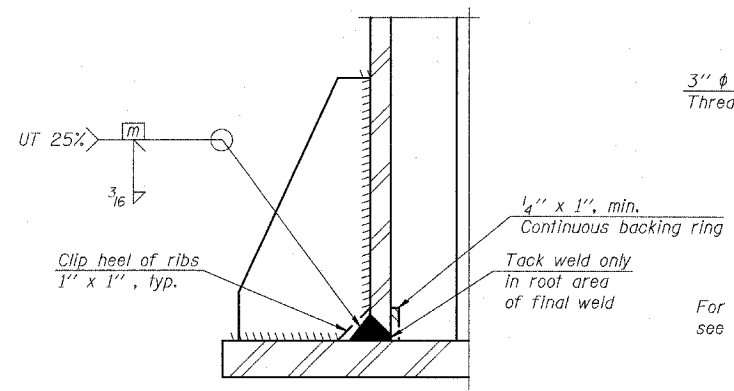
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	13
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJ.	
125X-HB-(1&2) R-1		CONTRACT # 60		



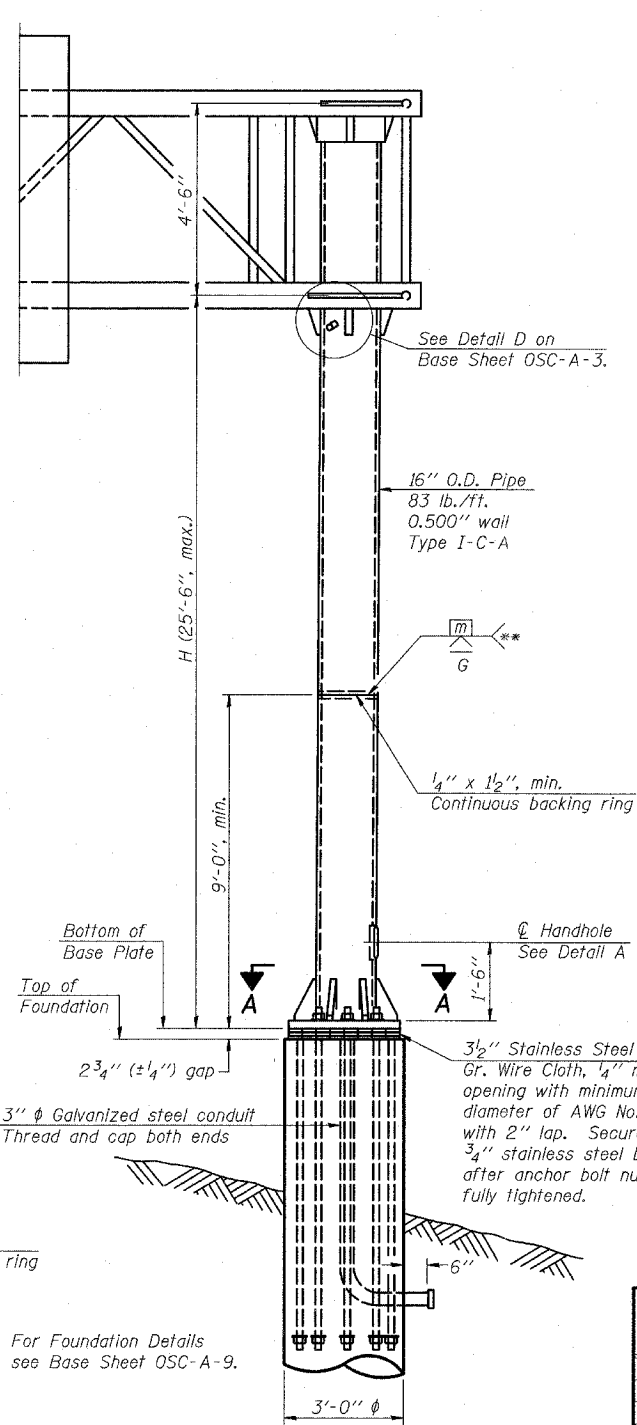
**SECTION A-A**



**SECTION B-B**

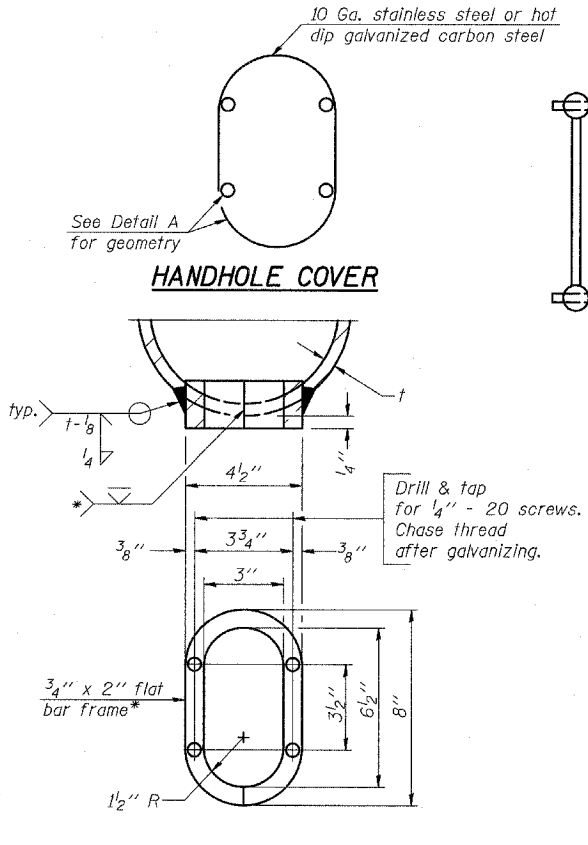


**DETAIL B**  
(Typical rib)



**FRONT ELEVATION**

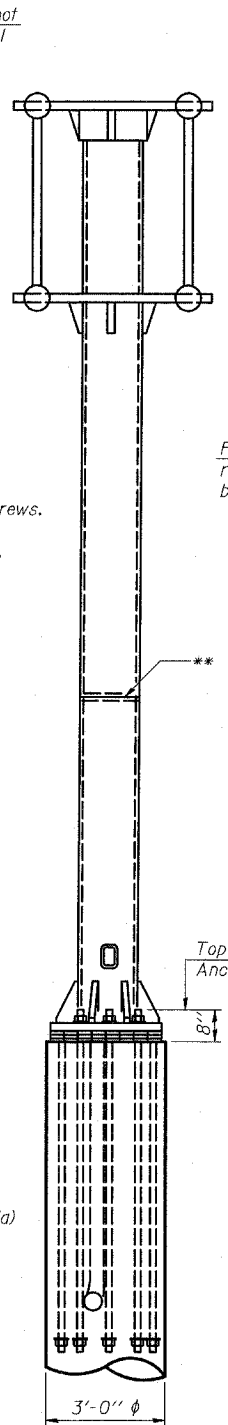
NUMBER	REVISION	DATE



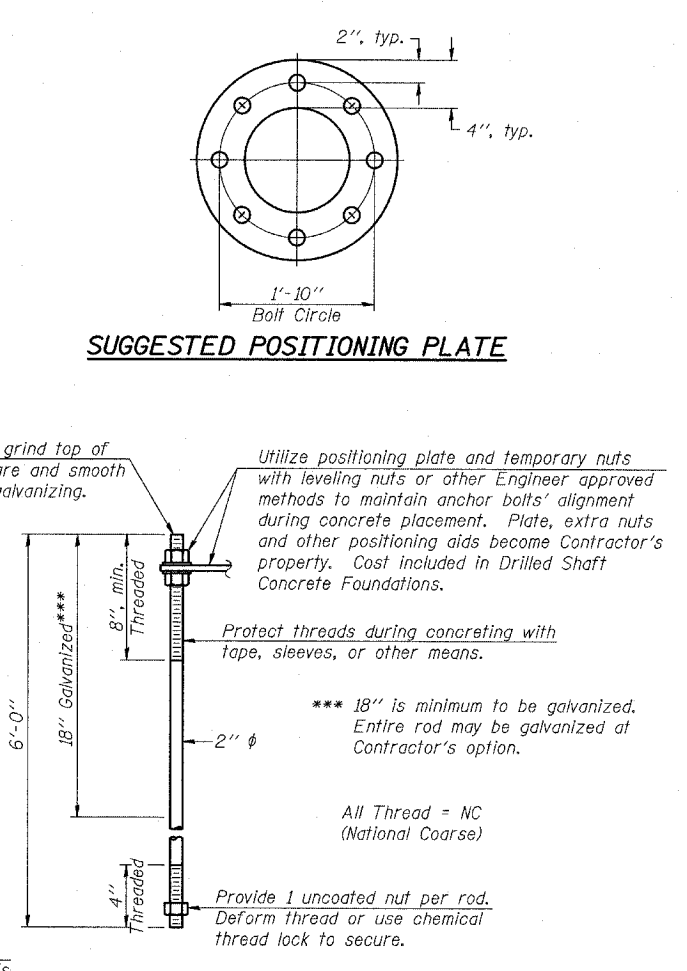
**DETAIL A**

\* Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.

\*\* Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.



**SIDE ELEVATION**



**ANCHOR ROD DETAIL**

Anchor rods shall conform to AASHTO M314 Grade 105 and meet Charpy V-Notch (CVN) energy of 15 lb.-ft. at 10° F. before galvanizing. Galvanize the upper 18" (minimum) and associated M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide an unfinished nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 200 lb.-ft. minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, using a straight beam, 2" φ 3.5 mhz. transducer, to insure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

**SUGGESTED POSITIONING PLATE**

Utilize positioning plate and temporary nuts with leveling nuts or other Engineer approved methods to maintain anchor bolts' alignment during concrete placement. Plate, extra nuts and other positioning aids become Contractor's property. Cost included in Drilled Shaft Concrete Foundations.

Protect threads during concreting with tape, sleeves, or other means.

\*\*\* 18" is minimum to be galvanized. Entire rod may be galvanized at Contractor's option.

All Thread = NC (National Coarse)

Provide 1 uncoated nut per rod. Deform thread or use chemical thread lock to secure.

Structure Number	Station	H
1C049U041R	543+93.18	24.52'

Note: "H" based on 15'-0" or actual sign height, whichever is greater.

OSC-A-4

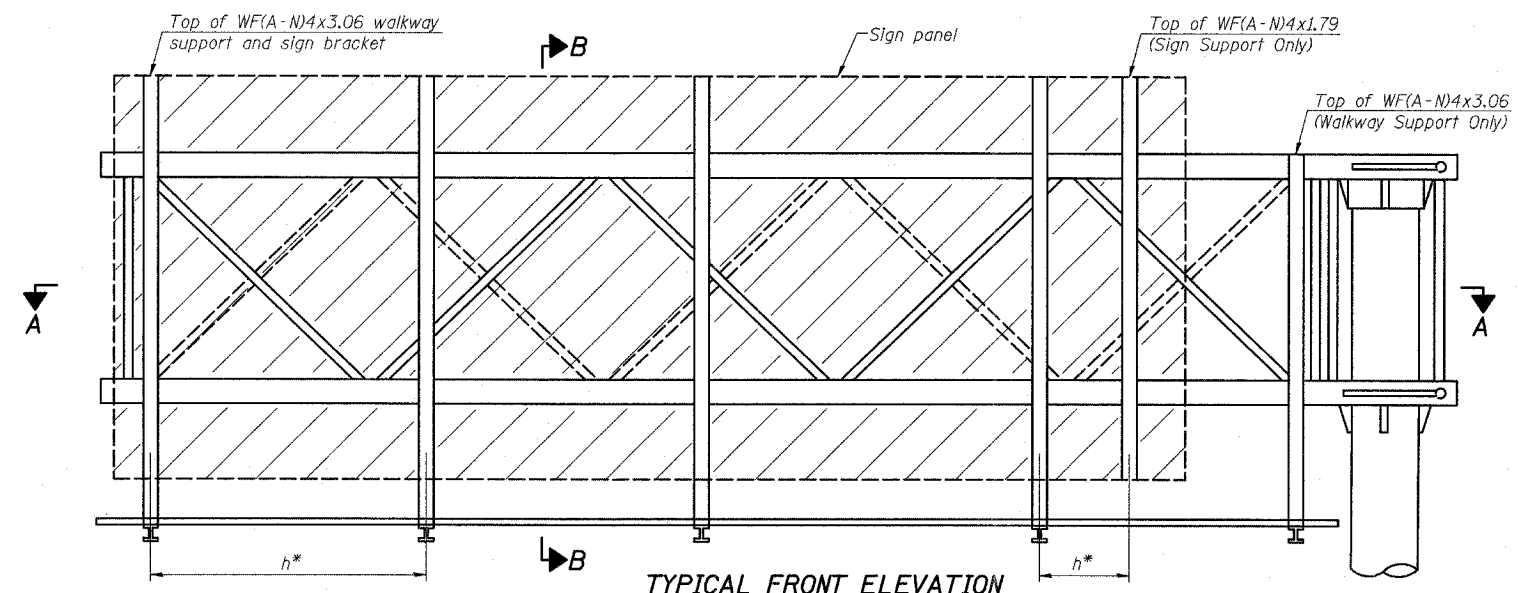
6/01/2007

REVISIONS	
NAME	DATE

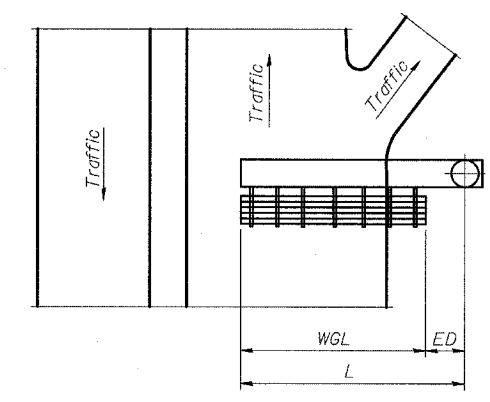
ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
CANTILEVER SIGN STRUCTURES  
TYPE I-C-A TRUSS SUPPORT POST  
ALUMINUM TRUSS & STEEL POST

SCALE: N.T.S. DRAWN BY: JF, AF  
DATE: MAY 12, 2008 CHECKED BY: MAF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	•	LAKE	469	140
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-404-99	ILLINOIS	FED. AID PROJ. NO.		
• 125X-HB-(1&2) R-1	CONTRACT		• 601	

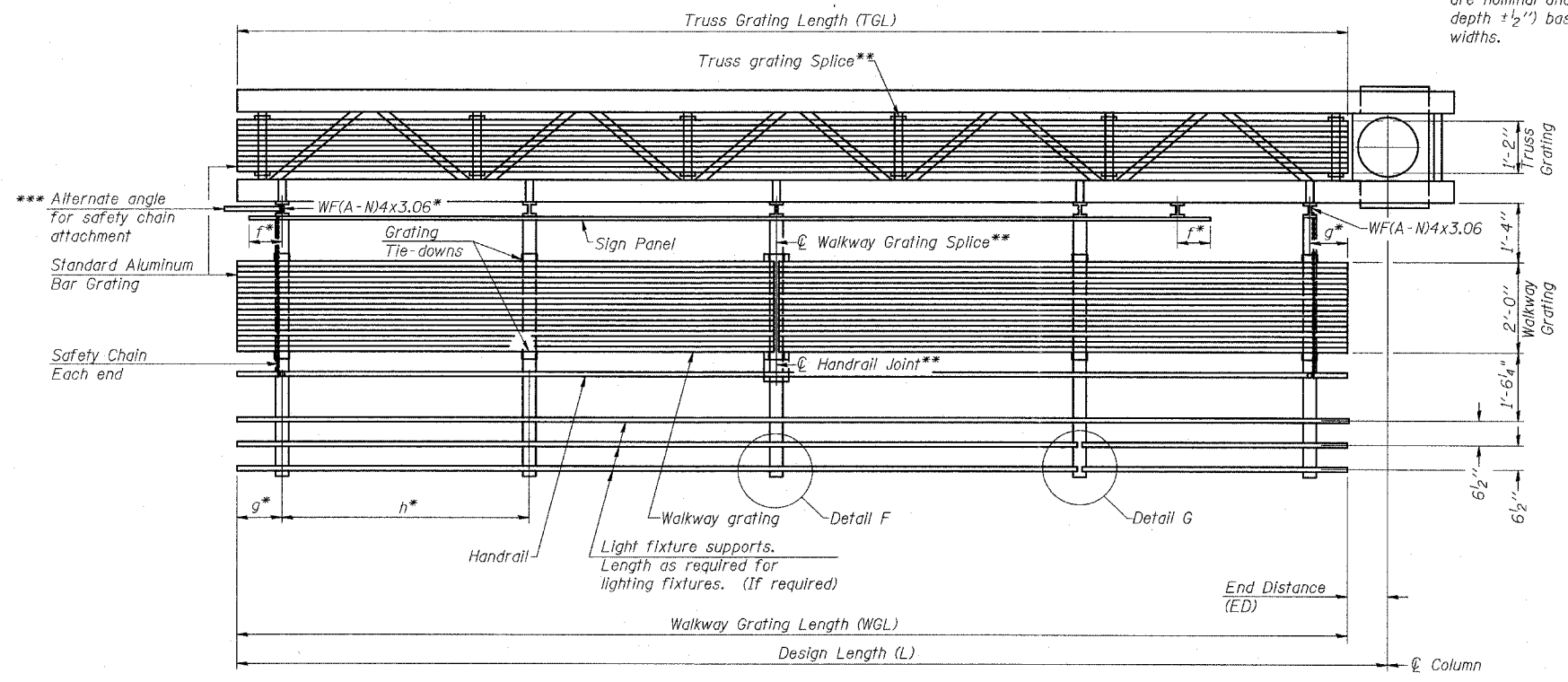


**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.



**PLAN WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath truss varies)

Walkway and truss grating dimensions are nominal and may vary (width ± 1/2", depth ± 1/2") based on available standard widths.



**SECTION A-A**

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

Handrail and walkway grating shall span a minimum of three brackets between splices.  
\*\* Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left( \frac{\text{Post O.D.}}{2} + 6'' \right)$$

NUMBER	REVISION	DATE

Structure Number	Station	WGL	ED	TGL
1C049U041R----	543+93.18	16.0'	4.75'	19.5'

Notes:  
Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:  
f = 12" maximum, 4" minimum (End of sign to center of nearest bracket)  
g = 12" maximum, 4" minimum (End of walkway to center of nearest bracket)  
h = 6'-0" maximum (center to center sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)  
\*\*\* If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on base sheet OSC-A-8  
For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7.  
For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

**BRACKET TABLE**

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

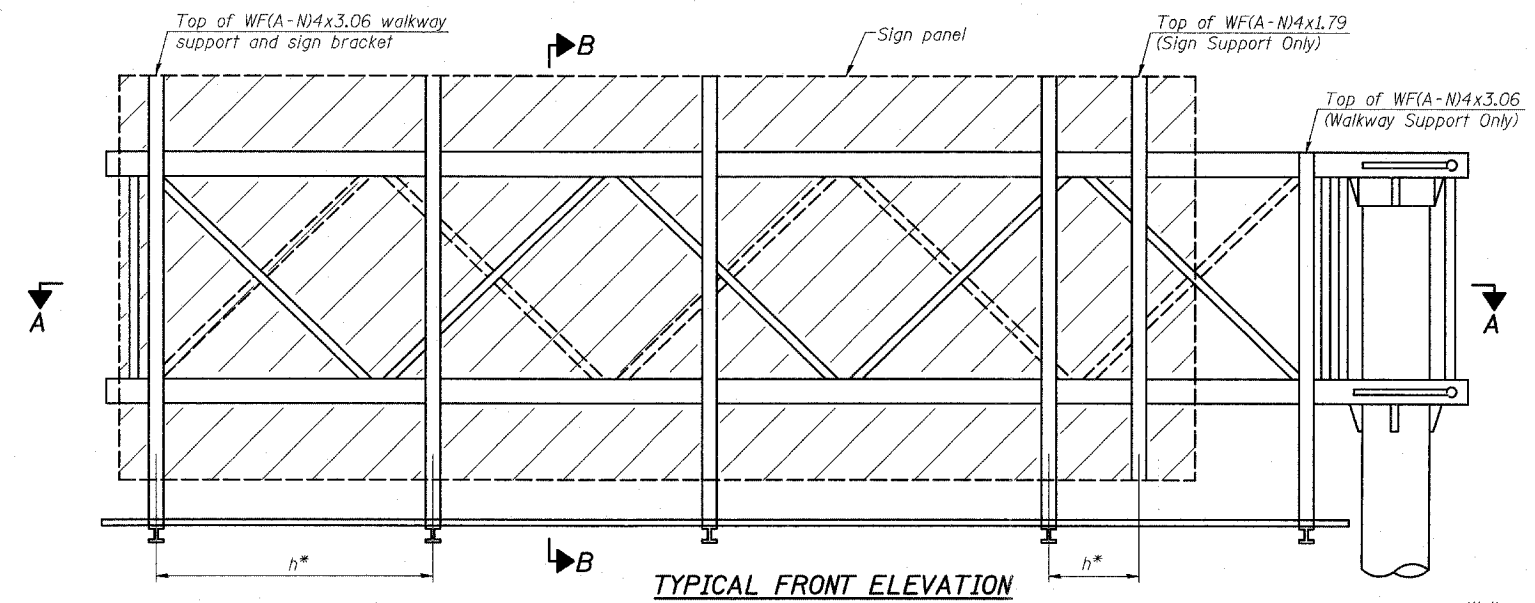
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
CANTILEVER SIGN STRUCTURES  
ALUMINUM WALKWAY DETAILS  
ALUMINUM TRUSS & STEEL POST  
SCALE: N.T.S. DRAWN BY: JF, AF  
DATE: MAY 12, 2008 CHECKED BY: MAF

PLAN  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
NOTE BOOK NO. \_\_\_\_\_  
STRUCTURE NO. \_\_\_\_\_  
FILE NAME: \_\_\_\_\_

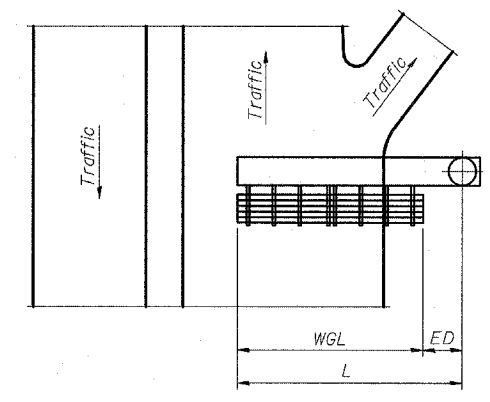
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STRUCTURE NO. \_\_\_\_\_  
FILE NAME: \_\_\_\_\_

PLAN  
 SURVEYED  
 PLOTTED  
 CHECKED  
 DATE  
 BY  
 NOTE BOOK NO.  
 DATE OF WAY CHECKED  
 CADD FILE NAME

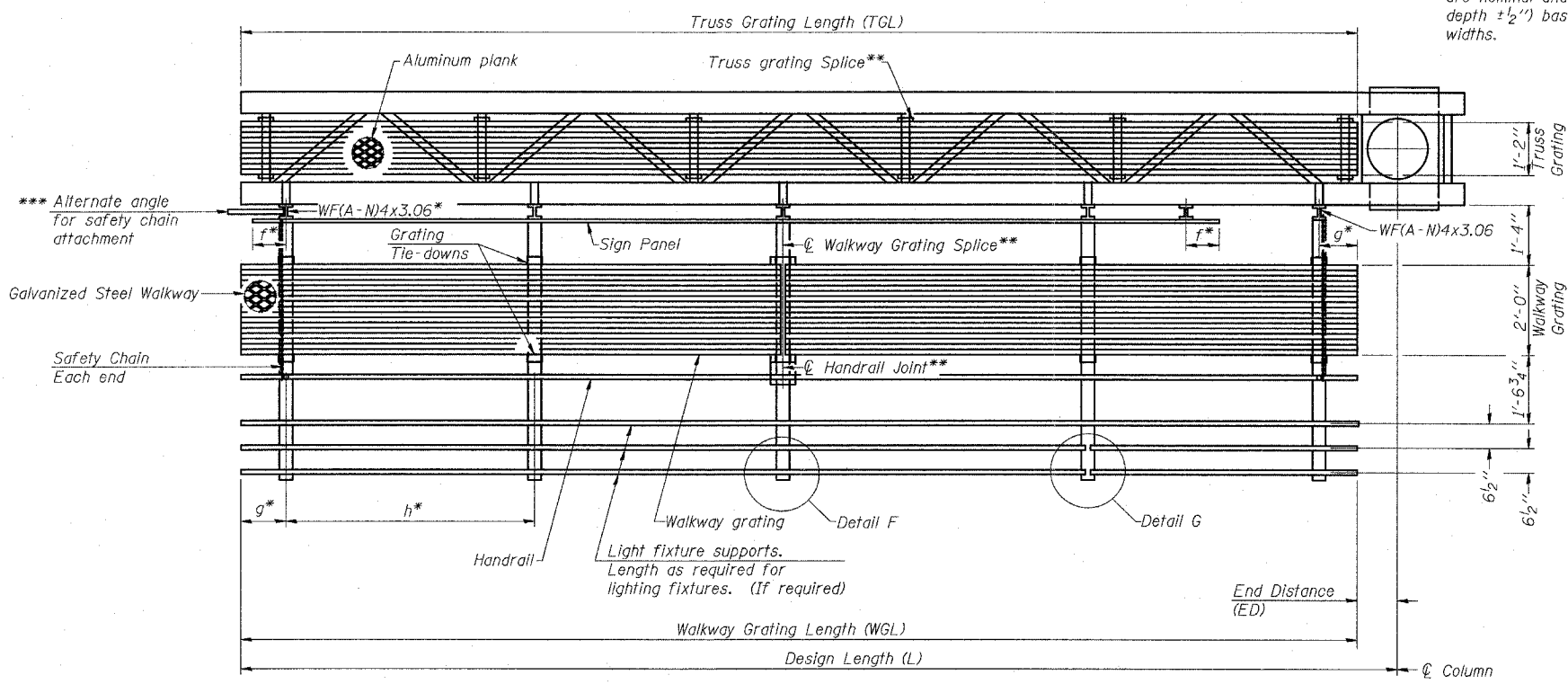


**TYPICAL FRONT ELEVATION**  
 With lights and handrail omitted for clarity.

Walkway and truss grating dimensions are nominal and may vary (width ± 1/2", depth ± 1/2") based on available standard widths.



**PLAN WALKWAY AND HANDRAIL SKETCH**  
 (Road plan beneath truss varies)



**SECTION A-A**

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

Handrail and walkway grating shall span a minimum of three brackets between splices.  
 \*\* Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left( \frac{\text{Post O.D.}}{2} + 6'' \right)$$

NUMBER	REVISION	DATE

Structure Number	Station	WGL	ED	TGL
100490041R	543+93.18	16.0'	4.75'	19.5'

Notes:  
 \* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:  
 f = 12" maximum, 4" minimum (End of sign to center of nearest bracket)  
 g = 12" maximum, 4" minimum (End of walkway to center of nearest bracket)  
 h = 6'-0" maximum (center to center sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)  
 \*\*\* If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on base sheet OSC-A-8.  
 For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7S.  
 For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

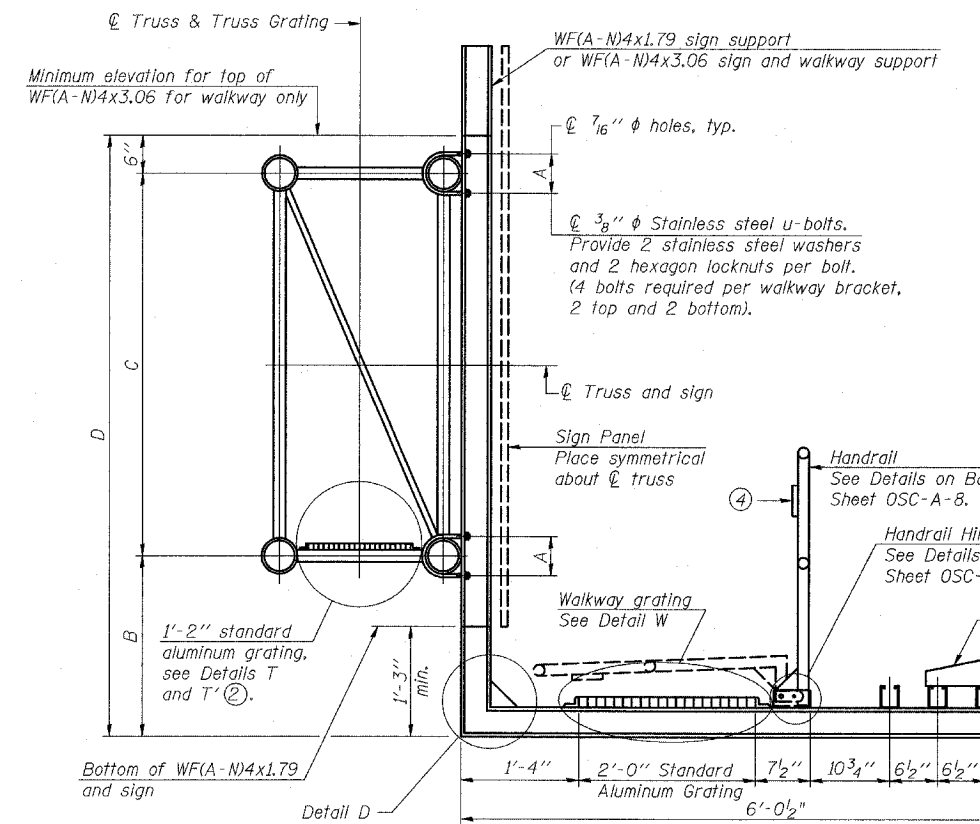
**BRACKET TABLE**

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
8'-0"	8'-0"	2
14'-0"	14'-0"	3
20'-0"	20'-0"	4
26'-0"	26'-0"	5
32'-0"	32'-0"	6

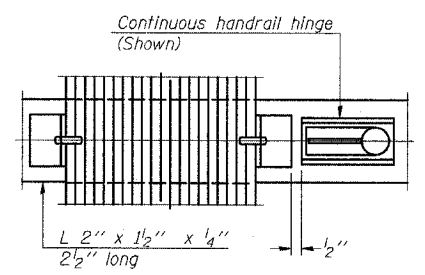
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 CANTILEVER SIGN STRUCTURES  
 ALTERNATE STEEL WALKWAY DETAIL  
 ALUMINUM TRUSS & STEEL POST  
 SCALE: N.T.S.  
 DATE: MAY 12, 2008  
 DRAWN BY: JF, AF  
 CHECKED BY: MAF

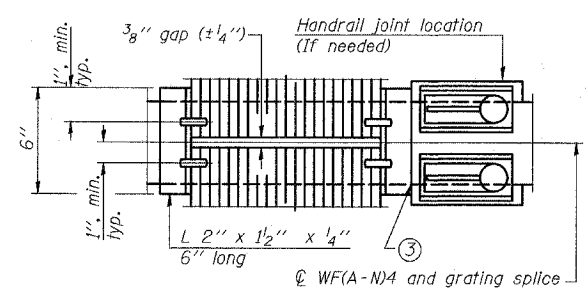
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SH. N.
346		LAKE	469	1
STA.	TO STA.		FED. AID PROJ.	
FED. ROAD DIST. NO. D-91-404-99	ILLINOIS	FED. AID PROJ.		
• 125X-HB-(1&2) R-1		CONTRACT # 60		



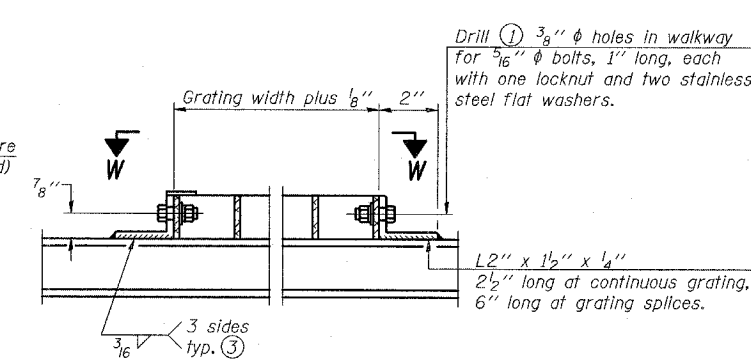
**SECTION B-B**  
Sign shall be even with the top of the bracket, but it may extend no more than 6" above the top of the bracket for field adjustments.



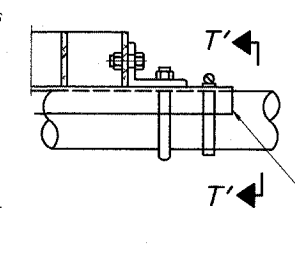
**(CONTINUOUS WALKWAY GRATING)**



**SECTION W-W (AT WALKWAY GRATING SPLICE)**



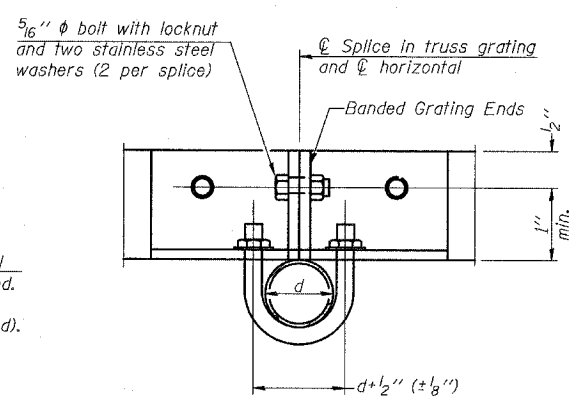
**DETAIL W**  
(Walkway grating)



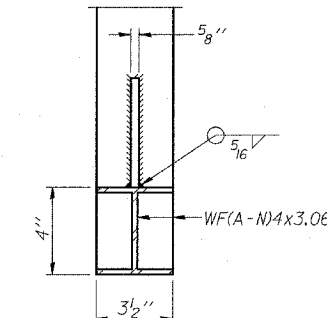
**DETAIL T'**  
(Truss grating splice)  
Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.

**SPECIFICATIONS FOR STANDARD ALUMINUM GRATING**  
Main Bearing Bars (MBB) shall be 3/16" x 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.  
Cross bars (CB) shall be 3/16" x 1/2" on 4" centers and conform to ASTM B211 Alloy 6063-T5 or 6061-T6.

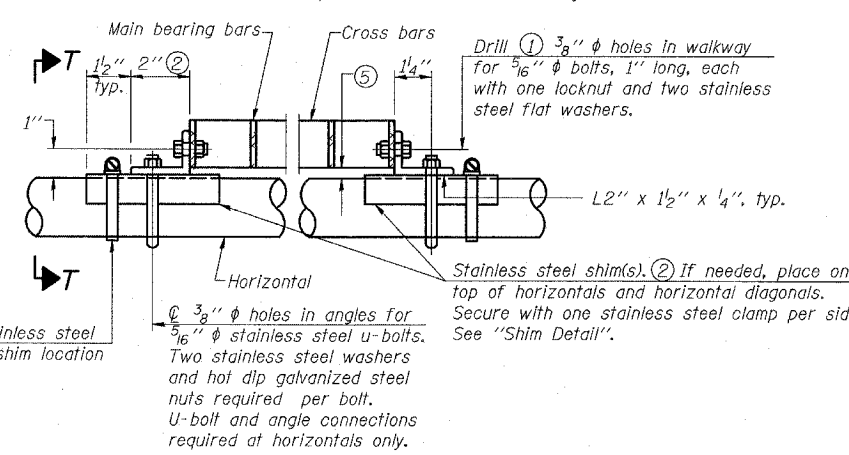
**OR**  
Aluminum Grating with modified "T" sections for main bearing bars shall meet the following requirements:  
Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.<sup>3</sup> per bar, a depth of 1/2", spaced on 1 3/16" centers.  
Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.



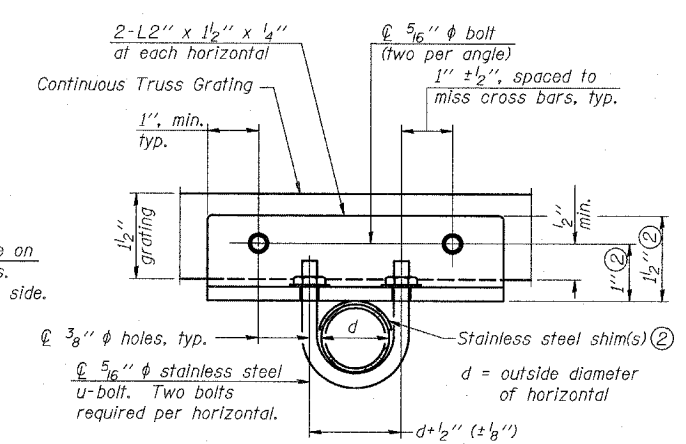
**SECTION T'-T'**



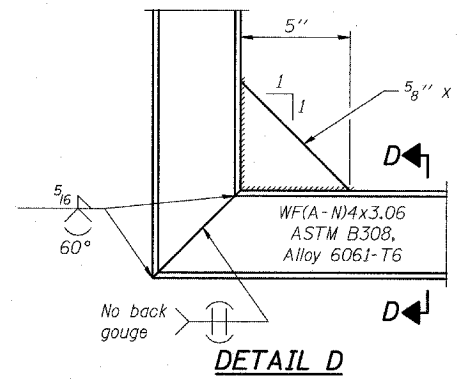
**SECTION D-D**  
Screw type stainless steel tube clamp at shim location



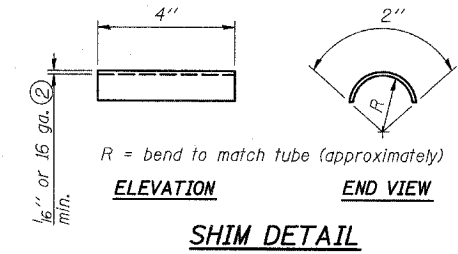
**DETAIL T**  
(Continuous Truss grating)



**SECTION T-T**



**DETAIL D**



**SHIM DETAIL**

NUMBER	REVISION	DATE

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OSC-A-8.)
- 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.

Structure Number	Station	A	B	C	D
1C049U041R----	543+93.18	5.5'	4.25'	4.5'	9.25'

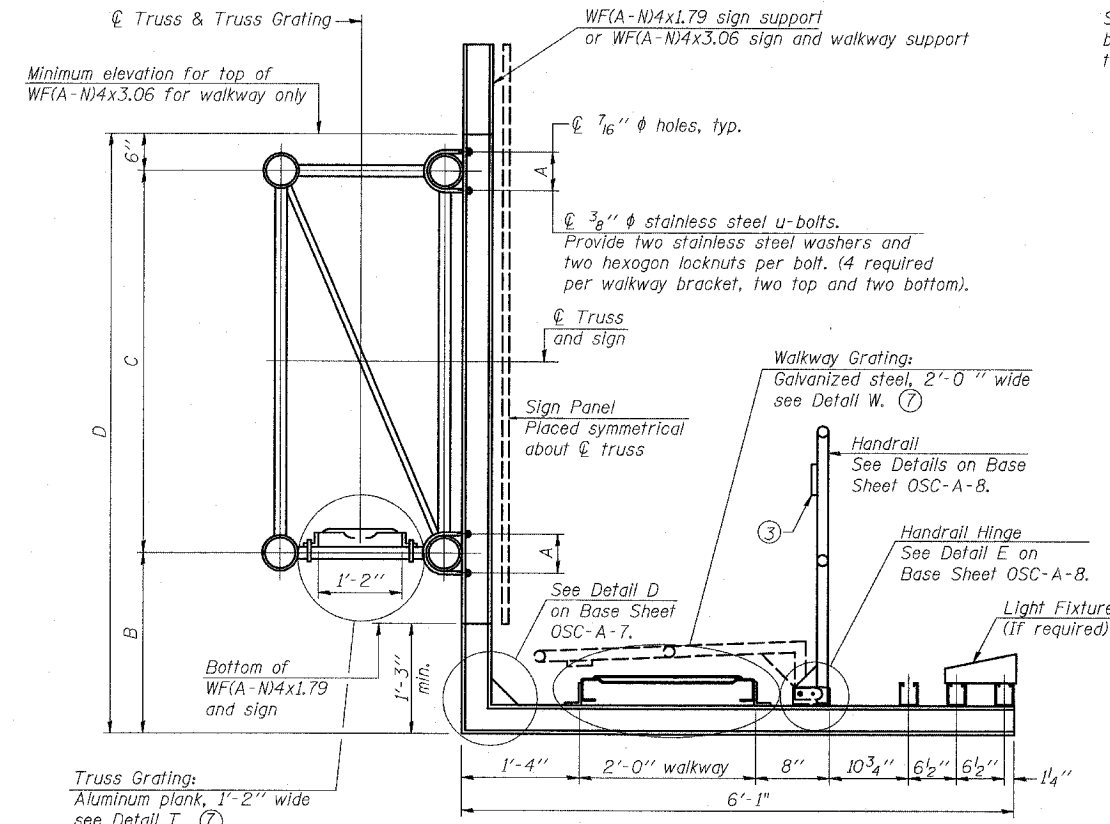
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
CANTILEVER SIGN STRUCTURES  
WALKWAY DETAILS  
ALUMINUM TRUSS & STEEL POST  
SCALE: N.T.S. DRAWN BY: JF, AF  
DATE: MAY 12, 2008 CHECKED BY: MAF

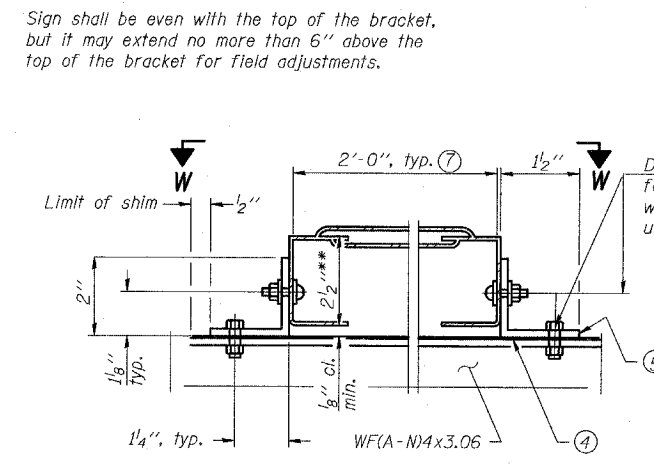
DATE	
BY	
PLAN	
DATE	
BY	
PROFILE	
DATE	
BY	

DATE	
BY	
PROFILE	
DATE	
BY	

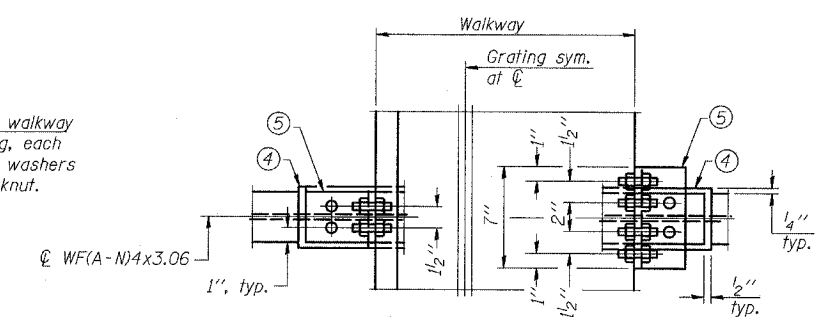
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SH N
346	.	LAKE	469	1/2
STA.	TO STA.		FED. AID PROJ.	CONTRACT # 60
FED. ROAD DIST. NO. D-91-404-99	ILLINOIS	FED. AID PROJ.		
125X-HB-(G&2) R-1				



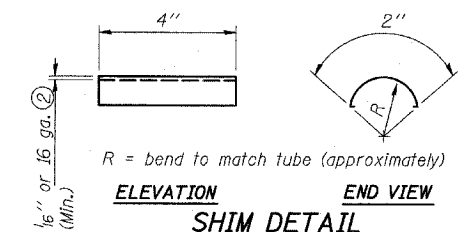
**SECTION B-B**



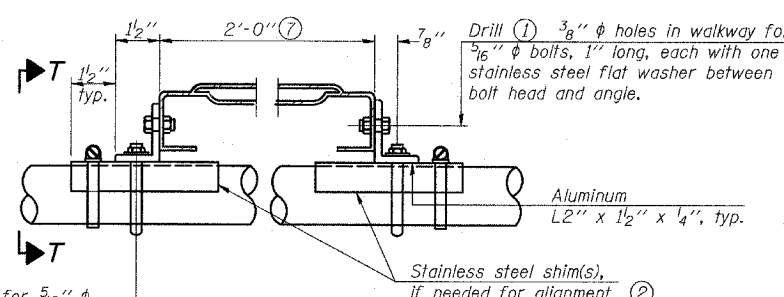
**DETAIL W**  
**GALVANIZED STEEL WALKWAY GRATING**



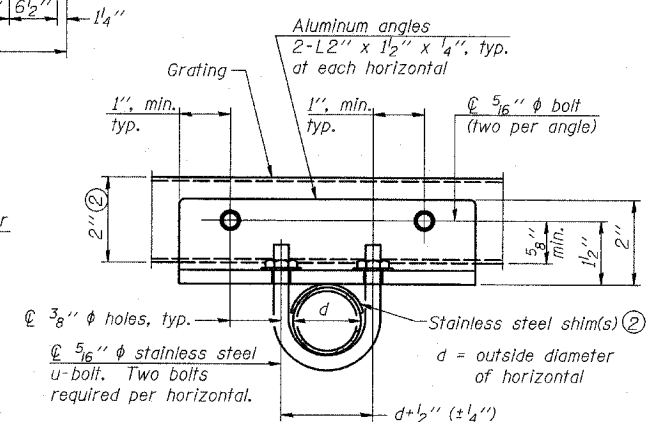
**WALKWAY GRATING CONTINUOUS AT WALKWAY GRATING SPLICE**  
**SECTION W-W**



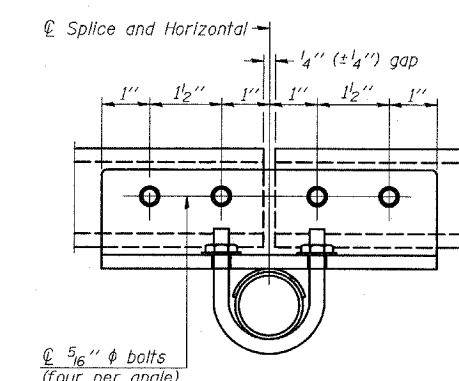
**SHIM DETAIL**



**DETAIL T**  
(Truss grating at horizontal)



**SECTION T-T**  
(Truss Grating Continuous)



**SECTION T-T**  
(Truss Grating Splice)

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- Stainless steel shims shall be placed under angles at horizontals and horizontal diagonals if needed to compensate for alignment variations and differences in horizontal diagonal pipe sizes beyond adjustment provided by angles. Secure with one stainless steel clamp per location, see "Shim Detail". Thicker shim plates may be used when needed subject to shims performing properly.
- 1/2 inch x 1/2 inch x 2 inch welded to handrail posts to protect locations that contact grating.
- 1/16 inch (or 16 ga.) x 2 1/2 inch x 4 inch stainless steel shim adhered to top of WF(A-N)4x3.06 beneath each galvanized angle, typ. Adhesives for shims shall be suitable for materials joined and full exposure conditions.
- Galvanized steel L2 inch x 2 inch x 1/4 inch, 3 1/2 inch long with continuous grating 7 inch long at grating splice.
- Details shown are considered equal alternatives to Aluminum Walkway Details and may be substituted by Contractor at no charge in contract cost.
- Perforated or expanded metal grating providing a skid resistant (non-serrated) surface and capable of supporting a 500 pound concentrated load with a 6'-0 inch clear span. Walkway and truss grating dimensions are nominal and may vary (width +/- 1/2 inch, depth +/- 1/2 inch) based on available standard sizes. Cut ends of grating shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

**ALUMINUM TRUSS GRATING**

Structure Number	Station	A	B	C	D
1C049U041R----	543+93.18	5.5'	4.25'	4.5'	9.25'

NUMBER	REVISION	DATE

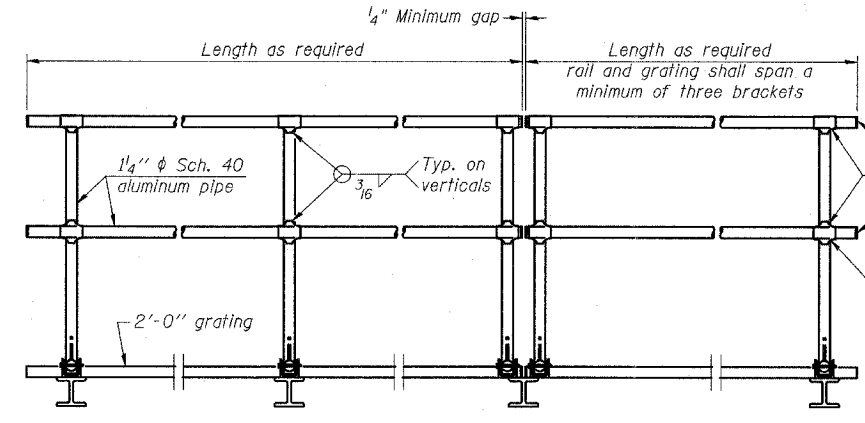
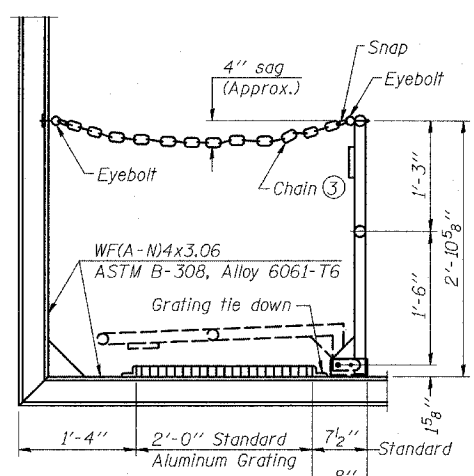
OSC-A-7S 6/01/2007

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132

CANTILEVER SIGN STRUCTURES  
ALTERNATE WALKWAY DETAILS

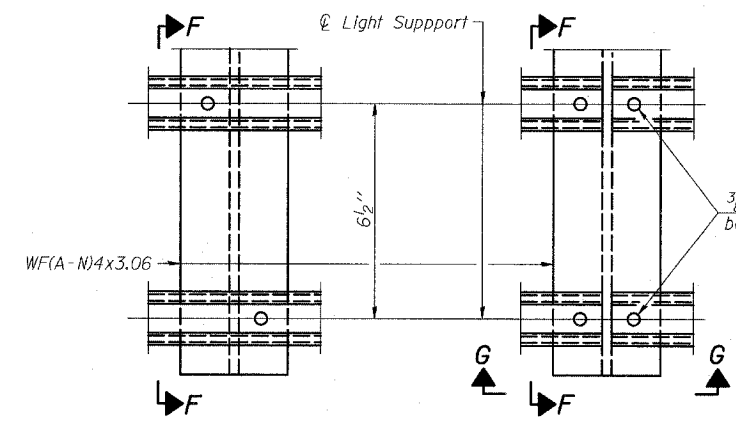
SCALE: N.T.S. DRAWN BY: JF, AF  
DATE: MAY 12, 2008 CHECKED BY: MAF



**HANDRAIL DETAILS**

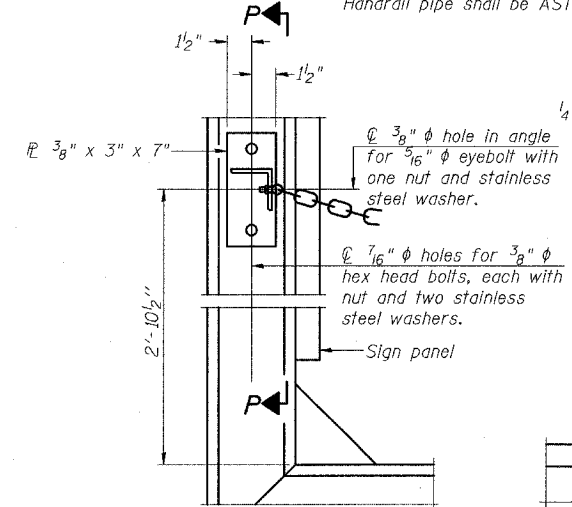
Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.

- ① Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends)
- ② Horizontal handrail member shall be continuous thru fitting. Provide 1/16" hole in fitting for 3/8" bolt. Field drill 1/16" hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 1/16" holes on top rail at ends only.)

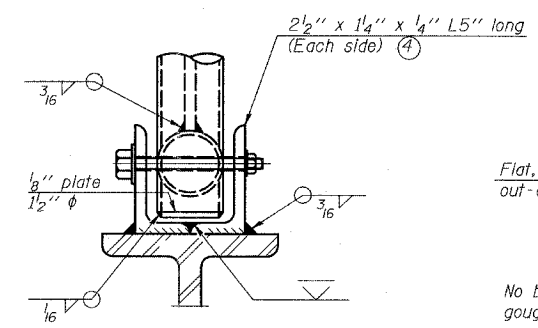


**LIGHTING FIXTURE MOUNTS (IF REQUIRED)**

- ⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

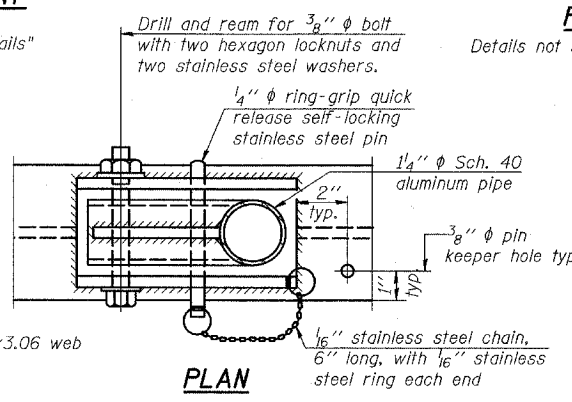
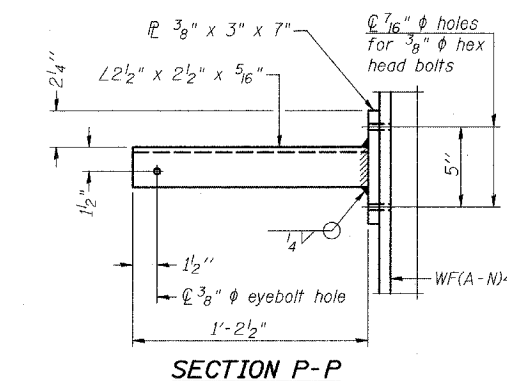
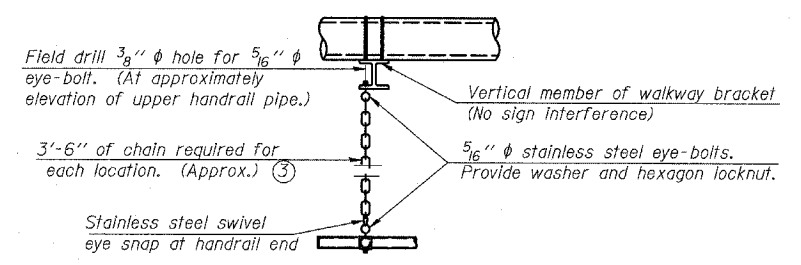


**SIDE ELEVATION**

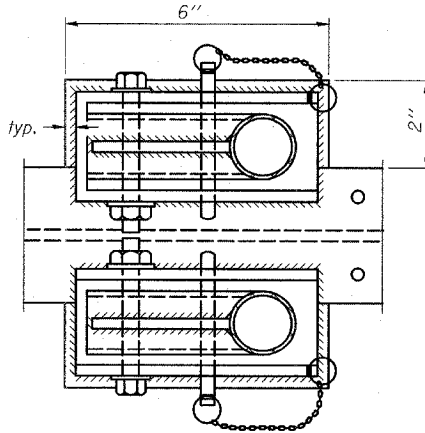


**FRONT ELEVATION**

**ELEVATION AT HANDRAIL JOINT** ④  
Details not shown same as "FRONT ELEVATION"



**PLAN**



**PLAN AT HANDRAIL JOINT**

NUMBER	REVISION	DATE

OSC-A-8

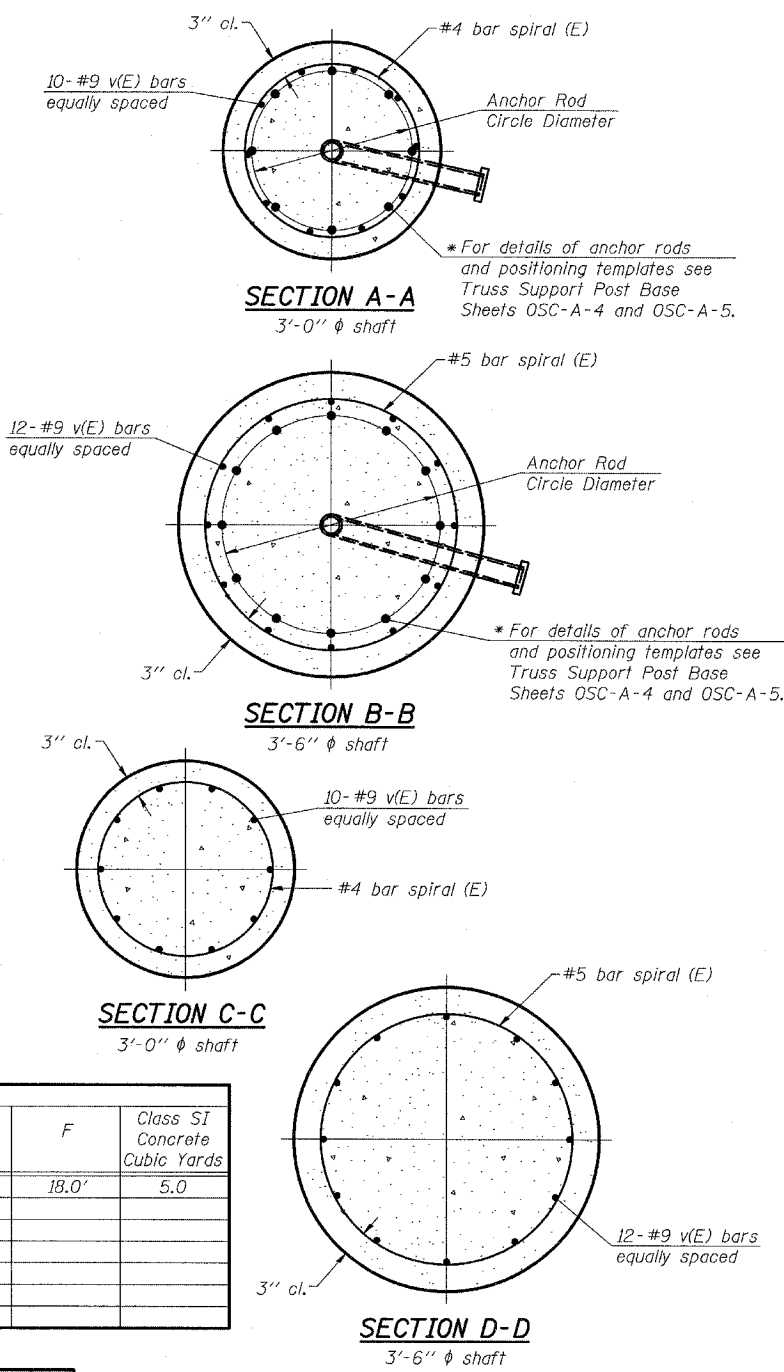
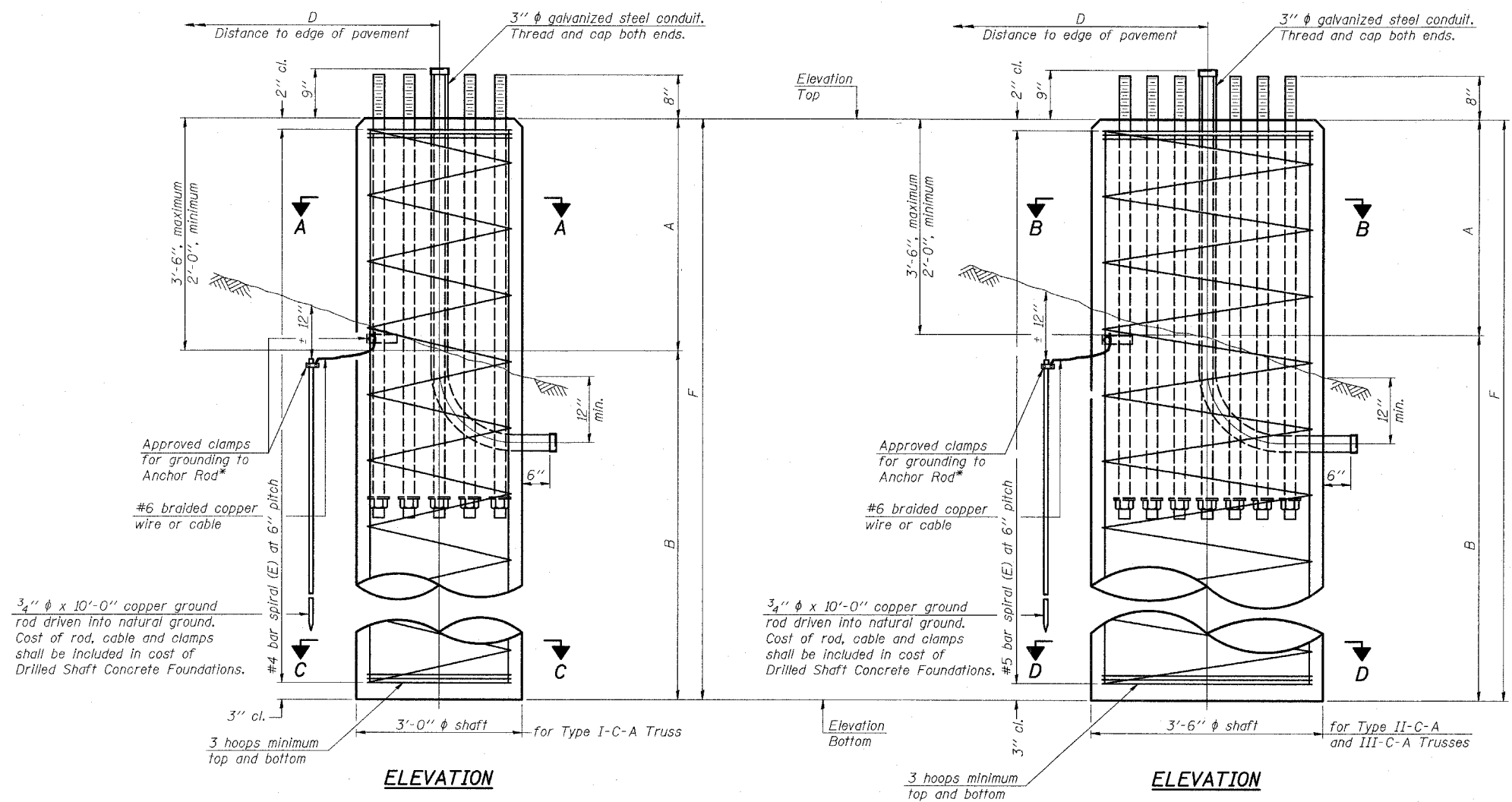
6/01/2007

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
CANTILEVER SIGN STRUCTURES  
HANDRAIL DETAILS  
ALUMINUM TRUSS & STEEL POST  
SCALE: N.T.S.      DRAWN BY: JF, AF  
DATE: MAY 12, 2008      CHECKED BY: MAF



\* Grind anchor rod to bright finish at ground clamp location before installing clamp.



**NOTES:**  
 The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown in the Foundation Data Table will be the result of site specific designs.  
 If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.  
 No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.  
 Concrete shall be placed monolithically, without construction joints.  
 Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.  
 A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	Qu	A	B	F	Class SI Concrete Cubic Yards
1C049U041R	543+93.18	I-C-A	3.0'	686.40	668.40	3.30 tsf	2.0'	16.0'	18.0'	5.0

Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (in)	"B" Depth (ft)	Anchor Rods		Anchor Rod Circle Diameter (in)
						No.	Diameter (in)	
I-C-A	OSC-A-4	25	170	3.0	16.0	8	2	22
II-C-A	OSC-A-5	30	170	3.5	17.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	32.0	12	2	30

NUMBER	REVISION	DATE













REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 CANTILEVER SIGN STRUCTURES  
 DRILLED SHAFT  
 ALUMINUM TRUSS & STEEL POST  
 SCALE: N.T.S.  
 DATE: MAY 12, 2008  
 DRAWN BY: JF, AF  
 CHECKED BY: MAF

F.A.P. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	449	143
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
125X-HB-(1&2) R-1		CONTRACT # 60826		

**EXISTING EQUIPMENT TO BE REMOVED**

**LEGEND**

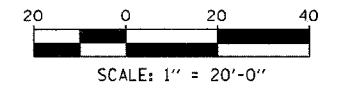
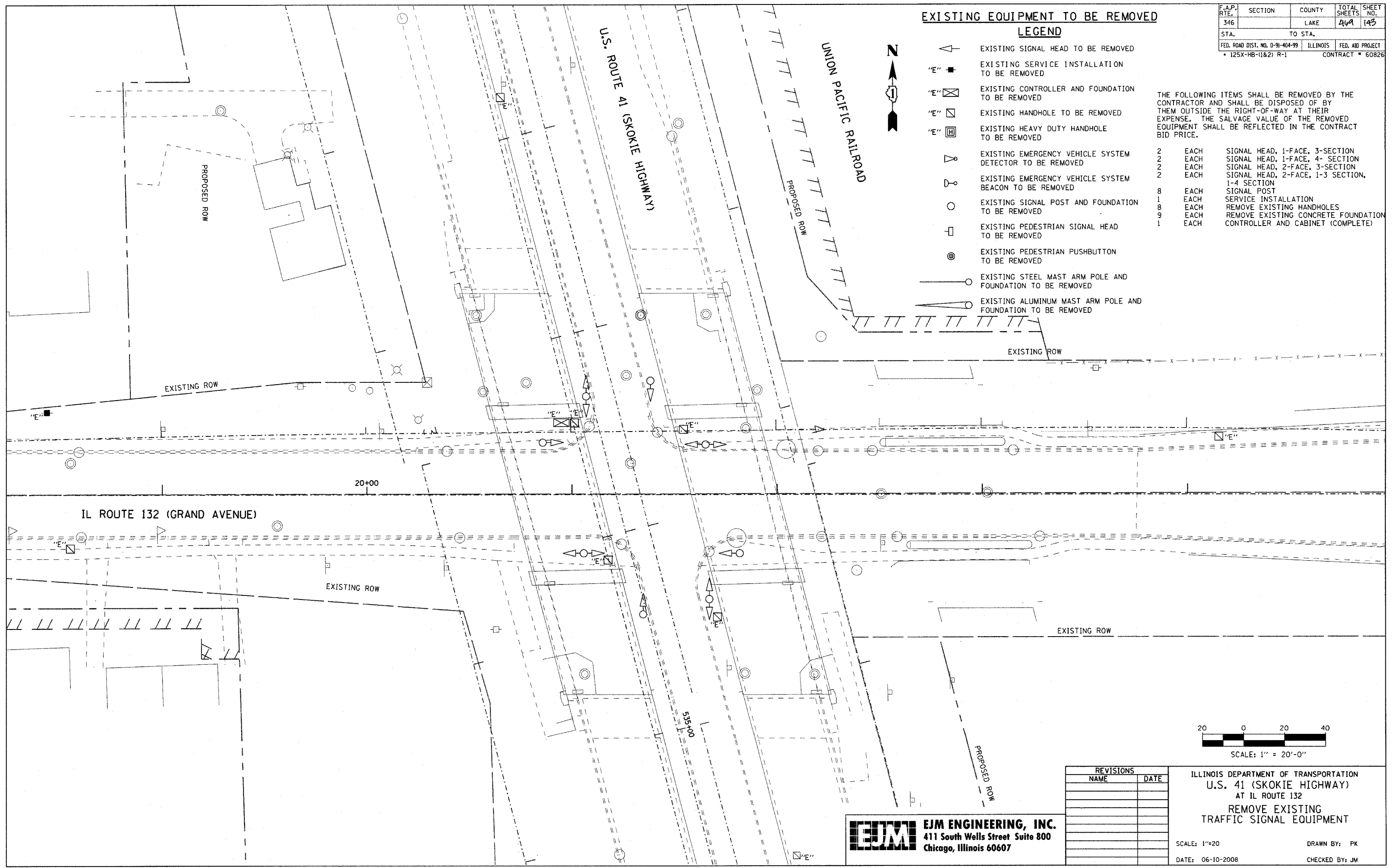
-  EXISTING SIGNAL HEAD TO BE REMOVED
-  EXISTING SERVICE INSTALLATION TO BE REMOVED
-  EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
-  EXISTING HANDHOLE TO BE REMOVED
-  EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED
-  EXISTING EMERGENCY VEHICLE SYSTEM DETECTOR TO BE REMOVED
-  EXISTING EMERGENCY VEHICLE SYSTEM BEACON TO BE REMOVED
-  EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
-  EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
-  EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
-  EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
-  EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 4-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-4 SECTION
8	EACH	SIGNAL POST
1	EACH	SERVICE INSTALLATION
8	EACH	REMOVE EXISTING HANDHOLES
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	CONTROLLER AND CABINET (COMPLETE)

DATE
BY
REVISIONS
ALIGNED CHECKED
PLANNED CHECKED
NOTE BOOK NO.
FIELD FILE NAME
PLAN

DATE
BY
REVISIONS
GRADES CHECKED
PLANNED CHECKED
NOTE BOOK NO.
STRUCTURE NOTATIONS CHKD
PROFILE



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132**  
 REMOVE EXISTING  
 TRAFFIC SIGNAL EQUIPMENT

SCALE: 1"=20'      DRAWN BY: PK  
 DATE: 06-10-2008      CHECKED BY: JM

**EJM ENGINEERING, INC.**  
 411 South Wells Street Suite 800  
 Chicago, Illinois 60607

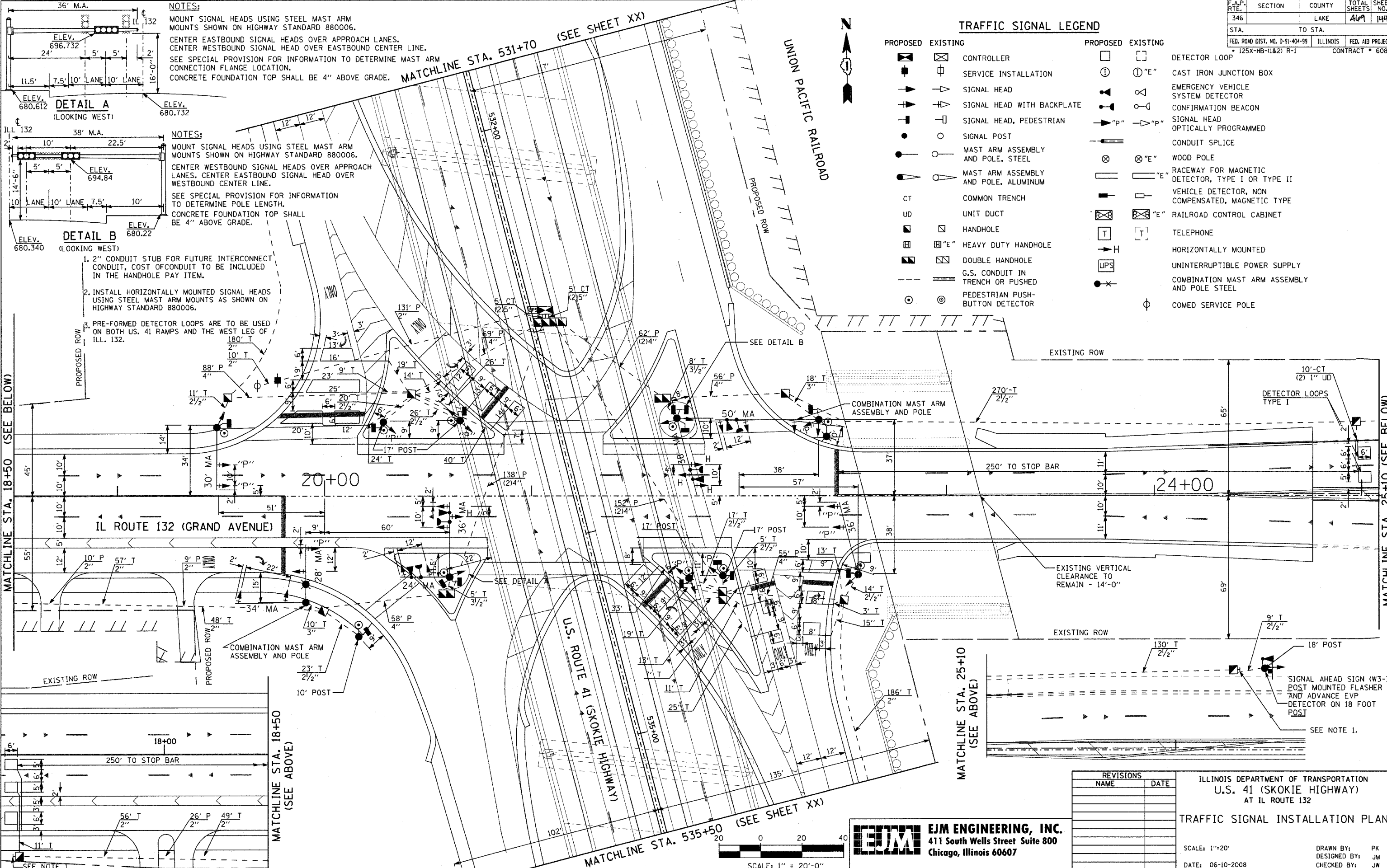
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	144
STA.	TO STA.		FED. AID PROJECT	CONTRACT
			ILLINOIS	60826
FED. ROAD DIST. NO. D-91-404-99 ILLINOIS				
• 125X-HB-(1&2) R-1				

**TRAFFIC SIGNAL LEGEND**

PROPOSED	EXISTING	DESCRIPTION	PROPOSED	EXISTING	DESCRIPTION
		CONTROLLER			DETECTOR LOOP
		SERVICE INSTALLATION			CAST IRON JUNCTION BOX
		SIGNAL HEAD			EMERGENCY VEHICLE SYSTEM DETECTOR
		SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON
		SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED
		SIGNAL POST			CONDUIT SPLICE
		MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE
		MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
CT		COMMON TRENCH			VEHICLE DETECTOR, NON COMPENSATED, MAGNETIC TYPE
UD		UNIT DUCT			RAILROAD CONTROL CABINET
		HANDHOLE			TELEPHONE
		HEAVY DUTY HANDHOLE			HORIZONTALLY MOUNTED
		DOUBLE HANDHOLE			UNINTERRUPTIBLE POWER SUPPLY
		G.S. CONDUIT IN TRENCH OR PUSHED			COMBINATION MAST ARM ASSEMBLY AND POLE STEEL
		PEDESTRIAN PUSH-BUTTON DETECTOR			COMED SERVICE POLE

DATE	BY	REVISIONS

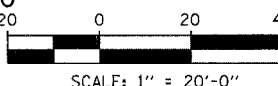
DATE	BY	REVISIONS



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**U.S. 41 (SKOKIE HIGHWAY)**  
 AT IL ROUTE 132  
**TRAFFIC SIGNAL INSTALLATION PLAN**  
 SCALE: 1"=20'  
 DATE: 06-10-2008  
 DRAWN BY: PK  
 DESIGNED BY: JM  
 CHECKED BY: JW

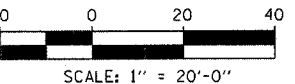
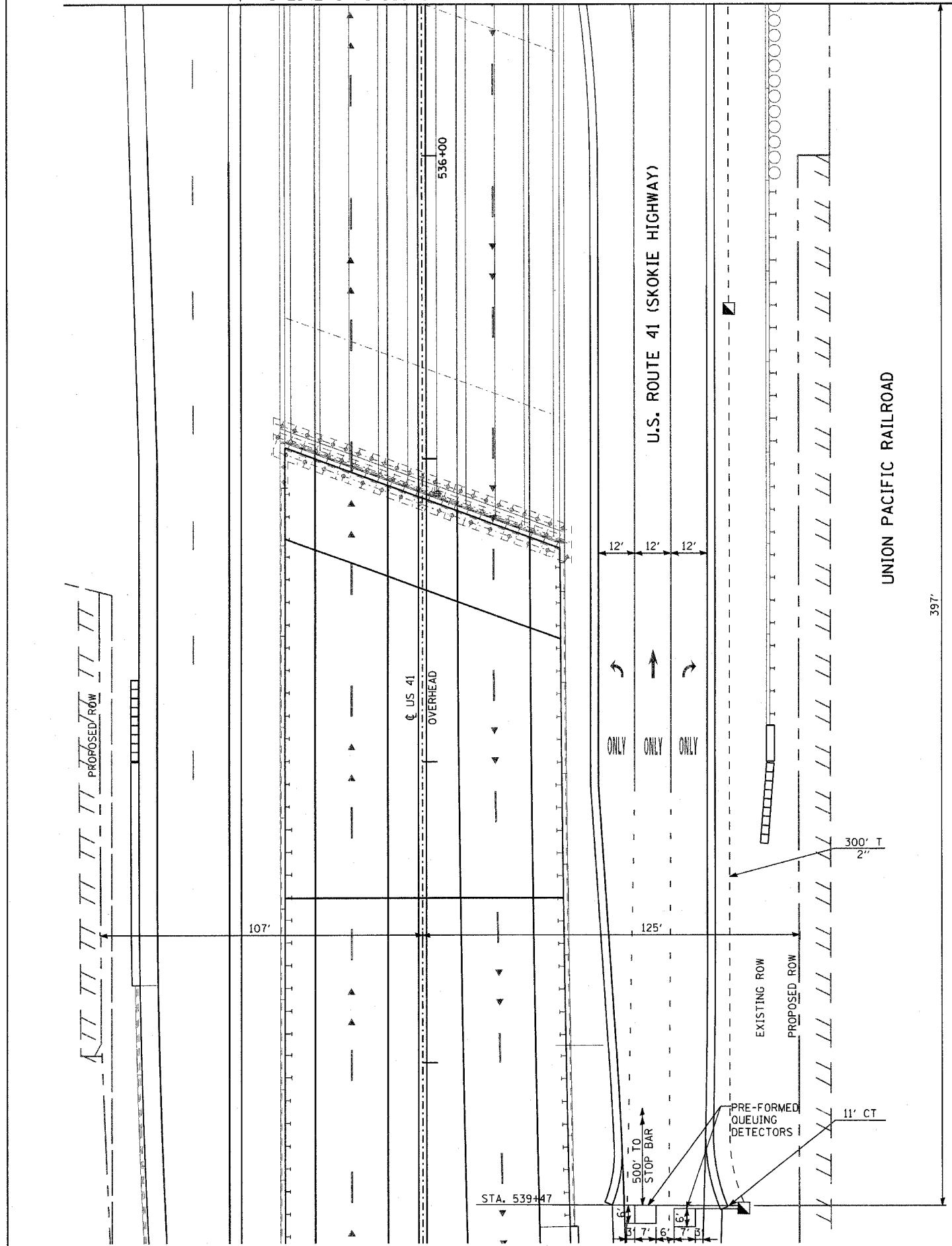
**EJM ENGINEERING, INC.**  
 411 South Wells Street Suite 800  
 Chicago, Illinois 60607



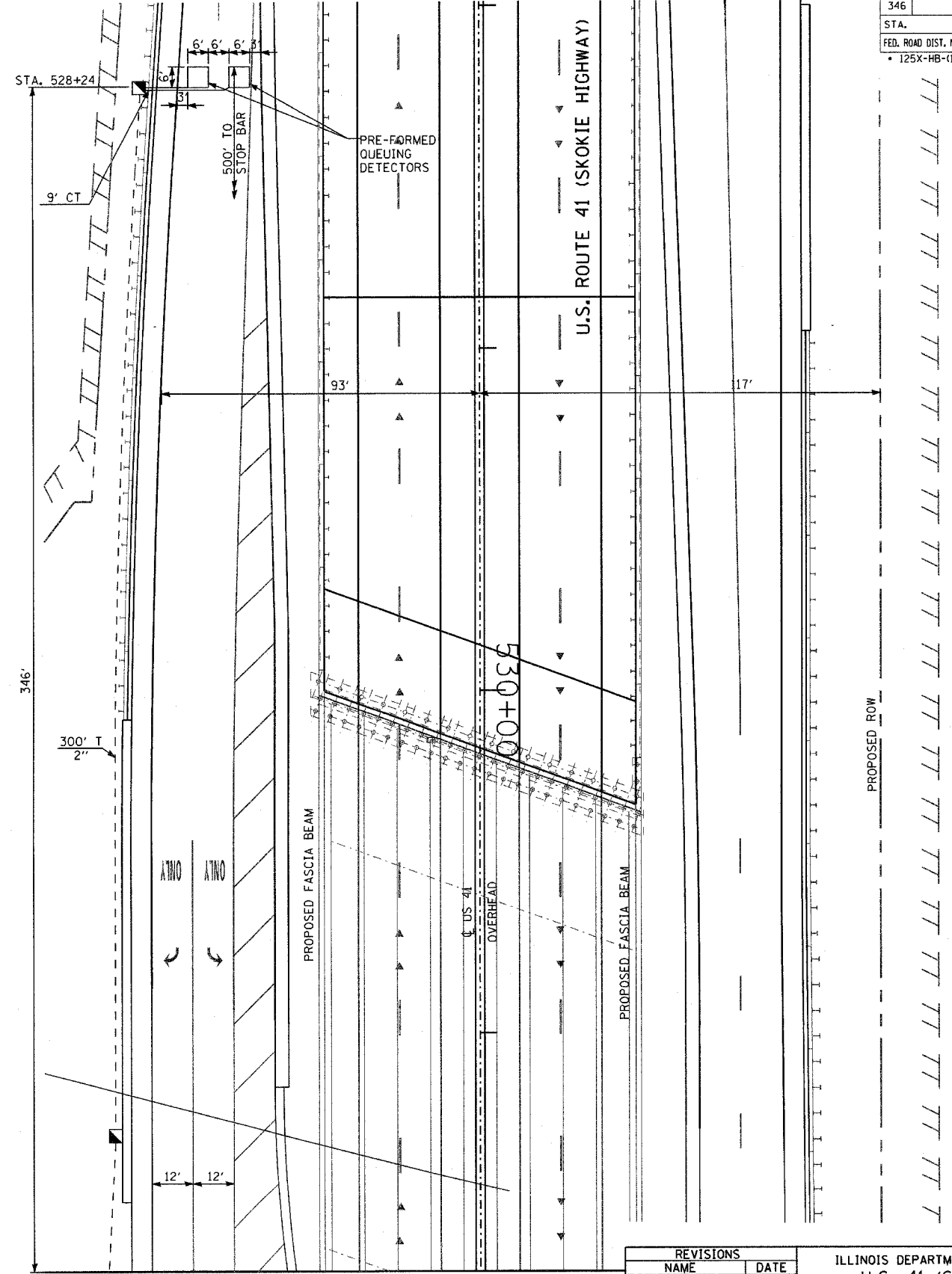
PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	PROJ. FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	STRUCTURE NOTATIONS CIPID	

MATCHLINE STA. 535+50 (SEE SHEET XX)



MATCHLINE STA. 531+70 (SEE SHEET XX)



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	145
STA.	TO STA.			
FED. ROAD DIST. NO. 0-91-404-99	ILLINOIS	FED. AID PROJECT		
• 125X-HB-(1&2) R-1		CONTRACT • 60826		

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 TRAFFIC SIGNAL INSTALLATION PLAN  
 SCALE: 1"=20'  
 DATE: 06-10-2008  
 DRAWN BY: PK  
 DESIGNED BY: JM  
 CHECKED BY: JW

**EJM ENGINEERING, INC.**  
 411 South Wells Street Suite 800  
 Chicago, Illinois 60607

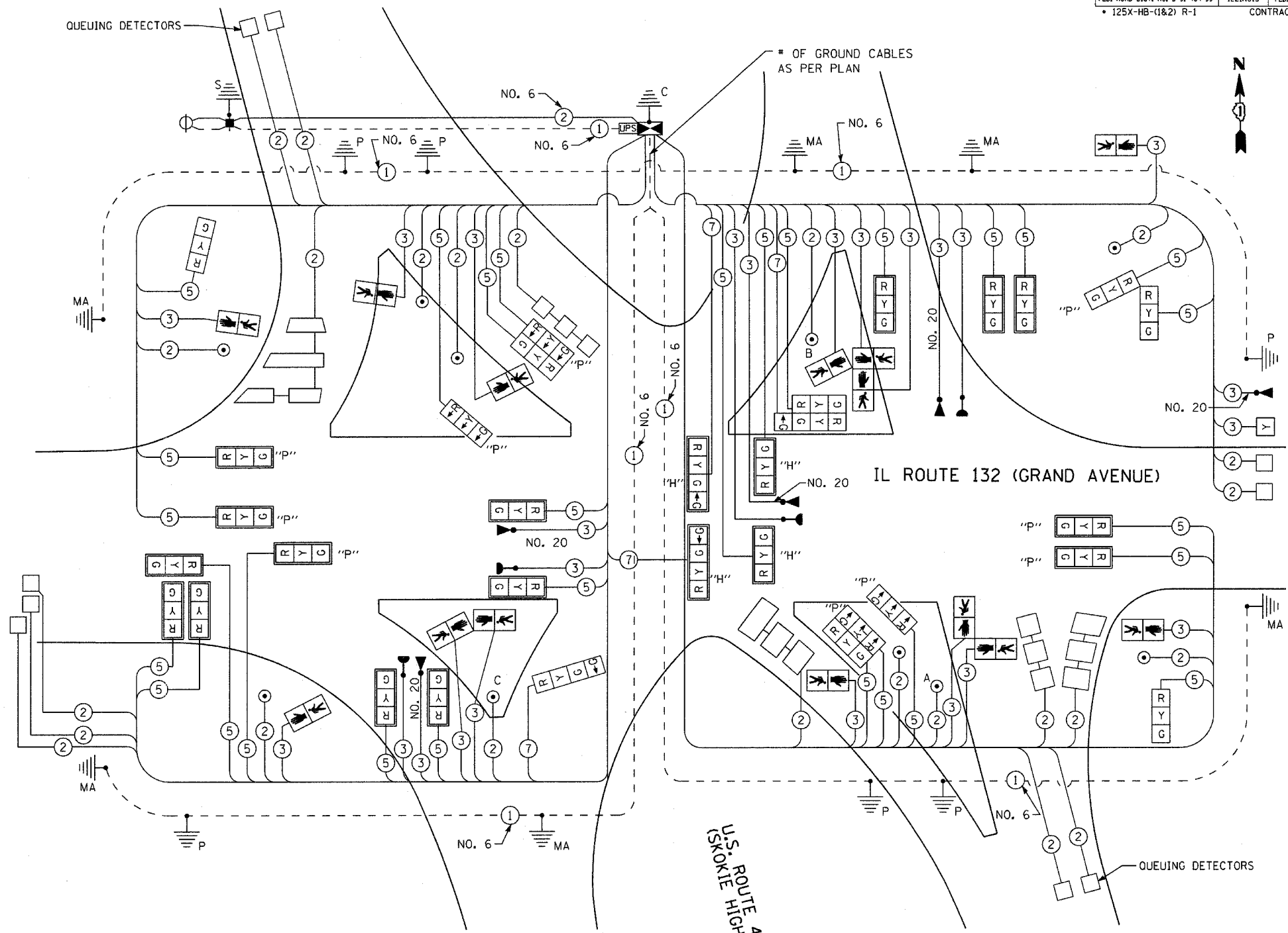
### CABLE PLAN LEGEND

EXISTING PROPOSED

- 8" (200mm) TRAFFIC SIGNAL SECTION
- 12" (300mm) TRAFFIC SIGNAL SECTION
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- CONTROLLER CABINET
- SERVICE INSTALLATION
- TELEPHONE CONNECTION
- MAGNETIC DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PUSHBUTTON DETECTOR
- VEHICLE DETECTOR, INDUCTION LOOP
- ② DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
- COMED SERVICE POLE

EXISTING PROPOSED

- SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD
- RAILROAD CONTROL CABINET
- GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
- GROUND ROD AT POST OR MAST ARM POLE
- GROUND ROD AT ELECTRIC SERVICE INSTALLATION
- ① GROUND CABLE IN CONDUIT, NO.6 SOLID COPPER (GREEN)
- ② FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F
- UNINTERRUPTIBLE POWER SUPPLY
- HORIZONTAL MOUNTED SIGNAL HEAD "H"



**CABLE PLAN**  
NOT TO SCALE

PEDESTRIAN PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 1 & 4  
 PEDESTRIAN PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 3 & 4  
 PEDESTRIAN PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 1 & 2

NOTE:  
 1. INSTALL HORIZONTALLY MOUNTED SIGNAL HEADS USING STEEL MAST ARM MOUNTS AS SHOWN ON HIGHWAY STANDARD 880006.  
 2. 3/C NO 20 TWISTED SHIELDED FOR THE LIGHT DETECTOR SHALL COMPLY WITH EQUIPMENT MANUFACTURER RECOMMENDATION.

DATE	
BY	
REVISIONS	
PLAN	
NO.	
NOTE BOOK	
NO.	
NO.	
NO.	
NO.	

DATE	
BY	
REVISIONS	
PROFILE	
NO.	
NOTE BOOK	
NO.	
NO.	
NO.	
NO.	

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. OF LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	32	135	17	0.50	272
(YELLOW)	32	135	25	0.25	200
(GREEN)	36	135	15	0.25	135
PED. SIGNAL	14	90	25	1.00	350
CONTROLLER	1	100	100	1.00	100
FLASHER	1		25	0.50	12.50

ENERGY COSTS TO:	TOTAL =	1069.50
ILLINOIS DEPARTMENT OF TRANSPORTATION		
DIVISION OF HIGHWAY/DISTRICT I		
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096		
ENERGY SUPPLY:	CONTACT:	DOTTI PROSEN
	PHONE:	(847) 816-5529
	COMPANY:	COMED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L-2 =
E - MAST ARM POLE		SIGNAL POST	2 (1.0)	(6mH.-0.6m)	
		24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)
		30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)
		36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)
				GROUND CABLE	1 (0.5)
				POST MOUNTED	6 (1.8)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132

CABLE PLAN

SCALE: NONE  
 DATE: 06-10-2008

DRAWN BY: PK  
 DESIGNED BY: JM  
 CHECKED BY: JW

**EJM ENGINEERING, INC.**  
 411 South Wells Street Suite 800  
 Chicago, Illinois 60607

# SCHEDULE OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346		LAKE	469	147
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1		CONTRACT • 60826		

UNIT	DESCRIPTION	QUANTITY		
		GRAND TOTAL	SIGNAL	EMERGENCY VEHICLE PRE-EMPTION SYSTEM
EACH	SERVICE INSTALLATION - GROUND MOUNTED	1	1	
FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	1186	1186	
FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	499	499	
FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	24	24	
FOOT	CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	13	13	
FOOT	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	20	20	
FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	176	176	
FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	1030	1030	
EACH	HANDHOLE	12	12	
EACH	DOUBLE HANDHOLE	5	5	
FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK	2014	2014	
EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET	1	1	
FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1/C	1506	1506	
FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2/C	1882	1882	
FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C	3650	2787	863
FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5/C	6100	6100	
FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7/C	720	720	
FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	5850	5850	
FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2/C	166	166	
FOOT	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	1455		1455
FOOT	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT	1	1	
EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 17 FT.	4	4	
EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 18 FT	1	1	
EACH	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	1	1	
EACH	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	1	1	
EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT. (SPECIAL)	1	1	
EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 50 FT.	1	1	
EACH	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 24 FT & 36 FT (SPECIAL)	1	1	
EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 28 FT. & 34 FT.	1	1	
FOOT	CONCRETE FOUNDATION, TYPE A	24	24	
FOOT	CONCRETE FOUNDATION, TYPE C	4	4	
FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	90	90	
EACH	SIGNAL HEAD, LED, 1-FACE, 1-SECTION, BRACKET MOUNTED	1	1	
EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	12	12	
EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	3	3	
EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	1	1	
EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	2	2	
EACH	COMBINATION SIGNAL HEAD, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, LIGHT EMITTING DIOD, BRACKET MOUNTED	2	2	
EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED	1	1	
EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	3	3	
EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	5	5	
EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	7	7	
EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	2	2	
EACH	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED	1	1	
EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED	19	19	
EACH	INDUCTIVE LOOP DETECTOR	14	14	
FOOT	DETECTOR LOOP, TYPE 1	67	67	
FOOT	PERFORMED DETECTOR LOOP	1021	1021	
EACH	LIGHT DETECTOR	5		5
EACH	LIGHT DETECTOR AMPLIFIER	2		2
EACH	PEDESTRIAN PUSH-BUTTON	10	10	
EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	1	1	
EACH	REMOVE EXISTING HANDHOLE	8	8	
EACH	REMOVE EXISTING CONCRETE FOUNDATION	9	9	
EACH	UNINTERRUPTABLE POWER SUPPLY	1	1	
EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	1	1	

NOTE:  
 QUANTITIES FOR THE EMERGENCY VEHICLE  
 PRE-EMPTION SYSTEM SHALL BE PAID  
 FOR BY THE VILLAGE OF GURNEE.

DATE	
BY	
PLAN	
NO.	
DATE	
BY	
PROFILE	
NO.	

DATE	
BY	
PROFILE	
NO.	
DATE	
BY	
PLAN	
NO.	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132

SCHEDULE OF QUANTITIES

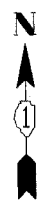
SCALE: NONE  
 DATE: 06-10-2008

DRAWN BY: PK  
 DESIGNED BY: JM  
 CHECKED BY: JW




**EJM ENGINEERING, INC.**  
 411 South Wells Street Suite 800  
 Chicago, Illinois 60607

# PROPOSED SEQUENCE OF OPERATION

	1					2						3					4						
MOVEMENT																							
PHASE																							
INTERVAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
CHANGE TO	/	/	2	/	3 OR 4	/	/	/	/	3 OR 4	1	/	/	4	/	1 OR 2	/	/	/	/	1 OR 2	3	
IL 132 (WEST OF BRIDGE) MAST ARM AND NEAR RIGHT SIGNALS	E/B	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
IL 132 ( EAST OF BRIDGE AND IN NORTHEAST ISLAND) MAST ARM FAR LEFT SIGNALS	E/B	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
IL 132 (EAST OF INTERSECTION) MAST ARM AND FAR LEFT OPTICALLY PROGRAMMED SIGNALS	E/B	G	G	G	G	Y	G	G	G	G	Y	G	R	R	R	R	R	R	R	R	R	R	R
IL 132 (EAST OF BRIDGE) END AND FAR RIGHT MAST ARM AND FAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	
IL 132 (WEST OF BRIDGE AND IN SOUTHWEST ISLAND MAST ARM AND FAR LEFT) SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	
IL 132 (WEST OF INTERSECTION) MAST ARM AND FAR LEFT OPTICALLY PROGRAMMED SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	G	G	G	G	G	Y	G
NB EXIT RAMP (NORTH OF INTERSECTION) MAST ARM, FAR RIGHT AND NEAR RIGHT SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	
NB EXIT RAMP FAR LEFT SIGNALS (IN NORTHWEST ISLAND) AND NEAR RIGHT (IN SOUTHEAST ISLAND) SIGNALS	N/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←G	←Y	←R	←R	←R	
SB EXIT RAMP (SOUTH OF INTERSECTION) BOTH MAST ARM AND NEAR RIGHT SIGNALS	S/B	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	
SB EXIT RAMP FAR LEFT (IN SOUTHEAST ISLAND) AND NEAR RIGHT (IN NORTHWEST ISLAND) SIGNALS	S/B	←R	←R	←R	←R	←R	←G	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
PEDESTRIAN SIGNALS CROSSING US 41 NORTH EXIT RAMP & SOUTH LEFT ENTRANCE RAMP ON SOUTH SIDE OF IL 132		*P	*FH	H	*FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS HEADS CROSSING US 41 SOUTHBOUND RIGHT ENTRANCE RAMP ON SOUTH SIDE OF ILL. 132		H	H	H	H	H	*P	*FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING US 41 RAMPS ON NORTH SIDE OF IL 132		H	H	H	H	H	H	H	H	H	H	*P	*FH	H	*FH	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING IL 132 ON EAST SIDE OF US 41		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	*P	*FH	H	H	H	H	

P = ILLUMINATED PERSON = WALK  
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK  
 H = ILLUMINATED SOLID HAND = DON'T WALK

\* TO APPEAR ONLY UPON PUSHBUTTON ACTUATION  
 \*\* FLASHING  IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.

**EJM ENGINEERING, INC.**  
 411 South Wells Street Suite 800  
 Chicago, Illinois 60607

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED SEQUENCE OF OPERATION  
 US 41 & IL ROUTE 132

SCALE: NONE  
 DATE: 06-10-2008

DRAWN BY: PK  
 DESIGNED BY: JM  
 CHECKED BY: JW

# EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	2	4	6 OR 7	6 OR 7	8	9	8	12 OR 13	12 OR 13	15	17 OR 18	17 OR 18	19	20	19	PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	PREEMPTOR NUMBER 6	CLEAR TO NORMAL SEQUENCE
																	3	4	5	6	
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1I	1J	1K	1L	1M	1N	1P	1Q	3	4	5	6	
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	4	4	5 6	5 6	3	3	5 4	3 6	6	3 4	6	3 4	4	4	5 3	4 6					
IL 132 (WEST OF BRIDGE) MAST ARM AND NEAR RIGHT SIGNALS E/B	Y	Y	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	R	R	◇
IL 132 (MAST ARM EAST OF BRIDGE AND IN NORTHERN ISLAND) FAR LEFT SIGNALS E/B	Y	Y	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	R	R	◇
IL 132 (EAST OF INTERSECTION) MAST ARM AND FAR LEFT OPTICALLY PROGRAMMED SIGNALS E/B	G	G	Y	Y	G	G	Y	G	R	R	R	R	R	R	R	R	G	R	R	R	◇
IL 132 (EAST OF BRIDGE) END AND FAR RIGHT MAST ARM AND FAR RIGHT SIGNALS W/B	R	R	R	R	R	R	R	R	Y	Y	R	R	R	R	R	R	R	G	R	R	◇
IL 132 (WEST OF BRIDGE AND IN SOUTHWEST ISLAND MAST ARM AND FAR LEFT) SIGNALS W/B	R	R	R	R	R	R	R	R	Y	Y	R	R	R	R	R	R	R	G	R	R	◇
IL 132 (WEST OF INTERSECTION) MAST ARM AND FAR LEFT OPTICALLY PROGRAMMED SIGNALS W/B	R	R	R	R	R	R	R	R	G	Y	G	Y	G	G	Y	G	R	G	R	R	◇
NB EXIT RAMPS (NORTH OF INTERSECTION) MAST ARM, FAR RIGHT AND NEAR RIGHT SIGNALS N/B	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	Y	R	R	G	R	◇
NB EXIT RAMP FAR LEFT (IN NORTHWEST ISLAND) AND NEAR RIGHT IN SOUTHEAST ISLAND SIGNALS N/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←Y	←Y	←R	←R	←R	←R	←R	←G	←R	◇
SB EXIT RAMP (SOUTH OF INTERSECTION) BOTH MAST ARM AND NEAR RIGHT SIGNALS S/B	R	R	R	Y	Y	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	G	◇
SB EXIT RAMP FAR LEFT (IN SOUTHEAST ISLAND) AND NEAR RIGHT IN NORTHWEST ISLAND SIGNALS S/B	←R	←R	←R	←Y	←Y	←R	←Y	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	◇
PEDESTRIAN SIGNALS CROSSING US 41 NORTH EXIT RAMP & SOUTH LEFT ENTRANCE RAMP ON SOUTH SIDE OF IL 132	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS HEADS CROSSING US 41 SOUTHBOUND RIGHT ENTRANCE RAMP ON SOUTH SIDE OF ILL. 132	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS CROSSING US 41 RAMPS ON NORTH SIDE OF IL 132	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS CROSSING IL 132 ON EAST SIDE OF US 41	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◇

P = ILLUMINATED PERSON = WALK  
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK  
 H = ILLUMINATED SOLID HAND = DON'T WALK  
 ◇ = EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE INTERVALS 3, 4, 5 or 6 ARE TERMINATED.

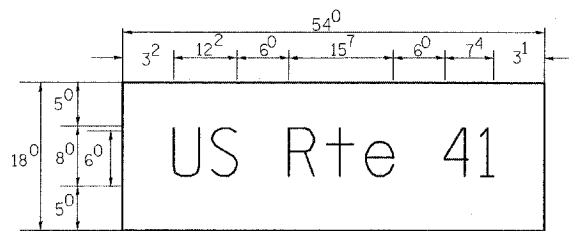
**EJM ENGINEERING, INC.**  
 411 South Wells Street Suite 800  
 Chicago, Illinois 60607

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION  
 US 41 & IL RTE. 132  
 SCALE: NONE  
 DATE: 06-10-2008  
 DRAWN BY: PK  
 DESIGNED BY: JM  
 CHECKED BY: JW



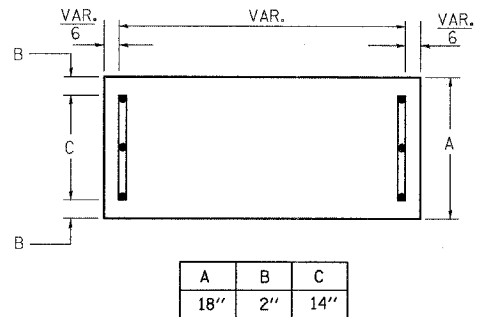
PANEL SIGN DESIGN TYPE 1



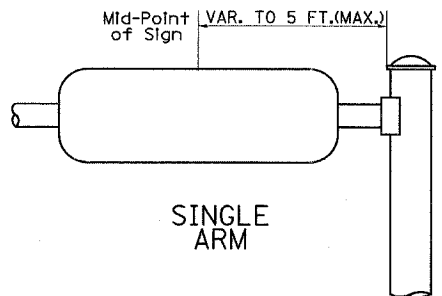
Sq. M. each  
 7.5 Sq. Ft. each  
 2 Required  
 Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

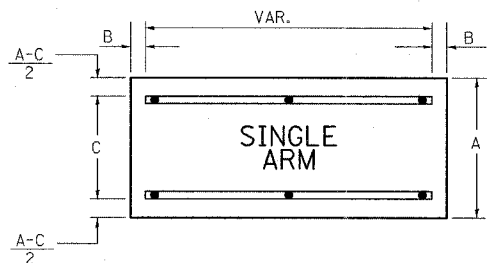
SUPPORTING CHANNELS



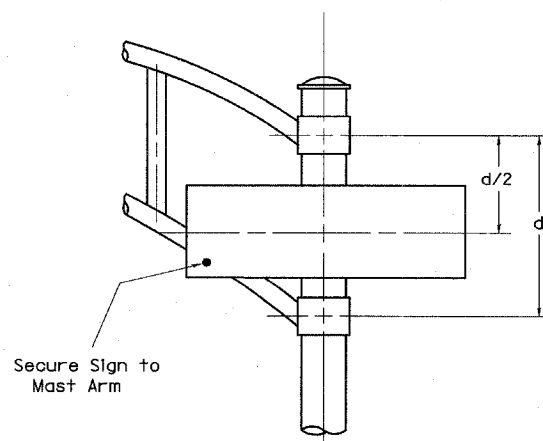
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



DUAL ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM  
 Shall be used. See Note #5.

Upper Case To Lower Case  
 Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE, 2 DENOTES 3/8"

SERIES	SECOND LETTER															
	acde		bhikl		f w		J		s t		v y		x		z	
	g	o	q	m	n	p	r	u	C	D	C	D	C	D	C	D
A W X	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>
B	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>
C E G	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>
D O Q R	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>
F	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>
H I M N	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>2</sup>	2 <sup>4</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>
J U	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>
K L	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>
P	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>
S	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>
T	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>6</sup>	1 <sup>7</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>
V	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>
Y	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>5</sup>	0 <sup>7</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>
Z	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>

Lower Case To Lower Case  
 Spacing Chart 6 Inch Series "C & D"

SERIES	SECOND LETTER															
	acde		bhikl		f w		J		s t		v y		x		z	
	g	o	q	m	n	p	r	u	C	D	C	D	C	D	C	D
ad h g i j	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>
l m n q u																
b f k o p s	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>
c e	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>
r	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>3</sup>	0 <sup>3</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>
t z	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>
v y	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>
w	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>
x	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>

Number To Number  
 Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>
1	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>
2 3 4	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>
5	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>
6	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>
7	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>
8	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	.	LAKE	469	14
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJ. CONTRACT # 601	
* 125X-HB-(1&2) R-1				

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>5</sup>	a	3 <sup>5</sup>	4 <sup>2</sup>
B	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	b	3 <sup>5</sup>	4 <sup>2</sup>
C	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	c	3 <sup>5</sup>	4 <sup>1</sup>
D	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	d	3 <sup>5</sup>	4 <sup>2</sup>
E	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	e	3 <sup>5</sup>	4 <sup>2</sup>
F	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	f	2 <sup>3</sup>	2 <sup>6</sup>
G	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	g	3 <sup>5</sup>	4 <sup>2</sup>
H	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	h	3 <sup>5</sup>	4 <sup>2</sup>
I	0 <sup>7</sup>	0 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	i	1 <sup>1</sup>	1 <sup>1</sup>
J	3 <sup>0</sup>	3 <sup>6</sup>	4 <sup>0</sup>	5 <sup>0</sup>	j	2 <sup>0</sup>	2 <sup>2</sup>
K	3 <sup>2</sup>	4 <sup>1</sup>	4 <sup>3</sup>	5 <sup>4</sup>	k	3 <sup>5</sup>	4 <sup>2</sup>
L	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	l	1 <sup>1</sup>	1 <sup>1</sup>
M	3 <sup>7</sup>	4 <sup>5</sup>	5 <sup>1</sup>	6 <sup>1</sup>	m	6 <sup>0</sup>	7 <sup>0</sup>
N	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	n	3 <sup>5</sup>	4 <sup>2</sup>
O	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	o	3 <sup>6</sup>	4 <sup>3</sup>
P	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	p	3 <sup>5</sup>	4 <sup>2</sup>
Q	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	q	3 <sup>5</sup>	4 <sup>2</sup>
R	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	r	2 <sup>6</sup>	3 <sup>2</sup>
S	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	s	3 <sup>6</sup>	4 <sup>2</sup>
T	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	t	2 <sup>7</sup>	3 <sup>2</sup>
U	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	u	3 <sup>5</sup>	4 <sup>2</sup>
V	3 <sup>5</sup>	4 <sup>4</sup>	4 <sup>7</sup>	6 <sup>0</sup>	v	4 <sup>2</sup>	4 <sup>7</sup>
W	4 <sup>4</sup>	5 <sup>2</sup>	6 <sup>0</sup>	7 <sup>0</sup>	w	5 <sup>5</sup>	6 <sup>4</sup>
X	3 <sup>4</sup>	4 <sup>0</sup>	4 <sup>5</sup>	5 <sup>3</sup>	x	4 <sup>4</sup>	5 <sup>1</sup>
Y	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>6</sup>	y	4 <sup>6</sup>	5 <sup>3</sup>
Z	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	z	3 <sup>6</sup>	4 <sup>3</sup>

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>
2	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
3	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
4	3 <sup>5</sup>	4 <sup>3</sup>	4 <sup>7</sup>	5 <sup>7</sup>
5	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
6	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
7	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
8	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
9	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
0	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>

REVISIONS	
NAME	DATE
</	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	150
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(182) R-1				

**GENERAL NOTES**

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLE FOUNDATIONS, CENTER LINE OF TRENCH AND CONDUIT PUSHES AND THE LIGHTING CONTROLLERS FOR EXAMINATION AND CONFIRMATION WITH THE VILLAGE AND ENGINEER. THE EXACT LOCATIONS OF ALL ITEMS SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO STARTING WORK.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR GROUNDING. GROUNDING CONNECTIONS AT THE FOUNDATION SHALL BE EXOTHERMIC ALLY WELDED, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING, AS APPLICABLE.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE SPECIFIED REQUIREMENTS FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ROADWAY LIGHTING". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED BY THE ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS AND THE LIKE SHALL REMAIN WITH THE CONTRACTOR.
- NO LIGHT POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL NOTE THE REQUIREMENTS FOR THE ELECTRICAL SERVICE FOR THE PROPOSED ROADWAY LIGHTING CONTROL CABINET. IT IS THE CONTRACTOR'S RESPONSIBILITY FOR TIMELY NOTIFICATION AND COORDINATION WITH THE ELECTRIC UTILITY COMPANY.
- THE LIGHTING CONTROL CABINET SHALL BE CONSTRUCTED TO U.L. STANDARD 508 AND BEAR THE LABEL "INDUSTRIAL CONTROL PANEL" WITHIN THE CABINET DOOR.
- TO MAINTAIN STRUCTURAL INTEGRITY OF THE LIGHT POLES WITH MAST ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES. NOTE THAT POLES SHALL NOT BE PAID UNTIL THE LUMINAIRES ARE INSTALLED.
- NO EQUIPMENT OR MATERIAL SHALL BE DELIVERED TO THE JOB SITE PRIOR TO THE APPROVAL AND INSPECTION BY THE ENGINEER. ANY EQUIPMENT OR MATERIAL DELIVERED TO THE JOB SITE PRIOR TO APPROVAL AND INSPECTION SHALL BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
- CONDUIT PUSHED AND IN TRENCH SHALL EXTEND FIVE (5) FEET BEYOND THE SHOULDER, CURB OR DRIVEWAY, AS APPLICABLE.
- THE CONTRACTOR SHALL PROVIDE A 3/4" X 10' COPPER CLAD GROUND ROD AT EACH LIGHT POLE (REFER TO THE FOUNDATION DETAIL).
- THE UNIT DUCT AND CONDUIT SHALL BE INSTALLED MIN. 30 INCHES BELOW FINISHED GRADE (UNLESS DIRECTED OTHERWISE) COMPLETE WITH WARNING TAPE. CONTRACTOR SHALL HAND DIG TEST HOLES FOR EVERY 1000 FT. OF TRENCHING/PLOWING FOR ENGINEER'S APPROVAL OF THE INSTALLATION.
- MATERIALS AND INSTALLATION METHODS SHALL COMPLY WITH CODES AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES HAVING JURISDICTION. NATIONAL ELECTRICAL CODE (LATEST REVISION) SHALL BE CONSIDERED AS A MINIMUM REQUIREMENT.
- IT IS CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTACT J.U.L.I.E. PRIOR TO THE START OF ANY EXCAVATION WORK.
- BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL COMED FOR APPROVAL OF LOCATION.
- MATERIAL QUANTITIES ARE APPROXIMATIONS ONLY. IT IS CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL QUANTITIES PRIOR TO ORDERING MATERIAL.
- THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION AND STAGING WITH OTHER WORK BEING DONE IN THE SAME GENERAL AREA BY COMED. CONTRACTOR SHALL SET UP COORDINATION MEETINGS IF REQUIRED.
- A STAGING SCHEDULE FOR MATERIAL INSTALLATION, REMOVAL AND APPROXIMATE DATE OF PROPOSED ENERGIZING OF PERMANENT LIGHTING SHALL BE SUBMITTED PRIOR TO THE COMMENCEMENT OF WORK TO ASSURE COORDINATION WITH EXPEDITED WORK SCHEDULE.

- COMMONWEALTH EDISON COMPANY SHALL BE CONTACTED AS SOON AS POSSIBLE AND NOTIFIED OF PENDING SERVICE CONNECTIONS AND INSTALLATIONS TO ENSURE CONTINUITY OF NIGHT TIME HOURS OF LIGHTING OPERATION.
- ALL PROPOSED LIGHTING CONTROL CABINETS SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY. THE EXACT LOCATION TO BE CONFIRMED IN THE FIELD BY THE RESIDENT ENGINEER.
- ALL PROPOSED LIGHT POLE FOUNDATIONS, LIGHT FIXTURES, UNIT DUCT, AND CONDUIT SHALL BE INSTALLED AS SHOWN ON THE PLANS. THE EXACT LOCATION IS TO BE CONFIRMED IN THE FIELD BY THE RESIDENT ENGINEER.
- EACH WIRE SHALL BE IDENTIFIED AT EACH POLE BY APPROPRIATE CONTROLLER AND CIRCUIT NUMBER.
- CONTRACTOR SHALL SUBMIT "RECORD DRAWINGS" A MINIMUM OF 7 DAYS PRIOR TO THE FINAL INSPECTION. "RECORD DRAWINGS" SHALL BE UPDATED REGULARLY DURING CONSTRUCTION AND INDICATE ALL LIGHTING MATERIAL INSTALLATION WITH ANY CHANGES IN RED.
- ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE VILLAGE AND ENGINEER.
- CONTRACTOR SHALL NOT PROCEED WITH CUTTING OF TREES OR CLEARING OF RIGHT- OF-WAY WITHOUT WRITTEN NOTIFICATION OF ENGINEER.
- CONTRACTOR TO VERIFY FOUNDATION BOLT PATTERN PRIOR TO CONSTRUCTING FOUNDATIONS.
- QUANTITY OF PUSHED CONDUIT AND CONDUIT IN TRENCH ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY THE QUANTITIES PRIOR TO ORDERING THE MATERIAL AND INSTALL CONDUITS IN FULL COMPLIANCE WITH THE DETAILS AND SPECIFICATIONS SET REQUIREMENTS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, FLAG AND PROTECT ALL EXISTING UNDERGROUND UTILITIES PRIOR TO AND DURING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY AT NO EXTRA COST TO THE VILLAGE. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE PROPOSED CABLE IN UNIT DUCT.
- CIRCUIT NUMBERING AND DESIGNATIONS SHOWN ON THE PLANS ARE FROM EXISTING DRAWINGS. CONTRACTOR SHALL VERIFY CIRCUIT NUMBERING, CABLE ROUTING AND POWER SOURCES DURING CONSTRUCTION.
- ANY REMOVED LIGHT POLES/FIXTURES SHALL BE TURNED OVER TO THE VILLAGE. COORDINATE LOCATION AND DELIVERY TIMES WITH OWNER/ENGINEER. CONTRACTOR SHALL MAINTAIN THE EXISTING LIGHTING SYSTEM IN OPERATION DURING INSTALLATION OF PROPOSED LIGHTING SYSTEM.
- UNLESS OTHERWISE INDICATED, ALL ITEMS AND WORK SHOWN ON THESE PLANS ARE PROPOSED NEW ITEMS OF WORK.
- CONTRACTOR'S STAGING AREA SHALL BE AS DIRECTED BY THE OWNER IN THE PRE-CONSTRUCTION MEETING.
- ALL 47.5 FT POLE-MOUNTED FIXTURES SHALL BE MOUNTED ON A 10 FT MAST ARM AND RATED AT 400 WATTS.
- ALL FIXTURES ON TRAFFIC SIGNAL POLES SHALL BE MOUNTED ON A 10 FT MAST ARM AND RATED AT 400 WATTS.
- ALL UNDERPASS FIXTURES SHALL BE RATED AT 70 WATTS AND MOUNTED WITHIN STAINLESS STEEL HOUSINGS.
- ALL LIGHT POLES SHALL HAVE TRANSFORMER BASES ATTACHED TO THEM WITH THE EXCEPTION OF THOSE POLES LOCATED ON BRIDGE PARAPETS.

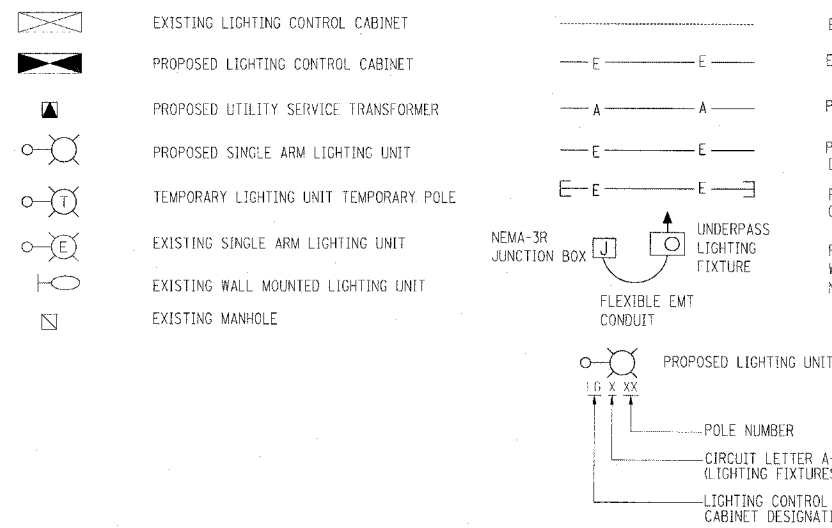
**SUMMARY OF ELECTRICAL QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
XX006937	GROUND ROD, 5/8" DIA. X 10' FT.	EACH	66
	TEMPORARY WOOD POLE, 60 FT., CLASS 4, 15 FT. MAST ARM	EACH	16
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	3210
81701315	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE USE) 3-1/C NO. 2	FOOT	30000
81800300	AERIAL CABLE, 3-1/C NO. 2 AWG, ALUMINUM, WITH MESSENGER WIRE	FOOT	4300
X8110115	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL, PVC COATED	FOOT	510
X8110140	CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA., RIGID GALVANIZED STEEL, PVC COATED	FOOT	600
81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	16
81300420	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 10" X 8" X 6"	EACH	3
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	300
	UNIT DUCT, WITHOUT CABLE, IN TRENCH 2"	FOOT	8100
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	8100
82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	64
82107100	UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	16
XX002112	TEMPORARY LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	16
XX002113	TEMPORARY LIGHTING CONTROLLER	EACH	1
83050770	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 10 FT. MAST ARM	EACH	64
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	735
83600215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	60
X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	8
	TEMPORARY ELECTRIC SERVICE DISCONNECTION	EACH	1
X0323003	TEMPORARY ELECTRIC SERVICE INSTALLATION	EACH	1
X8250110	LIGHTING CONTROLLER, RADIO CONTROL, DUPLEX CONSOLE TYPE, WITH SCADA	EACH	1
X8040310	ELECTRICAL SERVICE DISCONNECT	EACH	1
84200500	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	10
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	10000
84200700	LIGHTING FOUNDATION REMOVAL	EACH	6
83800105	BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	52

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**LEGEND**



**ABBREVIATIONS**

- C - CONDUIT
- E - ELECTRICAL
- REM - REMOVED
- P - PROPOSED
- EX - EXISTING
- AWG - AMERICAN WIRE GAUGE
- UD - UNIT DUCT
- RGS - RIGID GALVANIZED STEEL
- CCT - CIRCUIT
- DIA - DIAMETER
- GND - GROUND
- REL - RELOCATED
- KW - KILOWATT

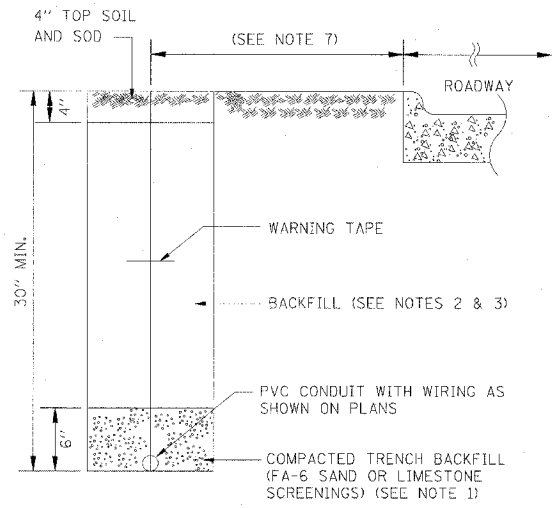
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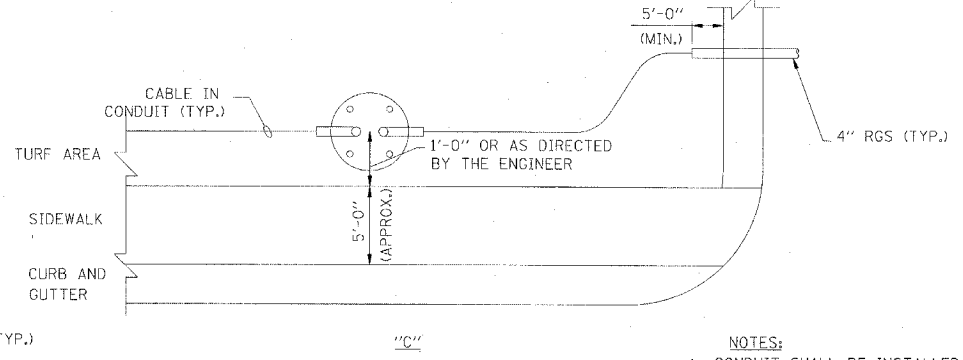
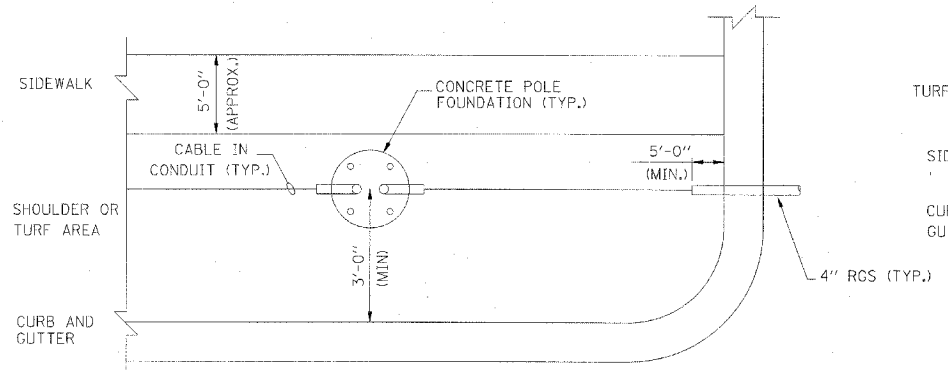
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
**PROPOSED ROADWAY LIGHTING PLAN**  
 GENERAL NOTES AND LEGEND  
 SCALE: NONE  
 DATE: 05/07/08  
 DRAWN BY: JRH  
 CHECKED BY: DEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	151
STA.		TO STA.		
FED. ROAD DIST. NO. 0-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1				

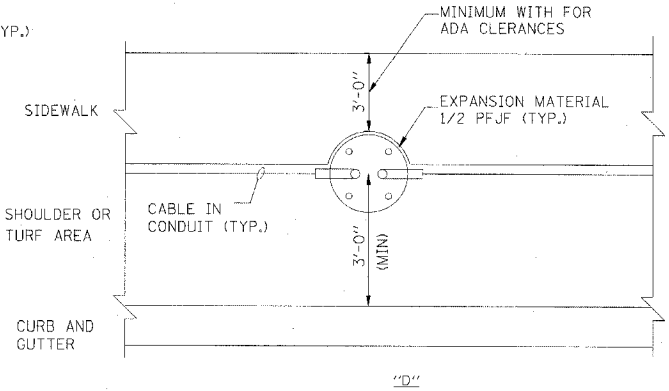
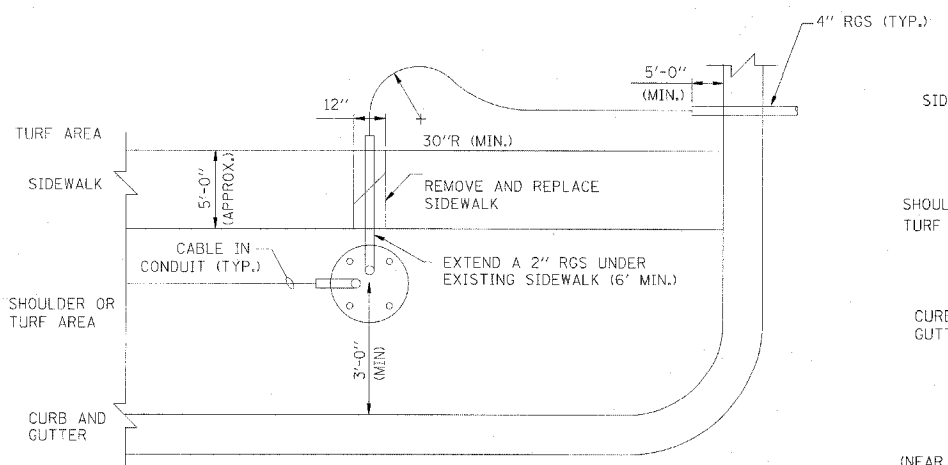


- NOTES:**
- CONDUIT INSTALLED IN TRENCHES SHALL BE COVERED WITH A MINIMUM OF 6" OF COMPACTED FA-6 OR LIMESTONE SCREENINGS.
  - IN GRASSY AREAS, THE BACKFILL MAY BE COMPACTED EARTH.
  - TRENCHES WITHIN 2' OF PROPOSED OR EXISTING STREETS, DRIVEWAYS, OR SIDEWALKS SHALL BE BACKFILLED WITH COMPACTED FA-6 SAND OR LIMESTONE SCREENINGS.
  - WHERE 2 OR MORE CONDUITS RUN ADJACENT TO EACH OTHER, THEY SHALL BE PLACED IN A COMMON TRENCH SO AS NOT TO CROSS EACH OTHER.
  - 6" WIDE REINFORCED METALLIC WARNING TAPE, RED WITH BLACK LETTERING TO READ "CAUTION-ELECTRICAL LINE BURIED BELOW". WARNING TAPE TO BE PLACED 1" MINIMUM TO 2" MAXIMUM BELOW FINISHED GRADE.
  - ALL GRASSY AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED WITH 4" OF TOPSOIL AND SOD.
  - EXACT DISTANCE SHALL BE FIELD COORDINATED.

1 TYPICAL CONDUIT TRENCH DETAIL  
NOT TO SCALE



- NOTES:**
- CONDUIT SHALL BE INSTALLED MIN. 2'-0" FROM PAVEMENT EDGE.
  - CONTRACTOR SHALL MAKE AN EFFORT TO INSTALL RGS CONDUITS (UNDER DRIVEWAYS OR ROADWAY) AT THE SAME SIDE OF THE SIDEWALK AS THE POLE FOUNDATION (DETAIL "A").
  - WHEN ITS NECESSARY TO CROSS THE EXISTING SIDEWALK, CONTRACTOR SHALL INSTALL A 4" RGS CONDUIT PERPENDICULAR TO THE SIDEWALK (DETAIL "B").
  - WHEN LOCATION OF A POLE FOUNDATION FALLS COMPLETELY WITHIN THE EXISTING SIDEWALK, CONTRACTOR SHALL CONSTRUCT THE FOUNDATION AT THE SIDE OF SIDEWALK AWAY FROM THE ROAD (DETAIL "C"). WHEN PARTIAL OVERLAP OCCURS, CONTRACTOR SHALL CONSTRUCT THE POLE FOUNDATION AS SHOWN ON DETAIL "D".
  - LOCATIONS SHOWN IN DETAILS ARE APPROXIMATE AND SHALL BE FIELD COORDINATED DURING CONSTRUCTION.



2 TYPICAL CONDUIT INSTALLATION PLAN VIEWS  
NOT TO SCALE

PLAN	DATE
REVISIONS	BY
NO. 1	DATE
NO. 2	DATE
NO. 3	DATE
NO. 4	DATE
NO. 5	DATE
NO. 6	DATE
NO. 7	DATE
NO. 8	DATE
NO. 9	DATE
NO. 10	DATE

PROFILE	DATE
REVISIONS	BY
NO. 1	DATE
NO. 2	DATE
NO. 3	DATE
NO. 4	DATE
NO. 5	DATE
NO. 6	DATE
NO. 7	DATE
NO. 8	DATE
NO. 9	DATE
NO. 10	DATE

PLOT DATE = 08/07/08  
FILE NAME = 01114



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
ELECTRICAL DETAILS

SCALE: NOT TO SCALE  
DATE: 05/07/08

DRAWN BY: FO  
CHECKED BY: DEM

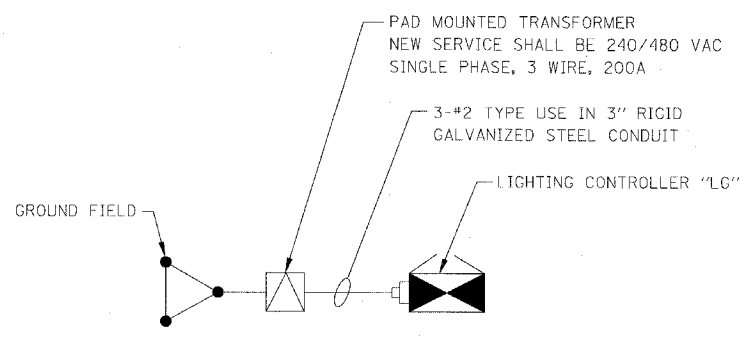
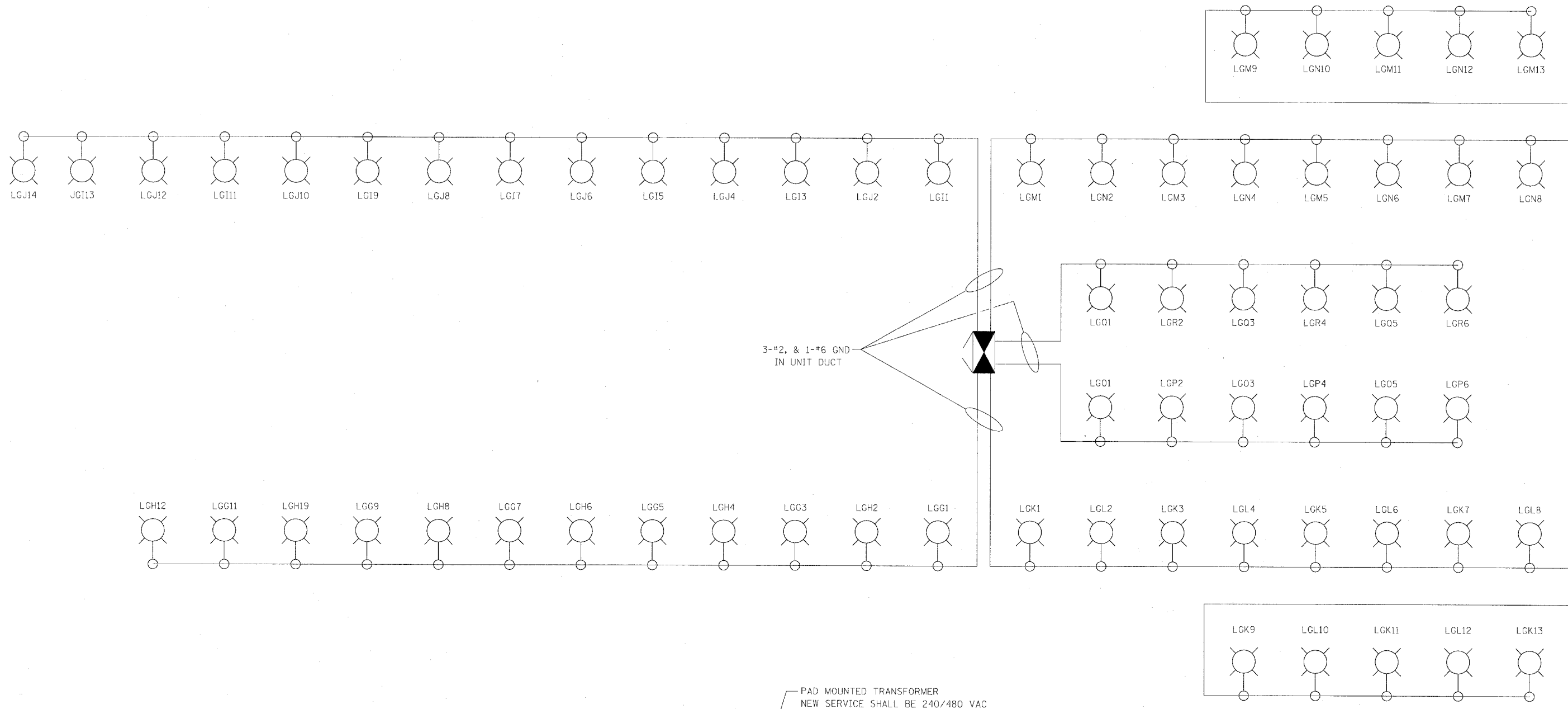




F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	194
STA.		TO STA.		
FED. ROAD DIST. NO. 0-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1				

PLAN	DATE
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PLOTTED	
NOTE BOOK	
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PROFILE	DATE
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NOTE BOOK	
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FET	06/19/08	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT JL ROUTE 132

LIGHTING CONTROLLER "LG"  
 WIRING DIAGRAM (UPPER LEVEL)

SCALE: NONE  
 DATE: 05/07/08

DRAWN BY: JRH  
 CHECKED BY: DEM

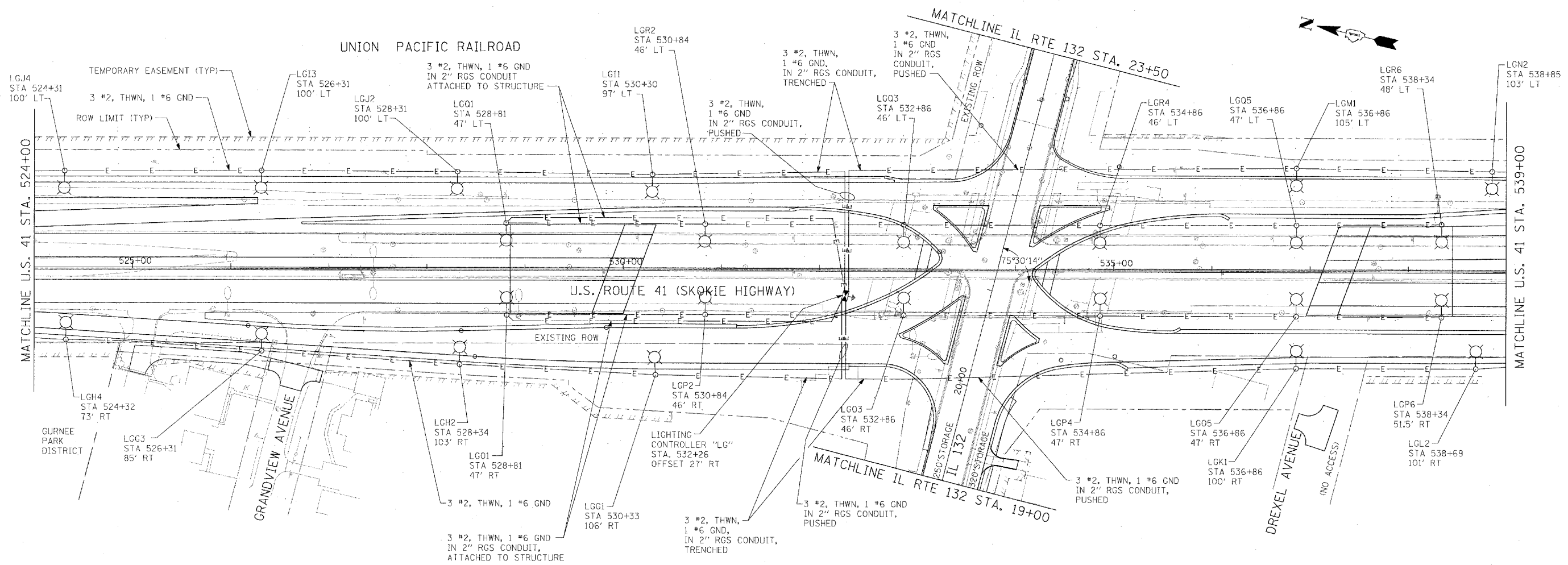
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	156
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
125X-HB-(1&2) R-1				

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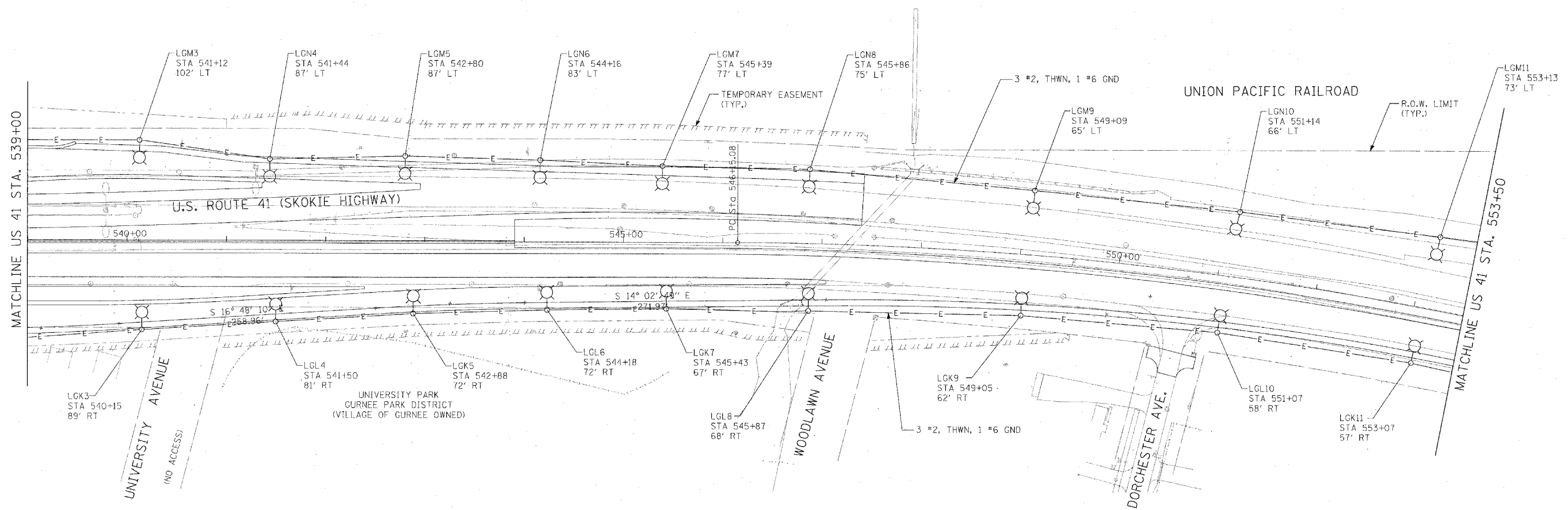


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 PROPOSED ROADWAY LIGHTING PLAN  
 SHEET 2 OF 6  
 US 41 - STA. 524+00 TO STA. 539+00  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: FO  
 CHECKED BY: DEM



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120	*	LAKE	469	157
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
* 125X-HB-(1&2) R-1				



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REVISIONS	BY
NOTED	DATE
BY	DATE

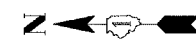
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 PROPOSED ROADWAY LIGHTING PLAN  
 SHEET 3 OF 6  
 US 41 - STA. 539+00 TO STA. 553+50  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: FO  
 CHECKED BY: DEM

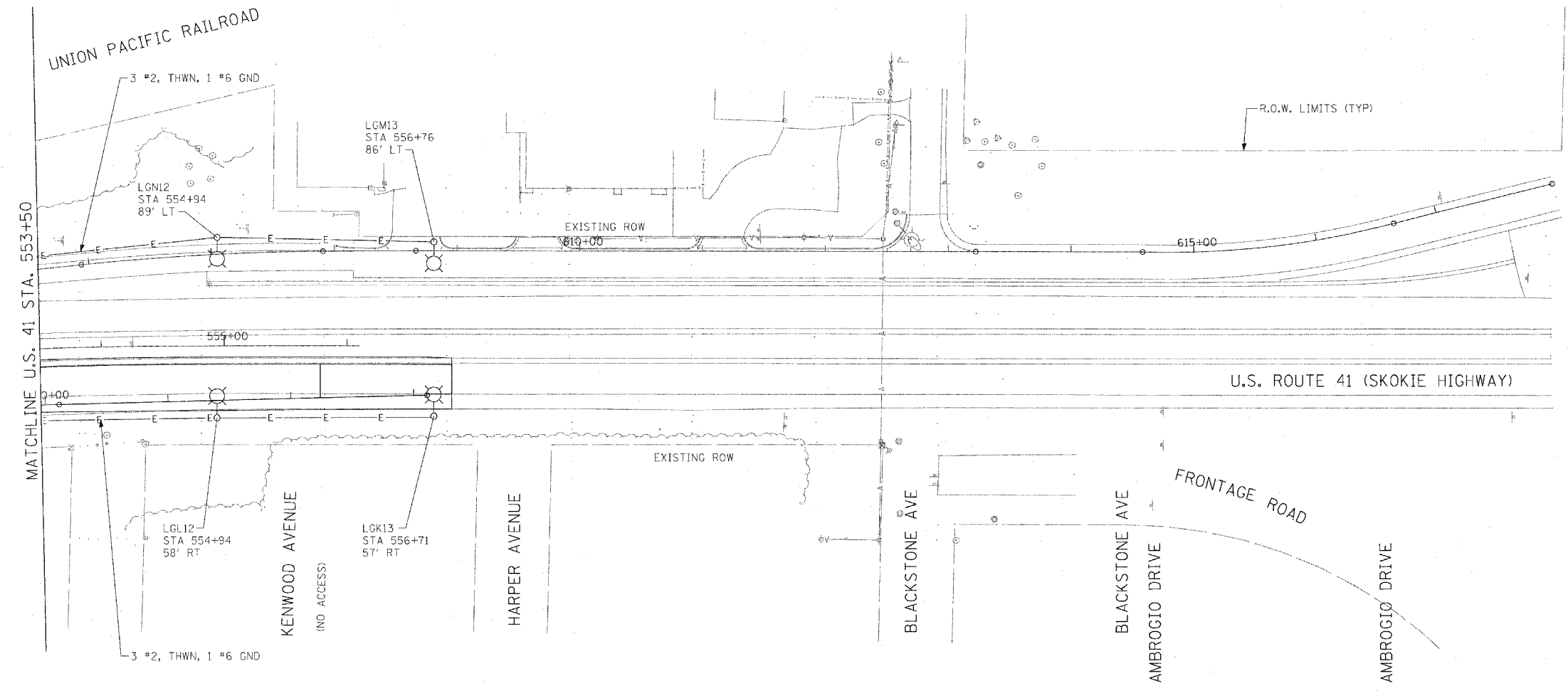
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120		LAKE	469	158
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
125X-HB-(1&2) R-1				



PLAN	SUBMITTED	DATE
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	RT. OF WAY	
	CHECKED	
	DATE	
	FILE NAME	

PROFILE	SUBMITTED	DATE
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	RT. OF WAY	
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NAME	DATE

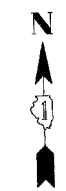
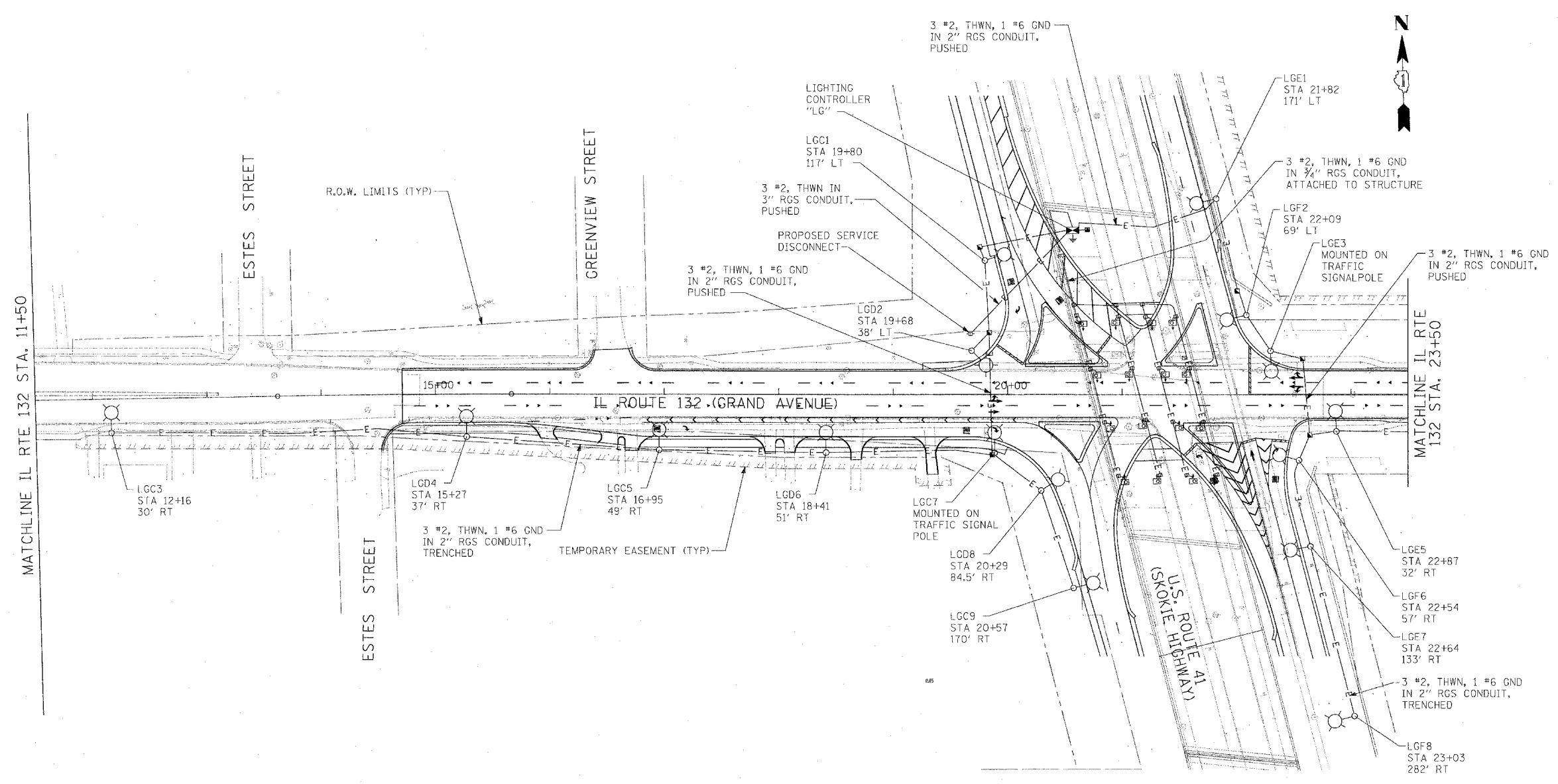
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 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 PROPOSED ROADWAY LIGHTING PLAN  
 SHEET 4 OF 6  
 US 41 - STA. 553+50 TO EOP  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: FO  
 CHECKED BY: DEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	159
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
* 125X-HB-(1&2) R-1				

PLAN	DATE
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PROFILE	DATE
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PLOT DATE = 5/14/2008  
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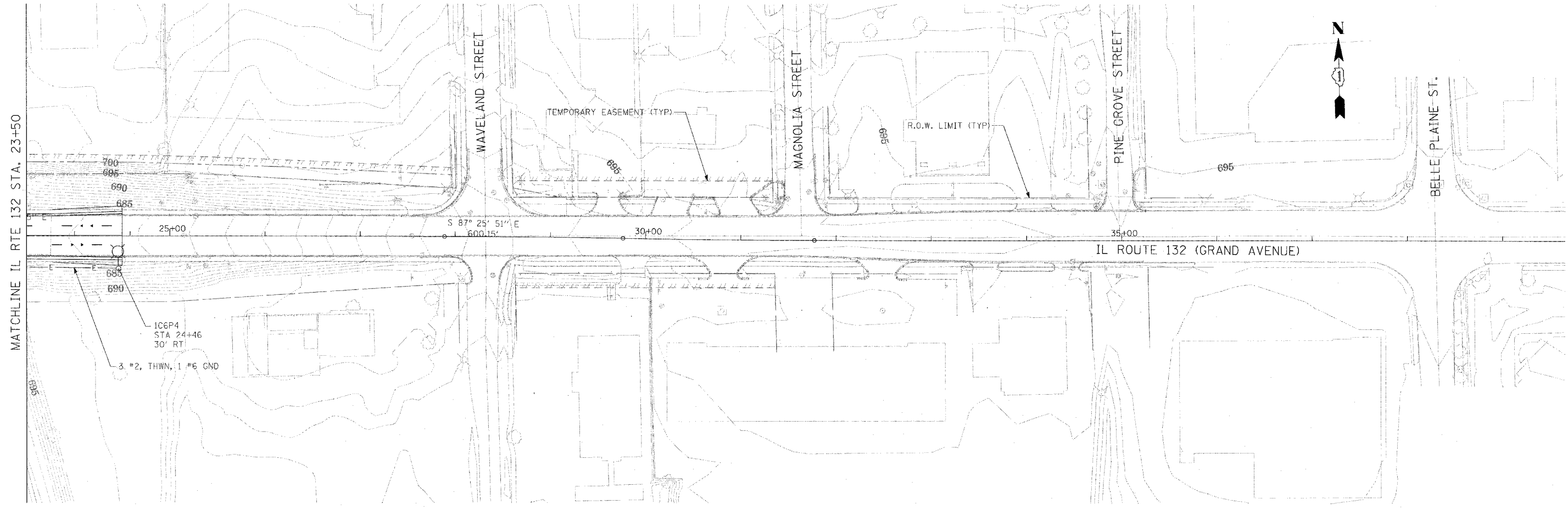
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 PROPOSED ROADWAY LIGHTING PLAN  
 SHEET 5 OF 6  
 IL 132 - STA. 11+50 TO STA. 19+00  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: FO  
 CHECKED BY: DEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120	LAKE	LAKE	469	140
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-101-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1				

PLAN	DATE
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PROFILE	DATE
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DATE	



MATCHLINE IL RTE 132 STA. 23+50

106P4  
STA 24+46  
30' RT  
3 #2, THWN, 1 #6 GND

S 87° 25' 51" E  
600.15'

IL ROUTE 132 (GRAND AVENUE)

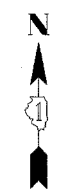
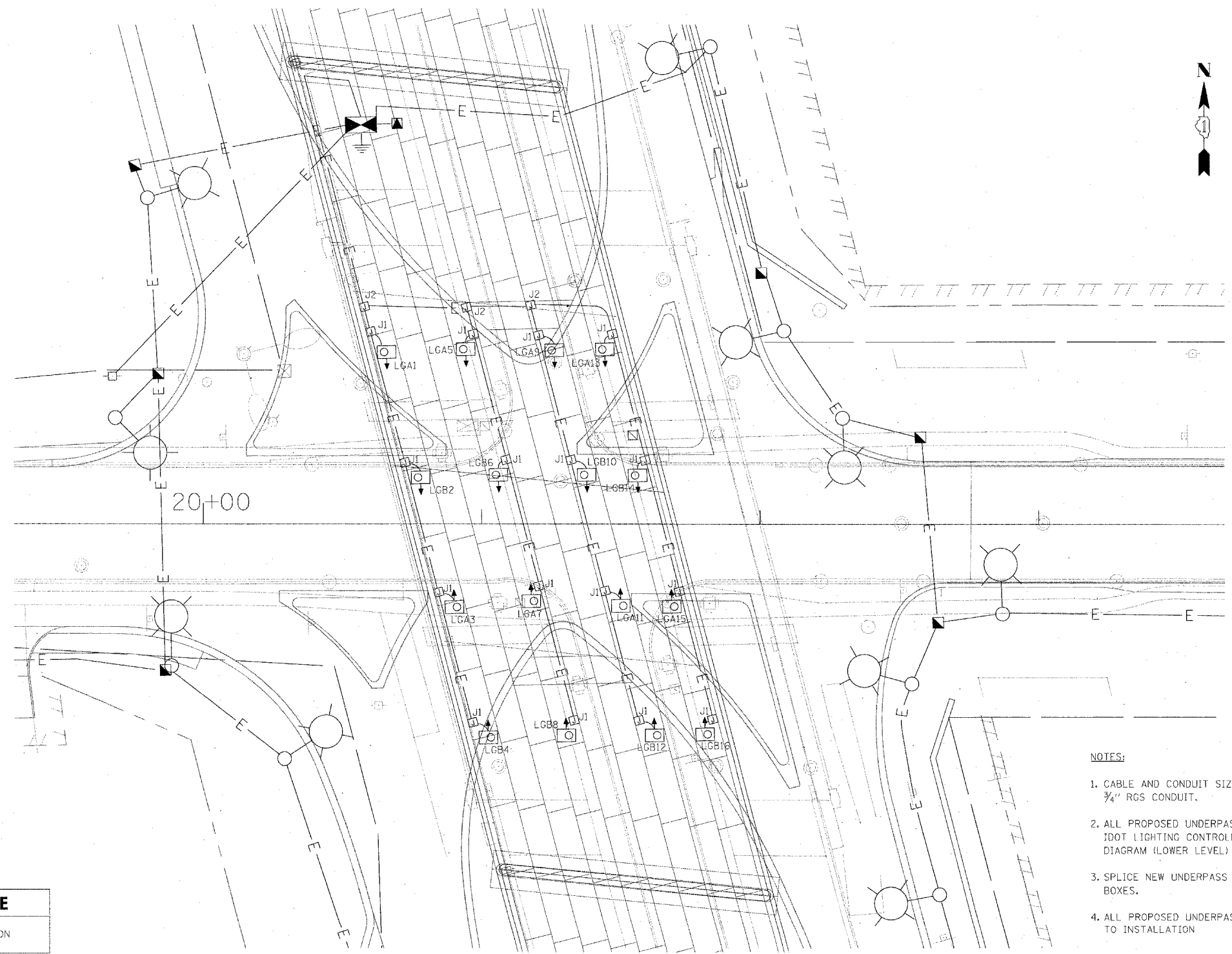
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
PROPOSED ROADWAY LIGHTING PLAN  
SHEET 6 OF 6  
IL 132 - STA. 23+50 TO EOP  
SCALE: 1"=50'-0"  
DATE: 05/07/08  
DRAWN BY: FO  
CHECKED BY: DEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	160A
STA.	TO STA.			
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1				



**NOTES:**

1. CABLE AND CONDUIT SIZES SHALL BE SPECIFIED AS 3 1-1/2" #10, 1-1/2" #10 GND IN 3/4" RGS CONDUIT.
2. ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THE DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "LC". SEE SHEET LIGHTING CONTROLLER "LC" WIRING DIAGRAM (LOWER LEVEL) FOR SINGLE-LINE DIAGRAM.
3. SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE CABLES LOCATED IN JUNCTION BOXES.
4. ALL PROPOSED UNDERPASS LUMINAIRE LOCATIONS SHALL BE APPROVED BY DOT PRIOR TO INSTALLATION.

JUNCTION BOX SCHEDULE		
LABEL	SIZE	DESCRIPTION
J1	6"x6"x4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, FEEDS INDIVIDUAL UNDERPASS LUMINAIRES
J2	10"x8"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, FEEDS JUNCTION BOXES



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**U.S. 41 (SKOKIE HIGHWAY)**  
 AT IL ROUTE 132

PROPOSED UNDERPASS  
 LIGHTING PLAN

SCALE: 1"=20'-0"  
 DATE: 05/07/08

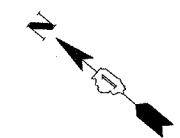
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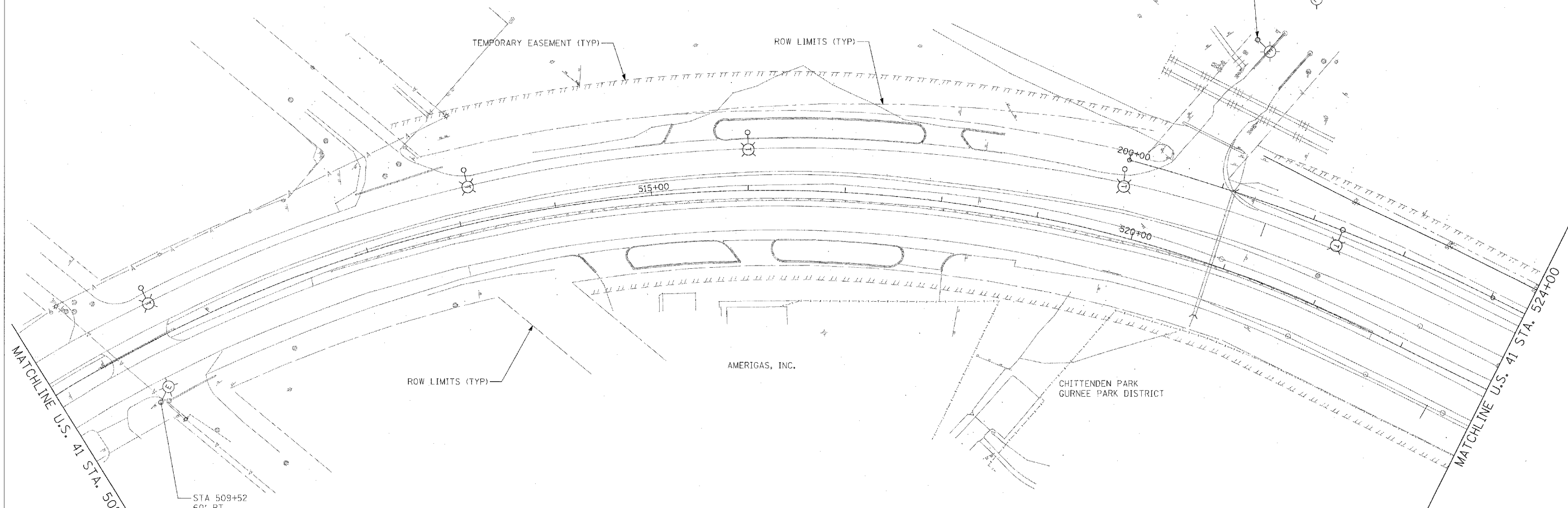
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DATE	
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PLOT DATE = 5/14/2008  
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	161
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1				



EXISTING LIGHT POLES TO BE REPLACED. REFER TO PROPOSED LIGHTING PLAN, SHEET 1



PLAN	DATE
BY	
CHECKED	
DATE	
NO.	

PROFILE	DATE
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CHECKED	
DATE	
NO.	

PLOT DATE \* BUA/EP  
FILE NAME \* #FILE#



REVISIONS	
NAME	DATE
FEI	06/19/08

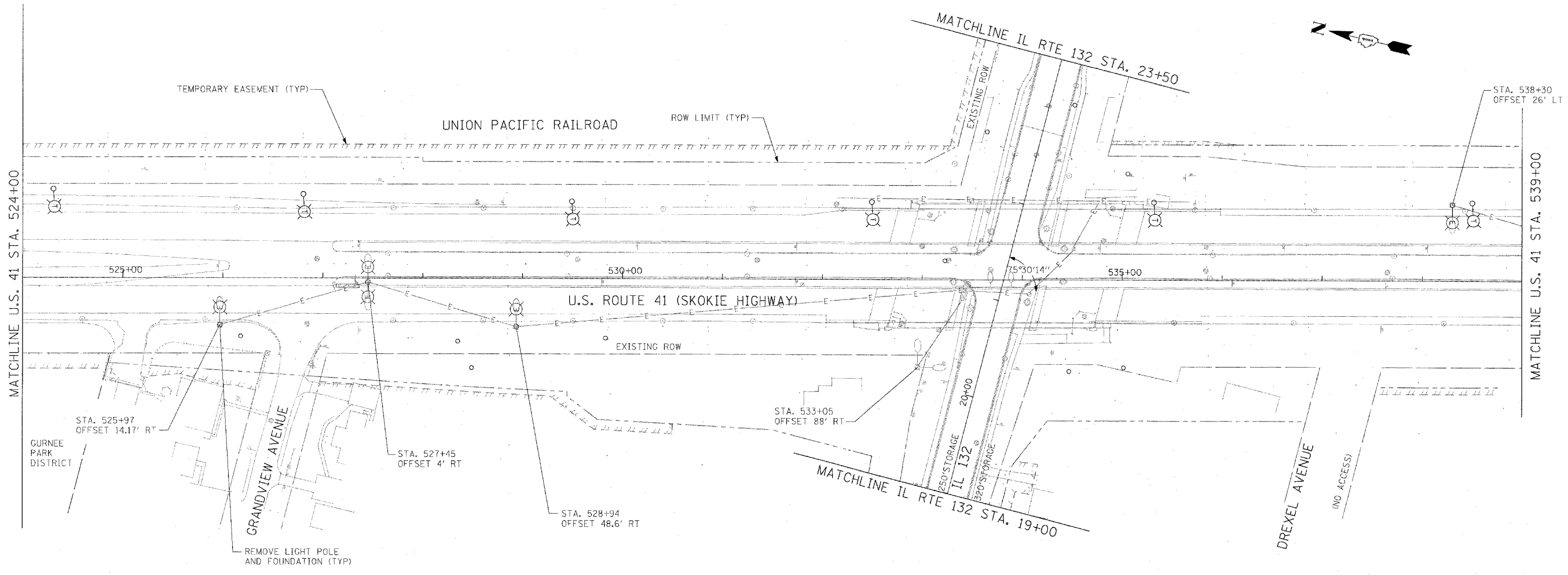
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 LIGHTING DEMOLITION PLAN  
 SHEET 1 OF 4  
 US 41 - BOP TO STA. 524+00  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: FO  
 CHECKED BY: DEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	162
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
125X-HB-(1&2) R-1				

PLAN	SURVEYED	DATE
NOTED	BY	
NOTE BOOK	NO. OF WAY CHECKED	
NO.	FILE NAME	

PROFILE	STARTED	DATE
NOTED	BY	
NO.	FILE NAME	

PLOT DATE = 5/14/2008  
 FILE NAME = 151TY L111342PE - US 41 sk. IL 132.CADD\exp11\132demo\_sh2.dwg



REVISIONS	
NAME	DATE



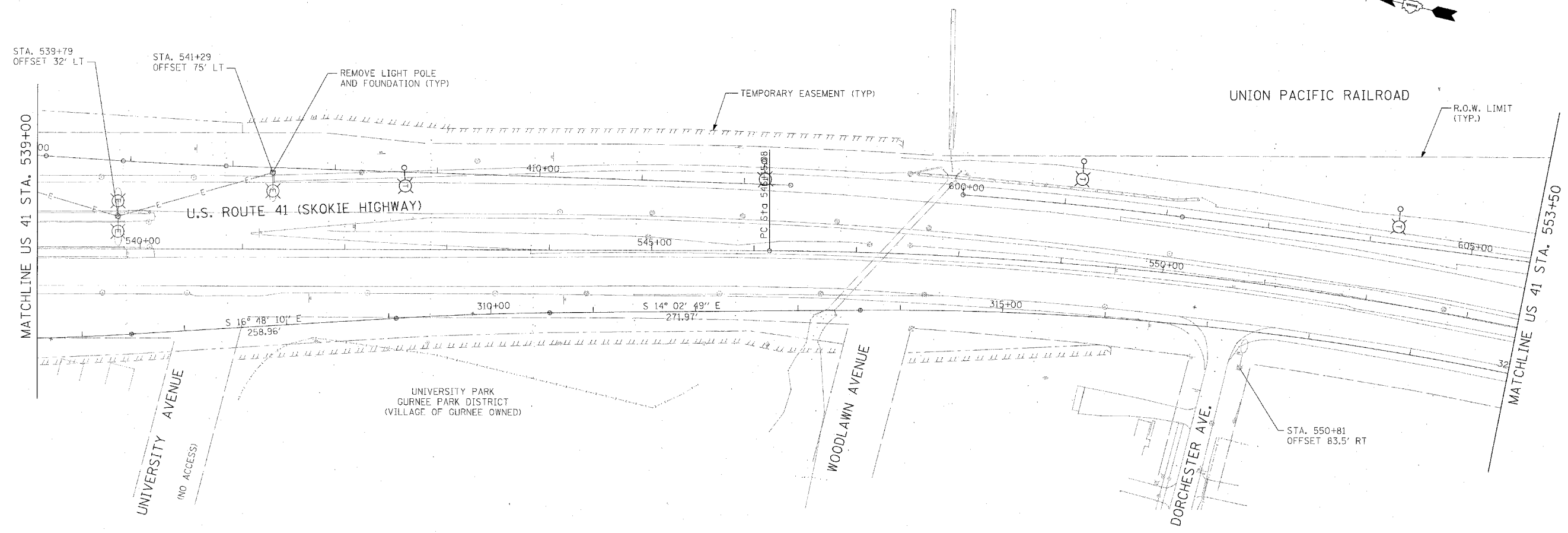
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 LIGHTING DEMOLITION PLAN  
 SHEET 2 OF 4  
 US 41 - STA. 524+00 TO STA. 539+00  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: FO  
 CHECKED BY: DEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	163
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1				

PLAN	DATE
REVISIONS	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	

PROF. ILL.	DATE
REVISIONS	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	

PLOT DATE = 5/14/2008  
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 LIGHTING DEMOLITION PLAN  
 SHEET 3 OF 4  
 US 41 - STA. 539+00 TO STA. 553+50  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: FO  
 CHECKED BY: DEM



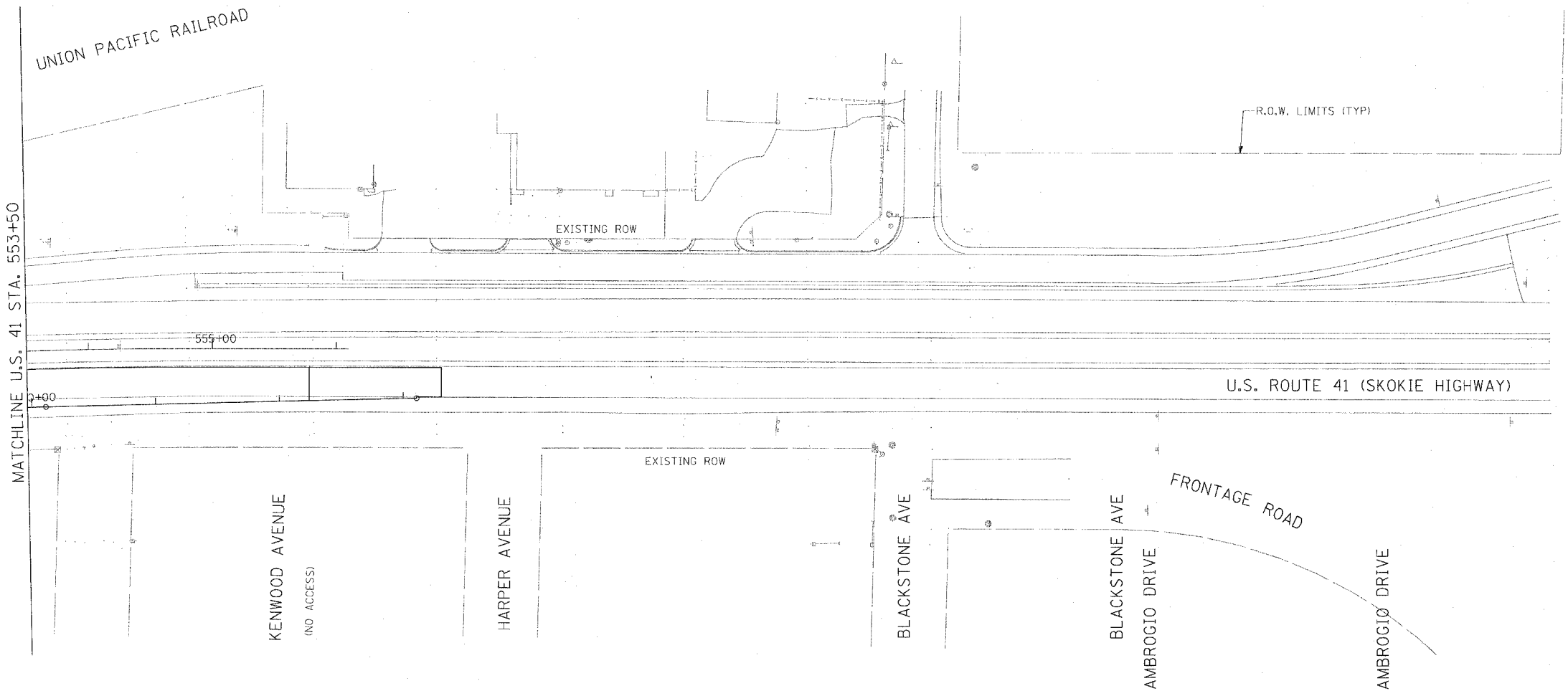
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120	•	LAKE	469	164
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99			ILLINOIS	FED. AID PROJECT
• 125X-HB-(1&2) R-1				



PLAN	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	
	CHKD BY	
	DATE	

PROFILE	DATE
NOTE BOOK NO.	

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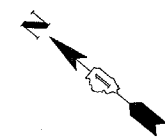


REVISIONS	
NAME	DATE



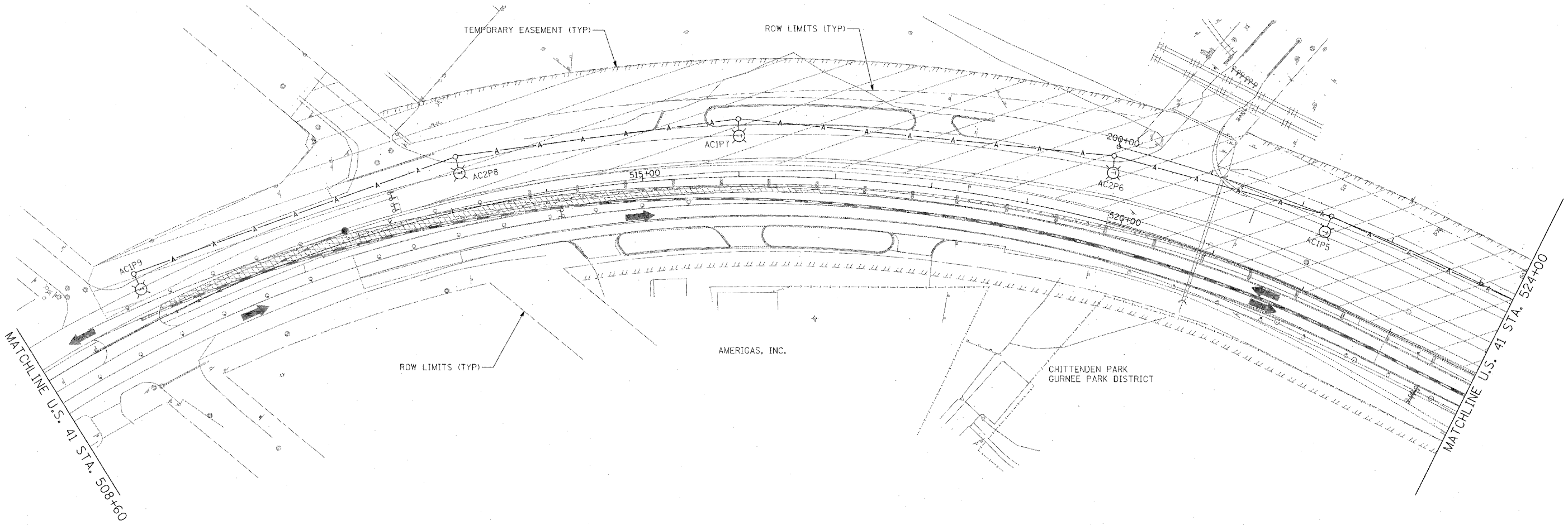
ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
LIGHTING DEMOLITION PLAN  
SHEET 4 OF 4  
US 41 - STA. 553+50 TO EOP  
SCALE: 1"=50'-0"  
DATE: 05/07/08  
DRAWN BY: FO  
CHECKED BY: DEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	165
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1				



PLAN	REVISIONS	DATE
NO. _____	BY _____	DATE _____
NOTE BOOK _____	ALIGNED _____	
	CHANGED _____	
	FILE NAME _____	

PROFILE	REVISIONS	DATE
NO. _____	BY _____	DATE _____
NOTE BOOK _____	ALIGNED _____	
	CHANGED _____	
	FILE NAME _____	



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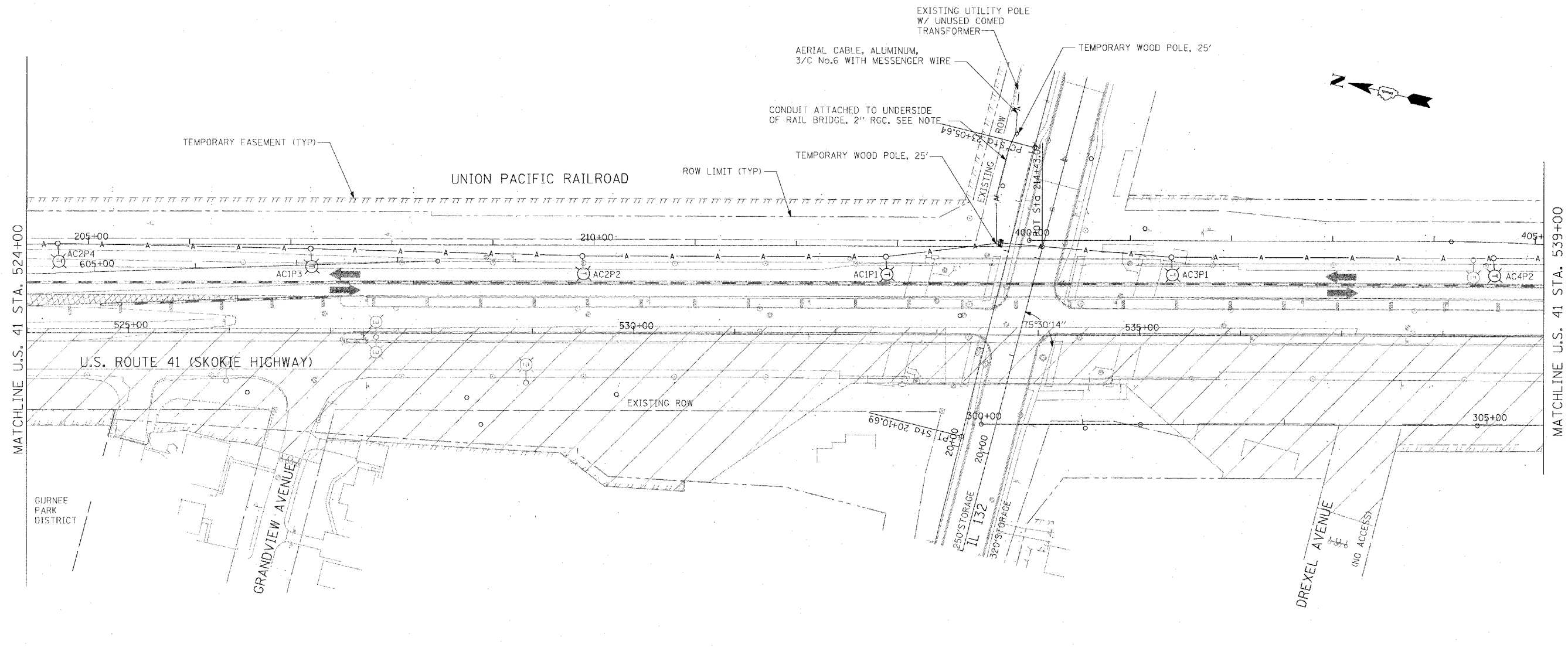
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 TEMPORARY ROADWAY LIGHTING PLAN  
 SHEET 1 OF 4  
 US 41 - BOP TO STA. 524+00  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: FO  
 CHECKED BY: DEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
120		LAKE	469	166
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99 ILLINOIS FED. AID PROJECT				
• 125X-HB-(1&2) R-1				

DATE	BY

DATE	BY



**NOTE:**  
 CONDUIT SHALL BE ATTACHED TO RAIL BRIDGE USING ONLY CLAMPS AND OTHER FITTINGS THAT WILL NOT PENETRATE OR DEFORM THE BRIDGE STRUCTURE. NO HOLES SHALL BE DRILLED IN BRIDGE STRUCTURE. ANY DAMAGE TO BRIDGE SURFACE COATING SHALL BE REPAIRED WHEN CONDUIT IS REMOVED. CONDUIT ENDS SHALL BE BUSHED TO PROTECT CABLE.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 TEMPORARY ROADWAY LIGHTING PLAN  
 SHEET 2 OF 4  
 US 41 - STA. 524+00 TO STA. 539+00  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: FO  
 CHECKED BY: DEM

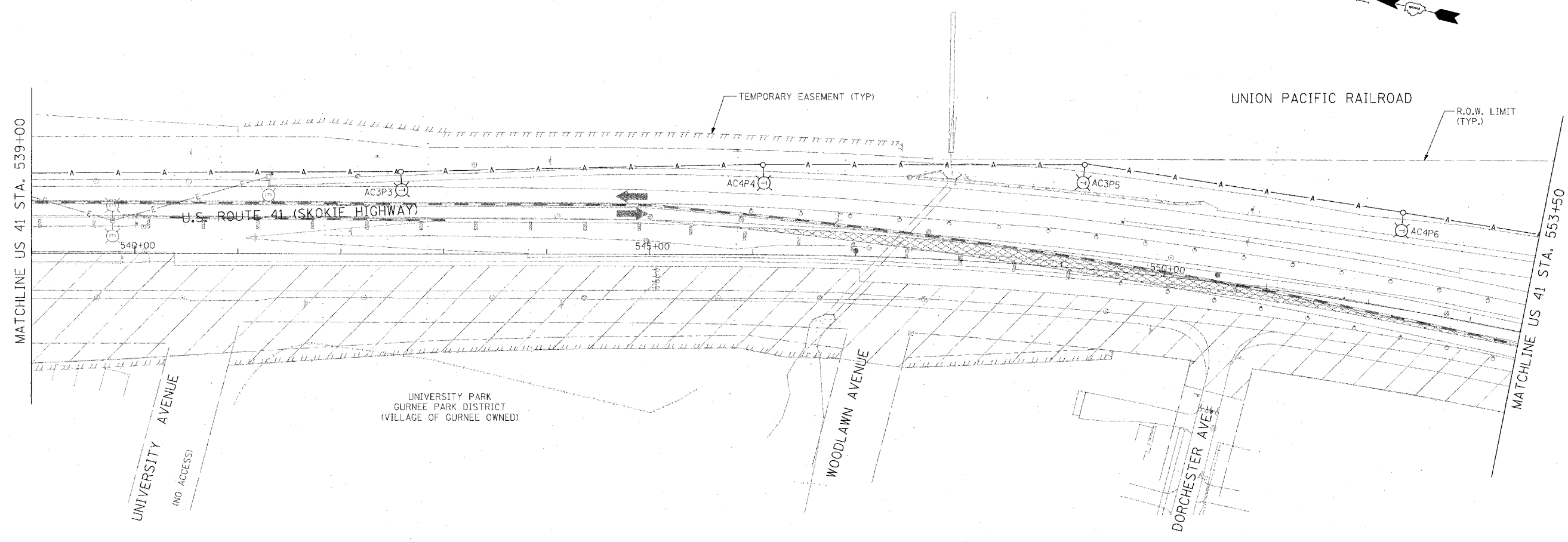
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120	•	LAKE	469	147
STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1				

PLAN	DATE
NO. E. BOOK	BY
NO. SHEET	DATE
NO. FILE	BY
NO. FILE	DATE

PROFILE	DATE
NO. E. BOOK	BY
NO. SHEET	DATE
NO. FILE	BY
NO. FILE	DATE

PLOT DATE = 5/17/2008  
FILE NAME = I:\TY\LINKS\295 - US 41 ST. IL 132\GOOD\41TEMP\TG-3103.dwg



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
U.S. 41 (SKOKIE HIGHWAY)  
AT IL ROUTE 132  
TEMPORARY ROADWAY LIGHTING PLAN  
SHEET 3 OF 4  
US 41 - STA. 539+00 TO STA. 553+50  
SCALE: 1"=50'-0" DRAWN BY: FO  
DATE: 05/07/08 CHECKED BY: DEM

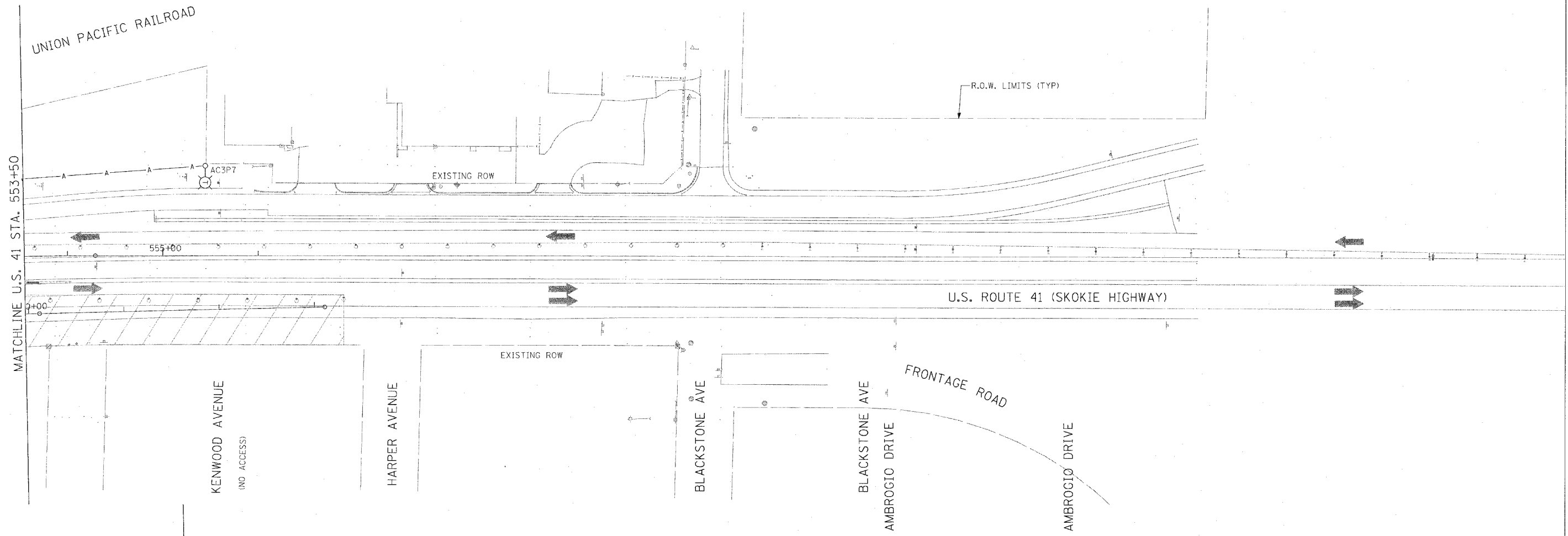
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STA.		TO STA.		
FED. ROAD DIST. NO. D-91-404-99		ILLINOIS	FED. AID PROJECT	
• 125X-HB-(1&2) R-1				



PLAN	BY	DATE
REVISION		
ALIGNMENT CHECKED		
NOTE BOOK		
NO.		

PROFILE	BY	DATE
GRADES CHECKED		
NOTE BOOK		
NO.		

PLOT DATE = 5/14/2008  
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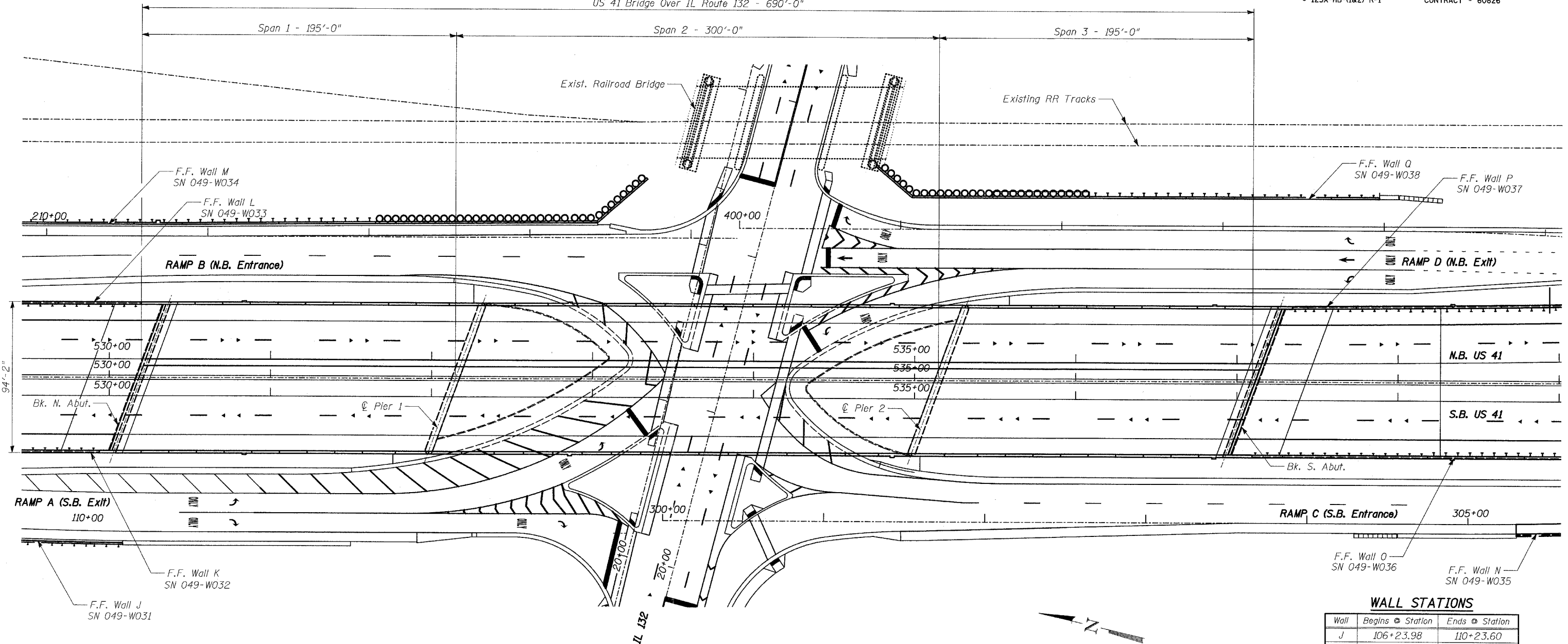
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 U.S. 41 (SKOKIE HIGHWAY)  
 AT IL ROUTE 132  
 TEMPORARY ROADWAY LIGHTING PLAN  
 SHEET 4 OF 4  
 US 41 - STA. 553+50 TO EOP  
 SCALE: 1"=50'-0"  
 DATE: 05/07/08  
 DRAWN BY: F0  
 CHECKED BY: DEM

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.	SHEET NO. - S-1
346	•	LAKE	469	170	S-66 - SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		
• 125X-HB-(1&2) R-1		CONTRACT # 60826			

US 41 Bridge Over IL Route 132 - 690'-0"



OVERALL PLAN

**CONSTRUCTION STAGING**

Stage 1 - Divert traffic to existing N.B. bridge. Close existing S.B. bridge and existing entrance and exit ramps. Remove existing S.B. bridge. Construct portion of new bridge and retaining walls J, K, N, and O.

Stage 2 - Divert traffic to constructed portion of new bridge. Close and remove existing N.B. bridge. Construct remaining portion of new bridge and retaining walls L, M, Q, and P.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications For Highway Bridges

**LOADING HS20-44**

Allow 50 psf for future wearing surface

**DESIGN STRESSES**

**FIELD UNITS**  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)  
 $f_y = 50,000$  psi (structural steel M270 Grade 50)  
 $f_y = 36,000$  psi (structural steel M270 Grade 36)

**SEISMIC DATA**

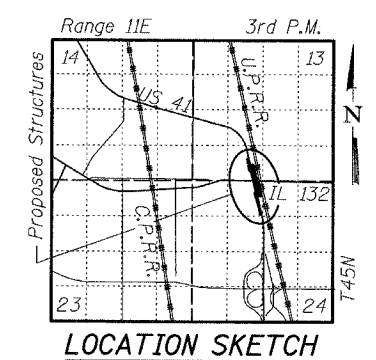
Seismic Performance Category (SPC) = A  
 Bedrock Acceleration Coefficient (A) = 0.035g  
 Site Coefficient (S) = 1.0

**WALL STATIONS**

Wall	Begins @ Station	Ends @ Station
J	106+23.98	110+23.60
K	527+76.95	529+93.95
L	527+91.28	530+19.78
M	209+34.09	213+73.11
N	305+29.91	312+64.94
O	537+09.57	540+88.57
P	537+34.42	539+54.74
Q	400+84.81	403+97.09

TYLIN INTERNATIONAL

DESIGNED	- SP
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD



**OVERALL GENERAL PLAN**

FAP 346 (U.S. ROUTE 41 - SKOKIE HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

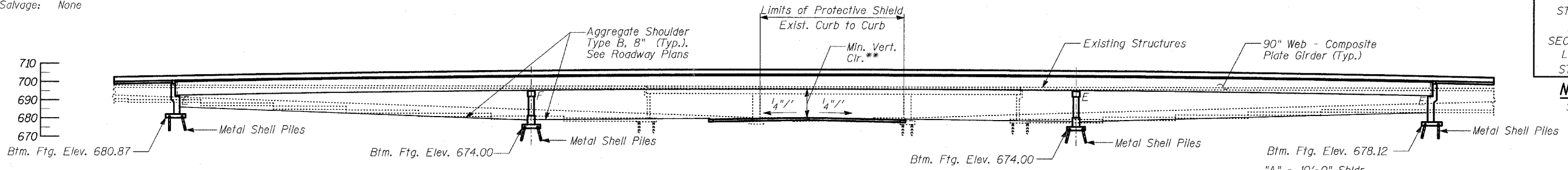
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346	*	LAKE	469	171
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* 125X-HB-(1&2) R-1		CONTRACT # 60826		

Benchmark: BM #6 - Square cut in base of L.P. at N.E. corner of IL Route 132 and Magnolia (Speedway) 45.14' LT, Sta. 32+13.24 (IL 132 E.B. @), Elev. 696.47.

Existing Structure: Each existing superstructure consists of a 208'-5 1/4" (Bk. to Bk. abutments) by 41'-6" wide reinforced concrete deck supported on six continuous wide flange beams. The superstructure rests on two piers and two closed abutments, all of reinforced concrete, and founded on timber piles. Existing structure numbers are 049-0030 & 049-0031. See staging plan for staging details.

Salvage: None

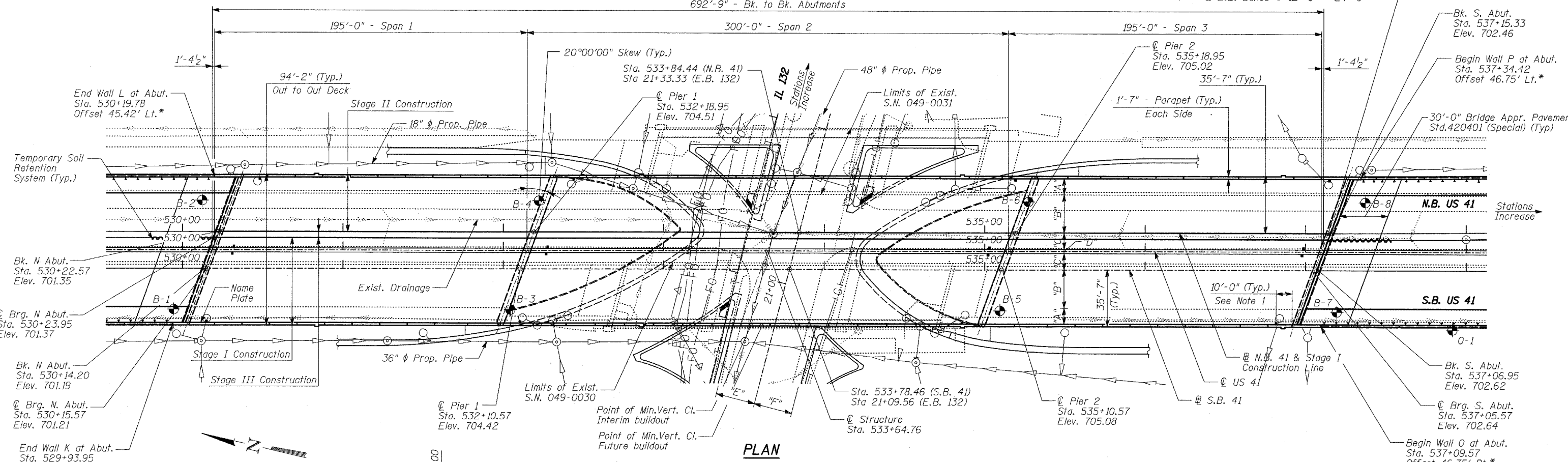
STATION 533+64.76  
BUILT 200\_ BY  
STATE OF ILLINOIS  
F.A.P. RT. 346  
SEC. 125X-HB-(1&2)R-1  
LOADING HS20-44  
STR. NO. 049-0209  
**NAME PLATE**  
See Std. 515001



**NOTES:**  
1. Scuppers are placed 10'-0" from the face of piers and abutments.

\*\*15'-3" Future buildout  
15'-8" Interim buildout

"A" - 10'-0" Shldr.  
"B" - 2 Lanes @ 12'-0" = 24'-0"  
"C" - 10'-2" Shldr.  
"D" - 2'-8" Median Barrier  
"E" - 2 W.B. Lanes @ 12'-0" = 24'-0"  
"F" - 2 E.B. Lanes @ 12'-0" = 24'-0"

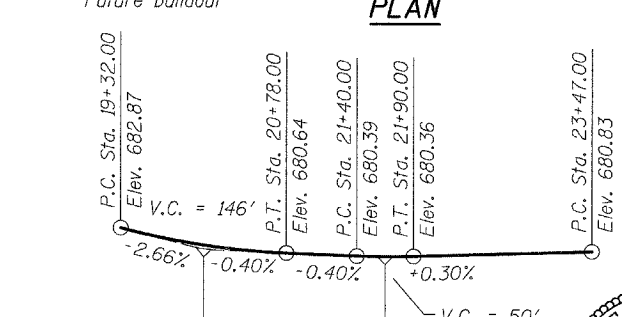
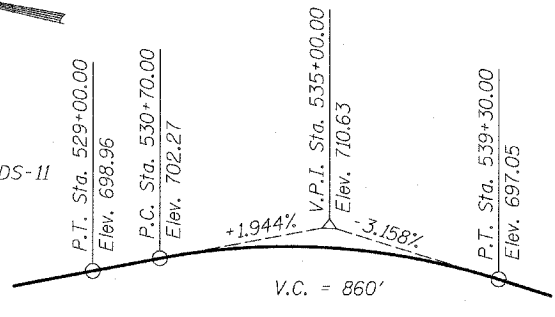


**LEGEND**

- ⊙ - Manhole
- - Catch Basin
- ⊕ - Soil Boring
- Prop. Drain Pipe
- - Drainage Scupper - Type DS-11

**TYLIN INTERNATIONAL**

DESIGNED	- SP
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD



**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (PE)  
ENGINEER OF BRIDGES AND STRUCTURES



Signed *SP*  
Spiros Pantazis, S.E. II, Lic. No. 081-006448  
Expires 11-30-2008.  
Date 5/14/08  
For drawings S-1 thru S-66

**BRIDGE**  
**GENERAL PLAN & ELEVATION,**  
**STA 533+64.76**

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

**GENERAL NOTES**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-3
346	*	LAKE	469	132	S-66 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
			CONTRACT # 60826		

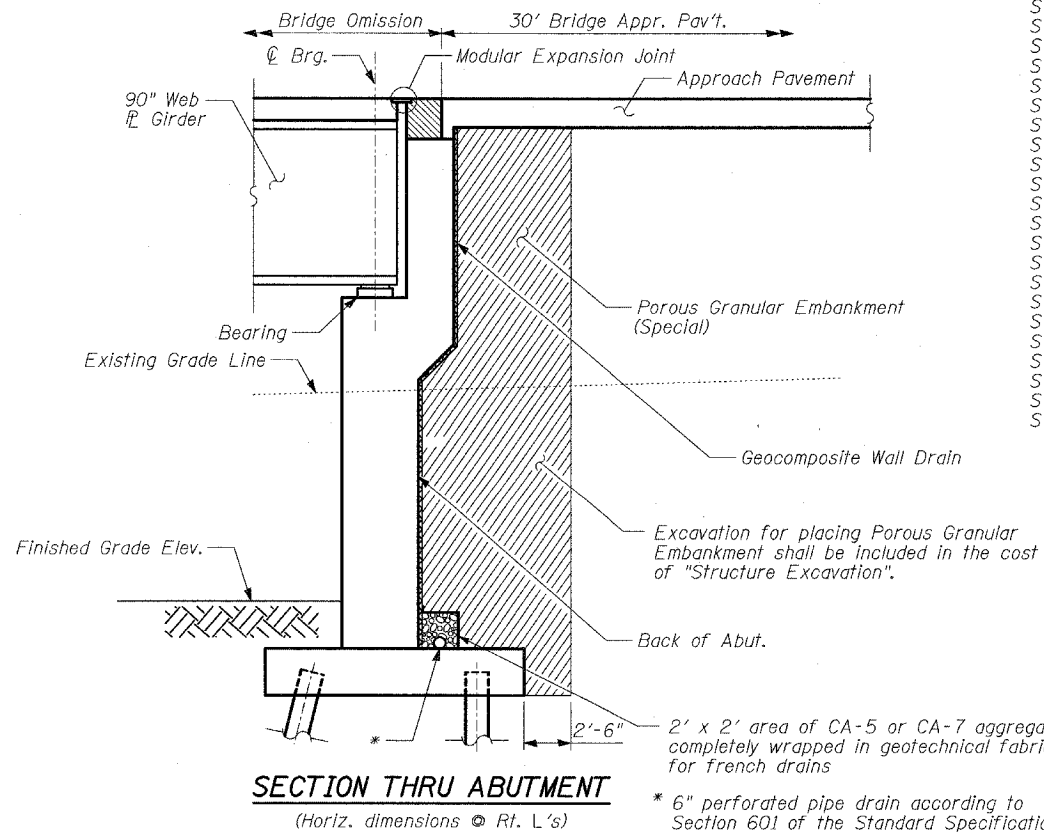
- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts  $\frac{1}{8}$  in.  $\phi$ , holes  $\frac{15}{16}$  in.  $\phi$ , unless otherwise noted.
- Calculated weight of Structural Steel =  
Grade 50 = 3,572,300 lbs.  
Grade 36 = 180,150 lbs. \* For Information Only
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of  $\frac{1}{8}$  inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to all exposed surfaces of the abutments.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surface shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown Munsell No. 2.5 YR 3/4. The final finish coat shall be field painted. See Special Provisions for "Cleaning and Painting New Metal Structures."
- The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
- The Contractor is alerted that camber and dead load deflection values shown on the drawings were developed based on the deck pouring sequence shown in the Contract Drawings. Any deviation from this pouring sequence may require changes to camber and elevations that reflect dead load deflections. If the Contractor wishes to vary from the sequence shown on the plans, then proposed plan revisions and design calculations shall be submitted to the Engineer for review and approval. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer.
- Slip forming of the parapets is not allowed.
- The pay item, "Removal of Existing Structure No. 1" and "Removal of Existing Structure No. 2" shall also include the removal of the approach retaining walls and stairwell in accordance with the Special Provisions.

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- S-1 OVERALL GENERAL PLAN
- S-2 BRIDGE GENERAL PLAN & ELEVATION, STA 533+64.76
- S-3 GENERAL NOTES, INDEX OF SHEETS AND BILL OF MATERIAL
- S-4 STAGE CONSTRUCTION I
- S-5 STAGE CONSTRUCTION & TEMPORARY SOIL RETENTION SYSTEM
- S-6 TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
- S-7 TOP OF SLAB ELEVATIONS LAYOUT
- S-8 TOP OF SLAB ELEVATIONS (1 OF 7)
- S-9 TOP OF SLAB ELEVATIONS (2 OF 7)
- S-10 TOP OF SLAB ELEVATIONS (3 OF 7)
- S-11 TOP OF SLAB ELEVATIONS (4 OF 7)
- S-12 TOP OF SLAB ELEVATIONS (5 OF 7)
- S-13 TOP OF SLAB ELEVATIONS (6 OF 7)
- S-14 TOP OF SLAB ELEVATIONS (7 OF 7)
- S-15 TOP OF NORTH APPROACH SLAB ELEVATIONS
- S-16 TOP OF SOUTH APPROACH SLAB ELEVATIONS
- S-17 SUPERSTRUCTURE SPAN 1
- S-18 SUPERSTRUCTURE SPAN 2
- S-19 SUPERSTRUCTURE SPAN 3
- S-20 SUPERSTRUCTURE DETAILS I
- S-21 SUPERSTRUCTURE DETAILS II
- S-22 SUPERSTRUCTURE DETAILS III
- S-22A SUPERSTRUCTURE DETAILS IV
- S-23 SUPERSTRUCTURE DETAILS V
- S-24 DRAINAGE SCUPPER, DS-II
- S-25 MODULAR EXPANSION JOINT DETAILS
- S-26 PREFORMED JOINT STRIP SEAL
- S-27 DRAINAGE SYSTEM DETAILS
- S-28 BAR SPLICER (ASSEMBLY) DETAILS
- S-29 FRAMING PLAN
- S-30 GIRDER ELEVATION
- S-31 FRAMING DETAILS I
- S-32 FRAMING DETAILS II
- S-33 FRAMING DETAILS III
- S-34 FIXED BEARING
- S-35 FLOATING BEARINGS
- S-36 METAL SHELL PILES
- S-37 NORTH ABUTMENT
- S-38 NORTH ABUTMENT DETAILS I
- S-39 NORTH ABUTMENT DETAILS II
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- S-40 SOUTH ABUTMENT
- S-41 SOUTH ABUTMENT DETAILS I
- S-42 SOUTH ABUTMENT DETAILS II
- S-42A SOUTH ABUTMENT DETAILS III
- S-43 PIER 1
- S-44 PIER 1 DETAILS
- S-45 PIER 2
- S-46 PIER 2 DETAILS
- S-47 NORTH BRIDGE APPROACH PAVEMENT (1 OF 2)
- S-48 NORTH BRIDGE APPROACH PAVEMENT (2 OF 2)
- S-49 SOUTH BRIDGE APPROACH PAVEMENT (1 OF 2)
- S-50 SOUTH BRIDGE APPROACH PAVEMENT (2 OF 2)
- S-51 BORING LOG B-1 (1 OF 2)
- S-52 BORING LOG B-1 (2 OF 2)
- S-53 BORING LOG B-2 (1 OF 2)
- S-54 BORING LOG B-2 (2 OF 2)
- S-55 BORING LOG B-3 (1 OF 2)
- S-56 BORING LOG B-3 (2 OF 2)
- S-57 BORING LOG B-4 (1 OF 2)
- S-58 BORING LOG B-4 (2 OF 2)
- S-59 BORING LOG B-5 (1 OF 2)
- S-60 BORING LOG B-5 (2 OF 2)
- S-61 BORING LOG B-6 (1 OF 2)
- S-62 BORING LOG B-6 (2 OF 2)
- S-63 BORING LOG B-7 (1 OF 2)
- S-64 BORING LOG B-7 (2 OF 2)
- S-65 BORING LOG B-8 (1 OF 2)
- S-66 BORING LOG B-8 (2 OF 2)

**TOTAL BILL OF MATERIAL**

Item	Unit	Super.	Sub.	Total
POROUS GRANULAR EMBANKMENT (SPECIAL)	CU. YD.	-	934	934
BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ. YD.	474	-	474
REMOVAL OF EXISTING STRUCTURE NO. 1	EACH	-	-	1
REMOVAL OF EXISTING STRUCTURE NO. 2	EACH	-	-	1
PROTECTIVE SHIELD	SQ. YD.	466	-	466
STRUCTURE EXCAVATION	CU. YD.	-	12,595	12,595
CONCRETE STRUCTURES	CU. YD.	-	1,458	1,458
CONCRETE SUPERSTRUCTURE	CU. YD.	2,025	-	2,025
BRIDGE DECK GROOVING	SQ. YD.	6,488	-	6,488
PROTECTIVE COAT	SQ. YD.	8,441	19	8,460
ERECTING STRUCTURAL STEEL	L. SUM	1	-	1
STUD SHEAR CONNECTORS	EACH	10,230	-	10,230
REINFORCEMENT BARS, EPOXY COATED	POUND	525,770	194,210	719,980
BAR SPLICERS	EACH	5,690	498	6,188
FURNISHING METAL PILE SHELLS 14"x $\frac{3}{8}$ "	FOOT	-	14,959	14,959
DRIVING PILES	FOOT	-	14,959	14,959
TEST PILE METAL SHELLS	EACH	-	4	4
NAMES PLATES	EACH	1	-	1
PREFORMED JOINT STRIP SEAL	FOOT	99	-	99
CONCRETE SEALER	SQ. FT.	-	523	523
PIPE UNDERDRAIN FOR STRUCTURES 6"	FOOT	-	261	261
MECHANICAL SPLICE	EACH	22	-	22
DRAINAGE SCUPPERS, DS-II	EACH	16	-	16
TEMPORARY SOIL RETENTION SYSTEM	SQ. FT.	-	1,271	1,271
ERECTING HLMR BEARINGS, GUIDED EXPANSION, 250 KIPS	EACH	20	-	20
ERECTING HLMR BEARINGS, GUIDED EXPANSION, 850 KIPS	EACH	10	-	10
DRAINAGE SYSTEM	L.SUM	1	-	1
ERECTING MODULAR EXPANSION JOINT 6"	FOOT	99	-	99
PILE EXTRACTION	EACH	-	11	11
GEOCOMPOSITE WALL DRAIN	SQ. YD.	-	414	414
ANCHOR BOLTS, 1 $\frac{1}{2}$ "	EACH	-	120	120



**TYLIN INTERNATIONAL**

DESIGNED	- SP
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

REVISIONS	
NAME	DATE
SP	6/17/08

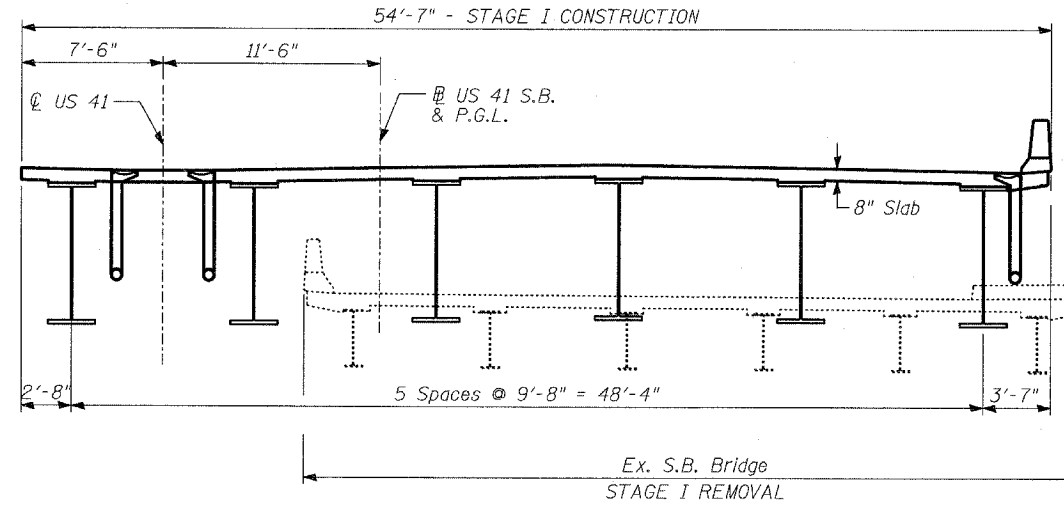
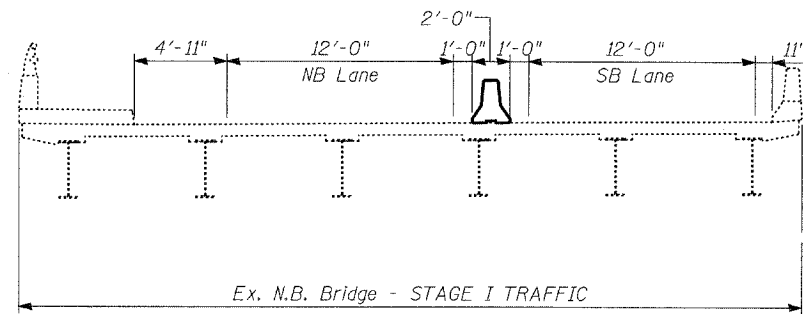
**GENERAL NOTES, INDEX OF SHEETS & BILL OF MATERIAL**

FAP 346 (U.S. ROUTE 41 - SKOKIE HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

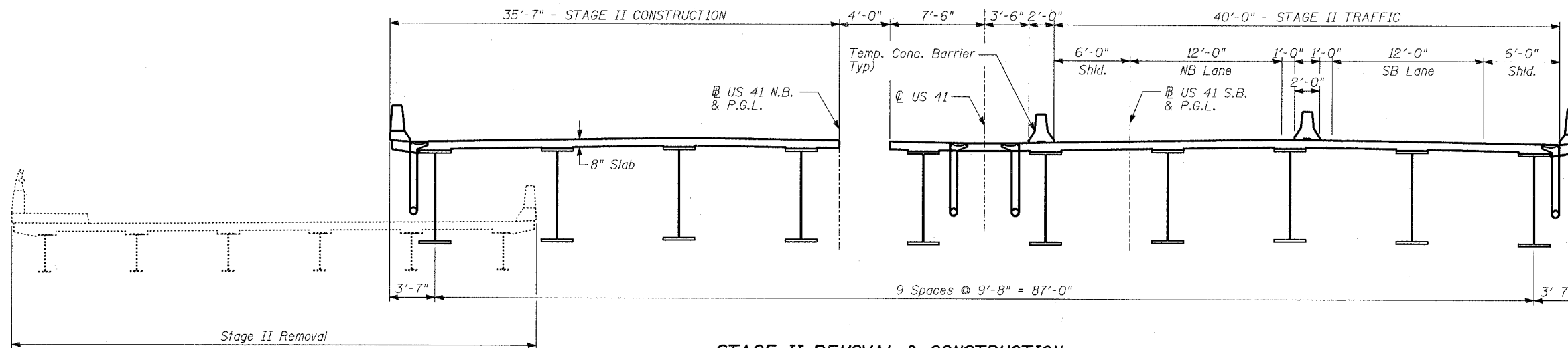


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

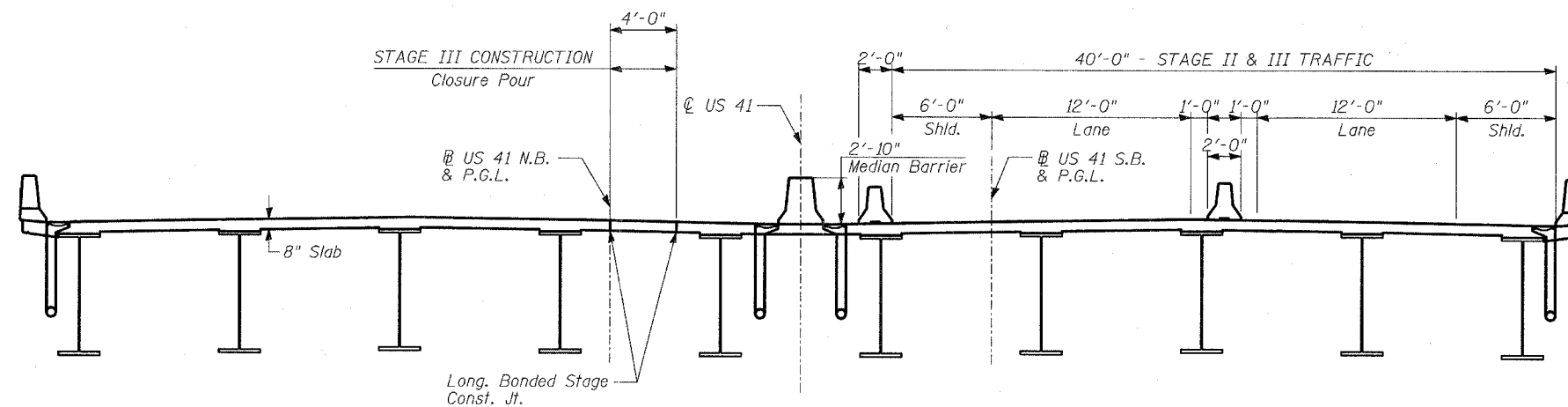
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. - S-4
346	*	LAKE	469	173	S-86 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
* 125X-HB-(1&2) R-1		CONTRACT # 60826			



**STAGE I REMOVAL & CONSTRUCTION**  
(Looking South)



**STAGE II REMOVAL & CONSTRUCTION**  
(Looking South)



**STAGE III CONSTRUCTION**  
(Looking South)

**NOTES**

1. Work to be performed during Stage III includes the deck closure pour and the median barrier.
2. For temporary Concrete Barrier details, see See Sheet S-6.
3. For Quantity of temporary concrete barrier, see Roadway Plans.

**STAGE CONSTRUCTION I**

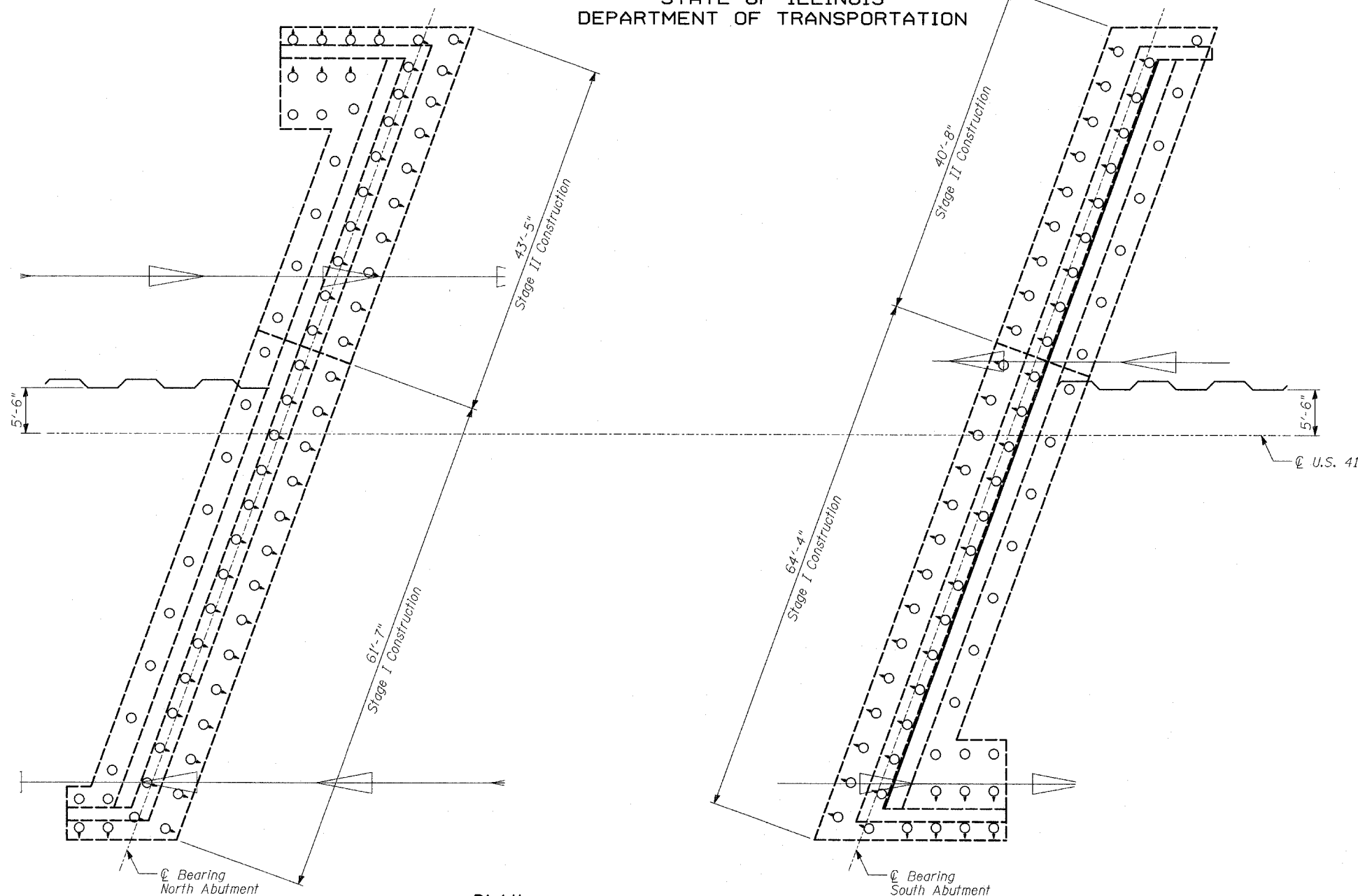
FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

TYLIN INTERNATIONAL

DESIGNED	- CM
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-5 S-66 SHEETS
346	*	LAKE	469	174	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		
* 125X-HB-(1&2) R-1		CONTRACT * 60826			



PLAN

BILL OF MATERIAL

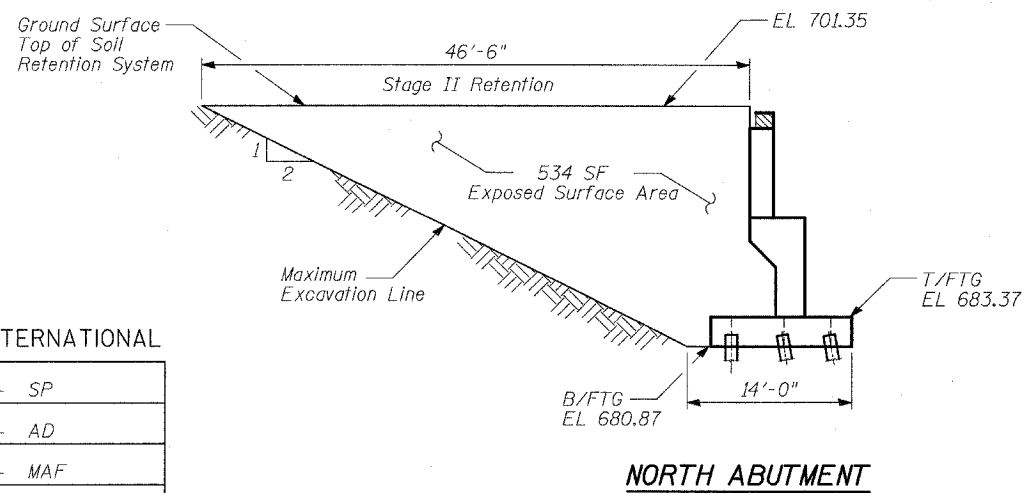
ITEM	UNIT	TOTAL
Temporary Soil Retention System	SQ FT	1271

NOTES:

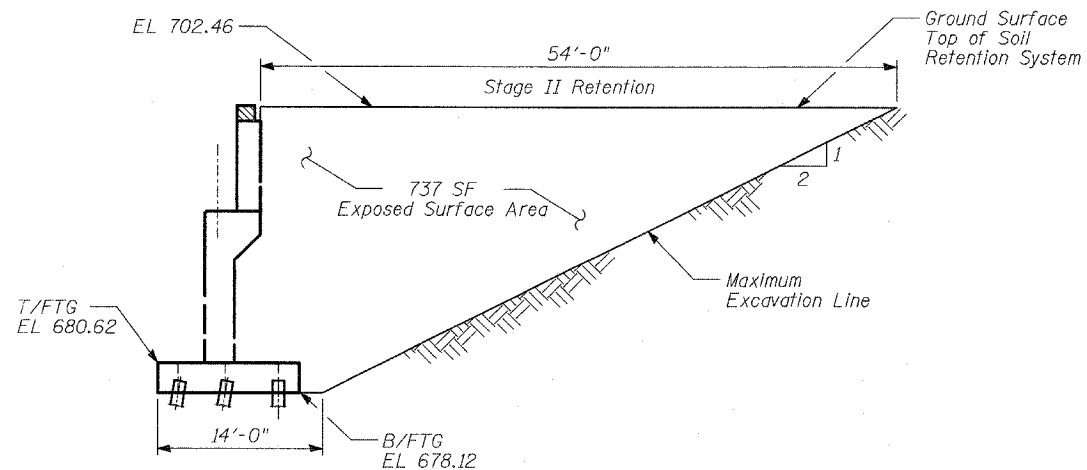
1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

STAGE CONSTRUCTION &  
TEMPORARY SOIL RETENTION SYSTEM

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209



NORTH ABUTMENT



SOUTH ABUTMENT

TYLIN INTERNATIONAL

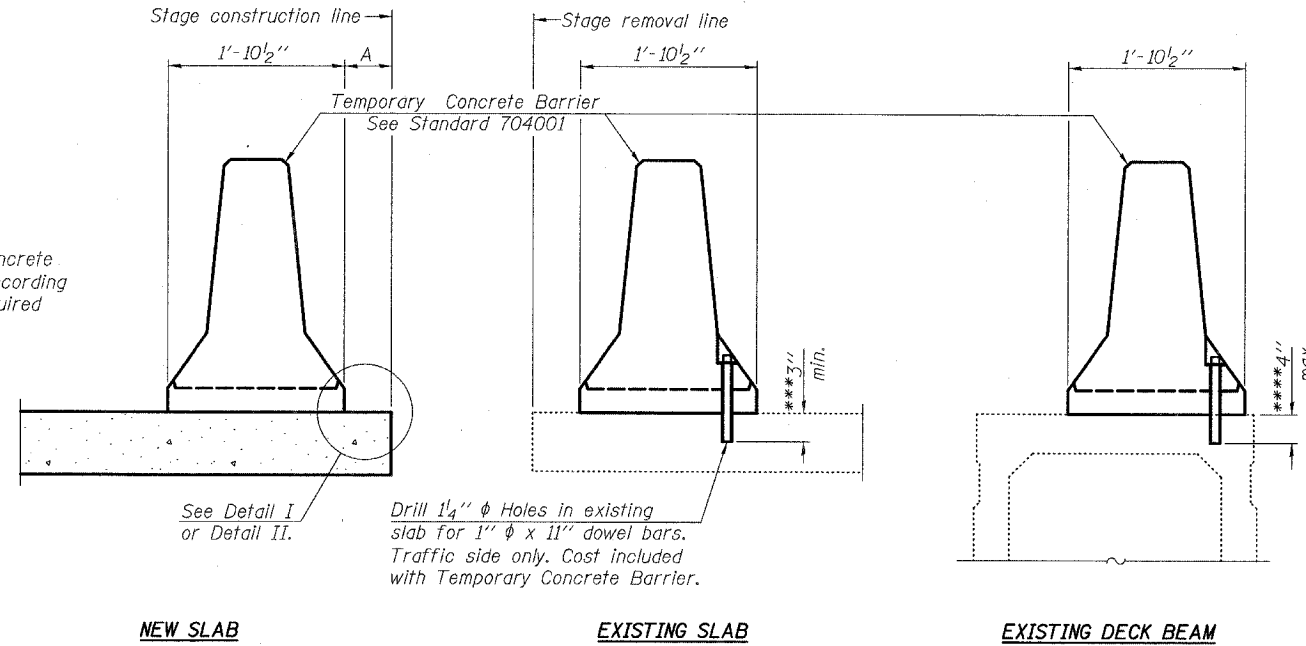
DESIGNED	- SP
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
346	•	LAKE	469	175
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
125X-HB-(1&2)	R-1	CONTRACT # 60826		

SHEET NO. - S-6  
S-66 SHEETS

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

**NOTES**

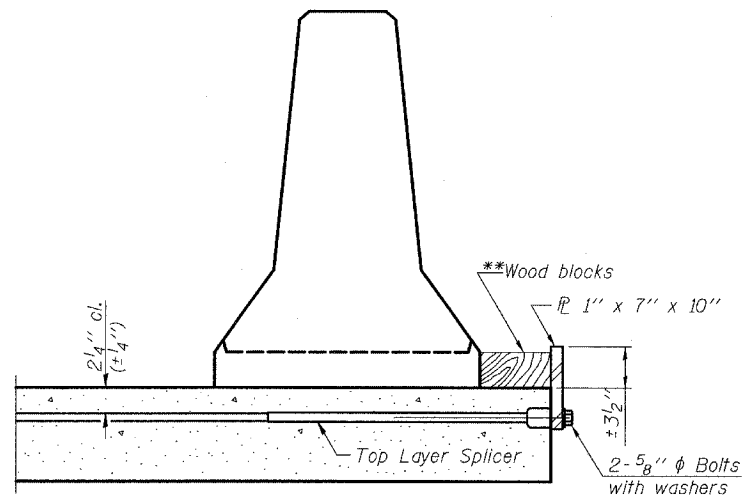
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1"x7"x10" steel  $\bar{L}$  to the top layer of couplers with 2-5/8"  $\phi$  bolts screwed to coupler at approximate  $\bar{C}$  of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1"x7"x10" steel  $\bar{L}$  to the concrete slab or concrete wearing surface with 2-5/8"  $\phi$  Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate  $\bar{C}$  of each barrier panel.

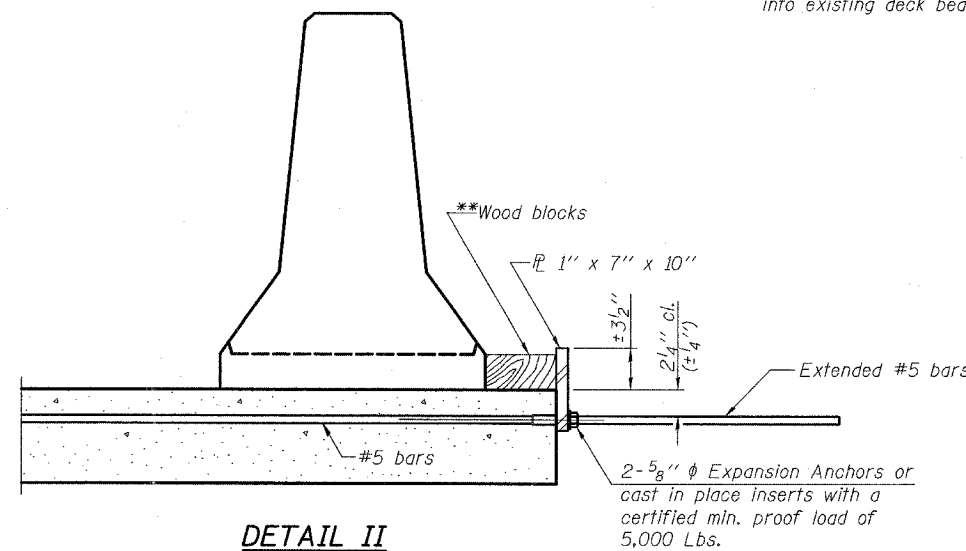
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

\*\*\*Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

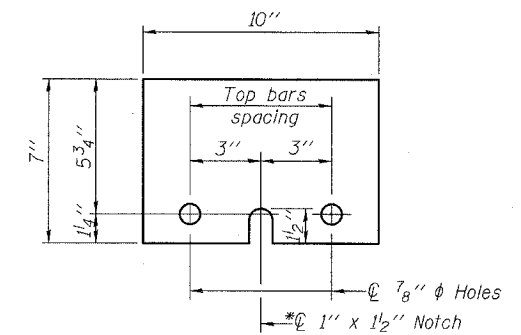
\*\*\*\*If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER 1" x 7" x 10"

\* Required only with Detail II

\*\*Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

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DESIGNED	- SP
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

R-27

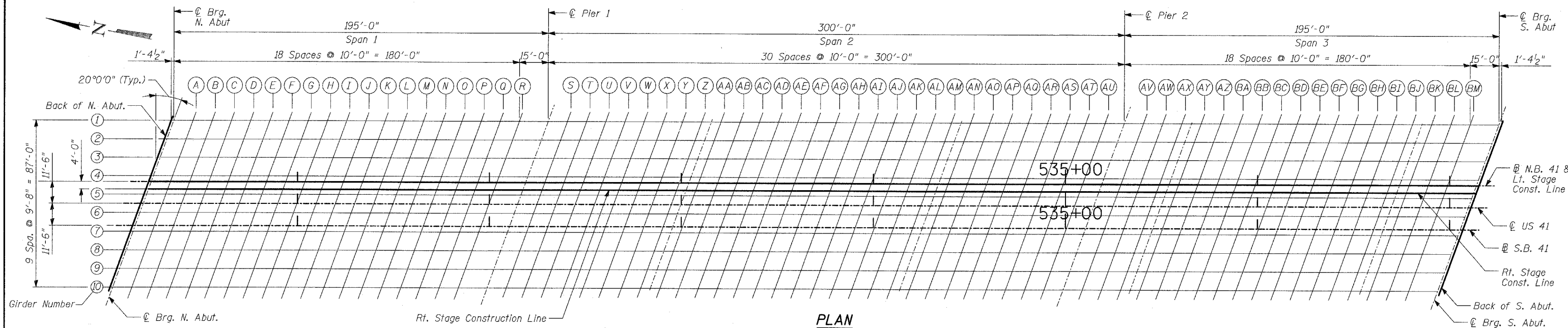
9-3-07

**TEMPORARY CONCRETE BARRIER  
FOR STAGE CONSTRUCTION**

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

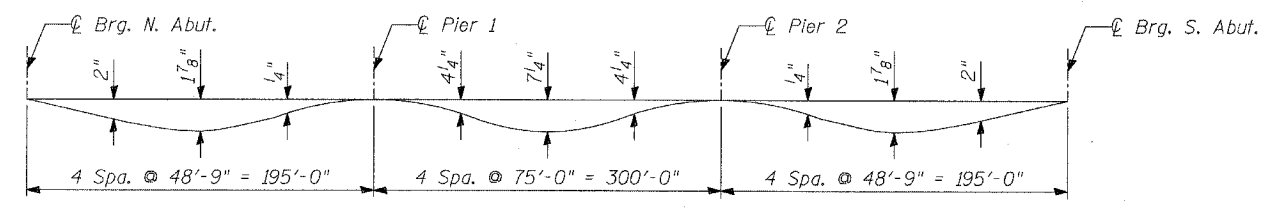
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-7
346		LAKE	469	176	S-66 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
125X-HB-(1&2) R-1		CONTRACT # 60826			

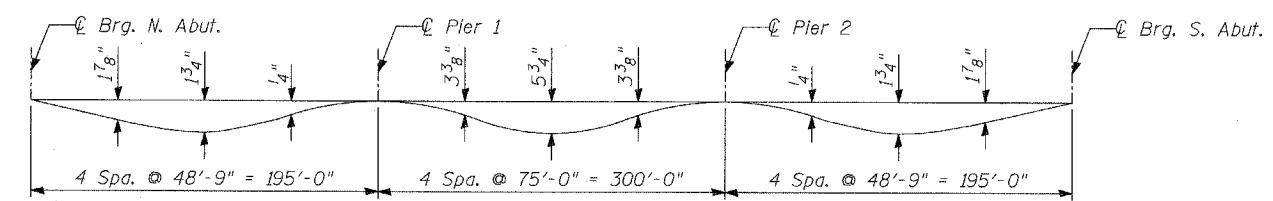


**PLAN**

Note: All stations relating to top of slab elevations are given relative to the  $\odot$  U.S. 41.

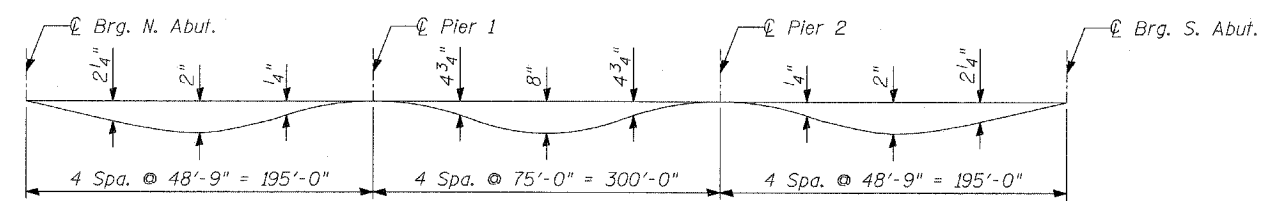


**DEAD LOAD DEFLECTION DIAGRAM - BEAM 1 AND 10**  
(INCLUDES WEIGHT OF CONCRETE ONLY)

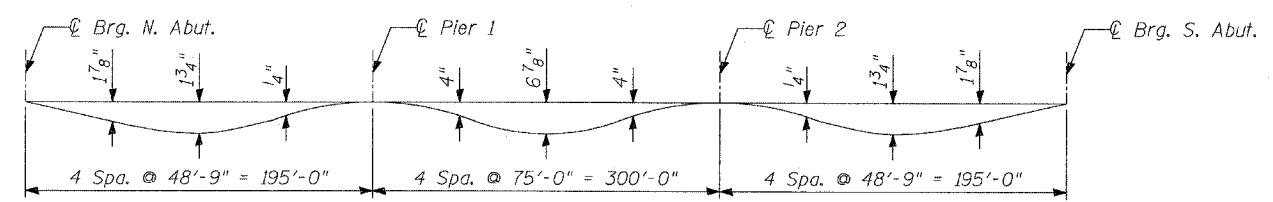


**DEAD LOAD DEFLECTION DIAGRAM - BEAM 5**  
(INCLUDES WEIGHT OF CONCRETE ONLY)

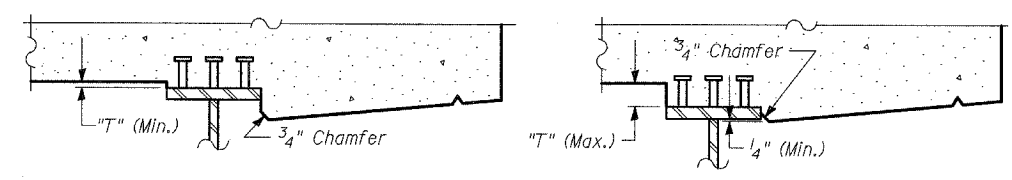
Note: The deflections shown in the dead load deflection diagrams are not to be used if the Engineer is working from the grade elevations adjusted for dead load deflections as shown in the Top of Slab elevation tables



**DEAD LOAD DEFLECTION DIAGRAM - BEAMS 2, 3 AND 6-9**  
(INCLUDES WEIGHT OF CONCRETE ONLY)



**DEAD LOAD DEFLECTION DIAGRAM - BEAM 4**  
(INCLUDES WEIGHT OF CONCRETE ONLY)



**AT MINIMUM FILLET**

**AT MAXIMUM FILLET**

**FILLET HEIGHTS**

**METHOD OF DETERMINING FILLET HEIGHTS "T"**

After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown on the elevation location diagram. These elevations subtracted from the "Theoretical Grade Elevations Adjusted For Dead Load Deflections" shown on the tables, minus slab thickness equals the fillet heights above top flange of girders.

**TOP OF SLAB ELEVATIONS LAYOUT**

FAP 346 (U.S. ROUTE 41 - SKOKIE HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

**TYLIN INTERNATIONAL**

DESIGNED	- SP
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	177
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	
125X-HB-(1&2) R-1		CONTRACT # 60826		

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+34.21	43.50 Lt.	701.41	701.41
☉ Brg. N. Abut.	530+35.59	43.50 Lt.	701.43	701.43
A	530+45.59	43.50 Lt.	701.63	701.68
B	530+55.59	43.50 Lt.	701.82	701.90
C	530+65.59	43.50 Lt.	702.02	702.14
D	530+75.59	43.50 Lt.	702.21	702.36
E	530+85.59	43.50 Lt.	702.40	702.57
F	530+95.59	43.50 Lt.	702.58	702.76
G	531+05.59	43.50 Lt.	702.76	702.95
H	531+15.59	43.50 Lt.	702.93	703.11
I	531+25.59	43.50 Lt.	703.09	703.26
J	531+35.59	43.50 Lt.	703.25	703.40
K	531+45.59	43.50 Lt.	703.40	703.52
L	531+55.59	43.50 Lt.	703.55	703.64
M	531+65.59	43.50 Lt.	703.69	703.75
N	531+75.59	43.50 Lt.	703.83	703.86
O	531+85.59	43.50 Lt.	703.95	703.96
P	531+95.59	43.50 Lt.	704.08	704.07
Q	532+05.59	43.50 Lt.	704.19	704.17
R	532+15.59	43.50 Lt.	704.31	704.29
☉ Pier 1	532+30.59	43.50 Lt.	704.46	704.46
S	532+40.59	43.50 Lt.	704.56	704.58
T	532+50.59	43.50 Lt.	704.65	704.71
U	532+60.59	43.50 Lt.	704.73	704.83
V	532+70.59	43.50 Lt.	704.81	704.96
W	532+80.59	43.50 Lt.	704.88	705.09
X	532+90.59	43.50 Lt.	704.95	705.22
Y	533+00.59	43.50 Lt.	705.01	705.34
Z	533+10.59	43.50 Lt.	705.06	705.44
AA	533+20.59	43.50 Lt.	705.11	705.55
AB	533+30.59	43.50 Lt.	705.16	705.64
AC	533+40.59	43.50 Lt.	705.19	705.72
AD	533+50.59	43.50 Lt.	705.22	705.78
AE	533+60.59	43.50 Lt.	705.25	705.83
AF	533+70.59	43.50 Lt.	705.27	705.87
AG	533+80.59	43.50 Lt.	705.28	705.88
AH	533+90.59	43.50 Lt.	705.29	705.89
AI	534+00.59	43.50 Lt.	705.29	705.87
AJ	534+10.59	43.50 Lt.	705.28	705.84
AK	534+20.59	43.50 Lt.	705.27	705.80
AL	534+30.59	43.50 Lt.	705.26	705.75
AM	534+40.59	43.50 Lt.	705.23	705.67
AN	534+50.59	43.50 Lt.	705.21	705.60
AO	534+60.59	43.50 Lt.	705.17	705.50
AP	534+70.59	43.50 Lt.	705.13	705.40
AQ	534+80.59	43.50 Lt.	705.09	705.33

GIRDER 1 CONTINUED

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+90.59	43.50 Lt.	705.03	705.24
AS	535+00.59	43.50 Lt.	704.97	705.15
AT	535+10.59	43.50 Lt.	704.91	705.06
AU	535+20.59	43.50 Lt.	704.84	704.97
☉ Pier 2	535+30.59	43.50 Lt.	704.76	704.76
AV	535+40.59	43.50 Lt.	704.68	704.72
AW	535+50.59	43.50 Lt.	704.60	704.63
AX	535+60.59	43.50 Lt.	704.50	704.50
AY	535+70.59	43.50 Lt.	704.40	704.40
AZ	535+80.59	43.50 Lt.	704.30	704.30
BA	535+90.59	43.50 Lt.	704.19	704.17
BB	536+00.59	43.50 Lt.	704.07	704.05
BC	536+10.59	43.50 Lt.	703.94	703.92
BD	536+20.59	43.50 Lt.	703.82	703.81
BE	536+30.59	43.50 Lt.	703.68	703.69
BF	536+40.59	43.50 Lt.	703.54	703.57
BG	536+50.59	43.50 Lt.	703.39	703.45
BH	536+60.59	43.50 Lt.	703.24	703.33
BI	536+70.59	43.50 Lt.	703.08	703.20
BJ	536+80.59	43.50 Lt.	702.91	703.06
BK	536+90.59	43.50 Lt.	702.74	702.91
BL	537+00.59	43.50 Lt.	702.57	702.75
BM	537+10.59	43.50 Lt.	702.38	702.56
☉ Brg. S. Abut.	537+25.59	43.50 Lt.	702.10	702.10
BK S. Abut.	537+26.96	43.50 Lt.	702.07	702.07

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+30.70	33.83 Lt.	701.53	701.53
☉ Brg. N. Abut.	530+32.07	33.83 Lt.	701.56	701.56
A	530+42.07	33.83 Lt.	701.75	701.81
B	530+52.07	33.83 Lt.	701.95	702.04
C	530+62.07	33.83 Lt.	702.14	702.27
D	530+72.07	33.83 Lt.	702.34	702.51
E	530+82.07	33.83 Lt.	702.53	702.72
F	530+92.07	33.83 Lt.	702.71	702.91
G	531+02.07	33.83 Lt.	702.89	703.10
H	531+12.07	33.83 Lt.	703.06	703.26
I	531+22.07	33.83 Lt.	703.23	703.42
J	531+32.07	33.83 Lt.	703.39	703.56
K	531+42.07	33.83 Lt.	703.54	703.68
L	531+52.07	33.83 Lt.	703.69	703.79
M	531+62.07	33.83 Lt.	703.84	703.91
N	531+72.07	33.83 Lt.	703.97	704.01
O	531+82.07	33.83 Lt.	704.10	704.11
P	531+92.07	33.83 Lt.	704.23	704.22
Q	532+02.07	33.83 Lt.	704.35	704.33
R	532+12.07	33.83 Lt.	704.46	704.44
☉ Pier 1	532+27.07	33.83 Lt.	704.62	704.62
S	532+37.07	33.83 Lt.	704.72	704.75
T	532+47.07	33.83 Lt.	704.81	704.88
U	532+57.07	33.83 Lt.	704.90	705.01
V	532+67.07	33.83 Lt.	704.98	705.15
W	532+77.07	33.83 Lt.	705.05	705.28
X	532+87.07	33.83 Lt.	705.12	705.42
Y	532+97.07	33.83 Lt.	705.18	705.54
Z	533+07.07	33.83 Lt.	705.24	705.67
AA	533+17.07	33.83 Lt.	705.29	705.78
AB	533+27.07	33.83 Lt.	705.33	705.87
AC	533+37.07	33.83 Lt.	705.37	705.96
AD	533+47.07	33.83 Lt.	705.41	706.03
AE	533+57.07	33.83 Lt.	705.43	706.08
AF	533+67.07	33.83 Lt.	705.45	706.12
AG	533+77.07	33.83 Lt.	705.47	706.14
AH	533+87.07	33.83 Lt.	705.48	706.15
AI	533+97.07	33.83 Lt.	705.48	706.13
AJ	534+07.07	33.83 Lt.	705.48	706.11
AK	534+17.07	33.83 Lt.	705.47	706.06
AL	534+27.07	33.83 Lt.	705.46	706.00
AM	534+37.07	33.83 Lt.	705.44	705.93
AN	534+47.07	33.83 Lt.	705.41	705.84
AO	534+57.07	33.83 Lt.	705.38	705.75
AP	534+67.07	33.83 Lt.	705.34	705.64
AQ	534+77.07	33.83 Lt.	705.29	705.52

GIRDER 2 CONTINUED

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+87.07	33.83 Lt.	705.24	705.41
AS	534+97.07	33.83 Lt.	705.19	705.31
AT	535+07.07	33.83 Lt.	705.13	705.20
AU	535+17.07	33.83 Lt.	705.06	705.09
☉ Pier 2	535+27.07	33.83 Lt.	704.99	704.99
AV	535+37.07	33.83 Lt.	704.91	704.89
AW	535+47.07	33.83 Lt.	704.82	704.80
AX	535+57.07	33.83 Lt.	704.73	704.71
AY	535+67.07	33.83 Lt.	704.63	704.62
AZ	535+77.07	33.83 Lt.	704.53	704.54
BA	535+87.07	33.83 Lt.	704.42	704.46
BB	535+97.07	33.83 Lt.	704.30	704.37
BC	536+07.07	33.83 Lt.	704.18	704.29
BD	536+17.07	33.83 Lt.	704.05	704.19
BE	536+27.07	33.83 Lt.	703.92	704.09
BF	536+37.07	33.83 Lt.	703.78	703.97
BG	536+47.07	33.83 Lt.	703.64	703.84
BH	536+57.07	33.83 Lt.	703.49	703.69
BI	536+67.07	33.83 Lt.	703.33	703.52
BJ	536+77.07	33.83 Lt.	703.17	703.34
BK	536+87.07	33.83 Lt.	703.00	703.15
BL	536+97.07	33.83 Lt.	702.82	702.93
BM	537+07.07	33.83 Lt.	702.64	702.71
☉ Brg. S. Abut.	537+22.07	33.83 Lt.	702.36	702.36
BK S. Abut.	537+23.44	33.83 Lt.	702.33	702.33

TYLIN INTERNATIONAL

DESIGNED	- CM
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD

TOP OF SLAB ELEVATIONS  
(1 OF 7)

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. - 5-9 S-66 SHEETS
346	*	LAKE	469	178	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-	CONTRACT # 60826		
* 125X-HB-(1&2) R-1					

**GIRDER 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+27.18	24.17 Lt.	701.62	701.62
☉ Brg. N. Abut.	530+28.55	24.17 Lt.	701.64	701.64
A	530+38.55	24.17 Lt.	701.84	701.90
B	530+48.55	24.17 Lt.	702.03	702.12
C	530+58.55	24.17 Lt.	702.23	702.36
D	530+68.55	24.17 Lt.	702.42	702.59
E	530+78.55	24.17 Lt.	702.61	702.80
F	530+88.55	24.17 Lt.	702.80	703.00
G	530+98.55	24.17 Lt.	702.98	703.19
H	531+08.55	24.17 Lt.	703.15	703.35
I	531+18.55	24.17 Lt.	703.32	703.51
J	531+28.55	24.17 Lt.	703.48	703.65
K	531+38.55	24.17 Lt.	703.64	703.78
L	531+48.55	24.17 Lt.	703.79	703.89
M	531+58.55	24.17 Lt.	703.94	704.01
N	531+68.55	24.17 Lt.	704.08	704.12
O	531+78.55	24.17 Lt.	704.21	704.22
P	531+88.55	24.17 Lt.	704.34	704.33
Q	531+98.55	24.17 Lt.	704.46	704.44
R	532+08.55	24.17 Lt.	704.57	704.55
☉ Pier 1	532+23.55	24.17 Lt.	704.73	704.73
S	532+33.55	24.17 Lt.	704.83	704.86
T	532+43.55	24.17 Lt.	704.93	705.00
U	532+53.55	24.17 Lt.	705.02	705.13
V	532+63.55	24.17 Lt.	705.10	705.27
W	532+73.55	24.17 Lt.	705.18	705.41
X	532+83.55	24.17 Lt.	705.25	705.55
Y	532+93.55	24.17 Lt.	705.31	705.67
Z	533+03.55	24.17 Lt.	705.37	705.80
AA	533+13.55	24.17 Lt.	705.42	705.91
AB	533+23.55	24.17 Lt.	705.47	706.01
AC	533+33.55	24.17 Lt.	705.51	706.10
AD	533+43.55	24.17 Lt.	705.55	706.17
AE	533+53.55	24.17 Lt.	705.58	706.23
AF	533+63.55	24.17 Lt.	705.60	706.27
AG	533+73.55	24.17 Lt.	705.62	706.29
AH	533+83.55	24.17 Lt.	705.63	706.30
AI	533+93.55	24.17 Lt.	705.63	706.28
AJ	534+03.55	24.17 Lt.	705.63	706.26
AK	534+13.55	24.17 Lt.	705.63	706.22
AL	534+23.55	24.17 Lt.	705.61	706.15
AM	534+33.55	24.17 Lt.	705.59	706.08
AN	534+43.55	24.17 Lt.	705.57	706.00
AO	534+53.55	24.17 Lt.	705.54	705.91
AP	534+63.55	24.17 Lt.	705.50	705.80
AQ	534+73.55	24.17 Lt.	705.46	705.69

**GIRDER 3 CONTINUED**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+83.55	24.17 Lt.	705.41	705.58
AS	534+93.55	24.17 Lt.	705.36	705.48
AT	535+03.55	24.17 Lt.	705.30	705.37
AU	535+13.55	24.17 Lt.	705.23	705.26
☉ Pier 2	535+23.55	24.17 Lt.	705.16	705.16
AV	535+33.55	24.17 Lt.	705.09	705.07
AW	535+43.55	24.17 Lt.	705.00	704.98
AX	535+53.55	24.17 Lt.	704.91	704.89
AY	535+63.55	24.17 Lt.	704.82	704.81
AZ	535+73.55	24.17 Lt.	704.72	704.73
BA	535+83.55	24.17 Lt.	704.61	704.65
BB	535+93.55	24.17 Lt.	704.49	704.56
BC	536+03.55	24.17 Lt.	704.38	704.49
BD	536+13.55	24.17 Lt.	704.25	704.39
BE	536+23.55	24.17 Lt.	704.12	704.29
BF	536+33.55	24.17 Lt.	703.98	704.17
BG	536+43.55	24.17 Lt.	703.84	704.04
BH	536+53.55	24.17 Lt.	703.69	703.89
BI	536+63.55	24.17 Lt.	703.54	703.73
BJ	536+73.55	24.17 Lt.	703.38	703.55
BK	536+83.55	24.17 Lt.	703.21	703.36
BL	536+93.55	24.17 Lt.	703.04	703.15
BM	537+03.55	24.17 Lt.	702.86	702.93
☉ Brg. S. Abut.	537+18.55	24.17 Lt.	702.58	702.58
BK S. Abut.	537+19.93	24.17 Lt.	702.55	702.55

**GIRDER 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+23.66	14.50 Lt.	701.42	701.42
☉ Brg. N. Abut.	530+25.03	14.50 Lt.	701.44	701.44
A	530+35.03	14.50 Lt.	701.64	701.69
B	530+45.03	14.50 Lt.	701.83	701.91
C	530+55.03	14.50 Lt.	702.03	702.14
D	530+65.03	14.50 Lt.	702.22	702.36
E	530+75.03	14.50 Lt.	702.41	702.57
F	530+85.03	14.50 Lt.	702.60	702.77
G	530+95.03	14.50 Lt.	702.79	702.96
H	531+05.03	14.50 Lt.	702.96	703.13
I	531+15.03	14.50 Lt.	703.13	703.29
J	531+25.03	14.50 Lt.	703.30	703.44
K	531+35.03	14.50 Lt.	703.46	703.57
L	531+45.03	14.50 Lt.	703.61	703.70
M	531+55.03	14.50 Lt.	703.76	703.82
N	531+65.03	14.50 Lt.	703.90	703.93
O	531+75.03	14.50 Lt.	704.03	704.04
P	531+85.03	14.50 Lt.	704.16	704.15
Q	531+95.03	14.50 Lt.	704.28	704.26
R	532+05.03	14.50 Lt.	704.40	704.38
☉ Pier 1	532+20.03	14.50 Lt.	704.57	704.57
S	532+30.03	14.50 Lt.	704.67	704.69
T	532+40.03	14.50 Lt.	704.77	704.83
U	532+50.03	14.50 Lt.	704.86	704.96
V	532+60.03	14.50 Lt.	704.94	705.08
W	532+70.03	14.50 Lt.	705.02	705.22
X	532+80.03	14.50 Lt.	705.09	705.34
Y	532+90.03	14.50 Lt.	705.16	705.47
Z	533+00.03	14.50 Lt.	705.22	705.58
AA	533+10.03	14.50 Lt.	705.27	705.68
AB	533+20.03	14.50 Lt.	705.32	705.78
AC	533+30.03	14.50 Lt.	705.37	705.87
AD	533+40.03	14.50 Lt.	705.40	705.93
AE	533+50.03	14.50 Lt.	705.44	705.99
AF	533+60.03	14.50 Lt.	705.46	706.02
AG	533+70.03	14.50 Lt.	705.48	706.05
AH	533+80.03	14.50 Lt.	705.49	706.05
AI	533+90.03	14.50 Lt.	705.50	706.05
AJ	534+00.03	14.50 Lt.	705.50	706.03
AK	534+10.03	14.50 Lt.	705.50	706.00
AL	534+20.03	14.50 Lt.	705.49	705.95
AM	534+30.03	14.50 Lt.	705.47	705.91
AN	534+40.03	14.50 Lt.	705.45	705.87
AO	534+50.03	14.50 Lt.	705.42	705.81
AP	534+60.03	14.50 Lt.	705.39	705.76
AQ	534+70.03	14.50 Lt.	705.35	705.69

**GIRDER 4 CONTINUED**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+80.03	14.50 Lt.	705.30	705.61
AS	534+90.03	14.50 Lt.	705.25	705.53
AT	535+00.03	14.50 Lt.	705.19	705.44
AU	535+10.03	14.50 Lt.	705.13	705.36
☉ Pier 2	535+20.03	14.50 Lt.	705.06	705.06
AV	535+30.03	14.50 Lt.	704.98	705.10
AW	535+40.03	14.50 Lt.	704.90	705.00
AX	535+50.03	14.50 Lt.	704.81	704.89
AY	535+60.03	14.50 Lt.	704.72	704.78
AZ	535+70.03	14.50 Lt.	704.62	704.66
BA	535+80.03	14.50 Lt.	704.52	704.54
BB	535+90.03	14.50 Lt.	704.41	704.42
BC	536+00.03	14.50 Lt.	704.29	704.29
BD	536+10.03	14.50 Lt.	704.17	704.17
BE	536+20.03	14.50 Lt.	704.04	704.04
BF	536+30.03	14.50 Lt.	703.90	703.89
BG	536+40.03	14.50 Lt.	703.76	703.74
BH	536+50.03	14.50 Lt.	703.61	703.59
BI	536+60.03	14.50 Lt.	703.46	703.45
BJ	536+70.03	14.50 Lt.	703.30	703.31
BK	536+80.03	14.50 Lt.	703.14	703.17
BL	536+90.03	14.50 Lt.	702.97	703.03
BM	537+00.03	14.50 Lt.	702.79	702.88
☉ Brg. S. Abut.	537+15.03	14.50 Lt.	702.52	702.52
BK S. Abut.	537+16.41	14.50 Lt.	702.49	702.49

**TYLIN** INTERNATIONAL

DESIGNED	- CM
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD

**TOP OF SLAB ELEVATIONS  
(2 OF 7)**

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. - S-10 S-66 SHEETS
346	*	LAKE	469	179	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT * 60826		
* 125X-HB-(1&2) R-1					

**U.S. 41 @ - N.B. & LEFT STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+22.57	11.50 Lt.	701.35	701.35
⊙ Brg. N. Abut.	530+23.94	11.50 Lt.	701.38	701.38
A	530+33.94	11.50 Lt.	701.57	701.62
B	530+43.94	11.50 Lt.	701.76	701.84
C	530+53.94	11.50 Lt.	701.96	702.07
D	530+63.94	11.50 Lt.	702.15	702.29
E	530+73.94	11.50 Lt.	702.35	702.51
F	530+83.94	11.50 Lt.	702.54	702.71
G	530+93.94	11.50 Lt.	702.72	702.89
H	531+03.94	11.50 Lt.	702.90	703.07
I	531+13.94	11.50 Lt.	703.07	703.23
J	531+23.94	11.50 Lt.	703.23	703.37
K	531+33.94	11.50 Lt.	703.39	703.50
L	531+43.94	11.50 Lt.	703.55	703.64
M	531+53.94	11.50 Lt.	703.69	703.75
N	531+63.94	11.50 Lt.	703.84	703.87
O	531+73.94	11.50 Lt.	703.97	703.98
P	531+83.94	11.50 Lt.	704.10	704.09
Q	531+93.94	11.50 Lt.	704.22	704.20
R	532+03.94	11.50 Lt.	704.34	704.32
⊙ Pier 1	532+18.95	11.50 Lt.	704.51	704.51
S	532+28.94	11.50 Lt.	704.61	704.63
T	532+38.94	11.50 Lt.	704.71	704.77
U	532+48.94	11.50 Lt.	704.80	704.90
V	532+58.94	11.50 Lt.	704.88	705.02
W	532+68.94	11.50 Lt.	704.96	705.16
X	532+78.94	11.50 Lt.	705.04	705.29
Y	532+88.94	11.50 Lt.	705.11	705.42
Z	532+98.94	11.50 Lt.	705.17	705.53
AA	533+08.94	11.50 Lt.	705.22	705.63
AB	533+18.94	11.50 Lt.	705.27	705.73
AC	533+28.94	11.50 Lt.	705.32	705.82
AD	533+38.94	11.50 Lt.	705.35	705.88
AE	533+48.94	11.50 Lt.	705.39	705.94
AF	533+58.94	11.50 Lt.	705.41	705.97
AG	533+68.94	11.50 Lt.	705.43	706.00
AH	533+78.94	11.50 Lt.	705.45	706.01
AI	533+88.94	11.50 Lt.	705.45	706.00
AJ	533+98.94	11.50 Lt.	705.46	705.99
AK	534+08.94	11.50 Lt.	705.45	705.95
AL	534+18.94	11.50 Lt.	705.44	705.90
AM	534+28.94	11.50 Lt.	705.43	705.87
AN	534+38.94	11.50 Lt.	705.41	705.83
AO	534+48.94	11.50 Lt.	705.38	705.77
AP	534+58.94	11.50 Lt.	705.34	705.71
AQ	534+68.94	11.50 Lt.	705.31	705.65

**U.S. 41 @ - N.B. CONTINUED & LEFT CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+78.94	11.50 Lt.	705.26	705.57
AS	534+88.94	11.50 Lt.	705.21	705.49
AT	534+98.94	11.50 Lt.	705.15	705.40
AU	535+08.94	11.50 Lt.	705.09	705.32
⊙ Pier 2	535+18.94	11.50 Lt.	705.02	705.02
AV	535+28.94	11.50 Lt.	704.94	705.06
AW	535+38.94	11.50 Lt.	704.86	704.96
AX	535+48.94	11.50 Lt.	704.78	704.86
AY	535+58.94	11.50 Lt.	704.68	704.74
AZ	535+68.94	11.50 Lt.	704.59	704.63
BA	535+78.94	11.50 Lt.	704.48	704.50
BB	535+88.94	11.50 Lt.	704.37	704.38
BC	535+98.94	11.50 Lt.	704.25	704.25
BD	536+08.94	11.50 Lt.	704.13	704.13
BE	536+18.94	11.50 Lt.	704.00	704.00
BF	536+28.94	11.50 Lt.	703.87	703.86
BG	536+38.94	11.50 Lt.	703.73	703.71
BH	536+48.94	11.50 Lt.	703.58	703.56
BI	536+58.94	11.50 Lt.	703.43	703.42
BJ	536+68.94	11.50 Lt.	703.27	703.28
BK	536+78.94	11.50 Lt.	703.11	703.14
BL	536+88.94	11.50 Lt.	702.94	703.00
BM	536+98.94	11.50 Lt.	702.76	702.72
⊙ Brg. S. Abut.	537+13.94	11.50 Lt.	702.49	702.49
BK S. Abut.	537+15.32	11.50 Lt.	702.46	702.46

**RIGHT STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+21.11	7.50 Lt.	701.24	701.24
⊙ Brg. N. Abut.	530+22.49	7.50 Lt.	701.26	701.26
A	530+32.49	7.50 Lt.	701.46	701.50
B	530+42.49	7.50 Lt.	701.65	701.72
C	530+52.49	7.50 Lt.	701.85	701.96
D	530+62.49	7.50 Lt.	702.04	702.18
E	530+72.49	7.50 Lt.	702.24	702.40
F	530+82.49	7.50 Lt.	702.43	702.61
G	530+92.49	7.50 Lt.	702.61	702.79
H	531+02.49	7.50 Lt.	702.79	702.96
I	531+12.49	7.50 Lt.	702.96	703.12
J	531+22.49	7.50 Lt.	703.13	703.27
K	531+32.49	7.50 Lt.	703.29	703.41
L	531+42.49	7.50 Lt.	703.44	703.53
M	531+52.49	7.50 Lt.	703.59	703.65
N	531+62.49	7.50 Lt.	703.73	703.77
O	531+72.49	7.50 Lt.	703.87	703.89
P	531+82.49	7.50 Lt.	704.00	704.00
Q	531+92.49	7.50 Lt.	704.12	704.11
R	532+02.49	7.50 Lt.	704.24	704.23
⊙ Pier 1	532+17.49	7.50 Lt.	704.41	704.41
S	532+27.49	7.50 Lt.	704.51	704.53
T	532+37.49	7.50 Lt.	704.61	704.66
U	532+47.49	7.50 Lt.	704.70	704.78
V	532+57.49	7.50 Lt.	704.79	704.91
W	532+67.49	7.50 Lt.	704.87	705.03
X	532+77.49	7.50 Lt.	704.94	705.14
Y	532+87.49	7.50 Lt.	705.01	705.26
Z	532+97.49	7.50 Lt.	705.07	705.37
AA	533+07.49	7.50 Lt.	705.13	705.47
AB	533+17.49	7.50 Lt.	705.18	705.56
AC	533+27.49	7.50 Lt.	705.23	705.64
AD	533+37.49	7.50 Lt.	705.27	705.71
AE	533+47.49	7.50 Lt.	705.30	705.76
AF	533+57.49	7.50 Lt.	705.32	705.80
AG	533+67.49	7.50 Lt.	705.35	705.83
AH	533+77.49	7.50 Lt.	705.36	705.84
AI	533+87.49	7.50 Lt.	705.37	705.83
AJ	533+97.49	7.50 Lt.	705.37	705.81
AK	534+07.49	7.50 Lt.	705.37	705.79
AL	534+17.49	7.50 Lt.	705.36	705.74
AM	534+27.49	7.50 Lt.	705.35	705.69
AN	534+37.49	7.50 Lt.	705.33	705.63
AO	534+47.49	7.50 Lt.	705.30	705.55
AP	534+57.49	7.50 Lt.	705.27	705.48
AQ	534+67.49	7.50 Lt.	705.23	705.39

**RIGHT STAGE CONSTRUCTION LINE CONTINUED**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+77.49	7.50 Lt.	705.18	705.30
AS	534+87.49	7.50 Lt.	705.13	705.21
AT	534+97.49	7.50 Lt.	705.08	705.13
AU	535+07.49	7.50 Lt.	705.02	705.05
⊙ Pier 2	535+17.49	7.50 Lt.	704.95	704.95
AV	535+27.49	7.50 Lt.	704.87	704.87
AW	535+37.49	7.50 Lt.	704.79	704.79
AX	535+47.49	7.50 Lt.	704.71	704.70
AY	535+57.49	7.50 Lt.	704.62	704.61
AZ	535+67.49	7.50 Lt.	704.52	704.51
BA	535+77.49	7.50 Lt.	704.41	704.42
BB	535+87.49	7.50 Lt.	704.30	704.32
BC	535+97.49	7.50 Lt.	704.19	704.24
BD	536+07.49	7.50 Lt.	704.07	704.14
BE	536+17.49	7.50 Lt.	703.94	704.04
BF	536+27.49	7.50 Lt.	703.81	703.93
BG	536+37.49	7.50 Lt.	703.67	703.82
BH	536+47.49	7.50 Lt.	703.52	703.68
BI	536+57.49	7.50 Lt.	703.37	703.54
BJ	536+67.49	7.50 Lt.	703.21	703.39
BK	536+77.49	7.50 Lt.	703.05	703.22
BL	536+87.49	7.50 Lt.	702.88	703.03
BM	536+97.49	7.50 Lt.	702.71	702.83
⊙ Brg. S. Abut.	537+12.49	7.50 Lt.	702.43	702.43
BK S. Abut.	537+13.86	7.50 Lt.	702.41	702.41

**TYLINT** INTERNATIONAL

DESIGNED	- CM
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD

**TOP OF SLAB ELEVATIONS  
(3 OF 7)**

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	180
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT-		
125X-HB-(1&2) R-1		CONTRACT # 60826		

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+20.14	4.83 Lt.	701.16	701.16
⊙ Brg. N. Abut.	530+21.51	4.83 Lt.	701.19	701.19
A	530+31.51	4.83 Lt.	701.38	701.42
B	530+41.51	4.83 Lt.	701.58	701.65
C	530+51.51	4.83 Lt.	701.77	701.88
D	530+61.51	4.83 Lt.	701.97	702.11
E	530+71.51	4.83 Lt.	702.16	702.32
F	530+81.51	4.83 Lt.	702.35	702.53
G	530+91.51	4.83 Lt.	702.54	702.72
H	531+01.51	4.83 Lt.	702.72	702.89
I	531+11.51	4.83 Lt.	702.89	703.05
J	531+21.51	4.83 Lt.	703.05	703.19
K	531+31.51	4.83 Lt.	703.22	703.34
L	531+41.51	4.83 Lt.	703.37	703.46
M	531+51.51	4.83 Lt.	703.52	703.58
N	531+61.51	4.83 Lt.	703.66	703.70
O	531+71.51	4.83 Lt.	703.80	703.82
P	531+81.51	4.83 Lt.	703.93	703.93
Q	531+91.51	4.83 Lt.	704.06	704.05
R	532+01.51	4.83 Lt.	704.18	704.17
⊙ Pier 1	532+16.51	4.83 Lt.	704.34	704.34
S	532+26.51	4.83 Lt.	704.45	704.47
T	532+36.51	4.83 Lt.	704.55	704.60
U	532+46.51	4.83 Lt.	704.64	704.72
V	532+56.51	4.83 Lt.	704.73	704.85
W	532+66.51	4.83 Lt.	704.81	704.97
X	532+76.51	4.83 Lt.	704.88	705.08
Y	532+86.51	4.83 Lt.	704.95	705.20
Z	532+96.51	4.83 Lt.	705.01	705.31
AA	533+06.51	4.83 Lt.	705.07	705.41
AB	533+16.51	4.83 Lt.	705.12	705.50
AC	533+26.51	4.83 Lt.	705.17	705.58
AD	533+36.51	4.83 Lt.	705.21	705.65
AE	533+46.51	4.83 Lt.	705.24	705.70
AF	533+56.51	4.83 Lt.	705.27	705.75
AG	533+66.51	4.83 Lt.	705.29	705.77
AH	533+76.51	4.83 Lt.	705.30	705.78
AI	533+86.51	4.83 Lt.	705.31	705.77
AJ	533+96.51	4.83 Lt.	705.32	705.76
AK	534+06.51	4.83 Lt.	705.31	705.73
AL	534+16.51	4.83 Lt.	705.31	705.69
AM	534+26.51	4.83 Lt.	705.29	705.63
AN	534+36.51	4.83 Lt.	705.27	705.57
AO	534+46.51	4.83 Lt.	705.25	705.50
AP	534+56.51	4.83 Lt.	705.21	705.42
AQ	534+66.51	4.83 Lt.	705.18	705.34

GIRDER 5 CONTINUED

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+76.51	4.83 Lt.	705.13	705.25
AS	534+86.51	4.83 Lt.	705.08	705.16
AT	534+96.51	4.83 Lt.	705.03	705.08
AU	535+06.51	4.83 Lt.	704.97	705.00
⊙ Pier 2	535+16.51	4.83 Lt.	704.90	704.90
AV	535+26.51	4.83 Lt.	704.82	704.82
AW	535+36.51	4.83 Lt.	704.75	704.75
AX	535+46.51	4.83 Lt.	704.66	704.65
AY	535+56.51	4.83 Lt.	704.57	704.56
AZ	535+66.51	4.83 Lt.	704.47	704.46
BA	535+76.51	4.83 Lt.	704.37	704.38
BB	535+86.51	4.83 Lt.	704.26	704.28
BC	535+96.51	4.83 Lt.	704.14	704.19
BD	536+06.51	4.83 Lt.	704.02	704.09
BE	536+16.51	4.83 Lt.	703.90	704.00
BF	536+26.51	4.83 Lt.	703.76	703.88
BG	536+36.51	4.83 Lt.	703.63	703.78
BH	536+46.51	4.83 Lt.	703.48	703.64
BI	536+56.51	4.83 Lt.	703.33	703.50
BJ	536+66.51	4.83 Lt.	703.17	703.35
BK	536+76.51	4.83 Lt.	703.01	703.18
BL	536+86.51	4.83 Lt.	702.84	702.99
BM	536+96.51	4.83 Lt.	702.67	702.79
⊙ Brg. S. Abut.	537+11.51	4.83 Lt.	702.40	702.40
BK S. Abut.	537+12.89	4.83 Lt.	702.37	702.37

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+16.62	4.83 Rt.	701.09	701.09
⊙ Brg. N. Abut.	530+18.00	4.83 Rt.	701.12	701.12
A	530+28.00	4.83 Rt.	701.32	701.38
B	530+38.00	4.83 Rt.	701.51	701.60
C	530+48.00	4.83 Rt.	701.70	701.83
D	530+58.00	4.83 Rt.	701.90	702.07
E	530+68.00	4.83 Rt.	702.09	702.28
F	530+78.00	4.83 Rt.	702.29	702.49
G	530+88.00	4.83 Rt.	702.47	702.68
H	530+98.00	4.83 Rt.	702.65	702.85
I	531+08.00	4.83 Rt.	702.83	703.02
J	531+18.00	4.83 Rt.	703.00	703.17
K	531+28.00	4.83 Rt.	703.16	703.30
L	531+38.00	4.83 Rt.	703.32	703.42
M	531+48.00	4.83 Rt.	703.47	703.54
N	531+58.00	4.83 Rt.	703.61	703.65
O	531+68.00	4.83 Rt.	703.75	703.76
P	531+78.00	4.83 Rt.	703.89	703.88
Q	531+88.00	4.83 Rt.	704.01	703.99
R	531+98.00	4.83 Rt.	704.13	704.11
⊙ Pier 1	532+13.00	4.83 Rt.	704.31	704.31
S	532+23.00	4.83 Rt.	704.41	704.44
T	532+33.00	4.83 Rt.	704.51	704.58
U	532+43.00	4.83 Rt.	704.61	704.72
V	532+53.00	4.83 Rt.	704.70	704.87
W	532+63.00	4.83 Rt.	704.78	705.01
X	532+73.00	4.83 Rt.	704.86	705.16
Y	532+83.00	4.83 Rt.	704.93	705.29
Z	532+93.00	4.83 Rt.	704.99	705.42
AA	533+03.00	4.83 Rt.	705.05	705.54
AB	533+13.00	4.83 Rt.	705.10	705.64
AC	533+23.00	4.83 Rt.	705.15	705.74
AD	533+33.00	4.83 Rt.	705.19	705.81
AE	533+43.00	4.83 Rt.	705.23	705.88
AF	533+53.00	4.83 Rt.	705.26	705.93
AG	533+63.00	4.83 Rt.	705.28	705.95
AH	533+73.00	4.83 Rt.	705.30	705.97
AI	533+83.00	4.83 Rt.	705.31	705.96
AJ	533+93.00	4.83 Rt.	705.32	705.95
AK	534+03.00	4.83 Rt.	705.32	705.91
AL	534+13.00	4.83 Rt.	705.31	705.85
AM	534+23.00	4.83 Rt.	705.30	705.79
AN	534+33.00	4.83 Rt.	705.28	705.71
AO	534+43.00	4.83 Rt.	705.26	705.63
AP	534+53.00	4.83 Rt.	705.23	705.53
AQ	534+63.00	4.83 Rt.	705.19	705.42

GIRDER 6 CONTINUED

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+73.00	4.83 Rt.	705.15	705.32
AS	534+83.00	4.83 Rt.	705.10	705.22
AT	534+93.00	4.83 Rt.	705.05	705.12
AU	535+03.00	4.83 Rt.	704.99	705.02
⊙ Pier 2	535+13.00	4.83 Rt.	704.92	704.92
AV	535+23.00	4.83 Rt.	704.85	704.83
AW	535+33.00	4.83 Rt.	704.77	704.75
AX	535+43.00	4.83 Rt.	704.69	704.67
AY	535+53.00	4.83 Rt.	704.60	704.59
AZ	535+63.00	4.83 Rt.	704.51	704.52
BA	535+73.00	4.83 Rt.	704.41	704.45
BB	535+83.00	4.83 Rt.	704.30	704.37
BC	535+93.00	4.83 Rt.	704.19	704.30
BD	536+03.00	4.83 Rt.	704.07	704.21
BE	536+13.00	4.83 Rt.	703.94	704.11
BF	536+23.00	4.83 Rt.	703.81	704.00
BG	536+33.00	4.83 Rt.	703.67	703.87
BH	536+43.00	4.83 Rt.	703.53	703.73
BI	536+53.00	4.83 Rt.	703.38	703.57
BJ	536+63.00	4.83 Rt.	703.23	703.40
BK	536+73.00	4.83 Rt.	703.07	703.22
BL	536+83.00	4.83 Rt.	702.90	703.01
BM	536+93.00	4.83 Rt.	702.73	702.80
⊙ Brg. S. Abut.	537+08.00	4.83 Rt.	702.46	702.46
BK S. Abut.	537+09.37	4.83 Rt.	702.44	702.44

TYLIN INTERNATIONAL

DESIGNED	- CM
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD

TOP OF SLAB ELEVATIONS  
(4 OF 7)

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-12 S-66 SHEETS
346	*	LAKE	469	131	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
* 125X-HB-(1&2) R-1		CONTRACT # 60826			

U.S. 41 @ - S.B.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+14.20	11.50 Rt.	701.19	701.19
☉ Brg. N. Abut.	530+15.57	11.50 Rt.	701.21	701.21
A	530+25.57	11.50 Rt.	701.41	701.47
B	530+35.57	11.50 Rt.	701.60	701.69
C	530+45.57	11.50 Rt.	701.80	701.93
D	530+55.57	11.50 Rt.	701.99	702.16
E	530+65.57	11.50 Rt.	702.18	702.37
F	530+75.57	11.50 Rt.	702.38	702.58
G	530+85.57	11.50 Rt.	702.57	702.78
H	530+95.57	11.50 Rt.	702.75	702.95
I	531+05.57	11.50 Rt.	702.92	703.11
J	531+15.57	11.50 Rt.	703.10	703.27
K	531+25.57	11.50 Rt.	703.26	703.40
L	531+35.57	11.50 Rt.	703.42	703.52
M	531+45.57	11.50 Rt.	703.57	703.64
N	531+55.57	11.50 Rt.	703.72	703.76
O	531+65.57	11.50 Rt.	703.86	703.87
P	531+75.57	11.50 Rt.	703.99	703.98
Q	531+85.57	11.50 Rt.	704.12	704.10
R	531+95.57	11.50 Rt.	704.24	704.22
☉ Pier 1	532+10.57	11.50 Rt.	704.42	704.42
S	532+20.57	11.50 Rt.	704.53	704.56
T	532+30.57	11.50 Rt.	704.63	704.70
U	532+40.57	11.50 Rt.	704.72	704.83
V	532+50.57	11.50 Rt.	704.81	704.98
W	532+60.57	11.50 Rt.	704.90	705.13
X	532+70.57	11.50 Rt.	704.98	705.28
Y	532+80.57	11.50 Rt.	705.05	705.41
Z	532+90.57	11.50 Rt.	705.12	705.55
AA	533+00.57	11.50 Rt.	705.18	705.67
AB	533+10.57	11.50 Rt.	705.23	705.77
AC	533+20.57	11.50 Rt.	705.28	705.87
AD	533+30.57	11.50 Rt.	705.32	705.94
AE	533+40.57	11.50 Rt.	705.36	706.01
AF	533+50.57	11.50 Rt.	705.39	706.06
AG	533+60.57	11.50 Rt.	705.42	706.09
AH	533+70.57	11.50 Rt.	705.43	706.10
AI	533+80.57	11.50 Rt.	705.45	706.10
AJ	533+90.57	11.50 Rt.	705.45	706.08
AK	534+00.57	11.50 Rt.	705.46	706.05
AL	534+10.57	11.50 Rt.	705.45	705.99
AM	534+20.57	11.50 Rt.	705.44	705.93
AN	534+30.57	11.50 Rt.	705.42	705.85
AO	534+40.57	11.50 Rt.	705.40	705.77
AP	534+50.57	11.50 Rt.	705.37	705.67
AQ	534+60.57	11.50 Rt.	705.34	705.57

U.S. 41 @ - S.B. CONTINUED

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+70.57	11.50 Rt.	705.30	705.47
AS	534+80.57	11.50 Rt.	705.25	705.37
AT	534+90.57	11.50 Rt.	705.20	705.27
AU	535+00.57	11.50 Rt.	705.14	705.17
☉ Pier 2	535+10.57	11.50 Rt.	705.08	705.08
AV	535+20.57	11.50 Rt.	705.01	704.99
AW	535+30.57	11.50 Rt.	704.93	704.91
AX	535+40.57	11.50 Rt.	704.85	704.83
AY	535+50.57	11.50 Rt.	704.76	704.75
AZ	535+60.57	11.50 Rt.	704.67	704.68
BA	535+70.57	11.50 Rt.	704.57	704.61
BB	535+80.57	11.50 Rt.	704.46	704.53
BC	535+90.57	11.50 Rt.	704.35	704.46
BD	536+00.57	11.50 Rt.	704.23	704.37
BE	536+10.57	11.50 Rt.	704.11	704.28
BF	536+20.57	11.50 Rt.	703.98	704.17
BG	536+30.57	11.50 Rt.	703.85	704.05
BH	536+40.57	11.50 Rt.	703.71	703.91
BI	536+50.57	11.50 Rt.	703.56	703.75
BJ	536+60.57	11.50 Rt.	703.41	703.58
BK	536+70.57	11.50 Rt.	703.25	703.40
BL	536+80.57	11.50 Rt.	703.08	703.19
BM	536+90.57	11.50 Rt.	702.91	702.85
☉ Brg. S. Abut.	537+05.57	11.50 Rt.	702.64	702.64
BK S. Abut.	537+06.94	11.50 Rt.	702.62	702.62

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+13.10	14.50 Rt.	701.21	701.21
☉ Brg. N. Abut.	530+14.48	14.50 Rt.	701.24	701.24
A	530+24.48	14.50 Rt.	701.43	701.49
B	530+34.48	14.50 Rt.	701.63	701.72
C	530+44.48	14.50 Rt.	701.82	701.95
D	530+54.48	14.50 Rt.	702.02	702.19
E	530+64.48	14.50 Rt.	702.21	702.40
F	530+74.48	14.50 Rt.	702.40	702.60
G	530+84.48	14.50 Rt.	702.59	702.80
H	530+94.48	14.50 Rt.	702.78	702.98
I	531+04.48	14.50 Rt.	702.95	703.14
J	531+14.48	14.50 Rt.	703.12	703.29
K	531+24.48	14.50 Rt.	703.29	703.43
L	531+34.48	14.50 Rt.	703.45	703.55
M	531+44.48	14.50 Rt.	703.60	703.67
N	531+54.48	14.50 Rt.	703.75	703.79
O	531+64.48	14.50 Rt.	703.89	703.90
P	531+74.48	14.50 Rt.	704.03	704.02
Q	531+84.48	14.50 Rt.	704.15	704.13
R	531+94.48	14.50 Rt.	704.28	704.26
☉ Pier 1	532+09.48	14.50 Rt.	704.45	704.45
S	532+19.48	14.50 Rt.	704.56	704.59
T	532+29.48	14.50 Rt.	704.66	704.73
U	532+39.48	14.50 Rt.	704.76	704.87
V	532+49.48	14.50 Rt.	704.85	705.02
W	532+59.48	14.50 Rt.	704.94	705.17
X	532+69.48	14.50 Rt.	705.02	705.32
Y	532+79.48	14.50 Rt.	705.09	705.45
Z	532+89.48	14.50 Rt.	705.16	705.59
AA	532+99.48	14.50 Rt.	705.22	705.71
AB	533+09.48	14.50 Rt.	705.27	705.81
AC	533+19.48	14.50 Rt.	705.32	705.91
AD	533+29.48	14.50 Rt.	705.36	705.98
AE	533+39.48	14.50 Rt.	705.40	706.05
AF	533+49.48	14.50 Rt.	705.43	706.10
AG	533+59.48	14.50 Rt.	705.46	706.13
AH	533+69.48	14.50 Rt.	705.48	706.15
AI	533+79.48	14.50 Rt.	705.49	706.14
AJ	533+89.48	14.50 Rt.	705.50	706.13
AK	533+99.48	14.50 Rt.	705.50	706.09
AL	534+09.48	14.50 Rt.	705.50	706.04
AM	534+19.48	14.50 Rt.	705.49	705.98
AN	534+29.48	14.50 Rt.	705.47	705.90
AO	534+39.48	14.50 Rt.	705.45	705.82
AP	534+49.48	14.50 Rt.	705.42	705.72
AQ	534+59.48	14.50 Rt.	705.39	705.62

GIRDER 7 CONTINUED

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+69.48	14.50 Rt.	705.35	705.52
AS	534+79.48	14.50 Rt.	705.30	705.42
AT	534+89.48	14.50 Rt.	705.25	705.32
AU	534+99.48	14.50 Rt.	705.20	705.23
☉ Pier 2	535+09.48	14.50 Rt.	705.13	705.13
AV	535+19.48	14.50 Rt.	705.06	705.04
AW	535+29.48	14.50 Rt.	704.99	704.97
AX	535+39.48	14.50 Rt.	704.91	704.89
AY	535+49.48	14.50 Rt.	704.82	704.81
AZ	535+59.48	14.50 Rt.	704.73	704.74
BA	535+69.48	14.50 Rt.	704.63	704.67
BB	535+79.48	14.50 Rt.	704.52	704.59
BC	535+89.48	14.50 Rt.	704.41	704.52
BD	535+99.48	14.50 Rt.	704.29	704.43
BE	536+09.48	14.50 Rt.	704.17	704.34
BF	536+19.48	14.50 Rt.	704.04	704.23
BG	536+29.48	14.50 Rt.	703.91	704.11
BH	536+39.48	14.50 Rt.	703.77	703.97
BI	536+49.48	14.50 Rt.	703.62	703.81
BJ	536+59.48	14.50 Rt.	703.47	703.64
BK	536+69.48	14.50 Rt.	703.31	703.46
BL	536+79.48	14.50 Rt.	703.15	703.26
BM	536+89.48	14.50 Rt.	702.98	703.05
☉ Brg. S. Abut.	537+04.48	14.50 Rt.	702.71	702.71
BK S. Abut.	537+05.85	14.50 Rt.	702.69	702.69

TYLIN INTERNATIONAL

DESIGNED	- CM
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD

TOP OF SLAB ELEVATIONS  
(5 OF 7)

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	182
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		
			* 125X-HB-(1&2) R-1 CONTRACT * 60826	

SHEET NO. - S-13  
S-66 SHEETS

**GIRDER 8**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+09.59	24.17 Rt.	701.27	701.27
⊙ Brg. N. Abut.	530+10.96	24.17 Rt.	701.30	701.30
A	530+20.96	24.17 Rt.	701.49	701.55
B	530+30.96	24.17 Rt.	701.69	701.78
C	530+40.96	24.17 Rt.	701.88	702.01
D	530+50.96	24.17 Rt.	702.08	702.25
E	530+60.96	24.17 Rt.	702.27	702.46
F	530+70.96	24.17 Rt.	702.47	702.67
G	530+80.96	24.17 Rt.	702.66	702.87
H	530+90.96	24.17 Rt.	702.84	703.04
I	531+00.96	24.17 Rt.	703.02	703.21
J	531+10.96	24.17 Rt.	703.19	703.36
K	531+20.96	24.17 Rt.	703.36	703.50
L	531+30.96	24.17 Rt.	703.52	703.62
M	531+40.96	24.17 Rt.	703.68	703.75
N	531+50.96	24.17 Rt.	703.83	703.87
O	531+60.96	24.17 Rt.	703.97	703.98
P	531+70.96	24.17 Rt.	704.11	704.10
Q	531+80.96	24.17 Rt.	704.24	704.22
R	531+90.96	24.17 Rt.	704.37	704.35
⊙ Pier 1	532+05.96	24.17 Rt.	704.54	704.54
S	532+15.96	24.17 Rt.	704.65	704.68
T	532+25.96	24.17 Rt.	704.76	704.83
U	532+35.96	24.17 Rt.	704.86	704.97
V	532+45.96	24.17 Rt.	704.95	705.12
W	532+55.96	24.17 Rt.	705.04	705.27
X	532+65.96	24.17 Rt.	705.12	705.42
Y	532+75.96	24.17 Rt.	705.19	705.55
Z	532+85.96	24.17 Rt.	705.26	705.69
AA	532+95.96	24.17 Rt.	705.33	705.82
AB	533+05.96	24.17 Rt.	705.38	705.92
AC	533+15.96	24.17 Rt.	705.43	706.02
AD	533+25.96	24.17 Rt.	705.48	706.10
AE	533+35.96	24.17 Rt.	705.52	706.17
AF	533+45.96	24.17 Rt.	705.55	706.22
AG	533+55.96	24.17 Rt.	705.58	706.25
AH	533+65.96	24.17 Rt.	705.60	706.27
AI	533+75.96	24.17 Rt.	705.62	706.27
AJ	533+85.96	24.17 Rt.	705.63	706.26
AK	533+95.96	24.17 Rt.	705.63	706.22
AL	534+05.96	24.17 Rt.	705.63	706.17
AM	534+15.96	24.17 Rt.	705.62	706.11
AN	534+25.96	24.17 Rt.	705.61	706.04
AO	534+35.96	24.17 Rt.	705.59	705.96
AP	534+45.96	24.17 Rt.	705.56	705.86
AQ	534+55.96	24.17 Rt.	705.53	705.76

**GIRDER 8 CONTINUED**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+65.96	24.17 Rt.	705.49	705.66
AS	534+75.96	24.17 Rt.	705.45	705.57
AT	534+85.96	24.17 Rt.	705.40	705.47
AU	534+95.96	24.17 Rt.	705.35	705.38
⊙ Pier 2	535+05.96	24.17 Rt.	705.29	705.29
AV	535+15.96	24.17 Rt.	705.22	705.20
AW	535+25.96	24.17 Rt.	705.14	705.12
AX	535+35.96	24.17 Rt.	705.07	705.05
AY	535+45.96	24.17 Rt.	704.98	704.97
AZ	535+55.96	24.17 Rt.	704.89	704.90
BA	535+65.96	24.17 Rt.	704.79	704.83
BB	535+75.96	24.17 Rt.	704.69	704.76
BC	535+85.96	24.17 Rt.	704.58	704.69
BD	535+95.96	24.17 Rt.	704.47	704.61
BE	536+05.96	24.17 Rt.	704.35	704.52
BF	536+15.96	24.17 Rt.	704.22	704.41
BG	536+25.96	24.17 Rt.	704.09	704.29
BH	536+35.96	24.17 Rt.	703.95	704.15
BI	536+45.96	24.17 Rt.	703.80	703.99
BJ	536+55.96	24.17 Rt.	703.65	703.82
BK	536+65.96	24.17 Rt.	703.50	703.65
BL	536+75.96	24.17 Rt.	703.34	703.45
BM	536+85.96	24.17 Rt.	703.17	703.24
⊙ Brg. S. Abut.	537+00.96	24.17 Rt.	702.90	702.90
BK S. Abut.	537+02.33	24.17 Rt.	702.88	702.88

**GIRDER 9**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+06.07	33.83 Rt.	701.05	701.05
⊙ Brg. N. Abut.	530+07.44	33.83 Rt.	701.08	701.08
A	530+17.44	33.83 Rt.	701.28	701.34
B	530+27.44	33.83 Rt.	701.47	701.56
C	530+37.44	33.83 Rt.	701.66	701.79
D	530+47.44	33.83 Rt.	701.86	702.03
E	530+57.44	33.83 Rt.	702.05	702.24
F	530+67.44	33.83 Rt.	702.25	702.45
G	530+77.44	33.83 Rt.	702.44	702.65
H	530+87.44	33.83 Rt.	702.63	702.83
I	530+97.44	33.83 Rt.	702.81	703.00
J	531+07.44	33.83 Rt.	702.98	703.15
K	531+17.44	33.83 Rt.	703.15	703.29
L	531+27.44	33.83 Rt.	703.32	703.42
M	531+37.44	33.83 Rt.	703.47	703.54
N	531+47.44	33.83 Rt.	703.62	703.66
O	531+57.44	33.83 Rt.	703.77	703.78
P	531+67.44	33.83 Rt.	703.91	703.90
Q	531+77.44	33.83 Rt.	704.04	704.02
R	531+87.44	33.83 Rt.	704.17	704.15
⊙ Pier 1	532+02.44	33.83 Rt.	704.35	704.35
S	532+12.44	33.83 Rt.	704.46	704.49
T	532+22.44	33.83 Rt.	704.57	704.64
U	532+32.44	33.83 Rt.	704.67	704.78
V	532+42.44	33.83 Rt.	704.77	704.94
W	532+52.44	33.83 Rt.	704.86	705.09
X	532+62.44	33.83 Rt.	704.94	705.24
Y	532+72.44	33.83 Rt.	705.02	705.38
Z	532+82.44	33.83 Rt.	705.09	705.52
AA	532+92.44	33.83 Rt.	705.15	705.64
AB	533+02.44	33.83 Rt.	705.21	705.75
AC	533+12.44	33.83 Rt.	705.27	705.86
AD	533+22.44	33.83 Rt.	705.31	705.93
AE	533+32.44	33.83 Rt.	705.36	706.01
AF	533+42.44	33.83 Rt.	705.39	706.06
AG	533+52.44	33.83 Rt.	705.42	706.09
AH	533+62.44	33.83 Rt.	705.45	706.12
AI	533+72.44	33.83 Rt.	705.46	706.11
AJ	533+82.44	33.83 Rt.	705.48	706.11
AK	533+92.44	33.83 Rt.	705.48	706.07
AL	534+02.44	33.83 Rt.	705.48	706.02
AM	534+12.44	33.83 Rt.	705.48	705.97
AN	534+22.44	33.83 Rt.	705.46	705.89
AO	534+32.44	33.83 Rt.	705.45	705.82
AP	534+42.44	33.83 Rt.	705.42	705.72
AQ	534+52.44	33.83 Rt.	705.39	705.62

**GIRDER 9 CONTINUED**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+62.44	33.83 Rt.	705.36	705.53
AS	534+72.44	33.83 Rt.	705.32	705.44
AT	534+82.44	33.83 Rt.	705.27	705.34
AU	534+92.44	33.83 Rt.	705.22	705.25
⊙ Pier 2	535+02.44	33.83 Rt.	705.16	705.16
AV	535+12.44	33.83 Rt.	705.09	705.07
AW	535+22.44	33.83 Rt.	705.02	705.00
AX	535+32.44	33.83 Rt.	704.94	704.92
AY	535+42.44	33.83 Rt.	704.86	704.85
AZ	535+52.44	33.83 Rt.	704.77	704.78
BA	535+62.44	33.83 Rt.	704.68	704.72
BB	535+72.44	33.83 Rt.	704.58	704.65
BC	535+82.44	33.83 Rt.	704.47	704.58
BD	535+92.44	33.83 Rt.	704.36	704.50
BE	536+02.44	33.83 Rt.	704.24	704.41
BF	536+12.44	33.83 Rt.	704.11	704.30
BG	536+22.44	33.83 Rt.	703.98	704.18
BH	536+32.44	33.83 Rt.	703.85	704.05
BI	536+42.44	33.83 Rt.	703.70	703.89
BJ	536+52.44	33.83 Rt.	703.56	703.73
BK	536+62.44	33.83 Rt.	703.40	703.55
BL	536+72.44	33.83 Rt.	703.24	703.35
BM	536+82.44	33.83 Rt.	703.08	703.15
⊙ Brg. S. Abut.	536+97.44	33.83 Rt.	702.82	702.82
BK S. Abut.	536+98.82	33.83 Rt.	702.79	702.79

TYLIN INTERNATIONAL

DESIGNED	- CM
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD

TOP OF SLAB ELEVATIONS  
(6 OF 7)

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. - S-14
346	*	LAKE	469	183	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-	CONTRACT # 60826		
• 125X-HB-(1&2) R-1					

**GIRDER 10**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+02.55	43.50 Rt.	700.79	700.79
☉ Brg. N. Abut.	530+03.92	43.50 Rt.	700.82	700.82
A	530+13.92	43.50 Rt.	701.01	701.06
B	530+23.92	43.50 Rt.	701.21	701.29
C	530+33.92	43.50 Rt.	701.40	701.52
D	530+43.92	43.50 Rt.	701.60	701.75
E	530+53.92	43.50 Rt.	701.79	701.96
F	530+63.92	43.50 Rt.	701.99	702.17
G	530+73.92	43.50 Rt.	702.18	702.37
H	530+83.92	43.50 Rt.	702.37	702.55
I	530+93.92	43.50 Rt.	702.55	702.72
J	531+03.92	43.50 Rt.	702.73	702.88
K	531+13.92	43.50 Rt.	702.90	703.02
L	531+23.92	43.50 Rt.	703.07	703.16
M	531+33.92	43.50 Rt.	703.23	703.29
N	531+43.92	43.50 Rt.	703.38	703.41
O	531+53.92	43.50 Rt.	703.53	703.54
P	531+63.92	43.50 Rt.	703.67	703.66
Q	531+73.92	43.50 Rt.	703.80	703.78
R	531+83.92	43.50 Rt.	703.93	703.91
☉ Pier 1	531+98.92	43.50 Rt.	704.12	704.12
S	532+08.92	43.50 Rt.	704.23	704.25
T	532+18.92	43.50 Rt.	704.34	704.40
U	532+28.92	43.50 Rt.	704.44	704.54
V	532+38.92	43.50 Rt.	704.54	704.69
W	532+48.92	43.50 Rt.	704.63	704.84
X	532+58.92	43.50 Rt.	704.72	704.99
Y	532+68.92	43.50 Rt.	704.80	705.13
Z	532+78.92	43.50 Rt.	704.87	705.25
AA	532+88.92	43.50 Rt.	704.94	705.38
AB	532+98.92	43.50 Rt.	705.00	705.48
AC	533+08.92	43.50 Rt.	705.06	705.59
AD	533+18.92	43.50 Rt.	705.10	705.66
AE	533+28.92	43.50 Rt.	705.15	705.73
AF	533+38.92	43.50 Rt.	705.19	705.79
AG	533+48.92	43.50 Rt.	705.22	705.82
AH	533+58.92	43.50 Rt.	705.24	705.84
AI	533+68.92	43.50 Rt.	705.26	705.84
AJ	533+78.92	43.50 Rt.	705.28	705.84
AK	533+88.92	43.50 Rt.	705.29	705.82
AL	533+98.92	43.50 Rt.	705.29	705.78
AM	534+08.92	43.50 Rt.	705.29	705.73
AN	534+18.92	43.50 Rt.	705.28	705.67
AO	534+28.92	43.50 Rt.	705.26	705.59
AP	534+38.92	43.50 Rt.	705.24	705.51
AQ	534+48.92	43.50 Rt.	705.21	705.45

**GIRDER 10 CONTINUED**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+58.92	43.50 Rt.	705.18	705.39
AS	534+68.92	43.50 Rt.	705.14	705.32
AT	534+78.92	43.50 Rt.	705.09	705.24
AU	534+88.92	43.50 Rt.	705.04	705.17
☉ Pier 2	534+98.92	43.50 Rt.	704.98	704.98
AV	535+08.92	43.50 Rt.	704.92	704.96
AW	535+18.92	43.50 Rt.	704.85	704.88
AX	535+28.92	43.50 Rt.	704.78	704.78
AY	535+38.92	43.50 Rt.	704.70	704.70
AZ	535+48.92	43.50 Rt.	704.61	704.61
BA	535+58.92	43.50 Rt.	704.52	704.50
BB	535+68.92	43.50 Rt.	704.42	704.40
BC	535+78.92	43.50 Rt.	704.31	704.29
BD	535+88.92	43.50 Rt.	704.20	704.19
BE	535+98.92	43.50 Rt.	704.09	704.10
BF	536+08.92	43.50 Rt.	703.97	704.00
BG	536+18.92	43.50 Rt.	703.84	703.90
BH	536+28.92	43.50 Rt.	703.70	703.79
BI	536+38.92	43.50 Rt.	703.56	703.68
BJ	536+48.92	43.50 Rt.	703.42	703.57
BK	536+58.92	43.50 Rt.	703.26	703.43
BL	536+68.92	43.50 Rt.	703.11	703.29
BM	536+78.92	43.50 Rt.	702.94	703.12
☉ Brg. S. Abut.	536+93.92	43.50 Rt.	702.69	702.69
BK S. Abut.	536+95.30	43.50 Rt.	702.66	702.66

**U.S. 41 ☉**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
Bk. N. Abut.	530+18.38	00.00	701.03	701.03
☉ Brg. N. Abut.	530+19.76	00.00	701.05	701.05
A	530+29.76	00.00	701.25	701.29
B	530+39.76	00.00	701.44	701.50
C	530+49.76	00.00	701.64	701.73
D	530+59.76	00.00	701.83	701.94
E	530+69.76	00.00	702.03	702.16
F	530+79.76	00.00	702.22	702.36
G	530+89.76	00.00	702.40	702.54
H	530+99.76	00.00	702.58	702.72
I	531+09.76	00.00	702.76	702.89
J	531+19.76	00.00	702.92	703.04
K	531+29.76	00.00	703.09	703.19
L	531+39.76	00.00	703.24	703.31
M	531+49.76	00.00	703.39	703.44
N	531+59.76	00.00	703.54	703.57
O	531+69.76	00.00	703.67	703.68
P	531+79.76	00.00	703.81	703.81
Q	531+89.76	00.00	703.93	703.92
R	531+99.76	00.00	704.05	704.04
☉ Pier 1	532+14.76	00.00	704.22	704.22
S	532+24.76	00.00	704.33	704.35
T	532+34.76	00.00	704.43	704.47
U	532+44.76	00.00	704.52	704.59
V	532+54.76	00.00	704.61	704.72
W	532+64.76	00.00	704.69	704.84
X	532+74.76	00.00	704.77	704.96
Y	532+84.76	00.00	704.84	705.07
Z	532+94.76	00.00	704.90	705.18
AA	533+04.76	00.00	704.96	705.28
AB	533+14.76	00.00	705.01	705.36
AC	533+24.76	00.00	705.06	705.44
AD	533+34.76	00.00	705.10	705.50
AE	533+44.76	00.00	705.13	705.55
AF	533+54.76	00.00	705.16	705.59
AG	533+64.76	00.00	705.18	705.62
AH	533+74.76	00.00	705.20	705.63
AI	533+84.76	00.00	705.21	705.63
AJ	533+94.76	00.00	705.22	705.63
AK	534+04.76	00.00	705.21	705.59
AL	534+14.76	00.00	705.21	705.56
AM	534+24.76	00.00	705.19	705.51
AN	534+34.76	00.00	705.18	705.46
AO	534+44.76	00.00	705.15	705.39
AP	534+54.76	00.00	705.12	705.31
AQ	534+64.76	00.00	705.08	705.23

**U.S. 41 ☉**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflections
AR	534+74.76	00.00	705.04	705.15
AS	534+84.76	00.00	704.99	705.06
AT	534+94.76	00.00	704.94	704.98
AU	535+04.76	00.00	704.88	704.90
☉ Pier 2	535+14.76	00.00	704.81	704.81
AV	535+24.76	00.00	704.74	704.73
AW	535+34.76	00.00	704.66	704.64
AX	535+44.76	00.00	704.57	704.56
AY	535+54.76	00.00	704.48	704.48
AZ	535+64.76	00.00	704.39	704.40
BA	535+74.76	00.00	704.29	704.32
BB	535+84.76	00.00	704.18	704.23
BC	535+94.76	00.00	704.06	704.13
BD	536+04.76	00.00	703.94	704.04
BE	536+14.76	00.00	703.82	703.93
BF	536+24.76	00.00	703.69	703.82
BG	536+34.76	00.00	703.55	703.69
BH	536+44.76	00.00	703.41	703.55
BI	536+54.76	00.00	703.26	703.39
BJ	536+64.76	00.00	703.10	703.22
BK	536+74.76	00.00	702.94	703.04
BL	536+84.76	00.00	702.77	702.85
BM	536+94.76	00.00	702.60	702.65
☉ Brg. S. Abut.	537+09.76	00.00	702.33	702.33
BK S. Abut.	537+11.13	00.00	702.30	702.30

**TYLIN** INTERNATIONAL

DESIGNED	- CM
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD

**TOP OF SLAB ELEVATIONS  
(7 OF 7)**

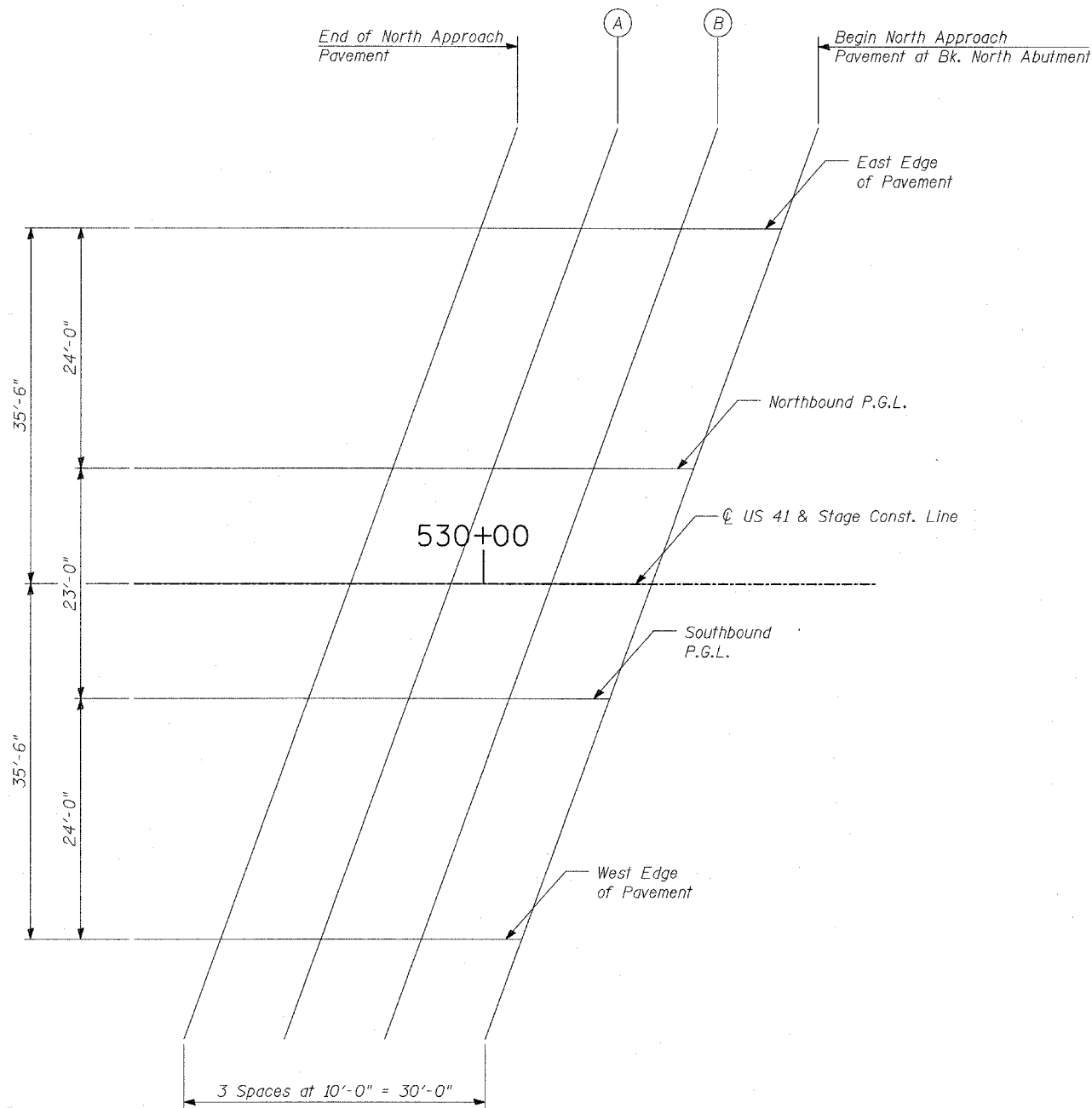
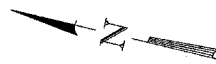
FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SOUTH SHEETS	SHEET NO.
346	*	LAKE	469	184
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			* 125X-HB-(1&2) R-1	

SHEET NO. - S-15  
S-66 SHEETS

CONTRACT # 60826



PLAN

**EAST EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	529+99.71	-35.50'	700.90
A	530+09.71	-35.50'	701.10
B	530+19.71	-35.50'	701.29
Begin N. Appr. Pav't	530+29.71	-35.50'	701.49

**NORTHBOUND P.G.L.**

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	529+90.97	-11.50'	700.73
A	530+00.97	-11.50'	700.93
B	530+10.97	-11.50'	701.12
Begin N. Appr. Pav't	530+20.97	-11.50'	701.32

**Centerline of US 41 & STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	529+86.78	00.00'	700.19
A	529+96.78	00.00'	700.39
B	530+06.78	00.00'	700.58
Begin N. Appr. Pav't	530+16.78	00.00'	700.78

**SOUTHBOUND P.G.L.**

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	529+82.60	11.50'	700.57
A	529+92.60	11.50'	700.77
B	530+02.60	11.50'	700.96
Begin N. Appr. Pav't	530+12.60	11.50'	701.15

**WEST EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	529+73.86	35.50'	700.40
A	529+83.86	35.50'	700.60
B	529+93.86	35.50'	700.79
Begin N. Appr. Pav't	530+03.86	35.50'	700.99

TYLIN INTERNATIONAL

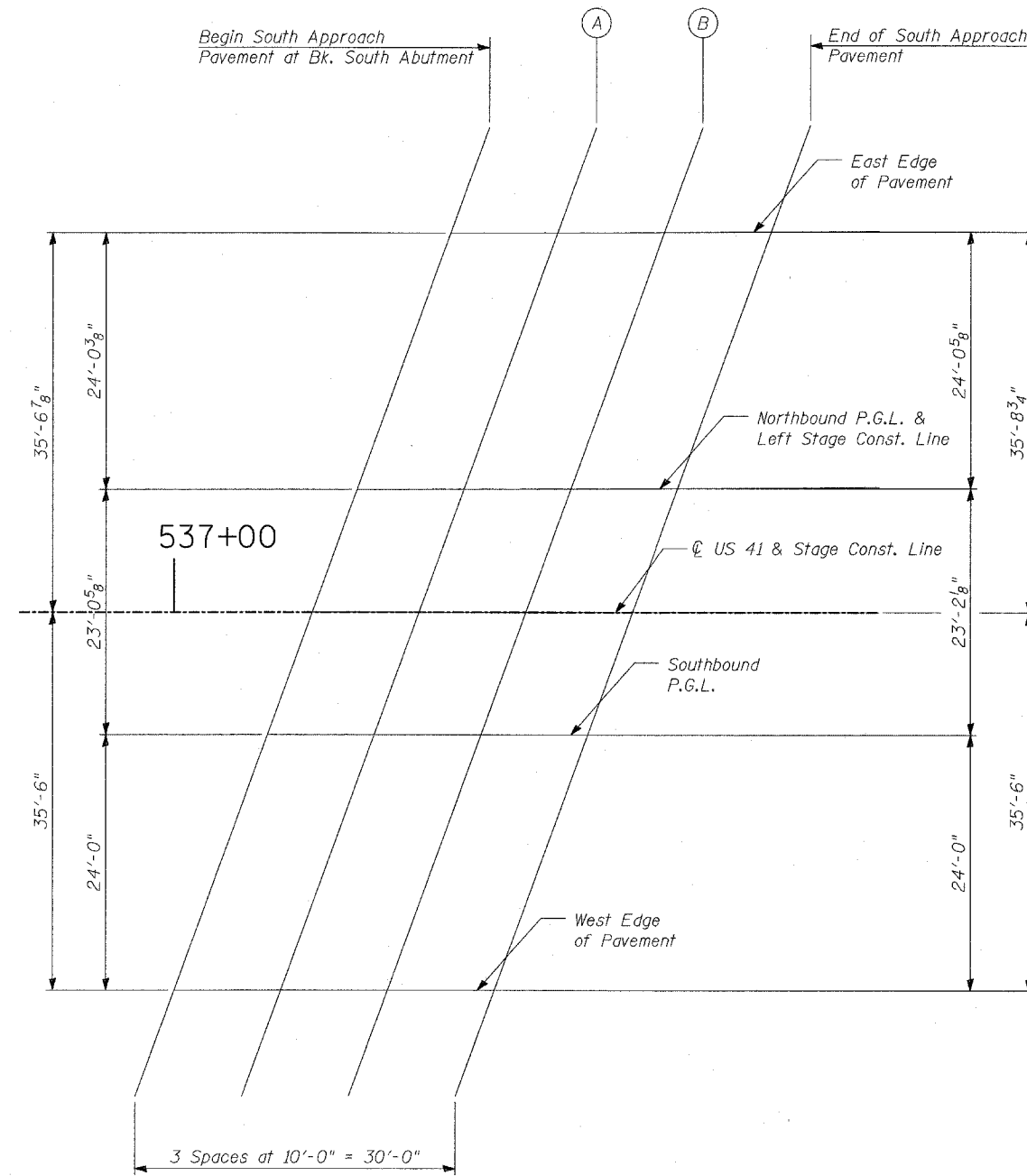
DESIGNED	- MAF
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

**TOP OF NORTH APPROACH  
SLAB ELEVATIONS**

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-16 S-66 SHEETS
346	•	LAKE	469	185	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
• 125X-HB-(1&2) R-1		CONTRACT # 60826			



PLAN

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Begin S. Appr. Pav't	537+25.90	-35.58'	702.26
A	537+35.91	-35.62'	702.06
B	537+45.93	-35.67'	701.86
End S. Appr. Pav't	537+55.95	-35.73'	701.65

NORTHBOUND P.G.L. & LEFT STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
Begin S. Appr. Pav't	537+17.15	-11.55'	702.43
A	537+27.16	-11.58'	702.24
B	537+37.18	-11.62'	702.04
End S. Appr. Pav't	537+47.20	-11.67'	701.83

Q US 41 & STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
Begin S. Appr. Pav't	537+12.95	00.00'	702.05
A	537+22.95	00.00'	701.86
B	537+32.95	00.00'	701.66
End S. Appr. Pav't	537+42.95	00.00'	701.46

SOUTHBOUND P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
Begin S. Appr. Pav't	537+08.76	11.50'	702.59
A	537+18.76	11.50'	702.40
B	537+28.76	11.50'	702.20
End S. Appr. Pav't	537+38.76	11.50'	702.01

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Begin S. Appr. Pav't	537+00.03	35.50'	702.74
A	537+10.03	35.50'	702.56
B	537+20.03	35.50'	702.37
End S. Appr. Pav't	537+30.03	35.50'	702.18

TYLIN INTERNATIONAL

DESIGNED	- MAF
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

TOP OF SOUTH APPROACH  
SLAB ELEVATIONS

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

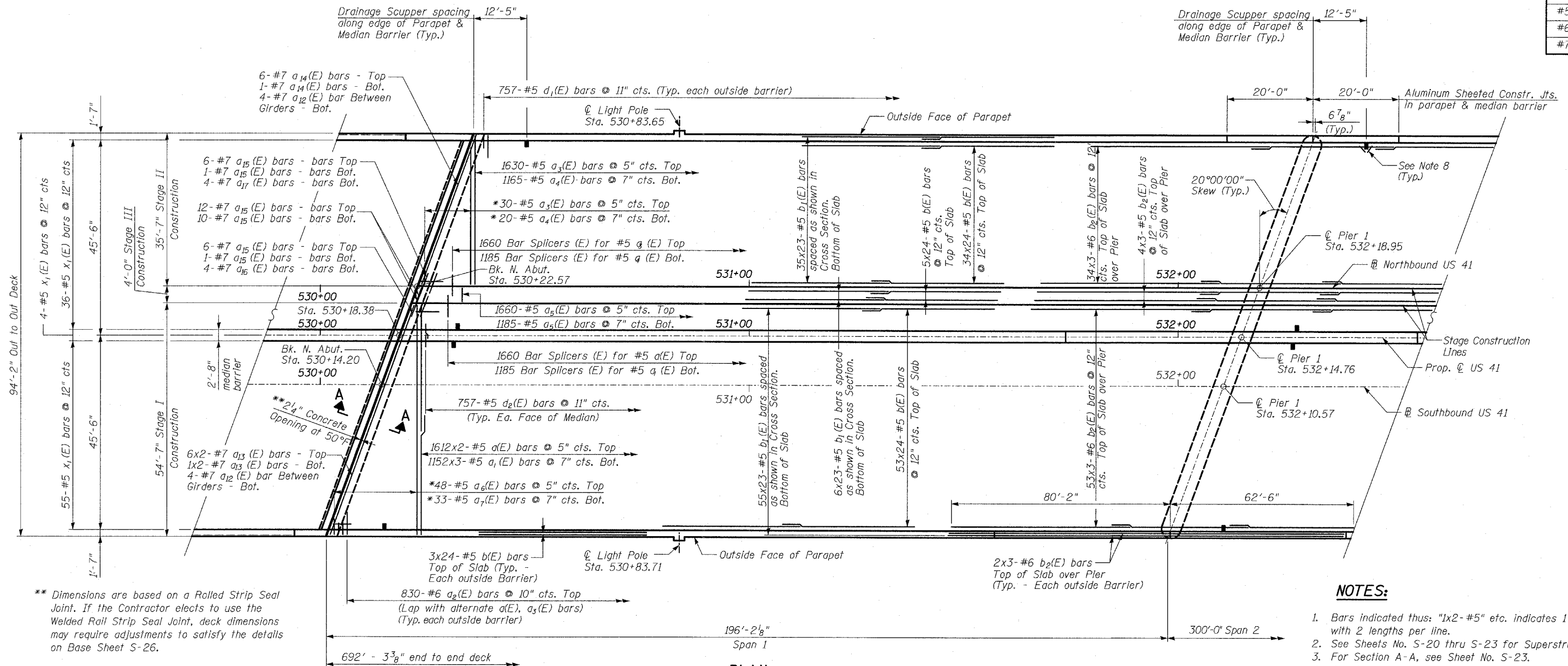
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	STATE SHEETS	SHEET NO.	SHEET NO. - 5-17 S-66 SHEETS
346		LAKE	469	186	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			
			CONTRACT • 60826		

LAP SPLICES

Bar	Lap
#4	1'-8"
#5	2'-2"
#6	2'-7"
#7	3'-5"

\* Order  $a_3(E)$ ,  $a_4(E)$ ,  $a_6(E)$  &  $a_7(E)$  bars full length.  
Cut to fit skew and use remainder of bars in same stage, opposite end.

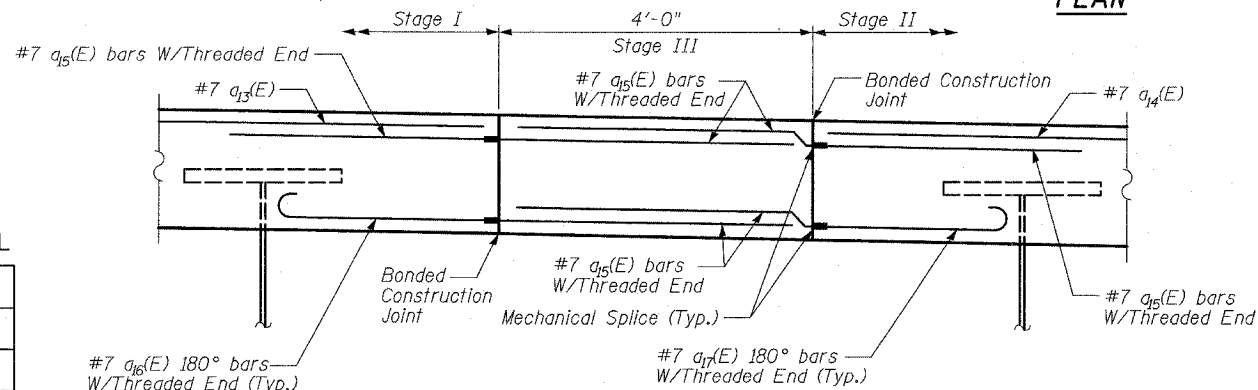


\*\* Dimensions are based on a Rolled Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Base Sheet S-26.

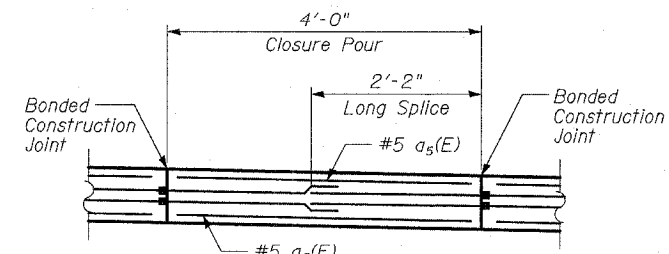
NOTES:

1. Bars indicated thus: "1x2-#5" etc. indicates 1 line of bars with 2 lengths per line.
2. See Sheets No. S-20 thru S-23 for Superstructure Details.
3. For Section A-A, see Sheet No. S-23.
4. See Sheet No. S-22A for Light Pole Mount Details.
5. See Sheet No. S-23 for Superstructure Bill of Material.
6. See Sheet No. S-28 for Bar Splicer (Assembly) Details.
7. Work this Sheet with Sheets No. S-18 thru S-23.
8. See Sheet No. S-23 for additional reinforcement at scuppers.

PLAN



EDGE BEAM CLOSURE POUR  
AT NORTH ABUTMENT



DECK CLOSURE POUR

SUPERSTRUCTURE  
SPAN 1

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

TYLIN INTERNATIONAL

DESIGNED	- SP
CHECKED	- AD
DRAWN	- SNB
CHECKED	- AD

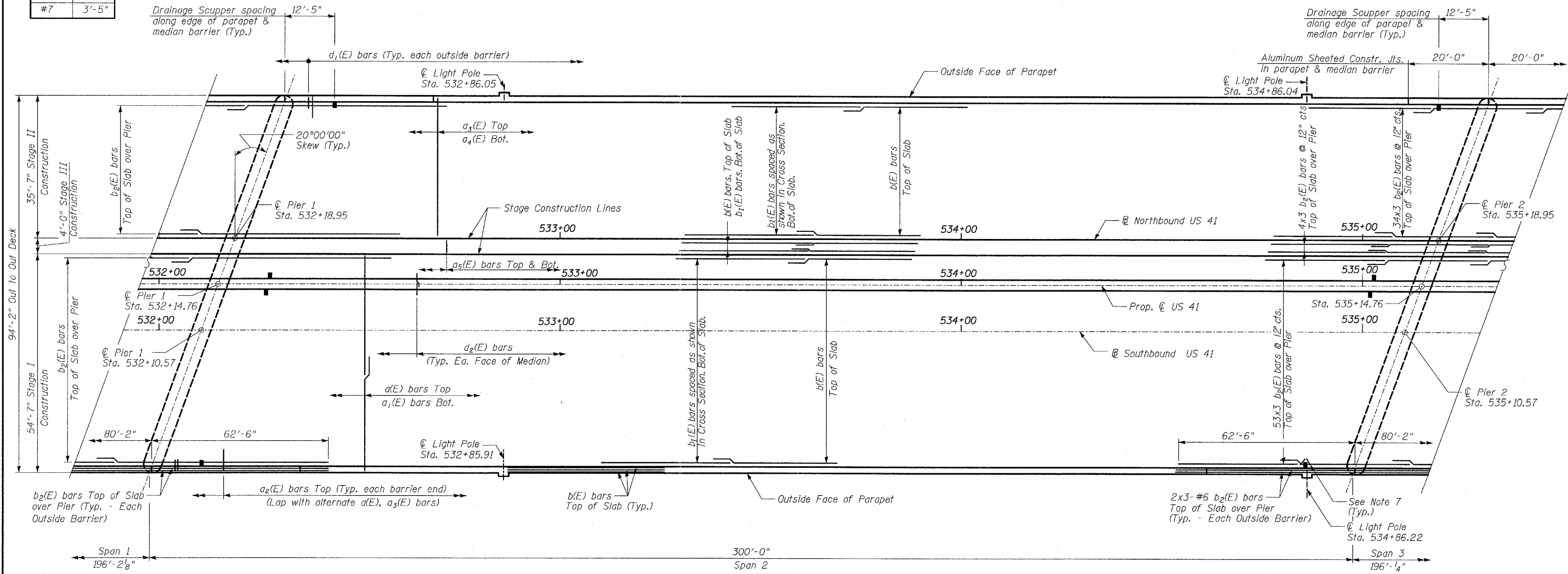
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	137
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT # 60826	

SHEET NO. S-18  
S-66 SHEETS

LAP SPLICES

Bar	Lap
#4	1'-8"
#5	2'-2"
#6	2'-7"
#7	3'-5"



PLAN

TYLIN INTERNATIONAL

DESIGNED	- SP
CHECKED	- AD
DRAWN	- SNB
CHECKED	- AD

NOTES:

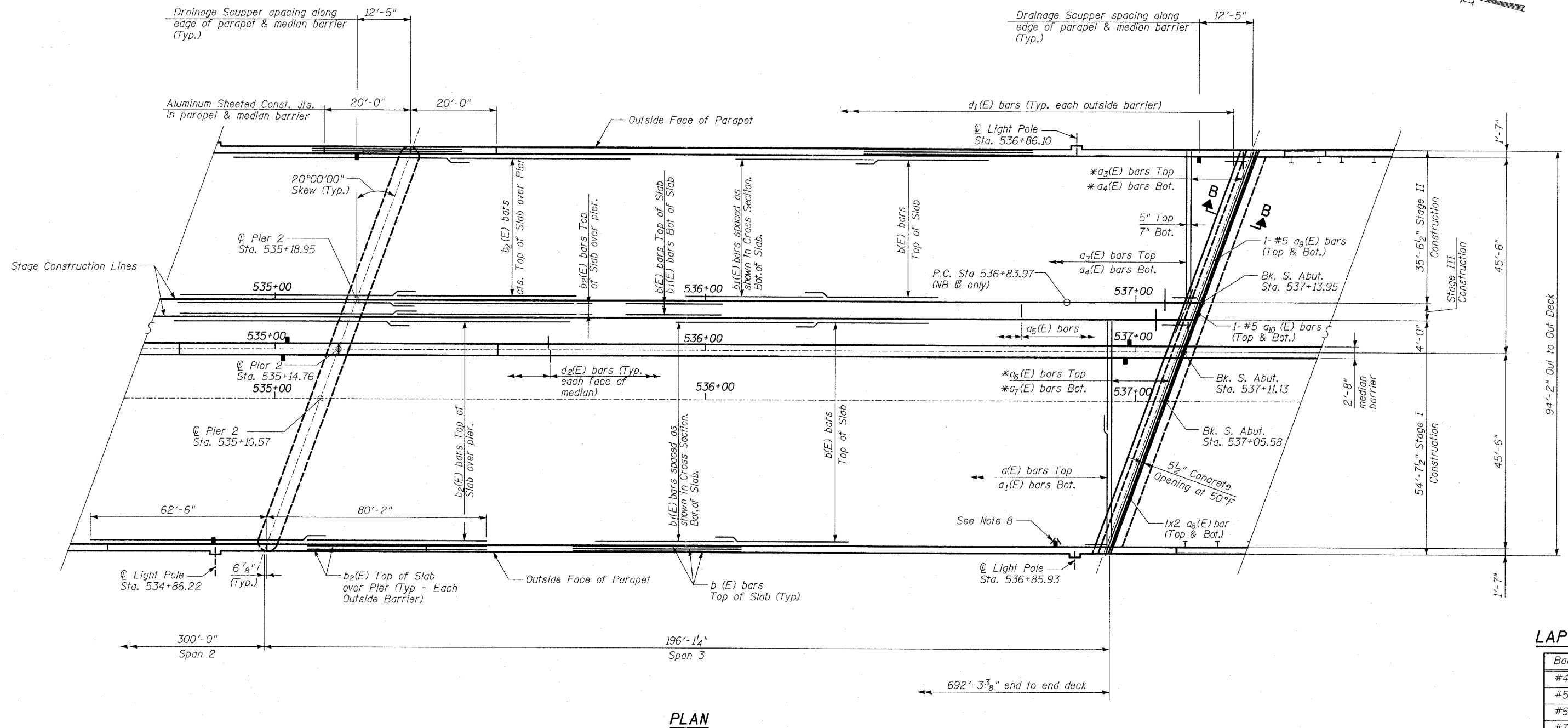
1. Bars indicated thus: "1x2-#5" etc. indicates 1 line of bars with 2 lengths per line.
2. See Sheets No. S-20 thru S-23 for Superstructure Details.
3. See Sheet No. S-22A for Light Pole Mount Details.
4. See Sheet No. S-23 for Superstructure Bill of Material.
5. See Sheet No. S-28 for Bar Splicer (Assembly) Details.
6. Work this Sheet with Sheets No. S-17 & S-19 thru S-23.
7. See Sheet No. S-23 for additional reinforcement at scuppers.

SUPERSTRUCTURE  
SPAN 2

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. - S-19
346	*	LAKE	469	158	S-66 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-			
125X-HB-(1&2) R-1		CONTRACT # 60826			



LAP SPLICES

Bar	Lap
#4	1'-8"
#5	2'-2"
#6	2'-7"
#7	3'-5"

PLAN

NOTES:

1. Bars indicated thus: "1x2-#5" etc. indicates 1 line of bars with 2 lengths per line. See Sheets No. S-20 thru S-23 for Superstructure Details.
2. For Section B-B, see Sheet No. S-23.
3. See Sheet No. S-23 for Superstructure Bill of Material.
4. See Sheet No. S-22A for Light Pole Mount Details.
5. See Sheet No. S-28 for Bar Splicer (Assembly) Details.
6. Work this Sheet with Sheets No. S-17, S-18 & S-20 thru S-23.
7. See Sheet No. S-23 for additional reinforcement at scuppers.
8. For Modular Expansion Joint details, see Sheet No. S-25.

\* Order bars full length. Cut to fit skew and use remainder of bars in same stage, opposite end.

TYLIN INTERNATIONAL

DESIGNED	- SP
CHECKED	- AD
DRAWN	- SNB
CHECKED	- AD

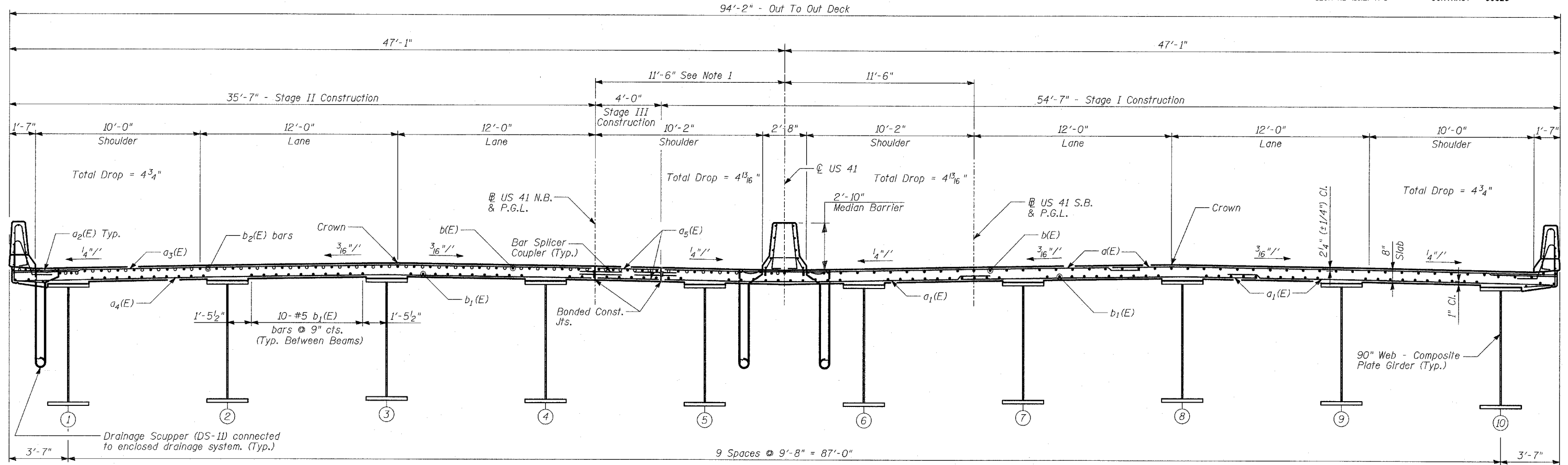
SUPERSTRUCTURE  
SPAN 3

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-20 S-66 SHEETS
346	*	LAKE	469	189	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-			
			125X-HB-(1&2) R-1 CONTRACT # 60826		

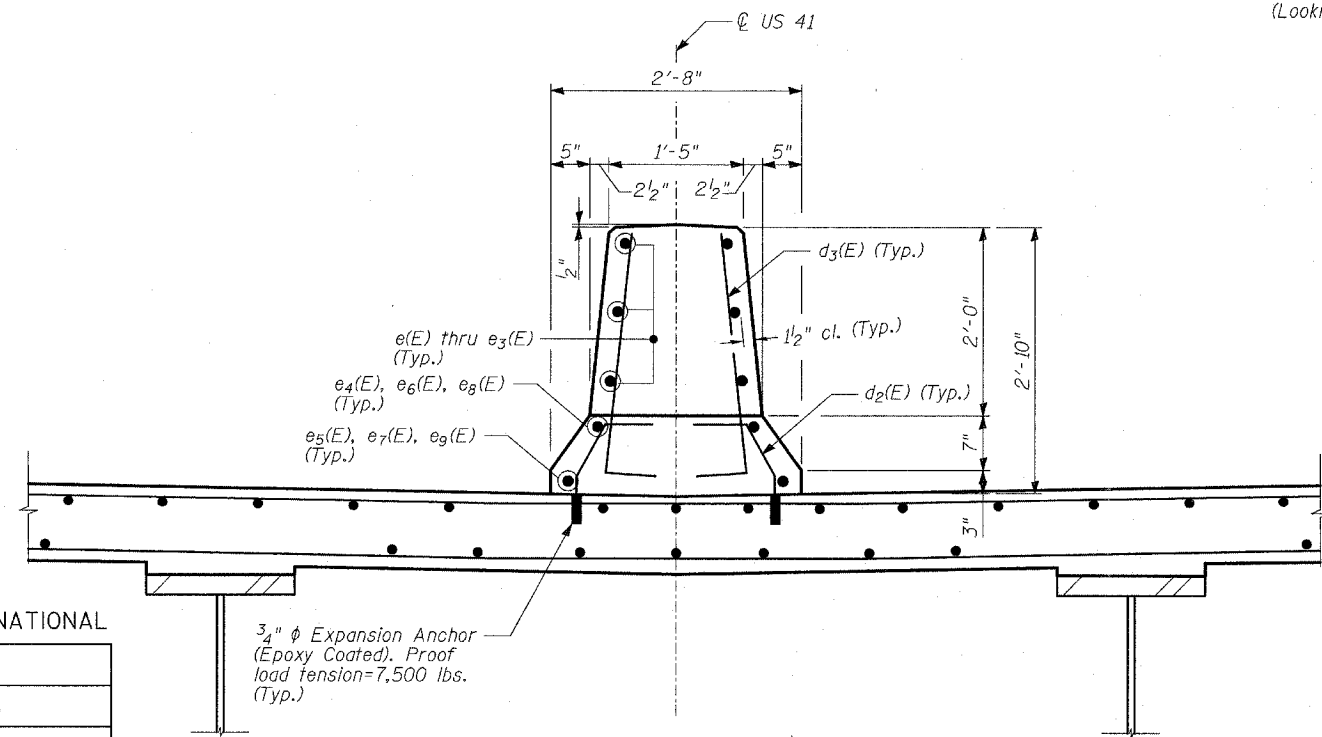


Note: From Sta. 536+83.97 to end of deck, Varies 11'-6" to 11'-6 1/2"

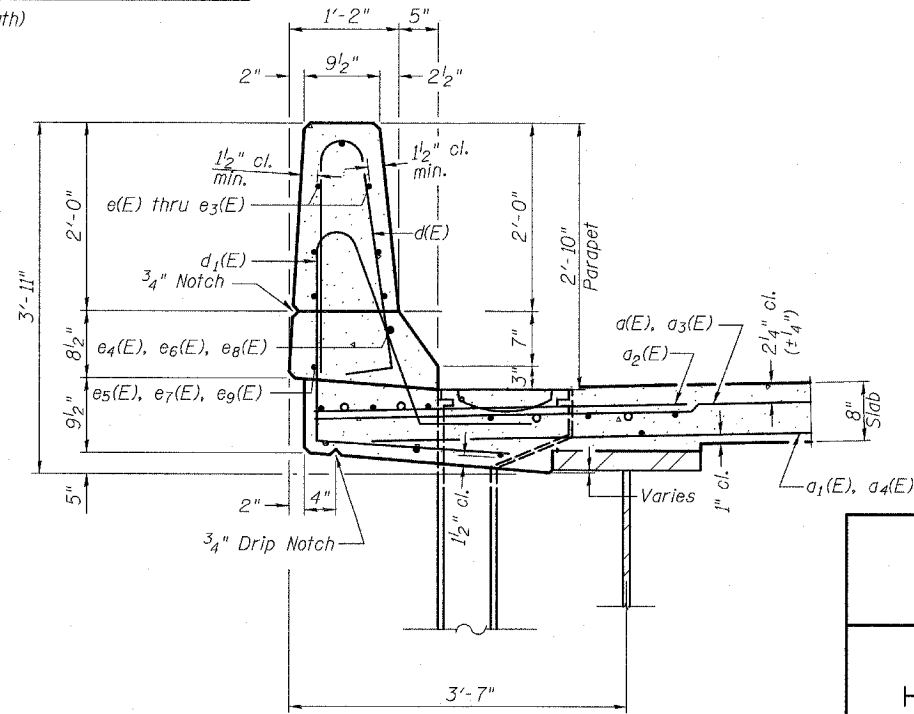
NEAR PIER

CROSS SECTION THRU SUPERSTRUCTURE

NEAR MIDSPAN



SECTION THRU BARRIER MEDIAN AT MIDSPAN



SECTION THRU PARAPET

SUPERSTRUCTURE DETAILS I

FAP 346 (U.S. ROUTE 41 - SKOKIE HIGHWAY) OVER ILLINOIS ROUTE 132 SECTION 125X-HB-(1&2)R-1 LAKE COUNTY S.N. 049-0209

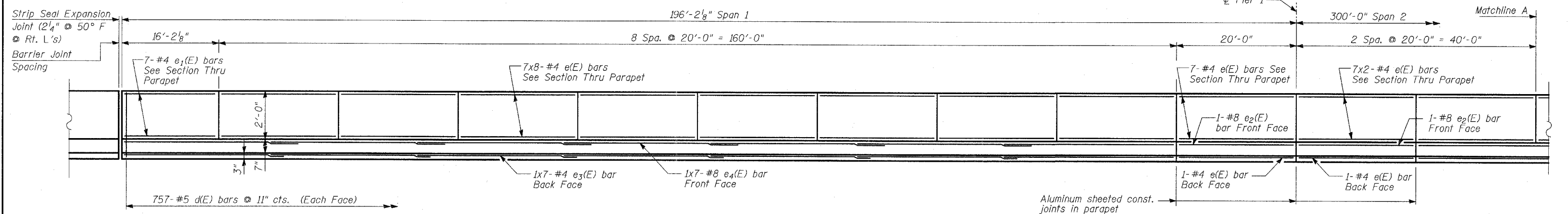
TYLIN INTERNATIONAL

DESIGNED	- SP
CHECKED	- AD
DRAWN	- SNB
CHECKED	- AD

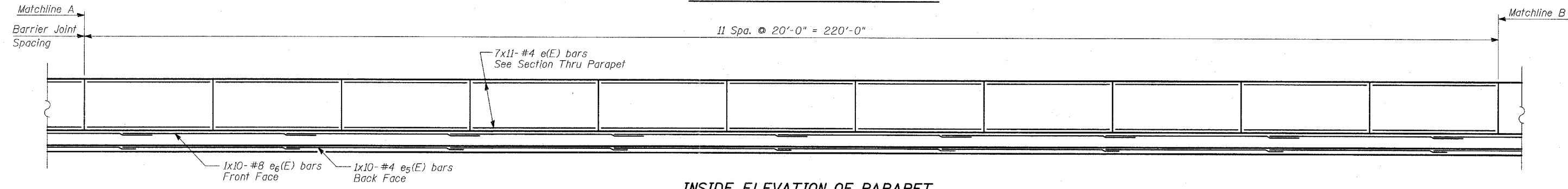
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-21
346	.	LAKE	469	190	S-66 SHEETS

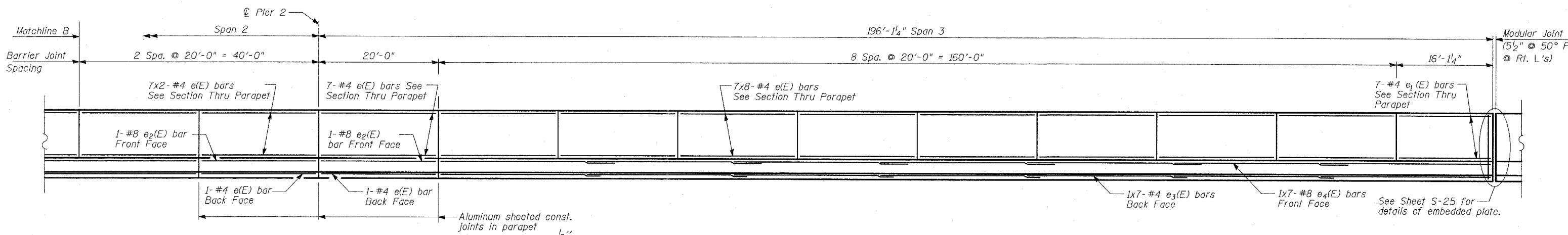
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT-  
 125X-HB-(1&2) R-1 CONTRACT # 60826



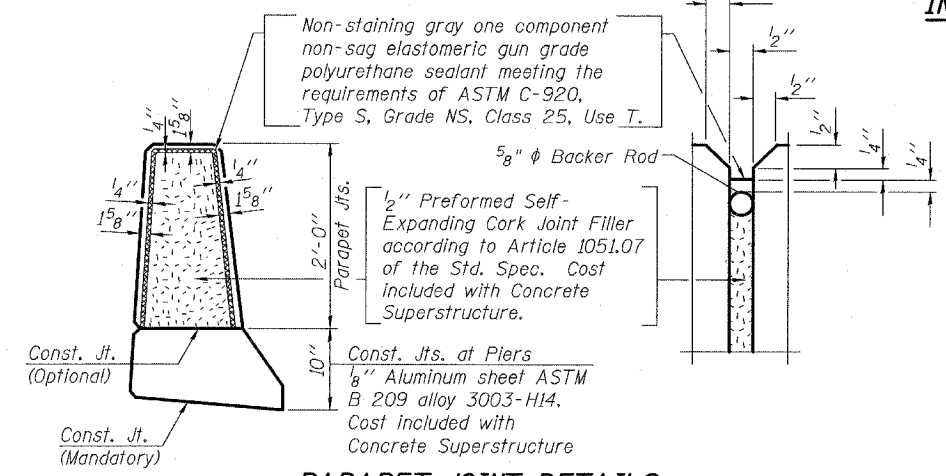
INSIDE ELEVATION OF PARAPET



INSIDE ELEVATION OF PARAPET



INSIDE ELEVATION OF PARAPET



PARAPET JOINT DETAILS

LAP SPLICES

Bar	Lap
#4	1'-8"
#8	4'-6"

NOTES

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

SUPERSTRUCTURE  
DETAILS II

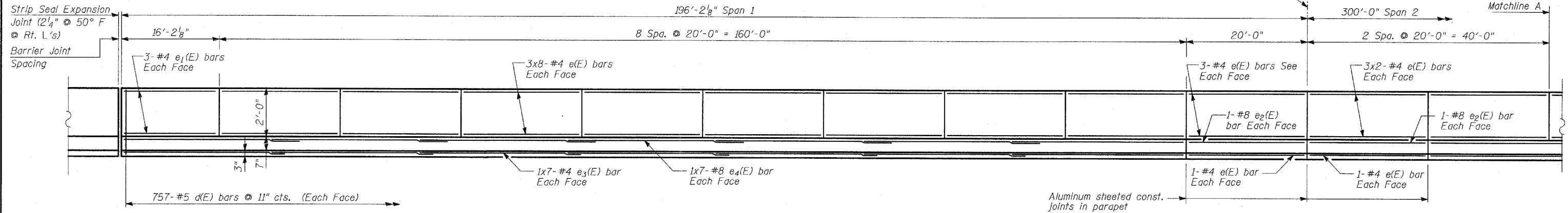
FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

TYLIN INTERNATIONAL

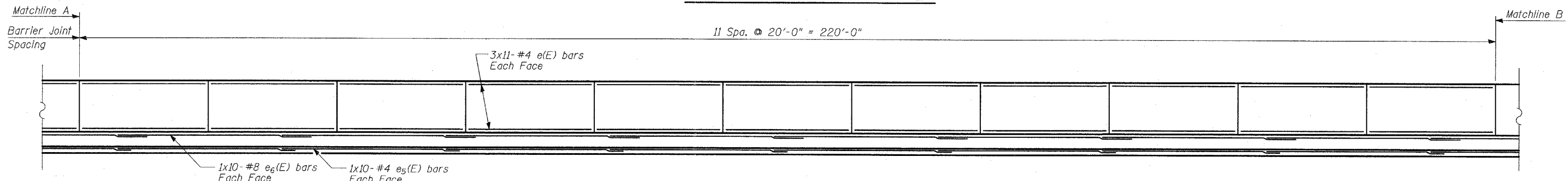
DESIGNED	- SP
CHECKED	- AD
DRAWN	- SNB
CHECKED	- MAF, AD

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

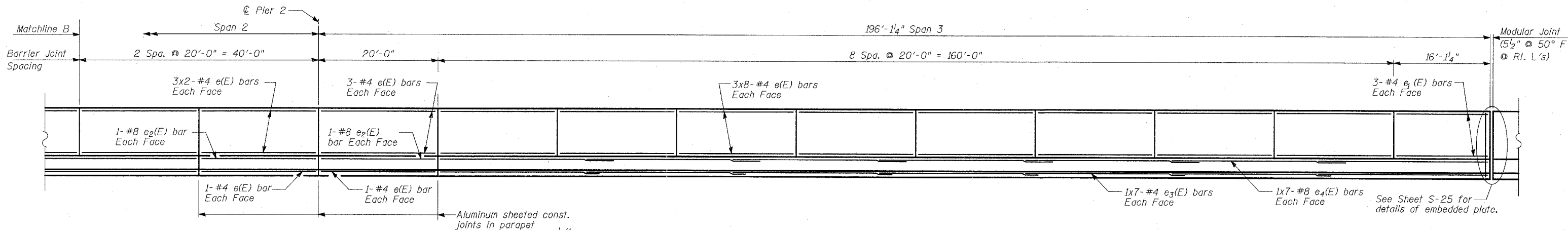
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-22 S-66 SHEETS
346	*	LAKE	469	191	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		



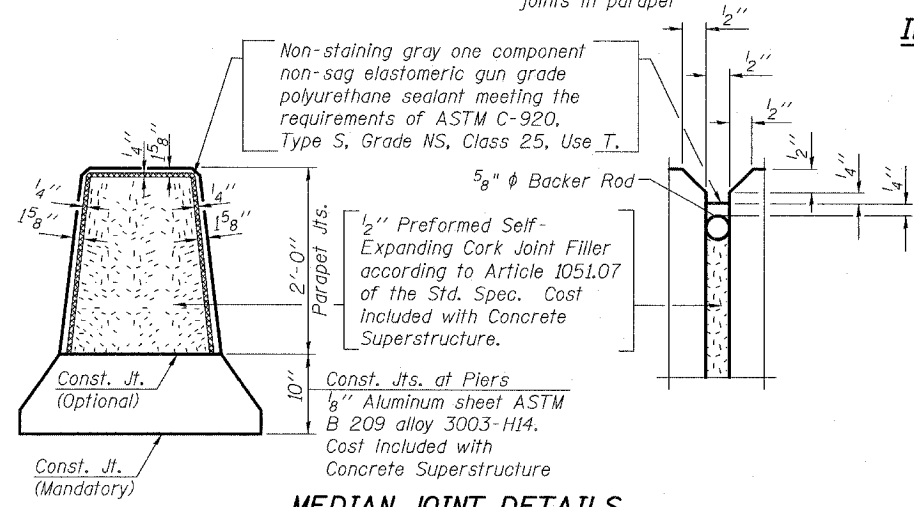
INSIDE ELEVATION OF PARAPET



INSIDE ELEVATION OF PARAPET



INSIDE ELEVATION OF PARAPET



MEDIAN JOINT DETAILS

LAP SPLICES

Bar	Lap
#4	1'-8"
#8	4'-6"

SUPERSTRUCTURE  
DETAILS III

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

NOTES

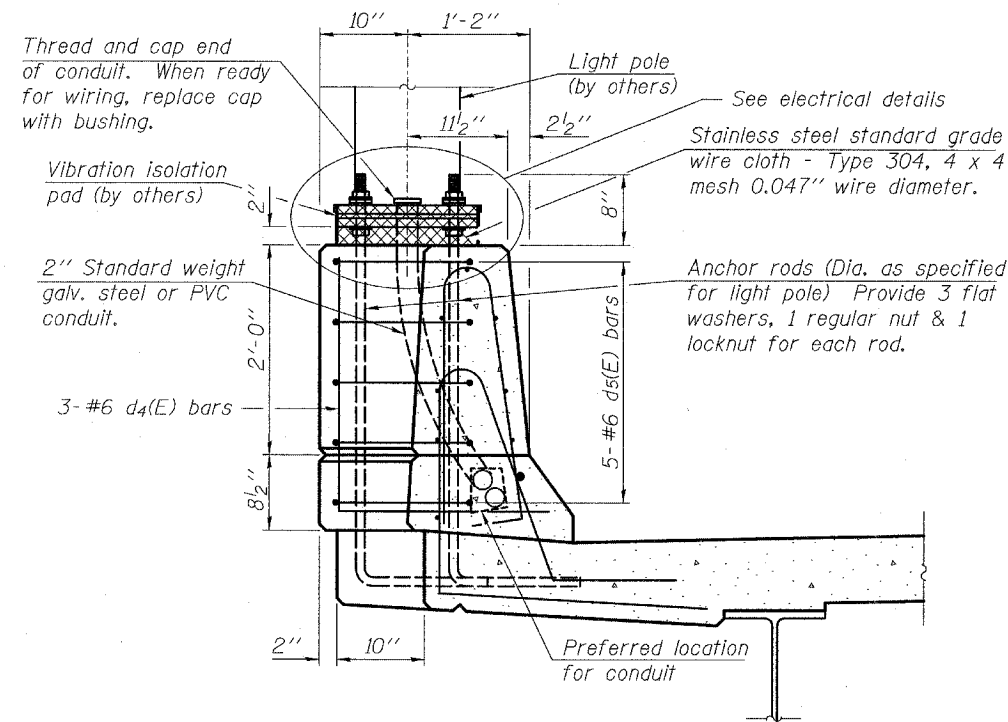
Bars indicated thus 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.

TYLIN INTERNATIONAL

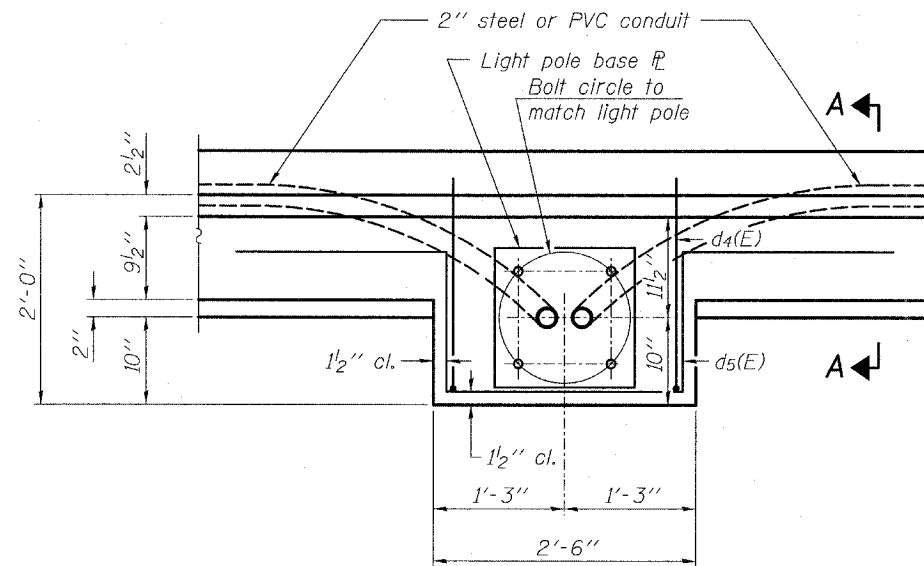
DESIGNED	- SP
CHECKED	- AD
DRAWN	- SNB
CHECKED	- MAF, AD

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. -S-22A S-66" SHEETS
346	•	LAKE	469	191A	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
• 125X-HB-(1&2) R-1		CONTRACT # 60826			

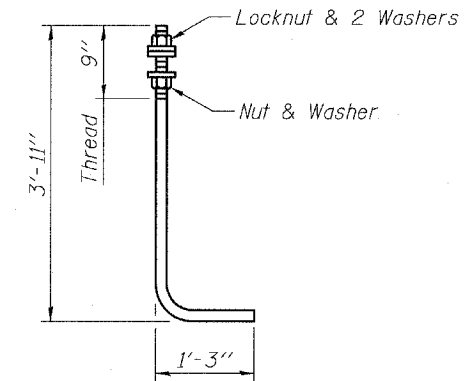


SECTION A-A



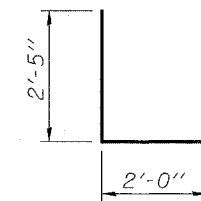
PLAN

Note:  
Cost of anchor rods and conduit is included with Concrete Superstructure.

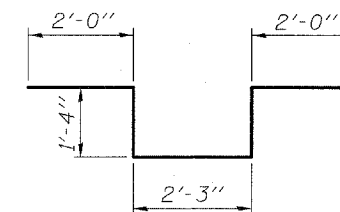


ANCHOR ROD

Diameter as specified for light poles.  
(ASTM F 1554 Grade 105)



BAR d<sub>4</sub>(E)



BAR d<sub>5</sub>(E)

TYLIN INTERNATIONAL

DESIGNED	- MAF
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

SUPERSTRUCTURE  
DETAILS IV

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	192
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	CONTRACT # 60826
125X-HB-(1&2) R-1				

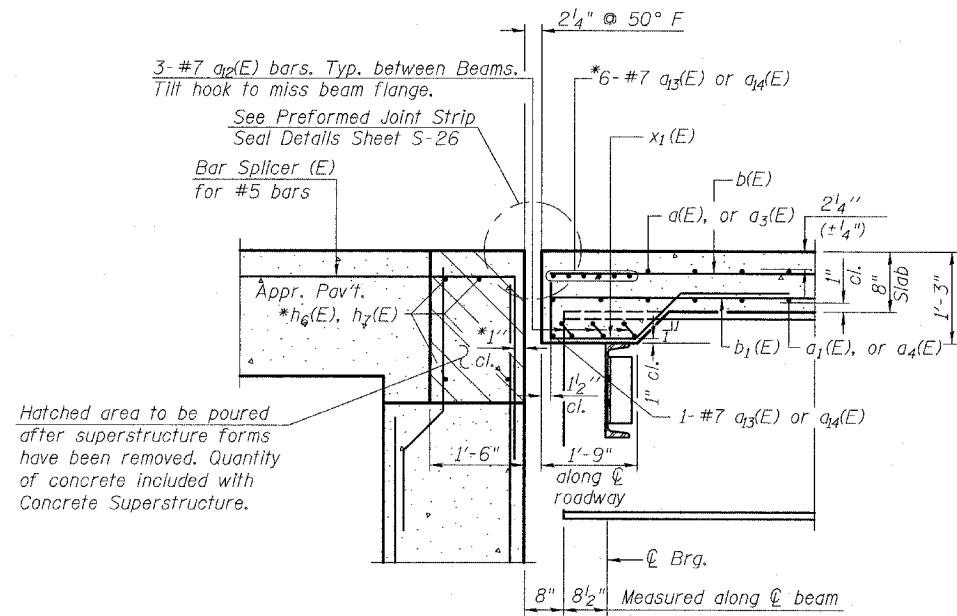
SHEET NO. - S-23  
S-66 SHEETS

BILL OF MATERIAL (CONTINUED)

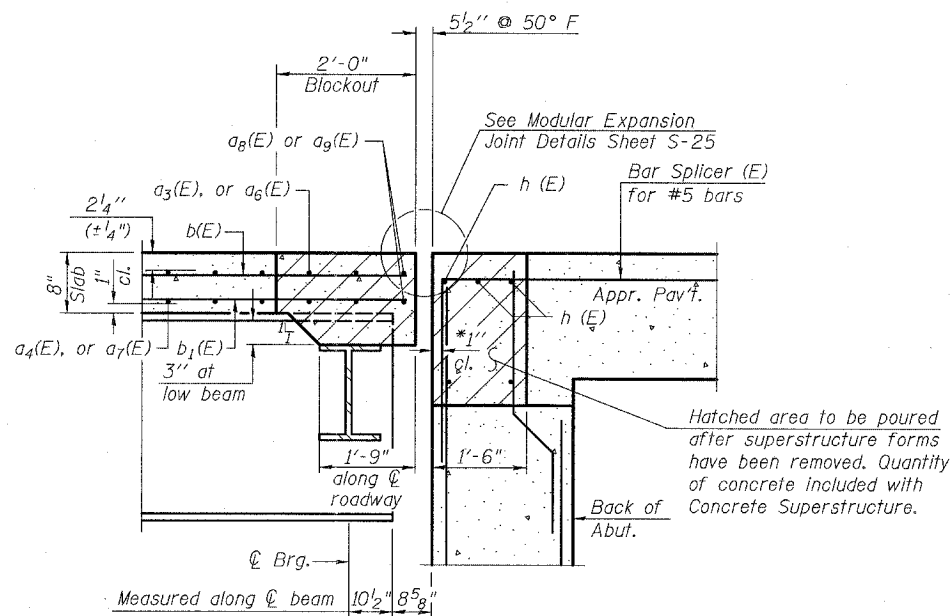
Reinforcement Bars, Epoxy Coated	POUND	525,770
Concrete Superstructure	CU YD	2,025
Bridge Deck Grooving	SQ YD	6,488
Protective Coat	SQ YD	7,935
Bar Splicers	EACH	5,690
Mechanical Splice	EACH	22

BILL OF MATERIAL

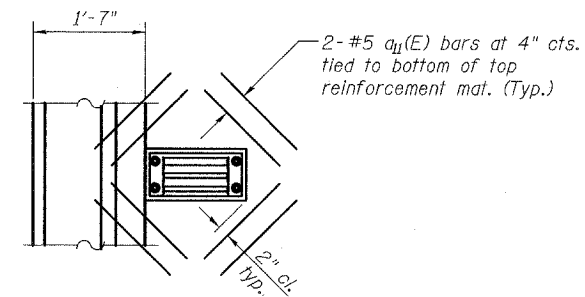
Bar	No.	Size	Length	Shape
d(E)	3224	#5	28'-2"	—
a <sub>1</sub> (E)	3456	#5	19'-5"	—
a <sub>2</sub> (E)	1660	#6	6'-0"	—
a <sub>3</sub> (E)	1660	#5	35'-3"	—
a <sub>4</sub> (E)	1185	#5	34'-11"	—
a <sub>5</sub> (E)	2845	#5	3'-8"	—
a <sub>6</sub> (E)	48	#5	54'-3"	—
a <sub>7</sub> (E)	33	#5	53'-11"	—
a <sub>8</sub> (E)	4	#5	29'-11"	—
a <sub>9</sub> (E)	2	#5	37'-6"	—
a <sub>10</sub> (E)	2	#5	3'-11"	—
a <sub>11</sub> (E)	128	#5	1'-6"	—
a <sub>12</sub> (E)	32	#7	11'-8"	—
a <sub>13</sub> (E)	14	#7	30'-7"	—
a <sub>14</sub> (E)	7	#7	37'-7"	—
a <sub>15</sub> (E)	22	#7	3'-10"	—
a <sub>16</sub> (E)	4	#7	3'-6"	—
a <sub>17</sub> (E)	4	#7	3'-9"	—
b(E)	2352	#5	30'-11"	—
b <sub>1</sub> (E)	2208	#5	32'-2"	—
b <sub>2</sub> (E)	570	#6	49'-4"	—
d(E)	1514	#5	5'-7"	—
d <sub>1</sub> (E)	1514	#5	7'-6"	—
d <sub>2</sub> (E)	1514	#5	1'-9"	—
d <sub>3</sub> (E)	1514	#5	3'-0"	—
d <sub>4</sub> (E)	24	#6	4'-5"	—
d <sub>5</sub> (E)	40	#6	8'-11"	—
e(E)	441	#4	19'-9"	—
e <sub>1</sub> (E)	26	#4	15'-10"	—
e <sub>2</sub> (E)	12	#8	19'-9"	—
e <sub>3</sub> (E)	42	#4	26'-7"	—
e <sub>4</sub> (E)	42	#8	29'-0"	—
e <sub>5</sub> (E)	30	#4	27'-6"	—
e <sub>6</sub> (E)	30	#8	30'-0"	—
x <sub>1</sub> (E)	95	#5	5'-11"	—



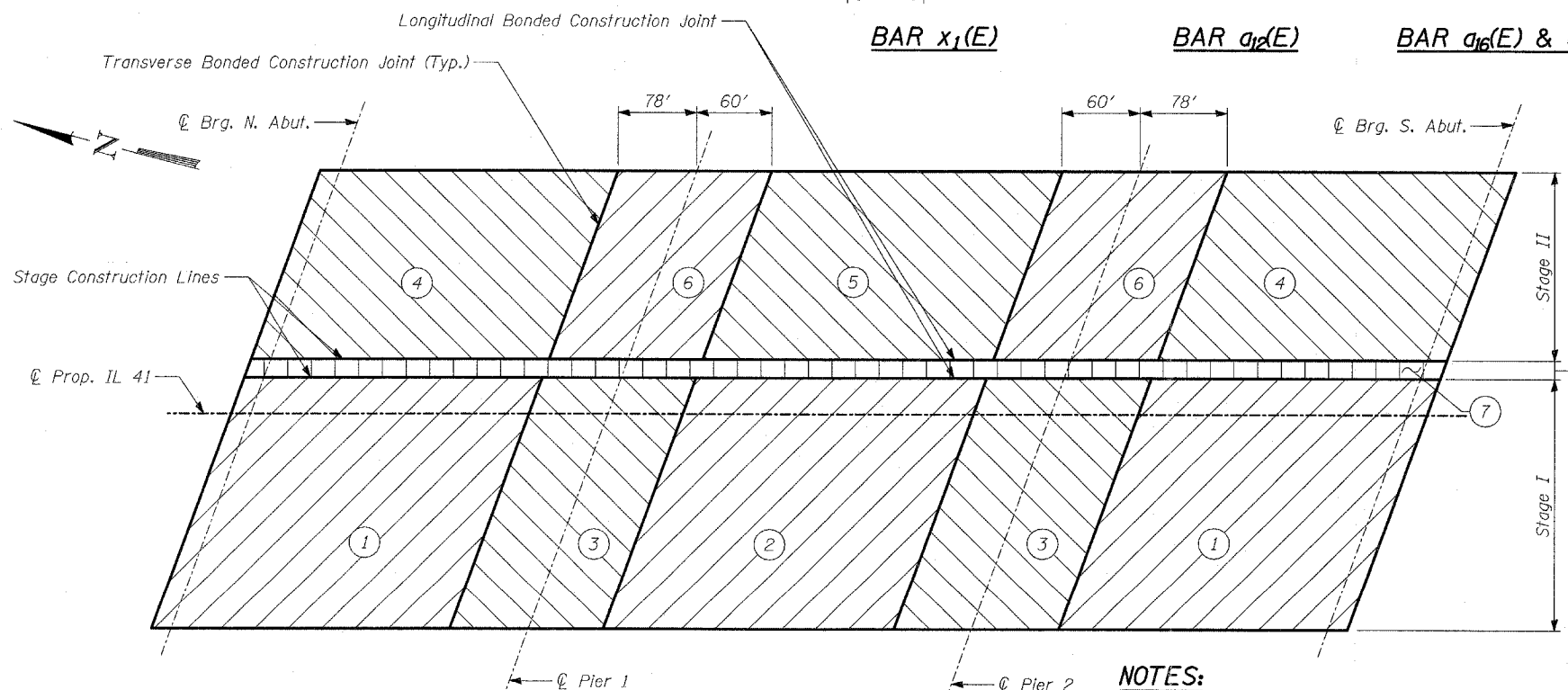
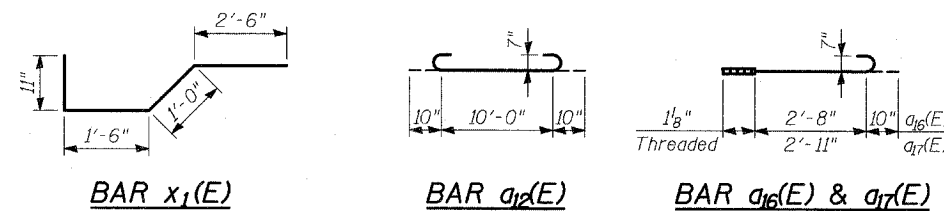
SECTION A-A



SECTION B-B



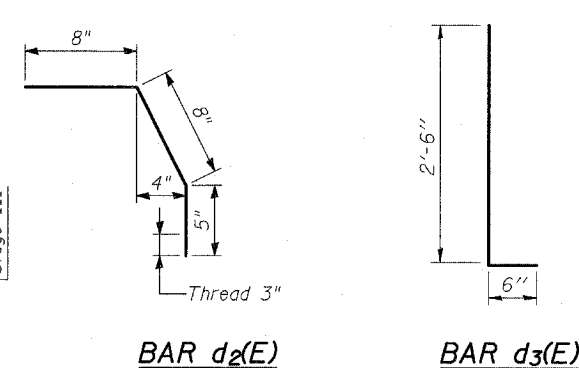
ADDITIONAL REINFORCEMENT AT SCUPPERS



DECK POUR SEQUENCE PLAN

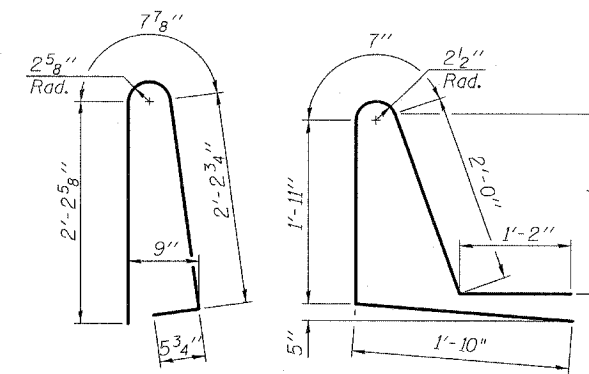
NOTES:

- When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
- At least 72 hours shall have elapsed from the end of previous pour.
- The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.



BAR d2(E)

BAR d3(E)



BAR d(E)

BAR d1(E)

TYLIN INTERNATIONAL

DESIGNED	- SP
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

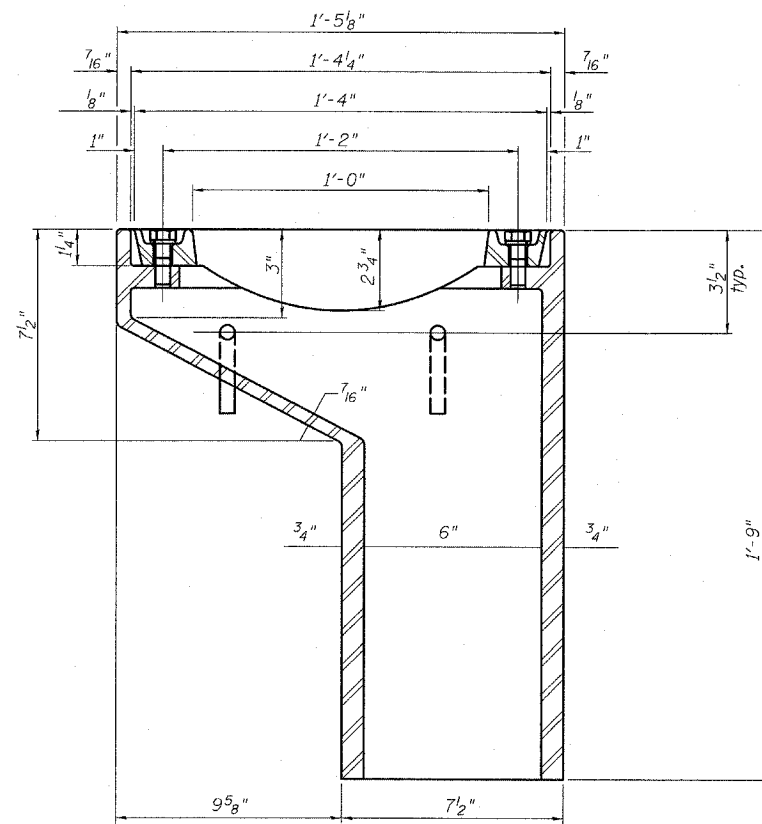
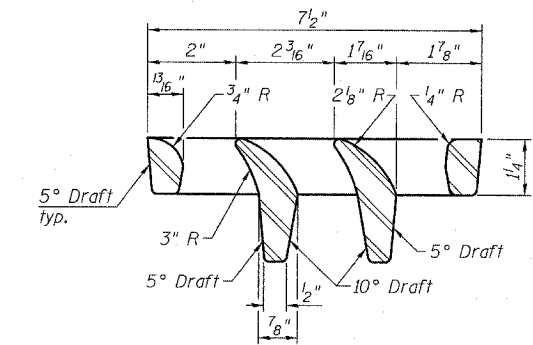
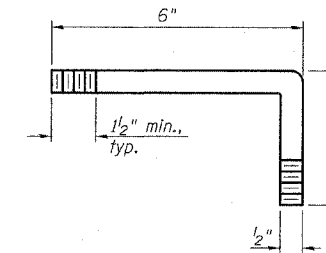
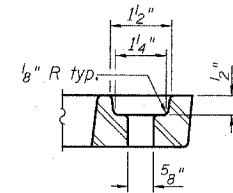
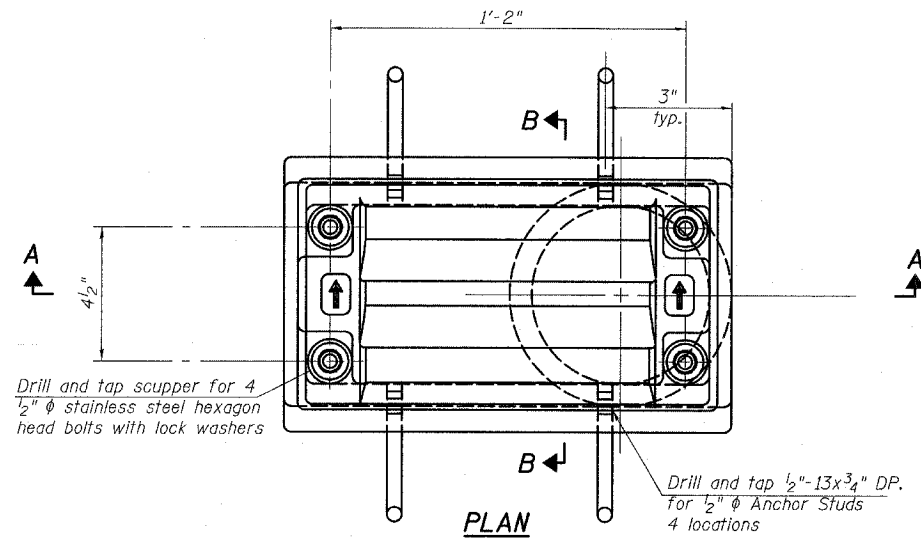
SUPERSTRUCTURE  
DETAILS V

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

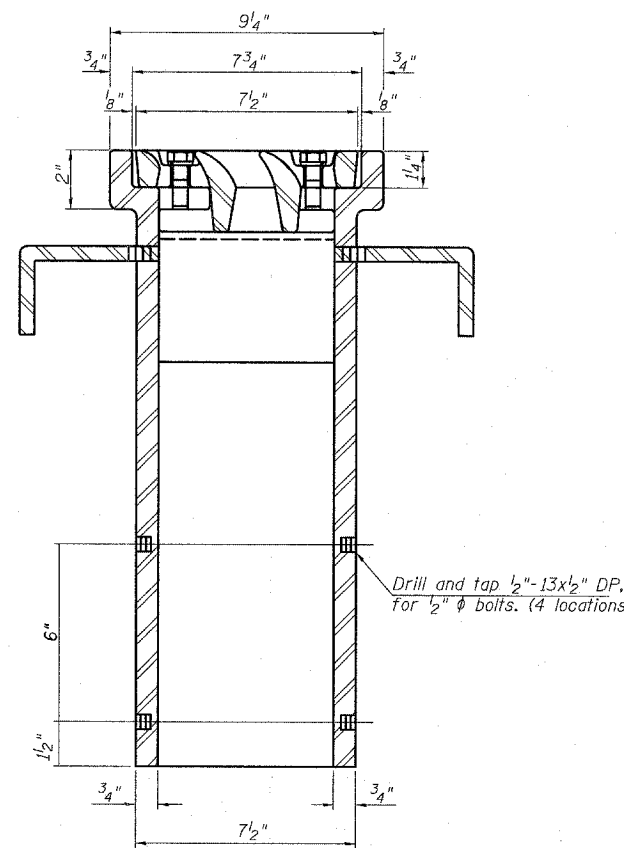
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	193
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		
			* 125X-HB-(1&2) R-1 CONTRACT # 60826	

SHEET NO. - S-24  
S-66 SHEETS



SECTION A-A  
See Sheet S-20 of S-66 for scupper location relative to parapet.



SECTION B-B

Notes: All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.  
Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.  
The grate, frame and downspout shall be galvanized according to AASHTO M 111 and ASTM A 385. Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.  
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.  
Structural steel weldments of equal sections and of the same configuration may be substituted for cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.  
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.  
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Drainage Scupper, DS-11	Each	16

TYLIN INTERNATIONAL

DESIGNED	- CM
CHECKED	- AD
DRAWN	- CM
CHECKED	- AD

DRAINAGE SCUPPER, DS-11

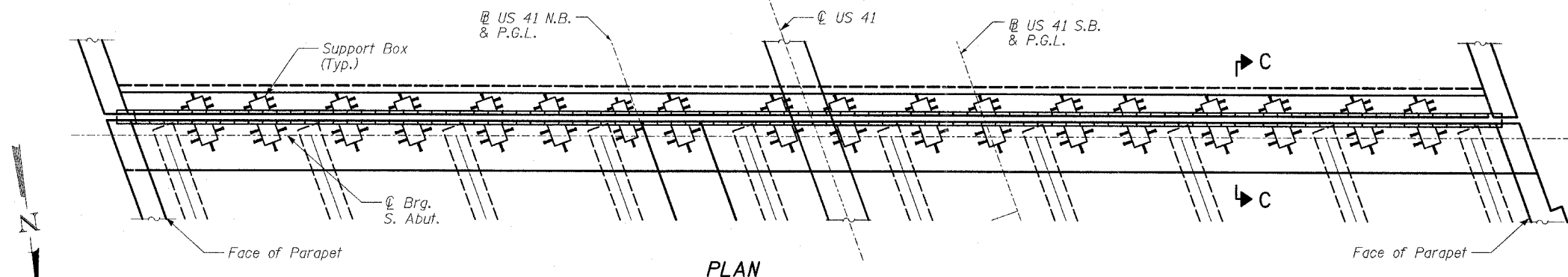
FAP 346 (U.S. ROUTE 41 - SKOKIE HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

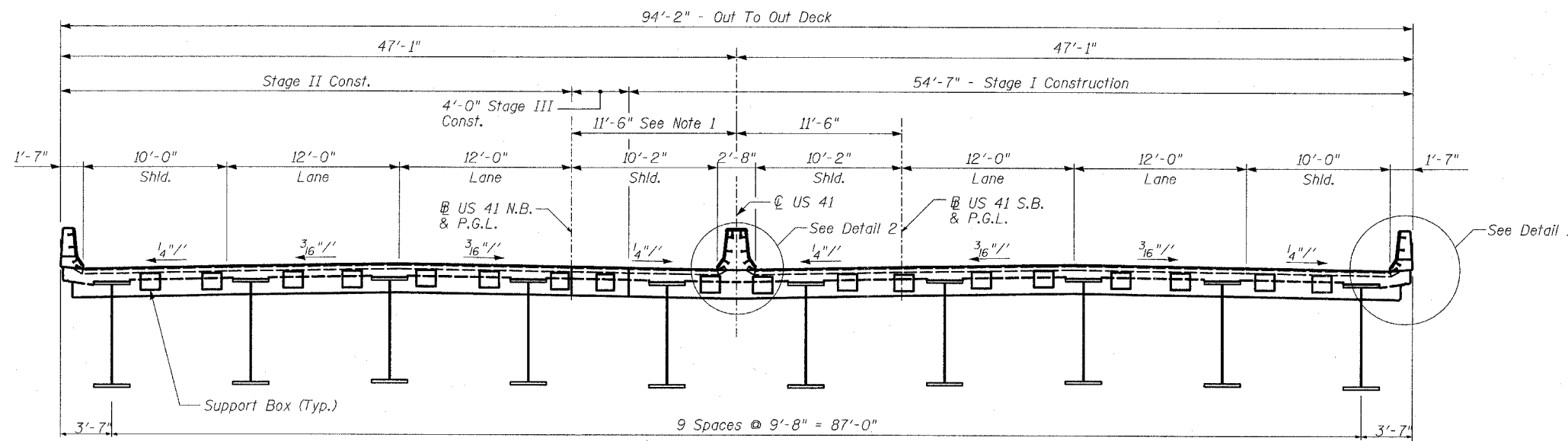
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	"OF" SHEETS	SHEET NO. - S-25
346	*	LAKE	469	194	S-86 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			
			• 125X-HB-(1&2) R-1 CONTRACT # 60826		

**GENERAL NOTES**

- The expansion joint device shall be a prefabricated modular assembly with multiple support bars and separator beams, providing a continuous seal across the deck.
- All splices of center beams and edge beams shall be full penetration welds. Upright splices may be partial penetration welds.
- Joint shall be fabricated and installed according to the manufacturer's recommendations and as shown in the Special Provisions for Modular Expansion Joint and as approved by the Engineer.
- Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the concrete blockout is cast at an ambient temperature other than 50° F.
- Joint shall be fabricated to conform to the roadway profile and cross slope.
- The cost of furnishing all material and installing the sliding plate assemblies at the parapets and median barrier shall be included with Modular Expansion Joints. The sliding plate assembly shall be galvanized.
- Countersunk bolts and concrete inserts shall be Hot-Dipped Galvanized according to AASHTO M232.
- Barrier plates to be AASHTO M270, Grade 36 and to be Hot-Dipped Galvanized according to AASHTO M111 after fabrication.
- 3/4" x 6" studs shall be according to Article 1006.32 of the Standard Specifications.
- All anchor studs shall be included with Modular Expansion Joint (unless noted otherwise).
- Modular expansion joint shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

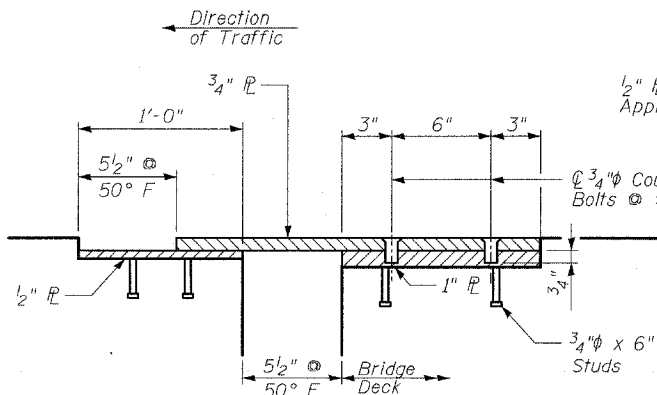


**PLAN**



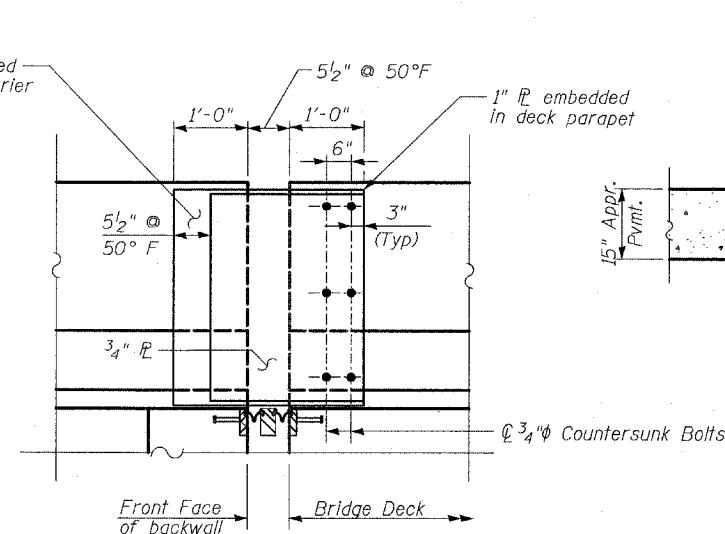
**CROSS SECTION**

Note 1:  
From Sta. 536+83.97 to end of deck,  
Varies 11'-6" to 11'-6 1/2"



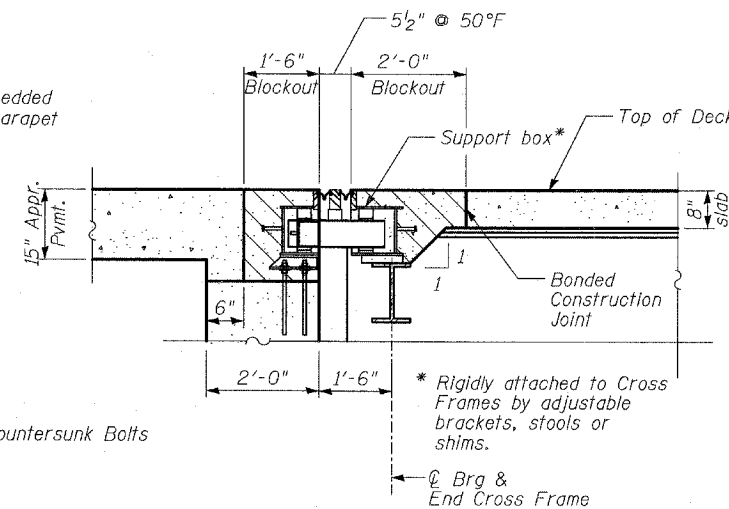
**SECTION A-A**

Note:  
Detail applicable to each  
face of median barrier.



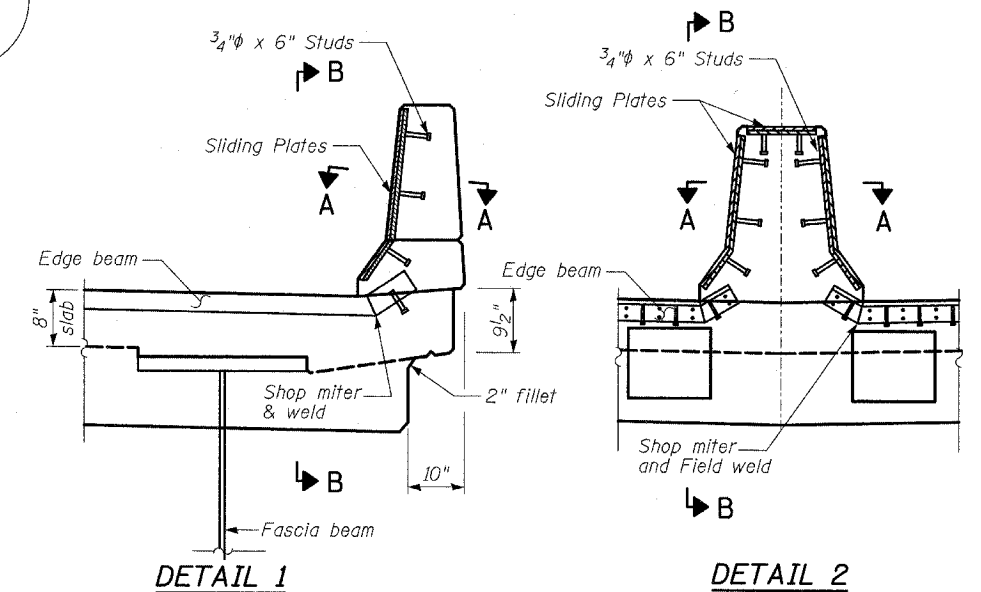
**VIEW B-B**

Note:  
Parapet shown.  
Studs not shown for clarity.  
Median Barrier Detail similar.



**SECTION C-C**

Note:  
Reinforcement not shown for clarity.  
All dimensions at Rt. L's.



**DETAIL 1**

**DETAIL 2**

Note:  
Install upturns at median in  
Construction Stage III.

**TYLIN INTERNATIONAL**

DESIGNED	- SP
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Erecting Modular Expansion Joint 6"	Foot	99

**NORTH ABUTMENT MODULAR EXPANSION JOINT DETAILS**

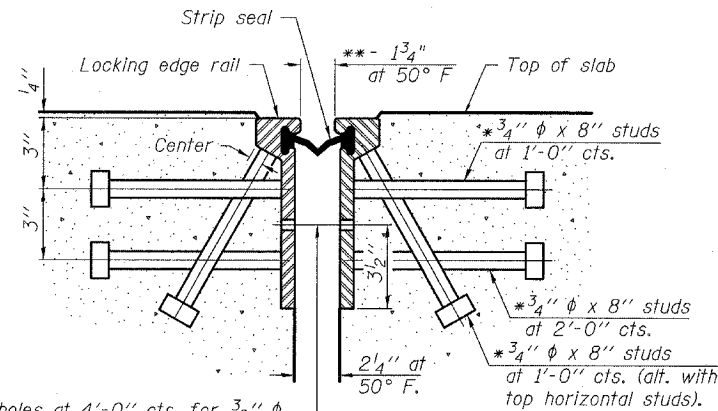
FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-26
346	*	LAKE	469	195	S-66-SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-			
* 125X-HB-(1&2) R-1			CONTRACT # 60826		

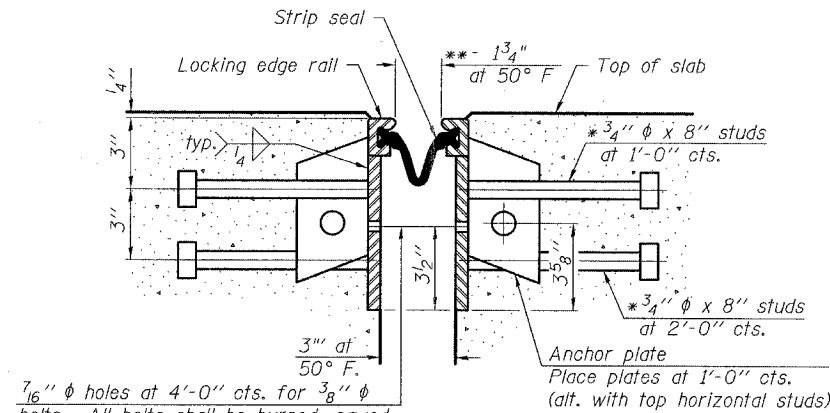
\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

\*\* When joint is fixed, dimension is set at 1/2".



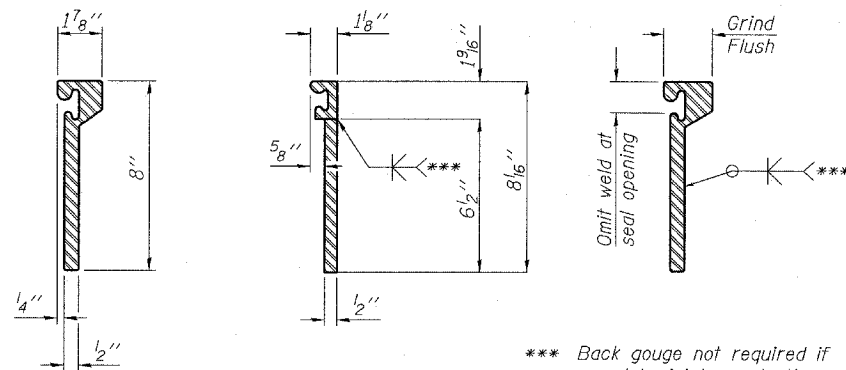
7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU  
ROLLED RAIL JOINT



7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU  
WELDED RAIL JOINT



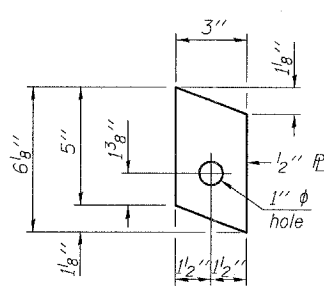
\*\*\* Back gouge not required if complete joint penetration is verified by mock-up.

ROLLED  
(EXTRUDED) RAIL WELDED RAIL

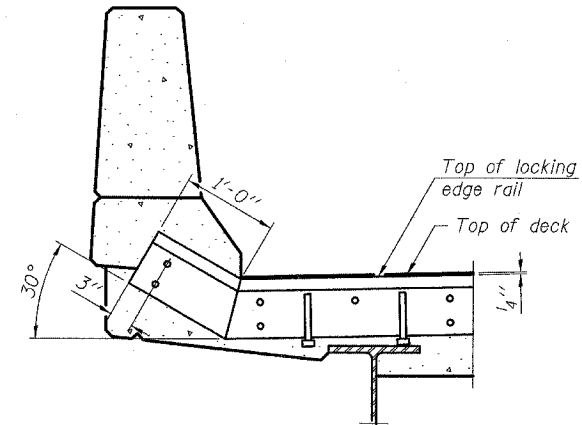
LOCKING EDGE  
RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

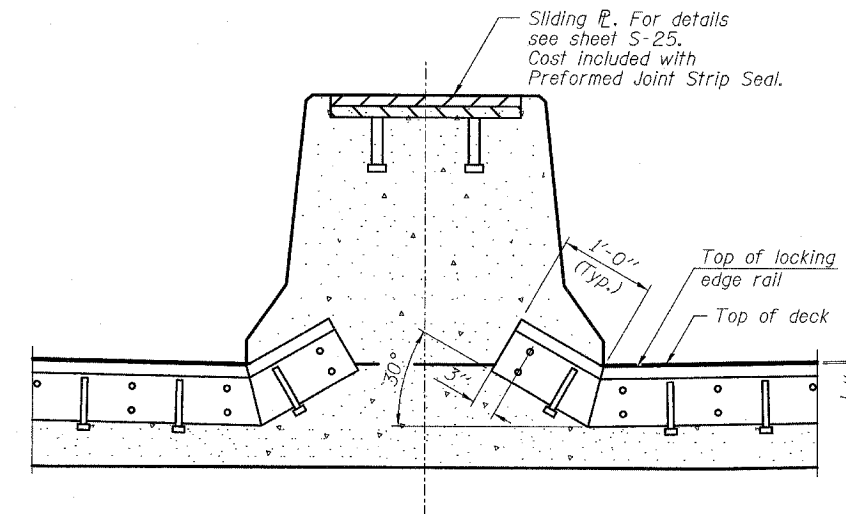
LOCKING EDGE RAILS



ANCHOR PLATE  
(for welded rail)



AT PARAPET



AT MEDIAN BARRIER

TYPICAL END TREATMENTS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	99

PREFORMED JOINT STRIP SEAL

FAP 346 (U.S. ROUTE 41 - SKOKIE HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

TYLIN INTERNATIONAL

DESIGNED	- SP
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

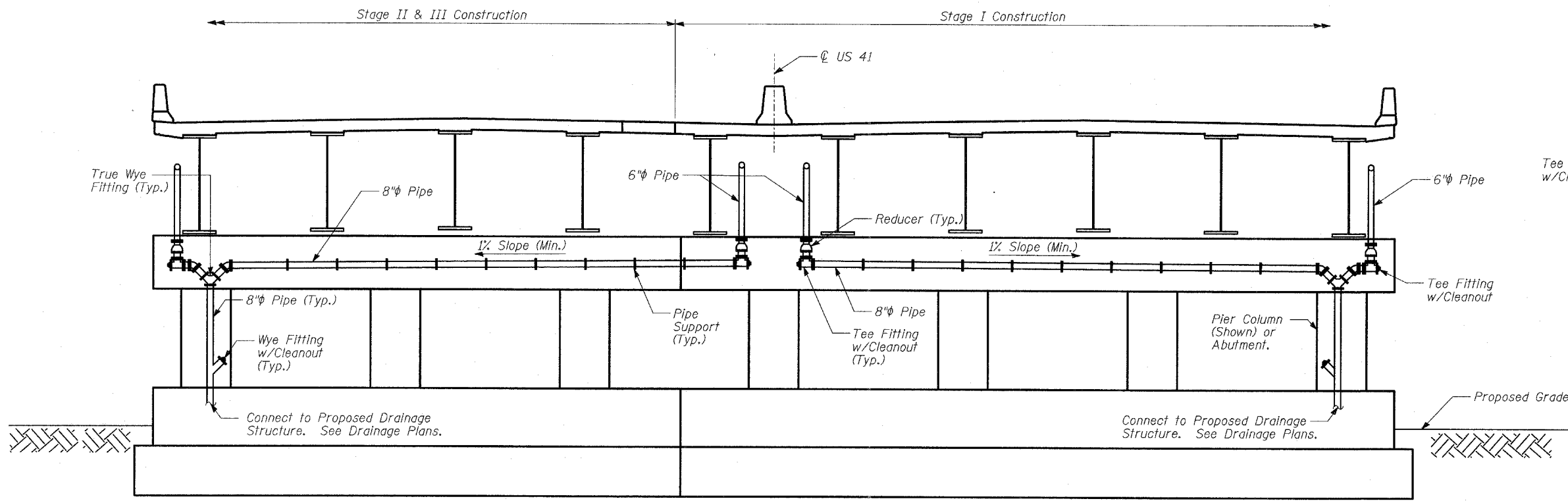
EJ-SSJ

11-1-06



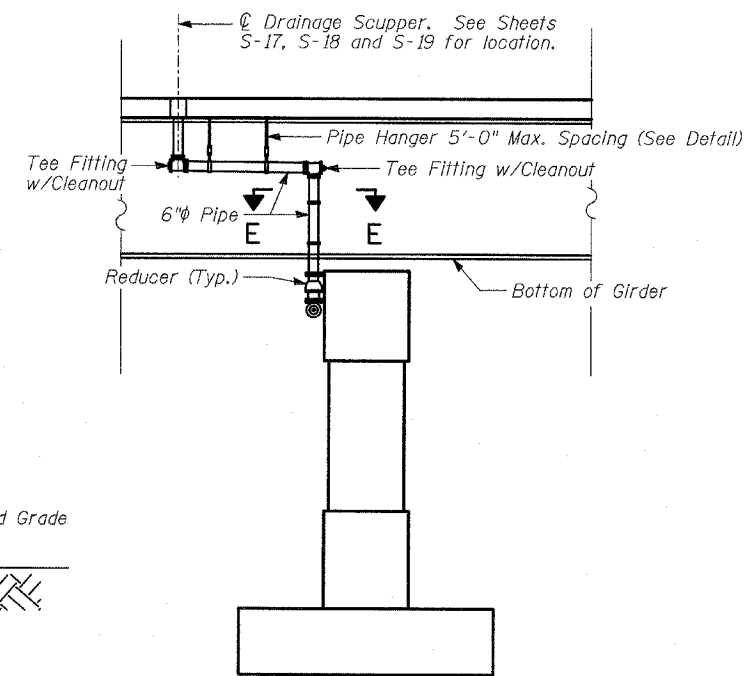
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-27
346	*	LAKE	469	196	S-66 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-			
			CONTRACT # 60826		



**ELEVATION**  
(Looking South)

(Pier 2 Shown, North Abutment Sym.)  
(Pier 1 and South Abutment Opp. Hand)



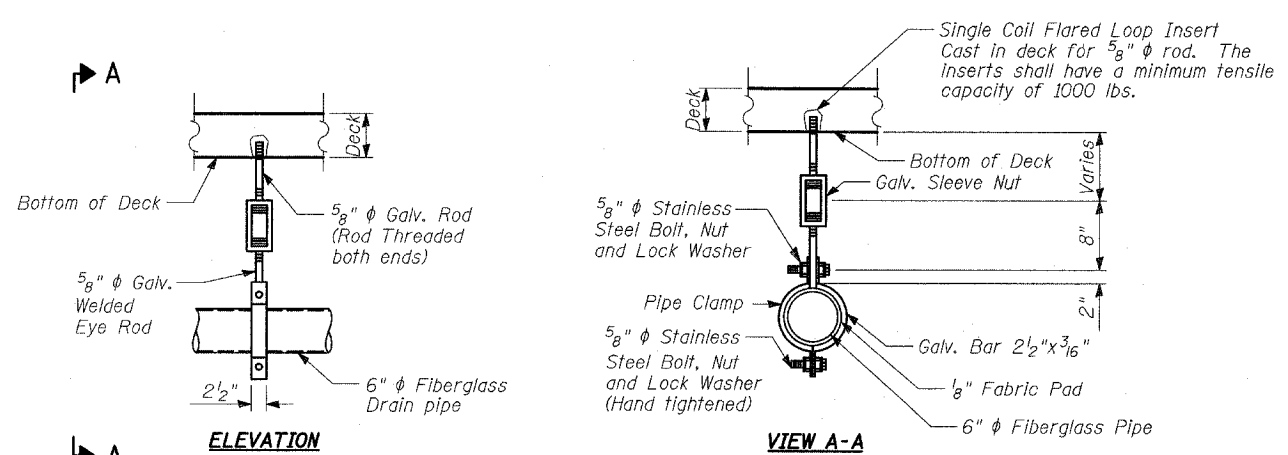
**LONGITUDINAL SECTION**  
(Pier Shown, Abutment Sym.)

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Drainage System	L.S.	1

**NOTES:**

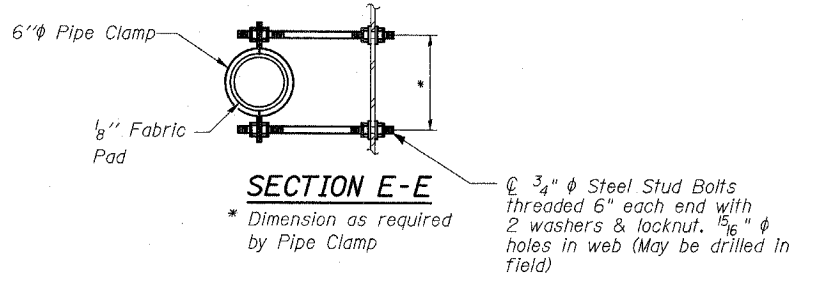
- Pipe bracket shall be provided on all horizontal pipes at each tee, elbow or change in direction and at intermediate points not more than 5'-0" O.C.
- There shall be a minimum of two brackets per column.
- At the following substructure units, the pipe fittings will need to accommodate the following total horizontal movement:  
N. Abut. - 2 1/4"  
Pier 2 - 3 1/2"  
S. Abut. - 5 7/8"



**ELEVATION**

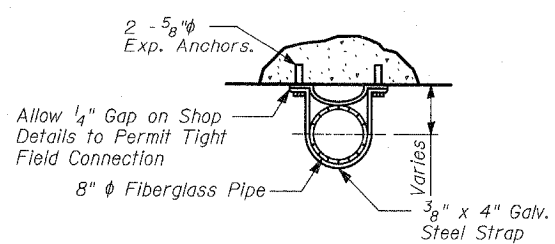
**VIEW A-A**

**PIPE HANGER DETAIL**



**SECTION E-E**

\* Dimension as required by Pipe Clamp



**PIPE BRACKET DETAIL**

(To Concrete)

**DRAINAGE SYSTEM DETAILS**

FAP 346 (U.S. ROUTE 41 - SKOKIE HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

**TYLIN INTERNATIONAL**

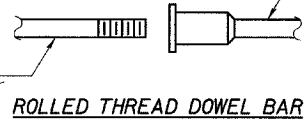
DESIGNED	- SP
CHECKED	- AD
DRAWN	- DE
CHECKED	- AD

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	197
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		
* 125X-HB-(1&2) R-1			CONTRACT # 60826	

SHEET NO. - S-28  
S-66 - SHEETS

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



ROLLED THREAD DOWEL BAR



\*\* ONE PIECE

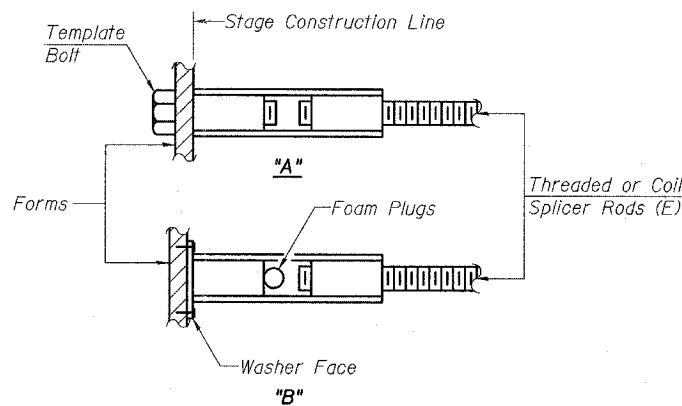
Wire Connector



WELDED SECTIONS

**BAR SPLICER ASSEMBLY ALTERNATIVES**

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



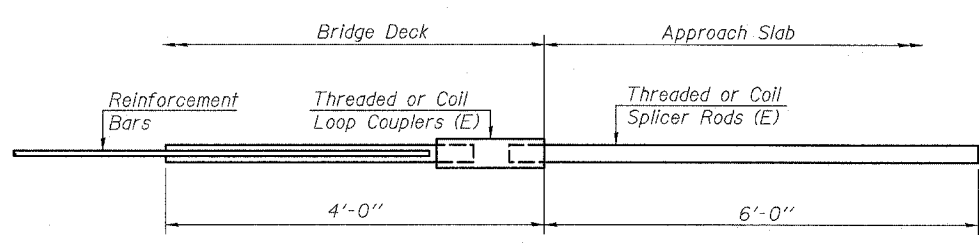
**INSTALLATION AND SETTING METHODS**

"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.

**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:

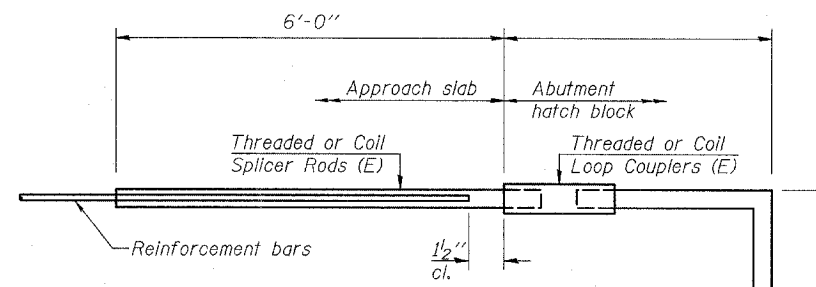
- ① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_s$
  - ② Minimum \*Pull-out Strength (Tension in kips) =  $0.66 \times f_y \times A_s$
- Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $A_s$  = Tensile stress area of lapped reinforcement bars.  
\* = 28 day concrete

BAR SPLICER ASSEMBLIES			
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	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



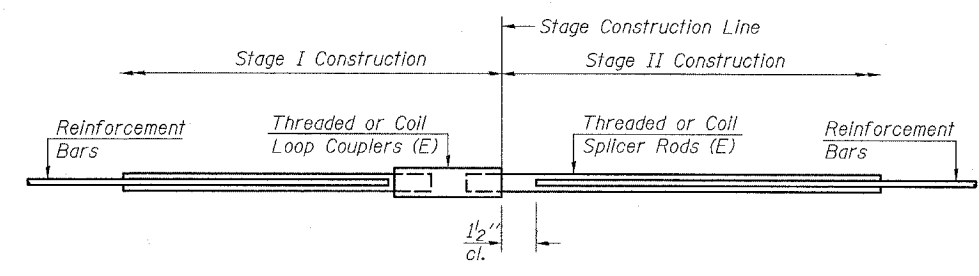
**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =



**FOR STUB ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 198



**STANDARD**

Bar Size	No. Assemblies Required	Location
#5	5690	Deck
#5	61	North Abutment
#6	4	North Abutment
#6	20	Pier 1
#9	38	Pier 1
#10	22	Pier 1
#6	20	Pier 2
#9	38	Pier 2
#10	22	Pier 2
#5	71	South Abutment
#6	4	South Abutment

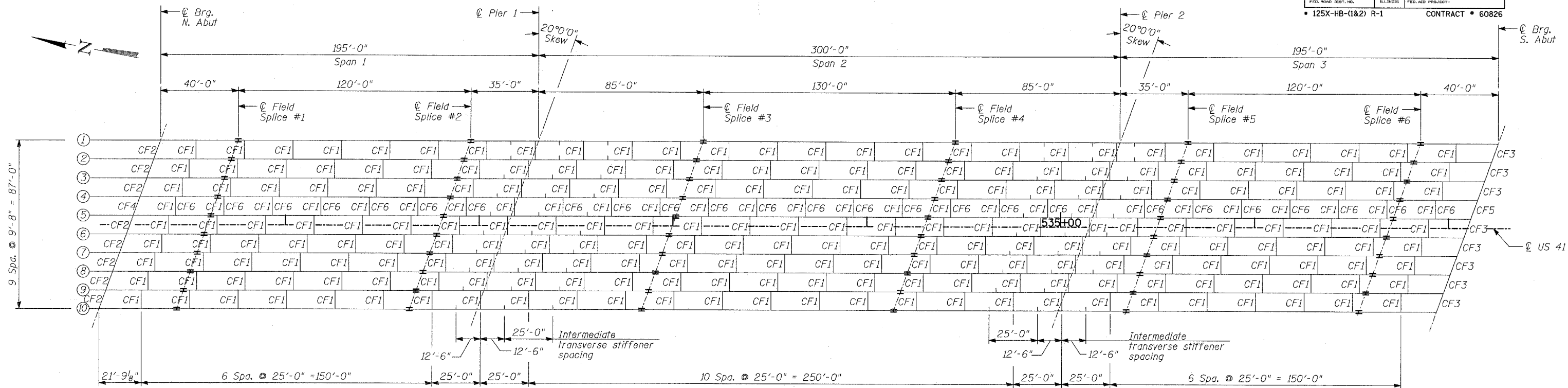
**BAR SPLICER ASSEMBLY DETAILS**

FAP 346 (U.S. ROUTE 41 - SKOKIE HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

**TYLIN INTERNATIONAL**  
DESIGNED - SP  
CHECKED - AD  
DRAWN - SP  
CHECKED - AD  
BSD-1 11-1-06

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-29 S-66 SHEETS
346		LAKE	469	198	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT # 60826		
			125X-HB-(1&2) R-1		



FRAMING PLAN

	0.4 Sp. 1 & 0.6 Sp. 3	Pier	0.5 Sp. 2
$I_s$ (in <sup>4</sup> )	127,652	382,990	203,212
$I_c$ (n) (in <sup>4</sup> )	264,482	---	407,843
$I_c$ (3n) (in <sup>4</sup> )	192,285	---	293,119
$S_s$ (in <sup>3</sup> )	2,965	7,979	5,555
$S_c$ (n) (in <sup>3</sup> )	3,962	---	6,936
$S_c$ (3n) (in <sup>3</sup> )	3,544	---	6,324
$\phi$ (k/ft.)	1.43	2.47	1.57
$M\phi$ (k)	2,185	15,606	6,421
$s\phi$ (k/ft.)	0.65	---	0.65
$M_s\phi$ (k)	1,202	---	2,892
$M\phi$ (k)	2,813	4,572	4,606
$M$ (Imp) (k)	440	613	542
$\phi_s [M\phi + M(\text{Imp})]$ (k)	5,422	8,642	8,580
$M_a$ (k)	11,452	31,522	23,261
$M_u$ (k)	17,609	---	24,653
$f_s\phi$ non-comp (k.s.i.)	8.84	23.47	13.87
$f_s\phi$ (comp) (k.s.i.)	4.08	---	5.49
$f_s\phi_s (\phi + \text{Imp})$ (k.s.i.)	16.39	13.00	14.84
$f_s$ (Overload) (k.s.i.)	29.31	36.47	34.2
$f_s$ (Total) (k.s.i.)	---	47.41	---
VR (k)	87.5	---	101.0

	Abut.	Pier
$R\phi$ (k)	124.9	631.6
$R\phi$ (k)	72.8	178.9
Imp. (k)	11.4	24.0
$R$ (Total) (k)	209.1	834.5

- $I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total and Overload) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).
- $I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total and Overload) due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).
- $I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total and Overload) due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).
- $\phi$ : Un-factored non-composite dead load (kips/ft.).
- $M\phi$ : Un-factored moment due to non-composite dead load (kip-ft.).
- $s\phi$ : Un-factored long-term composite (superimposed) dead load (kips/ft.).
- $M_s\phi$ : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
- $M\phi$ : Un-factored live load moment (kip-ft.).
- $M_{\text{Imp}}$ : Un-factored moment due to impact (kip-ft.).
- $M_a$ : Factored design moment (kip-ft.).
- $M_u$ : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
- $f_s$  (Overload): Sum of stresses as computed from the moments below (ksi).
- $f_s$  (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
- VR: Maximum  $\phi$  + impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

NOTES:

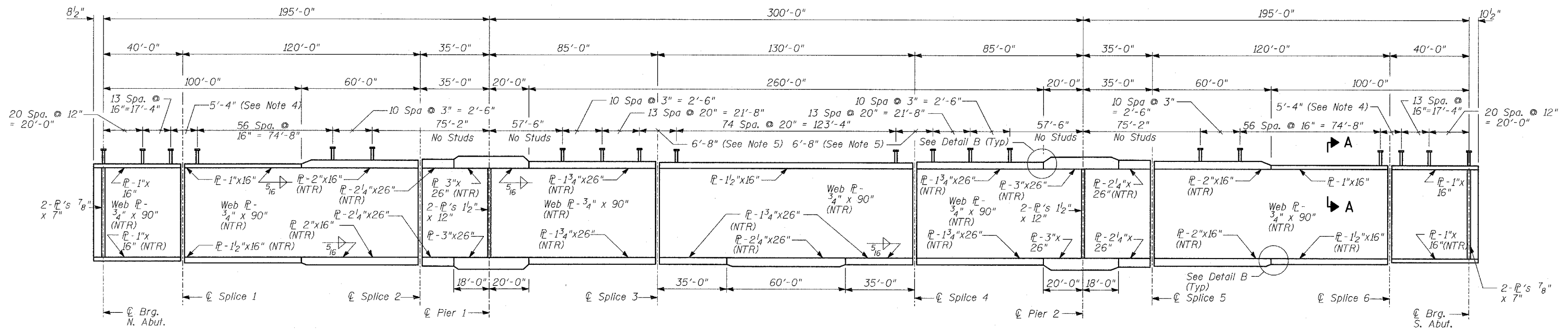
All structural steel for girders and splices shall conform to the requirements of AASHTO M270, Grade 50. All other structural steel shall conform to the requirements of AASHTO M270, Grade 36.

TYLIN INTERNATIONAL  
DESIGNED - SP  
CHECKED - AD  
DRAWN - MAF  
CHECKED - AD

FRAMING PLAN  
FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

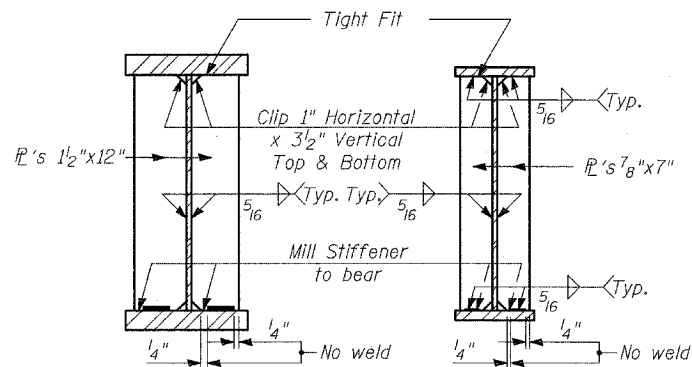
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-30 S-66 SHEETS
346	*	LAKE	469	199	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
			125X-HB-(1&2) R-1		CONTRACT # 60826



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

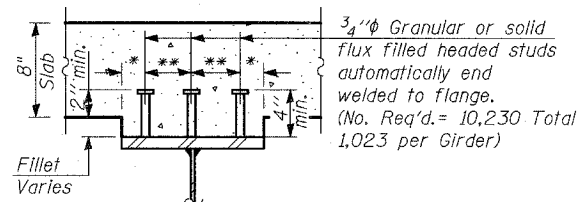
**GIRDER ELEVATION**



**SECTION AT PIER**

**SECTION AT ABUTMENT**

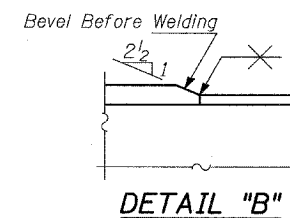
**BEARING STIFFENERS**



**SECTION A-A**

\* 2" for 16 in. flange  
4" for 26 in. flange

\*\* 6" for 16 in. flange  
9" for 26 in. flange

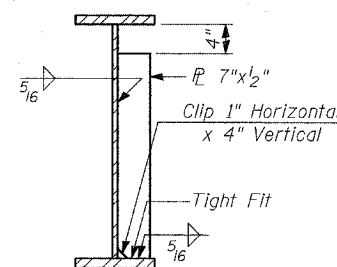


**DETAIL "B"**

Location	Girder	1	2	3	4	5	6	7	8	9	10
CL Brg. N. Abutment		700.53	700.66	700.74	700.54	700.29	700.22	700.34	700.40	700.18	699.92
CL Field Splice #1		701.50	701.63	701.71	701.51	701.26	701.19	701.31	701.37	701.15	700.89
CL Field Splice #2		703.00	703.15	703.26	703.08	702.85	702.81	702.95	703.03	702.83	702.59
CL Pier 1		703.42	703.58	703.69	703.53	703.30	703.26	703.41	703.50	703.31	703.07
CL Field Splice #3		704.73	704.90	705.04	704.89	704.68	704.66	704.83	704.93	704.76	704.54
CL Field Splice #4		704.86	705.06	705.22	705.10	704.92	704.93	705.12	705.26	705.11	704.92
CL Pier 2		703.72	703.94	704.12	704.02	703.86	703.88	704.09	704.24	704.12	703.94
CL Field Splice #5		703.37	703.60	703.79	703.69	703.54	703.57	703.79	703.95	703.82	703.66
CL Field Splice #6		702.12	702.37	702.58	702.51	702.38	702.44	702.68	702.87	702.77	702.63
CL Brg. S. Abutment		701.21	701.48	701.69	701.63	701.51	701.58	701.83	702.02	701.93	701.80

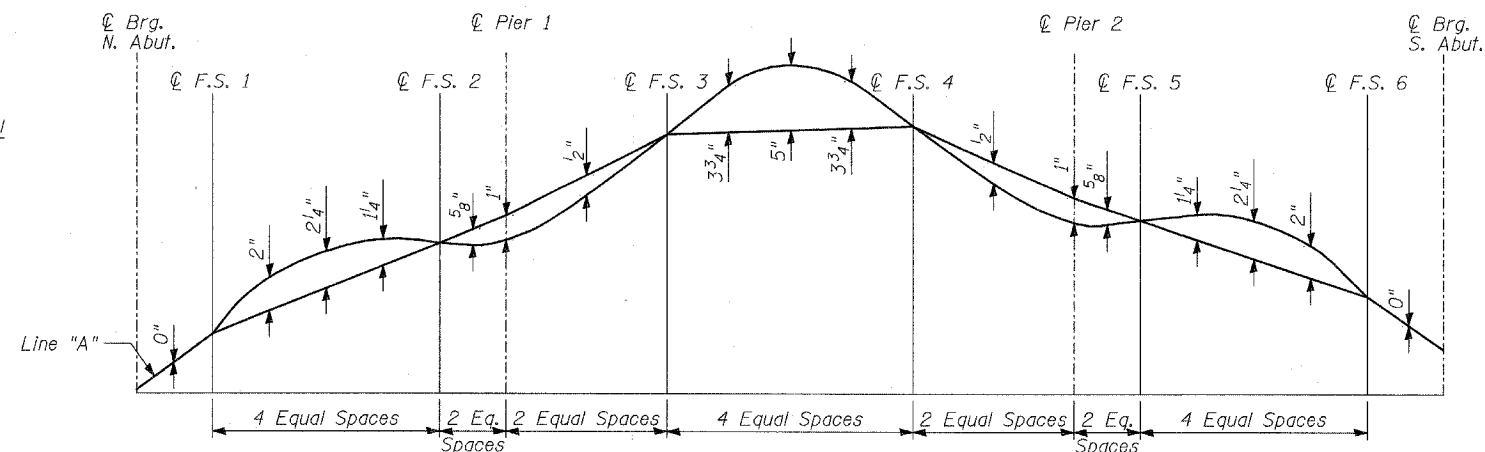
**NOTES:**

- Line "A" is a straight line between  $\text{CL Brg. N. Abut.}$  to  $\text{CL FS\#1}$ ;  $\text{CL FS\#1}$  to  $\text{CL FS\#2}$ ;  $\text{CL FS\#2}$  to  $\text{CL FS\#3}$ ;  $\text{CL FS\#3}$  to  $\text{CL FS\#4}$ ;  $\text{CL FS\#4}$  to  $\text{CL FS\#5}$ ;  $\text{CL FS\#5}$  to  $\text{CL FS\#6}$ ; and  $\text{CL FS\#6}$  to  $\text{CL Brg. S. Abut.}$
- Camber shown includes Dead Load Deflection due to deck concrete and steel weight only.
- Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
- See Sheet S-33 for stud layout at FS #1 and #6.
- See Sheet S-33 for stud layout at FS #3 and #4



**INTERMEDIATE STIFFENER DETAIL**

Note:  
See Framing Plan for stiffener placement.



**TYPICAL CAMBER DIAGRAM**

**TYLIN INTERNATIONAL**

DESIGNED	- SP
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

**GIRDER ELEVATION**

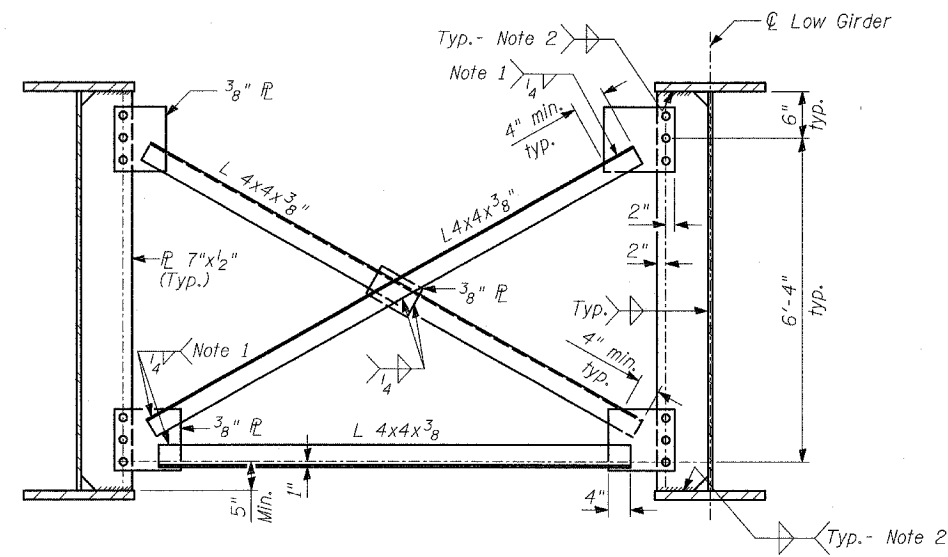
FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	*	LAKE	469	200
FED. AID DIST. NO.	ILLINOIS	FED. AID PROJECT		
* 125X-HB-(1&2) R-1			CONTRACT # 60826	

SHEET NO. - S-31

S-66 SHEETS

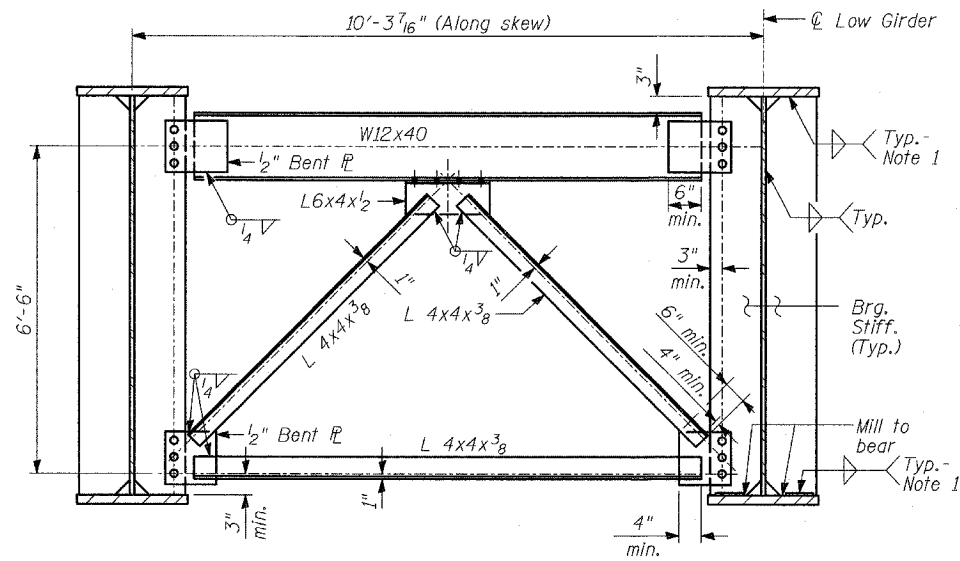


**INTERIOR CROSS FRAME CF1**

243 Required

**NOTES FOR CROSS FRAME CF1**

1. Fillet weld angle along 3 sides on one face of gusset plate.
2. Stop weld 1/4" from each end of plate.
3. Clip connection plates 1" horizontal and 4" vertical.

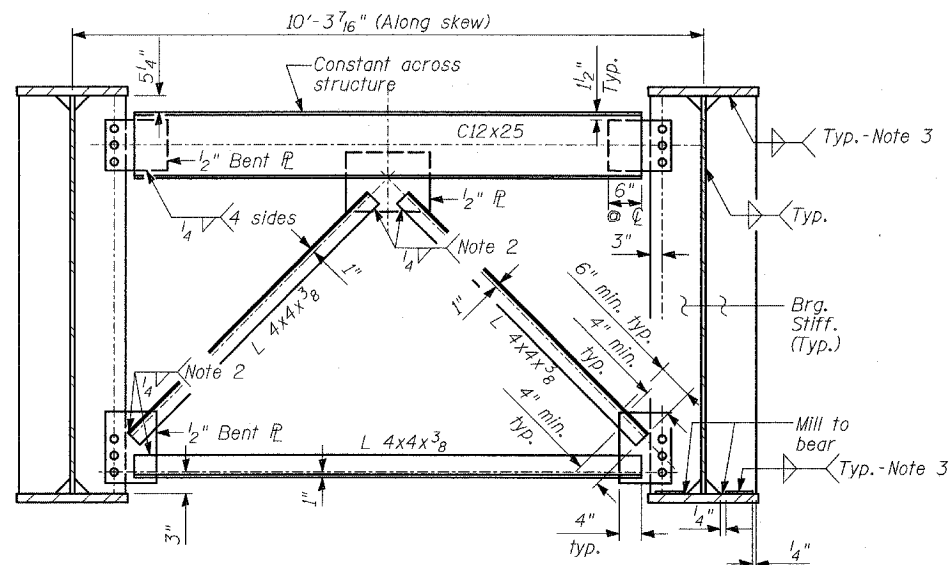


**END CROSS FRAME CF3**

8 Required for CF3

**NOTE FOR END CROSS FRAME CF3**

1. Stop weld 1/4" from each end of plate.

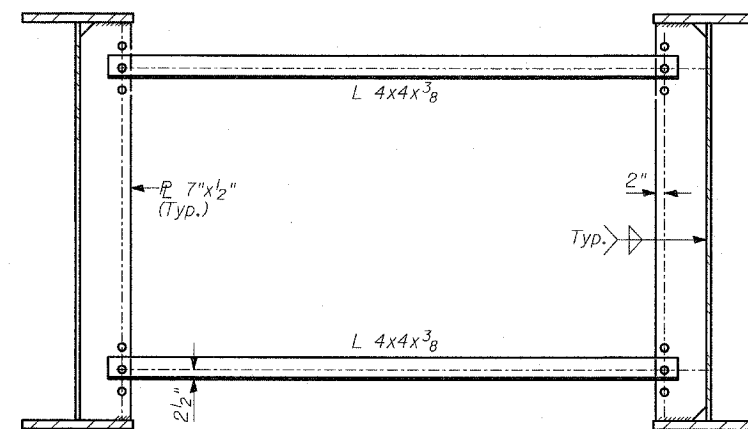


**END CROSS FRAME CF2**

8 Required

**NOTES FOR CROSS FRAME CF2**

1. Place Cross Frame with channel flanges and outstanding angle legs outward from abutment backwall.
2. Weld on near side for 1/2" plate.
3. Stop weld 1/4" from each end of plate.



**CROSS FRAME CF6 - TEMPORARY BRACING**

25 Required

**NOTES FOR CROSS FRAME CF6**

1. This detail shall be installed prior to stage II deck pour.
2. Once deck has cured, remove temporary bracing and install CF1 members.
3. Work this detail with Interior Cross Frame CF1.
4. Bolts shall be finger tight.

**GENERAL NOTES**

1. All bolts shall be 3/4" φ with 15/16" φ holes unless otherwise noted.
2. Two hardened washers required for each set of oversized holes.
3. All cross frames shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.

TYLIN INTERNATIONAL

DESIGNED	- MB
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD

**FRAMING DETAILS I**

FAP 346 (U.S. ROUTE 41 - SKOKIE  
HIGHWAY) OVER ILLINOIS ROUTE 132  
SECTION 125X-HB-(1&2)R-1  
LAKE COUNTY  
S.N. 049-0209