

PROP. CURVE DATA
 P.I. STA. 4+00.00
 $\Delta = 53^\circ 26' 25''$
 $D = 96^\circ 08' 24''$
 $R = 59.60'$
 $T = 30.00'$
 $L = 55.59'$
 $E = 7.12'$
 P.C. STA. 3+70.00
 P.T. STA. 4+25.59

ALLEY RELOCATION PLAN

NOTE: SEE PLAN AND PROFILE - BURTON DRIVE FOR MORE DETAILS

DESIGNED	
DRAWN	
REVISIONS	



USER NAME = Pop00275	DESIGNED -	REVISED -
PLOT SCALE = 10.0000" / 1"	DRAWN -	REVISED -
PLOT DATE = 4/10/2019	CHECKED -	REVISED -
	DATE - 03/15/2019	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 ALLEY RELOCATION PLAN - BURTON DRIVE**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	101
	09L0179B		CONTRACT NO. 93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



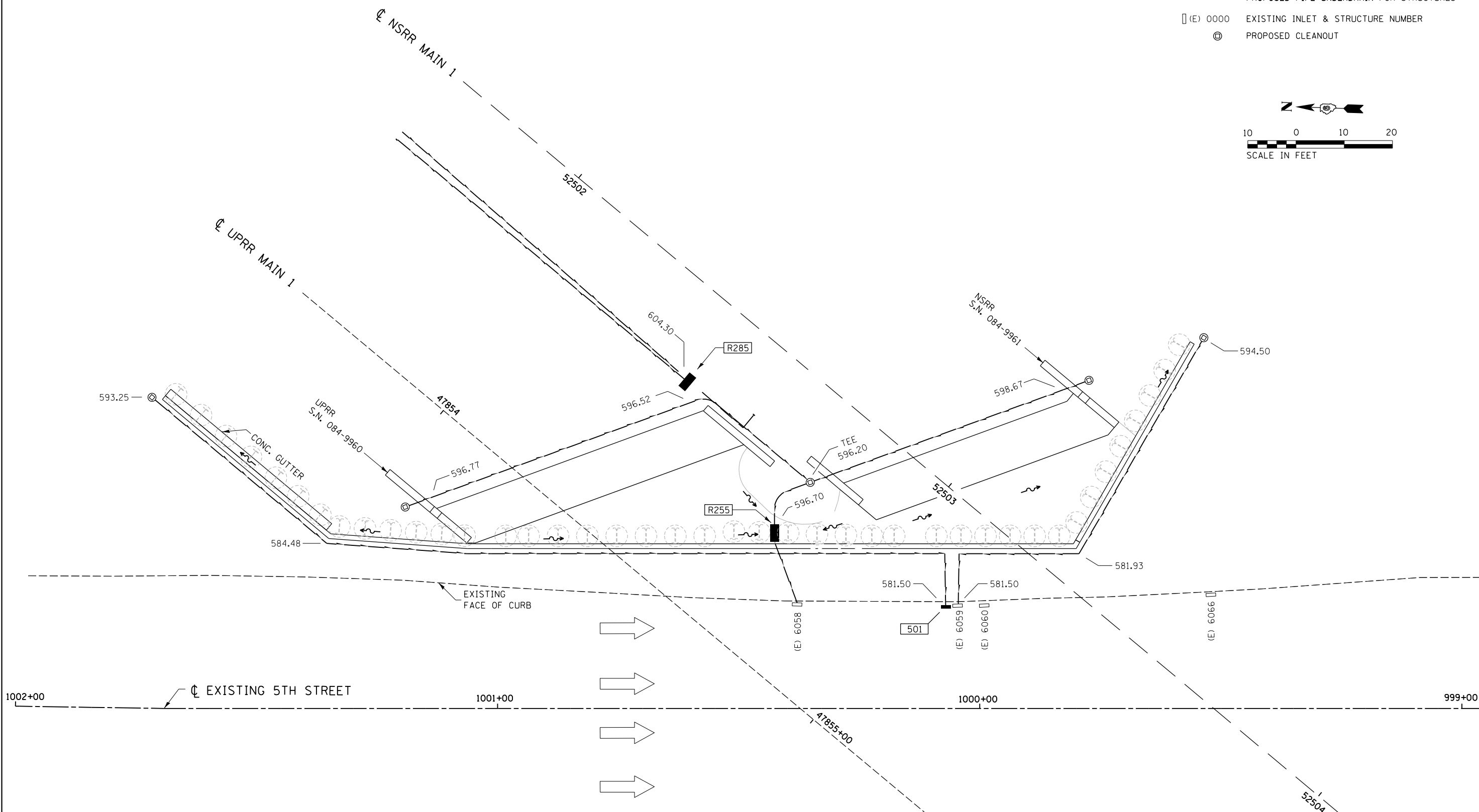
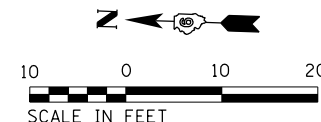
© Copyright Hanson Professional Services Inc. 2019

NOTES:

ALL FITTINGS, TEES, CONNECTIONS & CLEANOUTS INCLUDED IN THE CONTRACT UNIT PRICE FOR PIPE UNDERDRAIN.

LEGEND

- PROPOSED INLET
- RXXX PROPOSED STRUCTURE NUMBER
- ⊙ PROPOSED MANHOLE
- PROPOSED PIPE UNDERDRAIN FOR STRUCTURES
- (E) 0000 EXISTING INLET & STRUCTURE NUMBER
- ⊙ PROPOSED CLEANOUT



FINAL

FILE NAME = D609L0179B-UDrain_Abuts-5&6-01.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
	PLOT SCALE = 20.0000' / in.	CHECKED - JWM/GCN	REVISED -
ES5TH	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

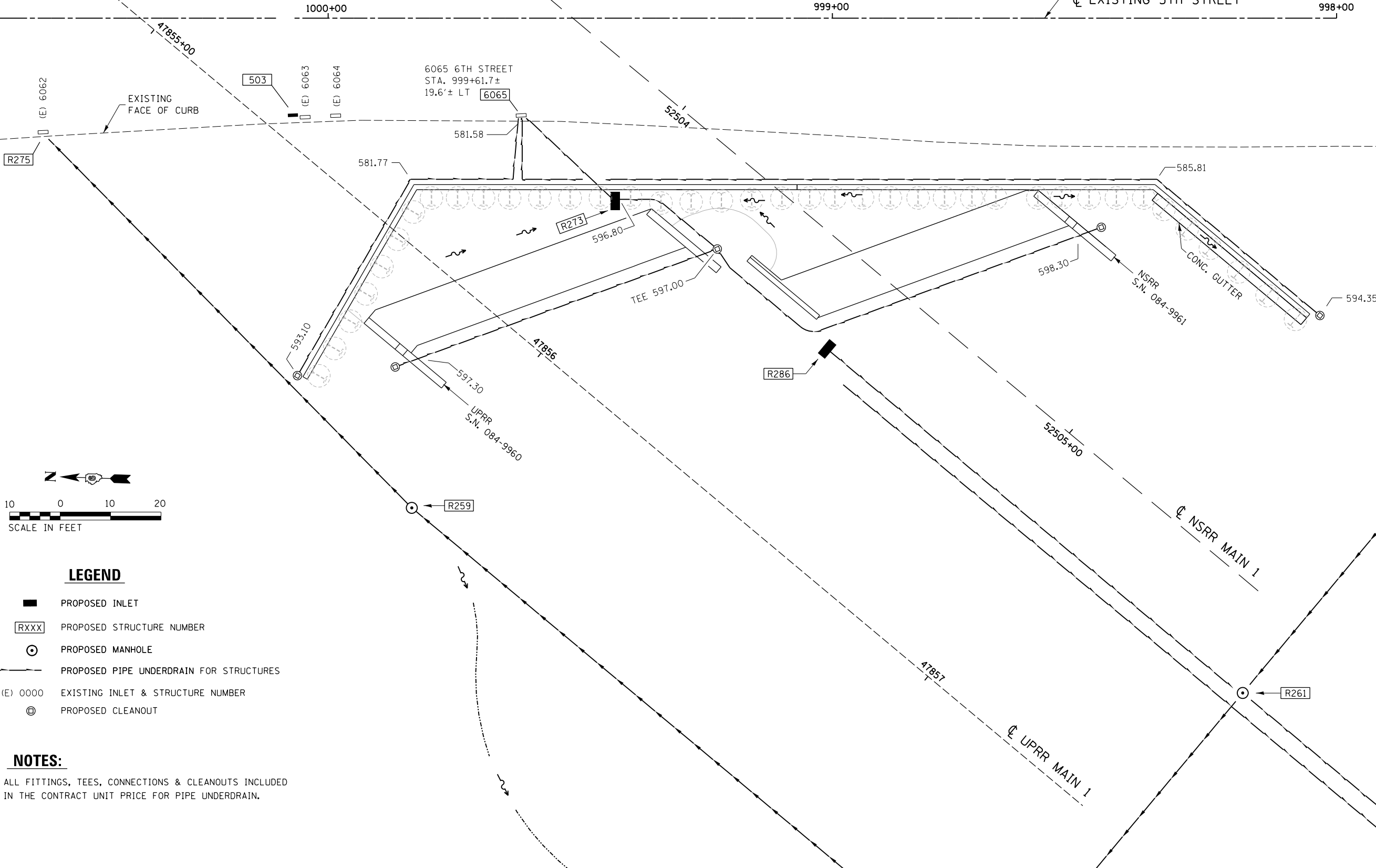
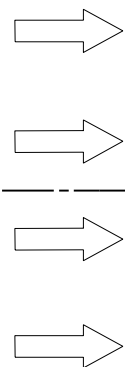
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PIPE UNDERDRAIN PLAN 5TH ST. EAST ABUTMENT - 1

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	102
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019



LEGEND

- PROPOSED INLET
- RXXX PROPOSED STRUCTURE NUMBER
- ⊙ PROPOSED MANHOLE
- PROPOSED PIPE UNDERDRAIN FOR STRUCTURES
- (E) 0000 EXISTING INLET & STRUCTURE NUMBER
- ⊙ PROPOSED CLEANOUT

NOTES:

ALL FITTINGS, TEES, CONNECTIONS & CLEANOUTS INCLUDED IN THE CONTRACT UNIT PRICE FOR PIPE UNDERDRAIN.

FINAL

FILE NAME = D609L0179B-UDrain_Abuts-5&6-01.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
		CHECKED - JWM/GCN	REVISED -
		DATE - 03/15/2019	REVISED -
WS5TH	PLOT SCALE = 20.0000' / in.		
	PLOT DATE = 4/10/2019		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PIPE UNDERDRAIN PLAN 5TH ST. WEST ABUTMENT - 2

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

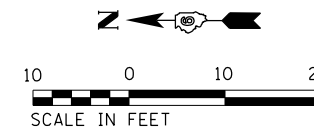
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	103
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

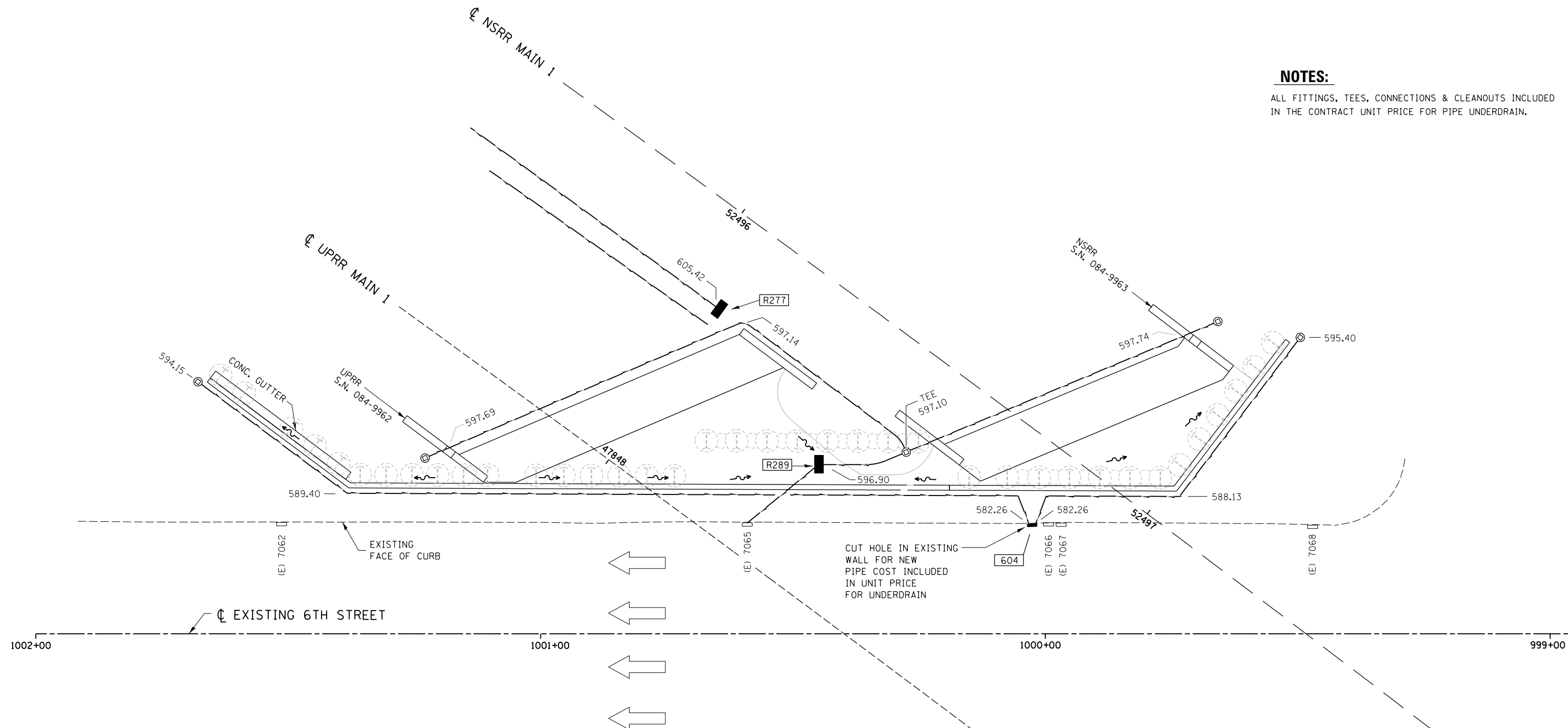
LEGEND

- PROPOSED INLET
- RXXX PROPOSED STRUCTURE NUMBER
- ⊙ PROPOSED MANHOLE
- PROPOSED PIPE UNDERDRAIN FOR STRUCTURES
- (E) 0000 EXISTING INLET & STRUCTURE NUMBER
- ⊙ PROPOSED CLEANOUT



NOTES:

ALL FITTINGS, TEES, CONNECTIONS & CLEANOUTS INCLUDED IN THE CONTRACT UNIT PRICE FOR PIPE UNDERDRAIN.



FINAL

FILE NAME = D609L0179B-UDrain_Abuts-5&6-01.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
	PLOT SCALE = 20.0000' / in.	CHECKED - JWM/GCN	REVISED -
	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

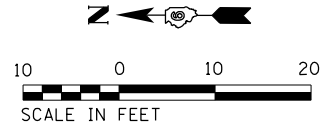
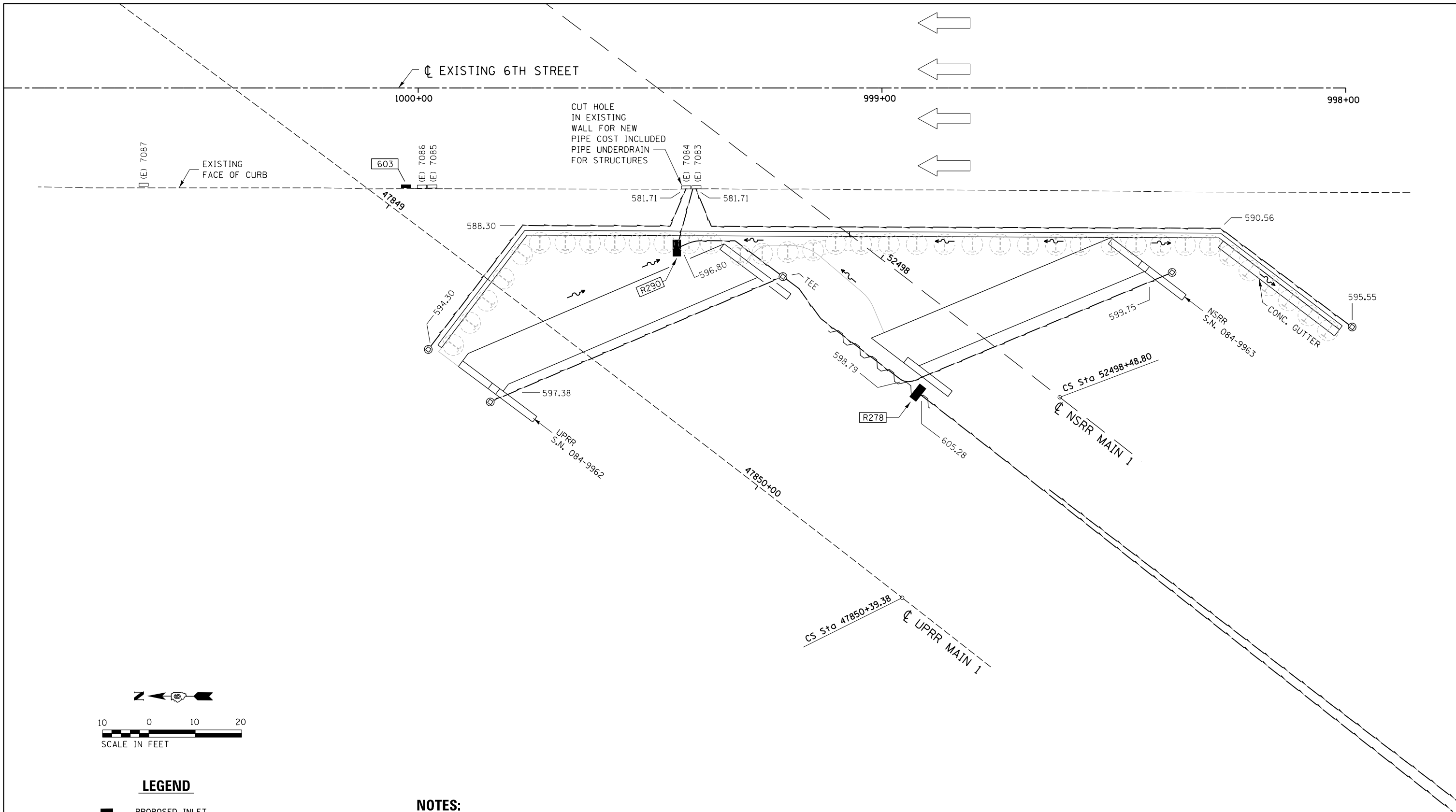
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PIPE UNDERDRAIN PLAN 6TH ST. EAST ABUTMENT - 1

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	104
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019



LEGEND

- PROPOSED INLET
- PROPOSED STRUCTURE NUMBER
- PROPOSED MANHOLE
- PROPOSED PIPE UNDERDRAIN FOR STRUCTURES
- EXISTING INLET & STRUCTURE NUMBER
- PROPOSED CLEANOUT

NOTES:

ALL FITTINGS, TEES, CONNECTIONS & CLEANOUTS INCLUDED IN THE CONTRACT UNIT PRICE FOR PIPE UNDERDRAIN.

FINAL	FILE NAME =	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
	D609L0179B-UDrain_Abuts-5&6-01.dgn		DRAWN - CLG	REVISED -
	WS6TH	PLOT SCALE = 20.0000' / in.	CHECKED - JWM/GCN	REVISED -
		PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

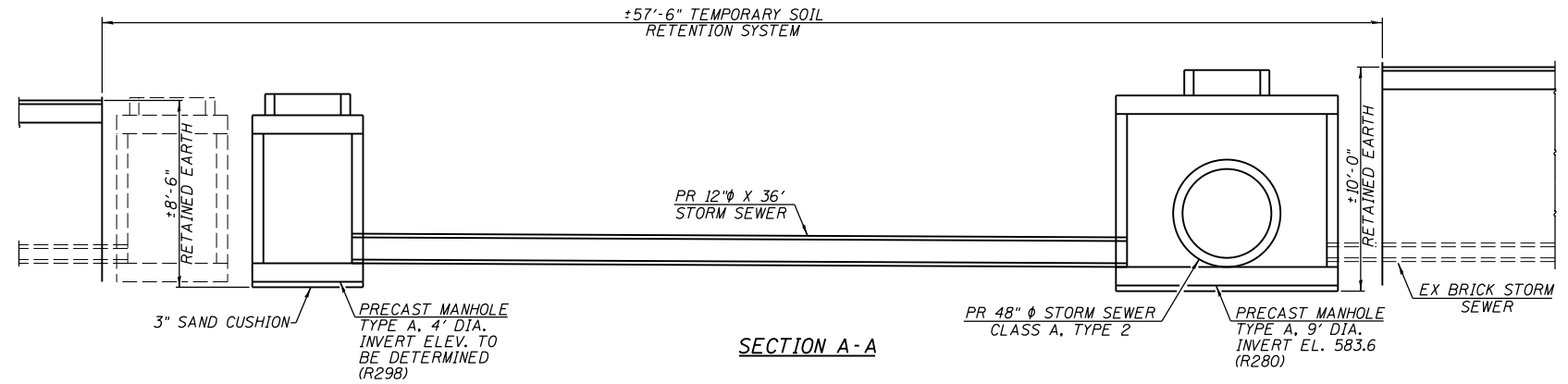
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 PIPE UNDERDRAIN PLAN 6TH ST. WEST ABUTMENT - 2

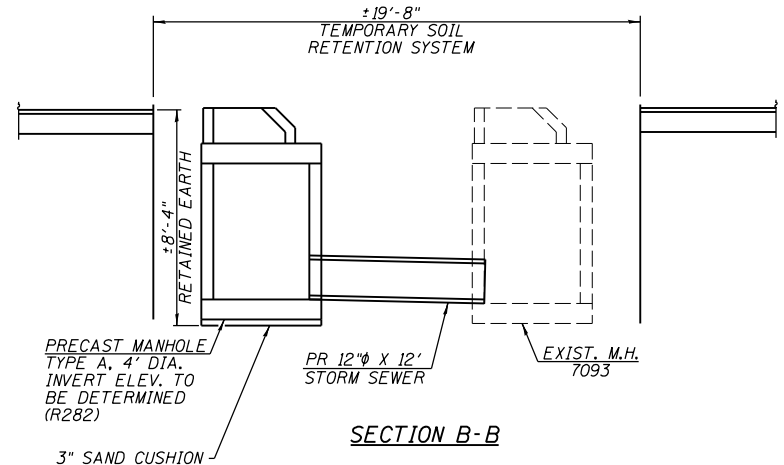
SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	105
	09L0179B	CONTRACT NO.	93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				

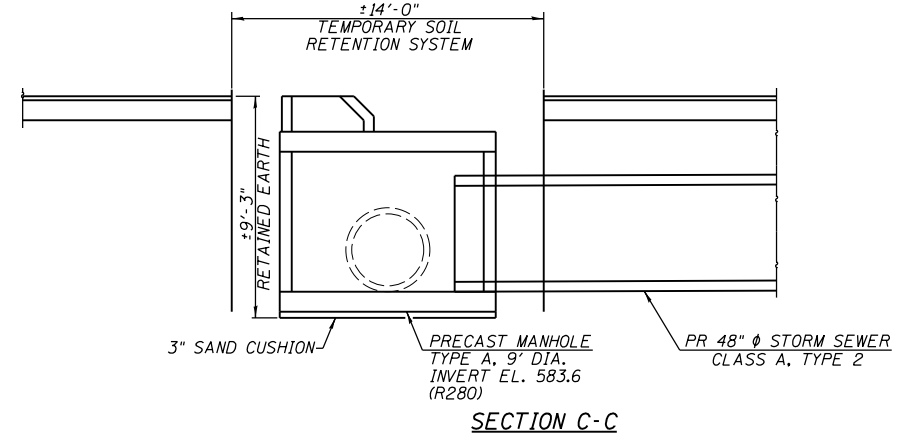
NOTE: THIS WORK TO BE COMPLETED DURING ONE OF THE ROAD CLOSURE WEEKENDS.
SEE PLAN AND PROFILE - RELOCATED 48" DIAMETER SANITARY SEWER FOR MORE DETAILS.



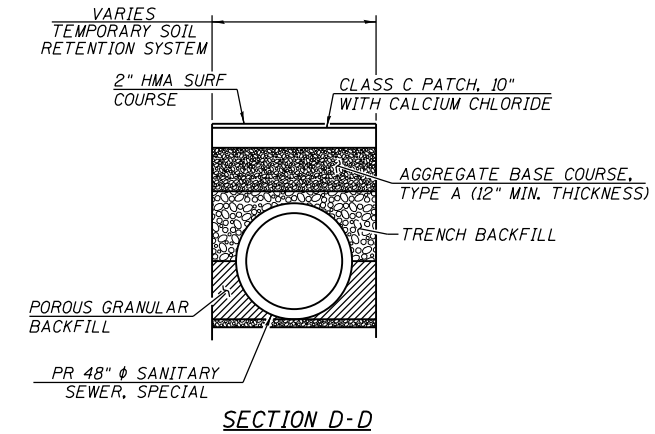
SECTION A-A



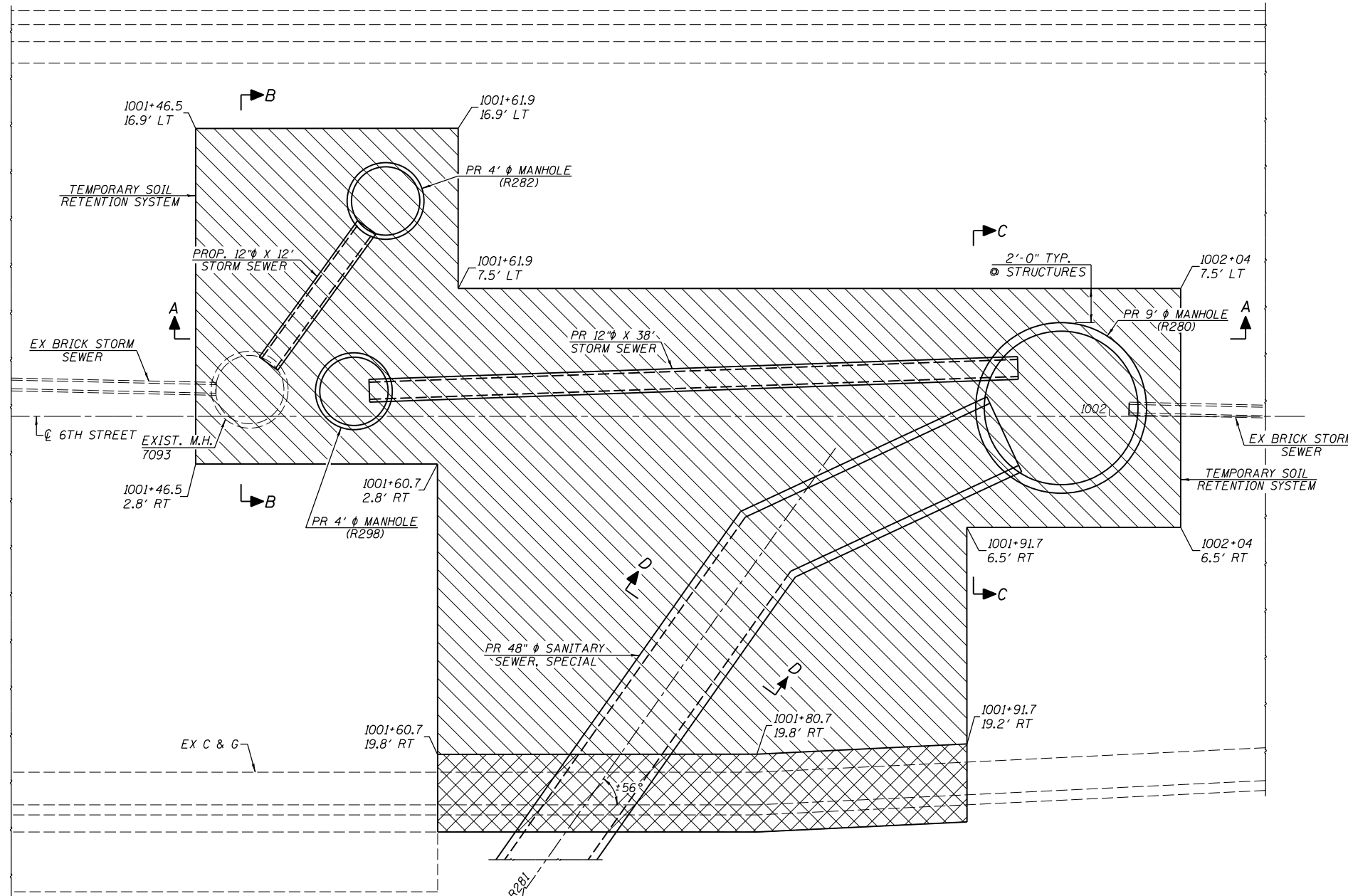
SECTION B-B



SECTION C-C



SECTION D-D



PAVEMENT REMOVAL - STAGE II
 - DENOTES CLASS C PATCH 10"
 - DENOTES CONCRETE REMOVAL

DESIGNED	
DRAWN	
REVIEWED	



USER NAME = Pop00275	DESIGNED -	REVISED -
PLOT SCALE = 8.0000' / in.	DRAWN - JRP	REVISED -
PLOT DATE = 4/10/2019	CHECKED -	REVISED -
	DATE - 03/15/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
6TH STREET DRAINAGE & STORM SEWER DETAILS**

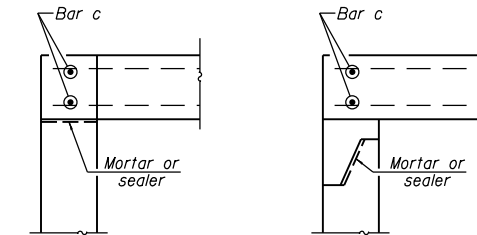
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	106
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

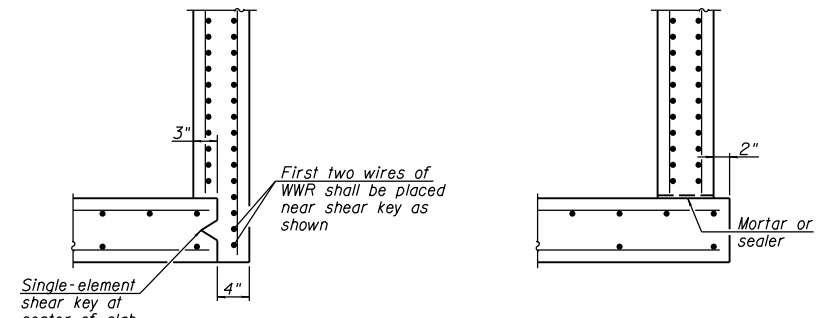
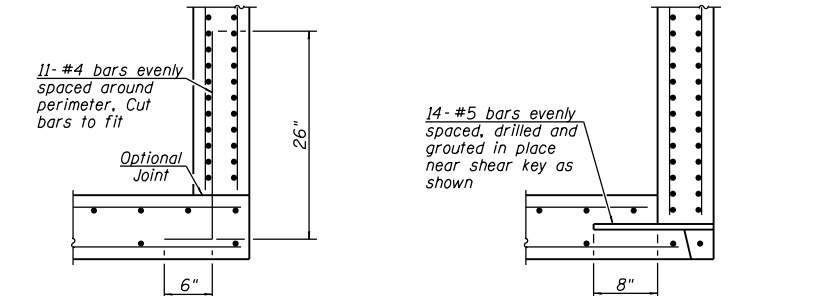
GEOMETRIC LIMITS

Oversize holes, as necessary for constructability, shall satisfy the following requirements:

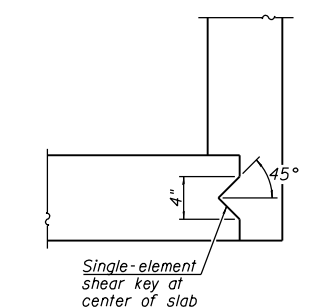
1. A minimum of 9" of monolithic reinforced concrete shall be maintained above the fabricated pipe hole.
2. A minimum 9" inside arc length of reinforced concrete, extending vertically from bottom slab to top slab, shall be maintained between the fabricated pipe holes.
3. A maximum of 60 percent of the inside perimeter of the reinforced concrete manhole walls may be removed.
4. Horizontal joints through pipe holes shall be spliced when the remaining column between holes, measured along inside arc length, is less than 24". See detail.
5. The recommended oversized hole is equal to the O.D. of the pipe plus 4".



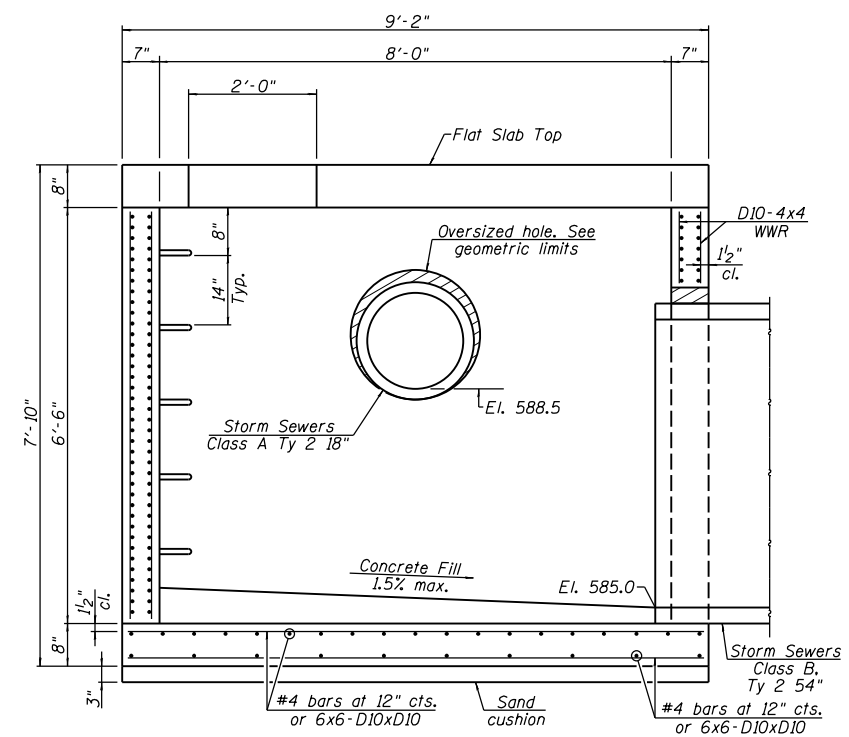
TOP SLAB JOINT CONFIGURATIONS
(Shown at access hole)



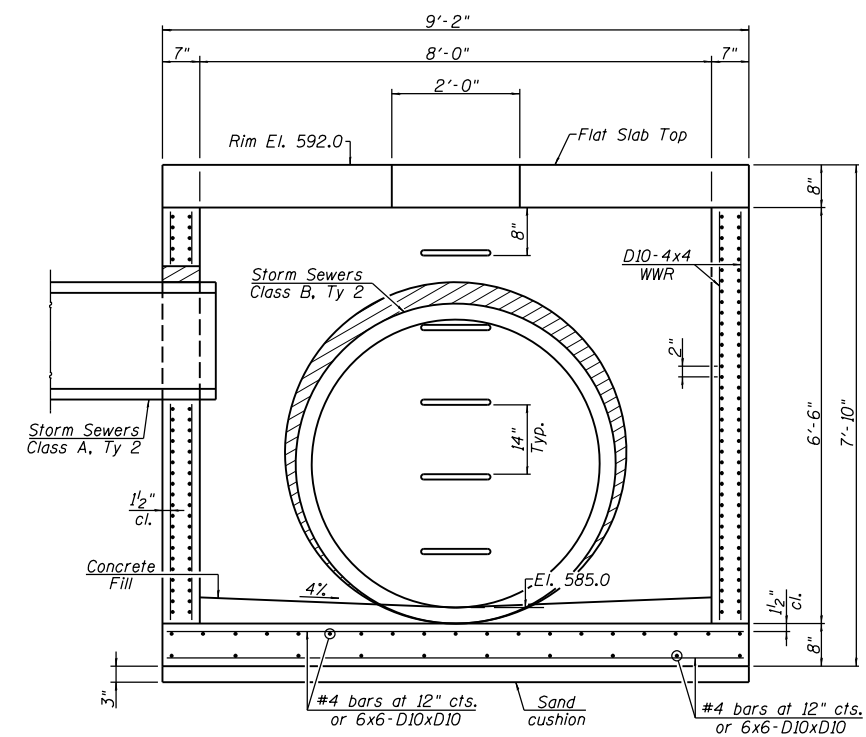
BOTTOM SLAB JOINT CONFIGURATIONS



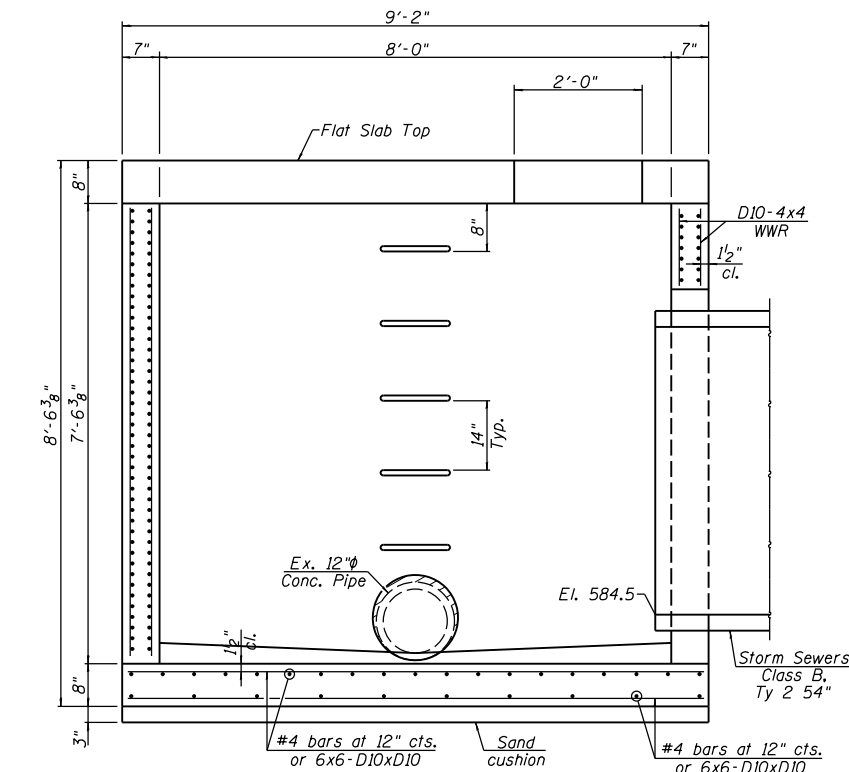
SHEAR KEY GEOMETRY
(Reinforcement not shown for clarity)



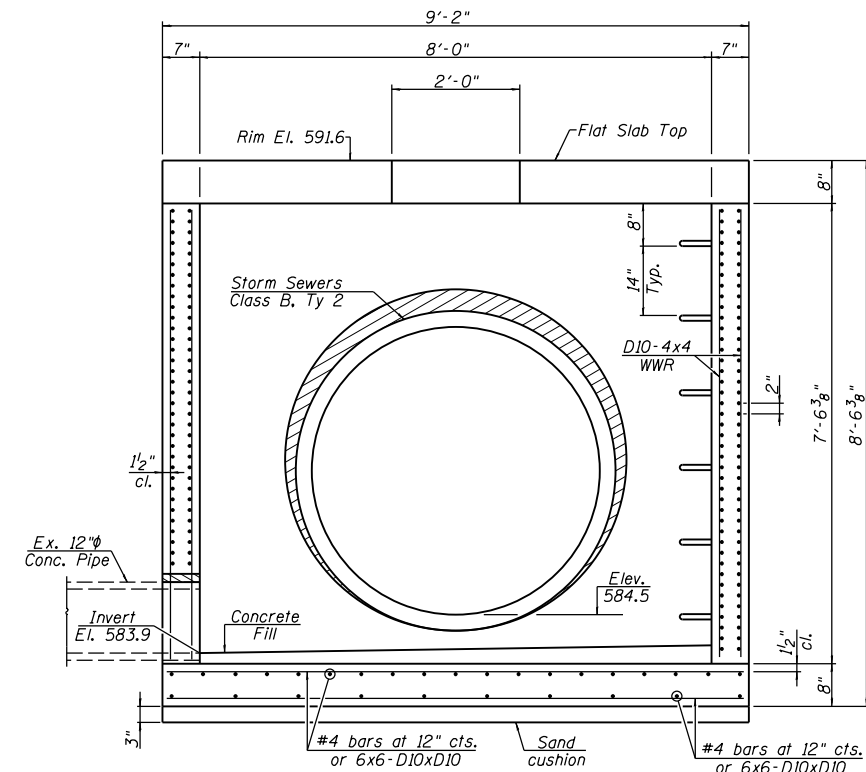
SECTION THRU MANHOLE P102
STA. 100+63, 11' LT.



SECTION THRU MANHOLE P102
STA. 100+63, 11' LT.



SECTION THRU MANHOLE P103
STA. 100+40, 11' RT.



SECTION THRU MANHOLE P103
STA. 100+40, 11' RT.

DESIGNED	
DRAWN	
CHECKED	
APPROVED	



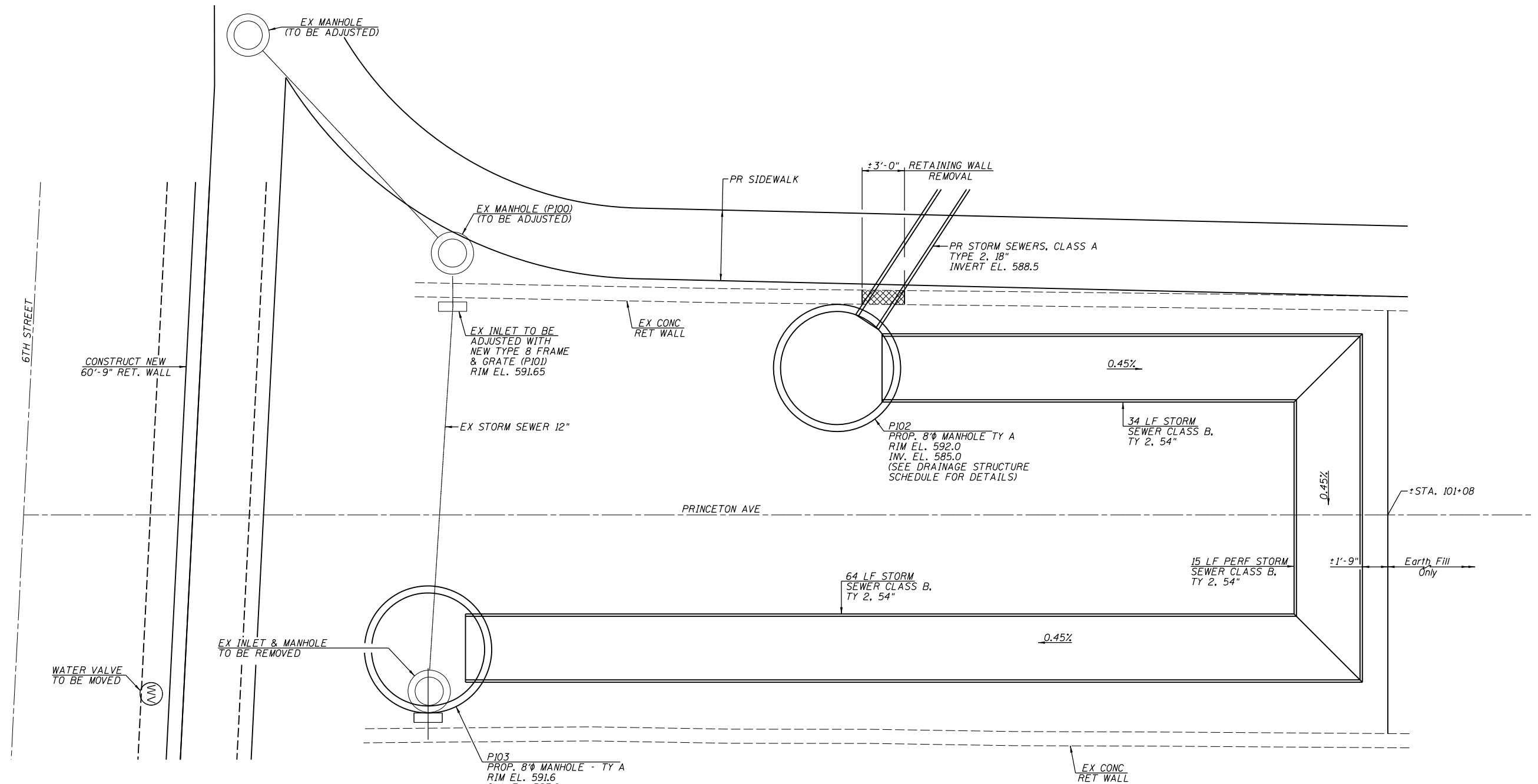
USER NAME = Pop00275	DESIGNED -	REVISED -
PLOT SCALE = 3.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 4/10/2019	CHECKED -	REVISED -
	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

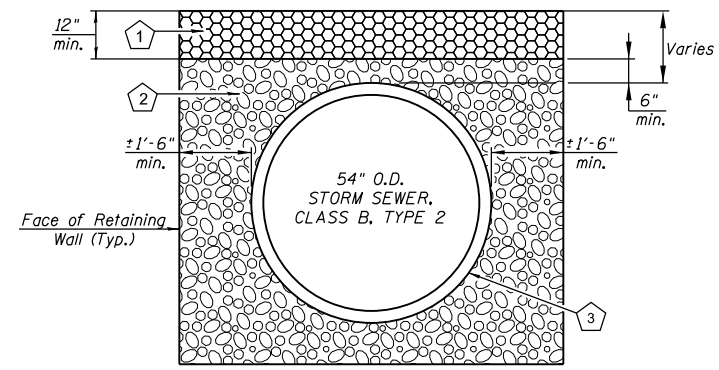
SCALE:	SHEET 1 OF 2 SHEETS	STA.	TO STA.
--------	---------------------	------	---------

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PRINCETON AVE. DRAINAGE DETAILS - 1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	107
	09L0179B	CONTRACT NO.	93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



STORM SEWER DETENTION PLAN



STORM SEWER DETENTION BACKFILL DETAIL

- 1.) EARTH FILL
- 2.) TRENCH BACKFILL
- 3.) HIGH DENSITY POLYETHYLENE

FOUNDATION/BEDDING PREPARATION

PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER. ONCE THE FOUNDATION PREPARATION IS COMPLETE, THE 4 INCHES OF A WELL-GRADED GRANULAR MATERIAL SHALL BE PLACED AS THE BEDDING.

BACKFILL

THE BACKFILL SHALL BE ACCORDING TO SECTIONS 208 AND 209 OF THE STANDARD SPECIFICATIONS OR A WELL-GRADED GRANULAR FILL AS APPROVED BY THE ENGINEER. THE MATERIAL SHALL BE PLACED IN 8-INCH LOOSE LIFTS AND COMPACTED TO 90% AASHTO T99 STANDARD PROCTOR DENSITY. WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE DETENTION SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.

OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS. REFER TO TYPICAL BACKFILL DETAIL FOR MATERIAL REQUIRED.

DESIGNED	
DRAWN	
REVISED	



USER NAME = Pop00275	DESIGNED -	REVISED -
PLOT SCALE = 7.9998' / 1\"/>		

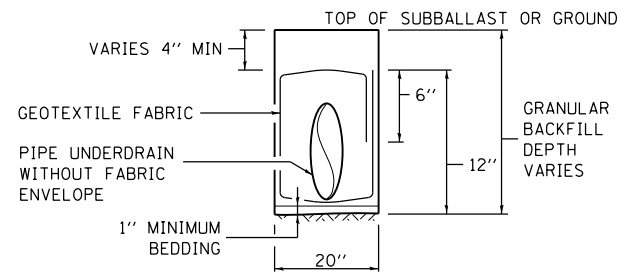
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE - 03/15/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PRINCETON AVE. DRAINAGE DETAILS - 2**

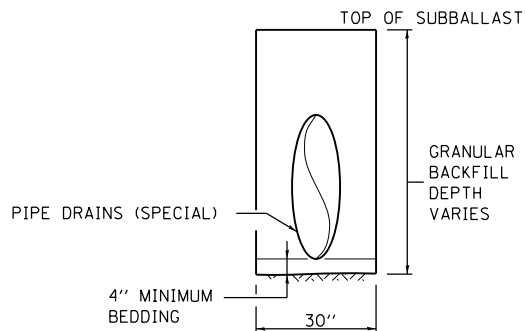
SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	108
	09L0179B	CONTRACT NO.	93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



SECTION VIEW

PIPE UNDERDRAINS, TYPE 2



SECTION VIEW

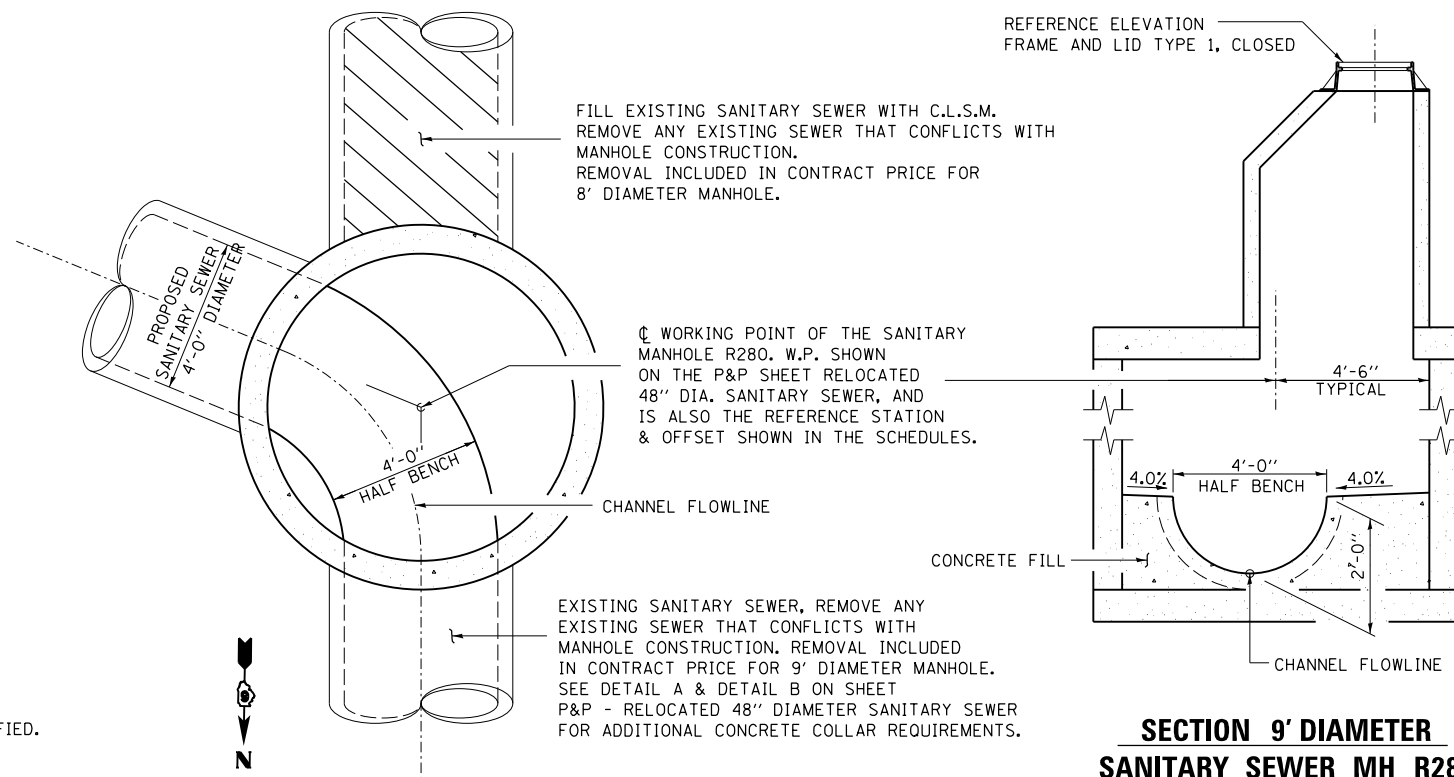
PIPE DRAINS (SPECIAL)

NOTES: PIPE UNDERDRAINS, TYPE 2

- ④ PIPE UNDERDRAIN MATERIALS AND CONSTRUCTION SHALL CONFORM TO SECTION 601 OF THE STANDARD SPECIFICATIONS. THE GRANULAR BACKFILL GRADATION SHALL BE CA-7.
- ⑤ ALL MATERIALS WILL NOT BE MEASURED SEPARATELY, BUT WILL BE INCLUDED IN THE CONTRACT PRICE PER UNIT FOR PIPE UNDERDRAINS, TYPE 2 OF THE SIZE SPECIFIED.
- ⑥ PERFORATED PIPE SHALL BE PERFORATED CORRUGATED PE PIPE WITH A SMOOTH INTERIOR MEETING ARTICLE 1040.04

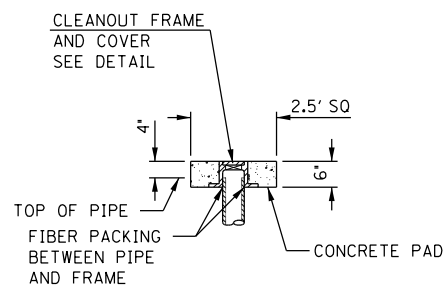
NOTES: PIPE DRAINS (SPECIAL)

- ① BEDDING AND GRANULAR BACKFILL SHALL BE COARSE AGGREGATE MEETING ARTICLE 1004.05, EXCEPT THAT THE GRADATION SHALL BE CA-7. GRANULAR BACKFILL SHALL BE PLACED AND COMPACTED ACCORDING TO ARTICLE 542.04(C) AND 542.04(F), RESPECTIVELY.
- ② ALL MATERIALS WILL NOT BE MEASURED SEPARATELY, BUT WILL BE INCLUDED IN THE CONTRACT PRICE PER UNIT FOR PIPE DRAIN (SPECIAL) OF DIAMETER SPECIFIED.
- ③ PIPE DRAINS (SPECIAL) SHALL BE A SMOOTH STEEL PIPE ACCORDING TO PROJECT SPECIFICATIONS.



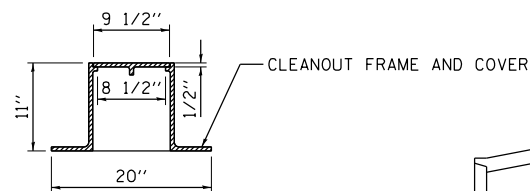
**PLAN VIEW 9' DIAMETER
SANITARY SEWER MH R280**

SEE DETAIL B ON SHEET
P&P - RELOCATED 48\"/>



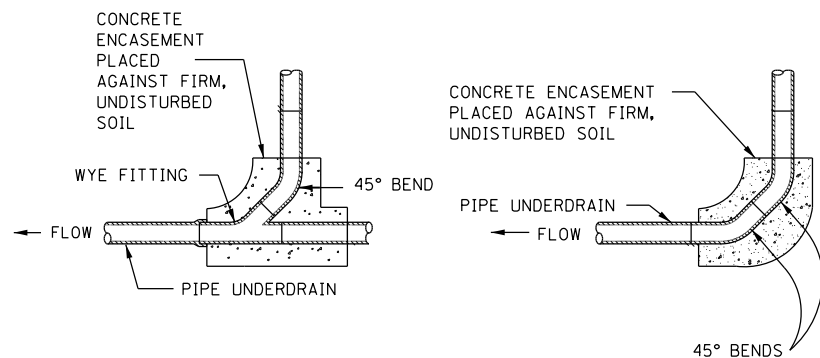
PIPE UNDERDRAIN CLEANOUT

N.T.S.

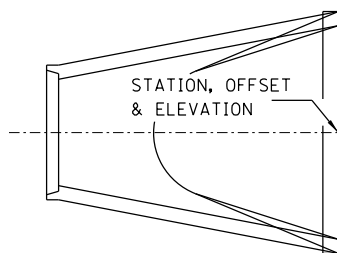


END SECTION OFFSET

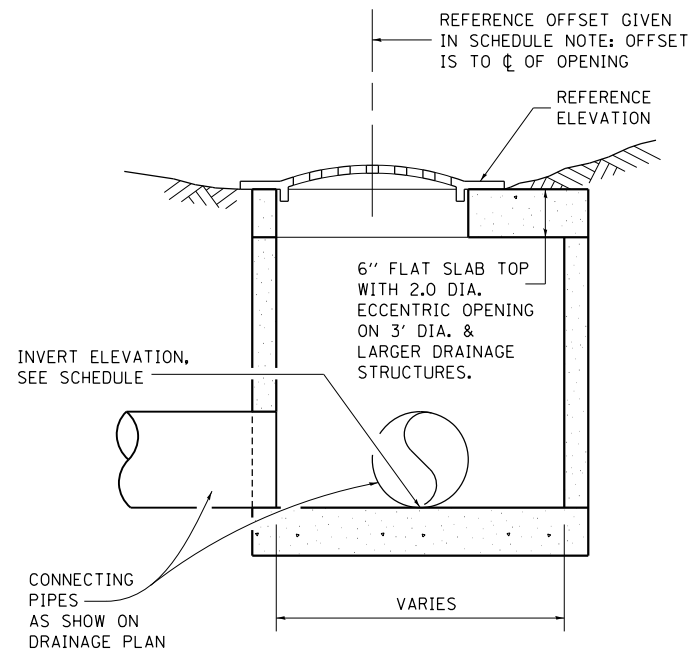
N.T.S.



NOTE:
THE CONTRACT UNIT PRICE PIPE UNDERDRAIN FOR STRUCTURES SHALL INCLUDE THE BENDS AND RISER PIPE, CONCRETE ENCASEMENT, FRAME & COVER AND CONCRETE PAD.

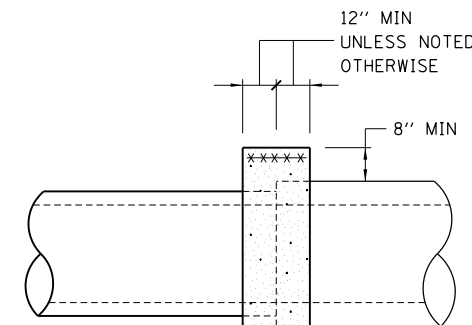


STANDARD 542301



**TYPICAL INLET TYPE A,
INLET TYPE B OR MANHOLE TYPE A
WITH TYPE 8 GRATE**

N.T.S.



TYPICAL CONCRETE COLLAR DETAIL

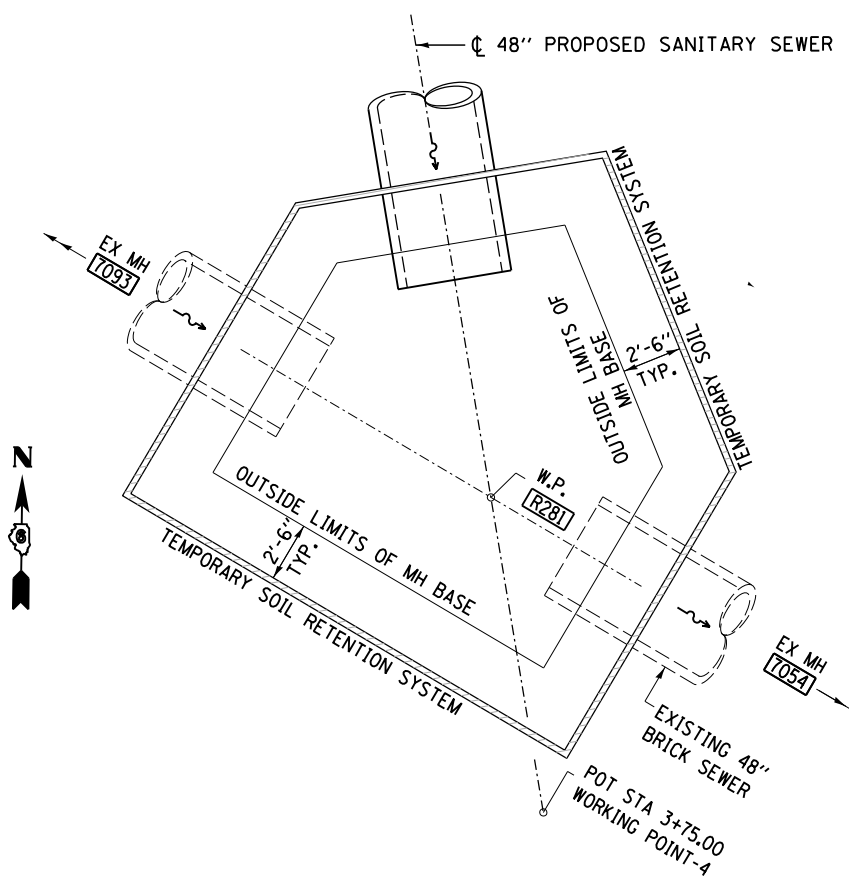
N.T.S.

CLASS SI CONCRETE COLLAR, ENCOMPASS WITH 6x6-W4.0xW4.0 WELDED WIRE FABRIC. 3\"/>

NOTE: CONCRETE COLLARS SHALL BE USED TO CONNECT SEWER TO EXISTING SEWER AND JACKED-IN-PLACE SEWER.

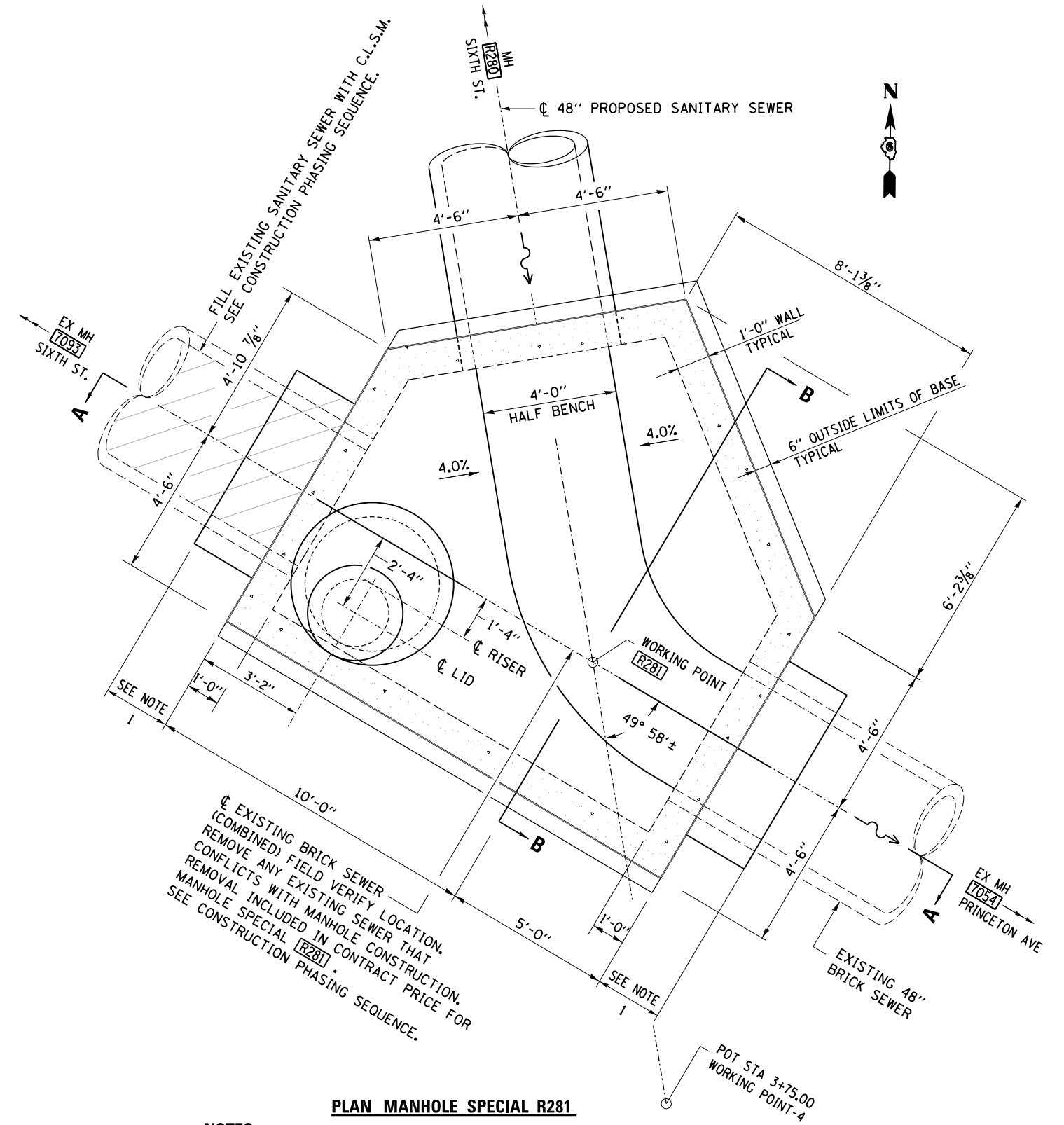
SANITARY SEWER CONSTRUCTION PHASING
EXISTING SIXTH STREET \ PRINCETON AVE 48" DIAMETER SEWER RELOCATION

- PHASE 1 -**
 CONSTRUCT SEWER JACKED IN PLACE, PIPE IN METAL LINER AND THOSE PORTIONS OF THE 48" SEWER EAST OF SIXTH STREET & WEST OF MANHOLE R281. MAINTAIN FLOW IN EXISTING SEWER. MAINTAIN A MINIMUM OF TWO LANES OF TRAFFIC ON SIXTH STREET.
- PHASE 2 -**
 CONSTRUCT MANHOLE SPECIAL R281 WHILE MAINTAINING FLOW IN EXISTING SEWER. MAINTAIN A MINIMUM OF TWO LANES OF TRAFFIC ON SIXTH STREET. CONNECT NEW 48"Ø PIPE TO R281.
- PHASE 3 -**
 CONSTRUCT ALL WORK IN SIXTH STREET DURING WEEKEND SHUTDOWN TO ERECT THE NSRR STRUCTURE OVER SIXTH STREET (SN084-9963)
- A) INSTALL 48" PIPE IN SIXTH STREET.
 B) INSTALL MANHOLE R280 & DIVERT FLOW TO NEW 48"
 C) INSTALL MANHOLE R282 & 12" PIPE TO CONNECT EXISTING INLETS TO R282.
 D) IF NECESSARY, INSTALL MANHOLE R298 & 12" PIPE ACCORDING TO NOTE "G" ON PLANS
- PHASE 4 -**
 PLUG EXISTING 48" WEST OUTLET PIPE AT MANHOLES R281 & FILL EXISTING PIPE FROM MANHOLE R280 TO MANHOLE R281 WITH C.L.S.M.



PLAN MANHOLE SPECIAL R281

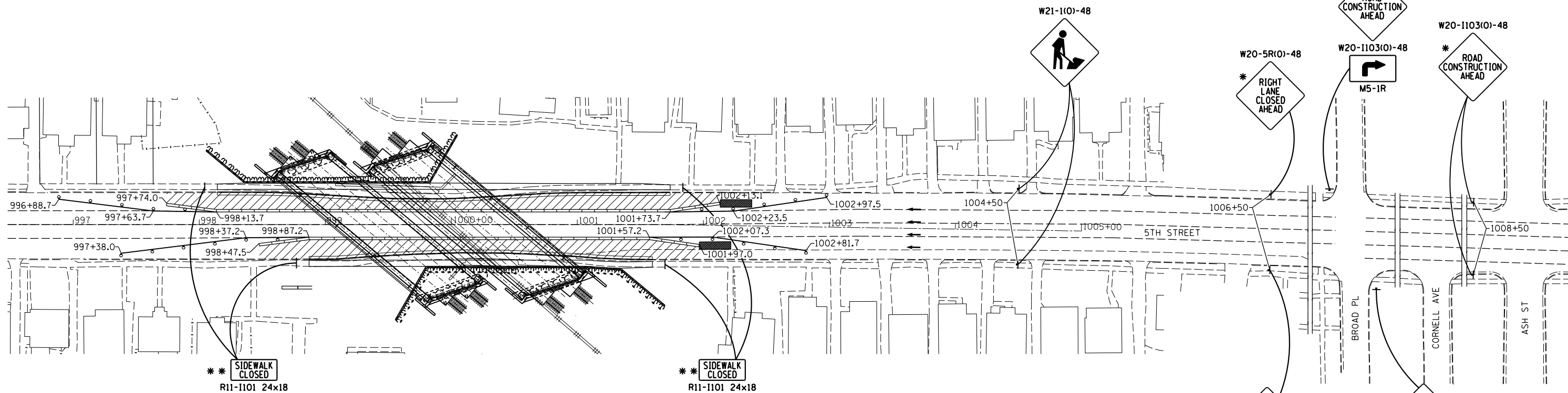
A CANTILEVERED SHEET PILING DESIGN DOES NOT APPEAR FEASIBLE AND ADDITIONAL MEMBERS OR OTHER RETENTION SYSTEMS MAY BE NECESSARY. THE CONTRACTOR SHALL SUBMIT A TEMPORARY SOIL RETENTION SYSTEM DESIGN INCLUDING PLAN DETAILS AND CALCULATIONS FOR REVIEW AND ACCEPTANCE BY THE ENGINEER.



PLAN MANHOLE SPECIAL R281

- NOTES:**
- 1) CONSTRUCT 2'-0" WIDE CONCRETE COLLAR WITH 6x6 44.0xW4.0 WELDED WIRE REINFORCEMENT. STABILIZE EXISTING BRICK SEWER, ALLOWING THE REMOVAL AND RECONSTRUCTION OF ACTIVE SEWER.
 - 2) SEE TRACK DRAINAGE & SEWER DETAILS -3 FOR SECTIONS A-A & B-B AND TOP SLAB PLAN.

FINAL	FILE NAME =	USER NAME = Pop00275	DESIGNED - JWM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SPRINGFIELD RAIL IMPROVEMENTS PROJECT SPRINGFIELD, SANGAMON COUNTY, ILLINOIS TRACK DRAINAGE & SEWER DETAILS - 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D609L0179B-sht-details-TRACK-001.dgn		DRAWN - CLG	REVISED -			(109) VB,(110) VB-5	SANGAMON	382	110	
	PLOT SCALE = 4.0000' / in.		CHECKED - JWM/MNM	REVISED -			09L0179B	CONTRACT NO.	93733		
	sheet2		DATE - 03/15/2019	REVISED -			*666 & 666 ALT.	ILLINOIS FED. AID PROJECT			

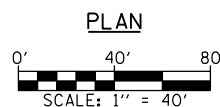


STAGING NOTE

TRAFFIC SHALL BE REDUCED TO TWO LANES FOR THE AMOUNT OF CALENDAR DAYS AS SPECIFIED IN THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER. WHEN THE ALLOTTED TIME FOR THE TWO LANE REDUCTION HAS EXPIRED, THEN ONE LINE OF TEMPORARY CONCRETE BARRIER WILL BE REMOVED AND THREE LANES OF TRAFFIC WILL BE OPENED TO TRAFFIC. THE CONTRACTOR AND ENGINEER SHALL DETERMINE WHICH LANE CAN BE OPENED THAT WILL NOT COMPROMISE THE SAFETY OF THE TRAVELLING PUBLIC.

- THESE SIGNS TO BE PLACED ON 5TH STREET PRIOR TO THE INTERSECTIONS OF LAUREL AND ASH STREETS ALSO. 200' SPACING BETWEEN SIGNS.
- SIDEWALK DETOUR SIGN PLACEMENT IS SHOWN ON DETOUR SIGN AND BARRICADE LOCATION PLAN SHEETS.

5TH STREET STAGING



(TO BE PLACED AT CORNELL AVE ALSO)

SYMBOLS

- ⊥ SIGN ON PORTABLE OR PERMANENT SUPPORT
- ⊙ DRUM WITH STEADY BURNING LIGHT
- ⊕ TYPE III BARRICADE WITH FLASHING LIGHTS
- ▬ TEMPORARY CONCRETE BARRIER
- ▬ IMPACT ATTENUATOR
- ➡ ARROW BOARD
- ▨ WORK AREA
- STEADY BURNING WARNING LIGHT

- SIGNS TO BE SPACED AT 200'
- CONES AT 25' CENTERS FOR 250'. ADDITIONAL CONES MAY BE PLACED AT 50' CENTERS. WHEN DRUMS OR TYPE I OR TYPE II BARRICADES ARE USED, THE INTERVAL BETWEEN DEVICES MAY BE DOUBLED.
- CONES, DRUMS OR BARRICADES AT 20' IN TAPER.

DESIGNED	
DRAWN	
REVIEWED	



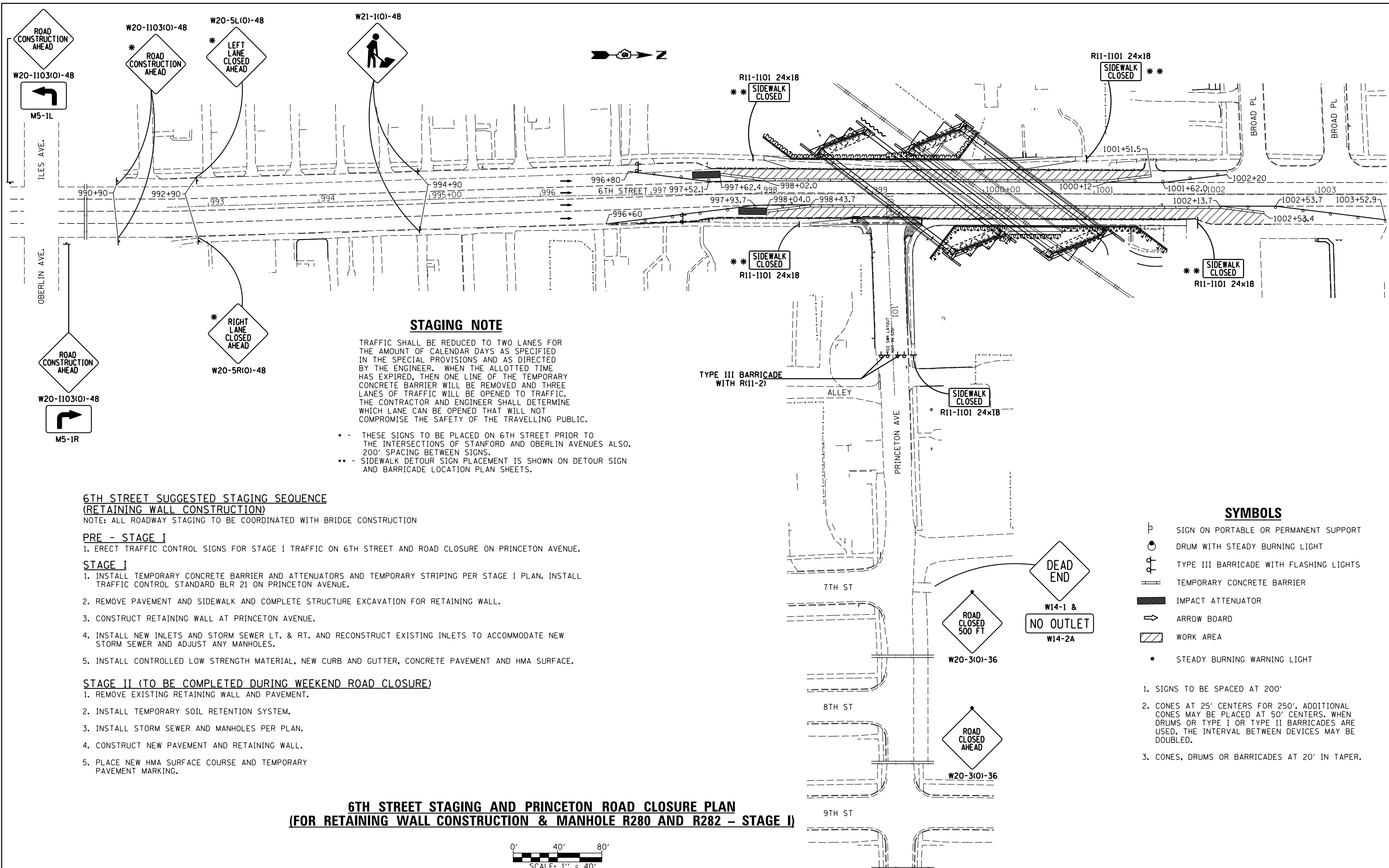
USER NAME = Pop00275	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 80.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRAFFIC CONTROL PLAN - 5TH STREET

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	112
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



STAGING NOTE

TRAFFIC SHALL BE REDUCED TO TWO LANES FOR THE AMOUNT OF CALENDAR DAYS AS SPECIFIED IN THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER. WHEN THE ALLOTTED TIME HAS EXPIRED, THEN ONE LINE OF THE TEMPORARY CONCRETE BARRIER WILL BE REMOVED AND THREE LANES OF TRAFFIC WILL BE OPENED TO TRAFFIC. THE CONTRACTOR AND ENGINEER SHALL DETERMINE WHICH LANE CAN BE OPENED THAT WILL NOT COMPROMISE THE SAFETY OF THE TRAVELLING PUBLIC.

- - THESE SIGNS TO BE PLACED ON 6TH STREET PRIOR TO THE INTERSECTIONS OF STANFORD AND OBERLIN AVENUES ALSO. 200' SPACING BETWEEN SIGNS.
- - SIDEWALK DETOUR SIGN PLACEMENT IS SHOWN ON DETOUR SIGN AND BARRICADE LOCATION PLAN SHEETS.

6TH STREET SUGGESTED STAGING SEQUENCE (RETAINING WALL CONSTRUCTION)

NOTE: ALL ROADWAY STAGING TO BE COORDINATED WITH BRIDGE CONSTRUCTION

PRE - STAGE I

1. ERECT TRAFFIC CONTROL SIGNS FOR STAGE I TRAFFIC ON 6TH STREET AND ROAD CLOSURE ON PRINCETON AVENUE.

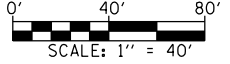
STAGE I

1. INSTALL TEMPORARY CONCRETE BARRIER AND ATTENUATORS AND TEMPORARY STRIPING PER STAGE I PLAN. INSTALL TRAFFIC CONTROL STANDARD BLR 21 ON PRINCETON AVENUE.
2. REMOVE PAVEMENT AND SIDEWALK AND COMPLETE STRUCTURE EXCAVATION FOR RETAINING WALL.
3. CONSTRUCT RETAINING WALL AT PRINCETON AVENUE.
4. INSTALL NEW INLETS AND STORM SEWER LT. & RT. AND RECONSTRUCT EXISTING INLETS TO ACCOMMODATE NEW STORM SEWER AND ADJUST ANY MANHOLES.
5. INSTALL CONTROLLED LOW STRENGTH MATERIAL, NEW CURB AND GUTTER, CONCRETE PAVEMENT AND HMA SURFACE.

STAGE II (TO BE COMPLETED DURING WEEKEND ROAD CLOSURE)

1. REMOVE EXISTING RETAINING WALL AND PAVEMENT.
2. INSTALL TEMPORARY SOIL RETENTION SYSTEM.
3. INSTALL STORM SEWER AND MANHOLES PER PLAN.
4. CONSTRUCT NEW PAVEMENT AND RETAINING WALL.
5. PLACE NEW HMA SURFACE COURSE AND TEMPORARY PAVEMENT MARKING.

6TH STREET STAGING AND PRINCETON ROAD CLOSURE PLAN (FOR RETAINING WALL CONSTRUCTION & MANHOLE R280 AND R282 - STAGE I)



SYMBOLS

- ⊥ SIGN ON PORTABLE OR PERMANENT SUPPORT
- DRUM WITH STEADY BURNING LIGHT
- ⊥ TYPE III BARRICADE WITH FLASHING LIGHTS
- ▬ TEMPORARY CONCRETE BARRIER
- ▬ IMPACT ATTENUATOR
- ➔ ARROW BOARD
- ▨ WORK AREA
- STEADY BURNING WARNING LIGHT

1. SIGNS TO BE SPACED AT 200'
2. CONES AT 25' CENTERS FOR 250'. ADDITIONAL CONES MAY BE PLACED AT 50' CENTERS. WHEN DRUMS OR TYPE I OR TYPE II BARRICADES ARE USED, THE INTERVAL BETWEEN DEVICES MAY BE DOUBLED.
3. CONES, DRUMS OR BARRICADES AT 20' IN TAPER.

DESIGNED	
DRAWN	
REVISED	

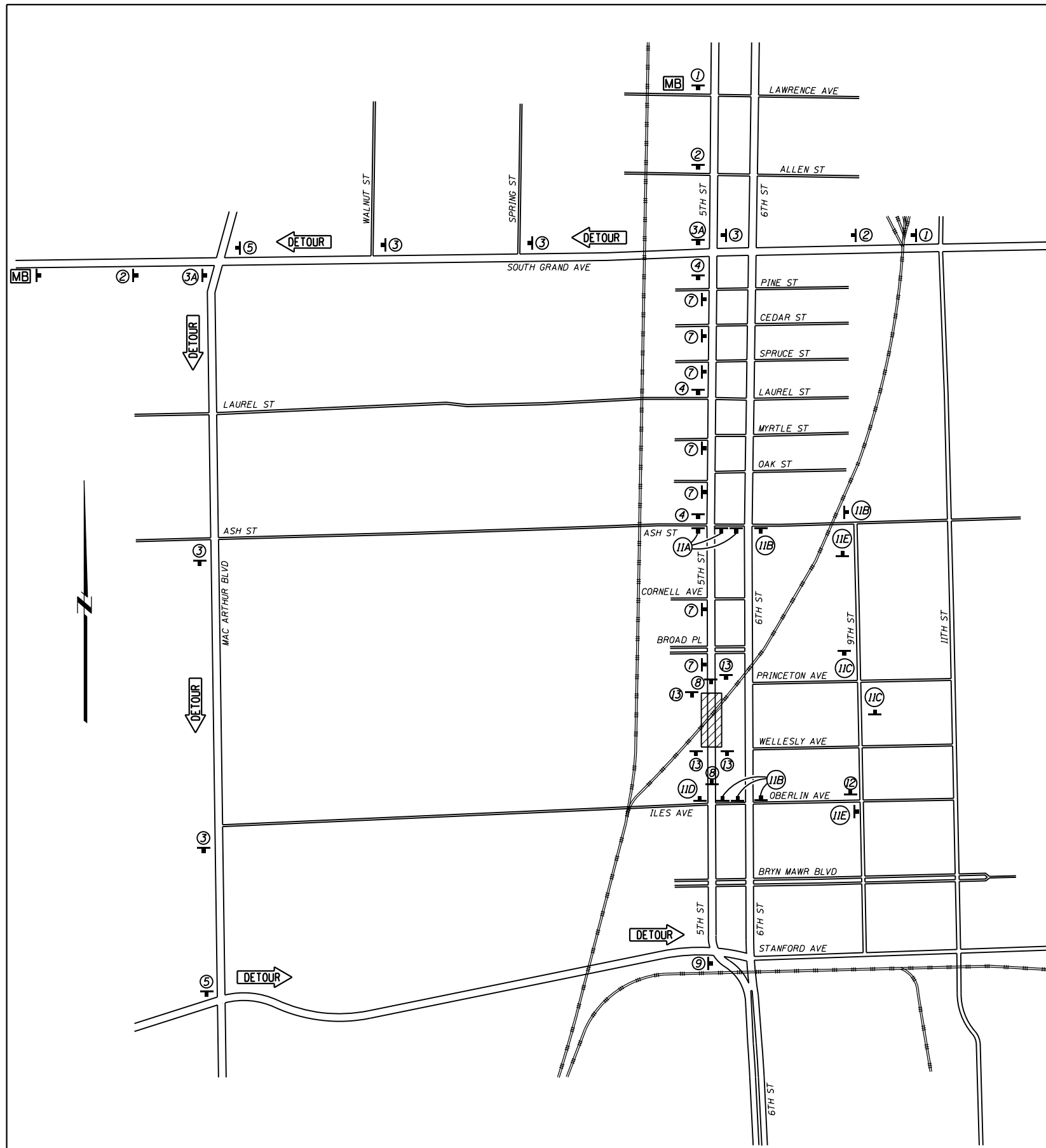


USER NAME = Pop00275	DESIGNED -	REVISED -
PLOT SCALE = 80.0000' / in.	DRAWN - JRP	REVISED -
PLOT DATE = 4/10/2019	CHECKED -	REVISED -
	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT SPRINGFIELD, SANGAMON COUNTY, ILLINOIS TRAFFIC CONTROL PLAN - 6TH STREET - STAGE I	
SCALE:	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	113
	09L0179B		CONTRACT NO.	93733
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



1 5TH STREET CLOSED AT RAILROAD UNDERPASS
1.5 MILES
① CUSTOM DETOUR SIGN WITH ORANGE HI-REFLECTIVITY FIELD 48x48 BLACK BORDER AND LETTERING

2 DETOUR AHEAD
W20-2(0)-48

3 DETOUR
5TH STREET
③ M4-8(0) 30x15 WITH CUSTOM DETOUR STREET SIGN BLACK ON ORANGE 24x12

3A DETOUR
5TH STREET
③A M4-8(0) 30x15 WITH CUSTOM DETOUR STREET SIGN BLACK ON ORANGE 24x12

4 ROAD CLOSED AHEAD LOCAL TRAFFIC ONLY
④ TYPE III BARRICADE WITH R11-3a 60x30

5 DETOUR
5TH STREET
⑤ M4-10R & M4-10L 48x18 WITH CUSTOM STREET SIGN BLACK ON ORANGE 24x12

6 DETOUR
6TH STREET
⑥ M4-8(0) 30x15 WITH CUSTOM DETOUR STREET SIGN BLACK ON ORANGE 24x12

7 ROAD CLOSED
⑦ R11-2 48x30 WITH M16-1 30x18

8 ROAD CLOSED
⑧ TYPE III BARRICADE WITH R11-2 48x30

9 END DETOUR
5TH STREET
⑨ M4-8A 24x18 WITH CUSTOM DETOUR STREET SIGN BLACK & ORANGE 24x12

10 END DETOUR
6TH STREET
⑩ M4-8A 24x18 WITH CUSTOM DETOUR STREET SIGN BLACK & ORANGE 24x12

11A SIDEWALK CLOSED
⑪ R11-1101 24x18 WITH M4-9BL OR M4-9BR

11B SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11L

11C DETOUR
M4-9BR

11D SIDEWALK CLOSED AHEAD
CROSS HERE
M4-9B

11E DETOUR
R9-11R

12 SIDEWALK CLOSED
DETOUR
⑫ R11-1101 24x18 WITH M4-8

13 SIDEWALK CLOSED
⑬ R11-1101 24x18

MB PORTABLE CHANGEABLE MESSAGE SIGN

NOTES:
ALL SIGNS AND DEVICES SHOWN SHALL BE IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS. FURNISHING, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL SIGNS AND DEVICES SHOWN SHALL BE PAID FOR AS DETOUR SIGNING.

TRAFFIC CONTROL IS AN INTEGRAL PART OF THE CONTRACTOR'S MEANS AND METHODS FOR COMPLETING THE WORK. THE REQUIREMENTS SET FORTH HEREIN PRESENT THE MINIMUM REQUIREMENTS FOR THE CONTROL & PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL IMPLEMENT ALL ADDITIONAL MEASURES NECESSARY TO FULLY PROTECT PEDESTRIANS, VEHICLES AND FROM PASSING TRAFFIC. FIELD MODIFICATION OF THE TRAFFIC CONTROL SCHEME DEPICTED IN THE TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.

ALL WORK SHOWN ON THIS SHEET FOR THE DETOUR WILL BE PAID FOR AT THE AT THE CONTRACT PRICE FOR DETOUR SIGNING.

TYPE 3 BARRICADES, ROAD CLOSED SIGNS & SIDEWALK CLOSED SIGNS WILL BE UTILIZED AND MAINTAINED BY THE CONTRACTOR TO PROTECT THE PUBLIC.

ALL DETOUR RELATED SIGNS SHALL HAVE AN ORANGE BACKGROUND.

- DENOTES WORK ZONE

5TH STREET DETOUR SIGN & BARRICADE LOCATION PLAN

DESIGNED
DRAWN
CHECKED
DATE



USER NAME = Pop00275	DESIGNED -	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 4/10/2019	CHECKED -	REVISED -
DATE = 03/15/2019	DATE -	REVISED -

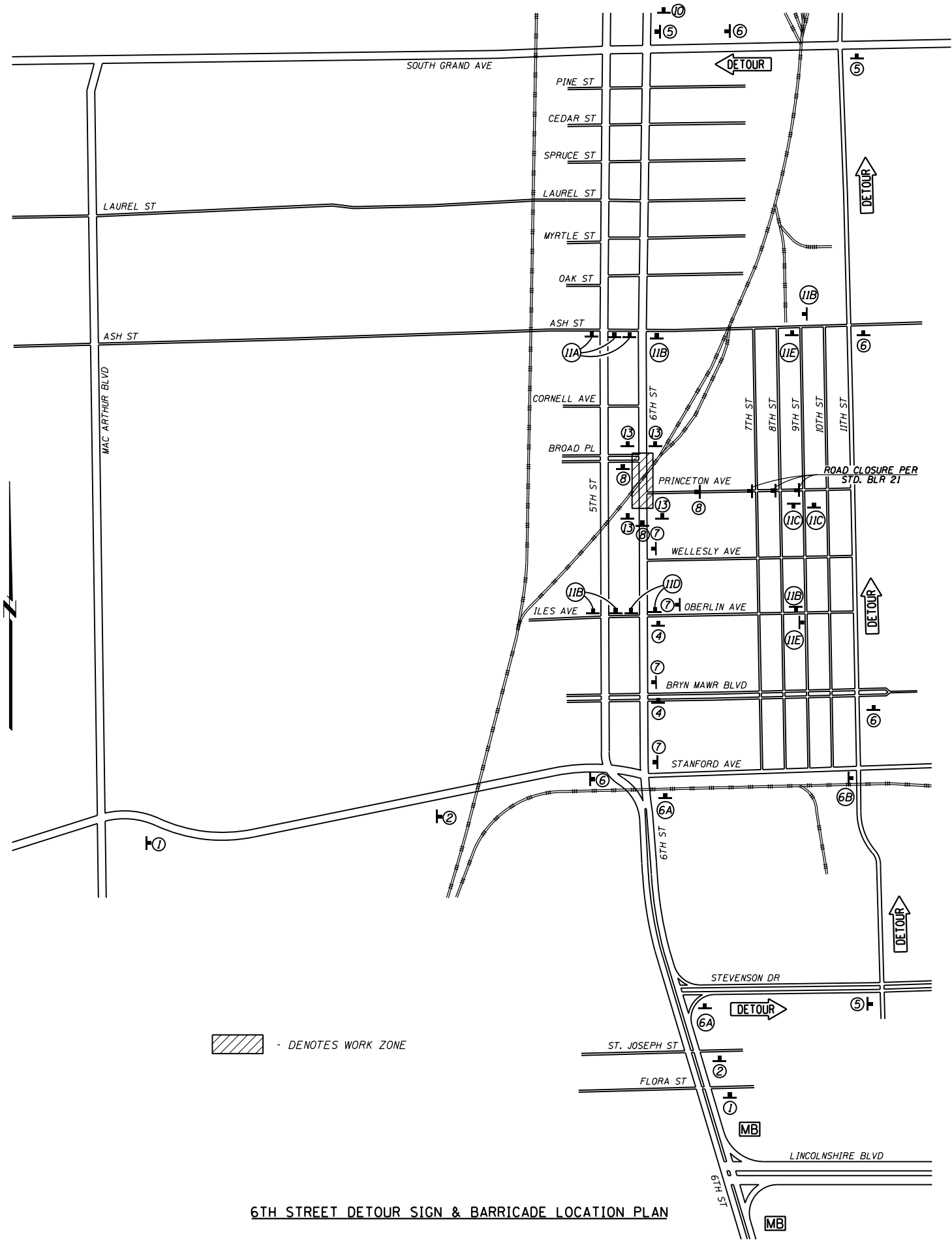
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRAFFIC DETOUR PLAN - 5TH STREET**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	114
	09L0179B	CONTRACT NO.	93733	

•666 & 666 ALT. ILLINOIS FED. AID PROJECT



- DENOTES WORK ZONE

6TH STREET DETOUR SIGN & BARRICADE LOCATION PLAN

1
5TH STREET CLOSED AT RAILROAD UNDERPASS
1.5 MILES
CUSTOM DETOUR SIGN WITH ORANGE HI-REFLECTIVITY FIELD 48x48 BLACK BORDER AND LETTERING

2
DETOUR AHEAD
W20-2101-48

3
DETOUR
↑
5TH STREET
M4-810) 30x15 WITH CUSTOM DETOUR STREET SIGN BLACK ON ORANGE 24x12

4
ROAD CLOSED AHEAD
LOCAL TRAFFIC ONLY
TYPE III BARRICADE WITH R11-3a 60x30

5
DETOUR
←
5TH STREET
DETOUR
→
5TH STREET
M4-10R & M4-10L 48x18 WITH CUSTOM STREET SIGN BLACK ON ORANGE 24x12

6
DETOUR
↑
6TH STREET
M4-810) 30x15 WITH CUSTOM DETOUR STREET SIGN BLACK ON ORANGE 24x12

6A
DETOUR
↘
6TH STREET
M4-810) 30x15 WITH CUSTOM DETOUR STREET SIGN BLACK ON ORANGE 24x12

6B
DETOUR
↙
6TH STREET
M4-810) 30x15 WITH CUSTOM DETOUR STREET SIGN BLACK ON ORANGE 24x12

7
ROAD CLOSED
→
R11-2 48x30 WITH M16-1 30x18

8
TYPE III BARRICADE WITH R11-2 48x30

9
END DETOUR
5TH STREET
M4-8A 24x18 WITH CUSTOM DETOUR STREET SIGN BLACK & ORANGE 24x12

10
END DETOUR
6TH STREET
M4-8A 24x18 WITH CUSTOM DETOUR STREET SIGN BLACK & ORANGE 24x12

11A
SIDEWALK CLOSED AHEAD
←
CROSS HERE
R9-11L

11B
DETOUR
→
M4-9BR

11C
DETOUR
↑
M4-9B

11D
SIDEWALK CLOSED AHEAD
→
CROSS HERE
R9-11R

11E
DETOUR
←
M4-9BL

12
SIDEWALK CLOSED
DETOUR
R11-1101 24x18 WITH M4-8

13
SIDEWALK CLOSED
R11-1101 24x18

MB
PORTABLE CHANGEABLE MESSAGE SIGN

NOTES:
ALL SIGNS AND DEVICES SHOWN SHALL BE IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS. FURNISHING, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL SIGNS AND DEVICES SHOWN SHALL BE PAID FOR AS DETOUR SIGNING.

TRAFFIC CONTROL IS AN INTEGRAL PART OF THE CONTRACTOR'S MEANS AND METHODS FOR COMPLETING THE WORK, THE REQUIREMENTS SET FORTH HEREIN PRESENT THE MINIMUM REQUIREMENTS FOR THE CONTROL & PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL IMPLEMENT ALL ADDITIONAL MEASURES NECESSARY TO FULLY PROTECT PEDESTRIANS, VEHICLES AND THE CONTRACTOR'S WORK FORCE FROM THE CONTRACTOR'S WORK ACTIVITIES AND FROM PASSING TRAFFIC. FIELD MODIFICATION OF THE TRAFFIC CONTROL SCHEME DEPICTED IN THE TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.

ALL WORK SHOWN ON THIS SHEET AND INCLUDING ANY OTHER WORK REQUIRED FOR THE DETOUR WILL BE PAID FOR AT THE CONTRACT PRICE FOR DETOUR SIGNING.

TYPE 3 BARRICADES, ROAD CLOSED SIGNS & SIDEWALK CLOSED SIGNS WILL BE UTILIZED AND MAINTAINED BY THE CONTRACTOR TO PROTECT THE PUBLIC.

ALL DETOUR RELATED SIGNS SHALL HAVE AN ORANGE BACKGROUND.

DESIGNED
DRAWN
CHECKED
DATE

V&K
Veenstra & Kimm, Inc.
Springfield, IL. Phone: (217)544-8033

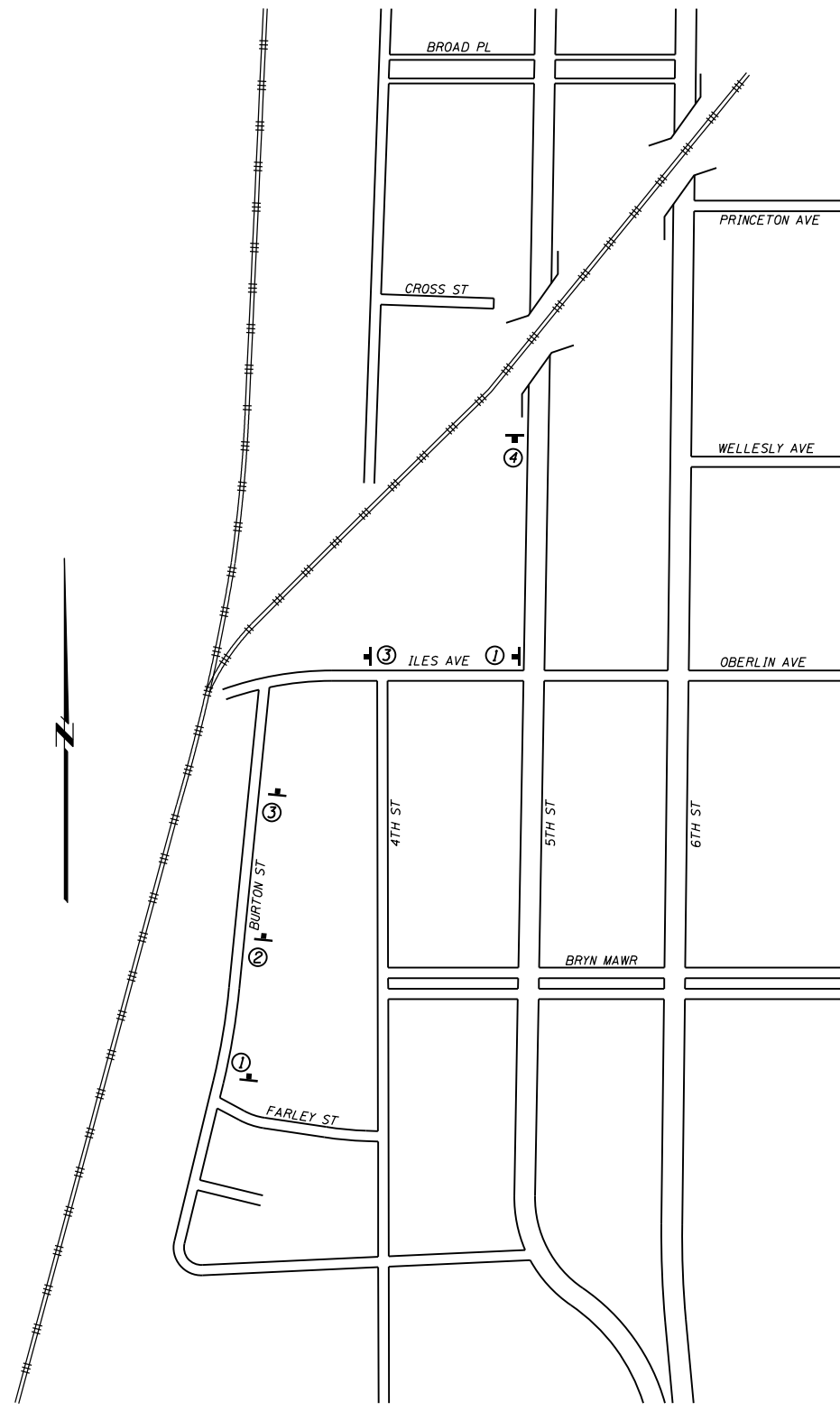
USER NAME = Pop00275	DESIGNED -	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 4/10/2019	CHECKED -	REVISED -
	DATE = 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

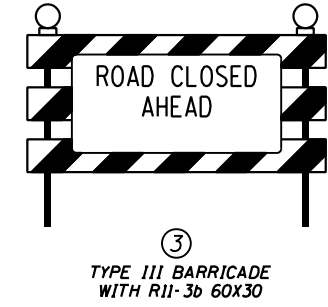
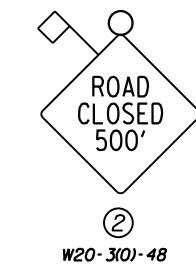
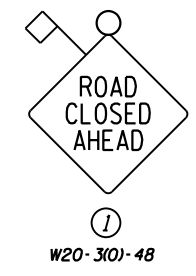
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRAFFIC DETOUR PLAN - 6TH STREET

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	115
	09L0179B	CONTRACT NO.	93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



BURTON STREET AND ILES AVENUE SIGN & BARRICADE LOCATION PLAN



NOTES:
ALL SIGNS AND DEVICES SHOWN SHALL BE IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS. FURNISHING, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL SIGNS AND DEVICES SHOWN SHALL BE PAID FOR AS DETOUR SIGNING.

TRAFFIC CONTROL IS AN INTEGRAL PART OF THE CONTRACTOR'S MEANS AND METHODS FOR COMPLETING THE WORK, THE REQUIREMENTS SET FORTH HEREIN PRESENT THE MINIMUM REQUIREMENTS FOR THE CONTROL & PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL IMPLEMENT ALL ADDITIONAL MEASURES NECESSARY TO FULLY PROTECT PEDESTRIANS, VEHICLES AND THE CONTRACTOR'S WORK FORCE FROM THE CONTRACTOR'S WORK ACTIVITIES AND FROM PASSING TRAFFIC. FIELD MODIFICATION OF THE TRAFFIC CONTROL SCHEME DEPICTED IN THE TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.

ALL WORK SHOWN ON THIS SHEET AND INCLUDING ANY OTHER WORK REQUIRED FOR THE DETOUR WILL BE PAID FOR AT THE CONTRACT PRICE FOR DETOUR SIGNING.

TYPE 3 BARRICADES, ROAD CLOSED SIGNS & SIDEWALK CLOSED SIGNS WILL BE UTILIZED AND MAINTAINED BY THE CONTRACTOR TO PROTECT THE PUBLIC.

ALL DETOUR RELATED SIGNS SHALL HAVE AN ORANGE BACKGROUND.

DESIGNED	
DRAWN	
REVISIONS	



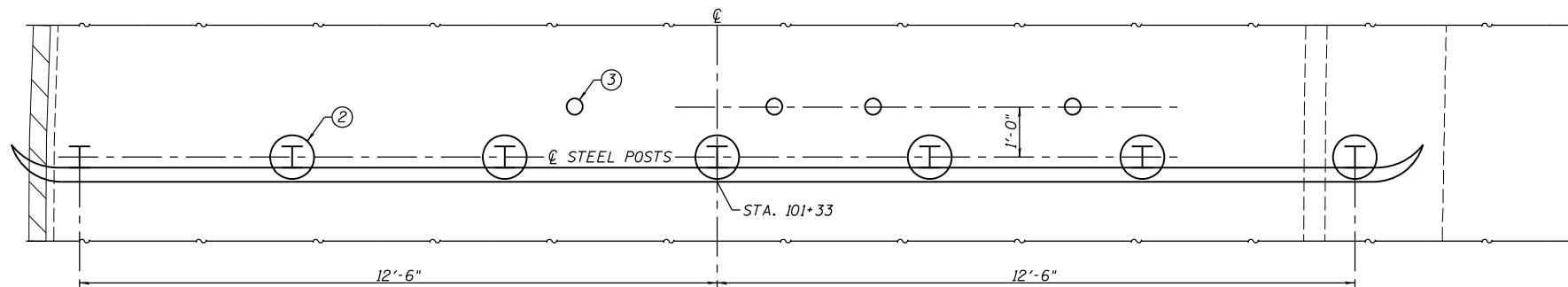
USER NAME = Pop00275	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

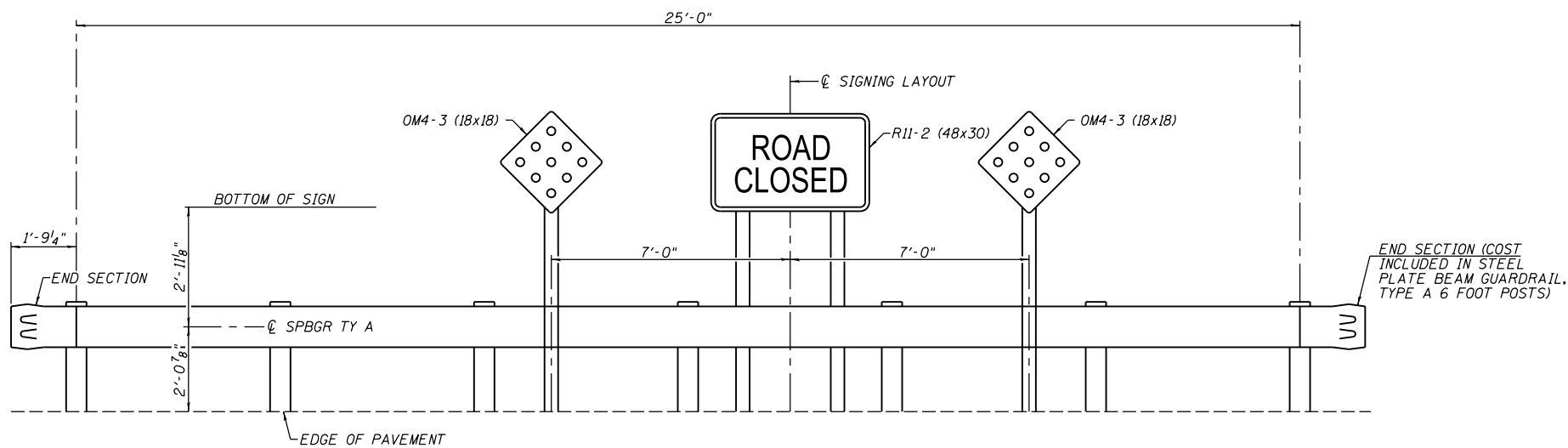
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRAFFIC DETOUR PLAN - BURTON DRIVE**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	116
	09L0179B	CONTRACT NO.	93733	
•666 & 666 ALT.		ILLINOIS FED. AID PROJECT		

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.



PLAN VIEW - STEEL PLATE BEAM GUARDRAIL LOCATION
(FOR PRINCETON ROAD CLOSURE)



ROAD CLOSURE AT PRINCETON AVENUE
ELEVATION VIEW

- ① LOCATION WILL BE VERIFIED WITH FIELD ENGINEER PRIOR TO PLACEMENT.
- ② CORE 12" DIAMETER HOLE IN EXISTING PAVEMENT FOR GUARDRAIL POSTS. BACKFILL WITH AGGREGATE AND BRING FLUSH WITH EXISTING PAVEMENT WITH 2" THICK HMA MIXTURE. COST INCLUDED IN CONTRACT PRICE FOR SPBGR TYPE A.
- ③ CORE 6" DIAMETER HOLE IN EXISTING PAVEMENT FOR SIGN POSTS. BACKFILL WITH AGGREGATE AND BRING FLUSH WITH EXISTING PAVEMENT WITH 2" THICK HMA MIXTURE. COST INCLUDED IN COST OF SIGN PANEL ASSEMBLY.

DESIGNED
DRAWN
REVISED



USER NAME = Pop00275	DESIGNED -	REVISED -
PLOT SCALE = 4.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 4/10/2019	CHECKED -	REVISED -
	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ROADWAY CLOSURE DETAILS - PRINCETON AVE.

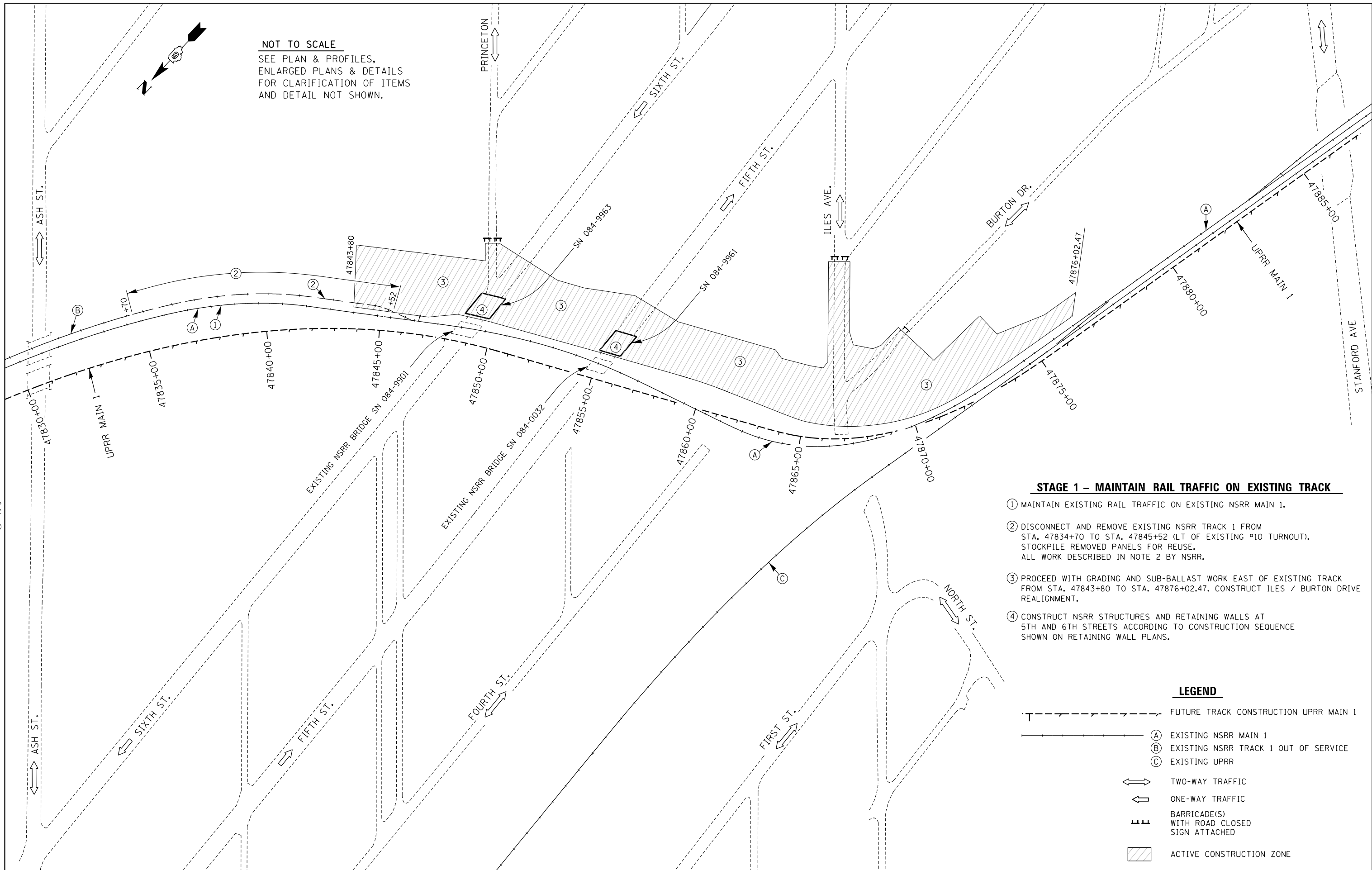
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	117
	09L0179B	CONTRACT NO.	93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

NOT TO SCALE
SEE PLAN & PROFILES,
ENLARGED PLANS & DETAILS
FOR CLARIFICATION OF ITEMS
AND DETAIL NOT SHOWN.



STAGE 1 - MAINTAIN RAIL TRAFFIC ON EXISTING TRACK

- ① MAINTAIN EXISTING RAIL TRAFFIC ON EXISTING NSRR MAIN 1.
- ② DISCONNECT AND REMOVE EXISTING NSRR TRACK 1 FROM STA. 47834+70 TO STA. 47845+52 (LT OF EXISTING #10 TURNOUT). STOCKPILE REMOVED PANELS FOR REUSE. ALL WORK DESCRIBED IN NOTE 2 BY NSRR.
- ③ PROCEED WITH GRADING AND SUB-BALLAST WORK EAST OF EXISTING TRACK FROM STA. 47843+80 TO STA. 47876+02.47. CONSTRUCT ILES / BURTON DRIVE REALIGNMENT.
- ④ CONSTRUCT NSRR STRUCTURES AND RETAINING WALLS AT 5TH AND 6TH STREETS ACCORDING TO CONSTRUCTION SEQUENCE SHOWN ON RETAINING WALL PLANS.

LEGEND

- FUTURE TRACK CONSTRUCTION UPRR MAIN 1
- (A) EXISTING NSRR MAIN 1
- (B) EXISTING NSRR TRACK 1 OUT OF SERVICE
- (C) EXISTING UPRR
- TWO-WAY TRAFFIC
- ONE-WAY TRAFFIC
- BARRICADE(S) WITH ROAD CLOSED SIGN ATTACHED
- ACTIVE CONSTRUCTION ZONE

FINAL

FILE NAME = D609L0179B-Staging_Plans-USIV.dgn
USIV_PLANI

USER NAME = Pop00275
PLOT SCALE = 400.0000' / in.
PLOT DATE = 4/10/2019

DESIGNED - GCN
DRAWN - CLG
CHECKED - JWM/GCN
DATE - 03/15/2019

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
STAGING PLAN - TRACK - 1

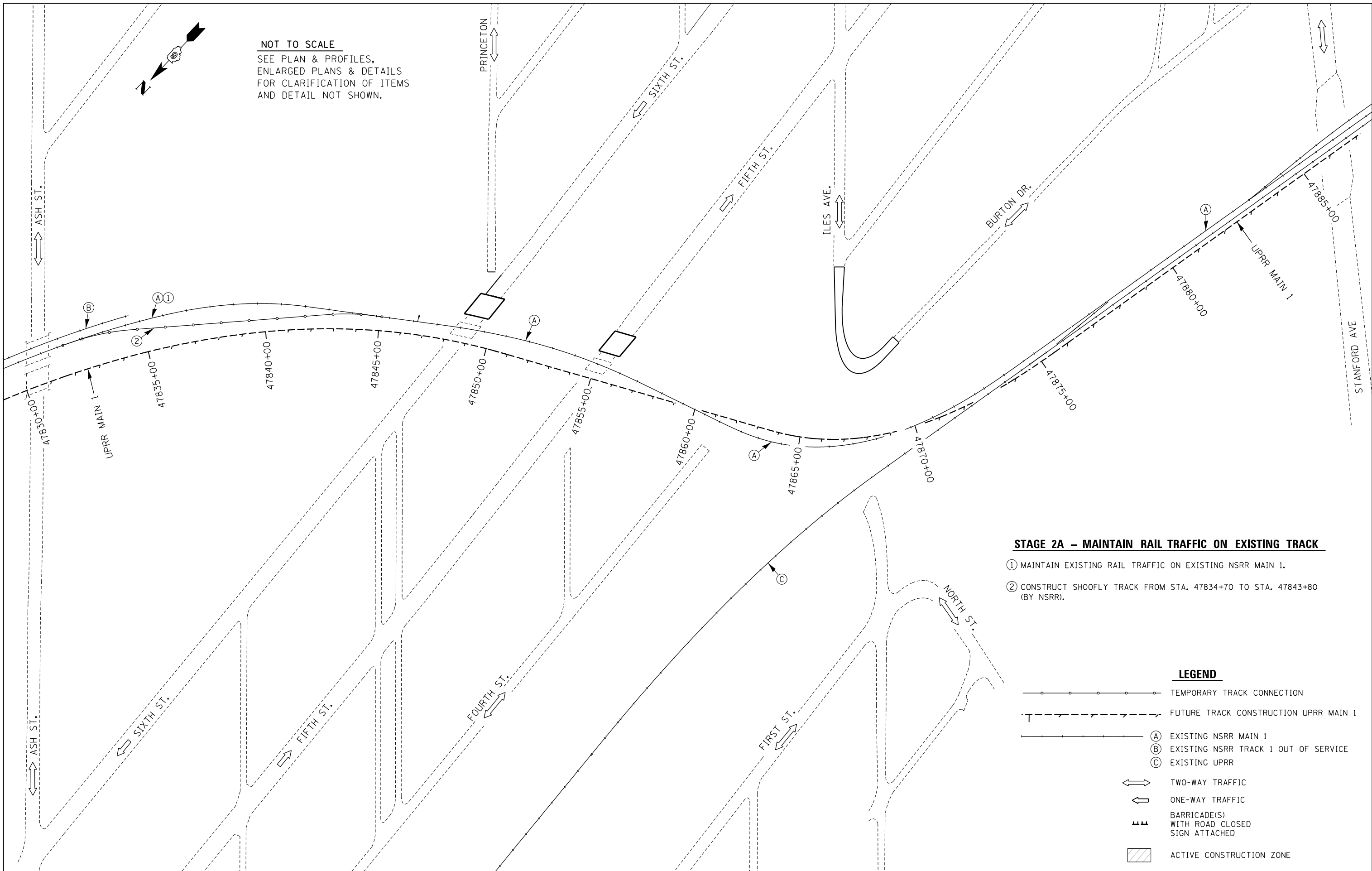
SCALE: SHEET 1 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	118
	09L0179B	CONTRACT NO.	93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

NOT TO SCALE
SEE PLAN & PROFILES,
ENLARGED PLANS & DETAILS
FOR CLARIFICATION OF ITEMS
AND DETAIL NOT SHOWN.



STAGE 2A – MAINTAIN RAIL TRAFFIC ON EXISTING TRACK

- ① MAINTAIN EXISTING RAIL TRAFFIC ON EXISTING NSRR MAIN 1.
- ② CONSTRUCT SHOOFLY TRACK FROM STA. 47834+70 TO STA. 47843+80 (BY NSRR).

LEGEND

- TEMPORARY TRACK CONNECTION
- FUTURE TRACK CONSTRUCTION UPRR MAIN 1
- (A) EXISTING NSRR MAIN 1
- (B) EXISTING NSRR TRACK 1 OUT OF SERVICE
- (C) EXISTING UPRR
- TWO-WAY TRAFFIC
- ONE-WAY TRAFFIC
- BARRICADE(S) WITH ROAD CLOSED SIGN ATTACHED
- ACTIVE CONSTRUCTION ZONE

FINAL
FILE NAME = D609L0179B-Staging_Plans-USIV.dgn
USIV_PLAN2

USER NAME = Pop00275	DESIGNED - GCN	REVISED -
DRAWN - CLG	CHECKED - JWM/GCN	REVISED -
PLOT SCALE = 400.0000' / in.	DATE - 03/15/2019	REVISED -
PLOT DATE = 4/10/2019		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
STAGING PLAN – TRACK – 2

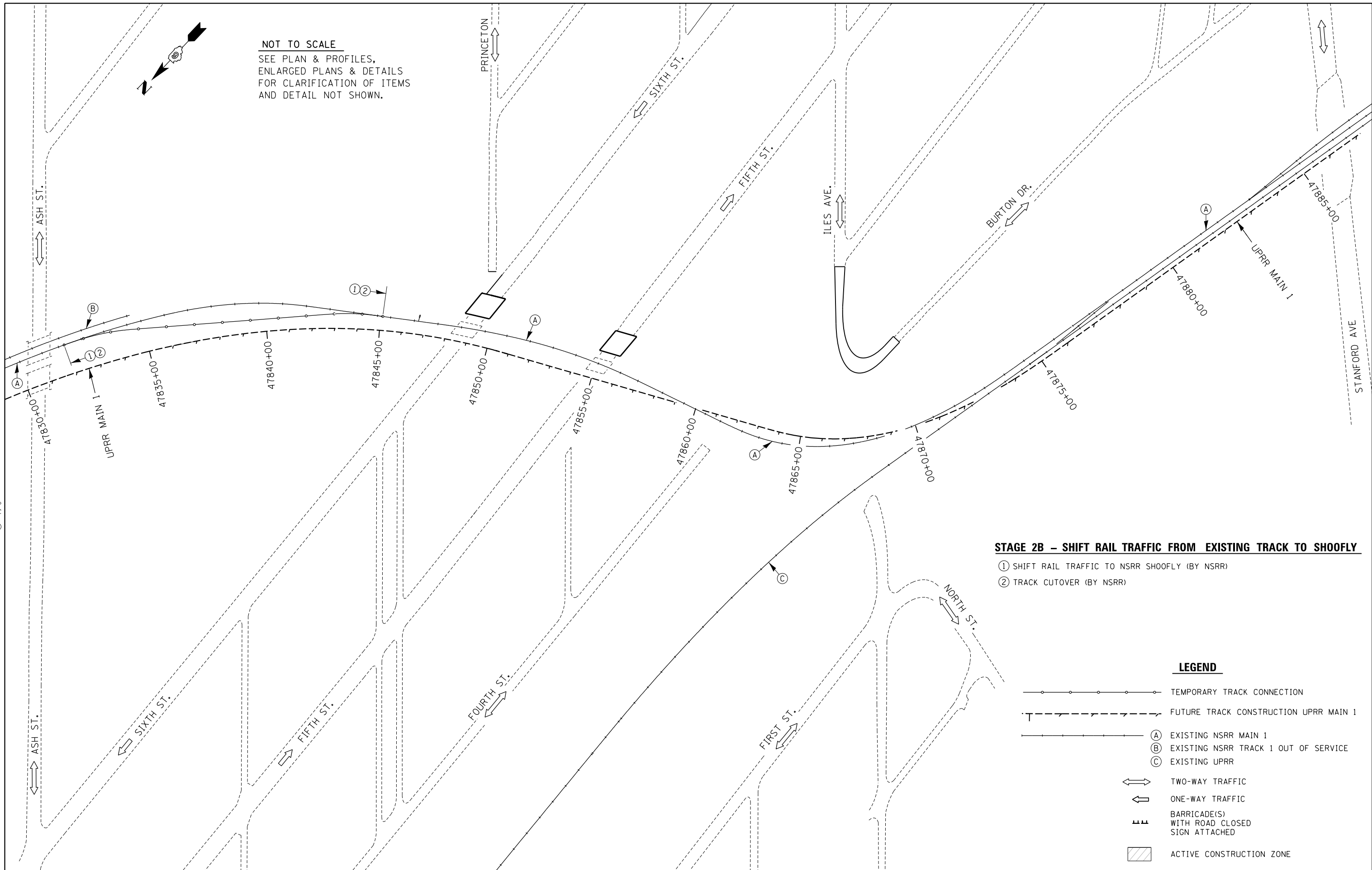
SCALE: SHEET 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	119
	09L0179B		CONTRACT NO. 93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

NOT TO SCALE
SEE PLAN & PROFILES,
ENLARGED PLANS & DETAILS
FOR CLARIFICATION OF ITEMS
AND DETAIL NOT SHOWN.



STAGE 2B - SHIFT RAIL TRAFFIC FROM EXISTING TRACK TO SHOOFLY

- ① SHIFT RAIL TRAFFIC TO NSRR SHOOFLY (BY NSRR)
- ② TRACK CUTOVER (BY NSRR)

LEGEND

- TEMPORARY TRACK CONNECTION
- FUTURE TRACK CONSTRUCTION UPRR MAIN 1
- (A) EXISTING NSRR MAIN 1
- (B) EXISTING NSRR TRACK 1 OUT OF SERVICE
- (C) EXISTING UPRR
- TWO-WAY TRAFFIC
- ONE-WAY TRAFFIC
- BARRICADE(S) WITH ROAD CLOSED SIGN ATTACHED
- ACTIVE CONSTRUCTION ZONE

FINAL

FILE NAME = D609L0179B-Staging_Plans-USIV.dgn
 USIV_PLAN3

USER NAME = Pop00275
 PLOT SCALE = 400.0000' / in.
 PLOT DATE = 4/10/2019

DESIGNED - GCN
 DRAWN - CLG
 CHECKED - JWM/GCN
 DATE - 03/15/2019

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
STAGING PLAN - TRACK - 3

SCALE: SHEET 3 OF 7 SHEETS STA. TO STA.

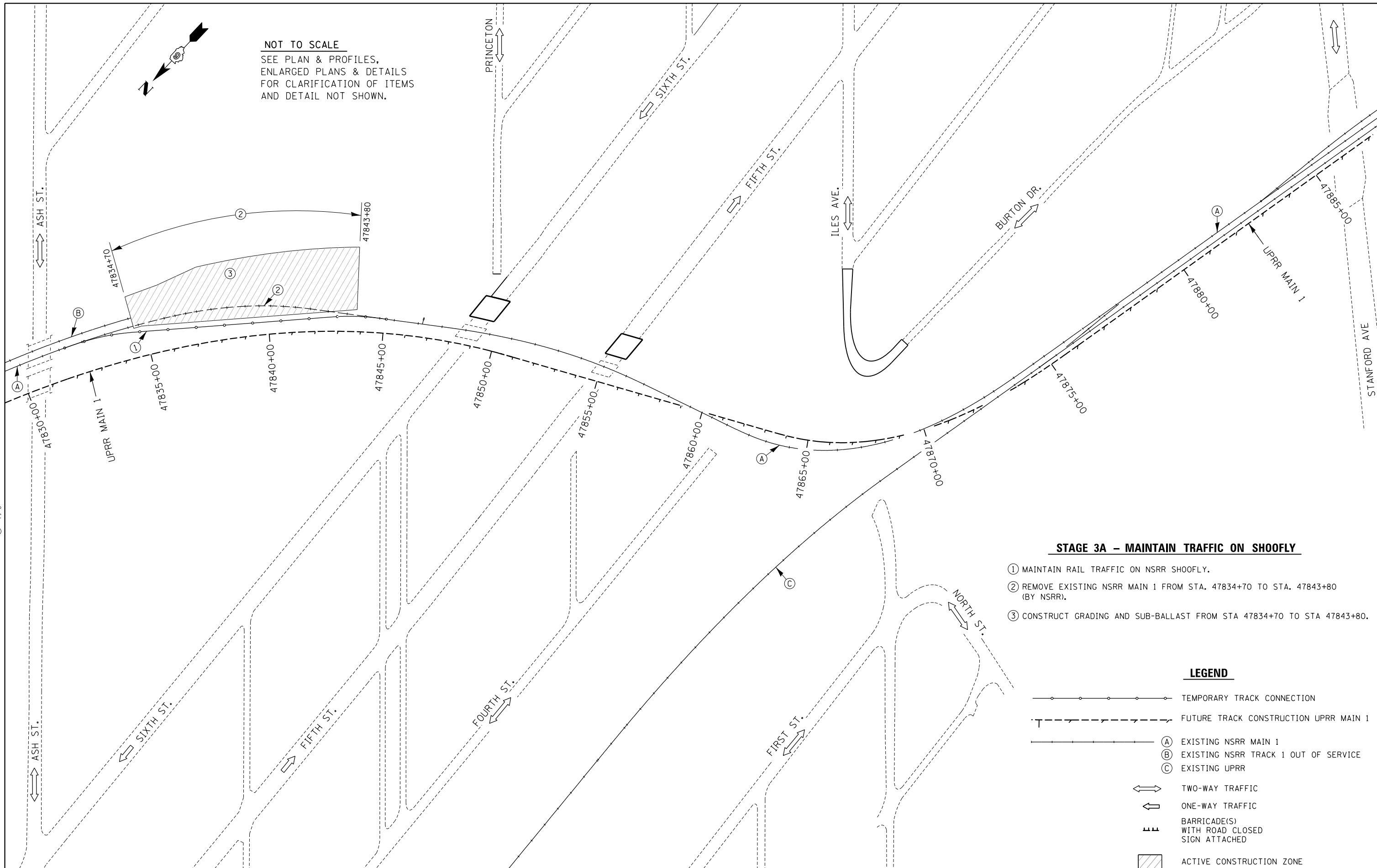
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	120
	09L0179B		CONTRACT NO. 93733	

•666 & 666 ALT. ILLINOIS FED. AID PROJECT



© Copyright Hanson Professional Services Inc. 2019

NOT TO SCALE
SEE PLAN & PROFILES,
ENLARGED PLANS & DETAILS
FOR CLARIFICATION OF ITEMS
AND DETAIL NOT SHOWN.



STAGE 3A – MAINTAIN TRAFFIC ON SHOOFLY

- ① MAINTAIN RAIL TRAFFIC ON NSRR SHOOFLY.
- ② REMOVE EXISTING NSRR MAIN 1 FROM STA. 47834+70 TO STA. 47843+80 (BY NSRR).
- ③ CONSTRUCT GRADING AND SUB-BALLAST FROM STA 47834+70 TO STA 47843+80.

LEGEND

- TEMPORARY TRACK CONNECTION
- FUTURE TRACK CONSTRUCTION UPRR MAIN 1
- (A) EXISTING NSRR MAIN 1
- (B) EXISTING NSRR TRACK 1 OUT OF SERVICE
- (C) EXISTING UPRR
- TWO-WAY TRAFFIC
- ONE-WAY TRAFFIC
- BARRICADE(S) WITH ROAD CLOSED SIGN ATTACHED
- ACTIVE CONSTRUCTION ZONE

FINAL

FILE NAME = D609L0179B-Staging_Plans-USIV.dgn
USIV_PLAN4

USER NAME = Pop00275
PLOT SCALE = 400.0000' / in.
PLOT DATE = 4/10/2019

DESIGNED - GCN
DRAWN - CLG
CHECKED - JWM/GCN
DATE - 03/15/2019

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
STAGING PLAN – TRACK – 4

SCALE: SHEET 4 OF 7 SHEETS STA. TO STA.

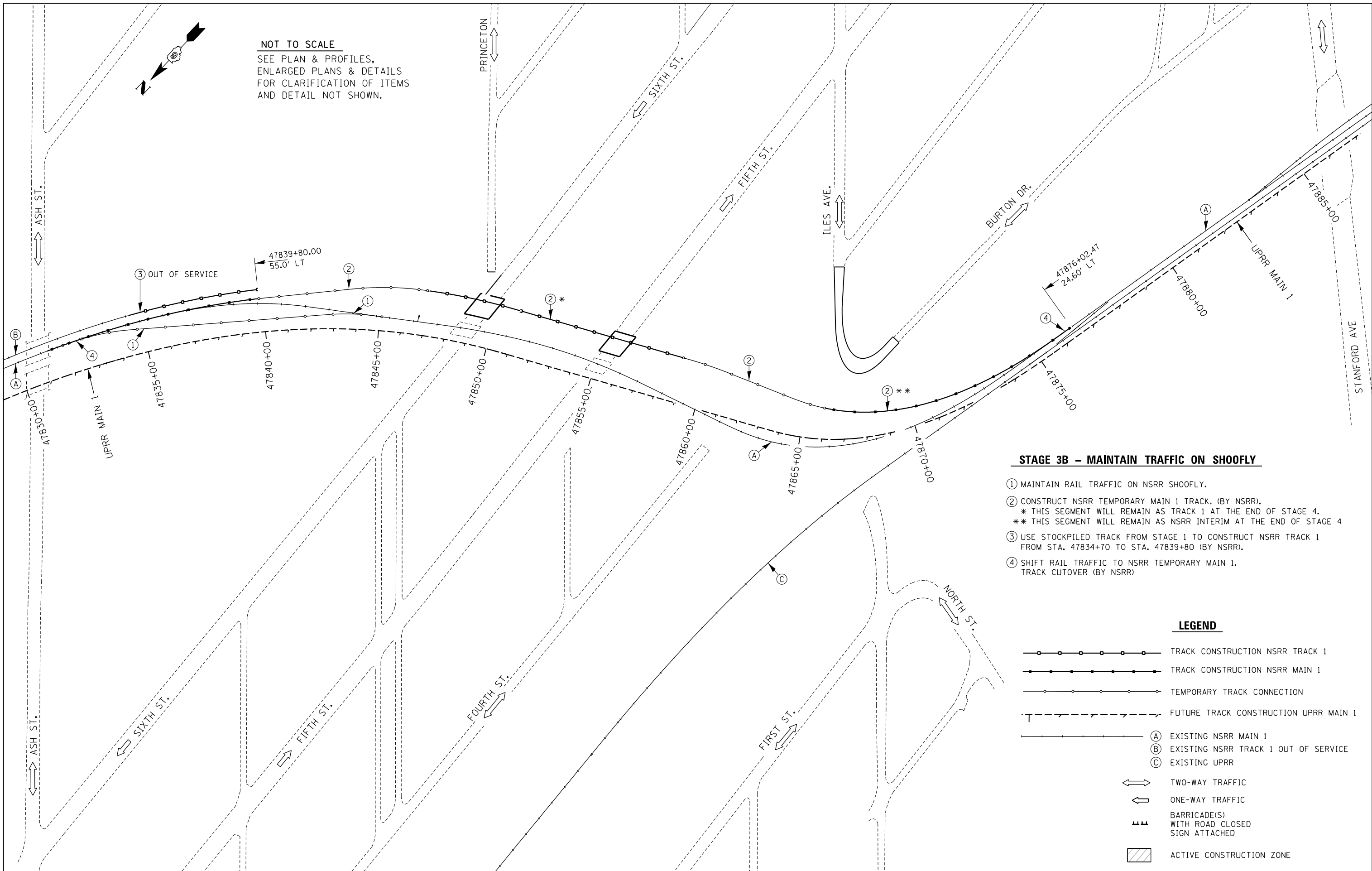
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	121
	09L0179B		CONTRACT NO. 93733	

•666 & 666 ALT. ILLINOIS FED. AID PROJECT



© Copyright Hanson Professional Services Inc. 2019

NOT TO SCALE
SEE PLAN & PROFILES,
ENLARGED PLANS & DETAILS
FOR CLARIFICATION OF ITEMS
AND DETAIL NOT SHOWN.



STAGE 3B - MAINTAIN TRAFFIC ON SHOOFLY

- ① MAINTAIN RAIL TRAFFIC ON NSRR SHOOFLY.
- ② CONSTRUCT NSRR TEMPORARY MAIN 1 TRACK. (BY NSRR).
* THIS SEGMENT WILL REMAIN AS TRACK 1 AT THE END OF STAGE 4.
** THIS SEGMENT WILL REMAIN AS NSRR INTERIM AT THE END OF STAGE 4
- ③ USE STOCKPILED TRACK FROM STAGE 1 TO CONSTRUCT NSRR TRACK 1 FROM STA. 47834+70 TO STA. 47839+80 (BY NSRR).
- ④ SHIFT RAIL TRAFFIC TO NSRR TEMPORARY MAIN 1. TRACK CUTOVER (BY NSRR)

LEGEND

- TRACK CONSTRUCTION NSRR TRACK 1
- TRACK CONSTRUCTION NSRR MAIN 1
- TEMPORARY TRACK CONNECTION
- FUTURE TRACK CONSTRUCTION UPRR MAIN 1
- (A) EXISTING NSRR MAIN 1
- (B) EXISTING NSRR TRACK 1 OUT OF SERVICE
- (C) EXISTING UPRR
- TWO-WAY TRAFFIC
- ONE-WAY TRAFFIC
- BARRICADE(S) WITH ROAD CLOSED SIGN ATTACHED
- ACTIVE CONSTRUCTION ZONE

FINAL

FILE NAME = D609L0179B-Staging_Plans-USIV.dgn
USIV_PLANS

USER NAME = Pop00275
PLOT SCALE = 400.0000' / in.
PLOT DATE = 4/10/2019

DESIGNED - GCN
DRAWN - CLG
CHECKED - JWM/GCN
DATE - 03/15/2019

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
STAGING PLAN - TRACK - 5

SCALE: SHEET 5 OF 7 SHEETS STA. TO STA.

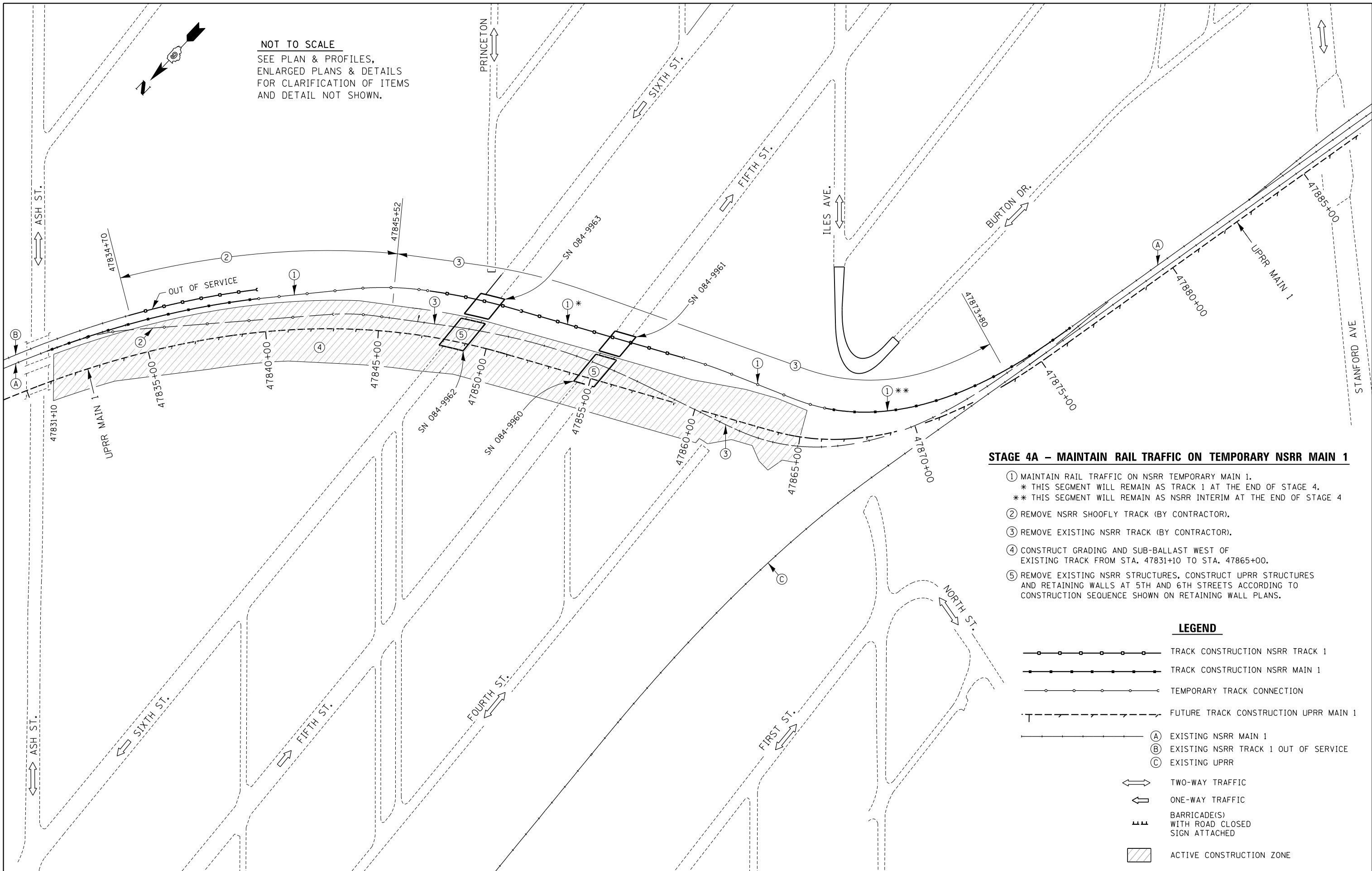
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	122
	09L0179B			CONTRACT NO. 93733

•666 & 666 ALT. ILLINOIS FED. AID PROJECT



© Copyright Hanson Professional Services Inc. 2019

NOT TO SCALE
SEE PLAN & PROFILES,
ENLARGED PLANS & DETAILS
FOR CLARIFICATION OF ITEMS
AND DETAIL NOT SHOWN.



STAGE 4A - MAINTAIN RAIL TRAFFIC ON TEMPORARY NSRR MAIN 1

- ① MAINTAIN RAIL TRAFFIC ON NSRR TEMPORARY MAIN 1.
* THIS SEGMENT WILL REMAIN AS TRACK 1 AT THE END OF STAGE 4.
** THIS SEGMENT WILL REMAIN AS NSRR INTERIM AT THE END OF STAGE 4
- ② REMOVE NSRR SHOOFLY TRACK (BY CONTRACTOR).
- ③ REMOVE EXISTING NSRR TRACK (BY CONTRACTOR).
- ④ CONSTRUCT GRADING AND SUB-BALLAST WEST OF EXISTING TRACK FROM STA. 47831+10 TO STA. 47865+00.
- ⑤ REMOVE EXISTING NSRR STRUCTURES, CONSTRUCT UPRR STRUCTURES AND RETAINING WALLS AT 5TH AND 6TH STREETS ACCORDING TO CONSTRUCTION SEQUENCE SHOWN ON RETAINING WALL PLANS.

LEGEND

- TRACK CONSTRUCTION NSRR TRACK 1
- TRACK CONSTRUCTION NSRR MAIN 1
- TEMPORARY TRACK CONNECTION
- FUTURE TRACK CONSTRUCTION UPRR MAIN 1
- (A) EXISTING NSRR MAIN 1
- (B) EXISTING NSRR TRACK 1 OUT OF SERVICE
- (C) EXISTING UPRR
- TWO-WAY TRAFFIC
- ONE-WAY TRAFFIC
- BARRICADE(S) WITH ROAD CLOSED SIGN ATTACHED
- ACTIVE CONSTRUCTION ZONE

FINAL

FILE NAME = D609L0179B-Staging_Plans-USIV.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
		CHECKED - JWM/GCN	REVISED -
USIV_PLAN6	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
STAGING PLAN - TRACK - 6

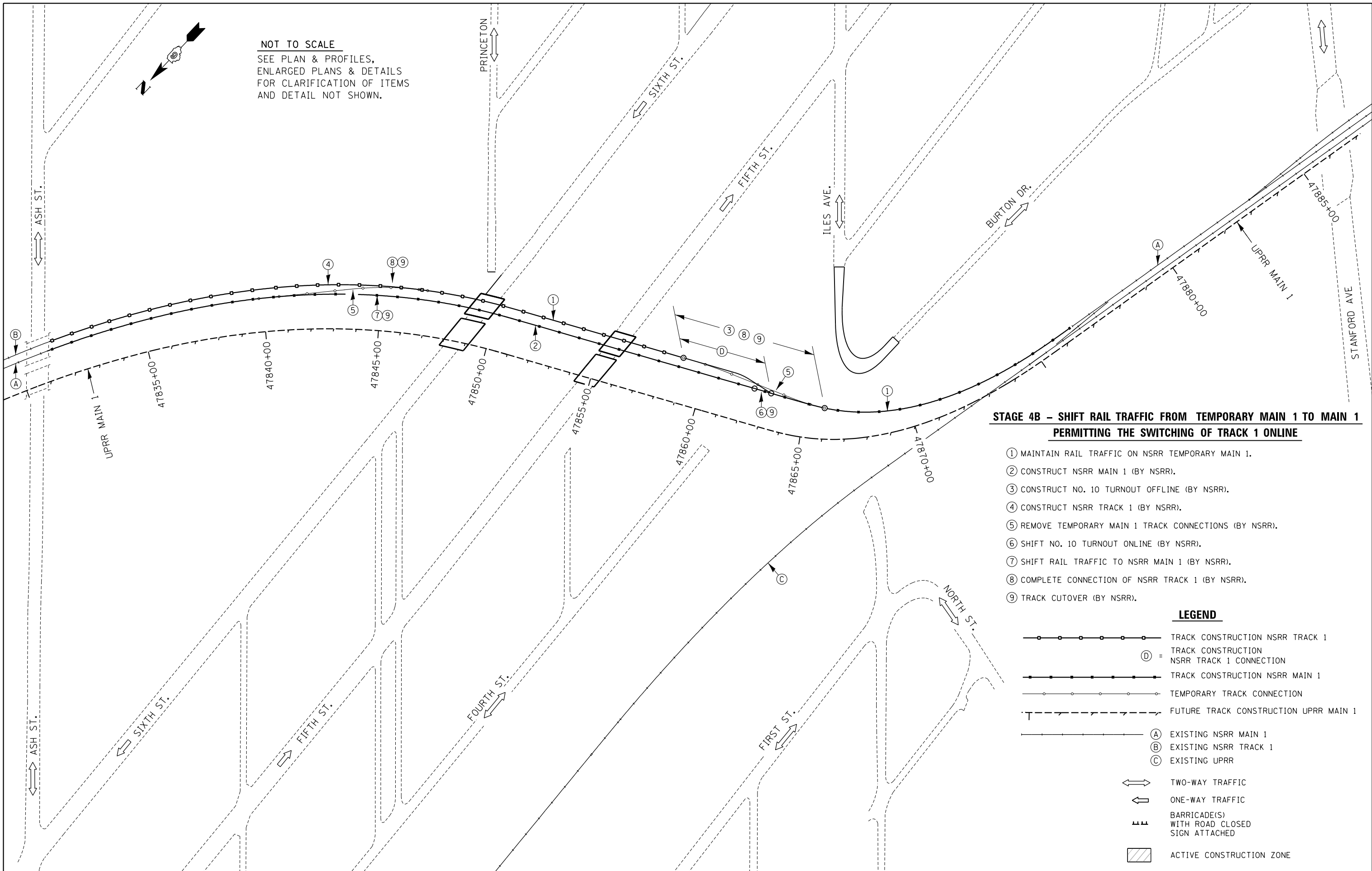
SCALE: SHEET 6 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	123
	09L0179B		CONTRACT NO.	93733
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

NOT TO SCALE
SEE PLAN & PROFILES,
ENLARGED PLANS & DETAILS
FOR CLARIFICATION OF ITEMS
AND DETAIL NOT SHOWN.



**STAGE 4B - SHIFT RAIL TRAFFIC FROM TEMPORARY MAIN 1 TO MAIN 1
PERMITTING THE SWITCHING OF TRACK 1 ONLINE**

- ① MAINTAIN RAIL TRAFFIC ON NSRR TEMPORARY MAIN 1.
- ② CONSTRUCT NSRR MAIN 1 (BY NSRR).
- ③ CONSTRUCT NO. 10 TURNOUT OFFLINE (BY NSRR).
- ④ CONSTRUCT NSRR TRACK 1 (BY NSRR).
- ⑤ REMOVE TEMPORARY MAIN 1 TRACK CONNECTIONS (BY NSRR).
- ⑥ SHIFT NO. 10 TURNOUT ONLINE (BY NSRR).
- ⑦ SHIFT RAIL TRAFFIC TO NSRR MAIN 1 (BY NSRR).
- ⑧ COMPLETE CONNECTION OF NSRR TRACK 1 (BY NSRR).
- ⑨ TRACK CUTOVER (BY NSRR).

LEGEND

- TRACK CONSTRUCTION NSRR TRACK 1
- TRACK CONSTRUCTION NSRR TRACK 1 CONNECTION
- TRACK CONSTRUCTION NSRR MAIN 1
- TEMPORARY TRACK CONNECTION
- FUTURE TRACK CONSTRUCTION UPRR MAIN 1
- (A) EXISTING NSRR MAIN 1
- (B) EXISTING NSRR TRACK 1
- (C) EXISTING UPRR
- TWO-WAY TRAFFIC
- ONE-WAY TRAFFIC
- BARRICADE(S) WITH ROAD CLOSED SIGN ATTACHED
- ACTIVE CONSTRUCTION ZONE

FINAL

FILE NAME = D609L0179B-Staging_Plans-USIV.dgn
USIV_PLAN7

USER NAME = Pop00275
PLOT SCALE = 400.0000' / in.
PLOT DATE = 4/10/2019

DESIGNED - GCN
DRAWN - CLG
CHECKED - JWM/GCN
DATE - 03/15/2019

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

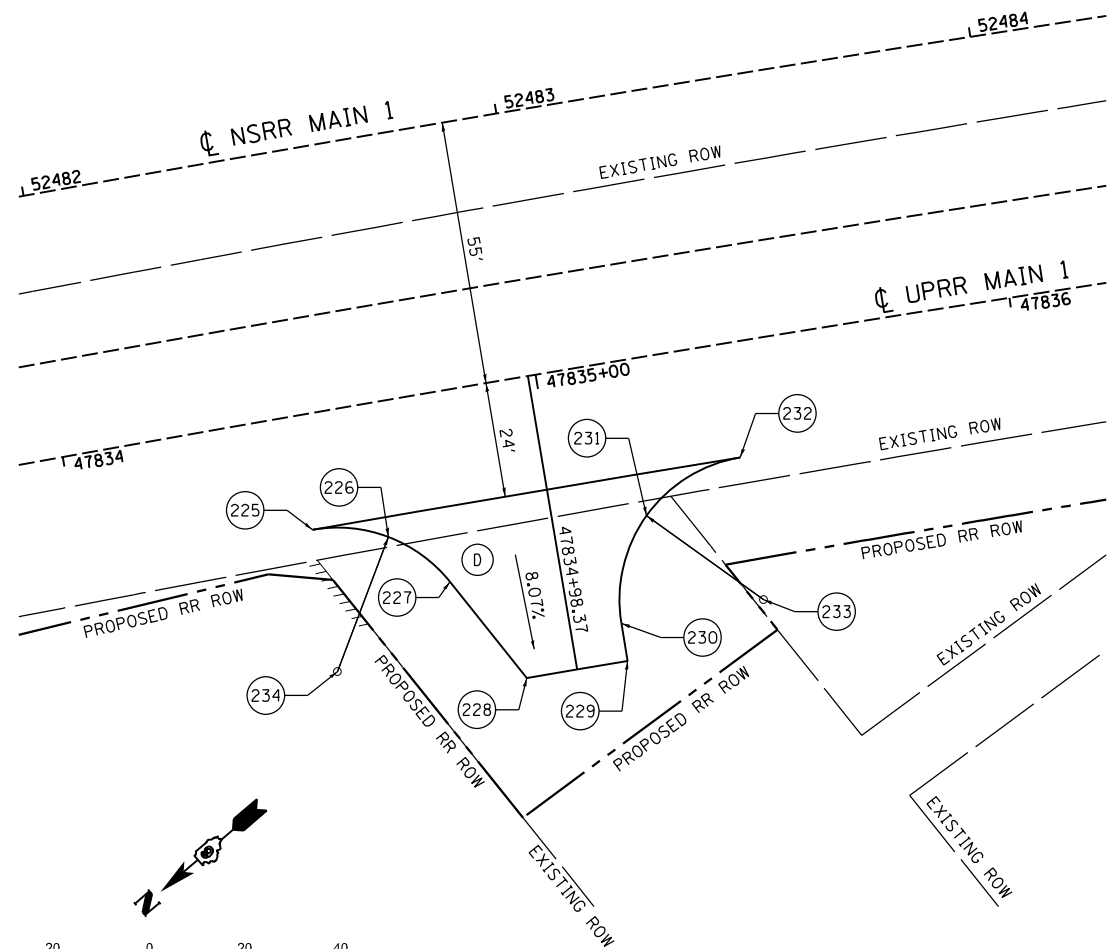
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
STAGING PLAN - TRACK - 7**

SCALE: SHEET 7 OF 7 SHEETS STA. TO STA.

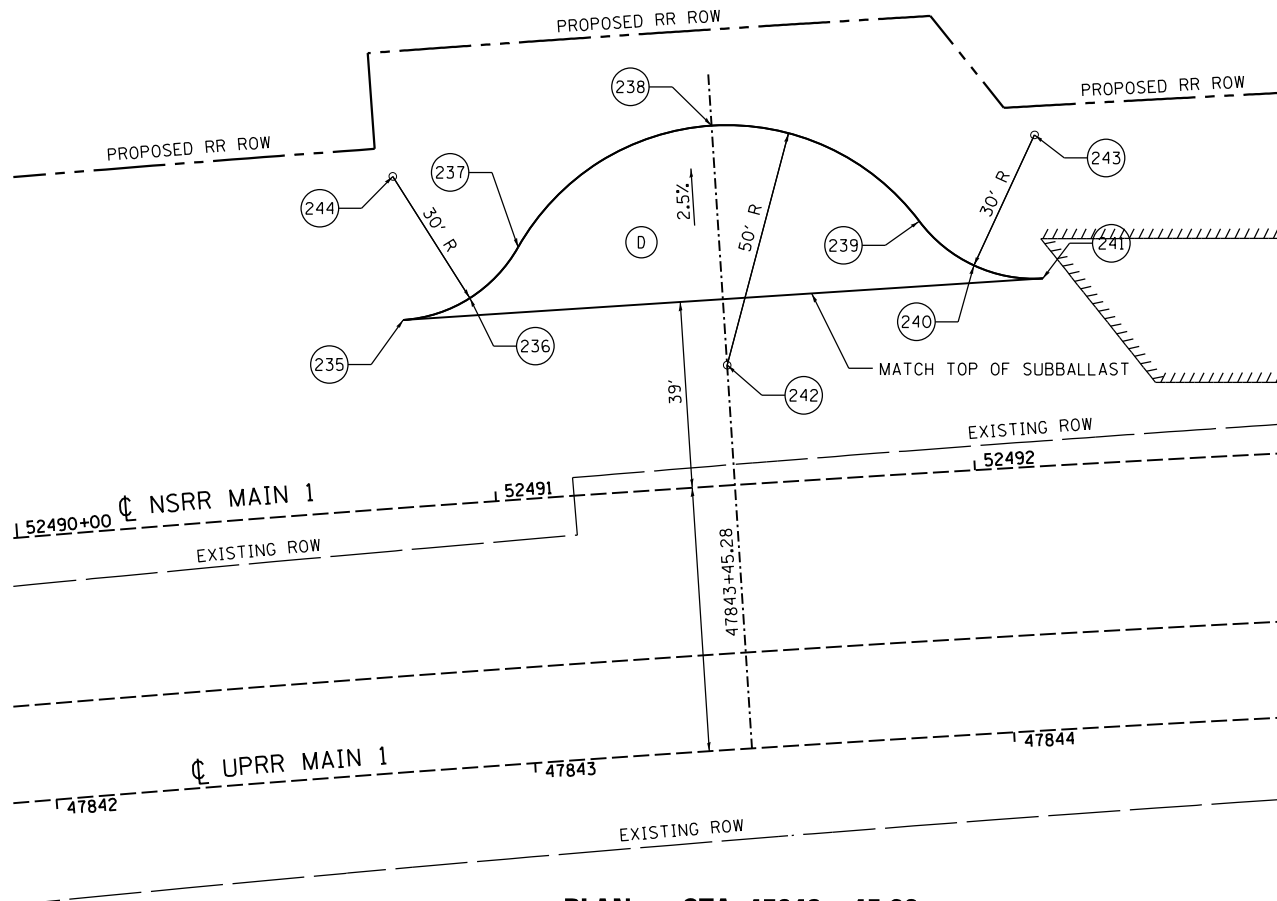
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	124
	09L0179B	CONTRACT NO.	93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



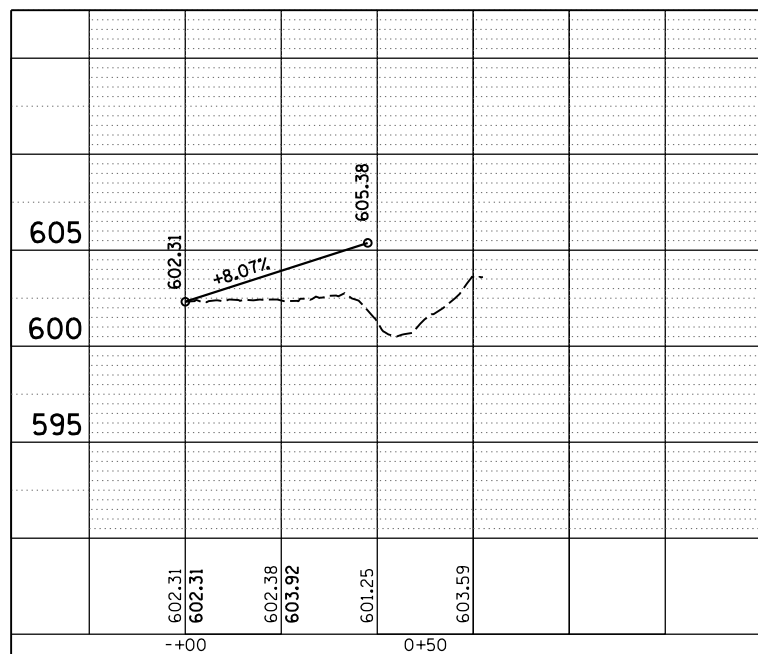
© Copyright Hanson Professional Services Inc. 2019



PLAN - STA. 47834 + 98.37



PLAN - STA. 47843 + 45.28



PROFILE - STA. 47834 + 98.37

POINT #	STATION	OFFSET	NORTHING	EASTING	ELEV.
225	47834+48.69	24.00	1,133,530.47	2,442,930.11	605.38
226	47834+64.03	28.17	1,133,518.83	2,442,919.36	604.50
227	47834+75.13	39.53	1,133,514.29	2,442,904.17	603.63
228	47834+87.63	62.00	1,133,513.69	2,442,878.51	602.23
229	47835+09.11	62.00	1,133,494.83	2,442,868.58	602.44
230	47835+09.11	54.05	1,133,491.12	2,442,875.61	602.86
231	47835+17.97	32.79	1,133,473.39	2,442,890.29	604.12
232	47835+39.31	24.00	1,133,450.49	2,442,888.09	605.38
233	47835+39.31	54.00	1,133,464.58	2,442,861.61	NA
234	47834+48.69	54.00	1,133,544.28	2,442,903.48	NA

STA. 47834 + 45.28

POINT #	STATION	OFFSET	NORTHING	EASTING	ELEV.
235	47842+79.28	-94.00	1,132,751.00	2,442,611.59	605.75
236	47842+93.29	-97.57	1,132,737.18	2,442,606.82	605.71
237	47843+03.95	-107.43	1,132,722.75	2,442,609.15	605.51
238	47843+45.28	-130.00	1,132,675.34	2,442,604.86	605.10
239	47843+86.61	-107.43	1,132,653.01	2,442,562.81	605.94
240	47843+97.27	-97.57	1,132,649.56	2,442,548.60	606.22
241	47844+11.28	-94.00	1,132,639.81	2,442,537.71	606.36
242	47843+45.28	-80.00	1,132,703.01	2,442,563.21	NA
243	47844+11.28	-124.00	1,132,623.01	2,442,562.57	NA
244	47842+79.28	-124.00	1,132,734.60	2,442,636.71	NA

NOTES

- (A) SEE CROSS SECTION SHEETS FOR SECTION THRU ENTRANCES AND TURNAROUND.
- (B) SEE FENCING PLAN FOR FENCE AND GATE LOCATIONS.
- (C) PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH.
- (D) SUBBALLAST, 12 INCH.

FINAL

FILE NAME = D609L0179B-sht-enlarged-plan-Rail-US4.dgn	USER NAME = Pop00275	DESIGNED - GNC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JWM/MNM	DRAWN - RSJ	REVISED -
PLOT DATE = 4/10/2019	DATE - 03/15/2019		REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SPRINGFIELD RAIL IMPROVEMENTS PROJECT	
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS	
TRACK ACCESS ROAD ENTRANCE & TURNAROUND DETAILS - 1	
SCALE:	SHEET 1 OF 4 SHEETS STA. TO STA.

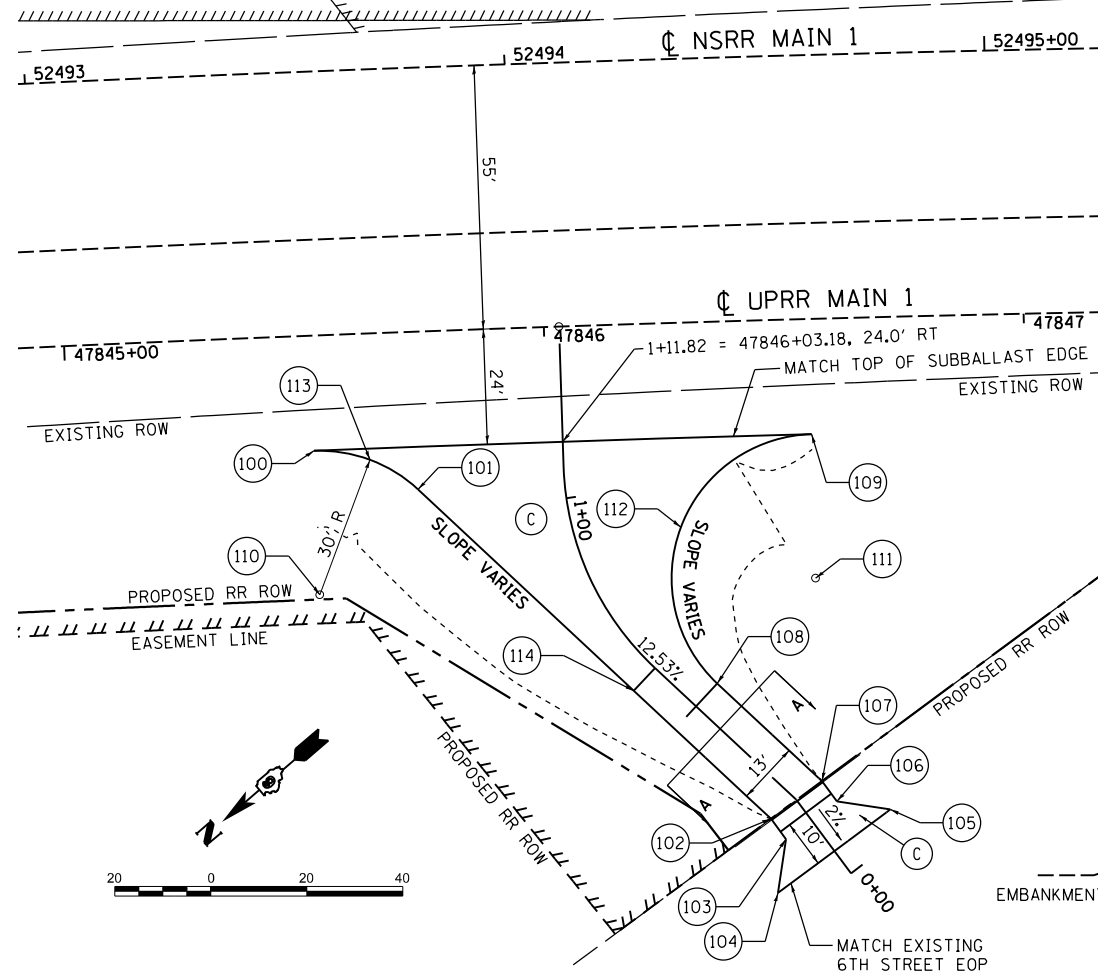
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
09L0179B	(109) VB,(110) VB-5	SANGAMON	382	125
CONTRACT NO. 93733		ILLINOIS FED. AID PROJECT		



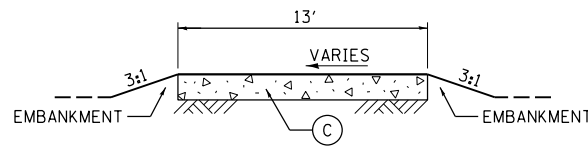
© Copyright Hanson Professional Services Inc. 2019

STA. 47846 + 03.17

POINT #	STATION	OFFSET	NORTHING	EASTING	ELEV.
100	47845+51.16	24.00	1,132,591.01	2,442,360.88	606.56
101	47845+72.57	32.87	1,132,578.66	2,442,341.35	604.72
102	47846+44.40	103.87	1,132,561.75	2,442,242.20	595.18
103	47846+47.45	108.20	1,132,561.83	2,442,236.93	595.07
104	47846+45.43	119.31	1,132,569.94	2,442,229.07	594.33
105	47846+69.62	102.58	1,132,540.79	2,442,228.69	593.94
106	47846+58.42	100.62	1,132,548.61	2,442,236.76	594.92
107	47846+55.39	96.32	1,132,548.53	2,442,242.00	595.02
108	47846+33.93	75.34	1,132,553.55	2,442,271.42	598.77
109	47846+55.18	24.00	1,132,506.45	2,442,300.81	606.76
110	47845+51.16	54.00	1,132,608.23	2,442,336.31	NA
111	47846+55.18	54.00	1,132,523.97	2,442,276.47	NA
112	47846+27.28	42.57	1,132,539.86	2,442,301.92	602.76
113	47845+62.75	26.31	1,132,582.88	2,442,352.35	605.64
114	47846+16.32	76.33	1,132,568.33	2,442,280.76	599.97

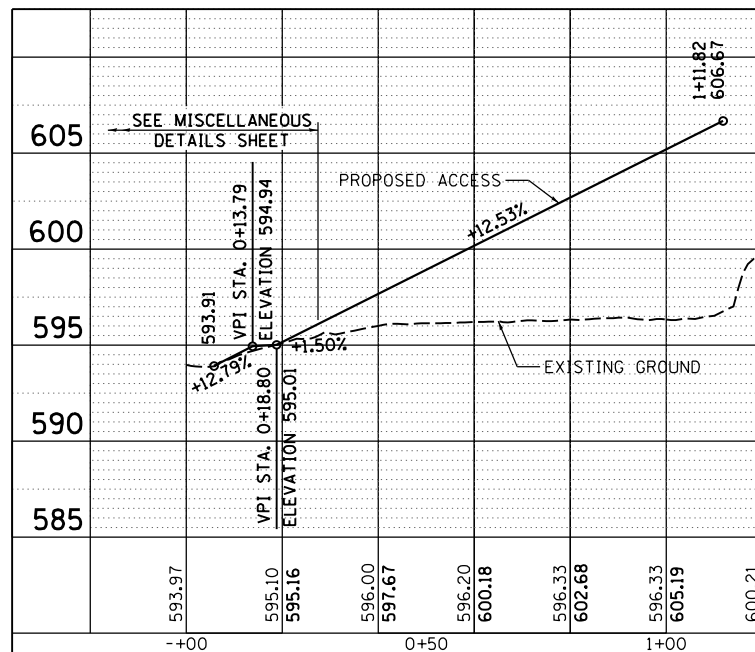


PLAN - STA. 47846 + 03.17



SECTION A-A

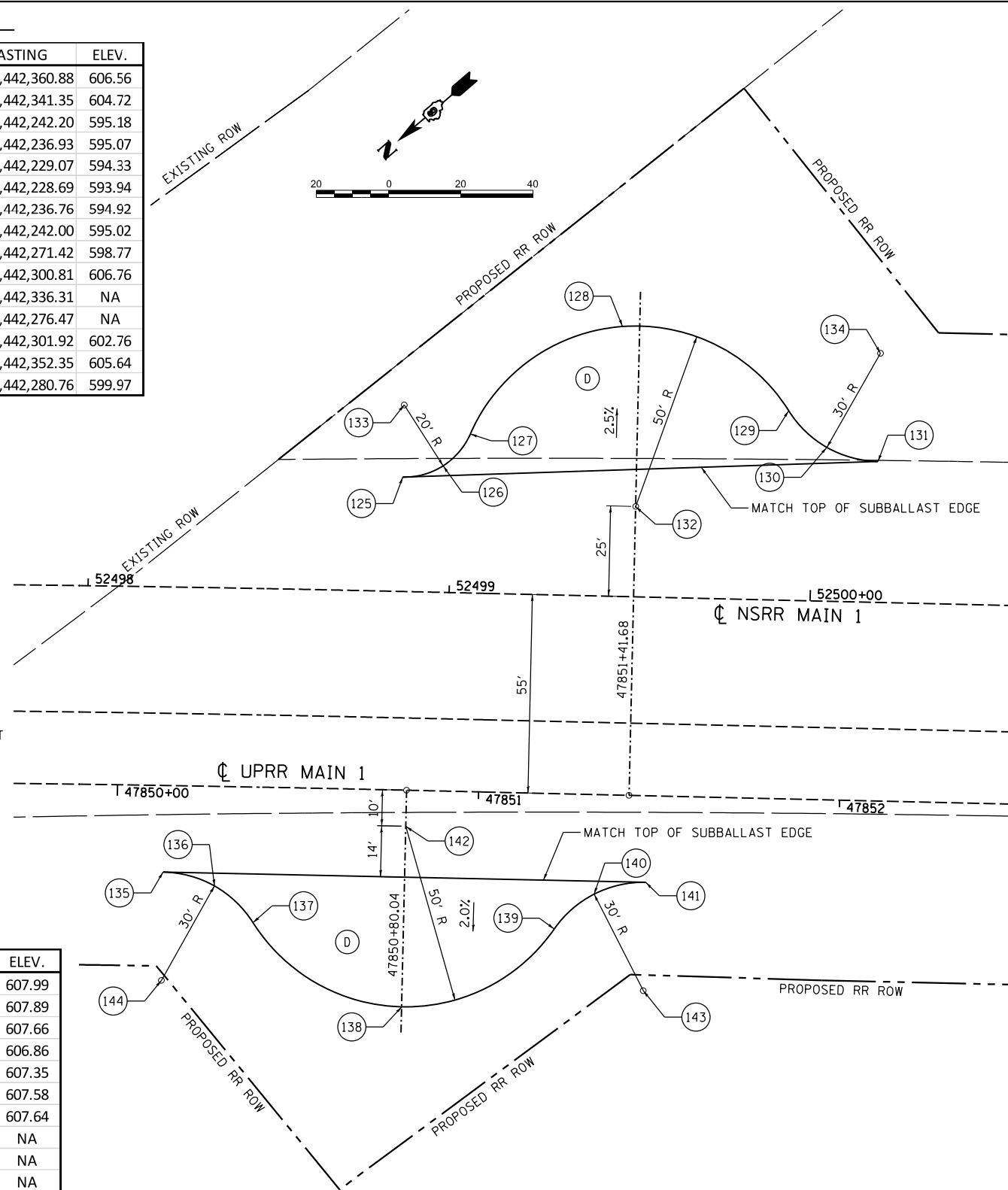
N.T.S.



PROFILE - STA. 47846 + 03.17

STA. 47850 + 80.04 & 47851 + 41.68

POINT #	STATION	OFFSET	NORTHING	EASTING	ELEV.
125	47850+77.05	-86.67	1,132,102.39	2,442,133.00	607.99
126	47850+88.12	-90.06	1,132,091.60	2,442,128.73	607.89
127	47850+95.45	-99.05	1,132,080.25	2,442,131.16	607.66
128	47851+36.89	-129.77	1,132,028.69	2,442,129.30	606.86
129	47851+83.43	-107.50	1,132,006.22	2,442,082.85	607.35
130	47851+94.26	-97.58	1,132,003.94	2,442,068.35	607.58
131	47852+08.49	-94.00	1,131,995.07	2,442,056.67	607.64
132	47851+41.68	-80.00	1,132,056.01	2,442,087.42	NA
133	47850+77.01	-106.67	1,132,089.94	2,442,148.66	NA
134	47852+08.49	-124.00	1,131,976.34	2,442,080.11	NA
135	47850+13.00	24.00	1,132,221.46	2,442,086.20	606.78
136	47850+27.33	27.60	1,132,212.48	2,442,074.52	606.69
137	47850+38.23	37.55	1,132,210.14	2,442,059.98	606.47
138	47850+80.10	60.00	1,132,191.47	2,442,016.45	605.95
139	47851+21.80	37.50	1,132,144.87	2,442,008.02	606.31
140	47851+32.63	27.59	1,132,130.23	2,442,009.01	606.49
141	47851+46.86	24.00	1,132,116.87	2,442,002.93	606.53
142	47850+80.04	10.00	1,132,160.33	2,442,055.57	NA
143	47851+46.86	54.00	1,132,135.59	2,441,979.49	NA
144	47850+13.00	54.00	1,132,240.02	2,442,062.63	NA



PLAN STA. 47850 + 80.04 & 47851 + 41.68

NOTES

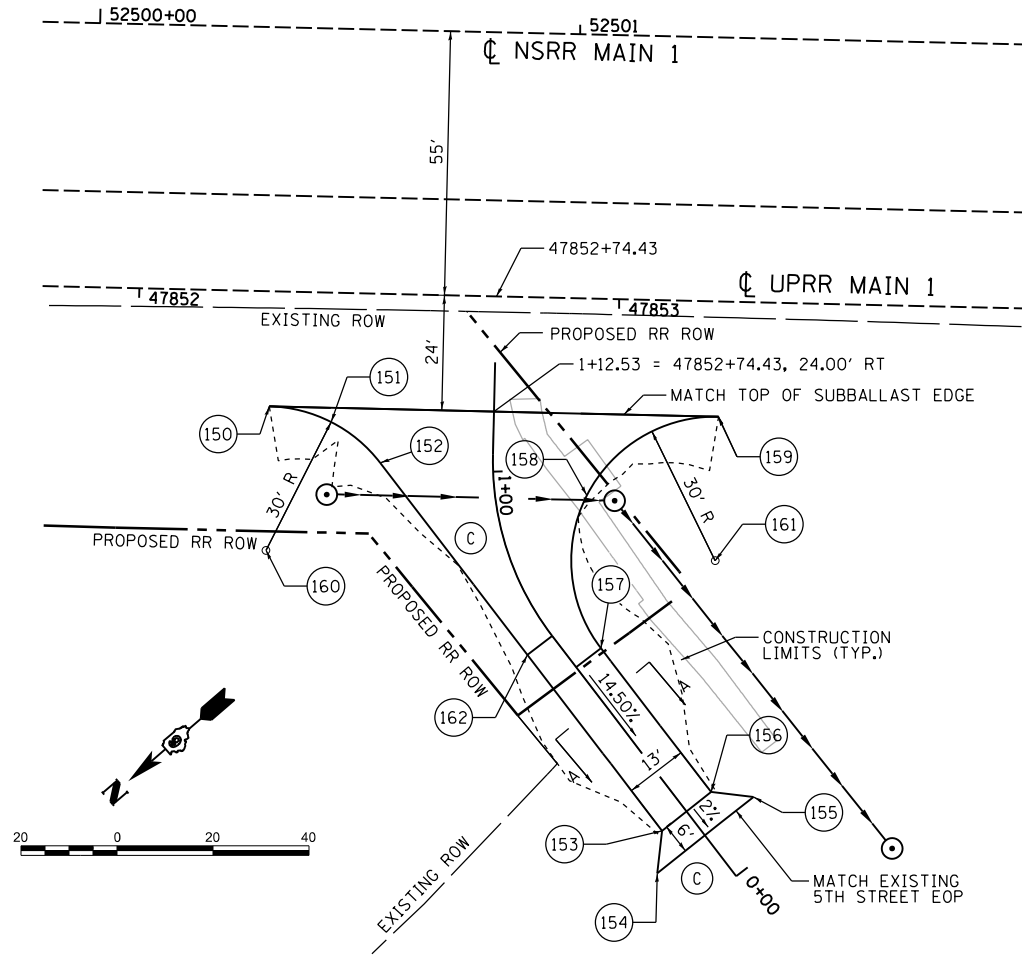
- (A) SEE CROSS SECTION SHEETS FOR SECTION THRU ENTRANCES AND TURNAROUND.
- (B) SEE FENCING PLAN FOR FENCE AND GATE LOCATIONS.
- (C) PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH. TYPE A FINISH.
- (D) SUBBALLAST, 12 INCH.

FINAL

FILE NAME = D609L0179B-shr-enlarged-plan-Rail-US4.dgn	USER NAME = Pop00275	DESIGNED - GNC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JWM/MNM	DRAWN - RSJ	REVISED -
PLOT DATE = 4/10/2019	DATE - 03/15/2019		REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SPRINGFIELD RAIL IMPROVEMENTS PROJECT		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS		•	(109) VB,(110) VB-5	SANGAMON	382	126
TRACK ACCESS ROAD ENTRANCE & TURNAROUND DETAILS - 2			09L0179B	CONTRACT NO.	93733	
SCALE:	SHEET 2 OF 4 SHEETS	STA.	TO STA.		*666 & 666 ALT. ILLINOIS FED. AID PROJECT	



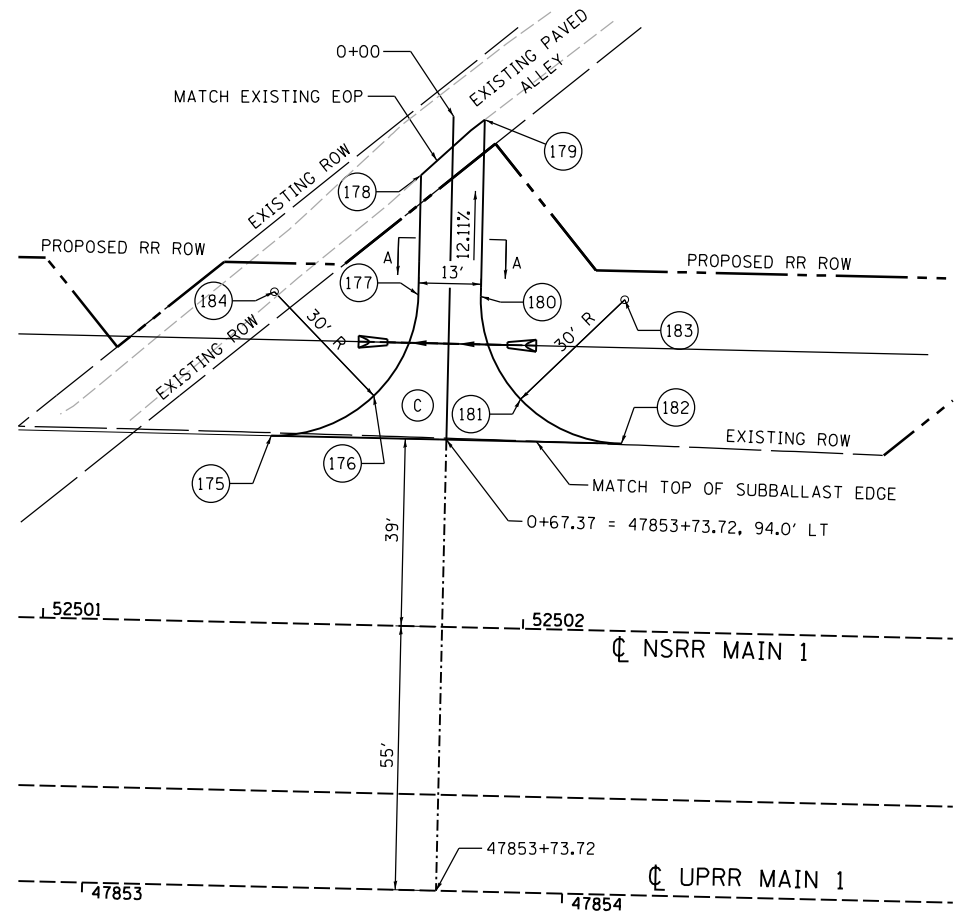
PLAN - STA. 47852 + 74.43

STA. 47852 + 74.43

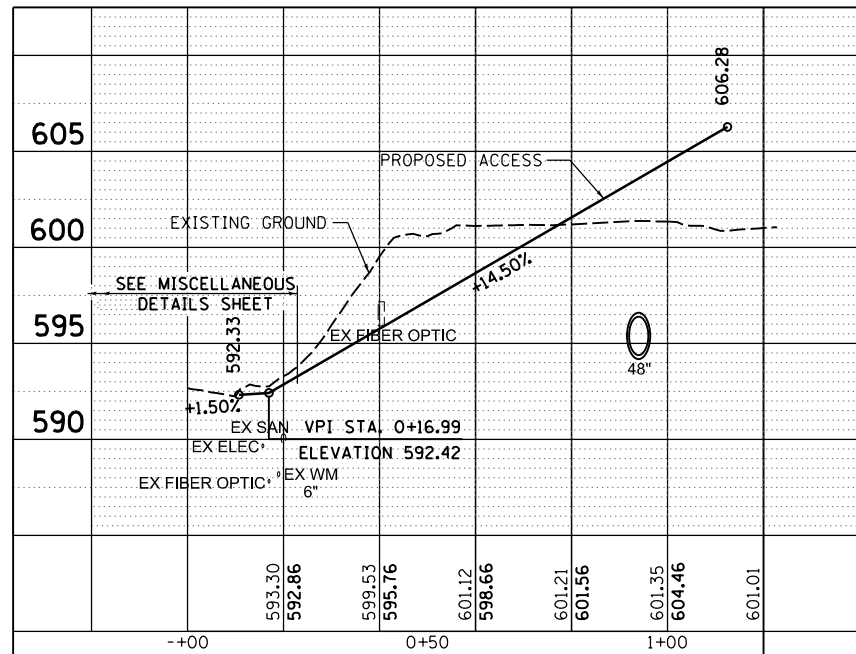
POINT #	STATION	OFFSET	NORTHING	EASTING	ELEV.
150	47852+27.62	24.00	1,132,053.77	2,441,952.53	606.37
151	47852+40.59	26.95	1,132,045.47	2,441,942.13	605.11
152	47852+51.01	35.22	1,132,042.49	2,441,929.17	603.84
153	47853+11.48	110.52	1,132,042.24	2,441,832.59	592.76
154	47853+10.67	119.37	1,132,048.40	2,441,826.18	592.95
155	47853+30.36	103.03	1,132,022.81	2,441,826.66	591.70
156	47853+21.48	102.21	1,132,029.24	2,441,832.84	592.10
157	47852+97.85	72.78	1,132,029.34	2,441,870.58	597.56
158	47852+94.19	41.03	1,132,012.38	2,441,897.68	601.87
159	47853+21.25	24.00	1,131,980.61	2,441,894.10	606.19
160	47852+27.62	54.00	1,132,072.49	2,441,929.09	NA
161	47853+21.25	54.00	1,131,999.34	2,441,870.66	NA
162	47852+82.58	74.53	1,132,042.36	2,441,878.75	599.07

STA. 47853 + 73.72

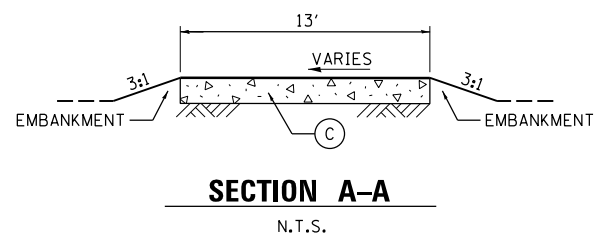
POINT #	STATION	OFFSET	NORTHING	EASTING	ELEV.
175	47853+37.22	-94.00	1,131,894.48	2,441,976.32	607.33
176	47853+58.44	-102.78	1,131,872.42	2,441,969.95	605.39
177	47853+67.22	-124.00	1,131,852.32	2,441,981.04	603.46
178	47853+67.22	-148.98	1,131,836.72	2,442,000.56	599.84
179	47853+80.22	-160.81	1,131,819.19	2,442,001.69	599.81
180	47853+80.22	-124.00	1,131,842.16	2,441,972.93	603.46
181	47853+89.01	-102.78	1,131,848.53	2,441,950.87	605.28
182	47854+10.22	-94.00	1,131,837.44	2,441,930.76	607.11
183	47854+10.22	-124.00	1,131,818.72	2,441,954.20	NA
184	47853+37.22	-124.00	1,131,875.76	2,441,999.76	NA



PLAN - STA. 47853 + 73.72

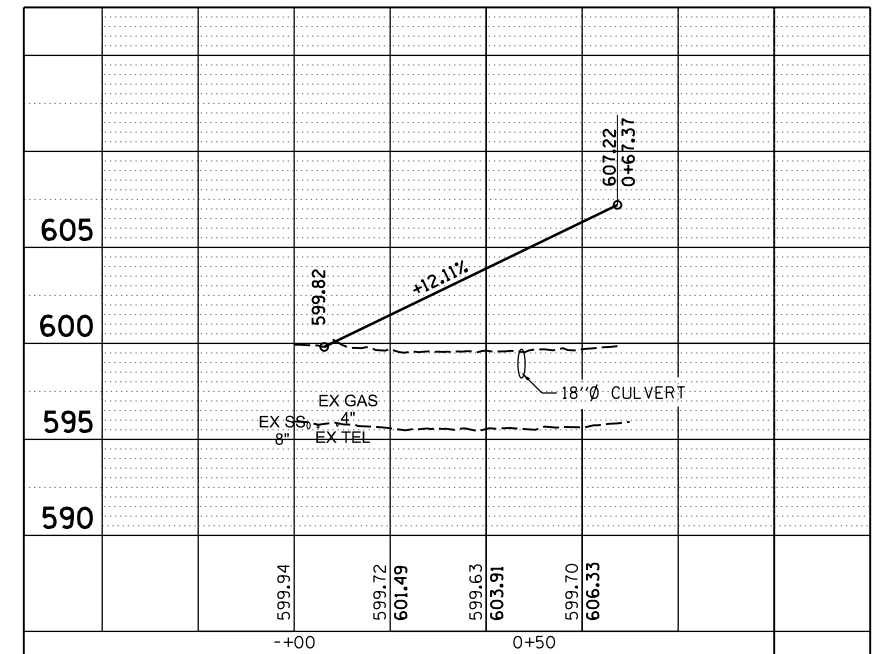


PROFILE - STA. 47852 + 74.43



NOTES

- (A) SEE CROSS SECTION SHEETS FOR SECTION THRU ENTRANCES AND TURNAROUND.
- (B) SEE FENCING PLAN FOR FENCE AND GATE LOCATIONS.
- (C) PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH. TYPE A FINISH.

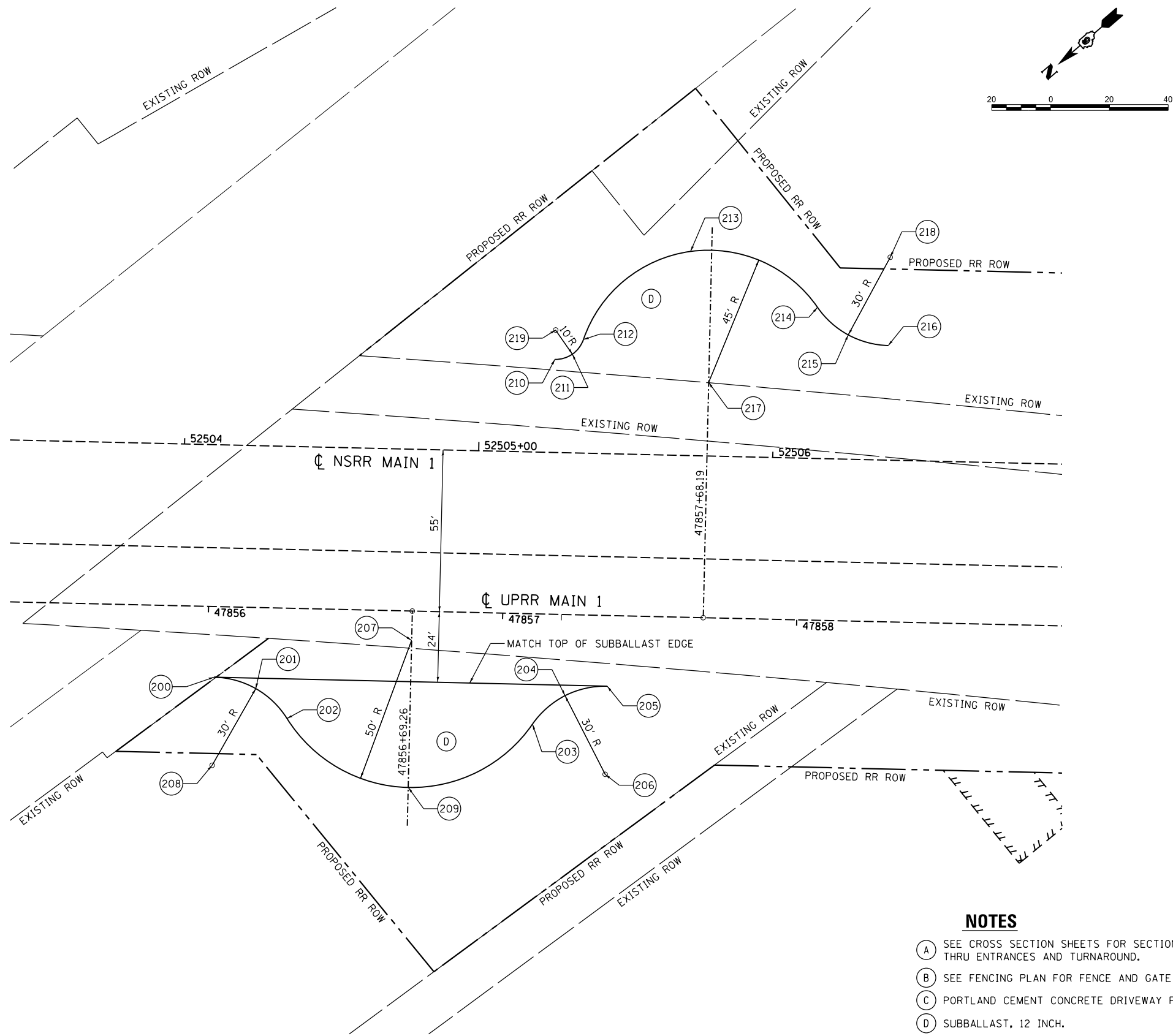


PROFILE - STA. 47853 + 73.72

FILE NAME = D609L0179B-shr-enlarged-plan-Rail-US4.dgn	USER NAME = Pop00275	DESIGNED - GNC	REVISED -
PLANT SCALE = 40.0000' / in.	CHECKED - JWM/MNM	REVISIONS -	REVISIONS -
PLANT DATE = 4/11/2019	DATE - 03/15/2019	REVISIONS -	REVISIONS -



© Copyright Hanson Professional Services Inc. 2019



STA. 47856 + 69.26 & 47857 + 68.19

POINT #	STATION	OFFSET	NORTHING	EASTING	ELEV.
200	47856+02.45	24.00	1,131,760.90	2,441,718.60	605.63
201	47856+16.68	27.58	1,131,752.02	2,441,706.91	605.52
202	47856+27.50	37.50	1,131,749.74	2,441,692.41	605.30
203	47857+11.02	37.50	1,131,684.49	2,441,640.29	605.14
204	47857+21.84	27.58	1,131,669.85	2,441,641.28	605.31
205	47857+36.07	24.00	1,131,656.49	2,441,635.20	605.36
206	47857+36.07	54.00	1,131,675.21	2,441,611.76	NA
207	47856+69.26	10.00	1,131,699.95	2,441,687.84	NA
208	47856+02.45	54.00	1,131,779.62	2,441,695.16	NA
209	47856+69.26	60.00	1,131,731.16	2,441,648.77	604.77
210	47857+15.77	-86.67	1,131,603.28	2,441,734.34	606.38
211	47857+21.67	-88.60	1,131,597.47	2,441,732.16	606.32
212	47857+25.30	-93.64	1,131,591.49	2,441,733.84	606.18
213	47857+65.21	-124.90	1,131,540.79	2,441,733.36	605.31
214	47858+04.63	-106.40	1,131,521.54	2,441,694.30	605.63
215	47858+15.29	-97.27	1,131,518.90	2,441,680.52	605.82
216	47858+28.93	-94.00	1,131,510.29	2,441,669.45	605.86
217	47857+68.19	-80.00	1,131,566.49	2,441,696.42	NA
218	47858+28.93	-124.00	1,131,491.57	2,441,692.89	NA
219	47857+15.77	-96.67	1,131,597.04	2,441,742.16	NA

NOTES

- (A) SEE CROSS SECTION SHEETS FOR SECTION THRU ENTRANCES AND TURNAROUND.
- (B) SEE FENCING PLAN FOR FENCE AND GATE LOCATIONS.
- (C) PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH.
- (D) SUBBALLAST, 12 INCH.

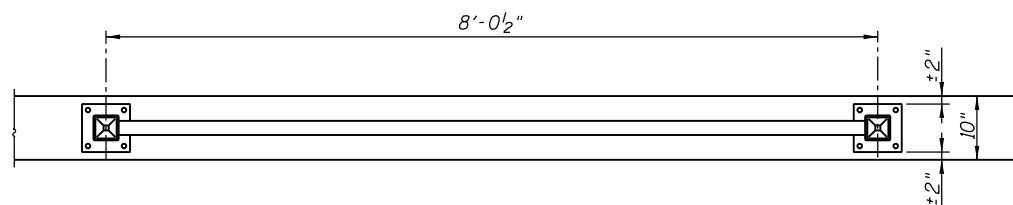
FINAL

FILE NAME = D609L0179B-shr-enlarged-pln-Rail-US4.dgn	USER NAME = Pop00275	DESIGNED - GNC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JWM/MNM	DRAWN - RSJ	REVISED -
PLOT DATE = 4/10/2019	DATE - 03/15/2019		REVISED -

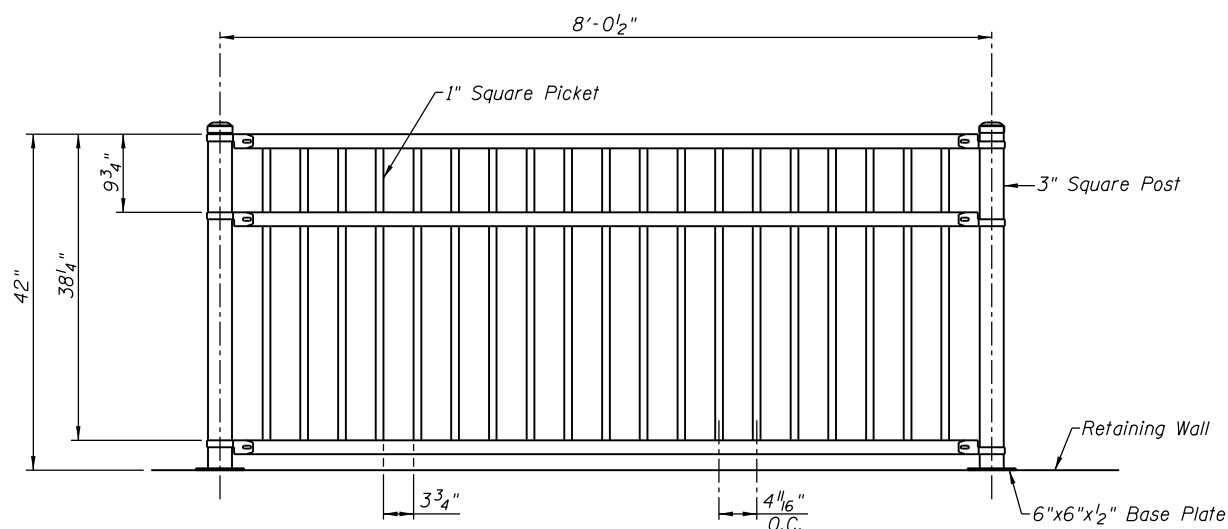
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRACK ACCESS ROAD ENTRANCE & TURNAROUND DETAILS - 4**

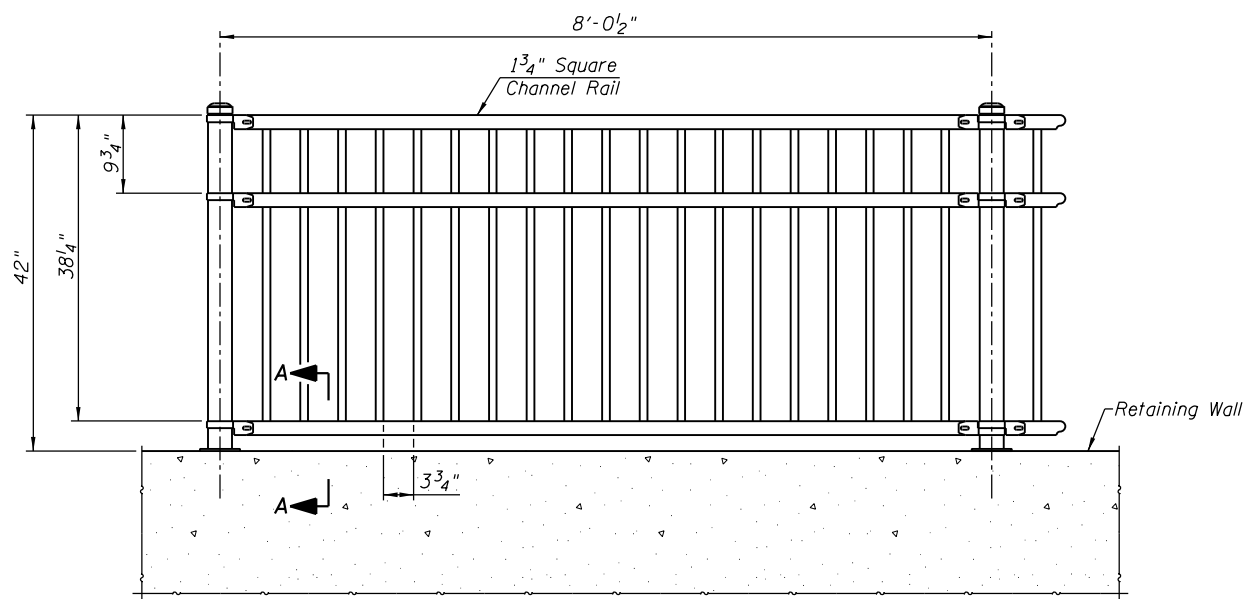
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	128
	09L0179B	CONTRACT NO.	93733	
SCALE: SHEET 4 OF 4 SHEETS		STA. TO STA.	*666 & 666 ALT. ILLINOIS FED. AID PROJECT	



ORNAMENTAL FENCE PLAN VIEW



ORNAMENTAL FENCE ELEVATION VIEW



ORNAMENTAL FENCE ELEVATION VIEW

(STA. 997+55 TO STA. 1001+41 LT. & STA. 997+55 TO STA. 1001+81 RT.)

Notes:

Fence posts shall be vertical.

Anchor rods shall be ASTM F1554, Gr. 55, galvanized steel all-thread for an Engineer-approved alternate material of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor rods may be used in lieu of ASTM F1554. The anchor rods shall be hot-dipped galvanized according to AASHTO M232, Class C.

The anchor rods shall be installed according to Article 509.06 of the Standard Specifications. Embedment shall be 6" min. or according to the manufacturer's specifications whatever is greater.

Structural steel plates and bars of the Steel Railing shall conform to the requirements of ASTM A36/36M.

FENCE LOADING

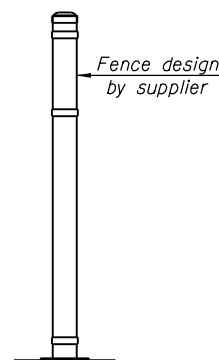
200 lb. concentrated load at any location and direction, or 50 lb./ft. along top rail at any location or direction.

DESIGN CODE

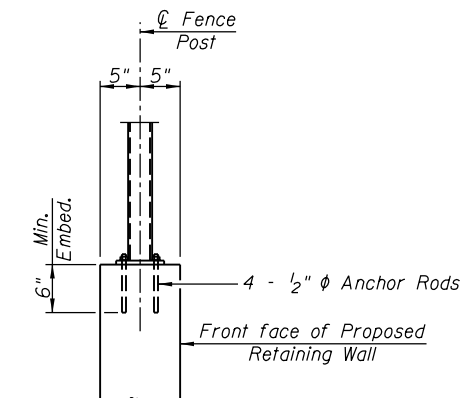
2012 International Building Code

DESIGN STRESSES

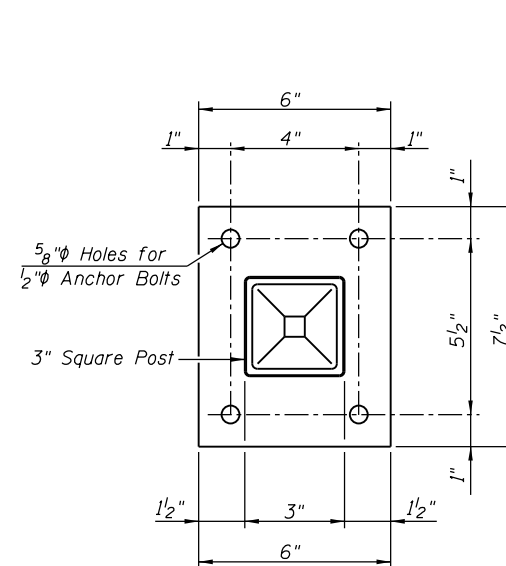
f'c = 3,000 psi (Exist.)
f'c = 3,500 psi (Prop.)
fy = 36,000 psi (M270 Grade 36)



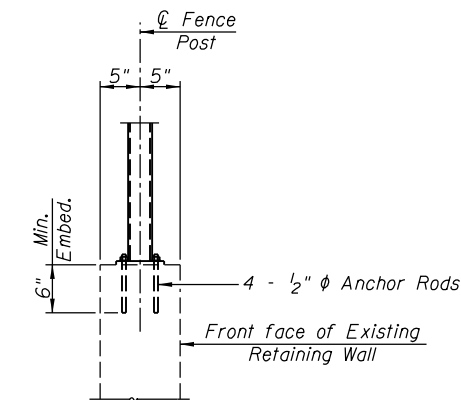
SIDE VIEW



SECTION A-A
(At Proposed Retaining Wall)



BASE PLATE DETAIL



SECTION A-A
(At Existing Retaining Wall)

BILL OF MATERIAL

Item	Unit	Total
Ornamental Fence	Foot	812

DESIGNED
DRAWN
REVISED



USER NAME = Pop00275
DRAWN - JRP
CHECKED -
DATE - 03/15/2019

DESIGNED -
REVISIONS -
REVISIONS -
REVISIONS -
REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ORNAMENTAL FENCE DETAILS - 6TH STREET**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	129
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

RAILWAY LEGEND

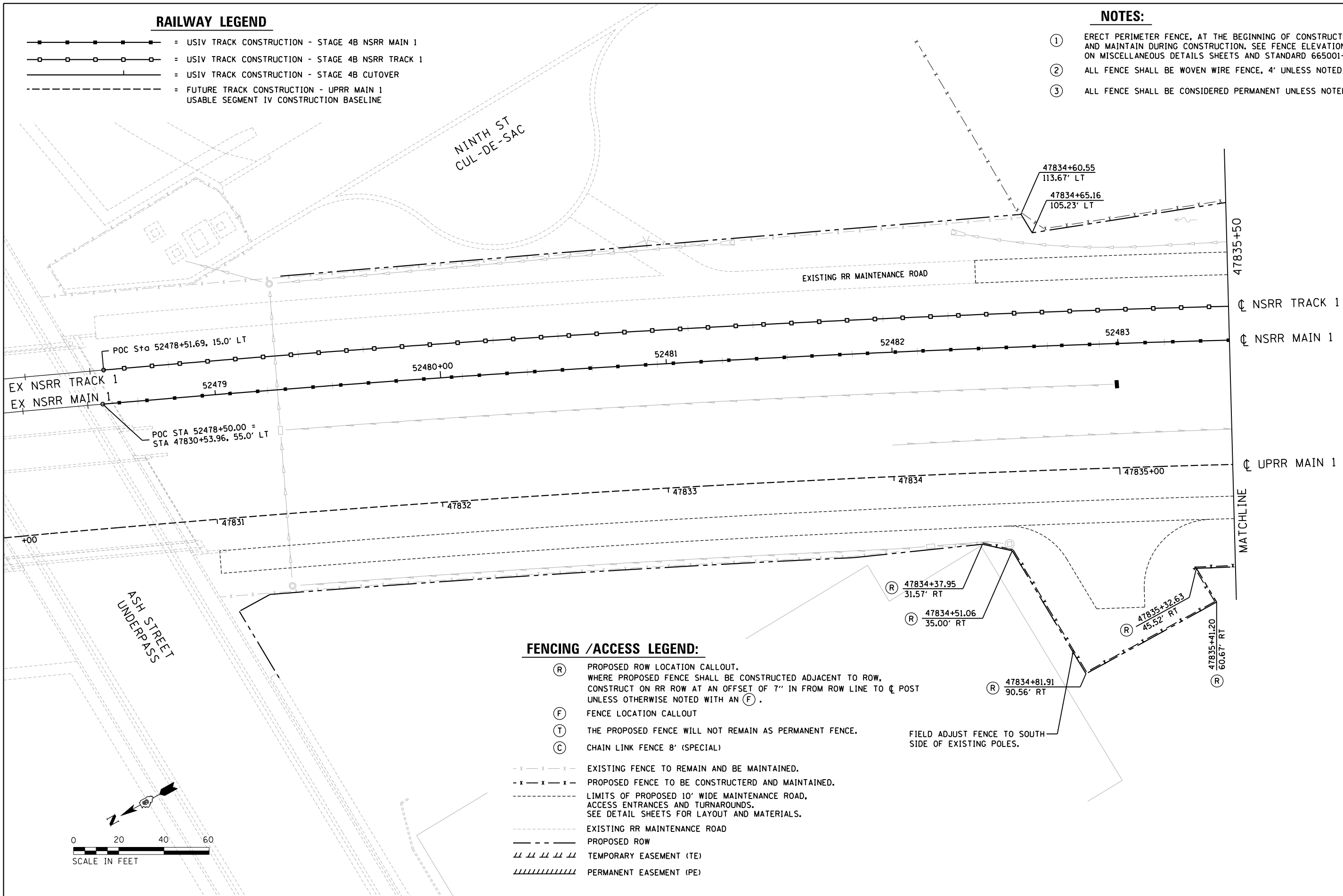
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- |—|—|—|— = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- - - - - = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1
USABLE SEGMENT IV CONSTRUCTION BASELINE

NOTES:

- ① ERECT PERIMETER FENCE, AT THE BEGINNING OF CONSTRUCTION AND MAINTAIN DURING CONSTRUCTION. SEE FENCE ELEVATION DETAILS ON MISCELLANEOUS DETAILS SHEETS AND STANDARD 665001-02.
- ② ALL FENCE SHALL BE WOVEN WIRE FENCE, 4' UNLESS NOTED OTHERWISE.
- ③ ALL FENCE SHALL BE CONSIDERED PERMANENT UNLESS NOTED OTHERWISE.



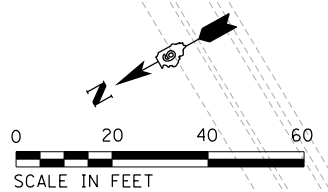
© Copyright Hanson Professional Services Inc. 2019



FENCING /ACCESS LEGEND:

- Ⓡ PROPOSED ROW LOCATION CALLOUT. WHERE PROPOSED FENCE SHALL BE CONSTRUCTED ADJACENT TO ROW, CONSTRUCT ON RR ROW AT AN OFFSET OF 7" IN FROM ROW LINE TO ☉ POST UNLESS OTHERWISE NOTED WITH AN Ⓡ.
- Ⓡ FENCE LOCATION CALLOUT
- Ⓡ THE PROPOSED FENCE WILL NOT REMAIN AS PERMANENT FENCE.
- Ⓡ CHAIN LINK FENCE 8' (SPECIAL)
- x - x - x - x - EXISTING FENCE TO REMAIN AND BE MAINTAINED.
- x - x - x - x - PROPOSED FENCE TO BE CONSTRUCTED AND MAINTAINED.
- - - - - LIMITS OF PROPOSED 10' WIDE MAINTENANCE ROAD, ACCESS ENTRANCES AND TURNAROUNDS. SEE DETAIL SHEETS FOR LAYOUT AND MATERIALS.
- - - - - EXISTING RR MAINTENANCE ROAD
- — — — — PROPOSED ROW
- /// /// /// /// TEMPORARY EASEMENT (TE)
- //// //// //// //// PERMANENT EASEMENT (PE)

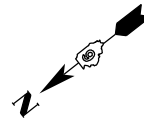
FIELD ADJUST FENCE TO SOUTH SIDE OF EXISTING POLES.



FINAL

FILE NAME = D609L0179B-FENCE-ACCESS-US4-TRACK-00.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SPRINGFIELD RAIL IMPROVEMENTS PROJECT SPRINGFIELD, SANGAMON COUNTY, ILLINOIS ROW & FENCING /ACCESS PLAN - TRACK - 1	F.A.P. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLANI	PLOT SCALE = 40.00' / in.	CHECKED - JWM/GCN	REVISED -			(109) VB,(110) VB-5	SANGAMON	382	130	
	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -			09L0179B	CONTRACT NO. 93733	666 & 666 ALT. ILLINOIS FED. AID PROJECT		

SCALE: SHEET 1 OF 11 SHEETS STA. 47830+53.96 TO STA. 47835+50

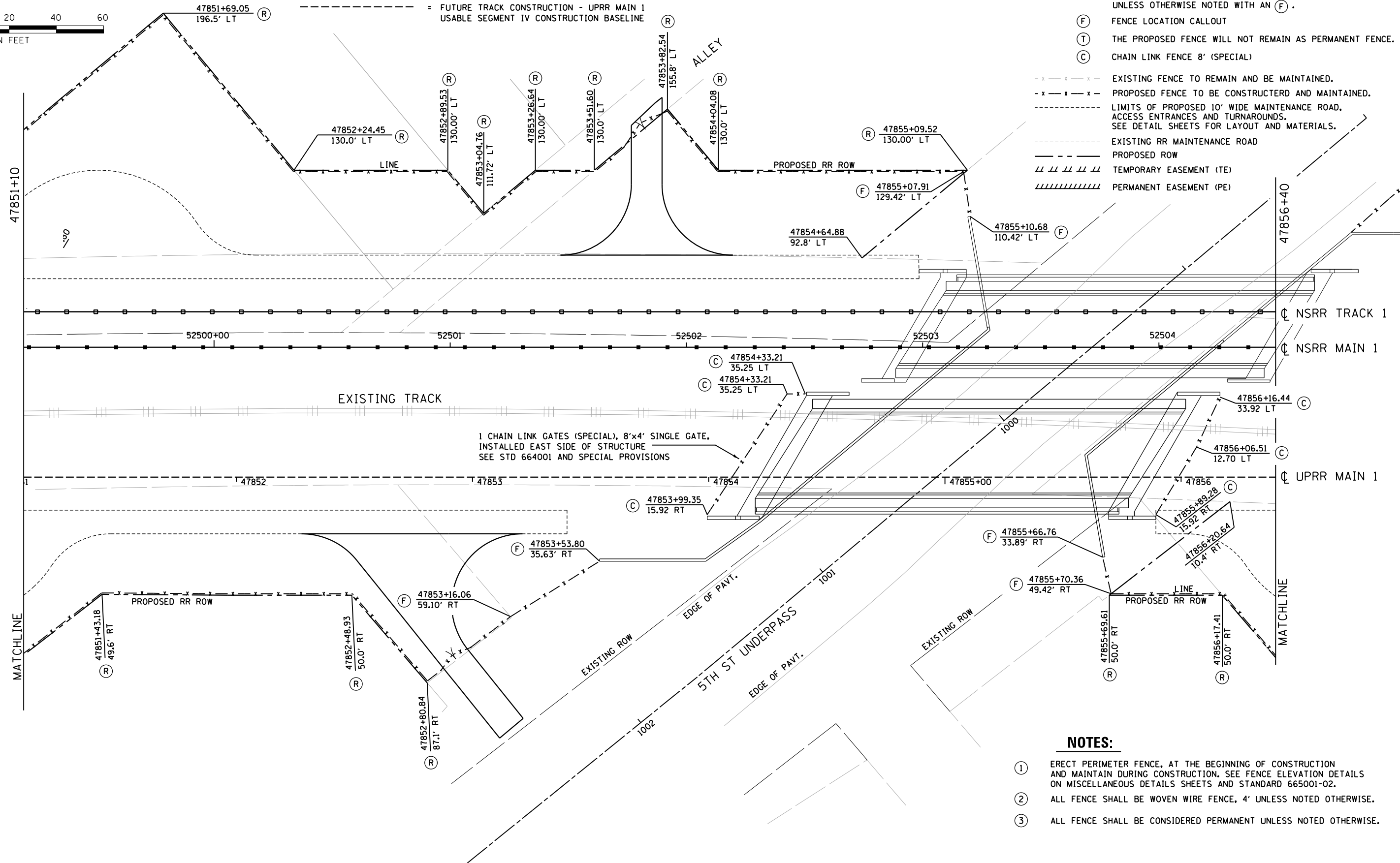


RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- |—|—|— = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- - - - - = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1
USABLE SEGMENT IV CONSTRUCTION BASELINE

FENCING /ACCESS LEGEND:

- (R) PROPOSED ROW LOCATION CALLOUT.
WHERE PROPOSED FENCE SHALL BE CONSTRUCTED ADJACENT TO ROW, CONSTRUCT ON RR ROW AT AN OFFSET OF 7" IN FROM ROW LINE TO CL POST' UNLESS OTHERWISE NOTED WITH AN (F).
- (F) FENCE LOCATION CALLOUT
- (T) THE PROPOSED FENCE WILL NOT REMAIN AS PERMANENT FENCE.
- (C) CHAIN LINK FENCE 8' (SPECIAL)
- - - - - EXISTING FENCE TO REMAIN AND BE MAINTAINED.
- x - x - x - PROPOSED FENCE TO BE CONSTRUCTED AND MAINTAINED.
- - - - - LIMITS OF PROPOSED 10' WIDE MAINTENANCE ROAD, ACCESS ENTRANCES AND TURNAROUNDS. SEE DETAIL SHEETS FOR LAYOUT AND MATERIALS.
- - - - - EXISTING RR MAINTENANCE ROAD
- - - - - PROPOSED ROW
- /// /// /// TEMPORARY EASEMENT (TE)
- //// //// //// PERMANENT EASEMENT (PE)



NOTES:

- ① ERECT PERIMETER FENCE, AT THE BEGINNING OF CONSTRUCTION AND MAINTAIN DURING CONSTRUCTION. SEE FENCE ELEVATION DETAILS ON MISCELLANEOUS DETAILS SHEETS AND STANDARD 665001-02.
- ② ALL FENCE SHALL BE WOVEN WIRE FENCE, 4' UNLESS NOTED OTHERWISE.
- ③ ALL FENCE SHALL BE CONSIDERED PERMANENT UNLESS NOTED OTHERWISE.



© Copyright Hanson Professional Services Inc. 2019

FINAL	FILE NAME =	USER NAME = Pop00275	DESIGNED - GCN	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SPRINGFIELD RAIL IMPROVEMENTS PROJECT SPRINGFIELD, SANGAMON COUNTY, ILLINOIS ROW & FENCING /ACCESS PLAN - TRACK - 5	F.A.P. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D609L0179B-FENCE_ACCESS-US4-TRACK104.dgn	PLOT SCALE = 40.00' / in.	DRAWN - CLG RSJ	REVISED -			(109) VB,(110) VB-5	SANGAMON	382	134	
	PLANI	PLOT DATE = 4/10/2019	CHECKED - JWM/GCN	REVISED -			09L0179B	CONTRACT NO. 93733	666 & 666 ALT. ILLINOIS FED. AID PROJECT		

SCALE: SHEET 5 OF 11 SHEETS STA. 47851+10 TO STA. 47856+40

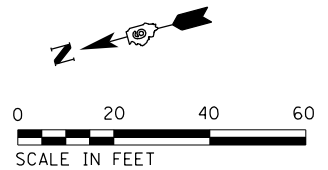
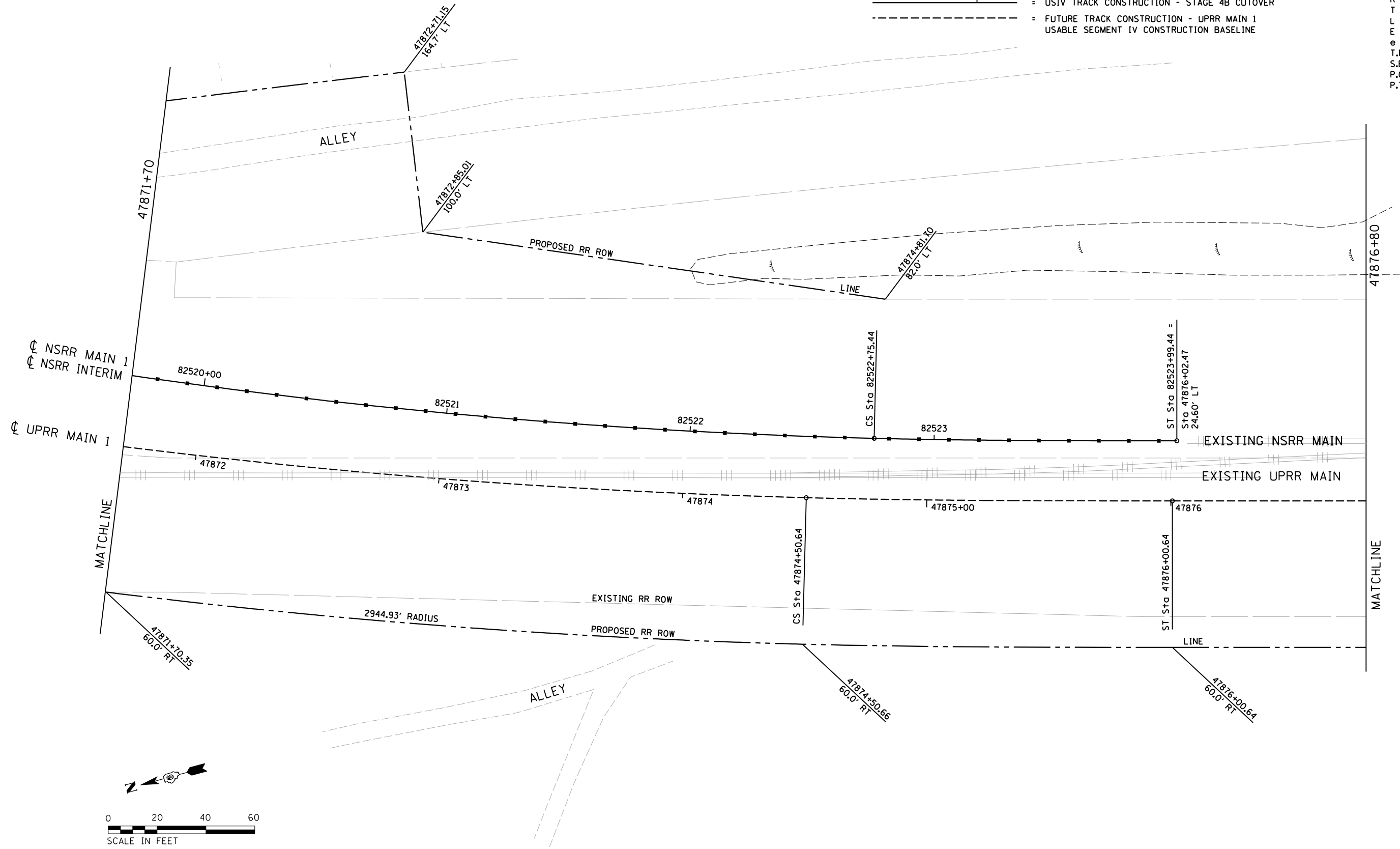


© Copyright Hanson Professional Services Inc. 2019

RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1
- = USABLE SEGMENT IV CONSTRUCTION BASELINE

PROP. CURVE 187.4
 PI STA. = 47869+55.36
 $\Delta = 19^\circ 52' 35''$ (LT)
 $D = 1^\circ 59' 10''$
 $R = 2,884.93'$
 $T = 505.48'$
 $L = 1,000.76'$
 $E = 43.95'$
 $e = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. \text{ RUN} = \text{-----}$
 P.C. STA = 47864+49.88
 P.T. STA = 47874+50.64



FINAL

FILE NAME = D609L0179B-FENCE-ACCESS-US4-TRACK108.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
PLANI	PLOT SCALE = 40.00' / in.	DRAWN - CLG	REVISED -
	PLOT DATE = 4/10/2019	CHECKED - JWM/GCN	REVISED -
		DATE - 03/15/2019	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 ROW & FENCING /ACCESS PLAN - TRACK - 9**

SCALE: SHEET 9 OF 11 SHEETS STA. 47871+70 TO STA. 47876+80

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	138
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

47876+80

47881+90

MATCHLINE

MATCHLINE

EXISTING RR ROW

EXISTING NSRR MAIN

EXISTING UPRR MAIN

47877

47878

47879

47880+00

47881

EXISTING RR ROW

PROPOSED RR ROW



FINAL

FILE NAME = D609L0179B-FENCE-ACCESS-US4-TRACK109.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
	PLOT SCALE = 40.00' / in.	CHECKED - JWM/GCN	REVISED -
PLANI	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ROW & FENCING /ACCESS PLAN - TRACK - 10

SCALE: SHEET 10 OF 11 SHEETS STA. 47876+80 TO STA. 47881+90

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	139
	09L0179B	CONTRACT NO.	93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

MATCHLINE

47881+90

EXISTING RR ROW

47882

47883

47884

47885+00

47886

47887

EXISTING NSRR MAIN

EXISTING UPRR MAIN

EXISTING RR ROW

PROPOSED RR ROW

STANFORD AVE
OVERPASS

47884+24.73
60.0' RT

POT Sta 47887+14.65



FINAL

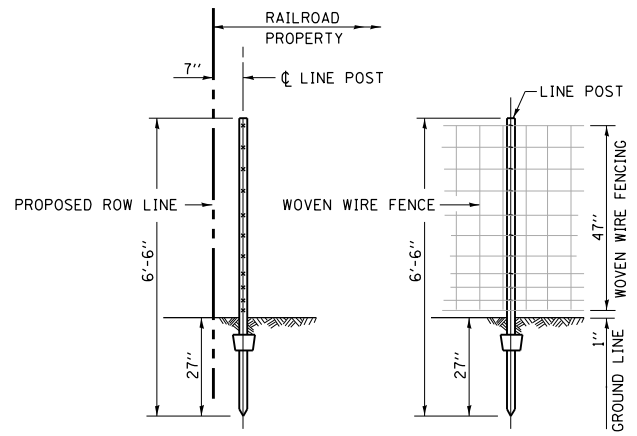
FILE NAME = D609L0179B-FENCE-ACCESS-US4-TRACK110.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
	PLOT SCALE = 40.00' / in.	CHECKED - JWM/GCN	REVISED -
	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ROW & FENCING /ACCESS PLAN - TRACK - 11**

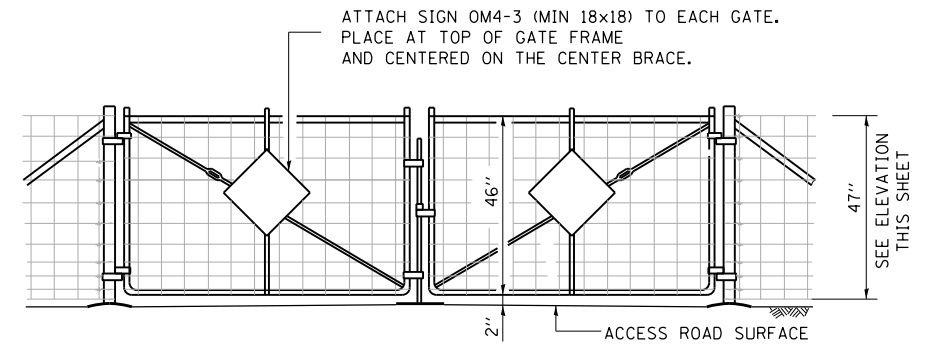
SCALE: SHEET 11 OF 11 SHEETS STA. 47881+90 TO STA. 47887+14.65

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5 09L0179B	SANGAMON	382	140
CONTRACT NO. 93733			ILLINOIS FED. AID PROJECT	



WOVEN WIRE FENCE 4 FT. ELEVATIONS

SEE STANDARD 665001-02 FOR ADDITIONAL DETAILS

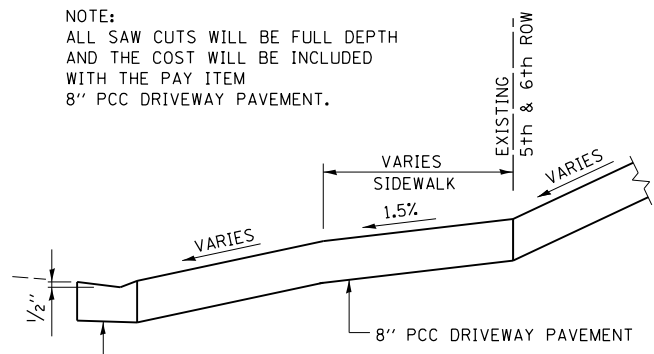


RAILWAY ACCESS GATE ELEVATION

WOVEN WIRE FENCE 4 FT.

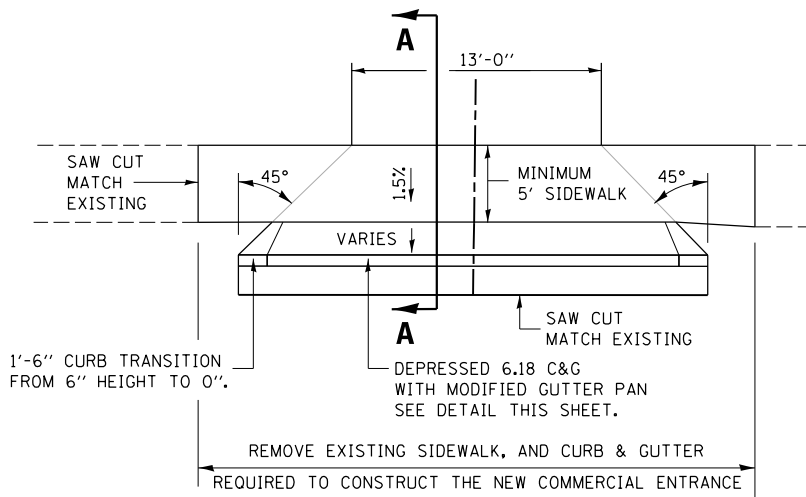
SEE STANDARD 665001-02 FOR ADDITIONAL DETAILS

NOTE:
ALL SAW CUTS WILL BE FULL DEPTH
AND THE COST WILL BE INCLUDED
WITH THE PAY ITEM
8" PCC DRIVEWAY PAVEMENT.



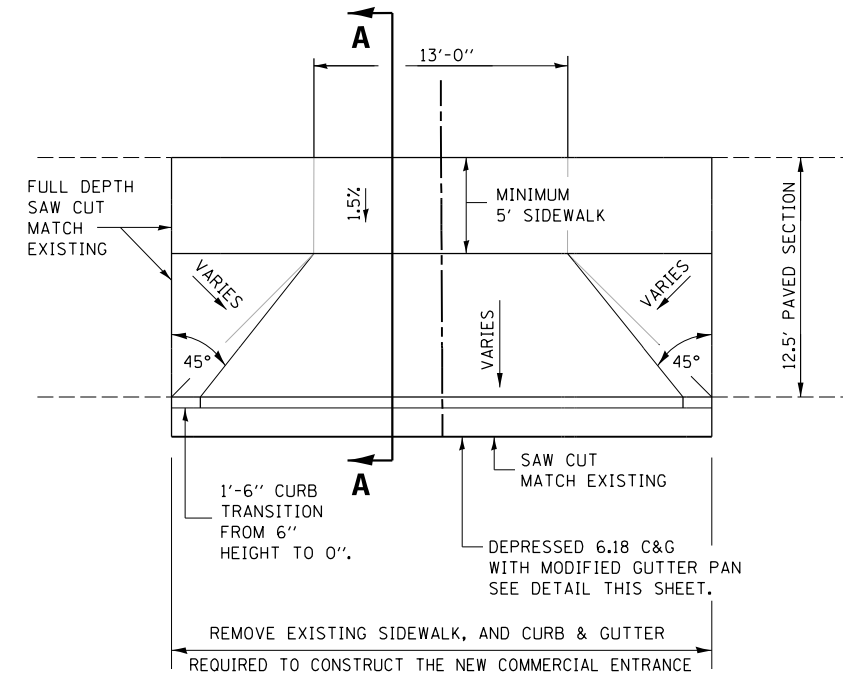
SECTION A-A

NOT TO SCALE



**5TH STREET ENTRANCE DETAIL
5TH STREET STATION 1002+44.1 RIGHT**

NOT TO SCALE



**6TH STREET ENTRANCE DETAIL
6TH STREET STATION 1002+66.1 RIGHT**

NOT TO SCALE

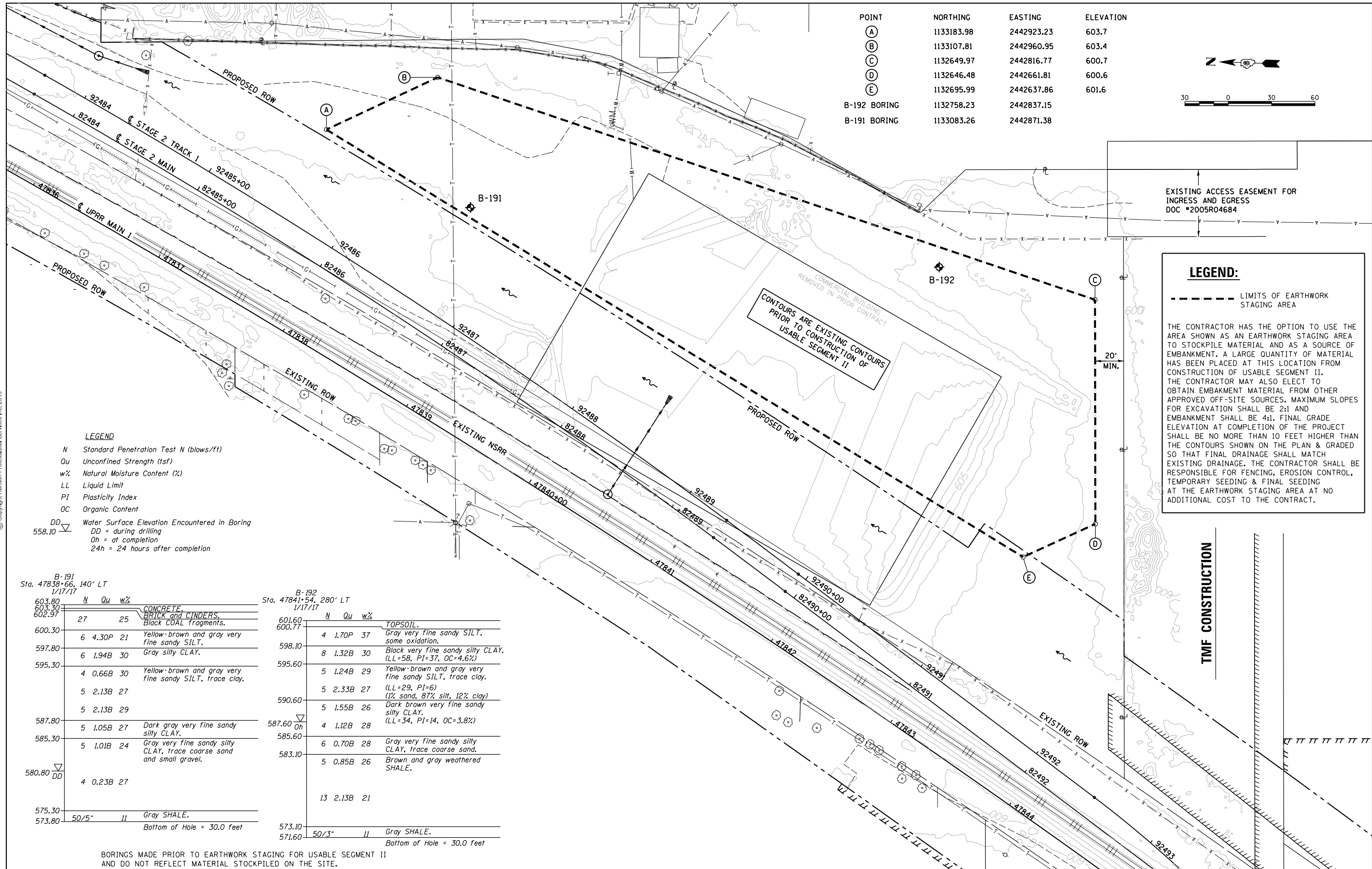
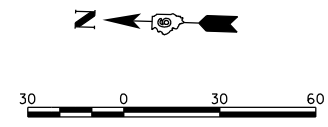
FILE NAME = D609L0179B-Miscellaneous_Details-US4-01.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
PLOT SCALE = 10.0000' / 1"	CHECKED - JWM/GCN	DRAWN - CLG	REVISED -
PLOT DATE = 4/10/2019	DATE - 03/15/2019		REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	141
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

POINT	NORTHING	EASTING	ELEVATION
(A)	1133183.98	2442923.23	603.7
(B)	1133107.81	2442960.95	603.4
(C)	1132649.97	2442816.77	600.7
(D)	1132646.48	2442661.81	600.6
(E)	1132695.99	2442637.86	601.6
B-192 BORING	1132758.23	2442837.15	
B-191 BORING	1133083.26	2442871.38	



EXISTING ACCESS EASEMENT FOR INGRESS AND EGRESS
DOC #2005R04684

LEGEND:

--- LIMITS OF EARTHWORK STAGING AREA

THE CONTRACTOR HAS THE OPTION TO USE THE AREA SHOWN AS AN EARTHWORK STAGING AREA TO STOCKPILE MATERIAL AND AS A SOURCE OF EMBANKMENT. A LARGE QUANTITY OF MATERIAL HAS BEEN PLACED AT THIS LOCATION FROM CONSTRUCTION OF USABLE SEGMENT II. THE CONTRACTOR MAY ALSO ELECT TO OBTAIN EMBANKMENT MATERIAL FROM OTHER APPROVED OFF-SITE SOURCES. MAXIMUM SLOPES FOR EXCAVATION SHALL BE 2:1 AND EMBANKMENT SHALL BE 4:1. FINAL GRADE ELEVATION AT COMPLETION OF THE PROJECT SHALL BE NO MORE THAN 10 FEET HIGHER THAN THE CONTOURS SHOWN ON THE PLAN & GRADED SO THAT FINAL DRAINAGE SHALL MATCH EXISTING DRAINAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FENCING, EROSION CONTROL, TEMPORARY SEEDING & FINAL SEEDING AT THE EARTHWORK STAGING AREA AT NO ADDITIONAL COST TO THE CONTRACT.

LEGEND

- N Standard Penetration Test N (blows/ft)
- Qu Unconfined Strength (tsf)
- w% Natural Moisture Content (%)
- LL Liquid Limit
- PI Plasticity Index
- OC Organic Content
- DD Water Surface Elevation Encountered in Boring
- 558.10 DD = during drilling
- Oh = at completion
- 24h = 24 hours after completion

B-191
Sta. 47838+66, 140' LT
1/17/17

ELEVATION	N	Qu	w%	DESCRIPTION
603.80				CONCRETE.
603.30				BRICK and CINDERS.
602.97	27	25		Black COAL fragments.
600.30	6	4.30P	21	Yellow-brown and gray very fine sandy SILT.
597.80	6	1.94B	30	Gray silty CLAY.
595.30	4	0.66B	30	Yellow-brown and gray very fine sandy SILT, trace clay.
	5	2.13B	27	
	5	2.13B	29	
587.80	5	1.05B	27	Dark gray very fine sandy silty CLAY.
585.30	5	1.01B	24	Gray very fine sandy silty CLAY, trace coarse sand and small gravel.
580.80	4	0.23B	27	
575.30				Gray SHALE.
573.80	50/5"			Bottom of Hole = 30.0 feet

B-192
Sta. 47841+54, 280' LT
1/17/17

ELEVATION	N	Qu	w%	DESCRIPTION
601.60				TOPSOIL.
600.77	4	1.70P	37	Gray very fine sandy SILT, some oxidation.
598.10	8	1.32B	30	Black very fine sandy silty CLAY. (LL=58, PI=37, OC=4.6%)
595.60	5	1.24B	29	Yellow-brown and gray very fine sandy SILT, trace clay.
	5	2.33B	27	(LL=29, PI=6)
590.60	5	1.55B	26	Dark brown very fine sandy silty CLAY. (LL=34, PI=14, OC=3.8%)
587.60	4	1.12B	28	
585.60	6	0.70B	28	Gray very fine sandy silty CLAY, trace coarse sand.
583.10	5	0.85B	26	Brown and gray weathered SHALE.
	13	2.13B	21	
573.10	50/3"			Gray SHALE.
571.60				Bottom of Hole = 30.0 feet

BORINGS MADE PRIOR TO EARTHWORK STAGING FOR USABLE SEGMENT II AND DO NOT REFLECT MATERIAL STOCKPILED ON THE SITE.

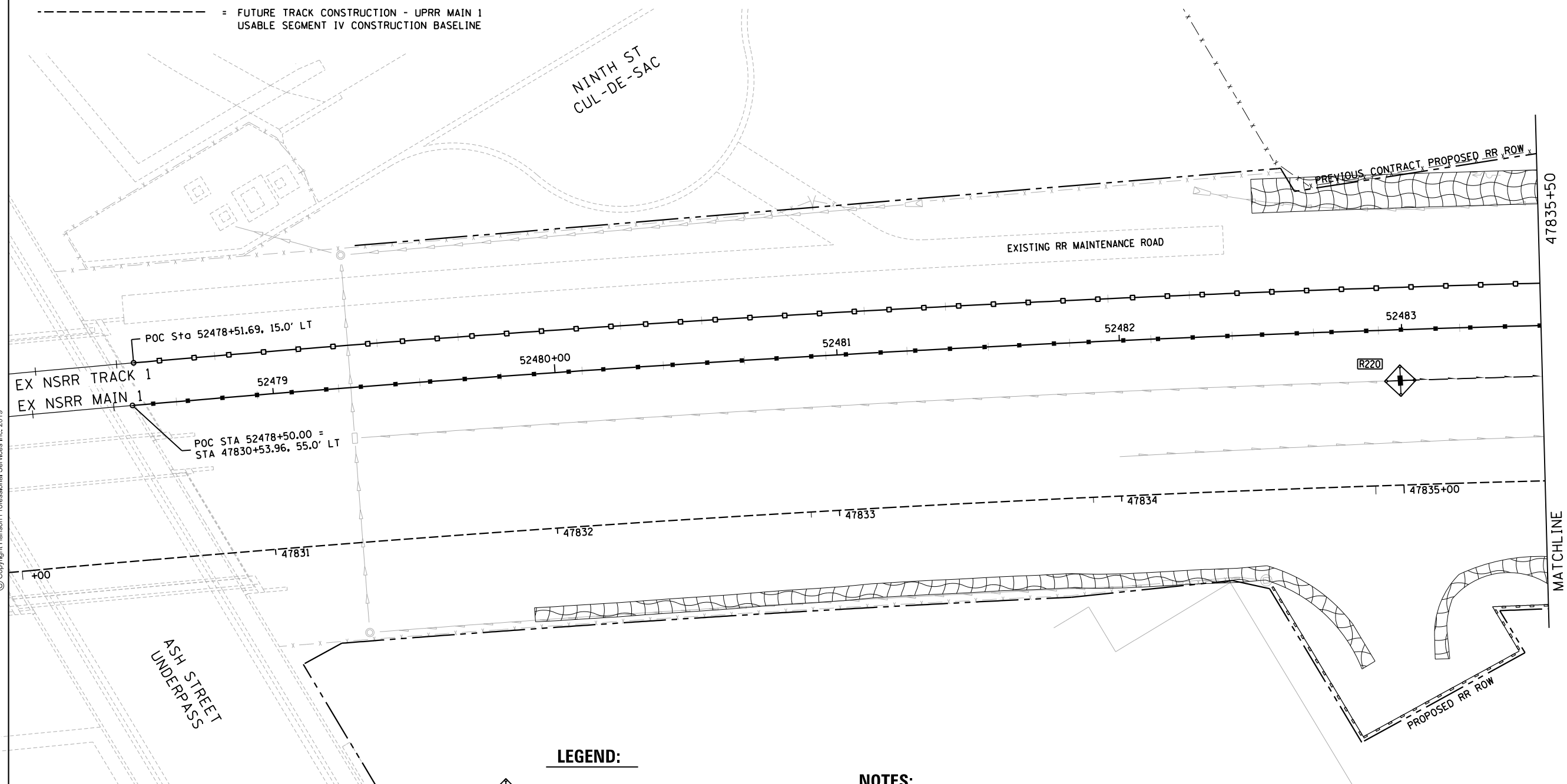
FINAL	FILE NAME = D609L0179B-sh-t-EARTHWORK-STAGING-AREA.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SPRINGFIELD RAIL IMPROVEMENTS PROJECT SPRINGFIELD, SANGAMON COUNTY, ILLINOIS OPTIONAL EARTHWORK STAGING AREA	F.A.P. RTE. (109) VB,(110) VB-5	SECTION 09L0179B	COUNTY SANGAMON	TOTAL SHEETS 382	SHEET NO. 142
	US4	PLOT SCALE = 60.0000' / in.	CHECKED - JWM/GCN	REVISED -			SCALE: SHEET 1 OF 1 SHEETS	STA. TO STA.	CONTRACT NO. 93733	ILLINOIS FED. AID PROJECT	
		PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -							

RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1
USABLE SEGMENT IV CONSTRUCTION BASELINE

HANSON

© Copyright Hanson Professional Services Inc. 2019

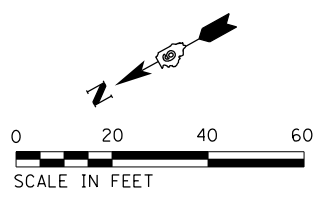


LEGEND:

- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET (ECB)
- PERIMETER EROSION BARRIER
- PROPOSED STORM STRUCTURE NO. SEE DRAINAGE SCHEDULES
- TEMPORARY DITCH CHECK

NOTES:

- (A) SEE EROSION AND SEDIMENT SCHEDULE FOR APPLICATION & LOCATION OF EROSION CONTROL & INLET AND PIPE PROTECTION ITEMS.
- (B) SEE EROSION CONTROL DETAILS SHEET.
- (C) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE ROW AND EASEMENTS WITH STATION & OFFSET CALLOUTS.
- (D) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE LIMITS OF TRACK ACCESS ENTRANCES, MAINTENANCE ROADS AND TURNAROUNDS.
- (E) SEE FIFTH STREET & SIXTH STREET / PRINCETON AVENUE EROSION CONTROL PLANS FOR ADDITIONAL ITEMS NOT SHOWN ON TRACK PLANS.
- (F) FIFTH AND SIXTH STREET UNDERPASS CONSTRUCTION STAGES REQUIRE THE CONTRACTOR TO MODIFY, EXTEND AND REINSTALL & MAINTAIN EROSION CONTROL ITEMS TO MEET REQUIREMENTS IN THE SPECIAL PROVISIONS.



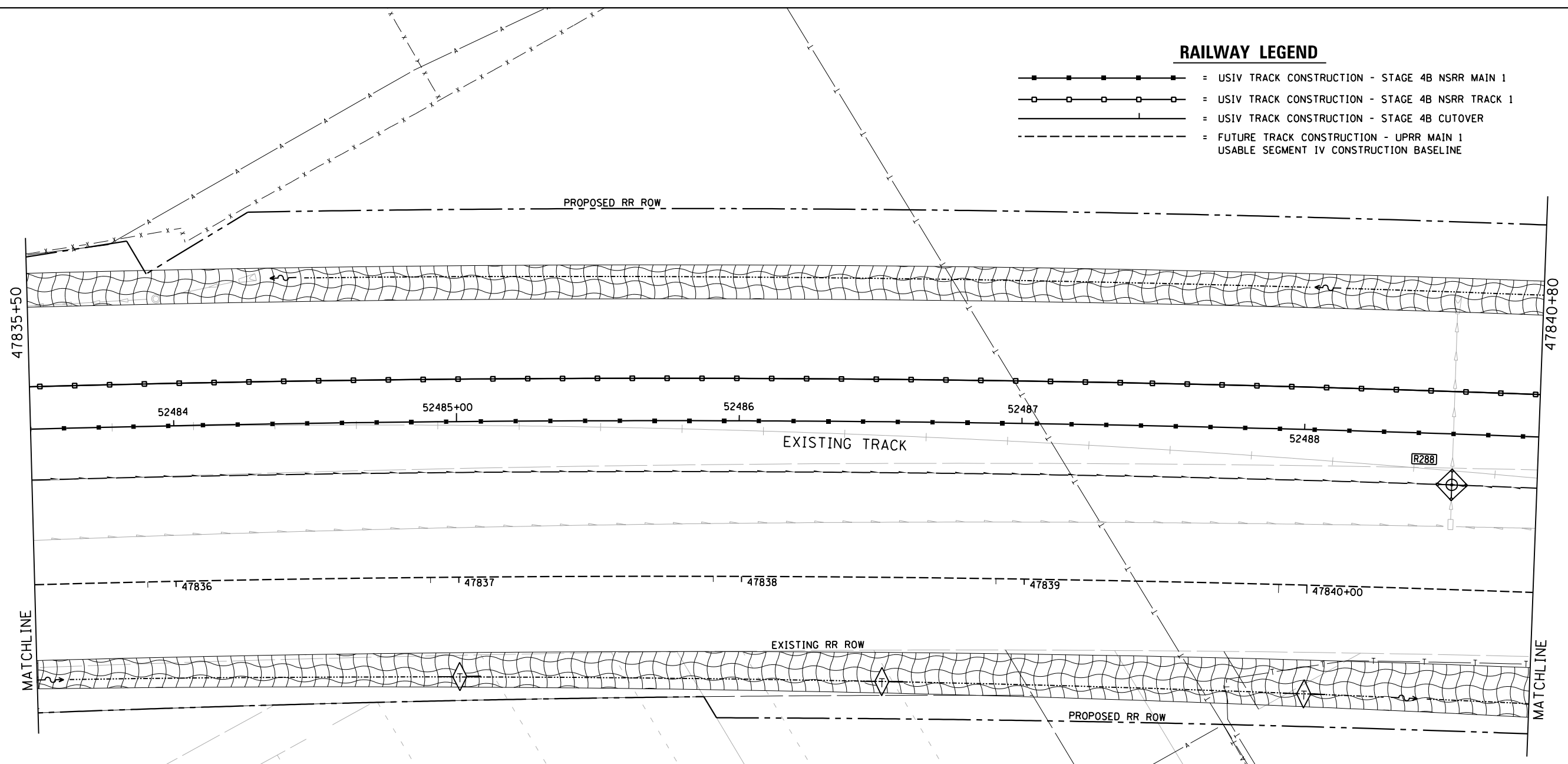
FINAL	FILE NAME = D609L0179B-EROSION-US4-TRACK-00.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SPRINGFIELD RAIL IMPROVEMENTS PROJECT SPRINGFIELD, SANGAMON COUNTY, ILLINOIS EROSION CONTROL PLAN - TRACK - 1	F.A.P. RTE. =	SECTION = (109) VB,(110) VB-5	COUNTY = SANGAMON	TOTAL SHEETS = 382	SHEET NO. = 143	
	PLANI	PLOT SCALE = 40.00' / in.	CHECKED - JWM/GCN	REVISED -			09L0179B	CONTRACT NO. = 93733				
		PLOT DATE = 4/10/2019	DATE = 03/15/2019	REVISED -			SCALE: SHEET 1 OF 9 SHEETS	STA. 47830+53.96 TO STA. 47835+50	*666 & 666 ALT. ILLINOIS FED. AID PROJECT			



© Copyright Hanson Professional Services Inc. 2019

RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1 USABLE SEGMENT IV CONSTRUCTION BASELINE

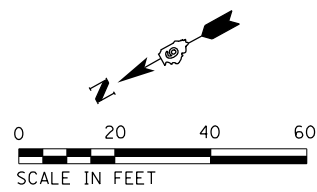


LEGEND:

- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET (ECB)
- PERIMETER EROSION BARRIER
- PROPOSED STORM STRUCTURE NO. SEE DRAINAGE SCHEDULES
- TEMPORARY DITCH CHECK

NOTES:

- (A) SEE EROSION AND SEDIMENT SCHEDULE FOR APPLICATION & LOCATION OF EROSION CONTROL & INLET AND PIPE PROTECTION ITEMS.
- (B) SEE EROSION CONTROL DETAILS SHEET.
- (C) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE ROW AND EASEMENTS WITH STATION & OFFSET CALLOUTS.
- (D) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE LIMITS OF TRACK ACCESS ENTRANCES, MAINTENANCE ROADS AND TURNAROUNDS.



FINAL

FILE NAME = D609L0179B-EROSION-US4-TRACK101.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
	PLOT SCALE = 40.00' / in.	CHECKED - JWM/GCN	REVISED -
	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

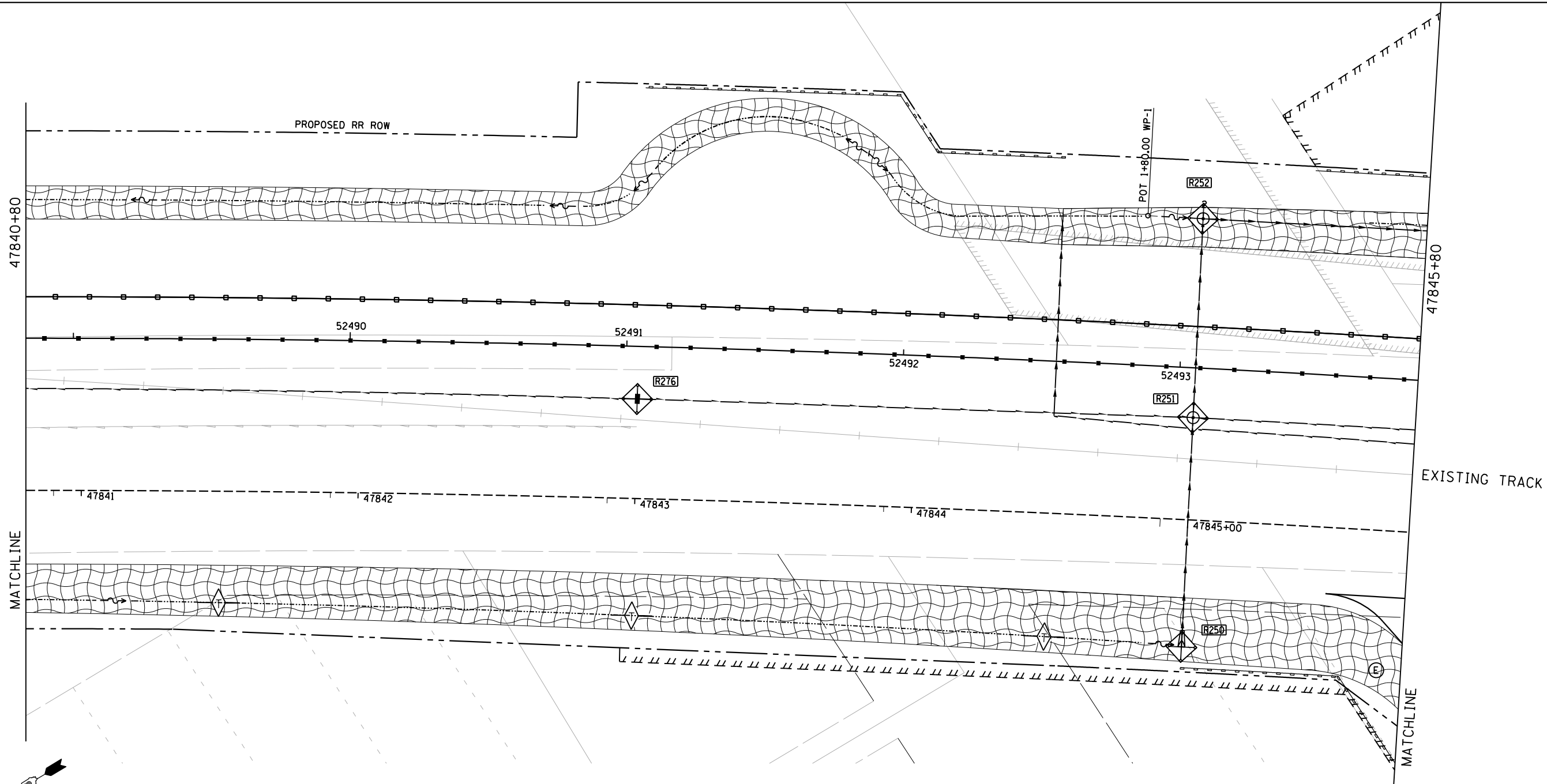
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EROSION CONTROL PLAN - TRACK - 2

SCALE: SHEET 2 OF 9 SHEETS STA. 47835+50 TO STA. 47840+80

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	144
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019



RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1 USABLE SEGMENT IV CONSTRUCTION BASELINE

LEGEND:

- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET (ECB)
- PERIMETER EROSION BARRIER
- PROPOSED STORM STRUCTURE NO. SEE DRAINAGE SCHEDULES
- TEMPORARY DITCH CHECK

NOTES:

- (A) SEE EROSION AND SEDIMENT SCHEDULE FOR APPLICATION & LOCATION OF EROSION CONTROL & INLET AND PIPE PROTECTION ITEMS.
- (B) SEE EROSION CONTROL DETAILS SHEET.
- (C) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE ROW AND EASEMENTS WITH STATION & OFFSET CALLOUTS.
- (D) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE LIMITS OF TRACK ACCESS ENTRANCES, MAINTENANCE ROADS AND TURNAROUNDS.
- (E) PLACE AND MAINTAIN ECB ALONG 2:1 SIDESLOPES OF TRACK ENTRANCES. SEE EROSION AND SEDIMENT SCHEDULE.

FINAL

FILE NAME = D609L0179B-EROSION-US4-TRACK102.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
	PLOT SCALE = 40.00' / in.	CHECKED - JWM/GCN	REVISED -
	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EROSION CONTROL PLAN - TRACK - 3

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	145
	09L0179B		CONTRACT NO.	93733

SCALE: SHEET 3 OF 9 SHEETS STA. 47840+80 TO STA. 47845+80

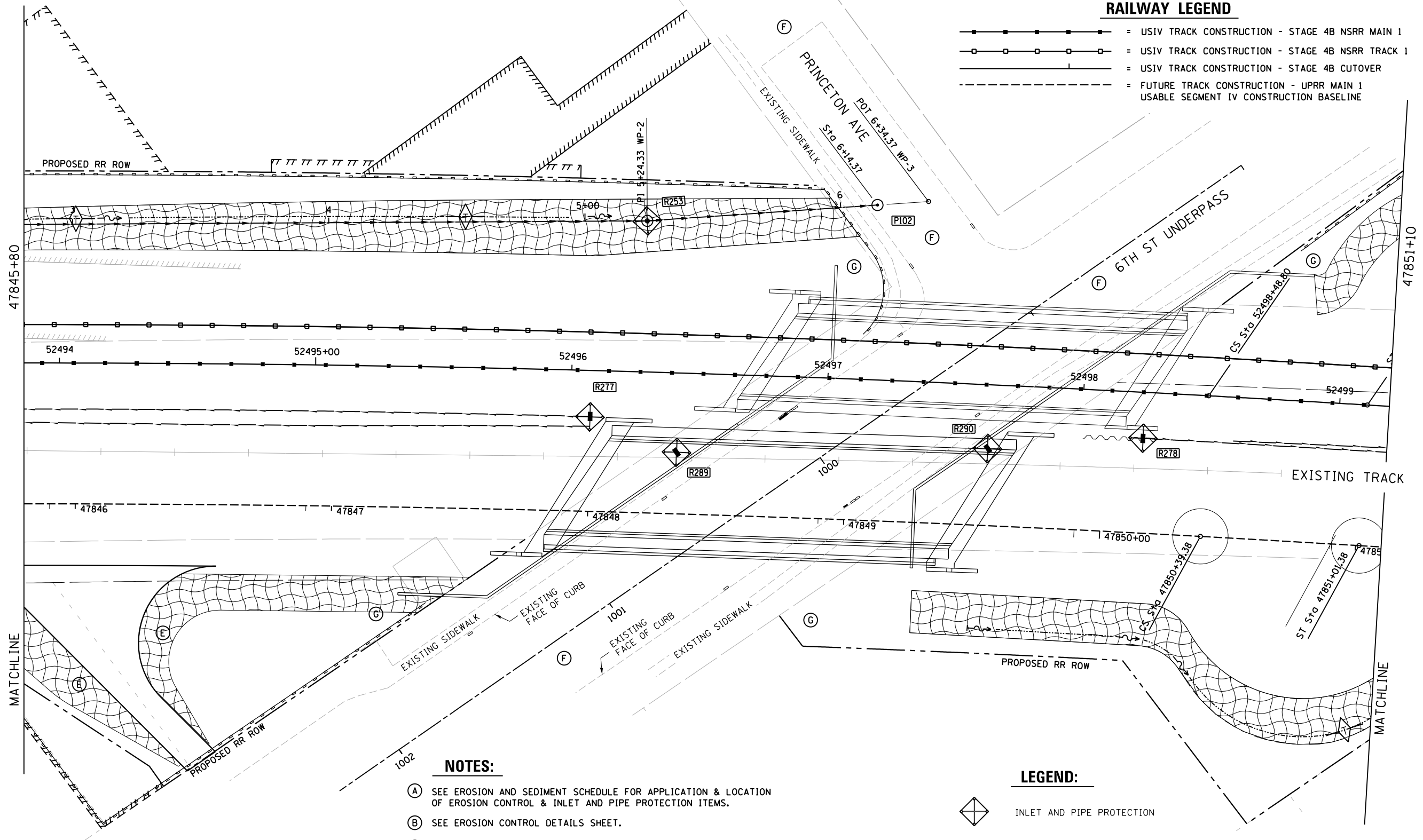
•666 & 666 ALT. ILLINOIS FED. AID PROJECT



© Copyright Hanson Professional Services Inc. 2019

RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1 USABLE SEGMENT IV CONSTRUCTION BASELINE



PROP. CURVE 186.4
 PI STA. = 47824+35.33
 $\Delta = 37^\circ 24' 41''$ (RT)
 $D = 0^\circ 41' 30''$
 $R = 8,283.78'$
 $T = 2,804.81'$
 $L = 5,408.86'$
 $E = 461.96'$
 $e =$
 $T.R. =$
 $S.E. RUN =$
 $P.C. STA = 47796+30.51$
 $P.T. STA = 47850+39.38$



NOTES:

- (A) SEE EROSION AND SEDIMENT SCHEDULE FOR APPLICATION & LOCATION OF EROSION CONTROL & INLET AND PIPE PROTECTION ITEMS.
- (B) SEE EROSION CONTROL DETAILS SHEET.
- (C) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE ROW AND EASEMENTS WITH STATION & OFFSET CALLOUTS.
- (D) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE LIMITS OF TRACK ACCESS ENTRANCES, MAINTENANCE ROADS AND TURNAROUNDS.
- (E) PLACE AND MAINTAIN ECB ALONG 2:1 SIDESLOPES OF TRACK ENTRANCES. SEE EROSION AND SEDIMENT SCHEDULE.
- (F) SEE FIFTH STREET & SIXTH STREET / PRINCETON AVENUE EROSION CONTROL PLANS FOR ADDITIONAL ITEMS NOT SHOWN ON TRACK PLANS.
- (G) FIFTH AND SIXTH STREET UNDERPASS CONSTRUCTION STAGES REQUIRE THE CONTRACTOR TO MODIFY, EXTEND AND REINSTALL & MAINTAIN EROSION CONTROL ITEMS TO MEET REQUIREMENTS IN THE SPECIAL PROVISIONS.

LEGEND:

- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET (ECB)
- PERIMETER EROSION BARRIER
- PROPOSED STORM STRUCTURE NO. SEE DRAINAGE SCHEDULES
- TEMPORARY DITCH CHECK

FINAL

FILE NAME = D609L0179B-EROSION-US4-TRACK103.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
PLANI	PLOT SCALE = 40.00' / in.	DRAWN - CLG	REVISED -
	PLOT DATE = 4/10/2019	CHECKED - JWM/GCN	REVISED -
		DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE:		SHEET 4 OF 9 SHEETS		STA. 47845+80 TO STA. 47851+10	
--------	--	---------------------	--	--------------------------------	--

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 EROSION CONTROL PLAN - TRACK - 4

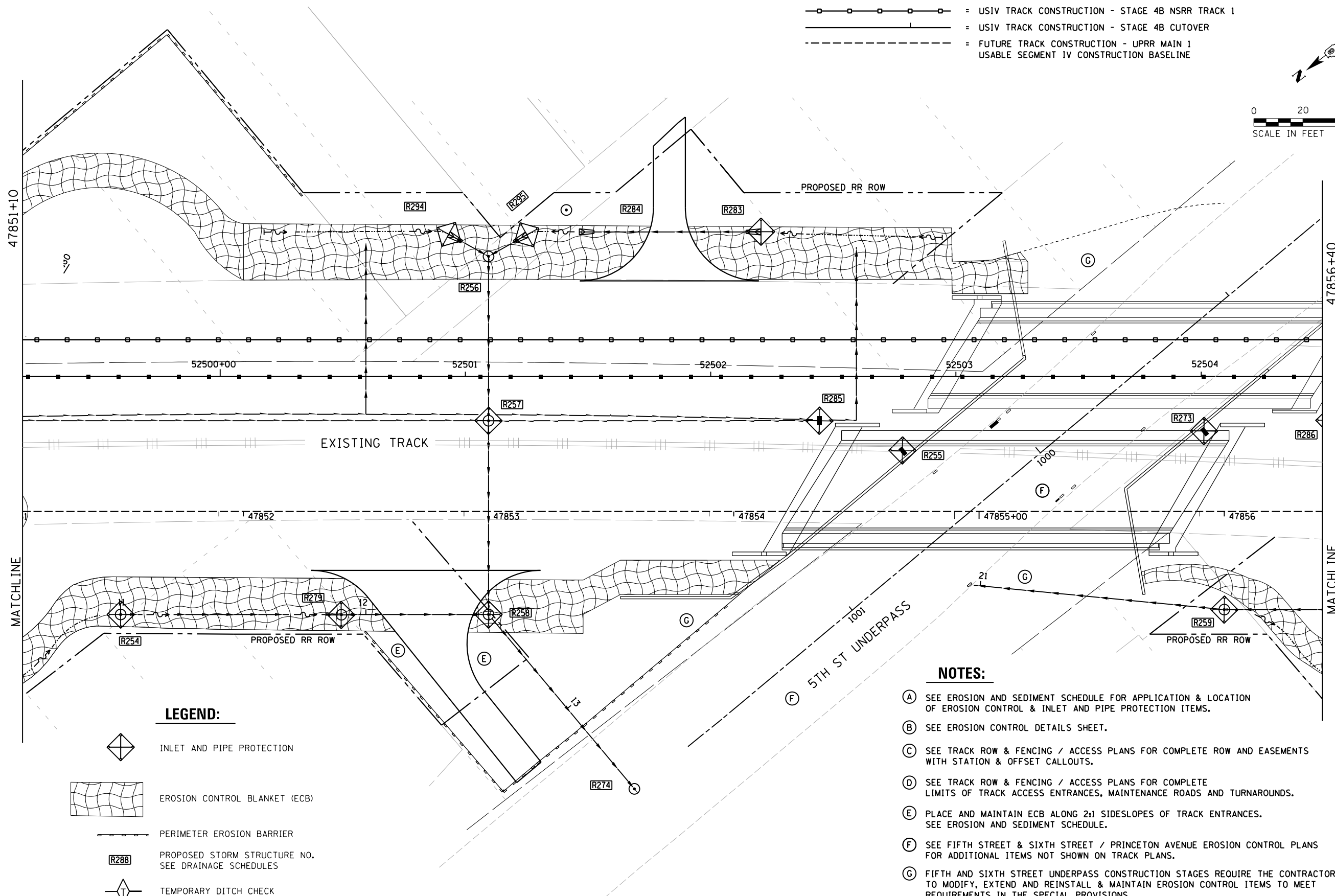
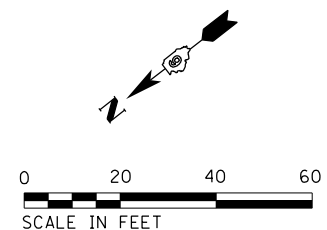
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	146
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1 USABLE SEGMENT IV CONSTRUCTION BASELINE



LEGEND:

- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET (ECB)
- PERIMETER EROSION BARRIER
- PROPOSED STORM STRUCTURE NO. SEE DRAINAGE SCHEDULES
- TEMPORARY DITCH CHECK

NOTES:

- (A) SEE EROSION AND SEDIMENT SCHEDULE FOR APPLICATION & LOCATION OF EROSION CONTROL & INLET AND PIPE PROTECTION ITEMS.
- (B) SEE EROSION CONTROL DETAILS SHEET.
- (C) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE ROW AND EASEMENTS WITH STATION & OFFSET CALLOUTS.
- (D) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE LIMITS OF TRACK ACCESS ENTRANCES, MAINTENANCE ROADS AND TURNAROUNDS.
- (E) PLACE AND MAINTAIN ECB ALONG 2:1 SIDESLOPES OF TRACK ENTRANCES. SEE EROSION AND SEDIMENT SCHEDULE.
- (F) SEE FIFTH STREET & SIXTH STREET / PRINCETON AVENUE EROSION CONTROL PLANS FOR ADDITIONAL ITEMS NOT SHOWN ON TRACK PLANS.
- (G) FIFTH AND SIXTH STREET UNDERPASS CONSTRUCTION STAGES REQUIRE THE CONTRACTOR TO MODIFY, EXTEND AND REINSTALL & MAINTAIN EROSION CONTROL ITEMS TO MEET REQUIREMENTS IN THE SPECIAL PROVISIONS.

FINAL

FILE NAME = D609L0179B-EROSION-US4-TRACK104.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
PLOT SCALE = 40.00' / in.		CHECKED - JWM/GCN	REVISED -
PLOT DATE = 4/10/2019		DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EROSION CONTROL PLAN - TRACK - 5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	147
	09L0179B	CONTRACT NO.	93733	

SCALE: SHEET 5 OF 9 SHEETS STA. 47851+10 TO STA. 47856+40

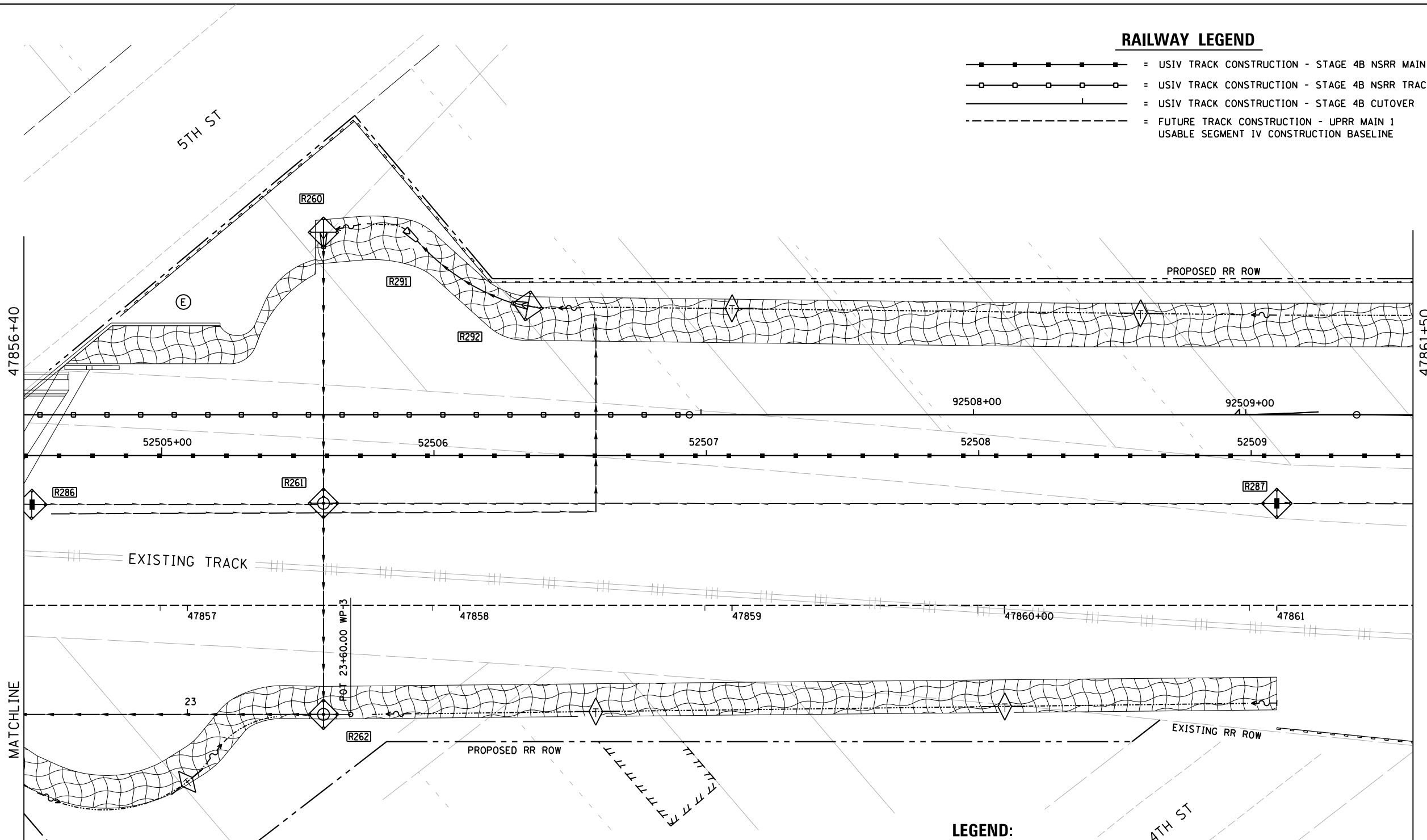
•666 & 666 ALT. ILLINOIS FED. AID PROJECT



© Copyright Hanson Professional Services Inc. 2019

RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1 USABLE SEGMENT IV CONSTRUCTION BASELINE

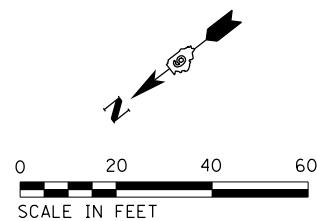


NOTES:

- (A) SEE EROSION AND SEDIMENT SCHEDULE FOR APPLICATION & LOCATION OF EROSION CONTROL & INLET AND PIPE PROTECTION ITEMS.
- (B) SEE EROSION CONTROL DETAILS SHEET.
- (C) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE ROW AND EASEMENTS WITH STATION & OFFSET CALLOUTS.
- (D) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE LIMITS OF TRACK ACCESS ENTRANCES, MAINTENANCE ROADS AND TURNAROUNDS.
- (E) FIFTH AND SIXTH STREET UNDERPASS CONSTRUCTION STAGES REQUIRE THE CONTRACTOR TO MODIFY, EXTEND AND REINSTALL & MAINTAIN EROSION CONTROL ITEMS TO MEET REQUIREMENTS IN THE SPECIAL PROVISIONS.

LEGEND:

- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET (ECB)
- PERIMETER EROSION BARRIER
- PROPOSED STORM STRUCTURE NO. SEE DRAINAGE SCHEDULES
- TEMPORARY DITCH CHECK



FINAL

FILE NAME = D609L0179B-EROSION-US4-TRACK105.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
	PLOT SCALE = 48.00' / in.	CHECKED - JWM/GCN	REVISED -
	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SPRINGFIELD RAIL IMPROVEMENTS PROJECT		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS			(109) VB,(110) VB-5	SANGAMON	382	148
EROSION CONTROL PLAN - TRACK - 6			09L0179B	CONTRACT NO.	93733	
SCALE:	SHEET 6 OF 9 SHEETS	STA. 47856+40	TO STA. 47861+50	*666 & 666 ALT. ILLINOIS FED. AID PROJECT		

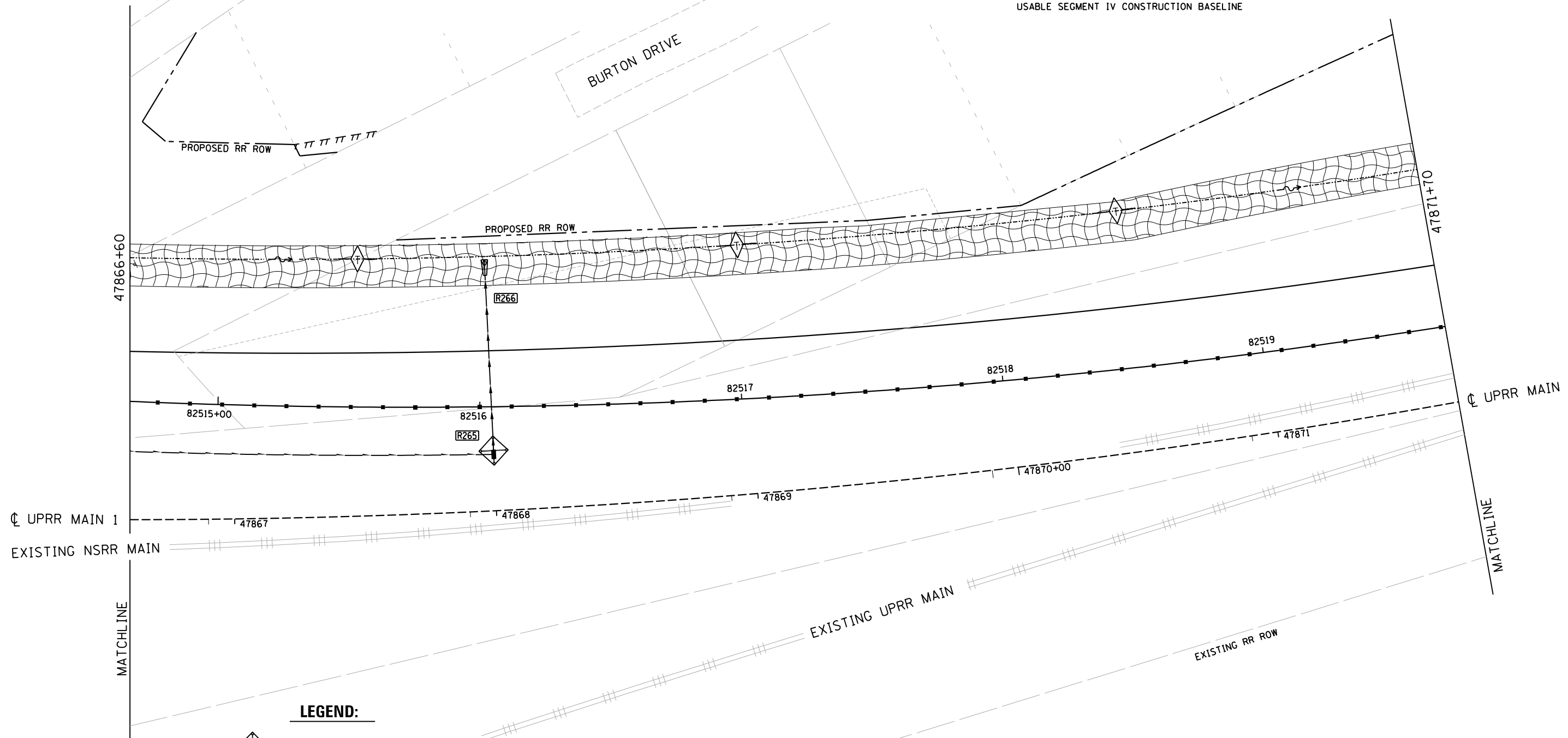
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	148
	09L0179B	CONTRACT NO.	93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



© Copyright Hanson Professional Services Inc. 2019

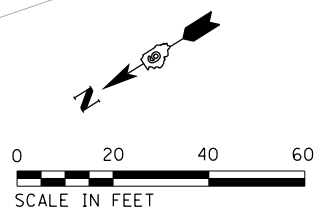
RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1 USABLE SEGMENT IV CONSTRUCTION BASELINE



LEGEND:

- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET (ECB)
- PERIMETER EROSION BARRIER
- PROPOSED STORM STRUCTURE NO. SEE DRAINAGE SCHEDULES
- TEMPORARY DITCH CHECK



NOTES:

- (A) SEE EROSION AND SEDIMENT SCHEDULE FOR APPLICATION & LOCATION OF EROSION CONTROL & INLET AND PIPE PROTECTION ITEMS.
- (B) SEE EROSION CONTROL DETAILS SHEET.
- (C) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE ROW AND EASEMENTS WITH STATION & OFFSET CALLOUTS.
- (D) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE LIMITS OF TRACK ACCESS ENTRANCES, MAINTENANCE ROADS AND TURNAROUNDS.

FINAL

FILE NAME = D609L0179B-EROSION-US4-TRACK107.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
PLANT	PLOT SCALE = 40.00' / in.	CHECKED - JWM/GCN	REVISED -
	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EROSION CONTROL PLAN - TRACK - 8

SCALE: SHEET 8 OF 9 SHEETS STA. 47866+60 TO STA. 47871+70

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
09L0179B	(109) VB,(110) VB-5	SANGAMON	382	150
CONTRACT NO. 93733			ILLINOIS FED. AID PROJECT	

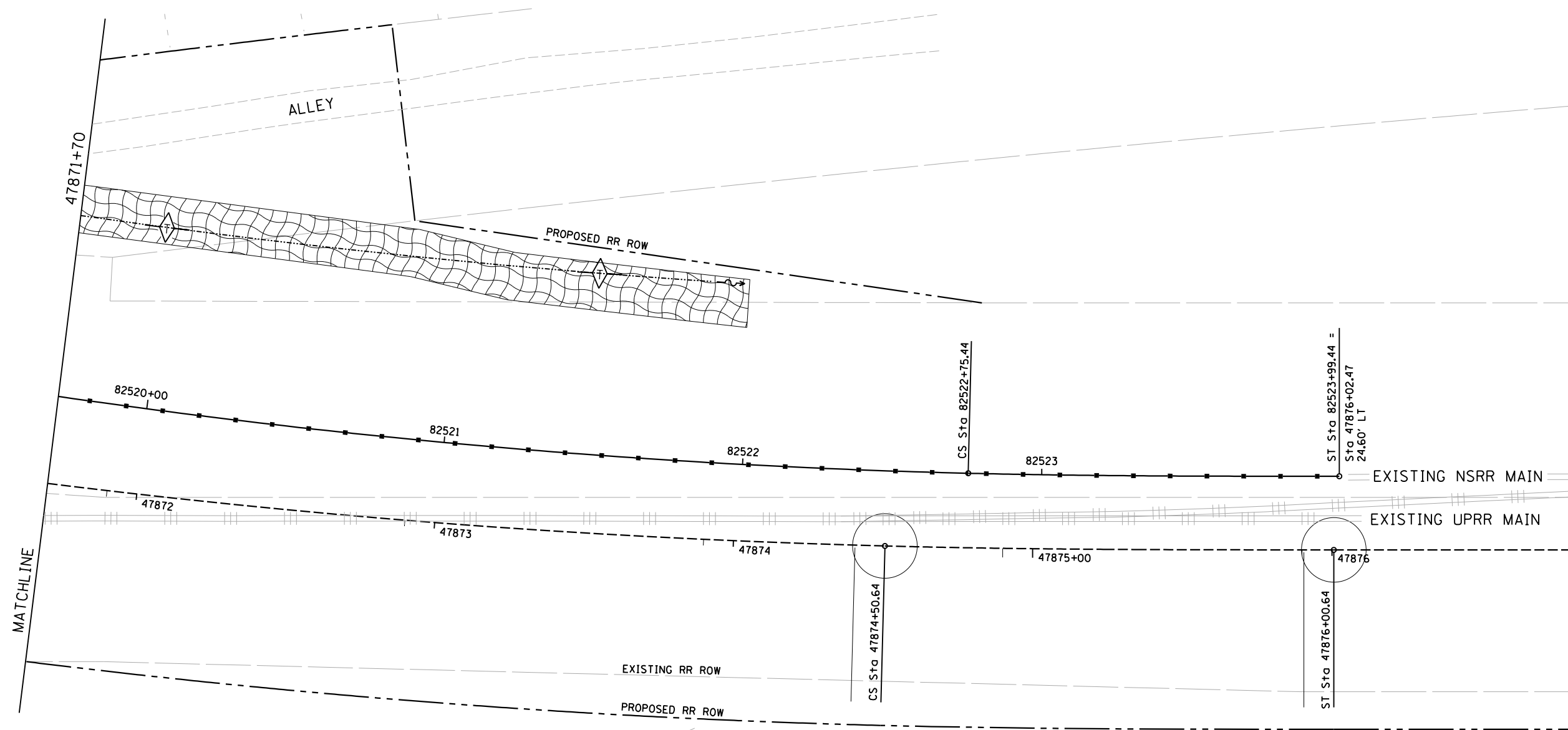


© Copyright Hanson Professional Services Inc. 2019

RAILWAY LEGEND

- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR MAIN 1
- = USIV TRACK CONSTRUCTION - STAGE 4B NSRR TRACK 1
- = USIV TRACK CONSTRUCTION - STAGE 4B CUTOVER
- = FUTURE TRACK CONSTRUCTION - UPRR MAIN 1
USABLE SEGMENT IV CONSTRUCTION BASELINE

PROP. CURVE 187.4
 PI STA. = 47869+55.36
 $\Delta = 19^\circ 52' 35''$ (LT)
 $D = 1^\circ 59' 10''$
 $R = 2,884.93'$
 $T = 505.48'$
 $L = 1,000.76'$
 $E = 43.95'$
 $e = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. \text{ RUN} = \text{-----}$
 P.C. STA = 47864+49.88
 P.T. STA = 47874+50.64



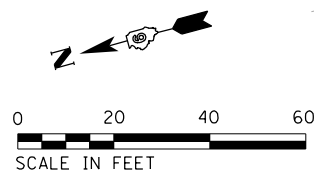
MATCHLINE

LEGEND:

- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET (ECB)
- PERIMETER EROSION BARRIER
- PROPOSED STORM STRUCTURE NO. SEE DRAINAGE SCHEDULES
- TEMPORARY DITCH CHECK

NOTES:

- (A) SEE EROSION AND SEDIMENT SCHEDULE FOR APPLICATION & LOCATION OF EROSION CONTROL & INLET AND PIPE PROTECTION ITEMS.
- (B) SEE EROSION CONTROL DETAILS SHEET.
- (C) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE ROW AND EASEMENTS WITH STATION & OFFSET CALLOUTS.
- (D) SEE TRACK ROW & FENCING / ACCESS PLANS FOR COMPLETE LIMITS OF TRACK ACCESS ENTRANCES, MAINTENANCE ROADS AND TURNAROUNDS.



FINAL

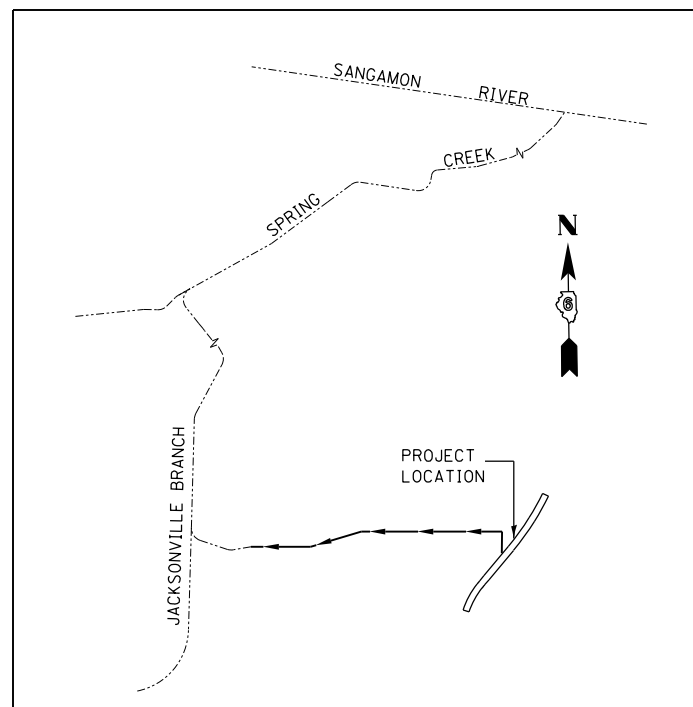
FILE NAME = D609L0179B-EROSION-US4-TRACK10B.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
	PLOT SCALE = 40.00' / in.	CHECKED - JWM/GCN	REVISED -
	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE:		SHEET 9 OF 9 SHEETS		STA. 47871+70	TO STA. 47876+02.47
		F.A.P. RTE.		SECTION	COUNTY
				(109) VB,(110) VB-5	SANGAMON
				09L0179B	CONTRACT NO. 93733

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 EROSION CONTROL PLAN - TRACK - 9

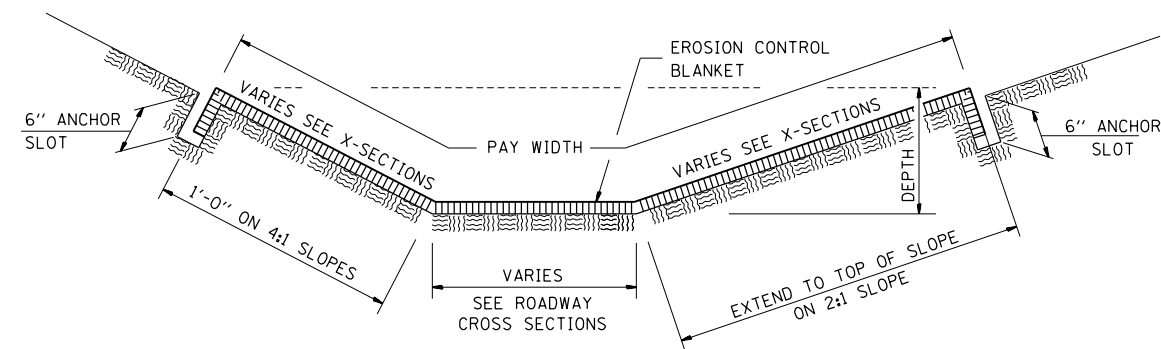
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	151
	09L0179B			



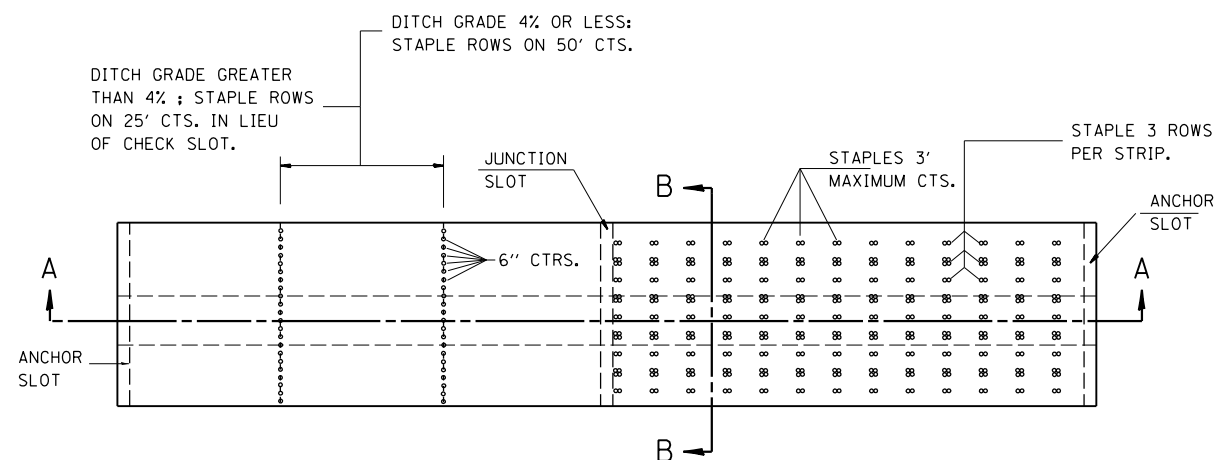
STORM WATER DISCHARGE SCHEMATIC

INTENDED SEQUENCE

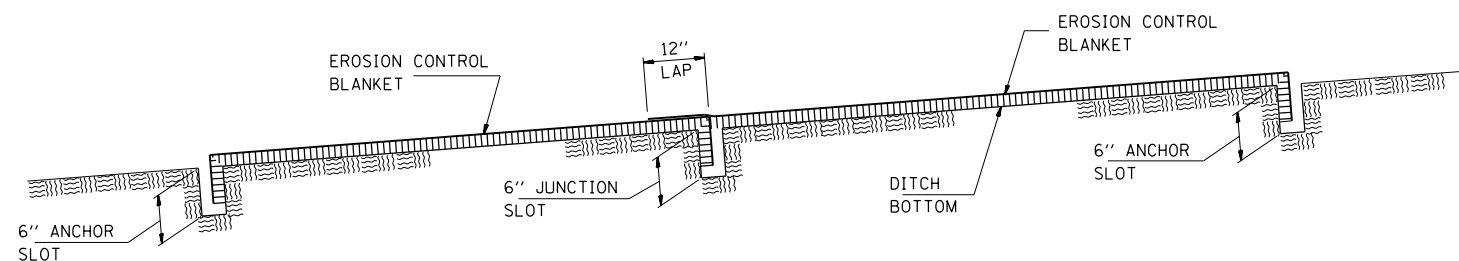
- ① PLACEMENT OF THE PERIMETER EROSION BARRIER PRIOR TO ANY COMMENCEMENT OF OTHER WORK. SEE STANDARD 280001.
- ② PLACEMENT OF INLET AND PIPE PROTECTION ON EXISTING STRUCTURES PRIOR TO COMMENCEMENT OF ANY WORK. PLACEMENT OF INLET AND PIPE PROTECTION AFTER CONSTRUCTION OF PROPOSED STRUCTURES. SEE STANDARD 280001
- ③ PLACEMENT OF TEMPORARY SEEDING ON GRADED SURFACES NOT HAVING PERMANENT SEEDING APPLIED.
- ④ PLACEMENT OF EROSION CONTROL BLANKET AFTER FINAL GRADING OF AREAS REQUIRING SUCH PROTECTION.
- ⑤ ONGOING MAINTENANCE OF EROSION CONTROL ELEMENTS PER SWPPP AND CITY OF SPRINGFIELD'S EROSION CONTROL ORDINANCE.
- ⑥ REMOVE TEMPORARY EROSION CONTROL ELEMENTS AFTER FINAL GRADING AND PERMANENT SEEDING IS ESTABLISHED AS PER THE SWPPP AND APPROVED BY THE ENGINEER.



EROSION CONTROL BLANKET SECTION B-B



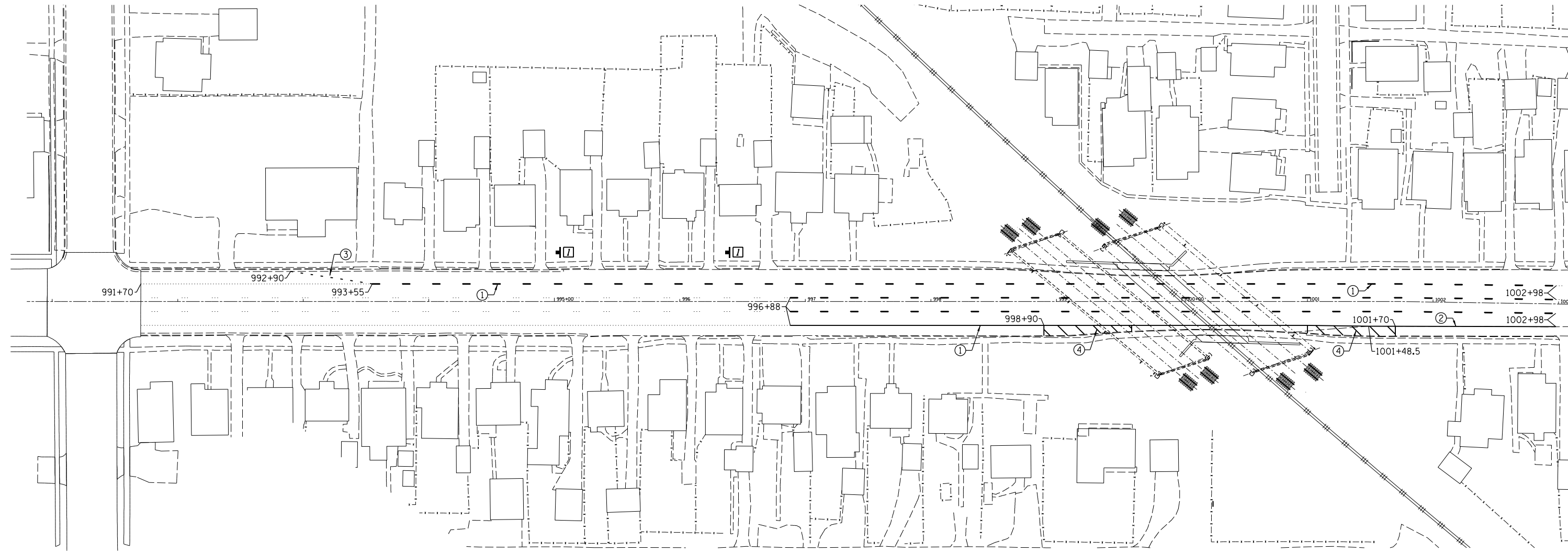
PLAN VIEW & STAPLING LAYOUT FOR EROSION CONTROL BLANKET PLACEMENT IN DITCH



EROSION CONTROL BLANKET SECTION A-A

FILE NAME = D609L0179B-EROSION-US4-DETAILS-01.dgn	USER NAME = Pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
		CHECKED - JWM/GCN	REVISED -
		DATE - 03/15/2019	REVISED -

SCALE:		SHEET 1 OF 1 SHEETS		STA. TO STA.	
SPRINGFIELD RAIL IMPROVEMENTS PROJECT					
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS					
EROSION CONTROL DETAILS - TRACK					
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
•	(109) VB,(110) VB-5	SANGAMON	382	152	
			09L0179B	CONTRACT NO. 93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT					

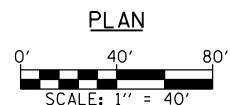


**NO
PARKING
4 PM-6 PM
MON-FRI
TOW-AWAY
ZONE**
**NO PARKING
DURING
SNOW
EMERGENCY**


**R7-2A 12x18
WITH
CUSTOM
NO PARKING**

LEGEND	
①	- THERMOPLASTIC PAVEMENT MARKING LINE - 5" (WHITE) - SKIP DASH 10' LINES 30' DASH
②	- THERMOPLASTIC PAVEMENT MARKING LINE - 5" (SOLID WHITE)
③	- THERMOPLASTIC PAVEMENT MARKING LINE - 6" (WHITE SKIP DASH) 2' LINES 6' DASH
④	- THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)

PAVEMENT MARKING PLAN – 5TH STREET



DESIGNED
DRAWN
CHECKED



USER NAME = Pop00275	DESIGNED -	REVISED -
PLOT SCALE = 80.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 4/10/2019	CHECKED -	REVISED -
	DATE - 03/15/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PAVEMENT MARKING PLAN – 5TH STREET**

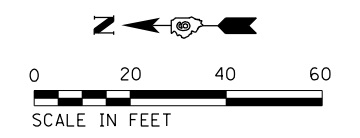
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	153
	09L0179B		CONTRACT NO. 93733	
ILLINOIS FED. AID PROJECT				

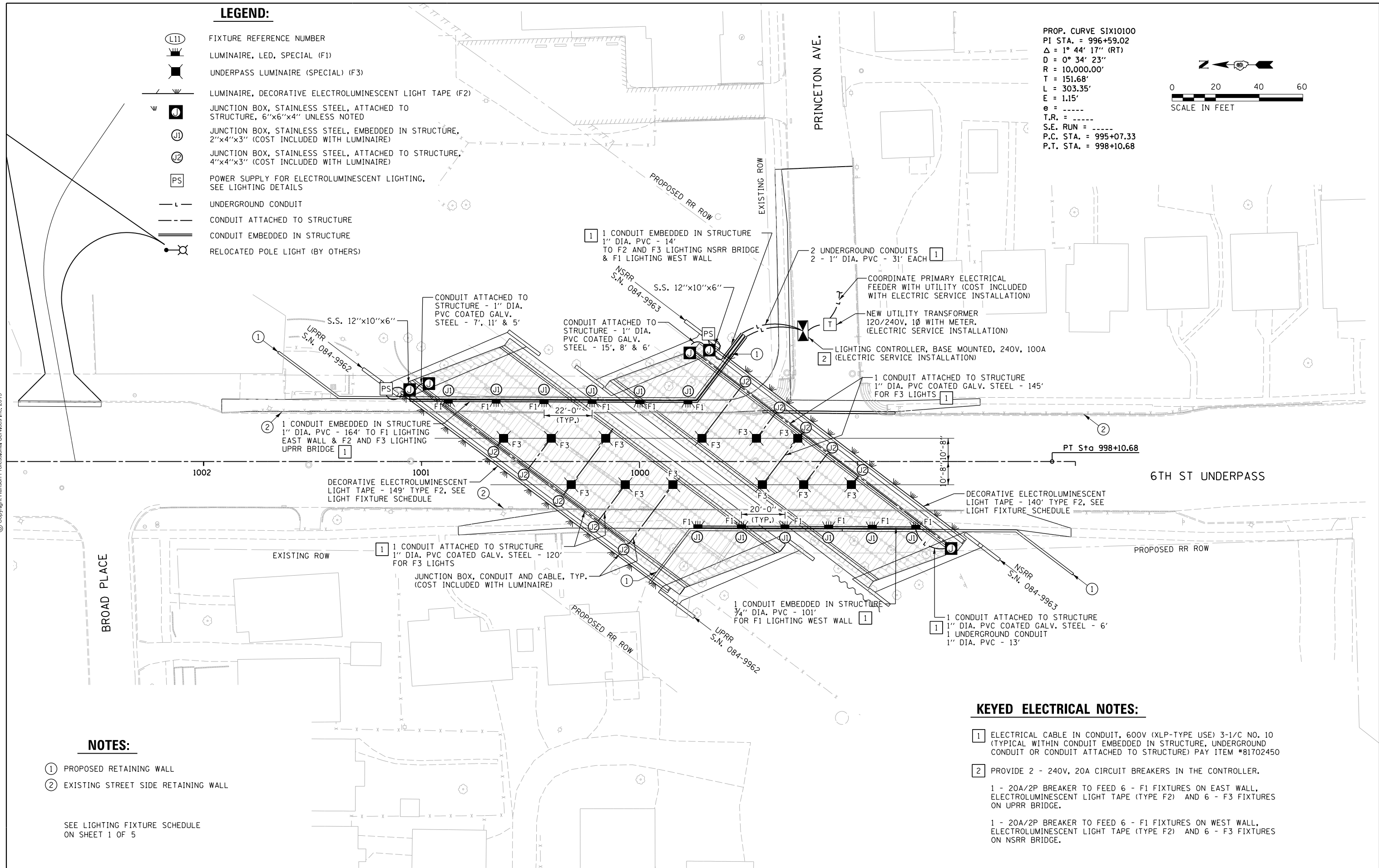
LEGEND:

- (L11) FIXTURE REFERENCE NUMBER
- LUMINAIRE, LED, SPECIAL (F1)
- UNDERPASS LUMINAIRE (SPECIAL) (F3)
- LUMINAIRE, DECORATIVE ELECTROLUMINESCENT LIGHT TAPE (F2)
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6"x6"x4" UNLESS NOTED
- JUNCTION BOX, STAINLESS STEEL, EMBEDDED IN STRUCTURE, 2"x4"x3" (COST INCLUDED WITH LUMINAIRE)
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 4"x4"x3" (COST INCLUDED WITH LUMINAIRE)
- POWER SUPPLY FOR ELECTROLUMINESCENT LIGHTING, SEE LIGHTING DETAILS
- UNDERGROUND CONDUIT
- CONDUIT ATTACHED TO STRUCTURE
- CONDUIT EMBEDDED IN STRUCTURE
- RELOCATED POLE LIGHT (BY OTHERS)

PROP. CURVE SIX10100
 PI STA. = 996+59.02
 Δ = 1° 44' 17" (RT)
 D = 0° 34' 23"
 R = 10,000.00'
 T = 151.68'
 L = 303.35'
 E = 1.15'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 995+07.33
 P.T. STA. = 998+10.68



© Copyright Hanson Professional Services Inc. 2019



NOTES:

- ① PROPOSED RETAINING WALL
- ② EXISTING STREET SIDE RETAINING WALL

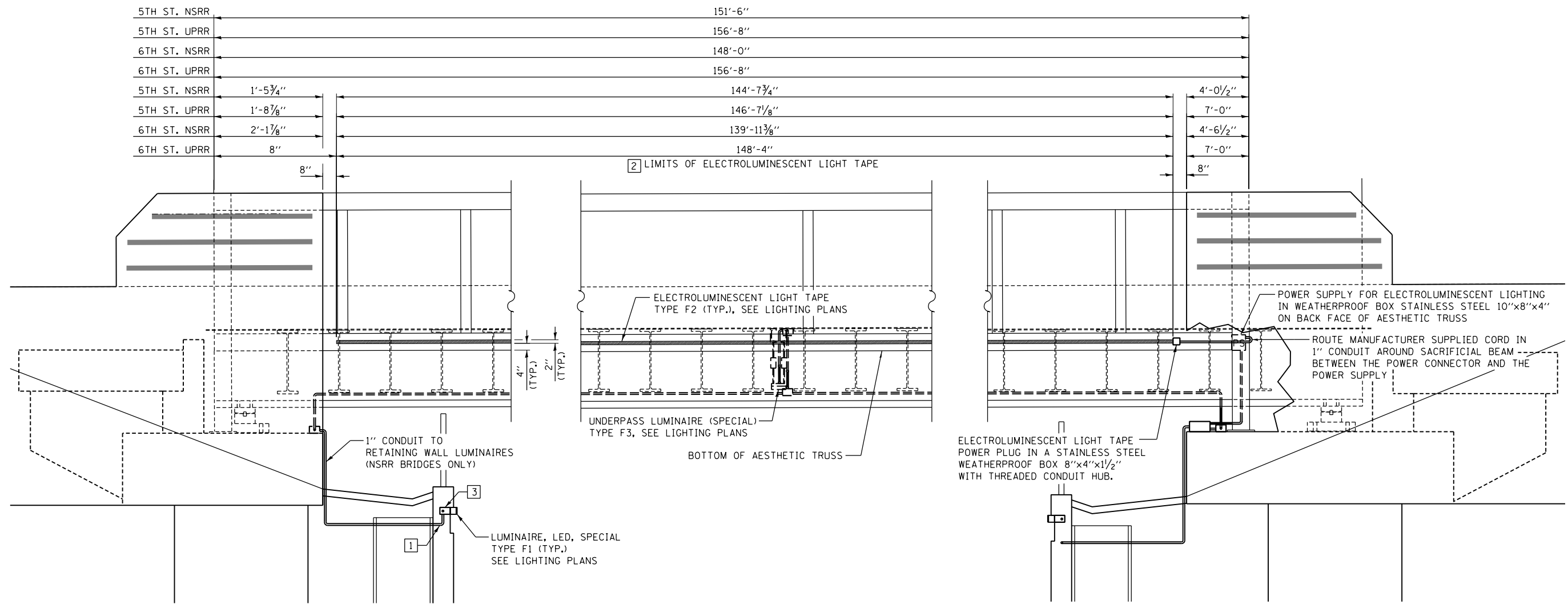
SEE LIGHTING FIXTURE SCHEDULE ON SHEET 1 OF 5

KEYED ELECTRICAL NOTES:

- ① ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10 (TYPICAL WITHIN CONDUIT EMBEDDED IN STRUCTURE, UNDERGROUND CONDUIT OR CONDUIT ATTACHED TO STRUCTURE) PAY ITEM #81702450
- ② PROVIDE 2 - 240V, 20A CIRCUIT BREAKERS IN THE CONTROLLER.
 - 1 - 20A/2P BREAKER TO FEED 6 - F1 FIXTURES ON EAST WALL, ELECTROLUMINESCENT LIGHT TAPE (TYPE F2) AND 6 - F3 FIXTURES ON UPRR BRIDGE.
 - 1 - 20A/2P BREAKER TO FEED 6 - F1 FIXTURES ON WEST WALL, ELECTROLUMINESCENT LIGHT TAPE (TYPE F2) AND 6 - F3 FIXTURES ON NSRR BRIDGE.

FINAL	FILE NAME = D609L0179B-Plan.Lighting.01.dgn	USER NAME = Pop00275	DESIGNED - RGC/RDN	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SPRINGFIELD RAIL IMPROVEMENTS PROJECT SPRINGFIELD, SANGAMON COUNTY, ILLINOIS LIGHTING PLAN - 6TH STREET	F.A.P. RTE. (109) VB,(110) VB-5	SECTION 09L0179B	COUNTY SANGAMON	TOTAL SHEETS 382	SHEET NO. 155
	PLOT SCALE = 40.00' / in.	CHECKED - RDN	REVISIED -	REVISIED -			CONTRACT NO. 93733				
	PLOT DATE = 4/10/2019	DATE - 03/15/2019	REVISIED -	REVISIED -			ILLINOIS FED. AID PROJECT				

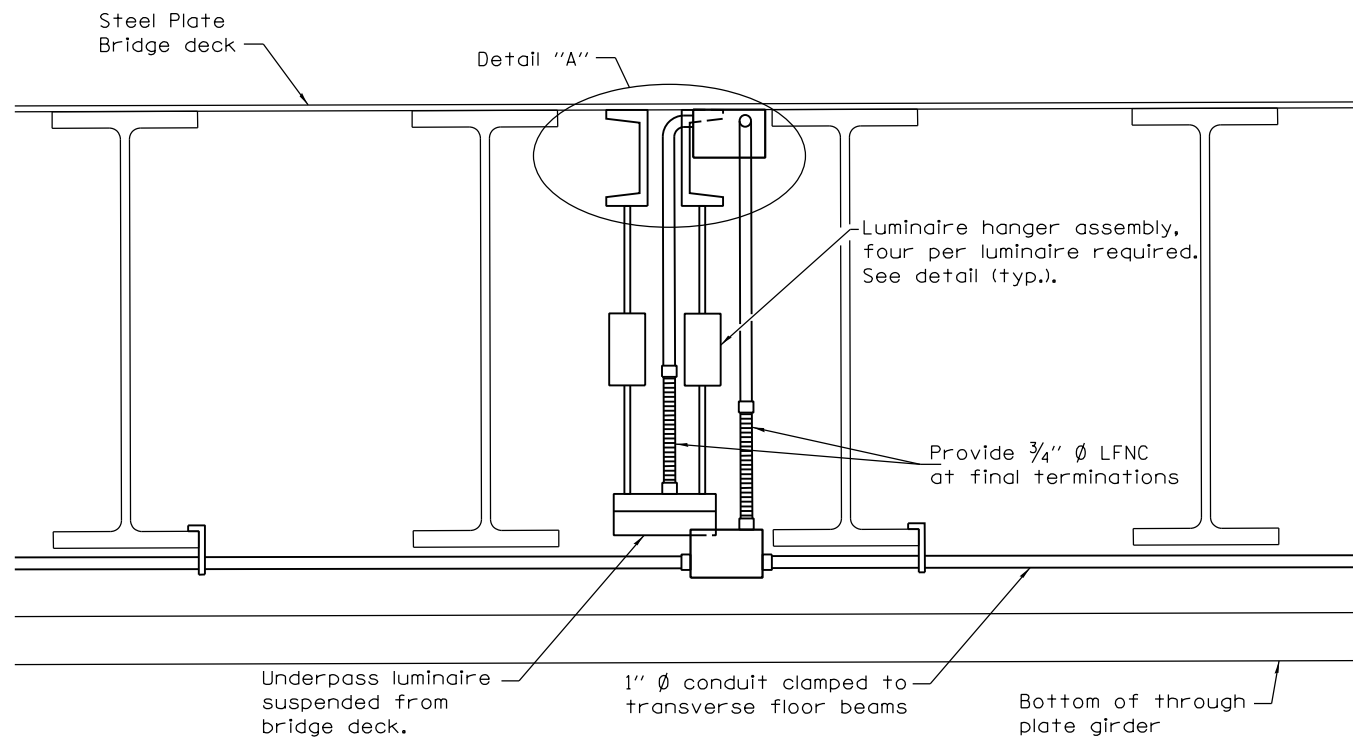
SCALE: SHEET 2 OF 5 SHEETS STA. TO STA.



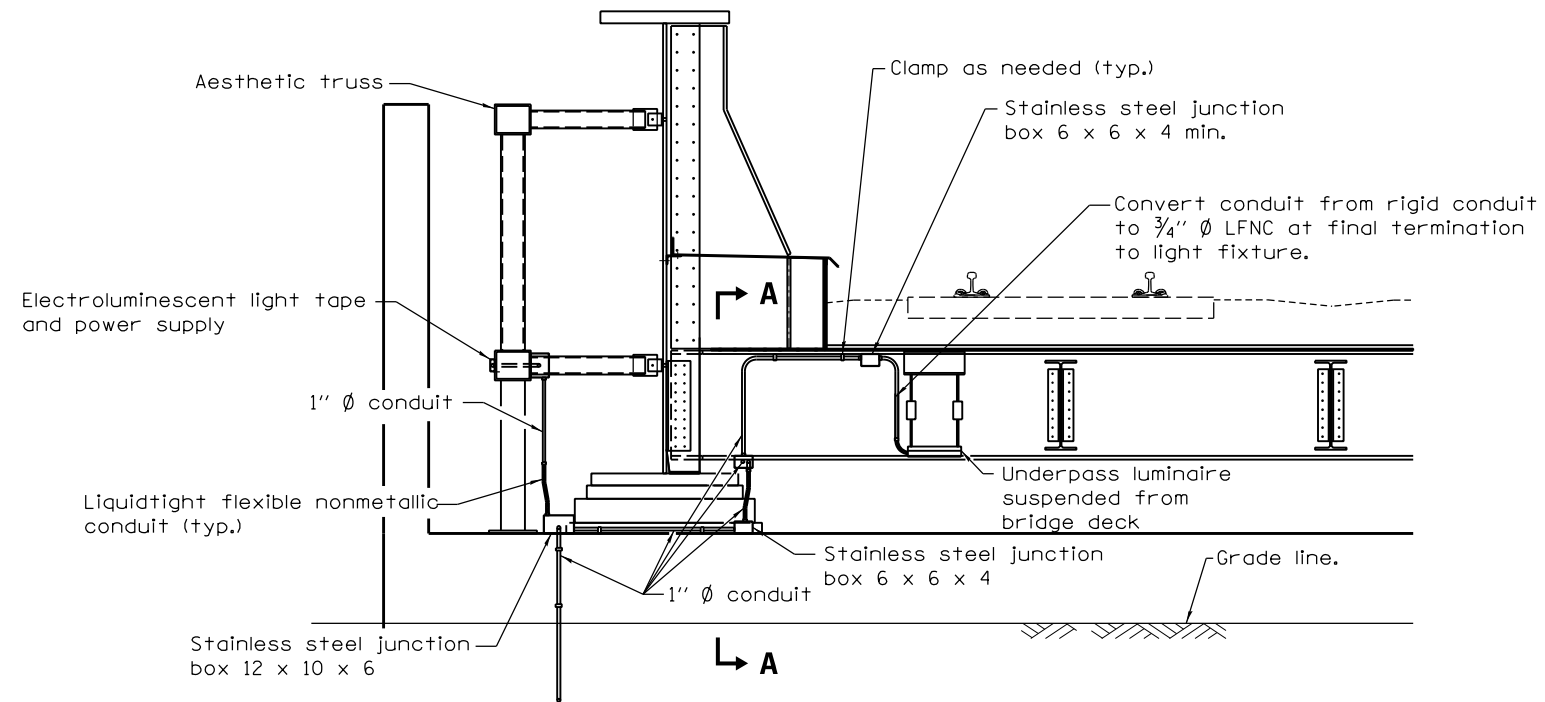
BRIDGE ELEVATION
 (LOOKING NORTH, NSRR BRIDGE)
 (LOOKING SOUTH, UPRR BRIDGE SIMILAR)

KEYED NOTES:

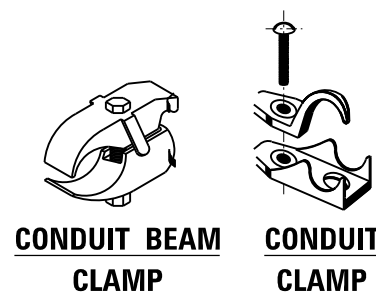
- 1 TYPICAL ELECTRICAL CONDUITS EMBEDDED IN STRUCTURE 3/4" DIA. PVC. SEE LIGHTING PLAN FOR LOCATIONS AND NUMBER OF CONDUITS REQUIRED.
- 2 COORDINATE EXACT LENGTH OF LIGHT TAPE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS AND EXACT SIZE OF WEATHERPROOF J-BOX PROTECTING LIGHT TAPE POWER CONNECTOR
- 3 JUNCTION BOX - STAINLESS STEEL EMBEDDED IN STRUCTURE, 2"x4"x3". COST INCLUDED WITH LUMINAIRE.



SECTION A-A

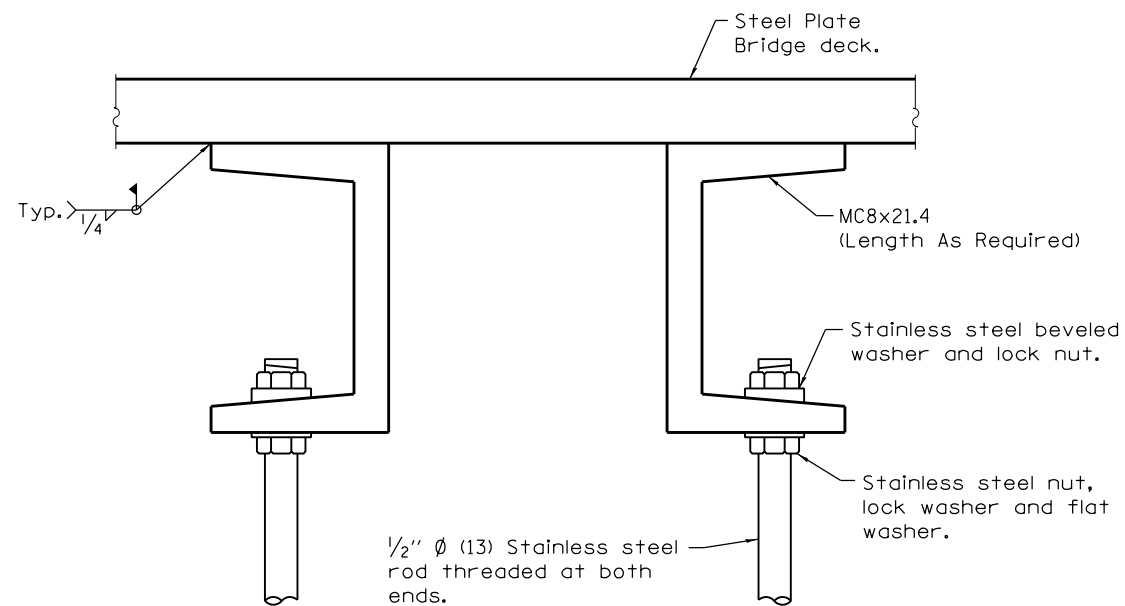


ABUTMENT ELEVATION

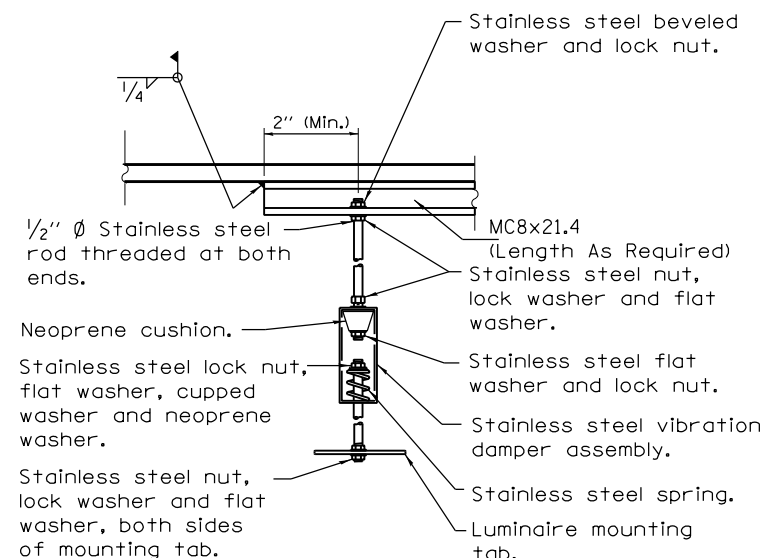


CONDUIT BEAM CLAMP

CONDUIT CLAMP



DETAIL "A"



LUMINAIRE HANGER ASSEMBLY DETAIL

GENERAL NOTES

Underpass Luminaires shall be installed and operational on the NSRR bridges at the end of Stage 1 and on the UPRR bridges at the end of Stage 4A.

No field drilling of the steel plate bridge deck will be allowed.

See plans for underpass luminaire locations.

Underpass luminaires shall be centered between transverse floor beams unless otherwise directed by the Engineer.

Optics of underpass luminaires shall be installed 1 inch above the bottom of the floor beams with no parts of the luminaire or attached conduit below the plane of the bottom of the through plate girders.

No conduits or junction boxes shall be attached to the through plate girder.

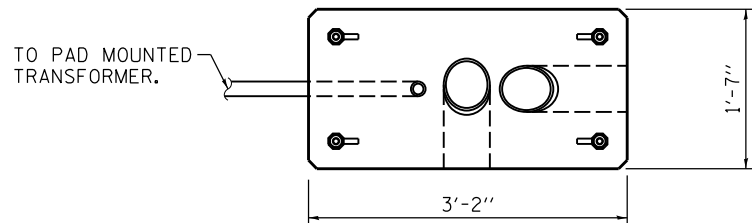
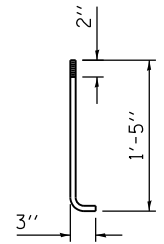
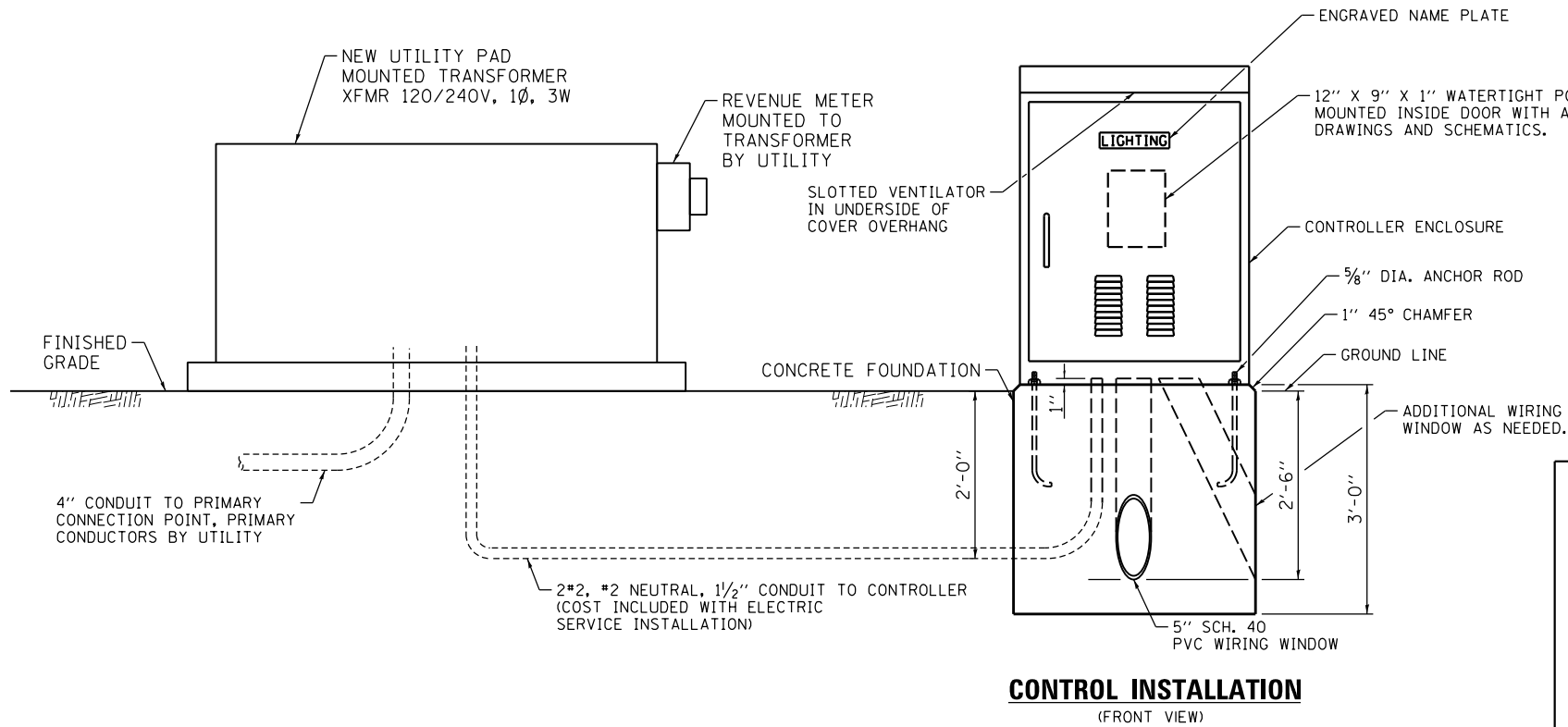
Stainless steel conduit shall be used beneath any openings in the bridge deck.

All dimensions are in inches (millimeters) unless otherwise shown.

Clamps should not be fastened to steel bridge deck directly. Contractor shall weld small plates to deck where clamps necessary and attach the clamp to the small plate. Cost included with conduit attached to structure.

FILE NAME = D609L0179B-Details-Lighting.dgn	USER NAME = Pop00275	DESIGNED - RGC/RDN	REVISED -
		DRAWN - EJM	REVISED -
		CHECKED - RDN	REVISED -
		DATE - 03/15/2019	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	157
	09L0179B			CONTRACT NO. 93733



- 240 V. SERVICE
- 480 V. SERVICE

SERVICE NOTES:

1. CONTRACTOR SHALL VERIFY AND COORDINATE SERVICE ENTRANCE WORK WITH THE SERVING ELECTRIC UTILITY COMPANY.
2. ALL METAL CONDUITS TERMINATING IN SERVICE EQUIPMENT (METER BASE & SERVICE BREAKER) SHALL HAVE GROUND BUSHING TYPE HUBS WITH BONDING JUMPERS TO THE RESPECTIVE GND BUS.
3. SEE CONTROL INSTALLATION AND FOUNDATION DETAILS ON THIS SHEET AND PLAN SHEETS 1 THROUGH 4 OF 5 FOR CONDUIT & WIRE SIZES & TYPES
4. UNLESS OTHERWISE NOTED, WORK SHOWN ON ELECTRIC SERVICE INSTALLATION DETAIL, INCLUDING COORDINATION WITH UTILITY COMPANY, SHALL BE PAID FOR AS ELECTRIC SERVICE INSTALLATION.
5. RACEWAYS SHALL TERMINATE 3' ABOVE TOP OF CONCRETE FOUNDATION.

**TYPICAL ELECTRICAL SERVICE INSTALLATION & LIGHTING CONTROL DETAILS
5TH & 6TH STREET UNDERPASS**

SECONDARY SERVICE CONDUCTORS, SIZED AS REQUIRED.

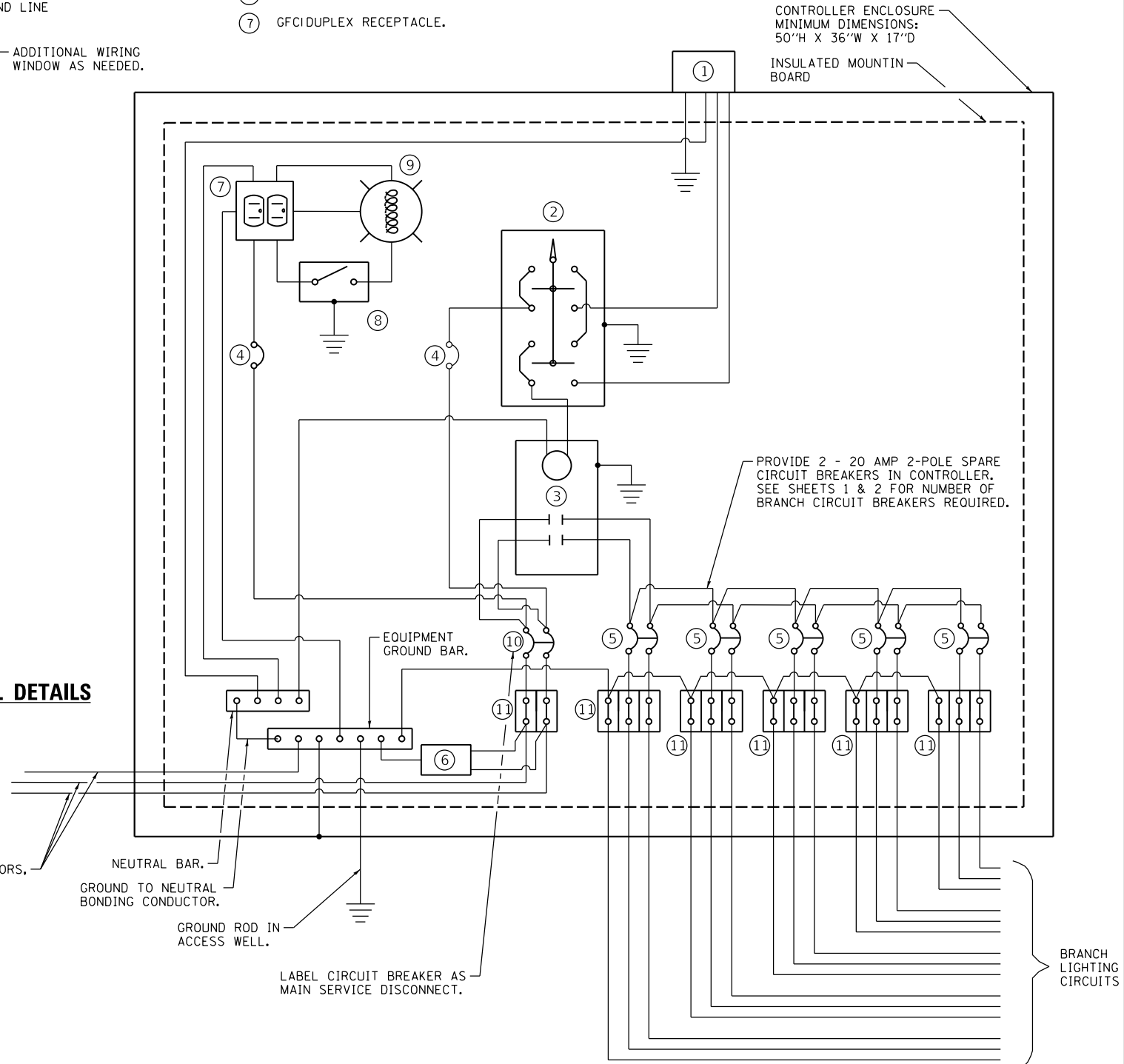
NEUTRAL BAR.
GROUND TO NEUTRAL BONDING CONDUCTOR.

GROUND ROD IN ACCESS WELL.

LABEL CIRCUIT BREAKER AS MAIN SERVICE DISCONNECT.

CONTROL SCHEMATIC

- ① PHOTOCELL WITH INTEGRAL SURGE ARRESTER.
- ② HAND-OFF-AUTO SELECTOR SWITCH.
- ③ 100 AMP, ELECTRICALLY HELD CONTACTOR.
- ④ 15 AMP, 1-POLE CIRCUIT BREAKER.
- ⑤ 20 AMP, 2-POLE CIRCUIT BREAKER
- ⑥ SURGE ARRESTER.
- ⑦ GFCI DUPLEX RECEPTACLE.
- ⑧ SINGLE-POLE, SINGLE-THROW SWITCH.
- ⑨ INCANDESCENT LUMINAIRE, ENCLOSED AND GASKETTED WITH 100 WATT LAMP.
- ⑩ 100 AMP, 2-POLE CIRCUIT BREAKER.
- ⑪ TERMINAL BLOCK SIZED FOR CONDUCTORS AS SHOWN ON PLANS.



CONTROL SCHEMATIC

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
666 ALT	(109) VB, (110) VB-5	SANGAMON	382	159
		ILLINOIS	CONTRACT NO. 93733	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED HIGHWAY PLANS
USABLE SEGMENT IV**

F.A.P. ROUTE 666 ALT. (FIFTH STREET) & F.A.P. ROUTE 666 (SIXTH STREET)
AT 10TH ST. CORRIDOR / RR UNDERPASS
SECTION (109) VB, (110) VB-5, LRS SECTION 18-00478-00-BR
PROJECT MFYW(203)
STRUCTURE REPLACEMENT
CITY OF SPRINGFIELD, SANGAMON COUNTY
C-96-051-18

**VOLUME II
STRUCTURES
&
CROSS SECTIONS**

FINAL PLANS

GENERAL NOTES

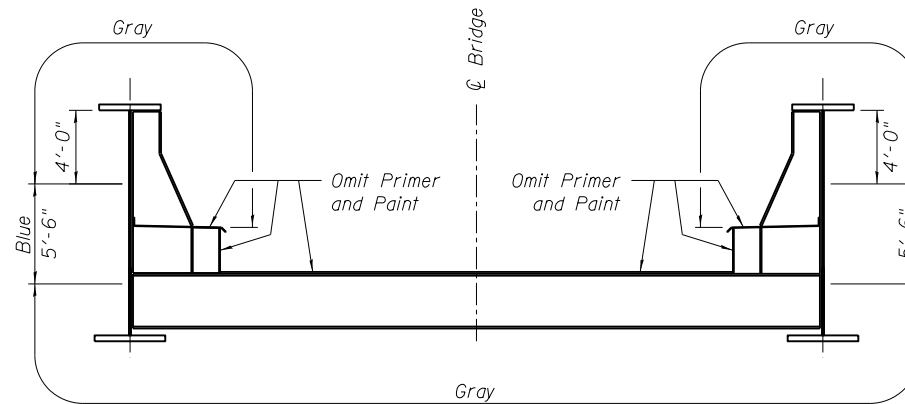
- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 1/2 in. φ, holes 5/8 in. φ, unless otherwise noted.
- Calculated weight of Structural Steel, ASTM A709, Gr. 50 = 1,701,120 lbs.
 ASTM A36, Gr. 36 = 29,020 lbs.
 ASTM A500, Gr. 46 = 31,230 lbs.
- All structural steel shall be ASTM A709 Grade 50 unless otherwise noted on the plans.
- All substructure concrete shall have a compressive strength of 4,000 psi at 14 days.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to the following surfaces:
 Abutments - inside face of backwall, inside face of cheekwall, top of cap, (except surfaces coated with surface color treatment).
 Concrete Surface Color Treatment shall be applied to the following surfaces:
 Abutments - concrete facing, wingwall and cheekwall surfaces coated with concrete surface color treatment.
- 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. All coatings on faying surfaces shall satisfy RSCS requirements for Class B slip coefficient. The color of the final finish coat for girder flanges, all interior steel surfaces, bottom of deck plate, and aesthetic truss shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for a 5.5 foot tall strip on the exterior face of girder web starting 4 foot down from the top flange shall be blue, Munsell No. 10B 3/6. See painting diagram for more information.
- Waterproofing shall be applied to the backside of the abutment cap and backwall and backside of wingwalls for surfaces below ground. This shall be according to Article 503.18 of the Std. Spec. Cost included with Concrete Structures.

Drilled shaft cross-hole sonic log (CSL) testing:

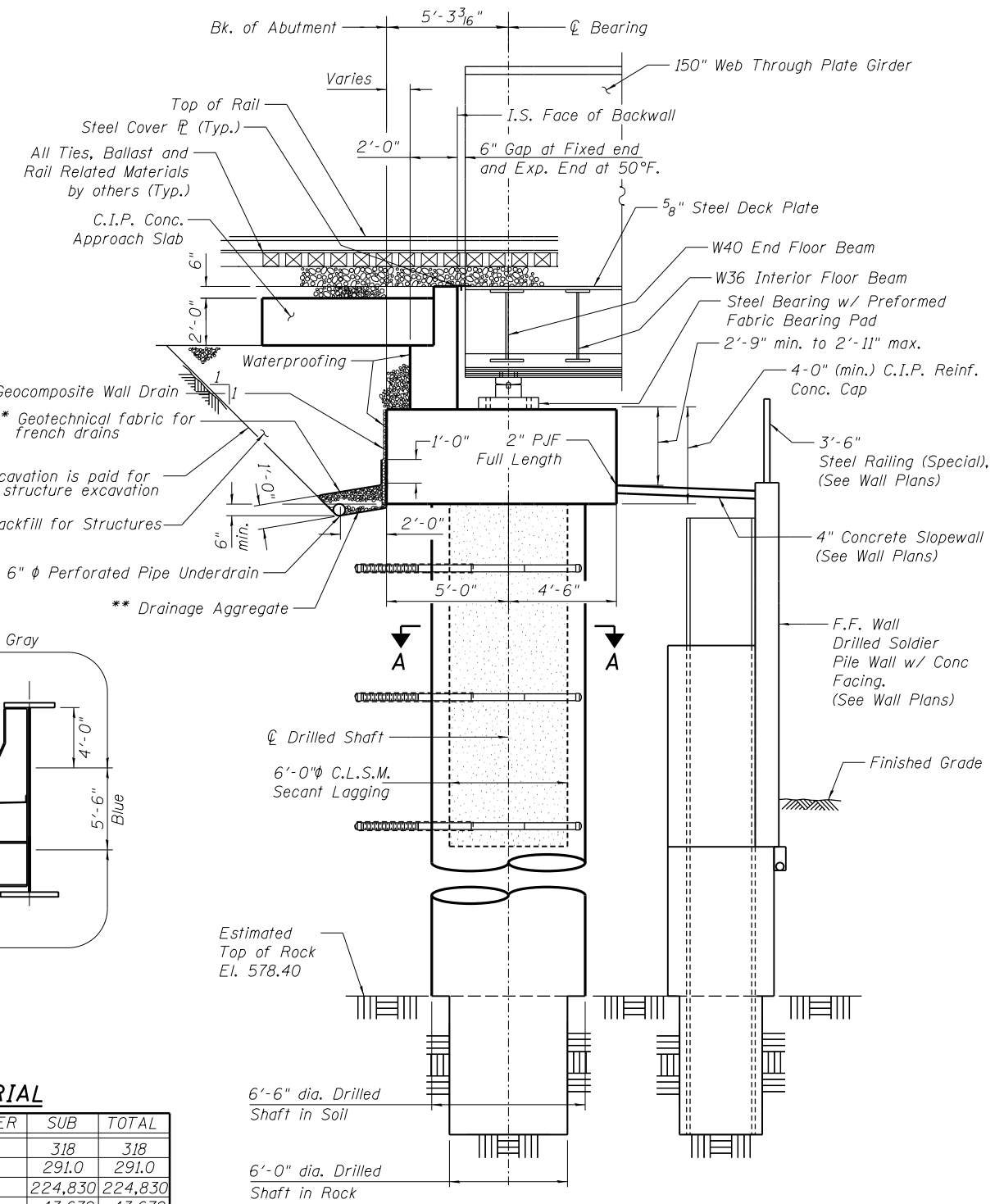
- Drilled shafts shall be evaluated by cross-hole sonic log testing. Testing pipes shall be installed in each drilled shaft to facilitate the logging process, which will follow completion of each shaft.
- Furnish and install six standard 2 inch nominal diameter steel pipes (ASTM A53, Grade B) for use in CSL testing of each drilled shaft. Pipes shall be equally spaced around the interior of the reinforcing steel cage.
- Pipes shall be fitted with a screw-on watertight shoe and cap and shall be securely fixed to the interior of the reinforcing steel cage. Watertight joints shall be used to achieve the required length. The pipes shall be filled with water and plugged or capped before concrete placement. The upper end of the pipe shall not be left open during or after concrete placement. The pipes shall extend at least 2'-6" above the top of the drilled shaft concrete.
- CSL testing will be completed by the Engineer at no cost to the Contractor. If CSL test results are unsatisfactory according to the Engineer, the Contractor shall propose a method of correction including designs if required to the Engineer for approval. The correction shall be at the expense of the Contractor.

INDEX OF SHEETS

- General Plan & Elevation
- General Data
- Foundation Layout
- Typical Section
- Framing Plan
- Outside Elevation of Girder (1 of 2)
- Outside Elevation of Girder (2 of 2)
- Inside Elevation of Girder (1 of 2)
- Inside Elevation of Girder (2 of 2)
- Typical Sections
- Girder Sections & Details
- Girder Splice Details
- Walkway and Ballast Plate Plan
- Walkway and Ballast Plate Details
- Miscellaneous Girder Details (1 of 3)
- Miscellaneous Girder Details (2 of 3)
- Miscellaneous Girder Details (3 of 3)
- Aesthetic Truss
- TPG Bearing Details
- End Floorbeam Bearing Details
- Bridge Deck Waterproofing
- West Abutment
- West Abutment Details
- West Abutment Bill of Material
- East Abutment
- East Abutment Details
- East Abutment Bill of Material
- Subsurface Data Profile



PAINTING DIAGRAM



ABUTMENT SECTION
(At Rt. L's to Back of Abutment)

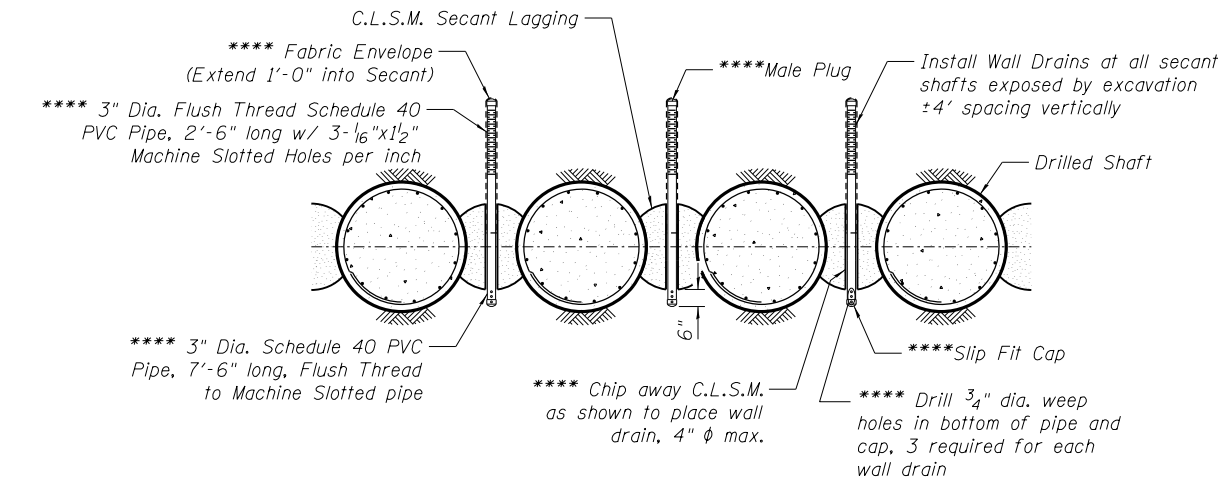
- Notes:
 West Abutment Section is Shown, East Similar.
- * Granular Backfill for Structures Shall Be Placed and Compacted According to Section 502.10 of the Standard Specifications.
 - ** Included in the cost of "Pipe Underdrains for Structures, 6". For additional drainage details see Railway Plans.

UNION PACIFIC RAILROAD
 S.N. 084-9960 BUILT 20__ BY
 CITY OF SPRINGFIELD
 SEC. (109)VB, (110)VB-5
 STATION 47855+08.40
 MILE POST 186.99
 LOADING COOPER E-80

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.	-	318	318
Concrete Structures	Cu. Yd.	-	291.0	291.0
Reinforcement Bars	Pound	-	224,830	224,830
Reinforcement Bars, Epoxy Coated	Pound	-	43,670	43,670
Name Plates	Each	-	1	1
Drilled Shaft in Soil	Cu. Yd.	-	276.0	276.0
Drilled Shaft in Rock	Cu. Yd.	-	182.2	182.2
Secant Lagging	Cu. Ft.	-	5,292	5,292
Membrane Waterproofing (Special)	Sq. Ft.	6,212	-	6,212
Concrete Sealer	Sq. Ft.	-	1,790	1,790
Geocomposite Wall Drain	Sq. Yd.	-	52	52
Drainage System, No. 1	Each	1	-	1
Crosshole Sonic Logging Access Ducts	Foot	-	2,571	2,571
Concrete Surface Color Treatment	Sq. Ft.	-	12	12
Granular Backfill for Structures	Cu. Yd.	-	183	183
Furnishing and Erecting Structural Steel, Bridge No. 1	L. Sum	1	-	1
Pipe Underdrains for Structures, 6"	Foot	-	158	158



SECTION A-A

**** Included in the cost of Secant Lagging

\\spr-svr306.hanson.com\hanson_projects\Documents\09Jobs\09L0179B\CAD\Struct\5th\Sheet\0849960-09L0179B-UPRR-002

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
		DRAWN - RSJ	REVISED -
		CHECKED - MJW	REVISED -
PLOT SCALE = 0:2.0000' = 1"			
PLOT DATE = 4/12/2019			

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA
 STRUCTURE 084-9960 - 5TH ST UPRR**

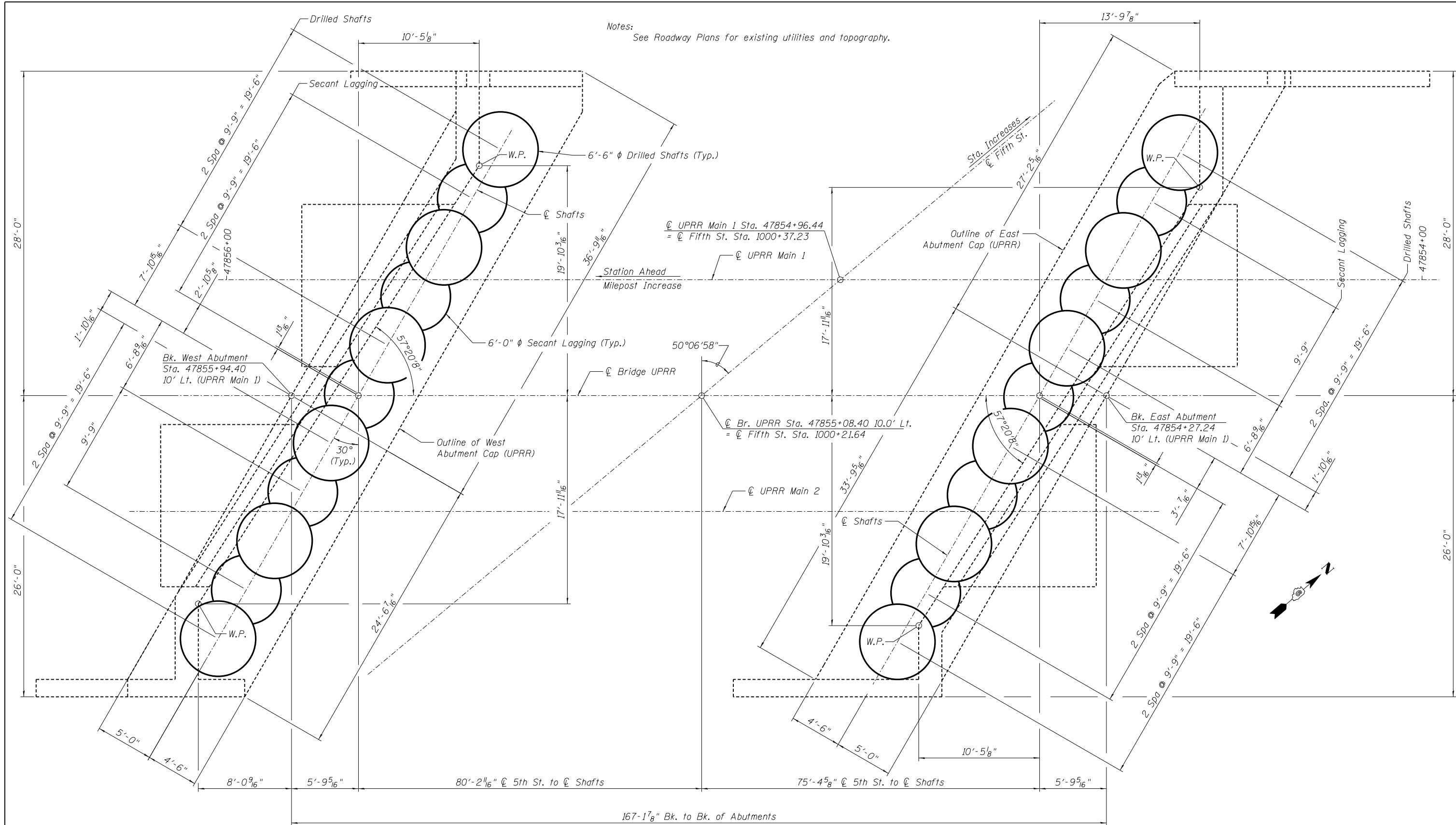
SHEET NO. 2 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(109) VB,(110) VB-5	SANGAMON	382	161
			CONTRACT NO. 93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

FINAL



© Copyright Hanson Professional Services Inc., 2019



Notes:
See Roadway Plans for existing utilities and topography.

FOUNDATION LAYOUT PLAN

\\prj\svr\306.hanson.dom\hanson_projects\Documents\09\Jobs\09L01798\CAD\Struct\5th\Sheet\0849960-09L01798-UPRR-002

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
		DRAWN - RSJ	REVISED -
		CHECKED - MJW	REVISED -
PLOT SCALE = 0:2.0000 '"/in.			
PLOT DATE = 4/11/2019			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FOUNDATION LAYOUT
STRUCTURE 084-9960 - 5TH ST UPRR**

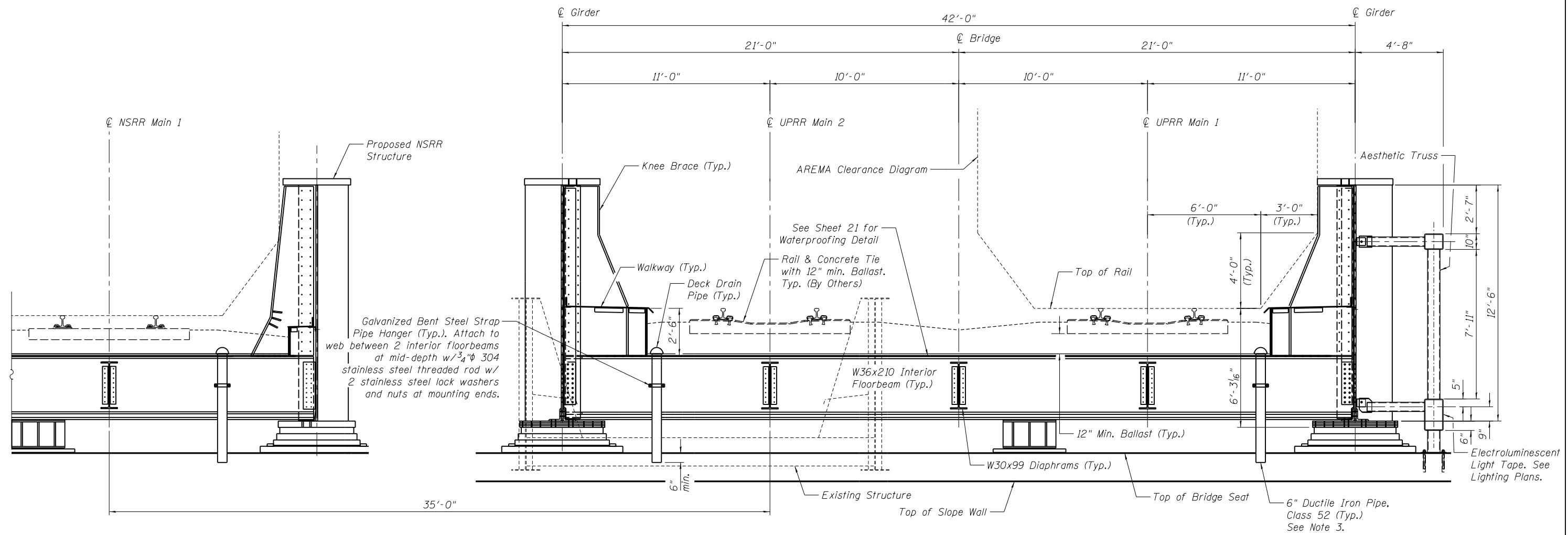
SHEET NO. 3 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	162
			CONTRACT NO.	93733
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

FINAL



Copyright Hanson Professional Services Inc., 2019



TYPICAL SECTION - 5TH ST. (UPRR)
(Looking West)

Notes:

1. Retaining Wall and Steel Railing not shown for clarity.
2. Drain pipe on west end only near low end of bridge deck.
3. With the ductile iron pipe fitted to the bottom of the deck drain bottom pan downspout, drill 4 holes through ductile iron pipe and downspout. Holes shall be aligned with the 4 quadrants of the pipe. Attach ductile iron pipe to downspout with 4 stainless steel carriage bolts. Rounded heads of carriage bolts shall be oriented towards the center of the pipe.
4. Cost of deck drain pipe, bottom pan, downspout, brackets and other hardware shall be included in the cost of Drainage System.

\\spr-svr-306.hanson.dom\hanson_projects\Documents\09\Jobs\09L0179B\CAD\Struct\5th\Sheet\0849960-09L0179B-UPRR-002

FILE NAME :	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
	PLOT SCALE = 0:2.0000 '1" / in.	DRAWN - RSJ	REVISED -
	PLOT DATE = 4/11/2019	CHECKED - MJW	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTION
STRUCTURE 084-9960 - 5TH ST UPRR**

SHEET NO. 4 OF 28 SHEETS

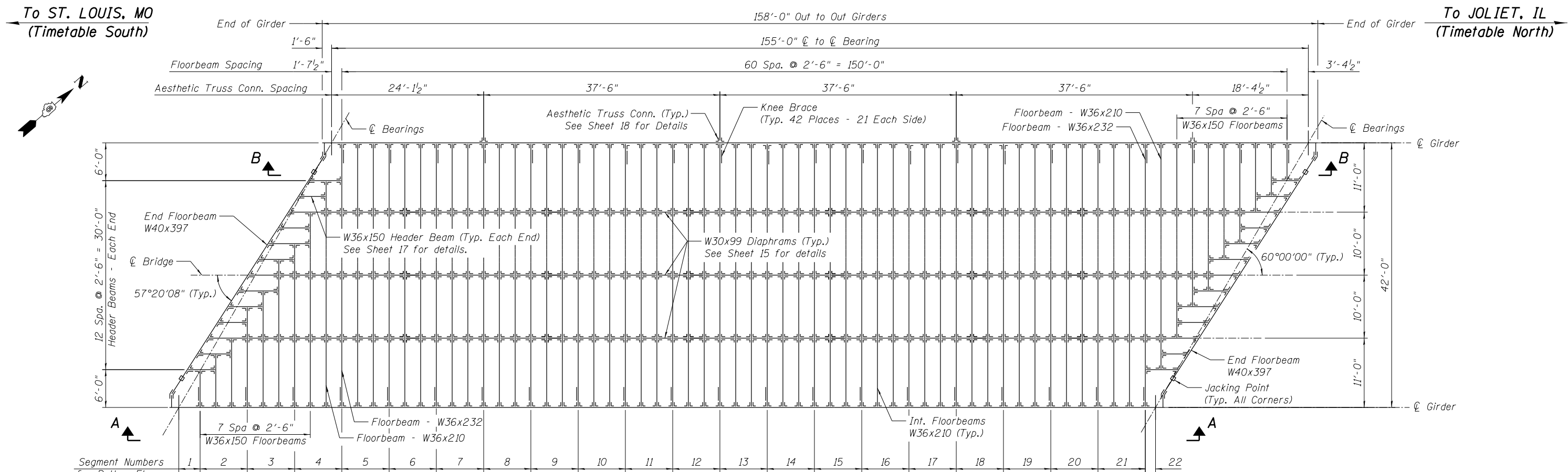
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	163
			CONTRACT NO. 93733	

•666 & 666 ALT. ILLINOIS FED. AID PROJECT

FINAL



© Copyright Hanson Professional Services Inc., 2019



FRAMING PLAN
 See Sheet 6 & 7 for View A-A
 See Sheet 8 & 9 for Section B-B

MOMENT & SHEAR TABLE FOR STEEL THRU PLATE GIRDER

DESCRIPTION	MOMENT	SHEAR
Dead Load	32,584 ft. -k	841 k
Live Load	30,781 ft. -k	871 k
Impact	7,081 ft. -k	200 k
Total	70,446 ft. -k	1,912 k
Section	See Sheet 11 of 28	
Steel	A.S.T.M. A709, Gr. 50	
Net I	2,395,582 in ⁴	
Net S (Bot.)	32,495 in ³	
f _s (Bot.)	26.0 ksi	
Gross I	2,867,701 in ⁴	
Gross S (Top)	33,487 in ³	
f _s (Top.)	25.2 ksi	

I- Moment of Inertia of the Section
 S- Section Modulus
 f_s- Max. Unfactored Stress in the Section Due to D.L. + L.L. + Impact

STEEL NOTES

GENERAL: All materials, fabrication, and erection shall be in accordance with chapter 15 of the current AREMA Manual for Railway Engineering.

Dead Load: (assumed)	
Rail	400
Ballast (Incl. Tie)	7,670
Waterproofing	190
Future Ballast	2,480
Steel	10,960
Total	21,700 lbs. per lin ft. of track

MATERIAL: Zone 2 Conditions control for Charpy V-Notch testing.
 Fracture Critical Members (FCM) shall be Charpy V-Notch tested. According to AREMA Table 15-9-3, Zone 2, P frequency in accordance with ASTM A673.

Impact Test Required (ITR) members shall be Charpy V-Notch (CVN) tested. According to AREMA Table 15-9-2, Zone 2, H frequency in accordance with ASTM A673.

FABRICATION: The top surface of beams shall be adjusted to form a straight line at any transverse section throughout the span. Tolerance is plus or minus 1/8".

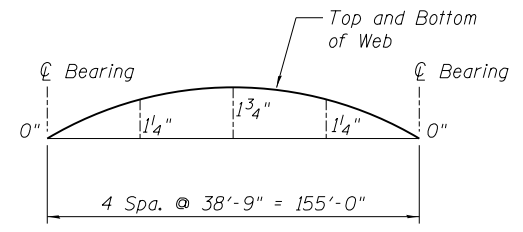
SPLICE NOTES:
 1. No two parts or members shall be spliced by shop welding at the same location, or within the length of a bolted field splice.
 2. Web splices by shop welding shall be located a minimum of 36" away from any flange splice.
 3. Splices of the web or flanges shall not be permitted within the central 30'-0" or the girder span length. This requirement may be waived only by the approval of the Engineer.

	TOP OF TIE	TO MASONRY	TO CLEARANCE
Tie	9/4"	9/4"	9/4"
Ballast	1'-0"	1'-0"	1'-0"
Waterproofing	1/8"	1/8"	1/8"
Ballast pan	5/8"	5/8"	5/8"
Floorbeam & Flange	3'-9"	3'-9"	3'-9"
Flange splice plate	2 1/4"	2 1/4"	2 1/4"
Bolt Head	3/4"	3/4"	3/4"
Bearing	1'-4 3/8"	1'-4 3/8"	1'-4 3/8"
Total	7'-0 3/8"	7'-0 3/8"	5'-11"

MOMENT & SHEAR TABLE FOR STEEL FLOORBEAMS

DESCRIPTION	MOMENT	SHEAR	MOMENT *	SHEAR *
Dead Load	239 ft. -k	20.7 k	4,582 ft. -k	833 k
Live Load	214 ft. -k	20.2 k		
Impact	635 ft. -k	59.8 k		
Total	1,088 ft. -k	100.7 k	4,582 ft. -k	833 k
Section	W36x210		W40x397	
Steel	A.S.T.M. A709, Gr. 50		A.S.T.M. A709, Gr. 50	
Net I	12,886 in ⁴		28,366 in ⁴	
Net S	702 in ³		1384 in ³	
f _s	18.6 ksi		39.7 ksi	

* Jacking Conditions Control 50% Allowable Stress Increase is Permitted



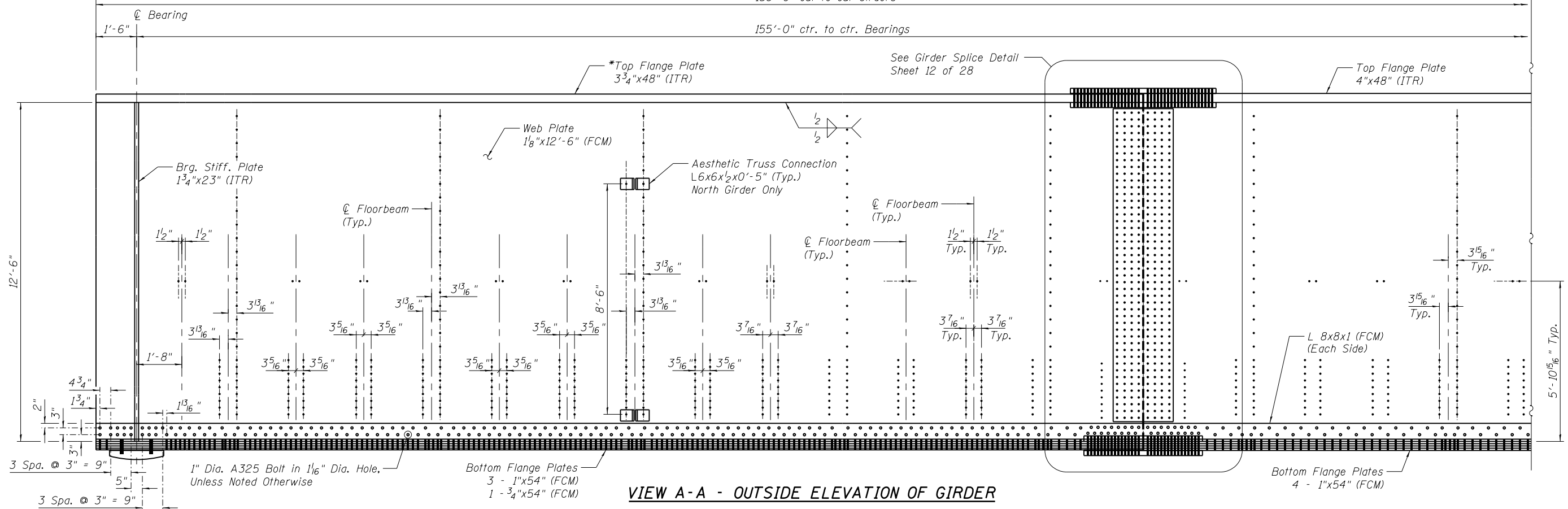
CAMBER DIAGRAM
 Camber Calculated for Dead Load Only

To ST. LOUIS, MO
(Timetable South)

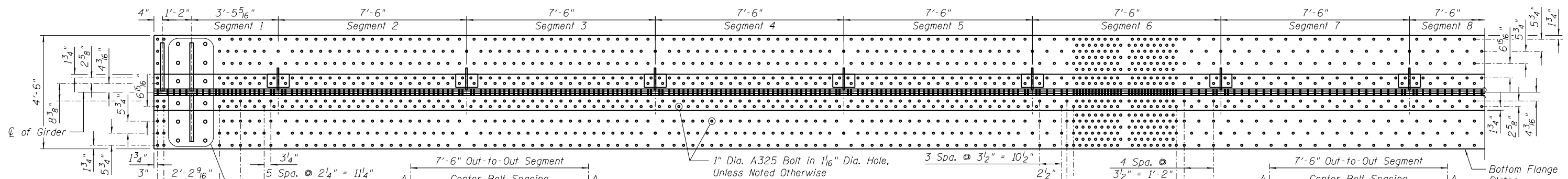
To JOLIET, IL
(Timetable North)

158'-0" out to out Girders

155'-0" ctr. to ctr. Bearings



VIEW A-A - OUTSIDE ELEVATION OF GIRDER



SECTION AT BOTTOM OF GIRDER

Floorbeams, Connection Angles and Int. Stiffeners Not Shown for Clarity
See Table for Bolt Hole Spacing

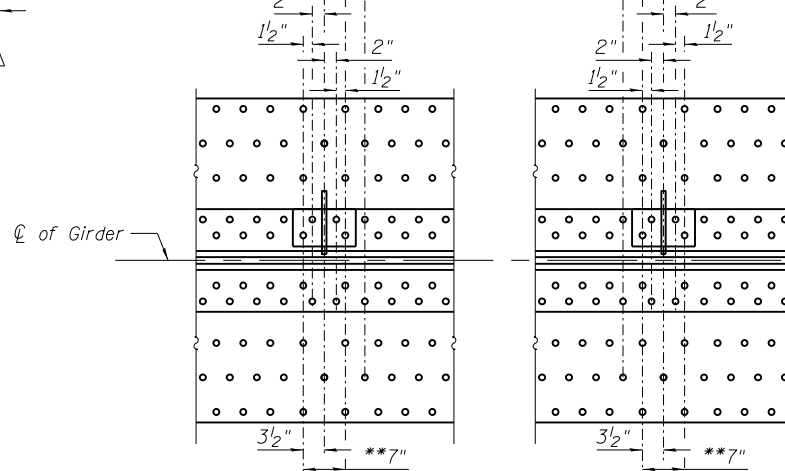
1 5/8" Dia. Holes (See Section G-G on Sheet 11 for Bearing Bolt Hole Locations)

* Alternate larger 4" flange thickness is permitted throughout to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. Calculated girder stresses are based on heavier section. The alternate, if utilized, shall be provided at no additional cost to the Department.

- Note:
1. FCM - Fracture Critical Member
 2. ITR - Impact Test Required
 3. Bolt Hole Spacing in Vertical Leg of Bottom Flange Angle is the Same as Horizontal Leg Except at Splice Locations or as Noted Otherwise.

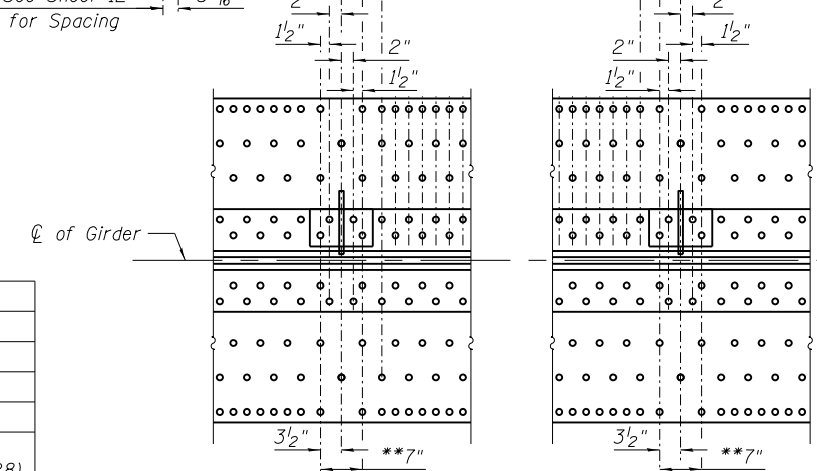
BOLT SPACING BETWEEN INT. STIFFENERS - DETAIL 1

Segments 2 thru 5, 7 thru 9, 14 thru 16, 18 thru 21



BOLT SPACING BETWEEN INT. STIFFENERS - DETAIL 2

Segments 10 thru 13



Segments	A	Center Spacing
2 thru 5 and 18 thru 21	3 1/4"	34 Spa. @ 2 1/4" = 6'-4 1/2"
7 thru 9 and 14 thru 16	3"	22 Spa. @ 3 1/2" = 6'-5"
10 thru 13	3 1/2"	16 Spa. @ 4 3/4" = 6'-4"
1 and 22	See Section at Bottom of Girder	
6 and 17	See Section at Bottom of Girder and Girder Splice Detail (Sheet 12 of 28)	

** Typical Bolt Spacing at Intermediate Stiffeners

FILE NAME: D:\spr\svr\306.hanson.dom\hanson_projects\Documents\09Jobs\09L0179B\CAD\Struct\5th\Sheet\0849960-09L0179B-UPRR-002

USER NAME = Pop00275	DESIGNED - MJW	REVISD -
PLOT SCALE = 0:2.0000 '"/in.	CHECKED - TJH/TDP	REVISD -
PLOT DATE = 4/12/2019	DRAWN - RSJ	REVISD -
	CHECKED - MJW	REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OUTSIDE ELEVATION OF GIRDER - SHEET 1 OF 2
STRUCTURE 084-9960 - 5TH ST UPRR

SHEET NO. 6 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(109) VB,(110) VB-5	SANGAMON	382	165
CONTRACT NO. 93733				
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

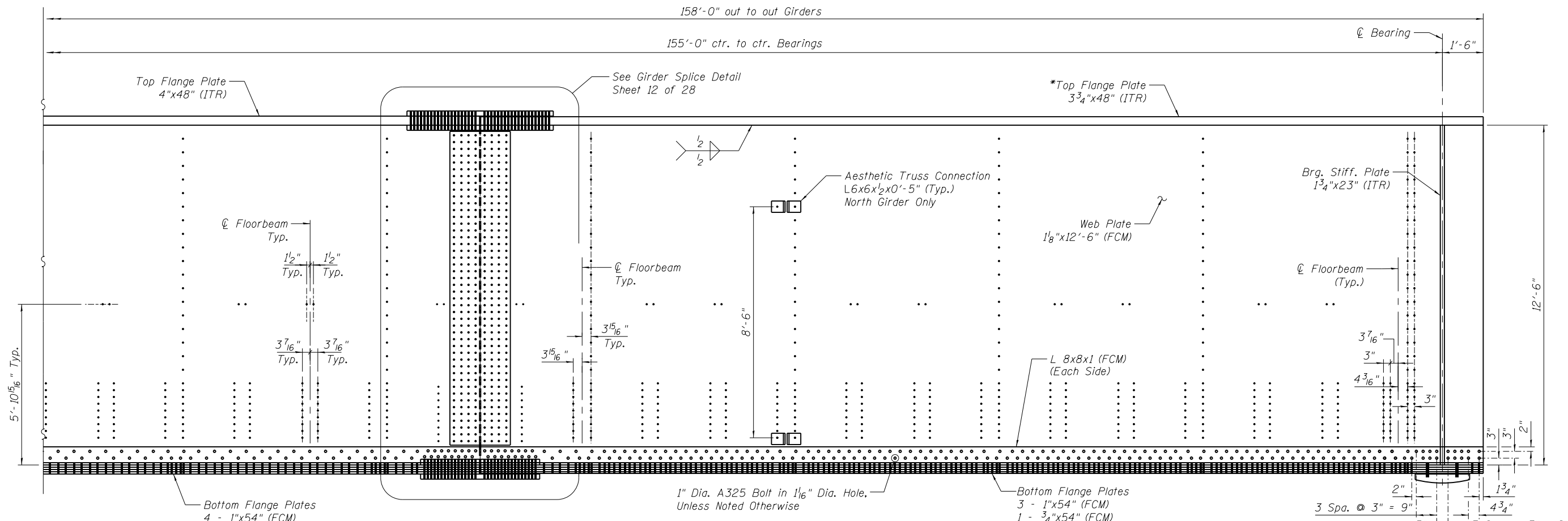
FINAL



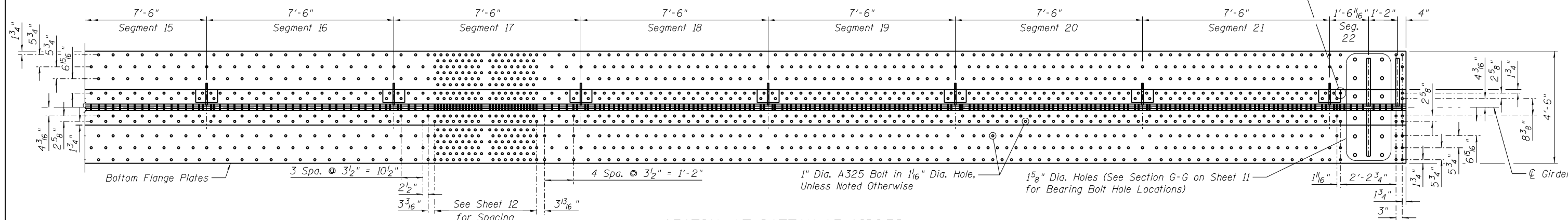
Copyright Hanson Professional Services Inc., 2019

To ST. LOUIS, MO
(Timetable South)

To JOLIET, IL
(Timetable North)



VIEW A-A - OUTSIDE ELEVATION OF GIRDER



SECTION AT BOTTOM OF GIRDER

Floorbeams, Connection Angles and Int. Stiffeners Not Shown for Clarity
See Table on Sheet 6 for Bolt Hole Spacing

- Note:
1. FCM - Fracture Critical Member
 2. ITR - Impact Test Required
 3. Bolt Hole Spacing in Vertical Leg of Bottom Flange Angle is the Same as Horizontal Leg Except at Splice Locations or as Noted Otherwise.

* Alternate larger 4" flange thickness is permitted throughout to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. Calculated girder stresses are based on heavier section. The alternate, if utilized, shall be provided at no additional cost to the Department.

\\spr\svr\306\hanson\dom\hanson\Projects\Documents\09\Jobs\09L0179B\CAD\Struct\5th\Sheet\0849960-09L0179B-UPRR-002

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
		DRAWN - RSJ	REVISED -
		CHECKED - MJW	REVISED -
	PLOT SCALE = 0:2.0000 ' = 1"		
	PLOT DATE = 4/11/2019		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OUTSIDE ELEVATION OF GIRDER - SHEET 2 OF 2
STRUCTURE 084-9960 - 5TH ST UPRR

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(109) VB,(110) VB-5	SANGAMON	382	166
			CONTRACT NO. 93733	

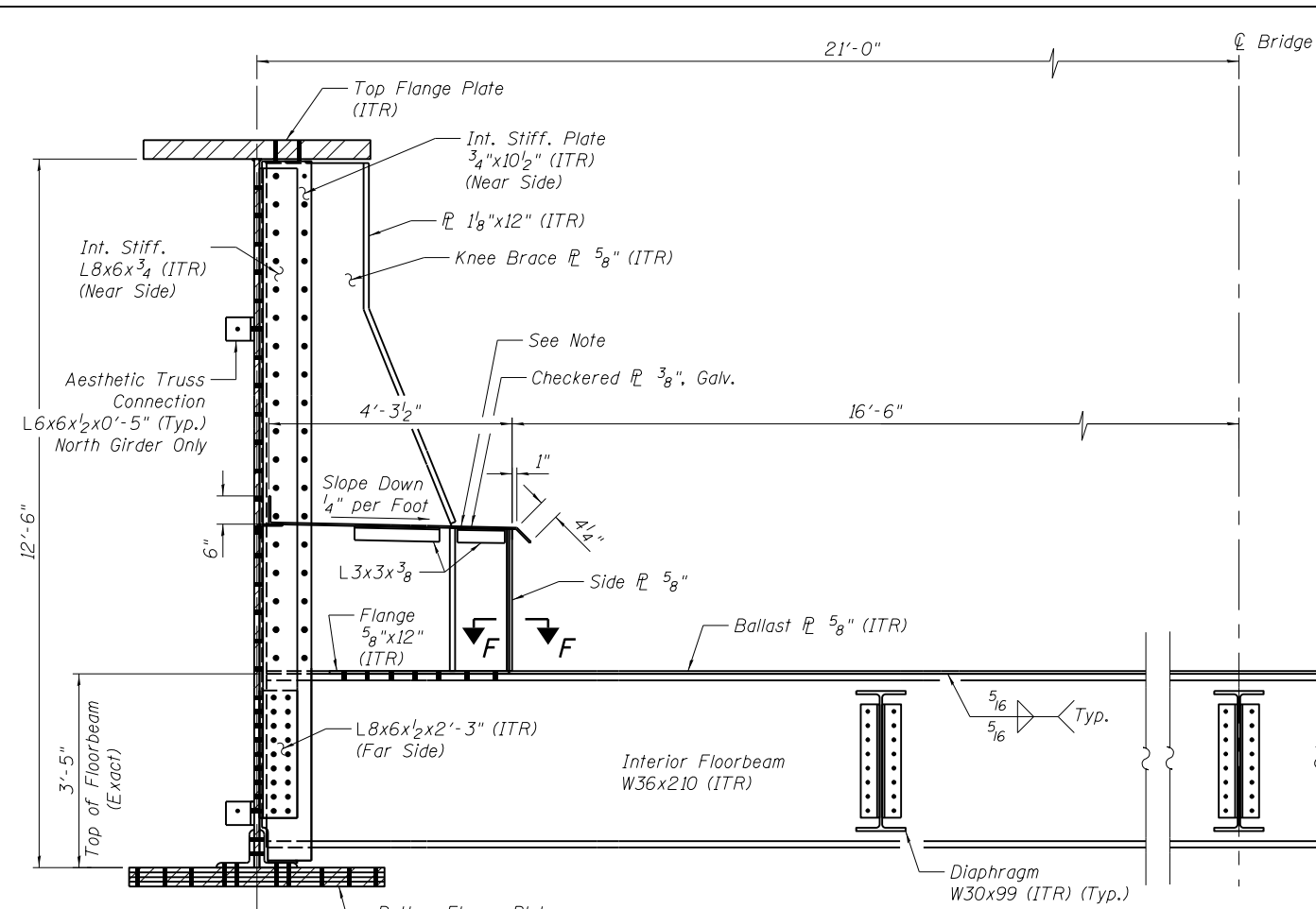
SHEET NO. 7 OF 28 SHEETS

•666 & 666 ALT. ILLINOIS FED. AID PROJECT

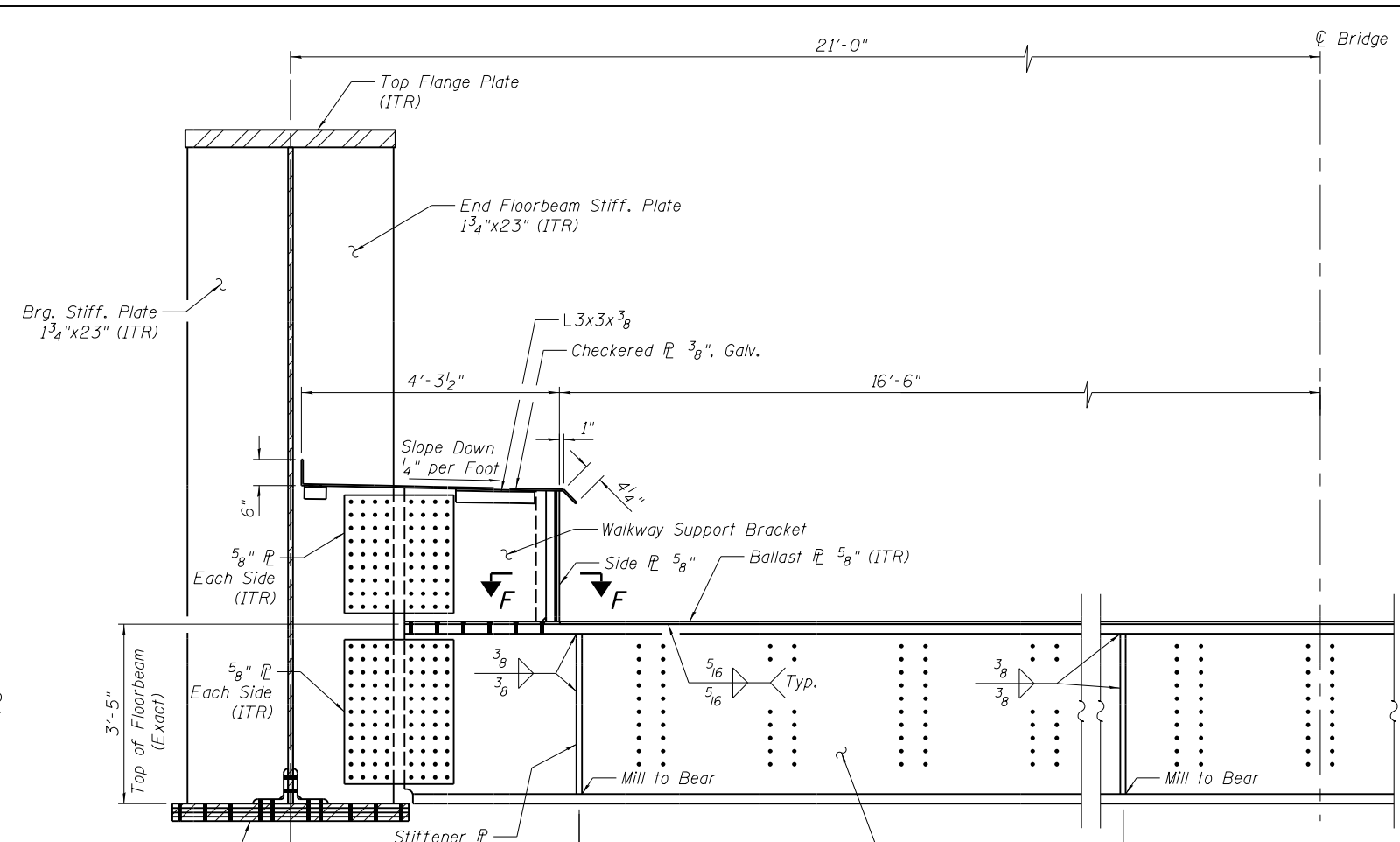
FINAL



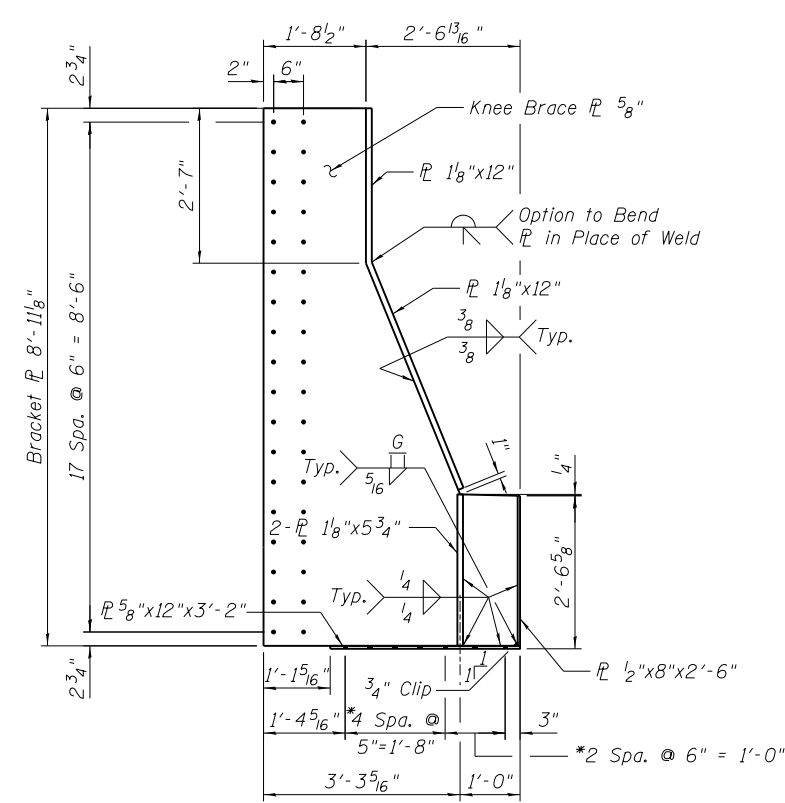
© Copyright Hanson Professional Services Inc., 2019



SECTION C-C

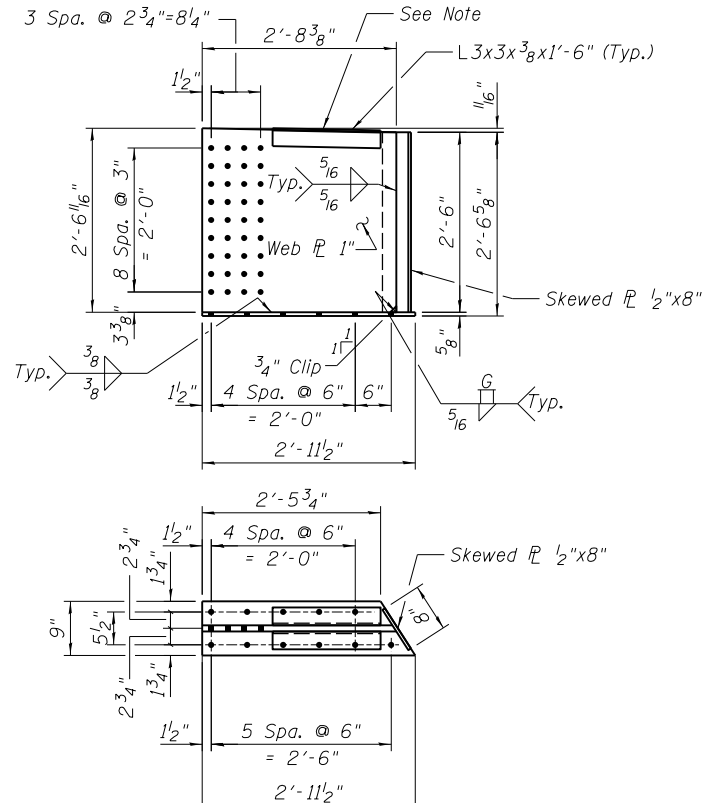


SECTION D-D
*(Along End Floorbeam \mathcal{C})



KNEE BRACE

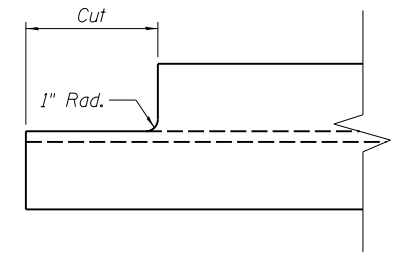
*See Detail 1 on Sheet 8 for Hole Locations.



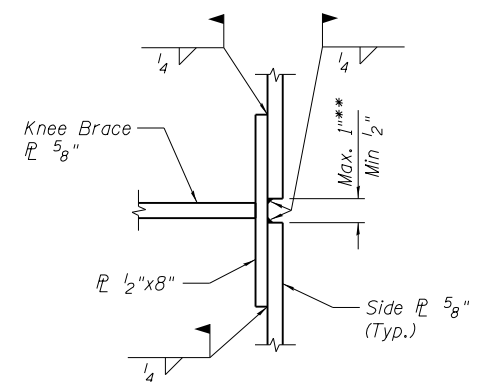
WALKWAY SUPPORT BRACKET

See Sheet 13 for Skew Angle

Note:
For Location of L3x3x3/8, Welding and Bolted Connection to Walkway Checker Plate see Plan View of Walkway at Knee Brace on Sheet 14.



FLOORBEAM COPE AT INTERIOR STIFFENER



SECTION F-F

**No Gap at Walkway Support Bracket Provide Continuous Side \mathcal{C}

FILE NAME: ... PROJECTS\DOCUMENTS\09\JOBS\09L01798\CAD\STRUCT\5th\Sheet\0849960-09L01798-UPRR-002

USER NAME = Pop00275	DESIGNED - MJW	REVISED -
PLOT SCALE = 0:2.0000' = 1" / in.	CHECKED - TJH/TDP	REVISED -
PLOT DATE = 4/11/2019	DRAWN - RSJ	REVISED -
	CHECKED - MJW	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS
STRUCTURE 084-9960 - 5TH ST UPRR**

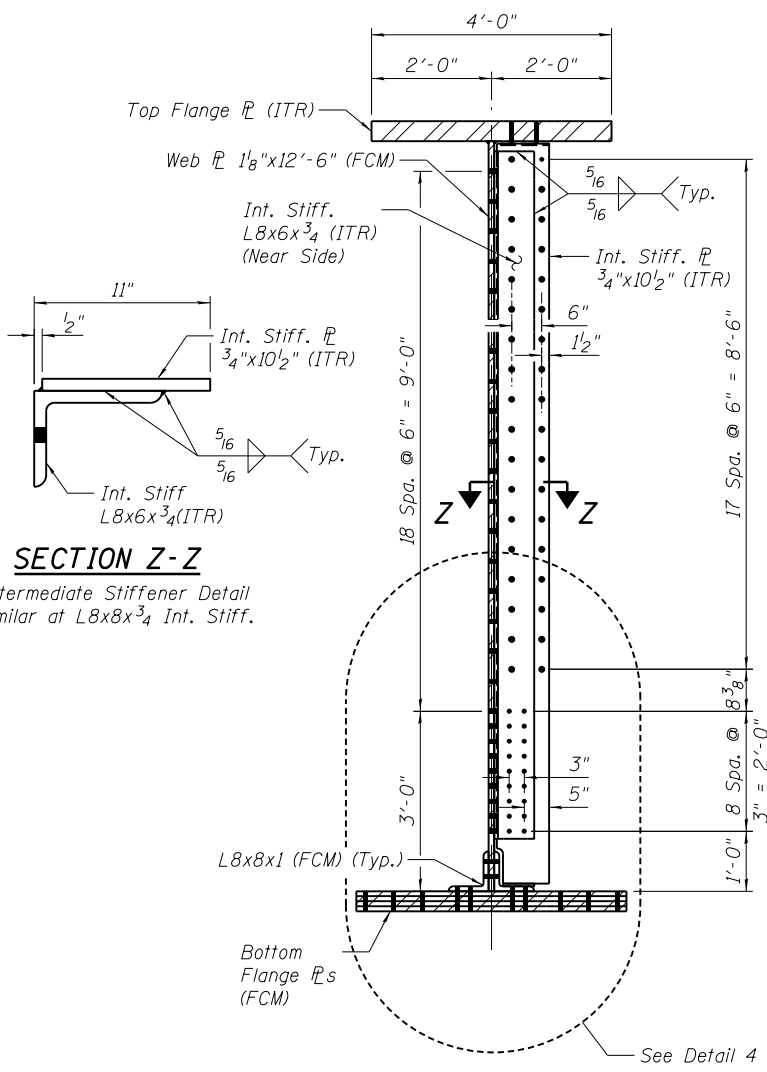
SHEET NO. 10 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	169
			CONTRACT NO. 93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				

FINAL

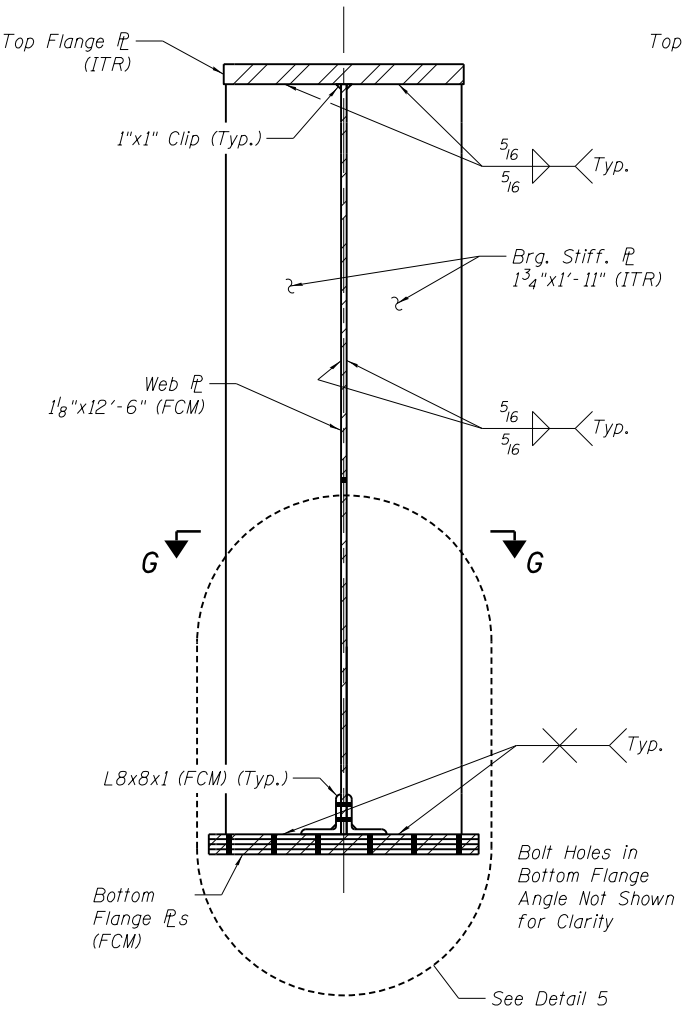


© Copyright Hanson Professional Services Inc., 2019

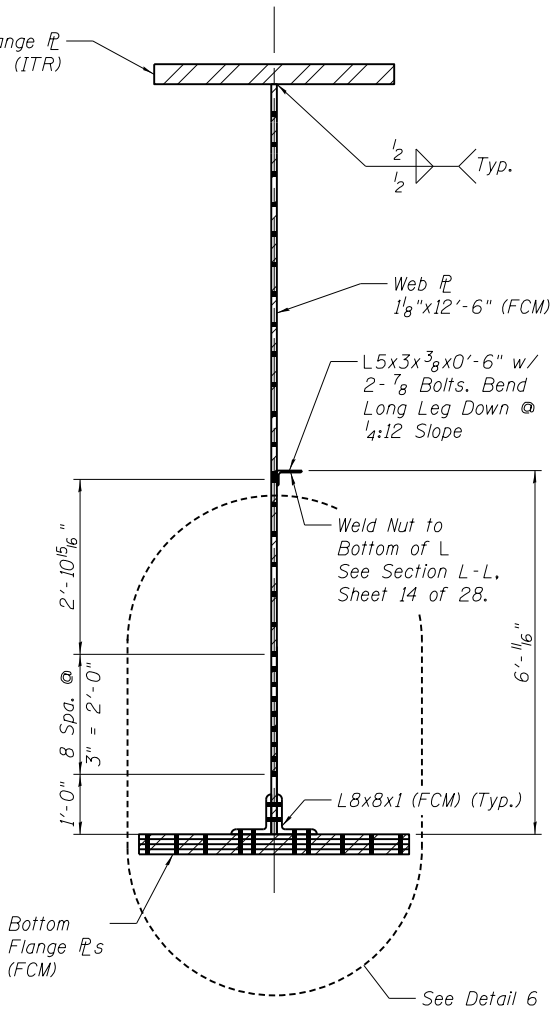


SECTION Z-Z
Intermediate Stiffener Detail
Similar at L8x8x3/4 Int. Stiff.

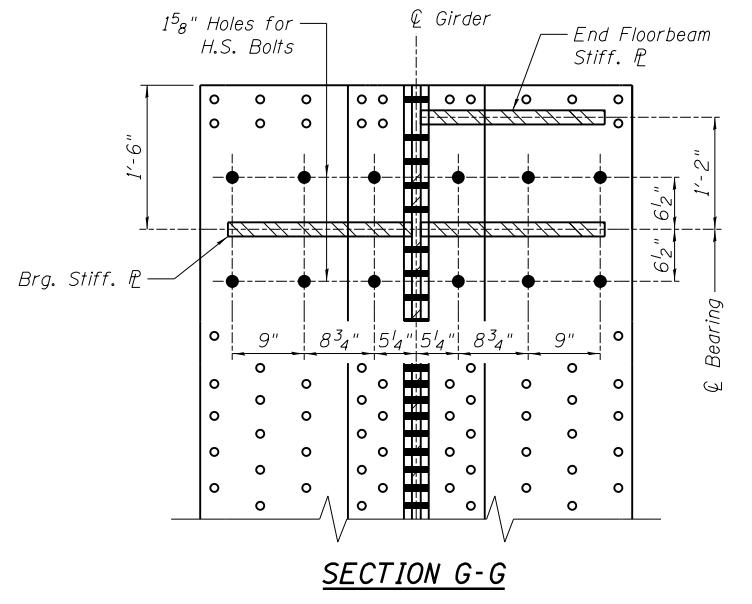
TYPICAL SECTION AT INT. STIFFENER AND KNEE BRACE
(Knee Brace Omitted for Clarity)



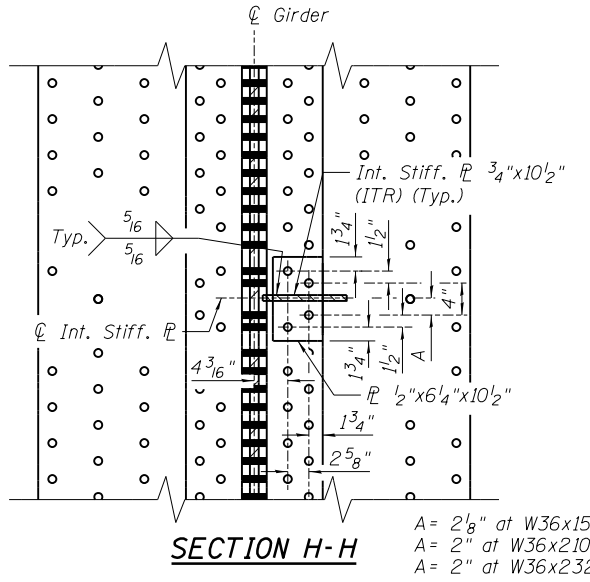
TYPICAL SECTION AT BEARING STIFFENER



TYPICAL SECTION AT CHECKERED PLATE SUPPORT

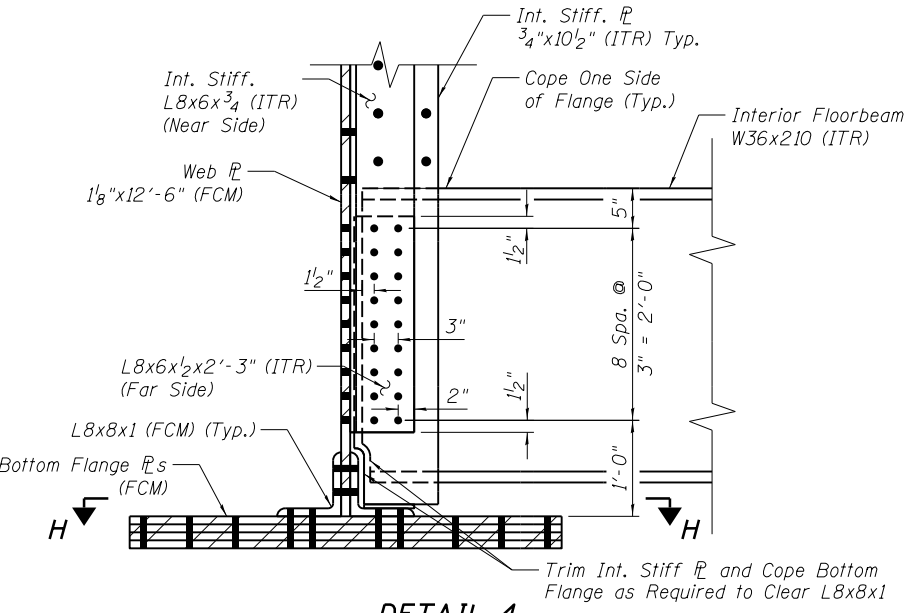


SECTION G-G

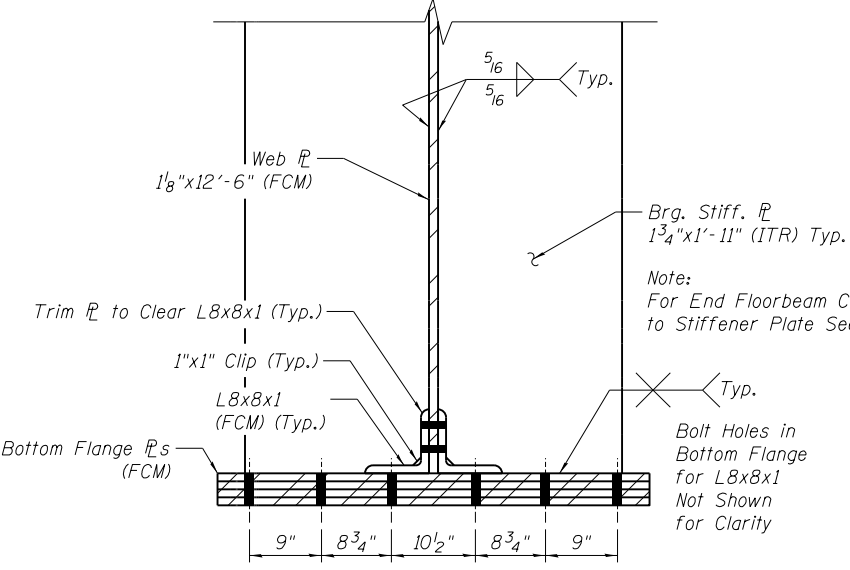


SECTION H-H

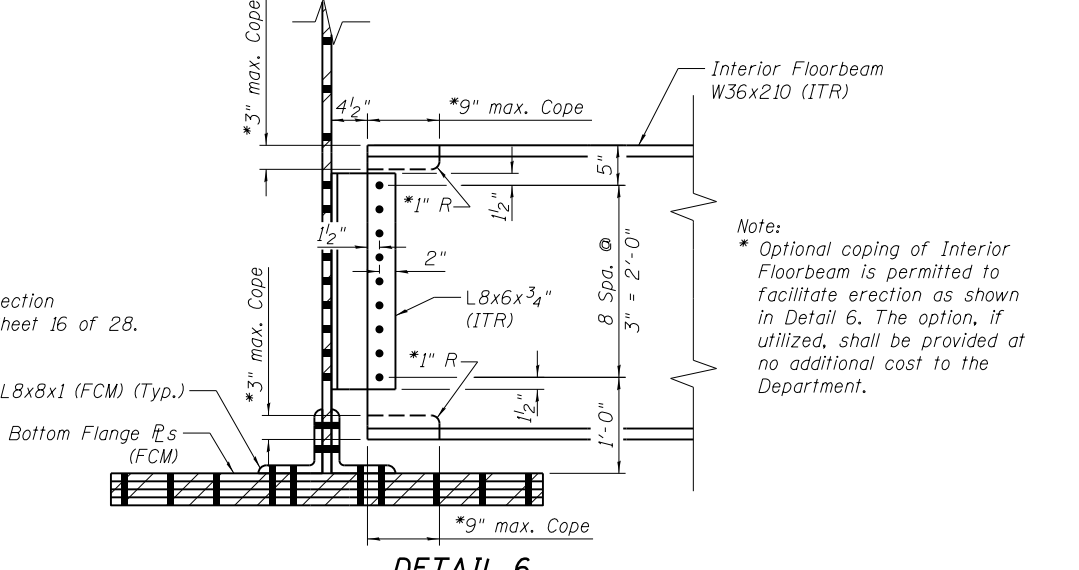
A = 2 1/8" at W36x150
A = 2" at W36x210
A = 2" at W36x232



DETAIL 4
Typical for Interior Stiffener Unless Otherwise Noted
(Knee Brace Omitted for Clarity)

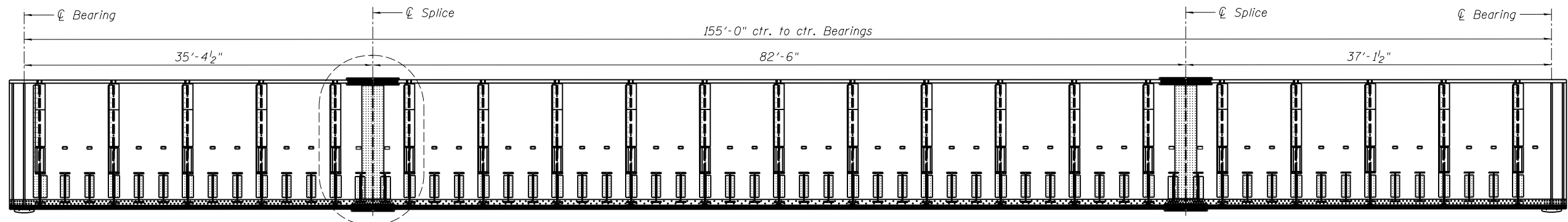


DETAIL 5
Typical at Bearing Stiffener

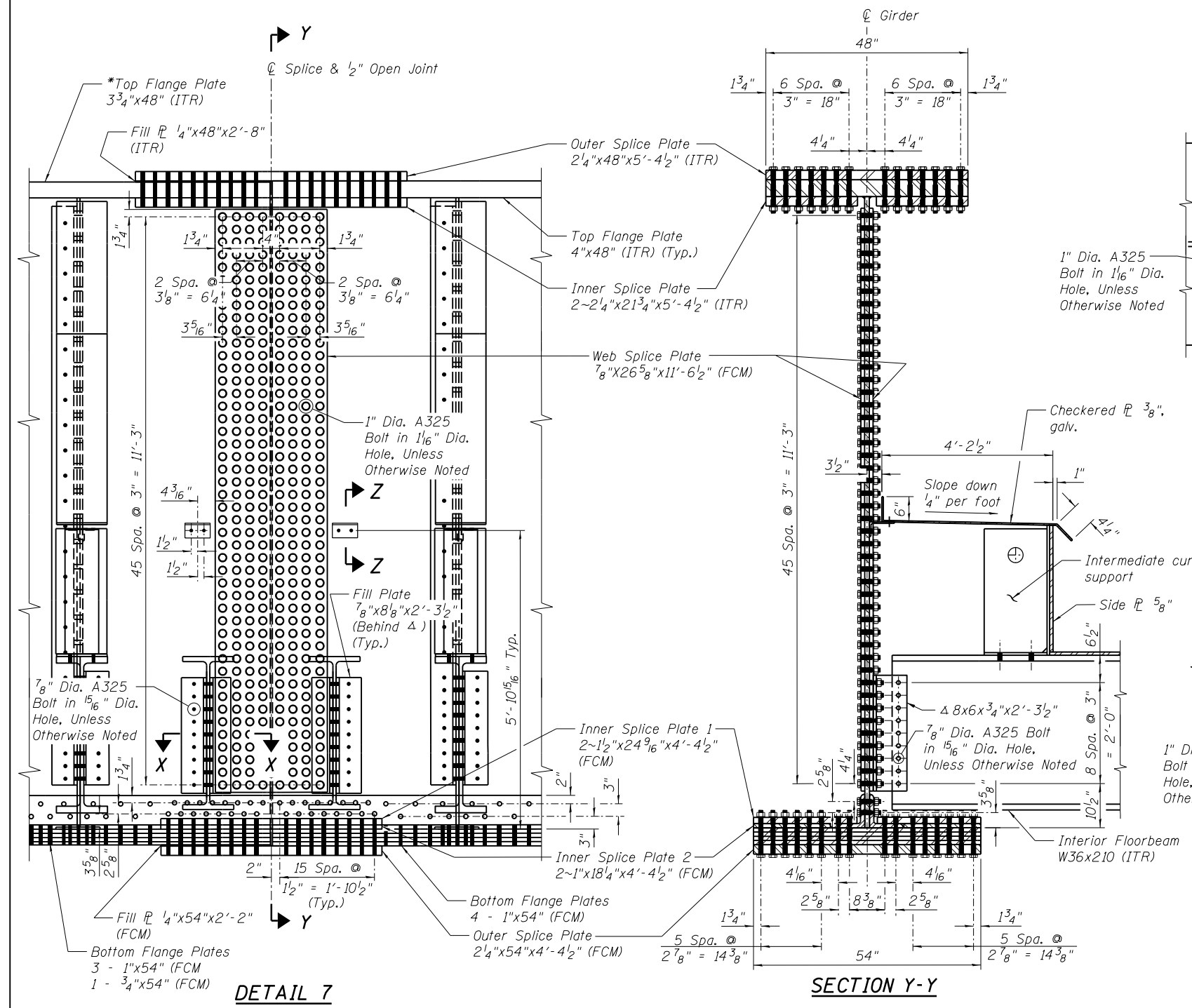


DETAIL 6
Typical Floorbeam Connection Between Interior Stiffeners

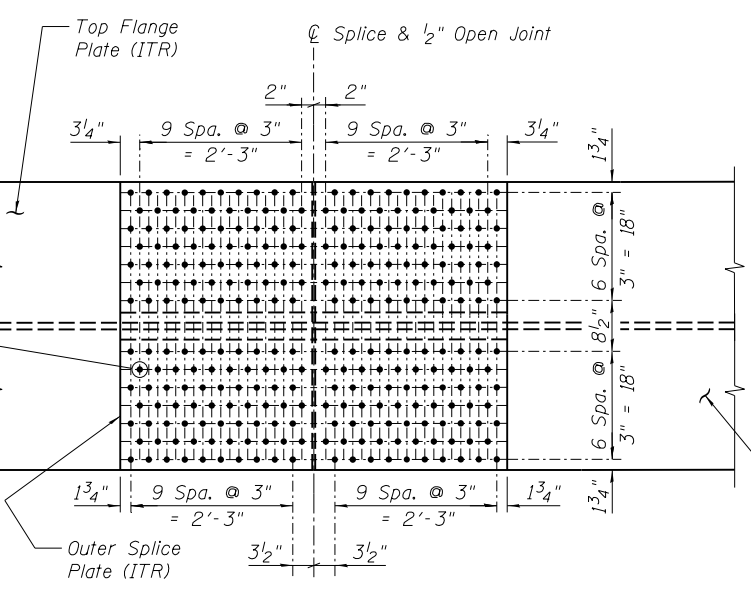
Note:
* Optional coping of Interior Floorbeam is permitted to facilitate erection as shown in Detail 6. The option, if utilized, shall be provided at no additional cost to the Department.



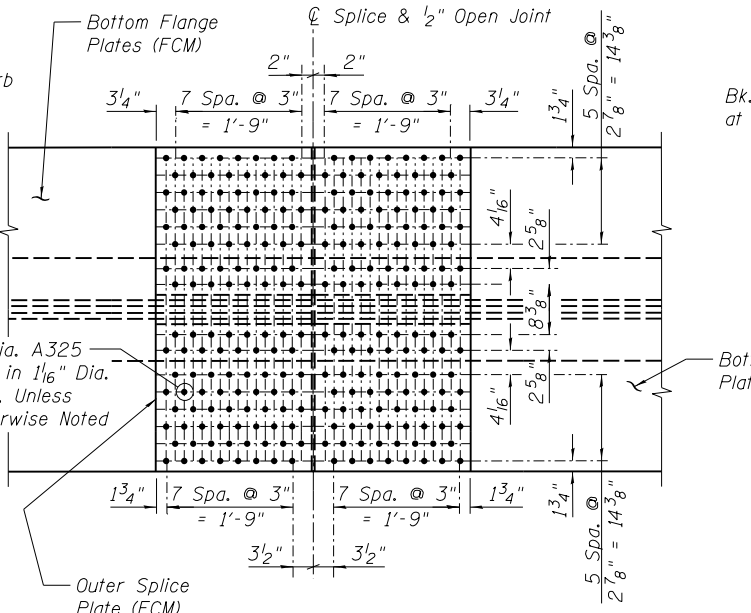
GIRDER ELEVATION (INSIDE FACE SHOWN)



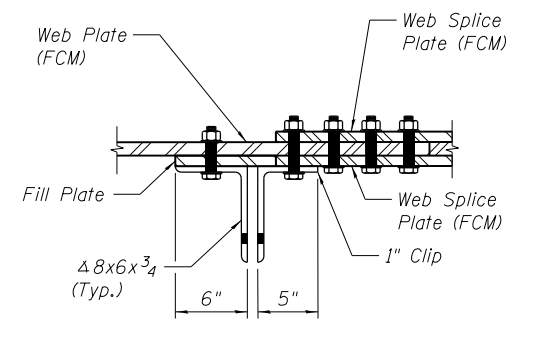
SECTION Y-Y



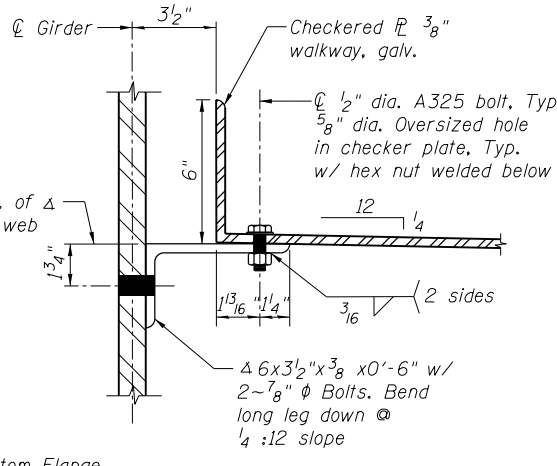
TOP FLANGE PLAN (Looking Down)



BOTTOM FLANGE PLAN (Looking Up)



SECTION X-X



SECTION Z-Z

Note: Bottom Flange Bolt Holes Not Shown for Clarity.

* Alternate larger 4" flange thickness is permitted throughout to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. Calculated girder stresses are based on heavier section. The alternate, if utilized, shall be provided at no additional cost to the Department.

Path: p:\sp\svr\306\hanson_dom\hanson_projects\documents\09\jobs\09\01798\CAD\Struct\5th\Sheet\0849960-09\01798-UPRR-002

FILE NAME =	USER NAME = Pop0275	DESIGNED - MJW	REVISIONS -
		CHECKED - TJH/TDP	REVISIONS -
		DRAWN - RSJ	REVISIONS -
		CHECKED - MJW	REVISIONS -
PLOT SCALE = 0:2.0000' = 1" / in.			
PLOT DATE = 4/11/2019			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GIRDER SPLICE DETAILS
STRUCTURE 084-9960 - 5TH ST UPRR**

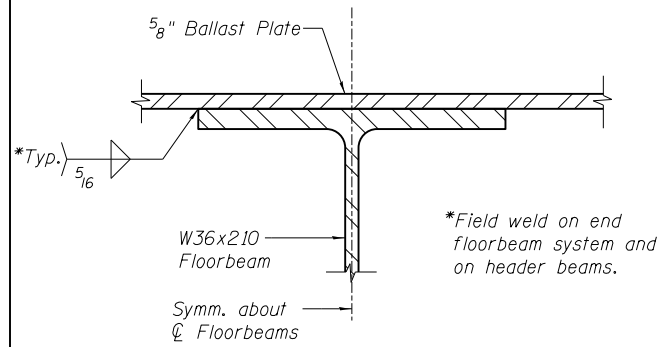
SHEET NO. 12 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	171
CONTRACT NO. 93733				
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				

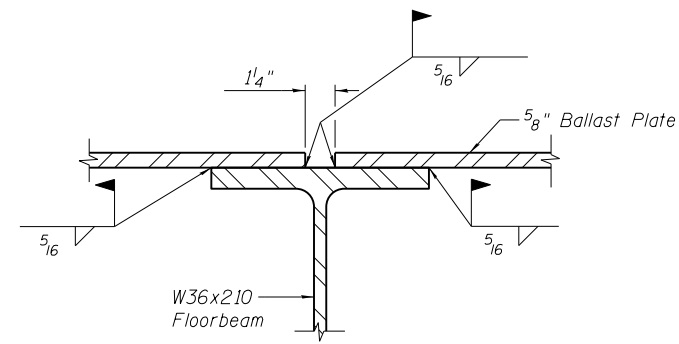
FINAL



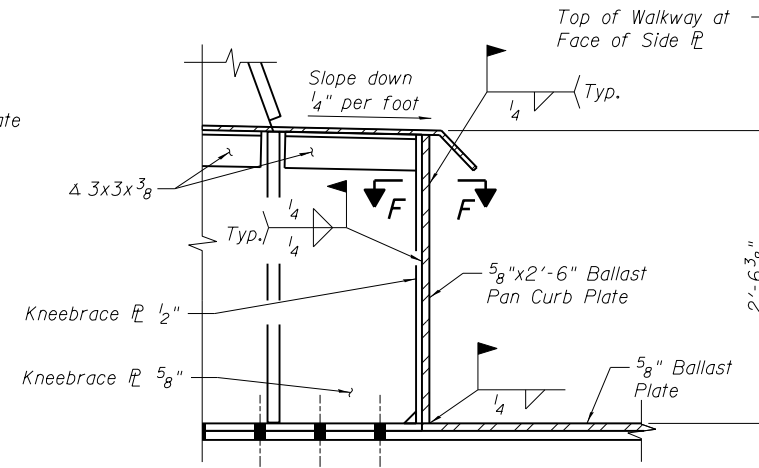
Copyright Hanson Professional Services Inc. 2019



SECTION H-H BALLAST PLATE TO FLOORBEAM CONNECTION (TYP.)
Similar Detail at Header Beam

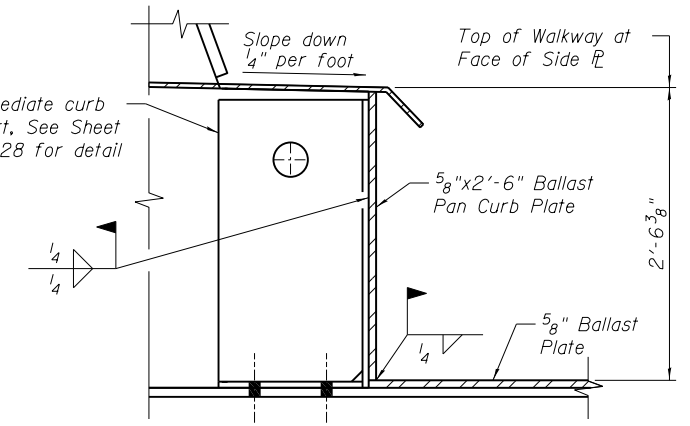


SECTION I-I

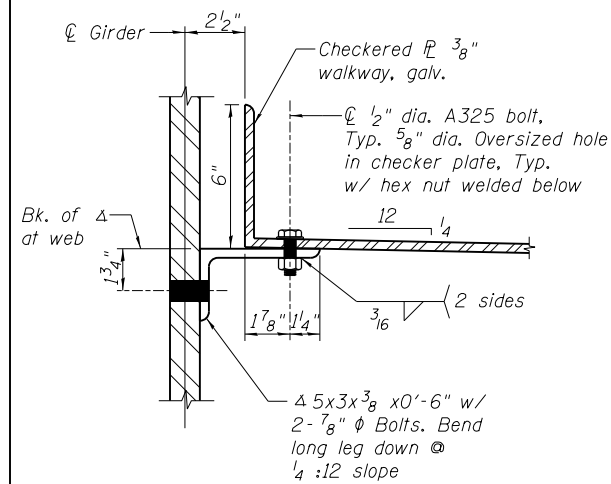


SECTION J-J

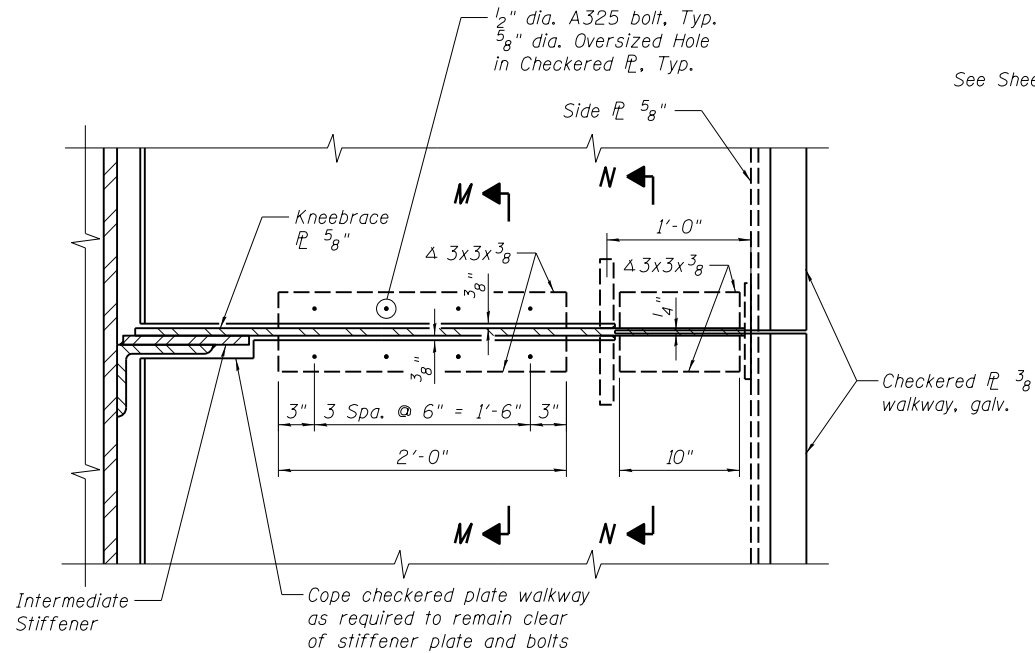
See Sheet 10 of 28 for Section F-F.



SECTION K-K

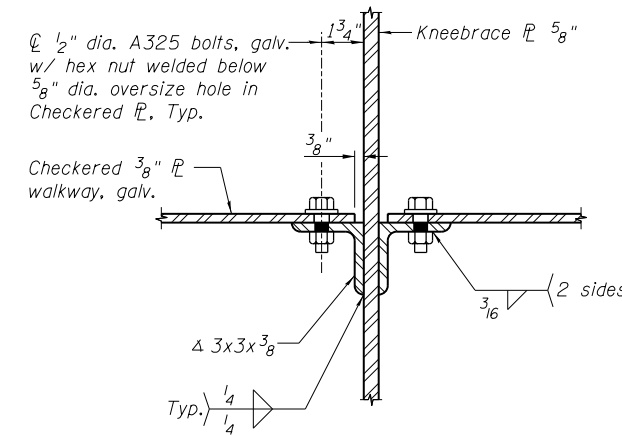


SECTION L-L

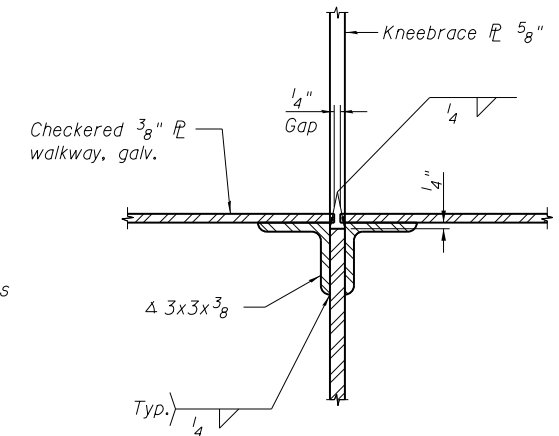


PLAN

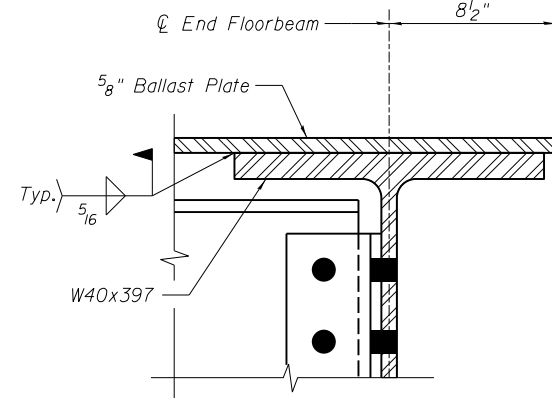
Walkway at Kneebrace



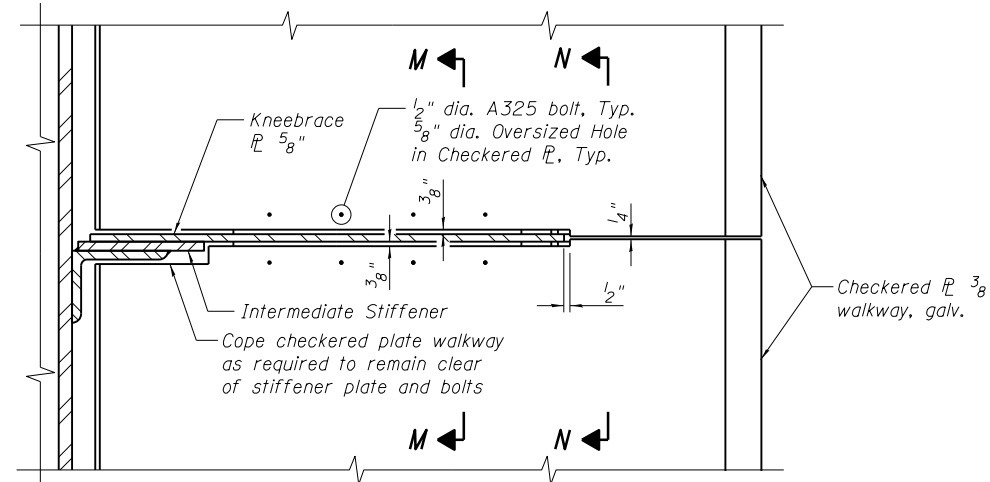
SECTION M-M



SECTION N-N

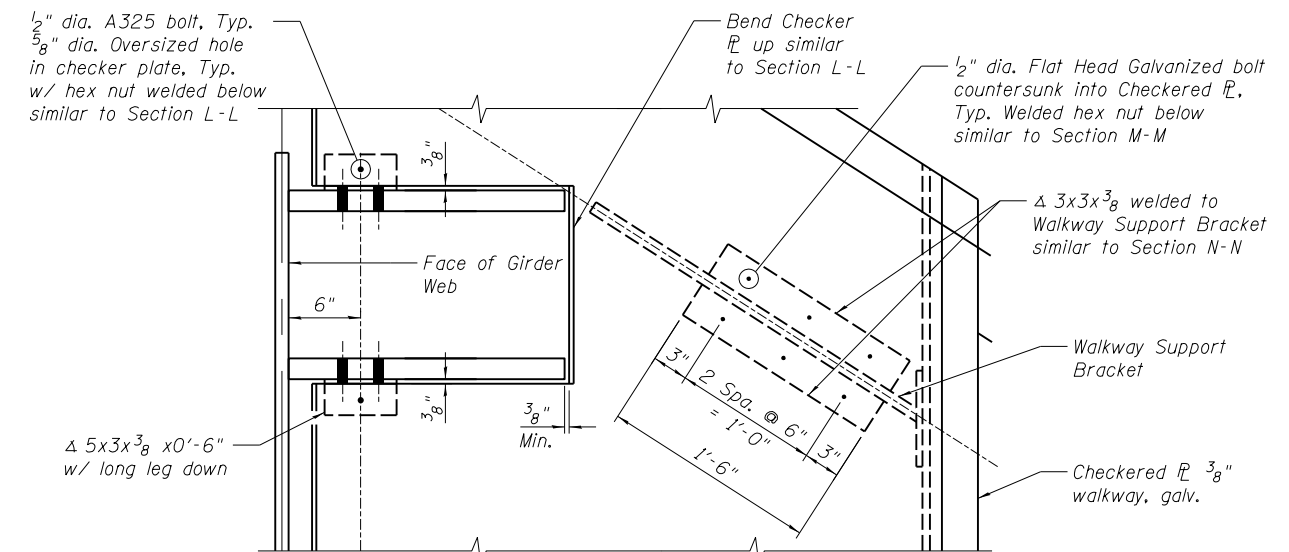


SECTION O-O



PLAN

Walkway at Bearing Stiffener



PLAN

Walkway at Bearing Stiffener

FILE NAME = ...

USER NAME = Pop00275	DESIGNED - MJW	REVISED -
PLOT SCALE = 0:2.0000 " = 1"	CHECKED - TJH/TDP	REVISED -
PLOT DATE = 4/11/2019	DRAWN - RSJ	REVISED -
	CHECKED - MJW	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALKWAY AND BALLAST PLATE DETAILS
STRUCTURE 084-9960 - 5TH ST UPRR

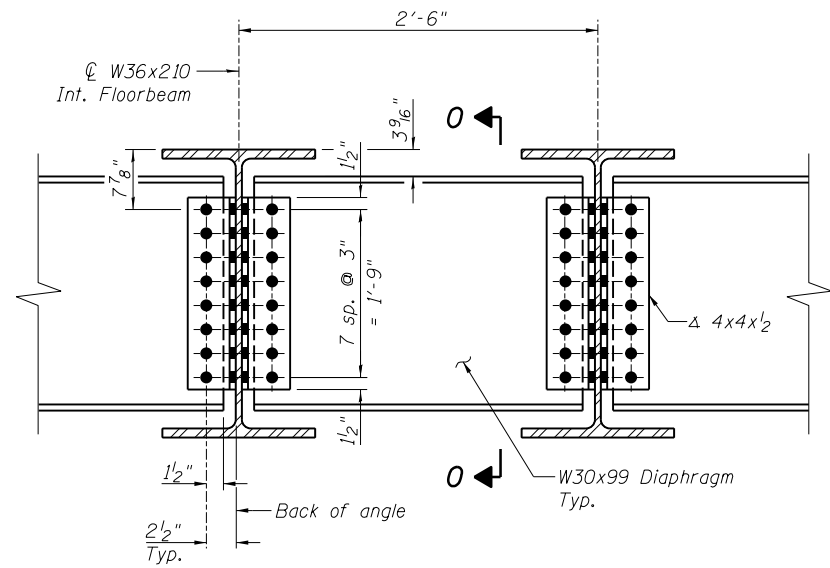
SHEET NO. 14 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	173
			CONTRACT NO. 93733	
*666 & 666 ALT.			ILLINOIS FED. AID PROJECT	

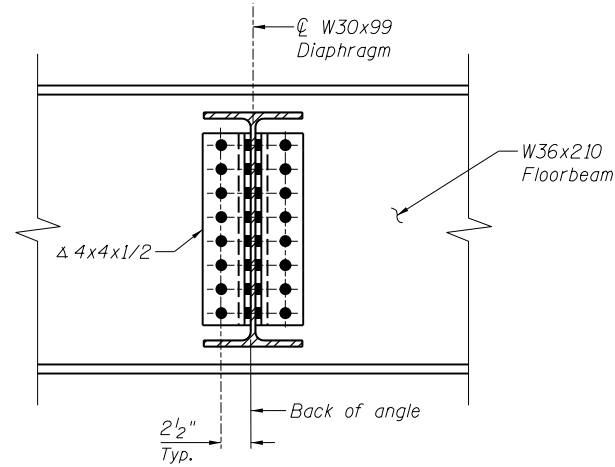
FINAL



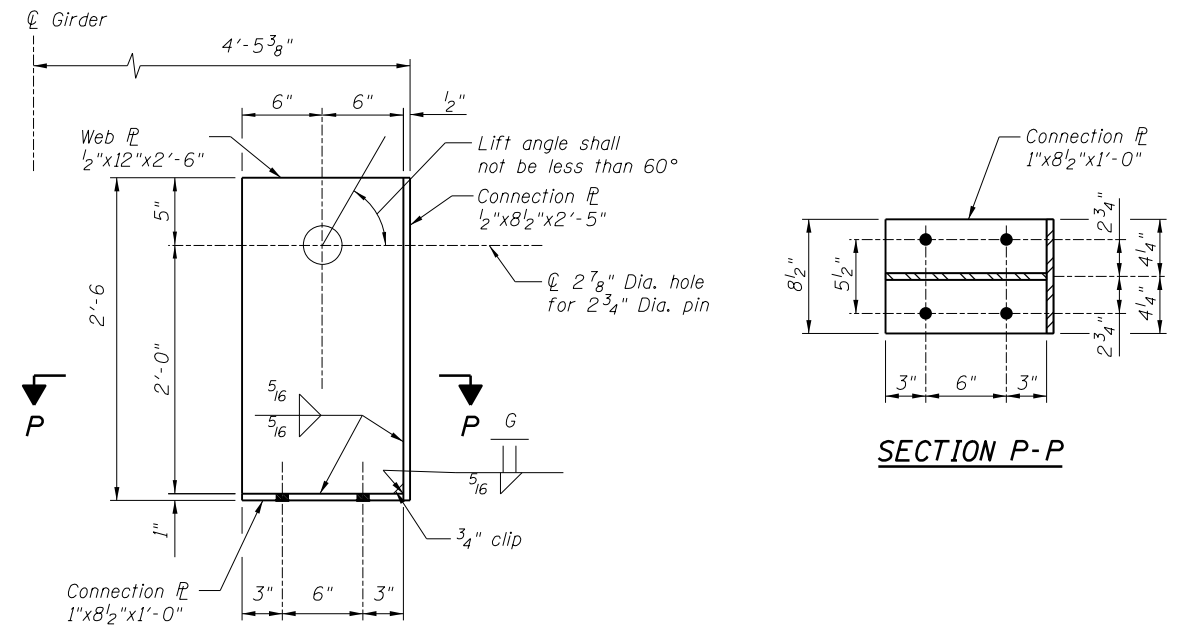
© Copyright Hanson Professional Services Inc., 2019



LONGITUDINAL DIAPHRAGM DETAIL

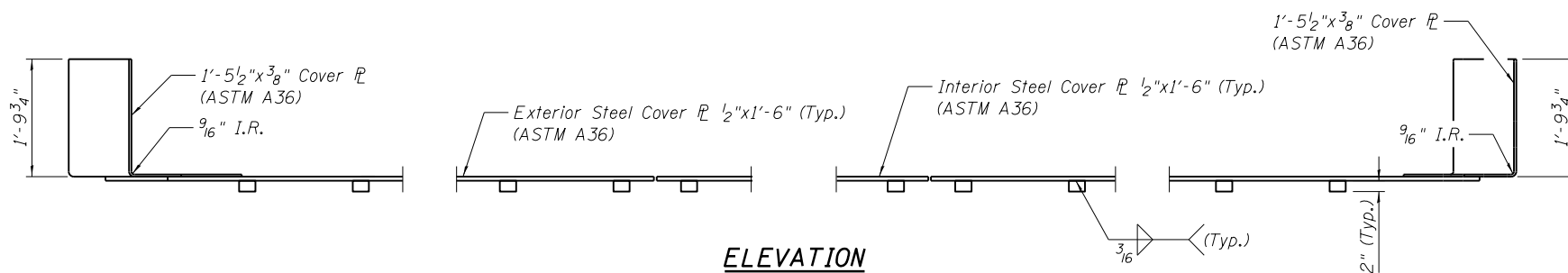


SECTION O-O

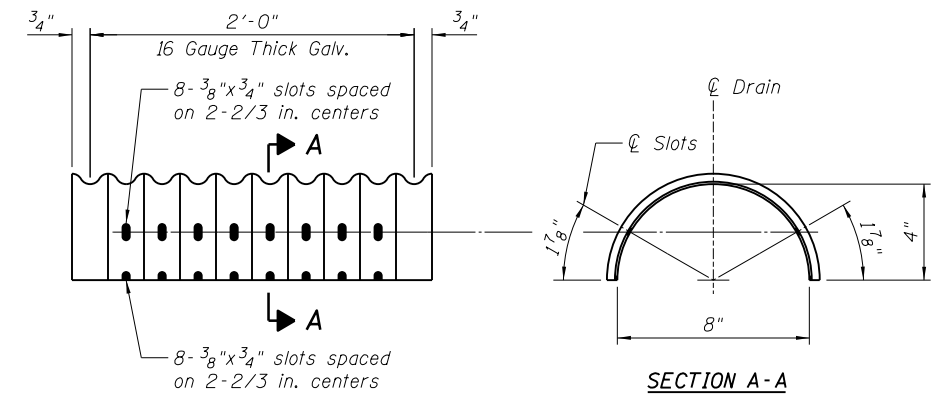


NOTE: Lug capacity = 6 Tons

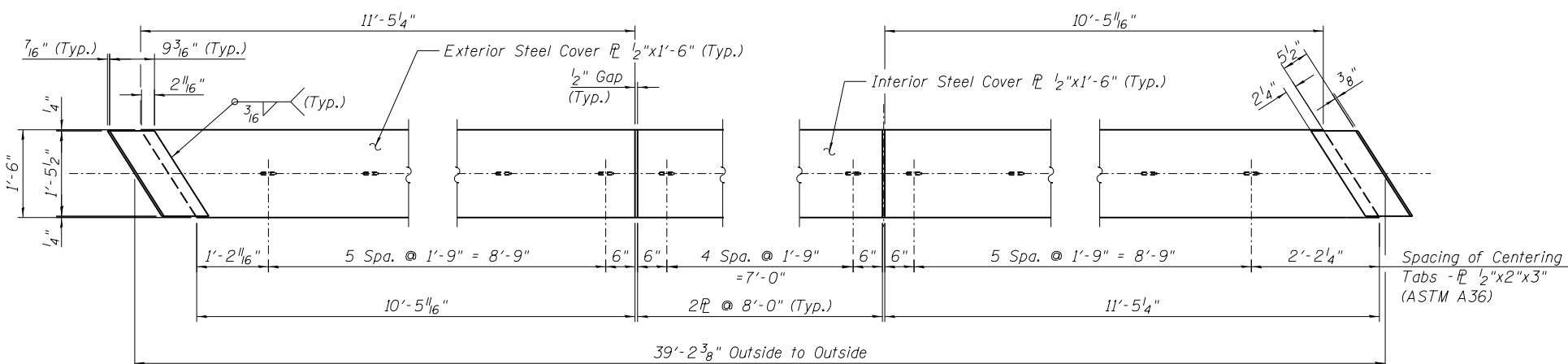
INTERMEDIATE CURB SUPPORT



ELEVATION

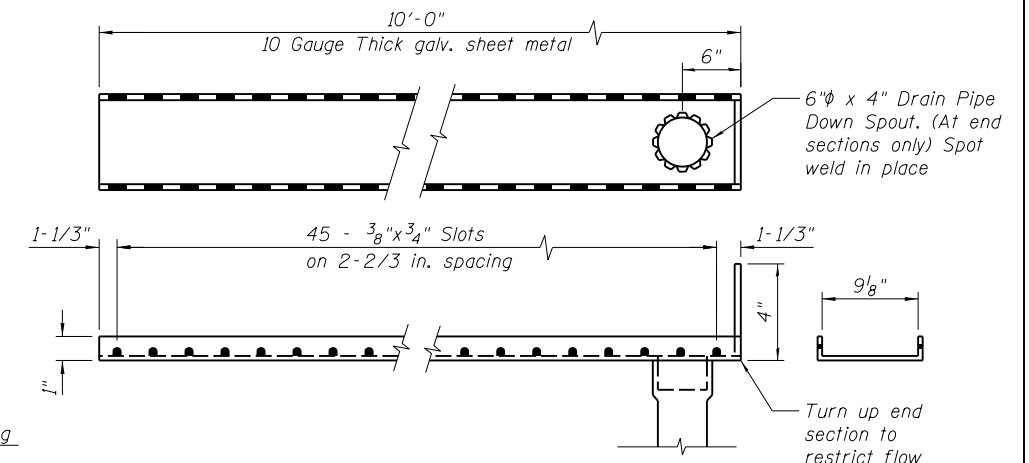


DETAIL - DECK DRAIN PIPE



**PLAN
COVER PLATES**

(Galvanize after Fabrication)

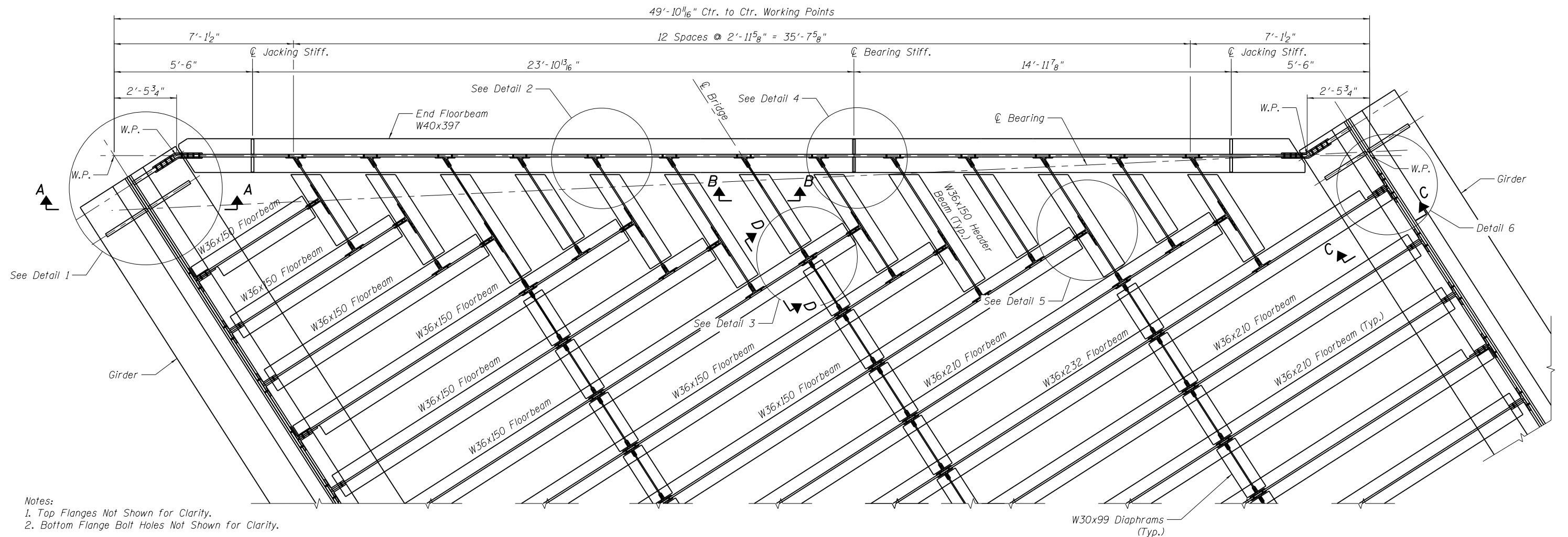


DETAIL - DECK DRAIN BOTTOM PAN

- Notes:
1. Lap Drain Pipe one corrugation at each end.
 2. Coordinate outside diameter of drain pipe down spout with 6" ϕ Ductile Iron Pipe.
 3. Cost for deck drain pipe and bottom pan shall be included in the cost of "Drainage System".

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
		DRAWN - RSJ	REVISED -
		CHECKED - MJW	REVISED -
PLOT SCALE = 0:2.0000 '1' = 1/8"			
PLOT DATE = 4/11/2019			

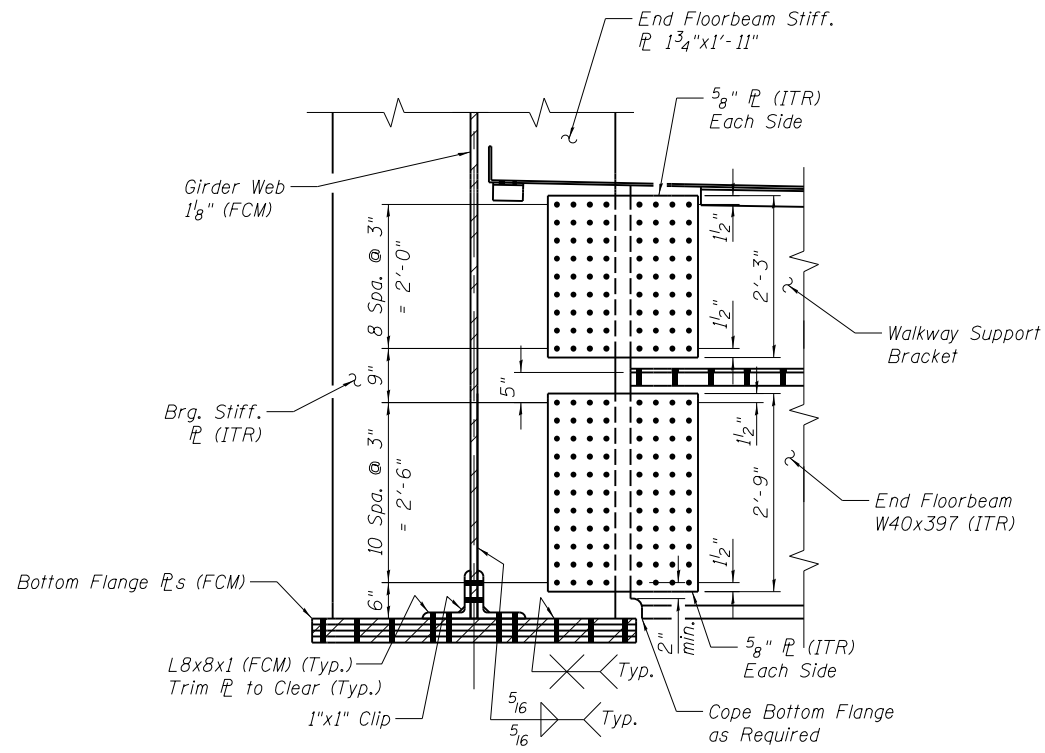
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	174
CONTRACT NO.			93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				



Notes:
 1. Top Flanges Not Shown for Clarity.
 2. Bottom Flange Bolt Holes Not Shown for Clarity.

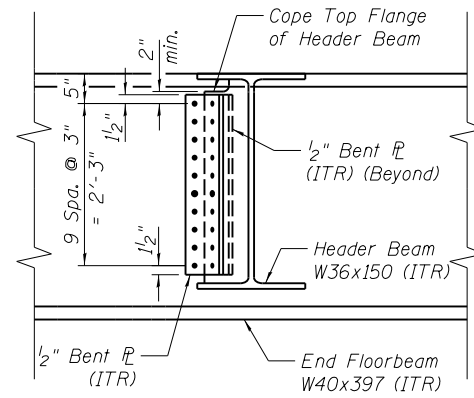
TYPICAL END FLOORBEAM PLAN

See Sheet 17 for Details



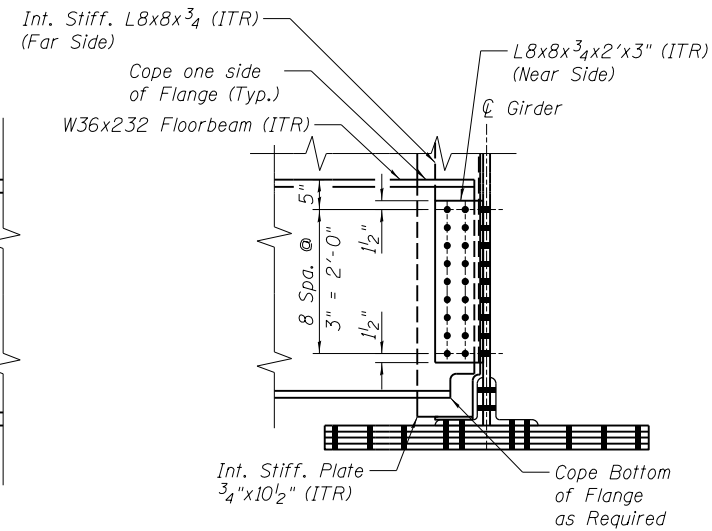
SECTION A-A

See Detail 1 on Sheet 17 for Horizontal Bolt Spacing.



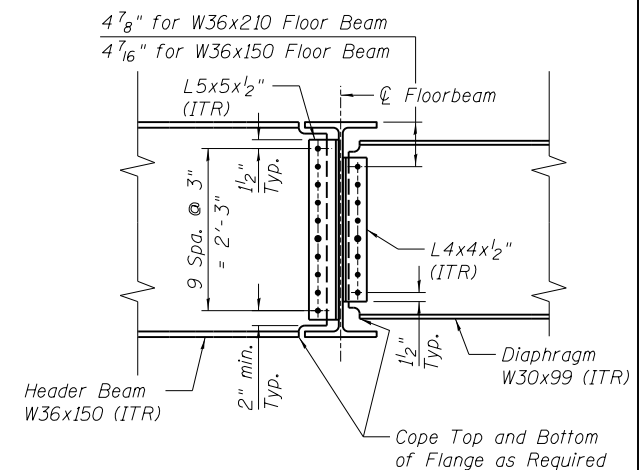
SECTION B-B

See Detail 2 on Sheet 17 for Horizontal Bolt Spacing.



SECTION C-C

See Detail 6 on Sheet 17 for Horizontal Bolt Spacing.



SECTION D-D

See Detail 3 on Sheet 17 for Horizontal Bolt Spacing.

\\spr-svr306.hanson.com\hanson_projects\Documents\09Jobs\09101798\CAD\Struct\5th\Sheet\0849960-09101798-UPRR-002

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
	PLOT SCALE = 0:2.0000 ' = 1\"/>		
	PLOT DATE = 4/12/2019	CHECKED - MJW	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MISCELLANEOUS GIRDER DETAILS - SHEET 2 OF 3
 STRUCTURE 084-9960 - 5TH ST UPRR**

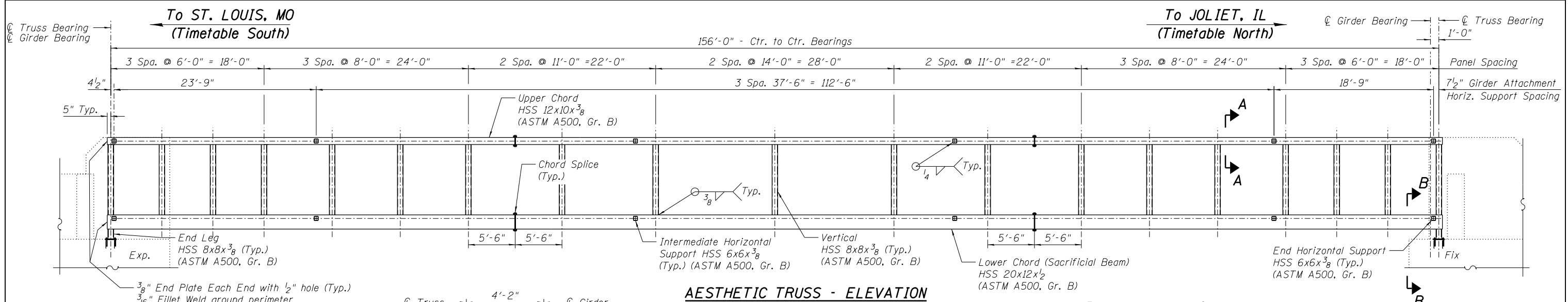
SHEET NO. 16 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	175
			CONTRACT NO. 93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				

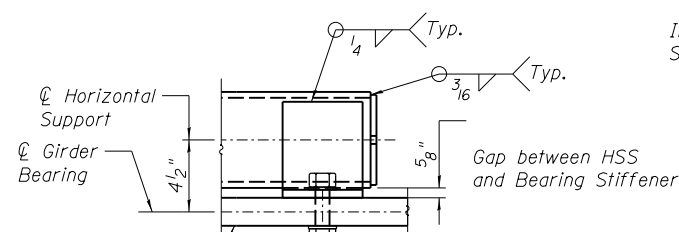
FINAL



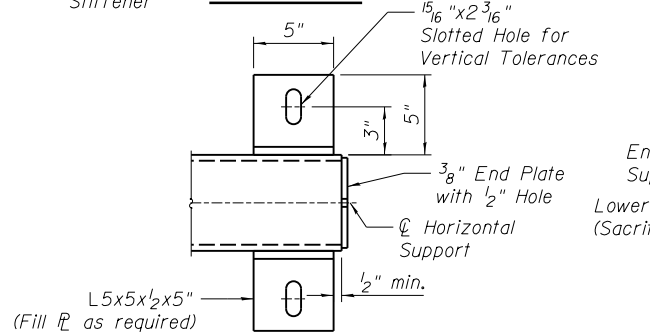
© Copyright Hanson Professional Services Inc., 2019



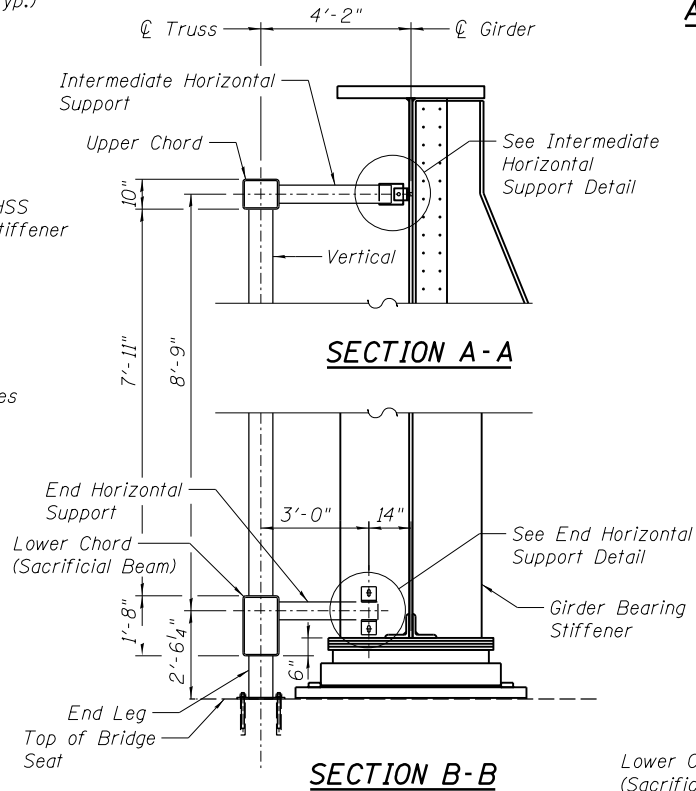
AESTHETIC TRUSS - ELEVATION
(Looking Northwest)



PLAN VIEW

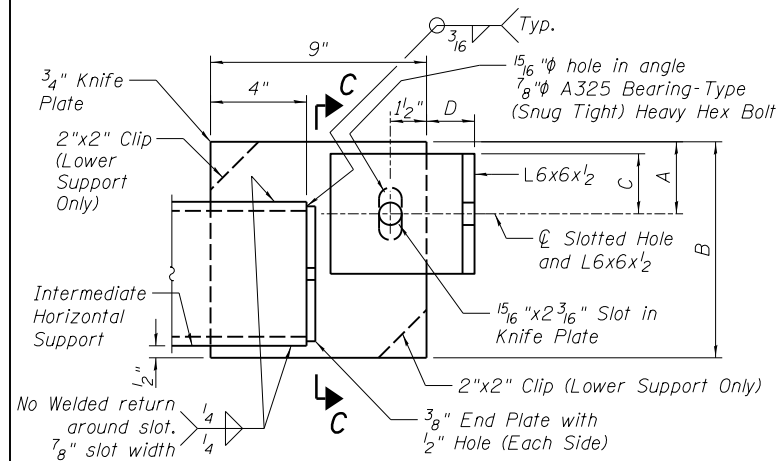


ELEVATION VIEW
END HORIZONTAL SUPPORT DETAIL



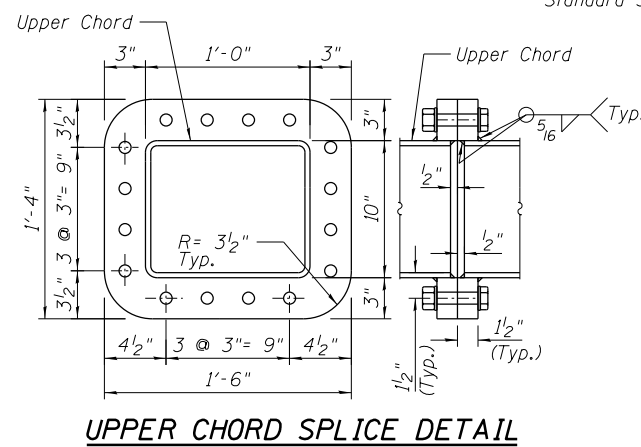
SECTION A-A

SECTION B-B

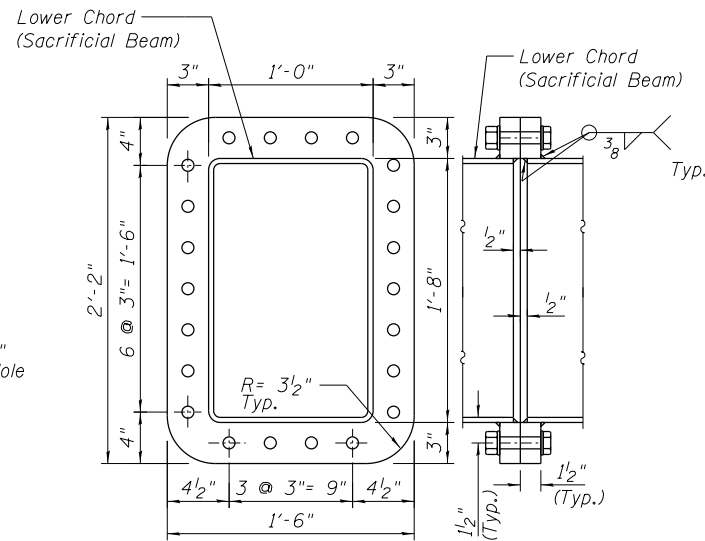


INTERMEDIATE HORIZONTAL SUPPORT DETAIL
(Lower Support Shown)

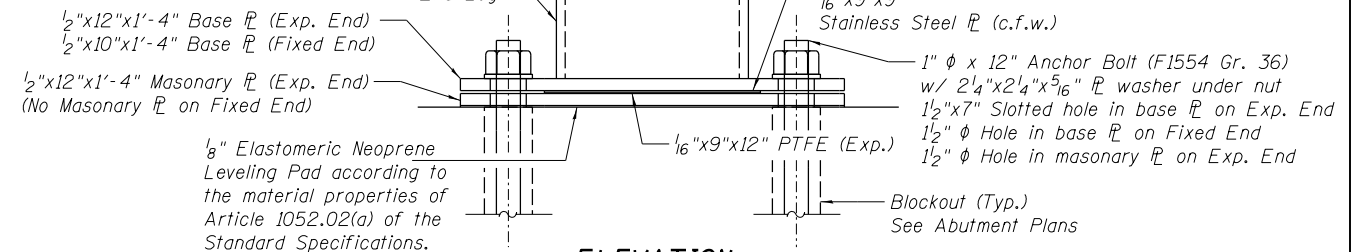
	A	B	C	D
Upper Support	3 1/2"	7"	2 1/2"	2"
Lower Support	2 1/2"	9"	1 1/2"	2 1/2"



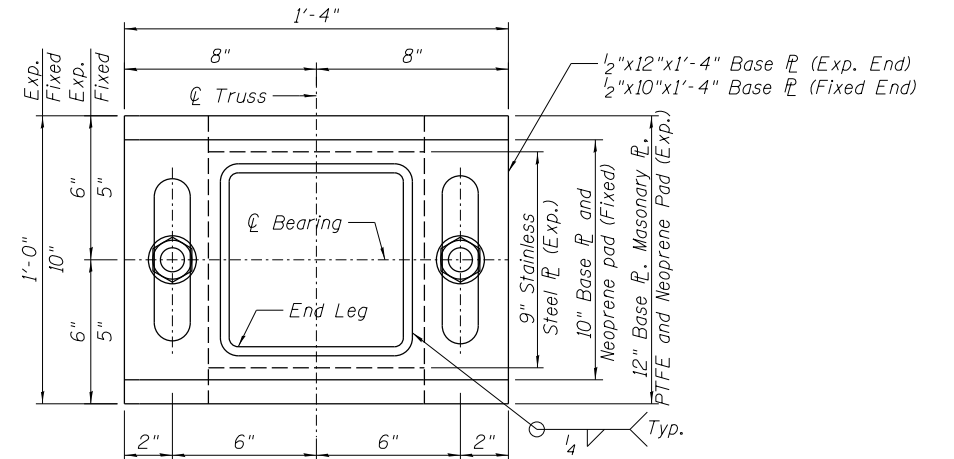
UPPER CHORD SPLICE DETAIL



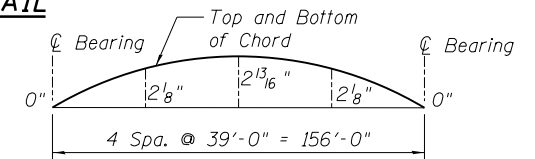
LOWER CHORD SPLICE DETAIL



ELEVATION



PLAN
END LEG BEARING DETAIL
(Expansion Bearing Shown)



CAMBER DIAGRAM

Camber Calculated for Dead Load Only

Note:
Location of Fixed and Expansion bearings shall match the girder.
Cost for elastomeric neoprene leveling pad, PTFE surface, shall be included in the cost of "Furnishing and Erecting Structural Steel, Bridge No. 1."
Anchor Bolts shall be ASTM F1554 all-thread (or an Engineer approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor Bolts shall be installed in blockouts with non-shrink grout meeting the material requirements of Article 1024.02 of the Standard Specifications. Blockouts shall be clean prior to grouting and grout installed according to manufacturer's recommendations.
The PTFE shall be bonded directly to the masonry plate according to the manufacturer's recommendations.

PROJECT: 084-9960-09L0179B-UPRR-002

FILE NAME :	USER NAME :	DESIGNED :	REVISIONS :
084-9960-09L0179B-UPRR-002	Pop00275	MJW	-
		TJH/TDP	REVISIONS -
		RSJ	REVISIONS -
		MJW	REVISIONS -

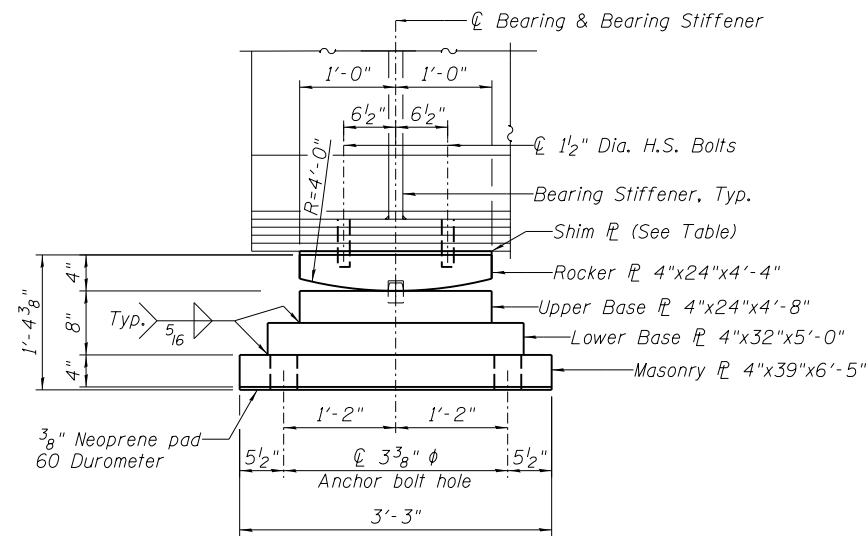
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AESTHETIC TRUSS
STRUCTURE 084-9960 - 5TH ST UPRR

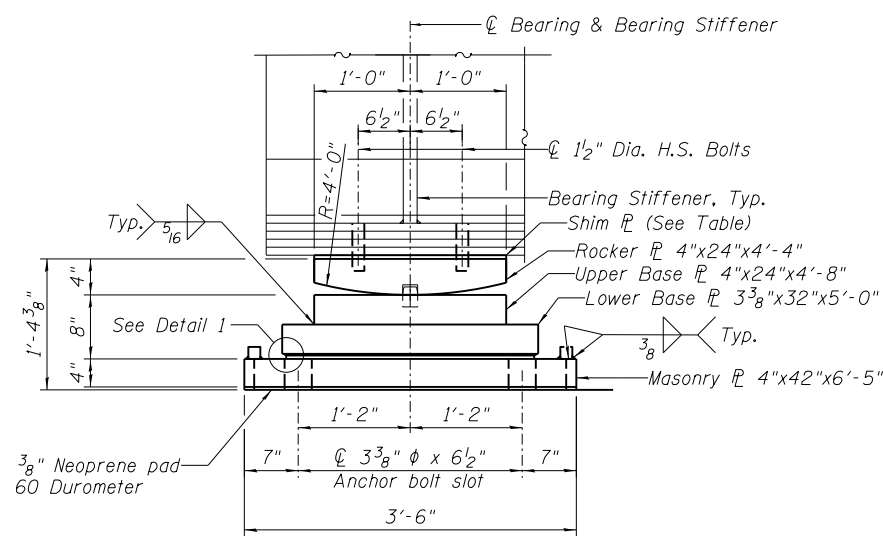
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	177
			CONTRACT NO. 93733	

SHEET NO. 18 OF 28 SHEETS

•666 & 666 ALT. ILLINOIS FED. AID PROJECT

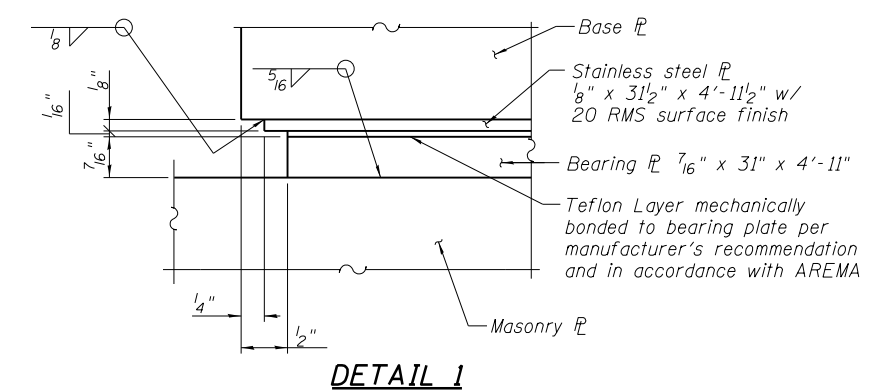


ELEVATION - FIXED BEARING

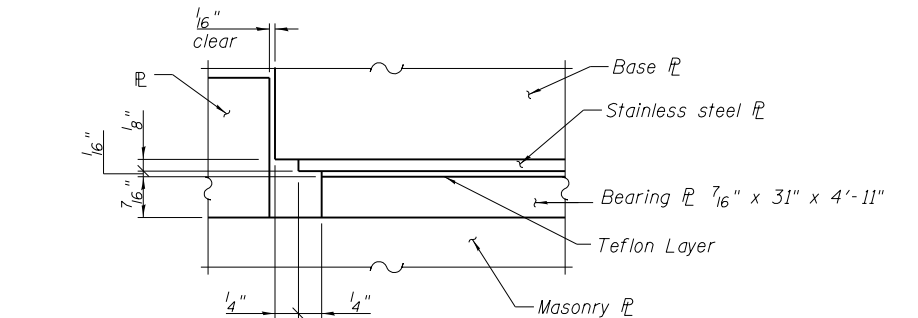


ELEVATION - EXPANSION BEARING

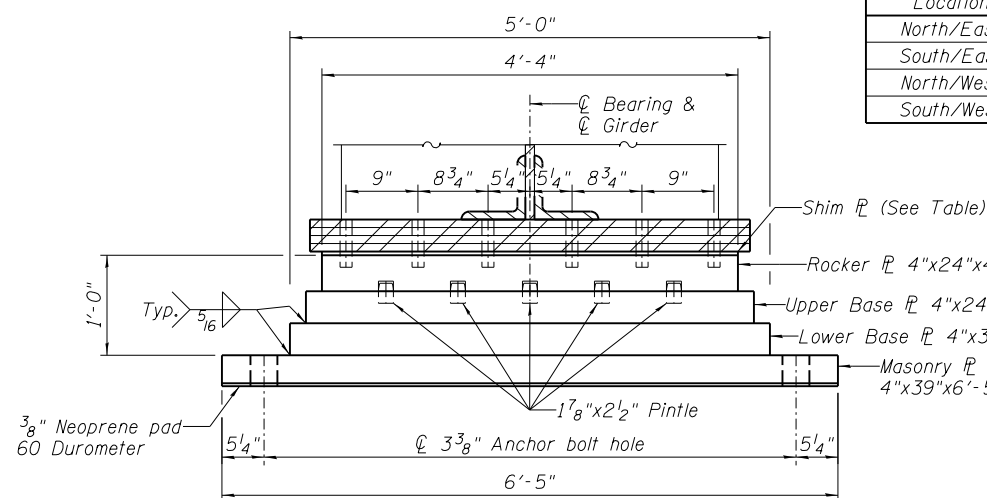
SHIM PLATE THICKNESS	
Location	Thickness
North/East	7/8"
South/East	1/4"
North/West	7/8"
South/West	1/4"



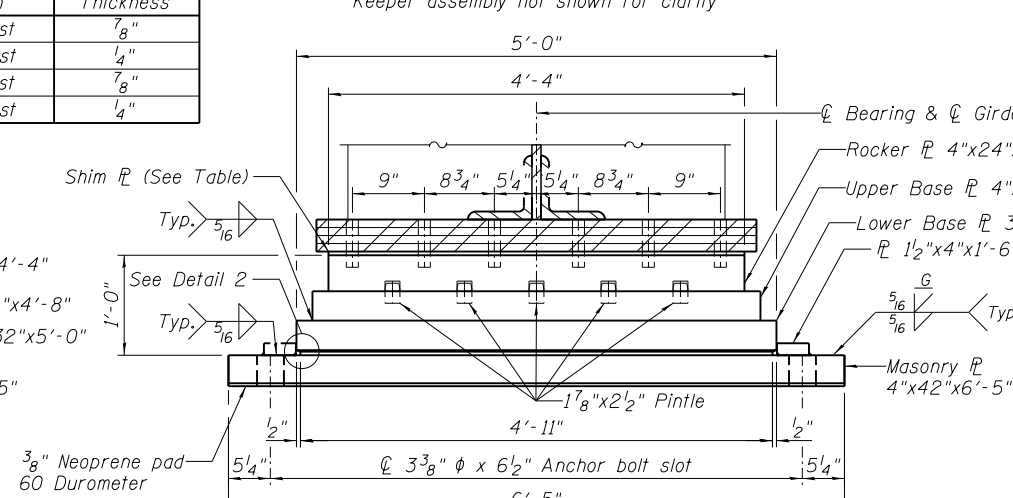
DETAIL 1



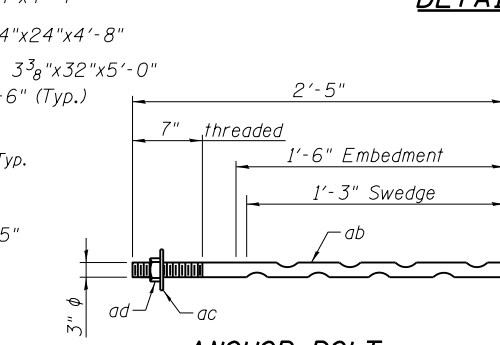
DETAIL 2



END VIEW - FIXED BEARING

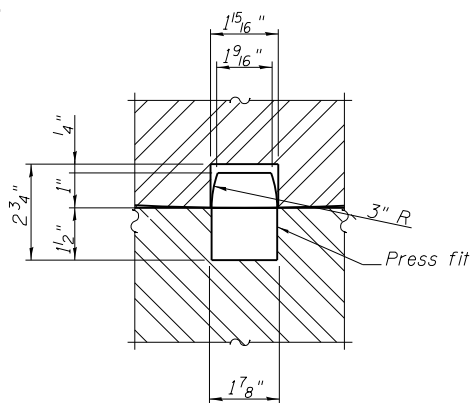


END VIEW - EXPANSION BEARING

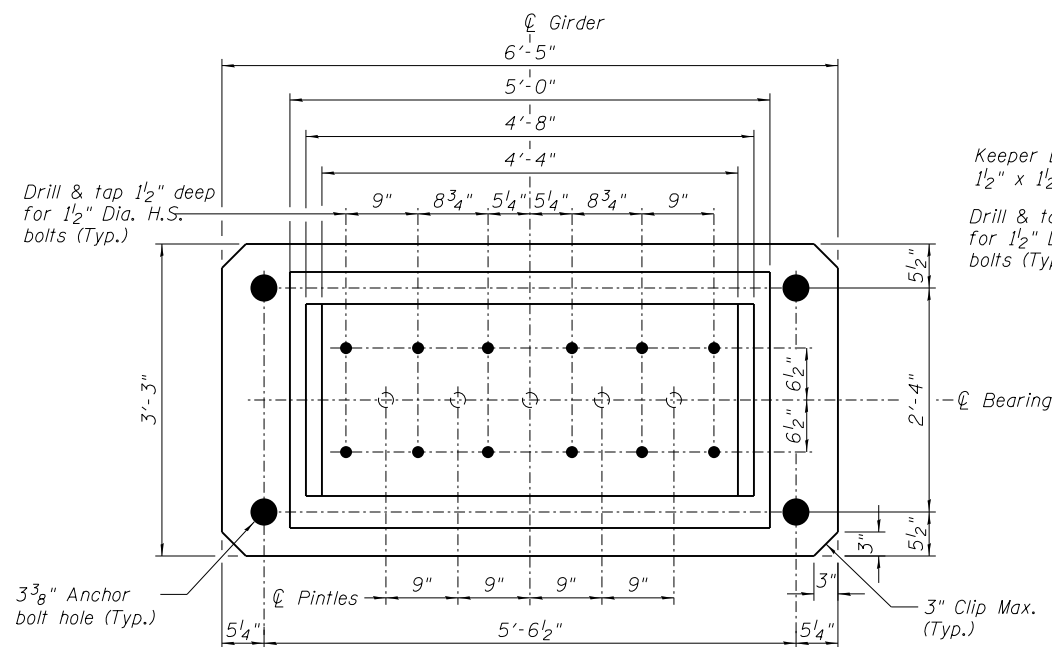


ANCHOR BOLT

- 1 - Bar 3" Dia. x 2'-5" - ab
- 1 - Bar 5/2" Dia. x 1/4" w/ 3/8" Dia. hole at center - ac
- 1 - Heavy Hex Nut - ad
- Weight = 69 lbs.
- Galvanize after fabrication (16 Required)

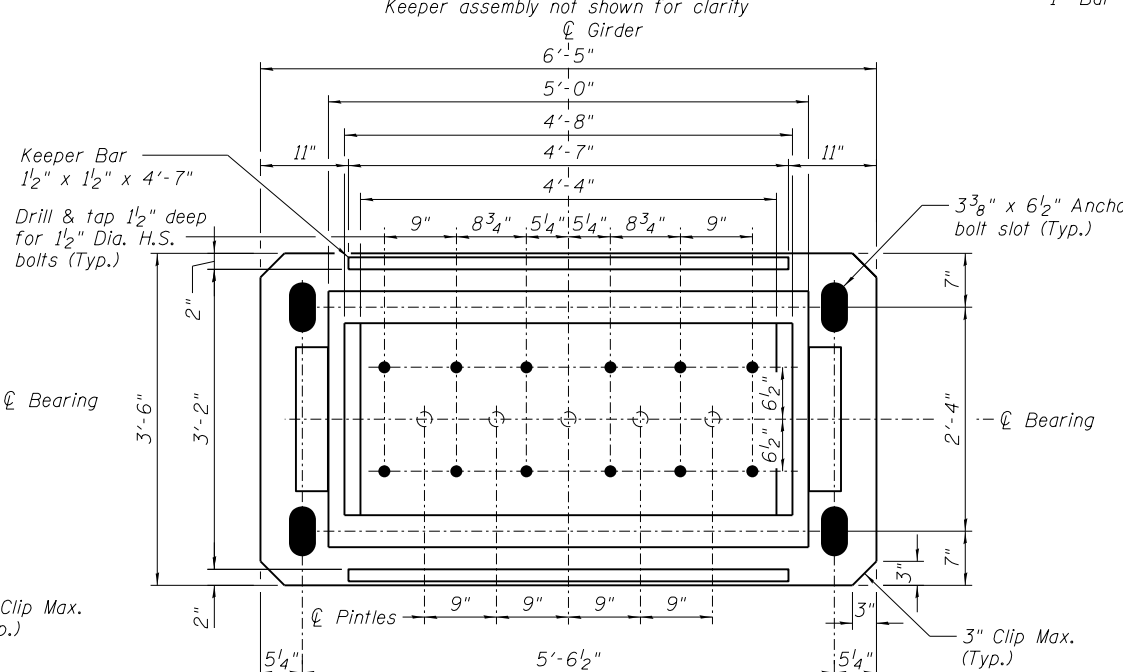


PINTLE DETAIL



PLAN VIEW - FIXED BEARING

(2 Required)



PLAN VIEW - EXPANSION BEARING

(2 Required)

NOTES:

- Steel used for bearing assemblies shall conform to ASTM A709 GR50, unless noted otherwise. Anchor bolts shall conform to ASTM F1554 Gr 105. Cost of bearings and anchor bolts shall be included in the cost of "Furnishing and Erecting Structural Steel, Bridge No. 1".
- Stainless steel shall conform to ASTM A480.
- Bearing assembly weldments shall be stress relieved by heat treating prior to finish machining, per current AWS structural welding codes.
- Teflon Layer shall be composed of virgin unfilled TFE resin, unfilled TFE sheets or unfilled TFE fabric. Filler material, such as milled glass fibers will not be allowed. Teflon layer shall conform to the requirements of AREMA Chapter 15.
- All surfaces in moving contact shall be finished 125/.
- All dimensions shown are final dimensions after machining.
- Bearings to be shop fitted to girders, match marked and assembled in units for shipping.
- Anchor bolts, nuts and plate washers shall be galvanized in accordance with ASTM B695, Class 50.
- Anchor bolt nuts shall be A563 Gr DH Heavy Hex & Washers shall be F436 Type 1.
- Bolt removal and replacements to gain access to properly tighten bearing bolts is incidental to steel erection.

FILE NAME = ... PROJECTS\DOCUMENTS\09\JOBS\09L0179B\CAD\STRUCT\5TH\Sheet\0849960-09L0179B-UPRR-002

USER NAME = Pop00275	DESIGNED - MJW	REVISD -
PLOT SCALE = 0:2.0000 " = 1"	CHECKED - TJH/TDP	REVISD -
PLOT DATE = 4/11/2019	DRAWN - RSJ	REVISD -
	CHECKED - MJW	REVISD -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TPG BEARING DETAILS
STRUCTURE 084-9960 - 5TH ST UPRR**

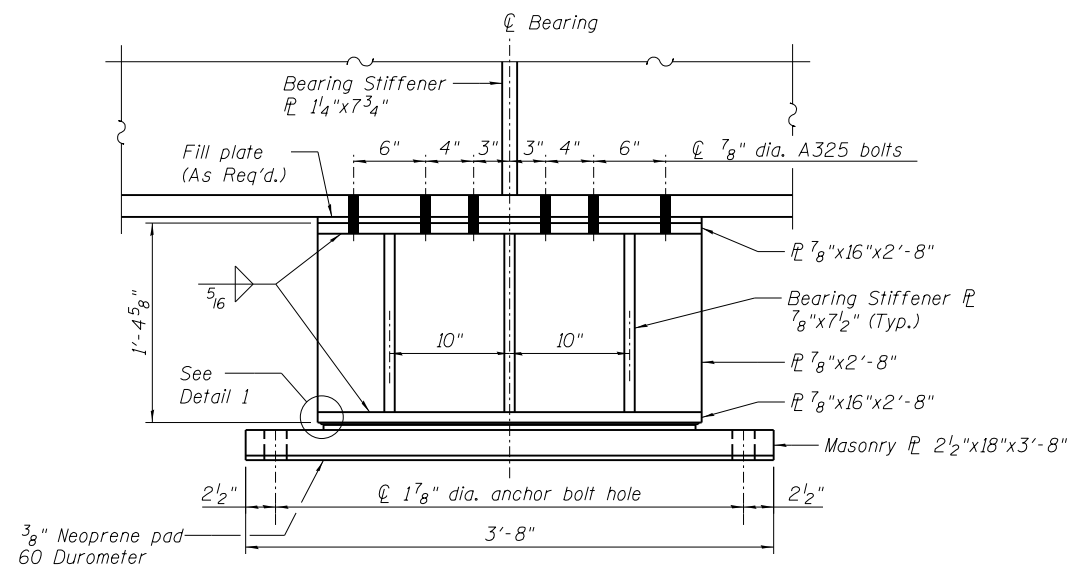
SHEET NO. 19 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	178
			CONTRACT NO. 93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				

FINAL

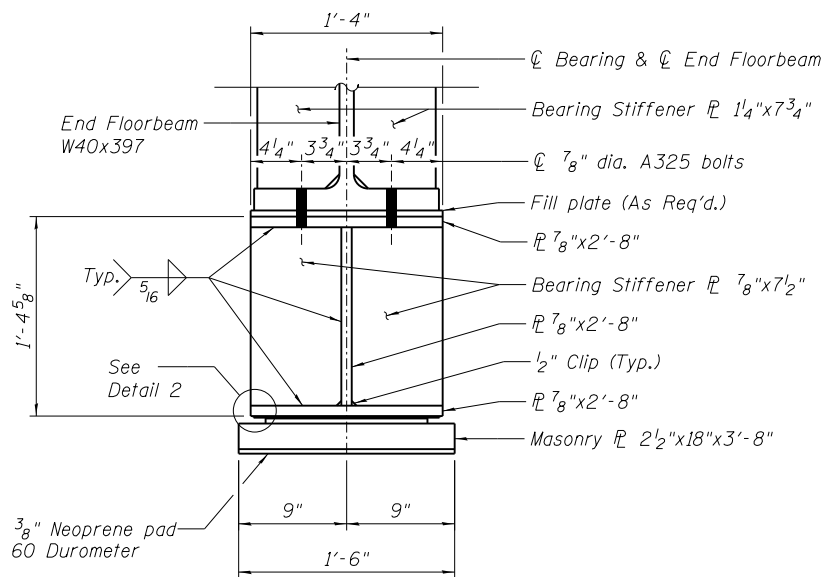


© Copyright Hanson Professional Services Inc., 2019



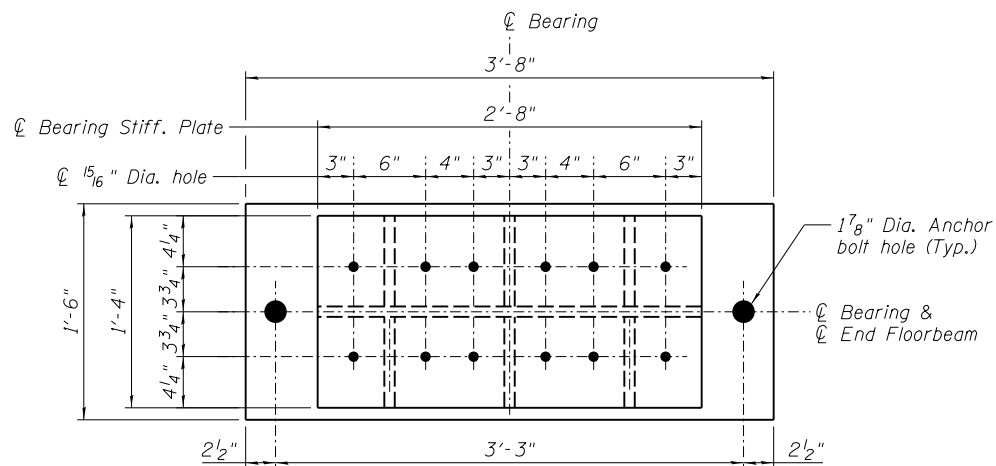
ELEVATION - END FLOORBEAM BEARING

Anchor Bolt not shown for clarity



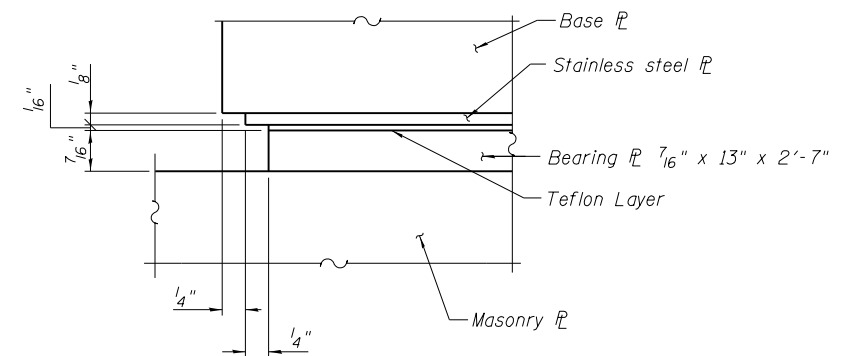
END VIEW - END FLOORBEAM BEARING

Anchor Bolt not shown for clarity

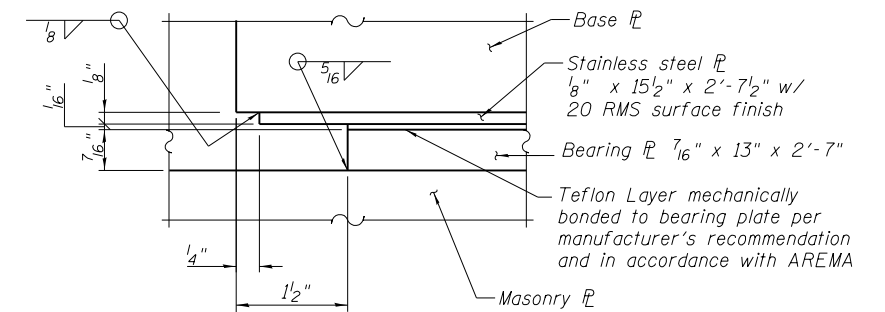


PLAN VIEW - END FLOORBEAM BEARING

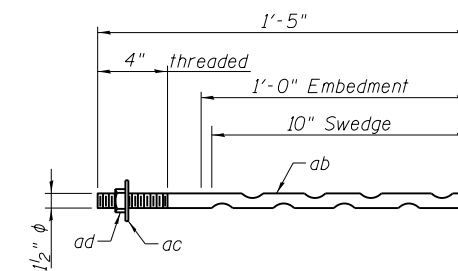
(2 Required)



DETAIL 1



DETAIL 2



ANCHOR BOLT

- 1 - Bar 1/2" Dia. x 1'-5" - ab
- 1 - Bar 3" Dia. x 1/4" w/ 1 5/8" Dia. hole at center - ac
- 1 - Heavy Hex Nut - ad
- Weight = 10 lbs.
- Galvanize after fabrication
- (4 Required)

NOTES:

1. Steel used for bearing assemblies shall conform to ASTM A709 GR50, unless noted otherwise. Anchor bolts shall conform to ASTM F1554 Gr 105. Cost of bearings and anchor bolts shall be included in the cost of "Furnishing and Erecting Structural Steel, Bridge No. 1".
2. Stainless steel shall conform to ASTM A480.
3. Bearing assembly weldments shall be stress relieved by heat treating prior to finish machining, per current AWS structural welding codes.
4. Teflon Layer shall be composed of virgin unfilled TFE resin, unfilled TFE sheets or unfilled TFE fabric. Filler material, such as milled glass fibers will not be allowed. Teflon layer shall conform to the requirements of AREMA Chapter 15.
5. All surfaces in moving contact shall be finished 125.
6. All dimensions shown are final dimensions after machining.
7. Bearings to be shop fitted to girders, match marked and assembled in units for shipping.
8. Anchor bolts, nuts and plate washers shall be galvanized in accordance with ASTM B695, Class 50.
9. Anchor bolt nuts shall be A563 Gr DH Heavy Hex & Washers shall be F436 Type 1.
10. Bolt removal and replacements to gain access to properly tighten bearing bolts is incidental to steel erection.

\\spr-svr306.hanson.dom\hanson_projects\Documents\09Jobs\09L0179B\CAD\Struct\5th\Sheet\0849960-09L0179B-UPRR-002

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
	PLOT SCALE = 0:2.0000 " = 1"	DRAWN - RSJ	REVISED -
	PLOT DATE = 4/11/2019	CHECKED - MJW	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**END FLOORBEAM BEARING DETAILS
STRUCTURE 084-9960 - 5TH ST UPRR**

SHEET NO. 20 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	179
			CONTRACT NO. 93733	
•666 & 666 ALT.		ILLINOIS FED. AID PROJECT		

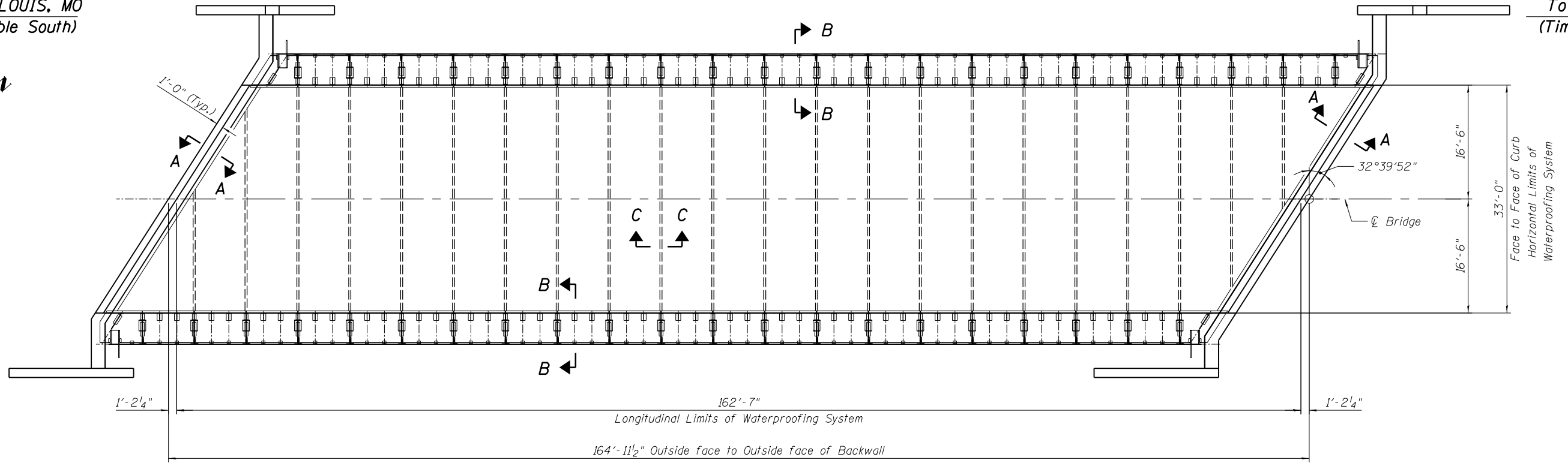
FINAL



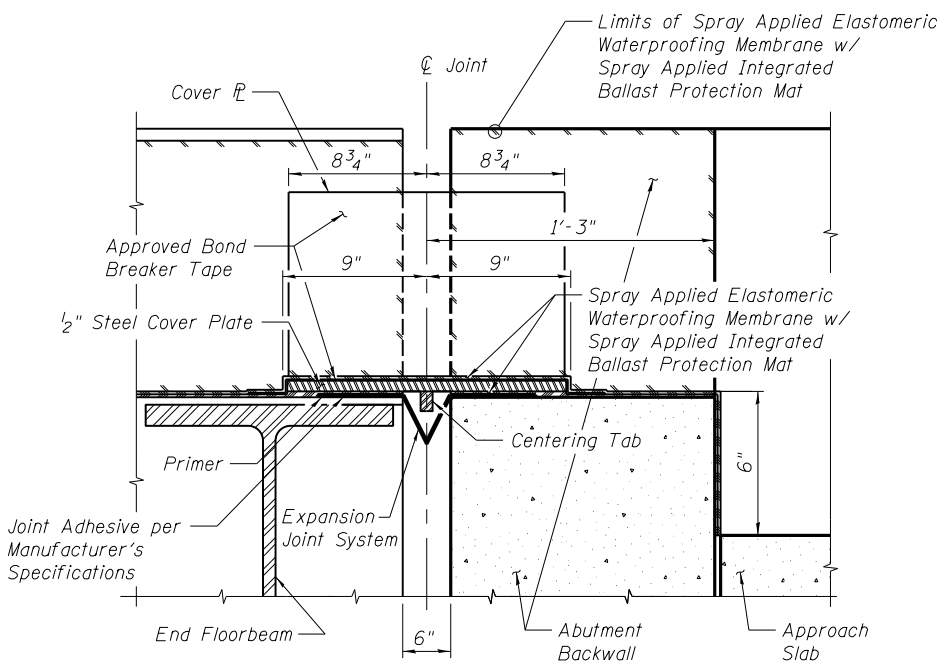
© Copyright Hanson Professional Services Inc., 2019

To ST. LOUIS, MO
(Timetable South)

To JOLIET, IL
(Timetable North)

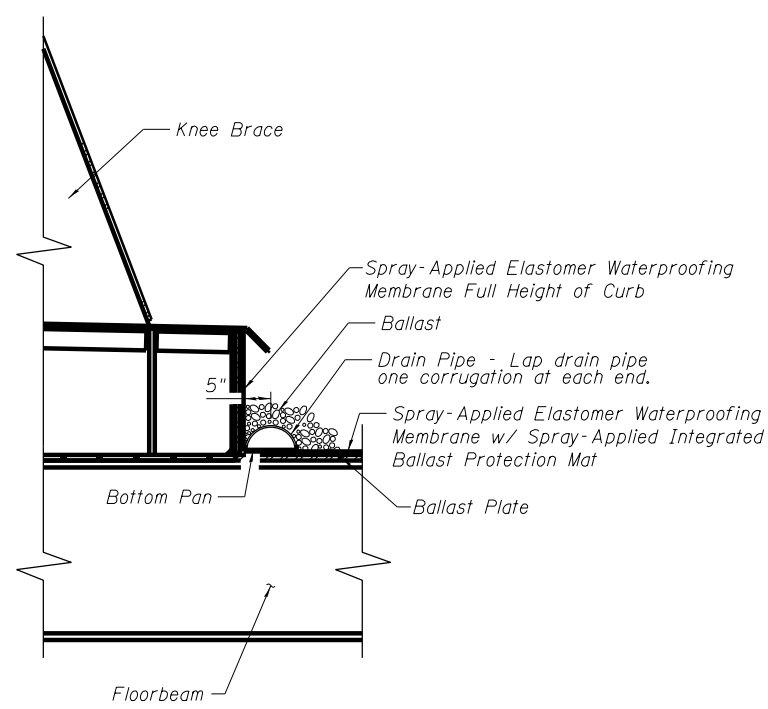


WATERPROOFING LIMITS PLAN

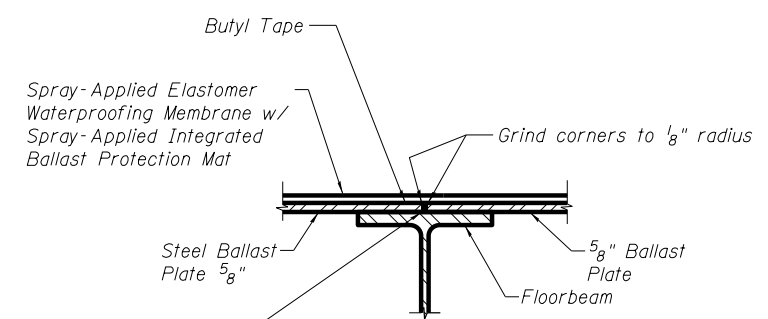


- Note:
1. Bridge deck membrane continuous thru joint.
 2. Typical Joint Detail shown for information only. Waterproofing installer shall determine final details in accordance with the manufacturer's recommendations.

SECTION A-A
(At Rt. 4's to Bk. of Abut.)



SECTION B-B



Non-staining grey one compound non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25. Cost included with Membrane Waterproofing (Special).

SECTION C-C

- Notes:
1. Prepare surfaces and apply in accordance with Manufacturer's recommendations.
 2. Structural steel cover plates shall be galvanized.
 3. Cost of joint adhesive and bond breaker tape shall be included in the cost of "Membrane Waterproofing (Special)".
 4. The cover plate is included in the weight of the Structural Steel and will be paid for as "Furnishing and Erecting Structural Steel, Bridge No. 1".
 5. For cover plate details see Sheet 15 of 28.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Membrane Waterproofing (Special)	Sq. Ft.	6,212

FILE NAME: ...

USER NAME = Pop00275	DESIGNED - MJW	REVISIONS
PLOT SCALE = 0:2.0000 '1" / in.	CHECKED - TJH/TDP	REVISIONS
PLOT DATE = 4/11/2019	DRAWN - RSJ	REVISIONS
	CHECKED - MJW	REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DECK WATERPROOFING
STRUCTURE 084-9960 - 5TH ST UPRR

SHEET NO. 21 OF 28 SHEETS

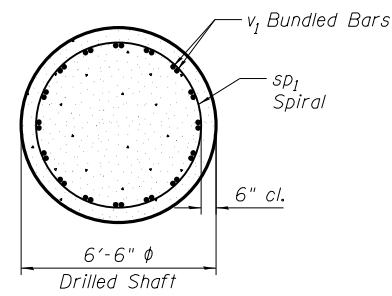
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	180
CONTRACT NO.			93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

FINAL

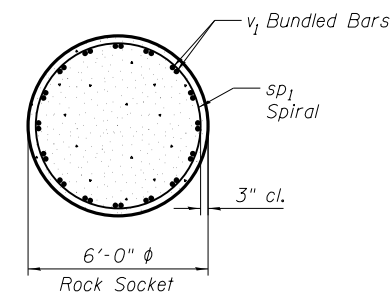


Copyright Hanson Professional Services Inc, 2019

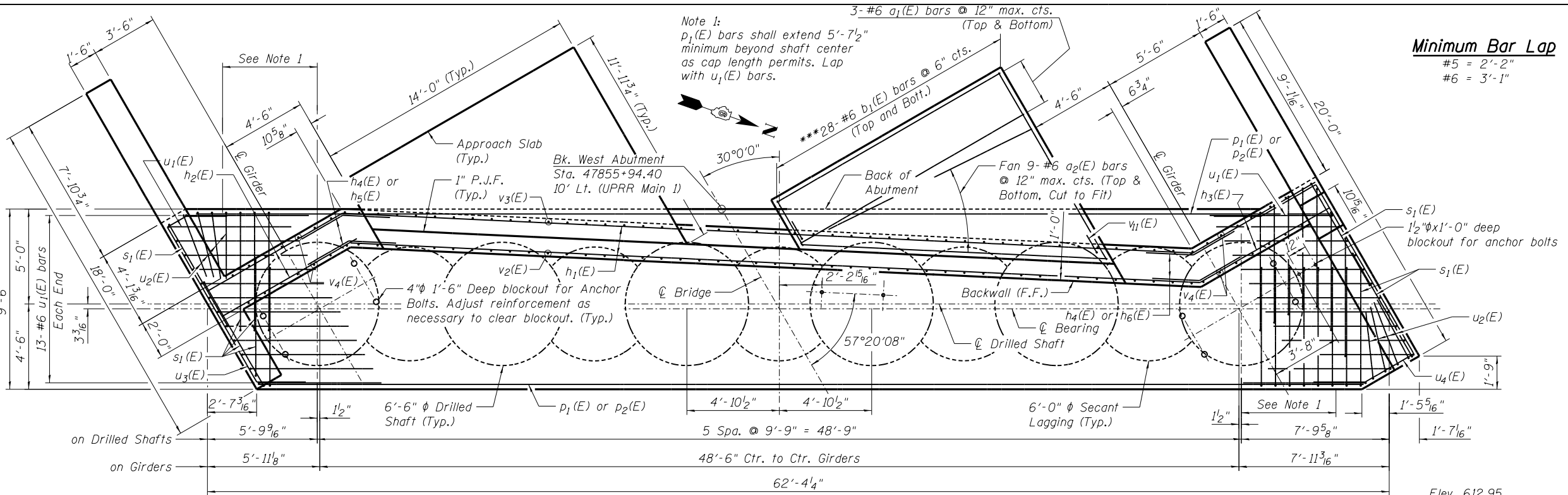
Minimum Bar Lap
 #5 = 2'-2"
 #6 = 3'-1"



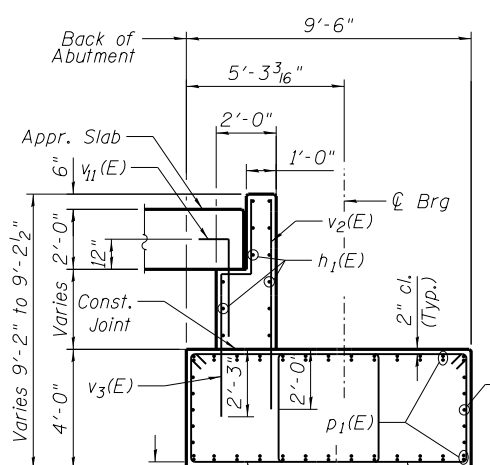
SECTION B-B
 Drilled Shaft



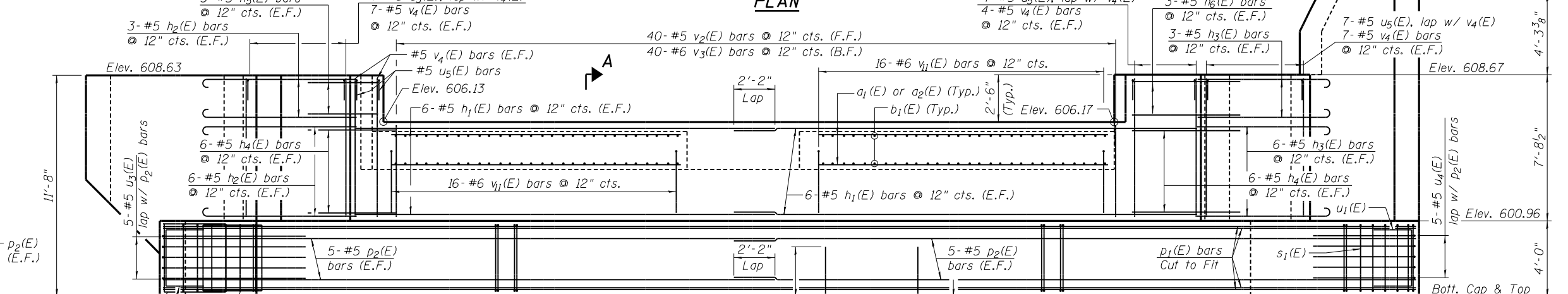
SECTION C-C
 Rock Socket



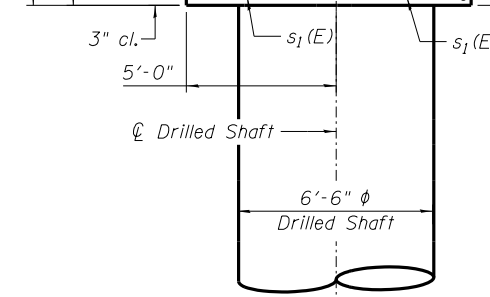
PLAN



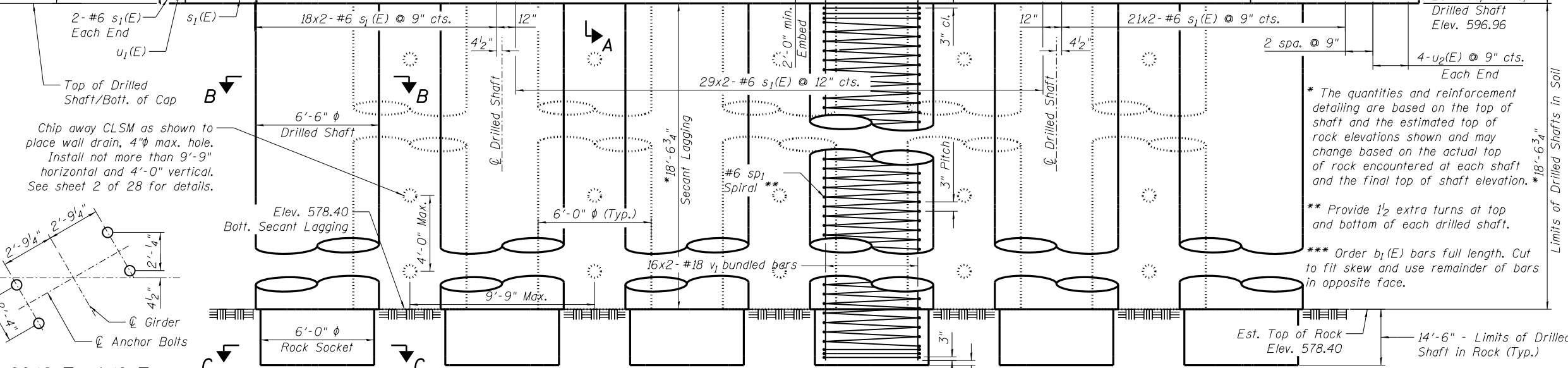
SECTION A-A
 (At Rt. L's to Bk. of Abut.)



ELEVATION - WEST ABUTMENT
 (Looking West)



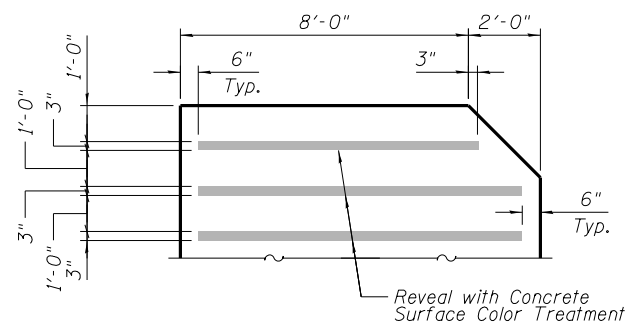
BLOCKOUT LAYOUT
 (At End Floorbeam Location)



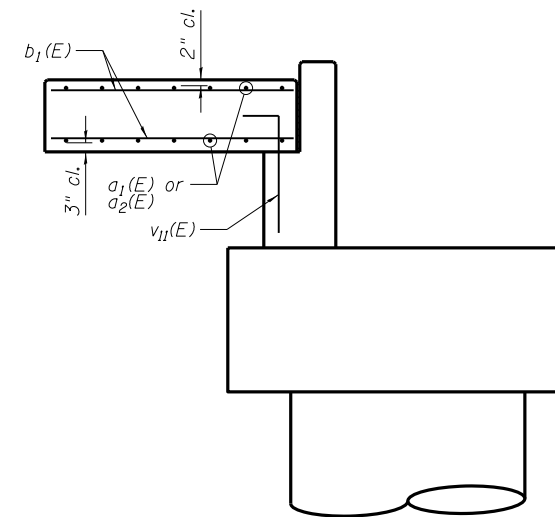
BLOCKOUT LAYOUT
 (At Girders Locations)

* The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.
 ** Provide 1/2 extra turns at top and bottom of each drilled shaft.
 *** Order b1(E) bars full length. Cut to fit skew and use remainder of bars in opposite face.

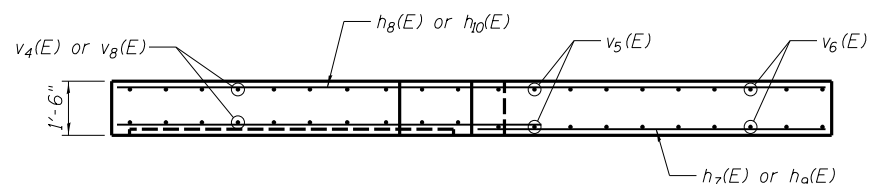
Limits of Drilled Shafts in Soil



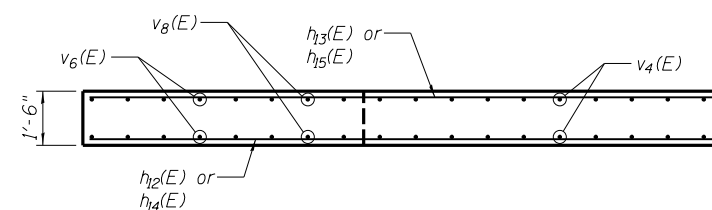
CONCRETE REVEAL DETAIL



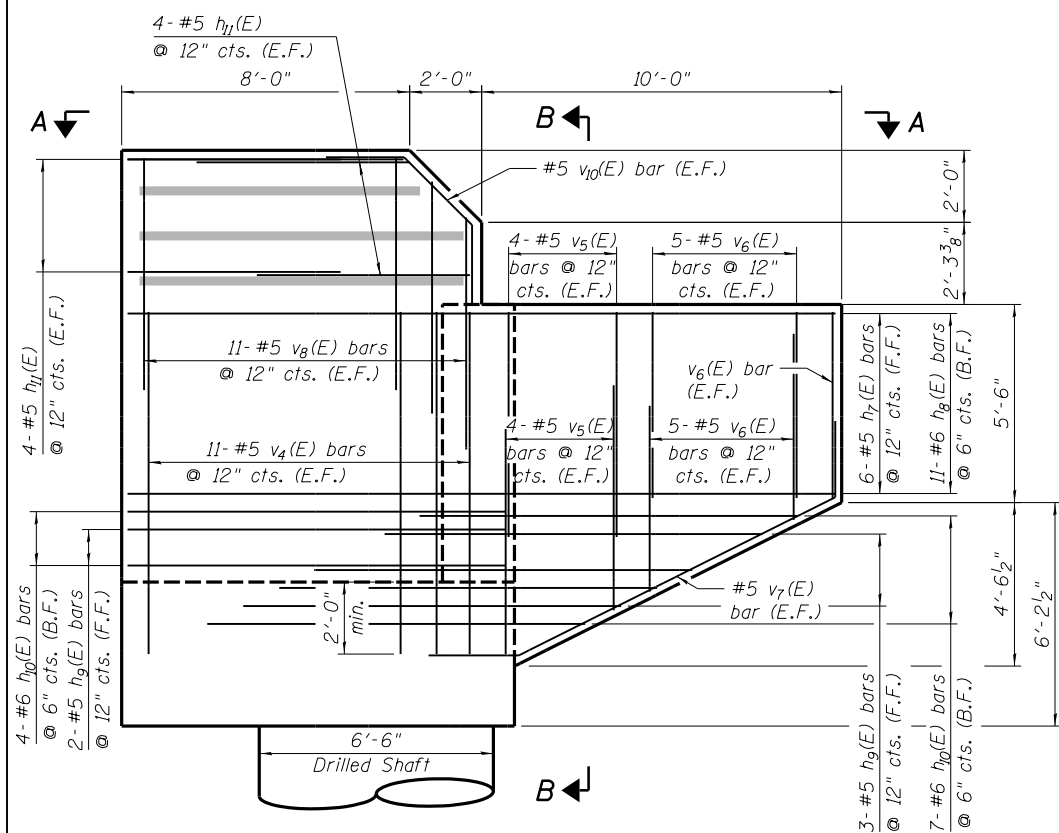
APPROACH SLAB SECTION



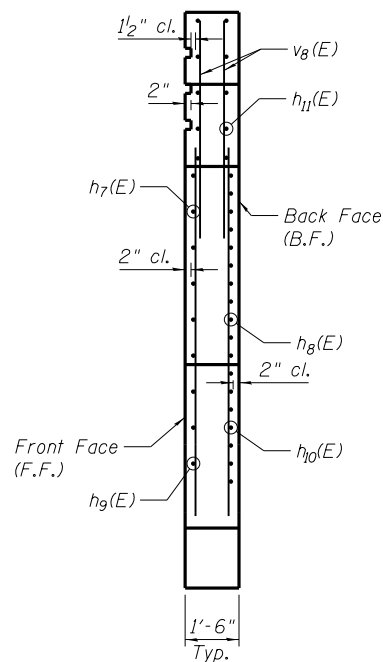
SECTION A-A - PLAN VIEW



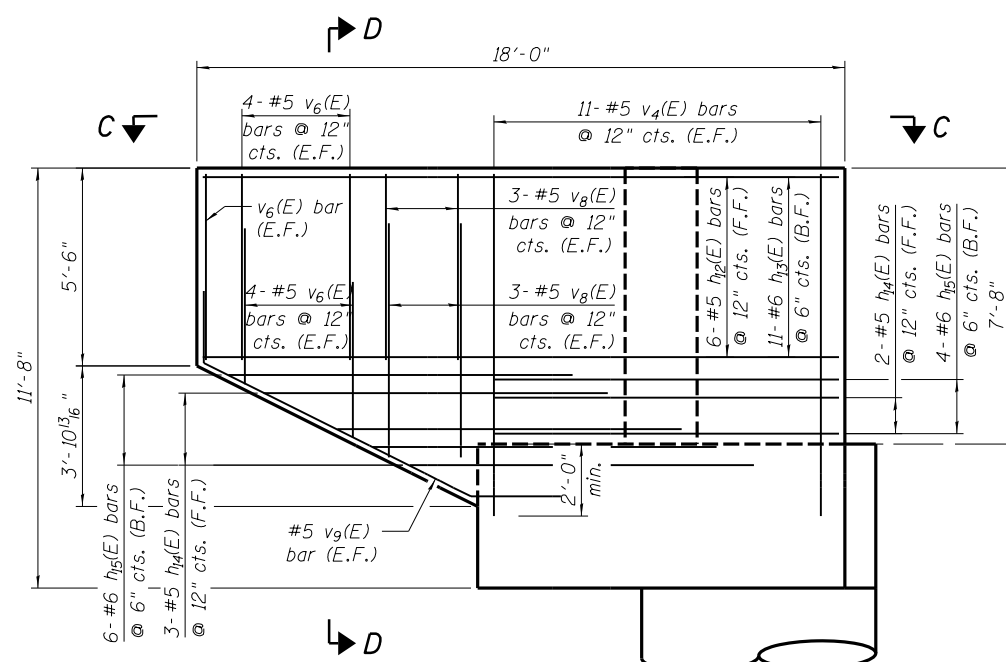
SECTION C-C - PLAN VIEW



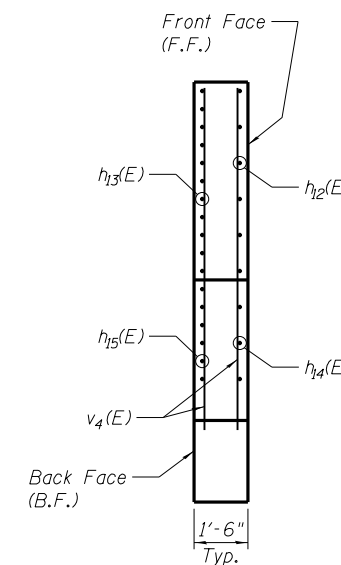
ELEVATION - NORTH WING END VIEW
(Looking South)



WINGWALL SECTION B-B



ELEVATION - SOUTH WING END VIEW
(Looking North)



WINGWALL SECTION D-D

\\spr-svr306.hanson.dom\hanson_projects\Documents\09Jobs\09L01798\CAD\Struct\5th\Sheet\0849960-09L01798-UPRR-002

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
		DRAWN - RSJ	REVISED -
		CHECKED - MJW	REVISED -
PLOT SCALE = 0:2.0000 ' = 1"			
PLOT DATE = 4/11/2019			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE 084-9960 - 5TH ST UPRR

SHEET NO. 23 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	182
CONTRACT NO. 666 & 666 ALT. ILLINOIS FED. AID PROJECT			93733	

FINAL



© Copyright Hanson Professional Services Inc., 2019

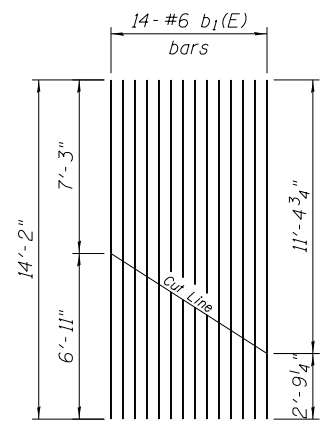
**BILL OF MATERIAL
WEST ABUTMENT**

Bar	No.	Size	Length	Shape
a ₁ (E)	12	#6	13'-8"	—
a ₂ (E)	36	#6	16'-0"	—
b ₁ (E)	56	#6	14'-2"	—
h ₁ (E)	24	#5	23'-7"	—
h ₂ (E)	18	#5	8'-11"	—
h ₃ (E)	18	#5	8'-6"	—
h ₄ (E)	24	#5	5'-0"	—
h ₅ (E)	6	#5	3'-5"	—
h ₆ (E)	6	#5	6'-4"	—
h ₇ (E)	6	#5	19'-8"	—
h ₈ (E)	11	#6	19'-8"	—
h ₉ (E)	5	#5	10'-0"	—
h ₁₀ (E)	11	#6	10'-11"	—
h ₁₁ (E)	16	#5	5'-11"	—
h ₁₂ (E)	6	#5	17'-8"	—
h ₁₃ (E)	11	#6	17'-8"	—
h ₁₄ (E)	5	#5	9'-1"	—
h ₁₅ (E)	10	#6	10'-1"	—
p ₁ (E)	52	#8	60'-0"	—
p ₂ (E)	20	#5	31'-4"	—
s ₁ (E)	142	#6	21'-0"	□
sp ₁	6	#6	*32'-4"	⋈
u ₁ (E)	26	#6	16'-5"	┌
u ₂ (E)	8	#5	10'-7"	┌
u ₃ (E)	5	#5	14'-11"	┌
u ₄ (E)	5	#5	21'-4"	┌
u ₅ (E)	20	#5	3'-4"	┌
v ₁	192	#18	35'-2"	—
v ₂ (E)	40	#5	7'-1"	—
v ₃ (E)	40	#6	8'-4"	—
v ₄ (E)	84	#5	9'-7"	—
v ₅ (E)	16	#5	6'-3"	—
v ₆ (E)	40	#5	5'-2"	—
v ₇ (E)	2	#5	14'-6"	—
v ₈ (E)	22	#5	6'-6"	—
v ₉ (E)	2	#5	13'-0"	—
v ₁₀ (E)	2	#5	7'-0"	—
v ₁₁ (E)	32	#6	4'-3"	—
Structure Excavation		Cu. Yds.	191	
Concrete Structures		Cu. Yds.	143.9	
Drilled Shaft in Soil		Cu. Yds.	136.9	
Drilled Shaft in Rock		Cu. Yds.	91.1	
Secant Lagging		Cu. Ft.	2,624	
Reinforcement Bars		Pound	112,430	
Reinforcement Bars, Epoxy Coated		Pound	21,620	
Crosshole Sonic Logging Access Ducts		Foot	1,280	

* Length is height of spiral

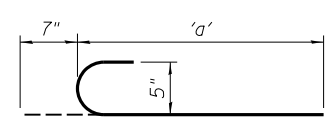
MIN. BAR LAPS FOR SPIRAL

#6 bars = 2'-7"



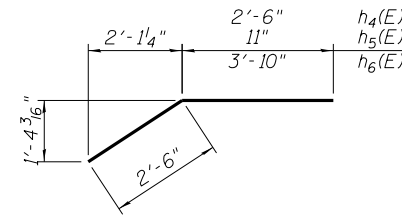
BAR CUTTING DIAGRAM FOR b₁(E)

Order b₁(E) full length. Cut as shown and use remainder of bars in opposite face.

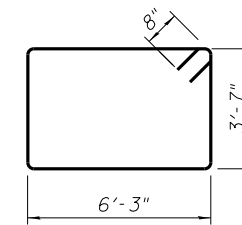


BARS h₂(E) & h₃(E)

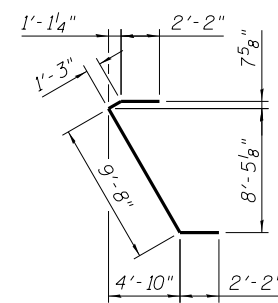
Bar	'a'
h ₂ (E)	8'-3"
h ₃ (E)	7'-11"



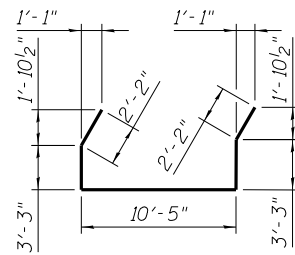
BARS h₄(E) & h₅(E) & h₆(E)



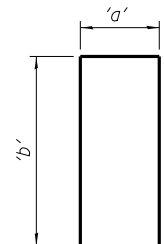
BAR s₁(E)



BAR u₃(E)

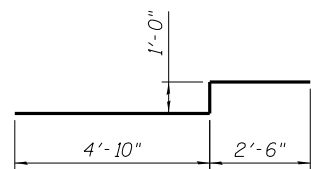


BAR u₄(E)

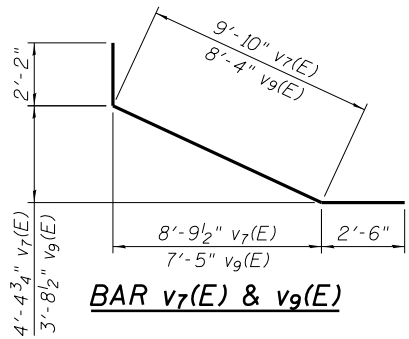


BARS u₁(E), u₂(E), u₅(E)

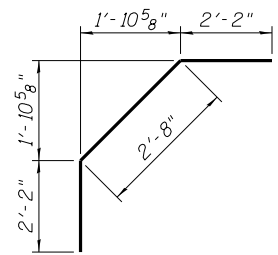
Bar	'a'	'b'
u ₁ (E)	3'-5"	6'-6"
u ₂ (E)	3'-7"	3'-6"
u ₅ (E)	1'-8"	0'-10"



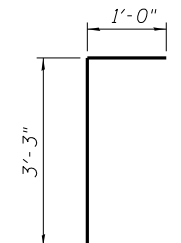
BAR v₃(E)



BARS v₇(E) & v₉(E)



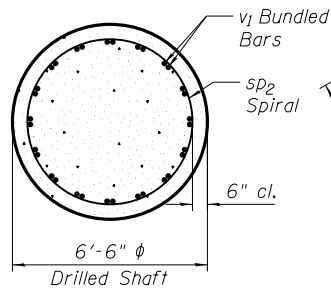
BAR v₁₀(E)



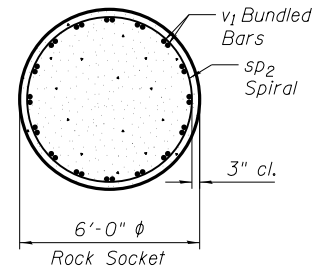
BAR v₁₁(E)

Minimum Bar Lap

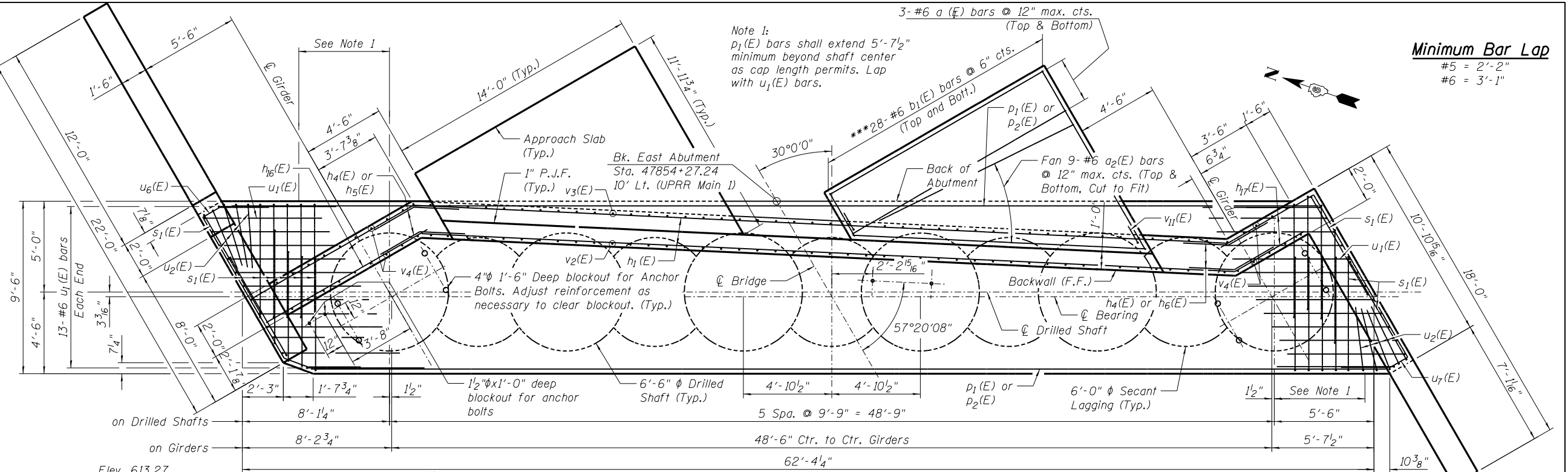
#5 = 2'-2"
#6 = 3'-1"



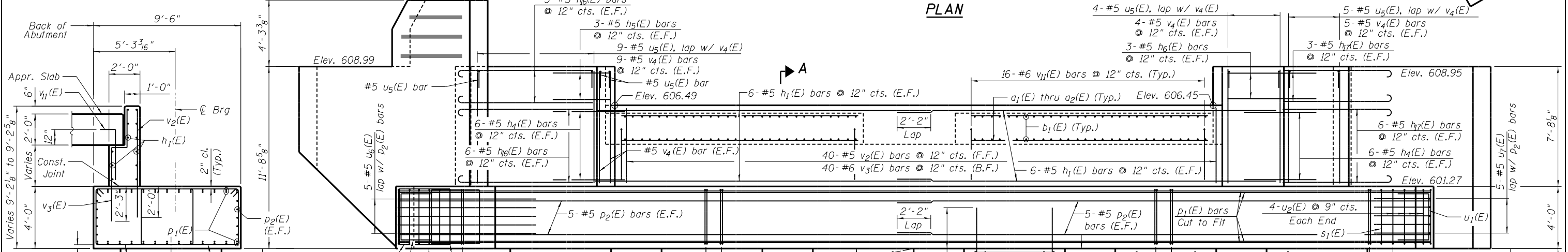
SECTION B-B



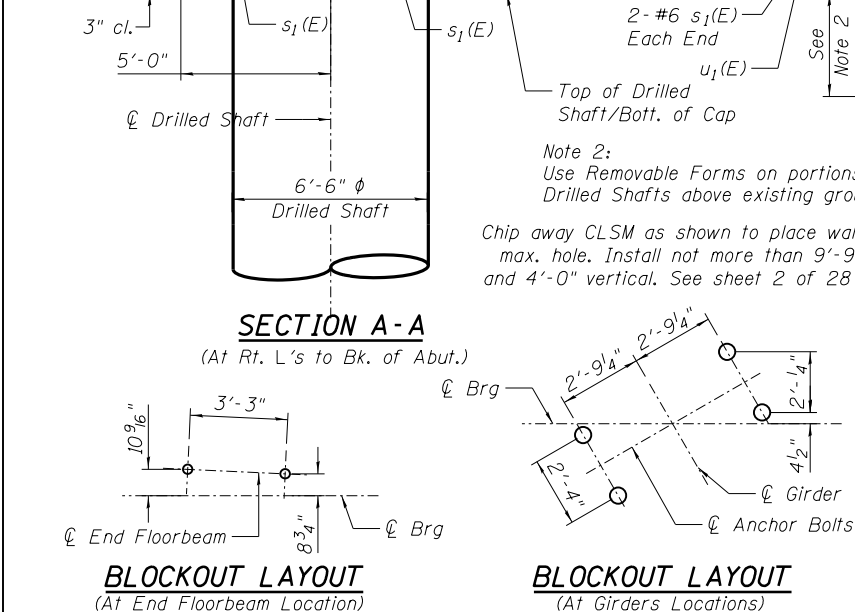
SECTION C-C



PLAN



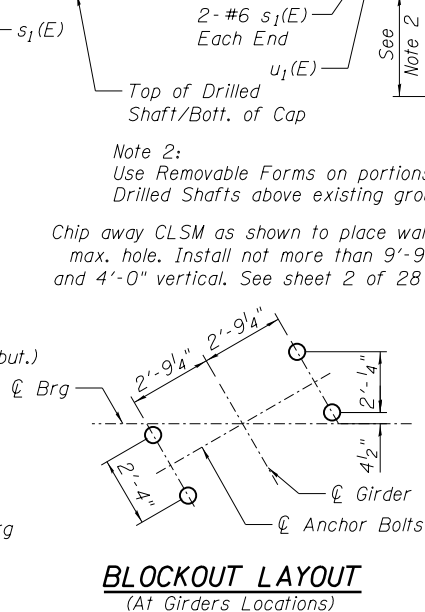
ELEVATION - EAST ABUTMENT
(Looking East)



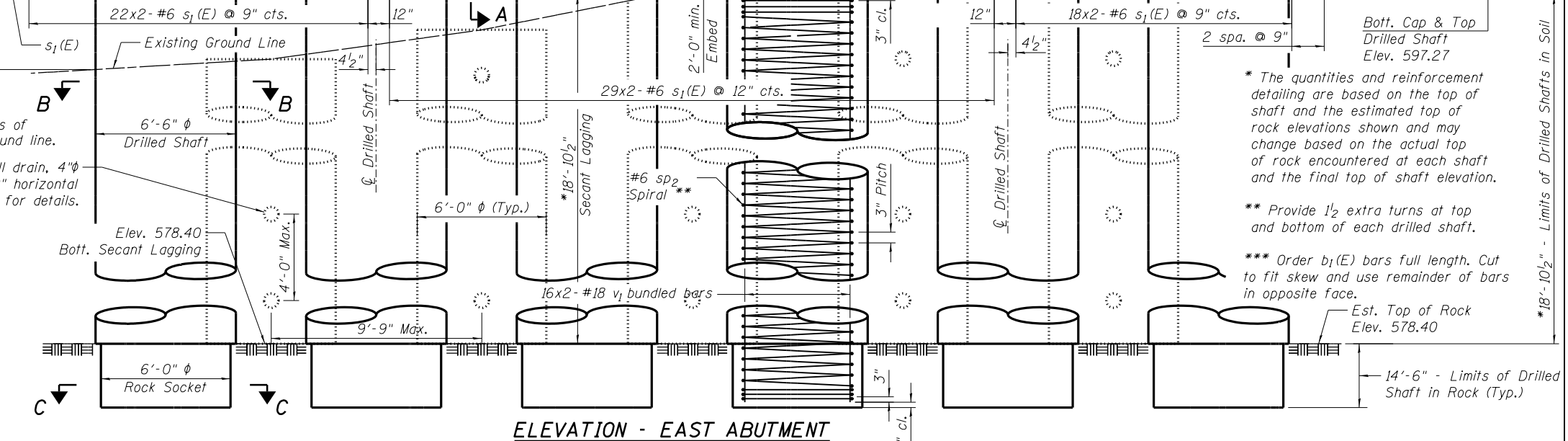
SECTION A-A
(At Rt. L's to Bk. of Abut.)



BLOCKOUT LAYOUT
(At End Floorbeam Location)



BLOCKOUT LAYOUT
(At Girders Locations)



* The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.

** Provide 1 1/2 extra turns at top and bottom of each drilled shaft.

*** Order b1(E) bars full length. Cut to fit skew and use remainder of bars in opposite face.

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
		DRAWN - RSJ	REVISED -
		CHECKED - MJW	REVISED -
PLOT SCALE = 0:2.0000" = 1' = 1/8"			
PLOT DATE = 4/11/2019			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
STRUCTURE 084-9960 - 5TH ST UPRR

SHEET NO. 25 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	184
			CONTRACT NO. 93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				

FINAL



© Copyright Hanson Professional Services Inc., 2019

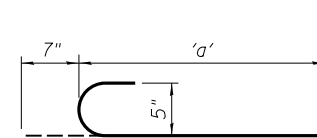
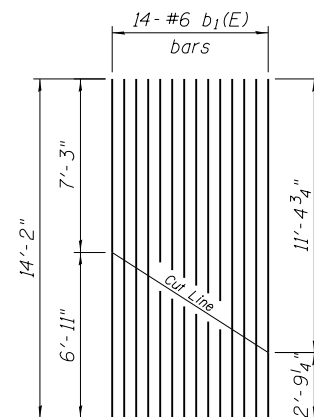
**BILL OF MATERIAL
EAST ABUTMENT**

Bar	No.	Size	Length	Shape
a ₁ (E)	12	#6	13'-8"	—
a ₂ (E)	36	#6	16'-0"	—
b ₁ (E)	56	#6	14'-2"	—
h ₁ (E)	24	#5	23'-7"	—
h ₄ (E)	24	#5	5'-0"	—
h ₅ (E)	6	#5	3'-5"	—
h ₆ (E)	6	#5	6'-4"	—
h ₁₁ (E)	16	#5	5'-11"	—
h ₁₂ (E)	8	#5	17'-8"	—
h ₁₃ (E)	15	#6	17'-8"	—
h ₁₆ (E)	18	#5	10'-11"	—
h ₁₇ (E)	18	#5	6'-6"	—
h ₁₈ (E)	6	#5	21'-8"	—
h ₁₉ (E)	11	#6	21'-8"	—
h ₂₀ (E)	7	#5	11'-2"	—
h ₂₁ (E)	14	#6	12'-1"	—
h ₂₂ (E)	4	#5	8'-11"	—
h ₂₃ (E)	8	#6	9'-2"	—
p ₁ (E)	52	#8	60'-0"	—
p ₂ (E)	20	#5	31'-4"	—
s ₁ (E)	144	#6	21'-0"	□
sp ₂	6	#6	*32'-7"	⋈
u ₁ (E)	26	#6	16'-5"	┌
u ₂ (E)	8	#5	10'-7"	┌
u ₅ (E)	20	#5	3'-4"	┌
u ₆ (E)	5	#5	16'-5"	┌
u ₇ (E)	5	#5	17'-4"	┌
v ₁	192	#18	35'-1"	—
v ₂ (E)	40	#5	7'-1"	—
v ₃ (E)	40	#6	8'-4"	—
v ₄ (E)	84	#5	9'-7"	—
v ₆ (E)	22	#5	5'-2"	—
v ₈ (E)	46	#5	6'-6"	—
v ₁₀ (E)	2	#5	7'-0"	—
v ₁₁ (E)	32	#6	4'-3"	—
v ₁₂ (E)	2	#5	18'-3"	—
v ₁₃ (E)	16	#5	11'-4"	—
Structure Excavation		Cu. Yds.	127	
Concrete Structures		Cu. Yds.	147.1	
Drilled Shaft in Soil		Cu. Yds.	139.1	
Drilled Shaft in Rock		Cu. Yds.	91.1	
Secant Lagging		Cu. Ft.	2,668	
Reinforcement Bars		Pound	112,400	
Reinforcement Bars, Epoxy Coated		Pound	22,050	
Crosshole Sonic Logging		Foot	1,291	
Access Ducts				

* Length is height of spiral

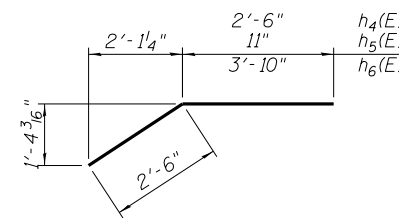
MIN. BAR LAPS FOR SPIRAL

#6 bars = 2'-7"

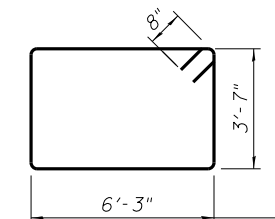


BARS h₁₆(E) & h₁₇(E)

Bar	'a'
h ₁₆ (E)	10'-4"
h ₁₇ (E)	5'-11"



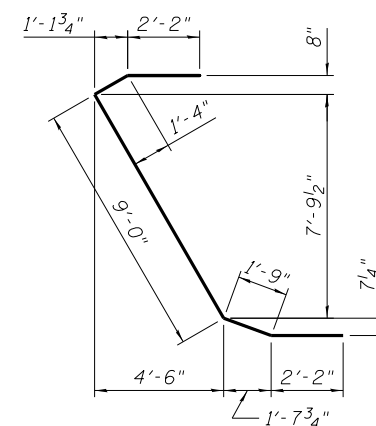
BARS h₄(E) & h₅(E) & h₆(E)



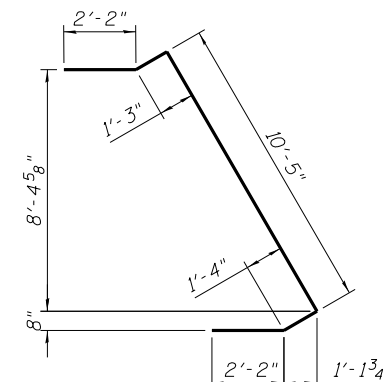
BAR s₁(E)

BAR CUTTING DIAGRAM FOR b₁(E)

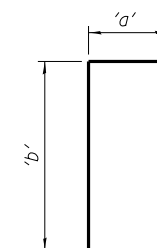
Order b₁(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR u₆(E)

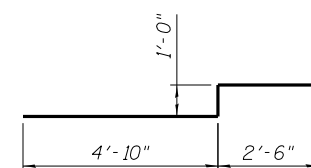


BAR u₇(E)

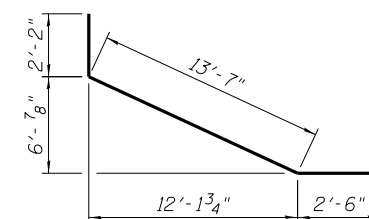


BARS u₁(E), u₂(E), u₅(E)

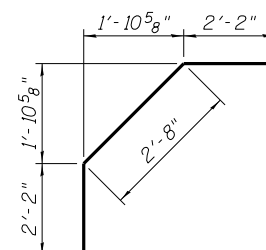
Bar	'a'	'b'
u ₁ (E)	3'-5"	6'-6"
u ₂ (E)	3'-7"	3'-6"
u ₅ (E)	1'-8"	0'-10"



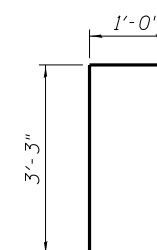
BAR v₃(E)



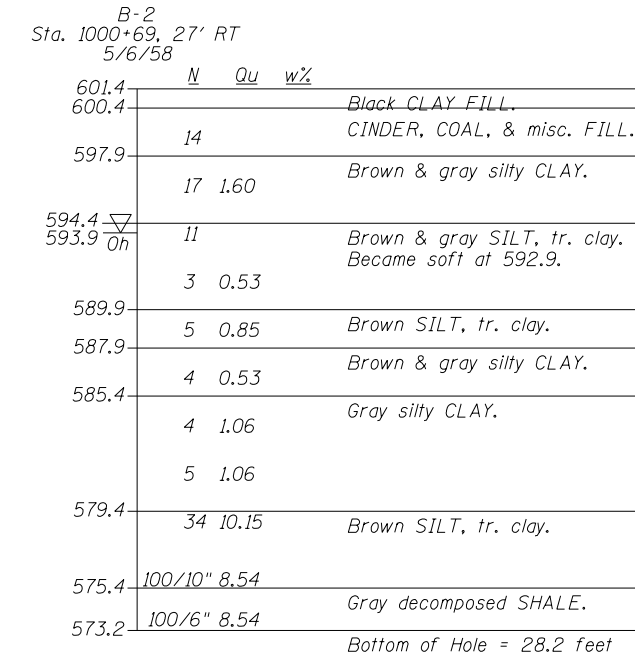
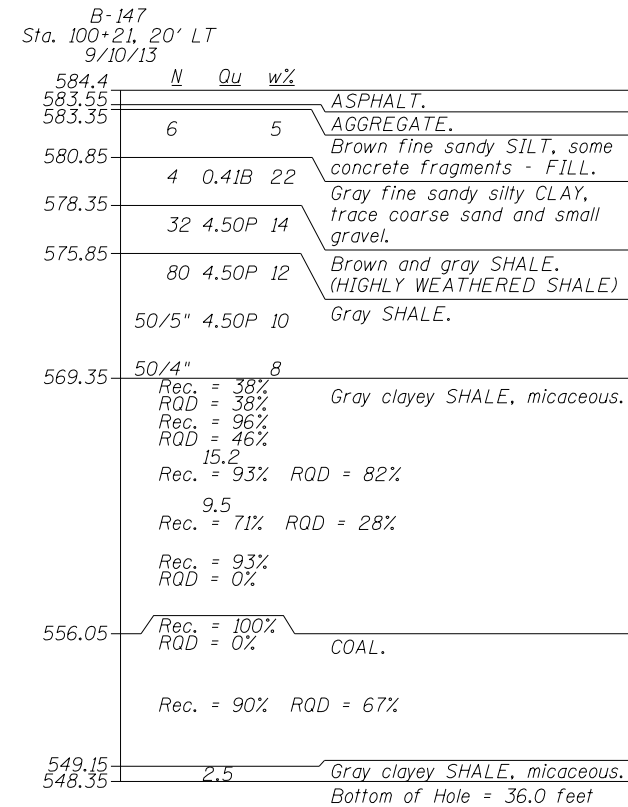
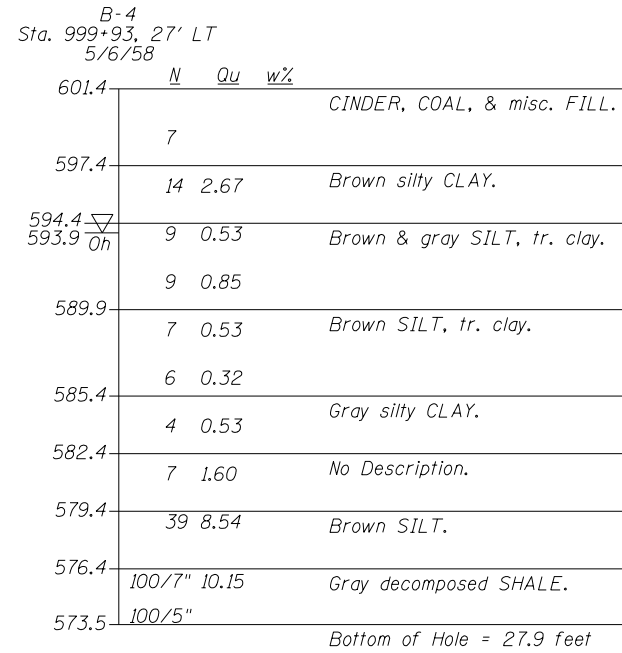
BAR v₁₃(E)



BARS v₁₀(E)



BAR v₁₁(E)



LEGEND

N Standard Penetration Test N (blows/ft)

Qu Unconfined Strength (tsf)

w% Natural Moisture Content (%)

DD Water Surface Elevation Encountered in Boring

558.10 DD = during drilling

Oh = at completion

24h = 24 hours after completion

D:\s\prj\svr\306\hanson_dom\hanson_projects\Documents\09\Jobs\09L0179B\CAD\Struct\5th\Sheet\0849960-09L0179B-UPRR-002

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
		DRAWN - RSJ	REVISED -
		CHECKED - MJW	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUBSURFACE DATA PROFILE
STRUCTURE 084-9960 - 5TH ST UPRR**

SHEET NO. 28 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	187
			CONTRACT NO. 93733	
•666 & 666 ALT.		ILLINOIS FED. AID PROJECT		

FINAL



© Copyright Hanson Professional Services Inc., 2019

Benchmark:
 BM# D2218-07 - Chiseled 'X' on West Bolt of fire hydrant - SE Quad
 6th Street and Wellesly Avenue.
 Elevation = 598.884

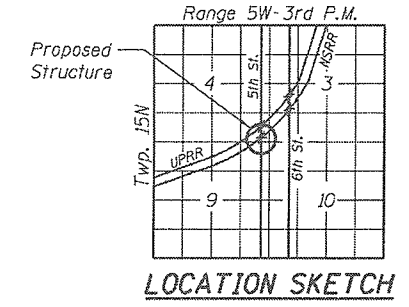
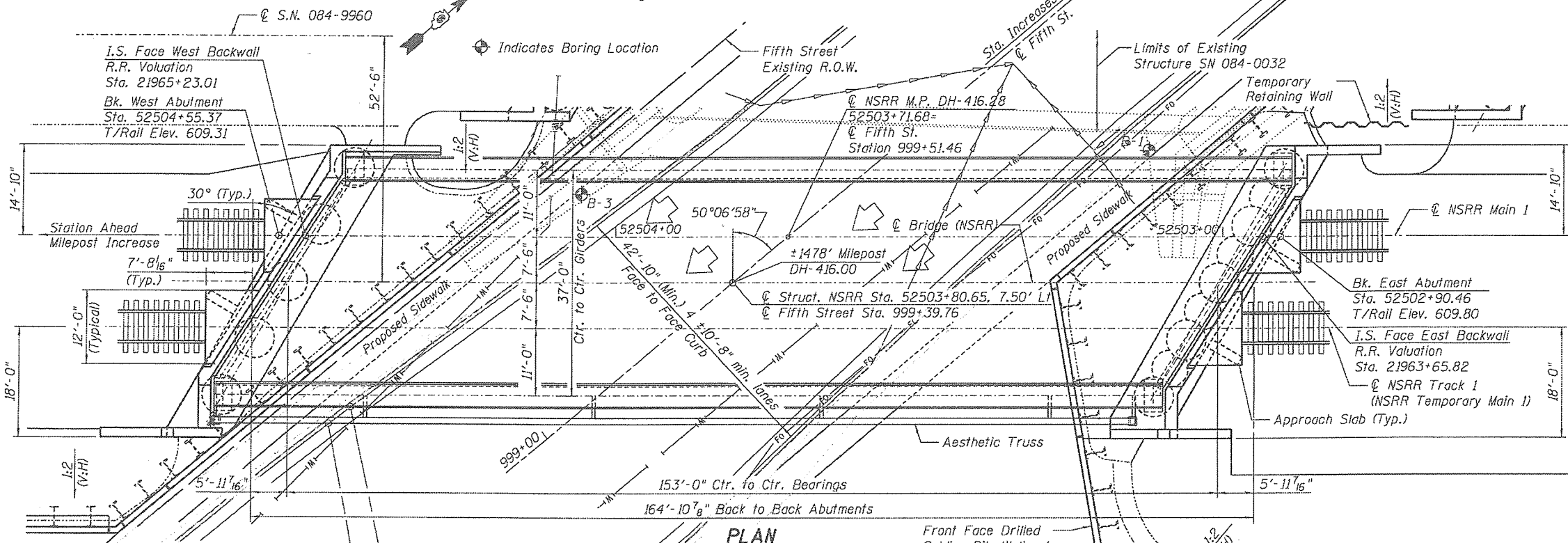
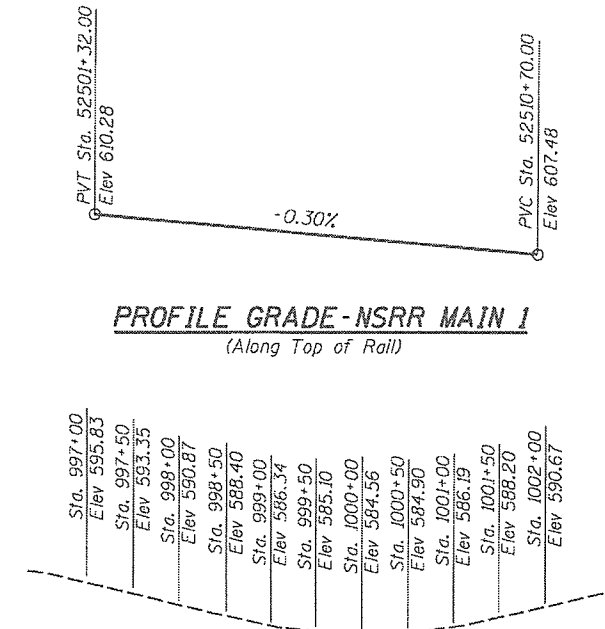
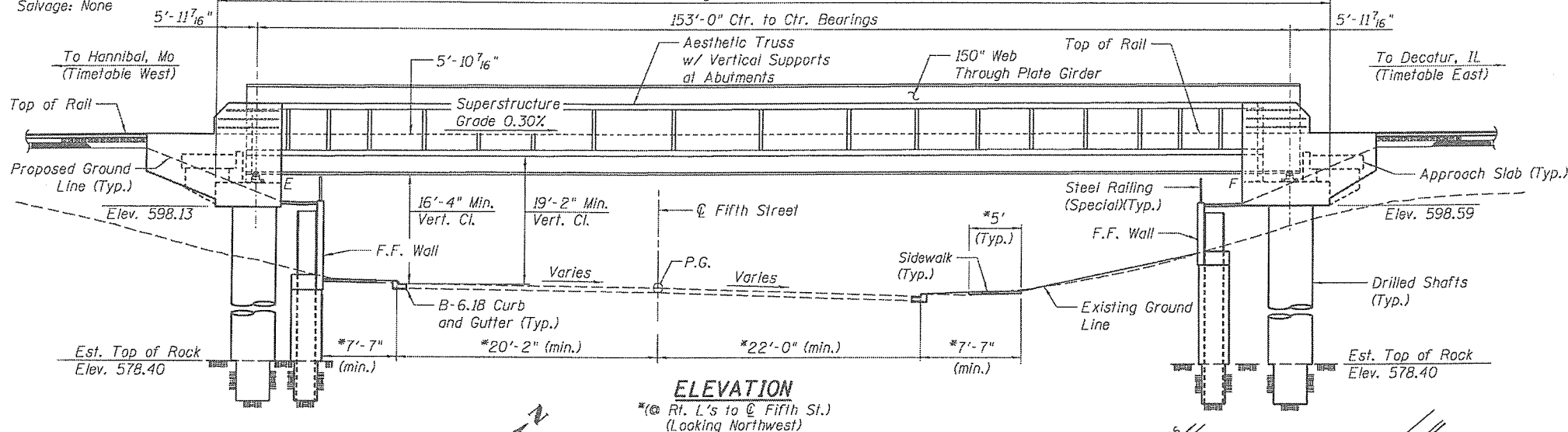
Existing Structure: SN 084-0032 - Built in 1961 under 109-15B. Steel through plate girder structure supported on closed abutments. Bk. to Bk. Abutment length is 95'-3" and ctr. to ctr. through girder width of 18'-6". Structure to be removed and replaced.

Construction Sequence: For Sequence and Details, See retaining wall General Detail Sheet.

Traffic Control: Temporary Lane Closures, Weekend and Nighttime Road Closures.

Salvage: None

Railroad utilities may exist within existing NSRR right-of-way. Prior to the start of any construction or excavation, utility relocations will have to be coordinated with the NSRR.



Point of Min. Vert. Clr. at Aesthetic Truss
 5th St. Sta. 998+74.01, 24.76' Lt.
 Top of Exist. Pavement El. 586.60
 NSRR Sta. 52504+46.99, 30.67' Lt.

Point of Min. Vert. Clr. at Bridge
 5th St. Sta. 998+78.50, 24.58' Lt.
 Top of Exist. Pavement El. 586.60
 NSRR Sta. 52504+43.43, 27.92' Lt.

LOADING COOPER E-80
 Impact: Diesel Impact
 Allow 6" of Future Ballast Dead Lead

DESIGN SPECIFICATIONS

2017 AREMA Specifications
 Live Load Deflection: L/640
 Composite Design for Floorbeam Defl. Req.
 Design Speed: 50 m.p.h.

DESIGN STRESSES

FIELD UNITS
 f'c = 4,000 psi
 fy = 60,000 psi (Reinforcement)
 fy = 50,000 psi (ASTM A709 Grade 50)

SEISMIC DATA

Ground Motion Level	PGA	S _p	S _i
Level 1 (100 Year)	0.010	0.025	0.005
Level 2 (475 Year)	0.040	0.090	0.035
Level 3 (2475 Year)	0.10	0.22	0.10

Soil Site Class = C

APPROVED
 For Structural Adequacy Only

Matthew J. Willey
 Engineer of Bridges & Structures

GENERAL PLAN & ELEVATION
 NSRR (MP DH-416.28) OVER BUSINESS 55 (5TH ST.)
 F.A.P. 666 ALT.-SECTION (109)VB, (110)VB-5

SANGAMON COUNTY
 STATION 52503+80.65
 STRUCTURE NO. 084-9961

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



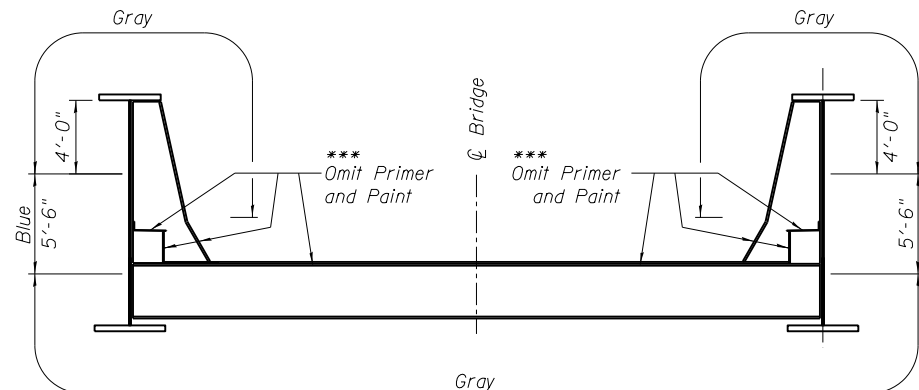
Matthew J. Willey
 4-12-2019
 DATE
 L.I.C. EXP. DATE: 11-30-2020

GENERAL NOTES

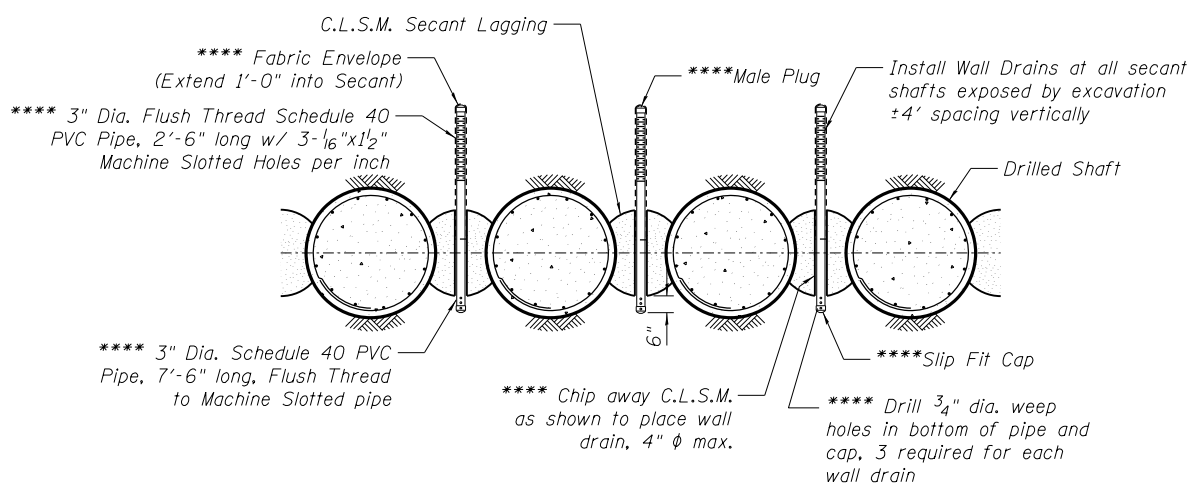
- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/8" dia., holes 1/2" dia., unless otherwise noted.
- Calculated weight of Structural Steel, ASTM A709, Gr. 50 = 1,426,443 lbs.
ASTM A36, Gr. 36 = 12,096 lbs.
ASTM A500, Gr. 46 = 21,978 lbs.
- All structural steel shall be ASTM A709 Grade 50 unless otherwise noted on the plans.
- All substructure concrete shall have a compressive strength of 4,000 psi at 14 days.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to the following surfaces:
Abutments - inside face of backwall, inside face of cheekwall and top of cap (except surfaces coated with surface color treatment).
Concrete Surface Color Treatment shall be applied to the following surfaces:
Abutments - concrete facing, wingwall and cheekwall surfaces coated with concrete surface color treatment.
- The Inorganic Zinc Rich Primer / Acrylic / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. All coatings on faying surfaces shall satisfy RCSC requirements for Class B slip coefficient. The color of the final finish coat for girder flanges, all interior steel surfaces, bottom of deck plate, and aesthetic truss shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for a 5.5 foot tall strip on the exterior face of girder web starting 4 foot down from the top flange shall be blue, Munsell No. 10B 3/6. See painting diagram for more information.
- Waterproofing shall be applied to the backside of the abutment cap and backwall and backside of wingwalls for surfaces below ground. This shall be according to Article 503.18 of the Std. Spec. Cost included with Concrete Structures.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

INDEX OF SHEETS

- General Plan & Elevation
- General Data
- Foundation Layout
- Stage Construction Details
- Typical Section
- Framing Plan
- Outside Elevation of Girder (1 of 2)
- Outside Elevation of Girder (2 of 2)
- Inside Elevation of Girder (1 of 2)
- Inside Elevation of Girder (2 of 2)
- Typical Sections
- Girder Sections & Details
- Girder Splice Details
- Closure Plate and Ballast Plate Plan
- Closure Plate and Ballast Plate Details
- Miscellaneous Girder Details (1 of 3)
- Miscellaneous Girder Details (2 of 3)
- Miscellaneous Girder Details (3 of 3)
- Aesthetic Truss
- TPG Bearing Details
- End Floorbeam Bearing Details
- Bridge Deck Waterproofing
- West Abutment
- West Abutment Details
- West Abutment Bill of Material
- East Abutment
- East Abutment Details
- East Abutment Bill of Material
- Subsurface Data Profile



PAINTING DIAGRAM

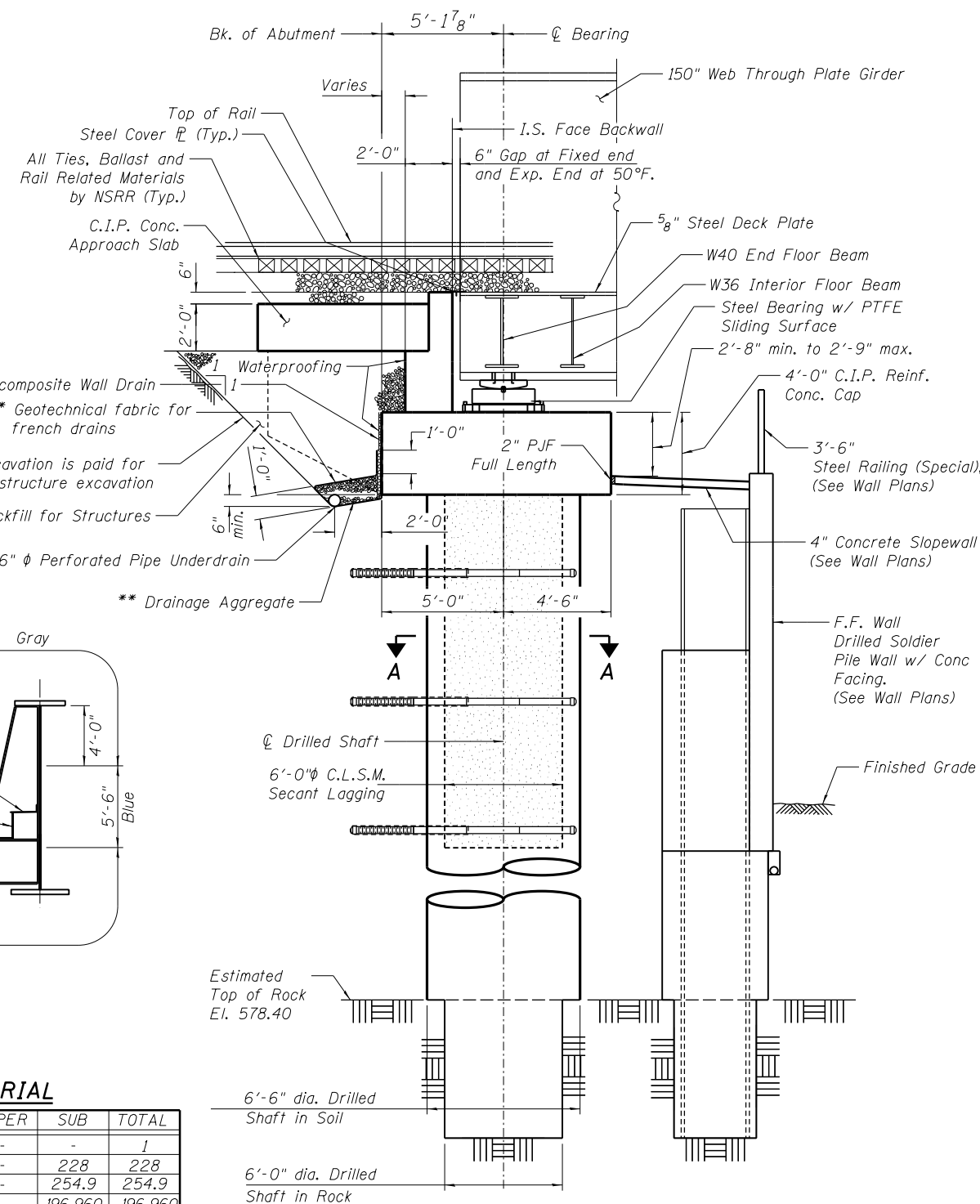


SECTION A-A

**** Included in the cost of Secant Lagging.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures No. 2	Each	-	-	1
Structure Excavation	Cu. Yd.	-	228	228
Concrete Structures	Cu. Yd.	-	254.9	254.9
Reinforcement Bars	Pound	-	196,960	196,960
Reinforcement Bars, Epoxy Coated	Pound	-	37,830	37,830
Name Plates	Each	-	1	1
Drilled Shaft in Soil	Cu. Yd.	-	245.3	245.3
Drilled Shaft in Rock	Cu. Yd.	-	157.0	157.0
Secant Lagging	Cu. Ft.	-	2,283	2,283
Membrane Waterproofing (Special)	Sq. Ft.	5,957	-	5,957
Concrete Sealer	Sq. Ft.	-	1,620	1,620
Geocomposite Wall Drain	Sq. Yd.	-	44	44
Drainage System, No. 2	Each	1	-	1
Concrete Surface Color Treatment	Sq. Ft.	-	12	12
Granular Backfill for Structures	Cu. Yd.	-	163	163
Furnishing and Erecting Structural Steel, Bridge No. 2	L. Sum	1	-	1
Temporary Sheet Piling	Sq. Ft.	-	314	314
Pipe Underdrains for Structures, 6"	Foot	-	144	144



ABUTMENT SECTION

(At Rt. L's to Back of Abutment)

Notes:
West Abutment Section is Shown, East Similar.

* Granular Backfill for Structures Shall Be Placed and Compacted According to Section 502.10 of the Standard Specifications.

** Included in the cost of "Pipe Underdrains for Structures, 6". For additional drainage details see Railway Plans.

*** Omit Primer and Paint only on portion of Structural Steel to receive Membrane Waterproofing

NORFOLK SOUTHERN RAILWAY
S.N. 084-9961 BUILT 20__ BY
CITY OF SPRINGFIELD
SEC. (109)VB, (110)VB-5
STATION 52503+80.65
MILE POST DH-416.28
LOADING COOPER E-80

NAME PLATE

See Std. 515001

D:\spr\svr\306.hanson.don\hanson_projects\Documents\09\Jobs\09L0179B\CAD\Struct\5th\Sheet\0849961-09L0179B-NSRR-001

FILE NAME :	USER NAME : Johns00944	DESIGNED : MJW	REVISED :
		CHECKED : TJH/TDP	REVISED :
		DRAWN : RSJ	REVISED :
		CHECKED : MJW	REVISED :

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE 084-9961 - 5TH ST NSRR

SHEET NO. 2 OF 29 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	189
			CONTRACT NO. 93733	
•666 & 666 ALT.		ILLINOIS FED. AID PROJECT		

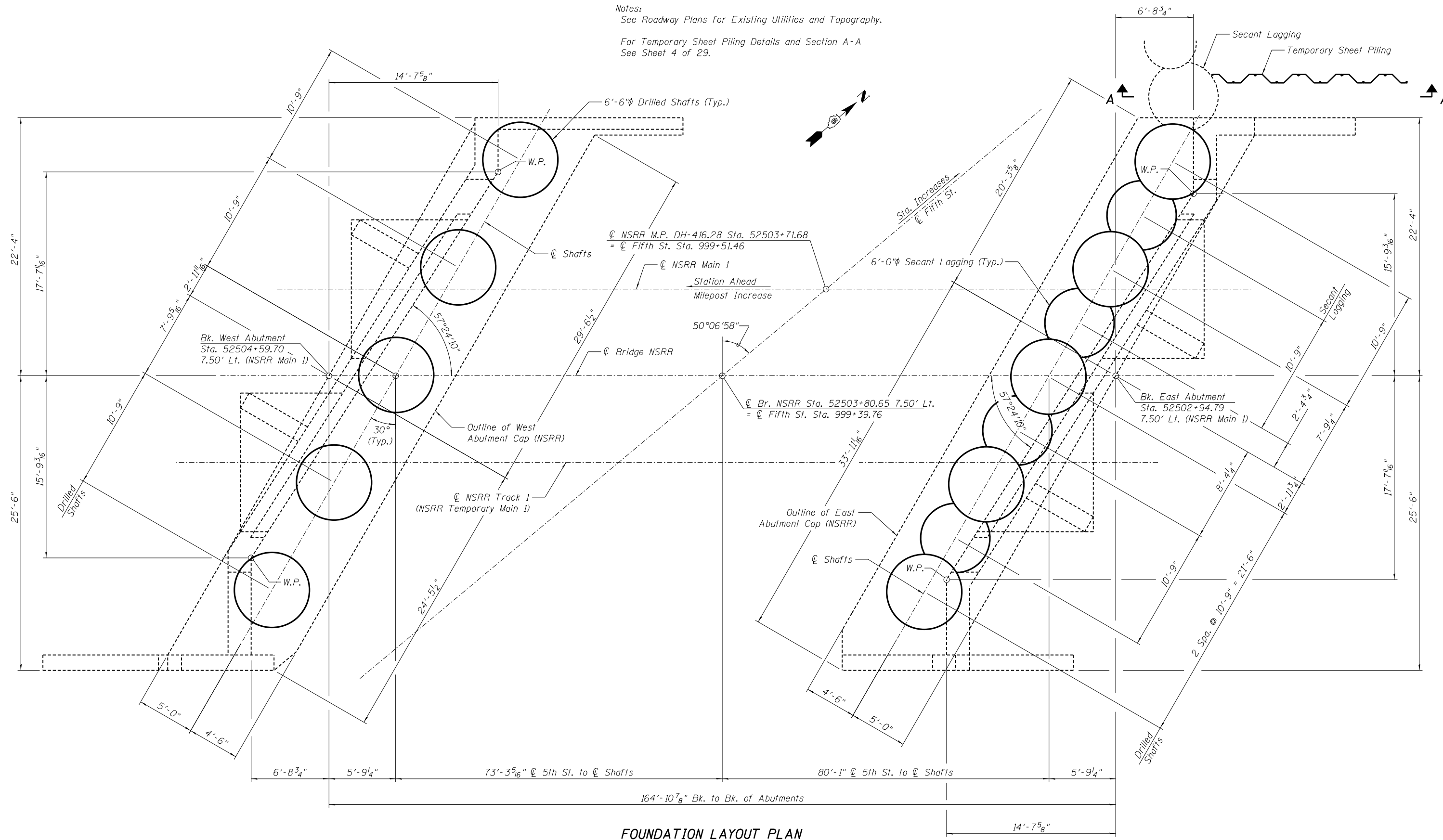
FINAL



© Copyright Hanson Professional Services Inc., 2019

Notes:
See Roadway Plans for Existing Utilities and Topography.

For Temporary Sheet Piling Details and Section A-A
See Sheet 4 of 29.



FOUNDATION LAYOUT PLAN

FILE NAME = D:\s\pr\svr\306.hanson.dom\hanson_projects\Documents\09\Jobs\09L01798\CAD\Struct\5th\Sheet\0849961-09L01798-NSRR-001

USER NAME = Pop00275	DESIGNED - MJW	REVISED -
PLOT SCALE = 0:2.0000 '1" / in.	CHECKED - TJH/TDP	REVISED -
PLOT DATE = 4/11/2019	DRAWN - RSJ	REVISED -
	CHECKED - MJW	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FOUNDATION LAYOUT
STRUCTURE 084-9961 - 5TH ST NSRR**

SHEET NO. 3 OF 29 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	190
			CONTRACT NO.	93733
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

FINAL



© Copyright Hanson Professional Services Inc., 2019

Temporary Sheet Piling Notes:

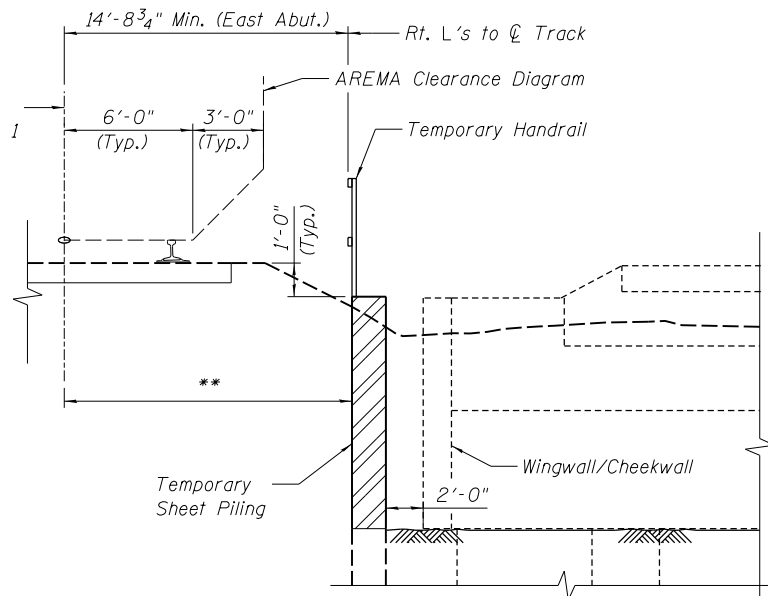
The Contractor is responsible for the design and installation of the Temporary handrail.

Temporary handrail shall meet AREMA, FRA, OSHA and NSRR requirements and cost shall be included with Temporary Sheet Piling.

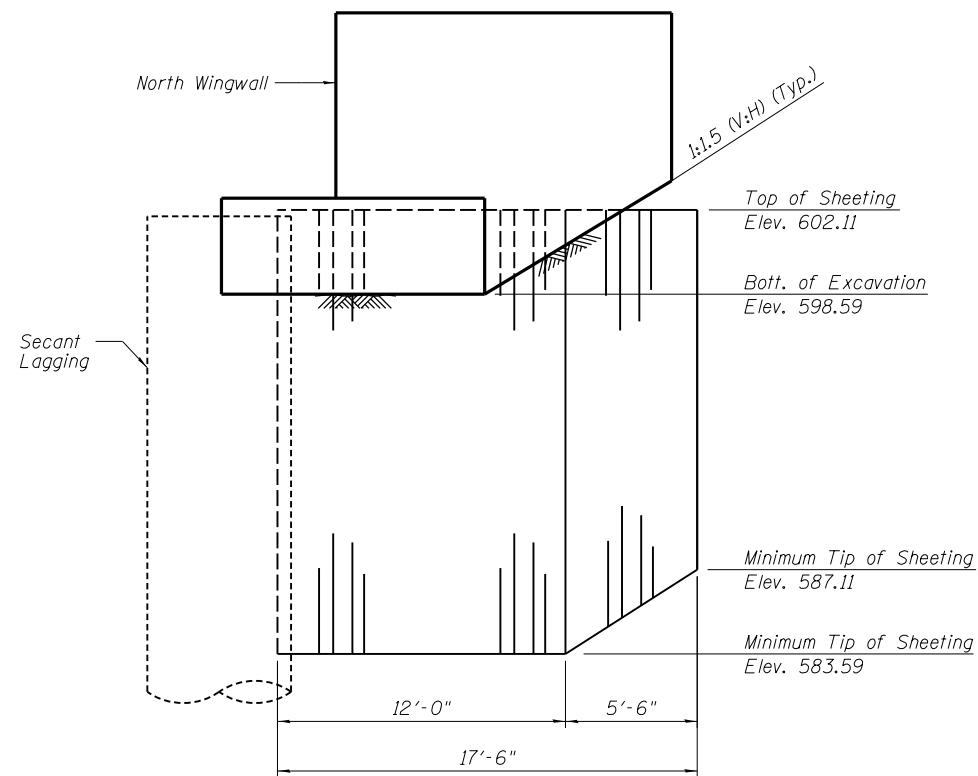
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

Retaining wall drilled shafts not shown for clarity.

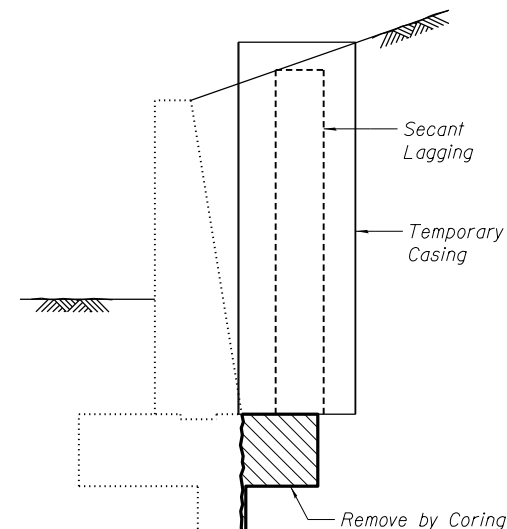
If the sheet piling extends to the edge of the secant lagging, the Contractor shall fill the void between the end of the sheet piling and the secant lagging to ensure there is no loss in retained material. The detail shall be reviewed and accepted by the Engineer and included in the cost of Temporary Sheet Piling.



TEMPORARY HANDRAIL DETAIL
(Looking East)



TEMPORARY SHEET PILING - SECTION A-A
(Looking North)



SECTION B-B

Existing Structure Removal Notes:

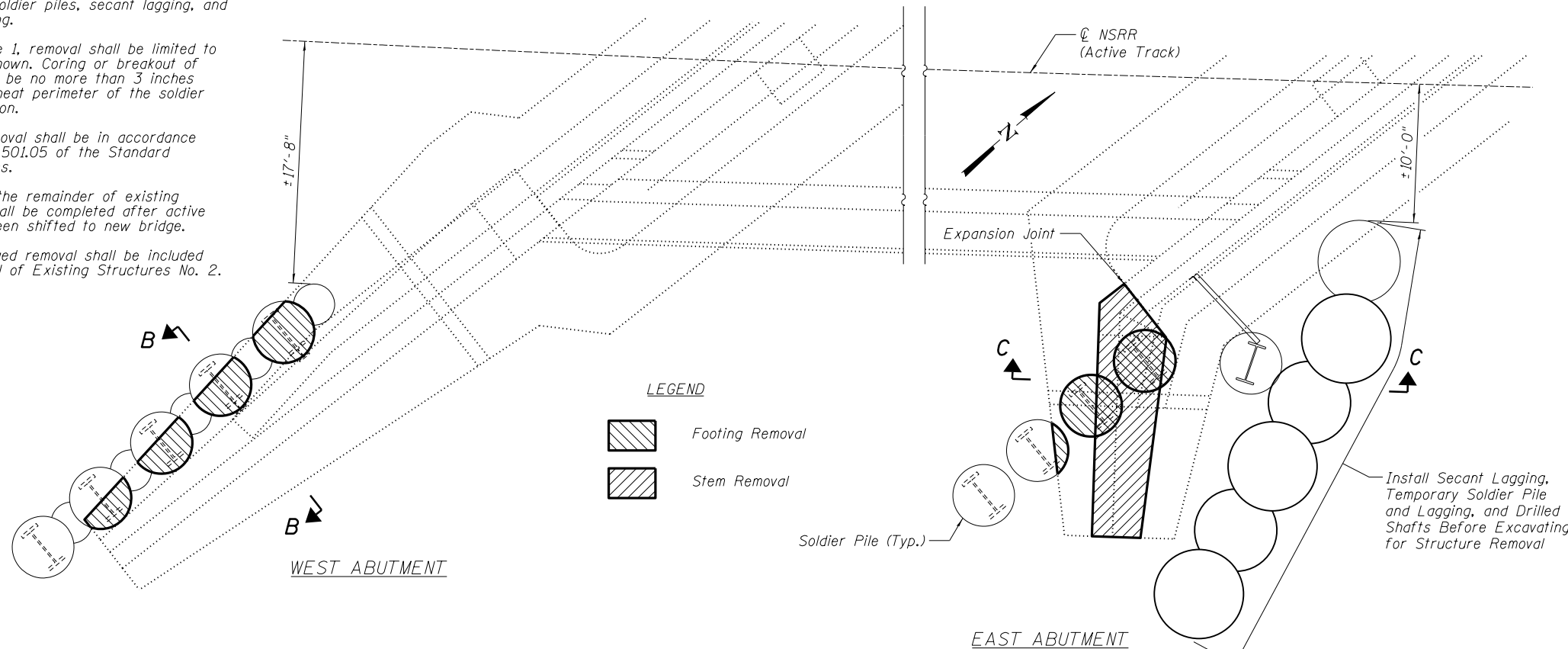
See Retaining Wall Plans for construction staging notes and details of temporary and permanent soldier piles, secant lagging, and timber lagging.

During Stage 1, removal shall be limited to the areas shown. Coring or breakout of footing shall be no more than 3 inches beyond the neat perimeter of the soldier pile excavation.

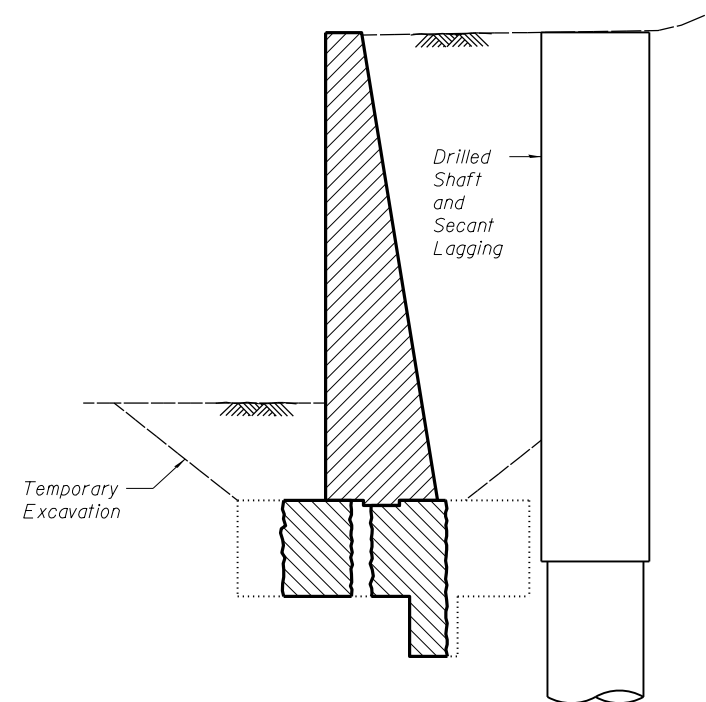
Stage 1 Removal shall be in accordance with Article 501.05 of the Standard Specifications.

Removal of the remainder of existing structure shall be completed after active track has been shifted to new bridge.

Cost of staged removal shall be included with Removal of Existing Structures No. 2.



STAGE 1 REMOVAL OF EXISTING STRUCTURES



SECTION C-C

Path: \\sp1-svr306.hanson.dom\hanson_projects\Documents\09Jobs\09L0179B\CAD\Struct\5th\Sheet\0849961-09L0179B-NSRR-001

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISIONS
		CHECKED - TJH/TDP	REVISIONS
		DRAWN - RSJ	REVISIONS
		CHECKED - MJW	REVISIONS
PLOT SCALE = 0:2.0000 '1" / in.			
PLOT DATE = 4/11/2019			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS
STRUCTURE 084-9961 - 5TH ST NSRR**

SHEET NO. 4 OF 29 SHEETS

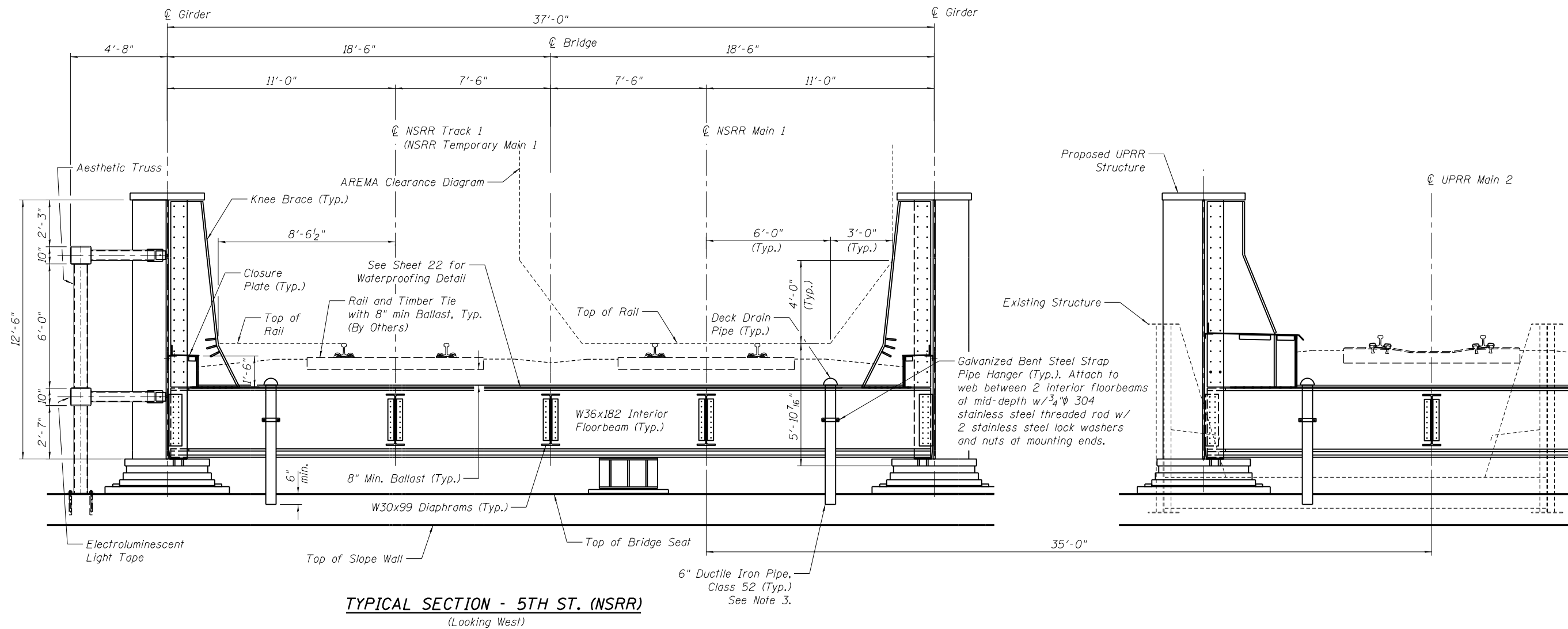
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	191
			CONTRACT NO. 93733	

•666 & 666 ALT. ILLINOIS FED. AID PROJECT

FINAL



© Copyright Hanson Professional Services Inc. 2019



Notes:

1. Retaining Wall and Steel Railing not shown for clarity.
2. Drain pipe on west end only near low end of bridge deck.
3. With the ductile iron pipe fitted to the bottom of the deck drain bottom pan downspout, drill 4 holes through ductile iron pipe and downspout. Holes shall be aligned with the 4 quadrants of the pipe. Attach ductile iron pipe to downspout with 4 stainless steel carriage bolts. Rounded heads of carriage bolts shall be oriented towards the center of the pipe.
4. Cost of deck drain pipe, bottom pan, downspout, brackets and other hardware shall be included in the cost of Drainage System.

\\spr-svr-306.hanson.dom\hanson_projects\Documents\09Jobs\09L01798\CAD\Struct\5th\Sheet\0849961-09L01798-NSRR-001

FILE NAME :	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
	PLOT SCALE = 0:2.0000 '1" / in.	DRAWN - RSJ	REVISED -
	PLOT DATE = 4/11/2019	CHECKED - MJW	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTION
STRUCTURE 084-9961 - 5TH ST NSRR**

SHEET NO. 5 OF 29 SHEETS

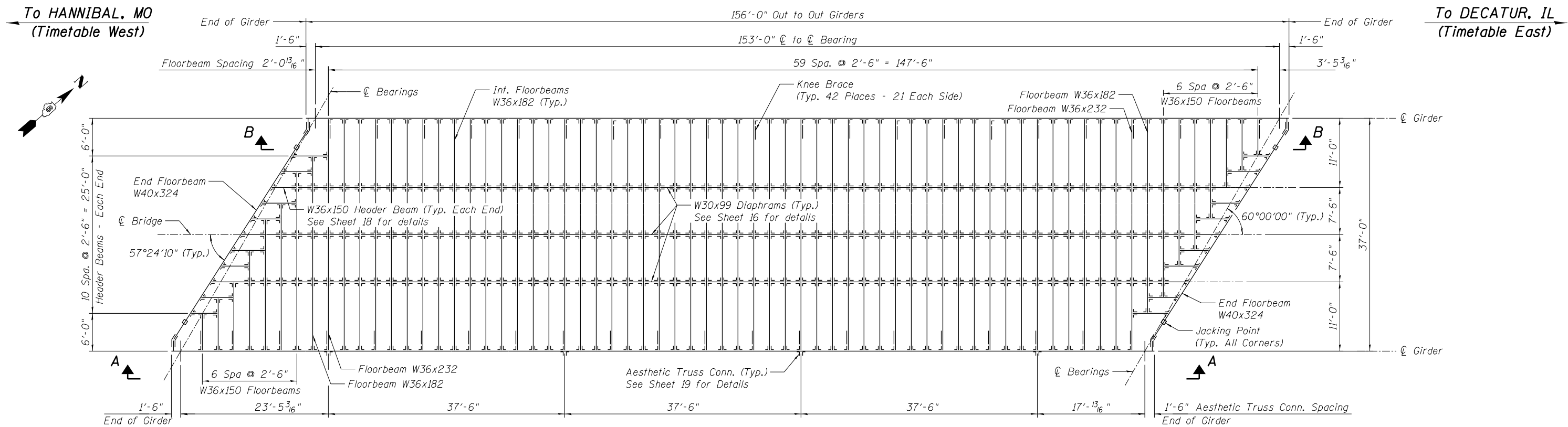
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	192
			CONTRACT NO. 93733	

•666 & 666 ALT. ILLINOIS FED. AID PROJECT

FINAL



© Copyright Hanson Professional Services Inc., 2019



FRAMING PLAN

See Sheet 7 & 8 for View A-A
See Sheet 9 & 10 for Section B-B

STEEL NOTES

GENERAL: All materials, fabrication, and erection shall be in accordance with chapter 15 of the current AREMA Manual for Railway Engineering.

Dead Load: (assumed)	
Rail	400
Ballast (Incl. Tie)	4,690
Waterproofing	200
Future Ballast	2,550
Steel	9,360
Total	17,200 lbs. per lin ft. of track

MATERIAL: Zone 2 Conditions control for Charpy V-Notch testing.

Fracture Critical Members (FCM) shall be Charpy V-Notch tested, according to AREMA Table 15-9-3, Zone 2, P frequency in accordance with ASTM A673.

Impact Test Required (ITR) members shall be Charpy V-Notch (CVN) tested, according to AREMA Table 15-9-2, Zone 2, H frequency in accordance with ASTM A673.

FABRICATION: The top surface of beams shall be adjusted to form a straight line at any transverse section throughout the span. Tolerance is plus or minus 1/8\"/>

SPLICE NOTES:

- No two parts or members shall be spliced by shop welding at the same location, or within the length of a bolted field splice.
- Web splices by shop welding shall be located a minimum of 36\"/>

	TOP OF TIE	TO MASONRY	TO CLEARANCE
Tie	7"		7"
Ballast	8"		8"
Waterproofing	1 1/8"		1 1/8"
Ballast pan	5/8"		5/8"
Floorbeam & Flange	3'-9"		3'-9"
Flange splice plate			2 1/4"
Nut & bolt shank			3/4"
Bearing	1'-4 3/8"		
Total	6'-6 8/8"		5'-4 3/4"

MOMENT & SHEAR TABLE FOR STEEL THRU PLATE GIRDER

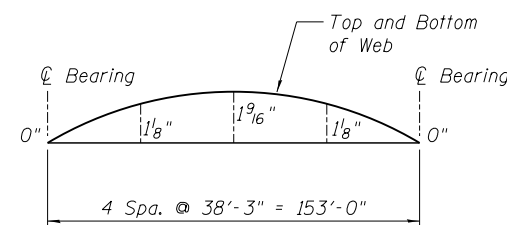
DESCRIPTION	MOMENT	SHEAR
Dead Load	25,165 ft. -k	658 k
Live Load	30,158 ft. -k	865 k
Impact	7,134 ft. -k	205 k
Total	62,457 ft. -k	1,728 k
Section	See Sheet 12 of 29	
Steel	A.S.T.M. A709, Gr. 50	
Net I	2,288,242 in	
Net S (Bot.)	28,257 in	
fst (Bot.)	26.5 ksi	
Gross I	2,492,406 in	
Gross S (Top)	30,232 in	
fsc (Top.)	24.8 ksi	

I- Moment of Inertia of the Section
S- Section Modulus
fs- Max. Unfactored Stress in the Section Due to D.L. + L.L. + Impact

MOMENT & SHEAR TABLE FOR STEEL FLOORBEAMS

DESCRIPTION	MOMENT	SHEAR	MOMENT *	SHEAR *
Dead Load	151 ft. -k	15.7 k	3618 ft. -k	658 k
Live Load	225 ft. -k	20.3 k		
Impact	666 ft. -k	60.1 k		
Total	1042 ft. -k	96.0 k	3618 ft. -k	658 k
Section	W36x182		W40x324	
Steel	A.S.T.M. A709, Gr. 50		A.S.T.M. A709, Gr. 50	
Net I	11,026 in ⁴		22,636 in ⁴	
Net S (Bot.)	607 in ³		1,126 in ³	
fst (Bot.)	20.6 ksi		38.6 ksi	

* Jacking Conditions Control 50% Allowable Stress Increase is Permitted



CAMBER DIAGRAM

Camber Calculated for Dead Load Only

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE 084-9961 - 5TH ST NSRR

SHEET NO. 6 OF 29 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(109) VB,(110) VB-5	SANGAMON	382	193
CONTRACT NO.			93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

\\spr-svr306.hanson.dom\hanson_projects\Documents\09Jobs\09L0179B\CAD\Struct\5th\Sheet\0849961-09L0179B-NSRR-001

FILE NAME :	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
	PLOT SCALE = 0:2.0000 ' = 1\"/>		
	PLOT DATE = 4/11/2019	CHECKED - MJW	REVISED -

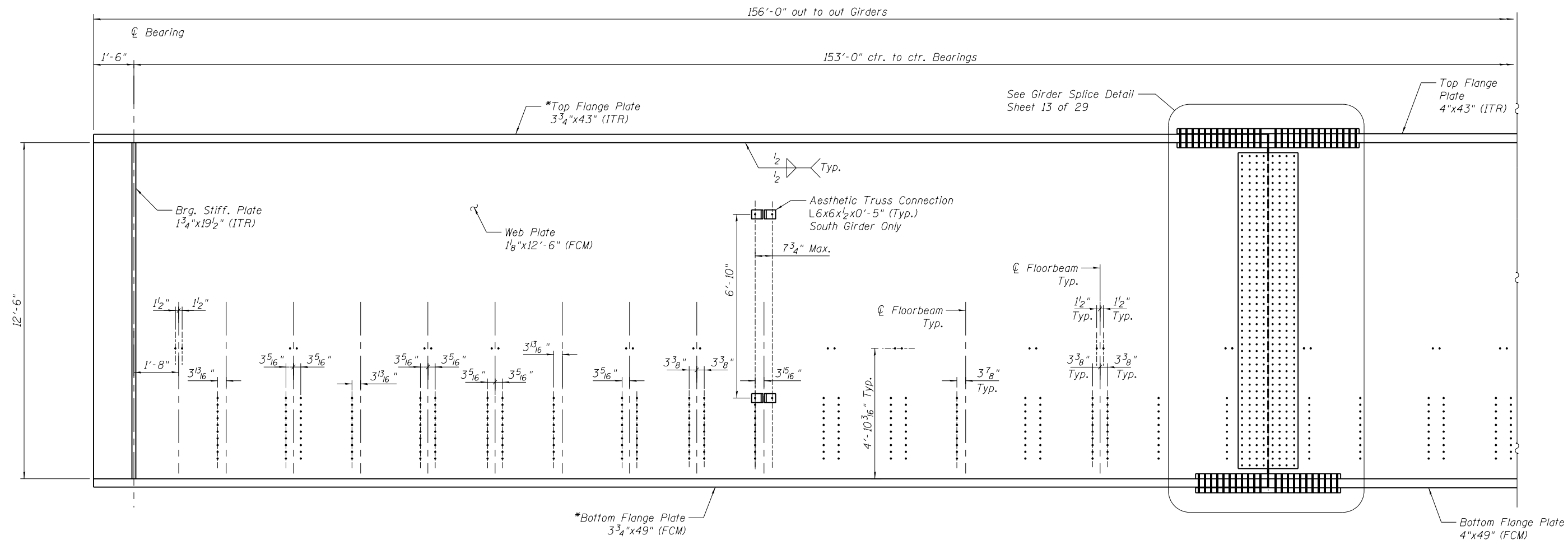
FINAL



© Copyright Hanson Professional Services Inc., 2019

To HANNIBAL, MO
(Timetable West)

To DECATUR, IL
(Timetable East)



VIEW A-A - OUTSIDE ELEVATION OF GIRDER

Note:
1. FCM - Fracture Critical Member
2. ITR- Impact Test Required

* Alternate larger 4" flange thickness is permitted throughout to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. Calculated girder stresses are based on heavier section. The alternate, if utilized, shall be provided at no additional cost to the Department.

D:\s\pr\svr\306.hanson.dom\hanson_projects\Documents\09Jobs\09L0179B\CAD\Struct\5th\Sheet\0849961-09L0179B-NSRR-001

FILE NAME :	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
	PLOT SCALE = 0:2.0000 '1" / in.	DRAWN - RSJ	REVISED -
	PLOT DATE = 4/11/2019	CHECKED - MJW	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OUTSIDE ELEVATION OF GIRDER - SHEET 1 OF 2
STRUCTURE 084-9961 - 5TH ST NSRR

SHEET NO. 7 OF 29 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(109) VB,(110) VB-5	SANGAMON	382	194
			CONTRACT NO. 93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

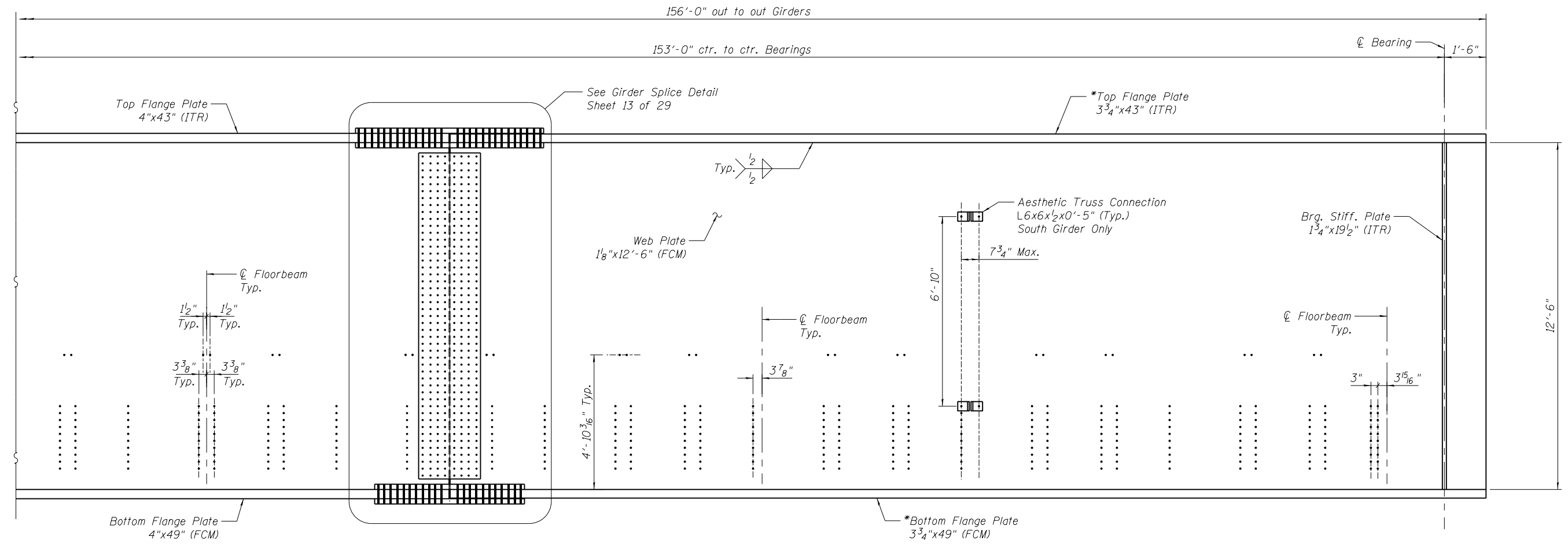
FINAL



© Copyright Hanson Professional Services Inc., 2019

To HANNIBAL, MO
(Timetable West)

To DECATUR, IL
(Timetable East)



VIEW A-A - OUTSIDE ELEVATION OF GIRDER

Note:
1. FCM - Fracture Critical Member
2. ITR- Impact Test Required

* Alternate larger 4" flange thickness is permitted throughout to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. Calculated girder stresses are based on heavier section. The alternate, if utilized, shall be provided at no additional cost to the Department.

\\spr-svr-306.hanson.dom\hanson_projects\Documents\09Jobs\09L0179B\CAD\Struct\5th\Sheet\0849961-09L0179B-NSRR-001

FINAL

© Copyright Hanson Professional Services Inc., 2019

FILE NAME =	USER NAME = Pop00275	DESIGNED - MJW	REVISED -
		CHECKED - TJH/TDP	REVISED -
	PLOT SCALE = 0:2.0000 ' / in.	DRAWN - RSJ	REVISED -
	PLOT DATE = 4/11/2019	CHECKED - MJW	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

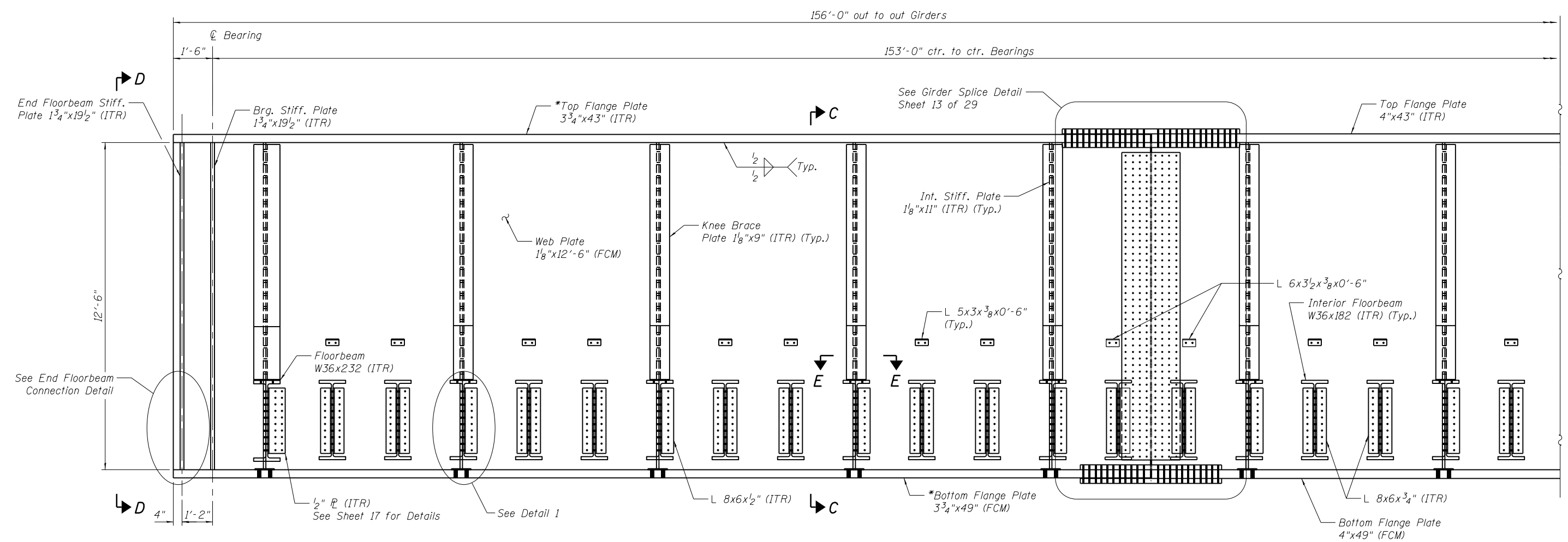
**OUTSIDE ELEVATION OF GIRDER - SHEET 2 OF 2
STRUCTURE 084-9961 - 5TH ST NSRR**

SHEET NO. 8 OF 29 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(109) VB,(110) VB-5	SANGAMON	382	195
*666 & 666 ALT. ILLINOIS FED. AID PROJECT			CONTRACT NO. 93733	

To HANNIBAL, MO
(Timetable West)

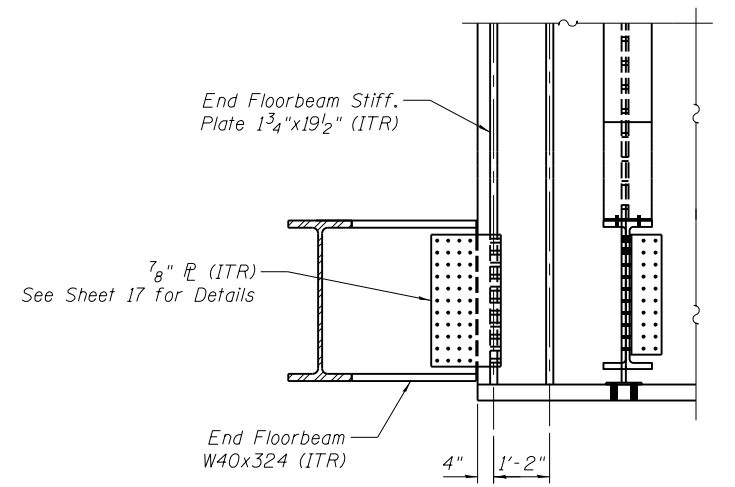
To DECATUR, IL
(Timetable East)



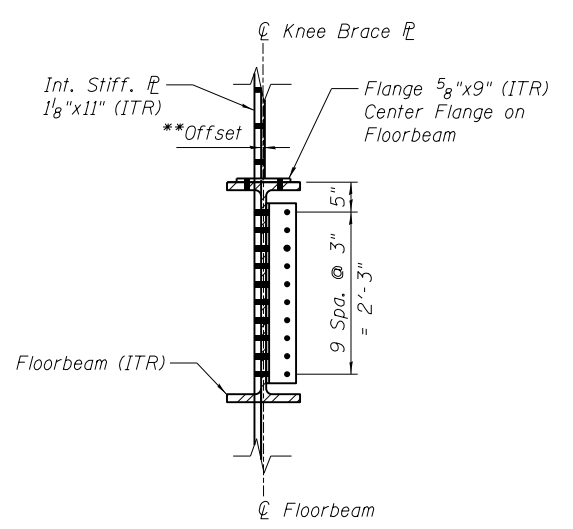
SECTION B-B - INSIDE ELEVATION OF GIRDER
See Sheet 11 of 29 for Section C-C & D-D.

Note:
1. FCM - Fracture Critical Member
2. ITR - Impact Test Required

* Alternate larger 4" flange thickness is permitted throughout to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. Calculated girder stresses are based on heavier section. The alternate, if utilized, shall be provided at no additional cost to the Department.

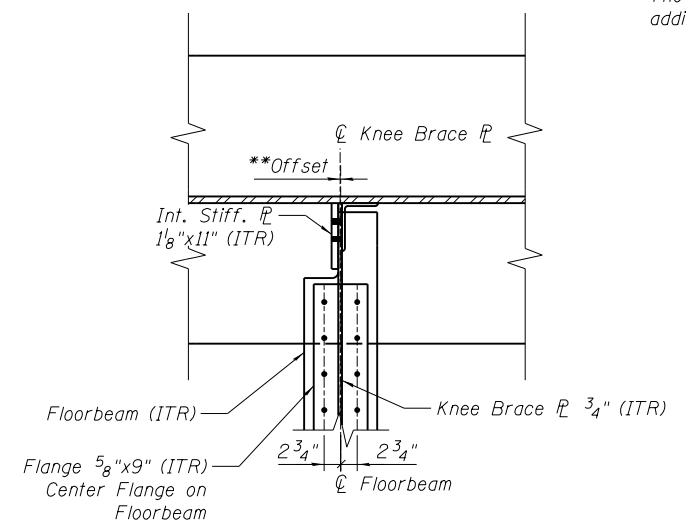


END FLOORBEAM CONNECTION



DETAIL 1

**See Table for Offset Dimension



SECTION E-E

**See Table for Offset Dimension

KNEE BRACE PLATE OFFSETS

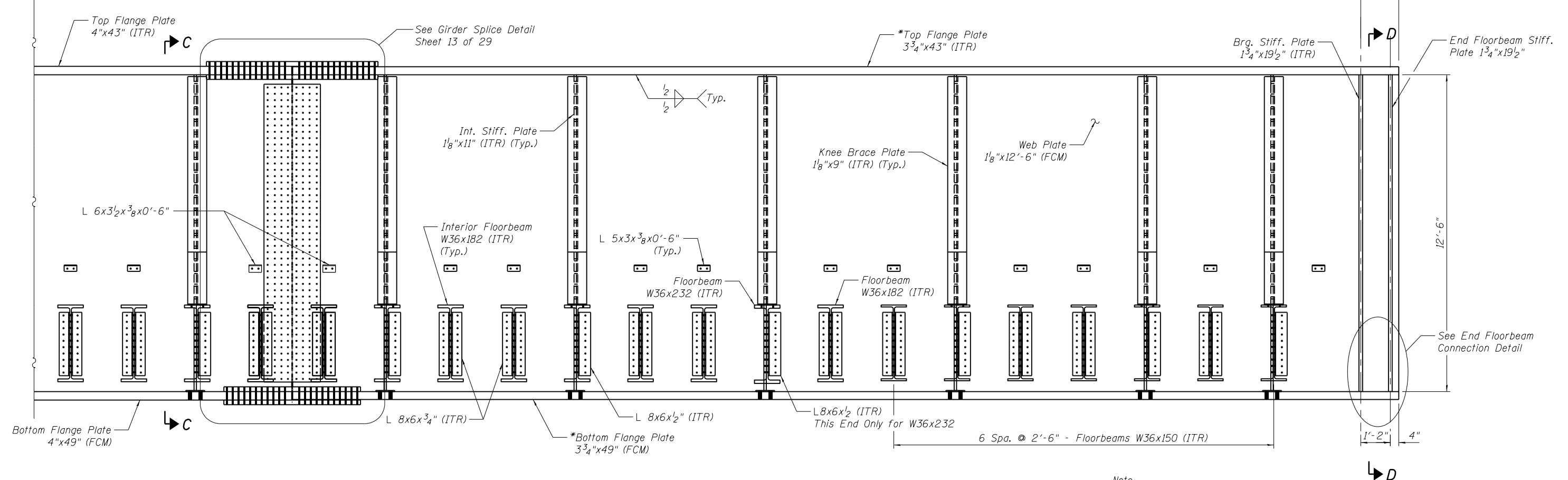
FLOORBEAM SHAPE	OFFSET
W36x150	-1/16"
W36x182	0"
W36x232	1/16"

To HANNIBAL, MO
(Timetable West)

To DECATUR, IL
(Timetable East)

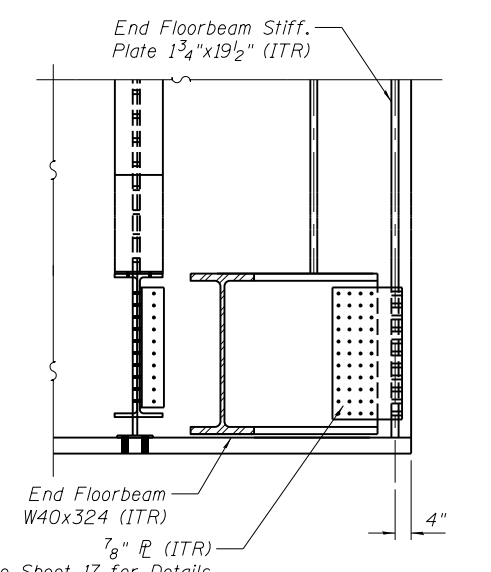
156'-0" out to out Girders

153'-0" ctr. to ctr. Bearings



SECTION B-B - INSIDE ELEVATION OF GIRDER
See Sheet 11 of 29 for Section C-C & D-D.

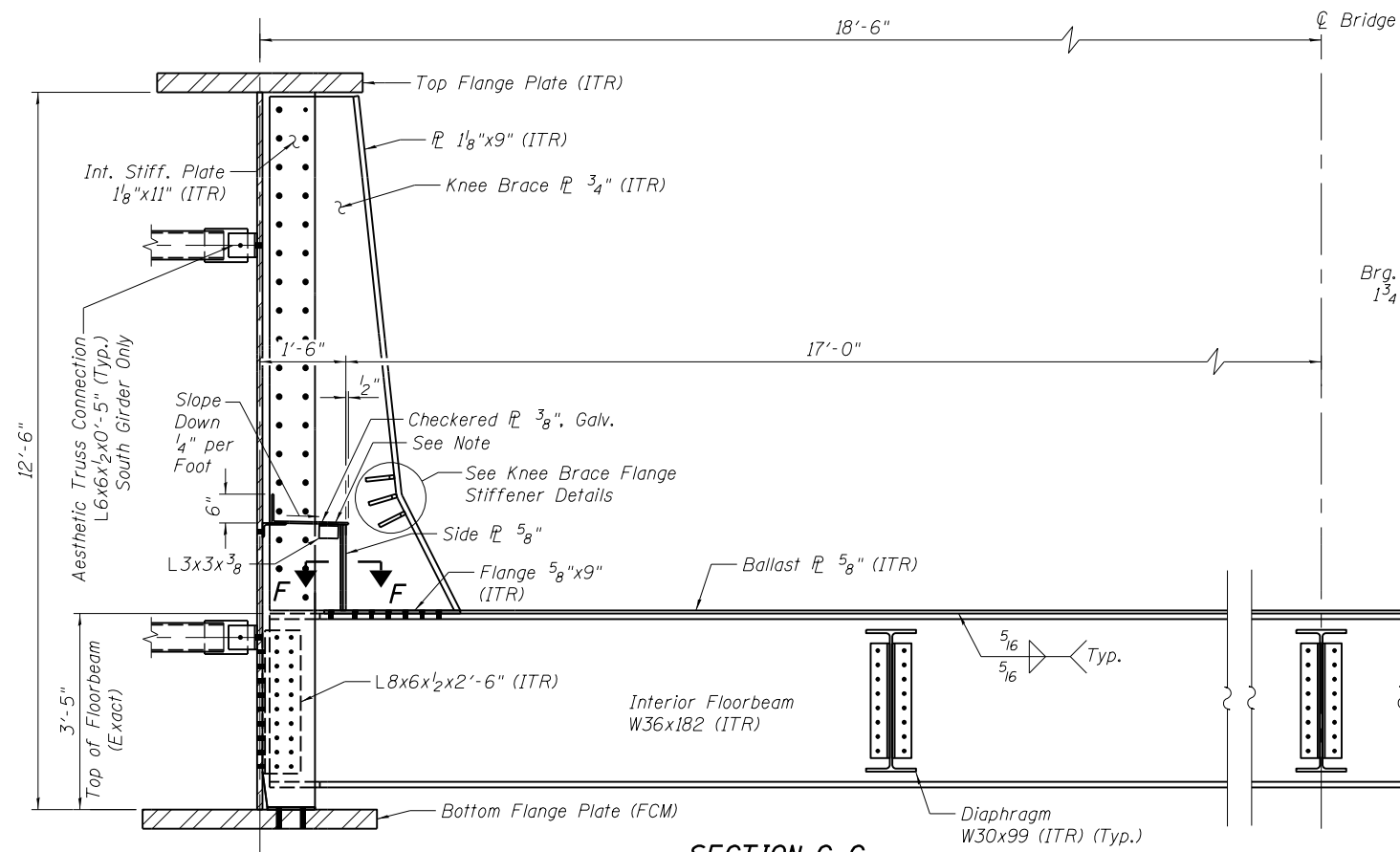
Note:
1. FCM - Fracture Critical Member
2. ITR - Impact Test Required



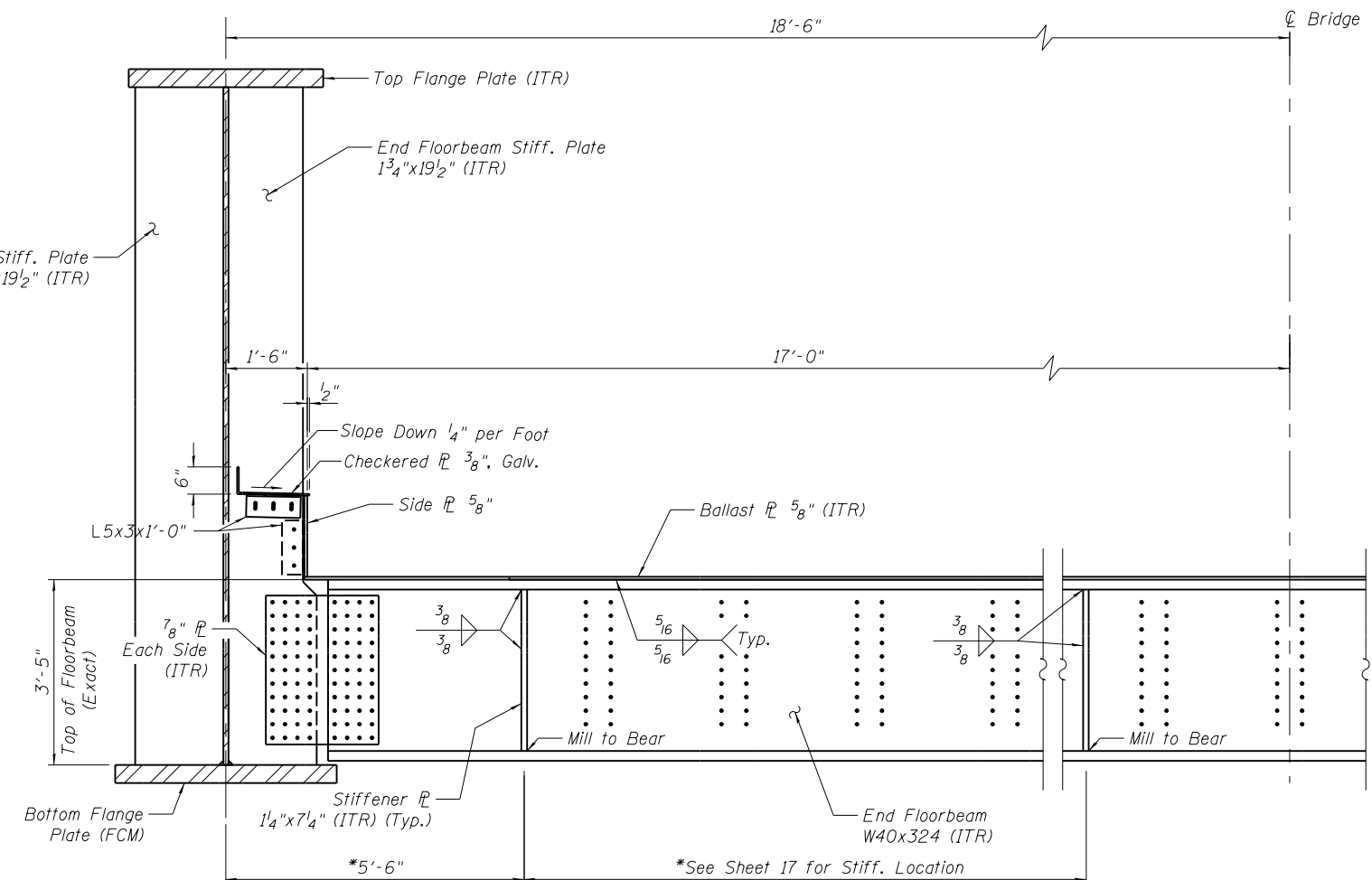
END FLOORBEAM CONNECTION DETAIL
See Sheet 17 for Details

* Alternate larger 4" flange thickness is permitted throughout to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. Calculated girder stresses are based on heavier section. The alternate, if utilized, shall be provided at no additional cost to the Department.

FINAL	FILE NAME = <small>pxt\spr\svr\306.hanson.dom\hanson_projects\Documents\09Jobs\09L01798\CAD\Struct\5th\Sheet\0849961-09L01798-NSRR-001</small>	USER NAME = Pop00275	DESIGNED - MJW	REVISIONS:	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INSIDE ELEVATION OF GIRDER - SHEET 2 OF 2 STRUCTURE 084-9961 - 5TH ST NSRR	SECTION: (109) VB,(110) VB-5	COUNTY: SANGAMON	TOTAL SHEETS: 382	SHEET NO.: 197
	PLOT SCALE = 0:2.0000 '1" / in.	DRAWN - RSJ	REVISIONS:	CONTRACT NO. 93733						
	PLOT DATE = 4/11/2019	CHECKED - MJW	REVISIONS:	*666 & 666 ALT. ILLINOIS FED. AID PROJECT						
	SHEET NO. 10 OF 29 SHEETS									



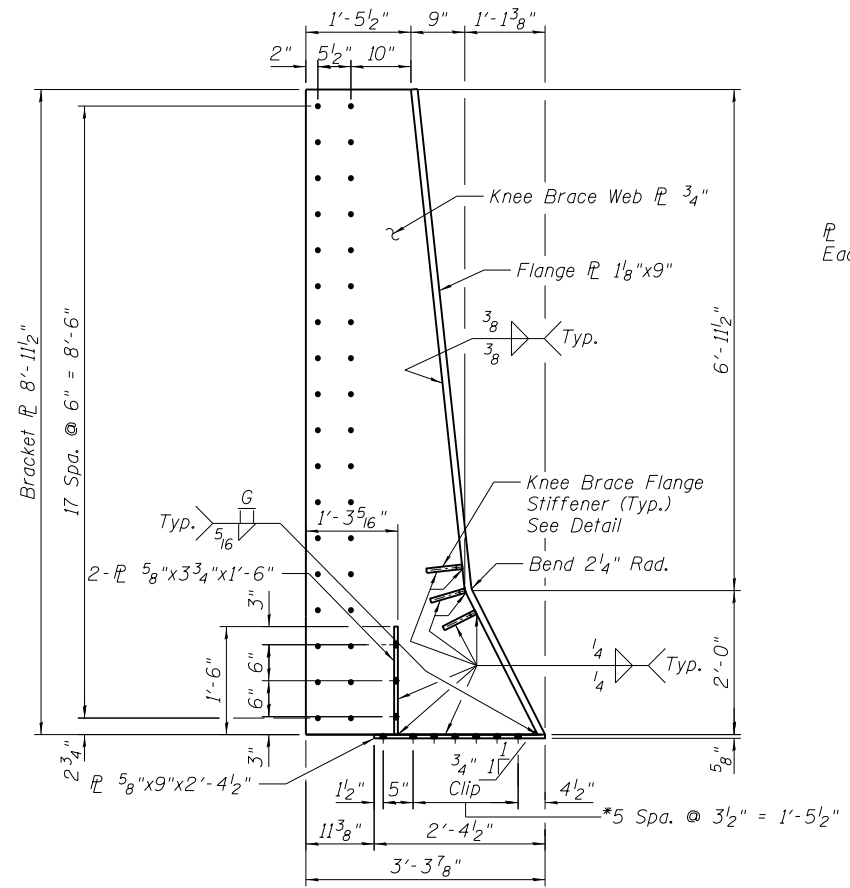
SECTION C-C



SECTION D-D

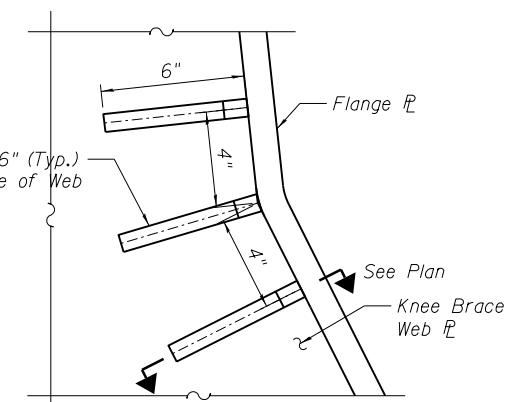
*(Along End Floorbeam \bar{C})

Note:
For Location of L3x3x3/8, Welding and Bolted Connection to Closure Plate see Plan View of Closure Plate at Knee Brace on Sheet 15.

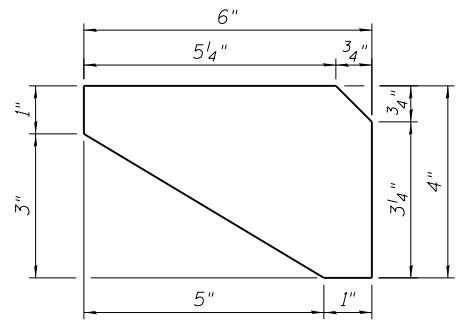


KNEE BRACE

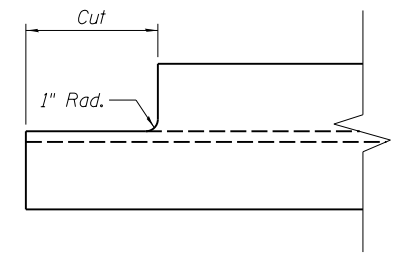
*See Detail 1 on Sheet 9 for Hole Locations.



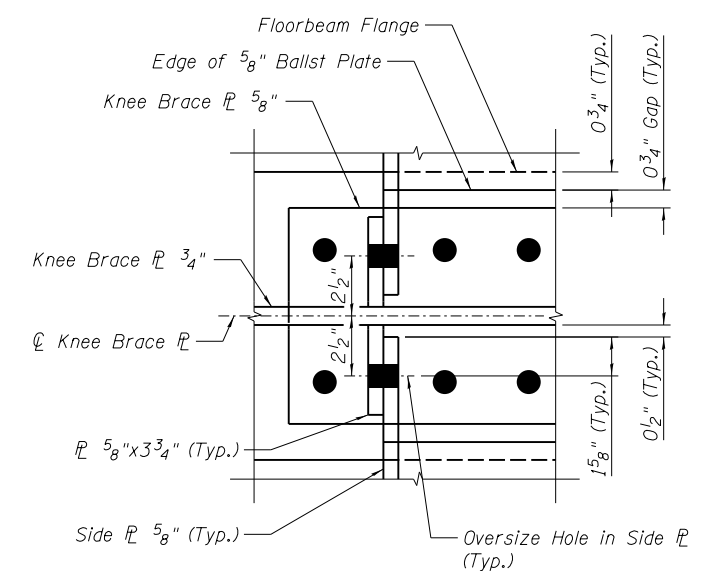
ELEVATION



**KNEE BRACE
FLANGE STIFFENER**



**FLOORBEAM COPE AT
INTERIOR STIFFENER**



SECTION F-F

Weld Ballast Plate to Floorbeam as shown in Section I-I on Sheet 15

FILE NAME: ...

USER NAME = Pop00275	DESIGNED - MJW	REVISED -
PLOT SCALE = 0:2.0000 ' = 1/8" in.	CHECKED - TJH/TDP	REVISED -
PLOT DATE = 4/11/2019	DRAWN - RSJ	REVISED -
	CHECKED - MJW	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS
STRUCTURE 084-9961 - 5TH ST NSRR**

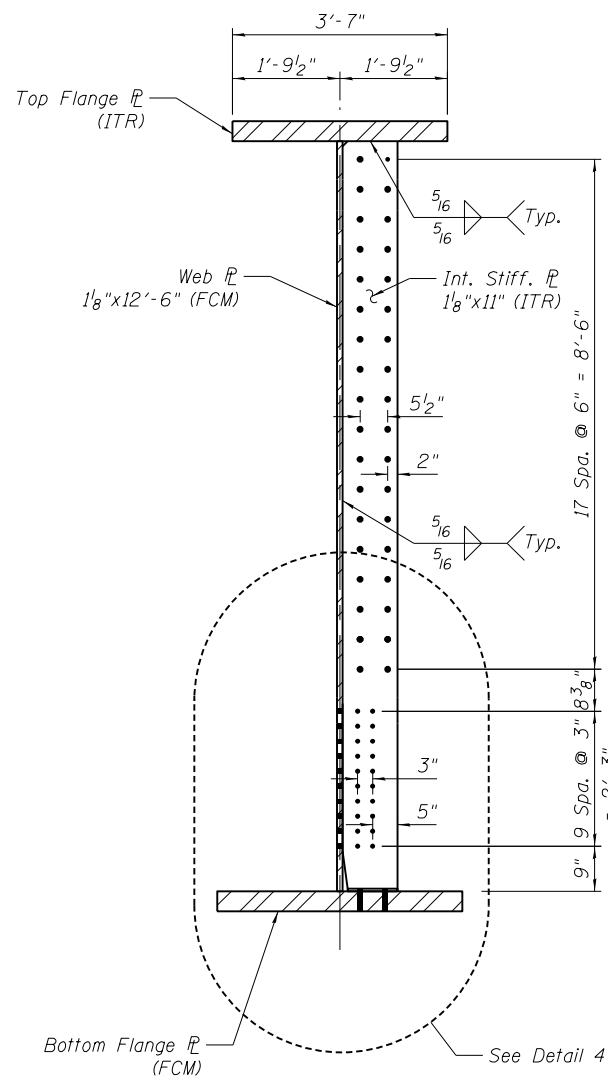
SHEET NO. 11 OF 29 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	198
			CONTRACT NO. 93733	
•666 & 666 ALT. ILLINOIS FED. AID PROJECT				

FINAL

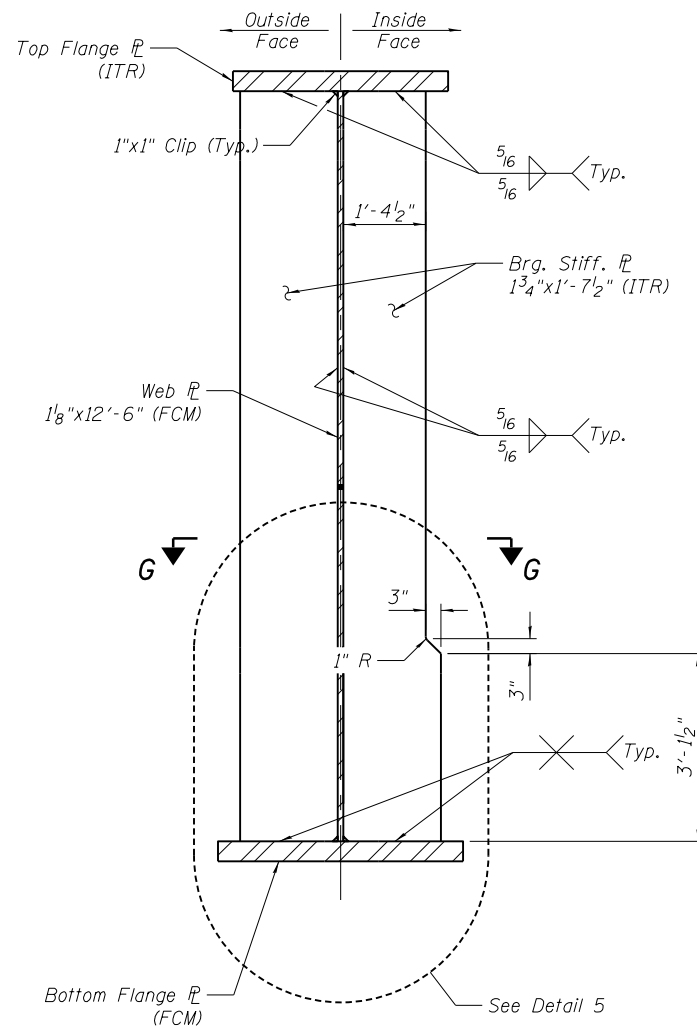


© Copyright Hanson Professional Services Inc., 2019

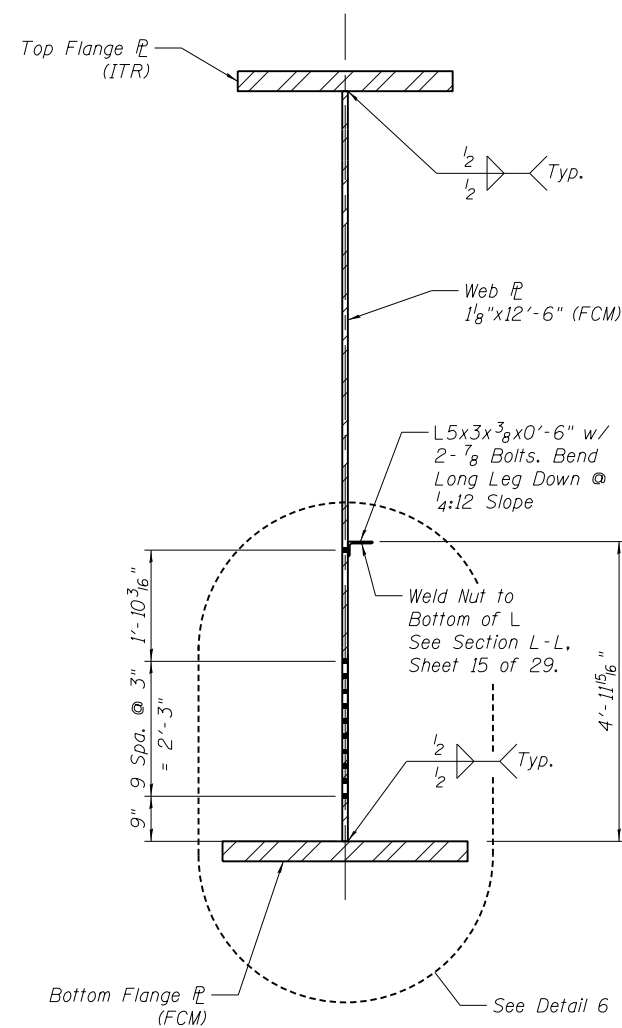


TYPICAL SECTION AT INT. STIFFENER AND KNEE BRACE

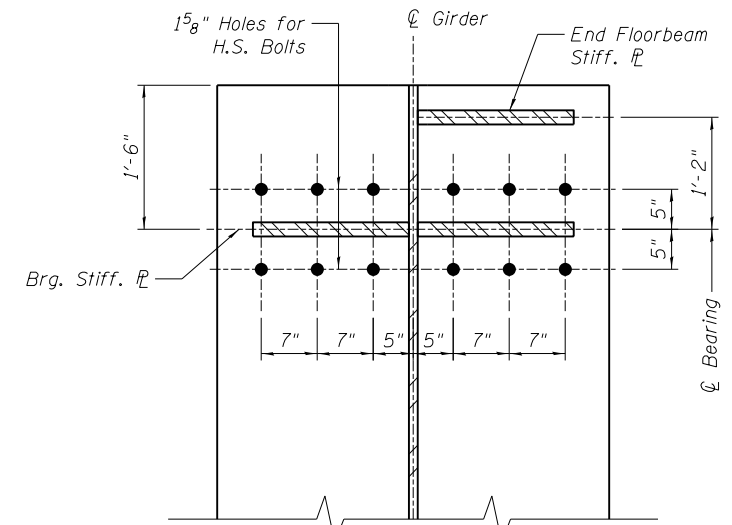
(Knee Brace Omitted for Clarity)



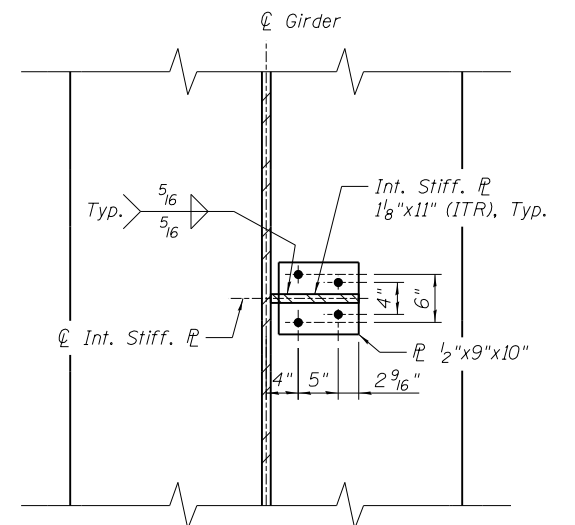
TYPICAL SECTION AT BEARING STIFFENER



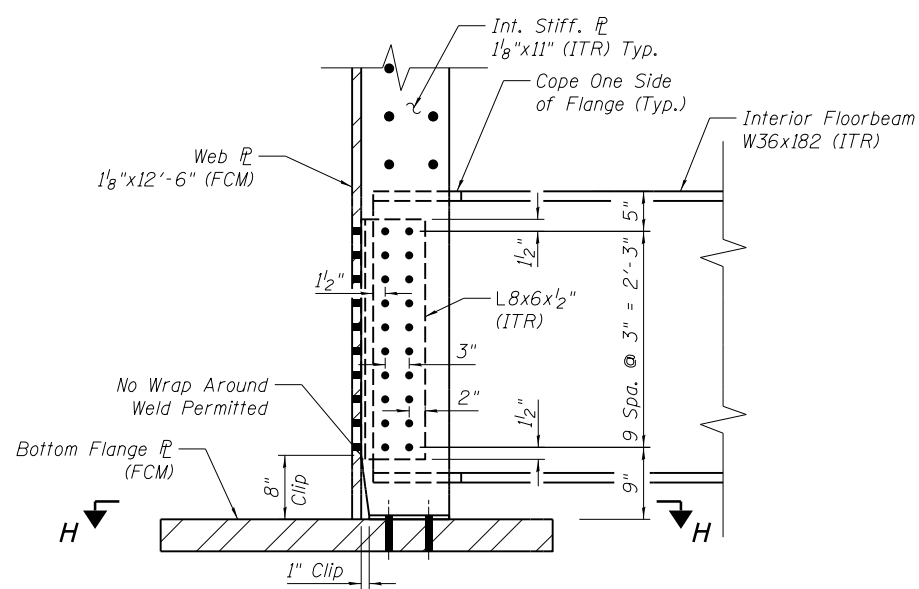
TYPICAL SECTION AT CHECKERED PLATE SUPPORT



SECTION G-G

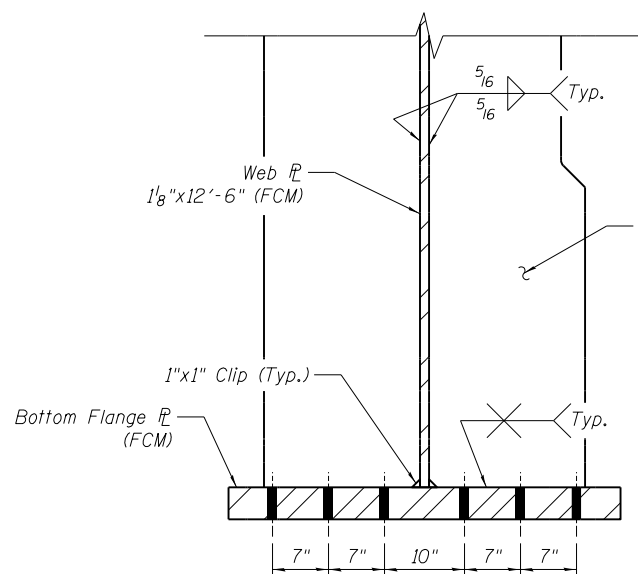


SECTION H-H



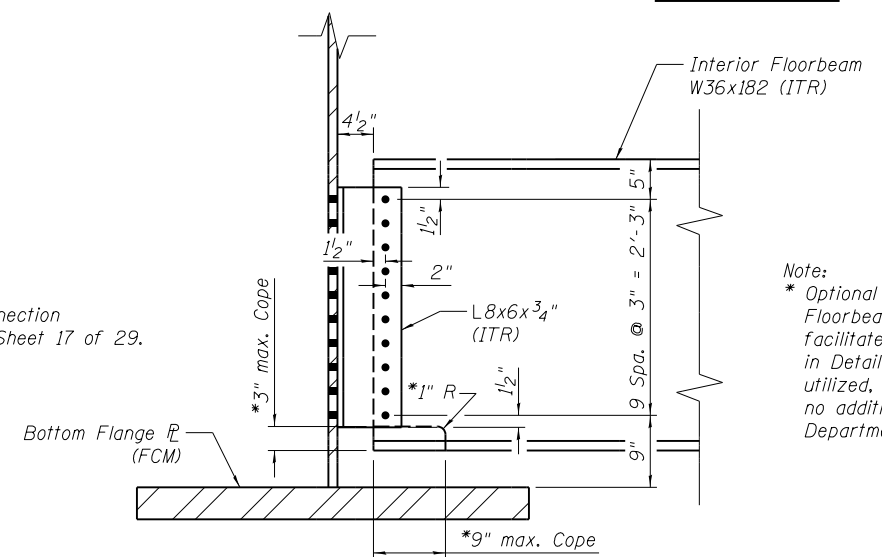
DETAIL 4

Typical for Interior Stiffener Unless Otherwise Noted
(Knee Brace Omitted for Clarity)



DETAIL 5

Typical at Bearing Stiffener



DETAIL 6

Typical Floorbeam Connection Between Interior Stiffeners

Note:
* Optional coping of Interior Floorbeam is permitted to facilitate erection as shown in Detail 6. The option, if utilized, shall be provided at no additional cost to the Department.

FILE NAME = ...

USER NAME = Pop00275	DESIGNED - MJW	REVISD -
PLOT SCALE = 0:2.0000 ' = 1/8" IN.	CHECKED - TJH/TDP	REVISD -
PLOT DATE = 4/11/2019	DRAWN - RSJ	REVISD -
	CHECKED - MJW	REVISD -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GIRDER SECTIONS & DETAILS
STRUCTURE 084-9961 - 5TH ST NSRR**

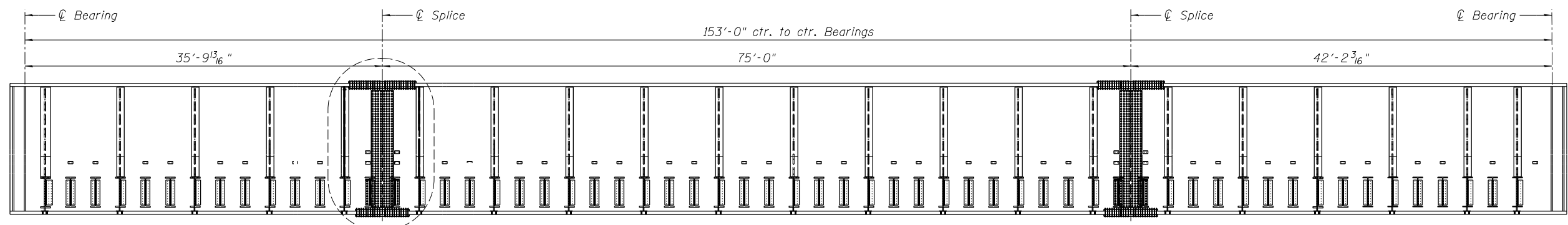
SHEET NO. 12 OF 29 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(109) VB,(110) VB-5	SANGAMON	382	199
•666 & 666 ALT. ILLINOIS FED. AID PROJECT			CONTRACT NO. 93733	

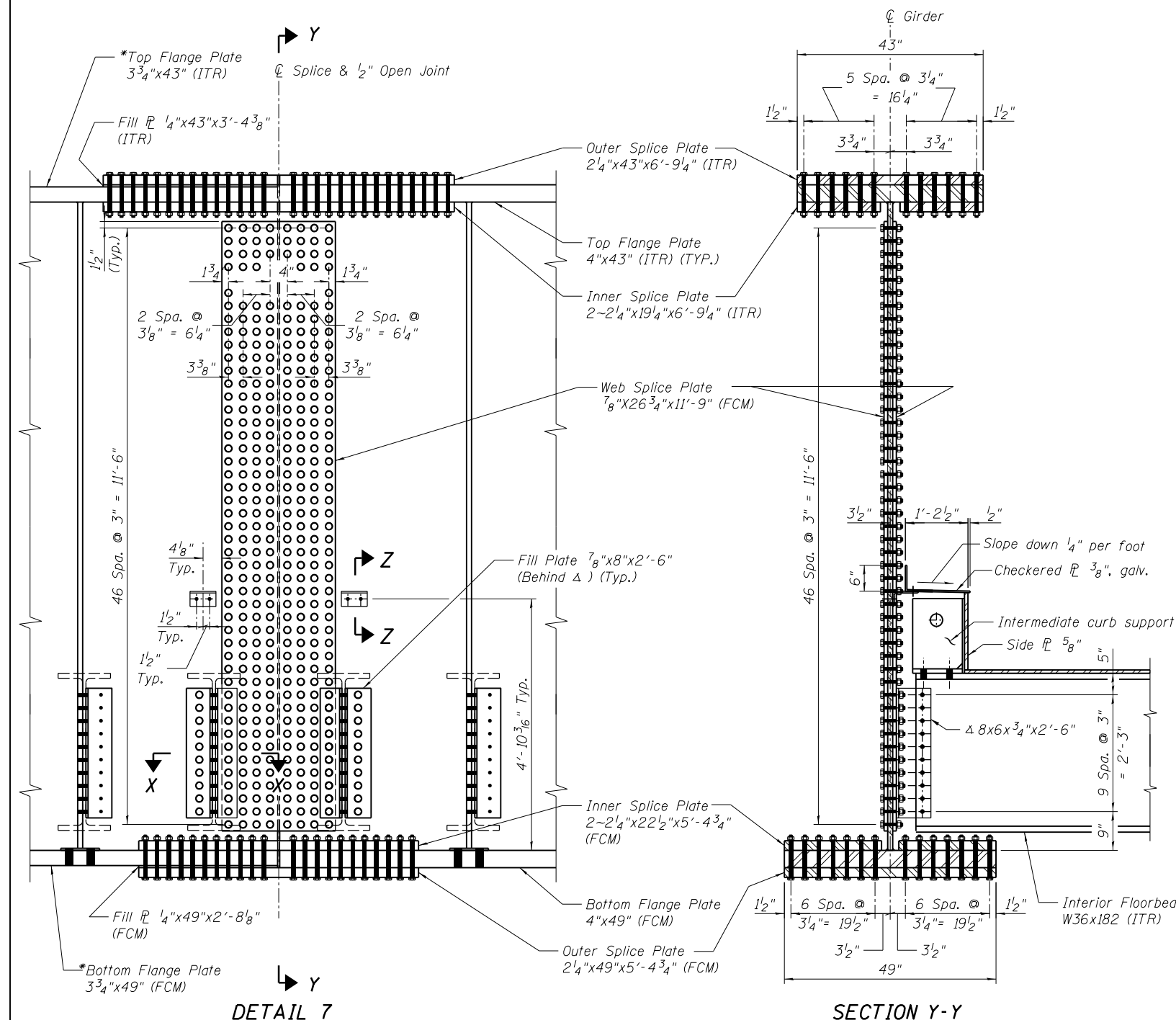
FINAL



© Copyright Hanson Professional Services Inc., 2019

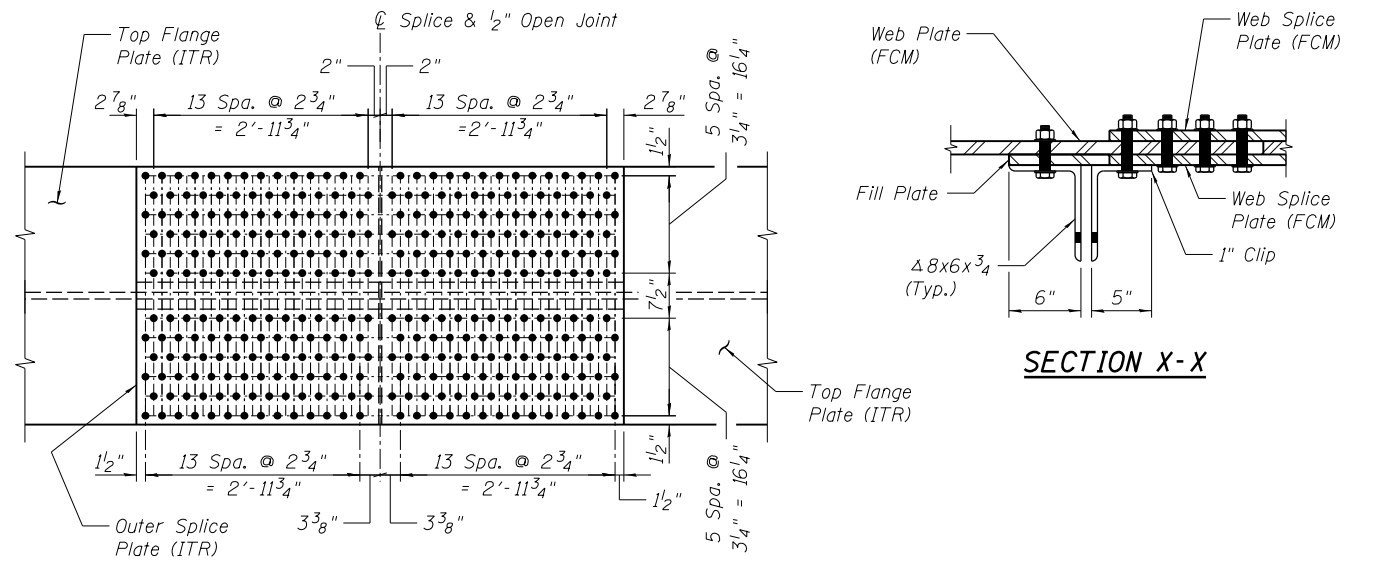


GIRDER ELEVATION (INSIDE FACE SHOWN)



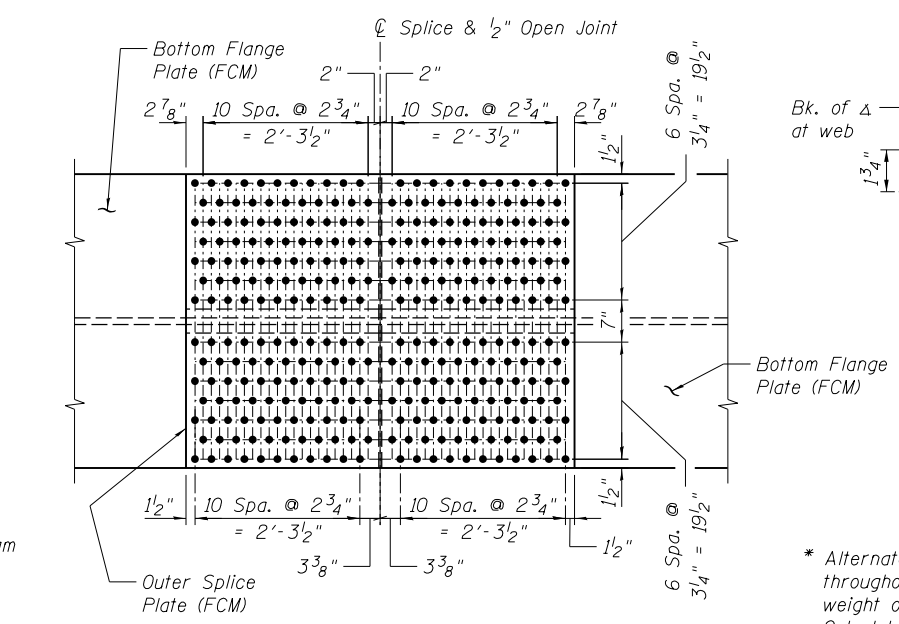
DETAIL 7

SECTION Y-Y

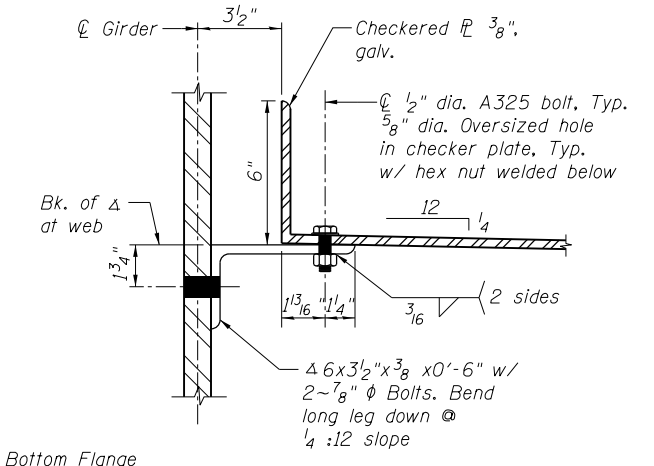


SECTION X-X

TOP FLANGE PLAN (Looking Down)



BOTTOM FLANGE PLAN (Looking Up)



SECTION Z-Z

* Alternate larger 4" flange thickness is permitted throughout to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. Calculated girder stresses are based on heavier section. The alternate, if utilized, shall be provided at no additional cost to the Department.

FILE NAME = ... PROJECTS\DOCUMENTS\... SHEET 0849961-09L01798-NSRR-001

USER NAME = Pop00275	DESIGNED - MJW	REVISIONS -
PLOT SCALE = 0.2:0000 ' = 1"	CHECKED - TJH/TDP	REVISIONS -
PLOT DATE = 4/11/2019	DRAWN - RSJ	REVISIONS -
	CHECKED - MJW	REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GIRDER SPLICE DETAILS
STRUCTURE 084-9961 - 5TH ST NSRR**

SHEET NO. 13 OF 29 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(109) VB,(110) VB-5	SANGAMON	382	200
			CONTRACT NO. 93733	
*666 & 666 ALT. ILLINOIS FED. AID PROJECT				

FINAL



Copyright Hanson Professional Services Inc. 2019