

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

ROUTE: VARIOUS LOCATIONS
SECTION: 2009-092 GRR
VARIOUS LOCATIONS IN EASTERN WILL COUNTY
GUARDRAIL REPLACEMENTS
PROJECT: ACHSIP-000S(699)
WILL COUNTY
C-91-040-10

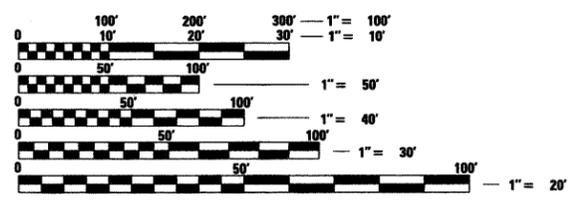
FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED IN THE
VILLAGES OF BEECHER, CRETE,
MONEE AND UNIVERSITY PARK

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	2009-092 GRR	WILL	18	1
		ILLINOIS	CONTRACT NO. 60145	

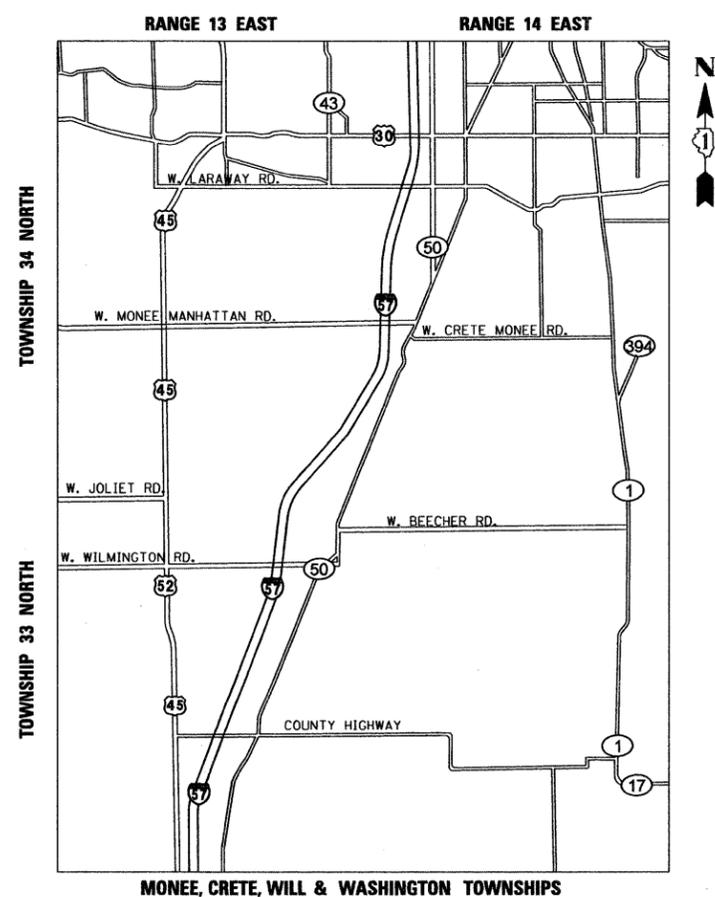
* VARIOUS * 18 + 2 = 20

D-91-040-10



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

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811



MONEE, CRETE, WILL & WASHINGTON TOWNSHIPS

Peter M. Johnston
12-15-09
PETER M. JOHNSTON
062-047647
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
Exp. 11-30-11

PROJECT ENGINEER: PETER JOHNSTON (GRAEF) 773-399-0112
PROJECT MANAGER: KEN ENG (IDOT) 847-705-4247

CONTRACT NO. 60145

GRAEF 8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED DECEMBER 15 2009

Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

January 29, 2010
Scott E. Stitt P.E.
Acting ENGINEER OF DESIGN AND ENVIRONMENT

January 29, 2010
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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HIGHWAY STANDARDS

STD. NO.	TITLE
202001-01	EARTH MEDIAN DITCH CHECK
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
542501-02	INLET BOX TYPE 600 (24) A
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-08	STEEL PLATE BEAM GUARDRAIL
630101-08	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-06	TRAFFIC BARRIER TERMINAL TYPE 2
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701326-03	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701421-02	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701422-02	LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701901-01	TRAFFIC CONTROL DEVICES

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 OR "CUAN" (CHICAGO UTILITY ALERT NETWORK), 312-744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND LOCAL AGENCIES.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED - ONE (1) WEIGHTED SANDBAG ACROSS EACH BOTTOM RAIL.
- THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- WHEN GUARDRAIL POSTS ARE PLACED BEHIND CONCRETE HEADWALLS, THE POSTS SHALL NOT BE PLACED TO BLOCK THE DRAINAGE OPENING.

SUMMARY OF QUANTITIES

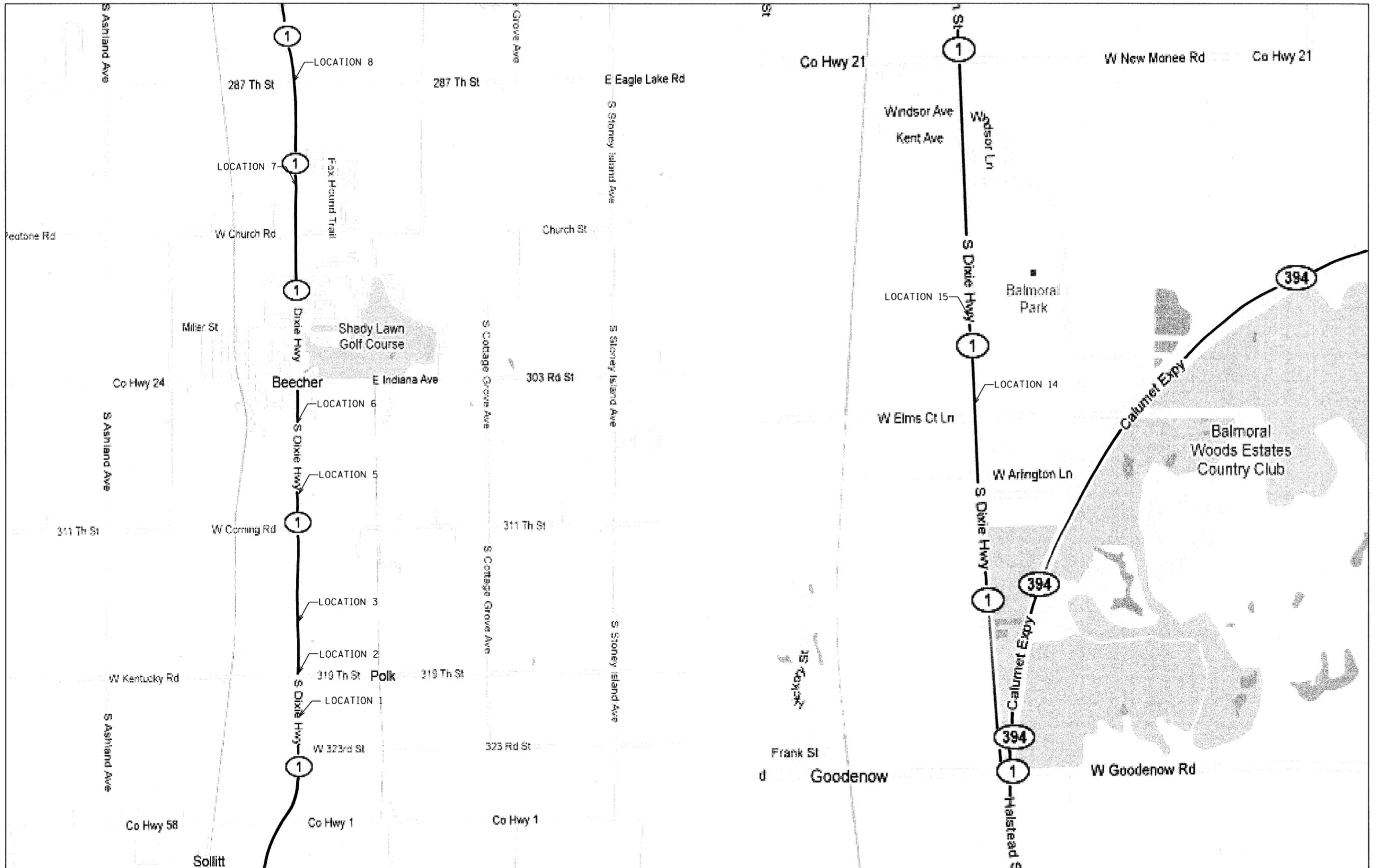
90% FED.
10% STATE

PAY ITEM NUMBER	DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	SFTY-3J ROADWAY
20200100	EARTH EXCAVATION	CU YD	336	336
20400800	FURNISHED EXCAVATION	CU YD	420	420
21400100	GRADING AND SHAPING DITCHES	FOOT	1,750	1,750
28000305	TEMPORARY DITCH CHECKS	FOOT	180	180
28000400	PERIMETER EROSION BARRIER	FOOT	1,085	1,085
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	129	129
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	2,177	2,177
50102400	CONCRETE REMOVAL	CU YD	1	1
50300225	CONCRETE STRUCTURES	CU YD	20	20
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	760	760
50800105	REINFORCEMENT BARS	POUND	1,900	1,900
54002020	EXPANSION BOLTS 3/4 INCH	EACH	40	40
NP 55039700	STORM SEWERS TO BE CLEANED	FOOT	160	160
63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	913	913
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	26	26
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	7	7
63200310	GUARDRAIL REMOVAL	FOOT	1,786	1,786
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	L SUM	1	1
78200405	GUARDRAIL MARKERS	EACH	10	10
78201000	TERMINAL MARKER-DIRECT APPLIED	EACH	26	26
X0325917	TURF ESTABLISHMENT	SQ YD	3,594	3,594
NP X2503100	MOWING	UNIT	323	323
70100315	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	EACH	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
X0322250	TEMPORARY INFORMATION SIGNING	SQ FT	308	308

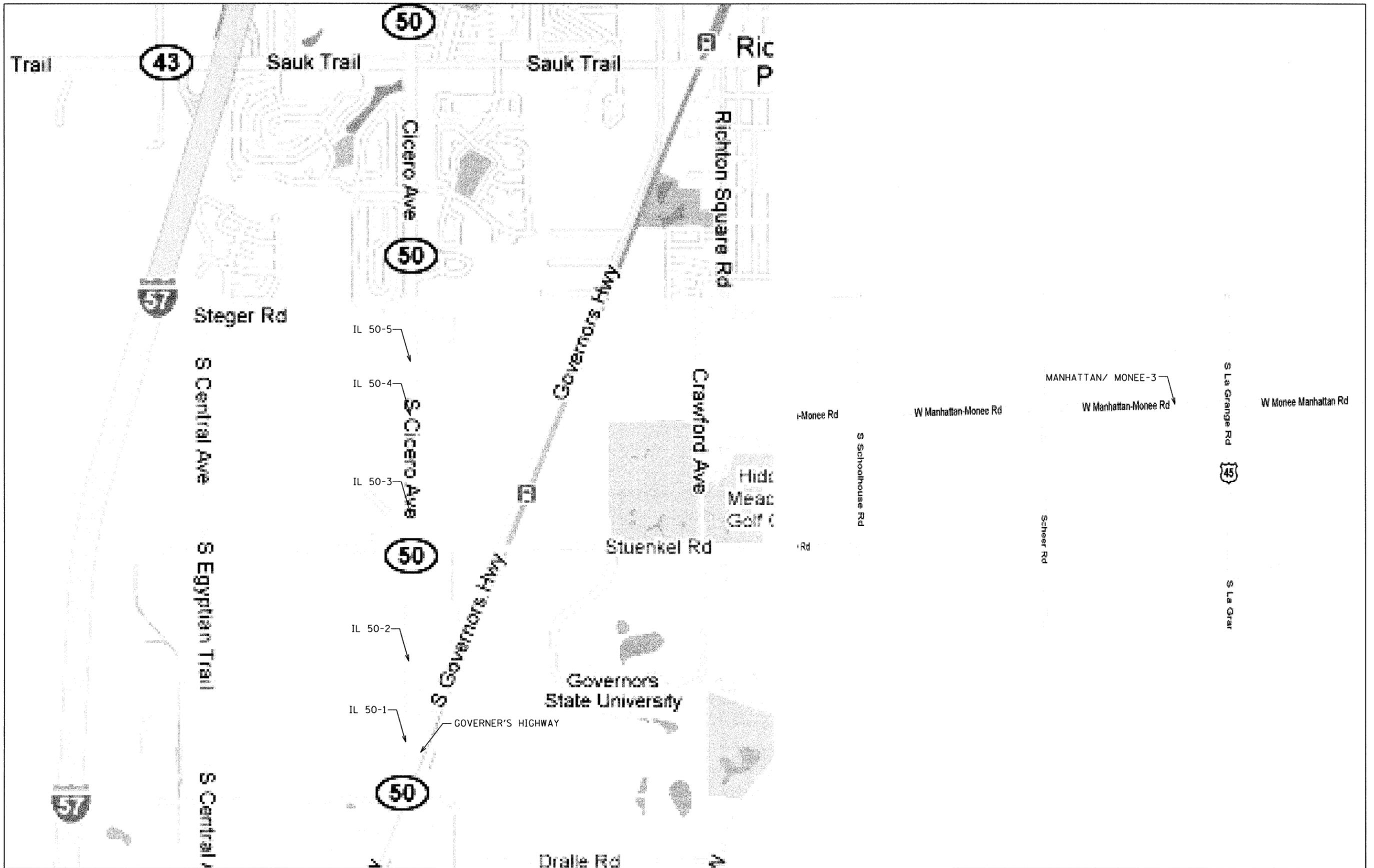
* Specialty Items
NP = Non-participating

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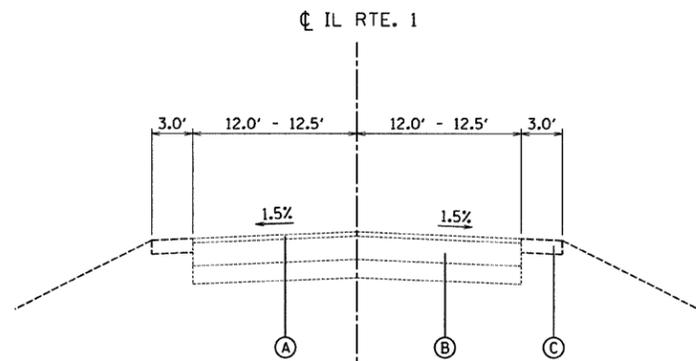
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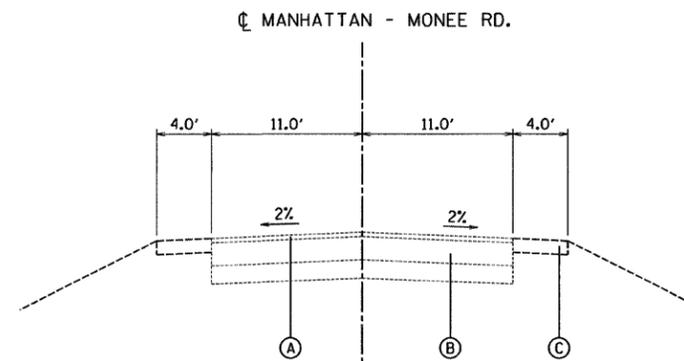
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ILLINOIS FED. AID PROJECT										CONTRACT NO. 60145			



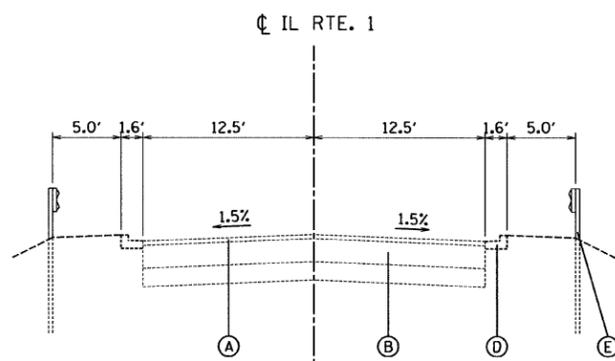
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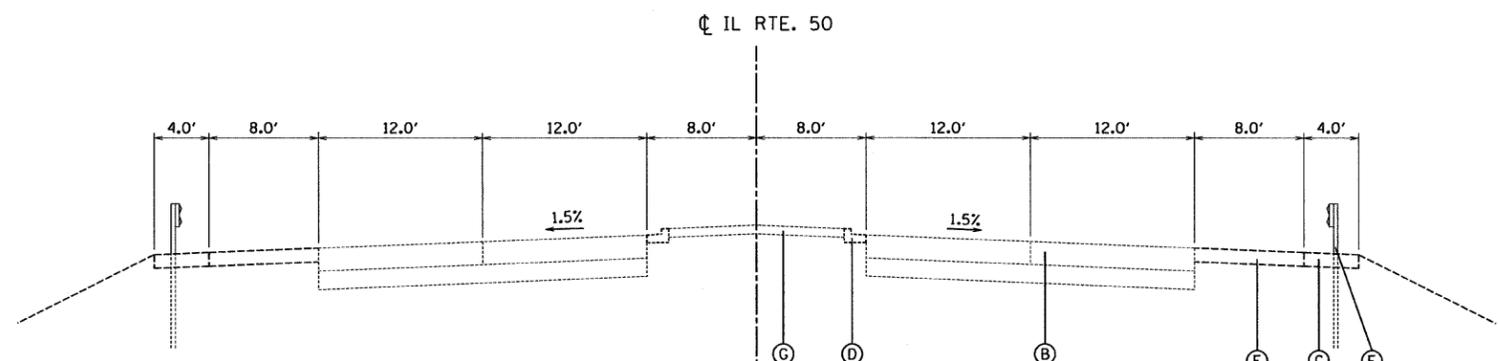
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VARIOUS LOCATIONS



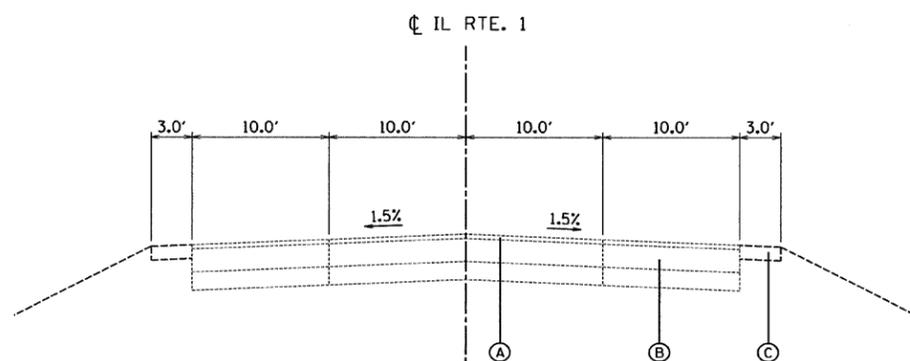
EXISTING TYPICAL SECTION
BETWEEN GREEN GARDEN ROAD AND 96TH AVENUE



EXISTING TYPICAL SECTION
IL RTE. 1 AT W. EAGLE LAKE ROAD



EXISTING TYPICAL SECTION
VARIOUS LOCATIONS

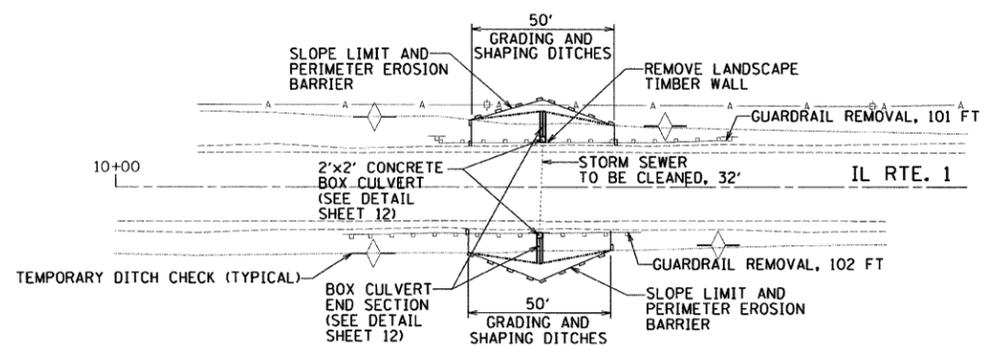
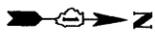


EXISTING TYPICAL SECTION
AT BALMORAL PARK ENTRANCE

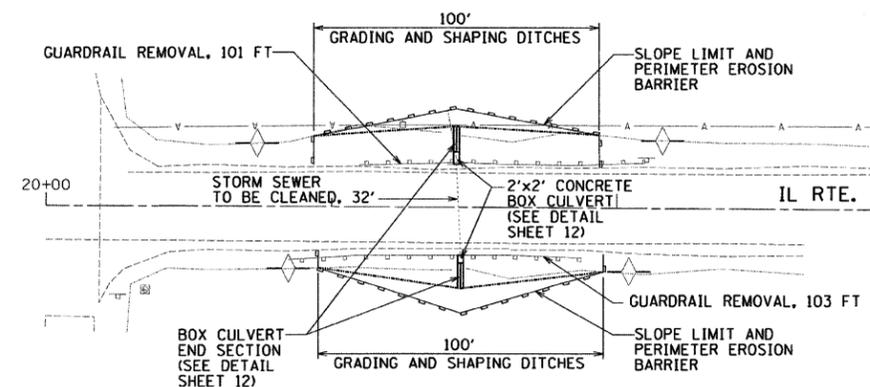
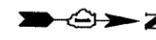
EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE
- (B) CONCRETE PAVEMENT
- (C) AGGREGATE SHOULDER
- (D) CURB AND GUTTER
- (E) GUARDRAIL
- (F) HOT-MIX ASPHALT SHOULDER
- (G) CONCRETE MEDIAN SURFACE

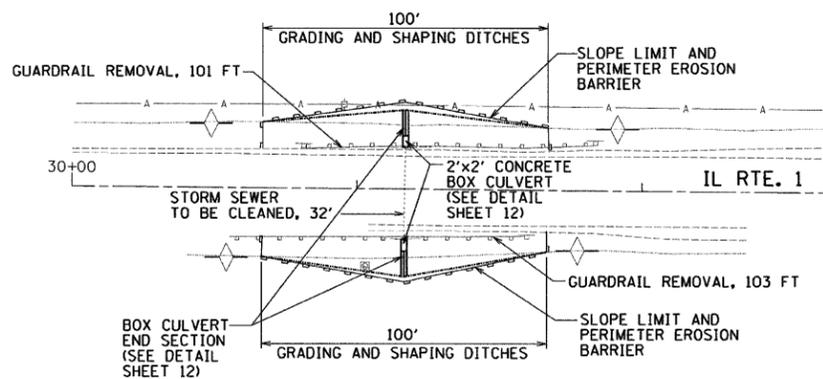
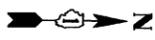
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IL 1-1



IL 1-2



IL 1-3

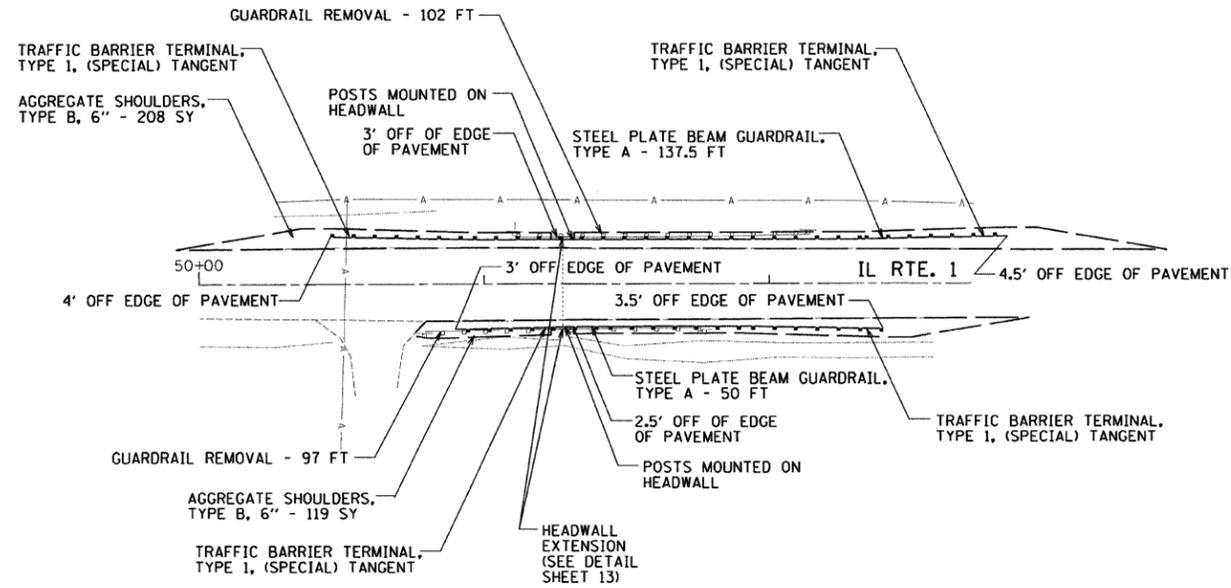
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

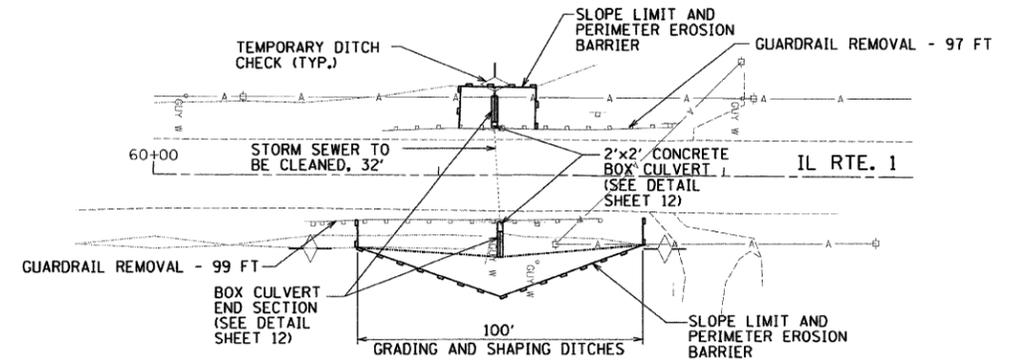
GUARDRAIL IMPROVEMENTS - EASTERN WILL COUNTY
ROADWAY PLANS

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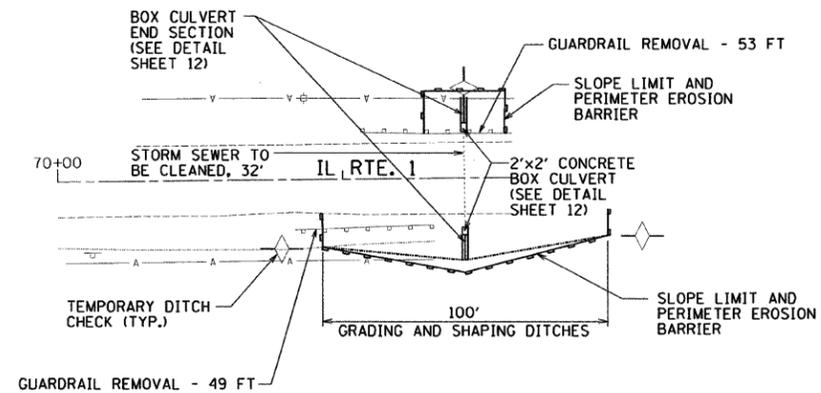
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CONTRACT NO. 60145				
ILLINOIS FED. AID PROJECT				



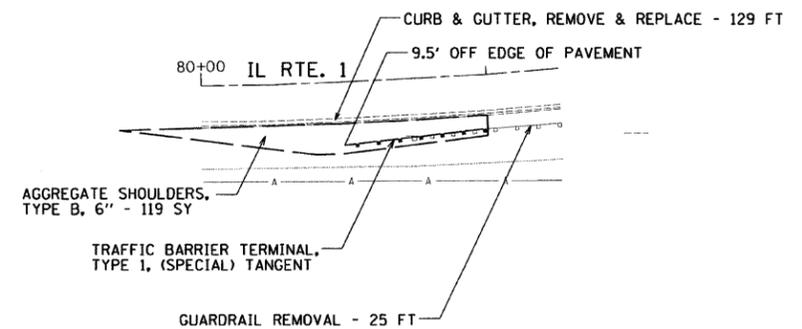
IL 1-5



IL 1-6



IL 1-7



IL 1-8

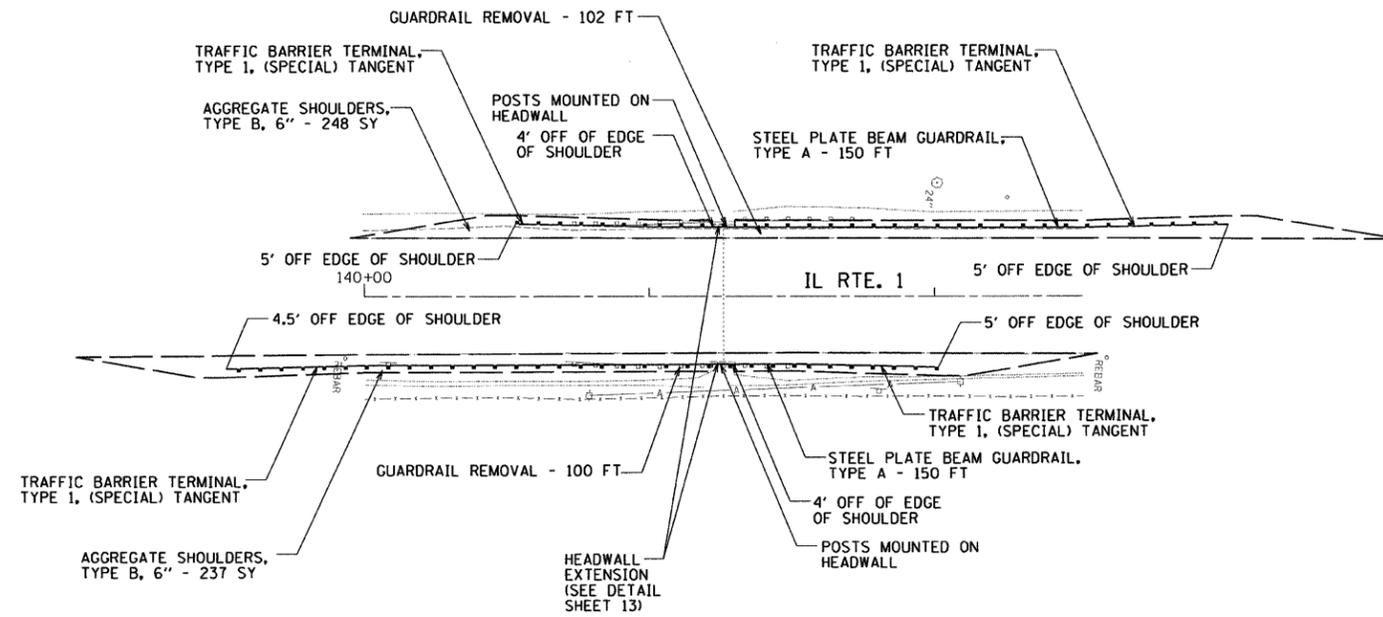
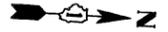
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

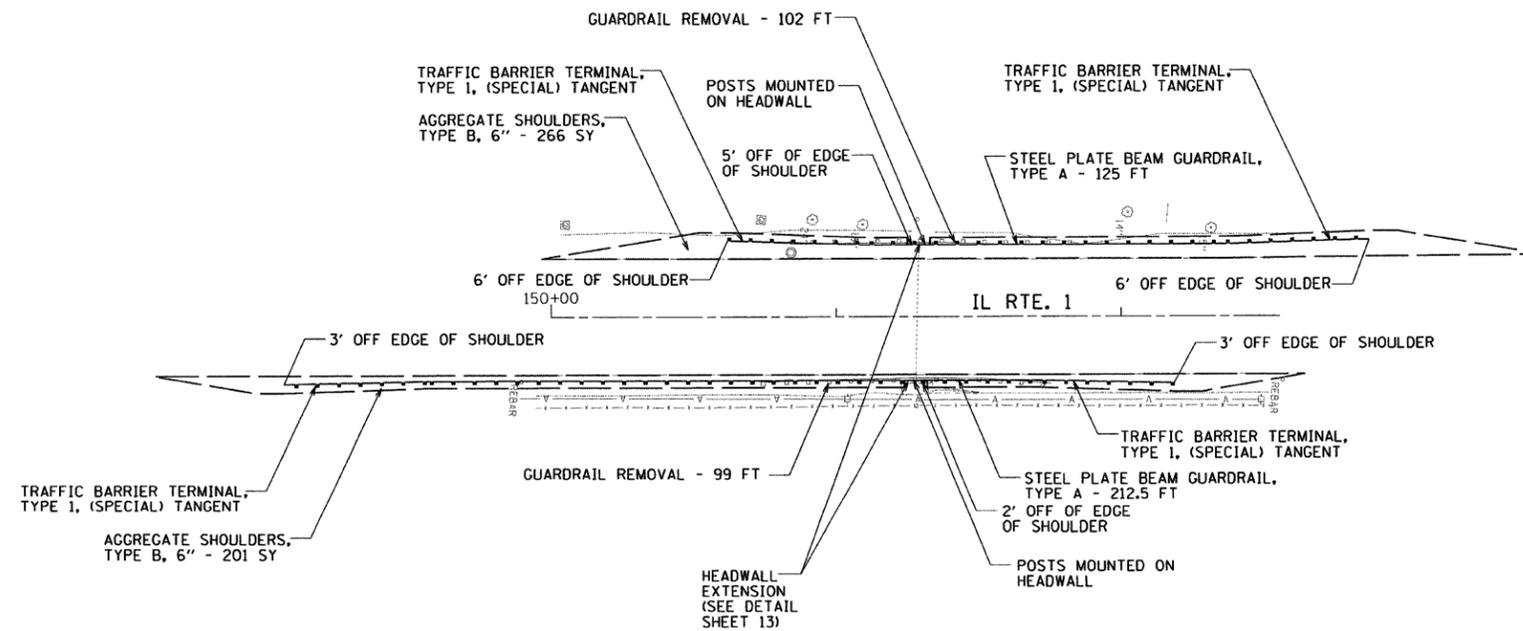
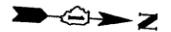
GUARDRAIL IMPROVEMENTS - EASTERN WILL COUNTY
ROADWAY PLANS

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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60145				
ILLINOIS FED. AID PROJECT				

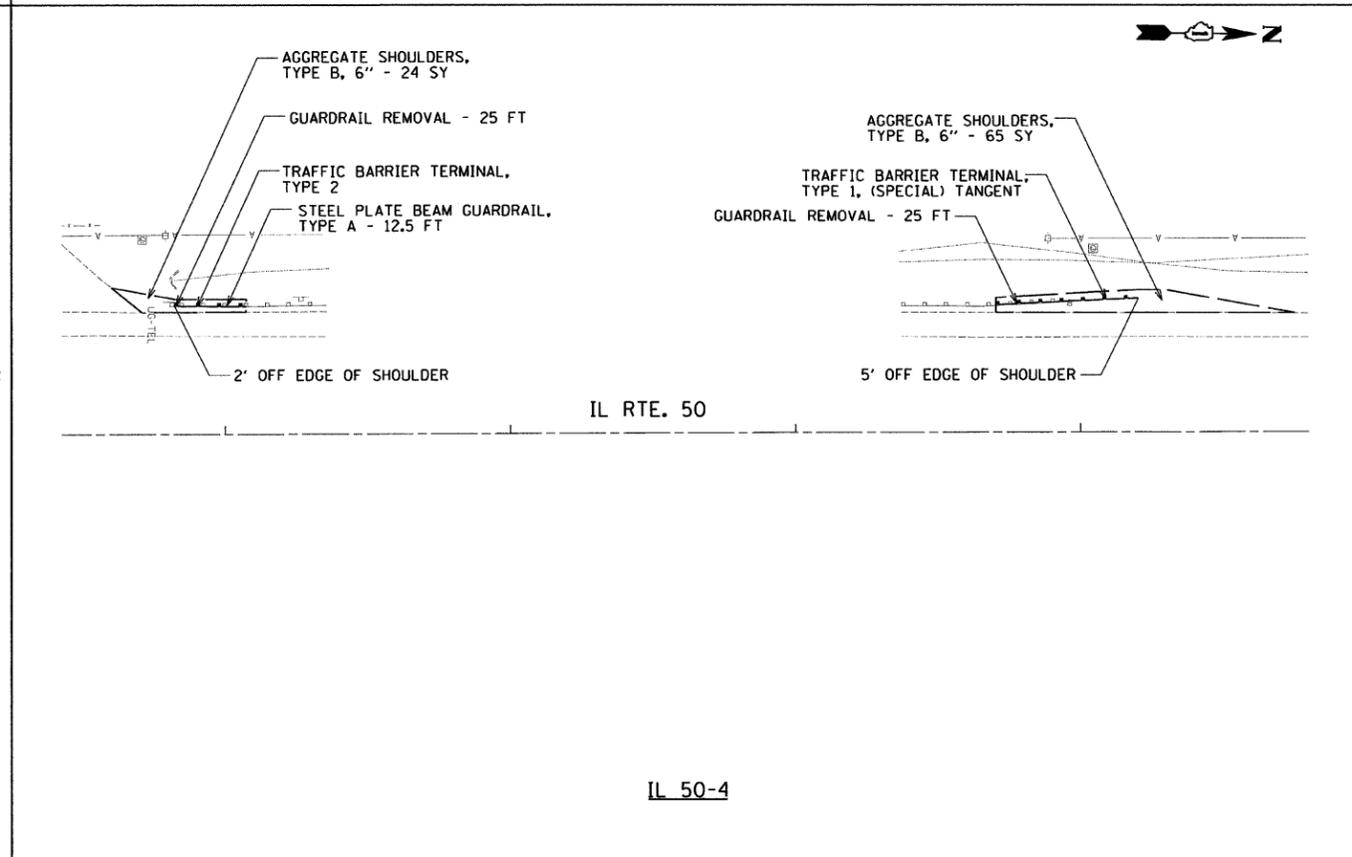
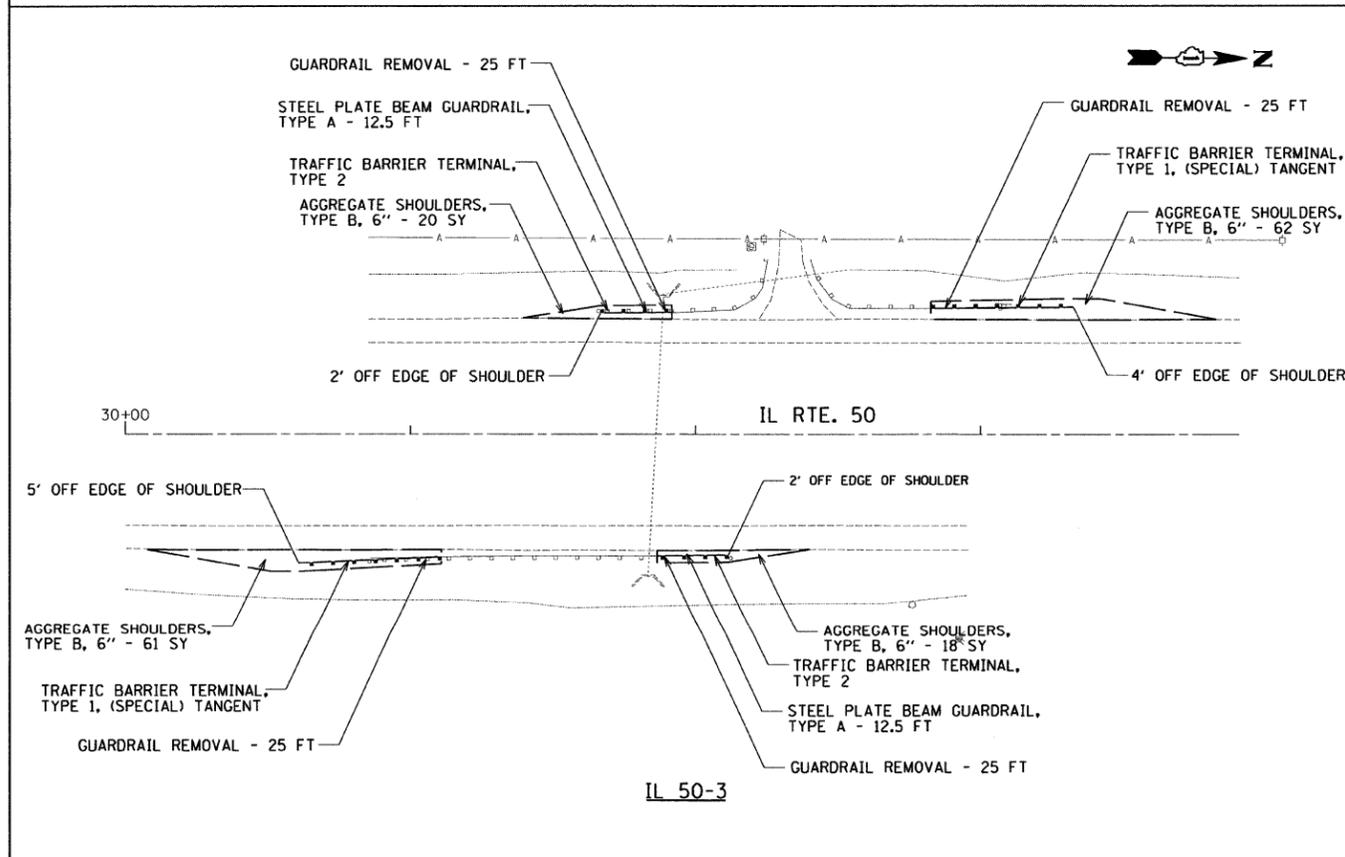
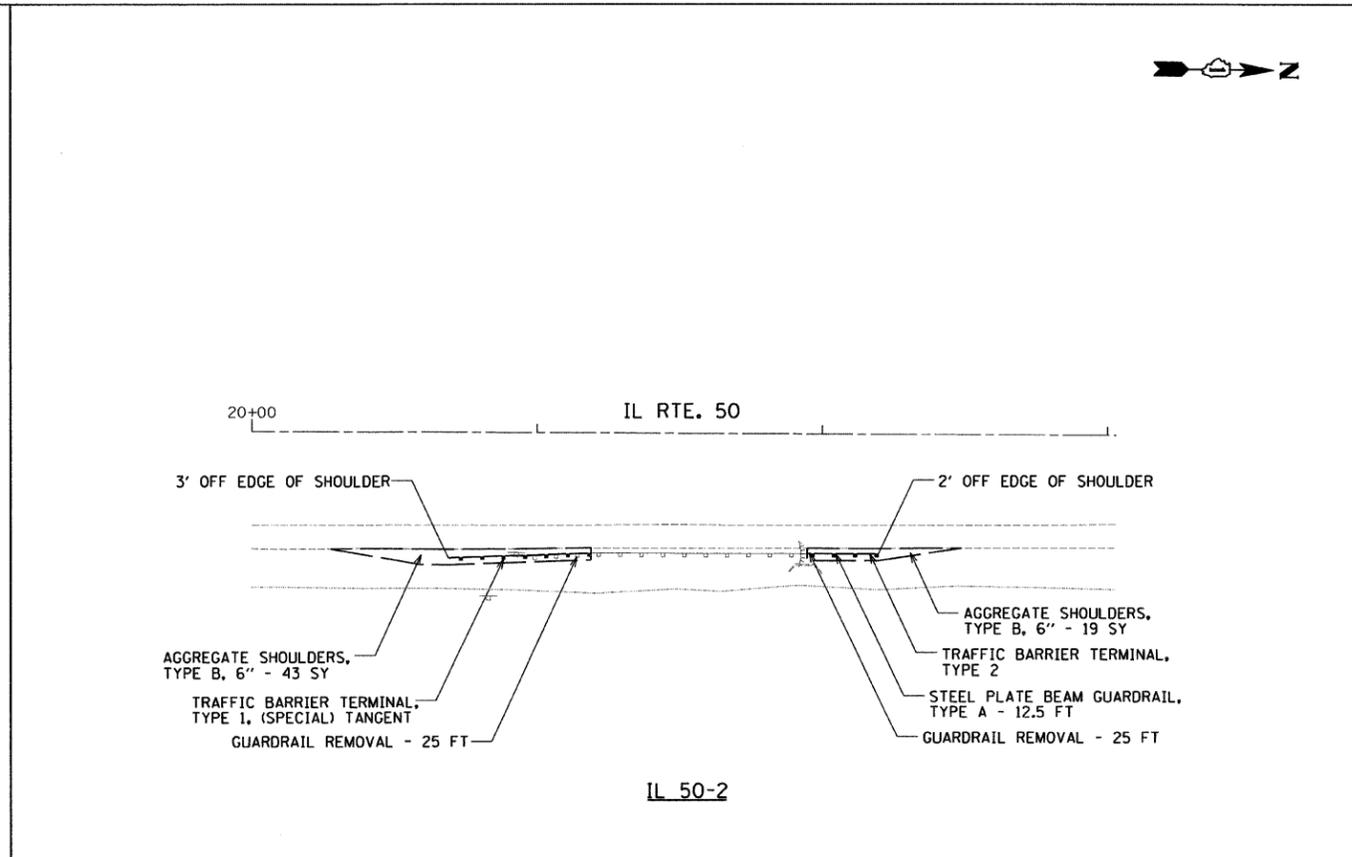
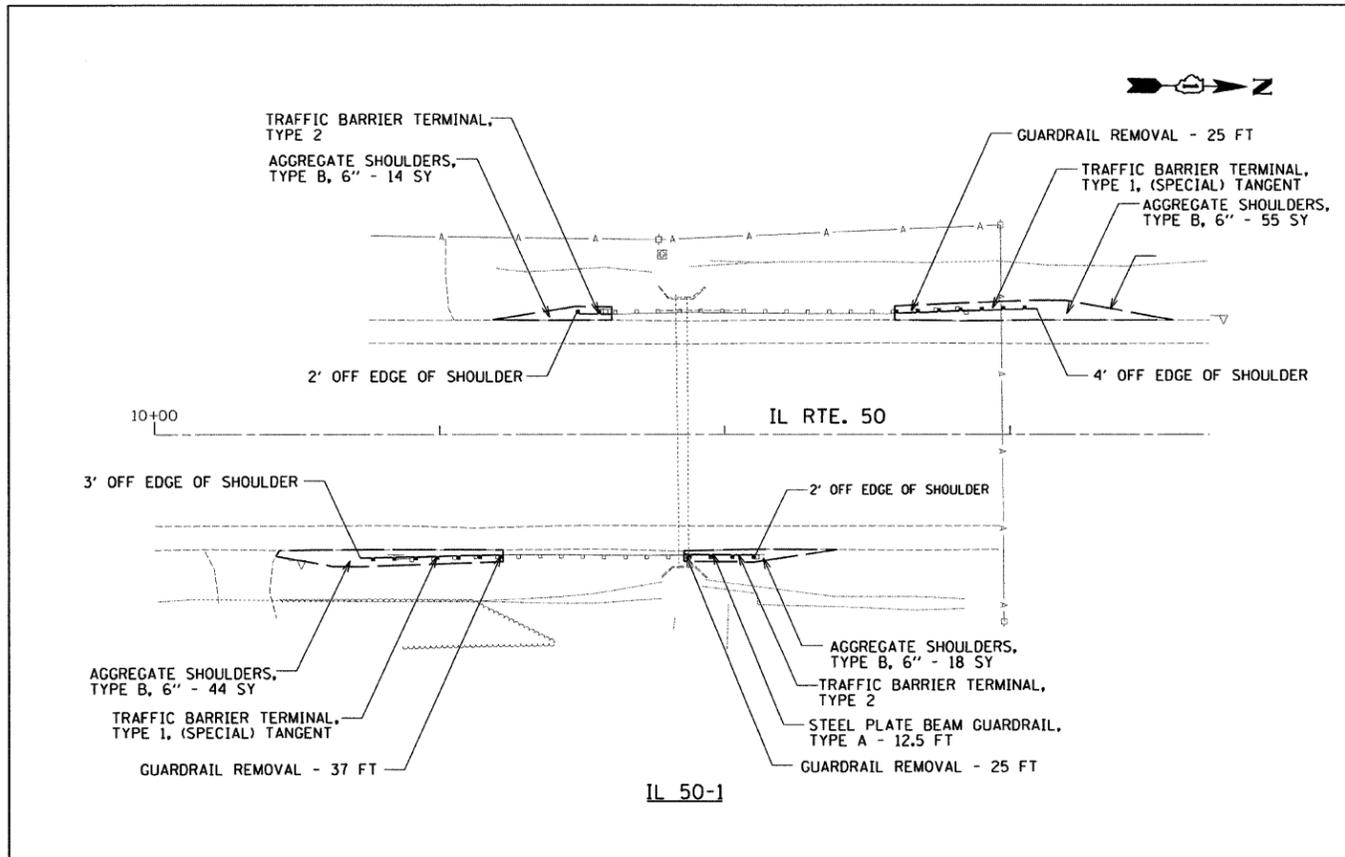


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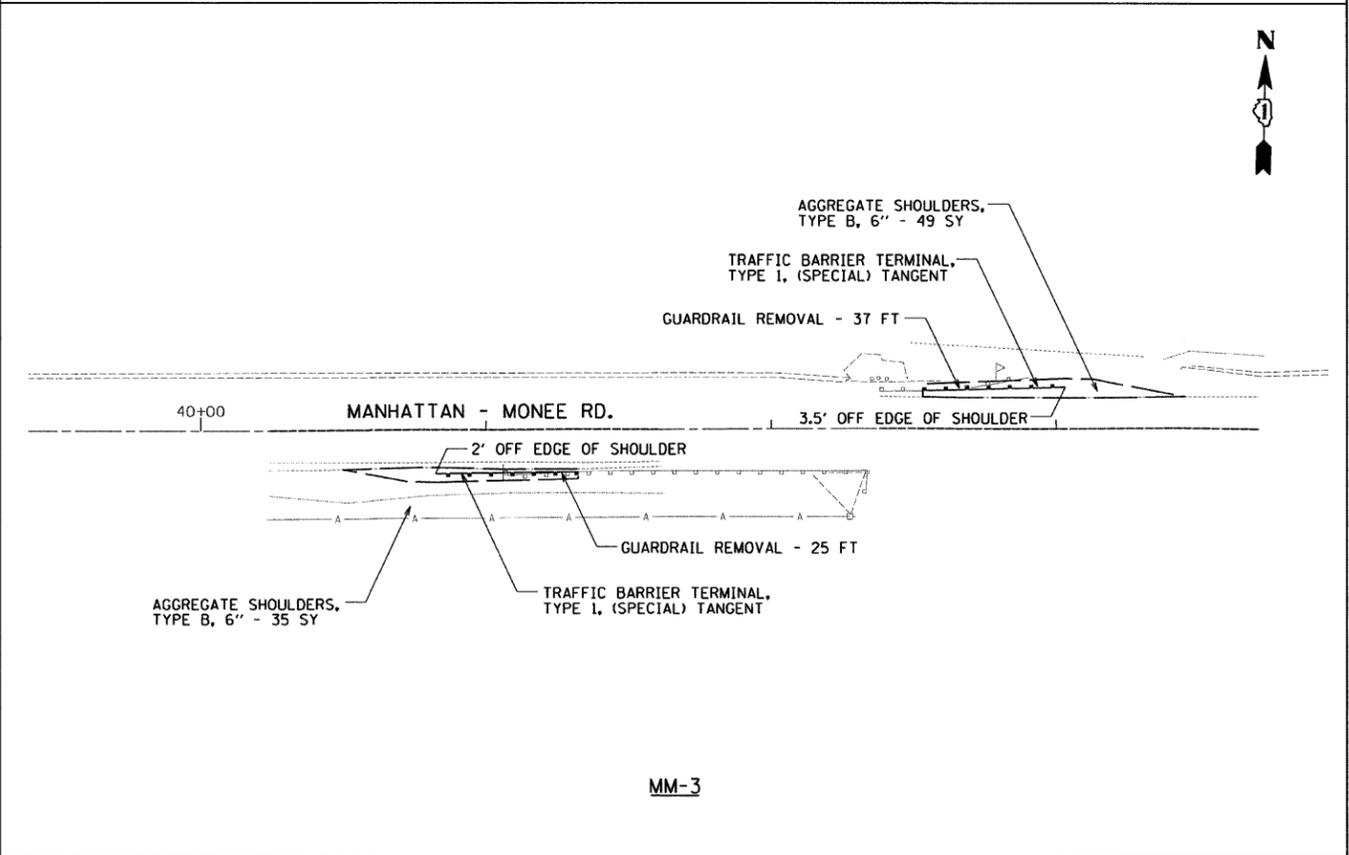
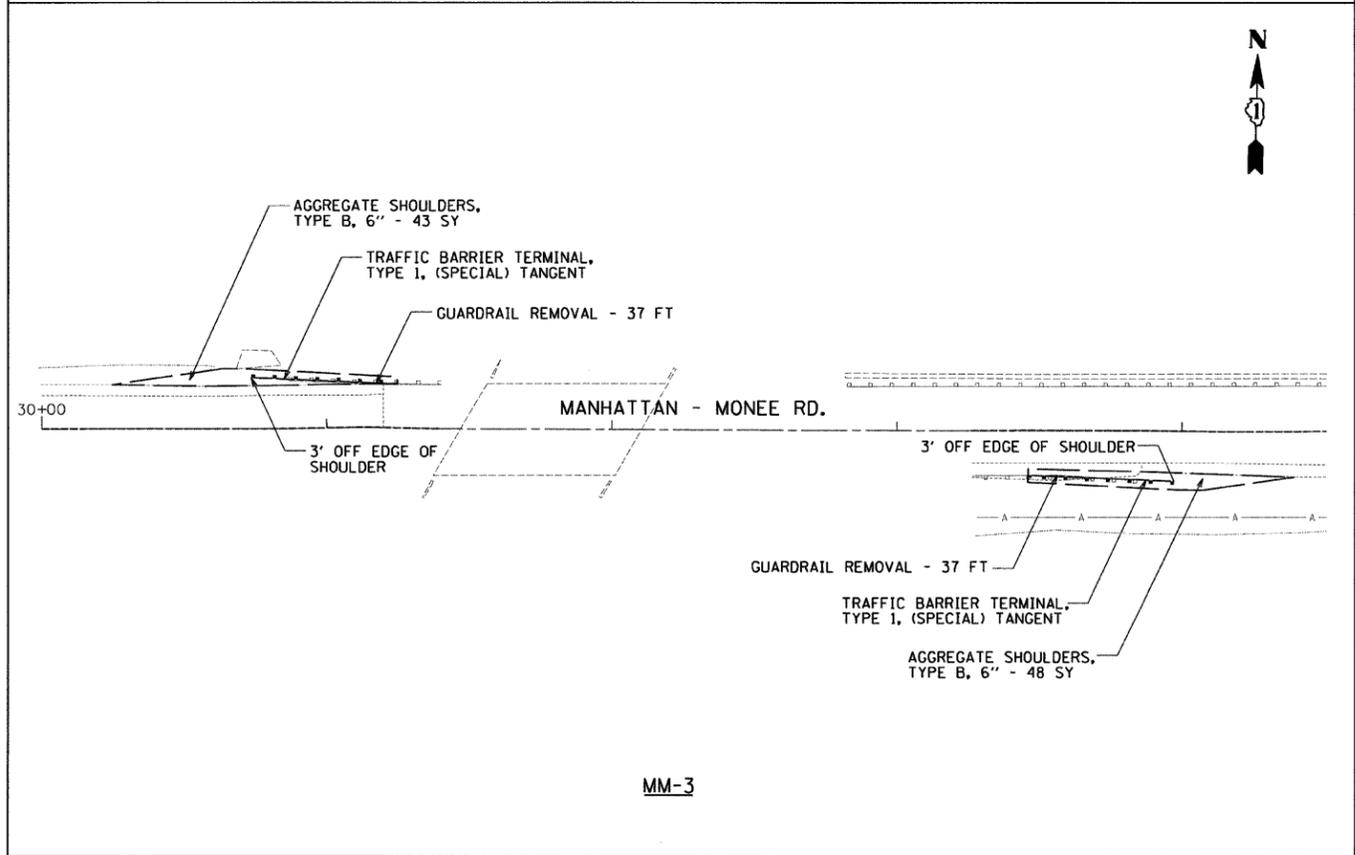
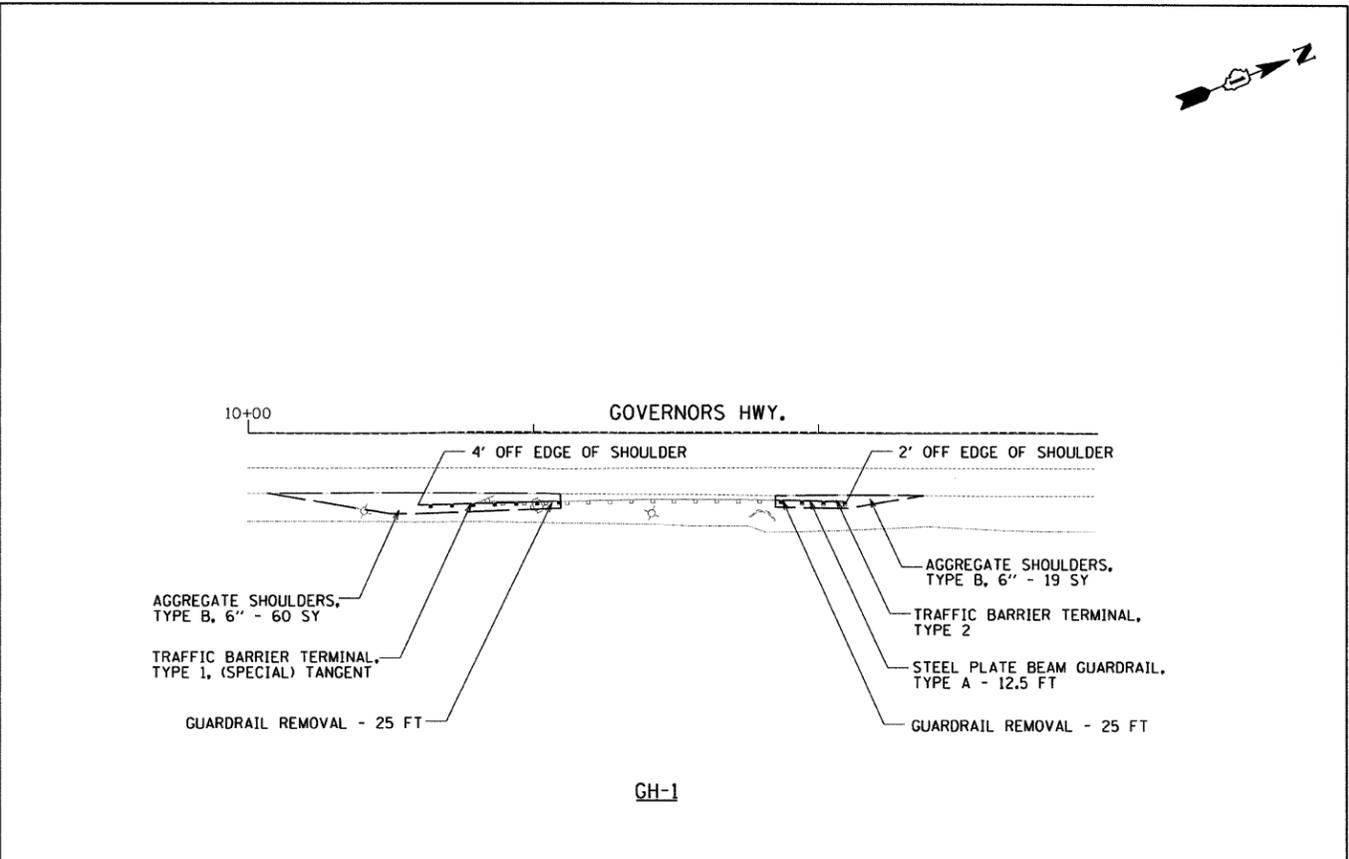
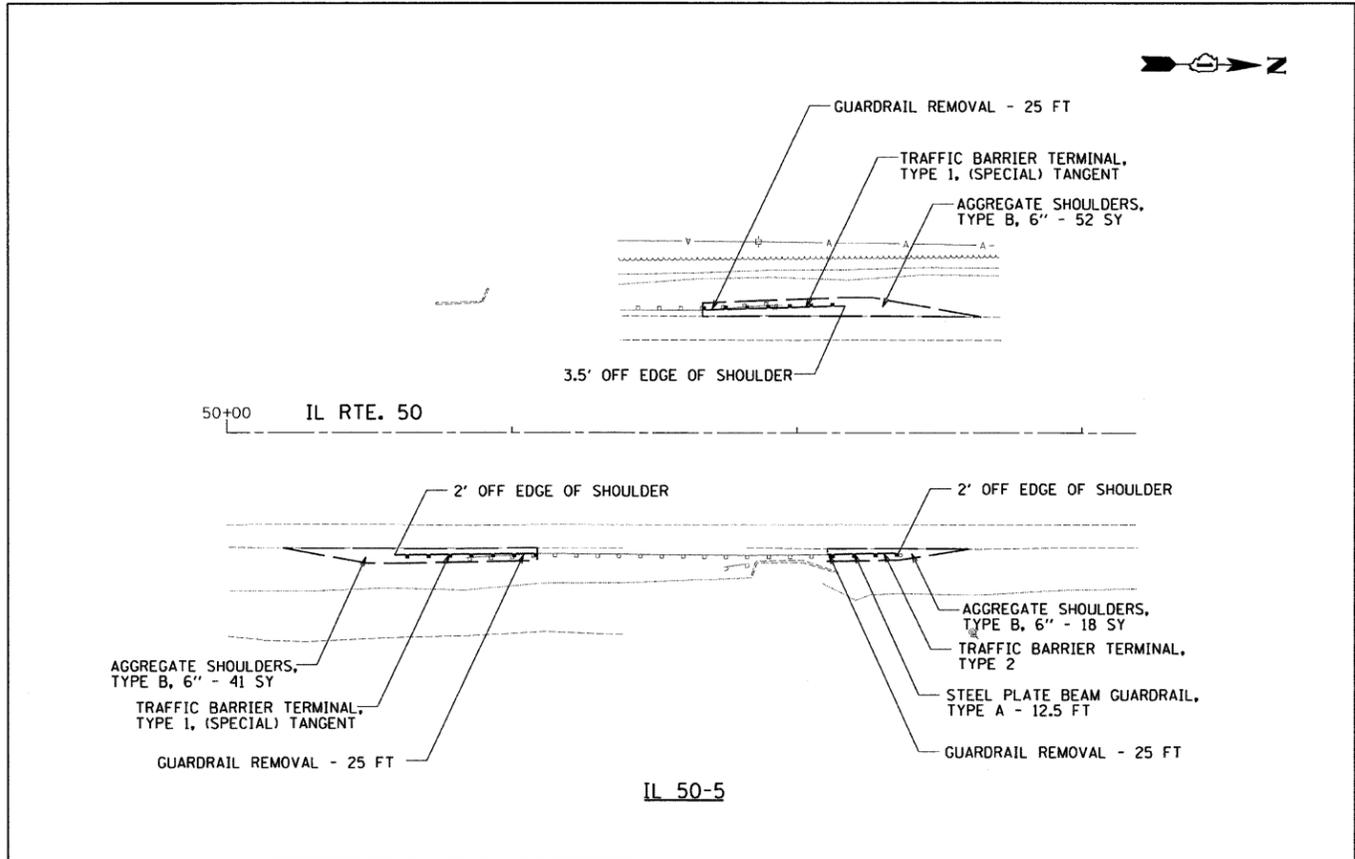


IL 1-15

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

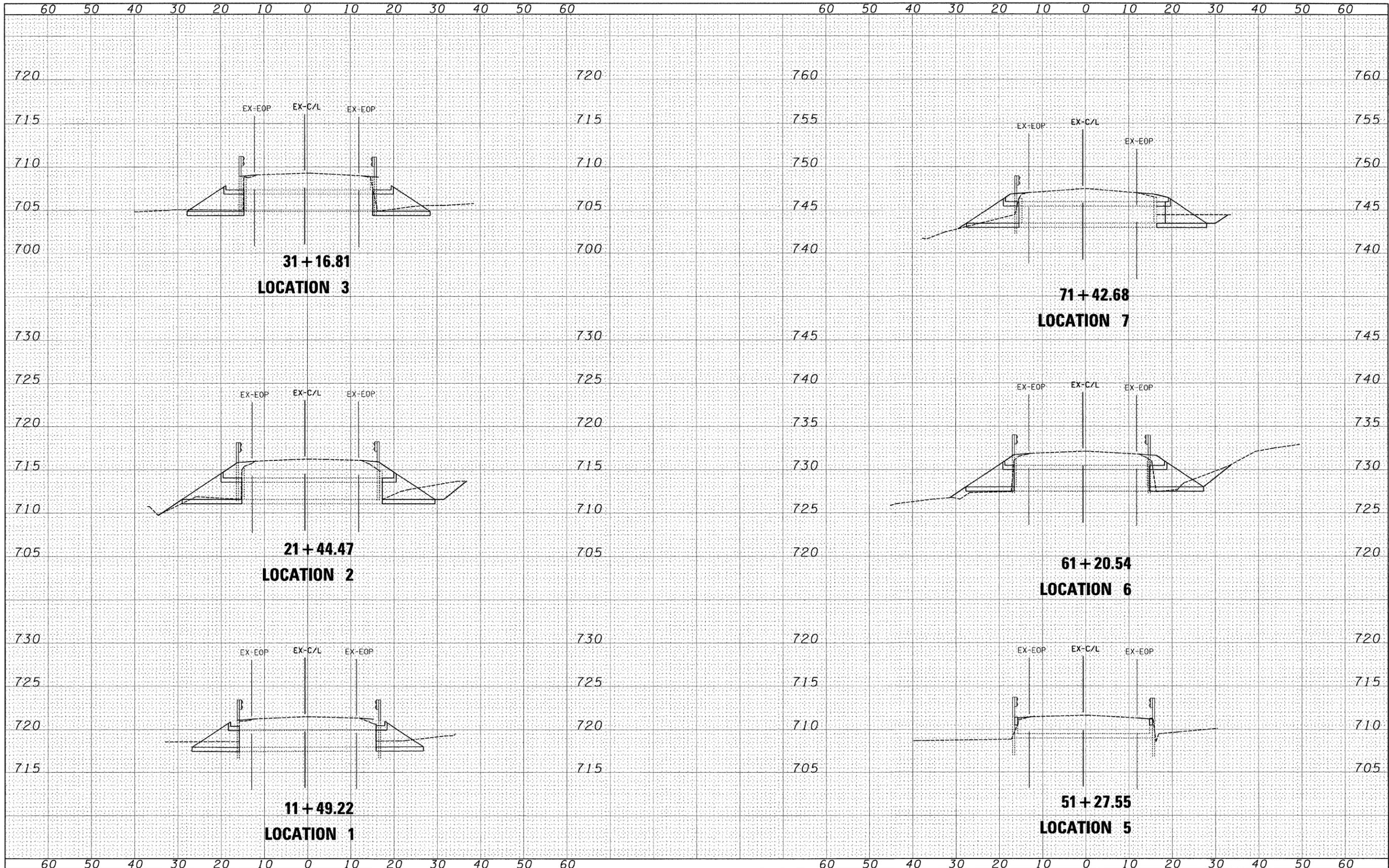
**GUARDRAIL IMPROVEMENTS - EASTERN WILL COUNTY
ROADWAY PLANS**

SCALE: 30 SHEET NO. 5 OF 5 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-092 GRR	WILL	18	9
CONTRACT NO. 60145				
ILLINOIS FED. AID PROJECT				

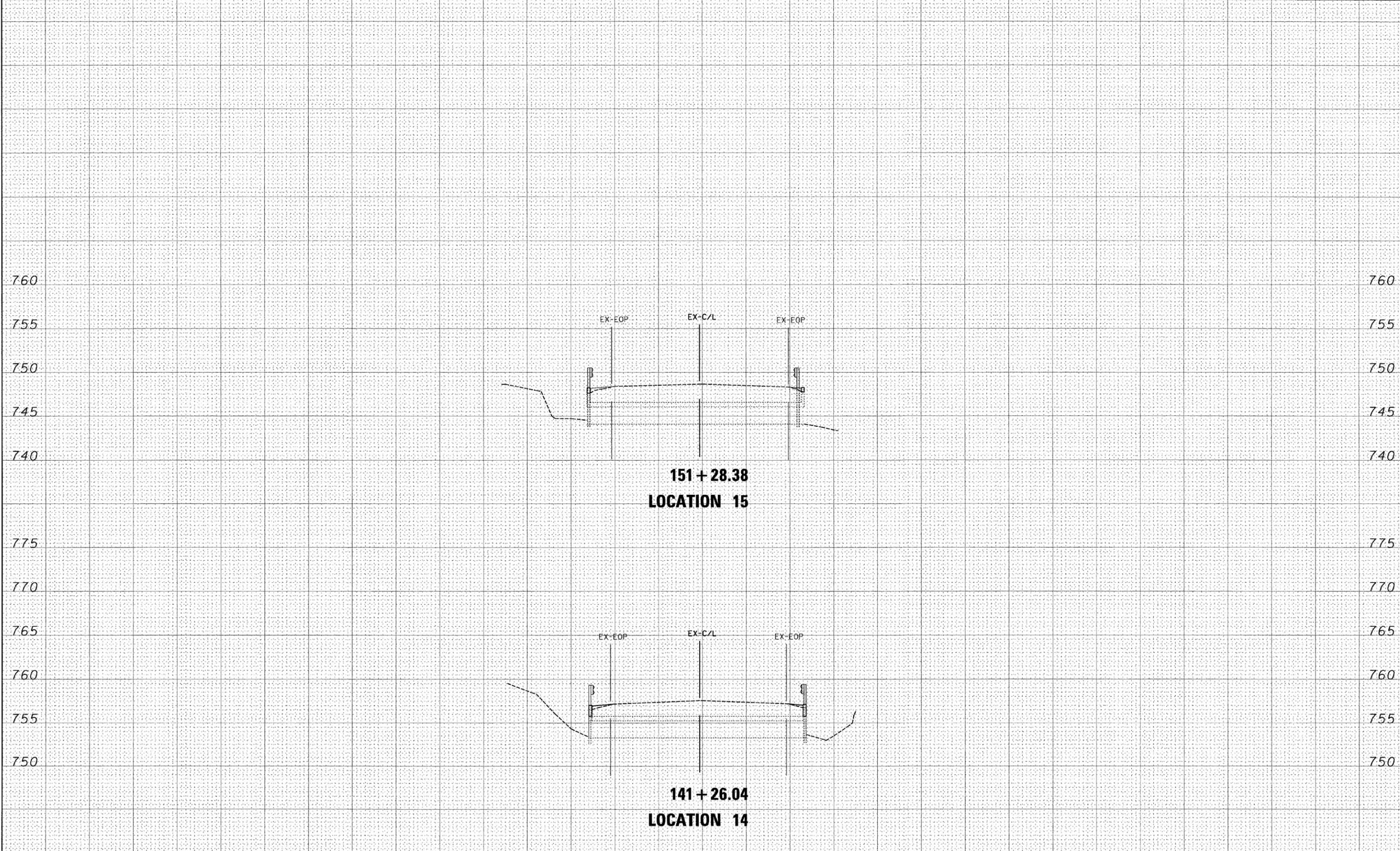
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BY	
DESIGNED	
DRAWN	
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DATE	
NO.	
FINAL SURVEY	
NOTE BOOK	
NO.	
DESIGNED	
DRAWN	
CHECKED	
DATE	
NO.	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
NO.	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
DESIGNED	
DRAWN	
CHECKED	
DATE	
NO.	



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		CHECKED - RS	REVISED -		CONTRACT NO. 60145								
		DATE - 11/13/2009	REVISED -		ILLINOIS FED. AID PROJECT								

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



FINAL SURVEY NO.	BY	DATE
NOTE BOOK NO.		
TEMPLATE AREAS CHECKED		

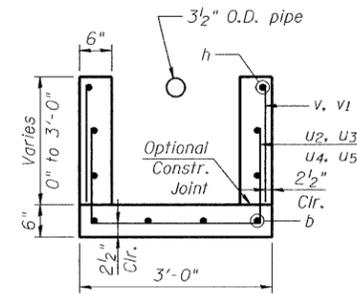
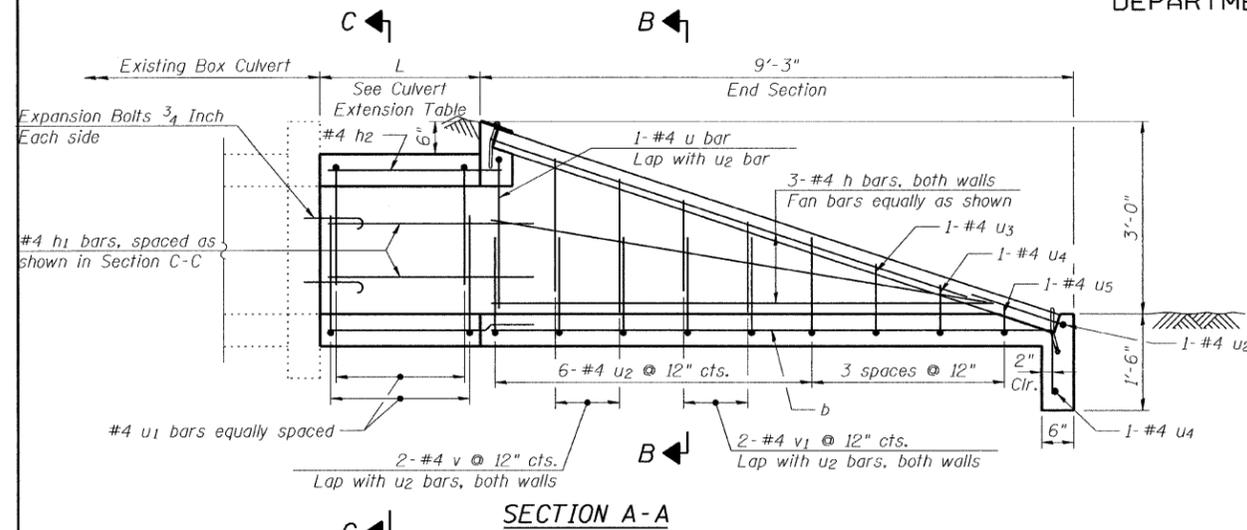
ORIGINAL SURVEY NO.	BY	DATE
NOTE BOOK NO.		
TEMPLATE AREAS CHECKED		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**DIMENSIONS AND QUANTITIES
CULVERT EXTENSION**

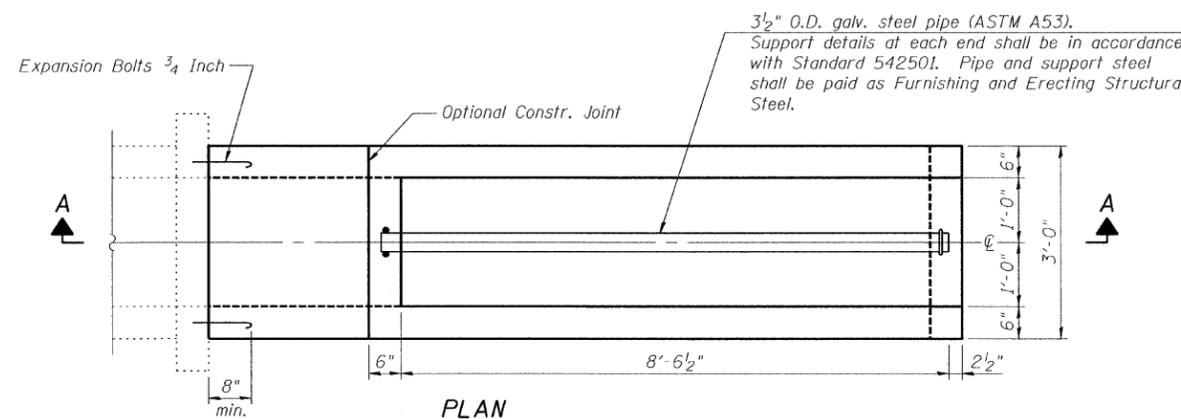


SECTION B-B

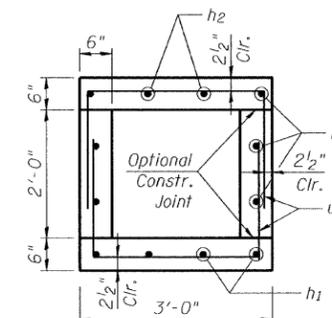
Location	Dimension 'L'	Reinforcement Bars - No. 4						Concrete Structures Cu. Yds.	Reinf. Bars lbs	Expansion Bolts 3/4 Inch Each
		h1		h2		u1				
1L	2'-0"	10	2'-8"	2	2'-2"	6	6'-3"	0.4	46	4
1R	2'-0"	10	2'-8"	2	2'-2"	6	6'-3"	0.4	46	4
2L	4'-4"	10	5'-0"	2	4'-6"	10	6'-3"	0.8	82	4
2R	4'-4"	10	5'-0"	2	4'-6"	10	6'-3"	0.8	82	4
3L	4'-2"	10	4'-10"	2	4'-4"	10	6'-3"	0.8	80	4
3R	4'-2"	10	4'-10"	2	4'-4"	10	6'-3"	0.8	80	4
6L	2'-1"	10	2'-9"	2	2'-3"	6	6'-3"	0.4	47	4
6R	2'-1"	10	2'-9"	2	2'-3"	6	6'-3"	0.4	47	4
7L	3'-1"	10	3'-9"	2	3'-3"	8	6'-3"	0.6	63	4
7R	3'-1"	10	3'-9"	2	3'-3"	8	6'-3"	0.6	63	4

BAR DIMENSIONS

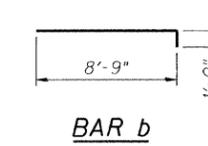
Bar	A
u	2'-4"
u1	1'-10"
u2	1'-6"
u3	1'-1"
u4	0'-9"
u5	0'-5"



PLAN



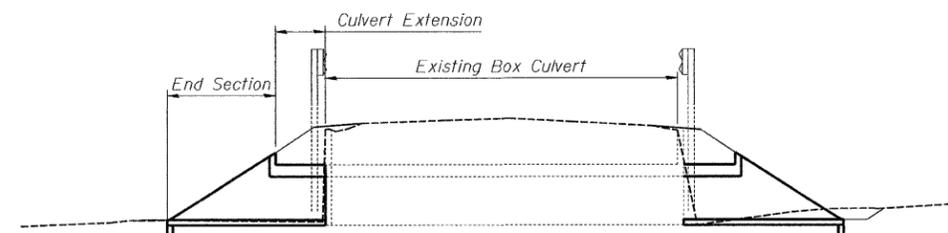
SECTION C-C



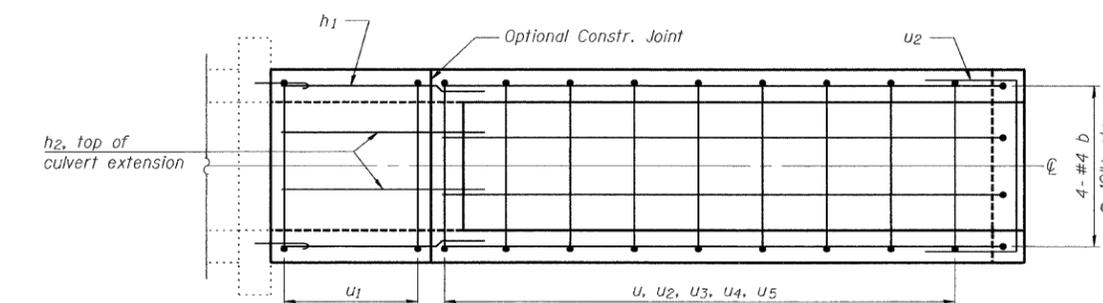
BAR b

MATERIAL REQUIRED FOR ONE END SECTION

Bar	No.	Size	Length	Shape
b	4	#4	9'-9"	┌
h	6	#4	7'-10"	—
u	1	#4	7'-3"	┌
u2	7	#4	5'-7"	┌
u3	1	#4	4'-9"	┌
u4	2	#4	4'-1"	┌
u5	1	#4	3'-5"	┌
v	4	#4	2'-1"	—
v1	4	#4	1'-5"	—
Concrete Structures			Cu. Yd.	1.2
Furnishing And Erecting Structural Steel			Pound	76
Reinforcement Bars			Pound	109



TYPICAL CROSS SECTION



PLAN OF REINFORCEMENT

NOTES

- The Culvert Extension and End Section shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of Section 503 of the Standard Specifications. Reinforcement Bars shall conform to Section 508.
- Expansion Bolts 3/4 Inch shall consist of approved Expansion Anchors, and 3/4" φ Hook Bolts which conform to Section 1006.09. These Bolts shall extend at least 8" into the new concrete.
- The cost of removal and disposal of any existing timber headwalls and any excavation required to construct the culvert extensions and end sections shall be included in Concrete Structures.

GRAEF	11-6-2009
DESIGNED	E.E.J.
CHECKED	J.A.Z.
DRAWN	E.E.J.
CHECKED	J.A.Z.

CULVERT EXTENSION AND END SECTION

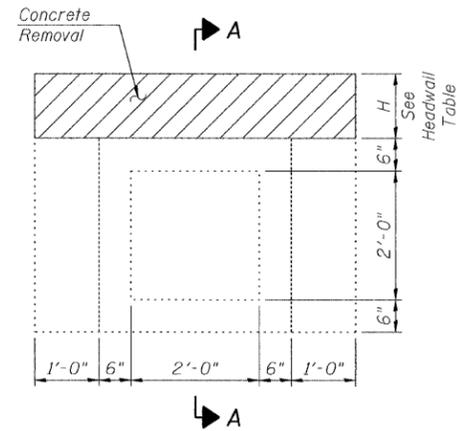
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	2009-092GRR	WILL	18	12
* VARIOUS		CONTRACT NO. 60145		
ILLINOIS FED. AID PROJECT				

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIMENSIONS AND QUANTITIES
HEADWALL

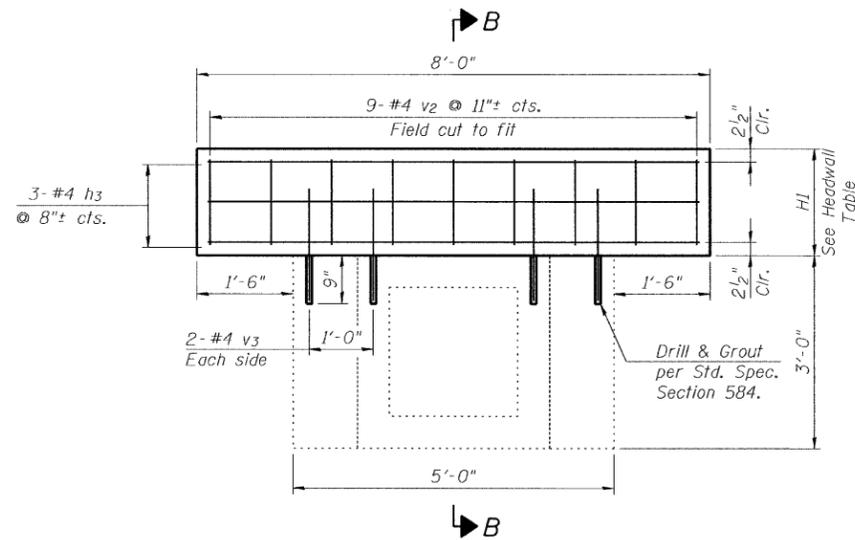
Location	Dimension 'H'	Dimension 'H1'	Concrete Removal Cu. Yd.	Concrete Structures Cu. Yd.	Reinf. Bars Pound
5L	1'-0"	1'-11"	0.2	0.4	29
5R	1'-0"	1'-9"	0.2	0.4	29
14L	0'-9 ³ / ₈ "	1'-3 ¹ / ₄ "	0.1	0.3	29
14R	1'-0"	1'-4 ¹ / ₄ "	0.2	0.3	29
15L	1'-1"	1'-8"	0.2	0.4	29
15R	1'-2"	1'-8"	0.2	0.4	29



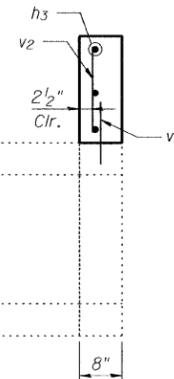
CONCRETE REMOVAL
ELEVATION



SECTION A-A



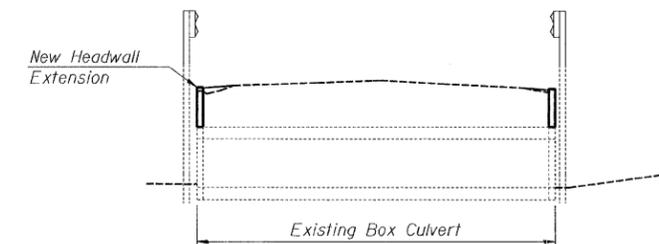
CONCRETE HEADWALL
ELEVATION



SECTION B-B

REINFORCEMENT BARS
FOR ONE HEADWALL

Bar	No.	Size	Length	Shape
v2	9	#4	1'-6"	—
v3	4	#4	1'-9"	—
h3	3	#4	7'-7"	—



TYPICAL CROSS SECTION

NOTES

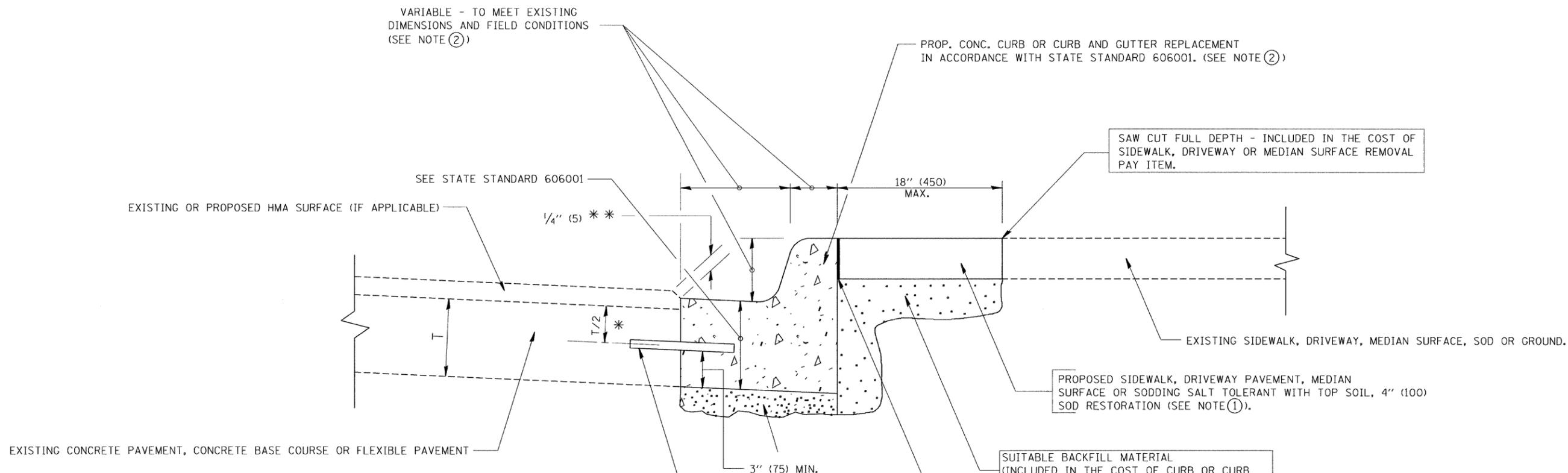
1. The Headwall shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of Section 503 of the Standard Specifications. Reinforcement Bars shall conform to Section 508.
2. The cost of removal and disposal of any existing timber headwalls and any excavation required to construct the headwall extensions shall be included in Concrete Structures.

GRAEF	11-6-2009
DESIGNED	E.E.J.
CHECKED	J.A.Z.
DRAWN	E.E.J.
CHECKED	J.A.Z.

CULVERT HEADWALL EXTENSION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	2009-092GRR	WILL	18	13
* VARIOUS			CONTRACT NO. 60145	
ILLINOIS FED. AID PROJECT				

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 11/30/2009



* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

* * IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE 3).

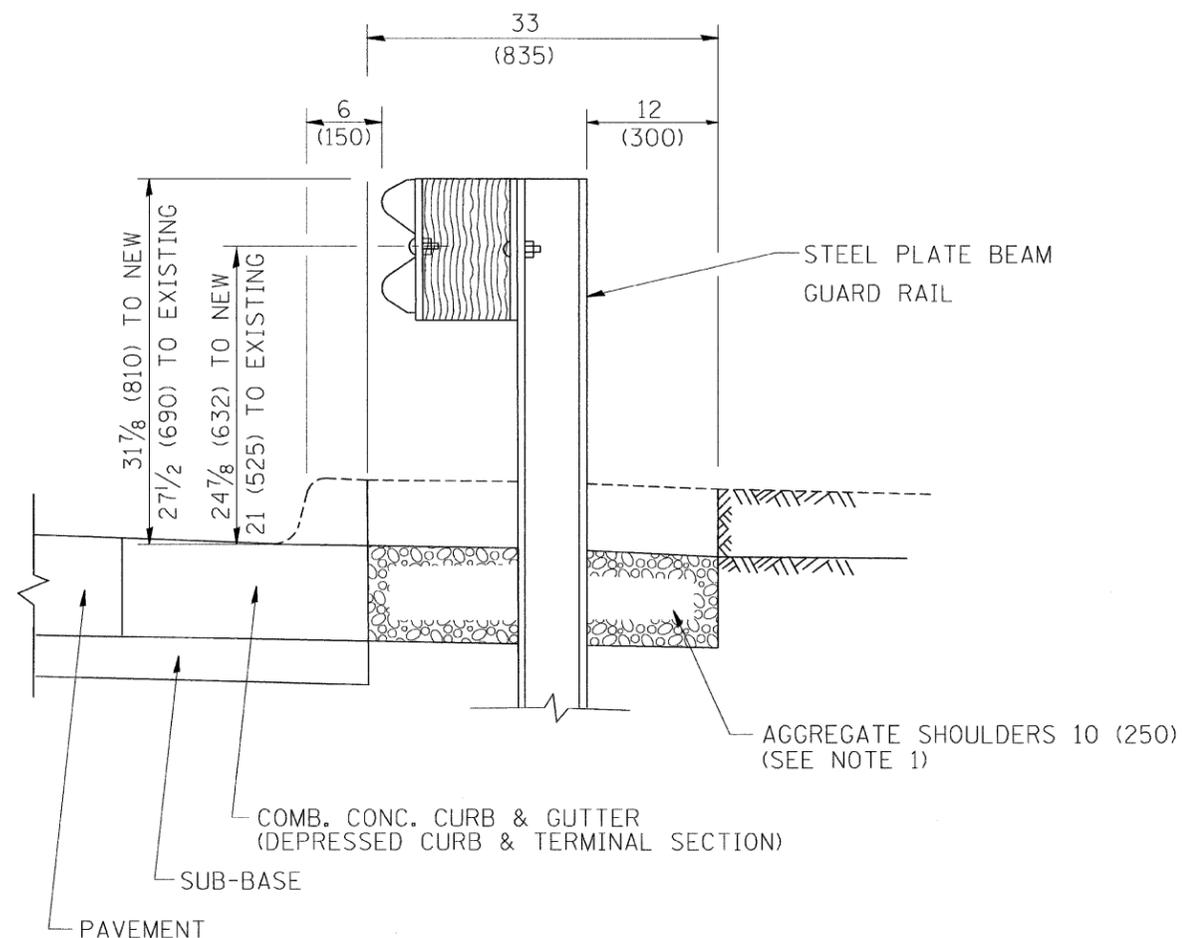
BASIS OF PAYMENT:

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

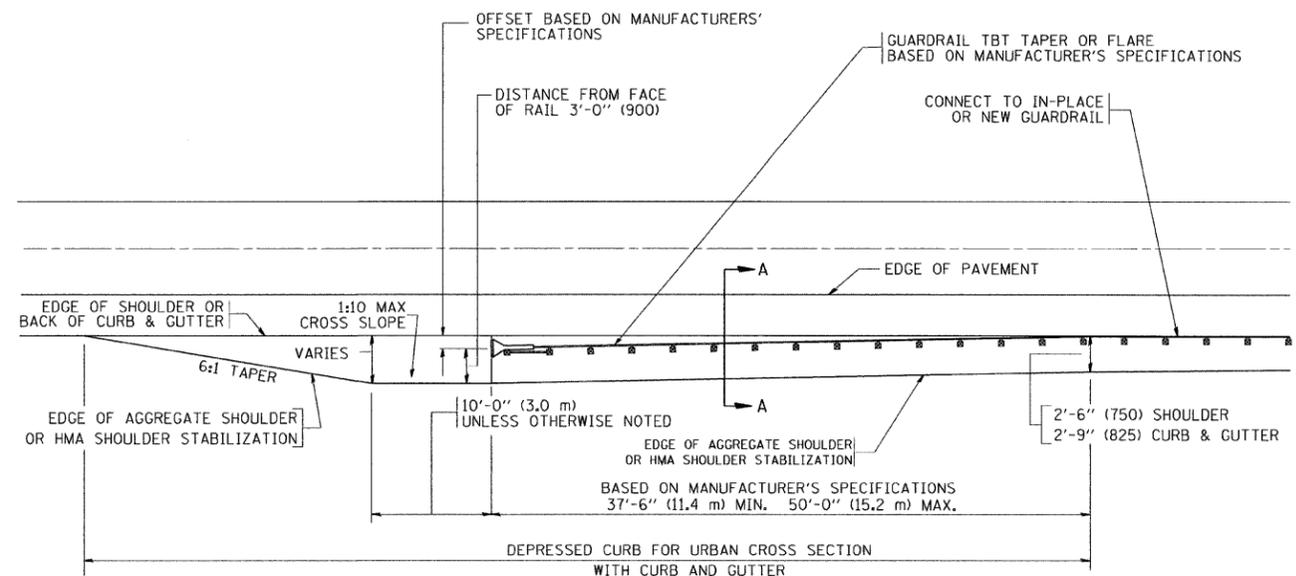
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c:\pw\work\p\dot\drivakosgn\0108315\bc24.dgn	DRAWN -	REVISOR - A. ABBAS 03-21-97	REVISED - M. GOMEZ 01-22-01			2009-092GBR	WILL.	18	14	
PLOT SCALE = 50,000 / IN.	CHECKED -	REVISOR - M. GOMEZ 01-22-01	REVISED - R. BORO 12-15-09			BD600-06 (BD-24)		CONTRACT NO. 60145		
PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		
						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SECTION A-A

- NOTES: 1. THE AGGREGATE SHOULDER, 10" OR HMA SHOULDER, 6" (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

DETAILS FOR STEEL PLATE BEAM
 GUARD RAIL ADJACENT TO CURB AND GUTTER
 [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



DEPRESSED CURB AND GUTTER AND
 SHOULDER TREATMENT AT TBT TY. 1 SPL.

BASIS OF PAYMENT: HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDERS 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL
 ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = drivakosgn	DESIGNED - M. DE YONG	REVISED - E. GOMEZ 08-28-00
c:\pwork\PWIDOT\DRIVAKOSGN\d0108315\34.dgn		DRAWN -	REVISED - R. BORO 01-01-07
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	PLOT DATE = 9/21/2009	DATE - 09-22-90	REVISED - R. BORO 09-14-2009

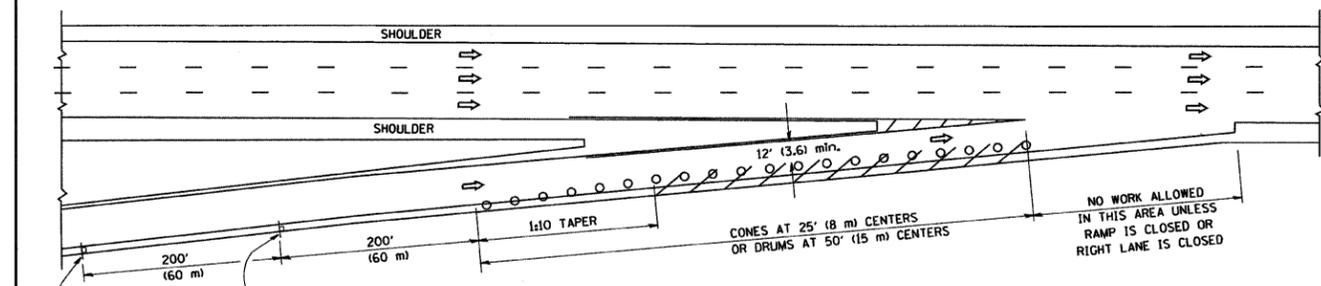
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DETAILS FOR DEPRESSED CURB & GUTTER AND
 SHOULDER TREATMENT AT TBT TY 1 SPL.

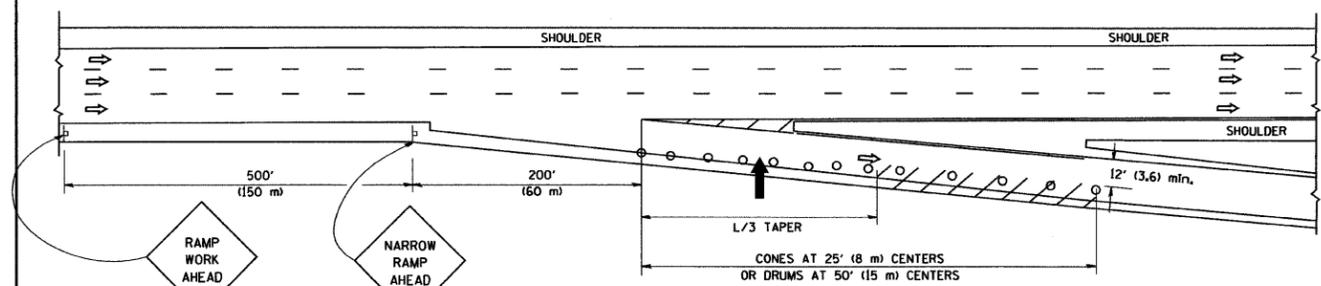
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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BD600-10 (BD 34)		CONTRACT NO. 60145		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

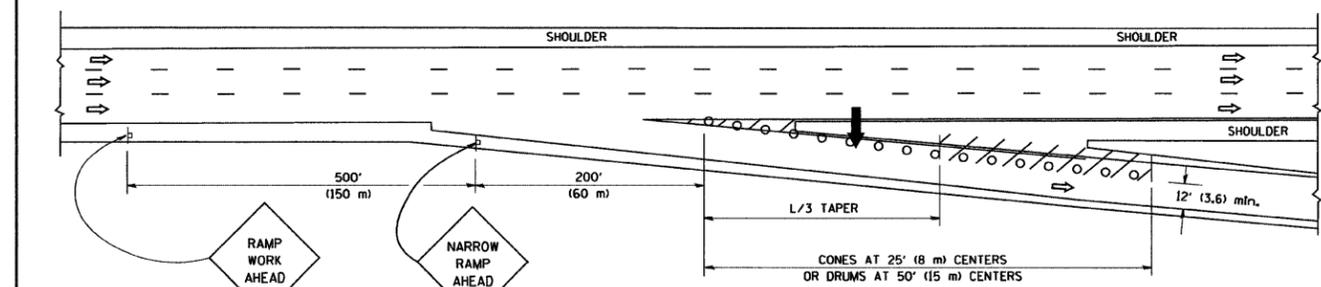
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

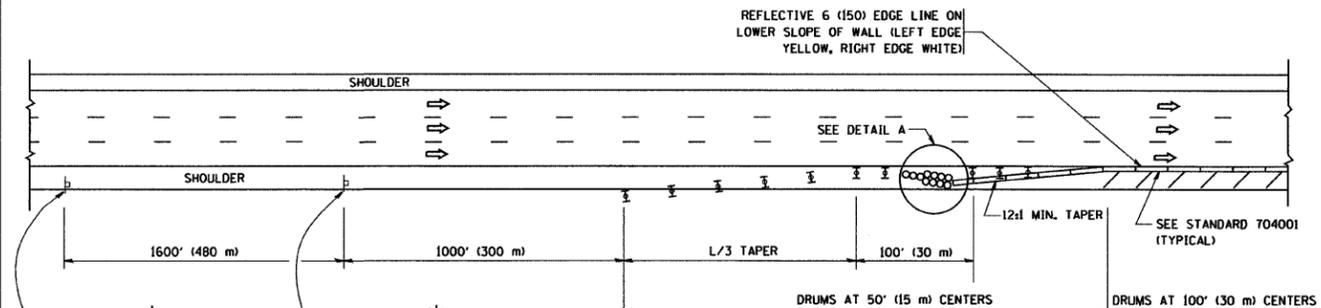
SYMBOLS

- ➔ ARROWBOARD
- ▨ WORK AREA
- ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- ⊥ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

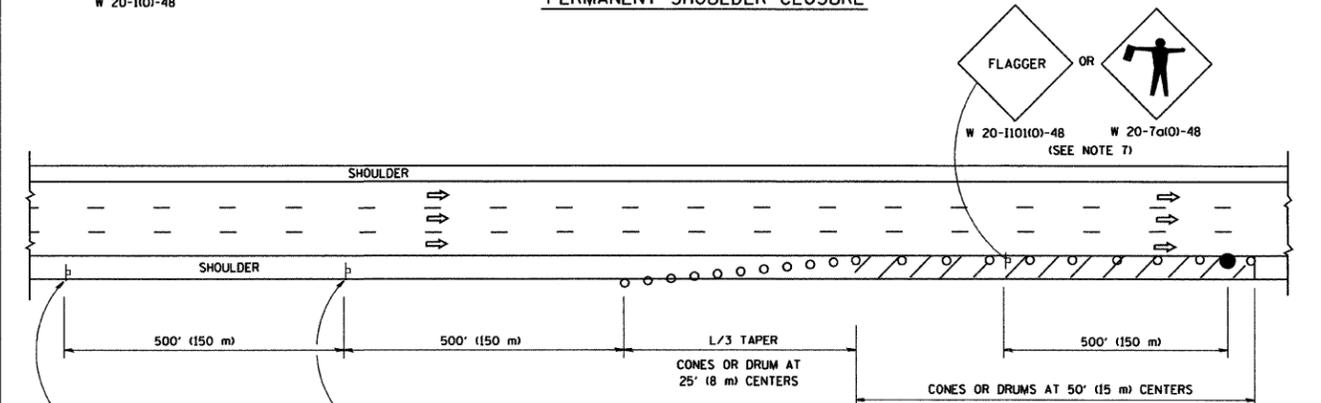
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:
SPEED LIMIT FORMULAS
45 mph (80 km/h) METRIC ENGLISH
OR GREATER: L=0.65(W/S) L=(W/S)
W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS

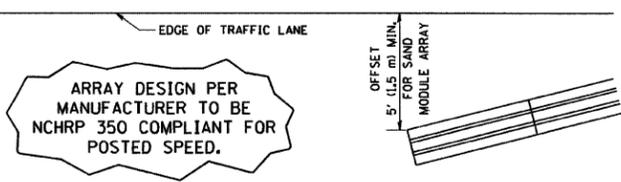


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE "TRAFFIC BARRIER TERMINAL, TYPE III, TEMPORARY" DEVICE TO MEET NCHRP350 FOR POSTED SPEED.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

FILE NAME = M:\diststd\22x34\to17.dgn

USER NAME = goglianobt

PLOT SCALE = 50.0000' / IN.

PLOT DATE = 1/4/2008

DESIGNED -

DRAWN - D.W.S.

CHECKED -

DATE - 11-96

REVISED - J.A.F. 12-02

REVISED - 04-03

REVISED - J.A.F. 12-06

REVISED - S.P.B. 01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

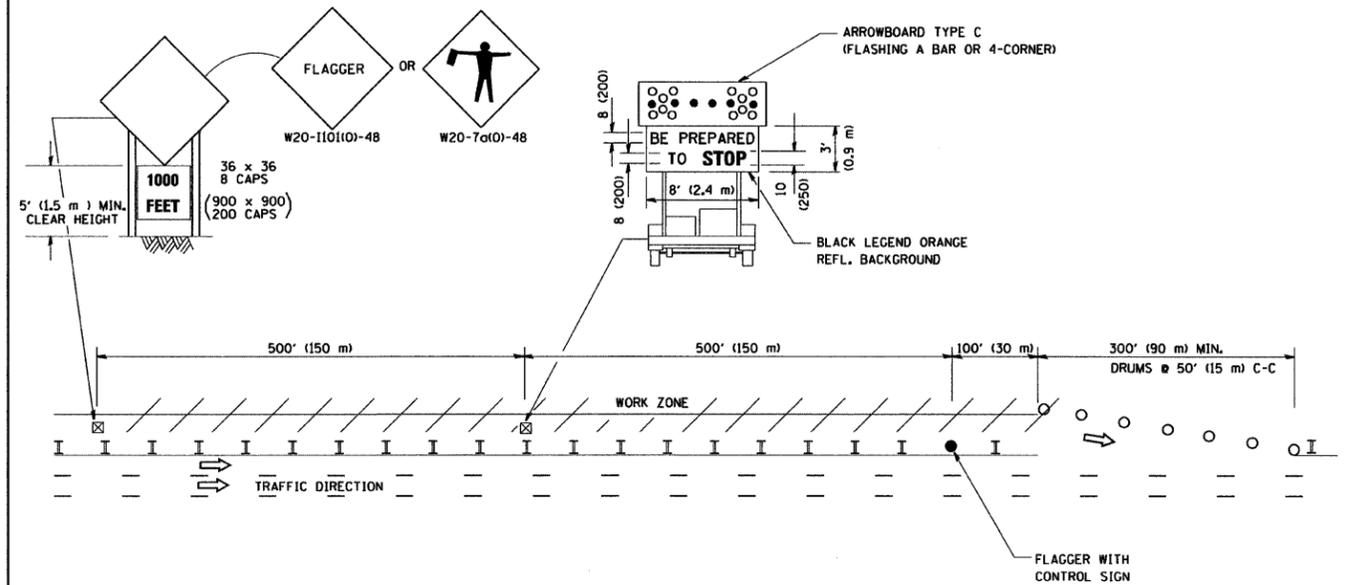
TRAFFIC CONTROL DETAILS FOR FREEWAY
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

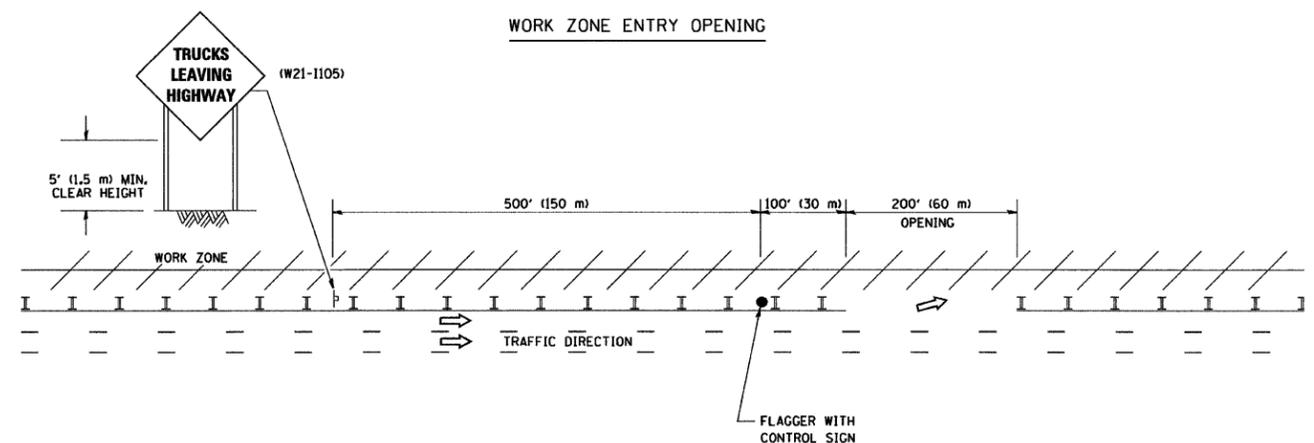
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-092GRR	WILL	18	16
TC-17			CONTRACT NO. 60145	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

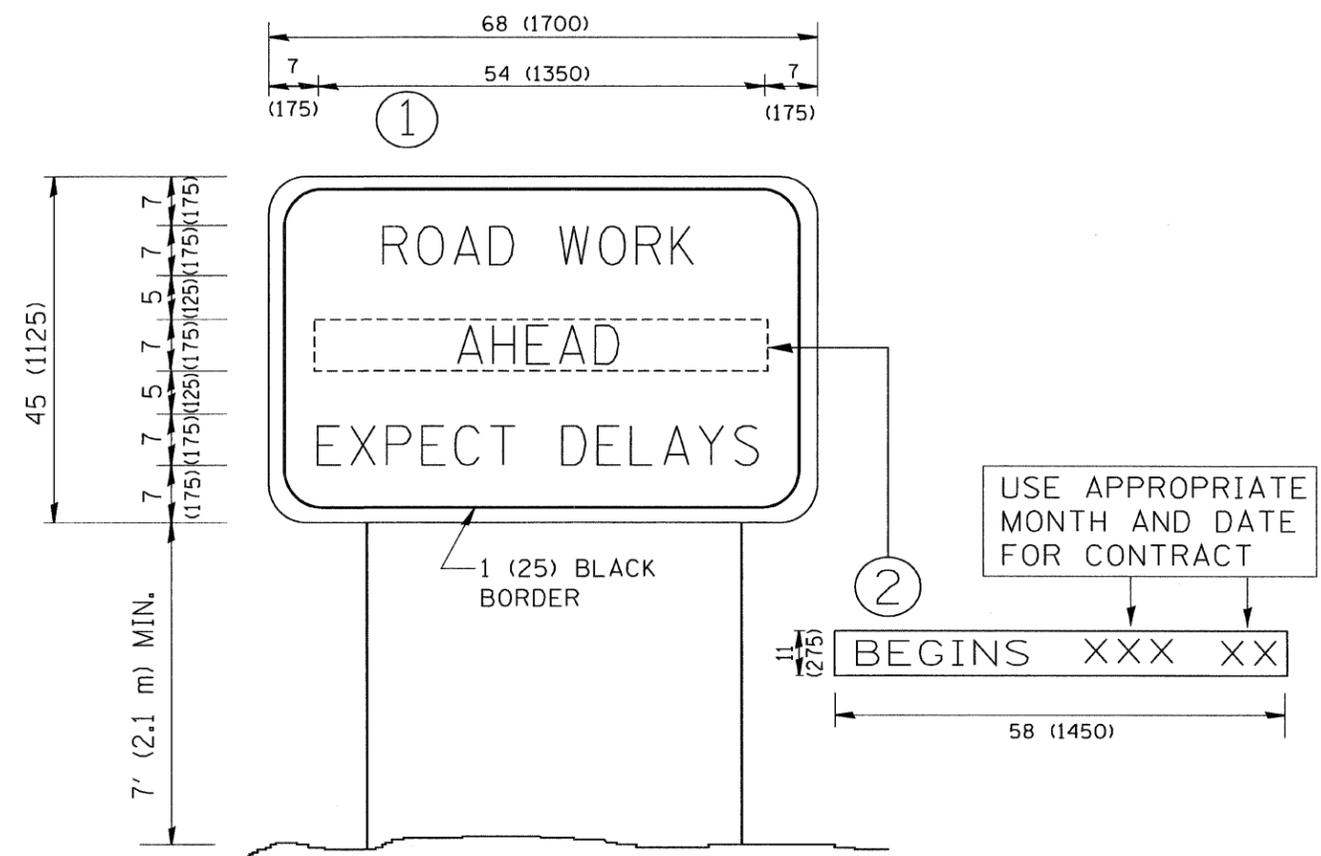
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		DRAWN -	REVISED - J.A.F. 04-03
	PLOT SCALE = 50.000 "/ IN.	CHECKED -	REVISED - J.A.F. 02-06
	PLOT DATE = 1/4/2008	DATE -	REVISED - S.P.B. 01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING FOR FLAGGING OPERATIONS
AT WORK ZONE OPENINGS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-092GRR	WILL	18	17
	TC-18	CONTRACT NO. 60I45		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = M:\diststd\22x34\to22.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50.000 "/ IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	2009-092GRR			WILL	18	18		
PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07	TC-22			CONTRACT NO. 60145				
						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
						SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	