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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED

HIGHWAY PLANS

ROUTE: VARIOUS LOCATIONS IN SOUTH COOK AND WILL COUNTIES

GUARDRAIL REPLACEMENTS

SECTION: 2016-004GRR PROJECT: ACHSIP-000V(065)

COOK COUNTY AND WILL COUNTIES C-91-270-16

THE PROJECT IS LOCATED IN THE CITIES OF HARVEY AND PALOS HILLS AND VILLAGES OF BOLINGBROOK, PLAINFIELD, BURR RIDGE, SUMMIT, TINLEY PARK, THORNTON AND ORLAND PARK.

FOR INDEX OF SHEETS, SEE SHEET NO. 2



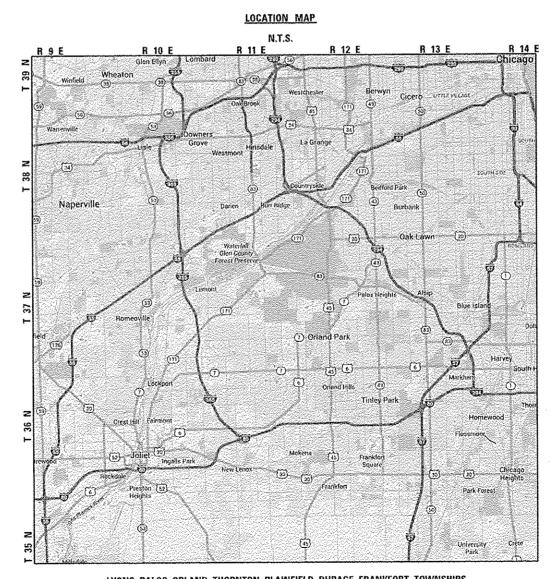
0 100' 200' 300' 1' = 100' 0 10' 20' 30' - 1' = 10' 0 50' 100' - 1'' = 50' 0 50' 100' - 1'' = 30' 0 50' 100' - 1'' = 30'

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.

DIGGER CHICAGO UTILITY ALERT NETWORK 1-312-744-7000

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

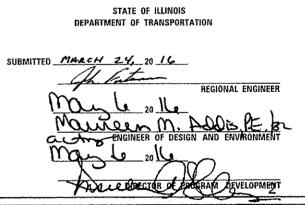
PROJECT ENGINEER: BENJAMIN HARTMAN (815) 385–1778 PROJECT MANAGER: DANIEL WILGREEN (847) 705–4240

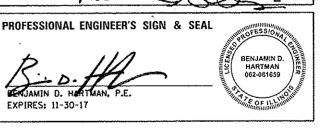


LYONS, PALOS, ORLAND, THORNTON, PLAINFIELD, DUPAGE, FRANKFORT TOWNSHIPS
COOK COUNTY, WILL COUNTY

D-91-270-16







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CONTRACT NO. 62C12

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LIST OF STATE STANDARDS

STANDARO NO.	DESCRIPTION
630001 - IO	STEEL PLATE BEAM CUARDRAIL
630301 - Olo	SHOULDER WIDENING FOR TYPE I (SPECIAL) GUARDRAIL TER
701006 - 05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-04	LANE CLOSURE. 2L. 2W. DAY ONLY, FOR SPEEDS >= 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS >= 45 MPH
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS >= 45 MPH
701421-07	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >= 45 MPH TO 55 MPH
701422-08	LANE CLOSURE, MULTILANE, FOR SPEEDS >= 45 MPH TO 55 MPH
701428 - Oi	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701901-05	TRAFFIC CONTROL DEVICES
720011-0]	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
725001	OBJECT AND TERMINAL MARKERS
782006	CUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
631011-09	TRAFFIC BARRIER TERMINAL. TYPE 2
631033-06	TRAFFIC BARRIER TERMINAL, TYPE 68
635001-02	DELINEATORS
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701326 - 04	LANE CLOSURE, 2L. 2W. PAVEMENT WIDENING FOR SPEEDS >= 45 MPH
701400 - OB	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-09	LANE CLOSURE, FREEWAY/EXPRESSWAY

GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 8-1-1 OR DIGGER AT 312-744-700 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- 2. REMOVAL OF DAMAGED MATERIALS WILL INCLUDE DISMANTLING, LOADING, HAULING AND DISPOSAL. THE WORK SITE WILL BE LEFT IN A SAFE AND ORDERLY CONDITION.
- 3. NO MATERIAL SHOULD BE LEFT ON OR NEAR THE ROADWAY DURING NON-WORKING HOURS.
- 4. ANY NECESSARY TRAFFIC CONTROL WILL BE PROVIDED BY THE CONTRACTOR.
- 5. REMOVED GUARDRAIL MUST BE REPLACED ON THE SAME DAY UNLESS AUTHORIZED BY THE RESIDENT ENGINEER. NO LOCATIONS WILL BE LEFT WITHOUT EITHER LIGHTED BARRICADES OR RESTORED GUARDRAIL AT ANY TIME.
- 6. THE CONTRACTOR SHALL ONLY PERFORM WORK ON ONE SIDE OF THE ROADWAY AT ANY TIME.
- 7. THE CORING REQUIRED FOR THE INSTALLATION OF GUARDRAIL POSTS WITHIN CONCRETE AND ASPHALT AREAS IS INCLUDED IN THE COST OF THE STEEL PLATE BEAM GUARDRAIL.
- 8. GUARDRAIL MARKERS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS.
- 9. THE REMOVAL OF EXISTING CONCRETE CURB TO PROVIDE A DEPRESSED CURB ALONG THE TERMINAL SECTION, PER DISTRICT ONE DETAIL (8D-34), SHALL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE COST FOR THE TERMINAL SECTION.
- 10. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE LOCAL AGENCIES LISTED ON THE COVER SHEET.
- 11. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE
- 12. THE REMOVAL OF GUARDRAIL TERMINAL SECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT FOR "GUARDRAIL REMOVAL".
- 13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 14. THE CONTRACTOR SHALL CONTACT THE IDDT DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT 847-705-4470 AND THE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR AT 847-705-4155 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 15. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 16. THE CONTRACTOR SHALL VERIFY THE EXISTING TYPE/HEIGHT OF EXISTING GUARDRAIL BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION SHALL MATCH THE HEIGHT OF THE EXISTING GUARDRAIL.

HOT-MIX ASPHALT MIXTURE	REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS © Ndes	OUALITY MANAGEMENT PROGRAM (OMP)
SHOULDERS		
HMA SHOULDER (HMA BINDER IL-19mm); 6"	4.0% & 50 GYR.	OC/OA
OMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC.	/QA)	

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE DUANTITIES IS 112 LBS/SQ YD/IN.

THE AC TYPE FOR POLYMERIZED HMA MIXTURES SHALL BE "SBS/SBR PG 76 -22". FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

DUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

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PLOT DATE * 4/1/2016	DATE	-	04/01/16	REVISED	•

URBAN 90% FED 90% FED 10% STATE 10% STATE TOTAL QUANTITIES ITEM DESCRIPTION UNIT 0021 0021 COOK WILL EARTH EXCAVATION 20200100 CU YD 226 183 43 20400800 FURNISHED EXCAVATION CU YD 24 0 24 21101615 TOPSOIL FURNISH AND PLACE, 4" SO YD 298 88 210 25200110 SODDING, SALT TOLERANT SO YD 298 210 88 25000400 NITROGEN FERTILIZER NUTRIENT POUND 4 3 25000500 PHOSPHORUS FERTILIZER NUTRIENT POUND 4 3 1 25000600 POTASSIUM FERTILIZER NUTRIENT 4 POUND 3 1 44004250 PAVED SHOULDER REMOVAL SQ YD 146 12 134 AGGREGATE SHOULDERS, TYPE B 48101200 TON 417 369 48 48203021 HOT-MIX ASPHALT SHOULDERS. 6" SQ YD 179 19 160 63000001 STEEL PLATE BEAM GUARDRAIL, TYPE A. 6 FOOT POSTS FOOT 1,525.0 1.162.5 362.5 63100045 TRAFFIC BARRIER TERMINAL, TYPE 2 EACH 1 1 0 TRAFFIC BARRIER TERMINAL, TYPE 68 63100089 EACH 1 0 63100167 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANCENT EACH 13 18 5 63200310 GUARDRAIL REMOVAL FOOT 1,034 759 275 66900200 NON-SPECIAL WASTE DISPOSAL CU YD 15 4 11 66900450 SPECIAL WASTE PLANS AND REPORTS LSUM 1 0.3 0.7 66900530 SOIL DISPOSAL ANALYSIS EACH 1

* SPECIALTY ITEMS

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES	RTE. SECTION		COUNTY	TOTAL	SHEET NO.
	YAR.	2016-004GRR	CODK/WILL	20	3
			CONTRACT		62C12
SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RC	DAD DIST. NO. ILLINOIS FED. A	ID PROJECT		

			-,,-,,		
				90% FED	90% FED
PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL OUANTITIES	10% STATE	10% STATE 0021
			OUANTITIES		
				ÇQOK	WILL
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	3	3

67100100	MOBILIZATION	LSUM	1	0.7	0.3
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	LSUM	1	1	0
					
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	1	0
70100100	704574 00470				
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	LSUM	1	1	0
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	LSUM	1	1	0
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	1,	1
78200410	GUARDRAIL MARKERS, TYPE A	EACH	22	17	5
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	18	13	5
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	LSUM	1	0.5	0,5
20030850	TEMPORARY INFORMATION SIGNING	SOFT	155	155	0

URBAN

	20200100	20400800	21101615	25200110	25000400	25000500	25000600	44004250	48101200	48203021	63000001	63100045	63100089	63100167	63200310	66900200	66900530
	EARTH EXCAVATION	FURNISHED EXCAVATION	TOPSOIL F & P	SODDING SALT TOLERANT	NITROGEN FERT NUTR	PHOSPHORUS FERT NUTR	POTASSIUM FERT NUTR	PAVED SHLD REMOVAL	AGGREGATE SHLDS B	HMA SHOULDERS 6	SPBGR TY A 6FT POSTS	TRAF BAR TERM T2	TRAF BAR TERM T6B	TR BAR TRM T1 SPL TAN	GUARDRAIL REMOV	NON SPL WASTE DISPOSL	SOIL DISPOSAL ANALY
	CU YD	CU YD	SQ YD	SQ YD	POUND	POUND	POUND	SQ YD	TON	SO YD	FOOT	EACH	EACH	EACH	FOOT	CU YD	EACH
LOCATION 1	7	0	0	0	0	0	0	0	13	0	25.0	0	0	1	75.0	0	0
LOCATION 2	5	0	0	0	0	0	0	30	0	35	0.0	0	0	1	50.0	3	0.3
LOCATION 3	10	0	88	88	1.1	1.1	1.1	82	0	95	225.0	0	0	1	50.0	5	0.3
LOCATION 4	4	0	0	0	0	0	0	22	0	30	0.0	0	0	1	50.0	3	0.3
LOCATION 5	17	0	0	0	0	0	0	0	35	0	112.5	0	0	1	50.0	0	0
LOCATION 6	6	0	0	0	0	0	0	0	11	0	0.0	0	0	1	50.0	0	0
LOCATION 7	7	0	0	0	0	0	0	0	14	0	0.0	0	0	1	50.0	0	0
LOCATION 8	11	0	0	0	0	0	0	0	23	0	150.0	0	0	1	37 . 5	0	0
LOCATION 9	0	0	0	0	0	0	0	0	0	0	12.5	1	0	0	12.5	0	0
LOCATION 10	22	6	100	100	1.2	1.2	1.2	0	44	0	262.5	0	0	2	101.0	0	0
LOCATION 11	61	0	0	0	0	0	0	0	124	0	125.0	0	0	2	150.0	0	0
LOCATION 12	21	18	105	105	1.3	1.3	1.3	0	42	0	275.0	0	0	2	82.0	0	0
LOCATION 13	14	0	0	0	0	0	0	0	28	0	125.0	0	1	1	62.5	0	0
LOCATION 14	0	0	5	5	0.1	0.1	0.1	12	0	19	0.0	0	0	1	87.5	4	1
LOCATION 15	41	0	0	0	0	0	0	0	83	0	212.5	0	0	2	126.0	0	0

	67000400	70106800	78200410	78201000	Z0030850
	67000400	70106800	78200410	78201000	20030830
	ENGR FIELD OFFICE A	CHANGEABLE	GUARDRAIL MKR	TERMINAL MARKER - DA	TEMP INFO
	OFFICE A	MESSAGE SN	I TIPE A	MARKER - DA	SIGNING
	CAL MO	CAL MO	EACH	EACH	SQ FT
LOCATION 1	0.6	0.5	0	1	0.0
LOCATION 2	0.6	0.5	0	1	0.0
LOCATION 3	0.6	0.0	3	1	0.0
LOCATION 4	0.6	0.0	0	1	0.0
LOCATION 5	0.6	0.0	2	1	0.0
LOCATION 6	0.3	0.5	0	1	0.0
LOCATION 7	0.3	0.0	0	1	0.0
LOCATION 8	0.3	0.0	2	1	0.0
LOCATION 9	0.3	0.5	0	0	0.0
LOCATION 10	0.3	0.0	4	2	25.7
LOCATION 11	0.3	0.0	2	2	25.7
LOCATION 12	0.3	0.0	4	2	25.7
LOCATION 13	0.3	0.0	2	1	25.7
LOCATION 14	0.3	0.0	0	1	25.7
LOCATION 15	0.3	0.0	3	2	25.7

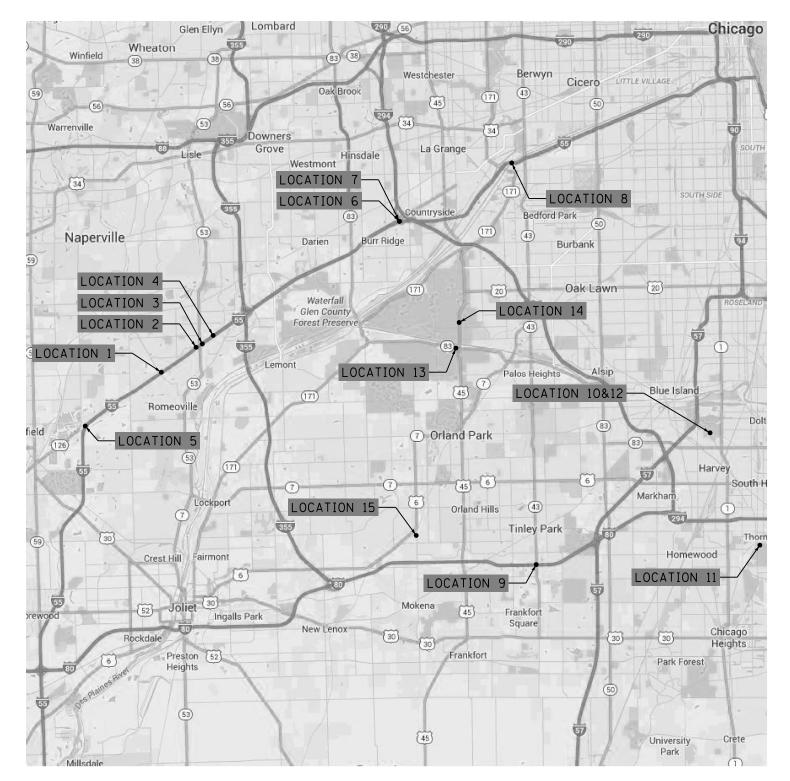
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	SCHEDULE OF QU	ANTITIES		F.A.I. RTE.	SEC	TION	COUNTY	TOTAL SHEETS	SHEET NO.
				VAR.	2016-0	004GRR	COOK/WILL	20	4
							CONTRACT	NO.	62C12
SCALE: N.T.S.	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. RC	DAD DIST. NO.	ILLINOIS FED. AI	D PROJECT		



LOCATION	COUNTY	ROUTE	APPROXIMATE LOCATION
1	WILL	I-55	N/B, RHS, JUST N/O VETERANS PARKWAY
2	WILL	I-55	N/B, RHS, START OF EXIT RAMP TO IL-53
3	WILL	I-55	N/B, RHS, JUST S/O IL-53
4	WILL	I-55	N/B, RHS, 0.7 MILE N/O IL-53
5	WILL	I-55	N/B, RHS, ON ENTRANCE RAMP FROM IL-126
6	соок	I-55	N/B, LHS, EXIT RAMP TO JOLIET RD
7	соок	I-55	N/B, RHS, EXIT RAMP TO JOLIET RD
8	соок	I - 55	N/B, LHS, ENTRANCE RAMP FROM S/B IL-171 (LONG ARM)
9	соок	I-80	E/B, LHS, AT IL-43
10	соок	THORNTON RD	S/B, RHS, 0.5 MILE N/O IL-83
11	соок	MARGARET ST	W/B, RHS, 0.3 MILE W/O IL-394
12	соок	THORNTON RD	N/B, RHS, 0.5 MILE N/O IL-83
13	соок	IL-83	S/B, RHS, JUST W/O US-45
14	соок	US-45	N/B, RHS, 0.2 MILE N/O 107TH ST
15	соок	WOLF RD	N/B, RHS, 0.2 MILE S/O US-6

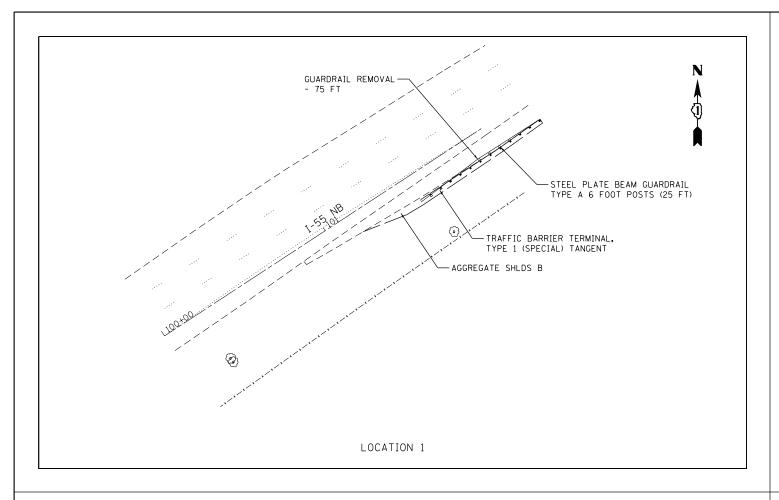
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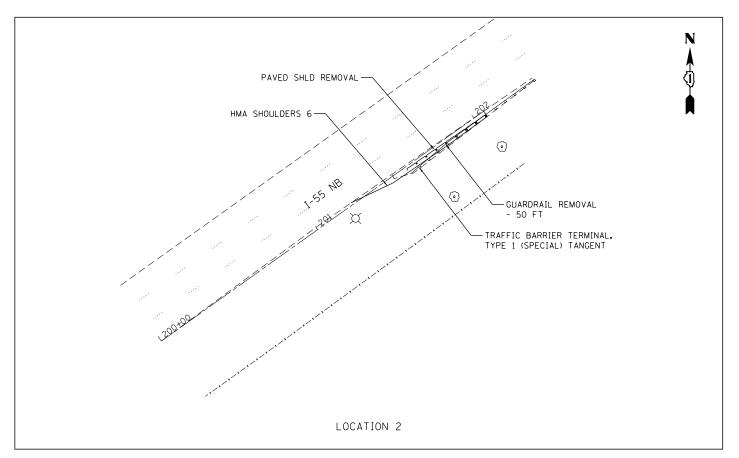
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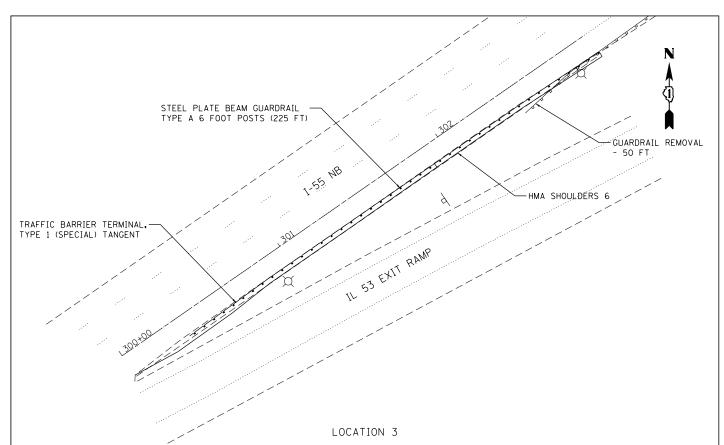
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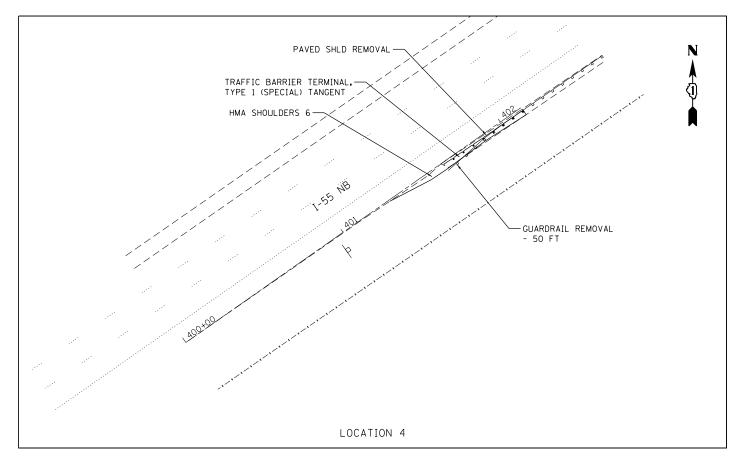
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DEPARTMENT	OF	TRANSPORTATION		

GUARDRAIL IMPROVEMENTS					SEC.	TION	COUNTY	TOTAL SHEETS	SHEET NO.
	VAR.	2016-0	004GRR	COOK/WILL	20	5			
LOCATION MAP					•		CONTRACT	NO.	62C12
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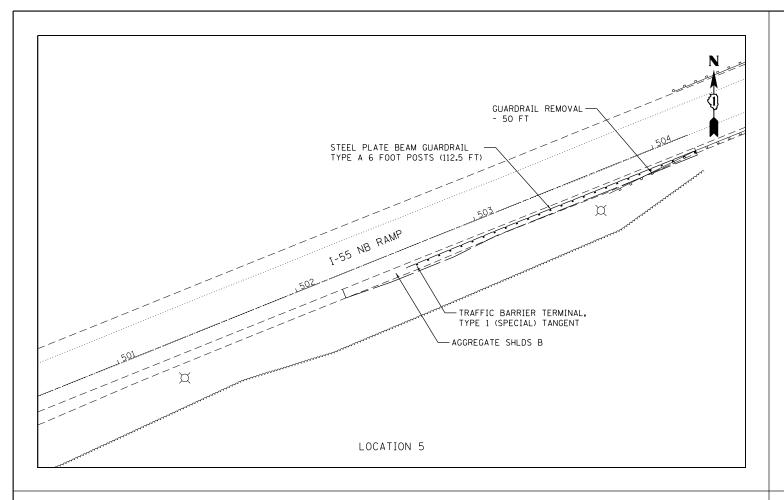


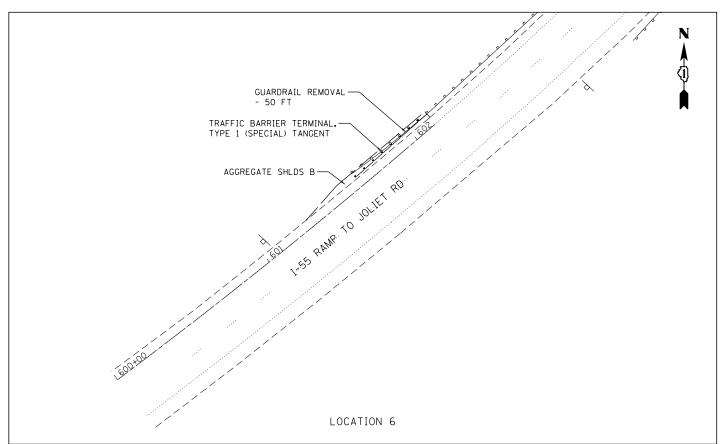
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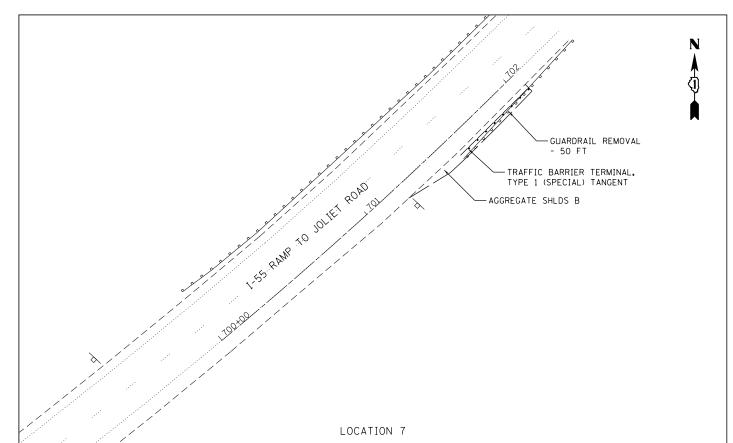
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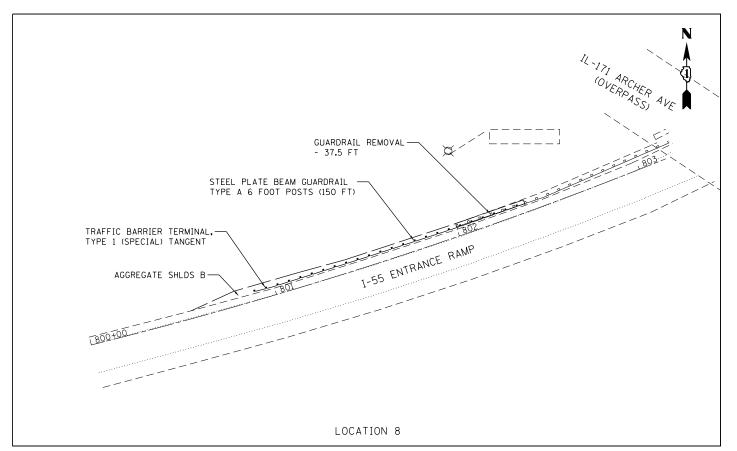
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	GUARDRAIL IMPRO	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	ROADWAY P	VAR.	2016-004GRR	COOK/WILL	20	6		
	IIOADWAT T			CONTRACT	NO.	62C12		
SCALE: 1"=25"	SHEET NO. 1 OF 4 SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. ILLINOIS FED. AI	D PROJECT		









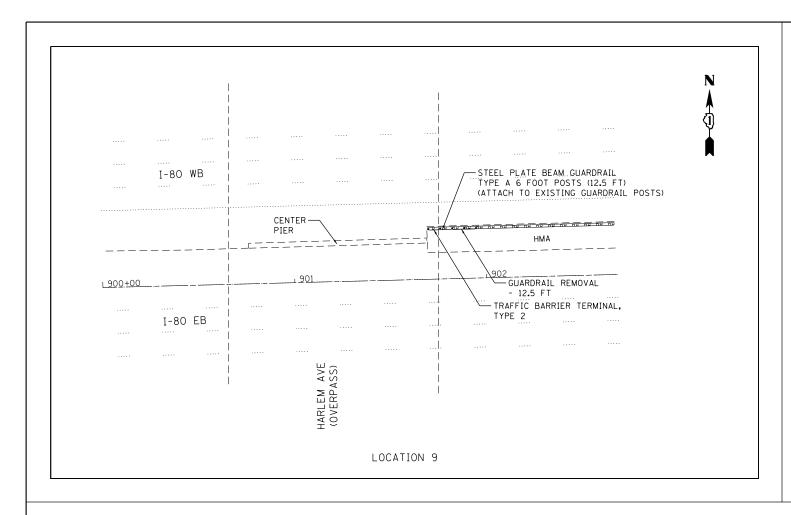


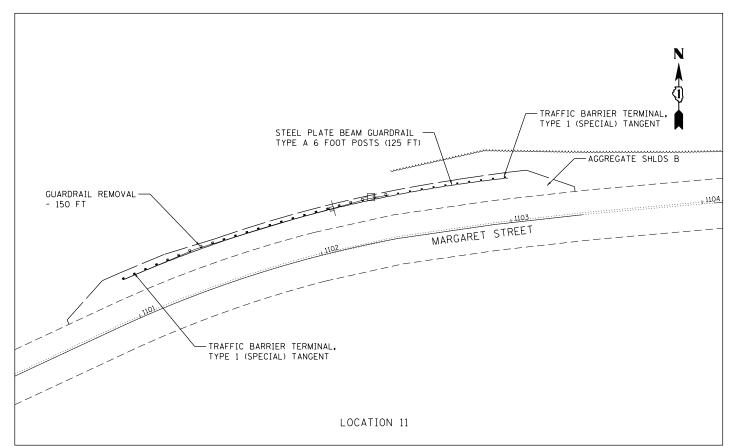
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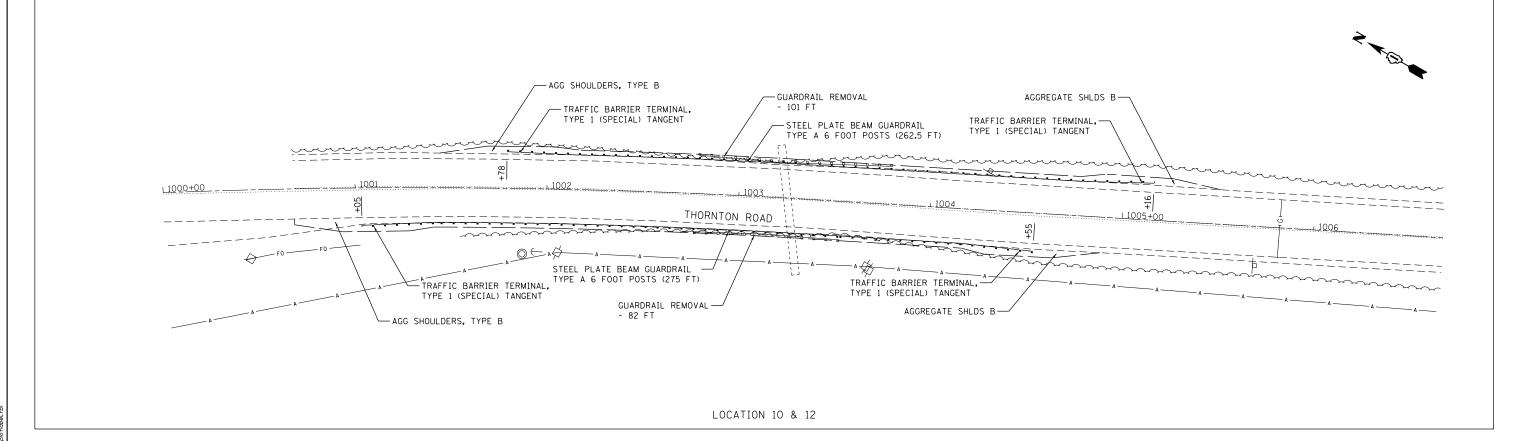
| Illinois Professional Design Firm |
| HRGreen

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	GUARDRAIL IMPROVEMENTS ROADWAY PLANS					SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						2016-004GRR	COOK/WILL	20	7
							CONTRACT	NO.	62C12
	SCALE: 1"=25"	SHEET NO. 2 OF 4 SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO. ILLINOIS FED. A	ID PROJECT		







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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL IMPROVEMENTS
ROADWAY PLANS

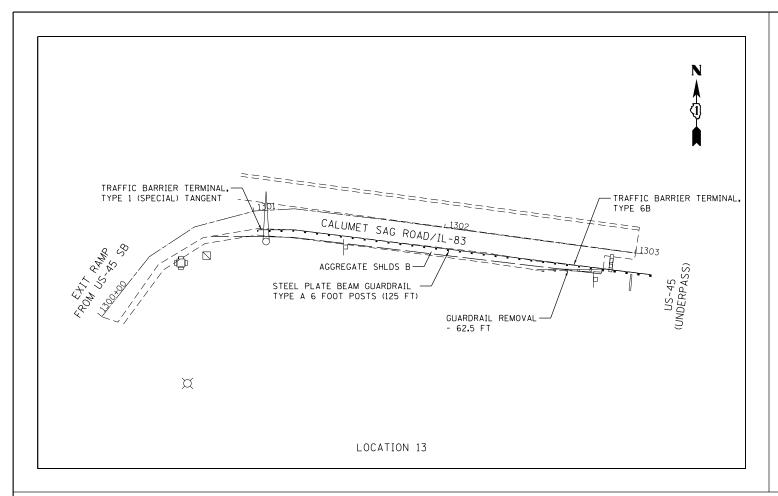
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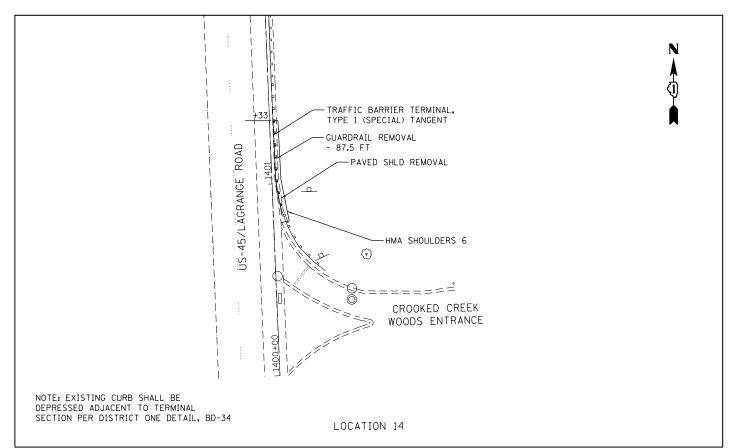
SHEET NO. 3 OF 4 SHEETS STA.

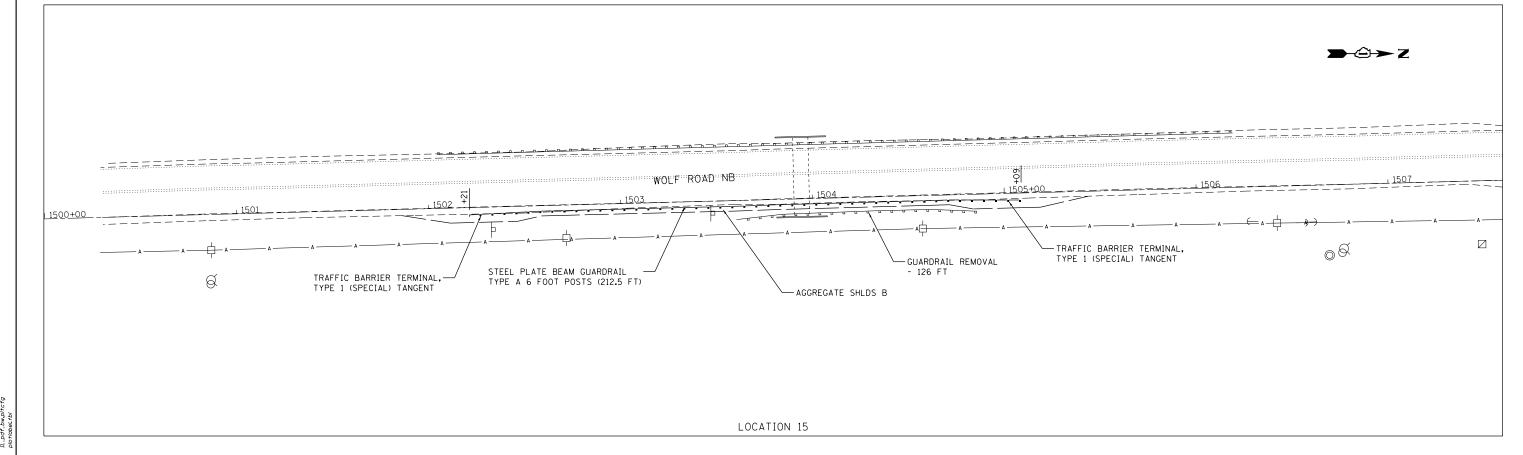
FA.I. SECTION COUNTY SHEETS NO. 2016-004GRR COOK/WILL 20 8

CONTRACT NO. 62C12

FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

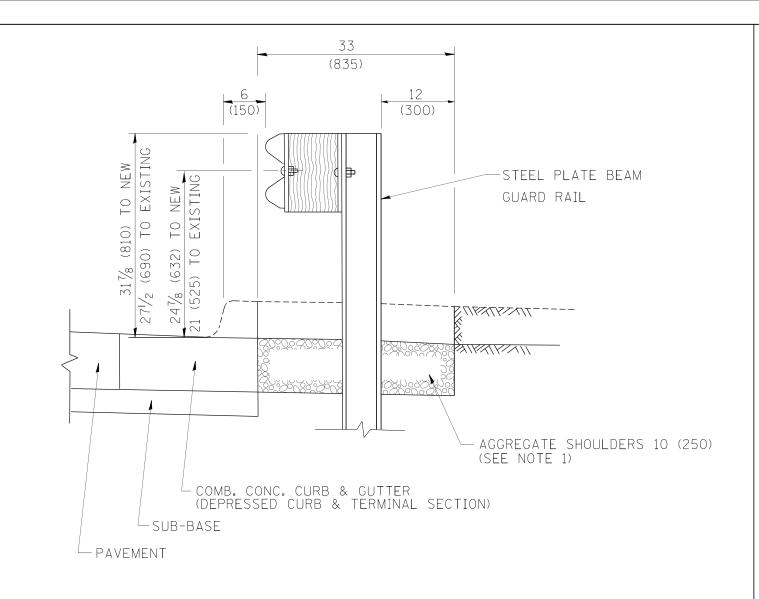






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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



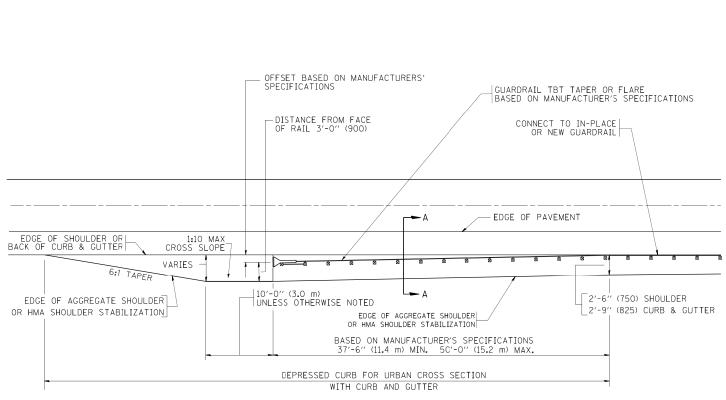
SECTION A-A

- 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.

USER NAME = drivakosgn DESIGNED M. DE YONG REVISED E. GOMEZ 08-28-00 DRAWN REVISED R. BORO 01-01-07 CHECKED REVISED R. BORO 12-08-2008 1 OT DATE = 9/21/2009 DATE 09-22-90 R. BORO 09-14-2009 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

SHEET NO. 1 OF 1 SHEETS STA. TO STA.

SCALE: NONE

FILE NAME:
PLOT DRIVER:
PEN TABLE:
Ad\: : : |

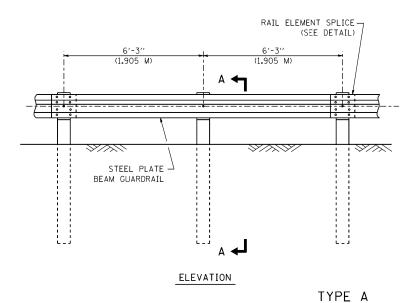
DESIGNED -REVISED - 10-31-06 FILE NAME = USER NAME = gaglianobt W:\diststd\22×34\bm21.dqr DRAWN REVISED PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED PLOT DATE = 1/4/2008 DATE REVISED

2 - 2 UNIT EXPANSION ANCHORS FOR %" (M16) BOLTS WITH STANDARD WASHERS. (STAGGERED)

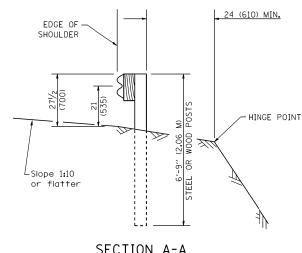
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL SHEET NO. 1 OF 4 SHEETS STA. SCALE: NONE

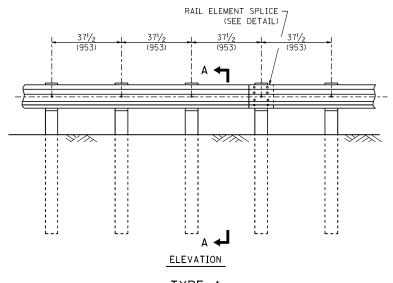
SECTION COUNTY 20 11 VAR. 2016-004GRR BM-21 CONTRACT NO. 62C12 TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT



6'-3" (1.905 M) TYPICAL POST SPACING



SECTION A-A



TYPE A

(1.905 M)

BEAM GUARDRAIL

TRAFFIC _

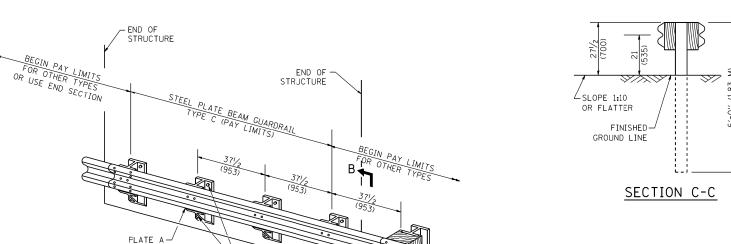
PLAN TYPE D DOUBLE STEEL PLATE BEAM GUARDRAIL 6'-3" (1.905 M) TYPICAL POST SPACING

371/2 (953) CLOSED POST SPACING

RAIL ELEMENT SPLICE — (SEE DETAIL)

-BLOCK-OUTS

C **←**

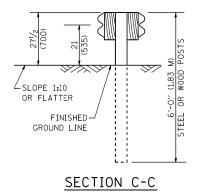


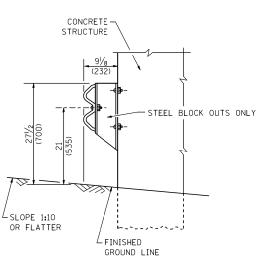
TYPE C $37\frac{1}{2}$ (953) BLOCK-OUT SPACING

ATTACHMENTS.

AFTER THIS POST HAS BEEN LOCATED, DRILL HOLES IN

CONCRETE FOR BLOCK-OUT





SECTION B-B

GENERAL NOTES

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

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

THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

FILE NAME = USER NAME = gaglianobt DESIGNED -REVISED - 10-31-06 W:\diststd\22x34\bm21.dgn DRAWN REVISED PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED PLOT DATE = 1/4/2008 DATE REVISED

(152)

W6×9 (W150×13.5) OR W6×8.5 (W150×12.75)

STEEL POST

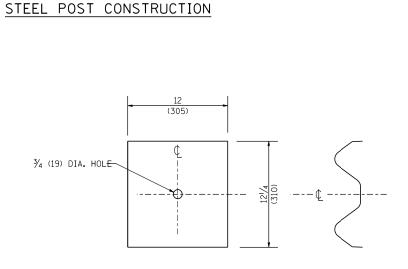
POST BOLT WITH-STD. HEX NUT

> STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL SCALE: NONE SHEET NO. 2 OF 4 SHEETS STA. TO STA.

SECTION 2016-004GRR VAR. BM-21 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

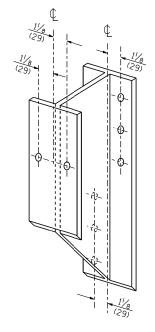
TOTAL SHEET NO. 20 12 COUNTY CONTRACT NO. 62C12



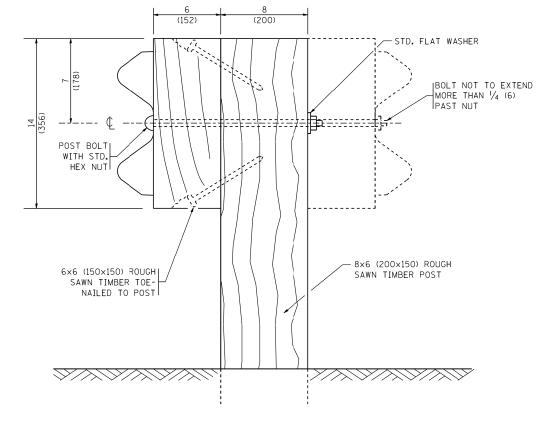
NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

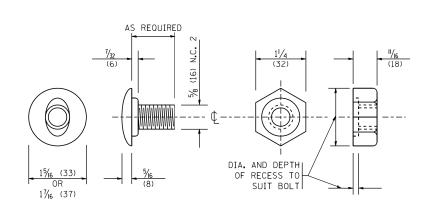




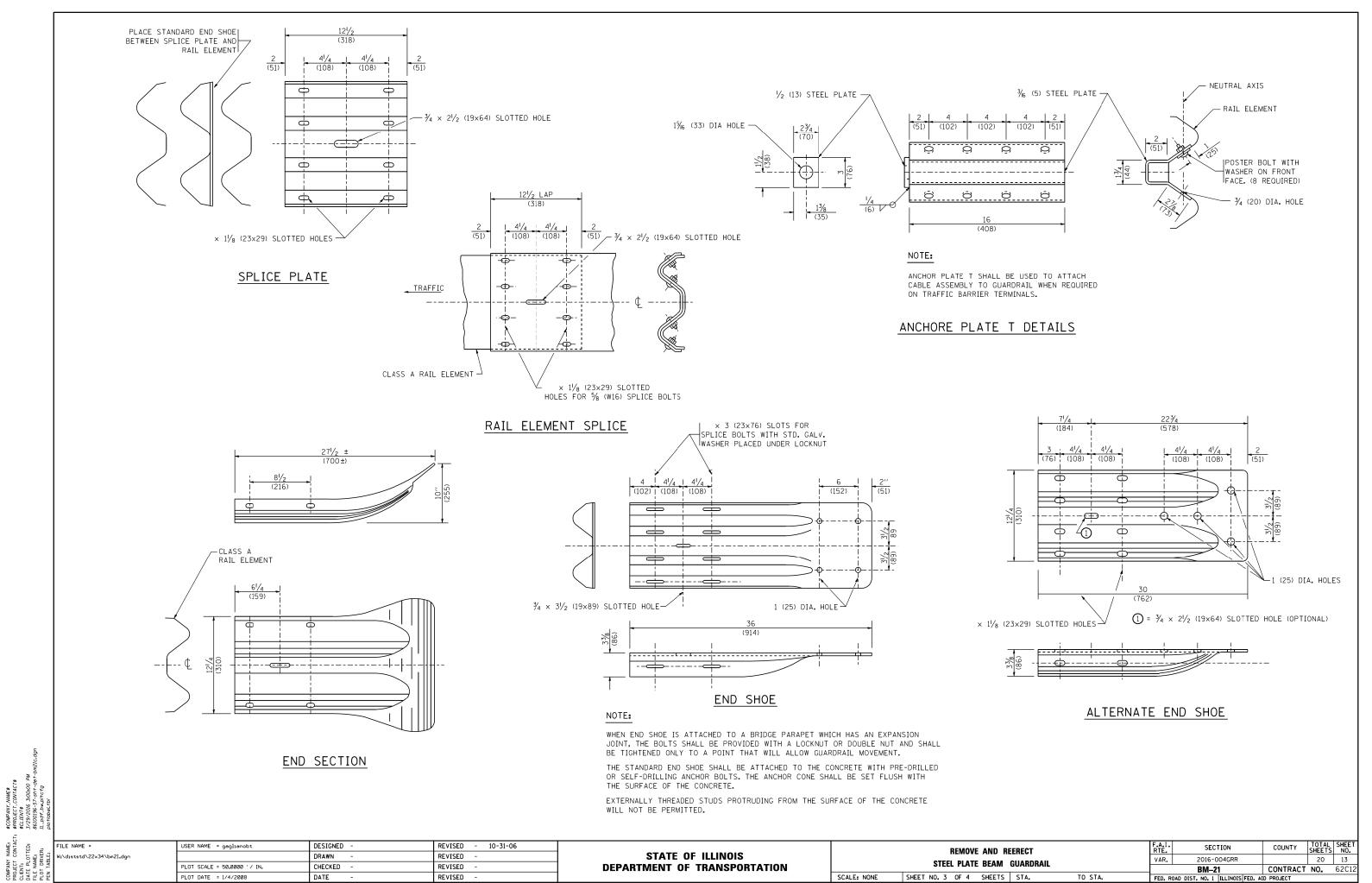
STEEL BLOCK-OUT DETAIL



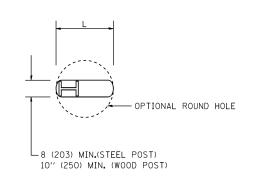
WOOD POST CONSTRUCTION



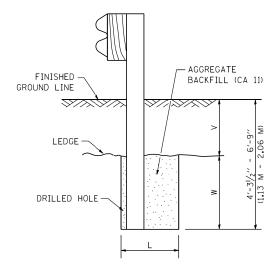
POST OR SPLICE BOLT & NUT



COOK/WILL 2016-004GRR 86100196-57-sht-det-bm21c,dgn



PLAN

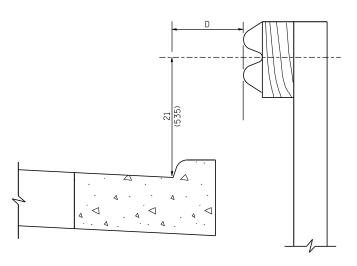


NOTE:

LEDGE LINE IS TOP OF ROCK LEDGE OR HARD SLAG FILL.

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED



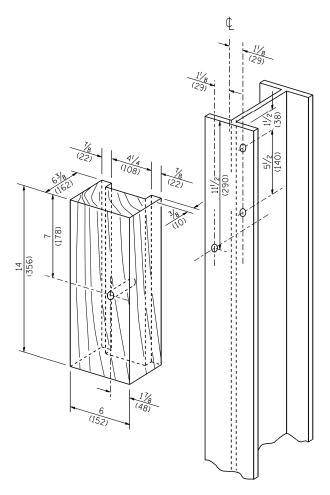
NOTE:

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

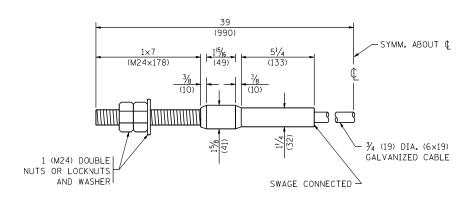
GUARDRAIL PLACED BEHIND CURB

(D = O DESIRABLE TO 12 (300) MAXIMUM)

V	w	L			
V	w	STEEL POST	WOOD POST		
0 - 18	24	21	23		
(0 - 460)	(610)	(530)	(580)		
>18 - 41.5	12	8	10		
(> 460 - 825)	(305)	(203)	(250)		
>41.5 - 53.5	12 - 0	8	10		
(> 825 - 1.13 M)	(350 - 0)	(203)	(250)		



WOOD BLOCK-OUT AND STEEL POST DETAILS

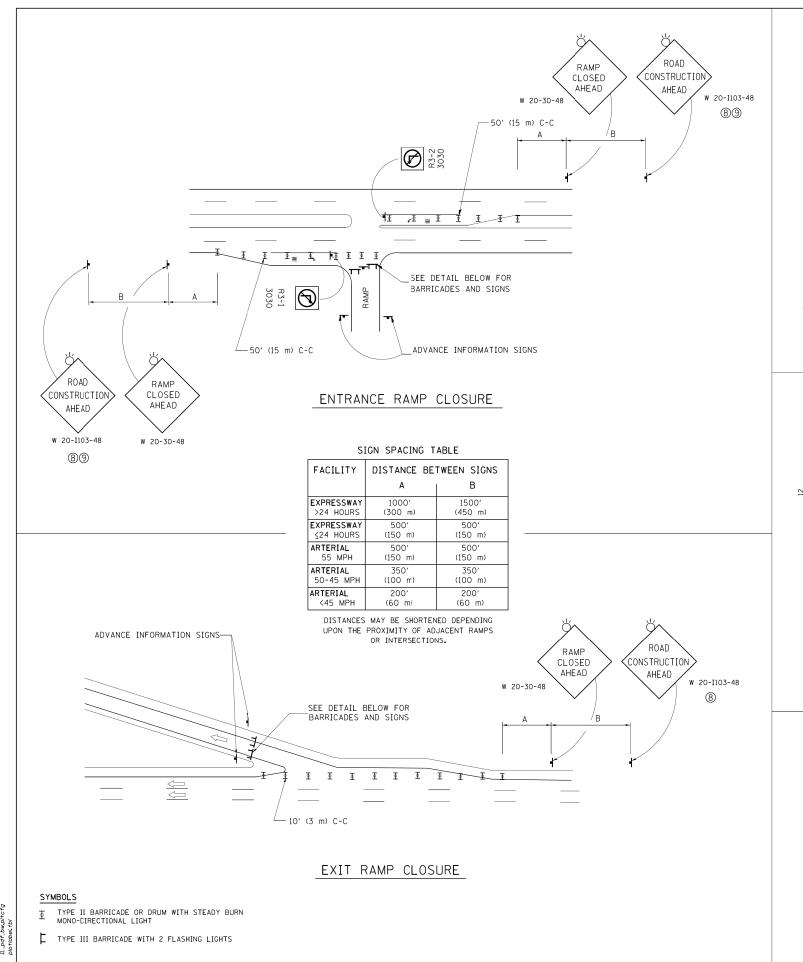


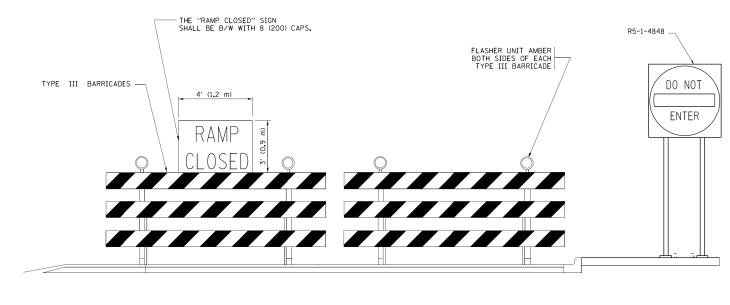
CABLE ASSEMBLY

(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)
TIGHTEN TO TAUT TENSION

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - 10-31-06
W:\diststd\22×34\bm21.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





DETAIL FOR REQUIRED BARRICADES & SIGNS

RAMP CLOSURE ADVANCE INFORMATION SIGN

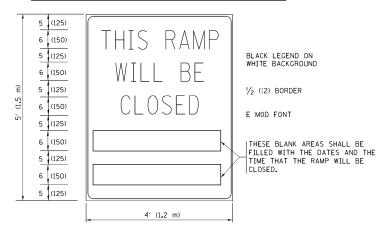
10' (3 m)

BLACK LEGEND ON ORANGE

RAMP CLOSURE ADVANCE WARNING SIGN

BACKGROUND MOUNTED DIAGONALLY E MOD FONT 1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

GENERAL NOTES:

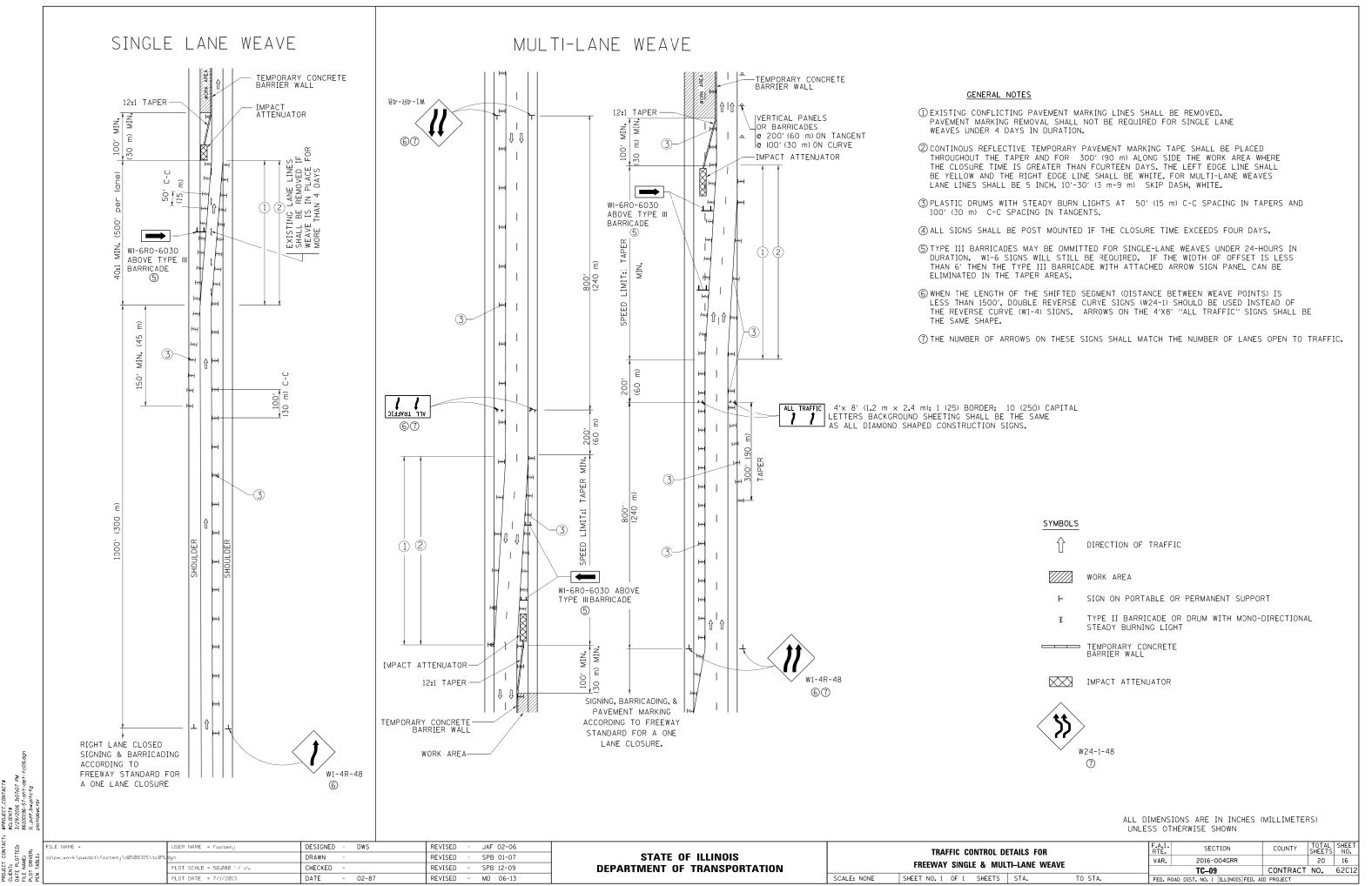
- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE 1 A MINIMUM OF 28 (700) HIGH.
- (2) STEADY BURN LICHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- 3 A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
- 4 ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- 5 THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

- 6 AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- (7) THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
- (8) ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

ا ي	FILE NAME =	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06		ENTRANCE AND EXIT RAMP	F.A.I.	SECTION	COUNTY	TOTAL	SHEET
. J. S. P. P. J. P.	c:\pw_work\pwidot\footemj\d0108315\tc08.	dgn	DRAWN -	REVISED - SPB 01-07	STATE OF ILLINOIS		VAR.	2016-004GRR		20	15
TAT		PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED - SPB 12-09	DEPARTMENT OF TRANSPORTATION	CLOSURE DETAILS			CONTRACT	NO.	62C12
125		PLOT DATE = 7/8/2013	DATE - 02-83	REVISED - MD 06-13		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST		PROJECT		

COOK/WILL 2016-004GRR 86100196-57-sht-det-tc08.dox



COOK/WILL 2016-004GRR 86100196-57-sht-det-tc09.dgn

ROAD CONSTRUCTION AHEAD ROAD TYPE III BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH. AHEAD TYPE I OR TYPE II BARRICADES WITH ONE FLASHING AMBER LIGHT ON EACH, OR 15 (380) 200'± (60 m±)-TYPE III BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH. DRIVEWAY WORK AREA J 200'± (60 m±) 09) COLLECTOR LIMIT> 40 MPH ST 40 OCAL W20-1(0) ROAD CONSTRUCTION SPEED M6-4(0)-2115 ROAD M6-1(0)-2115 CONSTRUCTION AHEAD

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- 0) ONE ROAD CONSTRUCTION AHEAD SIGN 36 \times 36 (900 \times 900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h)
 AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- Q) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

SCALE: NONE

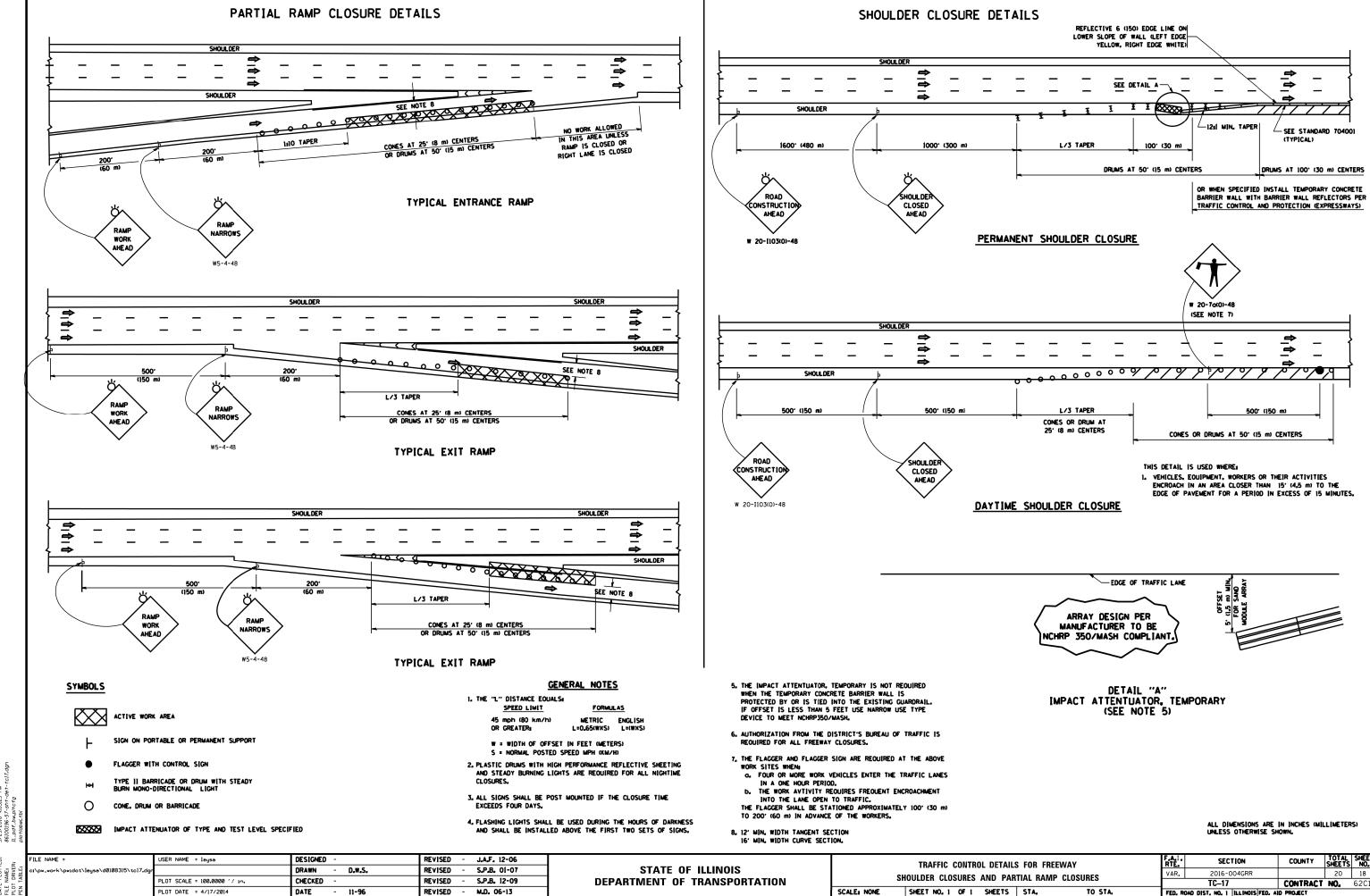
B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SCALE: NONE

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PLOT DATE = 4/17/2014

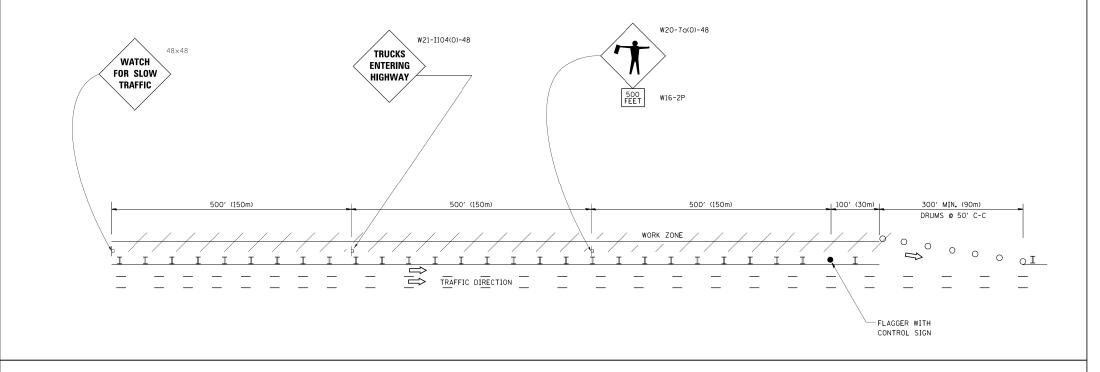
DATE

REVISED -

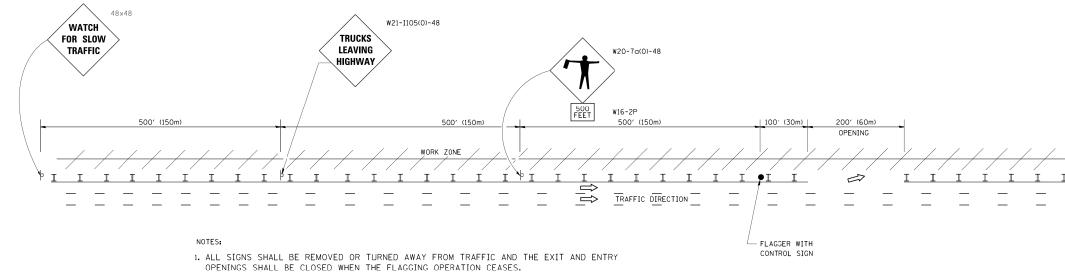
M.D. 06-13

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



- 1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
- 2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
- 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
- 5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - J.A.F. 02-06
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	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED - S.P.B. 12-09
	PLOT DATE = 7/8/2013	DATE -	REVISED - M.D. 06-13

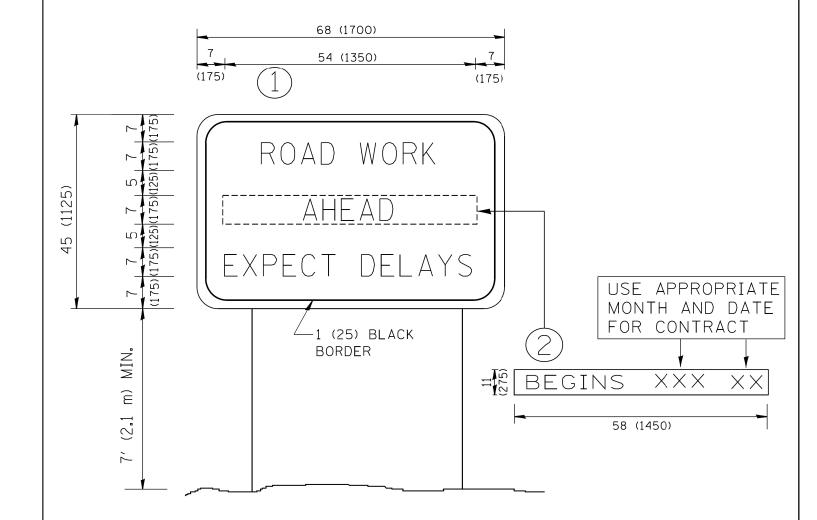
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DEPARTMENT	OF	TRANSPORTATION

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AT V	VAR.	2010				
A1 V		TC-				
SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD	DIST. NO.

F.A.I. RTE.	SEC	TION		COUNTY	TOTAL SHEETS	SHEE NO.	
VAR. 2016-004GRR						20	19
	TC-18		CONTRACT	NO.	62C1		
FED. R	OAD DIST, NO. 1	THE INOTS	FFD.	AID	PROJECT		



ARTERIAL ROAD
INFORMATION SIGN
SHEET NO. 1 OF 1 SHEETS STA. TO STA.



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.

SCALE: NONE

- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN () 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.