

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 62U92	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**PROPOSED
HIGHWAY PLANS**

**ROUTE: VARIOUS EXPRESSWAY AND ARTERIALS
HIGHWAYS – DISTRICT ONE
SECTION: 2023 VAR GUARDRAIL**

**GUARDRAIL REPAIRS
VARIOUS COUNTIES**

C-91-179-23

D-91-125-23



THIS SECTION IS LOCATED ALONG VARIOUS ROUTES WITHIN COOK, KANE, DUPAGE, LAKE, MCHENRY AND WILL COUNTIES.

**SEE LOCATION MAPS
SHEETS 5 THRU 13**

C.U.A.N.
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: RODRIGO LEDEZMA (847) 705-4580

PROJECT MANAGER: J. ALAIN MIDY (847) 221-3056

CONTRACT NO. 62U92

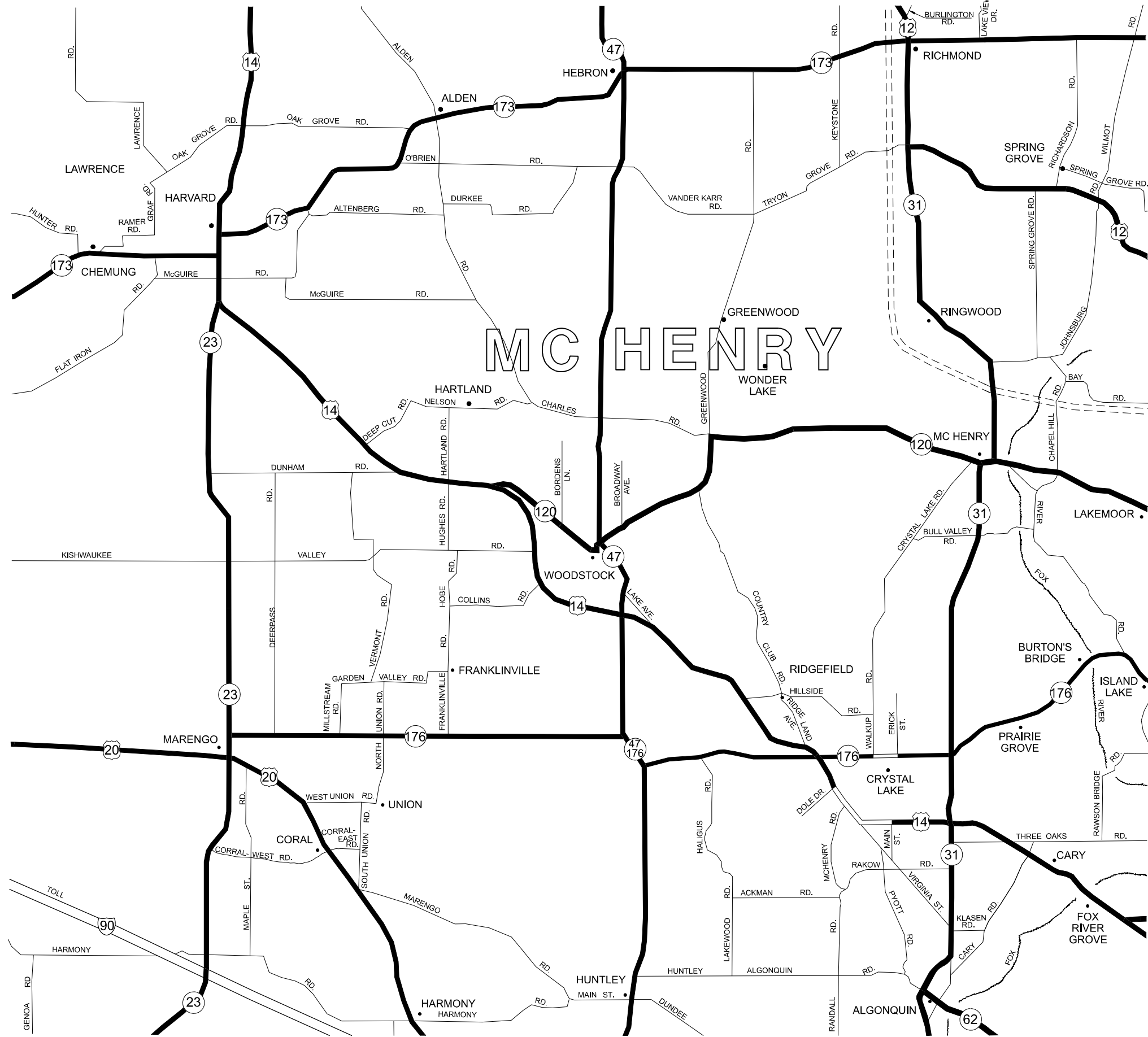
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED June 22, 2023
Jose Rios
REGIONAL ENGINEER

August 18, 2023
Scott A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT

August 18, 2023
Stephen McAnis
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**



DISTRICT NO. 1

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
- FUTURE HIGHWAYS
- VARIOUS AGENCIES HIGHWAYS

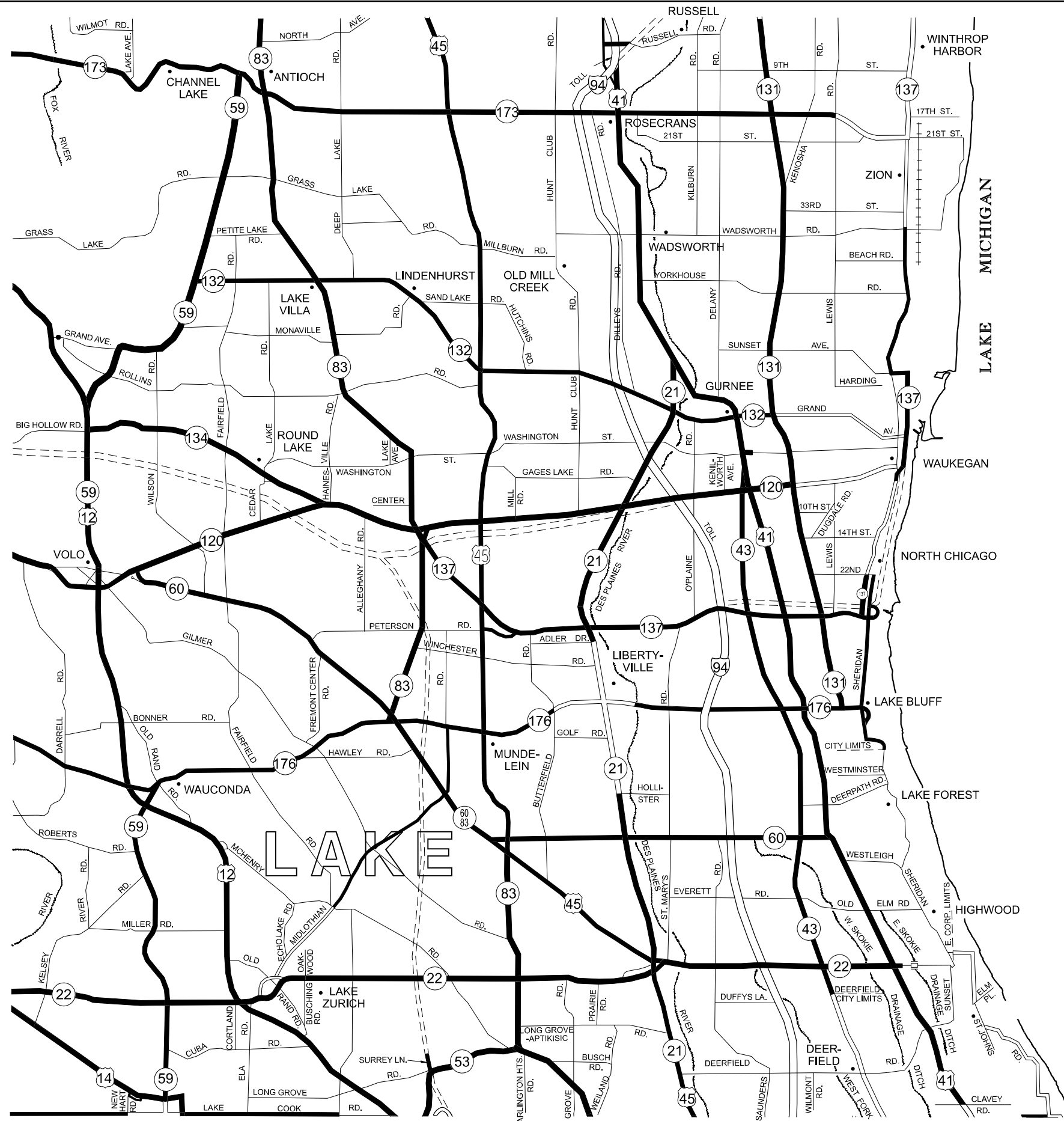
MODEL: Mapx3d [Sheet]
 FILE NAME: P:\MIDOT\Documents\DOT Office\District 1\ORD Project\011523\CADD\Mapx3d\011523-4-hc-dm.dgn

USER NAME = Rodrigo.Ledezma	DESIGNED -	REVISED -
PLOT SCALE = 0.16666633' / in.	DRAWN -	REVISED -
PLOT DATE = 6/21/2023	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GUARDRAIL REPAIR LOCATION MAP McHENRY COUNTY			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	5
CONTRACT NO. 62U92				
ILLINOIS FED. AID PROJECT				



- DISTRICT NO. 1**
- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION**
 - FUTURE HIGHWAYS**
 - VARIOUS AGENCIES HIGHWAYS**

MODEL: Mapcar01 (Sheet)
 FILE NAME: P:\MIDOT\Documents\DOT Office\District 1\ORD Project\112523\CADD\Drawings\CAD\Sheet\0112523-4-1.dwg

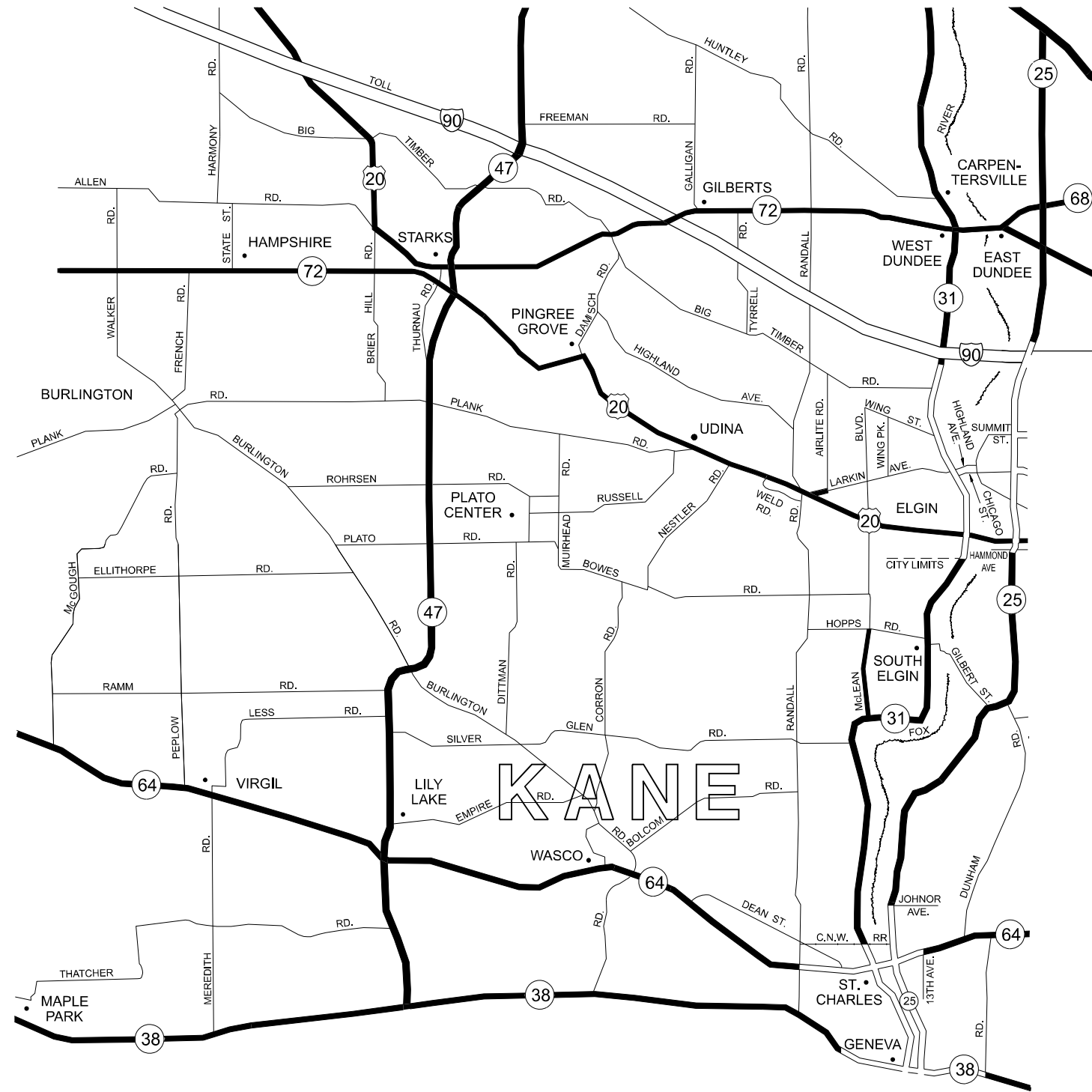
USER NAME = Rodrigo.Ledezma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL REPAIR LOCATION MAP
LAKE COUNTY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	6
			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				



DISTRICT NO. 1

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION**
- FUTURE HIGHWAYS**
- VARIOUS AGENCIES HIGHWAYS**

MODEL: MapInfo 1 (Sheet)
 FILE NAME: P:\MIDOT\Documents\IDOT Office\District 1\ORD Project\112523\CADD\Drawings\CAD\Sheet\0112523-4-1.dwg

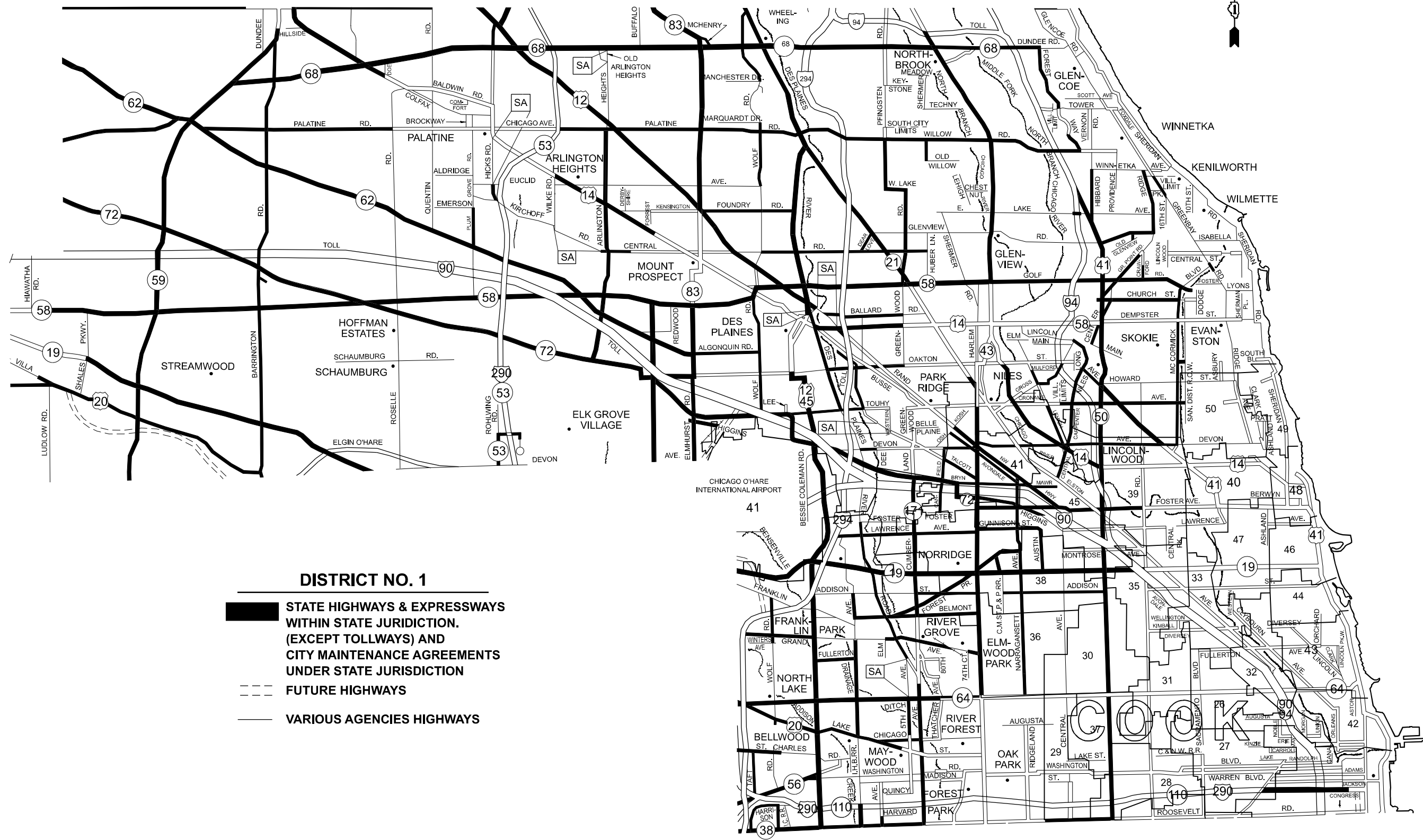
USER NAME = Rodrigo.Ledezma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP
NORTH OF AND INCLUDING IL RTE 38**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	7
			CONTRACT NO. 62U92	
		ILLINOIS FED. AID PROJECT		



DISTRICT NO. 1

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
- FUTURE HIGHWAYS
- VARIOUS AGENCIES HIGHWAYS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP
NORTH OF AND INCLUDING IL. RTE 38**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	9
			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				

MODEL: Mapx.dwg (Sheet)
 FILE NAME: P:\MIDOT\Documents\DOT Office\District 1\ORD Project\112523\CADD\Drawings\CD\Sheet\0112523-1h.dwg

USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666833 / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -



- DISTRICT NO. 1**
- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
 - FUTURE HIGHWAYS
 - VARIOUS AGENCIES HIGHWAYS

MODEL: Mapas41 (Sheet)
 FILE NAME: P:\MIDOT\Documents\DOT Office\District 1\ORD Project\112523\CADD\Map\CADSheet\112523-hd-ban.dgn

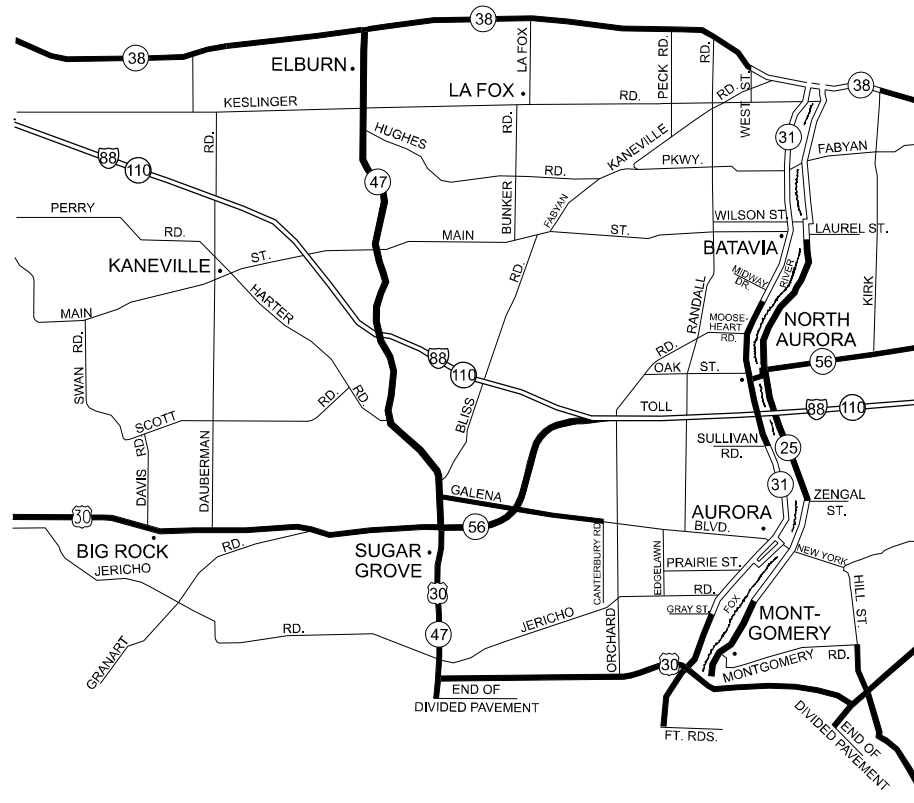
USER NAME = Rodrigo.Ledezma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666833' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP
SOUTH OF IL RTE 38**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	10
			CONTRACT NO. 62U92	
		ILLINOIS FED. AID PROJECT		



DISTRICT NO. 1

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION, (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
- FUTURE HIGHWAYS
- VARIOUS AGENCIES HIGHWAYS

MODEL: MapInfo 15 (Sheet)
 FILE NAME: P:\GIS\Projects\DOT Office\District 1\ORD Project\DOT\112523\CADDData\CAD\Sheet\0112523-11-1.dgn

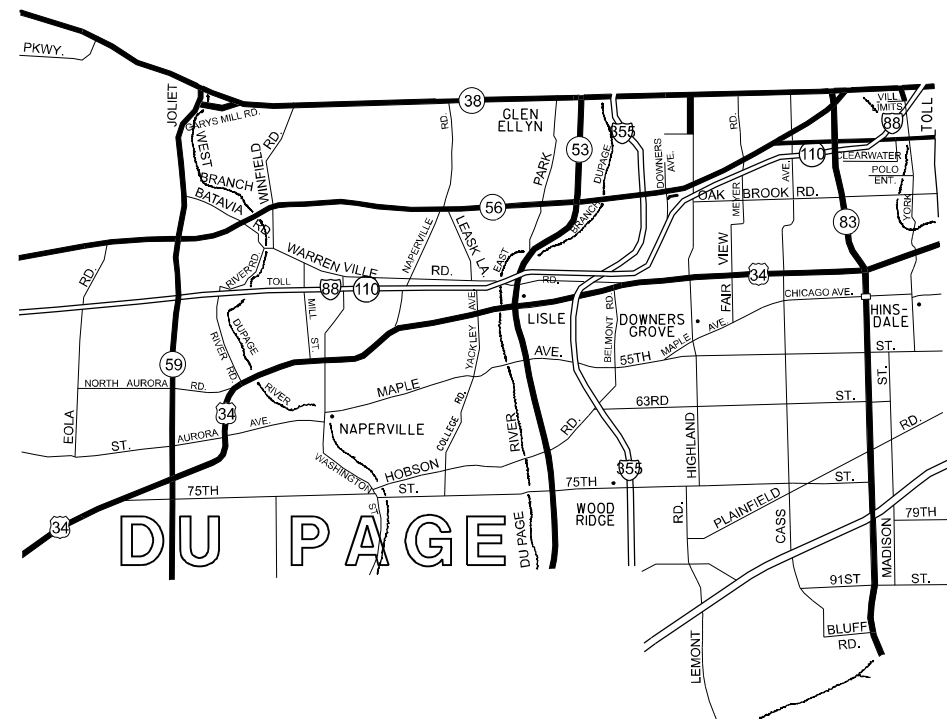
USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.166666833' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP
SOUTH OF IL RTE 38**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	11
			CONTRACT NO. 62U92	
		ILLINOIS	FED. AID PROJECT	



DISTRICT NO. 1

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
- FUTURE HIGHWAYS
- VARIOUS AGENCIES HIGHWAYS

MODEL: Mapas 6 (Sheet)
 FILE NAME: P:\MIDOT\Documents\IDOT Office\District 1\ORD Project\ID112323\CADD\Draws\CAD\Draws\ID112323-4-1.dwg

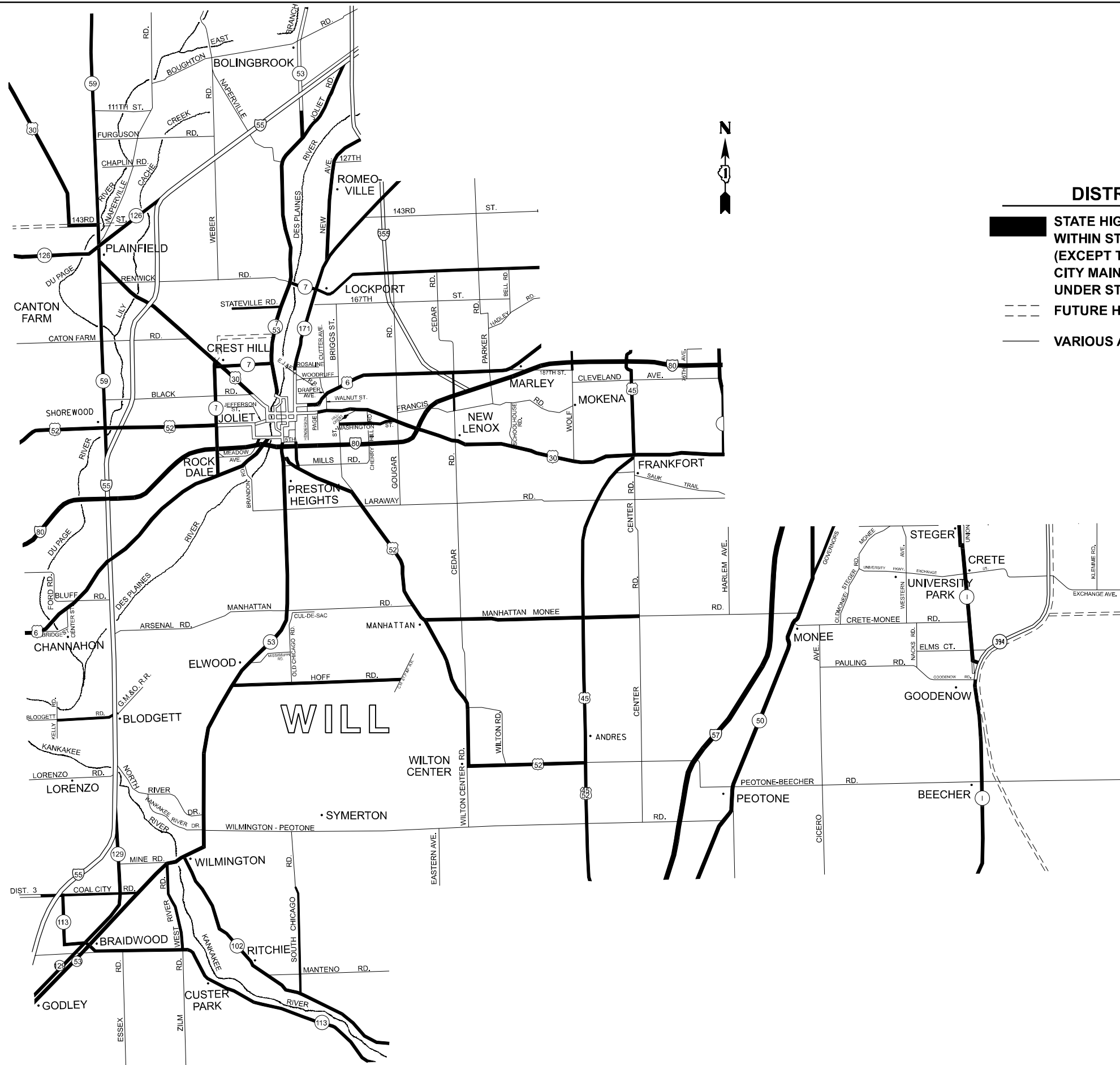
USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.166666833' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL REPAIR LOCATION MAP
SOUTH OF IL RTE 38

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	12
			CONTRACT NO. 62U92	
		ILLINOIS	FED. AID PROJECT	



DISTRICT NO. 1

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
- FUTURE HIGHWAYS
- VARIOUS AGENCIES HIGHWAYS

MODEL: Misp: 7 (Sheet)
 FILE NAME: P:\MIDOT\Documents\DOT Office\District 1\ORD Project\112523\CADD\Drawings\CD\Sheet\112523-41-1.dwg

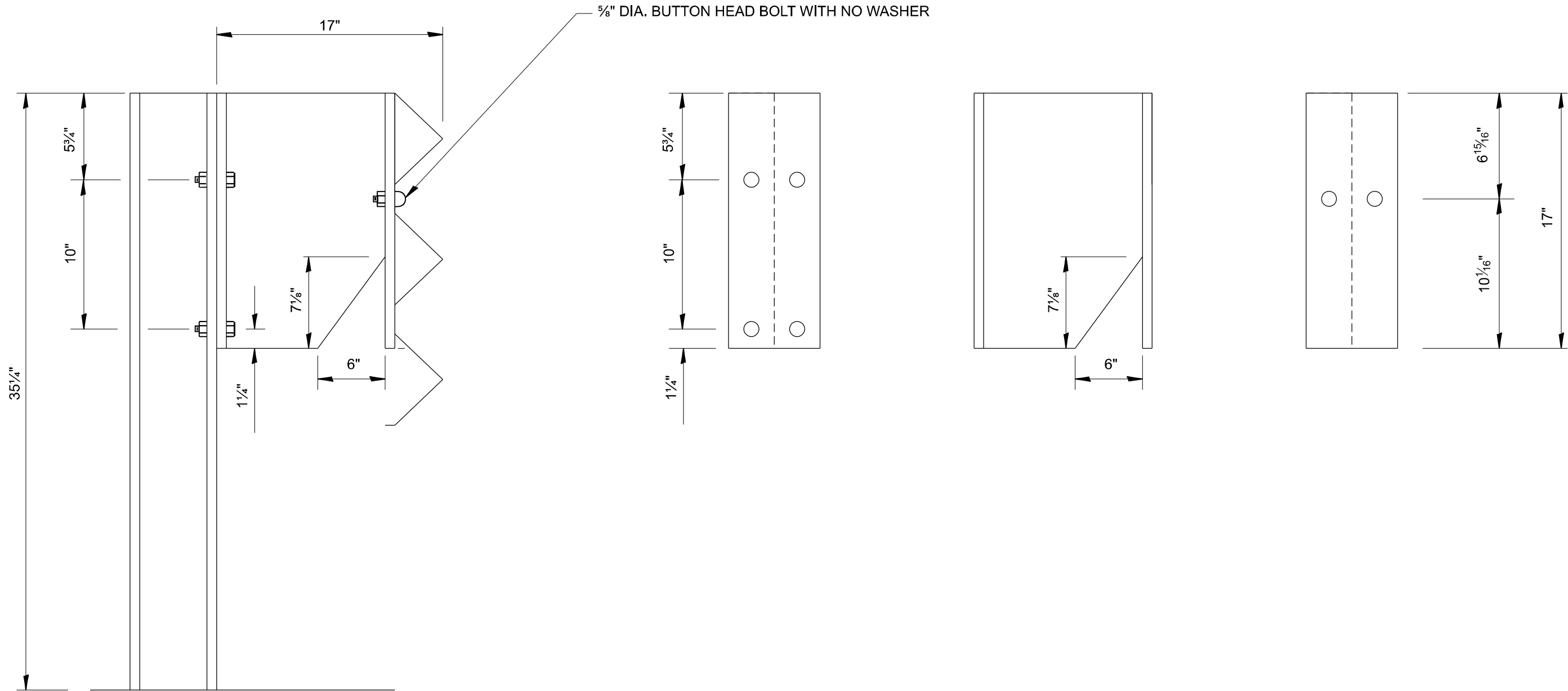
USER NAME = Rodrigu.Ledezma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666833' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP
WILL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	13
			CONTRACT NO. 62U92	
		ILLINOIS	FED. AID PROJECT	



5/8" DIA. BUTTON HEAD BOLT WITH NO WASHER

MODEL: D:\a\h\k\1\Sheet1
 FILE NAME: P:\projects\2023\2023-06-21\2023-06-21\2023-06-21\CAD\Drawings\2023-06-21\2023-06-21.dwg

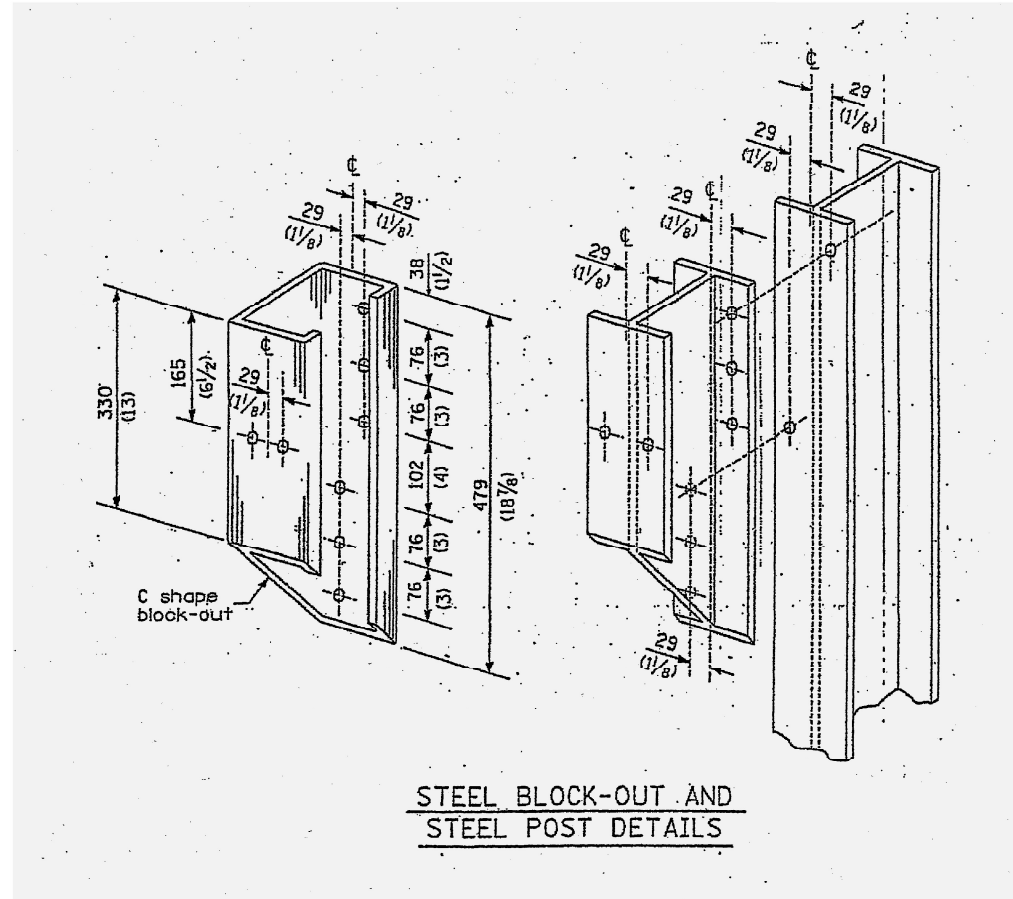
USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED -
PLOT SCALE = 0.16666633 / in.	DRAWN -	REVISED -
PLOT DATE = 6/21/2023	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAIL THREE BEAM GUARDRAIL
WITH MODIFIED OFFSET BLOCK**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	14
			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				



MODEL: D:\a11111_5 (Sheet)
 FILE NAME: P:\BID\BID Documents\BID\DOT Office\District 1\ORD Project\112323\CADD\Bids\CAD\Sheet\112323-41-1.dwg

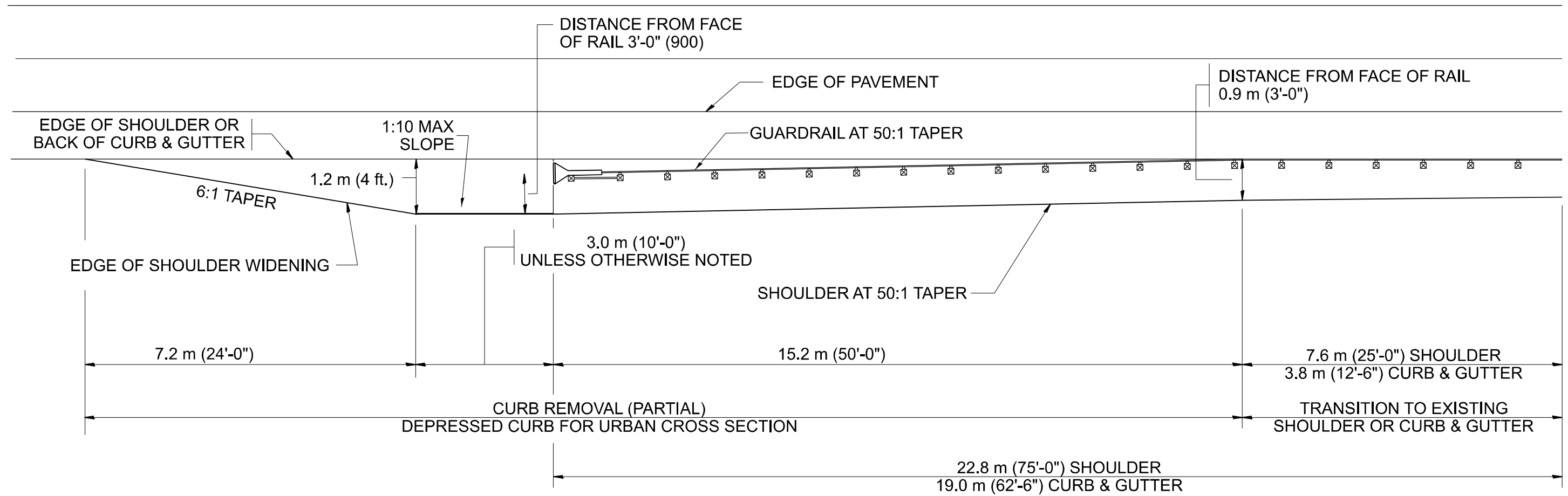
USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STEEL PLATE BEAM GUARDRAIL
STEEL BLOCK-OUT DETAIL**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	15
			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				



NOTES: 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.

SHOULDER WIDENING SHALL BE IN ACCORDANCE WITH STATE STANDARD 630301

MODEL: D:\a\116\6\1\sheet1
FILE NAME: p:\pub\pcc\barrier\1080\1080.ctb
PROJECT: ILLINOIS DOT Office District 1, ORD, Project ID: 112323, CAD Data: CAD sheets D112323-4-1.dwg

USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED -
DRAWN -	REVISED -	
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

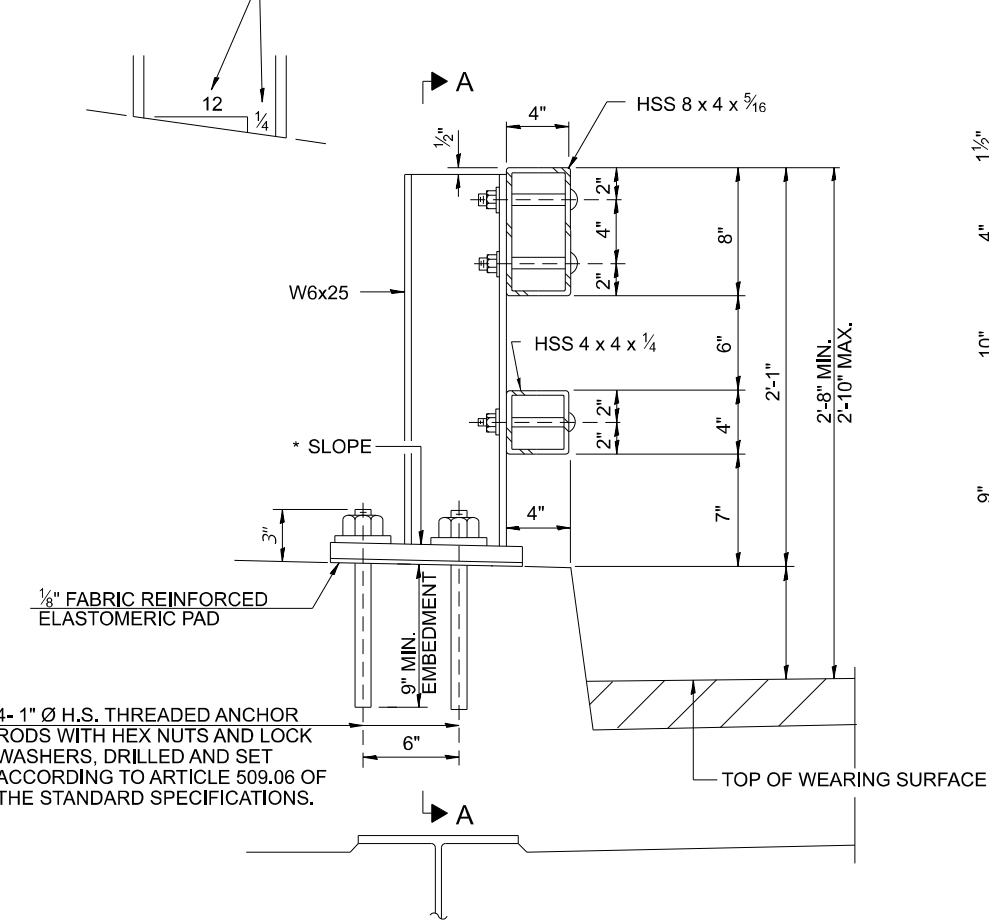
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CURB REMOVAL (PARTIAL) FOR
TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL**

SCALE: SHEET OF SHEETS STA. TO STA.

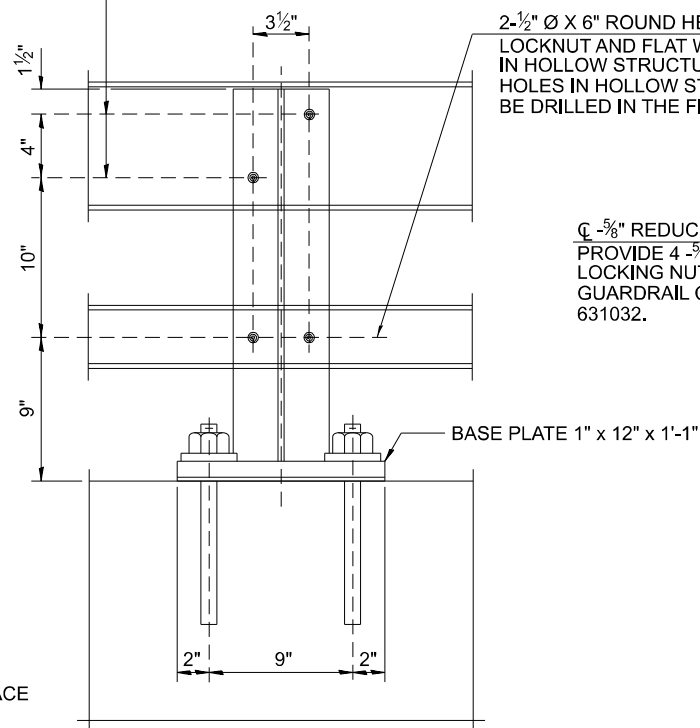
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VARIOUS	32	16
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62U92	

* CUT BOTTOM END OF POST TO CURB SLOPE.

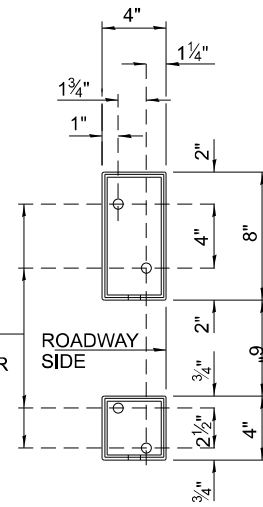


SECTION AT RAIL POST

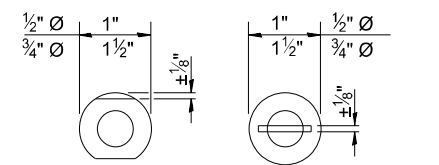
2-3/4" Ø X 6" ROUND HEAD BOLTS WITH LOCKNUT AND FLAT WASHER. 1/8" Ø HOLES IN TUBING AND POSTS. HOLES IN HOLLOW STRUCTURAL SECTION MAY BE DRILLED IN THE FIELD.



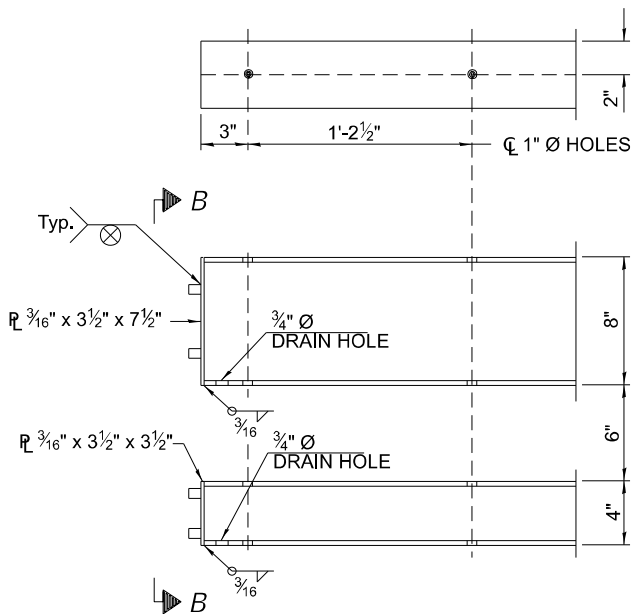
SECTION A-A



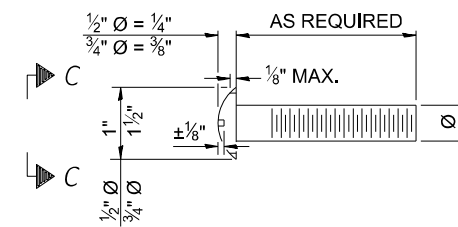
VIEW B-B



VIEW C-C



END OF RAIL DETAILS



DETAIL OF 1/2" Ø & 3/4" Ø ROUND HEAD BOLTS

NOTES:
 POSTS SHALL NOT BE LOCATED CLOSER THAN 1'-3" TO AN EXISTING BRIDGE EXPANSION JOINT OR END OF BRIDGE.
 STEEL BRIDGE RAIL EXPANSION JOINT SHALL BE PROVIDED BETWEEN ANY TWO (2) POSTS WHICH SPAN A BRIDGE EXPANSION JOINT. BOLTS LOCATED AT EXPANSION JOINT SHALL BE PROVIDED WITH LOCKNUTS AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW RAILING MOVEMENT.
 PROVIDE ONE 1/8" AND TWO 1/16" STEEL SHIMS FOR 25% OF THE POSTS. SHIMS SHALL BE SIMILAR TO BASE PLATES IN SIZE AND HOLES.
 ALL STEEL RAIL ELEMENTS SHALL BE GALVANIZED ACCORDING TO ARTICLE 509.05 OF THE STANDARD SPECIFICATIONS.

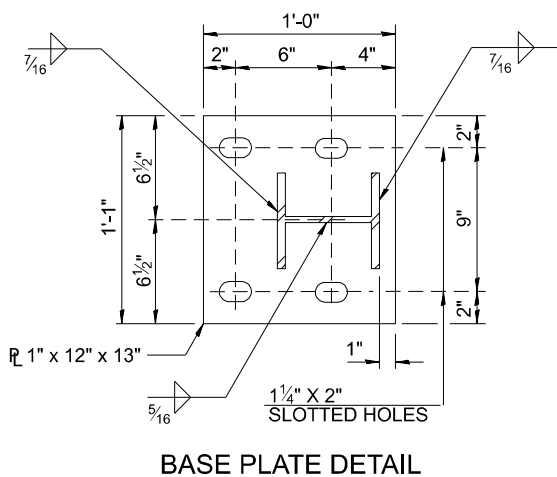
SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
RAIL SPLICE	1/4"	1'-8"	2"	4"	—

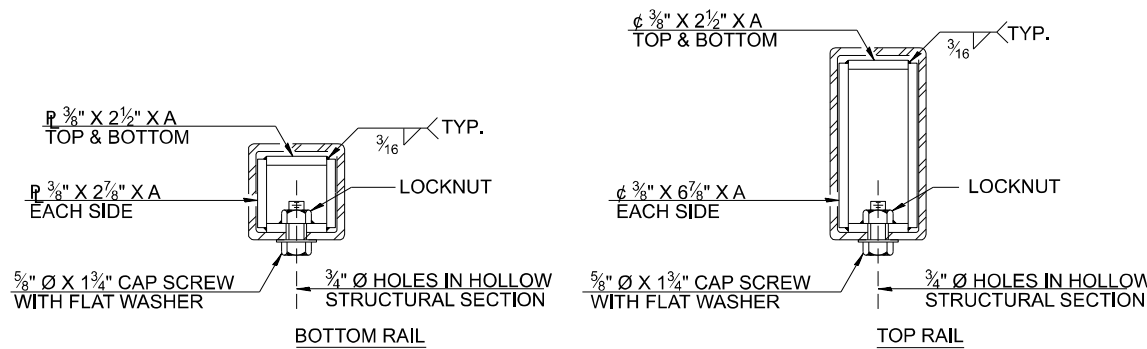
T = TOTAL MOVEMENT AT EXPANSION JOINT AS SHOWN ON THE DESIGN PLANS.

BILL OF MATERIAL

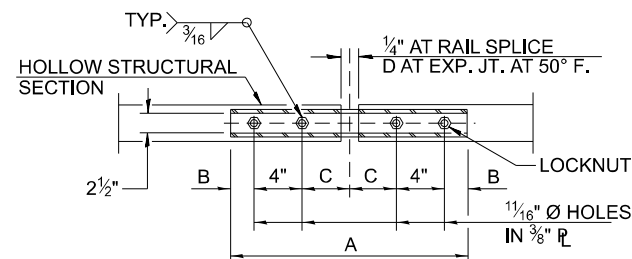
ITEM	UNIT	QUANTITY
STEEL RAILING, TYPE 2399	FOOT	



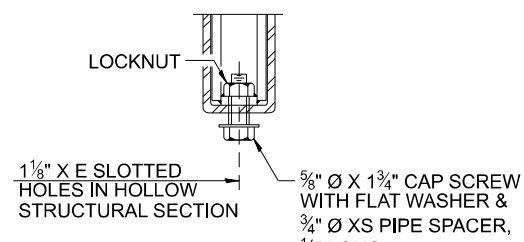
BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE PLATE TYPICAL

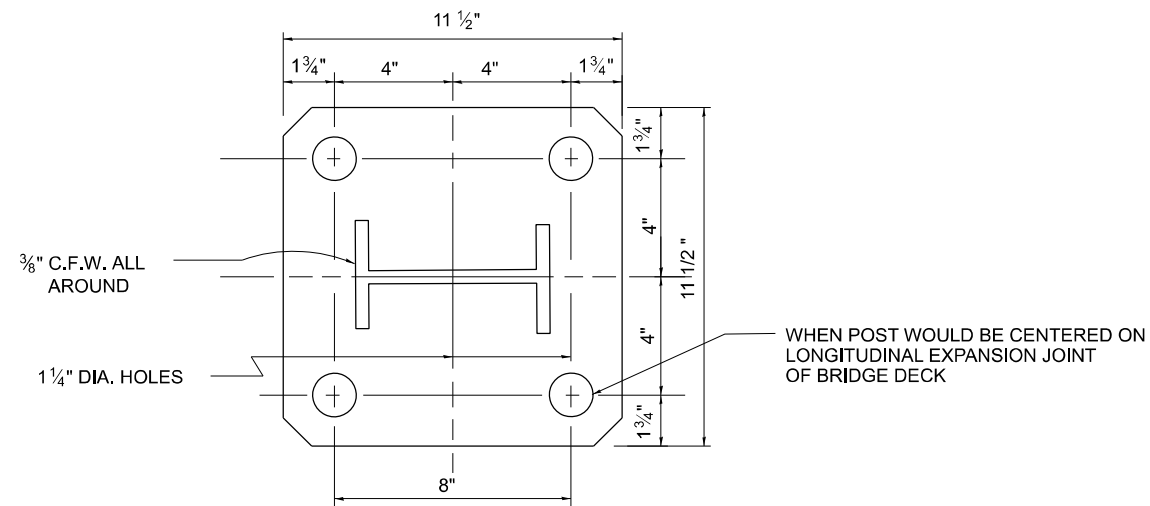


RAIL SPLICE CONNECTION AT EXPANSION JT.

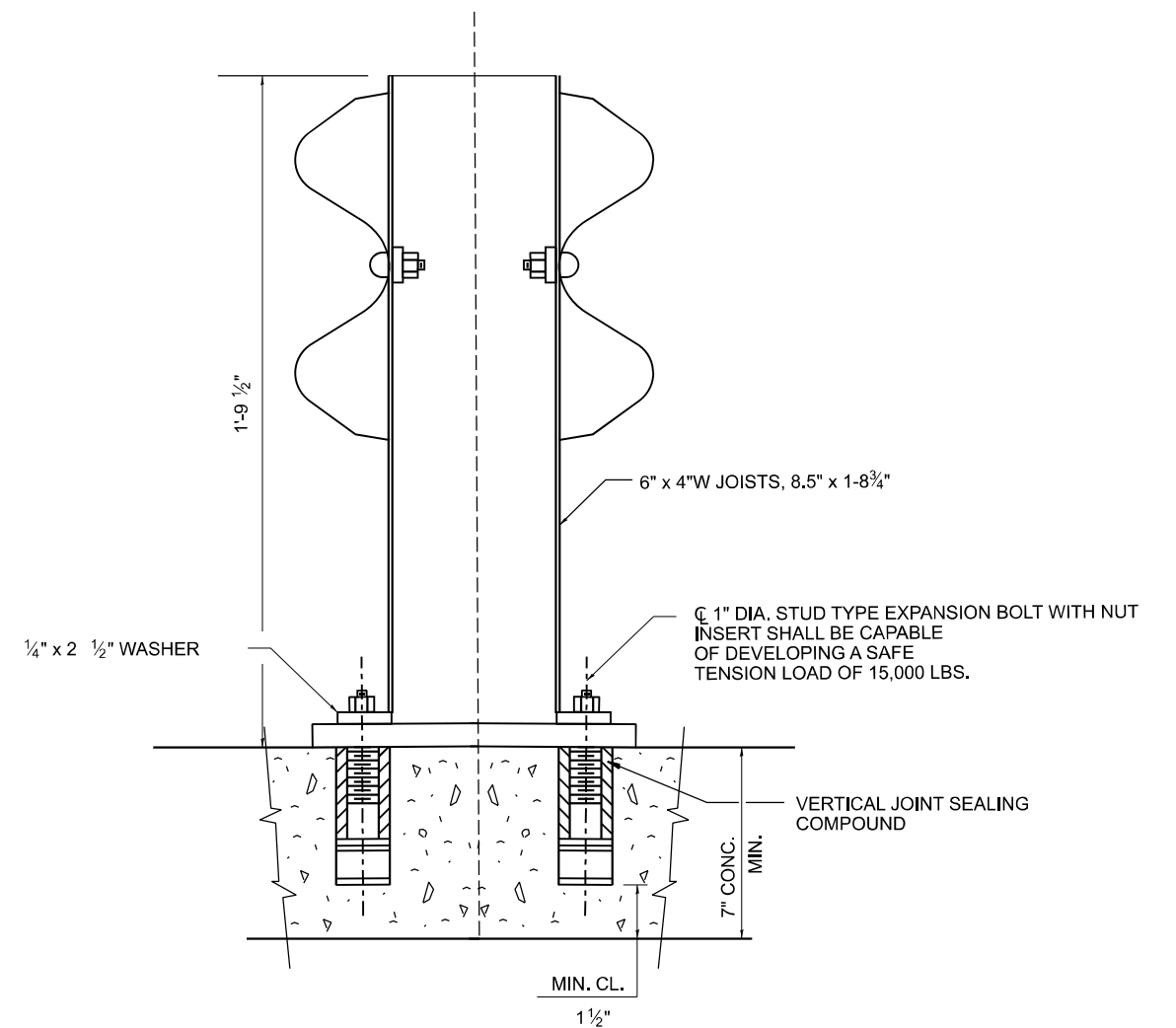
MODEL: D:\rail_r\Sheet1.dwg
 FILE NAME: P:\P\DOT\Documents\DOT Office\Sheet1.dwg
 PROJECT: I-55/US-40/US-41/US-42/US-43/US-44/US-45/US-46/US-47/US-48/US-49/US-50/US-51/US-52/US-53/US-54/US-55/US-56/US-57/US-58/US-59/US-60/US-61/US-62/US-63/US-64/US-65/US-66/US-67/US-68/US-69/US-70/US-71/US-72/US-73/US-74/US-75/US-76/US-77/US-78/US-79/US-80/US-81/US-82/US-83/US-84/US-85/US-86/US-87/US-88/US-89/US-90/US-91/US-92/US-93/US-94/US-95/US-96/US-97/US-98/US-99/US-100/US-101/US-102/US-103/US-104/US-105/US-106/US-107/US-108/US-109/US-110/US-111/US-112/US-113/US-114/US-115/US-116/US-117/US-118/US-119/US-120/US-121/US-122/US-123/US-124/US-125/US-126/US-127/US-128/US-129/US-130/US-131/US-132/US-133/US-134/US-135/US-136/US-137/US-138/US-139/US-140/US-141/US-142/US-143/US-144/US-145/US-146/US-147/US-148/US-149/US-150/US-151/US-152/US-153/US-154/US-155/US-156/US-157/US-158/US-159/US-160/US-161/US-162/US-163/US-164/US-165/US-166/US-167/US-168/US-169/US-170/US-171/US-172/US-173/US-174/US-175/US-176/US-177/US-178/US-179/US-180/US-181/US-182/US-183/US-184/US-185/US-186/US-187/US-188/US-189/US-190/US-191/US-192/US-193/US-194/US-195/US-196/US-197/US-198/US-199/US-200/US-201/US-202/US-203/US-204/US-205/US-206/US-207/US-208/US-209/US-210/US-211/US-212/US-213/US-214/US-215/US-216/US-217/US-218/US-219/US-220/US-221/US-222/US-223/US-224/US-225/US-226/US-227/US-228/US-229/US-230/US-231/US-232/US-233/US-234/US-235/US-236/US-237/US-238/US-239/US-240/US-241/US-242/US-243/US-244/US-245/US-246/US-247/US-248/US-249/US-250/US-251/US-252/US-253/US-254/US-255/US-256/US-257/US-258/US-259/US-260/US-261/US-262/US-263/US-264/US-265/US-266/US-267/US-268/US-269/US-270/US-271/US-272/US-273/US-274/US-275/US-276/US-277/US-278/US-279/US-280/US-281/US-282/US-283/US-284/US-285/US-286/US-287/US-288/US-289/US-290/US-291/US-292/US-293/US-294/US-295/US-296/US-297/US-298/US-299/US-300/US-301/US-302/US-303/US-304/US-305/US-306/US-307/US-308/US-309/US-310/US-311/US-312/US-313/US-314/US-315/US-316/US-317/US-318/US-319/US-320/US-321/US-322/US-323/US-324/US-325/US-326/US-327/US-328/US-329/US-330/US-331/US-332/US-333/US-334/US-335/US-336/US-337/US-338/US-339/US-340/US-341/US-342/US-343/US-344/US-345/US-346/US-347/US-348/US-349/US-350/US-351/US-352/US-353/US-354/US-355/US-356/US-357/US-358/US-359/US-360/US-361/US-362/US-363/US-364/US-365/US-366/US-367/US-368/US-369/US-370/US-371/US-372/US-373/US-374/US-375/US-376/US-377/US-378/US-379/US-380/US-381/US-382/US-383/US-384/US-385/US-386/US-387/US-388/US-389/US-390/US-391/US-392/US-393/US-394/US-395/US-396/US-397/US-398/US-399/US-400/US-401/US-402/US-403/US-404/US-405/US-406/US-407/US-408/US-409/US-410/US-411/US-412/US-413/US-414/US-415/US-416/US-417/US-418/US-419/US-420/US-421/US-422/US-423/US-424/US-425/US-426/US-427/US-428/US-429/US-430/US-431/US-432/US-433/US-434/US-435/US-436/US-437/US-438/US-439/US-440/US-441/US-442/US-443/US-444/US-445/US-446/US-447/US-448/US-449/US-450/US-451/US-452/US-453/US-454/US-455/US-456/US-457/US-458/US-459/US-460/US-461/US-462/US-463/US-464/US-465/US-466/US-467/US-468/US-469/US-470/US-471/US-472/US-473/US-474/US-475/US-476/US-477/US-478/US-479/US-480/US-481/US-482/US-483/US-484/US-485/US-486/US-487/US-488/US-489/US-490/US-491/US-492/US-493/US-494/US-495/US-496/US-497/US-498/US-499/US-500/US-501/US-502/US-503/US-504/US-505/US-506/US-507/US-508/US-509/US-510/US-511/US-512/US-513/US-514/US-515/US-516/US-517/US-518/US-519/US-520/US-521/US-522/US-523/US-524/US-525/US-526/US-527/US-528/US-529/US-530/US-531/US-532/US-533/US-534/US-535/US-536/US-537/US-538/US-539/US-540/US-541/US-542/US-543/US-544/US-545/US-546/US-547/US-548/US-549/US-550/US-551/US-552/US-553/US-554/US-555/US-556/US-557/US-558/US-559/US-560/US-561/US-562/US-563/US-564/US-565/US-566/US-567/US-568/US-569/US-570/US-571/US-572/US-573/US-574/US-575/US-576/US-577/US-578/US-579/US-580/US-581/US-582/US-583/US-584/US-585/US-586/US-587/US-588/US-589/US-590/US-591/US-592/US-593/US-594/US-595/US-596/US-597/US-598/US-599/US-600/US-601/US-602/US-603/US-604/US-605/US-606/US-607/US-608/US-609/US-610/US-611/US-612/US-613/US-614/US-615/US-616/US-617/US-618/US-619/US-620/US-621/US-622/US-623/US-624/US-625/US-626/US-627/US-628/US-629/US-630/US-631/US-632/US-633/US-634/US-635/US-636/US-637/US-638/US-639/US-640/US-641/US-642/US-643/US-644/US-645/US-646/US-647/US-648/US-649/US-650/US-651/US-652/US-653/US-654/US-655/US-656/US-657/US-658/US-659/US-660/US-661/US-662/US-663/US-664/US-665/US-666/US-667/US-668/US-669/US-670/US-671/US-672/US-673/US-674/US-675/US-676/US-677/US-678/US-679/US-680/US-681/US-682/US-683/US-684/US-685/US-686/US-687/US-688/US-689/US-690/US-691/US-692/US-693/US-694/US-695/US-696/US-697/US-698/US-699/US-700/US-701/US-702/US-703/US-704/US-705/US-706/US-707/US-708/US-709/US-710/US-711/US-712/US-713/US-714/US-715/US-716/US-717/US-718/US-719/US-720/US-721/US-722/US-723/US-724/US-725/US-726/US-727/US-728/US-729/US-730/US-731/US-732/US-733/US-734/US-735/US-736/US-737/US-738/US-739/US-740/US-741/US-742/US-743/US-744/US-745/US-746/US-747/US-748/US-749/US-750/US-751/US-752/US-753/US-754/US-755/US-756/US-757/US-758/US-759/US-760/US-761/US-762/US-763/US-764/US-765/US-766/US-767/US-768/US-769/US-770/US-771/US-772/US-773/US-774/US-775/US-776/US-777/US-778/US-779/US-780/US-781/US-782/US-783/US-784/US-785/US-786/US-787/US-788/US-789/US-790/US-791/US-792/US-793/US-794/US-795/US-796/US-797/US-798/US-799/US-800/US-801/US-802/US-803/US-804/US-805/US-806/US-807/US-808/US-809/US-810/US-811/US-812/US-813/US-814/US-815/US-816/US-817/US-818/US-819/US-820/US-821/US-822/US-823/US-824/US-825/US-826/US-827/US-828/US-829/US-830/US-831/US-832/US-833/US-834/US-835/US-836/US-837/US-838/US-839/US-840/US-841/US-842/US-843/US-844/US-845/US-846/US-847/US-848/US-849/US-850/US-851/US-852/US-853/US-854/US-855/US-856/US-857/US-858/US-859/US-860/US-861/US-862/US-863/US-864/US-865/US-866/US-867/US-868/US-869/US-870/US-871/US-872/US-873/US-874/US-875/US-876/US-877/US-878/US-879/US-880/US-881/US-882/US-883/US-884/US-885/US-886/US-887/US-888/US-889/US-890/US-891/US-892/US-893/US-894/US-895/US-896/US-897/US-898/US-899/US-900/US-901/US-902/US-903/US-904/US-905/US-906/US-907/US-908/US-909/US-910/US-911/US-912/US-913/US-914/US-915/US-916/US-917/US-918/US-919/US-920/US-921/US-922/US-923/US-924/US-925/US-926/US-927/US-928/US-929/US-930/US-931/US-932/US-933/US-934/US-935/US-936/US-937/US-938/US-939/US-940/US-941/US-942/US-943/US-944/US-945/US-946/US-947/US-948/US-949/US-950/US-951/US-952/US-953/US-954/US-955/US-956/US-957/US-958/US-959/US-960/US-961/US-962/US-963/US-964/US-965/US-966/US-967/US-968/US-969/US-970/US-971/US-972/US-973/US-974/US-975/US-976/US-977/US-978/US-979/US-980/US-981/US-982/US-983/US-984/US-985/US-986/US-987/US-988/US-989/US-990/US-991/US-992/US-993/US-994/US-995/US-996/US-997/US-998/US-999/US-1000/US-1001/US-1002/US-1003/US-1004/US-1005/US-1006/US-1007/US-1008/US-1009/US-1010/US-1011/US-1012/US-1013/US-1014/US-1015/US-1016/US-1017/US-1018/US-1019/US-1020/US-1021/US-1022/US-1023/US-1024/US-1025/US-1026/US-1027/US-1028/US-1029/US-1030/US-1031/US-1032/US-1033/US-1034/US-1035/US-1036/US-1037/US-1038/US-1039/US-1040/US-1041/US-1042/US-1043/US-1044/US-1045/US-1046/US-1047/US-1048/US-1049/US-1050/US-1051/US-1052/US-1053/US-1054/US-1055/US-1056/US-1057/US-1058/US-1059/US-1060/US-1061/US-1062/US-1063/US-1064/US-1065/US-1066/US-1067/US-1068/US-1069/US-1070/US-1071/US-1072/US-1073/US-1074/US-1075/US-1076/US-1077/US-1078/US-1079/US-1080/US-1081/US-1082/US-1083/US-1084/US-1085/US-1086/US-1087/US-1088/US-1089/US-1090/US-1091/US-1092/US-1093/US-1094/US-1095/US-1096/US-1097/US-1098/US-1099/US-1100/US-1101/US-1102/US-1103/US-1104/US-1105/US-1106/US-1107/US-1108/US-1109/US-1110/US-1111/US-1112/US-1113/US-1114/US-1115/US-1116/US-1117/US-1118/US-1119/US-1120/US-1121/US-1122/US-1123/US-1124/US-1125/US-1126/US-1127/US-1128/US-1129/US-1130/US-1131/US-1132/US-1133/US-1134/US-1135/US-1136/US-1137/US-1138/US-1139/US-1140/US-1141/US-1142/US-1143/US-1144/US-1145/US-1146/US-1147/US-1148/US-1149/US-1150/US-1151/US-1152/US-1153/US-1154/US-1155/US-1156/US-1157/US-1158/US-1159/US-1160/US-1161/US-1162/US-1163/US-1164/US-1165/US-1166/US-1167/US-1168/US-1169/US-1170/US-1171/US-1172/US-1173/US-1174/US-1175/US-1176/US-1177/US-1178/US-1179/US-1180/US-1181/US-1182/US-1183/US-1184/US-1185/US-1186/US-1187/US-1188/US-1189/US-1190/US-1191/US-1192/US-1193/US-1194/US-1195/US-1196/US-1197/US-1198/US-1199/US-1200/US-1201/US-1202/US-1203/US-1204/US-1205/US-1206/US-1207/US-1208/US-1209/US-1210/US-1211/US-1212/US-1213/US-1214/US-1215/US-1216/US-1217/US-1218/US-1219/US-1220/US-1221/US-1222/US-1223/US-1224/US-1225/US-1226/US-1227/US-1228/US-1229/US-1230/US-1231/US-1232/US-1233/US-1234/US-1235/US-1236/US-1237/US-1238/US-1239/US-1240/US-1241/US-1242/US-1243/US-1244/US-1245/US-1246/US-1247/US-1248/US-1249/US-1250/US-1251/US-1252/US-1253/US-1254/US-1255/US-1256/US-1257/US-1258/US-1259/US-1260/US-1261/US-1262/US-1263/US-1264/US-1265/US-1266/US-1267/US-1268/US-1269/US-1270/US-1271/US-1272/US-1273/US-1274/US-1275/US-1276/US-1277/US-1278/US-1279/US-1280/US-1281/US-1282/US-1283/US-1284/US-1285/US-1286/US-1287/US-1288/US-1289/US-1290/US-1291/US-1292/US-1293/US-1294/US-1295/US-1296/US-1297/US-1298/US-1299/US-1300/US-1301/US-1302/US-1303/US-1304/US-1305/US-1306/US-1307/US-1308/US-1309/US-1310/US-1311/US-1312/US-1313/US-1314/US-1315/US-1316/US-1317/US-1318/US-1319/US-1320/US-1321/US-1322/US-1323/US-1324/US-1325/US-1326/US-1327/US-1328/US-1329/US-1330/US-1331/US-1332/US-1333/US-1334/US-1335/US-1336/US-1337/US-1338/US-1339/US-1340/US-1341/US-1342/US-1343/US-1344/US-1345/US-1346/US-1347/US-1348/US-1349/US-1350/US-1351/US-1352/US-1353/US-1354/US-1355/US-1356/US-1357/US-1358/US-1359/US-1360/US-1361/US-1362/US-1363/US-1364/US-1365/US-1366/US-1367/US-1368/US-1369/US-1370/US-1371/US-1372/US-1373/US-1374/US-1375/US-1376/US-1377/US-1378/US-1379/US-1380/US-1381/US-1382/US-1383/US-1384/US-1385/US-1386/US-1387/US-1388/US-1389/US-1390/US-1391/US-1392/US-1393/US-1394/US-1395/US-1396/US-1397/US-1398/US-1399/US-1400/US-1401/US-1402/US-1403/US-1404/US-1405/US-1406/US-1407/US-1408/US-1409/US-1410/US-1411/US-1412/US-1413/US-1414/US-1415/US-1416/US-1417/US-1418/US-1419/US-1420/US-1421/US-1422/US-1423/US-1424/US-1425/US-1426/US-1427/US-1428/US-1429/US-1430/US-1431/US-1432/US-1433/US-1434/US-1435/US-1436/US-1437/US-1438/US-1439/US-1440/US-1441/US-1442/US-1443/US-1444/US-1445/US-1446/US-1447/US-1448/US-1449/US-1450/US-1451/US-1452/US-1453/US-1454/US-1455/US-1456/US-1457/US-1458/US-1459/US-1460/US-1461/US-1462/US-1463/US-1464/US-1465/US-1466/US-1467/US-1468/US-1469/US-1470/US-1471/US-1472/US-1473/US-1474/US-1475/US-1476/US-1477/US-1478/US-1479/US-1480/US-1481/US-1482/US-1483/US-1484/US-1485/US-1486/US-1487/US-1488/US-1489/US-1490

NOTE:

- FOR DETAILS OF RAIL ELEMENTS, RAIL SPLICING, NUT, BOLT AND SIDE VIEW OF RAIL, SEE STANDARD 2230-2.
- ALL WELDS SHALL BE GROUND SMOOTH
- POSTS SHALL BE CUT AND WELDED TO THE BASE PLATE SO THAT THE POST WILL BE PLUMB WHEN ERECTED.
- TWO PERCENT (2%) OF ALL ANCHOR BOLTS SHALL BE TEST LOADED IN PLACE, MINIMUM TEST LOAD=8 KIPS. IF ONE ANCHOR BOLT FAILS DURING THE TEST, TWO OTHER ANCHOR BOLTS SHALL BE TESTED. TESTING EQUIPMENT SHALL BE BOLT COMPANIES.
- PROVIDE 11#8" AND 21#16" GALVANIZED SHIMS FOR 25% OF THE POSTS.



RAIL POST BASE
 11 1/2" x 1 1/4" x 11 1/2"



MODEL: Typical Details Sub (Sheet)
 FILE NAME: P:\Bids\2023\2023 VAR GUARDRAIL\Documents\DOT Office\District 1\ORD Project\11523\CADDData\CADDetails\11523-Sub-Sheets.dgn

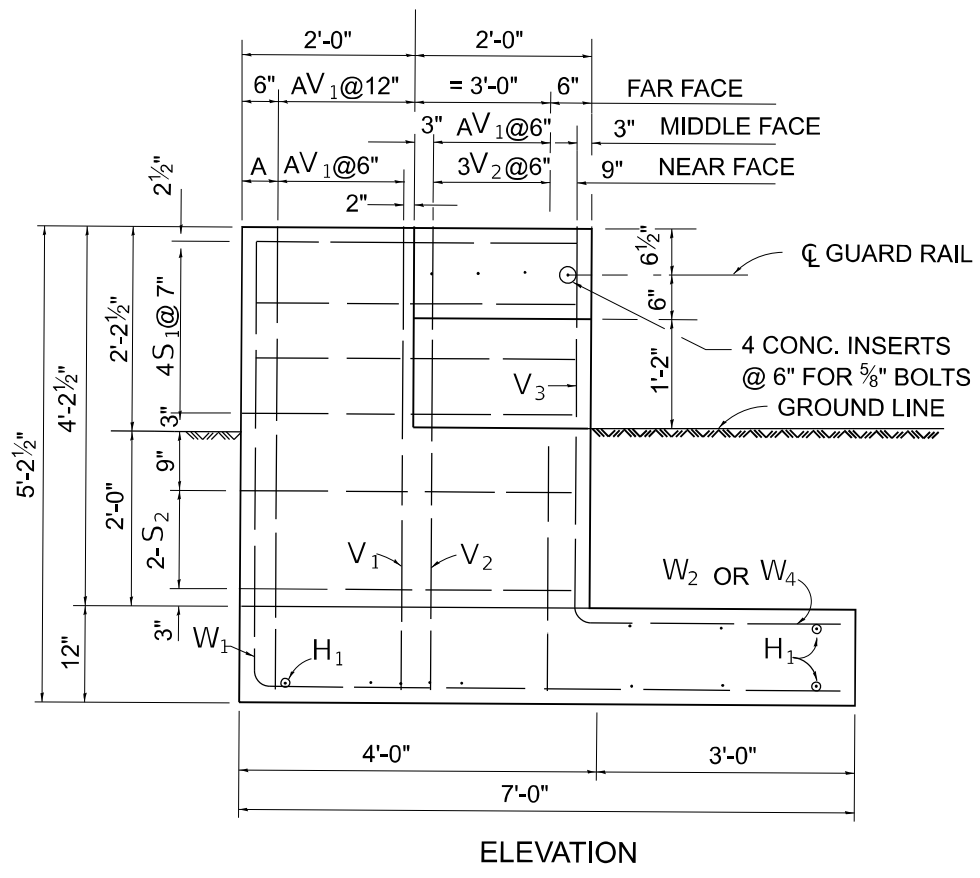
USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED - R. RITCHIE 05-02-00
DRAWN - RFL	REVISIONS	
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE - 10-31-88	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

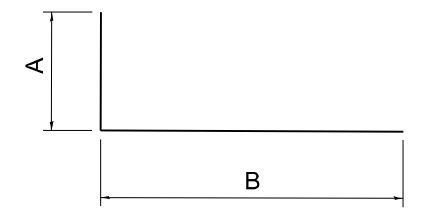
**ANCHOR DETAIL FOR STEEL PLATE BEAM
 GUARDRAIL ON CONCRETE**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. ___+___ TO STA. ___+___

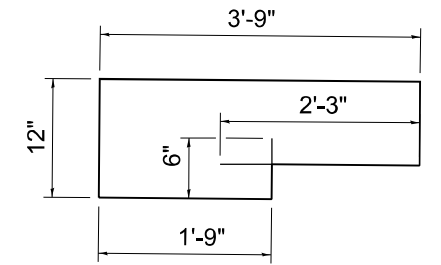
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VAR	32	18
BM-02			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				



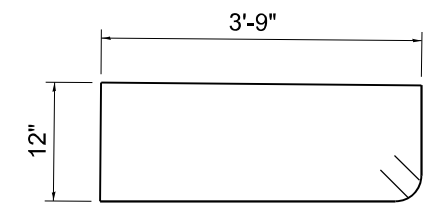
ELEVATION



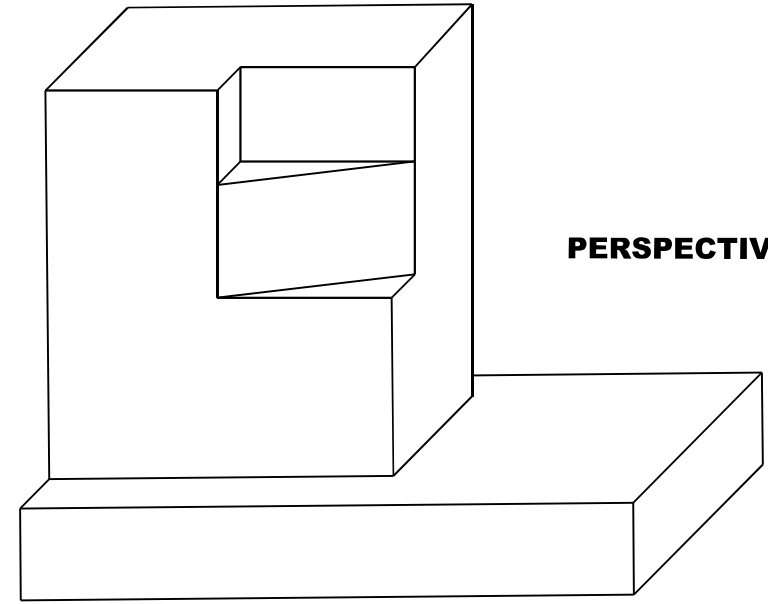
BAR	A	B	A+B
V ₁	4'-8"	6"	5'-2"
V ₂	2'-6"	6"	3'-0"
W ₁	4'-8"	6'-6"	11'-2"
W ₂	2'-0"	3'-0"	5'-0"
W ₄	4'-2"	3'-0"	7'-2"



S₁ BAR

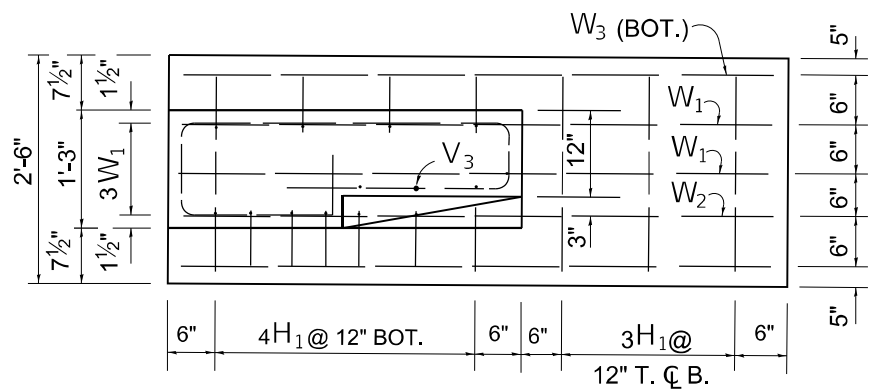


S₂ BAR



PERSPECTIVE VIEW

NOTES:
CLASS X CONCRETE SHALL BE USED THROUGHOUT
REINFORCEMENT TO BE SIZE #4 UNLESS OTHERWISE NOTED



FOOTING PLAN

BAR SCHEDULE

BAR	NO.	LENGTH
V ₁	8	5'-2"
V ₂	3	3'-0"
V ₃	4	3'-0"
W ₁	3	11'-2"
W ₂	1	5'-0"
W ₃	2	6'-6"
W ₄	2	7'-2"
S ₁	4	10'-0"
S ₂	2	10'-0"
H ₁	1	2'-3"

THIS SHEET IS FOR INFORMATION ONLY

MODEL: Typical Details Sub-1 [Sheet]
FILE NAME: P:\Bids\2023\2023 VAR GUARDRAIL\Documents\DOT Office\District 1\ORD Project\11523\CADD\Drawings\CAD\Sheet\11523-Sub-1-CAD.dgn

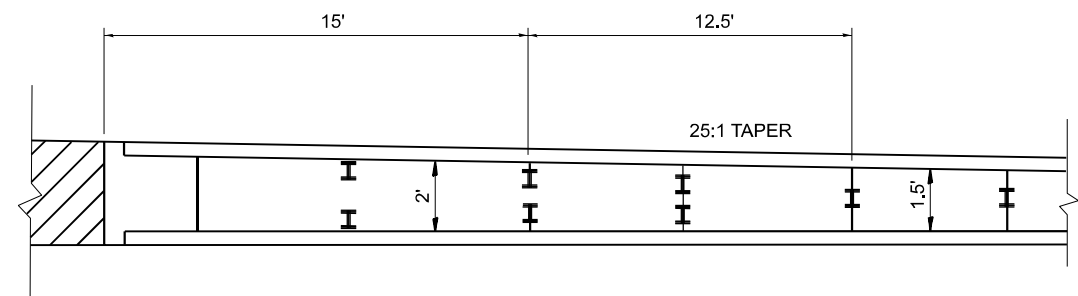
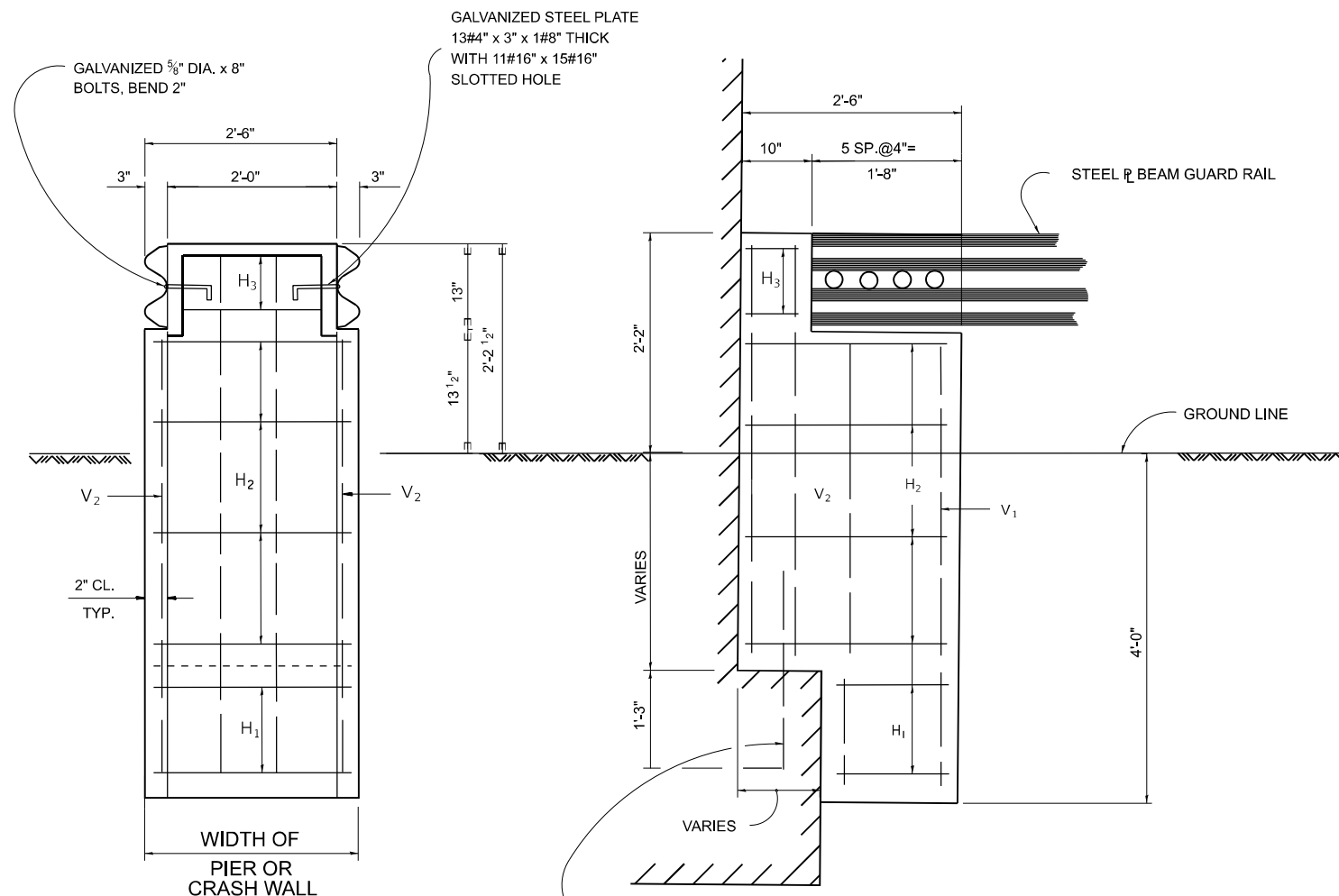
USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED - R. RITCHIE 06-02-00
PLOT SCALE = 0.16666633' / in.	DRAWN - R.F.L.	REVISED -
PLOT DATE = 6/21/2023	CHECKED -	REVISED -
	DATE - 10-31-88	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE		SHEET 1 OF 1 SHEETS		STA. ___+___ TO STA. ___+___	
-------------	--	---------------------	--	------------------------------	--

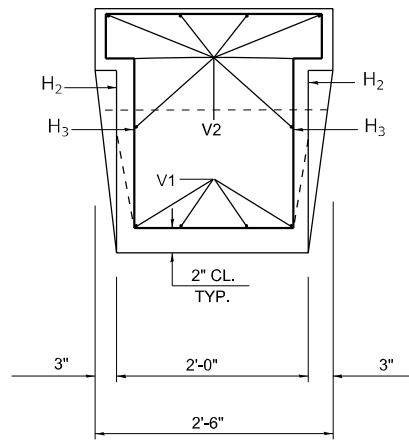
TYPICAL DETAIL FOR
GUARDRAIL ANCHOR BLOCK REPAIR

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VAR	32	19
BM-03		CONTRACT NO. 62U92		
ILLINOIS FED. AID PROJECT				

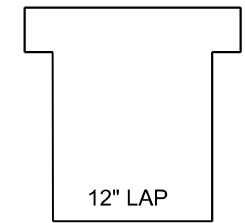


GUARD RAIL TRANSITIONS

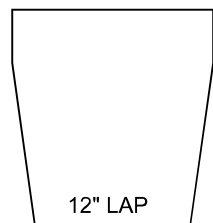
NOTES: CLASS X CONCRETE SHALL BE USED THROUGHOUT
REINFORCEMENT TO BE SIZE #4 UNLESS OTHERWISE
NOTED



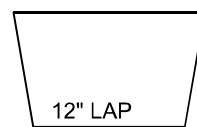
#6 DOWEL BARS
DRILL AND GROUT ON ROW OF THREE BARS



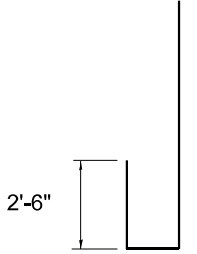
H₃-2 EACH



H₂-4 EACH



H₁-2 EACH



V₁-4 EACH



V₂-8 EACH

MODEL: Typical Details Sub-2 (Rev) FILE NAME: P:\Bids\2023\2023 VAR GUARDRAIL\Documents\DOT Office\District 1\ORD Project\11523\CADD\Drawings\11523-Sub-2-H&S.dgn

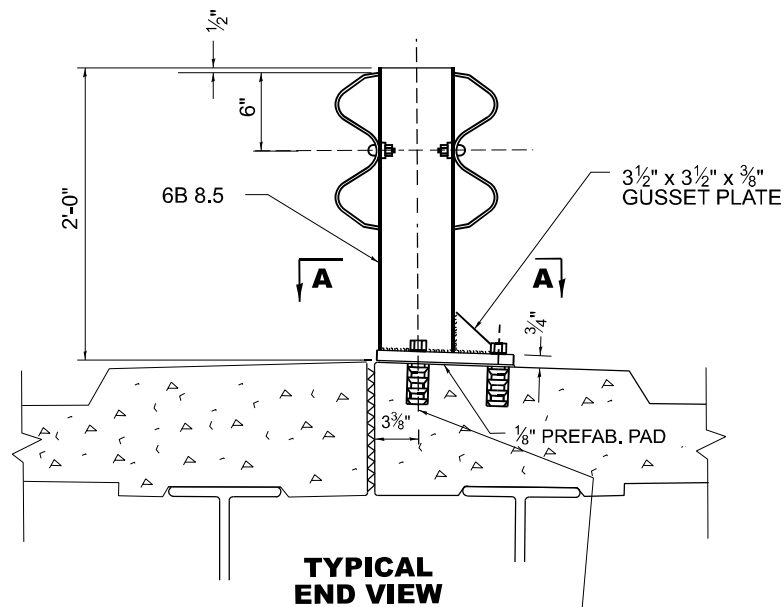
USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED - R. RITCHIE 05-02-00
DRAWN - R.F.L.	CHECKED -	REVISED -
PLOT SCALE = 0.16666633' / in.	DATE - 10-31-88	REVISED -
PLOT DATE = 6/21/2023		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL DETAILS FOR STEEL PLATE BEAM GUARDRAIL
ANCHORAGE REPAIR**

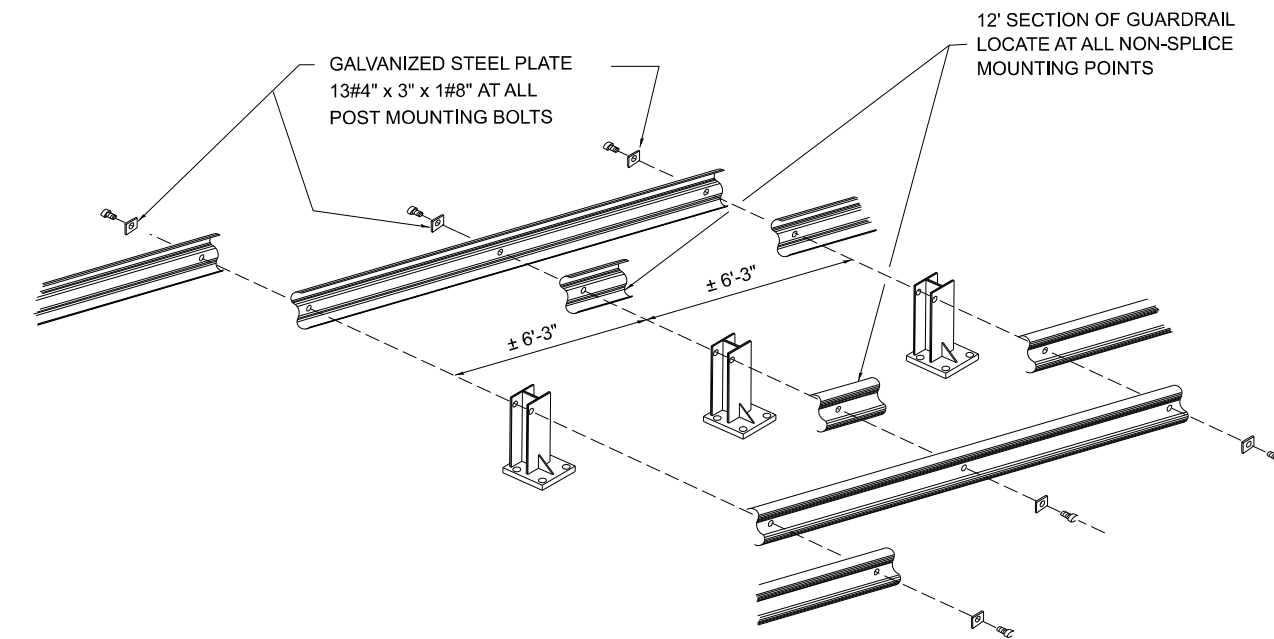
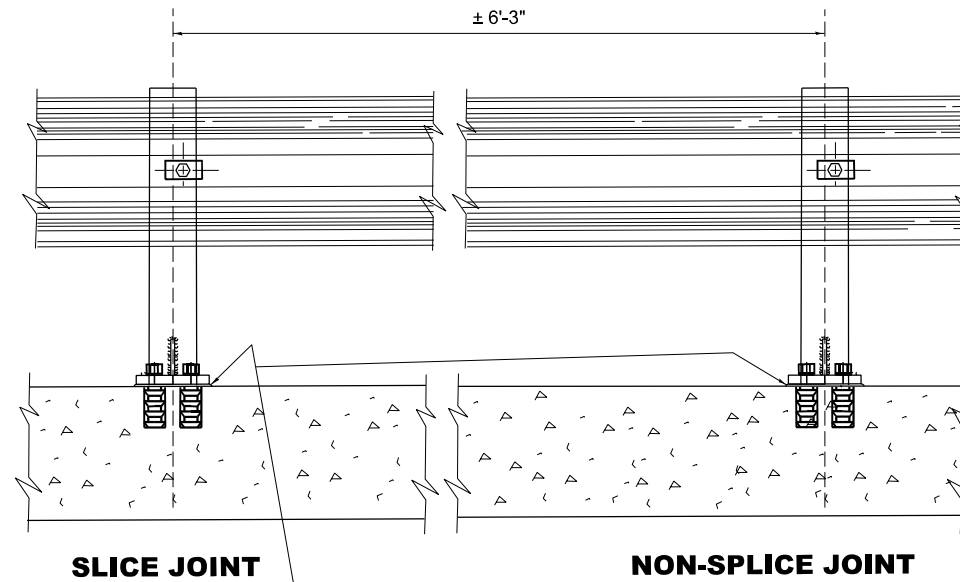
SCALE: NONE SHEET 1 OF 1 SHEETS STA. ___+___ TO STA. ___+___

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VAR	32	20
BM-04			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				



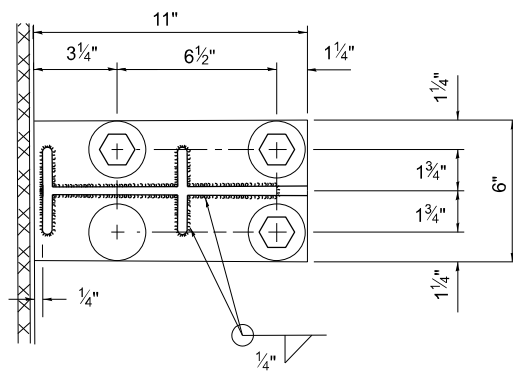
TYPICAL END VIEW

3/8" GALVANIZED ANCHOR BOLTS AND SELF DRILLING EXPANSION SHELLS OR MULTI UNIT TYPE ANCHORS
1 1/8" HOLES THRU BASE PLATE



NOTE:
DIAMOND TIPPED DRILL SHALL BE USED TO DRILL THRU REINFORCEMENT BARS

- NOTE:**
1. POSTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM DESIGNATIONS A-123 AND A-385.
 2. TWO PERCENT (2%) OF ALL ANCHOR BOLTS SHALL BE TEST LOADED IN PLACE. MIN. TEST LOAD = 8 KIPS.
 3. ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION A-153.
 4. FOR MATERIAL COMPOSITION OF PREFABRICATED PAD, SEE ARTICLE 54.9(F), (BEARING AND ANCHORAGE), OF THE STANDARD SPECIFICATIONS.
 5. PROVIDE 1-1#8" AND 2-1#16" GALVANIZED STEEL SHIMS FOR 25% OF THE POSTS.
 6. IF ONE ANCHOR BOLT FAILS DURING TEST, TWO OTHER ANCHOR BOLTS SHALL BE TESTED. TESTING EQUIPMENT CAN BE OBTAINED FROM BOLT COMPANIES.



SEC. A-A

THIS SHEET IS FOR INFORMATION ONLY

MODEL: Typical Details Sub-3 [Sheet]
FILE NAME: P:\Bids\2023\2023 VAR GUARDRAIL\Documents\DOT Office\District 1\ORD Project\112523\CADD\Drawings\CAD\Sheet\112523-Sub-3-Info-Shts.dgn

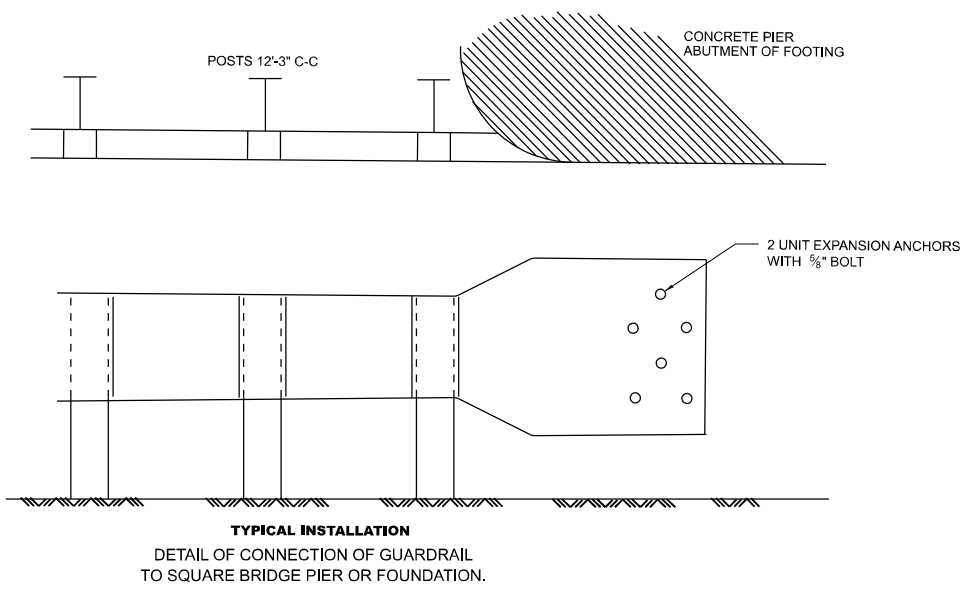
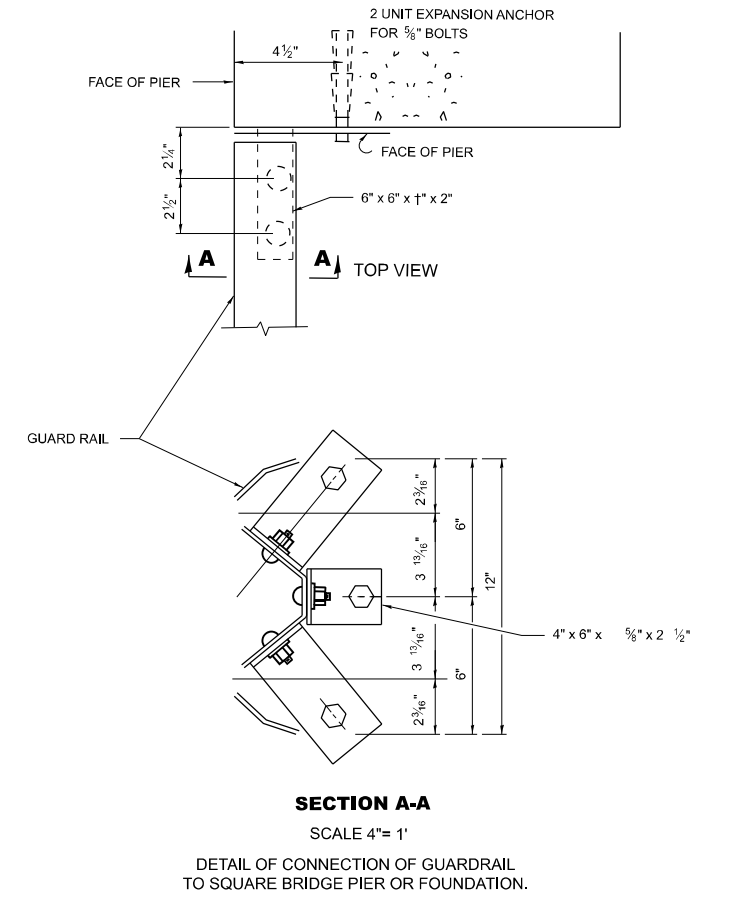
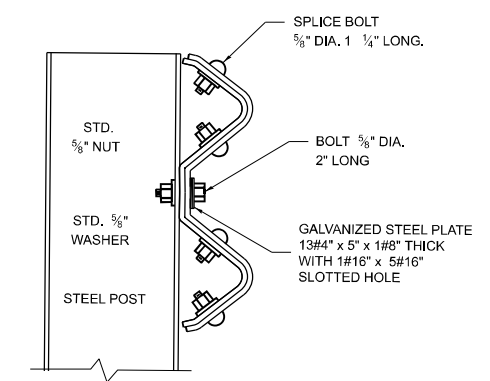
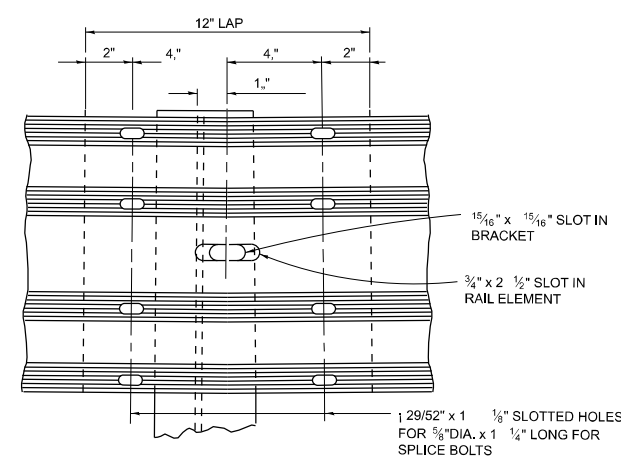
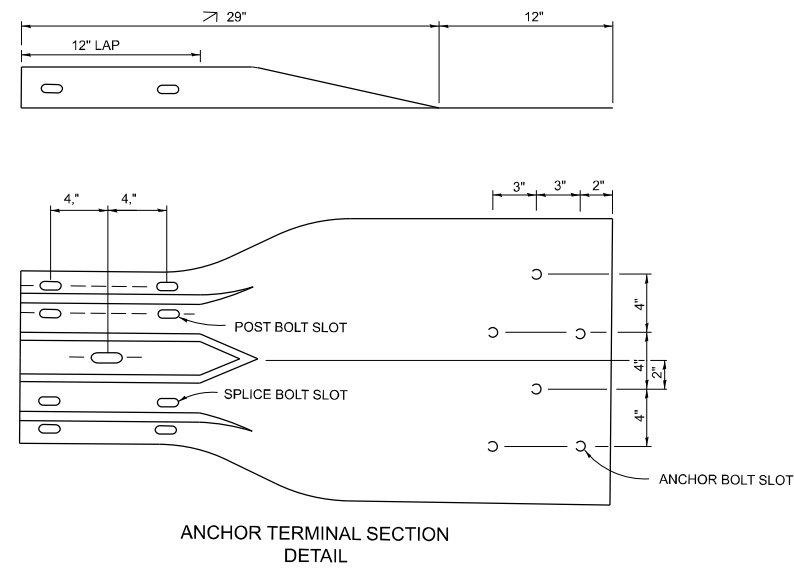
USER NAME = Rodrigo.Ledezma	DESIGNED -	REVISED - R. RITCHIE 05-02-00
PLOT SCALE = 0.16666633' / in.	DRAWN - R.F.L.	REVISED -
PLOT DATE = 6/21/2023	CHECKED -	REVISED -
	DATE - 10-31-88	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL DETAIL FOR CENTER LONGITUDINAL JOINT
GUARDRAIL JOINT**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. ___+___ TO STA. ___+___

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VAR	32	21
BM-05		CONTRACT NO. 62U92		
ILLINOIS FED. AID PROJECT				



THIS SHEET IS FOR INFORMATION ONLY

MODEL: Typical Details Sub-4 [Sheet]
FILE NAME: P:\Bids\Spec\Drawings\BIDD\Documents\BIDD\Office\District 1\ORD Project\11523\CADD\Drawings\11523-Sub-4-Sheets.dgn

USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED - R, RITCHIE 05-02-00
DRAWN - R.F.L.	REVISIONS	
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE - 10-31-88	REVISED -

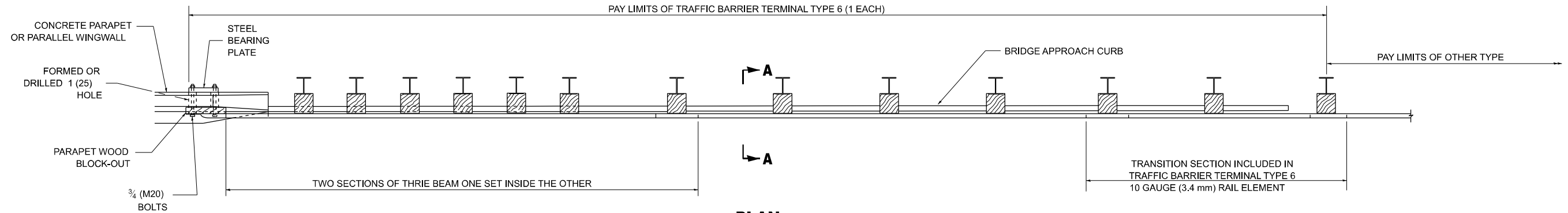
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF GUARDRAIL SUPPORT AND END ANCHORAGE			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. ___+___ TO STA. ___+___

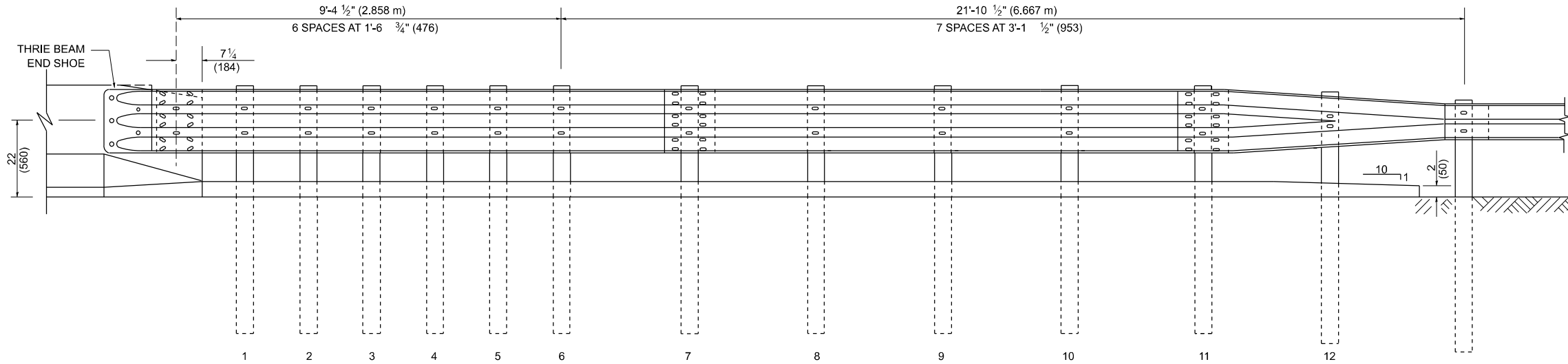
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VAR	32	23
BM-07		CONTRACT NO. 62U92		
ILLINOIS FED. AID PROJECT				

PARAPET OR WINGWALL

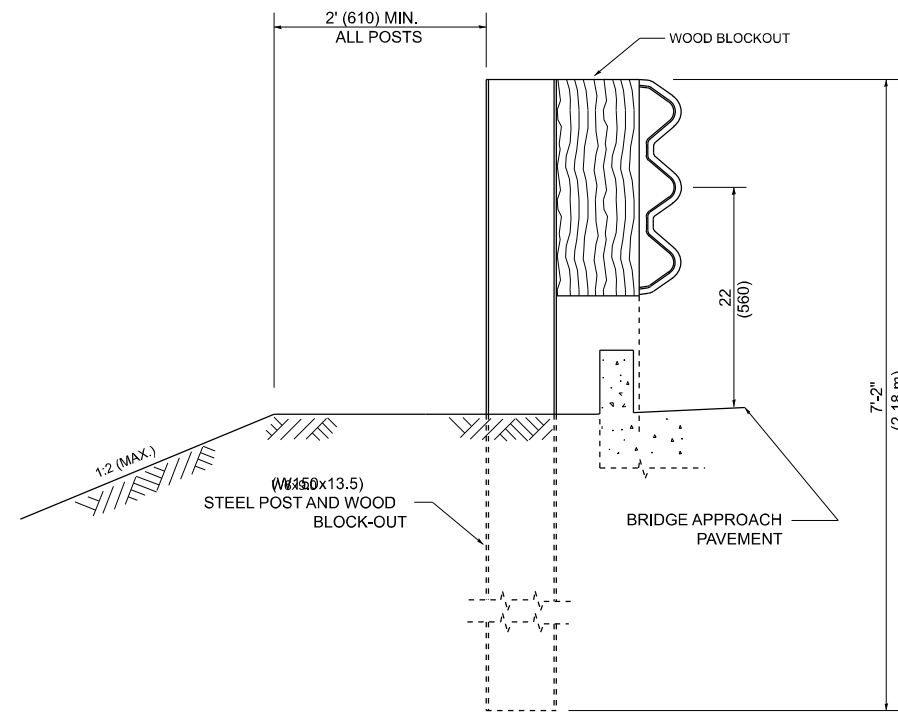
PAY LIMITS OF TRAFFIC BARRIER TERMINAL TYPE 6 (1 EACH)



PLAN



ELEVATION



SECTION A-A

GENERAL NOTES

TO BE USED WHEN CONNECTING TO EXISTING GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.

SEE STANDARD 630001 FOR DETAILS OF GUARDRAIL NOT SHOWN.

THRIE BEAM RAIL SHALL BE BOLTED TO BLOCK-OUT AT ALL POSTS.

SEE STANDARD 420401 FOR DETAILS OF BRIDGE APPROACH PAVEMENT.

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.

ILLINOIS STATE STANDARD:
631031-05 02/19/2008

USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED -
DRAWN -	REVISIONS - 631031-05 02/19/2008	
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPE 6 TERMINAL
FOR USE WITH 21" HIGH SPBGR**

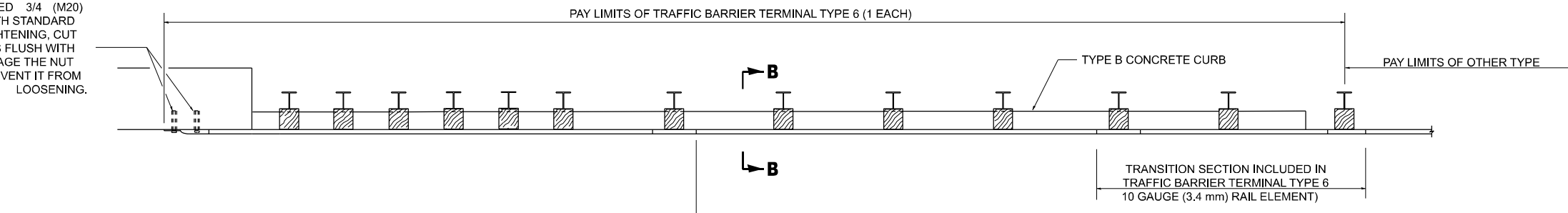
SCALE: NONE SHEET 1 OF 3 SHEETS STA. ___+___ TO STA. ___+___

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VAR	32	24
BM 22			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				

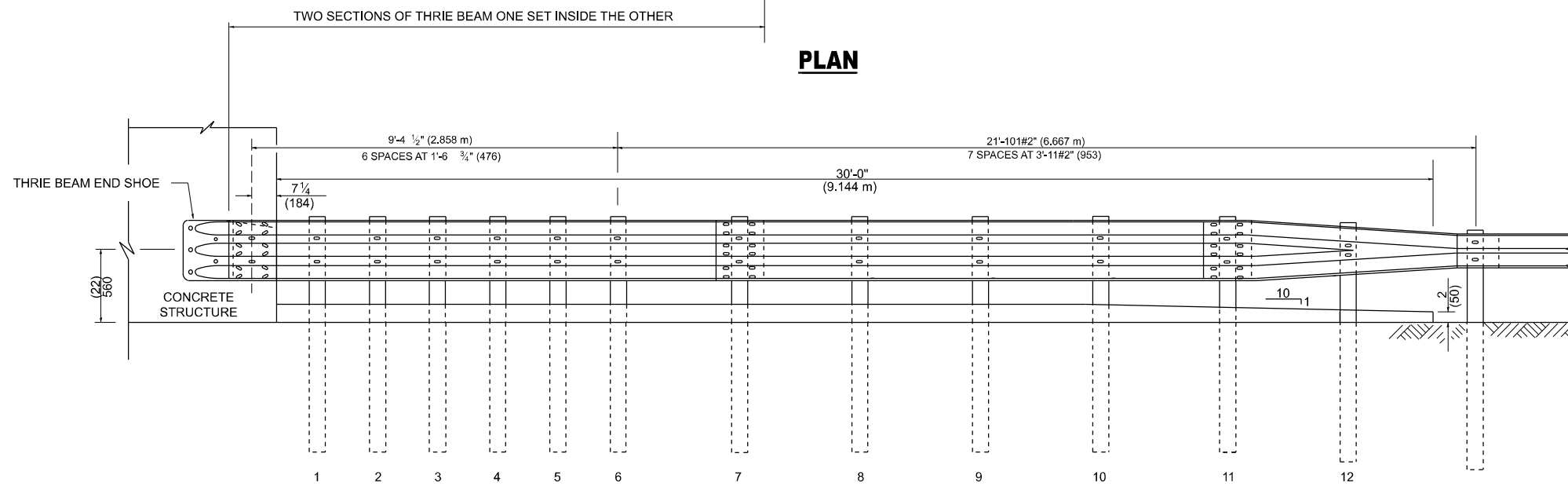
MODEL: D:\Cadd\Illinois\631031-05\631031-05.dgn
FILE NAME: P:\MIDOT\Documents\DOT Office\District 1\ORD Project\11523\CADDData\CADDraws\11523-04-Cha-Shts.dgn

OTHER CONCRETE STRUCTURE

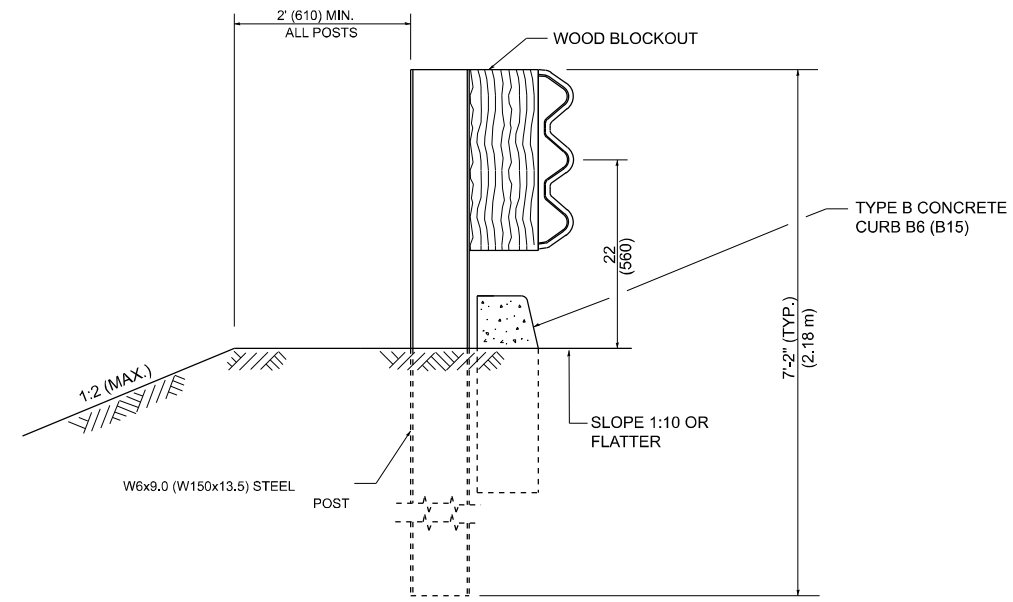
5 EPOXY GROUTED 3/4" (M20) ANCHOR BOLTS WITH STANDARD WASHERS. AFTER TIGHTENING, CUT THE ANCHOR BOLTS FLUSH WITH NUTS, AND DAMAGE THE NUT TO PREVENT IT FROM LOOSENING.



PLAN



ELEVATION



SECTION B-B

ILLINOIS STATE STANDARD:
631031-05 02/19/2008

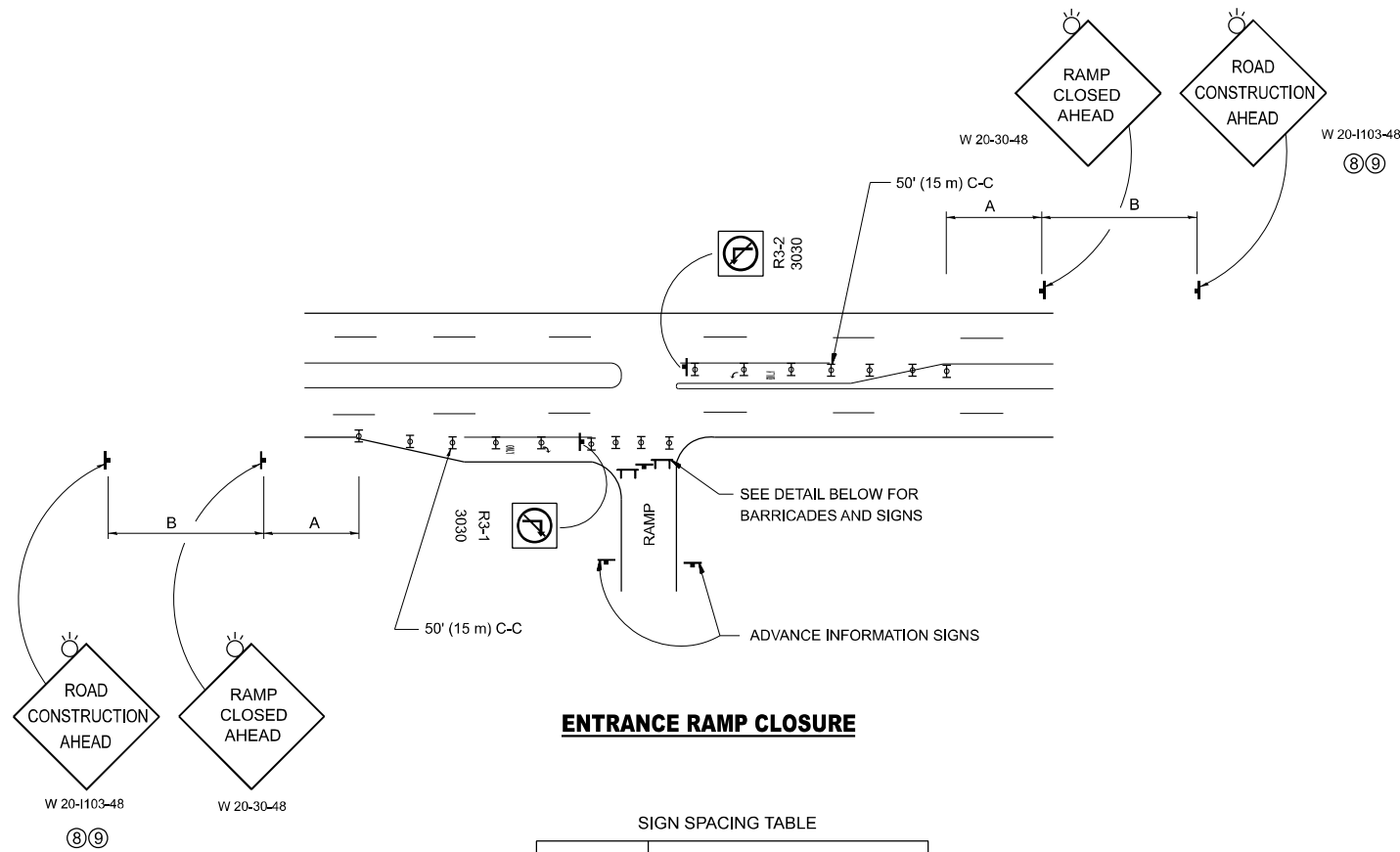
MODEL: D:\Cadd\11\Sheet1.dwg FILE NAME: P:\Biospec\cadd\11\ORD\Project\11\ORD\Project\11\ORD\CADDData\CADSheet\11\2023-04-14\Sheet1.dgn

USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED -
DRAWN -	REVISOR - 631031-05 02/19/2008	
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED -
PLOT DATE = 6/21/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPE 6 TERMINAL FOR USE WITH 21" HIGH SPBGR			
SCALE: NONE	SHEET 2	OF 3 SHEETS	STA. ___+___ TO STA. ___+___

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL VAR	VAR	32	25
BM 22			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				

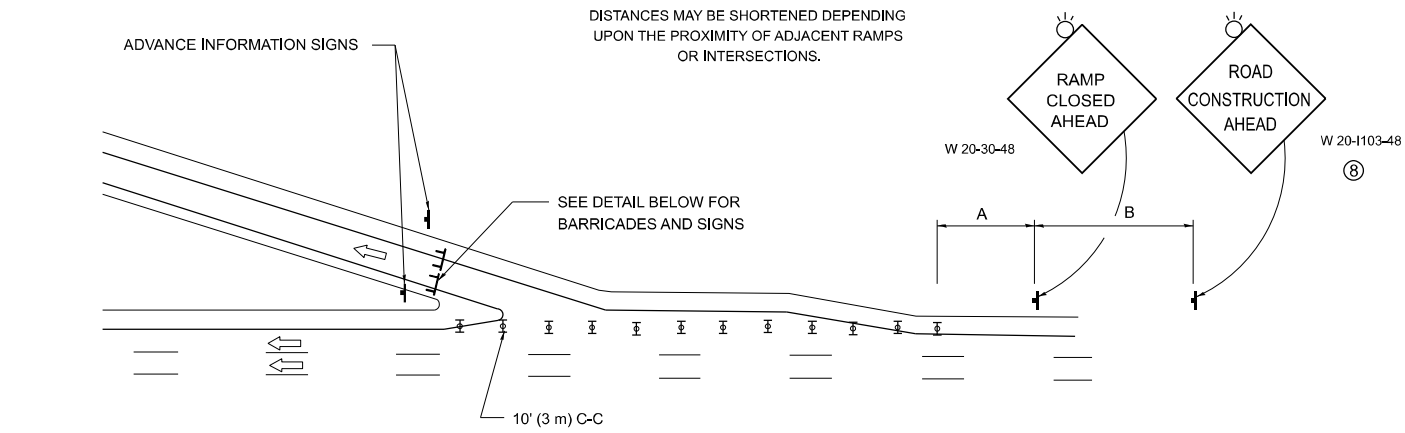


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

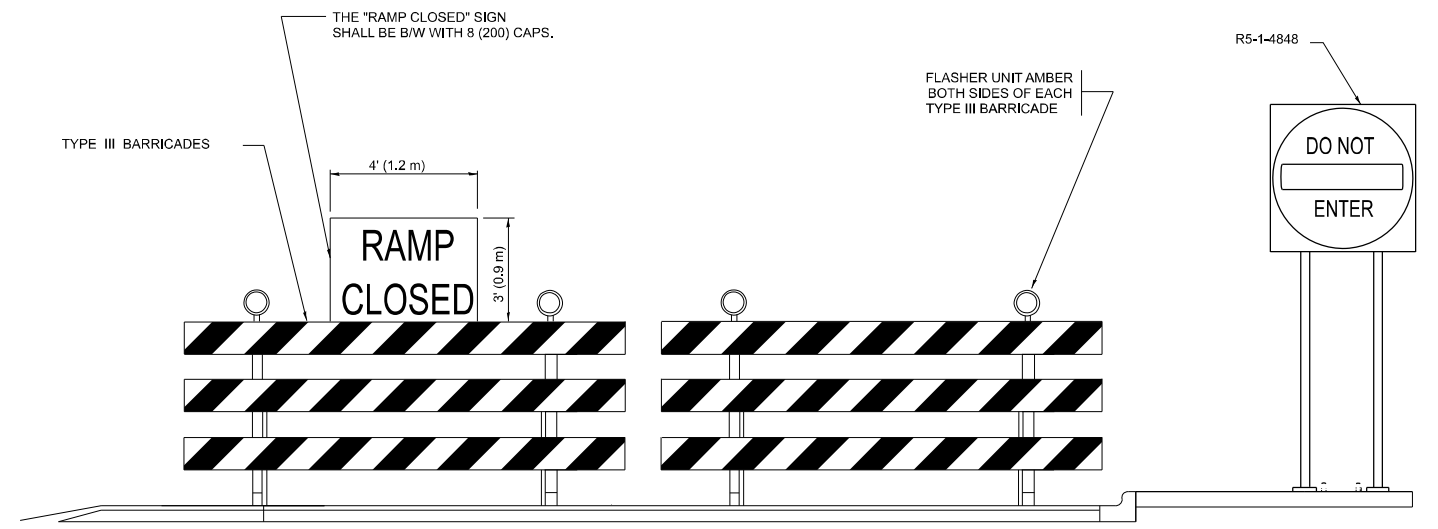
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



EXIT RAMP CLOSURE

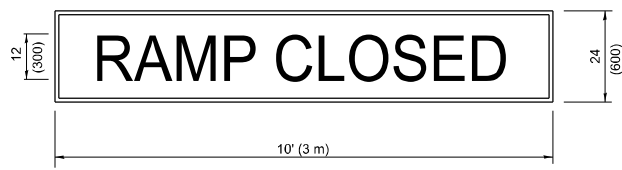
SYMBOLS

- ▬ TYPE II BARRICADE OR DRUM
- ▬ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



DETAIL FOR REQUIRED BARRICADES & SIGNS

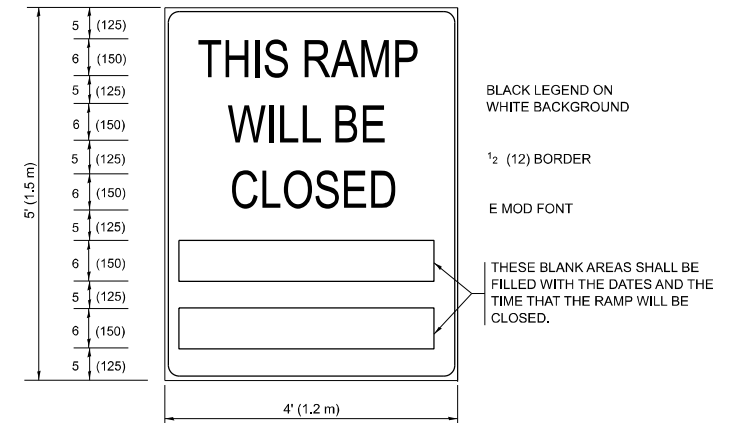
RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE 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

RAMP CLOSURE ADVANCE INFORMATION SIGN



GENERAL NOTES:

- 1 CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- 2 VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- 3 A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED 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.
- 9 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.

MODEL: D:\Drawings\9 (Sheet)\... FILE NAME: ...

USER NAME = Rodrigo Ledezma	DESIGNED - D.W.S.	REVISED - S.P.B._01-07
PLOT SCALE = 0.16666633' / in.	DRAWN -	REVISED - S.P.B._12-09
PLOT DATE = 6/21/2023	CHECKED -	REVISED - M.D._06-13
	DATE - 02-83	REVISED - M.D._01-18

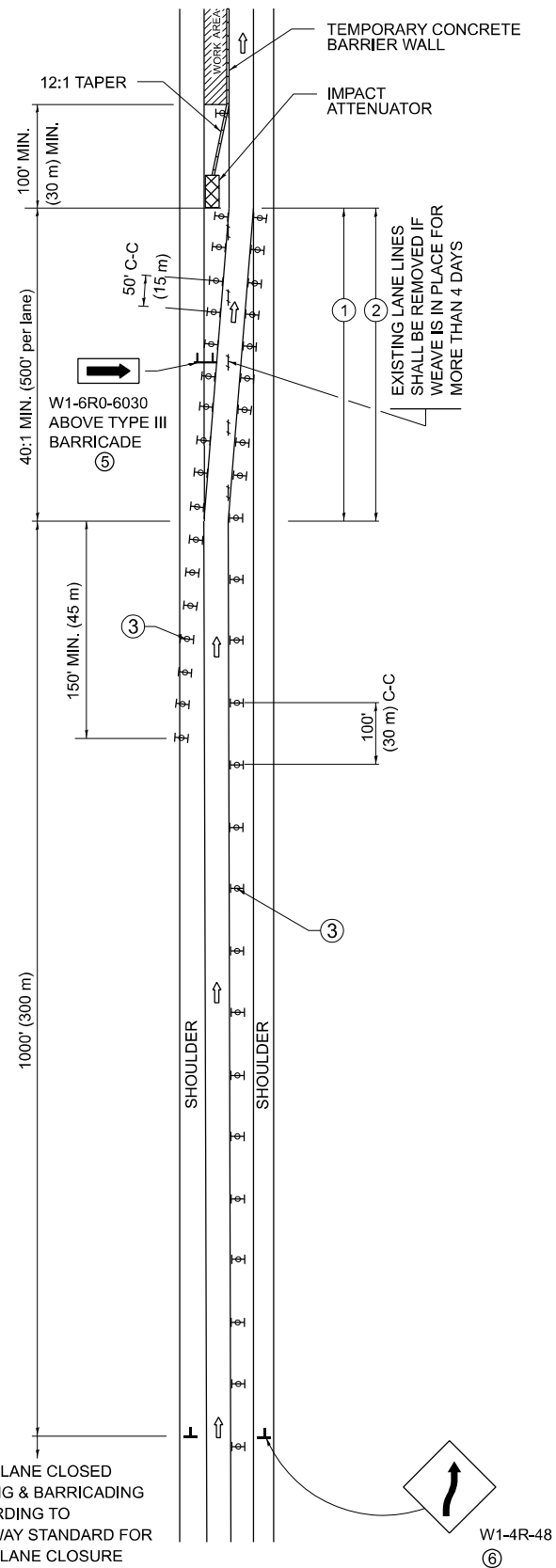
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ENTRANCE AND EXIT RAMP CLOSURE DETAILS

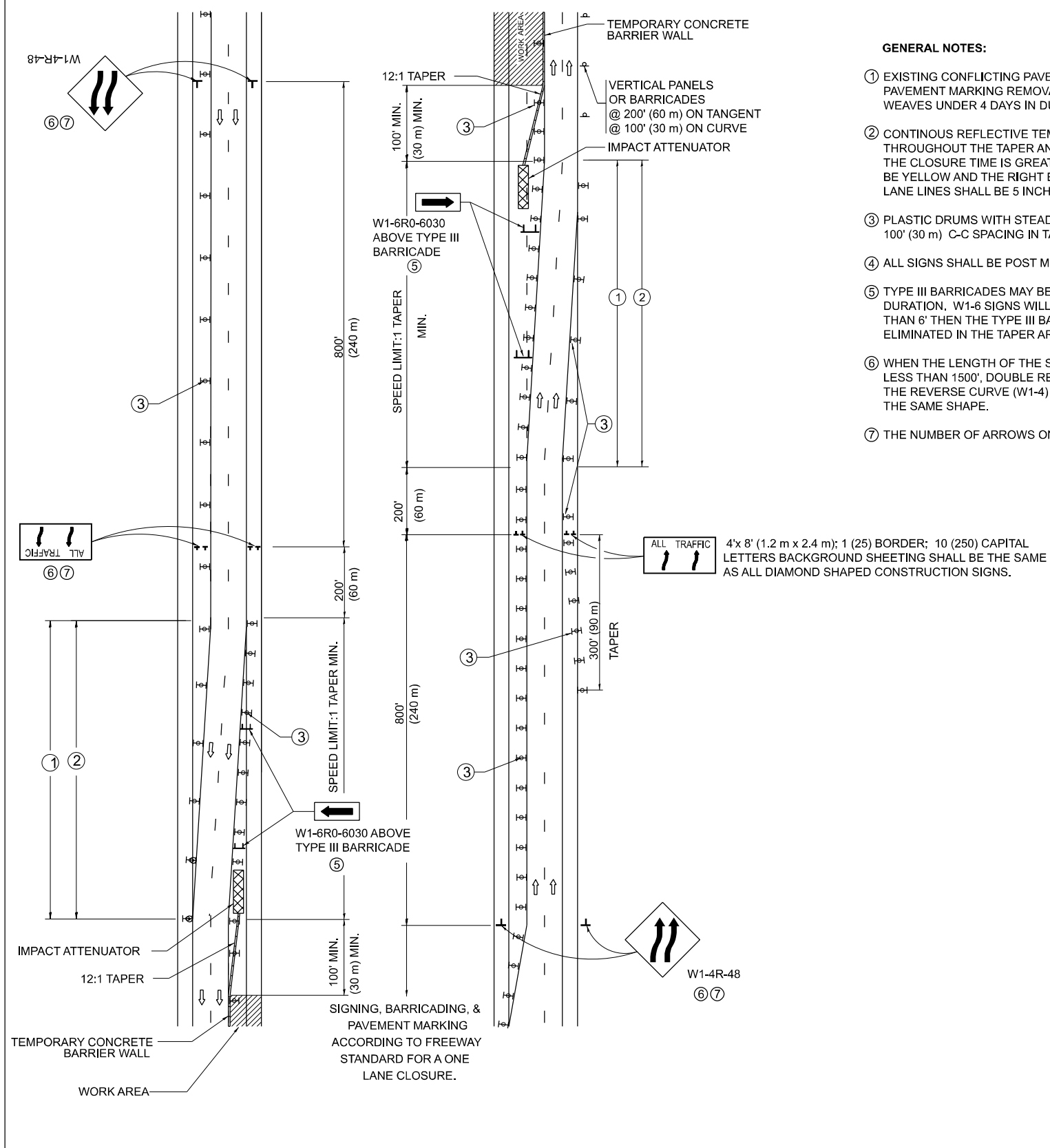
SCALE: NONE SHEET 1 OF 1 SHEETS STA. ___+___ TO STA. ___+___

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VAR	32	27
TC-08			CONTRACT NO. 62U92	
ILLINOIS		FED. AID PROJECT		

SINGLE LANE WEAVE



MULTI-LANE WEAVE



GENERAL NOTES:

- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.
- CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
- WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
- THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER WALL
- IMPACT ATTENUATOR
- W1-4R-48 (6)
- W24-1-48 (7)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

MODEL: D:\Drawings\4 (Sheet) FILE NAME: P:\Bids\2023\2023 VAR GUARDRAIL\TC-09\Traffic Control Details\TC-09-Traffic Control Details.dgn

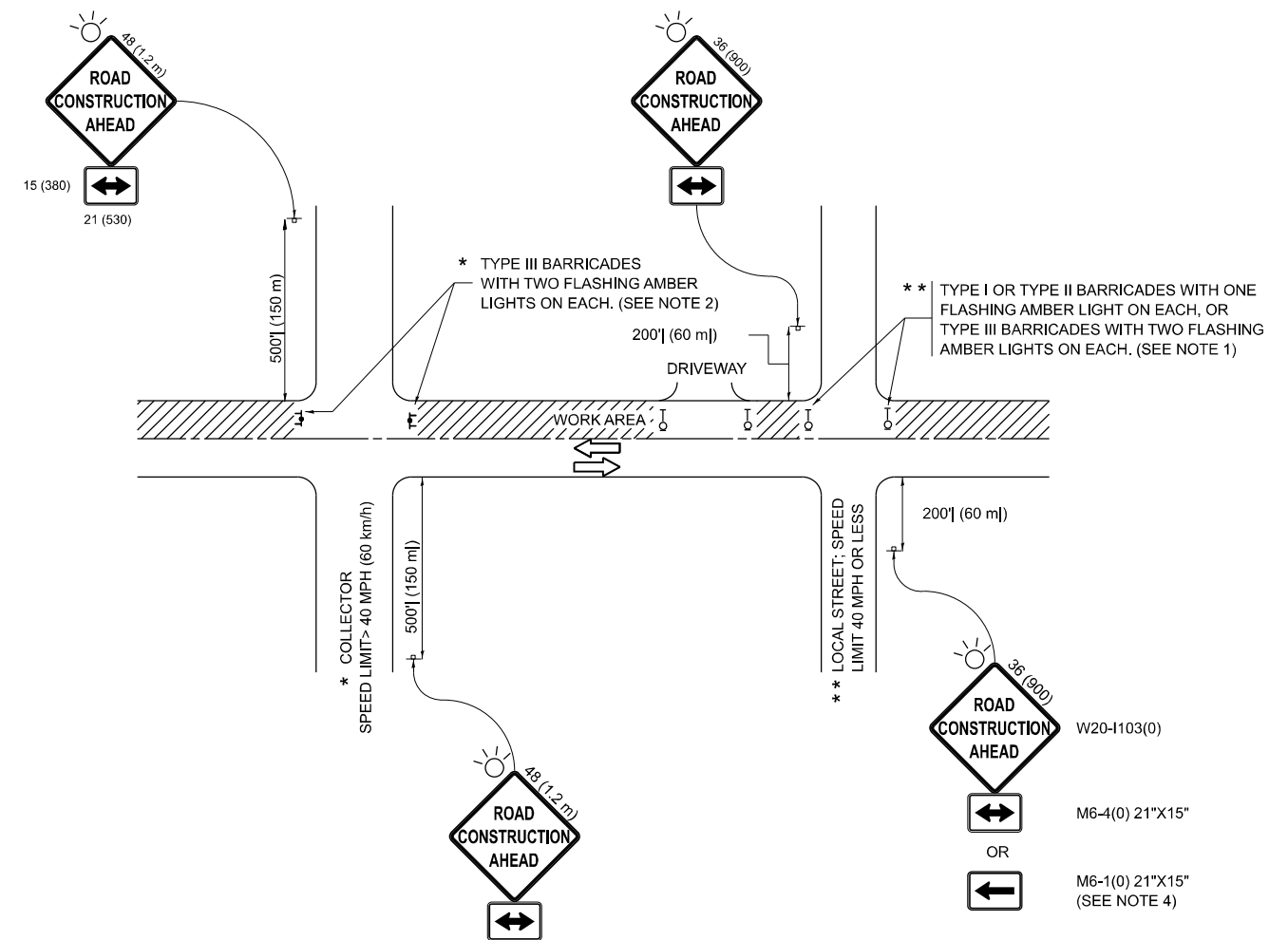
USER NAME = Rodrigo Ledezma	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06
PLOT SCALE = 0.16666633' / in.	DRAWN -	REVISED - S.P.B. 01-07
PLOT DATE = 6/21/2023	CHECKED -	REVISED - S.P.B. 12-09
	DATE - 02-87	REVISED - M.D. 06-13

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL DETAILS FOR
FREEWAY SINGLE & MULTI-LANE WEAVE**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. ___+___ TO STA. ___+___

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VAR	32	28
TC-09		CONTRACT NO. 62U92		
ILLINOIS FED. AID PROJECT				



NOTES:

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:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER 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:
 - a) 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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

MODEL: D:\Drawings\Sheet1
 FILE NAME: P:\Bids\2023\2023 VAR GUARDRAIL\DOT Office\Sheet1\ORD Project\112523\CADDData\CADDrawings\112523-24-Ch4-SideRds.dgn

USER NAME = Rodrigo.Ledezma	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
PLOT SCALE = 0.16666633" / in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
PLOT DATE = 6/21/2023	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
		REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

SCALE: SHEET OF SHEETS STA. ___+___ TO STA. ___+___

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL VAR	VAR	32	29
TC-10			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

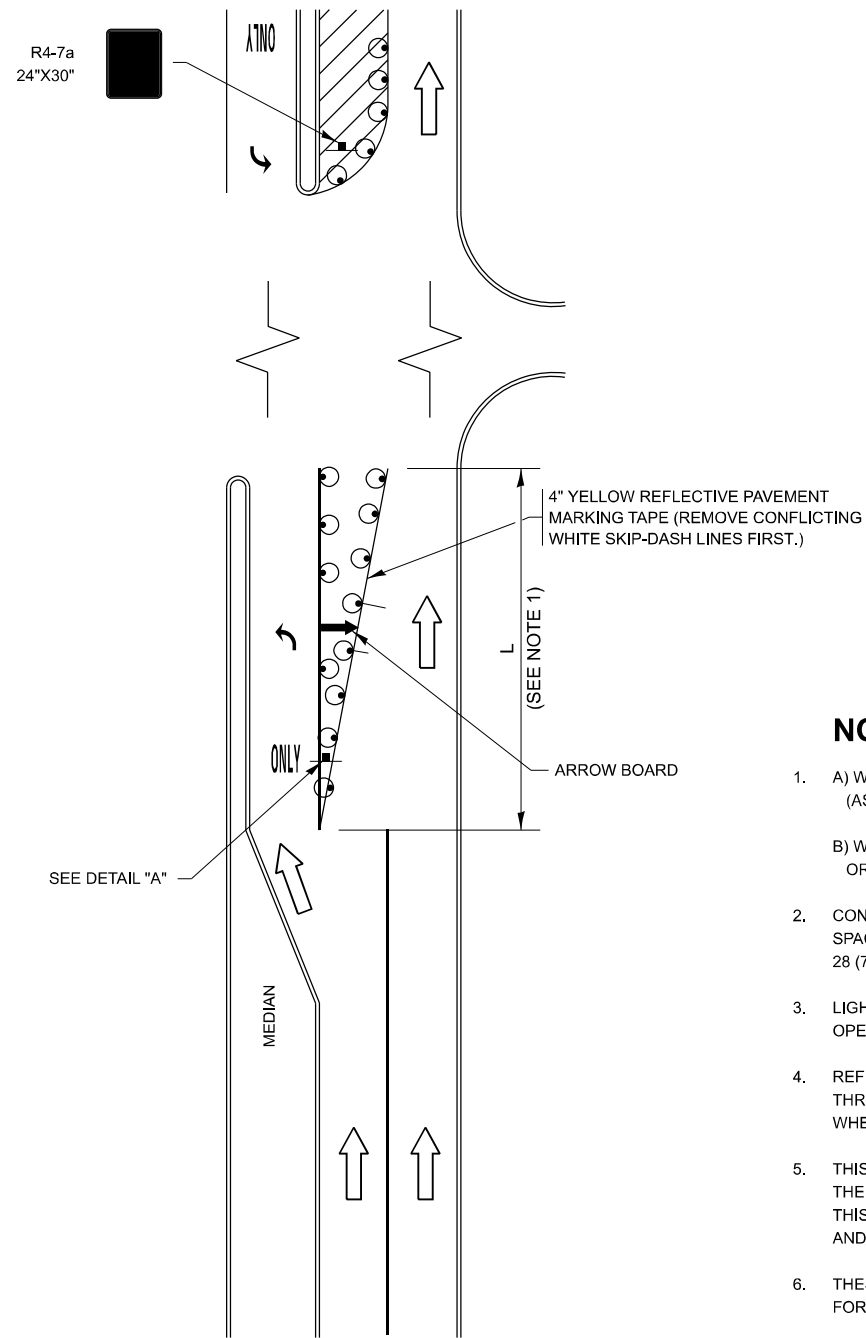


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

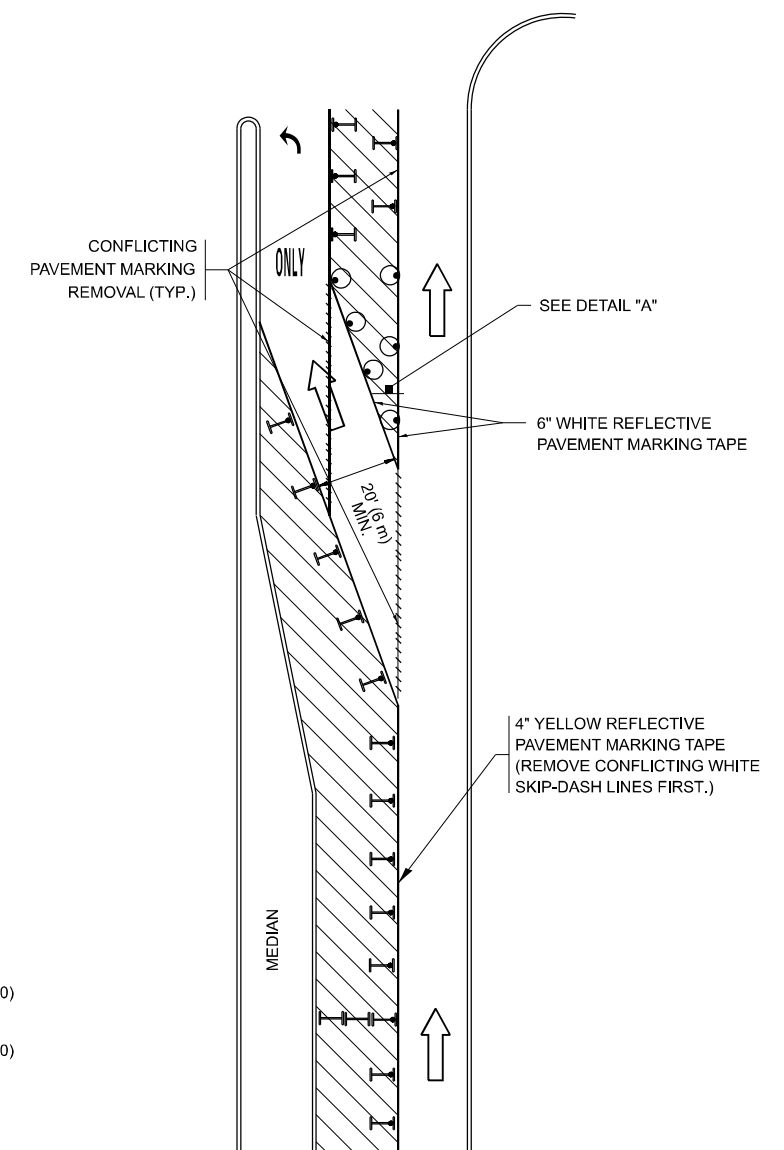
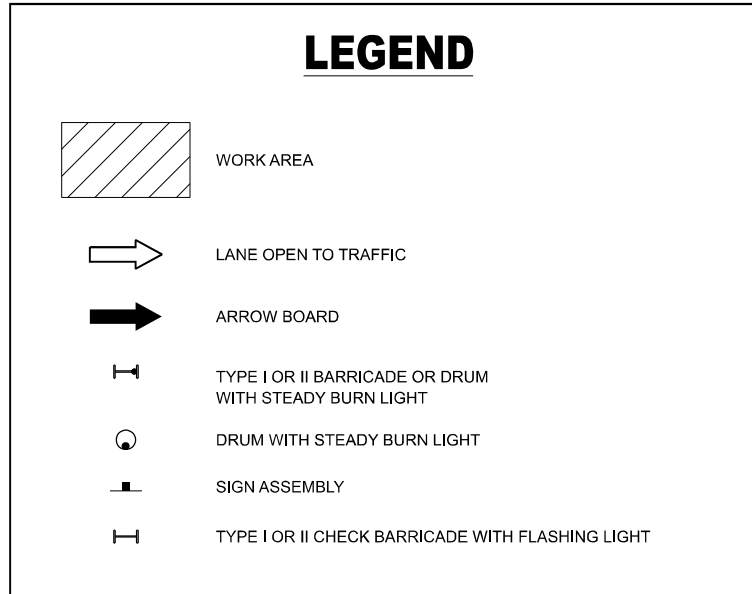
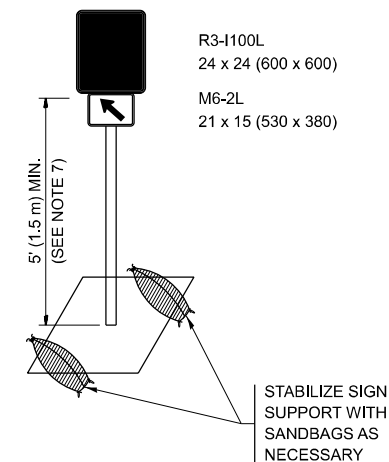


FIGURE 2



NOTES:

1. A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
B) WHEN "L" IS $>$ THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



DETAIL A

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

MODEL: D:\Drawings\6 (Sheet) FILE NAME: P:\Illinois\CDOT\Documents\DOT Office\District 1\ORD Project\112523\CADD\Drawings\CDOT\Sheet\112523-4-14-18-18-18.dgn

USER NAME = Rodrigu.Ledezma	DESIGNED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
	DRAWN - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13
PLOT SCALE = 0.16666633' / in.	CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16
PLOT DATE = 6/21/2023	DATE - T. RAMMACHER 01-06-00	REVISED -

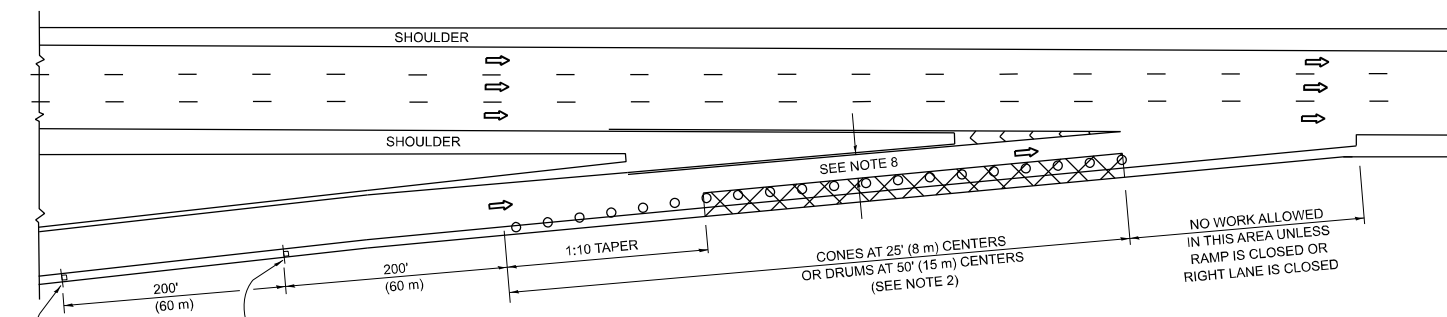
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

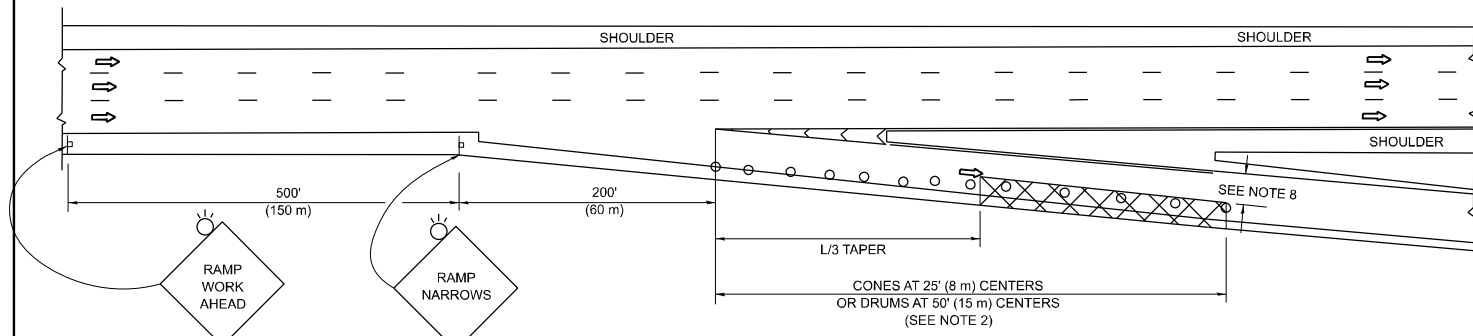
SCALE: NONE SHEET 1 OF 1 SHEETS STA. ___+___ TO STA. ___+___

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL VAR	VAR	32	30
TC-14			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				

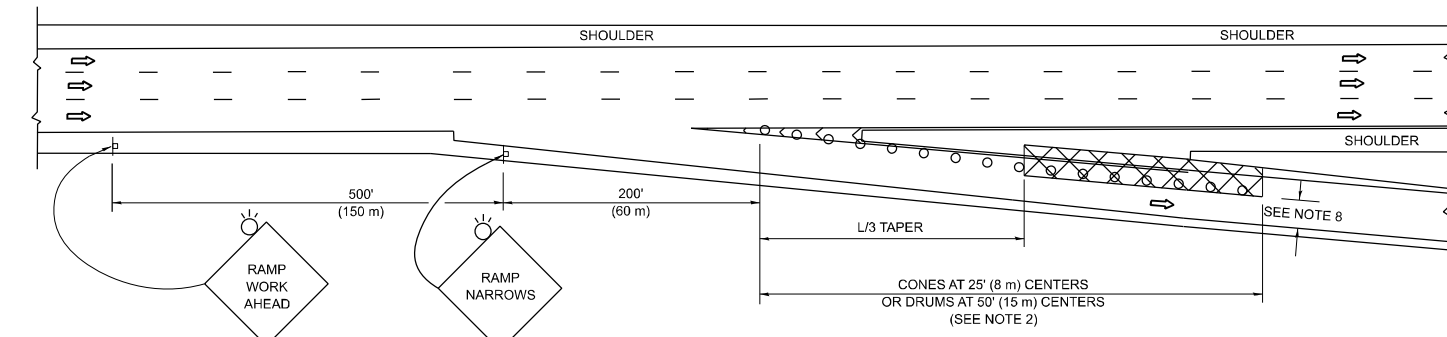
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

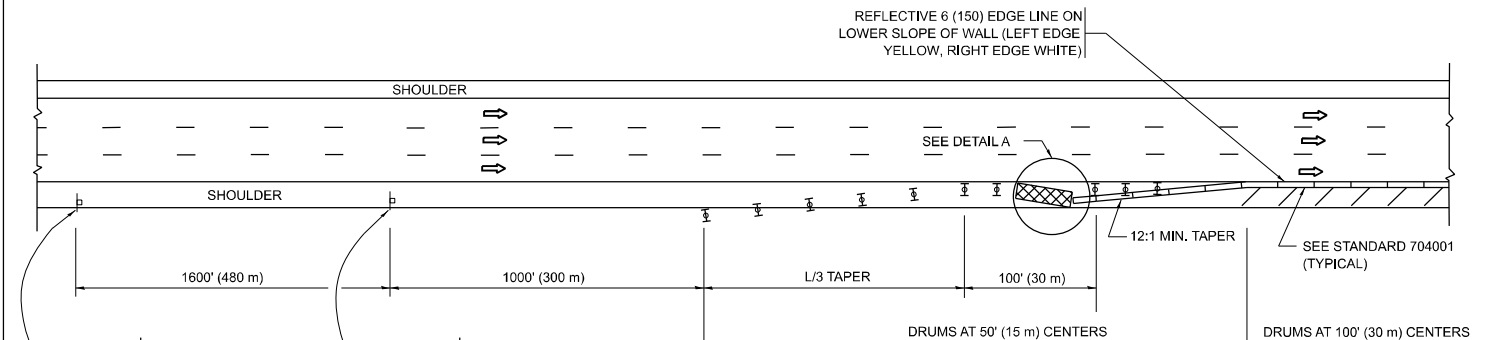
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES:

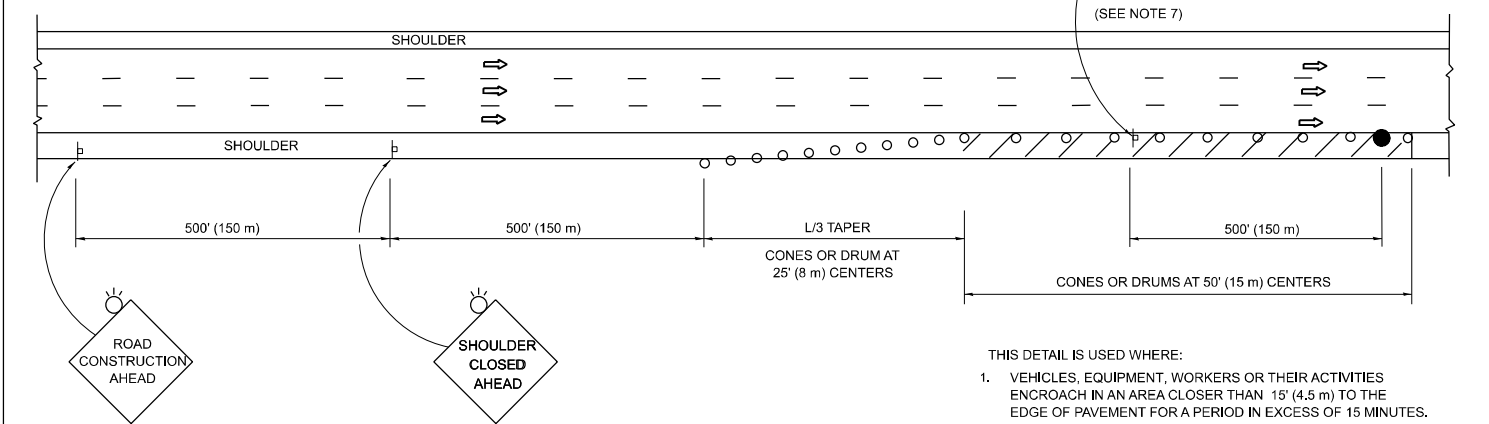
- THE "L" DISTANCE EQUALS:

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)
- TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTACLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- 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



TEMPORARY SHOULDER CLOSURE



**DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 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 NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
- 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 ENCR OACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

- 12' MIN. WIDTH TANGENT SECTION
16' MIN. WIDTH CURVE SECTION.

- TEMPORARY SHOULDER AND NON-SYSTEM INTERCHANGE PARTIAL RAMP CLOSURES ARE ALLOWED WEEKDAYS BETWEEN 9:00 A.M. AND 3:00 P.M. AND BETWEEN 7:00 P.M. AND 5:00 A.M. OR AS APPROVED BY THE EXPRESSWAY TRAFFIC OPERATIONS ENGINEER. PERMANENT SHOULDER AND PARTIAL RAMP CLOSURES WILL ONLY BE PERMITTED IF CALLED FOR IN THE PLANS OR AS APPROVED BY THE EXPRESSWAY OPERATIONS ENGINEER.

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

MODEL: D:\Drawings\7 (Sheet) FILE NAME: P:\Bids\2023\2023-24\2023-24-01\2023-24-01-01\2023-24-01-01-01.dgn

USER NAME = Rodrigo Ledezma	DESIGNED -	REVISED - S.P.B. 12-09
	DRAWN - D.W.S.	REVISED - M.D. 06-13
PLOT SCALE = 0.16666633 / in.	CHECKED -	REVISED - M.D. 01-18
PLOT DATE = 6/21/2023	DATE - 11-96	REVISED - M.D. 10-20

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

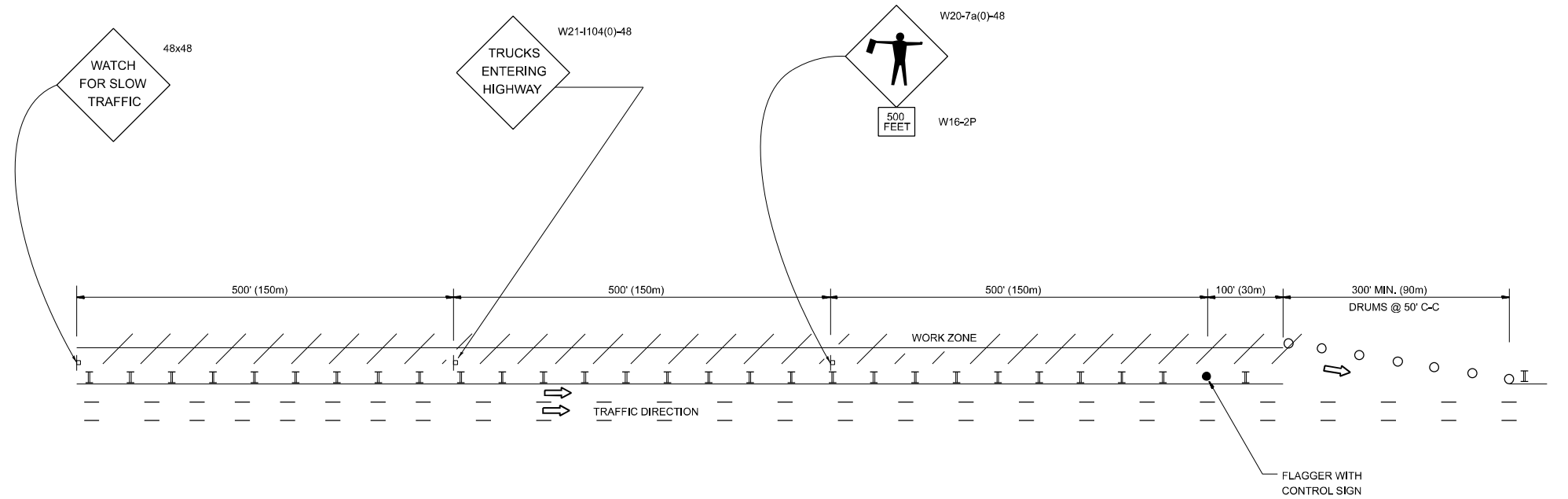
**TRAFFIC CONTROL DETAILS FOR FREEWAY
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. ___+___ TO STA. ___+___

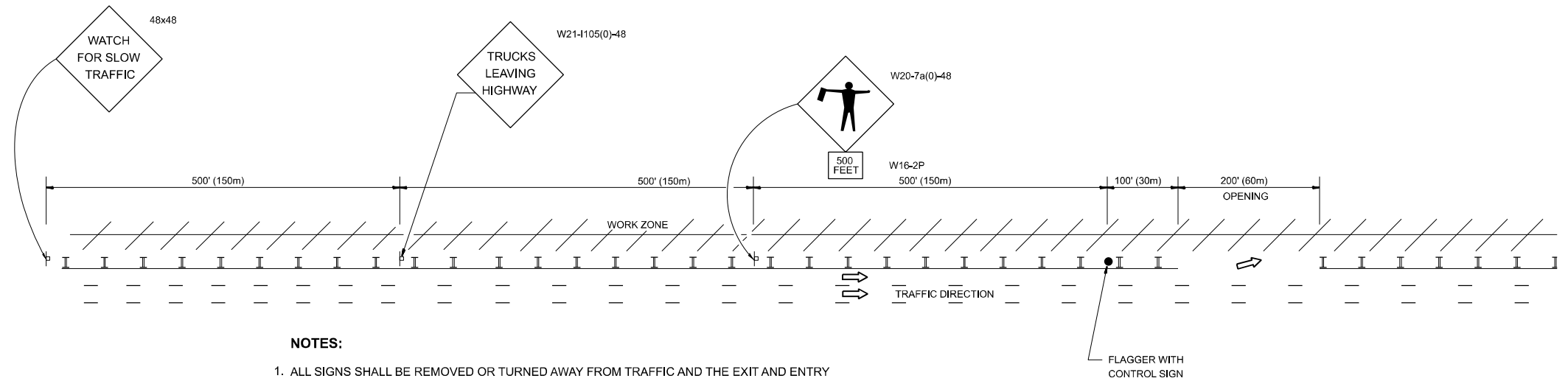
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL	VAR	32	31
TC-17			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

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

MODEL: D:\Cadd\6 (Sheet) FILE NAME: P:\I1080\Documents\DOT Office\District 1\I1080 Project\I1080_CADD\Drawings\I1080-4-4-24-24.dgn

USER NAME = Rodrigo.Ledezma	DESIGNED -	REVISED - J.A.F. 02-06
	DRAWN -	REVISED - S.P.B. 01-07
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED - S.P.B. 12-09
PLOT DATE = 6/21/2023	DATE -	REVISED - M.D.06-13

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FREEWAY / EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS
AT WORK ZONE OPENINGS ON FREEWAYS / EXPRESSWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. ___+___ TO STA. ___+___

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR GUARDRAIL VAR	VAR	32	32
TC-18			CONTRACT NO. 62U92	
ILLINOIS FED. AID PROJECT				