

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1481	13-00160-02-RS	MCLEAN	8	1
		ILLINOIS	CONTRACT NO. 91543	

STATE OF ILLINOIS

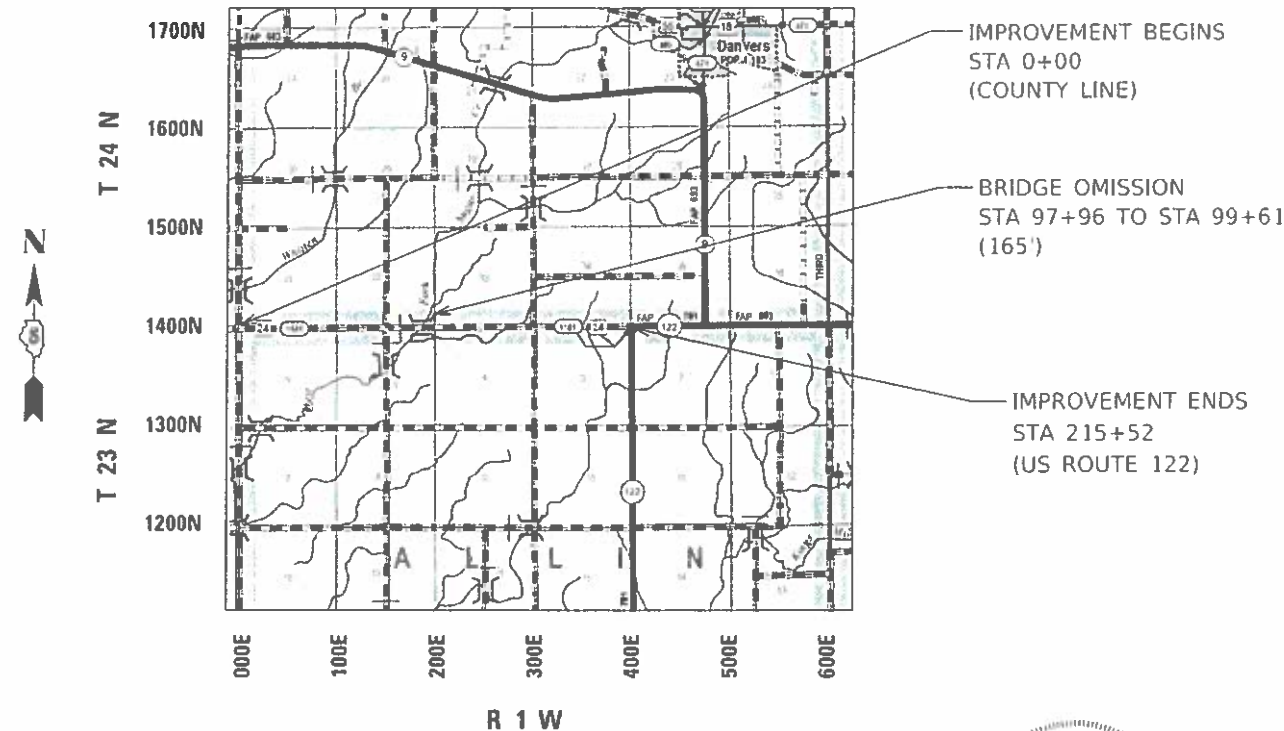
DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

F.A.S. ROUTE 1481 (CH 24)
13-00160-02-RS
RESURFACE
MCLEAN COUNTY
JOB# C-95-309-16
PROJECT: UPMV(809)
FUNDING: STR, TARP, & MATCHING

INDEX OF SHEETS

- 1 COVER SHEET
- 2 SUMMARY OF QUANTITIES
- 3 TYPICAL CROSS SECTIONS
- 4 MISCELLANEOUS DETAILS
- 5-8 PLAN VIEW



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY

APPROVED MARCH 1 20 22
Jimmy Stika
MCLEAN CO. HIGHWAY DEPT. COUNTY ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PASSED MARCH 8 20 22
[Signature]
DISTRICT 5 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW March 8 20 22
[Signature]
REGION 3 ENGINEER



02/28/2022 DATE *Luke D. Hohlin*
LUKE HOHULIN, P.E.
NO. 062-065157
EXPIRATION DATE 11/30/23

- NOTE:** THE TOTAL LENGTH OF THE PROPOSED PROJECT IS 21,552 FEET (4.082 MILES) WITH A NET LENGTH OF 21,387 FEET (4.051 MILES).
- NOTE:** THESE PLANS MEET THE MINIMUM REQUIREMENTS FOR A 3R IMPROVEMENT
- NOTE:** CURRENT ADT = 900 (2020)
FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

THESE PLANS ARE NOT TO SCALE

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

CONTRACT NO. 91543

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

STATE STANDARD DETAILS

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001006 DECIMAL OF AN INCH AND FOOT
- 642006-01 SHOULDER RUMBLE STRIPS 8IN.
- 701001-02 OFF-RD OPERATIONS, 2L, 2W MORE THAN 15' AWAY
- 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701011-04 OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
- 701201-05 LANE CLOSURE, 2L, 2W DAY ONLY, FOR SPEEDS > 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W SHORT TIME OPERATIONS
- 701306-04 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
- 701901-08 TRAFFIC CONTROL DEVICES
- 781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- B.L.R. 18-6 TRAFFIC CONTROL DEVICES-DAY LABOR MAINTENANCE
- B.L.R. 23-4 TRAFFIC BARRIER TERMINAL TYPE 1

SUMMARY OF QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL QUANTITY
20200500	EARTH EXCAVATION (WIDENING)	CU YD	2,417
35101400	AGGREGATE BASE COURSE, TYPE B	TON	100
35600650	HOT- MIX ASPHALT BASE COURSE WIDENING, 4"	SQ YD	13,944
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	41,562
40600370	LONGITUDINAL JOINT SEALANT	FOOT	21,387
40600990	TEMPORARY RAMP	SQ YD	93
40602965	HOT- MIX ASPHALT BINDER COURSE, IL-9.5FG, N50	TON	5,600
40604050	HOT- MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	5,750
40800029	BITUMINOUS MATERIALS (TACK COAT)	POUND	760
40800050	INCIDENTAL HOT- MIX ASPHALT SURFACING	TON	200
44000155	HOT- MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	1,511
44000158	HOT- MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	51,350
△ 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	500
△ 63000370	LONG-SPAN GUARDRAIL OVER CULVERT, 25 FT SPAN	FOOT	100
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	41,000
67100100	MOBILIZATION	L SUM	1
△ 78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	51,700
△ 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	269
△ LR631020	TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	4
X4401198	HOT- MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	1,680
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
Z0055300	RUMBLE STRIP	EACH	4

△ SPECIALTY ITEMS

EARTH EXCAVATION (WIDENING), 6-1/4" SCHEDULE	
3' WIDENING LEFT	3' WIDENING RIGHT
0+75 - 95+96	0+75 - 95+96
101+61 - 216+32	101+61 - 214+80

HMA BASE COURSE WIDENING, 4" SCHEDULE	
3' WIDENING LEFT	3' WIDENING RIGHT
0+75 - 95+96	0+75 - 95+96
101+61 - 216+32	101+61 - 214+80

LONGITUDINAL JOINT SEALANT SCHEDULE
0+00 - 97+96
99+61 - 215+52

GUARDRAIL SCHEDULE			
LOCATION	LONG SPAN GR 63000370	SPBGR, TYPE A, 6' POST 63000001	TRAFFIC BARRIER TERMINAL TYPE 1 LR631020
STA. 149+03	EBL Approach 148+78	162.5'	1 - 147+15.5
	EBL Depart 149+28	87.5'	1 - 150+15.5
	WBL Approach 148+78	162.5'	1 - 147+15.5
	WBL Depart 149+28	87.5'	1 - 150+15.5
QUANTITY TOTAL	100'	500'	4 EA

MILLING & PAVING SCHEDULE				
PAY ITEM	44000158 SURFACE REMOVAL 2-1/4"	44000155 SURFACE REMOVAL 1-1/2"	40602965 1-1/2" BINDER COURSE	40604050 1-1/2" SURFACE COURSE
LOCATION	0+00 - 95+96 (22')	95+96 - 97+96 (34')	0+75 - 95+96 (28')	0+00 - 95+96 (28')
	101+61 - 215+52 (22')	99+61 - 101+61 (34')	101+61 - 215+02 (28')	95+96 - 97+96 (34')
				99+61 - 101+61 (34')
				101+61 - 215+52 (28')
TOTALS	51,350 SQ YD	1,511 SQ YD	5,600 TONS	5,750 TONS

HMA MIXTURE REQUIREMENTS				
Location(s):	F.A.S. 1481	F.A.S. 1481	F.A.S. 1481	F.A.S. 1481
Mixture Use(s):	Base Course	Binder	Surface	Incidental
PG:	PG 64-22	PG 64-22	PG 64-22	PG 64-22
Design Air Voids:	4.0% @ N50	4.0% @ N50	4.0% @ N50	4.0% @ N50
Mixture Composition:	IL-19	IL-9.5FG	IL-9.5	IL-9.5
Friction Aggregate:	N/A	N/A	Mixture C	Mixture C
Mixture Weight:	112	112	112	112
Quality Management Program:	QC/QA	QC/QA	QC/QA	QC/QA
Sublot Size	N/A	N/A	N/A	N/A
Material Transfer Device (Required?):	No	No	No	No

NOTES:

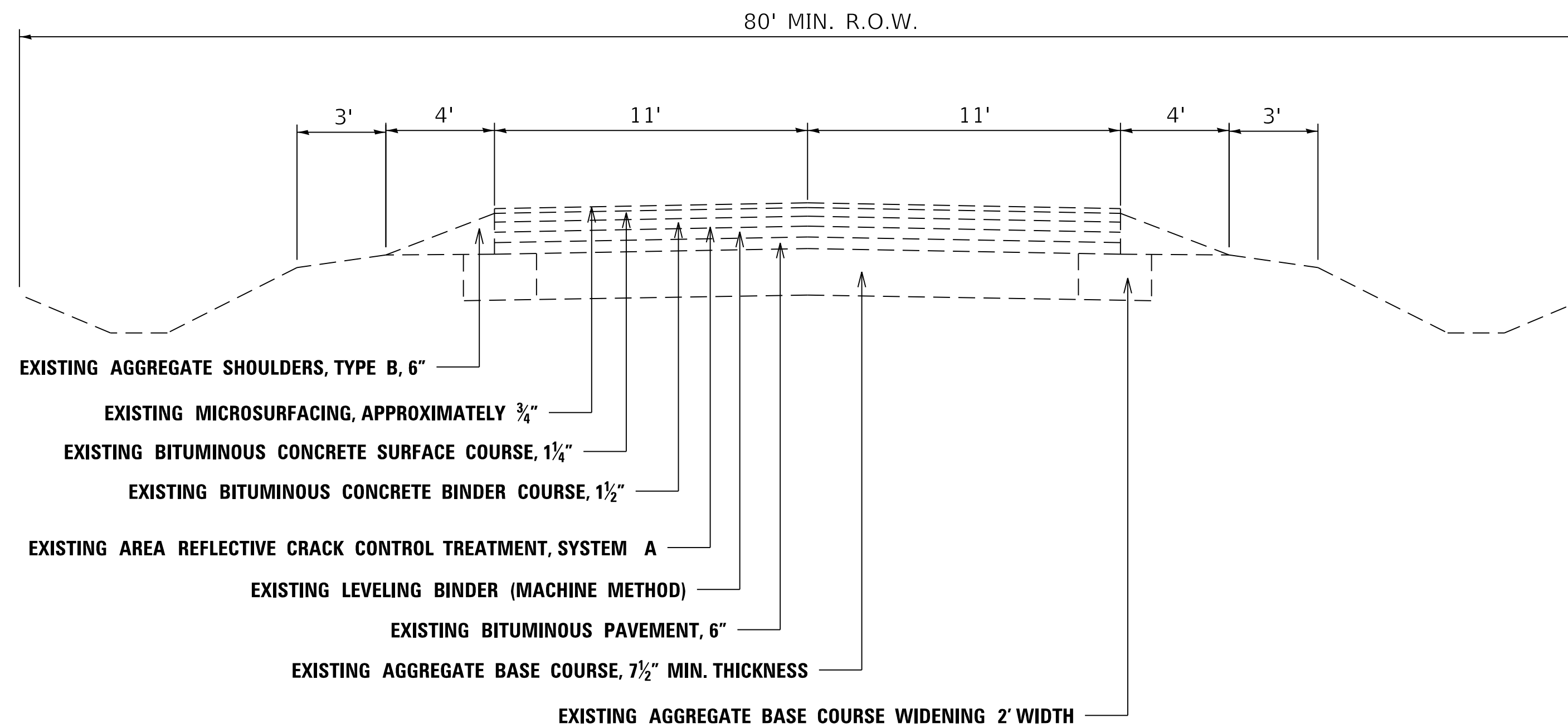
1. ALL TEMPORARY PAVEMENT STRIPING WILL BE DONE BY OTHERS.
2. ALL SIDE ROAD RETURNS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES AND RURAL MAILBOX TURNOUTS ARE TO BE CONSTRUCTED AND PAID FROM INCIDENTAL HOT-MIX ASPHALT SURFACING.
3. AGGREGATE BASE COURSE SHALL BE PLACED ALONG ALL SIDEROAD RETURN RADII AND SHALL BE PLACED ALONG AND BEHIND ALL FIELD ENTRANCES, GUADRAIL AND GUARDRAIL RUNOUTS, MAILBOX TURNOUTS AND ALL PRIVATE AND COMMERCIAL ENTRANCES UNLESS SPECIFIED BY THE RESIDENT ENGINEER.

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PLOT SCALE = 0.1667 ' / in.	DRAWN -	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.	13-00160-02-RS	MCLEAN	8	2
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	DATE -	REVISED -						ILLINOIS FED. AID PROJECT			

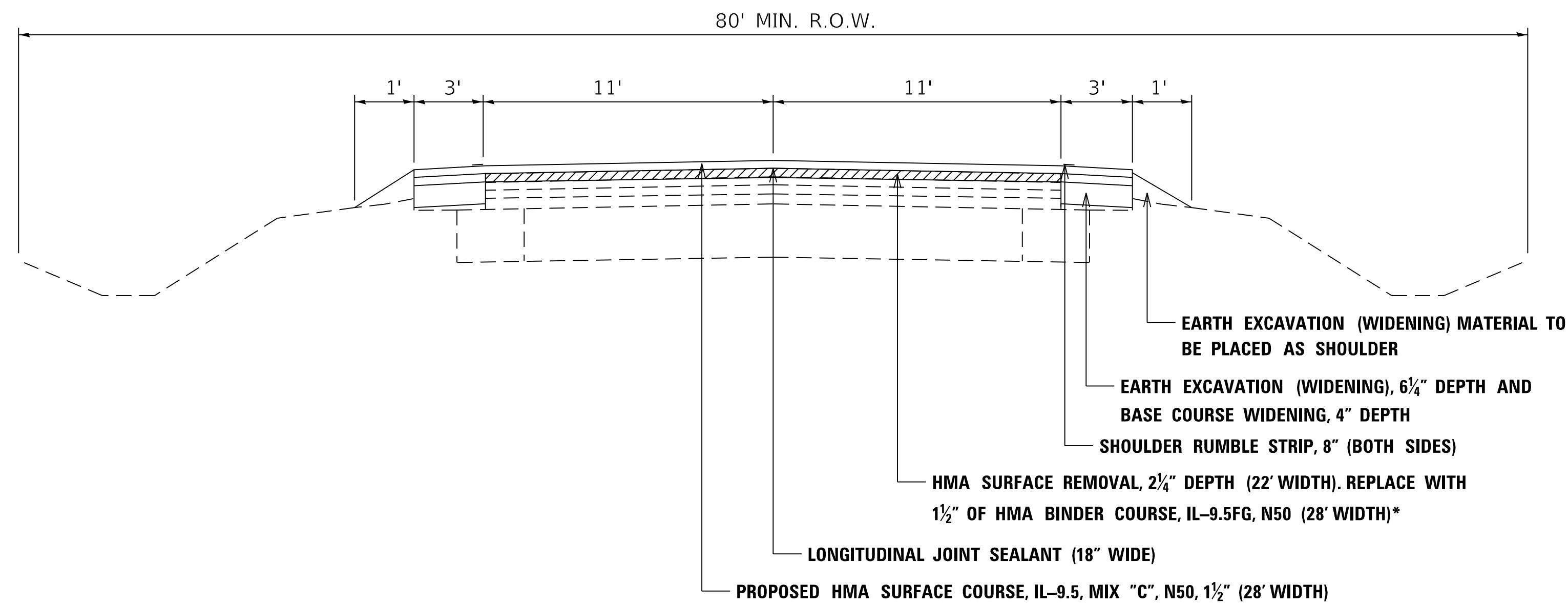
EXISTING TYPICAL CROSS SECTION

SEC. 13-00160-02-RS
SECTION V (C.H. 24)
STA. 0+00 TO STA. 97+96
STA. 97+96 TO STA. 99+61 (BRIDGE OMISSION)
STA. 99+61 TO 215+52
(NOT TO SCALE)



PROPOSED TYPICAL CROSS SECTION

SEC. 13-00160-02-RS
SECTION V (C.H. 24)
STA. 0+00 TO STA. 97+96 (BRIDGE OMISSION 165')
STA. 99+61 TO 215+52
(NOT TO SCALE)



SEC. 13-00160-02-RS: SECTION V (TOWNLINE RD) (CH 24)			
TAEWELL CO LINE TO IL ROUTE 122			
STRUCTURAL DESIGN DATA 80,000#			
CLASS II ROAD	DESIGN PERIOD 20 YEARS		
CURRENT A.D.T.	1129	YEAR:	2042
STUCTURAL DESIGN TRAFFIC:			
PERCENT OF DESIGN TRAFFIC IN DESIGN LANE:			
P.C.	88%	S.U.	7%
P.C.	99%	S.U.	79%
		M.U.	5%
		M.U.	56%
MINIMUM SOIL SUPPORT:	IBR=		3.0
TRAFFIC FACTOR (T.F.)=			0.31
STRUCTURAL NUMBER (D _s)=			3.43
PAVEMENT STUCTURE MATERIALS:			
SURFACE:	PROPOSED HMA PAVEMENT	3.00 @ 0.40	a1= 1.20
BASE:	EXISTING HMA PAVEMENT (SURFACE CSE)	0 @ 0.23	a2= 0.00
BASE:	EXISTING HMA PAVEMENT (BINDER CSE)	6.675 @ 0.23	a2= 1.54
SUBBASE:	EXISTING AGGREGATE BASE COURSE	7.5 @ 0.10	a3= 0.75
			PROPOSED D _s TOTAL 3.49

***NOTE:**
HMA SURFACE REMOVAL 1 1/2" LOCATIONS:
STA. 95 + 96 – STA. 97 + 96
STA. 99 + 61 – STA. 101 + 61

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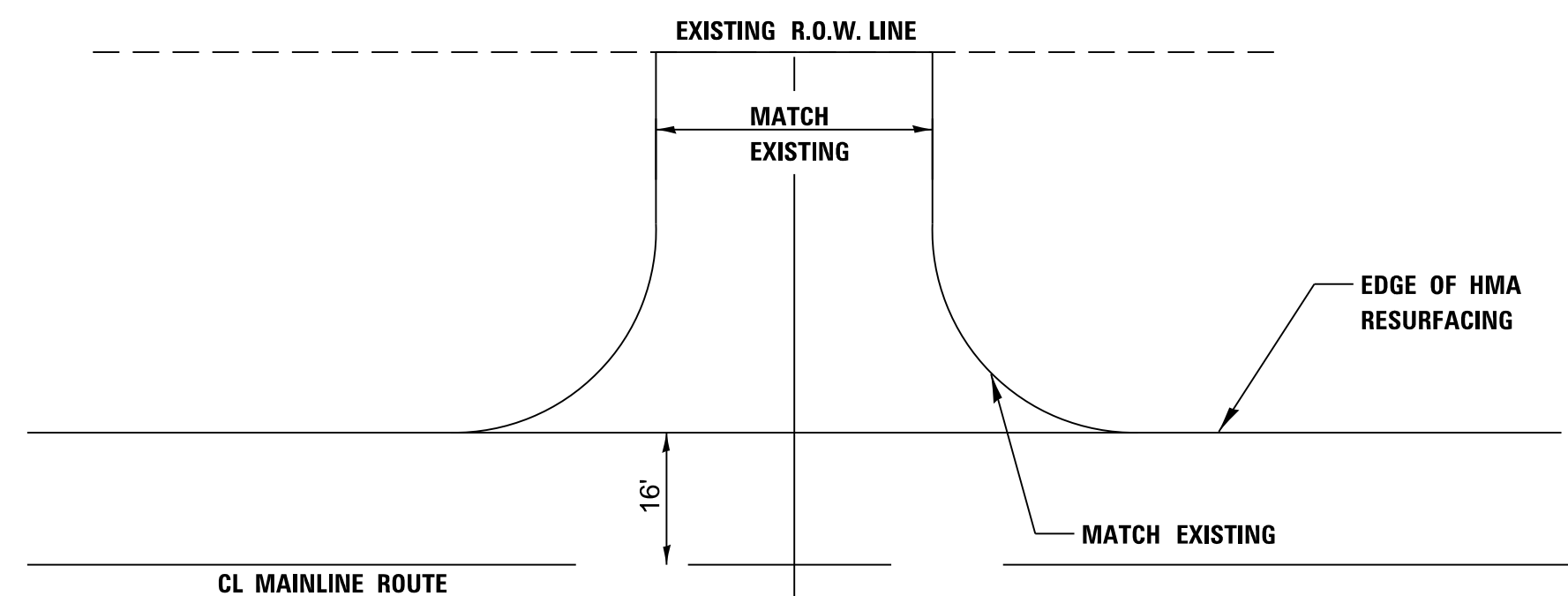
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS
SECTIONS

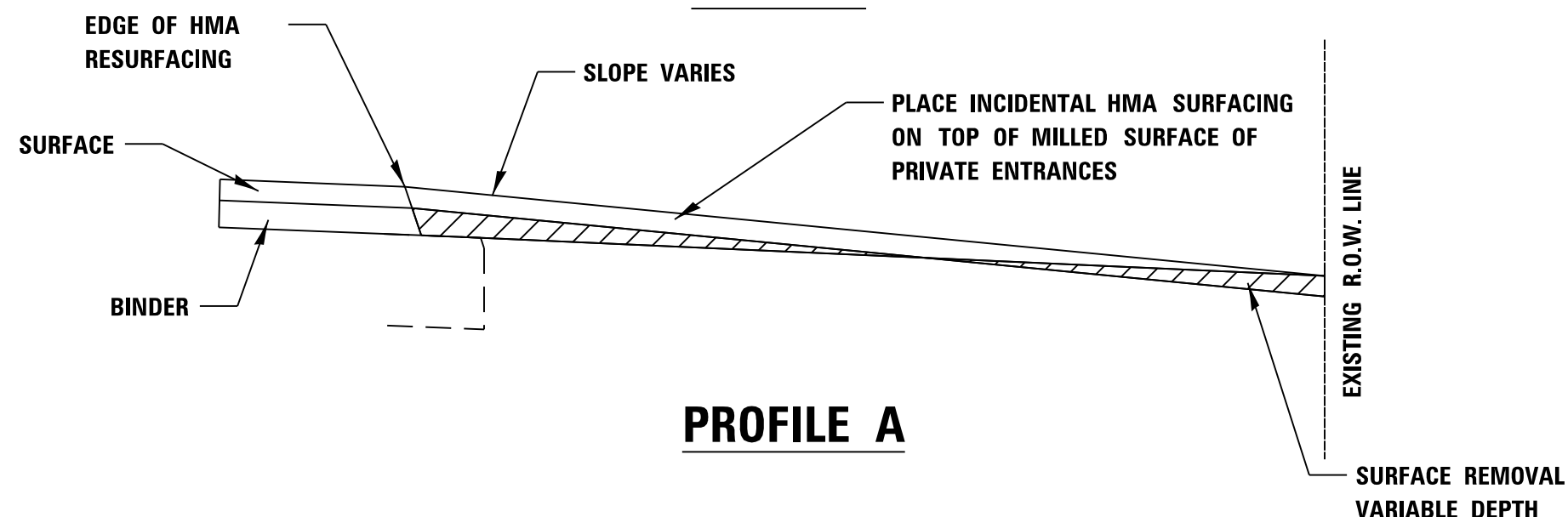
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1481	13-00160-02-RS	MCLEAN	8	3
CONTRACT NO. 91543				
		ILLINOIS	FED. AID PROJECT	

TYPICAL RURAL PRIVATE ENTRANCE



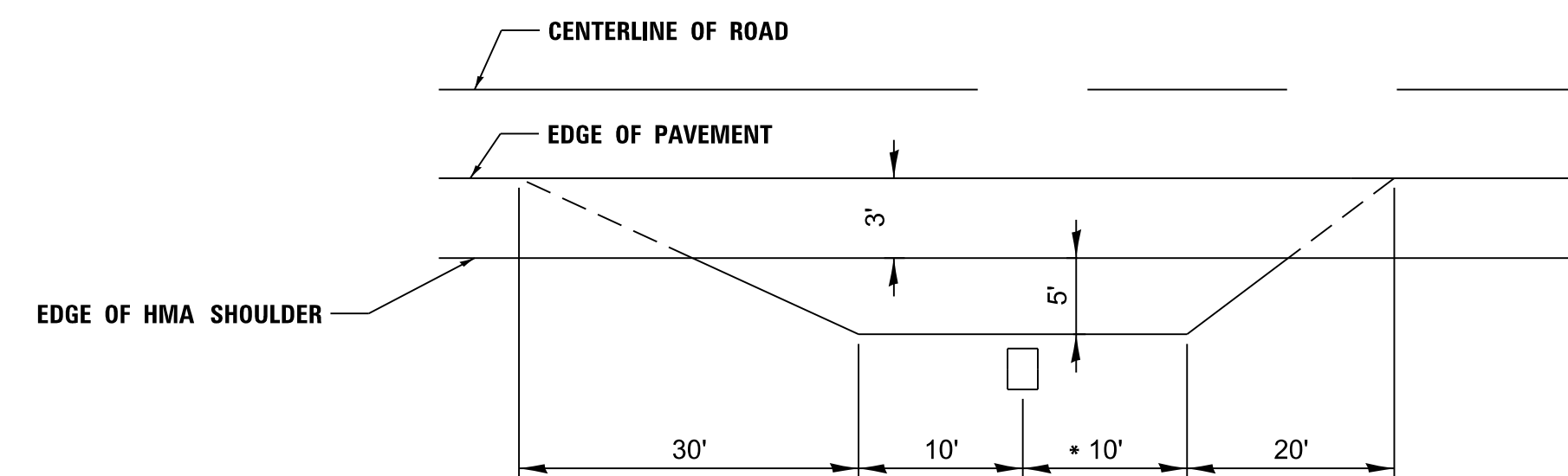
PLAN A



PROFILE A

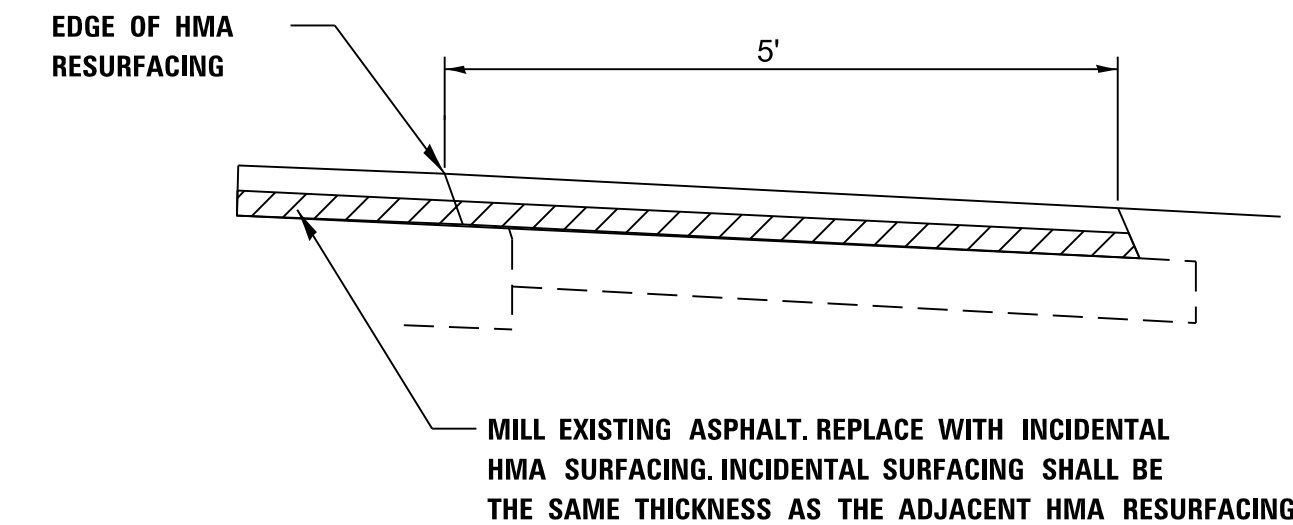
TYPICAL RURAL MAILBOX TURNOUT

14.4 SQ YD EACH (TYP.)



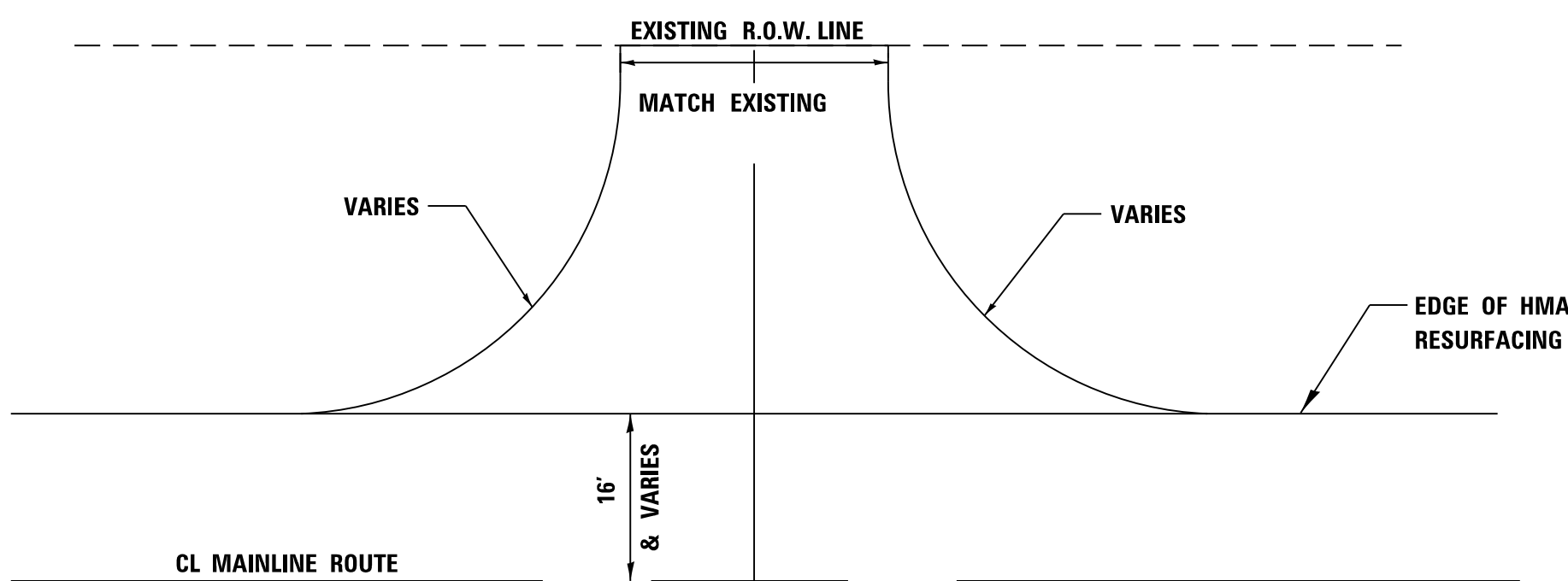
*NOTE: MULTIPLE MAILBOX CLUSTERS TO BE EXTENDED 2' FOR EACH ADDITIONAL MAILBOX

PLAN C

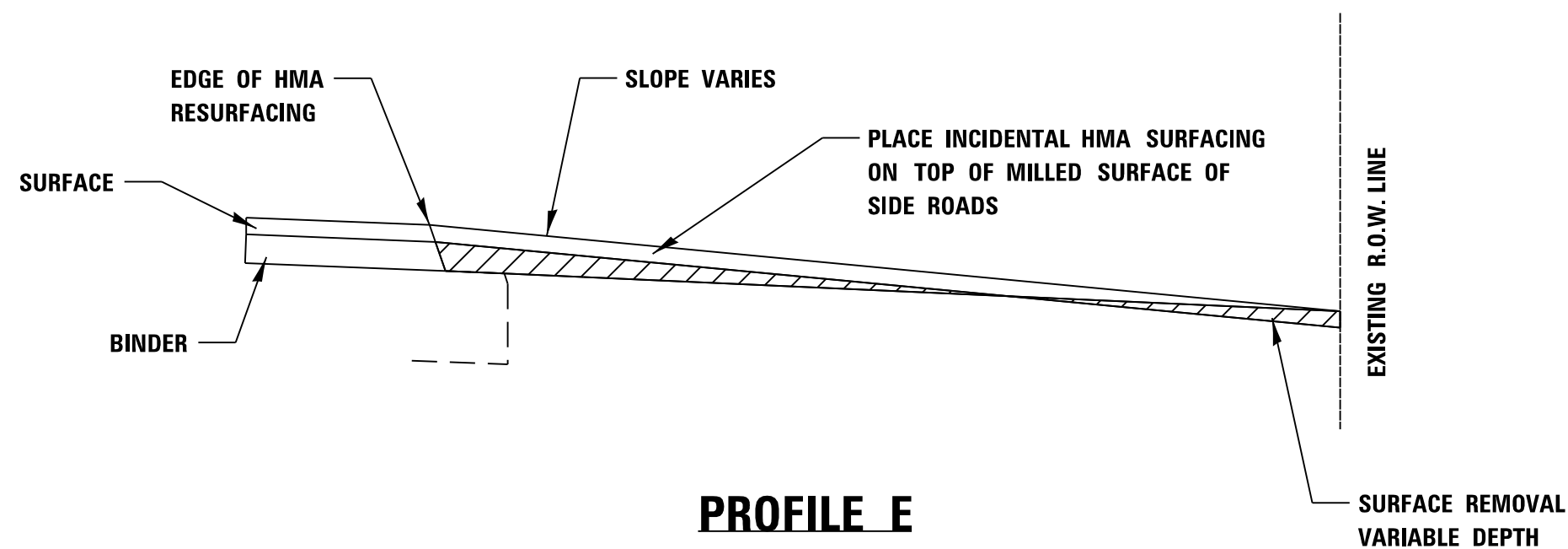


PROFILE C

TYPICAL SIDE ROAD DETAIL



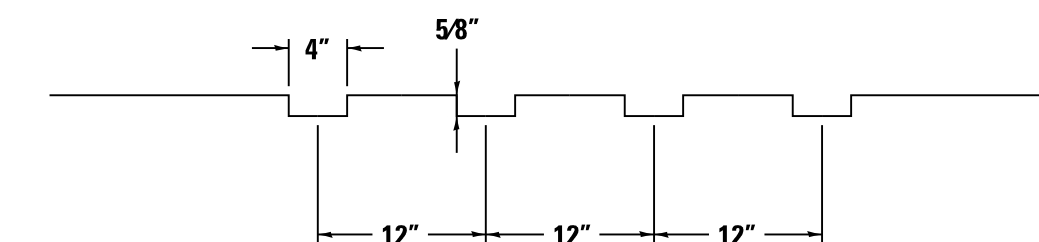
PLAN E



PROFILE E

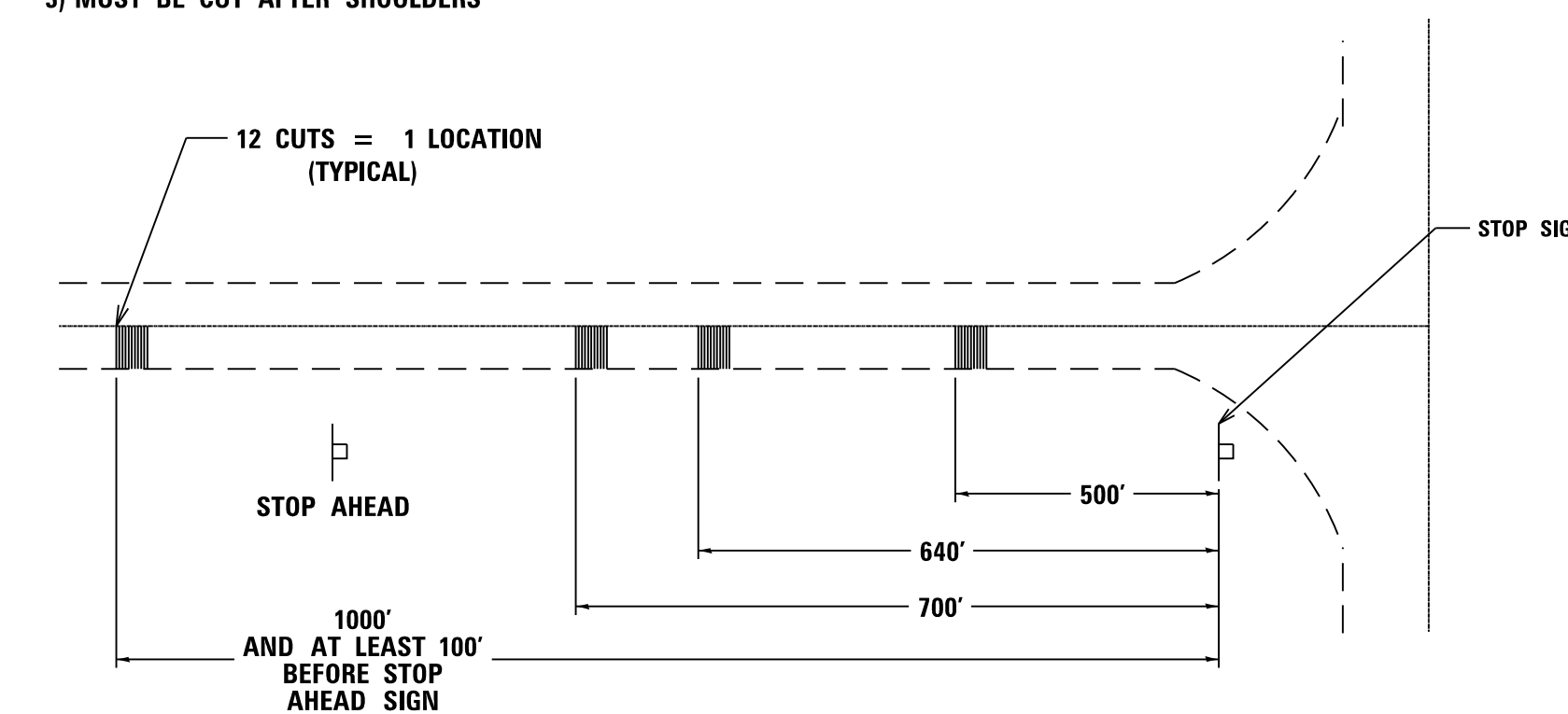
SAW CUT RUMBLE STRIP STANDARD

1 @ STA. 215+00



NOTES:

- 1) SAWCUTS 4" WIDE X 5/8" DEEP ON 12" CENTERS
- 2) MEASUREMENTS FROM STOP SIGN TO FAR END OF RUMBLE STRIP
- 3) MUST BE CUT AFTER SHOULDERS



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	DRAWN -	REVISED -
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PLOT DATE = 3/4/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MISCELLANEOUS
DETAILS**

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

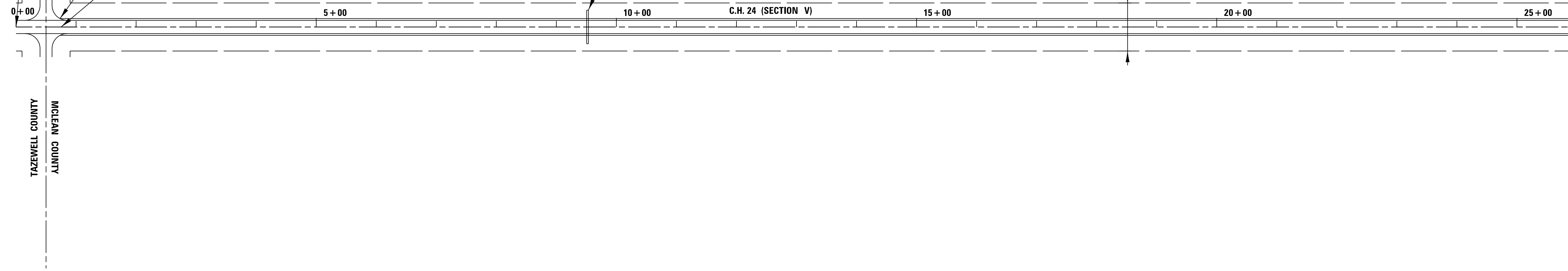
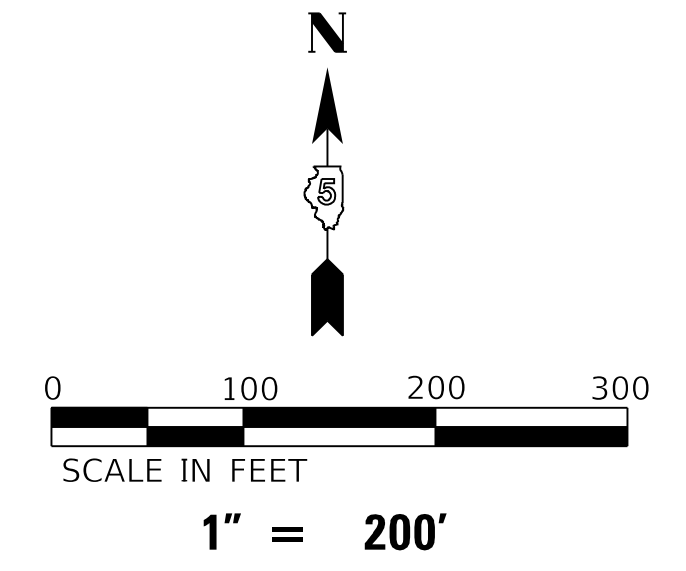
F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1481	13-00160-02-RS	MCLEAN	8	4
CONTRACT NO. 91543				
ILLINOIS FED. AID PROJECT				

IMPROVEMENT BEGINS STA. 0+00
(JOINT IN PAVEMENT W. OF COUNTY LINE)

BEGIN 3' WIDENING
STA. 0+75, LT & RT

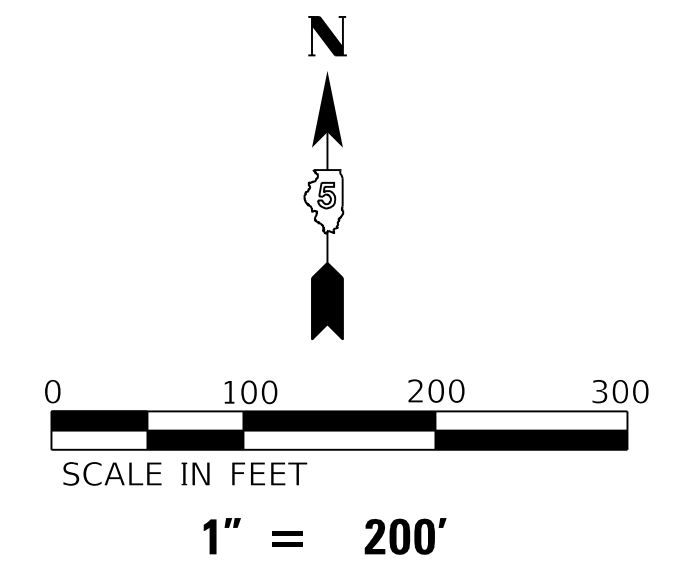
TAPER MILLING FROM 1½" TO 2¼"
BEGIN HMA BINDER COURSE, STA. 0+75

STA. 9+52
REPLACE EXISTING CULVERT WITH
36" X 56' ARCH CMP
SLOPE = 0.55%
(BY OTHERS)

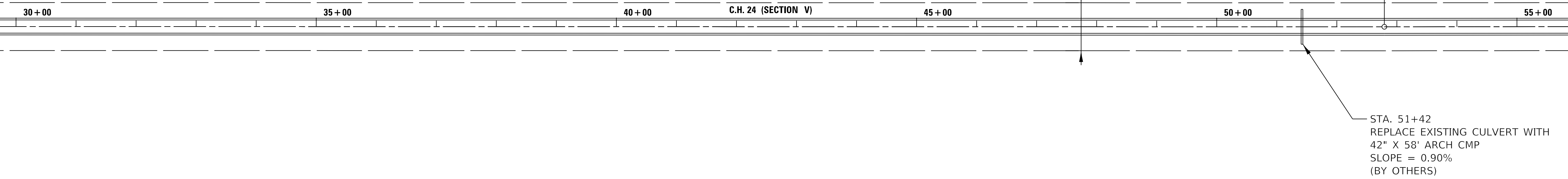


TAZEWELL COUNTY
MCLEAN COUNTY

MATCHLINE 28+00



MATCHLINE 28+00



STA. 51+42
REPLACE EXISTING CULVERT WITH
42" X 58' ARCH CMP
SLOPE = 0.90%
(BY OTHERS)

MATCHLINE 58+00

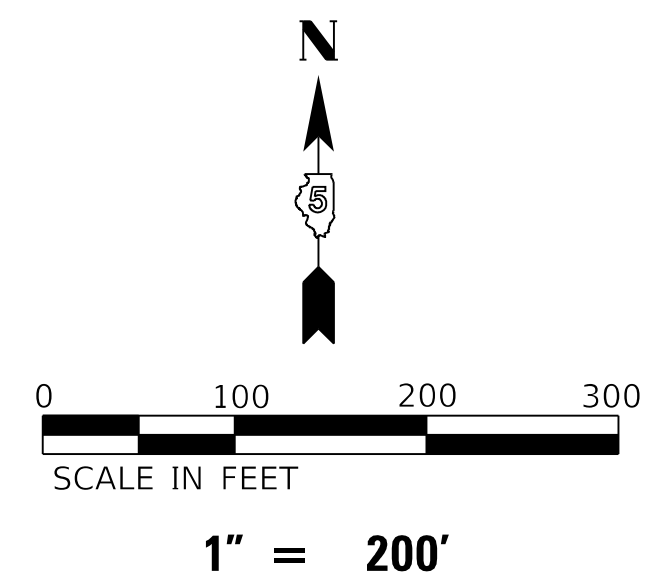
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	DRAWN -	REVISED -
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PLOT DATE = 3/4/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN VIEW
SCALE: 1" = 200' SHEET 1 OF 4 SHEETS STA. 0+00 TO STA. 58+00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1481	13-00160-02-RS	MCLEAN	8	5
CONTRACT NO. 91543				
ILLINOIS FED. AID PROJECT				



MATCHLINE 58+00

60+00

65+00

70+00

C.H. 24 (SECTION V)

75+00

80' R.O.W.

150E RD

80+00

85+00

PC Sta 87+29.96

MATCHLINE 88+00

STA. 64+93
REPLACE EXISTING CULVERT WITH
36" X 56' ARCH CMP
SLOPE = 0.50%
(BY OTHERS)

STA. 80+12
REPLACE EXISTING CULVERT WITH
48" X 52' ARCH CMP
SLOPE = 0.40%
(BY OTHERS)

MATCHLINE 88+00

90+00

95+00

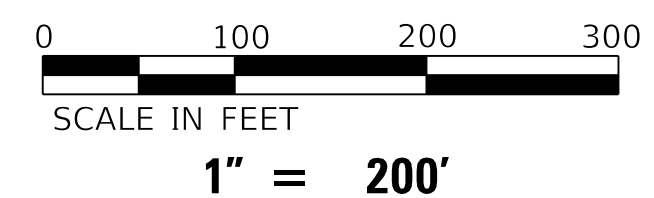
100+00

105+00

C.H. 24 (SECTION V)

110+00

115+00



MATCHLINE 118+00

STOP 3' WIDENING STA. 95+96, LT & RT

TAPER MILLING FROM 2 1/2" TO 1 1/2"
STOP HMA BINDER COURSE, STA. 95+96

RESUME 3' WIDENING STA. 101+61, LT & RT

TAPER MILLING FROM 1 1/2" TO 2 1/4"
RESUME HMA BINDER COURSE, STA. 101+61

PROP. CURVE CH24_1
PI STA. = 88+72.10
Δ = 11° 20' 00" (LT)
D = 3° 59' 59"
R = 1,432.50'
T = 142.14'
L = 283.35'
E = 7.03'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 87+29.96
P.T. STA. = 90+13.31

PROP. CURVE CH24_2
PI STA. = 91+87.37
Δ = 11° 20' 00" (RT)
D = 3° 59' 59"
R = 1,432.50'
T = 142.14'
L = 283.35'
E = 7.03'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 90+45.23
P.T. STA. = 93+28.59

STRUCTURE #057-4032
BRIDGE OMISSION STA. 97+96 - STA. 99+61
(165')

PROP. CURVE CH24_3
PI STA. = 101+21.94
Δ = 11° 20' 00" (RT)
D = 3° 59' 59"
R = 1,432.50'
T = 142.14'
L = 283.35'
E = 7.03'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 99+79.80
P.T. STA. = 102+63.16

PROP. CURVE CH4_4
PI STA. = 104+37.12
Δ = 11° 20' 00" (LT)
D = 3° 59' 59"
R = 1,432.50'
T = 142.14'
L = 283.35'
E = 7.03'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 102+94.98
P.T. STA. = 105+78.33

STA. 116+95
REPLACE EXISTING CULVERT WITH
48" X 58' ARCH CMP
SLOPE = 0.50%
(BY OTHERS)

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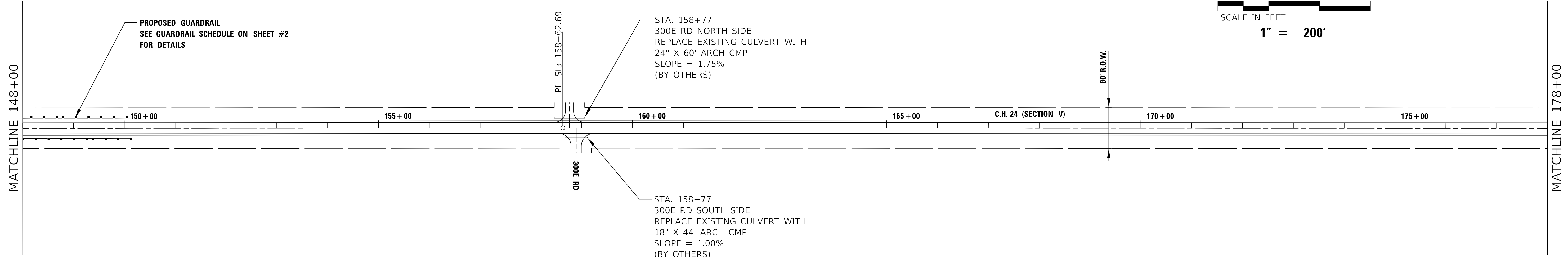
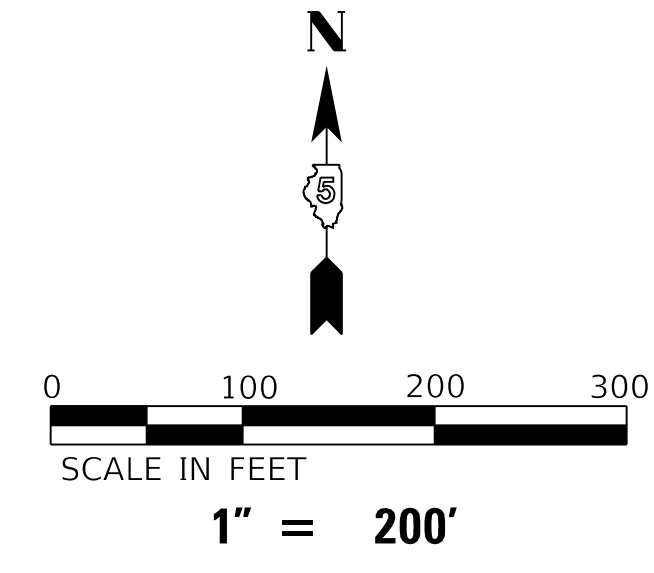
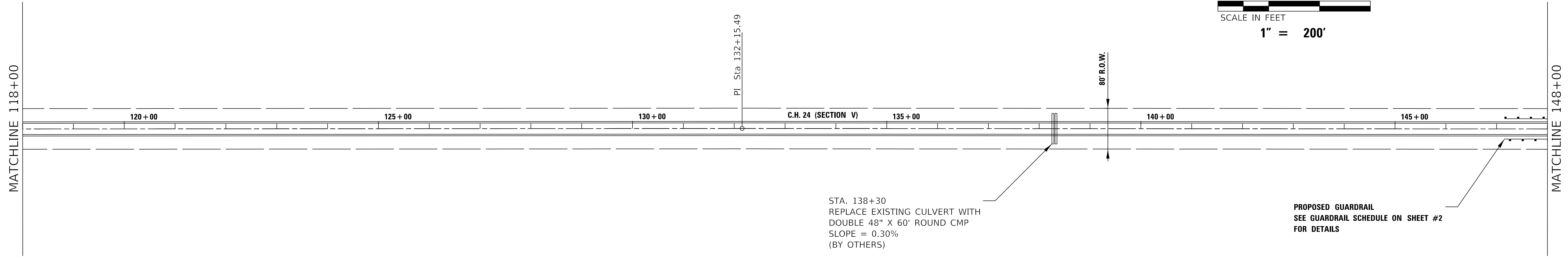
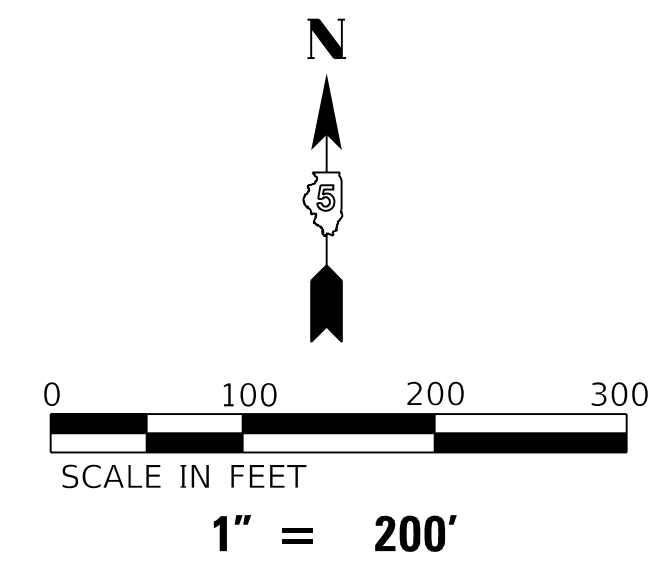
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PLOT DATE = 3/4/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN VIEW

SCALE: 1" = 200' SHEET 2 OF 4 SHEETS STA. 58+00 TO STA. 118+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1481	13-00160-02-RS	MCLEAN	8	6
CONTRACT NO. 91543				
ILLINOIS		FED. AID PROJECT		



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DRAWN -	REVISED -	
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PLOT DATE = 3/4/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN VIEW

SCALE: 1" = 200' SHEET 3 OF 4 SHEETS STA. 118+00 TO STA. 178+00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 91543				
ILLINOIS		FED. AID PROJECT		

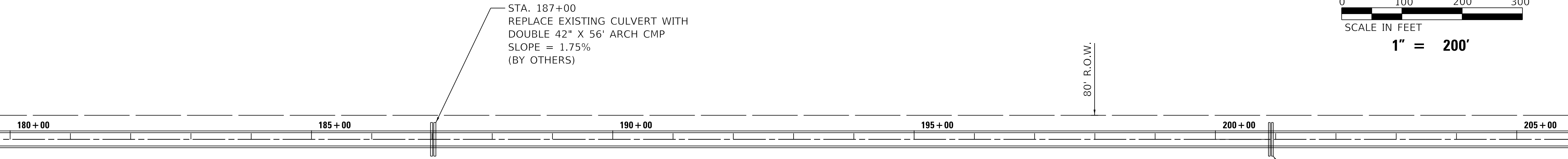
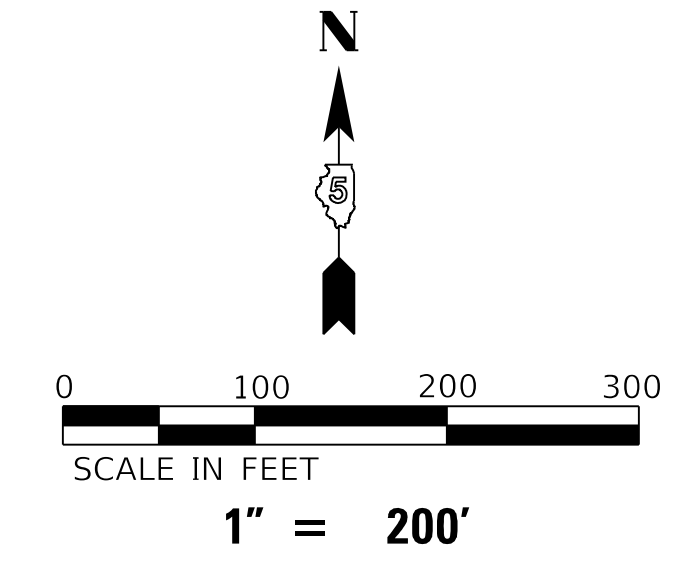
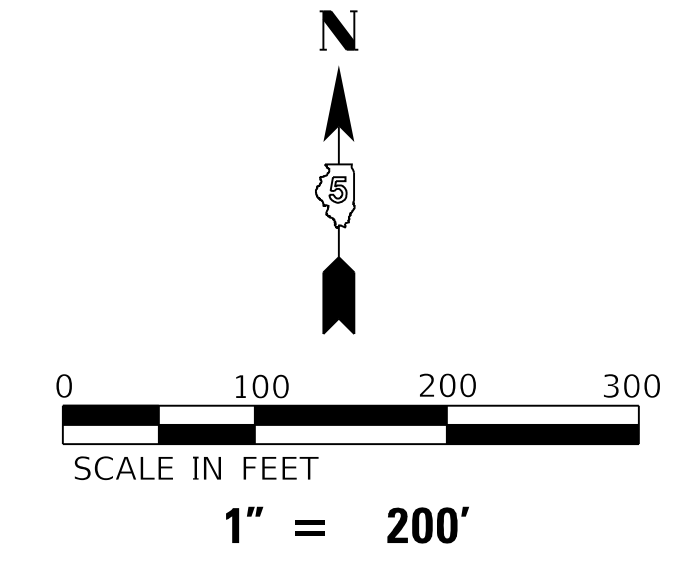
MODEL: Default
 FILE NAME: C:\CountyRoads\CH_24113-00160-02-RS - Section V (Townline Road) - 2022\Design\DWG\Plan_Sheets\8) SecV_Plan.dgn

MATCHLINE 178+00

MATCHLINE 208+00

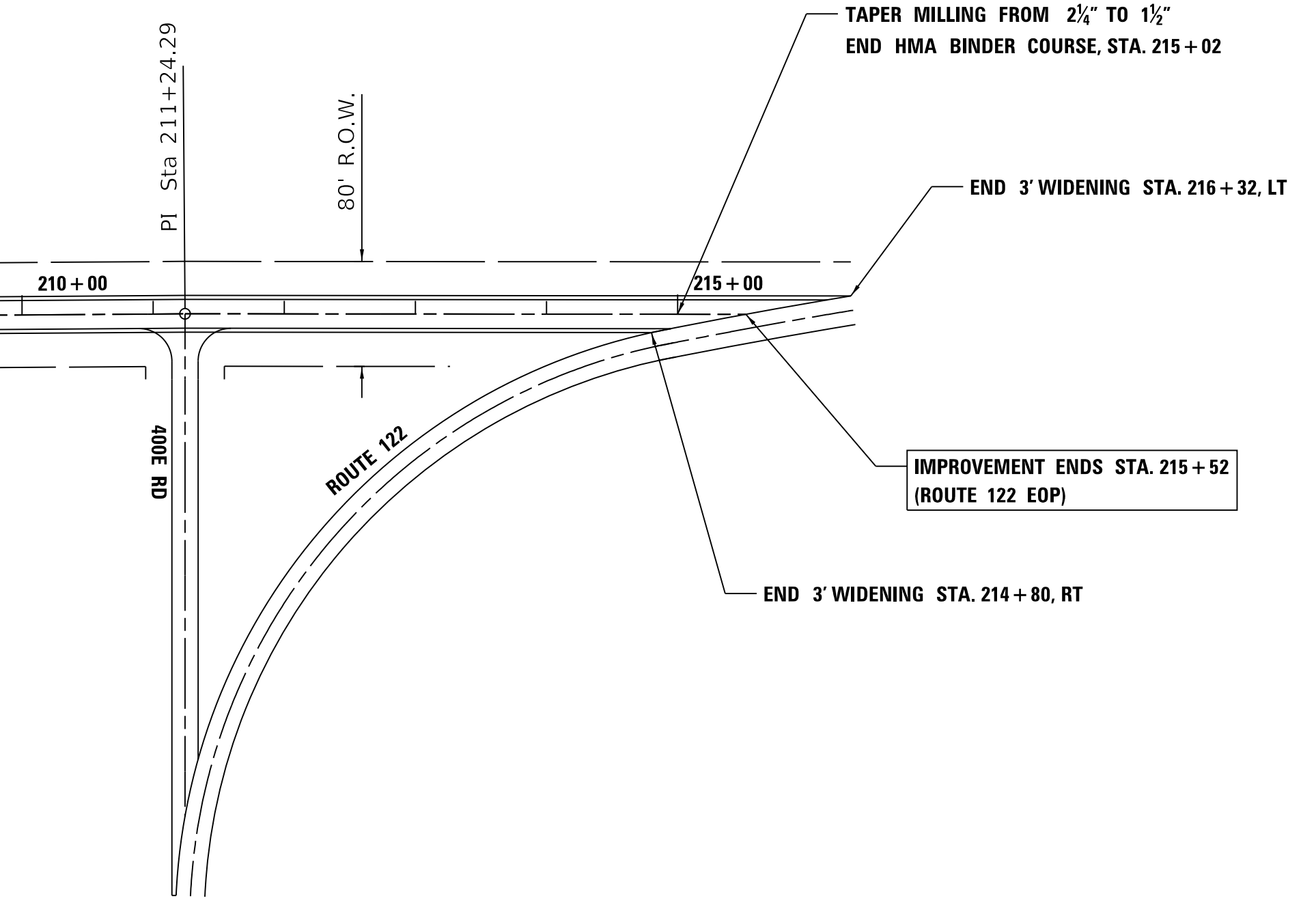
MATCHLINE 208+00

MATCHLINE 215+52.09 Ext. 2247.91



STA. 187+00
 REPLACE EXISTING CULVERT WITH
 DOUBLE 42" X 56' ARCH CMP
 SLOPE = 1.75%
 (BY OTHERS)

STA. 200+92
 REPLACE EXISTING CULVERT WITH
 DOUBLE 36" X 56' ARCH CMP
 SLOPE = 1.00%
 (BY OTHERS)



TAPER MILLING FROM 2 1/4" TO 1 1/2"
 END HMA BINDER COURSE, STA. 215+02

END 3' WIDENING STA. 216+32, LT

IMPROVEMENT ENDS STA. 215+52
 (ROUTE 122 EOP)

END 3' WIDENING STA. 214+80, RT

USER NAME = collin.frantz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PLAN VIEW
 SCALE: 1" = 200' SHEET 4 OF 4 SHEETS STA. 178+00 TO STA. 215+52

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1481	13-00160-02-RS	MCLEAN	8	8
CONTRACT NO. 91543			ILLINOIS FED. AID PROJECT	