04-28-2023 LETTING ITEM 153

INDEX OF SHEETS

SHEET NO. SHEET NAME

- COVER SHEET
- GENERAL NOTES & SUMMARY OF QUANTITIES
- TYPICAL SECTIONS & DETAILS SCHEDULE OF QUANTITIES
- SCHEDULE OF QUANTITIES
- PLAN & PROFILE (BELVIDERE)
- FRSA STANDARD DETAIL 25-26 PAVEMENT MARKING DETAILS
- DISTRICT 2 STANDARD 41.1

STATE OF ILLINOIS

WINNEBAGO COUNTY HIGHWAY DEPARTMENT

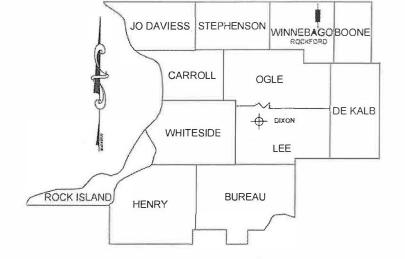
PLANS FOR PROPOSED FEDERAL HIGHWAY SAFETY IMPROVEMENT

FAU ROUTE 9884 (BELVIDERE ROAD)

SECTION: 21-00689-00-SP **PROJECT NO.: Q201 (020)**

HIGHWAY SAFETY IMPROVEMENTS ON BELVIDERE ROAD (C.H. 25)

JOB NO.: C-92-045-22 HSIP NO.: 202111008 CONTRACT NO.: 85739



DISTRICT HEADQUARTER

PROJECT ENDS

STA 350+35

PROJECT LOCATION

ANDRA

REGISTERED

ILLINOIS PROFESSIONAL

STA 101+36.14 (EAST OF MAIN STREET) **BEGIN OMISSION** STA 173+74.40 (BRIDGE APPROACH SLAB) **END OMISSION** 177+62.41 (BRIDGE APPROACH SLAB)

BEGIN PROJECT

STANDARDS

STAND, NO. STAND, NAME

406201-01 MAILBOX TURNOUT

482011-03 HMA SHLD. STRIPS/SHLDS. WITH RESURFACING PROJECTS

630001-12 STEEL PLATE BEAM GUARDRAIL

630101-10 STRONG POST GUARDRAIL ATTACHED TO CULVERT

630201-07 PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL

630301-09 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS

631032-10 TRAFFIC BARRIER TERMINAL, TYPE 6A

635001-02 DELINEATORS

642006-01 SHOULDER RUMBLE STRIPS, 8 IN.
701001-02 OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY

701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE

701011-04 OFF-ROAD 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

701311-03 LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY

701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEED > 45 MPH 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED

701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701901-08 TRAFFIC CONTROL DEVICES

720001-01 SIGNAL PANEL MOUNTING DETAILS

720006-04 SIGN PANEL ERECTION DETAILS

720011-01 METAL POSTS FOR SIGNS, MARKERS, AND DELINEATORS

725001-01 OBJECT AND TERMINAL MARKERS

728001-01 TELESCOPING STEEL SIGN SUPPORT

729001-01 APPLICATIONS OF TYPES A&B METAL POSTS (FOR SIGNS & MARKERS)

780001-05 TYPICAL PAVEMENT MARKINGS

782006-01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

805001-01 ELECTRICAL SERVICE INSTALLATION DETAILS

BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS BELVIDERE ROAD OMISSION (I-90 OVERPASS): 388.01 FT = 0.07 MILES TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

(TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)

TOTAL LENGTH OF IMPROVEMENTS = 24.617.98 FT = 4.66 MILES

BELVIDERE ROAD: 25.005.99 FT = 4.74 MILES

ADT: 5800 (2023) 10% TRUCKS MINOR ARTERIAL DESIGN SPEED: 35 MPH & 55 MPH

3R POLICY

PLAN & PROFILE FULL SIZE HORIZONTAL: 1" = 50' VERTICAL: 1" = 10' 1/4 SIZE HORIZONTAL: 1" = 100' VERTICAL: 1" = 20'

SCALES:

CALL J.U.L.I.E. BEFORE YOU DIG

1-800-892-0123

Brown

(173)

ROSCOE TWP (T46N-R2E) SEC. - 33

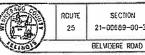
HARLEM TWP (T45N - R2E) SEC. 02, 03, 04, 11, 12, 13

WINNEBAGO COUNTY HIGHWAY DEPARTMENT teb WINNEBAGO COUNTY ENGINEER LOCAL ROADS & STREETS RELEASING FOR BID

THESE PLANS PREPARED BY:

DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 HONEER

GENERAL NOTES



21-00689-00-SF

SHEET 02 OF 29

GENERAL NOTES AND CONDITIONS

THE SCALE SHOWN ON THE DRAWINGS APPLIES TO THE FULL SIZE PLANS AND NOT REDUCED SIZE

THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF ALL BENCHMARK PRIOR TO COMMENCING WORK THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATIONS, ELEVATION AND SIZE OF EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIEV HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES, NOTIFY THE ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.

UTILITIES

EXACT VERTICAL OR HORIZONTAL LOCATIONS OF EXISTING LOCATIONS OF EXISTING UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT, LOCATIONS AND DEPTHS SHOWN ON THESE PLANS ARE ONLY SCHEMATIC REPRESENTATION

ABANDONED UNDERGROUND UTILITIES THAT CONFLICTS WITH CONSTRUCTION OR HAVE THE POTENTIAL FOR CREATING FUTURE PROBLEMS SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY ACCORDING TO ARTICLE 292,03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107,37 OF THE STANDARD SPECIFICATIONS. THE PHONE FOR J.U.L.I.E. IS 600-892-0123. THE UTILITIES LOCATED WITHIN PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS ARE MEMBERS OF J.U.L.I.E.

THE CONTRACTOR SHALL CONTACT BEN CHRISTIANSEN AT FRSA AT (815) 209-7952 PRIOR TO PERFORMING ANY SANITARY SEWER WORK; THIS INCLUDES WORK PERFORMED ABOVE SANITARY SEWERS WITH LESS THAN 18 INCHES OF VERTICAL SEPARATION.

EXCAVATION, GRADING AND EMBANKMENT NOTES

THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL EXPENSE TO THE OWNER.

ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE WINNEBAGO COUNTY HIGHWAY DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AT THE CONCLUSION OF EACH WORKING DAY.

THE FINAL TOP FOUR INCHES OF SOIL IN ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION.

WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED. THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACT SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS, MONUMENTS AND RIGHT-OF-WAY PINS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT HAS BEEN WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS. SEEDING CLASS 4 OR 2A SHALL BE USED, EXCEPT IN FRONT OF PROPERTIES WHERE THE GRASS WILL BE MOWED, THEN USE SEEDING, CLASS 1A. CLASS 2A SHALL BE USED ON FRONT SLOPES AND DITCH BOTTOMS. CLASS 4 OR 2A SHALL BE USED

BEHIND TYPE-A GUTTER, ON ALL BACK-SLOPES AND AREAS BEHIND THE BACK-SLOPE, AND BEYOND THE TOE OF FRONT SLOPE ON FILL SECTIONS WITHOUT DITCHES. THIS WORK WILL BE INCLUDED IN THE CONTRACT UNIT LUMP-SUM PRICE FOR LANDSCAPING SPECIAL.

PAVING

THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL RELOCATE AND REPLACE TO THE SATISFACTION OF THE ENGINEER, ALL MAILBOXES IN ACCORDANCE WITH ARTICLE 107.20 OF THE STANDARD SPECIFICATIONS.

IF, DURING THE GRINDING OR RESURFACING OPERATIONS, THE EXISTING MAILBOXES BECOME A HINDRANCE. THE CONTRACTOR SHALL BE REQUIRED TO CAREFULLY REMOVE AND REINSTALL THE MAILBOXES AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE HMA SURFACE COURSE II -9.5 MIX D. NSO.

EMERGENCY ACCESS, GARBAGE PICK-UP, AND MAIL SERVICE SHALL BE MAINTAINED AT ALL TIMES. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY RESIDENTS WHEN ACCESS TO THEIR DRIVEWAYS WILL BE TEMPORARILY CLOSED DUE TO CURB AND GUTTER AND / OR DRIVEWAY REPLACEMENT. THE CONTRACTOR SHALL DISTRIBUTE NOTICES PROVIDED BY THE COUNTY TO RESIDENTS. EVERY EFFORT SHALL BE MADE TO ACCOMMODATE ACCESS TO THESE PROPERTIES INCLUDING KNOCKING ON DOORS WHEN DRIVEWAYS ARE

THE CONTRACTOR SHALL CONSTRUCT ALL PRIVATE DRIVEWAYS AND FIELD ENTRANCES IN ACCORDANCE WITH THE PLANS, THE CONTACTOR IS RESPONSIBLE TO MAINTAIN ACCESS TO ALL EXISTING DRIVEWAYS DURING ALL STAGES OF CONSTRUCTION.

THE AREA TO BE TACKED OR PRIMED SHALL BE LIMITED TO THAT WHICH CAN BE COVERED WITH HMA ON THE NEXT DAY'S PRODUCTION, UNLESS APPROVED BY THE ENGINEER.

HMA BINDER COURSE SHALL BE PLACED TO CORRECT SUPER ELEVATION SLOPES BETWEEN STATION: 182+86.99 TO STATION: 188+34.03 AS PER PLANS. THE SUPER-ELEVATION CORRECTIONS SHALL BE COMPACTED PRIOR TO PLACING THE HMA SURFACE MIX. THE LAYOUT FOR SUPER ELEVATION HMA BINDER COURSE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LUMP SUM FOR CONSTRUCTION LAYOUT.

HMA SURFACE COURSE SHALL BE PLACED OVER AREAS OF HMA SHOULDERS, PE/FE DRIVEWAYS, MB TURN OUTS, AND GUARDRAIL WIDENING AREAS SIMULTANEOUSLY WITH THE EXISTING MAINLINE PAVING OPERATION. HMA SURFACE COURSE CROSS SLOPES FOR THE MAINLINE PAVEMENT, HMA SHOULDERS, PE/FE DRIVEWAYS, MB TURN OUTS, AND GUARDRAIL WIDENING AREAS SHALL BE MAINTAINED ACCORDING TO THE TYPICAL SECTIONS

INCIDENTAL HMA SURFACING SHALL 8E PLACED ON PUBLIC STREET/SIDE ROADS ON BLADED OFF OR MILLED SURFACE AS PER PLANS BUT NOT ON PRIVATE DRIVEWAYS, FIFLD ENTRANCES OR MAIL-BOX TURN OUT AREAS AS IT SHALL BE PLACED WITH HMA SURFACE COURSE AND QUANTITY THEREOF WILL BE PAID AT THE CONTRACT UNIT PRICE PER TON FOR HMA SURFACE COURSE.

GUARDRAIL

GUARDRAIL REMOVAL SHALL INCLUDE DISMANTLING, DISPOSAL AND RESTORATION OF THE SITE IN PREPARATION FOR INSTALLATION OF NEW GUARDRAIL

GUARDRAIL WEAK POSTS ATTACHED TO STRUCTURES 101-5096 (WCHD 25-07) AND WCHD 25-17 SHALL BE LEFT IN PLACE. ALL GUARDRAIL WEAK POSTS SHALL BE CUT TO THE NEW HEADWALL HEIGHT CREATED BY THE CONCRETE CURB, TYPE B (SPECIAL) HEADWALL EXTENSION. THE COST OF CUTTING THE GUARDRAIL WEAK POSTS WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR GUARDRAIL REMOVAL.

THE COST OF REMOVING AND REPLACING EARTH AND SHOULDER MATERIAL NECESSARY FOR INSTALLATION OF STRONG POST GUARDRAIL ATTACHED TO CULVERT WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STRONG POST GUARDRAIL ATTACHED TO CULVERT. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL FIELD CONDITIONS WHICH RELATE TO THIS ITEM AS WELL AS TO ALL ITEMS ASSOCIATED WITH THIS CONTRACT.

ANY COST ASSOCIATED WITH FURNISHING AND INSTALLING SHORTER OR LONGER POSTS FOR THE GUARDRAIL ATTACHED TO STRUCTURES WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STRONG POST GUARDRAIL ATTACHED TO CULVERT.

WORK AREAS SHALL BE LEFT IN SAFE AND ORDERLY CONDITION. NO MATERIAL SHALL BE LEFT ON OR NEAR THE ROAD OR SHOULDERS DURING NON-WORKING HOURS.

ALL GUARDRAIL AND TERMINAL MARKERS SHALL BE INSTALLED IN THE SAME DAY THE GUARDRAIL AND TERMINAL SECTIONS TO WHICH THEY ARE TO BE ATTACHED ARE INSTALLED. GUARDRAIL MARKERS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS. ALL GUARDRAIL DELINEATORS MUST BE INSTALLED IN THE SAME DAY AS THEIR CORRESPONDING GUARDRAIL AND TERMINAL SECTIONS. GUARDRAIL MARKERS, TERMINAL MARKERS AND GUARDRAIL DELINEATORS WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS; TRAFFIC BARRIER TERMINAL, TYPE 6A; AND TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT.

WHERE GUARDRAIL IS TO BE REMOVED ON BOTH SIDES OF THE ROAD, REPLACEMENT ON ONE SIDE SHALL BE COMPLETE BEFORE REMOVAL ON THE SECOND SIDE SHALL BEGIN.

AT BRIDGE LOCATIONS, FLAGGERS WILL NOT BE ALLOWED TO STAND ON THE BRIDGE TO PERFORM FLAGGING OPERATIONS. FLAGGERS WILL BE REQUIRED TO OPERATE AT OR NEAR THE BRIDGE APPROACHES IN ORDER TO PROVIDE AN ACCEPTABLE ESCAPE ROUTE.

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE: 0021

PAY CODE NUMBER	ITEMS	UNIT	QUANTITIES	SP Pro
20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	465	Sr
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	335	
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	44,115	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	46,250	
40600370	LONGITUDINALJOINTSEALANT	FOOT	25,055	Ī
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQYD	1,035	
40600990	TEMPORARY RAMP	SQ.YD	180	
	HDT-MIX ASPHALT BINDER COURSE, IL- 9.5FG, N50	TON	95	
-	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	10,090	
	INCIDENTALHOT-MIX ASPHALT SURFACING	TON	55	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	821	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	4,945	S
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	3,155	S
63000030	STRONG POST GUARDRAIL ATTACHED TO CULVERT	FOOT	100	
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	-
	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	12	
63200310	GUARDRAILREMOVAL	FOOT	2,615	S
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	43,605	S
	MOBILIZATION	LSUM	1	一
	SHORT TERM PAVEMENT MARKING	FOOT	10,000	
	SHORT TERM PAVEMENT MARKING REMOVAL	SQFT	3,000	
	PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS	SQFT	47	
	PAINT PAVEMENT MARKING - LINE 4"	FOOT	84.375	\vdash
	PAINT PAVEMENT MARKING - LINE 8"	FOOT	495	
	PAINT PAVEMENT MARKING - LINE 12"	FOOT	170	-
78001130	PAINT PAVEMENT MARKING - LINE 24"	FOOT	156	
	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	80	\vdash
	ELECTRIC SERVICE INSTALLATION	EACH	3	S
		LSUM	1	S
X0327618	LANDS CAPING. SPECIAL	EACH	1	S
X6026050	SANITARY MANHOLES TO BE ADJUSTED	FOOT	170	5
X6061005	CONCRETE CURB, TYPE B (SPECIAL)	LSUM	1	S
	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)		219	S
	SIGN PANEL TYPE 1 (SPECIAL)	SQFT	219	S
	REMOVE SIGN PANEL ASSEMBLY - TYPE A (SPECIAL)	EACH EACH	36	S
	TELESCOPING STEELSIGN SUPPORT (SPECIAL)		3	\$
	STREET LIGHTING ASSEMBLY COMPLETE	EACH		S
20013798	CONSTRUCTION LAYOUT	LSUM	20,700	S
20055400	RUMBLE STRIP	FOOT	20,700	1 3

* SPECIALTY ITEMS

ComEd

do Nota Fernandez c/o Josh Reeman 123 Energy Avenue, 1350 Turret Drive, Rockford, JL 61109 Machesney Park, JL 61115 Phose: (815)-490-2335 Phone: (815)-633-5461

North Park Public Water District

NICOR Four Rivers Sanitation Authority c/o Chris Winter clo Ben Christianser 300 West Terra Colta, 3333 Kishwaukee Road, Crystal Lake, IL 50014 Rockford, IL 61109 Phone: (815)-455-0271 Phone: (815)-209-7952

AT&T Engineer Comcast c/o Rob Schwerdtfeger c/o Thomas Yuccas 265 E. Chicago Street, 4450 Kishwaukee Road Elgin, IL60120 Rockford, IL 61109

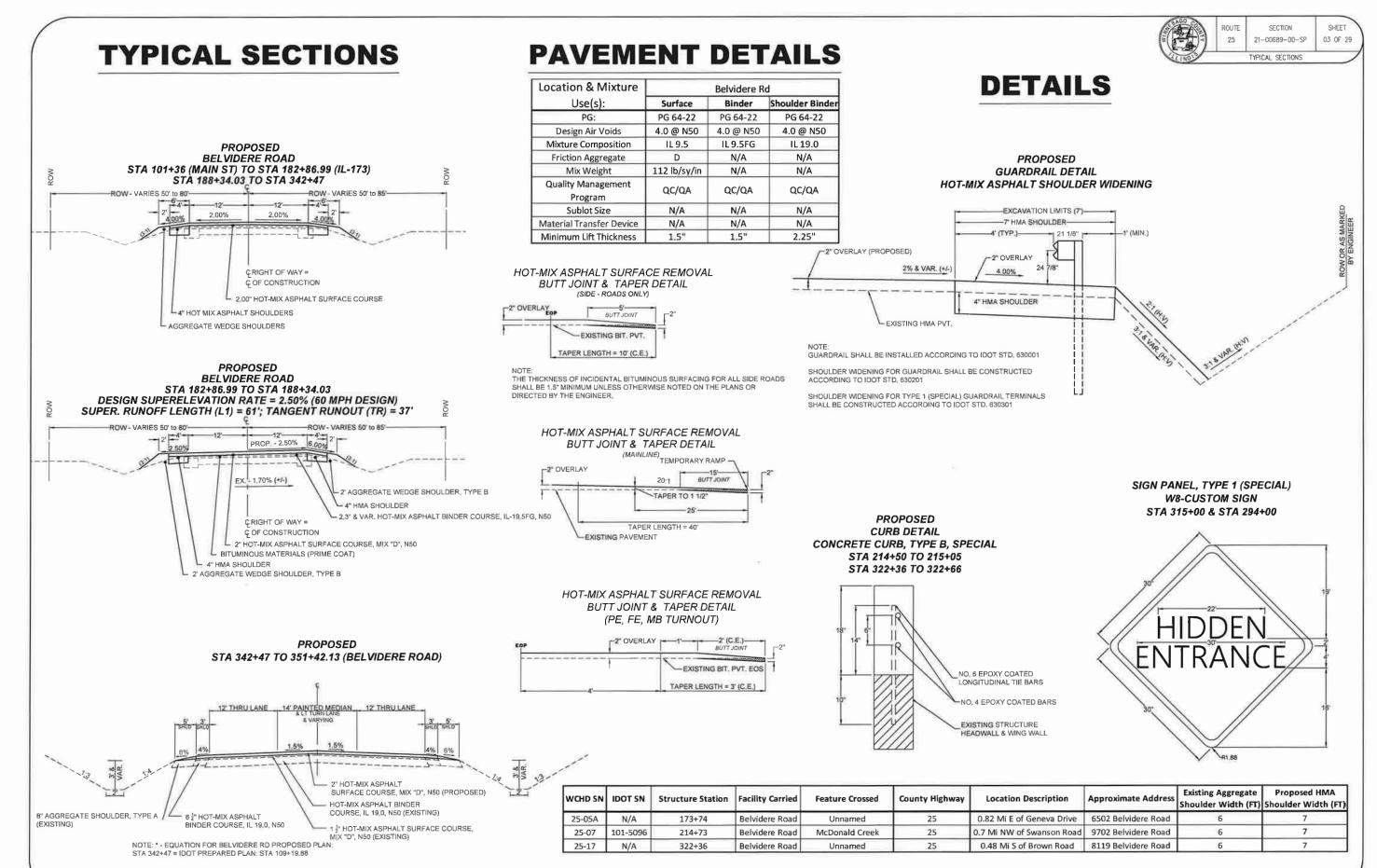
Charter Communications c/o Tom Phillips 1348 Plainfield Avenue Janesville, VM 53547 Phone: (508)-373-7837

LEGEND

EXISTING PROPOSED

EXISTING	PRUPUSEU	DESCRIPTION
(4)	400000000000000000000000000000000000000	TREE
Õ		UTILITY POLE
— E —		ELECTRIC LINE
		ELECTRIC PED/TRANS
		GAS LINE
		GASVALVE
	7.11	TELEPHONE UNE
(X)		TELEPHONE PEDESTAL
		TELEPHONE VAULT
	A CONTRACTOR OF THE PARTY OF TH	WATERLINE
0		WATER VALVE
0		FIRE HYDRANT
		SANITARY SEVVER
	-B 8 0-	GUARD RAIL
		CONCRETE END SECTION
		METAL END SECTION
RIV		RIGHT-OF-WAY
		DITCH FLGW
	ш	INLET PROTECTION
	Z,	PERIMETER EROSION BARRIER
	₹ >	TEMPORARY DITCH CHECK
	-	SIGN
	•	SIGNAL POST
	•—-	MAST ARM
		HANDHOLE
	(H)	HEAVY DUTY HANDHOLE
		SIGNAL CONTROLLER

GENERAL NOTES & SUMMARY OF QUANTITIES



NOTE: *- MAINTAIN EXISTING ROADSIDE SLOPES. EXISTING SLOPES ESTIMATED BETWEEN 3:1 AND 4:1.

73.3

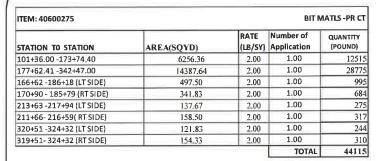
70.9

66.2

11.0

335.0

SHEET



STATION	FEATURE	o/s	QUANTIT
			(SQYE
101+36.14	MAIN LINE	N/A	50.0
101+61	PE	RT	4.8
102+00	PE	RT	2.5
102+71	PE CONTROL	RT	3.7
104+02	PEARL STREET	RT LT	17.8
104+07			22.3
107+25			10.0
108+12	PAPPY BROWN DR./VIN		18.3
110+16	THOMPSON DR.	LT	22.7
111+24	GENEVA DR.	RT	20.0
114+21	PE	RT	6.8
115+70	PE	RT	4.8
115+72	FE	LT	6.5
116+32	PE	RT	6.6
125+45	FE-	RT	5.3
127+11	FE	LT	9.0
127+21	PE	RT	8.0
128+23	PE	RT	6.3
130+66	PE	LT	7.7
131+62	PE	LT	6.5
135+47	FE	LT	5.8
142+58	PE	RT	4.8
143+27	PE	LT	10.4
144+66	MB-Turnout	LT	7.2
144+80	PE	RT	4.0
148+00	PE	LT	7.2
151+15	FE	RT	0.0
152+41	PE	LT	9.7
158+72	APPLEGATE DR.	RT	21.0
158+76	PE	LT	7.0
159+75	PE	LT	4.8
162+16	PE	LT	8.6
164+57	PE	RT	7.7
164+64	MB-Turnout	LT	7.0
166+54	MB-Turnout	LT	7.0
173+74.4	MAIN LINE	N/A	40.0
177+62.41	MAIN LINE	N/A	40.0
186+38	PE PE	RT	6.7
186+44		LT	14.1
	HAMBURG RD.	RT	
191+06	HAWTHRONE RD.	_	26.6 9.2
194+90	PE COLUMNIA KATOLI C	LT.	
196+76	COUNTY KNOLLS	RT	18.4
200+66	PE	LT	9.5
201+68	PE	LT	8.5
205+25	PE	LT	7.5
207+62	PE	LT	9,3
209+32	PE	LT	5.8
211+73	FE	RT	5.5
213+67	PE	LT	9.6
217+25	PE	RT	6.5
224+09	FE	RT	7.5
225+10	FE	LT	7.5
241+73	PE	LT.	10.3
241+96	FE	RT	7.2
247+18	FE	RT	5.6
248+82	ATWOOD RD.	LT	27.7
262+00	FE	RT	3.8
263+12	FE	LT	6.7
267+92	SWANSON RD.	RT	32.7
267+93	IPE.	LT	5.7

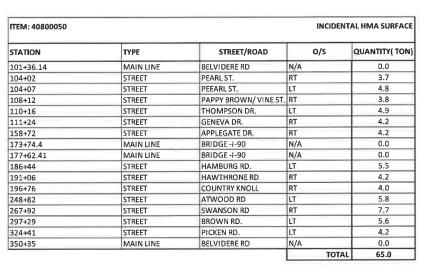
STATION	FEATURE	o/s	QUANTITY (SQYD)
275+32	FE	RT	5.33
280+40	PE	RT	11.22
282+80	PE	LT	5.89
282+90	MB-Turnout	RT	8.89
284+21	PE	RT	6.67
285+78	MB-Turnout	RT	7,89
286+97	PE	LT	5.89
287+77	MB-Turnout	RT	8.67
287+82	PE	LT	5.33
292+84	PE	LT	5.78
292+84	MB-Tumout	RT	8.67
296+51	PE	RT	12.78
296+70	FE	LT	10.00
297+29	BROWN RD.	LT	23.13
299+40	PE.	RT	7.11
301+54	PE	LT	6.56
302+89	MB	RT	11.89
303+05	PE	LT	6.22
304+99	MB-Turnout	RT	11.89
305+17	PE.	LT	6.33
306+89	MB-Turnout	RT	8.67
306+91	PE	LT	7.78
309+75	FE	LT	5,33
310+75	MB-Turnout	RT	8.67
310+77	PE	LT	7.78
315+25	PE	LT	6.33
315+27	MB-Turnout	RT	8.67
316+37	FE	RT	6.67
324+41	PICKENS RD.	LT	20.97
326+95	PE	RT	6.67
329+90	PE	RT	6.67
340+29	FE	LT	5.56
350+35	MAIN LINE	N/A	66.67
	***	TOTAL	1035.00

M: 40600982		HMA SURF R	QUANTITY
АПОМ	FEATURE	o/s	(SQYD)
5+32	FE	RT	5.33
0+40	PE	RT	11.22
2+80	PE	LT	5.89
2+90	MB-Turnout	RT	8,89
4+21	PE	RT	6.67
5+78	MB-Turnout	RT	7.89
5+97	PE	LT	5.89
7+77	MB-Turnout	RT	8,67
7+82	PF	LT	5.33
2+84	PE	LT	5.78
2+84	MB-Turnout	RT	8.67
5+51	PE	RT	12.78
6+70	FE	LT	10.00
7+29	BROWN RD.	LT	23.13
9+40	PE	RT	7.11
1+54	PE	LT	6.56
2+89	MB	RT	11.89
3+05	PE	LT	6.22
4+99	MB-Tumout	RT	11.89
5+17	PE	LT	6.33
5+89	MB-Turnout	RT	8.67
5+91	PE	LT	7.78
9+75	FE	LT	5.33
0+75	MB-Turnout	RT	8.67
0+77	PE	LT	7.78
5+25	PE	LT	6.33
5+27	MB-Turnout	RT	8.67
5+37	FE	RT	6.67
4+41	PICKENS RD.	LT	20.97
6+95	PE	RT	6.67
9+90	PE	RT	6.67
0+29	FE	LT	5.56
)+35	MAIN LINE	N/A	66.67
		TOTAL	1035.00

ITEM: 40600290 BIT MATLS -TACK CT						
STATION TO STATION	AREA (SQYD)	RATE (GAL/SY)	DENSITY LB/GAL	# OF APPLICATIONS	QUANTITY (POUND)	
101+36.00 -173+74.40	25558.76	0.06	8.40	1	12885	
177+62.41 -342+38.00	58346.58	0.06	8.40	1	29405	
342+38.00 -350+89	4116.44	0.06	8.40	1.	2075	
182+86.99 -188.34.03-SE-Hor.Curve	1458.77	0.06	8.40	1	735	
Tollway Bridge -Guardrails-3' wide	839.33	0.06	8.40		420	
McDonald CreekGuardrails-3' wide	296,17	0.06	8.40	1	150	
Un-named Creek GuardRails'-3' wide	276.17	0.06	8.40	1	140	
ALL -PE/FE/MB -INCIDENTAL	869.50	0.06	8.40	1 1	440	
				TOTAL	46250	

ITEM: 40604060 HMA SC IL-9.5 D N-50				
STATION TO STATION	AREA(SQYD)	DENSITY	LIFT THICKNESS(INCH)	QUANTITY(TON)
101+36.00 -173+74.40	25558,76	112.00	2.00	2862.6
177+62.41 -342+38.00	58346.58	112,00	2.00	6534.8
342+38 -350+89	4116.44	112.00	2.00	461.0
ALL-PE/FE/MB-INCIDENTAL	869.50	112.00	1.50	73.0
SN101-9917 -NR.Guardrails-3'	839.33	112.00	2.00	94.0
SN101-5096 -NRGuardrails-3'	296.17	112.00	-2.00	33.2
SN-25-17 Creek-NR. GuardRails'	276.17	112,00	2.00	30.9
7.			TOTAL	10,090.0

ITEM: 40602965 HMA B C IL-9.5FG, N-50				
STATION TO STATION	AREA(SQYD)	DENSITY	LIFT THICKNESS(INCH)	QUANTITY(TON)
182+86.99 -188.34.03	1458.77	112.00	1.15	95.0
			TOTAL	95.0



ITEM: 40600990

7238 16485

802

530

25055

ITEM :40600370 LONGITUDINAL JOINT SEALANT STATION TO STATION QUANTITY (FOOT)

TOTAL

101+36.00 - 173+74.4

177+62.41- 342+38.25

342+38.25- 350+35 345+05 - 350+35



TOTAL

TEMPORARY RAMP

177+62 - 248+82

248+83 - 297+29

297+29 - 324+41

324+42- 340+29

ROUTE

SECTION

ITEM: 20200600	EXC & GR EX SH	EXC & GR EX SHOULDER		
STATION TO STATION	NET LENGTH OF SHOULDER (LFT)	UNITS		
101+36.00 - 173+74.40	14076.8	141		
177+62.41 -342+38.00	32372.2	324		
	TOTAL	465		

180.0

TOTAL

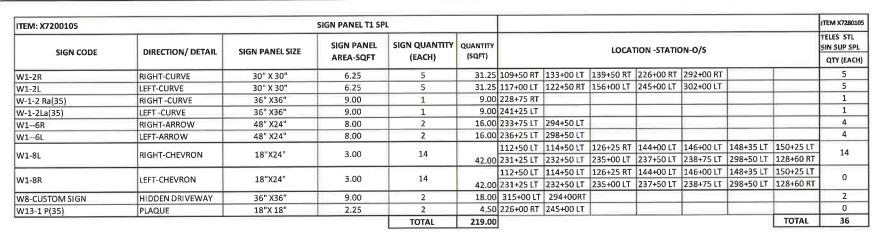
STATION	ТҮРЕ	0/5	STREET/ROAD	QUANTITY (SQYD)
101+36.14	MAIN LINE	N/A	BELVIDERE RD	10.7
104+02	STREET	RT	PEARL ST.	8.0
104+07	STREET	LT	PEARL ST.	8.7
108+12	STREET	RT	VINE ST.	8.3
110+16	STREET	LT	THOMPSON DR.	8.3
111+24	STREET	RT	GENEVA DR.	8.3
158+72	STREET	RT	APPLEGATE RD.	8.3
173+74.4	MAIN LINE	N/A	BELVIDERE RD	21.4
177+62.41	MAIN LINE	N/A	BELVIDERE RD	21.4
186+44	STREET	LT	HAMBORG RD.	9.3
191+06	STREET	RT	HAWTHORNE RD.	8.0
196+76	STREET	RT	COUNTRY KNOLLS	8.0
248+82	STREET	LT	ATWOOD RD.	11.7
267+92	STREET	RT	SWANSON RD.	11.7
297+29	STREET	LT	BROWN RD.	8.0
324+41	STREET	LT	PICKEN RD.	8.0
350+35	MAIN LINE	N/A	BELVIDERE RD	10.7

TEM: 48203100 HMA SHOULDERS					
STATION TO STATION	AREA(SQYD)	DENSITY	LIFT THICKNESS(INCH)	QUANTITY(TON)	
101+36.00 -173+74.40	6256.36	112.00	4.00	1405.0	
177+62.41 -342+47.00	14387.64	112.00	4.00	3223.0	
166+62 -186+18 (LT SIDE)	497.5	112,00	4.00	112.0	
170+90 - 185+79 (RT SIDE)	341.83	112.00	4.00	77.0	
213+63 -217+94 (LT SIDE)	137.67	112.00	4.00	30.0	
211+66- 216+59(RT SIDE)	158.5	112.00	4.00	35.0	
320+51 -324+32 (LT SIDE)	121.83	112,00	4.00	28.0	
319+51- 324+32 (RT SIDE)	154,33	112.00	4.00	35.0	
			TOTAL	4945.0	

ITEM 48102100 AGGREGATE WEDGE SHOULDER, TYPE B					
Station Length Length of Shoulder-LFT			Volume (CYD)	QUANTITY (TON)	
101+36.00 - 173+74.4	7238	14477	107.24	219.8	
177+62.41- 342+38.25	16485	32969	244.22	500.6	
ALL PE/FE/MB ADJUSTMENT	23723	LS	50.00	100.0	
			TOTAL	820.5	

SHEET

05 OF 29



TTEM: X7240110	- 00	REMOV SN PN ASS	
STATION	0/5	SIGN DETAIL	EACH
245+25	LT	W1-2 LEFT	1
226+50	RT	W-1-2 RIGHT	1
		TOTAL	2

ITEM: XX009521		ST LI	GHT ASSEMBLY COMP
INTERSECTION	STATION	o/s	QUANTITY (EACH)
APPLEGATE DR.	159+10	30 RT	1
HAMBURG RD.	186+10	35 LT	1
ATWOOD RD.	248+40	40 LT	1
		TOTAL	3

ITEM:80400100		ELEC	TRIC SERVICE INSTALLTION
INTERSECTION	STATION	o/s	QUANTITY (EACH)
APPLEGATE DR.	159+10	30 RT	
HAMBURG RD.	186+10	35 LT	
ATWOOD RD.	248+40	40 LT	
		TOTAL	The state of the s

STATION TO STATION	SHOULDER LENGTH	Exclude - Side Roads& PE/MB/FE (FOOT)	QUANTITY (FOOT)
101+36.00 - 173+74.4	14475	1660	12815
177+62.41-342+38.25	32970	2980	29990
342+38,25-350+35.00	845	45	800
		TOTAL	43605

ITEM: 20055400 RUMBLE ST				
STATION TO STATION	ROAD LENGTH (LFT)	Exclude - Side Roads& PE/MB/FE (FOOT)	QUANTITY (FOOT)	
101+36.00 - 173+74.4	7238	3455	3785	
177+62.41-342+38.25	16485	230	16255	
342+38.25-350+35.00	860	200	660	
		TOTAL	20700	

ITEM: X6026050	ARY MANHOLE ADJ		
INTERSECTION	STATION	o/s	QUANTITY (EACH)
THOMPSON DR.	110+16	18 LT	1
		TOTAL	1

ITEM: 63000001			SPBGR TY A 6FT POSTS
STATION	TO STATION	O/S	QUANTITY (FOOT)
167+40	172+90	LT	550.0
171+68	173+30.5	RT	163.0
185+40	178+15	LT	725.0
185+01	178+51	RT	650.0
214+41	214+66	LT	25.0
215+03.5	217+16	LT	213.0
212+44	214+44	RT	200.0
214+81.5	215+81.5	RT	100,0
321+29	322+29	LT	100.0
322+41.5	323+56.5	LT	116,0
320+29	322+41.5	RT	213.0
322+54	323+54	RT	100.0
		TOTAL	3155.0

ITEM: 63100167			TR BAR TRM T1 SPL TAN
STATION TO STATION		O/S	QUANTITY (EACH)
166+90	167+40	LT	1
171+18	171+68	RT	1
185+90	185+40	LT	1
185+51	185+01	RT	1
213+91	214+41	LT	1
217+16	217+66	LT	1
211+94	212+44	RT	1
215+81.5	216+31.5	RT	1
320+79	321+29	LT	1
323+56.5	324+06.5	LT	1
319+79	320+29	RT	1
323+54	324+04	RT	1
		TOTAL	12

ITEM: 632	200310		GAURDRAIL REMOV
STATION	O STATION	O/S	QUANTITY (FOOT)
171+01	173+46.50	LT	246.00
177+80	181+75	LT	395.00
171+20	173+47	RT	227.00
178+00	181+70	RT	370.00
213+84.25	216+97	LT	313.00
212+40.25	215+90	RT	350.00
320+82	324+11.25	LT	330.00
320+14	323+97.25	RT	384.00
		TOTAL	2615.00

TEM: 63000030			SPBGR ATT TO CULVERT
STATION	TO STATION	0/5	QUANTITY (FOOT)
214+66	215+03.5	LT	37.5
214+44	214+81.5	RT	37.5
322+29	322+41.5	LT	12.5
322+41.5	322+54	RT	12.5
		TOTAL	100.0

TEM: 63100087			TRAF BAR TERM T6 A
STATION	TO STATION	O/S	QUANTITY (EACH)
172+90	173+27.5	LT	1
173+30.5	173+68	RT	1
178+15	177+77.5	LT	1
178+51	78+51 178+13.5	RT	1
		TOTAL	4

ITEM X6061005		CONC CURB TYPE B, SPL	
STATION 1	TO STATION	0/5	QUANTITY (FOOT)
214+50	215+05	LT	55.0
214+35	214+90	RT	55.0
322+36	322+66	tī.	30.0
322+36	322+66 RT	RT	30.0
		TOTAL	170.0

ITEM: 78300200		RAI	SED REF PVT MK REM
LOCATION	STATION	- STATION	QUANTITY (EACH)
BELVIDRE ROAD	342+75 -	350+90	80
		TOTAL	80



ROUTE SECTION 25 21-00689-00-SP

BELVIDERE ROAD

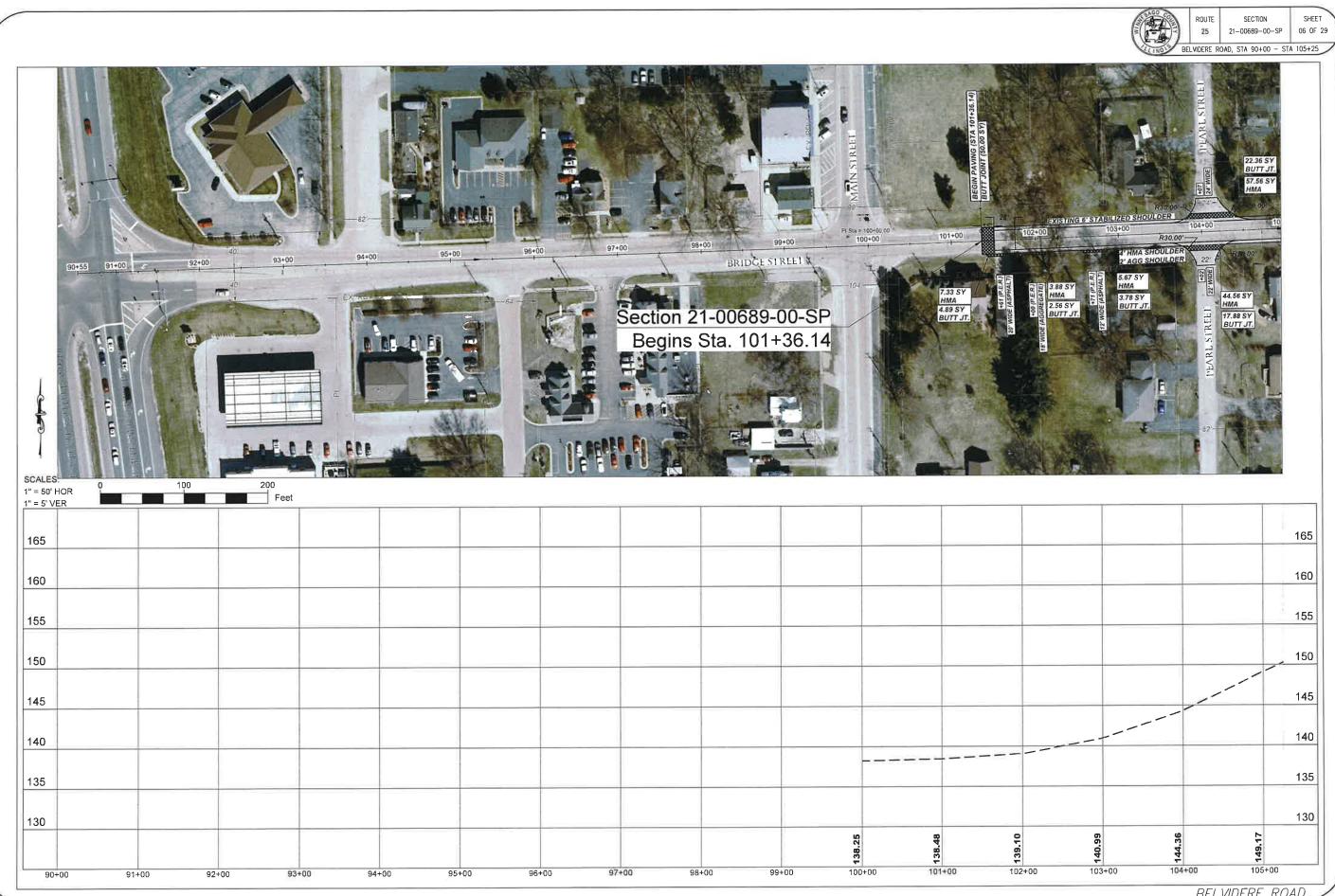
TEM:78001180	PAINT PVT MK LINE 24		
CORSS STREET/ROAD	QUANTITY -FOOT		
PEARL ST.	12,0		
PEARL ST.	12.0		
VINE ST.	12.0		
THOMPSON DR.	12.0		
GENEVA DR.	12.0		
APPLEGATE RD.	12.0		
HAMBORG RD.	12.0		
HAWTHORNE RD.	12.0		
COUNTRY KNOLLS	12.0		
ATWOOD RD.	12.0		
SWANSON RD.	12.0		
BROWN RD.	12.0		
PICKEN RD.	12.0		
TOTAL	156.0		

ITEM: 78001110	001110 PAINT PVT MK LINE			
STATION	то	STATION	QUANTITY -FOOT	
STA: 101+36,14	-	STA: 173+74.40	28,953.00	
STA: 177+62,41	34	STA: 342+38,25	50,922.00	
STA 342+38,25	- 51	STA:350+35.00	4500.00	
		TOTAL	84,375.00	

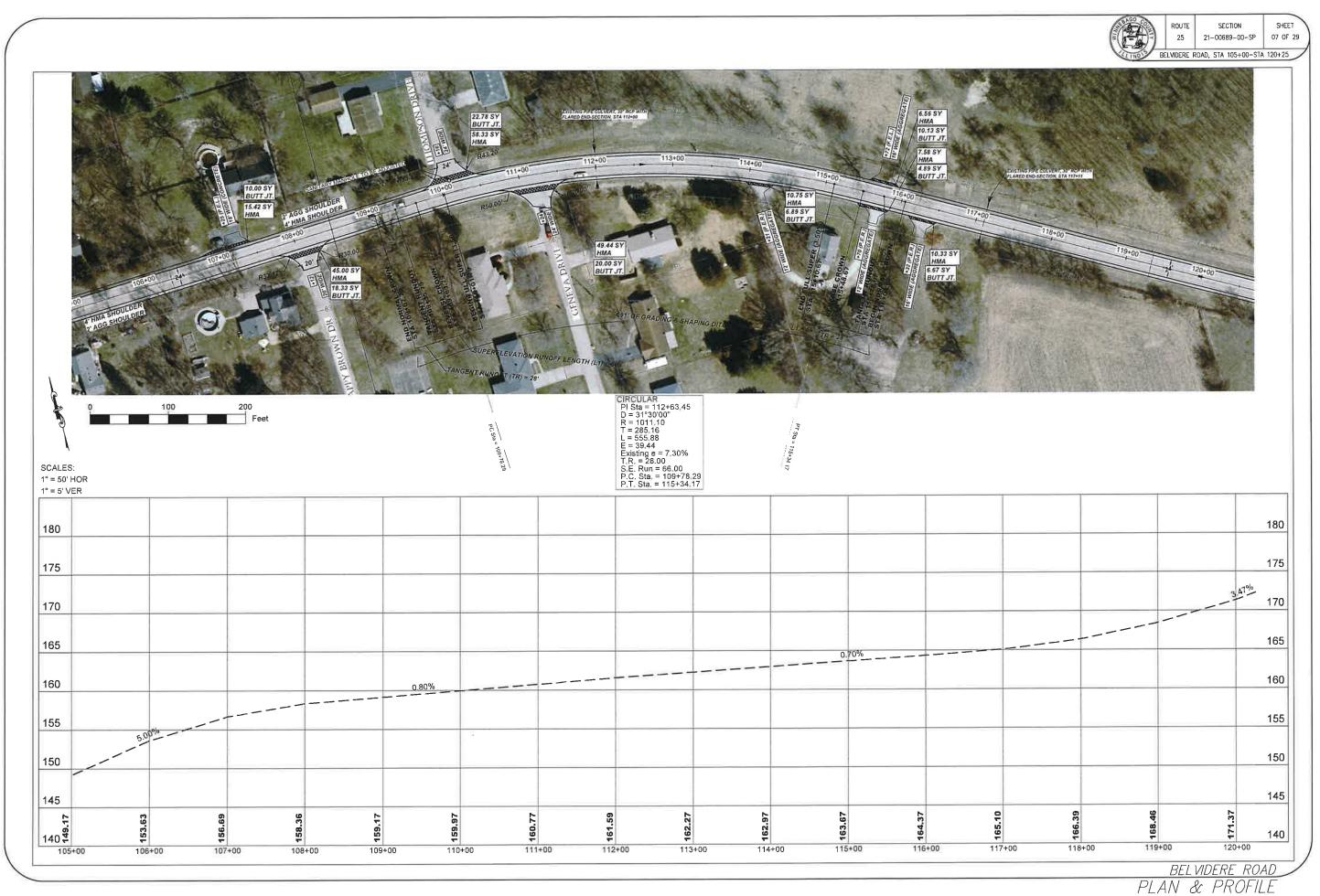
ITEM: 78001100	PT PVT MK LTRS & SYMB				
STATION	PARTICULAR	AREA(SQ.FT)			
STA: 350+50	WT. LEFT TURN ARROW	15.6			
STA: 349+75	WT. LEFT TURN ARROW	15.6			
STA: 349+00	WT. LEFT TURN ARROW	15.6			
-	TOTAL	47.0			

ITEM: 78001140	PAINT PVT MK LINE 8			
STATION-TO -STATION	PARTICULARS	QUANTITY -FOOT		
STA:350+81 -STA 350+35	WHITE PAINTED ISALND	220.0		
STA:348+31 -STA 350+35	LT TURN LANE	275.0		
	TOTAL	495.0		

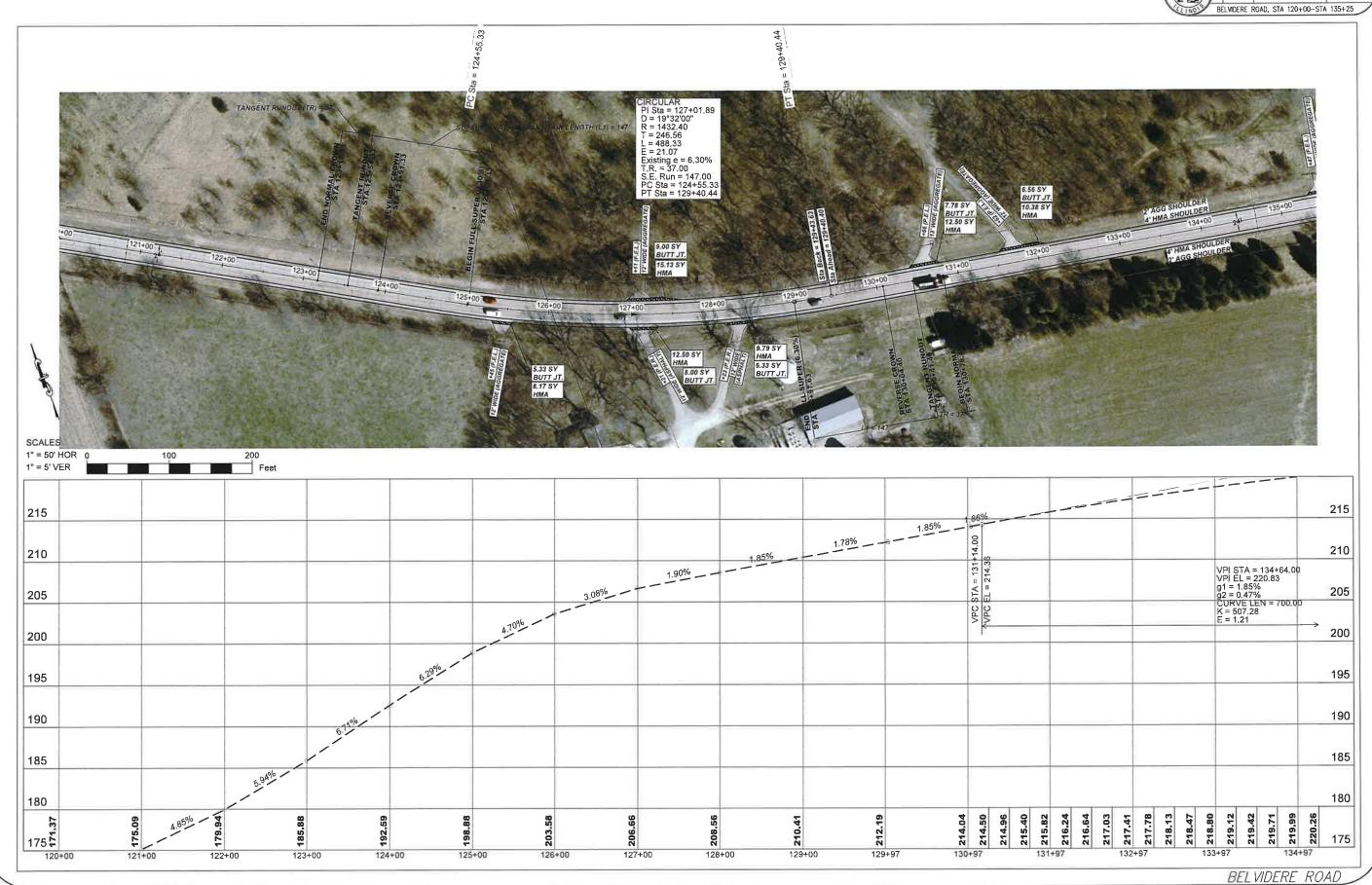
ITEM: 78001150	PAINT PVT MK LINE 12		
STATION-TO -STATION	PARTICULARS	QUANTITY -FOOT	
STA: 342+66 -STA:348+31	PAINTED MEDIAN	170.0	
	TOTAL	170.0	



BELVIDERE ROAD PLAN & PROFILE

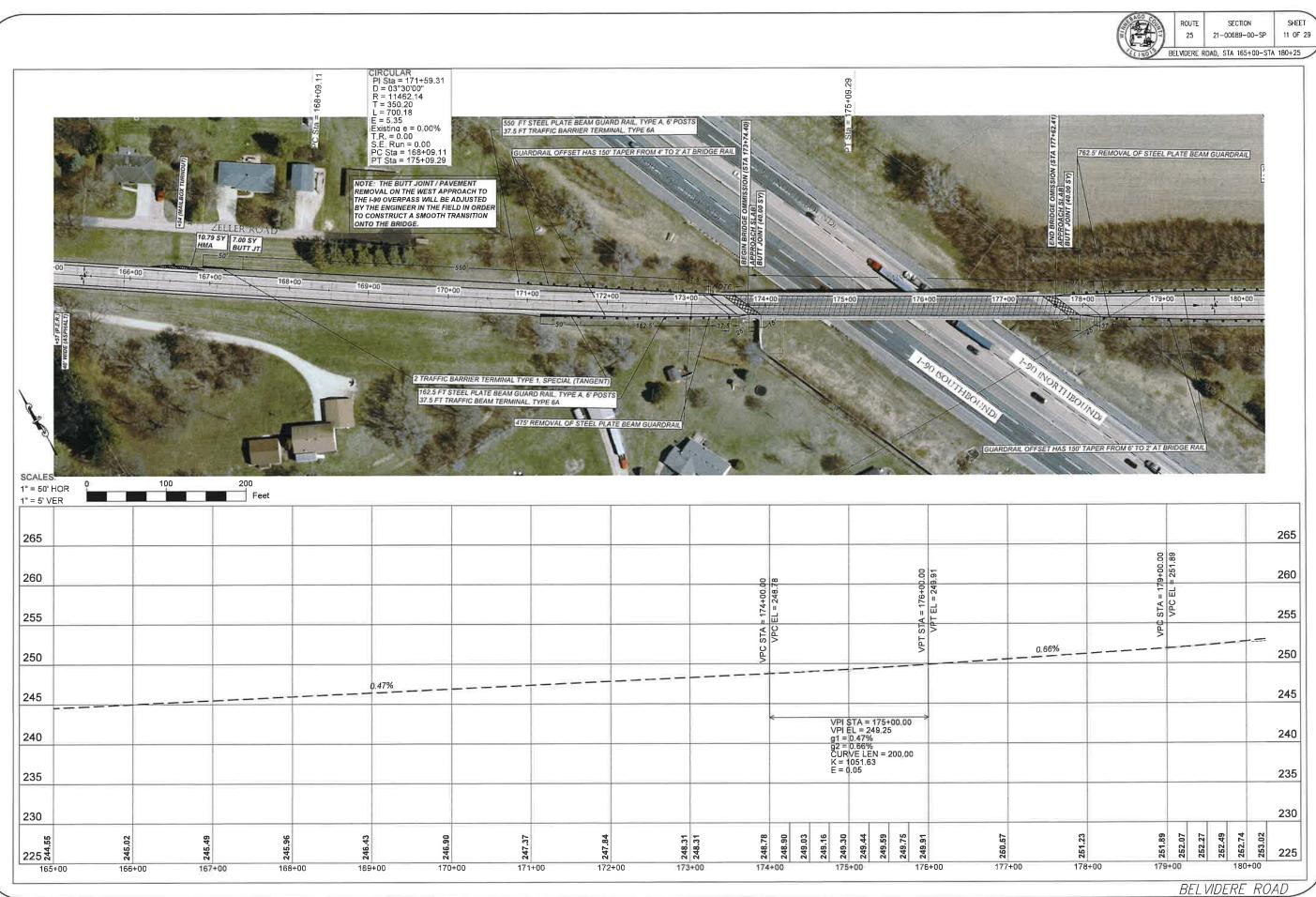


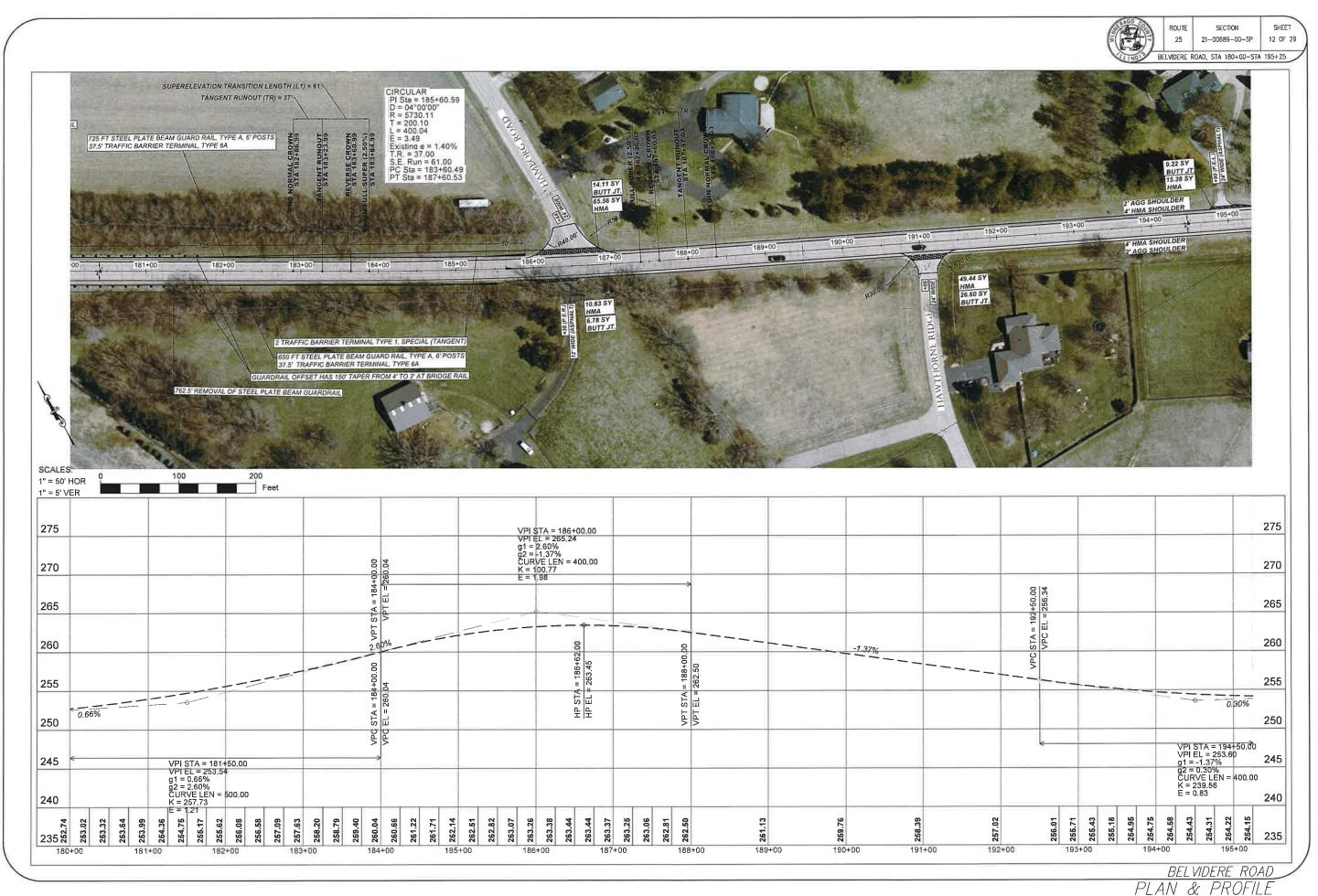


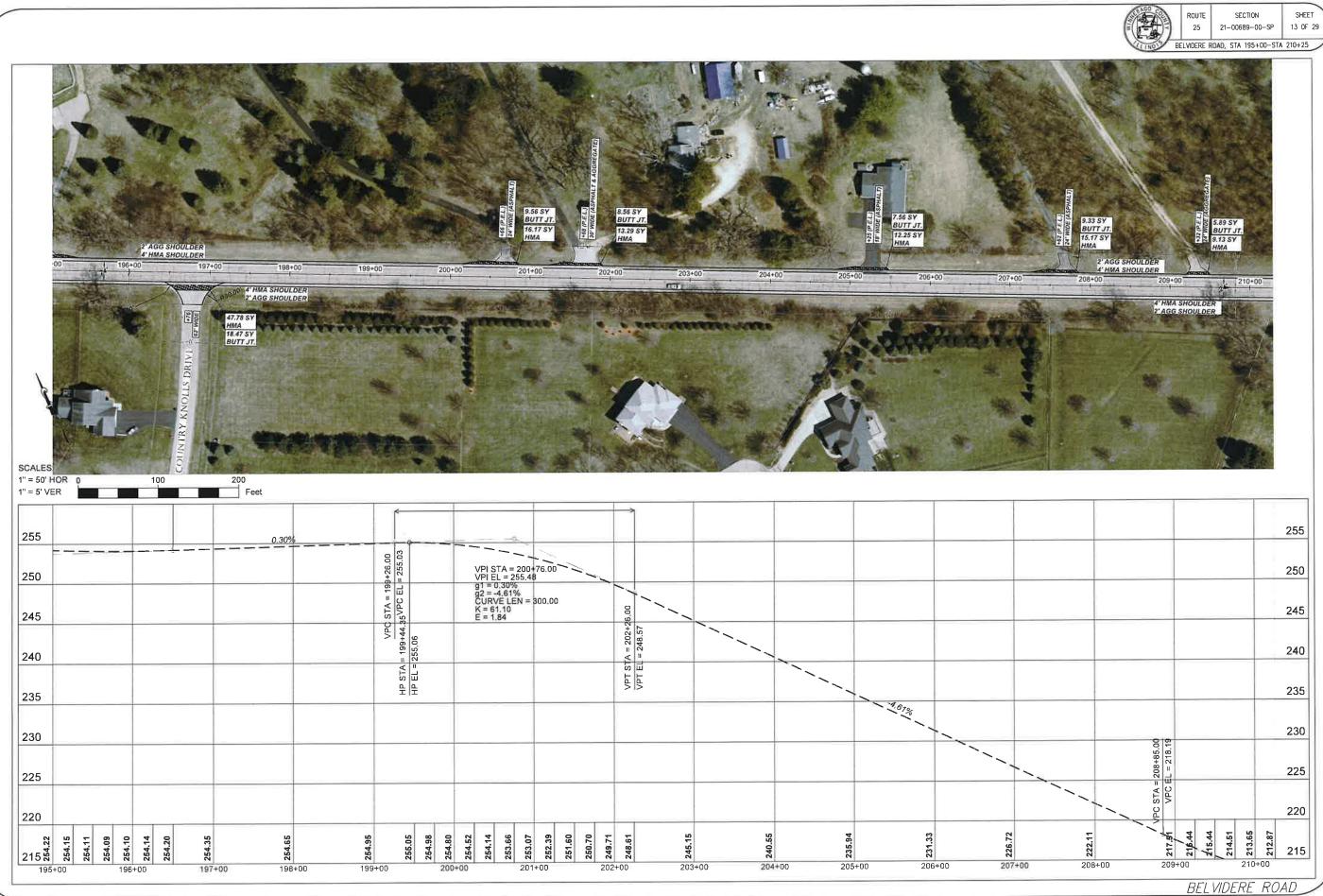


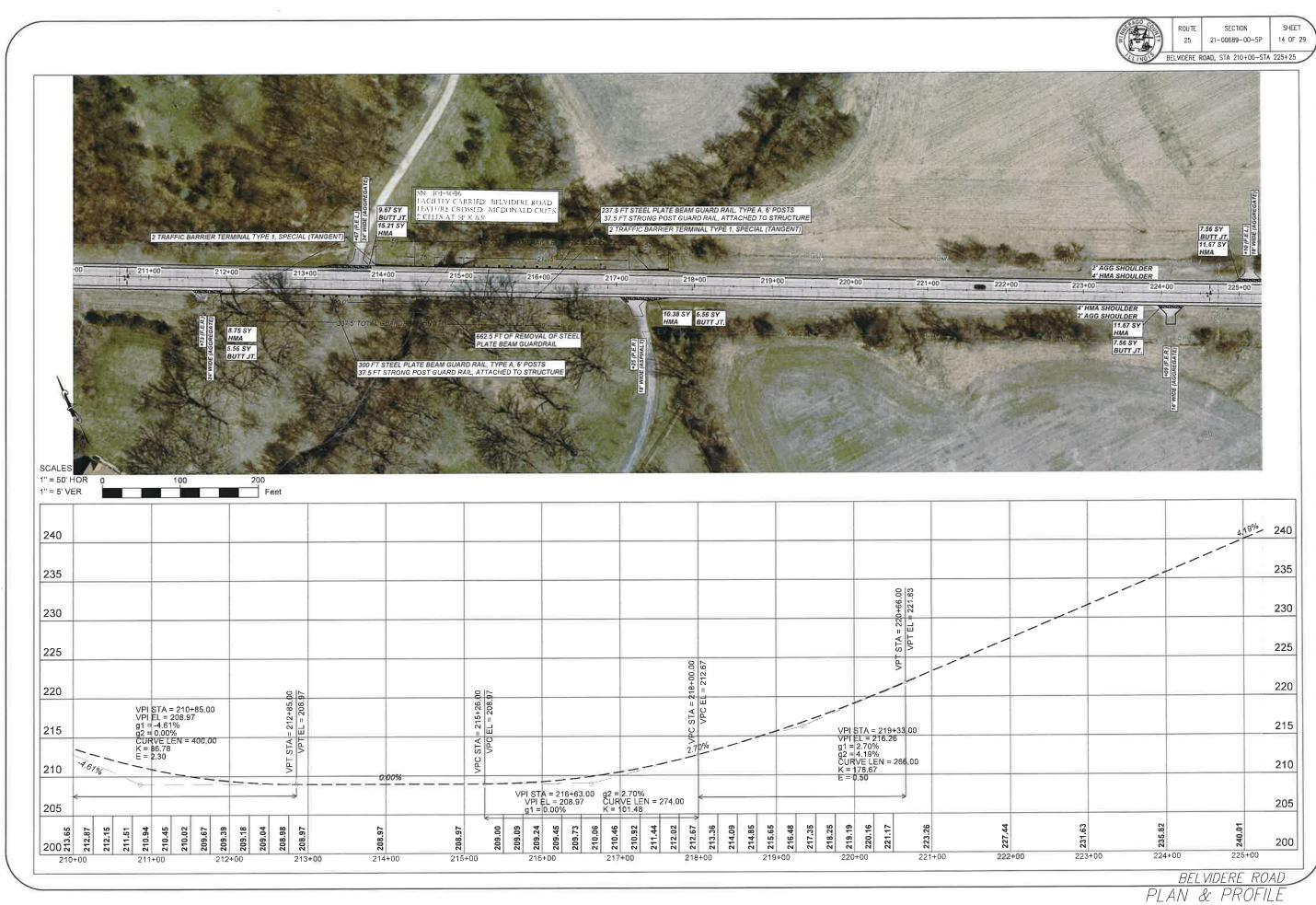


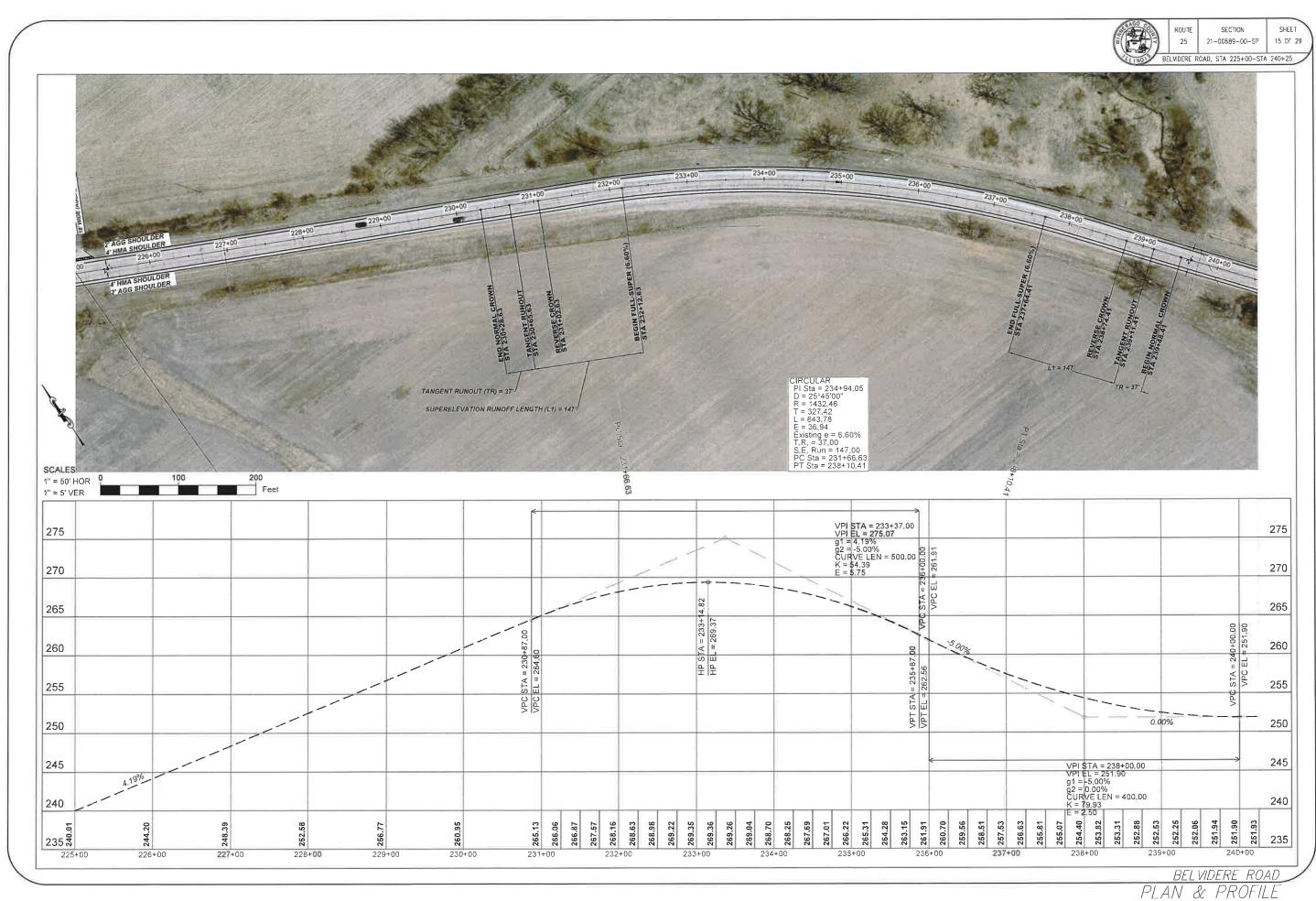


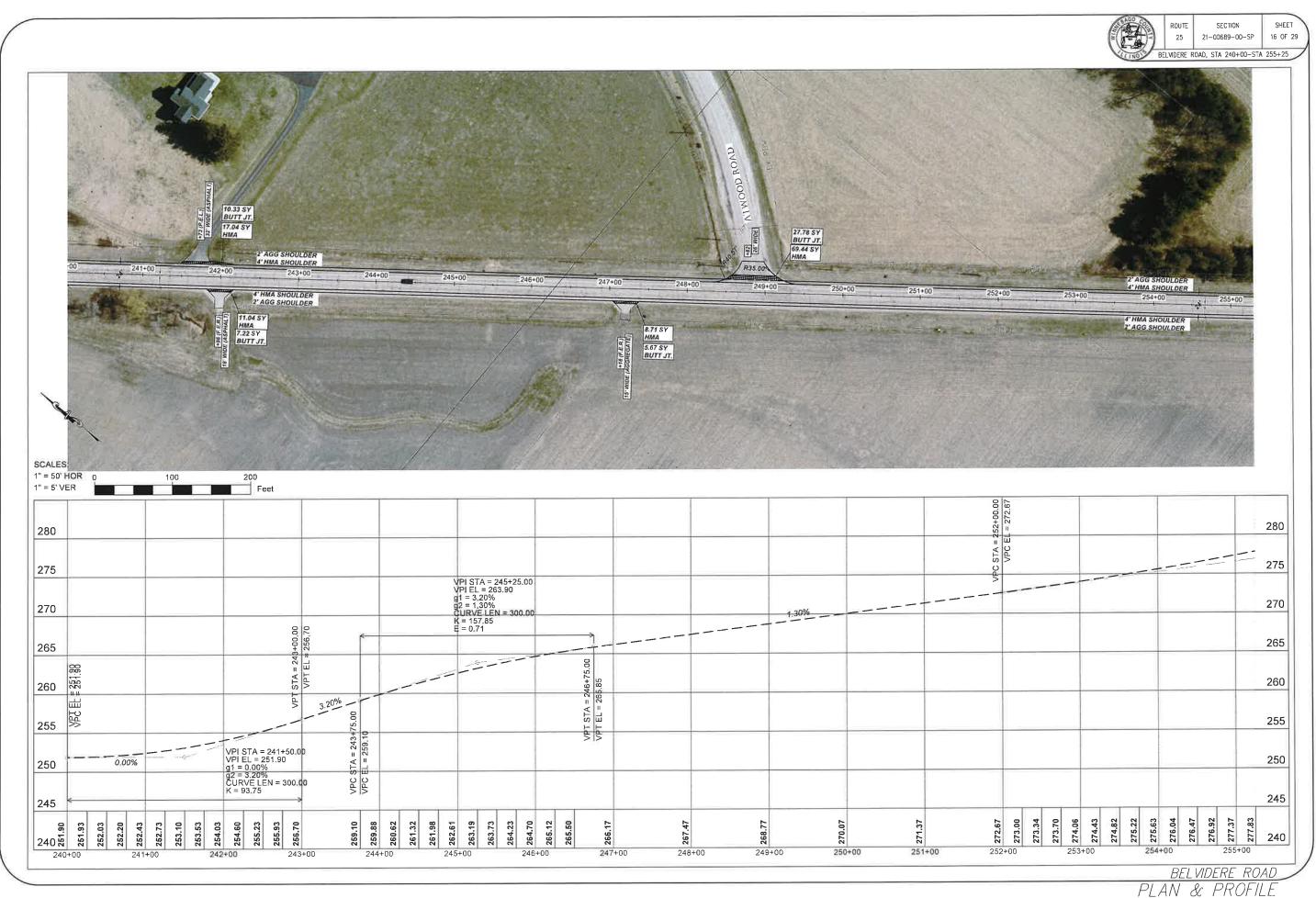


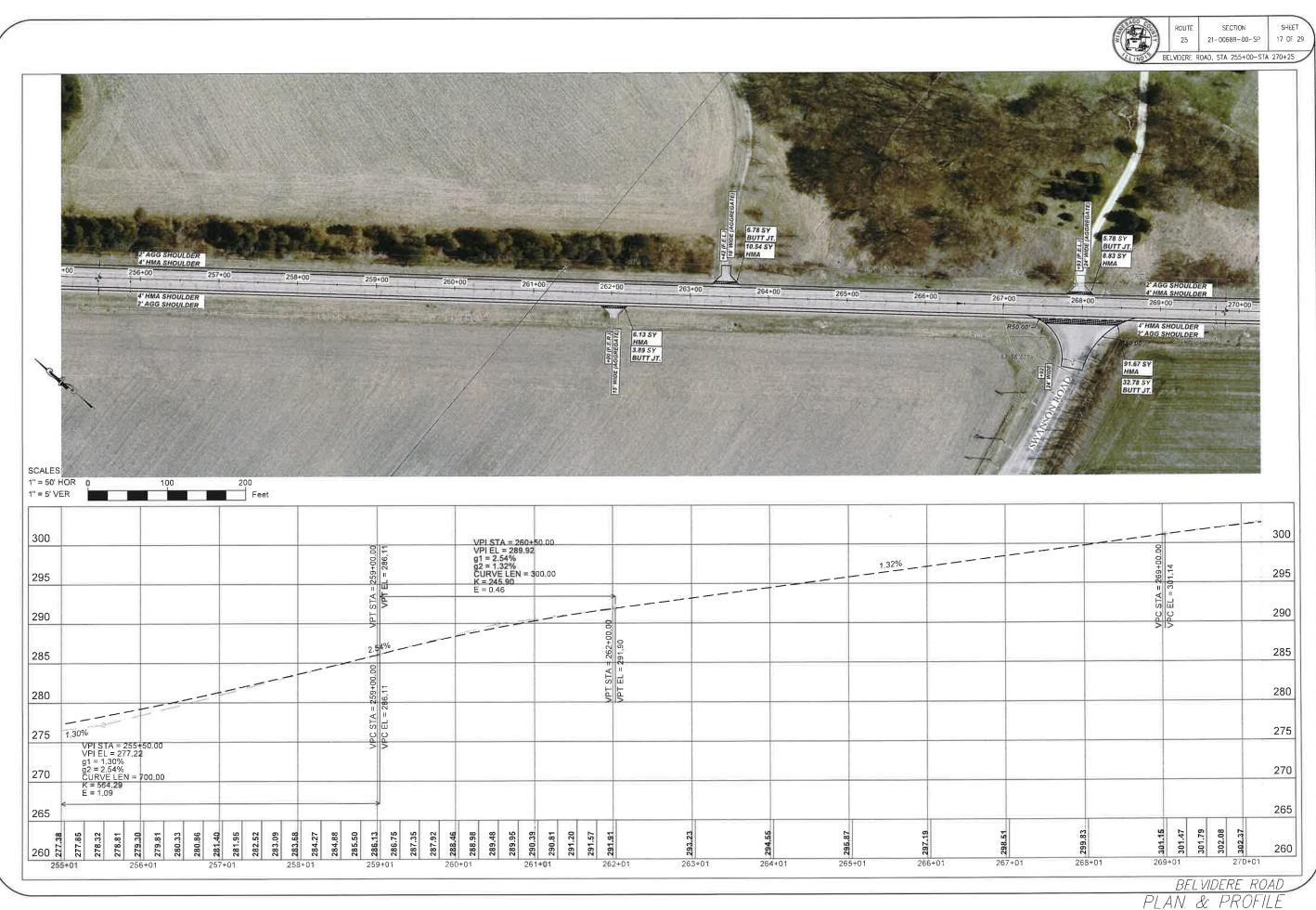


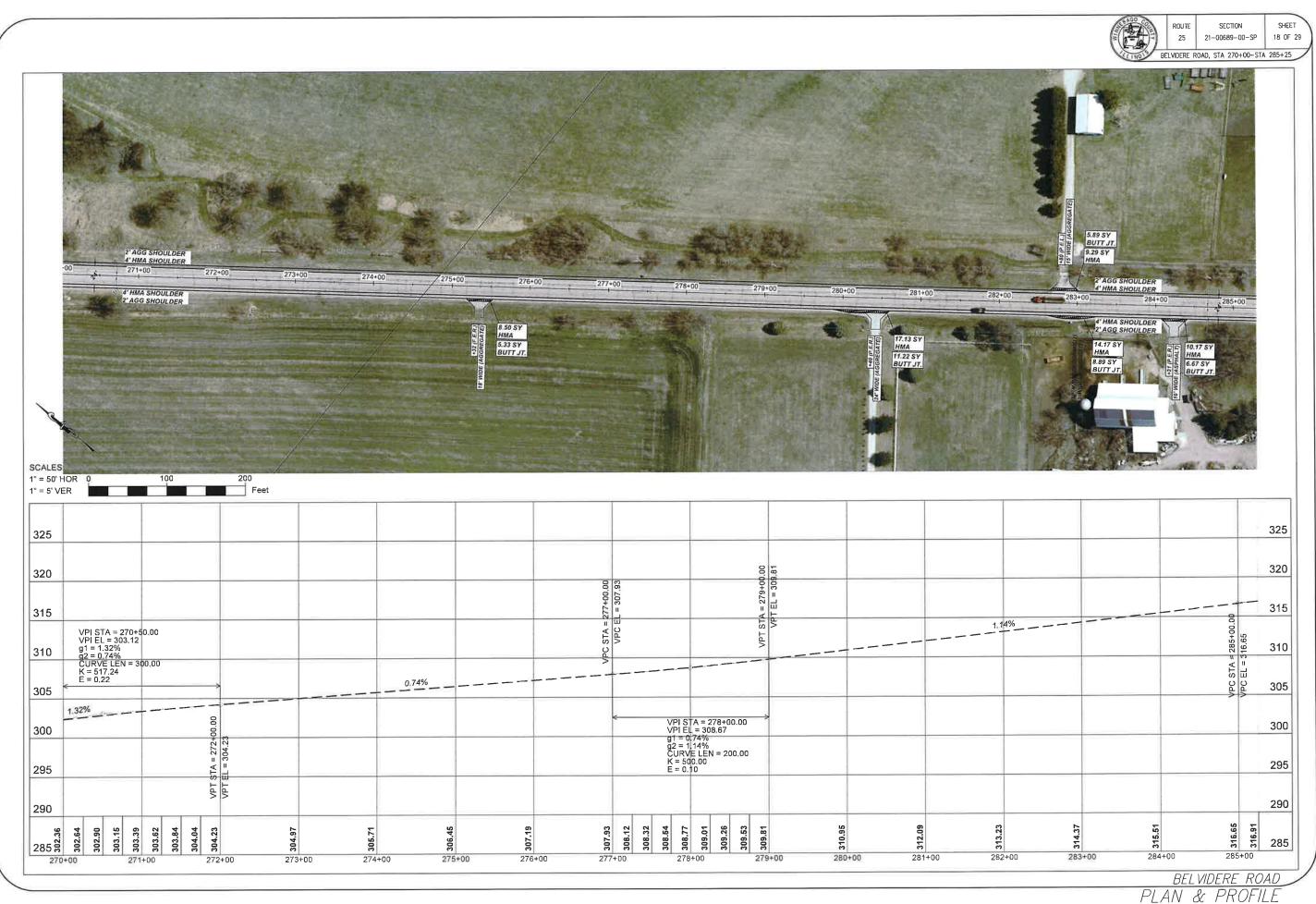


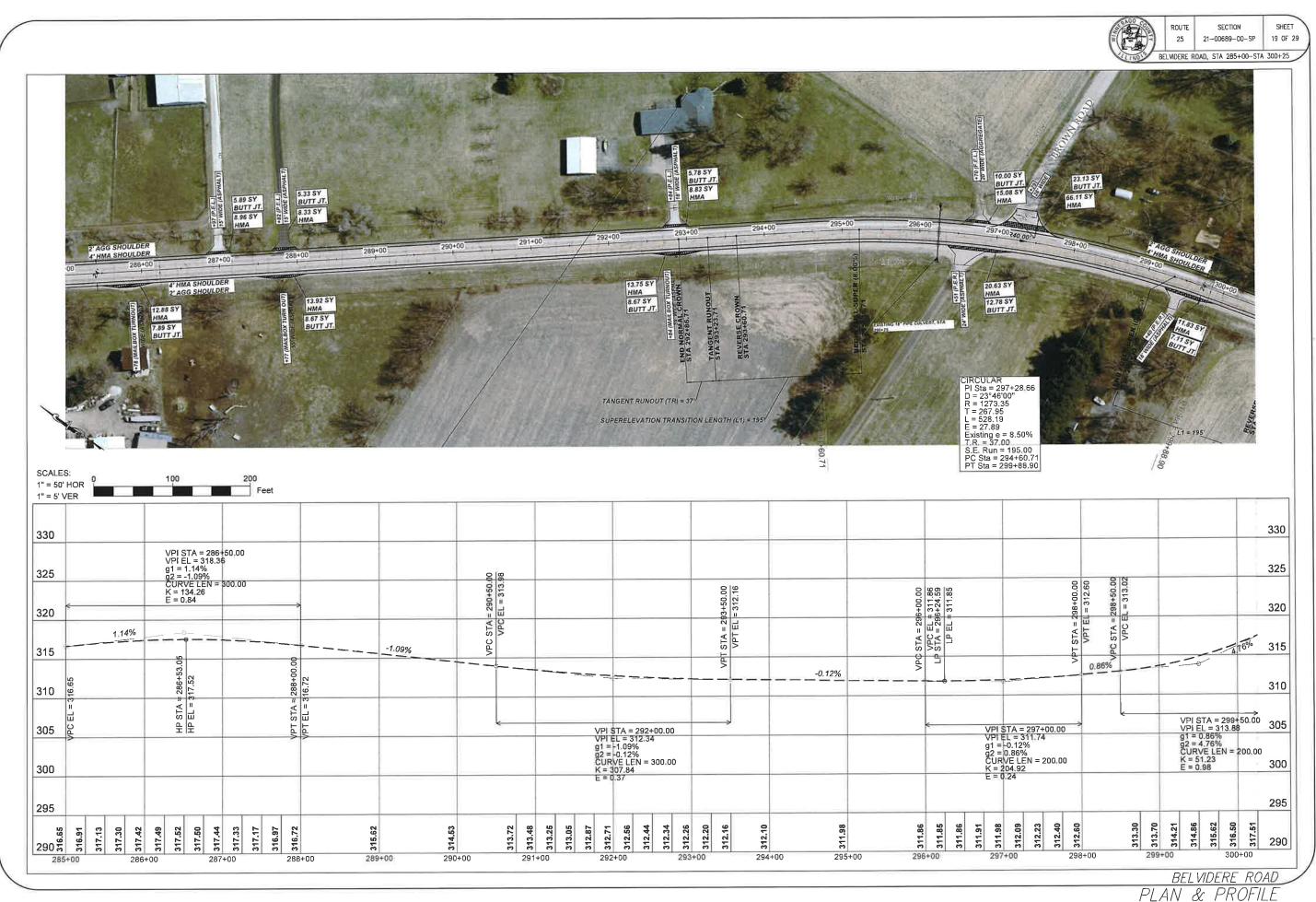


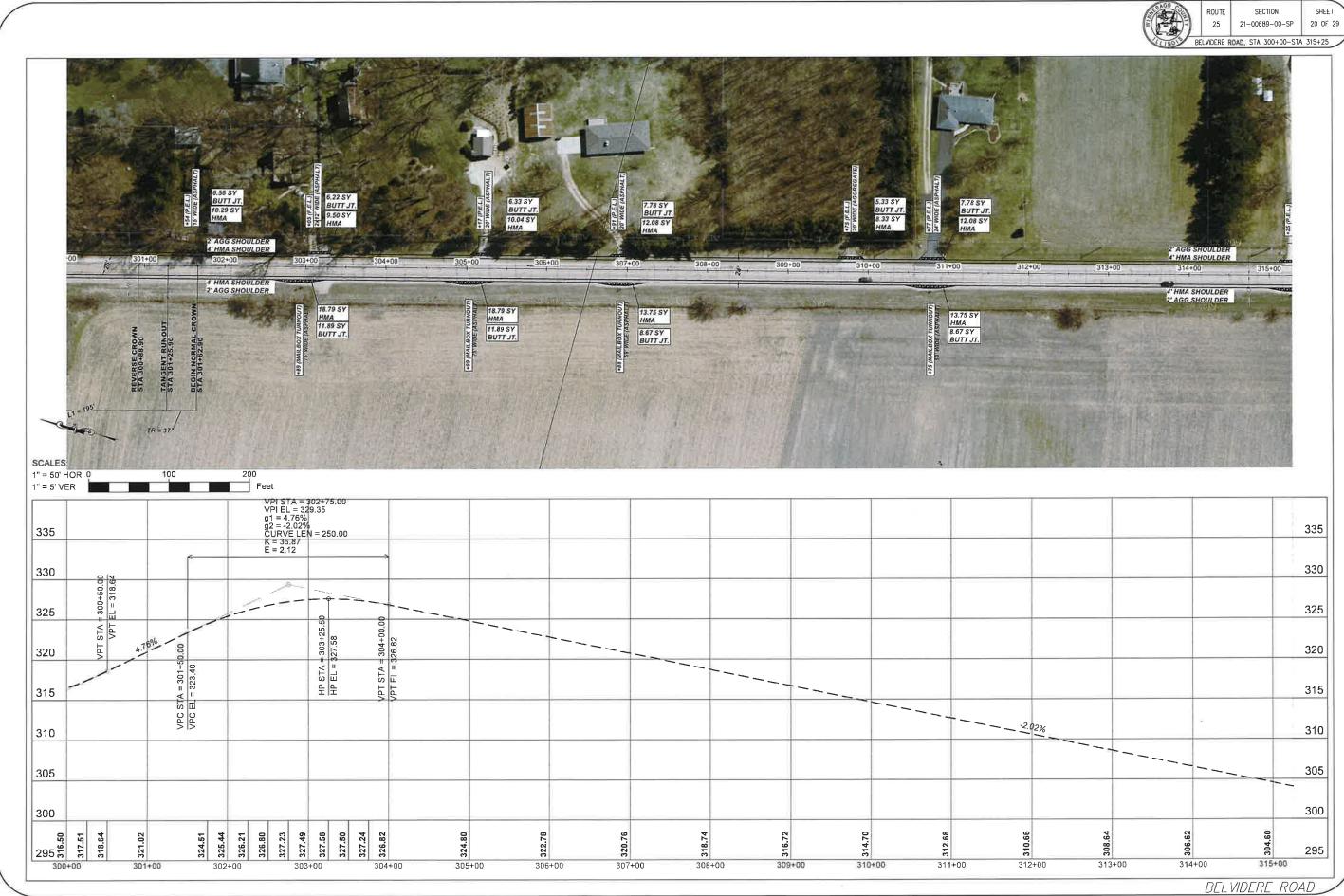


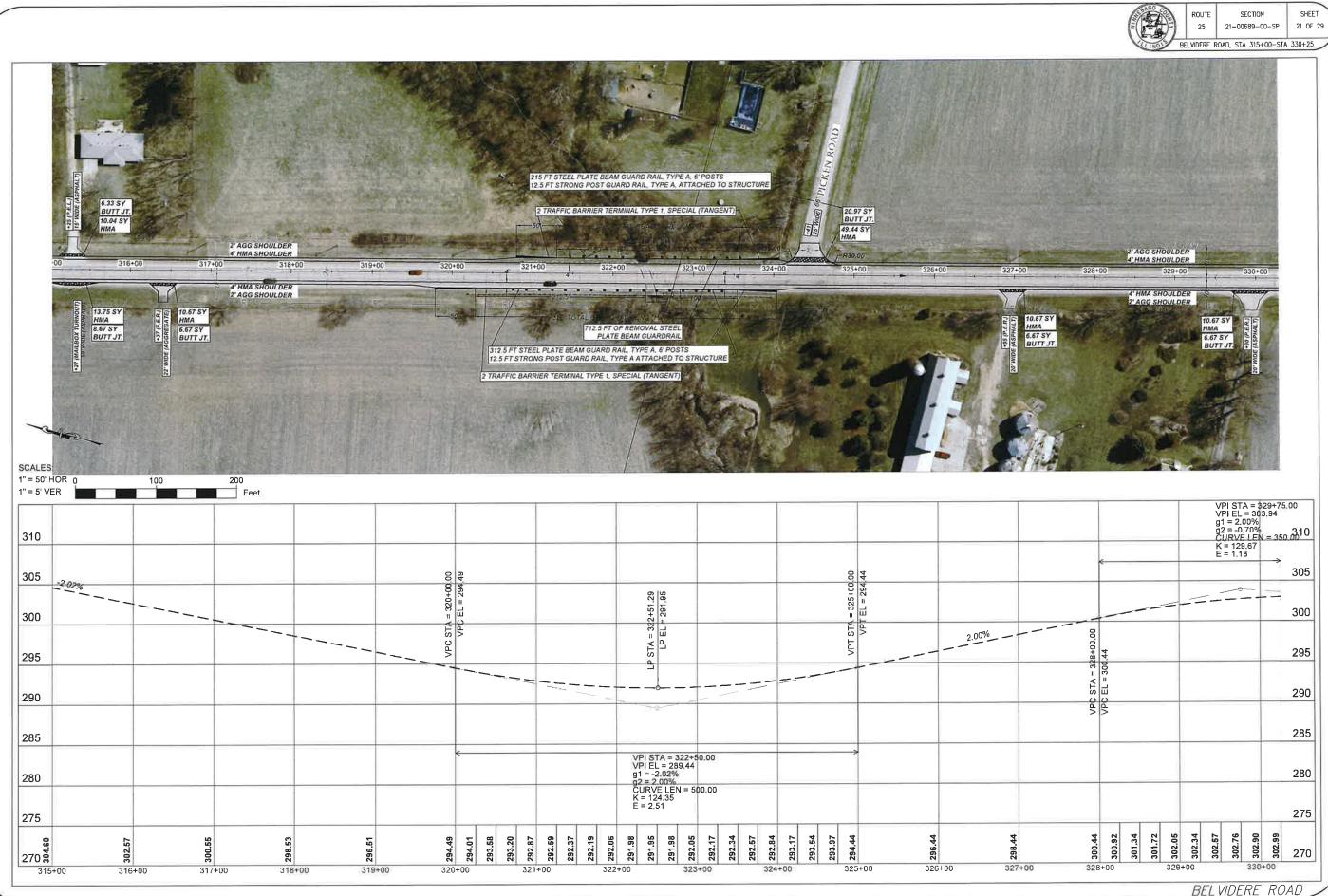




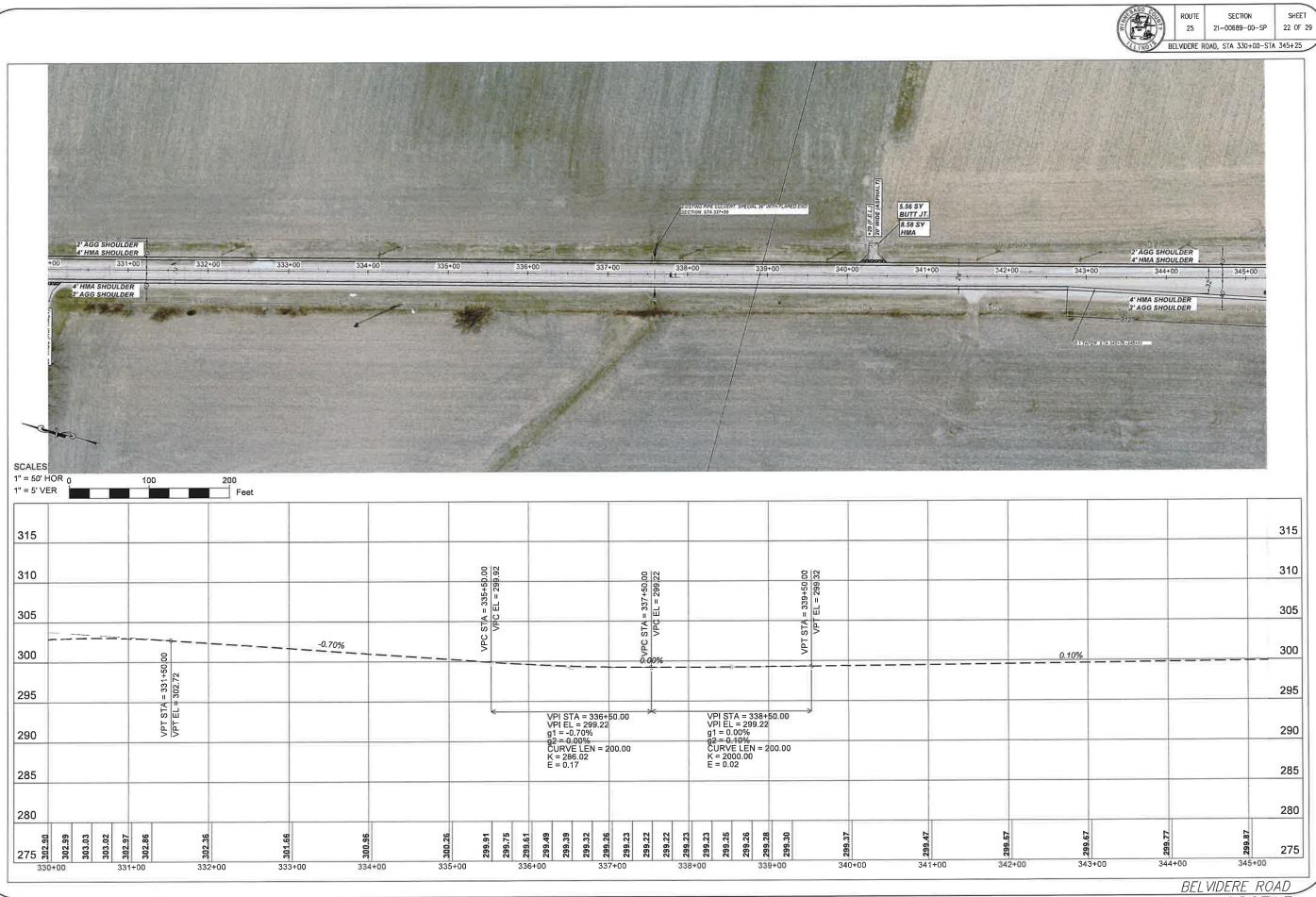






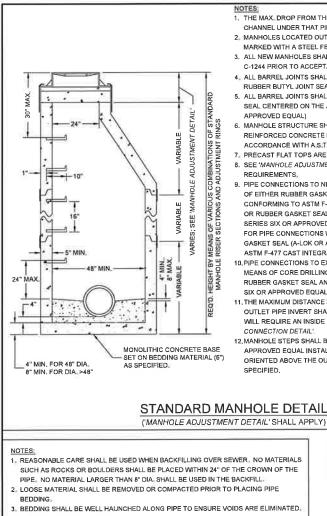


BELVIDERE ROAD PLAN & PROFILE





BELVIDERE ROAD PLAN & PROFILE



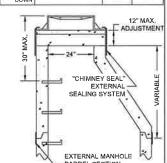
NOTES: 1. THE MAX, DROP FROM THE INVERT OF ANY PIPE TO THE CONCRETE

- CHANNEL UNDER THAT PIPE SHALL BE 8". 2. MANHOLES LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY SHALL BE
- MARKED WITH A STEEL FENCE POST AS DIRECTED 3. ALL NEW MANHOLES SHALL BE VACUUM TESTED PER A.S.T.M. C-1244 PRIOR TO ACCEPTANCE.
- 4. ALL BARREL JOINTS SHALL BE SEALED WITH 3 1/2" x 3/4" PRE-FORMED
- RUBBER BUTYL JOINT SEALANT ON THE LOWER SHIPLAP 5. ALL BARREL JOINTS SHALL BE SEALED WITH AN EXTERNAL BARRE SEAL CENTERED ON THE JOINT (MAR MAC MACWRAP, OR
- 6. MANHOLE STRUCTURE SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE MANHOLE RISER SECTIONS IN ACCORDANCE WITH A.S.T.M. C478-90 OR THE LATEST DESIGNATION
- 7. PRECAST FLAT TOPS ARE NOT APPROVED FOR USE.
- 8. SEE 'MANHOLE ADJUSTMENT DETAIL' FOR ADJUSTMEN'I REQUIREMENTS.
- 9. PIPE CONNECTIONS TO NEW MANHOLES SHALL BE MADE BY MEAN OF EITHER RUBBER GASKET SEAL (A-LOK OR APPROVED EQUAL) CONFORMING TO ASTM F-477 CAST INTEGRALLY IN MANHOLE WALL OR RUBBER GASKET SEAL AND STAINLESS STEEL CLAMP (PSX SERIES SIX OR APPROVED EQUAL) CONFORMING TO ASTM C-923. FOR PIPE CONNECTIONS WITH A DEPTH OF >20 FT., A RUBBER GASKET SEAL (A-LOK OR APPROVED EQUAL) CONFORMING TO ASTM F-477 CAST INTEGRALLY IN MANHOLE WALL SHALL BE USED
- 10.PIPE CONNECTIONS TO EXISTING MANHOLES SHALL BE MADE BY MEANS OF CORE DRILLING MANHOLE WALL AND INSTALLING RUBBER GASKET SEAL AND STAINLESS STEEL CLAMP (PSX SERIES SIX OR APPROVED EQUAL) CONFORMING TO ASTM C-923, 11. THE MAXIMUM DISTANCE FROM ANY INLET PIPE INVERT TO THE
- OUTLET PIPE INVERT SHALL BE 2'. DISTANCES GREATER THAN 2' WILL REQUIRE AN INSIDE DROP CONNECTION PER 'INSIDE DROP CONNECTION DETAIL
- 12 MANHOLE STEPS SHALL BE NEENAH R-1982-F OR M.A. IND. PS-1 OR APPROVED EQUAL INSTALLED AT 16" CENTERS, AND SHALL BE ORIENTED ABOVE THE OUTLET PIPE UNLESS OTHERWISE

9, WHEN ADJUSTING EXISTING MANHOLES, THE MANHOLE FRAMES & LIDS SHALL BE PER THE ENTIRE EXISTING ADJUSTMENT SHALL BE

- REMOVED AND REPLACED. 10. THE COMBINATION OF NEW ADJUSTING RING SHALL BE SUCH THAT THE MINIMUM NUMBER DIAMETER OR LARGER, OR FOR MANHOLES LOCATED IN FLOOD PRONE AREAS, FRAMES & OF RINGS POSSIBLE ARE USED.
 - 11.FLAT-TOPS ARE NOT PERMITTED ON 4' OR 5 DIA. MANHOLES.
- 12.REPLACEMENT OF EXISTING BARREL SECTIONS MAY BE REQUIRED TO MEET THE ABOVÉ REQUIREMENTS. EACH OTHER, EXCEPT THAT A PRECAST RING
 - 13. MANHOLE ADJUSTMENT INSERT RISER RINGS ARE NOT APPROVED FOR USE

FOR PRECAST ADJUSTING RINGS, ALL ADJUSTING RING JOINTS AS WELL AS THE	APPROVED FRAME & LID TABLE					
FRAME TO ADJUSTING RING JOINT SHALL BE SEALED WITH TWO 1" BEADS OF PRE-FORMED	TYPE	NEENAH FRAME	NEENAH LID	EAST JORDAN FRAME	EAST JORDAN LID	
RUBBER BUTYL JOINT SEALANT, INCLUDING FRAME TO CONCRETE JOINT, WHEN A FRAME	REGULAR	1670-2004	R-1670-0358	00111711	00111732	
REQUIRES PITCHING, A MIN. OF 3 SHIMS	LOW PROFILE	1670-2008	R-1670-0358	:==:		
EQUALLY SPACED SHALL BE INSTALLED BETWEEN THE FRAME AND CONCRETE AND	BOLT DOWN	191	5JT08	-	-	
HYDRAULIC CEMENT SHALL BE USED TO FILL THE VOID BETWEEN THE FRAME & CONCRETE.	-				2" MAX	



JOINT SEAL (TYP).

MANHOLE ADJUSTMENT DETAIL (FOR ADJUSTMENT OF BOTH NEW & EXISTING MANHOLES)

DROP BOWL & DROP PIPE SIZING TABLE

INLET PIPE DIA,	DROP PIPE DIA. (MIN.)
4-6 INCH	4 INCH
8 INCH	6 INCH
10 INCH	8 INCH
>10 INCH	•
PER MFG, OR AS I	DIRECTED BY FRSA

SEE 'STANDARD MANHOLL

MIN, STAINLESS STEEL BOLTS AND EPOXY IMPREGNATED LUGS PER MFR 'S RECOMMENDATIONS. 6. THE DROP BOWL SHALL BE PLACED AT A HEIGHT SO THAT THE FLOW LINE OF THE BOWL IS 2 INCHES BELOW THE INVERT OF THE INCOMING PIPE

NOTES:

1. INSIDE DROP TYPE MANHOLES SHALL BE 5' MIN. INSIDE

2. ALL INSIDE DROP CONNECTIONS FOR SERVICES AND

3. SEE TABLE FOR DROP BOWL AND DROP PIPE SIZES.

4. ALL INSIDE DROP PIPING SHALL BE PVC SDR35

5. ATTACH THE ROUND BACK DROP BOWL AND EACH

RELINER-DURAN INC., OR EQUAL

ASTM-D3034.

COLLECTOR SEWERS SHALL USE THE DROP AS MEG. BY

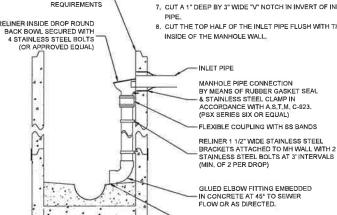
CLAMPING BRACKET TO THE MANHOLE WALL WITH 3/1 x 1/2

- 7, CUT A 1" DEEP BY 3" WIDE "V" NOTCH IN INVERT OF INLET
- 8. CUT THE TOP HALF OF THE INLET PIPE FLUSH WITH THE

INSIDE OF THE MANHOLE WALL

DROP PIPE INVERTIBLEV, SHALL

MATCH SPRINGLINE OF EXIT PIPE



INSIDE DROP CONNECTION DETAIL

('STANDARD MANHOLE DETAIL' SHALL APPLY)

PIPE BEDDING FOR SANITARY SERVICE PIPING SHALL BE PER 'FLEXIBLE PIPE BEDDING DETAIL' 6" BELOW AND 12" ABOVE PIPING THE REMAINDER OF SERVICE TO PROPERTY/EASEMENT LINE SHALL BE INSTALLED PER STANDARD SERVICE & ALTERNATE SERVICE SPOOL (ADAPTER) IS DETAIL REQUIRED. THE COMPRESSION FITTING SHALL BE A WATER-TIGHT FLEXIBLE TEE CONNECTOR OF SPECIFIED SIZE. (INSERT-A-TEE OR APPROVED COMPRESSION MAINLINE SEWER

GROUND OR ROADWAY SURFACE

FOR NEW MAINLINE, FACTORY PVC

FOR EX. MAINLINE, HOLE SHALL BE

CORE DRILLED IN THE MAINLINE

PIPE PER MFR.'S REQUIREMENTS.

LOCATION OF CORE SHALL BE

APPROVED BY THE ENGINEER

WYE FITTING SHALL BE USED.

SECTION

BEI WIDERE ROAD

21-00689-00-SP

3" IRON PIN 12" LONG

SCH 40 DWV GLUE CAP

MIN ATTACHED TO

VERTICAL SERVICE RISER DETAIL (FOR MAINLINE DIA, 8" - 18"; CONNECTION TO >18" MAIN PROHIBITED)

1. REASONABLE CARE SHALL BE USED WHEN BACKFILLING OVER SEWER, NO MATERIALS SUCH AS ROCKS OR BOULDERS SHALL BE PLACED WITHIN 24" OF THE CROWN OF THE PIPE. NO MATERIAL LARGER THAN 8" DIA. SHALL BE USED IN THE BACKFILL 2. LOOSE MATERIAL SHALL BE REMOVED OR COMPACTED PRIOR TO PLACING PIPE 3. BEDDING SHALL BE WELL HAUNCHED ALONG PIPE TO ENSURE VOIDS ARE ELIMINATED GROUND SURFACE TRENCH BACKFILL & MAX: EXCAVATED TRENCH WIDTH PIPE O.D. + 18 INCHES FOR 8"-24" PIPI PIPE O.D. + 24 INCHES FOR PIPE>24" CONFINED & STABLE TRENCH WALL IAINTAINED IN A DEWATERED GRANULAR MATERIAL COMPACTED TO 90% STANDARD PROCTOR DENSITY 12" MIN. ABOVE CROWN OR AS DIRECTED BY F.R.S.A. IDOT CA-7 OR APPROVED EQUAL CONFORMING TO ASTM C12 CLASS SPRINGLINE B, 6" BELOW BOTTOM OF PIPE TO RINGLINE, (HAUNCHED FROM SPRINGLINE TO BOTTOM OF PIPE) CA-1 BEDDING FOUNDATION IF REQUIRED)

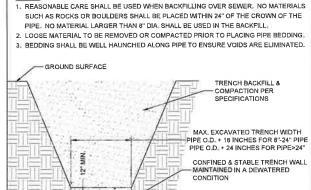


TABLE BELOW.

FOR MANHOLES CONNECTED TO MAINS 18'

LIDS SHALL BE THE BOLT DOWN TYPE.

ALLOWABLE TYPES OF ADJUSTING RINGS

INCLUDE PRECAST CONCRETE (4" HEIGHT

MIN.), & EXPANDED POLYPROPYLENE (EPP).

THESE CAN BE USED IN CONJUNCTION WITH

SHALL NOT BE PLACED OVER AN EPP RING.

FOR FPP ADJUSTING RINGS, RINGS SHALL BE

INSTALLED ACCORDING TO MANUFACTURER'S

INSTRUCTIONS. WHEN A FRAME REQUIRES

NO TARRING OR GROUTING IS ALLOWED ON

THE INSIDE OF MANHOLE OR ADJUSTMENT

OFF-ROAD OR IN CURB & GUTTER ROADWAY,

MANHOLE FRAMES SHALL BE SET 1/2" MIN, TO

3/4" MAX, BELOW PAVED SURFACES, AND AT

MAXIMUM MANHOLE ADJUSTMENT IS 12".

MINIMUM ADJUSTMENT IS 4" UNLESS

FINAL GRADE IN TURF AREAS.

PITCHING, THE TOP RING SHALL BE A

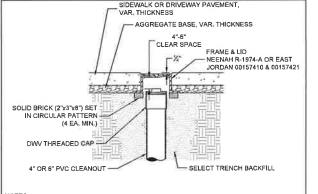
TAPERED ADJUSTMENT RING PER

MANUFACTURER'S INSTRUCTIONS.

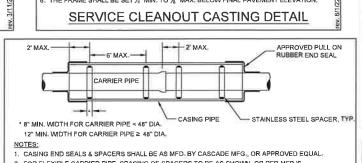
FOR PRECAST ADJUSTING RINGS, ALL

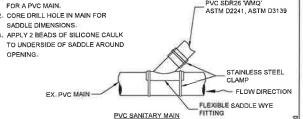
IDOT CA-7 OR APPROVED EQUAL CONFORMING TO ASTM D2321 CLASS 1A, 6" BELOW BOTTOM OF PIPE TO 12" ABOVE PIPE CROWN (HAUNCHED FROM SPRINGLINE TO BOTTOM OF PIPE) CA-1 BEDDING FOUNDATION (IF REQUIRED)

FLEXIBLE PIPE BEDDING DETAIL



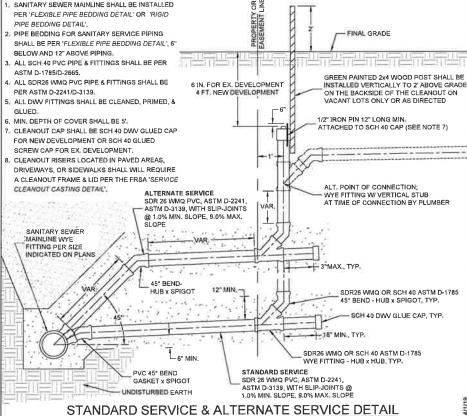
- SERVICE CLEANOUT CASTINGS ARE REQUIRED FOR ALL CLEANOUTS LOCATED IN PAVED AREAS, DRIVEWAYS, OR SIDEWALKS
- THE LOCATION OF THE CLEANOUT SHALL BE APPROVED BY FOUR RIVERS SANITATION AUTHORITY (FRSA)
- THE FRAME SHALL BE SET ON BRICKS THAT ARE PLACED IN A CIRCULAR PATTERN THE ENTIRE CIRCUMFERENCE OF THE FRAME, THE BRICKS SHALL BE SET ON COMPACTED TRENCH BACKFILL
- THE FRAME SHALL BE SET TO AN ELEVATION THAT PROVIDES 4"-6" CLEAR SPACE BETWEEN THE TOP OF THE CLEANOUT CAP AND THE BOTTOM OF THE CASTING LID. THE CONTRACTOR SHALL ENSURE THAT THE CLEANOUT CAP CAN BE UNSCREWED AND
- REMOVED AND REPLACED WITHOUT HINDRANCE. . THE FRAME SHALL BE SET X" MIN, TO X" MAX, BELOW FINAL PAVEMENT ELEVATION





- 2- FOR FLEXIBLE CARRIER PIPE, SPACING OF SPACERS TO BE AS SHOWN, OR PER MFR.'S RECOMMENDATION
- 3. FOR RIGID CARRIER PIPE, SPACING SHALL BE PER MFR.'S RECOMMENDATION

CASING & SPACER DETAIL



(FOR MAINLINE DIA, 8" - 18"; CONNECTION TO >18" MAIN PROHIBITED)



FOUR RIVERS SANITATION AUTHORITY (FRSA) STANDARD DETAIL SHEET

(NOT TO SCALE) 3501 KISHWAUKEE ST. ROCKFORD, ILLINOIS 61109 PH. (815) 387-7660

06/01/2022

NOTES:

DIMENSIONS

OPENING.

SADDLE TEE OR SADDLE WYE ARE

EX. VCP FITTING FOR SADDLE

BOTH ACCEPTABLE FOR VCP MAIN.

CORE DRILL HOLE IN MAIN OR MODIFY

APPLY 2 BEADS OF SILICONE CAULK

TO UNDERSIDE OF SADDLE AROUND

EX. VCP MAIN

FLEXIBLE SADDLE CONNECTION DETAIL

FOR SERVICE CONNECTIONS TO NON-PVC SANITARY MAINS LESS THAN 18" DIA

NON-PVC SANITARY MAIN WYE FITTING

RIGID PIPE BEDDING DETAIL

FLOW DIRECTION

STAINLESS STEEL

NOTES:

ONLY A SADDLE WYE IS ACCEPTABLE

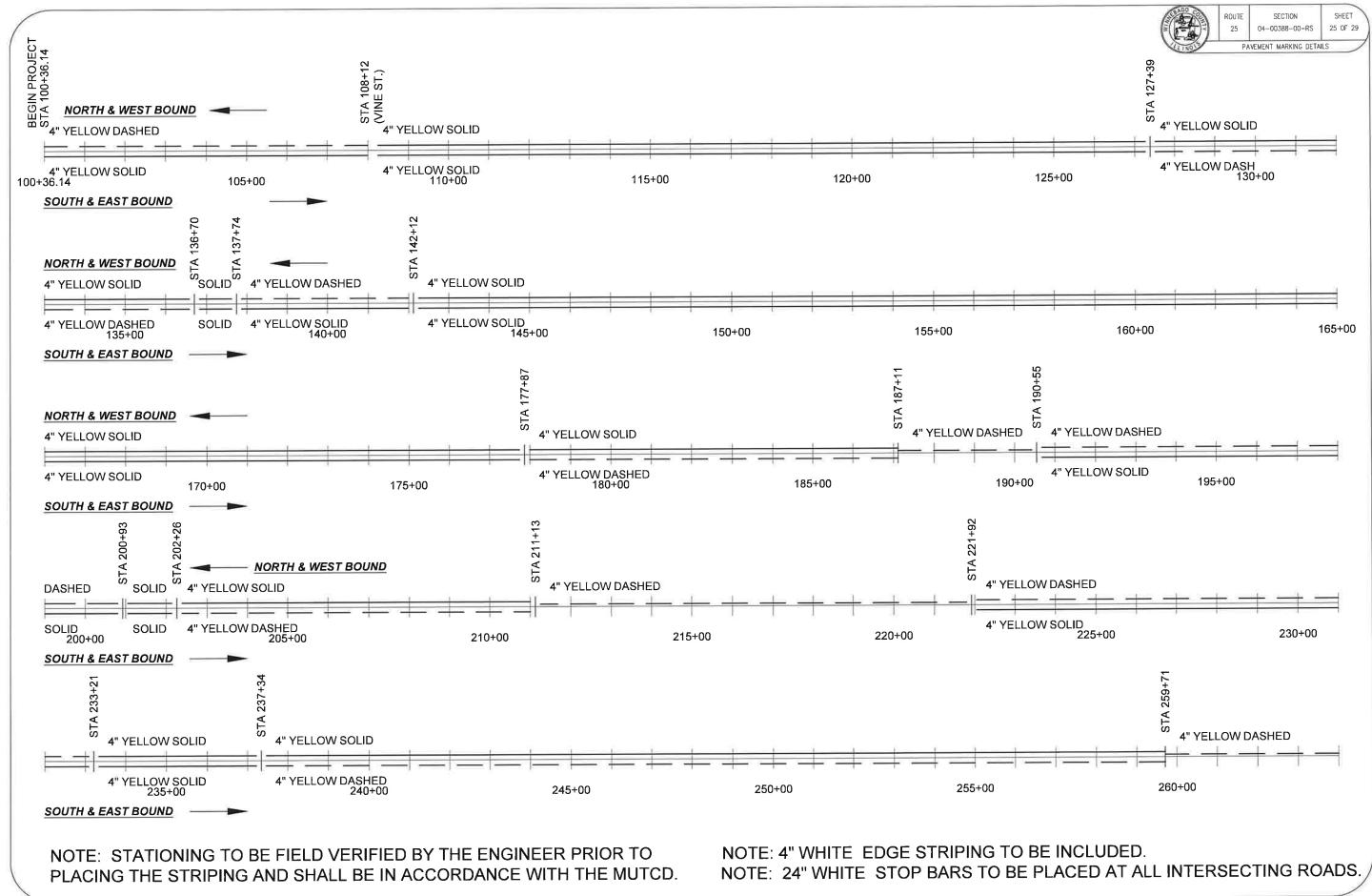
INDISTURBED FARTI

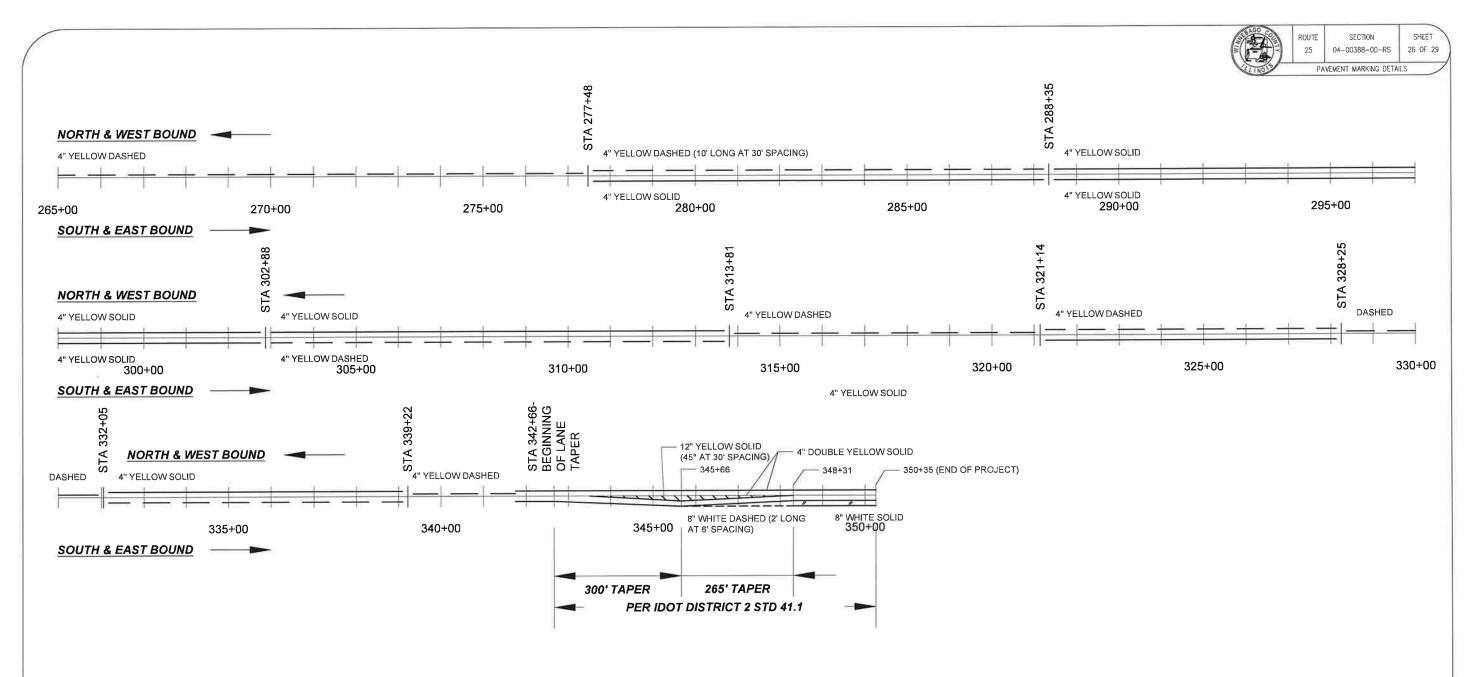
PVC SDR26 WMQ

FLEXIBLE SADDLE TEE OR

ASTM D2241, ASTM D3139

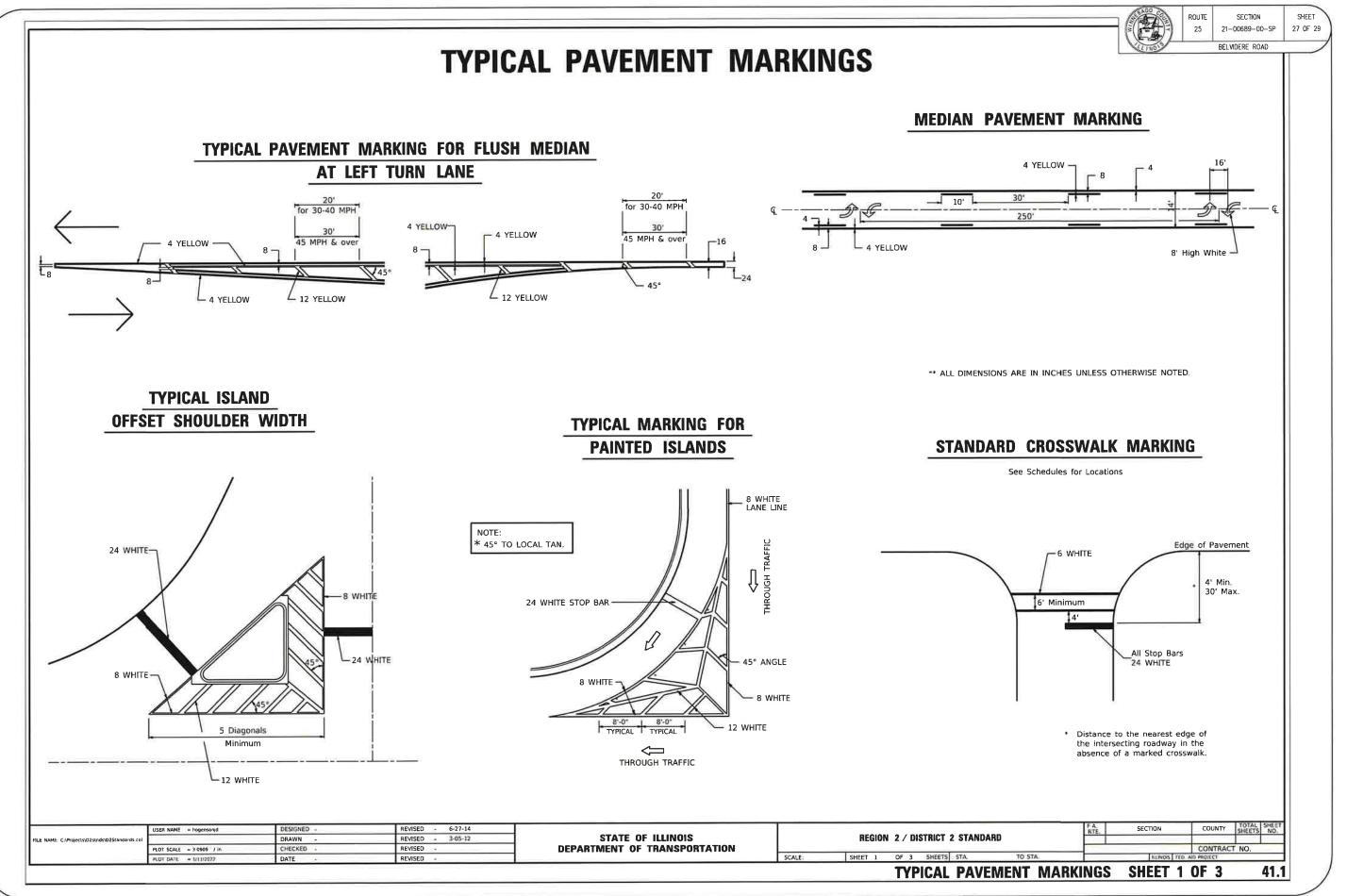
FLEXIBLE SADDLE CONNECTION DETAIL FOR SERVICE CONNECTIONS TO PVC SANITARY MAINS LESS THAN 18" DIA.

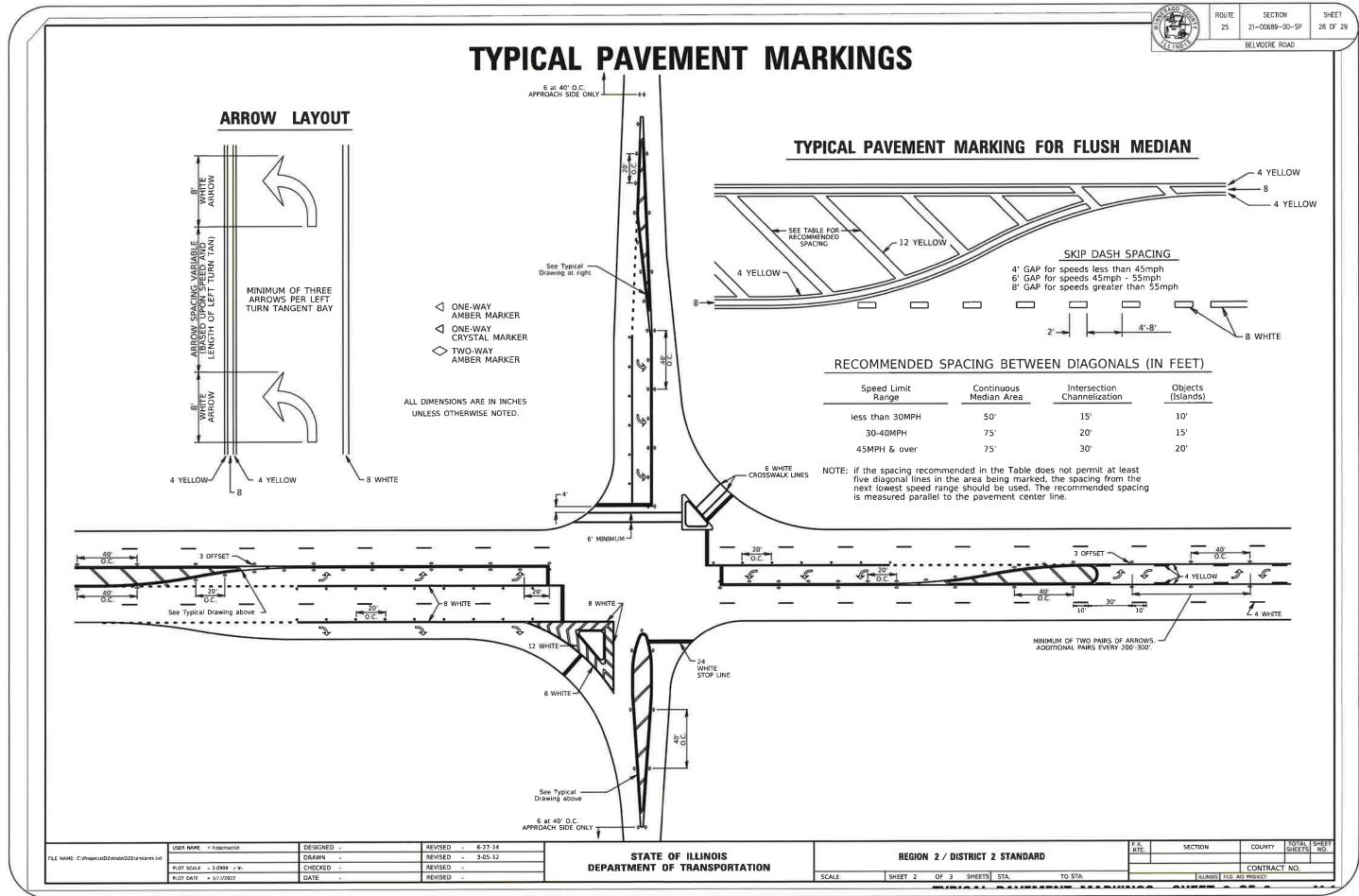




NOTE: 4" WHITE EDGE STRIPING TO BE INCLUDED.

NOTE: STATIONING TO BE FIELD VERIFIED BY THE ENGINEER PRIOR TO PLACING THE STRIPING AND SHALL BE IN ACCORDANCE WITH THE MUTCD AND THE APPLICABLE PORTIONS OF STD 780001-05 (TYPICAL PAVEMENT MARKINGS).







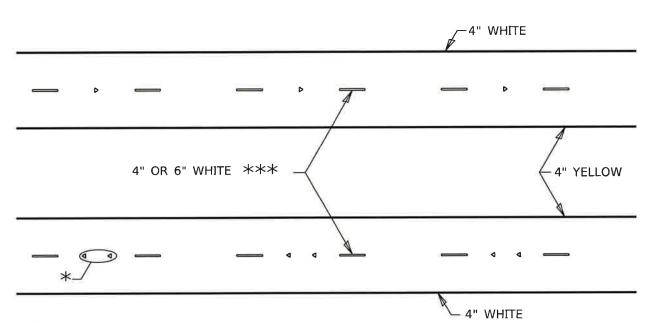
SECTION 21-00689-00-SP

SHEET 29 OF 29

BELVIDERE ROAD

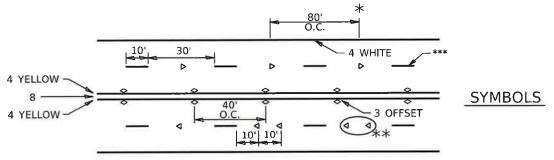
TYPICAL PAVEMENT MARKINGS

TYPICAL PARKING SPACING



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS. USE DOUBLE MARKERS WHEN ADT ≥ 20,000.

MULTI-LANE / DIVIDED



- * REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.
- ** USE DOUBLE MARKERS WHEN ADT ≥ 20,000

*** CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

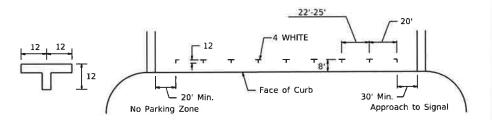
	USER NAME = hogensonid	DESIGNED -	REVISED - 6-27-14	
TLE NAME: C:\Projects\D2stnds\D2Standards cel		DRAWN -	REVISED - 8-27-13	
	PLOT SCALE = 3 0909 / In.	CHECKED -	REVISED - 11-28-12	
	PLOT DATE = 1/11/2022	DATE -	REVISED -	

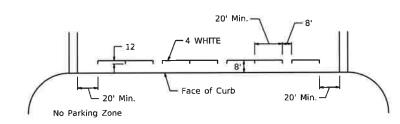
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

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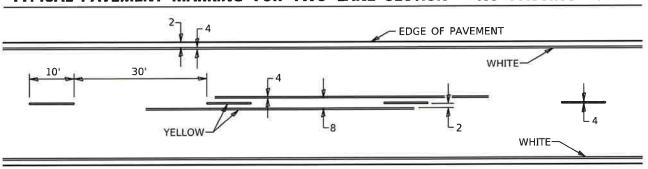
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└ 20' Min. No Parking Zone





TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



41.1