APPANOOSE Co.

HMA RESURFACING

STPN-005-1(76)--2J-04

LETTING DATE 06-16-2020

IOWADOT

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

APPANOOSE COUNTY

HMA RESURFACING

County Road J46 to Rock Valley Road

SCALES: As Noted

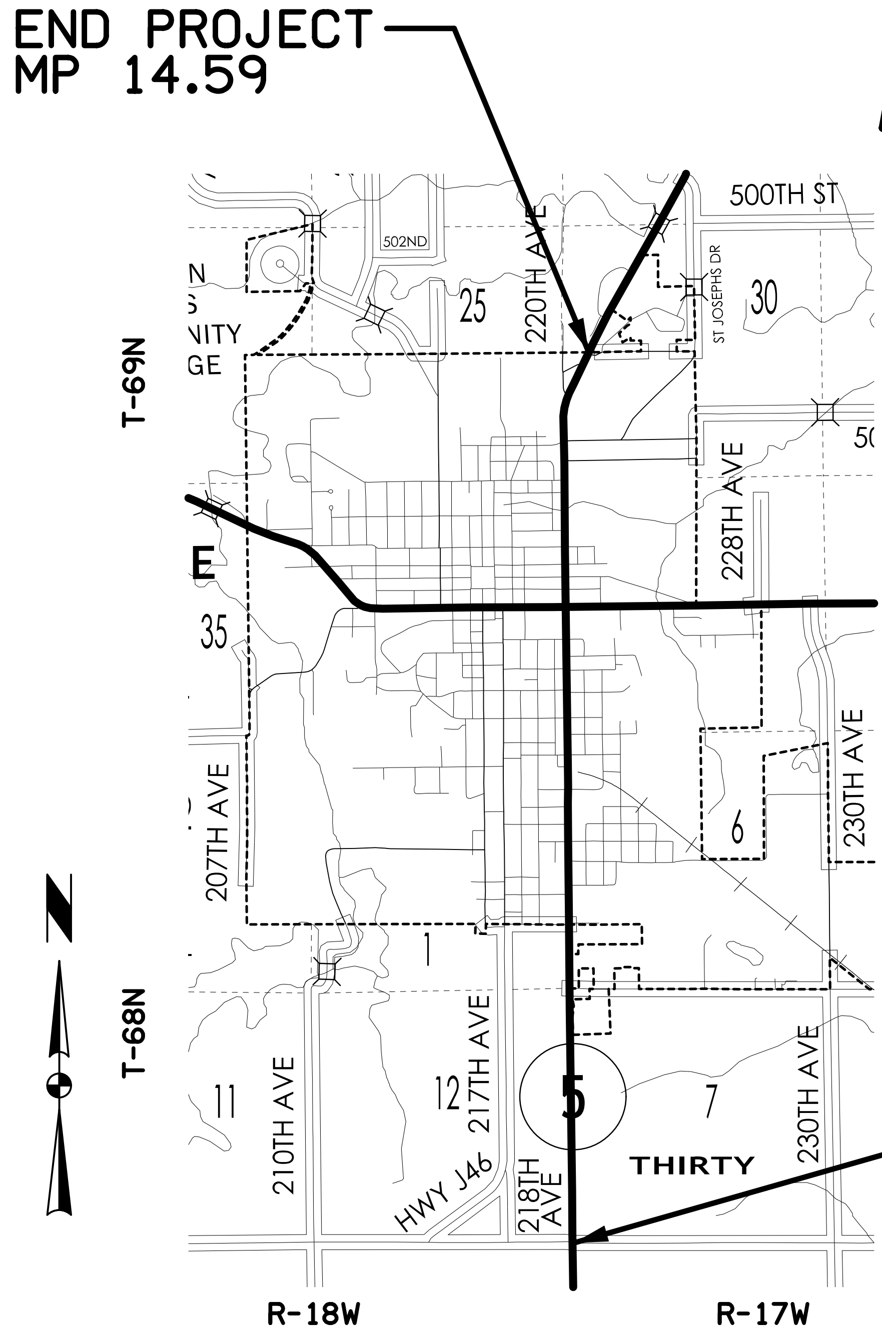
Refer to the Proposal Form for list of applicable specifications.

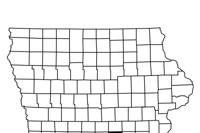
Value Engineering Saves. Refer to Article 1105.14 of the Specifications.

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

REVISIONS

	TOTAL 144
PROJECT IDENTIFICATION NUMBER	
19-04-005-010	
PROJECT NUMBER	
STPN-005-1(76)--2J-04	
R.O.W. PROJECT NUMBER	
STPN-005-1(77)--2J-04	





INDEX OF SHEETS

DESIGN DATA RURAL

2019 AADT	7400	V.P.D.
2039 AADT	8500	V.P.D.
20 DHV		V.P.H.
TRUCKS	6	%
Total Design ESALs		

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1		Primary Signature Block

PRELIMINARY PLANS

Subject to change by final design.

DM5 PLAN – Date: 12-10-2019

11" HMA Pavement Widening

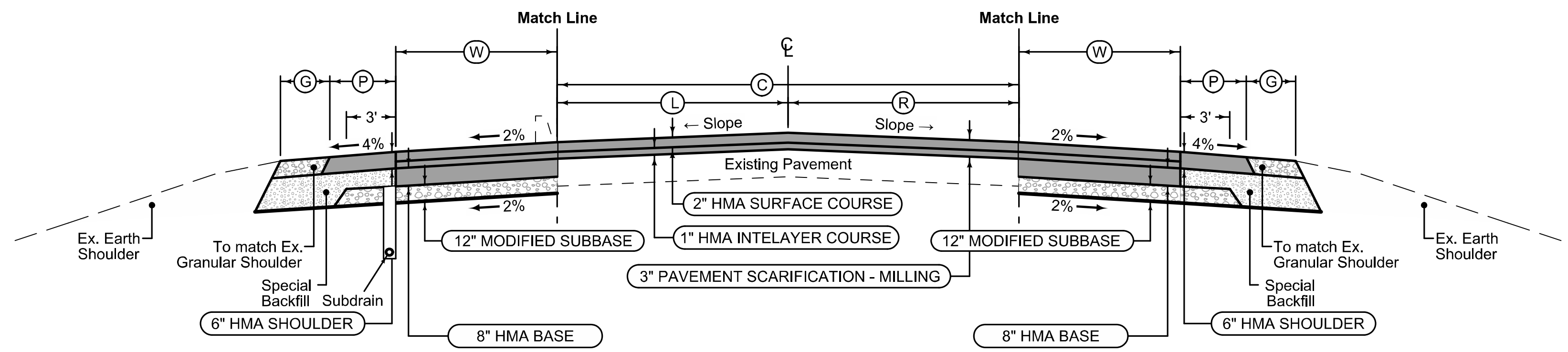
Longitudinal joint: B

2_AuxLane_HMA_ Modified 06-12-19		
STATION TO STATION		W Feet
730+03.17	735+55.44	2.25

HMA Pavement Widening 6" Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_AL_Shldr_C_ Modified 06-12-19	
P Feet	G Feet
4	Varies



11" HMA Pavement Widening

Longitudinal joint: B

2_AuxLane_HMA_ Modified 06-12-19		
STATION TO STATION		W Feet
729+37.27	735+61.33	2.25

HMA Pavement Widening 6" Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_AL_Shldr_C_ Modified 06-12-19	
P Feet	G Feet
4	Varies

3R_MillingOverlay_ 04-19-11					
STATION TO STATION		C Feet	L Feet	R Feet	Pavement Scarification SY
728+16.56	729+39.30	33.34-33.97	17.40-20.97	15.94-13.00	458.98
729+39.30	730+03.17	31.72-33.17	21.00-22.42	10.75	230.25
730+03.17	735+55.44	32.50	21.75	10.75	1994.31
735+55.44	735+61.33	33.75	22.00	10.75	22.09

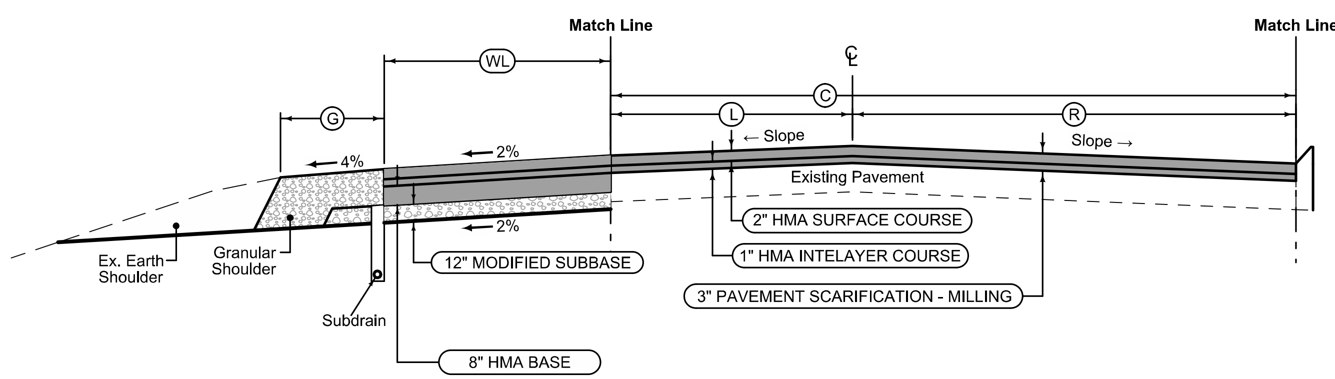
11" HMA Pavement Widening

Longitudinal joint: B

2_AuxLane_HMA_ Modified 06-12-19		
STATION TO STATION		WL Feet
758+40.55	758+98.28	11.81-9.50
758+98.28	794+30.63	9.50
794+30.63	794+57.53	9.50-10.58

HMA Pavement Widening Granular Shoulder

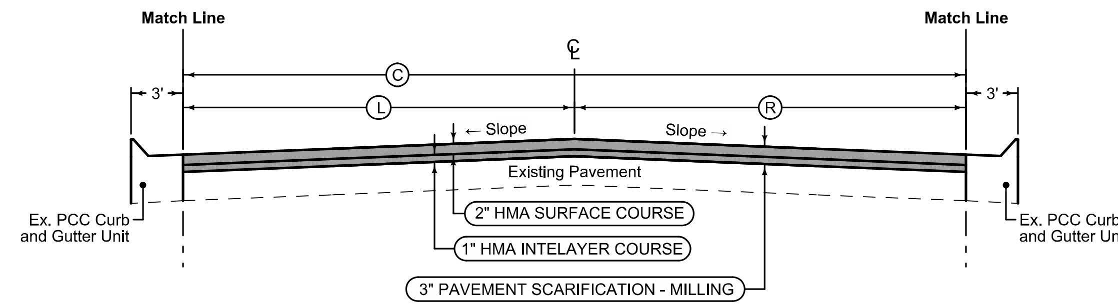
2_AL_Shldr_G_ Modified 6-12-19
G Feet
0.5



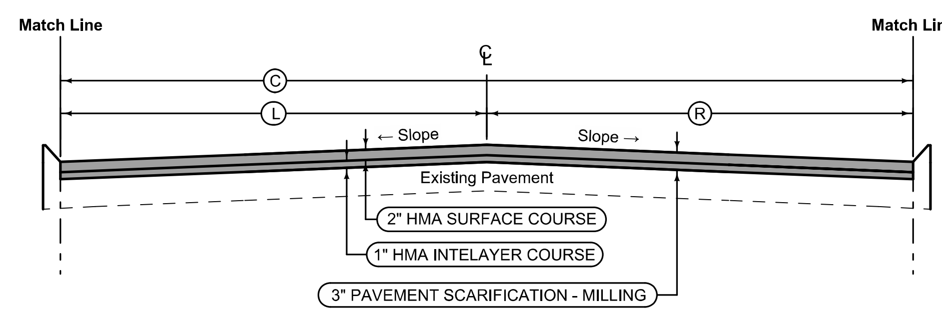
3R_MillingOverlay_ 04-19-11					
STATION TO STATION		C Feet	L Feet	R Feet	Pavement Scarification SY
758+40.55	794+57.53	32.75	10.75	22.00	13161.79

See Tab DE100-25 for pavement quantities.
See Tab DE106-5 for Base Widening.
See Tab DE112-9 for shoulder quantities.

NHS ROUTE IOWA 5



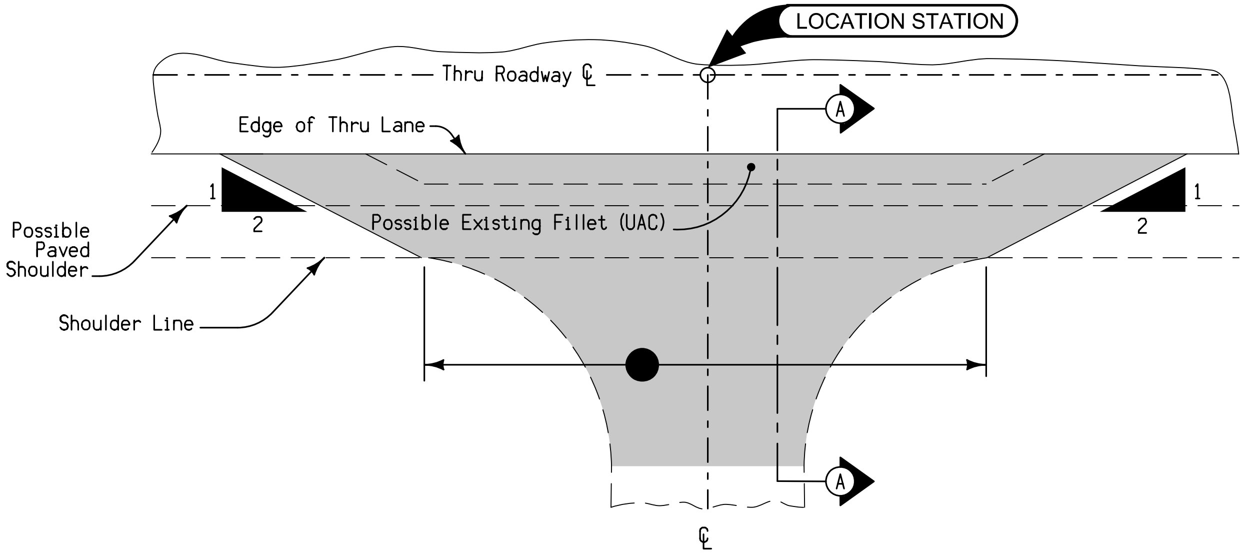
3R_MillingOverlay_ Modified 06-12-19					
STATION TO STATION		C Feet	L Feet	R Feet	Pavement Scarification SY
794+57.53	851+00.00	38	19	19	23823.76



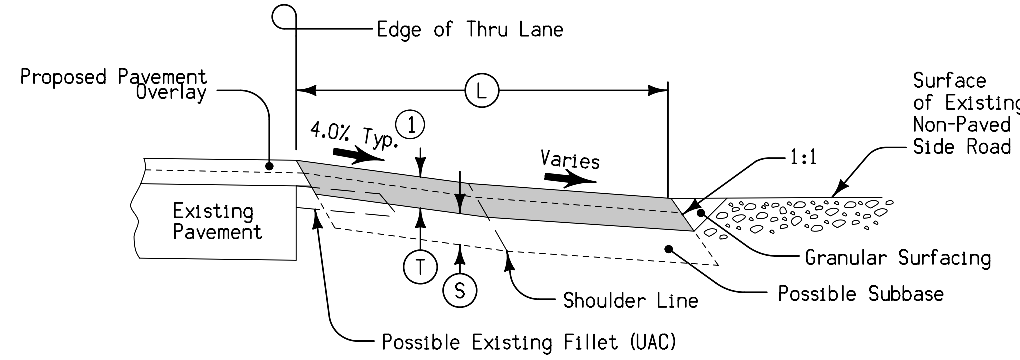
3R_MillingOverlay_ Modified 06-12-19					
STATION TO STATION		C Feet	L Feet	R Feet	Pavement Scarification SY
735+61.33	758+40.55	44.00	22.00	22.00	11142.85
851+00.00	859+38.00	44.00	22.00	22.00	4096.89
859+38.00	860+11.00	22.00	00.00	22.00	178.44
862+02.00	862+32.00	22.00	22.00	00.00	73.33
862+32.00	900+22.67	44.00	22.00	22.00	18532.16

See Tab DE100-25 for pavement quantities.

NHS ROUTE IOWA 5



PLAN



SECTION A-A

Special shaping of existing surface prior to placement of fillet or fillet extension may be required by the Engineer and is incidental to other work on the project.

Construct wedge shaped HMA fillets and full thickness fillets at all paved Intersected roads indicated by stationing on Tab DE102-16

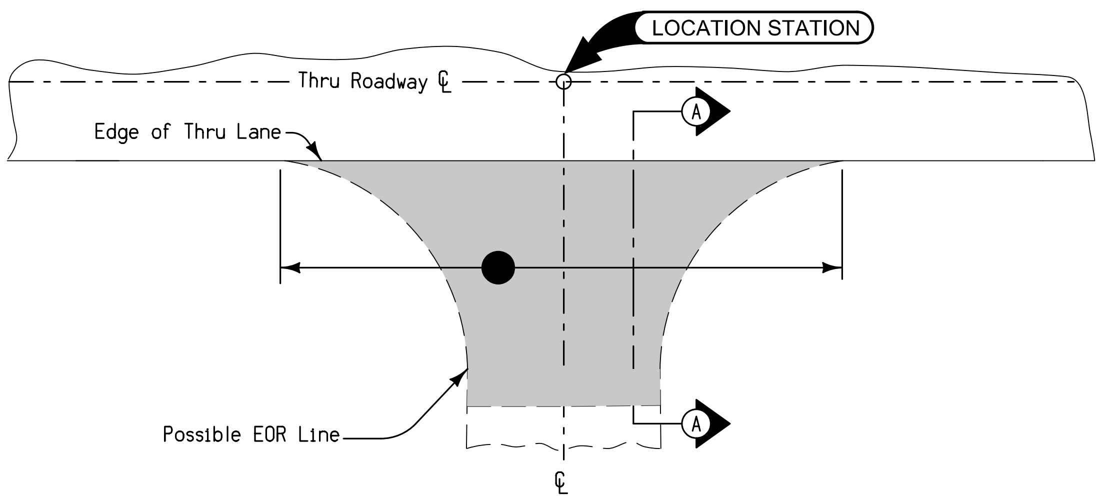
Pavement quantities included with mainline quantities.

Refer to PR-202 for additional information

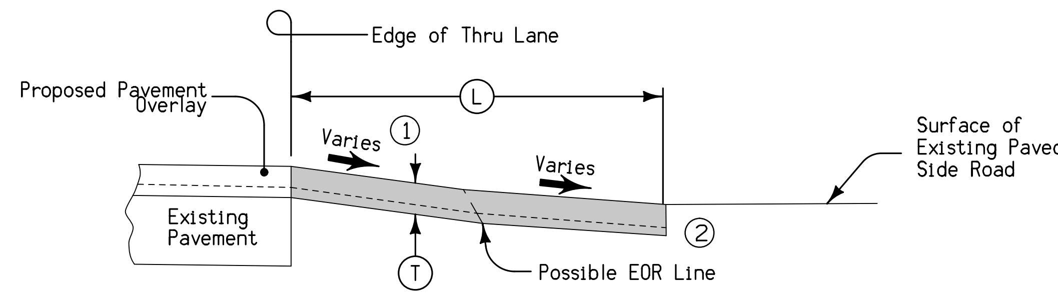
1. Match existing slope.

2. Special shaping of existing surface prior to placement of fillet may be required by the Engineer and is incidental to other work on the project.

FILLET EXTENSION FOR NON-PAVED SIDE ROADS



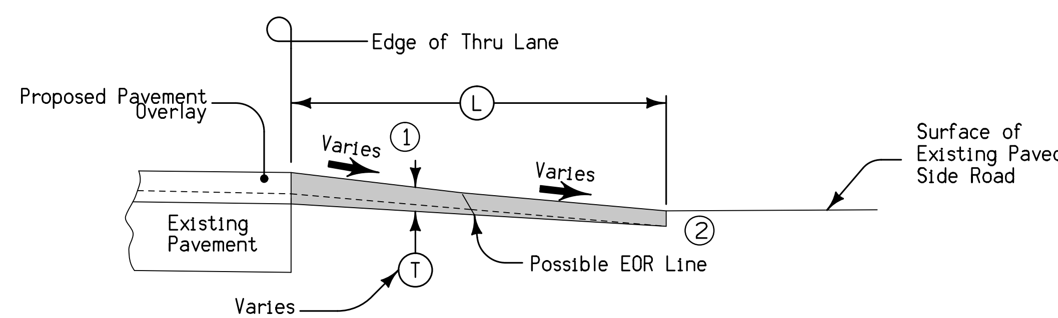
PLAN



(FULL THICKNESS FILLET - PAVED INTERSECTION)

TYPE A
SECTION A-A

Location Station	(F) Feet	(S) Inches	(T) Inches	(L) (50' min.) Feet	Remarks
728+75.00	92.00	6	6	50.00	24' @ Throat, Rt. DIV 2
812+23.00	66.00	-	3 to 1.5	38.30	29' @ Throat, Rt, TYPE B
854+21.00	49.00	-	3	38.30	20' @ Throat, Lt, TYPE A
873+41.00	64.00	-	3 to 1.5	20.30	24' @ Throat, Lt, TYPE B
873+41.00	59.00	-	3 to 1.5	13.10	27' @ Throat, Rt, TYPE B
876+82.00	64.00	-	3 to 1.5	4.00	40' @ Throat, Lt, TYPE B
884+77.00	64.00	-	3	20.00	24' @ Throat, Lt, TYPE A
887+31.00	66.00	-	3 to 1.5	6.00	39' @ Throat, Lt, TYPE B

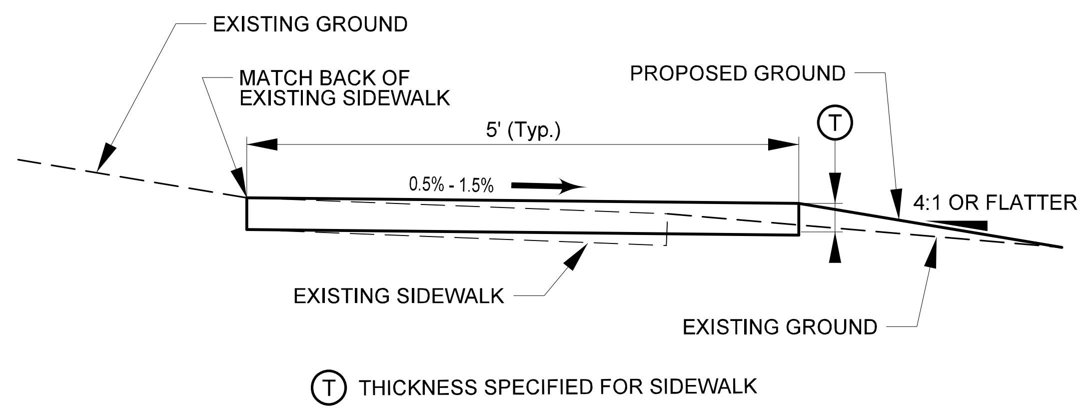


(WEDGE SHAPED FILLET - PAVED INTERSECTION)

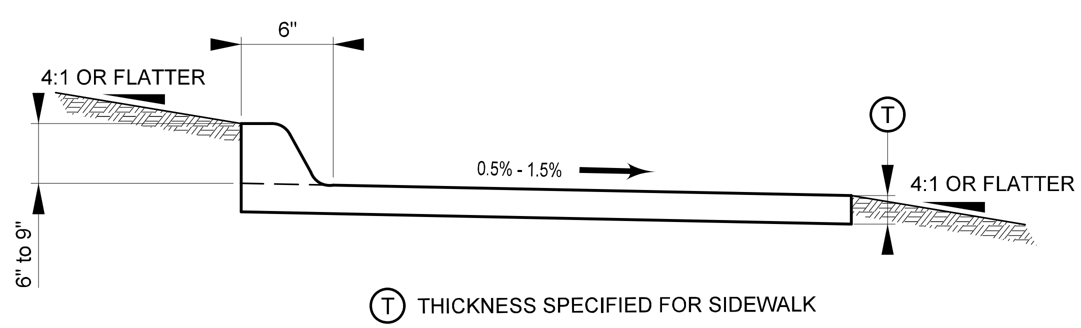
TYPE B
SECTION A-A

FILLET EXTENSION FOR PAVED SIDE ROADS

See Tab DE100-25 and DE102-16 for pavement quantities.



SIDEWALK TYPICAL SECTION



SIDEWALK WITH CURB

100-1D
10-18-05

PROJECT DESCRIPTION

This project involves the replacement/installation of ADA compliant sidewalk and curb ramps at various intersections along State of Iowa Highway 5. The intersections are located within the city limits of Centerville and in the county of Appanoose. The project also involves the scarification of 3 inches and placement of 3 inches of HMA. Total project length is approximately 3.5 miles.

100-1C
04-17-12

ESTIMATED PROJECT QUANTITIES
(UP TO A 5 DIVISION PROJECT)

Division 1: IowaDOT
Division 2: Appanoose County
Division 3: City of Centerville

Item No.	Item Code	Item	Unit	Quantities										
				Estimated						As Built				
				Division 1	Division 2	Division 3	Division 4	Division 5	Total	Division 1	Division 2	Division 3	Division 4	Division 5
1	2101-0850002	CLEARING & GRUBING	ACRE	0.94					0.94					
2	2102-0425071	SPECIAL BACKFILL	TON	1026.74					1026.74					
3	2102-2713090	EXCAVATION, CLASS 13, WASTE	CY	47.09	28.20				75.29					
4	2115-0100000	MODIFIED SUBBASE	CY	1663.68					1663.68					
5	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON	961.02					961.02					
6	2122-5500060	PAVED SHOULDER, HOT MIX ASPHALT MIXTURE, 6 IN	SY	522.81					522.81					
7	2122-5500090	PAVED SHOULDER, HOT MIX ASPHALT MIXTURE, 9 IN	SY	101.67	169.44				271.11					
8	2128-0000200	CONTRACTOR STOCKPILED SHOULDER MATERIAL	TON	4860.00					4860.00					
9	2212-5070310	PATCHES, FULL DEPTH REPAIR	SY	212.78					212.78					
10	2213-2713300	EXCAVATION, CLASS 13, FOR WIDENING	CY	4626.81					4626.81					
11	2213-6745500	REMOVAL OF CURB	STA	5.75					5.75					
12	2213-7100400	RELOCATION OF MAIL BOXES	EACH	1.00					1.00					
13	2214-5145150	PAVEMENT SCARIFICATION	SY	78286.48					78286.48					
14	2214-7450050	BLADING AND SHAPING SHOULDER MATERIAL	STA	47.93					47.93					
15	2301-1032080	STANDARD OR SLIP FORM PCC PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN.	SY	16.20					16.20					
16	2303-0002380	HOT MIX ASPHALT MIXTURE INTERLAYER BASE COURSE, 3/8 IN. MIX	TON	4290.70					4290.70					
17	2303-1043500	HOT MIX ASPHALT HIGH TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, NO SPECIAL FRICTION RE	TON	8642.30					8642.30					
18	2303-1051750	HOT MIX ASPHALT VERY HIGH TRAFFIC, BASE COURSE, 3/4 IN. MIX	TON	1792.65					1792.65					
19	2303-1258284	ASPHALT BINDER, PG 58-28H, HIGH TRAFFIC	TON	626.10					626.10					
20	2303-1258346	ASPHALT BINDER, PG 58-34E, EXTREMELY HIGH TRAFFIC	TON	321.80					321.80					
21	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES	LS	1.00					1.00					
22	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE	TON		5.37				5.37					
23	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	4529.25					4529.25					
24	2502-8221303	SUBDRAIN OUTLET, DR-303	EACH	18.00					18.00					
25	2510-6745850	REMOVAL OF PAVEMENT	SY	266.30					266.30					
26	2511-6745900	REMOVAL OF SIDEWALK	SY	425.89					425.89					
27	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.	SY	308.60					308.60					
28	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.	SY	156.51					156.51					
29	2511-7528101	DETECTABLE WARNINGS	SF	404.64					404.64					
30	2512-1725206	CURB AND GUTTER, P.C. CONCRETE, 2.5 FT.	LF	585.96					585.96					
31	2516-8625000	COMBINED CONCRETE SIDEWALK AND RETAINING WALL	CY	53.19					53.19					
32	2524-6765010	REMOVE AND REINSTALL SIGN AS PER PLAN	EACH	6.00					6.00					
33	2524-6765210	REMOVAL OF TYPE A SIGN ASSEMBLY	EACH	6.00					6.00					
34	2524-9275222	WOOD POSTS FOR TYPE A OR B SIGNS, 4 IN. X 6IN.	LF	512.00					512.00					
35	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM	SF	192.00					192.00					
36	2526-8285000	CONSTRUCTION SURVEY	LS	1.00					1.00					
37	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	523.86					523.86					
38	2527-9263137	PAINTED SYMBOLS AND LEGENDS, WATERBORNE OR SOLVENT-BASED	EACH	103.00					103.00					
39	2528-8445110	TRAFFIC CONTROL	LS	1.00					1.00					
40	2528-8445113	FLAGGERS	EACH						SEE PROPOSAL					
41	2528-8445115	PILOT CARS	EACH						SEE PROPOSAL					
42	2533-4980005	MOBILIZATION	LS	1.00					1.00					
43	2590-0000020	PROJECT MANAGEMENT	LS	1.00					1.00					
44	2599-9999005	CAST IRON VALVE BOX RISER	EACH	5.00					5.00					
45	2601-2634105	MULCHING, BONDED FIBER MATRIX	ACRE	0.30					0.30					
46	2601-2636044	SEED AND FERTILIZING (URBAN)	ACRE	0.15					0.15					
47	2601-2642120	STABLIZING CROP - SEED AND FERTILIZING (URBAN)	ACRE	0.15					0.15					
48	2602-0000309	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA	LF	5189.38					5189.38					
49	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	LF	5189.38					5189.38					
50	2602-0010010	MOBILIZATION, EROSION CONTROL	EACH	1.00					1.00					
51	2602-0010020	MOBILIZATION, EMERGENCY EROSION CONTROL	EACH	1.00					1.00					
						See MC.1 for Division 3 quantities								

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
1	2101-0850002	CLEARING & GRUBING
		See tabulation 110-17
		See contract documents and Engineer in charge of construction for specific locations.
-	-	-
2	2102-0425071	SPECIAL BACKFILL
		See tabulation 112-9 and sheet B.1
-	-	-
3	2102-2713090	EXCAVATION, CLASS 13, WASTE
		Item is for the excavation of areas where sidewalk is being constructed where there is no existing sidewalk,
		sidewalk widening, and for lowering grades between the sidewalk and back of curb.
		Item is also for excavation of non-paved shoulder; quantity for excavation of granular shoulder is 45 CY
-	-	-
4	2115-0100000	MODIFIED SUBBASE
		See tabulation 112-9, tabulation 100-25 and sheet B.1
-	-	-
5	2121-7425020	GRANULAR SHOULDERS, TYPE B
6	2122-5500060	PAVE SHOULDER, HOT MIX ASPHALT MIXTURE, 6 IN
7	2122-5500090	PAVE SHOULDER, HOT MIX ASPHALT MIXTURE, 9 IN
		See tabulation 112-9 and sheet B.1
-	-	-
8	2128-0000200	CONTRACTOR STOCKPILED SHOULDER MATERIAL
		See Tab 110-13 for Pavement Scarification information and See Developmental Specification 15007
		Estimated 64,000 SY of HMA millings. 50% for stockpiling. 3" thick and 135 lb/cf results in estimated 4860 tons.
-	-	-
9	2212-5070310	PATCHES, FULL DEPTH REPAIR
		See tabulation 102-6 and "D" sheets
-	-	-
10	2213-2713300	EXCAVATION, CLASS 13, FOR WIDENING
		See tabulation 112-9 and 100-25
-	-	-
11	2213-6745500	REMOVAL OF CURB
		See tabulation 110-4
-	-	-
12	2213-7100400	RELOCATION OF MAIL BOXES
		Item is for the relocation of mail boxes on this project. Mail box is located on the north side of IA-44,
		approximately 150 feet west of 15th Street. Mail box is to be relocated west of the proposed driveway apron.
		Method of Measurement will be per each mail box relocated.
		Payment will be the contract unit price per mail box relocated. This payment shall be full compensation for all
		equipment tools, labor and materials necessary to complete the item per the contract documents.
-	-	-
13	2214-5145150	PAVEMENT SCARIFICATION
		See typicals on sheets B.1 and B.2 for locations and details
		See tabulation 100-25 and see stockpiling bid item in Tab 110-13. 50% for recycling into HMA interlayer,
		50% for Delivery & Stockpile.
		Remainder of available millings are to become the property of the Contractor.
-	-	-
14	2214-7450050	BLADING AND SHAPING SHOULDER MATERIAL
		See tabulation 112-9
-	-	-
15	2301-1032080	STANDARD OR SLIP FORM PCC PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN.
		Item is for curb and gutter pavement at Percival Ave.
-	-	-
16	2303-0002380	HOT MIX ASPHALT MIXTURE INTERLAYER BASE COURSE, 3/8 IN. MIX
17	2303-1043500	HOT MIX ASPHALT HIGH TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, NO SPECIAL FRICTION REQUIREMENT
18	2303-1051750	HOT MIX ASPHALT VERY HIGH TRAFFIC, BASE COURSE, 3/4 IN. MIX
19	2303-1258284	ASPHALT BINDER, PG 58-28H, HIGH TRAFFIC
20	2303-1258346	ASPHALT BINDER, PG 58-34E, EXTREMELY HIGH TRAFFIC
		See tabulation 100-25 and 102-16
-	-	-
21	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES
		--
-	-	-
22	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE
		See "B" sheets for details
-	-	-
23	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.
24	2502-8221303	SUBDRAIN OUTLET, DR-303
		See tabulation 104-9
-	-	-
25	2510-6745850	REMOVAL OF PAVEMENT
		Item is for HMA removal for pavement widening. Includeds 4,723 LF of full depth saw cut.
		See tabulation 110-1
-	-	-
26	2511-6745900	REMOVAL OF SIDEWALK
		Includes 249 LF of full depth saw cut. See tabulation 110-5
-	-	-

100-4A
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
27	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.
28	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.
29	2511-7528101	DETECTABLE WARNINGS
		See tabulation 113-1
		See tabulation 290-01 for sidewalk compliance details
		See tyical sections on Sheet B.1. Standard sidewalk width is 5 feet, minimum width is 4 feet. Contractor may
		reduce the sidewalk width to 4 feet to avoid obstacles as needed.
		See S Sheets for additional details
-	-	-
30	2512-1725206	CURB AND GUTTER, P.C. CONCRETE, 2.5 FT.
		See tabulation 112-4
		The pavement for the Curb and Gutter shall be a minimum of 7 inches thick.
-	-	-
31	2516-8625000	COMBINED CONCRETE SIDEWALK AND RETAINING WALL
		See tabulation 108-16. See standard road plan MI-221 for details of construction.
-	-	-
32	2524-6765010	REMOVE AND REINSTALL SIGN AS PER PLAN
		See tabulation 190-62
		Remove signs and store in safe location. Reinstall in designated locations following sidewalk construction.
		Any damage to signs or post shall be repaired or replaced at Contractor's expense.
		Each sign and post assembly removed and reinstalled will be counted and paid for at the contract unit price.
-	-	-
33	2524-6765210	REMOVAL OF TYPE A SIGN ASSEMBLY
		See tabulation 190-62
		Remove sign assembly and sign post.
		Each sign and post assembly removed will be counted and paid for a the contract unit price.
-	-	-
34	2524-9275222	WOOD POSTS FOR TYPE A OR B SIGNS, 4 IN. X 6 IN.
35	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM
		See tabulations 190-51 and 190-66
-	-	-
36	2526-8285000	CONSTRUCTION SURVEY
		Preservation of Momuments is included in this bid item per Specification 2526.03 A.
		None of these will be provided by the Contracting Authority.
-	-	-
37	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED
38	2527-9263137	PAINTED SYMBOLS AND LEGENDS, WATERBORNE OR SOLVENT-BASED
		See tabulations 108-22 and 108-29
-	-	-
39	2528-8445110	TRAFFIC CONTROL
		See Traffic Control Plan on sheet J.1
		This item is for all closures of pedestrian paths as well as channelization at curb ramp work zones. See
		Standard Road Plans TC-202 and TC-601 for details.
-	-	-
40	2528-8445113	FLAGGERS
41	2528-8445115	PILOT CARS
		--
-	-	-
42	2533-4980005	MOBILIZATION
-	-	-
43	2590-0000020	PROJECT MANAGEMENT
		See Supplemental Specification 15008
-	-	-
44	2599-9999005	CAST IRON VALVE BOX RISER
		This item is for adjusting shut-off valves that fall within the sidewalk. See detail on sheet U.2
		Method of Measurement and Basis of Payment shall be per each Cast Iron Valve Box Riser furnished and installed.
-	-	-
45	2601-2634105	MULCHING, BONDED FIBER MATRIX
46	2601-2636044	SEED AND FERTILIZING (URBAN)
47	2601-2642120	STABLIZING CROP - SEED AND FERTILIZING (URBAN)
		For all areas designated by the Engineer
		Seedbed perparation, fertilizer and seed will be required per Article 2601.03, C, 4.
		All seed and fertilizer shall be applied with hydraulic seeding equipment per Article 2601.03, A, 7.
		Item includes 50% additional area for reseeding of bare spots. Reseeding will be completed on approval
		of the engineer.
-	-	-
48	2602-0000309	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA
49	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE
		See tabulation 100-19 for locations.
		Items is included for temporary perimeter sediment control, inlet protection, and water velocity reduction on
		slopes or ditches at locations to be determined during construction. Verify specific locations with the
		Engineer prior to placement.
		Item includes 25% additional quantity for field adjustments and replacements.
-	-	-
50	2602-0010010	MOBILIZATION, EROSION CONTROL
-	-	-
51	2602-0010020	MOBILIZATION, EMERGENCY EROSION CONTROL
-	-	-

111-25
10-18-11

INDEX OF TABULATIONS

Tabulation	Tabulation Title	Sheet No.
C Sheets		
100-1C	ESTIMATED PROJECT QUANTITIES (UP TO A 5 DIVISION PROJECT)	C.1
100-1D	PROJECT DESCRIPTION	C.1
100-4A	ESTIMATE REFERENCE INFORMATION	C.2 - C.2
100-19	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	C.3
100-25	HMA PAVEMENT	C.4
102-5	EXISTING PAVEMENT	C.5
102-6C	FULL-DEPTH PATCHES	C.6
102-16	NOTCHES AND RUNOUTS FOR RESURFACING	C.6
104-9	LONGITUDINAL SUBDRAIN SHOULDER AND BACKSLOPE	C.6
105-4	STANDARD ROAD PLANS	C.3
106-5	AREAS FOR PAVEMENT OR BASE WIDENING	C.5
107-31	PLOWING AND SHAPING	C.5
108-16	COMBINED CONCRETE SIDEWALK AND RETAINING WALL	C.5
108-22	PAVEMENT MARKING LINE TYPES	C.7 - C.8
108-29	PAVEMENT MARKING SYMBOLS AND LEGENDS	C.8 - C.9
110-1	REMOVAL OF PAVEMENT	C.5
110-4	CURB REMOVAL	C.11
110-5	SIDEWALK REMOVAL	C.11
110-12A	POLLUTION PREVENTION PLAN	C.13 - C.14
110-13	DELIVERY AND STOCKPILING	C.3
110-17	CLEARING AND GRUBBING	C.12
111-25	INDEX OF TABULATIONS	C.3
112-4	CURBS AND RAISED ISLANDS	C.12
112-9	SHOULDERS	C.12
113-1	SIDEWALKS	C.11
190-51	MATERIALS FOR TYPE 'A' SIGNS	C.10
190-62	EXISTING SIGNS TO BE REMOVED	C.10
190-66	SUMMARY OF TYPE 'A' SIGNS	C.10

105-4
10-18-11

STANDARD ROAD PLANS

The following Standard Road Plans apply to construction work on this project.

Number	Date	Title
DR-306	10-17-17	Precast Concrete Headwall for Subdrain Outlets
EC-204	04-18-17	Perimeter and Slope Sediment Control Devices
PV-101	10-17-17	Joints
SI-881	10-17-17	Special Signs for Workzones
TC-214	10-17-17	Lane Closure with Flaggers for use with Pilot Car
TC-233	10-17-17	Pavement Marking Operations Two-Lane
DR-303	10-18-16	Subdrains (Longitudinal)
MI-220	10-20-15	Detectable Warnings and Pedestrian Ramp
MI-221	10-20-15	Combined Retaining Wall - Sidewalk
PM-110	04-16-13	Line Types
PM-111	04-21-15	Symbols and Legends
PM-210	10-18-11	Separation in Two-Lane Roadway
PM-420	04-19-11	Two-Lane Roadway with no Turn Lanes (One-Way Stop Condition)
PM-550	04-19-11	Two-Lane Roadway with Two-Way Left Turn Lane
PR-103	10-21-14	Full Depth PCC Patch with Dowels
PR-140	04-21-15	Subbase Patches
PR-201	10-21-14	Runouts for Resurfacing
PR-202	10-21-14	Notches for Resurfacing (with or without Runout)
PV-102	10-18-16	PCC Curb Details
PV-202	04-16-13	Hot Mix Asphalt Resurfacing
PV-203	10-15-13	HMA Base Widening
SI-101	04-19-16	Locations - Type 'A' Signs
SI-111	04-19-16	Support Structures - Wood Posts
SI-119	04-19-16	Support Structures - Mounting Brackets
SI-131	10-18-16	Installation - Type 'A' Signs
TC-1	04-16-13	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	04-21-15	Work Within 15 ft of Traveled Way
TC-211	04-17-12	Lane Closure on Low Volume Roadway
TC-212	04-16-13	Spot Location Lane Closure with Flaggers
TC-213	04-17-12	Lane Closure with Flaggers
TC-228	10-15-13	Lane Closure Involving TWLTL
TC-282	04-19-11	Uneven Lanes
TC-601	10-18-11	Pedestrian Detour

100-19
04-19-16

PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

Possible Standards: EC-204

Location			Length of Installation			Remarks
Station	Station	Side	9 inch Dia	12 inch Dia	20 inch Dia	
			LF	LF	LF	
758+40.00	749+60.00	LT	4525.0			
811+88.00	812+65.00	BOTH	75.0			Place along back of curb near new sidewalk and ADA ramps
822+50.00	823+42.00	BOTH	14.4			Place along back of curb near new sidewalk and ADA ramps
830+05.00	830+40.00	BOTH	43.8			Place along back of curb near new sidewalk and ADA ramps
837+45.00	838+35.00	BOTH	131.3			Place along back of curb near new sidewalk and ADA ramps
853+75.00	854+55.00	BOTH	37.5			Place along back of curb near new sidewalk and ADA ramps
869+10.00	870+25.00	BOTH	156.3			Place along back of curb near new sidewalk and ADA ramps
872+85.00	873+85.00	BOTH	75.0			Place along back of curb near new sidewalk and ADA ramps
886+90.00	887+90.00	BOTH	131.3			Place along back of curb near new sidewalk and ADA ramps
		Total	5189.4			

SCH-01
12-10-19

ENVIRONMENTAL

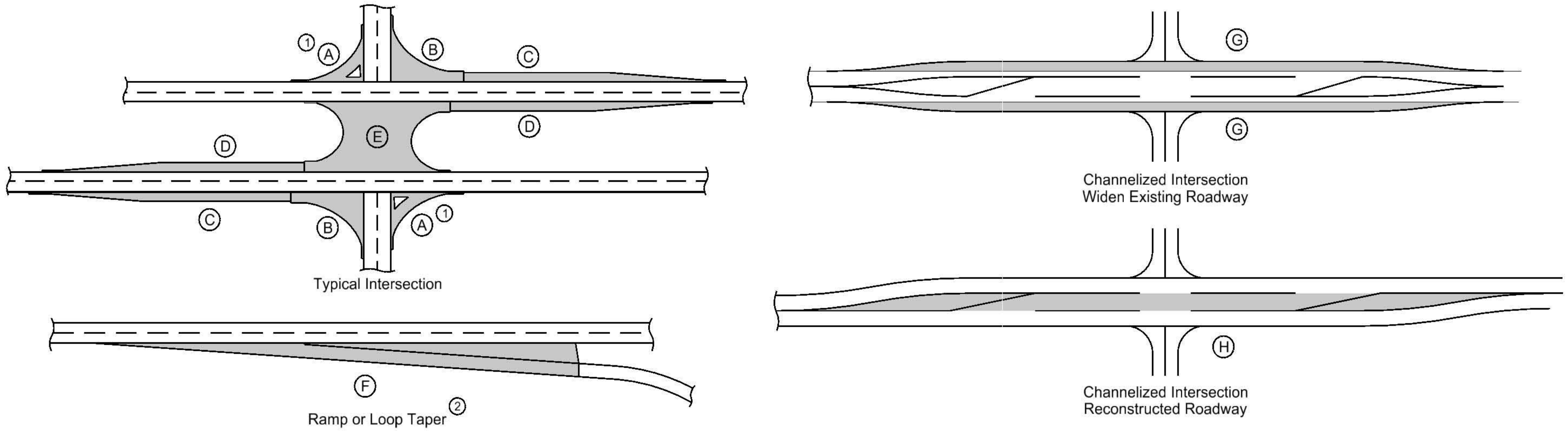
Contractor to adhere to the special provision for vibration monitoring.

110-13
04-20-10

DELIVERY AND STOCKPILING

Item Description	Quantity	Units	Delivery Location	Contact Name & Number	Remarks
Pavement Scarification	2430	TONS	Albia IowaDOT	Steve Scott	
See Item 2128-0000200			Maintenance Garage	Hwy Maintenance Supervisor	
				Cell: 515-357-7979	
Pavement Scarification	2430	TONS	Bloomfield IowaDOT	Jay Ridlen	
See Item 2128-0000200			Maintenance Garage	Hwy Maintenance Supervisor	
				Cell: 641-777-4897	

HMA PAVEMENT



(1) Does not include raised island area or curb. Refer to tabulation 112-4 for quantities.

(2) Refer to PV-410, PV-411, PV-412, and PV-414.

(3) Quantity includes Pavement Header.

Calculations assume a surface course unit weight (lbs/cf) of 147, an interlayer course unit weight (lbs/cf) of 147, a base course unit weight (lbs/cf) of 145, and a special backfill unit weight (lbs/cf) of 140.

Location				Mainline			Area (3)								Bid Items: Hot Mix Asphalt Pavement						Binder							
Road Identification	Direction of Travel	Station to Station		Width	Length	Area	A (1)	B	C	D	E	F (2)	G	H	Surface		Interlayer		Base		Surface (PG 58-28H)	Interlayer (PG 58-34E)	Base	Special Backfill	Modified Subbase	Granular Subbase	Pavement Scarification	Remarks
				FT	FT	SY	SY	SY	SY	SY	SY	SY	SY	SY	TONS	SY	TONS	SY	TONS	SY	TONS	TONS	TONS	TONS	CY	SY	SY	
IA-5	NB/SB	728+16.56	729+39.30	33.7	122.7	459.0									50.602	459.0	25.301	459.0			3.036	1.898					459.0	
IA-5	NB/SB	729+39.30	730+03.17	32.4	63.9	230.3									25.385	230.3	12.693	230.3			1.523	0.952					230.3	
IA-5	NB/SB	730+03.17	735+55.44	32.5	552.3	1994.3									219.872	1994.3	109.936	1994.3			13.192	8.245					1994.3	
IA-5	NB/SB	735+55.44	735+61.33	33.8	5.9	22.1									2.435	22.1	1.218	22.1			0.146	0.091					22.1	
IA-5	NB/SB	735+61.33	758+40.55	44.0	2279.2	11142.9									1228.500	11142.9	614.250	11142.9			73.710	46.069					11142.9	
IA-5	NB/SB	758+40.55	794+57.53	32.8	3617.0	13161.8									1451.087	13161.8	725.544	13161.8			87.065	54.416					13161.8	
IA-5	NB/SB	794+57.53	851+00.00	38.0	5642.5	23823.8									2626.570	23823.8	1313.285	23823.8			157.594	98.496					23823.8	
IA-5	NB/SB	851+00.00	859+38.00	44.0	838.0	4096.9									451.682	4096.9	225.841	4096.9			27.101	16.938					4096.9	
IA-5	NB/SB	859+38.00	860+11.00	22.0	73.0	178.4									19.674	178.4	9.837	178.4			1.180	0.738					178.4	
IA-5	NB/SB	862+02.00	862+32.00	22.0	30.0	73.3									8.085	73.3	4.043	73.3			0.485	0.303					73.3	
IA-5	NB/SB	862+32.00	900+22.67	44.0	3790.7	18532.2									2043.171	18532.2	1021.586	18532.2			122.590	76.619					18532.2	
IA-5	SB	730+03.17	735+55.44	2.3	552.3	138.1									15.222	138.1	7.611	138.1	60.059	138.1	0.913	0.571	3.604		46.0		138.1	
IA-5	NB	729+37.27	735+61.33	2.3	624.1	156.0									17.201	156.0	8.600	156.0	67.867	156.0	1.032	0.645	4.072		52.0		156.0	
IA-5	SB	758+40.55	758+98.28	10.7	57.7	68.3									7.535	68.3	3.768	68.3	29.730	68.3	0.452	0.283	1.784		22.8		68.3	
IA-5	SB	758+98.28	794+30.63	9.5	3532.4	3728.6									411.077	3728.6	205.539	3728.6	1621.937	3728.6	24.665	15.415	97.316		1242.9		3728.6	
IA-5	SB	794+30.63	794+57.53	10.0	26.9	30.0									3.308	30.0	1.654	30.0	13.054	30.0	0.199	0.124	0.783		10.0		30.0	
FILLET EX																												
IA-5	NB		812+23.00			150.3									18.646	150.3					1.119						150.3	
IA-5	SB		854+21.00			48.6									8.043	48.6					0.483						48.6	
IA-5	SB		873+41.00			73.4									9.103	73.4					0.546						73.4	
IA-5	NB		873+41.00			52.5									6.506	52.5					0.390						52.5	
IA-5	SB		876+82.00			21.2									2.627	21.2					0.158						21.2	
IA-5	SB		884+77.00			72.4									11.975	72.4					0.718						72.4	
IA-5	SB		887+31.00			32.2									3.993	32.2					0.240						32.2	
TOTAL:															8642.298	78286.5	4290.703				518.538	321.803			1373.7		78286.5	DIV1
FILLET EX																												
IA-5	NB		728+75.00			101.7									50.439	101.7					3.026							DIV1
IA-5	NB		728+75.00			169.4									84.066	169.4					5.044							DIV2

102-5
04-18-17

EXISTING PAVEMENT

No.	Location: County	Location: Route	Location: Dir. of Travel	Location: Begin Ref. Loc. Sign	Location: End Ref. Loc. Sign	Year	Type	Project Number	Surface: Type	Surface: Depth IN	Base: Type	Base: Depth IN	Subbase: Type	Subbase: Depth IN	Removal: Type	Removal: Depth IN	Coarse Aggregate: Source	Coarse Aggregate: Type	Coarse Aggregate: Durability Class	Reinforcement: Type	Remarks
1	4	IA 5	NB/SB	11.1	12.34	1992		FN-5-(31)--21-04	AAC	3							DURHAM	C. LST.			
						1975		FN-5-1(10)--21-04	AAC	1	TBB	2					LEMLEY	C. LST.			
						1949		F-781(3)	PC8	8							EDDYVILLE	GRAVEL	2		
2	4	IA 5	NB/SB	12.34	13.64	1992		FN-5-(31)--21-04	AAC	1.5	BAC	1.5			MILL	1	UNKNOWN				
						1952		U-781(9)	PC9	9							UNKNOWN				
3	4	IA 5	NB/SB	13.64	14.29	1999		MP-5-5(704)--76-04	AAC	2	BAC	1.5					DURHAN	C. LST			
						1956		U-781(9)	PCC	8.5							UNKNOWN				
4	4	IA 5	NB/SB	14.29	14.59	1992		FN-5-(32)--21-04	A	1.5	BINDER A	1.5					DURHAN	C. LST			
						1957		U-781(9)	PCC	8.5							DOUDS MINE	C. LST	2		

110-1
04-16-13

REMOVAL OF PAVEMENT

Refer to Tabulation 102-5

* Not a Bid Item

Begin Station	End Station	Side	Pavement Type	Area SY	Saw Cut* LF	Remarks
730+03.17	735+55.44	LT	HMA	30.7	552.3	South end of project, for widening and Shoulder Addition
729+37.27	735+61.33	RT	HMA	34.7	624.1	South end of project, for widening and Shoulder Addition
758+40.55	794+57.53	LT	HMA	200.9	3617.0	Widening
			Total	266.3	4793.3	

108-16
10-19-10

COMBINED CONCRETE SIDEWALK AND RETAINING WALL

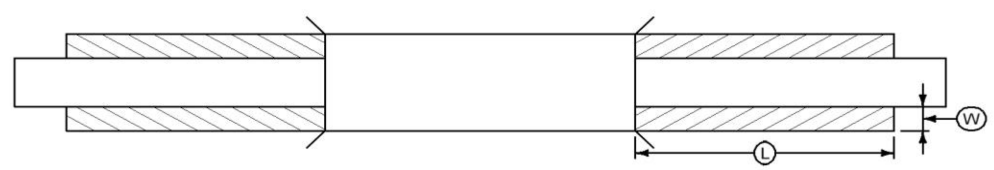
See MI-221

Location: Station to Station		Location: Side	Retaining Wall: Type	Retaining Wall: Height, H	Retaining Wall: Thickness	Sidewalk: Width, W	Sidewalk: Thickness	Concrete: Retaining Wall	Concrete: Sidewalk & Footing	Porous Backfill	Reinforcing Steel
837+52.05	837+60.09	LT	A	0.5 to 1	0.5	5.0	0.5	0.1	0.8	0.2	29
	837+60.09	LT	A	1 to 0.5	0.5	5.0	0.5	0.2	1.2	0.3	45
869+48.50	869+54.68	LT	A	0.5 to 1	0.5	4.0	0.5	0.2	1.2	0.3	51
	869+54.68	LT	A	1 to 0.5	0.5	4.0	0.5	0.2	0.9	0.3	41
	870+10.58	RT	A	1.0	0.5	5.0	0.5	0.2	0.9	0.2	35
	870+10.58	RT	A	1 to 0.5	0.5	5.0	0.5	0.2	1.5	0.4	55
870+10.58	870+18.59	RT	A	1 to 0.5	0.5	5.0	0.5	0.1	0.8	0.2	29
872+92.24	873+07.73	RT	A	0.5 to 1	0.5	5.0	0.5	0.2	1.7	0.4	62
872+92.24	873+14.61	RT	A	0.5 to 1	0.5	5.0	0.5	0.3	2.3	0.6	84
887+53.89	887+62.62	LT	A	.5 to 1.75	0.5	5.0	0.5	1.7	11.5	2.9	431
887+62.62	887+71.70	LT	A	75 to 2.25	0.5	5.0	0.5	3.3	22.9	5.8	862
	887+71.70	LT	A	.25 to 1.5	0.5	5.0	0.5	0.2	0.5	0.1	27
							Total =	6.8	46.3	11.7	1750

106-5
10-21-14

AREAS FOR PAVEMENT OR BASE WIDENING

Refer to Standard Road Plans PV-105 or PV-203



(1) Bid Item
(2) Estimated for two applications to achieve lifts and one application of 0.10 Gal/SY adjacent to existing pavement. Priming of subgrade or finished base is not required.
Calculations assume a HMA unit weight (lbs/cf) of 145, a Special Backfill unit weight (lbs/cf) of 140, and a Tack Coat unit weight (gal/sy) of 0.05.

Station to Station		Side	Pavement Type	(L) Length FT	(W) Width FT	(T) Thickness IN	HMA Base Widening (1) TONS	HMA Base Widening (1) SY	PCC Base Widening (1) SY	PCC Pavement Widening (1) SY	Tack Coat: Lifts GAL	Tack Coat: Vertical Edge GAL	Tack Coat (2) GAL	Asphalt Binder (1) TONS	Class 13 Excavation, Widening (1) CY	Special Backfill (1) TONS	Remarks
730+03.17	735+55.44	LT	HMA	552.27	2.3	8.0	60.059				13.81	4.09	17.90	3.604	88.2		
729+37.27	735+61.33	RT	HMA	624.06	2.3	8.0	67.867				15.60	4.62	20.22	4.072	99.7		
758+40.55	758+98.28	LT	HMA	57.73	10.7	8.0	29.730				6.83	0.43	7.26	1.784	43.7		
758+98.28	794+30.63	LT	HMA	3532.35	9.5	8.0	1621.937				372.86	26.17	399.02	97.316	2382.2		
794+30.63	794+57.53	LT	HMA	26.90	10.0	8.0	13.054				3.00	0.20	3.20	0.783	19.2		
TOTALS:							1792.647							107.559	2632.9		

107-31
04-19-11

PLOWING AND SHAPING

Refer to Standard Road Plan EW-101

Station to Station		D FT	Remarks
758+40.55	794+57.53	1.5	HMA 9.5' widening

102-6C
04-18-17

FULL-DEPTH PATCHES

Possible Standards: PR-101, PR-102, PR-103, PR-104, PR-105 and PR-140.

Location				Dimension			PCC Patches													
Count	Station	Reference Location Sign	Lane	Length	Width	Patch Thickness	With Dowels	Without Dowels	C R C	Ramp with Dowels	HMA Patches	Composite HMA	Subbase Patches	Subbase Patch w/ 'EF' Joint	Patch Subdrain	'CD' Joints	'CT' Joints	'EF' Joints	Anchor Lugs Removal	Remarks
							PR-103	PR-102	PR-104	PR-105			PR-140	PR-101	PR-101 or PR-140			PR-101		
			L, R, or B	FT	FT	IN	SY	SY	SY	SY	SY	TON	SY	SY	No.	No.	No.	No.	No.	
1	837+89.00	SW Intersec.	L	20.9	21.9	10.0	17.2						17.2							Terry Street
1	837+89.00	NW Intersec.	L	32.5	22.0	10.0	43.7						43.7							Terry Street
1	837+89.00	EOR	R	66.4	16.6	10.0	78.6						78.6							Terry Street
1	869+70.79	EOR	R	53.4	22.8	10.0	73.3						73.3							Van Buren Street
							212.8						212.8							
TOTALS:																				

102-16
10-21-14

NOTCHES AND RUNOUTS FOR RESURFACING

Refer to PR-201 and PR-202.

(1) Bid item. Applies only to Types 'N1' and 'N3' on PR-202. Refer to 100-25 for remaining values.

Location Station	Type of Notch or Runout	S	I	DI	L	M	Pavement Scarification (1)	Remarks
		IN	IN	IN	FT	IN	SY	
812+23.00	Type 'N3'	2.0	1.0		30.0	1.5	150.3	Rt. Side (E Cottage Street)
854+21.00	Type 'N3'	2.0	1.0		30.0	3.0	48.6	Lt. side (E Prairie Street)
873+41.00	Type 'N3'	2.0	1.0		30.0	1.5	73.4	Lt. Side (Washington Street)
873+41.00	Type 'N3'	2.0	1.0		30.0	1.5	52.5	Rt. Side (Washington Street)
876+82.00	Type 'N3'	2.0	1.0		30.0	1.5	21.2	Lt. Side (E Oak Street)
884+77.00	Type 'N3'	2.0	1.0		30.0	3.0	72.4	Lt. Side (E Orchard Street)
887+31.00	Type 'N3'	2.0	1.0		30.0	1.5	32.2	Lt. Side (Franklin Street)

104-9
10-17-17

LONGITUDINAL SUBDRAIN SHOULDER AND BACKSLOPE

Refer to Soils Sheets

* Not a bid item. Bridge berm quantities assume a trench depth of 24 inches.

Location					Longitudinal Subdrain (DR-303)								Subdrain Outlet				
					Depth	Shoulder		Backslope		Bridge Berm (EW-203 or EW-204)			DR-303, DR-305 or DR-306				
Line No.	Road or Lane Identification	Station to Station		Side	D	Size	Length	Size	Length	Standard Road Plan and Type	Size	Length	Station	Standard Road Plan and Type	Porous* Backfill	Class "A"* Crushed Stone	Remarks
					IN	IN	FT	IN	FT		IN	FT			CY	CY	
1	SB	730+03.17	735+55.44	LT	47.0	4.0	592.3						730+03.17	DR-303	62.5	0.2	
													735+55.44	DR-303			
2	SB	758+40.55	763+40.00	LT	47.0	4.0	539.4						758+40.55	DR-303	56.9	0.2	
													763+40.00	DR-303			
3	SB	763+40.00	768+40.00	LT	47.0	4.0	540.0						763+40.00	DR-303	56.9	0.2	
													768+40.00	DR-303			
4	SB	768+40.00	773+40.00	LT	47.0	4.0	540.0						768+40.00	DR-303	56.9	0.2	
													773+40.00	DR-303			
5	SB	773+40.00	778+00.00	LT	47.0	4.0	500.0						773+40.00	DR-303	52.7	0.2	
													778+00.00	DR-303			
6	SB	778+00.00	781+50.00	LT	47.0	4.0	390.0						778+00.00	DR-303	41.1	0.2	
													781+50.00	DR-303			
7	SB	781+50.00	786+50.00	LT	47.0	4.0	540.0						781+50.00	DR-303	56.9	0.2	
													786+50.00	DR-303			
8	SB	786+50.00	791+50.00	LT	47.0	4.0	540.0						786+50.00	DR-303	56.9	0.2	
													791+50.00	DR-303			
9	SB	791+50.00	794+57.53	LT	47.0	4.0	347.5						791+50.00	DR-303	36.6	0.2	
													794+57.53	DR-303			
TOTALS:							4529.3							DR-303 = 18	477.4	1.8	

NOTE: ALL LONGITUDINAL SUBDRAINS ARE TYPE 8A OR 8B WITH HMA (ACC) UNLESS OTHERWISE NOTED IN REMARKS COLUMN.

PAVEMENT MARKING LINE TYPES

See PM-110

*BCY4 - Place on the same side of the roadway to match existing markings near the project.
**NPY4 - For estimating purposes only. No Passing Zone Lines will be located in the field.
***MNY4 - Factor of 1.00 as value includes number of 4-inch passes to cover median nose area.

DCY4: Double Centerline (Yellow) @ 2.00
NPY4: No Passing Zone Line (Yellow) @ 1.25
SLW2: Stop Line (White) @ 6.00
ELW4: Edge Line Right (White) @ 1.00
SLW4: Solid Lane Line (White) @ 1.00

Location								Length by Line Type (Unfactored)															Remarks
Road ID	Station to Station		Dir. of Travel	Marking Type	Side				DCY4	NPY4**	SLW2	ELW4	SLW4										
					L	C	R	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	
IA-5	729+39.30	772+22.27	NB	Waterborne/Solvent Paint			X					42.83											
IA-5	729+39.30	735+61.33	BOTH	Waterborne/Solvent Paint		X			6.22														
IA-5	735+61.33	741+61.33	SB	Waterborne/Solvent Paint	X				6.00														
IA-5	735+61.33	741+61.33	NB	Waterborne/Solvent Paint			X		6.00														
IA-5	729+39.30	734+91.19	SB	Waterborne/Solvent Paint	X								5.52										
IA-5	730+03.17	735+55.44	SB	Waterborne/Solvent Paint	X							5.52											
IA-5	735+61.19	794+60.08	SB	Waterborne/Solvent Paint	X							58.99											
IA-5	741+61.34	773+41.95	SB	Waterborne/Solvent Paint	X					31.81													
IA-5	741+61.33	773+41.95	NB	Waterborne/Solvent Paint			X			31.81													
IA-5	773+44.16	775+15.87	NB	Waterborne/Solvent Paint			X						1.72										
IA-5	773+41.95	775+01.48	SB	Waterborne/Solvent Paint	X				1.60														
IA-5	773+41.95	775+15.87	NB	Waterborne/Solvent Paint			X		1.74														
IA-5	773+41.95	775+15.87	BOTH	Waterborne/Solvent Paint	X	X	X		1.78														
IA-5	775+86.30	781+21.33	NB	Waterborne/Solvent Paint			X		5.35														
IA-5	775+86.30	779+45.87	SB	Waterborne/Solvent Paint	X								3.60										
IA-5	776+38.38	778+65.04	NB	Waterborne/Solvent Paint			X					2.27											
IA-5	779+51.41	781+07.41	WB	Waterborne/Solvent Paint	X				1.56														
IA-5	779+97.24	781+21.33	BOTH	Waterborne/Solvent Paint	X	X	X		0.89														
IA-5	779+75.68	781+21.33	NB	Waterborne/Solvent Paint			X						1.46										
IA-5	781+96.53	794+60.08	NB	Waterborne/Solvent Paint			X			12.64													
IA-5	781+96.53	794+60.08	SB	Waterborne/Solvent Paint	X					12.64													
IA-5	795+58.66	800+87.44	SB	Waterborne/Solvent Paint	X					5.29													
IA-5	795+58.66	800+87.44	NB	Waterborne/Solvent Paint			X			5.29													
IA-5	801+47.46	802+79.76	NB	Waterborne/Solvent Paint			X			1.32													
IA-5	801+47.46	802+79.76	SB	Waterborne/Solvent Paint	X					1.32													
IA-5	803+39.78	807+77.84	NB	Waterborne/Solvent Paint			X			4.38													
IA-5	803+39.78	807+77.84	SB	Waterborne/Solvent Paint	X					4.38													
IA-5	808+37.85	811+90.49	NB	Waterborne/Solvent Paint			X			3.53													
IA-5	808+37.85	811+90.49	SB	Waterborne/Solvent Paint	X					3.53													
IA-5	812+50.89	815+50.51	NB	Waterborne/Solvent Paint			X			3.00													
IA-5	812+50.89	815+50.51	SB	Waterborne/Solvent Paint	X					3.00													
IA-5	816+10.51	819+10.53	NB	Waterborne/Solvent Paint			X			3.00													
IA-5	816+10.51	819+10.53	SB	Waterborne/Solvent Paint	X					3.00													
IA-5	819+70.54	822+72.30	NB	Waterborne/Solvent Paint			X			3.02													
IA-5	819+70.54	822+72.30	SB	Waterborne/Solvent Paint	X					3.02													
IA-5	823+32.30	829+91.67	NB	Waterborne/Solvent Paint			X			6.59													
IA-5	823+32.30	829+91.67	SB	Waterborne/Solvent Paint	X					6.59													
IA-5	830+51.67	834+24.42	NB	Waterborne/Solvent Paint			X			3.73													
IA-5	830+51.67	834+24.42	SB	Waterborne/Solvent Paint	X					3.73													
IA-5	834+57.31	837+57.37	NB	Waterborne/Solvent Paint			X			3.00													
IA-5	834+57.31	837+57.37	SB	Waterborne/Solvent Paint	X					3.00													
IA-5	838+17.38	842+85.30	NB	Waterborne/Solvent Paint			X			4.68													
IA-5	838+17.38	842+85.30	SB	Waterborne/Solvent Paint	X					4.68													
IA-5	843+96.82	847+57.56	NB	Waterborne/Solvent Paint			X			3.61													
IA-5	843+96.82	847+57.56	SB	Waterborne/Solvent Paint	X					3.61													
IA-5	848+41.40	850+47.58	NB	Waterborne/Solvent Paint			X			2.06													
IA-5	848+41.40	850+47.58	SB	Waterborne/Solvent Paint	X					2.06													
IA-5	850+94.58	853+97.60	NB	Waterborne/Solvent Paint			X			3.03													
IA-5	850+94.58	853+97.60	SB	Waterborne/Solvent Paint	X					3.03													
IA-5	854+36.40	858+05.43	NB	Waterborne/Solvent Paint			X			3.69													
IA-5	854+36.40	858+05.43	SB	Waterborne/Solvent Paint	X					3.69													
IA-5	858+05.43	860+41.05	SB	Waterborne/Solvent Paint	X				2.36														
IA-5	858+75.43	860+41.05	NB	Waterborne/Solvent Paint			X						1.66										
IA-5	860+41.05	860+41.05	NB	Waterborne/Solvent Paint	X	X	X				0.28												
IA-5	861+42.32	861+42.32	SB	Waterborne/Solvent Paint	X	X	X				0.28												
IA-5	861+42.32	862+92.32	SB	Waterborne/Solvent Paint	X								1.50										
IA-5	861+42.32	863+62.32	NB	Waterborne/Solvent Paint			X		2.20														
IA-5	863+62.32	864+49.44	NB	Waterborne/Solvent Paint			X			0.87													
IA-5	863+62.32	864+49.44	SB	Waterborne/Solvent Paint	X					0.87													
IA-5	864+82.24	866+83.19	NB	Waterborne/Solvent Paint			X			2.01													
IA-5	864+82.24	866+83.19	SB	Waterborne/Solvent Paint	X					2.01													
IA-5	867+53.19	869+54.48	NB	Waterborne/Solvent Paint			X			2.01													
IA-5	867+53.19	869+54.48	SB	Waterborne/Solvent Paint	X					2.01													
IA-5	870+11.02	873+11.60	NB	Waterborne/Solvent Paint			X			3.01													
IA-5	870+11.02	873+11.60	SB	Waterborne/Solvent Paint	X					3.01													
IA-5	873+71.61	876+57.34	NB	Waterborne/Solvent Paint			X			2.86													
IA-5	873+71.61	876+57.34	SB	Waterborne/Solvent Paint	X					2.86													
IA-5	877+07.11	884+49.15	NB	Waterborne/Solvent Paint			X			7.42													
IA-5	877+07.11	884+49.15	SB	Waterborne/Solvent Paint	X					7.42													
IA-5	885+05.17	887+00.85	NB	Waterborne/Solvent Paint			X			1.96													
IA-5	885+05.17	887+00.85	SB	Waterborne/Solvent Paint	X					1.96													
IA-5	887+60.86	890+97.87	NB	Waterborne/Solvent Paint			X			3.37													
IA-5	887+60.86	890+97.87	SB	Waterborne/Solvent Paint	X					3.37													
IA-5	891+57.39	892+51.90	NB	Waterborne/Solvent Paint			X			0.95													
IA-5	891+57.39	892+51.90	SB	Waterborne/Solvent Paint	X					0.95													
IA-5	892+51.90	894+71.90	SB	Waterborne/Solvent Paint	X				2.20														

PAVEMENT MARKING LINE TYPES

See PM-110

*BCY4 - Place on the same side of the roadway to match existing markings near the project.

**NPY4 - For estimating purposes only. No Passing Zone Lines will be located in the field.

***MNY4 - Factor of 1.00 as value includes number of 4-inch passes to cover median nose area.

SLW4: Solid Lane Line (White) @ 1.00 | DCY4: Double Centerline (Yellow) @ 2.00 | NPY4: No Passing Zone Line (Yellow) @ 1.25 | SLW2: Stop Line (White) @ 6.00 | ELW4: Edge Line Right (White) @ 1.00

Location: Road ID	Station to Station		Dir. of Travel	Marking Type	Side L	Side C	Side R	Length by Line Type (Unfactored)	DCY4	NPY4**	SLW2	ELW4	SLW4										Remarks
								STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	
IA-5	893+21.90	894+71.90	NB	Waterborne/Solvent Paint			X						1.50										
IA-5	894+71.90	894+71.90	NB	Waterborne/Solvent Paint	X	X	X				0.28												
IA-5	895+74.47	895+74.47	SB	Waterborne/Solvent Paint	X	X	X				0.28												
IA-5	895+74.47	897+24.47	SB	Waterborne/Solvent Paint	X								1.50										
IA-5	895+74.47	897+94.47	NB	Waterborne/Solvent Paint			X		2.20														
IA-5	897+94.47	897+23.63	NB	Waterborne/Solvent Paint			X			0.71													
IA-5	897+94.47	897+23.63	SB	Waterborne/Solvent Paint	X					0.71													
				Factored Total: Waterborne/Solvent Paint				-	80.20	308.88	6.72	109.61	18.45	-	-	-	-	-	-	-	-	-	
				Bid Quantity: Painted Pavement Markings, Waterborne or Solvent-Based							523.86												

PAVEMENT MARKING SYMBOLS AND LEGENDS

Refer to PM-111

Road Identification	Location: Station	Side	STAW	RTAW	LTAW	CSRW	CSLW	CSTW	CRLW	FERW	LLRW	RLRW	RRCW	BLSW	WCSW	WPSB	SCHOOL SCLW	XING XNGW	STOP STPW	AHEAD AHDW	ONLY ONLW	BIKE BIKW	LANE LANW	EXIT XITW	Groove Cuts EACH	Remarks
IA-5	730+29.84	LT		1																						
	731+04.84	LT		1																						
	743+74.78	CENTER			1																					
	743+90.78	CENTER			1																					
	747+24.78	CENTER			1																					
	747+40.78	CENTER			1																					
	750+74.78	CENTER			1																					
	750+90.78	CENTER			1																					
	754+24.78	CENTER			1																					
	754+40.78	CENTER			1																					
	757+74.78	CENTER			1																					
	757+90.78	CENTER			1																					
	761+24.78	CENTER			1																					
	761+40.78	CENTER			1																					
	764+74.78	CENTER			1																					
	764+90.78	CENTER			1																					
	768+24.78	CENTER			1																					
	768+40.78	CENTER			1																					
	771+74.77	CENTER			1																					
	771+90.77	CENTER			1																					
	776+12.97	CENTER			1																					
	776+48.80	CENTER																			1					
	776+87.97	CENTER			1																					
	783+03.72	CENTER			1																					
	783+19.72	CENTER			1																					
	786+53.72	CENTER			1																					
	786+69.72	CENTER			1																					
	790+03.72	CENTER			1																					
	790+19.72	CENTER			1																					
	793+53.72	CENTER			1																					
	793+69.72	CENTER			1																					
	796+30.22	CENTER			1																					
	796+46.22	CENTER			1																					
	799+80.22	CENTER			1																					
	799+96.22	CENTER			1																					
	802+01.36	CENTER			1																					
	802+17.36	CENTER			1																					
	803+69.04	CENTER			1																					
	803+85.04	CENTER			1																					
	807+19.04	CENTER			1																					
	807+35.04	CENTER			1																					
	810+28.37	CENTER			1																					
	810+44.37	CENTER			1																					
	813+84.75	CENTER			1																					
	814+00.75	CENTER			1																					
	817+51.41	CENTER			1																					
	817+67.41	CENTER			1																					
	821+09.97	CENTER			1																					
	821+25.97	CENTER			1																					

PAVEMENT MARKING SYMBOLS AND LEGENDS

Refer to PM-111

Road Identification	Location																SCHOOL	XING	STOP	AHEAD	ONLY	BIKE	LANE	EXIT	Groove Cuts	Remarks
	Station	Side	STAW	RTAW	LTAW	CSRW	CSLW	CSTW	CRLW	FERW	LLRW	RLRW	RRCW	BLSW	WCSW	WPSB	SCLW	XNGW	STPW	AHDW	ONLW	BIKW	LANW	XITW	EACH	
	821+25.97	CENTER			1																					
	824+80.35	CENTER			1																					
	824+96.35	CENTER			1																					
	828+30.35	CENTER			1																					
	828+46.35	CENTER			1																					
	832+34.95	CENTER			1																					
	832+50.95	CENTER			1																					
	835+99.09	CENTER			1																					
	836+15.09	CENTER			1																					
	840+43.29	CENTER			1																					
	840+59.29	CENTER			1																					
	842+11.84	CENTER			1																					
	842+31.17	CENTER			1																					
	845+73.06	CENTER			1																					
	845+89.06	CENTER			1																					
	849+31.24	CENTER			1																					
	849+47.24	CENTER			1																					
	852+35.55	CENTER			1																					
	852+51.55	CENTER			1																					
	856+25.42	CENTER			1																					
	856+41.42	CENTER			1																					
	859+41.10	CENTER			1																					
	857+78.60	CENTER																			1					
	860+16.10	CENTER			1																					
	861+69.02	CENTER			1																					
	862+06.52	CENTER																			1					
	862+44.02	CENTER			1																					
	863+98.30	CENTER			1																					
	864+14.30	CENTER			1																					
	865+75.64	CENTER			1																					
	865+91.64	CENTER			1																					
	868+44.56	CENTER			1																					
	868+60.56	CENTER			1																					
	871+47.08	CENTER			1																					
	871+63.08	CENTER			1																					
	875+04.33	CENTER			1																					
	875+20.33	CENTER			1																					
	878+58.68	CENTER			1																					
	878+74.68	CENTER			1																					
	882+08.68	CENTER			1																					
	882+24.68	CENTER			1																					
	885+90.44	CENTER			1																					
	886+06.44	CENTER			1																					
	888+93.93	CENTER			1																					
	889+09.93	CENTER			1																					
	891+99.58	CENTER			1																					
	892+15.58	CENTER			1																					
	893+71.95	CENTER			1																					
	894+09.43	CENTER																			1					
	894+46.95	CENTER			1																					
	896+01.04	CENTER			1																					
	896+38.54	CENTER																			1					
	896+76.04	CENTER			1																					
	898+67.49	CENTER			1																					
	898+83.49	CENTER			1																					
		TOTAL	0	2	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	

190-51
10-15-13

MATERIALS FOR TYPE 'A' SIGNS

TYPE A SIGNING TYPICALS	SIGN NUMBER	DIR OF TRAVEL	SIGN LOCATION	WOOD POSTS			PERFORATED SQUARE STEEL TUBE						Steel Rect. Tube			TYPE A SIGN MOUNTING BRACKETS						INSTALLATION			REMARKS
			STATION	NO. OF POSTS	4 x 6 LEG 1	4 x 6 LEG 2	LEG 1	LEG 2	LEG 3	ANCHOR CONC	ANCHOR SOIL	ANCHOR SLIPBASE	NO. OF POSTS	POST LENGTH	ANCHORS	ONE POST BRACKET	TWO POST	AUXILIARY	H	F	F1	TYPE	DIM 'X' FT	SEE SIGNING NOTES	
					FT	FT	FT	FT	FT					FT	EACH										
	R3-9B	NB	784+84	1	16																	1			
	R3-9B	NB	789+34	1	16																	1			
	R3-9B	NB	795+97	1	16																	1			
	R3-9B	NB	799+97	1	16																	1			
	R3-9B	NB	804+47	1	16																	1			
	R3-9B	NB	808+97	1	16																	1			
	R3-9B	NB	813+47	1	16																	1			
	R3-9B	NB	817+97	1	16																	1			
	R3-9B	NB	824+26	1	16																	1			
	R3-9B	NB	828+76	1	16																	1			
	R3-9B	NB	833+26	1	16																	1			
	R3-9B	NB	838+76	1	16																	1			
	R3-9B	NB	844+26	1	16																	1			
	R3-9B	NB	849+26	1	16																	1			
	R3-9B	NB	855+26	1	16																	1			
	R3-9B	SB	788+55	1	16																	1			
	R3-9B	SB	793+05	1	16																	1			
	R3-9B	SB	797+55	1	16																	1			
	R3-9B	SB	802+05	1	16																	1			
	R3-9B	SB	806+55	1	16																	1			
	R3-9B	SB	811+05	1	16																	1			
	R3-9B	SB	815+05	1	16																	1			
	R3-9B	SB	818+05	1	16																	1			
	R3-9B	SB	822+05	1	16																	1			
	R3-9B	SB	825+05	1	16																	1			
	R3-9B	SB	829+05	1	16																	1			
	R3-9B	SB	833+05	1	16																	1			
	R3-9B	SB	837+05	1	16																	1			
	R3-9B	SB	842+05	1	16																	1			
	R3-9B	SB	847+05	1	16																	1			
	R3-9B	SB	853+55	1	16																	1			
	R3-9B	SB	858+05	1	16																	1			
			Total =	32	512																				

190-66
10-21-14

SUMMARY OF TYPE 'A' SIGNS

Sign Number	Quantity	Size	Total Sign Area
	EACH	IN	SF
R3-9B	32	24 X 36	192.0
Total =	32		192.0

190-62
10-15-13

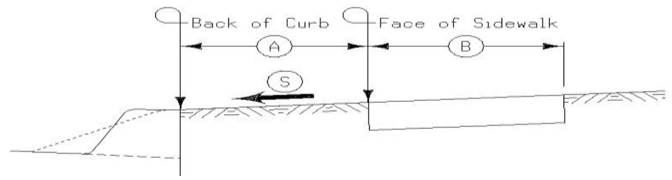
EXISTING SIGNS TO BE REMOVED

SIGN NUMBER OR DESCRIPTION	LOCATION STATION	DIRECTION OF TRAVEL	TYPE 'A' SIGN ASSEMBLY	TYPE 'B' SIGN ASSEMBLY	REMOVE & REINSTALL EXISTING SIGNS TYPE 'A'	REMOVE & REINSTALL EXISTING SIGNS TYPE 'B'	CONCRETE FOUNDATION	SUPPORT STRUCTURE & FOUNDATION	APPLICABLE SIGNING NOTES	REMARKS
			RA	RB	RR	RR	RF	RS		
			EACH	EACH	EACH	EACH	EACH	EACH		
W9-2	783+94	NB	1					1.0		
W4-2	789+40	NB	1					1.0		
	790+26	NB	1							REMOVE "END" PLAQUE
	854+96	NB	1							REMOVE "BEGIN" PLAQU
	855+56	SB	1							REMOVE "END" PLAQUE
W6-3	851+46	SB	1					1.0		
Street Name	854+01.51	SB			1					
R1-1	854+02.35	SB			1					
One-Way; Do Not Enter	869+50.06	SB			1					
R1-1	869+58.69	SB			1					
R1-1	870+02.60	NB			1					
R1-1	887+10.92	SB			1					
		Total =	6		6			3.0		

113-1
04-16-13

SIDEWALKS

See MI-220 and S Sheets



Road Identification	Street to Street	Side	(A)	(B)	(S)	4" PCC Sidewalk	6" PCC Sidewalk	_" PCC Sidewalk	Detectable Warnings	Remarks
			FT	FT	%	SY	SY	SY	SF	
IA-5	at E. Cottage St.	NW		5.00		13.7				
IA-5	at E. Cottage St.	NW		5.00			4.2		12	
IA-5	at E. Cottage St.	NE		5.00		5.5				
IA-5	at E. Cottage St.	NE		5.00			6.4		20	
IA-5	at E. Cottage St.	SE		5.00		4.6				
IA-5	at E. Cottage St.	SE		5.00			4.4		10	
IA-5	at Elm Street	NW				11.7				
IA-5	at Elm Street	NW		6.00			5.9		12	
IA-5	at Elm Street	SW		5.00		16.7				
IA-5	at Elm Street	SW		5.00			10.2		20	
IA-5	at Elm Street	NE		6.00			7.7		12	
IA-5	at Elm Street	SE				2.8				
IA-5	at Elm Street	SE					7.3		20	
IA-5	at Walsh Street	NW				33.8				
IA-5	at Walsh Street	NW					9.9		20	
IA-5	at Walsh Street	SW				19.9				
IA-5	at Walsh Street	SW					4.4		10	
IA-5	at Walsh Street	NE				12.4				
IA-5	at Walsh Street	NE					7.5		20	
IA-5	at Walsh Street	SE				12.4				
IA-5	at Walsh Street	SE					2.4		10	
IA-5	at E. Terry Street	NW		5.00		12.2				
IA-5	at E. Terry Street	NW		5.00			5.0		10	
IA-5	at E. Terry Street	SW		5.00		9.9				
IA-5	at E. Terry Street	SW		5.00			7.4		20	
IA-5	at E. Terry Street	NE		4.00		6.9				
IA-5	at E. Terry Street	NE		4.00			3.3		8	
IA-5	at E. Terry Street	SE		5.00		7.6				
IA-5	at E. Terry Street	SE		5.00			7.2		10	
IA-5	at E. Prairie St.	NW		4.00		3.6				
IA-5	at E. Prairie St.	NW		4.00			2.9		8	
IA-5	at E. Prairie St.	SW		5.00		17.6			10	
IA-5	at E. Prairie St.	SW		5.00			4.3			
IA-5	at Van Buren St.	NW		5.00		24.9				
IA-5	at Van Buren St.	NW		5.00			3.9		22	
IA-5	at Van Buren St.	SW		5.00		10.3				
IA-5	at Van Buren St.	SW		5.00			6.4		20	
IA-5	at Van Buren St.	NE		5.00		1.9				
IA-5	at Van Buren St.	NE		5.00			8.4		20	
IA-5	at Van Buren St.	SE	3.00	5.00		39.2				
IA-5	at Van Buren St.	SE	3.00	5.00			7.7		20	
IA-5	at Washington St.	SW		5.00		19.5				
IA-5	at Washington St.	SW		5.00			2.9		10	
IA-5	at Washington St.	NE				2.5				
IA-6	at Washington St.	NE					6.0		18	
IA-5	at Washington St.	SE					4.5		23	
IA-5	at Franklin St.	NW					10.4		20	
IA-5	at Franklin St.	SW				7.7				
IA-5	at Franklin St.	SW					4.3		10	
IA-5	at Franklin St.	NE				11.3				
IA-5	at Franklin St.	NE					1.6		10	
					Total	308.6	156.5		405	

110-5
10-20-15

SIDEWALK REMOVAL

* Not a bid item

Street	Location	Area	Saw Cut*	Remarks
		SY	LF	
IA-5 & E. Cottage St.	NW Corner	14.8	8.0	
IA-5 & E. Cottage St.	SE Corner	4.8	4.0	
IA-5 & E. Cottage St.	NE Corner	6.9	3.7	
IA-5 & Elm Street	NW Corner	15.5	10.0	
IA-5 & Elm Street	SW Corner	23.0	8.5	
IA-5 & Elm Street	NE Corner	6.3	5.5	
IA-5 & Elm Street	SE Corner	5.4	4.0	
IA-5 & E. Walsh St.	NW Corner	43.1	44.7	
IA-5 & E. Walsh St.	SW Corner	13.6	9.7	
IA-5 & E. Walsh St.	NE Corner	18.7	19.3	
IA-5 & E. Walsh St.	SE Corner	14.1	27.2	
IA-5 & E. Terry St.	NW Corner	25.0	8.9	
IA-5 & E. Terry St.	SW Corner	23.3	7.8	
IA-5 & E. Terry St.	NE Corner	11.8	7.0	
IA-5 & E. Terry St.	SE Corner	11.2	3.6	
IA-5 & E. Prairie St.	NW Corner	5.5	3.8	
IA-5 & E. Prairie St.	SW Corner	15.9	7.6	
IA-5 & Van Buren St.	NW Corner	25.0	10.0	
IA-5 & Van Buren St.	SW Corner	24.3	7.5	
IA-5 & Van Buren St.	NE Corner	18.7	7.4	
IA-5 & Van Buren St.	SE Corner	41.2	9.3	
IA-5 & Washington St.	SW Corner	21.7	7.7	
IA-5 & Washington St.	NE Corner	7.3	4.0	
IA-5 & Washington St.	SE Corner	13.1	3.9	
IA-5 & Franklin St.	SW Corner	6.5	8.0	
IA-5 & Franklin St.	NE Corner	9.0	8.0	
	Total	425.9	248.9	

110-4
08-01-08

CURB REMOVAL

Street	Street	Side	Length	Remarks
			STA	
IA-5	E. Cottage St.	NE	0.2	
IA-5	E. Cottage St.	SW	0.1	
IA-5	E. Cottage St.	SE	0.2	
IA-5	Elm Street	NW	0.2	
IA-5	Elm Street	NE	0.1	
IA-5	Elm Street	SW	0.2	
IA-5	Elm Street	SE	0.1	
IA-5	E. Walsh Street	NW	0.2	
IA-5	E. Walsh Street	NE	0.4	
IA-5	E. Walsh Street	SE	0.2	
IA-5	E. Walsh Street	SW	0.2	
IA-5	E. Terry Street	NW	0.2	
IA-5	E. Terry Street	NE	0.1	
IA-5	E. Terry Street	SW	0.2	
IA-5	E. Terry Street	SE	0.1	
IA-5	E. Prairie Street	NW	0.2	
IA-5	E. Prairie Street	NE	0.1	
IA-5	Van Buren St.	NW	0.4	
IA-5	Van Buren St.	NE	0.5	
IA-5	Van Buren St.	SW	0.4	
IA-5	Van Buren St.	SE	0.3	
IA-5	Washington St.	NW	0.2	
IA-5	Washington St.	SW	0.2	
IA-5	Washington St.	SE	0.2	
IA-5	Franklin Street	NW	0.1	
IA-5	Franklin Street	NE	0.4	
IA-5	Franklin Street	SE	0.1	
		Total	5.8	

290-01
04-15-14

SIDEWALK CONSTRAINTS

1. Widths:
   Widths listed in the S sheets are minimums.

2. Cross Slopes:
   Construct all sidewalks, curb ramps, and landings/turning spaces at a target cross slope of 1.5%. Cross slopes exceeding 2.0% will not be allowed, except for areas tying into existing pavement. In these areas, transition from existing pavement cross slope to a cross slope of less than 2.0% within one panel at a rate not to exceed 1.0% per foot.

3. Longitudinal Slopes:
   a. Sidewalk:
      i. Roadway slope exceeds 5.0%: Sidewalk longitudinal slope exceeding the roadway slope by more than 2.0% will not be allowed.
      ii. Roadway slope 5.0% or less: Sidewalk longitudinal slope exceeding 5.0% will not be allowed.
   b. Ramps:
      i. Ramps 15.0' in length or less: Longitudinal slope exceeding 8.3% will not be allowed.
      ii. Ramps greater than 15.0' in length: Construct with the longitudinal slope necessary to conform to the design.

4. Landing/Turning Spaces:
   Longitudinal slopes exceeding 2.0% will not be allowed.

112-4
10-21-14

CURBS AND RAISED ISLANDS

Refer to PV-20, PV-102, and 6000s Detail Series.

(1) Bid Item

Point No.	Street	Side	Island Interior Area (1)	Curb and Gutter			Remarks
				Curb Type	Gutter Width	Length (1)	
			SY		FT	LF	
	E. Cottage St.	NW		6" Standard PCC	2.5	19.3	
		NE		6" Standard PCC	2.5	20.4	
		SE		6" Standard PCC	2.5	11.0	
	Elm Street	NW		6" Standard PCC	2.5	11.4	
		SW		6" Standard PCC	2.5	25.1	
		NE		6" Standard PCC	2.5	13.4	
		SE		6" Standard PCC	2.5	22.4	
	E. Walsh St.	NW		6" Standard PCC	2.5	20.6	
		SW		6" Standard PCC	2.5	26.0	
		NE		6" Standard PCC	2.5	26.5	
		SE		6" Standard PCC	2.5	24.6	
	E. Terry St.	NW		6" Standard PCC	2.5	10.0	
		SW		6" Standard PCC	2.5	22.0	
		NE		6" Standard PCC	2.5	7.3	
		SE		6" Standard PCC	2.5	21.4	
	E. Prairie St.	NW		6" Standard PCC	2.5	8.3	
		SW		6" Standard PCC	2.5	25.1	
	Van Buren St.	NW		6" Standard PCC	2.5	57.0	
		SW		6" Standard PCC	2.5	46.7	
		NE		6" Standard PCC	2.5	29.7	
		SE		6" Standard PCC	2.5	45.6	
	Washington St.	SW		6" Standard PCC	2.5	26.0	
		NE		6" Standard PCC	2.5	16.8	
		SE		6" Standard PCC	2.5	22.1	
	Franklin St.	NW		6" Standard PCC	2.5	13.5	
		SW		6" Standard PCC	2.5	7.6	
		NE		6" Standard PCC	2.5	6.0	
					Total	586.0	

232-3B
10-20-15

EROSION CONTROL (URBAN SEEDING)

Following the completion of work in a disturbed area, place seed, fertilizer, and mulch on the disturbed area as follows:

Use seed mix and fertilizer meeting the requirements of Article 2601.03,C,4 and Section 4169 of the Standard Specifications.

Use mulch meeting the requirements of Articles 2601.03,E,2,a and 4169.07,A of the Standard Specifications.

Preparing the seedbed and furnishing and applying seed, fertilizer, and mulch is incidental to mobilization and will not be paid for separately.

290-02
04-21-15

SMALL QUANTITY CONCRETE TESTING

- Test air and slump once per 30 cy placed, or minimum of once per day.
- Verification gradations will not be required for this project. However, the Contractor will be expected to provide certified plant inspection.
- The Contractor has the option of using the following minimum opening times in lieu of flexural testing:
  - 48 hours for pedestrian traffic
  - 72 hours for curb and gutter or patching

232-11
10-20-15

EROSION CONTROL (STABILIZING CROP SEEDING)

Following the completion of work in a disturbed area, place stabilizing crop, fertilizer, and mulch on the disturbed area as follows:

Use seed mix and fertilizer meeting the requirements of Article 2601.03,C,1 and Section 4169 of the Standard Specifications.

Use mulch meeting the requirements of Articles 2601.03,E,2,a and 4169.07,A of the Standard Specifications.

Preparing the seedbed and furnishing and applying seed, fertilizer, and mulch is incidental to mobilization and will not be paid for separately.

262-6
10-18-05

UTILITIES (NOT A POINT 25 PROJECT)

This is NOT a POINT 25 project and is not subject to the provisions of IAC 761-115.25.

112-9
10-15-13

SHOULDERS

(1) Lane(s) to which the shoulder is adjacent.
(2) Bid Item
(3) Applies only for Paved Shoulders constructed on project with existing granular shoulders.
(4) Does not include shrink.

Calculations assume a HMA unit weight (lbs/cf) of 145, a Special Backfill unit weight (lbs/cf) of 140, and a Granular Shoulder unit weight (lbs/cf) of 140.

Road Identification	Direction of Traffic (1)	Station to Station		Side	(P) Width	(G) Width	(L) Length	Class 13 Excavation (3)	Hot Mix Asphalt		Binder	Paved Shoulder	Reinforced Paved Shoulder	Special Backfill HMA Alternate		Special Backfill PCC Alternate		Modified Subbase	Granular Shoulder		Earth Shoulder Construction Alternates STA (2)	HMA	PCC	Remarks
					FT	FT	FT	CY (2)	TON	TON/STA	TONS	SY (2)	SY (2)	TON (2)	TON/STA	TON (2)	TON/STA	CY (2)	TON (2)	TON/STA		CY (4)	CY (4)	
IA-5	SB	730+03.17	735+55.44	LT	4.0	6.0	552.3	392.7	85.292	15.444	5.118	245.5		482.038	87.283			72.0	115.977	21.000	5.5			
IA-5	NB	729+37.27	735+61.33	RT	4.0	6.0	624.1	443.8	96.380	15.444	5.783	277.4		544.698	87.283			81.4	131.053	21.000	6.2			
IA-5	SB	758+40.55	794+57.53	LT		0.5	3617.0	1157.4										136.6	713.992	19.740	36.2			
TOTALS:								1993.9	181.672		10.900	522.8		1026.736				290.0	961.021		47.9			

110-17
04-18-17

CLEARING AND GRUBBING

Location: Station to Station or Ref. Loc. Sign to Ref. Loc. Sign or Description	Location: Direction of Travel	Work and Material Type	Trees, Stumps, and Logs and Down Timber Material Diameters: 3"-6"	>6"-9"	>9"-12"	>12"-15"	>15"-18"	>18"-24"	>24"-30"	>30"-36"	>36"-42"	>42"-48"	>48"-60"	>60"-72"	>72"	All Other Materials: Length	All Other Materials: Width	Estimated Quantities: Units	Estimated Quantities: Area	Estimated Quantities: Herbicide Application	Remarks
																FT	FT	Units	Acres	Each	
767+00 to 787+50, Lt.	NB	Brush - Clearing														2050.0	20.0		0.9		

POLLUTION PREVENTION PLAN

This project is regulated by the requirements of the Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 OR an Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) individual storm water permit. The Contractor shall carry out the terms and conditions of this permit and the Pollution Prevention Plan (PPP).

This Base PPP includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed per plan revisions or by contract modification, will be readily available for review.

All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The prime contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP.

I. ROLES AND RESPONSIBILITES
- A. Designer:
  1. Prepares Base PPP included in the project plan.
  2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.
  3. Signature authority on the Base PPP and NOI.
- B. Contractor/Subcontractor:
  1. Affected contractors/subcontractors are co-permittees with the IDOT and will sign a certification statement adhering to the requirements of the NPDES permit and this PPP plan. Affected contractors/subcontractors are anyone responsible for sediment or erosion controls or involved in land disturbing activities. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
  2. Submit an Erosion Control Implementation Plan (ECIP) according to Specifications Section 2602 and any additional plan notes.
  3. Install and maintain appropriate controls.
  4. Supervise and implement good housekeeping practices.
  5. Conduct joint required inspections of the site with inspection staff.
  6. Comply with training and certification requirements of Specifications Section 2602.
  7. Signature authority on Co-Permittee Certification Statements and storm water inspection reports.
- C. RCE/Inspector:
  1. Update PPP whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the discharge of pollutants from the project.
  2. Maintain an up-to-date record that identifies contractors and subcontractors as co-permittees.
  3. Make these plans available to the DNR upon their request.
  4. Conduct joint required inspections of the site with the contractor/subcontractor.
  5. Complete an inspection report after each inspection.
  6. Signature authority on storm water inspection reports and Notice of Discontinuation (NOD).

II. PROJECT SITE DESCRIPTION
- A. This Pollution Prevention Plan (PPP) is for the construction of the resurfacing and paved shoulders for an existing roadway. It includes constructing hot mix asphalt paved shoulders and ADA compliant sidewalk ramps in the City of Centerville along a two-lane facility (Iowa 5) in Appanoose County.
- B. This PPP covers approximately 29.6 acres with an estimated 1.3 acres being disturbed. The portion of the PPP covered by this contract has 1.3 acres disturbed.
- C. The PPP is located in an area of 1 soil association (Seymour - Edine - Clarinda). The estimated weighted average runoff coefficient number for this PPP after completion will be 0.65.
- D. Storm Water Site Map - Multiple sources of information comprise the base storm water site map including:
  1. Drainage patterns – Plan and Profile sheets and Situation plans.
  2. Proposed Slopes – Cross Sections.
  3. Areas of Soil Disturbance – construction limits shown on Plan and Profile sheets.
  4. Location of Structural Controls – Tabulations on C sheets.
  5. Locations of Non-structural Controls – Tabulations on C sheets.
  6. Locations of Stabilization Practices – generally within construction limits shown on Plan and Profile sheets.
  7. Surface Waters (including wetlands) – Project Location Map and Plan and Profile sheets.
  8. Locations where storm water is discharged – Plan and Profile sheets.
- E. The base site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be documented by fieldbook entries.
- F. Runoff from this work will flow into Cooper Creek.

III. CONTROLS
- A. The contractor’s ECIP specified in Article 2602.03 for accomplishment of storm water controls should clearly describe the intended sequence of major activities and for each activity define the control measure and the timing during the construction process that the measure will be implemented.
- B. Preserve vegetation in areas not needed for construction.
- C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water monitoring inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B.
  1. EROSION AND SEDIMENT CONTROLS
     - a. Stabilization Practices
       1) Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized.
       2) Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:
          a) Permanently ceased on any portion of the site, or
          b) Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
       3) Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above.
       4) Permanent and Temporary Stabilization practices to be used for this project are located in the Estimated Project

110-12A
10-17-17

POLLUTION PREVENTION PLAN

Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located on the C sheets of the plan. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation.
       5) Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips.
       6) Preservation of topsoil: Bid items to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located on the C sheets of the plan. Additional information may be found in Tabulations in the C or T sheets of the plans or is referenced in Standard Specifications Section 2105.
     - b. Structural Practices
       1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas.
       2) Structural practices to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located on the C sheets of the plan, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found on the B sheets of the plans or are referenced in the Standard Road Plans Tabulation.
     - c. Storm Water Management
       1) Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located on the C sheets of the plan, as well as all other item specific Tabulations. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation. The installation of these devices may be subject to Section 404 of the Clean Water Act.
  2. OTHER CONTROLS
     - a. Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive laws, rules or regulations shall apply.
       1) Vehicle Entrances and Exits - Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
       2) Material Delivery, Storage and Use - Implement practices to prevent discharge of construction materials during delivery, storage, and use.
       3) Stockpile Management - Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
       4) Waste Disposal - Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
       5) Spill Prevention and Control - Implement procedures to contain and clean-up spills and prevent material discharges to the storm drain system and waters of the state.
       6) Concrete Residuals and Washout Wastes - Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
       7) Concrete Grooving/Grinding Slurry – Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
       8) Vehicle and Equipment Storage and Maintenance Areas - Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onside fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water.
       9) Litter Management - Ensure employees properly dispose of litter.
       10) Dewatering – Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site. Measures are also to be taken to prevent scour erosion at dewatering discharge point.
  3. APPROVED STATE OR LOCAL PLANS

     During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at the time.

IV. MAINTENANCE PROCEDURES

The contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their capacity.

V. INSPECTION REQUIREMENTS
- A. Inspections shall be made jointly by the contractor and the contracting authority at least once every seven calendar days. Storm water monitoring inspections will include:
  1. Date of the inspection.
  2. Summary of the scope of the inspection.
  3. Name and qualifications of the personnel making the inspection.
  5. Review erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.
  6. Major observations related to the implementation of the PPP.
  7. Identify corrective actions required to maintain or modify erosion and sediment control measures.
- B. Include storm water monitoring inspection reports in the Amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection.

VI. NON-STORM WATER DISCHARGES

This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from these features may be controlled by the use of patio blocks, Class A stone, erosion stone or other appropriate materials. This also includes uncontaminated groundwater from dewatering operations, which will be controlled as discussed in Section III of the PPP.

VII. POTENTIAL SOURCES OF OFF RIGHT-OF-WAY (ROW) POLLUTION

Silts, sediment, and other forms of pollution may be transported onto highway right-of-way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveyed and controlled per this PPP.

VIII. DEFINITIONS

POLLUTION PREVENTION PLAN

A. Base PPP - Initial Pollution Prevention Plan.
B. Amended PPP - May include Plan Revisions or Contract Modifications for new items, storm water monitoring inspection reports, and fieldbook entries made by the inspector.
C. IDR - Inspector's Daily Report – this contains the inspector's daily diary and bid item postings.
D. Controls - Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
E. Signature Authority - Representative from Designer, Contractor/Subcontractor, or RCE/Inspector authorized to sign various storm water documents.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Printed or Typed Name

Signature

Printed or Typed Name

SURVEY SYMBOLS

UTILITY LEGEND

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities

SHADING	Design Color No.	
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)	Grading Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Ground Line Profile
Blue	(1)	Proposed Profile and Annotation
Magenta	(5)	Existing Utilities
Blue, Light	(230)	Proposed Ditch Grades, Left
Black	(0)	Proposed Ditch Grades, Median
Rust	(14)	Proposed Ditch Grades, Right

Reference Point
Station
Survey Line
Section Corner
Ground Line Intercept
Saw Cut
Guardrail
Trench Drain
HighTension Cable Guardrail
Sheet Pile
Pavement Removal
Clearing & Grubbing Area

RIGHT-OF-WAY LEGEND

- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- C/A Access Control
- Property Line

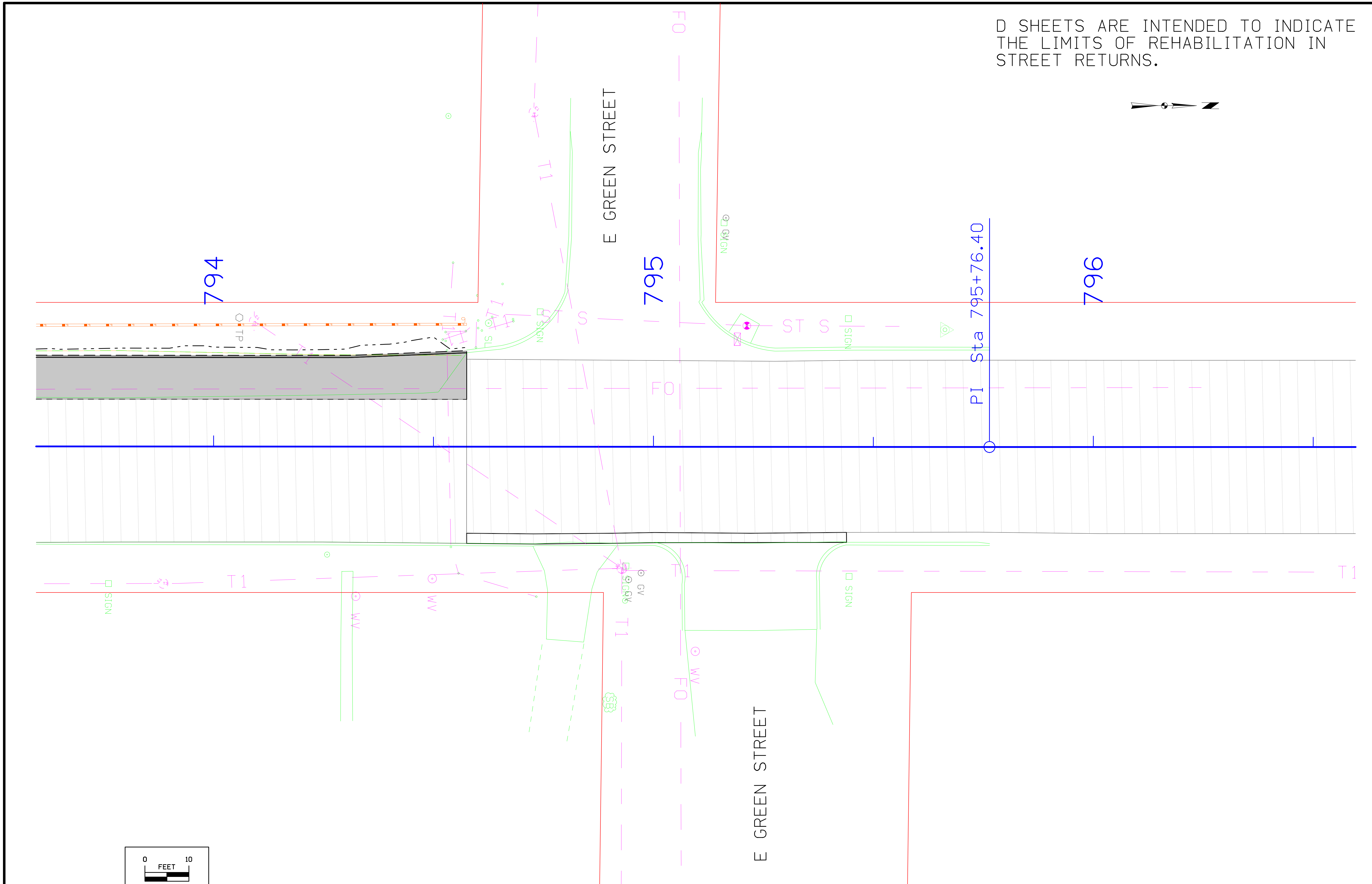
D SHEET LEGEND

- Existing street Return (EOR) Pavement Scarification and HMA Resurfacing
- Existing street of Return (EOR) Pavement full depth removal and replacement
- 3" Exisiting Pavement Scarification and HMA Resurfacing

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

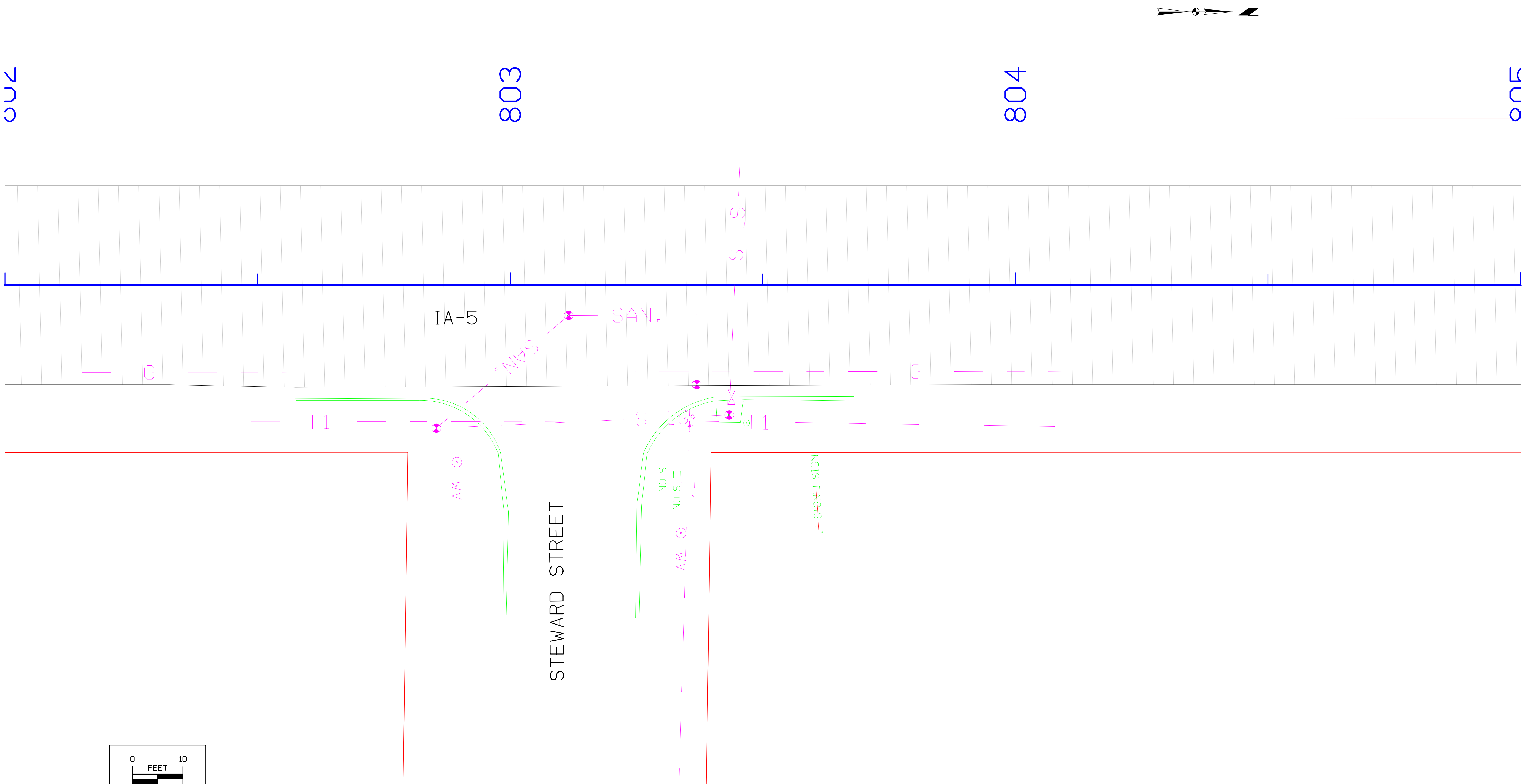
(COVERS SHEET SERIES D, E, F, & K)

D SHEETS ARE INTENDED TO INDICATE THE LIMITS OF REHABILITATION IN STREET RETURNS.



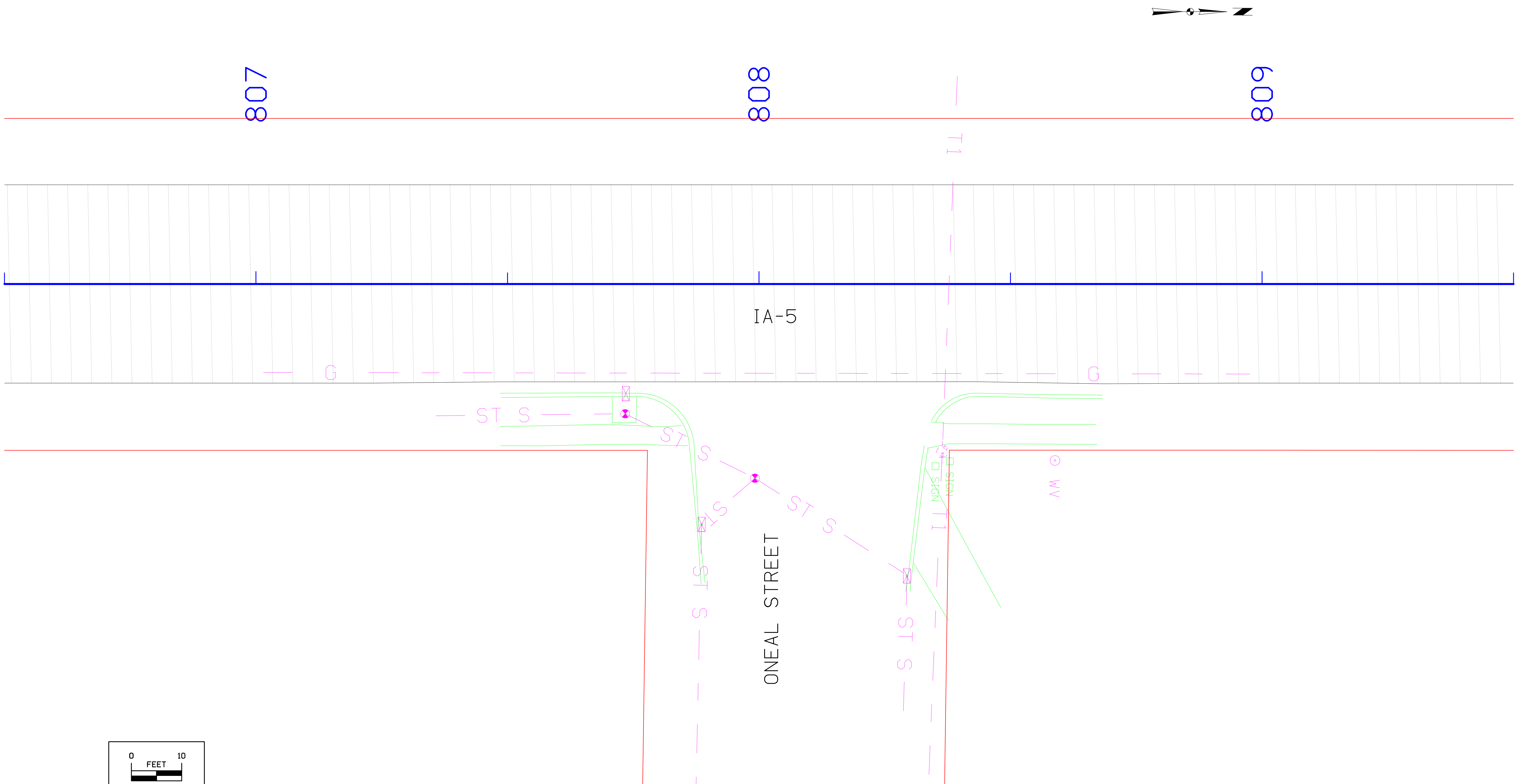
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.2

5:23:12 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn



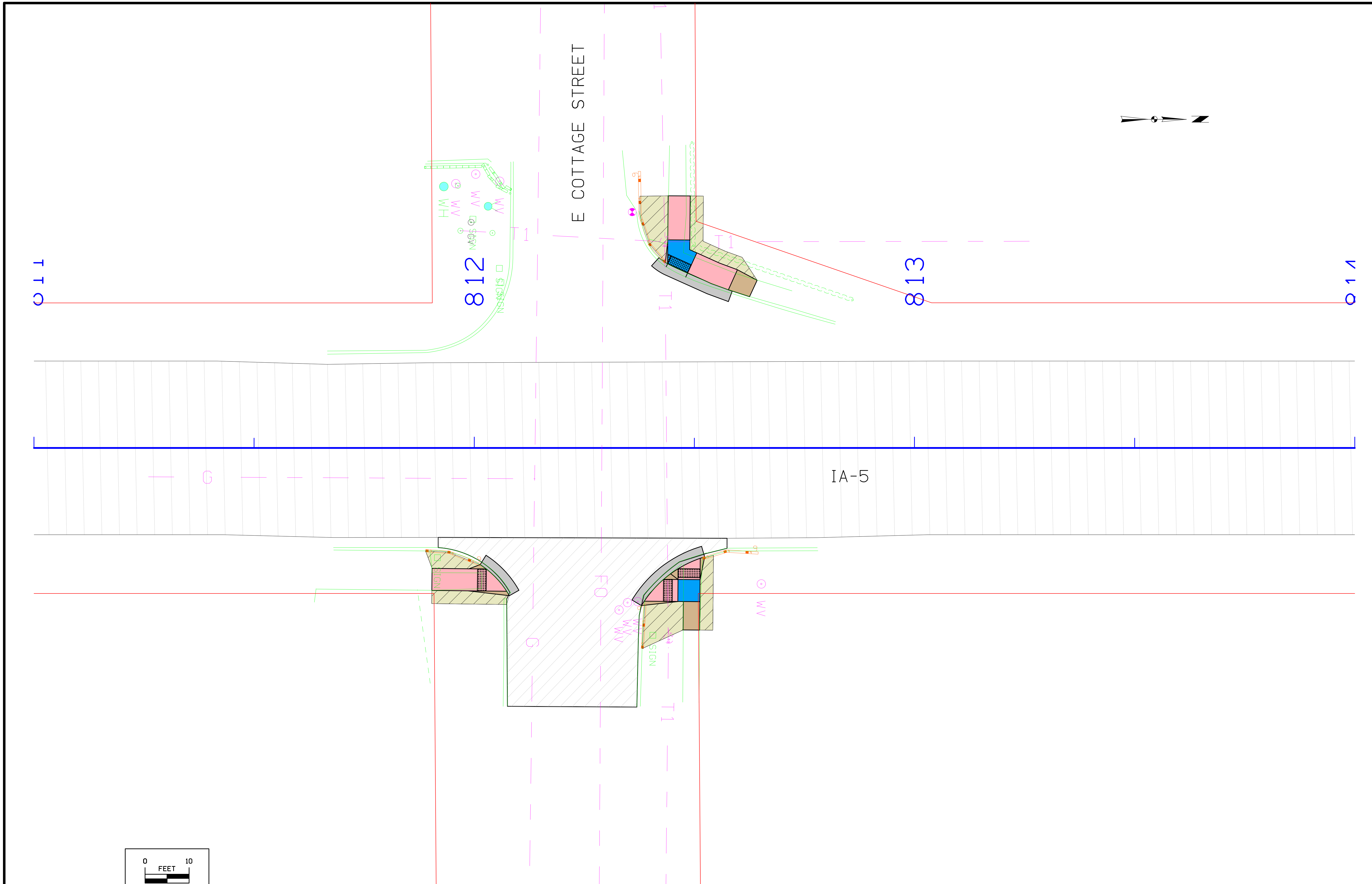
FILE NO. | ENGLISH | DESIGN TEAM IowaDOT\Schemmer | APPANOOSE COUNTY | PROJECT NUMBER STPN-005-1(76)--2J-04 | SHEET NUMBER D.3

5:23:13 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn

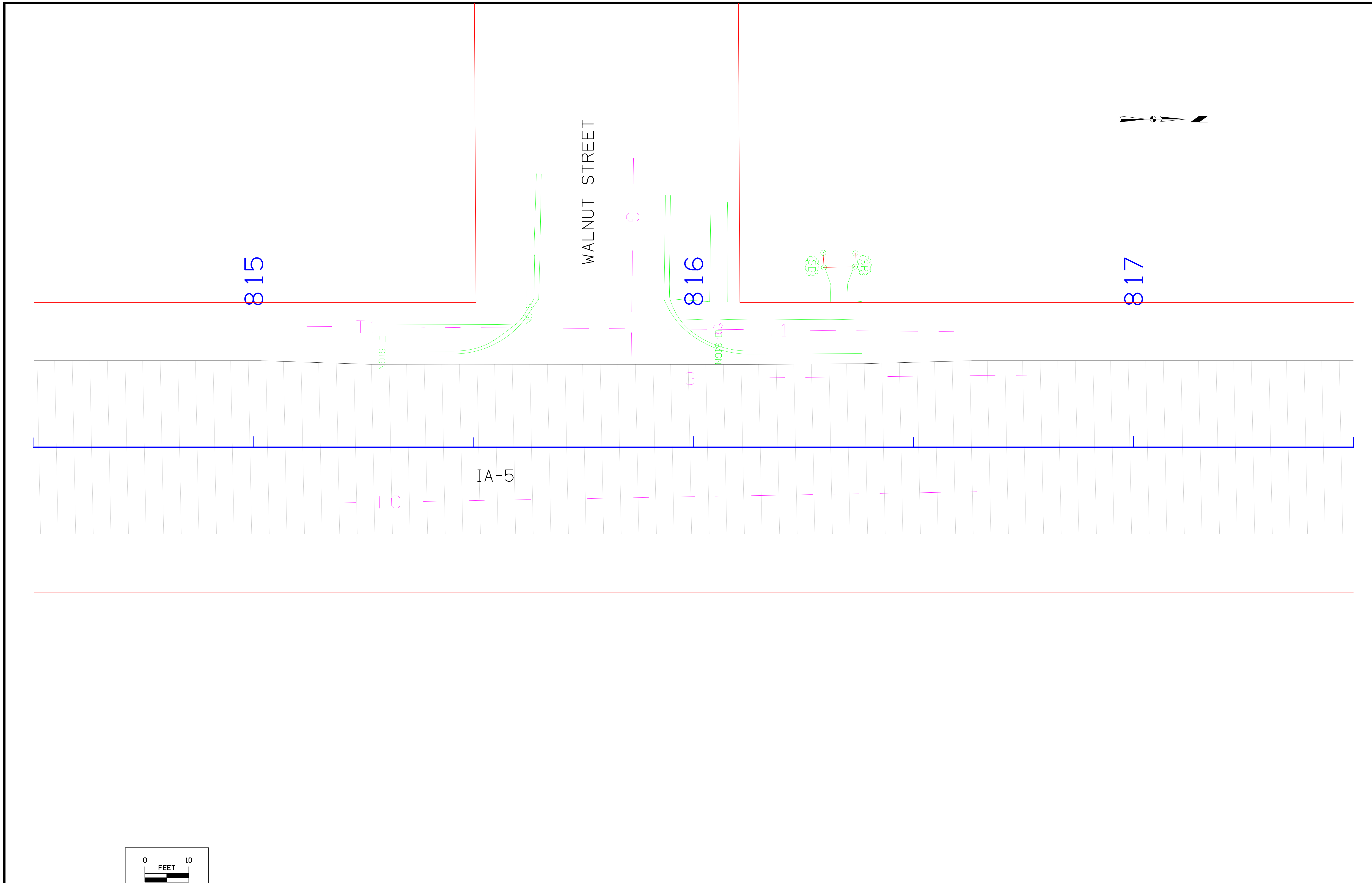


FILE NO.	ENGLISH	DESIGN TEAM **IowaDOT\Schemmer**	**APPANOOSE** COUNTY	PROJECT NUMBER	**STPN-005-1(76)--2J-04**	SHEET NUMBER	**D.4**	

5:23:14 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn

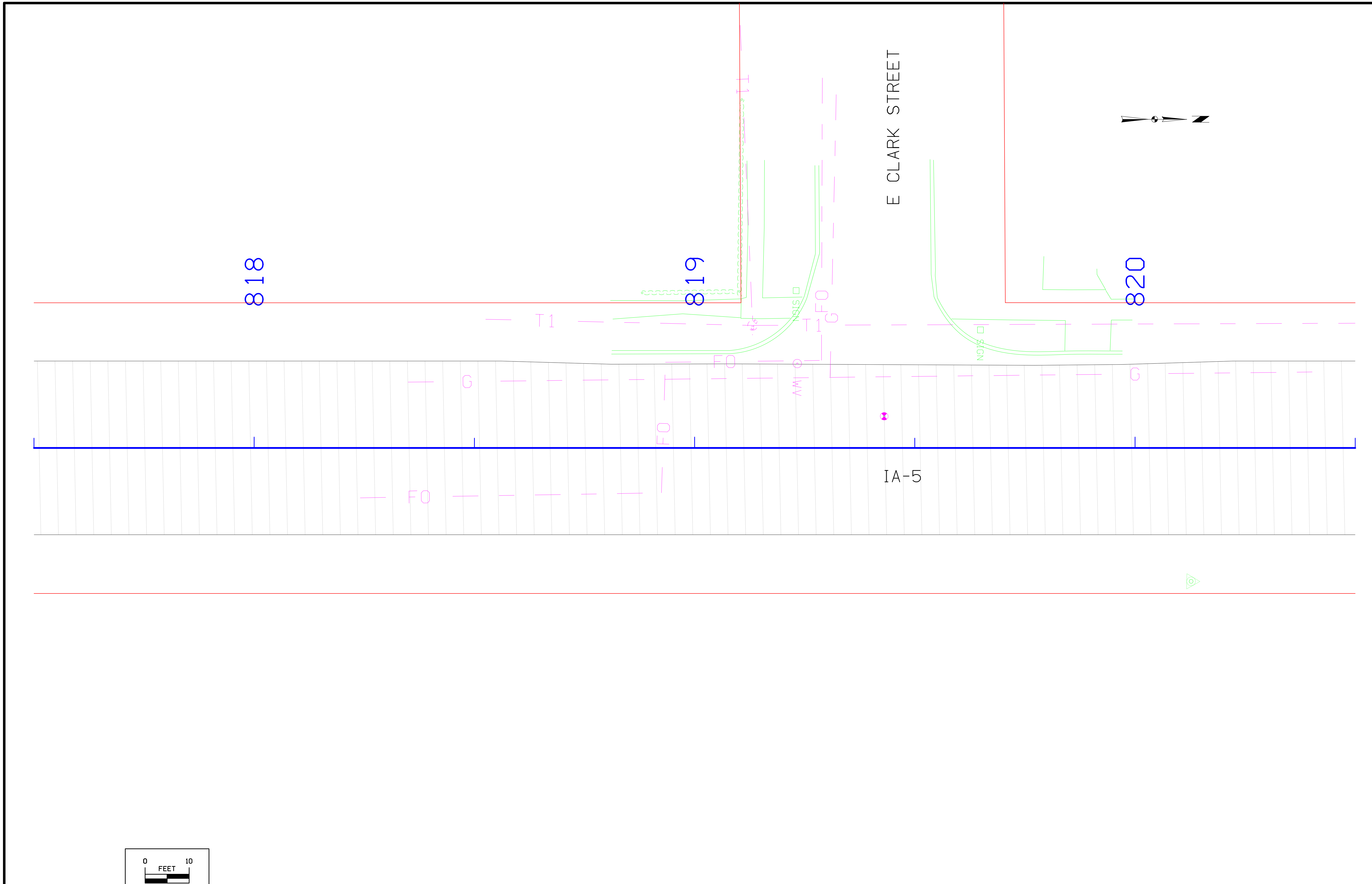


FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.5



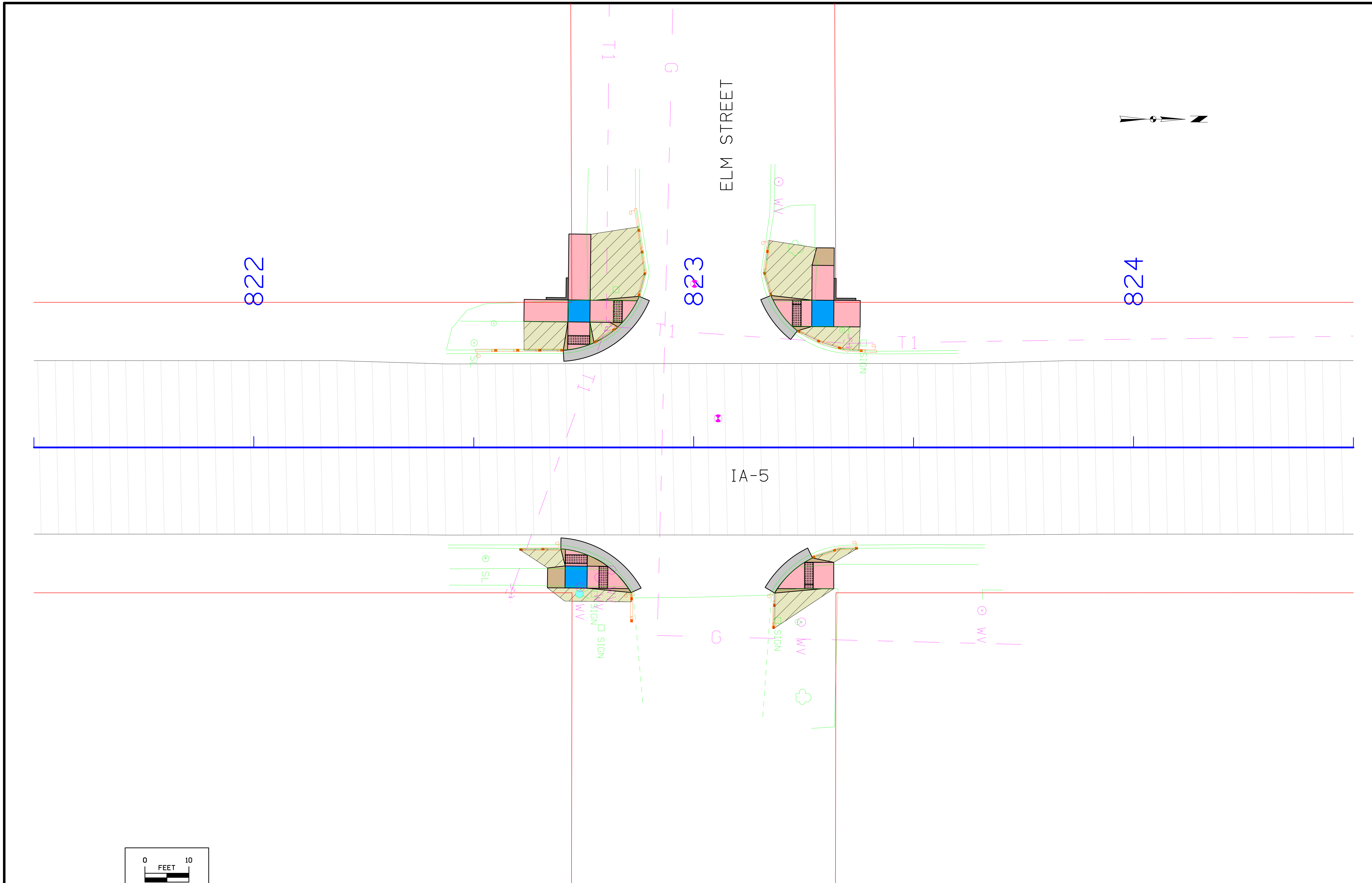
FILE NO. | ENGLISH | DESIGN TEAM IowaDOT\Schemmer | APPANOOSE COUNTY | PROJECT NUMBER STPN-005-1(76)--2J-04 | SHEET NUMBER D.6

5:23:16 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn



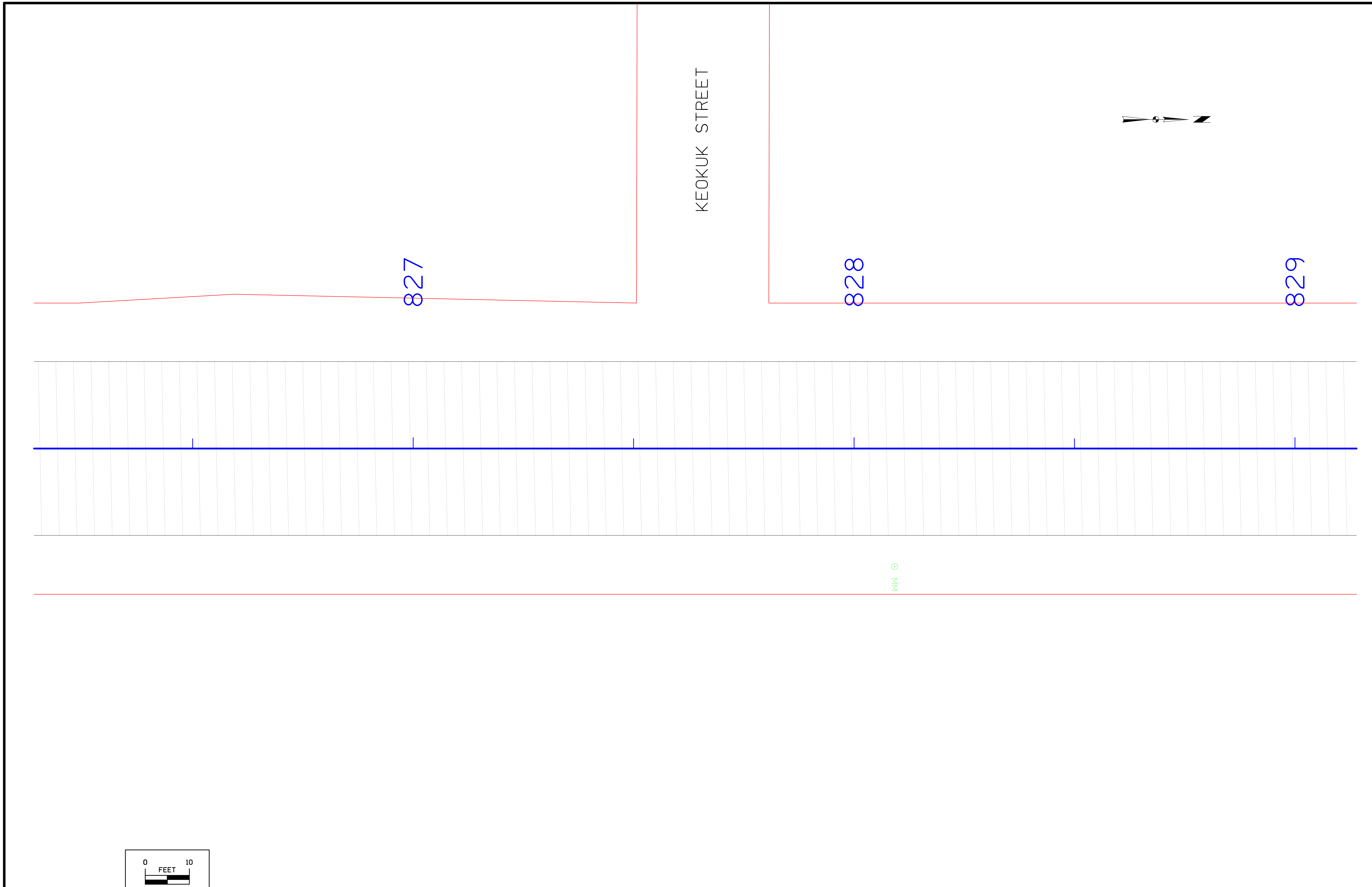
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.7

5:23:17 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn



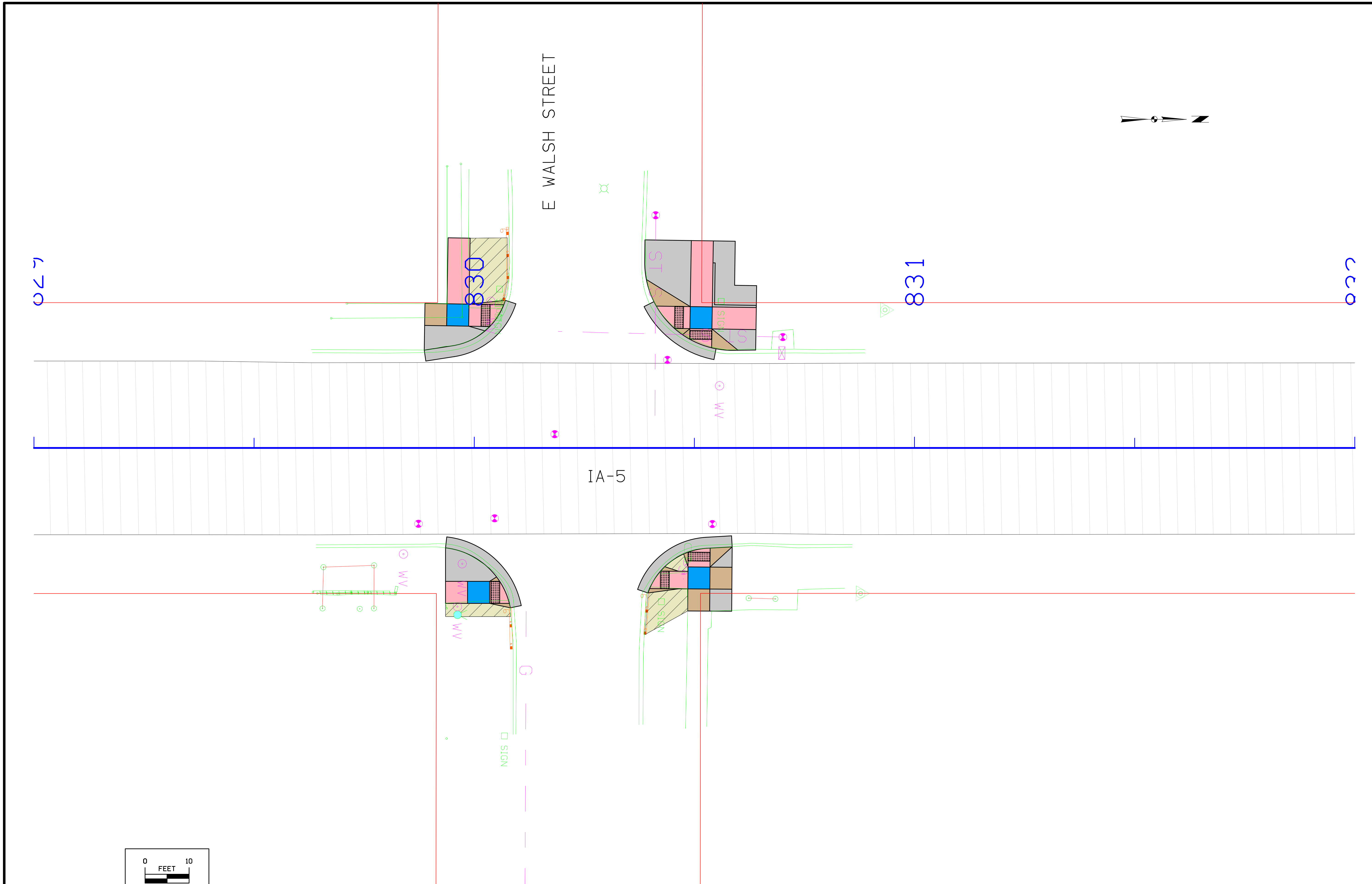
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.8

5:23:17 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn



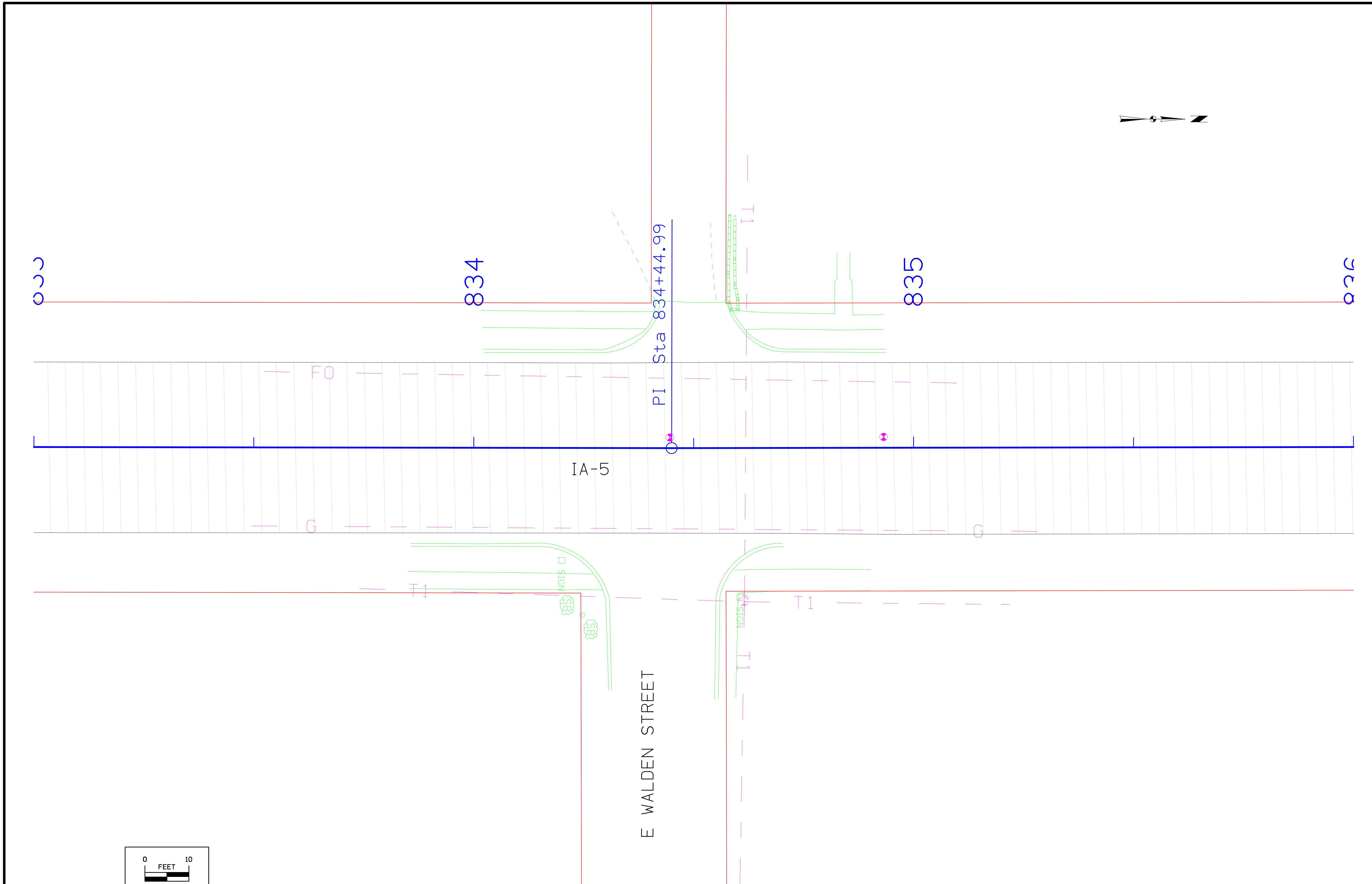
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.9

5:23:18 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn



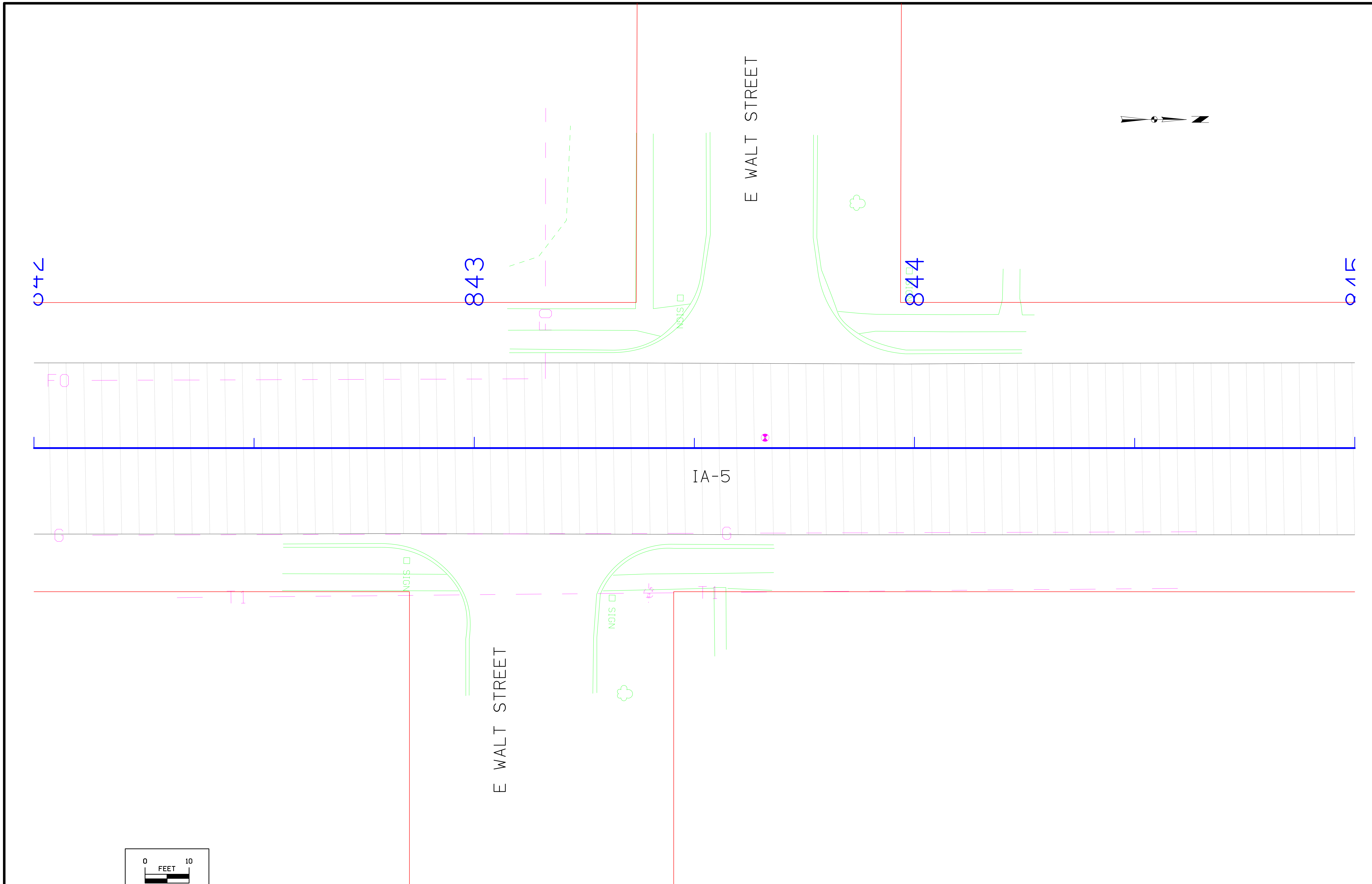
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.10

5:23:19 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn



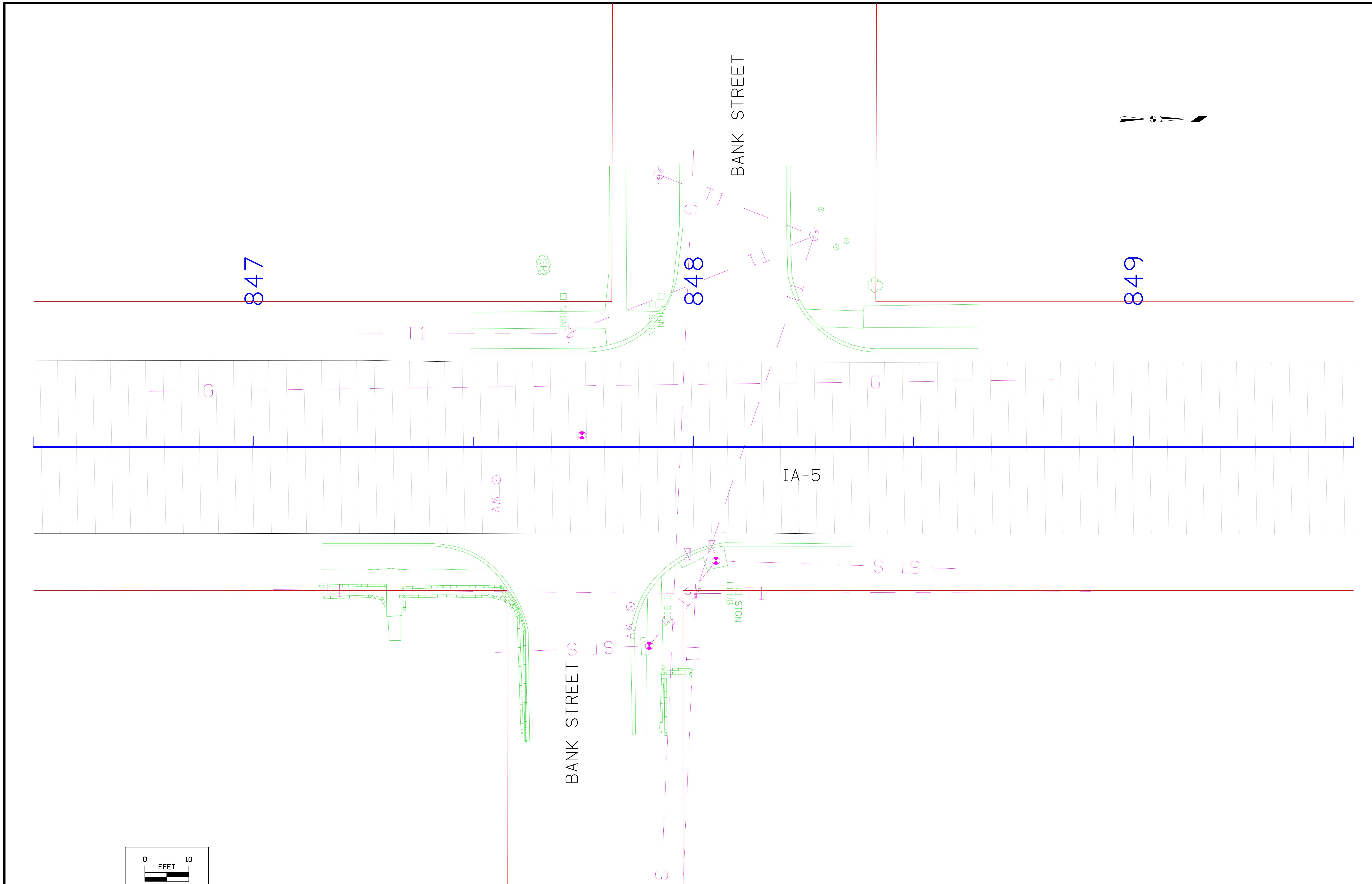
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.11


E TERRY STREET
IA-5
837
838
FO
G
T1
ST
S
WV
SIGN
0 10
FEET



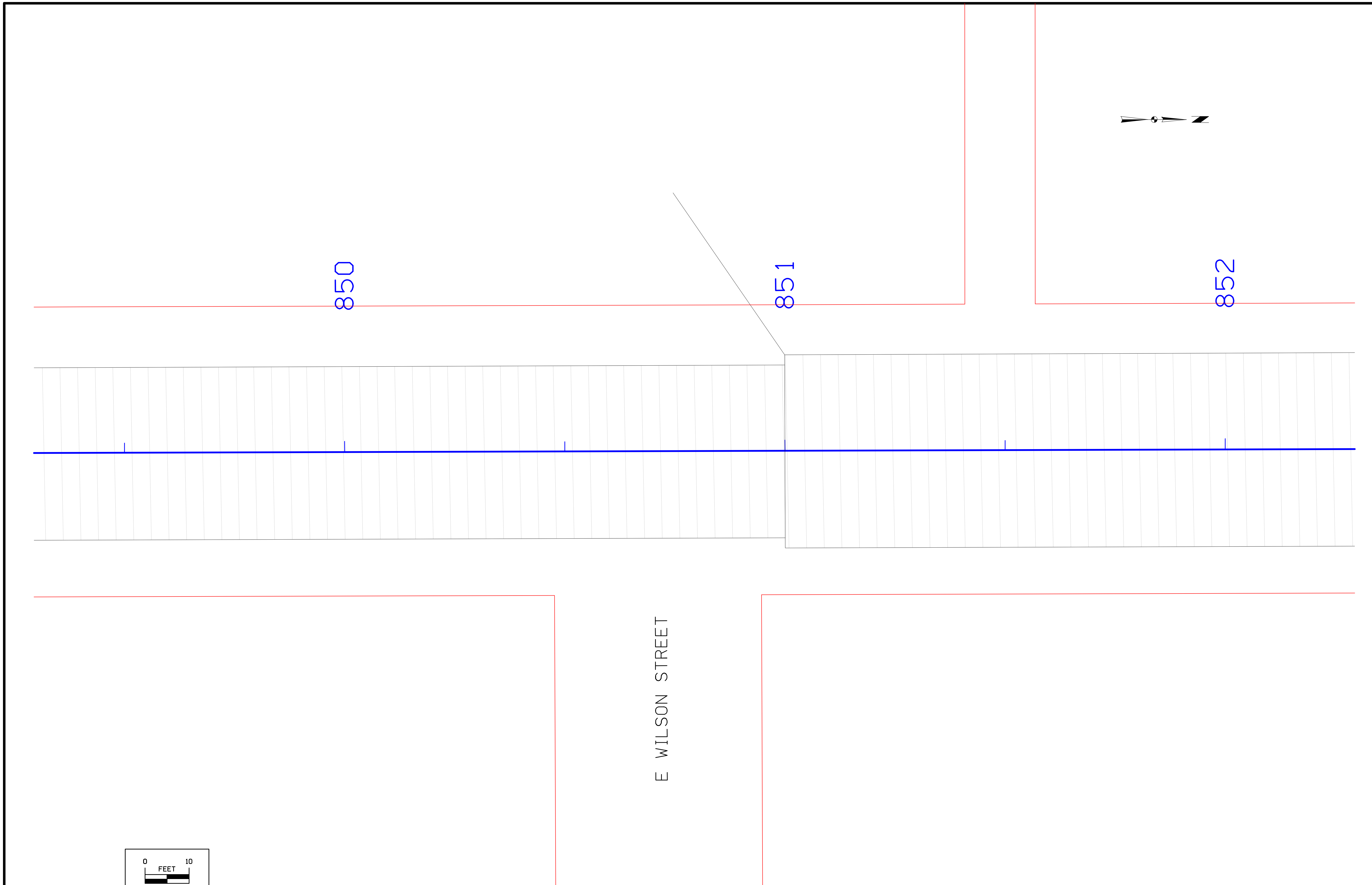
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER D.13

5:23:22 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn

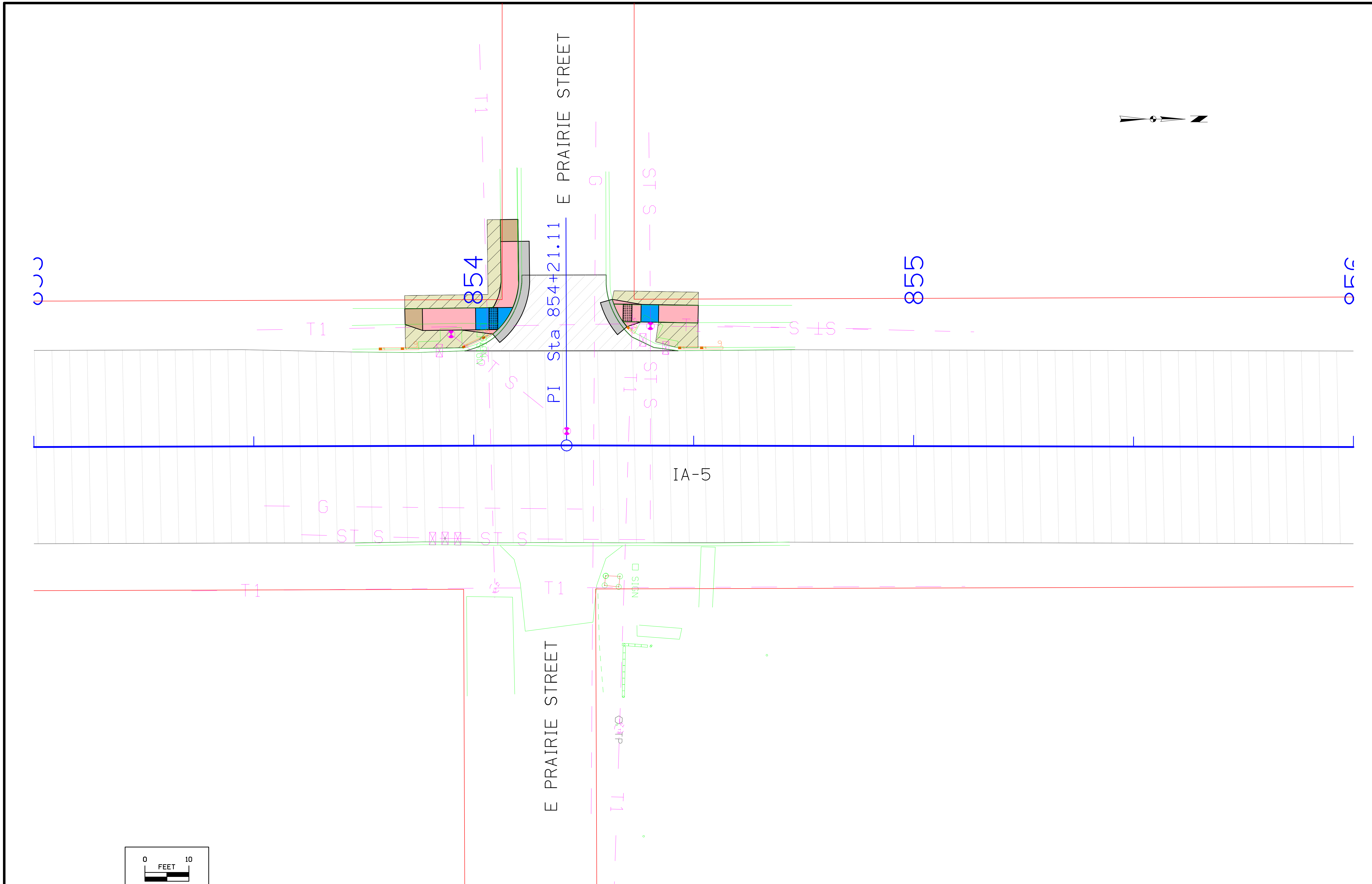


FILE NO. | ENGLISH | DESIGN TEAM **IowaDOT\Schemmer** | **APPANOOSE** COUNTY | PROJECT NUMBER **STPN-005-1(76)--2J-04** | SHEET NUMBER **D.14**

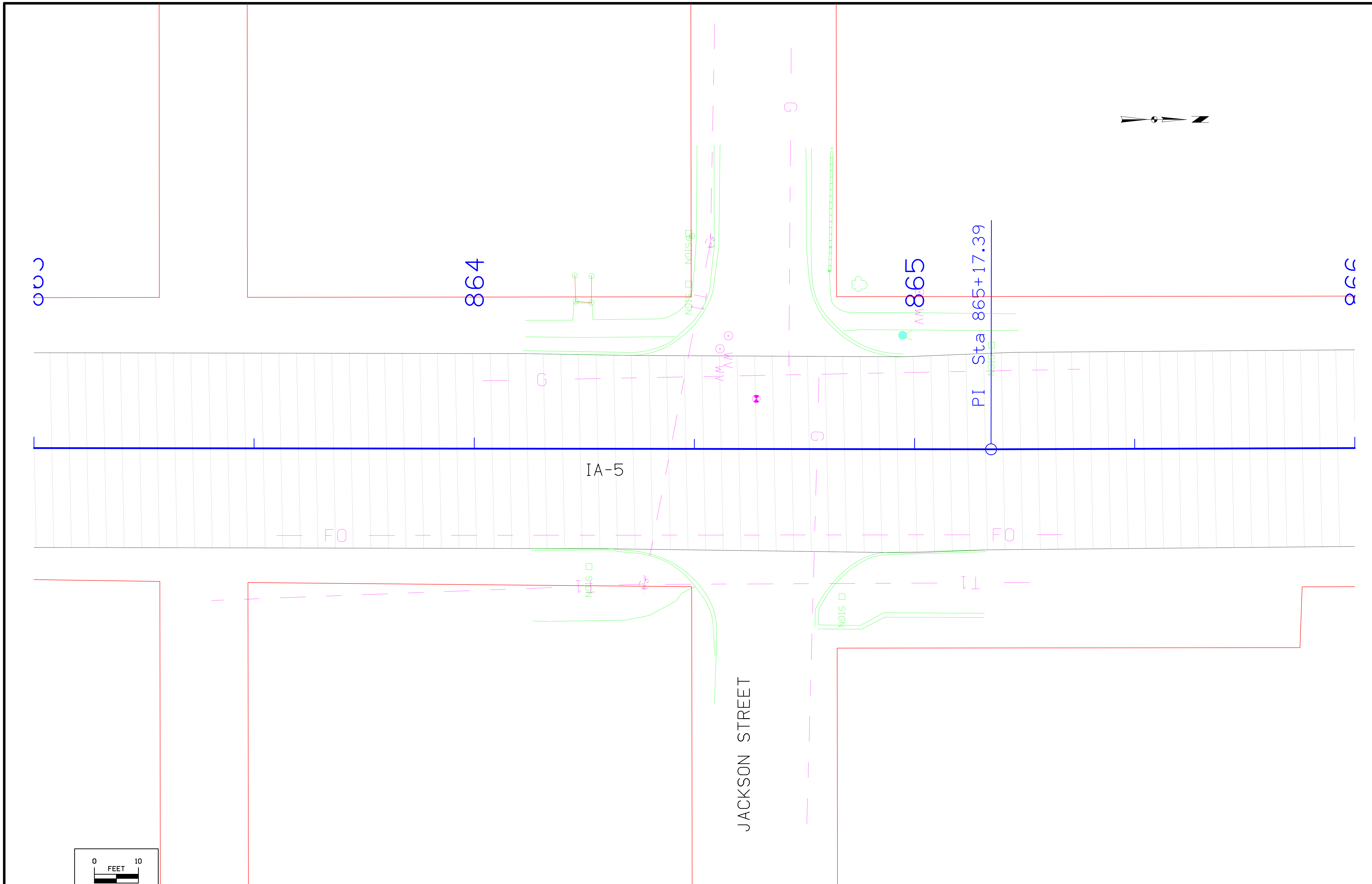
5:23:23 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn



FILE NO.	ENGLISH	DESIGN TEAM	IowaDOT\Schemmer	APPANOOSE	COUNTY	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER	D.15

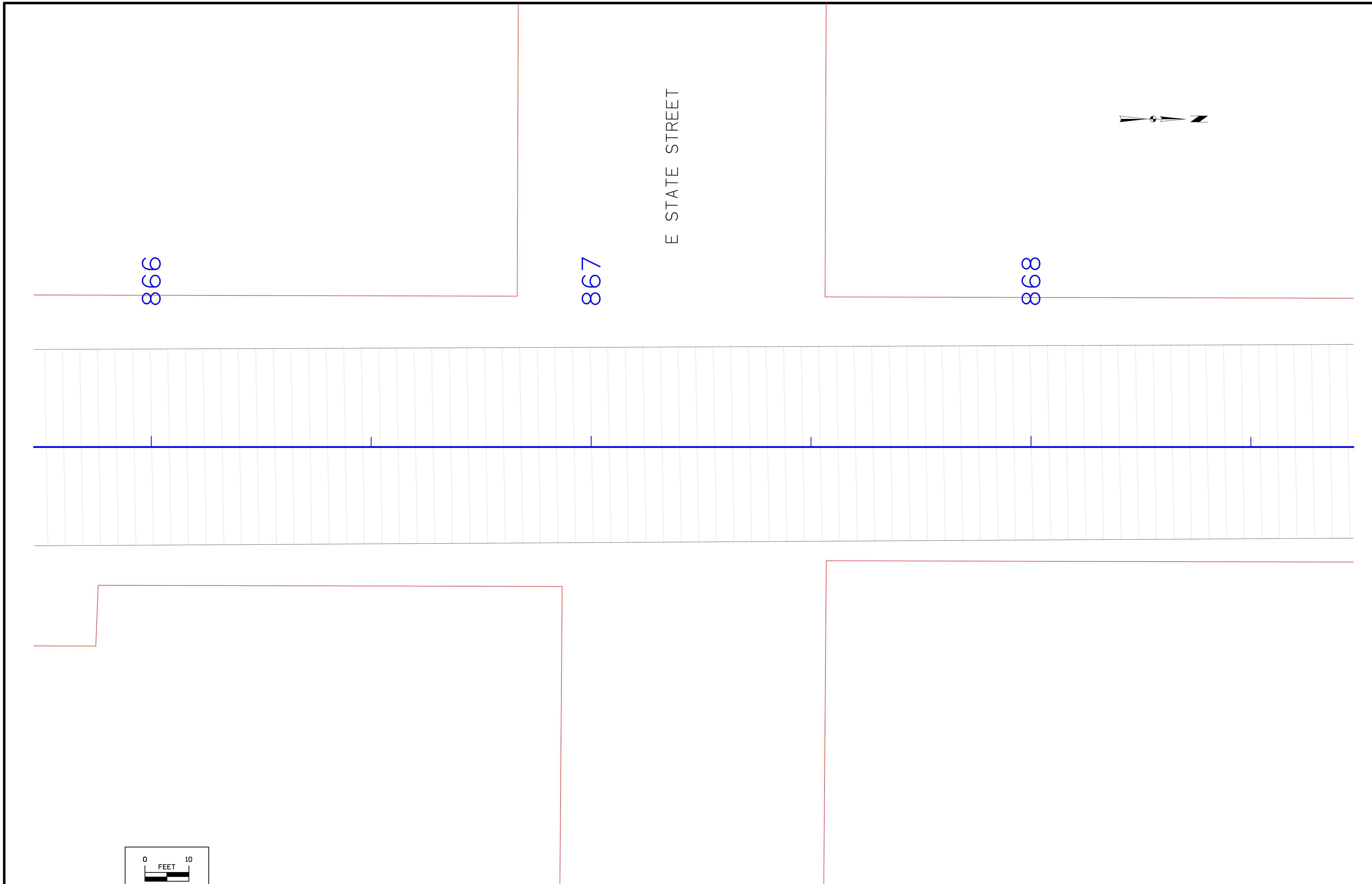


FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.16

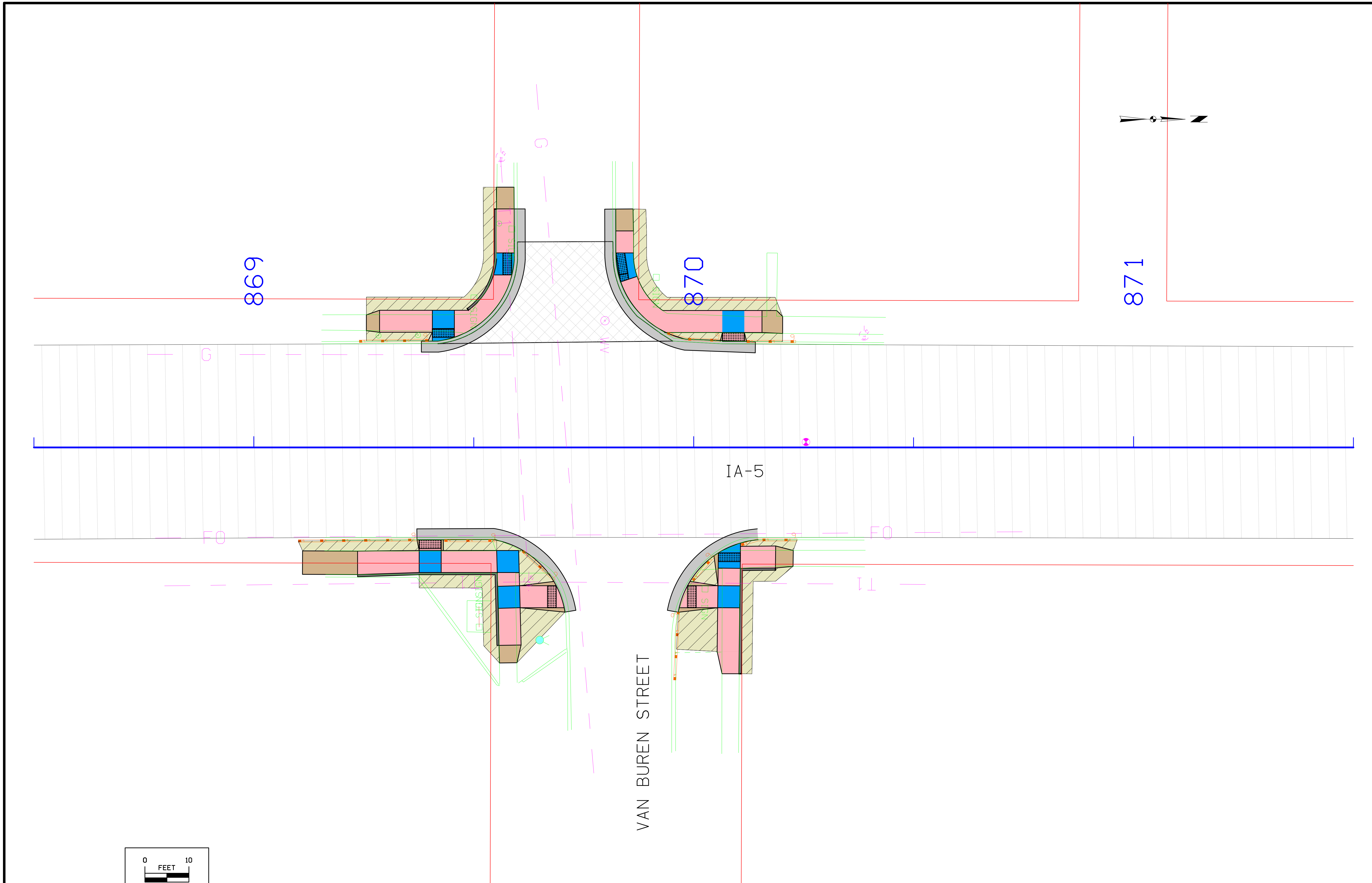


FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.17

5:23:25 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn

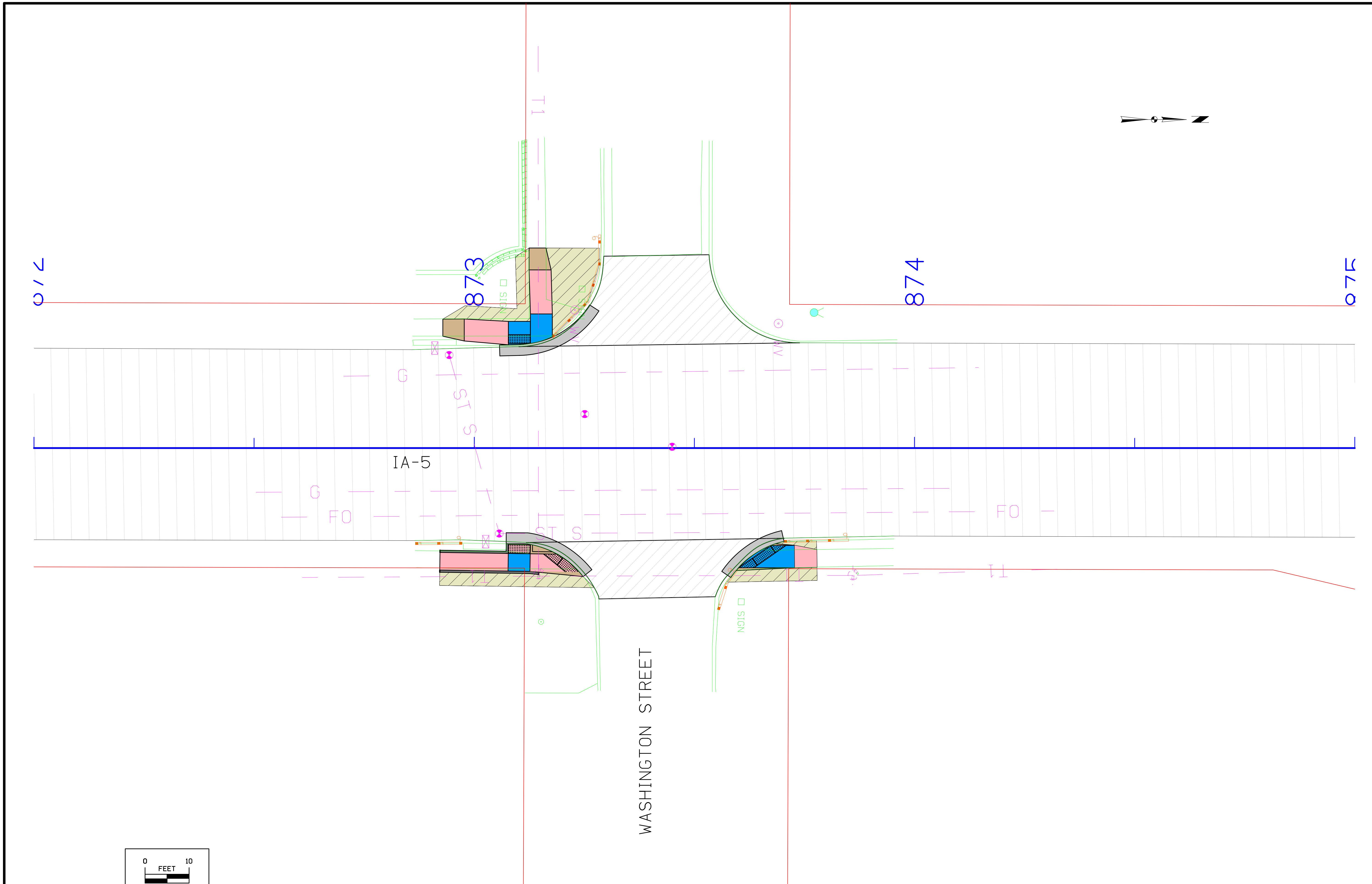


FILE NO.	ENGLISH	DESIGN TEAM **IowaDOT\Schemmer**	**APPANOOSE** COUNTY	PROJECT NUMBER **STPN-005-1(76)--2J-04**	SHEET NUMBER **D.18**



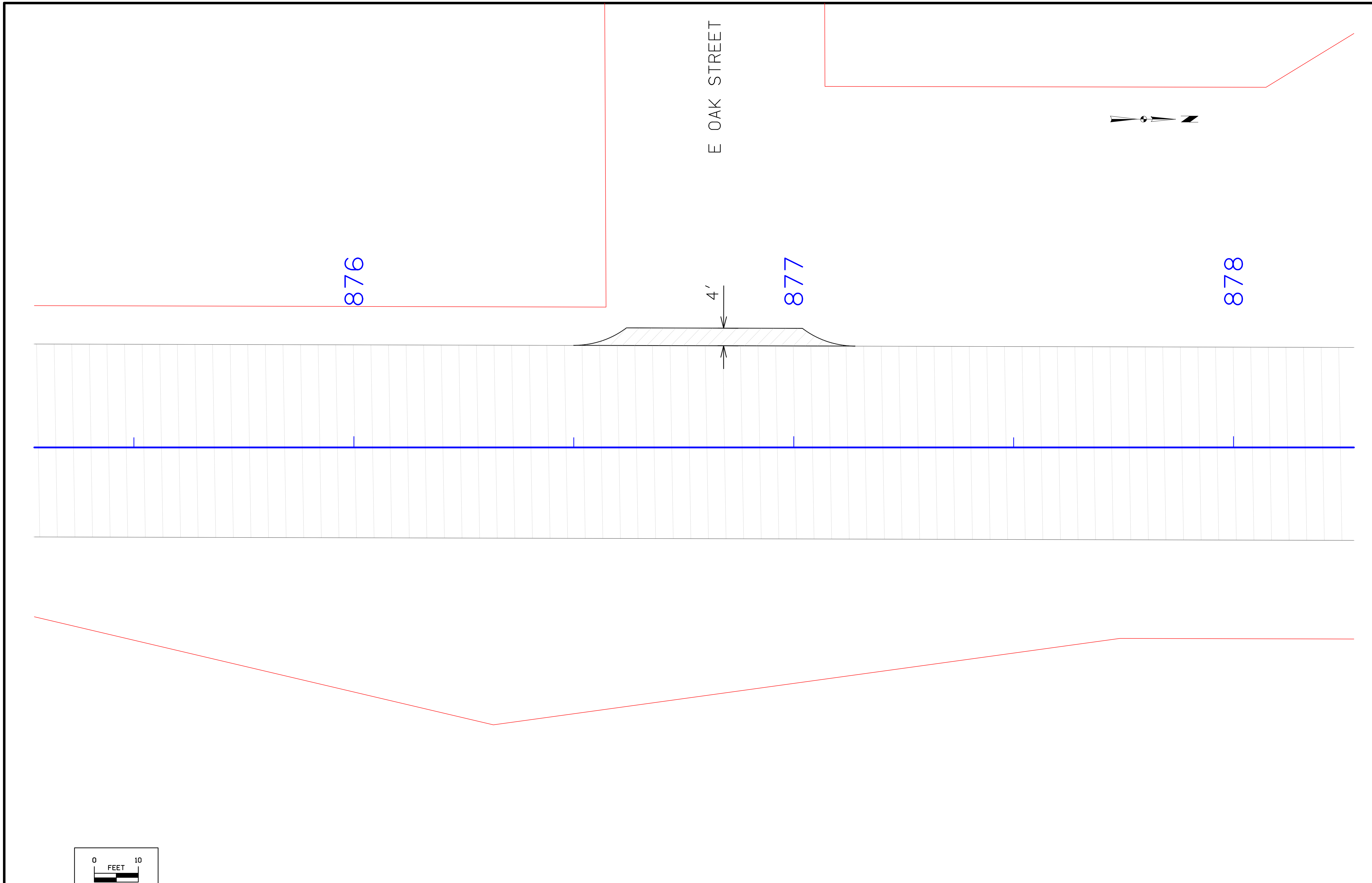
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.19

5:23:27 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn

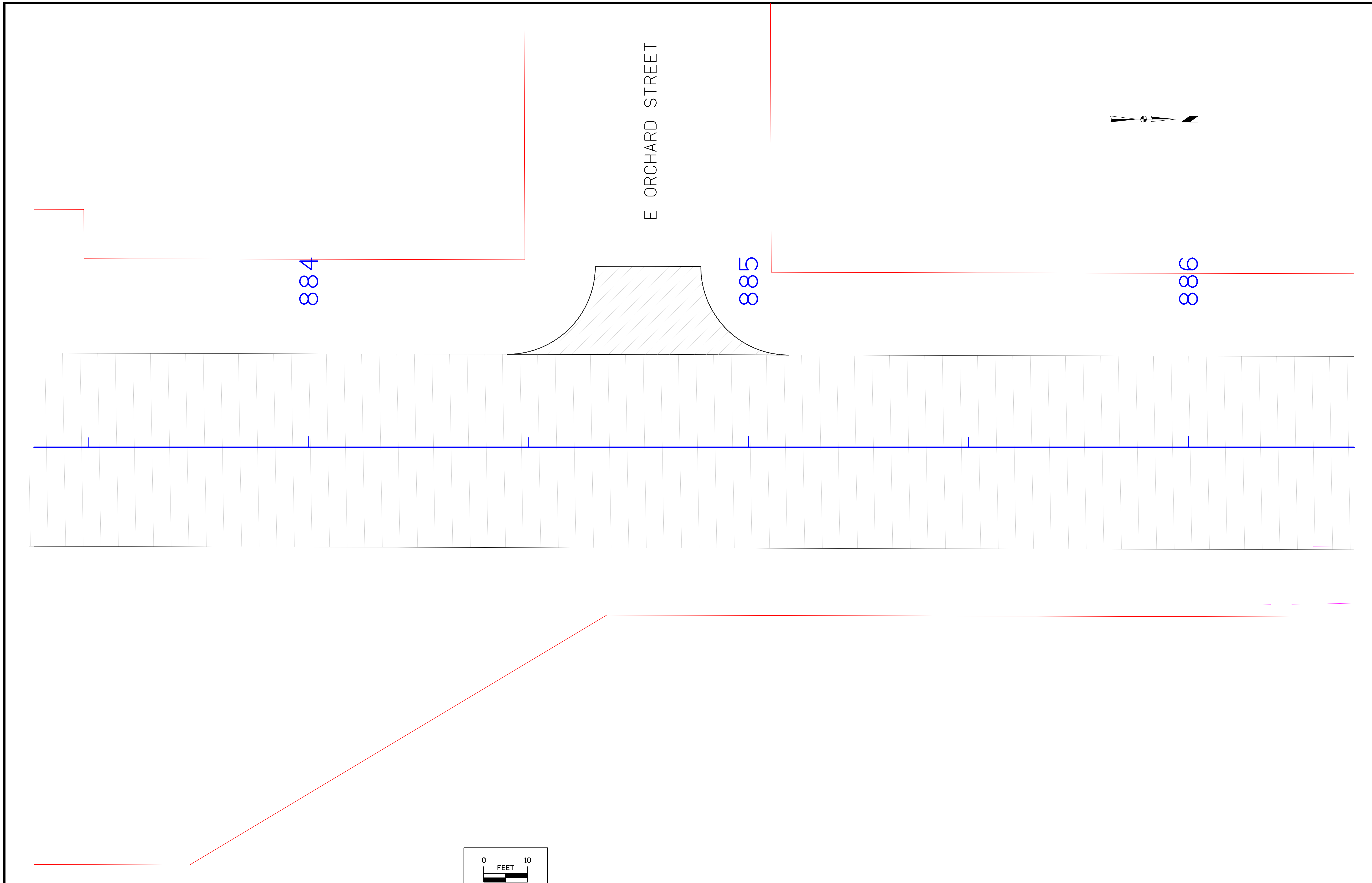


FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.20

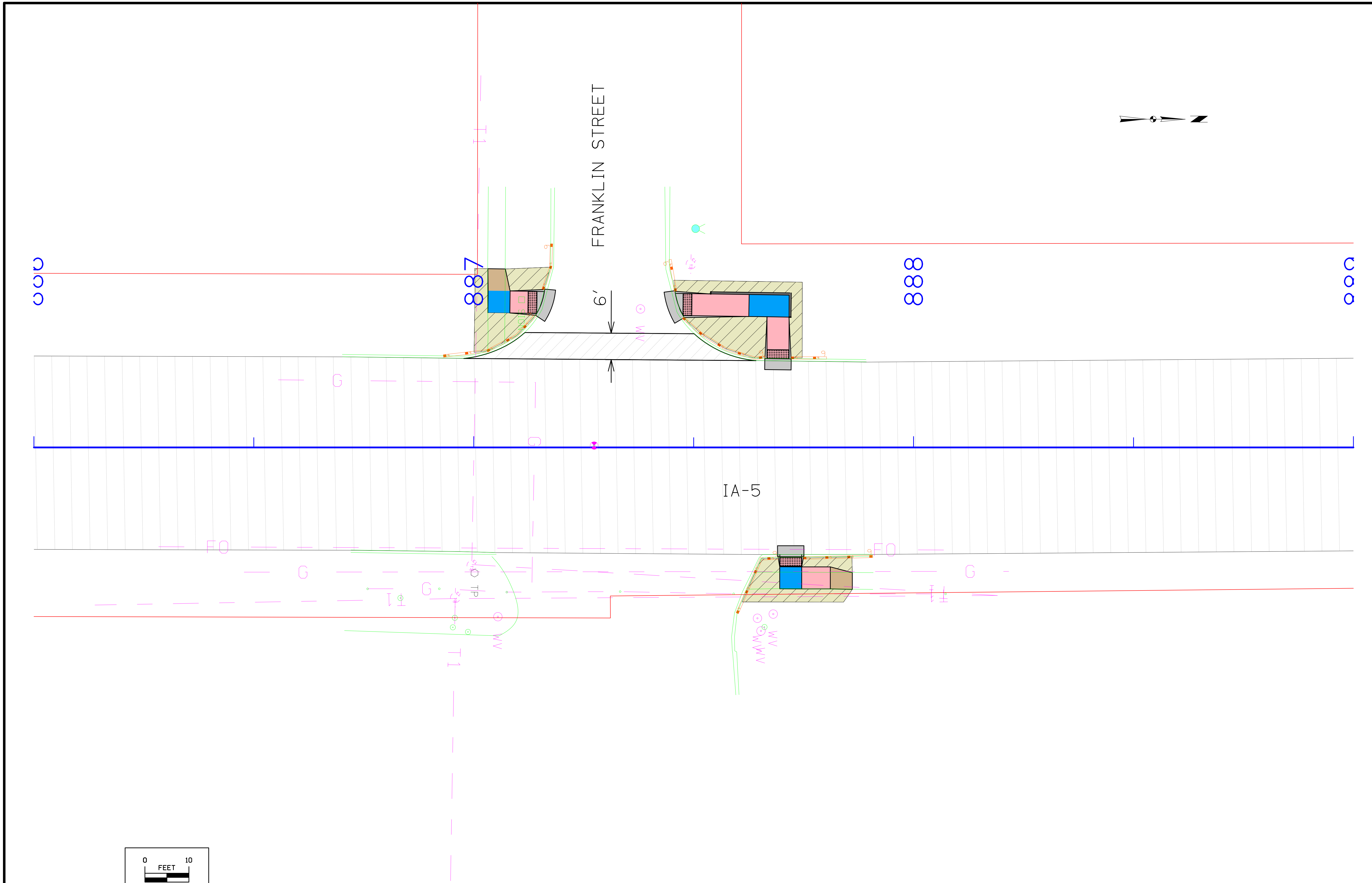
5:23:28 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn



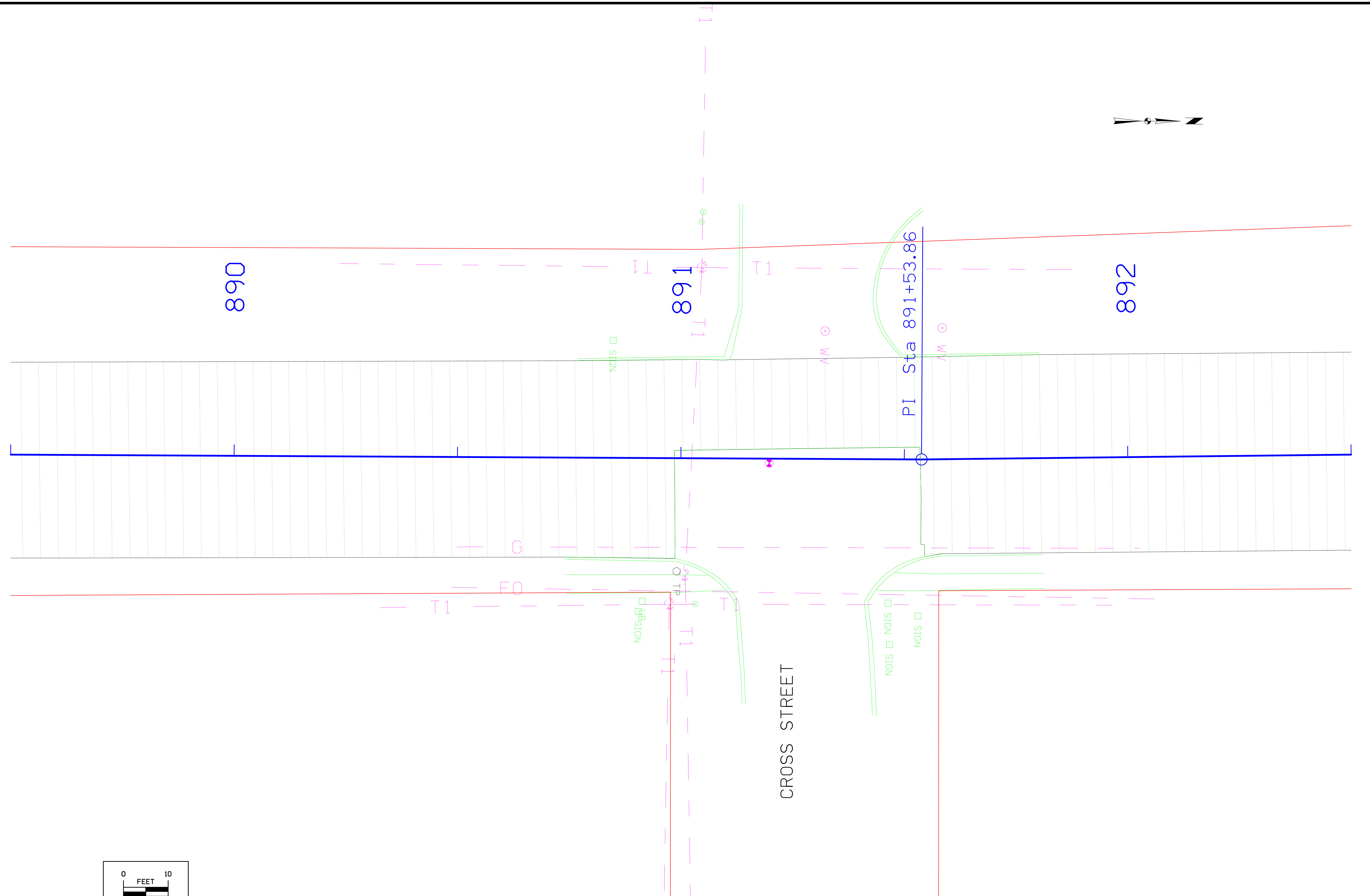
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.21



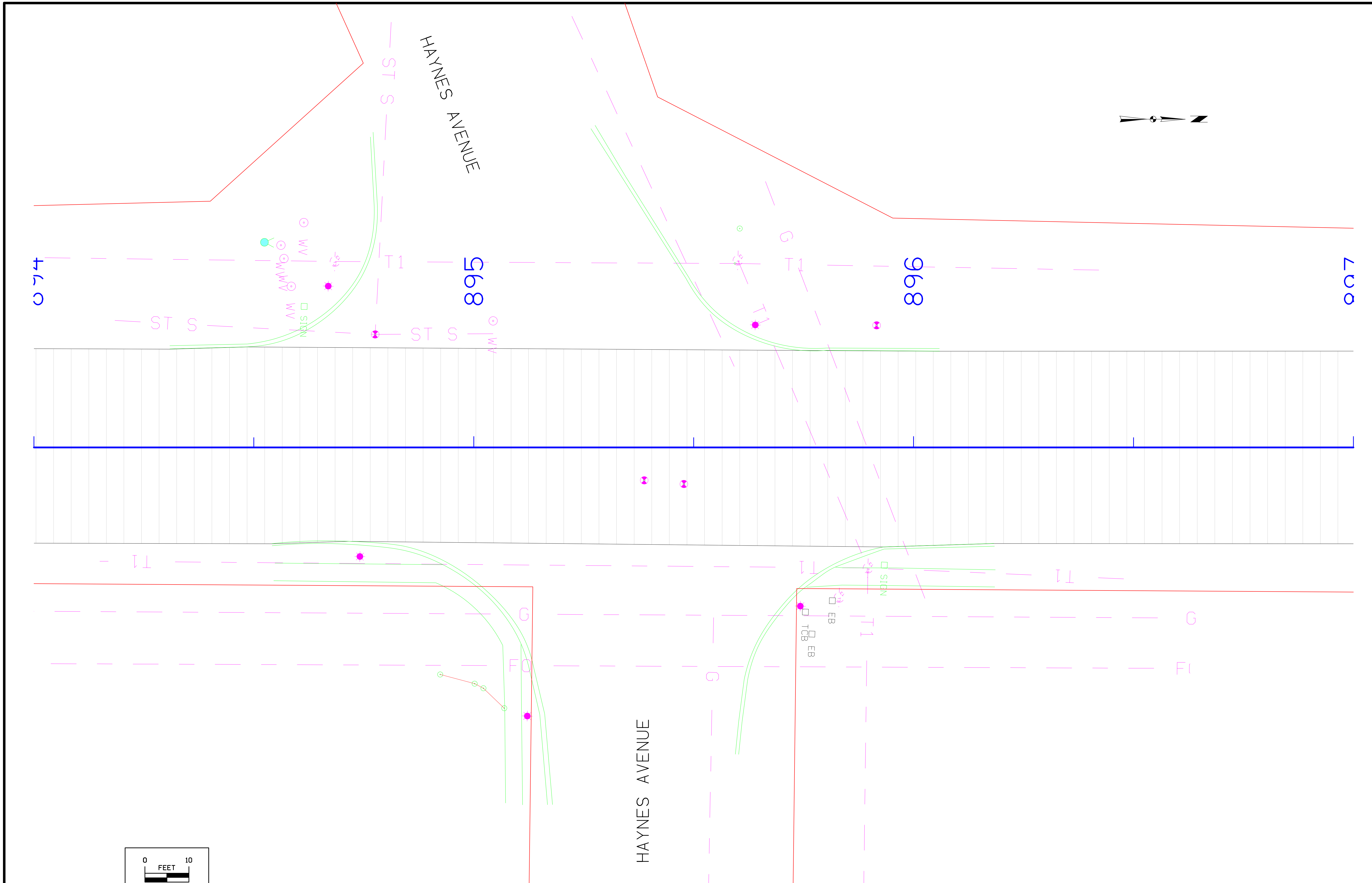
FILE NO.	ENGLISH	DESIGN TEAM **IowaDOT\Schemmer**	**APPANOOSE** COUNTY	PROJECT NUMBER **STPN-005-1(76)--2J-04**	SHEET NUMBER **D.22**



FRANKLIN STREET
6'
IA-5
0 FEET 10



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.24



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER D.25

5:23:32 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_D02.dgn

Survey Information

Appanoose County
STPN-005 1(77) --2J-04
STPN-005 1 (76) --2J-04
Road Design Including ADA, Row and T01 Co Rd J46 to NCL Centerville
PIN 19-04-005-010

General Information

Measurement units are in US survey feet. This survey is for proposed ADA Design of County Road J46 to NCL Centerville. Project control information was established by Schemmer Associates Inc. The project is a Topographic survey of area for the use in design for ADA ramps and TOI. This survey request was for County Road J46 to NCL Centerville.

Vertical Control

Vertical datum for this survey is NAVD88 (Computed using GEOID 12B). Project Point #99 was established observing a 60 second observation in RTK from nearby Iowa RTN reference stations. Additional benchmarks were established with a level loop relative to point #99. The loop error met 3rd order accuracy and the error was distributed proportionately among the project benchmarks.

Horizontal Control

The project coordinate system for this survey is LDP Regional Coordinate System Zone 12. This survey is relative to the LDP Regional Coordinate System Zone 12. Coordinates were established by observing 60 second observation on Project Point #99. Additional control points were placed throughout the project by using LDP Regional Coordinate System Zone 12 with an observation at each point for 60 seconds. Axis scale factor for LDP Zone 12 is 1.000037. Scale factor for use of total station should be 1.

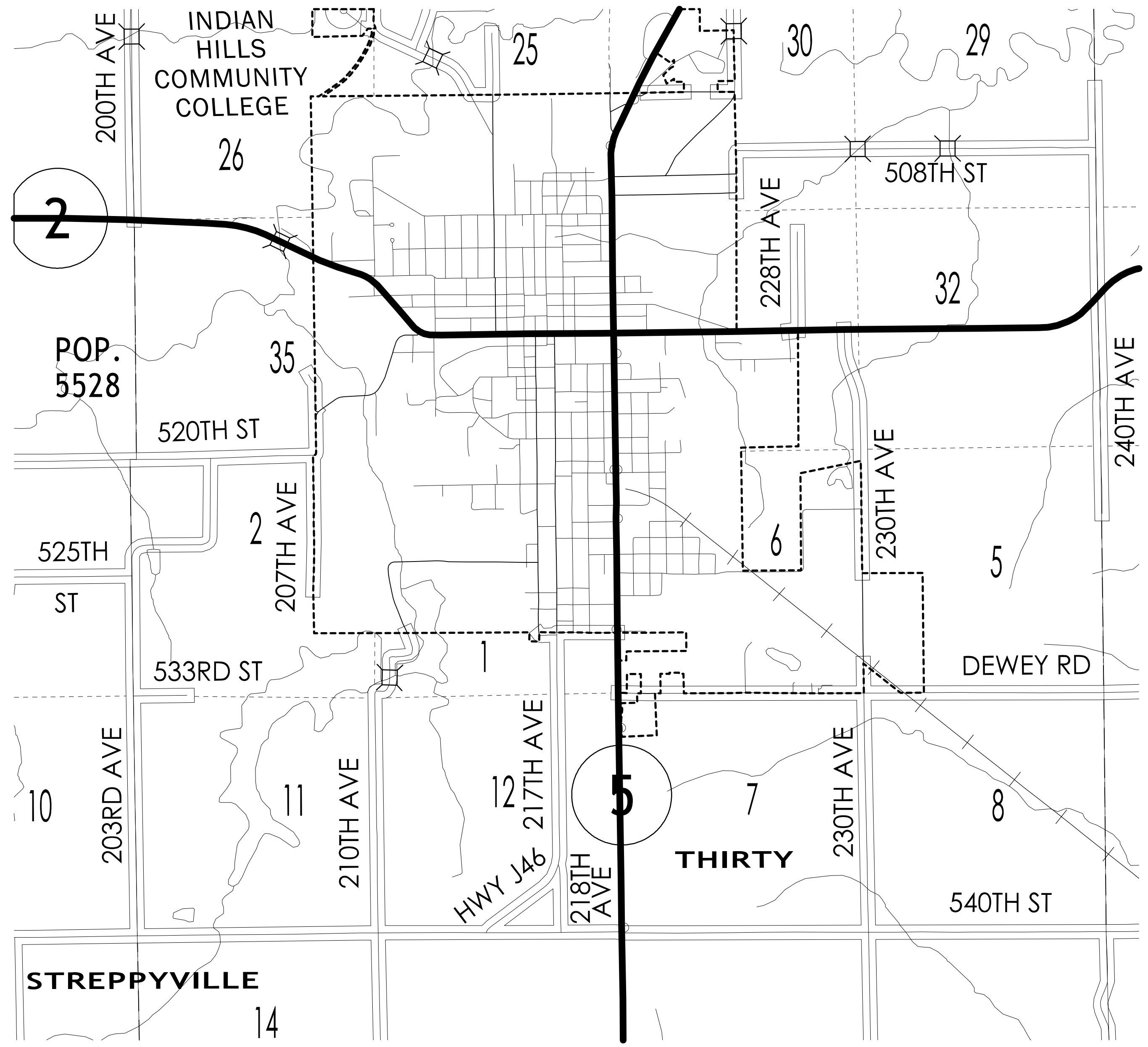
CP Control Point
EP Edge of Paved Roads (ML or SR)
ENU Edge Unpaved Entrance & Parking
C Centerline BL of Road (ML or SR)
MH Utility Access (Manhole)
TPC Telephone Pole Co. 3
TA Tower Anchor
SI Sign
GR Ground Shot
MIS Miscellaneous
BL Topo Breakline
ROW Right of Way Mark
EG Edge of Gravel Road
TPD Telephone Pedestal
FHD Fire Hydrants
PIP Pipe Culvert
SL Speed Limit Sign
RET Retaining Walls
ENP Edge Paved Entrance & Park Lot
WV Water Valve
UV Underground Utility Vault
FO1D Fiber Optic Co. 1 - Quality D
RIP Rip-Rap
IN Storm Sewer Intake
TDC Tree Deciduous
CU Back of Curb
GU Gutter In Front of Curb
CON Concrete or A/C Slab
BLD Building or Foundation
LC Lot Corner
EL1D Electric Line Co. 1 - Quality D
INB Storm Sewer Beehive Intake
SWK Sidewalk
FCL Chain Link and Security Fence
FLG Flag Poles
SHR Shrub
WHU RV Water Hook Up
WEL Well
SNP Unpaved Shoulder
OUT Tile Outlet
HDG Hedge Row
LUM Luminaire
STP Stump
TLNL Tree Line Left
SP Stream Profile
TLNR Tree Line Right
TEV Evergeen Tree
MM Mile Marker Post
CUL Culvert
TVP TV Pedestal
GV Gas Valve
ENT Centerline BL of Entrance
TFR Tree Fruit
TL1D Telephone Line Co. 1 - Quality D
WL1D Water Line Co. 1 - Quality D
WHD Water Hydrant
S Soil Sampling Site (Wetlands)
WC Wild Card (Misc. Field Shot)
GL1D Gas Line Co. 1 - Quality D
TCB Traffic Signal Box
EB Electrical Box
TSG Traffic Signal
UE Utility Elevation

CONTROL POINT VICINITY MAP

This map is a guide to the vicinity of the primary project control points

Primary control is for use with RTK base stations and for RTN validation.

Future surveys will use primary project control to establish temporary control as needed for construction or other surveying applications.



HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 12

Coordinate listing from next sheet will be used with IaRTN for monument recovery. No other reference ties are given.

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER G.2

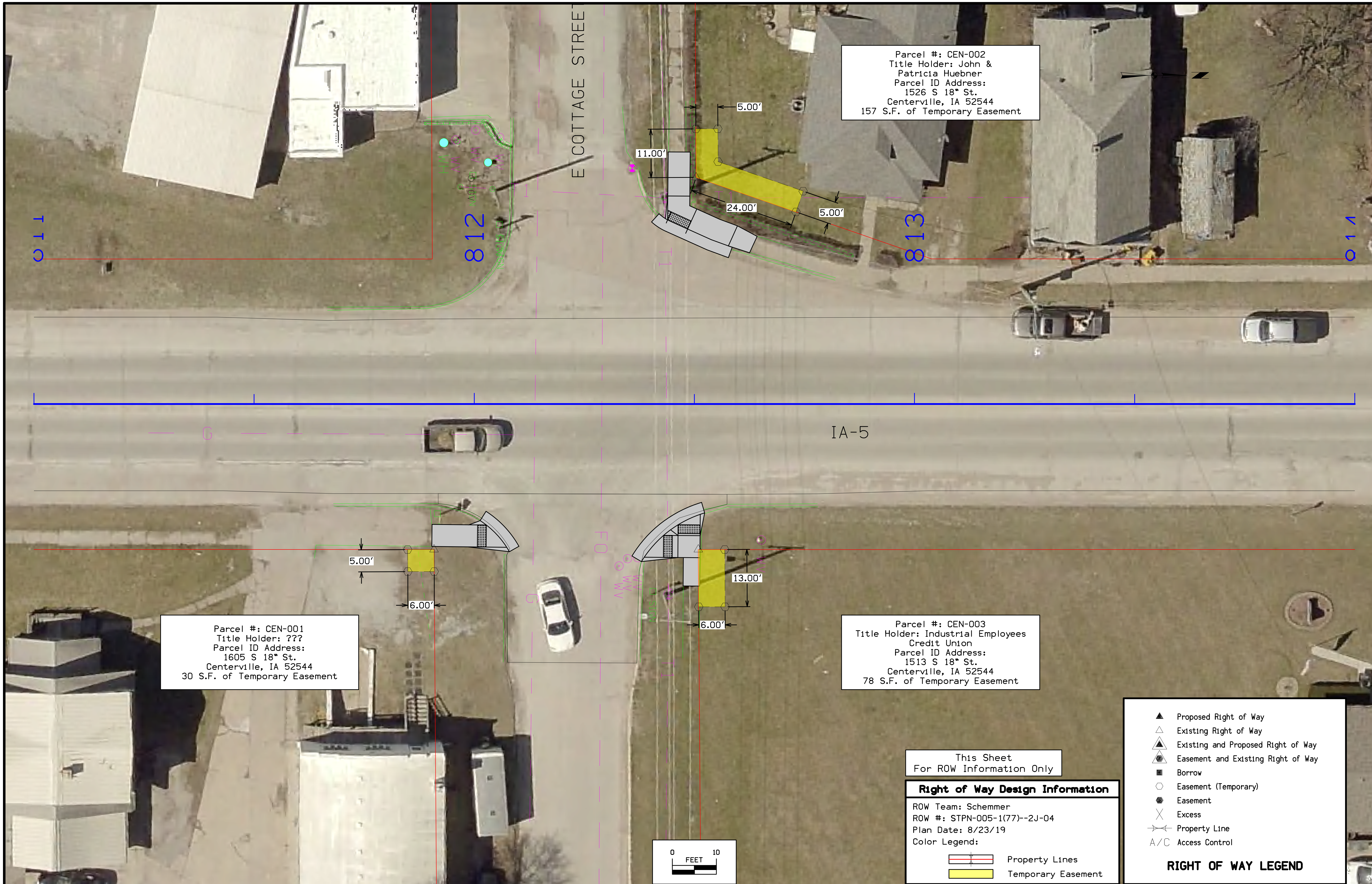
HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

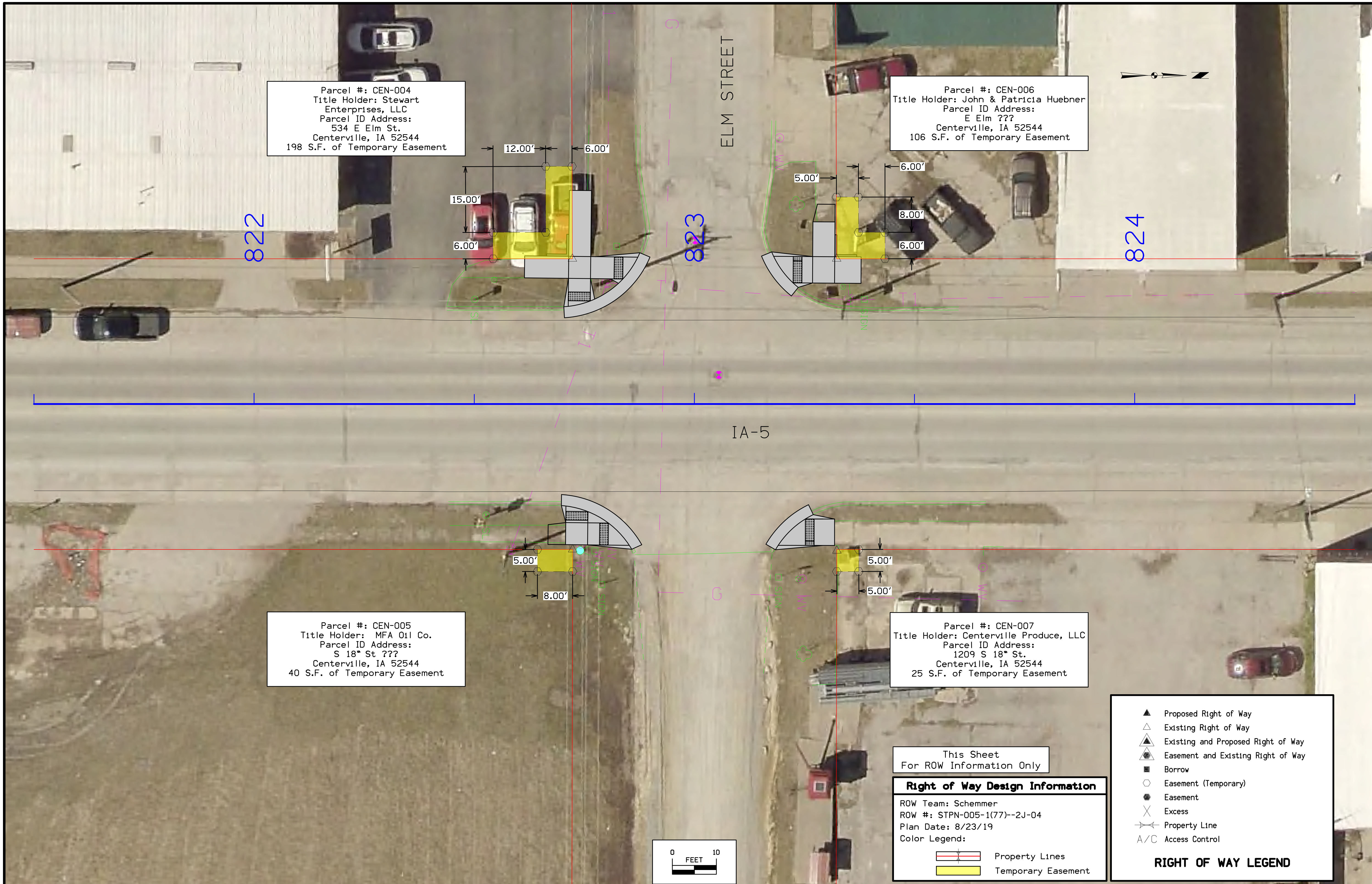
Ia. Regional Coordinate System Zone 12

Point Name	Northing	Easting	Elevation	Feature Definition
91	6131129.438	22744542.751	1008.60	CP 5/8" REBAR NE COR WALSH ST & HWY 5
92	6131134.260	22744478.326	1009.15	CP MAG NAIL NW COR WALSH ST & HWY 5
93	6139290.786	22744911.433	980.62	CP 5/8' REBAR
94	6138266.586	22744395.330	990.55	CP 5/8' REBAR IN FRNT OF SONIC
95	6133690.837	22744527.032	971.57	CP 5/8" REBAR
96	6130054.473	22744552.242	1014.75	CP 5/8" REBAR
97	6127607.538	22744523.142	1021.26	CP 5/8" REBAR NW COR GREEN ST & HWY 5
98	6125440.245	22744621.284	1010.52	CP 5/8" REBAR IN TURN LANE ON E SIDE OF HWY 5
99	6121039.402	22744693.927	1021.72	CP 5/8" REBAR



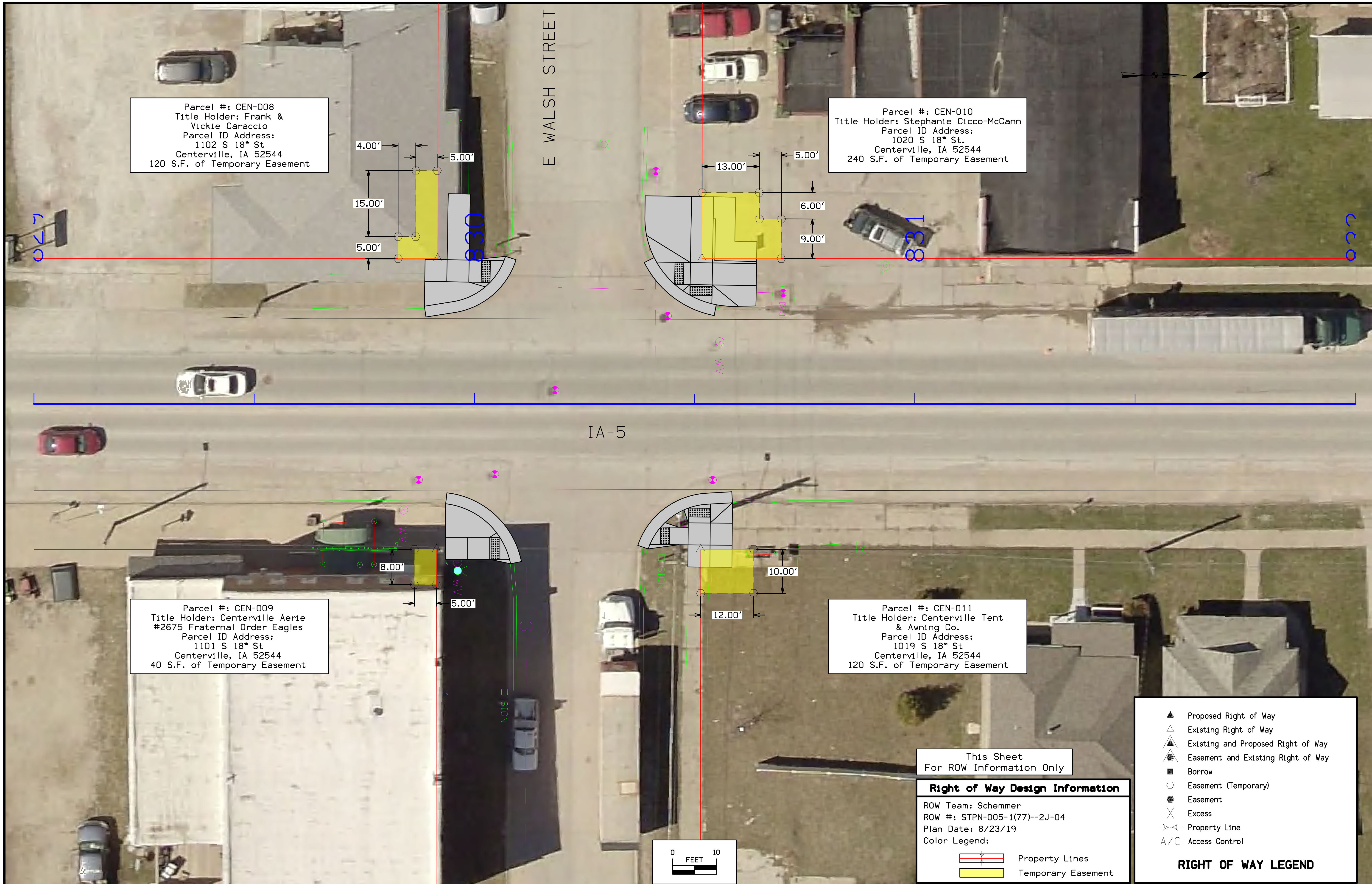
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER H.1

5:24:22 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_H01



FILE NO.	ENGLISH	DESIGN TEAM **IowaDOT\Schemmer**	**APPANOOSE** COUNTY	PROJECT NUMBER **STPN-005-1(76)--2J-04**	SHEET NUMBER **H.2**

5:24:29 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_H01



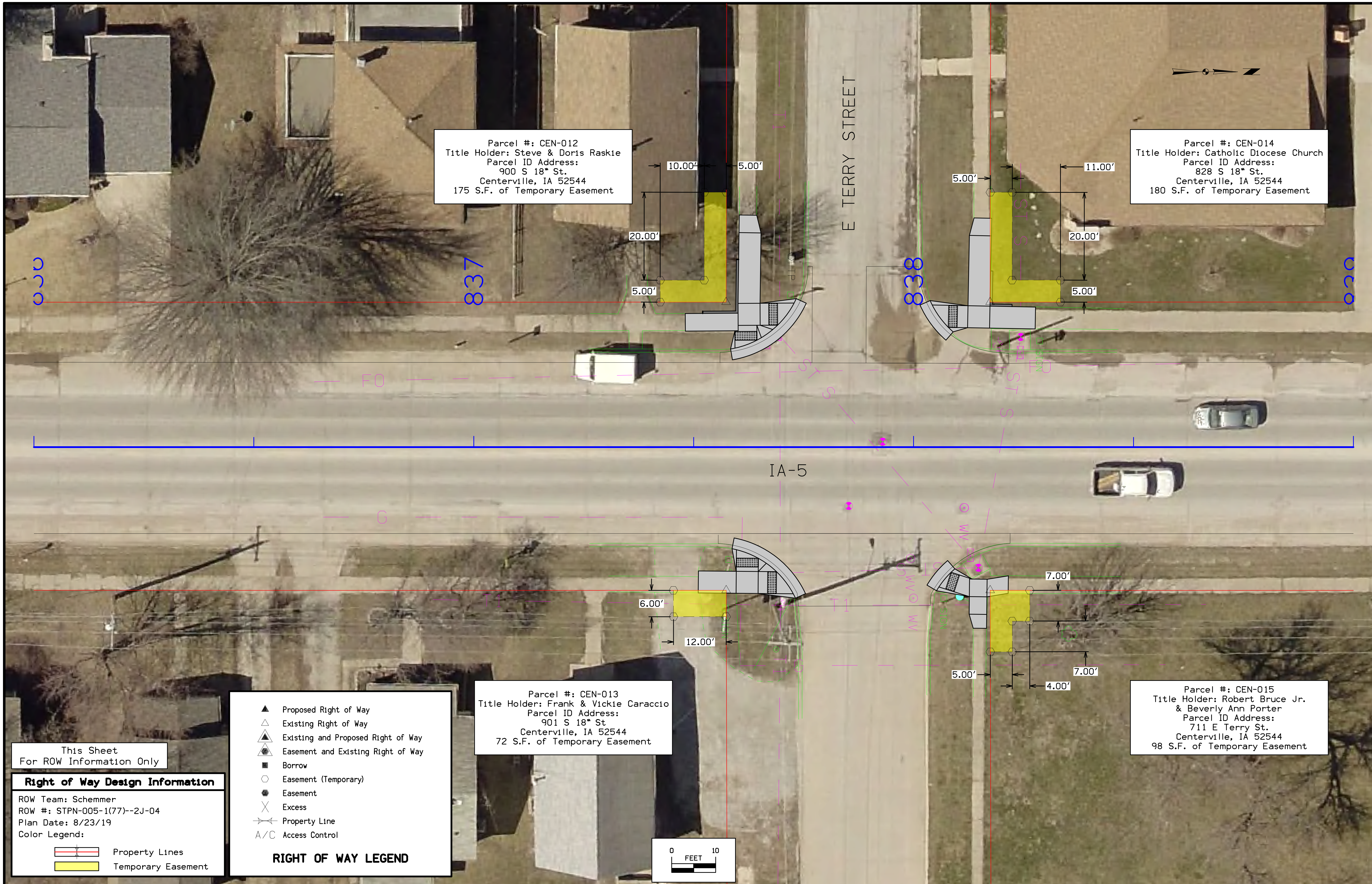
Right of Way Design Information

ROW Team: Schemmer
ROW #: STPN-005-1(77)--2J-04
Plan Date: 8/23/19
Color Legend:
Property Lines
Temporary Easement

RIGHT OF WAY LEGEND

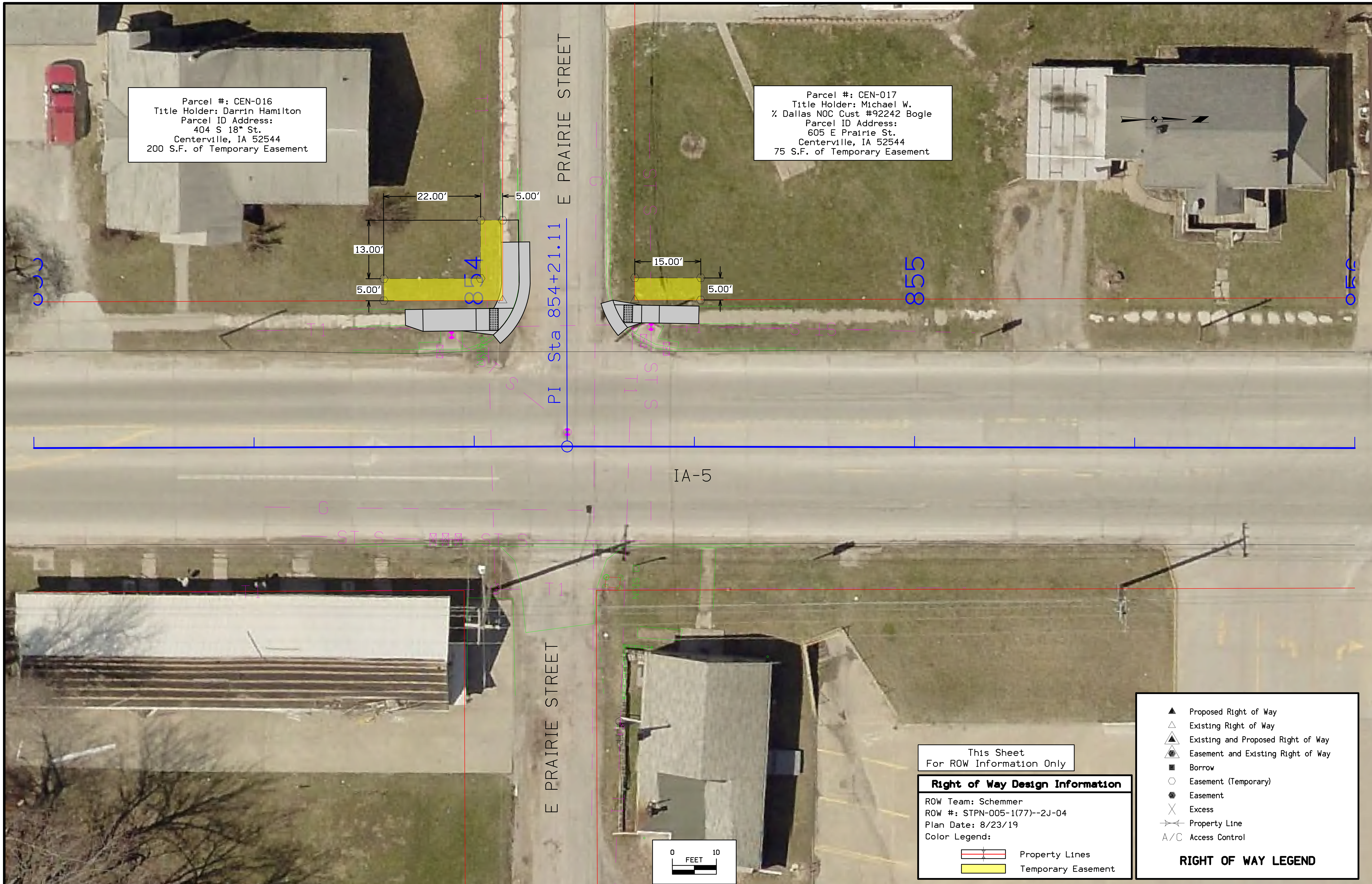
- Proposed Right of Way
- Existing Right of Way
- Existing and Proposed Right of Way
- Easement and Existing Right of Way
- Borrow
- Easement (Temporary)
- Easement
- Excess
- Property Line
- A/C Access Control

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER H.3



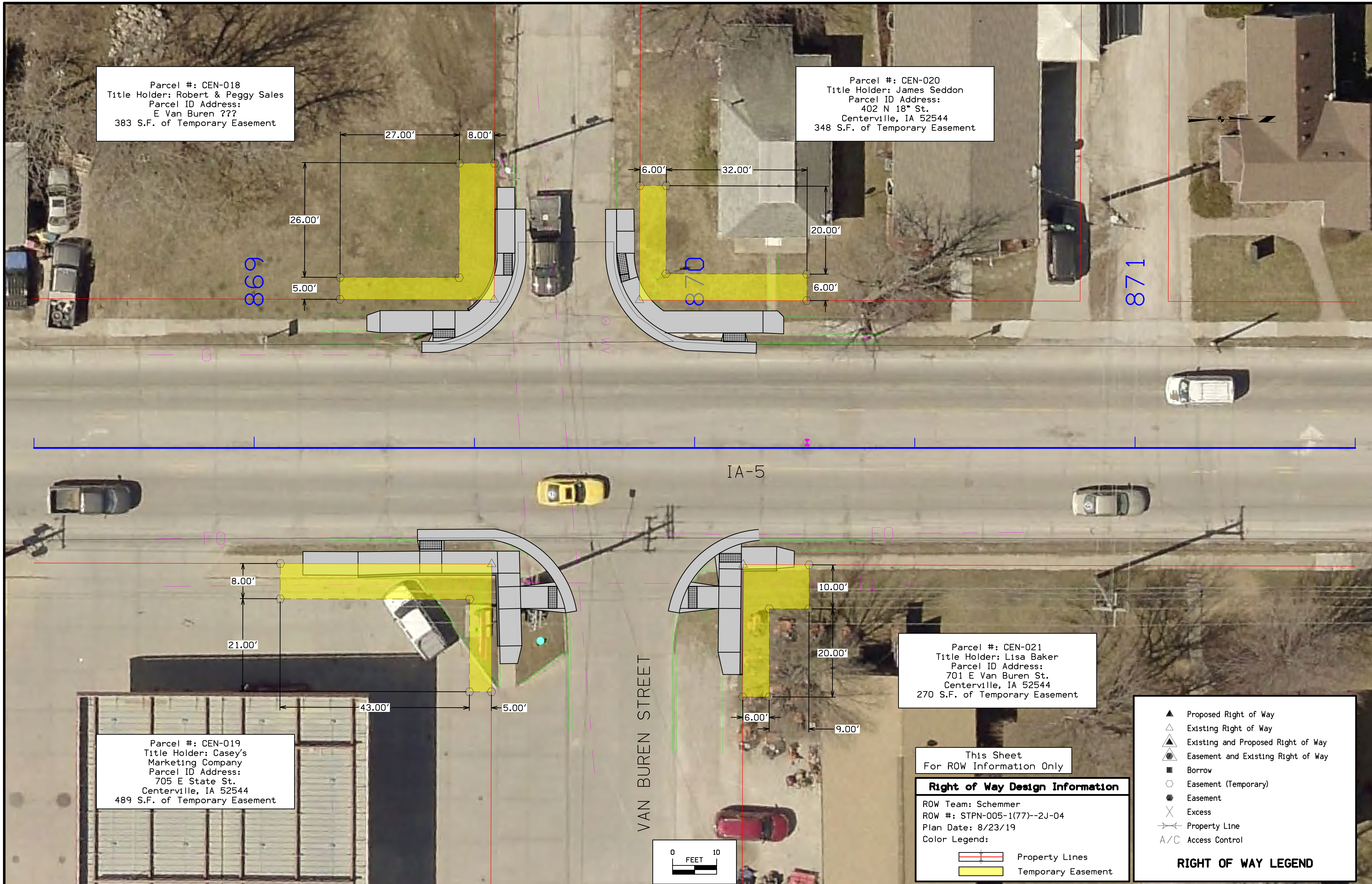
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER H.4

5:24:42 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_H01



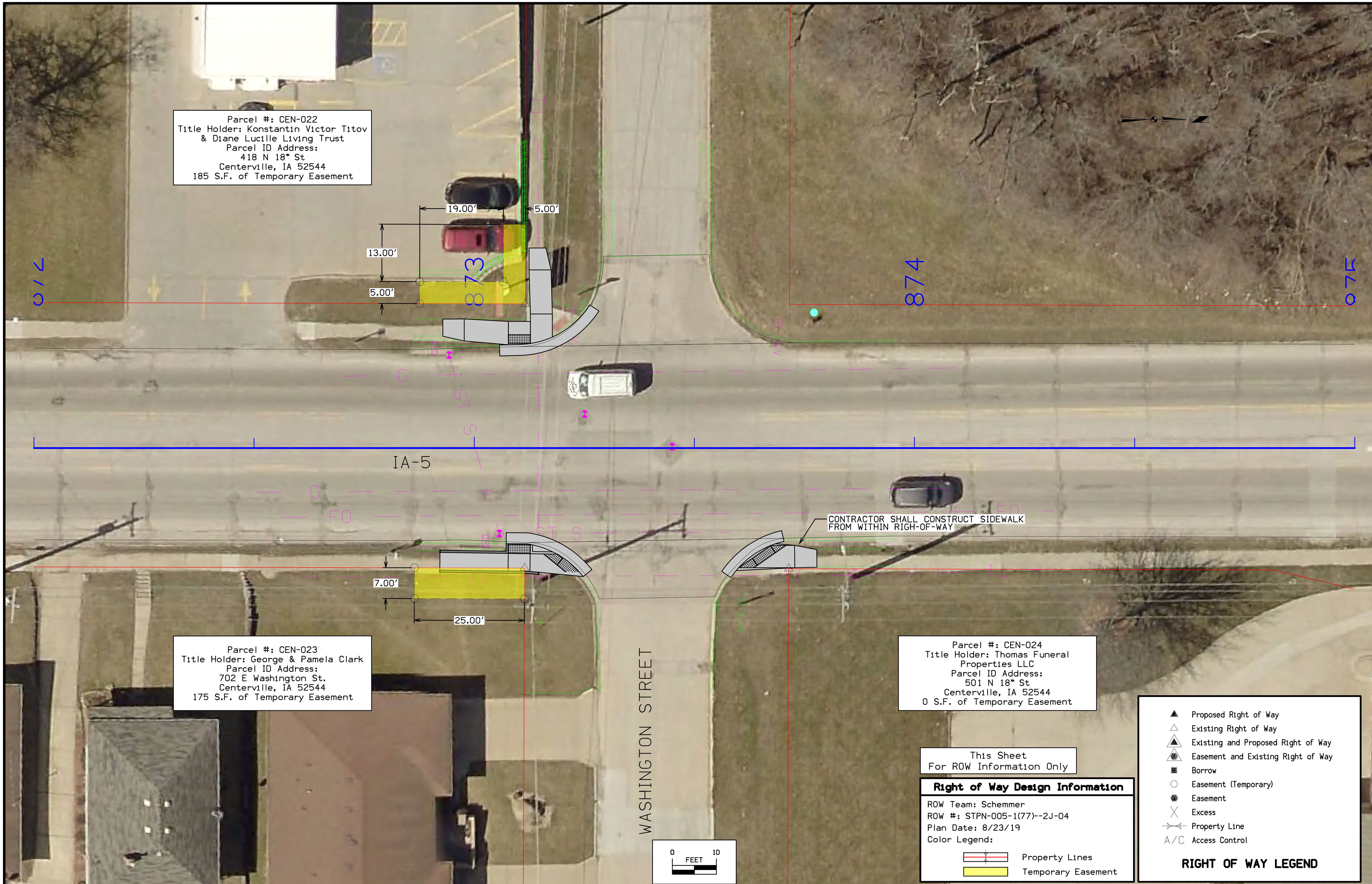
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER H.5

5:24:49 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_H01



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER H.6

5:24:56 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_H01



This Sheet
For ROW Information Only

Right of Way Design Information

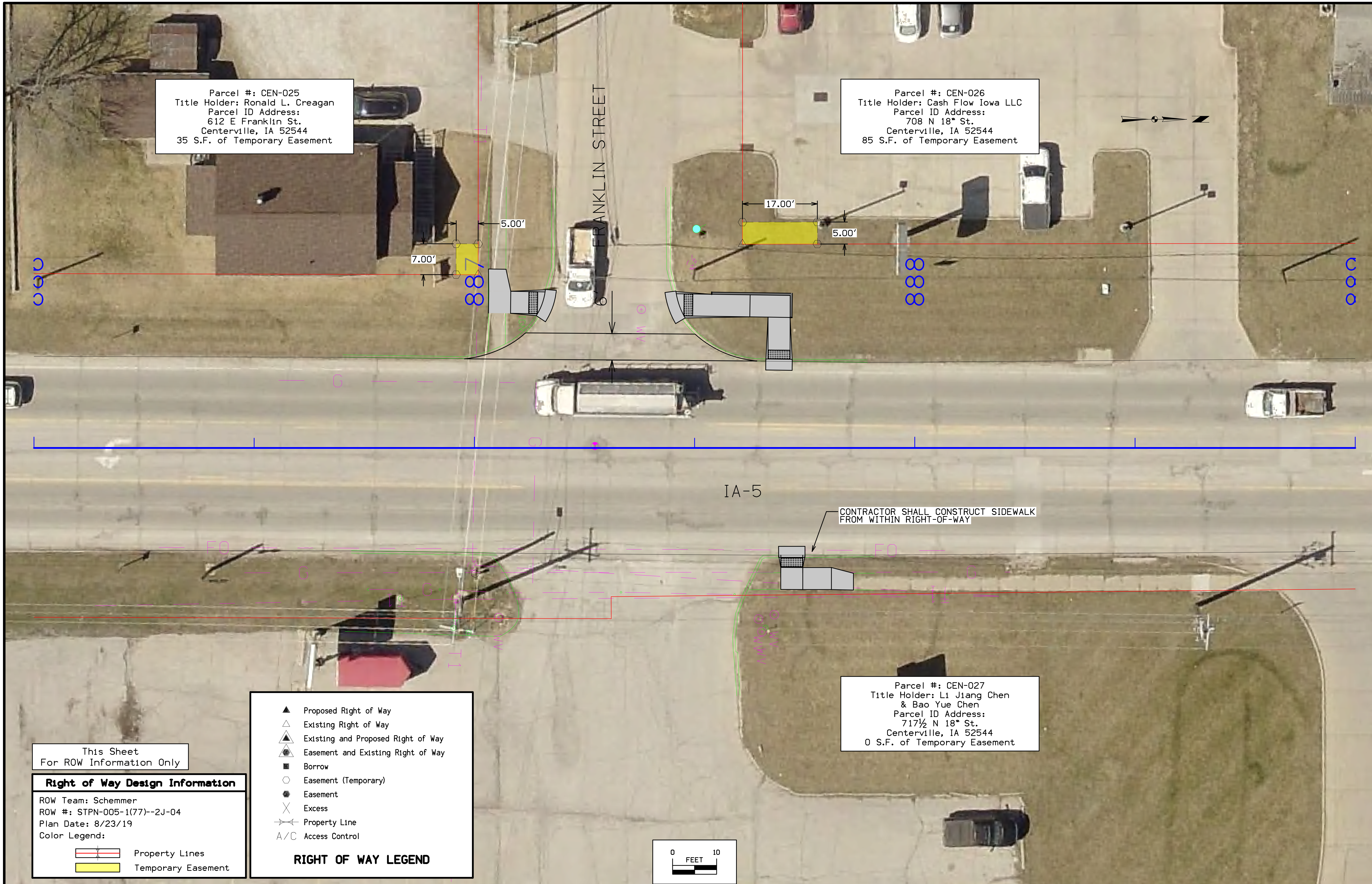
ROW Team: Schemmer
ROW #: STPN-005-1(77)--2J-04
Plan Date: 8/23/19
Color Legend:
Property Lines
Temporary Easement

Proposed Right of Way
Existing Right of Way
Existing and Proposed Right of Way
Easement and Existing Right of Way
Borrow
Easement (Temporary)
Easement
Excess
Property Line
A/C Access Control

RIGHT OF WAY LEGEND

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER H.7

5:25:03 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_H01



This Sheet
For ROW Information Only

Right of Way Design Information

ROW Team: Schemmer
ROW #: STPN-005-1(77)--2J-04
Plan Date: 8/23/19
Color Legend:

Property Lines
Temporary Easement

- Proposed Right of Way
- Existing Right of Way
- Existing and Proposed Right of Way
- Easement and Existing Right of Way
- Borrow
- Easement (Temporary)
- Easement
- Excess
- Property Line
- A/C Access Control

RIGHT OF WAY LEGEND

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER H.8

5:25:10 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_H01

108-23A
08-01-08

TRAFFIC CONTROL PLAN

1. Through traffic will be maintained at all times.
2. At least one lane of side road traffic at each individual Appanoose Co. Secondary road intersection will be maintained at all times.
3. Special Event: Pancake Day festival the last Saturday of September.

108-26A
08-01-08

STAGING NOTES

Sequence of Construction:
A general sequence of construction is suggested below.
The rural and urban work zones may be concurrent construction activities.

A. For the rural segment the contractor's activities shall be scheduled in the following sequence.

1. Place longitudinal subdrains and outlets.
2. Place full depth repair patches.
3. Perform scarification.
4. Construct the HMA base widening for shoulder.
5. Place the HMA interlayer and surface lifts.
6. Place granular shoulders.
7. Place permanent pavement markings and open all lanes to through traffic.

B. For the urban segments the contractor's activities shall be scheduled in the following sequence.

1. Place full depth repair patches.
2. Perform scarification.
3. Perform storm sewer work.
4. Adjust fixtures.
5. Place the HMA interlayer and surface lifts.
6. Place permanent pavement markings and open all lanes to through traffic.
7. Construct ADA sidewalk ramps.

111-01
04-17-12

COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
None at this time.	

113-2
04-16-13

PEDESTRIAN PATH CLOSURES

Refer to TC-601.

*Assumes 6 foot wide barricade.
Closures may need to be removed and re-established.

Location	Side	Type III Barricades* No.	Remarks
Cottage Street	NW	1	
	SE	1	
Elm Street	NW	2	
	NE	1	
	SE	1	
	SW	2	
Walsh Street	NW	2	
	NE	2	
	SE	1	
	SW	2	
Terry Street	NW	2	
	NE	2	
	SE	1	
	SW	2	
Prairie Street	NW	1	
	SW	2	
Buren Street	NW	1	
	NE	2	
	SE	2	
	SW	2	
Washington Street	NE	1	
	SE	1	
	SW	2	
Franklin Street	NE	1	
	SW	1	

LETTING DATE: 06/16/2020

TAP-U-1210 (612) - - 8I - 04

CENTERVILLE, IOWA

IOWA DOT GETTING YOU THERE

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

APPANOOSE COUNTY

STORM SEWER IMPROVEMENTS

HIGHWAY 5

REVISIONS

TOTAL NUMBER OF SHEETS: 19
PROJECT NUMBER
STPN-005-1(76)--2J-04

* Color Sheets

CITY OF CENTERVILLE

City of Centerville City Council

Michael O'Connor, Mayor
Jan Spurgeon
Neal Sokol
Jay Dillard
Dianne Senior
Ron Creagan

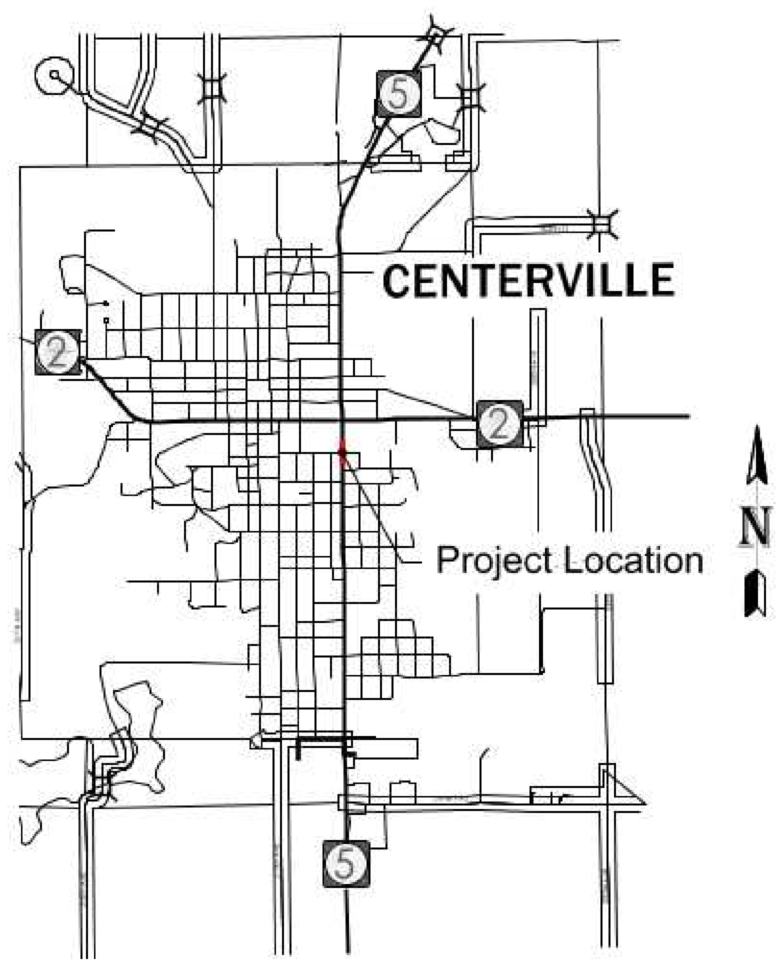
CONTACT INFORMATION:

City of Centerville, Iowa
Attn: Jason Fraser
City Hall
312 E Maple St
Centerville, Iowa 52544
PH: (641) 437-4339
Email: cityadmin@centerville-ia.org

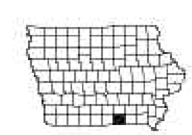
Hall Engineering Company
Attn: Ronda Cink
300 Sheridan Ave, Suite 101
Centerville, Iowa 52544
PH: (641) 437-4477
Email: RondaCink@hall-engineering.us

PLANS PREPARED BY:

HEC HALL ENGINEERING COMPANY
Consulting Engineers
Alliant Building, Suite 101
300 Sheridan Avenue
Centerville, Iowa



LOCATION MAP
Not To Scale



APPANOOSE COUNTY, IOWA

INDEX OF SHEETS	
No.	Description
MA.1	Title Sheet
MC.1	Estimated Project Quantities
MC.2	Estimate Reference Information
MC.3-MC.6	Tabulations
MC.7	Project Notations
MD.1	Removals and Abandonment
MD.2	Pavement Removals
MD.3	Site Plan
MD.4-MD.9	Storm Sewer Plan and Profile
MG.1	Survey Data Sheet
MU.1	SW-403 (Modified) Structure S-6

IOWA ONE CALL
800 / 292-8989
TOLL FREE
CALL - BEFORE - YOU - DIG

The Utilities as shown on these drawings were developed from available information. This is not implied nor intended to be the complete inventory of utilities in this area. It is the Contractor's responsibility to verify the location of all utilities (whether shown or not) and protect said utilities from any damage.

Preliminary Plans

I hereby certify that this plan was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Ronda L. Cink, P.E. Date

My license renewal date is 12-31-2021
Pages or Sheets covered by this seal: Pages listed in the Index of Sheets hereon

PROJECT DESCRIPTION

This project is for the purpose of replacing failing storm sewer intakes and piping along and across Highway 5 within the City Limits of Centerville, Iowa.

ESTIMATED PROJECT QUANTITIES

Item Number	Item Code	Item	Total	Unit	As Built Quant.
1	2111-8174100	Granular Subbase	12.9	SY	
2	2115-0100000	Modified Subbase	70.5	CY	
3	2312-8260050	Granular Surfacing on Road, Class A Crushed Stone	2.3	CY	
4	2435-0140310	Manhole, Storm Sewer, SW-403 Modified	2	EA	
5	2435-0250800	Intake, SW-508	1	EA	
6	2435-0250900	Intake, SW-509	5	EA	
7	2435-0251230	Intake, SW-512, 30 In.	1	EA	
8	2435-0254100	Intake, SW-541	1	EA	
9	2435-0254200	Intake Extension Unit, SW-542	1	EA	
10	2503-0114212	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 12 In.	23	LF	
11	2503-0114215	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 15 In.	48	LF	
12	2503-0114218	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 18 In.	93	LF	
13	2503-0114221	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 21 In.	19	LF	
14	2503-0114236	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 36 In.	41	LF	
15	2503-0114254	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 54 In.	50	LF	
16	2503-0116360	Storm Sewer Gravity Main, Trenched, 2000D, Low Clearance Concrete Pipe, Equivalent Dia. 60 In.	186	LF	
17	2503-0200036	Remove Storm Sewer Pipe less than or equal to 36 In.	121	LF	
18	2503-0200136	Remove Storm Sewer Pipe Greater than 36 In.	229	LF	
19	2510-6745850	Removal of Pavement	450.5	SY	
20	2510-6750600	Removal of Intakes and Utility Accesses	9	EA	
21	2526-8285000	Construction Survey	1	LS	
22	2528-8445110	Traffic Control	1	LS	
23	2529-5070110	Patches, Full-Depth Finish, By Area	12.9	SY	
24	2529-5070111	Patches, Full-Depth Finish, By Area (50 feet or greater in length)	406	SY	
25	2533-4980005	Mobilization	1	LS	
26	2601-2636044	Seeding and Fertilizing (Urban)	0.06	AC	
27	2599-9999009	Sewer Pipe Support Over Existing Utility	20.3	LF	

ESTIMATE REFERENCE INFORMATION

Item Number	Item Code	Item	Reference Information
1	2111-8174100	Granular Subbase	6-inches of Granular Subbase is required as shown on Full-Depth PCC Patches Tabulation.
2	2115-0100000	Modified Subbase	Refer to Full-Depth Patches Tabultion. 6-inches of Modified Subbase is required under all PCC Patches in streets and intersections plus 1-foot beyond outside edges.
3	2312-8260050	Granular Surfacing on Road, Class A Crushed Stone	8-inches of Granular Surfacing over storm sewer pipe P-S3.2
4	2435-0140310	Manhole, Storm Sewer, SW-403 Modified	Refer to Storm Sewer and Utility Accesses and MD Sheets. See, also, Sheets MD.3, MD.5 and MU.1 S-1 shall be modified as follows: Shall be poured in place to connect existing 72" RCP (e-p1.1). Place manhole opening at the South edge of box and include manhole steps. Use SW-602 Type F Casting. Long Wall Width shall be 9'-6" and Short Wall Width shall be 4'-0". S-6 Shall be modified as shown on Sheet MU.1
5	2435-0250800	Intake, SW-508	Refer to Storm Sewer-Intakes and Utility Accesses Tabulation and MD Sheets. Includes SW-550 Alternate Construction Method (SW-508 and SW-510).
6	2435-0250900	Intake, SW-509	Refer to Storm Sewer-Intakes and Utility Accesses Tabulation and MD Sheets. Structure tops shall match the lateral grade of the highway and transverse grade of the adjacent surface. Form grades are at the center of the structure.
7	2435-0251230	Intake, SW-512, 30 In.	Refer to Storm Sewer-Intakes and Utility Accesses Tabulation and MD Sheets.
8	2435-0254100	Intake, SW-541	Refer to Storm Sewer-Intakes and Utility Accesses Tabulation and MD Sheets. UseSW-602 Type F-HMA casting for adjustment during subsequent HMA overlay. Structure top shall match the lateral grade of the highway and transverse grade of the adjacent surface. Form grades are at the center of the structure.
9	2435-0254200	Intake Extension Unit, SW-542	
10	2503-0114212	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 12 In.	Refer to Storm Sewer-Pipes Tabulation and the MD Sheets. Tee sections shall be prefabricated per Iowa DOT Standard Road Plan DR-142. Backfill shall be Class I Material as per Section 2552.02 C. Class I Material shall be placed as per Section 2552.03, to the subgrade elevation. Backfill material, placement and compaction are incidental to the underground utility being installed and will not be paid for separately. -Where connecting to existing pipes, concrete collars are required.
11	2503-0114215	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 15 In.	
12	2503-0114218	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 18 In.	
13	2503-0114221	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 21 In.	
14	2503-0114236	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 36 In.	
15	2503-0114254	Storm Sewer Gravity Main, Trenched, (RCP), 2000D (Class III), 54 In.	
16	2503-0116360	Storm Sewer Gravity Main, Trenched, 2000D, Low Clearance Concrete Pipe, Equivalent Dia. 60 In.	
17	2503-0200036	Remove Storm Sewer Pipe less than or equal to 36 In.	Refer to Storm Sewer Abandonment or Removal Tabulation and Sheet MD.1. Backfill shall be Class 1 Material as per Section 2552.02C. Class 1 Material shall be placed as per Section 2552.03, to the subgrade elevation. Backfill material, placement and compaction are incidental to the undergroud utility being removed and will not be paid for seperately.
18	2503-0200136	Remove Storm Sewer Pipe Greater than 36 In.	
19	2510-6745850	Removal of Pavement	Refer to Removal of Pavement Tabulation for more information and MD.1. HMA material shall be milled off existing roadway pavement and stockpiled as per HMA Resurfacing Project.
20	2510-6750600	Removal of Intakes and Utility Accesses	Refer to Removal of Intakes and Utility Accesses for more information and Sheet MD.1. Backfill shall be Class 1 Material as per Section 2552.02C. Backfill material, palcement and compaction are incidental to the undergroud utility being removed and will not be paid for seperately.
21	2526-8285000	Construction Survey	-----
22	2528-8445110	Traffic Control	-----
23	2529-5070110	Patches, Full-Depth Finish, By Area	Refer to Full-Depth Patches Tabulation and Sheet MD.2
24	2529-5070111	Patches, Full-Depth Finish, By Area (50 feet or greater in length)	Refer to Full-Depth Patches Tabulation and Sheet MD.2. Patches shall be finished to 3-inches below HMA surface, with 6-inch standard curb, for subsequent HMA overlay. Includes Joints as required per Standard Road Plan PR-103, Full Depth PCC Patch with Dowels. 'CD' joints are required at 20' maximum spacing. Payment shall include curb where removed on both sides of pavement. Profilograph testing will not be required.
25	2533-4980005	Mobilization	-----
26	2601-2636044	Seeding and Fertilizing (Urban)	-----
27	2599-9999009	Sewer Pipe Support Over Existing Utility	Refer to Sewer Pipe Support Tabulation and SUDAS Figure 3010.901. There is limited clearance at locations where storm sewer crosses over sanitary sewer lines. Where there is less than 12: of clearance, the sanitary sewer lines shall have sewer pipe supports.

INDEX OF TABULATIONS

FULL-DEPTH PATCHES

Location			Dimension			PCC Patches		
Begin Station	End Station	Lane L, R, or B	Length FT	Width FT	Patch Thickness IN	With Dowels PR-103 SY	Without Dowels PR-102 SY	Remarks
852+81.56	854+73.87	B	Varies	Varies	10	401.0		Requires Modified Subbase - includes integral curb
853+03.36	853+11.27	L	Varies	Varies	6		2.9	Driveway Requires Granular Subbase
854+83.66	854+98.68	R	15.00	3.00	10	5.0		Requires Modified Subbase
854+75.95	854+97.46	R	19.92	4.54	6		10.1	Fareway Parking - includes integral curb Requires Granular Subbase

STANDARD ROAD PLANS

The following Standard Road Plans apply to construction work on this Project.

Number	Date	Title
DR-141	4/18/2017	Pipe Bends
DR-142	4/21/2015	Culvert Pipe Tee Sections
PR-103	10/21/2014	Full Depth PCC Patch with Dowels
PV-101	4/16/2016	Joints
SW-101	4/17/2018	Trench Bedding and Backfill Zones
SW-102	4/16/2019	Rigid Gravity Pipe Trench Bedding
SW-211	4/17/2018	Storm Sewer Pipe Connections
SW-403	4/17/2018	Deep Well Rectangular Storm Sewer Manhole
SW-509	4/17/2018	Double Open-Throat Curb Intake, Small Box
SW-512	4/17/2018	Circular Area Intake
SW-541	4/17/2018	Open-Throat Curb Intake Under Pavement
SW-542	4/17/2018	Extension Unit for Open-Throat Curb Intake Under Pavement
SW-602	4/21/2015	Castings for Storm Sewer Manholes
SW-603	10/16/2018	Castings for Grate Intakes
SW-604	4/17/2018	Castings for Area Intakes
TC-1	4/16/2013	Work Not Affecting Traffic (Two-Land or Multi-Lane)
TC-228	10/16/2018	Lane Closure Involving TWLTL
TC-402	4/21/2015	Work Within 15 Ft of Traveled Way
SUDAS FIGURES		
3010.901	10/21/2008	Sewer Pipe Support Over Existing Utility

REMOVAL OF PAVEMENT

*Not a Bid Item

Begin Station	End Station	Side	Pavement Type	Area SY	Saw Cut* LF	Remarks
852+81.56	854+73.87	Both	PCC & ACC	401.0	688	Concrete with asphalt overlay
853+03.36	853+11.27	Left	PCC	4.0	11	Driveway
854+83.66	854+98.68	Right	PCC & ACC	5.0	21	Concrete with asphalt overlay
854+75.95	854+97.46	Right	PCC	40.5	25	Pavement at Fareway

TABULATION OF UTILITIES

Centerville Public Works - Sewers	Steve Hawkins	641-895-0164
Centerville Municipal Waterworks - Water	Joe Sivetts	641-895-3944
Alliant Energy - Gas and Electric	Jeff Royer	641-437-5143
Mediacom - Communications	Tim Eagan	319-350-3679
Windstream - Communications	Kelly Eggers	319-385-5004
Natel - Fiber	Mike Schill	641-469-6220

REMOVAL OF INTAKES AND UTILITY ACCESSES

No.	Location/Description	Type	Remarks
e-s2	852+95.02, -22.08'L	"C"	Curb Intake with Extension
e-s3	852+99.90, 23.24'R	F-3	Curb Intake with Extension
e-s4	853+93.18, 20.24'R	"E"	Combination Intake
e-s5	854+79.42, 41.85'R	"Custom"	Retaining Wall Structure, Railing, and Grate Intake
e-s6	854+85.53, 22.50'R	"C"	Curb Intake with Extension
e-s7	854+39.88, -25.68'L	"C"	Curb Intake with Extension
e-s8	853+92.38, -22.49'L	"C"	Curb Intake with Extension
e-s9	854+39.69, -10.90'L	Manhole	Structure located under pavement
e-s10	854+38.92, 18.90'R	Manhole	Structure located under pavement

Sewer Pipe Support

Line Number	Location	Length FT
P-S8	854+37.54, -3.3'L	4.2
P-S9	854+21.03, -24.4'L	2.4
P-3	854+20.61, 16.7'R	7.9
P-6	853+00.89, -3.26'L	5.8

STORM SEWER ABANDONMENT OR REMOVAL

*Not a bid item

Location/ Description	Sanitary or Storm Sewer	Abandonment, Plug Only, or Abandonment, Plug and Fill or Removal	Length of Pipe		Fill Material*	Remarks
			≤ 36 inch diameter	> 36 inch diameter	Flowable Mortar or CLSM	
			LF	LF	CY	
e-p1	Storm Sewer	Removal		229		4'x4' Brick Arch Pipe - From e-s1 to e-s5
e-p2	Storm Sewer	Abandonment, Plug Only				Abandon pipe downstream of new connection with P-S3.2
e-p3	Storm Sewer	Removal	10			8" VCP
e-p4	Storm Sewer	Removal	15			15" VCP/CMP
e-p5	Storm Sewer	Removal	10			18" VCP (upstream end for new pipe installation)
e-p5	Storm Sewer	Abandonment, Plug Only				18" VCP (upstream and downstream ends)
e-p6	Storm Sewer	Removal	50			24" VCP
e-p7	Storm Sewer	Removal	20			18" RCP
e-p8	Storm Sewer	Removal	4			18" RCP
e-p9	Storm Sewer	Removal	12			15" RCP

STORM SEWER-INTAKES AND UTILITY ACCESSES						
*Bid Item						
** For SW-545						
No.	Location Station and Offset	*Type or Standard Road Plan	Form Grade Elev.	Bottom Well Elev.	Extension Length** FT.	Notes
S-1	854+82.10, 46.03'R	SW-403 (Modification 1)	TB: 963.97	953.00		Use SW-603 Type S Grate Intake instead of SW-602 Casting. Sheet MD.3
S-2	854+90.17, 24.21'R	SW-509	967.42	962.91		Sheet MD.3
S-3	854+30.70, 31.75'R	30" Dia. SW-512	Inlet: 966.00	960.37		Sheet MD.7
S-4	853+91.90, 24.16'R	SW-509	966.53	961.03		Sheet MD.7
S-5	853+00.14, 24.27'R	SW-509	968.25	963.27		Sheet MD.8
S-6	853+01.23, -24.47'L	SW-403 (Modification 2)	TB: 968.47	961.18		Sheet MU.1 and MD.5
S-7	852+90.09, -23.56'L	SW-509	968.83	964.29		Sheet MD.5
S-8	854+37.93, -23.72'L	SW-541 & SW-542	966.60	960.10		Sheet MD.6, SW-542 Not Shown, Use SW-602 Type F-HMA Casting for adjustment of HMA resurfacing
S-9	853+92.03, -23.57'L	SW-509	966.59	961.81		Sheet MD.6
S-10	854+82.74, 61.19'R	SW-508	964.00	955.30		Sheet MD.8

STORM SEWER-PIPES

**Diameter or equivalent diameter

*Bid Item

Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 2ft length is added to each side of the Design Length to account for estimated length to center of structures.
Design Length, Slope and Flowlines are calculated from the Centerline of the intersecting pipe where Tee Locations occur.
All Tee locations shall be prefabricated.
Pipe bends shall be fabricated elbows in conformance with SRP DR-141. Pipe bend locations are based on a design pipe length of 6'-0" with a minimum length of elbow of 5'-6" measured along centerline of pipe.

Line Number	Intake/Utility Access No.		Class 'D'	Pipe Size**	Bid* Length	Design Length	Slope %	Connected Pipe Joint (DR-121)	Flow Lines			Pipe Profile Sheet No.	Notes
	From	To		IN.	FT.	FT		Type	Inlet Elevation	Outlet Elevation	Other Elevation		
P-1	P-2	S-1	2000	60	34	31.53	7.70		956.62	954.20		MD.3	LCCP, Equiv. Dia. 60"
P-S2.1	S-2	P-S2.2	2000	15	17	15.09	13.22		963.41	961.43		MD.3	
P-S2.2	P-S2.1	S-1	2000	15	10	7.66	13.22		961.43	960.43		MD.3	
P-2	P-3	P-1	2000	60	42	41.57	7.71		959.81	956.70		MD.3 & MD.4	LCCP, Equiv. Dia. 60"
P-3	P-4	P-2	2000	60	110	109.12	1.51		961.46	959.81		MD.4 & MD.5	LCCP, Equiv. Dia. 60"
P-4	P-5	P-3	2000	54	6	5.84	1.50		961.54	961.46		MD.5	Shape Change to LCCP
P-5	P-6	P-4	2000	54	12	12.00	1.50		961.72	961.54		MD.5	Fabricated Tee at Pipe Outlet
P-6	S-6	P-5	2000	54	32	29.63	1.50		962.18	961.72		MD.5	
P-S3	S-3	P-2	2000	18	16	13.77	3.78		960.87	960.35		MD.7	Fabricated Tee at Pipe Outlet
P-S3.2	e-p2	S-3	2000	12	23	20.85	-		Unknown	961.07		MD.7	Connect to e-p2
P-S4	S-4	P-3	2000	21	8	6.34	4.50		961.53	961.24		MD.7	Fabricated Tee at Pipe Outlet
P-S5.1	P-S5.2	P-5	2000	18	11	8.71	3.99		963.16	962.87		MD.8	Fabricated Tee at Pipe Outlet
P-S5.2	S-5	P-S5.1	2000	18	8	5.58	3.99		963.44	963.16		MD.8	
P-S5.3	e-p7	S-5	2000	18	6	3.29	-		Unknown	963.97		MD.8	Connect to e-p7
P-S7	S-7	S-6	2000	15	7	3.05	14.75		964.79	964.34		MD.5	
P-S8	S-8	P-2	2000	36	41	38.66	3.68		960.60	959.18		MD.6	Fabricated Tee at Pipe Outlet
P-S8.2	e-p9	S-8	2000	15	14	12.18	-		Unknown	961.40		MD.6	Connect to e-p9
P-S8.3	e-p8	S-8	2000	18	8	5.75	-		Unknown	961.64		MD.6	Connect to e-p8
P-S9	S-9	S-8	2000	18	44	40.35	3.74		962.31	960.80		MD.6	
P-S10	S-10	e-p1.1	2000	21	11	8.60	2.26		955.80	955.60		MD.8	Connect to e-p1.1, use concrete collar

GENERAL NOTES

Plans do not show the location of all existing utilities and the location of utilities that are shown are approximate. The Contractor shall personally check and verify all utility information. Utility companies should be notified in advance to avoid unnecessary inconvenience or delay

Plan and profile sheets included in the project are for the purpose of alignment, location and specific directions for the work to be performed under this contract. Irrelevant data on these sheets is not to be considered a part of this contract.

Prior to the start of construction, the Contractor shall excavate to uncover existing utilities that may interfere with the work so the elevation and location of utilities can be determined and adjustments of utilities be made to avoid interference.

Iowa Code 480, Underground Facilities Information, required verbal notice to Iowa One Call, 1-800-292-8989, not less than 48 hours before excavating, excluding weekends and legal holidays.

The Contractor shall be responsible for any damage to existing facilities outside the construction limits resulting from negligence.

The Contractor shall confine his work to the construction limits. If the Contractor obtains additional easements for the storage of equipment and materials, copies of the agreements with the property owners shall be provided to the City.

The Contractor shall provide notice to residents prior to driveway closures and shall coordinate work with residents

The Contractor shall remove all rubbish and unused material and the premises shall be left in a satisfactory and neat condition as work progresses.

It shall be the Contractor's responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project

It shall be the Contractor's responsibility to ensure that areas selected for waste and disposal not impact 1) culturally sensitive sites or graves or 2) wetlands or "Waters of the US", including streams or stream banks below the "ordinary high water mark," without an approved U.S. Army Corp of Engineers Section 404 permit.

No payment for overhaul will be allowed for material hauled to these sites. No material shall be placed within the right-of-way, unless specifically stated in the Plans.

The Contractor shall not disturb desirable grass areas and desirable trees outside the construction limits. The Contractor will not be permitted to park or service vehicles and equipment or use these areas for storage of materials. Storage, parking and service area(s) will be subject to the approval of the Engineer.

GENERAL NOTES

All holes resulting from operations of the Contractor, including fence posts, utility poles, or foundation studies shall be filled and consolidated to finished grade as directed by the Engineer to prevent further settlement. The voids shall be filled as soon as practical - preferably the day created, and no later than the following day. Any portion of the right-of-way or project limits (including borrow areas and operation sites) shall be restored to an acceptable condition. The operation shall be considered incidental to other bid items in the project.

The Contractor shall apply necessary moisture to the construction area and haul roads to prevent the spread of dust. Refer to Article 1107.07 of the current Standard Specification for additional details.

Utility poles are shown as located at the time of Plan Production. Some may have been relocated prior to start of construction of the Project.

UTILITIES
(POINT 25 PROJECT)

This is a POINT 25 project and is subject to the provisions of IAC 761-115.25.

TEMPORARY CROSSINGS AND DETOURS

Blading, shaping, and other work in preparation for maintaining temporary crossings or detours is incidental to other work. Furnish and spread additional granular surfacing needed for temporary crossings or detour during construction at the contract price.

STORM SEWER

Confirm location and depth of all existing utilities as required to eliminate conflicts prior to construction. Allow utility personnel to relocate utilities where conflicts occur.

Do not interrupt existing utilities or individual services unless directed by the Engineer.

Construct storm sewer under existing services with adequate clearance. Contractor may make slight changes in service line location at no cost to the Owner, with the Utilities permission.

There is limited clearance at locations where storm sewer crosses over sanitary sewer lines. Where there is less than 12" of clearance, the sanitary sewer lines shall have sewer pipe support per SUDAS Figure 3010.901, for the OD dimension of the crossing storm sewer, plus 6".

The storm sewer was designed with six foot pipe lengths. If the Contractor chooses to use a different laying length, fittings will need to be adjusted.

Structure tops shall match the lateral grade of highway and transverse grade of the adjacent surface. Form grades are provided at the center of the structure.

Precast Tee Sections, per Iowa DOT Standard Road Plan DR-142, are required where lateral pipes outlet into storm sewer main.

SITE PREPARATION & REMOVALS

Excess and waste materials shall be disposed of by the Contractor off-site in accordance with applicable government regulations

In order to avoid any unnecessary surface breaks or premature spalling, the Contractor is cautioned to exercise extreme care when performing any of the necessary saw cutting operations.

Sawcut edges of pavements, sidewalks, and drives full depth prior to removal to prevent damage to adjacent slabs and fixtures. Sawcut shall be incidental to pavement removal.

EROSION CONTROL

(Urban Seeding)

Following the completion of work in a disturbed area and according to the seeding dates in Section 2601 of the Standard Specifications, place seed, fertilizer, and mulch on the disturbed area as follows:

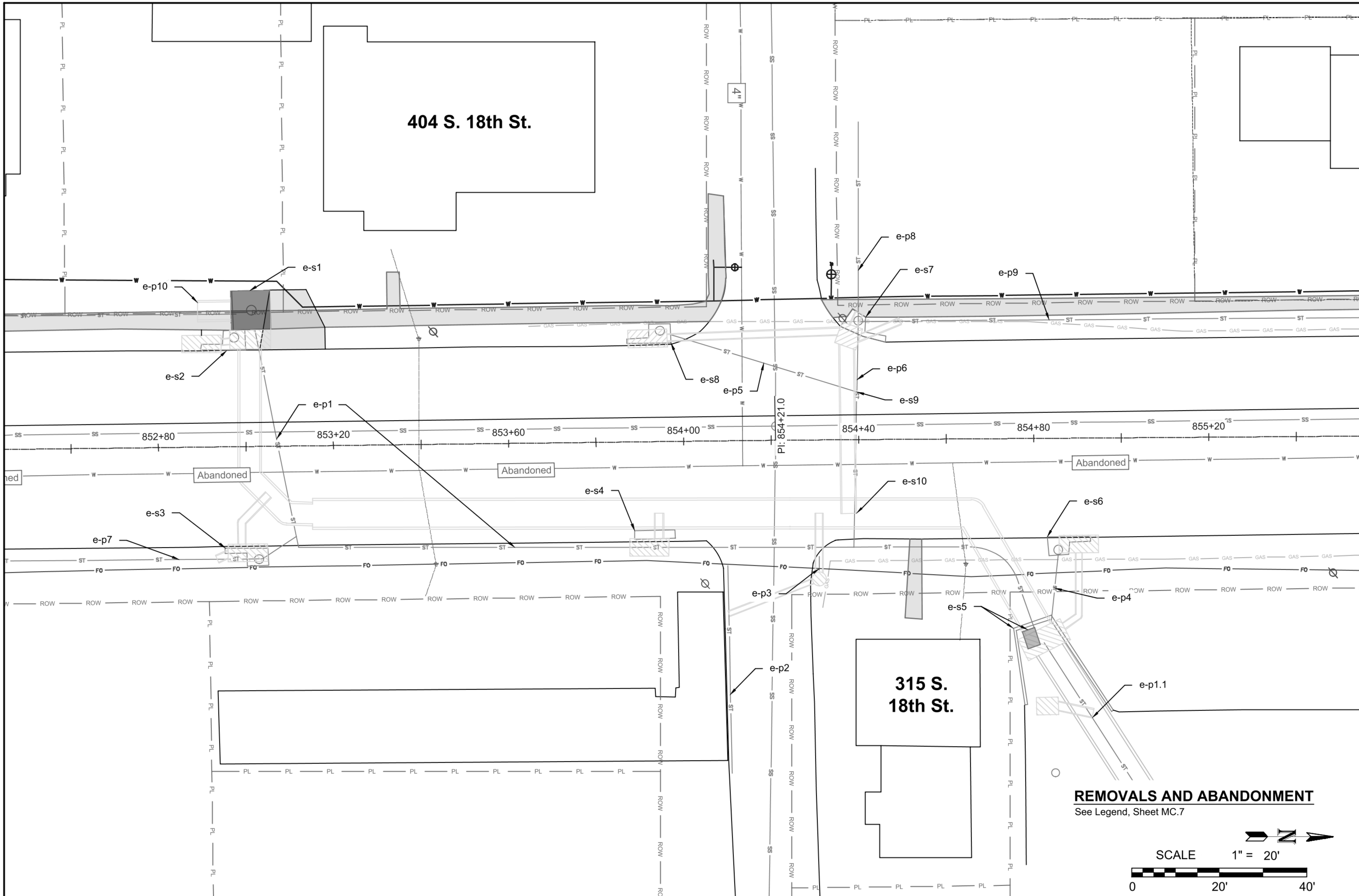
Place seed and fertilize according to the requirements of Article 2601.03,C,4 and Section 4169 of the Standard Specifications.

Place mulch according to the requirements of Articles 2601.03,E,2,a and 4169.07,A of the Standard Specifications.

Preparing the seedbed and furnishing and applying seed, fertilizer, and mulch is incidental to mobilization and will not be paid for separately.

LEGEND

Existing Water Main	W
Existing Fire Hydrant	
Existing Water Valve	
Water Shut Off	
Existing Gas Line	GAS GAS
Existing Overhead Electric	OHE
Existing Underground Electric	E
Existing Telecommunications	T
Existing Fiber Optic	FO
Existing Sanitary Sewer	SS
Existing Storm Sewer	ST
Existing Fence	X
Right of Way	ROW
Property Line	PL PL
Existing Utility Pole	
Existing Sidewalks and Driveways	
Removal of Pavement	
Patches, Full-Depth Finish	
Proposed Storm Sewer Structure	
FG	Form Grade
TDC	Top of Drop Curb
TB	Top of Box
LCCP	Low Clearance Concrete Pipe
ED	Equivalent Diameter
BW	Bottom of Well
El	Elevation



REMOVALS AND ABANDONMENT

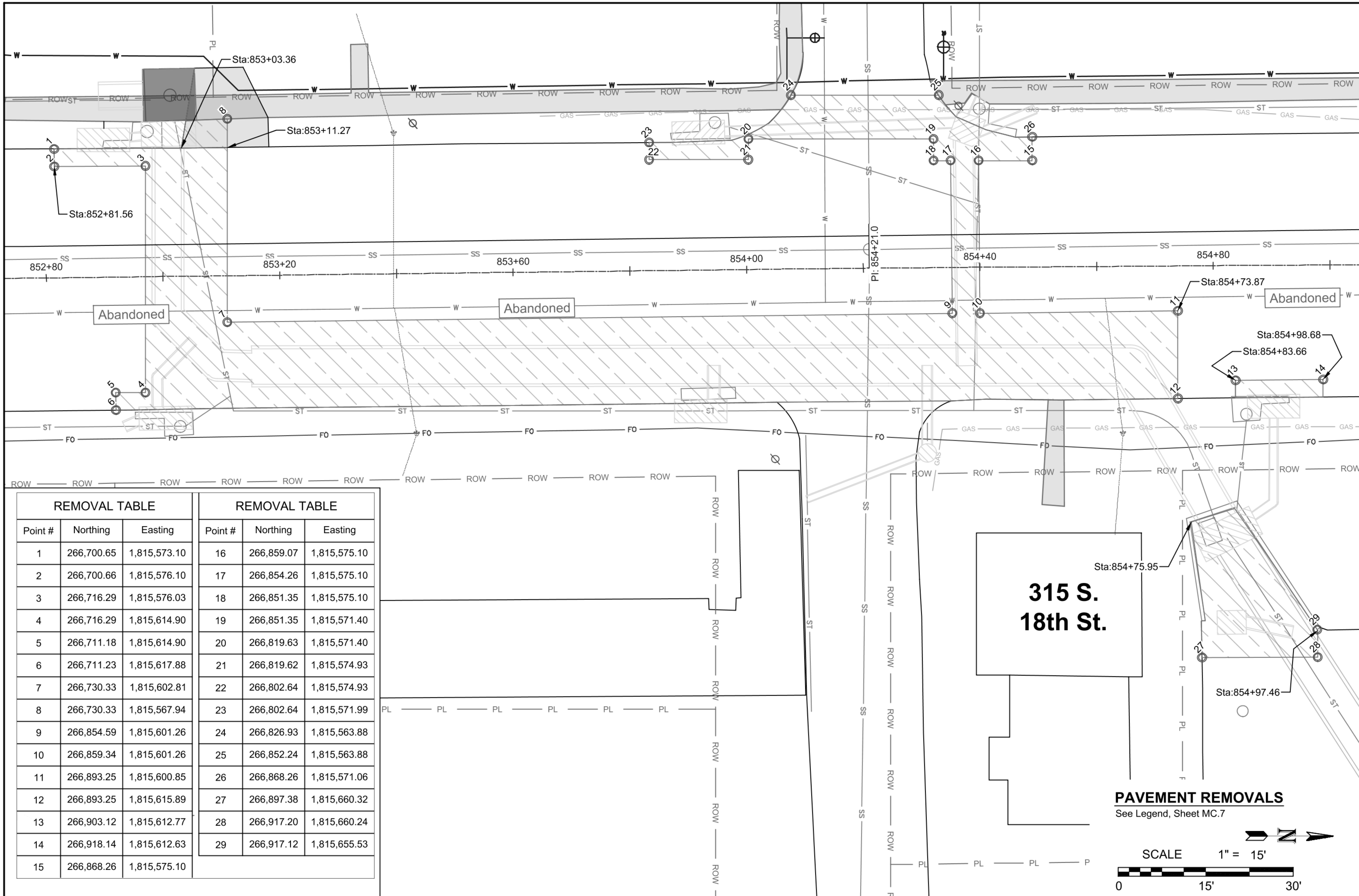
See Legend, Sheet MC.7

SCALE 1" = 20'

0 20' 40'

12/10/2019 2:38 PM Q:\1915 Cvlle Storm - 2019\CAD\M Sheets.dwg

ENGLISH	IOWA DOT	DESIGN TEAM	HALL ENGINEERING COMPANY	APPANOOSE COUNTY, IOWA	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER	MD.1



PAVEMENT REMOVALS

See Legend, Sheet MC.7

SCALE 1" = 15'

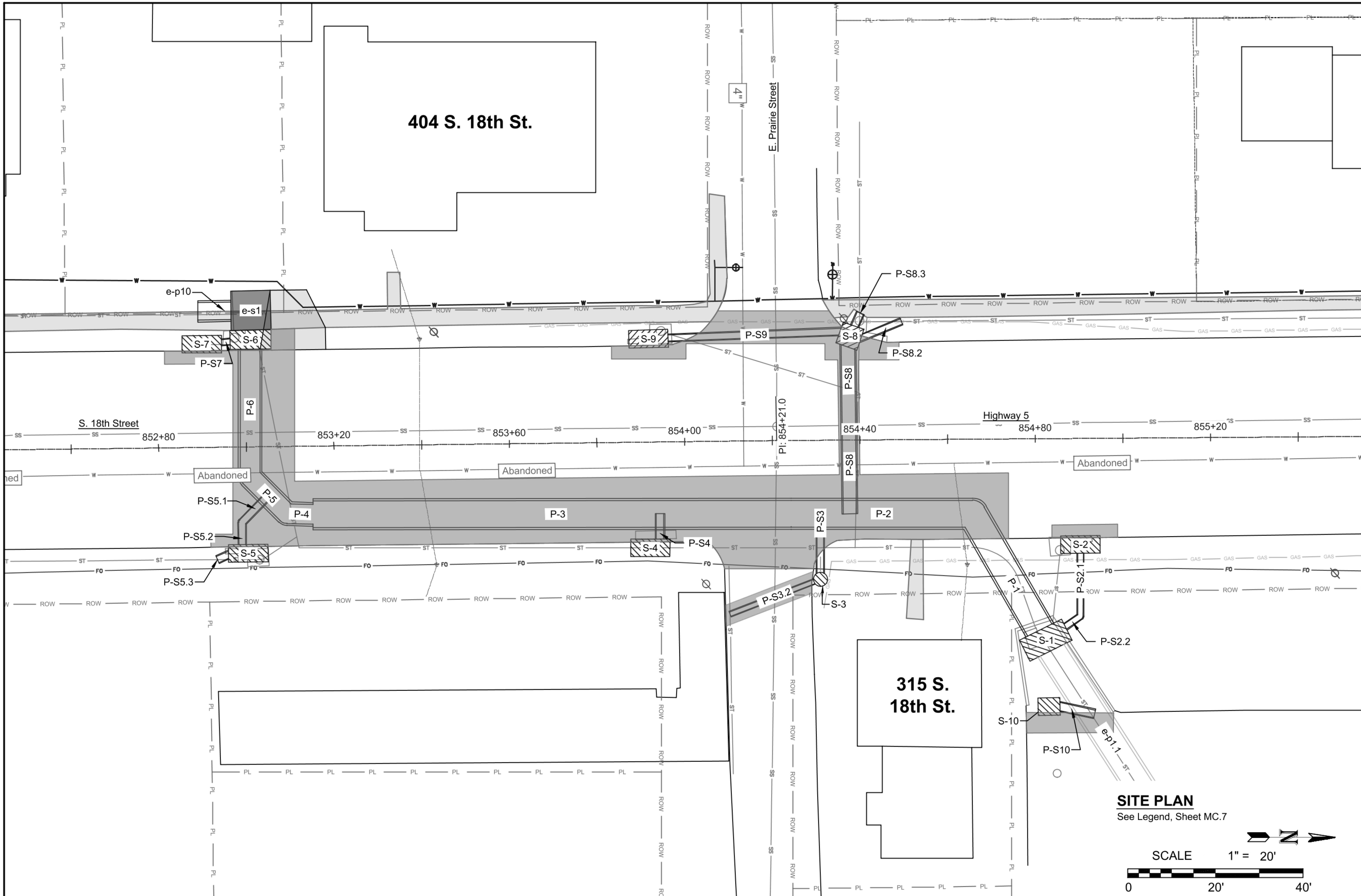
0 15' 30'

REMOVAL TABLE

Point #	Northing	Easting
1	266,700.65	1,815,573.10
2	266,700.66	1,815,576.10
3	266,716.29	1,815,576.03
4	266,716.29	1,815,614.90
5	266,711.18	1,815,614.90
6	266,711.23	1,815,617.88
7	266,730.33	1,815,602.81
8	266,730.33	1,815,567.94
9	266,854.59	1,815,601.26
10	266,859.34	1,815,601.26
11	266,893.25	1,815,600.85
12	266,893.25	1,815,615.89
13	266,903.12	1,815,612.77
14	266,918.14	1,815,612.63
15	266,868.26	1,815,575.10

REMOVAL TABLE

Point #	Northing	Easting
16	266,859.07	1,815,575.10
17	266,854.26	1,815,575.10
18	266,851.35	1,815,575.10
19	266,851.35	1,815,571.40
20	266,819.63	1,815,571.40
21	266,819.62	1,815,574.93
22	266,802.64	1,815,574.93
23	266,802.64	1,815,571.99
24	266,826.93	1,815,563.88
25	266,852.24	1,815,563.88
26	266,868.26	1,815,571.06
27	266,897.38	1,815,660.32
28	266,917.20	1,815,660.24
29	266,917.12	1,815,655.53



SITE PLAN

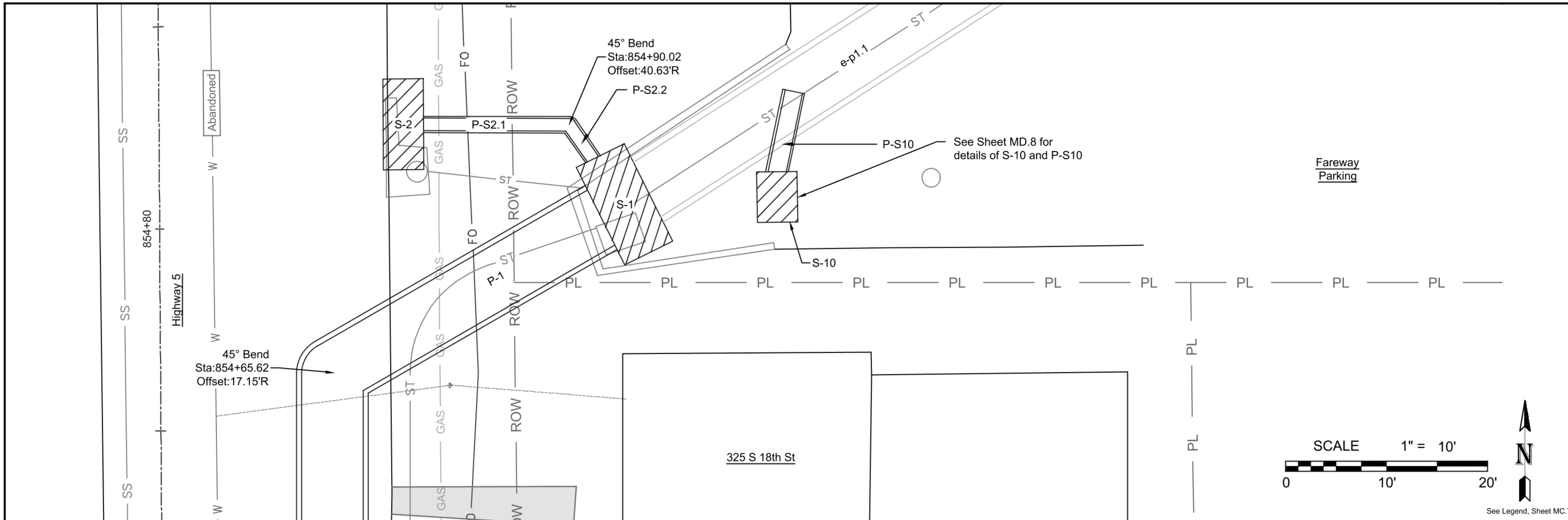
See Legend, Sheet MC.7

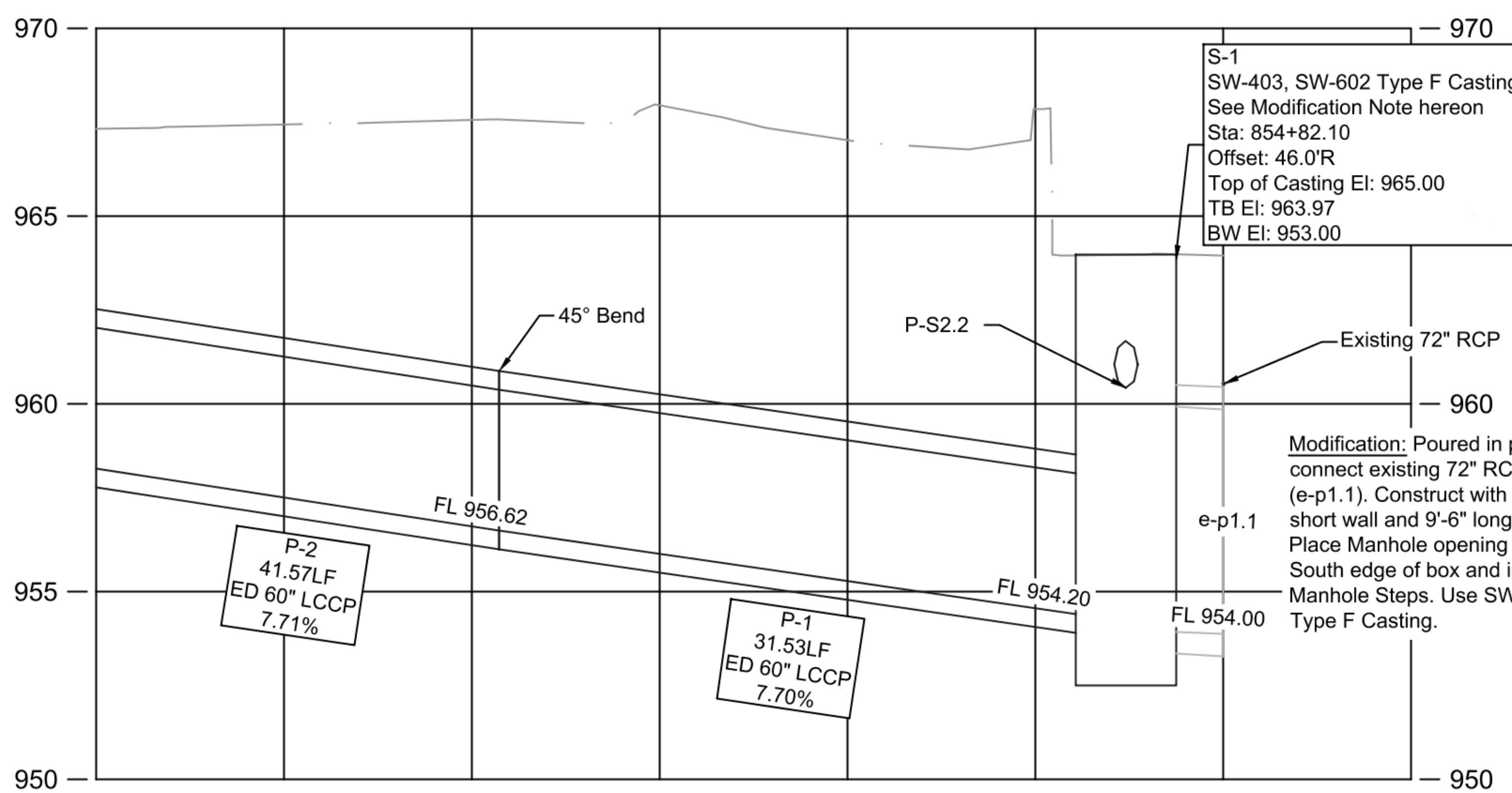
SCALE 1" = 20'

0 20' 40'

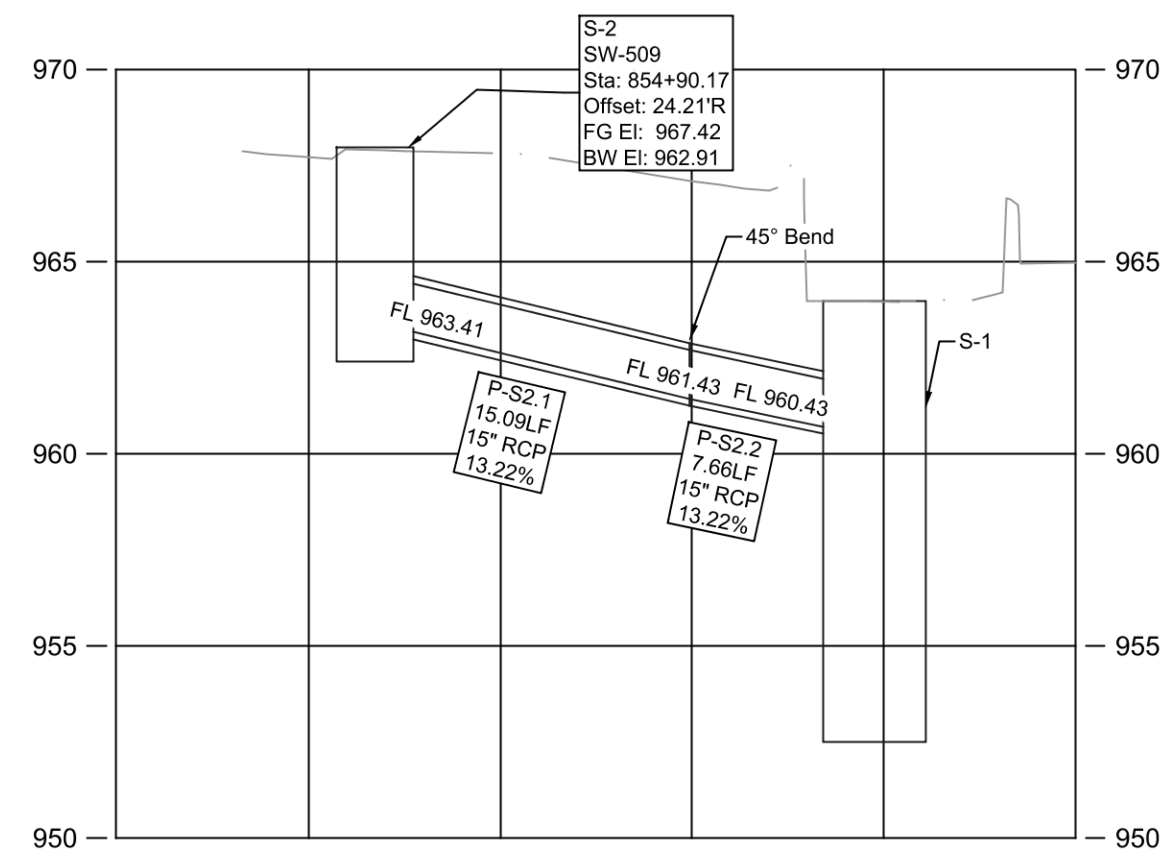
12/10/2019 2:38 PM Q:\1915 Cville Storm - 2019\CAD\M Sheets.dwg

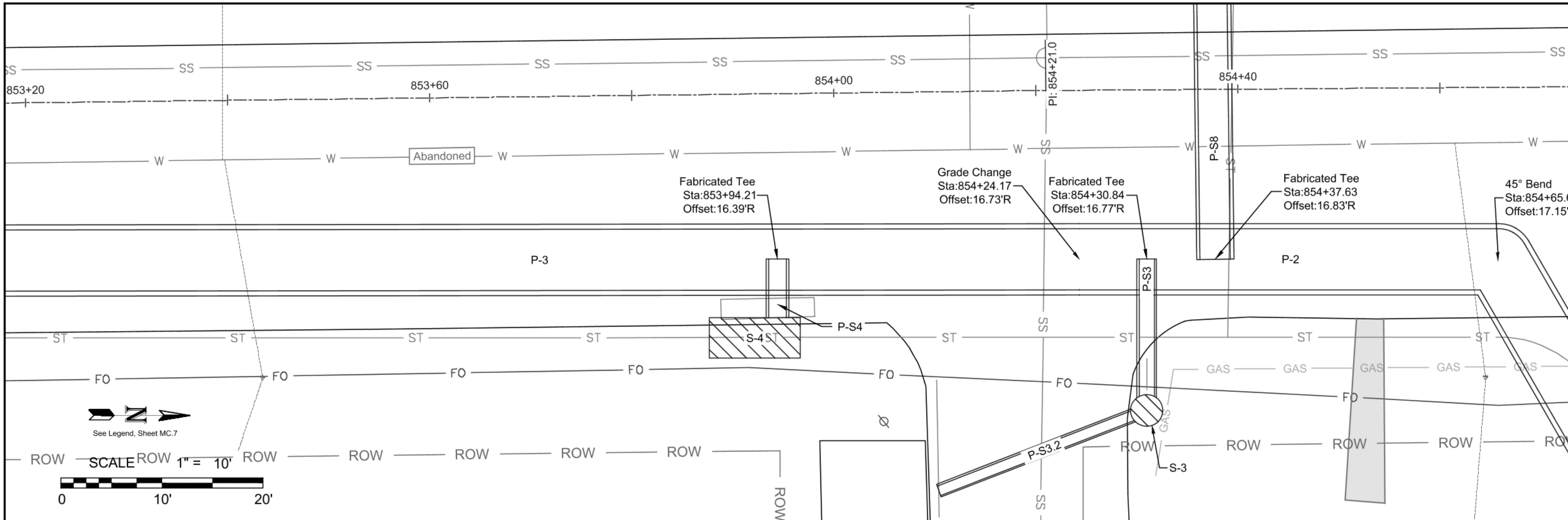
ENGLISH	IOWA DOT	DESIGN TEAM	HALL ENGINEERING COMPANY	APPANOOSE COUNTY, IOWA	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER	MD.3

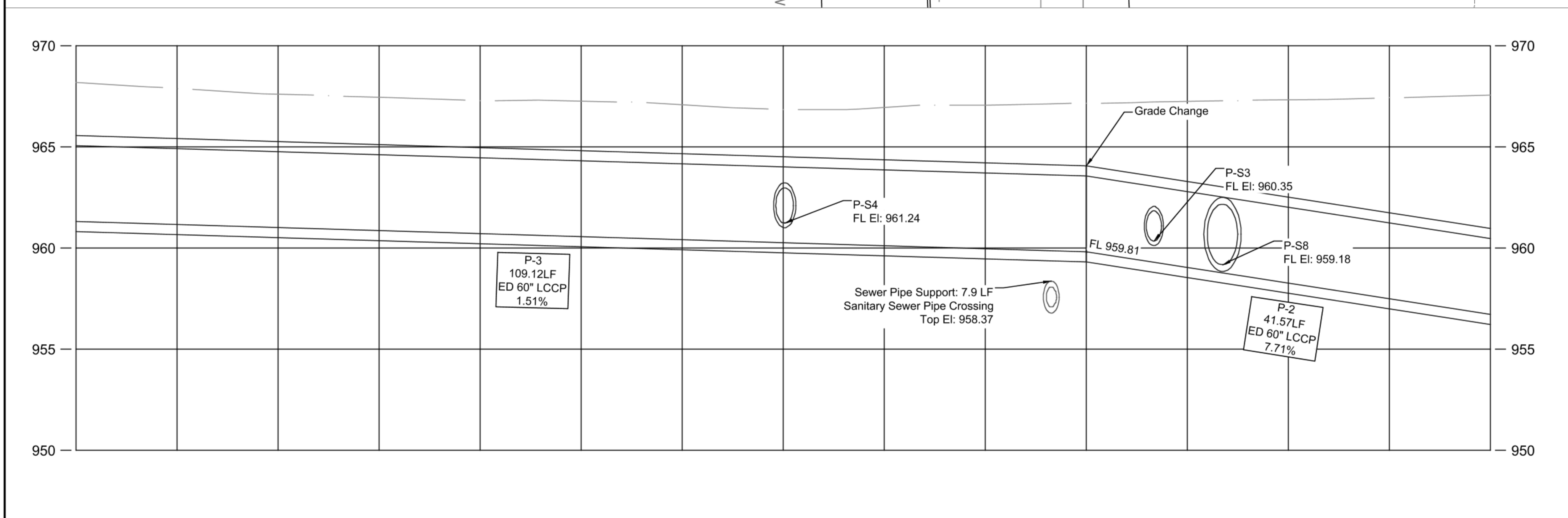




Modification: Poured in place to connect existing 72" RCP (e-p1.1). Construct with 4'-0" short wall and 9'-6" long wall. Place Manhole opening at the South edge of box and include Manhole Steps. Use SW-602 Type F Casting.

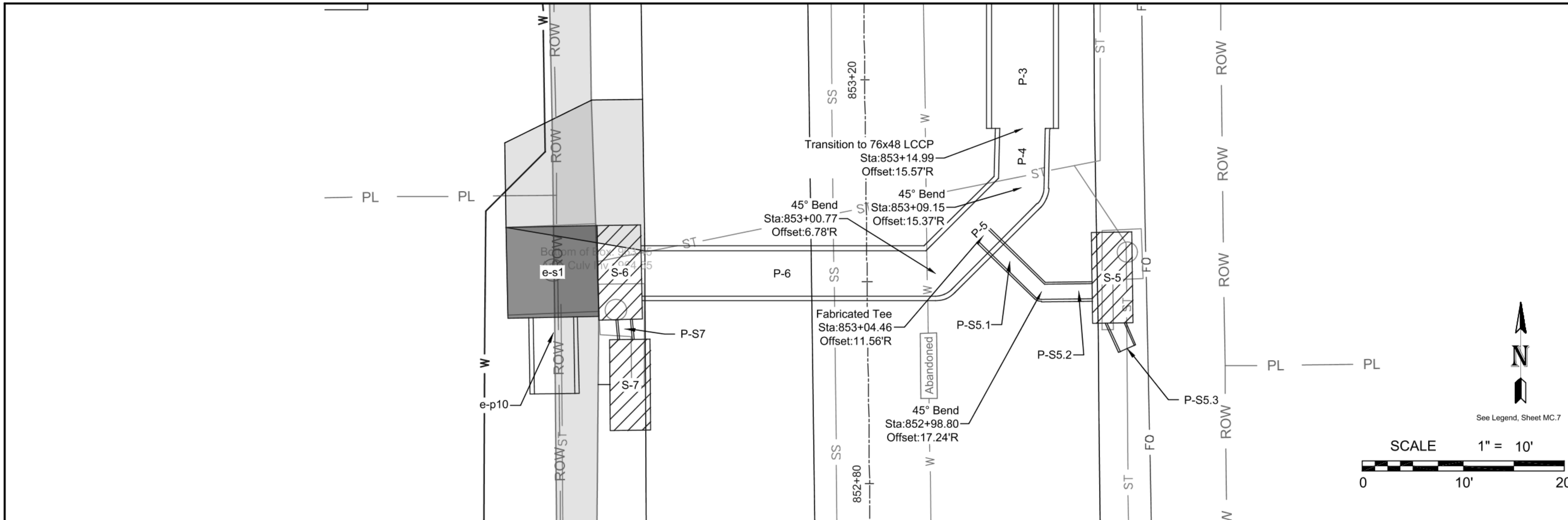


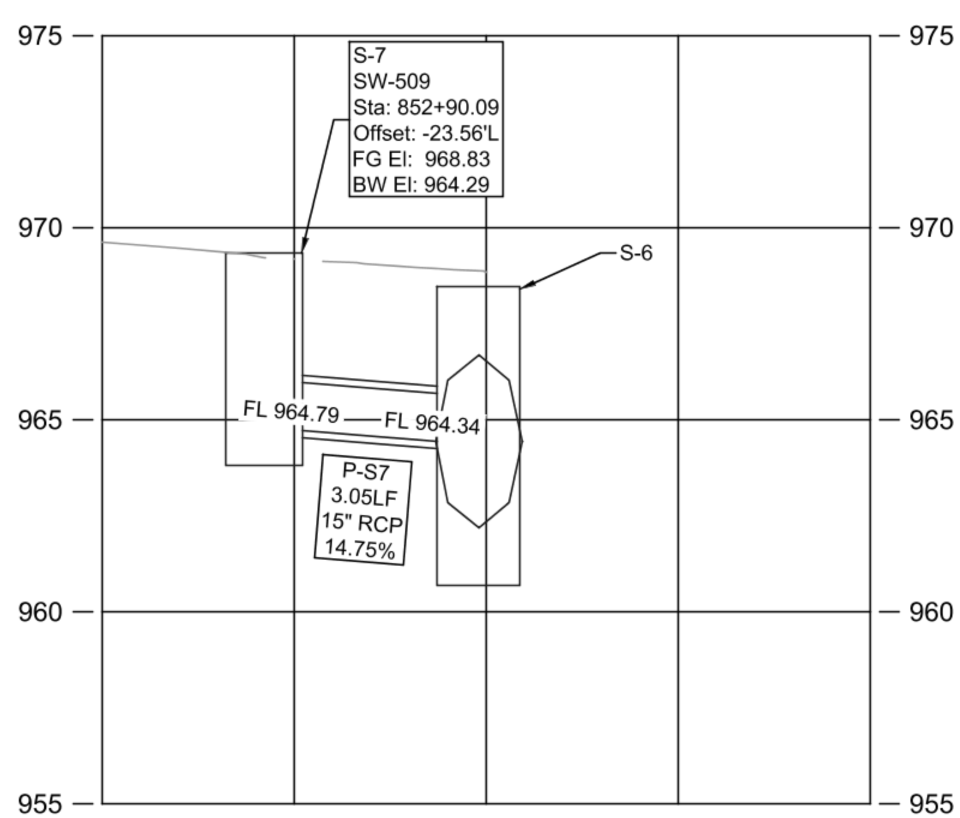


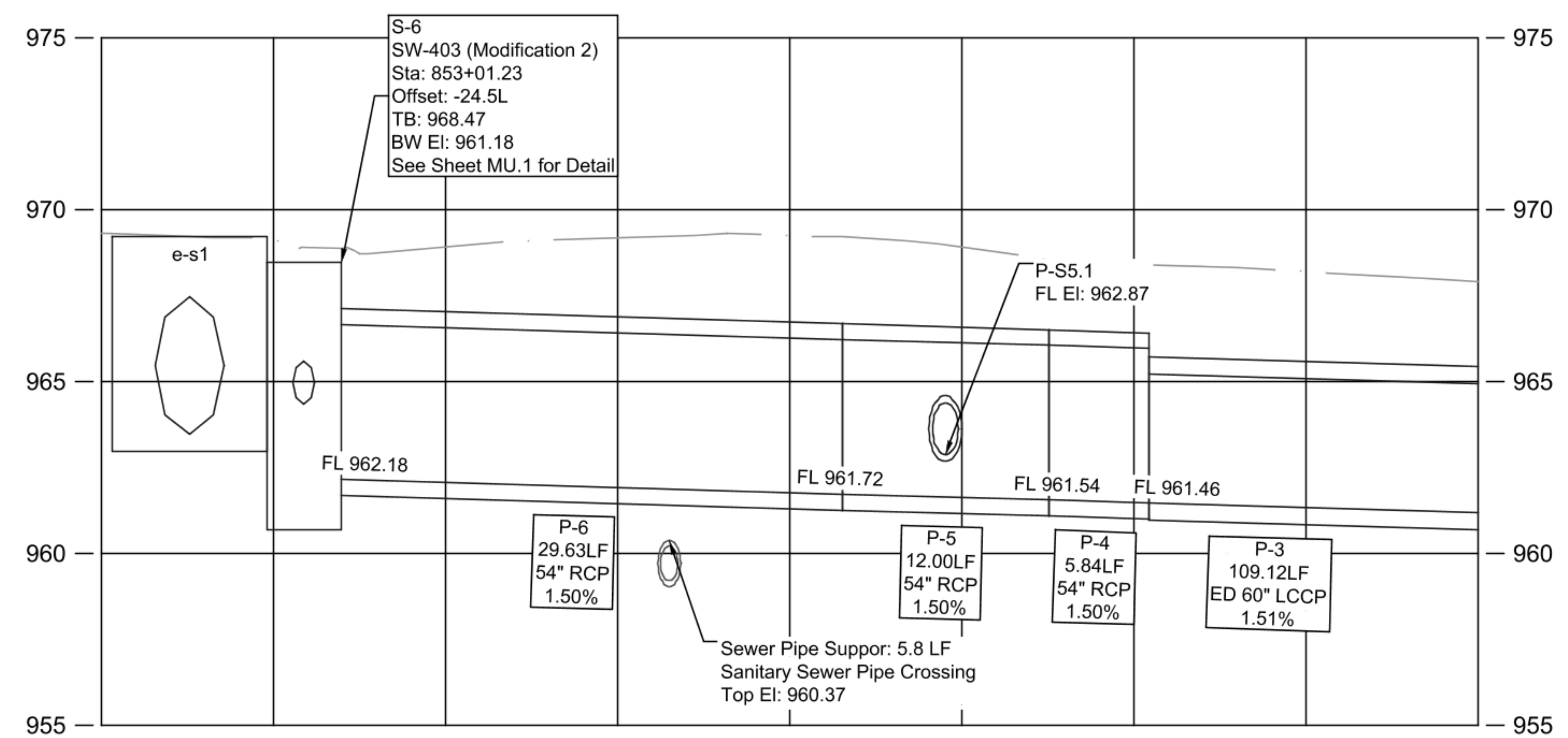


12/10/2019 2:38 PM

ENGLISH	IOWA DOT	DESIGN TEAM	HALL ENGINEERING COMPANY	APPANOOSE COUNTY, IOWA	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER	MD.5

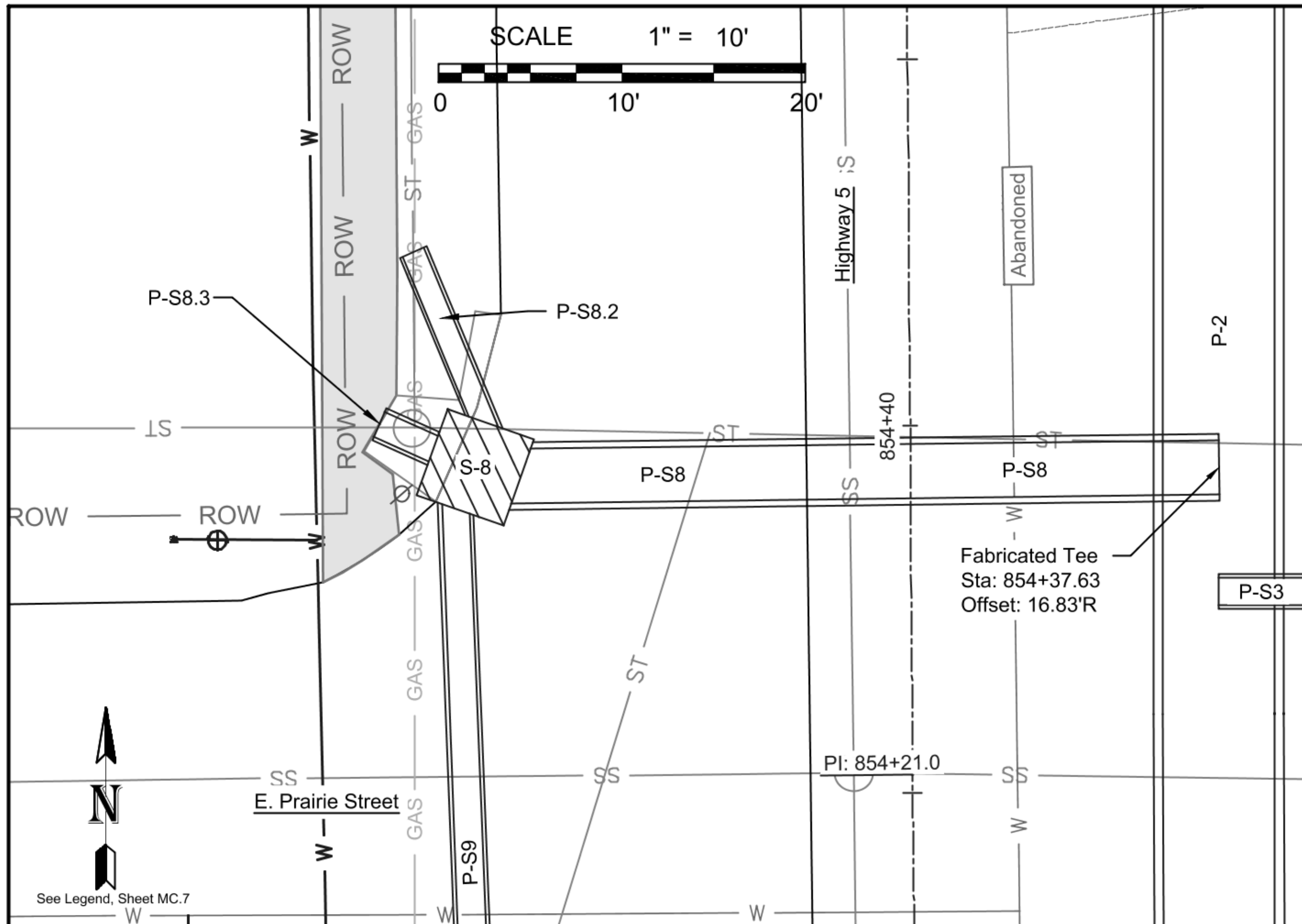


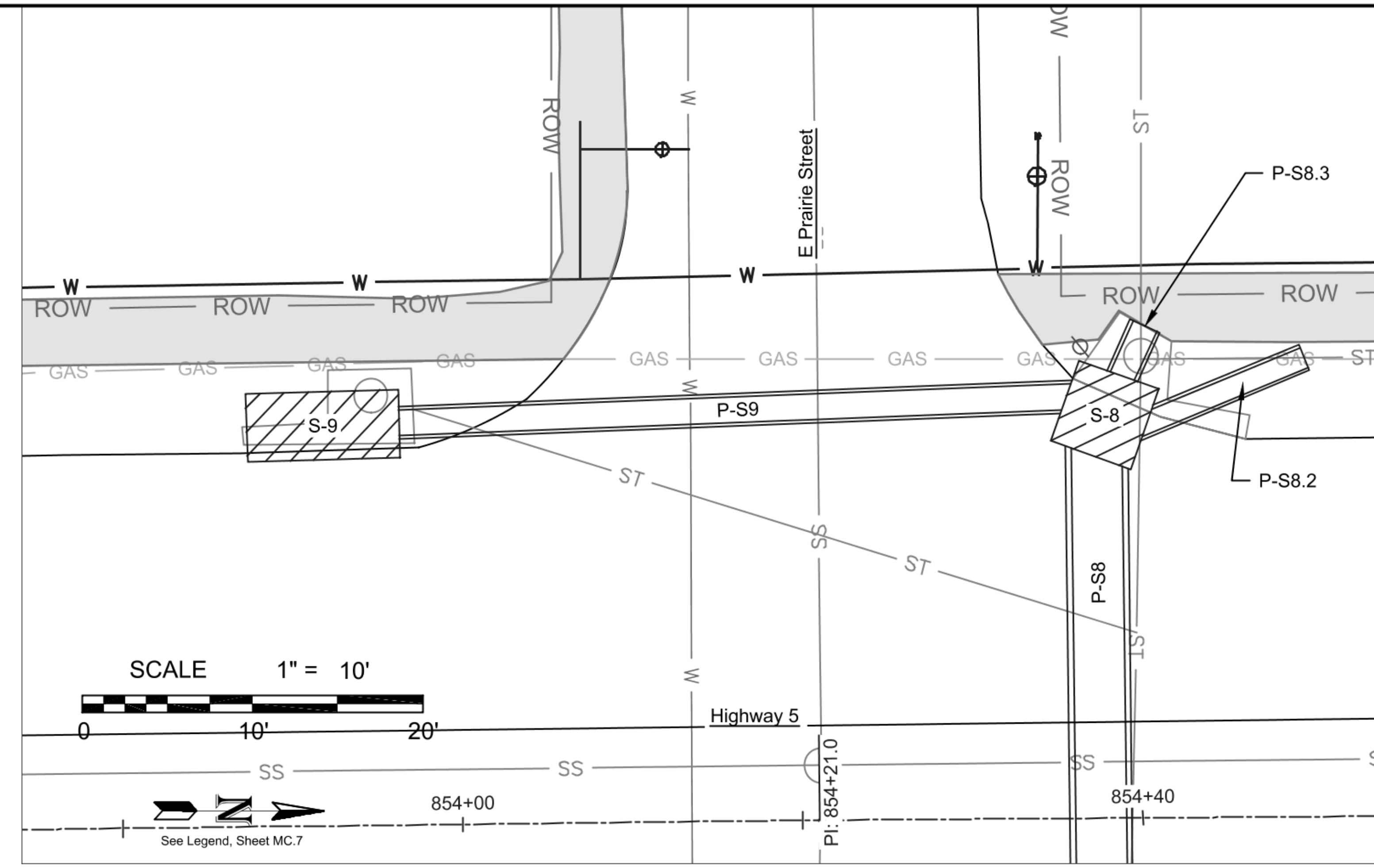


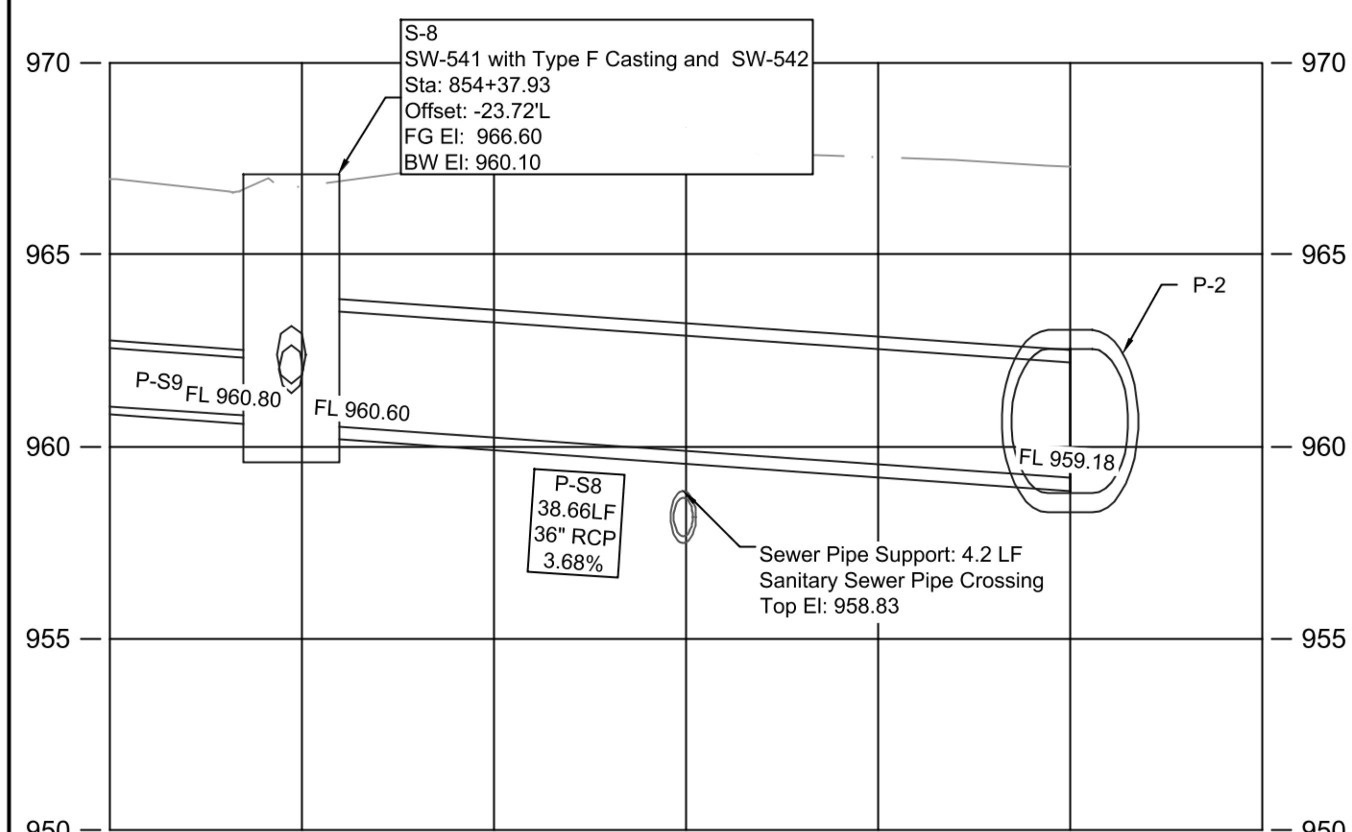


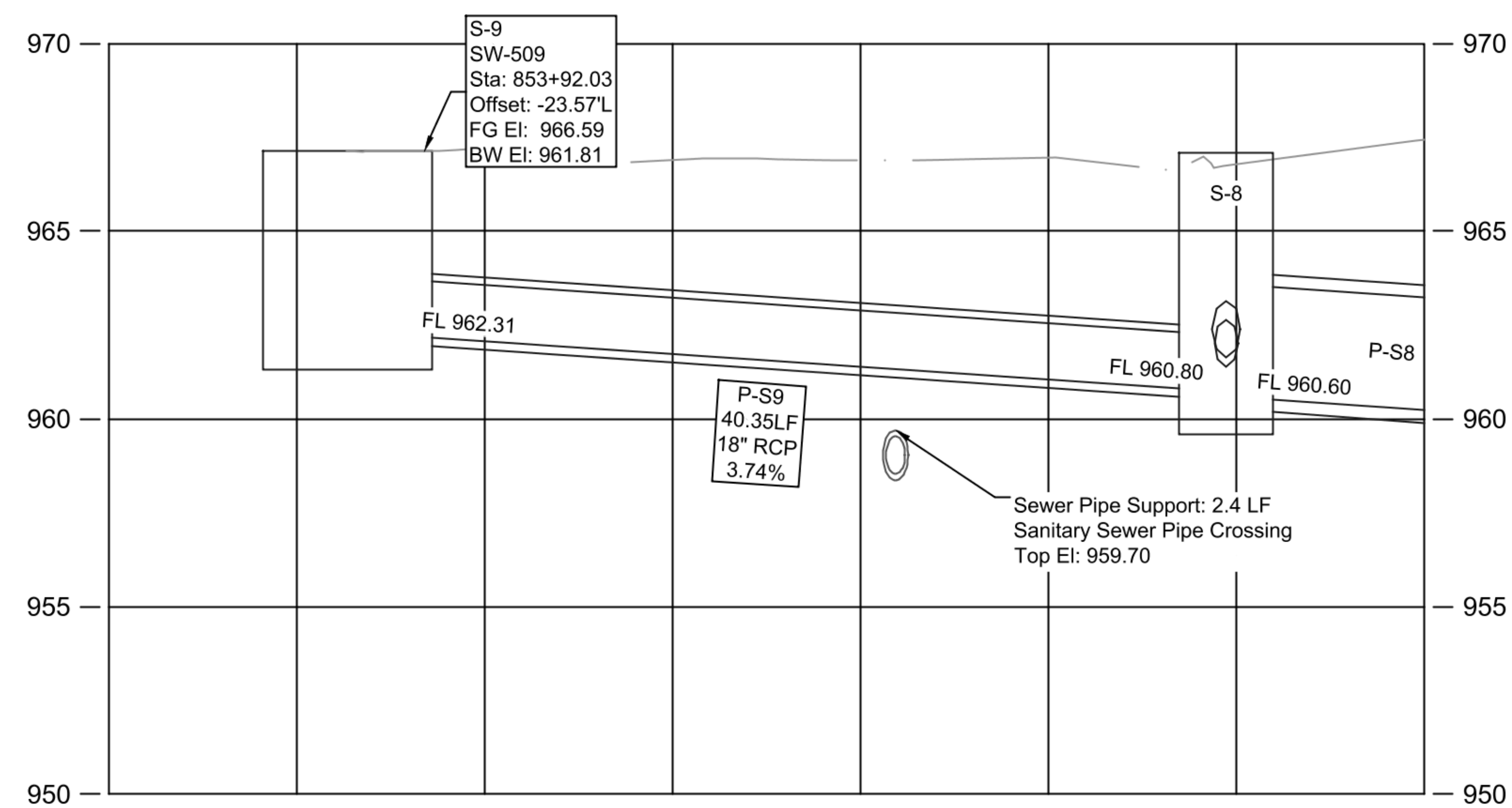
ENGLISH	IOWA DOT	DESIGN TEAM	HALL ENGINEERING COMPANY	APPANOOSE COUNTY, IOWA	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER	MD.6

12/10/2019 2:38 PM Q:\1915 Cville Storm - 2019\CAD\M Sheets.dwg

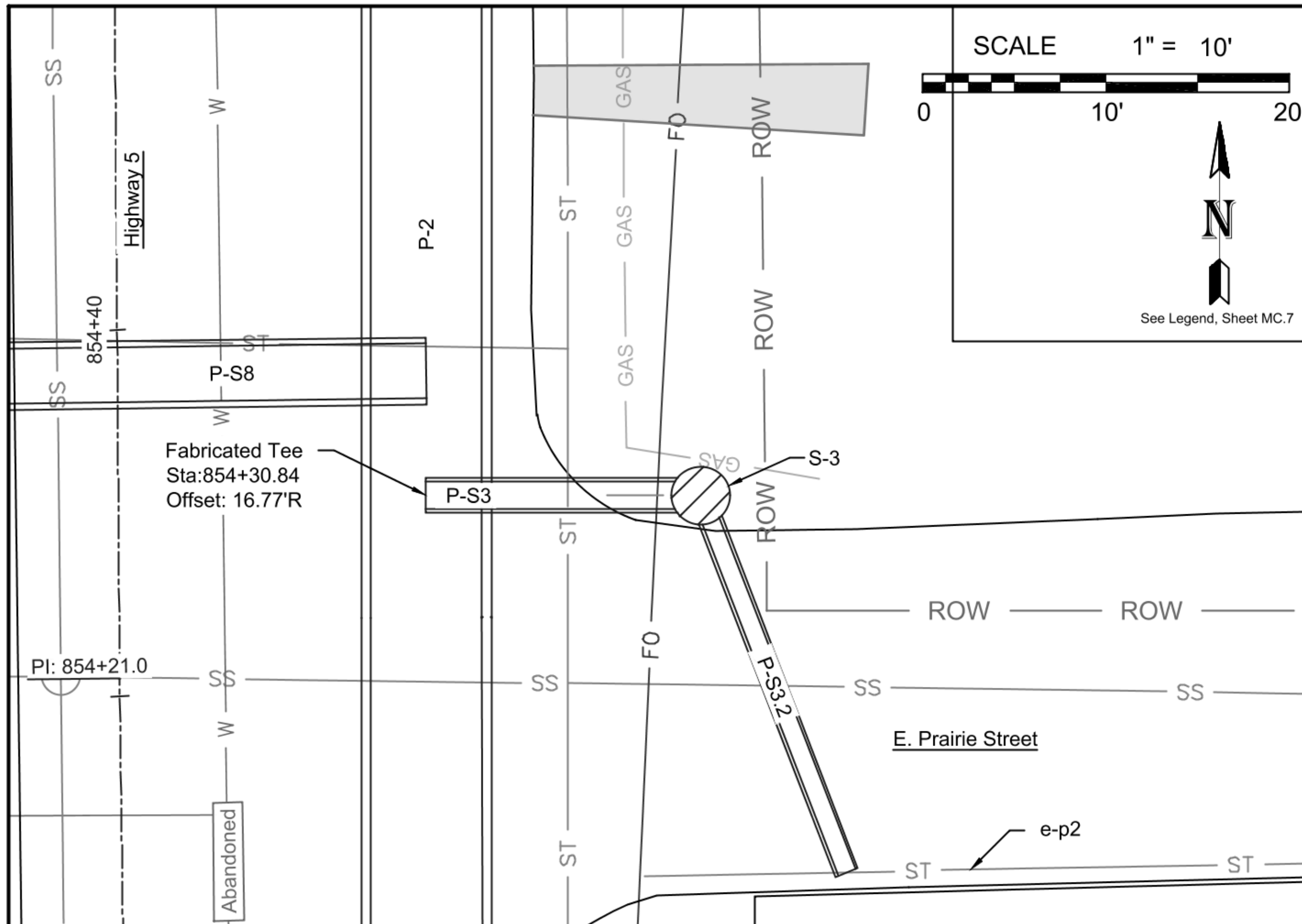


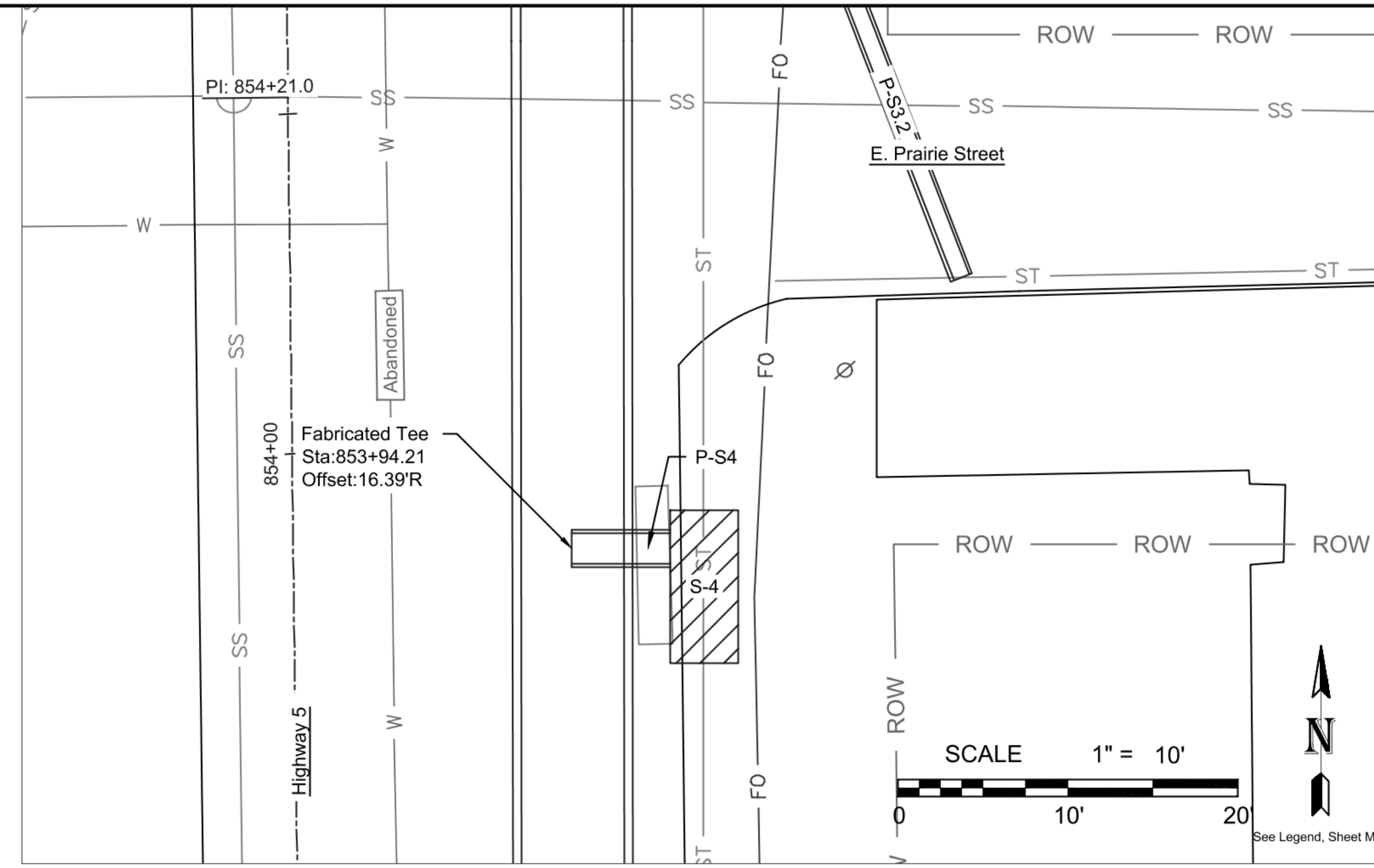


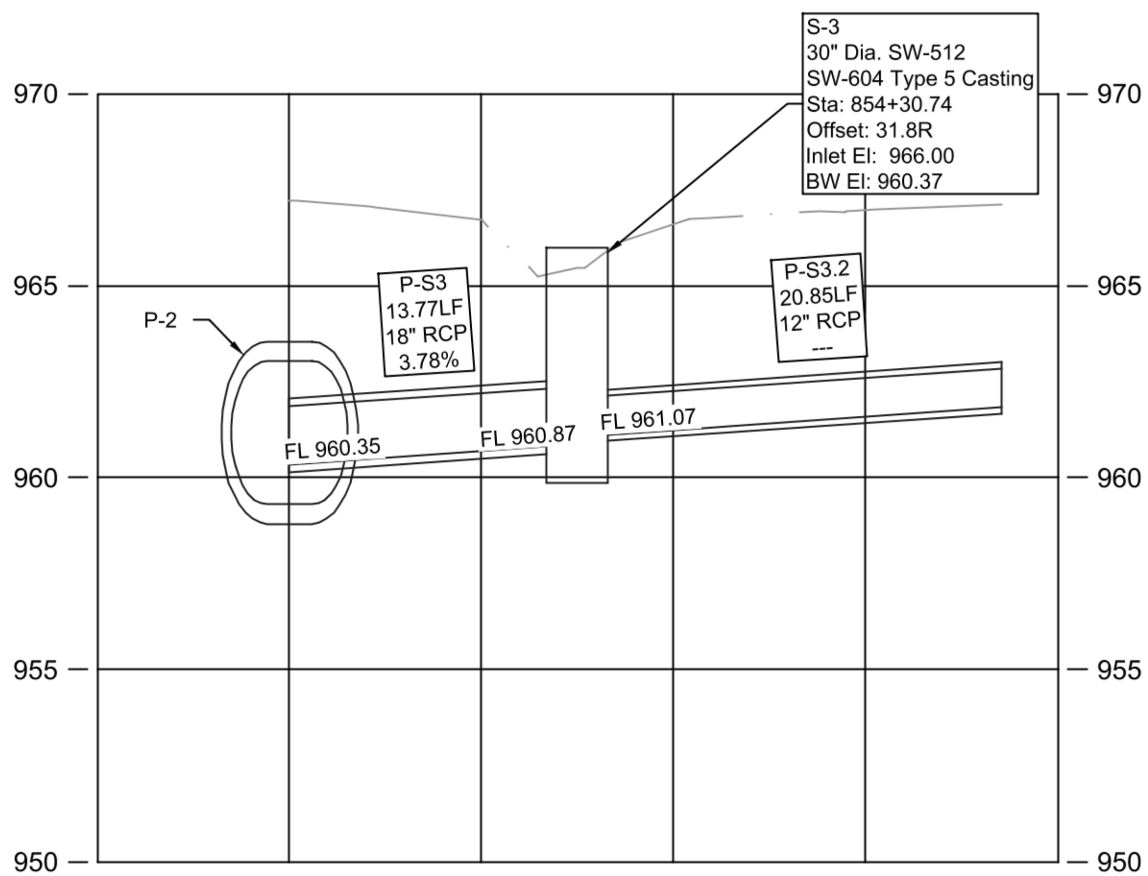


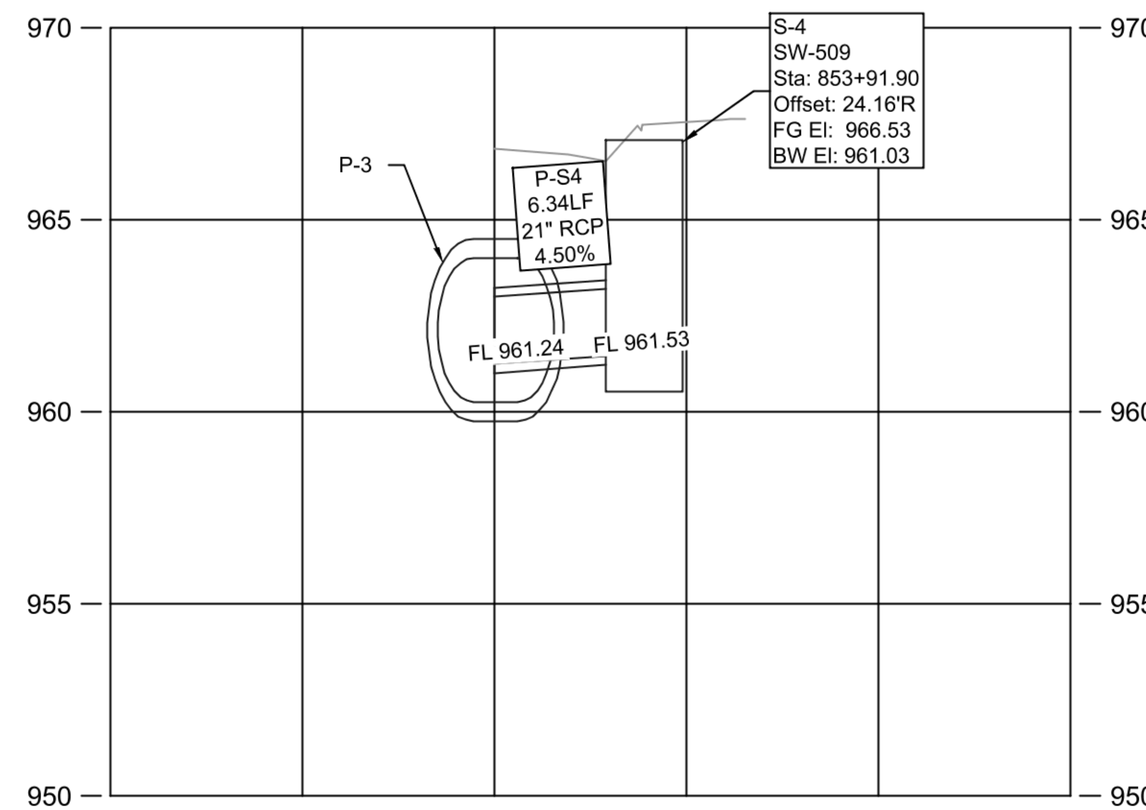


ENGLISH	IOWA DOT	DESIGN TEAM **HALL ENGINEERING COMPANY**	**APPANOOSE COUNTY, IOWA**	PROJECT NUMBER **STPN-005-1(76)--2J-04**		SHEET NUMBER **MD.7**



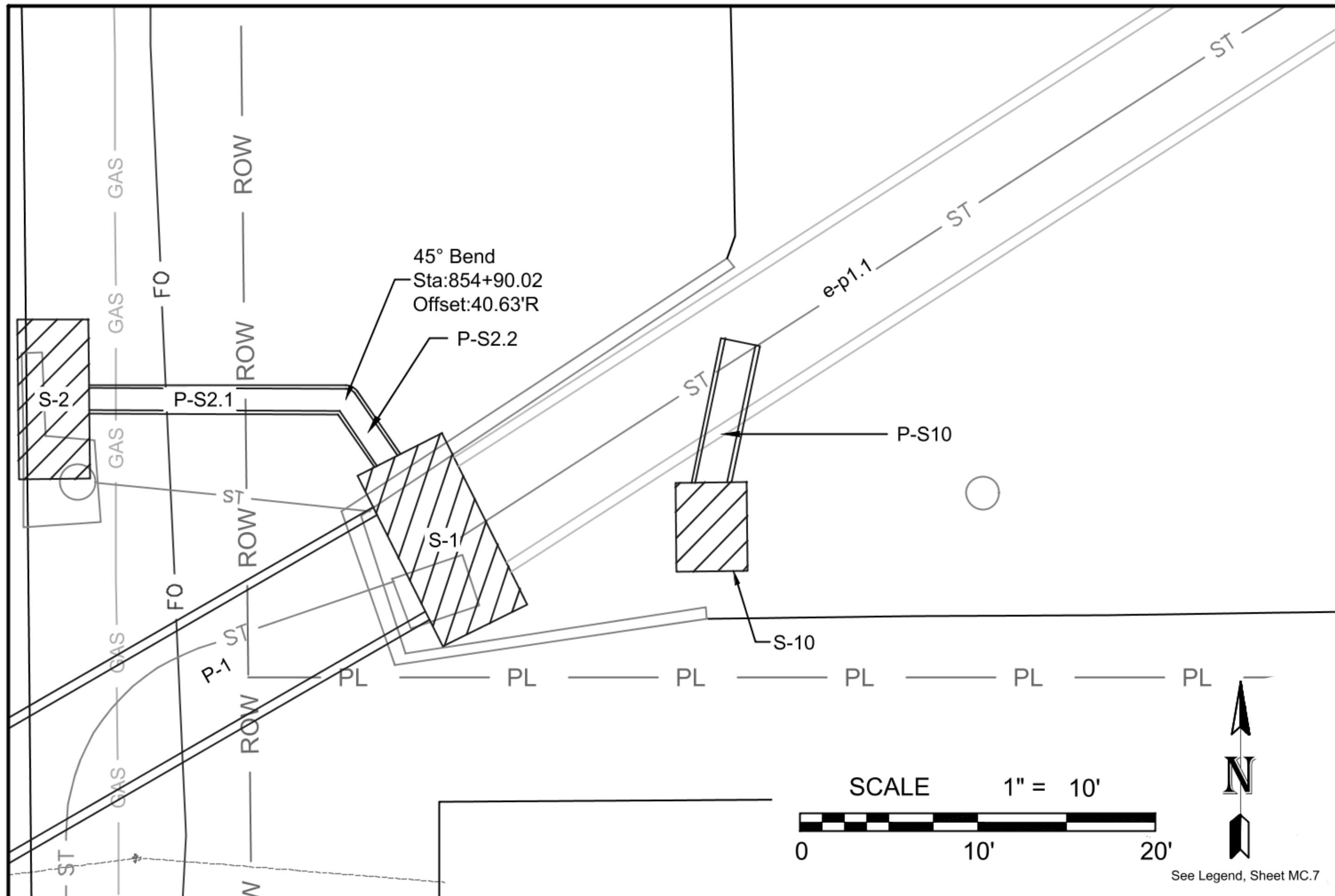


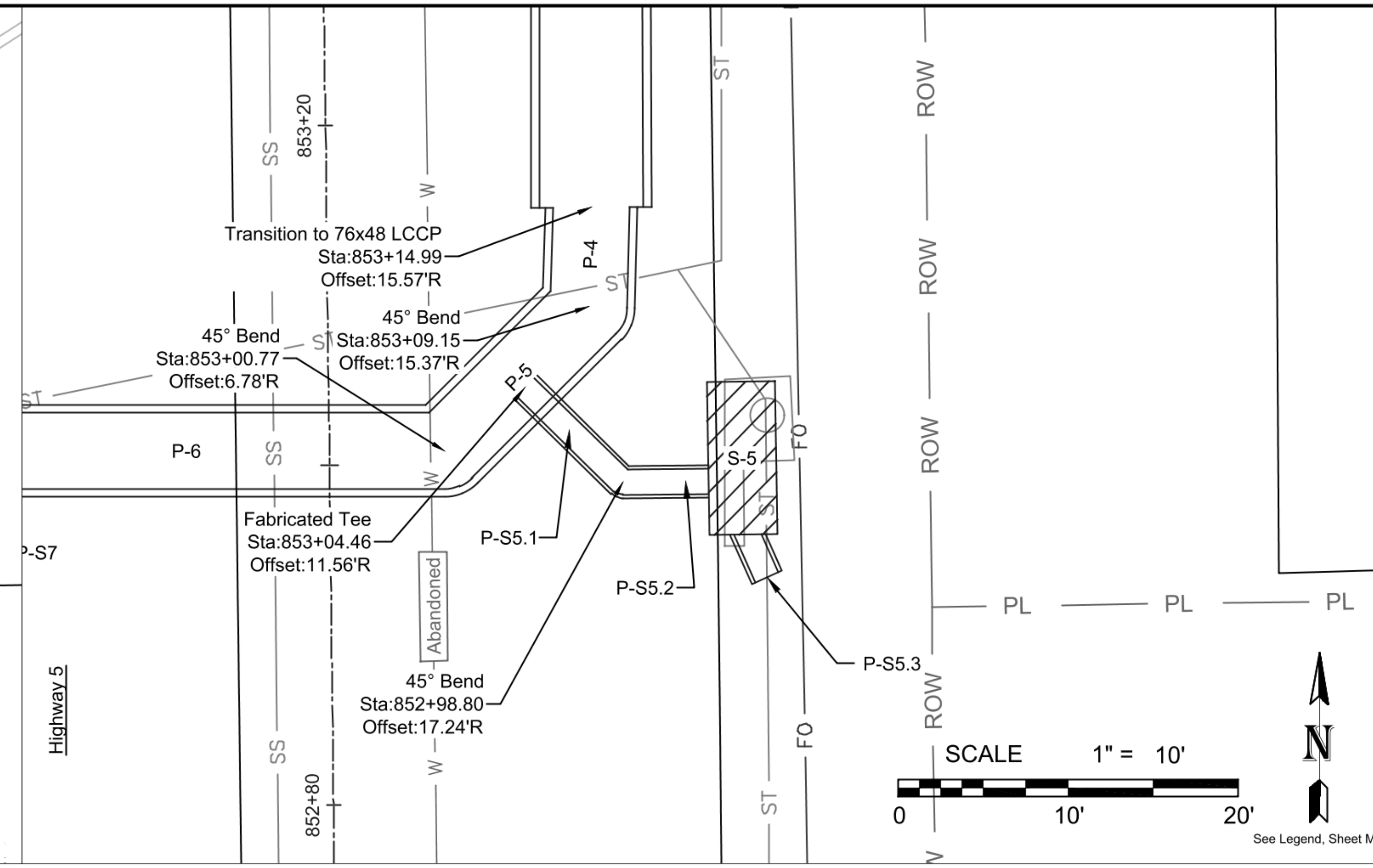


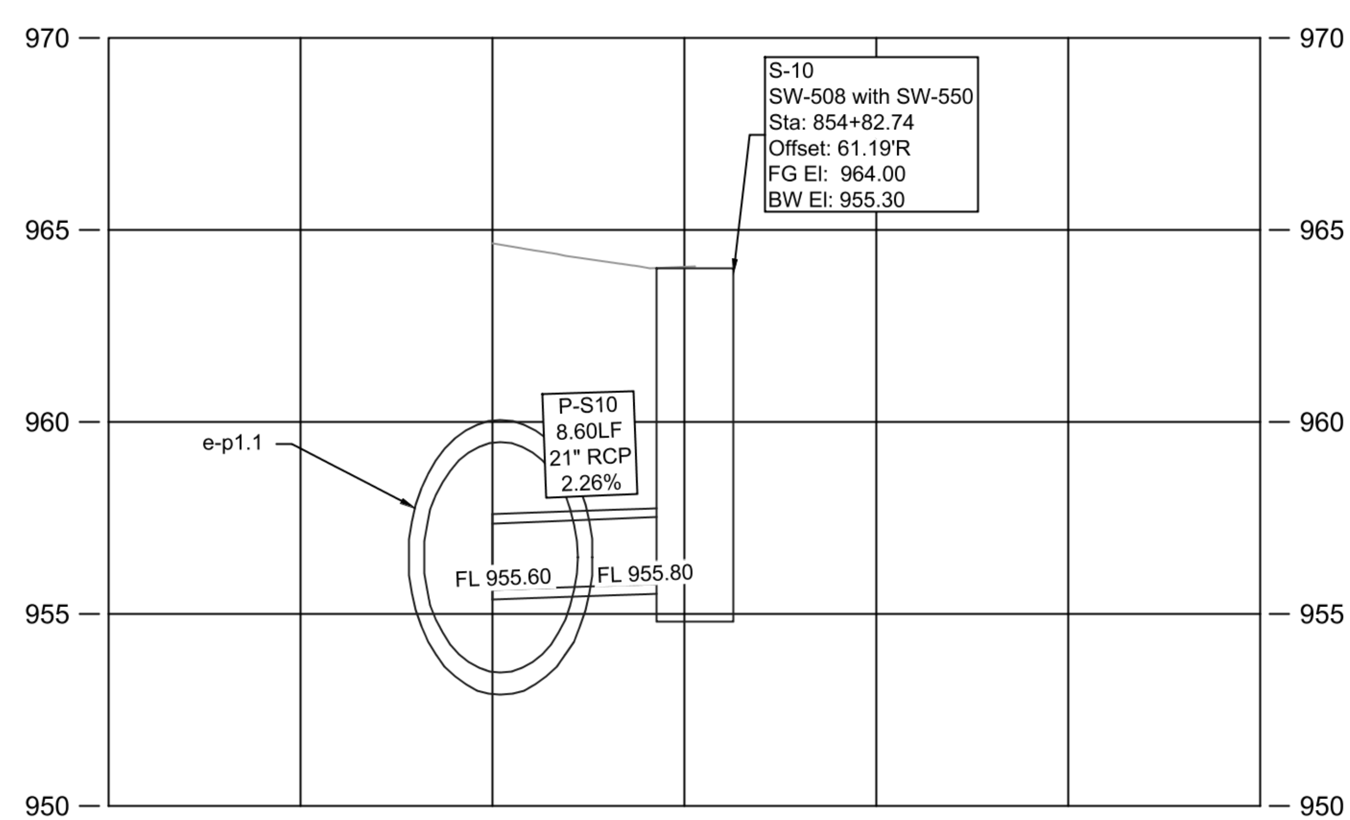


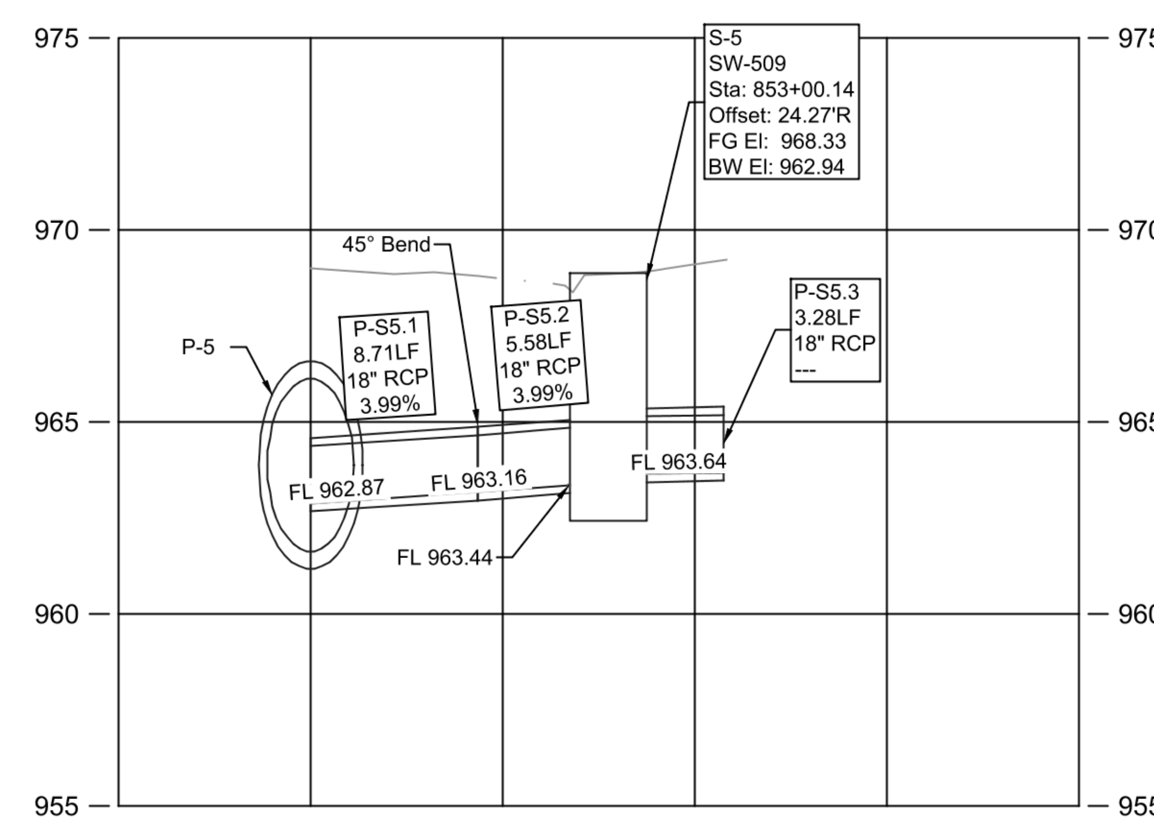
12/10/2019 2:38 PM Q:\1915 Cville Storm - 2019\CAD\M Sheets.dwg

ENGLISH	IOWA DOT	DESIGN TEAM	HALL ENGINEERING COMPANY	APPANOOSE COUNTY, IOWA	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER	MD.8



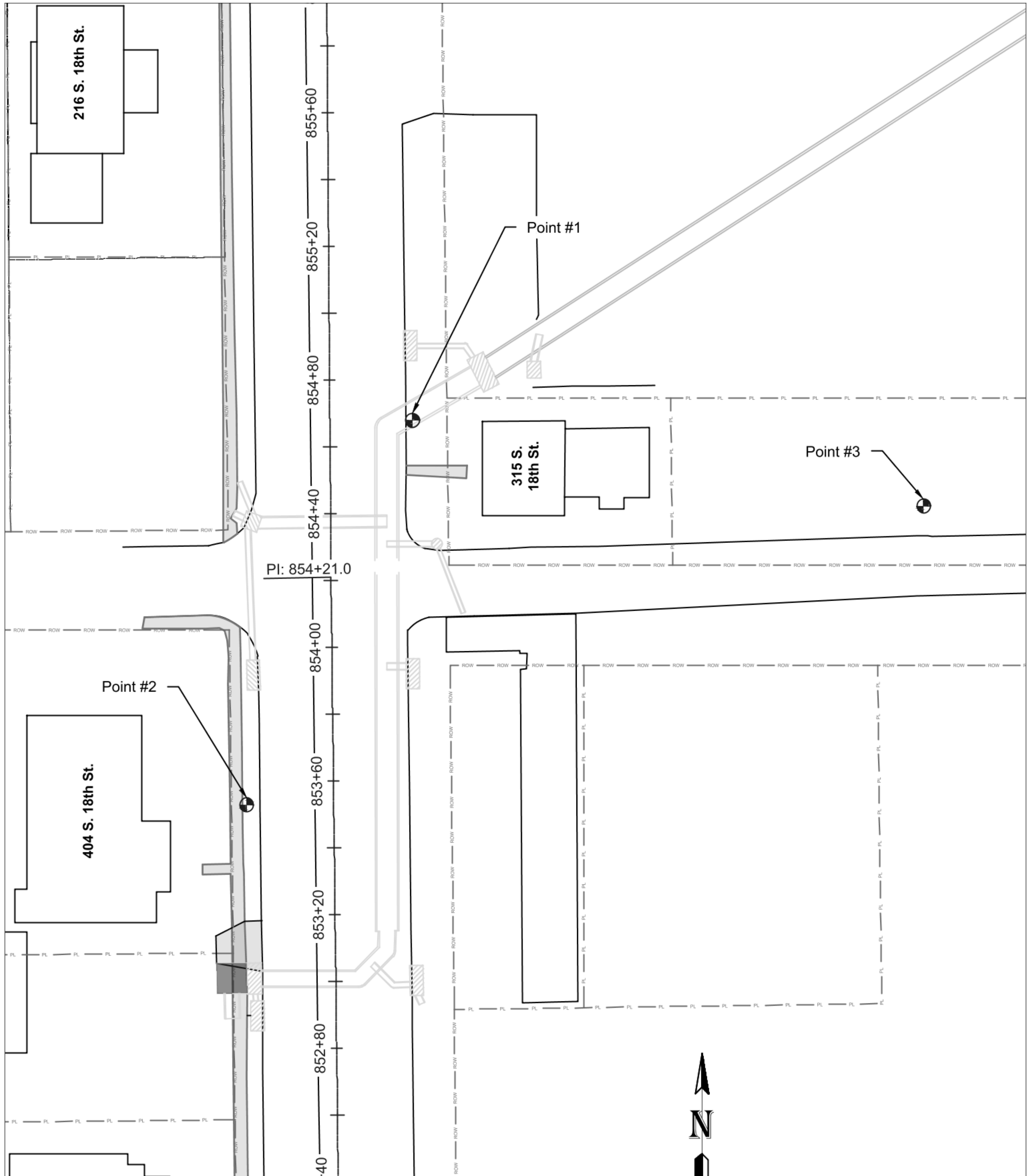






12/10/2019 2:38 PM Q:\1915 Cville Storm - 2019\CAD\M Sheets.dwg

ENGLISH	IOWA DOT	DESIGN TEAM HALL ENGINEERING COMPANY	APPANOOSE COUNTY, IOWA	PROJECT NUMBER STPN-005-1(76)--2J-04		SHEET NUMBER MD.9



CONTROL POINT VICINITY MAP

SCALE 1" = 40'

0 40' 80'

All measurements are in US survey feet.

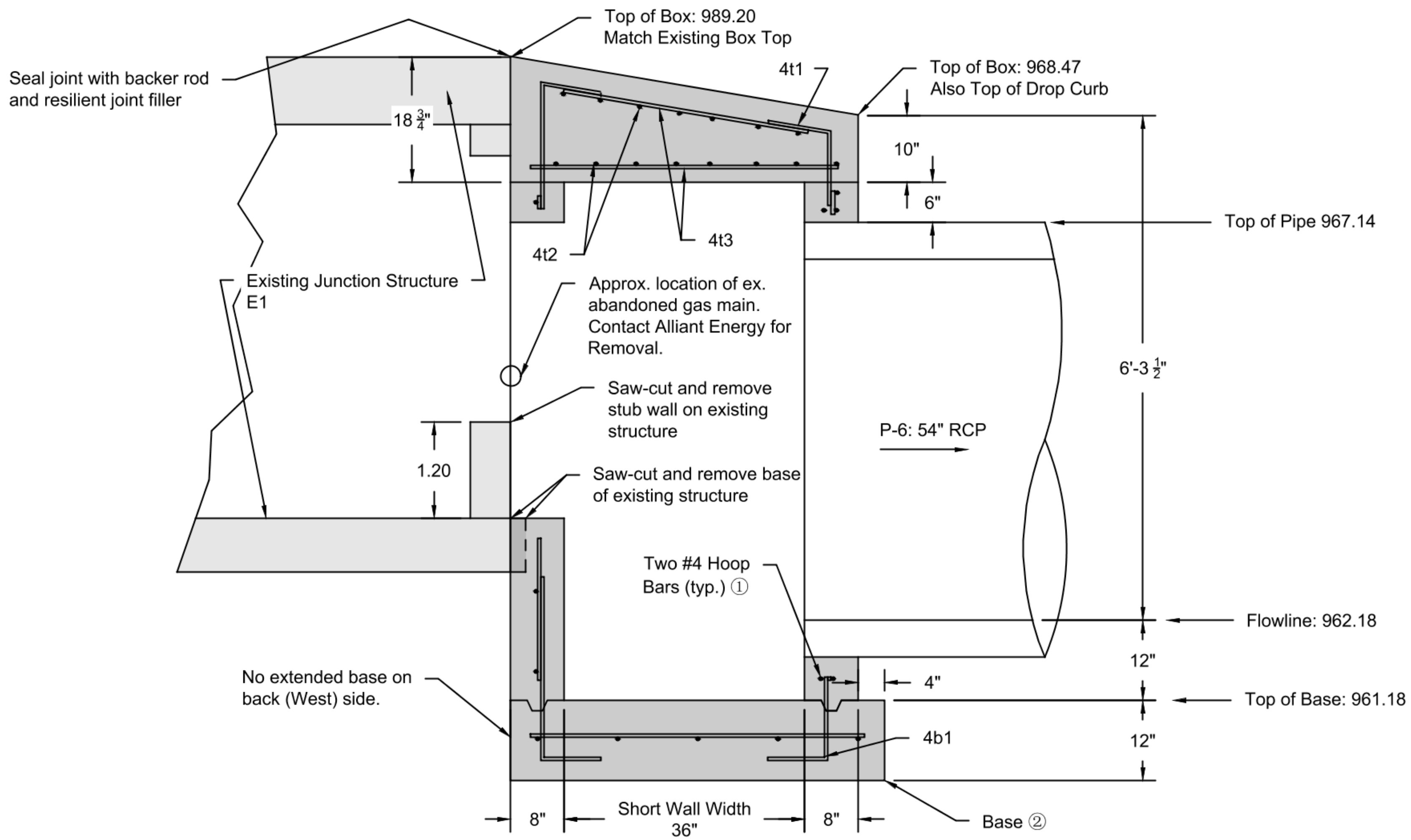
Horizontal Datum: NAD83 IaRTN Iowa South State Plane Coordinate System.

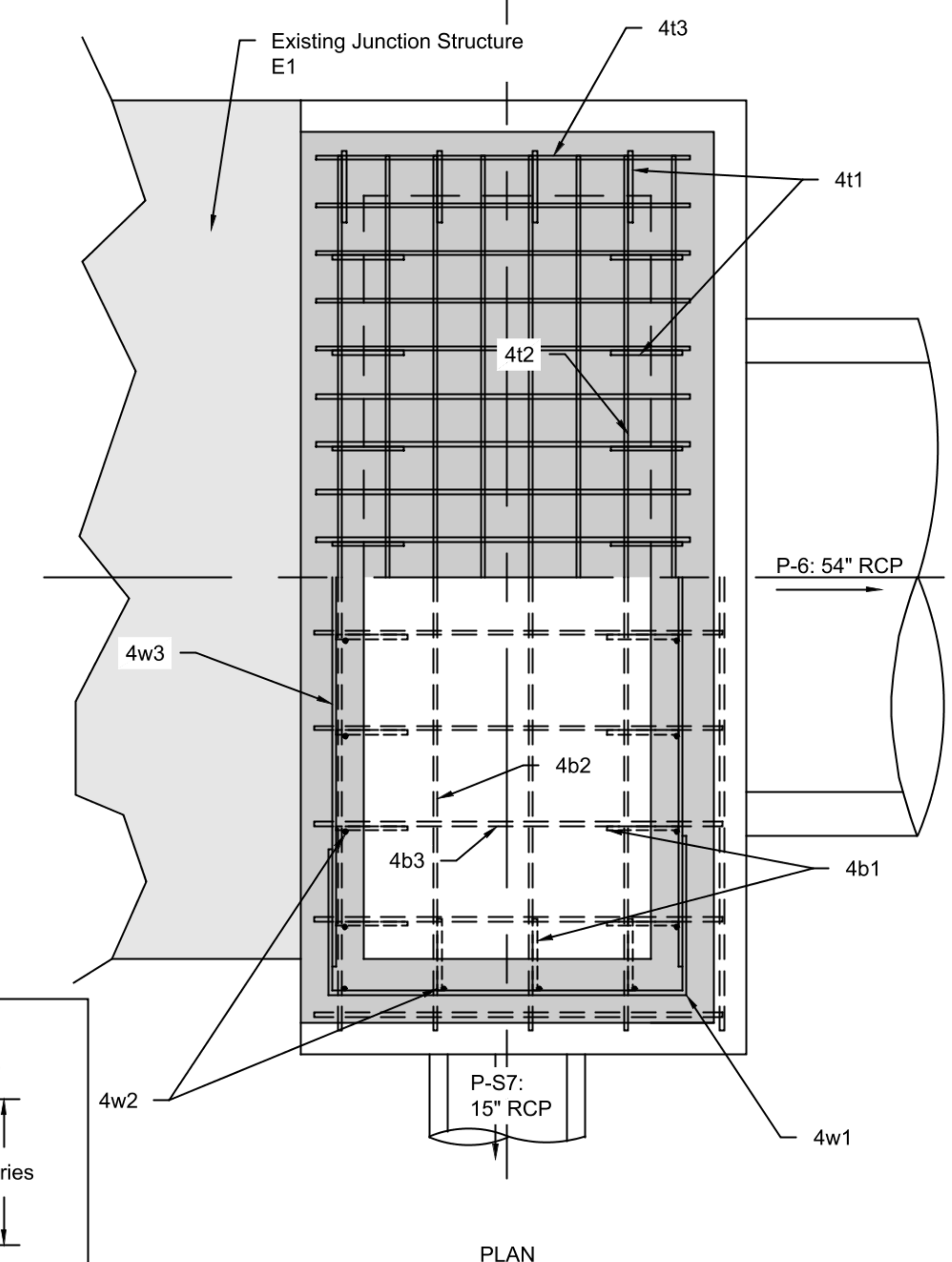
Vertical Datum: Elevations are relative to the North Rim of the Manhole East of 315th S 18th St. Northing and Easting coordinates are for use in locating the manhole, not to be used for horizontal positioning.

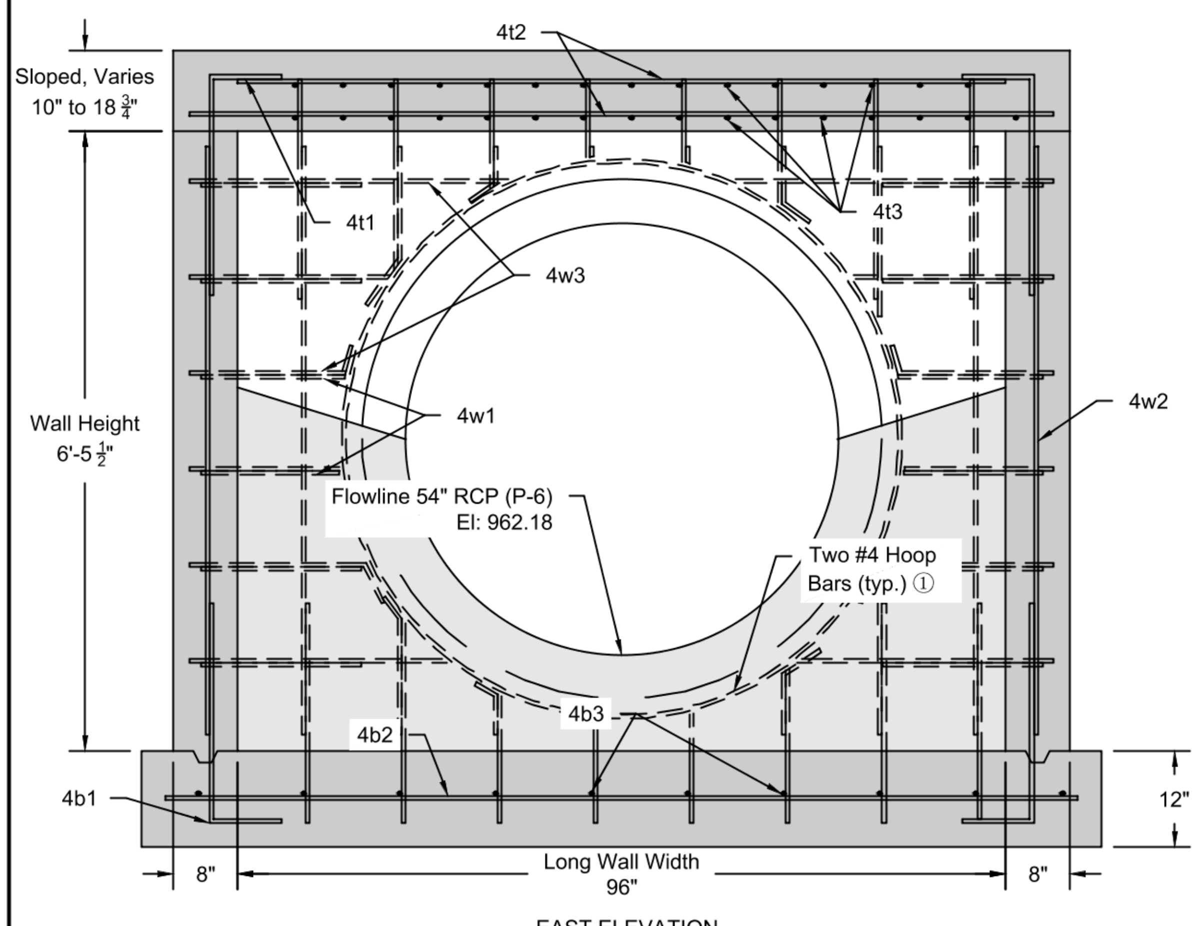
Point Number	Northing	Easting	Elevation	Description
1	266,887.274	1,815,617.881	967.99	60P Spike
2	266,772.161	1,815,568.285	968.16	60P Spike
3	266,861.664	1,815,770.927	966.74	North Rim of Manhole

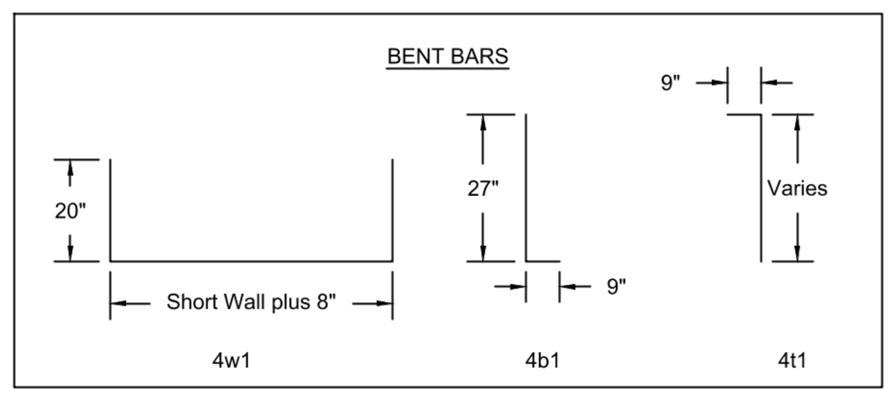
SURVEY DATA SHEET

See Legend, Sheet MC.7









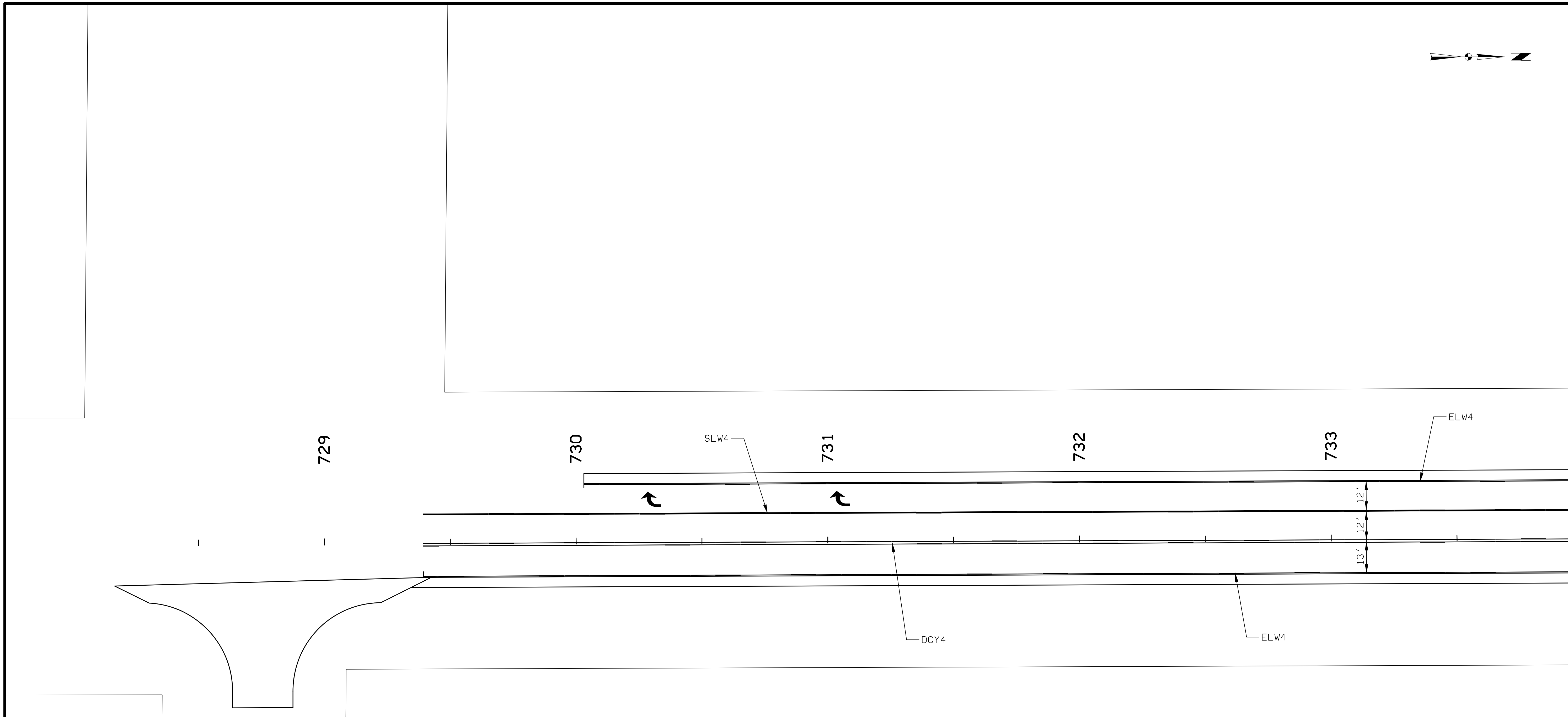
REINFORCING BAR LIST					
Mark	Size	Location	Shape	Length	Spacing
4t1	4	Top	˥	Varies	12"
4t2	4	Top	—	Long Wall plus 12"	6"
4t3	4	Top	—	Short Wall plus 12"	6"
4b1	4	Base	L	36"	12"
4b2	4	Base	—	Long Wall plus 18"	12"
4b3	4	Base	—	Short Wall plus 18"	12"
4w1	4	Wall	⊓	Short Wall plus 48"	12"
4w2	4	Wall	—	Wall Height minus 4"	12"
4w3	4	Wall	—	Long Wall plus 12"	12"

SW-403 (MODIFIED)
STRUCTURE S-6

Bid Price to include all work shown hereon.

12/10/2019 2:38 PM Q:\1915 Cville Storm - 2019\CADM Sheets.dwg

ENGLISH	IOWA DOT	DESIGN TEAM	HALL ENGINEERING COMPANY	APPANOOSE COUNTY, IOWA	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER	MU.1

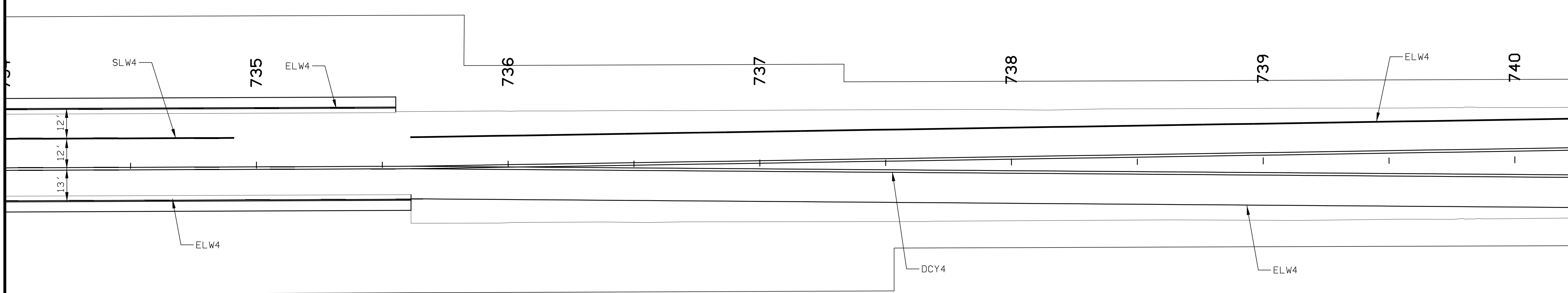


LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

0 FEET 20

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.1



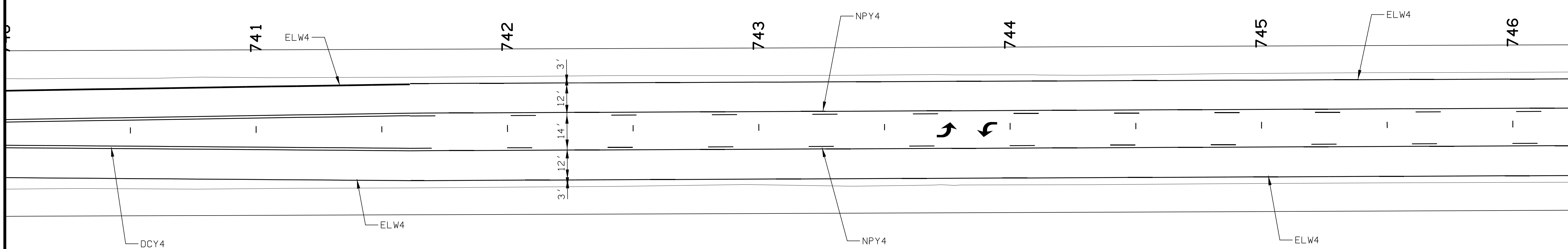
LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

0 FEET 20

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.2

5:25:21 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_N01.dgn

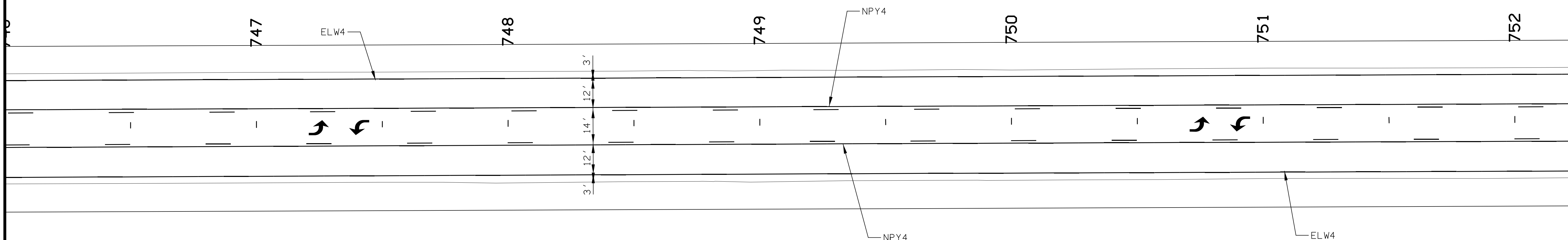


LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

0 FEET 20

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.3



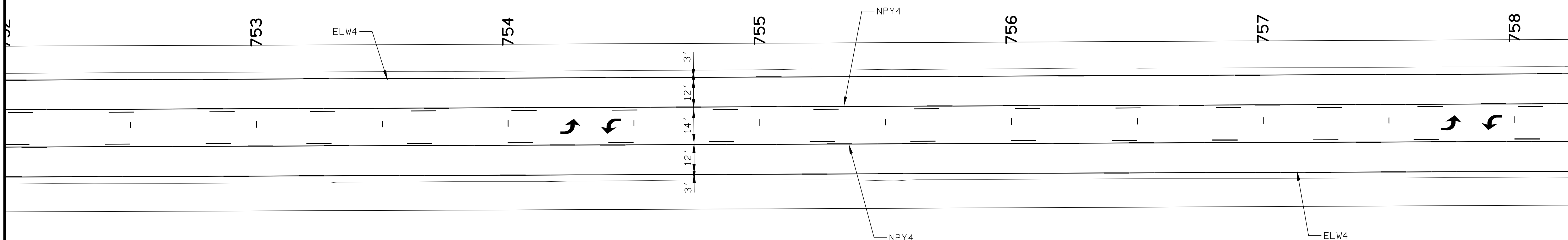
0 FEET 20

LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.4

5:25:22 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_N01.dgn

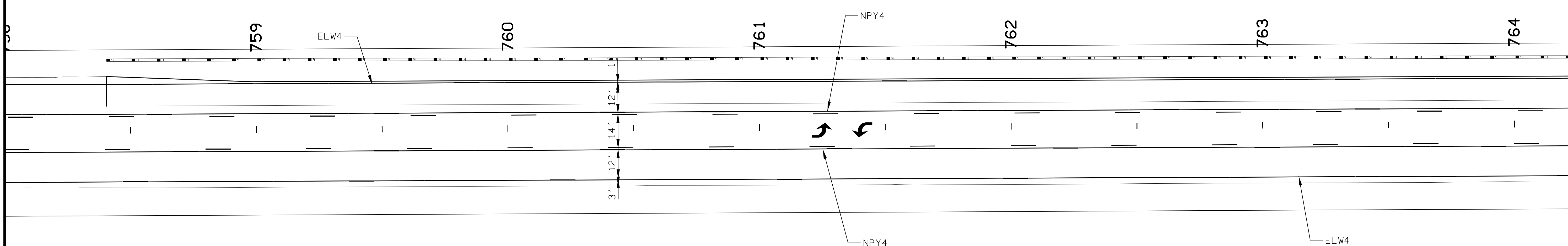


LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

0 FEET 20

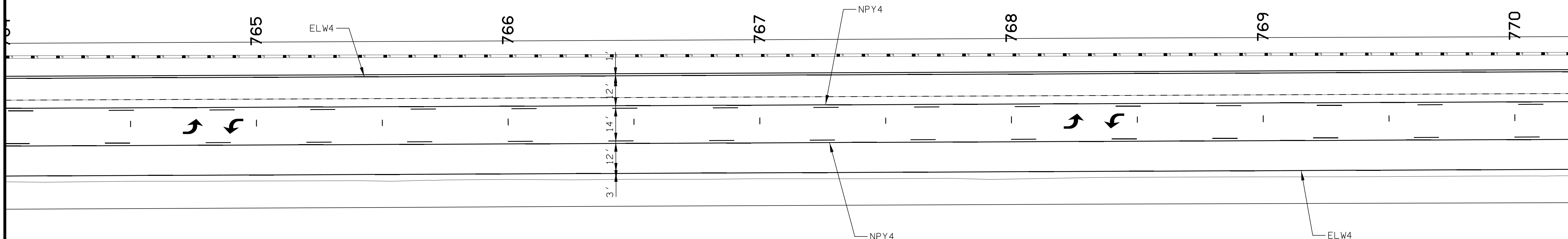
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.5



0 FEET 20

LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

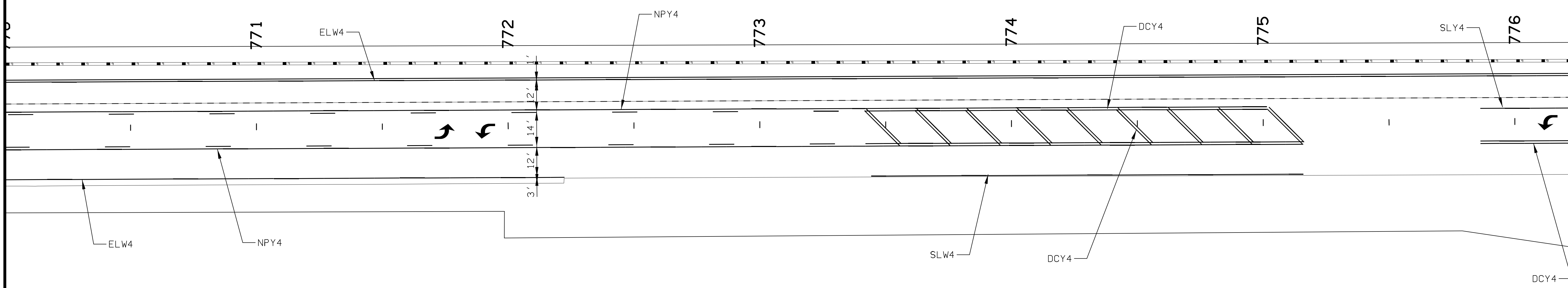


LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

0 FEET 20

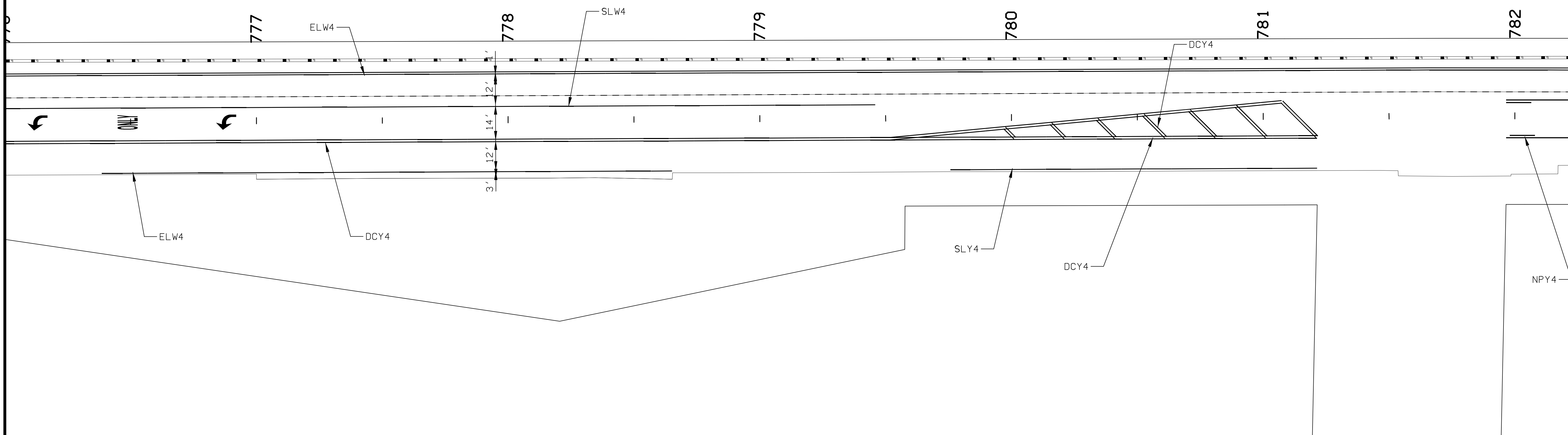
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.7



LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

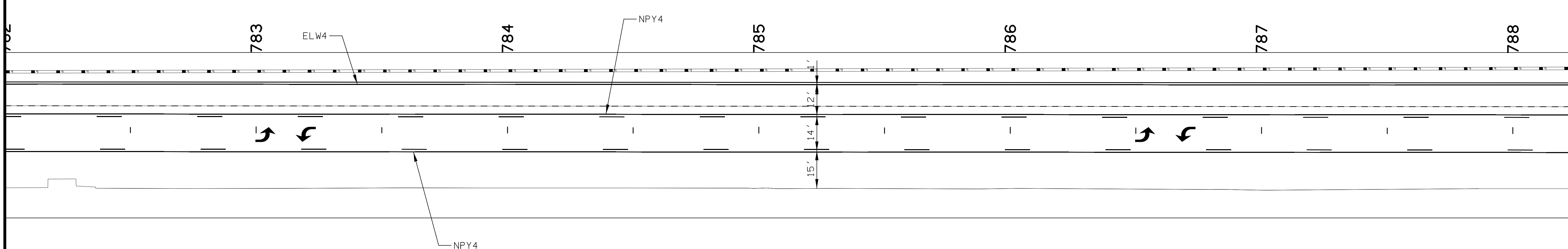
0 FEET 20



LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

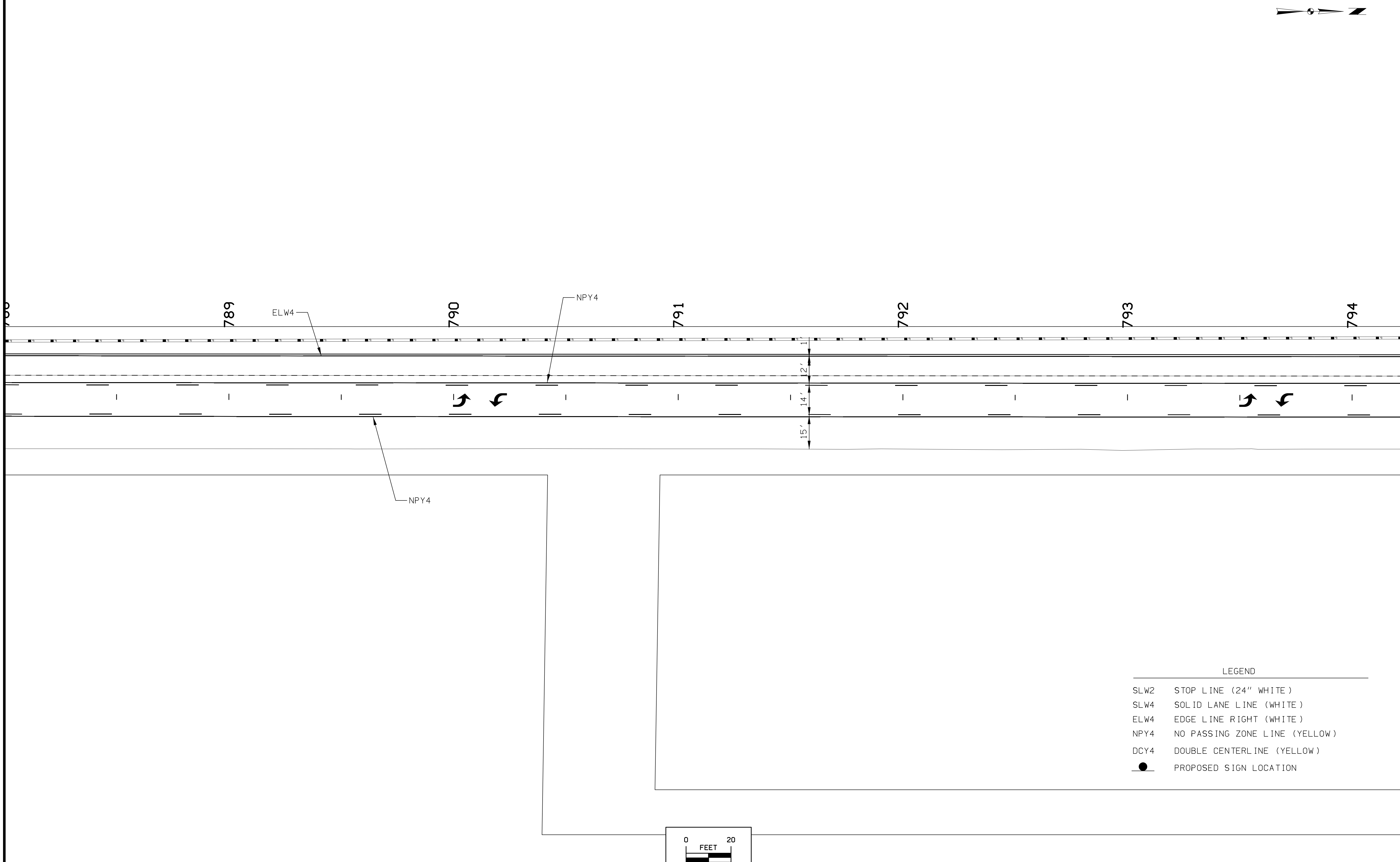
0 FEET 20



LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

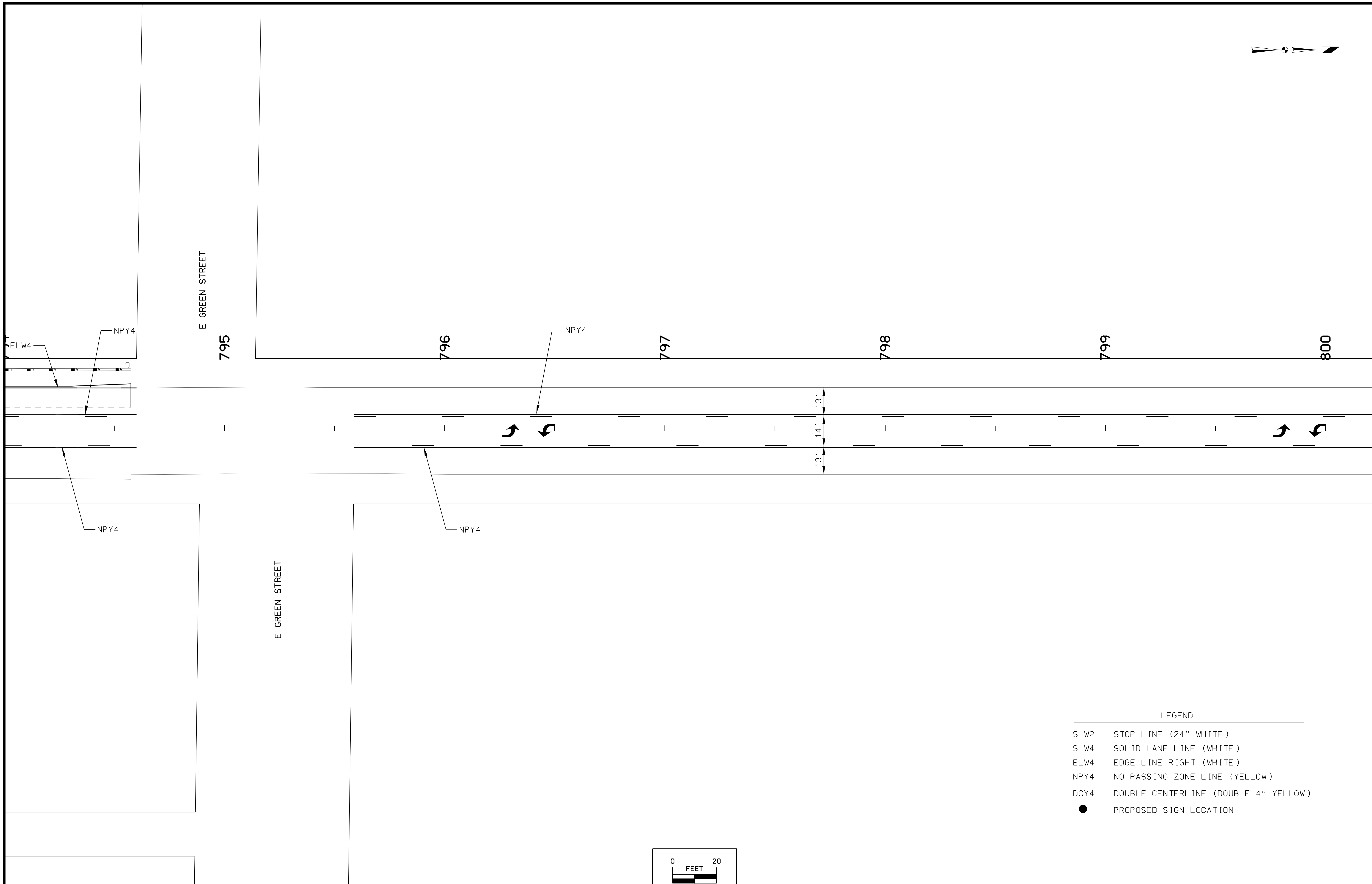
0 FEET 20



LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.11

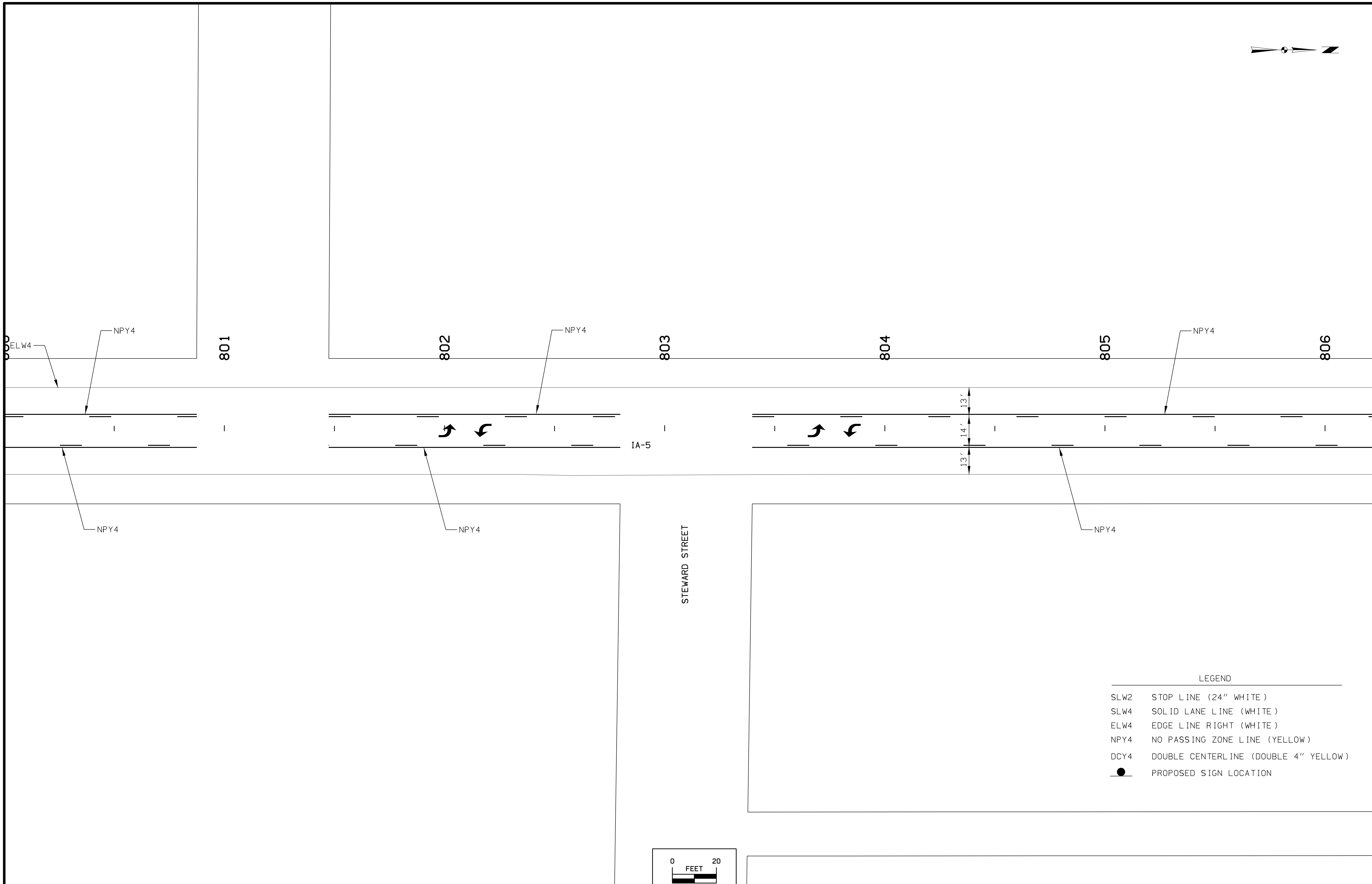


LEGEND

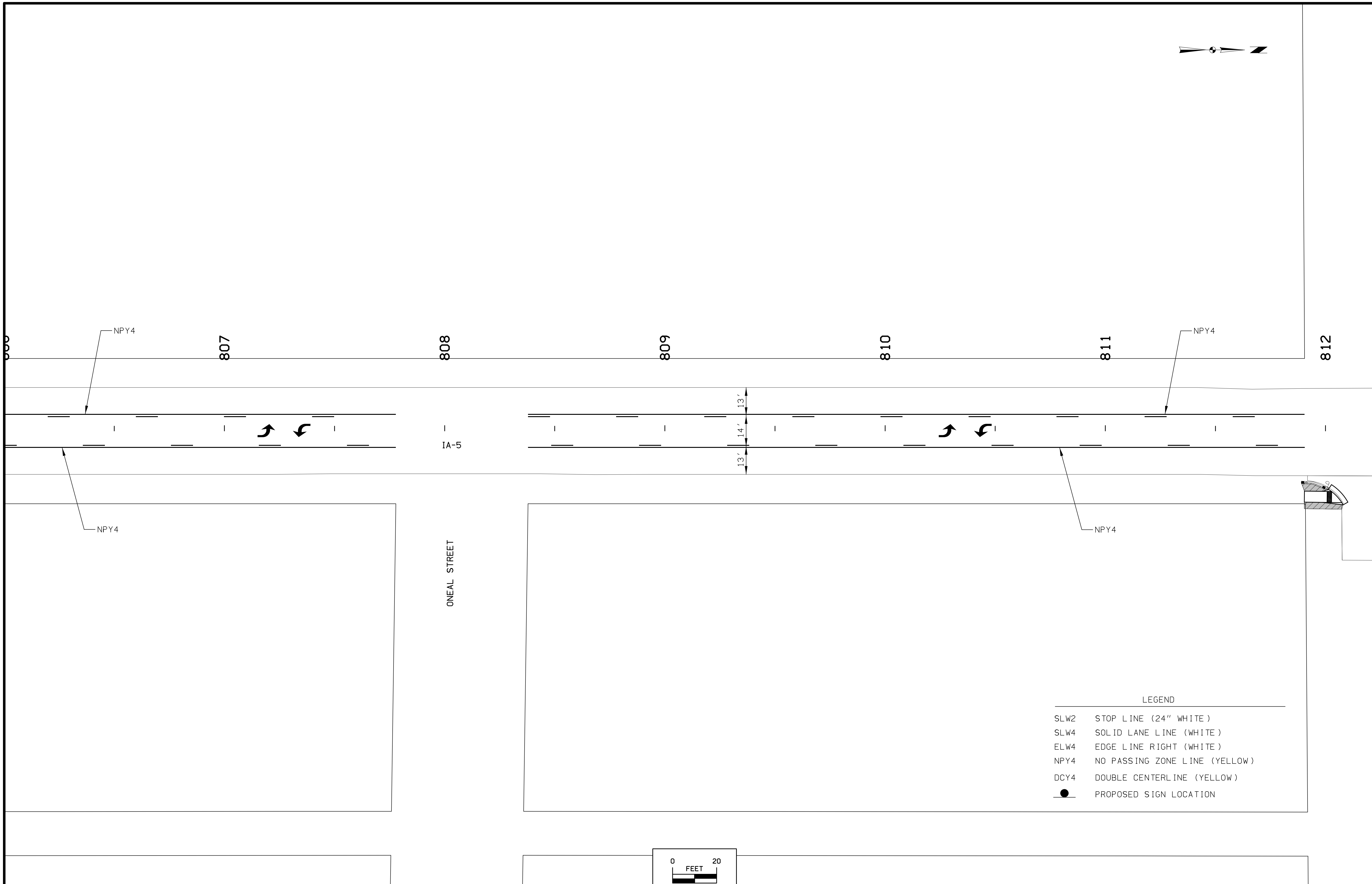
SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (DOUBLE 4" YELLOW)
●	PROPOSED SIGN LOCATION

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.12

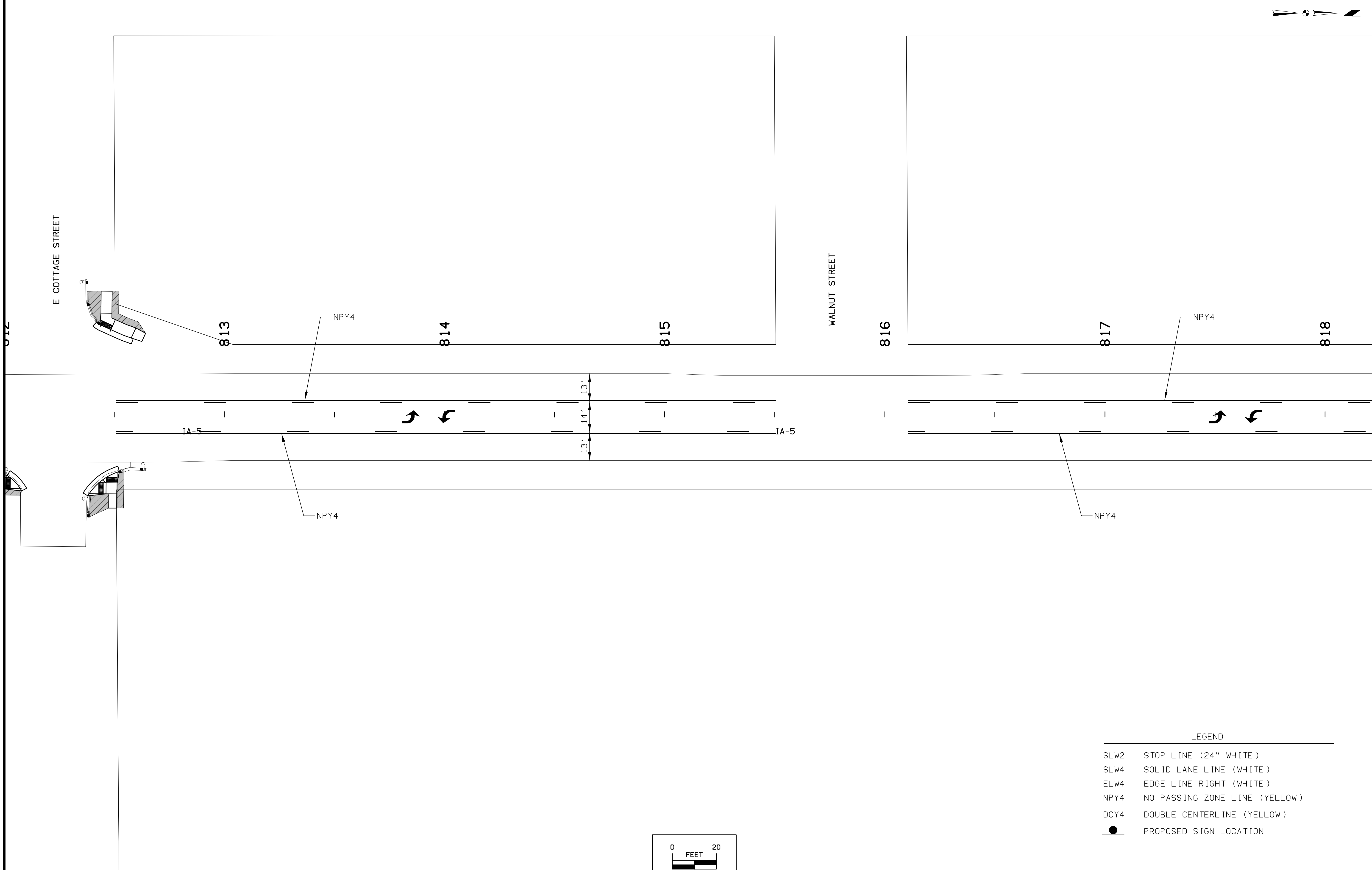
5:25:28 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_N01.dgn



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.13



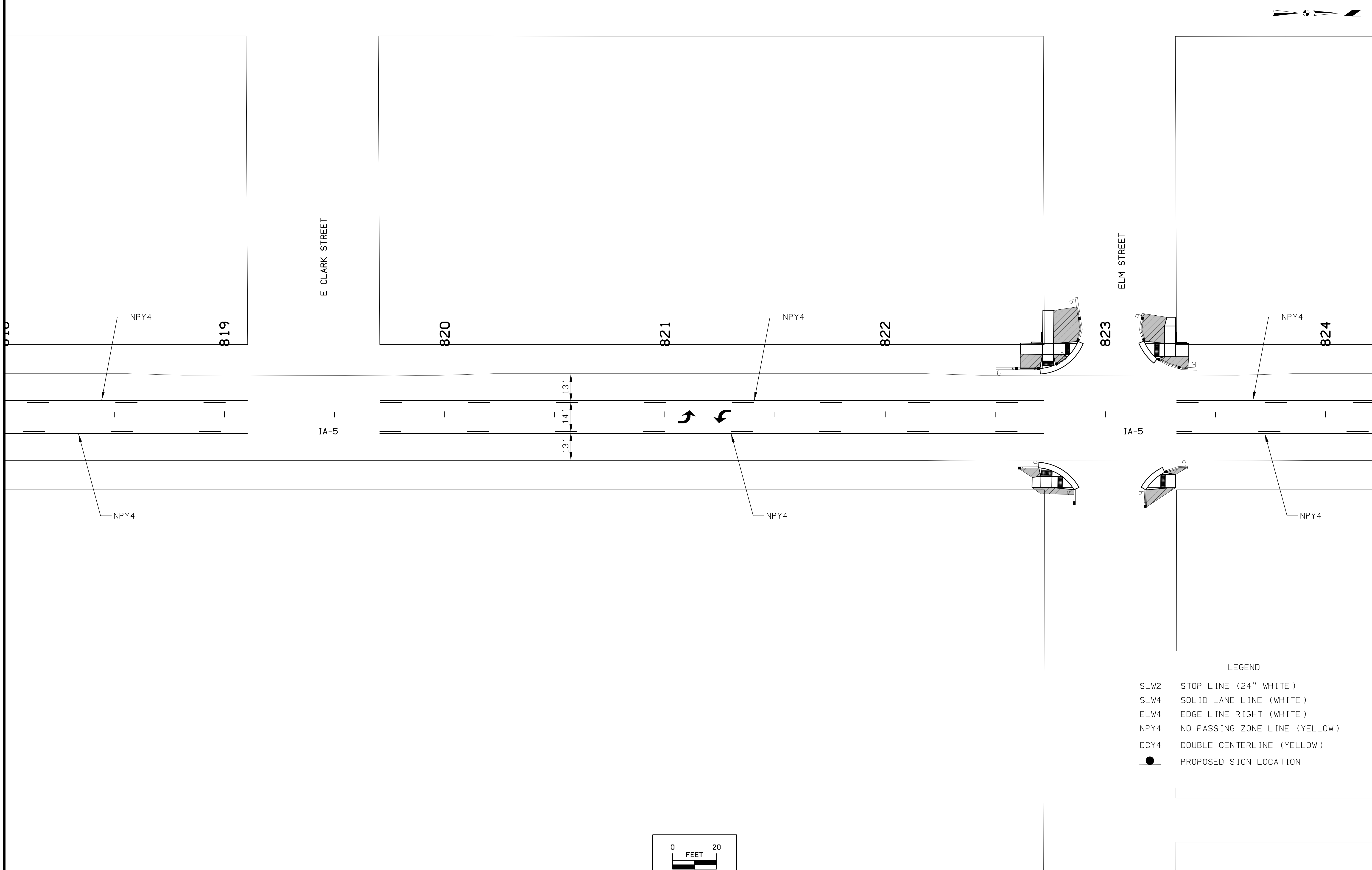
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.14



LEGEND

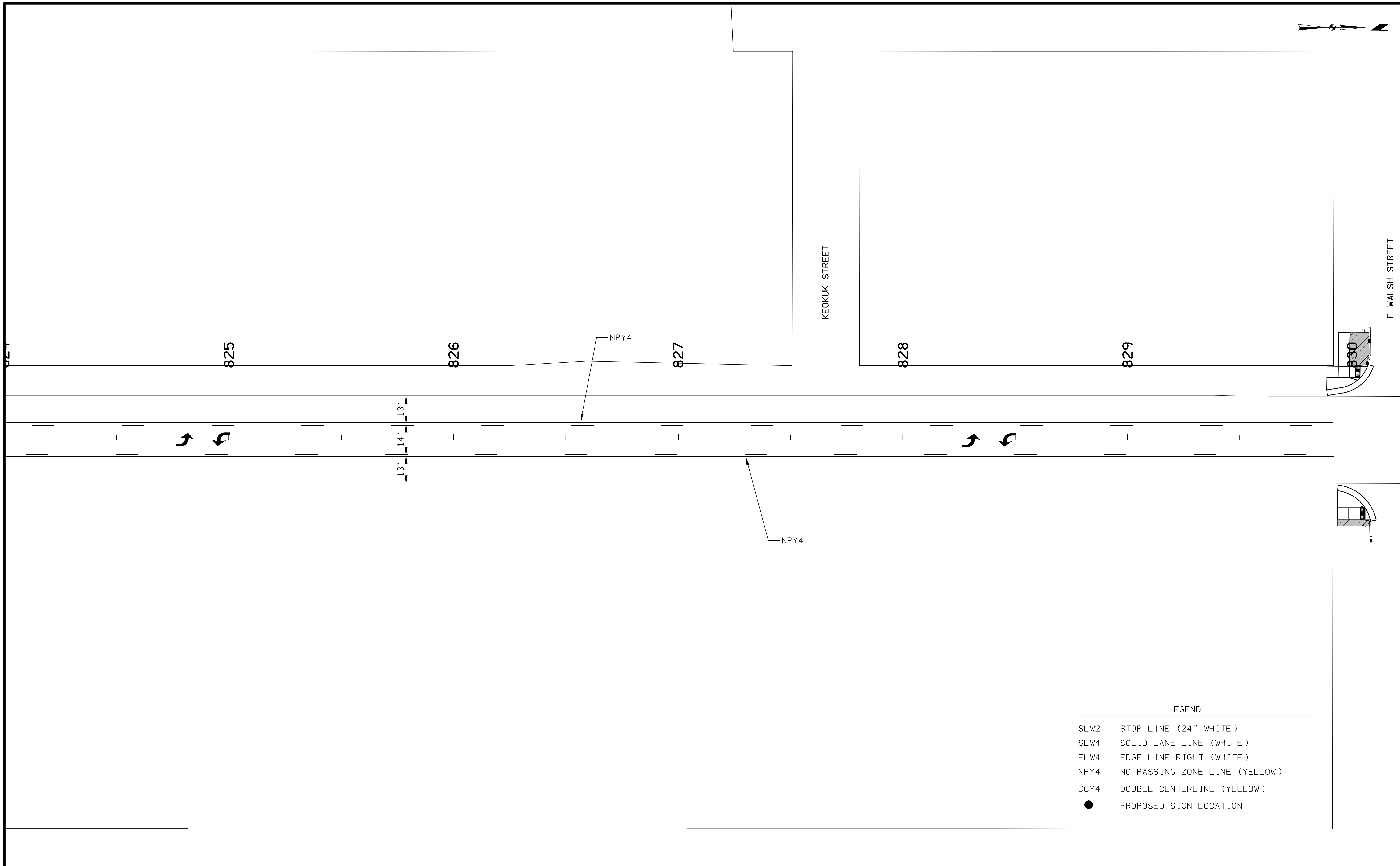
SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.15



LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

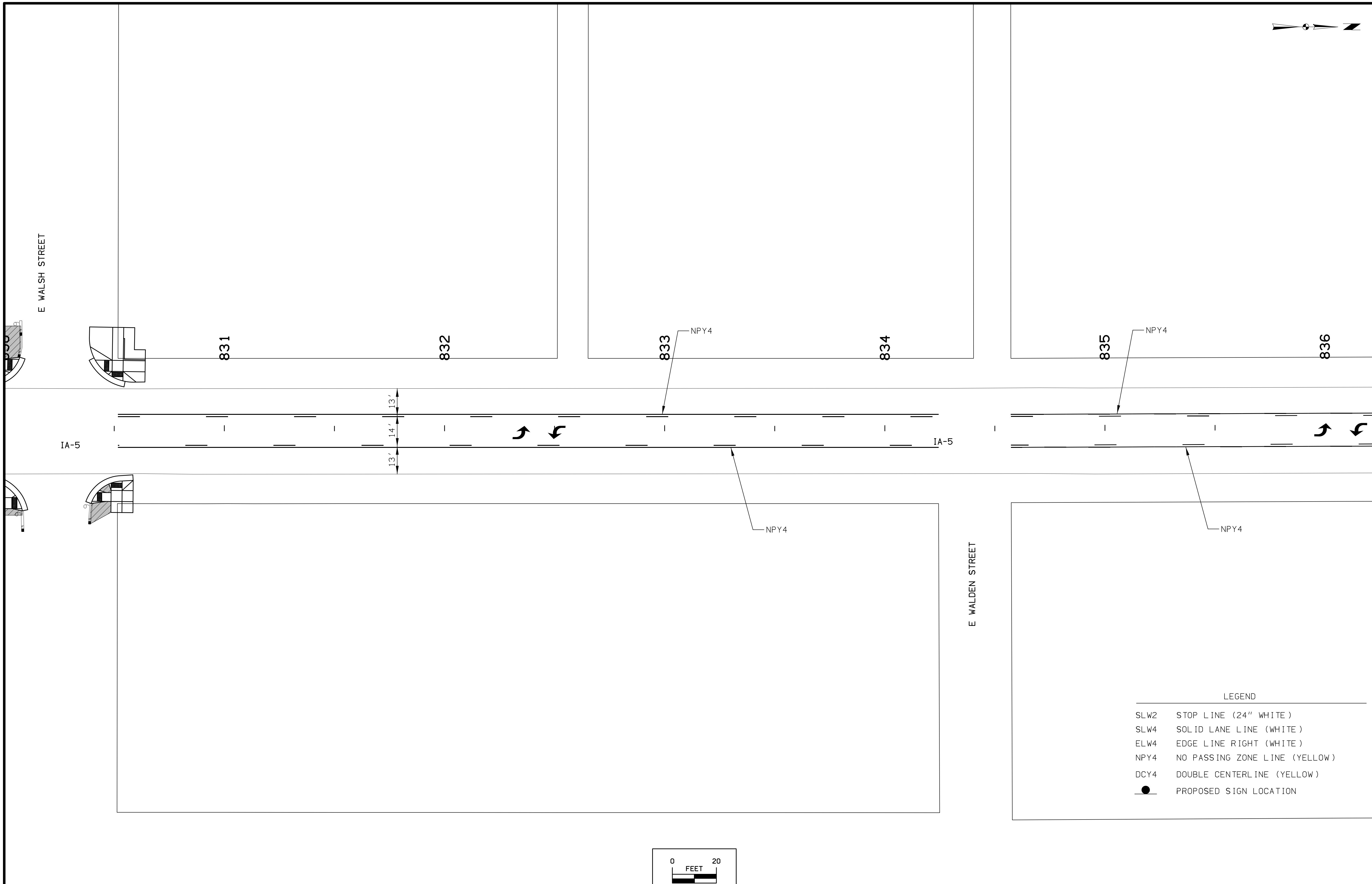


LEGEND

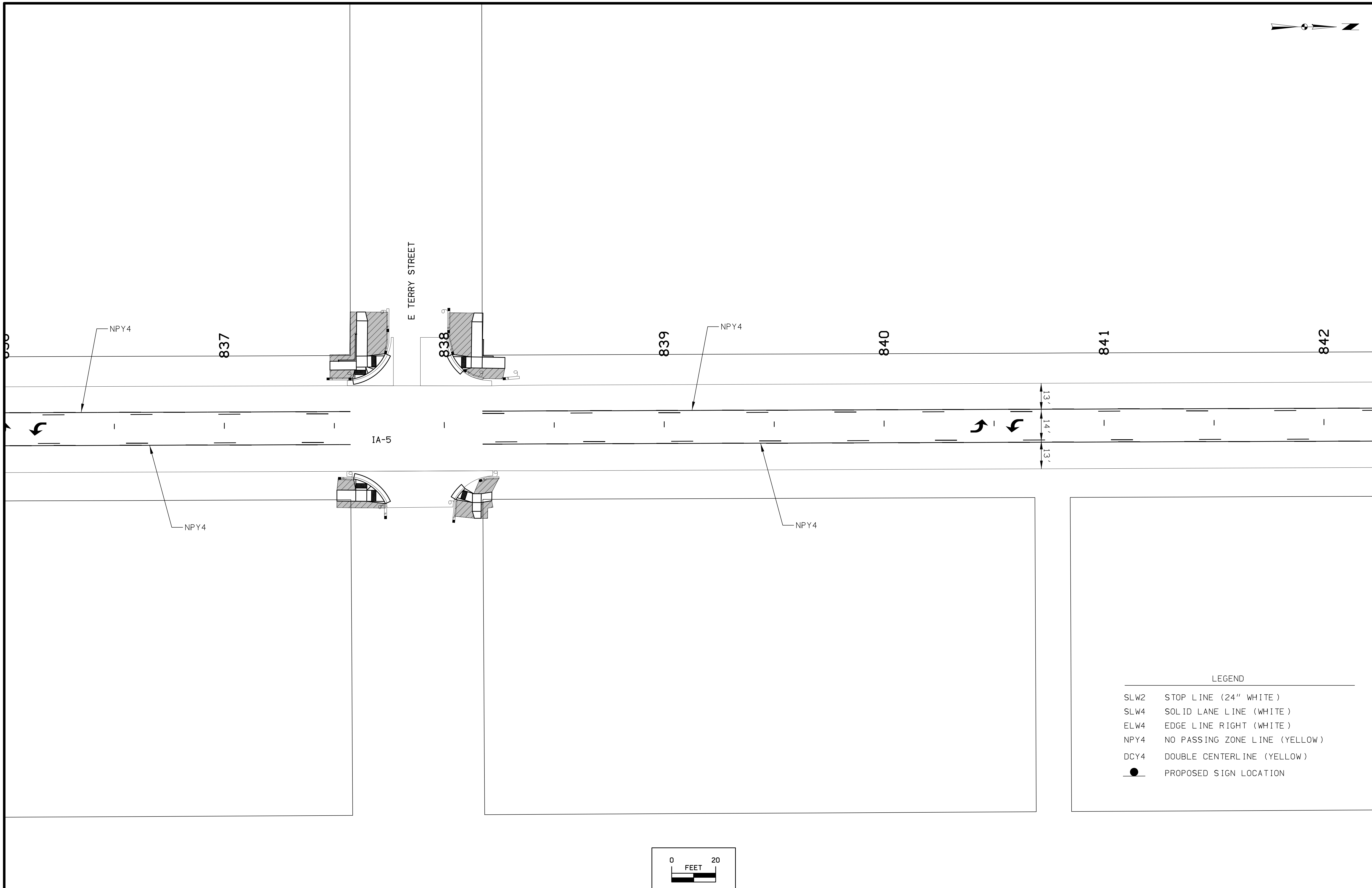
SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

0 FEET 20

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.17



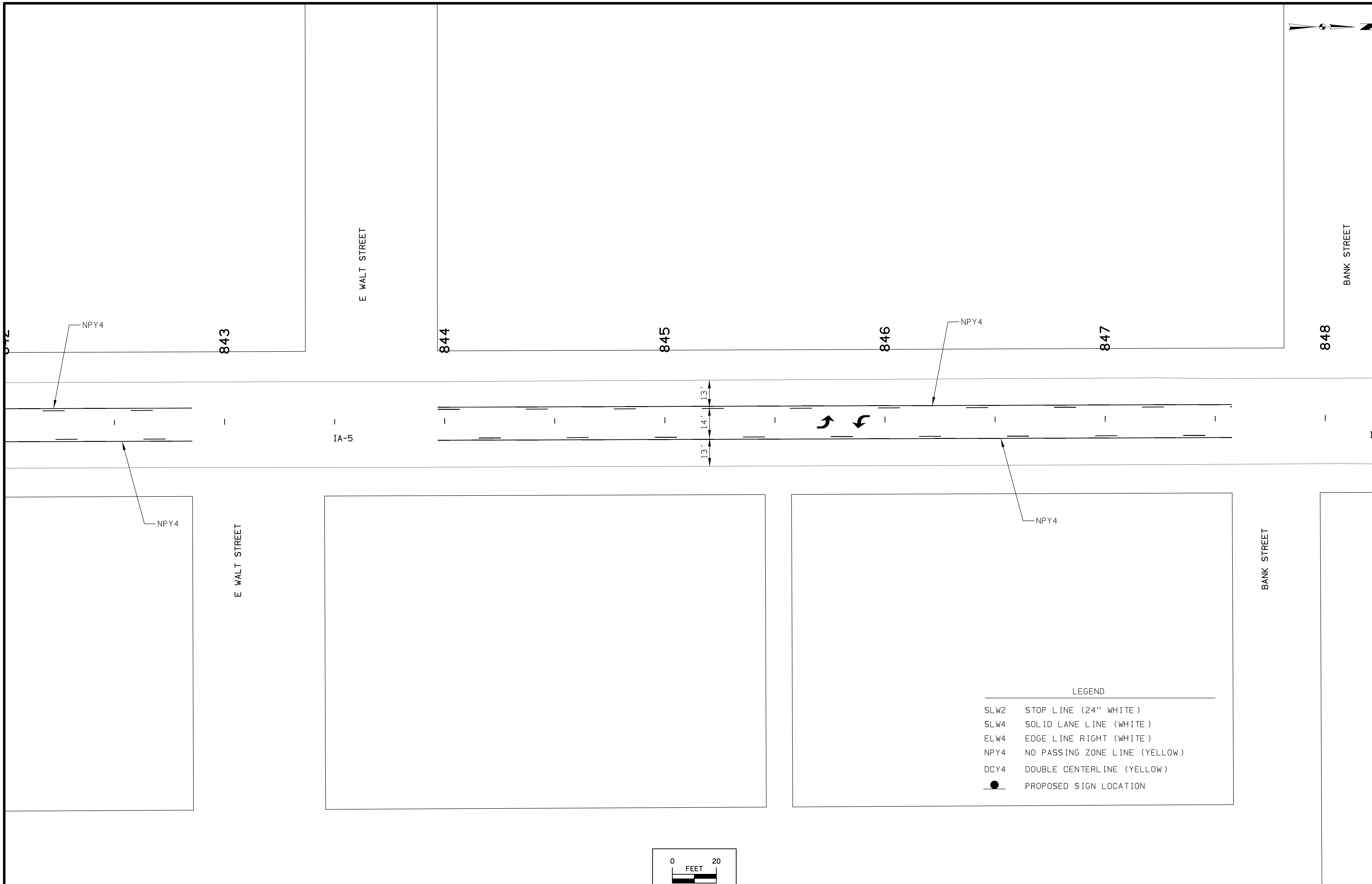
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER	N.18



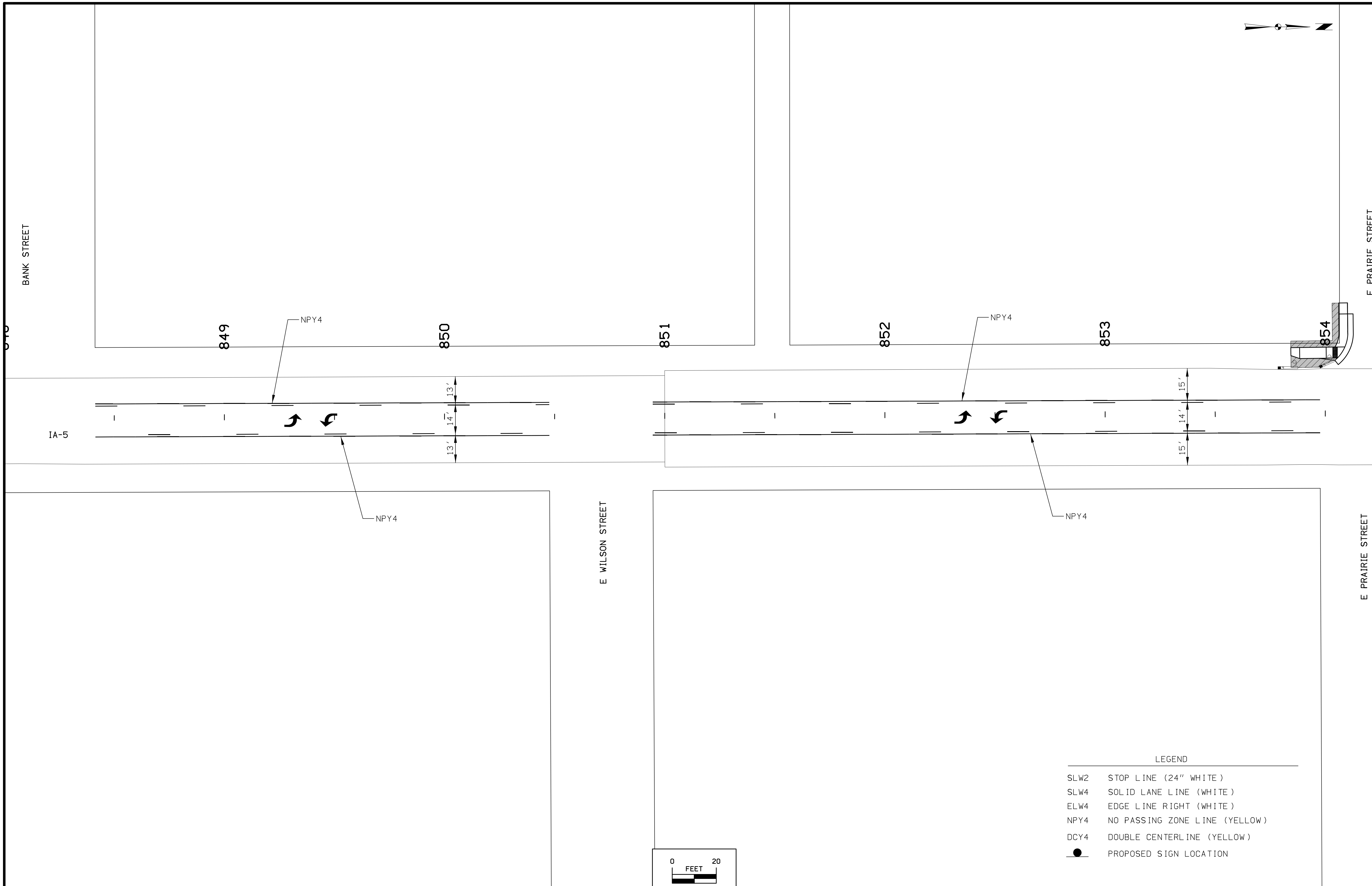
LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.19



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.20

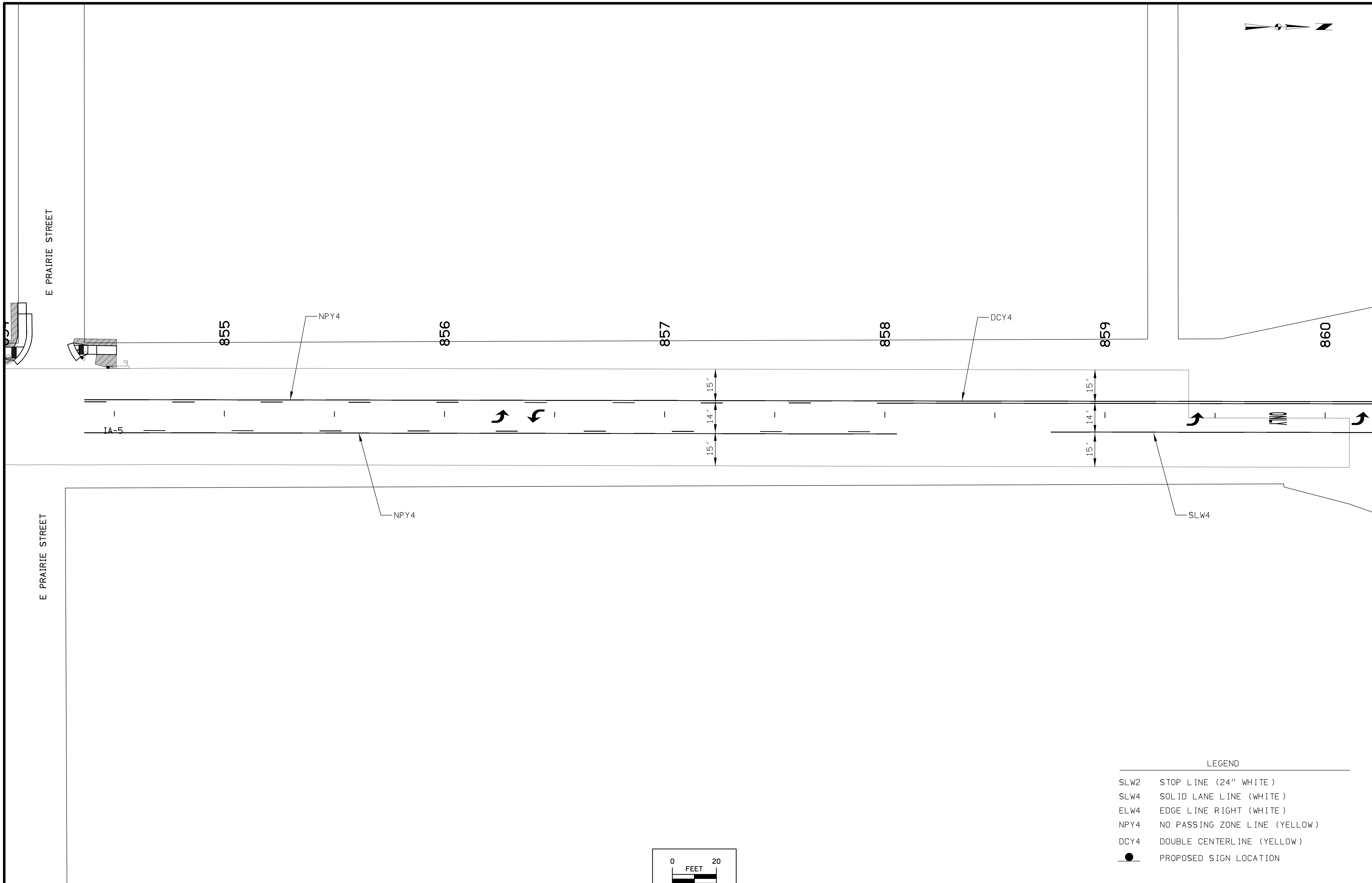


LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

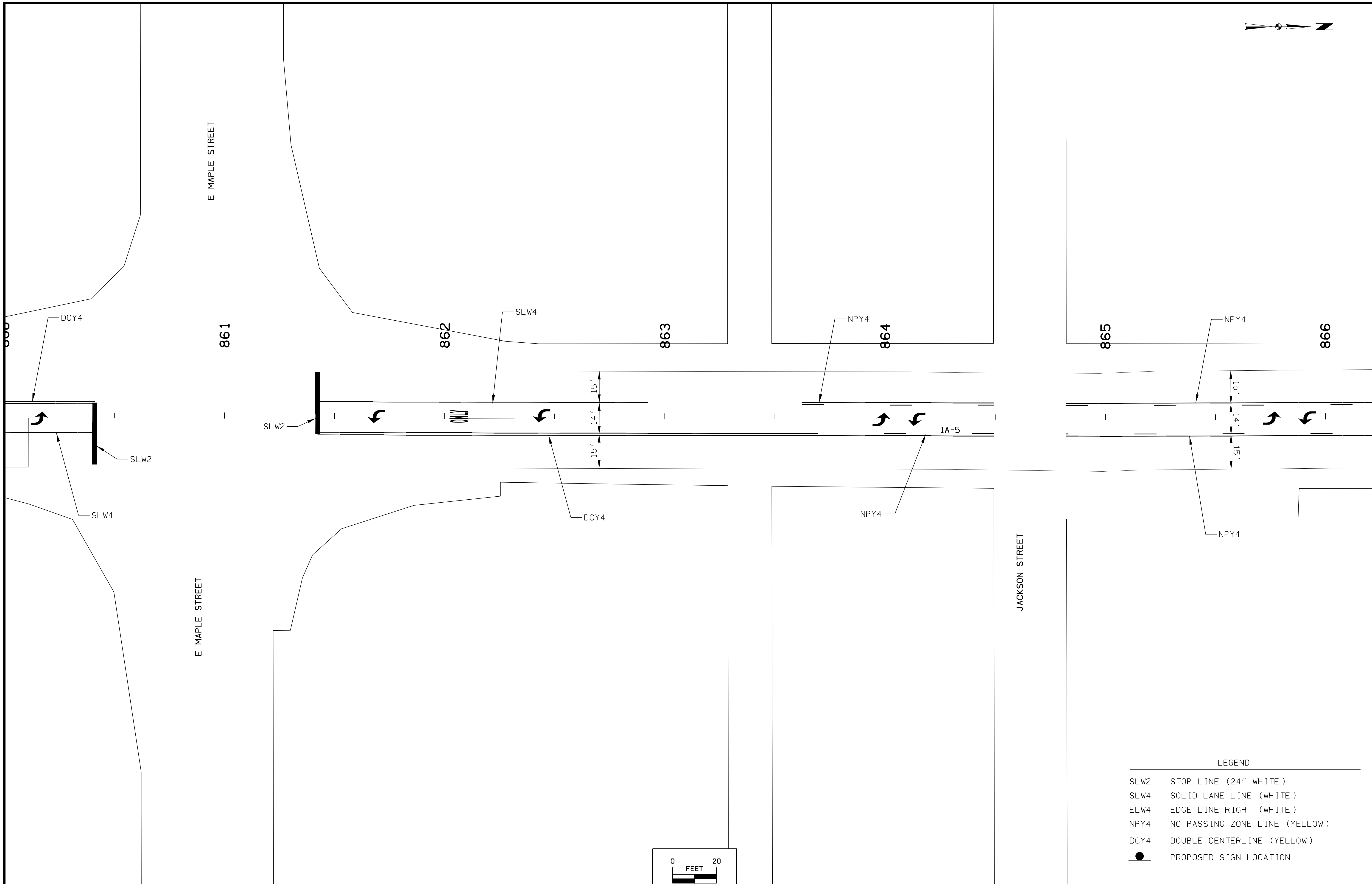
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.21

5:25:35 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_N01.dgn



LEGEND

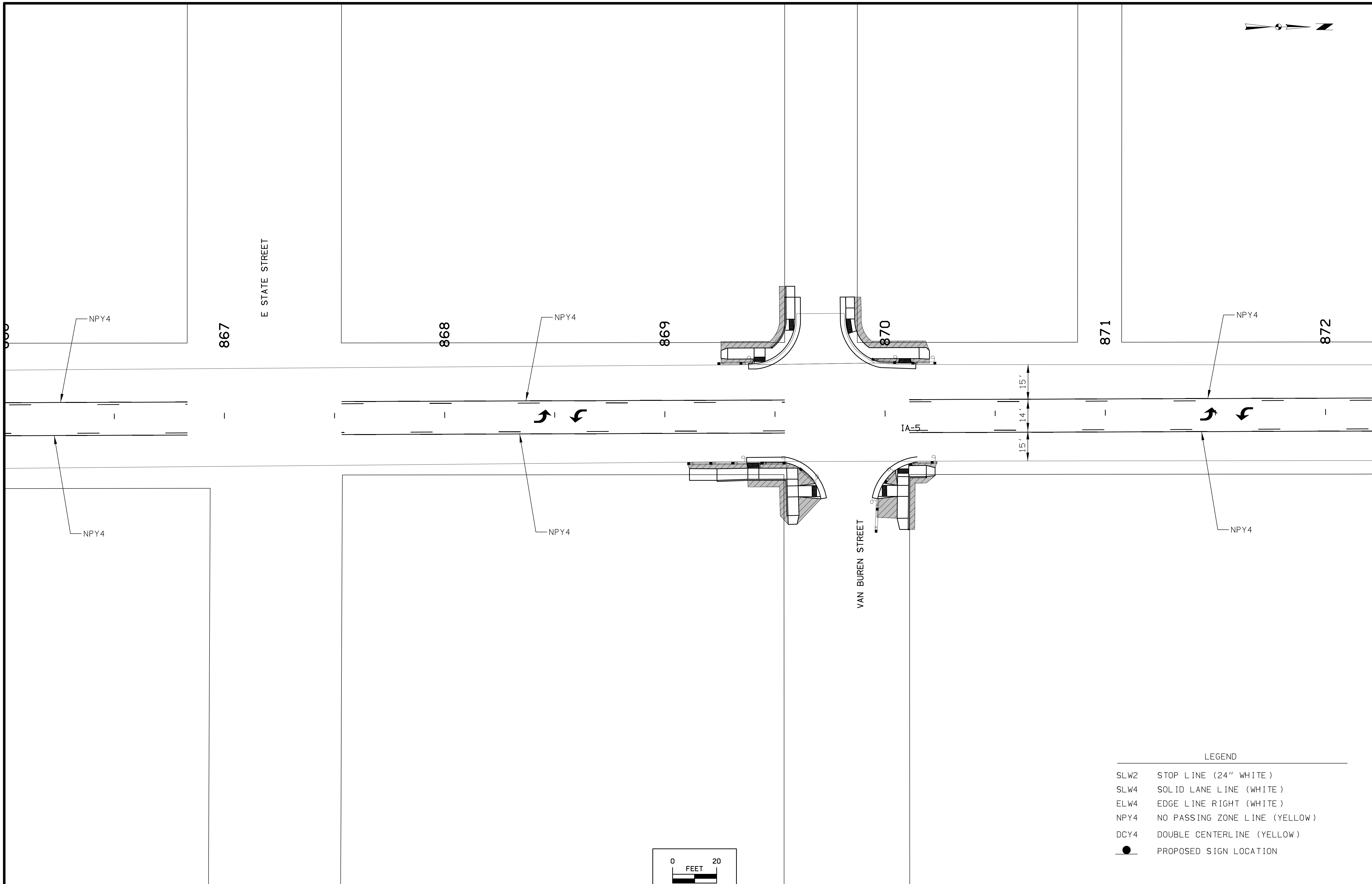
SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION



LEGEND

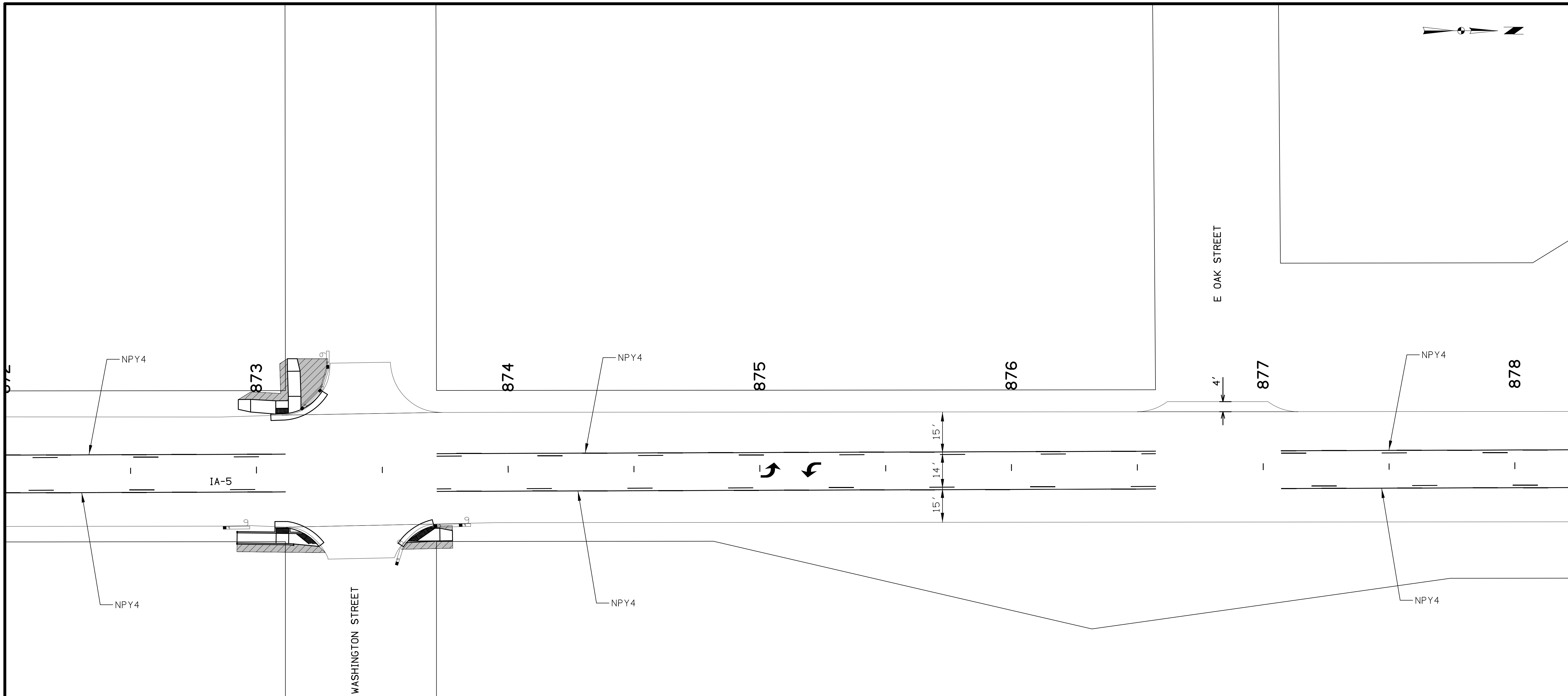
SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER N.23



LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION



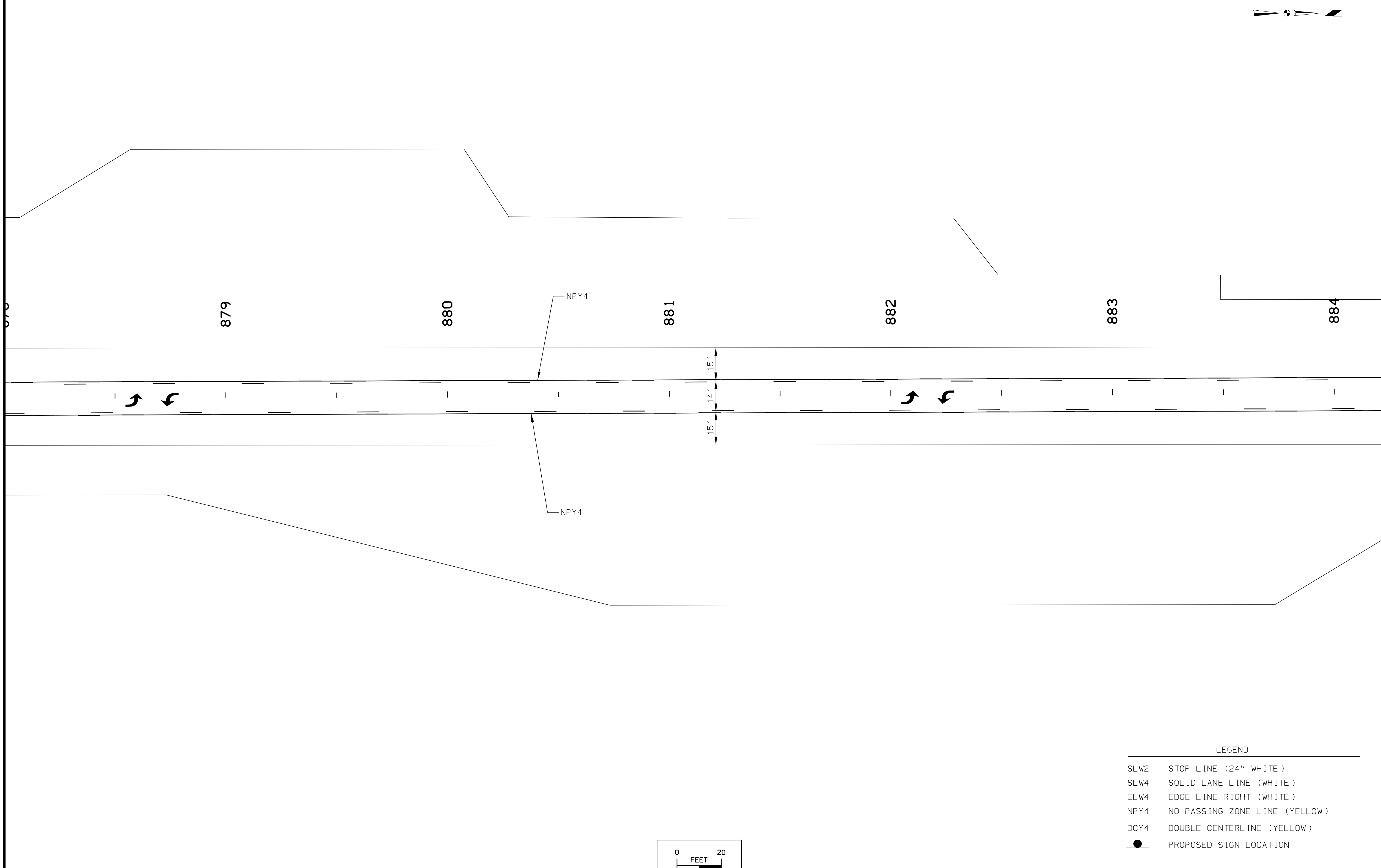
LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

0 FEET 20

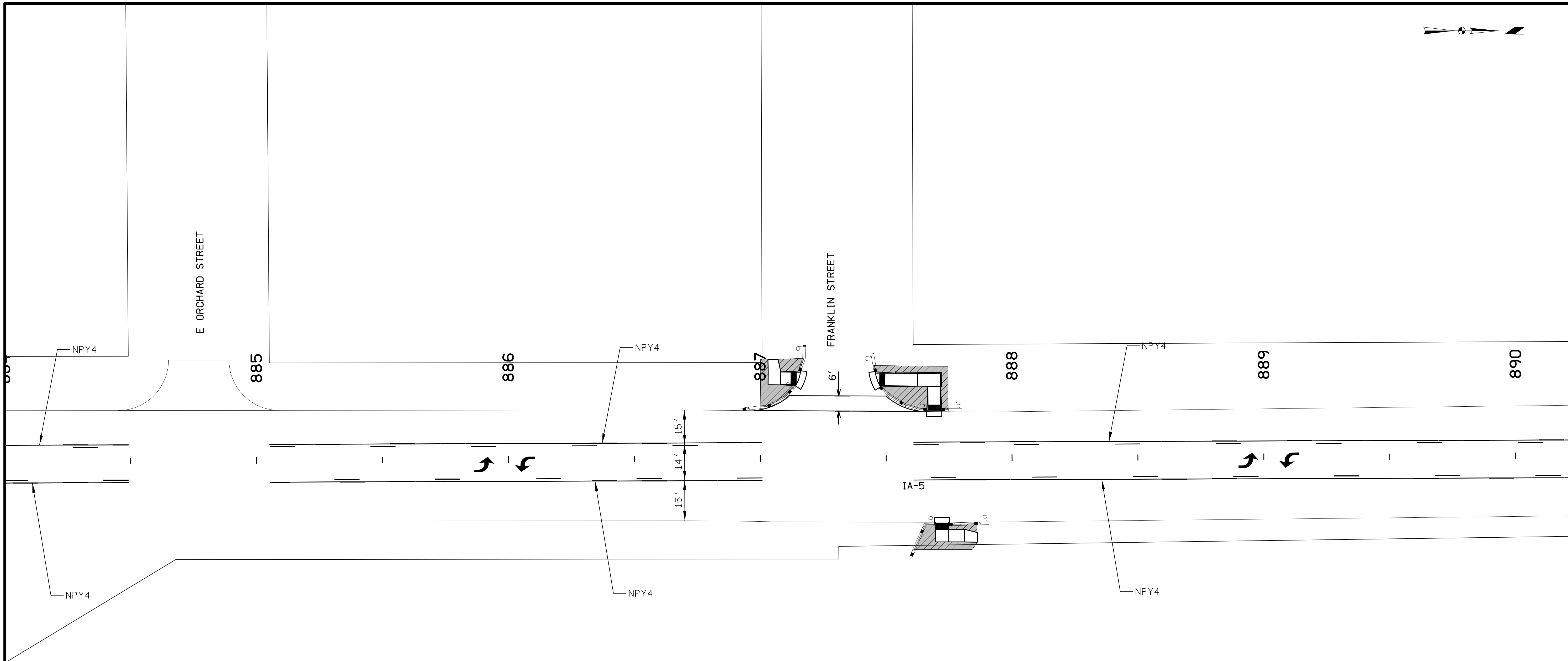
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER N.25

5:25:37 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_N01.dgn



LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

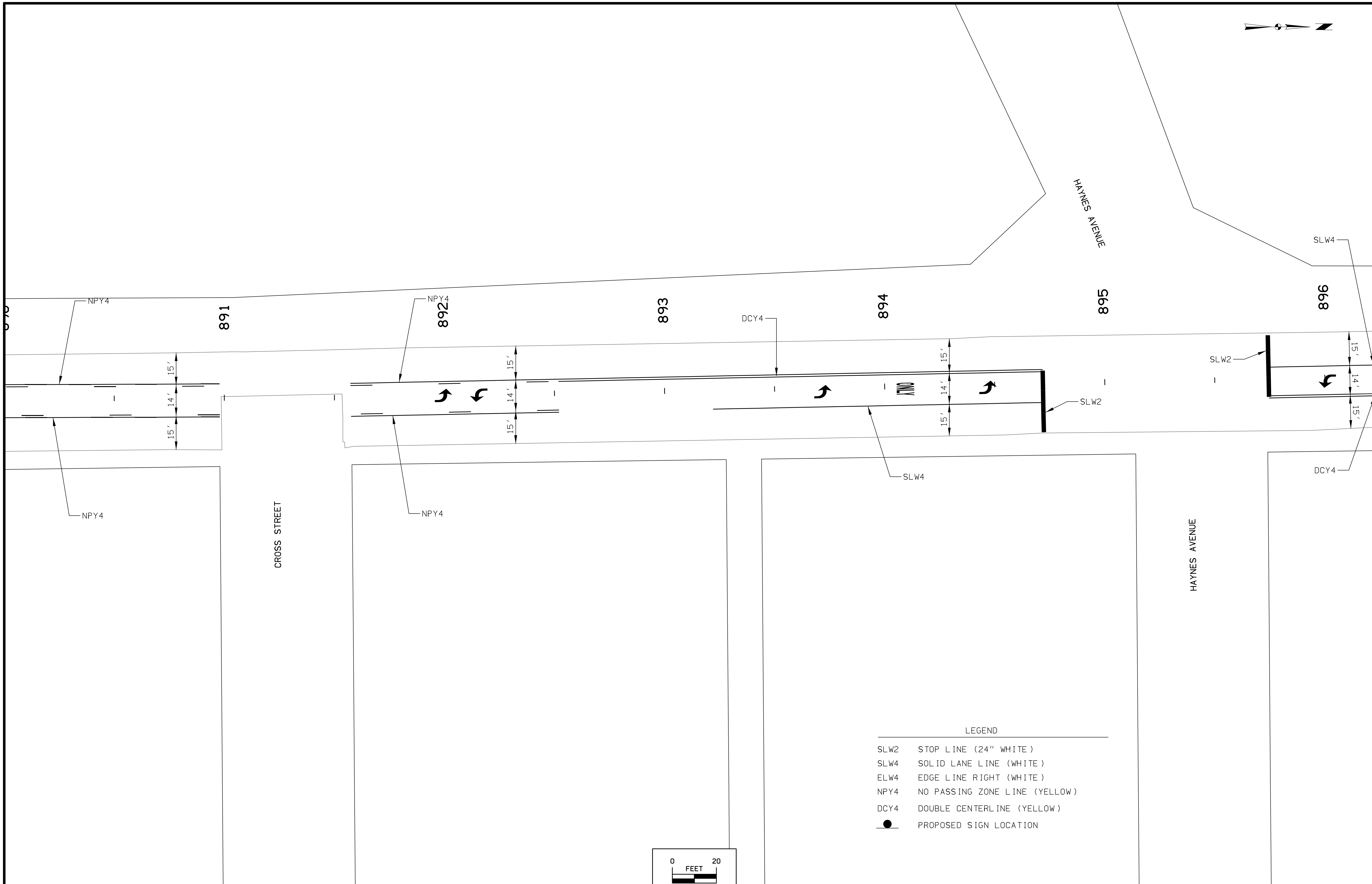


LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER	N.27

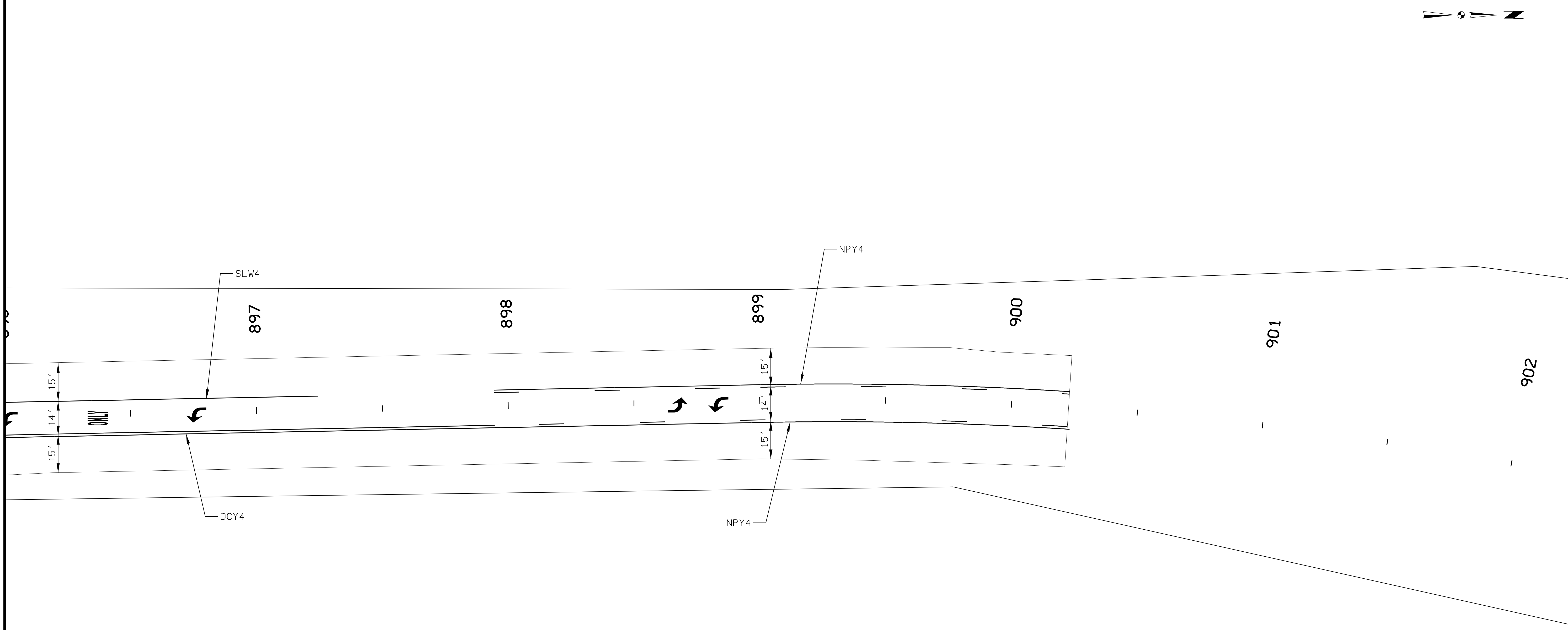
5:25:39 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_N01.dgn



LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.28



LEGEND

SLW2	STOP LINE (24" WHITE)
SLW4	SOLID LANE LINE (WHITE)
ELW4	EDGE LINE RIGHT (WHITE)
NPY4	NO PASSING ZONE LINE (YELLOW)
DCY4	DOUBLE CENTERLINE (YELLOW)
●	PROPOSED SIGN LOCATION

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER N.29

LINE STYLE LEGEND OF EROSION CONTROL SHEETS

	Silt Fence
	Perimeter and Slope Sediment Control Device (9")
	Perimeter and Slope Sediment Control Device (12")
	Perimeter and Slope Sediment Control Device (20")
	Open-Throat Curb Intake Sediment Filter
	Concentrated Flow
	Sheet Flow

PLAN VIEW COLOR LEGEND OF EROSION CONTROL SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
Black	(0)	Permanent Erosion Control Features
Blaze Orange	(222)	Temporary Erosion Control Features

SHADING	Design Color No.		Transparency
Citron	(234)	Mulching, All Types	50%
Light Brown	(238)	Special Ditch Control, Wood Excelsior Mat	0%

CELL LEGEND OF EROSION CONTROL SHEETS

- Temporary Sediment Control basin
- Erosion Control for Circular Intake or Manhole Well
- Erosion Control for Rectangular Intake or Manhole Well
- Grate Intake Sediment Filter Bag
- Silt Basin
- Silt Fence Tail
- Stormwater Drainage Basin Discharge Point

PATTERN LEGEND OF EROSION CONTROL SHEETS

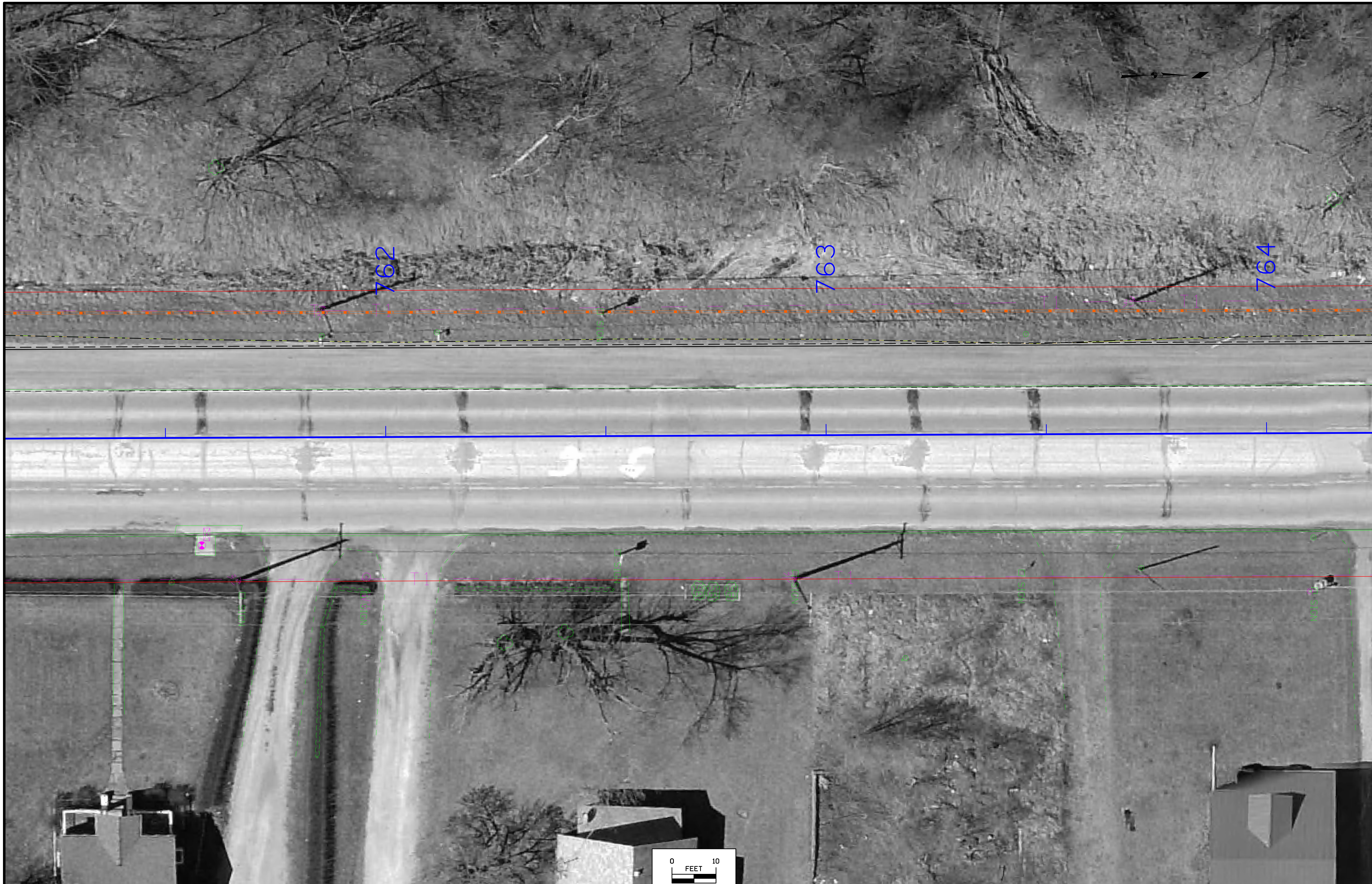
	Seeding and Fertilizing	01	Turf Reinforcement Mat Type 1
R	Seeding and Fertilizing (Rural)	02	Turf Reinforcement Mat Type 2
U	Seeding and Fertilizing (Urban)	03	Turf Reinforcement Mat Type 3
N	Native Grass Seeding	04	Turf Reinforcement Mat Type 4
ST	Salt Tolerant Seeding	S	Slope Protection, Wood Excelsior Mat
WL	Wetland Grass Seeding	TM	Transition Mat
WF	Wildflower Seeding	P	Rock Features, Permanent
SOD	Sodding	T	Rock Features, Temporary

EROSION CONTROL LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES R)

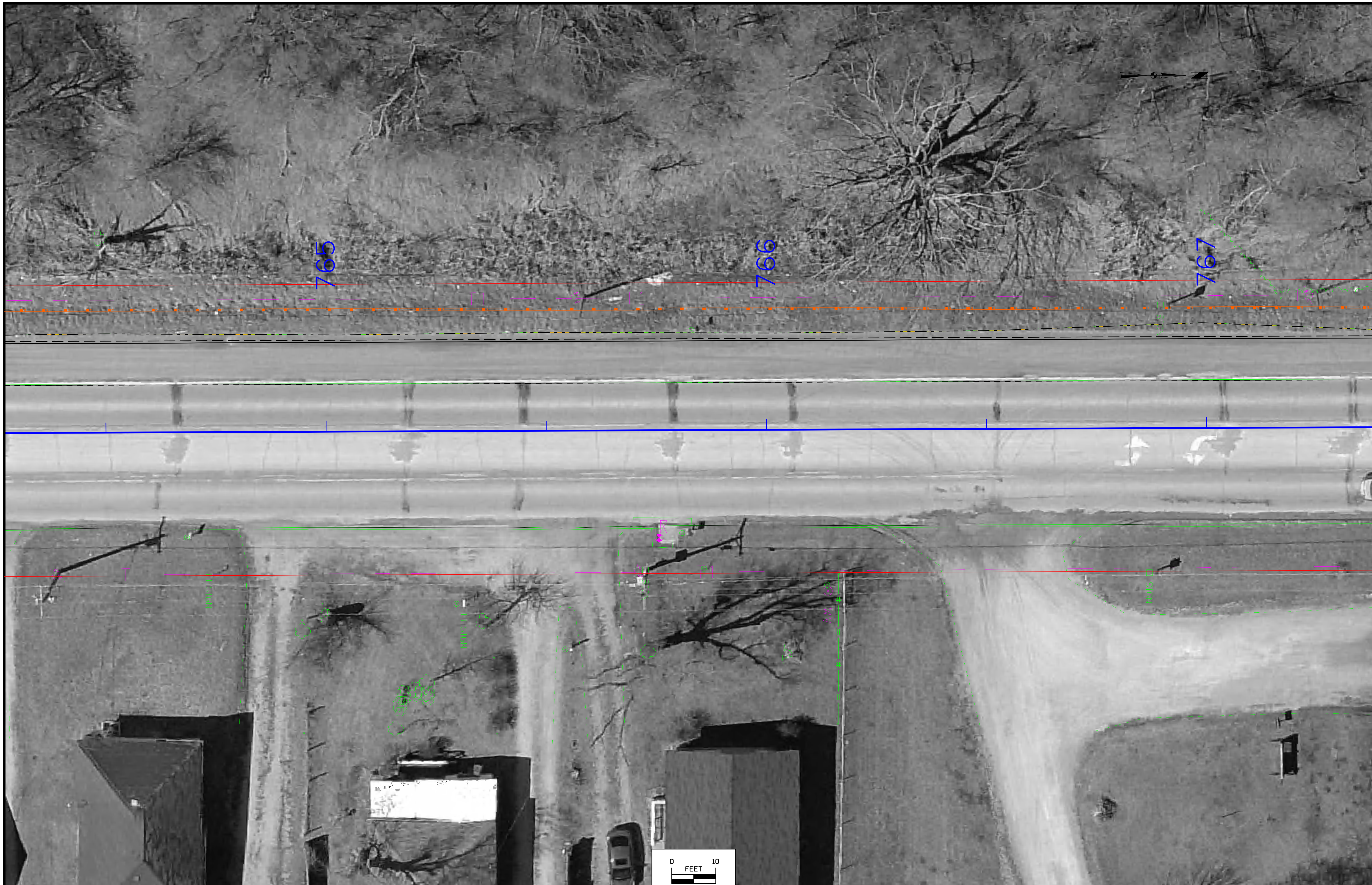
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.2

5:26:50 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

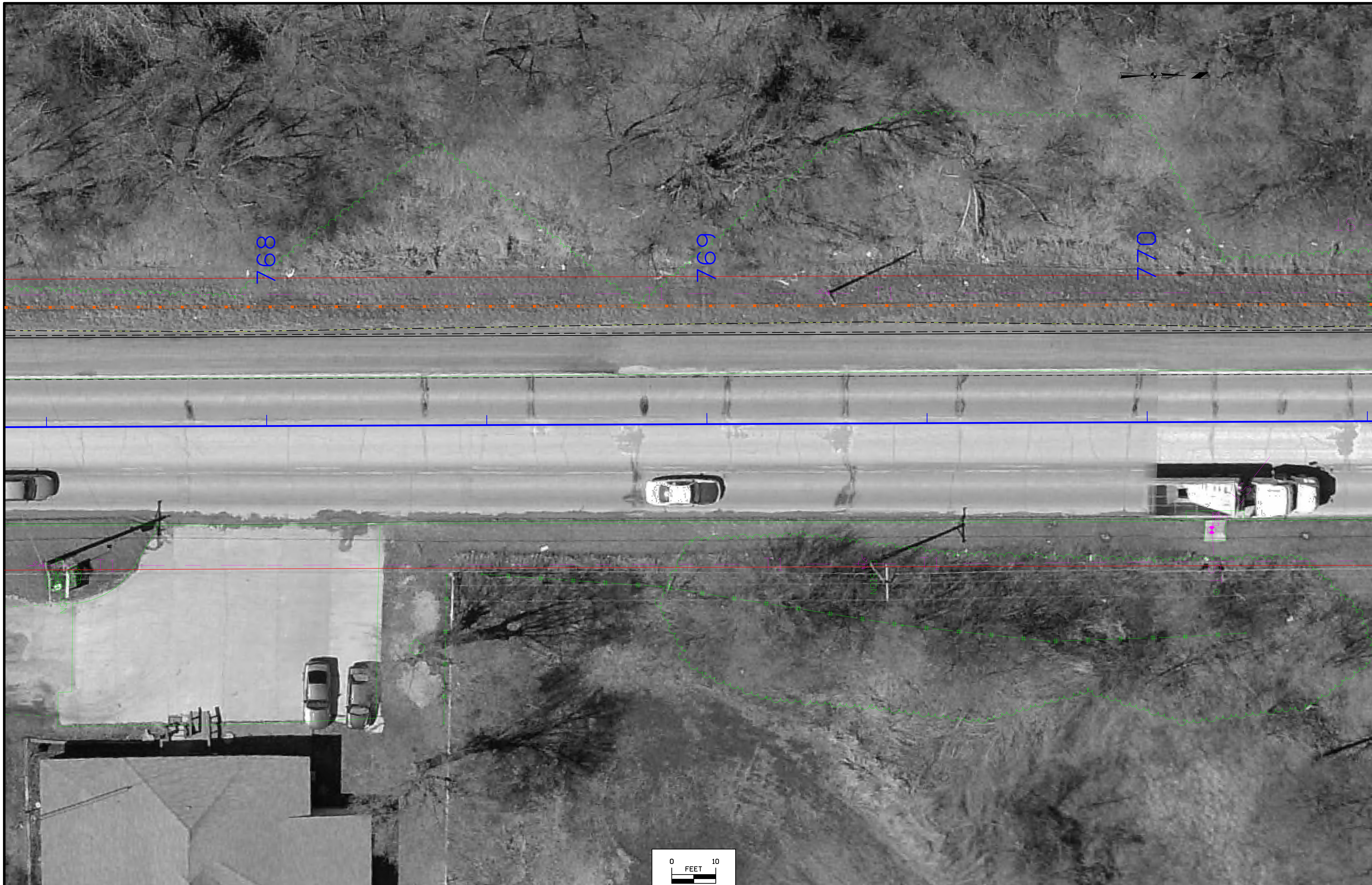


FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.3

5:27:03 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.4

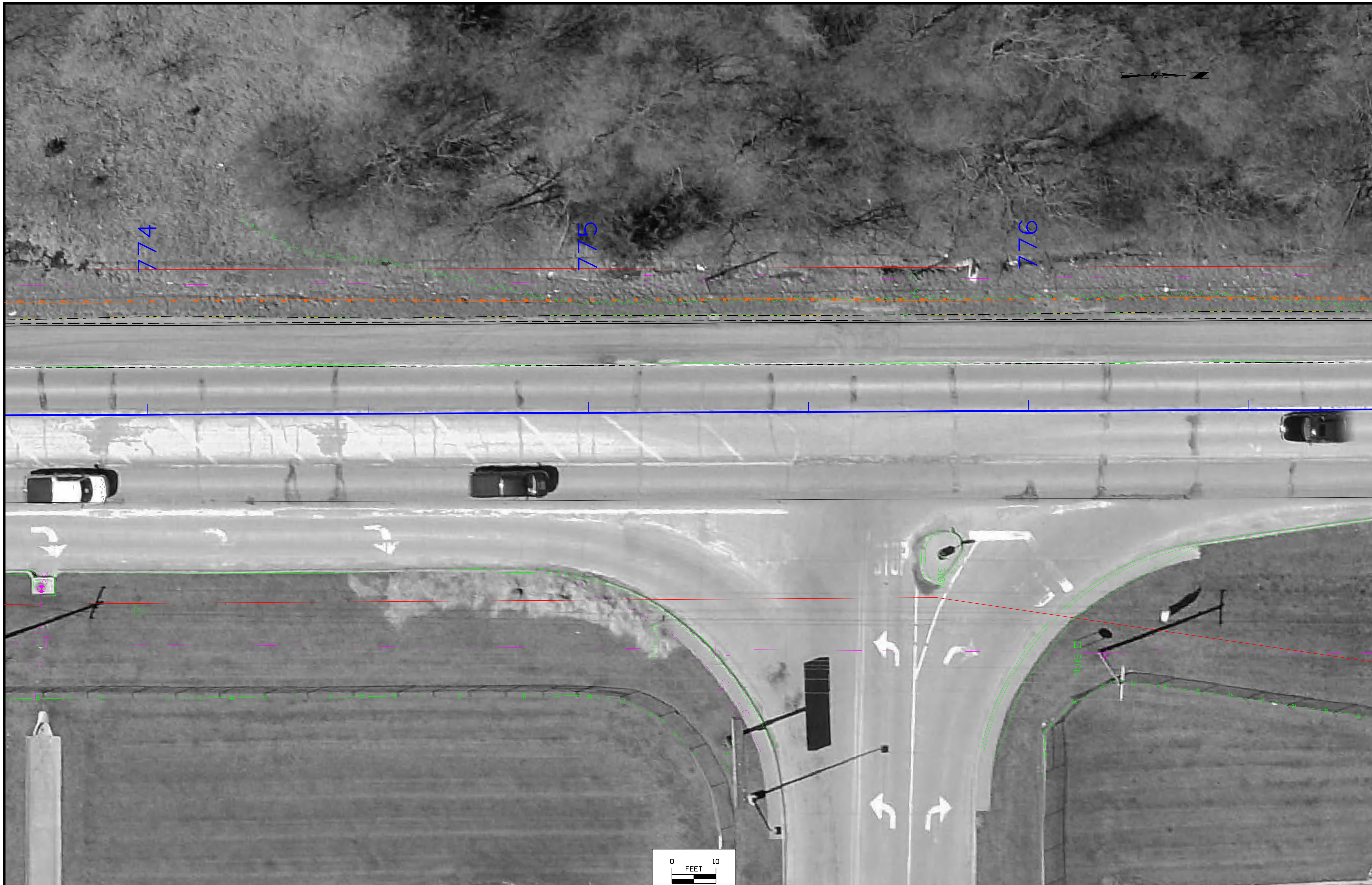


FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.5

5:27:31 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

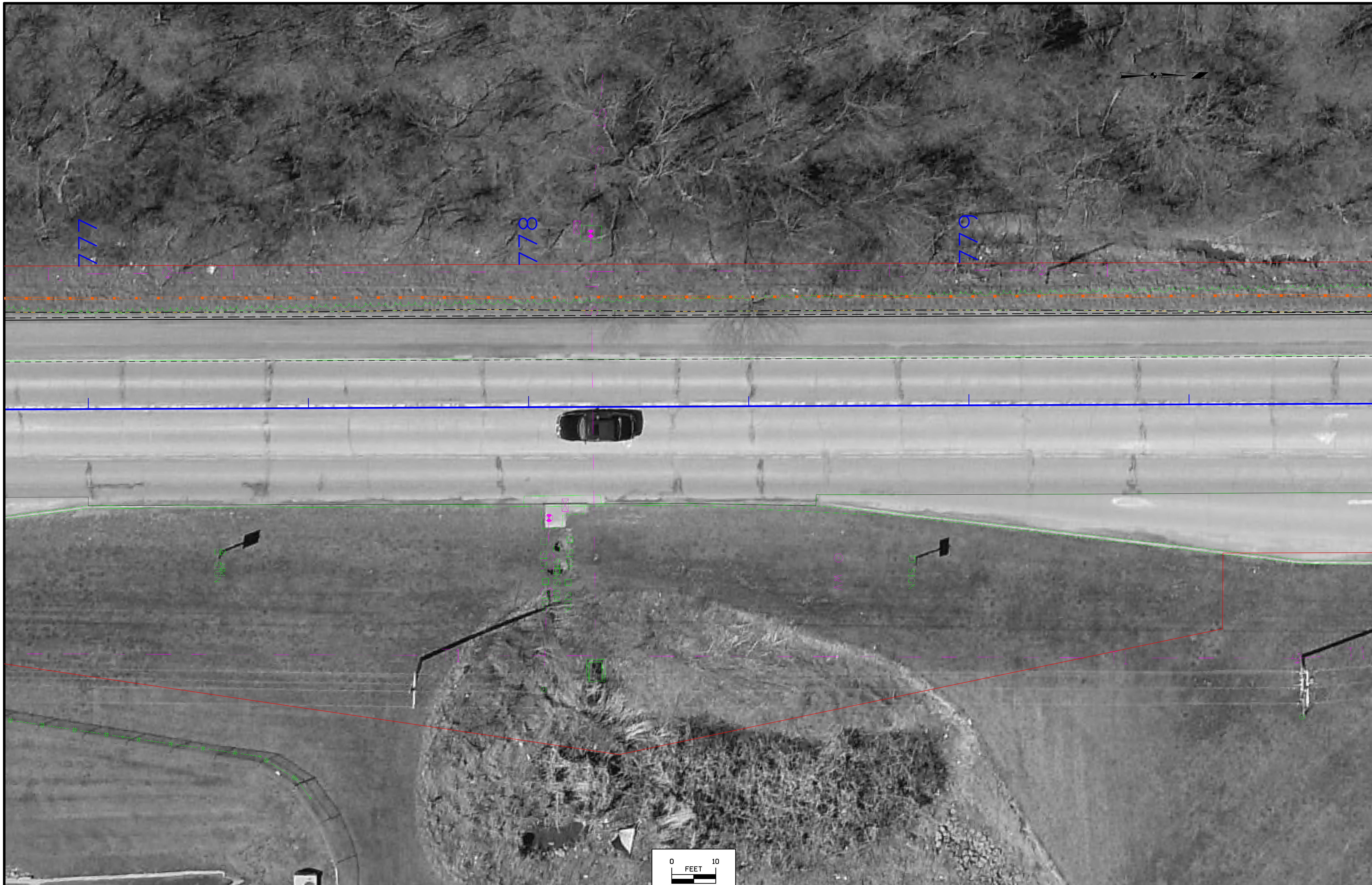
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.6

5:27:44 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.7

5:27:57 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.8

5:28:11 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

FILE NO. | ENGLISH | DESIGN TEAM IowaDOT\Schemmer | APPANOOSE COUNTY | PROJECT NUMBER STPN-005-1(76)--2J-04 | SHEET NUMBER RR.9

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.10

5:28:42 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.11

FILE NO.	ENGLISH	DESIGN TEAM **IowaDOT\Schemmer**		**APPANOOSE** COUNTY	PROJECT NUMBER	**STPN-005-1(76)--2J-04**	SHEET NUMBER **RR.12**	

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.13

5:29:17 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.14

5:29:29 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.15

5:29:45 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER	STPN-005-1(76)--2J-04	SHEET NUMBER RR.16

FILE NO. | ENGLISH | DESIGN TEAM IowaDOT\Schemmer | APPANOOSE COUNTY | PROJECT NUMBER STPN-005-1(76)--2J-04 | SHEET NUMBER RR.17

5:30:13 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.18

5:30:28 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.19

5:30:45 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.20

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER RR.21

5:31:15 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_RR01.dgn

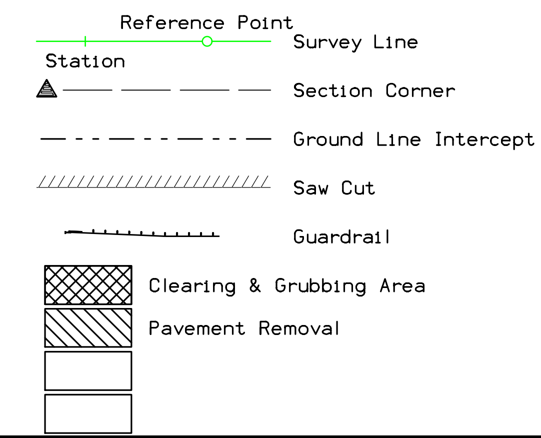
SURVEY SYMBOLS

UTILITY LEGEND

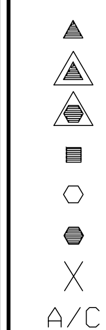
PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities

SHADING	Design Color No.	
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading
Magenta	(5)	Detectable Warning
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading
Brown, Light	(236)	Grading Shading



RIGHT-OF-WAY LEGEND

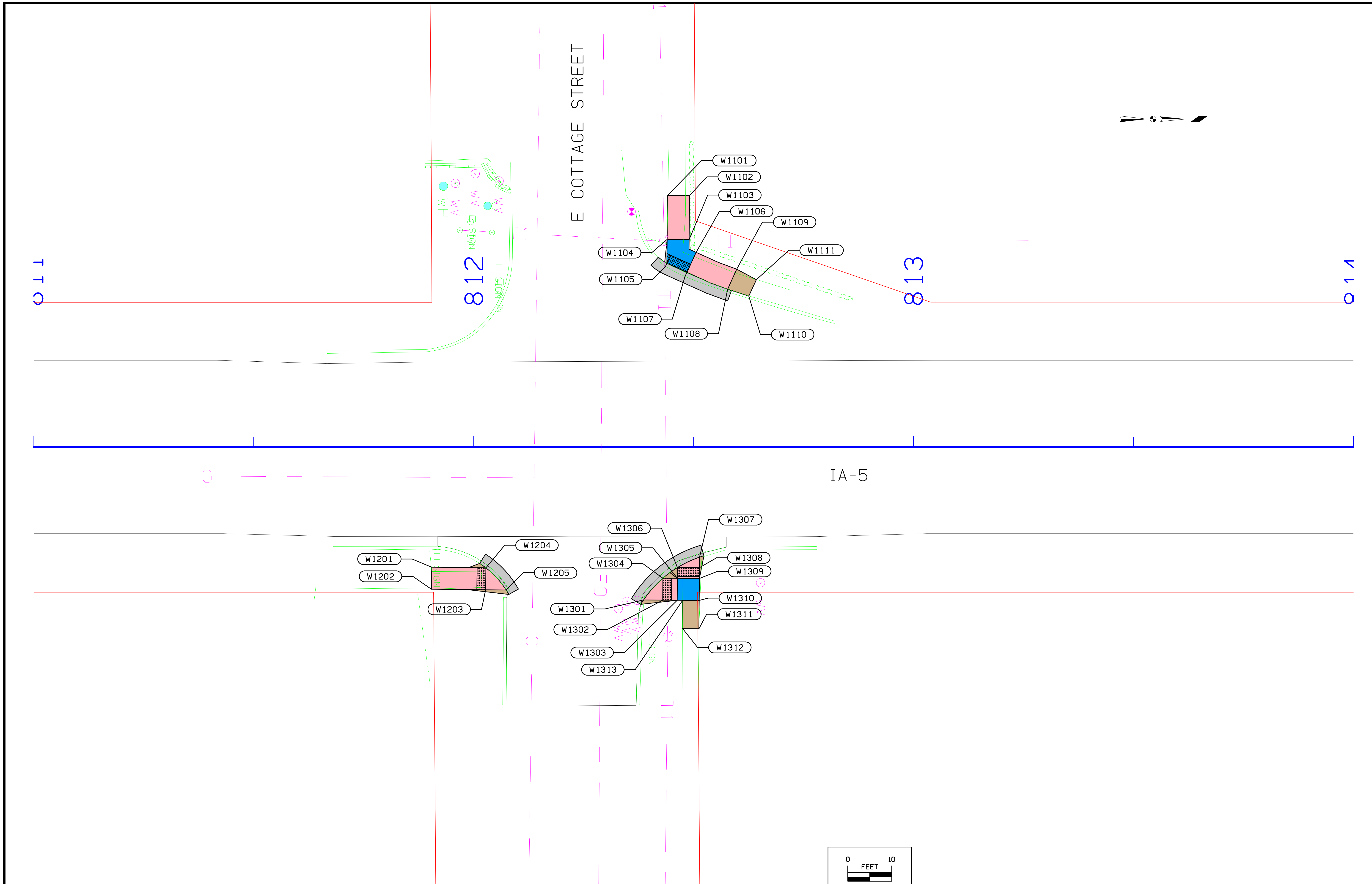


SIDEWALK LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES S)

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER S.1

5:31:29 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_Legend.dgn



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER S.2

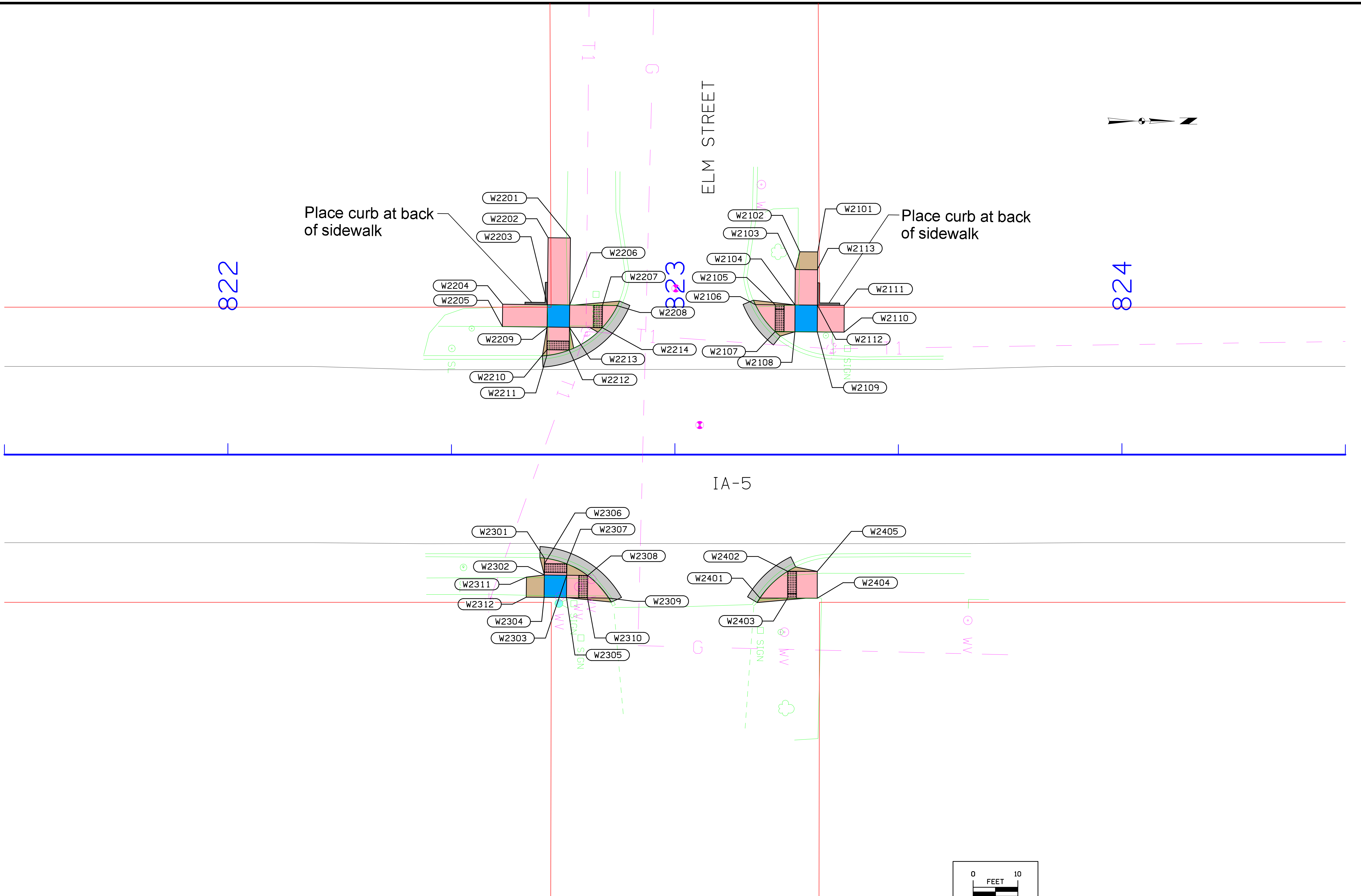
5:31:46 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_S02.dgn

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
1 Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
2 Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	_" PCC Sidewalk 2	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? 1	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.		%			Point	Station	Offset	Elevation
1101	1102	Match Existing Cross Slope	4	5.00	-0.07	-1.4%	Match Existing					1101			1013.69
1101	1104	Ramp Running Slope	6	10.00	0.47	4.7%	0.5% to 8.3%					1102			1013.62
1104	1103	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%					1103			1014.23
1102	1103	Ramp Running Slope	6	10.00	0.61	6.1%	0.5% to 8.3%					1104			1014.16
1104	1105	Landing/Turning Space	4	5.42	-0.08	-1.5%	0.1% to 2.0%					1105			1014.08
1105	1107	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes				1106			1014.24
1107	1106	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes				1107			1014.16
1106	1103	Landing/Turning Space	4	2.20	-0.01	-0.5%	0.1% to 2.0%					1108			1014.97
1107	1108	Ramp Running Slope	6	10.00	0.81	8.1%	0.5% to 8.3%	Yes				1109			1014.96
1108	1109	Ramp Cross Slope	6	5.00	-0.01	-0.2%	0.1% to 2.0%					1110			1015.10
1109	1106	Ramp Running Slope	6	10.00	-0.72	-7.2%	0.5% to 8.3%					1111			1015.02
1108	1110	Sidewalk Running Slope	4	5.08	0.13	2.6%	0.5% to 5.0%								
1110	1111	Match Existing Cross Slope	4	4.10	-0.08	-2.0%	Match Existing								
1111	1109	Sidewalk Running Slope	4	5.05	-0.06	-1.2%	0.5% to 5.0%								
1201	1202	Ramp Cross Slope	6	5.00	0.05	1.0%	0.1% to 2.0%					1201			1015.97
1202	1203	Ramp Running Slope	6	12.34	-0.39	-3.2%	0.5% to 8.3%					1202			1016.02
1203	1205	Ramp Running Slope	6	4.66	-0.03	-0.6%	0.5% to 8.3%					1203			1015.63
1205	1204	Ramp Cross Slope	6	6.84	-0.05	-0.7%	0.1% to 2.0%					1204			1015.55
1201	1204	Ramp Running Slope	6	12.34	-0.42	-3.4%	0.5% to 8.3%					1205			1015.60
1301	1302	Ramp Running Slope	6	4.35	0.03	0.7%	0.5% to 8.3%					1301			1015.64
1302	1303	Ramp Running Slope	6	3.30	0.18	5.5%	0.5% to 8.3%					1302			1015.67
1303	1305	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					1303			1015.85
1305	1304	Ramp Running Slope	6	3.30	-0.20	-6.1%	0.5% to 8.3%					1304			1015.60
1301	1304	Ramp Cross Slope	6	6.63	-0.04	-0.6%	0.1% to 2.0%					1305			1015.80
1303	1310	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					1306			1015.65
1310	1309	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					1307			1015.70
1309	1305	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					1308			1015.72
1313	1310	Landing/Turning Space	4	3.75	0.02	0.5%	0.1% to 2.0%					1309			1015.85
1313	1312	Sidewalk Running Slope	4	6.44	-0.04	-0.6%	0.5% to 5.0%					1310			1015.90
1312	1311	Match Existing Cross Slope	4	3.75	0.12	3.2%	Match Existing					1311			1015.96
1311	1310	Sidewalk Running Slope	4	6.44	-0.06	-0.9%	0.5% to 5.0%					1312			1015.84
1306	1305	Ramp Running Slope	6	2.45	0.15	6.1%	0.5% to 8.3%					1313			1015.88
1309	1308	Ramp Running Slope	6	2.45	-0.13	-5.3%	0.5% to 8.3%								
1308	1307	Ramp Running Slope	6	2.39	-0.02	-0.8%	0.5% to 8.3%								
1307	1306	Ramp Cross Slope	6	5.54	-0.05	-0.9%	0.1% to 2.0%								



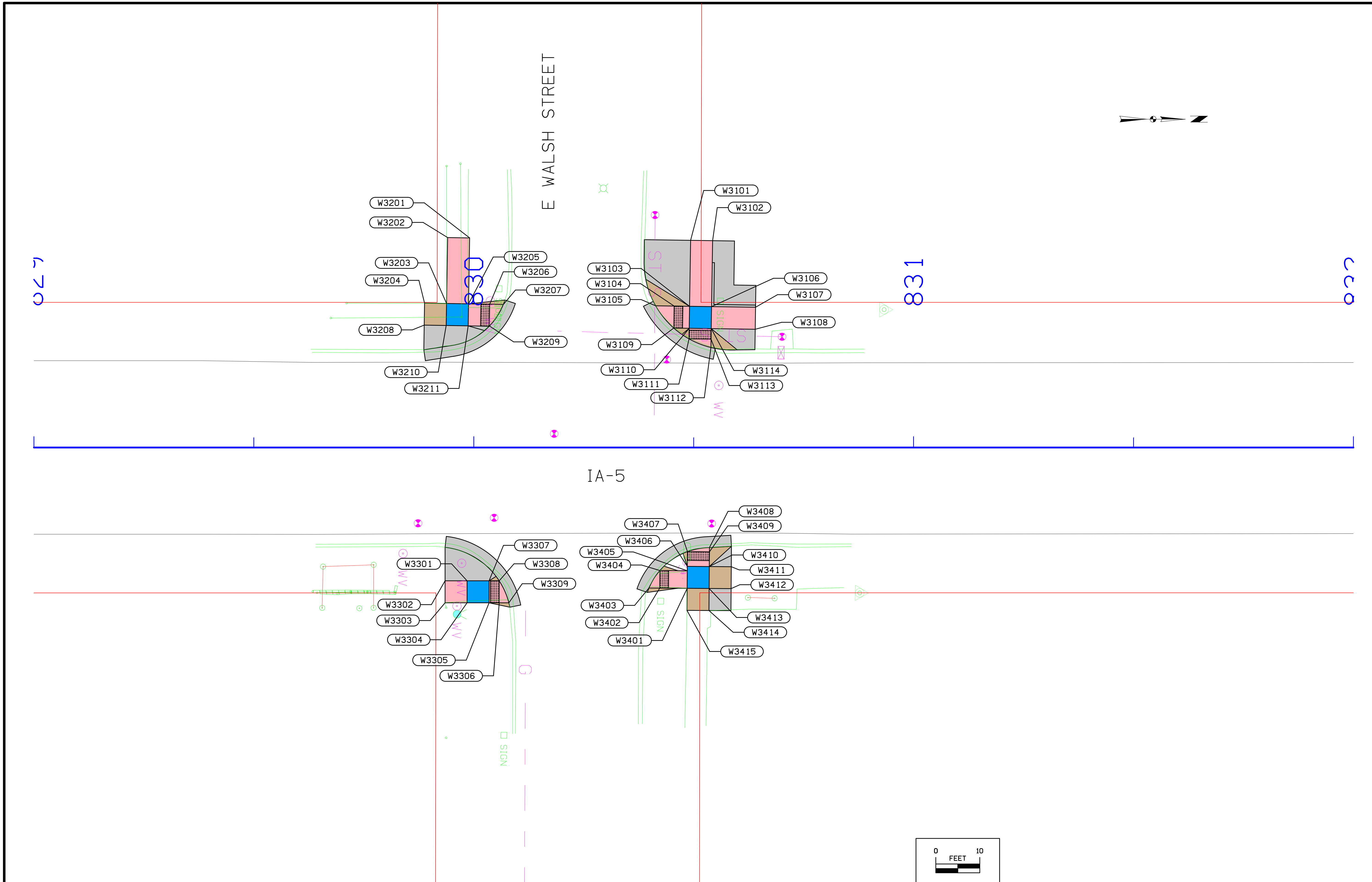
FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer		APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER S.4

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
(1) Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
(2) Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	_" PCC Sidewalk (2)	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? (1)	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
												Point	Station	Offset	Elevation
				FT	FT	%	Pos. or Neg.		%						
2101	2102	Match Existing Cross Slope	4	5.00	0.14	2.8%	Match Existing					2101			1011.80
2102	2103	Sidewalk Running Slope	4	4.00	-0.29	-7.3%	0.5% to 8.3%				Slope required to match existing conditions	2102			1011.94
2104	2112	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%					2103			1011.65
2101	2113	Sidewalk Running Slope	4	4.00	-0.10	-2.5%	0.5% to 5.0%					2104			1011.03
2113	2112	Ramp Running Slope	4	8.00	-0.60	-7.5%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	2105			1010.68
2104	2105	Ramp Running Slope	6	4.41	-0.35	-7.9%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	2106			1010.83
2105	2106	Ramp Running Slope	6	4.45	0.15	3.4%	0.5% to 8.3%					2107			1010.61
2106	2107	Match Existing Cross Slope	4	7.47	-0.22	-2.9%	Match Existing				Match curb profile	2108			1010.96
2107	2108	Ramp Running Slope	6	4.41	0.35	7.9%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	2109			1011.03
2108	2104	Landing/Turning Space	4	6.00	0.07	1.2%	0.1% to 2.0%					2110			1011.35
2108	2109	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%					2111			1011.41
2112	2109	Landing/Turning Space	4	6.00	-0.07	-1.2%	0.1% to 2.0%					2112			1011.10
2112	2109	Ramp Running Slope	4	6.00	-0.07	-1.2%	0.5% to 8.3%					2113			1011.70
2111	2112	Ramp Running Slope	4	6.00	-0.31	-5.2%	0.5% to 8.3%								
2110	2112	Match Existing Cross Slope	4	6.00	-0.25	-4.2%	Match Existing								
2201	2202	Match Existing Cross Slope	4	5.00	0.07	1.4%	Match Existing					2201			1012.58
2202	2203	Ramp Running Slope	6	15.00	-1.22	-8.1%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	2202			1012.65
2203	2206	Landing/Turning Space	4	5.00	-0.10	-2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	2203			1011.43
2206	2201	Ramp Running Slope	6	15.00	1.25	8.3%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	2204			1012.20
2203	2204	Ramp Running Slope	6	10.00	0.77	7.7%	0.5% to 8.3%					2205			1011.65
2204	2205	Match Existing Cross Slope	4	5.00	-0.55	-11.0%	Match Existing					2206			1011.33
2205	2209	Ramp Running Slope	6	10.00	-0.32	-3.2%	0.5% to 8.3%					2207			1010.96
2209	2203	Landing/Turning Space	4	5.00	0.10	2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	2208			1011.07
2209	2210	Ramp Running Slope	6	5.07	-0.42	-8.3%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	2209			1011.33
2210	2211	Ramp Running Slope	6	1.28	-0.01	-0.8%	0.5% to 8.3%					2210			1010.91
2211	2212	Ramp Cross Slope	6	5.16	-0.06	-1.2%	0.1% to 2.0%					2211			1010.90
2212	2213	Ramp Running Slope	6	5.07	0.42	8.3%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	2212			1010.84
2209	2213	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%					2213			1011.26
2213	2214	Ramp Running Slope	6	7.35	-0.35	-4.8%	0.5% to 8.3%					2214			1010.91
2214	2208	Match Existing Cross Slope	4	6.02	0.16	2.7%	Match Existing				Match curb profile				
2208	2207	Ramp Running Slope	6	3.35	-0.11	-3.3%	0.5% to 8.3%								
2207	2206	Ramp Running Slope	6	7.35	0.37	5.0%	0.5% to 8.3%								
2206	2213	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%								
2301	2306	Ramp Running Slope	6	1.21	-0.06	-5.0%	0.5% to 8.3%					2301			1010.90
2306	2302	Ramp Running Slope	6	2.57	0.13	5.1%	0.5% to 8.3%					2302			1010.97
2302	2303	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					2303			1010.92
2303	2307	Ramp Running Slope	6	2.57	-0.13	-5.1%	0.5% to 8.3%					2304			1011.02
2307	2301	Match Existing Cross Slope	4	5.14	0.11	2.1%	Match Existing				Match curb profile	2305			1010.97
2302	2304	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					2306			1010.84
2304	2305	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					2307			1010.79
2305	2303	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					2308			1010.70
2305	2310	Ramp Running Slope	6	4.70	-0.32	-6.8%	0.5% to 8.3%					2309			1010.40
2310	2309	Ramp Running Slope	6	4.78	-0.25	-5.2%	0.5% to 8.3%					2310			1010.65
2309	2308	Match Existing Cross Slope	4	6.92	0.30	4.3%	Match Existing				Match curb profile	2311			1011.14
2308	2303	Ramp Running Slope	6	4.70	0.22	4.7%	0.5% to 8.3%					2312			1011.10
2311	2302	Sidewalk Running Slope	4	4.00	-0.17	-4.2%	0.5% to 5.0%								
2312	2304	Sidewalk Running Slope	4	4.00	-0.08	-2.0%	0.5% to 5.0%								
2401	2403	Ramp Running Slope	6	6.15	0.07	1.1%	0.5% to 8.3%					2401			1010.13
2403	2404	Ramp Running Slope	6	6.65	-0.05	-0.8%	0.5% to 8.3%					2402			1010.26
2404	2405	Match Existing Cross Slope	6	6.00	-0.05	-0.8%	Match Existing					2403			1010.20
2405	2402	Ramp Running Slope	6	6.65	0.16	2.4%	0.5% to 8.3%					2404			1010.15
2402	2403	Ramp Cross Slope	6	5.00	-0.06	-1.2%	0.1% to 2.0%					2405			1010.10



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER S.6

5:31:57 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_S02.dgn

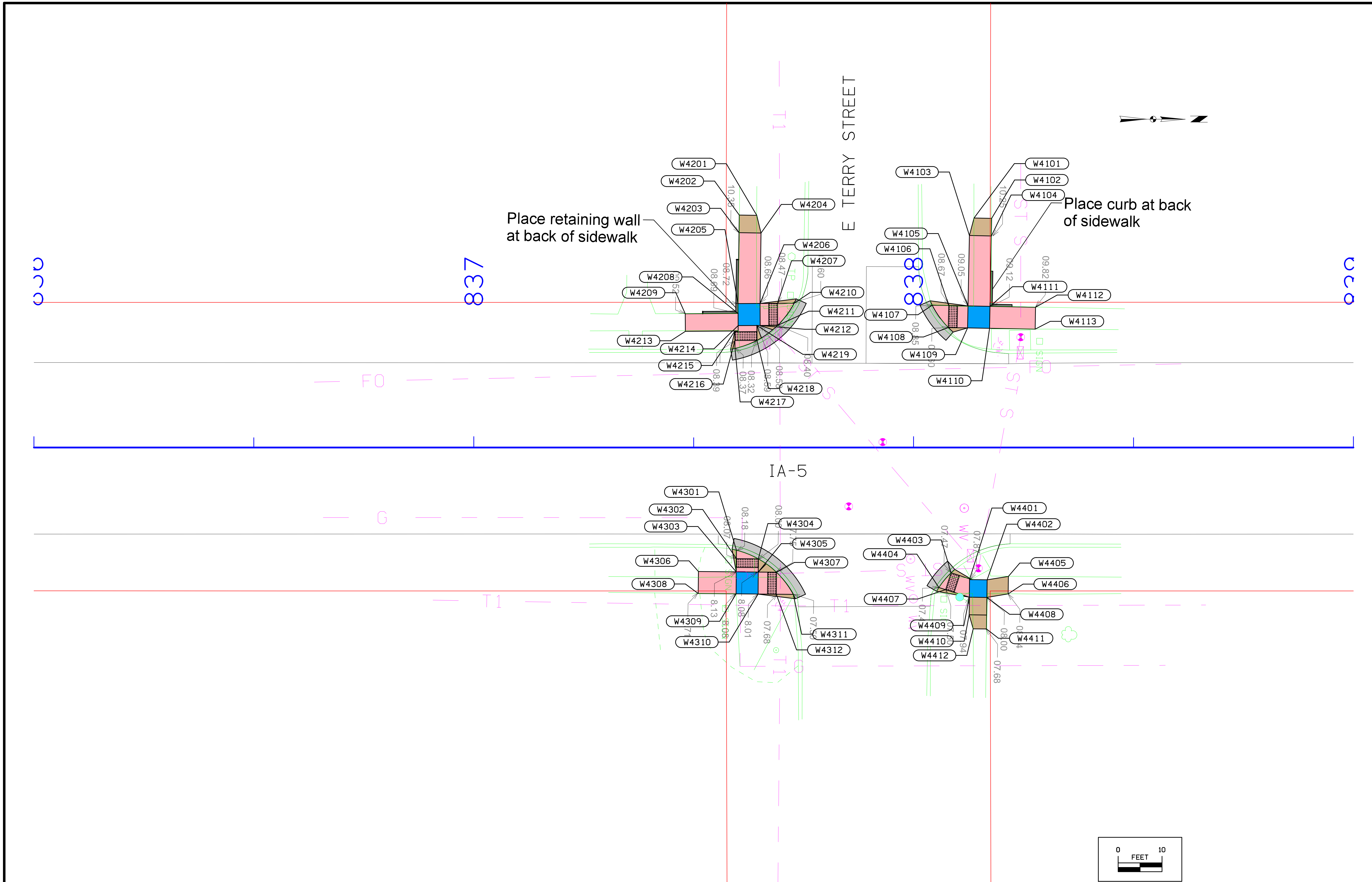
SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
(1) Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
(2) Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	_" PCC Sidewalk (2)	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? (1)	Measured Slope	Initials	Remarks
				FT	FT	%	Pos. or Neg.		%		
3101	3102	Match Existing Cross Slope	4	5.00	-0.03	-0.6%	Match Existing				
3102	3106	Ramp Running Slope	4	15.00	-0.94	-6.3%	0.5% to 8.3%				
3106	3103	Landing/Turning Space	4	5.00	-0.06	-1.2%	0.1% to 2.0%				
3103	3101	Ramp Running Slope	4	15.00	1.03	6.9%	0.5% to 8.3%				
3106	3107	Ramp Running Slope	4	10.00	0.57	5.7%	0.5% to 8.3%				
3107	3108	Match Existing Cross Slope	4	5.00	-0.14	-2.8%	Match Existing				
3108	3114	Ramp Running Slope	4	10.00	-0.52	-5.2%	0.5% to 8.3%				
3114	3106	Landing/Turning Space	4	5.00	0.09	1.8%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed
3114	3113	Ramp Running Slope	6	2.40	-0.18	-7.5%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed
3113	3112	Ramp Running Slope	6	1.88	-0.06	-3.2%	0.5% to 8.3%				
3112	3111	Ramp Cross Slope	6	5.34	-0.01	-0.2%	0.1% to 2.0%				
3111	3110	Ramp Running Slope	6	2.40	0.19	7.9%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed
3110	3114	Landing/Turning Space	4	5.00	0.06	1.2%	0.1% to 2.0%				
3110	3109	Ramp Running Slope	6	3.50	-0.16	-4.6%	0.5% to 8.3%				
3109	3105	Ramp Cross Slope	6	6.53	0.11	1.7%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed
3105	3104	Ramp Running Slope	6	4.21	-0.04	-1.0%	0.5% to 8.3%				
3104	3103	Ramp Running Slope	6	3.50	0.18	5.1%	0.5% to 8.3%				
3103	3110	Landing/Turning Space	4	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed
3201	3202	Match Existing Cross Slope	4	5.00	0.10	2.0%	Match Existing				
3202	3203	Ramp Running Slope	6	15.00	-1.06	-7.1%	0.5% to 8.3%				
3203	3205	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%				
3205	3201	Ramp Running Slope	6	15.00	1.03	6.9%	0.5% to 8.3%				
3203	3204	Sidewalk Running Slope	4	5.00	0.24	4.8%	0.5% to 5.0%	Yes			Proposed slope is maximum allowed
3204	3208	Match Existing Cross Slope	4	5.00	-0.08	-1.6%	Match Existing				
3208	3210	Sidewalk Running Slope	4	5.00	-0.21	-4.2%	0.5% to 5.0%				
3210	3203	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%				
3211	3209	Ramp Running Slope	6	4.80	-0.39	-8.1%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed
3209	3207	Match Existing Cross Slope	4	5.89	0.26	4.4%	Match Existing				Match curb profile
3207	3206	Ramp Running Slope	6	3.11	-0.19	-6.1%	0.5% to 8.3%				
3206	3205	Ramp Running Slope	6	4.80	0.38	7.9%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed
3205	3211	Landing/Turning Space	4	5.00	-0.06	-1.2%	0.1% to 2.0%				
3210	3211	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%				
3301	3302	Ramp Running Slope	4	5.00	0.41	8.2%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed
3302	3303	Match Existing Cross Slope	4	5.00	-0.05	-1.0%	Match Existing				
3303	3304	Ramp Running Slope	6	5.00	-0.40	-8.0%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed
3304	3301	Landing/Turning Space	4	5.00	0.04	0.8%	0.1% to 2.0%				
3301	3307	Landing/Turning Space	4	5.00	-0.06	-1.2%	0.1% to 2.0%				
3307	3305	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%				
3305	3304	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%				
3307	3308	Ramp Running Slope	6	2.29	-0.18	-7.9%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed
3308	3309	Match Existing Cross Slope	4	5.47	-0.10	-1.8%	Match Existing				Match curb profile
3309	3306	Ramp Running Slope	6	2.21	0.05	2.3%	0.5% to 8.3%				
3306	3305	Ramp Running Slope	6	2.29	0.18	7.9%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed
3401	3402	Ramp Running Slope	6	6.23	-0.50	-8.0%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed
3402	3403	Ramp Running Slope	6	2.44	-0.03	-1.2%	0.5% to 8.3%				
3403	3404	Ramp Cross Slope	6	4.69	0.06	1.3%	0.1% to 2.0%				
3404	3405	Ramp Running Slope	6	6.23	0.42	6.7%	0.5% to 8.3%				
3405	3401	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%				
3401	3415	Sidewalk Running Slope	4	5.00	-0.10	-2.0%	0.5% to 5.0%				
3415	3414	Match Existing Cross Slope	4	5.00	0.28	5.6%	Match Existing				
3414	3413	Sidewalk Running Slope	4	5.00	-0.11	-2.2%	0.5% to 5.0%				
3413	3401	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%				
3413	3412	Sidewalk Running Slope	4	5.00	0.12	2.4%	0.5% to 5.0%				
3412	3411	Match Existing Cross Slope	4	5.00	-0.05	-1.0%	Match Existing				
3411	3410	Sidewalk Running Slope	4	5.00	-0.14	-2.8%	0.5% to 5.0%				
3410	3413	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%				
3407	3406	Ramp Running Slope	6	3.35	0.19	5.7%	0.5% to 8.3%				
3406	3410	Landing/Turning Space	4	5.00	0.06	1.2%	0.1% to 2.0%				
3410	3409	Ramp Running Slope	6	3.35	-0.19	-5.7%	0.5% to 8.3%				
3409	3408	Ramp Running Slope	6	0.95	-0.03	-3.2%	0.5% to 8.3%				
3408	3407	Ramp Cross Slope	6	5.09	-0.03	-0.6%	0.1% to 2.0%				

FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
Point	Station	Offset	Elevation
3101			1009.45
3102			1009.42
3103			1008.42
3104			1008.24
3105			1008.28
3106			1008.48
3107			1009.05
3108			1008.91
3109			1008.17
3110			1008.33
3111			1008.14
3112			1008.15
3113			1008.21
3114			1008.39
3201			1009.40
3202			1009.50
3203			1008.44
3204			1008.68
3205			1008.37
3206			1007.99
3207			1008.18
3208			1008.60
3209			1007.92
3210			1008.39
3211			1008.31
3301			1007.49
3302			1007.90
3303			1007.85
3304			1007.45
3305			1007.38
3306			1007.20
3307			1007.43
3308			1007.25
3309			1007.15
3401			1007.95
3402			1007.45
3403			1007.42
3404			1007.48
3405			1007.90
3406			1007.89
3407			1007.70
3408			1007.73
3409			1007.76
3410			1007.95
3411			1008.09
3412			1008.14
3413			1008.02
3414			1008.13
3415			1007.85



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER S.8

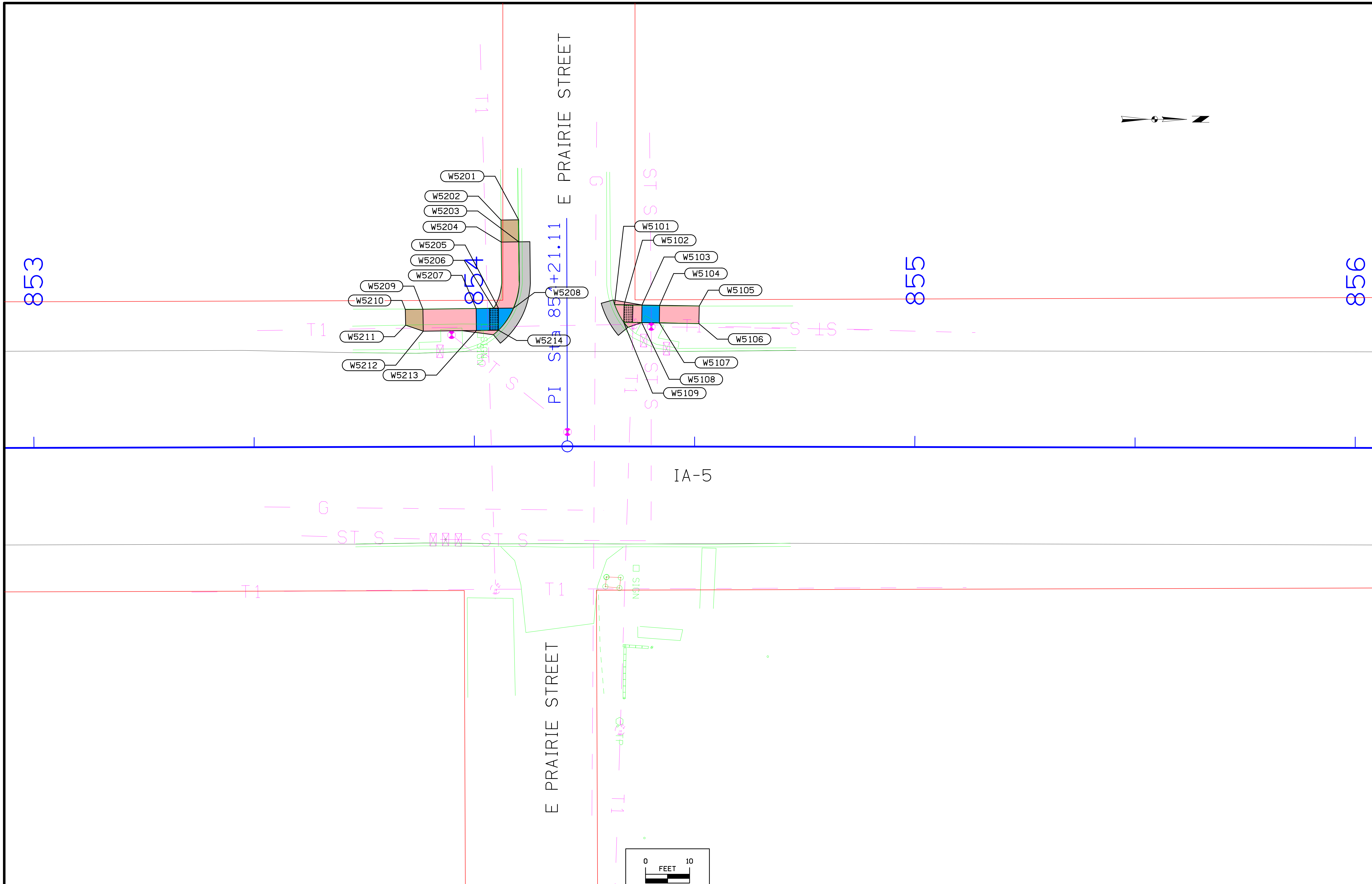
5:31:58 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_S02.dgn

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
1 Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
2 Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	_" PCC Sidewalk 2	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? 1	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.		%			Point	Station	Offset	Elevation
4101	4102	Match Existing Cross Slope	4	4.02	0.05	1.2%	Match Existing					4101			1010.57
4102	4104	Sidewalk Running Slope	4	4.00	-0.17	-4.2%	0.5% to 5.0%					4102			1010.62
4104	4103	Sidewalk Cross Slope	4	5.00	-0.05	-1.0%	0.5% to 2.0%					4103			1010.40
4103	4101	Sidewalk Running Slope	4	4.12	0.17	4.1%	0.5% to 5.0%					4104			1010.45
4104	4111	Ramp Running Slope	4	16.00	-1.37	-8.6%	0.5% to 9.6%				Length constructed must exceed 15 feet at a uniform running slope	4105			1009.00
4111	4105	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	4106			1008.67
4105	4103	Ramp Running Slope	6	16.00	1.40	8.7%					Length constructed must exceed 15 feet at a uniform running slope	4107			1008.85
4105	4106	Ramp Running Slope	6	4.39	-0.33	-7.5%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	4108			1008.60
4106	4107	Ramp Running Slope	6	3.75	0.18	4.8%	0.5% to 8.3%					4109			1008.96
4107	4108	Match Existing Cross Slope	4	6.25	-0.25	-4.0%	Match Existing				Match curb profile	4110			1009.04
4108	4109	Ramp Running Slope	6	4.39	0.36	8.2%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	4111			1009.08
4109	4105	Landing/Turning Space	4	5.00	0.04	0.8%	0.1% to 2.0%					4112			1009.82
4111	4112	Ramp Running Slope	6	10.35	0.74	7.1%	0.5% to 8.3%					4113			1009.68
4112	4113	Match Existing Cross Slope	4	5.00	-0.14	-2.8%	Match Existing								
4113	4110	Ramp Running Slope	6	10.35	-0.64	-6.2%	0.5% to 8.3%								
4110	4111	Landing/Turning Space	4	5.00	0.04	0.8%	0.1% to 2.0%								
4201	4202	Match Existing Cross Slope	4	3.98	0.02	0.5%	Match Existing					4201			1010.54
4202	4203	Sidewalk Running Slope	4	4.00	-0.18	-4.5%	0.5% to 5.0%					4202			1010.56
4203	4204	Sidewalk Cross Slope	4	5.00	-0.03	-0.6%	0.5% to 2.0%					4203			1010.38
4204	4201	Sidewalk Running Slope	4	4.13	0.19	4.6%	0.5% to 5.0%					4204			1010.35
4203	4205	Ramp Running Slope	6	16.10	-1.66	-10.3%	0.5% to 11.3%				Length constructed must exceed 15 feet at a uniform running slope	4205			1008.72
4205	4206	Landing/Turning Space	4	5.00	-0.06	-1.2%	0.1% to 2.0%					4206			1008.66
4206	4204	Ramp Running Slope	6	16.00	1.69	10.6%					Length constructed must exceed 15 feet at a uniform running slope	4207			1008.47
4205	4214	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%					4208			1008.69
4214	4212	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%					4209			1009.52
4212	4206	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%					4210			1008.60
4208	4209	Ramp Running Slope	6	12.00	0.83	6.9%	0.5% to 8.3%					4211			1008.40
4209	4213	Match Existing Cross Slope	4	4.00	-0.17	-4.2%	Match Existing					4212			1008.58
4213	4215	Ramp Running Slope	6	11.26	-0.80	-7.1%	0.5% to 8.3%					4213			1009.35
4215	4216	Ramp Running Slope	6	2.15	-0.16	-7.4%	0.5% to 8.3%					4214			1008.65
4216	4217	Ramp Running Slope	6	1.79	-0.02	-1.1%	0.5% to 8.3%					4215			1008.55
4217	4218	Ramp Cross Slope	6	5.31	-0.05	-0.9%	0.1% to 2.0%					4216			1008.39
4218	4219	Ramp Running Slope	6	3.39	0.27	8.0%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	4217			1008.37
4212	4211	Ramp Running Slope	6	3.99	-0.18	-4.5%	0.5% to 8.3%					4218			1008.32
4211	4210	Match Existing Cross Slope	4	6.26	0.20	3.2%	Match Existing				Match curb profile	4219			1008.59
4210	4207	Ramp Running Slope	6	3.77	-0.13	-3.5%	0.5% to 8.3%								
4207	4206	Ramp Running Slope	6	3.99	0.19	4.8%	0.5% to 8.3%								
4301	4302	Ramp Running Slope	6	1.91	-0.11	-5.8%	0.5% to 8.3%					4301			1008.18
4302	4303	Ramp Running Slope	6	3.00	0.06	2.0%	0.5% to 8.3%					4302			1008.07
4303	4305	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					4303			1008.13
4305	4304	Ramp Running Slope	6	3.00	-0.08	-2.7%	0.5% to 8.3%					4304			1008.00
4304	4301	Match Existing Cross Slope	4	5.35	0.18	3.4%	Match Existing				Match curb profile	4305			1008.08
4303	4306	Ramp Running Slope	6	8.60	0.52	6.0%	0.5% to 8.3%					4306			1008.65
4306	4308	Match Existing Cross Slope	4	5.00	0.06	1.2%	Match Existing					4307			1007.75
4308	4309	Ramp Running Slope	6	8.60	-0.63	-7.3%	0.5% to 8.3%					4308			1008.71
4309	4303	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					4309			1008.08
4310	4312	Ramp Running Slope	6	4.15	-0.33	-7.9%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	4310			1008.01
4312	4311	Ramp Running Slope	6	3.86	-0.18	-4.7%	0.5% to 8.3%					4311			1007.50
4311	4307	Match Existing Cross Slope	4	6.32	0.25	4.0%	Match Existing				Match curb profile	4312			1007.68
4307	4305	Ramp Running Slope	6	4.15	0.33	7.9%	0.5% to 8.3%								
4305	4310	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%								
4403	4401	Ramp Running Slope	6	5.04	0.40	7.9%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	4401			1007.87
4403	4404	Ramp Cross Slope	6	4.32	-0.07	-1.6%	0.1% to 2.0%					4402			1007.93
4404	4407	Ramp Running Slope	6	1.62	0.10	6.2%	0.5% to 8.3%					4403			1007.47
4407	4409	Ramp Running Slope	6	5.64	0.44	7.8%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	4404			1007.40
4409	4401	Landing/Turning Space	4	4.00	-0.07	-1.8%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	4405			1008.16
4409	4410	Sidewalk Running Slope	4	4.00	-0.19	-4.8%	0.5% to 5.0%	Yes			Proposed slope is maximum allowed	4406			1008.14
4410	4412	Sidewalk Running Slope	4	3.32	-0.14	-4.2%	0.5% to 5.0%					4407			1007.50
4412	4411	Match Existing Cross Slope	4	3.03	0.07	2.3%	Match Existing					4408			1008.00
4411	4408	Sidewalk Running Slope	4	7.17	0.32	4.5%	0.5% to 5.0%					4409			1007.94
4408	4409	Landing/Turning Space	4	4.00	-0.06	-1.5%	0.1% to 2.0%					4410			1007.75
4408	4406	Sidewalk Running Slope	4	4.89	0.14	2.9%	0.5% to 5.0%					4411			1007.68
4406	4405	Match Existing Cross Slope	4	3.95	0.02	0.5%	Match Existing					4412			1007.61
4405	4402	Sidewalk Running Slope	4	4.88	-0.23	-4.7%	0.5% to 5.0%	Yes			Proposed slope is maximum allowed				
4402	4408	Landing/Turning Space	4	4.00	0.07	1.8%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed				



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER S.10

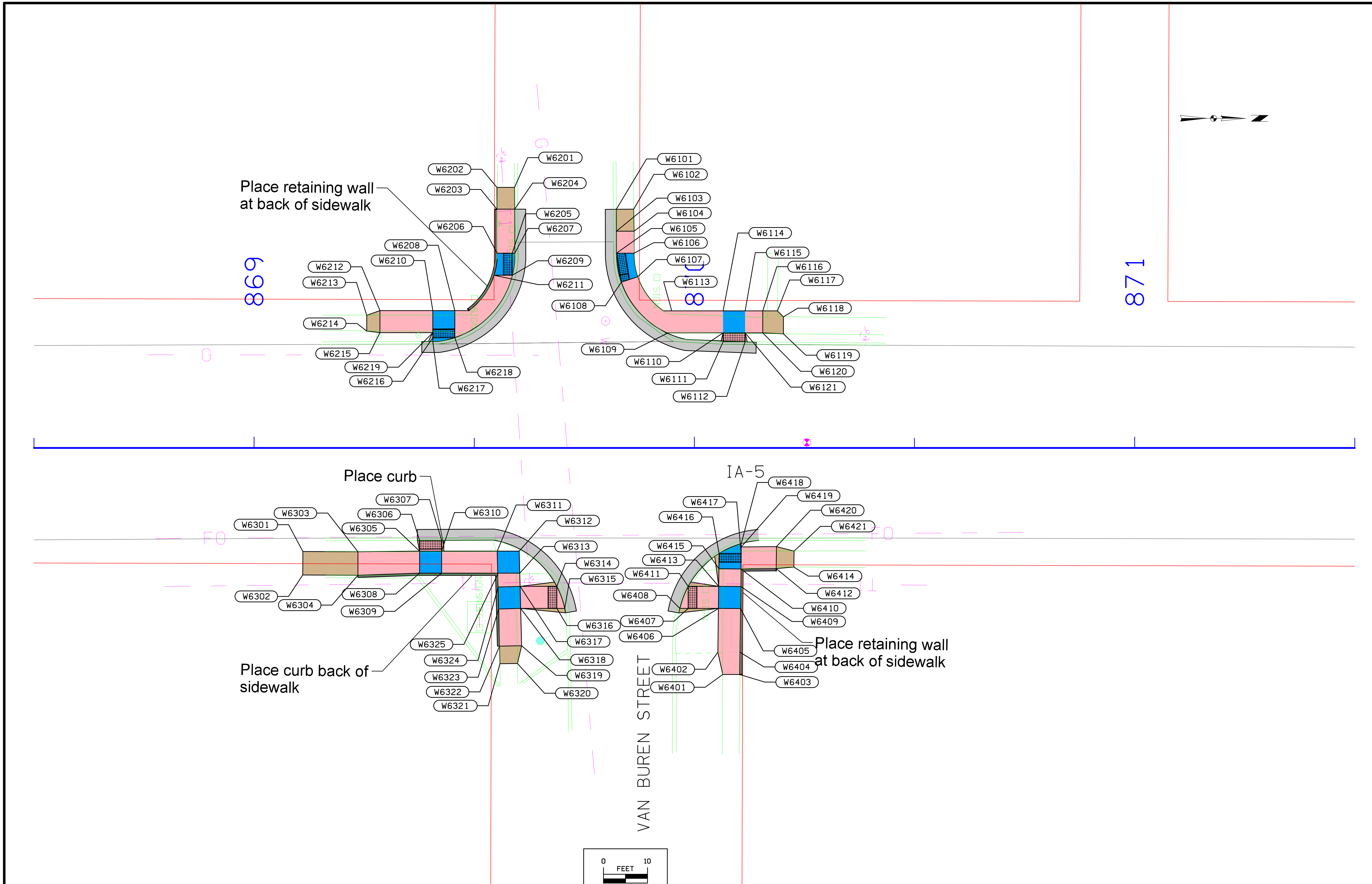
5:31:59 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_S02.dgn

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
(1) Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
(2) Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	_" PCC Sidewalk (2)	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? (1)	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.		%			Point	Station	Offset	Elevation
5101	5102	Ramp Running Slope	6	2.15	0.05	2.3%	0.5% to 8.3%					5101			967.00
5102	5103	Ramp Running Slope	6	2.06	0.21	10.2%	0.5% to 11.2%				Drainage issues were considered	5102			967.05
5103	5108	Landing/Turning Space	4	4.00	0.06	1.5%	0.1% to 2.0%					5103			967.26
5108	5109	Ramp Running Slope	6	4.06	-0.42	-10.3%	0.5% to 11.3%				Sidewalk to match curb inlet top elevation	5104			967.20
5109	5101	Match Existing Cross Slope	6	4.54	0.10	2.2%	Match Existing				Match curb profile	5105			967.71
5103	5104	Landing/Turning Space	4	4.00	-0.06	-1.5%	0.1% to 2.0%					5106			967.50
5104	5107	Landing/Turning Space	4	4.00	0.06	1.5%	0.1% to 2.0%					5107			967.26
5107	5108	Landing/Turning Space	4	4.00	0.06	1.5%	0.1% to 2.0%					5108			967.32
5104	5105	Ramp Running Slope	6	10.00	0.51	5.1%	0.5% to 8.3%					5109			966.90
5105	5106	Match Existing Cross Slope	4	4.00	-0.21	-5.3%	Match Existing								
5106	5107	Ramp Running Slope	6	10.00	-0.24	-2.4%	0.5% to 8.3%								
5201	5202	Match Existing Cross Slope	4	4.00	0.21	5.3%	Match Existing					5201			967.99
5202	5204	Sidewalk Running Slope	4	15.26	-0.30	-2.0%	0.5% to 5.0%					5202			968.20
5204	5206	Ramp Running Slope	6	15.40	-1.00	-6.5%	0.5% to 8.3%					5203			967.70
5208	5201	Ramp Running Slope	6	15.17	1.15	7.6%	0.5% to 8.3%					5204			967.90
5205	5206	Landing/Turning Space	4	1.10	0.01	0.9%	0.1% to 2.0%					5205			966.89
5206	5207	Landing/Turning Space	4	4.00	0.05	1.3%	0.1% to 2.0%					5206			966.90
5207	5213	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%					5207			966.95
5213	5214	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%					5208			966.84
5204	5207	Ramp Running Slope	6	12.08	-0.95	-7.9%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	5209			967.35
5209	5212	Ramp Cross Slope	6	5.00	-0.05	-1.0%	0.1% to 2.0%					5210			967.41
5210	5211	Ramp Running Slope	6	12.05	-0.07	-0.6%	0.5% to 8.3%					5211			967.34
5207	5208	Sidewalk Running Slope	4	4.00	-0.11	-2.8%	0.5% to 5.0%					5212			967.30
5208	5209	Match Existing Cross Slope	4	3.60	0.51	14.2%	Match Existing					5213			966.87
5209	5210	Sidewalk Running Slope	4	4.25	0.06	1.4%	0.5% to 5.0%					5214			966.80



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER S.12

5:32:00 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_S02.dgn

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
(1) Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
(2) Refer to tabulation 113-01 for bid quantities.

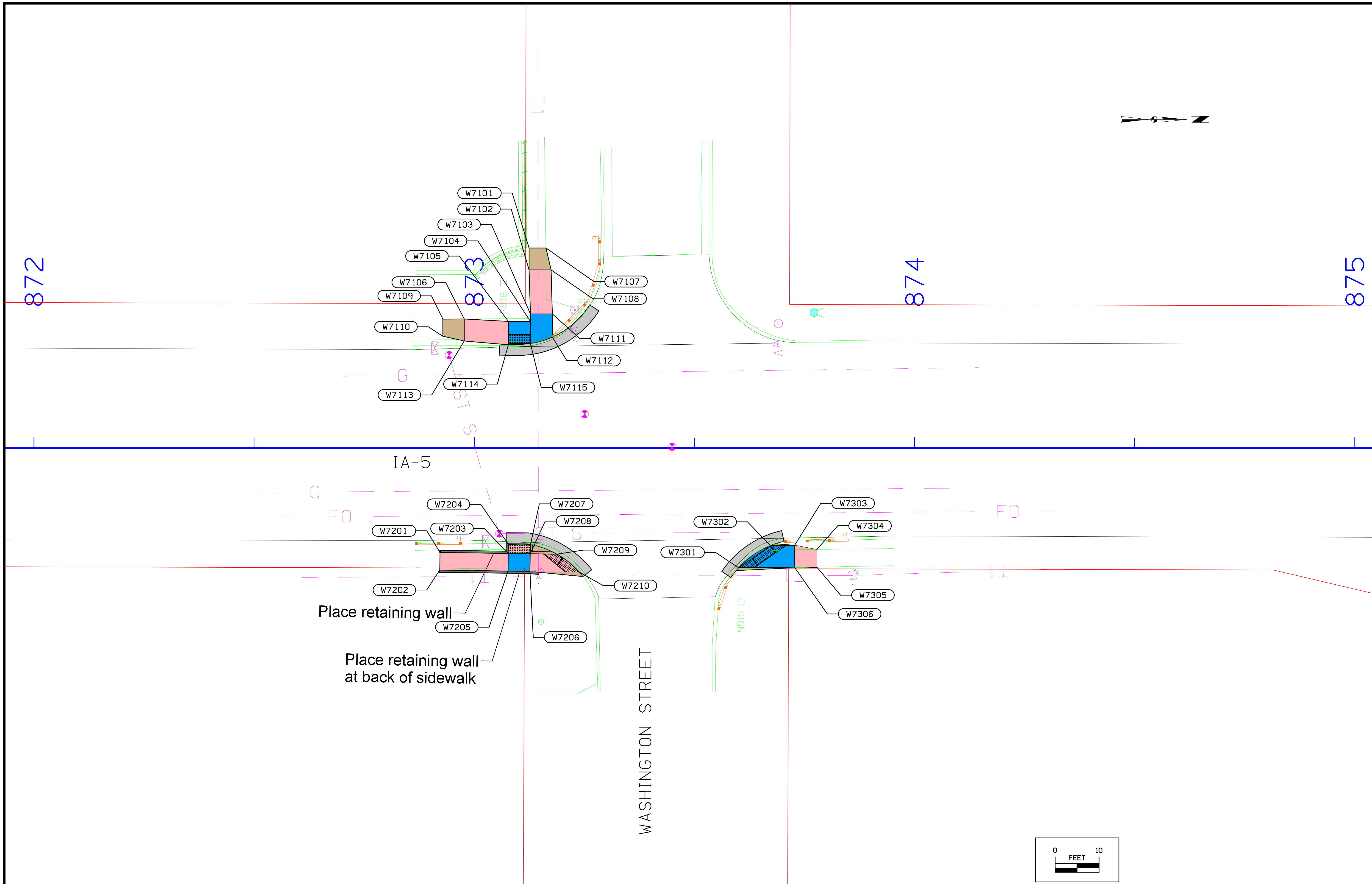
Point to Point		Sidewalk Designation	_" PCC Sidewalk (2)	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? (1)	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
												Point	Station	Offset	Elevation
				FT	FT	%	Pos. or Neg.		%						
6101	6102	Match Existing Cross Slope	4	3.95	0.15	3.8%	Match Existing					6101			992.02
6102	6104	Sidewalk Running Slope	4	5.00	0.11	2.2%	0.5% to 5.0%					6102			992.17
6104	6103	Ramp Cross Slope	6	4.00	-0.06	-1.5%	0.1% to 2.0%					6103			992.22
6103	6101	Sidewalk Running Slope	4	5.00	-0.20	-4.0%	0.5% to 5.0%					6104			992.28
6103	6105	Ramp Running Slope	6	5.00	-0.10	-2.1%	0.5% to 8.3%					6105			992.12
6105	6106	Landing/Turning Space	4	4.00	0.05	1.4%	0.1% to 2.0%					6106			992.17
6106	6104	Ramp Running Slope	6	5.00	0.11	2.2%	0.5% to 8.3%					6107			992.25
6105	6108	Landing/Turning Space	4	6.67	0.08	1.1%	0.1% to 2.0%					6108			992.19
6108	6107	Landing/Turning Space	4	3.92	0.06	1.5%	0.1% to 2.0%					6109			992.10
6107	6106	Landing/Turning Space	4	5.38	-0.08	-1.5%	0.1% to 2.0%					6110			991.42
6108	6109	Ramp Running Slope	6	15.51	-0.09	-0.6%	0.5% to 8.3%					6111			991.46
6109	6110	Ramp Running Slope	6	13.21	-0.68	-5.2%	0.5% to 8.3%					6112			991.18
6110	6114	Landing/Turning Space	4	5.00	0.07	1.5%	0.1% to 2.0%					6113			992.15
6114	6113	Ramp Running Slope	6	11.67	0.66	5.6%	0.5% to 8.3%					6114			991.49
6113	6107	Ramp Running Slope	6	11.23	0.10	0.9%	0.5% to 8.3%					6115			991.41
6114	6115	Landing/Turning Space	4	5.00	-0.08	-1.5%	0.1% to 2.0%					6116			991.45
6115	6121	Landing/Turning Space	4	5.00	-0.07	-1.5%	0.1% to 2.0%					6117			991.60
6121	6112	Ramp Running Slope	6	2.02	-0.16	-8.1%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	6118			991.51
6112	6111	Match Existing Cross Slope	4	5.00	0.28	5.6%	Match Existing				Match curb profile	6119			991.41
6111	6110	Ramp Running Slope	6	2.00	-0.04	-2.1%	0.5% to 8.3%					6120			991.38
6115	6116	Ramp Running Slope	6	4.00	0.04	0.9%	0.5% to 8.3%					6121			991.34
6116	6120	Ramp Cross Slope	6	5.00	-0.07	-1.4%	0.1% to 2.0%								
6120	6121	Ramp Running Slope	6	4.00	-0.04	-1.0%	0.5% to 8.3%								
6116	6117	Sidewalk Running Slope	4	3.33	0.15	4.5%	0.5% to 5.0%	Yes			Proposed slope is maximum allowed				
6117	6118	Sidewalk Running Slope	4	1.91	-0.09	-4.7%	0.5% to 5.0%	Yes			Proposed slope is maximum allowed				
6118	6119	Match Existing Cross Slope	4	3.88	-0.10	-2.6%	Match Existing								
6119	6120	Sidewalk Running Slope	4	4.68	-0.03	-0.6%	0.5% to 5.0%								
6201	6202	Match Existing Cross Slope	4	4.00	-0.10	-2.5%	Match Existing					6201			992.21
6202	6203	Sidewalk Running Slope	4	4.97	0.32	6.4%	0.5% to 7.4%				Slope required to match existing conditions	6202			992.11
6203	6204	Ramp Cross Slope	4	4.00	0.07	1.7%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	6203			992.43
6204	6201	Sidewalk Running Slope	4	4.96	-0.29	-5.8%	0.5% to 6.8%				Slope required to match existing conditions	6204			992.50
6203	6206	Ramp Running Slope	4	9.99	0.28	2.8%	0.5% to 8.3%					6205			992.66
6206	6205	Landing/Turning Space	6	3.42	-0.05	-1.5%	0.1% to 2.0%					6206			992.71
6205	6207	Landing/Turning Space	6	0.58	-0.01	-1.1%	0.1% to 2.0%					6207			992.65
6207	6209	Landing/Turning Space	6	5.05	0.09	1.9%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	6208			994.48
6209	6211	Landing/Turning Space	6	4.13	0.02	0.5%	0.1% to 2.0%					6209			992.75
6211	6208	Ramp Running Slope	6	13.21	1.71	12.9%	0.5% to 13.9%				Slope required to match existing conditions	6210			994.55
6208	6218	Landing/Turning Space	4	6.14	0.07	1.1%	0.1% to 2.0%					6211			992.77
6218	6209	Ramp Running Slope	6	20.02	-1.80	-9.0%	0.5% to 10%				Slope required to match existing conditions	6212			995.43
6208	6210	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%					6213			995.56
6210	6216	Landing/Turning Space	4	6.16	0.09	1.5%	0.1% to 2.0%					6214			995.41
6216	6217	Landing/Turning Space	4	0.85	0.01	1.7%	0.1% to 2.0%	Yes				6215			995.39
6217	6218	Match Existing Cross Slope	4	5.10	-0.11	-2.1%	Match Existing				Match curb profile	6216			994.64
6210	6212	Ramp Running Slope	6	12.00	0.88	7.3%	0.5% to 8.3%					6217			994.65
6212	6215	Ramp Cross Slope	6	5.00	-0.04	-0.8%	0.1% to 2.0%					6218			994.55
6215	6219	Ramp Running Slope	6	12.00	-0.73	-6.1%	0.5% to 8.3%					6219			994.66
6212	6213	Sidewalk Running Slope	4	3.18	0.13	4.1%	0.5% to 5.0%								
6213	6214	Sidewalk Cross Slope	4	3.59	-0.15	-4.2%	0.5% to 5.2%								
6214	6215	Sidewalk Running Slope	4	3.02	-0.02	-0.7%									
6301	6302	Match Existing Cross Slope	4	5.34	0.05	0.9%	Match Existing					6301			996.40
6302	6304	Sidewalk Running Slope	4	12.53	-0.35	-2.8%	0.5% to 5.0%					6302			996.45
6304	6303	Ramp Cross Slope	4	5.33	-0.07	-1.4%	0.1% to 2.0%					6303			996.03
6303	6301	Sidewalk Running Slope	4	12.50	0.37	3.0%	0.5% to 5.0%					6304			996.10
6303	6305	Ramp Running Slope	4	14.00	-0.75	-5.4%	0.5% to 8.3%					6305			995.28
6305	6308	Landing/Turning Space	4	5.00	-0.06	-1.2%	0.1% to 2.0%					6306			995.10
6308	6304	Ramp Running Slope	4	14.00	0.88	6.3%	0.5% to 8.3%					6307			995.01
6306	6305	Ramp Running Slope	6	2.42	0.18	7.5%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	6308			995.22
6305	6310	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%					6309			995.14
6310	6307	Ramp Running Slope	6	2.45	-0.19	-7.7%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	6310			995.20
6307	6306	Ramp Cross Slope	6	5.00	0.09	1.7%	0.1% to 2.0%	Yes			Match curb profile	6311			994.53
6310	6309	Landing/Turning Space	4	5.00	-0.06	-1.2%	0.1% to 2.0%					6312			994.45
6309	6325	Ramp Running Slope	6	12.76	-0.69	-5.4%	0.5% to 8.3%					6313			994.37
6325	6311	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%					6314			993.53
6311	6310	Ramp Running Slope	6	12.64	0.67	5.3%	0.5% to 8.3%					6315			993.47
6311	6312	Landing/Turning Space	4	4.97	-0.08	-1.6%	0.1% to 2.0%					6316			993.50
6312	6313	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%					6317			994.15
6313	6325	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%					6318			994.12
6325	6324	Ramp Running Slope	6	3.13	-0.22	-7.0%	0.5% to 8.3%					6319			994.72
6324	6317	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%					6320			994.92
6317	6313	Ramp Running Slope	6	3.00	0.22	7.3%	0.5% to 8.3%					6321			995.00
6325	6324	Ramp Running Slope	6	5.00	-0.22	-4.4%	0.5% to 8.3%					6322			994.80
6323	6318	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%					6323			994.20
6318	6317	Landing/Turning Space	4	5.00	0.03	0.6%	0.1% to 2.0%					6324			994.23

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
1 Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
2 Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	_" PCC Sidewalk 2	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? 1	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.		%			Point	Station	Offset	Elevation
6318	6316	Ramp Running Slope	6	8.21	-0.62	-7.6%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	6325			994.45
6316	6315	Ramp Running Slope	6	1.80	-0.03	-1.7%	0.5% to 8.3%								
6315	6314	Ramp Cross Slope	6	5.31	0.06	1.1%	0.1% to 2.0%								
6314	6317	Ramp Running Slope	6	8.34	0.62	7.4%	0.5% to 8.3%								
6323	6322	Ramp Running Slope	6	8.42	0.60	7.1%	0.5% to 8.3%								
6322	6319	Ramp Cross Slope	6	5.00	-0.08	-1.6%	0.1% to 2.0%								
6319	6318	Ramp Running Slope	6	8.48	-0.60	-7.1%	0.5% to 8.3%								
6322	6321	Sidewalk Running Slope	4	4.00	0.20	5.0%	0.5% to 5.0%	Yes			Slope required to match existing conditions				
6321	6320	Match Existing Cross Slope	4	3.96	-0.08	-2.1%	Match Existing								
6320	6319	Sidewalk Running Slope	4	4.12	-0.20	-4.8%	0.5% to 5.0%	Yes			Slope required to match existing conditions				
6401	6402	Ramp Running Slope	6	5.19	-0.34	-6.6%	0.5% to 8.3%					6401			993.39
6402	6404	Ramp Cross Slope	6	5.00	-0.08	-1.6%	0.1% to 2.0%					6402			993.05
6404	6403	Ramp Running Slope	6	5.07	0.28	5.5%	0.5% to 8.3%					6403			993.25
6403	6401	Match Existing Cross Slope	4	3.82	0.14	3.7%	Match Existing					6404			992.97
6402	6406	Ramp Running Slope	6	9.94	-0.79	-8.0%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	6405			992.18
6406	6405	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%					6406			992.26
6405	6404	Ramp Running Slope	6	9.93	0.79	8.0%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	6407			992.62
6408	6407	Ramp Running Slope	6	1.89	-0.03	-1.6%	0.5% to 8.3%					6408			992.65
6407	6406	Ramp Running Slope	6	6.87	-0.36	-5.2%	0.5% to 8.3%					6409			992.10
6406	6413	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%					6410			991.80
6413	6411	Ramp Running Slope	6	6.93	0.35	5.0%	0.5% to 8.3%					6411			992.53
6411	6408	Match Existing Cross Slope	4	5.35	0.12	2.2%	Match Existing				Match curb profile	6412			991.85
6405	6409	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%					6413			992.18
6409	6410	Ramp Running Slope	6	3.95	-0.30	-7.6%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	6414			992.00
6410	6415	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%					6415			991.88
6414	6413	Ramp Running Slope	6	4.00	0.18	4.5%	0.5% to 8.3%					6416			991.82
6415	6416	Landing/Turning Space	4	3.47	-0.06	-1.7%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	6417			991.74
6416	6417	Landing/Turning Space	4	5.51	-0.08	-1.5%	0.1% to 2.0%					6418			991.70
6417	6410	Landing/Turning Space	4	5.78	0.06	1.0%	0.1% to 2.0%					6419			991.71
6410	6412	Ramp Running Slope	6	8.00	0.05	0.6%	0.5% to 8.3%					6420			991.80
6412	6420	Ramp Cross Slope	6	5.00	-0.05	-1.0%	0.1% to 2.0%					6421			991.65
6420	6419	Ramp Running Slope	6	8.00	-0.09	-1.1%	0.5% to 8.3%								
6420	6421	Sidewalk Running Slope	4	4.12	-0.15	-3.6%	0.5% to 5.0%								
6421	6414	Match Existing Cross Slope	4	3.61	0.35	9.7%	Match Existing								
6414	6412	Sidewalk Running Slope	4	4.02	-0.15	-3.7%	0.5% to 5.0%								



FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER S.15

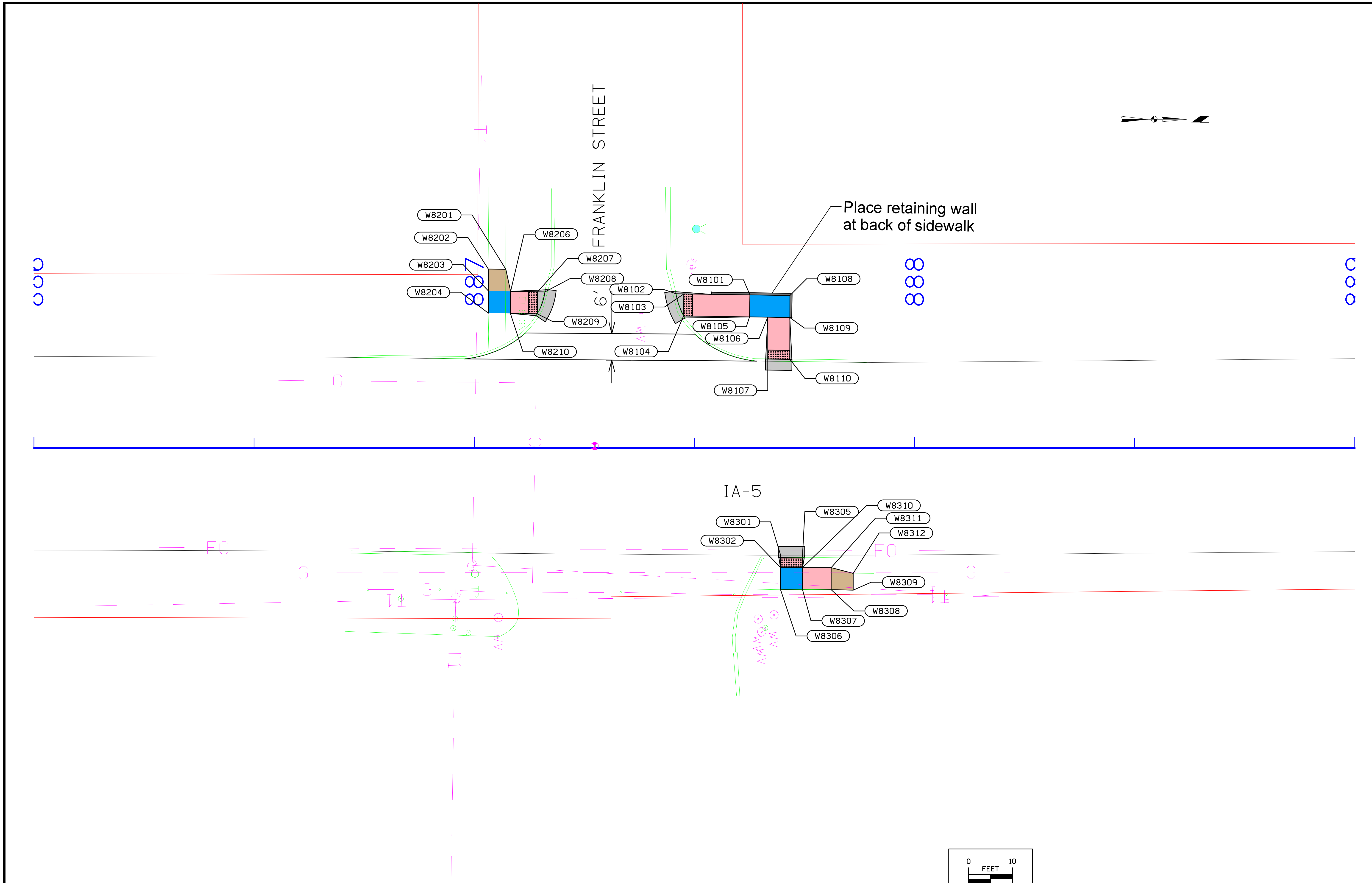
5:32:00 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_S02.dgn

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
(1) Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
(2) Refer to tabulation 113-01 for bid quantities.

Point	to Point	Sidewalk Designation	_" PCC Sidewalk (2)	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? (1)	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.		%			Point	Station	Offset	Elevation
7101	7102	Sidewalk Running Slope	4	4.97	0.04	0.8%	0.5% to 5.0%					7101			974.99
7102	7108	Ramp Cross Slope	4	5.00	-0.07	-1.5%	0.1% to 2.0%					7102			975.03
7108	7107	Sidewalk Running Slope	4	5.10	-0.17	-3.4%	0.5% to 5.0%					7103			975.45
7107	7101	Match Existing Cross Slope	4	3.85	0.21	5.4%	Match Existing					7104			975.43
7102	7103	Ramp Running Slope	6	10.00	0.42	4.2%	0.5% to 8.3%					7105			975.51
7103	7111	Landing/Turning Space	4	5.00	-0.09	-1.9%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	7106			976.06
7111	7108	Ramp Running Slope	6	10.00	-0.40	-4.0%	0.5% to 8.3%					7107			974.78
7103	7104	Landing/Turning Space	4	1.71	-0.02	-1.1%	0.1% to 2.0%					7108			974.95
7104	7105	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	7109			976.06
7105	7114	Landing/Turning Space	4	5.28	0.10	1.8%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	7110			976.05
7114	7115	Landing/Turning Space	4	5.00	-0.09	-1.7%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	7111			975.36
7115	7104	Landing/Turning Space	4	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	7112			975.43
7115	7112	Landing/Turning Space	4	5.21	-0.09	-1.7%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed	7113			976.05
7112	7111	Landing/Turning Space	4	5.25	-0.07	-1.4%	0.1% to 2.0%					7114			975.61
7105	7106	Ramp Running Slope	6	10.03	0.55	5.5%	0.5% to 8.3%					7115			975.52
7106	7113	Ramp Cross Slope	6	5.00	-0.01	-0.2%	0.1% to 2.0%								
7113	7114	Ramp Running Slope	6	10.05	-0.44	-4.4%	0.5% to 8.3%								
7106	7109	Sidewalk Running Slope	4	4.88	0.00	0.0%	0.5% to 5.0%				Slope required to match existing conditions				
7109	7110	Match Existing Cross Slope	4	3.91	-0.01	-0.3%	Match Existing								
7110	7113	Sidewalk Running Slope	4	5.00	0.00	0.0%	0.5% to 5.0%				Slope required to match existing conditions				
7201	7202	Match Existing Cross Slope	4	4.00	0.15	3.7%	Match Existing					7201			977.60
7202	7205	Ramp Running Slope	6	15.50	-1.65	-10.6%	0.5% to 11.6%				Length constructed must exceed 15 feet at a uniform running slope	7202			977.75
7205	7203	Landing/Turning Space	4	4.00	-0.05	-1.3%	0.1% to 2.0%					7203			976.05
7203	7201	Ramp Running Slope	6	15.50	1.55	10.0%					Length constructed must exceed 15 feet at a uniform running slope	7204			976.00
7203	7204	Ramp Running Slope	6	2.19	-0.05	-2.3%	0.5% to 8.3%					7205			976.10
7204	7207	Ramp Cross Slope	6	5.00	-0.05	-1.0%	0.1% to 2.0%					7206			976.05
7207	7208	Ramp Running Slope	6	2.12	0.05	2.4%	0.5% to 8.3%					7207			975.95
7208	7203	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					7208			976.00
7208	7209	Ramp Running Slope	6	6.06	-0.50	-8.2%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	7209			975.50
7209	7210	Match Existing Cross Slope	4	6.54	-0.20	-3.1%	Match Existing				Match curb profile	7210			975.30
7210	7206	Ramp Running Slope	6	11.22	0.75	6.7%	0.5% to 8.3%								
7206	7208	Landing/Turning Space	4	4.00	-0.05	-1.2%	0.1% to 2.0%								
7301	7302	Match Existing Cross Slope	4	8.80	-0.17	-2.0%	Match Existing				Match curb profile	7301			973.56
7302	7303	Landing/Turning Space	4	5.49	-0.06	-1.1%	0.1% to 2.0%					7302			973.39
7303	7306	Landing/Turning Space	4	5.07	0.07	1.5%	0.1% to 2.0%					7303			973.33
7306	7301	Landing/Turning Space	4	12.76	0.16	1.3%	0.1% to 2.0%					7304			972.97
7303	7304	Ramp Running Slope	6	5.11	-0.36	-7.0%	0.5% to 8.3%					7305			973.11
7304	7305	Match Existing Cross Slope	4	4.02	0.14	3.5%	Match Existing					7306			973.40
7305	7306	Ramp Running Slope	6	5.03	0.29	5.8%	0.5% to 8.3%								



FILE NO.	ENGLISH	DESIGN TEAM **IowaDOT\Schemmer**	**APPANOOSE** COUNTY	PROJECT NUMBER **STPN-005-1(76)--2J-04**	SHEET NUMBER **S.17**

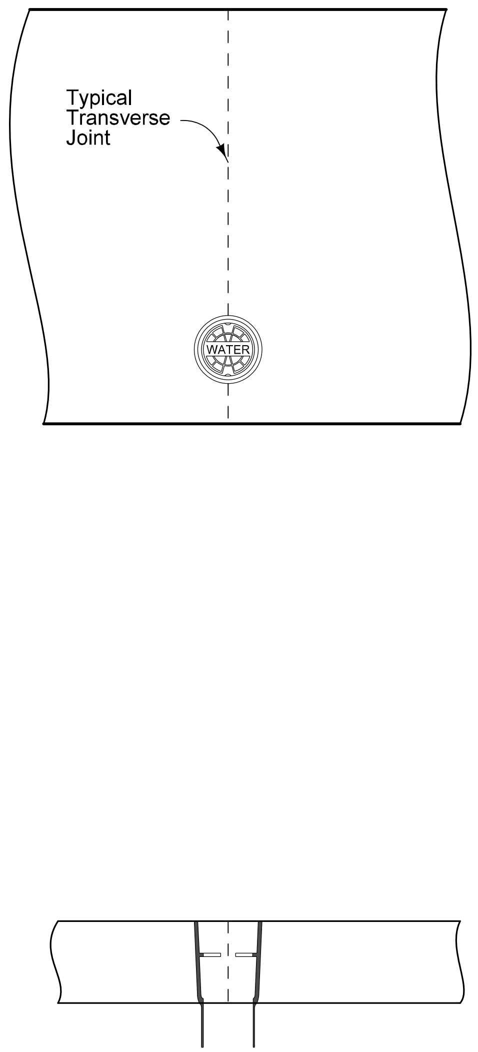
5:32:01 PM 12/10/2019 tlerdahl pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\0400501019\Design\CADD_Files\Sheet_files\SHT_04005076_S02.dgn

SIDEWALK COMPLIANCE

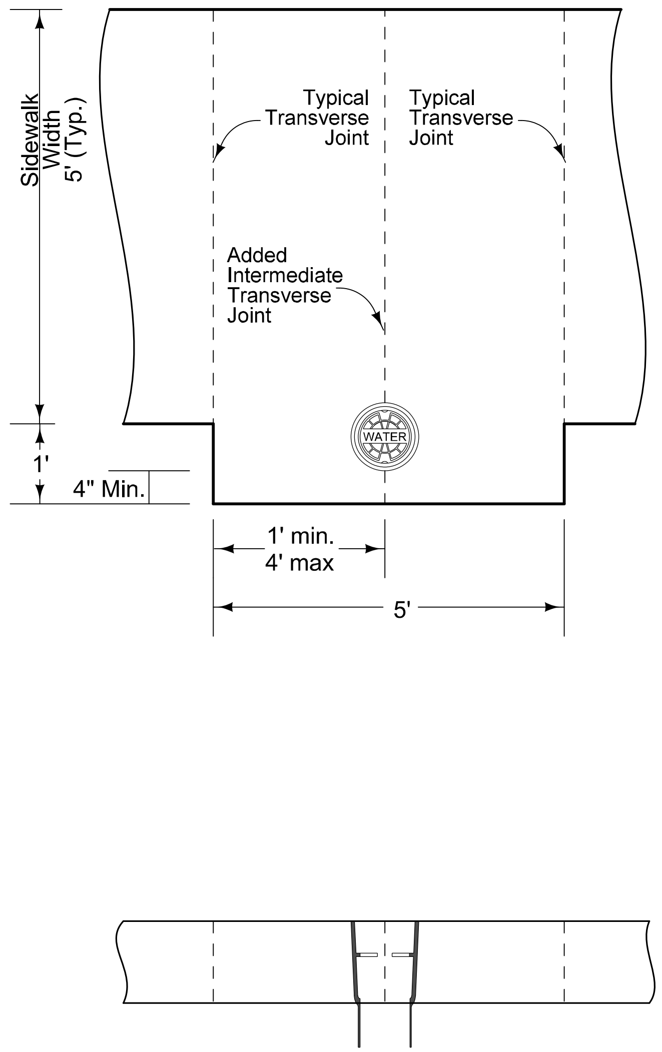
See S Sheets

* Does not include curb
(1) Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
(2) Refer to tabulation 113-01 for bid quantities.

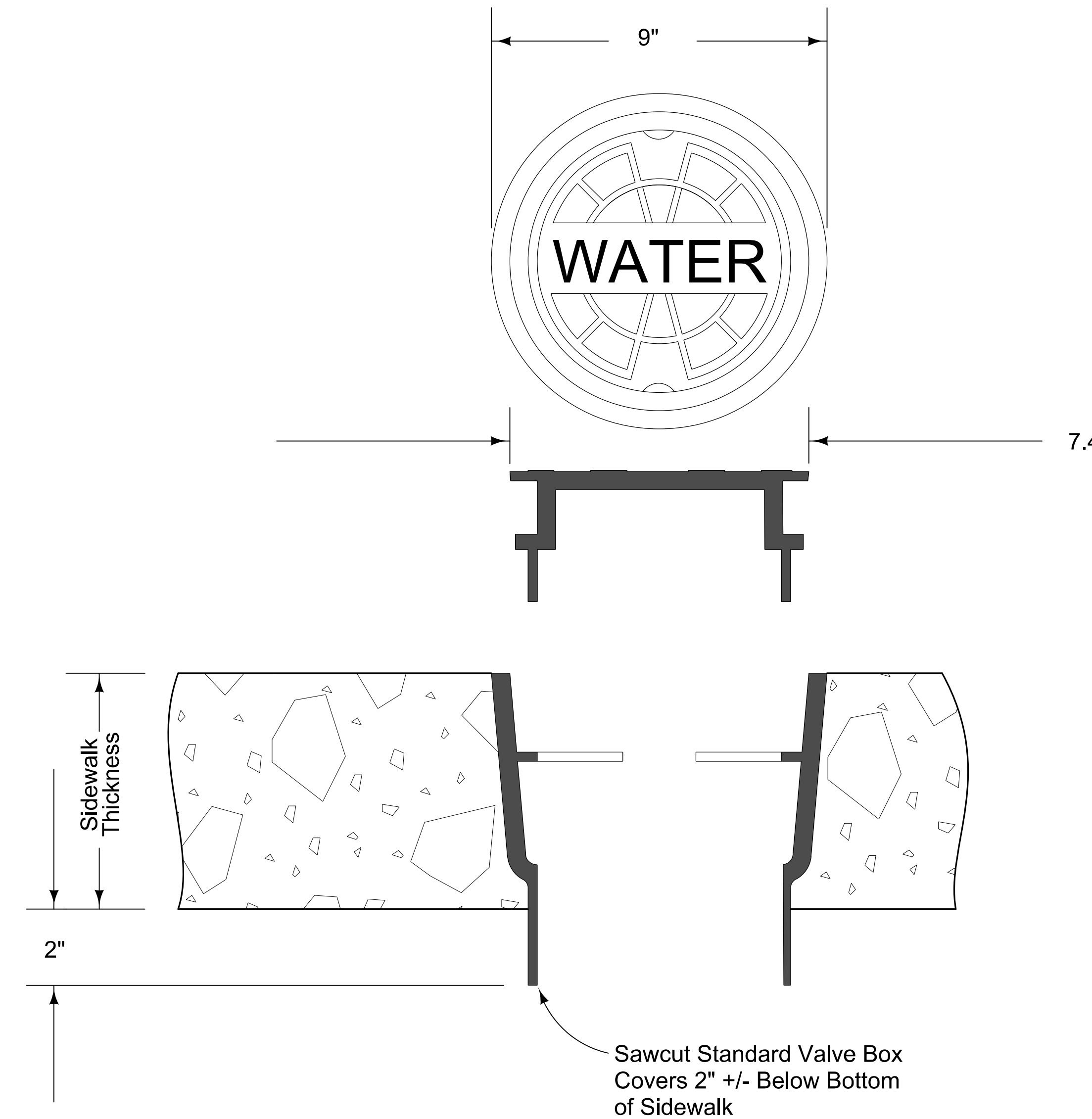
Point to Point		Sidewalk Designation	_" PCC Sidewalk (2)	Distance* FT	Δ Elevation FT	Slope %	Acceptable Constructed Range Pos. or Neg.	Staking Required on this Quadrant? (1)	Measured Slope %	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
												Point	Station	Offset	Elevation
8101	8103	Ramp Running Slope	6	15.00	-1.23	-8.2%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	8101			973.22
8103	8102	Ramp Running Slope	6	1.77	-0.04	-2.1%	0.5% to 8.3%					8102			971.95
8102	8104	Match Existing Cross Slope	6	5.34	0.17	3.2%	Match Existing				Match curb profile	8103			971.99
8104	8105	Ramp Running Slope	6	15.00	1.17	7.8%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed	8104			972.13
8105	8101	Landing/Turning Space	6	5.00	-0.07	-1.5%	0.1% to 2.0%					8105			973.30
8101	8108	Landing/Turning Space	6	9.08	0.13	1.5%	0.1% to 2.0%					8106			973.36
8108	8109	Landing/Turning Space	6	5.00	0.07	1.5%	0.1% to 2.0%					8107			973.46
8109	8106	Landing/Turning Space	6	5.00	-0.07	-1.5%	0.1% to 2.0%					8108			973.36
8106	8105	Landing/Turning Space	6	4.14	-0.06	-1.4%	0.1% to 2.0%					8109			973.43
8106	8107	Ramp Running Slope	6	9.47	0.10	1.0%	0.5% to 8.3%					8110			973.53
8107	8110	Ramp Cross Slope	6	5.00	0.07	1.5%	0.1% to 2.0%								
8110	8109	Ramp Running Slope	6	9.47	-0.10	-1.0%	0.5% to 8.3%								
8201	8202	Match Existing Cross Slope	4	3.98	0.04	1.1%	Match Existing					8201			971.47
8202	8203	Sidewalk Running Slope	4	5.00	-0.06	-1.1%	0.5% to 5.0%					8202			971.52
8203	8206	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%					8203			971.46
8206	8201	Sidewalk Running Slope	4	5.14	0.08	1.6%	0.5% to 5.0%					8204			971.39
8203	8204	Landing/Turning Space	4	5.00	-0.08	-1.5%	0.1% to 2.0%								
8204	8210	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%					8206			971.39
8210	8206	Landing/Turning Space	4	5.00	0.08	1.5%	0.1% to 2.0%					8207			971.35
8210	8209	Ramp Running Slope	6	6.11	-0.04	-0.6%	0.5% to 8.3%					8208			971.32
8209	8208	Ramp Cross Slope	6	5.27	0.04	0.8%	0.1% to 2.0%					8209			971.28
8208	8207	Ramp Running Slope	6	1.67	0.03	2.0%	0.5% to 8.3%					8210			971.31
8207	8206	Ramp Running Slope	6	6.11	0.04	0.6%	0.5% to 8.3%								
8301	8302	Ramp Running Slope	6	2.79	0.11	4.0%	0.5% to 8.3%					8301			973.53
8302	8310	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%					8302			973.64
8310	8305	Ramp Running Slope	6	2.81	-0.11	-3.8%	0.5% to 8.3%								
8305	8301	Ramp Cross Slope	6	5.00	-0.07	-1.5%	0.1% to 2.0%								
8306	8302	Landing/Turning Space	4	5.00	-0.06	-1.2%	0.1% to 2.0%					8305			973.60
8306	8307	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%					8306			973.70
8307	8308	Ramp Running Slope	6	6.50	0.46	7.1%	0.5% to 8.3%					8307			973.78
8308	8311	Ramp Cross Slope	6	5.00	-0.06	-1.2%	0.1% to 2.0%					8308			974.24
8311	8310	Ramp Running Slope	6	6.50	-0.47	-7.2%	0.5% to 8.3%					8309			974.46
8310	8307	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%					8310			973.71
8311	8312	Sidewalk Running Slope	4	5.17	0.24	4.6%	0.5% to 5.0%					8311			974.18
8312	8309	Match Existing Cross Slope	4	3.79	0.04	1.1%	Match Existing					8312			974.42
8309	8308	Sidewalk Running Slope	4	5.00	-0.22	-4.4%	0.5% to 5.0%								



CASE 1



CASE 2



Double Curb Stop Cover will utilize same cover as shown.
Contractor may be required to stagger elevation of shut-off cover in order to pass heads through lower flange or supporting seat.

SIDEWALK CURB BOX COVER

FILE NO.	ENGLISH	DESIGN TEAM IowaDOT\Schemmer	APPANOOSE COUNTY	PROJECT NUMBER STPN-005-1(76)--2J-04	SHEET NUMBER U.1