A d d e n d u m

Iowa Department of Transportation
Office of Contracts

Date of Letting: December 15, 2015
Date of Addendum: November 24, 2015

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
112	77-7875-638	PCC PAVEMENT - GRADE & REPLACE	POLK	STP-U-7875(638)--70-77	15DEC112.A01

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Item No. 0020, 2102-2625001 EMBANKMENT-IN-PLACE, CONTRACTOR FURNISHED, increase from 31,993.000 CY to 33,922.000 CY

Item No. 0030, 2102-2710070 EXCAVATION, CLASS 10, ROADWAY AND BORROW, decrease from 20,638.000 CY to 18,170.000 CY

Item No. 0070, 2123-7450020 SHOULDER FINISHING, EARTH, decrease from 251.200 STA to 167.400 STA

Item No. 0450, 2511-0302500 RECREATIONAL TRAIL, PORTLAND CEMENT CONCRETE, 5 IN., decrease from 4,259.300 SY to 2,558.500 SY

Item No. 0470, 2511-0310100 SPECIAL COMPACTION OF SUBGRADE FOR RECREATIONAL TRAIL, decrease from 41.900 STA to 27.800 STA

Item No. 0480, 2511-7526004 SIDEWALK, P.C. CONCRETE, 4 IN., increase from 152.800 SY to 440.900 SY

Item No. 0500, 2515-2475007 DRIVEWAY, P. C. CONCRETE, 7 IN., increase from 206.600 SY to 231.900 SY

Item No. 0770, 2602-0000020 SILT FENCE, decrease from 5,593.000 LF to 5,205.000 LF

Item No. 0800, 2602-0000071 REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS, decrease from 4,930.000 LF to 4,620.000 LF

Item No. 0810, 2602-0000101 MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS, decrease from 628.000 LF to 589.000 LF.

If the above changes are not made, they will be made as shown here.

Replace the following sheets in the plan set with the attached sheets:

A.1 (revised sheet numbering)
B.1-B.2, B.4 (updates to typicals “4_LN_BLVD_1,” “4_LN_BLVD_2,” and deleting “TRAIL.”)
C.1-C.3, C.7 (Revisions to Tabs 100-1C, 100-4A, 113-1, and 100-17)
C.9, C.11 (Delete silt fence adjacent to trail)
G.1 (Delete trail alignment)
H.2-H.3 (ROW Revisions to Parcels 4 and 6)
L.19 (sidewalk revision)
All S Sheets. Note that the total number of S sheets is reduced from 9 to 8.

Delete the following sheets from the plan set:
E.4
X.31 – X.35

POLK COUNTY

PCC PAVEMENT - GRADE AND REPLACE
STP-U-7875(638)--70-77

LETTING DATE
Dec. 15, 2015

THIS PROJECT IS COVERED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2. THE CONTRACTOR SHALL CARRY OUT THE TERMS AND CONDITIONS OF GENERAL PERMIT NO. 2 AND THE STORM WATER POLLUTION PREVENTION PLAN WHICH IS A PART OF THESE CONTRACT DOCUMENTS.

04-30-02 101-5

DESIGN DATA URBAN

2008	AADT	4,400	V.P.D.
2035	AADT	34,000	V.P.D.
20	DHV	--	V.P.H.
TRUCKS		X	%
Total Design ESALs		--	

IOWADOT

PLANS OF PROPOSED IMPROVEMENT ON THE

URBAN ROAD SYSTEM

POLK COUNTY

PCC PAVEMENT - GRADE AND REPLACE

100TH STREET - FROM SOUTH OF NORTHPARK DRIVE TO NORTH OF 54TH AVENUE
IN THE CITIES OF URBANDALE, JOHNSTON, AND GRIMES

SCALES: As Noted

Refer to the Proposal Form for a list of applicable Specifications.

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

REVISIONS

TOTAL
159

PROJECT IDENTIFICATION NUMBER

PROJECT NUMBER
STP-U-7875(638)--70-77

R.O.W. PROJECT NUMBER

INDEX OF SHEETS 105-3 10-18-05

No.	Description
A.1	TITLE SHEET
A.2	LEGEND SHEET
B.1-B.4	TYPICAL CROSS SECTION AND DETAILS
C.1-C.7	QUANTITIES AND TABULATIONS
C.8-C.11	EROSION CONTROL SHEETS
D.1-D.3	MAIN LINE PLAN AND PROFILE SHEETS
E.1-E.3	SIDE ROAD PLAN AND PROFILE SHEETS
G.1	REFERENCE TIES AND BENCHMARKS
H.1-H.3	ROW PLAN SHEETS
J.1-J.2	TRAFFIC CONTROL AND STAGING
J.3-J.8	PAVEMENT MARKING SHEETS
L.1-L.22	INTERSECTION DETAIL SHEETS
M.1-M.5	STORM SEWER SHEETS
N.1-N.11	SIGNAL SHEETS
S.1-S.8	SIDEWALK DETAIL SHEETS
T.1-T.2	EARTHWORK
U.1-U.2	MODIFIED STANDARDS AND DETAIL SHEETS
U.3-U.5	WATER MAIN SHEETS
W.1-W.41	CROSS SECTIONS - 100TH STREET
X.1-X.28	CROSS SECTIONS - NW 54TH AVENUE
X.29-X.30	CROSS SECTIONS - NORTHPARK DRIVE

VICINITY MAP
NOT TO SCALE

MILEAGE SUMMARY 105-1 MODIFIED

Location	Lin. Ft.	Miles
100TH ST. STA. 1224+76.09 - STA. 1253+98.27	2922.18	0.55
54TH AVE. STA. 2232+32.00 - STA. 2254+32.00	2,200.0	0.42
TOTAL	5122.18	0.97

LEAD AGENCY

CITY OF URBANDALE

Dave McKay
Date

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	Cindy A. Spencer	Primary Signature Block
N.1	Mark Perington	Traffic Signals
U.3	Wes Farrand	Water Main

LICENSED PROFESSIONAL ENGINEER
CINDY A. SPENCER
17561
IOWA

I hereby certify that this engineering document 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.

Cindy Spencer 10-30-15
Cindy A. Spencer P.E. Date

License Number 17561

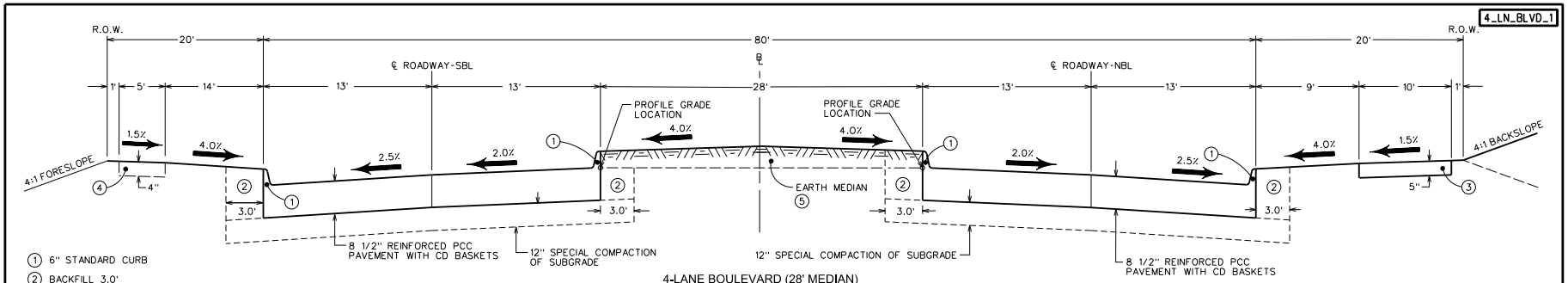
My License Renewal Date is December 31, 2016

Pages or sheets covered by this seal:
A.1-A.2, B.1-B.4, C.1-C.11, D.1-D.3, E.1-E.3, G.1, H.1-H.3, J.1-J.8, L.1-L.22, M.1-M.5, S.1-S.8, T.1-T.2, U.1-U.2, W.1-W.41, X.1-X.30

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER A.1	REVISED

BTJ 10/29/2015 d:\112081B\Cadd\cd_112081B.A1 Y:\print_drivers\Black_Gray\V8BWHalfWeightPDF.pltcfg Y:\gen\date.tbl Snyder 1:2000

4_LN_BLVD_1



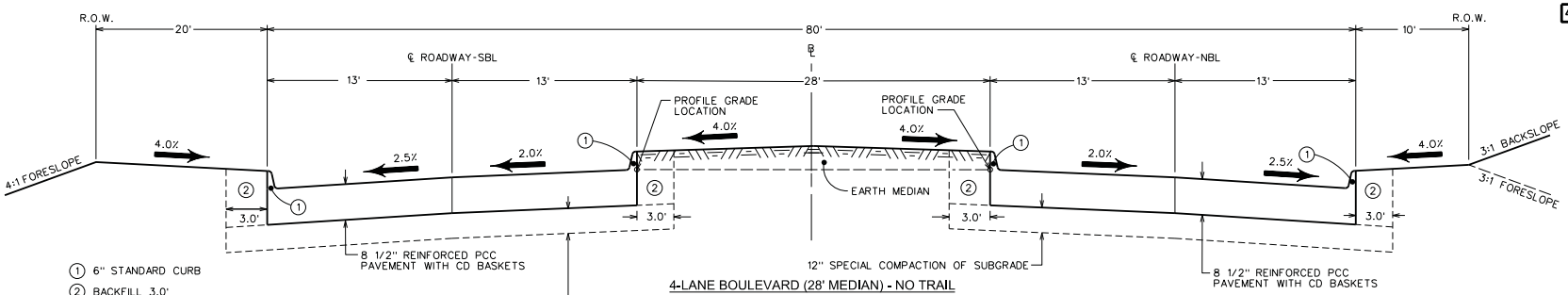
1. 6" STANDARD CURB
2. BACKFILL 3.0'
3. PCC MULTI-USE TRAIL (SOUTH OF 54TH AVE). FUTURE PCC TRAIL (NORTH OF 54TH AVE).
4. FUTURE PCC SIDEWALK
5. MODIFY MEDIAN IN AREAS WHERE TEMPORARY PAVEMENT WILL BE PLACED. REFER TO L SHEETS.

4-LANE BOULEVARD (28' MEDIAN)

LOCATION		
ROAD IDENTIFICATION	STATION TO STATION	
100TH STREET	1224+76.09	1242+97.61
100TH STREET	1246+95.00	1253+50.00

NOTES:
NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS OR SPECIAL SIDEWALK OFFSETS. REFER TO OTHER DRAWINGS FOR DETAILS OF SHOULDER DESIGN AND CONSTRUCTION.

4_LN_BLVD_2



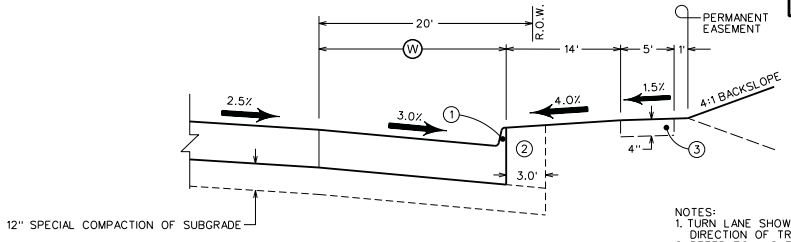
1. 6" STANDARD CURB
2. BACKFILL 3.0'

4-LANE BOULEVARD (28' MEDIAN) - NO TRAIL

LOCATION		
ROAD IDENTIFICATION	STATION TO STATION	
100TH STREET	1243+65.15	1246+95.00

NOTES:
NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS OR SPECIAL SIDEWALK OFFSETS. REFER TO OTHER DRAWINGS FOR DETAILS OF SHOULDER DESIGN AND CONSTRUCTION.

SINGLE_RTL_1



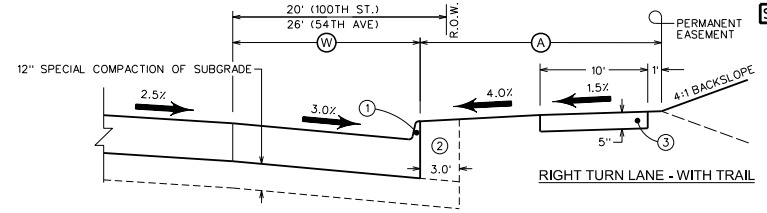
RIGHT TURN LANE - NO TRAIL

1. 6" STANDARD CURB
2. BACKFILL 3.0'
3. FUTURE PCC SIDEWALK

LOCATION			W FT.
ROAD IDENTIFICATION	STATION TO STATION		
100TH STREET	1244+16.28	1245+30.26	12
100TH STREET	1245+30.26	1246+50.26	12-0

NOTES:
1. TURN LANE SHOWN IN DIRECTION OF TRAFFIC.
2. REFER TO L SHEETS FOR ADDITIONAL INFORMATION.
3. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS OR SPECIAL SIDEWALK OFFSETS. REFER TO OTHER DRAWINGS FOR DETAILS OF SHOULDER DESIGN AND CONSTRUCTION.

SINGLE_RTL_2



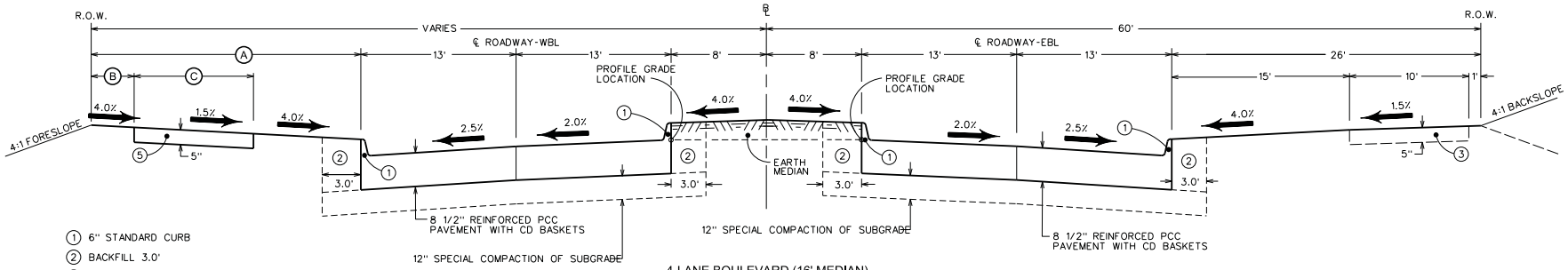
RIGHT TURN LANE - WITH TRAIL

1. 6" STANDARD CURB
2. BACKFILL 3.0'
3. PCC MULTI-USE TRAIL

LOCATION			W FT.	A FT.
ROAD IDENTIFICATION	STATION TO STATION			
100TH STREET	1226+25.00	1227+45.00	0-12	20
100TH STREET	1227+45.00	1228+39.34	12	20
100TH STREET	1238+43.21	1240+23.21	0-12	20
100TH STREET	1240+23.21	1242+47.61	12	20
NW 54TH AVENUE	2239+05.00	2240+25.00	0-12	VAR.
NW 54TH AVENUE	2240+25.00	2242+42.26	12	20

NOTES:
1. TURN LANE SHOWN IN DIRECTION OF TRAFFIC.
2. REFER TO L SHEETS FOR ADDITIONAL INFORMATION.
3. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS OR SPECIAL SIDEWALK OFFSETS. REFER TO OTHER DRAWINGS FOR DETAILS OF SHOULDER DESIGN AND CONSTRUCTION.

4_LN_BLVD_2



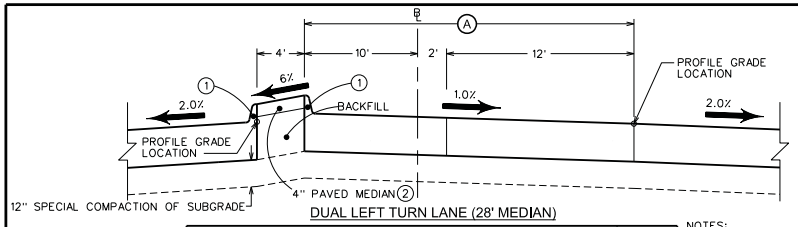
1. 6" STANDARD CURB
2. BACKFILL 3.0'
3. FUTURE PCC MULTI-USE TRAIL
4. DO NOT GRADE FOR TRAIL AND USE 3:1 BACKSLOPE ON LEFT SIDE OF ROADWAY AT THIS LOCATION.
5. PCC TRAIL/SIDEWALK.
6. LEFT SIDE: GRADE 10' WIDE BENCH AT 1.5% FOR FUTURE 10' WIDE TRAIL

4-LANE BOULEVARD (16' MEDIAN)

LOCATION			A FT.	B FT.	C FT.
ROAD IDENTIFICATION	STATION TO STATION				
NW 54TH AVENUE	2233+32.00	2242+79.72	26	4	10
NW 54TH AVENUE ④	2243+88.58	2246+50.00	10	1	5
NW 54TH AVENUE ⑥	2246+50.00	2253+32.00	26	1	5

NOTES:
NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS OR SPECIAL SIDEWALK OFFSETS. REFER TO OTHER DRAWINGS FOR DETAILS OF SHOULDER DESIGN AND CONSTRUCTION.

DUAL_LTL_1



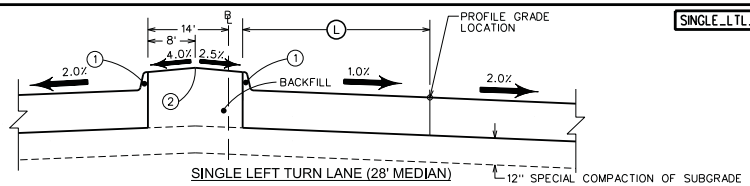
DUAL LEFT TURN LANE (28' MEDIAN)

1. 6" STANDARD CURB
2. ADJACENT TO FULL-WIDTH TURN LANE ONLY

LOCATION			A FT.
ROAD IDENTIFICATION	STATION TO STATION		
100TH STREET	1229+75.00	1232+25.00	24
100TH STREET	1232+25.00	1234+65.00	24-0
100TH STREET	1237+83.21	1240+23.21	0-24
100TH STREET	1240+23.21	1242+65.15	24
100TH STREET	1243+83.58	1245+30.26	24
100TH STREET	1245+30.26	1247+70.26	24-0
100TH STREET	1249+35.00	1250+85.00	24
100TH STREET	1250+85.00	1253+25.00	24-0

NOTES:
1. TURN LANE SHOWN IN DIRECTION OF TRAFFIC.
2. REFER TO L SHEETS FOR ADDITIONAL INFORMATION.
3. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS OR SPECIAL SIDEWALK OFFSETS. REFER TO OTHER DRAWINGS FOR DETAILS OF SHOULDER DESIGN AND CONSTRUCTION.

SINGLE_LTL_1



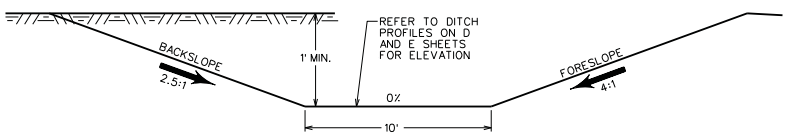
SINGLE LEFT TURN LANE (28' MEDIAN)

1. 6" STANDARD CURB
2. CROWN MEDIAN AT CENTER. APPLY SPECIAL SHAPING AS NECESSARY.

LOCATION			L FT.
ROAD IDENTIFICATION	STATION TO STATION		
100TH STREET	1226+25.00	1227+45.00	0-12
100TH STREET	1227+45.00	1228+75.00	12
100TH STREET	1232+82.00	1234+02.00	0-12
100TH STREET	1234+02.00	1235+52.00	12
100TH STREET	1236+48.00	1237+98.00	12
100TH STREET	1237+98.00	1239+18.00	12-0
100TH STREET	1246+19.61	1247+39.61	12
100TH STREET	1247+39.61	1248+39.61	12-0

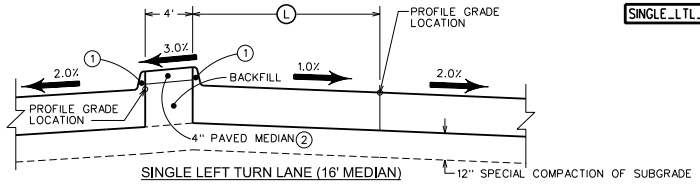
NOTE:
TURN LANE SHOWN IN DIRECTION OF TRAFFIC.

DITCH



TYPICAL DITCH SECTION

SINGLE_LTL_2



SINGLE LEFT TURN LANE (16' MEDIAN)

1. 6" STANDARD CURB
2. ADJACENT TO FULL-WIDTH TURN LANE ONLY

LOCATION			L FT.
ROAD IDENTIFICATION	STATION TO STATION		
NW 54TH AVENUE	2234+75.00	2236+11.00	12
NW 54TH AVENUE	2236+11.00	2237+31.00	12-0
NW 54TH AVENUE	2239+05.00	2240+25.00	0-12
NW 54TH AVENUE	2240+25.00	2242+54.00	12
NW 54TH AVENUE	2243+95.84	2246+36.58	12
NW 54TH AVENUE	2246+36.58	2247+56.58	12-0
NW 54TH AVENUE	2247+11.26	2248+31.26	0-12
NW 54TH AVENUE	2248+31.26	2249+75.76	12
NW 54TH AVENUE	2250+96.47	2252+48.83	12
NW 54TH AVENUE	2252+48.83	2253+32.00	12-3.68

NOTES:
1. TURN LANE SHOWN IN DIRECTION OF TRAFFIC.
2. REFER TO L SHEETS FOR ADDITIONAL INFORMATION.
3. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS OR SPECIAL SIDEWALK OFFSETS. REFER TO OTHER DRAWINGS FOR DETAILS OF SHOULDER DESIGN AND CONSTRUCTION.

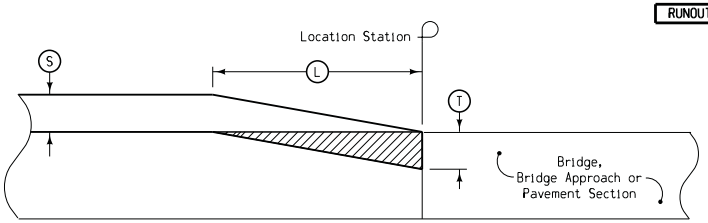
ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER B.2	REVISED

DCH 10/30/2015 J:\2012_projects\112.0818\Cadd\cd_1120818.B2 Y:\print_drivers\Black_Gray\V8iBWHalfWeightPDF.pltcfg Y:\pen\date.tbl Snyder 1:200

RUNOUT

Posted Speed Limit (mph)	Runout Ratio (ft per inch)
45 or More	50
20 to 45	25
Under 20	10 *

* Based on turning maneuvers at side roads and intersections.



S Surface Course
T Milling

Location Station	L Feet	S Inches	T Inches
1237+57.14	48	2	2
2232+32.00	50	2	2
2254+32.00	50	2	2

SURFACE NOTCH FOR
SINGLE COURSE RESURFACING

100-1C
04-17-12

ESTIMATED PROJECT QUANTITIES
(UP TO A 5 DIVISION PROJECT)

Division 1: Roadway Items (STP Funding)
Division 2: Water Main Items (Non-participating)

Item No.	Item Code	Item	Unit	Quantities				
				Estimated			As Built	
				Division 1	Division 2	Total	Division 1	Division 2
1	2101-0850001	CLEARING AND GRUBBING	ACRE	1.6		1.6		
2	2102-2625001	EMBANKMENT-IN-PLACE, CONTRACTOR FURNISHED	CY	33922.0		33922.0		
3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	18170.0		18170.0		
4	2105-8425015	TOPSOIL STRIP, SALVAGE, AND SPREAD	CY	15059.0		15059.0		
5	2109-8225100	SPECIAL COMPACTION OF SUBGRADE	STA	52.5		52.5		
6	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON	229.6		229.6		
7	2123-7450020	EARTH SHOULDER FINISHING	STA	167.4		167.4		
8	2214-5145150	PAVEMENT SCARIFICATION	SY	424.3		424.3		
9	2301-1033085	STANDARD OR SLIP-FORM PCC PAVEMENT, CLASS C, CLASS 3, 8.5 INCH	SY	38788.3		38788.3		
10	2301-4875004	MEDIAN, PCC, 4 INCH	SY	739.8		739.8		
11	2301-6911722	PCC PAVEMENT SAMPLES	LS	1.0		1.0		
12	2303-0041500	HMA (3M ESAL) BASE COURSE, 1/2 INCH MIX	TON	40.4		40.4		
13	2303-0143500	HMA (3M ESAL) SURFACE COURSE, 1/2 INCH MIX, NO SPECIAL FRICTION	SY	832.9		832.9		
14	2303-0246422	ASPHALT BINDER, PG 64-22	TON	2.4		2.4		
15	2304-0100000	DETOUR PAVEMENT	SY	403.7		403.7		
16	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE	TON	18.0		18.0		
17	2403-0100000	STRUCTURAL CONCRETE (MISCELLANEOUS)	CY	1.7		1.7		
18	2404-7775000	REINFORCING STEEL	LB	24.0		24.0		
19	2416-0100015	APRON, CONCRETE, 15 INCH	EACH	1.0		1.0		
20	2416-0100018	APRON, CONCRETE, 18 INCH	EACH	1.0		1.0		
21	2416-0100030	APRON, CONCRETE, 30 INCH	EACH	1.0		1.0		
22	2416-0100066	APRON, CONCRETE, 66 INCH	EACH	1.0		1.0		
23	2435-0140148	MANHOLE, STORM SEWER, SW-401, 48 INCH	EACH	4.0		4.0		
24	2435-0140160	MANHOLE, STORM SEWER, SW-401, 60 INCH	EACH	4.0		4.0		
25	2435-0140172	MANHOLE, STORM SEWER, SW-401, 72 INCH	EACH	1.0		1.0		
26	2435-0140184	MANHOLE, STORM SEWER, SW-401, 84 INCH	EACH	1.0		1.0		
27	2435-0140196	MANHOLE, STORM SEWER, SW-401, 96 INCH	EACH	6.0		6.0		
28	2435-0250300	INTAKE, SW-503	EACH	1.0		1.0		
29	2435-0250500	INTAKE, SW-505	EACH	15.0		15.0		
30	2435-0250600	INTAKE, SW-506	EACH	6.0		6.0		
31	2435-0250610	INTAKE, SW-506, MODIFIED	EACH	8.0		8.0		
32	2435-0251300	INTAKE, SW-513	EACH	2.0		2.0		
33	2503-0114215	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D, 15 INCH	LF	1048.0		1048.0		
34	2503-0114218	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D, 18 INCH	LF	364.0		364.0		
35	2503-0114224	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D, 24 INCH	LF	1642.0		1642.0		
36	2503-0114230	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D, 30 INCH	LF	838.0		838.0		
37	2503-0114236	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D, 36 INCH	LF	530.0		530.0		
38	2503-0114248	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D, 48 INCH	LF	200.0		200.0		
39	2503-0114260	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D, 60 INCH	LF	813.0		813.0		
40	2503-0114266	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D, 66 INCH	LF	178.0		178.0		
41	2507-3250005	ENGINEERING FABRIC	SY	850.4		850.4		
42	2507-6800061	REVETMENT, CLASS E	TON	765.1		765.1		
43	2510-6745850	REMOVAL OF PAVEMENT	SY	15908.5		15908.5		
44	2510-6750600	REMOVAL OF INTAKES AND UTILITY ACCESSES	EACH	6.0		6.0		
45	2511-0302500	RECREATIONAL TRAIL, PCC, 5 INCH	SY	2558.5		2558.5		
46	2511-0302600	RECREATIONAL TRAIL, PCC, 6 INCH	SY	527.9		527.9		
47	2511-0310100	SPECIAL COMPACTION OF SUBGRADE FOR RECREATIONAL TRAIL	STA	27.8		27.8		
48	2511-7526004	SIDEWALK, PCC, 4 INCH	SY	440.9		440.9		
49	2511-7528101	DETECTABLE WARNINGS	SF	311.3		311.3		
50	2515-2475007	DRIVEWAY, PCC, 7 INCH	SY	231.9		231.9		
51	2515-2475008	DRIVEWAY, PCC, 8 INCH	SY	771.1		771.1		
52	2518-6910000	SAFETY CLOSURE	EACH	13.0		13.0		
53	2524-9275100	WOOD POST, TYPE A OR B SIGN, 4" X 4"	LF	93.0		93.0		
54	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM	SF	51.3		51.3		
55	2525-0000100	TRAFFIC SIGNALIZATION - NORTHPARK DRIVE	LS	1.0		1.0		
56	2525-0000100	TRAFFIC SIGNALIZATION - 54TH AVENUE	LS	1.0		1.0		
57	2525-0000100	TRAFFIC SIGNALIZATION - INTERCONNECT	LS	1.0		1.0		
58	2526-8285000	CONSTRUCTION SURVEY	LS	0.9	0.1	1.0		
59	2527-9263109	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	248.3		248.3		
60	2527-9263137	PAINTED SYMBOL AND LEGEND, WATERBORNE OR SOLVENT-BASED	EACH	42.0		42.0		
61	2527-9270111	GROOVES CUT FOR PAVEMENT MARKINGS	STA	248.3		248.3		
62	2527-9270120	GROOVES CUT FOR SYMBOLS AND LEGEND	EACH	42.0		42.0		
63	2528-8445110	TRAFFIC CONTROL	LS	1.0		1.0		
64	2533-4980005	MOBILIZATION	LS	0.9	0.1	1.0		
65	2554-0114012	WATER MAIN, TRENCHED, PVC, 12 INCH	LF		348.0	348.0		
66	2554-0114016	WATER MAIN, TRENCHED, PVC, 16 INCH	LF		1277.0	1277.0		
67	2554-0202200	FITTINGS BY COUNT, DUCTILE IRON, 12 INCH	EACH		6.0	6.0		
68	2554-0202200	FITTINGS BY COUNT, DUCTILE IRON, 16 INCH	EACH		2.0	2.0		
69	2554-0207000	VALVE, GATE, DIP, 16 INCH	EACH		3.0	3.0		
70	2554-0207012	VALVE, GATE, DIP, 12 INCH	EACH		2.0	2.0		
71	2554-0210201	FIRE HYDRANT ASSEMBLY, WM-201	EACH		5.0	5.0		
72	2599-9999005	CONNECTION TO EXISTING WATER MAIN	EACH		1.0	1.0		
73	2599-9999005	SPECIAL INTAKE	EACH	3.0		3.0		
74	2599-9999005	DROP-IN INTAKE PROTECTION	EACH	30.0		30.0		
75	2601-2636044	SEEDING AND FERTILIZING (URBAN)	ACRE	10.0		10.0		
76	2601-2642120	STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)	ACRE	5.0		5.0		
77	2602-0000020	SILT FENCE	LF	5205.0		5205.0		
78	2602-0000030	SILT FENCE FOR DITCH CHECKS	LF	684.0		684.0		
79	2602-0000050	SILT BASIN	EACH	10.0		10.0		
80	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	4620.0		4620.0		

100-1D
10-18-05

PROJECT DESCRIPTION

This project involves the removal of existing pavement and construction of a 4-lane PCC urban section on 100th Street from approximately 615 feet north of I-35/80 to 1,000 feet north of 54th Avenue, and on 54th Avenue from 1,000 feet west of 100th Street to 1,000 feet east of 100th Street. Work includes grading, roadway paving, trail paving, storm sewer installation, traffic signals, construction of match-in pavement, and associated work. Also includes construction of water main through the project area.

232-10
10-21-14

EMERALD ASH BORER

Dispose of all wood material generated as a result of clearing and/or grubbing according to the Iowa Department of Agriculture and Land Stewardship's Emerald Ash Borer (EAB) Quarantine Order. For more information refer to http://www.iowatreepests.com/eab_regulations.html.

100-1C
04-17-12

ESTIMATED PROJECT QUANTITIES
(UP TO A 5 DIVISION PROJECT)

Division 1: Roadway Items (STP Funding)
Division 2: Water Main Items (Non-participating)

Item No.	Item Code	Item	Unit	Quantities				
				Estimated			As Built	
				Division 1	Division 2	Total	Division 1	Division 2
81	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	589.0		589.0		
82	2602-0000306	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 INCH	LF	8970.0		8970.0		
83	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	LF	4485.0		4485.0		
84	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	2.0		2.0		
85	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1.0		1.0		

100-4A
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
1	2101-0850001	CLEARING AND GRUBBING Area is calculated to construction limits on the roadway portion of project. Through areas of water main construction, area is based on a 50 foot wide corridor centered on the water main. Refer to Tab. 110-17 on sheet C.7 for locations. Verify limits with City prior to removals.
2	2102-2625001	EMBANKMENT-IN-PLACE, CONTRACTOR FURNISHED
3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW Refer to T sheets for additional information. Quantity includes 18,170 CY cut and 62,269 CY fill plus 30% shrink. 44,099 CY borrow plus shrink (33,922 CY no shrink) necessary to construct project is to be furnished by the Contractor. Removal of all pipes to be incidental to Class 10 item.
4	2105-8425015	TOPSOIL STRIP, SALVAGE, AND SPREAD Topsoil quantity based on 8 inch respread depth plus 40% shrink.
7	2123-7450020	EARTH SHOULDER FINISHING Quantity includes 167.4 Sta. adjacent to roadway (including in median).
8	2214-5145150	PAVEMENT SCARIFICATION Refer to Detail HMA-1 on Sheet B.3 and Detail RUNOUT on Sheet B.4. Mill pavement at match-ins.
9	2301-1033085	STANDARD OR SLIP-FORM PCC PAVEMENT, CLASS C, CLASS 3, 8.5 INCH Refer to Tab. 100-24 for locations. Section 2316, Schedule B smoothness requirements apply.
10	2301-4875004	MEDIAN, PCC, 4 INCH Refer to Tab. 112-5 for locations.
12	2303-0041500	HMA (3M ESAL) BASE COURSE, 1/2 INCH MIX
14	2303-0246422	ASPHALT BINDER, PG 64-22 For pavement widening at tie-ins adjacent to existing HMA. Refer to Detail HMA-1 on Sheet B.3. Binder rate estimated at 6%. Quantities increased 5% for overruns.
13	2303-0143500	HMA (3M ESAL) SURFACE COURSE, 1/2 INCH MIX, NO SPECIAL FRICTION For use in constructing overlay at match-ins. Refer to Detail HMA-1 on Sheet B.3 for details. Thickness will vary, use 2 inch minimum / nominal thickness.
15	2304-0100000	DETOUR PAVEMENT For asphalt widening adjacent to new PCC pavement. Refer to Detail HMA-2 on Sheet B.3. Detour pavement shall be 8 inches thick.
16	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE
50	2515-2475007	DRIVEWAY, PCC, 7 INCH
51	2515-2475008	DRIVEWAY, PCC, 8 INCH Refer to Tab. 102-3 for locations. 8" bid item is for 8.5" entrance pavement.
17	2403-0100000	STRUCTURAL CONCRETE (MISCELLANEOUS)
18	2404-7775000	REINFORCING STEEL For construction of RCP apron footings. Refer to Sheet U.2 for details and Sheet M.1 for locations.
31	2435-0250610	INTAKE, SW-506, MODIFIED Refer to Sheet U.1 for details.
41	2507-3250005	ENGINEERING FABRIC
42	2507-6800061	REVETMENT, CLASS E Refer to Tab. 100-23 for locations.
43	2510-6745850	REMOVAL OF PAVEMENT Refer to Tab. 110-1 for locations.
44	2510-6750600	REMOVAL OF INTAKES AND UTILITY ACCESSES Refer to Tab. 110-15 for locations.
45	2511-0302500	RECREATIONAL TRAIL, PCC, 5 INCH
46	2511-0302600	RECREATIONAL TRAIL, PCC, 6 INCH Refer to Tab. 113-1 for locations.
49	2511-7528101	DETECTABLE WARNINGS

100-4A
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
		Refer to Tab. 113-1 for locations. Warnings shall be red in color.
52	2518-6910000	SAFETY CLOSURE Refer to Tab. 108-13A and J sheets for locations.
53	2524-9275100	WOOD POST, TYPE A OR B SIGN, 4" X 4"
54	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM Refer to Sheets J.5 - J.8 and Tab. 190-51 for locations and details.
55	2525-0000100	TRAFFIC SIGNALIZATION - NORTHPARK DRIVE
56	2525-0000100	TRAFFIC SIGNALIZATION - 54TH AVENUE
57	2525-0000100	TRAFFIC SIGNALIZATION - INTERCONNECT Refer to N sheets for additional information.
59	2527-9263109	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED Refer to Tab. 108-22 and J sheets for locations. Cut grooves for all pavement markings.
60	2527-9263137	PAINTED SYMBOL AND LEGEND, WATERBORNE OR SOLVENT-BASED Refer to Tab. 108-29 and J sheets for locations.
65	2554-0114012	WATER MAIN, TRENCHED, PVC, 12 INCH
66	2554-0114016	WATER MAIN, TRENCHED, PVC, 16 INCH Use restrained pipe joint where noted on the U sheets. Unit cost includes restrained joints, thrust blocks, plugs, temporary sheeting and shoring, and pigging of the completed line.
67	2554-0202200	FITTINGS BY COUNT, DUCTILE IRON, 12 INCH
68	2554-0202200	FITTINGS BY COUNT, DUCTILE IRON, 16 INCH
69	2554-0207000	VALVE, GATE, DIP, 16 INCH
70	2554-0207012	VALVE, GATE, DIP, 12 INCH Refer to Sheet U.3 for locations and additional information.
71	2554-0210201	FIRE HYDRANT ASSEMBLY, WM-201 Paint exterior of hydrant above grade mark with one coat primer and finish paint of highway yellow. Hydrant to have one 4-¾ inch pumper nozzle; use O-ring packing and Storz adaptor. Nozzle threads are to be National Standard. Provide 6 inchmechanical joint inlet and 5-¾ inch main valve. Cap and operating nut shall be Type C. On each hydrant, install a hydrant flag as follows: Hydrant flags shall be 4' to 5' tall and attach to the bonnet of the hydrant. Theshaft shall be made of fiberglass coated with a protection formula that prevents the ultraviolet rays from reaching the resin fibers. Displayed on the shaft will be a minimum of four strips of hi-intensity reflective tape. Each strip shall be a minimum of 4 inches in width. Attach the shaft at the base with a spring to allow the operation of the hydrant without removal. Refer to Sheet U.3 for locations.
72	2599-9999005	CONNECTION TO EXISTING WATER MAIN Refer to U sheets for location, notes, and details. Coordinate all work with Urbandale Water Utility. Unit price includes full compensation for furnishing all materials, equipment, and labor necessary to make connections to the existing water main. Includes pipe, fittings, valves and accessories, excavation, temporary connections, removal of temporary materials, thrust blocks, backfill, compaction, testing, and associated work. Also includes 20" x 16" reducer for connection at Sta. 1230+00. Payment to be made based on the number of connections to existing water main made as counted in the field.
73	2599-9999005	SPECIAL INTAKE Refer to Sheet U.2 for details. Refer to Section 2435 of the Standard Specifications for construction materials, means, and methods. Each Special Intake constructed will be counted for payment. Payment will be full compensation for all labor, equipment, and materials necessary to construct the intake.
74	2599-9999005	DROP-IN INTAKE PROTECTION For all grate intakes, install drop-in intake protection. Use a manufactured device that is inserted into the intake and is capable of trapping or filtering sediment from runoff prior to entering the storm sewer. All components must be contained entirely below the surface of the intake grate. Incorporate means of emergency outflow to prevent flooding if plugged with sediment. Install intake protection devices according to the manufacturer's recommendations. Remove the accumulated sediment as required to maintain the intake protection device in working order. Remove any accumulated sediment from the street if it encroaches into the traveled way. Each intake protection device installed will be counted for payment. Payment will be at the unit price for each. Unit price includes, but is not limited to, maintenance, clean-out, and removal of device.
76	2601-2642120	STABILIZING CROP - SEEDING AND FERTILIZING (URBAN) Item is included for stabilizing areas where grading work is complete outside of permanent seeding times.

100-4A
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
77	2602-0000020	SILT FENCE Refer to Tab. 100-17 and Sheets C.8 - C.10 for locations. Verify specific locations with the Engineer prior to placement. Bid item includes 25% additional quantity for field adjustments and replacements.
78	2602-0000030	SILT FENCE FOR DITCH CHECKS Refer to Tab. 100-18 and Sheets C.8 - C.10 for locations. Verify specific locations with the Engineer prior to placement. Bid item includes 50% additional quantity for field adjustments and replacements.
79	2602-0000050	SILT BASIN Refer to Tab. 100-14 and Sheets C.8 - C.10 for locations. Bid item includes 100% additional quantity for field adjustments and maintenance.
80	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS This item is included for silt fence and silt fence for ditch check removal required for staging reasons, removal to allow for replacement (replacement to be paid separately), or for areas that have achieved 70% permanent growth.
81	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS This item is included for clean-out and repair of the silt fence and silt fence for ditch checks during the project.

105-4
10-18-11

STANDARD ROAD PLANS

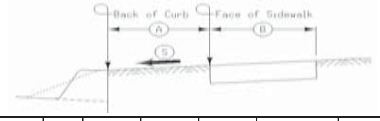
The following Standard Road Plans apply to construction work on this project.

Number	Date	Title
DR-121	10-20-15	Connected Pipe Joints
DR-122	04-21-15	Construction of Type "C" Concrete Adaptors for Pipe Culvert Connections
DR-201	04-21-15	Concrete Aprons
DR-213	04-21-15	Pipe Apron Guard
EC-101	04-21-15	Wood Excelsior Mat for Ditch Protection
EC-103	04-21-15	Wood Excelsior Mat for Slope Protection
EC-201	04-21-15	Silt Fence
EC-204	04-21-15	Perimeter and Slope Sediment Control Devices
EC-301	04-21-15	Rock Erosion Control (REC)
EW-403	10-20-15	Temporary Erosion Control Measures
LI-201	10-21-14	Light Pole Foundation
MI-210	10-20-15	PCC Driveways and Alleys
MI-220	10-20-15	Detectable Warnings and Pedestrian Ramp
PM-110	04-16-13	Line Types
PM-111	04-21-15	Symbols and Legends
PM-120	10-21-14	Stop Lines and Islands
PM-210	10-18-11	Separation in Two-Lane Roadway
PV-3	10-18-11	Safety Edge
PV-101	04-21-15	Joints
PV-102	04-15-14	PCC Curb Details
PV-103	04-19-11	Manhole Boxouts in PCC Pavement
PV-104	04-19-11	Ramped Median Nose
SI-101	04-21-09	Locations - Type 'A' Signs
SI-111	10-20-09	Support Structures - Wood Posts
SI-131	10-18-11	Installation - Type 'A' Signs
SW-101	04-21-09	Trench Bedding and Backfill Zones
SW-102	10-20-15	Rigid Gravity Pipe Trench Bedding
SW-104	04-21-09	Pressure Pipe Trench Bedding
SW-401	04-21-09	Circular Storm Sewer Manhole
SW-503	10-16-12	Single Grate Intake with Manhole
SW-505	10-16-12	Double Grate Intake
SW-506	10-16-12	Double Grate Intake with Manhole
SW-513	04-21-09	Open-Sided Area Intake
SW-514	04-21-09	Boxouts for Grate Intakes
SW-602	04-21-15	Castings for Storm Sewer Manholes
SW-603	10-15-13	Castings for Grate Intakes
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-252	10-20-15	Routes Closed to Traffic
WM-101	04-21-09	Thrust Blocks
WM-102	04-21-09	Tracer System
WM-201	04-19-11	Fire Hydrant Assembly

113-1
04-16-13

SIDEWALKS

See MI-220 and S Sheets



Road Identification	Station to Station		Side	A	B	S	4" PCC Sidewalk	5" PCC Trail	6" PCC Trail	Detectable Warnings	Remarks
				FT	FT	%	SY	SY	SY	SF	
100th Street	1224+76.09	1228+39.34	R	9.00	10.00	4.00%		403.6			
100th Street	1228+39.34	1228+78.57	R	VAR	10.00	VAR			38.3	20	
100th Street	1229+75.17	1230+11.90	R	VAR	10.00	VAR			36.0	20	
100th Street	1230+11.90	1235+51.50	R	9.00	10.00	4.00%		599.6			
100th Street	1235+51.50	1235+79.41	R	VAR	10.00	VAR			27.9	20	
100th Street	1236+20.59	1236+48.50	R	VAR	10.00	VAR			27.9	20	
100th Street	1236+48.50	1242+47.61	R	9.00	10.00	4.00%		665.7			
100th Street	1242+47.61	2244+55.14	R	VAR	10.00	VAR			93.8	23	
100th Street	1248+41.47	1248+64.40	R	VAR	10.00	VAR			22.4	20	
100th Street	1249+09.72	1249+47.67	R	VAR	10.00	VAR			39.0	20	
54th Avenue	2233+32.00	2233+87.69	L	12.00	10.00	4.00%		61.9			
54th Avenue	2233+87.69	2234+16.61	L	VAR	10.00	VAR			29.8	20	
54th Avenue	2234+55.78	2234+84.69	L	VAR	10.00	VAR			29.8	20	
54th Avenue	2234+84.69	2242+29.72	L	12.00	10.00	4.00%		827.8			
54th Avenue	2242+29.72	1244+16.26	L	VAR	VAR	VAR			59.2	26	
54th Avenue	2243+85.20	2244+21.67	L	4.00	5.00	VAR			24.6	23	
54th Avenue	2244+21.67	2246+71.11	L	4.00	5.00	4.00%	138.6				
54th Avenue	2246+71.11	2247+25.37	L	VAR	5.00	VAR	30.1				
54th Avenue	2247+25.37	2249+47.84	L	20.00	5.00	VAR	123.6				
54th Avenue	2249+47.84	2249+77.84	L	VAR	5.00	VAR	16.7				
54th Avenue	2249+77.84	2250+07.24	L	VAR	10.00	VAR			28.3	20	
54th Avenue	2250+65.07	2250+94.47	L	VAR	10.00	VAR			28.3	20	
54th Avenue	2250+94.47	2251+24.47	L	VAR	5.00	VAR	16.7				
54th Avenue	2251+24.47	2253+32.00	L	20.00	5.00	VAR	115.3				
54th Avenue	2234+05.17	2234+23.47	R	VAR	10.00	VAR			20.3	20	
54th Avenue	2234+48.92	2234+69.03	R	VAR	10.00	VAR			22.3	20	

100-26
10-15-13

INCIDENTAL ITEMS

Special or unique items where method of measurement / basis of payment is not indicated in the specifications or other contract documents.

No.	Incidental Item	Unit	Quantity	Incidental To		Remarks
				Item Code	Item	
1	Pipe apron guard, 15"	EACH	1	2416-0100015	APRON, CONCRETE, 15"	
2	Pipe apron guard, 18"	EACH	1	2416-0100018	APRON, CONCRETE, 18"	
3	Pipe apron guard, 24"	EACH	1	2416-0100024	APRON, CONCRETE, 24"	
4	Pipe apron guard, 30"	EACH	1	2416-0100030	APRON, CONCRETE, 30"	
5	Pipe apron guard, 66"	EACH	1	2416-0100066	APRON, CONCRETE, 66"	
6	Removal of all existing pipes			2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	

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	Saw Cut*	Remarks
				SY	LF	
1224+76.09	1242+74.10	B	HMA	4850.5	24.0	
1242+74.10	1243+88.20	B	HMA	756.8	0.0	NW 100th / NW 54th Intersection
1243+88.20	1253+50.00	B	HMA	2671.9	24.0	
2233+32.00	2242+75.20	B	HMA	2785.2	26.0	
2243+83.40	2253+32.00	B	HMA	2786.9	26.0	
1248+35.80	1249+36.80	R	PCC	538.5	41.0	Office Park entrance
2249+80.80	2250+91.30	L	PCC	507.6	40.0	West Parkway
2234+04.40	2234+59.30	R	HMA	345.4	64.0	Entrance south
2235+62.30	2236+03.30	R	HMA	74.9	10.0	Entrance south
3229+34.00	3230+90.07	B	PCC	590.8	187.0	Northpark

100-19
10-16-12

PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

Refer to EC-204

Location			Length of Installation				Remarks
Begin Station	End Station	Side	6 inch Dia	9 inch Dia	12 inch Dia	20 inch Dia	
			LF	LF	LF	LF	
1224+76.09	1226+92.00	L	226.0				
1226+92.00	1229+09.00	L	227.0				
1229+34.00	1231+49.00	L	225.0				
1231+49.00	1233+65.00	L	226.0				
1233+65.00	1235+81.00	L	226.0				
1236+19.00	1238+33.00	L	224.0				
1238+33.00	1240+48.00	L	225.0				
1240+48.00	1242+63.00	L	225.0				
1243+82.00	1246+22.00	L	250.0				
1246+22.00	1248+62.00	L	250.0				
1249+08.00	1251+29.00	L	231.0				
1251+29.00	1253+50.00	L	231.0				
1224+76.09	1226+72.00	R	205.0				
1226+72.00	1228+67.00	R	204.0				
1229+85.00	1231+84.00	R	208.0				
1231+84.00	1233+83.00	R	208.0				
1233+83.00	1235+81.00	R	207.0				
1236+19.00	1238+35.00	R	225.0				
1238+35.00	1240+51.00	R	225.0				
1240+51.00	1242+67.00	R	225.0				
1243+82.00	1246+19.00	R	246.0				
1246+19.00	1248+57.00	R	247.0				
1249+17.00	1251+33.00	R	225.0				
1251+33.00	1253+50.00	R	226.0				
3229+93.00	3230+89.60	R	97.0				
3229+81.00	3230+90.07	L	109.0				
2233+32.00	2234+11.00	L	89.0				
2234+61.00	2236+89.00	L	238.0				
2236+89.00	2239+17.00	L	238.0				
2239+17.00	2241+46.00	L	239.0				
2241+46.00	2242+55.00	L	119.0				
2246+25.00	2248+01.00	L	180.0				
2248+01.00	2249+77.00	L	186.0				
2250+95.00	2253+32.00	L	242.0				
2233+32.00	2234+23.00	R	101.0				
2234+49.00	2236+32.00	R	193.0				
2236+32.00	2238+15.00	R	193.0				
2238+15.00	2239+99.00	R	193.0				
2239+99.00	2241+83.00	R	193.0				
2241+83.00	2242+56.00	R	82.0				
2243+94.00	2245+88.00	R	204.0				
2245+88.00	2247+82.00	R	204.0				
2247+82.00	2249+77.00	R	205.0				
2250+95.00	2253+32.00	R	247.0				

100-17
04-20-10

TABULATION OF SILT FENCES

Refer to EC-201

Location			Length	Remarks
Begin Station	End Station	Side	LF	
1224+76.09	1226+00.00	L	144.0	
1226+00.00	1227+25.00	L	145.0	
1227+25.00	1228+55.00	L	150.0	
1228+55.00	1229+85.00	L	150.0	
1229+85.00	1231+85.00	L	220.0	
1232+82.00	1234+32.00	L	170.0	
1234+32.00	1235+81.00	L	169.0	
1236+19.00	1238+24.00	L	225.0	
1238+24.00	1240+29.00	L	225.0	
1240+29.00	1242+35.00	L	226.0	
1251+00.00	1252+50.00	L	170.0	
1252+50.00	1254+00.00	L	170.0	
1243+84.00	1246+08.00	R	264.0	20' hooks both ends
2244+00.00	2246+40.00	L	280.0	20' hooks both ends
2235+00.00	2236+75.00	R	195.0	
2236+75.00	2238+50.00	R	195.0	
2240+00.00	2242+21.00	R	241.0	
2244+55.00	2246+41.00	R	206.0	
2246+41.00	2248+27.00	R	206.0	
2248+27.00	2250+13.00	R	206.0	
2250+13.00	2252+00.00	R	207.0	

100-18
04-20-10

TABULATION OF SILT FENCES FOR DITCH CHECKS

Refer to EC-201

Location Station	Side	Length	Remarks
		LF	
1237+00.0	R	23.0	
1237+40.0	R	23.0	
1237+80.0	R	23.0	
1238+20.0	R	23.0	
1238+60.0	R	23.0	
1239+35.0	R	23.0	
1240+10.0	R	23.0	
1240+85.0	R	23.0	
1241+60.0	R	23.0	
1244+00.0	L	23.0	
1244+75.0	L	23.0	
1245+50.0	L	23.0	
1246+25.0	L	23.0	
1247+00.0	L	23.0	
1247+75.0	L	23.0	
2232+30.0	L	22.0	
2232+30.0	R	22.0	
2241+00.0	L	23.0	
2254+35.0	L	22.0	
2254+35.0	R	22.0	

110-15
04-16-13

REMOVAL OF INTAKES AND UTILITY ACCESSES

No.	Location/Description	Type	Remarks
1	1248+65.51, 40.7' RT	Intakes	Single grate intake
2	2250+11.60, 49.4' LT	Intakes	Double grate intake
3	2250+60.21, 50.1' LT	Intakes	Double grate intake w/ manhole
4	3230+11.74, 23.5' LT	Intakes	Double grate intake
5	3230+11.80, 22.8' RT	Intakes	Double grate intake
6	3230+11.80, 34.7' RT	Utilities	Manhole

100-14
04-21-15

SILT BASINS

Refer to EW-403

Location Station	Side	Each	Remarks
2238+73.00	L	1	West of Structure 20
2238+77.00	L	1	East of Structure 20
2242+02.50	L	1	West of Structure 14
2242+08.10	L	1	East of Structure 14
1236+60.25	R	1	North of Structure 43
1254+00.00	L	1	North of Structure 1
1254+00.00	R	1	North of Structure 3

100-23
04-21-15

ROCK EROSION CONTROL

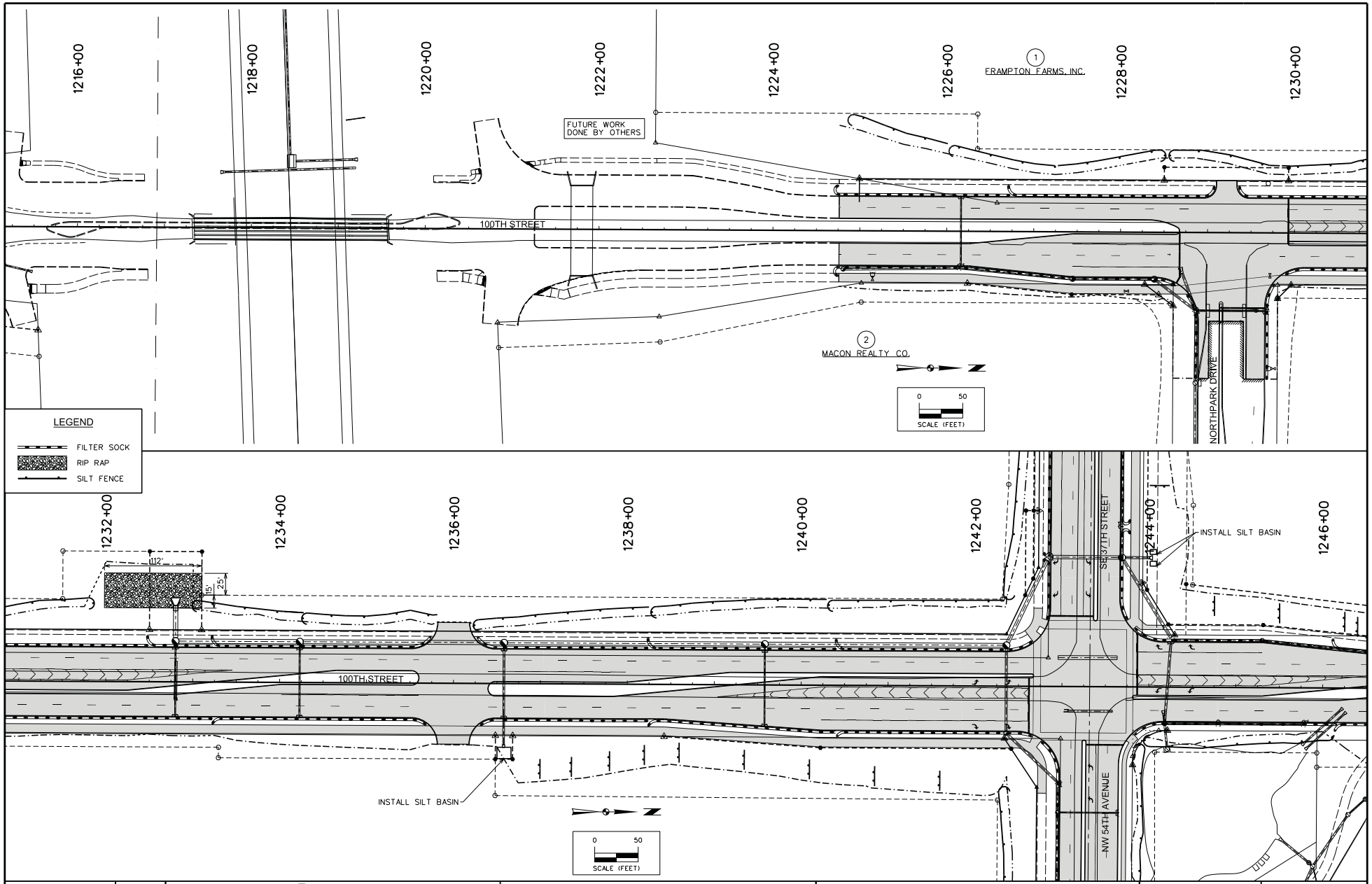
Refer to EC-301

Location				L	W	Rock Erosion Control (REC)					Material Bid Quantities			Remarks
Road Identification	Begin Station	End Station	Side			Type 1	Type 2	Type 3	Type 4	Type 5	Erosion Stone	Class E Revetment	Eng. Fabric	
			Lt./Rt.	FT	FT	Rock Ditch Check	Rock Ditch	Rock Flume	Rock Splash Basin	Rock Slope Protection	TON	TON	SY	
100th Street	1231+98.00	1233+10.00	LT	112	40		X					765.1	850.4	

110-17
04-15-14

CLEARING AND GRUBBING

Location		Work and Material Type	Trees, Stumps, and Logs and Down Timber Material Diameters													All Other Materials		Estimated Quantities			Remarks
Station to Station or Milepost to Milepost or Description	Side		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"	Length	Width	Units	Area	Herbicide Application	
																FT	FT	Units	Acres	Each	
1224+76.09-1225+95.50	LT	Trees - Clearing and Grubbing																	0.1		
1231+18.00-1242+46.10	LT	Trees - Clearing and Grubbing																	1.0		
2236+13.00-2242+70.00	RT	Trees - Clearing and Grubbing																	0.3		
2243+70.00-2253+32.00	RT	Trees - Clearing and Grubbing																	0.2		



ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER C.9	REVISED

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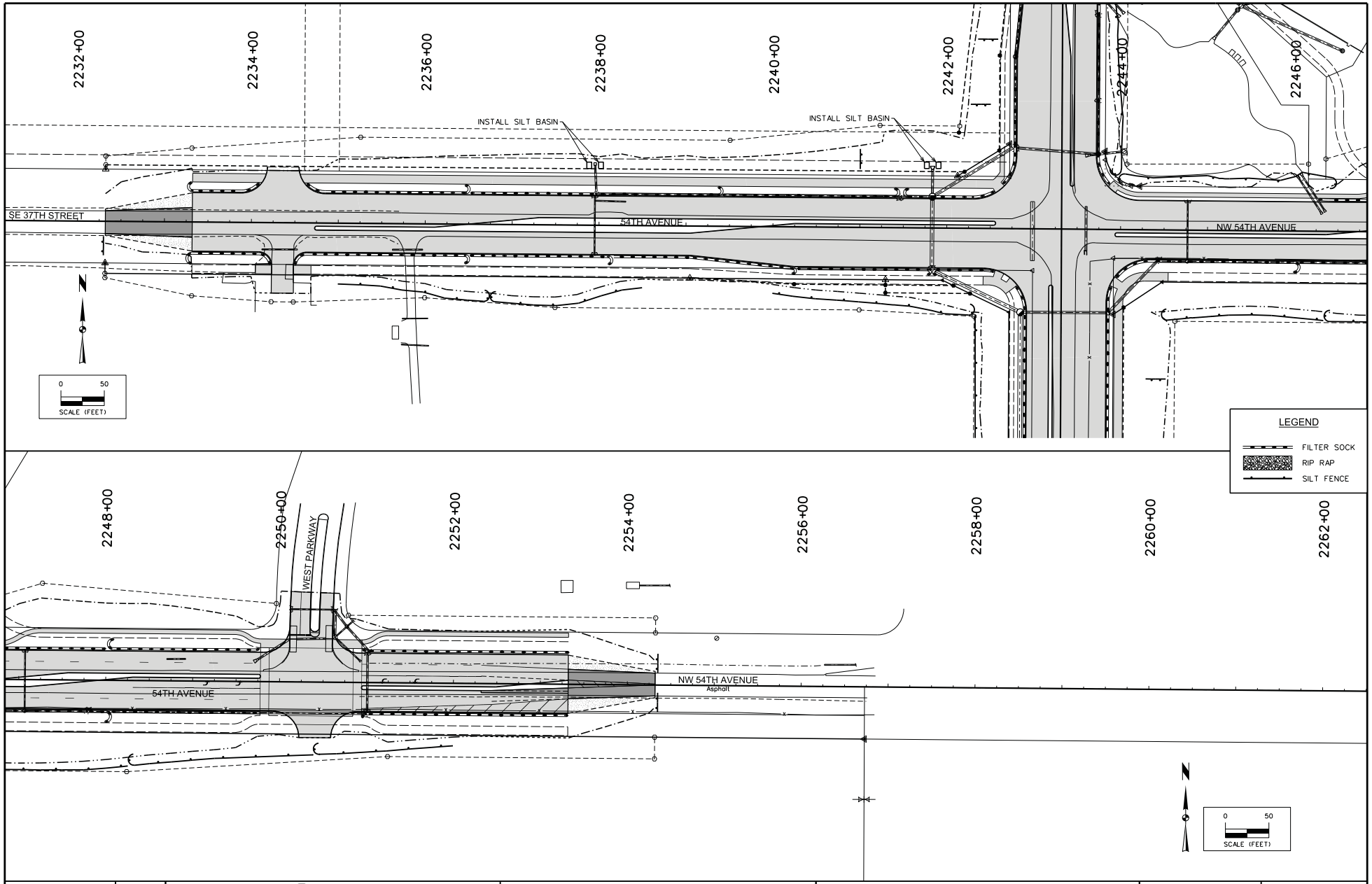

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER C.11	REVISED

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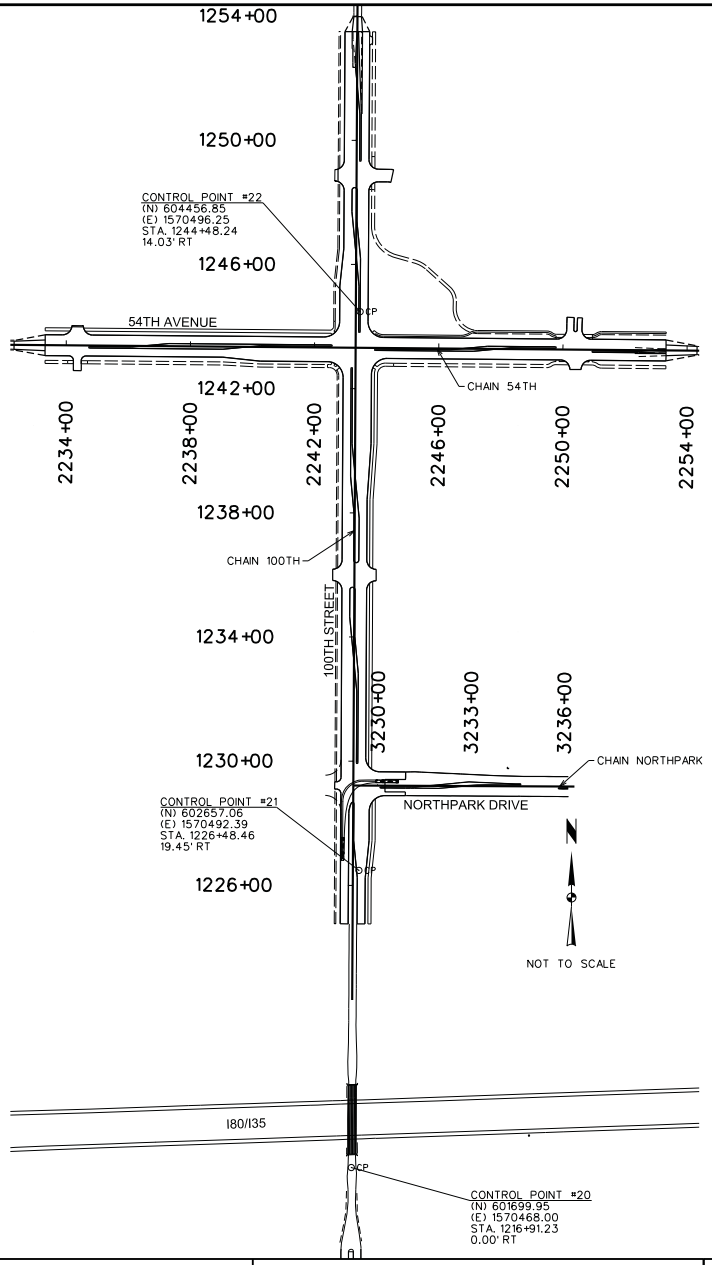


Chain 100TH contains:
CUR C1001 CL10003 CL10004 CL10005

Beginning chain 100TH description

Curve Data

Curve C1001
P.I. Station 1204+33.92 N 600,379.27 E 1,570,462.30
Delta = 55° 41' 21" (LT)
Degree = 7° 38' 22"
Tangent = 396.18
Length = 728.97
Radius = 750.00
External = 98.21
Long Chord = 700.61
Mid. Ord. = 86.84
P.C. Station 1200+37.74 N 600,157.37 E 1,570,134.10
P.T. Station 1207+66.71 N 600,775.44 E 1,570,464.01
C.C. N 600,778.68 E 1,569,714.02
Back = N 55° 56' 12" E
Ahead = N 0° 14' 51" E
Chord Bear = N 28° 05' 32" E

Course from PT C1001 to CL10003 N 0° 14' 51" E Dist 924.52

Point CL10003 N 601,699.95 E 1,570,468.00 Sta 1216+91.23

Course from CL10003 to CL10004 N 0° 17' 44" E Dist 2,640.74

Point CL10004 N 604,340.66 E 1,570,481.62 Sta 1243+31.97

Course from CL10004 to CL10005 N 0° 19' 38" E Dist 2,643.82

Point CL10005 N 606,984.43 E 1,570,496.72 Sta 1269+75.79

Ending chain 100TH description

Chain 54TH contains:
CL5401 CL5402 CL5403

Beginning chain 54TH description

Point CL5401 N 604,358.80 E 1,568,265.51 Sta 2221+15.79

Course from CL5401 to CL5402 S 89° 31' 52" E Dist 2,216.18

Point CL5402 N 604,340.66 E 1,570,481.62 Sta 2243+31.97

Course from CL5402 to CL5403 S 89° 29' 55" E Dist 2,200.00

Point CL5403 N 604,321.41 E 1,572,681.54 Sta 2265+31.97

Ending chain 54TH description

Chain NORTHPARK contains:
CLNRTHPRK01 CLNRTHPRK02 CLNRTHPRK03

Beginning chain NORTHPARK description

Point CLNRTHPRK01 N 602,931.54 E 1,570,274.35 Sta 3227+21.83

Course from CLNRTHPRK01 to CLNRTHPRK02 S 89° 42' 47" E Dist 200.00

Point CLNRTHPRK02 N 602,930.54 E 1,570,474.35 Sta 3229+21.83

Course from CLNRTHPRK02 to CLNRTHPRK03 S 89° 42' 47" E Dist 712.10

Point CLNRTHPRK03 N 602,926.97 E 1,571,186.44 Sta 3236+33.93

Ending chain NORTHPARK description

BENCHMARKS

BM #602 = IHCBM NE WINGWALL ON 100TH ST BRIDGE OVER 35-80
ELEV. = 927.50
NOTE: THIS BENCHMARK WILLBE REMOVED WITH THE BRIDGE REPLACEMENT PROJECT, AND CONSTRUCTED CONCURRENTLY WITH THIS PROJECT.

BM #603 = RR SPIKE IN PP SE CORNER 100TH ST AND NW 54TH AVE
ELEV. = 937.76

BM #604 = RR SPIKE PP EAST SIDE 100TH ST ±1000' NORTH OF BRIDGE OVER I35
ELEV. = 921.71

CONTROL POINTS

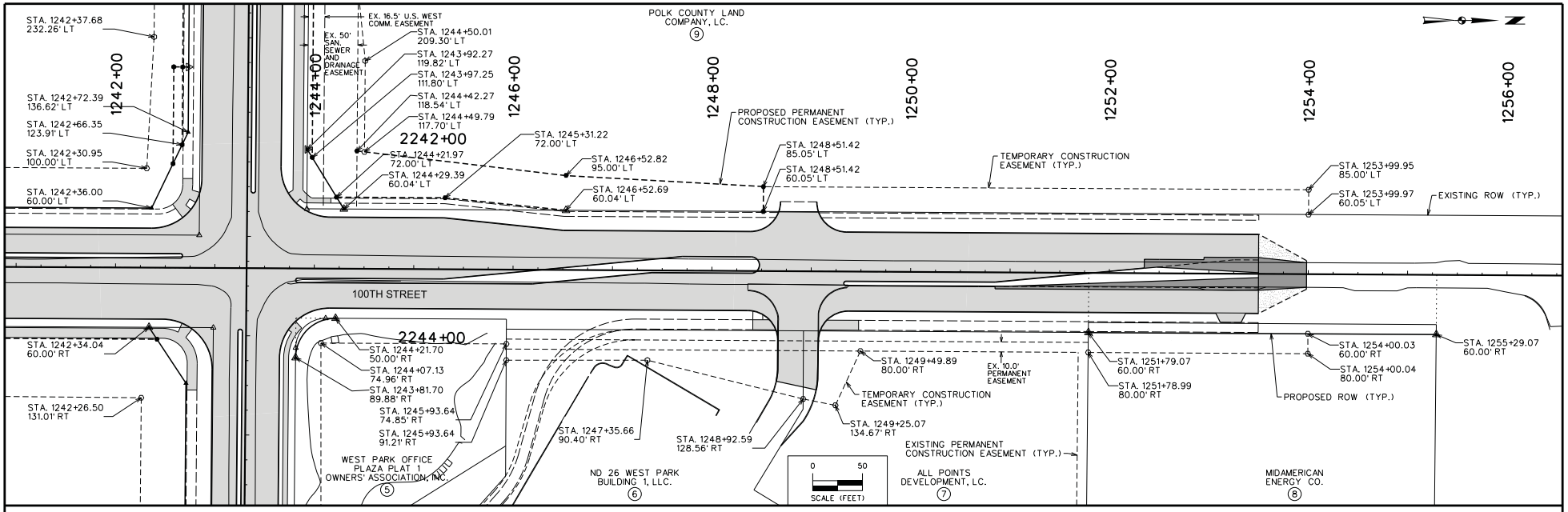
CP #19 = NORTHING 600919.81 / EASTING 1570488.47
SET 1/2" REBAR ±12' EAST OF EDGE OF 100TH ST ±700' SOUTH OF 35-80 BRIDGE

CP #20 = NORTHING 601699.95 / EASTING 1570468.00
FOUND 1/2" REBAR AT CENTERLINE OF 100TH ST 30' SOUTH OF 35-80 BRIDGE

CP #21 = NORTHING 602657.06 / EASTING 1570492.39
SET 1/2" REBAR ±7' EAST OF 100TH ±900' NORTH OF 35-80 BRIDGE

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER G.1	REVISED

BTJ 10/29/2015 d:\1120818\Cadd\cd_1120818.G1 Y:\print_drivers\Black_Gray\V8iBWHalfWeightPDF.pltcfg Y:\pen\date.tbl Snyder 1:400



ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER H.2	REVISED

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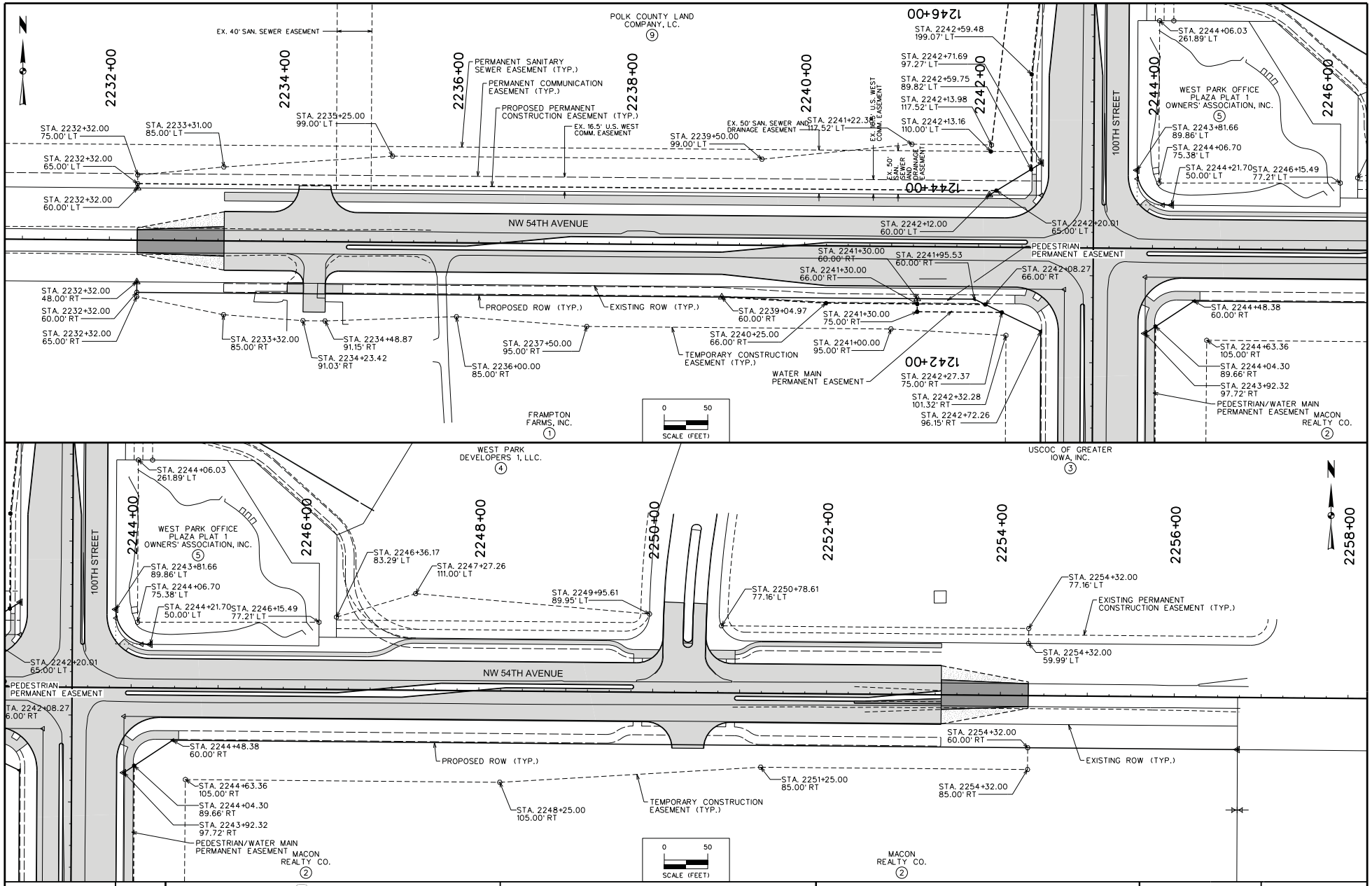

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER H.3	REVISED

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CIRCULAR CURVE DATA						
NO.	△	D	T	L	E	R
1	89° 5' 33.31"	190° 59' 9.35"	29.53'	46.65'	12.09	30.00'
2	90° 53' 10.72"	190° 59' 9.35"	30.47'	47.59'	12.76	30.00'
3	90° 0' 0.00"	190° 59' 9.35"	30.00'	47.12'	12.43	30.00'
4	90° 0' 0.00"	190° 59' 9.35"	30.00'	47.12'	12.43	30.00'
5	180° 0' 0.00"	-	-	6.28'	-	2.00'
6	180° 0' 0.00"	-	-	6.28'	-	2.00'
7	180° 0' 0.00"	-	-	15.99'	-	5.09'

CURVE 1		
LOCATION	DISTANCE	ELEVATION
PC	0'	958.46
1/4	11.66'	958.97
1/2	23.33'	959.48
3/4	24.99'	960.00
PT	46.65'	960.51

CURVE 2		
LOCATION	DISTANCE	ELEVATION
PC	0'	961.82
1/4	11.90'	961.76
1/2	23.80'	961.83
3/4	35.69'	962.02
PT	47.59'	962.34

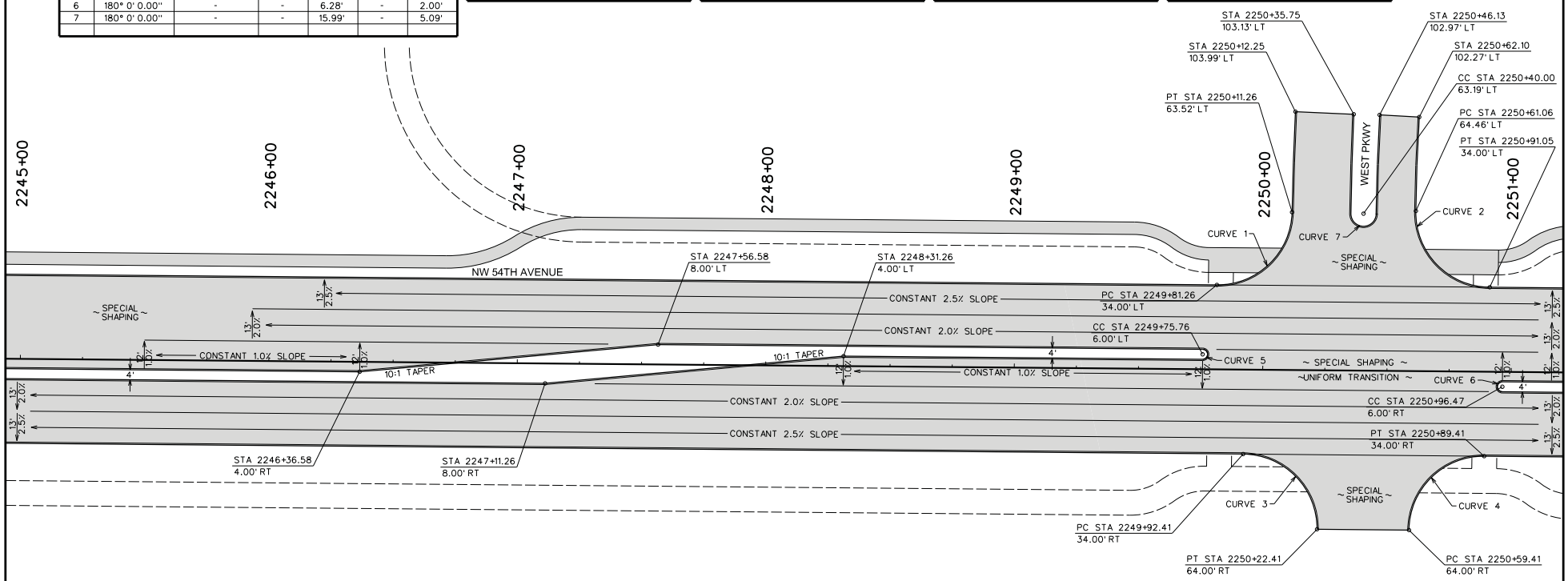
VPI @ 26.04 ELEV=961.67 L=40'

CURVE 3		
LOCATION	DISTANCE	ELEVATION
PC	0'	958.90
1/4	11.78'	959.36
1/2	23.56'	959.82
3/4	35.34'	960.24
PT	47.12'	960.51

VPI @ 36.63 ELEV=960.33 L=20'

CURVE 4		
LOCATION	DISTANCE	ELEVATION
PC	0'	961.62
1/4	11.78'	961.60
1/2	23.56'	961.71
3/4	35.34'	961.94
PT	47.12'	962.29

VPI @ 21.78 ELEV=961.50 L=40'



NW 54TH AVENUE STAKING

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER L.19	REVISED

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SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
(1) Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.

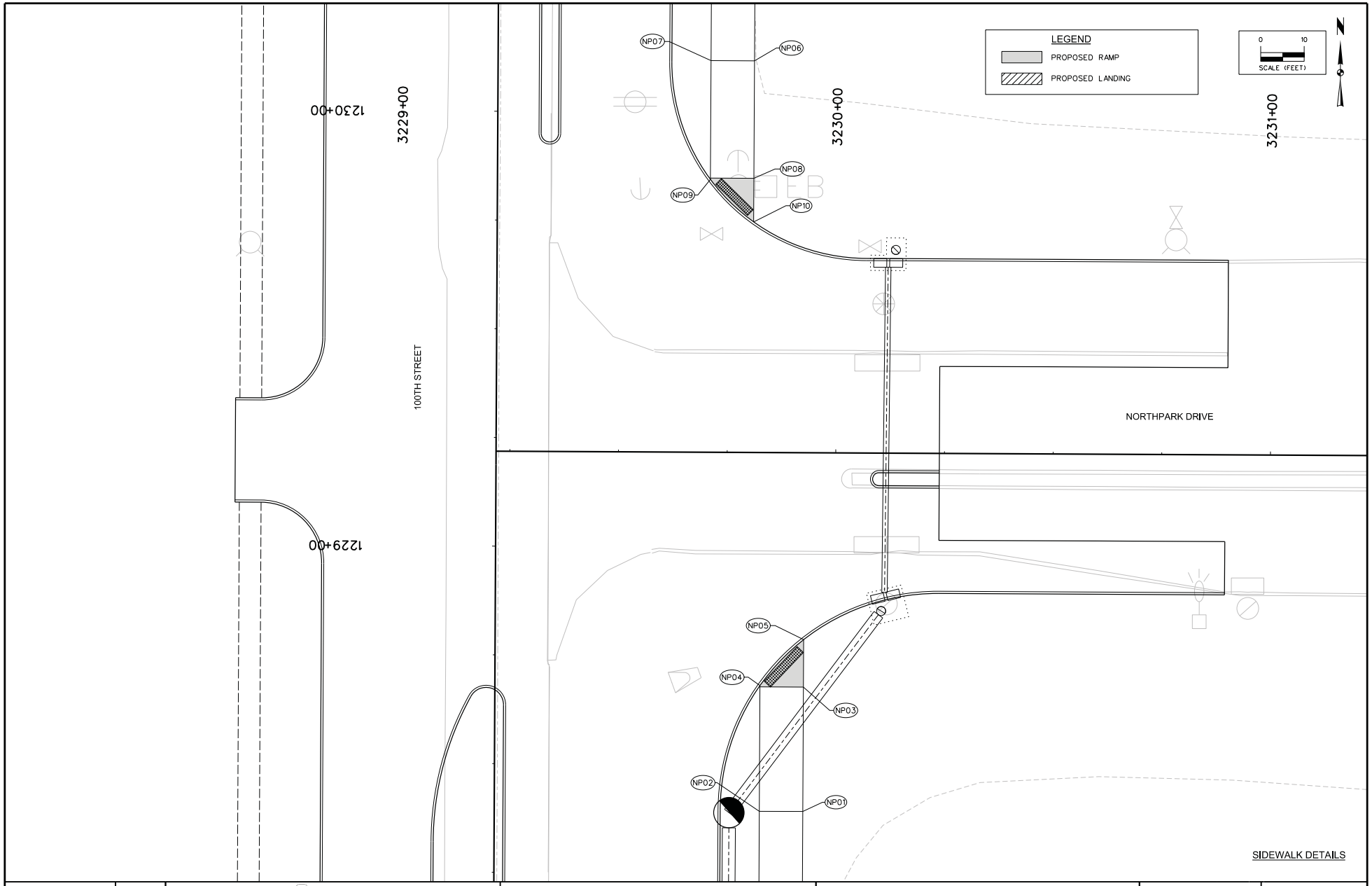
Point to Point		Sidewalk Designation	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? (1)	Measured Slope	Initials	Remarks		FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
			FT	FT	%	Pos. or Neg.		%				Point	Station	Offset	Elevation
NP01	NP02	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						NP01	1228+39.34	71.00	919.82
NP01	NP03	Sidewalk Running Slope	28.62	-0.30	-1.0%	0.5% to 5.0%						NP02	1228+39.34	61.00	919.67
NP02	NP04	Sidewalk Running Slope	28.62	-0.34	-1.2%	0.5% to 5.0%						NP03	1228+68.26	71.00	919.52
NP03	NP04	Crosswalk Cross Slope - Yield Condition	10.00	-0.19	-1.9%	0.0% to 2.0%						NP04	1228+68.26	61.00	919.33
NP03	NP05	Ramp Running Slope	10.61	0.08	0.8%	0.5% to 8.3%						NP05	1228+78.88	71.00	919.60
NP06	NP07	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						NP06	1230+11.90	59.00	920.35
NP06	NP08	Sidewalk Running Slope	27.00	-0.62	-2.3%	0.5% to 5.0%						NP07	1230+11.90	49.00	920.20
NP07	NP09	Sidewalk Running Slope	27.00	-0.66	-2.4%	0.5% to 5.0%						NP08	1229+84.59	59.00	919.73
NP08	NP09	Crosswalk Cross Slope - Yield Condition	10.00	-0.19	-1.9%	0.0% to 2.0%						NP09	1229+84.59	49.00	919.54
NP08	NP10	Ramp Running Slope	9.73	-0.08	-0.8%	0.5% to 8.3%						NP10	1229+74.86	59.00	919.65
ENT01	ENT02	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						ENT01	1235+51.50	59.00	919.56
ENT01	ENT03	Sidewalk Running Slope	21.42	-0.22	-1.0%	0.5% to 5.0%						ENT02	1235+51.50	49.00	919.41
ENT02	ENT04	Sidewalk Running Slope	21.42	-0.27	-1.3%	0.5% to 5.0%						ENT03	1235+72.92	59.00	919.34
ENT03	ENT04	Crosswalk Cross Slope - Yield Condition	10.00	-0.20	-2.0%	0.0% to 2.0%						ENT04	1235+72.92	49.00	919.14
ENT03	ENT05	Ramp Running Slope	6.49	0.11	1.7%	0.5% to 8.3%						ENT05	1235+79.41	59.00	919.45
ENT06	ENT07	Sidewalk Cross Slope	10.00	-0.17	-1.7%	0.5% to 2.0%	Yes					ENT06	1236+48.50	59.00	922.34
ENT06	ENT08	Ramp Running Slope	21.42	-1.78	-8.3%	0.5% to 8.3%	Yes					ENT07	1236+48.50	49.00	922.17
ENT07	ENT09	Ramp Running Slope	21.42	-1.79	-8.4%	0.5% to 9.4%						ENT08	1236+27.08	59.00	920.56
ENT08	ENT09	Crosswalk Cross Slope - Yield Condition	10.00	-0.18	-1.8%	0.0% to 2.0%						ENT09	1236+27.08	49.00	920.38
ENT08	ENT10	Ramp Running Slope	6.49	-0.25	-3.9%	0.5% to 8.3%						ENT10	1236+20.59	59.00	920.31
ENT07	ENT11	Landing/Turning Space	10.00	0.20	2.0%	0.1% to 2.0%	Yes					ENT11	1236+58.50	49.00	922.37
ENT06	ENT12	Landing/Turning Space	10.00	0.18	1.8%	0.1% to 2.0%	Yes					ENT12	1236+58.50	59.00	922.52
ENT11	ENT12	Sidewalk Cross Slope	10.00	0.15	1.5%	0.5% to 2.0%									
M001	M002	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						M001	1242+47.61	71.00	943.33
M001	M003	Ramp Running Slope	11.68	0.93	8.0%	0.5% to 8.3%	Yes					M002	1242+47.61	61.00	943.18
M002	M004	Ramp Running Slope	16.36	0.98	6.0%	0.5% to 8.3%						M003	1242+58.89	73.68	944.26
M003	M004	Landing/Turning Space	10.00	-0.10	-1.0%	0.1% to 2.0%						M004	1242+63.40	64.75	944.16
M004	M005	Ramp Running Slope	9.54	-0.17	-1.8%	0.5% to 8.3%						M005	1242+67.12	55.97	943.99
M006	M003	Landing/Turning Space	7.67	-0.15	-2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed		M006	1242+65.10	78.12	944.41
M007	M004	Landing/Turning Space	9.31	-0.19	-2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed		M007	1242+71.06	70.00	944.35
M006	M007	Landing/Turning Space	10.07	-0.06	-0.6%	0.1% to 2.0%						M008	1242+77.16	61.67	944.33
M007	M008	Ramp Running Slope	10.33	-0.02	-0.2%	0.5% to 8.3%				Drainage issues were considered		M009	2244+28.28	59.00	946.01
M008	M005	Crosswalk Cross Slope - No Yield Condition	11.57	-0.34	-2.9%	0.0% to 5.0%						M010	2244+28.28	49.00	945.86
M009	M006	Ramp Running Slope	20.01	-1.60	-8.0%	0.5% to 8.3%	Yes					M011	2244+55.14	59.00	947.35
M010	M007	Ramp Running Slope	29.44	-1.51	-5.1%	0.5% to 8.3%						M012	2244+55.14	49.00	947.20
M009	M010	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%									
M011	M009	Sidewalk Running Slope	26.86	-1.34	-5.0%	0.5% to 5.0%	Yes			Proposed slope is maximum allowed					
M012	M010	Sidewalk Running Slope	26.86	-1.34	-5.0%	0.5% to 5.0%	Yes			Proposed slope is maximum allowed					
M011	M012	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%									
M013	M014	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						M013	2242+42.26	65.00	943.68
M013	M015	Ramp Running Slope	10.07	-0.18	-1.8%	0.5% to 8.3%						M014	2242+42.26	55.00	943.53
M014	M016	Ramp Running Slope	11.71	-0.18	-1.5%	0.5% to 8.3%						M015	2242+52.32	65.33	943.50
M015	M016	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						M016	2242+53.95	55.47	943.35
M016	M017	Ramp Running Slope	7.82	-0.50	-6.4%	0.5% to 8.3%						M017	2242+56.12	47.96	942.85
M015	M018	Landing/Turning Space	6.64	0.12	1.8%	0.1% to 2.0%	Yes					M018	2242+58.65	67.27	943.62
M016	M019	Landing/Turning Space	9.30	0.12	1.3%	0.1% to 2.0%						M019	2242+62.82	58.18	943.47
M018	M019	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						M020	2242+66.14	52.07	942.99
M019	M020	Ramp Running Slope	6.95	-0.48	-6.9%	0.5% to 8.3%						M021	1242+62.31	-69.12	943.69
M020	M017	Crosswalk Cross Slope - No Yield Condition	10.85	-0.14	-1.3%	0.0% to 5.0%						M022	1242+70.35	-63.16	943.54
M021	M018	Ramp Running Slope	5.13	-0.07	-1.4%	0.5% to 8.3%						M023	1242+75.54	-59.08	943.04
M022	M019	Ramp Running Slope	7.19	-0.07	-1.0%	0.5% to 8.3%						M024	1242+57.12	-63.92	943.69
M021	M022	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						M025	1242+63.08	-55.89	943.54
M022	M023	Ramp Running Slope	6.60	-0.50	-7.6%	0.5% to 8.3%	Yes					M026	1242+67.16	-50.70	943.04
M024	M021	Landing/Turning Space	7.37	0.00	0.0%	0.1% to 2.0%				Drainage issues were considered					
M025	M022	Landing/Turning Space	10.32	0.00	0.0%	0.1% to 2.0%				Drainage issues were considered					
M024	M025	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%									
M025	M026	Ramp Running Slope	6.60	-0.50	-7.6%	0.5% to 8.3%	Yes								
M026	M023	Crosswalk Cross Slope - No Yield Condition	11.87	0.00	0.0%	0.0% to 5.0%									
M027	M028	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						M027	2242+29.72	-56.00	944.47
M027	M029	Ramp Running Slope	23.30	-0.07	-0.3%	0.5% to 8.3%				Drainage issues were considered		M028	2242+29.72	-46.00	944.32
M028	M030	Ramp Running Slope	23.30	-0.07	-0.3%	0.5% to 8.3%				Drainage issues were considered		M029	2242+53.02	-56.00	944.40
M029	M030	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						M030	2242+53.02	-46.00	944.25
M030	M031	Ramp Running Slope	5.43	-0.43	-7.9%	0.5% to 8.3%	Yes					M031	2242+55.85	-41.37	943.82
M032	M030	Landing/Turning Space	11.45	-0.15	-1.3%	0.1% to 2.0%						M032	2242+61.90	-53.16	944.40
M032	M034	Ramp Running Slope	5.43	-0.33	-6.1%	0.5% to 8.3%						M033	1243+90.00	-66.00	944.47
M033	M032	Ramp Running Slope	6.08	-0.07	-1.2%	0.5% to 8.3%						M034	2242+65.82	-49.41	944.07
M034	M031	Crosswalk Cross Slope - No Yield Condition	12.84	-0.25	-1.9%	0.0% to 5.0%						M035	1243+97.16	-71.00	944.64
M035	M029	Landing/Turning Space	11.91	-0.24	-2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed		M036	1243+97.16	-66.00	944.56
M036	M033	Sidewalk Running Slope	7.26	-0.09	-1.2%	0.5% to 5.0%						M037	1244+16.26	-71.00	945.96
M035	M036	Sidewalk Cross Slope	5.00	-0.08	-1.6%	0.5% to 2.0%	Yes					M038	1244+16.26	-66.00	945.88
M037	M035	Ramp Running Slope	19.03	-1.32	-6.9%	0.5% to 8.3%									

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
(1) Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.

Point to Point		Sidewalk Designation	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
M038	M036	Ramp Running Slope	19.03	-1.32	-6.9%	0.5% to 8.3%									
M037	M038	Sidewalk Cross Slope	5.00	-0.08	-1.6%	0.5% to 2.0%	Yes								
M039	M040	Sidewalk Cross Slope	5.00	-0.08	-1.6%	0.5% to 2.0%	Yes					M039	2244+21.67	-43.00	946.73
M039	M041	Sidewalk Running Slope	24.21	-0.67	-2.8%	0.5% to 5.0%						M040	2244+21.67	-38.00	946.65
M040	M042	Sidewalk Running Slope	27.16	-0.67	-2.5%	0.5% to 5.0%						M041	1243+81.67	67.05	946.06
M041	M042	Landing/Turning Space	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes					M042	1243+77.53	64.26	945.98
M042	M043	Ramp Running Slope	4.00	-0.32	-8.0%	0.5% to 8.3%	Yes					M043	1243+74.21	62.02	945.66
M041	M044	Landing/Turning Space	9.32	-0.03	-0.3%	0.1% to 2.0%						M044	1243+87.72	59.99	946.03
M044	M045	Landing/Turning Space	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes					M045	1243+84.31	56.33	945.95
M042	M045	Landing/Turning Space	10.45	-0.03	-0.3%	0.1% to 2.0%						M046	1243+81.58	53.40	945.63
M045	M046	Ramp Running Slope	4.00	-0.32	-8.0%	0.5% to 8.3%	Yes								
M046	M043	Crosswalk Cross Slope - No Yield Condition	11.36	0.03	0.3%	0.0% to 5.0%									
OP03	OP04	Landing/Turning Space	10.00	-0.20	-2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed		OP03	1248+41.50	59.00	955.18
OP03	OP05	Landing/Turning Space	10.00	0.20	2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed		OP04	1248+41.50	49.00	954.98
OP04	OP06	Landing/Turning Space	10.00	0.20	2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed		OP05	1248+51.50	59.00	955.38
OP05	OP06	Landing/Turning Space	10.00	-0.20	-2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed		OP06	1248+51.50	49.00	955.18
OP05	OP07	Ramp Running Slope	6.44	-0.03	-0.5%	0.5% to 8.3%				Drainage issues were considered		OP07	1248+64.43	59.00	955.35
OP06	OP08	Ramp Running Slope	6.44	-0.03	-0.5%	0.5% to 8.3%				Drainage issues were considered		OP08	1248+57.94	49.00	955.15
OP07	OP08	Crosswalk Cross Slope - Yield Condition	10.00	-0.20	-2.0%	0.0% to 2.0%				Proposed slope is maximum allowed		OP09	1248+57.94	59.00	955.60
OP07	OP09	Ramp Running Slope	6.49	0.25	3.9%	0.5% to 8.3%									
OP10	OP11	Sidewalk Cross Slope	10.00	-0.17	-1.7%	0.5% to 2.0%	Yes					OP10	1249+37.67	59.00	959.35
OP10	OP12	Ramp Running Slope	21.43	-1.74	-8.1%	0.5% to 8.3%	Yes					OP11	1249+37.67	49.00	959.18
OP11	OP13	Ramp Running Slope	21.43	-1.77	-8.3%	0.5% to 8.3%	Yes			Proposed slope is maximum allowed		OP12	1249+16.24	59.00	957.61
OP12	OP13	Crosswalk Cross Slope - Yield Condition	10.00	-0.20	-2.0%	0.0% to 2.0%						OP13	1249+16.24	49.00	957.41
OP12	OP14	Ramp Running Slope	6.49	-0.13	-2.0%	0.5% to 8.3%						OP14	1249+09.76	59.00	957.48
OP15	OP11	Landing/Turning Space	10.00	-0.19	-1.9%	0.1% to 2.0%	Yes					OP15	1249+47.67	49.00	959.37
OP16	OP10	Landing/Turning Space	10.00	-0.17	-1.7%	0.1% to 2.0%	Yes					OP16	1249+47.67	59.00	959.52
OP15	OP16	Sidewalk Cross Slope	10.00	0.15	1.5%	0.5% to 2.0%									
LV01	LV02	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						LV01	2233+87.69	-56.00	960.97
LV01	LV03	Ramp Running Slope	24.00	-1.31	-5.5%	0.5% to 8.3%						LV02	2233+87.69	-46.00	960.82
LV02	LV04	Ramp Running Slope	24.00	-1.31	-5.5%	0.5% to 8.3%						LV03	2234+11.69	-56.00	959.66
LV03	LV04	Crosswalk Cross Slope - Yield Condition	10.00	-0.15	-1.5%	0.0% to 2.0%						LV04	2234+11.69	-46.00	959.51
LV03	LV05	Ramp Running Slope	4.92	-0.06	-1.2%	0.5% to 8.3%						LV05	2234+16.61	-56.00	959.60
LV06	LV07	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						LV06	2234+84.69	-56.00	958.46
LV06	LV08	Ramp Running Slope	24.00	0.20	0.8%	0.5% to 8.3%						LV07	2234+84.69	-46.00	958.31
LV07	LV09	Ramp Running Slope	24.00	0.15	0.6%	0.5% to 8.3%						LV08	2234+60.69	-56.00	958.66
LV08	LV09	Crosswalk Cross Slope - Yield Condition	10.00	-0.20	-2.0%	0.0% to 2.0%						LV09	2234+60.69	-46.00	958.46
LV08	LV10	Sidewalk Running Slope	4.91	0.09	1.8%	0.5% to 5.0%						LV10	2234+55.78	-56.00	958.75
LV19	LV07	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						LV19	2234+94.69	-46.00	958.46
LV20	LV06	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						LV20	2234+94.69	-56.00	958.61
LV20	LV19	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%									
LV11	LV12	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						LV11	2234+08.47	59.00	960.75
LV11	LV13	Ramp Running Slope	15.00	-1.00	-6.7%	0.5% to 8.3%						LV12	2234+08.47	49.00	960.60
LV12	LV14	Ramp Running Slope	15.00	-1.00	-6.7%	0.5% to 8.3%						LV13	2234+23.47	59.00	959.75
LV13	LV14	Crosswalk Cross Slope - Yield Condition	10.00	-0.15	-1.5%	0.0% to 2.0%						LV14	2234+23.47	49.00	959.60
LV15	LV16	Sidewalk Cross Slope	10.00	-0.15	-1.5%	0.5% to 2.0%						LV15	2234+63.92	59.00	959.53
LV15	LV17	Ramp Running Slope	15.00	-0.27	-1.8%	0.5% to 8.3%						LV16	2234+63.92	49.00	959.38
LV16	LV18	Ramp Running Slope	15.00	-0.32	-2.1%	0.5% to 8.3%						LV17	2234+48.92	59.00	959.26
LV17	LV18	Crosswalk Cross Slope - Yield Condition	10.00	-0.20	-2.0%	0.0% to 2.0%						LV18	2234+48.92	49.00	959.06
WP01	WP02	Sidewalk Cross Slope	5.00	-0.07	-1.4%	0.5% to 2.0%						WP01	2249+47.84	-59.00	958.36
WP01	WP03	Sidewalk Running Slope	32.18	0.51	1.6%	0.5% to 5.0%						WP02	2249+47.84	-54.00	958.29
WP03	WP04	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						WP03	2249+77.85	-49.00	958.87
WP04	WP07	Landing/Turning Space	10.00	0.15	1.5%	0.1% to 2.0%						WP04	2249+77.85	-39.00	958.72
WP06	WP07	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						WP06	2249+87.85	-49.00	959.02
WP06	WP11	Ramp Running Slope	10.00	0.41	4.1%	0.5% to 8.3%						WP07	2249+87.85	-39.00	958.87
WP07	WP10	Ramp Running Slope	10.00	0.36	3.6%	0.5% to 8.3%						WP09	2250+07.24	-49.00	959.84
WP11	WP10	Crosswalk Cross Slope - Yield Condition	10.00	-0.20	-2.0%	0.0% to 2.0%						WP10	2249+97.85	-39.00	959.23
WP11	WP09	Ramp Running Slope	9.39	0.41	4.4%	0.5% to 8.3%						WP11	2249+97.85	-49.00	959.43
WP12	WP13	Sidewalk Cross Slope	5.00	-0.07	-1.4%	0.5% to 2.0%						WP12	2251+24.47	-59.00	964.58
WP12	WP14	Ramp Running Slope	32.18	-1.73	-5.4%	0.5% to 8.3%						WP13	2251+24.47	-54.00	964.51
WP14	WP15	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						WP14	2250+94.47	-49.00	962.85
WP15	WP18	Landing/Turning Space	10.00	-0.20	-2.0%	0.1% to 2.0%	Yes			Proposed slope is maximum allowed		WP15	2250+94.47	-39.00	962.70
WP17	WP18	Landing/Turning Space	10.00	-0.15	-1.5%	0.1% to 2.0%						WP17	2250+84.47	-49.00	962.65
WP17	WP22	Ramp Running Slope	10.00	-0.54	-5.4%	0.5% to 8.3%						WP18	2250+84.47	-39.00	962.50
WP18	WP21	Ramp Running Slope	10.00	-0.59	-5.9%	0.5% to 8.3%						WP20	2250+65.07	-49.00	961.77
WP22	WP21	Crosswalk Cross Slope - Yield Condition	10.00	-0.20	-2.0%	0.0% to 2.0%						WP21	2250+74.47	-39.00	961.91
WP22	WP20	Ramp Running Slope	9.40	-0.34	-3.6%	0.5% to 8.3%						WP22	2250+74.47	-49.00	962.11



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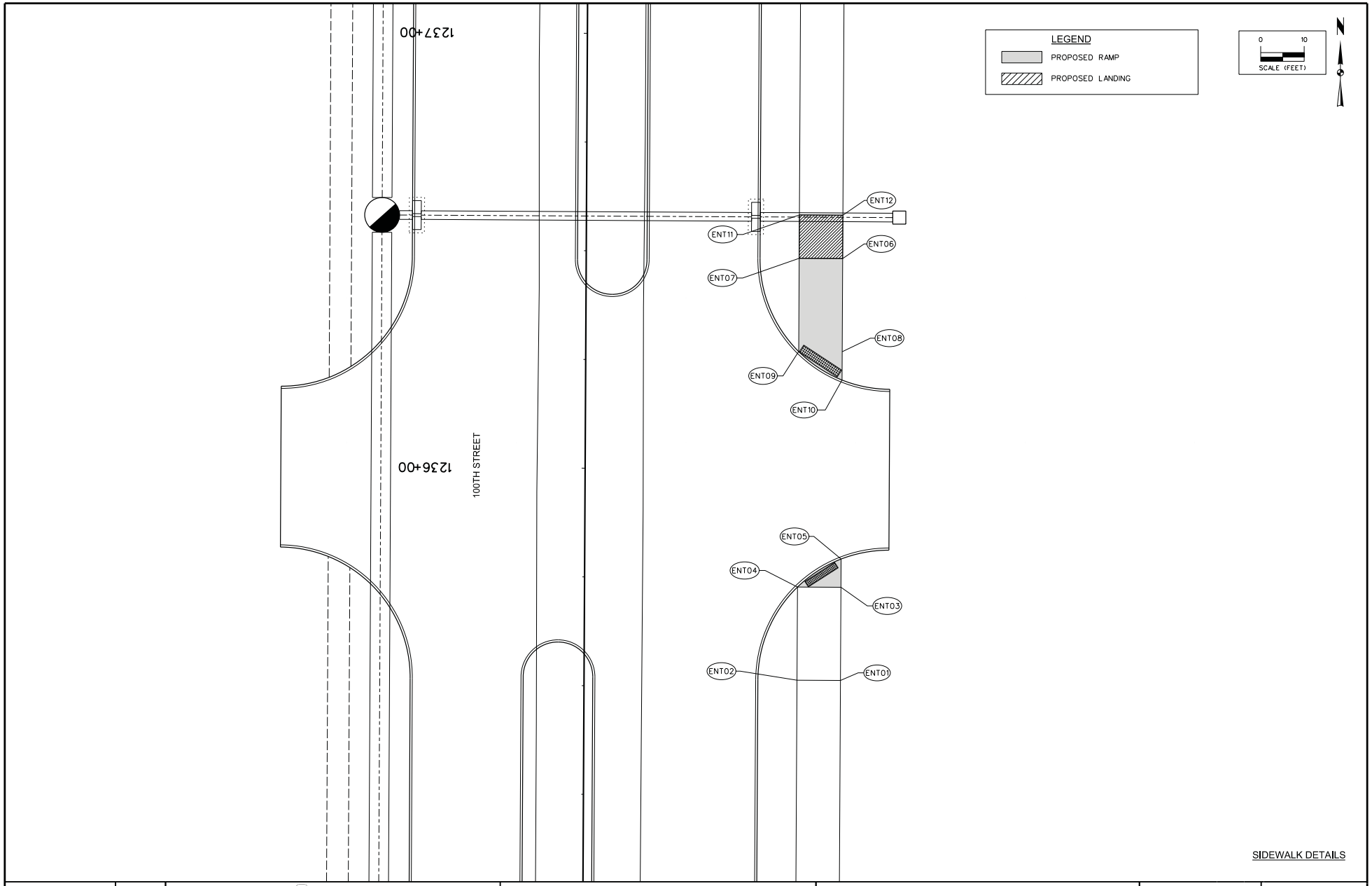

SIDEWALK DETAILS

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER S.4	REVISED

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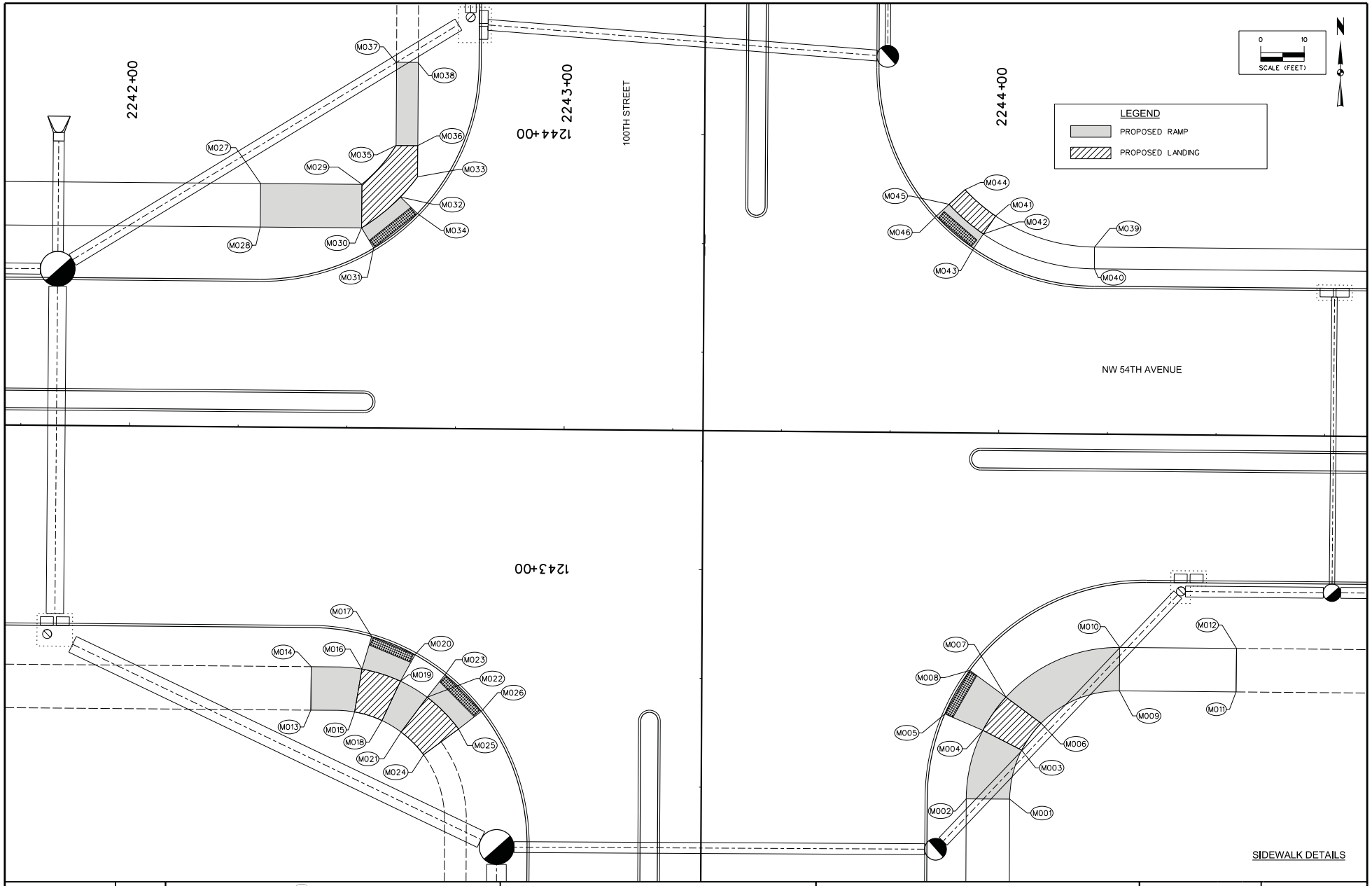

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER S.5	REVISED

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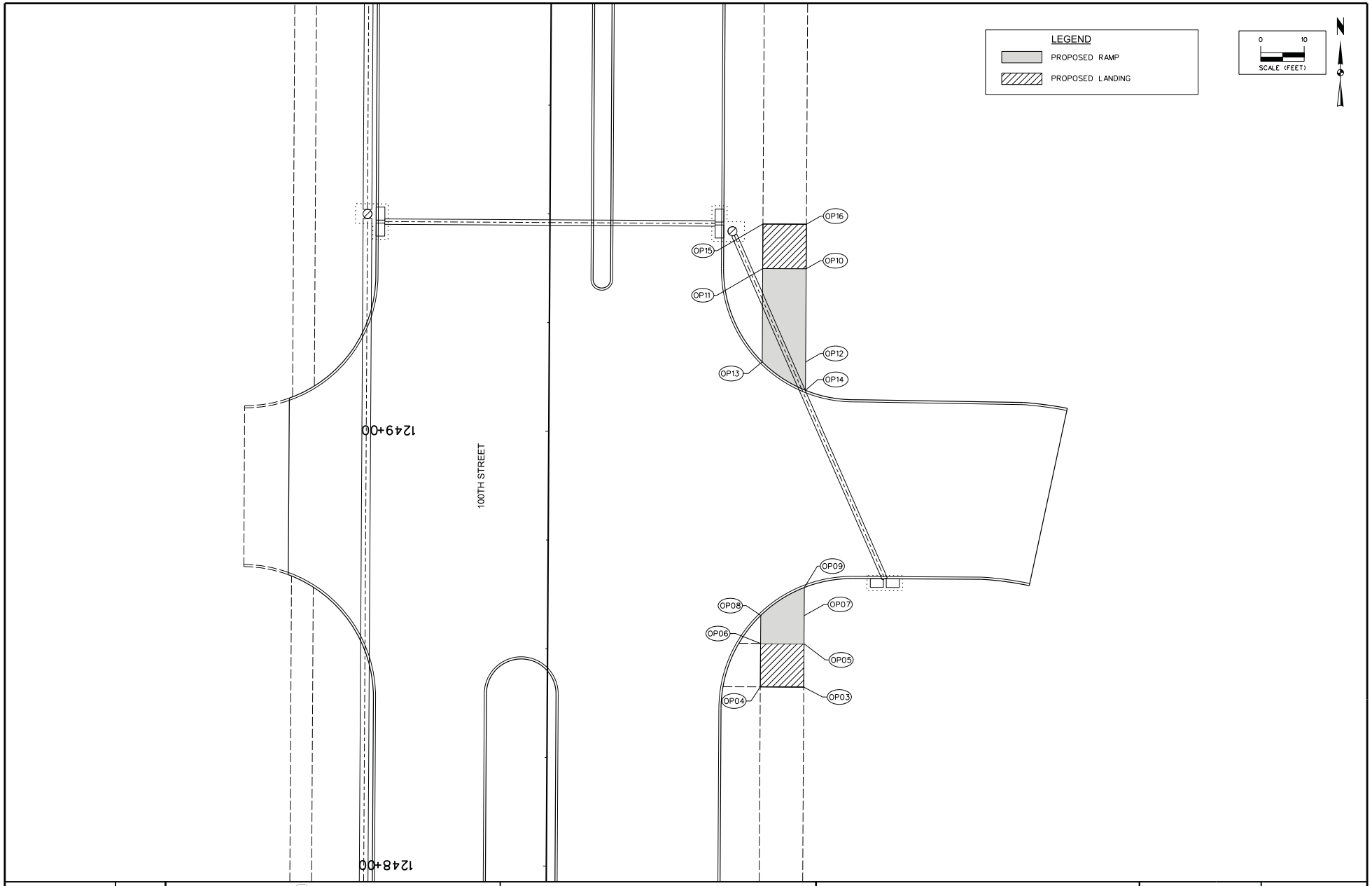

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER S.6	REVISED

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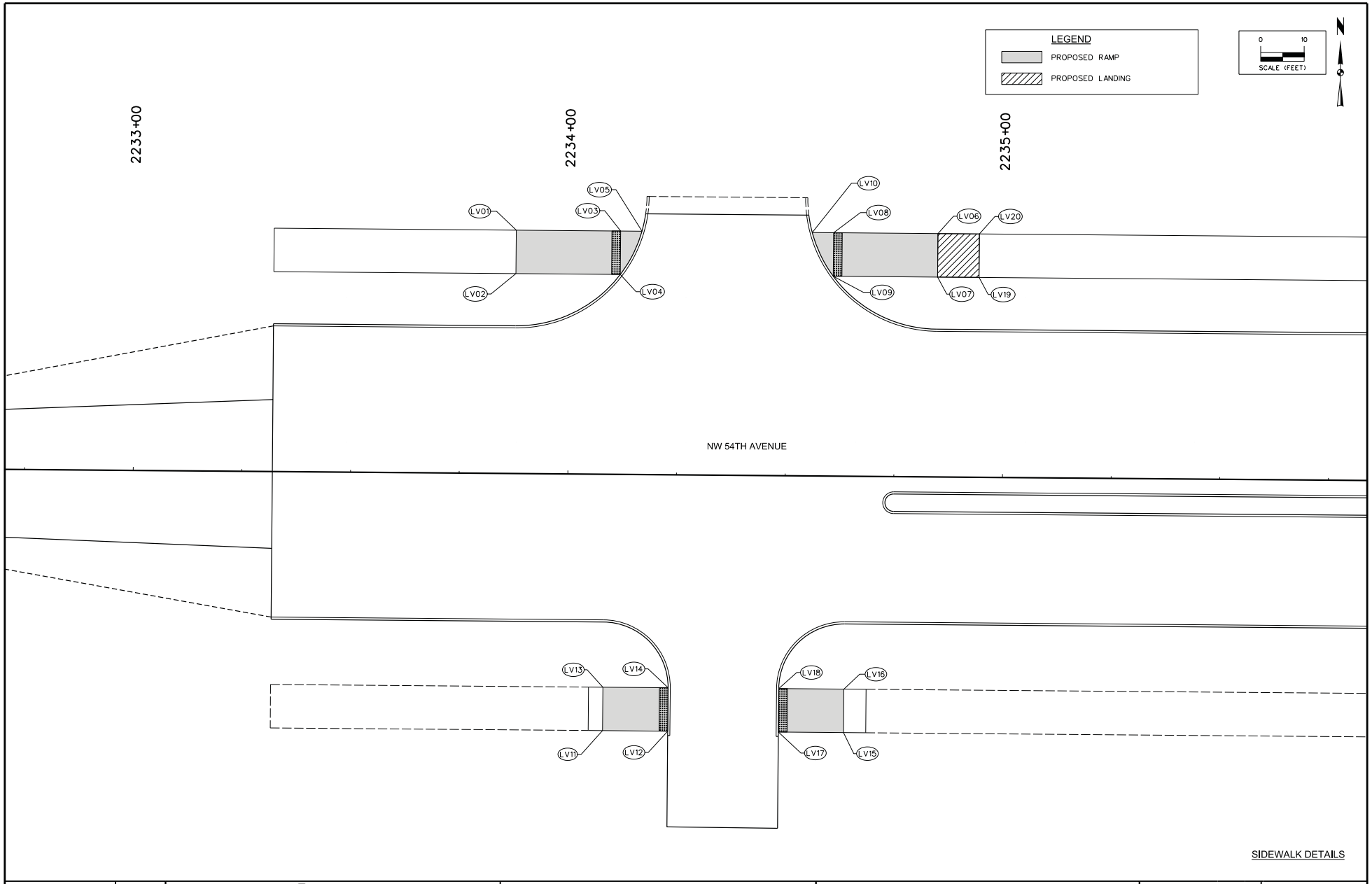

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER S.7	REVISED

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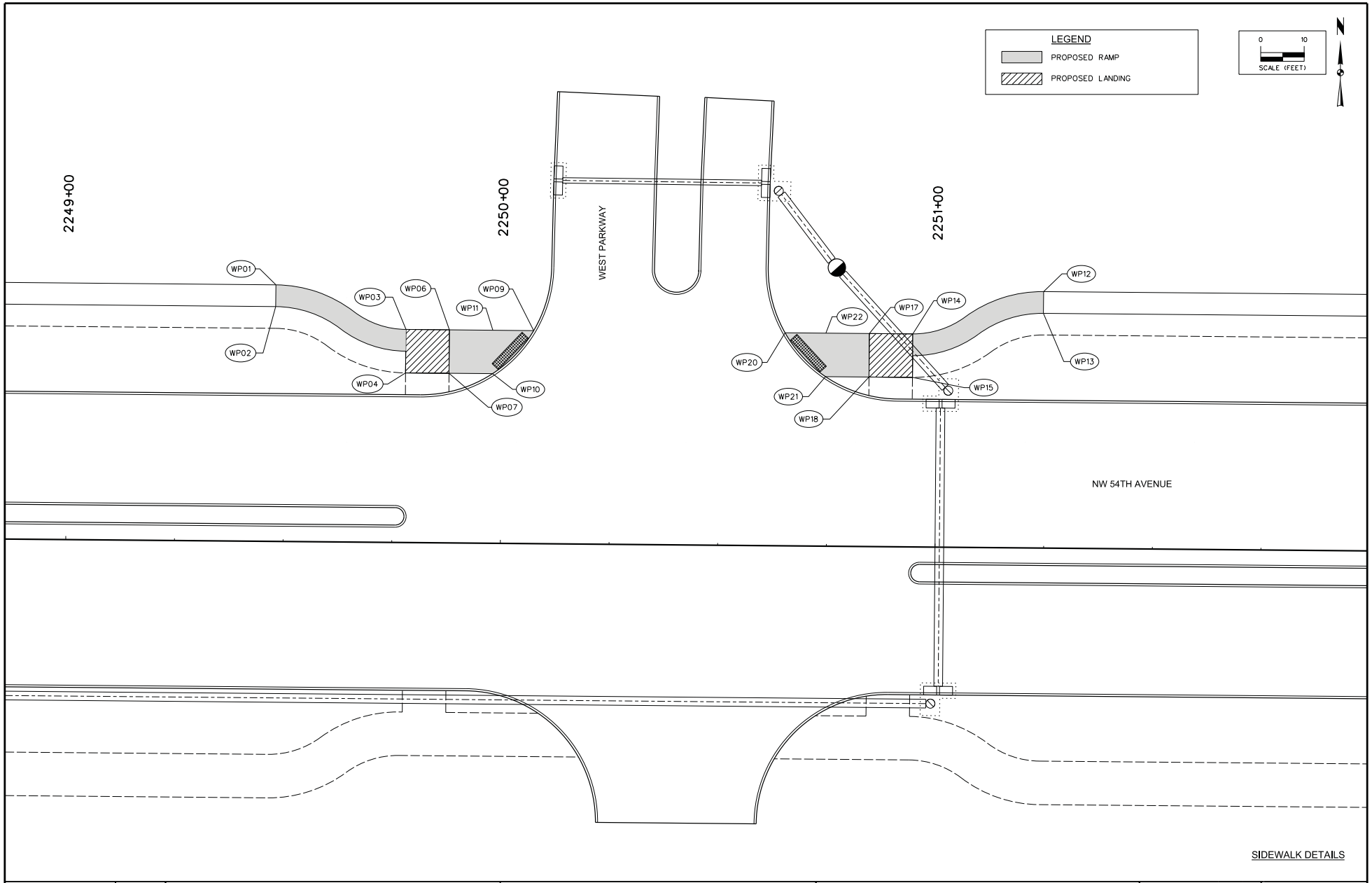

ENGLISH	IOWA DOT	DESIGN TEAM	SNYDER & ASSOCIATES	POLK COUNTY	PROJECT NUMBER STP-U-7875(638)--70-77	SHEET NUMBER S.8	REVISED

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