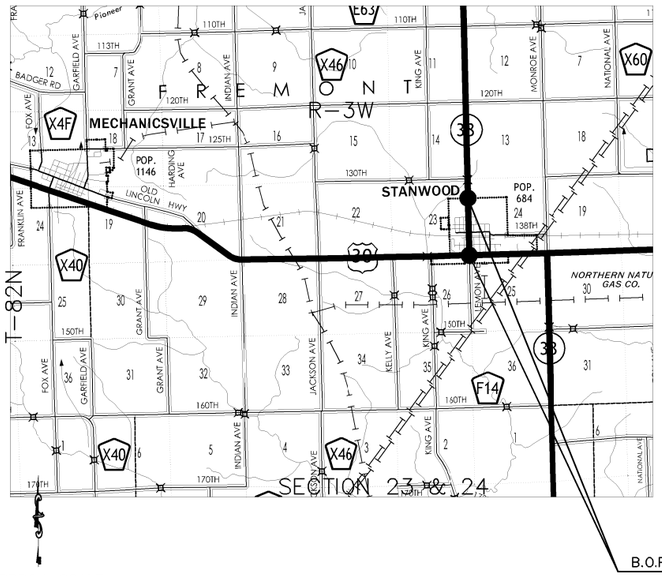
PCC PAVEMENT – REPLACE
LETTING DATE FEBRUARY 16, 2016

STP-038-2(37)--2C-16

CITY OF STANWOOD, CEDAR COUNTY

IOWA DNR STORM WATER PERMIT

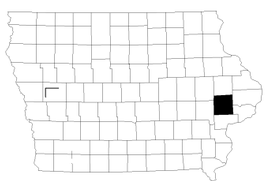
THIS PROJECT IS COVERED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2. THE CONTRACTOR SHALL CARRY OUT THE TERMS AND CONDITIONS OF GENERAL PERMIT NO. 2 AND THE STORM WATER POLLUTION PREVENTION PLAN WHICH IS PART OF THESE CONTRACT DOCUMENTS. REFER TO SECTION 2602 OF THE IDOT STANDARD SPECIFICATIONS FOR ADDITIONAL INFORMATION.



APPROX. SCALE:

0 1 2
SCALE IN MILES

LOCATION MAP



IOWA DOT

Highway Division

PLANS OF PROPOSED IMPROVEMENTS ON THE

PRIMARY ROAD SYSTEM

CITY OF STANWOOD
CEDAR COUNTY
STP-038-2(37)--2C-16
PCC PAVEMENT - REPLACE
IA 38
FROM W JCT US 30 TO NCL STANWOOD

SCALES: As Noted

REFER TO THE PROPOSAL FORM FOR LIST OF APPLICABLE SPECIFICATIONS.

VALUE ENGINEERING SAVES. REFER TO ARTICLE 1105.15 OF THE SPECIFICATIONS.

SEE SHEET C.4 FOR STANDARD ROAD PLAN TABULATION

DESIGN SPEED: 25 MPH STA 0+22.08 TO 10+22
45 MPH STA 10+22 TO 39+78

TRAFFIC CONTROL PLAN
SEE J SHEETS. THIS ROAD SHALL BE CLOSED TO VEHICULAR AND PEDESTRIAN TRAFFIC DURING CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES, PROCEDURES, AND LAYOUTS WITHIN THE LIMITS OF THIS PROJECT SHALL CONFORM TO THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS, (MUTCD) AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC), CHAPTER 130." THE CONTRACTOR SHALL FURNISH TRAFFIC CONTROL INCLUDING BARRICADES AND SIGNS IN ACCORDANCE WITH TC-252 AND THE MUTCD. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DETOUR SIGNING. CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL DEVICES ON A 24 HOUR PER DAY, 7 DAYS A WEEK BASIS DURING THE CONSTRUCTION PERIOD. CONTRACTOR TO PROVIDE 24 HOUR CALL NUMBER FOR REPAIR OF DEFICIENCIES.

B.O.P. STATION 0+12.71 M.P. 34.98
E.O.P. STATION 39+78.32 M.P. 35.73

WORKING DRAWINGS WILL BE CHECKED BY IIW, P.C.
4155 PENNSYLVANIA AVE., DUBUQUE, IA 52002 (563) 556-2464 (EMAIL ADDRESS)

APPROVED
CITY OF STANWOOD

APPROVED

MAYOR DATE

AADT 1500 V.P.D. 2015, 15% TRUCKS
AADT 2420 V.P.D. 2035, 15% TRUCKS

IIW, P.C.
iiw
ARCHITECTURE
CIVIL ENGINEERING
CONSTRUCTION SERVICES
ENVIRONMENTAL ENGINEERING
LAND SURVEYING
MUNICIPAL ENGINEERING
STRUCTURAL ENGINEERING
TRANSPORTATION ENGINEERING
INTEGRITY.EXPERTISE.SOLUTIONS
www.iiwengr.com • 800.556.4491

TOTAL SHEETS
135

PROJECT NUMBER
STP-038-2(37)--2C-16

INDEX OF SHEETS

105-3
10-18-05

NO.	DESCRIPTION
A.1, A.2	TITLE SHEET, LEGENDS AND ABBREVIATIONS
B.1 – B.12	TYPICAL SECTIONS AND DETAILS
C.1 – C.16	ESTIMATE OF QUANTITIES, STANDARD ROAD PLANS, & GENERAL INFORMATION
D.1 – D.7	PLAN & PROFILES (MAINLINE)
E.1	PLAN & PROFILE (SIDE ROAD)
EC.1 – EC.4	EROSION CONTROL
G.1 – G.5	SURVEY
H.1 – H.3	RIGHT OF WAY
J.1 – J.8	TRAFFIC CONTROL
L.1 – L.10	INTERSECTION STAKING & JOINTING
M.1 – M.4	MUNICIPAL UTILITIES (STORM)
MU.1 – MU.7	MUNICIPAL UTILITIES (SANITARY & WATER)
S.1 – S.5	SIDEWALK SHEETS
T.1 – T.2	EARTHWORK QUANTITY
W.1 – W.44	CROSS SECTIONS (MAINLINE)
X.1 – X.5	CROSS SECTIONS (SIDE ROADS)

MILEAGE SUMMARY

105-1
09-27-94

DIV.	LOCATION		LIN. FT.	MILES
1	HWY 38 / ASH STREET	STA 0+12.71 TO 12+98.96	1286.25	0.24
	HWY 38 / ASH STREET	STA 13+22.73 TO 39+78.32	2655.59	0.50
	TOTAL		3941.84	0.74

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com

UTILITY CONTACTS:

ALLIANT ENERGY
LAURA BARR
319-286-1315
LOCATE_IPL@ALLIANTENERGY.COM

CLARENCE TELEPHONE CO
CURTIS ELDRED
563-452-3852
CLARENCE@NETINS.NET

IOWA DEPT OF TRANSPORTATION
WILLIAM KREINBRING
563-946-2391
WILLIAM.KREINBRING@DOT.IOWA.GOV

WINDSTREAM COMMUNICATIONS / WINDSTREAM MCLEOD
JOEL SCHROEDER
800-289-1901
LOCATE.DESK@WINDSTREAM.COM

MEDIACOM
SHELLEY MARTIN/DON COOK
319-395-9699
SHMARTIN@MEDIACOMCC.COM
DCOOK@MEDIACOMCC.COM

SPRINT NEXTEL
GERRY CRAIN
847-737-1279
GERRY.A.CRAIN@SPRINT.COM

CITY OF STANWOOD
STEVE IHNS
563-942-3340
STANWOOD PW@GMAIL.COM

CENTURYLINK
TOM STURMER
303-664-8090
THOMAS.STURMER@CENTURYLINK.COM

LICENSED PROFESSIONAL ENGINEER
JULIE P. NEEBEL
14690
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

FOR IIW, P.C.

JULIE P. NEEBEL — DATE
PE 14690 — 12/31/2016
LICENSE # — RENEWAL DATE

PAGES OR SHEETS COVERED BY THIS CERTIFICATION:
J SHEETS

LICENSED PROFESSIONAL ENGINEER
GEOFFRY T. BLANDIN
15274
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

FOR IIW, P.C.

GEOFFRY T. BLANDIN — DATE
PE 15274 — 12/31/2015
LICENSE # — RENEWAL DATE

PAGES OR SHEETS COVERED BY THIS CERTIFICATION:
ALL SHEETS EXCEPT J SHEETS

CHECK PLANS

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA			A.1	135

P:\14\183\DRAWINGS\CIVIL\14183_ZZ_A.DWG 10/22/2015 8:43:40 AM JERI M. VONDERA

STP-038-2(37)--2C-16

ABBREVIATIONS

Δ	CENTRAL ANGLE
A/C	AIR CONDITIONING(ER)
AC	ACRES
A.F.F.	ABOVE FINISHED FLOOR
AGG	AGGREGATE
AOH	ARROW ON HYDRANT
ARCH	ARCHITECTURAL
ASPH	ASPHALT
AVG	AVERAGE
B-B	B/C - B/C
B/C, BOC	BACK OF CURB
B/DITCH	BOTTOM OF DITCH
BFP	BACKFLOW PREVENTOR
B/L	BASE LINE
B/S	BOTTOM OF SLOPE
BLDG	BUILDING
B.M.	BENCH MARK
BOP	BEGINNING OF PROJECT
BOT	BOTTOM
BSMT	BASEMENT
BV	BUTTERFLY VALVE
C&G	CURB AND GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
C-C	CENTER TO CENTER
CF	CUBIC FEET
CH	CHORD
CH BRG	CHORD BEARING
CIP	CAST IRON PIPE
C-I-P	CAST-IN-PLACE
CISP	CAST IRON SOIL PIPE
CJ	CONTROL JOINT
℄, CL	CENTERLINE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPACTED
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
COR	CORNER
CP	CONTROL POINT
CPE	CORRUGATED POLYETHYLENE PIPE
CRST	CRUSHED STONE
CSP	CORRUGATED STEEL PIPE
CTRD	CENTERED
CTR	CENTER
CULT	CULTIVATED
CV	CHECK VALVE
CY	CUBIC YARD
D	DEGREE OF CURVE
DIA (ø)	DIAMETER
DIP	DUCTILE IRON PIPE
DN	DOWN
DRWY	DRIVEWAY
DS	DOWNSPOUT
DWG(S)	DRAWING(S)
DWL(S)	DOWEL(S)
E	EAST
E'LY	EASTERLY
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMBED	EMBEDMENT
ENGR	ENGINEER
ENTR	ENTRANCE
EOP	END OF PROJECT
EOR	END OF RADIUS
E/P	EDGE OF PAVEMENT
EQ	EQUAL
E/S	EDGE OF SHOULDER
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
EXC	EXCAVATE/EXCAVATION
EXP	EXPANSION
EXT	EXTERIOR
EXTD	EXTEND
EW	EACH WAY
FD	FLOOR DRAIN
FDN	FOUNDATION
F.E.	FIELD ENTRANCE
FES	FLARED END SECTION
F-F	FACE TO FACE
FFE	FINISH FLOOR ELEVATION
FG	FORM GRADE
FIN GR	FINISHED GRADE
FL	FLOWLINE
FLG	FLANGE
FLR	FLOOR
FM	FORCE MAIN
FND	FOUND
FT	FOOT/FEET
FTG	FOOTING
FUT	FUTURE
FV	FIELD VERIFY
G	GUTTER
GC	GENERAL CONTRACTOR
GALV	GALVANIZED
GND	GROUND
GRAN	GRANULAR
GRD	GRADE
GV	GATE VALVE
HMA	HOT MIX ASPHALT
HORIZ	HORIZONTAL
HPT	HIGH POINT
HYD	HYDRANT
ID	INSIDE DIA/INSIDE DIM
IE	INVERT ELEVATION
IMP	IMPROVEMENTS
IN	INCHES
INV	INVERT
IP	IRON PIPE
JB	JUNCTION BOX
JT	JOINT/JOINT LENGTH
K	RATE OF VERT CURVATURE
L	LENGTH OF CURVE
LAT	LATERAL
LF	LINEAL FOOT
LONG	LONGITUDINAL
LP	LIGHT POLE
LPT	LOW POINT
LT	LEFT
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MON	MONUMENT
N	NORTH
N/A	NOT APPLICABLE
NE'LY	NORTHEASTERLY
N'LY	NORTHERLY
NO/#	NUMBER
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NW'LY	NORTHWESTERLY
OC	ON CENTER
OD	OUTSIDE DIAMETER
PC	POINT OF CURVE
PERF	PERFORATED
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
PM	PRINCIPAL MERIDIAN
POB	POINT OF BEGINNING
POC	POINT OF CURVE
POT	POINT OF TANGENT
PRC	POINT OF REVERSE CURVE
PRELIM	PRELIMINARY
PROP	PROPOSED
PRV	PRESSURE REDUCING VALVE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS
R&R	REMOVE & REPLACE
R&S	REMOVE & SALVAGE
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REBAR	REINFORCING BAR
REF	REFERENCE
REINF	REINFORCING/REINFORCED
REV	REVISION
RIM	RIM ELEVATION
ROW	RIGHT OF WAY
RP	RADIUS POINT
RS	RESILIENT SEAT
RT	RIGHT
S	SOUTH
S=	SUPERELEVATION
SAN	SANITARY
SANS	SANITARY SEWER
SB	SOIL BORING
SCH	SCHEDULE
SD	SUB DRAIN
SEC	SECTION
SE'LY	SOUTHEASTERLY
SF	SQUARE FOOT
S.F.D.	STEP FOOTING DOWN
SHT	SHEET
SIG.	SIGNAL
SIM.	SIMILAR
S'LY	SOUTHERLY
SOG	SLAB ON GRADE
SPEC	SPECIFICATION
SS	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STM	STORM
STMS	STORM SEWER
SW'LY	SOUTHWESTERLY
SY	SQUARE YARD
T	TANGENT LENGTH
T/B	TOP OF BANK
T/DITCH	TOP OF DITCH
T/C, TC	TOP OF CURB
T/GRAV	TOP OF GRAVEL
T/WALL	TOP OF WALL
T/P, TP	TOP OF PAVEMENT
T/S	TOP OF SLOPE
T/SUB	TOP OF SUBGRADE
T/W, TW	TOP OF WALK
T & B	TOP AND BOTTOM
T.O.B.	TOP OF BEAM
T.O.B.L.	TOP OF BRICK LEDGE
T.O.C.	TOP OF CONCRETE
T.O.E.F.	TOP OF EXISTING FOOTING
T.O.F.	TOP OF FOOTING
T.O.M.	TOP OF MASONRY
T.O.P.	TOP OF PIER
T.O.S.	TOP OF STEEL
TCE	TEMP CONSTRUCTION EASEMENT
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICK / THICKNESS
TWP	TOWNSHIP
TYP	TYPICAL
U	UTILITY
UAC	USE AS CONSTRUCTED
UE	UTILITY EASEMENT
UL	UNDERWRITERS LABORATORIES, INC.
ULFM	UNDERWRITERS LABORATORIES FACTORY MUTUAL
UNO	UNLESS NOTED OTHERWISE
VAR	VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VER	VERIFY
VERT	VERTICAL
VOL	VOLUME
VPC	VERT POINT OF CURVE
VPI	VERT POINT OF INTERSECTION
VPT	VERT POINT OF TANGENCY
W	WEST
W/	WITH
W'LY	WESTERLY
WM	WATER MAIN
W/O	WITHOUT
W.P.	WORKING POINT
WD	WOOD
WSO	WATER SHUT OFF
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
YD	YARD

LEGEND

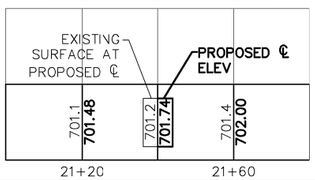
EXISTING		PROPOSED
	PROPERTY LINE	
	EASEMENT	
	SECTION LINE	
	QUARTER SECTION LINE	
	QUARTER QUARTER SECTION LINE	
	CENTERLINE	
D	STORM SEWER	D
SD	SUB DRAIN	SD
S	SANITARY SEWER	S
FM	FORCE MAIN	FM
W	WATER LINE	W
G	GAS LINE	G
OHE	OVERHEAD ELECTRIC	OHE
E	UNDERGROUND ELECTRIC	E
OHT	OVERHEAD TELEPHONE	OHT
T	UNDERGROUND TELEPHONE	T
OHTV	OVERHEAD TELEVISION	OHTV
TV	UNDERGROUND TELEVISION	TV
FIB	FIBER OPTIC	FIB
X	WIRE FENCE	X
O	CHAINLINK FENCE	O
□	WOOD FENCE	□
--000--	CONTOUR LINE	000
	RAILROAD TRACKS	
	GUARD RAIL	
+ 0.00	SPOT ELEVATION	+ 0.00
	DIRECTION OF FLOW	
	TREE LINE	

EXISTING		PROPOSED
	CATCH BASIN	
	AREA INTAKE	
Ⓓ	STORM MANHOLE	Ⓓ
Ⓢ	SANITARY MANHOLE	Ⓢ
Ⓤ	UTILITY MANHOLE	Ⓤ
Ⓥ	WATER VALVE MANHOLE	Ⓥ
	FIRE HYDRANT	
	WATER SHUT OFF	
	WATER VALVE	
	YARD HYDRANT	
GV	GAS VALVE	GV
	SIGN	
	UTILITY POLE	
	UTILITY POLE WITH LIGHT	
	TRAFFIC SIGNAL POLE	
	GUY ANCHOR	
	LIGHT POLE	
	UTILITY PEDESTAL	
Ⓦ	WELL	Ⓦ
	MAILBOX	
	WATER LEVEL	
	BOLLARD	
	SOIL BORING	
PIV	POST INDICATOR VALVE	PIV
	DECIDUOUS TREE W/ TRUNK DIA.	
	CONIFEROUS TREE W/ TRUNK DIA.	
	SHRUB OR BUSH	

SURVEY

■	FOUND REBAR
●	FOUND IRON PIPE
O	SET REBAR

PROFILE LEGEND



Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

CIVIL ABBREVIATIONS & LEGEND

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

iiw 563.556.2464 ◆ 800.556.4491
IIW, P.C. ◆ www.iiwengr.com

CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
			IOWA	.	2016	A.2	135

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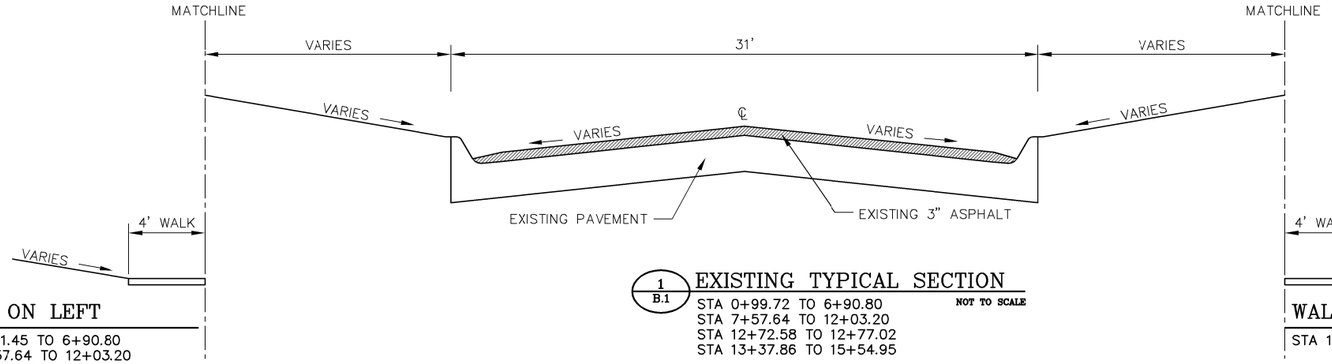


1 B.1 EXISTING TYPICAL SECTION
NOT TO SCALE

WALK ON LEFT
STA 1+51.45 TO 6+90.80
STA 7+57.64 TO 12+03.20
STA 12+72.58 TO 12+77.02
STA 13+37.86 TO 15+54.95

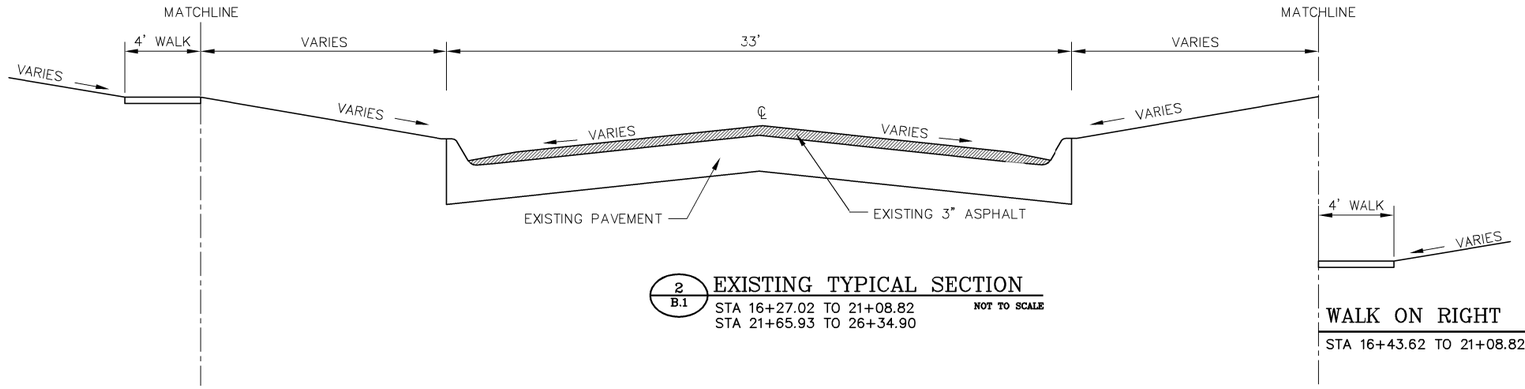
STA 0+99.72 TO 6+90.80
STA 7+57.64 TO 12+03.20
STA 12+72.58 TO 12+77.02
STA 13+37.86 TO 15+54.95

WALK ON RIGHT
STA 10+48.14 TO 12+03.20

NOTE:

EXISTING UTILITY POLES ARE TO BE RELOCATED (BY OTHERS) TO LOCATIONS BETWEEN THE RIGHT OF WAY AND PROPOSED SIDEWALK.

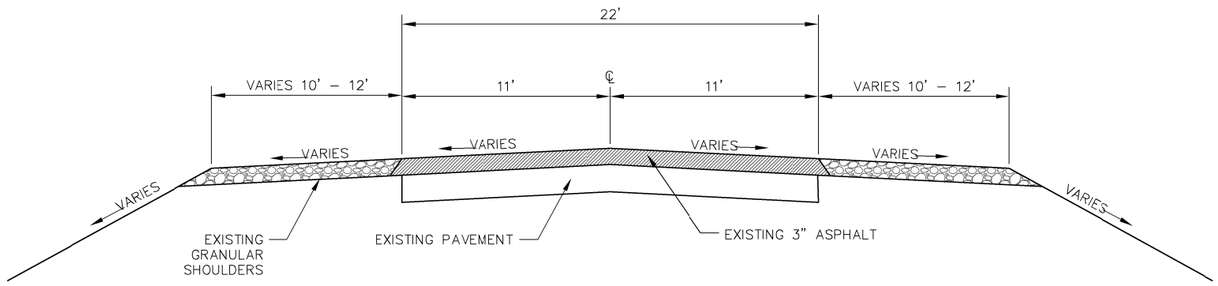
STA TO STA	INTERSECTION
0+12.72 TO 0+99.72	US HWY 30
6+90.80 TO 7+57.64	PRESTON ST
12+03.20 TO 12+72.58	CENTER ST
12+77.02 TO 13+37.86	UNION PACIFIC RR
15+54.95 TO 16+27.02	BROADWAY ST
21+08.82 TO 21+65.93	NORTH ST
26+34.90 TO 27+04.66	FARMERS ST



2 B.1 EXISTING TYPICAL SECTION
NOT TO SCALE

STA 16+27.02 TO 21+08.82
STA 21+65.93 TO 26+34.90

WALK ON RIGHT
STA 16+43.62 TO 21+08.82



3 B.1 EXISTING TYPICAL SECTION
NOT TO SCALE

STA 27+04.66 TO 39+78.32

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TYPICAL SECTIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

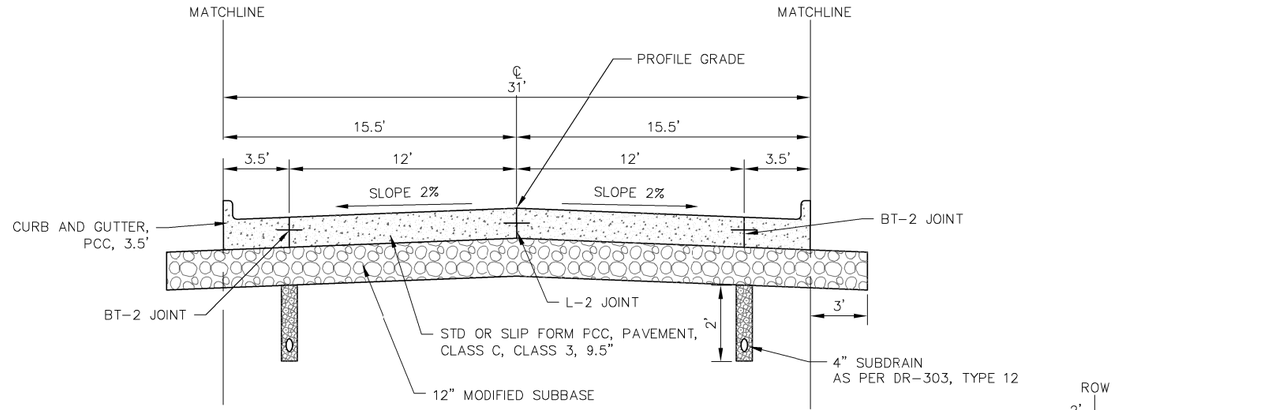
DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

iiw 563.556.2464 ◆ 800.556.4491
IIW, P.C. ◆ www.iiwengr.com

CITY OF STANWOOD, CEDAR COUNTY

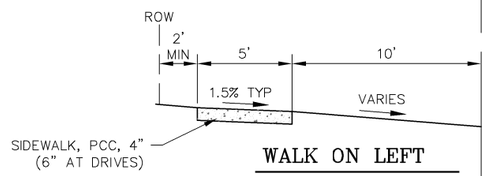
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	B.1	135

STP-038-2(37)--2C-16



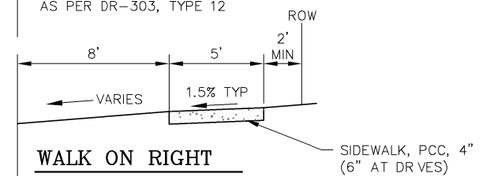
1 / B.2 **PROPOSED TYPICAL SECTION** NOT TO SCALE

STA 1+00.23 TO 6+88.80
STA 7+54.80 TO 12+05.04
STA 13+72.91 TO 15+58.44
STA 16+29.44 TO 21+04.50
STA 21+70.50 TO 26+16.41



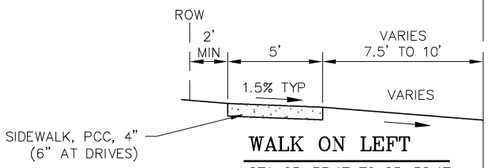
WALK ON LEFT

STA 1+51.39 TO 6+88.80
STA 7+54.80 TO 12+04.29
STA 12+72.12 TO 12+77.02
STA 13+37.86 TO 15+58.44
STA 16+29.44 TO 21+04.50
STA 21+70.50 TO 25+33.47



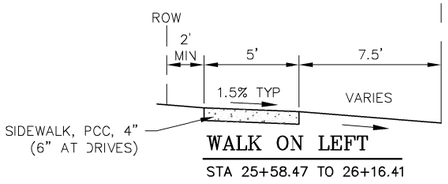
WALK ON RIGHT

STA 10+48.13 TO 12+04.29
STA 16+29.44 TO 21+04.50



WALK ON LEFT

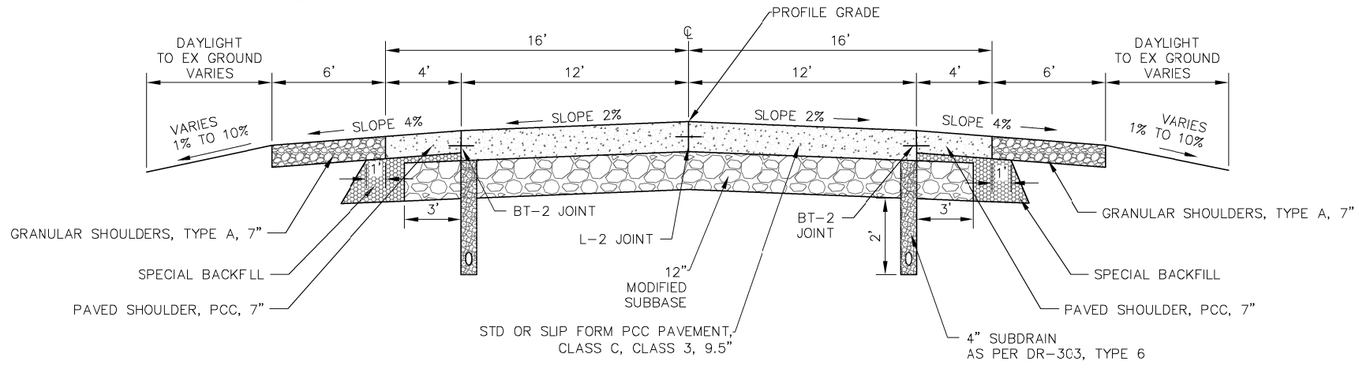
STA 25+33.47 TO 25+58.47



WALK ON LEFT

STA 25+58.47 TO 26+16.41

STA TO STA	INTERSECTION
0+12.72 TO 1+00.23	US HWY 30
6+88.80 TO 7+54.80	PRESTON ST
12+05.04 TO 12+68.71	CENTER ST
12+68.71 TO 13+67.91	UNION PACIFIC RR
15+58.44 TO 16+29.44	BROADWAY ST
21+04.50 TO 21+70.50	NORTH ST
26+16.41 TO 26+92.73	FARMERS ST



2 / B.2 **PROPOSED TYPICAL SECTION**
STA 26+92.73 TO 39+78.32 NOT TO SCALE

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD
.
TYPICAL SECTIONS
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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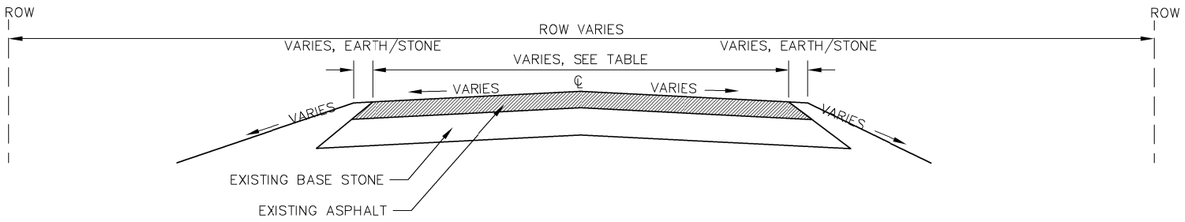
CITY OF STANWOOD, CEDAR COUNTY

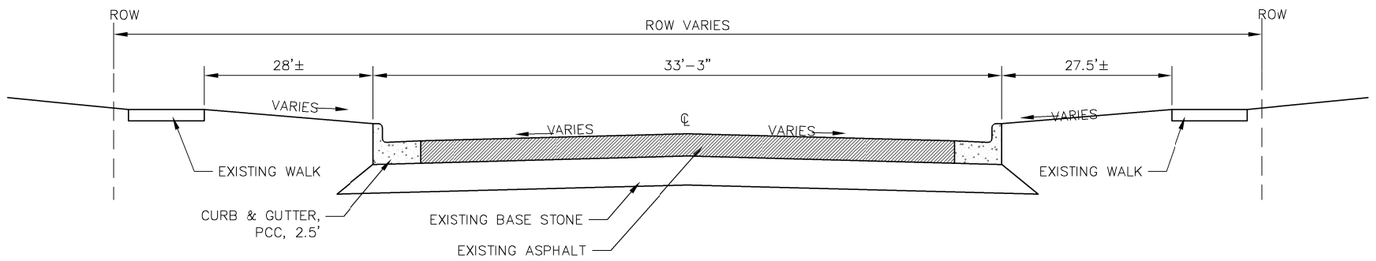
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	B.2	135

P:\14\183\DRAWINGS\CIVIL\14183_ZZ_B.DWG 10/22/2015 8:55:00 AM JERI M. VONDERA



1 / B.3 EXISTING TYPICAL SECTION
EX SIDE STREETS
NOT TO SCALE

EXISTING HMA WIDTH	
PRESTON	19' – 21'
CENTER ST.	24'–4"
W. BROADWAY ST.	24'–6"
NORTH ST.	23'–6"
W. FARMERS ST.	20'–6"
E. FARMERS ST.	15'–6"



2 / B.3 EXISTING TYPICAL SECTION
E. BROADWAY ST
EAST OF IA 38/ASH ST
NOT TO SCALE

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TYPICAL SECTIONS
SIDE STREETS

Station:. Date:.

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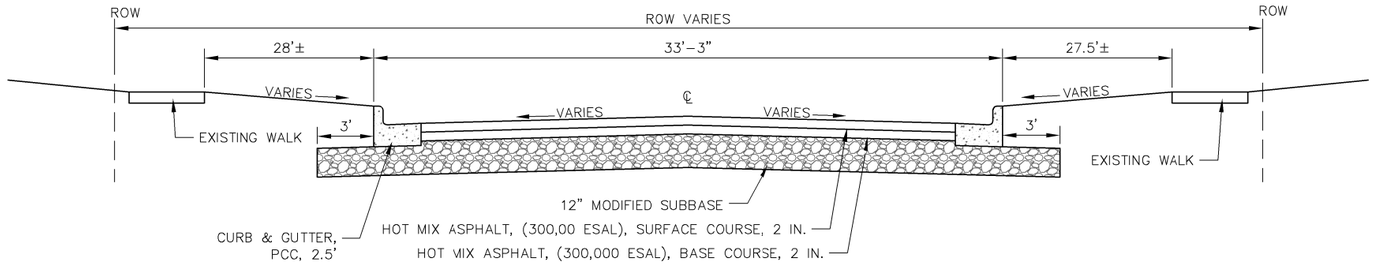
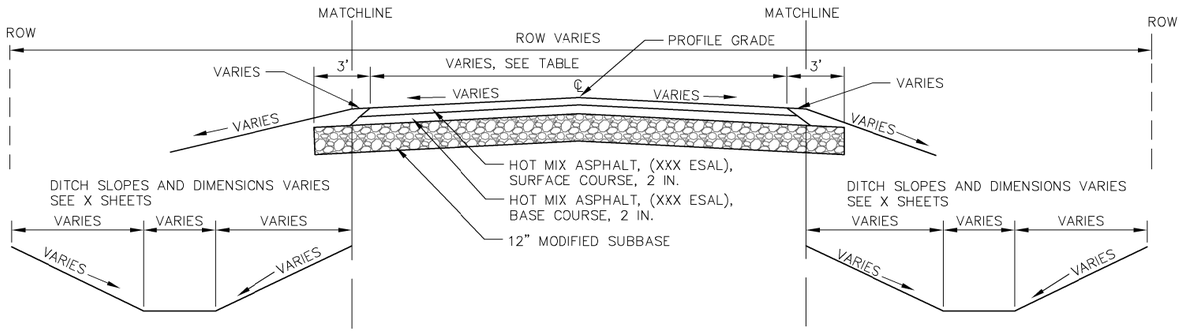
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	B.3	135

STP-038-2(37)--2C-16



1 / B.3 **TYPICAL SECTION**
HMA TRANSITION AT BROADWAY ST
EAST OF IA 38/ASH ST
NOT TO SCALE

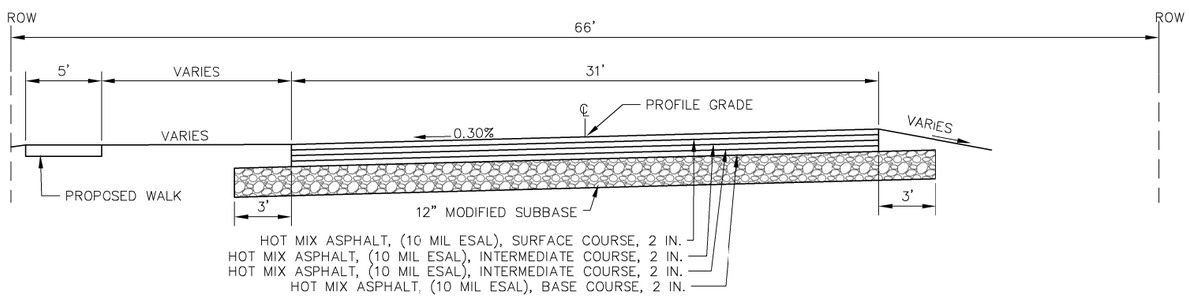


DITCH ON LEFT
PRESTON ST
STA 100+46 TO 101+51
STA 102+16 TO 102+87

DITCH ON RIGHT
PRESTON ST
STA 102+17 TO 102+37

HMA WIDTH	
PRESTON ST.	22'-0"
CENTER ST.	24'-6"
W. BROADWAY ST.	24'-6"
NORTH ST.	24'-6"
FARMERS ST.	25'-3"

2 / B.3 **PROPOSED TYPICAL SECTION**
HMA TRANSITIONS
SIDE STREETS
NOT TO SCALE



3 / B.3 **PROPOSED TYPICAL SECTION**
HMA TRANSITIONS
ASH ST @ UNION PACIFIC RAILROAD
NORTH AND SOUTH OF CROSSING
NOT TO SCALE

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TYPICAL SECTIONS
SIDE STREETS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

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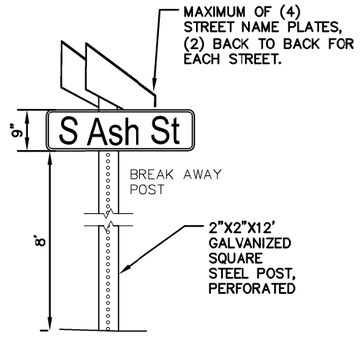
NOTES:

D3-1 STREET NAME SIGN, WHITE LETTERS ON GREEN BACKGROUND WITH WHITE BORDER. UPPER AND LOWER CASE, 6" / 4.5" LETTERS.

SUBMIT SHOP DRAWINGS.

S1 – S Ash St
S2 – S Ash St / E Preston St
S3 – S Ash St / E Center St
S4 – N Ash St / E Broadway St
S5 – N Ash St / E North St
S6 – N Ash St / W Farmers St

REFER TO TABULATION ON C SHEET FOR LOCATIONS



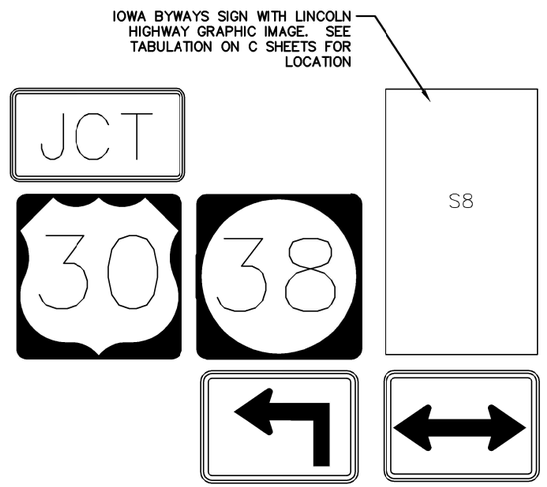
1 B.5 STREET NAME SIGNS DETAIL — NOT TO SCALE



D1-3A DESTINATION SIGN. WHITE ON GREEN WITH WHITE BORDER. 6" CAPITAL LETTERS AND 4.5" SMALL LETTERS. SEE TABULATION ON C SHEETS FOR LOCATION.

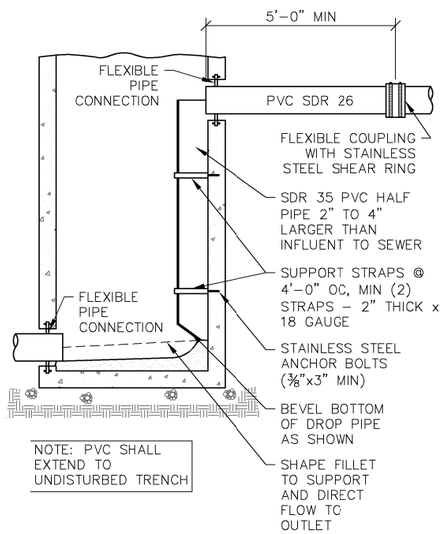
SUBMIT SHOP DRAWINGS.

2 B.5 DESTINATION SIGN DETAIL – S7 DETAIL — NOT TO SCALE

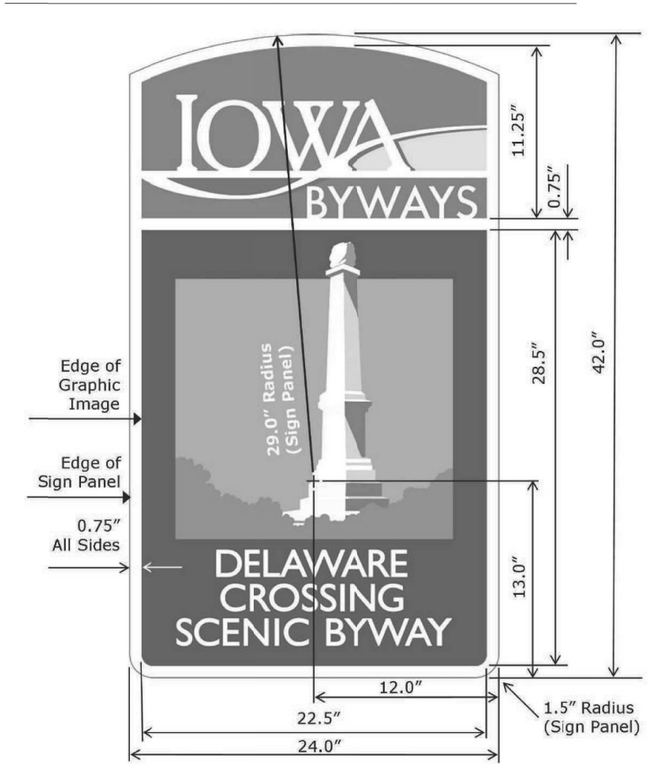


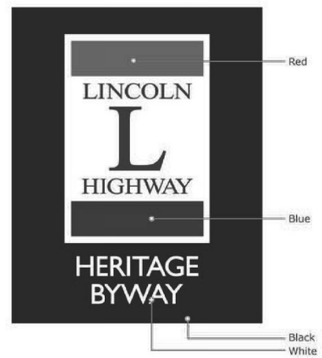
3 B.5 IOWA BYWAYS SIGN DETAIL — NOT TO SCALE

AVERAGE GRADE	MINIMUM DROP THROUGH MANHOLE
0.00 – 2.5%	0.10'
2.51 – 5.0%	0.20'
5.01 – 7.5%	0.30'
7.51 – 10.0%	0.40'
10.01 – 12.5%	0.50'
12.51 – 15.0%	0.60'
15.01 – 17.5%	0.70'
17.51 – 20.0%	0.80



4 B.5 INSIDE DROP MANHOLE DETAIL — NOT TO SCALE





The typeface for "LINCOLN HIGHWAY HERITAGE BYWAY" is Gill Sans set in all caps. Colors for the Lincoln Highway graphic identity:

Red: C20 M100 Y100
Blue: C100 M70 Y20
Black
White

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD
DETAILS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

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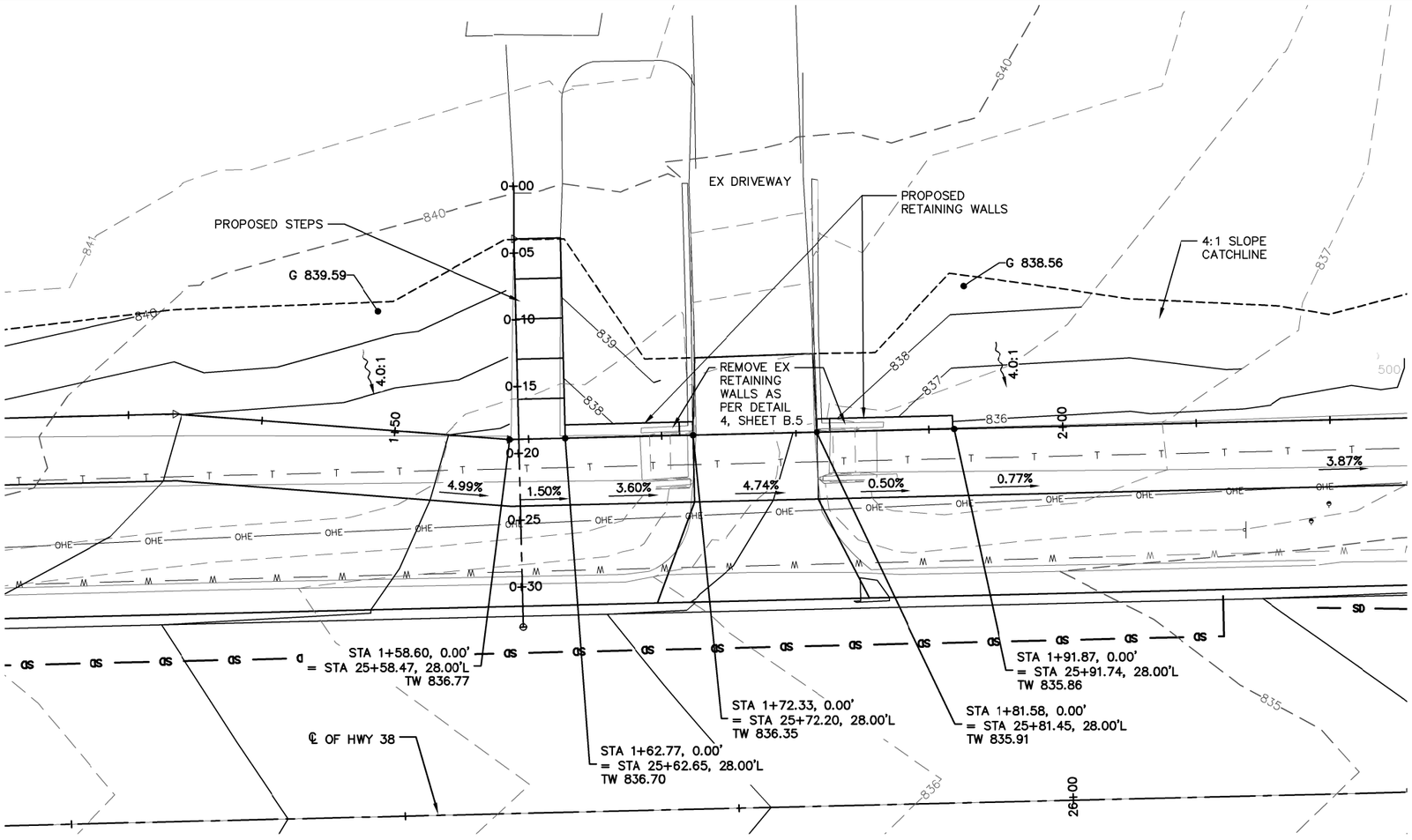
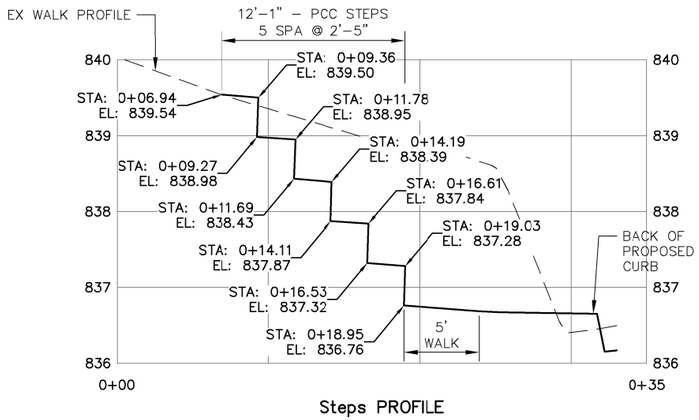
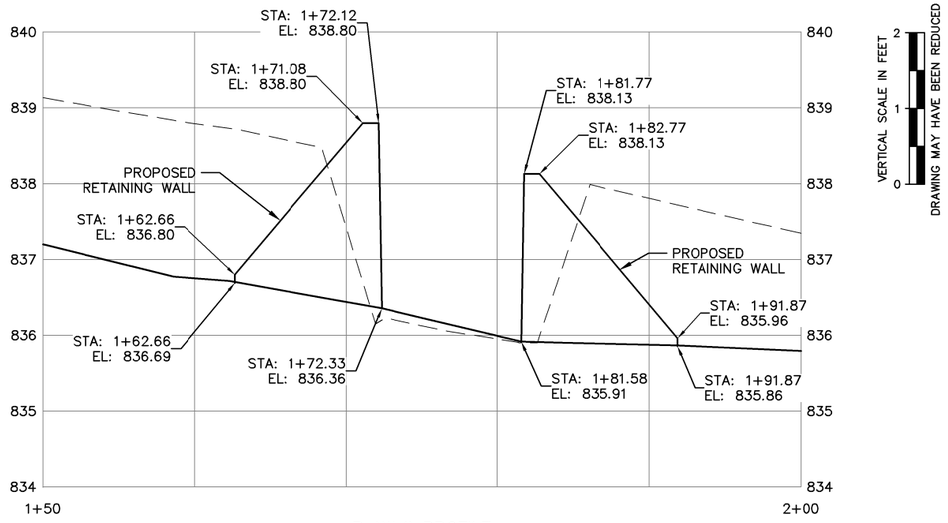
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	B.5	135

STP-038-2(37)--2C-16





Steps PROFILE



RetWall PROFILE

P:\14183\DRAWINGS\CIVIL\14183_ZZ_B RETWALL.DWG 10/22/2015 8:56:28 AM JERI M. VONDERA

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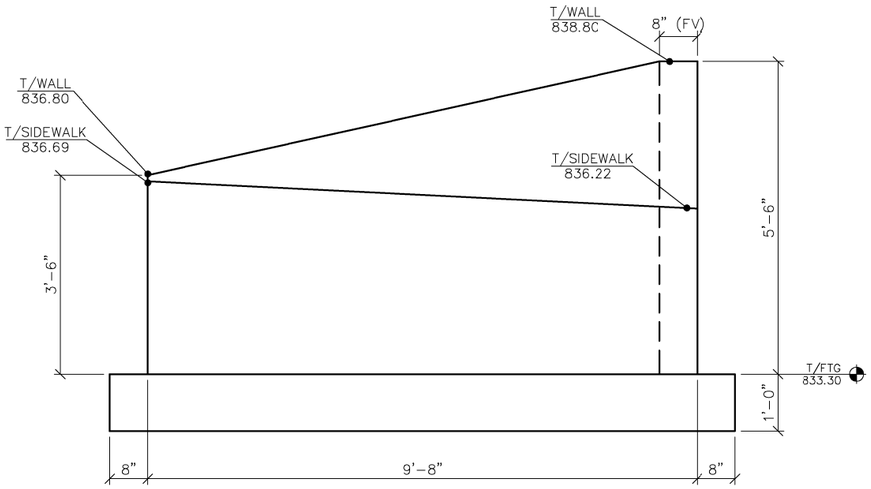
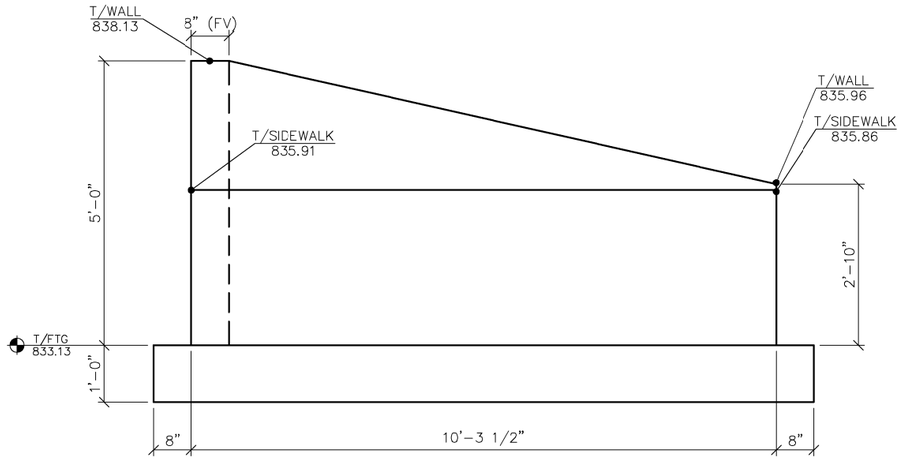
DETAILED BY:	CHECKED BY:					IOWA		2016	B.6	135

STP-038-2(37)--2C-16



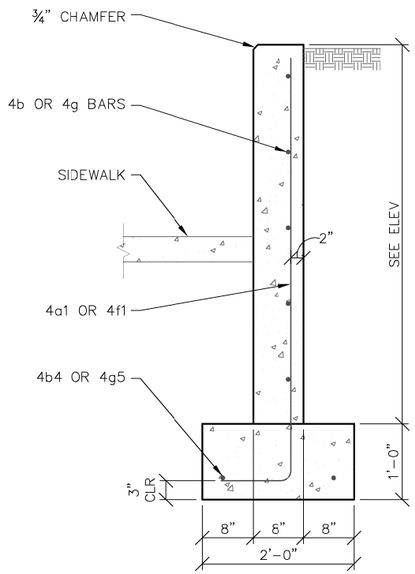
1 / B.7 SOUTH RETAINING WALL ELEVATION

NOT TO SCALE



2 / B.7 NORTH RETAINING WALL ELEVATION

NOT TO SCALE



3 / B.7 RETAINING WALL SECTION

NOT TO SCALE

NOTES:

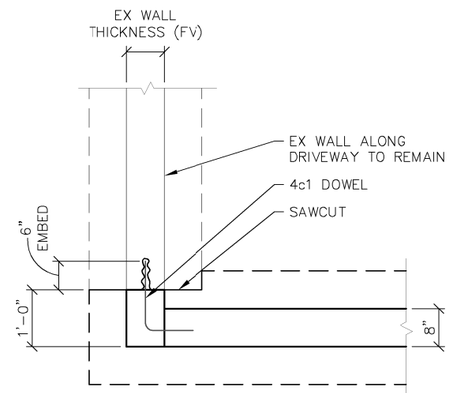
THE MINIMUM CLEAR DISTANCE FROM THE FACE OF CONCRETE TO NEAR REINFORCEMENT BAR IS TO BE 2 INCHES, UNLESS OTHERWISE NOTED OR SHOWN.

ALL REINFORCING STEEL IS TO BE GRADE 60.

ALL REINFORCING STEEL IS TO BE EPOXY COATED.

FIELD VERIFY THE EXISTING WALL THICKNESS AND MATCH AT THE CONNECTION BETWEEN EXISTING AND NEW WALLS.

(FV) = FIELD VERIFY



4 / B.7 CONNECTION DETAIL, TYP BOTH WALL

NOT TO SCALE

Design For

IA 38

FROM W JCT US 30 TO NCL STANWOOD

RETAINING WALL SECTIONS & DETAILS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

P:\14\183\DRAWINGS\CIVIL\14183_ZZ_B RETAINING WALL DETAILS.DWG 10/22/2015 8:56:39 AM JERI M. VONDERA

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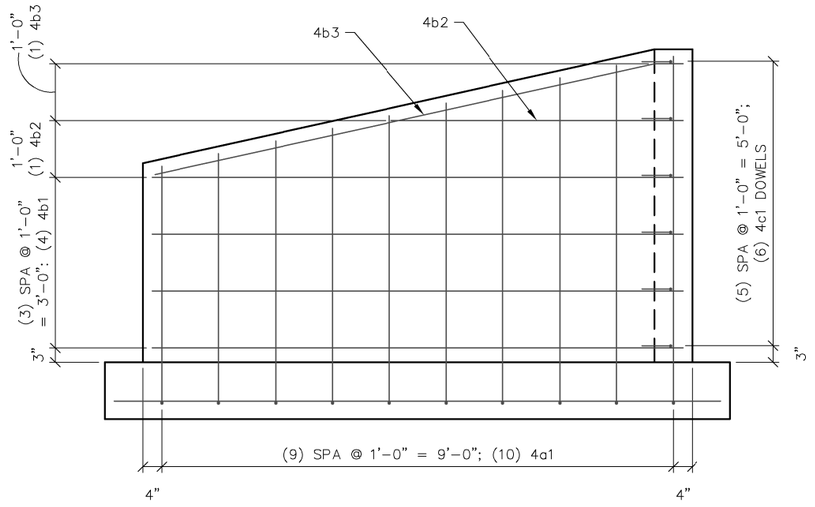
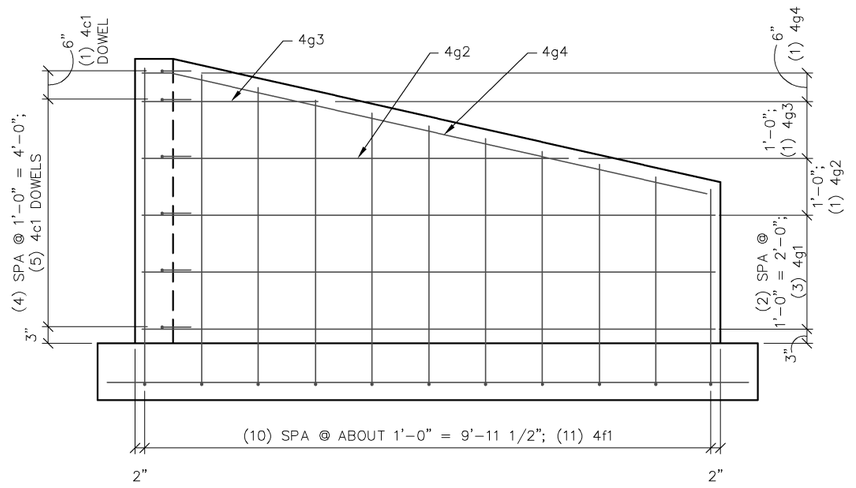
STP-038-2(37)--2C-16	IOWA	.	2016	B.7	135

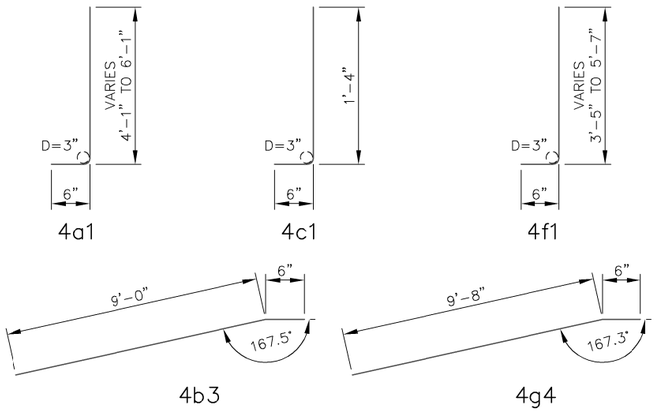


1 / B.8 SOUTH RETAINING WALL REINFORCING
NOT TO SCALE



2 / B.8 NORTH RETAINING WALL REINFORCING
NOT TO SCALE

BENT BAR DETAILS



NOTE: ALL DIMENSIONS ARE OUT TO OUT.
D = PIN DIAMETER

EPOXY REINFORCING STEEL - TWO RETAINING WALLS

BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
				FT '- IN	LB
4 a1	VERTICAL, SOUTH WALL, VARIES 4'-7 TO 6'-7	⌟	10	5 '- 7	37
4 b1	HORIZONTAL, SOUTH WALL	—	4	9 '- 4	25
4 b2	HORIZONTAL, SOUTH WALL	—	1	5 '- 1	3
4 b3	HORIZONTAL, SOUTH WALL, TOP	⌒	1	9 '- 6	6
4 b4	HORIZONTAL, SOUTH FOOTING	—	2	10 '- 8	14
4 c1	DOWELS TO EXISTING WALL, BOTH WALLS	⌟	12	1 '- 10	15
4 f1	VERTICAL, NORTH WALL, VARIES 3'-11 TO 6'-1	⌟	11	5 '- 0	37
4 g1	HORIZONTAL, NORTH WALL	—	3	9 '- 11	20
4 g2	HORIZONTAL, NORTH WALL	—	1	7 '- 6	5
4 g3	HORIZONTAL, NORTH WALL	—	1	3 '- 1	2
4 g4	HORIZONTAL, NORTH WALL, TOP	⌒	1	10 '- 2	7
4 g5	HORIZONTAL, NORTH FOOTING	—	2	11 '- 3	15
	TOTAL EPOXY COATED REINFORCING (LB)				186

CONCRETE QUANTITIES

LOCATION	CONC. (CY)
SOUTH WALL FOOTING	0.8
SOUTH WALL	1.1
NORTH WALL FOOTING	0.8
NORTH WALL	1.0
TOTAL (CY)	3.7

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD
.
RETAINING WALL REINFORCING DETAILS
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

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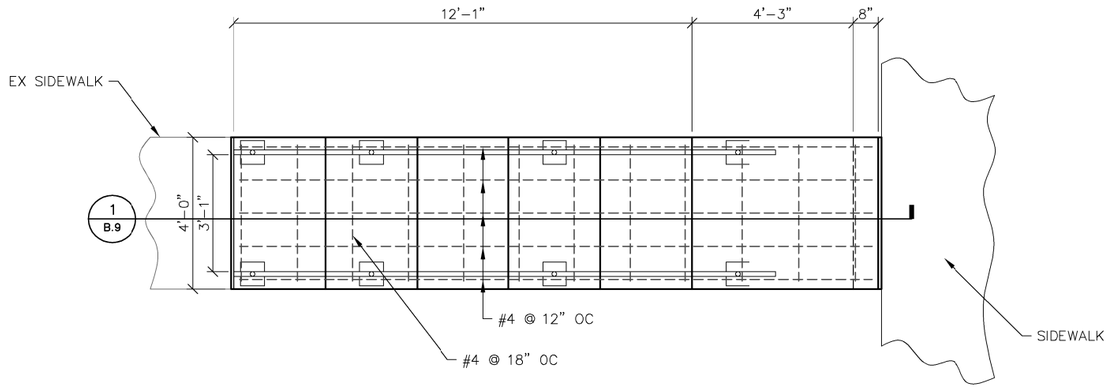


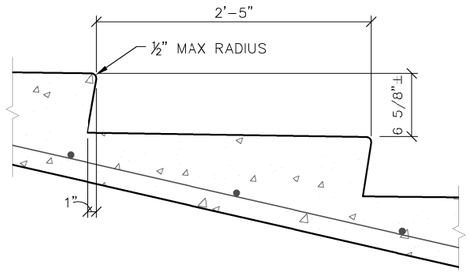
NORTH

STAIR PLAN

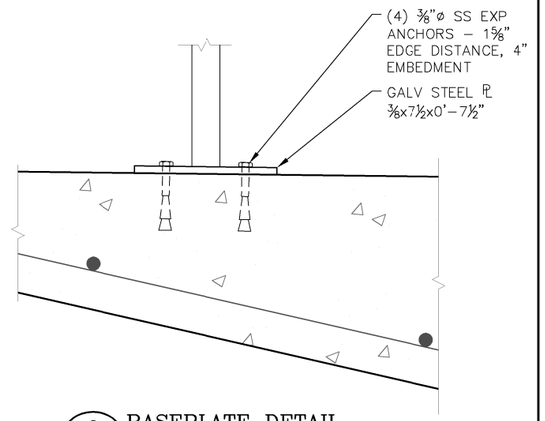
NOTES:

PROVIDE A MINIMUM OF 2 INCHES OF COVER FOR ALL REINFORCING.

ENSURE ALL RISERS ARE AN EQUAL HEIGHT AND ALL TREADS ARE AN EQUAL DEPTH WITHIN A FLIGHT OF STAIRS.

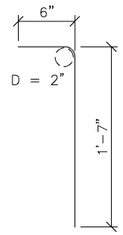


2 B.9 TREAD AND RISER DETAIL
NOT TO SCALE



3 B.9 BASEPLATE DETAIL
NOT TO SCALE

BENT BARS



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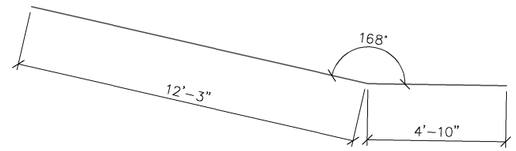

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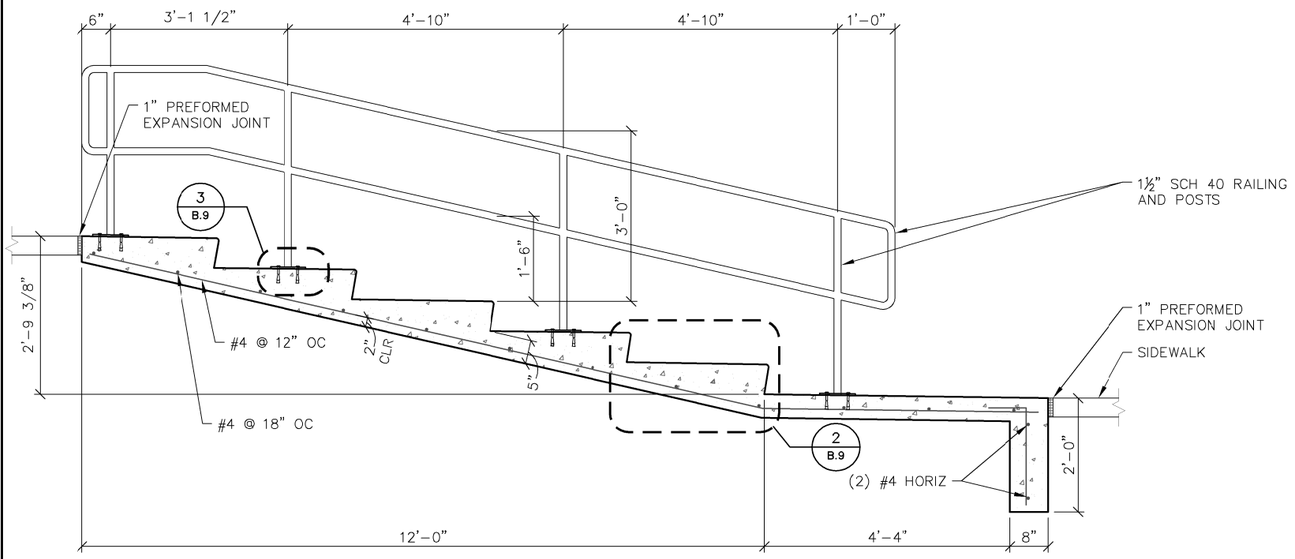

1 B.9 SOUTH RETAINING WALL REINFORCING
NOT TO SCALE

RAILING NOTES:

THE STEEL PIPE RAILING IS TO BE BID ON LINEAL FOOT BASIS MEASURED END TO END OF RAIL. THE PRICE BID FOR "ORNAMENTAL METAL RAILING" SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIAL, INCLUDING ANCHOR BOLTS AND SHIMS, AND ALL OF THE EQUIPMENT AND LABOR REQUIRED TO ERECT THE RAIL IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.

THE MATERIAL FOR TUBE RAILS, POSTS AND SPLICE TUBES SHALL BE STANDARD STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, TYPE E OR S, GRADE B. BASE PLATES AND SHIMS SHALL MEET THE REQUIREMENTS OF ASTM A-36. THE ASSEMBLY SHALL BE GALVANIZED, AFTER FABRICATION, IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A-123.

END OF RAIL SECTIONS ARE TO BE SAWED OR MILLED. ALL CUT ENDS ARE TO BE TRUE, SMOOTH, AND FREE OF BJRRS OR RAGGED EDGES. ALL CORNERS TO BE MITERED JOINTS. NO PAINTING WILL BE REQUIRED.

THE STUD CONCRETE ANCHORS SHALL BE STAINLESS STEEL AND HAVE A MINIMUM PULL OUT STRENGTH OF 3,000 POUNDS BASED ON 4,000 PSI CONCRETE.

REINFORCING SHALL BE EPOXY COATED.

QUANTITIES	
EPOXY COATED REINFORCING	98 LB
STRUCTURAL CONC MISC.	98 LB
ORNAMENTAL METAL RAILING	38.6 LF

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD
.
RETAINING WALL REINFORCING DETAILS
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

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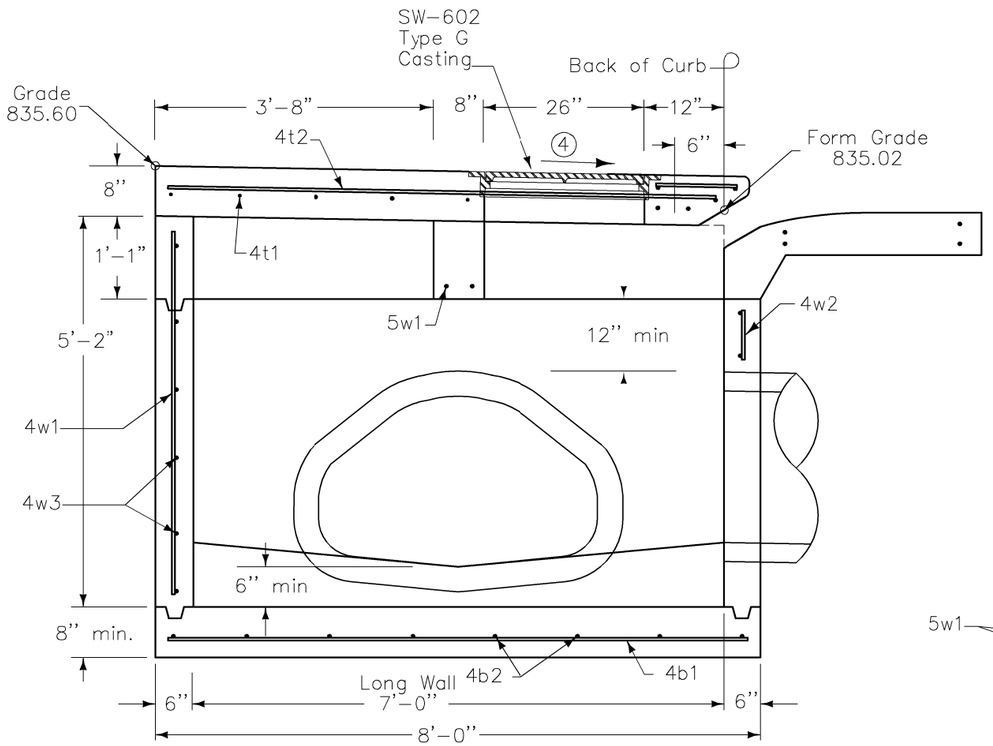
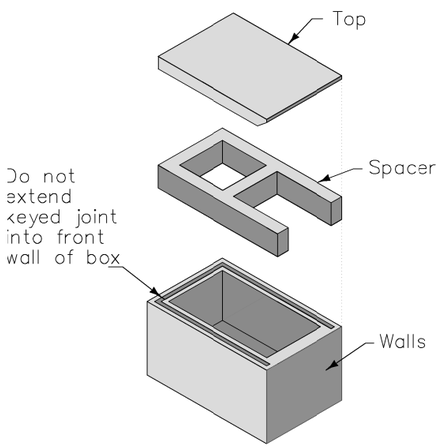
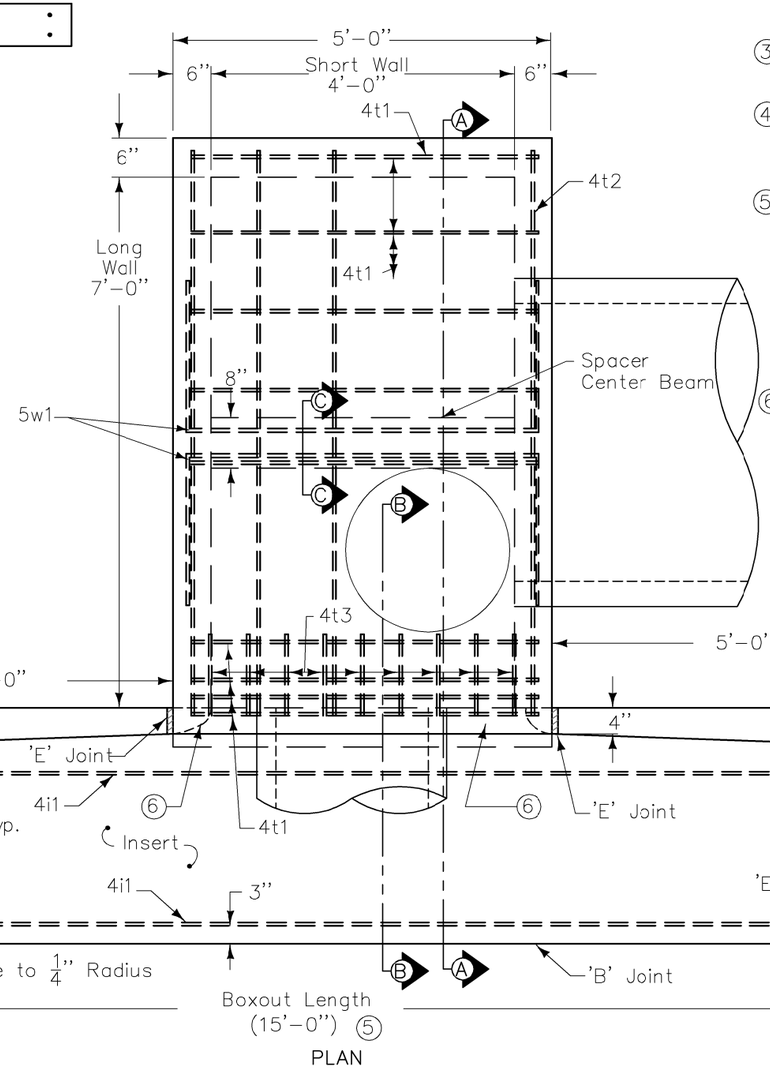
STP-038-2(37)--2C-16



SECTION A-A



ISOMETRIC
(Refer to Section B-B
for alignment of Top
with Spacer)



PLAN

① Modify dimensions as required to accommodate other curb heights when specified.

② Insert shaping may be modified for insert widths less than 36 inches. For an 18 inch insert, reduce dimensions indicated by $\frac{1}{4}$ inch.

③ 12 inch minimum wall height above all pipes.

④ Slope of 1.5% or as specified in the contract documents.

⑤ Transverse joint spacing on new concrete pavement is controlled by the intake boxout. Adjust adjacent joint spacing as required to accommodate boxouts.

For retrofit intakes, match existing pavement joints. Stop any transverse pavement joints that do not conform to the minimum spacing requirements at the edge of the insert area.

⑥ Rounded shaping at inlet.

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD
.
SW-510 MODIFIED DETAILS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

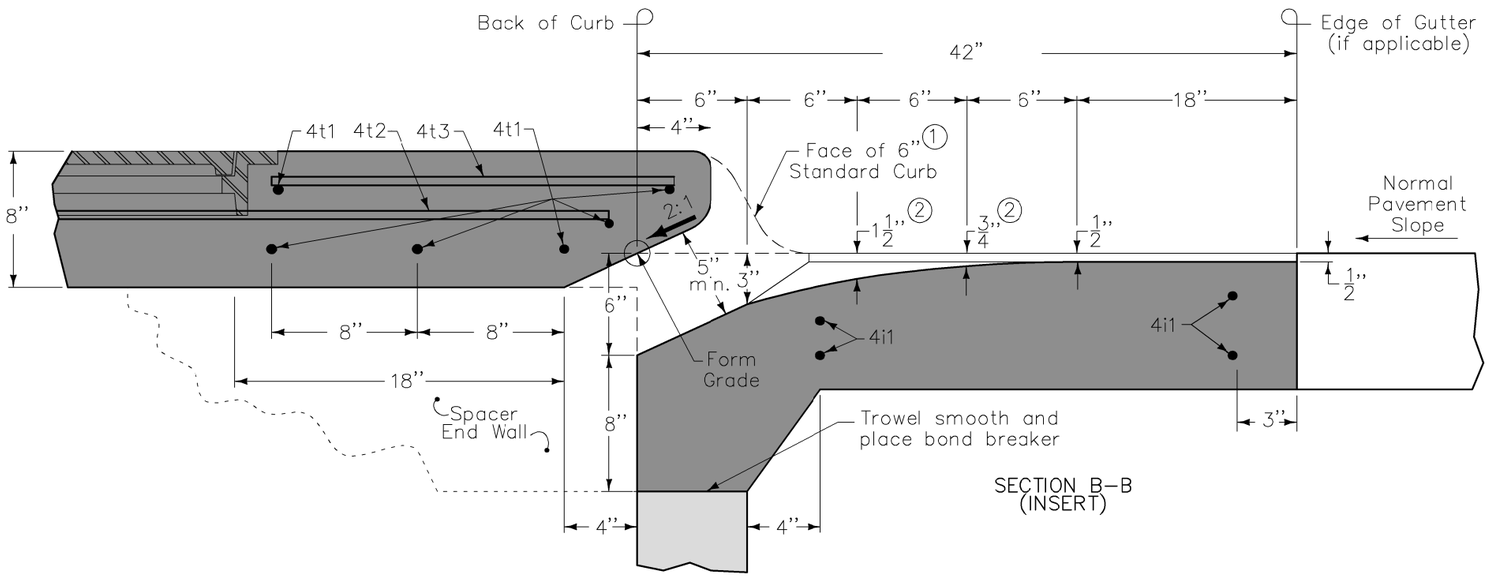
P:\14\183\DRAWINGS\CIVIL\14183_ZZ_B_SW 510 MODIFIED.DWG 10/22/2015 8:57:04 AM JERI M. VONDERA

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

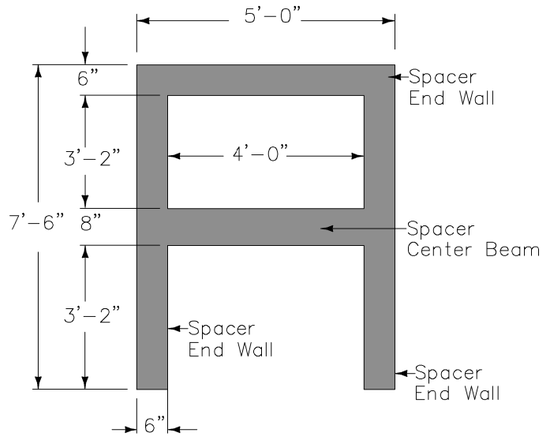
iiw 563.556.2464 ◆ 800.556.4491
IIW, P.C. ◆ www.iiwengr.com

CITY OF STANWOOD, CEDAR COUNTY

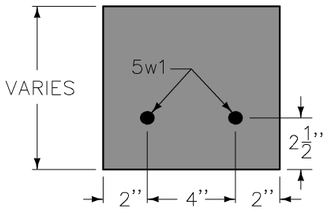
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	B.10	135



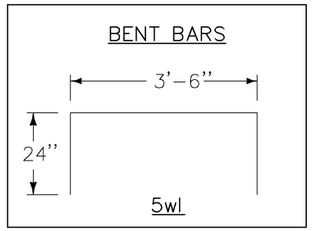
SECTION B–B
(INSERT)



PLAN
(SPACER)



SECTION C–C



REINFORCING BAR LIST - SW-510 MODIFIED

BAR	LOCATION	SHAPE	SPACE (IN)	NO.	LENGTH ft - in.	WEIGHT (LB)
4 b1	BASE, LONG.		12	5	7 - 6	25
4 b2	BASE, TRANS.		12	8	4 - 6	24
4 i1	INSERT, LONG.		SEE PLAN	4	14 - 4	38
4 t1	SLAB, TRANS.		SEE PLAN	10	4 - 6	30
4 t2	SLAB, LONG.		12	4	7 - 4	20
4 t3	SLAB, TRANS. AT GUTTER LINE		6	9	1 - 1	7
4 w1	WALL, (1) SHORT & (2) LONG WALLS, VERT.		12	21	4 - 8	65
4 w2	WALL, (1) SHORT WALL AT GUTTER LINE, VERT.		12	5	3 - 9	13
4 w3	WALL, (2) SHORT WALLS, HORIZ.		12	11	4 - 8	34
4 w4	WALL, (2) LONG WALLS, HORIZ.		12	10	7 - 8	51
5 w1	HOOK @ BEAM	⌐	12	4	11 - 0	46
	TOTAL EPOXY-COATED REINFORCING STEEL (LB)					353

NOTE: FIELD CUT REINFORCING AS REQUIRED FOR PIPE PENETRATIONS.

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD
.
SW–510 MODIFIED DETAILS
.
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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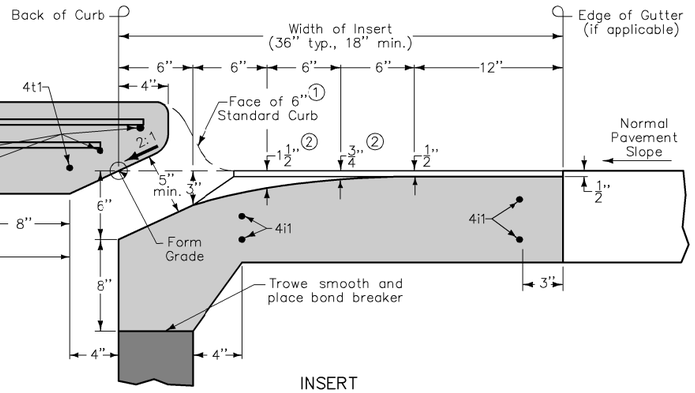
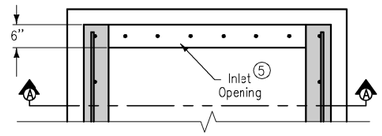
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	B.11	135

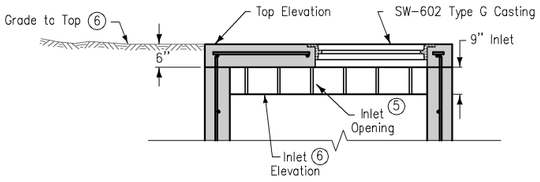


INSERT

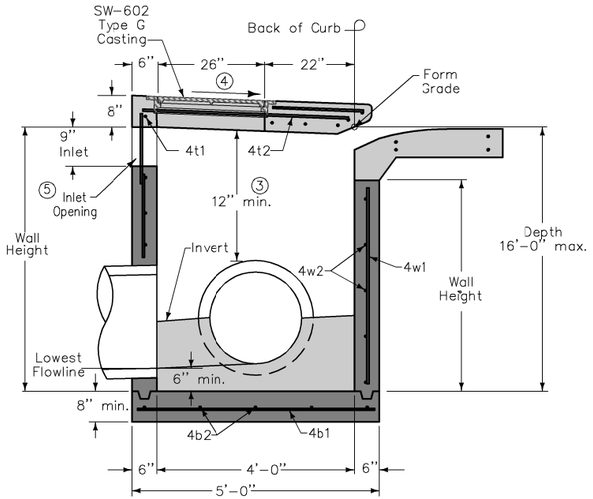
MAXIMUM PIPE DIAMETERS	
Precast Structure	Cast-in-place Structure
30"	36"



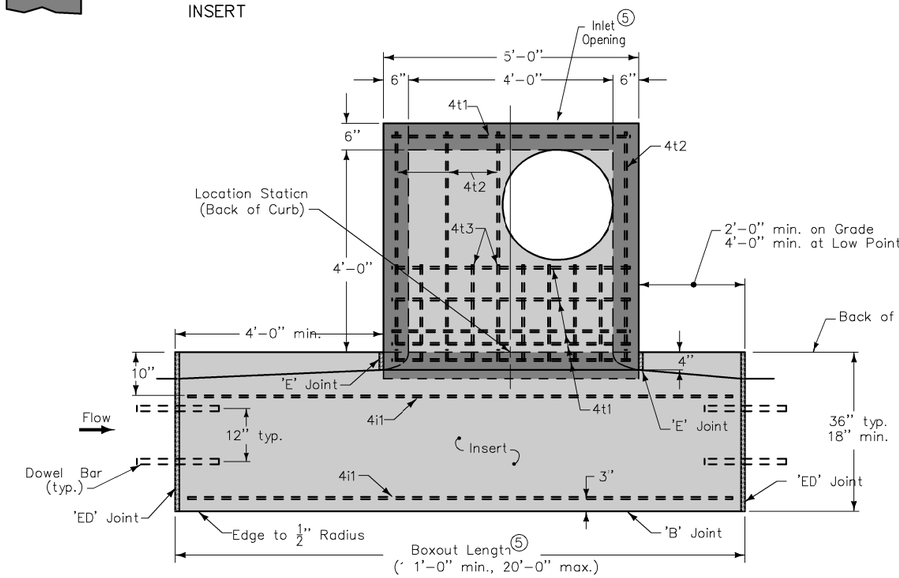
INLET OPENING
PLAN



SECTION A–A



TYPICAL SECTION



PLAN

REINFORCING BAR LIST						
Mark	Size	Location	Shape	Count	Length	Spacing
4t1	4	Top	——	7	4'-8"	See Insert
4t2	4	Top	——	4	4'-6"	12"
4t3	4	Top	——	10	1'-10"	6"
4b1	4	Base	——	6	4'-6"	1 1"
4b2	4	Base	——	6	4'-6"	1 1"
4i1	4	Insert	——	4	Boxout Length minus 8"	See Plan
4w1	4	Walls	——	16	Wall Height minus 4"	14"
4w2	4	Walls	——	Varies	4'-8"	12"
4w3	4	Walls	——	Varies	4'-8"	12"

① Modify dimensions as required to accommodate other curb heights when specified.

② Insert shaping may be modified for insert widths less than 36 inches. For an 18 inch insert, reduce dimensions indicated by ½ inch.

③ 12 inch minimum wall height above all pipes.

④ Slope of 1.5% or as specified in the contract documents.

⑤ Construct inlet openings with 15–inch #4 epoxy–coated bars at 8 inches on center. Embed bars a minimum of 3 inches into walls and top at all openings.

⑥ Grade to inlet elevation on open sides. Grade to top elevation on closed sides.

⑦ Cast–in–place base shown. If base is precast integral with walls, the footprint of base is not required to extend beyond the outer edge of the walls.

⑧ Transverse joint spacing on new concrete pavement is controlled by the intake boxout. Adjust adjacent joint spacing as required to accommodate boxouts.

For retrofit intakes, match existing pavement joints. Stop any transverse pavement joints that do not conform to the minimum spacing requirements at the edge of the insert area.

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

SW–508 MODIFIED DETAILS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: TRACED BY:
DETAILED BY: CHECKED BY:

iiw 563.556.2464 ◆ 800.556.4491
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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER STP–038–2(37)––2C–16

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA	.	2016	B.12	135

P:\14\183\DRAWINGS\CIVIL\14183_ZZ_B_SW 508 MODIFIED.DWG 10/22/2015 8:57:24 AM JERI M. VONDERA

ESTIMATED PROJECT QUANTITIES - IA 38 From W Jct US 30 to NCL Stanwood

STP-038-2(37)--2C-16

CONSTRUCTION USE ONLY	REF. NO.	ITEM CODE	BID ITEM DESCRIPTION	UNITS	DIVISION 1 Paving	DIVISION 2 Sidewalk/Ret Wall/Steps	DIVISION 3 Storm	DIVISION 4 Sanitary/Water	QUANTITY TOTAL
	1	2101-0850002	CLEARING & GRUBBING	UNIT	191.7			251.3	443
	2	2102-0425071	SPECIAL BACKFILL	CY	590				590
	3	2102-2710070	EXCAVATION CL 10, RDWY & BORROW	CY	6858		90.7		6948.7
	4	2102-2712015	EXCAVATION CL 12, BOULDERS OR ROCK FRAG.	CY	4				4
	5	2105-8425015	TOPSOIL STRIP SALVAGE & SPREAD	CY	605		74	66	745
	6	2111-8174100	GRANULAR SUBBASE	SY	425.3	91.2			516.5
	7	2115-0100000	MODIFIED SUBBASE	CY	5619.9			316.4	5936.3
	8	2121-7425010	SHOULDER GRANULAR, TYPE A	TON	629.7				629.7
	9	2122-5190007	PAVED SHOULDER, PCC, 7 IN	SY	1318				1318
	10	2301-1033095	STANDARD OR SLIP FORM PCC PAVEMENT, CLASS C, CLASS 3 DURABILITY, 9.5 IN	SY	13785.8				13785.8
	11	2303-0021500	HMA (300,000 ESAL), BASE COURSE,1/2 IN. MIX	TON	35			81.2	116.2
	12	2303-0023500	HMA (300,000 ESAL), INTER OR SURF, 1/2 IN.MIX, NO FRIC REQ	TON	35			81.2	116.2
	13	2303-0246428	ASPHALT BINDER, PG 64-28	TON	5.4			9.7	15.1
	14	2303-0051500	HMA (10M ESAL) BASE COURSE, 1/2" MIX	TON	9.8				9.8
	15	2303-0053500	HMA (10M ESAL) SURFACE COURSE, 1/2" MIX, NO SPCL FRIC REQ	TON	9.8				9.8
	16	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE	TON	108.8				108.8
	17	2401-6745650	RMVL OF EXIST STRUCTURES	LS		1			1
	18	2401-6745910	RMVL OF SIGN	EACH	51				51
	19	2403-0100000	STRUCTURAL CONCRETE (MISCELLANEOUS)	CY		5.4			5.4
	20	2404-7775005	STEEL REINFORC EPOXY COATED	LB		284			284
	21	2416-0102230	APRON. LOW CLEARANCE CONCRETE, EQUIVALENT DIAMETER 30 IN.	EACH			1		1
	22	2416-0102236	APRON. LOW CLEARANCE CONCRETE, EQUIVALENT DIAMETER 36 IN.	EACH			1		1
	23	2435-0130148	MANHCLE, SANITARY SEWER, SW-301, 48 IN.	EACH				5	5
	24	2435-0130160	MANHCLE, SANITARY SEWER, SW-301, 60 IN.	EACH				3	3
	25	2435-0140200	MANHCLE, STORM SEWER, SW-402	EACH			2		2
	26	2435-0250700	INTAKE, SW-507	EACH			5		5
	27	2435-0250800	INTAKE, SW-508	EACH			1		1
	28	2435-0250810	INTAKE, SW-508 MODIFIED	EACH			1		1
	29	2435-0250900	INTAKE, SW-509	EACH			5		5
	30	2435-0251010	INTAKE, SW-510 MODIFIED	EACH			1		1
	31	2435-0251224	INTAKE, SW-512, 24 IN.	EACH			3		3
	32	2435-0600010	MANHCLE ADJUSTMENT, MINOR	EA				3	3
	33	2435-0700010	CONNECTION TO EXISTING MANHOLE	EA			1		1
	34	2502-8212204	SUBDRAIN PERFORATED PLASTIC PIPE 4 IN	LF	7696				7696
	35	2503-0114215	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D (CLASS III), 15 IN.	LF			130		130
	36	2503-0114218	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D (CLASS III), 18 IN.	LF			254		254
	37	2503-0114224	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D (CLASS III), 24 IN.	LF			583		583
	38	2503-0116222	STORM SEWER GRAVITY MAIN, TRENCHED, RCAP, 2000D (CLASS A-III), 22 IN. X 14 IN.	LF			37		37
	39	2503-0116237	STORM SEWER GRAVITY MAIN, TRENCHED, RCAP, 2000D (CLASS A-III), 37 IN. X 23 IN.	LF			55		55
	40	2503-0116244	STORM SEWER GRAVITY MAIN, TRENCHED, RCAP, 2000D (CLASS A-III), 44 IN. X 27 IN.	LF			101		101
	41	2503-0200036	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	LF			663		663
	42	2504-0114008	SANITARY SEWER GRAVITY MAIN, TRENCHED, PVC, 8 IN.	LF				875	875
	43	2504-0134008	SANITARY SEWER GRAVITY MAIN WITH CASING PIPE, TRENCHED, PVC, 8 IN.	LF				151	151
	44	2504-0200404	SANITARY SEWER SERVICE STUB, PVC, 4 IN.	LF				30	30
	45	2504-0200406	SANITARY SEWER SERVICE STUB, PVC, 6 IN.	LF				30	30
	46	2504-0240036	REMOVE SANITARY SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	LF				836	836
	47	2504-0240236	SANITARY SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO 36 IN.	LF				5	5
	48	2510-6745850	REMOVAL OF PAVEMENT	SY	6068.8			707.9	6776.7
	49	2510-6750600	REMOVAL OF INTAKES AND UTILITY ACCESSES	EA			12	5	17
	50	2511-6745900	REMOVAL OF SIDEWALK	SY		1447.6		4.7	1452.3
	51	2511-7526004	SIDEWALK PCC 4 IN	SY		1680.6			1680.6
	52	2511-7526006	SIDEWALK, PCC, 6 IN.	SY		91.2			91.2
	53	2511-7528101	DETECTABLE WARNINGS	SF		220			220
	54	2512-1725256	CURB AND GUTTER PCC 2.5'	LF	43				43
	55	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN.	SY	425.3				425.3
	56	2515-6745600	REMOVAL OF PAVED DRIVEWAY	SY	367.2				367.2
	57	2518-6910000	SAFETY CLOSURE	EACH	10			4	14
	58	2519-4200020	REMOVAL AND REINSTALLATION OF FENCE, CHAIN LINK	LF				88	88
	59	2524-6765010	REMOVE AND RE-INSTALL SIGN, AS PER PLAN	EACH	1				1
	60	2524-9100030	OBJECT MARKER, TYPE 3	EACH	2				2
	61	2524-9210000	MILEPOST MARKER	EA	2				2
	62	2524-9275100	WOOD POSTS FOR TYPE A OR B SIGNS, 4 IN. X 4 IN.	LF	476				476
	63	2524-9275222	WOOD POSTS FOR TYPE A OR B SIGNS, 4 IN. X 6 IN.	LF	64				64
	64	2524-9325001	TYPE A SIGNS ALUM	SF	291.9				291.9
	65	2524-9325150	INSTALL TYPE A SIGN	EACH	34				34
	66	2527-9263109	PAINTED PAVEMENT MARKING WATERBORNE OR SOLVENT	STA	86.13				86.13
	67	2527-9263131	WET RETROREFLECTIVE REMOVABLE TAPE MARKINGS	STA	37.34				37.34
	68	2527-9263180	PAVEMENT MARKINGS REMOVED	STA	11.91				11.91
	69	2528-8445110	TRAFFIC CONTROL	LS	0.8		0.1	0.1	1
	70	2528-9290050	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	CDAY	7				7
	71	2533-4980005	MOBILIZATION	LS	0.59	0.05	0.12	0.26	1.02
	72	2552-0000210	TRENCH FOUNDATION	TON				16	16
	73	2554-0112006	WATER MAIN, TRENCHED, DUCTILE IRON PIPE (DIP), 6 IN.	LF				91	91
	74	2554-0114004	WATER MAIN, TRENCHED, POLYVINYL CHLORIDE PIPE (PVC), 4 IN.	LF				23	23
	75	2554-0114006	WATER MAIN, TRENCHED, POLYVINYL CHLORIDE PIPE (PVC), 6 IN.	LF				1620	1620
	76	2554-0132006	WATER MAIN WITH CASING PIPE, TRENCHED, DUCTILE IRON PIPE LF STD (DIP), 6 IN.	LF				138	138
	77	2554-0203000	FITTINGS BY WEIGHT, DUCTILE IRON	LB				2089	2089
	78	2554-0204110	WATER SERVICE STUB, COPPER, 1 IN.	EACH				15	15
	79	2554-0207004	VALVE, GATE, DIP, 4 IN.	EACH				1	1
	80	2554-0207006	VALVE, GATE, DIP, 6 IN.	EACH				18	18
	81	2554-0210201	FIRE HYDRANT ASSEMBLY, WM-201	EACH				7	7
	82	2595-0005150	RAILROAD PROTECTIVE LIABILITY INSURANCE FOR UNION PACIFIC RAILROAD	LS	1				1
	83	2599-9999005	STREET NAME SIGNS, COMPLETE, INSTALLED	EA	6				6
	84	2599-9999009	CASING, PVC, 3 INCH	LF				562	562
	85	2599-9999009	CASING, STEEL, 12 INCH	LF				131	131
	86	2599-9999009	FULL DEPTH SAW CUT	LF	436.1				436.1
	87	2599-9999009	ORNAMENTAL METAL RAILING	LF		28.6			28.6
	88	2599-9999020	SUBGRADE STABILIZATION MATERIAL, MODIFIED MACADAM	TON	200				200
	89	2601-2634100	MULCH	ACRE	1.26		0.03	0.11	1.4
	90	2601-2636043	SEEDING AND FERTILIZING (RURAL)	ACRE	0.19				0.19
	91	2601-2636044	SEEDING AND FERTILIZING (URBAN)	ACRE	1.07		0.03	0.11	1.21
	92	2601-2640350	SPECIAL DITCH CONTROL, WOOD EXCELSIOR MAT	SQ			39		39
	93	2602-0000020	SILT FENCE	LF	425				425
	94	2602-0000030	SILT FENCE-DITCH CHECKS	LF	20		94		114
	95	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	445		94		539
	96	26020000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	225		47		272
	97	2602-0000309	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA.	LF	780				780
	98	6000-2528010	RAILROAD FLAGGER	DAY	12				12

Design For

IA 38

FROM W JCT US 30 TO NCL STANWOOD

BID ITEMS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: TRACED BY:

DETAILED BY: CHECKED BY:

iiw 563.556.2464 ◆ 800.556.4491
IIW, P.C. ◆ www.iiwengr.com

CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.1	135

P:\14\183\DRAWINGS\CIVIL\14183_ZZ_C.DWG 10/22/2015 10:03:19 AM JERI M. VONDERA
STP-038-2(37)--2C-16

STP-038-2(37)--2C-16

REF. NO.	DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS ESTIMATE REFERENCE INFORMATION	BID ITEM DESCRIPTION
1	GRUBBING OF TOPPED TREES THROUGHOUT PROJECT CORRIDOR. CLEARING AND GRUBBING OF 12" AND 18" TREES LOCATED NEAR SANITARY SEWER 10+25, (MU.5) AS DIVISION 4, IF NECESSARY. CLEARING OF TREES PRIOR TO APRIL 15, OR AFTER SEPTEMBER 15, ONLY.	
2	QUANTITY ESTIMATED BASED UPON 2 FOOT DEPTH, AND A 3-FOOT WIDTH FROM ABOUT US30 TO ABOUT FARMER'S STREET ACTUAL LENGTHS, WIDTHS AND DEPTH WILL VARY FROM AREA TO AREA DEPENDING ON ACTUAL CONDITION OF PROPOSED SUBGRADE. DETERMINATION OF NEED FOR SPECIAL BACKFILL MADE AFTER OPERATIONS ASSOCIATED WITH MODIFIED SUBBASE COMPLETE. ASSOCIATED WITH REMOVAL AND REPLACEMENT OF UNSUITABLE OR UNSTABLE PAVEMENT SUBGRADE SOILS. SUITABLE SOILS EXCAVATED AS CLASS 10 MAY BE USED TO REPLACE UNSUITABLE OR UNSTABLE SOILS TO BE REPLACED.	SPECIAL BACKFILL
3	SEE T SHEETS. IF EXCAVATED MATERIAL ASSOCIATED WITH INSTALLATION OF STORM SEWER, WATER MAIN, OR SANITARY SEWER IS SUITABLE, THE CONTRACTOR MAY USE THE SUITABLE EXCESS MATERIAL FOR ROADWAY FILL. CLASS 10 QUANTITY INCLUDES QUANTITY ASSOCIATED WITH DITCH FROM 27+25 TO 27+75 LT. QUANTITY ALSO INCLUDES EARTHWORK ASSOCIATED WITH GRANULAR AND PCC SHOULDERS. METHOD OF MEASUREMENT SHALL BE THE QUANTITY IN THE CONTRACT DOCUMENTS. BASIS OF PAYMENT SHALL INCLUDE ALL EQUIPMENT, MATERIALS, TOOLS AND LABOR NECESSARY TO EXCAVATE FOR THE STREET AND SIDEWALK AREAS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. VOLUME OF CLASS 10 EXCAVATION, ROADWAY AND BORROW IS ESTIMATED TO BE 6858 CY CUT (0% SHRINKAGE) AND 574 CY FILL (0% SHRINKAGE). ALL CLASS 10 EXCAVATION, ROADWAY AND BORROW MOVED TO OR WITHIN THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF ANY UNSUITABLE OR EXCESS MATERIAL AT LOCATIONS PROVIDED BY THE CONTRACTOR.	EXCAVATION CL 10, RDWY & BORROW
4	REMOVAL OF LANSCAPING BOULDERS LOCATED AT STATIONS 14+25 RT, 15+66 RT, AND 15+72 RT.	EXCAVATION CL 12, BOULDERS OR ROCK FRAG.
5	TO BE PLACED AS NEEDED AND AS AUTHORIZED BY THE ENGINEER IN ALL AREAS WHERE GRASS IS TO BE THE FINAL SURFACE. STRIP AND PLACE AT A DEPTH OF 4 INCHES. METHOD OF MEASUREMENT SHALL BE THE QUANTITY MEASURED BY THE ENGINEER. FOR THE AMOUNT OF TOPSOIL PLACED. THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER CY. THIS PAYMENT SHALL INCLUDE ALL EQUIPMENT, MATERIALS, TOOLS AND LABOR NECESSARY TO INSTALL TOPSOIL IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	TOPSOIL STRIP SALVAGE & SPREAD
6	SHALL BE PLACED AS SHOWN ON THE B SHEETS. FOR USE UNDER PCC DRIVES AND 6-INCH THICK PCC SIDEWALK.	GRANULAR SUBBASE
7	SHALL BE PLACED AS SHOWN ON THE B SHEETS. FOR USE UNDER 9.5 INCH PCC PAVEMENT, 4' WIDE 7 INCH THICK PAVED SHOULDERS, AND HMA.	MODIFIED SUBBASE
8	SHALL BE PLACED AS SHOWN ON THE B SHEETS.	SHOULDER GRANULAR, TYPE A
9	SHALL BE PLACED AS SHOWN IN THE TYPICAL SECTIONS ON THE B SHEETS. SPECIAL BACKFILL ASSOCIATED WITH THIS ITEM SHALL BE INCIDENTAL AND NOT PAID FOR SEPARATELY. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. SEE QUANTITIES FOR SPECIAL BACKFILL MATERIAL (SECTION 4132) ASSOCIATED WITH PAVED SHOULDERS IN SHOULDER TABULATION ON C SHEETS.	PAVED SHOULDER, PCC, 7 IN
10	FOR IA38/ASH STREET INCLUDING INTEGRAL CURB AND GUTTER. FOR PLACEMENT OF ALL PCC STREET PAVEMENT ACCORDING TO THE CONTRACT DOCUMENTS. SEE B AND L SHEETS FOR DETAILS. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. CONTRACTOR SHALL NOT USED KEYWAY FOR PAVEMENT JOINTS. ALL CURB DROPS SHALL BE HAND FORMED, NO CUTS ALLOWED WITHOUT PERMISSION FROM THE ONSITE REPRESENTATIVE. INCLUDES PAVEMENT SMOOTHNESS PER SECTION 2316.	STANDARD OR SLIP FORM PCC PAVEMENT, CLASS C, CLASS 3 DURABILITY, 9.5 IN
11	TO BE PLACED AS SHOWN ON THE B SHEETS. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. TABULATED ON C SHEETS.	HMA (300,000 ESAL), BASE COURSE,1/2 IN. MIX
12	TO BE PLACED AS SHOWN ON THE B SHEETS. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. TABULATED ON C SHEETS.	HMA (300,000 ESAL), INTER OR SURF, 1/2 IN.MIX, NO FRIC REQ
13	TABULATED ON C SHEETS	ASPHALT BINDER, PG 64-28
14	TO BE PLACED AS SHOWN ON THE B SHEETS. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. TABULATED ON C SHEETS.	HMA (10M ESAL) BASE COURSE, 1/2" MIX
15	TO BE PLACED AS SHOWN ON THE B SHEETS. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. TABULATED ON C SHEETS.	HMA (10M ESAL) SURFACE COURSE, 1/2" MIX, NO SPCL FRIC REQ
16	FOR USE WHERE NEW CONSTRUCTION ABUTS EXISTING STONE-SURFACE DRIVEWAY. WIDTH, LENGTH AND THICKNESS AS INDICATED ON THE MU SHEETS. METHOD OF MEASUREMENT WILL BE THE QUANTITY, IN TONS, COMPUTED BY THE ENGINEER FROM WEIGHTS OF INDIVIDUAL TRUCK LOADS (TICKETS). WIDTHS AND DEPTHS SHALL BE AS INDICATED IN THE B SHEETS. LENGTHS SHALL BE APPROVED BY THE ENGINEER. MATERIAL SHALL CONFORM TO GRADATION NUMBER 11 (4120.04).	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE
17	FOR REMOVAL OF STAIRS AND PORTIONS OF EXISTING RETAINING WALLS STATIONS 25+50 TO 26+00 LT. SEE B SHEET FOR DETAILS.	RMVL OF EXIST STRUCTURES
18	AS INDICATED IN THE TABULATION ON THE C SHEET. 3 SIGNS IN CHURCH PARKING LOT (NEAR STA 1+50) TO BE SALVAGED AND RETURNED TO OWNER. CONTRACTOR TO NOTIFY CHURCH PRIOR TO REMOVAL AND TO CAREFULLY REMOVE THE SIGNS AND DELIVER TO CHURCH REPRESENTATIVE.	RMVL OF SIGN
19	FOR RETAINING WALL AND STAIRS, AS DETAILED IN THE B SHEETS, 25+50 TO 26+00 LT. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION.	STRUCTURAL CONCRETE (MISCELLANEOUS)
20	FOR RETAINING WALL AND STAIRS, AS DETAILED IN THE B SHEETS, 25+50 TO 26+00 LT.	STEEL REINFORC EPOXY COATED
21	SEE M SHEETS FOR DETAILS AND TABULATION.	APRON, LOW CLEARANCE CONCRETE, EQUIVALENT DIAMETER 30 IN.
22	SEE M SHEETS FOR DETAILS AND TABULATION.	APRON, LOW CLEARANCE CONCRETE, EQUIVALENT DIAMETER 36 IN.
23	AT LOCATIONS AS INDICATED ON THE MU SHEETS. INTERNAL CHIMNEY SEAL ONLY. ITEM SHALL BE PRECAST ONLY. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION FOR CAST IN PLACE COMPONENTS. INCLUDES CONNECTIONS TC EXISTING PIPE. SHALL INCLUDE O-RINGS.	MANHOLE, SANITARY SEWER, SW-301, 48 IN.
24	ALL ADDITIONAL COSTS NECESSARY FOR THE COMPONENTS ASSOCIATED WITH AN INTERNAL DROP MANHOLE SHALL BE INCLUDED IN THIS BID ITEM. SHALL INCLUDE THE FLEXIBLE CONNECTION WITH SS SHEAR BAND LOCATED 5 FOOT OUTSIDE OF THE INTERNAL DROP MANHOLE. SHALL INCLUDE O-RINGS AND INTERNAL CHIMNEY SEAL.	MANHOLE, SANITARY SEWER, SW-301, 60 IN.
25	SIZE SHALL BE 60 INCH INSIDE DIMENSION WITH 6-INCH WALL THICKNESS.	MANHOLE, STORM SEWER, SW-402
26	CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION FOR ANY CAST-IN-PLACE COMPONENTS.	INTAKE, SW-507
27	CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION FOR ANY CAST-IN-PLACE COMPONENTS.	INTAKE, SW-508
28	CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION FOR ANY CAST-IN-PLACE COMPONENTS.	INTAKE, SW-508 MODIFIED
29	CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION FOR ANY CAST-IN-PLACE COMPONENTS.	INTAKE, SW-509
30	CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION FOR ANY CAST-IN-PLACE COMPONENTS.	INTAKE, SW-510 MODIFIED
31	CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION FOR ANY CAST-IN-PLACE COMPONENTS.	INTAKE, SW-512, 24 IN.
32	FOR ADJUSTMENT OF EXISTING SANITARY SEWER MANHOLES LOCATED AT NEAR STATIONS 14+14 LT, 15+57 LT AND 29+59 LT. METHOD OF MEASUREMENT: THE ENGINEER WILL DETERMINE BY COUNT THE QUANTITY OF MANHOLES REQUIRING A MINOR ADJUSTMENT AS DEFINED IN THE CONTRACT DOCUMENTS. BASIS OF PAYMENT: FOR THE QUANTITY BY COUNT OF MANHOLE ADJUSTMENT, MINOR, THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER EACH. THIS PAYMENT WILL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR AND EQUIPMENT NEEDED FOR ADJUSTMENT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	MANHOLE ADJUSTMENT, MINOR
34	TO BE PLACED AS SHOWN ON THE D SHEETS AND AS SHOWN IN DR-305, TYPE A INSTALLATION EXCEPT THAT COST FOR SUBDRAIN CONNECTIONS AND END-CAPS SHALL BE INCIDENTAL TO AND INCLUDED IN THE PAYMENT UNDER THIS ITEM AND LOCATION SHALL BE AS SHOWN ON TYPICAL SECTIONS. CONNECTIONS SHALL BE IN ACCORDANCE TO THE REQUIREMENTS OF SPECIFICATION 2502. FOR CONNECTION TO INLETS FROM BEGINNING OF PROJECT TO STATION 27+00, A 6 INCH CPE SLEEVE SHALL BE INSERTED INTO THE INLET/MANHOLE AT A MAXIMUM OF 1 INCH ABOVE THE FILLET. INSERT DRAIN TILE THROUGH SLEEVE. RODENT GUARD REQUIRED. CONNECTION LOCATION SHALL BE AT THE DISCRETION OF THE CONTRACTOR. STEEL POSTS ARE REQUIRED AT OUTLETS FROM STATION 27+00 TO EOP ONLY. TABULATION ON C SHEETS.	SUBDRAIN PERFORATED PLASTIC PIPE 4 IN
35	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-101 AND SW-102. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING GRADATION 30 OR GRADATION 32 MATERIAL IN ALL AREAS WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT. CONNECTIONS TO EXISTING PIPES SHALL BE IN ACCORDANCE TC STANDARD ROAD PLAN SW-211 UNLESS EXACT MATING OF BELL AND SPIGOT OR TONGUE AND GROOVE CAN BE ACHIEVED.	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D (CLASS III), 15 IN.

REF. NO.	DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS ESTIMATE REFERENCE INFORMATION	BID ITEM DESCRIPTION
36	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-101 AND SW-102. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING GRADATION 30 OR GRADATION 32 MATERIAL IN ALL AREAS WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT. CONNECTIONS TO EXISTING PIPES SHALL BE IN ACCORDANCE TO STANDARD ROAD PLAN SW-211 UNLESS EXACT MATING OF BELL AND SPIGOT OR TONGUE AND GROOVE CAN BE ACHIEVED.	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D (CLASS III), 18 IN.
37	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-101 AND SW-102. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING GRADATION 30 OR GRADATION 32 MATERIAL IN ALL AREAS WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT. CONNECTIONS TO EXISTING PIPES SHALL BE IN ACCORDANCE TO STANDARD ROAD PLAN SW-211 UNLESS EXACT MATING OF BELL AND SPIGOT OR TONGUE AND GROOVE CAN BE ACHIEVED.	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D (CLASS III), 24 IN.
38	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-101 AND SW-102. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING GRADATION 30 OR GRADATION 32 MATERIAL IN ALL AREAS WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT. CONNECTIONS TO EXISTING PIPES SHALL BE IN ACCORDANCE TO STANDARD ROAD PLAN SW-211 UNLESS EXACT MATING OF BELL AND SPIGOT OR TONGUE AND GROOVE CAN BE ACHIEVED.	STORM SEWER GRAVITY MAIN, TRENCHED, RCAP, 2000D (CLASS A-III), 22 IN. X 14 IN.
39	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-101 AND SW-102. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING GRADATION 30 OR GRADATION 32 MATERIAL IN ALL AREAS WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT. CONNECTIONS TO EXISTING PIPES SHALL BE IN ACCORDANCE TO STANDARD ROAD PLAN SW-211 UNLESS EXACT MATING OF BELL AND SPIGOT OR TONGUE AND GROOVE CAN BE ACHIEVED.	STORM SEWER GRAVITY MAIN, TRENCHED, RCAP, 2000D (CLASS A-III), 37 IN. X 23 IN.
40	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-101 AND SW-102. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING GRADATION 30 OR GRADATION 32 MATERIAL IN ALL AREAS WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT. CONNECTIONS TO EXISTING PIPES SHALL BE IN ACCORDANCE TO STANDARD ROAD PLAN SW-211 UNLESS EXACT MATING OF BELL AND SPIGOT OR TONGUE AND GROOVE CAN BE ACHIEVED.	STORM SEWER GRAVITY MAIN, TRENCHED, RCAP, 2000D (CLASS A-III), 44 IN. X 27 IN.
41	SEE M SHEETS FOR REMOVAL LOCATIONS. TO BE REMOVED AS NECESSARY FOR THE INSTALLATION OF THE NEW STORM SEWER OR AS NEEDED FOR ROADWAY CONSTRUCTION. EXCAVATION TRENCH SHALL BE BACKFILLED WITH CLASS A (GRADATION 11) STONE COMPACTED TO 95% MAXIMUM STANDARD PROCTOR DENSITY IN 8-INCH LIFTS. PAYMENT UNDER THIS ITEM WILL INCLUDE FULL COMPENSATION FOR FURNISHING AND PLACEMENT OF BACKFILL. NO SEPARATE PAYMENT WILL BE MADE FOR BACKFILL.	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.
42	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-103. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING TYPE II BEDDING ONLY WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT OR GRANULAR SURFACING. IN LOCATIONS NOT WITHIN 5 FEET OF PROPOSED PAVEMENT OR GRANULAR SURFACING THE FINAL BACKFILL MAY BE DONE USING TYPE III, IVA, OR IVB. THE APPROXIMATE LOCATIONS WHERE TYPE II BACKFILL WILL NOT BE REQUIRED ARE AS FOLLOWS: STA 10+08 TO 11+33; STA 11+90 TO 12+13; STA 30+12 TO 31+33; AND STA 32+03 TO 33+44. CONNECTIONS TO EXISTING PIPES SHALL BE WITH FLEXIBLE COUPLING WITH SS SHEAR RINGS. CONNECTION SHALL BE INCIDENTAL TO THIS BID ITEM AND SHALL NOT BE PAID FOR SEPARATELY. ONLY SOLID WALL PVC SHALL BE ACCEPTED. SHALL BE PVC SDR 26 PER ASTM D3034 WITH ELASTOMERIC GASKETS.	SANITARY SEWER GRAVITY MAIN, TRENCHED, PVC, 8 IN.
43	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-103. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING GRADATION 30 OR GRADATION 32 MATERIAL IN ALL AREAS WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT. CONNECTIONS TO EXISTING PIPES SHALL BE IN ACCORDANCE TO STANDARD ROAD PLAN SW-211 UNLESS EXACT MATING OF BELL AND SPIGOT OR TONGUE AND GROOVE CAN BE ACHIEVED. THE CASING PIPE SHALL BE 16 INCH. THERE SHALL BE A MINIMUM OF 3/8 INCH WALL THICKNESS FOR THE CARRIER PIPE. ONLY SCLID WALL PVC SHALL BE ACCEPTED. SHALL BE PVC SDR 26 PER ASTM D3034 WITH ELASTOMERIC GASKETS. CASING SPACERS ARE TO BE INCLUDEDED AND AT A MINIMUM EACH PIPE SHALL HAVE A MINIMUM OF 3 CASING SPACERS. CASING SPACERS SHALL BE STAINLESS STEEL WITH POLYMERIC GUIDES. ALL BOLTS AND NUTS USED TO ASSEMBLE THE CASING SPACERS SHALL BE STAINLESS STEEL. THE CASING SPACERS SHALL CENTER THE SANITARY SEWER IN THE STEEL CASING.	SANITARY SEWER GRAVITY MAIN WITH CASING PIPE, TRENCHED, PVC, 8 IN.
44	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-201. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING GRADATION 30 OR GRADATION 32 MATERIAL IN ALL AREAS WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT OR GRANULAR SURFACING. IN LOCATIONS NOT WITHIN 5 FEET OF PROPOSED PAVEMENT OR GRANULAR SURFACING THE FINAL BACKFILL MAY BE DONE USING TYPE III, IVA, OR IVB. CONNECTIONS TO EXISTING PIPES SHALL BE IN ACCORDANCE TO STANDARD ROAD PLAN SW-211 UNLESS EXACT MATING OF BELL AND SPIGOT OR TONGUE AND GROOVE CAN BE ACHIEVED. SANITARY SEWER SERVICE STUBS SHALL BE PVC SDR 26 PER ASTM D3034 WITH ELASTOMERIC GASKETS.	SANITARY SEWER SERVICE STUB, PVC, 4 IN.
45	REFER TO TABULATION ON THE C SHEETS AND ROAD STANDARDS SW-201. INCLUDES COST OF BEDDING, HAUNCH SUPPORT, AND PRIMARY, SECONDARY AND FINAL TRENCH BACKFILL USING GRADATION 30 OR GRADATION 32 MATERIAL IN ALL AREAS WHERE PIPE IS PLACED UNDER OR WITHIN FIVE FEET OF PROPOSED PAVEMENT OR GRANULAR SURFACING. IN LOCATIONS NOT WITHIN 5 FEET OF PROPOSED PAVEMENT OR GRANULAR SURFACING THE FINAL BACKFILL MAY BE DONE USING TYPE III, IVA, OR IVB. CONNECTIONS TO EXISTING PIPES SHALL BE IN ACCORDANCE TO STANDARD ROAD PLAN SW-211 UNLESS EXACT MATING OF BELL AND SPIGOT OR TONGUE AND GROOVE CAN BE ACHIEVED. SANITARY SEWER SERVICE STUBS SHALL BE PVC SDR 26 PER ASTM D3034 WITH ELASTOMERIC GASKETS.	SANITARY SEWER SERVICE STUB, PVC, 6 IN.
46	APPLIES TO ALL SANITARY SEWER REPLACED AS PART OF THIS PROJECT, AS INDICATED ON THE TABS IN THE C SHEETS.	REMOVE SANITARY SEWER PIPE LESS THAN OR EQUAL TO 36 IN.
47	AS INDICATED ON MU SHEETS, APPROXIMATE MAINLINE STATION 2+43 TO WEST TO EXISTING MANHOLE BEHIND CHURCH. PLUG ONLY, FILL NOT REQUIRED.	SANITARY SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO 36 IN. DIA.
48	FOR FULL-DEPTH SAWCUTTING AND REMOVAL OF ALL EXISTING STREET PAVEMENT, INCLUDING CURB AND GUTTER, TO THE LIMITS NECESSARY TO CONSTRUCT THE IMPROVEMENT. VERIFY REMOVAL LIMITS WITH THE ENGINEER PRIOR TO REMOVAL.	REMOVAL OF PAVEMENT
49	SEE C SHEETS FOR TABULATION. EXCEPT WHERE PIPE IS NOTED TO BE REMOVED, CAREFUL REMOVAL OF EXISTING INTAKES AND UTILITY ACCESSES SO AS NOT TO DAMAGE THE EXISTING STORM SEWER PIPE.	REMOVAL OF INTAKES AND UTILITY ACCESSES
50	SEE C SHEETS FOR TABULATION. VERIFY REMOVAL LIMITS WITH THE ENGINEER PRIOR TO REMOVAL. INCLUDES REMOVAL OF SIDEWALK THROUGH DRIVEWAYS.	REMOVAL OF SIDEWALK
51	SEE C SHEETS FOR TABULATION OF SIDEWALK, L SHEETS FOR JOINTING AND STAKING INFORMATION. CONTRACTOR TO SUPPLY CERTIFIED PLANT INSPECTION. PEDESTRIAN RAMP CURB SHALL BE PLACED AS SHOWN ON THE S SHEETS AND IN SECTION D-D ON STANDARD ROAD PLAN MI-220 AND SHALL BE INTEGRALLY CAST WITH SIDEWALK. NO ADDITIONAL PAYMENT WILL BE MADE SHOULD THE CONTRACTOR CHOOSE TO UTILIZE STONE FOR LEVELING PURPOSES.	SIDEWALK PCC 4 IN
52	SEE C SHEETS FOR TABULATION OF SIDEWALK, L SHEETS FOR JOINTING AND STAKING INFORMATION. CONTRACTOR TO SUPPLY CERTIFIED PLANT INSPECTION. PEDESTRIAN RAMP CURB SHALL BE PLACED AS SHOWN ON THE S SHEETS AND IN SECTION D-D ON STANDARD ROAD PLAN MI-220 AND SHALL BE INTEGRALLY CAST WITH SIDEWALK. SIDEWALK AREA WITHIN DRIVEWAYS WILL BE PAID FOR AS DRIVEWAY. CREATE AN ADA-COMPLIANT PATH A MINIMUM OF 5 FEET WIDE THROUGH DRIVEWAY. NO ADDITIONAL PAYMENT WILL BE MADE SHOULD THE CONTRACTOR CHOOSE TO UTILIZE STONE FOR LEVELING PURPOSES.	SIDEWALK, PCC, 6 IN.
53	DETECTABLE WARNINGS SHALL BE IN ACCORDANCE WITH IDOT "MATERIALS I.M. 411". TYPES OF ACCEPTABLE PANELS SHALL BE PRECAST AND MODULAR TYPES ONLY. SURFACE-APPLIED AND STAMPED CONCRETE TYPES OF WARNING PANELS SHALL NOT BE ACCEPTABLE. CAST-IN-PLACE COMPONENTS INCLUDE CERTIFIED PLANT INSPECTION THE QUANTITY OF DETECTABLE WARNINGS INSTALLED SHALL BE THE QUANTITY MEASURED BY THE ENGINEER TO THE NEAREST 0.1 SF.	DETECTABLE WARNINGS

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

REFERENCE NOTES

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

P:\14183\DRAWINGS\CIVIL\14183_ZZ_C.DWG 10/22/2015 10:03:25 AM JERI M. VONDERA

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DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.2	135

REF. NO.	DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS ESTIMATE REFERENCE INFORMATION	BID ITEM DESCRIPTION
54	CONTRACTOR TC SUPPLY CERTIFIED PLANT INSPECTION. METHOD OF MEASUREMENT: THE QUANTITY OF CURB AND GUTTER CONSTRUCTED SHALL BE QUANTITY MEASURED BY THE ENGINEER TO THE NEAREST 0.1 LF. 2.5' PCC CURB AND GUTTER FOR SIDE STREETS, AS INDICATED IN THE PLAN DRAWINGS, IN ASSOCIATION WITH HMA PAVING.	CURB AND GUTTER PCC 2.5'
55	SEE C SHEETS FOR DRIVEWAY PLACEMENT LOCATIONS. CONTRACTOR TO SUPPLY CERTIFIED PLANT INSPECTION. INCLUDES AREA FROM THE BACK OF THE CURB TO THE FRONT OF THE SIDEWALK AND FROM THE BACK OF THE SIDEWALK TO THE POINT WHERE THE EXISTING DRIVEWAY MATCHES. AREA WITHIN SIDEWALK WILL BE PAID FOR AS DRIVEWAY. CREATE AN ADA PATH A MINIMUM OF 5 FEET WIDE. CONSTRUCTION SHALL BE AS PROVIDED IN STANDARD ROAD PLAN MI-210, 'CASE 2 ENTRANCE'.	DRIVEWAY, P.C. CONCRETE, 6 IN.
56	REMOVAL AT LOCATIONS AS DIRECTED BY THE ENGINEER. INCLUDES CORE OUT AND PREPARATION OF EXISTING MATERIAL TO ALLOW PLACEMENT OF 6 INCHES OF MODIFIED SUBBASE (SEE DETAIL ON B SHEETS). MODIFIED SUBBASE SHALL BE PAID FOR SEPARATELY. METHOD OF MEASUREMENT: THE QUANTITY OF DRIVEWAY REMOVED, SHALL BE THE AMOUNT MEASURED BY THE ENGINEER TO THE NEAREST 0.1 SY. FOR THE AMOUNT OF DRIVEWAY SUCCESSFULLY REMOVED THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER SY. THIS PAYMENT SHALL INCLUDE ALL EQUIPMENT, MATERIALS, TOOLS AND LABOR NECESSARY TO REMOVE PAVED DRIVEWAYS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	REMOVAL OF PAVED DRIVEWAY
57	PLACEMENT ON ROADWAY FOR CLOSURE DURING CONSTRUCTION OPERATIONS. SEE TABULATION ON C SHEETS.	SAFETY CLOSURE
58	FOR FENCE AT STA 30+29, 3.79R TO STA 31+04, 2.63R AS SHOWN ON SHEET MU.7.	REMOVAL AND REINSTALLATION OF FENCE, CHAIN LINK
59	INCLUDES EXISTING SIGN AT APPROX. STA. 24+90 L. SEE SHEET D.5 FOR LOCATION. CONTRACTOR SHALL CAREFULLY REMOVE AND STORE THE SIGN WITH FLASHER AND POST. ANY DAMAGE TO ANY OF THE EXISTING MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACT WILL RE-INSTALL SIGN AT APPROXIMATELY THE SAME LOCATION, FOLLOWING MUTCD AND IDOT SPECIFICATIONS. METHOD OF MEASUREMENT: CONTRACTOR SHALL BE PAID AS EACH. BASIS OF PAYMENT: THE QUANTITY OF SUCCESSFUL REMOVAL AND INSTALLATION SHALL BE CONSIDERED AS ONE COUNT. THIS PAYMENT SHALL INCLUDE ALL EQUIPMENT, MATERIALS, TOOLS AND LABOR NECESSARY TO REMOVE AND REPLACE THE SIGN AND APPURTENANCES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	REMOVE AND RE-INSTALL SIGN, AS PER PLAN
60	TO BE INSTALLED AT RAILROAD CROSSING TO DELINEATE CROSSING SIGNAL. SEE TABULATION ON C SHEETS.	OBJECT MARKER, TYPE 3
61	SEE TABULATION ON C SHEET.	MILEPOST MARKER
62	SEE TABULATION ON C SHEET.	WOOD POSTS FOR TYPE A OR B SIGNS, 4 IN. X 4 IN.
63	SEE TABULATION ON C SHEET.	WOOD POSTS FOR TYPE A OR B SIGNS, 4 IN. X 6 IN.
64	SEE TABULATION ON C SHEET.	TYPE A SIGNS ALUM
65	REFER TO J SHEETS FOR LOCATIONS OF NEW GROUND MOUNTED SIGNS TO BE INSTALLED.	INSTALL TYPE A SIGN
66	PLACEMENT SHALL BE IN ACCORDANCE WITH APPLICABLE STANDARD ROAD PLANS. SEE C SHEETS FOR TABULATION.	PAINTED PAVEMENT MARKING WATERBORNE OR SOLVENT
67	FOR TRAFFIC SHIFT ON US 30 DURING STAGED CONSTRUCTION AT IA 38. SEE DETAIL ON J SHEETS AND APPLICABLE STANDARD ROAD PLANS. TABULATION ON C SHEETS.	WET RETROREFLECTIVE REMOVABLE TAPE MARKINGS
68	FOR TRAFFIC SHIFT ON US 30 DURING STAGED CONSTRUCTION AT IA 38. SEE DETAIL ON J SHEETS AND APPLICABLE STANDARD ROAD PLANS. TABULATION ON C SHEETS.	PAVEMENT MARKINGS REMOVED
69	SEE J SHEETS FOR DETOUR AND TRAFFIC CONTROL NOTES.	TRAFFIC CONTROL
70	TO BE PLACED AS INDICATED ON THE J SHEETS.	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)
71		MOBILIZATION
72	AS INDICATED ON MU SHEETS, INTENDED FOR USE WITH SANITARY SEWER LOCATED AT APPROXIMATE MAINLINE STATION 2+43 TO WEST TO EXISTING MANHOLE BEHIND CHURCH. QUANTITY ESTIMATE BASED UPON 110 LF, 1 FOOT THICK, WITH A TRENCH BOTTOM WIDTH OF 2 FEET 3 INCHES. TO BE USED TO STABILIZE UNSUITABLE, AND/OR UNSTABLE SOILS ENCOUNTERED IN UTILITY TRENCHES. ANTICIPATED TO BE NEED IN TRENCHES GREATER THAN 5-FEET IN DEPTH, WHERE EXISTING UTILITY ALIGNMENT DIFFERS FROM PROPOSED.	TRENCH FOUNDATION
73	TO BE USED FOR HYDRANT LEADS. POLYETHELENE ENCASEMENT REQUIRED.	WATER MAIN, TRENCHED, DUCTILE IRON PIPE (DIP), 6 IN.
74	4" PVC WATER MAIN SHALL BE PVC CLASS 235 DR 18 PER AWWA C900, WITH ELASTOMERIC GASKET JOINTS.	WATER MAIN, TRENCHED, POLYVINYL CHLORIDE PIPE (PVC), 4 IN.
75	6" PVC WATER MAIN SHALL BE PVC CLASS 235 DR 18 PER AWWA C900, WITH ELASTOMERIC GASKET JOINTS. POLYSTYRENE BOARD INSULATION WITH MINIMUM R VALUE OF 5 PER 1" THICKNESS TO BE INSTALLED IN 2" MIN. THICKNESS FOR A MINIMUM WIDTH OF 3' CENTERED ON WATER MAIN IN DITCH CUT, NORTH OF FARMERS STREET, FROM STA 27+50 TO 28+00, AS SHOWN ON MU SHEETS. INSULATION BOARD INCIDENTAL TO BID ITEM.	WATER MAIN, TRENCHED, POLYVINYL CHLORIDE PIPE (PVC), 6 IN.
76	THE CASING PIPE SHALL BE 16 INCH WITH MINIMUM OF 3/8 INCH WALL THICKNESS. POLYETHYLENE ENCASEMENT REQUIRED. CASING SPACERS ARE TO BE INCLUDED, AT A MINIMUM EACH PIPE SHALL HAVE A MINIMUM OF 2 CASING SPACERS. CASING SPACERS SHALL BE STAINLESS STEEL WITH POLYMERIC GUIDES. ALL BOLTS AND NUTS USED TO ASSEMBLE THE CASING SPACERS SHALL BE STAINLESS STEEL. THE CASING SPACERS SHALL CENTER THE WATER MAIN IN THE STEEL CASING.	WATER MAIN WITH CASING PIPE, TRENCHED, DUCTILE IRON PIPE LF STD (DIP), 6 IN.
77	POLYETHYLENE ENCASEMENT REQUIRED. CONNECTIONS WITH EXISTING WATER MAIN SHALL BE MADE WITH FITTINGS. COUPLINGS MAY BE USED FOR THE CONNECTIONS WITH EXISTING, THE COUPLINGS SHALL HAVE DUCTILE IRON OR STAINLESS STEEL BODIES AND STAINLESS STEEL FASTENERS AND HARDWARE. CONNECTIONS WITH THE EXISTING WATER MAIN WILL BE PAID FOR BY THE POUND FOR THE APPROPRIATELY SIZED SLEEVE. NO ADDTIONAL WEIGHT WILL BE PAID FOR IF THE CONTRACTOR WISHES TO UTILIZE COUPLINGS.	FITTINGS BY WEIGHT, DUCTILE IRON
78	TAPPING SADDLES ARE REQUIRED FOR EACH SERVICE STUB INSTALLED. TAPPING SADDLES SHALL BE DUCTILE IRON BODY WITH STAINLESS STEEL STRAPS AND FASTENERS AND HARDWARE. THE TAPPING SADDLES SHALL HAVE AWWA/CC THREADED OUTLETS. THE CORPORATION STOPS FOR THE WATER SERVICES SHALL BE MUELLER B25008N. THE CURB STOPS FOR THE WATER SERVICES SHALL BE MUELLER B25155N. THE CURB BOXES FOR THE WATER SERVICES SHALL BE MUELLER H-10332. THE FOLLOWING IS ONLY APPLICABLE TO THE PROPOSED WATER SERVICES LOCATED ON THE EAST SIDE OF HIGHWAY 38 (ASH STREET): HOUSE/PRIVATE SIDE OF THE CURB STOP THE CONTRACTOR SHALL UTILIZE A 1 FOOT (MINIMUM) LONG SEGMENT OF POLYETHYLENE TUBE BETWEEN THE PROPOSED CURB STOP AND EXISTING WATER SERVICE. THE POLYETHYLENE TUBE SHALL BE CTS POLYETHYLENE (PE) PER ASTM D-2737 SDR-9. THE CONNECTION TO EXISTING WATER SERVICE SHALL BE MADE WITH A BRASS COMPRESSION COUPLING. COMPRESSION CONNECTIONS WITH POLYETYLENE TUBE WILL REQUIRE STAINLESS STEEL INSERT STIFFENER LINERS.	WATER SERVICE STUB, COPPER, 1 IN.
79	GATE VALVES SHALL BE MUELLER 2361 RESILIENT WEDGE GATE VALVES.	VALVE, GATE, DIP, 4 IN.
80	GATE VALVES SHALL BE MUELLER 2361 RESILIENT WEDGE GATE VALVES.	VALVE, GATE, DIP, 6 IN.
81	FIRE HYDRANTS SHALL BE EITHER: MUELLER SUPER CENTURION OR WATEROUR PACER (5-1/4") FIRE HYDRANTS. NO SEPARATE PAYMENT WILL BE MADE FOR HYDRANT EXTENSIONS.	FIRE HYDRANT ASSEMBLY, WM-201

REF. NO.	DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS ESTIMATE REFERENCE INFORMATION	BID ITEM DESCRIPTION
82	RAILROAD PROTECTIVE LIABILITY INSURANCE AS REQUIRED BY DS-15027.	RAILROAD PROTECTIVE LIABILITY INSURANCE FOR UNION PACIFIC RAILROAD
83	SEE DETAIL ON B SHEETS. BID ITEM INCLUDES 2 INCH X 2 INCH X 8 FOOT PERFORATED SQUARE STEEL TUBE POST, ANCHOR, FOUNDATION, SIGN PANELS WITH STREET NAMES ON BOTH SIDES, BRACKETS AND LABOR NECESSARY TO INSTALL SIGN ASSEMBLY. TO BE INSTALLED ON THE NORTHEAST CORNER OF EACH INTERSECTION. METHOD OF MEASUREMENT IS FOR EACH SIGN ASSEMBLY. BASIS OF PAYMENT IS CONTRACT UNIT PRICE FOR FULL COMPENSATION TO FURNISH AND INSTALL EACH SIGN ASSEMBLY.	STREET NAME SIGNS, COMPLETE, INSTALLED
84	FOR WATER SERVICES CROSSING IA 38. ALSO FOR FUTURE WATER MAIN CONSTRUCTION NORTH OF THE UP RAILROAD. PVC SHALL BE SCHEDULE 80. ENDS OF CASINGS FOR FUTURE CONSTRUCTION TO BE WRAPPED ENGINEERING FABRIC AND AFFIXED WITH DUCT TAPE. PREVENT PUNCTURING OF ENGINEERING FABRIC DURING BACKFILL OF TRENCH. METHOD OF MEASUREMENT: THE ENGINEER MEASURE LF OF CASING. BASIS OF PAYMENT: FOR THE QUANTITY OF CASING, PVC, 3 INCH, THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER LF. THIS PAYMENT WILL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR AND EQUIPMENT NEEDED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS	CASING, PVC, 3 INCH
85	FOR FUTURE WATER MAIN CONSTRUCTION NORTH OF THE UP RAILROAD. ENDS OF CASINGS FOR FUTURE CONSTRUCTION TO BE WRAPPED ENGINEERING FABRIC AND AFFIXED WTH DUCT TAPE. PREVENT PUNCTURING OF ENGINEERING FABRIC DURING BACKFILL OF TRENCH. METHOD OF MEASUREMENT: THE ENGINEER MEASURE LF OF CASING. BASIS OF PAYMENT: FOR THE QUANTITY OF CASING, PVC, 12 INCH, THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER LF. THIS PAYMENT WILL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR AND EQUIPMENT NEEDED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS	CASING, STEEL, 12 INCH
86	FULL DEPTH SAW CUT SHALL BE PROVIDED WHERE PROPOSED PAVEMENT TRANSITIONS MEET EXISTING MAINLINE PAVEMENT AT SIDEROADS AND AT ROADWAY TERMINI. INCLUDES SAWCUT ALONG EDGE OF US30 FOR PAVED SHOULDER CONSTRUCTION (APPROXIMATE STATION 90+15 TO 91+73). ALL OTHER SAW CUTS SHALL BE CONSIDERED INCIDENTAL TO THE REMOVALS ITEM. METHOD OF MEASUREMENT: THE QUANTITY OF FULL DEPTH SAW CUT, SHALL BE THE AMOUNT MEASURED BY THE ENGINEER TO THE NEAREST 0.1 LF. BASIS OF PAYMENT: FOR THE AMOUNT OF FULL DEPTH SAW CUT THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER LF. THIS PAYMENT SHALL INCLUDE ALL EQUIPMENT, MATERIALS, TOOLS AND LABOR NECESSARY TO FULL DEPTH SAW CUT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	FULL DEPTH SAW CUT
87	FURNISH AND INSTALL ORNAMENTAL METAL RAILING ASSOCIATED WITH STEPS/STAIRS (25+50 TO 26+00 LT) AS INDICATED IN DETAILS ON THE B SHEETS. MEASUREMENT WILL BE IN LINEAR FEET FOR ORNMENTAL SAFETY RAIL, MEASURED ALONG THE TOPF OF THE RAIL FROM END OF RAIL TO END OF RAIL. PATMENT WILL BE AT THE UNIT PRICE PER LINEAR FOOT OF ORNAMENTAL SAFETY RAIL. PAYMENT SHALL INCLUDE ALL EQUIPMENT, MATERIALS, TOOLS AND LABOR NECESSARY TO INSTALL ORNAMENTAL SAFETY RAIL.	ORNAMENTAL METAL RAILING
88	ANTICIPATED BETWEEN 16+00 AND 18+50, SUBJECT TO APPROVAL OF THE ENGINEER AS DETERMINED THROUGH PROOF-ROLLING OF THE PROPOSED SUBRADE PRIOR TO PLACEMENT OF BASE STONE. USE MACADAM MATERIAL IDOT GRADATION 13 EXCEPT THAT IT SHALL NOT BE SCREENED OVER THE 3/4 INCH OR 1 INCH SCREEN. THIS MATERIAL IS TO BE USED AS SUBGRADE STABILIZATION MATERIAL. IF SUBGRADE STABILIZATION IS NECESSARY, AND IF AUTHORIZED IN LOCATIONS IN ADVANCE BY THE ENGINEER OR OWNER, THE BID UNIT PRICES SHALL GOVERN. ENGINEER WILL DETERMINE AREA AND THICKNESS TO BE STABILIZED. INCLUDES EXCAVATION AND DISPOSAL OF THE EXCAVATED MATERIAL. METHOD OF MEASUREMENT: THE ENGINEER WILL MEASURE THE TONS PLACED BASED ON WEIGHT TICKETS. BASIS OF PAYMENT: FOR THE TONS PLACED, THE CONTRACTOR WILL BE PAID THE UNIT PRICE PER TON WHICH INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR SUBGRADE STABILIZATION.	SUBGRADE STABILIZATION MATERIAL, MODIFIED MACADAM
89	ALL DISTURBED AREAS WITHOUT PAVEMENT, SIDEWALK OR STONE.	MULCH
90	ALL DISTURBED AREAS WITHOUT PAVEMENT, SIDEWALK OR STONE.	SEEDING AND FERTILIZING (RURAL)
91	ALL DISTURBED AREAS WITHOUT PAVEMENT, SIDEWALK OR STONE.	SEEDING AND FERTILIZING (URBAN)
92	PLACED IN ACCORDNACE WITH STANDARD ROAD PLAN EC-101 AND TO THE LIMITS IDENTIFED IN THE EROSION CONTROL PLANS.	SPECIAL DITCH CONTROL, WOOD EXCELSIOR MAT
93	REFER TO EC SHEETS FOR LOCATIONS AND TABULATION ON C SHEETS FOR QUANTITIES. THE EC SHEETS INCLUDE ESTIMATED LOCATIONS OF SILT FENCE TO ADDRESS EROSION TO BE ENCOUNTERED DURING CONSTRUCTION. VERIFY THE SPECIFIC LOCATIONS WITH THE ENGINEER PRIOR TO BEINNING PLACEMENT. BID ITEM DOES INLCUDE 25% ADDITIONAL QUANITTY FOR FIELD ADJUSTMENTS AND REPLACEMENTS.	SILT FENCE
94	REFER TO EC SHEETS FOR LOCATIONS AND TABULATION ON C SHEETS FOR QUANTITIES. THE EC SHEETS INCLUDE ESTIMATED LOCATIONS OF SILT FENCE TO ADDRESS EROSION THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. VERIFY THE SPECIFIC LOCATIONS WITH THE ENGINEER PRIOR TO BEINNING PLACEMENT. BID ITEM DOES INLCUDE 25% ADDITIONAL QUANITTY FOR FIELD ADJUSTMENTS AND REPLACEMENTS.	SILT FENCE-DITCH CHECKS
95	FOR REMOVAL OF SILT FENCE AND SILT FENCE FOR DITCH CHECKS.	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS
96	THIS ITEM IS INCLUDED FOR CLEAN-OUT AND REPAIR OF THE SILT FENCE DURING THE CONSTRUCTION OF THE PROJECT. QUANTITY IS ESTIMATED TO BE 50% OF THE INSTALLED QUANTITY.	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK
97	PLACED AS INDICATED IN A DETAIL ON THE B SHEETS AND THE TABULATION ON C SHEETS. FOR INLET PROTECTION AND SEDIMENT CONTROL. PLACE IN ACCORDANCE WITH STANDARD ROAD PLAN EC-204 AS SHOWN ON THE EC SHEETS AND TABULATED ON THE C SHEETS. BID QUANTITY INCLUDES 50% FOR FIELD ADJUSTMENTS, MAINTENANCE, AND REMOVAL.	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA.
98	UNION PACIFIC RAILROAD FLAGGER DAYS REQUIRED AS INDICATED IN DS-15027.	RAILROAD FLAGGER

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

REFERENCE NOTES

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.3	135

STP-038-2(37)--2C-16

105-4
10-18-11

STANDARD ROAD PLANS

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

Number	Date	Title
DR-101	04-21-15	Pipe Culvert (Bedding and Backfill)
DR-102	04-21-15	Pipe Culvert (Cover and Camber)
DR-103	04-21-15	Pipe Culvert (Installation Details)
DR-104	04-21-15	Depth of Cover Tables for Concrete and Corrugated Pipe
DR-121	10-20-15	Connected Pipe Joints
DR-201	04-21-15	Concrete Aprons
DR-202	04-21-15	Low Clearance Concrete Pipe Aprons
DR-213	04-21-15	Pipe Apron Guard
DR-303	10-20-15	Subdrains (Longitudinal)
DR-304	04-21-15	Outlets for Longitudinal, Transverse and Backslope Subdrains
DR-305	04-21-15	Subdrain Outlets (Standard Subdrain, Pressure Release and Special)
EC-101	04-21-15	Wood Excelsior Mat for Ditch Protection
EC-201	04-21-15	Silt Fence
EC-204	04-21-15	Perimeter and Slope Sediment Control Devices
EC-502	04-21-15	Seeding in Rural Areas
EW-102	10-20-15	Allowable Placement of Unsuitable Soil in Embankments
EW-105	04-21-15	Reshaping Slopes and Ditches
MI-102	10-20-15	Chain Link Fence Construction
MI-210	10-20-15	PCC Driveways and Alleys
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-120	10-21-14	Stop Lines and Islands
PM-240	04-21-15	Railroad Crossing on Two-Lane Roadway
PM-520	04-19-11	Two-Lane Roadway with no Turn Lanes (Two-Way Stop Condition)
PV-101	04-21-15	Joints
PV-102	04-15-14	PCC Curb Details
PV-103	04-19-11	Manhole Boxouts in PCC Pavement
SI-101	04-21-09	Locations - Type 'A' Signs
SI-111	10-20-09	Support Structures - Wood Posts
SI-119	10-20-09	Support Structures - Mounting Brackets
SI-131	10-18-11	Installation - Type 'A' Signs
SI-171	10-20-09	Reference Posts
SI-241	10-18-11	Sign Placement Approaching a Railroad Crossing
SW-102	10-20-15	Rigid Gravity Pipe Trench Bedding
SW-103	10-20-15	Flexible Gravity Pipe Trench Bedding
SW-104	04-21-09	Pressure Pipe Trench Bedding
SW-201	04-21-09	Sanitary Sewer Service Stub
SW-211	10-16-12	Special Pipe Connections for Storm Sewer
SW-301	10-21-14	Circular Sanitary Sewer Manhole
SW-306	04-21-15	Chimney Seals for Sanitary Sewer Manholes
SW-401	04-21-09	Circular Storm Sewer Manhole
SW-402	04-21-09	Rectangular Storm Sewer Manhole
SW-507	10-21-14	Single Open-Throat Intake, Small Box
SW-508	10-21-14	Single Open-Throat Intake, Large Box
SW-509	10-21-14	Double Open-Throat Curb Intake, Small Box
SW-512	10-21-14	Circular Area Intake
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
TC-253	10-21-14	Paved On-Site Detour
TC-601	10-18-11	Pedestrian Detour
TC-602	10-18-11	Sidewalk Diversion
WM-101	04-21-09	Thrust Blocks
WM-102	04-21-09	Tracer System
WM-201	04-19-11	Fire Hydrant Assembly

111-25
10-18-11

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GENERAL NOTES:

ALL UNSALVAGEABLE MATERIAL AND RUBBLE GENERATED DURING THIS PROJECT SHALL BE DISPOSED OF OFF THE HIGHWAY RIGHT-OF-WAY IN A WASTE AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE COUNTY ENGINEER. THE WASTED MATERIAL MUST NOT CREATE AN UNSIGHTLY CONDITION WHEN VIEWED FROM PUBLIC HIGHWAYS. REMOVALS AND DISPOSALS SHALL BE IN ACCORDANCE WITH SECTION 2401 OF THE STANDARD SPECIFICATIONS. ALSO, ALL EXCESSIVE EXCAVATED MATERIAL AND UNSUITABLE MATERIAL FOR BACKFILL WILL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE DISPOSED OF OFF SITE. ALL BORROW MATERIAL SHALL BE SUPPLIED BY THE CONTRACTOR AND APPROVED BY THE COUNTY ENGINEER.

NO EXTRA PAYMENT IS ALLOWED FOR COLD WEATHER PROTECTION DURING CONSTRUCTION. WORKING DAYS WILL BE CHARGED OVER THE WINTER.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE, AND TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERE TO. NO CLAIMS FOR ANY INTERFERENCE, DELAY, OR ANY AND ALL DAMAGES CAUSED BY SUCH WORK WILL BE GRANTED.

IOWA DOT WILL PROVIDE THE CONSTRUCTION STAKING FOR USE BY THE CONTRACTOR.

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD
.
NOTES AND TABULATIONS
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.4	135

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STP-038-2(37)--2C-16

PCC PAVEMENT

This Data Entry Sheet fills Tab 100-24 effective 04-21-15

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

Refer to PV-410, PV-411, PV-412, and PV-414.

Quantity includes Pavement Header.

Location				Mainline				
Road Identification	Direction of Travel	Station to Station		Width	Length	Area	Modified Subbase	Remarks
				FT	FT	SY	CY	
IA 38 / Ash St	N&S	+13.00	12+94.00	VARIES	1281.0	5172.8	2012.7	South of UPRR, Urban section, Includes intersection returns and RR Approach
IA 38 / Ash St	N&S	13+28.00	26+93.00	VARIES	1365.0	5191.2	2028.9	North of UPRR, Urban section, Includes intersection returns and RR Approach
IA 38 / Ash St	N&S	26+93.00	39+78.00	VARIES	1285.0	3421.8	1140.7	North of UPRR, Rural section
				TOTALS		13785.8	5182.3	

100-19
10-16-12

PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

Refer to EC-204

Location			Length of Installation				
Begin Station	End Station	Side	6 inch Dia	9 inch Dia	12 inch Dia	20 inch Dia	Remarks
			LF	LF	LF	LF	
+43.62		L		20.0			INLET PROTECTION
+49.05		R		20.0			INLET PROTECTION
6+38.06		L		30.0			INLET PROTECTION
6+38.06		R		30.0			INLET PROTECTION
6+99.60		R		20.0			INLET PROTECTION
7+41.75		R		20.0			INLET PROTECTION
7+39.84		L		20.0			INLET PROTECTION
7+98.37		L		30.0			INLET PROTECTION
7+98.37		R		30.0			INLET PROTECTION
15+55.43		L		20.0			INLET PROTECTION
15+55.43		R		20.0			INLET PROTECTION
15+73.00		R		20.0			INLET PROTECTION
21+00.00		L		20.0			INLET PROTECTION
21+00.00		R		30.0			INLET PROTECTION
21+21.59		L		20.0			INLET PROTECTION
21+25.25		R		20.0			INLET PROTECTION
21+75.00		L		20.0			INLET PROTECTION
21+75.00		R		20.0			INLET PROTECTION
26+13.41		L		20.0			INLET PROTECTION
26+13.41		R		20.0			INLET PROTECTION
26+72.55		R		30.0			NORTH SIDE OF FARMERS ST
26+79.47		L		40.0			NORTH SIDE OF FARMERS ST
		TOTAL		520.0			

100-17
04-20-10

TABULATION OF SILT FENCES

Refer to EC-201

Location			Length	Remarks
Begin Station	End Station	Side	LF	
90+05.00	91+72.00	R	177.0	US 30 SHOULDER, DIV 1
29+13.00	30+15.00	L	122.0	CULVERT OUTLET, DIV 1
34+22.00	34+58.00	L	42.0	CULVERT OUTLET, DIV 1
		TOTAL	341.0	

100-18
04-20-10

TABULATION OF SILT FENCES FOR DITCH CHECKS

Refer to EC-201

Location Station	Side	Length	Remarks
		LF	
27+32.00	R	15.0	DIV 1
24+60.00	L	25.0	DIV 3
28+00.00	L	25.0	DIV 3
28+40.00	L	25.0	DIV 3
TOTAL		90.0	

HMA PAVEMENT

This Data Entry Sheet fills Tab 100-25 effective 04-21-15

HMA unit weight (lbs/cf) of 145

Location				Mainline			HMA Pavement Thicknesses		Bid Items							
									Hot Mix Asphalt Pavement				Binder			
Road Identification	Direction of Travel	Station to Station		Width	Length	Area	Surface	Base	Surface		Base		Surface	Base	Modified Subbase (Extends 3' beyond HMA)	Remarks
				FT	FT	SF	IN	IN	TONS	SY	TONS	SY	TONS	TONS	CY	
Preston St	E&W	100+00.00	101+55.00	VARIES	155.0	3434.8	2.0	2.0	41.504	381.6	41.504	381.6	2.490	2.490	161.7	
Preston St	E&W	102+26.00	103+75.00	VARIES	149.0	3284.2	2.0	2.0	39.683	364.9	39.683	364.9	2.381	2.381	154.7	
Center St	E&W	200+21.00	200+31.00	VARIES	10.0	240.9	2.0	2.0	2.911	26.8	2.911	26.8	0.175	0.175	11.3	
Center St	E&W	201+04.00	201+09.00	VARIES	5.0	122.0	2.0	2.0	1.475	13.6	1.475	13.6	0.088	0.088	5.7	
Broadway St	E&W	300+00.00	300+31.00	VARIES	31.0	757.8	2.0	2.0	9.157	84.2	9.157	84.2	0.549	0.549	35.0	
Broadway St	E&W	301+02.00	301+15.00	VARIES	13.0	366.6	2.0	2.0	4.430	40.7	4.430	40.7	0.266	0.266	18.9	
North St	E&W	401+46.00	401+61.00	VARIES	15.0	332.7	2.0	2.0	4.020	37.0	4.020	37.0	0.241	0.241	15.6	
North St	E&W	402+37.00	402+47.00	VARIES	10.0	242.5	2.0	2.0	2.930	26.9	2.930	26.9	0.176	0.176	11.3	
Farmers St	E&W	500+71.00	500+94.00	VARIES	23.0	505.0	2.0	2.0	6.102	56.1	6.102	56.1	0.366	0.366	24.2	
Farmers St	E&W	510+35.00	510+52.00	VARIES	17.0	327.6	2.0	2.0	3.959	36.4	3.959	36.4	0.238	0.238	16.1	
Ash St	N&S	12+94.00	12+99.00	VARIES	5.0	155.0	5.3	5.3	4.916	17.2	4.916	17.2	0.295	0.295	6.9	At UPRR, 5.3" will require to 2 lifts (4 lifts total)
Ash St	N&S	13+23.00	13+28.00	VARIES	5.0	155.0	5.3	5.3	4.916	17.2	4.916	17.2	0.295	0.295	6.9	At UPRR, 5.3" will require to 2 lifts (4 lifts total)
								TOTALS	126.004	1102.7	126.004	1102.7	7.560	7.560	468.4	

108-13A
08-01-08

SAFETY CLOSURES

Refer to Section 2518 of the Standard Specifications

Station	Closure Type		Remarks
	Road Qty.	Hazard Qty.	
+31.00	1		BOP
7+22.00	2		PRESTON ST
12+39.00	2		CENTER ST
12+67.00	1		S SIDE UPRR
13+67.00	1		N SIDE UPRR
15+94.00	2		BROADWAY ST
21+38.00	2		NORTH ST
26+55.00	2		FARMERS ST
39+78.00	1		EOP

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

P:\14\183\DRAWINGS\CIVIL\14183_ZZ_C.DWG 10/22/2015 10:03:39 AM JER M. VONDERA

DESIGNED BY: _____ TRACED BY: _____
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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.5	135

FENCING

* Bid Item

Refer to MI-101, MI-102, MI-103, MI-104, 510-3, and 510-5

Location				Side	Chain Link				Deer				Field				Channel Crossing		Remarks
From		To			Fence		Gate				Gate				Gate				
Station	Offset	Station	Offset		Length*	Type	No.*	Type	Fence Length*	Brace Panels*	No.*	Type	Fence Length*	Brace Panels*	No.*	Type	Length*	Type	
					LF		EACH		LF	EACH	EACH		LF	EACH	EACH		LF		
10+78.00	66.0	10+84.00	66.0	LT	6.0	42 IN.													DIVISION 4
10+84.00	66.0	10+84.00	138.0	LT	72.0	42 IN.													DIVISION 4
10+74.00	138.0	10+84.00	138.0	LT	10.0	42 IN.													DIVISION 4
				TOTAL	88.0														

ACCESS POINTS AND SAFETY RAMPS

Refer to Cross-Sections

Length of unclassified pipe calculated is based on using Reinforced Concrete Pipe.

(1) Refer to MI-210

(2) Refer to EW-501.

(3) Refer to EW-501 or EW-502.

*Predetermined for access point not constructed with this project.

#REF!

Location		Type	Length of Opening (1)			W	(1) (2) PR	(2) SR	Pipe Culvert (3)					Aprons	Driveway Surface Area				Driveway Surfacing Material	Remarks
Station	Side	A, B, C, Safety Ramp, or Predetermined*	Case	1½" Dropped Curb	3" Dropped Curb				H	Size	Pipe Length	Lt.	Rt.		HMA Sq. Ft. from Microstation	HMA	PCC Sq. Ft. from Microstation	PCC		
			1 or 2	LF	LF	FT	FT	FT	FT	IN	LF	LF	LF	No.	SF	SY	SF	SY	TON	
1+69	L		2	21		17											191	21.22		
2+44.00	R		2	18		13											122	13.56		
3+40.00	L		2	19		14											165	18.33		
4+34.00	R		2	25		16											163	18.11		
4+38.00	L		2	17		11											142	15.78		
4+94.00	L		2	12		9											104	11.56		
5+09.00	R		2	21		21											167	18.56		
5+45.00	L		2	14		11											120	13.33		
5+61.00	R		2	13		10											91	10.11		
6+71.00	L		2	17		12											143	15.89		
9+04.00	L		2	19		10											223	24.78		
9+66.00	R		2	24		20											177	19.67		
9+97.00	R		2	17		11											107	11.89		
10+88.00	R		2	11		9											77	8.56		
11+23.00	R		2	25		20											179	19.89		
13+96.00	L		2	26		21											237	26.33		
17+28.00	R		2	35		32											265	29.44		
17+56.00	R		2	18		13											122	13.56		
17+79.00	L		2	18		11											145	16.11		
19+02.00	L		2	20		12											161	17.89		
19+15.00	R		2	22		12											134	14.89		
20+21.00	L		2	20		13											165	18.33		
22+46.00	L		2	21		14											180	20.00		
23+77.00	L		2	17		14											154	17.11		
25+77.00	L		2	16		9											94	10.44		
																	TOTAL	425.33		

ROLLED EROSION CONTROL

Refer to EC-101, EC-103 and EC-104

Location				(L)	(W)	Turf Reinforcement Mat (TRM) (EC-104)				Slope Protection (EC-103)	Special Ditch Control (EC-101)	Remarks
Road Identification	Begin Station	End Station	Side			Type 1	Type 2	Type 3	Type 4			
				FT	FT	Squares	Squares	Squares	Squares	Squares	Squares	
PRESTON ST	100+45	101+51	L	106	19						20	DIV 3
IA 38	27+12.00	28+02.00	L	90	21						19	DIV 3
										TOTAL	39	

Design For

IA 38

FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____

DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER STP-038-2(37)--2C-16

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA	.	2016	C.6	135

STP-038-2(37)--2C-16
P:\14\183\DRAWINGS\CIVIL\4183_ZZ_C.DWG 10/22/2015 10:03:44 AM JERI M. VONDERA

TABULATION OF SPREADING TOPSOIL

This Data Entry Sheet fills Tab 103-4 effective 04-19-11

Perform this work according to Section 2105. Prior to placing topsoil on any cohesive soil, scarify the area to be covered to a minimum depth of 3 inches. Appropriate adjustments have been made in the template quantities to reflect the placement of topsoil on foreslope, backslope and ditch bottom as detailed hereon.

Totals: 743.3

Placement Description									
Area	Length	Width	Depth	Volume	Quantity	Location		Side	Remarks
No.	FT	FT	FT	CF	CY	Station to Station		L. or R.	
	135.00	12	0.33	534.60	19.8	+25.00	1+60.00	L	
	650.00	3	0.33	643.50	23.8	+22.00	2+33.00	R	
	160.00	3	0.33	158.40	5.9	2+33.00	2+50.00	R	FOR SANITARY SEWER, DIVISION 4
	157.00	12	0.33	621.72	23.0	1+77.00	3+34.00	L	
	147.00	16	0.33	776.16	28.7	2+63.00	2+79.00	L	FOR SANITARY SEWER, DIVISION 4
	177.00	7.00	0.33	408.87	15.1	2+50.00	4+27.00	R	
	85.00	12.00	0.33	336.60	12.5	3+47.00	4+32.00	L	
	46.00	12	0.33	182.16	6.7	4+43.00	4+89.00	L	
	56.00	12	0.33	221.76	8.2	4+43.00	4+99.00	R	
	41.00	12	0.33	162.36	6.0	4+98.00	5+39.00	L	
	37.00	2	0.33	24.42	0.9	5+19.00	5+56.00	R	
	115.00	14	0.33	531.30	19.7	5+50.00	6+65.00	L	
	135.00	8	0.33	356.40	13.2	5+56.00	6+91.00	R	
	14.00	12	0.33	55.44	2.1	6+77.00	6+91.00	L	
	15.00	20	0.33	99.00	3.7	6+96.00	7+11.00	R	DIV 3
	15.00	16	0.33	79.20	2.9	6+96.00	7+11.00	L	
	140.00	1	0.33	46.20	1.7	7+11.00	7+11.00	R	SOUTH SIDE OF PRESTON, DIV 4
	140.00	2	0.33	92.40	3.4	7+05.00	7+33.00	L	SOUTH SIDE OF PRESTON, DIV 4
	75.00	1	0.33	24.75	0.9	7+32.00	7+35.00	R	NORTH SIDE PRESTON, DIVISION 4
	80.00	15	0.33	396.00	2.8	7+34.00	7+56.00	R	NORTH SIDE OF PRESTON, DIV 3
	105.00	19	0.33	658.35	2.8	7+33.00	7+54.00	L	NORTH SIDE OF PRESTON, DIV 3
	200.00	1	0.33	66.00	2.8	7+54.00	9+55.00	R	
	318.00	12	0.33	1259.28	46.6	9+11.00	12+29.00	L	
	129.00	16	0.33	681.12	25.2	10+80.00	10+96.00	L	FOR SANITARY SEWER, DIVISION 4
	137.00	8	0.33	361.68	13.4	9+76.00	11+13.00	R	
	92.00	10	0.33	303.60	11.2	11+33.00	12+25.00	R	
	26.00	12	0.33	102.96	3.8	12+52.00	12+78.00	L	
	35.00	3	0.33	34.65	1.3	12+50.00	12+78.00	R	AROUND THE RADIUS
	27.00	12	0.33	105.92	4.0	13+58.00	13+85.00	L	
	21.00	3	0.33	20.79	0.8	13+59.00	13+80.00	R	
	184.00	9	0.33	545.48	20.2	13+93.00	15+77.00	R	
	177.00	12	0.33	700.92	26.0	14+05.00	15+82.00	L	
	166.00	12	0.33	657.36	24.3	16+07.00	17+73.00	L	
	101.00	12	0.33	399.96	14.8	16+10.00	17+11.00	R	
	167.00	8	0.33	440.88	16.3	17+43.00	19+10.00	R	
	112.00	12	0.33	443.52	16.4	17+84.00	18+96.00	L	
	107.00	12	0.33	423.72	15.7	19+08.00	20+15.00	L	
	206.00	12	0.33	815.76	30.2	19+21.00	21+27.00	R	
	160.00	12	0.33	633.60	23.5	20+27.00	21+28.00	L	AROUND THE RADIUS, SOUTH SIDE OF NORTH ST
	91.00	12	0.33	360.36	13.3	21+48.00	22+39.00	L	
	491.00	4	0.33	648.12	24.0	21+51.00	26+42.00	R	
	116.00	12	0.33	459.36	17.0	22+54.00	23+70.00	L	
	188.00	13	0.33	805.52	29.9	23+84.00	25+72.00	L	
	65.00	18.5	0.33	395.83	14.7	25+82.00	26+47.00	L	
	121.00	9	0.33	359.37	13.3	26+56.00	27+77.00	R	END OF URBAN SEEDING
	128.00	20	0.33	844.80	31.3	26+72.00	28+00.00	L	DIVISION 3
	533.00	7	0.33	1231.23	45.6	27+77.00	33+10.00	R	
	461.00	4	0.33	608.52	22.5	28+25.00	32+86.00	L	
	485.00	2	0.33	320.10	11.9	33+24.00	38+09.00	L	
	639.00	2	0.33	421.74	15.6	33+39.00	39+78.00	R	
	50.00	2	0.33	33.00	1.2	38+50.00	39+00.00	L	
	29.00	7	0.33	66.99	2.5	39+49.00	39+78.00	L	

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.7	135

STORM SEWER

① Diameter or equivalent diameter
* Bid Item
** For SW-545

INTAKES AND UTILITY ACCESSES

Designer Info

PIPE

Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 3 ft length is added to each end of the Design Length to account for estimated length to center of structures (Except at DR-201 and SW-512).

This Data Entry Sheet fills Tab 104-5B effective 04-21-15.

No.	Location Station and Offset	*Type or Standard Road Plan	Form Grade	Bottom Well	Extension Length**	Notes
			Elev.	Elev.	FT	
IN-100	6+38.06, 15.5' L	SW-509	834.22	831.49		
IN-101	6+38.06, 15.5' R	SW-509	834.22	831.31		
JB-102	6+98.1, 12.81' R	SW 402, 48"X48"	834.62	831.10		
IN-103	6+99.60, 30.26' R	SW-512	834.5	831.50		
JB-104	7+42.35, 12.59' R	SW-402, 60"X60"	834.85	830.93		
IN-108	7+41.75, 38.23' R	SW-512	834	831.50		
APRON106	7+43, 49' R	DR-202				37"X23"
IN-105	7+98.37, 15.5' R	SW-509	834.54	831.19		
IN-106	7+98.37, 15.5' L	SW-509	834.04	831.44		
IN-200	15+55.43, 15.50' L	SW-507	842.85	840.37		
IN-201	15+55.43, 15.50' R	SW-507	842.85	840.18		
IN-202	15+73.00, 49.86' R	SW-512	843.62	840.07		
IN-300	21+00, 15.50' L	SW-508	837.36	834.47		
IN-301	21+00, 15.50' R	SW-509	837.36	834.07		
IN-305	21+25.25, 38.08' R	CUSTOM	837.8	833.43		
IN-304	21+75.0, 15.50' R	SW-507	838.07	833.06		
IN-303	21+75.0, 15.50' L	SW-507	838.07	834.07		
IN-400	26+13.41, 15.50' R	SW-507	835.02	830.79		
IN-401	26+13.41, 15.50' L	SW-510 MOD	835.02	830.31		
APRON402	27+20, 30' L	DR-202				44"X27"
		Total:				
		CUSTOM	1			
		DR-202	2			
		SW 402, 48"X48"	1			
		SW-402, 60"X60"	1			
		SW-507	5			
		SW-508	1			
		SW-509	5			
		SW-510 MOD	1			
		SW-512	3			

Line Number	Intake/ Utility Access No. From	Intake/ Utility Access No. To	Class 'D'	Pipe Diameter ① IN	Bid* Length FT	Change to 3 if an Apron or SW-512 is used FT	Design Length FT	Slope %	Connected Pipe Joint (DR-121) TYPE	Flow Lines: Inlet Elevation	Flow Lines: Outlet Elevation	Flow Lines: Other Elevation	Pipe Profile Sheet No.	Notes
P-106	IN-100	IN-101	2000	15	37	6	31.00	0.300		831.49	831.40		M.2	
P-104	IN-101	JB-102	2000	18	60	6	54.35	0.300		831.31	831.15		M.2	
P-105	IN-103	JB-102	2000	15	19	3	16.00	0.625		831.50	831.40		M.2	
P-103	JB-102	JB-104	2000	24	47	6	40.73	0.300		831.10	830.98		M.2	
P-102	IN-108	JB-104	2000	18	27	3	24.00	0.833		831.50	831.30		M.2	
P-101	JB-104	APRON106	2000	30	55	3	52.40	0.300		830.93	830.75		M.2	RCAP 37"X23"X52.4'
P-107	JB-104	IN-105	2000	18	56	6	50.43	0.425		831.19	830.98		M.2	
P-108	IN-106	IN-105	2000	18	37	6	31.00	0.496		831.44	831.29		M.2	
					0									
					0									
P-202	IN-200	IN-201	2000	18	37	6	31.00	0.300		840.37	840.28		M.2	22"X14"X31'
P-201	IN-201	IN-202	2000	18	39	3	36.46	0.300		840.18	840.07		M.2	
					0									
					0									
P-306	IN-300	IN-301	2000	15	37	6	31.00	0.500		834.47	834.32		M.3	
P-304	IN-301	IN-305	2000	18	34	6	27.69	0.500		834.07	833.93		M.3	
P-305	IN-305	IN-304	2000	24	59	6	52.55	0.500		833.43	833.16		M.3	
P-308	IN-303	IN-304	2000	15	37	6	31.00	0.500		834.07	833.91		M.3	
P-307	IN-304	IN-400	2000	24	441	6	434.79	0.500		833.06	830.89		M.3	
P-402	IN-400	IN-401	2000	24	37	6	31.30	0.500		830.79	830.63		M.4	
P-401	IN-401	APRON402	2000	36	101	3	97.90	0.300		830.31	830.01		M.4	44"X27"X98'
					0									
					0									
			Total:		0									
			2000	15	130									
			2000	18	291									
			2000	24	583									
			2000	30	55									
			2000	36	101									
					0									
					0									
					0									
					0									
					0									
					0									
					0									

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.8	135

STP-038-2(37)--2C-16

LIST OF SUBDRAIN WORK

Refer to DR-121, DR-201, DR-203, DR-301, DR-302, DR-303, DR-304, and DR-305.

* Not a bid item

This Data Entry Sheet fills Tab 104-5C effective 04-21-15

Location			Pipe			Aprons		Outlets			Connected Pipe Joints*		Trench Drain	Granular Material	Porous Backfill*	Class "A" Crushed Stone*	Remarks
									DR-303 Refer to Note 4		DR-121			Blanket			
No.	Station to Station		Type of Installation	Concrete C.M.P.	Dia.	Length	DR-201	DR-203	DR-304			Type	No.	LF	CY	CY	CY	
			301, DR-302, DR	,	IN	LF	No.	No.	No.	Type	No.						
1	90+17.00	91+69.00	DR-303, Type	Plast	4.0	181			1							10.6	0.5	SOUTH SHOULDER OF HWY 30
2	1+00.00	6+38.06	DR-303, Type	Plast	4.0	538					1					31.5		
3	+97.00	6+38.06	DR-303, Type	Plast	4.0	542					1					31.7		
4	6+38.06	7+42.00	DR-303, Type	Plast	4.0	101					1					5.9		
5	7+42.00	7+98.37	DR-303, Type	Plast	4.0	52					1					3.0		
6	7+98.37	12+75.00	DR-303, Type	Plast	4.0	475					1					27.8		
7	7+98.37	12+76.00	DR-303, Type	Plast	4.0	475					1					27.8		
8	13+68.00	15+55.43	DR-303, Type	Plast	4.0	189					1					11.1		
9	13+68.00	15+55.43	DR-303, Type	Plast	4.0	189					1					11.1		
10	15+55.43	21+00.00	DR-303, Type	Plast	4.0	543					1					31.8		
11	15+55.43	21+00.00	DR-303, Type	Plast	4.0	543					1					31.8		
12	21+00.00	21+75.00	DR-303, Type	Plast	4.0	74					1					4.3		
13	21+00.00	21+75.00	DR-303, Type	Plast	4.0	75					1					4.4		
14	21+75.00	26+13.41	DR-303, Type	Plast	4.0	438					2					25.6		
15	21+75.00	26+13.41	DR-303, Type	Plast	4.0	438					2					25.6		
16	26+13.41	29+47.00	DR-303, Type	Plast	4.0	357			1							20.9	0.5	
17	26+13.41	29+47.00	DR-303, Type	Plast	4.0	354			1							20.7	0.5	
18	29+64.00	34+40.00	DR-303, Type	Plast	4.0	531			2							31.1		
19	26+61.00	34+40.00	DR-303, Type	Plast	4.0	532			2							31.1		
20	34+40.00	39+60.00	DR-303, Type	Plast	4.0	536			1							31.4	0.5	
21	34+40.00	39+60.00	DR-303, Type	Plast	4.0	533			1							31.2	0.5	
				TOTAL		7696												

REMOVAL OF PAVEMENT

Refer to Tabulation 102-5

* Not a Bid Item

This Data Entry Sheet fill Tab 110-1 effective 04-16-13

Begin Station	End Station	Side	Pavement Type	Length	Width	Area	Area	Saw Cut*	Remarks
				FT	FT	FT	SY	LF	
+13.00	12+68.00	L & R	HMA/PCC	1255	VARIES	46355	5150.6	280.6	IA 38/ASH ST, RETURNS SOUTH OF UPRR
13+68.00	39+78.00	L & R	HMA/PCC	2610	VARIES	7858	873.1	184.8	IA 38/ASH ST, RETURNS NORTH OF UPRR
100+00.00	100+58.00	L & R	HMA	58	VARIES	3134	348.2	18.9	PRESTON ST - WEST OF IA 38/ASH ST
102+24.00	103+75.00	L & R	HMA	151	VARIES	3237	359.7	19.6	PRESTON ST - EAST OF IA 38/ASH ST
4+30.00	4+45.00	L	HMA	15	VARIES	155	17.2	0.0	DRIVEWAY
17+45.00	17+67.00	R	HMA	22	VARIES	251	27.9	0.0	DRIVEWAY
					TOTAL		6776.7		

SIDEWALK REMOVAL

* Not a bid item

This Data Entry Sheet fill tab 110-5 effective 10-20-15

Begin Station	End Station	Side	Length	Width	Area	Area	Saw Cut*	Remarks
			FT	FT	SF	SY	LF	
1+51.00	7+07.00	L	556.0	VARIES	2398	266.4	5.0	INCLUDES COURTESY WALKS AND PED RAMPS
2+63.00	2+79.00	L	16.0	VARIES	42	4.7	6.0	SANITARY SEWER INSTALL
7+38.00	12+25.00	L	487.0	VARIES	2121	235.7	5.0	INCLUDES COURTESY WALKS AND PED RAMPS
12+56.00	12+68.00	L	12.0	VARIES	49	5.4	5.0	
13+68.00	15+76.00	L	208.0	VARIES	901	100.1	10.0	INCLUDES COURTESY WALKS AND PED RAMPS
16+10.00	21+25.00	L	515.0	VARIES	2139	237.7	5.0	INCLUDES COURTESY WALKS AND PED RAMPS
21+50.00	25+72.00	L	422.0	VARIES	1774	197.1	15.0	INCLUDES COURTESY WALKS AND PED RAMPS
25+83.00	26+46.00	L	63.0	VARIES	279	31.0	5.0	INCLUDES WALK TO WEST AT FARMERS ST
3+06.00	3+10.00	R	0.0	VARIES	43	4.8		COURTESY WALK
6+92.00	6+95.00	R	0.0	VARIES	85	9.4	5.0	PED RAMP SE QUAD OF PRESTON ST
10+48.00	12+08.00	R	160.0	VARIES	677	75.2	5.0	INCLUDES PED RAMP AND WALK TO EAST
15+45.00	15+77.00	R	0.0	VARIES	233	25.9	5.0	INCLUDES PED RAMP AND WALK TO EAST
16+11.00	21+25.00	R	514.0	VARIES	2000	222.2	5.0	INCLUDES PED RAMP AND WALK TO EAST
21+50.00	21+70.00	R	0.0	VARIES	132	14.7	10.0	INCLUDES PED RAMPS
26+65.00	27+22.00	R	57.0	VARIES	198	22.0	0.0	
					TOTAL	1452.3		

REMOVAL OF CONCRETE DRIVES

This Data Entry Sheet fills Tab 110-8 effective 08-01-08

Location		Length	Width	Area	Area	Remarks
Station	Side	FT	FT	SF	SY	
1+69.00	L			247	27.4	
3+40.00	L			202	22.4	
9+04.00	L			176	19.6	
13+96.00	L			282	31.3	
17+79.00	L			131	14.6	
19+02.00	L			135	15.0	
20+21.00	L			146	16.2	
22+46.00	L			138	15.3	
25+77.00	L			159	17.7	
4+34.00	R			270	30.0	
5+09.00	R			240	26.7	
9+66.00	R			280	31.1	
11+23.00	R			246	27.3	
17+28.00	R			367	40.8	
19+15.00	R			155	17.2	
20+19.00	R			131	14.6	
			TOTAL		367.2	

Design For

IA 38

FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____

DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.9	135

P:\14\183\DRAWINGS\CIVIL\14183_ZZ_C.DWG 10/22/2015 10:03:59 AM JERI M. VONDERA

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.

BCY4: Broken Centerline (Yellow) @ 0.25 DCY4: Double Centerline (Yellow) @ 2.00 NPY4: No Passing Zone Line (Yellow) @ 1.25 SLW2: Stop Line (White) @ 6.00 CLW6: Crosswalk Line (White) @ 3.00
ELW4: Edge Line Right (White) @ 1.00

Location							Length by Line Type (Unfactored)															
Road ID	Station to Station		Dir. of Travel	Marking Type	Side		BCY4*	DCY4	NPY4**	SLW2	CLW6	ELW4										Remarks
					L	C R	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	
IA 38	+50.00	3+74.00	BOTH	Waterborne/Solvent Paint		C		3.24														
IA 38	3+74.00	6+41.00	SB	Waterborne/Solvent Paint		C			2.67													NO PASSING SOUTHBOUND
IA 38	6+41.00	9+49.00	BOTH	Waterborne/Solvent Paint		C	3.08															
IA 38	9+49.00	12+25.00	NB	Waterborne/Solvent Paint		C			2.76													NO PASSING, NORTHBOUND
IA 38	12+25.00	12+93.96	BOTH	Waterborne/Solvent Paint		C		0.69														MATCH TO EXISTING AT RAILROAD
IA 38	12+84.00		NB	Waterborne/Solvent Paint		R				0.15												STOP LINE FOR RR, PM-240
IA 38	13+48.00		SB	Waterborne/Solvent Paint		R				0.15												STOP LINE FOR RR, PM-240
IA 38	13+27.73	15+62.00	SB	Waterborne/Solvent Paint		C			2.34													NO PASSING, SOUTHBOUND
IA 38	15+62.00	16+33.21	BOTH	Waterborne/Solvent Paint		C	0.71															
IA 38	16+33.21	21+73.14	NB	Waterborne/Solvent Paint		C			5.40													NO PASSING, NORTHBOUND
IA 38	21+73.14	24+19.00	BOTH	Waterborne/Solvent Paint		C		2.46														
IA 38	24+19.00	33+92.00	SB	Waterborne/Solvent Paint		C			9.73													NO PASSING SOUTHBOUND
IA 38	33+92.00	39+78.32	BOTH	Waterborne/Solvent Paint		C	5.86															
IA 38	+50.00		SB	Waterborne/Solvent Paint		R				0.30												AT INTERSECTION US30 & IA38
IA 38	21+67.00		BOTH	Waterborne/Solvent Paint		C					0.33											SCHOOL CROSSWALK AT NORTH ST
IA 38	26+82.41	39+78.32	NB	Waterborne/Solvent Paint		R						12.96										EDGE LINE IN RURAL SECTION
IA 38	26+92.38	39+78.32	SB	Waterborne/Solvent Paint		R						12.86										EDGE LINE IN RURAL SECTION
US 30			WB	Removal of Paint		R						2.30										230' E OF IA 38, SHEET J.2
US 30			WB	Removal of Paint		R						2.60										260' W OF IA 38, SHEET J.2
US 30			EB	Removal of Paint		R						2.75										295' W OF IA 38, SHEET J.2
US 30			EB	Removal of Paint		R						2.75										275' E OF IA 38, SHEET J.2
US 30			BOTH	Removal of Paint		C	6.02															602' CENTERLINE, SHEET J.2
US 30			WB	Wet Retroreflective Removable Tape		R						4.50										NORTH EDGELINE, DETAIL 1/J.2
US 30			EB	Wet Retroreflective Removable Tape		R						3.72										SOUTH EDGELINE, DETAIL 1/J.2
US 30			BOTH	Wet Retroreflective Removable Tape		C		4.22														CENTERLINE, DETAIL 1/J.2
US 30			WB	Wet Retroreflective Removable Tape		R						5.51										NORTH EDGELINE, DETAIL 2 /J.2
US 30			EB	Wet Retroreflective Removable Tape		R						4.67										SOUTH EDGELINE, DETAIL 2/J.2
US 30			BOTH	Wet Retroreflective Removable Tape		C		5.25														CENTERLINE, DETAIL 2/J.2
US 30			WB	Waterborne/Solvent Paint		R						2.30										
US 30			WB	Waterborne/Solvent Paint		R						2.60										REPLACE REMOVED MARKINGS
US 30			EB	Waterborne/Solvent Paint		R						2.75										REPLACE REMOVED MARKINGS
US 30			EB	Waterborne/Solvent Paint		R						2.75										REPLACE REMOVED MARKINGS
US 30			BOTH	Waterborne/Solvent Paint		C	6.02															REPLACE REMOVED MARKINGS
																						REPLACE REMOVED MARKINGS
				Factored Total: Waterborne/Solvent Paint			3.92	12.78	28.63	3.60	0.99	36.22	-	-	-	-	-	-	-	-	-	
				Factored Total: Wet Retroreflective Removable Tape			-	18.94	-	-	-	18.40	-	-	-	-	-	-	-	-	-	
				Factored Total: Removal of Paint			1.51	-	-	-	-	10.40	-	-	-	-	-	-	-	-	-	
				Bid Quantity: Painted Pavement Markings, Waterborne or Sclvent-Based						86.13												
				Bid Quantity: Wet Retroreflective Removable Tape Markings						37.34												
				Bid Quantity: Pavement Markings Removed						11.91												

PAVEMENT MARKING SYMBOLS AND LEGENDS

Refer to PM-111

Road Identification	Location		STAW	RTAW	LTAW	CSRW	CSLW	CSTW	CRLW	FERW	LLRW	RLRW	RRCW	BLSW	WCSW	WPSB	SCLW			Remarks
	Station	Side															SCHOOL			
IA 38	9+60.00																			
	TO 10+20	R											1							
IA 38	15+04.00																			
	TO 15+64	R											1							

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD
TABULATIONS
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.10	135

STP-038-2(37)--2C-16
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POLLUTION PREVENTION PLAN

This Base Pollution Prevention Plan (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. 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 a detailed schedule according to Article 2602 of the Specifications 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. 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 list 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 a PCC Pavement Replacement on IA 38 from Jct. US 30 to NCS Stanwood.
- B. This PPP covers approximately 5.7 acres with an estimated 5.7 acres being disturbed. The portion of the PPP covered by this contract has 5.7 acres disturbed.
- C. The PPP is located in an area of 1 soil association Tama-Muscatine-Downs. The estimated average SCS runoff curve number for this PPP after completion will be 87.
- 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) – 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 of completed erosion control work.
- F. Runoff from this work will flow into storm water inlets to small streams to Wapsipinicon River to Mississippi River.

III. CONTROLS
- A. The contractor's work plan and sequence of operations 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. Section 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used 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 is preserved where attainable and disturbed portions of the site will be stabilized.
        2) Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased.
        3) Temporary stabilizing seeding shall be completed as the disturbed areas are constructed. If construction activity is not planned to occur in a disturbed area for at least 21 days, the area shall be stabilized by temporary seeding or mulching within 14 days. Other stabilizing methods shall be used outside the seeding time period.
        4) Stabilization measures to be used for this project are located in the Estimated Project Quantities (100-1A) and Estimate Reference Information (100-4A) located on the C sheets of the plan. Additional items may be found in the Inspector's Daily Reports (IDR) or Contract Modifications.
     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.
        2) Structural items to be used for this project are located in the Estimated Project Quantities (100-1A) 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 plan 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. 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.
        7) Vehicle and Equipment Cleaning - Employ washing practices that prevent contamination of surface and ground water from wash water.
        8) Vehicle and Equipment Fueling and Maintenance - 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.
        9) Litter Management - Ensure employees properly dispose of litter.
  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.
  4. Rainfall amount.
  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 and complete all actions 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.

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
- A. Base PPP - Initial Pollution Prevention Plan.
- B. Amended PPP - May include Plan Revisions or Contract Modifications for new items and fieldbook entries made by the inspector.
- C. IDR - Inspector's Daily Report – this contains the inspector's daily diary and 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.
- 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.

Consultant Signature — Contracting Authority Signature

Printed or Typed Name — Printed or Typed Name

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD
.
POLLUTION PREVENTION PLAN
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.11	135

STP-038-2(37)--2C-16
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SANITARY OR STORM SEWER ABANDONMENT OR REMOVAL

Designer Info

* Not a bid item

This Data Entry Sheet fills Tab 110-14 effective 04-16-13

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	
Sta 6+32, 15" RCP	Storm Sewer	Removal	30			
Sta 6+77, 31' L, 15" RCP	Storm Sewer	Removal	77			
Sta 6+90, 34' R, 12" CMP	Storm Sewer	Removal	14			
Sta 7+13, 5' L, 24" RCP	Storm Sewer	Removal	92			
Sta 7+43, 42' L, 36" RCP	Storm Sewer	Removal	8			
Sta 7+46, 2' L, 18" RCP	Storm Sewer	Removal	71			
Sta 7+63, 27' L, 18" RCP	Storm Sewer	Removal	42			
Sta 7+80, 15' R, 15" RCP	Storm Sewer	Removal	30			
Sta 15+72, 1' L, 10" CLAY	Storm Sewer	Removal	65			
Sta 15+96, 24' L, 10" CLAY	Storm Sewer	Removal	42			
Sta 21+08, 12" CMP	Storm Sewer	Removal	32			
Sta 21+15, 46' L, 10" CLAY	Storm Sewer	Removal	56			
Sta 21+19, 25' R, 8" CLAY	Storm Sewer	Removal	21			
Sta 21+46, 15' R, 10" CLAY	Storm Sewer	Removal	56			
Sta 26+61, 36' L, 12" CMP	Storm Sewer	Removal	27			
Sta 2+44, 100' R	Sanitary Sewer	Removal	137			
Sta 2+71, 169' L	Sanitary Sewer	Removal	10			
Sta 7+21, 90' R	Sanitary Sewer	Removal	186			
Sta 7+21, 90' L	Sanitary Sewer	Removal	167			
Sta 10+88	Sanitary Sewer	Removal	336			
Sta 2+40.77, 168.61' L to Sta 2+43.48, 24.82' R	Sanitary Sewer	Abandonment, Plug Only				Near Lutheran Church
Sta 2+40.77, 168.61' L to Sta 2+67.86, 168.63' L	Sanitary Sewer	Abandonment, Plug Only				Near Lutheran Church
		TOTALS	1499			

REMOVAL OF INTAKES AND UTILITY ACCESSES

This Data Entry Sheet fills Tab 110-15 effective 04-16-13

No.	Location/Description	Type	Remarks
1	Sta 6+32, 16' L	Intakes	
2	Sta 6+32, 16' R	Intakes	
3	Sta 6+82, 32' R	Intakes	
4	Sta 7+43, 36' L	Intakes	
5	Sta 7+80, 16' L	Intakes	
6	Sta 7+80, 16' R	Intakes	
7	Sta 15+71, 24' L	Intakes	
8	Sta 16+15, 24' L	Intakes	
9	Sta 21+08, 16' L	Intakes	
10	Sta 21+08, 16' R	Intakes	
11	Sta 21+19, 25' R	Intakes	
12	Sta 21+64, 15' R	Intakes	
13	Sta 2+45.41, 164.83' R	Utilities	
14	Sta 7+19.93, 169.05' L	Utilities	
15	Sta 7+20.88, 2.20' L	Utilities	
16	Sta 10+86.97, 167.13' R	Utilities	
17	Sta 10+88.17, 169.02' L	Utilities	

CURB AND GUTTER

Refer to PV-102

(1) Bid Item

This Data Entry Sheet fills Tab 112-4 effective 10-21-14

Point No.	Station	Offset	Island Interior Area (1)	Curb and Gutter			Remarks
				Curb Type	C&G Width	Length (1)	
			SY		FT	LF	
1	12+65.00	15.5' L		6" Standard PCC	2.5	3.5	SW Side of UPRR Transition
2	12+65.00	15.5' R		6" Standard PCC	2.5	3.5	SE Side of UPRR Transition
3	13+70.00	15.5' L		6" Standard PCC	2.5	5.0	NW Side of UPRR Transition
4	13+70.00	15.5' R		6" Standard PCC	2.5	5.0	NE Side of UPRR Transition
5	301+02.00	16.6' L		6" Standard PCC	2.5	13.0	Broadway St East Transition
6	301+02.00	16.6' R		6" Standard PCC	2.5	13.0	Broadway St East Transition
					TOTAL	43.0	

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

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	Direction of Travel		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	0	Acres	Each	
1+24, L		Stumps - Grubbing					1											8.8			DIV 4
1+50, L		Stumps - Grubbing						1										13.6			DIV 4
1+87, L		Stumps - Grubbing						1										13.6			DIV 4
2+15, R		Stumps - Grubbing							1									17.6			
2+57, R		Stumps - Grubbing										1						80.0			
2+67, L		Trees - Clearing and Grubbing			1													6.7			FOR SANITARY SEWER
2+73, L		Trees - Clearing and Grubbing			1													6.7			FOR SANITARY SEWER
2+78, L		Trees - Clearing and Grubbing					1											13.5			FOR SANITARY SEWER
2+84, L		Trees - Clearing and Grubbing					1											13.5			FOR SANITARY SEWER
3+00, L		Stumps - Grubbing									1							50.0			DIV 4
4+24, L		Stumps - Grubbing						1										13.6			DIV 4
4+48, L		Stumps - Grubbing							1									17.6			DIV 4
4+84, L		Stumps - Grubbing								1								28.0			DIV 4
5+21, L		Stumps - Grubbing			1													4.8			DIV 4
5+54, L		Stumps - Grubbing							1									17.6			DIV 4
5+95, L		Stumps - Grubbing							1									17.6			DIV 4
7+97, L		Stumps - Grubbing						1										13.6			DIV 4
10+42, L		Stumps - Grubbing					1											8.8			DIV 4
10+75, L		Stumps - Grubbing	1															1.1			DIV 4
11+52, R		Stumps - Grubbing							1									17.6			
11+94, L		Stumps - Grubbing	1															1.1			DIV 4
13+78, L		Stumps - Grubbing					1											8.8			
18+52, R		Stumps - Grubbing				1												6.6			
18+73, R		Stumps - Grubbing					1											8.8			
19+02, R		Stumps - Grubbing						1										13.6			
19+35, R		Stumps - Grubbing						1										13.6			
19+37, L		Stumps - Grubbing			1													4.8			
19+62, L		Stumps - Grubbing			1													4.8			
20+11, R		Stumps - Grubbing			1													4.8			
20+27, R		Stumps - Grubbing			1													4.8			
20+38, L		Stumps - Grubbing	1															1.1			
20+61, R		Stumps - Grubbing			1													4.8			
20+96, L		Stumps - Grubbing	1															1.1			DIV 4
																	TOTAL	443.0			

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.

, a Special Backfill unit weight (lbs/cf) of 140 a Granular Shoulder unit weight (lbs/cf) of 140

Calculations assume a HMA unit weight (lbs/cf) of 0

This Data Entry Sheet fills Tab 112-9 effective 10-15-13

Location					Quantities														Remarks
Road Identification	(1) Direction Of Traffic	Station to Station		Side	(P) Start	(P) End	(P) Width	(G) Start	(G) End	(G) Width	(L) Length	Class 10 (3) Excavation	Paved Shoulder	Special Backfill Cross Section Area (PCC)	Special Backfill PCC Alternate CY (2)	Special Backfill PCC Alternate CY/STA	Modified Subbase CY (2)	Granular Shoulder Cross Section Area	Granular Shoulder TON (2)	Granular Shoulder TON/STA	
					FT	FT	FT	FT	FT	FT	FT	CY (2)	SY (2)	SF				SF			
Hwy 30	East	90+14.93	91+73.17	R	10	10	10.0				158.2	129.6	175.8	25	146.5	92.6					
IA 38	South	26+93.00	39+78.00	L	4	4	4.0	6.0	6.0	6.0	1285.0		571.1	3.6	171.3	13.3	142.8	3.5	314.8	24.5	
IA 38	North	26+93.00	39+78.00	R	4	4	4.0	6.0	6.0	6.0	1285.0		571.1	3.6	171.3	13.3	142.8	3.5	314.8	24.5	
										TOTALS		129.6	1318.0		489.2		285.6		629.7		

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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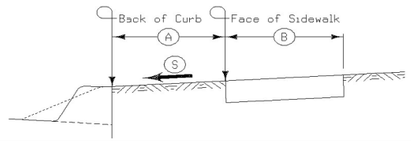
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.13	135

STP-038-2(37)--2C-16
P:\14\183\DRAWINGS\CIVIL\14183_ZZ_C.DWG 10/22/2015 10:05:10 AM JERI M. VONDERA

SIDEWALKS

See MI-220 and S Sheets

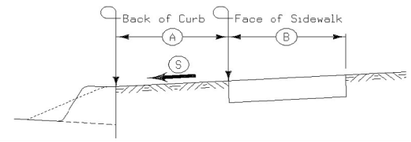


Road Identification	Station to Station		Side	A	B	S	4" PCC Sidewalk	6" PCC Sidewalk	_" PCC Sidewalk	Detectable Warnings	Remarks
				FT	FT	%	SY	SY	SY	SF	
ASH STREET	1+51.39	3+33.70	L	10.00	5.00	VARIES	101.3				
ASH STREET	3+33.70	3+47.58	L	10.00	5.00	VARIES		7.7			
ASH STREET	3+47.58	4+32.15	L	10.00	5.00	VARIES	47.0				
ASH STREET	4+32.15	4+43.19	L	10.00	5.00	VARIES		6.1			
ASH STREET	4+43.19	4+89.28	L	10.00	5.00	VARIES	25.6				
ASH STREET	4+89.28	4+98.10	L	10.00	5.00	VARIES		4.9			
ASH STREET	4+98.10	5+39.51	L	10.00	5.00	VARIES	23.0				
ASH STREET	5+39.51	5+50.03	L	10.00	5.00	VARIES		5.8			
ASH STREET	5+50.03	6+65.22	L	10.00	5.00	VARIES	64.0				
ASH STREET	6+65.22	6+77.03	L	10.00	5.00	VARIES		6.6			
ASH STREET	6+77.03	6+95.80	L	10.00	5.00	VARIES	10.4				
ASH STREET	6+95.80	7+06.12	L	10.00	5.00	VARIES	5.7			10	RAMP
ASH STREET	7+37.48	7+54.80	L	10.00	5.00	VARIES	9.6			10	RAMP
ASH STREET	7+54.80	8+97.30	L	10.00	5.00	VARIES	79.2				
ASH STREET	8+97.30	9+10.70	L	10.00	5.00	VARIES		7.4			
ASH STREET	9+10.70	12+12.31	L	10.00	5.00	VARIES	167.6				
ASH STREET	12+12.31	12+23.42	L	10.00	5.00	VARIES	6.2			10	RAMP
ASH STREET	12+54.80	12+67.55	L	10.00	5.00	VARIES	7.1			10	RAMP
ASH STREET	13+67.92	13+84.65	L	10.00	5.00	VARIES	9.3				
ASH STREET	13+84.65	14+06.12	L	10.00	5.00	VARIES		11.9			
ASH STREET	14+06.12	15+49.77	L	10.00	5.00	VARIES	79.8				
ASH STREET	15+49.77	15+78.24	L	10.00	5.00	VARIES	15.8			10	RAMP
ASH STREET	16+09.60	16+38.70	L	10.00	5.00	VARIES	16.2			10	RAMP
ASH STREET	16+38.70	17+72.71	L	10.00	5.00	VARIES	74.5				
ASH STREET	17+72.71	17+84.11	L	10.00	5.00	VARIES		6.3			
ASH STREET	17+84.11	18+96.04	L	10.00	5.00	VARIES	62.2				
ASH STREET	18+96.04	19+08.51	L	10.00	5.00	VARIES		6.9			
ASH STREET	19+08.51	20+14.60	L	10.00	5.00	VARIES	58.9				
ASH STREET	20+14.60	20+27.16	L	10.00	5.00	VARIES		7.0			
ASH STREET	20+27.16	21+05.25	L	10.00	5.00	VARIES	43.4				
ASH STREET	21+05.25	21+22.55	L	10.00	5.00	VARIES	9.6			10	RAMP
ASH STREET	21+53.91	21+65.07	L	10.00	5.00	VARIES	6.2			10	RAMP
ASH STREET	21+65.07	22+39.11	L	10.00	5.00	VARIES	41.1				
ASH STREET	22+39.11	22+53.59	L	10.00	5.00	VARIES		8.0			
ASH STREET	22+53.59	23+70.61	L	10.00	5.00	VARIES	65.0				
ASH STREET	23+70.61	23+84.15	L	10.00	5.00	VARIES		7.5			
ASH STREET	23+84.15	25+33.47	L	10.00	5.00	VARIES	83.0				
ASH STREET	25+33.47	25+58.47	L	VARIES	5.00	VARIES	13.9				
ASH STREET	25+58.47	25+72.20	L	7.50	5.00	VARIES	7.6				
ASH STREET	25+72.20	25+81.45	L	7.50	5.00	VARIES		5.1			
ASH STREET	25+81.45	26+31.46	L	7.50	5.00	VARIES	27.8				
ASH STREET	26+31.46	26+42.35	L	7.50	5.00	VARIES	6.0			10	RAMP
ASH STREET	26+74.87	26+90.73	L	10.90	5.00	VARIES	8.8				
ASH STREET	10+48.13	12+07.33	R	8.00	5.00	VARIES	88.4				
ASH STREET	15+49.77	15+73.40	R	8.00	5.00	VARIES	13.1			10	RAMP
ASH STREET	16+14.62	21+05.25	R	8.00	5.00	VARIES	272.6				
ASH STREET	21+05.25	21+21.25	R	VARIES	5.00	VARIES	8.9			10	RAMP
ASH STREET	21+55.25	21+64.84	R	VARIES	5.00	VARIES	5.3			10	RAMP
PRESTON STREET	101+50.25	101+60.25	R	VARIES	5.00	VARIES	5.6				
PRESTON STREET	101+65.25	101+73.99	R	VARIES	5.00	VARIES	4.9			10	RAMP
PRESTON STREET	102+07.50	102+16.75	R	VARIES	5.00	VARIES	5.1			10	RAMP
PRESTON STREET	102+16.75	102+29.95	R	VARIES	5.00	VARIES	7.3				
CENTER STREET	200+27.98	200+37.97	R	VARIES	5.00	VARIES	5.6				
CENTER STREET	200+43.10	200+53.06	R	VARIES	5.00	VARIES	5.5			10	RAMP
CENTER STREET	200+84.32	200+92.09	R	VARIES	5.00	VARIES	4.3			10	RAMP
CENTER STREET	200+97.08	201+07.08	R	VARIES	5.00	VARIES	5.6				
BROADWAY STREET	300+21.00	300+36.00	R	VARIES	5.00	VARIES	8.3				
BROADWAY STREET	300+41.00	300+51.00	R	VARIES	5.00	VARIES	5.6			10	RAMP
BROADWAY STREET	300+82.00	300+90.00	R	VARIES	5.00	VARIES	4.4			10	RAMP
BROADWAY STREET	300+90.00	301+05.00	R	VARIES	5.00	VARIES	8.3				
BROADWAY STREET	300+21.02	300+36.02	L	VARIES	5.00	VARIES	8.3				
BROADWAY STREET	300+41.02	300+51.02	L	VARIES	5.00	VARIES	5.6			10	RAMP
BROADWAY STREET	300+82.02	300+90.02	L	VARIES	5.00	VARIES	4.4			10	RAMP
BROADWAY STREET	300+95.02	301+10.02	L	VARIES	5.00	VARIES	8.3				
NORTH STREET	401+56.33	401+66.33	L	VARIES	5.00	VARIES	5.6				
NORTH STREET	401+71.33	401+80.34	L	VARIES	5.00	VARIES	5.0			10	RAMP
NORTH STREET	402+13.38	402+20.33	L	VARIES	5.00	VARIES	3.9			10	RAMP
NORTH STREET	402+20.33	402+28.11	L	VARIES	5.00	VARIES	4.3				

113-1
04-16-13

SIDEWALKS

See MI-220 and S Sheets



Road Identification	Station to Station		Side	A	B	S	4" PCC Sidewalk	6" PCC Sidewalk	_" PCC Sidewalk	Detectable Warnings	Remarks
				FT	FT	%	SY	SY	SY	SF	
ASH STREET	2+62.92	2+79.06	L	N/A	3.00	N/A	5.4				SAN SEWER

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.14	135

STP-038-2(37)--2C-16
P:\14\183\DRAWINGS\CIVIL\14183_ZZ_C.DWG 10/22/2015 10:05:22 AM JERI M. VONDERA

REFERENCE LOCATION SIGNS AND DELINEATORS

Refer to SI-171, SI-172 and SI-173.

Begin Station	End Station	Location	Reference Location Signs								Enhanced Reference Location Signs								Intermediate Reference Location Signs			Delineators								Object Markers			Installation	
																						Type I		Type IA		Type II		Type III		Type 1	Type 2	Type 3	Type	Offset
			D10-1	D10-2	D10-3	D10-5	D10-6	D10-7	D10-8	D10-9	D10-1A	D10-2A	D10-3A	D10-5A	D10-6A	D10-7A	D10-8A	D10-9A	D10-1D	D10-2D	D10-3D	White	Yellow	White	Yellow	White	Yellow	White	Yellow					
1+29.9, R		MILE MARKER 35		1																													
1+29.9, L		MILE MARKER 35		1																													
12+83.84, R		OM3-R, TO DELINEATE CROSSING SIGNAL																												1			
13+39.52, L		OM3-R, TO DELINEATE CROSSING SIGNAL																												1			

MATERIALS FOR TYPE 'A' SIGNS

TYPE A SIGNING TYPICALS	SIGN NUMBER	DIR OF TRAVEL	SIGN LOCATION	WOOD POSTS			PERFORATED SQUARE STEEL TUBE						WOOD, 4 X 6			TYPE A SIGN MOUNTING BRACKETS							INSTALLATION			REMARKS
				NO. OF POSTS	4 x 4					ANCHOR			NO. OF POSTS	POST LENGTH	POST LENGTH	ONE POST BRACKET	TWO POST	AUXILIARY	(H)	(F)	(F1)				
			STATION		LEG 1 FT	LEG 2 FT	LEG 1 FT	LEG 2 FT	LEG 3 FT	CONC	SOIL	SLIPBASE		FT	FT								TYPE	DIM 'X' FT	SEE SIGNING NOTES	
	R1-1	SB	0+58, L	1	14																					STOP 36X36
	M3-1	NB	1+20, R	1	14																					NORTH
	M1-5	NB	1+20, R																							IOWA 38
	R2-1	NB	1+42, R	1	14																					SPEED LIMT 25
2/B.5 S7	D1-3a	SB	3+73, L										2	16	16											DESTINATION
	R7-1	NB	4+57, R	1	14																					NO PARKING
3/B.5	M2-1	SB	5+05, L										2	16	16		1	1								JCT
3/B.5	M1-4	SB	5+05, L																							US 30
3/B.5	M1-5	SB	5+05, L																							IA 38
3/B.5	M5-1	SB	5+05, L																							ADV. LEFT
3/B.5 S8	BYWAYS	SB	5+05, L																							BYWAYS
3/B.5	M6-4	SB	5+05, L																							DBL ARROW
	W14-3	SB	6+41, R	1	14																					NO PASSING
	W3-1	SB	6+44, L	1	14																					STOP AHEAD
	R12-1	EB	7+05, R	1	14																					LIMIT 10 TON
	R1-1	EB	7+05, L	1	14																					STOP 30X30
	R1-1	WB	7+42, R	1	14																					STOP 30X30
	W14-3	NB	9+49, L	1	14																					NO PASSING
	W10-1	NB	9+83, R	1	14																					RR X-ING
	R7-1	NB	11+75, R	1	14																					NO PARKING
	R1-1	EB	12+22, L	1	14																					STOP 30X30
	R1-1	WB	12+54, R	1	14																					STOP 30X30
	R7-1	NB	13+66, R	1	14																					NO PARKING
	S1-1	NB	15+39, R	1	14																					SCHOOL X-ING
	W16-9P	NB	15+39, R																							SHOOL AHEAD
	W10-1	SB	15+40, L	1	14																					RR X-ING
	W14-3	SB	15+62, R	1	14																					NO PASSING
	R1-1	EB	15+75, L	1	14																					STOP 30X30
	R1-1	WB	16+14, R	1	14																					STOP 30X30
	R12-1	WB	16+15, L	1	14																					10 TON
	W14-3	NB	16+33, L	1	14																					NO PASSING
	M1-5	SB	19+75, L	1	14																					IA 38
	R1-1	EB	21+21, L	1	14																					STOP 30X30
	R1-1	WB	21+56, R	1	14																					STOP 30X30
	S1-1	NB	21+61, R	1	14																					SCHOOL X-ING
	W16-7P	NB	21+61, R																							SCHOOL ARROW
	S1-1	SB	21+77, L	1	14																					SCHOOL X-ING
	W16-7P	SB	21+77, L																							SCHOOL ARROW
	R7-1	NB	22+07, R	1	14																					NO PARKING
	R7-1	NB	24+76, R	1	14																					NO PARKING
	R2-1	SB	26+10, L	1	14																					SPEED LIMT 25
	R6-2L	SB	26+35, R	1	14																					ONE WAY
	R6-2R	NB	26+35, R																							ONE WAY
	R5-1A	WB	26+35, R																							WRONG WAY
	R1-1	EB	26+43, L	1	14																					STOP 30X30
	R12-1	WB	26+79, L	1	14																					10 TON
	M1-5	NB	27+04, R	1	14																					IA-38
	M3-1	NB	27+04, R																							NORTH
			TOTAL	476									32	32												

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: TRACED BY:
DETAILED BY: CHECKED BY:

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.15	135

STP-038-2(37)--2C-16
P:\14\183\DRAWINGS\CIVIL\14183_ZZ_C.DWG 10/22/2015 10:05:29 AM JERI M. VONDERA

SUMMARY OF TYPE 'A' SIGNS

Sign Number	Quantity EACH	Size IN	Total Sign Area SF
R1-1	1	36 X 36	9.0
R1-1	9	30 X 30	56.3
M1-5 (IA 38)	4	24 X 24	16.0
M3-1	2	24 X 12	4.0
R2-1	2	24 X 30	10.0
R7-1AB	5	12X18	7.5
M2-1	1	24 X 12	2.0
M1-4	1	24 X 24	4.0
M5-1	1	24 X 24	4.0
BYWAYS SEE DETAIL 3/B.5	1	24 X 42	7.0
M6-4	1	24 X 12	2.0
W14-3B	4	36 X 48 X 48	48.0
W3-1	1	36 X 36	9.0
R12-1	3	24 X 30	15.0
W10-1	2	36DIA	14.1
S1-1	3	36 X 36	27.0
W16-9P	1	24 X 12	2.0
W16-7P DIAGONAL DWN ARROW	2	24 X 12	4.0
R6-2	2	24 X 30	10.0
R5-1a WRONG WAY	1	36 X 24	6.0
D1-3 DESTINATION DETAIL 2/B.5	1	42 X 120	35.0
		TOTAL	291.9

EXISTING SIGNS TO BE REMOVED

SIGN NUMBER OR DESCRIPTION	LOCATION STATION	DIRECTION OF TRAVEL	TYPE 'A' SIGN ASSEMBLY (RA) EACH	TYPE 'B' SIGN ASSEMBLY (RB) EACH	REMOVE & REINSTALL EXISTING SIGNS TYPE 'A' (RR) EACH	REMOVE & REINSTALL EXISTING SIGNS TYPE 'B' (RR) EACH	CONCRETE FOUNDATION (RF) EACH	SUPPORT STRUCTURE & FOUNDATION (RS) EACH	APPLICABLE SIGNING NOTES	REMARKS
D3-1, STREET NAME SIGN	0+61, R		1							
R1-1, STOP	0+63, L	SB	1							
M1-5, M3-1, ROUTE SIGN	1+20, R	NB	1							
D10-2, MILE MARKER	1+30, R	NB	1							
R2-1, SPEED LIMIT	1+42, R	NB	1							
PRIVATE	1+43, L		1						CHURCH LOT	SALVAGE, RTN TO OWNER
PRIVATE	1+51, L		1						CHURCH LOT	SALVAGE, RTN TO OWNER
PRIVATE	APPROX 1+79		1						CHURCH LOT	SALVAGE, RTN TO OWNER
D1-3a, DESTINATION	3+72, L	SB	1							2 POSTS
R7-1, NO PARKING	4+57, R	NB	1							
ROUTE ASSEMBLY	5+05, L	SB	1							2 POSTS
W14-3, NO PASSING	6+41, R	SB	1							
W3-1, STOP AHEAD	6+44, L	SB	1							
R12-1, WEIGHT LIMIT	7+05, R	EB	1							
R1-1, STOP	7+05, L	EB	1							
R1-1, STOP	7+42, R	WB	1							
D3-1, STREET NAME SIGN	7+54, R		1							
M1-5, ROUTE SIGN	7+68, R	NB	1							
W14-3, NO PASSING	10+15, L	NB	1							
W10-1. GRADE X-ING	10+25, R	NB	1							
R7-1, NO PARKING	11+75, R	NB	1							
D3-1, STREET NAME SIGN	12+10, R		1							
R1-1, STOP	12+22, L	EB	1							
R1-1, STOP	12+54, R	WB	1							
OM3-L	12+86, L	NB	1							
OM3-L	13+40, L	SB	1							
R7-1, NO PARKING	13+66, R	NB	1							
M1-5, ROUTE SIGN	14+82, L	SB	1							
S1-1, SCHOOL X-ING	15+39, R	NB	1							
W10-1. GRADE X-ING	15+40, L	SB	1							
W14-3, NO PASSING	15+62, R	SB	1							
R1-1, STOP	15+75, L	EB	1							
R1-1, STOP	16+14, R	WB	1							
R12-1, WEIGHT LIMIT	16+15, L	WB	1							
D3-1, STREET NAME SIGN	16+22, L		1							
D3-1, STREET NAME SIGN	16+33, R		1							
W14-3, NO PASSING	16+33, L	NB	1							
M1-5, ROUTE SIGN	16+57, R	NB	1							
M1-5, ROUTE SIGN	19+75, L	SB	1							
R1-1, STOP	21+21, L	EB	1							
R1-1, STOP	21+56, R	WB	1							
D3-1, STREET NAME SIGN	21+63, R		1							
S1-1, SCHOOL X-ING	21+77, L	SB	1							
R7-1, NO PARKING	22+07, R	NB	1							
R7-1, NO PARKING	24+76, R	NB	1							
R2-1, SPEED LIMIT	26+13, L	SB	1							
D3-1, STREET NAME SIGN	26+29, R	NB	1							
5-2 ONE WAY, WRONG WAY	26+35, R		1							
R1-1, STOP	26+43, L	EB	1							
R12-1, WEIGHT LIMIT	26+79, L	WB	1							
M1-5, ROUTE SIGN	27+04, R	NB	1							
		TOTAL	51							

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TABULATIONS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

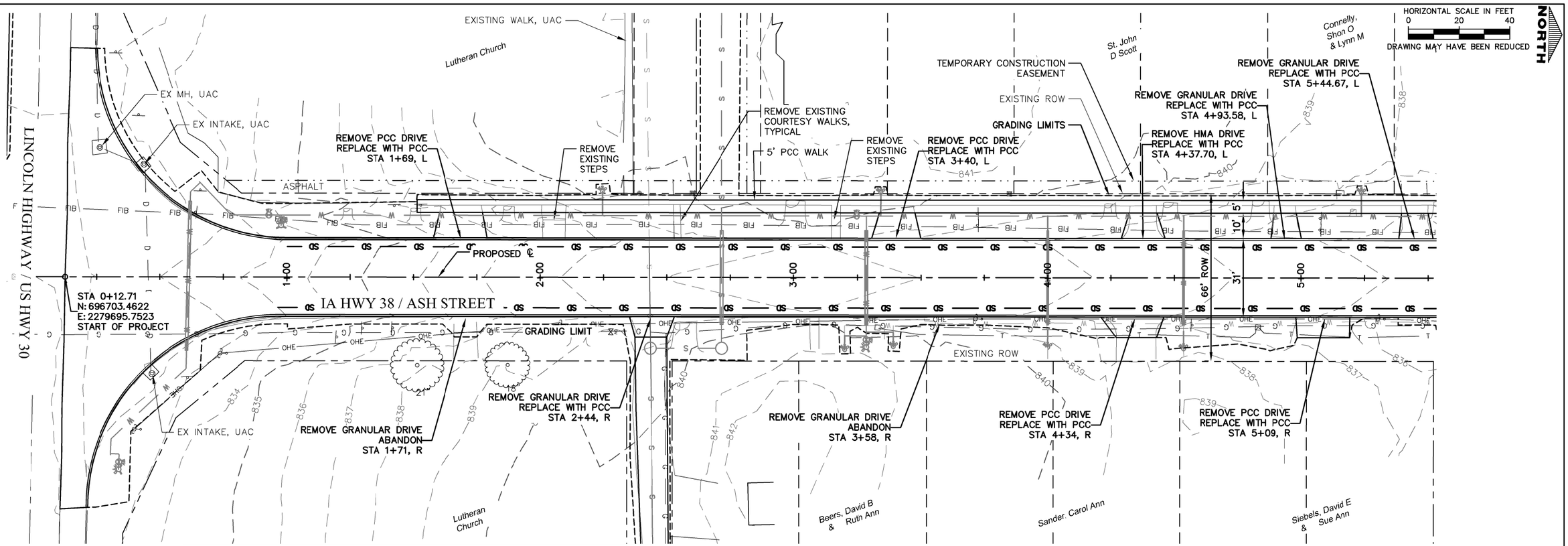
DESIGNED BY: TRACED BY:
DETAILED BY: CHECKED BY:

iiw 563.556.2464 ◆ 800.556.4491
IIW, P.C. ◆ www.iiwengr.com

CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	C.16	135

STP-038-2(37)--2C-16
P:\14\183\DRAWINGS\CIVIL\14183_ZZ_C.DWG 10/22/2015 10:05:35 AM JERI M. VONDERA



NOTES:
PROTECT EXISTING AND RELOCATED UTILITY POLES AND OVERHEAD LINES DURING CONSTRUCTION.

FOR SURVEY CONTROL AND ALIGNMENT INFORMATION, REFER TO G SHEETS
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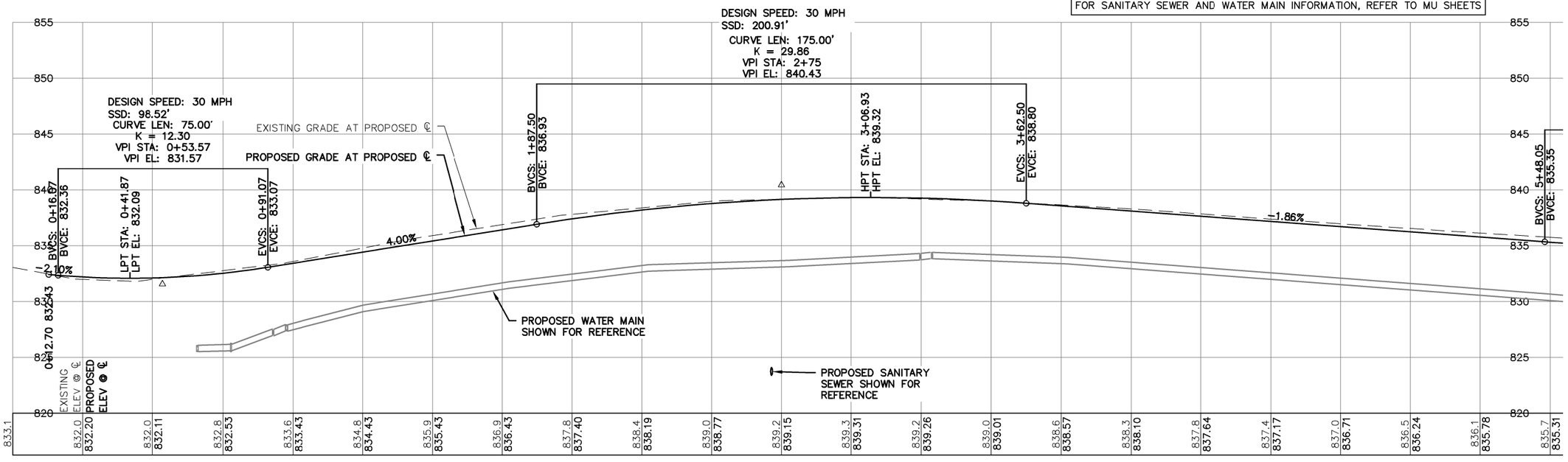

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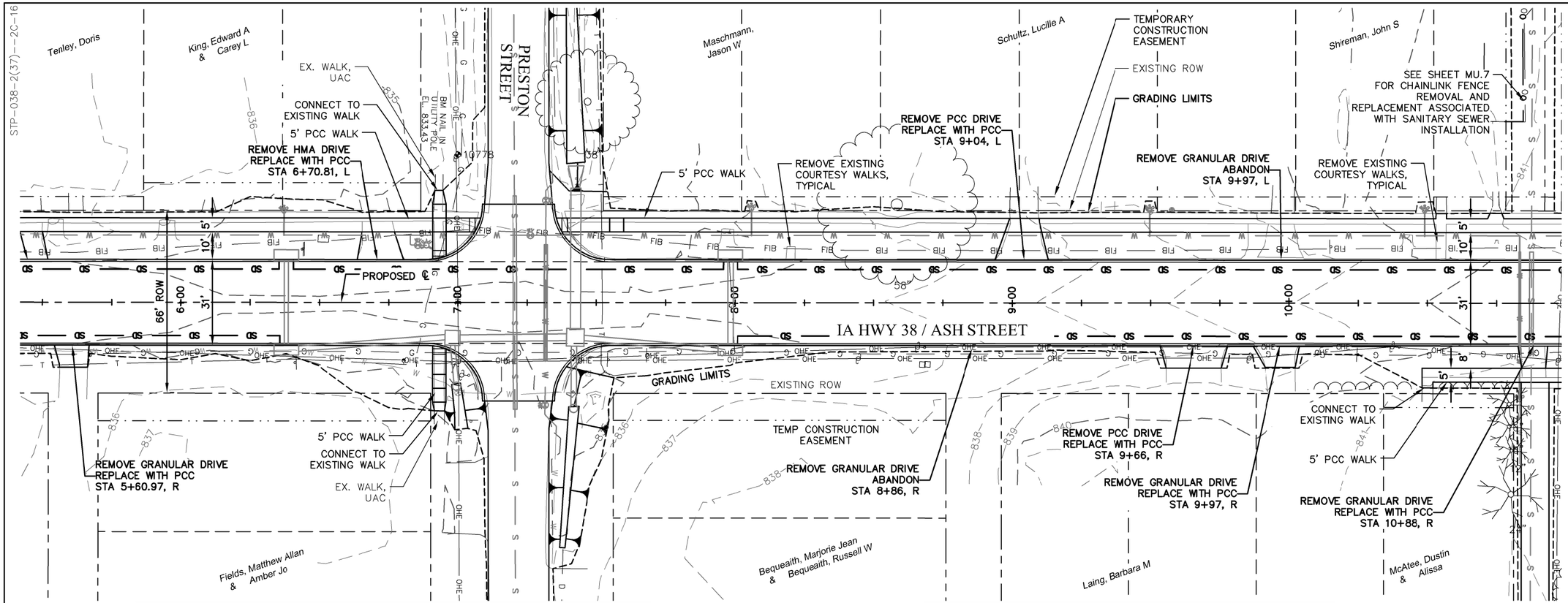
DETAILED BY:	CHECKED BY:					IOWA		2016	D.1	135



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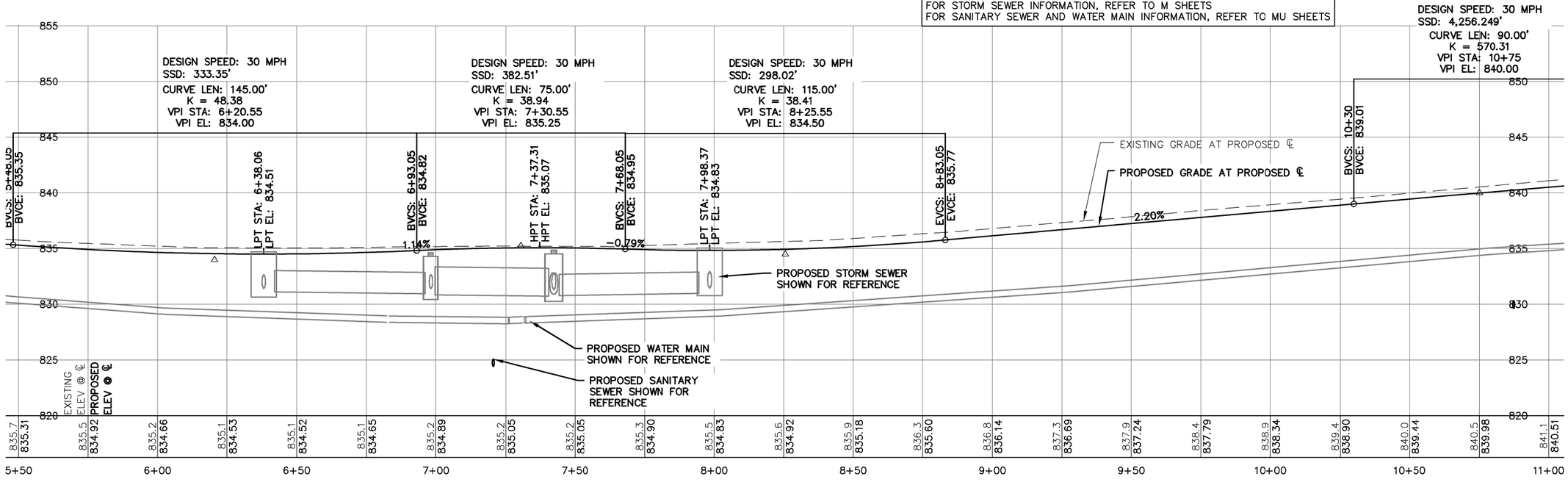

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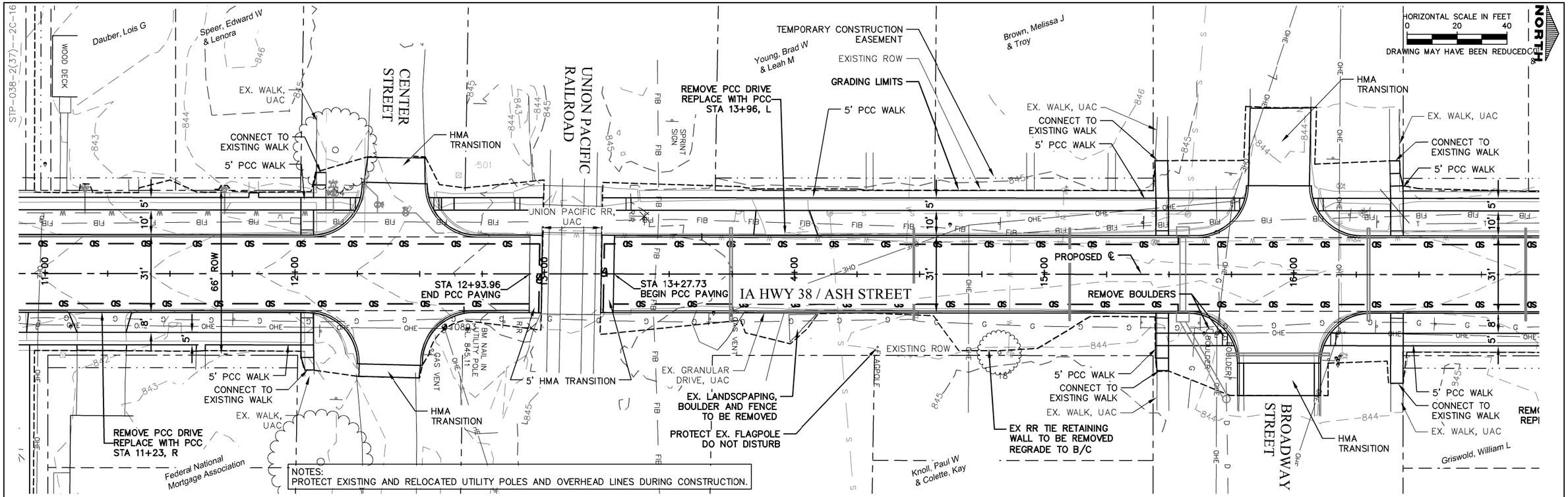
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	D.2	135



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DETAILED BY:	CHECKED BY:					IOWA		2016	D.3	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED

NORTH

Crist, Grayland J & Kathaleen M

Boothe, Larry R & Hack, Suzanne K

Klawiter, William A & Cynthia R

Wachendorf, Michael & Rebecca J

Pierson, Steven K & Natasha L

Zink, Kyle C & Baker, Marinna L

Hines, Carol & Flockhart, Donald

REMOVE HMA DRIVE REPLACE WITH PCC STA 17+79, L

PROPOSED 5' PCC WALK

REMOVE PCC DRIVE REPLACE WITH PCC STA 19+02, L

TEMPORARY CONSTRUCTION EASEMENT

EXISTING ROW

GRADING LIMITS

REMOVE PCC DRIVE REPLACE WITH PCC STA 20+21, L

HMA TRANSITION

EX. WALK, UAC

CONNECT TO EXISTING WALK

PROPOSED 5' PCC WALK

REMOVE PCC DRIVE REPLACE WITH PCC STA 22+46, L

17+00 | 18+00 | 19+00 | 20+00 | 21+00 | 22+00

10' | 31' | 66' ROW | 8' | 5' | 5'

PROPOSED ℄

IA HWY 38 / ASH STREET

REMOVE HMA DRIVE REPLACE WITH PCC STA 17+28, R

REMOVE GRANULAR DRIVE REPLACE WITH PCC STA 17+56, R

REMOVE HMA DRIVE REPLACE WITH PCC STA 19+15, R

REMOVE PCC DRIVE ABANDON STA 20+19, R

TEMPORARY CONSTRUCTION EASEMENT

NORTH STREET

EXISTING ROW

EX. WALK, UAC

PROPOSED 5' PCC WALK

GRADING LIMITS

CONNECT TO EXISTING WALK

HMA TRANSITION

Saltzman, Leroy Edward

Childers, Elizabeth J

Koob, Kevin Michael & Koob, Kenneth Robert

Flockhart, Robert R & Darlene

NOTES:
PROTECT EXISTING AND RELOCATED UTILITY POLES AND OVERHEAD LINES DURING CONSTRUCTION.

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DESIGN SPEED: 30 MPH
SSD: 313.61'
CURVE LEN: 110.00'
K = 38.06
VPI STA: 21+06.68
VPI EL: 837.26

EXISTING GRADE AT PROPOSED ℄

PROPOSED GRADE AT PROPOSED ℄

-1.27%

1.62%

BVCS: 20+51.68
BVCE: 837.96

LPT STA: 20+99.99
LPT EL: 837.65

EVCS: 21+61.68
EVCE: 838.15

PROPOSED STORM SEWER SHOWN FOR REFERENCE

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

	EXISTING ELEV @ ℄	PROPOSED ELEV @ ℄
17+00	842.8	842.33
17+50	842.4	842.08
18+00	842.0	841.79
18+50	841.7	841.47
19+00	841.3	841.15
19+50	841.0	840.84
20+00	840.6	840.52
20+50	840.3	840.20
21+00	839.9	839.88
21+50	839.6	839.57
22+00	839.3	839.25
22+50	838.9	838.93
23+00	838.6	838.61
	838.3	838.30
	838.0	837.98
	837.8	837.73
	837.6	837.65
	837.6	837.73
	837.8	837.98
	838.1	838.37
	838.5	838.77
	838.8	839.18
	839.4	839.58
	839.9	839.99
	840.4	840.39

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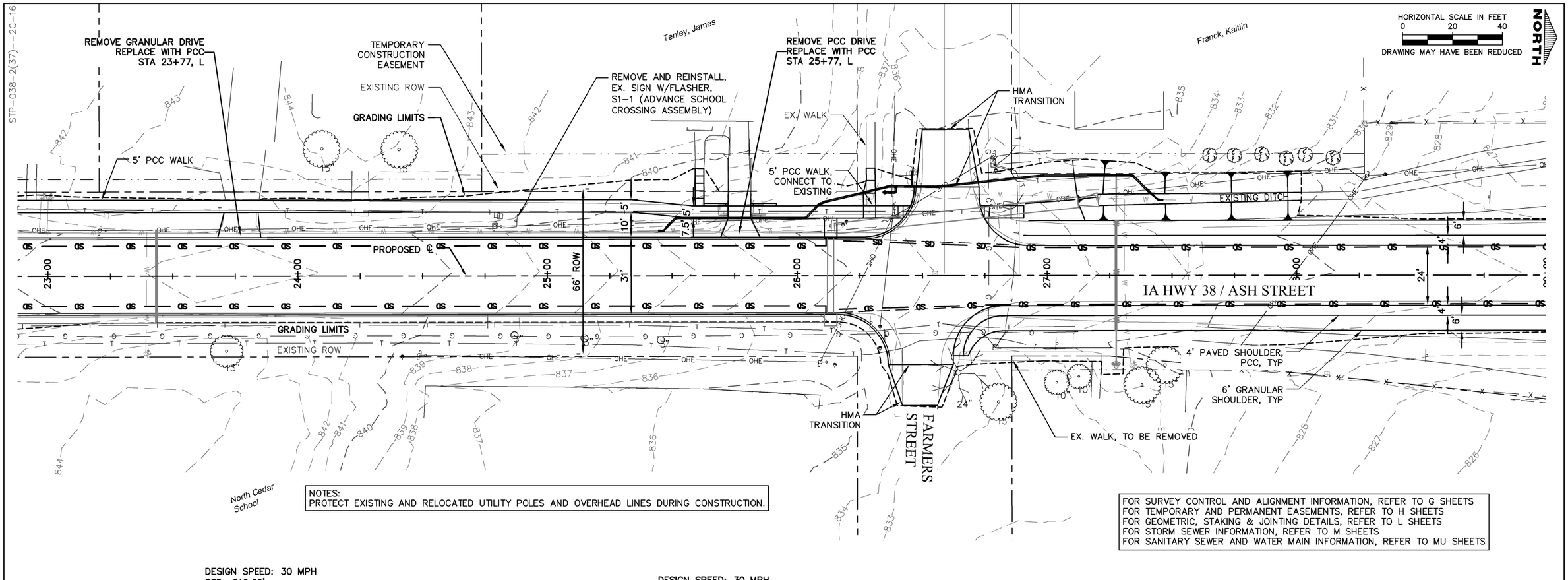
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	D.4	135



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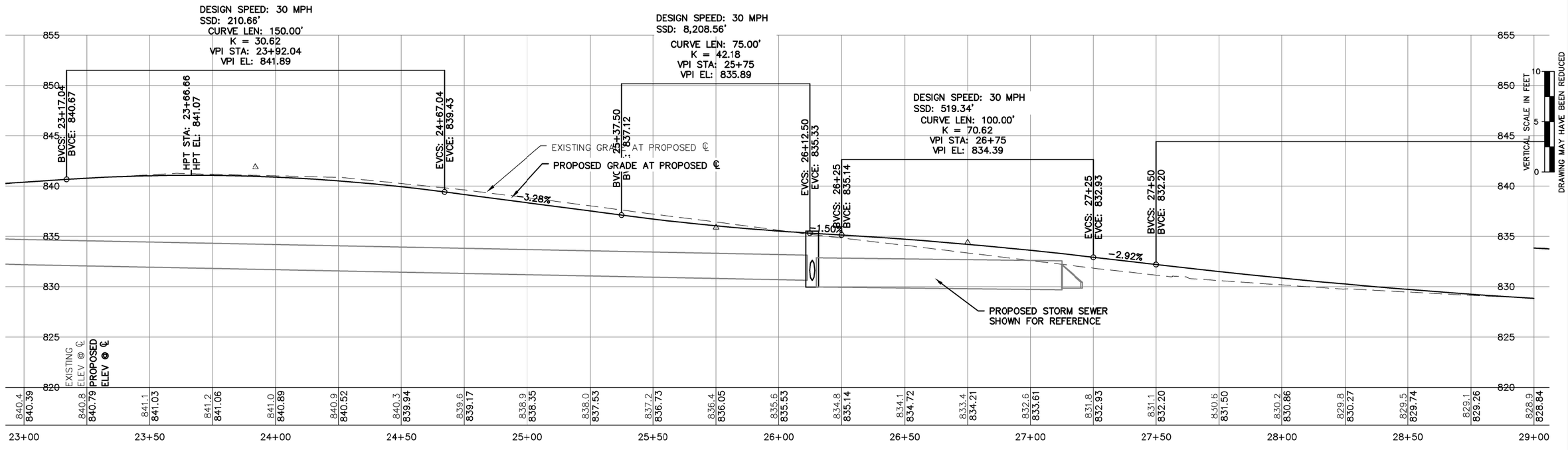

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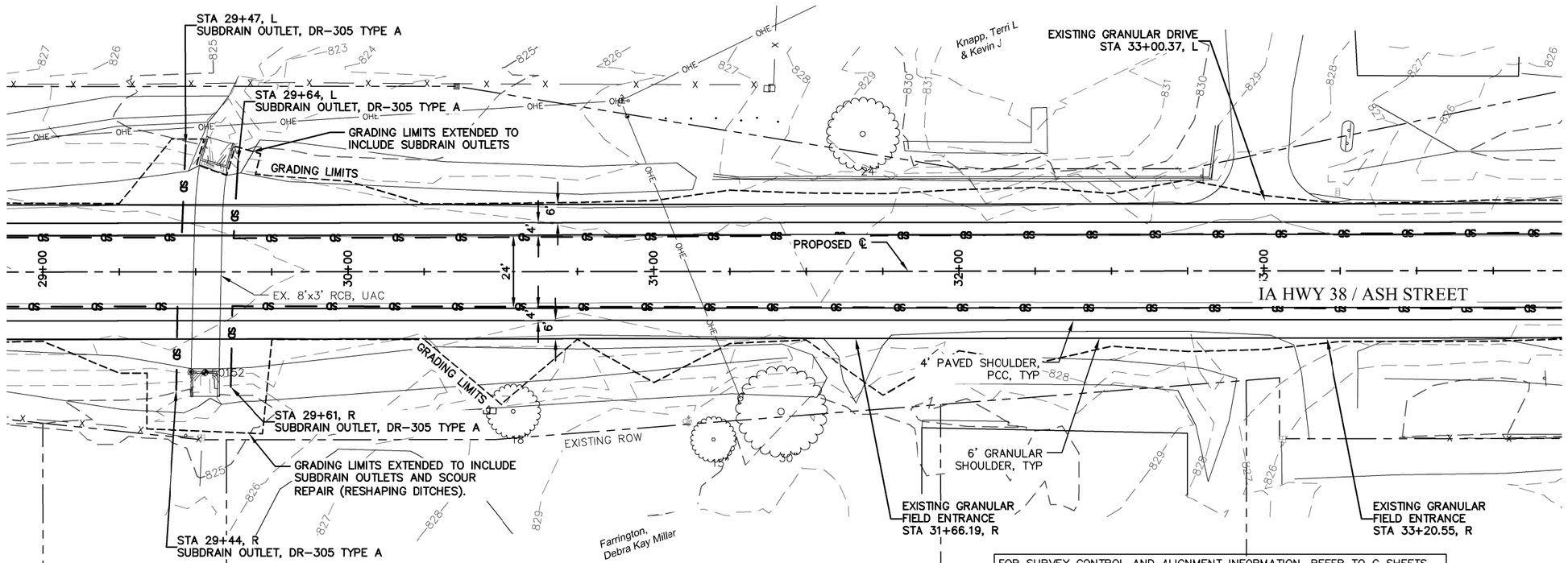
DETAILED BY:	CHECKED BY:					IOWA		2016	D.5	135

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED

NORTH



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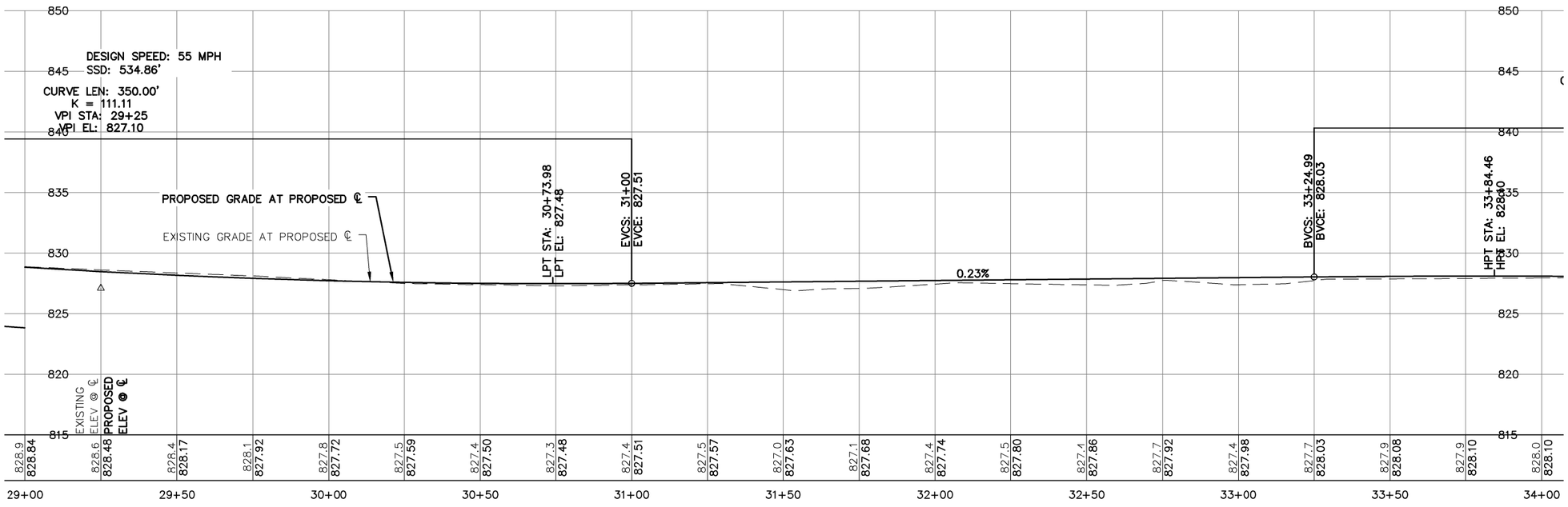

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

DESIGNED BY:	TRACED BY:	iiw	563.556.2464 ◆ 800.556.4491	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:		IIW, P.C. ◆ www.iiwengr.com				IOWA		2016	D.6	135

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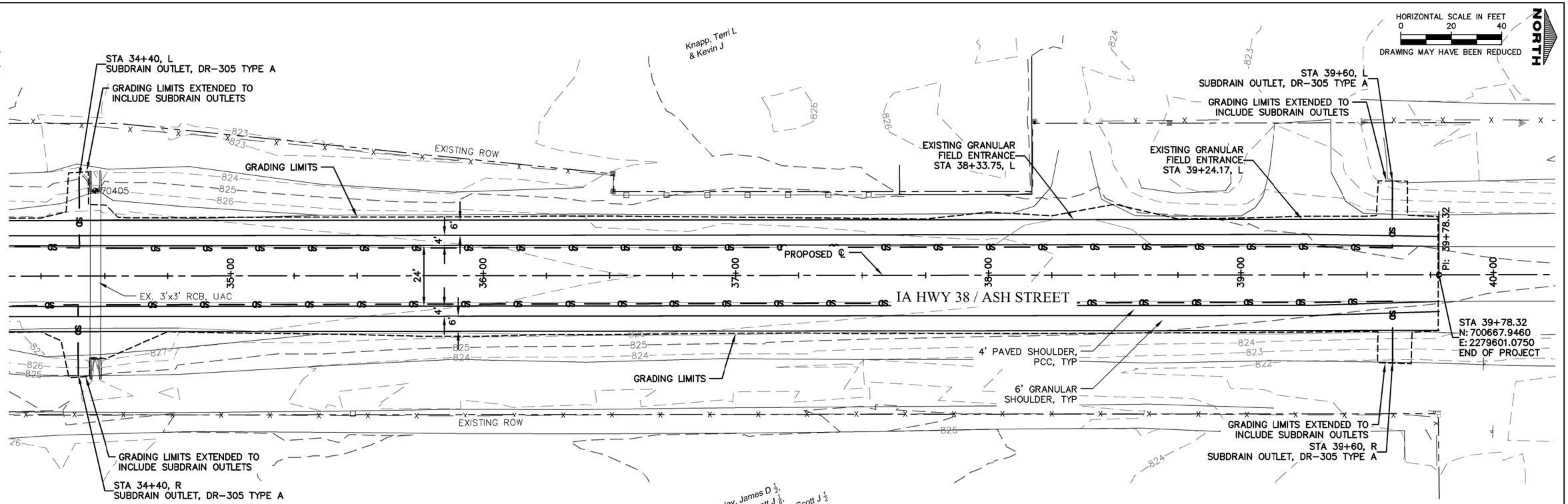

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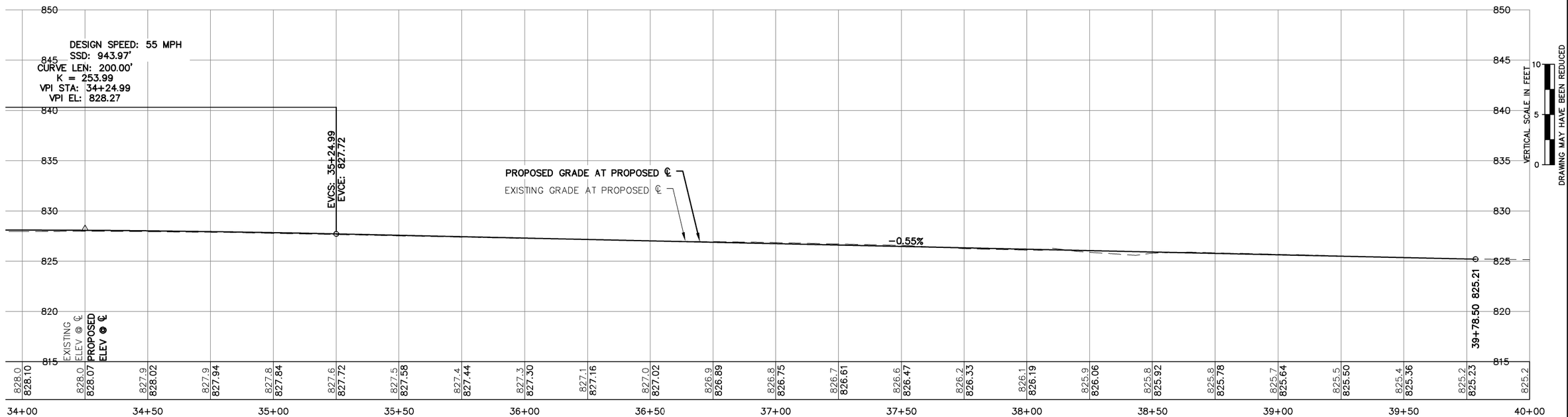

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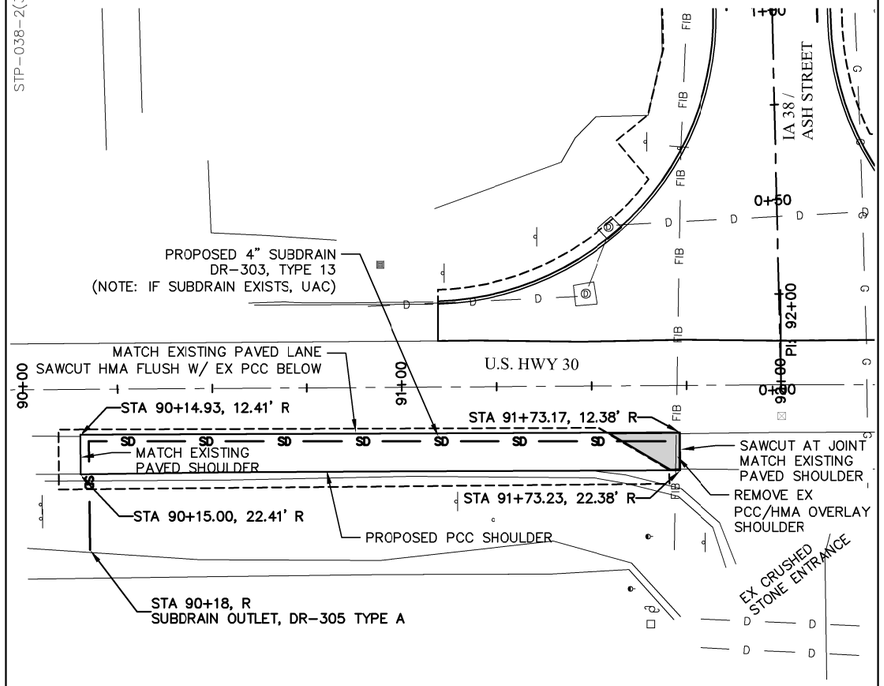
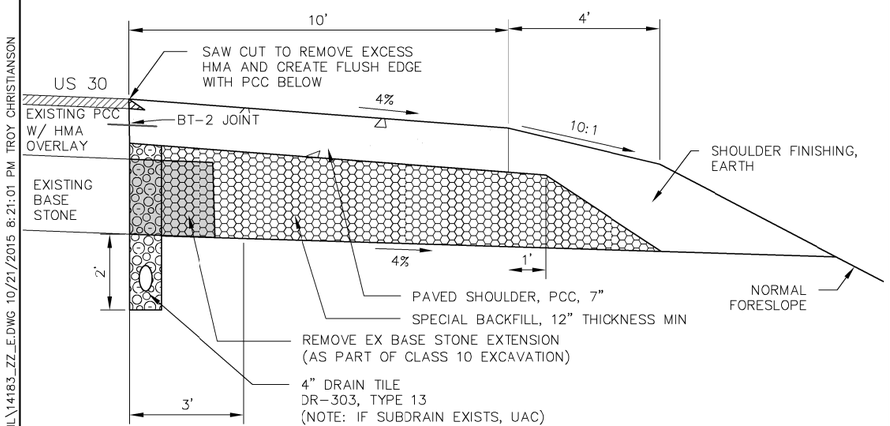
DETAILED BY:	CHECKED BY:					IOWA		2016	D.7	135

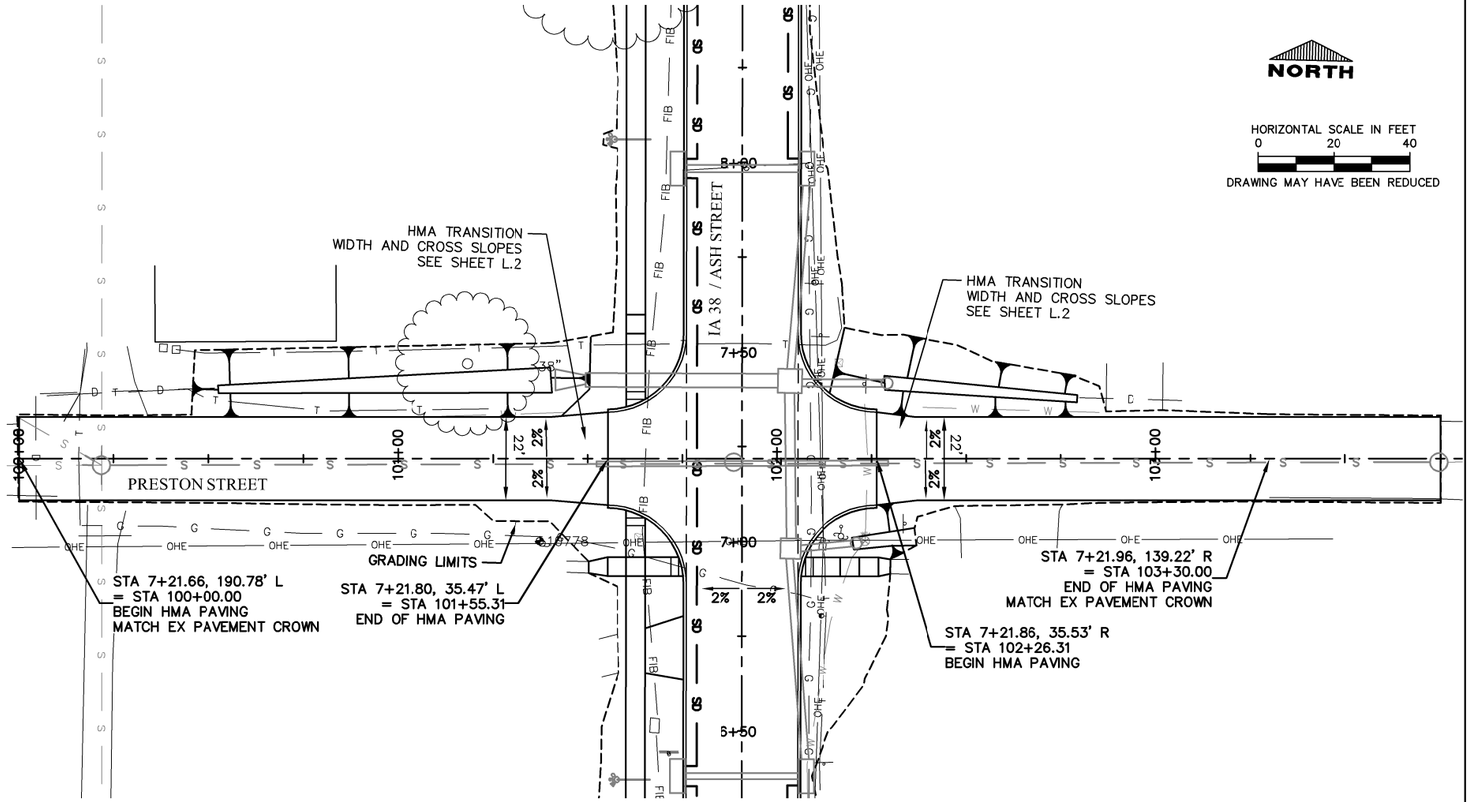
STP-038-2(37)--2C-16

PRIOR TO CONSTRUCTION AT THE INTERSECTION OF US 30, EXISTING SHOULDER ON SOUTH SIDE OF US 30 SHALL BE PAVED. SEE STAGE 1 NOTES ON J.1 & DETAIL 1 & 2 ON J.2.





1 / E.1 PROPOSED PAVED SHOULDER
TYPICAL SECTION NOT TO SCALE



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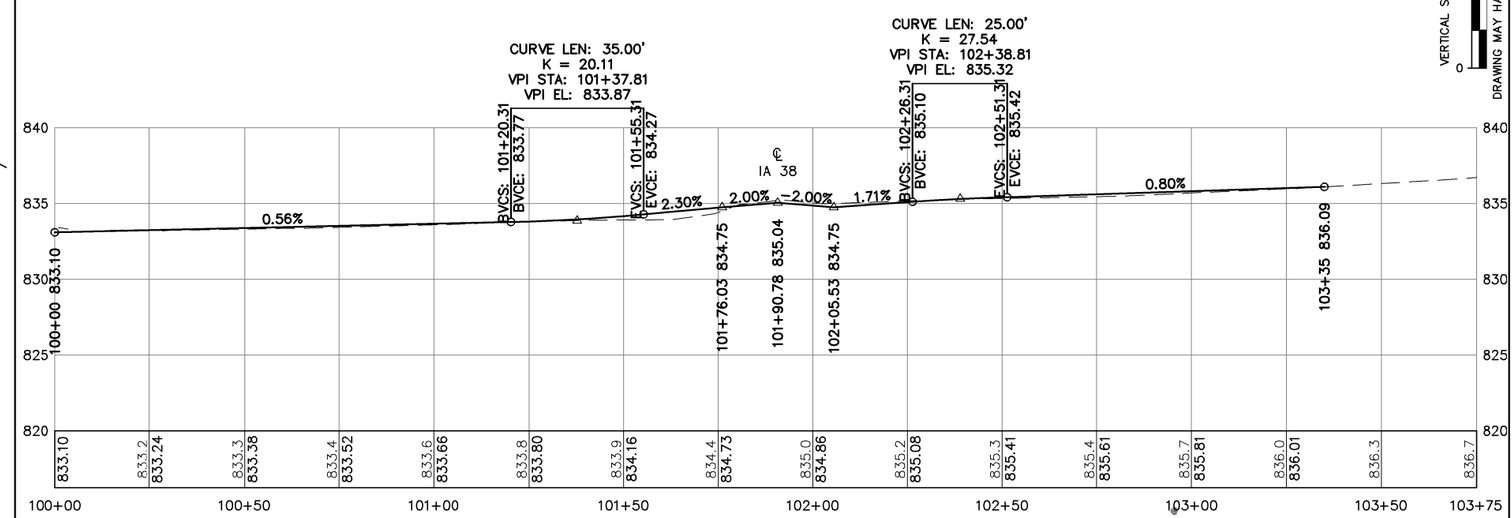

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	E.1	135

STP-038-2(37)--2C-16

EROSION CONTROL LEGEND

- 9" ø DEVICE
- SF — SILT FENCE
- (IP) INLET PROTECTION – 9" PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE PER STANDARD ROAD PLAN EC-204.
- (OP) OUTLET PROTECTION – WOOD EXCELSIOR MAT PER STANDARD ROAD PLAN EC-101
- (CE) CONSTRUCTION ENTRANCE
- WOOD EXCELSIOR MAT PER STANDARD ROAD PLAN EC-101, SEED AND FERTILIZE

SEEDING LEGEND

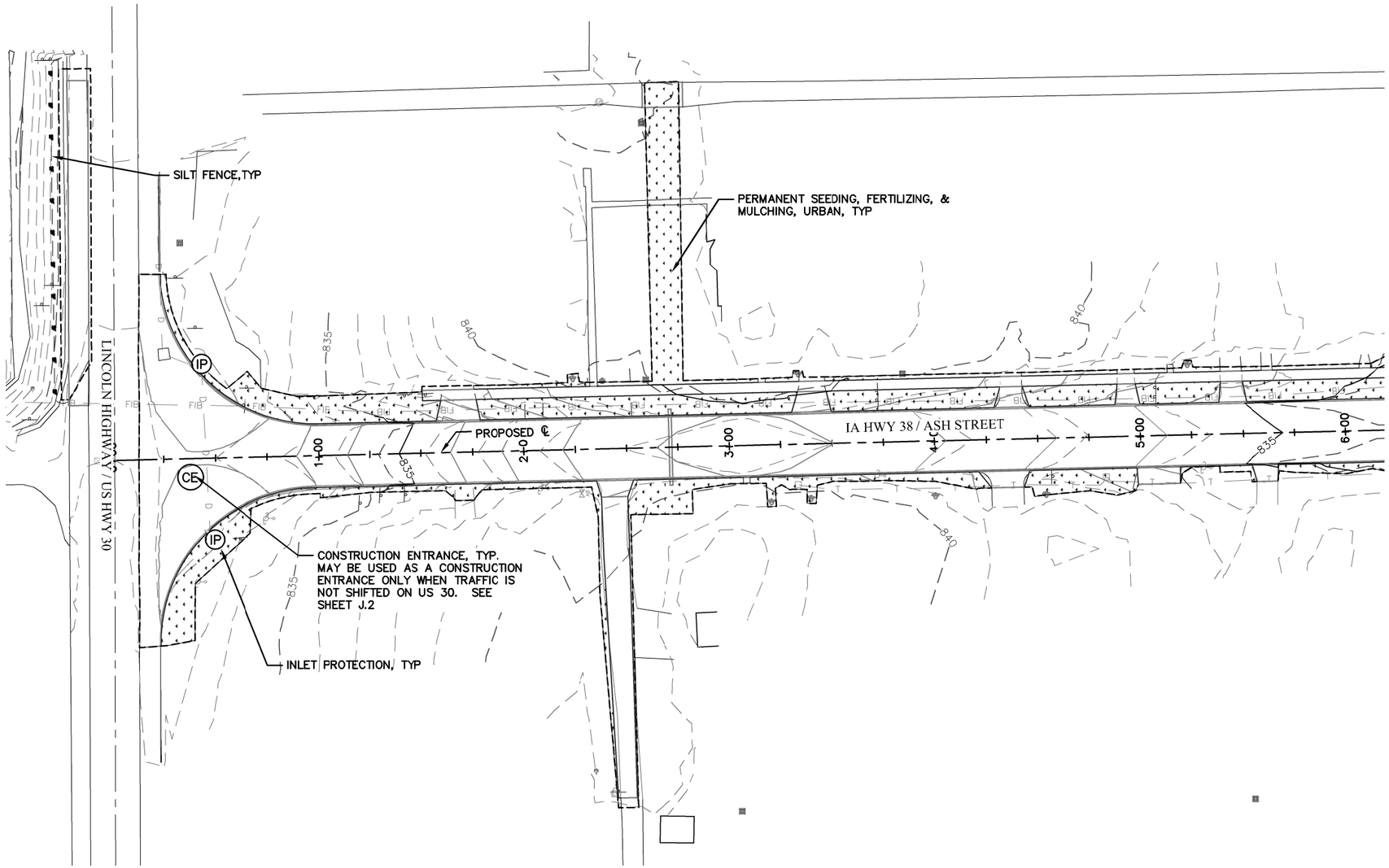
- SEEDING AND FERTILIZING (URBAN)
- SEEDING AND FERTILIZING (RURAL)

NORTH

HORIZONTAL SCALE IN FEET
0 30 60
DRAWING MAY HAVE BEEN REDUCED

IMPORTANT:
GRAPHICS SHOWN FOR THE EROSION AND SEDIMENT CONTROL DEVICES ON THIS DRAWING ARE GENERAL AND INTENDED ONLY TO SHOW THE LOCATIONS OF THE MINIMUM SEDIMENT AND EROSION CONTROL THAT IS ANTICIPATED. THE LOCATIONS AND DEVICES USED WILL DEPEND ON THE FIELD CONDITIONS ENCOUNTERED. THE GRAPHICS DO NOT SHOW THE REQUIRED "J-HOOKS", OVERLAPS NOR REFLECT THE MAXIMUM ALLOWABLE LENGTHS OF THE VARIOUS EROSION AND SEDIMENT CONTROL DEVICES.

ALL EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PER IDOT STANDARDS AND SPECIFICATIONS, AS APPLICABLE. ALL LOCATIONS TO BE FIELD VERIFIED WITH ENGINEER.



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DETAILED BY:	CHECKED BY:		IIW, P.C. ◆ www.iiwengr.com			

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA		2016	EC.1	135

STP-038-2(37)--2C-16

EROSION CONTROL LEGEND

- 9" ø DEVICE
- SF — SILT FENCE
- (IP) INLET PROTECTION – 9" PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE PER STANDARD ROAD PLAN EC-204.
- (OP) OUTLET PROTECTION – WOOD EXCELSIOR MAT PER STANDARD ROAD PLAN EC-101
- (CE) CONSTRUCTION ENTRANCE
- WOOD EXCELSIOR MAT PER STANDARD ROAD PLAN EC-101, SEED AND FERTILIZE

SEEDING LEGEND

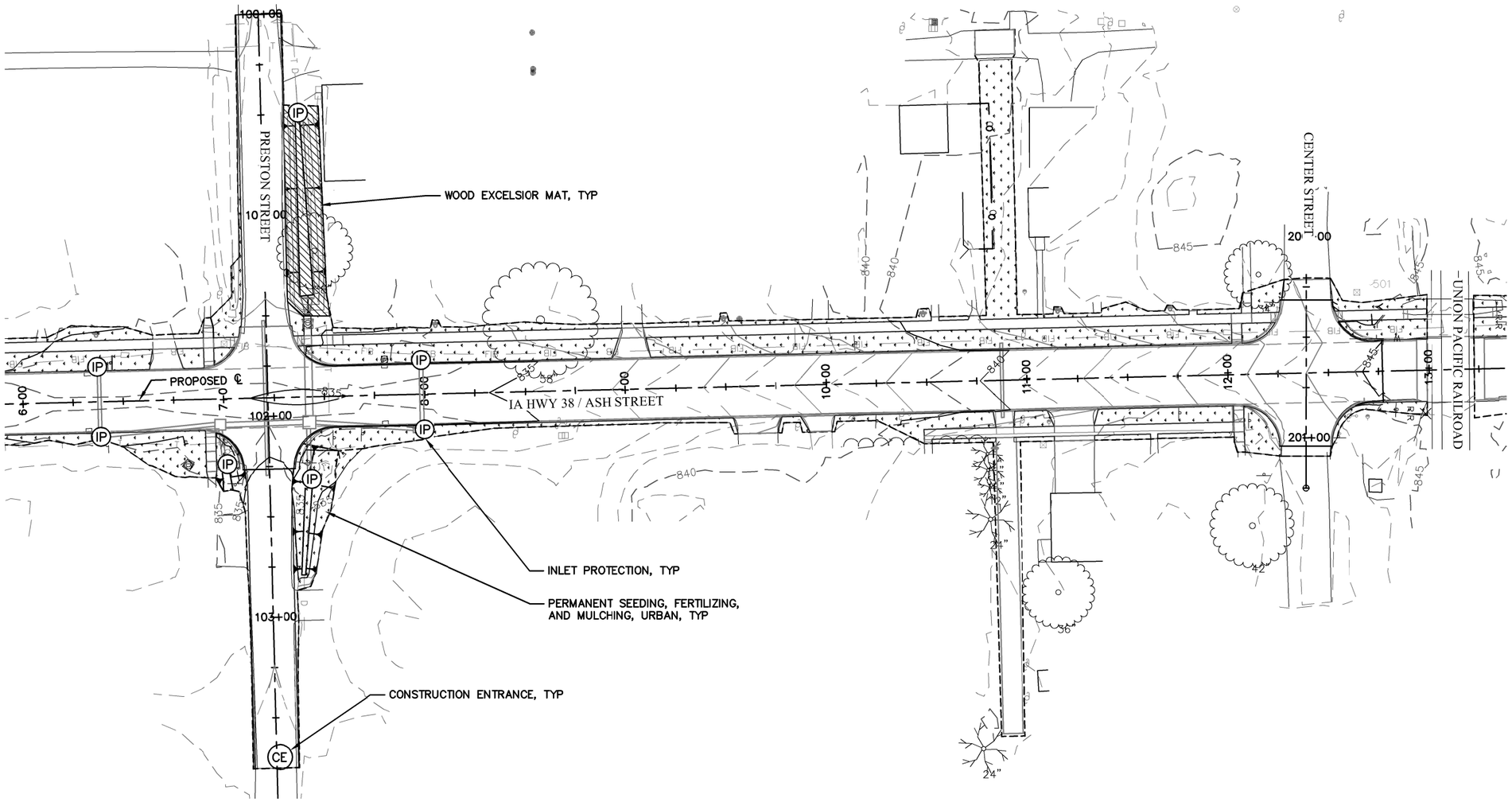
- SEEDING AND FERTILIZING (URBAN)
- SEEDING AND FERTILIZING (RURAL)

NORTH

HORIZONTAL SCALE IN FEET
0 30 60
DRAWING MAY HAVE BEEN REDUCED

IMPORTANT:
GRAPHICS SHOWN FOR THE EROSION AND SEDIMENT CONTROL DEVICES ON THIS DRAWING ARE GENERAL AND INTENDED ONLY TO SHOW THE LOCATIONS OF THE MINIMUM SEDIMENT AND EROSION CONTROL THAT IS ANTICIPATED. THE LOCATIONS AND DEVICES USED WILL DEPEND ON THE FIELD CONDITIONS ENCOUNTERED. THE GRAPHICS DO NOT SHOW THE REQUIRED "J-HOOKS", OVERLAPS NOR REFLECT THE MAXIMUM ALLOWABLE LENGTHS OF THE VARIOUS EROSION AND SEDIMENT CONTROL DEVICES.

ALL EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PER IDOT STANDARDS AND SPECIFICATIONS, AS APPLICABLE. ALL LOCATIONS TO BE FIELD VERIFIED WITH ENGINEER.



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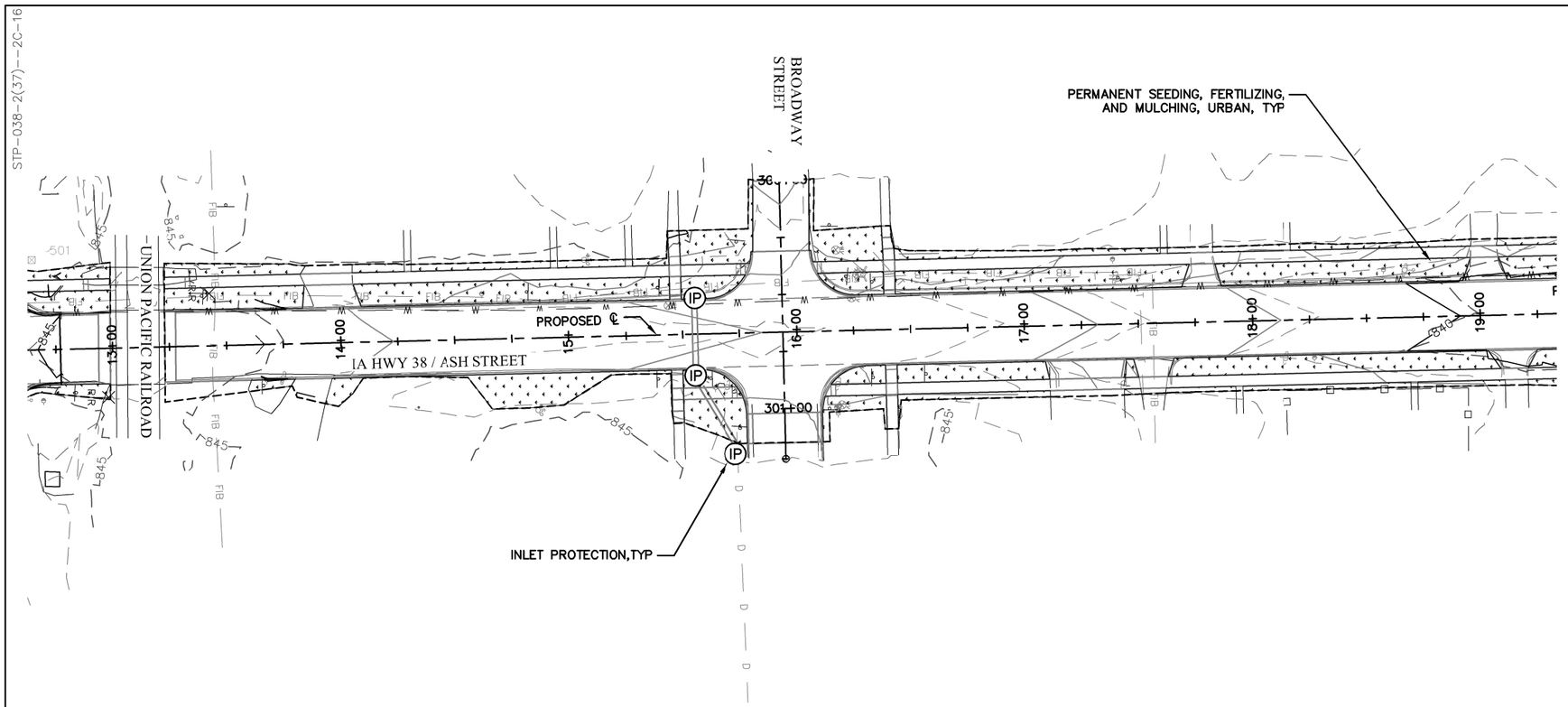
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	EC.2	135

STP-038-2(37)--2C-16



SEEDING LEGEND

SEEDING AND FERTILIZING (URBAN)

SEEDING AND FERTILIZING (RURAL)

NORTH

HORIZONTAL SCALE IN FEET
0 30 60
DRAWING MAY HAVE BEEN REDUCED

EROSION CONTROL LEGEND

9" ø DEVICE

SF SILT FENCE

(IP) INLET PROTECTION – 9" PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE PER STANDARD ROAD PLAN EC-204.

(OP) OUTLET PROTECTION – WOOD EXCELSIOR MAT PER STANDARD ROAD PLAN EC-101

(CE) CONSTRUCTION ENTRANCE

WOOD EXCELSIOR MAT PER STANDARD ROAD PLAN EC-101, SEED AND FERTILIZE

IMPORTANT:
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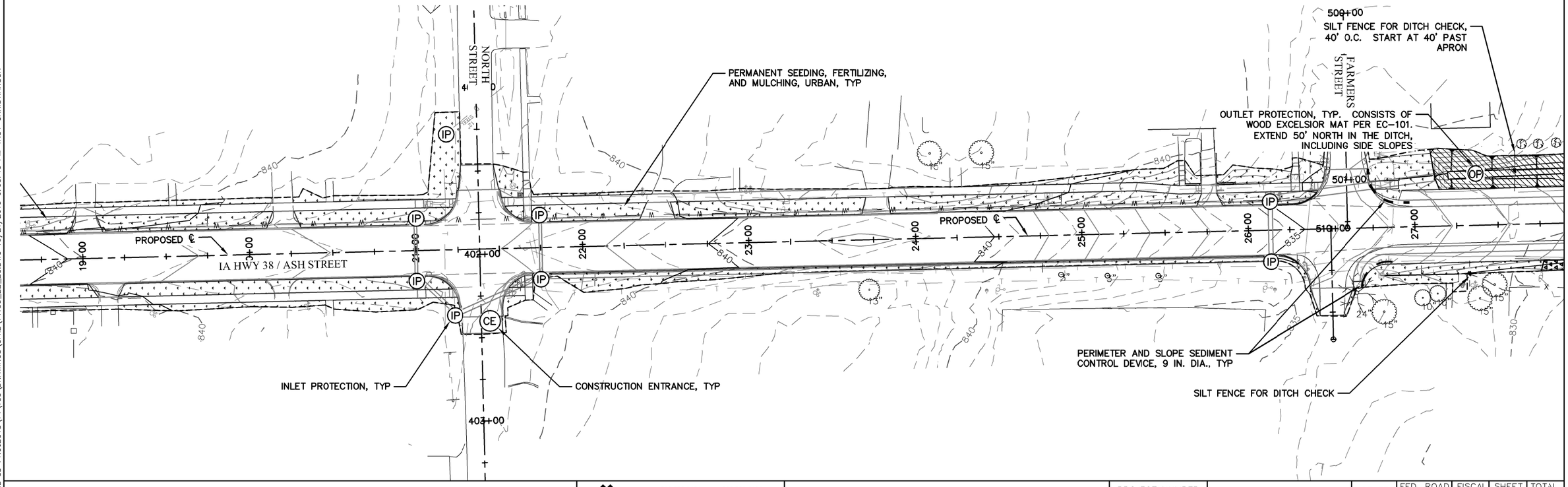

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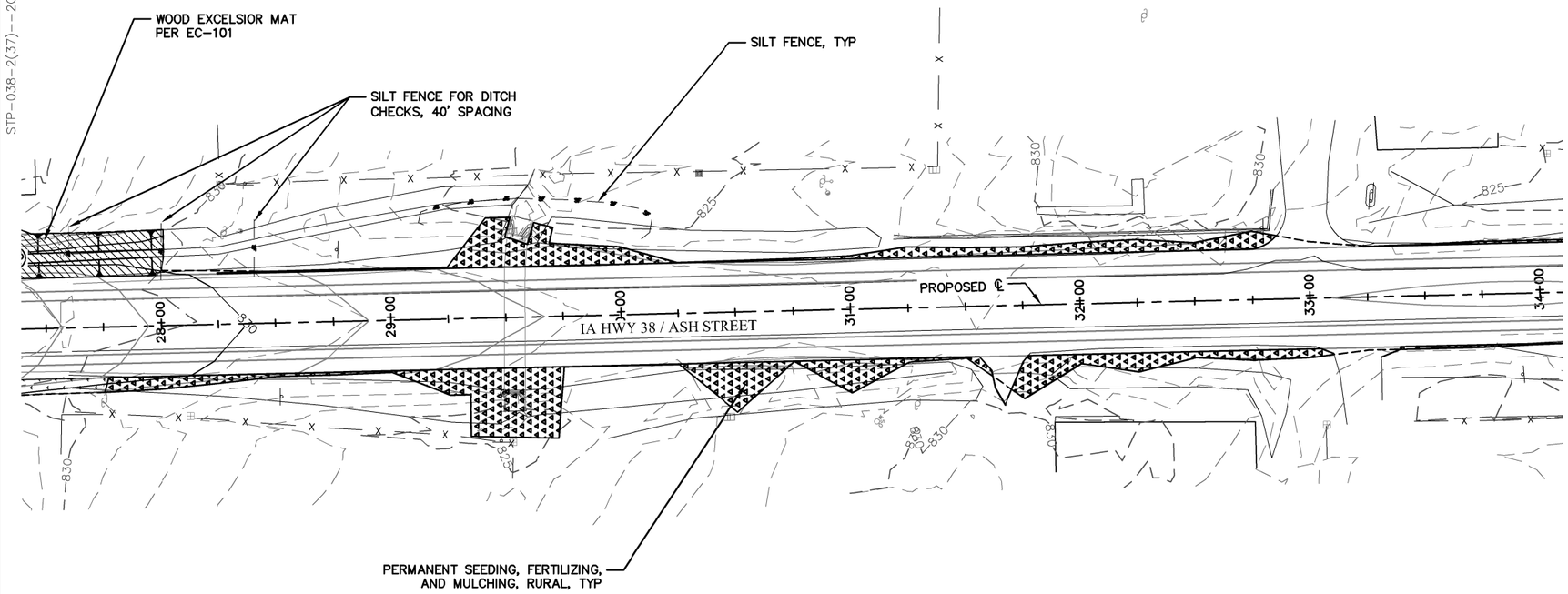
DETAILED BY:	CHECKED BY:					IOWA		2016	EC.3	135

STP-038-2(37)--2C-16



SEEDING LEGEND

SEEDING AND FERTILIZING (URBAN)

SEEDING AND FERTILIZING (RURAL)

NORTH

HORIZONTAL SCALE IN FEET
0 30 60
DRAWING MAY HAVE BEEN REDUCED

EROSION CONTROL LEGEND

9" ø DEVICE

SF — SILT FENCE

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OP — OUTLET PROTECTION – WOOD EXCELSIOR MAT PER STANDARD ROAD PLAN EC-101

CE — CONSTRUCTION ENTRANCE

WOOD EXCELSIOR MAT PER STANDARD ROAD PLAN EC-101, SEED AND FERTILIZE

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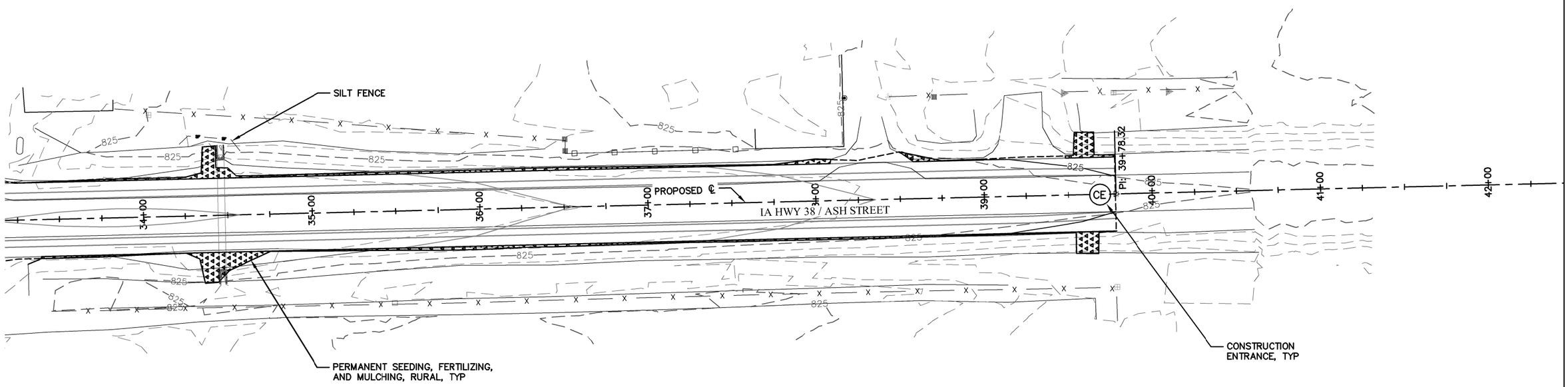

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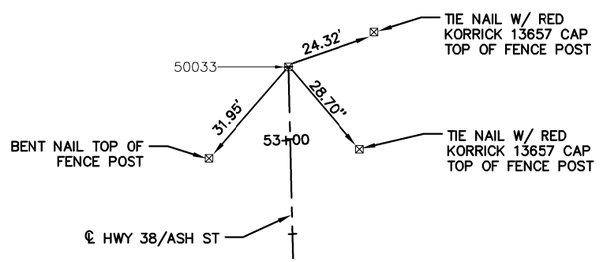
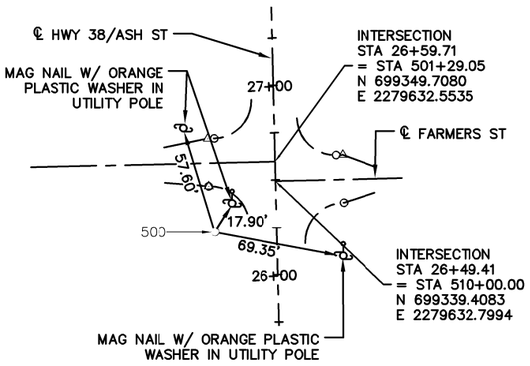
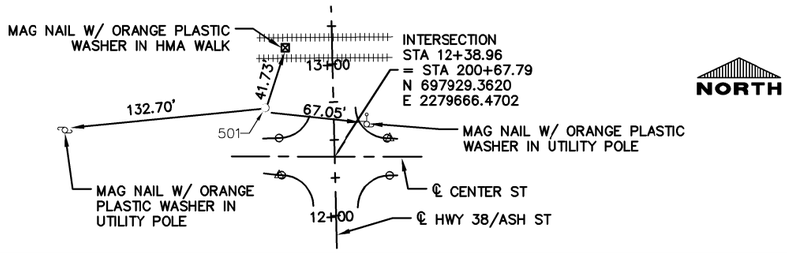
DETAILED BY:	CHECKED BY:		IIW, P.C. ◆ www.iiwengr.com				IOWA		2016	EC.4	135



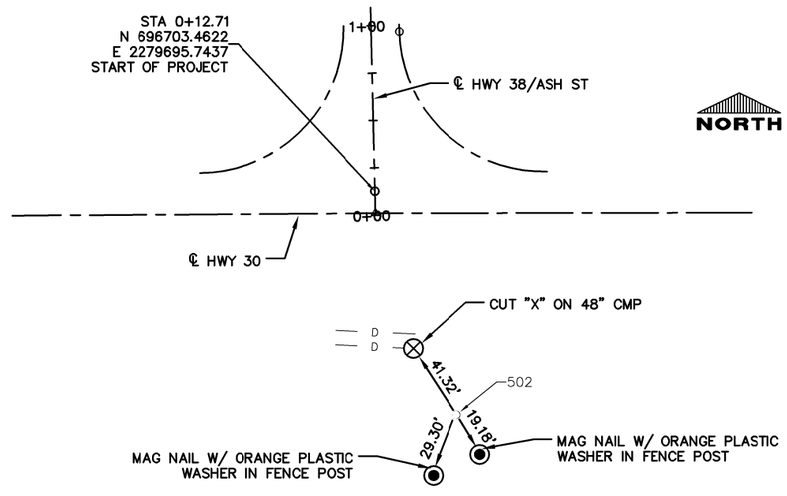
NORTH



NORTH



NORTH



NORTH

HORIZONTAL CONTROL						
PCINT NO.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
500	699312.65	2279600.74	26+23.42	32.69 L	836.50	REBAR 5/8X24
501	697961.54	2279621.12	12+72.21	44.57 L	844.83	REBAR 5/8X24
502	696585.46	2279738.58			828.21	REBAR 5/8X24
50033	702008.30	2279568.81	53+19.07	0.00 R	824.21	MAG NAIL AT NW COR SEC 24-82-3

BENCH MARKS						
BENCHMARK NO.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
50152	699643.7320	2279658.4960	29+53.03	32.95 R	828.16	IOWA DOT BRASS CAP IN HEADWALL
70405	700135.4320	2279580.0230	34+46.47	33.76 L	826.71	IOWA DOT BRASS CAP IN HEADWALL

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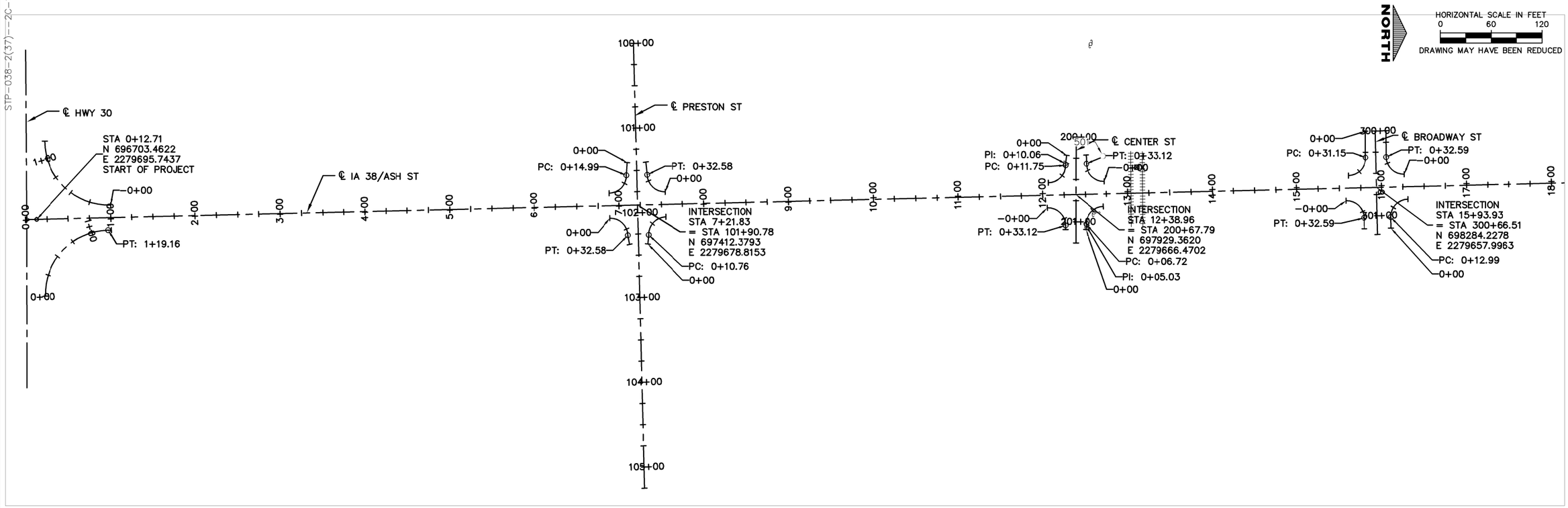
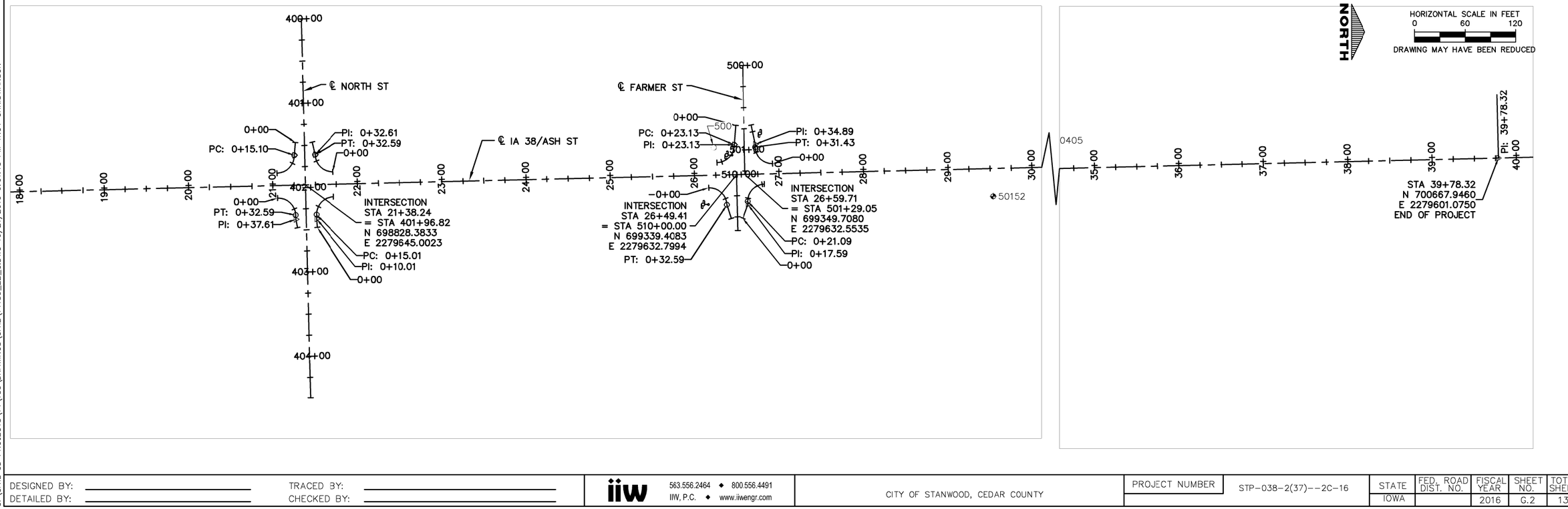
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	G.1	135





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DETAILED BY:	CHECKED BY:					IOWA		2016	G.2	135

Alignment: Ash St
Description: proposed CI of Ash St (US 38)

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	696690.755	2279696.047
End:	39+78.325	700667.946	2279601.075

Tangent Data

Parameter	Value	Parameter	Value
Length:	3978.325	Course:	N 01° 22' 04.5016" W

Alignment: Hwy 30 Return NE
Description: Ash St and Hwy 30 NE Return

NOTE:
RETURN ALIGNMENTS ARE AT THE GUTTER LINE

Curve Point Data

Description	Station	Northing	Easting
PC:	0+00.000	696713.823	2279786.315
RP:		696789.656	2279784.294
PT:	1+19.165	696787.64	2279708.461

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	90° 00' 10.7041"	Type:	RIGHT
Radius:	75.86		
Length:	119.165	Tangent:	75.864
Mid-Ord:	22.22	External:	31.425
Chord:	107.285	Course:	N 46° 31' 29.7488" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+19.165	696787.64	2279708.461
End:	1+22.854	696791.329	2279708.4

Tangent Data

Parameter	Value	Parameter	Value
Length:	3.689	Course:	N 00° 56' 58.8220" W

Alignment: Hwy 30 Return NW
Description: Ash St and Hwy 30 NW Return

Curve Point Data

Description	Station	Northing	Easting
PC:	0+000.000	696790.62	2279678.88
RP:		696788.792	2279603.152
PT:	1+20.533	696713.042	2279603.435

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	91° 10' 08.0487"	Type:	RIGHT
Radius:	75.75		
Length:	120.533	Tangent:	77.311
Mid-Ord:	22.736	External:	32.486
Chord:	108.214	Course:	S 44° 12' 05.9854" W

Alignment: Preston St
Description: Centerline of Preston St

Tangent Data

Description	PT Station	Northing	Easting
Start:	100+00.000	697407.65	2279488.096
End:	105+25.000	697420.664	2280012.935

Tangent Data

Parameter	Value	Parameter	Value
Length:	525	Course:	N 88° 34' 46.6935" E

NOTE:
RETURN ALIGNMENTS ARE AT THE GUTTER LINE

Alignment: Preston Return NE
Description: Preston and Ash St NE Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	697424.522	2279724.751
End:	0+10.765	697425.506	2279714.031

Tangent Data

Parameter	Value	Parameter	Value
Length:	10.765	Course:	N 84° 45' 07.7107" W

Curve Point Data

Description	Station	Northing	Easting
PC:	0+10.765	697425.506	2279714.031
RP:		697446.25	2279713.517
PT:	0+43.378	697445.754	2279692.773

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	90° 03' 08.8049"	Type:	RIGHT
Radius:	20.75		
Length:	32.613	Tangent:	20.769
Mid-Ord:	6.084	External:	8.608
Chord:	29.358	Course:	N 46° 23' 38.9040" W

Alignment: Preston Return NW
Description: Preston and Ash St NW Return

Curve Point Data

Description	Station	Northing	Easting
PC:	0+00.000	697444.985	2279663.283
RP:		697444.49	2279642.538
PT:	0+32.575	697423.746	2279643.053

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	89° 56' 51.1951"	Type:	RIGHT
Radius:	20.75		
Length:	32.575	Tangent:	20.731
Mid-Ord:	6.071	External:	8.582
Chord:	29.331	Course:	S 43° 36' 21.0960" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+32.575	697423.746	2279643.053
End:	0+47.627	697422.125	2279628.088

Tangent Data

Parameter	Value	Parameter	Value
Length:	15.052	Course:	S 83° 48' 57.5835" W

Alignment: Preston Return SE
Description: Preston and Ash St SE return

Curve Point Data

Description	Station	Northing	Easting
PC:	0+00.000	697379.773	2279694.348
RP:		697380.269	2279715.092
PT:	0+32.575	697401.012	2279714.578

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	89° 56' 51.1951"	Type:	RIGHT
Radius:	20.75		
Length:	32.575	Tangent:	20.731
Mid-Ord:	6.071	External:	8.582
Chord:	29.331	Course:	N 43° 36' 21.0960" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+32.575	697401.012	2279714.578
End:	0+43.469	697403.028	2279725.284

Tangent Data

Parameter	Value	Parameter	Value
Length:	10.894	Course:	N 79° 20' 07.7796" E

Alignment: Preston Return SW
Description: Preston and Ash St SW Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	697400.132	2279628.634
End:	0+14.992	697399.252	2279643.6

Tangent Data

Parameter	Value	Parameter	Value
Length:	14.992	Course:	S 86° 38' 15.1692" E

Curve Point Data

Description	Station	Northing	Easting
PC:	0+14.992	697399.252	2279643.6
RP:		697378.509	2279644.114
PT:	0+47.605	697379.004	2279664.858

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	90° 03' 08.8049"	Type:	RIGHT
Radius:	20.75		
Length:	32.613	Tangent:	20.769
Mid-Ord:	6.084	External:	8.608
Chord:	29.358	Course:	S 46° 23' 38.9040" E

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	G.3	135

STP-038-2(37)--2C-16

Alignment: Center St
Description: Centerline of Center St

Tangent Data

Description	PT Station	Northing	Easting
Start:	200+00.000	697929.47	2279598.683
End:	201+25.000	697929.271	2279723.682

Tangent Data

Parameter	Value	Parameter	Value
Length:	125	Course:	S 89° 54' 31.5794" E

NOTE:
RETURN ALIGNMENTS ARE AT THE GUTTER LINE

Alignment: Center Return NE
Description: Center and Ash St NE Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	697941.159	2279707.86
End:	0+05.034	697941.554	2279702.842

Tangent Data

Parameter	Value	Parameter	Value
Length:	5.034	Course:	N 85° 30' 03.2847" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+05.034	697941.554	2279702.842
End:	0+06.715	697941.557	2279701.161

Tangent Data

Parameter	Value	Parameter	Value
Length:	1.681	Course:	N 89° 54' 31.5794" W

Curve Point Data

Description	Station	Northing	Easting
PC:	0+06.715	697941.557	2279701.161
RP:		697962.307	2279701.194
PT:	0+38.781	697961.811	2279680.45

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	88° 32' 27.0779"	Type:	RIGHT
Radius:	20.75		
Length:	32.066	Tangent:	20.228
Mid-Ord:	5.892	External:	8.228
Chord:	28.969	Course:	N 45° 38' 18.0405" W

Alignment: Center Return NW
Description: Center and Ash St Return NW

Curve Point Data

Description	Station	Northing	Easting
PC:	0+000.000	697962.915	2279650.915
RP:		697962.42	2279630.171
PT:	0+33.122	697941.67	2279630.138

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	91° 27' 32.9223"	Type:	RIGHT
Radius:	20.75		
Length:	33.122	Tangent:	21.285
Mid-Ord:	6.266	External:	8.976
Chord:	29.716	Course:	S 44° 21' 41.9595" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+33.122	697941.67	2279630.138
End:	0+43.519	697941.244	2279619.75

Tangent Data

Parameter	Value	Parameter	Value
Length:	10.396	Course:	S 87° 39' 12.7791" W

Alignment: Center Return SE
Description: Center and Ash St SE Return

Curve Point Data

Description	Station	Northing	Easting
PC:	0+000.000	697895.809	2279682.045
RP:		697896.304	2279702.789
PT:	0+33.122	697917.054	2279702.822

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	91° 27' 32.9222"	Type:	RIGHT
Radius:	20.75		
Length:	33.122	Tangent:	21.285
Mid-Ord:	6.266	External:	8.976
Chord:	29.716	Course:	N 44° 21' 41.9595" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+33.122	697917.054	2279702.822
End:	0+38.122	697917.031	2279707.822

Tangent Data

Parameter	Value	Parameter	Value
Length:	5	Course:	S 85° 44' 06.9281" E

Alignment: Center Return SW
Description: Center and Ash St SW Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	697918.396	2279620.128
End:	0+10.065	697917.17	2279630.118

Tangent Data

Parameter	Value	Parameter	Value
Length:	10.065	Course:	S 83° 00' 01.4774" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+10.065	697917.17	2279630.118
End:	0+11.746	697917.167	2279631.799

Tangent Data

Parameter	Value	Parameter	Value
Length:	1.681	Course:	S 85° 54' 31.5794" E

Curve Point Data

Description	Station	Northing	Easting
PC:	0+11.746	697917.167	2279631.799
RP:		697896.417	2279631.766
PT:	0+43.811	697896.913	2279652.51

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	88° 32' 27.0778"	Type:	RIGHT
Radius:	20.75		
Length:	32.066	Tangent:	20.228
Mid-Ord:	5.892	External:	8.228
Chord:	28.969	Course:	S 45° 38' 18.0405" E

Alignment: Broadway St
Description: Centerline of Broadway St

Tangent Data

Description	PT Station	Northing	Easting
Start:	300+00.000	698282.62	2279591.507
End:	301+22.088	698285.571	2279713.559

Tangent Data

Parameter	Value	Parameter	Value
Length:	122.088	Course:	N 88° 36' 54.8232" E

NOTE:
RETURN ALIGNMENTS ARE AT THE GUTTER LINE

Alignment: Broadway Return NE
Description: Broadway and Ash St NE Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	698301.329	2279706.093
End:	0+12.985	698301.015	2279593.112

Tangent Data

Parameter	Value	Parameter	Value
Length:	12.985	Course:	S 88° 36' 54.8232" W

Curve Point Data

Description	Station	Northing	Easting
PC:	0+12.985	698301.015	2279593.112
RP:		698321.759	2279692.61
PT:	0+45.585	698321.264	2279571.866

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	90° 01' 00.5752"	Type:	RIGHT
Radius:	20.75		
Length:	32.6	Tangent:	20.756
Mid-Ord:	6.08	External:	8.599
Chord:	29.349	Course:	N 46° 22' 34.8392" W

Alignment: Broadway Return NW
Description: Broadway and Ash St NW Return

Curve Point Data

Description	Station	Northing	Easting
PC:	0+000.000	698316.856	2279542.463
RP:		698316.36	2279521.719
PT:	0+32.588	698295.617	2279622.22

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	89° 58' 59.3248"	Type:	RIGHT
Radius:	20.75		
Length:	32.588	Tangent:	20.744
Mid-Ord:	6.075	External:	8.591
Chord:	29.341	Course:	S 43° 37' 25.1608" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+32.588	698295.617	2279622.22
End:	0+63.732	698295.446	2279591.077

Tangent Data

Parameter	Value	Parameter	Value
Length:	31.144	Course:	S 89° 41' 10.6720" W

Alignment: Broadway Return SE
Description: Broadway and Ash St SE Return

Curve Point Data

Description	Station	Northing	Easting
PC:	0+000.000	698248.059	2279673.614
RP:		698248.554	2279694.358
PT:	0+32.588	698269.298	2279693.857

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	89° 58' 59.3248"	Type:	RIGHT
Radius:	20.75		
Length:	32.588	Tangent:	20.744
Mid-Ord:	6.075	External:	8.591
Chord:	29.341	Course:	N 43° 37' 25.1608" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+32.588	698269.298	2279693.857
End:	0+45.603	698269.613	2279706.869

Tangent Data

Parameter	Value	Parameter	Value
Length:	13.016	Course:	N 88° 36' 54.8232" E

Alignment: Broadway Return SW
Description: Broadway and Ash St SW Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	698271.126	2279591.645
End:	0+31.148	698271.123	2279622.793

Tangent Data

Parameter	Value	Parameter	Value
Length:	31.148	Course:	S 89° 59' 39.2644" E

Curve Point Data

Description	Station	Northing	Easting
PC:	0+31.148	698271.123	2279622.793
RP:		698250.379	2279623.294
PT:	0+63.748	698250.875	2279644.039

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	90° 01' 00.6752"	Type:	RIGHT
Radius:	20.75		
Length:	32.6	Tangent:	20.756
Mid-Ord:	6.08	External:	8.599
Chord:	29.349	Course:	S 46° 22' 34.8392" E

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DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	G.4	135

STP-038-2(37)--2C-16

Alignment: North St
Description: Centerline of North St

Tangent Data

Description	PT Station	Northing	Easting
Start:	400+00.000	698823.627	2279448.239
End:	404+49.100	698834.48	2279897.208

Tangent Data

Parameter	Value	Parameter	Value
Length:	449.1	Course:	N 88° 36' 54.8232" E

NOTE:
RETURN ALIGNMENTS ARE
AT THE GUTTER LINE

Alignment: North Return NE
Description: North and Ash St NE Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	698842.358	2279695.189
End:	0+10.013	698841.609	2279685.205

Tangent Data

Parameter	Value	Parameter	Value
Length:	10.013	Course:	S 85° 42' 39.7346" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+10.013	698841.609	2279685.205
End:	0+15.014	698841.488	2279680.205

Tangent Data

Parameter	Value	Parameter	Value
Length:	5.001	Course:	S 88° 36' 54.8232" W

Curve Point Data

Description	Station	Northing	Easting
PC:	0+15.014	698841.488	2279680.205
RP:		698862.232	2279679.704
PT:	0+47.614	698861.736	2279658.96

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	90° 01' 00.6752"	Type:	RIGHT
Radius:	20.75		
Length:	32.6	Tangent:	20.756
Mid-Ord:	6.08	External:	8.599
Chord:	29.349	Course:	N 46° 22' 34.8392" W

Alignment: North Return NW
Description: North and Ash St Return NW

Curve Point Data

Description	Station	Northing	Easting
PC:	0+00.000	698861.011	2279629.469
RP:		698860.516	2279608.725
PT:	0+32.588	698839.772	2279609.226

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	89° 58' 59.3248"	Type:	RIGHT
Radius:	20.75		
Length:	32.588	Tangent:	20.744
Mid-Ord:	6.075	External:	8.591
Chord:	29.341	Course:	S 43° 37' 25.1608" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+32.588	698839.772	2279609.226
End:	0+32.607	698839.772	2279609.207

Tangent Data

Parameter	Value	Parameter	Value
Length:	0.019	Course:	S 88° 36' 54.8226" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+32.607	698839.772	2279609.207
End:	0+47.897	698836.449	2279594.283

Tangent Data

Parameter	Value	Parameter	Value
Length:	15.29	Course:	S 77° 26' 51.2770" W

NOTE:
RETURN ALIGNMENTS ARE
AT THE GUTTER LINE

Alignment: North Return SE
Description: North and Ash St SE Return

Curve Point Data

Description	Station	Northing	Easting
PC:	0+00.000	698795.755	2279660.535
RP:		698796.251	2279681.279
PT:	0+32.588	698816.995	2279680.778

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	89° 58' 59.3248"	Type:	RIGHT
Radius:	20.75		
Length:	32.588	Tangent:	20.744
Mid-Ord:	6.075	External:	8.591
Chord:	29.341	Course:	N 43° 37' 25.1608" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+32.588	698816.995	2279680.778
End:	0+37.608	698817.116	2279685.797

Tangent Data

Parameter	Value	Parameter	Value
Length:	5.02	Course:	N 88° 36' 54.8232" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+37.608	698817.116	2279685.797
End:	0+47.761	698819.114	2279695.751

Tangent Data

Parameter	Value	Parameter	Value
Length:	10.153	Course:	N 78° 39' 08.4336" E

Alignment: North Return SW
Description: North and Ash St SW Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	698816.627	2279594.762
End:	0+15.097	698815.279	2279609.799

Tangent Data

Parameter	Value	Parameter	Value
Length:	15.097	Course:	S 84° 52' 35.3269" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+15.097	698815.279	2279609.799
End:	0+15.097	698815.279	2279609.799

Tangent Data

Parameter	Value	Parameter	Value
Length:	0	Course:	S 84° 52' 35.3220" E

Curve Point Data

Description	Station	Northing	Easting
PC:	0+15.097	698815.279	2279609.799
RP:		698794.535	2279610.3
PT:	0+47.697	698795.03	2279631.044

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	90° 01' 00.6752"	Type:	RIGHT
Radius:	20.75		
Length:	32.6	Tangent:	20.756
Mid-Ord:	6.08	External:	8.599
Chord:	29.349	Course:	S 46° 22' 34.8392" E

Alignment: Farmer St W
Description: Centerline of Farmer St West of Ash St

Tangent Data

Description	PT Station	Northing	Easting
Start:	500+00.000	699346.708	2279503.537
End:	501+29.052	699349.708	2279632.553

Tangent Data

Parameter	Value	Parameter	Value
Length:	129.052	Course:	N 88° 40' 05.2515" E

NOTE:
RETURN ALIGNMENTS ARE
AT THE GUTTER LINE

Alignment: Farmer Return NE
Description: Farmer and Ash St NE Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	699347.23	2279684.51
End:	0+17.595	699353.253	2279667.978

Tangent Data

Parameter	Value	Parameter	Value
Length:	17.595	Course:	N 69° 58' 59.5723" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+17.595	699353.253	2279667.978
End:	0+21.093	699353.169	2279664.48

Tangent Data

Parameter	Value	Parameter	Value
Length:	3.498	Course:	S 88° 37' 50.2000" W

Curve Point Data

Description	Station	Northing	Easting
PC:	0+21.093	699353.169	2279664.48
RP:		699373.164	2279664.002
PT:	0+52.509	699372.686	2279644.008

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	90° 00' 05.2985"	Type:	RIGHT
Radius:	20		
Length:	31.416	Tangent:	20.001
Mid-Ord:	5.858	External:	8.285
Chord:	28.285	Course:	N 46° 22' 07.1508" W

Alignment: Farmer Return NW
Description: Farmer and Ash St NW Return

Curve Point Data

Description	Station	Northing	Easting
PC:	0+00.000	699382.432	2279619.769
RP:		699381.955	2279599.774
PT:	0+31.429	699361.96	2279600.239

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	90° 02' 09.7530"	Type:	RIGHT
Radius:	20		
Length:	31.429	Tangent:	20.013
Mid-Ord:	5.862	External:	8.293
Chord:	28.293	Course:	S 43° 39' 00.3749" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+31.429	699361.96	2279600.239
End:	0+34.887	699361.88	2279596.782

Tangent Data

Parameter	Value	Parameter	Value
Length:	3.458	Course:	S 88° 40' 05.0687" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+34.887	699361.88	2279596.782
End:	0+58.262	699357.191	2279573.882

Tangent Data

Parameter	Value	Parameter	Value
Length:	23.375	Course:	S 78° 25' 42.6274" W

Alignment: Farmer St E
Description: Centerline Farmer St East of Ash St

Tangent Data

Description	PT Station	Northing	Easting
Start:	510+00.000	699339.408	2279632.799
End:	510+66.334	699340.994	2279699.114

Tangent Data

Parameter	Value	Parameter	Value
Length:	66.334	Course:	N 88° 37' 50.2000" E

Alignment: Farmer Return SE
Description: Farmer and Ash St SE Return

Curve Point Data

Description	Station	Northing	Easting
PC:	0+000.000	699306.771	2279648.333
RP:		699307.266	2279669.077
PT:	0+32.593	699328.01	2279668.581

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	89° 59' 54.7015"	Type:	RIGHT
Radius:	20.75		
Length:	32.593	Tangent:	20.749
Mid-Ord:	6.077	External:	8.595
Chord:	29.345	Course:	N 43° 37' 52.8492" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+32.593	699328.01	2279668.581
End:	0+49.676	699333.238	2279684.844

Tangent Data

Parameter	Value	Parameter	Value
Length:	17.082	Course:	N 72° 10' 46.0893" E

Alignment: Farmer Return SW
Description: Farmer and Ash St SW Return

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	699338.536	2279574.316
End:	0+23.131	699336.637	2279597.368

Tangent Data

Parameter	Value	Parameter	Value
Length:	23.131	Course:	S 85° 17' 25.3077" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+23.131	699336.637	2279597.368
End:	0+23.131	699336.637	2279597.369

Tangent Data

Parameter	Value	Parameter	Value
Length:	0	Course:	S 81° 48' 30.4995" E

Curve Point Data

Description	Station	Northing	Easting
PC:	0+23.131	699336.637	2279597.369
RP:		699315.892	2279597.851
PT:	0+55.712	699316.388	2279618.595

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	89° 57' 50.2470"	Type:	RIGHT
Radius:	20.75		
Length:	32.581	Tangent:	20.737
Mid-Ord:	6.073	External:	8.586
Chord:	29.336	Course:	S 46° 20' 59.6251" E

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED
NORTH

STA 2+61.44, 158.08' L
STA 2+81.44, 158.09' L
Lutheran Church
St. John
D Scott
Connelly, Shon O & Lynn M
Tenley, Dons
King, Edward A & Carey L
PRESTON STREET
STA 0+76.22, 38.03' L
STA 0+82.24, 33.03' L
STA 2+61.48, 33.08' L
STA 2+81.48, 33.09' L
EXISTING ROW
GRADING LIMITS
STA 5+86.61, 43.19' L
STA 5+86.61, 38.19' L
STA 6+86.53, 43.22' L
STA 6+86.54, 33.22' L
STA
STA
LINCOLN HIGHWAY / US HWY 30
STA 0+12.71
N: 696703.4622
E: 2279695.7437
START OF PROJECT
PROPOSED ℄
1+00 2+00 3+00 4+00 5+00 66' ROW 6+00 7+00
IA HWY 38 / ASH STREET
STA 5+70.12, 32.82' R
STA 5+70.12, 42.82' R
STA 6+90.12, 32.78' R
STA 6+90.12, 42.78' R
STA
STA
Lutheran Church
Beers, David B & Ruth Ann
Sander, Carol Ann
Siebels, David E & Sue Ann
Fields, Matthew Allan & Amber Jo

Maschmann, Jason W
Schultz, Lucille A
Shireman, John S
Dauber, Lois G
Speer, Edward W & Lenora
PRESTON STREET
EXISTING ROW
GRADING LIMITS
STA 7+52.53, 38.24' L
STA 7+52.54, 33.24' L
STA 12+02.17, 38.38' L
STA 12+02.18, 33.38' L
CENTER STREET
UNION PACIFIC RAILROAD
Young, Brad W & Leah M
Brown, Melissa J & Troy
STA 13+68.28, 38.43' L
STA 13+68.20, 33.43' L
STA 15+43.66, 38.48' L
STA 15+43.66, 33.48' L
7+00 8+00 9+00 10+00 11+00 66' ROW 12+00 13+00 14+00 15+00 16+00
IA HWY 38 / ASH STREET
UNION PACIFIC RR, UAC
PROPOSED ℄
STA 8+76.12, 32.72' R
STA 8+76.12, 42.45' R
STA 7+56.12, 32.76' R
STA 7+56.12, 42.54' R
STA 10+34.12, 32.67' R
STA 10+34.12, 37.67' R
STA 10+81.12, 32.66' R
STA 10+81.12, 37.66' R
STA 11+01.12, 32.65' R
STA 11+01.12, 37.65' R
STA 12+01.12, 32.62' R
STA 12+01.12, 37.62' R
Bequeaith, Marjorie Jean & Bequeaith, Russell W
Laing, Barbara M
McAtee, Dustin & Alissa
Federal National Mortgage Association
Knoll, Paul W & Colette, Kay
BROADWAY STREET

FOR INFORMATION ONLY

TEMPORARY EASEMENT
PERMANENT EASEMENT

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DESIGNED BY:	TRACED BY:	iiw	563.556.2464 ◆ 800.556.4491	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:		IIW, P.C. ◆ www.iiwengr.com				IOWA		2016	H.1	47

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED

NORTH

Crist, Grayland J & Kathaleen M
Boothe, Larry R & Hack, Suzanne K
Klawiter, William A & Cynthia R
Wachendorf, Michael & Rebecca J
Pierson, Steven K & Natasha L
Zink, Kyle C & Baker, Marinna L
Hines, Carol & Flockhart, Donald
Kintz, John M. & Cherise R.

STA 21+04.28, 96.43' L
STA 20+92.68, 96.46' L
EXISTING ROW
GRADING LIMITS
STA 16+43.66, 38.52' L
STA 16+43.66, 33.52' L
STA 21+04.30, 33.66' L
STA 20+92.55, 38.66' L
STA 21+70.30, 38.68' L
STA 21+70.30, 33.68' L

16+00 17+00 18+00 66' ROW 19+00 PROPOSED ℄ 20+00 21+00 22+00 23+00 24+00

IA HWY 38 / ASH STREET

STA 16+43.68, 32.48' R
STA 16+43.68, 37.48' R
STA 17+63.83, 32.45' R
STA 17+63.83, 37.45' R
STA 21+04.32, 32.34' R
STA 21+04.32, 37.34' R
STA 17+43.83, 32.45' R
STA 17+43.83, 37.45' R
GRADING LIMITS
BROADWAY STREET
NORTH STREET
Griswold, William L
Saltzman, Leroy Edward
Childers, Elizabeth J
Koob, Kevin Michael & Koob, Kenneth Robert
Flockhart, Robert R & Darlene
North Cedar School

Tenley, James
Franck, Kaitlin

STA 24+73.71, 48.78' L
STA 24+73.71, 38.78' L
STA 26+23.93, 48.82' L
STA 26+23.93, 33.82' L
EXISTING ROW
GRADING LIMITS
STA 26+85.93, 48.68' L
STA 26+85.93, 40.81' L
STA 28+27.06, 48.62' L
STA 28+27.07, 60.82' L
STA 28+27.05, 40.72' L
EXISTING ROW
STA 30+35.53, 60.69' L
EXISTING DITCH

24+00 PROPOSED ℄ 25+00 66' ROW 26+00 27+00 28+00 29+00 30+00 31+00 32+00

IA HWY 38 / ASH STREET

STA 28+10.00, 40.00' R
STA 27+84.42, 37.66' R
STA 27+25.00, 32.21' R
STA 26+85.95, 32.19' R
STA 26+85.96, 37.69' R
STA 29+52.00, 55.00' R
EXISTING ROW
STA 30+48.00, 55.00' R
FARMERS STREET
North Cedar School
Farrington, Debra Kay Miller

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TEMPORARY EASEMENT
PERMANENT EASEMENT

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	H.2	47

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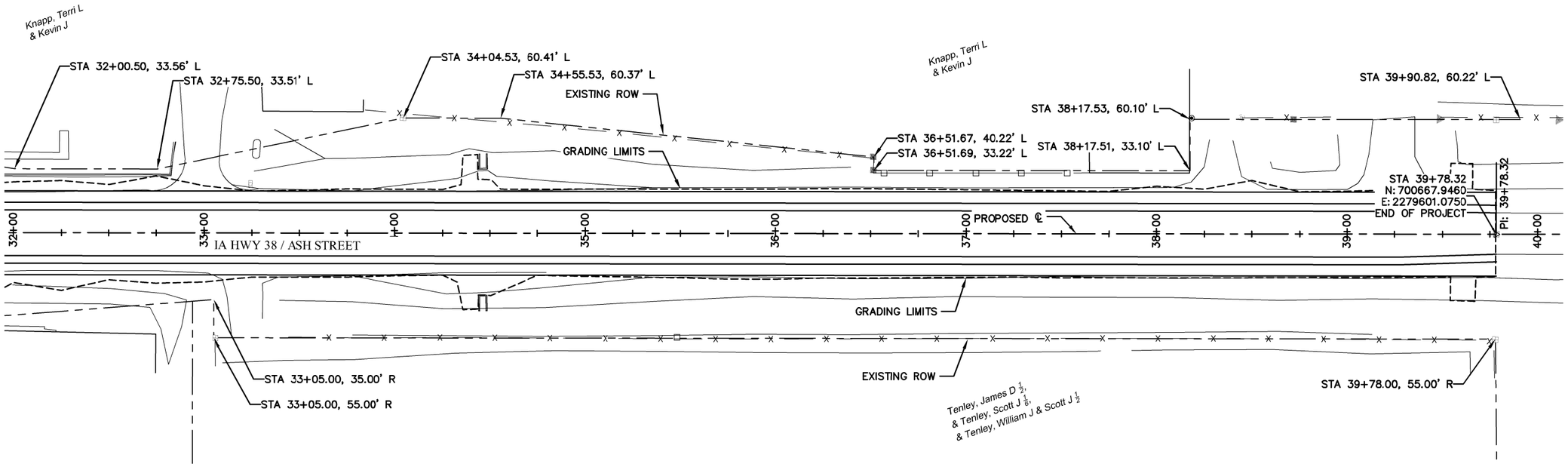
STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 30 60
DRAWING MAY HAVE BEEN REDUCED
NORTH



FOR INFORMATION ONLY

TEMPORARY EASEMENT

PERMANENT EASEMENT

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	H.3	47

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STP-038-2(37)--2C-16

GENERAL TRAFFIC CONTROL NOTES:

1. CONSTRUCTION SHALL BE PERFORMED IN TWO STAGES: STAGE 1 IS ALL WORK NECESSARY TO COMPLETE CONSTRUCTION SOUTH OF THE UNION PACIFIC RAILROAD (UPRR). STAGE 2 IS ALL WORK NECESSARY TO COMPLETE CONSTRUCTION NORTH OF THE UPRR. LANE CLOSURES, FOR LONGER THAN 8 HOURS, MAY NOT OCCUR ON SECOND STAGE UNTIL CONSTRUCTION OF FIRST STAGE IS COMPLETED SUCH THAT (2) LANES ARE OPEN TO TRAFFIC.

2. DURING STAGE 1, IA 38 / ASH STREET IS CLOSED TO ALL TRAFFIC FROM US 30 TO THE SOUTHERN LIMITS OF THE UNION PACIFIC RAILROAD (UPRR) RIGHT OF WAY. IA 38 TRAFFIC WILL BE DETOURED TO MAIN STREET AND BROADWAY STREET.

3. DURING STAGE 2, THROUGH TRAFFIC ON IA 38 (ASH ST.) WILL BE DETOURED USING US HWY 30, IA 1, AND US HWY 151 THROUGH MOUNT VERNON, ANAMOSA, AND MONTICELLO. IA 38 (ASH ST.) IS CLOSED TO ALL TRAFFIC FROM THE NORTHERN LIMITS OF UPRR TO THE NORTH END OF THE PROJECT, EXCEPT FOR:
   - 3.1. INTERSECTION OF ASH ST/IA 38 AND FARMERS STREET SHALL BE CONSTRUCTED IN STAGES SO THAT ½ OF THE INTERSECTION IS OPEN TO EMERGENCY VEHICLES, MAIL DELIVERY, AND TO PROVIDE ACCESS TO ONE RESIDENCE BETWEEN FARMERS STREET AND THE NORTH END OF THE PROJECT.
   - 3.2. ASH ST/IA 38, NORTH OF FARMERS STREET SHALL BE CONSTRUCTED IN STAGES SO THAT AT LEAST A 10' TRAVEL PATH (WHICH MAY INCLUDE THE SHOULDER) IS AVAILABLE TO EMERGENCY VEHICLES, MAIL DELIVERY, AND TO PROVIDE ACCESS TO ONE RESIDENCE BETWEEN FARMERS STREET AND THE NORTH END OF THE PROJECT.
   - 3.3. CONTRACTOR SHALL MAINTAIN TRAFFIC ACROSS IA 38 (ASH STREET) AT ONE OF THE THREE INTERSECTIONS NORTH OF THE UPRR, EITHER BROADWAY ST., NORTH ST., OR FARMERS ST., TO PROVIDE ACCESS TO RESIDENTS NORTH OF THE UPRR AND WEST OF IA 38 (ASH ST).

4. CONTRACTOR IS RESPONSIBLE FOR DETOUR SIGNING. CONTRACTOR TO NOTIFY IOWA DOT MAINTENANCE SUPERVISORS PRIOR TO SIGN PLACEMENT ON STATE ROADS. FOR SUPERVISOR IN JONES COUNTY – CALL 319-462-3676, FOR SUPERVISOR IN LINN COUNTY – CALL 319-364-8189, AND FOR SUPERVISOR IN CEDAR COUNTY – CALL 563-946-2391. THE MAINTENANCE SUPERVISORS MAY DETERMINE IF DETOUR SIGNING MAY BE PLACED ON STATE ROUTE MARKING SIGNING BY ATTACHING BRACKETS TO EXISTING SIGN POSTS. STAGE 1 DETOUR OCCURS ENTIRELY IN CEDAR COUNTY. STAGE 2 DETOUR OCCURS IN JONES, LINN, AND CEDAR COUNTIES. SEE EACH DETAIL FOR COUNTY LOCATION.

5. (2) PORTABLE CHANGEABLE MESSAGE SIGNS, PAID FOR AS BID ITEM 'PORTABLE DYNAMIC MESSAGE SIGN', SHALL BE INSTALLED A MINIMUM OF (7) CALENDAR DAYS BEFORE STAGE 2 DETOUR IS INSTALLED TO GIVE ADVANCE WARNING TO MOTORISTS OF ROAD CLOSURE. SIGNS MAY BE REMOVED, AND WILL NOT BE PAID FOR, AFTER DETOUR IS INSTALLED. LOCATION OF PORTABLE SIGNS AND MESSAGE DISPLAYED IS SHOWN ON DETAIL 1/J.6.

6. ALL CONSTRUCTION EQUIPMENT SHALL BE KEPT 25' AWAY FROM UNION PACIFIC RAILROAD CROSSING ON IA 38 (ASH STREET) IN BOTH DIRECTIONS AT ALL TIMES. ALL CONSTRUCTION SHALL BE KEPT OUTSIDE OF THE UPRR RIGHT OF WAY.

7. THE BID ITEM 'TRAFFIC CONTROL' SHALL INCLUDE PROVIDING, INSTALLING, MAINTAINING, AND REMOVING ALL TRAFFIC CONTROL DEVICES BY THE CONTRACTOR. THIS SHALL INCLUDE INSPECTION DURING WORKING HOURS, NIGHTTIME, AND WEEKENDS TO ASSURE THAT THE DEVICES ARE CORRECTLY POSITIONED AND IN WORKING ORDER.

8. DETOUR RELATED SIGNS SHALL BE MOUNTED ON POSTS, NOT SKIDS. SIGN AND POST INSTALLATIONS SHALL HAVE THE SAME OFFSET AS EXISTING SIGNS ALONG THE ROADWAY.

9. ALL TEMPORARY TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE MOST RECENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. ALL SIGNS SHALL BE IN CONFORMANCE WITH THE STANDARD HIGHWAY SIGNS BOOK.

10. THE BACKSIDE OF THE TYPE III BARRICADES SHALL BE FULLY REFLECTORIZED. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE. SIGNS MOUNTED ON TYPE III BARRICADES SHOULD NOT COVER THE BOTTOM TWO RAILS.

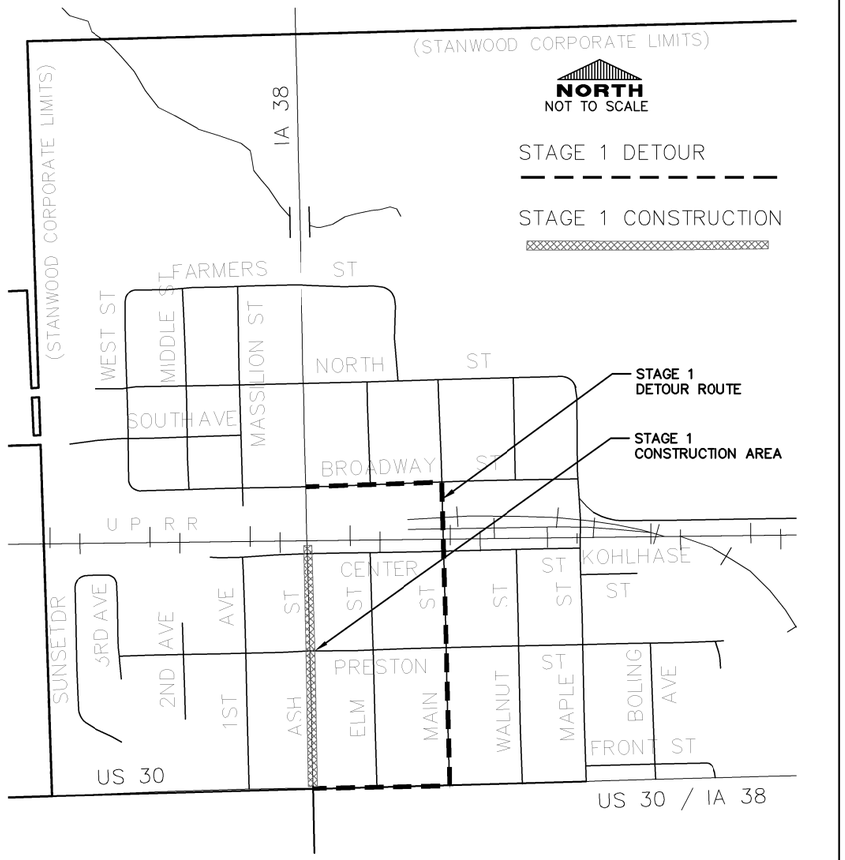
11. PROPOSED SIGN SPACING MAY BE MODIFIED BY THE CONTRACTOR TO MEET EXISTING FIELD CONDITIONS OR TO PREVENT OBSTRUCTION OF THE MOTORIST'S VIEW OF PERMANENT SIGNING. ALL ADJUSTMENTS ARE SUBJECT TO APPROVAL BY THE ENGINEER AND MUST BE DOCUMENTED IN THE TRAFFIC CONTROL DIARY.

12. PERMANENT SIGNING THAT CONVEYS A MESSAGE IN CONFLICT WITH THE MESSAGE OF THE TEMPORARY SIGNING, AND NOT APPLICABLE TO THE WORKING CONDITIONS, SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE ENGINEER.

13. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NON-WORKING HOURS SHALL BE IN SUCH A PLACE SO IT IS NOT SUBJECT TO BEING HIT BY ERRANT VEHICLES. EQUIPMENT SHALL NOT BE STORED WHERE IT BLOCKS THE VIEW OF TRAFFIC CONTROL DEVICES OR VISIBILITY AT INTERSECTIONS. THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT OUTSIDE THE LOCATION OF THE ROAD CLOSURE BARRICADES.

14. THE DEPTH OF ANY DROP-OFF ADJACENT TO TRAFFIC SHOULD BE LIMITED TO A NOMINAL 10 INCHES DURING NON-WORKING HOURS. THE EDGE OF ANY DROP-OFF ADJACENT TO TRAFFIC SHOULD BE DELINEATED BY RETRO-REFLECTORIZED CHANNELIZING DEVICES SPACED A MAXIMUM OF 25 FEET APART.

15. THE CONTRACTOR IS RESPONSIBLE FOR PEDESTRIAN AND HAZARD PROTECTION NOT SPECIFICALLY SHOWN ON THESE PLANS BUT DICTATED BY CONSTRUCTION OPERATIONS FOR THE WORK AREA ESTABLISHED BY THIS CONTRACT. THE PEDESTRIAN PROTECTION SHALL CONSIST OF BARRICADES, SIGNS, AND ORANGE PLASTIC FENCE AS NEEDED FOR THE GUIDANCE OF PEDESTRIANS. TYPICALLY PEDESTRIAN SIGNING IS PLACED AT INTERSECTIONS SO PEDESTRIANS ARE NOT CONFRONTED WITH MID-BLOCK CROSSINGS. INSTALL R9-9 (24"X12" SIDEWALK CLOSED) SIGNS WHERE SIDEWALKS ARE NOT OPEN TO PEDESTRIAN TRAFFIC. IF AN ALTERNATE SIDEWALK IS AVAILABLE, THE R9-11 (24"X18" SIDEWALK CLOSED AHEAD, CROSS HERE) SIGNS SHOULD BE USED, PROVIDED THE PEDESTRIANS ARE NOT BEING LED INTO DIRECT CONFLICTS WITH WORK SITE VEHICLES, EQUIPMENT, OPERATIONS OR EXCAVATIONS. ORANGE PLASTIC SAFETY FENCE AND BARRICADES SHOULD BE USED FOR ADDITIONAL PROTECTION IN AREAS WHERE PEDESTRIANS ARE PRESENT WITHIN THE SIDEWALK CLOSED AREA UNLESS TEMPORARY FENCING IN ALREADY INSTALLED IN THESE AREAS.



STAGE 1:

CONSTRUCTION OCCURS ON IA 38 / ASH ST FROM US 30 TO THE SOUTHERN LIMIT OF UNION PACIFIC RAILROAD (UPRR) RIGHT-OF-WAY.

PRIOR TO CONSTRUCTION AT THE INTERSECTION OF US 30, EXISTING GRANULAR SHOULDER ON SOUTH SIDE OF US 30 SHALL BE PAVED. SEE E SHEET. PRIOR TO PAVING OF SHOULDER, SHIFT TRAFFIC ON US 30, 6' TO THE NORTH. SEE DETAIL 1/J.2. AFTER SHOULDER ON SOUTH SIDE OF US 30 IS PAVED, SHIFT TRAFFIC 6' TO THE SOUTH PRIOR TO BEGINNING CONSTRUCTION NEXT TO THRU LANES OF US 30 ON IA 38/ASH STREET. SEE DETAIL 2/J.2

IA 38 / ASH STREET IS CLOSED TO ALL TRAFFIC FROM US 30 TO THE SOUTHERN LIMITS OF THE UNION PACIFIC RAILROAD (UPRR) RIGHT OF WAY. IA 38 TRAFFIC WILL BE DETOURED TO MAIN STREET AND BROADWAY STREET. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, MAINTAINING, AND REMOVING ALL DETOUR SIGNING AND DEVICES. WHILE DETOUR FOR STAGE 1 IS IN PLACE, CONTRACTOR IS RESPONSIBLE FOR ALL SIGNING TO RESTRICT PARKING ON BOTH SIDES OF MAIN ST. FROM US 30 TO CENTER STREET, AND ON BROADWAY ST. FROM ASH ST / IA 38 TO ELM STREET. SEE DETAIL 1/J.4.

AT THE INTERSECTION OF BROADWAY ST. AND ASH ST / IA 38, RADIUS IN NORTH EAST CORNER IS NOT SUFFICIENT FOR LARGE SEMI-TRAILERS TO MAKE RIGHT TURN WITHOUT ENCROACHING ON OPPOSING LANES. IF DETERMINED NECESSARY BY THE ENGINEER, CONTRACTOR SHALL INCREASE RADIUS IN NORTH EAST CORNER WITH TEMPORARY HMA PAVEMENT. SEE DETAIL 2/J.3.

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TRAFFIC CONTROL
GENERAL NOTES & STAGE 1 OVERVIEW
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

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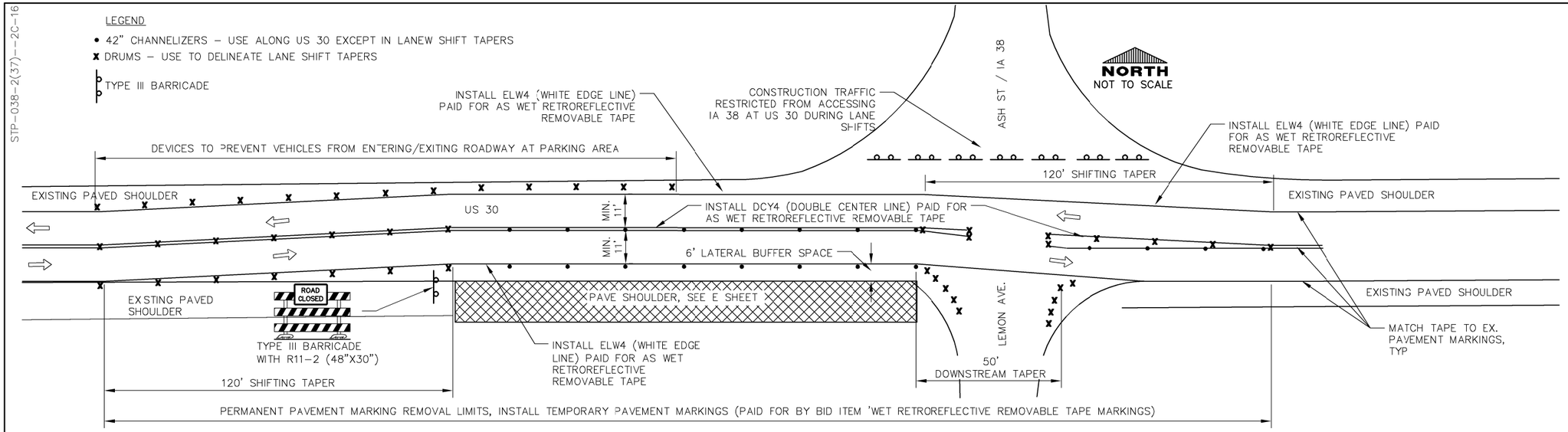
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	J.1	135

LEGEND

- 42" CHANNELIZERS – USE ALONG US 30 EXCEPT IN LANEW SHIFT TAPERS
- DRUMS – USE TO DELINEATE LANE SHIFT TAPERS

TYPE III BARRICADE



NOTE:

REMOVAL OF PERMANENT PAVEMENT MARKINGS PAID FOR AS PAVEMENT MARKINGS REMOVED. REMOVAL OF TAPE INCIDENTAL TO BID ITEM WET RETROREFLECTIVE REMOVABLE TAPE. REPLACE ALL PERMANENT PAVEMENT MARKINGS WHEN CONSTRUCTION IN INTERSECTION IS FINISHED, PAID FOR AS PAINTED PAVEMENT MARKING, WATERBORNE/SOLVENT. SEE TABULATION ON C SHEETS

INSTALL W1-4, REVERSE CURVE, 48"X48", 100' BEFORE SHIFT IN BOTH DIRECTIONS

INSTALL W20-1, ROAD WORK AHEAD, 48"X48", 600' BEFCRE SHIFT IN BOTH DIRECTIONS

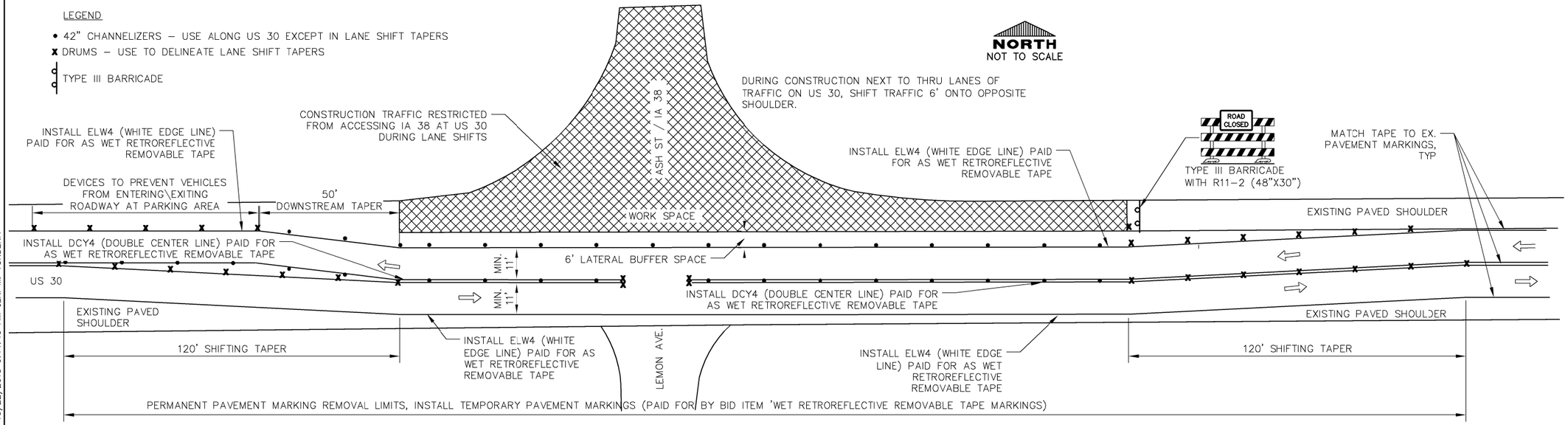
INSTALL G20-2A, END ROAD WORK, 48"X24", 500' AFTER CONSTRUCTION ZONE IN BOTH DIRECTIONS

1/J.2 TRAFFIC SHIFT ON US 30 — CEDAR COUNTY
PAVE SHOULDER ON SOUTH SIDE OF US 30 — NOT TO SCALE
PRIOR TO STAGE 1 WORK IN IA 38 / US 30 INTERSECTION

LEGEND

- 42" CHANNELIZERS – USE ALONG US 30 EXCEPT IN LANE SHIFT TAPERS
- DRUMS – USE TO DELINEATE LANE SHIFT TAPERS

TYPE III BARRICADE



INSTALL W1-4, REVERSE CURVE, 48"X48", 100' BEFORE SHIFT IN BOTH DIRECTIONS

INSTALL W20-1, ROAD WORK AHEAD, 48"X48", 600' BEFORE SHIFT IN BOTH DIRECTIONS

INSTALL G20-2A, END ROAD WORK, 48"X24", 500' AFTER CONSTRUCTION ZONE IN BOTH DIRECTIONS

2/J.2 TRAFFIC SHIFT ON US 30 — CEDAR COUNTY
PAVE ASH ST NEXT TO THRU LANES ON US 30 — NOT TO SCALE
PART OF STAGE 1 WORK

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TRAFFIC CONTROL
STAGE 1 DETAILS

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

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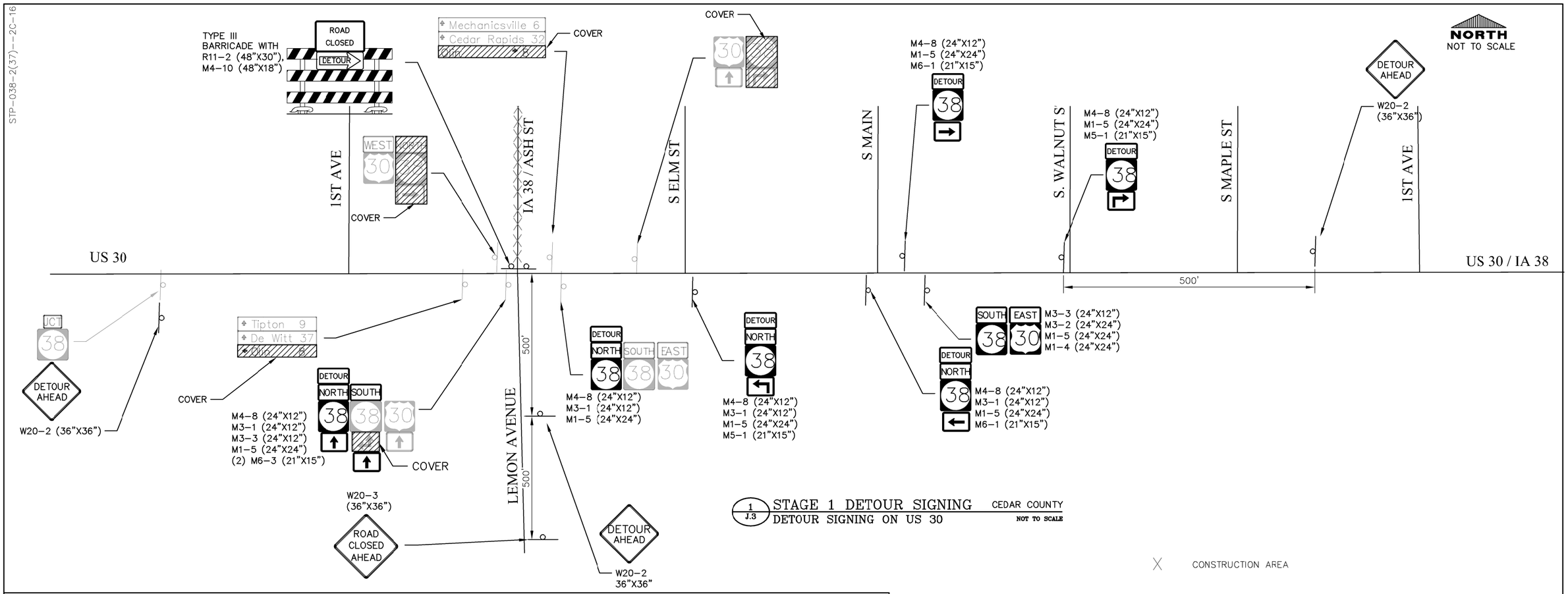
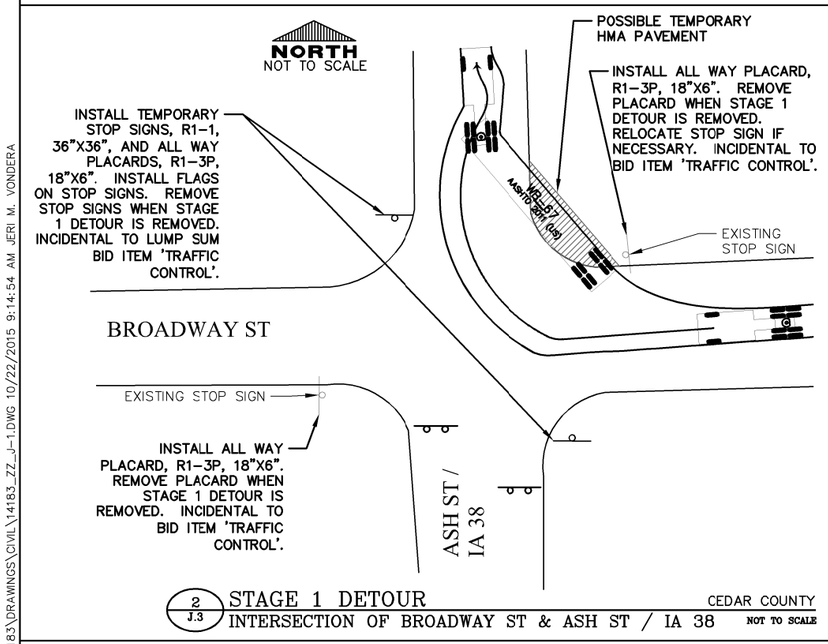
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	J.2	135



1 J.3 STAGE 1 DETOUR SIGNING — CEDAR COUNTY
DETOUR SIGNING ON US 30 — NOT TO SCALE



2 J.3 STAGE 1 DETOUR — CEDAR COUNTY
INTERSECTION OF BROADWAY ST & ASH ST / IA 38 — NOT TO SCALE

NOTE: RIGHT TURN RADIUS IS SUFFICIENT FOR A SU-40 (LARGE STRAIGHT TRUCK). WB-67 (LARGE SEMI-TRAILER) WILL ENCROACH ON OPPOSING LANES. IF ENGINEER DETERMINES A LARGER RADIUS IS NEEDED, CONTRACTOR SHALL INCREASE RADIUS WITH TEMPORARY HMA PAVEMENT. TO BE PAID FOR AT THE CONTRACT PRICE PER TON OF HMA.

X CONSTRUCTION AREA

38 EXISTING SIGN, TYPICAL

38 PROPOSED TEMPORARY SIGN, TYPICAL

COVER EXISTING SIGN, TYPICAL

TYPE III BARRICADE

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TRAFFIC CONTROL
STAGE 1 DETOUR SIGNING
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

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CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	STP-038-2(37)--2C-16	IOWA	.	2016	J.3	135

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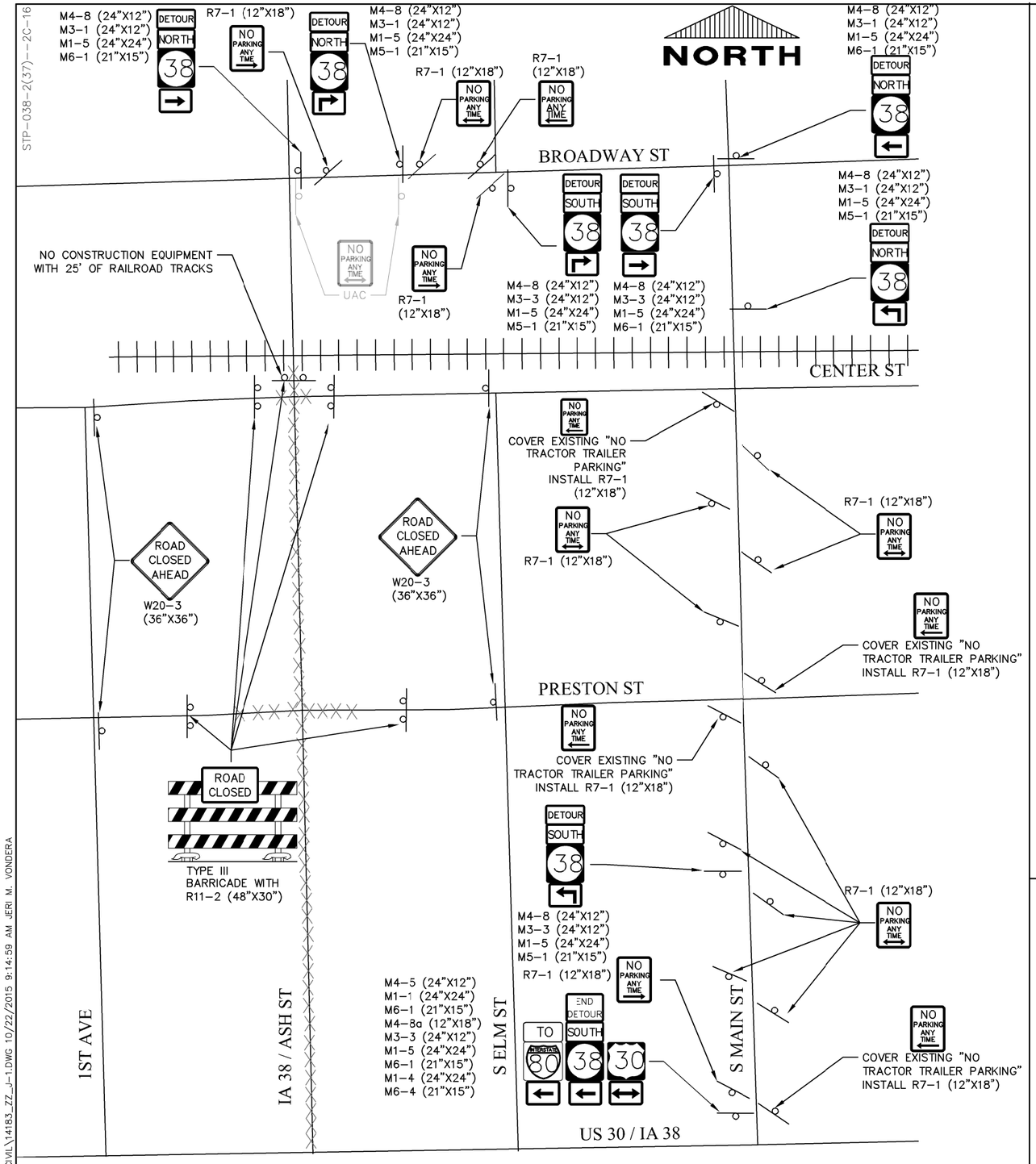
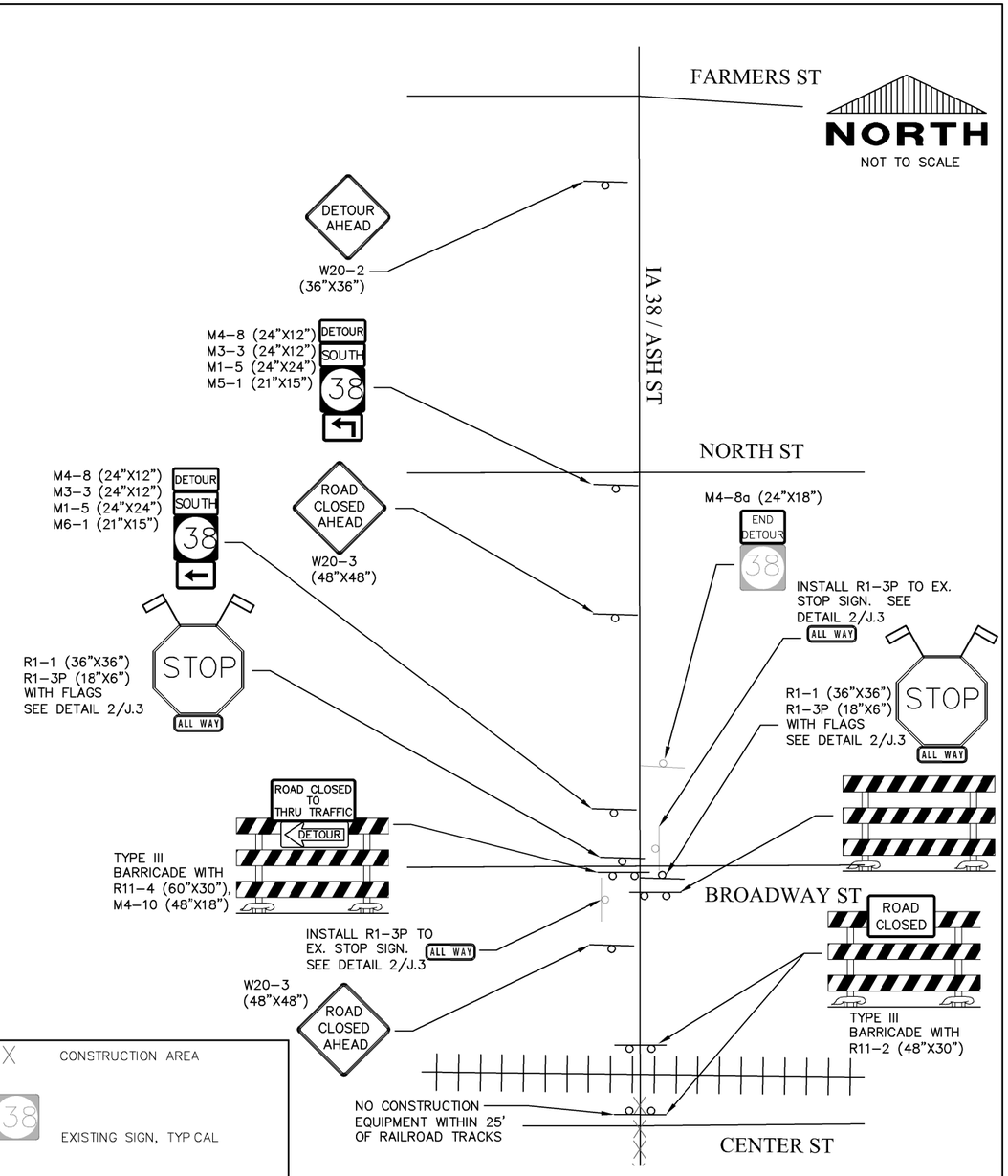


1 J.4 STAGE 1 DETOUR SIGNING ON MAIN ST. & BROADWAY ST. AND ROAD CLOSURES BARRICADES ON SIDE STREETS — CEDAR COUNTY — NOT TO SCALE



2 J.4 STAGE 1 DETOUR SIGNING ON ASH ST — CEDAR COUNTY
DETOUR SIGNING NORTH OF UPRR — NOT TO SCALE

CONSTRUCTION AREA

EXISTING SIGN, TYPICAL

PROPOSED TEMPORARY SIGN, TYPICAL

COVER EXISTING SIGN, TYPICAL

TYPE III BARRICADE

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TRAFFIC CONTROL
STAGE 1 DETOUR SIGNING

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

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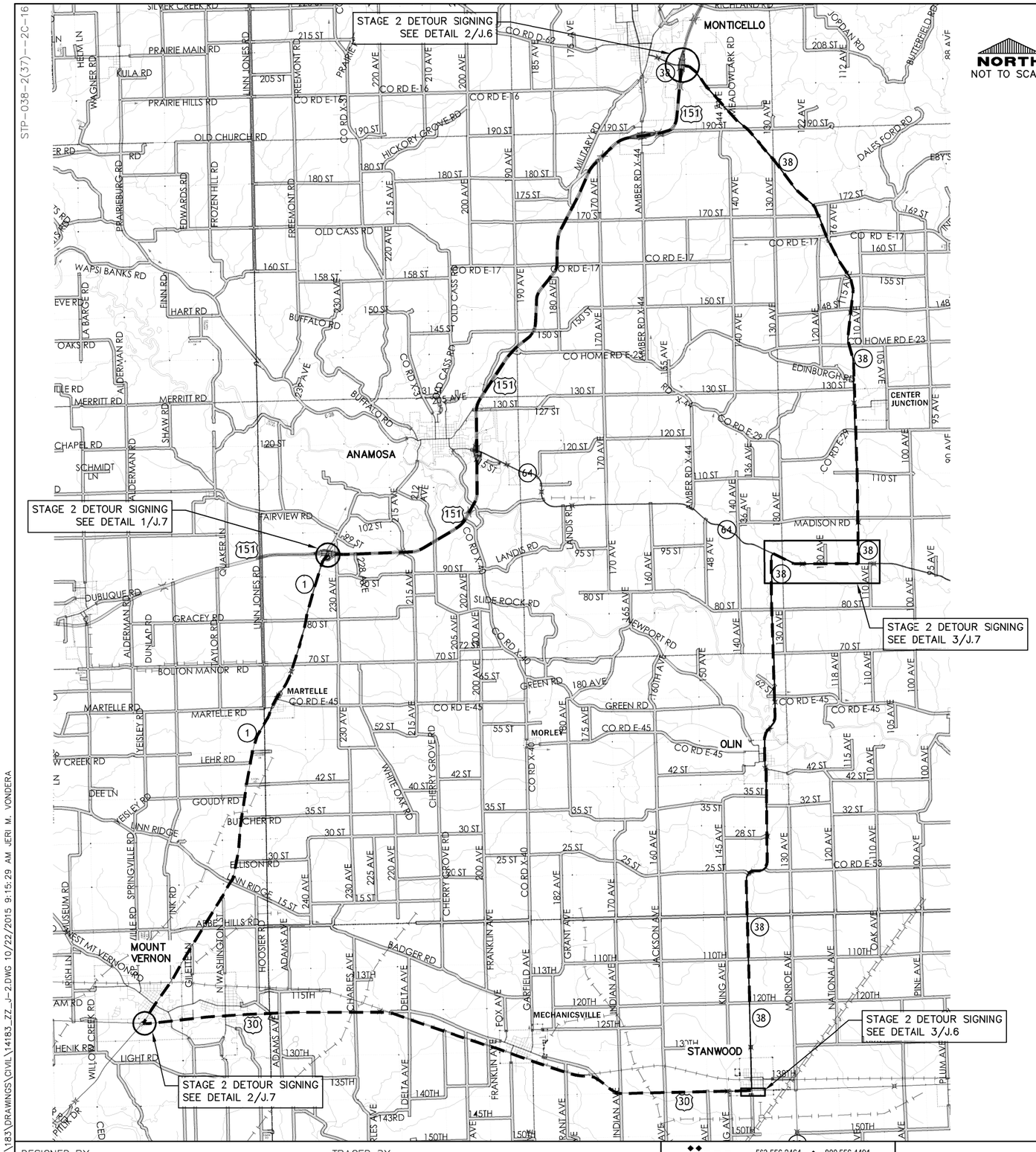
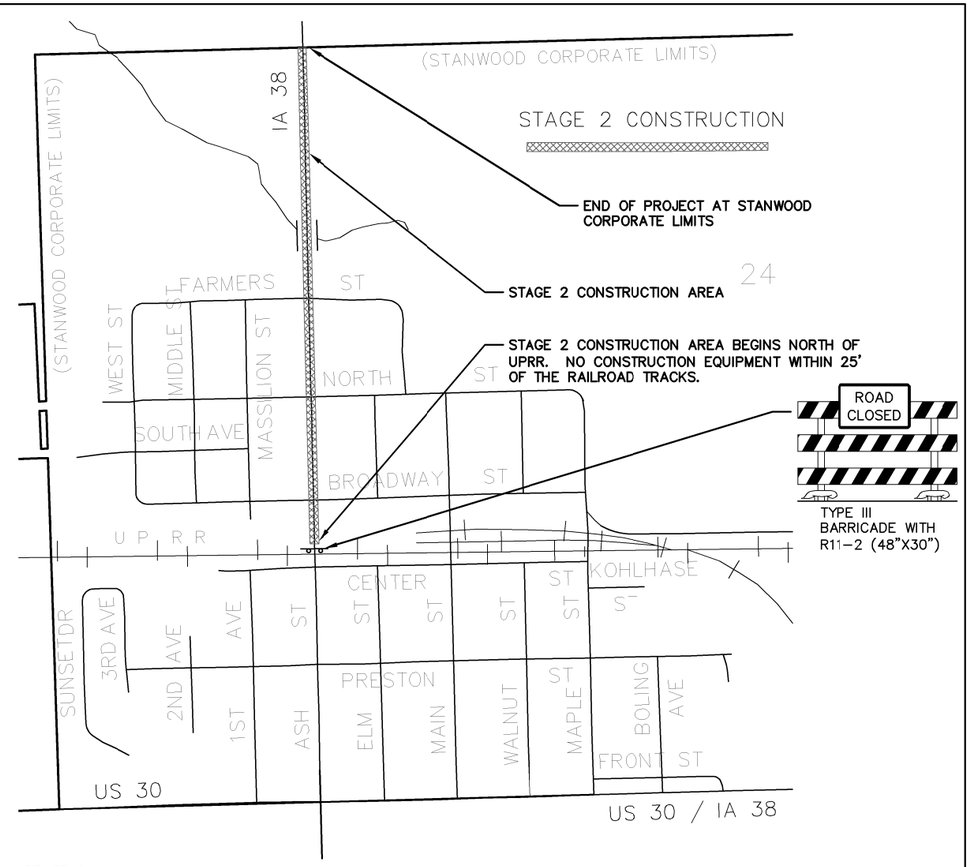
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	J.4	135





STAGE 2:

CONSTRUCTION OCCURS ON IA 38 (ASH ST.) FROM THE NORTHERN LIMIT OF UNION PACIFIC RAILROAD (UPRR) RIGHT-OF-WAY TO STANWOOD NORTH CORPORATE LIMITS.

(2) PORTABLE CHANGEABLE MESSAGE SIGNS, PAID FOR AS BID ITEM 'PORTABLE DYNAMIC MESSAGE SIGN', SHALL BE INSTALLED A MINIMUM OF (7) CALENDAR DAYS BEFORE STAGE 2 DETOJR IS INSTALLED TO GIVE ADVANCE WARNING TO MOTORISTS OF ROAD CLOSURE. SIGNS MAY BE REMOVED, AND WILL NOT BE PAID FOR, ONCE DETOUR IS INSTALLED. LOCATION OF PORTABLE SIGNS AND MESSAGE DISPLAYED SHOWN IN DETAIL 1/J.6, AND MAY BE CHANGED AS DIRECTED BY THE ENGINEER.

STAGE 2 DETOUR CANNOT BE INSTALLED JNTIL IA 38 (ASH STREET) IS OPEN TO TRAFFIC SOUTH OF THE UPRR. IN STAGE 2, IA 38 (ASH ST.) IS CLOSED TO ALL TRAFFIC FROM THE NORTHERN LIMITS OF UPRR TO THE NORTH END OF THE PROJECT, EXCEPT FOR:

- INTERSECTION OF ASH ST/IA 38 AND FARMERS STREET SHALL BE CONSTRUCTED IN STAGES SO THAT ½ OF THE INTERSECTION IS OPEN TO EMERGENCY VEHICLES, MAIL DELIVERY, AND TO PROVICE ACCESS TO ONE RESIDENCE BETWEEN FARMERS STREET AND THE NORTH END OF THE PROJECT.
- ASH ST/IA 38, NORTH OF FARMERS STREET SHALL BE CONSTRUCTED IN STAGES SO THAT AT LEAST A 10' TRAVEL PATH (WHICH MAY INCLUDE THE SHOULDER) IS AVAILABLE TO EMERGENCY VEHICLES, MAIL DELIVERY, AND TO PROVIDE ACCESS TO ONE RESIDENCE BETWEEN FARMERS STREET AND THE NORTH END OF THE PROJECT.
- CONTRACTOR SHALL MAINTAIN TRAFFIC ACROSS IA 38 (ASH STREET) AT ONE OF THE THREE INTERSECTIONS NORTH OF THE UPRR, EITHER BROADWAY ST., NORTH ST., OR FARMERS ST., TO PROVIDE ACCESS TO RESIDENTS NORTH OF THE UPRR AND WEST OF IA 64 (ASH ST).

THROUGH TRAFFIC ON IA 38 (ASH ST.) WILL BE DETOURED USING US HWY 30, IA 1, AND US HWY 151 THROUGH MOUNT VERNON, ANAMOSA, AND MONTICELLO. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, MAINTAINING, AND REMOVING ALL DETOUR SIGNING AND DEVICES.

STAGE 2 DETOUR ROUTE

Design For

IA 38

FROM W JCT US 30 TO NCL STANWOOD

TRAFFIC CONTROL

STAGE 2 DETOUR SIGNING

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	J.5	135

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STP-038-2(37)--2C-16

INSTALL PORTABLE CHANGEABLE MESSAGE SIGN 100' NORTH OF PROJECT LIMITS. TO BE INSTALLED (7) CALENDAR DAYS BEFORE STAGE 2 DETOUR IS INSTALLED. 3 DISPLAYS TO BE SHOWN FOR 2.8 SECONDS.

STARTING (DATE) HWY 38	NORTH OF STANWOOD	CLOSED TO RR XING

FARMERS ST

IA 38 / ASH ST

ENGINEER MAY CHANGE LOCATION OR MESSAGE BASED ON FIELD CONDITIONS. SIGNS MAY BE REMOVED, AND WILL NOT BE PAID FOR, AFTER DETOUR IS INSTALLED.

NORTH ST

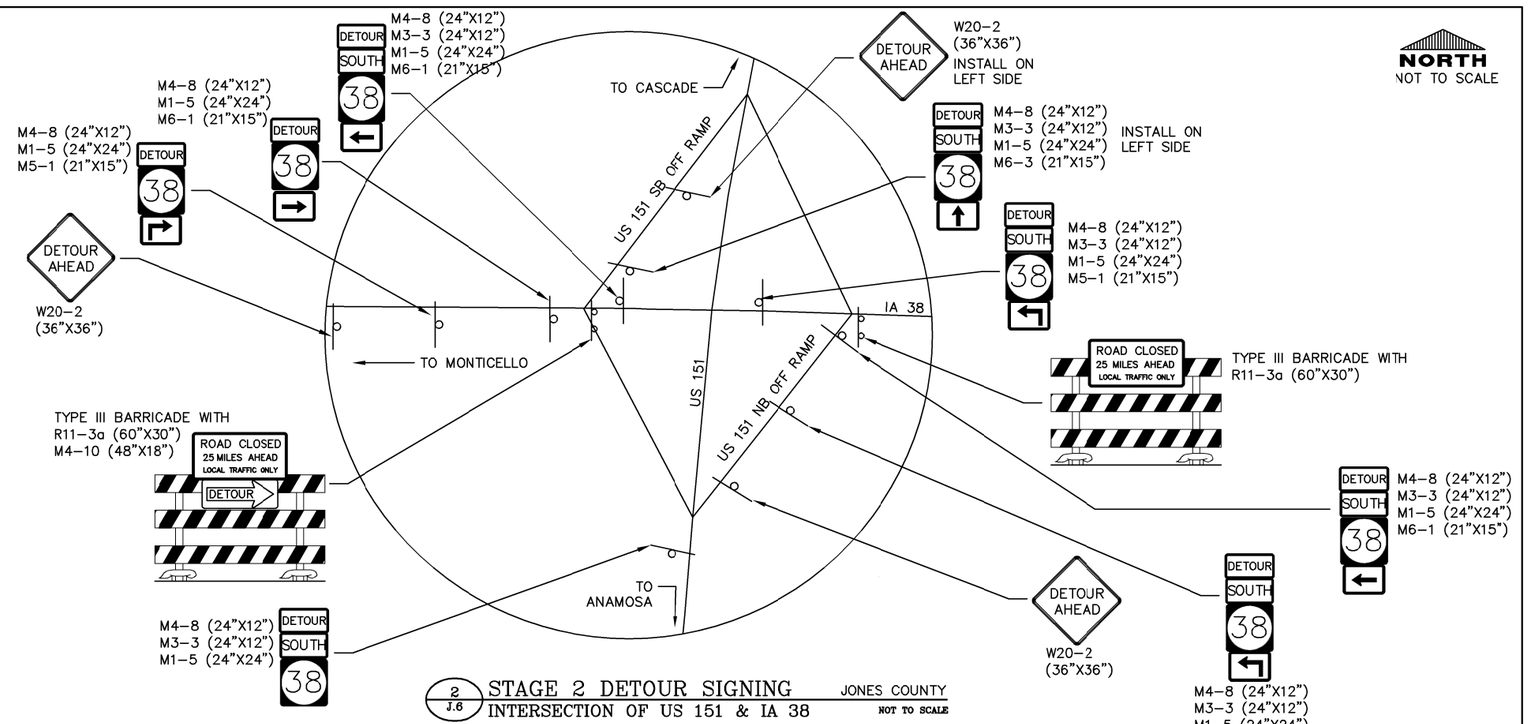
INSTALL PORTABLE CHANGEABLE MESSAGE SIGN APPROX. 160' NORTH OF BROADWAY ST. TO BE INSTALLED (7) CALENDAR DAYS BEFORE STAGE 2 DETOUR IS INSTALLED. 2 DISPLAYS TO BE SHOWN FOR 3.0 SECONDS.

BROADWAY ST

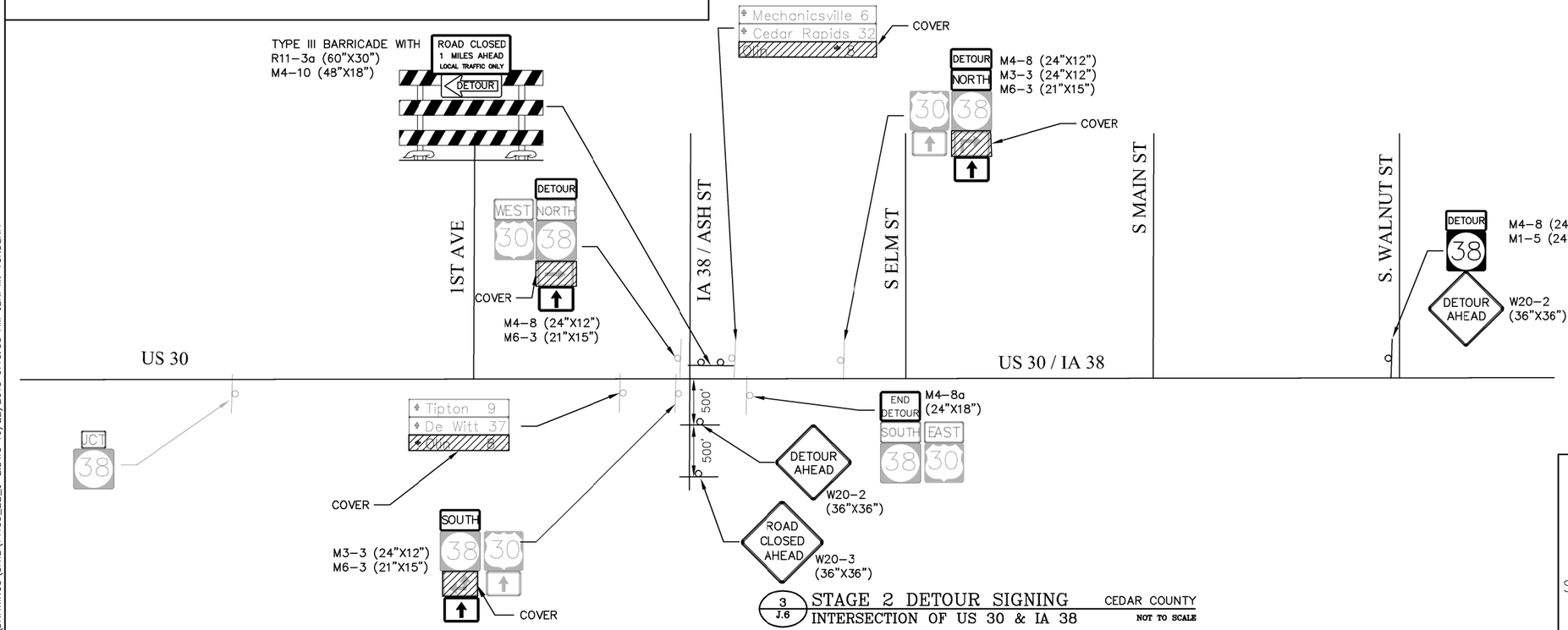
STARTING (DATE) HWY 38	CLOSED NORTH OF RR XING

CENTER ST

1 / J.6 SIGNING PRIOR TO STAGE 2 DETOUR — CEDAR COUNTY
PORTABLE CHANGEABLE MESSAGE SIGNS — NOT TO SCALE



2 / J.6 STAGE 2 DETOUR SIGNING — JONES COUNTY
INTERSECTION OF US 151 & IA 38 — NOT TO SCALE



3 / J.6 STAGE 2 DETOUR SIGNING — CEDAR COUNTY
INTERSECTION OF US 30 & IA 38 — NOT TO SCALE

38 EXISTING SIGN, TYPICAL

38 PROPOSED TEMPORARY SIGN, TYPICAL

COVER EXISTING SIGN, TYPICAL

TYPE III BARRICADE

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TRAFFIC CONTROL
STAGE 2 DETOUR SIGNING

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

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DETAILED BY: CHECKED BY:

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER STP-038-2(37)--2C-16

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA	.	2016	J.6	135

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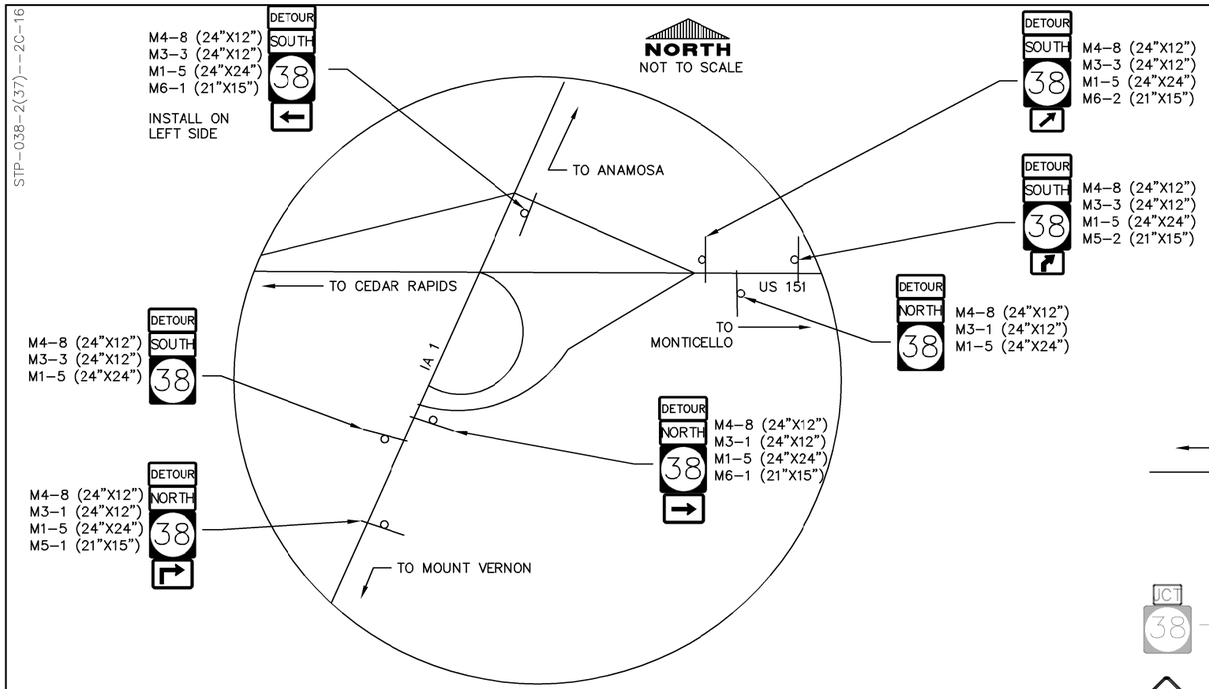
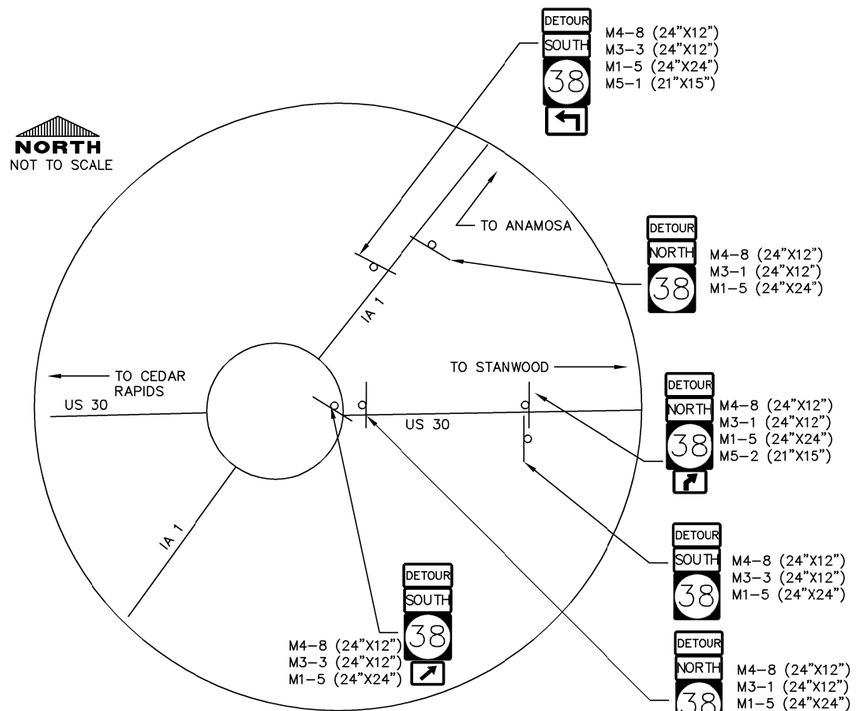
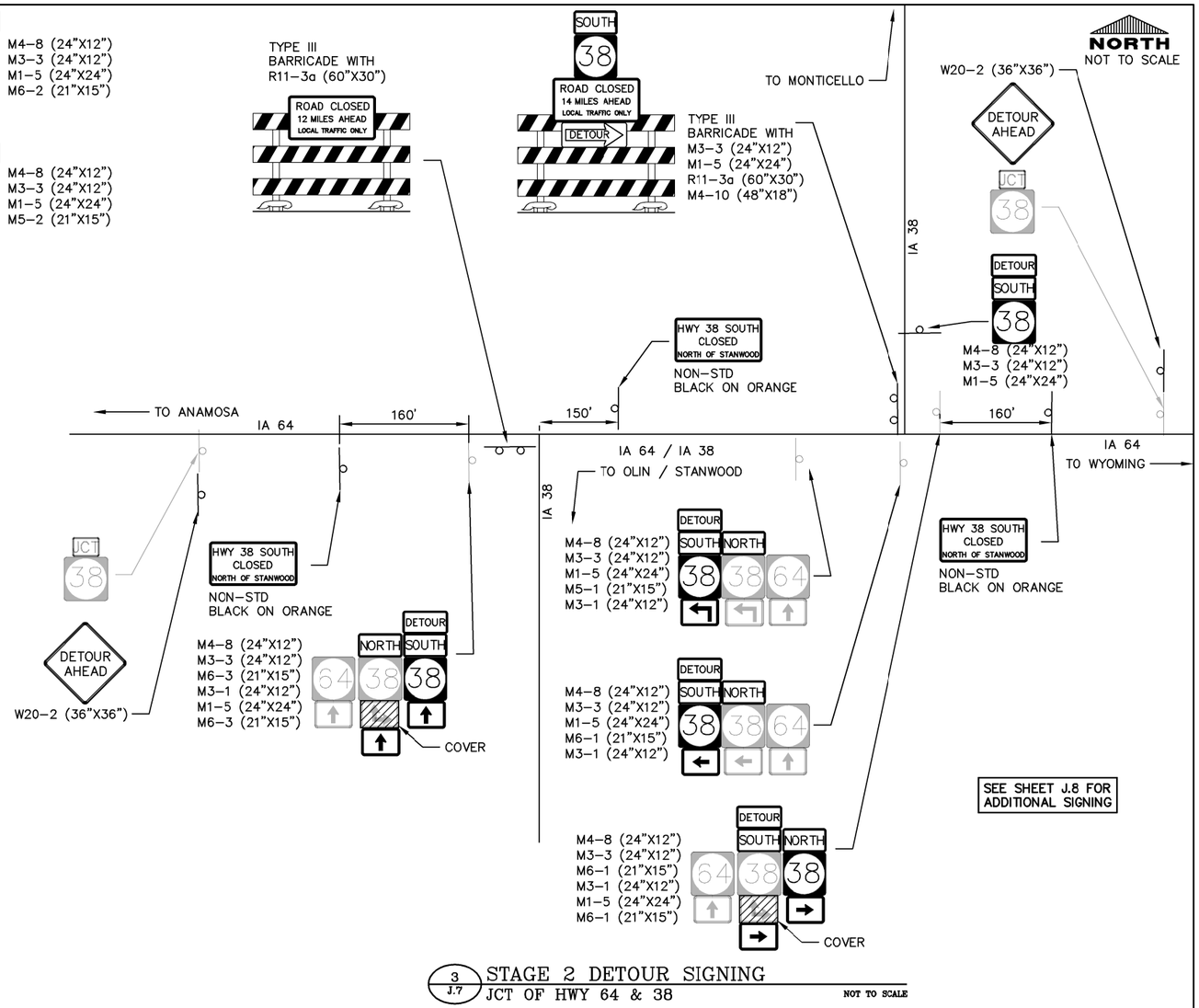


1 J.7 STAGE 2 DETOUR SIGNING
INTERSECTION OF IA 1 & US 151
JONES COUNTY
NOT TO SCALE



2 J.7 STAGE 2 DETOUR SIGNING
INTERSECTION OF IA 1 & US 30
LINN COUNTY
NOT TO SCALE



3 J.7 STAGE 2 DETOUR SIGNING
JCT OF HWY 64 & 38
NOT TO SCALE

38 EXISTING SIGN, TYPICAL

38 PROPOSED TEMPORARY SIGN, TYPICAL

COVER EXISTING SIGN, TYPICAL

TYPE III BARRICADE

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TRAFFIC CONTROL
STAGE 2 DETOUR SIGNING
Station:. Date:.
CITY OF STANWOOD, CEDAR COUNTY

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	J.7	135

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CONFIRMATION SIGNING (8 LOCATIONS)
M4-8, 24"X12" BLACK ON ORANGE
M3-1 (NORTH) OR M3-3 (SOUTH), 24"X12"
M1-5, 24"X24"

DETOUR NORTH 38
JONES COUNTY

DETOUR SOUTH 38
JONES COUNTY

DETOUR NORTH 38
JONES COUNTY

DETOUR SOUTH 38
JONES COUNTY

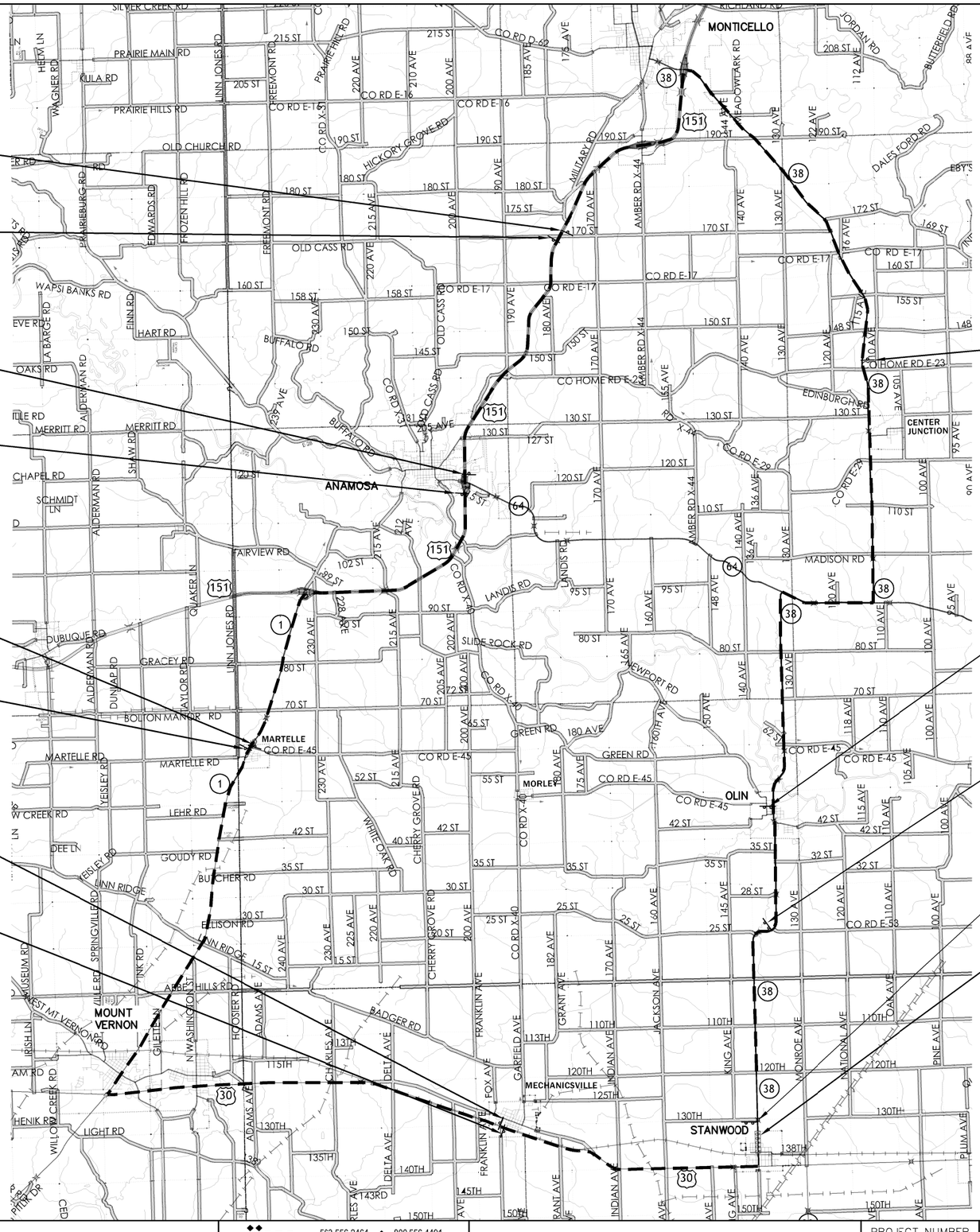
DETOUR NORTH 38
JONES COUNTY

DETOUR SOUTH 38
JONES COUNTY

DETOUR NORTH 38
CEDAR COUNTY

DETOUR SOUTH 38
CEDAR COUNTY

STAGE 2 DETOUR ROUTE



NORTH
NOT TO SCALE

DETOUR SOUTH 38
CONFIRMATION SIGNING
M4-8, (24"X12")
M3-3 (24"X12")
M1-5 (24"X24")
JONES COUNTY

ROAD CLOSED 7 MILES AHEAD LOCAL TRAFFIC ONLY
TYPE III BARRICADE WITH R11-3a (60"X30")
JONES COUNTY

ROAD CLOSED 4 MILES AHEAD LOCAL TRAFFIC ONLY
TYPE III BARRICADE WITH R11-3a (60"X30")
CEDAR COUNTY

INSTALL STANDARD ROAD PLAN TC-252, ROUTES CLOSED TO TRAFFIC, SITUATION 1, RURAL. (130TH ST. IS LAST PUBLIC ROAD, ROAD CLOSED 0.3 MILES AHEAD)

CONSTRUCTION AREA

38 PROPOSED TEMPORARY SIGN, TYPICAL

TYPE III BARRICADE

Design For
IA 38
FROM W JCT US 30 TO NCL STANWOOD

TRAFFIC CONTROL
STAGE 2 DETOUR SIGNING

Station:. Date:.

CITY OF STANWOOD, CEDAR COUNTY

P:\14\183\DRAWINGS\CIVIL\14183_ZZ_JJ-2.DWG 10/22/2015 9:15:51 AM JERI M. VONDERA

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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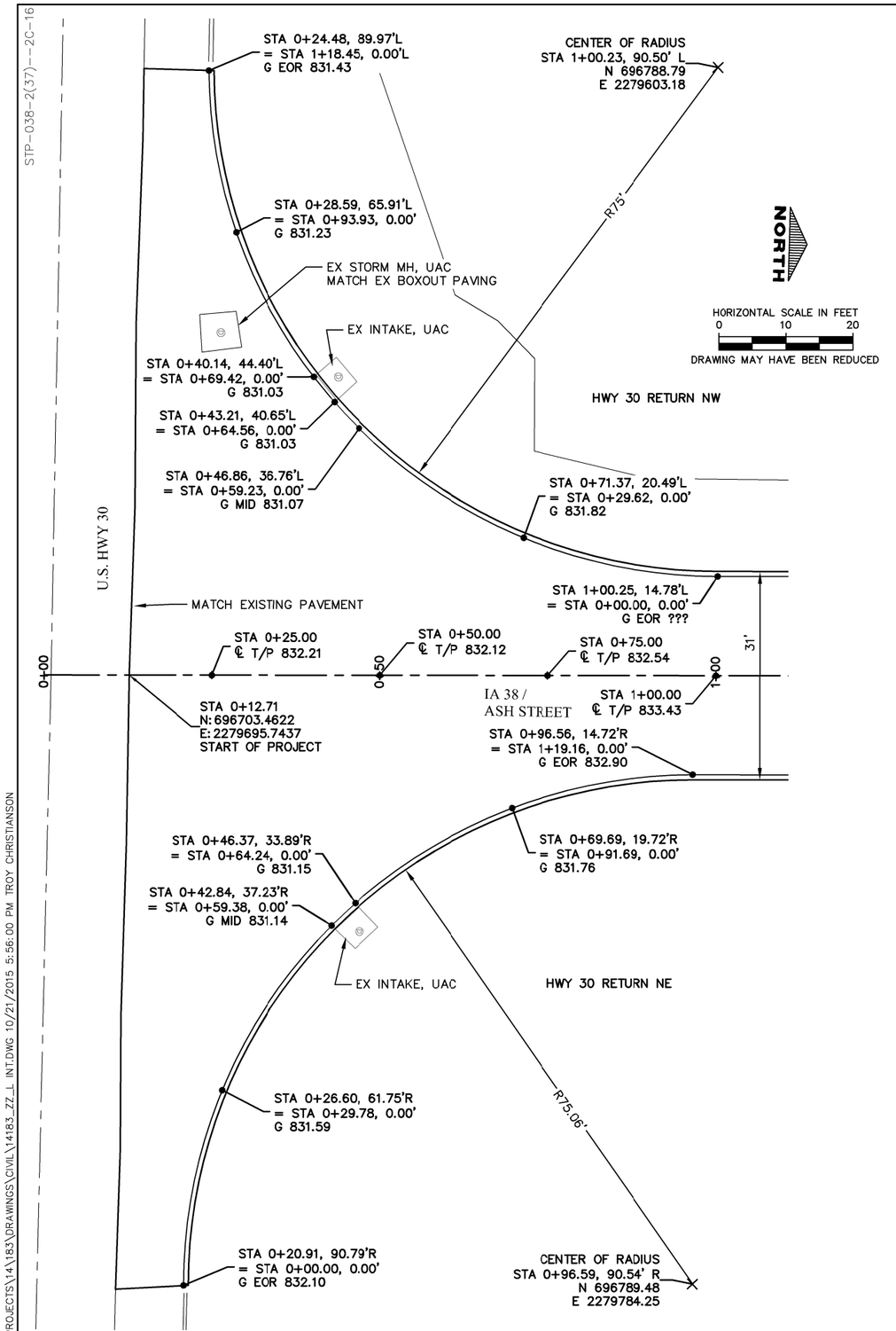
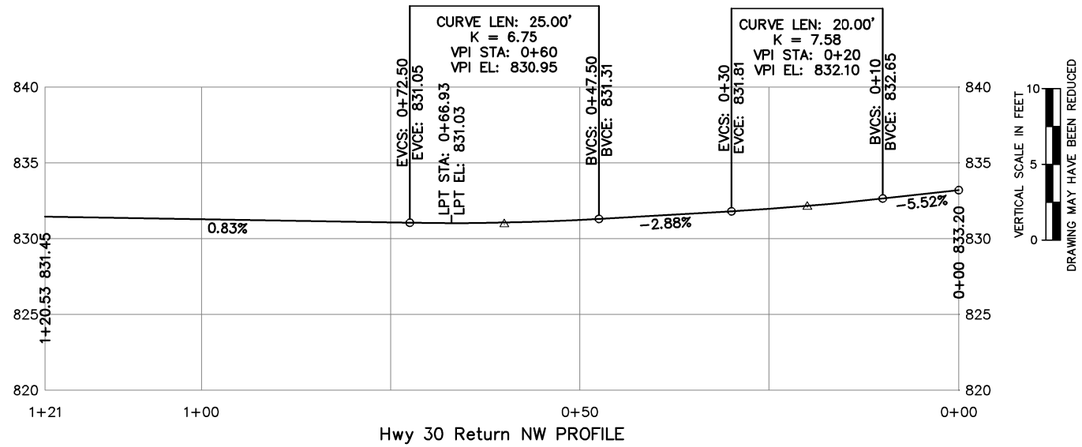
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA	.	2016	J.8	135





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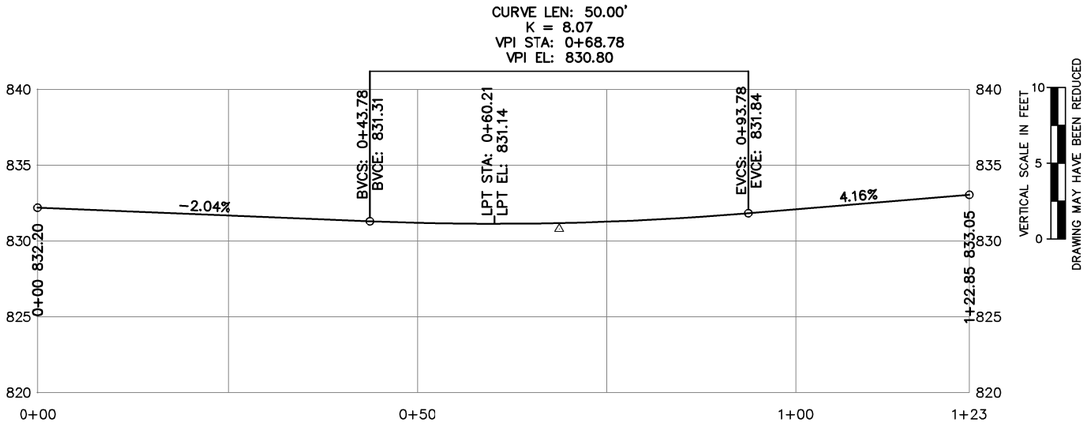

Hwy 30 Return NE PROFILE

GEOMETRIC, STAKING DETAILS
AND EDGE RETURN PROFILES
INTERSECTION OF
HWY 38 (ASH ST.) AND HWY 30

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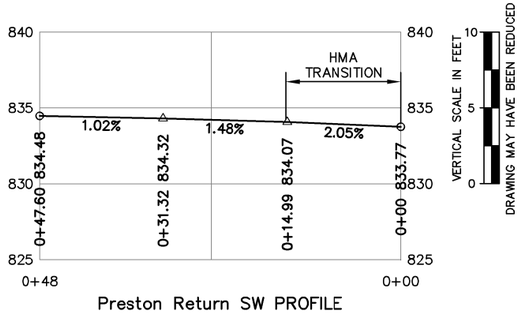
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	L.1	47

SEE SHEET E.1 FOR PRESTON STREET PLAN AND PROFILE



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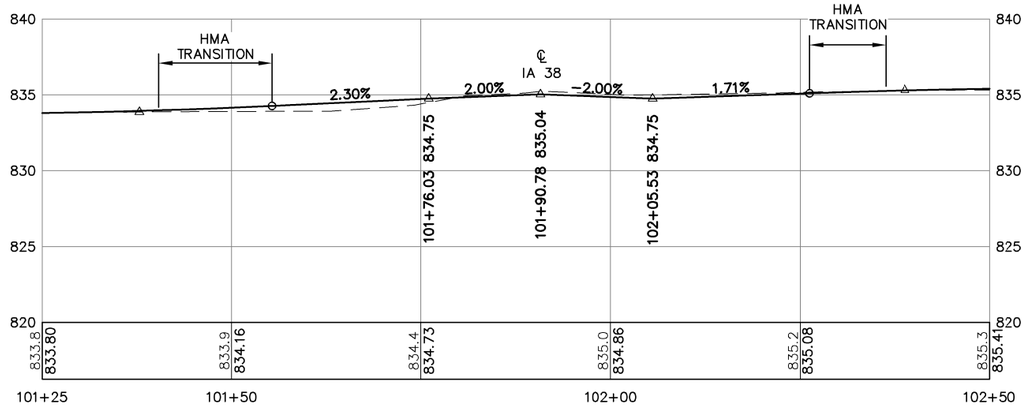

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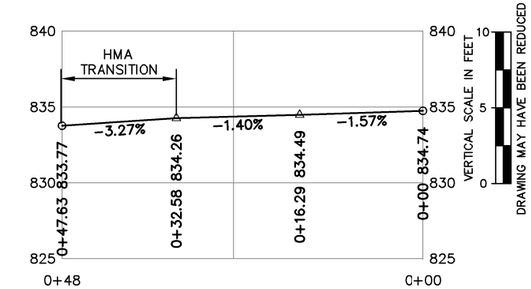

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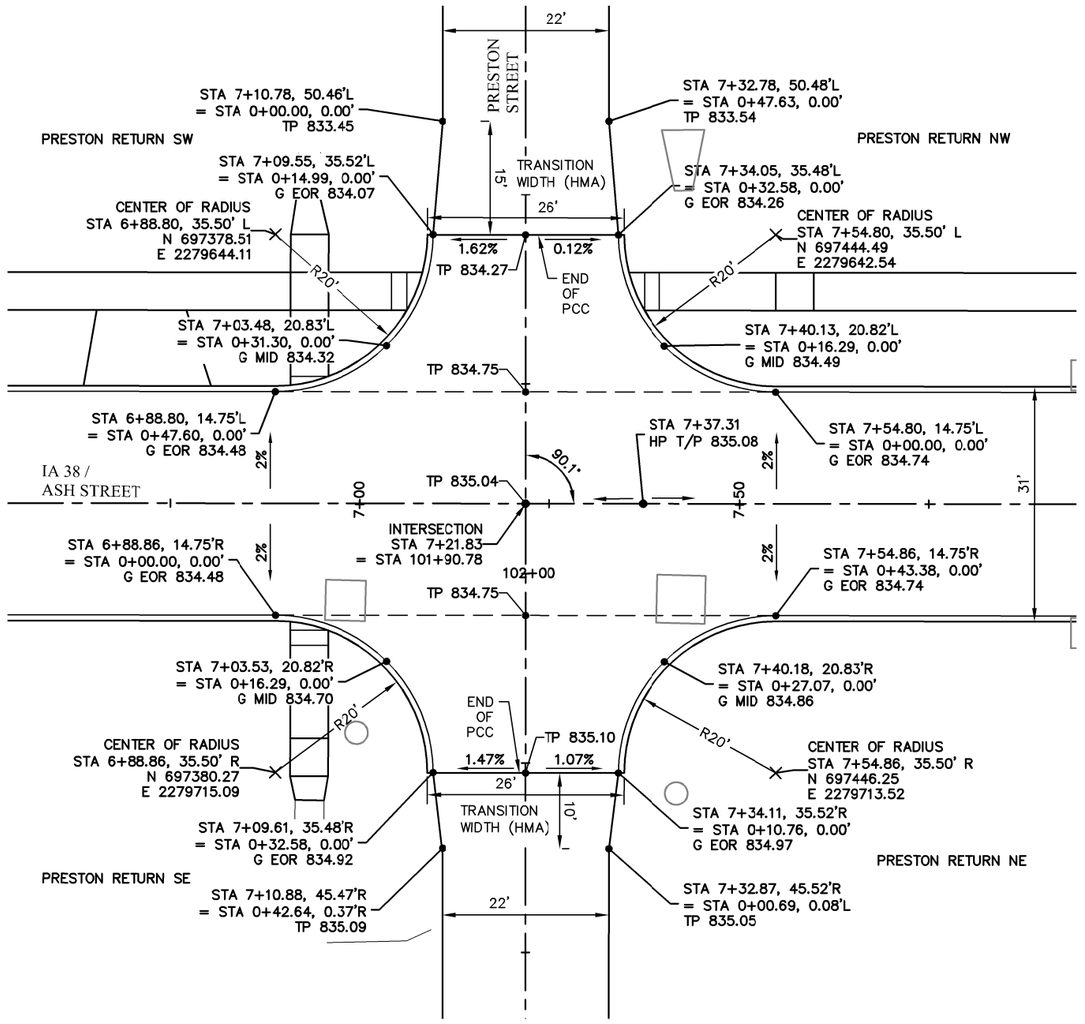

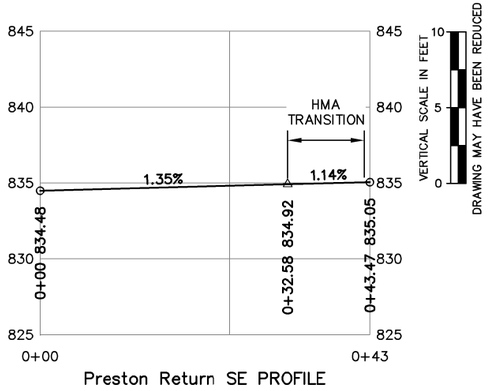

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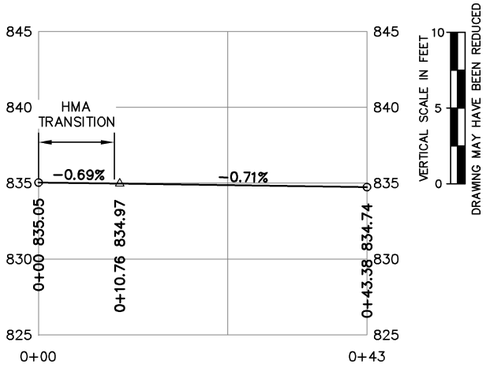

Preston Return NE PROFILE

NORTH

HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

GEOMETRIC, STAKING DETAILS AND EDGE RETURN PROFILES INTERSECTION OF HWY 38 (ASH ST.) AND PRESTON ST.

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STP-038-2(37)--2C-16

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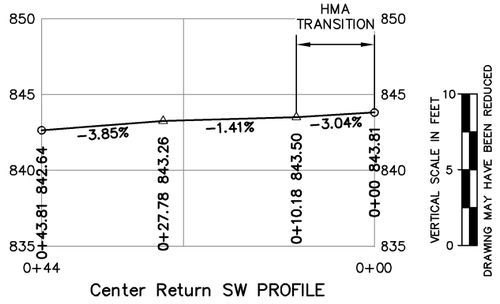
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	L.2	47

STP-038-2(37)--2C-16



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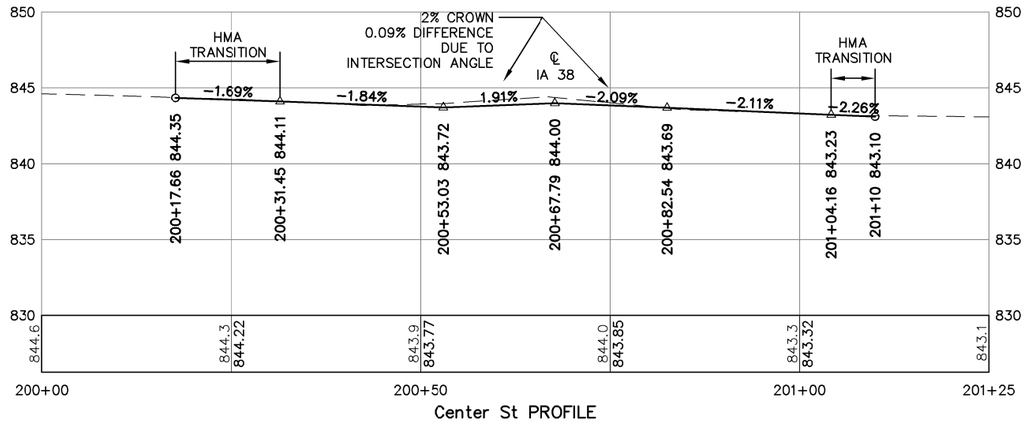
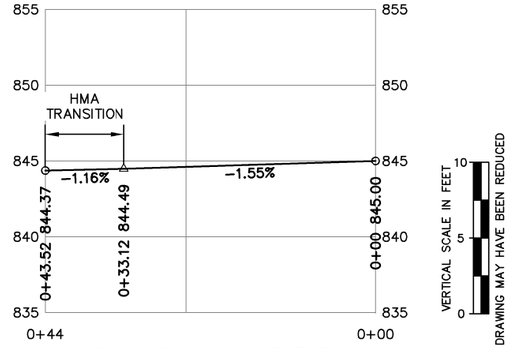


Center St PROFILE



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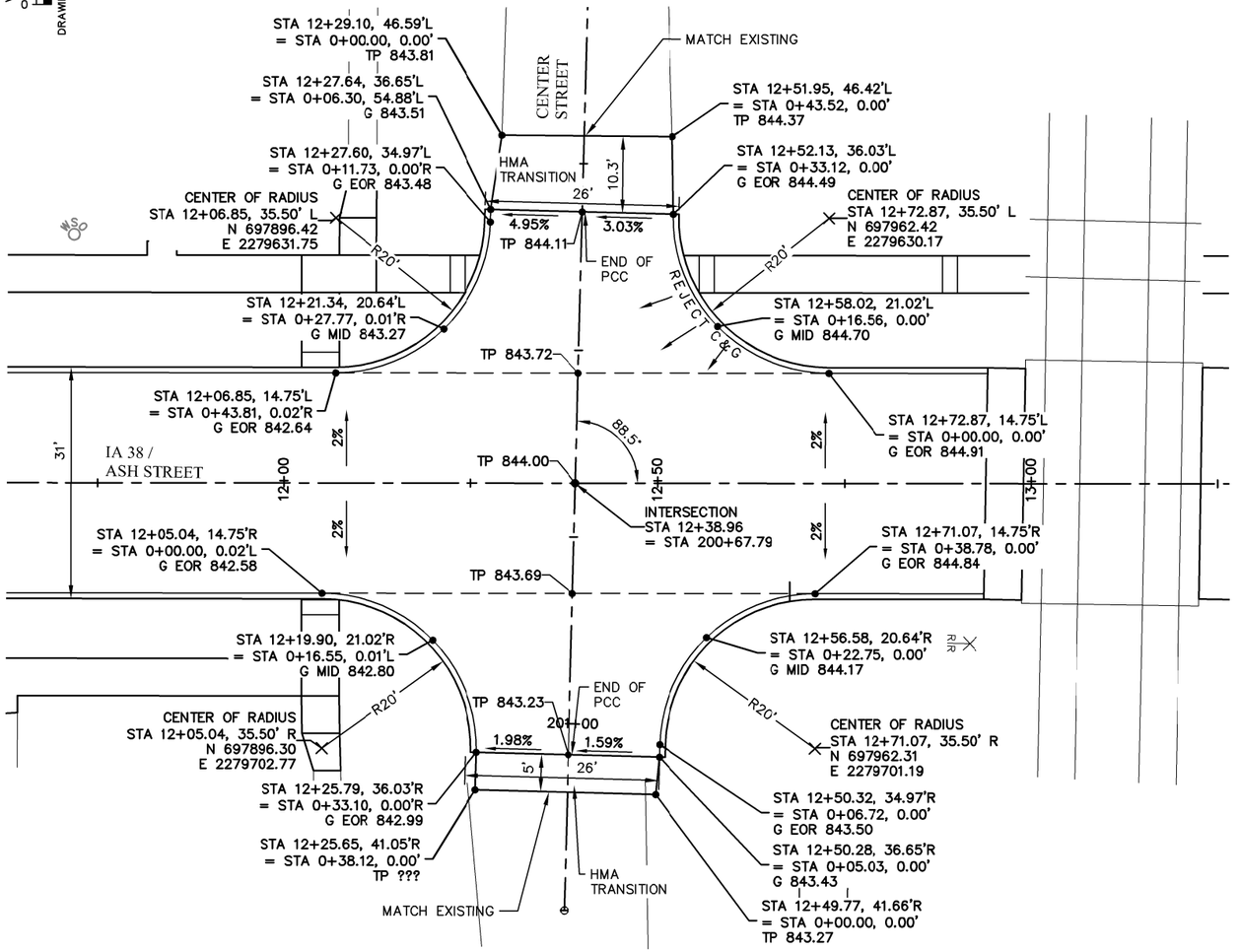
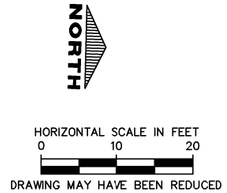
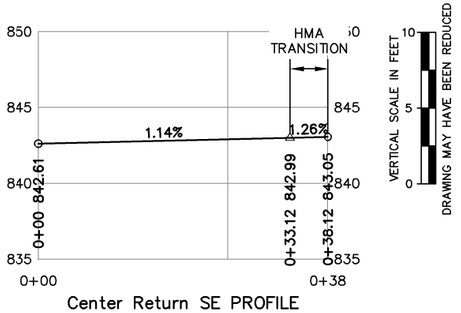
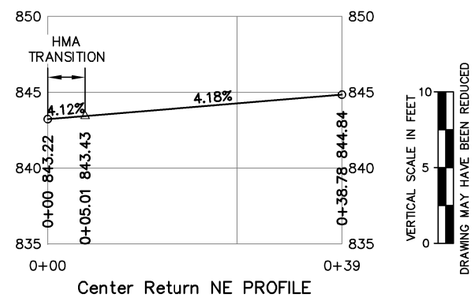






Center Return SE PROFILE



Center Return NE PROFILE

GEOMETRIC, STAKING DETAILS AND EDGE RETURN PROFILES INTERSECTION OF HWY 38 (ASH ST.) AND CENTER ST.

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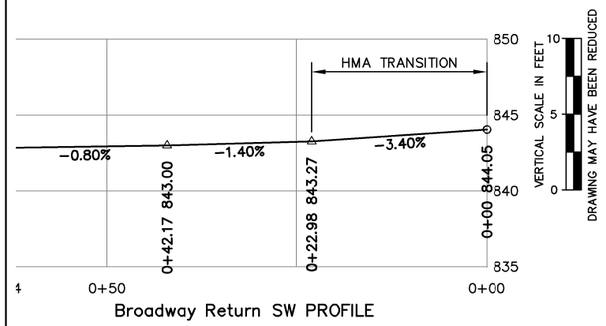
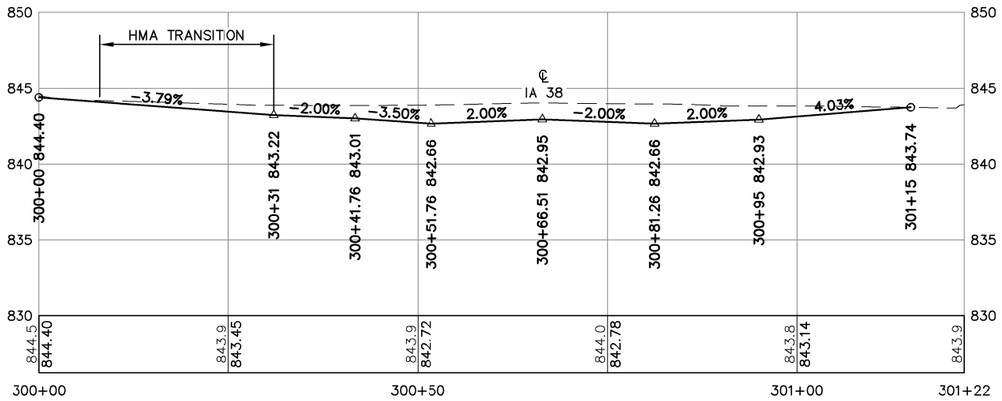
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	L.3	47

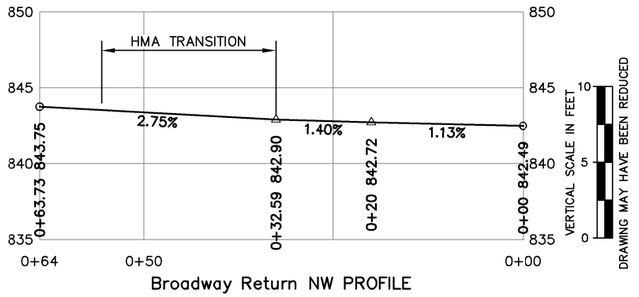
STP-038-2(37)--2C-16



Broadway Return SW PROFILE



Broadway St PROFILE



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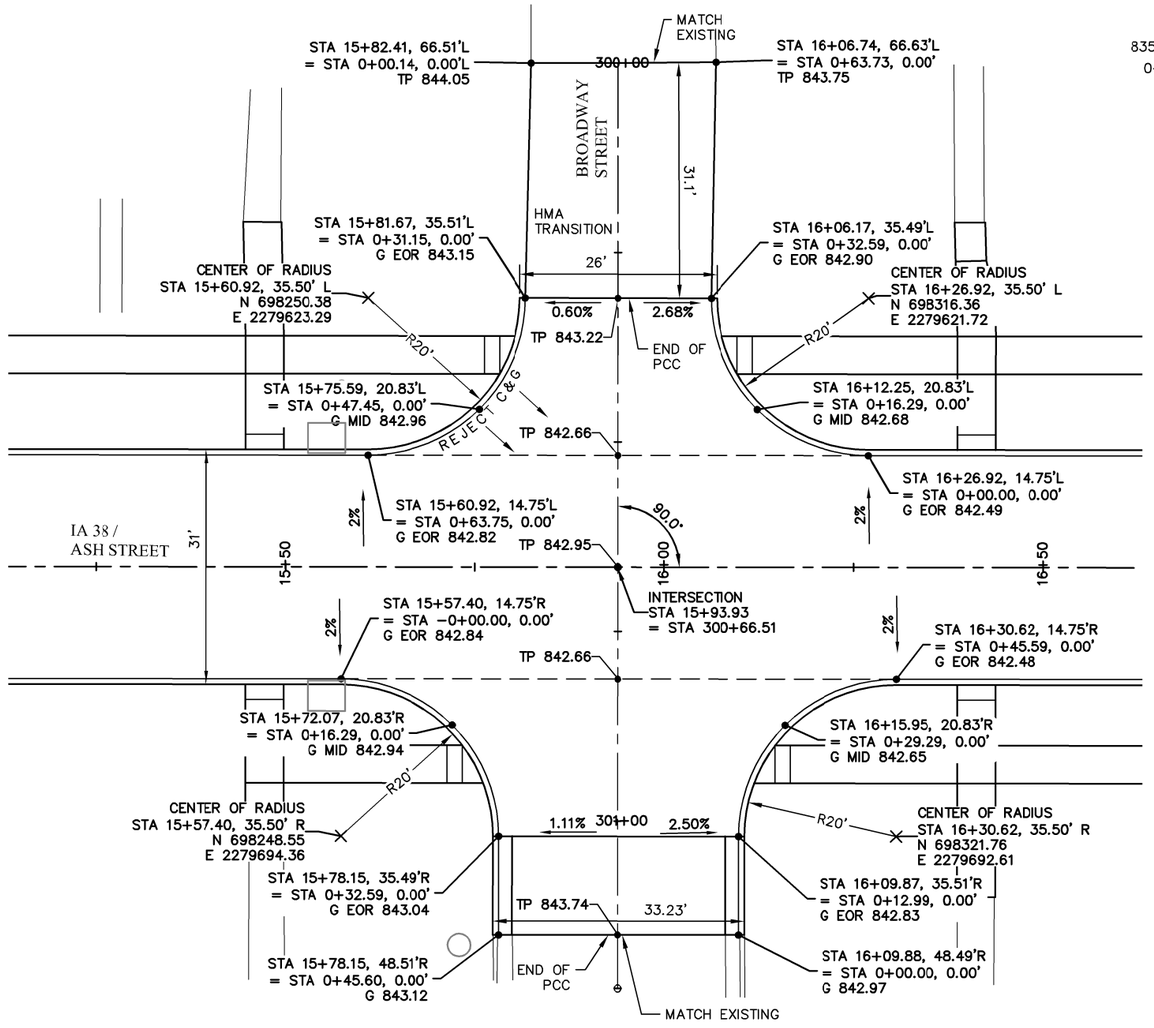

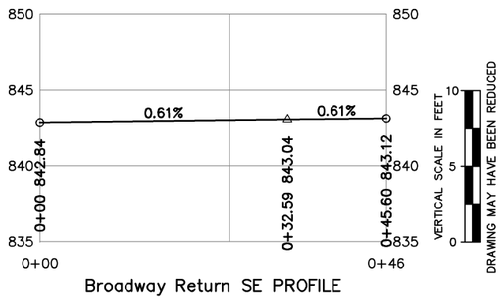

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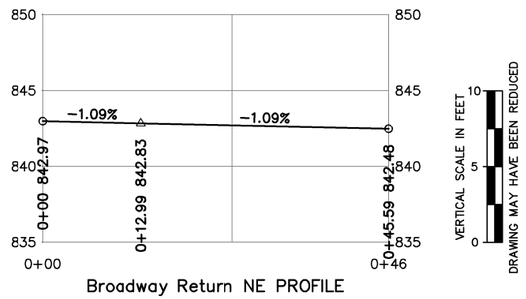

Broadway Return NE PROFILE

GEOMETRIC, STAKING DETAILS
AND EDGE RETURN PROFILES
INTERSECTION OF
HWY 38 (ASH ST.) AND BROADWAY ST.

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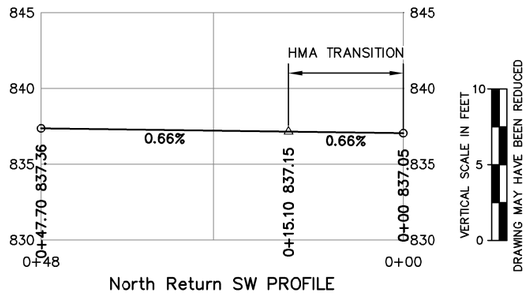
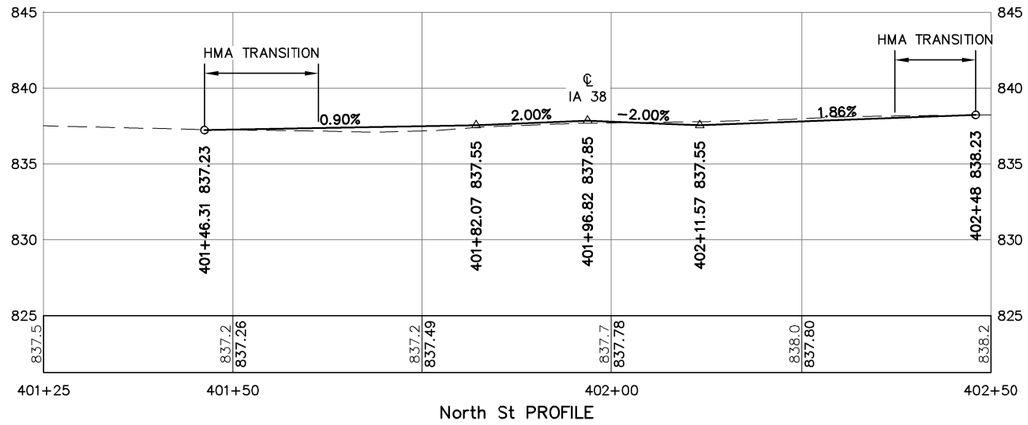
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		IOWA		2016	L.4	47

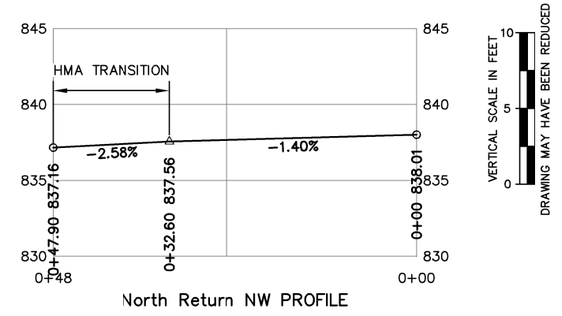
STP-038-2(37)--2C-16



North Return SW PROFILE



North St PROFILE



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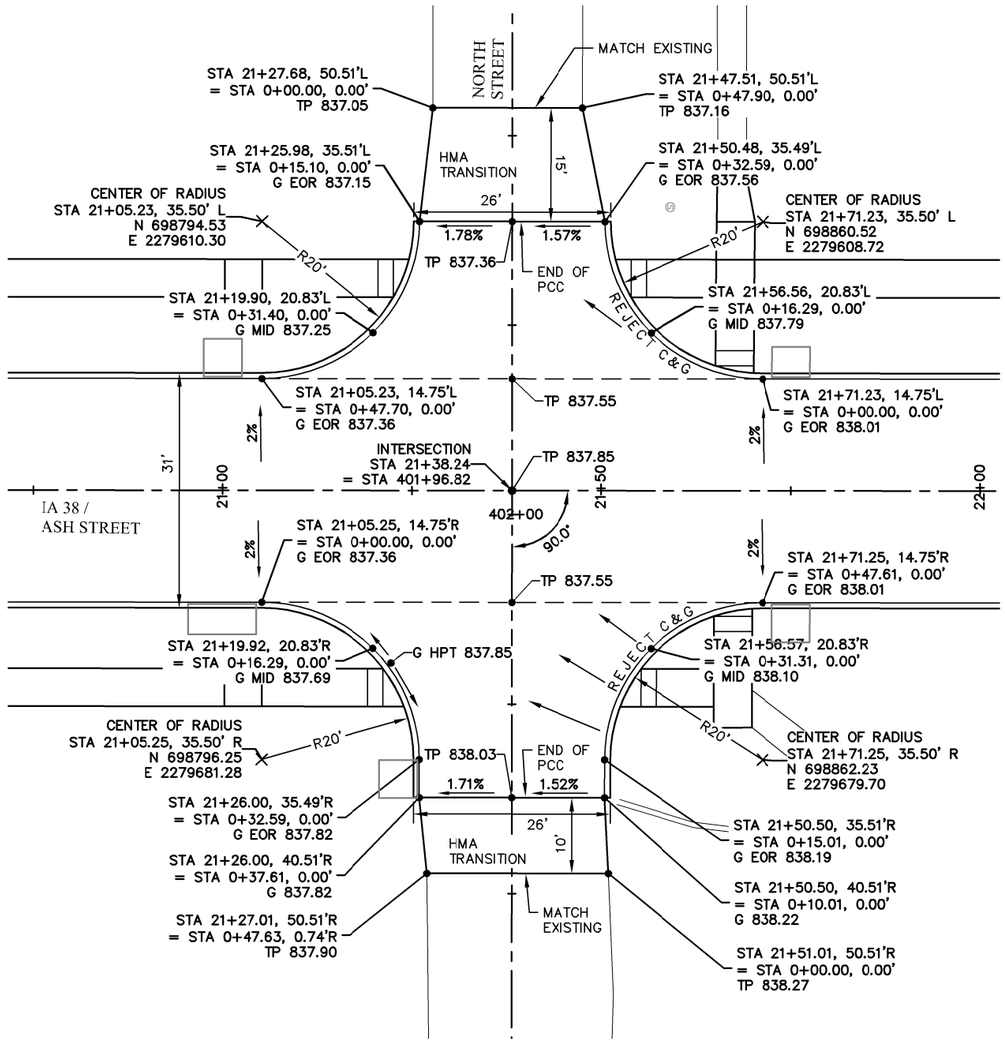

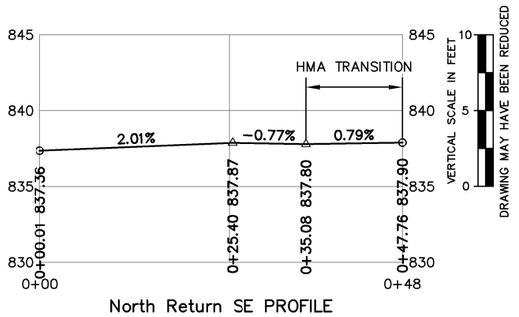

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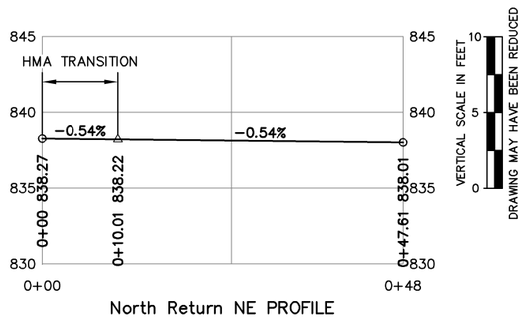

North Return NE PROFILE

GEOMETRIC, STAKING DETAILS
AND EDGE RETURN PROFILES
INTERSECTION OF
HWY 38 (ASH ST.) AND NORTH ST.

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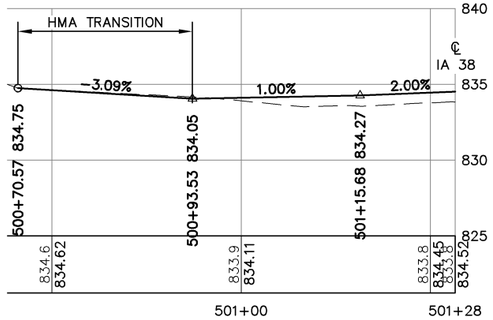
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	L.5	47

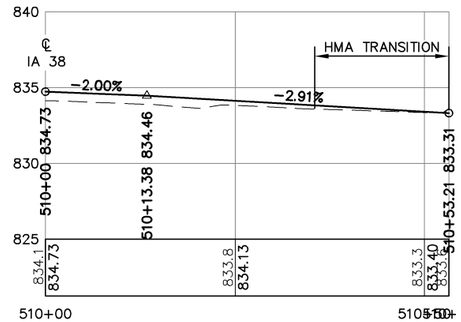
STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

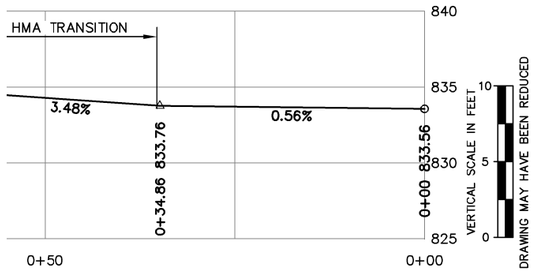
NORTH



Farmer St W PROFILE



Farmer St E PROFILE



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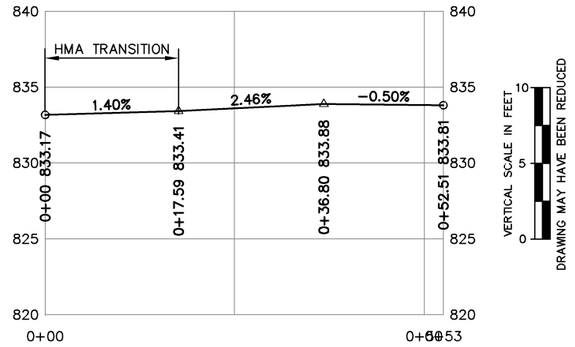

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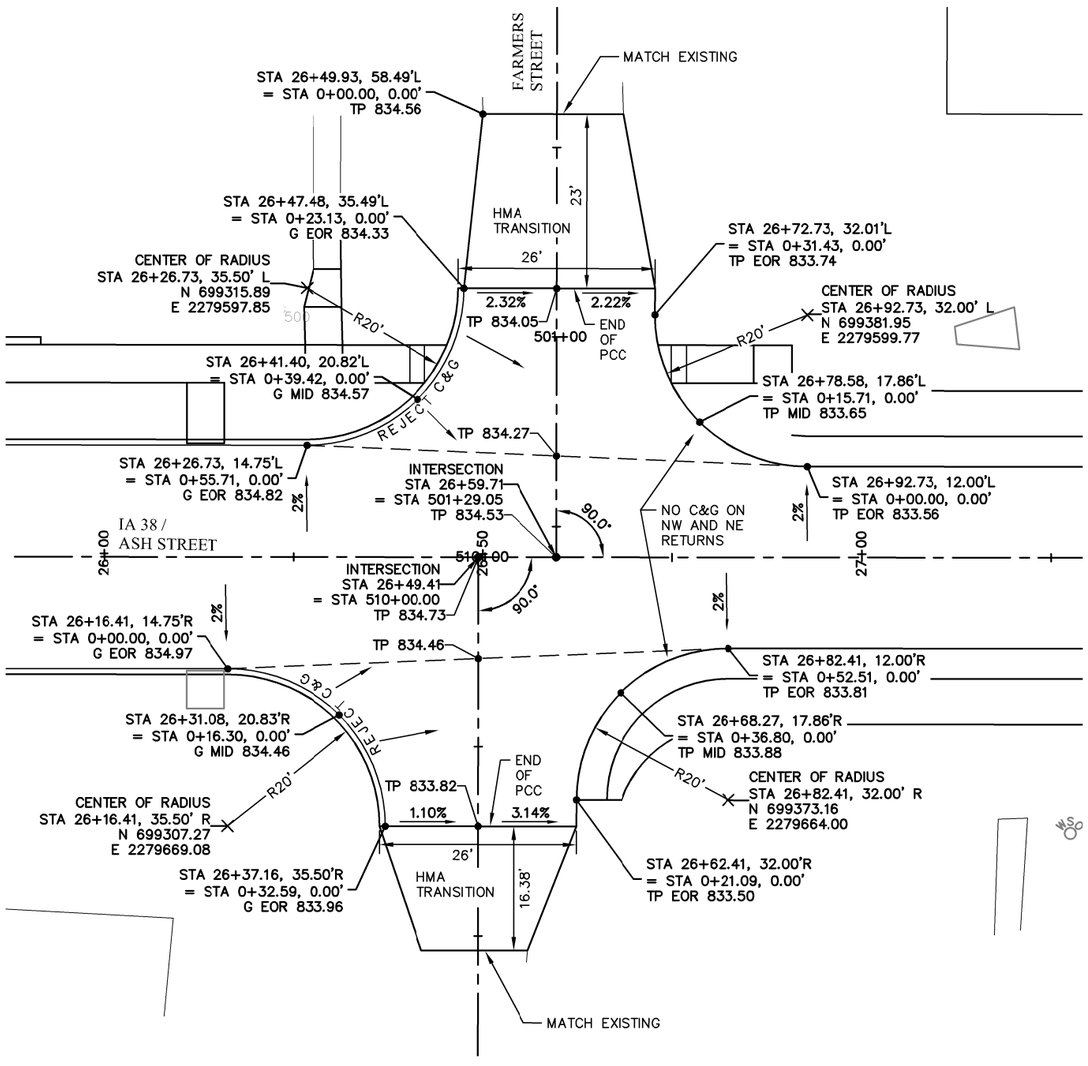

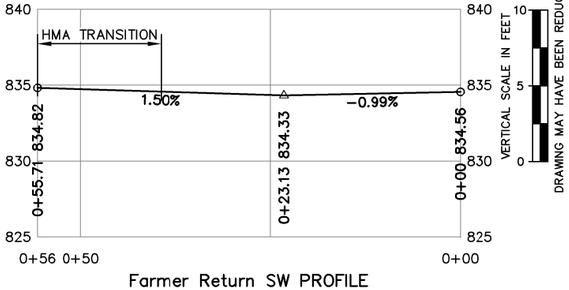

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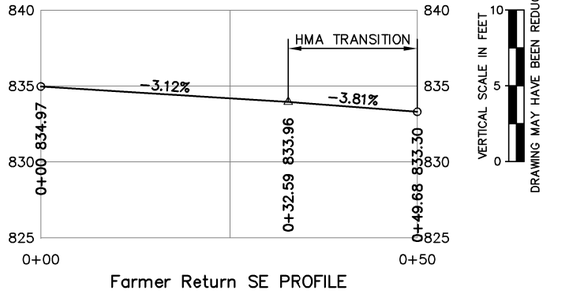

Farmer Return SE PROFILE

GEOMETRIC, STAKING DETAILS
AND EDGE RETURN PROFILES
INTERSECTION OF
HWY 38 (ASH ST.) AND FARMERS ST.

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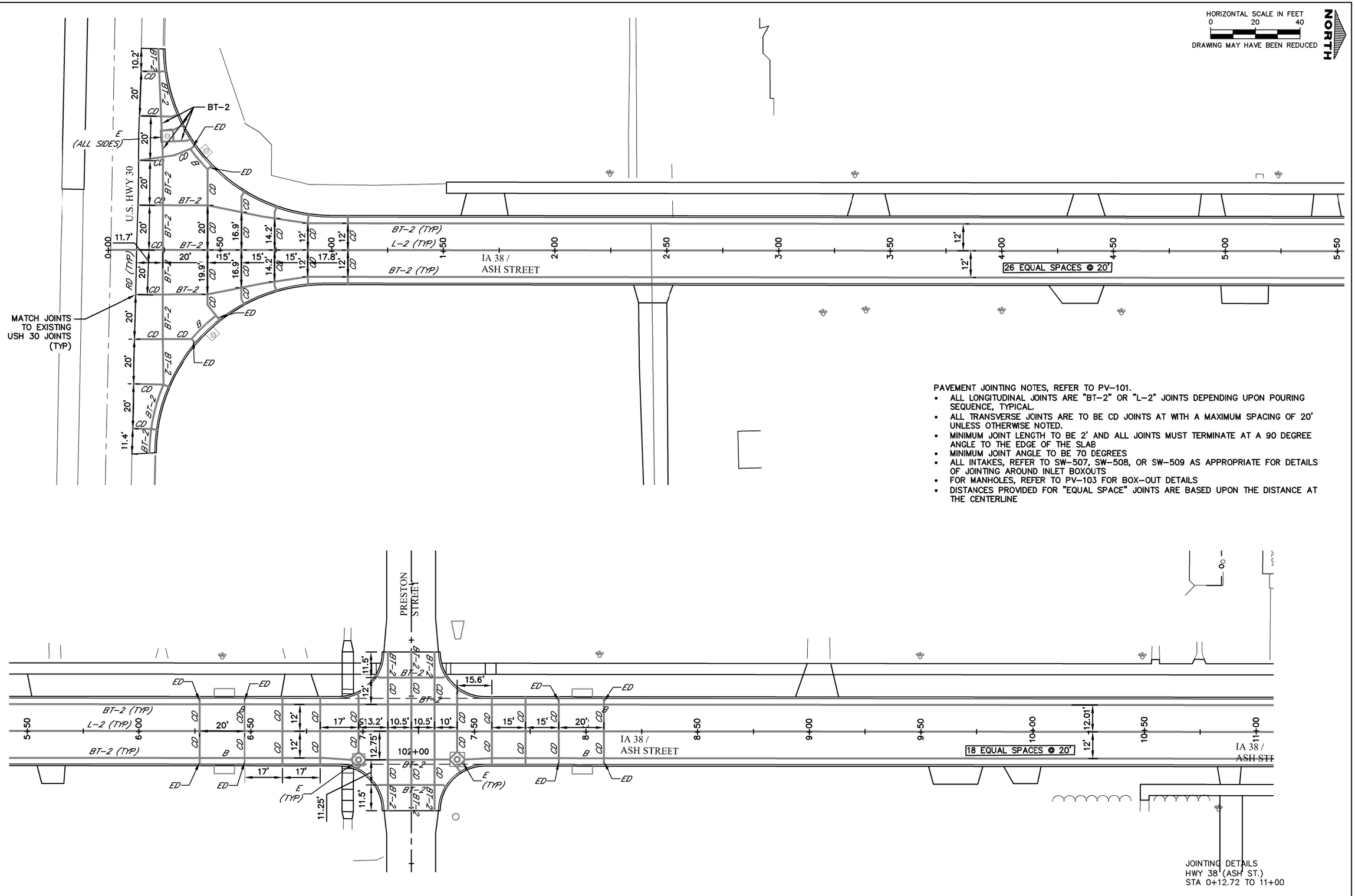
DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	L.6	47

STP-038-2(37)--2C-16



PAVEMENT JOINTING NOTES, REFER TO PV-101.

- ALL LONGITUDINAL JOINTS ARE "BT-2" OR "L-2" JOINTS DEPENDING UPON POURING SEQUENCE, TYPICAL.
- ALL TRANSVERSE JOINTS ARE TO BE CD JOINTS AT WITH A MAXIMUM SPACING OF 20' UNLESS OTHERWISE NOTED.
- MINIMUM JOINT LENGTH TO BE 2' AND ALL JOINTS MUST TERMINATE AT A 90 DEGREE ANGLE TO THE EDGE OF THE SLAB
- MINIMUM JOINT ANGLE TO BE 70 DEGREES
- ALL INTAKES, REFER TO SW-507, SW-508, OR SW-509 AS APPROPRIATE FOR DETAILS OF JOINTING AROUND INLET BOXOUTS
- FOR MANHOLES, REFER TO PV-103 FOR BOX-OUT DETAILS
- DISTANCES PROVIDED FOR "EQUAL SPACE" JOINTS ARE BASED UPON THE DISTANCE AT THE CENTERLINE

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DETAILED BY: _____ CHECKED BY: _____

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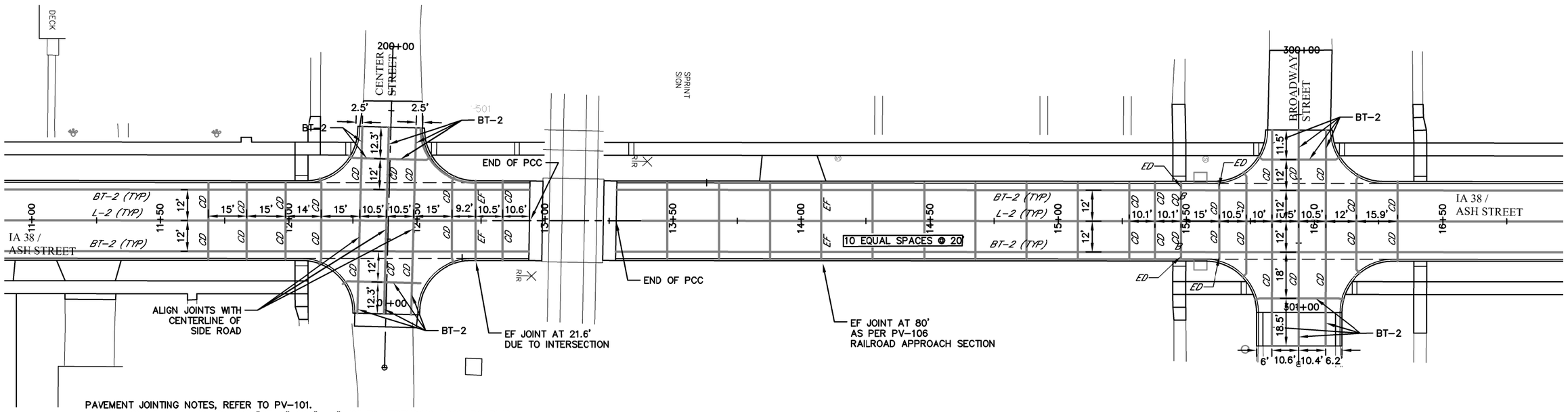
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	L.7	47

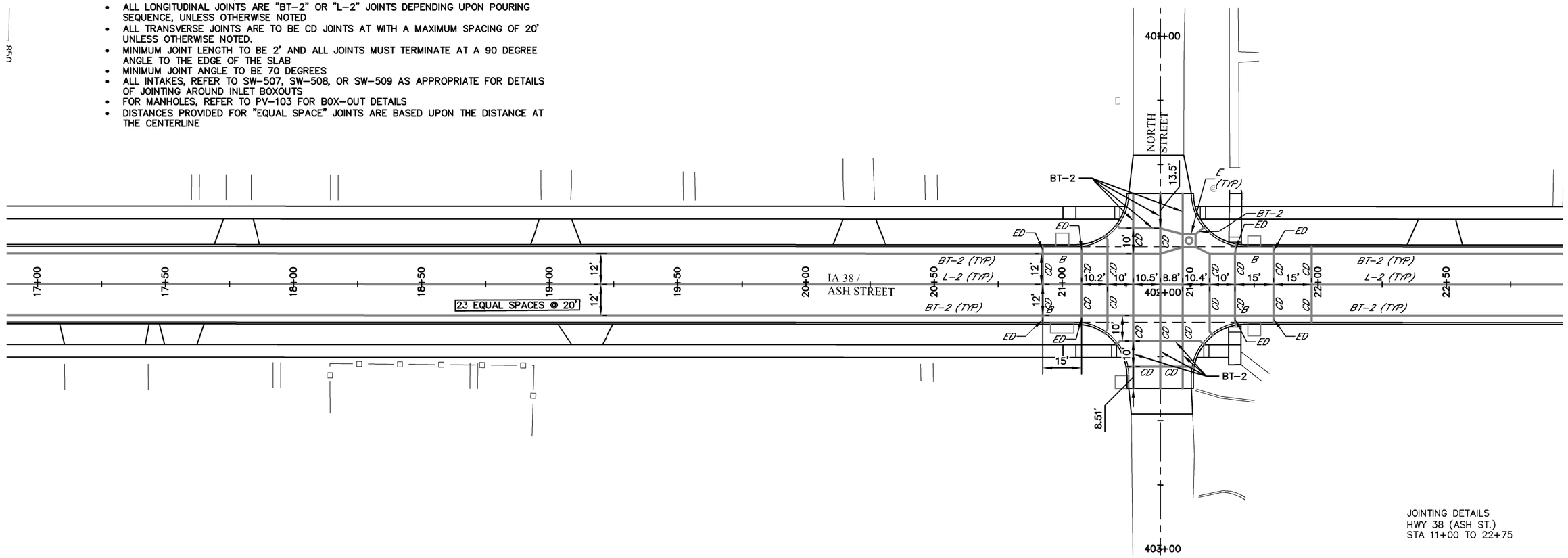
STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED
NORTH



PAVEMENT JOINTING NOTES, REFER TO PV-101.

- ALL LONGITUDINAL JOINTS ARE "BT-2" OR "L-2" JOINTS DEPENDING UPON POURING SEQUENCE, UNLESS OTHERWISE NOTED
- ALL TRANSVERSE JOINTS ARE TO BE CD JOINTS AT WITH A MAXIMUM SPACING OF 20' UNLESS OTHERWISE NOTED.
- MINIMUM JOINT LENGTH TO BE 2' AND ALL JOINTS MUST TERMINATE AT A 90 DEGREE ANGLE TO THE EDGE OF THE SLAB
- MINIMUM JOINT ANGLE TO BE 70 DEGREES
- ALL INTAKES, REFER TO SW-507, SW-508, OR SW-509 AS APPROPRIATE FOR DETAILS OF JOINTING AROUND INLET BOXOUTS
- FOR MANHOLES, REFER TO PV-103 FOR BOX-OUT DETAILS
- DISTANCES PROVIDED FOR "EQUAL SPACE" JOINTS ARE BASED UPON THE DISTANCE AT THE CENTERLINE



JOINTING DETAILS
HWY 38 (ASH ST.)
STA 11+00 TO 22+75

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DETAILED BY: _____ CHECKED BY: _____

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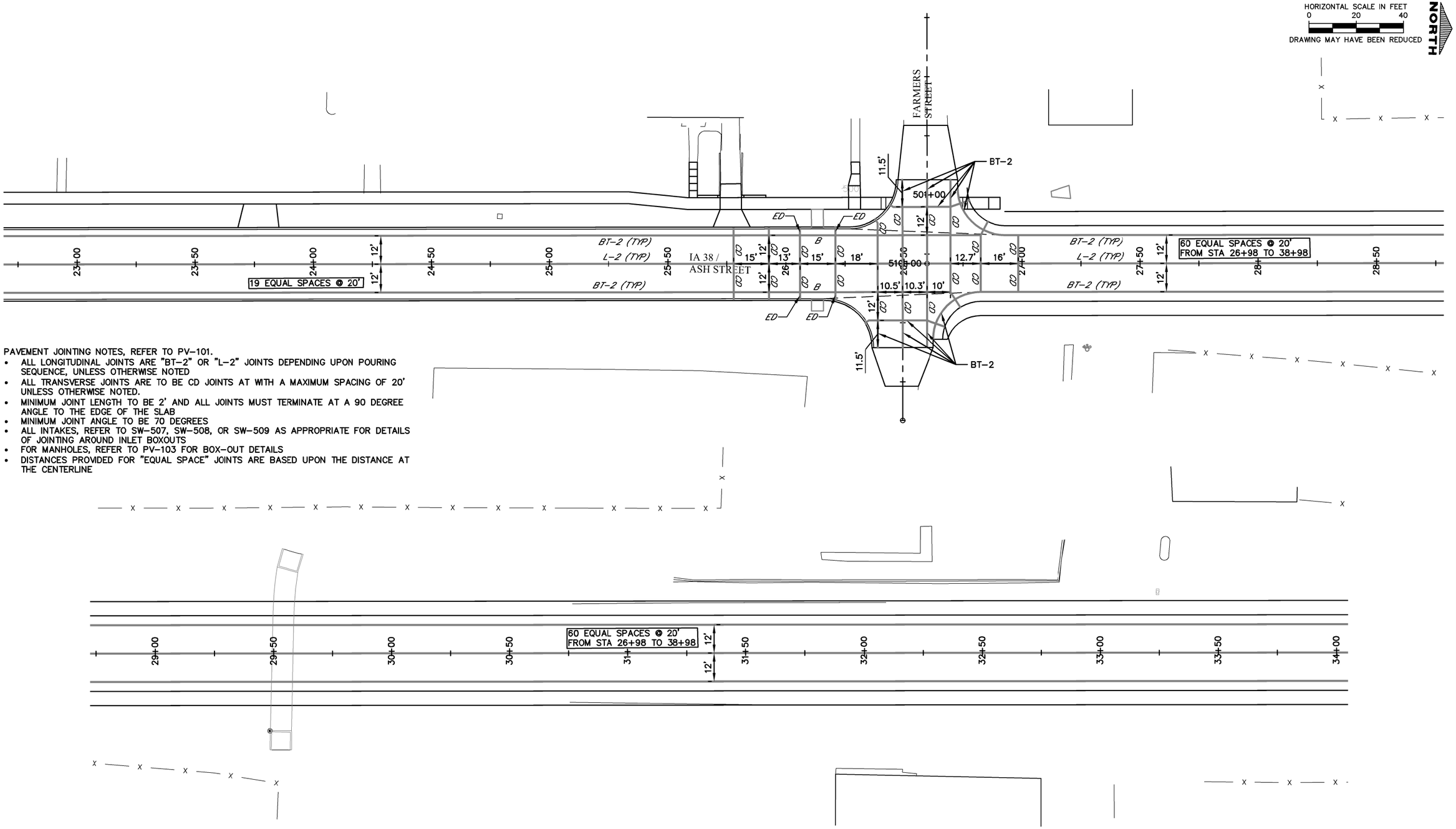
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	L.8	47

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED
NORTH



PAVEMENT JOINTING NOTES, REFER TO PV-101.

- ALL LONGITUDINAL JOINTS ARE "BT-2" OR "L-2" JOINTS DEPENDING UPON POURING SEQUENCE, UNLESS OTHERWISE NOTED
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- MINIMUM JOINT ANGLE TO BE 70 DEGREES
- ALL INTAKES, REFER TO SW-507, SW-508, OR SW-509 AS APPROPRIATE FOR DETAILS OF JOINTING AROUND INLET BOXOUTS
- FOR MANHOLES, REFER TO PV-103 FOR BOX-OUT DETAILS
- DISTANCES PROVIDED FOR "EQUAL SPACE" JOINTS ARE BASED UPON THE DISTANCE AT THE CENTERLINE

JOINTING DETAILS
HWY 38 (ASH ST.)
STA 22+75 TO 34+00

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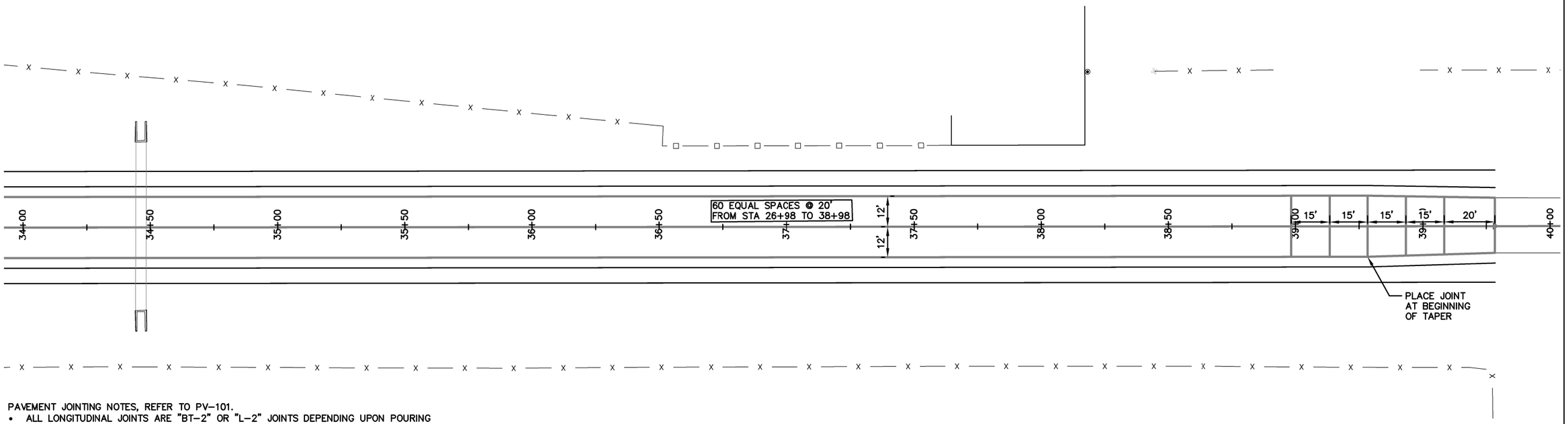
DETAILED BY:	CHECKED BY:					IOWA		2016	L.9	47

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED

NORTH



PAVEMENT JOINTING NOTES, REFER TO PV-101.

- ALL LONGITUDINAL JOINTS ARE "BT-2" OR "L-2" JOINTS DEPENDING UPON POURING SEQUENCE, UNLESS OTHERWISE NOTED
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- MINIMUM JOINT LENGTH TO BE 2' AND ALL JOINTS MUST TERMINATE AT A 90 DEGREE ANGLE TO THE EDGE OF THE SLAB
- MINIMUM JOINT ANGLE TO BE 70 DEGREES
- ALL INTAKES, REFER TO SW-507, SW-508, OR SW-509 AS APPROPRIATE FOR DETAILS OF JOINTING AROUND INLET BOXOUTS
- FOR MANHOLES, REFER TO PV-103 FOR BOX-OUT DETAILS
- DISTANCES PROVIDED FOR "EQUAL SPACE" JOINTS ARE BASED UPON THE DISTANCE AT THE CENTERLINE

JOINTING DETAILS
HWY 38 (ASH ST.)
STA 34+00 TO 39+78.32

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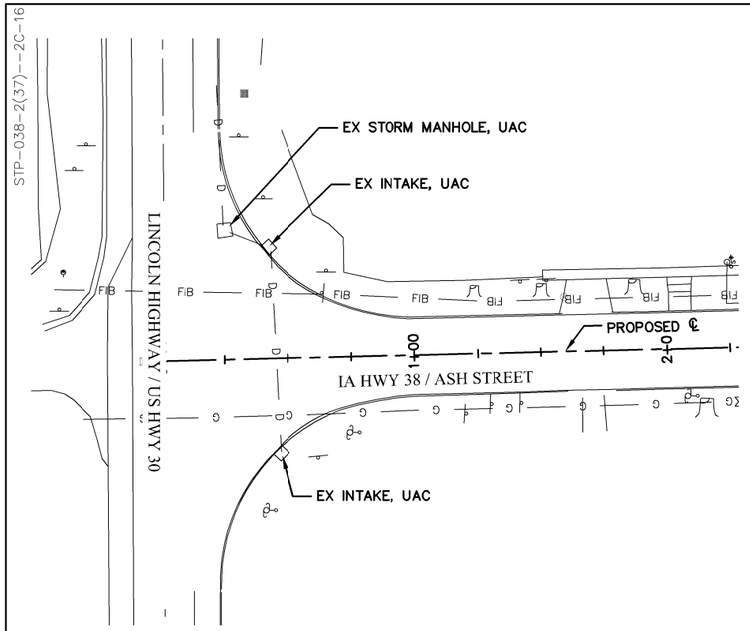
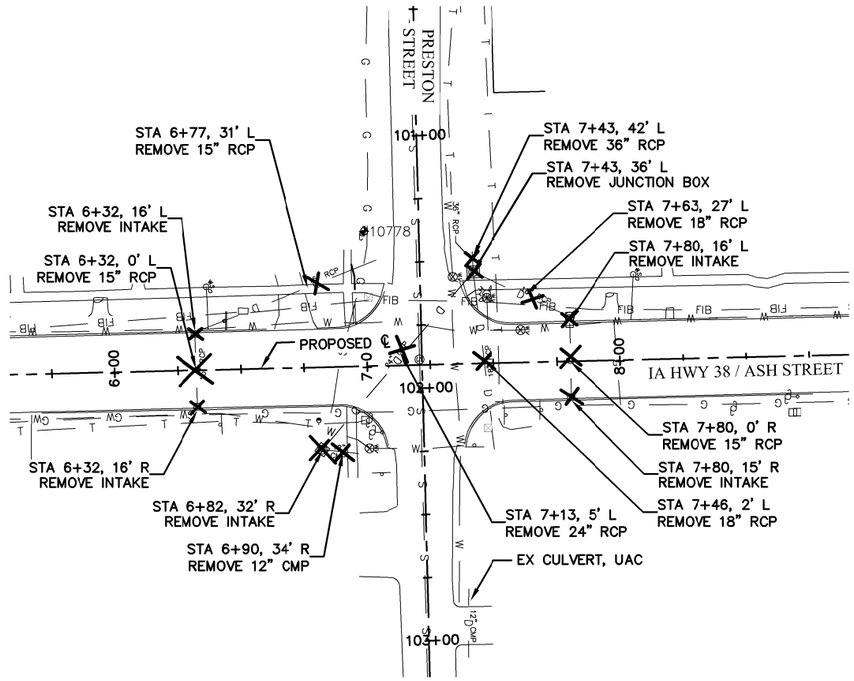
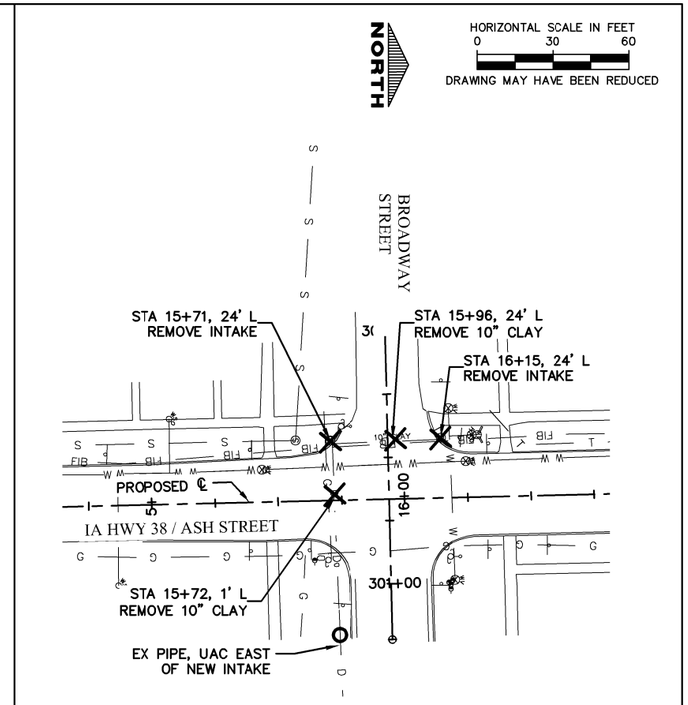
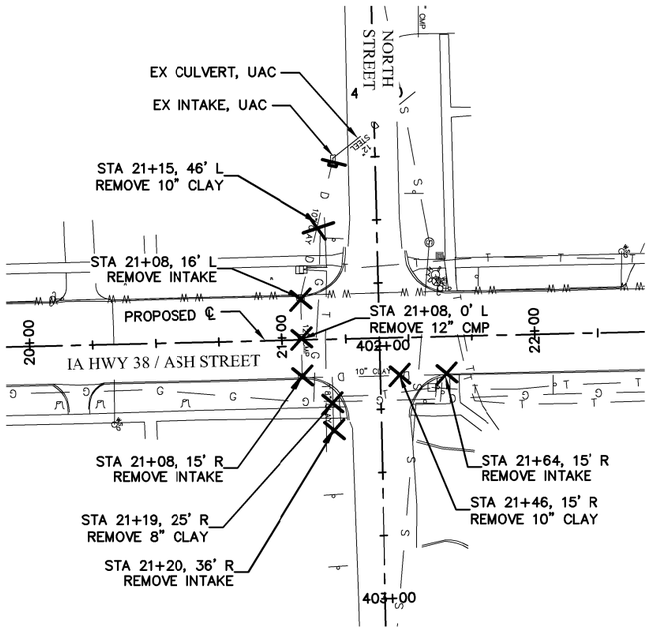
CITY OF STANWOOD, CEDAR COUNTY

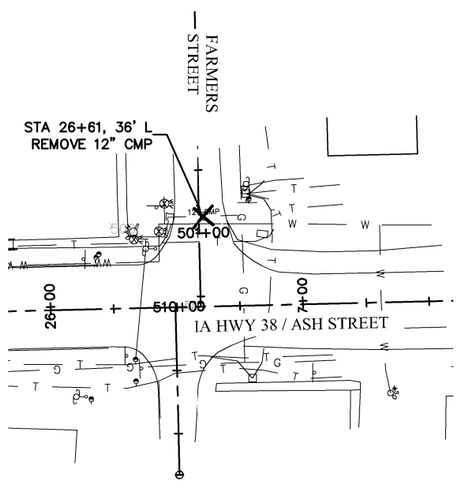
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	L.10	47

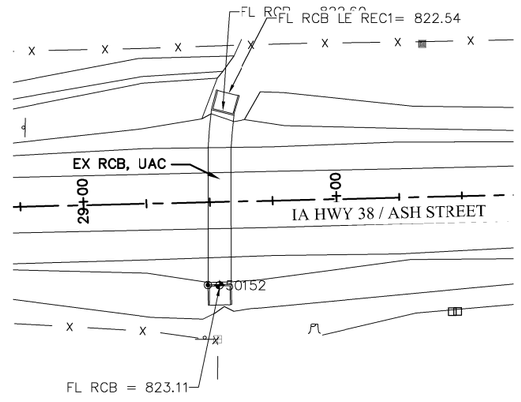


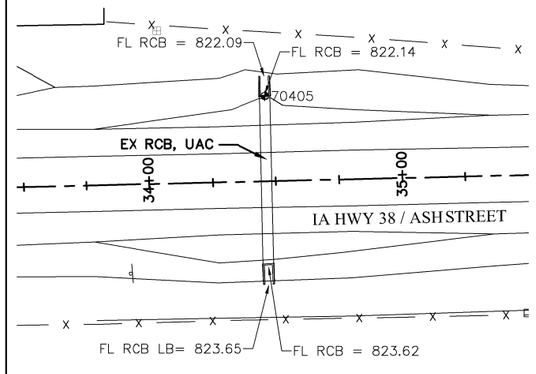












EXISTING STORM SEWER
UAC / FILL, PLUG & ABANDON / REMOVALS

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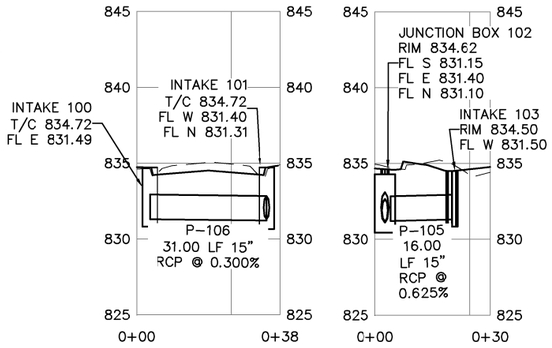
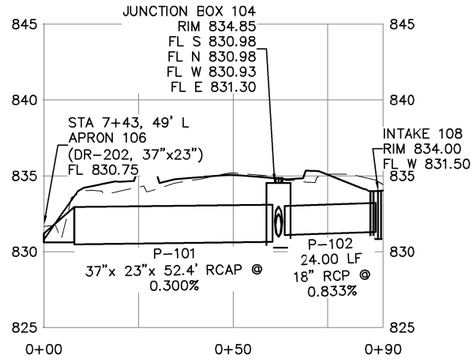
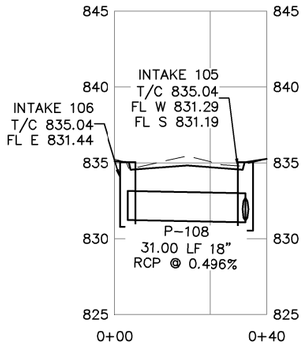
CITY OF STANWOOD, CEDAR COUNTY

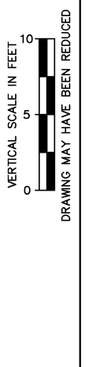
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	M.1	47

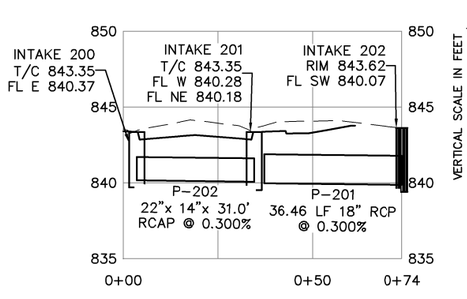
STP-038-2(37)--2C-16

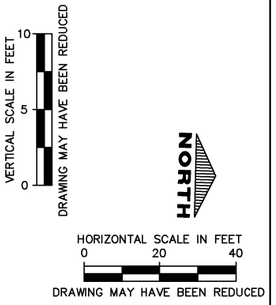


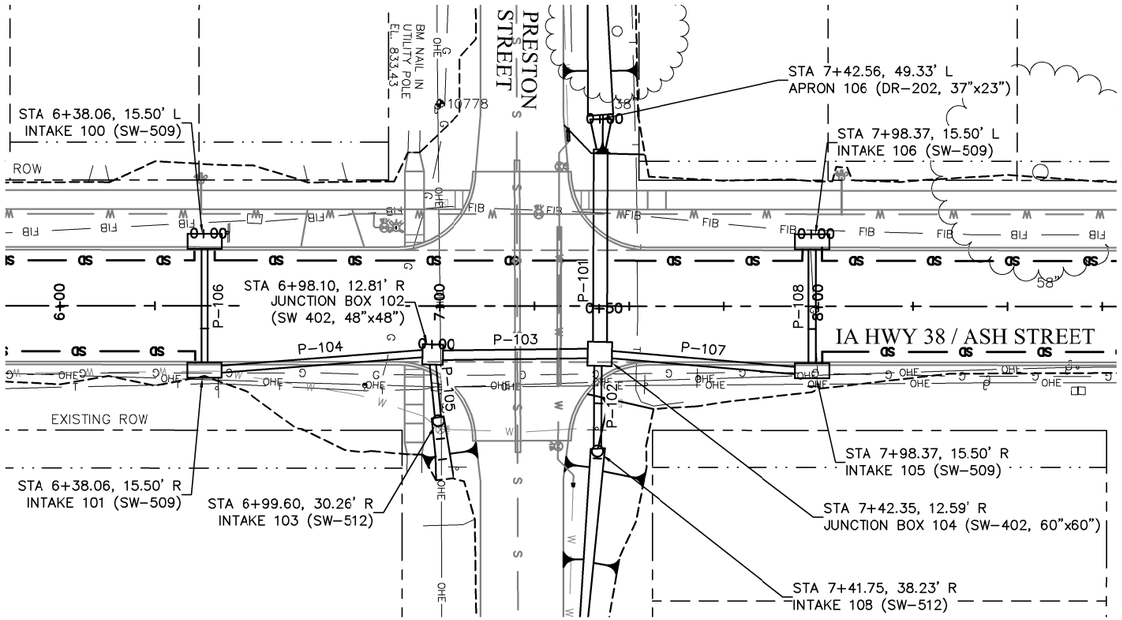




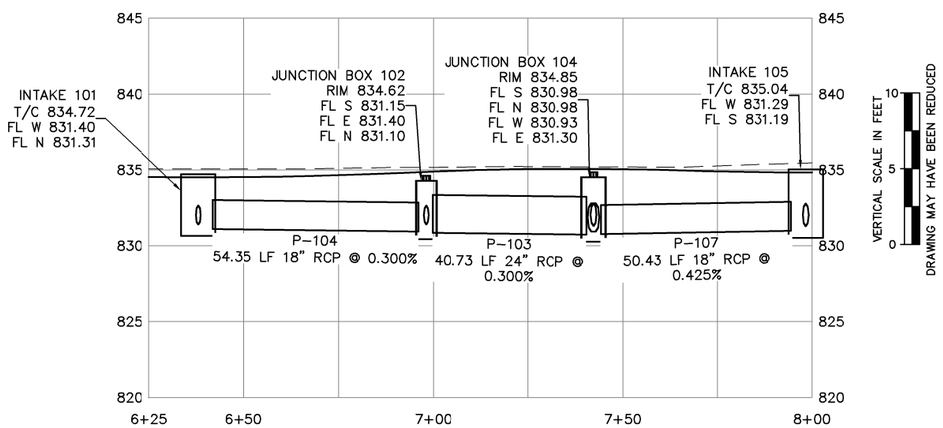


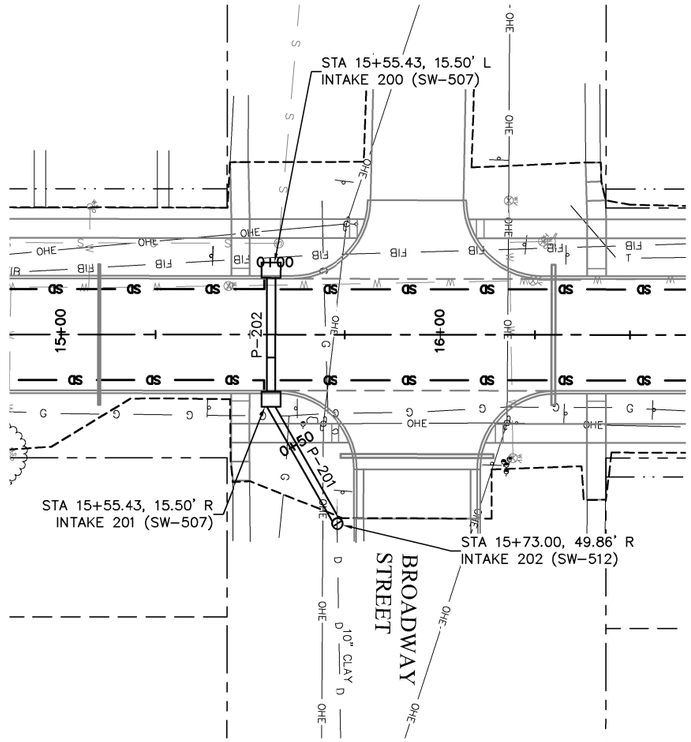












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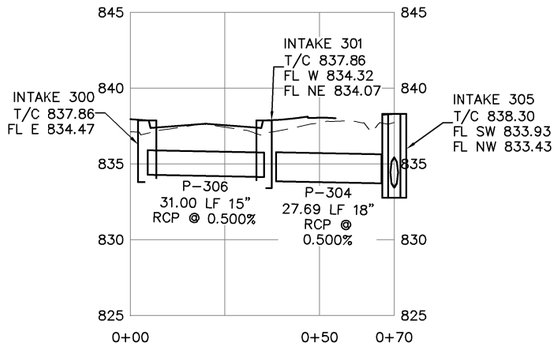
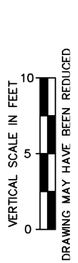
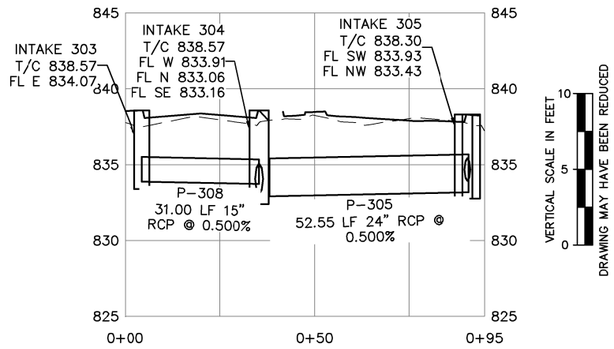
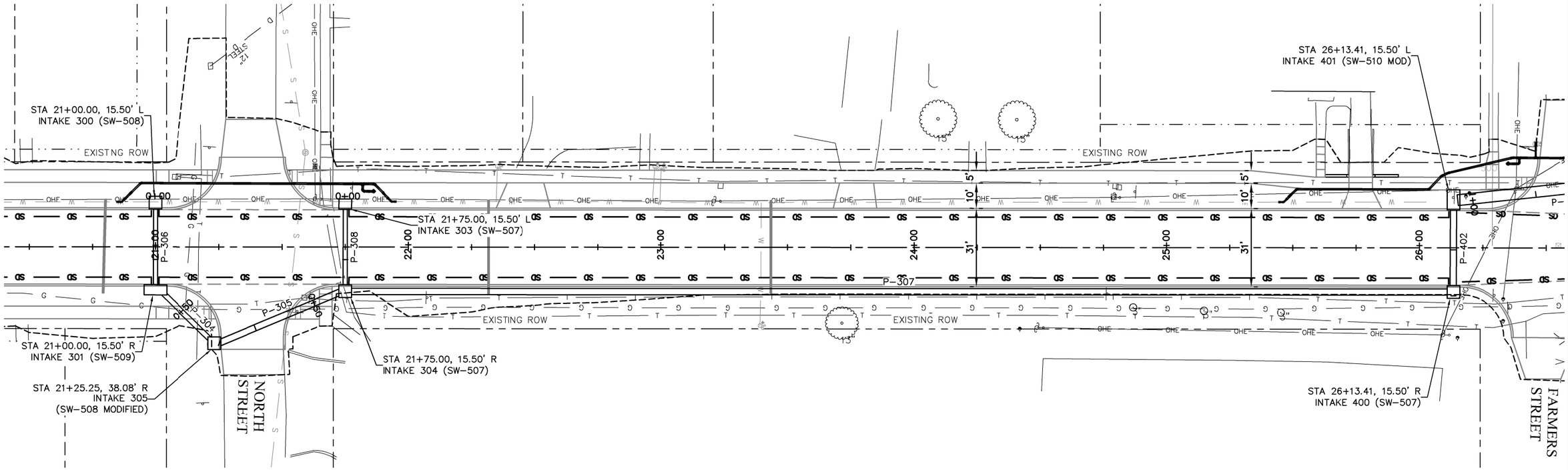
DETAILED BY:	CHECKED BY:					IOWA		2016	M.2	135

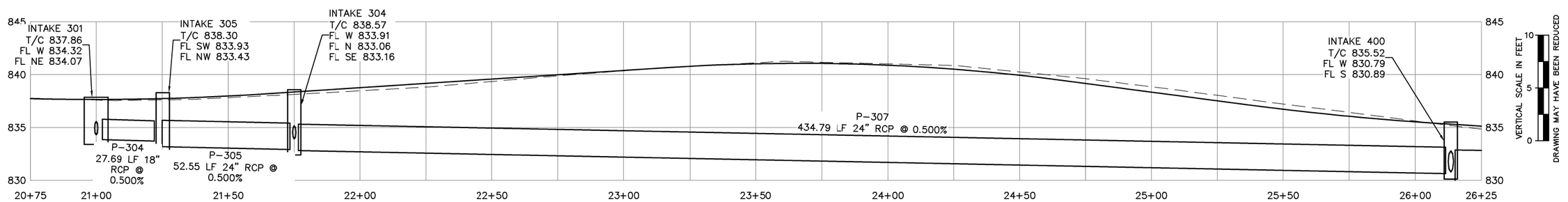
HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED
NORTH











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DETAILED BY:	CHECKED BY:		IIW, P.C. ◆ www.iiwengr.com				IOWA		2016	M.3	135

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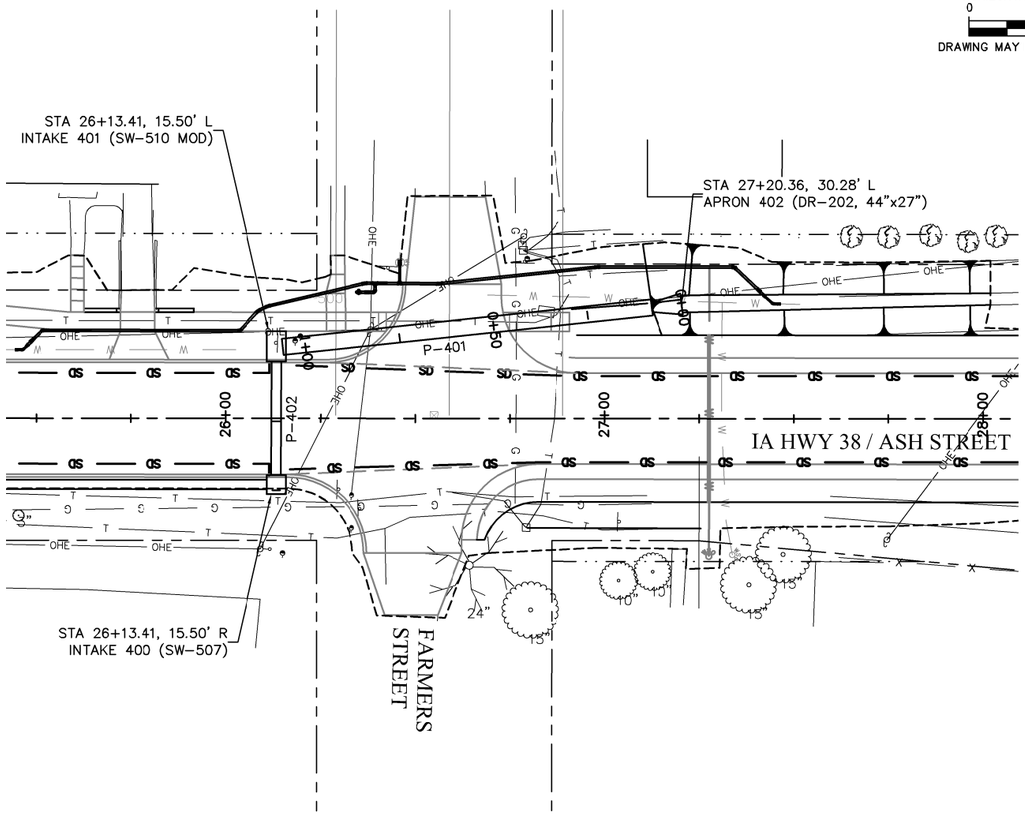
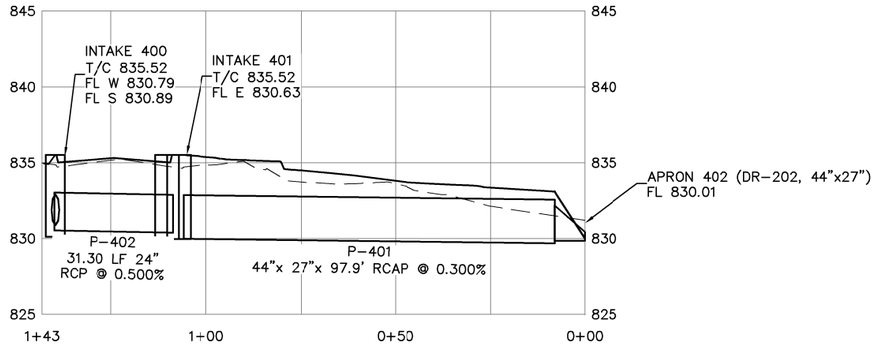
STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED
NORTH





VERTICAL SCALE IN FEET
10
5
0
DRAWING MAY HAVE BEEN REDUCED

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	M.4	135

NOTE:
RESTRAINT TO THE CASING SHALL CONSIST OF 2 – 3/4" CORTEN ALL THREAD RODS, THAT ARE WELDED TO THE STEEL CASING WITH A 4" LONG WELD (MIN) ALL NUTS AND WASHERS SHALL BE HSLA. THE RODS SHALL BE EVENLY SPACED. CLOSE THE ENDS OF THE CASING WITH A DOUBLE WRAP OF WOVEN GEOTEXTILE SECURED TO CASING & WATER MAIN WITH #14 INSULATED COPPER WIRE OR AS APPROVED OR ELASTOMERIC BOOT.

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED
NORTH

STP-038-2(37)--2C-16

LINCOLN HIGHWAY / US HWY 30

6" MJ TEE
W/ PLUG TO SW
6" PVC WM
6" PVC WM
6" MJ 45° BEND
6" MJ 45° BEND
6" PVC WM
6" DIP WM
12" STEEL CASING
RESTRAIN ALL JOINTS WITHIN 10' NE OF TEE. RESTRAIN ALL JOINTS BETWEEN TEE AND STEEL CASING.

6" PVC WM
3'
6" MJ TEE
6" PVC WM
6" MJ RS GATE VALVE
4'
6" DIP WM
6" DIP WM
6" HYDRANT
RESTRAIN ALL JOINTS FROM TEE TO HYDRANT.

6" PVC WM
3'
6" MJ TEE
6" PVC WM
6" MJ RS GATE VALVE
3'
5.7'
6" DIP WM
12" STEEL CASING
BACK OF CURB
RESTRAIN ALL JOINTS WITHIN 5 FEET FROM TEE.

STA 0+78.01, –24.45'
45d BEND 9 (6")
RESTRAIN ALL JOINTS WITHIN 6 FEET OF THE 45° BEND

STA 0+65.95, –37.14'
TEE 8 (6"x6")
W/ PLUG TO SW

STA 0+62.18, –33.57'
45d BEND 7 (6")
RESTRAIN TO STEEL CASING

STA 0+97.73, –24.41'
TEE 11 (6"x6")

ASPHALT

STA 0+97.73, –20.36'
HYDRANT 2 (6")
P GND 833.75

PROPOSED 6" PVC WATER MAIN

STA 3+28.62, –24.24'
TEE 13 (6"x6")

EXISTING ROW

PLUG & ABANDON SANITARY PIPE
STA 11+93.44, 28.01' R
= IA 38 STA 2+43.48, 24.82' R

IA HWY 38 / ASH ST

STA 0+61
12" STEEL CASING

STA 3+29
12" STEEL CASING

STA 4+00
3" PVC CASING

STA 4+54
3" PVC CASING

STA 0+60.54, 36.04'
45d BEND 6 (6")
RESTRAIN THE BEND TO THE CASING
RESTRAIN ALL JOINTS WITHIN 6' SE OF 45 DEG BEND

STA 12+24.54, 0.00'
= IA 38 STA 12+24.54, 0.00'
MH 14 (48" ID)

8" PVC
Pl: 12+24.54

8" PVC
Pl: 11+96.55

STA 11+96.55, 0.00'
= IA 38 STA 2+71.50, 27.91' R
MH 13 (48" ID)

STA 3+28.62, 27.37'
HYDRANT 3 (6")
P GND 840.78

EXISTING ROW

STA 0+30.88, 63.80'
45d BEND 2 (6")

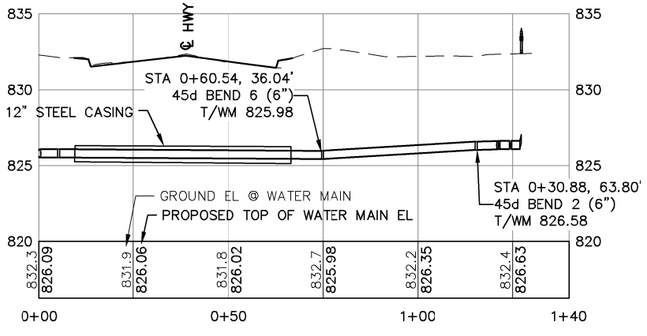
STA 0+30.69, 69.64'
TEE 1 (6"x6")

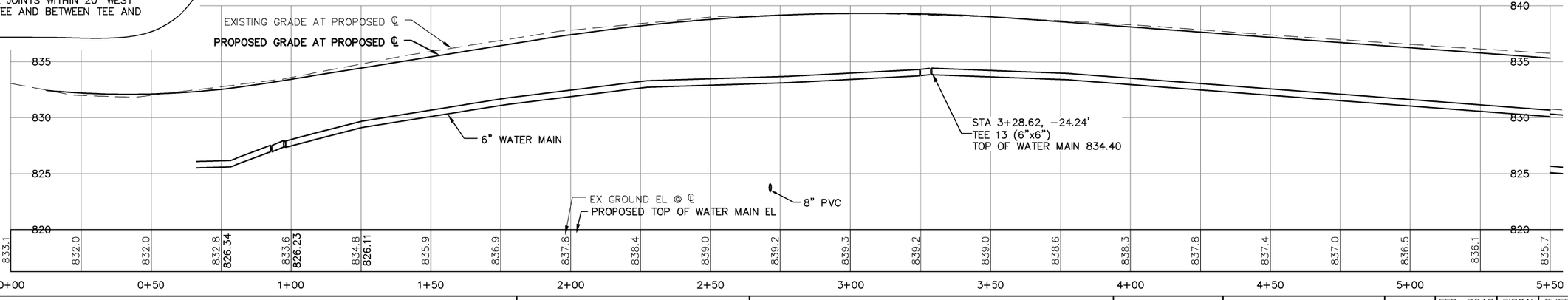
STA 0+33.92, 75.79'
HYDRANT 1 (6")
P GND 832.44

RESTRAIN ALL JOINTS FROM HYDRANT TO CASING. RESTRAIN THE WATER MAIN TO THE CASING BY UTILIZING A PUSH–ON JOINT SPLIT RING ASSEMBLY (SPIGOT END PORTION) AND RESTRAIN TO THE CASING.

BACK OF CURB
12" STEEL CASING
6" DIP WM
1" WATER SERVICE
1" WATER SERVICE
3'
3'
18"
18"
3'
6" MJ RS GATE VALVE
6" DIP WM
6" HYDRANT

6" MJ 45° BEND
6" PVC WM
3'
6" MJ 90° BEND
6" MJ TEE
W/ PLUG TO EAST
2.5'
2.5'
6" MJ RS GATE VALVE
6" HYDRANT
RESTRAIN ALL JOINTS WITHIN 20' WEST AND NW OF TEE AND BETWEEN TEE AND HYDRANT





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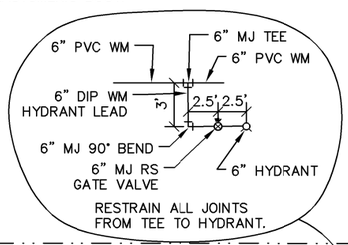
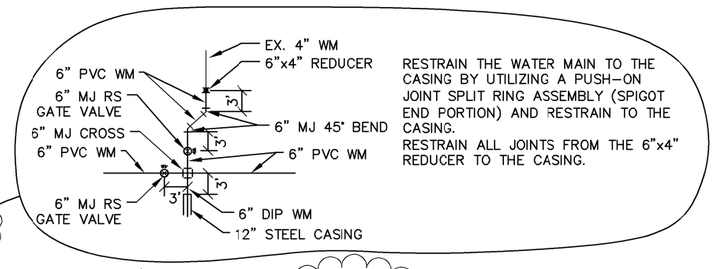
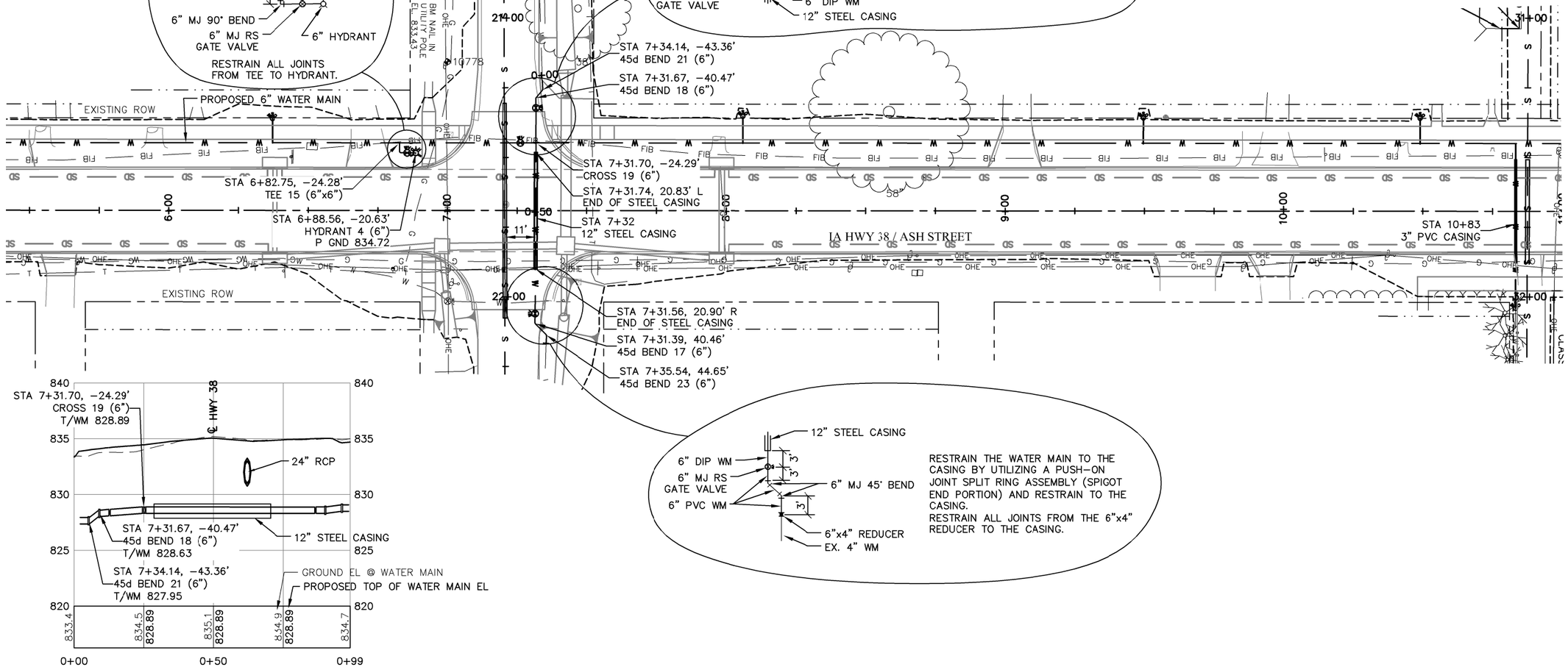
DETAILED BY:	CHECKED BY:					IOWA		2016	MU.1	135

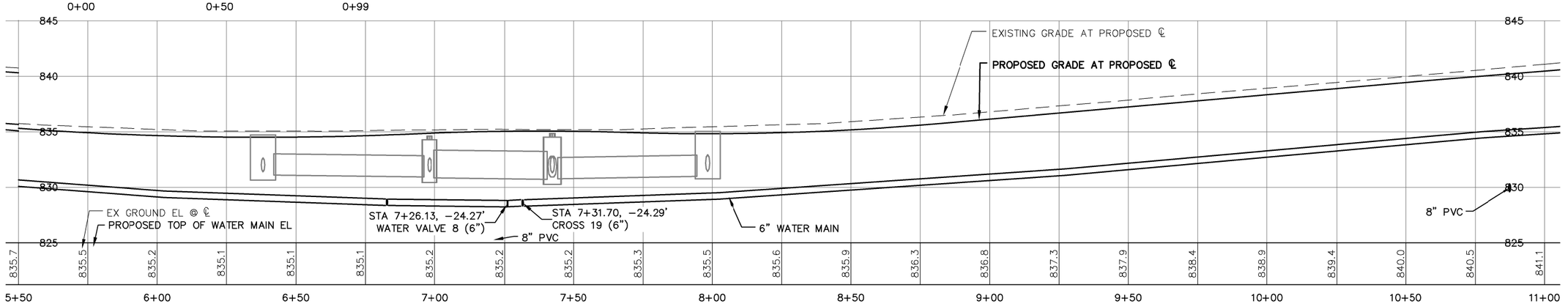
NOTE:
RESTRAINT TO THE CASING SHALL CONSIST OF 2 – 3/4" CORTEN ALL THREAD RODS, THAT ARE WELDED TO THE STEEL CASING WITH A 4" LONG WELD (MIN) ALL NUTS AND WASHERS SHALL BE HSLA. THE RODS SHALL BE EVENLY SPACED. CLOSE THE ENDS OF THE CASING WITH A DOUBLE WRAP OF WOVEN GEOTEXTILE SECURED TO CASING & WATER MAIN WITH #14 INSULATED COPPER WIRE OR AS APPROVED OR ELASTOMERIC BOOT.

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED
NORTH





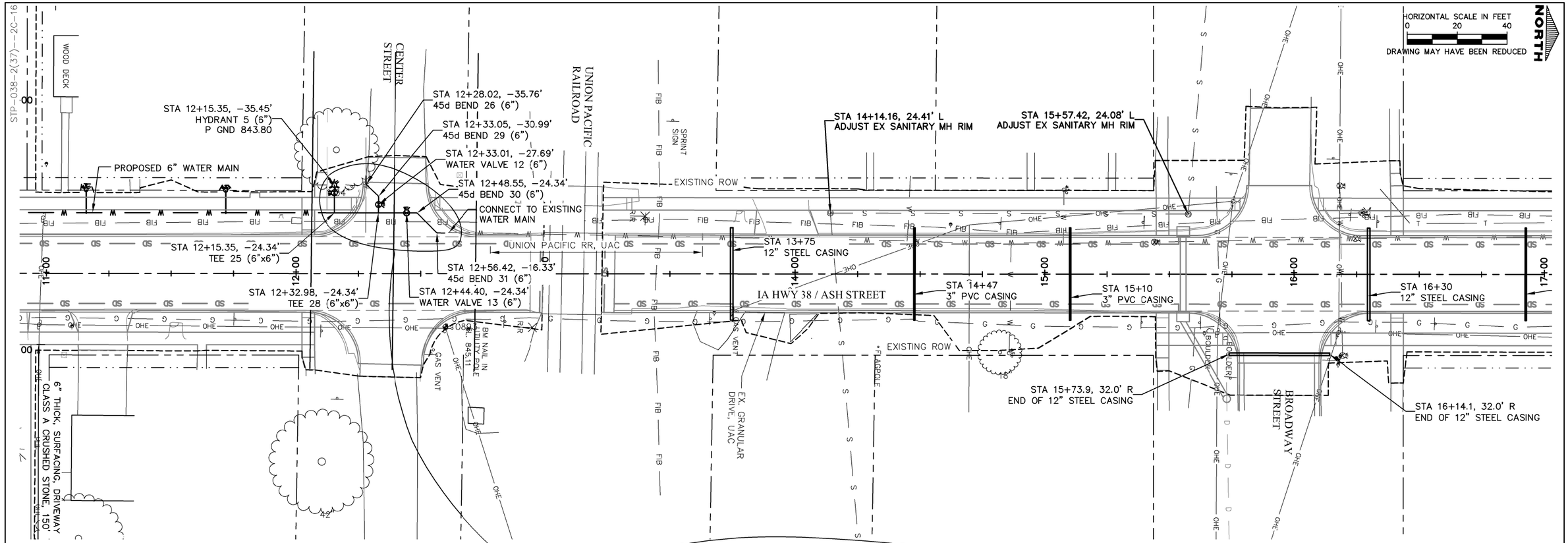




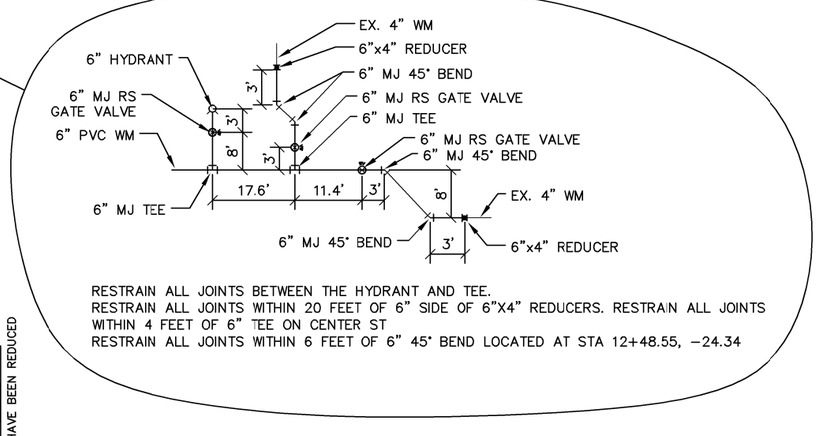
VERTICAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

C:\CIVIL 3D PROJECTS\14\183\DRAWINGS\CIVIL\14183_ZZ_MU.DWG 10/21/2015 5:11:19 PM TROY CHRISTIANSON

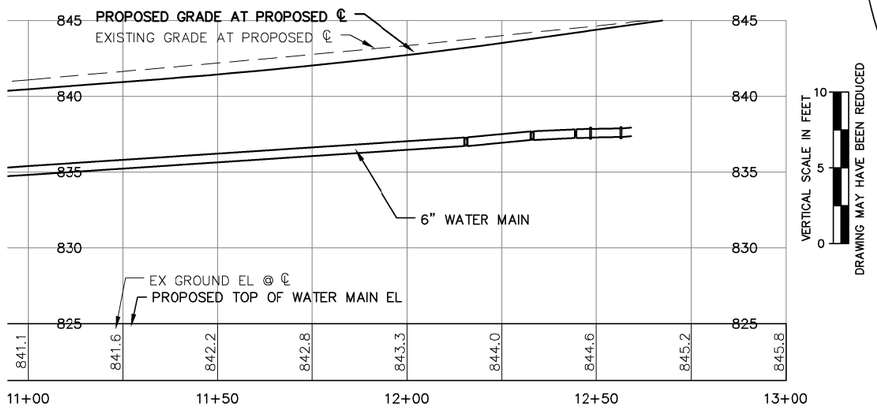
DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP–038–2(37)––2C–16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	MU.2	135



NOTE:
IT IS ANTICIPATED THAT LOADING OF THE PROPOSED WATER MAIN WILL BE PERFORMED FROM THE CONNECTION TO THE EXISTING WATER MAIN ALONG HIGHWAY 30. IF THE LOADING OF THE WATER MAIN IS PERFORMED UTILIZING A DIFFERENT CONNECTION TO EXISTING WATER MAIN WITHIN THE PROJECT EXTENTS, CONSULT PROJECT ENGINEER FOR REQUIREMENTS OF THRUST RESTRAINT AT THE WATER MAIN CONNECTIONS AT HIGHWAY 30 AND AT CENTER ST



RESTRAIN ALL JOINTS BETWEEN THE HYDRANT AND TEE.
RESTRAIN ALL JOINTS WITHIN 20 FEET OF 6" SIDE OF 6"X4" REDUCERS. RESTRAIN ALL JOINTS WITHIN 4 FEET OF 6" TEE ON CENTER ST
RESTRAIN ALL JOINTS WITHIN 6 FEET OF 6" 45° BEND LOCATED AT STA 12+48.55, −24.34



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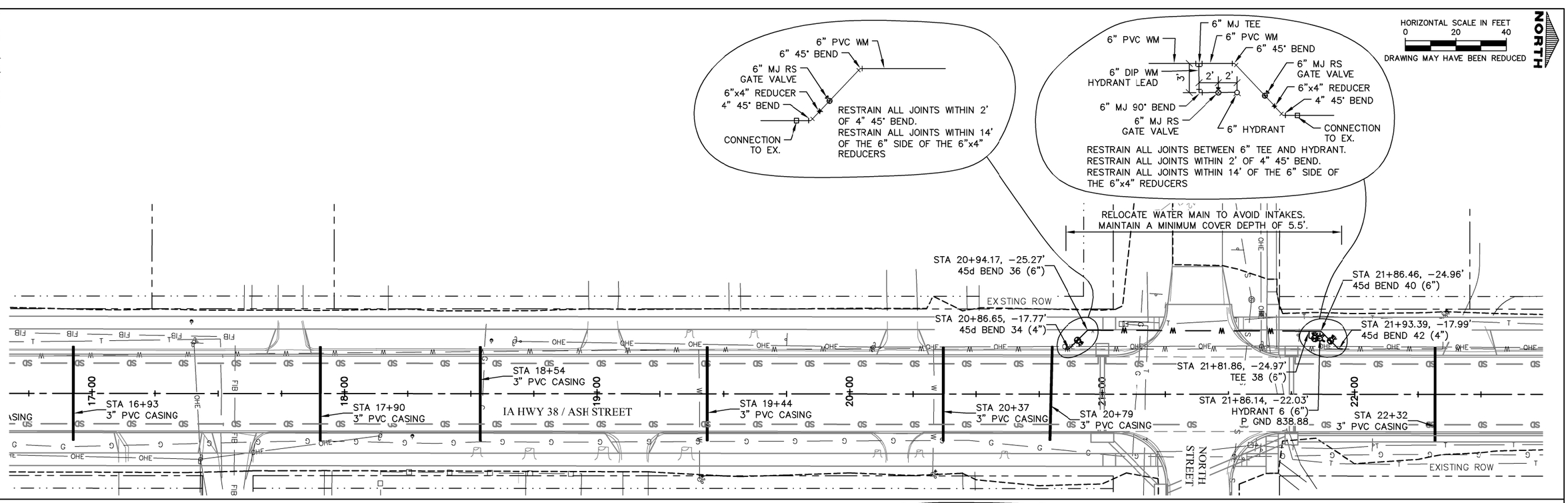
DETAILED BY:	CHECKED BY:					IOWA		2016	MU.3	135



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DETAILED BY: _____ CHECKED BY: _____

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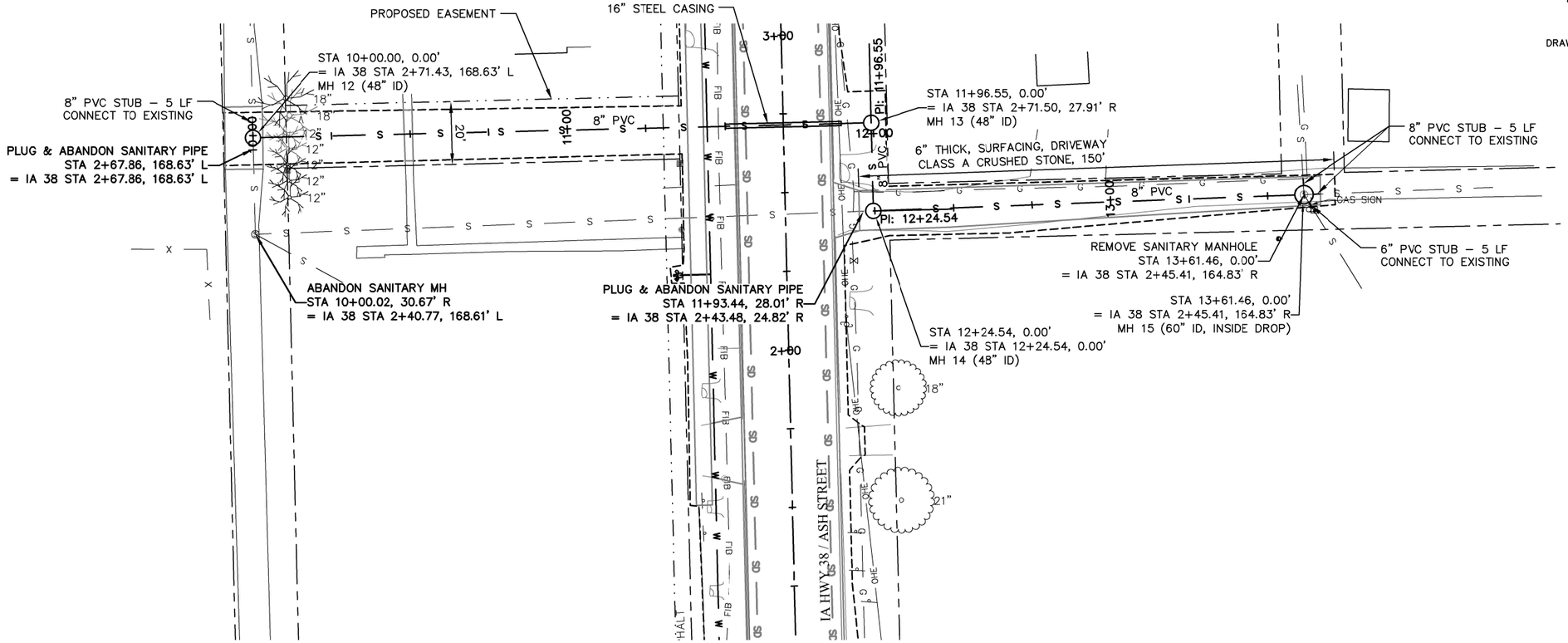
CITY OF STANWOOD, CEDAR COUNTY

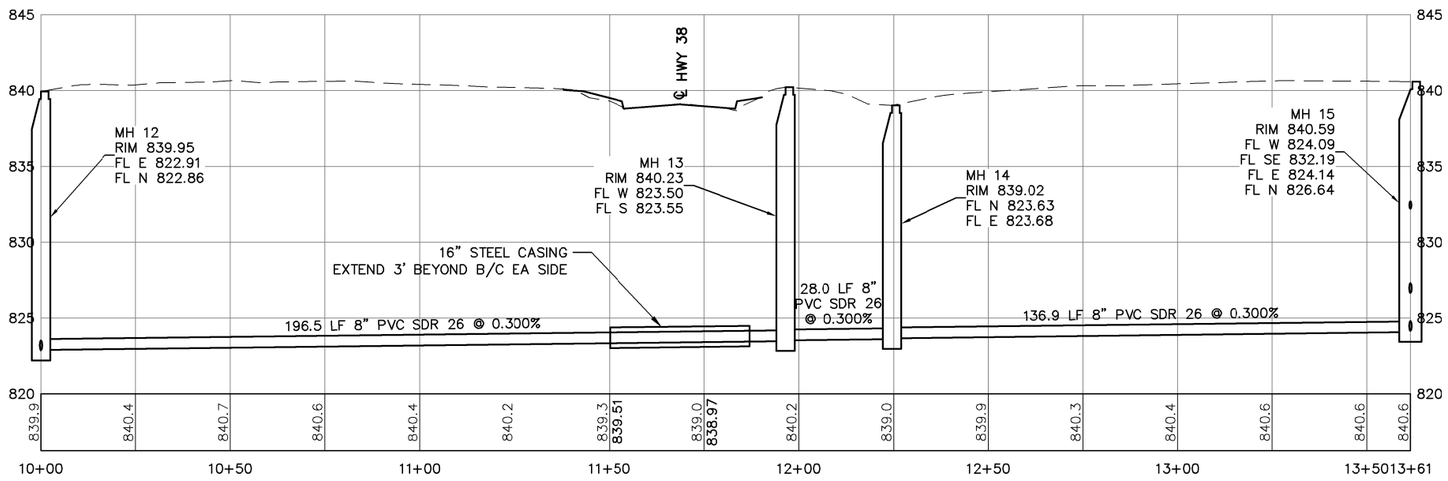
PROJECT NUMBER	STP-038-2(37)--2C-16

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA		2016	MU.4	135

NORTH

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED





PLUG &
= IA 3

VERTICAL SCALE IN FEET
10
5
0
DRAWING MAY HAVE BEEN REDUCED

C:\CIVIL 3D PROJECTS\14\183\DRAWINGS\CIVIL\14183_ZZ_MU.DWG 10/21/2015 5:11:34 PM TROY CHRISTIANSON

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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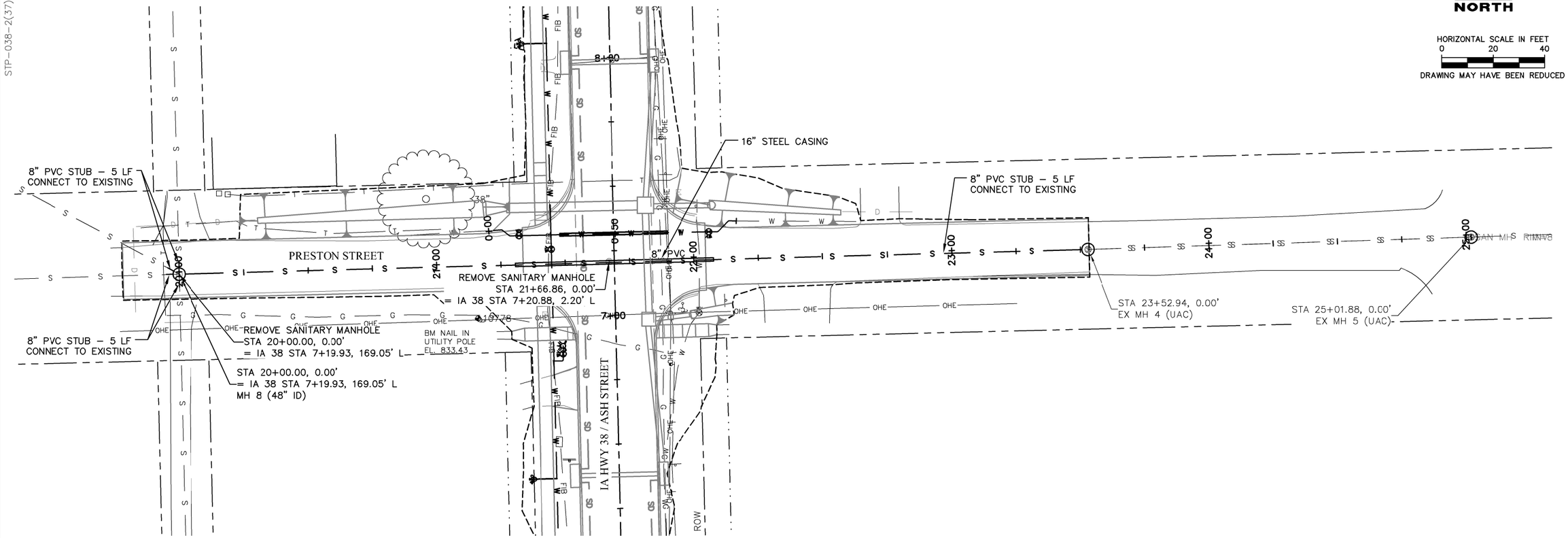
CITY OF STANWOOD, CEDAR COUNTY

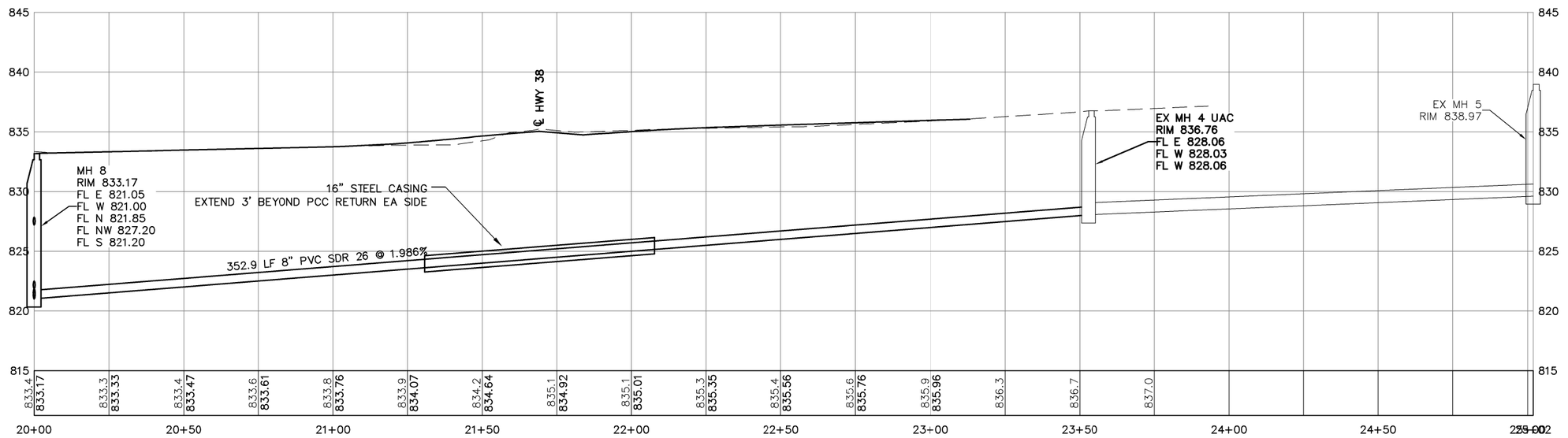
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	MU.5	135

STP-038-2(37)--2C-16

NORTH

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED



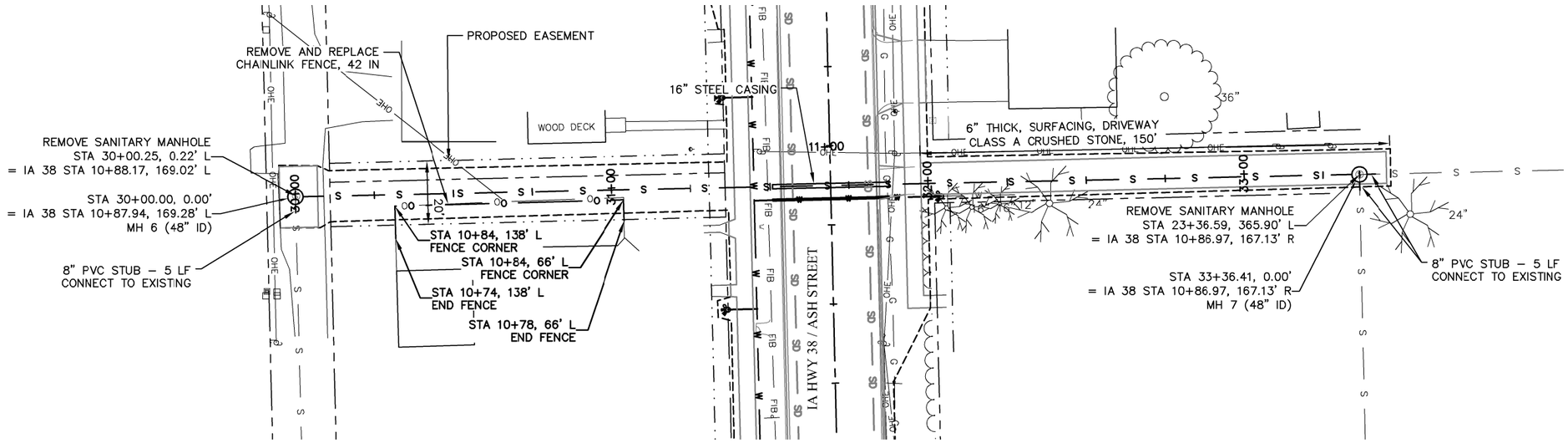


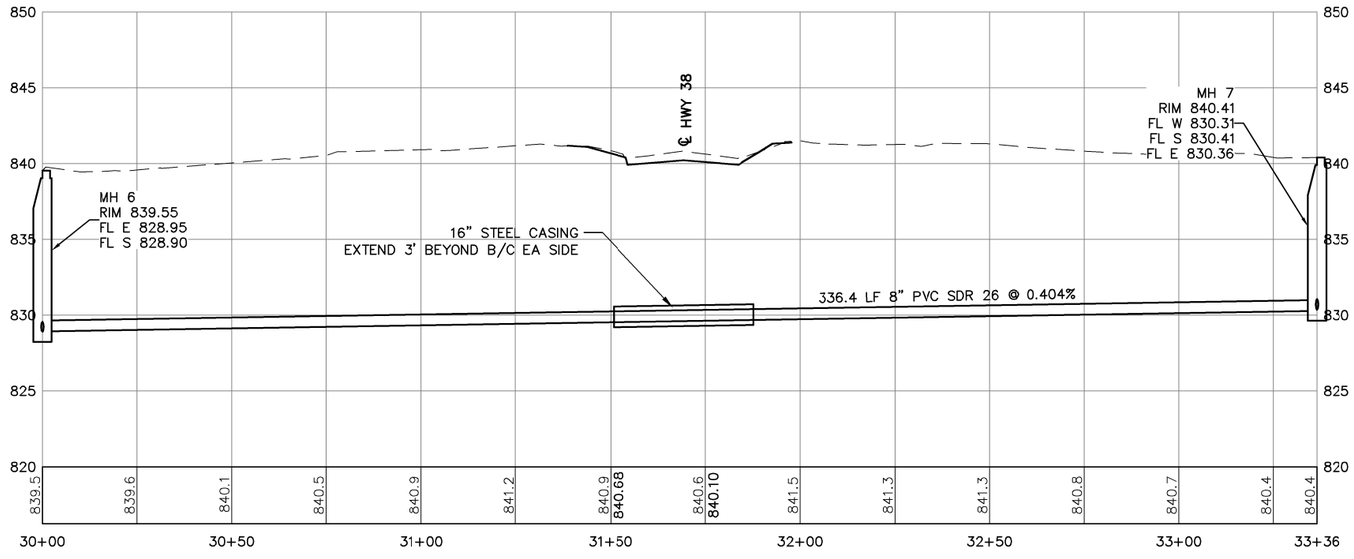
VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

C:\CIVIL 3D PROJECTS\14\183\DRAWINGS\CIVIL\14183_ZZ_MU.DWG 10/21/2015 5:11:39 PM TROY CHRISTIANSON

DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	MU.6	135

STP-038-2(37)--2C-16





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DESIGNED BY: _____ TRACED BY: _____
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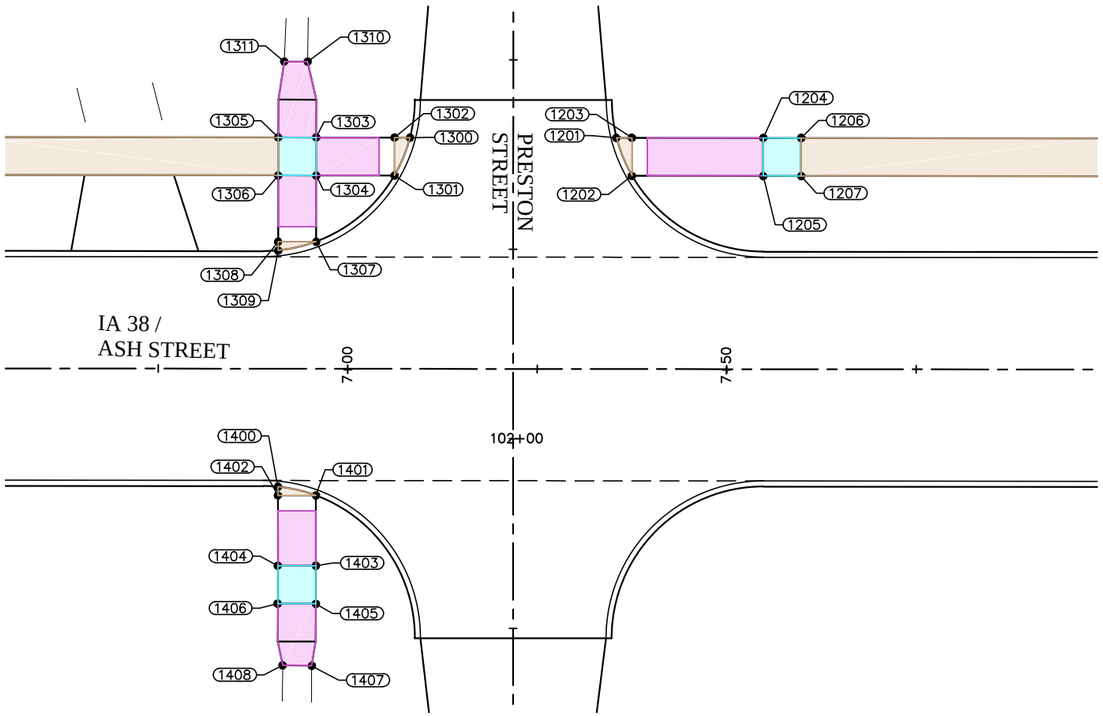
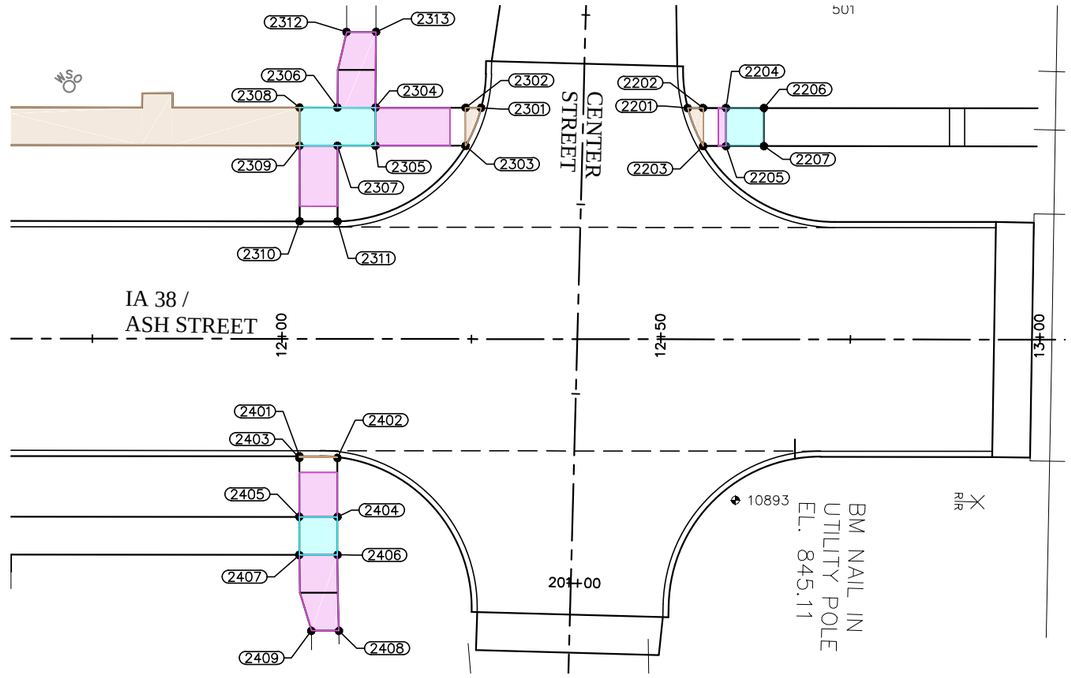
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	MU.7	135

STP-038-2(37)--2C-16



IA 38/ASH ST & PRESTON ST
SIDEWALK LAYOUT



IA 38/ASH ST & CENTER ST
SIDEWALK LAYOUT

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HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED
NORTH

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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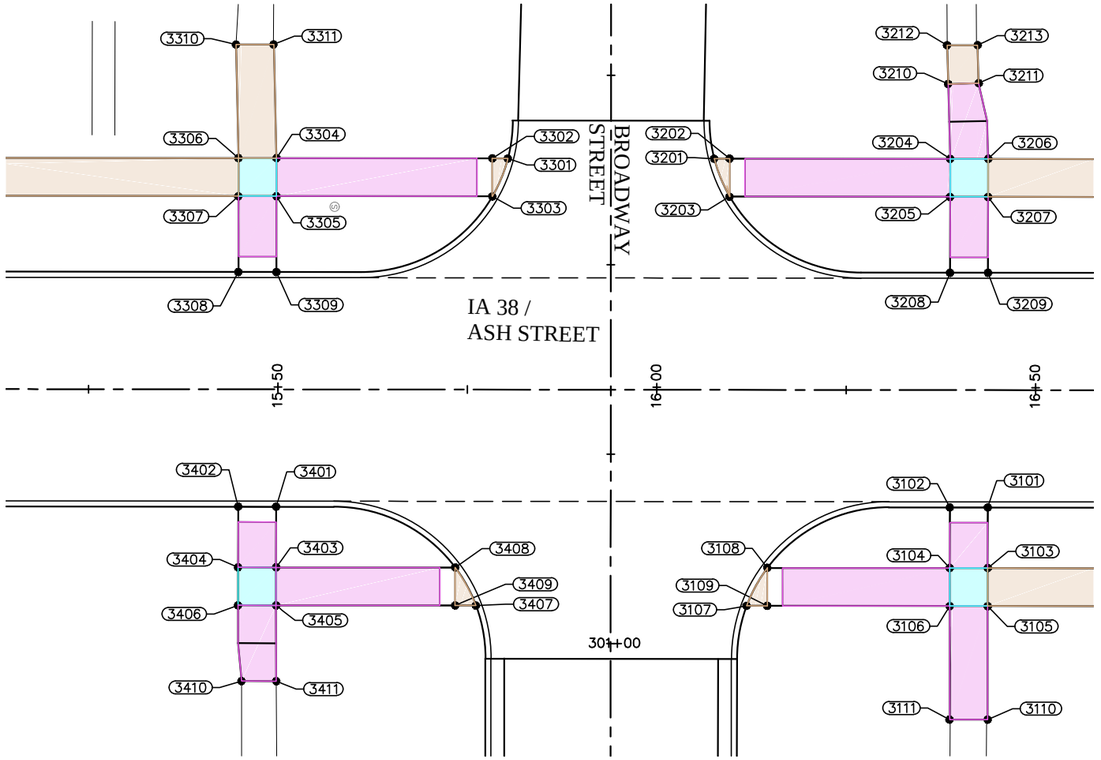
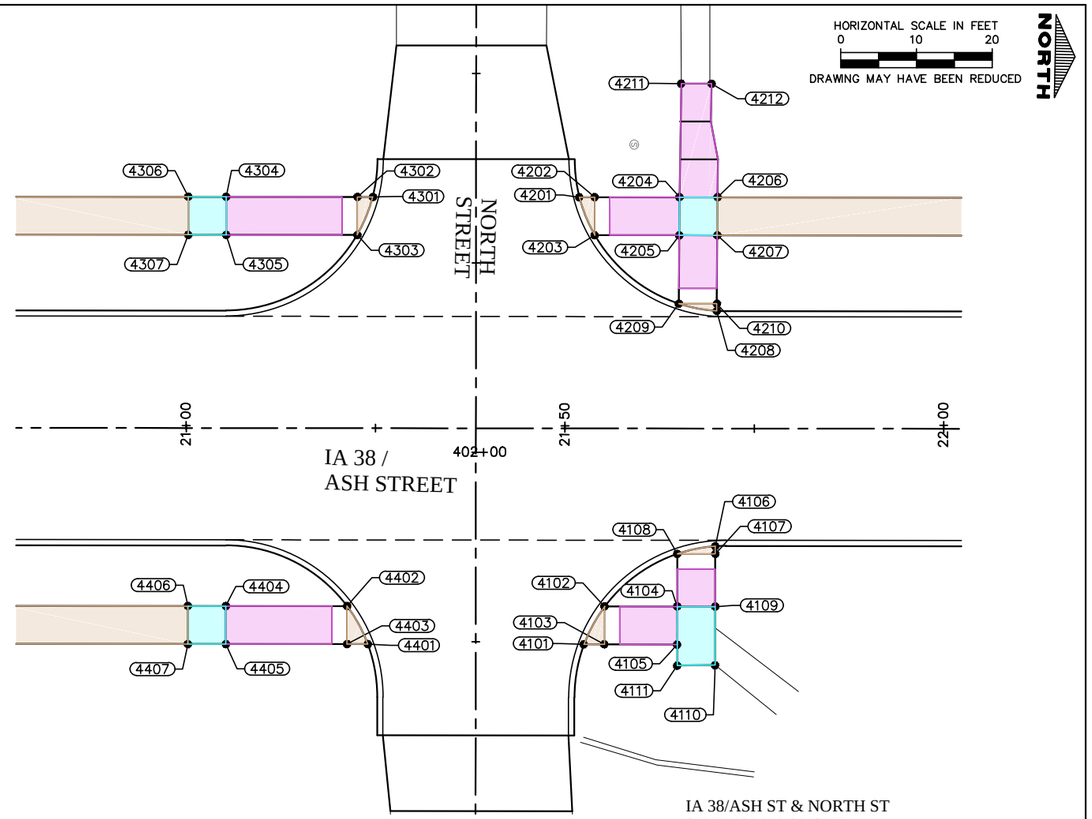
CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	S.1	135

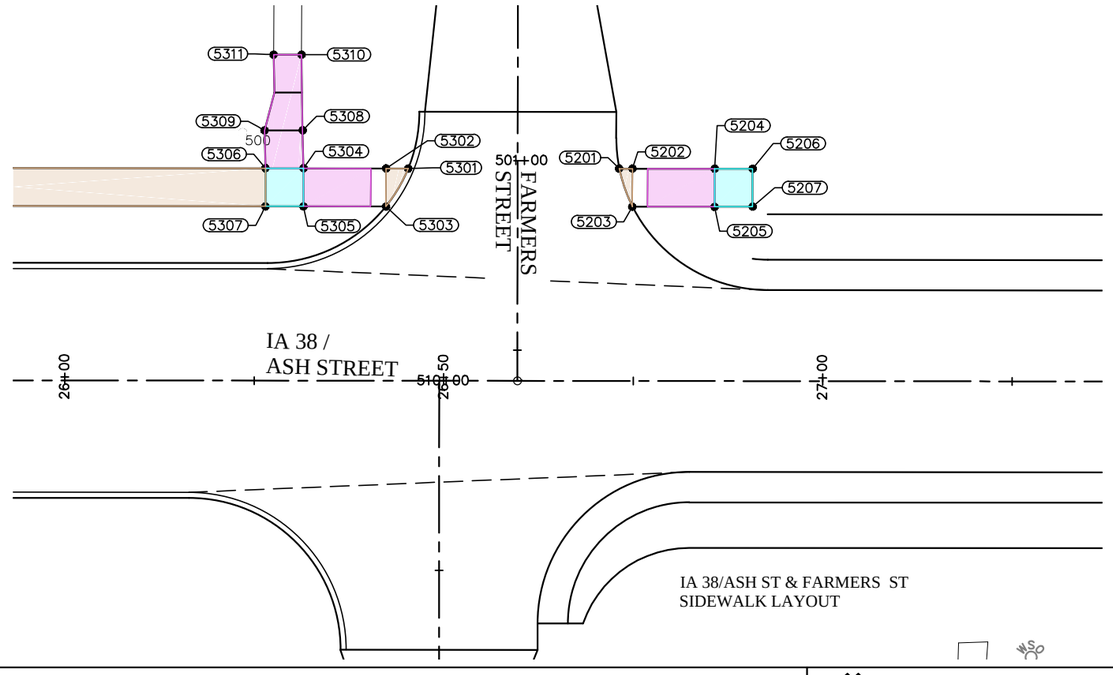
STP-038-2(37)--2C-16



IA 38/ASH ST & BROADWAY ST
SIDEWALK LAYOUT



IA 38/ASH ST & NORTH ST
SIDEWALK LAYOUT



IA 38/ASH ST & FARMERS ST
SIDEWALK LAYOUT

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DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	S.2	135

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	Legally Acceptable Range	Difference between Designed Slope and Maximum Legally Acceptable Range	Acceptable Constructed Range	Does Designer need to obtain design	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.		Pos. or Neg.			%						
1201	1202	Crosswalk Cross Slope - Yield Condition	5.40	0.08	1.5%	0.0% to 2.0%	0.5%	0.0% to 2.0%						1201	7+35.43	-30.50	834.35
1201	1203	Ramp Running Slope	2.04	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						1202	7+37.48	-25.50	834.43
1202	1203	Ramp Cross Slope	5.00	-0.08	-1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes				1203	7+37.48	-30.50	834.35
1202	1205	Ramp Running Slope	17.32	0.82	4.7%	0.5% to 8.3%	3.6%	0.5% to 8.3%						1204	7+54.80	-30.50	835.31
1203	1204	Ramp Running Slope	17.32	0.96	5.6%	0.5% to 8.3%	2.7%	0.5% to 8.3%						1205	7+54.80	-25.50	835.25
1204	1205	Landing/Turning Space	5.00	-0.07	-1.3%	0.1% to 2.0%	0.7%	0.1% to 2.0%						1206	7+59.80	-30.50	835.34
1204	1206	Landing/Turning Space	5.00	0.02	0.5%	0.1% to 2.0%	1.5%	0.1% to 2.0%						1207	7+59.80	-25.50	835.26
1205	1207	Landing/Turning Space	5.00	0.01	0.3%	0.1% to 2.0%	1.7%	0.1% to 2.0%						1300	7+08.16	-30.50	834.17
1206	1207	Landing/Turning Space	5.00	-0.08	-1.5%	0.1% to 2.0%	0.5%	0.1% to 2.0%						1301	7+06.12	-25.50	834.25
														1302	7+06.12	-30.50	834.17
1300	1301	Crosswalk Cross Slope - Yield Condition	5.40	0.08	1.5%	0.0% to 2.0%	0.5%	0.0% to 2.0%						1303	6+95.80	-30.50	834.40
1300	1302	Ramp Running Slope	2.04	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						1304	6+95.80	-25.50	834.45
1301	1302	Ramp Cross Slope	5.00	-0.08	-1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes				1305	6+90.80	-30.50	834.45
1301	1304	Ramp Running Slope	10.32	0.20	1.9%	0.5% to 8.3%	6.4%	0.5% to 8.3%						1306	6+90.80	-25.50	834.50
1302	1303	Ramp Running Slope	10.32	0.23	2.2%	0.5% to 8.3%	6.1%	0.5% to 8.3%						1307	6+95.80	-16.77	834.43
1303	1304	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						1308	6+90.80	-16.77	834.49
1303	1305	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						1309	6+90.80	-15.60	834.49
1304	1306	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						1310	6+94.64	-40.50	833.71
1304	1307	Ramp Running Slope	8.73	-0.02	-0.2%	0.5% to 8.3%	8.1%	0.5% to 8.3%						1311	6+91.59	-40.50	833.75
1306	1308	Ramp Running Slope	8.73	-0.01	-0.1%	0.5% to 8.3%	8.2%	0.5% to 8.3%						1400	6+90.80	15.59	834.53
1308	1309	Ramp Running Slope	1.17	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						1401	6+95.80	16.74	834.60
1307	1308	Ramp Cross Slope	5.00	0.06	1.2%	0.1% to 2.0%	0.8%	0.1% to 2.0%						1402	6+90.80	16.74	834.53
1307	1309	Crosswalk Cross Slope - No Yield Condition	5.13	0.06	1.2%	0.0% to 5.0%	3.8%	0.0% to 5.0%						1403	6+95.80	26.00	834.65
1303	1310	Sidewalk Running Slope	10.07	-0.69	-6.9%	0.5% to 5.0%	-1.9%	0.5% to 7.9%	Yes					1404	6+90.80	26.00	834.65
1305	1311	Sidewalk Running Slope	10.03	-0.70	-7.0%	0.5% to 5.0%	-2.0%	0.5% to 8%	Yes					1405	6+95.80	31.00	834.70
1310	1311	Match Existing Cross Slope	3.05	0.04	1.3%	Match Existing	FALSE	Match Existing						1406	6+90.80	31.00	834.70
														1407	6+95.27	39.19	834.98
1400	1401	Crosswalk Cross Slope - No Yield Condition	5.13	0.07	1.4%	0.0% to 5.0%	3.6%	0.0% to 5.0%						1408	6+91.45	39.13	834.94
1400	1402	Ramp Running Slope	1.15	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						2201	12+53.51	-30.50	844.60
1401	1402	Ramp Cross Slope	5.00	-0.07	-1.4%	0.1% to 2.0%	0.6%	0.1% to 2.0%						2202	12+55.55	-30.50	844.60
1401	1403	Ramp Running Slope	9.26	0.05	0.5%	0.5% to 8.3%	7.8%	0.5% to 8.3%						2203	12+55.55	-25.50	844.70
1402	1404	Ramp Running Slope	9.26	0.12	1.3%	0.5% to 8.3%	7.0%	0.5% to 8.3%						2204	12+58.55	-30.50	844.70
1403	1405	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						2205	12+58.55	-25.50	844.75
1403	1404	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%						2206	12+63.55	-30.50	844.75
1404	1406	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						2207	12+63.55	-25.50	844.80
1405	1406	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%						2301	12+26.22	-30.50	843.44
1405	1407	Ramp Running Slope	8.21	0.28	3.4%	0.5% to 8.3%	4.9%	0.5% to 8.3%						2302	12+24.17	-30.50	843.44
1406	1408	Ramp Running Slope	8.15	0.24	2.9%	0.5% to 8.3%	5.4%	0.5% to 8.3%						2303	12+24.17	-25.50	843.36
1407	1408	Match Existing Cross Slope	3.82	-0.04	-1.0%	Match Existing	FALSE	Match Existing						2304	12+12.30	-30.50	843.55
														2305	12+12.31	-25.50	843.50
2201	2202	Ramp Running Slope	2.04	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						2306	12+07.30	-30.50	843.49
2201	2203	Crosswalk Cross Slope - Yield Condition	5.40	0.10	1.9%	0.0% to 2.0%	0.1%	0.0% to 2.0%						2307	12+07.31	-25.50	843.42
2202	2203	Ramp Cross Slope	5.00	0.10	2.0%	0.1% to 2.0%	0.0%	0.1% to 2.0%	Yes	Yes				2308	12+02.31	-30.50	843.42
2202	2204	Ramp Running Slope	3.00	0.10	3.3%	0.5% to 8.3%	5.0%	0.5% to 8.3%						2309	12+02.31	-25.50	843.34
2203	2205	Ramp Running Slope	3.00	0.05	1.7%	0.5% to 8.3%	6.6%	0.5% to 8.3%						2310	12+02.31	-15.54	842.54
2204	2205	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						2311	12+07.31	-15.54	842.69
2204	2206	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						2312	12+08.50	-40.50	843.90
2205	2207	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						2313	12+12.36	-40.50	843.92
2206	2207	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						2401	12+02.33	15.50	842.54
														2402	12+07.33	15.73	842.64
2301	2302	Ramp Running Slope	2.04	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						2403	12+02.33	15.73	842.55
2301	2303	Crosswalk Cross Slope - Yield Condition	5.40	-0.08	-1.5%	0.0% to 2.0%	0.5%	0.0% to 2.0%						2404	12+07.33	23.50	843.12
2302	2303	Crosswalk Cross Slope - Yield Condition	5.00	-0.08	-1.6%	0.0% to 2.0%	0.4%	0.0% to 2.0%						2405	12+02.33	23.50	843.04
2302	2304	Ramp Running Slope	11.87	0.11	0.9%	0.5% to 8.3%	7.4%	0.5% to 8.3%						2406	12+07.33	28.50	843.12
2303	2305	Ramp Running Slope	11.87	0.14	1.2%	0.5% to 8.3%	7.1%	0.5% to 8.3%						2407	12+02.33	28.50	843.07
2304	2305	Landing/Turning Space	5.00	-0.05	-1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						2408	12+07.54	38.50	843.66
2304	2308	Landing/Turning Space	10.00	-0.13	-1.3%	0.1% to 2.0%	0.7%	0.1% to 2.0%						2409	12+03.93	38.50	843.63
2305	2309	Landing/Turning Space	10.00	-0.16	-1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes				3101	16+43.70	15.50	842.43
2307	2311	Ramp Running Slope	9.96	-0.73	-7.3%	0.5% to 8.3%	1.0%	0.5% to 8.3%						3102	16+38.70	15.50	842.46
2309	2310	Ramp Running Slope	9.96	-0.80	-8.0%	0.5% to 8.3%	0.3%	0.5% to 8.3%	Yes	Yes				3103	16+43.70	23.50	842.93
2310	2311	Crosswalk Cross Slope - No Yield Condition	5.00	0.15	2.9%	0.0% to 5.0%	2.1%	0.0% to 5.0%						3104	16+38.70	23.50	842.93
2304	2313	Sidewalk Running Slope	10.00	0.37	3.7%	0.5% to 5.0%	1.3%	0.5% to 5.0%						3105	16+43.70	28.50	842.98
2306	2312	Sidewalk Running Slope	10.07	0.41	4.1%	0.5% to 5.0%	0.9%	0.5% to 5.0%	Yes	Yes				3106	16+38.70	28.50	842.98
2312	2313	Match Existing Cross Slope	3.86	0.02	0.5%	Match Existing	FALSE	Match Existing						3107	16+11.89	28.50	842.77
														3108	16+14.62	23.50	842.71
2401	2402	Crosswalk Cross Slope - No Yield Condition	5.01	0.10	2.0%	0.0% to 5.0%	3.0%	0.0% to 5.0%						3109	16+14.62	28.50	842.77
2401	2403	Ramp Running Slope	0.23	0.01	6.0%	0.5% to 8.3%	2.3%	0.5% to 8.3%						3110	16+43.70	43.50	843.83
2402	2404	Ramp Running Slope	7.77	0.48	6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						3111	16+38.70	43.50	843.69
2403	2405	Ramp Running Slope	7.77	0.49	6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						3201	16+07.55	-30.50	842.85
2404	2405	Landing/Turning Space	5.00	-0.08	-1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes				3202	16+09.60	-30.50	842.85
2404	2406	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%						3203	16+09.60	-25.50	842.77
2405	2407	Landing/Turning Space	5.00	0.03	0.6%	0.1% to 2.0%	1.4%	0.1% to 2.0%						3204	16+38.70	-30.50	843.13
2406	2407	Landing/Turning Space	5.00	-0.05	-1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						3205	16+38.70	-25.50	843.08
2406	2408	Sidewalk Running Slope	10.00	0.54	5.4%	0.5% to 5.0%	-0.4%	0.5% to 6.4%	Yes					3206	16+43.70	-30.50	843.13
2407	2409	Sidewalk Running Slope	10.13	0.56	5.5%	0.5% to 5.0%	-0.5%	0.5% to 6.5%	Yes					3207	16+43.70	-25.50	843.06
2408	2409	Match Existing Cross Slope	3.60	-0.03	-0.8%	Match Existing	FALSE	Match Existing						3208	16+38.70	-15.50	842.46

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	Legally Acceptable Range	Difference between Designed Slope and Maximum Legally Acceptable Range	Acceptable Constructed Range	Does Designer need to obtain design	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.		Pos. or Neg.			%						
3101	3102	Crosswalk Cross Slope - No Yield Conditio	5.00	0.03	0.6%	0.0% to 5.0%	4.4%	0.0% to 5.0%						3210	16+38.43	-40.39	843.58
3101	3103	Ramp Running Slope	8.00	0.50	6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						3211	16+42.42	-40.50	843.64
3102	3104	Ramp Running Slope	8.00	0.47	5.9%	0.5% to 8.3%	2.4%	0.5% to 8.3%						3212	16+38.29	-45.50	843.81
3103	3104	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%						3213	16+42.29	-45.50	843.90
3103	3105	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						3301	15+80.28	-30.50	843.10
3104	3106	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						3302	15+78.24	-30.50	843.10
3104	3108	Ramp Running Slope	24.08	-0.22	-0.9%	0.5% to 8.3%	7.4%	0.5% to 8.3%						3303	15+78.24	-25.50	843.02
3106	3109	Ramp Running Slope	24.08	-0.21	-0.9%	0.5% to 8.3%	7.4%	0.5% to 8.3%						3304	15+49.76	-30.50	843.60
3107	3109	Ramp Running Slope	2.73	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						3305	15+49.77	-25.50	843.52
3107	3108	Crosswalk Cross Slope - Yield Condition	5.70	-0.06	-1.1%	0.0% to 2.0%	0.9%	0.0% to 2.0%						3306	15+44.76	-30.50	843.60
3108	3109	Ramp Cross Slope	5.00	0.06	1.2%	0.1% to 2.0%	0.8%	0.1% to 2.0%						3307	15+44.77	-25.50	843.55
3105	3110	Sidewalk Running Slope	15.00	0.85	5.7%	0.5% to 5.0%	-0.7%	0.5% to 6.7%	Yes					3308	15+44.77	-15.50	842.93
3106	3111	Sidewalk Running Slope	15.00	0.71	4.7%	0.5% to 5.0%	0.3%	0.5% to 5.0%	Yes	Yes				3309	15+49.77	-15.50	842.90
3110	3111	Match Existing Cross Slope	5.00	-0.14	-2.8%	Match Existing	FALSE	Match Existing						3310	15+44.43	-45.50	845.38
														3311	15+49.34	-45.50	845.20
3201	3202	Ramp Running Slope	2.04	0.00	0.0%									3401	15+49.77	15.50	842.90
3201	3203	Crosswalk Cross Slope - Yield Condition	5.40	-0.08	-1.5%	0.0% to 2.0%	0.5%	0.0% to 2.0%						3402	15+44.77	15.50	842.93
3202	3203	Ramp Cross Slope	5.00	-0.08	-1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes				3403	15+49.77	23.50	843.40
3202	3204	Ramp Running Slope	29.10	0.28	1.0%	0.5% to 8.3%	7.3%	0.5% to 8.3%						3404	15+44.77	23.50	843.43
3203	3205	Ramp Running Slope	29.10	0.31	1.1%	0.5% to 8.3%	7.2%	0.5% to 8.3%						3405	15+49.77	28.50	843.48
3204	3205	Landing/Turning Space	5.00	-0.05	-1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						3406	15+44.77	28.50	843.48
3204	3206	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%						3407	15+76.13	28.50	843.02
3205	3207	Landing/Turning Space	5.00	-0.03	-0.5%	0.1% to 2.0%	1.5%	0.1% to 2.0%						3408	15+73.40	23.50	842.98
3205	3208	Ramp Running Slope	10.00	-0.62	-6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						3409	15+73.40	28.50	843.02
3207	3209	Ramp Running Slope	10.00	-0.63	-6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						3410	15+45.24	38.50	844.22
3208	3209	Crosswalk Cross Slope - No Yield Conditio	5.00	-0.03	-0.6%	0.0% to 5.0%	4.4%	0.0% to 5.0%						3411	15+49.80	38.50	844.08
3204	3210	Sidewalk Running Slope	9.89	0.45	4.5%	0.5% to 5.0%	0.5%	0.5% to 5.0%	Yes	Yes				4101	21+52.51	28.50	838.17
3206	3211	Sidewalk Running Slope	10.08	0.51	5.1%	0.5% to 5.0%	-0.1%	0.5% to 6.1%	Yes					4102	21+55.25	23.50	838.14
3210	3211	Match Existing Cross Slope	4.00	0.07	1.6%	Match Existing	FALSE	Match Existing						4103	21+55.25	28.50	838.22
														4104	21+64.84	23.50	838.40
3301	3302	Ramp Running Slope	2.04	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						4105	21+64.84	28.50	838.40
3301	3303	Crosswalk Cross Slope - Yield Condition	5.40	-0.08	-1.5%	0.0% to 2.0%	0.5%	0.0% to 2.0%						4106	21+69.84	15.55	838.04
3302	3304	Ramp Running Slope	28.47	0.50	1.8%	0.5% to 8.3%	6.5%	0.5% to 8.3%						4107	21+69.84	16.55	838.04
3303	3305	Ramp Running Slope	28.47	0.50	1.8%	0.5% to 8.3%	6.5%	0.5% to 8.3%						4108	21+64.84	16.55	838.07
3304	3305	Landing/Turning Space	5.00	-0.08	-1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes				4109	21+69.84	23.50	838.45
3304	3306	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%						4110	21+69.84	31.21	838.42
3305	3307	Landing/Turning Space	5.00	0.03	0.6%	0.1% to 2.0%	1.4%	0.1% to 2.0%						4111	21+64.84	31.29	838.40
3305	3309	Ramp Running Slope	10.00	-0.62	-6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						4201	21+51.86	-30.50	837.65
3307	3308	Ramp Running Slope	10.00	-0.62	-6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						4202	21+53.91	-30.50	837.65
3308	3309	Crosswalk Cross Slope - No Yield Conditio	5.00	-0.03	-0.6%	0.0% to 5.0%	4.4%	0.0% to 5.0%						4203	21+53.91	-25.50	837.73
3306	3307	Landing/Turning Space	5.00	-0.05	-1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						4204	21+65.10	-30.50	838.35
3306	3310	Sidewalk Running Slope	15.00	1.78	11.9%	0.5% to 5.0%	-6.9%		Yes					4205	21+65.07	-25.50	838.35
3304	3311	Sidewalk Running Slope	15.01	1.60	10.7%	0.5% to 5.0%	-5.7%		Yes					4206	21+70.10	-30.50	838.40
3310	3311	Match Existing Cross Slope	4.91	-0.18	-3.7%	Match Existing	FALSE	Match Existing						4207	21+70.07	-25.50	838.33
														4208	21+70.01	-15.54	838.02
3401	3402	Crosswalk Cross Slope - No Yield Conditio	5.00	0.03	0.6%	0.0% to 5.0%	4.4%	0.0% to 5.0%						4209	21+65.02	-16.49	837.94
3401	3403	Ramp Running Slope	8.00	0.50	6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						4210	21+70.02	-16.49	838.02
3402	3404	Ramp Running Slope	8.00	0.50	6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						4211	21+65.30	-45.50	837.57
3403	3404	Landing/Turning Space	5.00	0.03	0.6%	0.1% to 2.0%	1.4%	0.1% to 2.0%						4212	21+69.30	-45.50	837.74
3403	3405	Landing/Turning Space	5.00	0.08	1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes				4301	21+24.59	-30.50	837.35
3404	3406	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						4302	21+22.55	-30.50	837.35
3405	3406	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%						4303	21+22.55	-25.50	837.43
3403	3408	Ramp Running Slope	23.63	-0.42	-1.8%	0.5% to 8.3%	6.5%	0.5% to 8.3%						4304	21+05.25	-30.50	838.11
3405	3409	Ramp Running Slope	23.63	-0.46	-1.9%	0.5% to 8.3%	6.4%	0.5% to 8.3%						4305	21+05.25	-25.50	838.04
3408	3409	Ramp Cross Slope	5.00	0.04	0.8%	0.1% to 2.0%	1.2%	0.1% to 2.0%						4306	21+00.25	-30.50	838.13
3407	3409	Ramp Running Slope	2.73	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						4307	21+00.25	-25.50	838.06
3407	3408	Crosswalk Cross Slope - Yield Condition	5.70	-0.04	-0.7%	0.0% to 2.0%	1.3%	0.0% to 2.0%						4401	21+23.98	28.50	837.89
3405	3411	Sidewalk Running Slope	10.00	0.60	6.0%	0.5% to 5.0%	-1.0%	0.5% to 7%	Yes					4402	21+21.25	23.50	837.93
3406	3410	Sidewalk Running Slope	10.01	0.74	7.4%	0.5% to 5.0%	-2.4%	0.5% to 8.4%	Yes					4403	21+21.25	28.50	837.91
3410	3411	Match Existing Cross Slope	4.55	-0.14	-3.1%	Match Existing	FALSE	Match Existing						4404	21+05.25	23.50	838.05

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	Legally Acceptable Range	Difference between Designed Slope and Maximum Legally Acceptable Range	Acceptable Constructed Range	Does Designer need to obtain design	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.		Pos. or Neg.			%						
4101	4102	Crosswalk Cross Slope - Yield Condition	5.70	-0.03	-0.5%	0.0% to 2.0%	1.5%	0.0% to 2.0%						4406	21+00.25	23.50	838.00
4101	4103	Ramp Running Slope	2.73	0.05	1.9%	0.5% to 8.3%	6.4%	0.5% to 8.3%						4407	21+00.25	28.50	838.08
4102	4103	Ramp Cross Slope	5.00	0.08	1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes				5201	26+73.14	-28.00	833.71
4102	4104	Ramp Running Slope	9.59	0.26	2.7%	0.5% to 8.3%	5.6%	0.5% to 8.3%						5202	26+74.87	-28.00	833.69
4103	4105	Ramp Running Slope	9.59	0.18	1.9%	0.5% to 8.3%	6.4%	0.5% to 8.3%						5203	26+74.87	-23.00	833.68
4104	4111	Landing/Turning Space	7.78	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%						5204	26+85.73	-28.00	833.55
4104	4109	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						5205	26+85.73	-23.00	833.55
4110	4111	Landing/Turning Space	5.00	-0.02	-0.4%	0.1% to 2.0%	1.6%	0.1% to 2.0%						5206	26+90.73	-28.00	833.50
4109	4110	Landing/Turning Space	7.71	-0.03	-0.4%	0.1% to 2.0%	1.6%	0.1% to 2.0%						5207	26+90.73	-23.00	833.50
4104	4108	Ramp Running Slope	6.95	-0.33	-4.8%	0.5% to 8.3%	3.5%	0.5% to 8.3%						5301	26+45.27	-28.00	834.47
4109	4107	Ramp Running Slope	6.95	-0.41	-5.9%	0.5% to 8.3%	2.4%	0.5% to 8.3%						5302	26+42.35	-28.00	834.47
4106	4107	Ramp Running Slope	1.00	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						5303	26+42.35	-23.00	834.56
4107	4108	Ramp Cross Slope	5.00	0.03	0.6%	0.1% to 2.0%	1.4%	0.1% to 2.0%						5304	26+31.46	-28.00	835.10
														5305	26+31.46	-23.00	835.10
4201	4202	Ramp Running Slope	2.04	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%						5306	26+26.46	-28.00	835.17
4201	4203	Crosswalk Cross Slope - Yield Condition	5.40	0.08	1.5%	0.0% to 2.0%	0.5%	0.0% to 2.0%						5307	26+26.46	-23.00	835.10
4202	4203	Ramp Cross Slope	5.00	0.08	1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes				5308	26+31.34	-33.00	835.48
4202	4204	Ramp Running Slope	11.19	0.70	6.2%	0.5% to 8.3%	2.1%	0.5% to 8.3%						5309	26+26.34	-33.00	835.51
4203	4205	Ramp Running Slope	11.16	0.62	5.6%	0.5% to 8.3%	2.7%	0.5% to 8.3%						5310	26+31.19	-43.00	836.24
4204	4205	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%						5311	26+27.53	-43.00	836.32
4204	4206	Landing/Turning Space	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%									
4205	4207	Landing/Turning Space	5.00	-0.02	-0.4%	0.1% to 2.0%	1.6%	0.1% to 2.0%									
4205	4209	Ramp Running Slope	9.01	-0.41	-4.5%	0.5% to 8.3%	3.8%	0.5% to 8.3%									
4207	4210	Ramp Running Slope	9.01	-0.31	-3.4%	0.5% to 8.3%	4.9%	0.5% to 8.3%									
4210	4208	Ramp Running Slope	0.95	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%									
4209	4210	Ramp Cross Slope	5.00	0.08	1.6%	0.1% to 2.0%	0.4%	0.1% to 2.0%	Yes	Yes							
4208	4209	Crosswalk Cross Slope - No Yield Conditio	5.08	-0.08	-1.6%	0.0% to 5.0%	3.4%	0.0% to 5.0%									
4206	4207	Landing/Turning Space	5.00	-0.07	-1.4%	0.1% to 2.0%	0.6%	0.1% to 2.0%									
4204	4211	Landing/Turning Space	15.00	-0.78	-5.2%	0.1% to 2.0%	-3.2%	0.1% to 6.2%	Yes								
4204	4211	Ramp Running Slope	15.00	-0.78	-5.2%	0.5% to 8.3%	3.1%	0.5% to 8.3%									
4206	4212	Ramp Running Slope	15.02	-0.66	-4.4%	0.5% to 8.3%	3.9%	0.5% to 8.3%									
4211	4212	Match Existing Cross Slope	4.00	0.17	4.2%	Match Existing	FALSE	Match Existing									
4301	4302	Ramp Running Slope	2.04	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%									
4301	4303	Crosswalk Cross Slope - Yield Condition	5.40	0.08	1.5%	0.0% to 2.0%	0.5%	0.0% to 2.0%									
4302	4304	Ramp Running Slope	17.30	0.76	4.4%	0.5% to 8.3%	3.9%	0.5% to 8.3%									
4303	4305	Ramp Running Slope	17.30	0.61	3.5%	0.5% to 8.3%	4.8%	0.5% to 8.3%									
4304	4305	Landing/Turning Space	5.00	-0.07	-1.4%	0.1% to 2.0%	0.6%	0.1% to 2.0%									
4304	4306	Landing/Turning Space	5.00	0.03	0.5%	0.1% to 2.0%	1.5%	0.1% to 2.0%									
4305	4307	Landing/Turning Space	5.00	0.02	0.4%	0.1% to 2.0%	1.6%	0.1% to 2.0%									
4306	4307	Landing/Turning Space	5.00	-0.08	-1.5%	0.1% to 2.0%	0.5%	0.1% to 2.0%									
4401	4402	Crosswalk Cross Slope - Yield Condition	5.70	0.04	0.7%	0.0% to 2.0%	1.3%	0.0% to 2.0%									
4401	4403	Ramp Running Slope	2.73	0.02	0.7%	0.5% to 8.3%	7.6%	0.5% to 8.3%									
4402	4404	Ramp Running Slope	16.00	0.12	0.7%	0.5% to 8.3%	7.6%	0.5% to 8.3%									
4403	4405	Ramp Running Slope	16.00	0.21	1.3%	0.5% to 8.3%	7.0%	0.5% to 8.3%									
4404	4405	Landing/Turning Space	5.00	0.07	1.4%	0.1% to 2.0%	0.6%	0.1% to 2.0%									
4404	4406	Landing/Turning Space	5.00	-0.05	-1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%									
4405	4407	Landing/Turning Space	5.00	-0.04	-0.8%	0.1% to 2.0%	1.2%	0.1% to 2.0%									
4406	4407	Landing/Turning Space	5.00	0.08	1.5%	0.1% to 2.0%	0.5%	0.1% to 2.0%									
5201	5202	Ramp Running Slope	1.74	-0.03	-1.5%	0.5% to 8.3%	6.8%	0.5% to 8.3%									
5202	5203	Ramp Cross Slope	5.00	0.00	-0.1%	0.1% to 2.0%	1.9%	0.1% to 2.0%									
5202	5204	Ramp Running Slope	10.86	-0.14	-1.3%	0.5% to 8.3%	7.0%	0.5% to 8.3%									
5203	5205	Ramp Running Slope	10.85	-0.13	-1.2%	0.5% to 8.3%	7.1%	0.5% to 8.3%									
5204	5205	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%									
5204	5206	Landing/Turning Space	5.00	-0.05	-1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%									
5205	5207	Landing/Turning Space	5.00	-0.05	-1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%									
5206	5207	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%									
5301	5302	Ramp Running Slope	2.93	0.00	0.0%	0.5% to 8.3%	8.3%	0.5% to 8.3%									
5301	5303	Crosswalk Cross Slope - Yield Condition	5.79	0.09	1.6%	0.0% to 2.0%	0.4%	0.0% to 2.0%									
5302	5304	Ramp Running Slope	10.89	0.63	5.8%	0.5% to 8.3%	2.5%	0.5% to 8.3%									
5303	5305	Ramp Running Slope	10.89	0.54	5.0%	0.5% to 8.3%	3.3%	0.5% to 8.3%									
5304	5305	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%									
5304	5306	Landing/Turning Space	5.00	0.07	1.4%	0.1% to 2.0%	0.6%	0.1% to 2.0%									
5305	5307	Landing/Turning Space	5.00	0.00	0.0%	0.1% to 2.0%	2.0%	0.1% to 2.0%									
5306	5307	Landing/Turning Space	5.00	-0.07	-1.4%	0.1% to 2.0%	0.6%	0.1% to 2.0%									
5304	5308	Ramp Running Slope	5.00	0.38	7.6%	0.5% to 8.3%	0.7%	0.5% to 8.3%	Yes	Yes							
5308	5310	Ramp Running Slope	10.00	0.76	7.6%	0.5% to 8.3%	0.7%	0.5% to 8.3%	Yes	Yes							
5306	5309	Ramp Running Slope	5.00	0.34	6.7%	0.5% to 8.3%	1.6%	0.5% to 8.3%									
5309	5311	Ramp Running Slope	10.07	0.82	8.1%	0.5% to 8.3%	0.2%	0.5% to 8.3%	Yes	Yes							
5310	5311	Match Existing Cross Slope	3.66	0.08	2.2%	Match Existing	FALSE	Match Existing									

STP-038-2(37)--2C-16

IA 38 / ASH ST – SOUTH OF UPRR (DIVISION 1)

Total Volume Table							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
0+13.00	80.95	0.00	0.00	0.00	0.00	0.00	0.00
0+20.00	153.62	0.00	30.41	0.00	30.41	0.00	30.41
0+25.00	163.60	0.00	29.37	0.00	59.78	0.00	59.78
0+30.00	139.55	0.00	28.07	0.00	87.85	0.00	87.85
0+35.00	118.28	0.00	23.87	0.00	111.72	0.00	111.72
0+40.00	104.53	0.00	20.63	0.00	132.35	0.00	132.35
0+50.00	73.31	0.00	32.93	0.00	165.29	0.00	165.29
0+75.00	50.35	0.00	57.25	0.00	222.53	0.00	222.53
0+95.00	37.90	0.00	32.68	0.00	255.22	0.00	255.22
1+00.25	38.89	1.10	7.47	0.14	262.69	0.14	262.55
1+25.00	44.39	0.00	38.17	0.66	300.85	0.79	300.06
1+50.00	48.09	0.00	42.81	0.00	343.67	0.79	342.87
1+75.00	51.02	0.65	45.88	0.39	389.55	1.19	388.36
2+00.00	49.50	2.61	46.54	1.97	436.09	3.15	432.94
2+25.00	41.62	4.38	42.18	4.21	478.27	7.36	470.91
2+50.00	41.64	1.51	38.54	3.54	516.82	10.90	505.92
2+75.00	34.68	7.48	35.33	5.41	552.15	16.32	535.83
3+00.00	36.65	2.59	33.02	6.06	585.17	22.37	562.80
3+25.00	35.15	4.78	33.24	4.44	618.41	26.81	591.60
3+50.00	41.42	0.00	35.45	2.88	653.87	29.69	624.18
3+75.00	41.78	1.76	38.52	1.06	692.39	30.75	661.64
4+00.00	43.24	3.85	39.36	3.37	731.75	34.12	697.63
4+25.00	42.33	2.50	39.61	3.82	771.36	37.94	733.42
4+50.00	46.41	4.02	41.08	3.92	812.44	41.86	770.58
4+75.00	45.33	5.53	42.47	5.75	854.91	47.61	807.30
5+00.00	57.42	0.00	47.57	3.33	902.48	50.94	851.54
5+25.00	50.17	0.48	49.81	0.29	952.28	51.23	901.06
5+50.00	59.07	0.00	50.57	0.29	1002.86	51.52	951.34
5+75.00	54.16	1.30	52.42	0.78	1055.28	52.30	1002.98
6+00.00	53.50	2.25	49.84	2.14	1105.13	54.43	1050.69
6+25.00	49.35	4.81	47.62	4.25	1152.74	58.68	1094.06
6+50.00	48.92	5.61	45.49	6.27	1198.24	64.95	1133.29
6+75.00	53.20	9.98	47.28	9.38	1245.52	74.33	1171.18
6+87.50	43.10	5.08	22.29	4.53	1267.81	78.87	1188.94
7+00.00	69.26	3.74	26.01	2.66	1293.82	81.52	1212.30
7+12.50	59.53	0.00	29.81	1.13	1323.63	82.65	1240.98
7+25.00	55.46	0.00	26.62	0.00	1350.25	82.65	1267.60
7+37.50	57.27	1.27	26.09	0.38	1376.35	83.03	1293.31
7+50.00	50.22	18.55	24.88	5.96	1401.23	88.99	1312.23
7+75.00	43.98	9.77	43.61	17.04	1444.84	106.03	1338.80

Total Volume Table							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
8+00.00	51.66	3.50	44.28	7.99	1489.12	114.02	1375.09
8+25.00	58.79	0.28	51.14	2.28	1540.25	116.30	1423.96
8+50.00	57.62	3.36	53.90	2.19	1594.15	118.48	1475.66
8+75.00	57.52	2.72	53.31	3.66	1647.45	122.14	1525.31
9+00.00	61.76	0.00	55.22	1.64	1702.68	123.78	1578.89
9+25.00	54.64	2.75	53.89	1.66	1756.57	125.44	1631.13
9+50.00	57.23	0.84	51.80	2.16	1808.36	127.60	1680.76
9+75.00	61.77	0.44	55.10	0.77	1863.46	128.38	1735.08
10+00.00	62.56	0.06	57.56	0.30	1921.02	128.68	1792.34
10+25.00	57.87	0.00	55.75	0.04	1976.77	128.71	1848.06
10+50.00	57.55	3.60	53.44	2.17	2030.21	130.88	1899.33
10+75.00	58.99	2.34	53.95	3.57	2084.16	134.45	1949.71
11+00.00	60.49	1.40	55.31	2.25	2139.47	136.70	2002.77
11+25.00	66.08	0.00	58.60	0.84	2198.07	137.55	2060.53
11+50.00	63.32	4.30	59.91	2.59	2257.98	140.13	2117.85
11+75.00	68.23	0.17	60.90	2.69	2318.89	142.82	2176.06
12+00.00	58.70	2.39	58.76	1.54	2377.65	144.37	2233.28
12+12.50	66.90	0.15	29.07	0.76	2406.72	145.13	2261.59
12+25.00	85.57	0.00	35.29	0.05	2442.02	145.18	2296.84
12+37.50	72.78	0.00	36.66	0.00	2478.67	145.18	2333.49
12+50.00	58.74	0.00	30.44	0.00	2509.11	145.18	2363.94
12+62.50	38.09	1.14	22.41	0.34	2531.53	145.52	2386.01
12+70.78	39.89	0.00	11.96	0.23	2543.49	145.75	2397.74

PRESTON ST – WEST OF IA 38 / ASH ST (DIVISION 4)

NOTE: CUT AND FILL QUANTITIES SHOWN INCLUDE THE DITCH RESHAPING (NORTH SIDE OF PRESTON ST) TO BE COMPLETED AS PART OF DIVISION 3 STORM SEWER

Total Volume Table							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
100+00.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00
100+25.00	5.46	1.57	2.78	0.95	2.78	0.95	1.83
100+47.00	5.09	1.33	4.29	1.53	7.07	2.48	4.59
100+52.63	15.83	1.20	2.18	0.34	9.26	2.82	6.43
100+75.00	13.51	1.01	12.16	1.19	21.41	4.01	17.40
101+00.00	16.02	1.60	13.67	1.57	35.08	5.58	29.50
101+25.00	19.90	1.39	16.63	1.80	51.71	7.38	44.33
101+40.61	26.13	0.43	13.30	0.68	65.01	8.06	56.95
101+50.00	3.92	2.51	5.23	0.69	70.24	8.75	61.49
101+54.46	20.33	6.30	2.00	0.96	72.24	9.71	62.53

Parcel Name: Ditch Reshaping - Preston West
Description: Division 3
Volume Surface: Cut-Fill
Fill correction: 1.30
Cut correction: 1.00
Elevation Tolerance: 0.05

Fill Volume	Cut Volume
3.98Cu.Yd	41.75Cu.Yd

PRESTON ST – EAST OF IA 38 / ASH ST (DIVISION 4)

NOTE: CUT AND FILL QUANTITIES SHOWN INCLUDE THE DITCH RESHAPING (NORTH & SOUTH SIDES OF PRESTON ST) TO BE COMPLETED AS PART OF DIVISION 3 STORM SEWER

Total Volume Table							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
102+26.63	24.67	11.82	0.00	0.00	0.00	0.00	0.00
102+36.00	15.48	5.62	6.96	3.93	6.96	3.93	3.03
102+50.00	14.16	0.14	7.68	1.94	14.65	5.88	8.77
102+75.00	7.85	0.63	10.19	0.47	24.83	6.34	18.49
102+79.59	13.40	0.65	1.81	0.14	26.64	6.49	20.15
102+85.07	5.06	1.78	1.87	0.32	28.51	6.81	21.71
103+00.00	5.40	0.48	2.89	0.81	31.41	7.62	23.79
103+25.00	6.97	0.76	5.73	0.75	37.14	8.37	28.77
103+35.00	4.38	3.99	2.10	1.15	39.24	9.51	29.73

Parcel Name: Ditch Reshaping - Preston East
Description: Division 3
Volume Surface: Cut-Fill
Fill correction: 1.30
Cut correction: 1.00
Elevation Tolerance: 0.05

Fill Volume	Cut Volume
5.53Cu.Yd	12.81Cu.Yd

C:\CIVIL 3D PROJECTS\14\183\DRAWINGS\CIVIL\14183_ZZ_T S.DWG 10/21/2015 5:00:22 PM TROY CHRISTIANSON

DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	T.1	135

STP-038-2(37)--2C-16

IA 38 / ASH ST – NORTH OF UPRR (DIVISION 1)

NOTE: CUT AND FILL QUANTITIES SHOWN INCLUDE THE DITCH RESHAPING (NORTH OF FARMERS STEET, WEST SIDE) TO BE COMPLETED AS PART OF DIVISION 3 STORM SEWER

Total Volume Table

Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
13+67.91	41.07	2.32	0.00	0.00	0.00	0.00	0.00
13+75.00	39.78	1.92	10.61	0.72	10.61	0.72	9.89
14+00.00	42.72	0.00	38.19	1.16	48.80	1.88	46.92
14+25.00	48.25	1.86	42.12	1.12	90.92	3.00	87.92
14+50.00	54.94	0.62	47.77	1.49	138.69	4.49	134.20
14+75.00	62.45	2.20	54.35	1.70	193.04	6.19	186.85
15+00.00	57.96	0.00	55.75	1.33	248.79	7.52	241.27
15+25.00	63.24	0.44	56.11	0.26	304.90	7.78	297.12
15+50.00	99.63	0.00	75.40	0.26	380.30	8.04	372.26
15+62.50	135.35	0.00	54.39	0.00	434.70	8.04	426.65
15+75.00	169.64	0.00	70.60	0.00	505.29	8.04	497.25
15+79.00	136.81	0.00	22.70	0.00	527.99	8.04	519.95
15+87.50	158.19	0.00	46.43	0.00	574.43	8.04	566.38
15+94.00	162.79	0.04	38.64	0.01	613.06	8.05	605.01
16+00.00	155.78	0.00	35.40	0.01	648.46	8.06	640.40
16+07.00	171.24	0.00	42.39	0.00	690.85	8.06	682.80
16+08.00	154.91	0.00	6.04	0.00	696.89	8.06	688.84
16+15.00	171.39	0.00	42.30	0.00	739.19	8.06	731.14
16+25.00	151.47	0.00	59.79	0.00	798.98	8.06	790.92
16+37.50	99.44	0.00	58.08	0.00	857.06	8.06	849.00
16+50.00	82.04	0.23	42.01	0.07	899.07	8.13	890.94
16+75.00	67.78	0.90	69.36	0.68	968.43	8.81	959.62
17+00.00	54.51	3.63	56.61	2.73	1025.04	11.54	1013.51
17+25.00	50.23	1.90	48.49	3.33	1073.53	14.87	1058.67
17+50.00	44.02	3.86	43.63	3.47	1117.17	18.34	1098.83
17+75.00	37.07	13.13	37.54	10.23	1154.71	28.56	1126.15
18+00.00	46.53	4.94	38.70	10.87	1193.41	39.43	1153.97
18+25.00	48.43	6.06	43.96	6.62	1237.37	46.06	1191.32
18+50.00	44.68	5.76	43.11	7.11	1280.48	53.17	1227.31
18+75.00	43.43	6.86	40.79	7.60	1321.27	60.76	1260.51
19+00.00	41.31	2.12	39.23	5.40	1360.50	66.17	1294.33
19+25.00	42.30	4.35	38.71	3.89	1399.21	70.06	1329.15
19+50.00	35.86	11.29	36.19	9.41	1435.40	79.47	1355.93
19+75.00	36.65	7.86	33.57	11.53	1468.97	91.00	1377.98
20+00.00	35.65	6.68	33.47	8.75	1502.45	99.75	1402.70
20+25.00	36.03	3.70	33.19	6.25	1535.64	106.00	1429.63
20+50.00	34.09	7.12	32.46	6.51	1568.10	112.51	1455.59
20+75.00	28.89	17.13	29.16	14.59	1597.25	127.11	1470.15
21+00.00	24.71	24.11	24.81	24.82	1622.07	151.93	1470.14
21+12.50	35.79	0.07	14.00	7.27	1636.07	159.20	1476.87
21+25.00	67.67	0.00	23.95	0.02	1660.02	159.22	1500.80
21+37.50	64.79	0.00	30.66	0.00	1690.68	159.22	1531.46
21+50.00	57.83	0.00	28.38	0.00	1719.06	159.22	1559.84
21+62.50	42.79	4.10	23.29	1.23	1742.35	160.45	1581.90
21+75.00	21.78	7.20	14.95	3.40	1757.30	163.85	1593.45
22+00.00	20.82	10.55	19.73	10.68	1777.02	174.53	1602.49
22+25.00	18.14	11.51	18.04	13.27	1795.06	187.81	1607.26
22+50.00	27.67	3.74	21.21	9.18	1816.27	196.98	1619.29
22+75.00	30.15	6.56	26.76	6.20	1843.03	203.18	1639.86
23+00.00	35.51	4.91	30.39	6.90	1873.43	210.08	1663.35

Total Volume Table

Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
23+25.00	39.43	2.40	34.69	4.40	1908.12	214.48	1693.64
23+50.00	41.47	1.97	37.45	2.63	1945.57	217.11	1728.46
23+67.00	48.03	0.10	28.18	0.85	1973.75	217.96	1755.78
23+75.00	51.73	0.00	14.78	0.02	1988.53	217.98	1770.55
24+00.00	43.47	1.34	44.03	0.81	2032.60	218.79	1813.82
24+25.00	45.72	2.85	41.29	2.52	2073.89	221.31	1852.59
24+50.00	48.45	2.35	43.60	3.13	2117.49	224.43	1893.05
24+75.00	58.76	0.76	49.63	1.87	2167.12	226.31	1940.81
25+00.00	65.97	0.53	57.74	0.78	2224.86	227.08	1997.78
25+25.00	73.09	0.52	64.33	0.64	2289.24	227.72	2061.52
25+32.00	75.27	0.48	19.23	0.17	2308.47	227.89	2080.58
25+37.50	74.31	0.44	15.24	0.12	2323.71	228.01	2095.70
25+50.00	76.81	0.20	34.93	0.19	2358.69	228.21	2130.48
25+58.00	80.24	0.19	23.27	0.07	2381.96	228.28	2153.68
25+70.00	60.68	0.81	31.32	0.29	2413.27	228.57	2184.70
25+75.00	48.65	0.00	10.12	0.10	2423.40	228.67	2194.73
25+85.00	51.75	1.02	18.59	0.25	2441.99	228.91	2213.07
25+92.00	62.04	0.70	14.75	0.29	2456.74	229.20	2227.54
26+00.00	52.81	0.82	17.01	0.29	2473.75	229.50	2244.26
26+25.00	32.84	0.88	39.65	1.03	2513.41	230.52	2282.88
26+37.50	64.13	0.00	22.45	0.27	2535.85	230.79	2305.07
26+50.00	24.35	0.00	20.48	0.00	2556.33	230.79	2325.55
26+62.50	33.31	0.46	13.35	0.14	2569.68	230.92	2338.76
26+75.00	21.54	4.10	12.70	1.37	2582.38	232.30	2350.08
26+85.00	3.04	23.27	4.55	6.59	2586.93	238.89	2348.04
26+90.00	1.95	29.98	0.46	6.41	2587.39	245.30	2342.09
26+92.73	3.40	28.52	0.27	3.85	2587.66	249.14	2338.52
27+00.00	3.23	30.29	0.89	10.29	2588.56	259.43	2329.12
27+11.00	3.92	36.51	1.46	17.69	2590.01	277.12	2312.89
27+21.00	21.81	21.15	4.76	13.88	2594.78	291.00	2303.77
27+25.00	20.43	20.38	3.13	4.00	2597.90	295.00	2302.90
27+50.00	18.18	15.17	17.87	21.40	2615.78	316.40	2299.38
27+75.00	12.30	16.37	14.11	18.98	2629.89	335.38	2294.51
28+00.00	18.91	8.37	14.45	14.88	2644.34	350.26	2294.08
28+25.00	19.50	2.20	17.79	6.36	2662.13	356.62	2305.51
28+50.00	24.16	6.24	20.22	5.08	2682.34	361.70	2320.64
28+75.00	30.68	2.01	25.39	4.97	2707.73	366.67	2341.07
29+00.00	36.73	1.03	31.21	1.83	2738.94	368.50	2370.45
29+25.00	46.66	0.01	38.61	0.62	2777.55	369.12	2408.43
29+50.00	53.10	0.84	46.19	0.51	2823.74	369.63	2454.11
29+75.00	48.06	0.00	46.83	0.51	2870.57	370.13	2500.44
30+00.00	43.31	0.00	42.30	0.00	2912.87	370.13	2542.74
30+25.00	36.13	0.06	36.78	0.04	2949.65	370.17	2579.48
30+50.00	34.47	0.48	32.63	0.33	2982.33	370.50	2611.84
30+75.00	33.04	0.29	31.25	0.47	3013.58	370.96	2642.62
31+00.00	34.16	0.70	31.11	0.60	3044.69	371.56	2673.13
31+25.00	35.66	1.24	32.33	1.17	3077.02	372.73	2704.29
31+50.00	34.85	1.57	32.65	1.69	3109.67	374.42	2735.24
31+75.00	40.91	0.77	35.07	1.41	3144.74	375.84	2768.90
32+00.00	35.18	1.13	35.23	1.15	3179.97	376.98	2802.99

Total Volume Table

Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
32+25.00	28.42	1.45	29.45	1.56	3209.41	378.54	2830.88
32+50.00	27.81	2.95	26.03	2.65	3235.44	381.19	2854.26
32+75.00	28.48	0.81	26.06	2.26	3261.50	383.45	2878.05
33+00.00	29.64	2.28	26.91	1.86	3288.41	385.31	2903.09
33+25.00	27.39	0.87	26.40	1.90	3314.81	387.21	2927.60
33+50.00	28.99	0.60	26.10	0.88	3340.91	388.09	2952.82
33+75.00	30.45	0.45	27.51	0.63	3368.42	388.72	2979.70
34+00.00	26.96	5.91	26.57	3.83	3395.00	392.55	3002.45
34+25.00	34.37	0.31	28.39	3.75	3423.39	396.30	3027.10
34+50.00	36.77	1.09	32.94	0.85	3456.33	397.14	3059.19
34+75.00	34.42	0.54	32.96	0.98	3489.29	398.12	3091.16
35+00.00	34.98	0.87	32.13	0.85	3521.42	398.97	3122.45
35+25.00	34.01	0.78	31.94	1.00	3553.36	399.97	3153.39
35+50.00	33.64	0.88	31.32	1.00	3584.69	400.96	3183.72
35+75.00	33.88	0.92	31.26	1.08	3615.95	402.04	3213.90
36+00.00	33.86	1.04	31.36	1.18	3647.31	403.23	3244.09
36+25.00	33.69	1.36	31.28	1.45	3678.59	404.67	3273.92
36+50.00	31.48	4.58	30.17	3.57	3708.76	408.25	3300.51
36+75.00	33.10	3.34	29.90	4.77	3738.66	413.01	3325.65
37+00.00	38.10	0.74	32.96	2.46	3771.62	415.47	3356.15
37+25.00	39.16	0.51	35.77	0.76	3807.39	416.23	3391.16
37+50.00	40.23	0.35	36.75	0.52	3844.14	416.75	3427.39
37+75.00	40.32	0.65	37.29	0.60	3881.44	417.35	3464.09
38+00.00	39.11	0.68	36.77	0.80	3918.21	418.15	3500.06
38+25.00	36.41	2.42	34.96	1.86	3953.17	420.01	3533.16
38+50.00	36.24	1.97	33.63	2.64	3986.80	422.65	3564.15
38+75.00	37.54	0.36	34.16	1.40	4020.96	424.05	3596.91
39+00.00	38.36	0.36	35.14	0.44	4056.10	424.49	3631.61
39+25.00	36.18	1.29	34.51	1.00	4090.61	425.48	3665.12
39+50.00	36.41	0.67	33.60	1.18	4124.21	426.66	3697.55
39+75.00	38.28	0.30	34.58	0.59	4158.79	427.25	3731.54
39+78.00	38.76	0.42	4.28	0.05	4163.07	427.30	3735.77

Parcel Name: Ditch Reshaping - Farmers North
Description: Division 3
Volume Surface: Cut-Fill
Fill correction: 1.30
Cut correction: 1.00
Elevation Tolerance: 0.05

Fill Volume	Cut Volume
9.31Cu.Yd	36.14Cu.Yd

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	T.2	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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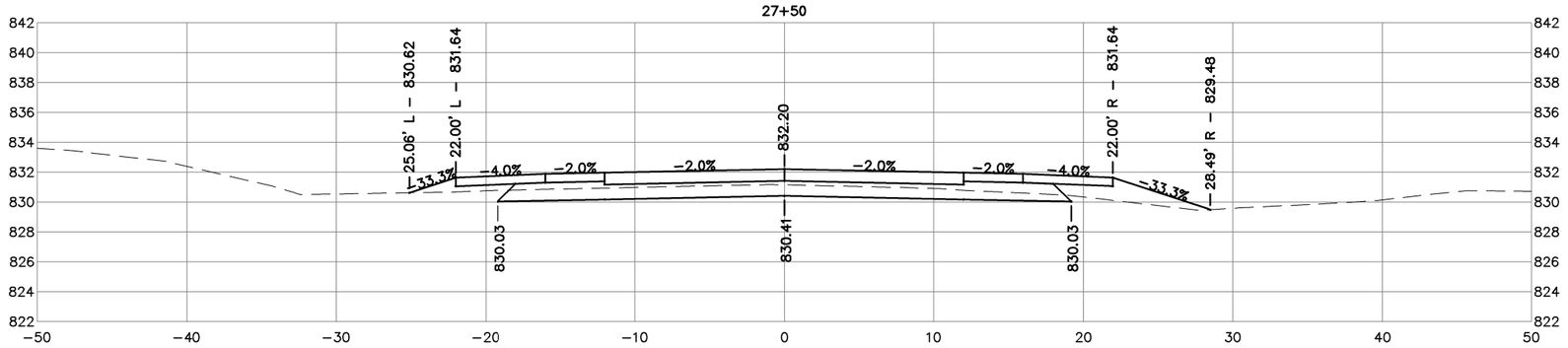
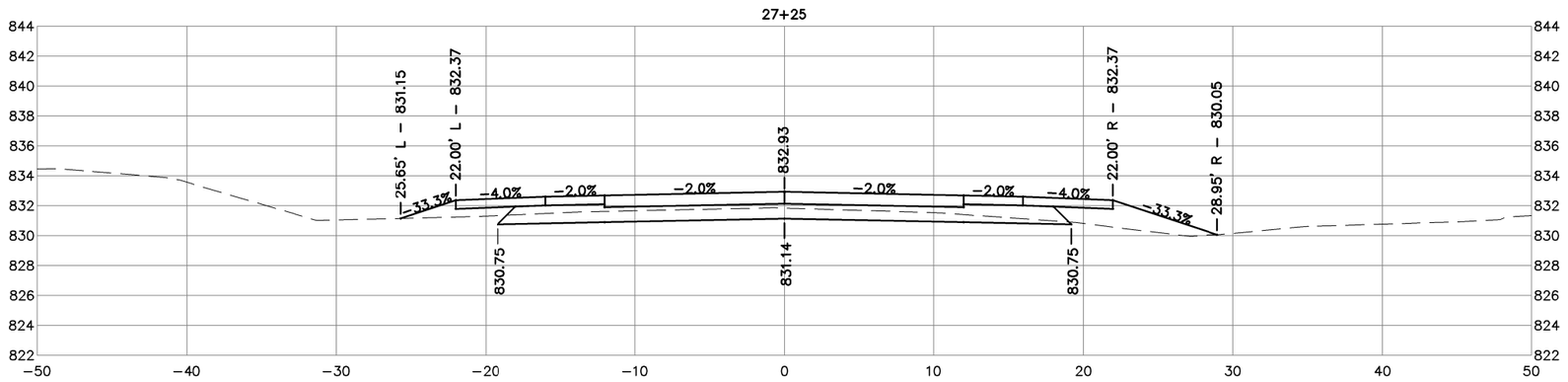
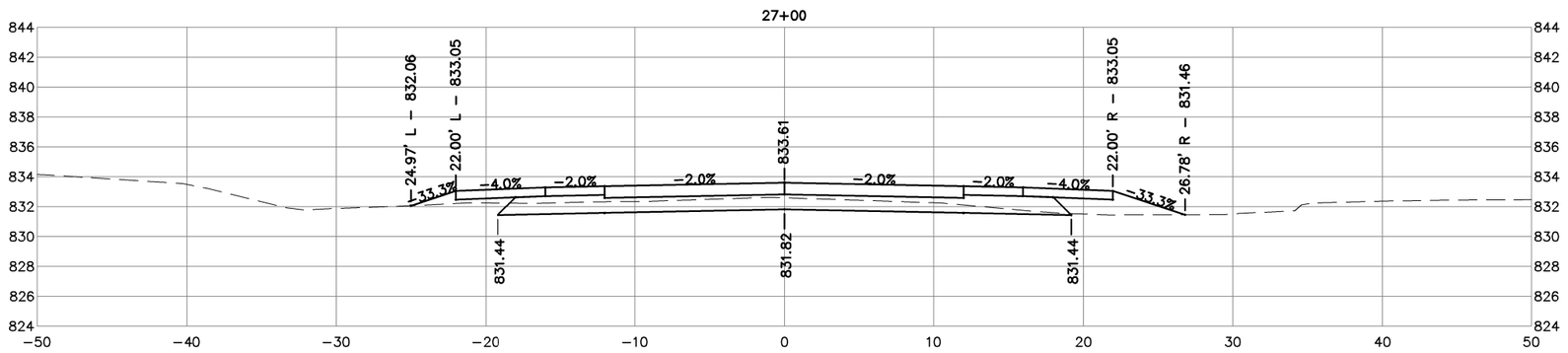
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED







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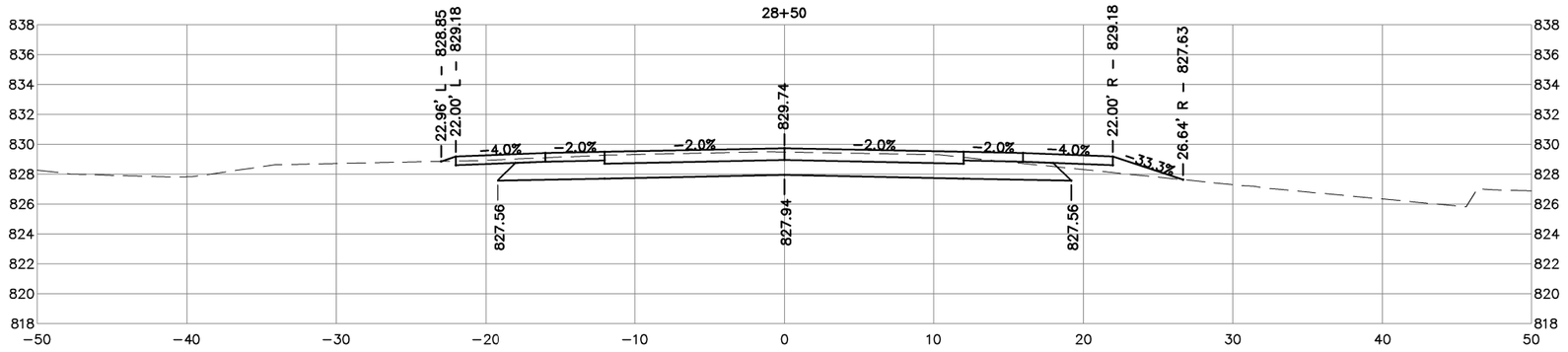
CITY OF STANWOOD, CEDAR COUNTY

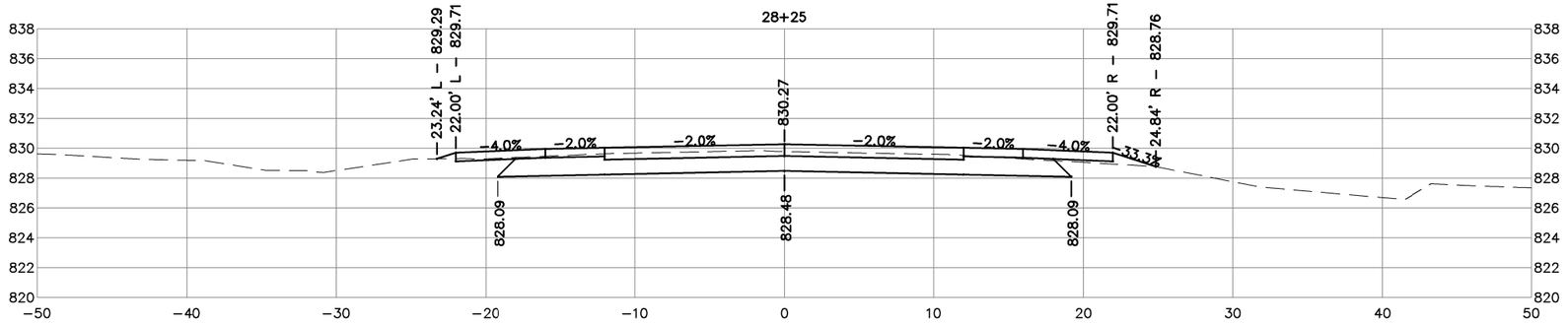
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.31	135

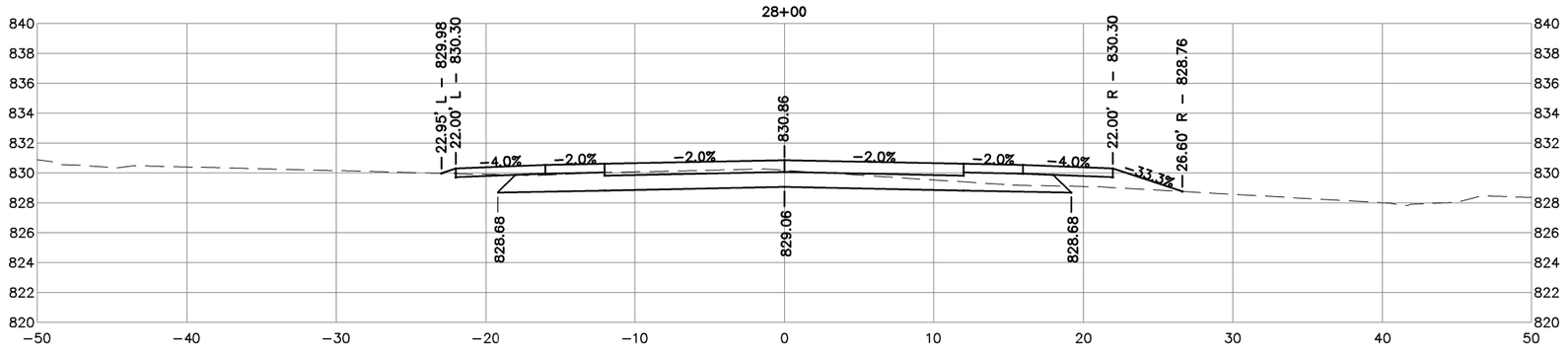
STP-038-2(37)--2C-16

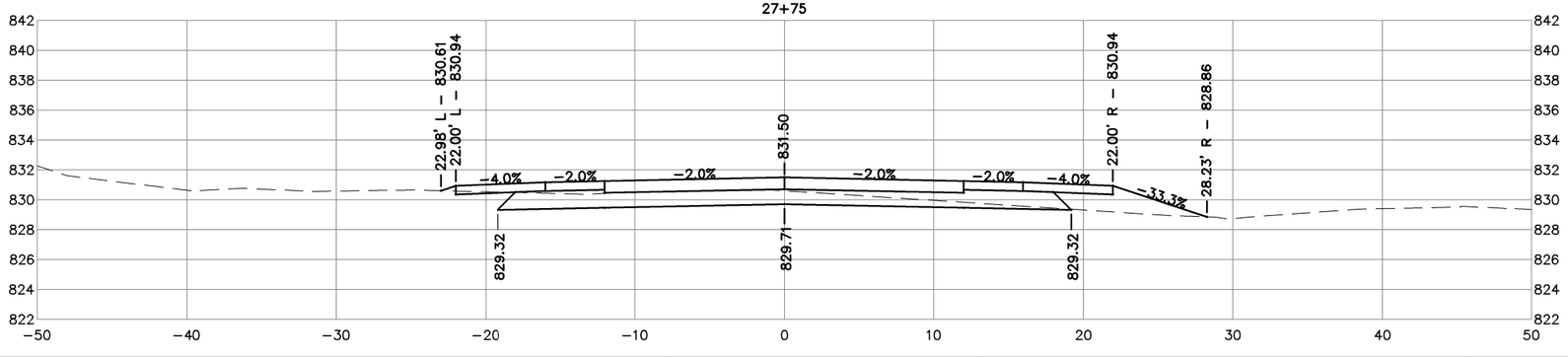
HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED









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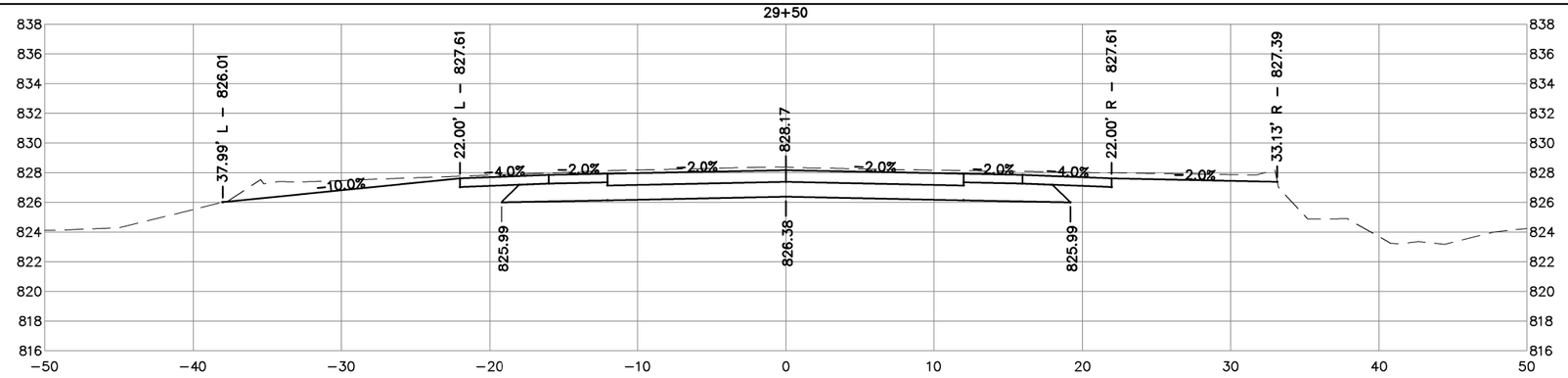
CITY OF STANWOOD, CEDAR COUNTY

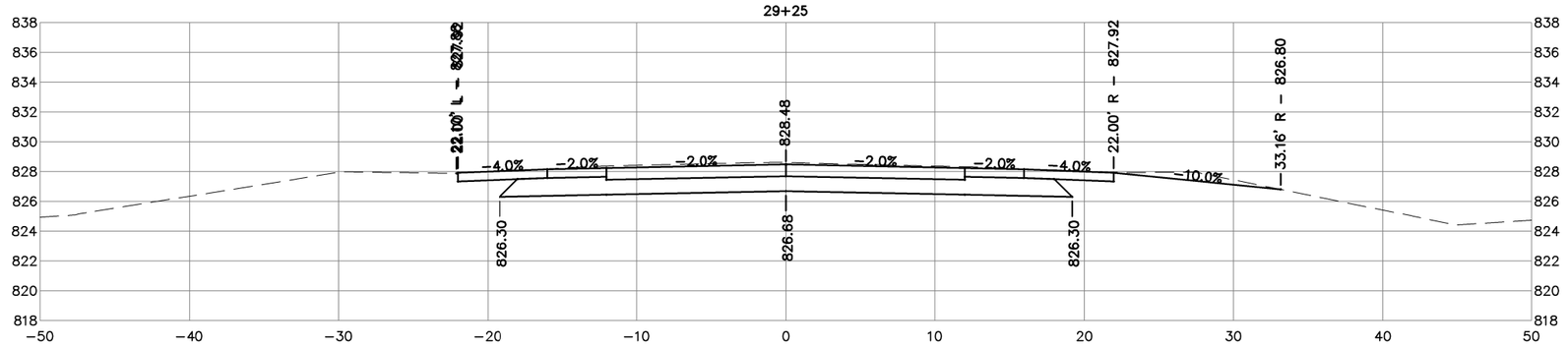
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.32	135

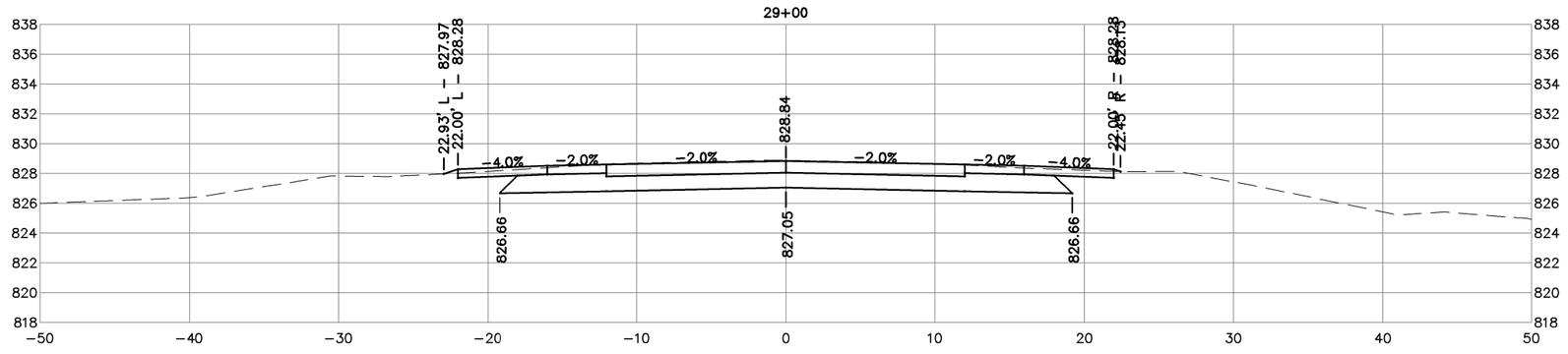
STP-038-2(37)--2C-16

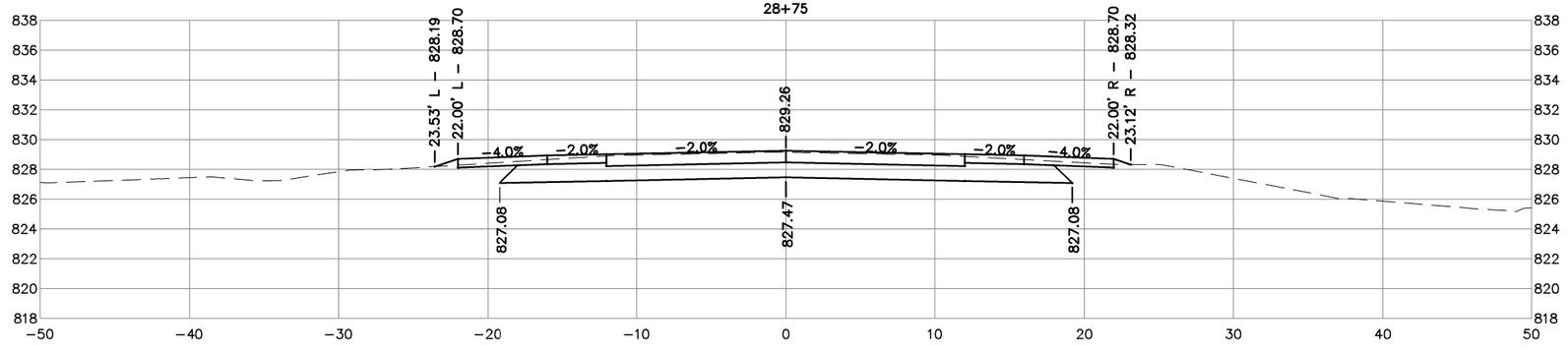
HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED









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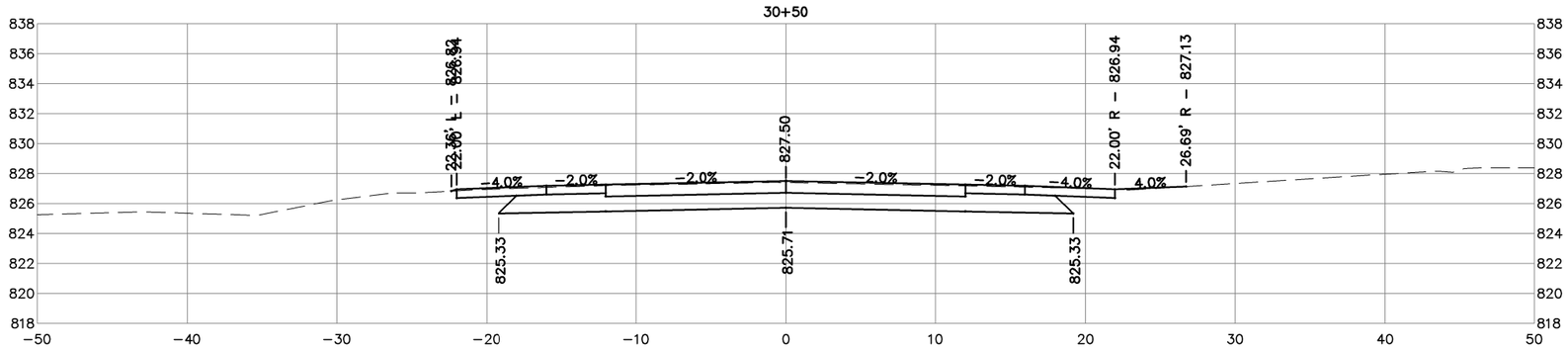
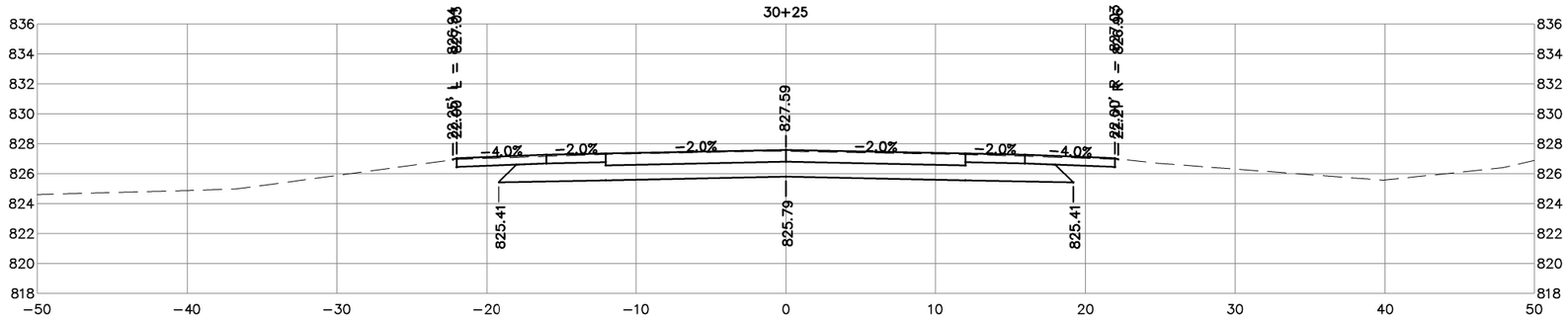
CITY OF STANWOOD, CEDAR COUNTY

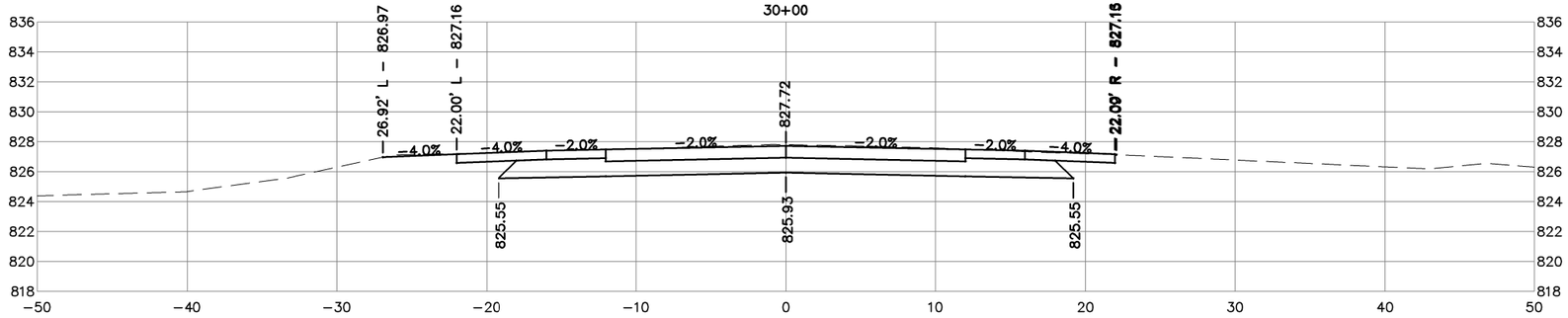
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.33	135

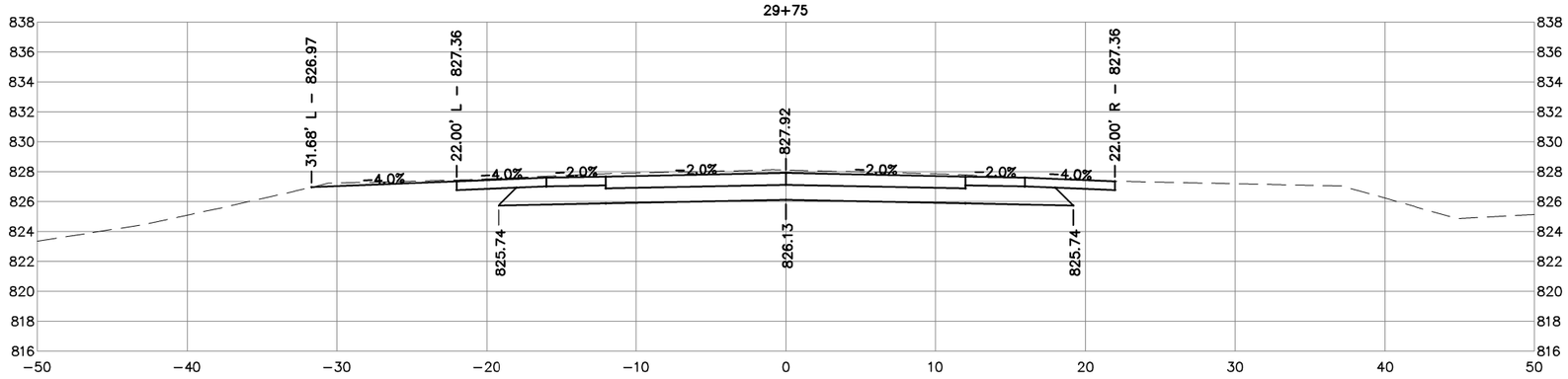
HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 0 5 10
DRAWING MAY HAVE BEEN REDUCED









STP-038-2(37)--2C-16

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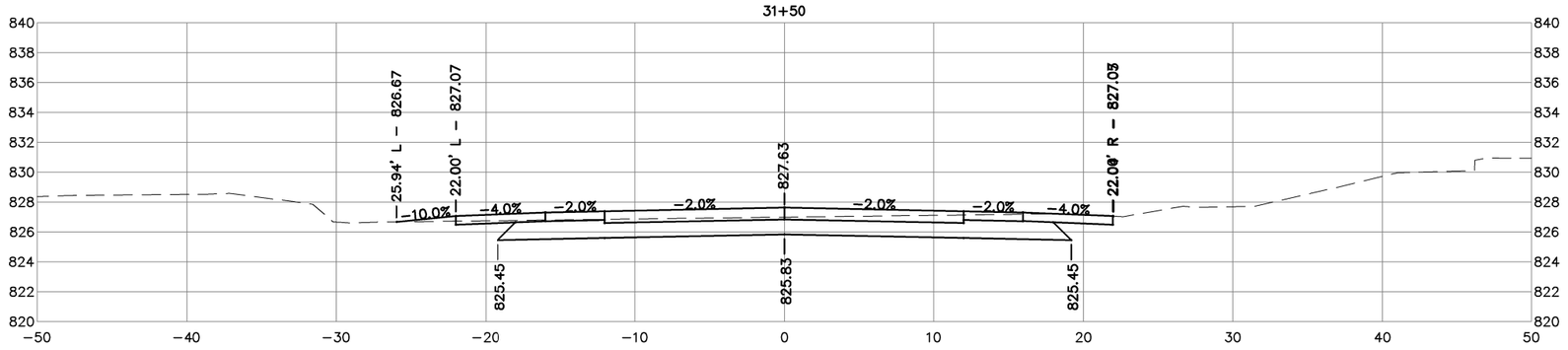
CITY OF STANWOOD, CEDAR COUNTY

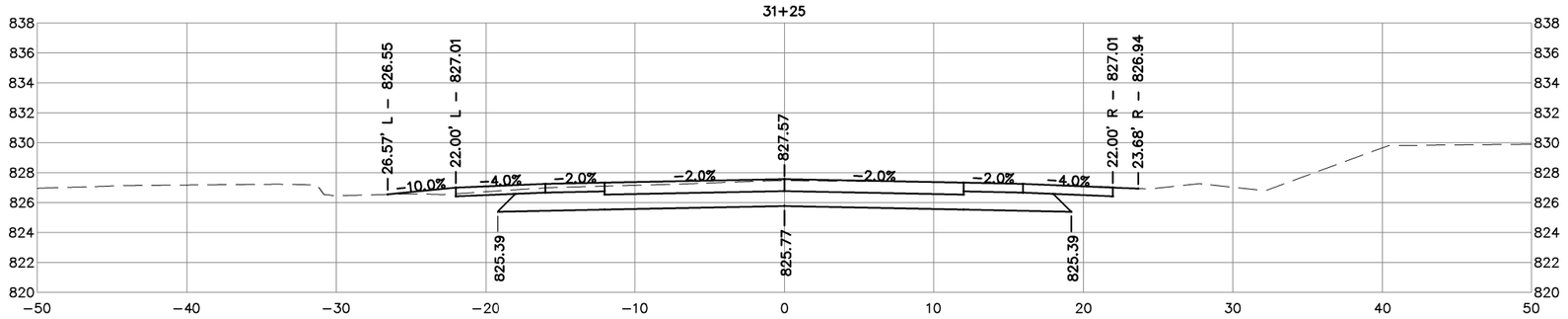
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.34	135

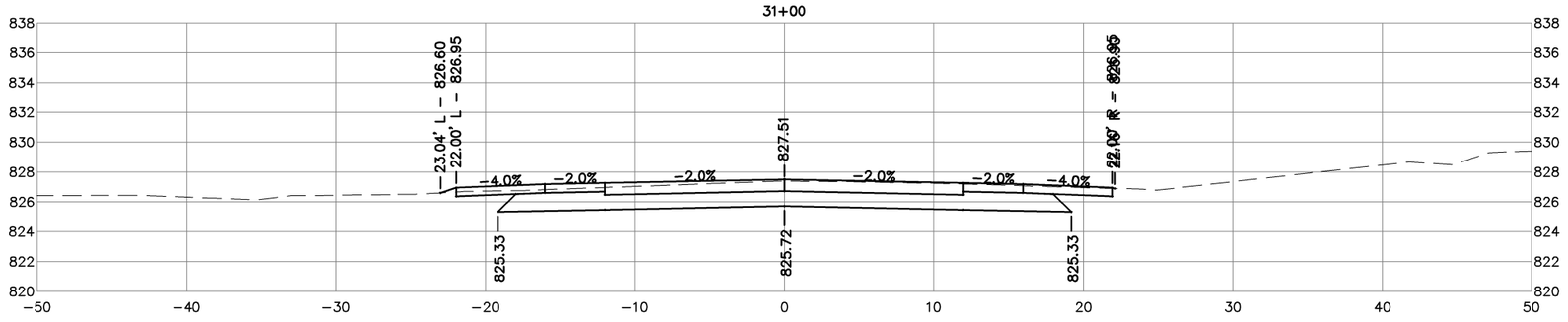
STP-038-2(37)--2C-16

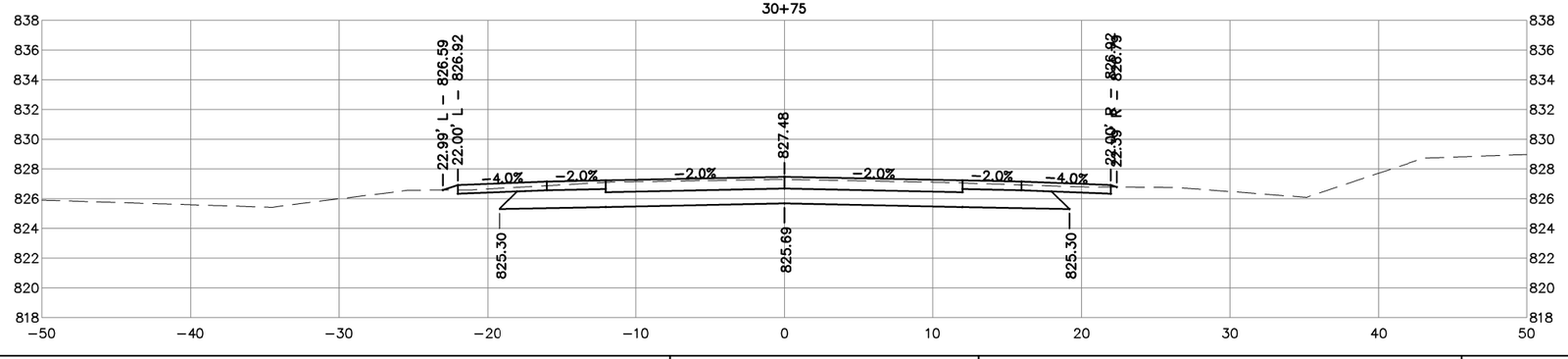
HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED









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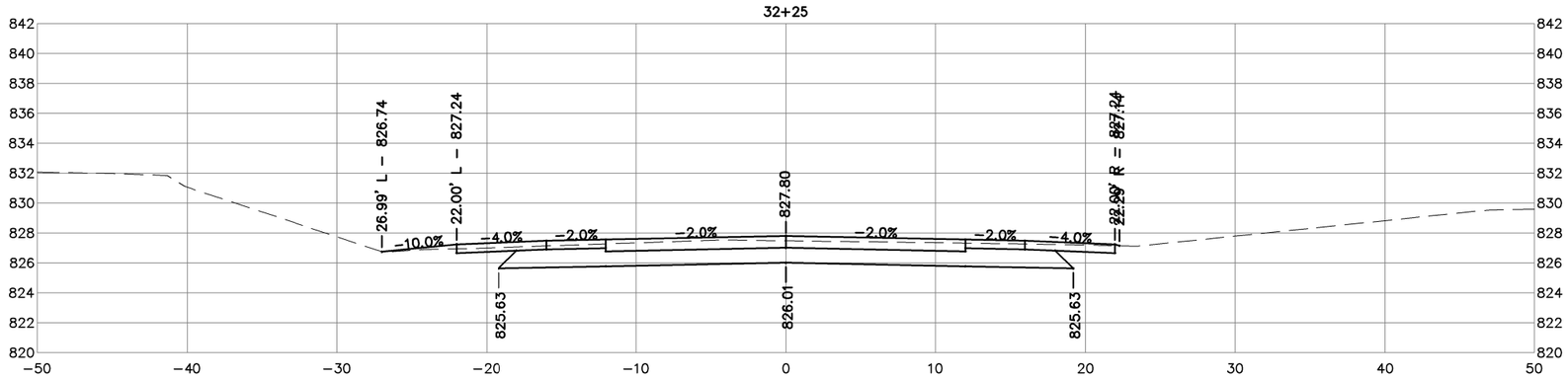
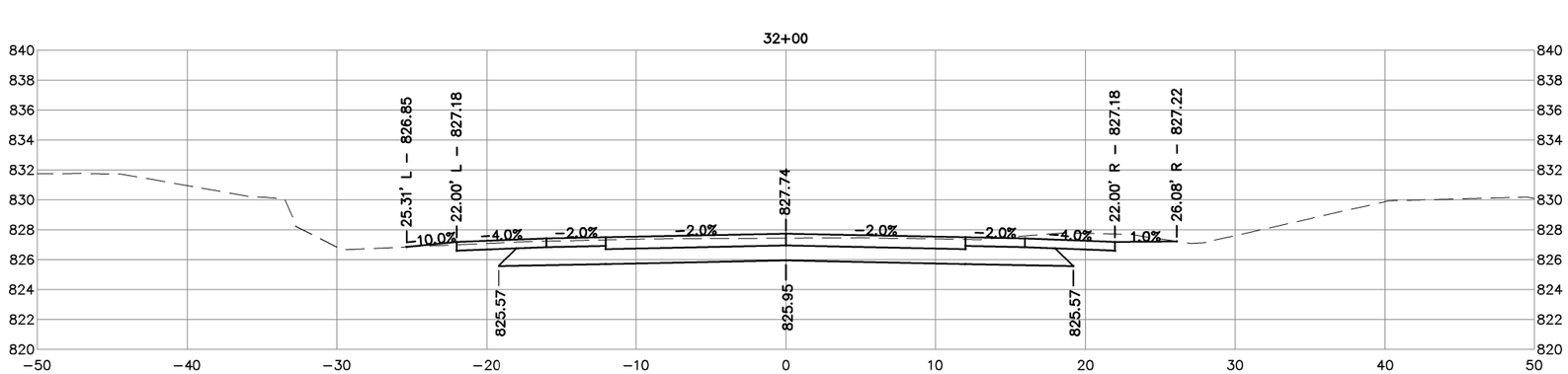
CITY OF STANWOOD, CEDAR COUNTY

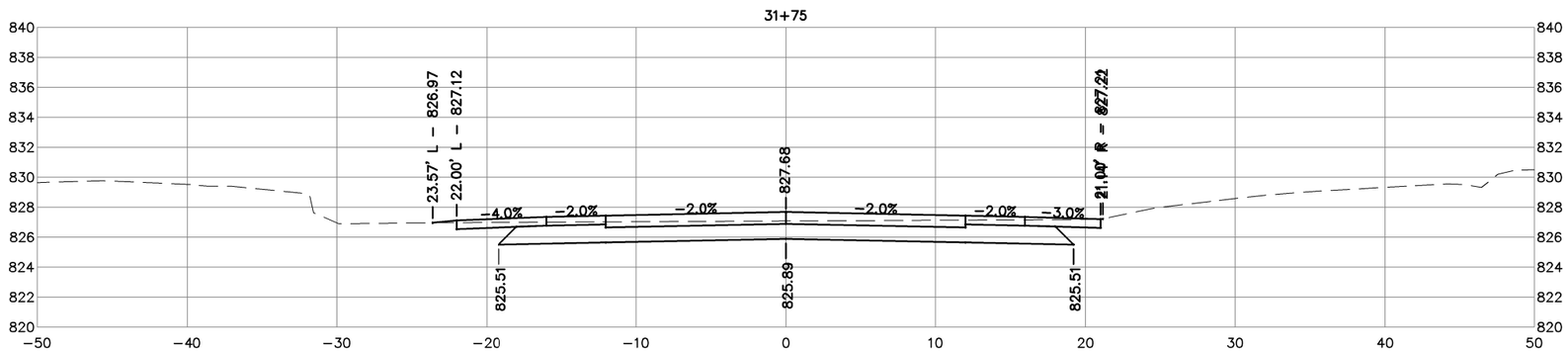
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.35	135

HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 0 5 10
DRAWING MAY HAVE BEEN REDUCED







DESIGNED BY:	TRACED BY:	iiw	563.556.2464 ◆ 800.556.4491	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:		IIW, P.C. ◆ www.iiwengr.com				IOWA		2016	W.36	135

STP-038-2(37)--2C-16

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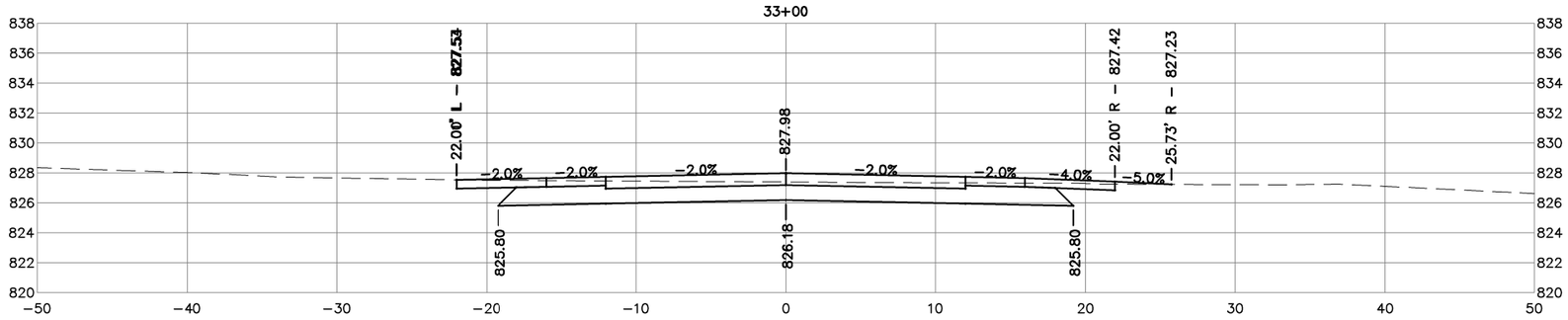
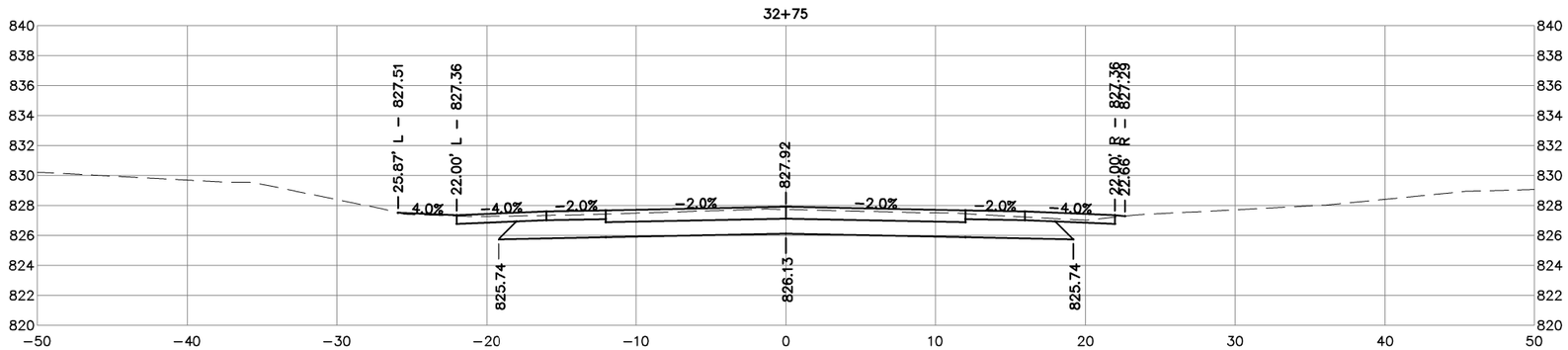
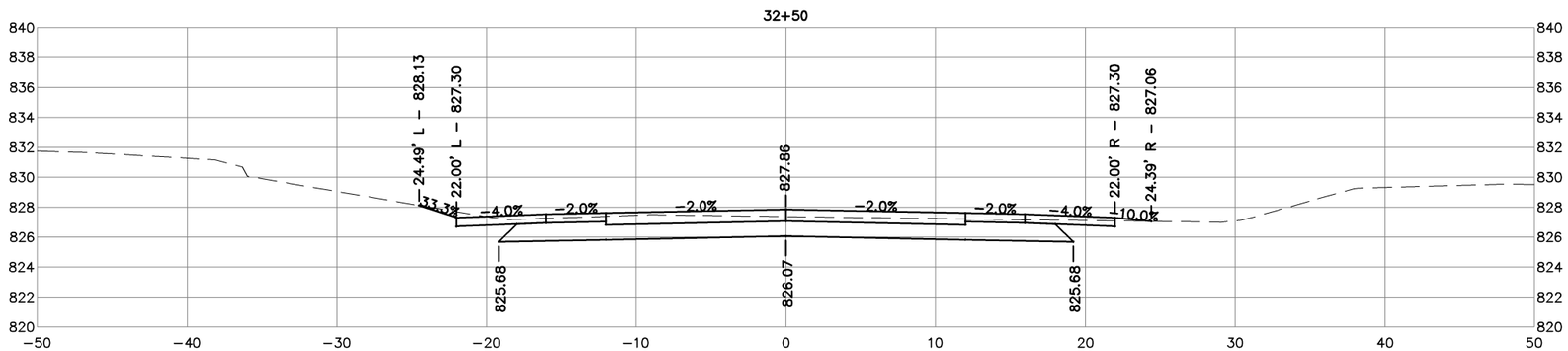
STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED







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DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		IOWA		2016	W.37	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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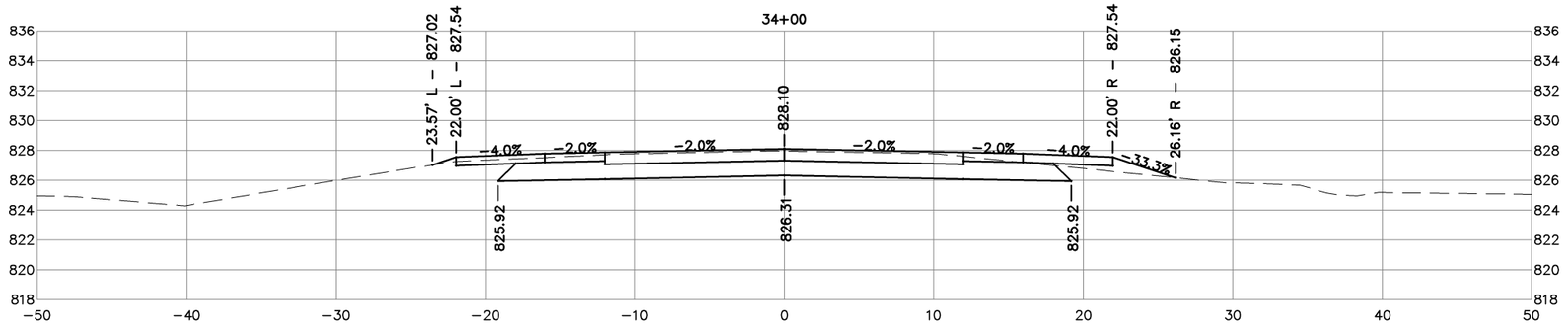
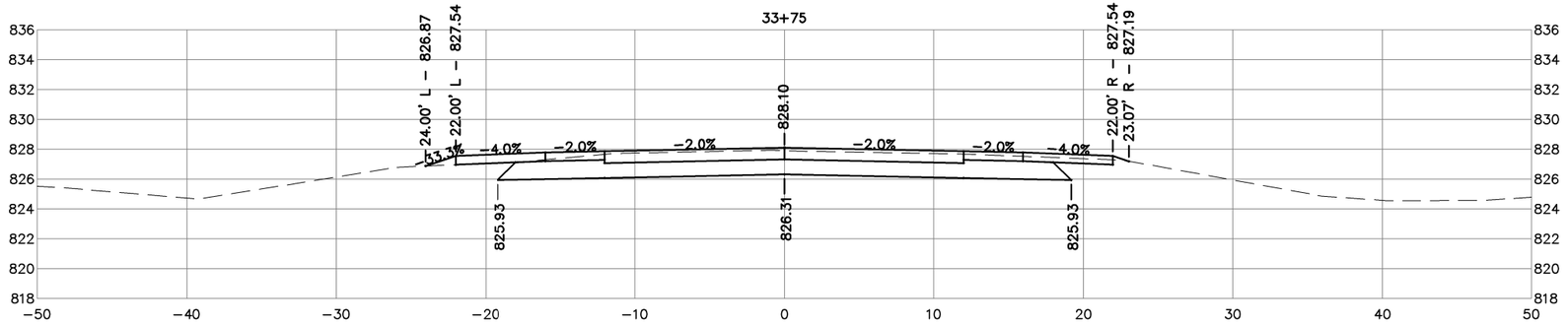
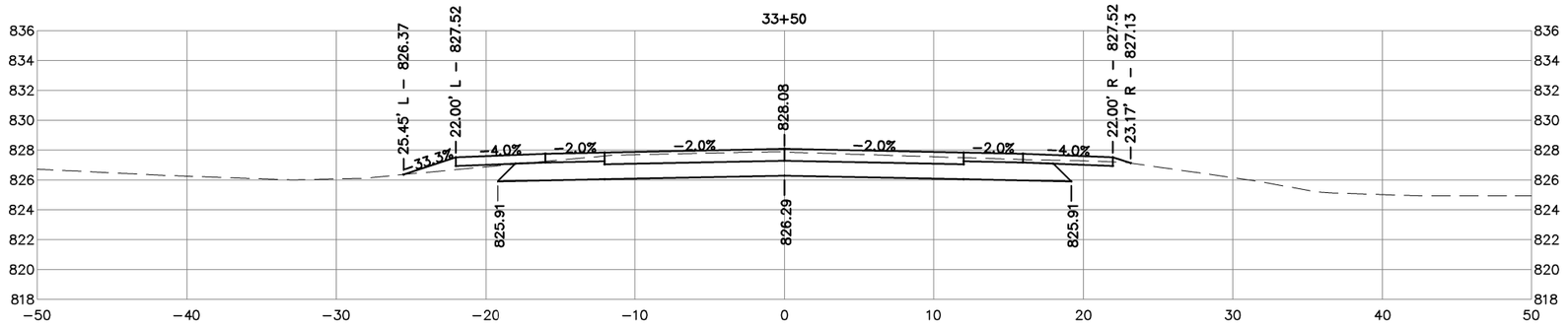
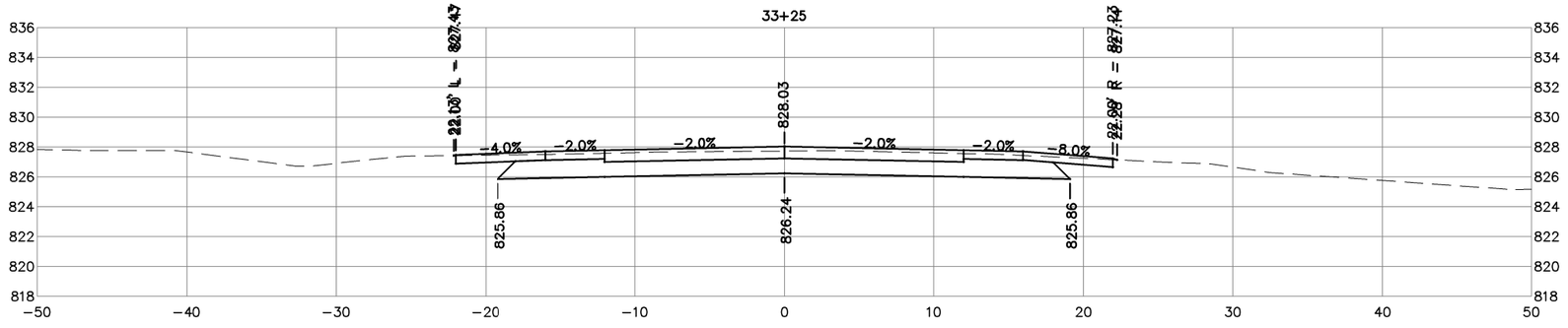
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED









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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.38	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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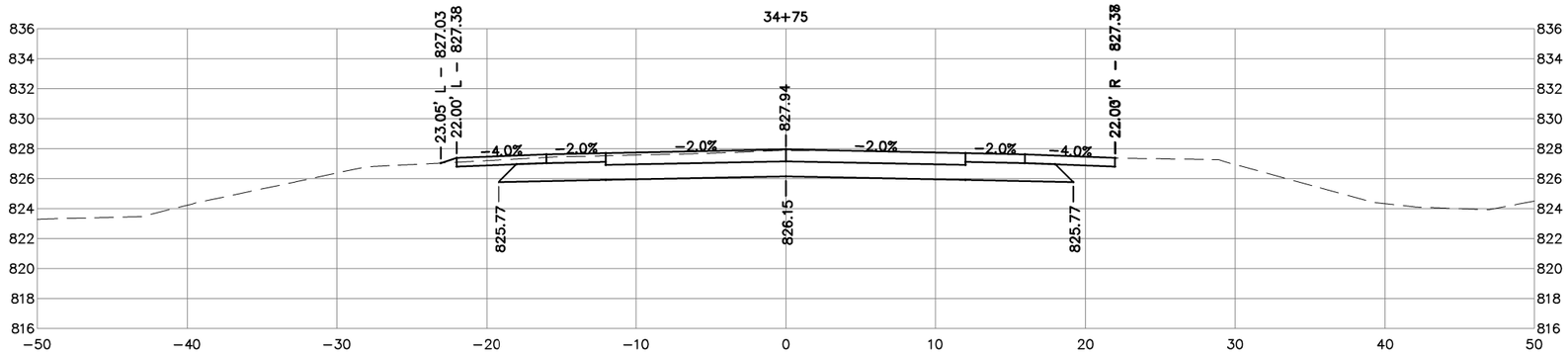
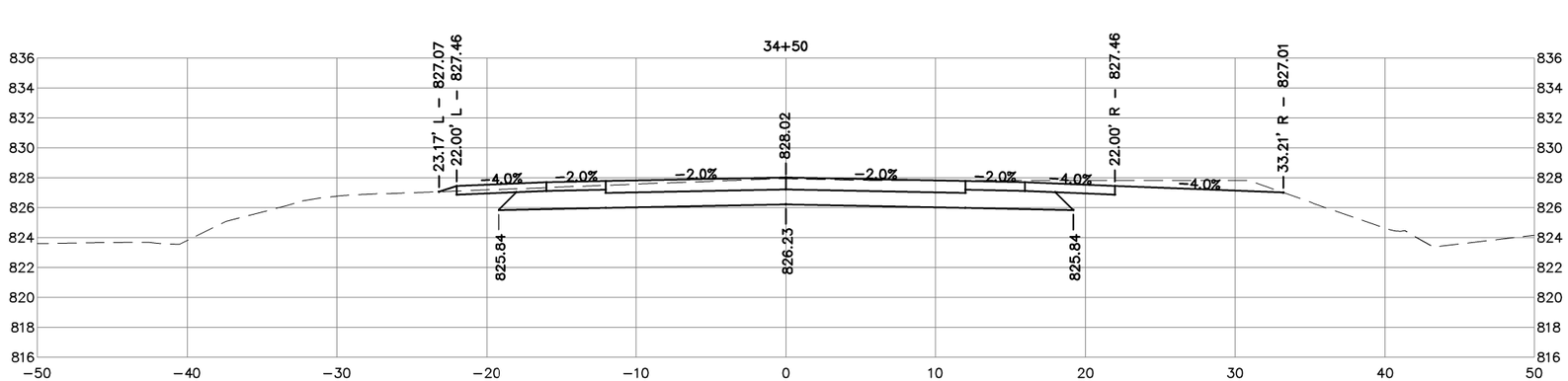
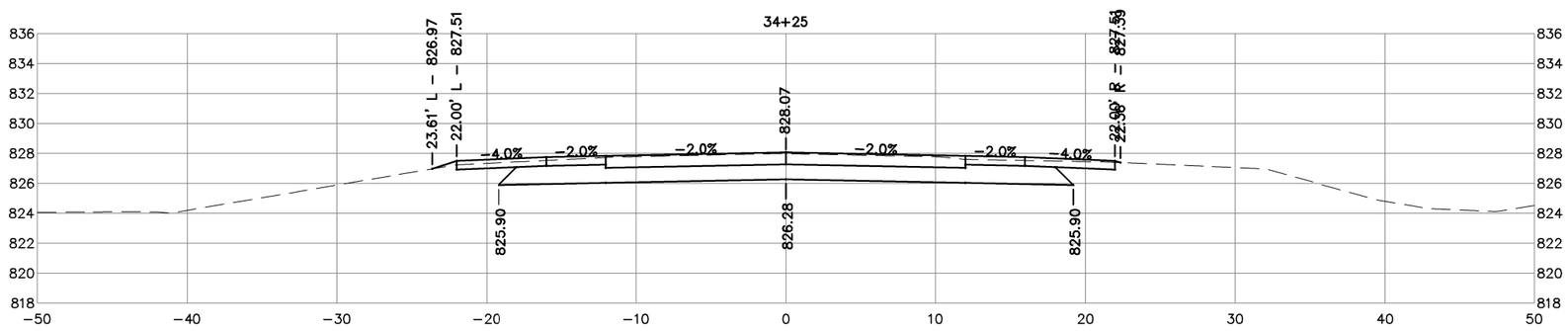
DRAWING MAY HAVE BEEN REDUCED







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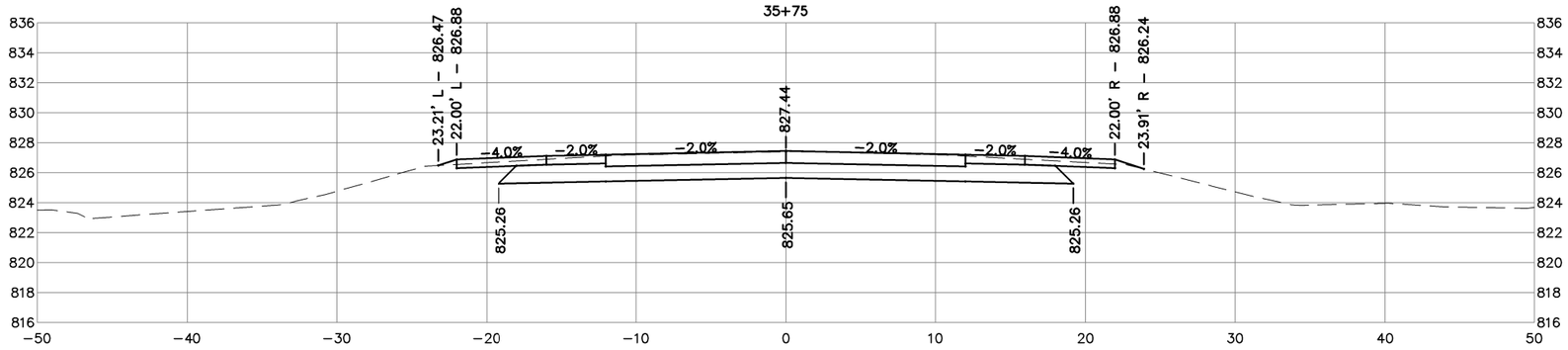
CITY OF STANWOOD, CEDAR COUNTY

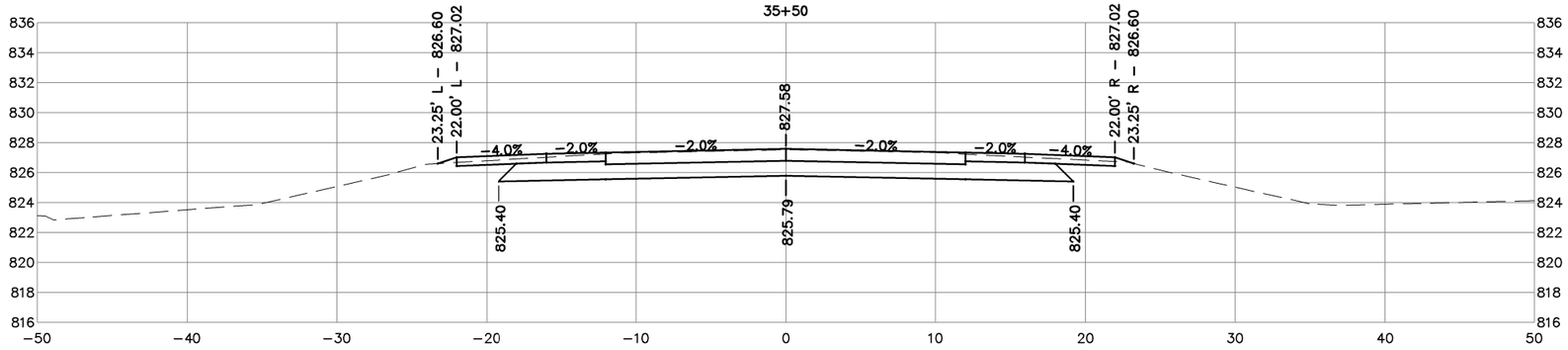
PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		IOWA		2016	W.39	135

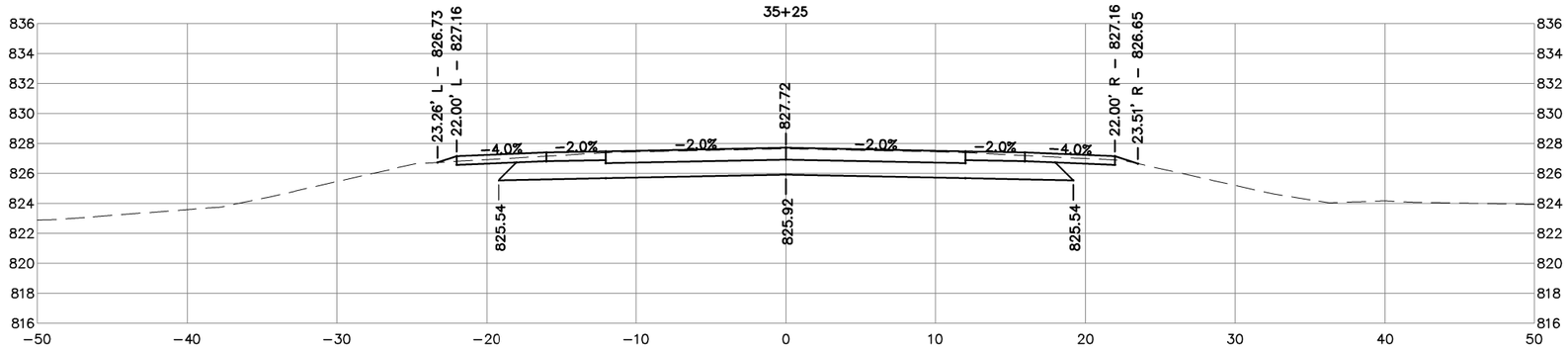
STP-038-2(37)--2C-16

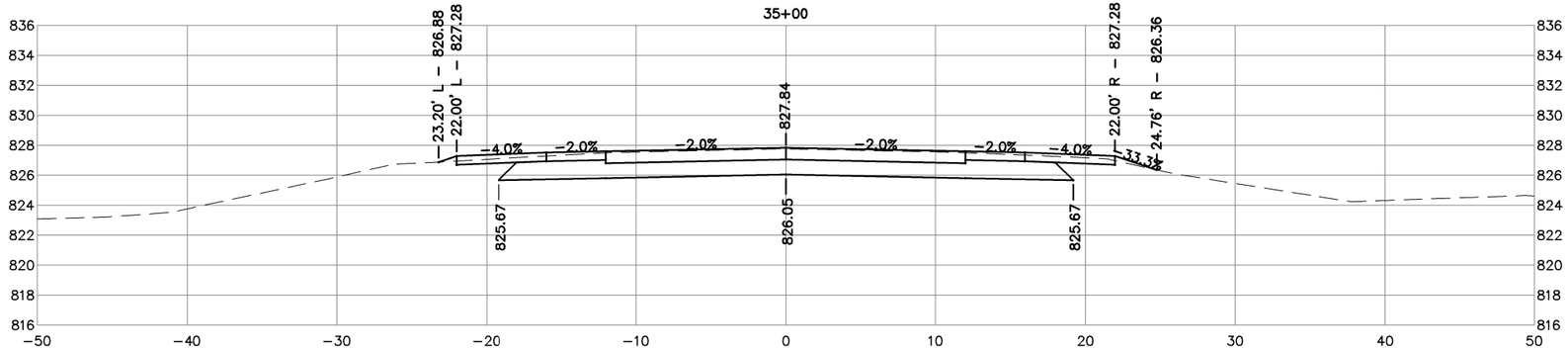
HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED









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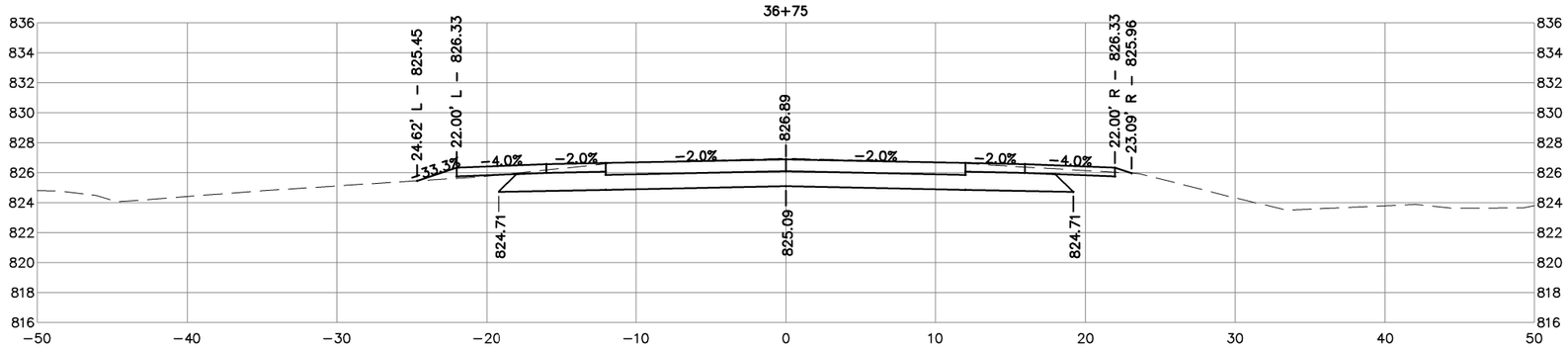
CITY OF STANWOOD, CEDAR COUNTY

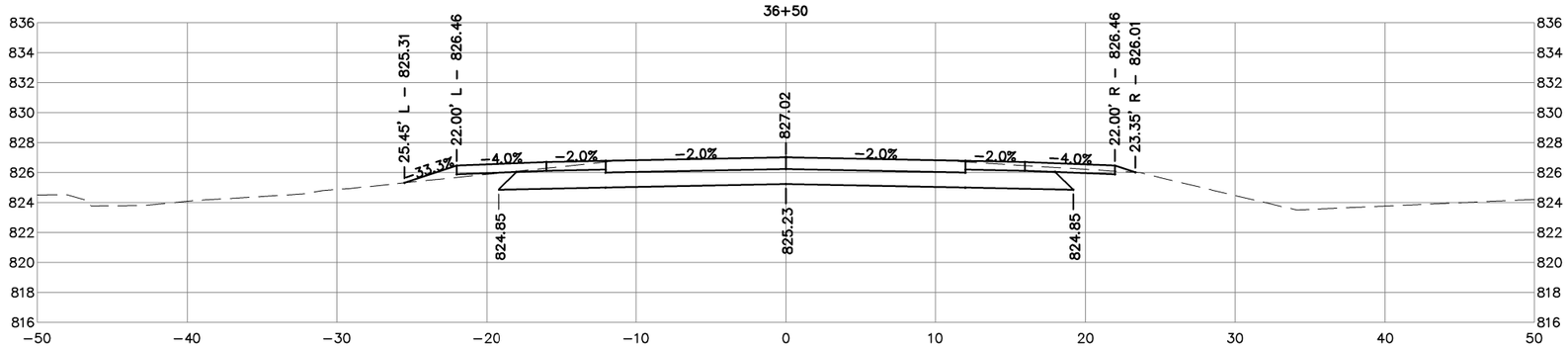
PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.40	135

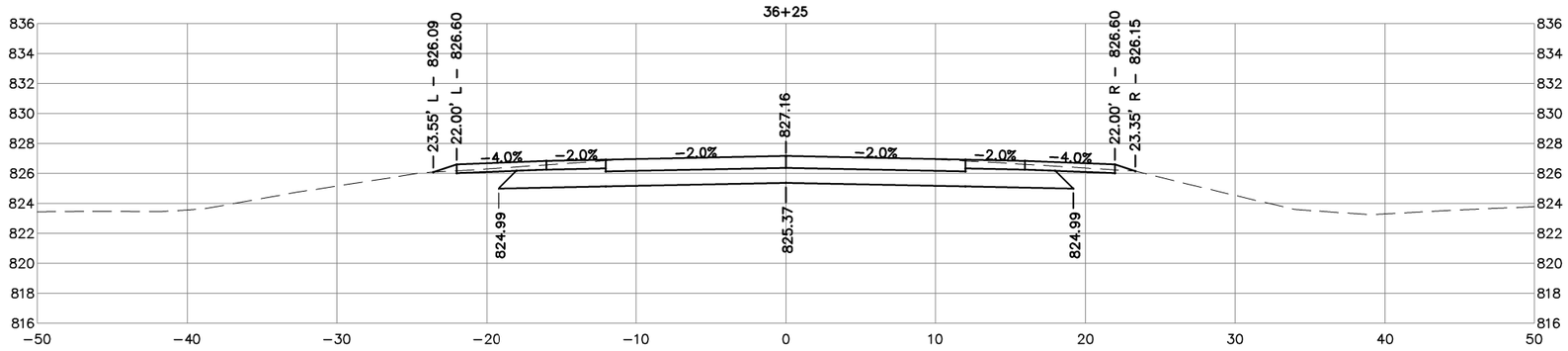
STP-038-2(37)--2C-16

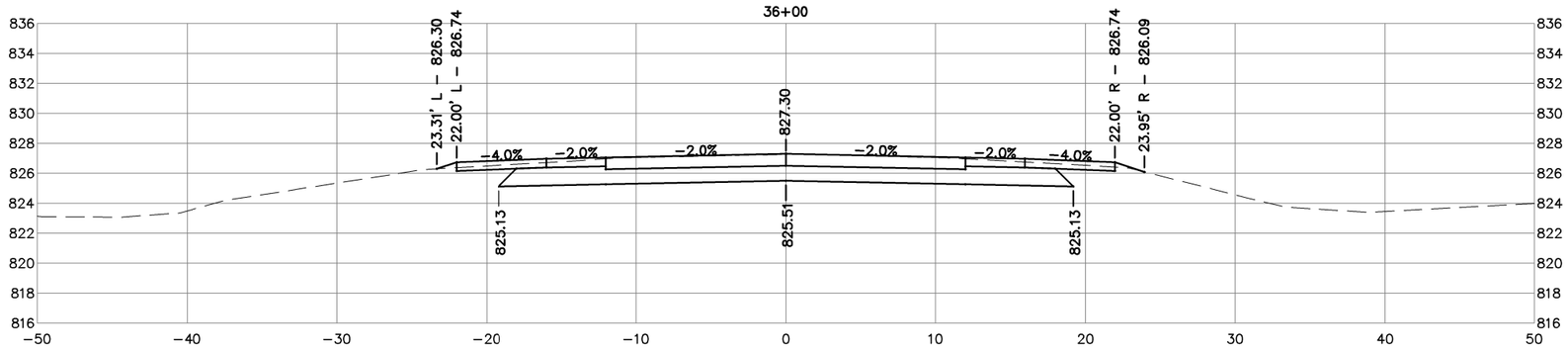
HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED









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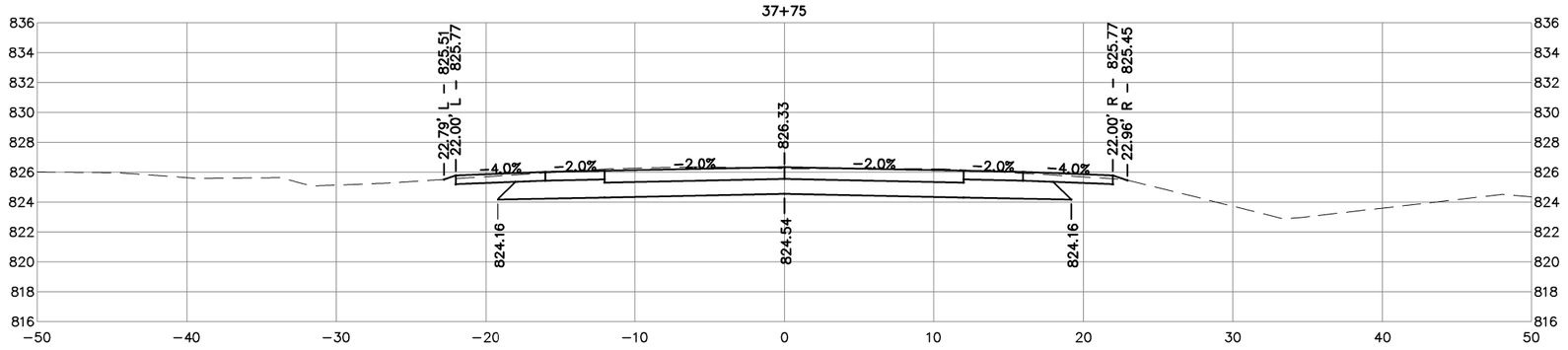
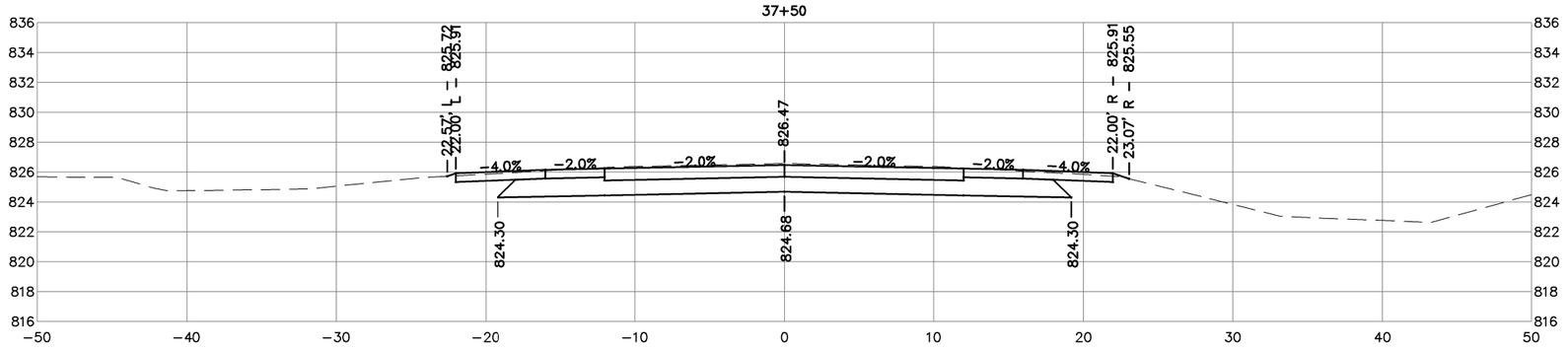
DETAILED BY:	CHECKED BY:					IOWA		2016	W.41	135

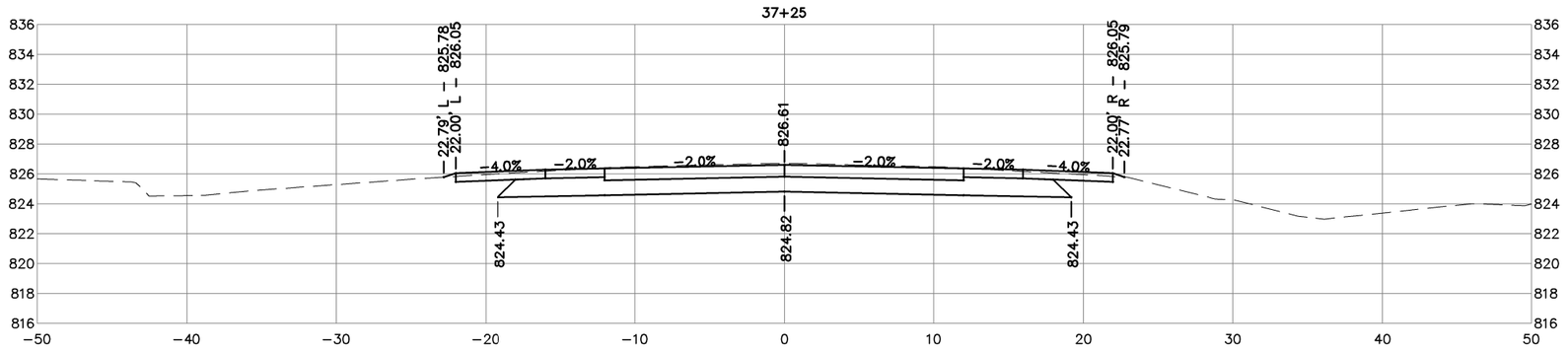
STP-038-2(37)--2C-16

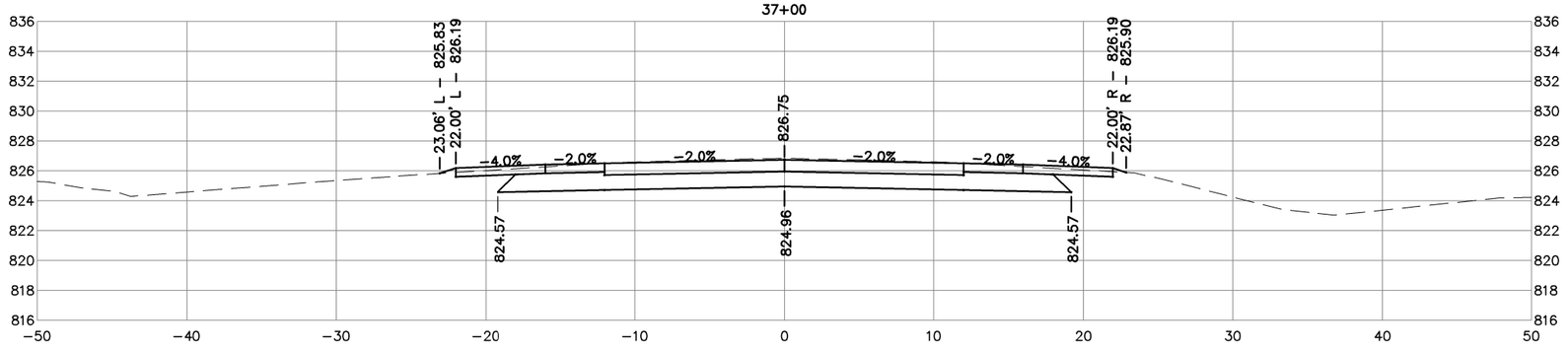
HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED









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DETAILED BY:	CHECKED BY:					IOWA		2016	W.42	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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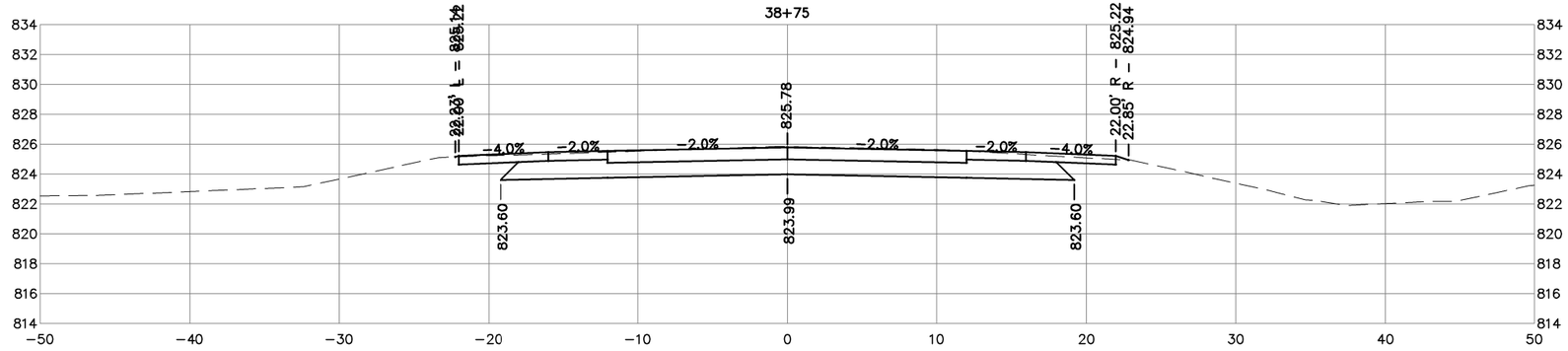
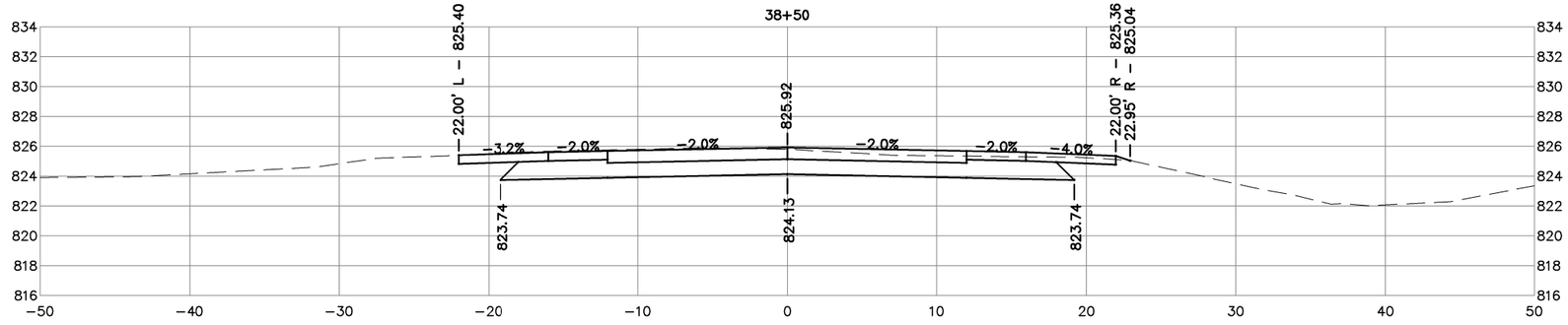
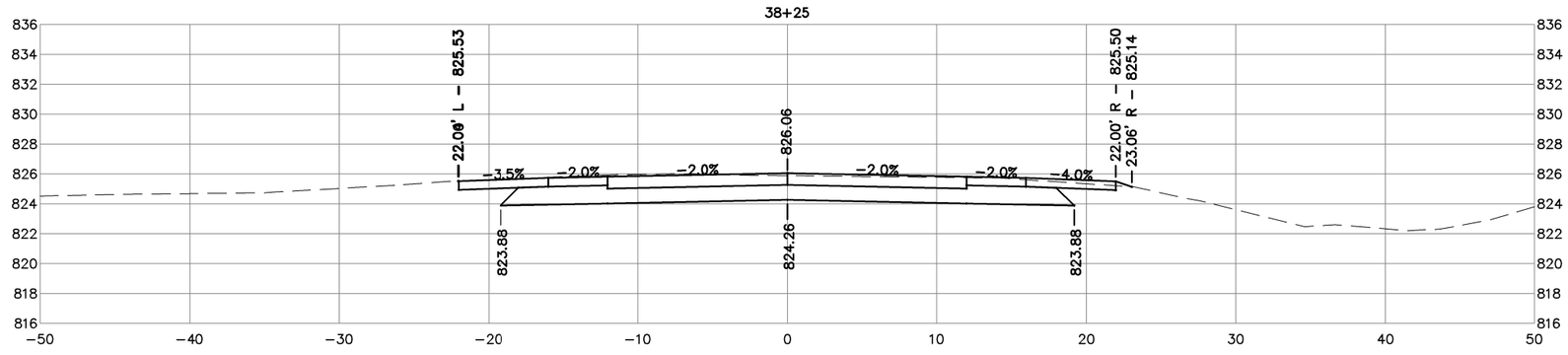
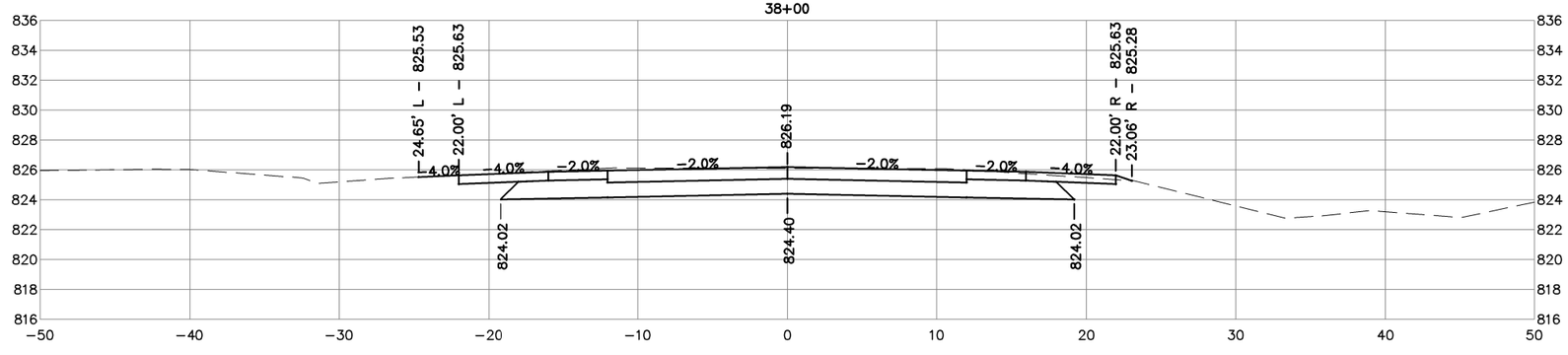
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 0 5 10
DRAWING MAY HAVE BEEN REDUCED









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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.43	135

STP-038-2(37)--2C-16

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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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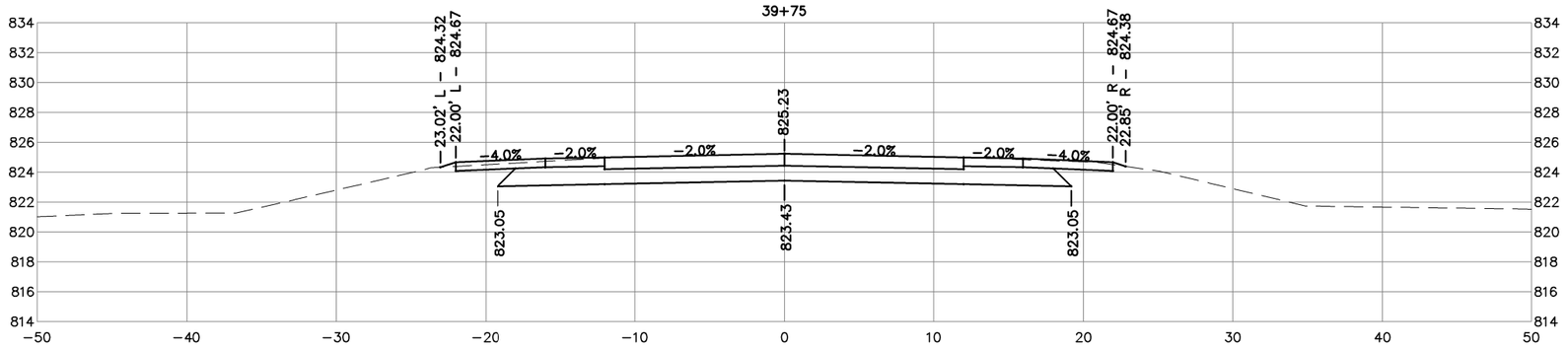
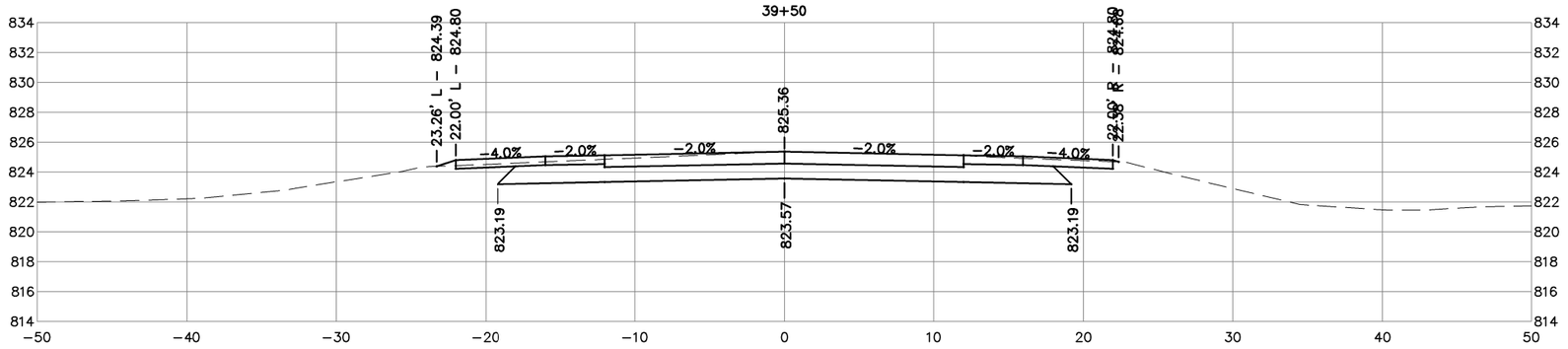
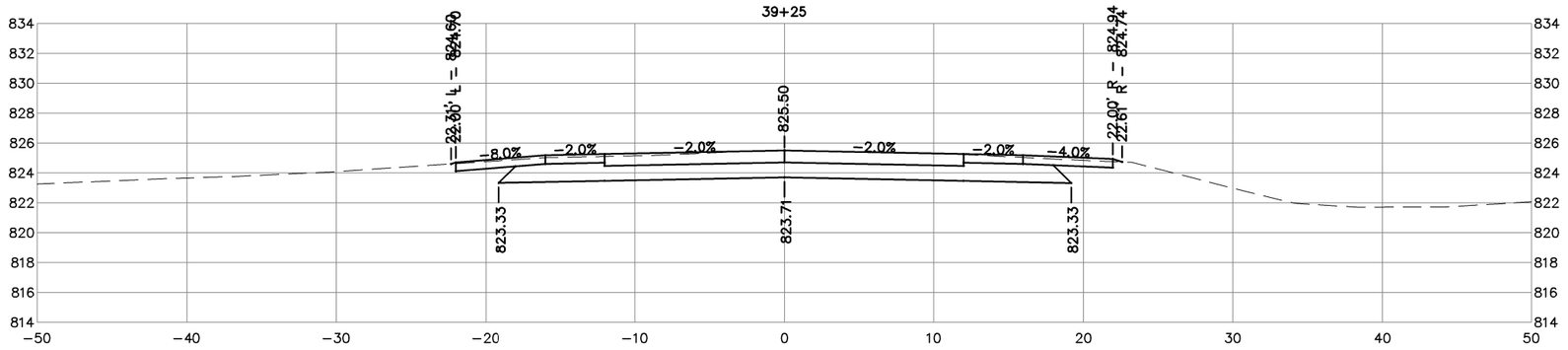
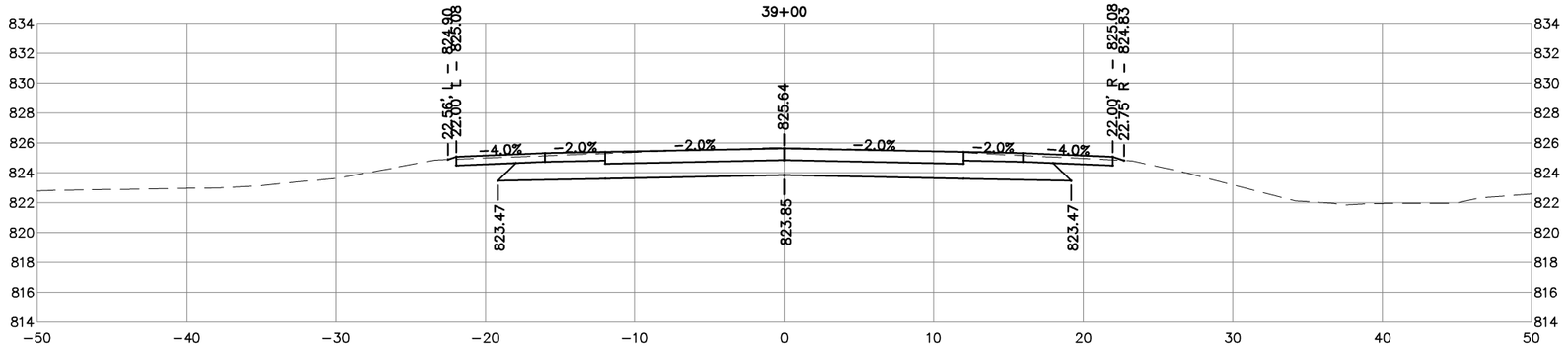
DRAWING MAY HAVE BEEN REDUCED









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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.44	135

STP-038-2(37)--2C-16

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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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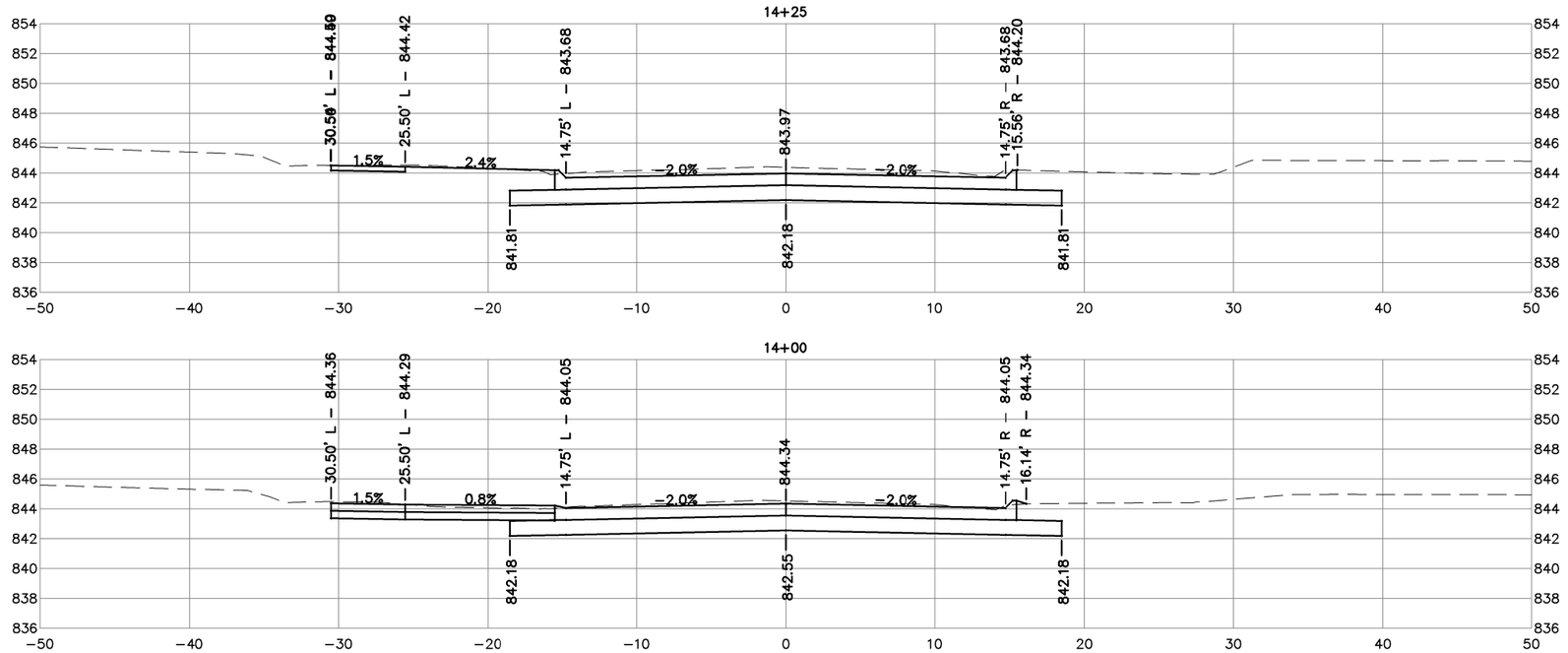
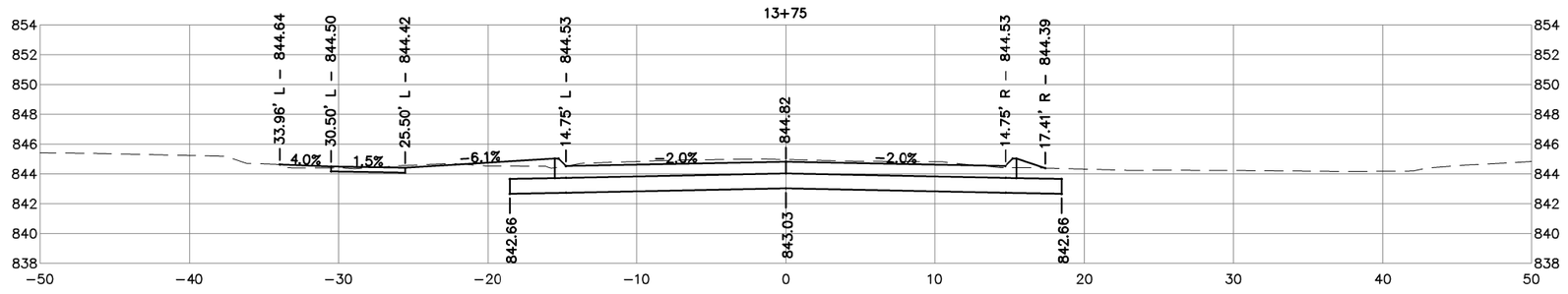
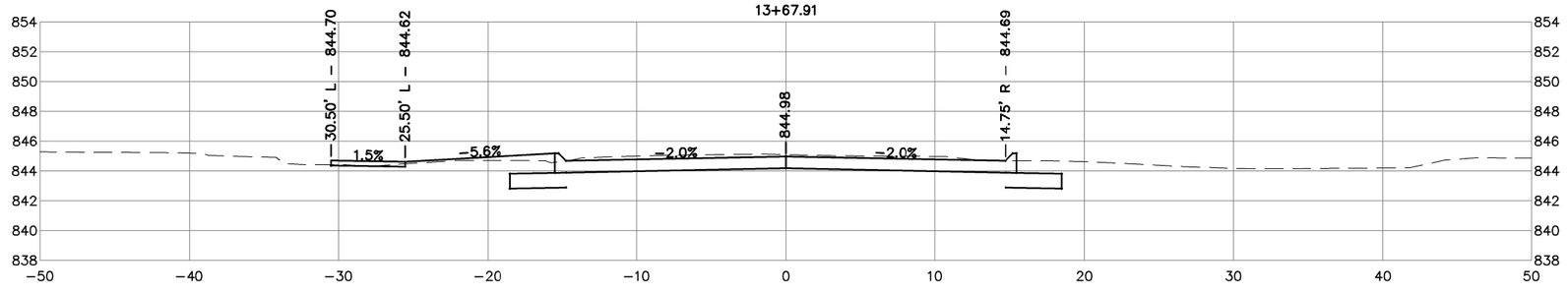
DRAWING MAY HAVE BEEN REDUCED







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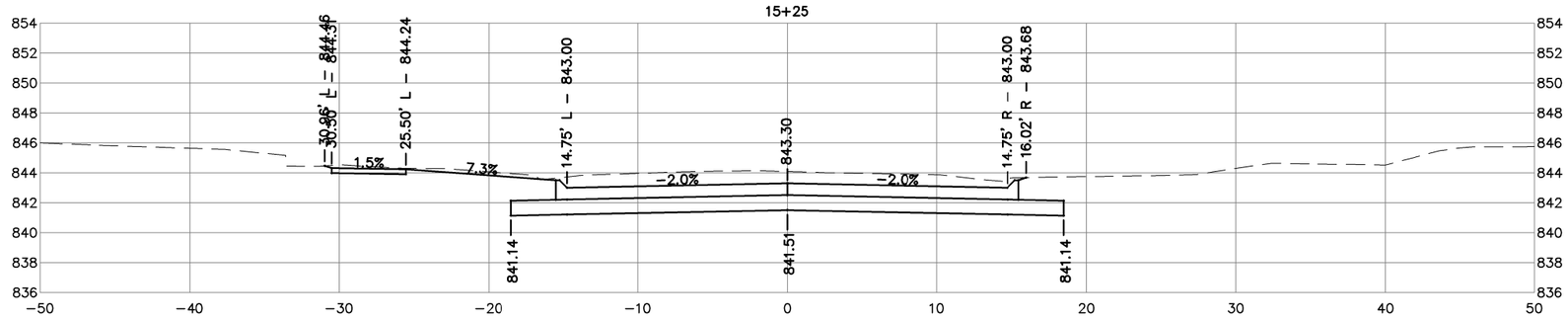
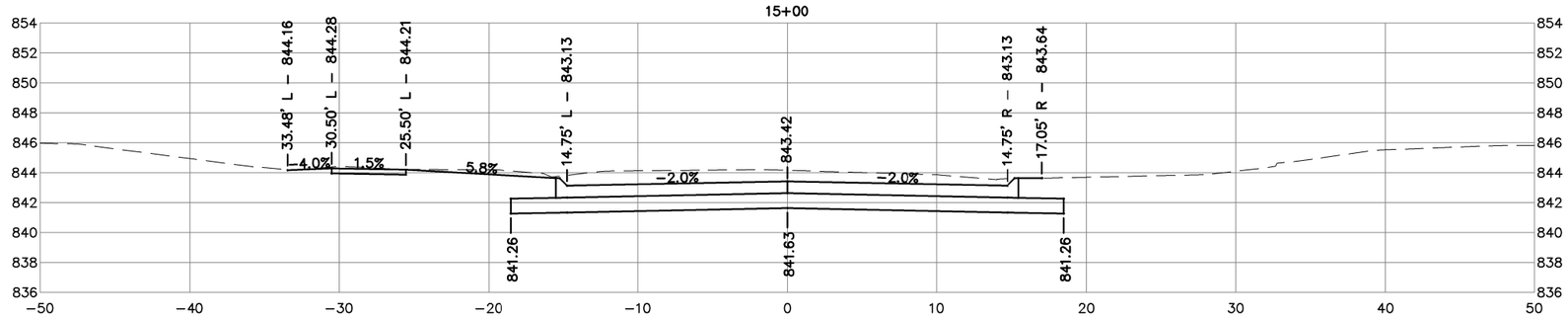
DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.15	135

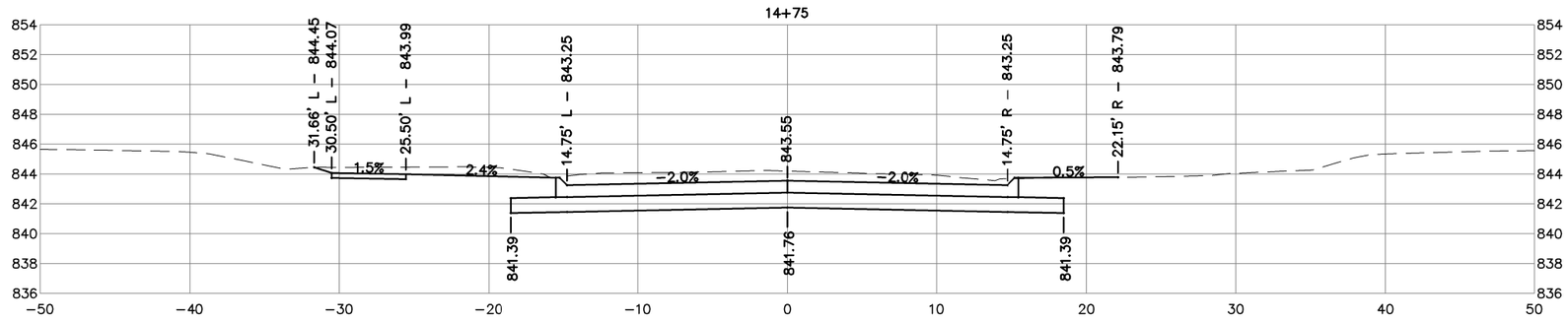
STP-038-2(37)--2C-16

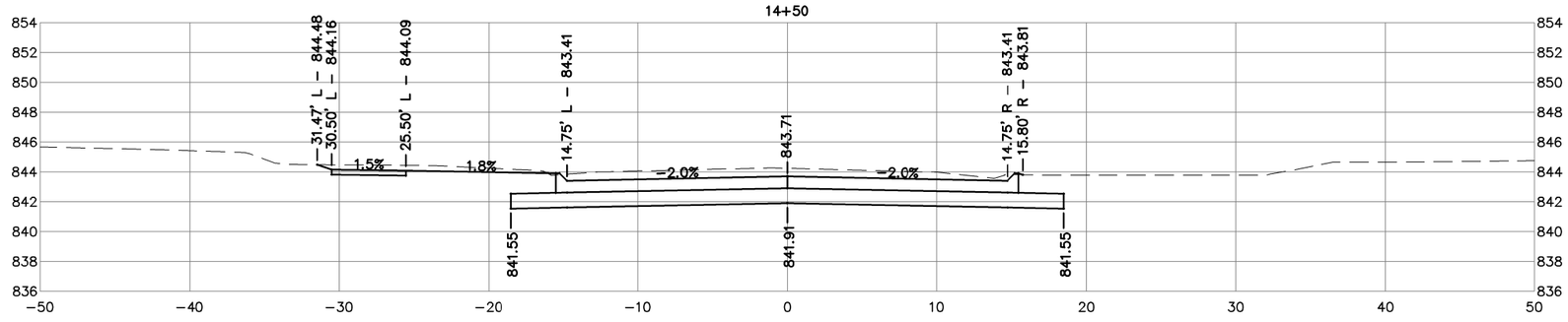
HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED









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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.16	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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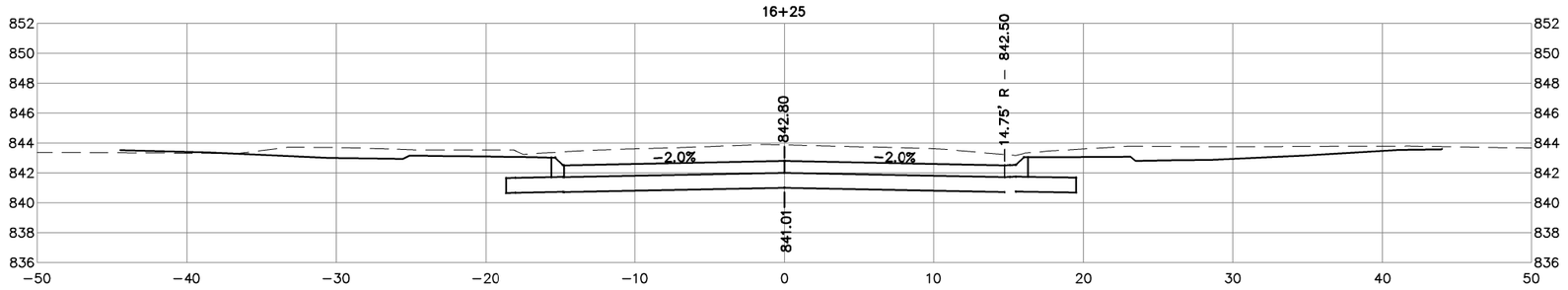
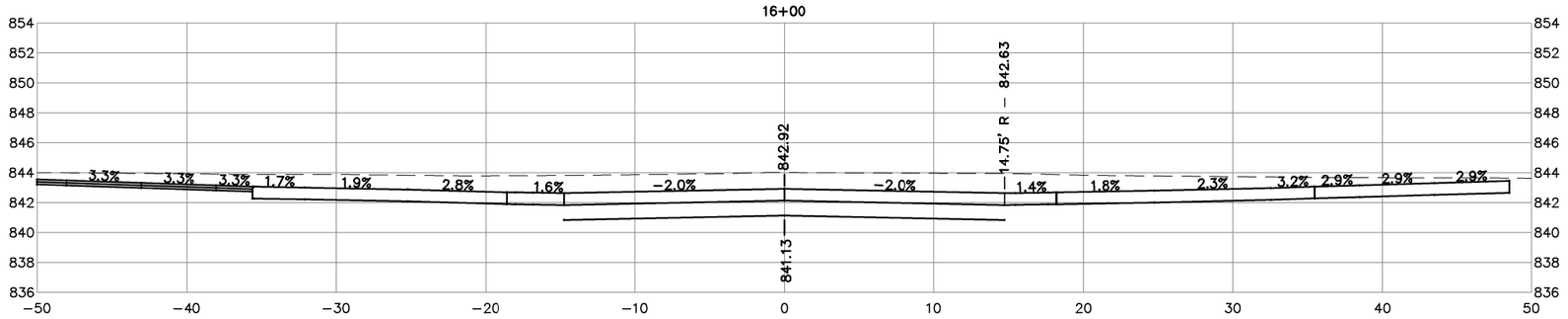
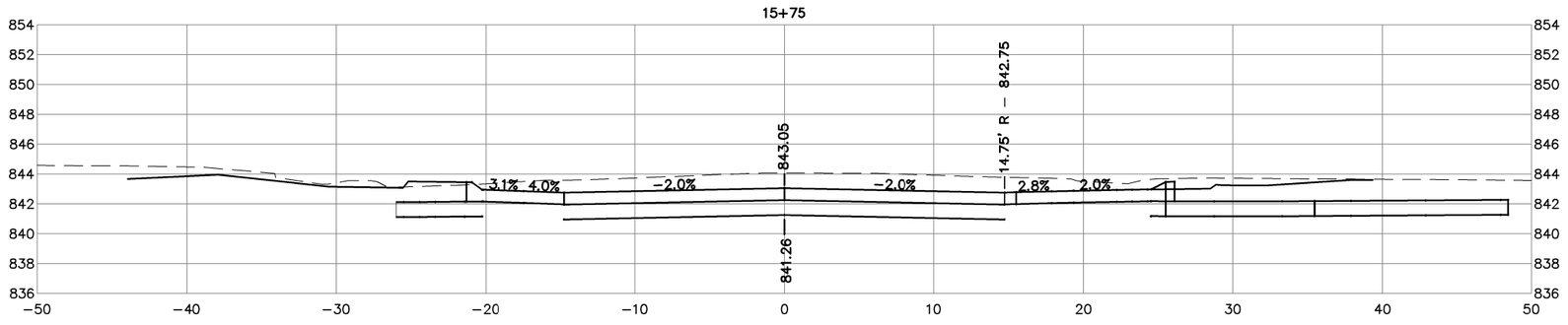
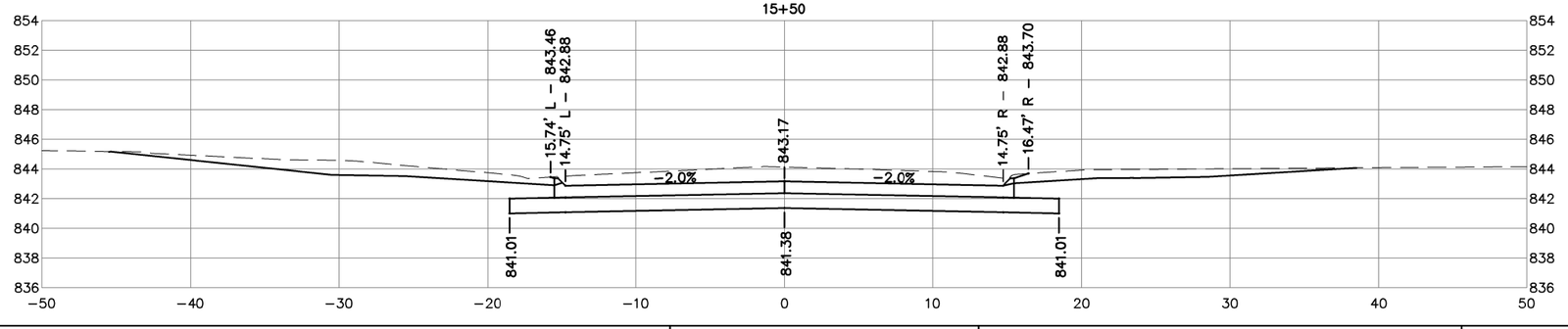
DRAWING MAY HAVE BEEN REDUCED









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DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.17	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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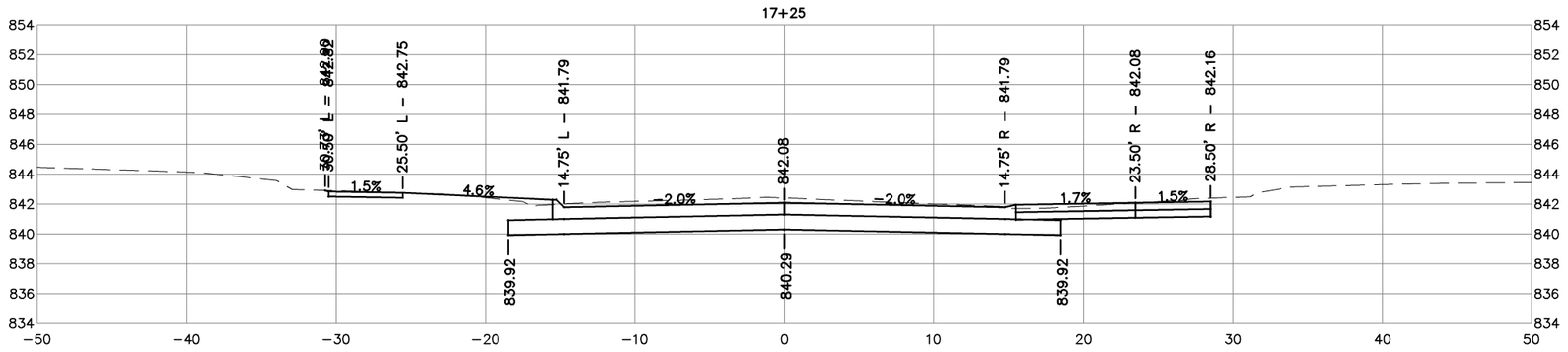
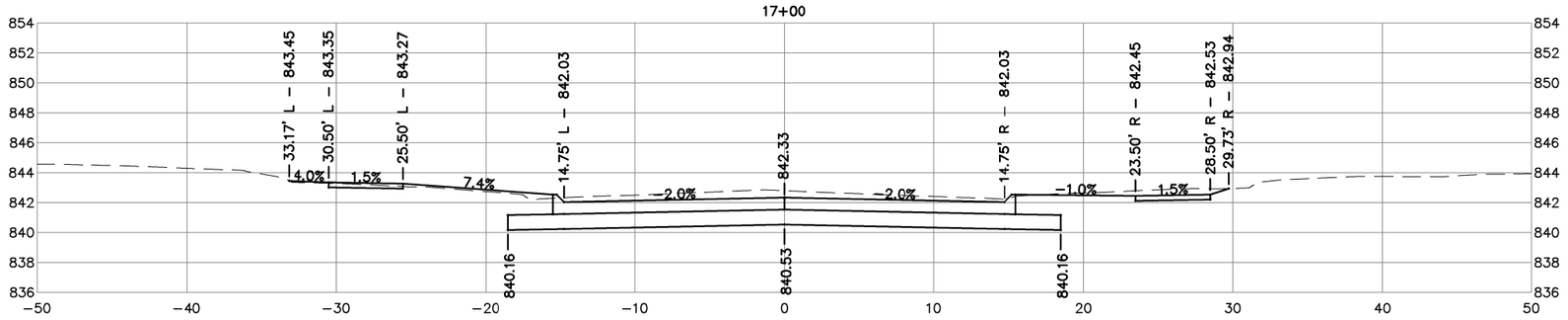
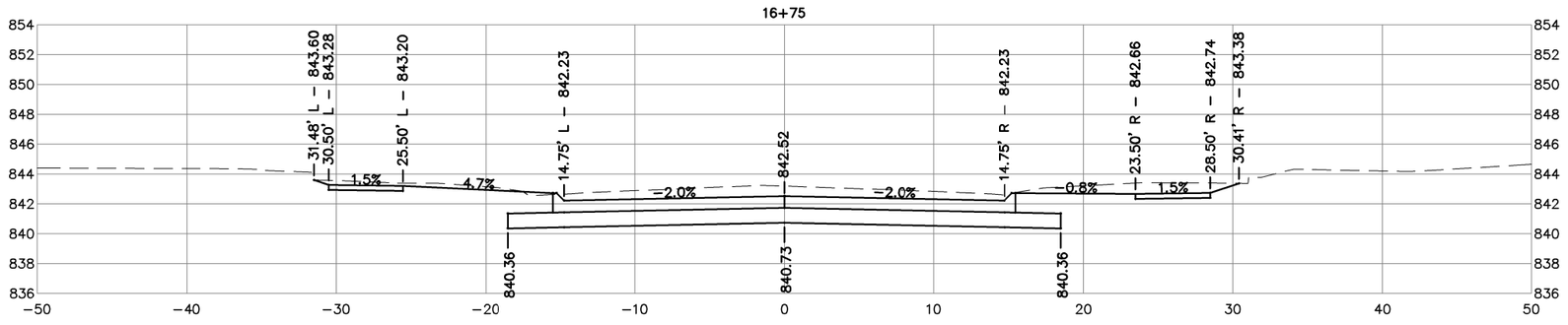
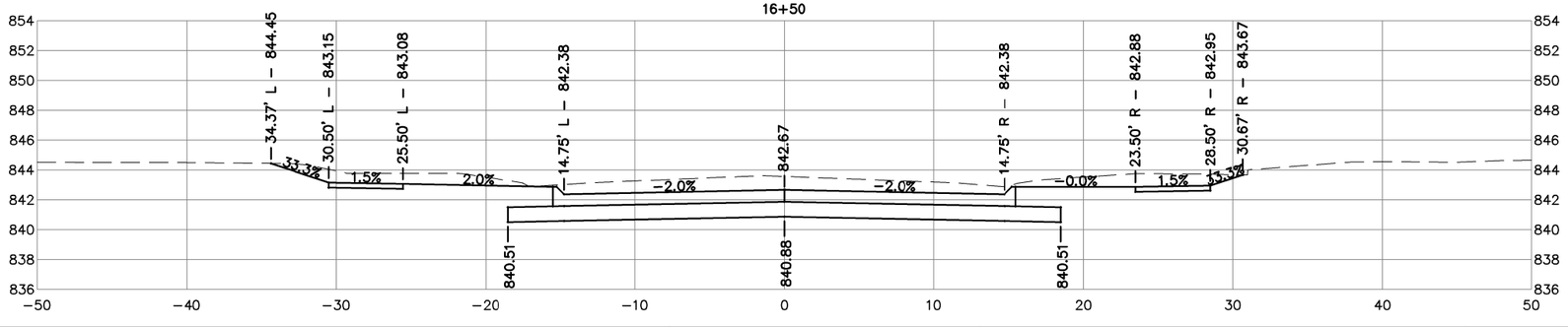
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED









DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.18	135

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STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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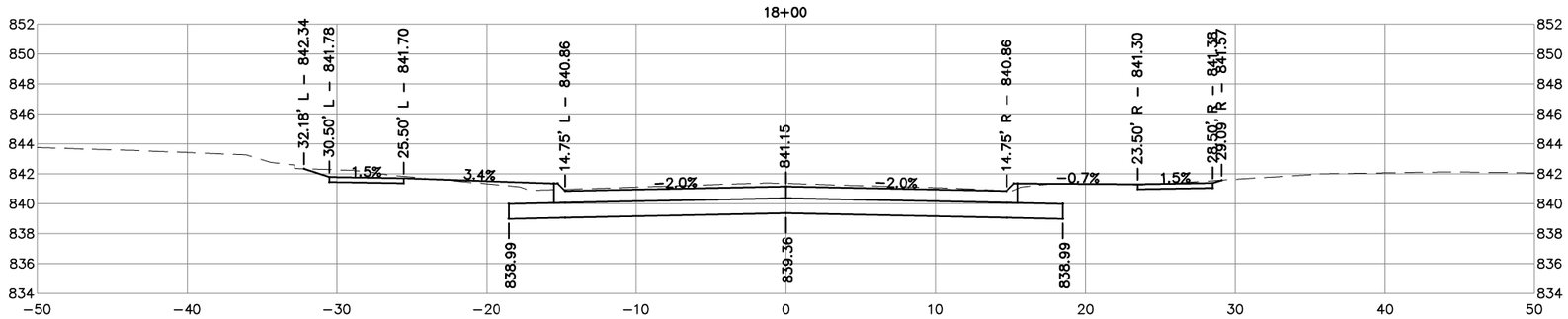

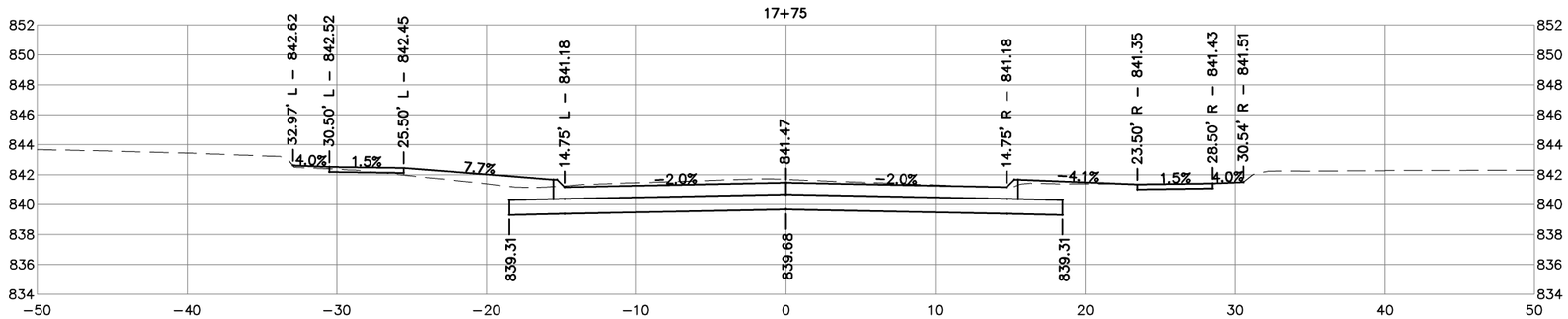

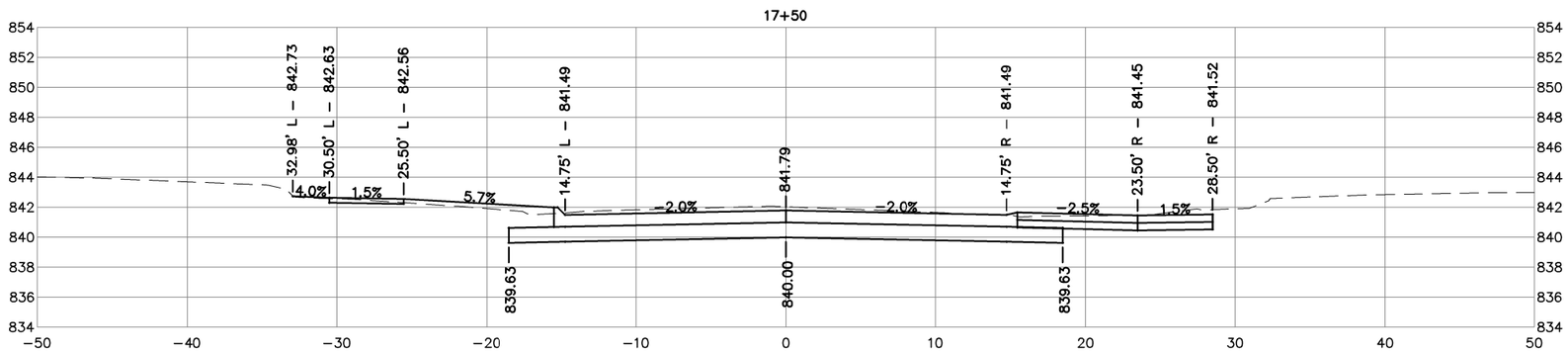

DESIGNED BY:	TRACED BY:	iiw	563.556.2464 ◆ 800.556.4491	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:		IIW, P.C. ◆ www.iiwengr.com				IOWA		2016	W.19	135

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STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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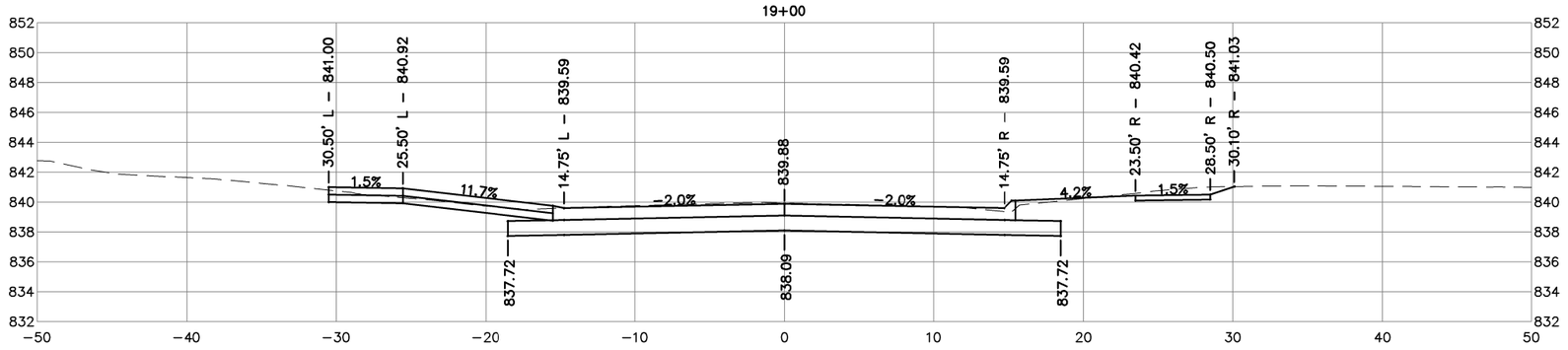
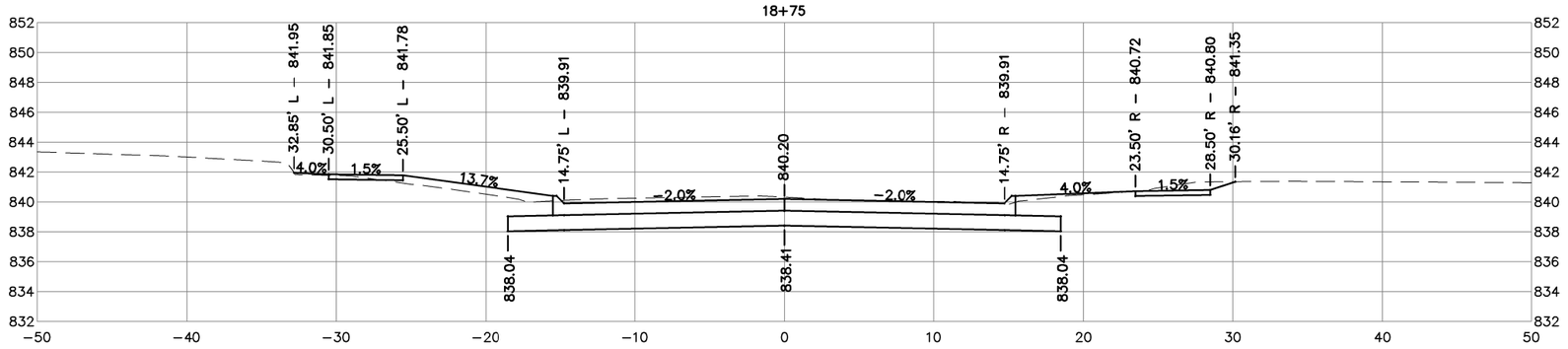
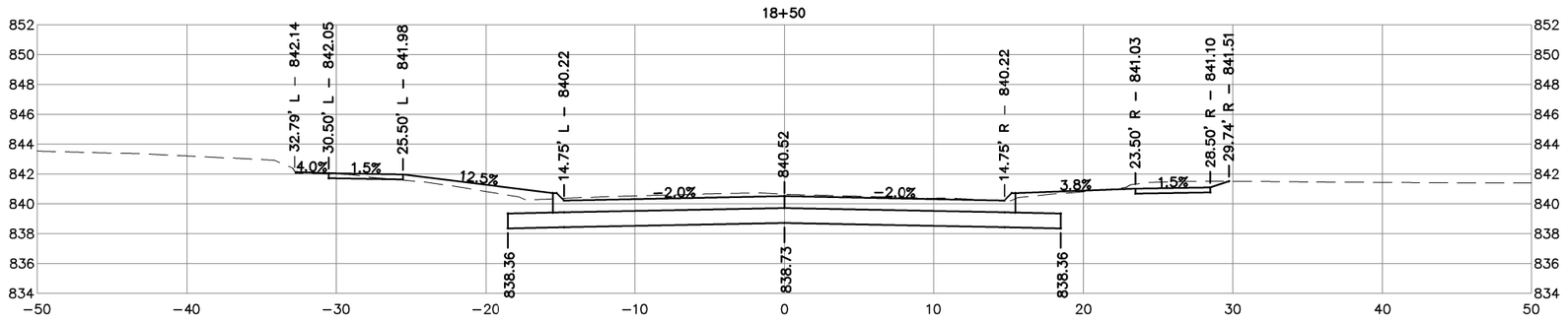
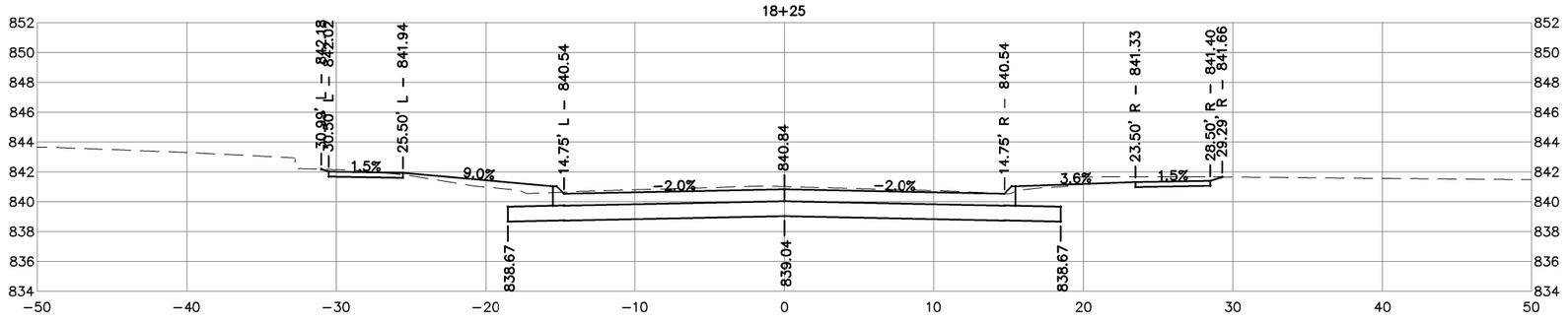
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED









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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.20	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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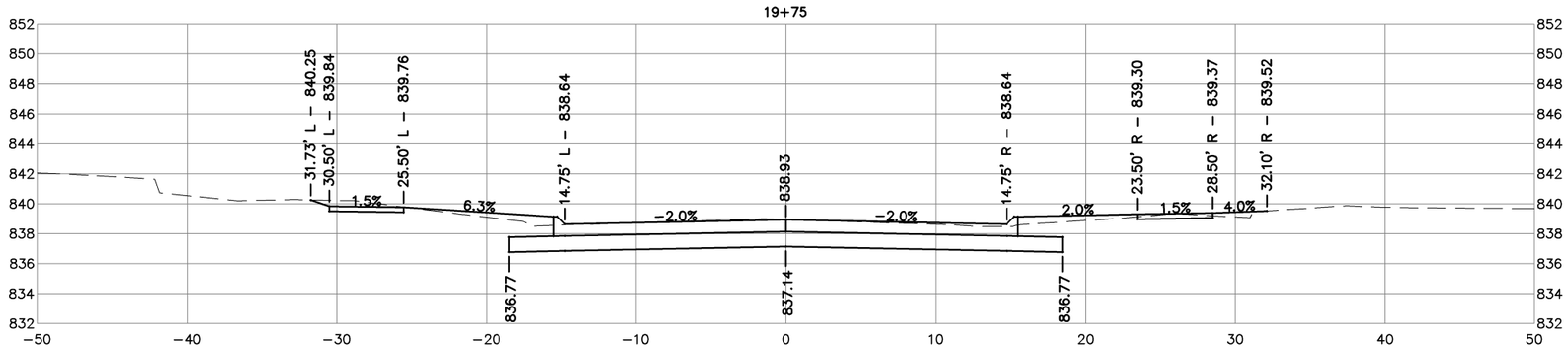
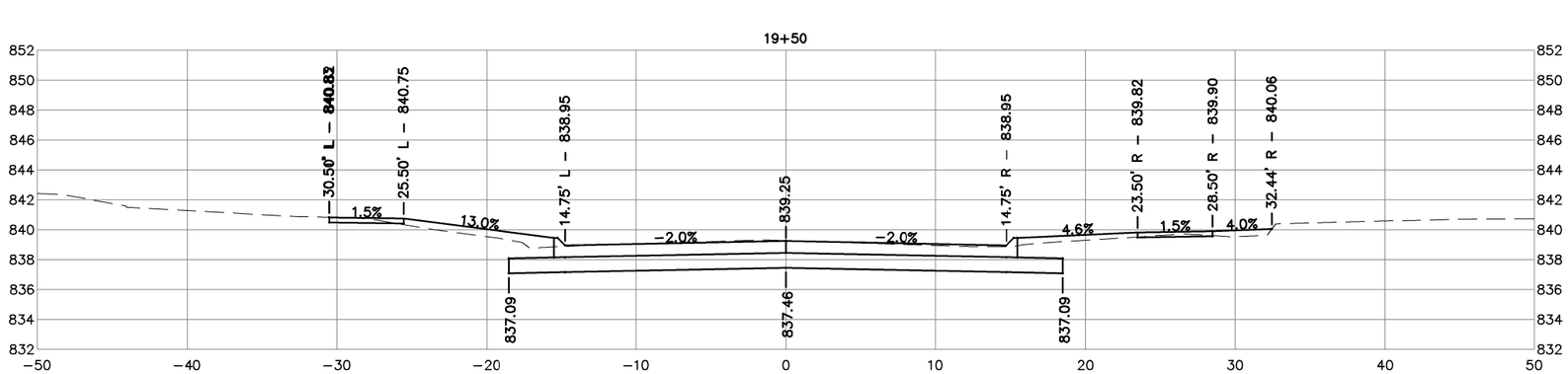
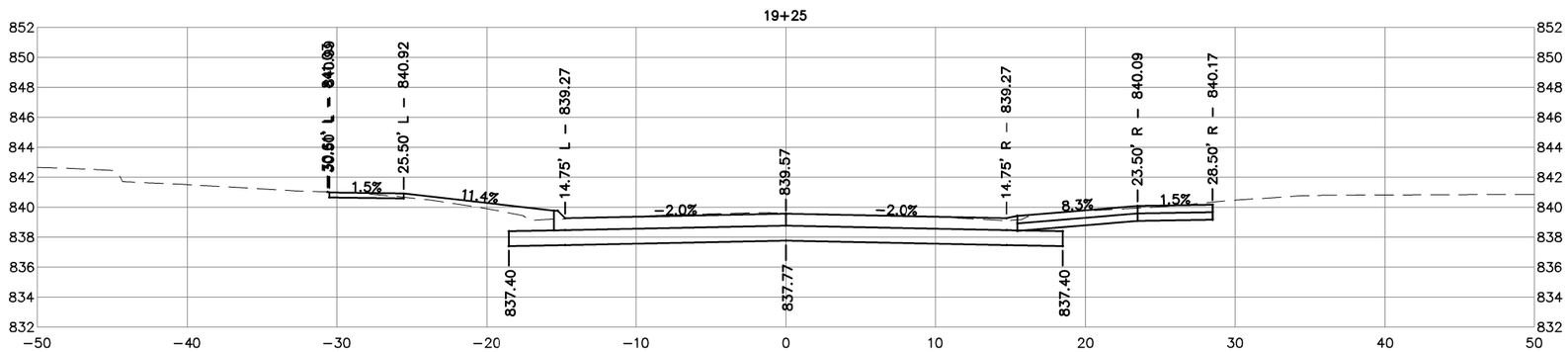
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED







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DETAILED BY:	CHECKED BY:					IOWA		2016	W.21	135

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HORIZONTAL SCALE IN FEET
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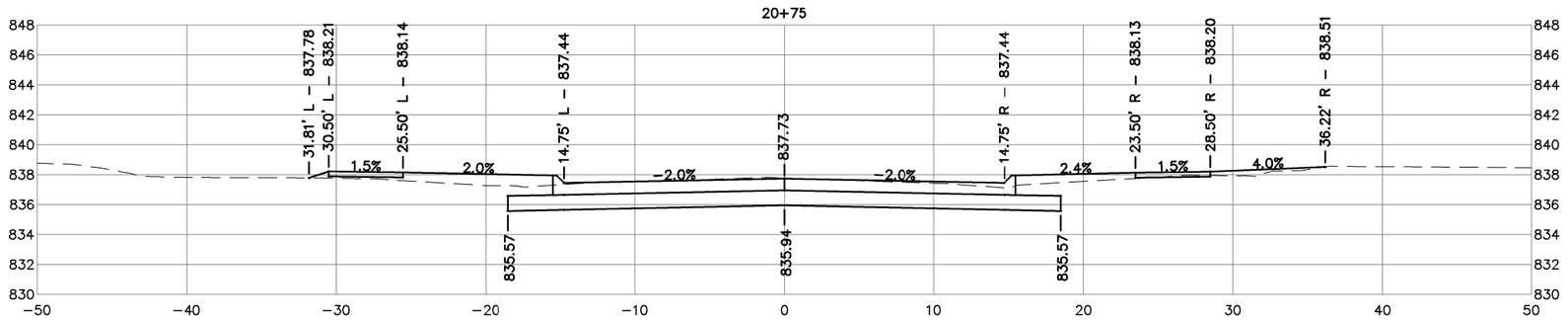
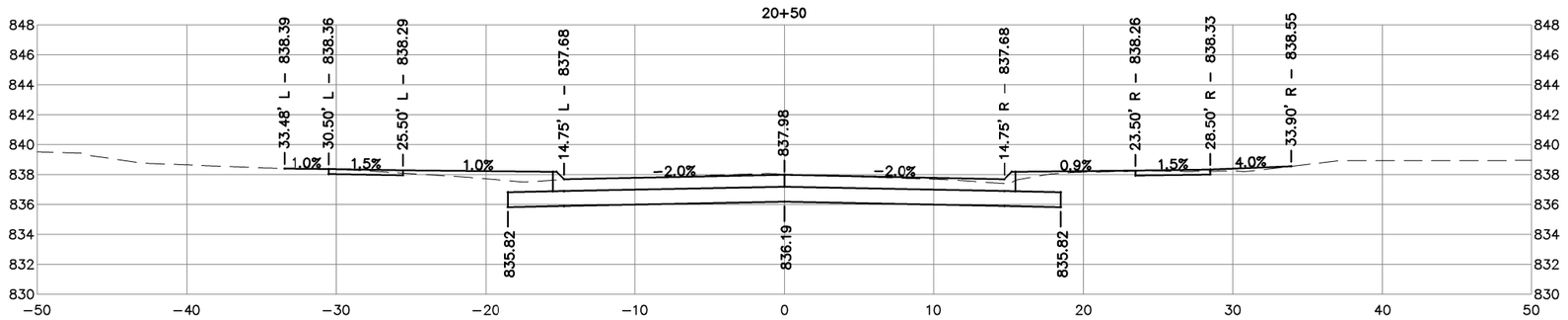
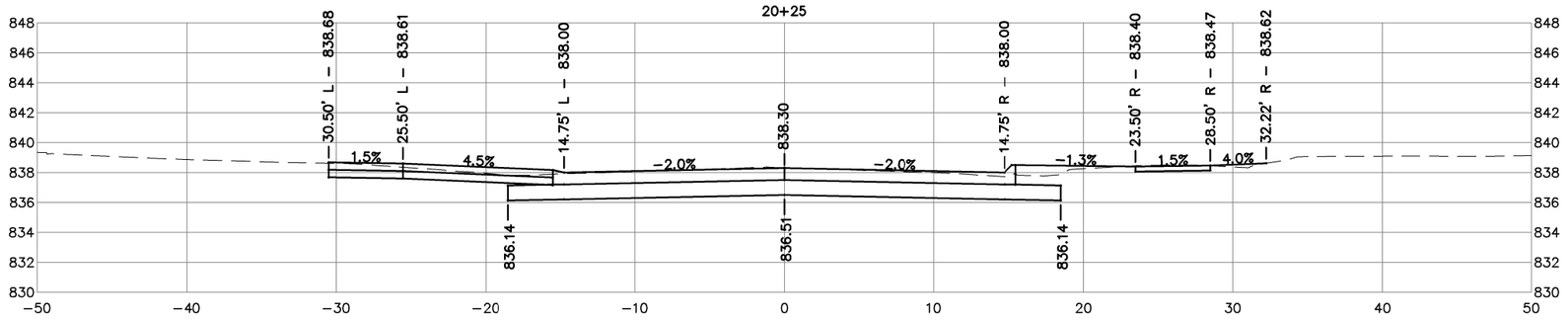
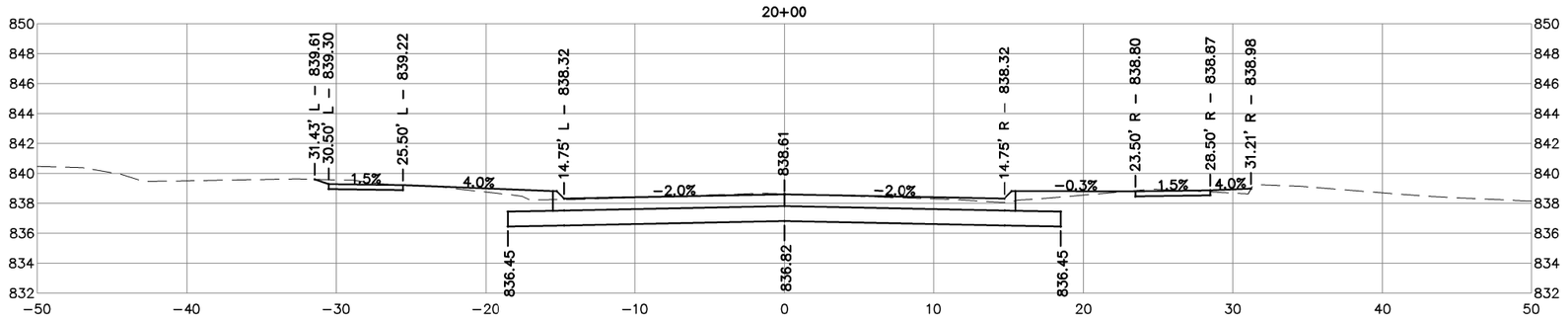
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 0 5 10
DRAWING MAY HAVE BEEN REDUCED









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DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.22	135

STP-038-2(37)--2C-16

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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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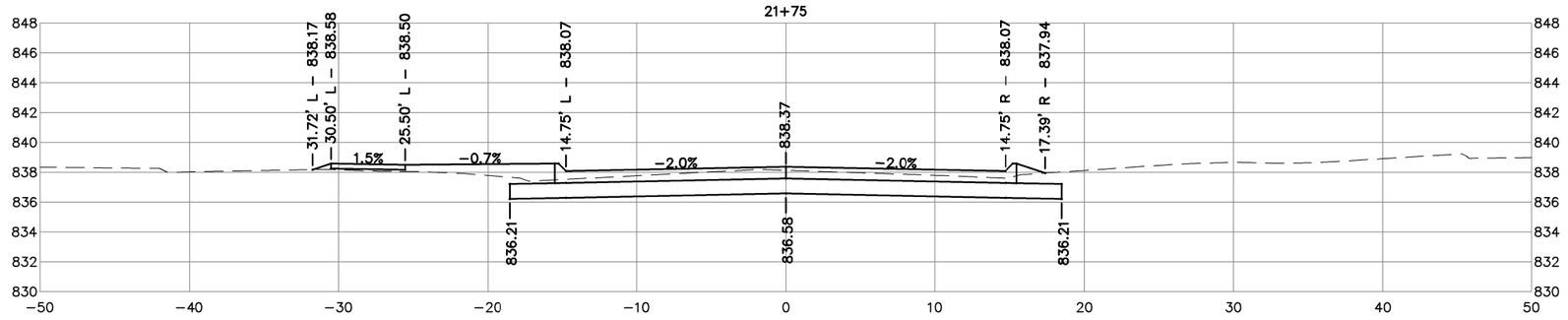
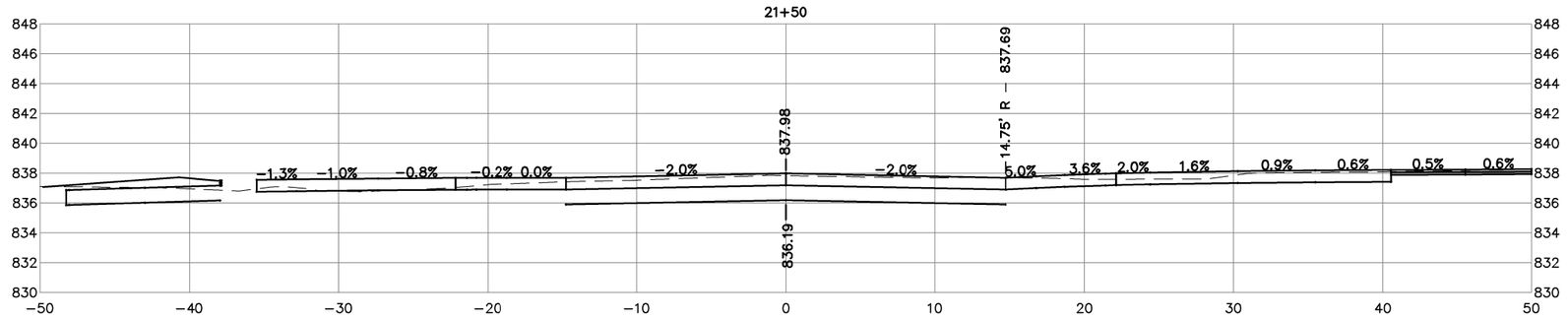
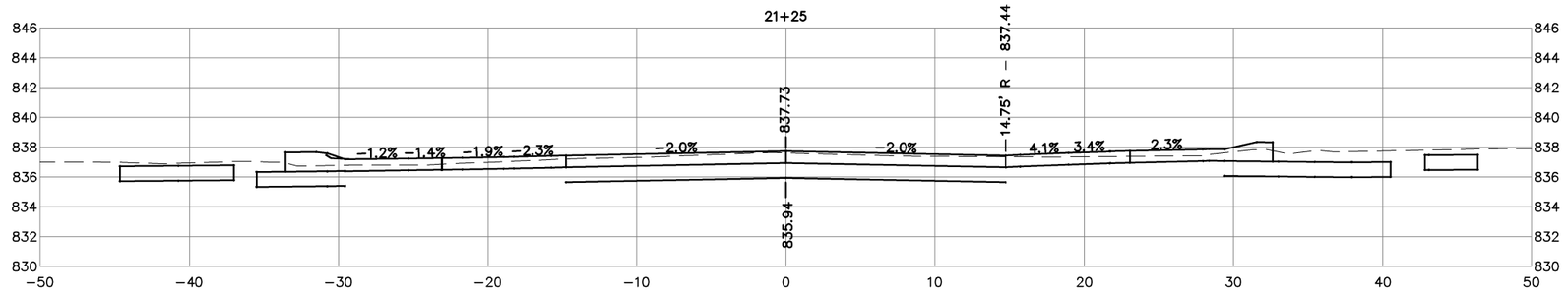
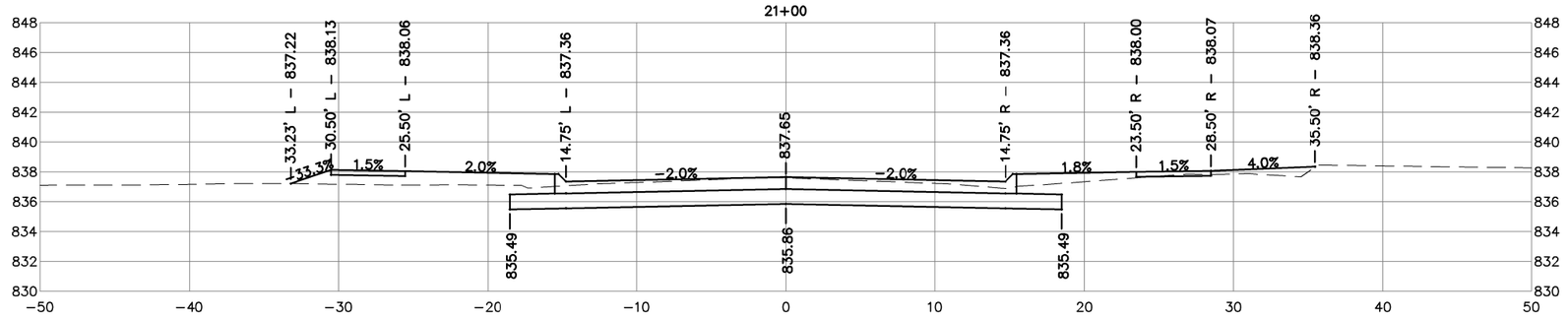
DRAWING MAY HAVE BEEN REDUCED









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						IOWA		2016	W.23	135

STP-038-2(37)--2C-16

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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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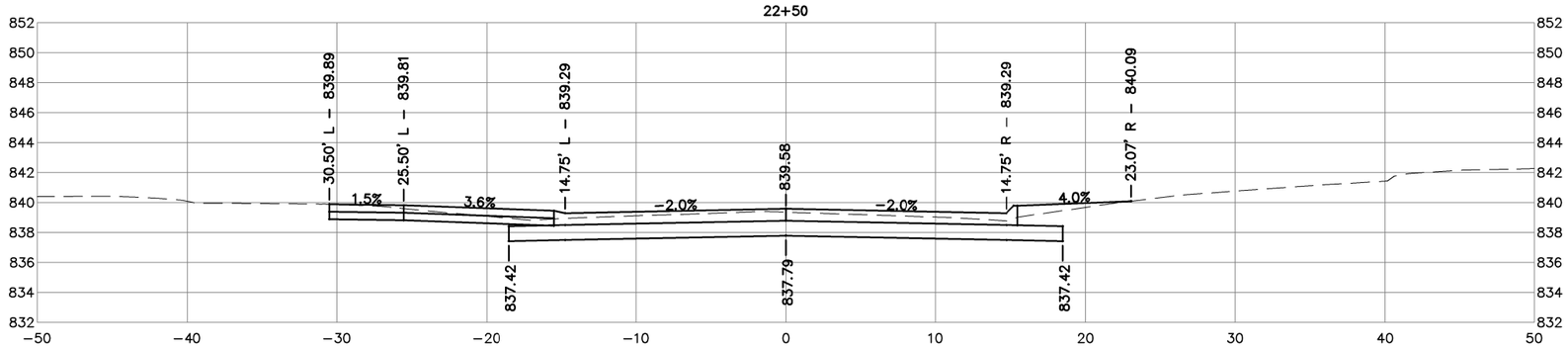
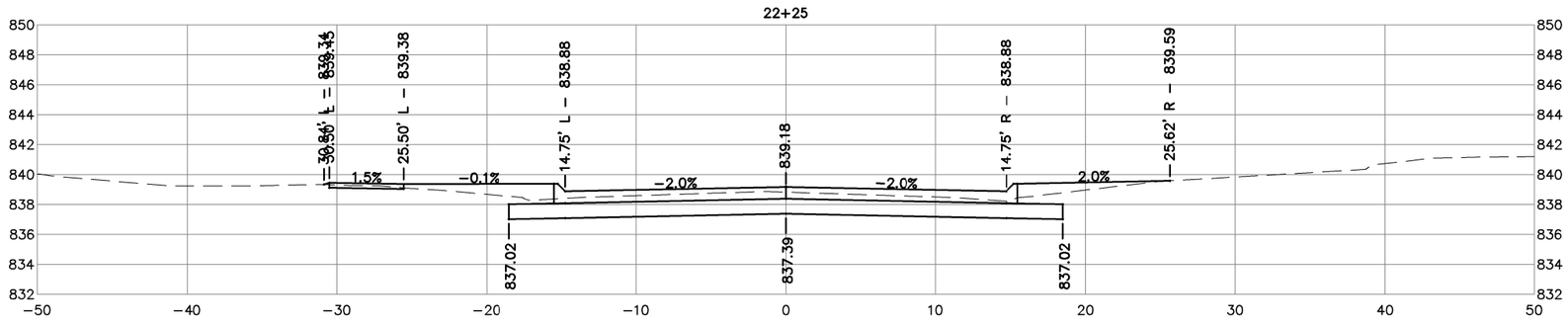
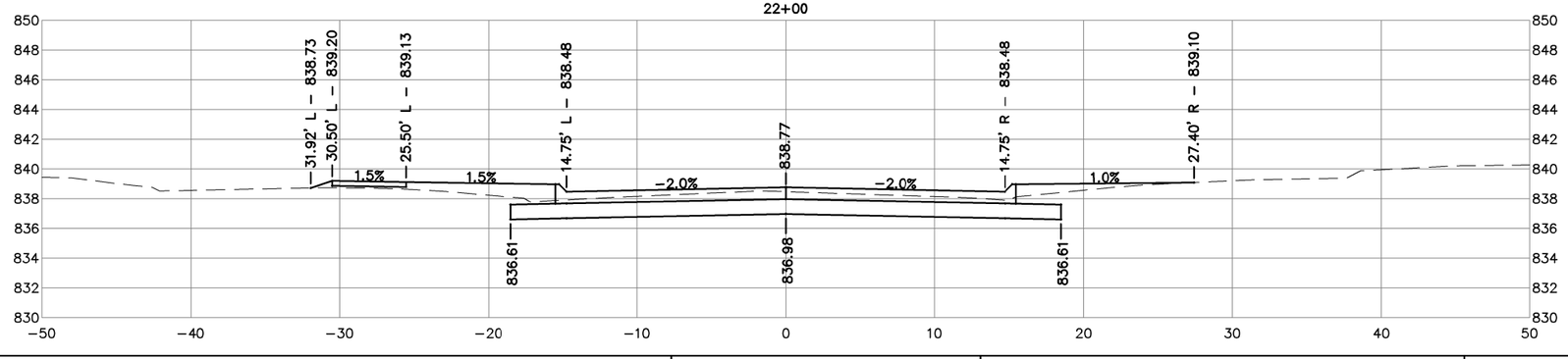
DRAWING MAY HAVE BEEN REDUCED







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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.24	135

STP-038-2(37)--2C-16

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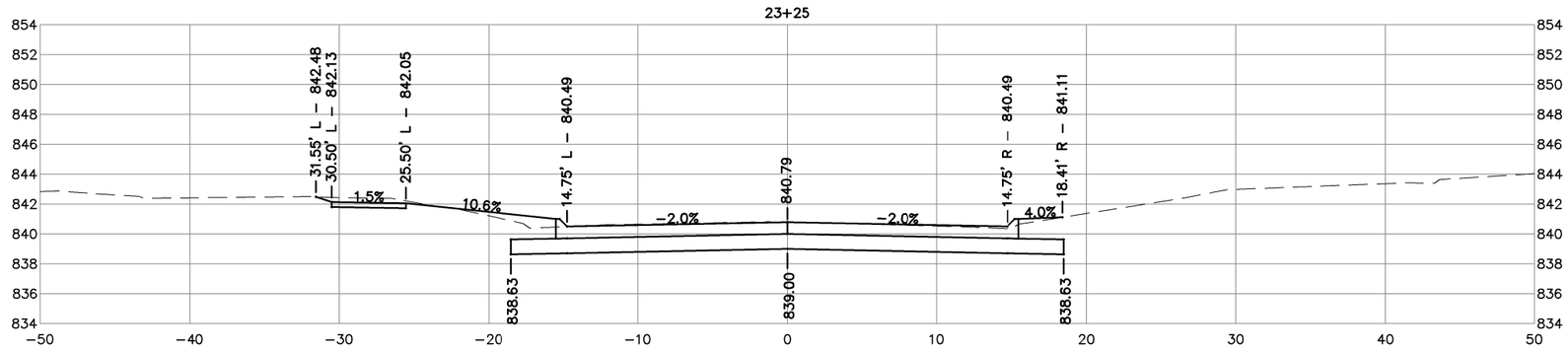
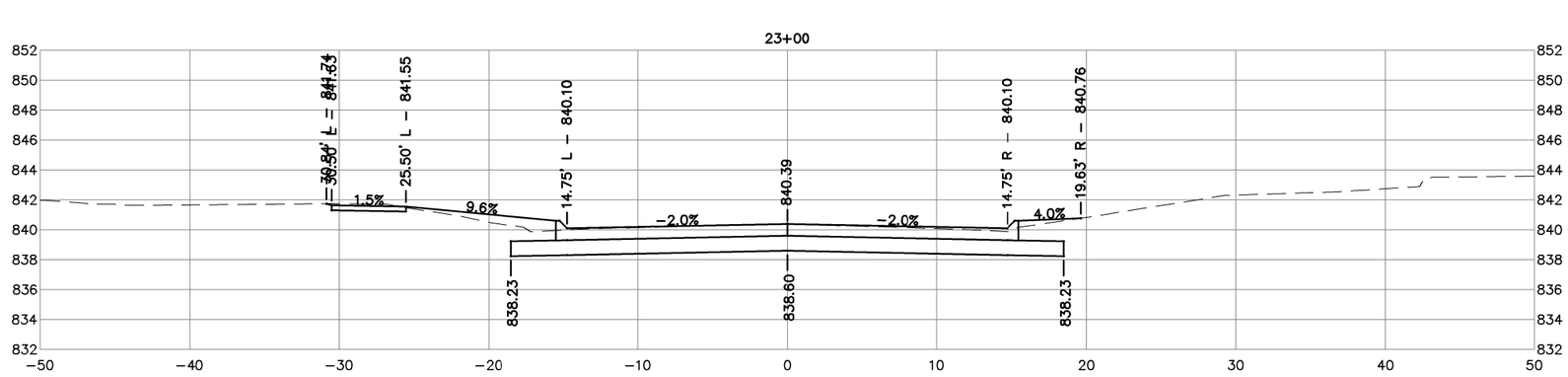
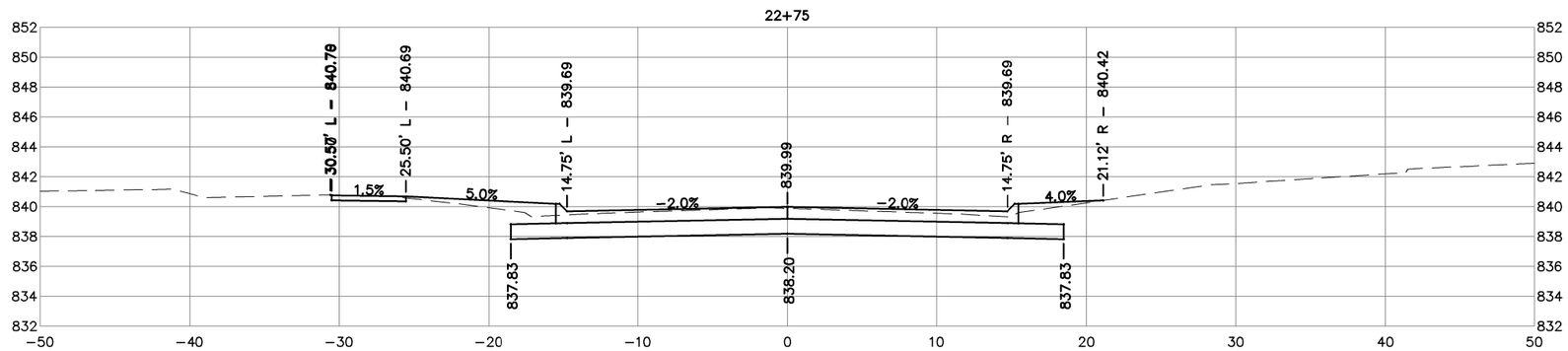
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED







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DESIGNED BY: TRACED BY:
DETAILED BY: CHECKED BY:

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER STP-038-2(37)--2C-16

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA		2016	W.25	135

STP-038-2(37)--2C-16

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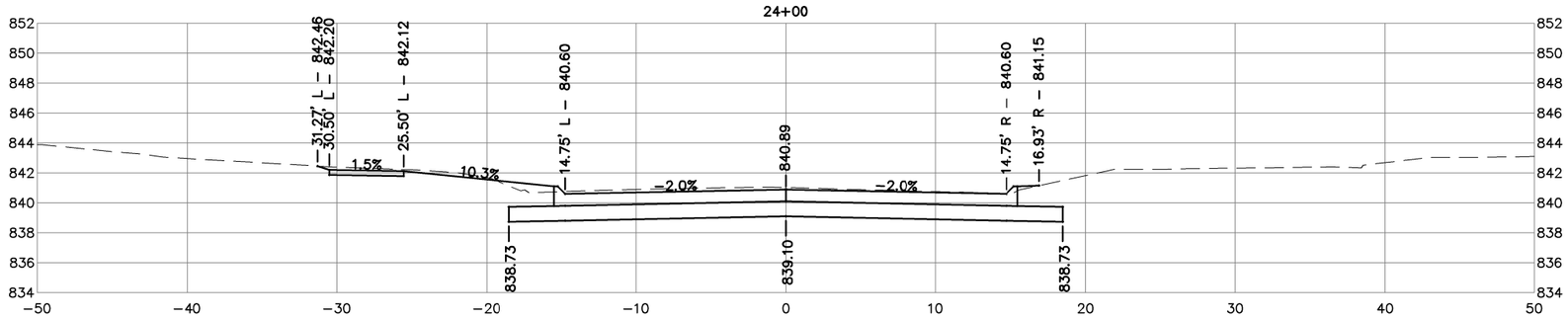
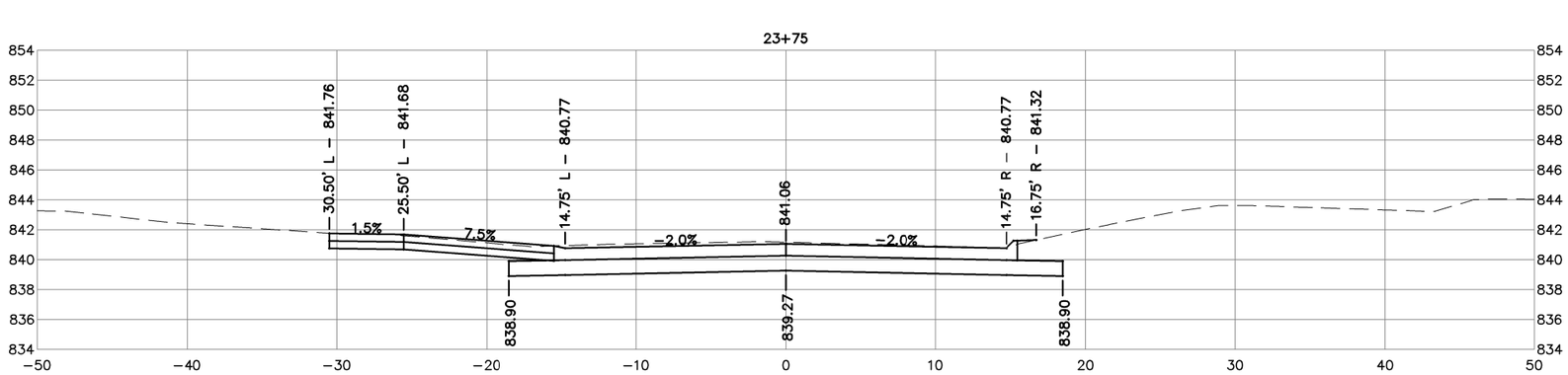
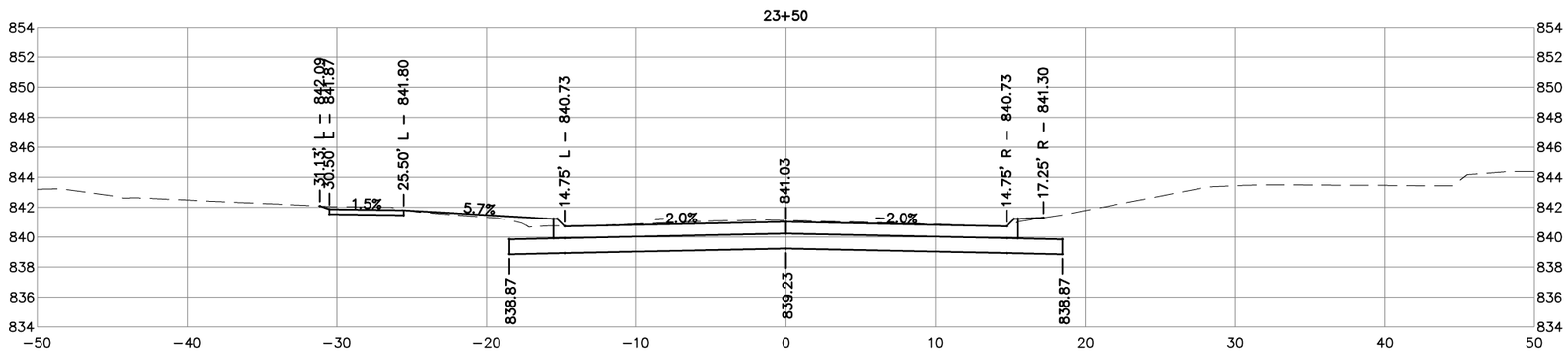
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED







DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.26	135

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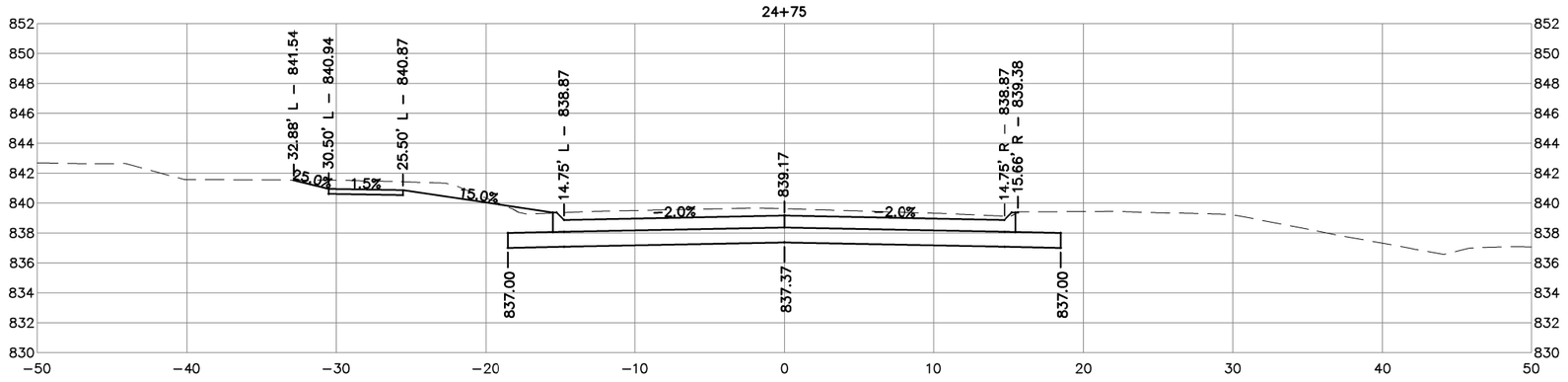
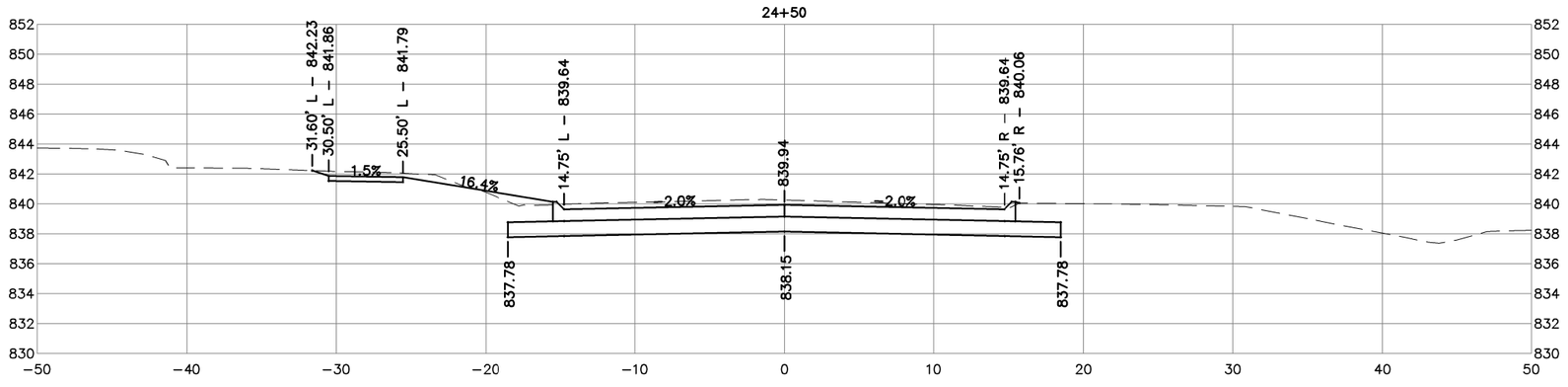
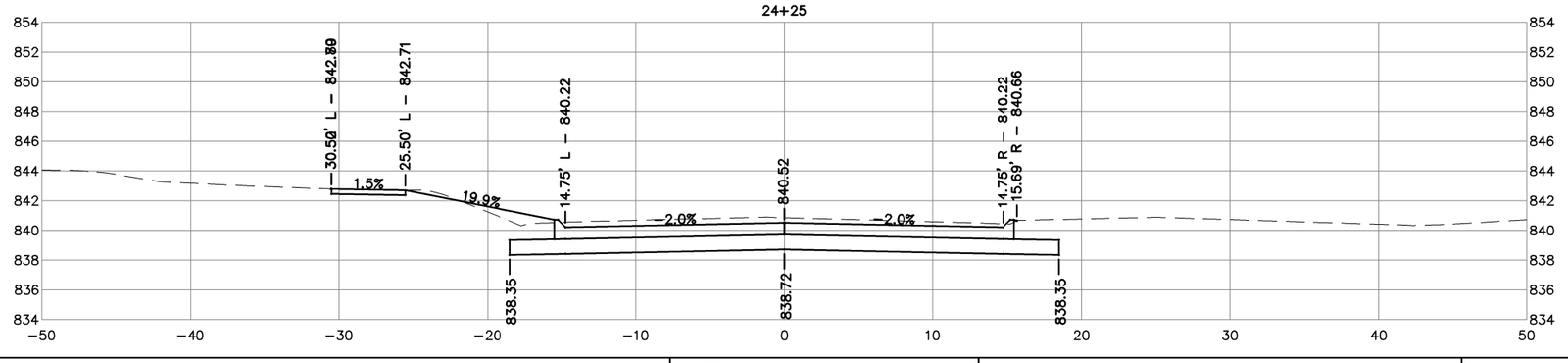
STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED







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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.27	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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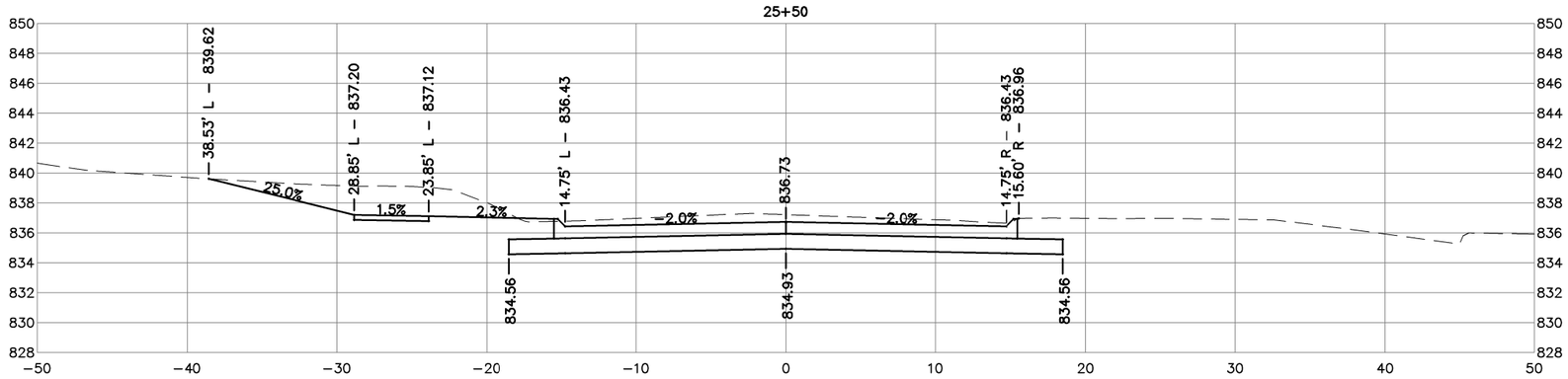
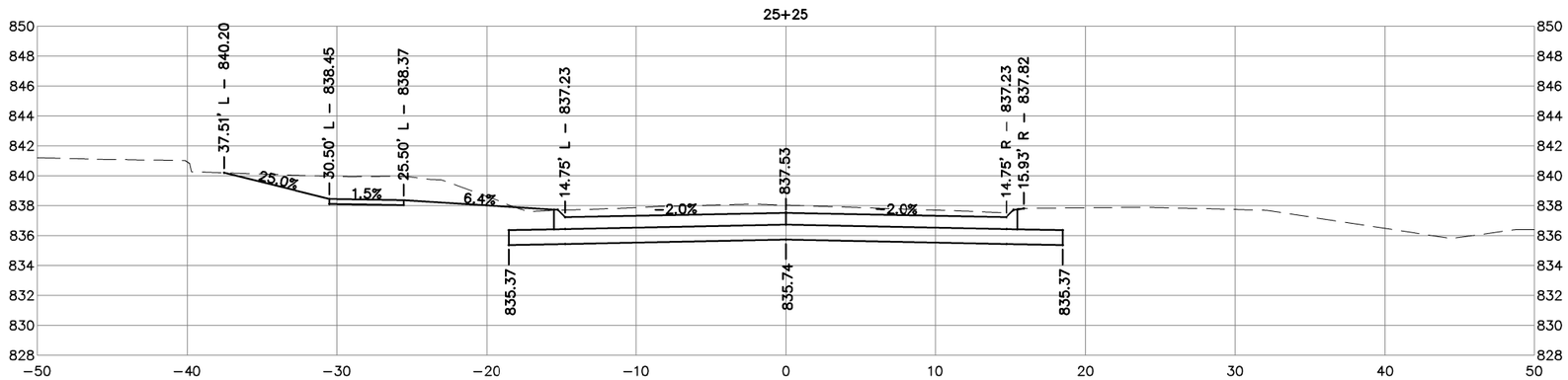
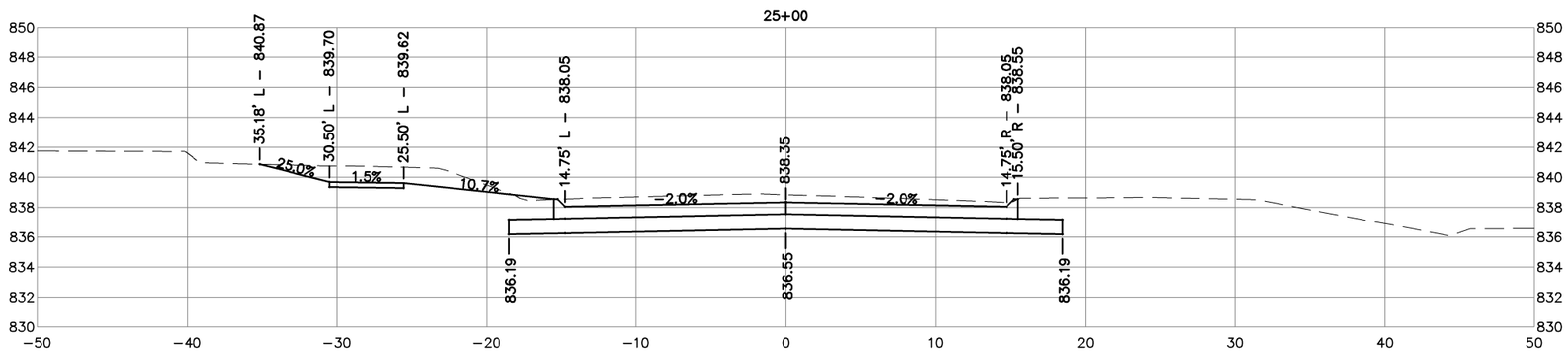
DRAWING MAY HAVE BEEN REDUCED







DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.28	135

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HORIZONTAL SCALE IN FEET
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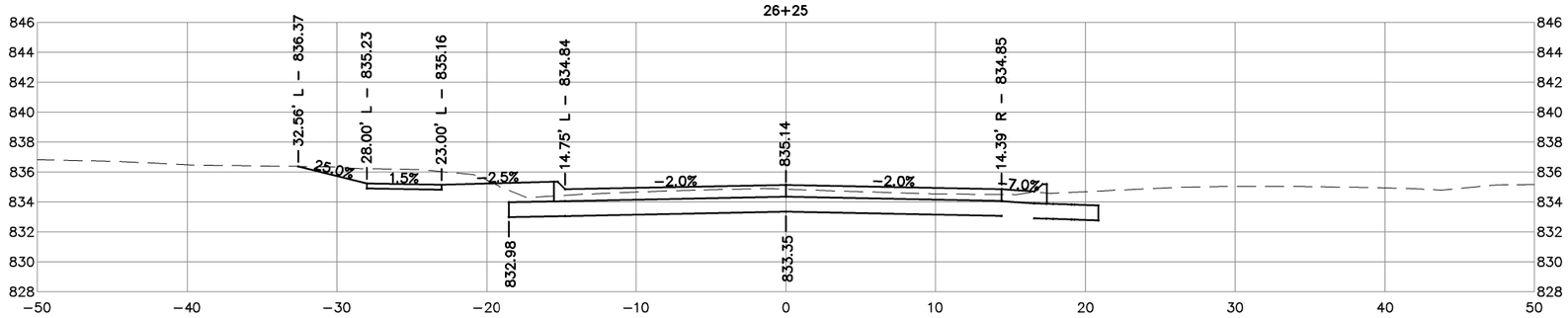
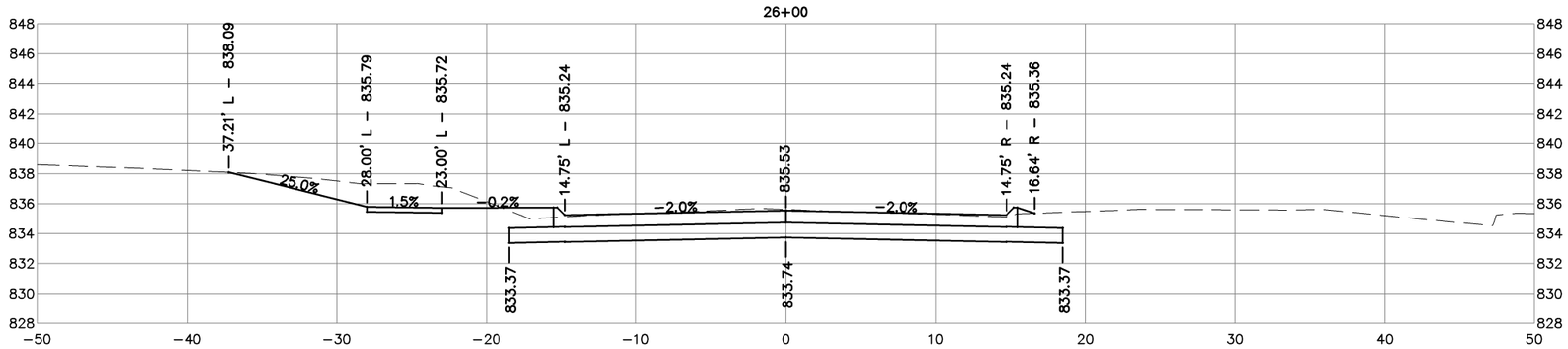
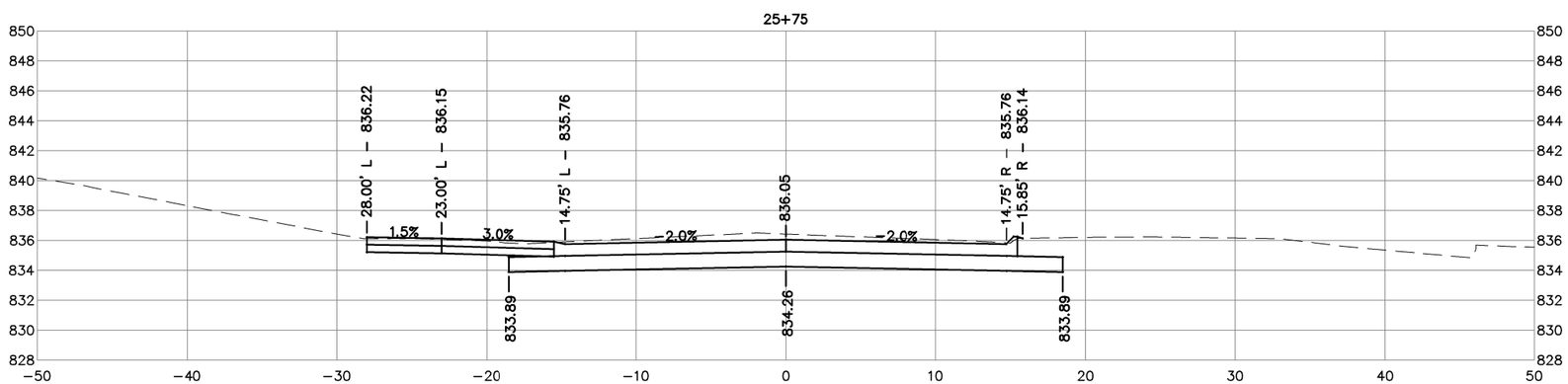
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED







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STP-038-2(37)--2C-16

DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.29	135

STP-038-2(37)--2C-16

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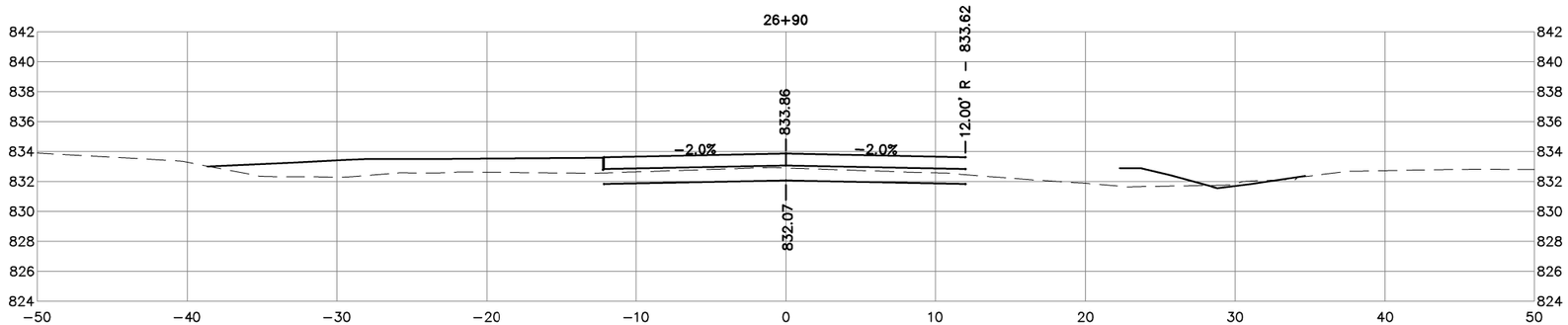
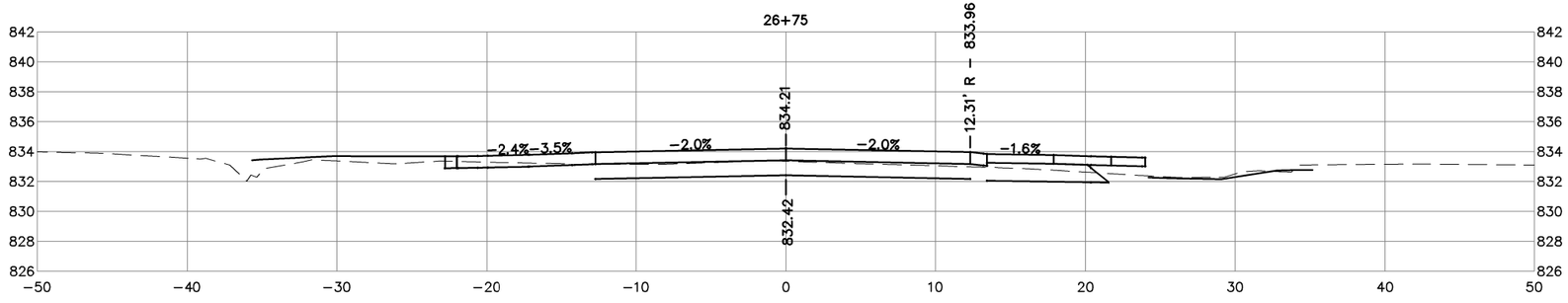
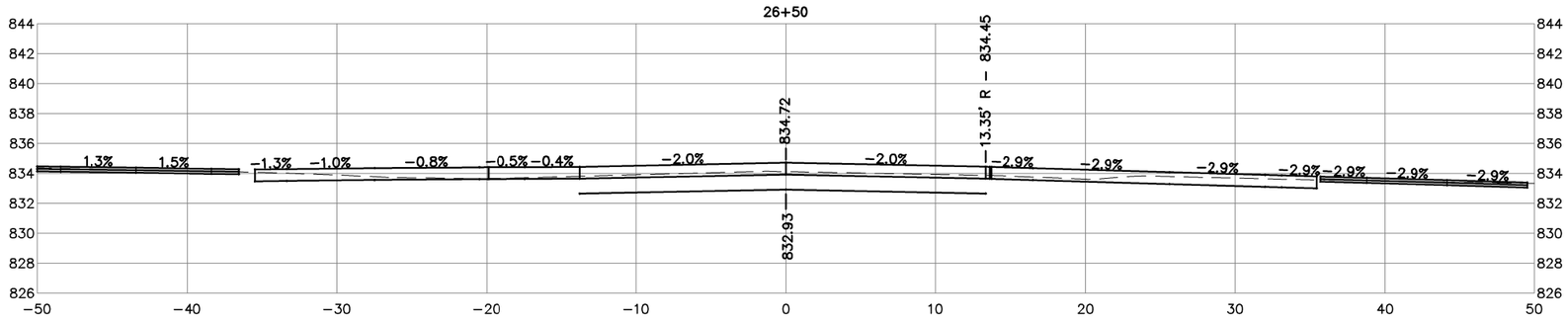
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED







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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.30	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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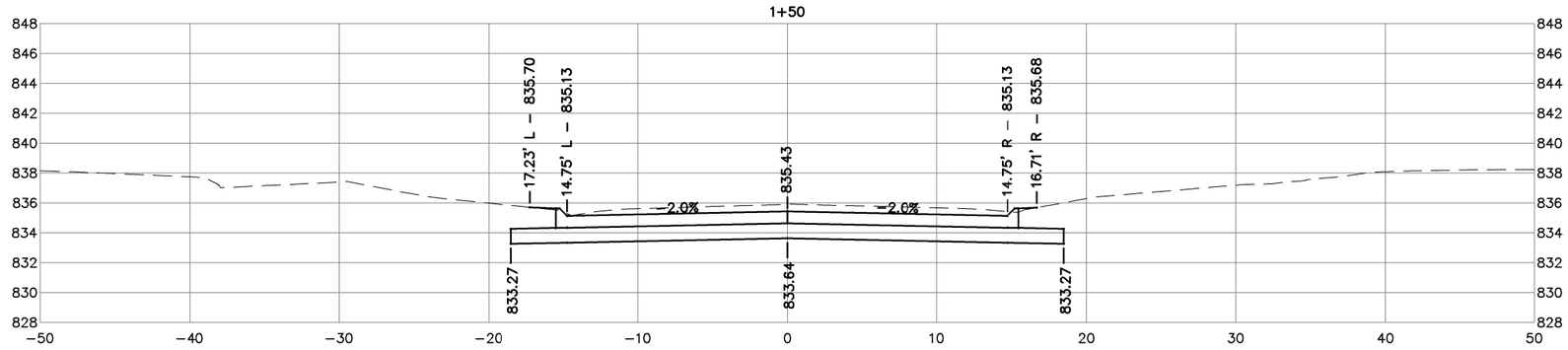
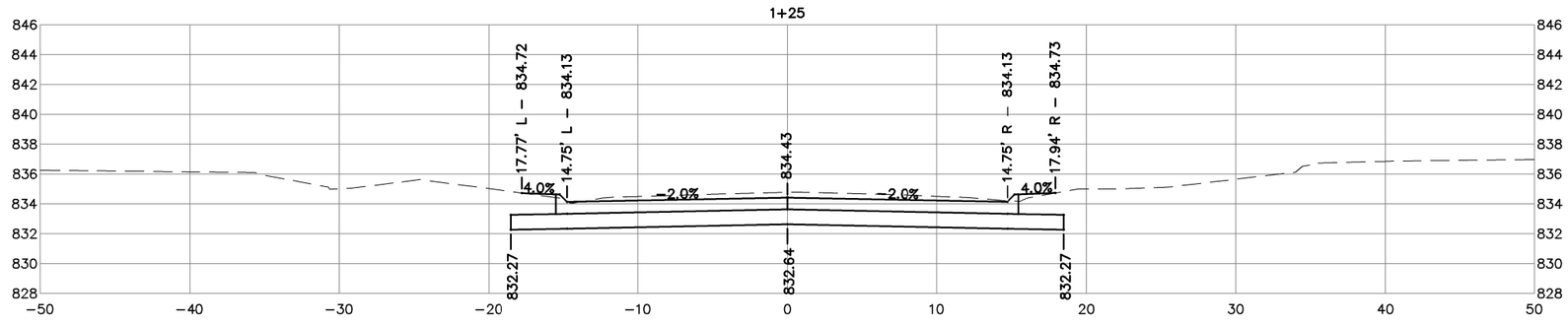
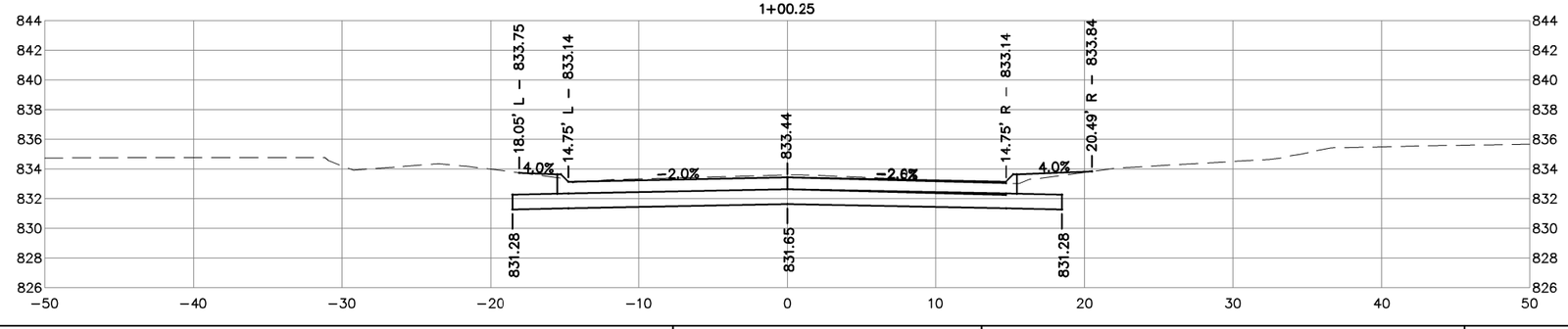
DRAWING MAY HAVE BEEN REDUCED







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DESIGNED BY:	TRACED BY:	iiw	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:	563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com				IOWA		2016	W.1	135

HORIZONTAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
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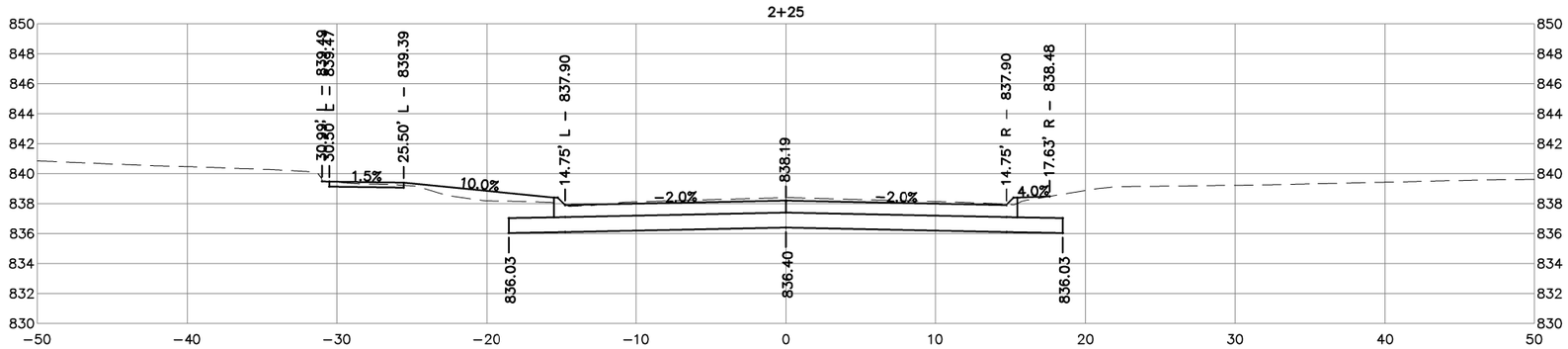

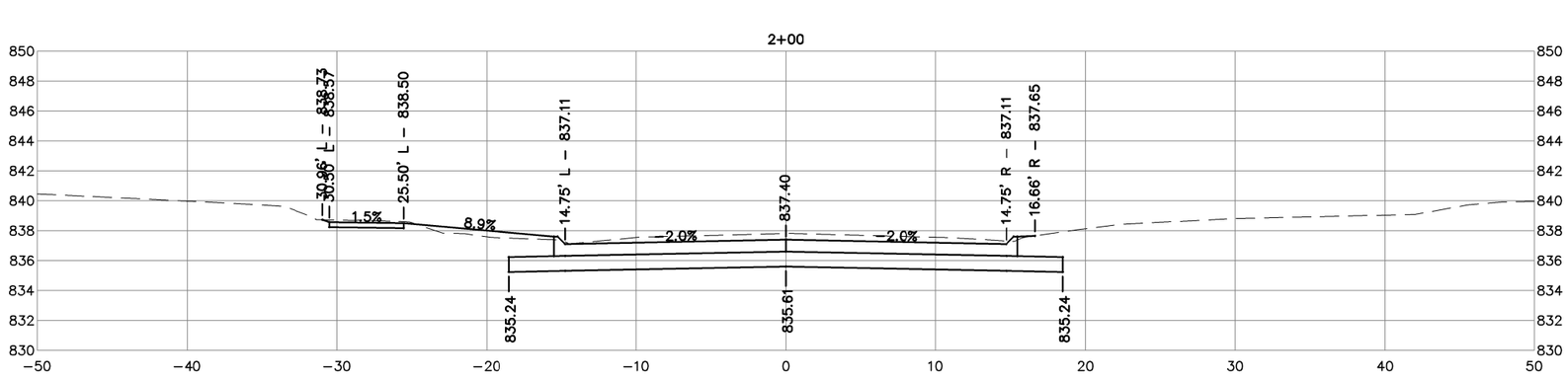

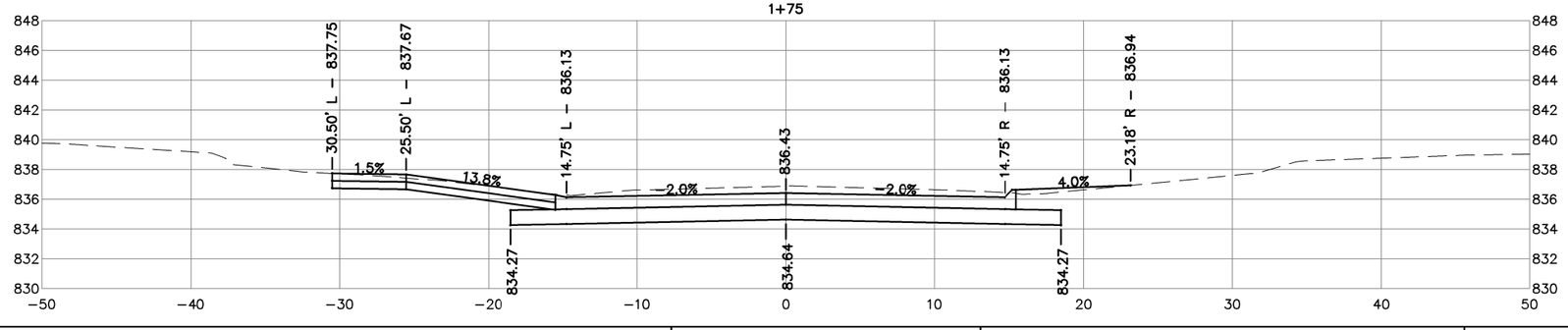

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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.2	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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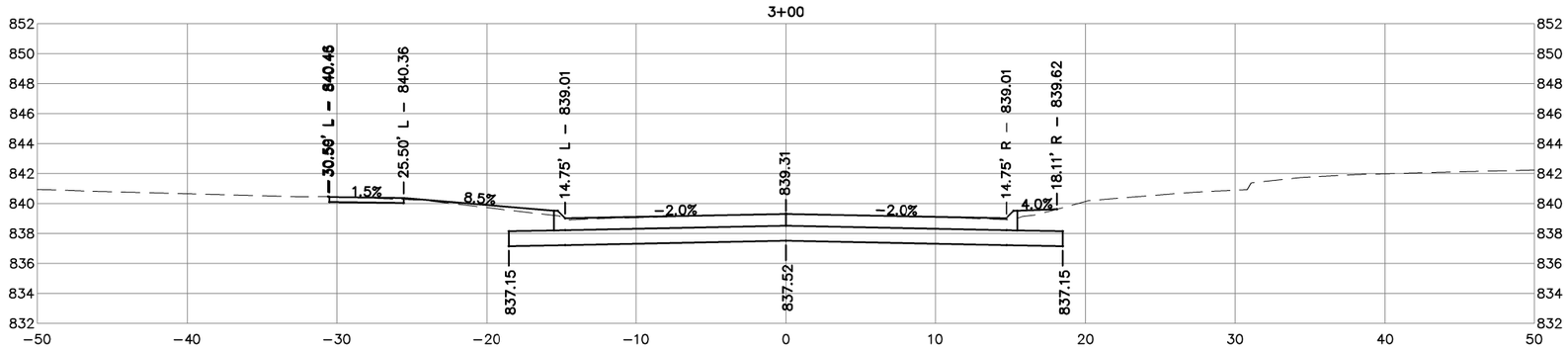
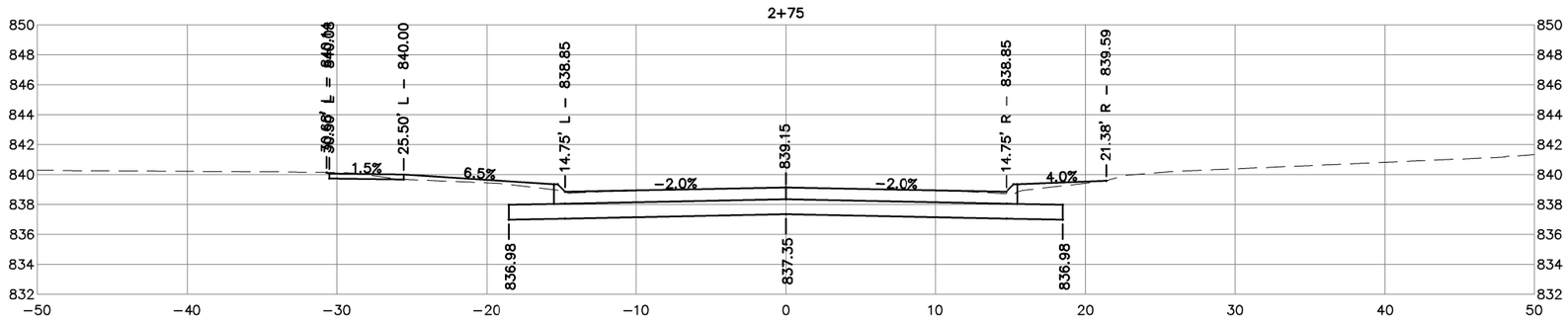
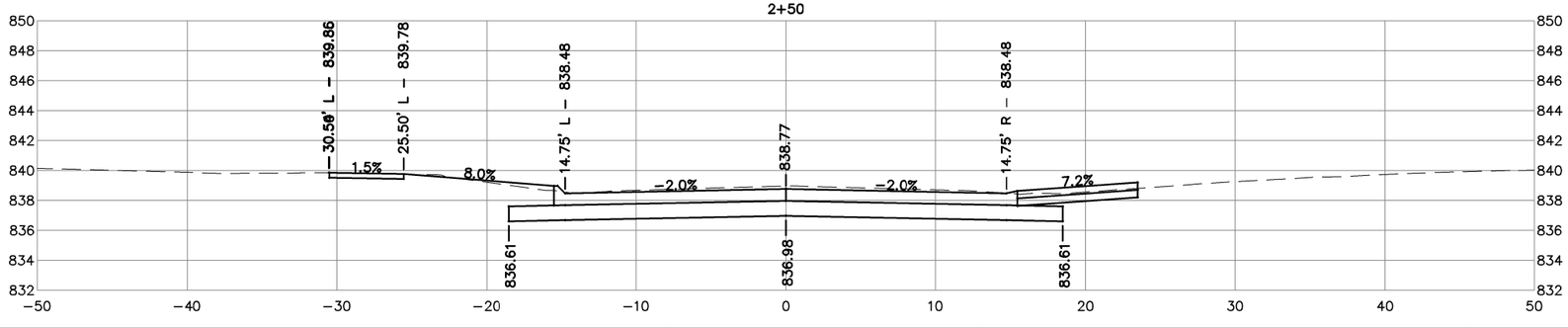
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED







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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.3	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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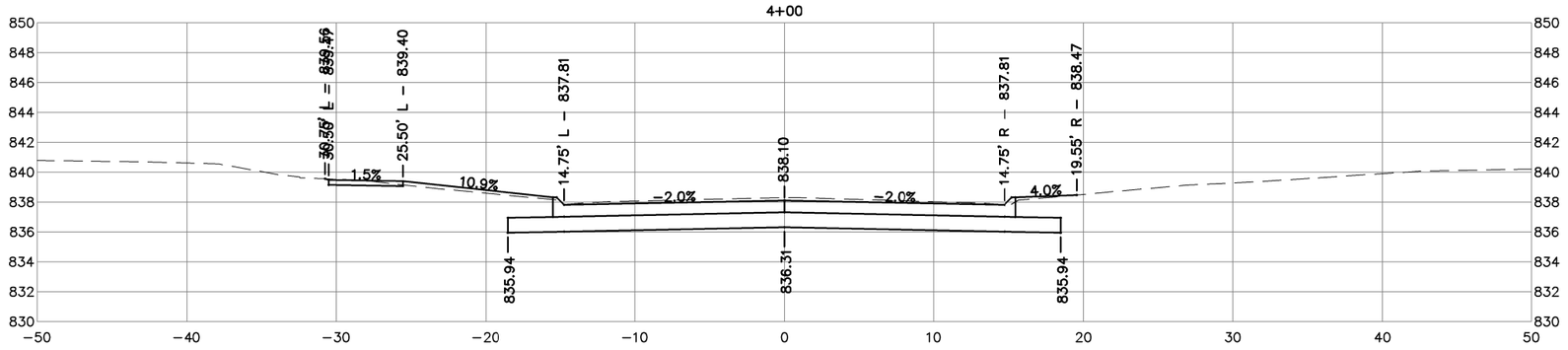
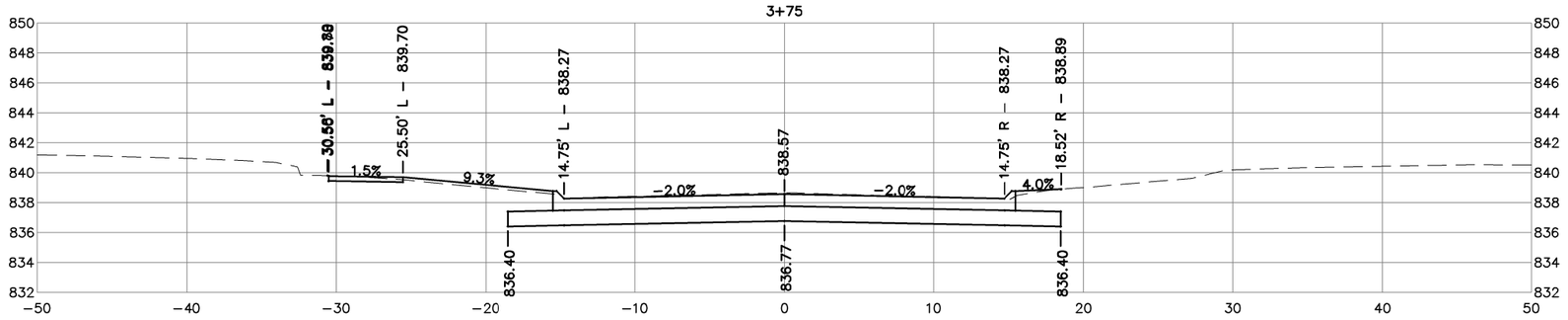
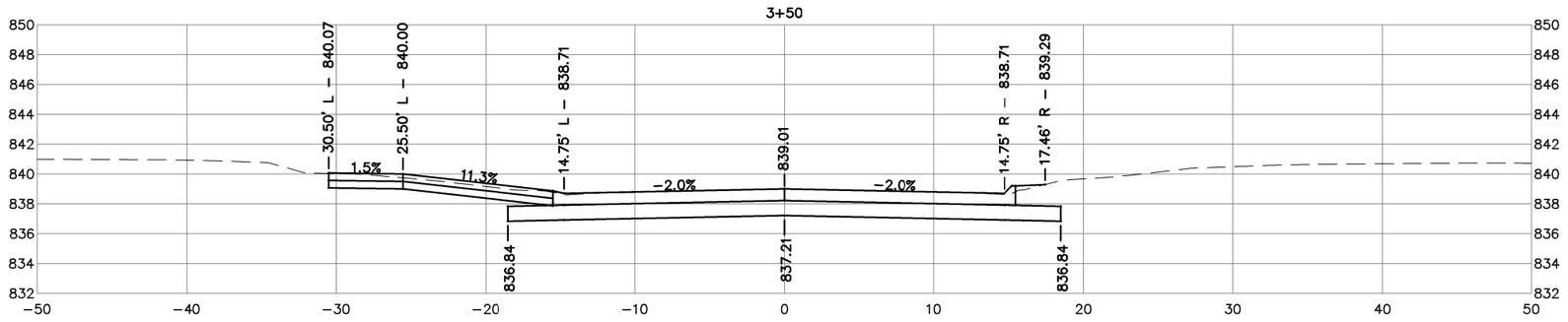
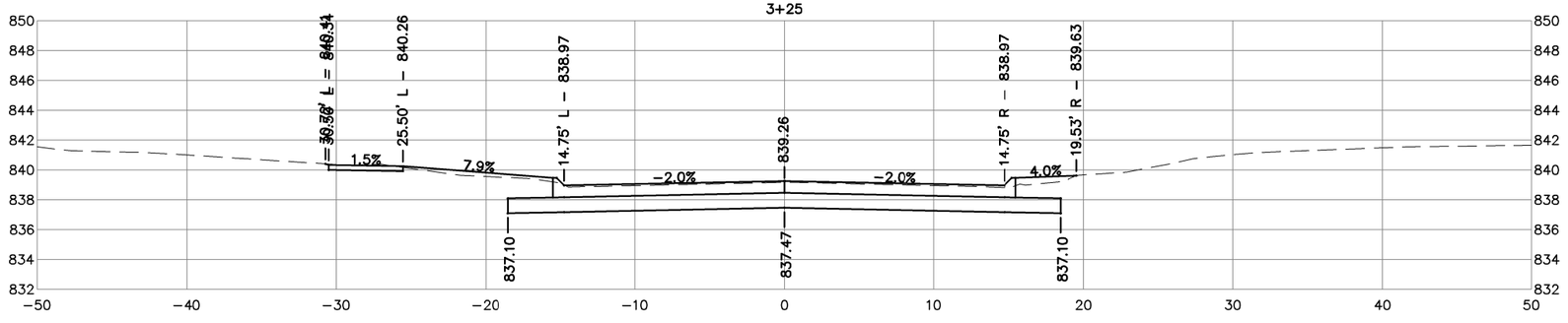
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED









DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.4	135

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STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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VERTICAL SCALE IN FEET
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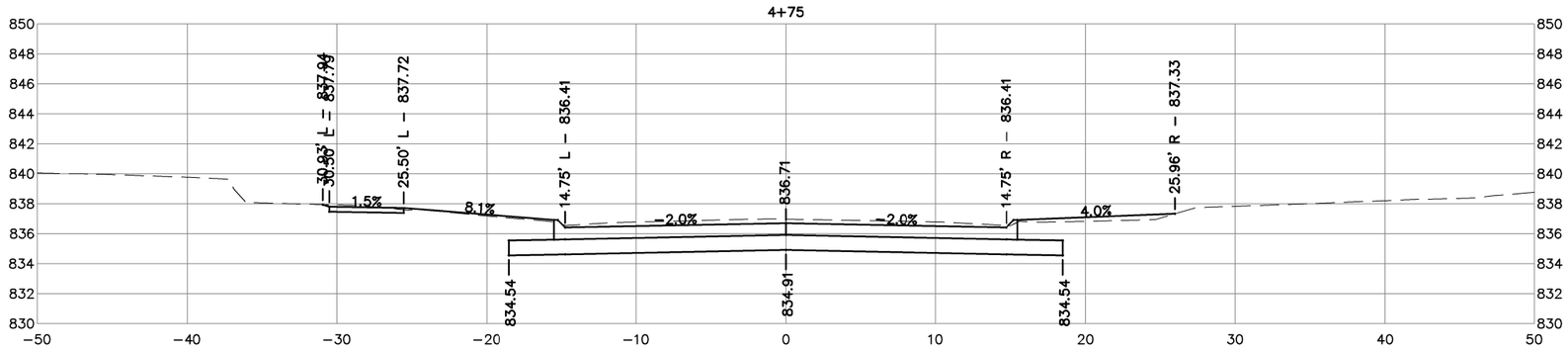

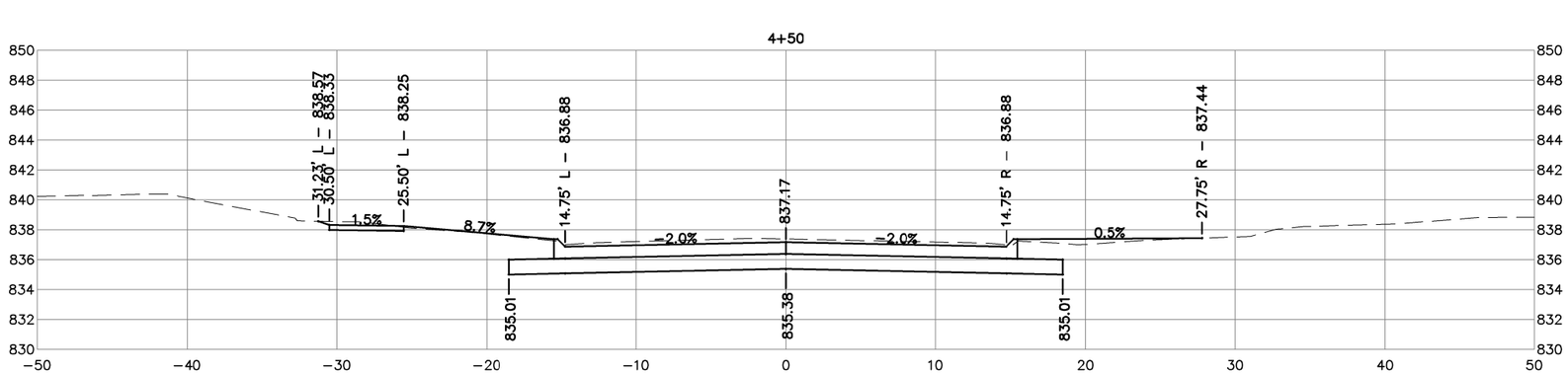

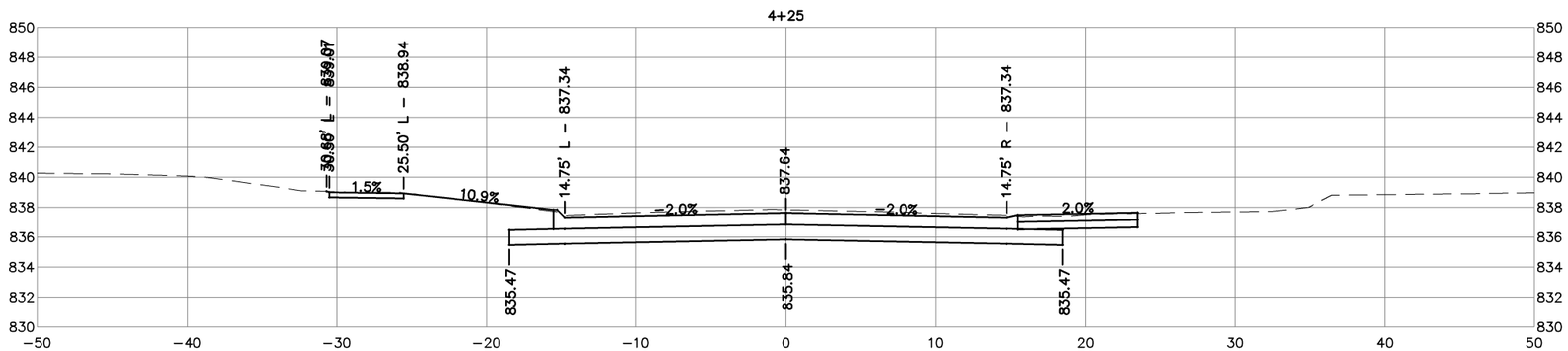

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DETAILED BY:	CHECKED BY:		IIW, P.C. ◆ www.iiwengr.com				IOWA		2016	W.5	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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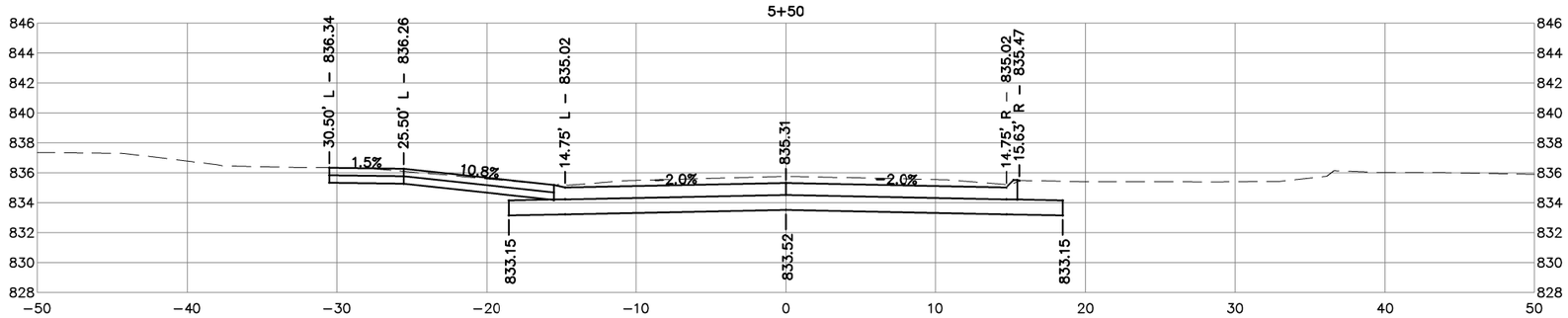
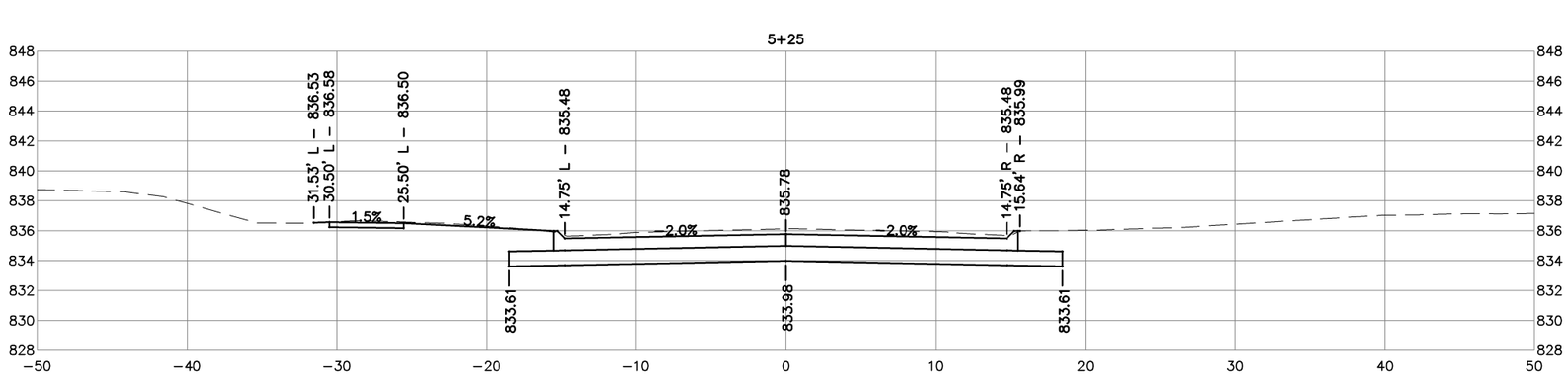
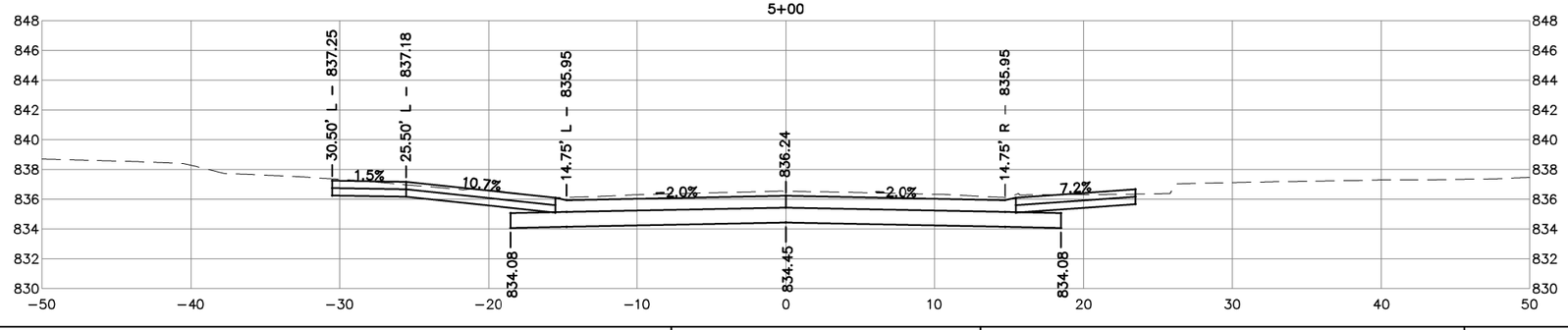
DRAWING MAY HAVE BEEN REDUCED







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DESIGNED BY: _____ TRACED BY: _____
DETAILED BY: _____ CHECKED BY: _____

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	W.6	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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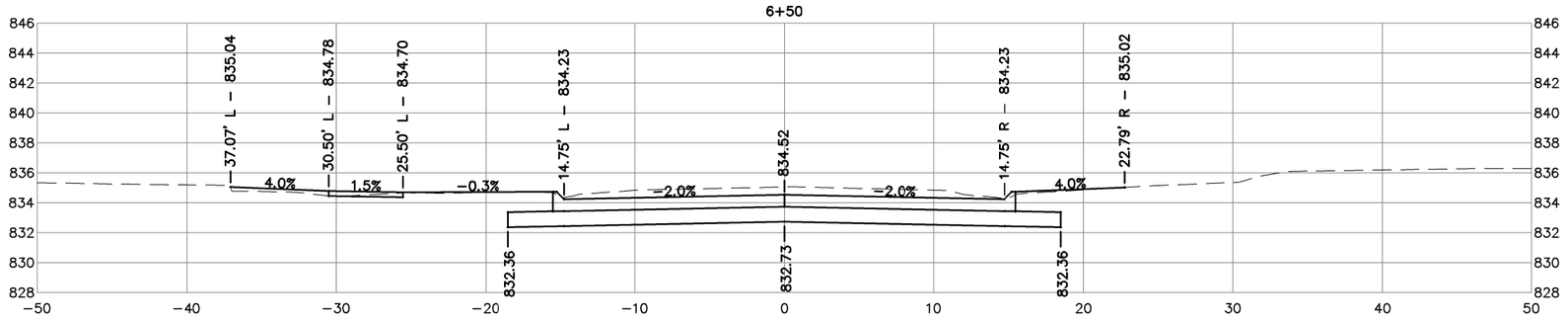
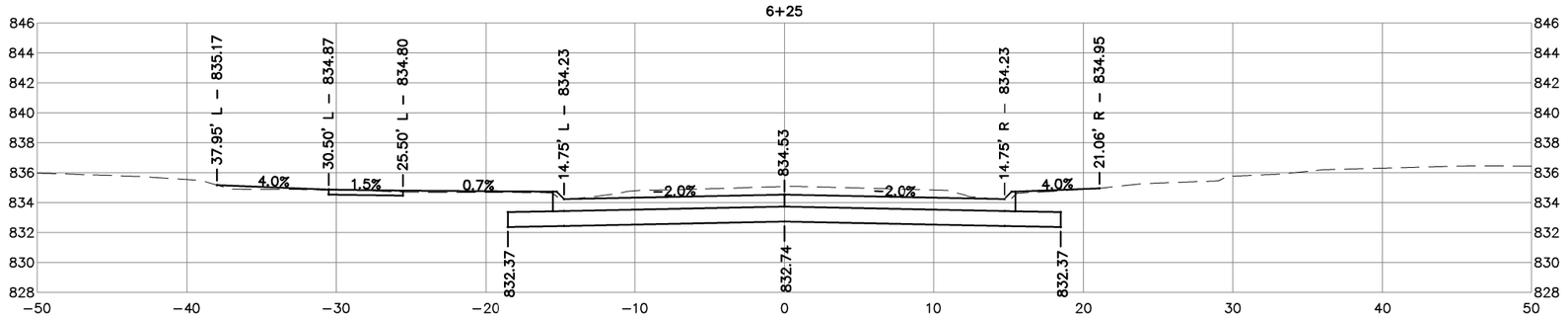
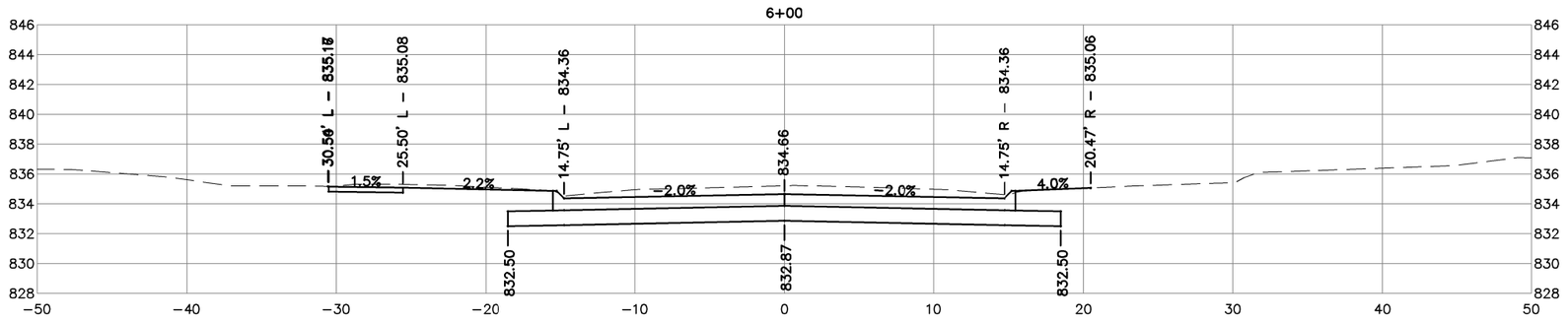
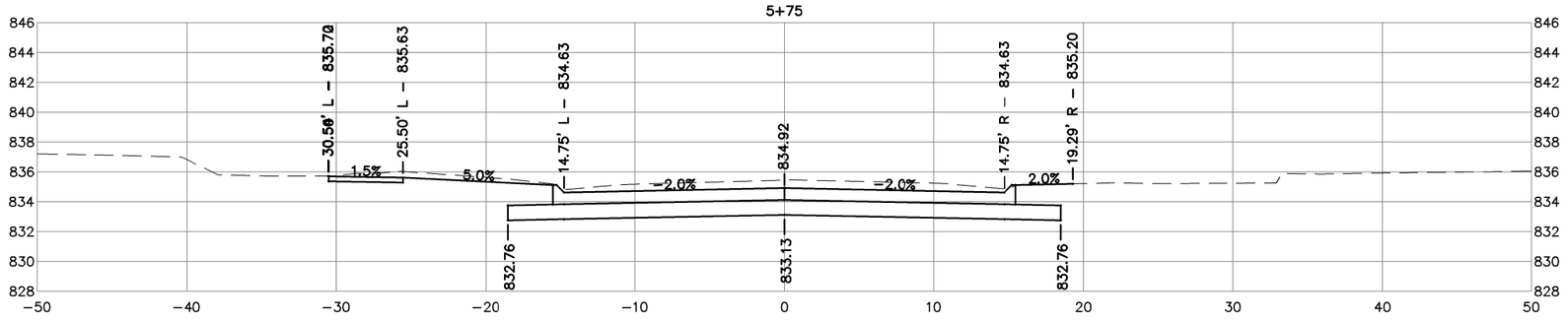
DRAWING MAY HAVE BEEN REDUCED









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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.7	135

STP-038-2(37)--2C-16

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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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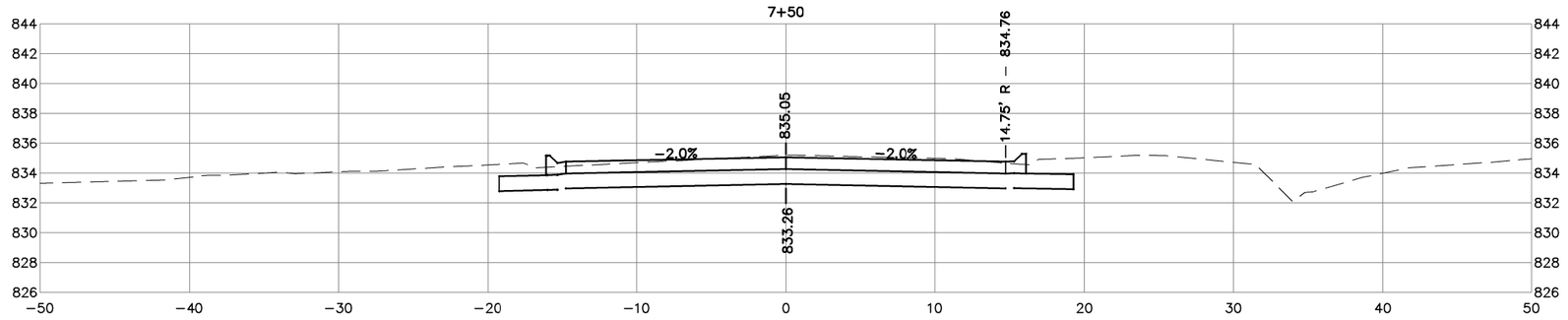

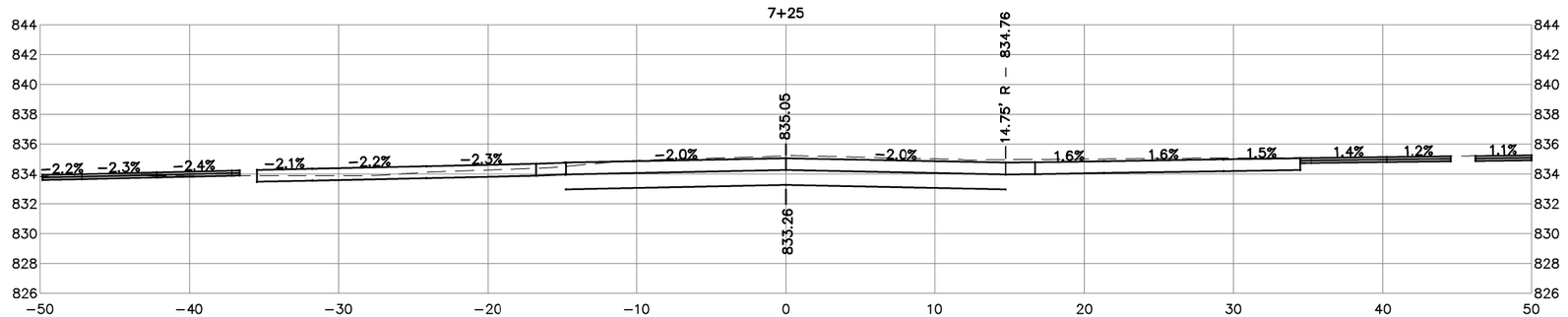

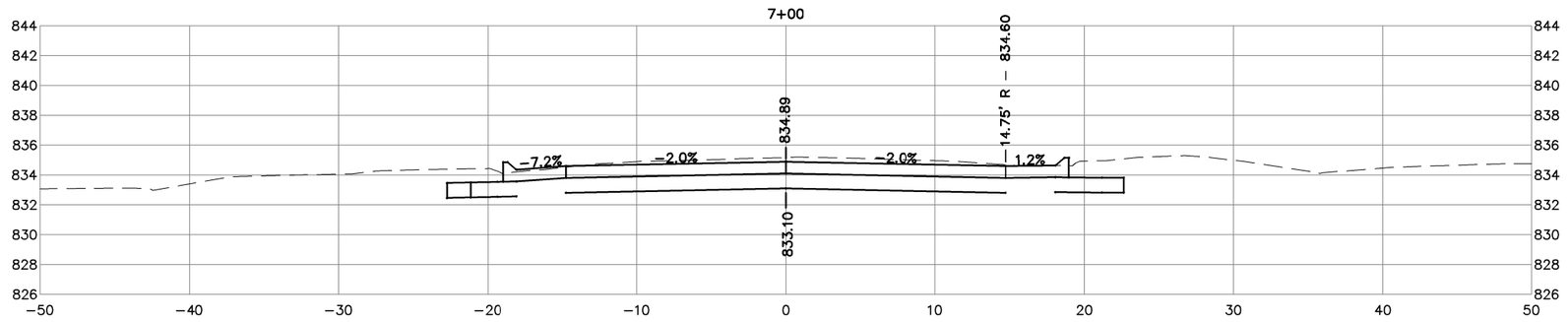

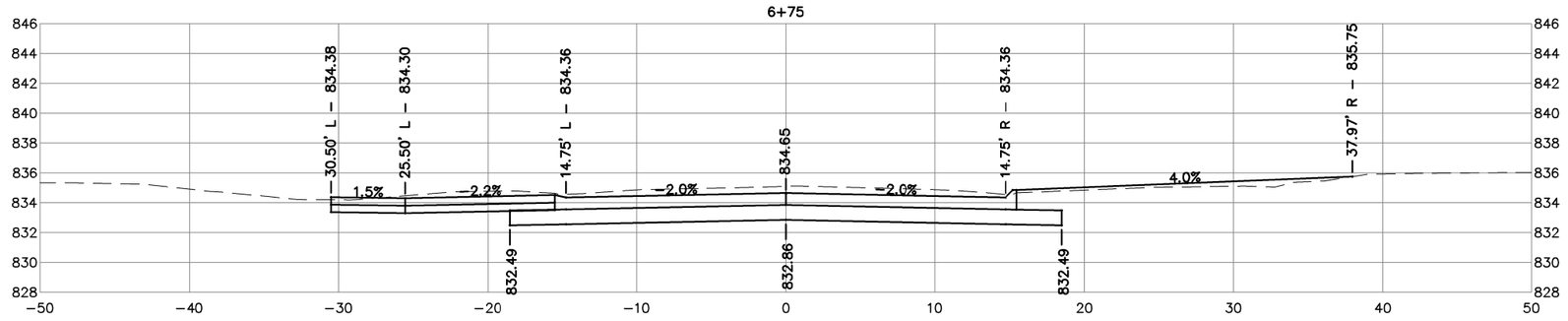

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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.8	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
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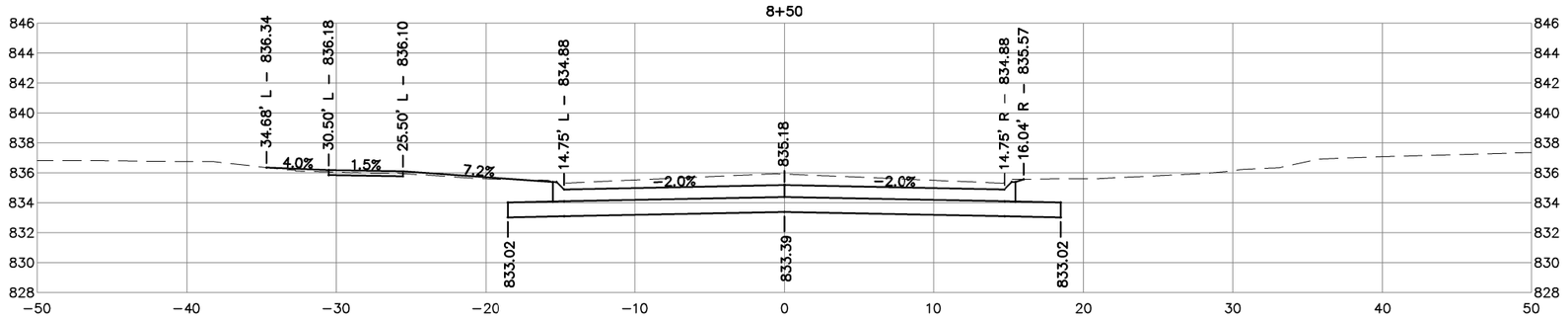

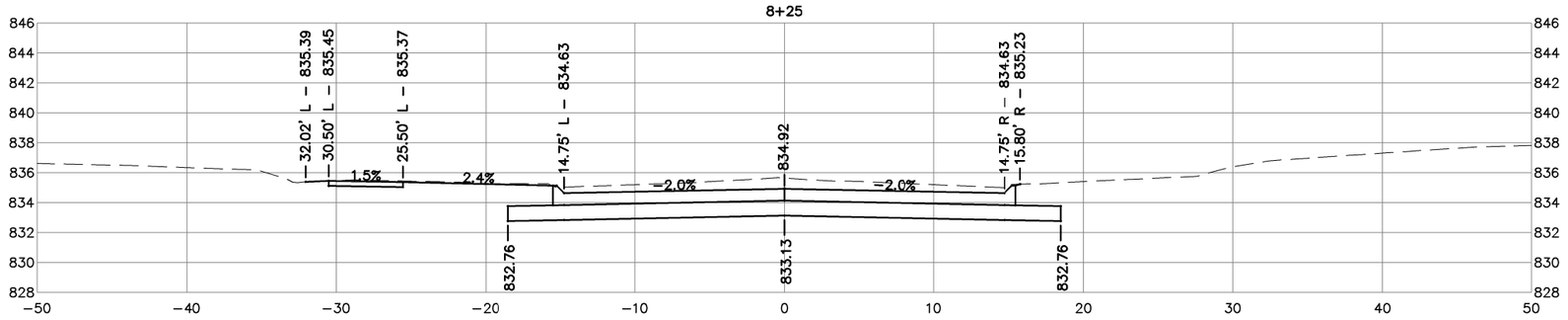

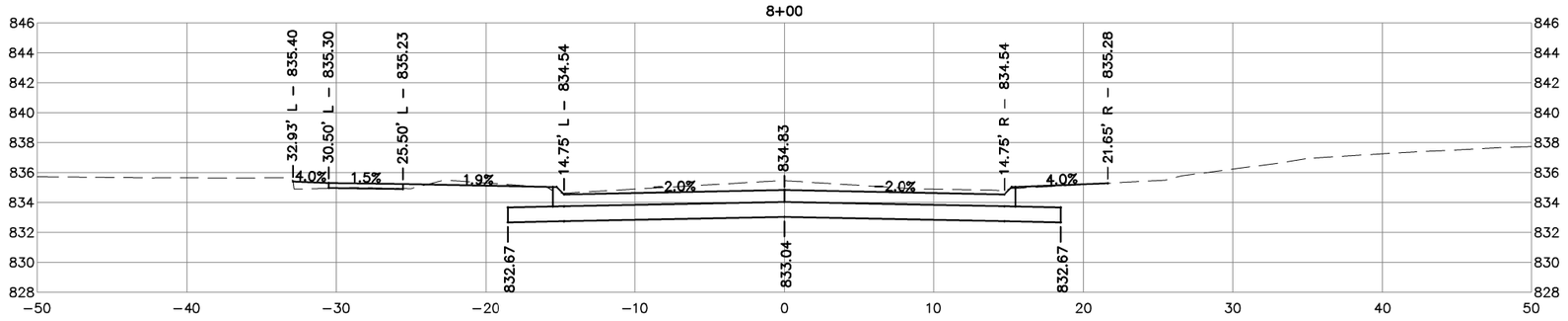

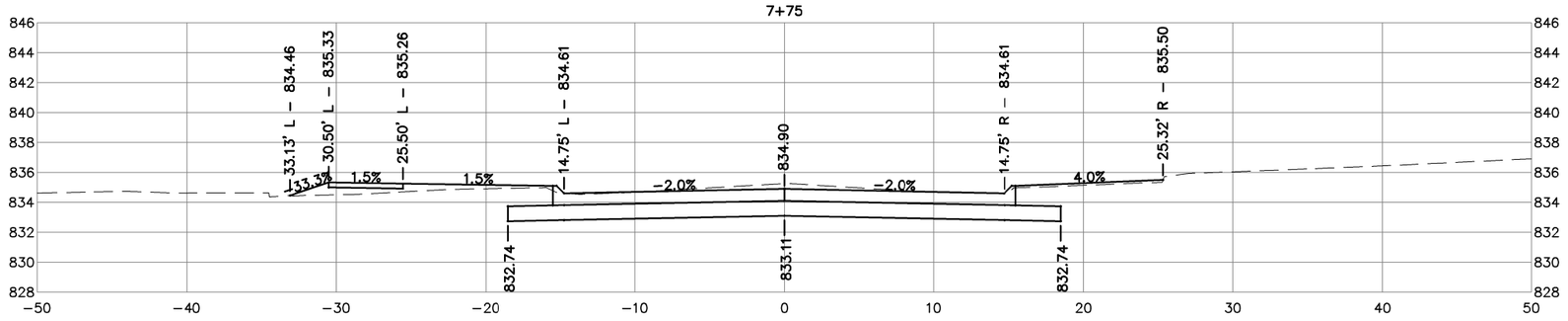

DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.9	135

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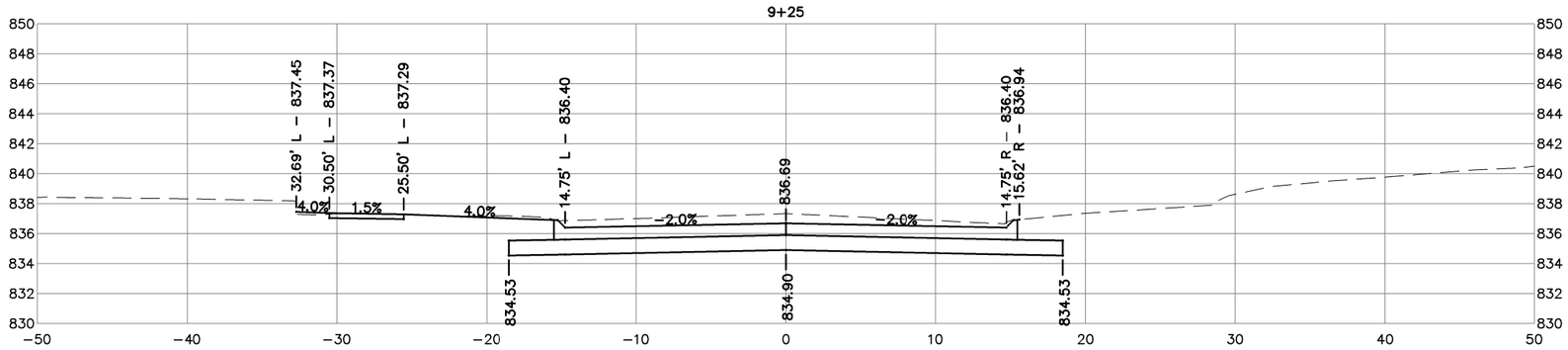
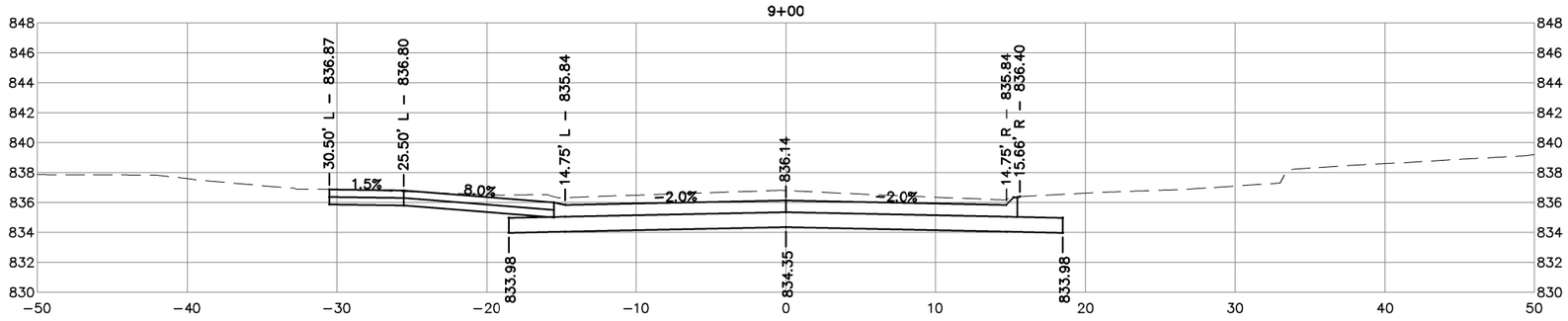
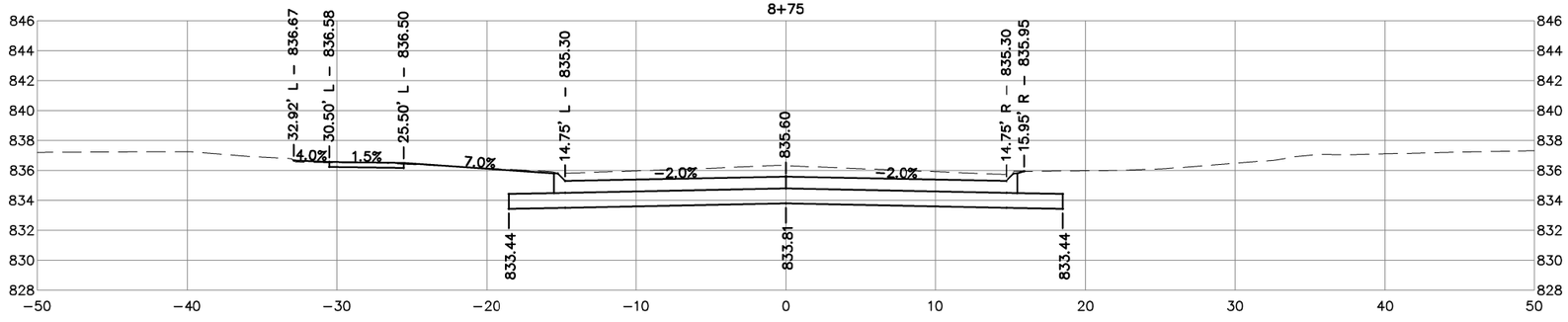
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED







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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	W.10	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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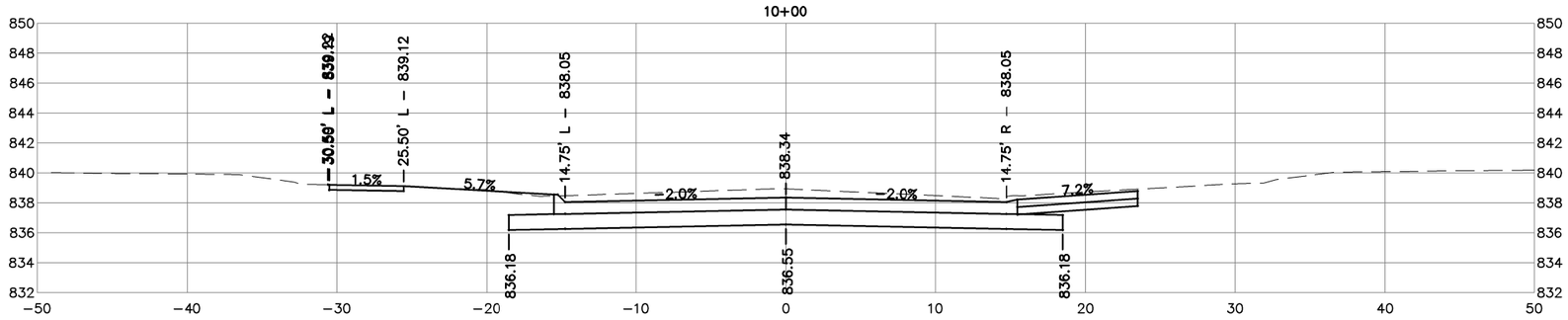
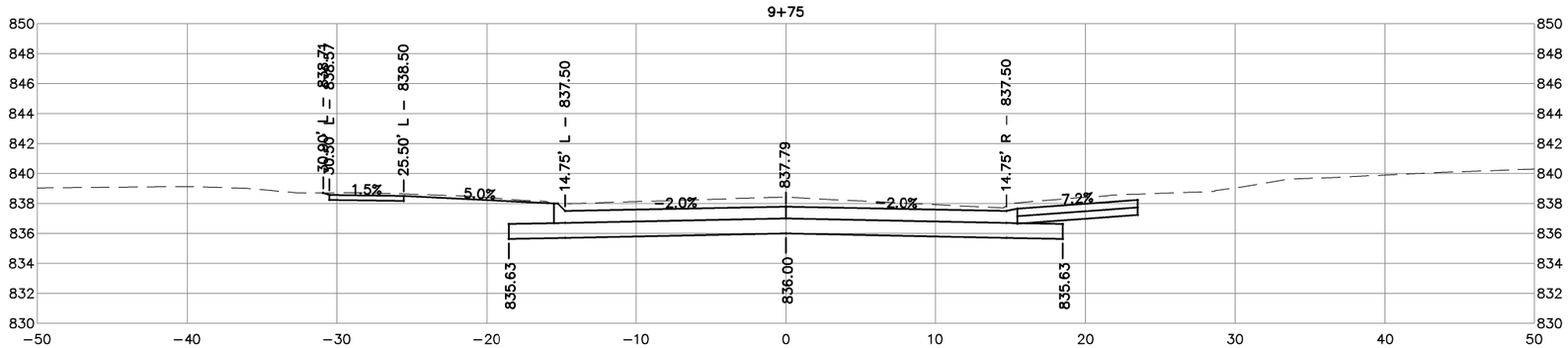
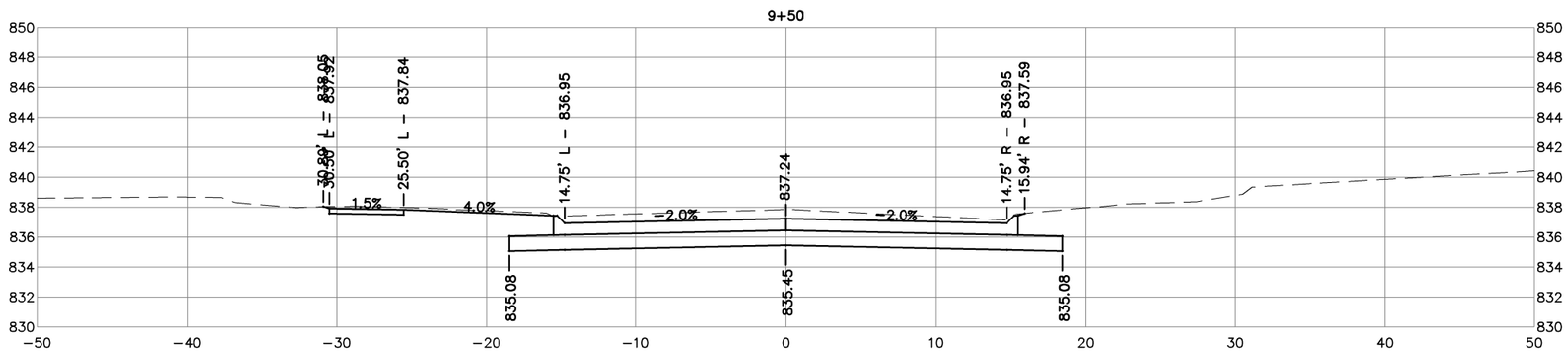
DRAWING MAY HAVE BEEN REDUCED







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DETAILED BY:	CHECKED BY:					IOWA		2016	W.11	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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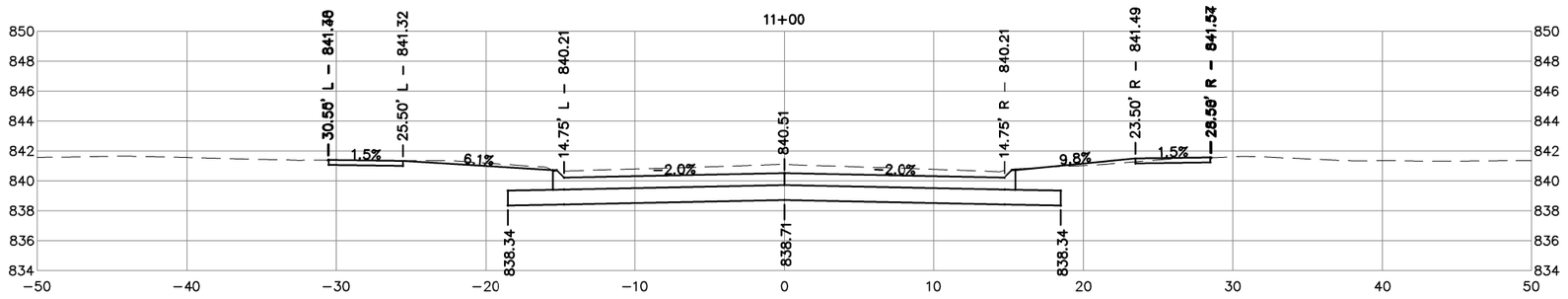
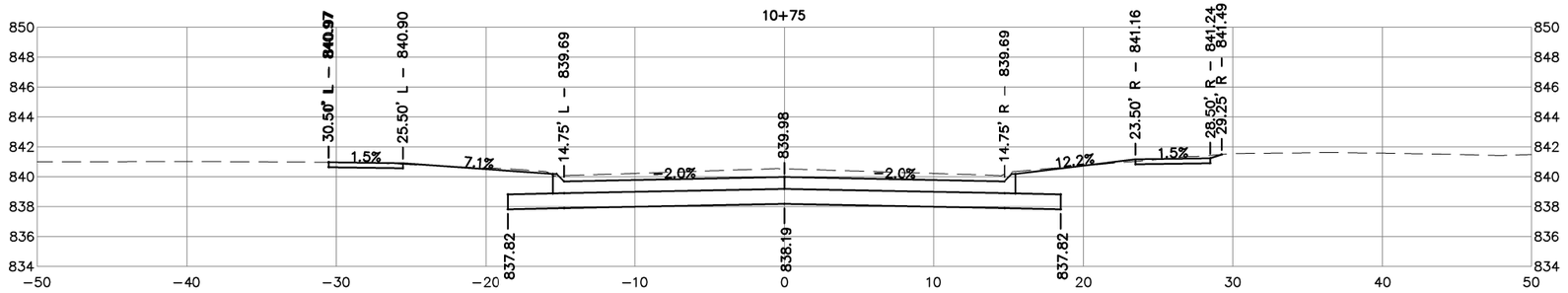
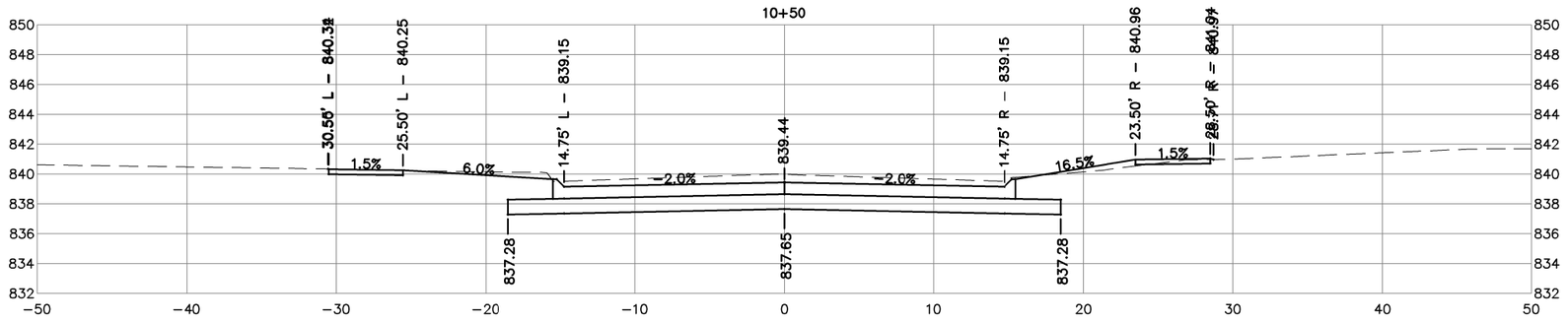
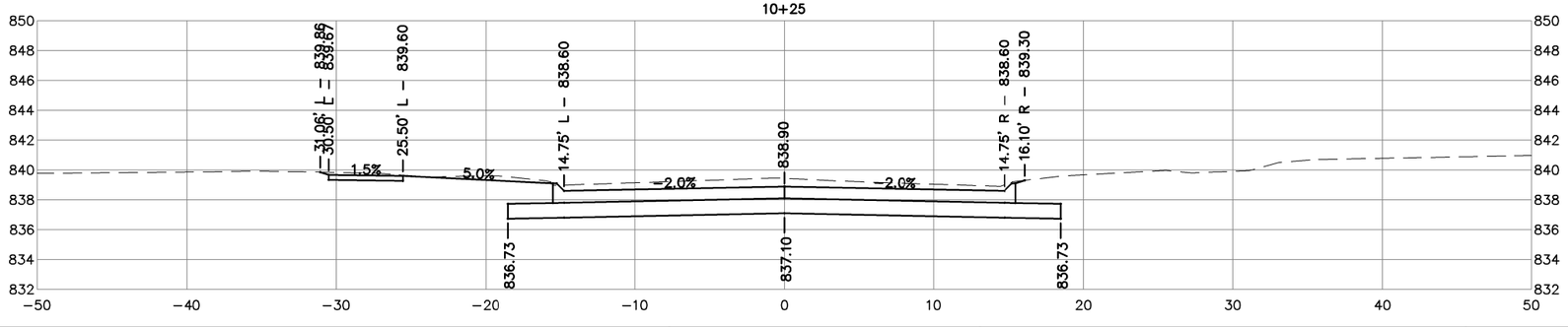
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED









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DETAILED BY:	CHECKED BY:					IOWA		2016	W.12	135

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STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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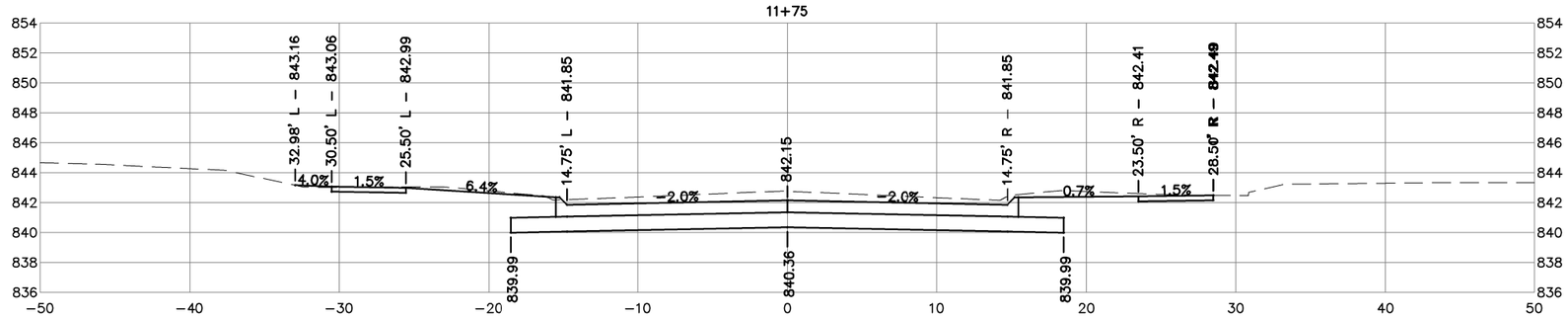
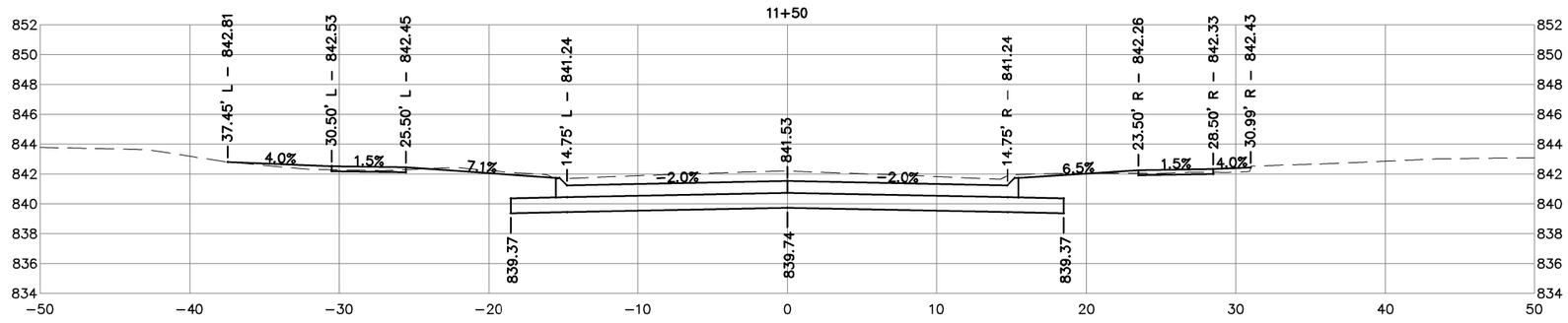
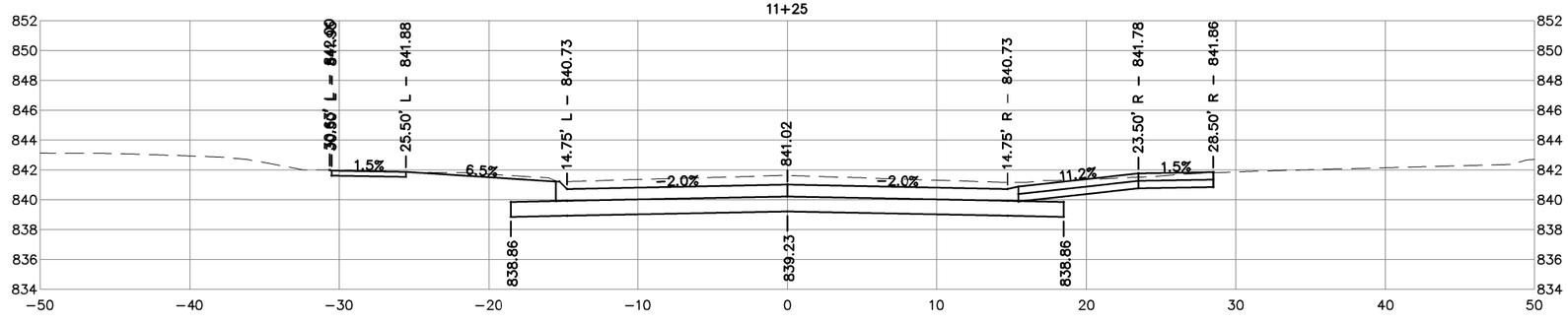
DRAWING MAY HAVE BEEN REDUCED







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DETAILED BY:	CHECKED BY:					IOWA		2016	W.13	135

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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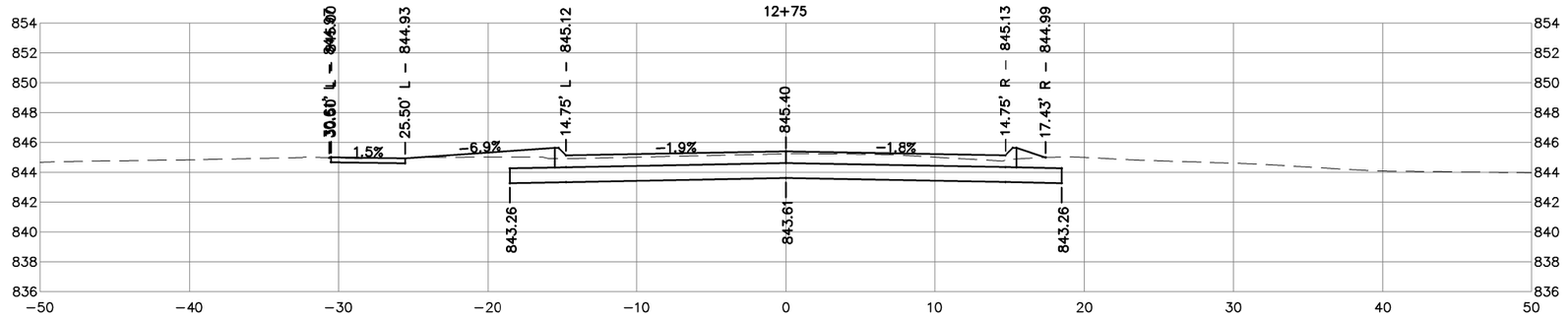
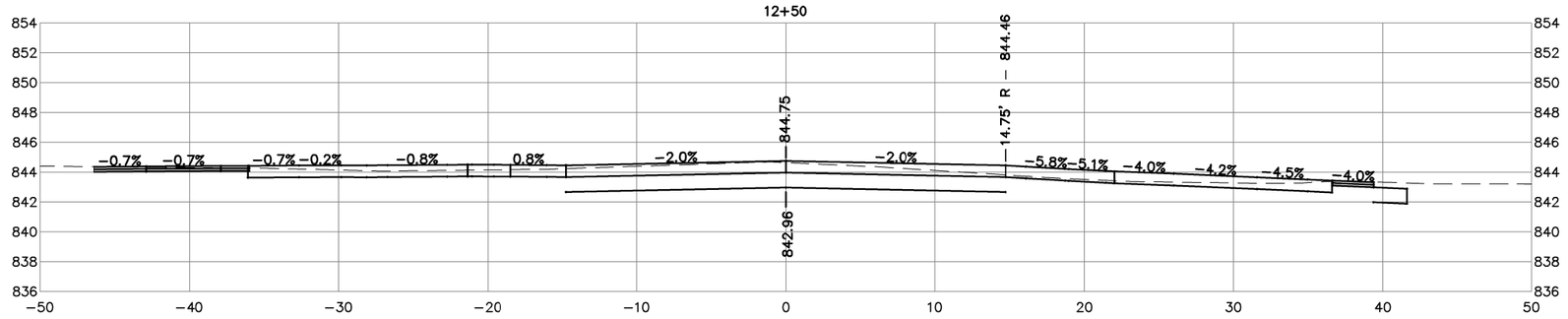
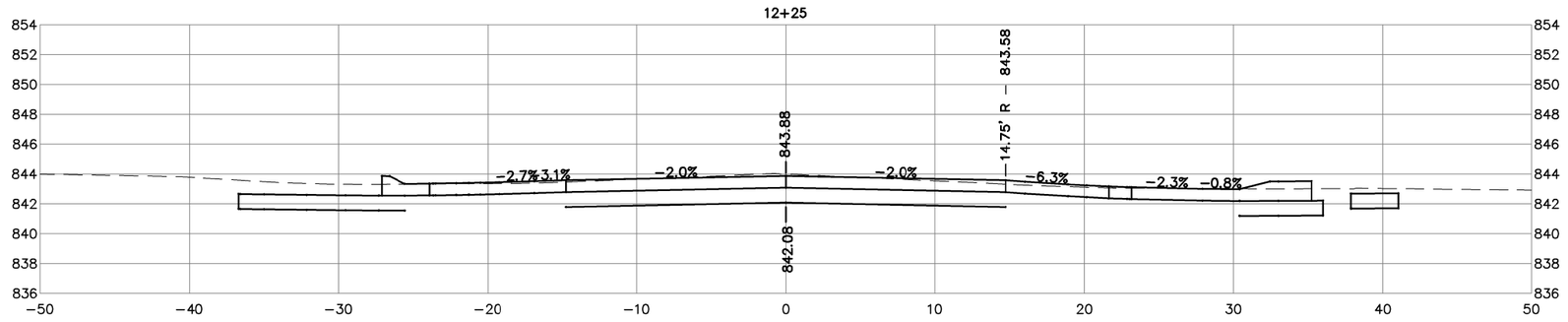
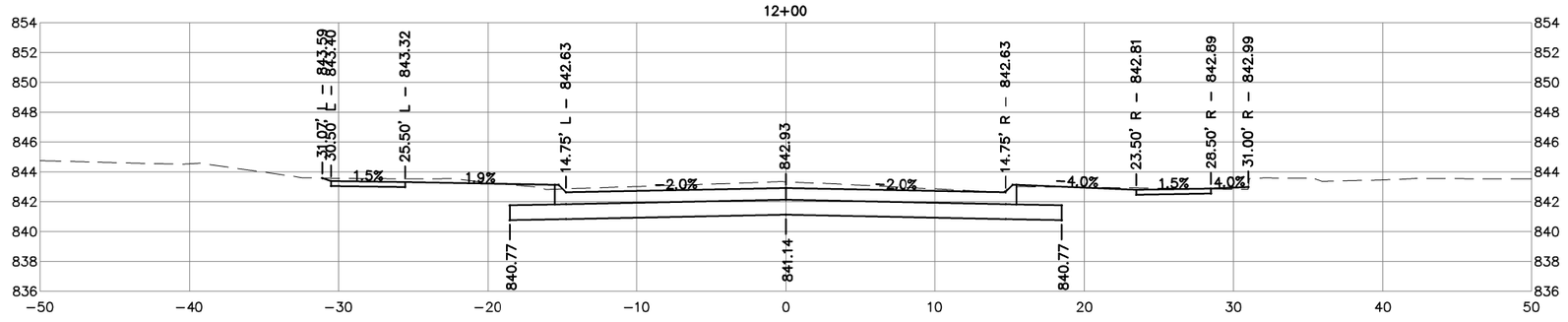
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET 10 5 0
DRAWING MAY HAVE BEEN REDUCED









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DETAILED BY:	CHECKED BY:					IOWA		2016	W.14	135

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STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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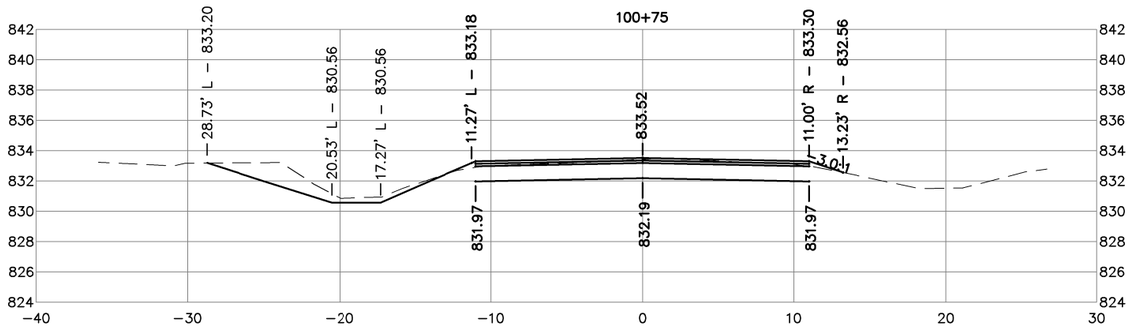

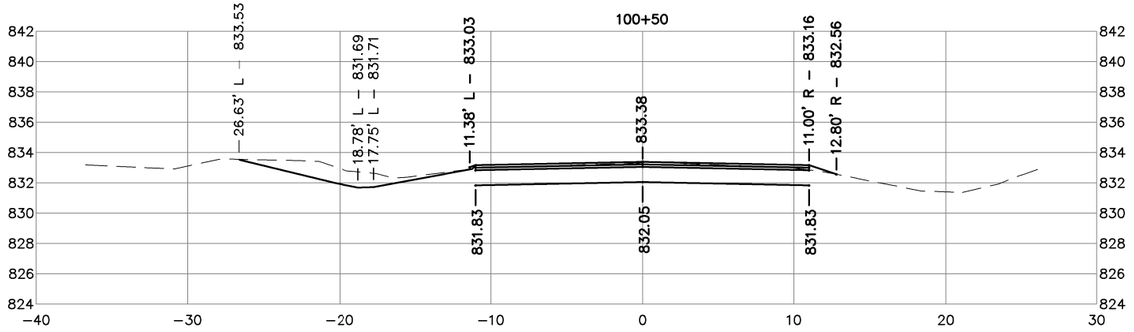

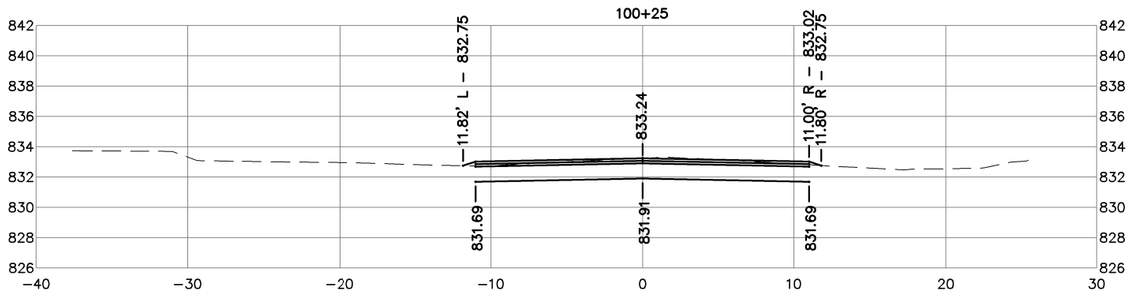

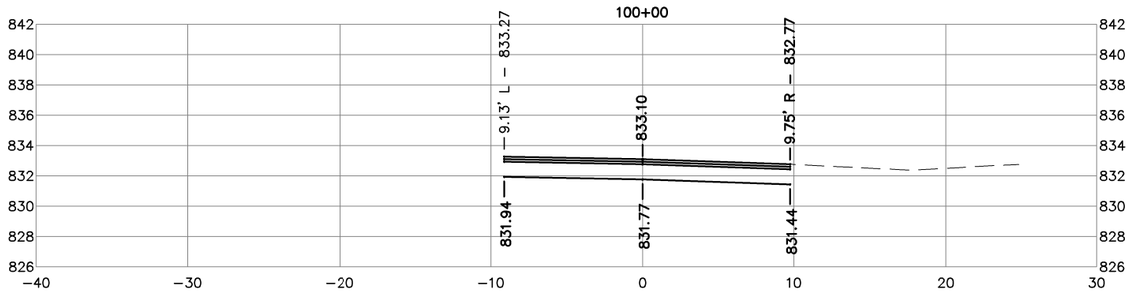

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	X.1	130

STP-038-2(37)--2C-16

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VERTICAL SCALE IN FEET 10 5 0
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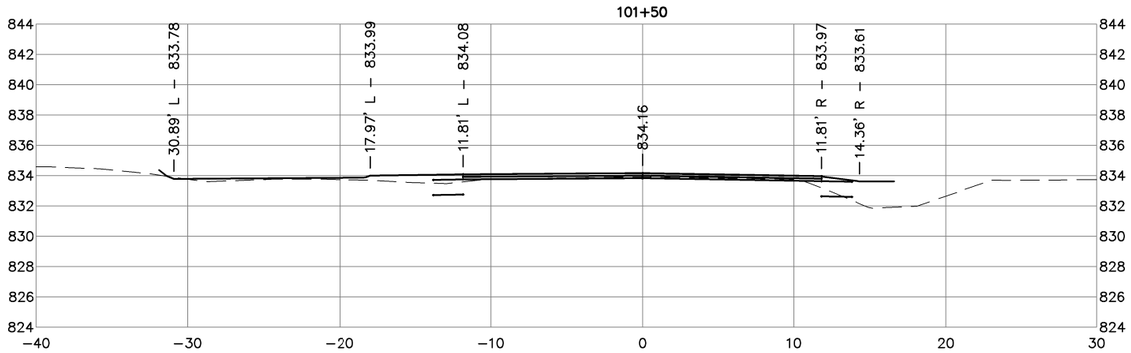

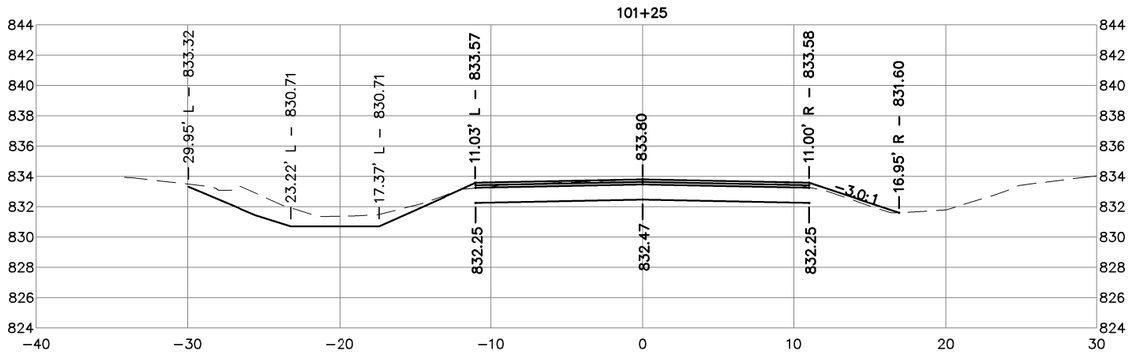

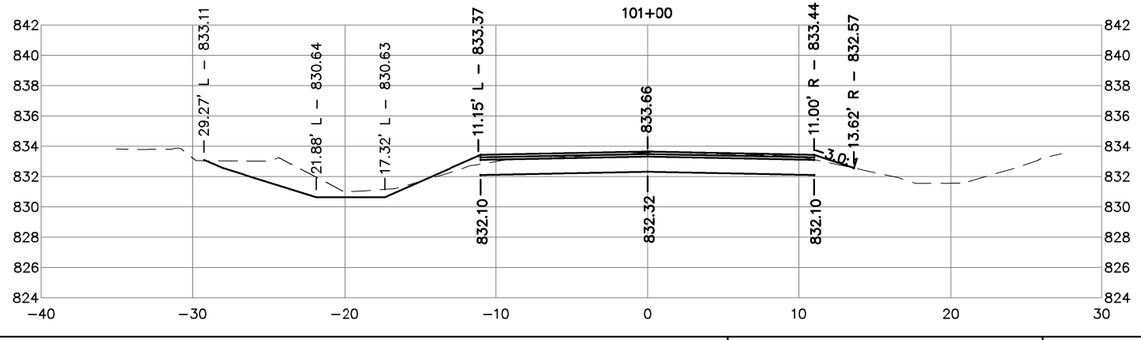

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DETAILED BY:	CHECKED BY:					IOWA		2016	X.2	130

HORIZONTAL SCALE IN FEET
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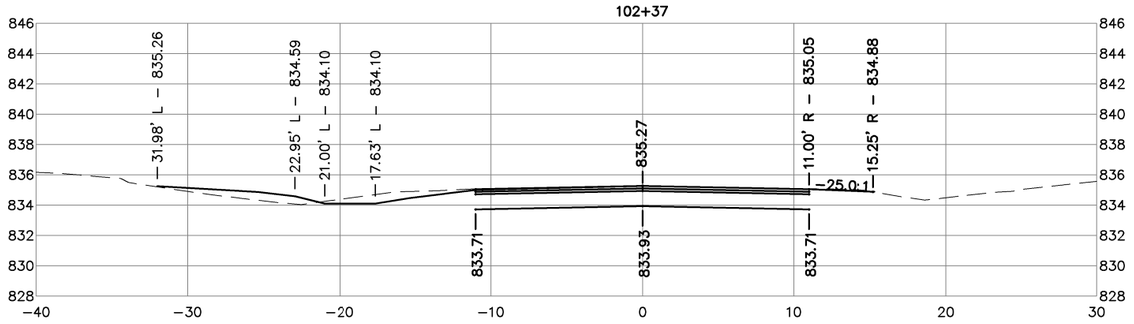
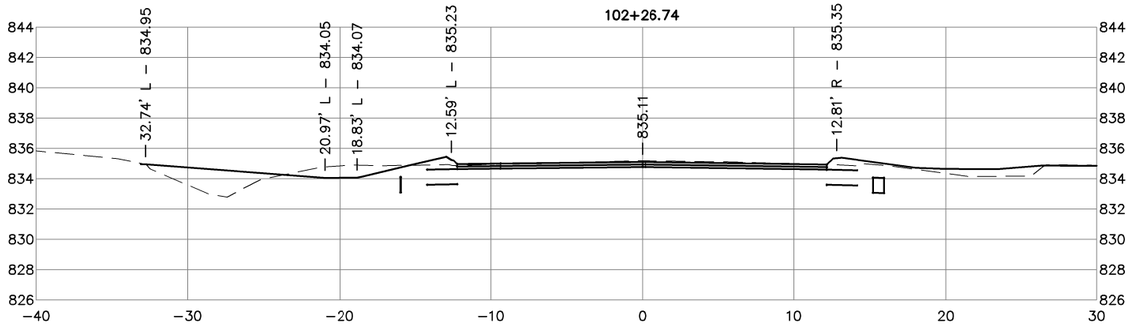
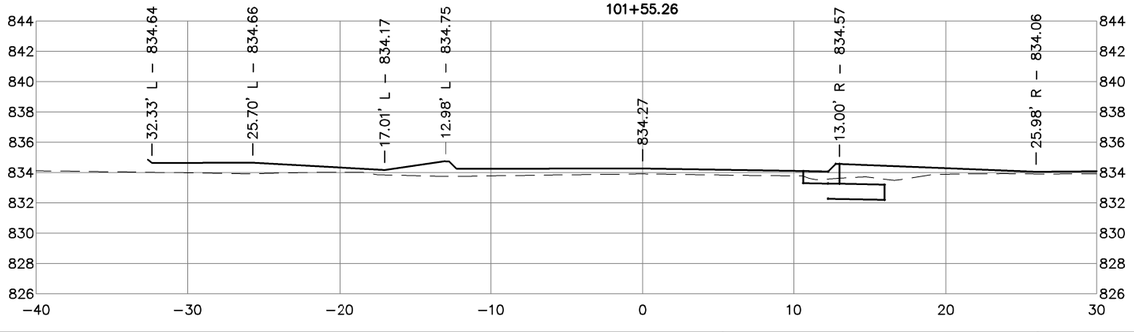
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED







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DESIGNED BY: TRACED BY:
DETAILED BY: CHECKED BY:

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	X.3	130

HORIZONTAL SCALE IN FEET
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DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
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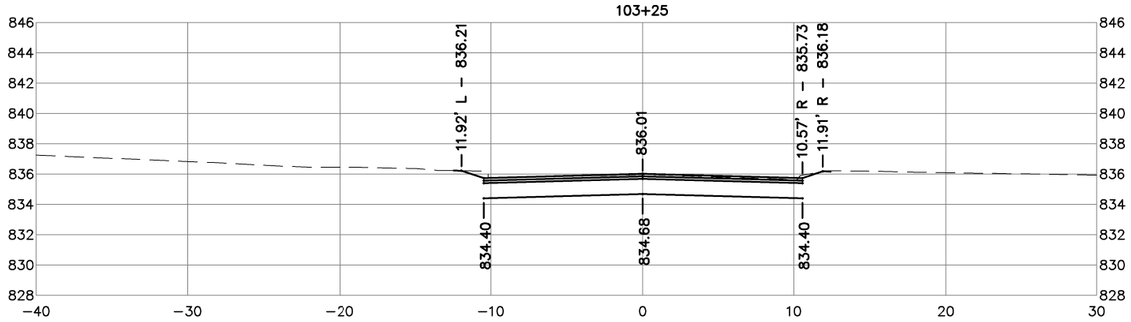
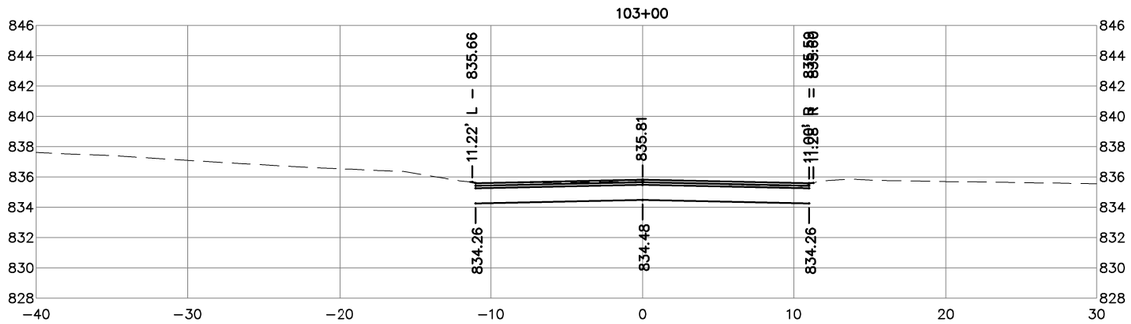
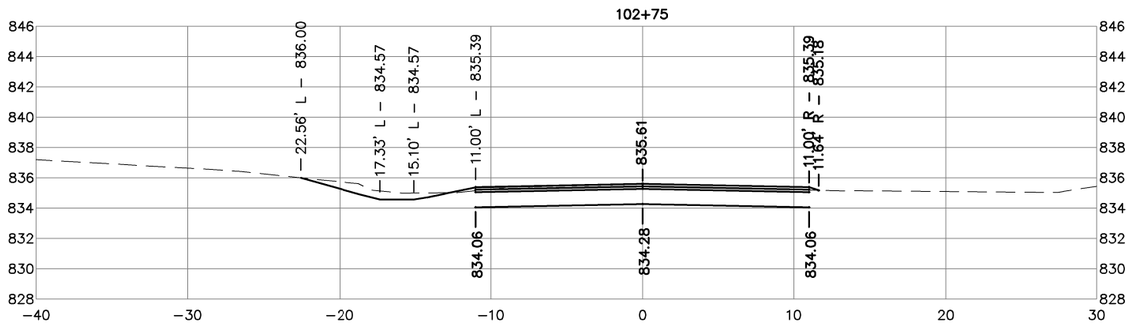
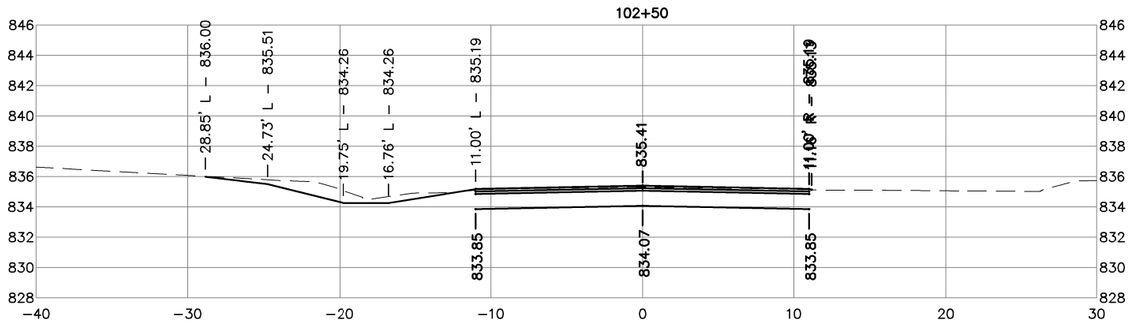
DRAWING MAY HAVE BEEN REDUCED









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DESIGNED BY: TRACED BY:
DETAILED BY: CHECKED BY:

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CITY OF STANWOOD, CEDAR COUNTY

PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
STP-038-2(37)--2C-16	IOWA		2016	X.4	130

STP-038-2(37)--2C-16

HORIZONTAL SCALE IN FEET
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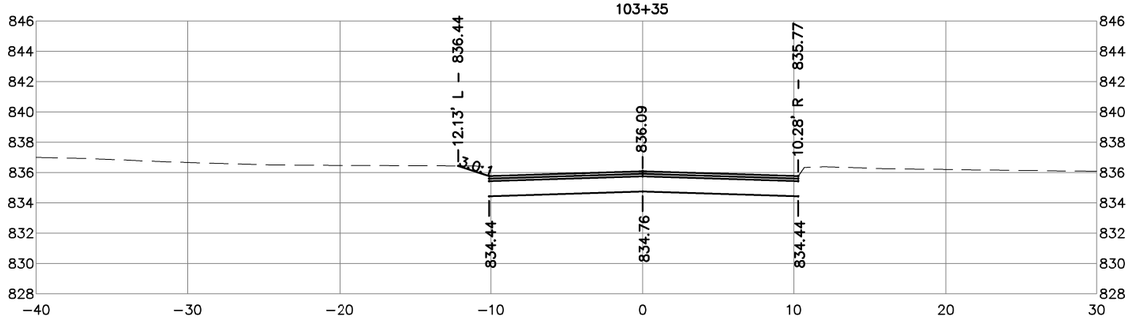
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10
5
0
DRAWING MAY HAVE BEEN REDUCED



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DESIGNED BY:	TRACED BY:	iiw 563.556.2464 ◆ 800.556.4491 IIW, P.C. ◆ www.iiwengr.com	CITY OF STANWOOD, CEDAR COUNTY	PROJECT NUMBER	STP-038-2(37)--2C-16	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DETAILED BY:	CHECKED BY:					IOWA		2016	X.5	130