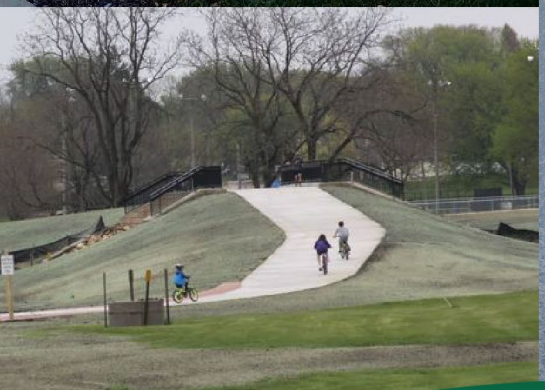
City of Dyersville



Appendix D: Preliminary Plan and Environmental Review for Component 2

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Preliminary Plans - Component 2.....3
Environmental Review - Component 2.....24

CITY PROJECT NUMBER: 10192243

LETTING DATE

DUBUQUE COUNTY

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	**Title Sheets**
A.1	Title Sheet
* A.2	Legend Sheet
B Sheets	**Typical Cross Sections and Details**
B.1 - 2	Typical Cross Sections and Details
D Sheets	**Mainline Plan and Profile Sheets**
* D.1 - 2	12th Ave to 13th Ave Plan & Profile Sheets
* D.3	1st St SW Plan & Profile Sheets
G Sheets	**Survey Sheets**
G.1 - 2	Roadway Alignment Geometry
G.3	Reference Ties, Bench Marks & Horizontal Control Tab.
J Sheets	**Traffic Control and Staging Sheets**
* J.1	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.2	Traffic Control Plan & Staging Notes
* J.3	Staging and Traffic Control Sheets Stage 1
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R Sheets	**Borrow Sheets**
R.1 - 2	Removal Sheets
V Sheets	**Bridge and Culvert Situation Plans**
V.1 - 2	Bridge Situation Plans
	* Color Plan Sheets

City of Dyersville

PLANS OF PROPOSED IMPROVEMENT IN THE

CITY OF DYERSVILLE

DUBUQUE COUNTY

12TH AVENUE SW TO 13TH AVENUE SE CONNECTOR BRIDGE FROM 1ST STREET SW TO 6TH STREET SE

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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

IOWA ONE CALL
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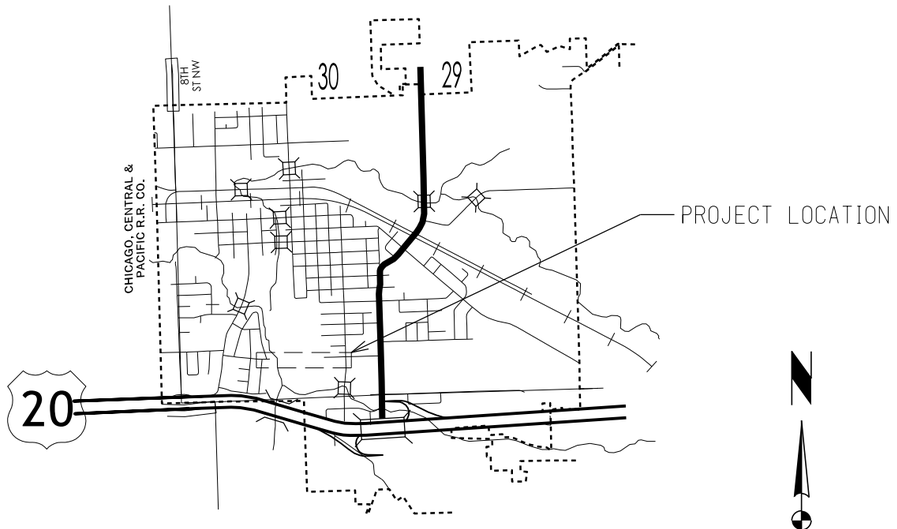
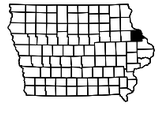
www.iowaonecall.com
Know what's below. Call before you dig.

REVISIONS

TOTAL
PROJECT IDENTIFICATION NUMBER
PROJECT NUMBER
10192243
R.O.W. PROJECT NUMBER





LOCATION MAP
NOT TO SCALE

INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	X	Primary Signature Block
X	X	X

PRELIMINARY PLANS

Subject to change by final design.

30% PLAN – Date: 10/21/2020

FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER A.1

2:46:20 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_A01.sht

SURVEY SYMBOLS

- Interstate Highway Symbol
- U.S. Highway Symbol
- Iowa Highway Symbol
- County Road Highway Symbol
- Evergreen Tree
- Deciduous Tree
- Fruit Tree
- Shrub (Bushes)
- Timber
- Hedge
- Stump
- Swamp
- Rock Outcrop
- Broken Concrete
- Revetment (Rip Rap)
- Cemetery
- Grave
- Cave
- Sink Hole
- Board Fence
- Chain Link or Security Fence
- Wire Fence
- Terrace
- Earth Dam or Dike (Existing)
- Earth Dam or Dike (Proposed)
- Tile Outlet
- Edge of Water
- Existing Drainage
- Proposed Drainage
- Right of Way Rail or Lot Corner
- Concrete Monument
- Well
- Windmill
- Beehive Intake
- Existing Intake
- Proposed Intake
- Existing Utility Access (Manhole)
- Proposed Utility Access (Manhole)
- Fire Hydrant
- WH Water Hydrant (Rural)
- Septic Tank
- C Cistern
- LP L.P. Gas Tank (No Footing)
- UST Underground Storage Tank
- Latrine
- Luminaire
- Traffic Signal
- Traffic Signal with Luminaire
- TP Telephone Pedestal
- TVP Television Pedestal
- Telephone Pole
- Power Pole
- Electrical Highline Tower (Metal or Concrete)
- Telephone Riser Pole
- Power Riser Pole
- Telegraph Pole
- Satellite TV Dish
- WHU Water Hook Up
- RT Radio Tower
- TA Tower Anchor
- Guardrail (Beam or Cable)
- GP Guard Post (one or two)
- Guard Post (over two)
- FP Filler Pipe
- GV Gas Valve
- WV Water Valve
- SL Speed Limit Sign
- MM Mile Marker Post
- SIGN Sign
- TCB Traffic Signal Control Box
- RRB Rail Road Signal Control Box
- TSB Telephone Switch Box
- EB Electric Box

UTILITY LEGEND

— W(B) — –
CITY OF DYERSVILLE
Contact Name : Terry Recker
Contact Phone: 563-875-7724
Contact Email: trecker@cityofdyersville.com

— San. — –
— San.(C) — –
CITY OF DYERSVILLE
Contact Name : Terry Recker
Contact Phone: 563-875-7724
Contact Email: trecker@cityofdyersville.com

— FO(B) — –
WINDSTREAM COMMUNICATIONS
Contact Name : LOCATE DESK
Contact Phone: 800-289-1901
Contact Email: LOCATE.DESK@WINDSTREAM.COM

— St.S. — –
CITY OF DYERSVILLE
Contact Name : Terry Recker
Contact Phone: 563-875-7724
Contact Email: trecker@cityofdyersville.com

— G(B) — –
BLACK HILLS ENERGY MANCHESTER
Contact Name : Jan Krueger
Contact Phone: 563-382-0953
Contact Email: Jan.Krueger@BlackHillsCorp.com

— E(B) — –
ALLIANT ENERGY
Contact Name : Alliant Energy Field Engineer
Contact Phone: 800-255-4268
Contact Email: locate_IPL@alliantenergy.com

— TV(B) — –
MEDIACOM
Contact Name : Darin Dean
Contact Phone: 563-584-0589
Contact Email: ddean@mediacomcc.com

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
SHADING	**Design Color No.**	
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)	Grading Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

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

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

RIGHT-OF-WAY LEGEND

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

PROFILE VIEW COLOR LEGEND OF STORM SEWER SHEETS

LINEWORK	Design Color No.	
Gray, Dark	(112)	Existing Ground Line Profile and Existing Utilities Information
Black	(17)	Proposed Pipes and Intakes

PROFILE VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS

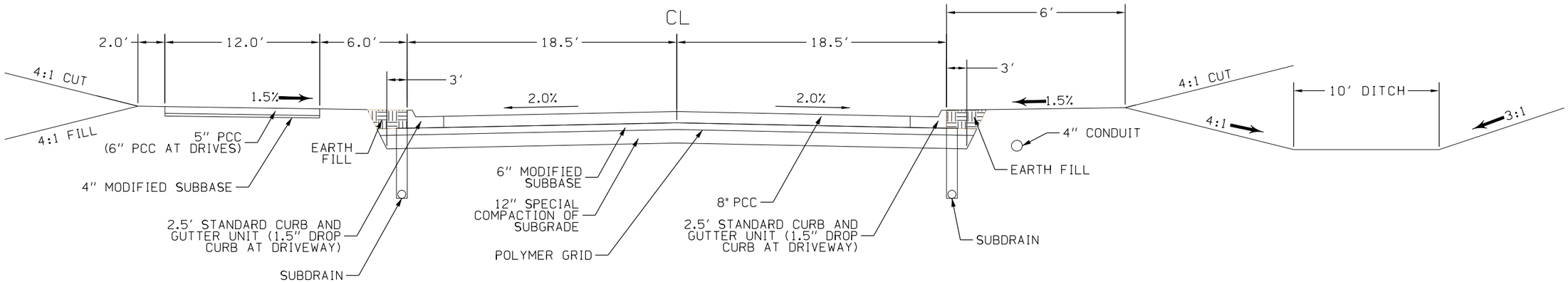
- Existing Ground
- Proposed Ground
- Previously Constructed Pipe or Structure
- Proposed Pipe or Structure

PLAN VIEW COLOR LEGEND OF STORM SEWER SHEETS

LINEWORK	Design Color No.	
Gray, Dark	(112)	Existing Topographic Features, Utilities, and Labels
Black	(17)	Proposed Storm Sewer Details, Alignment, Stationing, Tic Marks, and Alignment Annotation
SHADING	**Design Color No.**	
Gray, Light	(48)	Proposed Pavement Shading

PLAN VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS

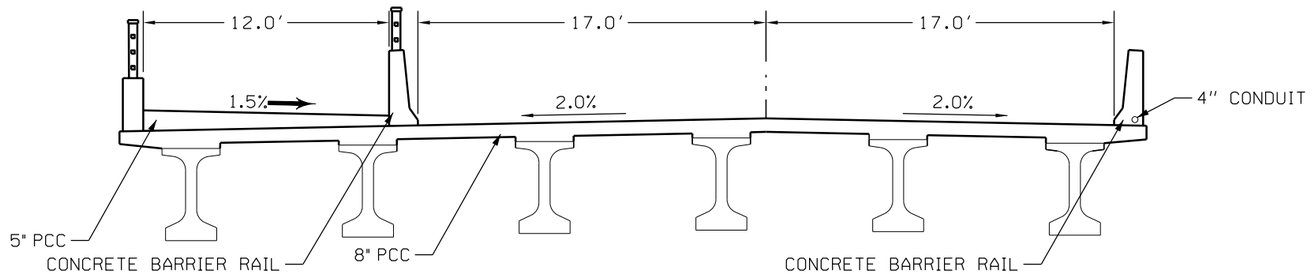
- Plug and Abandon Existing Pipe or Structure
- Removal of Existing Pipe or Structure
- Previously Constructed Pipe or Structure
- Direction of Pipe Flow



SHARED-USE PATH

ROADWAY TYPICAL SECTION

GRASS SHOULDER



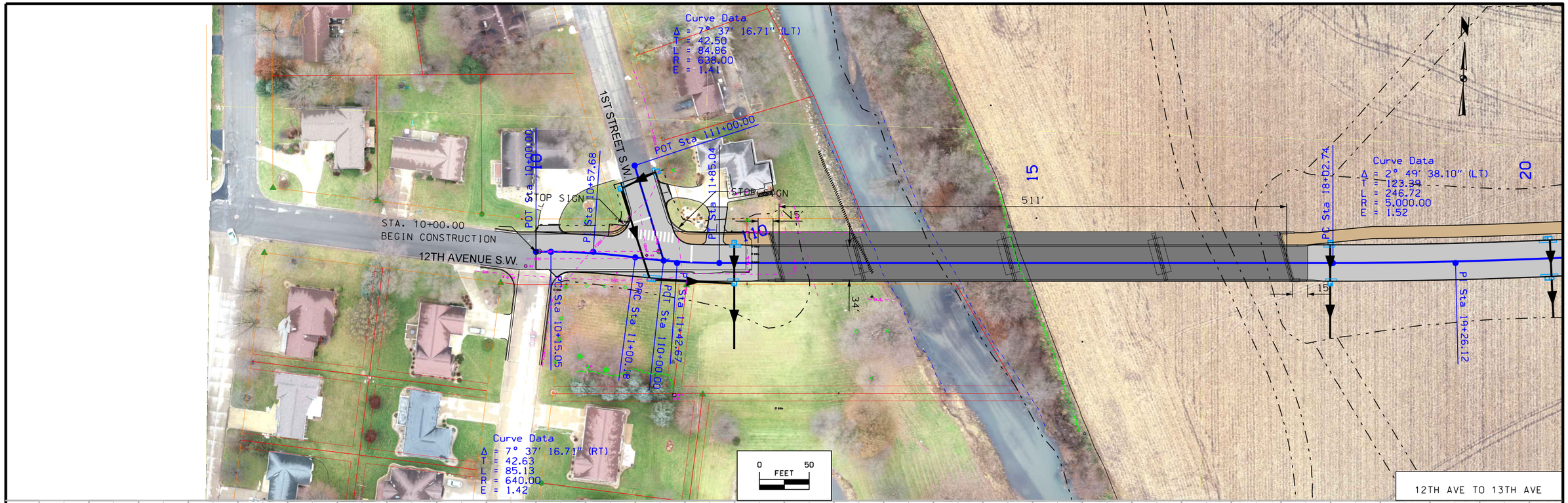
BRIDGE TYPICAL SECTION

FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER B.2

2:46:30 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_B01.sht

ESTIMATED ROADWAY QUANTITIES
(1 DIVISION PROJECT)

Item No.	Item Code	Item	Unit	Total	As Built Qty.
1	2101-0850001	CLEARING AND GRUBBING	ACRE	0.2	
2	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	74453	
3	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	6037	
4	2109-8225100	SPECIAL COMPACTION OF SUBGRADE	STA	9.36	
5	2113-0001100	SUBGRADE STABILIZATION MATERIAL, POLYMER GRID	SY	4396	
6	2115-0100000	MODIFIED SUBBASE	CY	1185	
7	2301-0685550	BRIDGE APPROACH PAVEMENT, AS PER PLAN	SY	300	
8	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES	LS	1	
9	2301-6911722	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C,	SY	3878	
		CLASS 3 DURABILITY, 8 IN. W/ INTEGRAL CURB			
10	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE	TON	5	
11	2416-0100024	APRONS, CONCRETE, 24 IN. DIA	EACH	5	
12	2435-0250800	INTAKE, SW-508	EACH	9	
13	2435-0250900	INTAKE, SW-509	EACH	5	
14	2435-0254100	INTAKE, SW-541	EACH	1	
15	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	1890	
16	2502-8221303	SUBDRAIN OUTLET, DR-303	EACH	12	
17	2503-0110024	STORM SEWER GRAVITY MAIN, TRENCHED, 24 IN.	LF	776	
18	2503-0200036	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	LF	158	
19	2507-3250005	ENGINEER FABRIC	SY	1082	
20	2507-6800061	REVETMENT, CLASS E	TON	603	
21	2507-8029000	EROSION STONE	TON	191	
22	2510-6745850	REMOVAL OF PAVEMENT	SY	1662	
23	2511-0302500	RECREATIONAL TRAIL, PORTLAND CEMENT CONCRETE, 5 IN.	SY	984	
24	2511-7528101	DETECTABLE WARNINGS	SF	48	
25	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN.	SY	290	
26	2518-6910000	SAFETY CLOSURE	EACH	8	
27	2523-0000100	LIGHTING POLE	EACH	6	
28	2523-0000200	ELECTRICAL CONDUIT	LF	1670	
29	2523-0000510	UNDERDECK LIGHTING	EACH	2	
30	2526-8285000	CONSTRUCTION SURVEY	LS	1	
31	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	53	
33	2533-4980005	MOBILIZATION	LS	1	
34	2599-9999999	TREE REMOVAL	EACH	1	
35	2599-9999999	SWPPP PREPARATION	LS	16	
36	2599-9999999	SWPPP MANAGEMENT	LS	1	
37	2599-9999999	BRIDGE STRUCTURE COMPLETE (743 LF)	SQ FT	1	
38	2601-2636044	SEEDING AND FERTILIZING (URBAN)	AC	37455	
39	2602-0000020	SILT FENCE	LF	5.6	
				2900	



FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER D.1

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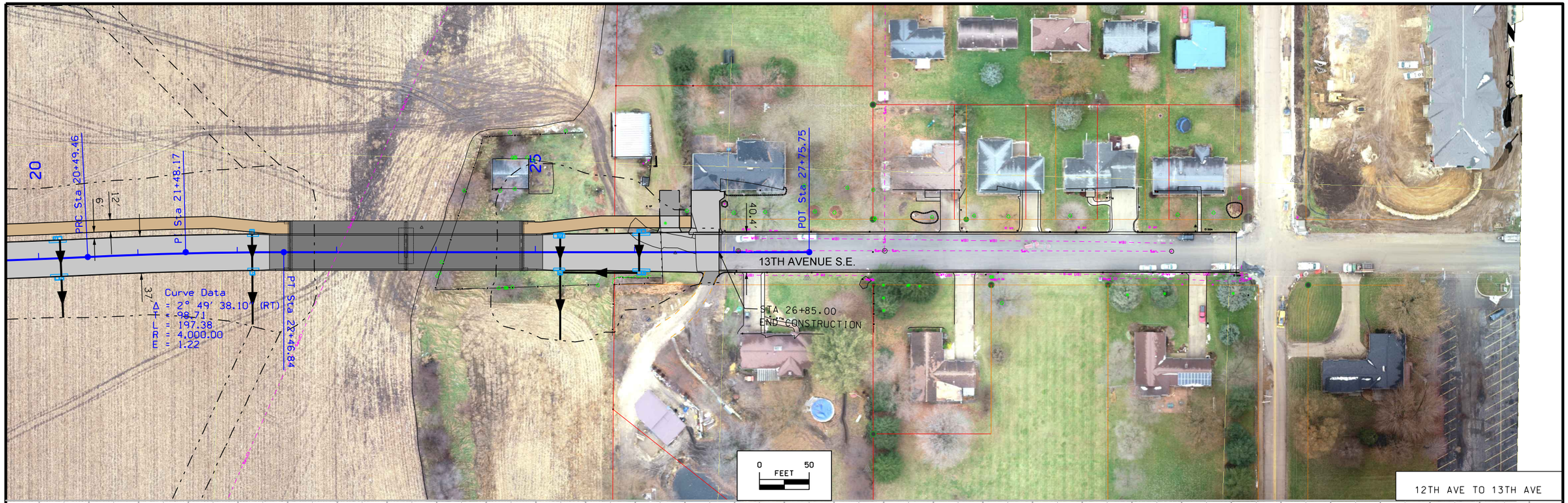

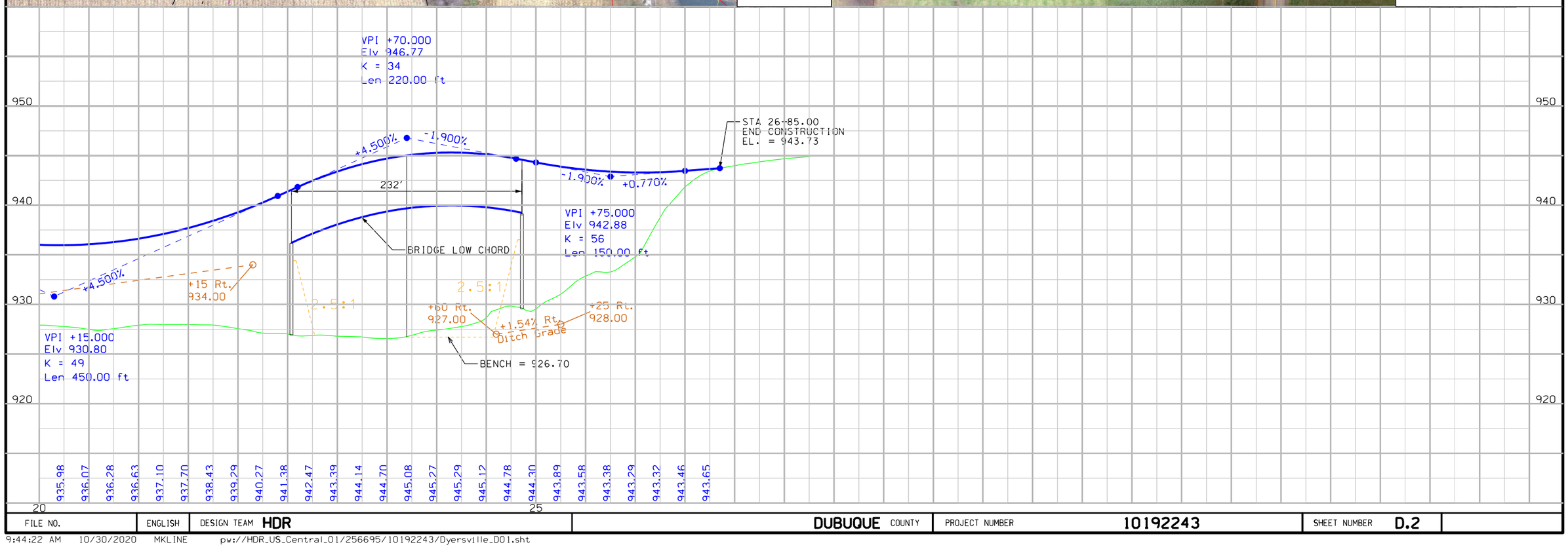

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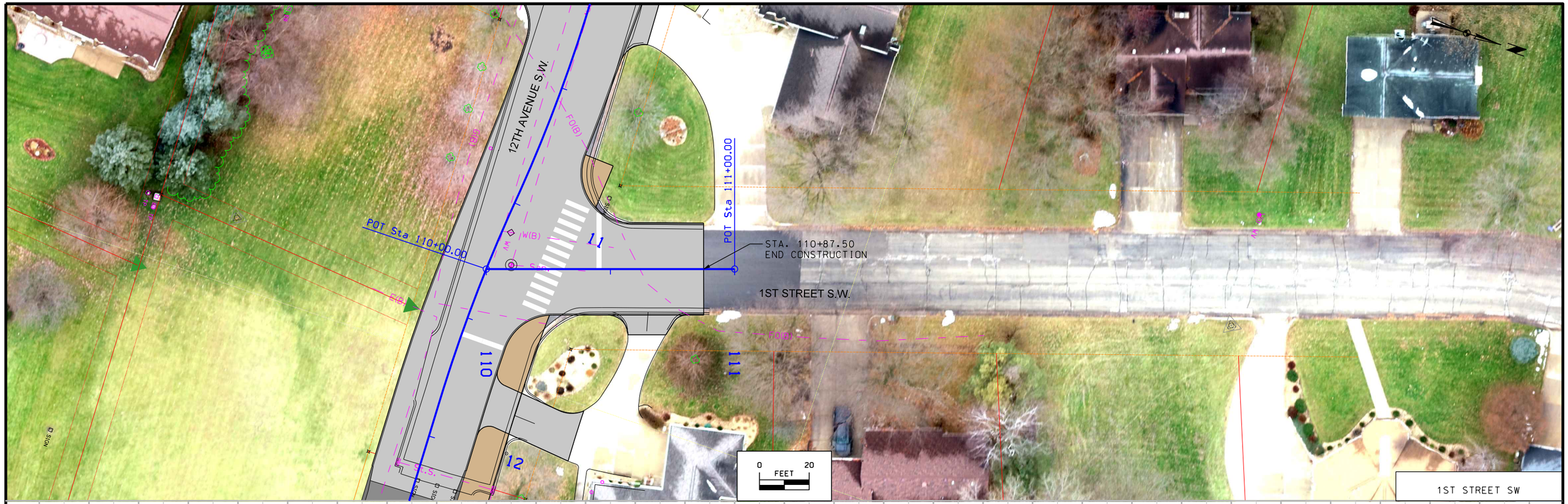
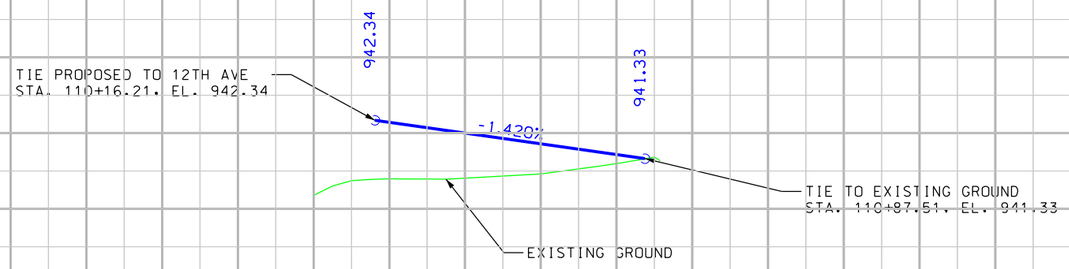




948 946 944 942 940 938 936 934

942.29 942.14 942.00 941.86 941.72 941.58 941.43

110

FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER D.3

3:00:16 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_D01.sht

FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER G.1

2:47:41 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_G01.sht

20

25

PRC Sta 20+49.46

P Sta 21+48.17

PT Sta 22+46.84

POT Sta 27+75.75

13TH AVENUE S.E.

Curve Data
Δ = 2° 49' 38.10" (RT)
T = 98.71
L = 197.38
R = 4,000.00
E = 1.22

0 50
FEET

FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER	10192243	SHEET NUMBER G.2

2:48:04 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_G01.sht

CONTROL POINT INFORMATION

100 3644871.552 5563375.903 **944.97** CP #5REBAR
SET #5 REBAR 5.4' ± SOUTH OF THE BACK OF CURB ON THE SOUTH SIDE OF 13TH AVENUE SE, 43' ± EAST OF CONCRETE DRIVEWAY TO HOUSE #407 13TH AVENUE SE

101 3644678.236 5562160.403 **928.94** CP #5REBAR
SET #5 REBAR 17' ± EAST OF THE TOP OF BANK ON THE EAST SIDE OF NORTH FORK MAQUOKETA RIVER, 185' ± SOUTH OF CONNECTION OF CENTERLINE OF ROADS 13TH AVENUE SE AND 12TH AVENUE SW AND 1108' ± WEST OF THE END OF 13TH AVENUE SE

104 3644737.798 5561744.06 **937.83** CP #5REBAR
SET # 5 REBAR 130.6' ± EAST OF THE BACK OF CURB ON THE EAST SIDE OF 1ST STREET SW AND 90.4' ± SOUTH OF THE BACK OF CURB ON THE SOUTH SIDE OF 12TH AVENUE SW

Table of Contents2

105 3644884.296 5562078.020 **928.72** CP #5REBAR
SET #5 REBAR 65' ± EAST OF THE TOP OF BANK ON THE EAST SIDE OF NORTH FORK MAQUOKETA RIVER, 24' ± NORTH OF CONNECTION OF CENTERLINE OF ROADS 13TH AVENUE SE AND 12TH AVENUE SW AND 1184' ± WEST OF THE END OF 13TH AVENUE SE

107 3645131.016 5561656.785 **942.95** CP #5REBAR
SET # 5 REBAR 2.5' ± EAST OF THE BACK OF CURB ON THE EAST SIDE OF 1ST STREET SW AND 10.5' ± SOUTH OF CONCRETE DRIVEWAY TO HOUSE # 1106 1ST STREET SW

116 3644985.256 5563862.633 **944.56** CP #5REBAR
SET # 5 REBAR 1.0' ± EAST OF THE BACK OF CURB ON THE EAST SIDE OF 6TH STREET SE AND 54' ± NORTH OF BACK OF CURB ON 13TH AVENUE SE

118 3645447.551 5563848.871 **946.09** CP #5REBAR
SET # 5 REBAR 1.0' ± EAST OF THE BACK OF CURB ON THE EAST SIDE OF 6TH STREET SE AND 30' ± SOUTH OF BACK OF CURB ON 11TH AVENUE SE

119 3644543.093 5563842.071 **945.13** CP PK NAIL
SET PK NAIL 1.0' ± WEST OF THE BACK OF CURB ON THE WEST SIDE OF 6TH STREET SE AND 14.5' ± NORTH OF CONCRETE DRIVEWAY TO HOUSE #1310 6TH STREET SE

Horizontal Control based on IDOT Horizontal Datum (NAD 83) (2011)
Delaware Co GIS PT 2001-44 3643047.7800 5544380.3800 1014.07
IARTN PT 2001-44 3643047.8130 5544380.3510 1014.00
Control Point Elevation adjusted + 0.22 based on USGS BMs.

BENCHMARK INFORMATION

TBM - 1 - Set RR Spike in the North side of the power pole with light at the Northeast Corner of House #407 13th Ave SE property, power pole is 400' ± west of 6th Street SE and 13th Ave SE and 6' ± South of the South side of the back of curb of 13th Ave SE.
IARTN Elevation = 946.72 **Adj. Elevation = 946.94**

TBM - 2 - Bolt in Word "Mueller" on fire hydrant at the Northeast corner 6th Street SE and 13th Ave SE, 33' ± North of 13th Ave SE and 7' ± East of the back of curb on 6th Street SE.
IARTN Elevation = 946.75 **Adj. Elevation = 946.97**

TBM - 3 - Set PK Nail in the South side of power pole with light at the Southeast corner of metal shed at House address 406 13th Ave SE, 625' ± West of 6th Street SE and 13th Ave SE and 90' ± North of the centerline of 13th Ave SE.
IARTN Elevation = 936.65 **Adj. Elevation = 936.87**

TBM - 5 - Bolt by "K" in word Kennedy on fire hydrant at the Southwest corner of 12th Ave SW and 1st Street SW, 30' ± west of centerline of 1st Street SW and 6' ± South of the back of curb of 12th Ave SW. IARTN Elevation = 945.80 **Adj. Elevation = 946.02**

TBM - 6 - Bolt by "K" in word Kennedy on fire hydrant at the Northeast corner of House #1111 1st Street SW, 295' ± North of 12th Ave SW and 10' West of the back of curb of 1st Street SW.
IARTN Elevation = 945.97 **Adj. Elevation = 946.19**

Elevations based on NAVD 88 Datum
USGS BM G 73 1033.59 USGS BM B 73 1059.05
IARTN BM G 73 1033.34 IARTN BM B 73 1058.86
Diff. 0.25 Diff. 0.19
Adj. 0.25 + 0.19 / 2 = 0.22

All BM Elevations adjusted +0.22 to match USGS BMs.

ALIGNMENT COORDINATES

101-16
10-20-09

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
35	12TH AVE/13TH AVE	10+00.00	3,644,844.44	5,561,602.71															
36	12TH AVE/13TH AVE							10+15.05	3,644,844.90	5,561,617.75	10+57.68	3,644,846.18	5,561,660.36	11+00.18	3,644,841.80	5,561,702.76			
37	12TH AVE/13TH AVE							11+00.18	3,644,841.80	5,561,702.76	11+42.67	3,644,837.44	5,561,745.03	11+85.04	3,644,838.72	5,561,787.51			
38	12TH AVE/13TH AVE							18+02.74	3,644,857.34	5,562,404.92	19+26.12	3,644,861.06	5,562,528.25	20+49.46	3,644,870.86	5,562,651.25			
39	12TH AVE/13TH AVE							20+49.46	3,644,870.86	5,562,651.25	21+48.17	3,644,878.70	5,562,749.65	22+46.84	3,644,881.67	5,562,848.31			
73	12TH AVE/13TH AVE	27+75.75	3,644,897.62	5,563,376.98															
110	1ST ST SW	110+00.00	3,644,839.50	5,561,731.42															
111	1ST ST SW	111+00.00	3,644,934.22	5,561,699.37															

SPIRAL OR CIRCULAR CURVE DATA

101-17
04-19-11

Name	Location	Δ_{SCS}	Horizontal Alignment Data													Remarks
			Spiral Data								Curve Data					
			θs	Ls	Ts	Es	Xc	Yc	L.T.	S.T.	Δ_C	T	L	R	E	
36	12TH AVE/13TH AVE										7° 37′ 16.71″ RT	42.63′	85.13′	640.00′	1.42′	
37	12TH AVE/13TH AVE										7° 37′ 16.71″ LT	42.50′	84.86′	638.00′	1.41′	
38	12TH AVE/13TH AVE										2° 49′ 38.10″ LT	123.39′	246.72′	5,000.00′	1.52′	
39	12TH AVE/13TH AVE										2° 49′ 38.10″ RT	98.71′	197.38′	4,000.00′	1.22′	

CROSS SECTION VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Med	(237)	Future Proposed Pavement Shading

CROSS SECTION VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

	Pavement Removal		Proposed Granular Shoulder
	Proposed Granular Subbase		Temporary Shoulder
	Proposed Special Backfill		Existing Shoulder Strengthening
	Temporary Barrier Rail		Permanent Barrier Rail
			Channelizing Device

PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Magenta	(5)	Pavement Marking Call Outs
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow	(4)	Pavement Markings, Yellow
Off White	(254)	Pavement Markings, White
Violet	(15)	Temporary barrier rail, Unpinned
Flush Orange	(228)	Temporary barrier rail, Pinned

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Proposed Granular Surface Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Pink, Dark	(13)	Proposed MSE or CIP Wall Shading
Red	(3)	Proposed Bridge Shading and Sign Trusses
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

PLAN VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

●	Channelizing Device		Crash Cushion (Temp or Perm)
✕	Drum		Traffic Signal
◘	Temporary Lane Separator		Flagger
◆	Tubular Marker		Temporary Floodlighting
♦	Channelizer Marker		Traffic Sign
△	Concrete Barrier Marker		Type III Barricade
‹	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Safety Closure
	Sand Barrel Layout	1	Lane Identification

NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.

TRAFFIC CONTROL AND STAGING LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES J)

108-23A
08-01-08

TRAFFIC CONTROL PLAN

1. CONTRACTOR WILL MAINTAIN ACCESS TO INDIVIDUAL PROPOERTIES DURING CONSTRUCTION.

108-26A
08-01-08

STAGING NOTES

GENERAL:
-CONTRACTOR SHALL DISTRIBUTE CONSTRUCTION NOTIFICATIONS TO PROPERTY OWNERS WITH IN THE PROJECT LIMITS BETWEEN 7-14 CALENDER DAYS IN ADVANCE OF COMMENCEMENT OF CONSTRUCTION IMPACTING VEHICULAR TRAVEL. NOTIFICATION LETTER OR HANGERS SHALL BE APPROVED BY THE ENGINEER PRIOR TO DISTRIBUTION. LETTERS SHALL INCLUDE:
- PRIME CONTRACTOR'S NAME
- SUPERINTENDENT'S NAME
- BRIEF DESCRIPTION OF WORK
- DATE OF COMMENCEMENT AND COMPLETION OF CONSTRUCTION ACTIVITIES
- DESCRIPTION OF ACCESS LIMITATIONS

-WORK MAY NOT BEGIN UNLESS NOTIFICATIONS ARE MADE IN ACCORDNACE WITH THIS PROVISION.
-CONTRACTOR WILL BE REQUIRED TO COORDINATED STAGING ACTIVITIES WITH PRIVATE UTILITIES.

STAGE 1 TRAFFIC:
-MAINTAIN TRAFFIC ON 1ST ST, 12 AVE, AND 13TH AVE
-MAINTAIN ACCESS TO LOCAL PROPERTIES.

STAGE 1 CONSTRUCTION:
-BEGIN GRADING AND PAVING PORTIONS OF 12TH AVE & 13TH AVE.
-CONSTRUCT BRIDGES.

STAGE 2 TRAFFIC:
-CLOSE 12TH AVE AND 1ST INTERSECTION TO TRAFFIC.
-MAINTAIN TRAFFIC ON 13TH AVE.
-MAINTAIN ACCESS TO LOCAL PROPERTIES.

STAGE 2 CONSTRUCTION:
-CONSTRUCT 12TH AVE AND 1ST ST INTERSECTION
-CONSTRUCT 13TH AVE TIE-IN.

ROAD CLOSED AHEAD

W20-3
48" x 48"

1ST STREET S.W.

100'

SAFETY CLOSURE

ROAD CLOSED

R11-2
48" x 30"

MAINTAIN ACCESS TO ENTRANCE

10

15

20

200'

12TH AVENUE S.W.

ROAD WORK AHEAD

W20-1
48" x 48"
10+40

SAFETY CLOSURE

ROAD CLOSED

R11-2
48" x 30"

N

0 50
FEET

12TH AVE TO 13TH AVE
STAGE 1

20

25

ROAD WORK AHEAD

W20-1
48" x 48"

200'

13TH AVENUE S.E.

SAFETY CLOSURE

ROAD CLOSED

R11-2
48" x 30"

N

0 50
FEET

12TH AVE TO 13TH AVE
STAGE 1

FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER J.3

2:49:58 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_J03.sht

12TH AVE ADVANCE SIGNAGE

ROAD CLOSED AHEAD

W20-3
48" x 48"

PLACE 350' IN ADVANCE OF 12TH AVE AND 1 1/2 ST INTERSECTION ON EB SIDE

1ST ST ADVANCE SIGNAGE

ROAD CLOSED TO THRU TRAFFIC

R11-4
60" x 30"

MOUNT TO TYPE III BARRICADE AT THE 1ST ST AND 10TH AVE NTERSECTION

ROAD CLOSED AHEAD

W20-3
48" x 48"

1ST STREET S.W.

100'

SAFETY CLOSURE

ROAD CLOSED

R11-2
48" x 30"

10

SAFETY CLOSURE

ROAD CLOSED

R11-2
48" x 30"

15

20

110

12TH AVENUE S.W.

ROAD CLOSED TO THRU TRAFFIC

R11-4
60" x 30"

100'

ROAD WORK AHEAD

W20-1
48" x 48"

MAINTAIN SAFETY CLOSURE

ROAD CLOSED

R11-2
48" x 30"

0 50
FEET

12TH AVE TO 13TH AVE
STAGE 2

20

25

200'

ROAD WORK AHEAD

W20-1
48" x 48"

13TH AVENUE S.E.

MAINTAIN SAFETY CLOSURE

ROAD CLOSED

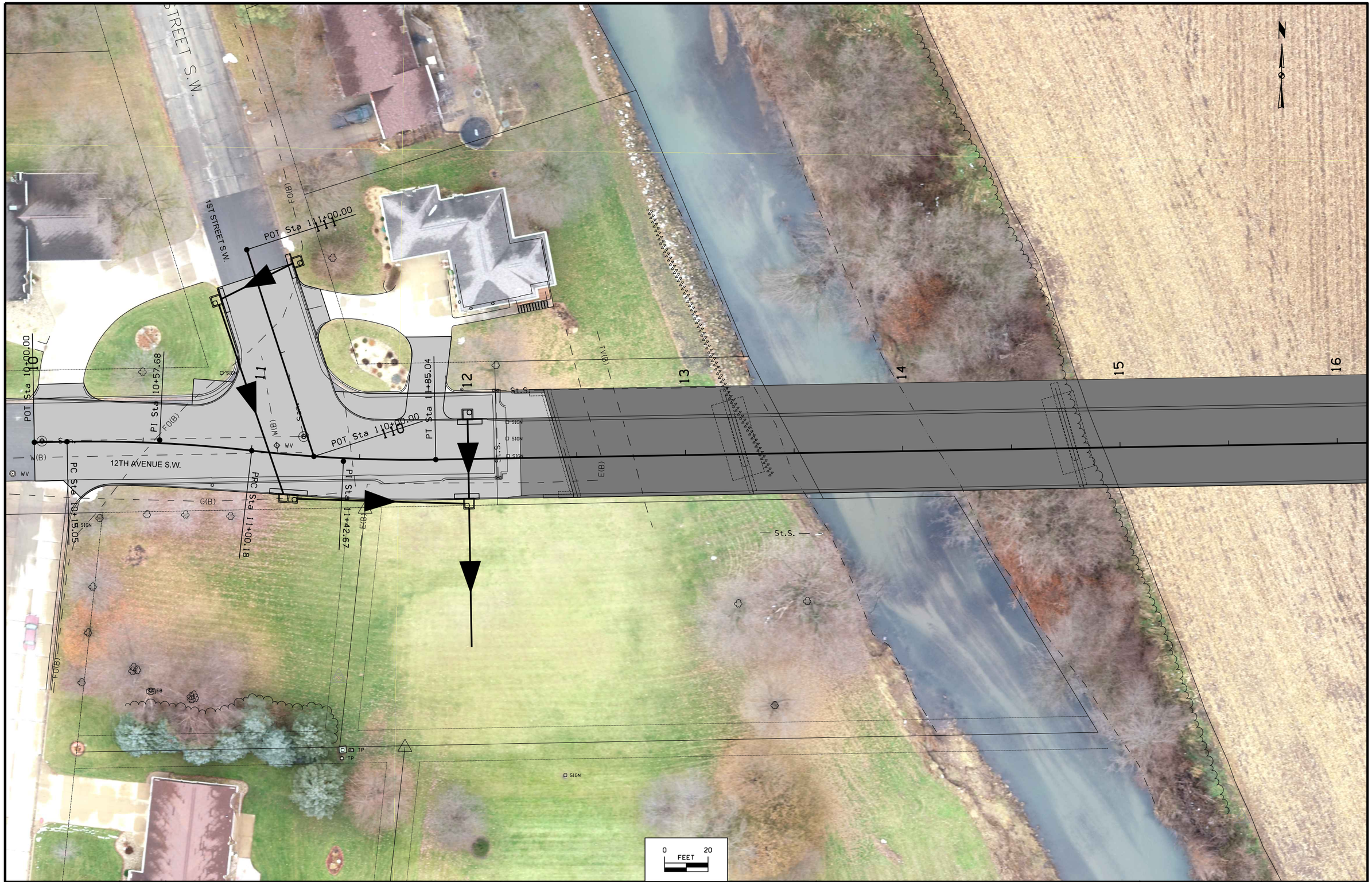
R11-2
48" x 30"

0 50
FEET

12TH AVE TO 13TH AVE
STAGE 2

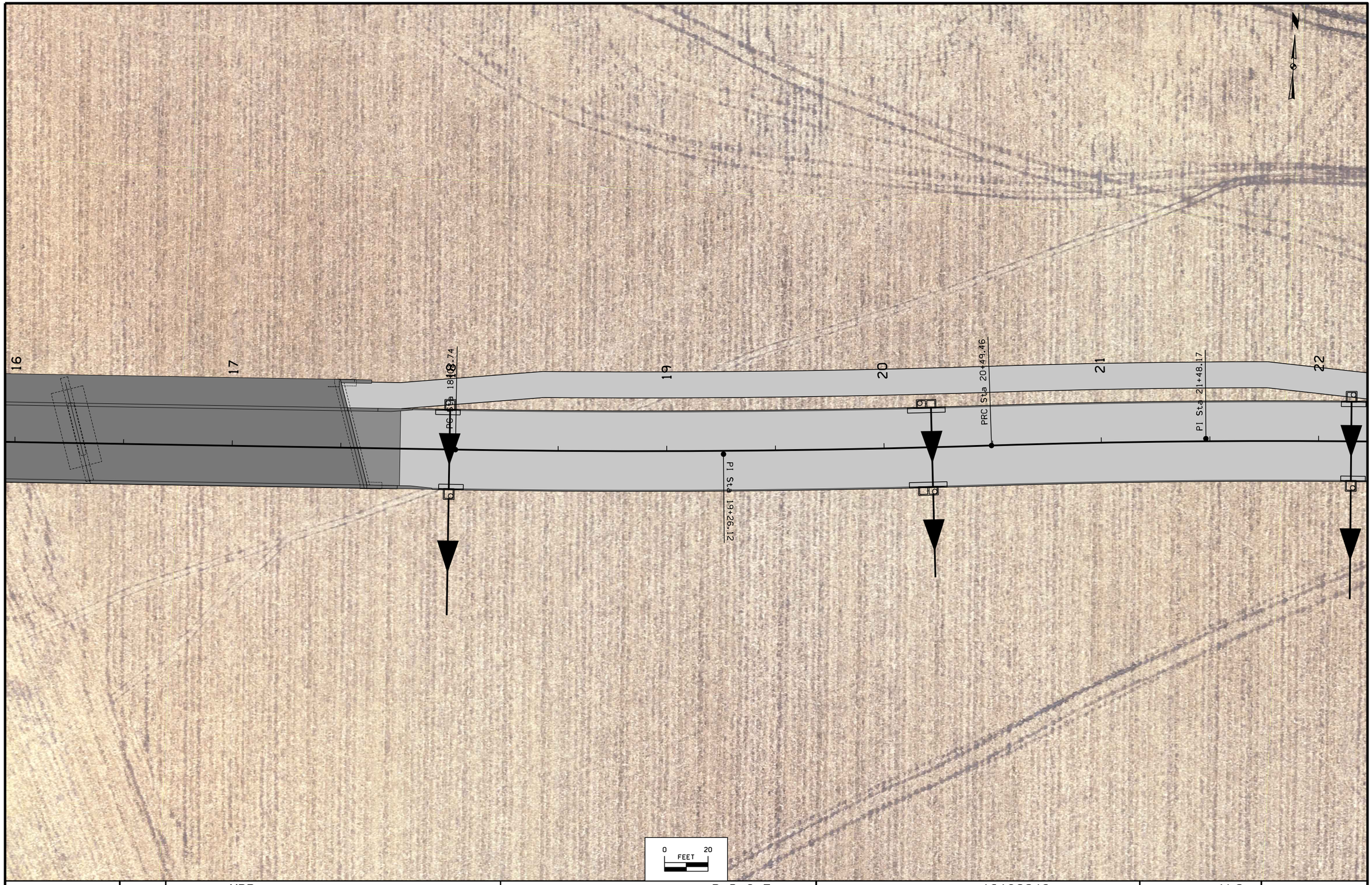
FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER J.4

2:50:02 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_J03.sht



FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER M.1

2:50:08 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_M01.sht



FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER M.2	

2:50:11 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_M01.sht

22
23
24
25
26
27
PT Sta 22+46.84
POT Sta 27+75.75
W(B)
San.
13TH AVENUE S.E.
G(B)
WV
Fig
GP
0 20
FEET

FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER M.3	

2:50:15 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_M01.sht

STA. 110+87, 18' LT
REMOVE PAVEMENT

STA. 10+49, 32' LT
REMOVE TREE

STA. 10+23, 27' LT
REMOVE ENTRANCE

STA. 10+02, 27' LT
REMOVE ENTRANCE

STA. 10+00, 20' LT
REMOVE PAVEMENT

1ST STREET S.W.

F.O.(B)

POT Sta 111+00.00

STA. 110+88, 18' RT
REMOVE PAVEMENT

STA. 110+72, 27' RT
REMOVE ENTRANCE

STA. 110+57, 27' RT
REMOVE ENTRANCE

STA. 11+74, 44' LT
REMOVE ENTRANCE

STA. 11+92, 45' LT
REMOVE ENTRANCE

STA. 11+98, 32' LT
RELOCATE MAILBOX

STA. 12+14, 43' LT
REMOVE TREE

STA. 12+13, 31' LT
REMOVE STORM INTAKE

REMOVE 118 LF 24" STORM SEWER

STA. 12+15, 32' LT
REMOVE PAVEMENT

STA. 13+91, 45' LT
CLEARING & GRUBBING

STA. 14+72, 45' LT
CLEARING & GRUBBING

10

11

12

13

14

15

POT Sta 10+00.00

RT Sta 10+57.68

POT Sta 110+00.00

PT Sta 11+85.04

St.S.

REMOVE 40 LF 24" STORM SEWER

12TH AVENUE S.W.

W(B)

WV

SIGN

PC Sta 10+15.05

PRC Sta 11+00.18

PT Sta 11+42.67

E(B)

STA. 10+22, 26' RT
REMOVE PAVEMENT

STA. 12+18, 7' RT
REMOVE PAVEMENT

STA. 12+13, 9' RT
REMOVE STORM INTAKE

G(B)

STA. 10+00, 18' RT
REMOVE PAVEMENT

STA. 10+13, 18' RT
REMOVE PAVEMENT

STA. 10+94, 31' RT
REMOVE TREE

STA. 10+84, 18' RT
REMOVE LIGHT POLE AND FOOTING

STA. 10+72, 32' RT
REMOVE TREE

STA. 10+53, 33' RT
REMOVE TREE

STA. 10+30, 35' RT
REMOVE TREE

STA. 14+35, 35' RT
CLEARING & GRUBBING

STA. 14+99, 35' RT
CLEARING & GRUBBING

F.O.(B)

EB

TP

0 20
FEET

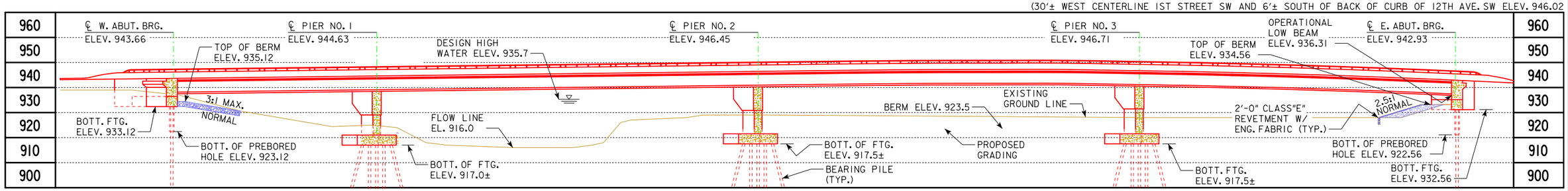
FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER R.1	

2:50:20 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_R01.sht

FILE NO.	ENGLISH	DESIGN TEAM HDR	DUBUQUE COUNTY	PROJECT NUMBER 10192243	SHEET NUMBER R.2	

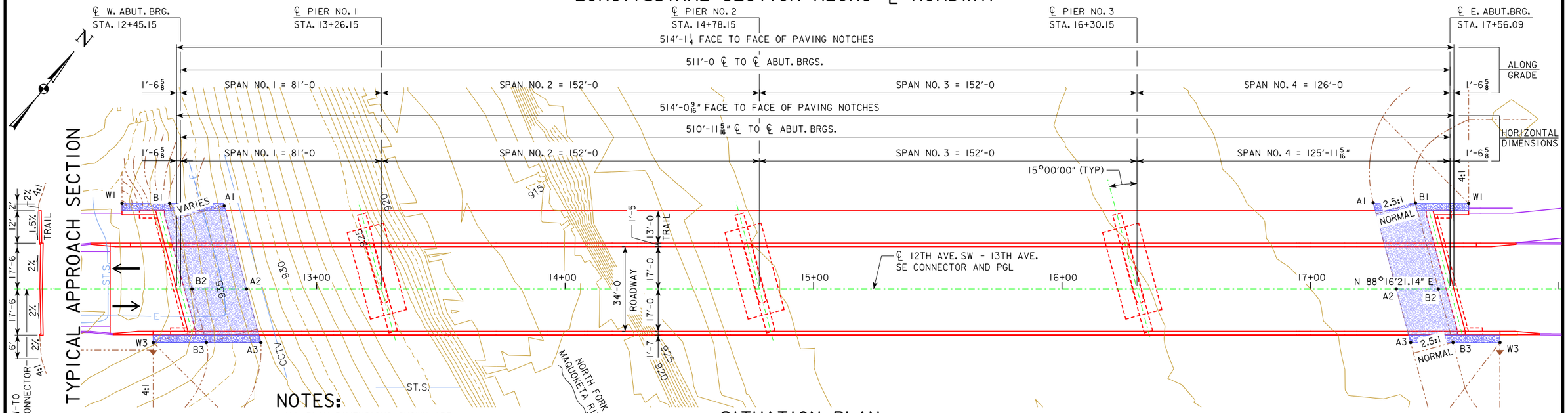
2:50:22 PM 10/29/2020 MKLINE pw://HDR_US_Central_01/256695/10192243/Dyersville_R01.sht

BENCH MARK NO.: BOLT BY "K" IN WORD KENNEDY ON FIRE HYDRANT AT SW CORNER OF 12TH AVE. SW AND 1ST STREET SW
(30'± WEST CENTERLINE 1ST STREET SW AND 6'± SOUTH OF BACK OF CURB OF 12TH AVE. SW ELEV. 946.02



NOTE:
TO ACCOUNT FOR PARABOLIC CROWN, TOP OF BRIDGE DECK AT CENTERLINE OF ROADWAY IS 0.03' BELOW PROFILE GRADE.

LONGITUDINAL SECTION ALONG ℄ ROADWAY



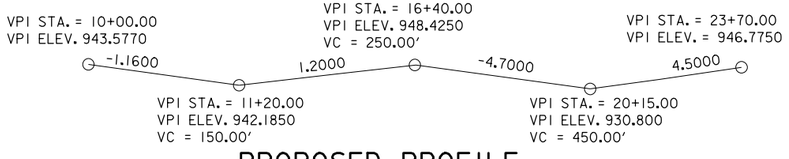
UTILITIES LEGEND:

- E - ELECTRIC (ALLIANT ENERGY)
- ST.S. - STORM SEWER (CITY OF DYERSVILLE)
- CCTV - CABLE TV (MEDIA COM)

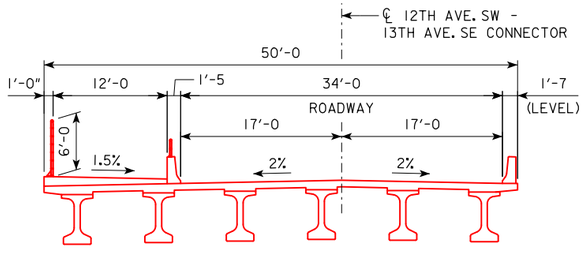
NOTES:

ALL PLAN DIMENSIONS SHOWN ARE MEASURED IN A HORIZONTAL PLANE UNLESS OTHERWISE NOTED.
TL-4 BRIDGE RAIL PROPOSED
PIER TYPE-T; BEAM TYPE BTE.
BRIDGE AESTHETICS TO BE INCORPORATED IN FINAL DESIGN.
BERM SLOPES TO BE CONFIRMED IN FINAL DESIGN.
FOUNDATION TYPE TO BE CONFIRMED IN FINAL DESIGN.

SITUATION PLAN



PROPOSED PROFILE
12TH AVE. SW - 13TH AVE. SE CONNECTOR



TYPICAL SECTION

BERM SLOPE LOCATION TABLE

POINTS	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	12+62.53	34.42' LT.	933.0	17+25.29	34.42' LT.	928.0
A2	12+71.76	0.0	933.0	17+34.51	0.0	928.0
A3	12+77.54	21.58' RT.	933.0	17+40.30	21.58' RT.	928.0
B1	12+40.59	34.42' LT.	935.12	17+42.21	34.42' LT.	934.56
B2	12+49.81	0.0	935.12	17+51.43	0.0	934.56
B3	12+55.59	21.58' RT.	935.12	17+57.21	21.58' RT.	934.56
W1	12+21.66	34.42' LT.	943.26	17+63.66	34.42' LT.	942.47
W3	12+34.21	21.58' RT.	943.16	17+76.21	21.58' RT.	942.63

BERM SLOPE ELEVATIONS REFLECT THE GRADING SURFACE

TRAFFIC ESTIMATE

2020 AADT	810	V.P.D.
2040 AADT	4520	V.P.D.
2040 DHV	461	V.P.H.
TRUCKS	1	%
TOTAL DESIGN ESALs	-	

HYDRAULIC DATA

DRAINAGE AREA = 118.0 SQ. MI.
STREAM SLOPE = 5.84 FT./MI. (LIDAR)

Q_{25} = 2,730 CFS
STAGE = 926.9 FEET
CHANNEL VELOCITY = 2.5 FT/SEC

Q_{50} = 14,300 CFS
STAGE = 934.4 FT.
BACKWATER = 0.08 FT. (MAX.)
CHANNEL VELOCITY = 3.0 FPS

Q_{100} = 16,700 CFS
STAGE = 935.7
BACKWATER = 0.08 FT. (MAX.)
CHANNEL VELOCITY = 3.0 FPS

Q_{200} = 21,400 CFS
STAGE = 937.5
CHANNEL VELOCITY = 3.2 FPS
DESIGN SCOUR = TBD

Q_{500} = 23,300 CFS
STAGE = 939.3
CHANNEL VELOCITY = 2.9 FPS
CHECK SCOUR = TBD

LOCATION

12TH AVE. SW - 13TH AVE. SE
CONNECTOR OVER NORTH
MAQUOKETA RIVER
T-89N R-02W
SECTION 31
NEW WINE TOWNSHIP
DUBUQUE COUNTY
FHWA NO. XX
BRIDGE MAINT. NO. XXX
LATITUDE 42.474171°
LONGITUDE -91.124214°

0 ENGLISH 40
SCALE IN FEET

PRELIMINARY

DESIGN FOR 15° SKEW (LA)

511'-0 x 34'-0 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE

81'-0, 152'-0, 152'-0, 126'-0 SPANS (BTE BEAM TYPE)

SITUATION PLAN

(STA. 15+00.65) OCTOBER 2020

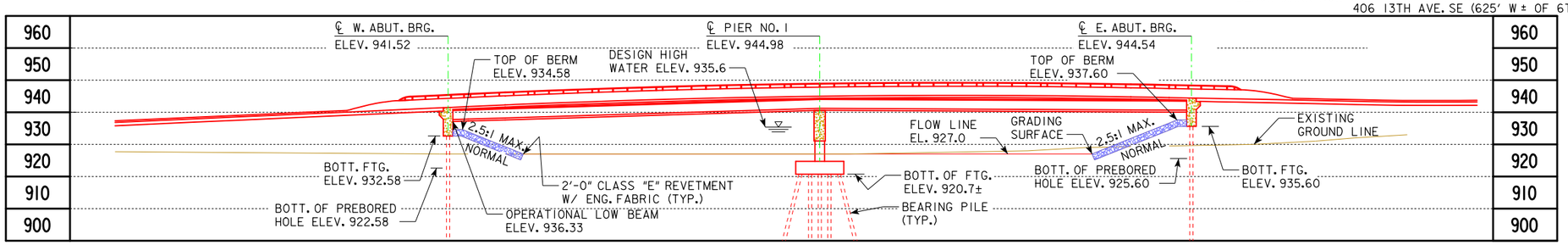
DUBUQUE COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 1 FILE NO. _____ DESIGN NO. _____

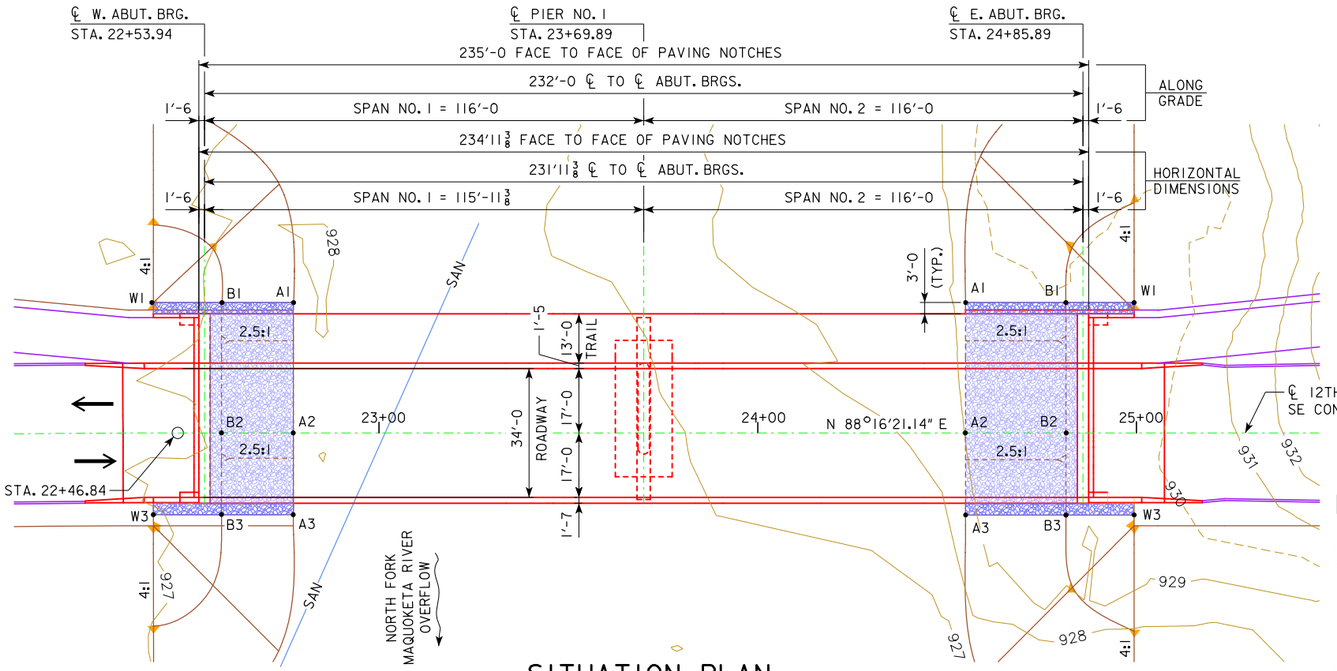
DESIGN TEAM HDR | DUBUQUE COUNTY | PROJECT NUMBER | SHEET NUMBER V.1

BENCH MARK NO.: SET PK NAIL IN SOUTH SIDE OF POWER POLE WITH LIGHT, SE CORNER OF METAL SHED AT HOUSE AT 406 13TH AVE. SE (625' W ± OF 6TH ST. SE AND 90' N OF CENTERLINE OF 13TH AVE SE): ELEV. 936.87



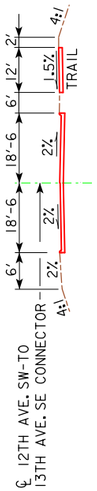
NOTE:
TO ACCOUNT FOR PARABOLIC CROWN, TOP OF BRIDGE DECK AT CENTERLINE OF ROADWAY IS 0.03' BELOW PROFILE GRADE.

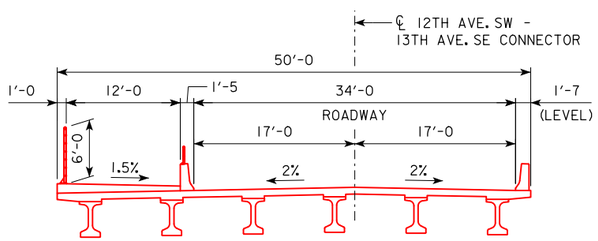
LONGITUDINAL SECTION ALONG ℄ ROADWAY



SITUATION PLAN

TYPICAL APPROACH SECTION





TYPICAL SECTION

BERM SLOPE LOCATION TABLE

POINTS	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
AI	22+77.34	34.42' LT.	927.00	24+54.89	34.42' LT.	927.00
A2	22+77.34	0.00	927.00	24+54.89	0.00	927.00
A3	22+77.34	21.58' RT.	927.00	24+54.89	21.58' RT.	927.00
BI	22+58.44	34.42' LT.	934.58	24+81.39	34.42' LT.	937.60
B2	22+58.44	0.00	934.58	24+81.39	0.00	937.60
B3	22+58.44	21.58' RT.	934.58	24+81.39	21.58' RT.	937.60
WI	22+40.44	34.42' LT.	940.80	24+99.39	34.42' LT.	944.17
W2	22+40.44	21.58' RT.	940.55	24+99.39	21.58' RT.	943.92

BERM SLOPE ELEVATIONS REFLECT THE GRADING SURFACE

NOTES:

ALL PLAN DIMENSIONS SHOWN ARE MEASURED IN A HORIZONTAL PLANE UNLESS OTHERWISE NOTED.

TL-4 BRIDGE RAILING PROPOSED

PIER TYPE-T; BEAM TYPE BTC.

BRIDGE AESTHETICS TO BE INCORPORATED IN FINAL DESIGN.

BERM SLOPES TO BE CONFIRMED IN FINAL DESIGN.

FOUNDATION TYPE TO BE CONFIRMED IN FINAL DESIGN.

TRAFFIC ESTIMATE

2020 AADT	810	V.P.D.
2040 AADT	4520	V.P.D.
2040 DHV	461	V.P.H.
TRUCKS	1	%
TOTAL DESIGN ESALs	-	

UTILITIES LEGEND:

- SAN - SANITARY SEWER (CITY OF DYERSVILLE)

VPI STA. = 23+70.00
VPI ELEV. 946.7750
VC = 220.00'
4.5000% -1.9000%
VPI STA. = 20+15.00
VPI ELEV. 930.8000
VPI STA. = 25+75.00
VPI ELEV. 942.8800

PROPOSED PROFILE
12TH AVE. SW - 13TH AVE. SE CONNECTOR

CURVE DATA

PI STA. 21+48.17
Δ = 2°49'38.10" (RT)
T = 98.7097
L = 197.3793
E = 1.2178
R = 4000.00
PC STA. 20+49.46
PT STA. 22+46.84

LOCATION

12TH AVE. SW - 13TH AVE. SE CONNECTOR OVER NORTH MAQUOKETA RIVER OVERFLOW
T-89N R-02W
SECTION 31
NEW WINE TOWNSHIP
DUBUQUE COUNTY
FHWA NO. XX
BRIDGE MAINT. NO. XXX
LATITUDE 42.474206°
LONGITUDE -91.120992°

HYDRAULIC DATA

DRAINAGE AREA = 118.0 SQ. MI.
STREAM SLOPE = 5.84 FT./MI. (LIDAR)

Q2 = 2,730 CFS
STAGE = NA
CHANNEL VELOCITY = NA FT/SEC

Q_{50} = 14,300 CFS
STAGE = 934.4 FT.
BACKWATER = 0.08 FT. (MAX.)
CHANNEL VELOCITY = 2.5 FPS

Q_{100} = 16,700 CFS
STAGE = 935.6 FT.
BACKWATER = 0.08 FT. (MAX.)
CHANNEL VELOCITY = 2.6 FPS

Q_{200} = 21,400 CFS
STAGE = 937.4 FT.
CHANNEL VELOCITY = 2.8 FPS
DESIGN SCOUR = TBD

Q_{500} = 23,300 CFS
STAGE = 939.3 FT.
CHANNEL VELOCITY = 2.5 FPS
CHECK SCOUR = TBD

0 ENGLISH 40
SCALE IN FEET

PRELIMINARY

DESIGN FOR 0° SKEW

232'-0 x 34'-0 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE

116'-0, 116'-0 SPANS (BTC BEAM TYPE)

SITUATION PLAN

(STA. 23+69.92) OCTOBER 2020

DUBUQUE COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 1 FILE NO. _____ DESIGN NO. _____

DESIGN TEAM HDR | DUBUQUE COUNTY | PROJECT NUMBER | SHEET NUMBER V.2

ENVIRONMENTAL REVIEW

METHODOLOGY

HDR qualitatively reviewed the project corridor extending west from 13th Avenue Southeast to 12th Avenue Southwest and the surrounding area for consideration of environmental constraints in the design of a connecting roadway and bridge (see Figure 1). Figure 2 shows the project area on aerial without constraints, and includes an expanded image of the connection corridor. HDR gathered environmental and other related geographic information system (GIS) data available from the City of Dyersville, Iowa Department of Natural Resources (Iowa DNR), Federal Emergency Management Agency, US Fish and Wildlife Service, US Geological Survey, US Census Bureau, and National Park Service. Data acquired included shapefiles of the following resources:

- railroads;
- natural gas pipeline and other utilities;
- schools;
- cemeteries;
- wetlands, floodways, floodplains, waterways, and potential karst terrain;
- conservation/recreation/park area boundaries and historic sites; and
- locations of groundwater wells, leaking underground storage tank sites, and contaminated sites.

Wetland and other waters of the US boundaries acquired from US Fish and Wildlife Service and US Geological Survey datasets were plotted on an aerial photography base, as were other shapefiles. Eventually, wetland and waterway boundaries would need field delineation to confirm their actual location as well as to identify potential wetlands not shown in the National Wetlands Inventory, such as wetlands in agricultural settings. The field delineation would determine if construction would impact these features and require acquisition of a Clean Water Act Section 404 permit.

The National Park Service database of sites listed on the National Register of Historic Places was reviewed, and sites were identified north of 3rd Avenue, approximately 0.6 mile north of the project corridor. The Dubuque County Assessor's files (linked to Dubuque County's GIS map) were reviewed to identify existing structures adjacent to the project corridor for their dates of construction. A search of Iowa state databases of past cultural surveys, archaeological resources, and historic structures was also performed, and the results were reviewed and compared to the alignments of the concept corridors located within the project corridor.

Bridge and roadway concepts were reviewed for extent of potential impacts during and subsequent to construction. Hydrologic and hydraulic data were used to review potential water surface elevation impacts upstream of the project corridor and to assess the area and depth of a soil removal area to mitigate for the potential impacts. Preliminary grading limits to create a stream bench were incorporated into the GIS and are shown in Figure 1. The environmental review of concepts was comparative based on the current level of design. Further research, such as field studies and solicitation of project input from resource agencies and potentially affected landowners, would be used to further identify and delineate environmental constraints for consideration of avoidance and impact minimization.

CONCEPT REVIEW SUMMARY

Engineers considered several different concepts, varying based on slight changes in orientation, bridge length, and elevation. Concepts were eliminated based on cost, land ownership, likelihood of achieving a no-rise condition, and frequency of overtopping. Ultimately, two concepts were presented to the City of Dyersville in June 2020. The methodology described above was used to develop the summary of potential environmental issues and impacts of those two concepts shown in Table 1.

There are no structures or buildings listed on the National Register of Historic Places, no conservation areas, and no current parks or land trails within the two concept corridors. Both concept corridors traverse the North Fork Maquoketa River (an Iowa Sovereign River), with trees and potential wetlands along the river (the wooded area is also considered to be habitat for the northern long-eared bat, bald eagle, and migratory birds), farmland, the floodway and floodplain of the river, the river as an Iowa DNR designated Paddling Route, and a sanitary sewer line. There are no known contaminated sites present within the concept corridors, although there is a brownfields site upgradient that could possibly affect the river. The concepts vary minimally in terms of environmental impacts, as shown in Table 1. Based on preliminary impact determinations, neither of the concepts selected for detailed evaluation would be eliminated solely based on environmental concerns.

Table 1 – Potential Environmental Issues and Qualitative Impacts by Concept

Criteria or Resource		Concept	
	Present in Project Area	Concept 1 – 549' Bridge, 50-yr LOS	Concept 2 – 549' Bridge, 50-yr LOS
Design Alignment	N/A	Straight	Skewed
Surface Water Elevation	N/A	No-rise condition was achieved with a 1-D hydraulic model.	
Floodways and Floodplains (acres)	Yes	The amount of a straight alignment within the floodway and floodplain would be slightly less than a skewed alignment.	The amount of a skewed alignment within the floodway and floodplain would be slightly more than a straight alignment.
Conservation, Park, and Recreational Resources	Yes	The City plans to establish a park at, and trails through, the project area after the project is constructed. The North Fork Maquoketa River is an Iowa DNR designated Paddling Route.	
Wetlands (acres)	Yes	The amount of wetlands impacted would likely be slightly less than a skewed alignment.	The amount of wetlands impacted would likely be slightly more than a straight alignment.
Waterways (linear feet)	Yes	The length of waterway crossed by the bridge would be slightly less than a skewed alignment.	The length of waterway crossed by the bridge would be slightly less than a straight alignment.
Potential Karst	Yes	Geotechnical borings will evaluate potential for karst impact.	
Groundwater Wells	No	0	
Threatened and Endangered Species	Yes	No critical habitat is present, and no likely habitat is present for any federally listed species except for the northern long-eared bat. Potential roosting habitat for northern long-eared bat exists along the westernmost edge of the project corridor.	
Railroads	No	No impacts to railroads	
Cemeteries	No	No impacts to cemeteries	
Utilities	Yes	Sanitary sewer line would be crossed but impacts would be avoided.	

Criteria or Resource	Present in Project Area	Concept	
		Concept 1 – 549' Bridge, 50-yr LOS	Concept 2 – 549' Bridge, 50-yr LOS
Potential Historic Properties	Yes	Potential impacts on a residence and two outbuildings (both unevaluated for listing on the National Register of Historic Places) owned by the City on the eastern edge of the project corridor.	
Visual Aesthetics	Yes	The project area consists of farmland, residential areas, and riparian riverine corridor.	
Farmland	Yes	Farmland is present in the middle of the project corridor and would be impacted by the project, but is not protected by the Farmland Policy Protection Act because the land is within the City limits.	
Regulated Materials	No	No contaminated sites requiring action are nearby, but a brownfield site 0.8 mile upgradient has groundwater contamination moving toward the North Fork Maquoketa River.	
Noise	Yes	Construction noise would occur temporarily and intermittently, and traffic noise would be minimal based on two-lane traffic at a posted speed limit of 30 or 35 miles per hour.	
Right of Way Acquisitions	N/A	There would be no residential relocation, but a retaining wall would need to be installed and some residential property acquired on the northwestern edge of the project corridor.	Residential relocation, residential acquisition, or retaining wall would not be required.

Subsequent to the comparison presented in Table 1, the City indicated that the skewed alignment would not work because there is land on the western portion of the project corridor owned by the Federal Emergency Management Agency. The City recommended moving forward with the straight alignment (Concept 1) and shifting it slightly to the south. The straight alignment (which is not fully straight due to the current alignments of 12th Avenue SW and 13th Avenue SE) was shifted slightly to the south, and another option was considered to include a second bridge on the eastern portion of the project to help reduce the projected surface water elevation changes. The preferred option by the City is the two bridge option, with a 511-foot-long western bridge and a 232-foot-long eastern bridge. The pedestrian path to the north of the bridge would be 10-foot-wide with a 2-foot-wide shoulder. These variations to Concept 1 are minor and negligibly changed the impact comparison presented in Table 1.

PERMITS AND APPROVALS SUMMARY

A variety of permits and approvals would likely be needed before construction of either concept, as follows:

- National Pollutant Discharge Elimination System Construction General Permit for grading disturbance of an acre or more of ground, with Stormwater Pollution Prevention Plans
- A Joint Section 404/401, Iowa Sovereign Lands, and Floodplain Development Permit
    - Section 404 of the Clean Water Act permit for impacts on wetlands and other waters of the US, with Section 401 Water Quality Certification (Section 404 permitting requires compliance with requirements of Section 106 of the National Historic Preservation Act and Section 7 of the Endangered Species Act.)
    - Iowa DNR and local floodplain permits
    - Iowa Sovereign Lands Permit

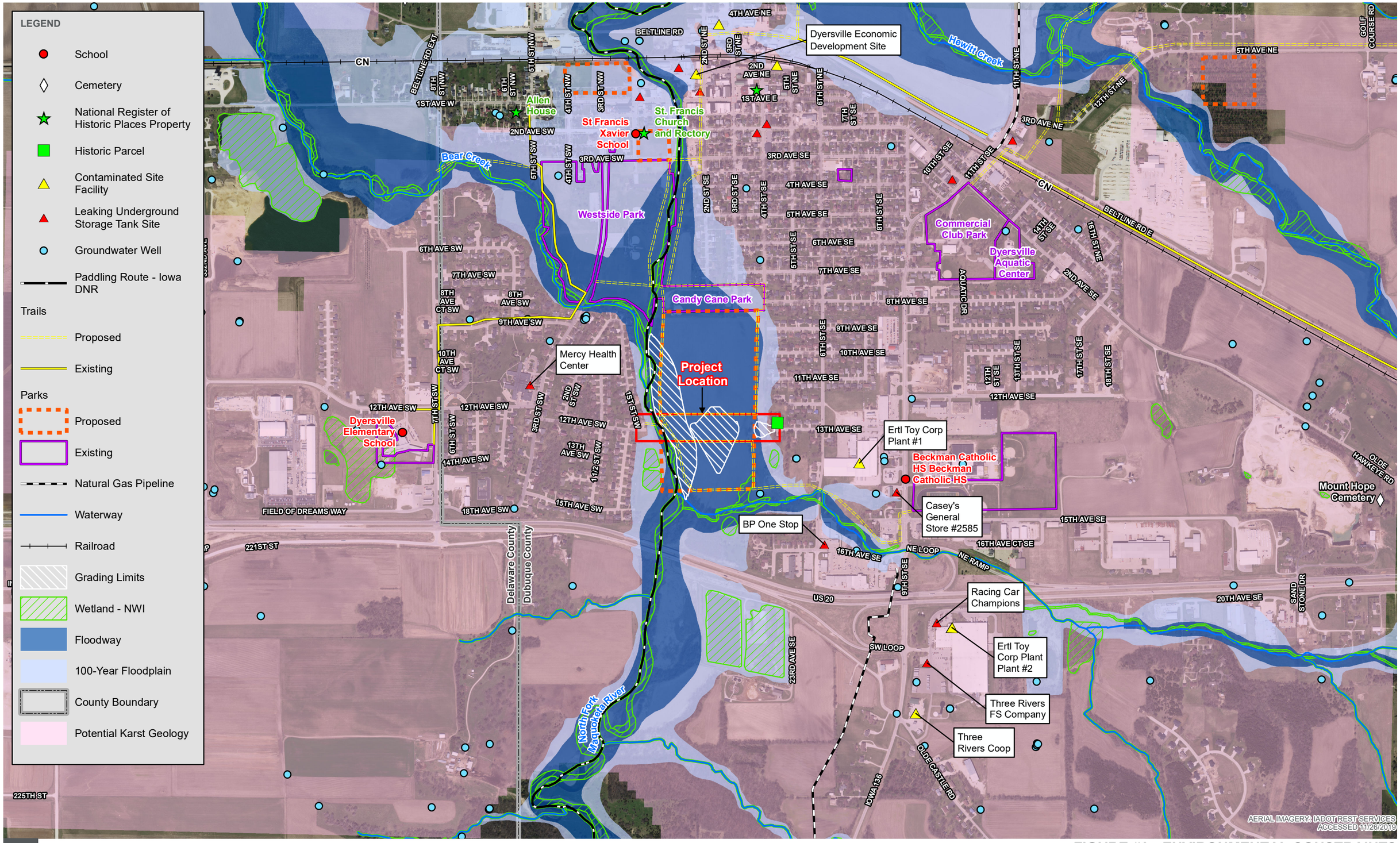
- City of Dyersville rezoning application, right of way permit, and other applicable local permits

National Environmental Policy Act (NEPA) and Section 4(f) of the US Department of Transportation Act requirements would apply with the use of federal funds. The North Fork Maquoketa River Paddling Route is a Section 4(f) resource requiring construction coordination with Iowa DNR. It is likely that a Categorical Exclusion would be a suitable classification of NEPA documentation, subject to approval by the Federal Highway Administration and the Iowa Department of Transportation. Section 4(f) should be able to be addressed through a temporary occupancy exception process in conjunction with the NEPA process.

If a Section 404 Clean Water Act permit is required, the US Army Corps of Engineers would be an approving authority.

NEXT STEPS AND RECOMMENDATIONS FOR ENVIRONMENTAL COMPLIANCE

Future field surveys will be needed for wetland delineation, threatened and endangered species habitat review, and potential archaeological resources to supplement the desktop data gathered during the conceptual phase of the project. We recommend that City-planned demolition of the two outbuildings in the northeast portion of the project area be done with City funds outside of this project to eliminate potential historic impacts for this project. We also recommend that the City wait for further planning of park and recreational resources along the project corridor until the preferred alignment and design have been further determined, and conduct joint planning with the project. Conducting joint planning will support the future Section 4(f) process with the Federal Highway Administration and the Iowa Department of Transportation.



HDR | City of Dyersville

0 Feet 1,000

FIGURE #1 - ENVIRONMENTAL CONSTRAINTS

12TH AVE SW TO 13TH AVENUE SE BRIDGE [PHASE I - PRELIMINARY DESIGN]

FIGURE 1

PATH: Z:\PROJECTS\CITY_OF_DYERSVILLE\10192243_DYERSVILLE_12TH_13THSE_PH1\MAP_DOCS\DRAFT\MAP_11X17_ENV_CONSTRAINTS_FIG1_V2.MXD - USER: TTALBITZ - DATE: 8/31/2020

DATE: 8/31/2020

LEGEND

- Waterway
- Railroad
- Grading Limits
- County Boundary
- Crossing Location

Project Crossing Location

Bear Creek
Hewitt Creek
North Fork Maquoketa River
Delaware County
Dubuque County
CN
BELTLINE RD EXT
BELTLINE RD
BELTLINE RD E
US 20
IOWA 136
AQUATIC DR
GOLF COURSE RD
OLDE HAWKEYE RD
OLDE CASTLE RD
SAND STONE DR
INDUS PKW
332ND AVE
225T
1ST ST SW
2ND ST SW
3RD ST SW
4TH ST SW
5TH ST SW
6TH ST SW
7TH ST SW
1ST ST NW
2ND ST NW
3RD ST NW
4TH ST NW
5TH ST NW
6TH ST NW
2ND ST NE
3RD ST NE
4TH ST NE
5TH ST NE
6TH ST NE
7TH ST SE
2ND ST SE
3RD ST SE
4TH ST SE
5TH ST SE
6TH ST SE
8TH ST SE
9TH ST SE
10TH ST SE
11TH ST SE
11TH ST NE
12TH ST NE
14TH ST SE
16TH ST NE
6TH ST SW
6TH ST NW
6TH ST NE
6TH ST SE
10TH ST SE
12TH ST SE
13TH ST SE
17TH ST SE
18TH ST SE
1ST AVE W
1ST AVE E
2ND AVE SW
3RD AVE SW
6TH AVE SW
7TH AVE SW
8TH AVE SW
8TH AVE CT SW
9TH AVE SW
10TH AVE SW
10TH AVE CT SW
12TH AVE SW
13TH AVE SW
14TH AVE SW
15TH AVE SW
2ND AVE NE
3RD AVE NE
4TH AVE NE
5TH AVE NE
1ST AVE SW
2ND AVE SE
3RD AVE SE
4TH AVE SE
5TH AVE SE
6TH AVE SE
7TH AVE SE
8TH AVE SE
9TH AVE SE
10TH AVE SE
11TH AVE SE
12TH AVE SE
13TH AVE SE
15TH AVE SE
16TH AVE SE
16TH AVE CT SE
20TH AVE SE
23RD AVE SE
NE LOOP
NE RAMP
SW LOOP
1 1/2 ST SW

AERIAL IMAGERY: IADOT REST SERVICES
ACCESSED 11/26/2019

City of Dyersville

0 Feet 1,000

FIGURE #2 - AERIAL SHOWING PROJECT LOCATION

12TH AVE SW TO 13TH AVENUE SE BRIDGE [PHASE I - PRELIMINARY DESIGN]

FIGURE 2

PATH: Z:\PROJECTS\CITY_OF_DYERSVILLE\10192243_DYERSVILLE_12TH_13THSE_PH1\MAP_DOCS\DRAFT\MAP_11X17_PROJECT_AREA_FIG2.MXD - USER: TTALBITZ - DATE: 10/29/2020

DATE: 10/29/2020