Agenda

City Council Meeting

20 Second Avenue SW, Oelwein

6:00 PM

September 08, 2025
Oelwein, Iowa

Mayor: Brett DeVore
Mayor Pro Tem: Matt Weber
Council Members: Karen Seeders, Anthony Ricchio, Lynda Payne, Dave Lenz, Renee Cantrell

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Pledge of Allegiance

Call to Order

Roll Call

Additions or Deletions

Citizens Public Comments - See Guidelines for Public Comments Below.

A. Public Comment Policy.

Consent Agenda

1. Consideration of a motion to approve the August 25, 2025 minutes.
2. Consideration of a resolution authorizing temporary closure of public ways or grounds for Oelwein Volunteer Fire Department.

Public Hearing

3. Public Hearing on September 8th, 2025 at 6:00 PM at the Oelwein City Council Chambers for the construction plan specifications for the construction of the 10th Street Bridge.
4. Public Hearing on September 8, 2025 at 6:00 PM at the Oelwein City Council Chambers for a lease with Alltel Corporation d/b/a Verizon Wireless for land at 230 4th Street SW (Parcel No. 1821376002) for construction of a cell phone tower.

Resolutions

5. Consideration of a resolution approving the plans and specifications of the 10th St. Bridge Project from origin Design and approving the bid from Taylor Construction, Inc. in the amount of $1,416,351.70
6. Consideration of a resolution approving a lease with Alltel Corporation d/b/a Verizon Wireless for land at parcel number 1821376002, LOTS 1 TO 5 BLK 5 BENNETT'S ADD & PC 215' X 450' ADJ ON N LOTS 1 TO 5 BLK 1 MILES ADD, for construction of a cell phone tower
7. Consideration of a resolution approving Final Pay Application No. 9 in the amount of $12,240.75 to Woodruff Construction for the Oelwein Municipal Airport Airfield Vault.

8. Consideration of a resolution approving a demolition bid in the amount of $43,558.00 with Matt Construction for the 2025 Demolition Project.

9. Consideration of a resolution approving a three-year contract with NUWAVE for Voice over Internet Protocol phones (VOIP).

10. Consideration of a resolution authorizing the release of mortgages granted by BBV, LLC. and Tiki Properties, LLC., to the City of Oelwein.

Motions

11. Consideration of a motion to move the employee December 24, 2025 holiday to December 26, 2025

Council Updates

Mayor's Report

City Attorney's Report

A. City Attorney.

City Administrator's Report

B. City Administrator.

Adjournment

C. Additional Information.

In compliance with the Americans with Disabilities Act, those requiring accommodation for Council meetings should notify the City Clerk's Office at least 24 hours prior to the meeting at 319-283-5440

Public Comment Policy
Oelwein Guidelines for Public Participation during City Council Meetings
Adopted by Council Resolution 5495-2023

1. Regular City Council Meetings "Public Comments" on non-agenda items.
    a. The first opportunity for public comment is listed on the agenda as "Public Comments". This time is set aside for the public to address the City Council on issues not scheduled on the agenda. It is not to be confused with a public hearing, which is a formal proceeding conducted for the purpose of discussing a specific topic, such as the city budget.
    b. Anyone wishing to address the City Council must adhere to the following "Rules of Procedure and Decorum":
        i. Be recognized by the Mayor or Mayor Pro Tem.
        ii. State their name and address.
        iii. Speak from the podium in a civil, non-argumentative and respectful manner.
        iv. Whenever a group wishes to address the City Council on the same subject, the Mayor may request that a spokesperson be chosen by the group to avoid significant repetitive comments. Follow up comments by others that are similarly minded, should be limited to acknowledging their agreement with the comments made by the spokesperson or any other prior speaker, and not merely repeating previously made comments.
        v. Each person wising to speak during the public comment period shall be given three (3) minutes to share their comments.
        vi. Speakers will be required to speak into the microphone, speak clearly and succinctly, to ensure all in attendance, in person or virtually, can clearly hear and understand what is being said.
        vii. All remarks shall be directed to the Mayor and City Council as a body rather than to the Mayor, any particular Councilmember, or any member of the staff or audience.
        viii. If the speaker intends to share any documents the City Council during their comments, a copy must also be provided to the City Clerk. If the speaker is reading a "statement" to the Council, it is requested that a copy of the "statement" be provided to the City Clerk so as to have a clear and accurate record of what was said.
        ix. Speakers shall refrain from the use of profanity; language likely to incite violence or outbursts from the audience; language that is disruptive to the orderly process of the meeting; engaging in conversations with individual council members; making comments of a personal nature regarding others; shouting, yelling or screaming.
        x. Speakers shall not continue to address the City Council once they have left the podium and will at no point address or engage in conversation with the Mayor, Council, or staff from their seat.
    c. Other matters relevant to the Public Comment section reference topics not on the Agenda.
        i. Should the Mayor or Council request clarifications from the speaker the Mayor, in the Mayor's sole discretion, may provide additional time to the speaker.

ii. The Mayor or Mayor Pro Tem, in the sole discretion of the Mayor or Mayor Pro Tem in the absence of the Mayor, may provide additional time or reduce time allowed any speaker and/or make other allowances or judgements deemed appropriate under the circumstances, in the Mayor's capacity as the presiding official.

iii. In many cases, the speaker will be directed to meet with staff outside of the meeting to further discuss, obtain answers to questions, to resolve the issue, and/or to discuss next steps.

iv. Other than asking a question to clarify a statement made by the speaker, Council members shall refrain from entering into a dialogue with the speaker. This portion of the agenda is not intended for a discussion or debate between the City Council and the speaker and should not be used for that purpose. Iowa Code requires public notice of all items to be considered/debated to be posted at least twenty-four (24) hours in advance of the meeting. Therefore, Council discussion or debate on a topic brought up in the public comment section would be a violation of Iowa Code.

v. The Mayor is responsible for maintaining order and decorum and will not allow the speaker, or any other person in attendance, to make personal attacks or inflammatory comments and will, when appropriate, direct any person violating any of the rules set forth herein to be quiet, to sit down and/or return to their seat as appropriate. Failure to comply with directives of the Mayor may result in the person being asked to leave the meeting or removed from the meeting. The Mayor may call for a break or recess to allow the speaker to leave or be removed from the meeting.

2. City Council Meetings "Public Comments" on Agenda Items during the meeting
   a. The City Council meeting is designed for the City Council to discuss and make decisions on the various issues on the agenda. The procedure for introduction, consideration, and action on agenda items is as follows:
      i. Each agenda item is introduced by the Mayor
      ii. The Mayor asks for a staff presentation or clarification of any relevant staff report.
      iii. If dealing with an issue tied to an applicant, the Mayor may ask for comments from the applicant.
      iv. The Mayor will then request whether any person in attendance wished to comment on the agenda item.
      v. After the cessation of Council debate and any other comments as appropriate, the Mayor will call for a motion and second.
      vi. Once a motion has been made and seconded, no additional comments will be received from the public, only City Council debate, with staff input as appropriate, will occur from this point forward.
   b. The rules for addressing the City Council at the designated time during this portion of the meeting are:
      i. The speaker must be recognized by the Mayor.
      ii. The speaker must speak from the podium and must provide their name and address for the record.

iii. At no time will members of the public be allowed to enter into the City Council discussion from their seat. Upon recognition by the Mayor, a person may only be allowed to speak at the podium during the City Council discussion so long as the Mayor finds the comments to be germane, necessary and/or helpful to the City Council.

iv. No speaker will be allowed to speak more than once on any agenda item unless clarification is requested by the City Council and permission granted by the Mayor.

v. When an agenda includes a "Public Hearing", any comments from the Public will only be received during the Public Hearing, not after the Public Hearing during consideration of any action item tied to the Public Hearing discussion.

vi. All rules set forth above in the "Public Comments" on non-agenda items section of this Policy, unless specifically excepted by the provisions of this section, shall by this reference be applicable to Public Comments on agenda items.

3. Public Hearings
   a. When an item under consideration requires a public hearing by statute, the Mayor will open and facilitate the public hearing. Public comments will be received in the same manner, and subject to, all provisions described and set forth under Paragraph 2 of this Policy.
   b. Reasonable limitations on the number of speakers and time allowed to speak may be imposed by the Mayor in order to keep the meeting moving.
   c. Public hearings are held to gather data and opinions from the public to assist and facilitate the decision-making process.
   d. All rules set forth above in the "Public Comments" on non-agenda items section of this Policy, unless specifically excepted by the provisions of this section, shall by this reference be applicable to Public Comments on agenda items..

4. Public Comments at Council Workshops / Work Sessions.
   a. The committee chair runs the work session. The purpose of work sessions is to allow staff to present material and for the Council to have time to discuss and consider issues in greater detail before taking action.
   b. Public Comments:
      i. Because the Workshop/Work Session is designed for discussion among the members of the City Council and staff, public comment is not warranted. A member of the audience may only speak should the chair recognizes a member of the public or interested party or if a Council member requests that a member of the public be recognized. If so recognized, the same rules of decorum as listed for Council meetings apply, and the chair may impose any and all other restrictions deemed appropriate in the sole discretion of the chair.
   c. All rules set forth above in the "Public Comments" on non-agenda items section of this Policy, unless specifically excepted by the provisions of this section, shall by this reference be applicable to Public Comments on agenda items.

5. Rules of Decorum for the Audience during Council Meetings and Work Sessions
   a. Meeting attendees (the audience):

i. Will refrain from commenting, clapping, shouting, booing, or other inappropriate and/or disruptive behavior.
ii. Will refrain from private conversations during meetings.
iii. Should not address Council members in individual conversation or make comments to individual Council members.

6. Contacting City Council Members outside of Meetings
    a. You may contact your City Council member at any time. Their contact information is on the City's website (https://www.cityofoelwein.org) at the button marked Government then City Council. Phone numbers may be provided City Hall should permission be given by the elected official.

Minutes

City Council Meeting
20 Second Avenue SW, Oelwein
August 25, 2025 - 6:00 PM

Pledge of Allegiance

Call to Order

Mayor DeVore called the meeting to order at 6:00 PM.

Roll Call

Present: Lenz, Cantrell, Payne, Seeders, Ricchio, Weber

Also Present: Mayor DeVore, City Administrator Mulfinger, City Clerk/Treasurer Rigdon

Absent: NA

Additions or Deletions

A motion was made by Lenz, seconded by Weber to approve the agenda as presented.

All aye. Motion carried.

Citizens Public Comments

John Latham, 230 4th Street SW, inquired about the location of the of the cell tower and other logistics. City staff answered accordingly.

Consent Agenda

1. Consideration of a motion to approve the August 11, 2025 minutes.
2. Claims resolution in the amount of $576,518.48.
3. Consideration of a resolution authorizing temporary closure of public ways and grounds for Oelwein Rotary Club Events on August 28, 2025.

   Resolution No. 5791-2025 was applied to this resolution
4. Consideration of a motion to approve the Class 'E' Retail Alcohol License for Hy-Vee, Inc DBA Hy-Vee Oelwein Dollar Fresh.
5. Consideration of a motion to approve the Special Class 'C' Retail Alcohol License for First Garden.
6. Consideration of a motion to approve the Special Class 'C' Retail Alcohol License for Oelwein Area Historical Society DBA Oelwein Coliseum.

   A motion was made by Weber, seconded by Lenz to approve the consent agenda.

   All aye. Motion carried.

Ordinances

7. Consideration of an ordinance amending Chapter 10, Industrial Property Tax Exemption. - Third and Final Reading.

   A motion was made by Weber, seconded by Lenz to approve Ordinance No. 1223.

   Ayes: Lenz, Cantrell, Payne, Seeders, Ricchio, Weber

Nays: NA Motion carried.

Resolutions

8. Consideration of a resolution setting a public hearing for September 8th, 2025 at 6:00 PM at the Oelwein City Council Chambers for the construction plan specifications for the construction of the 10th Street Bridge.

   A motion was made by Lenz, seconded by Weber to approve Resolution No. 5792-2025.

   Ayes: Lenz, Cantrell, Payne, Seeders, Ricchio, Weber

   Nays: NA Motion carried.

9. Consideration of a resolution setting a public hearing on September 8, 2025 at 6:00 PM at the Oelwein City Council Chambers for a lease with Alltel Corporation d/b/a Verizon Wireless for land at 230 4th Street SW for construction of a cell phone tower.

   A motion was made by Weber, seconded by Lenz to approve Resolution No. 5793-2025.

   Ayes: Lenz, Cantrell, Seeders, Weber

   Nays: Payne, Ricchio Motion carried.

10. Consideration of a resolution approving an employee education assistance agreement with Kameron Bennett.

    A motion was made by Seeders, seconded by Cantrell to approve Resolution No. 5794-2025.

    Ayes: Lenz, Cantrell, Payne, Seeders, Ricchio, Weber

    Nays: NA Motion carried.

11. Consideration of a resolution accepting 314 1st Avenue NE from Teresa Haas for a Property Forfeiture.

    A motion was made by Weber, seconded by Lenz to accept the Planning, Finance, Enterprise and Economic Development recommendation and approve Resolution No. 5795-2025.

    Ayes: Lenz, Cantrell, Payne, Seeders, Ricchio, Weber

    Nays: NA Motion carried.

Motions

12. Consideration of a motion approving a cemetery walk at Oakdale Cemetery on Thursday, September 18, 2025 from 6:00 – 7:30 p.m. hosted by the Oelwein Public Library.

    A motion was made by Seeder, seconded by Cantrell to approve a cemetery walk at Oakdale Cemetery on Thursday, September 18, 2025 from 6:00 – 7:30 p.m. hosted by the Oelwein Public Library. All aye. Motion carried.

Committee Reports

13. Report from Seeders on the Library Board minutes.

    For full minutes, please visit: https://www.oelwein.lib.ia.us/about/library-board-minutes-1

14. Report from Cantrell on the Park and Recreation Commission minutes.

    For full minutes, please visit: https://www.cityofoelwein.org/bc-parks/page/parks-and-recreation-24

Mayor's Report

Mayor DeVore spoke on a new program starting in January for elderly, disabled, and low income to fix issue with their homes.

City Administrator's Report

City Administrator Mulfinger reported former city council member Darin Christensen passed away. Christensen was on the council when Mulfinger was hired. This is a big loss for the community.

The Public Works department has purchased a new power washer as the almost 30-year-old unit has finally quit.

The City Attorney Herman will be at the September 8th work session to discuss the vicious dog process and other topics for an open work session.

Mulfinger invited the city council to the Rotary Sweet Corn Feed.

Adjournment

A motion was made by Weber, seconded by Lenz to adjourn the meeting at 6:22PM.

All aye. Motion carried.

_____

Brett DeVore, Mayor

ATTEST:

_____

Dylan Mulfinger, City Administrator

I, Dylan Mulfinger, City Administrator in and for the City of Oelwein, Iowa do hereby certify that the above and foregoing is a true accounting of the Council Proceedings held August 25, 2025 and copy of said proceedings was furnished to the Register August 28, 2025.

_____

Dylan Mulfinger, City Administrator

RESOLUTION NO. _____-2025

A RESOLUTION AUTHORIZING TEMPORARY CLOSURE OF PUBLIC WAYS OR GROUNDS FOR OELWEIN VOLUNTEER FIRE DEPARTMENT

WHEREAS, Iowa Code Section 364. 12 (2) states that " a city shall keep all public grounds, streets, sidewalks, alleys, bridges, culverts, overpasses, underpasses, grade crossing separations and approaches, public ways, squares, and commons open, in repair, and free from nuisance, with the following exceptions "; and

WHEREAS, Iowa Code Section 364. 12 (2) (a) states that "Public ways and grounds may be temporarily closed by resolution "; and

WHEREAS, Oelwein Volunteer Fire Department have requested temporarily closure of streets and parks for the following events, locations and times:

Event	Location of Street Closures	Date & Time
Iowa Fire Service Training Bureau	Industrial Park Rd. (West of 1007 Industrial Park Road, East of Parcel No. 1828405004 & 1006 Industrial Park Rd.	September 23, 2025 at 5:00 PM to 9:00 PM

NOW, THEREFORE, BE IT RESOLVED by the City Council of Oelwein, Iowa that

Oelwein Volunteer Fire Department are authorized to temporarily close the aforementioned requested streets and park.

Passed and Approved this 8th day of September, 2025.

_____
Brett DeVore, Mayor

It was moved by _____ and seconded by _____ that the Resolution as read be adopted, and upon roll call there were:

	AYES	NAYS	ABSENT	ABSTAIN
Ricchio				
Weber				
Lenz				
Garrigus				
Seeders				
Payne				

Attest:

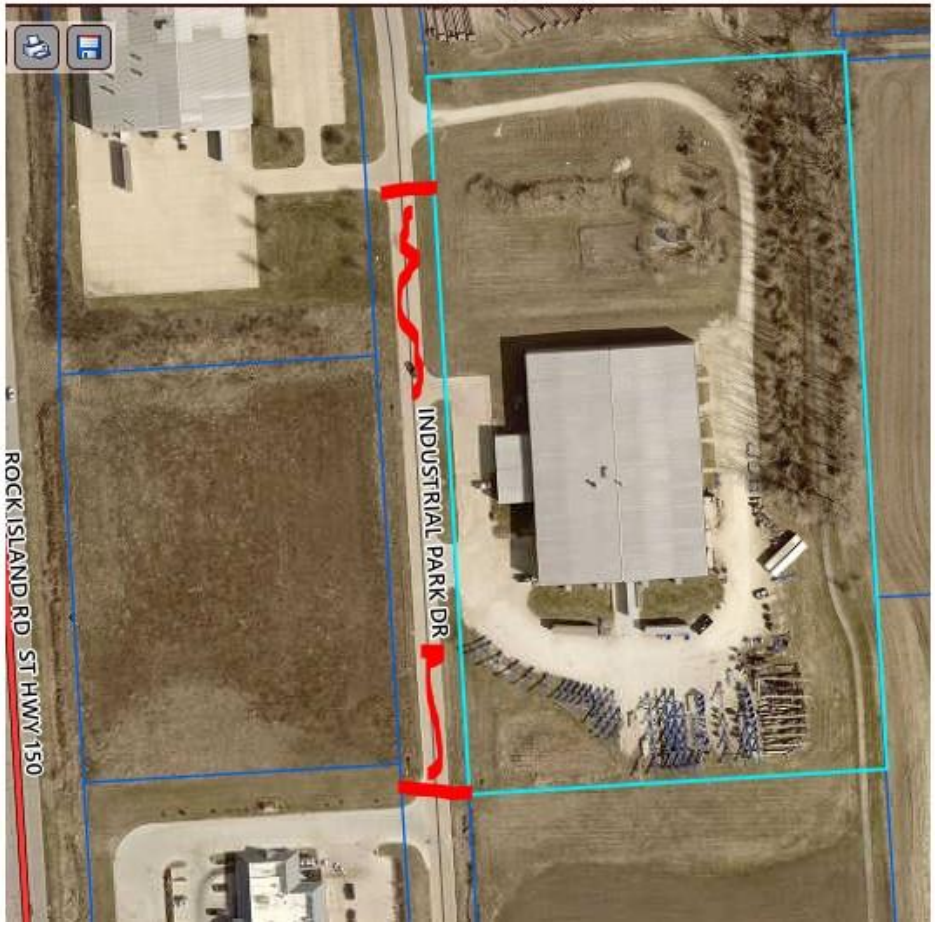
_____
Dylan Mulfinger, City Administrator

Recorded September 9, 2025.

We will be conducting Fire Department training in cooperation with the Iowa Fire Service Training Bureau on the evening of 9/23 and would like to use the section of road we have in previous years on Industrial Park Drive. This would be between Bertch Cabinets and Kwik Star. The training itself is for LP fire control with an actual training unit onsite. We have chosen this location for multiple years due to the water supply requirements needed and the drainage aspects of consuming that volume of water.

Based on our recent conversations at council being that if there were any road closures you would like to see those go as a resolution in front of council. Would you need me to submit a letter for the next Council Meeting or is this something you can authorize?

Reference of location closure:



NOTICE OF PUBLIC HEARING
ON PLANS AND SPECIFICATIONS
CITY OF OELWEIN, IOWA
10th Street SW over Otter Creek, S28 T91 R09
BRM-5657(614)--8N-33

NOTICE IS HEREBY GIVEN: The City Council of Oelwein, Iowa, will hold a public hearing on the proposed plans and specifications for the 10th Street SW Over Otter Creek project in accordance with the provisions of Chapter 26, Code of Iowa, at 6:00 p.m. on the 8th of September, 2025 at City Hall, 20 2nd Ave SW Oelwein, Iowa 50662. Said proposed plans and specifications are now on file in the office of the City Clerk. At said hearing any interested person may appear and file objections thereto.

The 10th Street over Otter Creek project consists of constructing a replacement structure on 10th St SW over Otter Creek in the City of Oelwein. The replacement structure is a 239' x 32' PPCB Bridge with an 8' wide sidewalk with concrete roadway approach pavement.

Improvements for the project will be constructed at 10th Street SW over Otter Creek.

Published by order of the City Council given on the 25th of August, 2025.

BRIDGE REPLACEMENT – PPCB
LETTING DATE AUGUST 19, 2025
BRM-5657(614)– –8N–33

281–1
09–28–22

SECTION 404 PERMIT AND CONDITIONS

CONSTRUCT THIS PROJECT ACCORDING TO THE REQUIREMENTS OF U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 14, USACE PROJECT NO. MVR–2024–742. A COPY OF THIS PERMIT IS AVAILABLE FROM THE IOWA DOT WEBSITE (http://www.envpermits.iowadot.gov/). THE U.S. ARMY CORPS OF ENGINEERS RESERVES THE RIGHT TO VISIT THE SITE WITHOUT PRIOR NOTICE.

IOWA DNR FLOODPLAIN CONSTRUCTION PERMIT
THIS PROJECT IS COVERED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES FLOODPLAIN CONSTRUCTION PERMIT NO. FP–2024–1096

IOWA DOT
Highway Division

PLANS OF PROPOSED IMPROVEMENTS ON THE
URBAN ROAD SYSTEM

CITY OF OELWEIN

BRM-5657(614)- -8N-33

BRIDGE REPLACEMENT - PPCB

IN THE CITY OF OELWEIN ON 10th ST SW
OVER OTTER CREEK, S28 T91 R09
SCALES: As Noted

REFER TO THE PROPOSAL FORM FOR LIST OF APPLICABLE SPECIFICATIONS.

SEE SHEET C.4 FOR STANDARD ROAD PLAN TABULATION

TOTAL SHEETS
40

PROJECT NUMBER
BRM–5657(614)– –8N–33

INDEX OF SHEETS

105–3
10–18–05

NO.	DESCRIPTION
A.1 – A.2	TITLE SHEET, LEGENDS AND ABBREVIATIONS
B.1	TYPICAL SECTIONS
C.1 – C.4	ESTIMATE OF QUANTITIES, STANDARD ROAD PLANS, & GENERAL INFORMATION
* D.1	PLAN & PROFILES (MAINLINE)
* H.1	EASEMENT PLAN
J.1	DETOUR PLAN
L.1	PAVING PLANS
* SPS.1–SPS.2	SOIL BORINGS
U.1 – U.6	APPROACH DETAILS, BRIDGE RAILING DETAILS, MISC DETAILS
* V.1	SITUATION PLAN
V.2	BERM GRADING PLAN
V.3 – V.12	BRIDGE DETAILS
* V.13 – V.15	BRIDGE DETAILS
V.16 – V.21	BRIDGE DETAILS

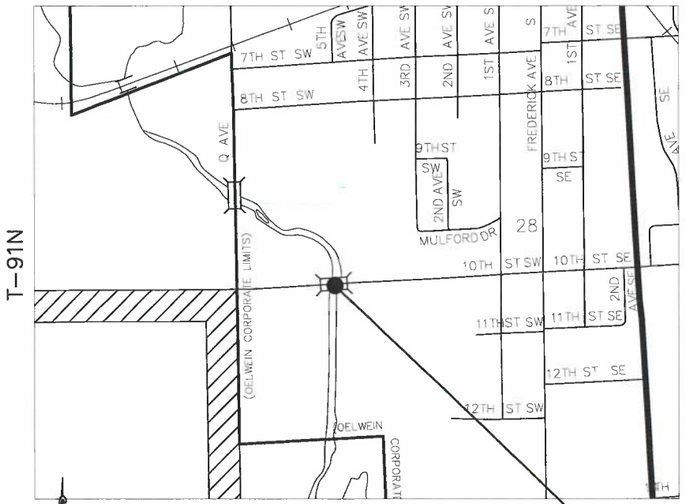
* COLOR PLAN SHEETS

MILEAGE SUMMARY

105–1
09–27–94

DIV.	LOCATION	LIN. FT.	MILES
1	10TH STREET SW STA 08+25 TO 12+00	375	0.07
	TOTAL	375	0.07

R–9W



APPROX. SCALE:
0 1/4 1/2
SCALE IN MILES

LOCATION MAP



DESIGN SPEED: 40 MPH

TRAFFIC CONTROL PLAN
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 ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS 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 8+25
E.O.P. STATION 12+00
FHWA STRUCTURE NO. 8920

IOWA 811 ONE CALL SM
1 (800) 292 - 8989

UTILITY CONTACTS:

ALLIANT ENERGY (GAS & ELECTRIC)
COMPANY NAME: ALLIANT ENERGY
DESIGN CONTACT: CRISTEN GALLUP
PHONE: 319 283 9023
EMAIL: CRISTENGALLUP@ALLIANTENERGY.COM

CENTURYLINK/LUMEN
COMPANY NAME : CENTURYLINK/LUMEN
DESIGN CONTACT: KRYSTAL HUNTER
PHONE: 319 540 1889
EMAIL: KRYSTAL.HUNTER@LUMEN.COM

ALLIANT ENERGY (FIBER)
COMPANY NAME: ALLIANT ENERGY
DESIGN CONTACT: LAURA SEALS
PHONE: 319 786 4198
EMAIL: LAURASEALS@ALLIANTENERGY.COM

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	NOAH HOFRICHTER	CIVIL
U.1	COURTNEY WAND	STRUCTURAL
SPS.1	MATT REISDORFER	GEOTECHNICAL

origin design®
WORKING ON TOMORROW.
800 556-4491
origindesign.com

WORKING DRAWINGS WILL BE CHECKED BY ORIGIN DESIGN
137 MAIN STREET, DUBUQUE, IA 52001
563–556–2464 (PHONE); 563–556–7811 (FAX)
COURTNEY WAND
COURTNEY.WAND@ORIGINDESIGN.COM

AADT 820 V.P.D. 2021

LICENSED PROFESSIONAL ENGINEER
NOAH HOFRICHTER
24665
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 ORIGIN DESIGN CO.

NOAH HOFRICHTER — 5/13/2025
NOAH HOFRICHTER — DATE

PE 24665 — 12/31/2025
LICENSE # — RENEWAL DATE

PAGES OR SHEETS COVERED BY THIS CERTIFICATION:
INDEX THIS SHEET EXCEPT FOR SPS, U, & V SHEETS

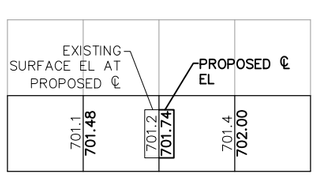
P:\23\036\DRAWINGS\CIVIL\23036 ZZ A SHEETS.DWG 4/1/2025 11:48:42 AM MARY ABBOTT

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
℄ OR 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
HSD	HEADLIGHT STOPPING DISTANCE
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
MP	MILE POST
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
RCAP	REINFORCED CONCRETE ARCH PIPE
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
SSD	STOPPING SIGHT DISTANCE
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/WM	TOP OF WATER MAIN
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



PROFILE LEGEND

LEGEND

EXISTING		PROPOSED
	PROPERTY/ROW 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	
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	□
SF	SILT FENCE	SF
PC	PERIMETER CONTROL	PC
--000--	CONTOUR LINE	000
	RAILROAD TRACKS	
	GUARD RAIL	
+ 0.00	SPOT ELEVATION	+ 0.00
	DIRECTION OF FLOW	
	TREE LINE	
	REVETMENT EXTENTS	
	EROSION STONE	

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

UTILITY LINES WITH DESIGNATORS WRAPPED IN PARENTHESIS SUCH AS (W) or (G) ARE LOCATED BASED ON MAP OR GIS DATA

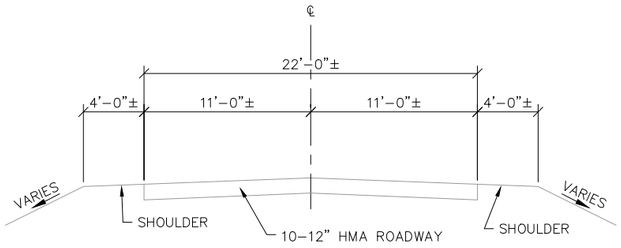
SURVEY

■	FOUND REBAR
●	FOUND IRON PIPE
○	SET REBAR

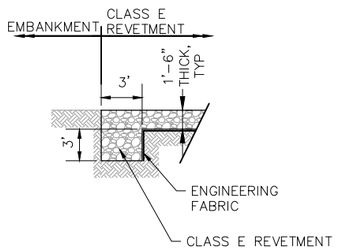
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

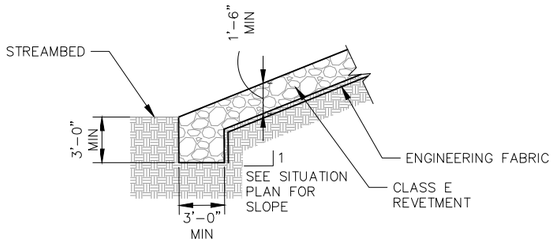
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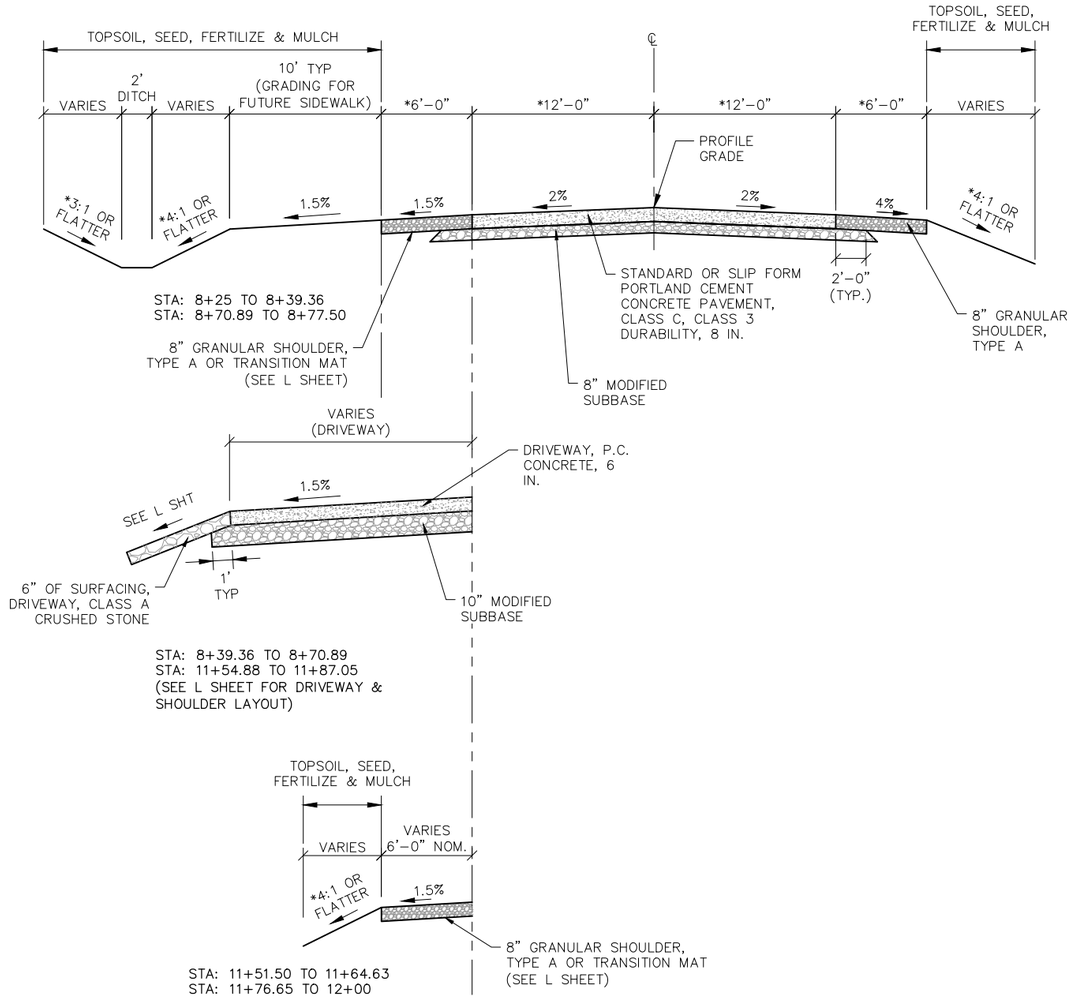
1 B.1 EXISTING SECTION
NOT TO SCALE



3 B.1 TRENCH END ANCHOR DETAIL
NOT TO SCALE



4 B.1 REVETMENT TOE–IN SECTION
NOT TO SCALE



* FROM STATION 8+25 TO 8+39.36, STATION 11+51.50 L TO 12+00 L, & 11+75 R TO 12+00 R, TAPER BACK TO EX GRADES AND PAVING WIDTHS

2 B.1 TYPICAL SECTION
NOT TO SCALE

STA: 8+25 TO 8+77.50
STA: 11+51.50 TO 12+00

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

10th STREET IN OELWEIN BRIDGE REPLACEMENT - BRM-5657(614)- -8N-33						
REF. NO.	ITEM CODE	BID ITEM DESCRIPTION	UNITS	ROADWAY QUANTITIES	BRIDGE QUANTITIES	TOTAL
1	2101-0850001	CLEARING AND GRUBBING	ACRE	0.72		0.72
2	2102-2710070	EXCAVATION, CLASS 10, ROADWAY & BORROW	CY	295		295
3	2104-2713020	EXCAVATION, CLASS 13, CHANNEL	CY		4107	4107
4	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	241		241
5	2115-0100000	MODIFIED SUBBASE	CY	85		85
6	2121-7425010	GRANULAR SHOULDERS, TYPE A	TON	55		55
7	2301-0685550	BRIDGE APPROACH PAVEMENT, AS PER PLAN	SY	154.2		154.2
8	2301-1033080	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN.	SY	268		268
9	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE	TON	42		42
10	2401-6745625	REMOVAL OF EXISTING BRIDGE	LS		1	1
11	2402-2720000	EXCAVATION, CLASS 20	CY		104	104
12	2402-2721000	EXCAVATION, CLASS 21	CY		106	106
13	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY		495.0	495
14	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB		128331	128331
15	2407-0562870	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTB70	EACH		10	10
16	2407-0562895	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTB95	EACH		5	5
17	2408-7800000	STRUCTURAL STEEL	LB		5787.2	5787.2
18	2414-6424110	CONCRETE BARRIER RAILING	LF		476	476
19	2414-6460000	ORNAMENTAL METAL RAILING	LF		261.6	261.6
20	2417-0225024	APRONS, METAL, 24 IN. DIA.	EACH	1		1
21	2417-1040024	CULVERT, CORRUGATED METAL ENTRANCE PIPE, 24 IN. DIA.	LF	28		28
22	2501-0201057	PILES, STEEL, HP 10 X 57	LF		1100	1100
23	2501-6335010	PREBORED HOLES	LF		183.2	183.2
24	2505-4008120	REMOVAL OF STEEL BEAM GUARDRAIL	LF		106	106
25	2507-3250005	ENGINEERING FABRIC	SY		1310	1310
26	2507-6800061	REVETMENT, CLASS E	TON		1250	1250
27	2510-6745850	REMOVAL OF PAVEMENT	SY	529		529
28	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN.	SY	56		56
29	2524-6765010	REMOVE AND REINSTALL SIGN AS PER PLAN	EACH	1		1
30	2528-2518000	SAFETY CLOSURE	EACH	4		4
31	2528-8445110	TRAFFIC CONTROL	LS	1		1
32	2533-4980005	MOBILIZATION	LS	1		1
33	2599-9999005	34" TO 38" CONCRETE BARRIER TRANSITION SECTION, MODIFIED	EACH		4	4
34	2599-9999005	REMOVE AND REINSTALL EXISTING FLAP GATE, 24"	EACH	1		1
35	2599-9999005	CONCRETE BARRIER, APPROACH, MODIFIED, 16 FT	EACH	4		4
36	2599-9999009	CORING ROCK SOCKET	LF		24	24
37	2601-2634100	MULCHING	ACRE	1		1
38	2601-2636043	SEEDING AND FERTILIZING (RURAL)	AC	0.5		0.5
39	2601-2642100	STABILIZING CROP - SEEDING AND FERTILIZING	AC	0.5		0.5
40	2601-2700020	TRANSITION MAT	SF	240		240
41	2602-0000020	SILT FENCE	LF	450		450
42	2602-000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	450		450
43	2602-000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	225		225
44	2602-0000309	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA.	LF	575		575
45	2602-0000351	REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE	LF	575		575

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ESTIMATE REFERENCE INFORMATION

DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS

REF. NO.	DESCRIPTION	BID ITEM DESCRIPTION
1	QUANTITY IN THE PLANS IS BASED ON THE AREAS SHOWN BETWEEN THE EXISTING EDGE OF GRANULAR SHOULDER AND SLOPE LIMITS FROM APPROXIMATELY STA 8+25 TO STA 12+00 BOTH SIDES. DO NOT DISTURB WETLAND AREA NOTED ON SHEET D.1 WITHOUT PRIOR APPROVAL OF THE ENGINEER. CITY WILL FELL ANY POTENTIAL BAT HABITAT TREES PRIOR TO MARCH 31, 2025. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL AND GRUBBING ASSOCIATED WITH ANY REMAINING MATERIALS, AND ALL EFFORTS NEEDED FOR ANY OTHER TREES OR BRUSH WITHIN THE GRADING LIMITS. PRIOR TO BIDDING, CONTRACTOR SHALL REVIEW EXISTING SITE CONDITIONS AND TO IDENTIFY TREES THAT NEED TO BE CLEARED AND GRUBBED TO CONFIRM THE EXTENT OF EFFORT REMAINING. INCLUDES REMOVAL OF ANY FENCE POSTS OR OTHER MISCELLANEOUS LANDSCAPING POSTS ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS.	CLEARING AND GRUBBING
2	SEE SUMMARY TABLE ON C SHEETS FOR A BREAKDOWN OF VOLUMES ON EACH SIDE OF THE CREEK. CLASS 10 EXCAVATION INCLUDES EARTHWORK FOR ROADWAY EMBANKMENT, DITCHES, AND REVETMENT PLACEMENT OTHER THAN BETWEEN THE FACE OF THE PROPOSED BRIDGE ABUTMENTS. QUANTITY INDICATED IN THE PLANS REPRESENTS TOTAL CUT QUANTITY WITHIN THE LIMITS OF CLASS 10. QUANTITIES ARE ADJUSTED FOR PAVEMENT REMOVAL BUT ARE NOT ADJUSTED FOR TOPSOIL. SUFFICIENT CUT MATERIAL WILL BE AVAILABLE FROM THE CLASS 10 AND THE CLASS 13, CHANNEL BID ITEM SUCH THAT NO BORROW IS EXPECTED TO BE REQUIRED. CUT VOLUME ALSO INCLUDES EXCAVATION FOR EMBEDMENT OF REVETMENT, CLASS E AND REVETMENT TOE DETAIL THAT IS WITHIN THE LIMITS OF CLASS 10 EXCAVATION. MATERIAL DETERMINED TO BE SUITABLE BY THE ENGINEER MAY BE USED FOR EMBANKMENT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR WASTING ANY UNSUITABLE OR EXCESS MATERIAL. MATERIAL MAY NOT BE WASTED ON WETLANDS OR WITHIN THE FLOODPLAIN. PAYMENT QUANTITY WILL BE THE QUANTITY SHOWN IN THE CONTRACT DOCUMENTS.	EXCAVATION, CLASS 10, ROADWAY & BORROW
3	SEE SUMMARY TABLE ON C SHEETS FOR A BREAKDOWN OF VOLUMES ON EACH SIDE OF THE CREEK. CLASS 13 CHANNEL EXCAVATION INCLUDES THE AREA BETWEEN THE FACE OF PROPOSED BRIDGE ABUTMENTS. QUANTITY INDICATED IN THE PLANS REPRESENTS TOTAL CUT QUANTITY WITHIN THE LIMITS OF CLASS 13, CHANNEL. QUANTITIES ARE ADJUSTED FOR PAVEMENT REMOVAL BUT ARE NOT ADJUSTED FOR TOPSOIL. CUT VOLUME ALSO INCLUDES EXCAVATION FOR EMBEDMENT OF REVETMENT, CLASS E AND REVETMENT TOE DETAIL THAT IS WITHIN THE LIMITS OF CLASS 13, CHANNEL EXCAVATION. MATERIAL DETERMINED TO BE SUITABLE BY THE ENGINEER MAY BE USED FOR EMBANKMENT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR WASTING ANY UNSUITABLE OR EXCESS MATERIAL. MATERIAL MAY NOT BE WASTED ON WETLANDS OR WITHIN THE FLOODPLAIN. QUANTITY MEASURED FOR PAYMENT WILL BE THE QUANTITY SHOWN IN THE CONTRACT DOCUMENTS.	EXCAVATION, CLASS 13, CHANNEL
4	REPLACE TO A MINIMUM OF 4 INCHES. QUANTITY CALCULATED IS BASED ON AREA WHERE TOPSOIL IS TO BE PLACED WITHIN FINISHED CONSTRUCTION LIMITS. CONSTRUCTION LIMITS FOR THIS PURPOSE ARE THE SLOPE LIMITS SHOWN IN GRADING AREAS.	TOPSOIL, STRIP, SALVAGE AND SPREAD
5	FOR USE UNDER PCC PAVEMENT (ROADWAY AND DRIVEWAY) AS SHOWN ON SHEET B.1. PLAN QUANTITY ASSUMES THAT THERE IS A 2' EXTENSION OF THE SUBBASE ON ROADWAY PAVEMENT. MODIFIED SUBBASE UNDER APPROACH PAVEMENT IS INCLUDED IN BRIDGE APPROACH PAVEMENT ITEM AS NOTED ON U SHEETS AND IS NOT PAID SEPERATELY.	MODIFIED SUBBASE
6	FOR ROADWAY SHOULDER MATERIAL AS SHOWN ON THE B.1 TYPICAL SECTION SHEET.	GRANULAR SHOULDERS, TYPE A
7	SEE DETAILS INCLUDING METHOD OF MEASUREMENT AND BASIS OF PAYMENT ON SHEETS U.1 AND U.2. INCLUDES PAVING UNDER A PORTION OF CONCRETE, BARRIER, APPROACH MODIFIED. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. EVALUATION REQUIREMENTS FOR SMOOTHNESS OF SECTION 2428 OF THE STANDARD SPECIFICATIONS SHALL APPLY FOR THIS PROJECT. EVALUATION REQUIREMENTS FOR THICKNESS OF SECTION 2301 OF THE STANDARD SPECIFICATIONS DO NOT APPLY FOR THIS PROJECT AND NO INCENTIVE FOR THICKNESS WILL BE PAID.	BRIDGE APPROACH PAVEMENT, AS PER PLAN
8	SEE TYPICAL SECTIONS ON SHEET B.1 AND JOINTING AND LAYOUT INFORMATION ON SHEET L.1. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION. EVALUATION REQUIREMENTS FOR SMOOTHNESS OF SECTIONS 2316 AND 2317 OF THE STANDARD SPECIFICATIONS DO NOT APPLY FOR THIS PROJECT AND NO INCENTIVE FOR SMOOTHNESS WILL BE PAID. EVALUATION REQUIREMENTS FOR THICKNESS OF SECTION 2301 OF THE STANDARD SPECIFICATIONS DO NOT APPLY FOR THIS PROJECT AND NO INCENTIVE FOR THICKNESS WILL BE PAID.	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN.
9	FOR USE AS GRANULAR SURFACING ON ENTRANCES AS SHOWN ON SHEET B.1 AND SHEET L.1 CONTRACTOR TO FURNISH AND SPREAD THE MATERIAL AT A TYPICAL 6 INCH THICKNESS.	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE
10	EXISTING BRIDGE ON STATION 10+00 IS A 150'X 24' STEEL BEAM BRIDGE WITH CONCRETE DECK AND ABUTMENTS. CONTRACTOR TO REMOVE ALL SUBSTRUCTURE TO 3 FEET MINIMUM BELOW FINISHED GRADE OR AS NEEDED TO AVOID CONFLICTS WITH PROPOSED STRUCTURE. STRUCTURE BECOMES THE PROPERTY OF THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF THE STRUCTURE OFFSITE. SEE C.4 FOR ASBESTOS AND LEAD AND CHROMIUM TESTING NOTES.	REMOVAL OF EXISTING BRIDGE
11	AT BRIDGE ABUTMENTS	EXCAVATION, CLASS 20
12	AT BRIDGE PIERS	EXCAVATION, CLASS 21
13	CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION. EVALUATION REQUIREMENTS FOR SMOOTHNESS OF SECTION 2428 OF THE STANDARD SPECIFICATIONS SHALL APPLY FOR THIS PROJECT.	STRUCTURAL CONCRETE (BRIDGE)
14	-	REINFORCING STEEL, EPOXY COATED
15	INCLUDES THE COST OF PROVIDING BEAM VENTS PER V. 16 AND PROVIDING BEAM BEARING MATERIALS.	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTB70
16	INCLUDES THE COST OF PROVIDING BEAM VENTS PER V. 16 AND PROVIDING BEAM BEARING MATERIALS.	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTB95
17	FOR BRIDGE BEAM DIAPHRAGMS AND DECK DRAINS PER V SHEETS.	STRUCTURAL STEEL
18	CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION.	CONCRETE BARRIER RAILING
19	ON NORTH DECK EDGE PER U SHEETS. SHOP DRAWING SUBMITTAL REQUIRED. CONTRACTOR SHALL PROVIDE ONE RAILING PANEL AND POST AS A MOCK UP PRIOR TO FABRICATION OF THE ENTIRE SECTION. IF ACCEPTABLE, THE PANEL AND POST MAY BE INCORPORATED INTO THE PROJECT. NO FIELD PAINTING ALLOWED EXCEPT FOR REPAIR OR TOUCH UP PER NOTES IN PLAN SET. FIELD WELDING OR CUTTING IS NOT ALLOWED. METHOD OF MEASUREMENT SHALL BE BY THE LINEAR FEET SHOWN IN THE CONTRACT DOCUMENTS, FROM END OF RAILING TO END OF RAILING. BASIS OF PAYMENT IS FULL COMPENSATION FOR FURNINSHING ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO CONSTRUCT THE RAIL AS SHOWN IN THE CONTRACT DOCUMEENTS.	ORNAMENTAL METAL RAILING
20	FOR INLET END OF DRIVEWAY CULVERT AT STA 8+83.93 LT.	APRONS, METAL, 24 IN. DIA.
21	FOR DRIVEWAY AT STA 8+54.89 LT.	CULVERT, CORRUGATED METAL ENTRANCE PIPE, 24 IN. DIA.
22	CAST IN-ONE-PIECE STEEL PILE POINTS ARE REQUIRED FOR ALL THE STEEL H-PILES EXCEPT FOR PIER PILES THAT ARE IN ROCK CORES. PILE POINTS SHALL BE CONSIDERED INCIDENTAL TO THIS BID ITEM. SEE V SHEETS FOR PILE DRIVING NOTES.	PILES, STEEL, HP 10 X 57
23	AT BRIDGE ABUTMENTS PER V.1 AND AT PIER PILES THAT REQUIRE ROCK CORING PER DETAILS ON V.3. SEE NOTES ON V.3 FOR WHEN PIER PILE PREBORED HOLES SHOULD BE FILLED WITH SATURATED SAND INSTEAD OF BENTONITE. SATURATED SAND IS CONSIDERED INCIDENTAL TO THIS ITEM.	PREBORED HOLES
24	FOR REMOVAL OF STEEL BEAM GUARDRAIL ADJACENT TO EXISITNG BRIDGE ENDS. REMOVAL OF ALL OBJECT MARKERS/HAZARD SIGNS ASSOCIATED WITH THE GUARDRAIL AND BRIDGE ENDS ARE INCIDENTAL TO THIS ITEM.	REMOVAL OF STEEL BEAM GUARDRAIL
25	PLACED UNDER THE REVETMENT AS SHOWN ON SHEET D.1, V.1 AND V.2. NOTE ANCHORAGE OF THE ENGINEERING FABRIC AS PER THE DETAILS ON B.1. FABRIC UNDER REVETMENT SHALL BE INSTALLED AS SOON AS BERM GRADING IS COMPLETE AS EROSION CONTROL MEASURE. IF ENGINEERING FABRIC IS NOT IMMEDIATELY INSTALLED, PERIMETER AND SLOPE CONTROL DEVICE SHALL BE INSTALLED TO PREVENT EROSION INTO THE STREAM.	ENGINEERING FABRIC
26	PLACED AROUND ABUTMENTS AND PIERS AS SHOWN ON SHEET D.1, V.1 AND V.2 INCLUDING AS PER TOE-IN DETAILS ON SHEET B.1.	REVETMENT, CLASS E
27	FOR REMOVAL OF EXISTING HMA PAVEMENT. METHOD OF MEASUREMENT FOR REMOVAL OF PAVEMENT WILL BE THE QUANTITY SHOWN IN THE CONTRACT DOCUMENTS. CONFIRM EXTENTS OF PAVEMENT REMOVAL WITH THE ENGINEER PRIOR OT REMOVAL.	REMOVAL OF PAVEMENT
28	CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. SEE SHEET D.1 AND SHEET L.1 FOR LAYOUT INFORMATION.	DRIVEWAY, P.C. CONCRETE, 6 IN.
29	FOR EXISTING SPEED LIMIT SIGN AS SHOWN ON SHEET D.1. FIELD VERIFY LOCATION. REINSTALL PER SI-101 TYPE 1 INSTALLATION WITH AN "X" DISTANCE FROM THE EDGE OF PAVEMENT TO EDGE OF SIGN OF A MINIMUM OF 12 FEET. METHOD OF MEASUREMENT IS BY EACH SIGN AND POST INSTALLATION REMOVED AND REINSTALLED AS SHOWN IN THE CONTRACT DOCUMENTS. BASIS OF PAYMENT IS FULL COMPENSATION FOR FURNISHING ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR REMOVAL AND RE-INSTALLATION OF THE EXISTING SIGN AND POST AS SHOWN IN THE CONTRACT DOCUMENTS.	REMOVE AND REINSTALL SIGN AS PER PLAN
30	SEE TABULATION ON C SHEETS.	SAFETY CLOSURE

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REFERENCE NOTES CONTINUED:

ESTIMATE REFERENCE INFORMATION DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS			
REF. NO.	DESCRIPTION	B	BID ITEM DESCRIPTION
31	SEE NOTES ON SHEET A.1 AND SHEET J.1. INCLUDES ALL ITEMS ASSOCIATED WITH PROVIDING A SIGNED DETOUR.		TRAFFIC CONTROL
32	CONTRACTOR SHALL SUBMIT AN UPDATED PROJECT SCHEDULE TO THE CITY MONTHLY THAT INDICATES WHEN THE ROAD WILL BE OPEN TO TRAFFIC.		MOBILIZATION
33	SEE V SHEETS FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION. INCLUDES ALL CONCRETE AND REINFORCING STEEL. METHOD OF CONSTRUCTION SHALL BE AS PER SECTION 2513 OF THE STANDARD SPECIFICATIONS. METHOD OF MEASUREMENT SHALL BE BY COUNT FOR THE BARRIER TRANSITION SECTION. BASIS OF PAYMENT WILL BE THE CONTRACT UNIT PRICE EACH FOR THE TYPE OF END SECTION. REINFORCEMENT IN CONCRETE BARRIER TRANSITION SECTIONS THAT IS NOT PART OF THE BRIDGE STRUCTURE IS NOT PAID FOR SEPARATELY. PAYMENT IS CONSIDERED FULL COMPENSATION FOR ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO CONSTRUCT THE COMPLETE TAPERED END SECTION IN CONFORMANCE WITH THE PLAN DETAILS.		34" TO 38" CONCRETE BARRIER TRANSITION SECTION, MODIFIED
34	THIS ITEM COVERS ALL EFFORTS NEEDED TO REMOVE THE EXISTING FLAP GATE FROM THE EXISTING 24-INCH CMP DRIVEWAY PIPE NEAR STA 8+70 LT AND REINSTALL ON THE END OF THE NEW 24" CMP DRIVEWAY PIPE OUTLET AT APPROXIMATE STA. 8+70, 62.68' LT. SEE D.1 FOR LOCATION. METHOD OF MEASUREMENT IS BY EACH RUBBER FLASH GATE INSTALLED. BASIS OF PAYMENT SHALL BE FULL COMPENSATION FOR MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR REMOVAL AND RE-INSTALLATION OF THE EXISTING FLAP GATE.		REMOVE AND REINSTALL EXISTING FLAP GATE, 24"
35	SEE SHEET V.19 FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION. INCLUDES ALL CONCRETE AND REINFORCING STEEL OR DOWELS. METHOD OF CONSTRUCTION SHALL BE AS PER SECTION 2513 OF THE STANDARD SPECIFICATIONS. METHOD OF MEASUREMENT SHALL BE BY COUNT FOR THE BARRIER END SECTION. BASIS OF PAYMENT WILL BE THE CONTRACT UNIT PRICE EACH FOR THE TYPE OF END SECTION. REINFORCEMENT IN CONCRETE BARRIER END SECTIONS THAT IS NOT PART OF THE BRIDGE STRUCTURE IS NOT PAID FOR SEPARATELY. PAYMENT IS CONSIDERED FULL COMPENSATION FOR ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO CONSTRUCT THE COMPLETE TAPERED END SECTION IN CONFORMANCE WITH THE PLAN DETAILS.		CONCRETE BARRIER, APPROACH, MODIFIED, 16 FT
36	THE QUANTITY OF "CORING ROCK SOCKET" AT THE PIERS IS BASED ON THE ANTICIPATED TOP OF BEDROCK ELEVATIONS AND CORING 3 FEET INTO THE ROCK FOR (4) PILES IN EACH PIER AS NOTED ON V.6. THE NUMBER OF LINEAL FEET OF ROCK CORING WILL BE MEASURED IN THE FIELD AND PAID FOR AT THE CONTRACT UNIT PRICE BID PER LINEAL FOOT. THE PRICE BID INCLUDES THE COST OF PREDRILLING 16 INCH DIAMETER ROCK SOCKETS A MINIMUM 3 FEET INTO BEDROCK. THIS ITEM INCLUDES THE COST OF DISPOSAL OF EXCAVATED MATERIAL AND FURNISHING AND PLACING CLASS "C" STRUCTURAL CONCRETE TO BACKFILL THE SOCKET TO THE REQUIRED ELEVATION. IF PIER PILES CAN BE DRIVEN TO ELEVATION 972 (10 FEET BELOW THE SCOUR ELEVATION), THEN NO MEASUREMENT OR PAYMENT WILL BE MADE FOR "CORING ROCK SOCKET". SEE DETAILS ON V.3.		CORING ROCK SOCKET
37	MULCH ALL DISTURBED AREAS OUTSIDE THE STREAMBED WITHOUT REVETMENT, HARD SURFACING, OR GRANULAR MATERIAL. HYDROMULCHING IS ALLOWABLE. QUANTITY ASSUMES BOTH TEMPORARY AND PERMANENT SEEDING AND WILL BE ADJUSTED IF THE STABILIZING CROP IS NOT NEEDED.		MULCHING
38	ALL DISTURBED AREAS OUTSIDE THE STREAMBED WITHOUT REVETMENT, HARD SURFACING, OR GRANULAR MATERIAL. HYDROSEEDING IS ALLOWABLE.		SEEDING AND FERTILIZING (RURAL)
39	SEED WITH STABILIZING CROP ALL DISTURBED AREAS WITHIN CONSTRUCTION LIMITS WHICH ARE NOT ABLE TO BE SEEDED WITH PERMANENT SEEDING DUE TO CONSTRUCTION OPERATIONS, STAGING, OR IF THE SEEDING SEASON REQUIREMENTS OF STANDARD SPECIFICATIONS DELAYS PLACEMENT OF PERMANENT SEEDING. QUANTITY ESTIMATED IN THE PLANS IS THE SAME AS THE AREA OF THE PERMANENT SEEDING.		STABILIZING CROP - SEEDING AND FERTILIZING
40	FOR USE AT END OF BARRIER RAILS AS SHOWN ON SHEET D.1.		TRANSITION MAT
41	PLACED AT THE TOE OF FILL SLOPE IN AREAS WITHOUT A DITCH, AS SHOWN ON SHEET D.1. BID ITEM INCLUDES 25% ADDITIONAL QUANTITY FOR FIELD ADJUSTMENTS AND REPLACEMENTS.		SILT FENCE
42	REMOVE DEVICES ONLY AS DIRECTED BY THE ENGINEER. THE CITY OF OELWEIN MAY ELECT TO REMOVE SOME OF THE DEVICES STILL IN PLACE AT THE END OF THE PROJECT.		REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS
43	THIS ITEM IS INCLUDED FOR CLEANOUT AND REPAIR OF THE SILT FENCE DURING THE PROJECT. THE BID QUANTITY IS ESTIMATED TO BE 50% OF THE BID QUANTITY FOR SILT FENCE.		MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK
44	FOR USE ON OVERBANKS IN AND ADJACENT TO BRIDGE OPENING, AS SHOWN ON SHEET D.1 BID ITEM INCLUDES 25% ADDITIONAL QUANTITY FOR FIELD ADJUSTMENTS AND REPLACEMENTS.		PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA.
45	REMOVE DEVICES ONLY AS DIRECTED BY THE ENGINEER. THE CITY OF OELWEIN MAY ELECT TO REMOVE SOME OF THE DEVICES STILL IN PLACE AT THE END OF THE PROJECT.		REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE

P:\23\036\DRAWINGS\CIVIL\23036 ZZ C SHEETS.DWG 12/12/2024 3:57:33 PM JOE RETTENBERGER

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 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 ENGINEER.

NO EXTRA PAYMENT IS ALLOWED FOR COLD WEATHER PROTECTION DURING CONSTRUCTION.

THE OWNER WILL PROVIDE FOR FOUR TRIPS FOR STAKING, ONE OF THESE TRIPS INCLUDES COLLECTING THE IN-PLACE BEAM ELEVATIONS FOR HAUNCH ADJUSTMENTS AFTER THE BEAMS ARE PLACED. SUBGRADE STAKES WILL NOT BE PROVIDED, ONLY THE FINAL PAVEMENT GRADE STAKES. THE SURVEYOR REQUIRES A MINIMUM OF 48 HOURS NOTICE FOR THE SCHEDULING OF STAKING. RE-STAKING WILL BE AN EXTRA SERVICE CHARGED TO THE CONTRACTOR AS A TIME AND MATERIAL FEE AND CHANGE ORDERED INTO THE PROJECT AS A CONTRACTOR EXPENSE.

AN ASBESTOS INSPECTION WAS PERFORMED, AND NO ASBESTOS WAS DETECTED IN THE TESTED MATERIAL.

SCRAPE SAMPLES OF THIS BRIDGE WERE TAKEN TO GET AN INDICATION OF THE EXISTENCE OF AND LEVEL OF TOTAL CHROMIUM AND TOTAL LEAD. THE ANALYSIS OF THE TOTAL CHROMIUM FOUND WAS <220 PART PER MILLION (PPM) ON THE BRIDGE RAILINGS AND <130 PPM ON THE BRIDGE BEAMS. THE ANALYSIS OF THE TOTAL LEAD FOUND WAS 510 PPM ON THE BRIDGE RAILINGS AND <80 PPM ON THE BRIDGE BEAMS. THE ANALYSIS SHOWS THE EXISTENCE OF THESE TWO TOXIC CONSTITUENTS. NO OTHER SUBSTANCES WERE ANALYZED. THE BIDDER SHOULD NOT RELY ON THE LPA'S TESTING AND ANALYSIS FOR ANY PURPOSE OTHER THAN AS AN INDICATION OF THE EXISTENCE OF THESE TWO CONSTITUENTS. IF HAZARDOUS MATERIALS ARE DISCOVERED DURING CONSTRUCTION, CEASE WORK AND NOTIFY THE ENGINEER.

ROAD CONTRACTOR IS TO USE DUE CAUTION IN WORKING OVER AND AROUND ALL TILE LINES. BREAKS IN THE TILE LINE DUE TO THE CONTRACTOR'S CARELESSNESS ARE TO BE REPLACED AT THE CONTRACTOR'S EXPENSE WITHOUT COST TO OWNER. ANY TILE LINES BROKEN OR DISTURBED BY DESIGNATED CUT LINES WILL BE REPLACED AS DIRECTED BY THE ENGINEER AND AT THE OWNER'S EXPENSE.

STANDARD ROAD PLAN EW-401 IS LISTED IN TABULATION 105-4; HOWEVER, IT IS INCLUDED FOR INFORMATION PURPOSES ONLY SINCE IT IS AN OPTION. NO QUANTITIES ASSOCIATED WITH CONSTRUCTING EW-401 ARE INCLUDED IN ANY BID ITEMS. ANY STREAM CROSSING USED SHALL COMPLY WITH PERMIT REQUIREMENTS OF THE USACE NATIONWIDE PERMIT AND IOWA DNR FLOODPLAIN PERMIT REQUIREMENTS OF IOWA ADMINISTRATIVE CODE SECTION 567 IAC 72.1(6).

108-13A
10/4/2023

SAFETY CLOSURES

Station	Road Closure Qty.	Hazard Closure Qty.	Remarks
7+25	1		BEGINNING OF PROJECT
8+80		1	WEST ABUTMENT
11+50		1	EAST ABUTMENT
13+00	1		END OF PROJECT

105-4
10-18-11

STANDARD ROAD PLANS

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

Number	Date	Title
DR-203	04-21-20	Metal Pipe Aprons and Beveled Ends
EC-105	04-17-18	Transition Mat (TM)
EC-201	04-20-21	Silt Fence
EC-204	10-19-21	Perimeter, Slope and Ditch Deck Sediment Control Devices
EW-401	10-20-15	Temporary Stream Crossing, Causeway, or Equipment Pad
PV-101	04-15-25	Joints
SI-101	04-19-16	Locations - Type "A" Signs
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-252	04-21-20	Routes Closed to Traffic

10th Street Bridge
Oelwein

EARTHWORK SUMMARY

LOCATION	A TOTAL ROADWAY CUT UNADJUSTED	B UNUSABLE EXISTING PAVEMENT VOLUME	C TOTAL ROADWAY CUT, ADJUSTED **(EXCAVATION, CLASS 10, ROADWAY & BORROW)**	D TOTAL ROADWAY FILL, ADJUSTED (1.3 SHRINK FACTOR)	E CHANNEL AREA CUT, UNADJUSTED **(EXCAVATION, CLASS 13, CHANNEL)**	F CHANNEL AREA FILL, ADJUSTED (1.3 SHRINK FACTOR)	G **CLASS 20 EXCAVATION**
WEST OF BRIDGE	280	80	201	206	-	-	-
WEST BRIDGE BERM	-	-	-	-	1640	2	-
EAST OF BRIDGE	191	96	94	154	-	-	-
EAST BRIDGE BERM	-	-	-	-	2467	12	-
BRIDGE (WEST ABUTMENT)	-	-	-	-	-	-	52
BRIDGE (EAST ABUTMENT)	-	-	-	-	-	-	52
TOTALS:	471 CY	176 CY	**295 CY**	360 CY	**4107 CY**	14 CY	**104 CY**

NOTES:
- ALL VALUES IN CUBIC YARDS
- BOLD TITLES/VALUES INDICATE PAY ITEMS AND QUANTITIES
- ALL QUANTITIES INCLUDE EXCAVATION FOR EMBEDMENT OF CLASS E REVETMENT AS APPROPRIATE
- QUANTITIES NOT ADJUSTED FOR TOPSOIL

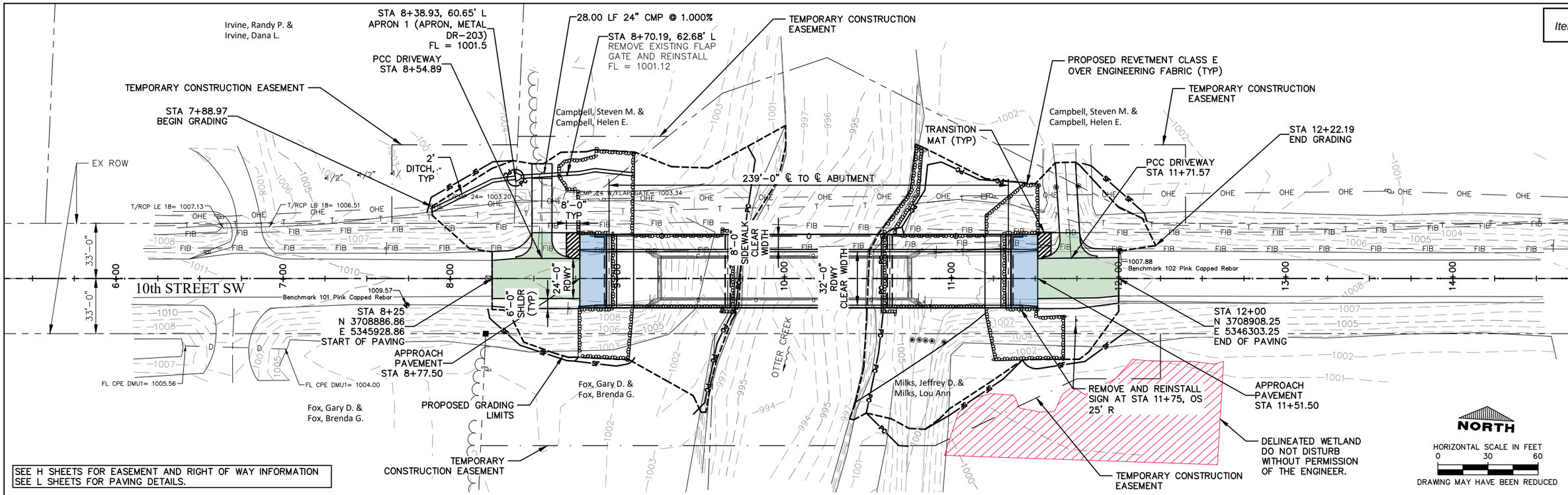
112-06
2/22/2024

BRIDGE APPROACH SECTION

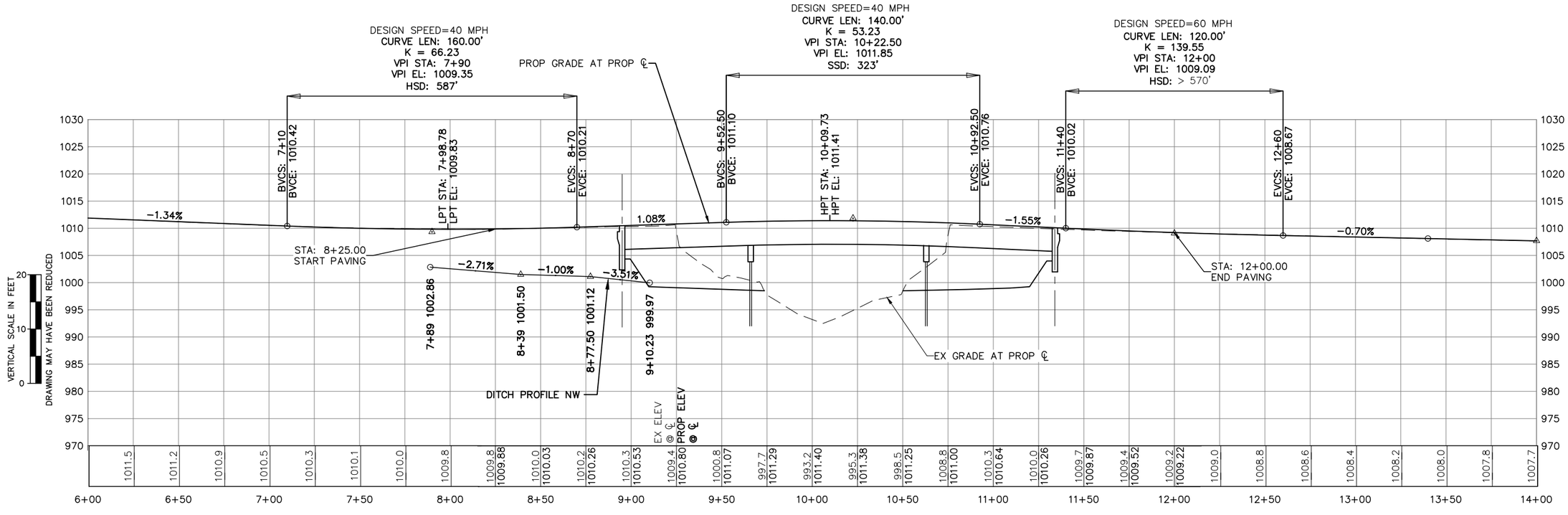
* Not a Bid Item

Line No.	Bridge Station	End	Skew Ahead Left (Degrees)	Skew Ahead Right (Degrees)	(T) Thickness (IN)	Pay Length	Double-Reinf. Area (SY)	Perforated * 4" Subdrain (LF)	Subdrain * Outlet (STA)	Subdrain * Outlet Side	Modified * Subbase (TON)	Remarks
1	8+77.50	W	0	0	10	15.83	77.1				75.1	SEE U SHEETS FOR DETAILS
2	11+51.50	E	0	0	10	15.83	77.1				75.1	SEE U SHEETS FOR DETAILS

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SEE H SHEETS FOR EASEMENT AND RIGHT OF WAY INFORMATION
SEE L SHEETS FOR PAVING DETAILS.



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NORTH

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

Irvine, Randy P. &
Irvine, Dana L.

Campbell, Steven M. &
Campbell, Helen E.

Campbell, Steven M. &
Campbell, Helen E.

STA 10+25.48, 132.14' L

EXISTING ROW

STA 9+62.99, 110.93' L

STA 8+40.49, 85.00' L
STA 8+40.27, 80.00' L
STA 7+65.00, 80.00' L
TEMPORARY EASEMENT

STA 9+30.19, 85.00' L
TEMPORARY EASEMENT

STA 11+27.82, 80.00' L
TEMPORARY EASEMENT

STA 12+40.00, 80.00' L

ø1/2" ø1/2" ø1/2"

STA 7+65.00, 33.00' L
STA 8+64.42, 33.00' L

STA 12+20.05, 33.00' L
STA 12+40.00, 33.00' L

1007.88
Benchmark 102 Pink Capped Rebar

8+00 9+00 10+00 11+00 12+00 13+00

1009.57
101 Pink Capped Rebar

10TH STREET SW ℄

EXISTING ROW

STA 8+21.18, 33.00' R

STA 9+58.30, 33.00' R

STA 12+25.00, 33.00' R

STA 11+75.00, 60.00' R

STA 12+25.00, 60.00' R

Fox, Gary D. &
Fox, Brenda G.

Fox, Gary D. &
Fox, Brenda G.

TEMPORARY EASEMENT

STA 8+18.23, 100.00' R

STA 9+55.35, 100.00' R

STA 10+90.00, 100.00' R

Milks, Jeffrey D. &
Milks, Lou Ann

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origin civil 800 556-4491	CITY OF OELWEIN	PROJECT NUMBER BRM-5657(614)- -8N-33	EASEMENT PLAN	SHEET: H.1	REV: .

SIGN LEGEND

Ⓐ ROAD CLOSED — R11–2, 48"X30" (TO BE PLACED IN ROAD) SAFETY CLOSURE

Ⓑ ROAD CLOSED TO THRU TRAFFIC — R11–4, 60"X30" (TO BE PLACED STAGGERED IN ROAD)

Ⓒ 10TH ST. SW — M1–94H, 12"X24" BLACK ON ORANGE
DETOUR → — M4–9R, 30"X24" BLACK ON ORANGE

Ⓓ DETOUR → — M4–9R, 30"X24" BLACK ON ORANGE

Ⓔ ROAD CLOSED 0.25 MILES AHEAD LOCAL TRAFFIC ONLY — R11–4, 60"X30"

Ⓕ END DETOUR — D3–1, BLACK ON ORANGE 6" UPPERCASE 4.5" LOWERCASE

Ⓖ 10TH ST. SE — M1–94H, 12"X24" BLACK ON ORANGE
DETOUR ← — M4–9L, 30"X24" BLACK ON ORANGE

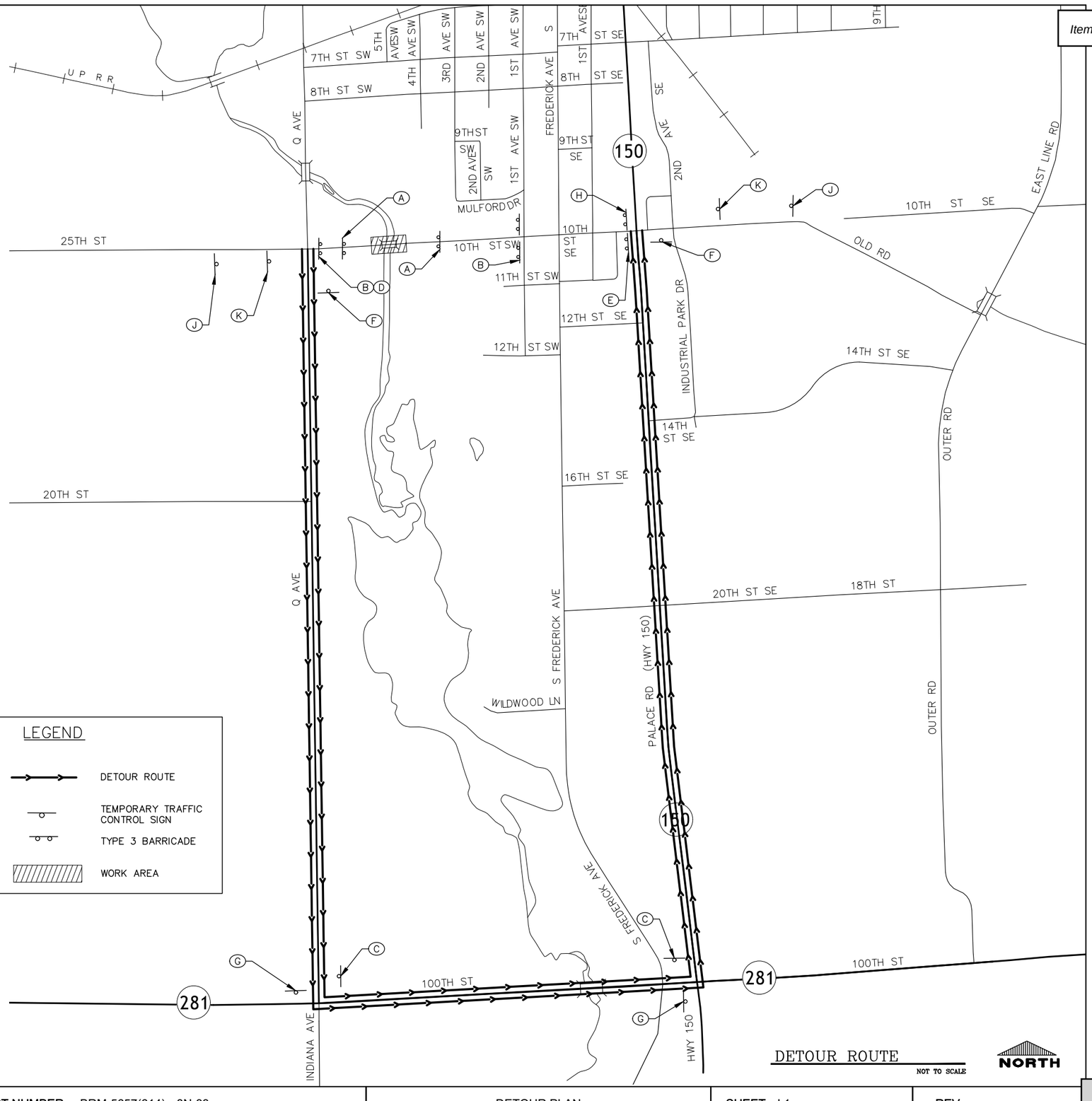
Ⓗ DETOUR ← — M4–9L, 30"X24" BLACK ON ORANGE

Ⓙ ROAD CLOSED AHEAD — W20–3, 48"X48" BLACK ON ORANGE

Ⓚ DETOUR AHEAD — W20–2, 48"X48" BLACK ON ORANGE

TRAFFIC CONTROL NOTES

1. 10th STREET BETWEEN Q AVENUE AND 1ST AVENUE SW WILL BE CLOSED TO VEHICULAR AND PEDESTRIAN TRAFFIC DURING CONSTRUCTION. PROPERTY ACCESS WILL BE MAINTAINED AT ALL TIMES.
2. THE LOCATION FOR STORAGE OF EQUIPMENT AND WORKERS VEHICLES DURING WORKING AND NON–WORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER.
3. WORK SHALL NOT BEGIN WITHOUT ADEQUATE TRAFFIC CONTROL IN PLACE.
4. PROPOSED SIGN SPACING MAY BE MODIFIED IF APPROVED BY THE ENGINEER TO MEET EXISTING FIELD CONDITIONS OR TO PREVENT OBSTRUCTION OF THE MOTORIST'S VIEW OF PERMANENT SIGNING.
5. ALL WORK WITHIN HIGHWAY 150 AND HIGHWAY 281 RIGHT OF WAY SHALL BE PERFORMED BY THE CONTRACTOR BETWEEN THE HOURS OF 30 MINUTES AFTER SUNRISE TO 30 MINUTES BEFORE SUNSET. DETOUR SIGNING MAY BE PLACED WITH IOWA DOT SIGNS IF THE SPACING IS ACCEPTABLE. THE EXISTING SIGNS MUST BE ABLE TO HANDLE THE ADDITIONAL WEIGHT AND TEMPORARY SIGNS MUST BE PLACED OUTSIDE OF THE EXISTING SIGNS, FARTHEST FROM THE ROAD.
6. 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.
7. THE CONTRACTOR SHALL PROVIDE A MINIMUM 2 WEEK NOTICE PRIOR TO INSTALLING THE PROPOSED DETOUR TO ALLOW NOTIFICATION OF AREA RESIDENTS AND BUSINESSES. THE CONTRACTOR SHALL PROVIDE NOTICE TO THE IOWA DOT MAINTENANCE SUPERVISOR:
   GABRIEL ZITTERGRUEN
   EMAIL: GABRIEL.ZITTERGRUEN@IOWADOT.US
   PHONE: 563–880–4519,
   PRIOR TO INSTALLING DETOUR SIGNS ON HIGHWAY 150 AND HIGHWAY 281 SO HE IS AWARE OF WORK ALONG THE HIGHWAY RIGHT OF WAY.
8. BARRICADES AND SAFETY CLOSURES SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD ROAD PLAN TC252



LEGEND

- DETOUR ROUTE
- TEMPORARY TRAFFIC CONTROL SIGN
- TYPE 3 BARRICADE
- WORK AREA

DETOUR ROUTE
NOT TO SCALE

NORTH

SEE D.1 FOR PIPE INFO

STA 8+48.89, 68.66'L
G 1004.60

STA 8+60.89, 68.66'L
G 1005.00

STA 8+77.27, 64.08' L
G 1001.11

STA 8+48.89, 59.92' L
G 1004.77

STA 8+60.89, 59.92' L
G 1004.98

STA 8+25.58, 57.58' L
G 1001.87

2'-0" DITCH

3.0:1

12'-0"

6" OF SURFACING, DRIVEWAY, CLASS A CRUSHED STONE

6.9:1

4.0:1

T/CMP 24= 1003.20

T/CMP 24 W/FLAP GATE= 1003.34

STA 8+25.00, 27.41'L
G 1009.41

STA 8+48.89, 27.41'L
T/P 1009.55

STA 8+60.89, 27.41'L
T/P 1009.65

STA 8+77.50, 26.42'L
T/P 1009.81

T/P 1009.59

GRADE BREAK

PROPOSED GRANULAR SHOULDER

STA 8+48.89, 23.00'L
T/P 1009.61

STA 8+60.89, 22.70'L
T/P 1009.72

8'-0" (TYP)

GRANULAR SHOULDER

T/P 1009.70

T/P 1009.74

T/P 1009.85

T/P 1009.94

1.50%

R10'-0"

BT-2 OR L-2

10.0'

7.7'

CT

5.4'

5'-5"

STA 8+39.36, 13.01'L
T/P 1009.70

STA 8+70.89, 13.00'L
T/P 1009.96

SEE U SHEETS FOR APPROACH PAVEMENT INFORMATION

STA 8+25.00, 10.82'L
MATCH EXISTING

STA 8+51.97, 12.00'L
T/P 1009.80

STA 8+54.89, 12.00'L
T/P 1009.83

T/P 1010.05

T/P 1009.93

2.00%

CD

ED

T/P 1009.88
MATCH EX

T/P 1010.15

T/P 1010.29

14.4'
BT-2 OR L-2 (TYP)

12.6'

12.9'

8+50

8+75

T/P 1010.04

STA 8+77.50
START OF BRIDGE APPROACH PAVEMENT, AS PER PLAN

24'-0"

10th STREET SW

STA 8+24.96, 10.57'R
MATCH EXISTING

JOINT (TYP)

T/P 1009.91

T/P 1010.05

1'-3" PAVING NOTCH

STA 8+39.36, 12.00'R
T/P 1009.70

STA 8+51.97, 12.00'R
T/P 1009.80

STA 8+77.50, 17.41'R
T/P 1009.94

4.00%

STA 8+39.36, 18.00'R
G 1009.32

PROPOSED GRANULAR SHOULDER

4.0:1

21'-4¾" FV

10'-9⅞"

10'-6⅞"

WEST DRIVEWAY

SEE SHEET V.2 FOR GRADING UNDER BRIDGE

STA 11+62.10, 69.27'L
G 1003.41

STA 11+74.10, 69.63'L
G 1003.42

STA 11+50.00, 56.65'L
G 1001.99

PAVEMENT JOINTING NOTES, REFER TO PV-101

- ALL LONGITUDINAL JOINTS ARE "BT-2" OR "L-2" JOINTS DEPENDING ON SEQUENCING, TYPICAL
- ALL TRANSVERSE JOINTS IN 8" PAVEMENT ARE TO BE CD JOINTS WITH A MAXIMUM SPACING OF 20' UNLESS OTHERWISE NOTED
- MINIMUM JOINT LENGTH TO BE 2'
- JOINTS SHOULD TERMINATE AT 90° ANGLES TO THE SLAB WHERE POSSIBLE
- MINIMUM JOINT ANGLE TO BE 70°
- KEYED JOINTS ARE NOT ALLOWED
- ROADWAY CENTERLINE JOINTS ARE INTENDED TO LINE UP WITH THE EXISTING CENTER OF ROADWAY PAVEMENT, WHICH DOES NOT ALWAYS MATCH THE CENTERLINE ESTABLISHED BASED ON PROPERTY OWNERSHIP AND EXISTING ROAD RIGHT OF WAY.

6" OF SURFACING, DRIVEWAY, CLASS A CRUSHED STONE

7.9:1

STA 12+00.02, 42.50'L
G 1002.16

STA 11+64.63, 27.42'L
T/P 1009.19

PROPOSED GRANULAR SHOULDER

STA 11+51.50, 26.42'L
T/P 1009.37

STA 11+76.65, 27.42'L
T/P 1009.03

T/P 1009.10

STA 11+71.24, 17.42'L
T/P 1009.25

PROPOSED GRANULAR SHOULDER

GRANULAR SHOULDER

12'-0⅛"

T/P 1009.24

T/P 1009.50

T/P 1009.15

STA 11+87.05, 13.42'L
T/P 1009.11

STA 11+54.88, 13.00'L
T/P 1009.54

T/P 1009.39

STA 12+00.00, 12.58'L
MATCH EXISTING

T/P 1009.61

T/P 1009.56

STA 11+87.05, 12.42'L
T/P 1009.12

STA 11+71.56, 12.24'L
T/P 1009.32

STA 11+79.56, 12.28'L
T/P 1009.07

STA 11+51.50
END OF BRIDGE APPROACH PAVEMENT, AS PER PLAN

11+50

11+75

T/P 1009.85

BT-2 OR L-2 (TYP)

11.8'

12.5'

10th STREET SW

JOINT (TYP)

STA 12+00.00, 0.57'L
MATCH EXISTING

STA 11+75.00, 11.72'R
T/P 1009.29

STA 12+00.00, 10.38'R
MATCH EXISTING

STA 11+51.50, 12.00'R
T/P 1009.61

STA 11+63.25, 11.86'R
T/P 1009.44

STA 11+87.50, 11.57'R
T/P 1009.13

STA 11+51.50, 17.42'R
T/P 1009.50

PROPOSED GRANULAR SHOULDER

STA 11+75.20, 18.00'R
G 1008.98

10'-11¼"

10'-11⅜"

21'-10⅝" FV

EAST DRIVEWAY

NORTH

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

P:\23\036\DRAWINGS\CIVIL\23036 ZZ L SHEETS.DWG 12/12/2024 3:57:55 PM JOE RETTENBERGER

origin design 800 556-4491	CITY OF OELWEIN	PROJECT NUMBER BRM-5657(614)- -8N-33	PAVING PLANS	SHEET: L.1	REV: .

LOG OF BORING

CHOSEN VALLEY TESTING

Chosen Valley Testing, Inc.

PROJECT: 23253.24.IAW
Design Phase Geotechnical Evaluation
Proposed 10th St. SW Bridge Replacement
10th St. SW
Oelwein, Iowa

BORING: **B-01**
LOCATION: See attached sketch
DATE: 5/28/2024
SCALE: 1" = 4'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
1010.2	0.0					
1009.2	1.0		**12" ASPHALT**			Elevations provided by Origin Design.
1008.2	2.0	SP	**POORLY-GRADED SAND** mostly medium grained, black, wet. (Fill) (IADOT: Coarse Sand)			
1006.2	4.0	SP SC	**POORLY-GRADED SAND to CLAYEY SAND** mostly medium grained, trace of gravel, brown, moist, medium dense. (Fill) (IADOT: Coarse Sand)	21		
		SC	**CLAYEY SAND** mostly medium grained, trace of gravel, brown to dark brown to dark grey to black, moist, medium dense. (Alluvium) (IADOT: Clayey Sand)	26		
998.7	11.5			28		
		SP	**POORLY-GRADED SAND** mostly medium grained, trace of gravel, brown to dark brown to dark grey, waterbearing, loose. (Alluvium) (IADOT: Silty Sand)	10		
992.2	18.0			5	▽	Water encountered at about 13 feet during drilling.
		SM	**SILTY SAND with GRAVEL** mostly fine grained, brown, moist, dense to very dense. (Weathered Dolomite) (IADOT: Granular Material)	6		
986.2	24.0			35		
			Auger refusal at about 24 feet during drilling, presumably on bedrock. Boring sealed upon completion.	*		* 50 = 1"

CVT STANDARD 23253.24.IAW (OELWEIN 10TH ST SW BRIDGE REPLACEMENT).GPJ LOG A GNNN06.GDT 6/10/24

23253.24.IAW B-01 page 1 of 1

LOG OF BORING

CHOSEN VALLEY TESTING

Chosen Valley Testing, Inc.

PROJECT: 23253.24.IAW
Design Phase Geotechnical Evaluation
Proposed 10th St. SW Bridge Replacement
10th St. SW
Oelwein, Iowa

BORING: **B-02**
LOCATION: See attached sketch
DATE: 5/28/2024
SCALE: 1" = 4'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
1011.5	0.0					
1011.0	0.5		**5" ASPHALT**			Elevations provided by Origin Design.
1010.3	1.2		**8" CONCRETE**			
			AIR VOID SPACE			
1000.0	11.5					
		SP SC	**POORLY-GRADED SAND to CLAYEY SAND** mostly medium grained, trace of gravel, trace of wood, dark grey, waterbearing, loose. (Alluvium) (IADOT: Silty Sand)	5	▽	Water encountered at about 12.5 feet during drilling.
997.5	14.0					
		SC	**CLAYEY SAND with GRAVEL** mostly medium grained, trace of wood, black, waterbearing, medium dense. (Alluvium) (IADOT: Clayey Sand)	16		
995.5	16.0					
		SP	**POORLY-GRADED SAND** mostly medium grained, trace of gravel, grey, waterbearing, loose. (Alluvium) (IADOT: Fine Sand)	8		
991.5	20.0					
990.5	21.0	SP	**POORLY-GRADED SAND with GRAVEL** mostly medium grained, grey, moist, medium dense. (Alluvium) (IADOT: Gravely Sand)	26		
990.0	21.5	GM	**SILTY GRAVEL** mostly fine grained, light brown, moist, medium dense. (Weathered Dolomite) (IADOT: Granular Material)			
			Auger refusal at about 21.5 feet during drilling, presumably on bedrock. Boring sealed upon completion.			

CVT STANDARD 23253.24.IAW (OELWEIN 10TH ST SW BRIDGE REPLACEMENT).GPJ LOG A GNNN06.GDT 6/10/24

23253.24.IAW B-02 page 1 of 1

LICENSED PROFESSIONAL ENGINEER
MATTHEW J. REISDORFER
22234
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.

June 10, 2024
(signature) (date)

Printed or typed name: Matthew J. Reisdorfer, PE.
License number: 22234.
My license renewal date is December 31, 2025.
Pages or sheets covered by this seal: SPS.1, SPS.2

P:\23\036\DRAWINGS\CIVIL\23036 ZZ SPS SHEETS.DWG 12/12/2024 3:58:01 PM JOE RETTENBERGER

LOG OF BORING

CHOSEN VALLEY TESTING

Chosen Valley Testing, Inc.

PROJECT: 23253.24.IAW
Design Phase Geotechnical Evaluation
Proposed 10th St. SW Bridge Replacement
10th St. SW
Oelwein, Iowa

BORING: **B-03**
LOCATION:
See attached sketch
DATE: 5/28/2024
SCALE: 1" = 4'

Elev. 1010.5	Depth 0.0	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
1010.0	0.5		**5" ASPHALT**			Elevations provided by Origin Design.
1009.3	1.2		**7.5" CONCRETE**			
			AIR VOID SPACE			
1003.0	7.5	SP	**POORLY-GRADED SAND with GRAVEL** mostly fine grained, light grey, moist, medium dense. (Alluvium) (IADOT: Gravely Sand)	16		
999.0	11.5	SP	**POORLY-GRADED SAND** mostly medium grained, trace of gravel, dark grey, waterbearing, loose. (Alluvium) (IADOT: Fine Sand)	8	▽	Water encountered at about 13 feet during drilling.
996.5	14.0	CL	**LEAN CLAY with SAND** trace of gravel, black, wet, rather soft. (Alluvium) (IADOT: Soft Silty Clay)	4		PP = 1.5 tsf
994.5	16.0	SC CL	**CLAYEY SAND to SANDY LEAN CLAY** mostly medium grained, trace of gravel, black, moist, loose to medium dense. (Alluvium) (IADOT: Clayey Sand)	6 14		
989.5	21.0	GC GM	**CLAYEY GRAVEL to SILTY GRAVEL** mostly fine grained, light brown, moist, medium dense. (Weathered Dolomite) (IADOT: Granular Material)	13		
984.0	26.5		Auger refusal at about 26.5 feet during drilling, presumably on bedrock. Boring sealed upon completion.			

CVT STANDARD 23253.24.IAW (OELWEIN 10TH ST SW BRIDGE REPLACEMENT).GPJ LOG A GNN06.GDT 6/1/24

23253.24.IAW B-03 page 1 of 1

LOG OF BORING

CHOSEN VALLEY TESTING

Chosen Valley Testing, Inc.

PROJECT: 23253.24.IAW
Design Phase Geotechnical Evaluation
Proposed 10th St. SW Bridge Replacement
10th St. SW
Oelwein, Iowa

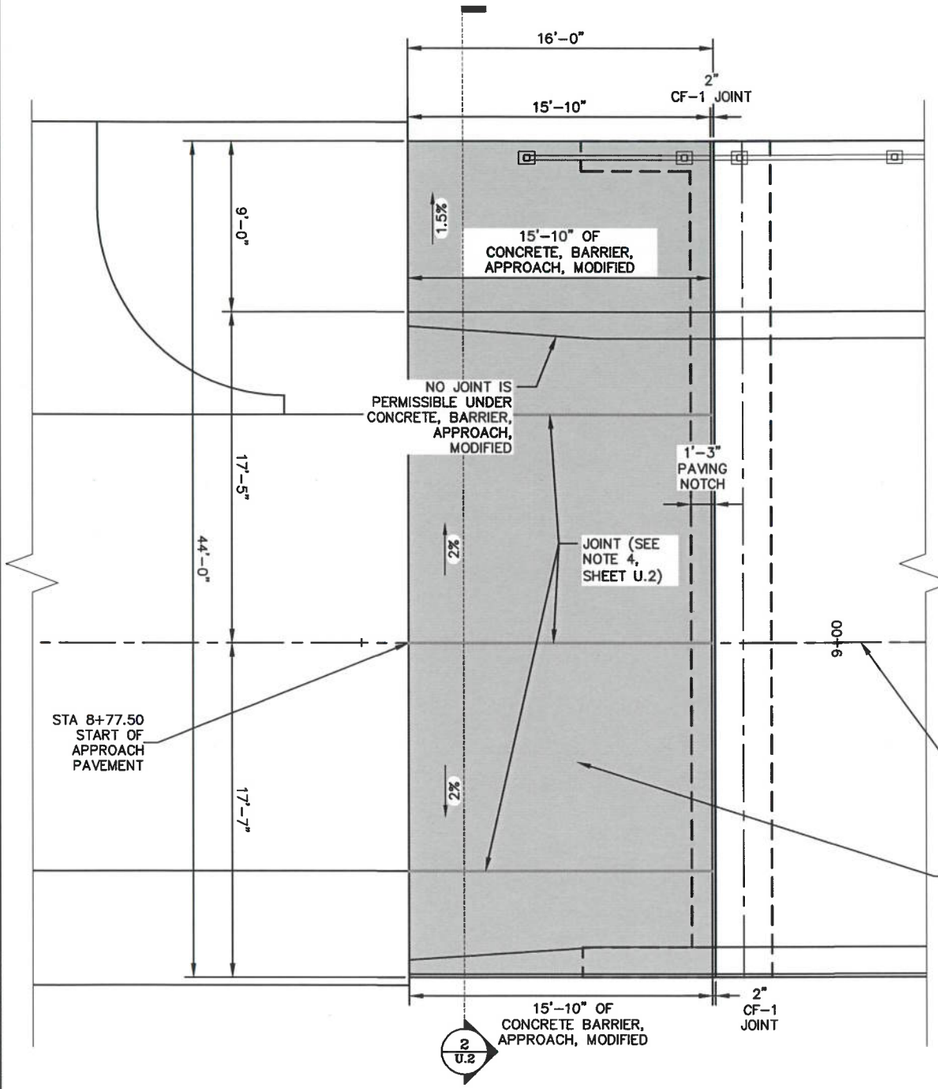
BORING: **B-04**
LOCATION:
See attached sketch
DATE: 5/28/2024
SCALE: 1" = 4'

Elev. 1009.8	Depth 0.0	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
1008.9	0.9		**10" ASPHALT**			Elevations provided by Origin Design.
1007.8	2.0	SP	**POORLY-GRADED SAND** mostly medium grained, black, moist. (Fill) (IADOT: Fine Sand)	21		
1005.8	4.0	SC	**CLAYEY SAND** mostly medium grained, trace of gravel, dark brown to dark grey, moist, medium dense. (Alluvium) (IADOT: Clayey Sand)	16		
1003.3	6.5	CL	**SANDY LEAN CLAY** trace of gravel, dark brown to dark grey, wet, stiff. (Alluvium) (IADOT: Firm-Very Firm Glacial Clay)	4		
998.3	11.5	SC	**CLAYEY SAND** mostly medium grained, trace of gravel, black, moist, loose. (Alluvium) (IADOT: Silty Sand)	9		
995.8	14.0	SP SC	**POORLY-GRADED SAND to CLAYEY SAND** mostly medium grained, trace of gravel, black, moist, loose. (Alluvium) (IADOT: Silty Sand)	5		
		SP	**POORLY-GRADED SAND** mostly medium grained, trace of gravel, dark grey, moist to waterbearing, loose to medium dense. (Alluvium) (IADOT: Silty Sand)	11 6	▽	Water encountered at about 20 feet during drilling.
987.8	22.0	SP	**POORLY-GRADED SAND with GRAVEL** mostly medium grained, grey, waterbearing, loose. (Alluvium) (IADOT: Fine Sand)	9		
982.8	27.0	SM	**SILTY SAND with GRAVEL** mostly fine grained, trace of clay, light brown, moist, medium dense. (Weathered Dolomite) (IADOT: Granular Material)	18		
979.3	30.5		Auger refusal at about 30.5 feet during drilling, presumably on bedrock. Boring sealed upon completion.			

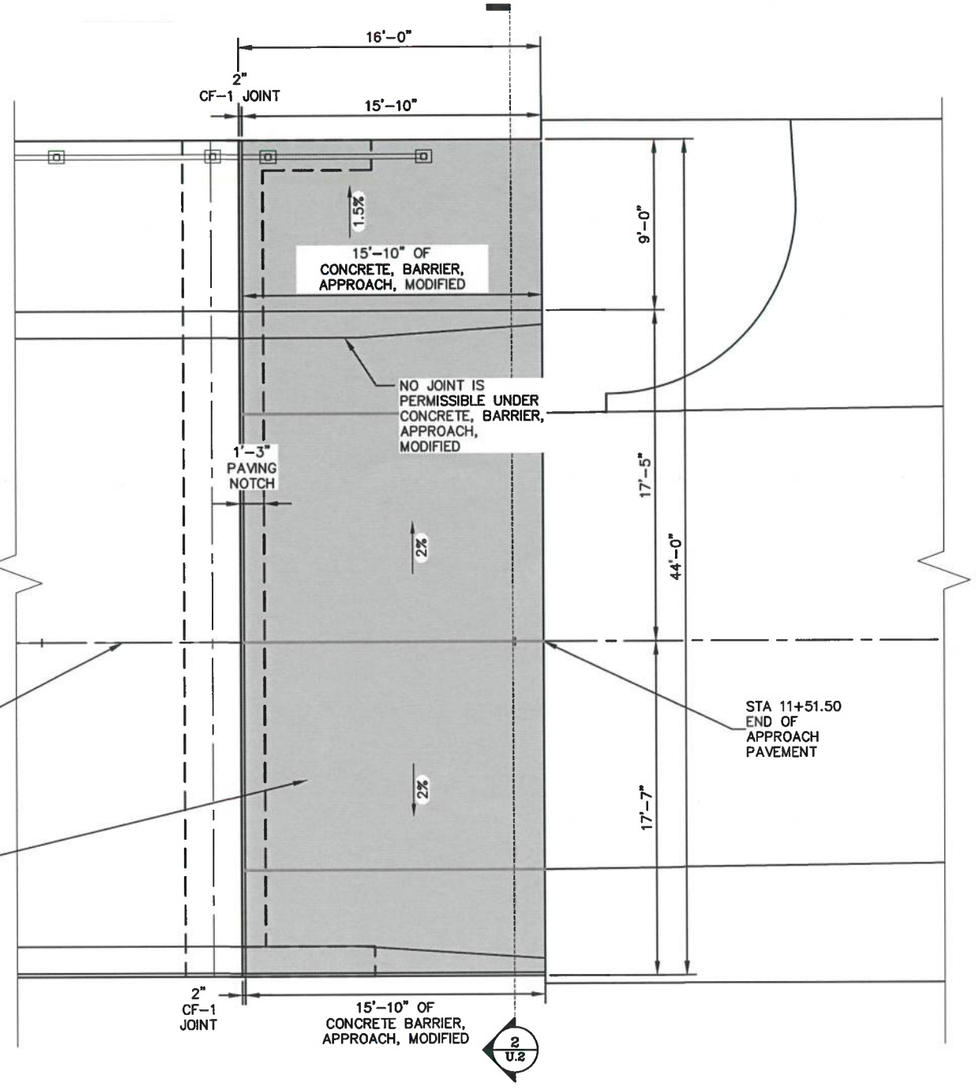
CVT STANDARD 23253.24.IAW (OELWEIN 10TH ST SW BRIDGE REPLACEMENT).GPJ LOG A GNN06.GDT 6/1/24

23253.24.IAW B-04 page 1 of 1

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WEST APPROACH



EAST APPROACH



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 ORIGIN DESIGN CO.

Courtney Wand 12-12-24

COURTNEY E. WAND — DATE

PE 23610 — 12/31/2025

LICENSE # — RENEWAL DATE

PAGES OR SHEETS COVERED BY THIS CERTIFICATION:

U & V SHEETS

NORTH

HORIZONTAL SCALE IN FEET
0 4 8

DRAWING MAY HAVE BEEN REDUCED

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

origin design® 800 556-4491	CITY OF OELWEIN	PROJECT NUMBER BRM-5657(614)- -8N-33	APPROACH DETAILS	SHEET: U.1	REV: .

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CONCRETE USED FOR THE BRIDGE APPROACH PAVEMENT SECTION SHALL BE CLASS C, CLASS 3i DURABILITY UNLESS OTHERWISE APPROVED BY ENGINEER.

CONTRACT ITEM:

BRIDGE APPROACH, PAVEMENT, AS PER PLAN

1. METHOD OF MEASUREMENT FOR BRIDGE APPROACH, AS PER PLAN SHALL BE THE SQUARE YARDS SHOWN IN THE CONTRACT DOCUMENTS.
2. BASIS OF PAYMENT FOR BRIDGE APPROACH PAVEMENT, AS PER PLAN IS FULL COMPENSATION FOR:
   - EXCAVATION FOR SPECIFIED STONE MATERIAL
   - SAW CUTTING
   - FURNISHING AND INSTALLING REINFORCED STEEL, TIE BARS, AND DOWEL ASSEMBLIES
   - PLACING, FINISHING, TEXTURING, GROOVING, AND CURING
   - ALL JOINT CONSTRUCTION
   - MODIFIED SUBBASE
   - ALL OTHER MATERIALS AND LABOR TO CONSTRUCT THE APPROACH PAVEMENT SECTION AS SHOWN IN THE CONTRACT DOCUMENTS.

FOR JOINT DETAILS, SEE STANDARD ROAD PLANS PV-101. FOR PROJECT SPECIFIC JOINTING OUTSIDE OF APPROACH PAVEMENT, SEE L SHEETS

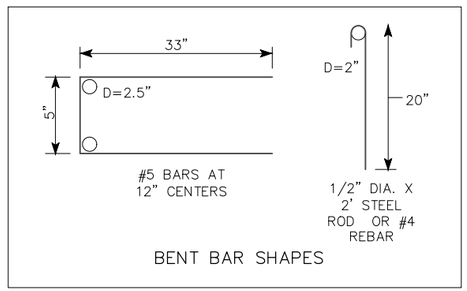
(1) 2" MIN. TO 2 1/2" MAX. CLEAR TO BENT BAR.

(2) MINIMUM LAP LENGTH: #5 Bars – 18"
#6 Bars – 27"
#8 Bars – 48"

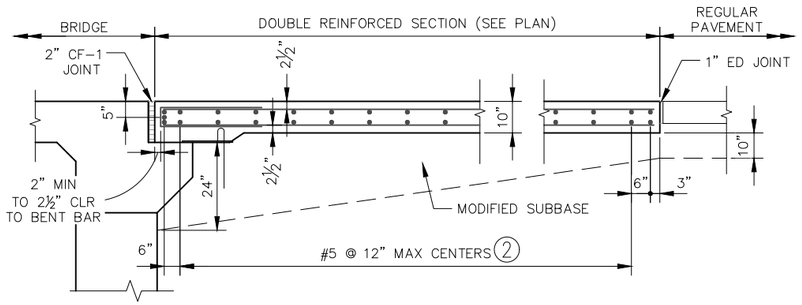
(3) PLACE ADDITIONAL #5 BAR PARALLEL TO SKEWED FACE.

(4) LONGITUDINAL JOINT: (PV-101, IDOT STANDARD ROAD PLANS)

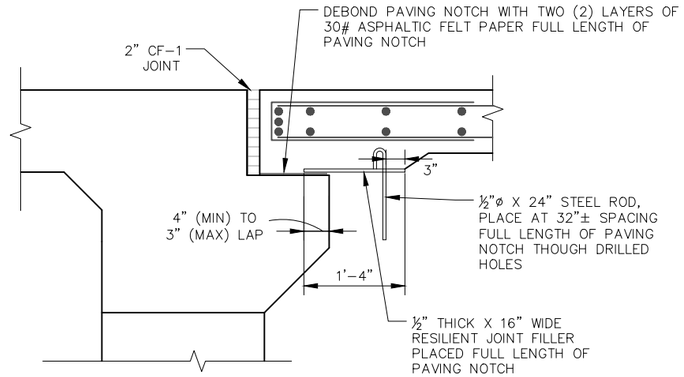
SINGLE POUR – SAW CUT JOINT PER PV-101 DETAIL B.
TWO POURS – USE BT-4 JOINT.



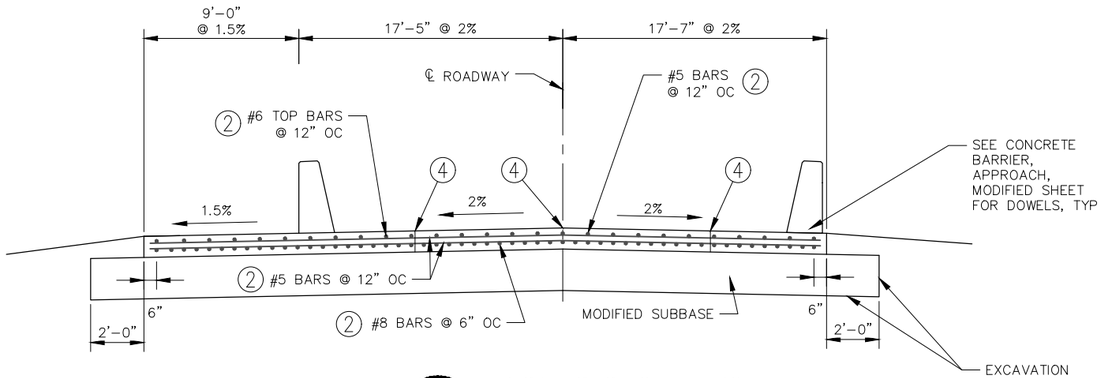
BENT BAR SHAPES



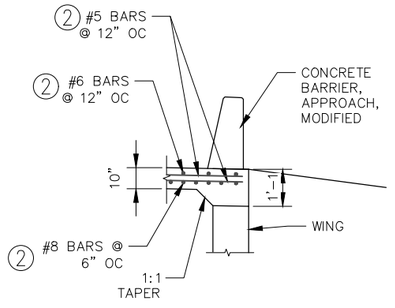
1 U.2 SECTION
NOT TO SCALE



3 U.2 DETAIL
NOT TO SCALE



2 U.2 TYPICAL SECTION – BOTH
NOT TO SCALE

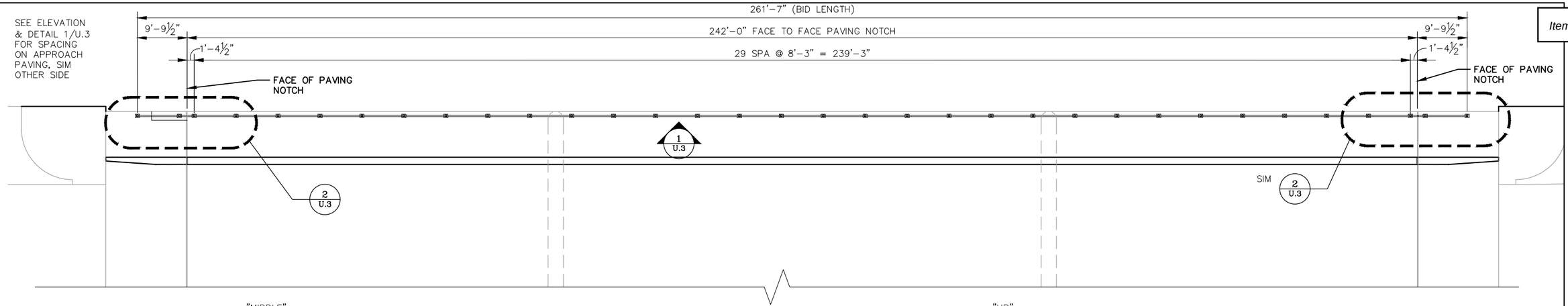


4 U.2 SECTION AT SOUTH WINGS
NOT TO SCALE

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'-0" END SPANS 97'-0" CENTER SPAN

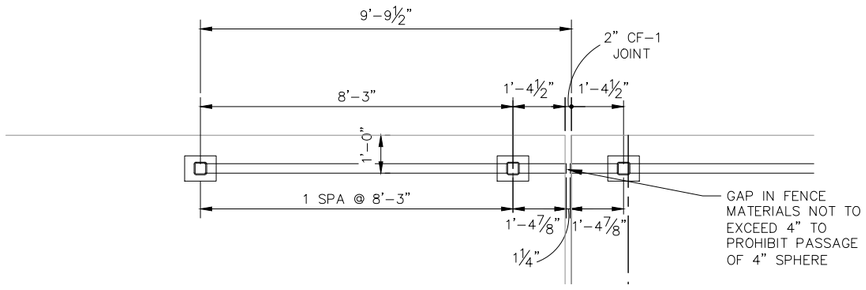
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ORNAMETAL RAILING PLAN NOT TO SCALE

NORTH

1 U.3 ORNAMENTAL METAL RAILING ELEVATION
LOOKING NORTH FROM SIDEWALK SIDE NOT TO SCALE



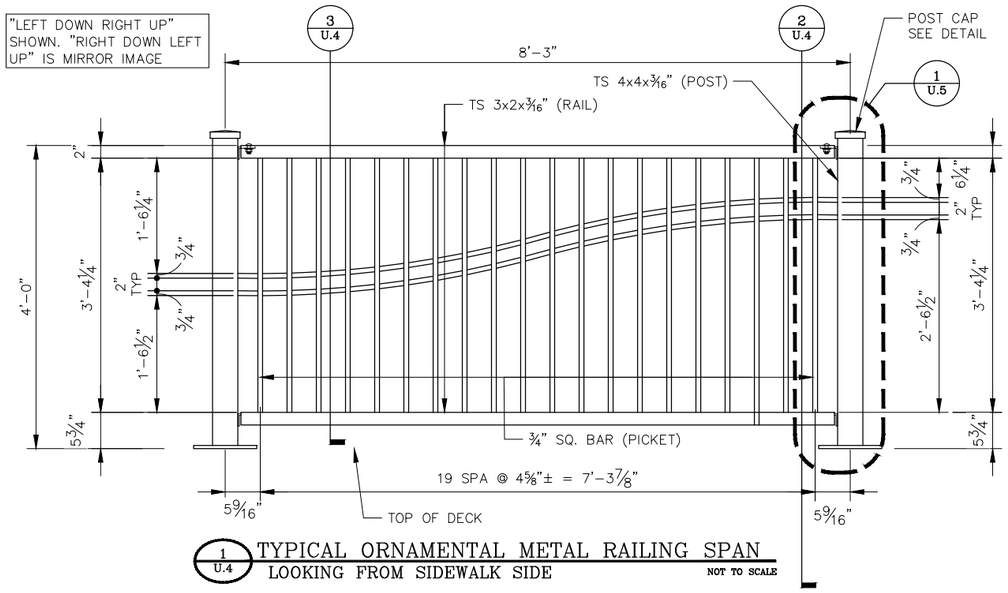
1 U.3 PLAN BLOWUP AT APPROACH PAVING NOT TO SCALE

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

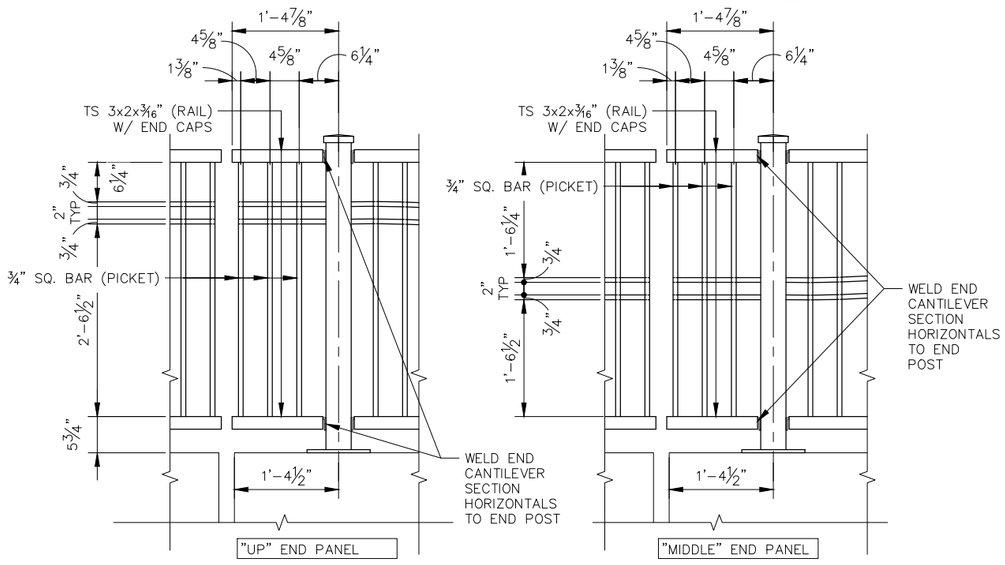
71'–0" END SPANS 97'–0" CENTER SPAN

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"LEFT DOWN RIGHT UP" SHOWN. "RIGHT DOWN LEFT UP" IS MIRROR IMAGE

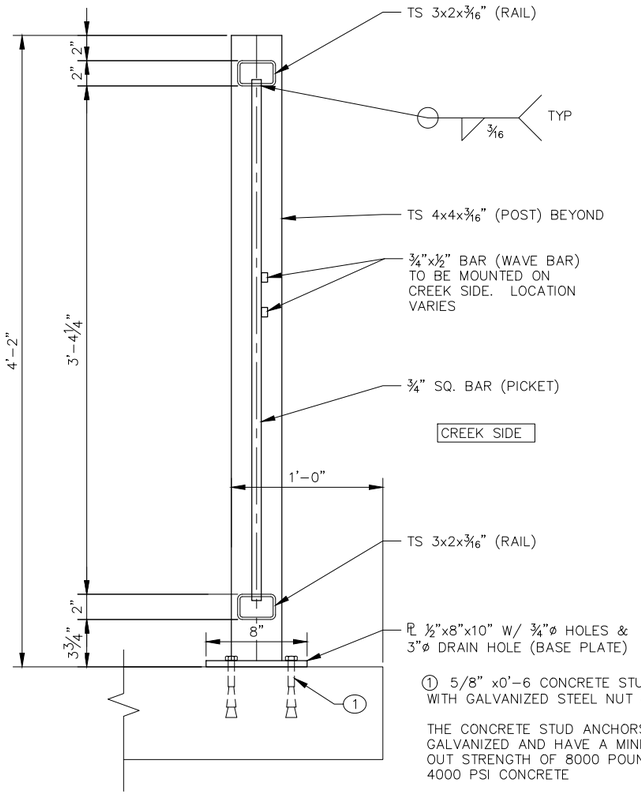


1 U.4 TYPICAL ORNAMENTAL METAL RAILING SPAN
LOOKING FROM SIDEWALK SIDE — NOT TO SCALE

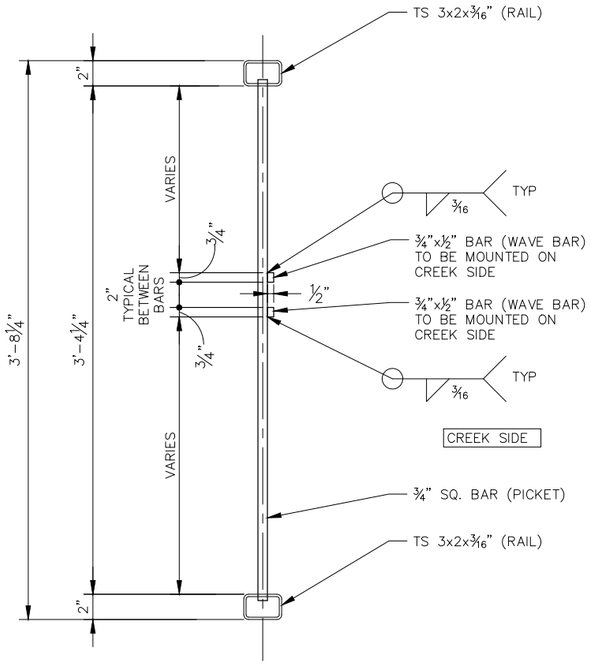


4 U.4 TYP ORNAMENTAL METAL RAILING END — NOT TO SCALE

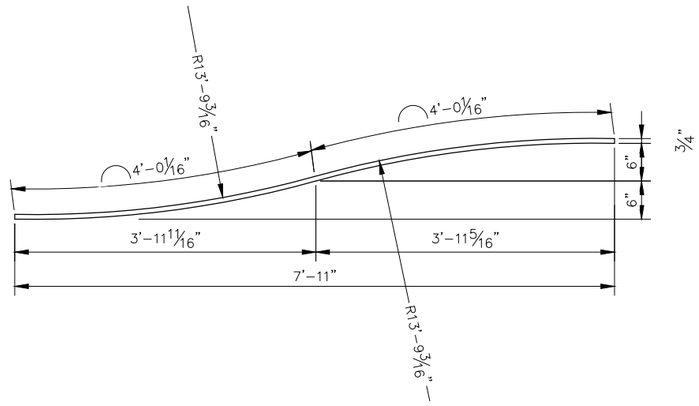
POST CAP NOT SHOWN FOR CLARITY



2 U.4 ORNAMENTAL METAL RAILING SECTION — NOT TO SCALE



3 U.4 ORNAMENTAL METAL RAILING SECTION — NOT TO SCALE



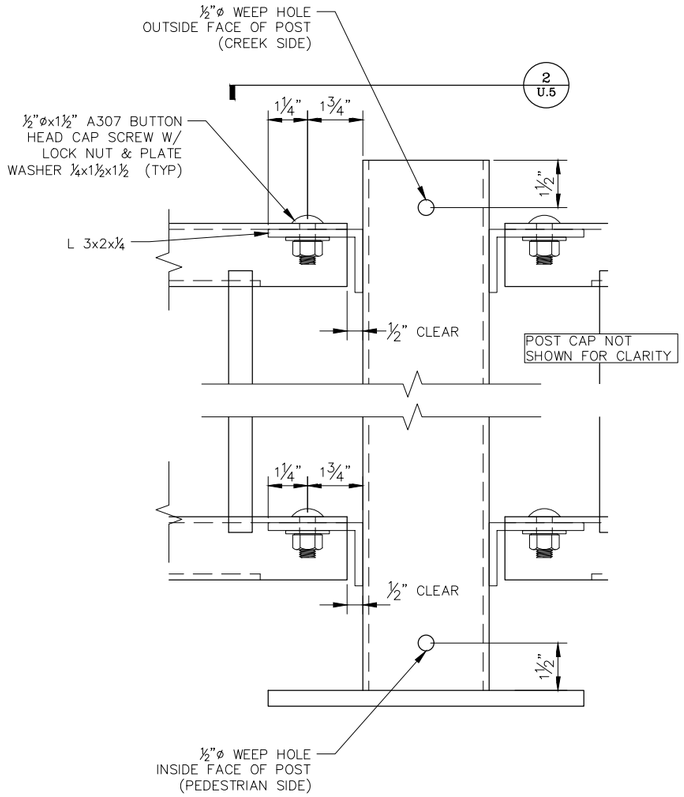
5 U.4 WAVE BAR DETAIL — NOT TO SCALE

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

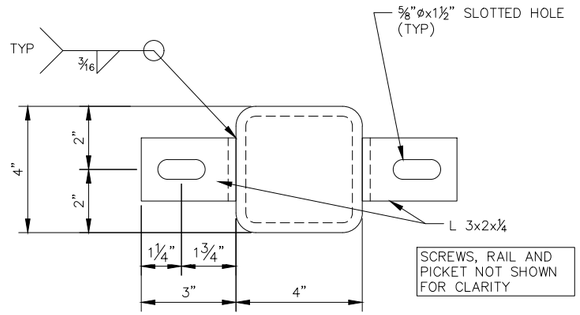
71'-0" END SPANS 97'-0" CENTER SPAN

origin design 800 556-4491	CITY OF OELWEIN	PROJECT NUMBER BRM-5657(614)- -8N-33	BRIDGE RAILING DETAILS	SHEET: U.4	REV: .

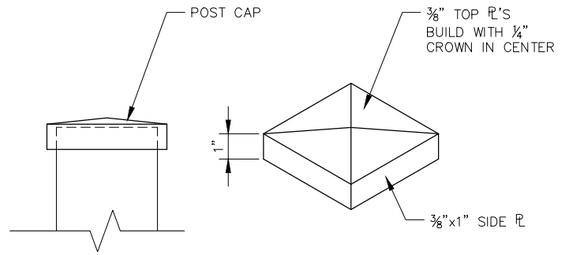
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1 U.5 ANGLE ATTACHMENT DETAIL
TYP BOTH RAILINGS NOT TO SCALE



2 U.5 SECTION
TYP BOTH RAILINGS NOT TO SCALE



3 U.5 POST CAP
TYP BOTH RAILINGS NOT TO SCALE

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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RAILING GALVANIZE AND PAINTING SPECIFICATIONS

STEEL RAILING COMPONENTS SHALL BE ABRASIVE BLAST CLEANED TO A MINIMUM OF SSPC–SP6 "COMMERCIAL BLAST CLEANING" PRIOR TO HOT–DIP GALVANIZING. GALVANIZE COMPONENTS IN ACCORDANCE WITH ASTM A 123. DO NOT QUENCH OR APPLY CHROMATE CONVERSION COATINGS TO ANY GALVANIZED COMPONENTS THAT WILL RECEIVE PAINTING. FOLLOWING GALVANIZING, PAINT COMPONENTS IN ACCORDANCE WITH MATERIALS I.M. 568.

PREPARATION OF GALVANIZED SURFACES FOR PAINT SHALL BE IN ACCORDANCE WITH MATERIALS I.M. 568, APPENDIX F. COMPLETE "PAINT OVER GALVANIZED SURFACE TRAVEL LOG" IN APPENDIX E.

ALL COATING SHALL BE PERFORMED IN AN APPROVED SHOP IN ACCORDANCE WITH MATERIALS I.M. 568.

PAINT SYSTEM SHALL USE A THREE COAT FLUOROPOLYMER PAINT SYSTEM. APPROVED FLUOROPOLYMER PAINT SYSTEMS FOR THIS PROJECT ARE LISTED IN MATERIALS I.M. 482.09. STANDARD SPECIFICATION 2408.02.Q SHALL APPLY EXCEPT AS MODIFIED HEREIN.

THE PAINT SYSTEM SHALL CONSIST OF THE FOLLOWING:

PRIME COAT:

a. APPLY A COAT OF THE ORGANIC ZINC RICH PAINT FROM THE APPROVED FLUOROPOLYMER PAINT SYSTEM TO ALL SURFACES AS SOON AS POSSIBLE AFTER SURFACE PREPARATION OF GALVANIZED SURFACE.

b. APPLY THE PRIMER AS RECOMMENDED BY THE MANUFACTURER IN A SINGLE APPLICATION TO OBTAIN A DRY FILM THICKNESS (DFT) AS LISTED IN THE MANUFACTURER'S PRODUCT DATA SHEET FOR THE PRIMER MATERIAL. APPLY THE PRIMER ABOVE THE BLAST PROFILE, SO THAT A UNIFORM APPEARANCE IS OBTAINED AFTER THE COATING IS CURED.

c. APPLY A STRIPE COAT BY BRUSH TO EDGES, WELDS, CREVICES, BOLT HEADS, AND OTHER SURFACE IRREGULARITIES WHEN APPLYING THE PRIMER COAT. THE STRIPE COAT MAY BE APPLIED TO THE SURFACE BY SPRAY AS LONG AS IT IS IMMEDIATELY AND THOROUGHLY WORKED INTO THESE AREAS BY BRUSH.

d. ALLOW THE PRIME COAT TO CURE ACCORDING TO THE COATING MANUFACTURER'S RECOMMENDATIONS BEFORE THE INTERMEDIATE COAT IS APPLIED.

e. PERFORM REPAIRS OR BUILD–UP OF THE PAINT FILM AS SOON AS POSSIBLE, AND NO LATER THAN 24 HOURS FROM THE INITIAL APPLICATION.

f. COMPLETELY REBLAST AND REPAINT STEEL MEMBERS WITH COATING AREAS MEASURING LESS THAN THE MANUFACTURER'S MINIMUM RECOMMENDED DRY FILM THICKNESS THAT HAVE NOT BEEN CORRECTED WITHIN 24 HOURS.

g. CORRECT, TO THE ENGINEER'S SATISFACTION, ALL DEFECTS IN APPLICATION SUCH AS RUNS, SAGS, MUD CRACKING, OVER–SPRAY, AND DRY SPRAY.

h. EXCESSIVE COATING THICKNESS IS AS EQUALLY UNDESIRABLE AS UNACCEPTABLY THIN COATING THICKNESS, AND BOTH WILL BE SUFFICIENT CAUSE FOR REJECTION. EXCESSIVE THICKNESS WILL BE EVALUATED ON A CASE–BY–CASE BASIS IN CONSULTATION WITH THE COATING MANUFACTURER.

INTERMEDIATE COAT:

a. SHOP APPLY THE INTERMEDIATE COAT OF THE APPROVED FLUOROPOLYMER PAINT SYSTEM TO ALL PRIMED SURFACES.

b. APPLY THE INTERMEDIATE COAT AS RECOMMENDED BY THE MANUFACTURER IN A SINGLE APPLICATION TO OBTAIN A DRY FILM THICKNESS AS LISTED IN THE MANUFACTURER'S PRODUCT DATA SHEET FOR THE MATERIAL. APPLY THE INTERMEDIATE COAT OVER THE PRIMER, SO THAT A UNIFORM APPEARANCE IS OBTAINED AFTER THE COATING IS CURED. USE A COLOR THAT CONTRASTS WITH THE PRIMER AND TOP COAT.

c. APPLY A STRIPE COAT BY BRUSH TO EDGES, WELDS, CREVICES, BOLT HEADS, AND OTHER SURFACE IRREGULARITIES WHEN APPLYING THE PRIMER COAT AND INTERMEDIATE SECOND COAT. THE STRIPE COAT MAY BE APPLIED TO THE SURFACE BY SPRAY AS LONG AS IT IS IMMEDIATELY AND THOROUGHLY WORKED INTO THESE AREAS BY BRUSH.

d. ALLOW THE INTERMEDIATE COAT TO CURE ACCORDING TO THE COATING MANUFACTURER'S RECOMMENDATIONS BEFORE THE FINISH COAT IS APPLIED.

TOP COAT

a. SHOP APPLY THE FLUOROPOLYMER TOP COAT OF THE APPROVED FLUOROPOLYMER PAINT SYSTEM TO ALL PAINTED SURFACES.

b. APPLY THE TOP COAT AS RECOMMENDED BY THE MANUFACTURER IN A SINGLE APPLICATION TO OBTAIN A DRY FILM THICKNESS AS LISTED IN THE MANUFACTURER'S PRODUCT DATA SHEET FOR THE MATERIAL. APPLY THE TOP COAT OVER THE INTERMEDIATE COAT, SO THAT A UNIFORM APPEARANCE IS OBTAINED AFTER THE COATING IS CURED.

c. APPLY A STRIPE COAT PRIOR TO FULL TOP COAT APPLICATION BY BRUSH TO EDGES, WELDS, CREVICES, BOLT HEADS, AND OTHER SURFACE IRREGULARITIES WHEN APPLYING THE PRIMER COAT AND INTERMEDIATE SECOND COAT. THE STRIPE COAT MAY BE APPLIED TO THE SURFACE BY SPRAY AS LONG AS IT IS IMMEDIATELY AND THOROUGHLY WORKED INTO THESE AREAS BY BRUSH.

SUBMIT PROPOSED PREPARATION METHODS AND PRODUCT DATA FOR ALL COATINGS PROPOSED FOR USE TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO APPLICATION. TOP COAT COLOR SHALL BE AMS–STD 27041 (BLACK) PER AMS STANDARD 595A. SUBMIT PAINT COLOR SAMPLE TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING MATERIALS.

HANDLING

PROTECT ALL PAINTED RAILING SURFACES FROM DAMAGE DURING SHIPPING, HANDLING, AND INSTALLATION.

REPAIRS

FOLLOWING RAILING INSTALLATION, REPAIR ANY DAMAGE TO THE PAINTING FINISH IN ACCORDANCE WITH THE COATING MANUFACTURER'S RECOMMENDATIONS. SUBMIT THE PAINTING MANUFACTURER'S WRITTEN FIELD REPAIR AND RECOATING PROCEDURES TO THE ENGINEER PRIOR TO TOUCH–UP OPERATIONS. FOLLOWING FINAL INSTALLATION AND TOUCH–UP PAINTING, THE FINISHED SURFACES SHALL BE UNIFORM IN COLOR, SHEEN, TEXTURE AND HIDING ACROSS EACH CONTINUOUS SURFACE AREA WHEN VIEWED IN NATURAL DAYLIGHT AT NORMAL VIEWING ANGLES AND FROM DISTANCES NOT LESS THAN 39 INCHES FROM SURFACE. COMPONENTS DEEMED UNACCEPTABLE BY THE ENGINEER SHALL BE REMOVED AND RETURNED TO AN APPROVED COATING SHOP, AND SHALL BE COMPLETELY STRIPPED AND RECOATED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AT NO ADDITIONAL COST TO THE PROJECT.

METHOD OF MEASUREMENT

1. PROTECTIVE COATINGS FOR ORNAMENTAL METAL RAILING AND STEEL PIPE PEDESTRIAN HANDRAILING, INCLUDING BOTH GALVANIZING AND PAINTING, SHALL NOT BE MEASURED SEPARATELY.

BASIS OF PAYMENT

1. PROTECTIVE COATINGS FOR ORNAMENTAL METAL RAILING AND STEEL PIPE PEDESTRIAN HANDRAILING WILL BE INCLUDED IN THE PRICE BID PER LINEAL FOOT FOR ORNAMENTAL METAL RAILING. PAYMENT WILL BE FULL COMPENSATION FOR ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO SATISFACTORILY COMPLETE THE WORK.

RAILING NOTES:

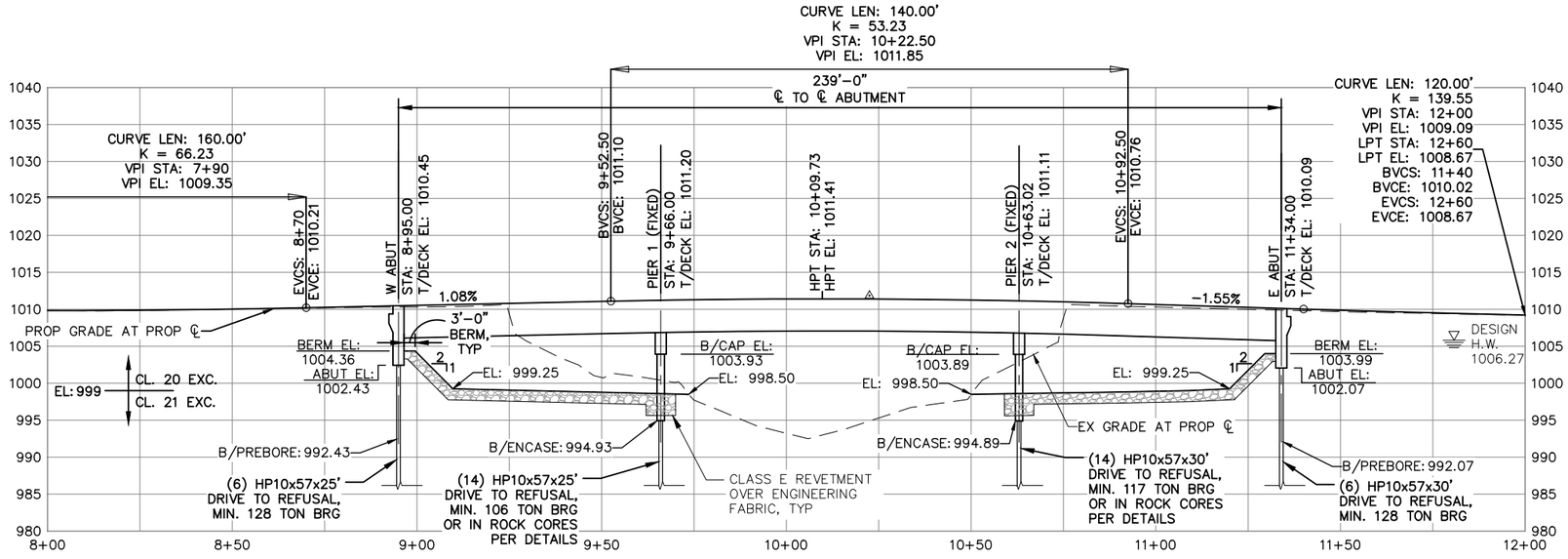
1. WELD ALL COMPONENTS WITH ⅛ INCH FILLET WELDS UNLESS NOTED OTHERWISE. GRIND WELDS AND CONNECTIONS AS REQUIRED TO PROVIDE A SMOOTH SURFACE, FREE OF BURRS.
2. RAILING MEMBERS SHALL COMPLY WITH ASTM A500 GR. C.
3. RAILING PLATES SHALL COMPLY WITH ASTM A572 GR. 50.
4. RAILING BOLTS SHALL COMPLY WITH ASTM A325 AND BE GALVANIZED AND PAINTED TO MATCH RAILING COMPONENTS U.N.O. FOR THE RAILING BOLTS SMALLER THAN ½" DIAMETER, ASTM A307 BOLTS MAY BE USED. OTHER RAILING NOTES AND REQUIREMENTS PER U AND V SHEETS SHALL STILL APPLY.
5. PROVIDE SUITABLE END CAPS FOR RAILINGS.
6. WELDING SHALL COMPLY WITH THE IOWA DOT STANDARD SPECIFICATIONS,. SECTION 2408.03.B.
7. FABRICATOR SHALL CONSULT WITH GALVANIZING FACILITY TO VERIFY PROPOSED RAIL SEGMENT LENGTHS CAN BE ACCOMPLISHED.
8. RAILING LAYOUT AND GEOMETRY SHALL BE FIELD VERIFIED PRIOR TO ORDERING MATERIALS OR INSTALLATION. IF CONTRACTOR ORDERS RAILING PRIOR TO FIELD VERIFICATION IT WILL BE AT THE CONTRACTOR'S RISK AT NO COST REPLACEMENT IF AS–BUILT LAYOUT DOES NOT MATCH DESIGN. SHOP DRAWINGS SHALL BE SUBMITTED SHOWING RAILING GEOMETRY, MATERIALS, AND QUANTITIES PER 1105.03 OF THE STANDARD SPECIFICATIONS.

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

P:\23\036\DRAWINGS\CIVIL\23036 ZZ U SHEETS2.DWG 12/12/2024 3:58:20 PM JOE RETTENBERGER

BENCH MARKS			
B.M. NO.	ELEV.	DESCRIPTION	STATION AND OFFSET
101	1009.57	Benchmark 101 Pink Capped Rebar	7+73.90, 15.95' R
102	1007.88	Benchmark 102 Pink Capped Rebar	12+00.83, 16.50' L

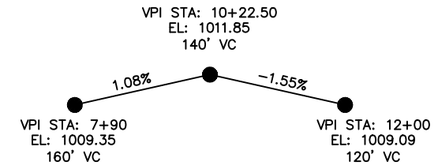


FOR TEMPORARY EASEMENTS, REFER TO H SHEETS

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

LEGEND

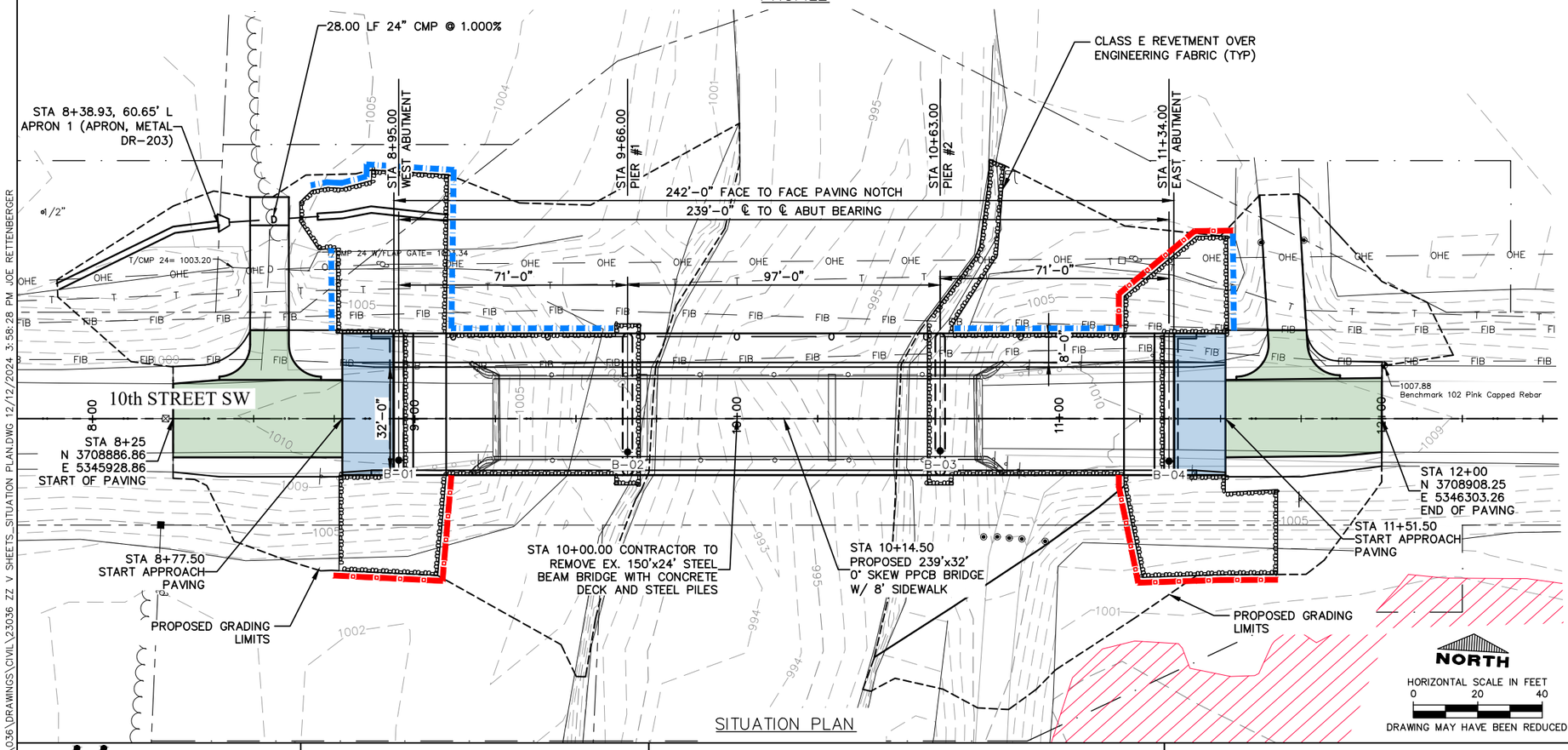
- REVETMENT DETAIL 3/B.1 EXTENTS
- REVETMENT DETAIL 4/B.1 EXTENTS
- WETLANDS



PROPOSED GRADE ON 10TH ST

NTS

PROFILE



SITUATION PLAN

NOTES
TOP OF BRIDGE DECK AT CENTERLINE ROADWAY IS 0.03' BELOW THE PROFILE GRADE TO ACCOUNT FOR DECK CROSS SLOPE AND PARABOLIC
PIER TYPE - ENCASED PILE BENT
CLASS E REVETMENT IS EMBEDDED.

LOCATION
CITY OF OELWEIN, FAYETTE COUNTY
T91N R9W, JEFFERSON TWP.
SW1/4 SEC 28
OVER OTTER CREEK
FHWA STRUCTURE NO. 8920
42.663750 N, -91.920260 E
TRAFFIC: 820 VPD (2021)

HYDRAULIC DATA

DRAINAGE AREA	38.8	SQ. MI.			
MAIN CHANNEL SLOPE	9.5	FT./MI.			
DESIGN DISCHARGE	9290	CFS (100 YR)			
DESIGN HIGH WATER	1006.27	FT. ELEV (100 YR)			
REACH SLOPE (LOCAL)	7.9	FT./MI.			
BRIDGE FLOW AREA	1878	SQ. FT. (100 YR)			
DESIGN VELOCITY	5.0	FPS (100 YR)			
Q_{50}	7900	CFS	NATURAL STAGE	1005.07	FT.
Q_{100}	9290	CFS	NATURAL STAGE	1005.69	FT.
CALCULATED DESIGN SCOUR (100 YR) = ELEV.				982.0	FT.
$Q_{OVERTOPPING}$	10000	CFS	MIN. ROAD ELEV.	1006.07	FT.
Q_{500}	13100	CFS	STAGE WITH BACKWATER	1007.70	FT.
CALCULATED CHECK SCOUR (500 YR) = ELEV.				983.0	FT.

Design For
239' x 32' 0° SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'-0" END SPANS 97'-0" CENTER SPAN

P:\23\036\DRAWINGS\CIVIL\23036 ZZ V SHEETS_SITUATION PLAN.DWG 12/12/2024 3:58:28 PM JOE RETTENBERGER

NORTH

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

STA 8+68.05, 70.84'L
G 1003.50

STA 8+86.63, 77.16'L
G 1004.56

STA 8+64.29, 62.30'L
G 1003.50

G 1001.13

STA 8+70.08, 52.36'L
G 1003.60

T/CMP 24 W/FLAP GATE= 1003.34

STA 8+75.76, 27.42'L
G 1009.80

STA 9+09.72, 26.42'L
G 999.25

STA 10+00.51, 91.46'L
MATCH EXISTING

PROPOSED GRADING LIMITS

STA 9+54.50, 66.17'L
MATCH EXISTING

STA 9+10.23, 62.18'L
G 999.97

INTENT IS TO MATCH INTO EXISTING STREAM BANK AT ELEVATION 998.50 ALONG THE LENGTH OF THE STREAM, BOTH SIDES

G 998.50

STA 9+44.75, 55.11'L
G 1000.00

STA 10+78.33, 80.37'L
MATCH EXISTING

PROPOSED GRADING LIMITS

STA 11+42.50, 56.57'L
G 1002.08

G 998.50

STA 11+20.02, 37.95'L
G 999.30

3.0:1

4.0:1

2.0:1

10'-0"

STA 9+09.72, 0.00'
G 999.25

STA 9+73.56, 0.00'
G 998.50

STA 10+50.15, 0.00'
G 998.50

STA 11+20.02, 0.00'
G 999.25

STA 11+20.02, 20.98'R
G 999.43

STA 9+08.24, 32.94'R
G 1000.00

PROPOSED REVETMENT, CLASS E (TYP)

STA 8+76.50, 47.14'R
G 1002.51

STA 9+07.09, 48.64'R
G 1002.51

PROPOSED GRADING LIMITS

STA 9+55.48, 63.78'R
G 998.50

STA 9+50.04, 79.94'R
MATCH EXISTING

REFER TO SHEETS V.1 AND B.1 FOR REVETMENT TOE LAYOUT DETAILS

STA 10+42.75, 73.86'R
G 998.50

SLOPE END OF EXISTING BERM

STA 10+74.61, 89.68'R
MATCH EXISTING

STA 11+42.50, 48.69'R
MATCH EXISTING

STA 11+25.70, 49.26'R
G 1001.37

STA 11+67.67, 48.35'R
G 1001.51

PROPOSED GRADING LIMITS

DELINEATED WETLAND
DO NOT DISTURB WITHOUT PERMISSION OF THE ENGINEER.

P:\23\036\DRAWINGS\CIVIL\23036 ZZ V SHEETS_1.DWG 12/12/2024 3:58:34 PM JOE RETTENBERGER

origin 800 556-4491	CITY OF OELWEIN	PROJECT NUMBER BRM-5657(614)- -8N-33	BERM GRADING PLAN	SHEET: V.2	REV: .

GENERAL BRIDGE NOTES:

IT IS THE INTENT OF THIS DESIGN TO CONSTRUCT A 239'–0"x44'–0" PPCB BRIDGE WITH A 0° SKEW WITH SOLID BARRIER RAILS ALONG THE ROADWAY. THE BRIDGE CONSISTS OF A 32'–0" ROADWAY WITH A 8'–0" SIDEWALK ALONG THE NORTH EDGE. THE WINGS ARE SHORTENED AND DO NOT EXTEND ABOVE THE PAVING NOTCH TO FACILITATE THE APPROACH SLAB.

THESE BRIDGES ARE DESIGNED FOR HL–93 LOADING PLUS 20LBS. PER SQ.FT. OF ROADWAY FOR FUTURE WEARING SURFACE. SIX FEET OF APPROACH SLAB DEAD AND LIVE LOADS APPLIED TO ABUTMENTS.

THE FLOOR SLAB SHOWN INCLUDES ½" INTEGRAL WEARING SURFACE.

DESIGN STRESSES:

DESIGN STRESSES FOR THE FOLLOWING MATERIALS ARE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, SERIES OF 2017. REINFORCING STEEL IN ACCORDANCE WITH LRFD AASHTO SECTION 5, GRADE 60. CONCRETE IN ACCORDANCE WITH LRFD AASHTO SECTION 5, f'c – 4,000 PSI. FOR STANDARD PRESTRESSED CONCRETE BEAMS, SEE PPCB SHEETS.

SOUNDING AND TEST BORING DATA SHOWN ON THE PLANS WERE ACCUMULATED FOR DESIGNING AND ESTIMATING PURPOSES ONLY. THEIR APPEARANCE ON THE PLANS DOES NOT CONSTITUTE A GUARANTEE THAT CONDITIONS OTHER THAN THOSE INDICATED WILL NOT BE ENCOUNTERED.

ABUTMENT PILE DESIGN NOTES:

THE CONTRACT LENGTH OF 25 FEET FOR THE WEST ABUTMENT PILES AND 30 FEET FOR THE EAST ABUTMENT PILES IS BASED ON A NON–COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 175 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.5 FOR SOIL AND 0.7 FOR ROCK END BEARING.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A NON–COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.5 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF PREBORE.

ABUTMENT PILE DRIVING NOTE:

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR ABUTMENT PILES IS 128 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. IN NO CASE SHALL A PILE BE EMBEDDED LESS THAN 6 FEET INTO DENSE SANDY SOIL BELOW PREBORE WITH AN ADDITIONAL 2 FEET OF PENETRATION INTO BEDROCK. IF MINIMUM EMBEDMENT CANNOT BE ACHIEVED, CONTACT ENGINEER TO DETERMINE IF ROCK CORING WILL BE REQUIRED. CONSTRUCTION CONTROL REQUIRES A MODIFIED IOWA DOT ENR FORMULA.

PIER PILE DESIGN NOTES:

THE CONTRACT LENGTH OF 25 FEET FOR THE PIER 1 PILES AND 30 FEET FOR THE PIER 2 PILES IS BASED ON A NON–COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 138 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.5 FOR SOIL AND 0.7 FOR ROCK END BEARING.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A NON–COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.5 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF ENCASEMENT. FOR PIER 1, THE DESIGN SCOUR (200–YEAR) WAS ASSUMED TO AFFECT THE UPPER 5 FEET OF EMBEDDED PILE LENGTH AND CAUSE 12 KIPS OF DRIVING RESISTANCE. FOR PIER 2, DESIGN SCOUR (200–YEAR) WAS ASSUMED TO AFFECT THE UPPER 11 FEET OF EMBEDDED PILE LENGTH AND CAUSE 30 KIPS OF DRIVING RESISTANCE.

PIER PILE DRIVING NOTE:

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR PIER 1 PILES IS 106 TONS AND FOR PIER 2 PILES IS 117 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. SEE ROCK CORING DETAILS FOR PIER PILES. CONSTRUCTION CONTROL REQUIRES A MODIFIED IOWA DOT ENR FORMULA.

SUMMARY OF CONCRETE QUANTITIES

LOCATION	STRUCTURAL CONCRETE
WEST ABUT. FOOTING	18.3
EAST ABUT. FOOTING	18.2
BRIDGE DECK **	355.5
(4) ABUTMENT WINGS	8.8
PIER 1 CAP & ENCASEMENT	47.1
PIER 2 CAP & ENCASEMENT	47.1
** INCLUDES ABUTMENT & PIER DIAPHRAGMS AND HAUNCHES	
TOTAL (CU. YDS.)	495.0

SUMMARY OF EPOXY COATED REINFORCING STEEL

LOCATION	EPOXY REINFORCING STEEL
SUPERSTRUCTURE AND TWO ABUTMENTS	105341
(4) ABUTMENT WINGS	660
BARRIER RAILS	12064
PIER 1 ENCASEMENT & CAP	5133
PIER 2 ENCASEMENT & CAP	5133
TOTAL (LBS.)	128331

SUMMARY OF EXCAVATION

LOCATION	CLASS 20 EXCAVATION	CLASS 21 EXCAVATION
WEST ABUTMENT	52	
EAST ABUTMENT	52	
PIER 1		53
PIER 2		53
TOTAL (CU. YDS.)	104	106

SUMMARY OF FOUNDATIONS

LOCATION	SUBSTRUCTURE TYPE	PILE TYPE	NUMBER	LENGTH (L.F.)	TOTAL (L.F.)
WEST ABUTMENT	INTEGRAL ABUTMENT	HP10x57	6	25	150
EAST ABUTMENT	INTEGRAL ABUTMENT	HP10x57	6	30	180
PIER 1	ENCASED PILE BENT	HP10x57	14	25	350
PIER 2	ENCASED PILE BENT	HP10x57	14	30	420
				TOTAL (LF)	1100

SUMMARY OF STRUCTURAL STEEL

LOCATION	TOTAL (LBS.)
DIAPHRAGMS	4683.2
DECK DRAINS	1104.0
TOTL (LBS.)	5787.2

SUMMARY OF BEARINGS

LOCATION	BEARING TYPE	NUMBER	ASSOCIATED BID ITEM
WEST ABUTMENT	3x3 BAR	5	INCIDENTAL ITEM
EAST ABUTMENT	3x3 BAR	5	INCIDENTAL ITEM
PIER 1	PLAIN NEOPRENE 1"	5	INCIDENTAL ITEM
PIER 2	PLAIN NEOPRENE 1"	5	INCIDENTAL ITEM

ROCK CORING NOTES:

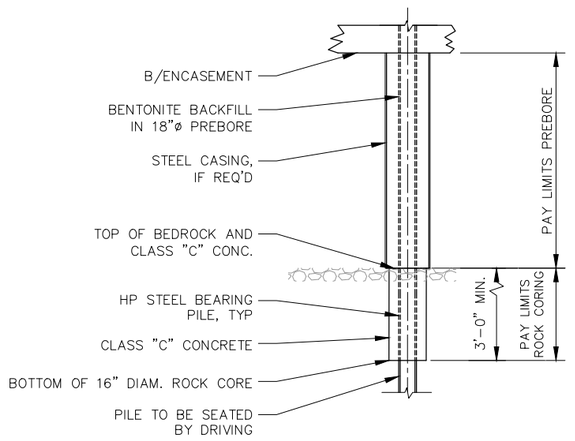
THE BRIDGE CONTRACTOR SHALL PREBORE HOLES FOR (4) PILES IN EACH PIER AS NOTED AND COMPLETE ROCK CORING. HOLES SHALL BE PREBORED AND ROCK CORING PERFORMED UNLESS BEDROCK ELEVATIONS VARY SIGNIFICANTLY FROM ANTICIPATED ELEVATIONS. NOTIFY THE ENGINEER PRIOR TO PREBORING AND ROCK CORING OPERATIONS SO THAT FIELD DEPTHS AND MEASUREMENTS CAN BE VERIFIED.

THE 18 INCH DIAMETER PREBORED HOLE IN THE SOIL SHALL EXTEND FROM THE BOTTOM OF THE PIER ENCASEMENTS TO THE TOP OF THE BEDROCK STRATUM AS SHOWN ON THE SPS SHEETS WHICH IS ANTICIPATED TO BE ELEVATION 990 AT THE WEST PIER AND 984 AT THE EAST PIER. THE 16 INCH DIAMETER ROCK SOCKET SHALL THEN BE CORED SO THAT THE BOTTOM OF THE SOCKET SHALL BE AT LEAST 3 FEET INTO BEDROCK. CONTRACTOR SHALL PROVIDE A SUITABLE CASING IF NEEDED TO MAINTAIN OPEN CORE HOLES. THE EQUIPMENT USED TO PERFORM THE ROCK CORING SHALL BE CAPABLE OF AUGURING THE ANTICIPATED BEDROCK MATERIALS. THE CONTRACTOR SHALL CLEAN THE BOTTOM OF THE ROCK SOCKET BEFORE INSERTING PILES OR PLACING CONCRETE.

SEAT THE PILING IN THE BEDROCK BY DRIVING IT TO THE TARGET DRIVING RESISTANCE. THE NUMBER OF HAMMER BLOWS SHALL BE LIMITED TO PREVENT DAMAGE TO THE PILING. THE SOCKET SHALL BE BACKFILLED WITH 3 FEET OF CLASS "C" STRUCTURAL CONCRETE BEFORE OR AFTER DRIVING PILES. CONCRETE PLACED BEFORE PILES ARE DRIVEN SHALL REMAIN PLASTIC UNTIL PILE DRIVING IS COMPLETE. RETARDER MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. PILES SHALL BE BRACED IN THE CORRECT POSITION UNTIL CONCRETE HAS REACHED 4 KSI COMPRESSIVE STRENGTH.

THE WEST PIER 1 QUANTITIES ASSUME 4.9 FEET OF PREBORE PLUS 3.0 FEET OF ROCK CORING FOR EACH OF THE (4) NOTED PILES. THE EAST PIER 2 QUANTITIES ASSUME 10.9 FEET OF PREBORE PLUS 3.0 FEET OF ROCK CORING FOR EACH OF THE (4) NOTED PILES.

IF BEDROCK IS NOT ENCOUNTERED ABOVE ELEVATION 972, THEN NO ADDITIONAL PREBORING IN THE SOIL IS REQUIRED AND NO "ROCK CORING" QUANTITY SHALL BE MEASURED FOR PAYMENT, AND THE PILE SHALL BE DRIVEN TO THE TARGET DRIVING RESISTANCE. THE LENGTH OF PREBORING SHALL BE MEASURED AND PAID FOR AT THE PRICE BID FOR "PREBORED HOLES" INSTEAD OF "ROCK CORING". PREBORED HOLES SHALL BE FILLED WITH SATURATED SAND IF ROCK CORING IS NOT PERFORMED TO LATERALLY SUPPORT THE PILING.

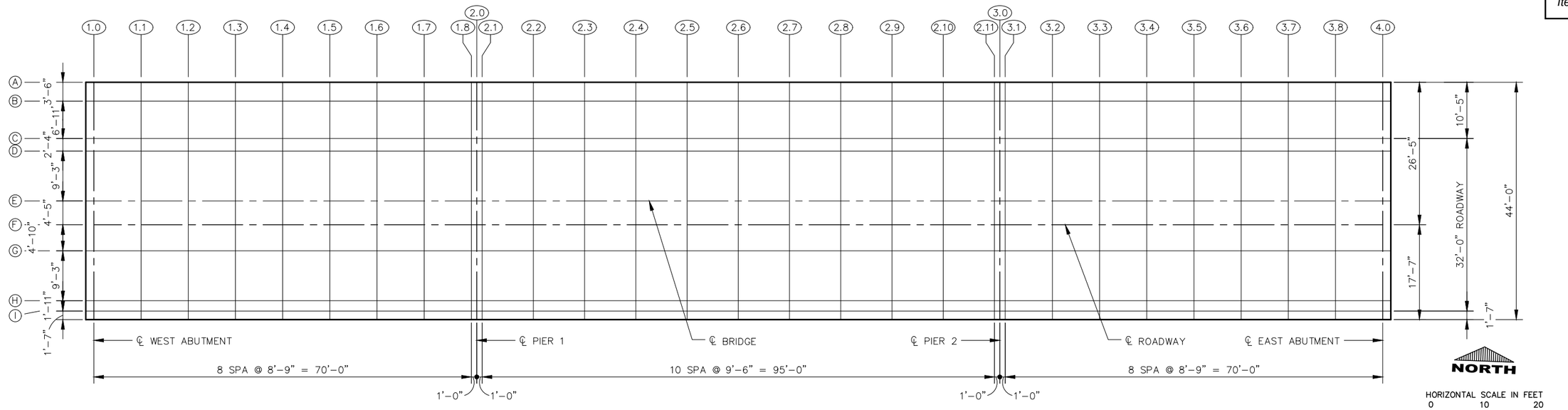


PILE ROCK CORE

Design For
239' x 32' 0° SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

P:\23\036\DRAWINGS\CIVIL\23036 ZZ V SHEETS_2.DWG 12/12/2024 3:58:38 PM JOE RETTENBERGER

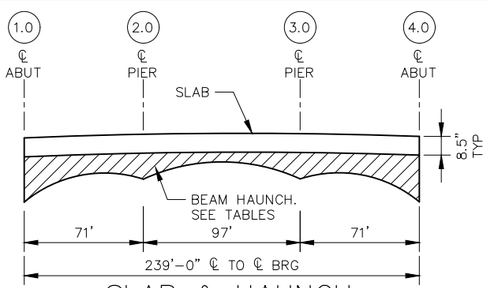


HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

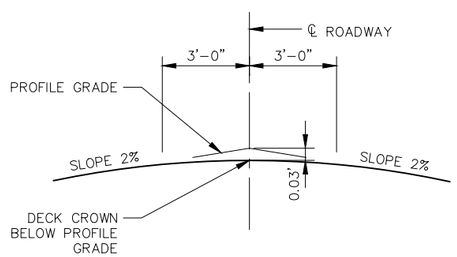
DECK ELEVATION LAYOUT GRID

GRID LINE		LINE 1.0	LINE 1.1	LINE 1.2	LINE 1.3	LINE 1.4	LINE 1.5	LINE 1.6	LINE 1.7	LINE 1.8	LINE 2.0	LINE 2.1	LINE 2.2	LINE 2.3	LINE 2.4	LINE 2.5	LINE 2.6	LINE 2.7	LINE 2.8	LINE 2.9	LINE 2.10	LINE 2.11	LINE 3.0	LINE 3.1	LINE 3.2	LINE 3.3	LINE 3.4	LINE 3.5	LINE 3.6	LINE 3.7	LINE 3.8	LINE 4.0
ALL BEAMS	HAUNCH, INCHES	2.00	1.45	0.96	0.60	0.39	0.35	0.45	0.66	0.80		1.00	1.25	1.37	1.40	1.39	1.35	1.30	1.23	1.11	0.91	0.57		0.33	0.47	0.52	0.51	0.53	0.70	1.03	1.48	2.00
ALL BEAMS	HAUNCH, FEET	0.17	0.12	0.08	0.05	0.03	0.03	0.04	0.06	0.07		0.08	0.10	0.11	0.12	0.12	0.11	0.11	0.10	0.09	0.08	0.05		0.03	0.04	0.04	0.04	0.04	0.06	0.09	0.12	0.17
EDGE LINE A	TOP OF DECK	1010.00	1010.10	1010.19	1010.28	1010.38	1010.47	1010.57	1010.66	1010.74	1010.75	1010.76	1010.82	1010.88	1010.91	1010.93	1010.93	1010.91	1010.88	1010.82	1010.76	1010.67	1010.66	1010.65	1010.56	1010.44	1010.32	1010.18	1010.05	1009.91	1009.78	1009.64
EDGE LINE A	EDGE FORM ELEV.	1010.00	1010.14	1010.27	1010.39	1010.50	1010.58	1010.65	1010.71	1010.74		1010.76	1010.93	1011.07	1011.17	1011.24	1011.25	1011.22	1011.14	1011.02	1010.86	1010.67		1010.65	1010.60	1010.53	1010.43	1010.30	1010.16	1010.00	1009.82	1009.64
BEAM LINE B	TOP OF DECK	1010.06	1010.15	1010.24	1010.34	1010.43	1010.53	1010.62	1010.71	1010.79	1010.80	1010.81	1010.88	1010.93	1010.96	1010.98	1010.98	1010.96	1010.93	1010.88	1010.81	1010.72	1010.71	1010.70	1010.61	1010.50	1010.37	1010.24	1010.10	1009.96	1009.83	1009.69
BEAM LINE B	BLH ELEV.	1009.35	1009.49	1009.62	1009.74	1009.84	1009.93	1009.99	1010.05	1010.08		1010.10	1010.27	1010.41	1010.52	1010.58	1010.60	1010.56	1010.48	1010.36	1010.20	1010.02		1010.00	1009.95	1009.87	1009.77	1009.65	1009.50	1009.34	1009.17	1008.98
GUTTER LINE C	TOP OF DECK	1010.16	1010.25	1010.35	1010.44	1010.54	1010.63	1010.72	1010.82	1010.90	1010.91	1010.91	1010.98	1011.03	1011.07	1011.08	1011.08	1011.07	1011.03	1010.98	1010.91	1010.83	1010.82	1010.81	1010.71	1010.60	1010.48	1010.34	1010.20	1010.07	1009.93	1009.80
BEAM LINE D	TOP OF DECK	1010.21	1010.30	1010.39	1010.49	1010.58	1010.68	1010.77	1010.86	1010.94	1010.95	1010.96	1011.03	1011.08	1011.11	1011.13	1011.13	1011.11	1011.08	1011.03	1010.96	1010.88	1010.87	1010.86	1010.76	1010.65	1010.52	1010.39	1010.25	1010.12	1009.98	1009.84
BEAM LINE D	BLH ELEV.	1009.50	1009.64	1009.77	1009.89	1009.99	1010.08	1010.15	1010.20	1010.24		1010.25	1010.42	1010.56	1010.67	1010.73	1010.75	1010.71	1010.63	1010.51	1010.35	1010.17		1010.15	1010.10	1010.02	1009.92	1009.80	1009.65	1009.49	1009.32	1009.13
BEAM LINE E	TOP OF DECK	1010.39	1010.48	1010.58	1010.67	1010.77	1010.86	1010.96	1011.05	1011.13	1011.14	1011.15	1011.21	1011.26	1011.30	1011.31	1011.31	1011.30	1011.26	1011.21	1011.14	1011.06	1011.05	1011.04	1010.94	1010.83	1010.71	1010.57	1010.44	1010.30	1010.16	1010.03
BEAM LINE E	BLH ELEV.	1009.68	1009.82	1009.95	1010.07	1010.18	1010.26	1010.33	1010.39	1010.42		1010.44	1010.61	1010.75	1010.85	1010.92	1010.93	1010.90	1010.82	1010.70	1010.54	1010.35		1010.33	1010.28	1010.21	1010.11	1009.98	1009.84	1009.68	1009.50	1009.32
CENTERLINE F	TOP OF DECK	1010.45	1010.54	1010.64	1010.73	1010.83	1010.92	1011.01	1011.11	1011.19	1011.20	1011.20	1011.27	1011.32	1011.36	1011.37	1011.37	1011.36	1011.32	1011.27	1011.20	1011.12	1011.11	1011.10	1011.00	1010.89	1010.77	1010.63	1010.49	1010.36	1010.22	1010.09
BEAM LINE G	TOP OF DECK	1010.38	1010.48	1010.57	1010.66	1010.76	1010.85	1010.95	1011.04	1011.12	1011.13	1011.14	1011.20	1011.26	1011.29	1011.31	1011.31	1011.29	1011.26	1011.20	1011.14	1011.05	1011.04	1011.03	1010.94	1010.82	1010.70	1010.56	1010.43	1010.29	1010.16	1010.02
BEAM LINE G	BLH ELEV.	1009.67	1009.81	1009.95	1010.06	1010.17	1010.25	1010.32	1010.38	1010.41		1010.43	1010.60	1010.74	1010.85	1010.91	1010.92	1010.89	1010.81	1010.69	1010.53	1010.34		1010.32	1010.27	1010.20	1010.10	1009.97	1009.83	1009.67	1009.49	1009.31
BEAM LINE H	TOP OF DECK	1010.20	1010.29	1010.39	1010.48	1010.57	1010.67	1010.76	1010.85	1010.94	1010.94	1010.95	1011.02	1011.07	1011.10	1011.12	1011.12	1011.10	1011.07	1011.02	1010.95	1010.87	1010.86	1010.85	1010.75	1010.64	1010.51	1010.38	1010.24	1010.11	1009.97	1009.83
BEAM LINE H	BLH ELEV.	1009.49	1009.63	1009.76	1009.88	1009.98	1010.07	1010.14	1010.19	1010.23		1010.24	1010.41	1010.56	1010.66	1010.72	1010.74	1010.71	1010.63	1010.50	1010.35	1010.16		1010.14	1010.09	1010.01	1009.91	1009.79	1009.64	1009.48	1009.31	1009.13
GUTTER LINE I	TOP OF DECK	1010.16	1010.25	1010.35	1010.44	1010.54	1010.63	1010.72	1010.82	1010.90	1010.91	1010.91	1010.98	1011.03	1011.07	1011.08	1011.08	1011.07	1011.03	1010.98	1010.91	1010.83	1010.82	1010.81	1010.71	1010.60	1010.48	1010.34	1010.20	1010.07	1009.93	1009.80
GUTTER LINE I	EDGE FORM ELEV.	1010.16	1010.30	1010.43	1010.55	1010.65	1010.74	1010.81	1010.86	1010.90		1010.91	1011.08	1011.23	1011.33	1011.39	1011.41	1011.38	1011.30	1011.17	1011.02	1010.83		1010.81	1010.76	1010.68	1010.58	1010.46	1010.31	1010.15	1009.98	1009.80

BLH = BEAM LINE HAUNCH ELEVATION = TOP OF DECK - SLAB THICKNESS + DL DEFLECTION = BOTTOM OF SLAB ELEVATION BEFORE DECK PLACEMENT
EDGE FORM ELEV. = TOP OF DECK ELEVATION AT EDGE + DL DEFLECTION



SLAB & HAUNCH THICKNESS AT BEAMS

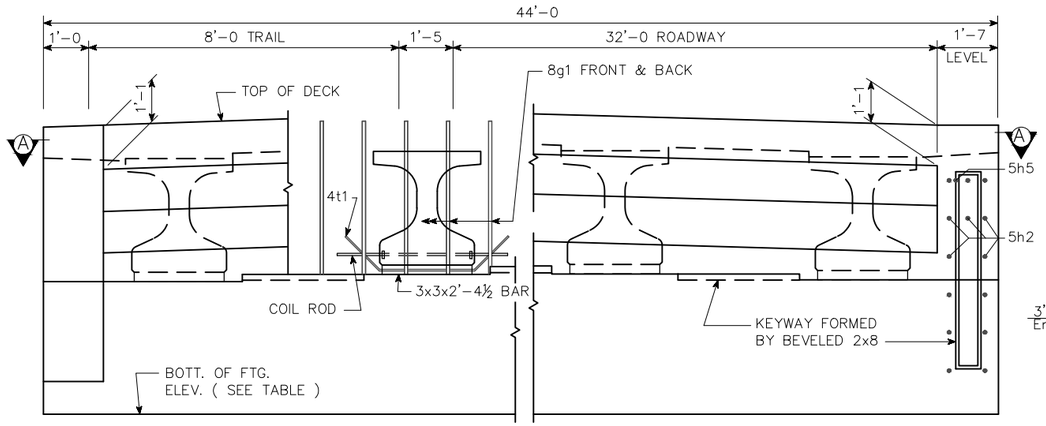


CROWN TEMPLATE

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

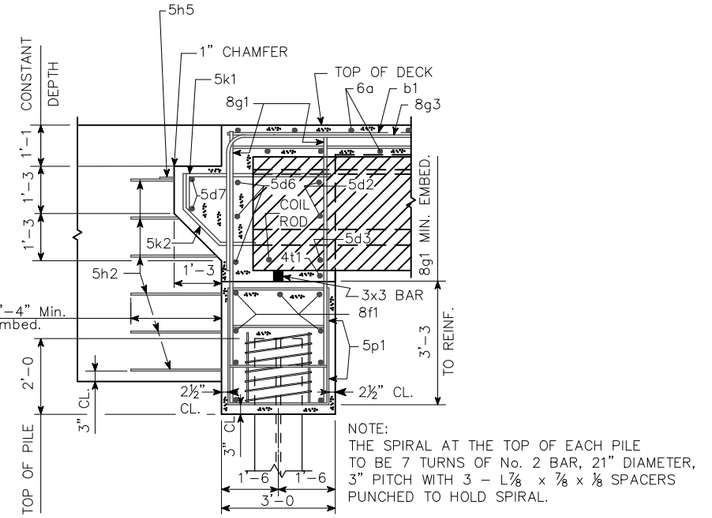
71'-0" END SPANS 97'-0" CENTER SPAN

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PART REAR ELEVATION AT ABUTMENT

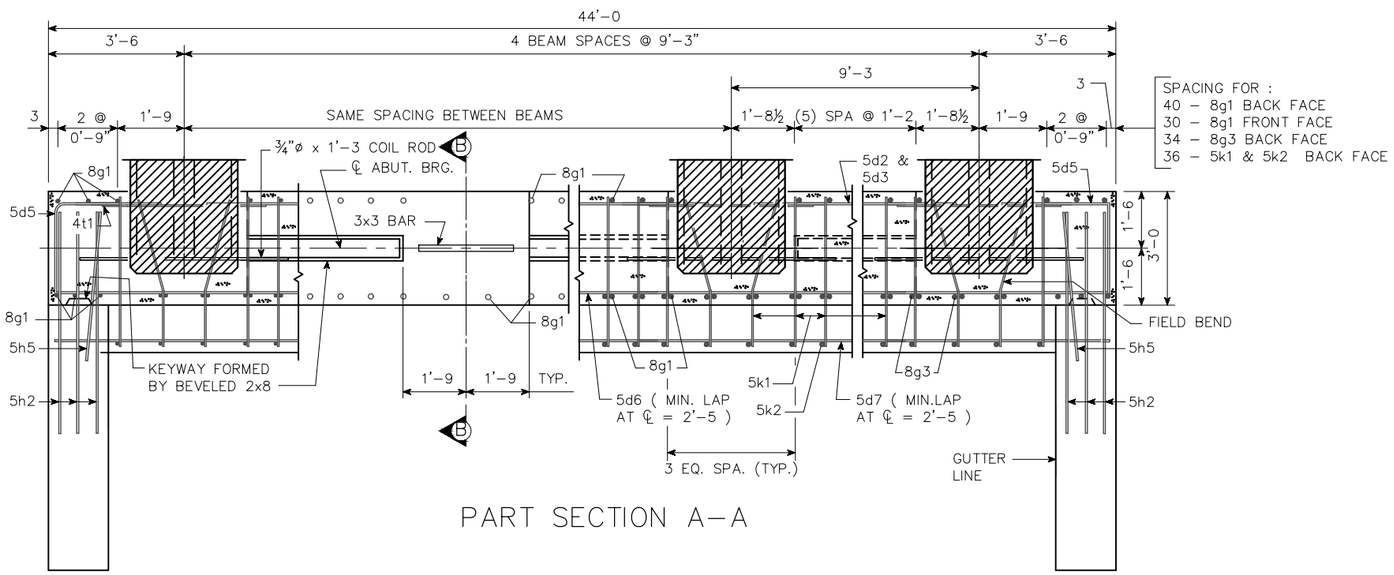
(LOOKING UP STATION)



NOTE:
THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF No. 2 BAR, 21" DIAMETER, 3" PITCH WITH 3 – L⅞ x ⅞ x ⅛ SPACERS PUNCHED TO HOLD SPIRAL.

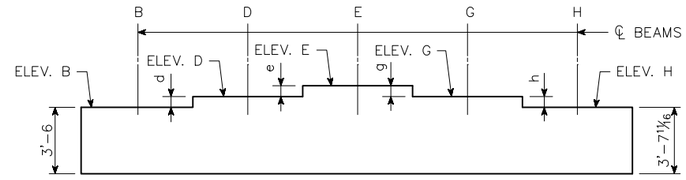
PART SECTION B–B

ABUTMENT BEARING ELEVATIONS						
	ELEV. B	ELEV. D	ELEV. E	ELEV. G	ELEV. H	B/FTG
WEST ABUT	1005.93	1006.08	1006.27	1006.26	1006.07	1002.43
STEP		1 3/4	2 1/4	1/8	2 1/4	
EAST ABUT	1005.57	1005.72	1005.90	1005.89	1005.71	1002.07
STEP		1 3/4	2 1/4	1/8	2 1/4	



SPACING FOR :
40 – 8g1 BACK FACE
30 – 8g1 FRONT FACE
34 – 8g3 BACK FACE
36 – 5k1 & 5k2 BACK FACE

PART SECTION A–A



ABUTMENT STEP DIAGRAM

(LOOKING UP STATION)

ABUTMENT CONCRETE QUANTITY	
LOCATION	QUANTITY
WEST ABUTMENT FOOTING	18.3
EAST ABUTMENT FOOTING	18.2
TOTAL (CU. YDS.)	36.5

NOTE: CONCRETE QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.

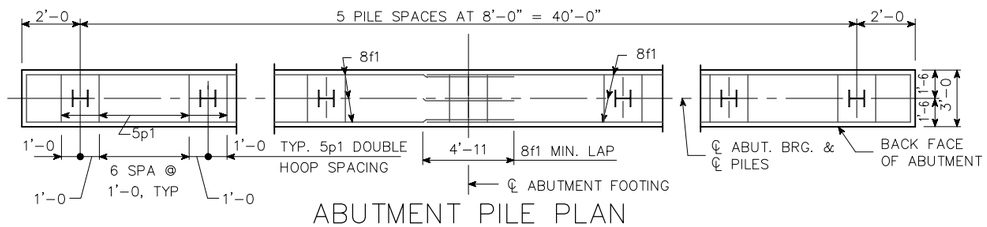
NOTE:
6 – HP 10x57 STEEL BEARING PILING REQUIRED AT EACH ABUTMENT.

NOTE: BARRIER RAIL NOT SHOWN IN DETAILS.

ABUTMENT NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

IF NECESSARY TO PREVENT DAMAGE TO THE END OF THE BRIDGE DECK OR BACKWALL FROM CONSTRUCTION EQUIPMENT, AN APPROPRIATE METHOD OF PROTECTION APPROVED BY THE ENGINEER SHALL BE PROVIDED BY THE BRIDGE CONTRACTOR AT NO EXTRA COST TO THE STATE.

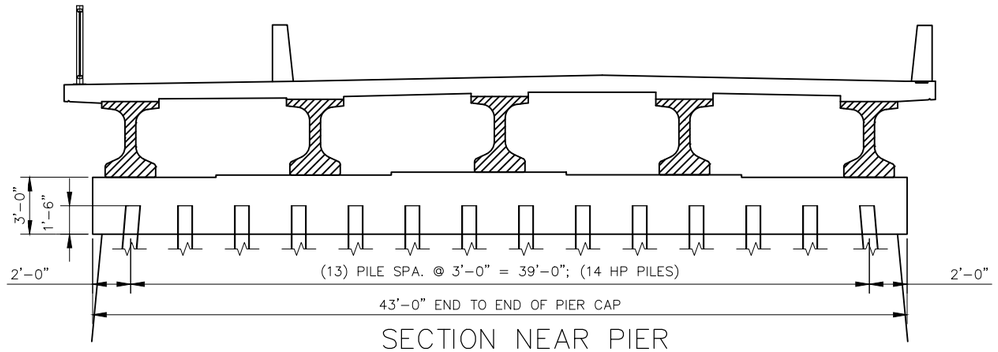


ABUTMENT PILE PLAN

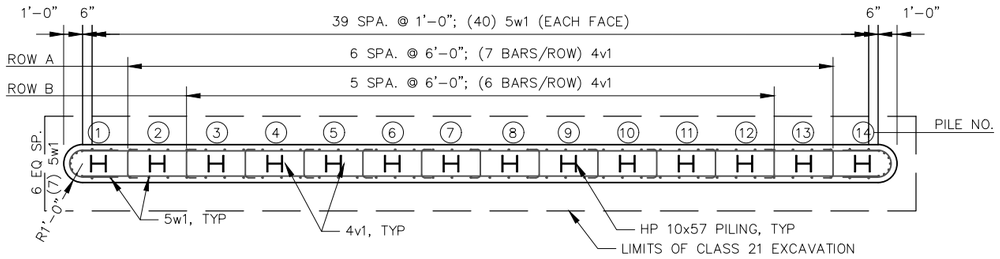
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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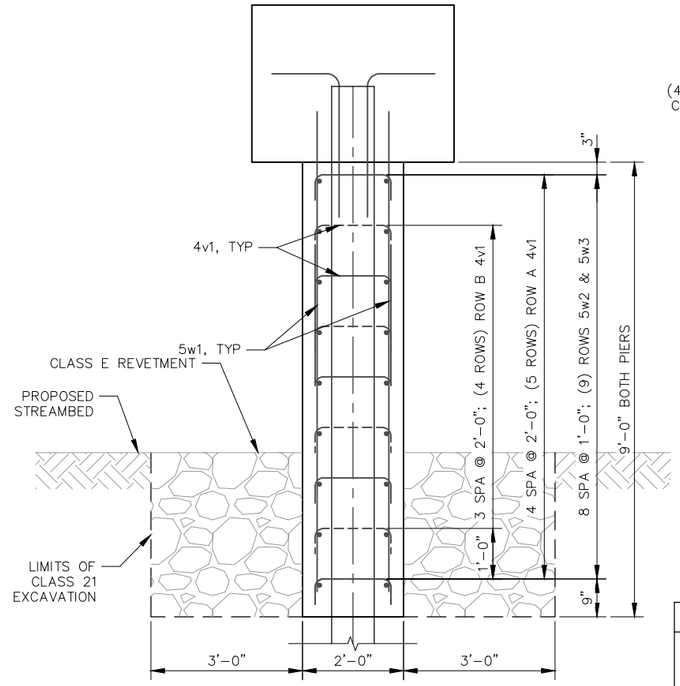


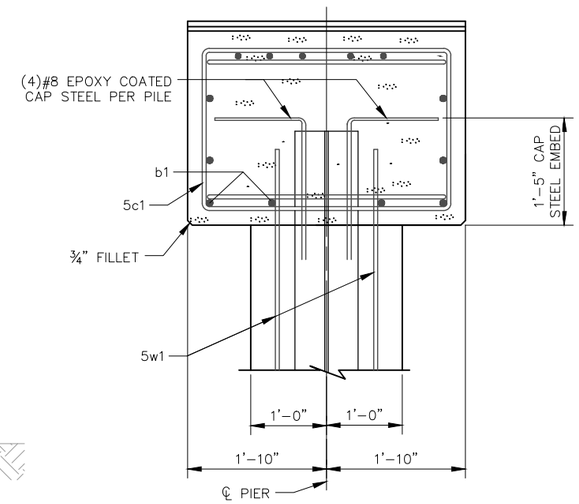
SECTION NEAR PIER
SHOWING NUMBER OF PILING



SECTION A–A

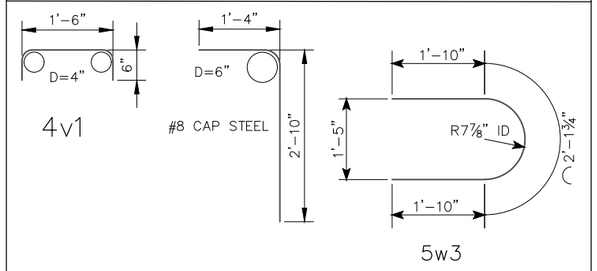
NOTE: INSTALL PILE NUMBERS 2, 6, 9, AND 13 IN ROCK CORES PER "PILE ROCK CORE" DETAILS.



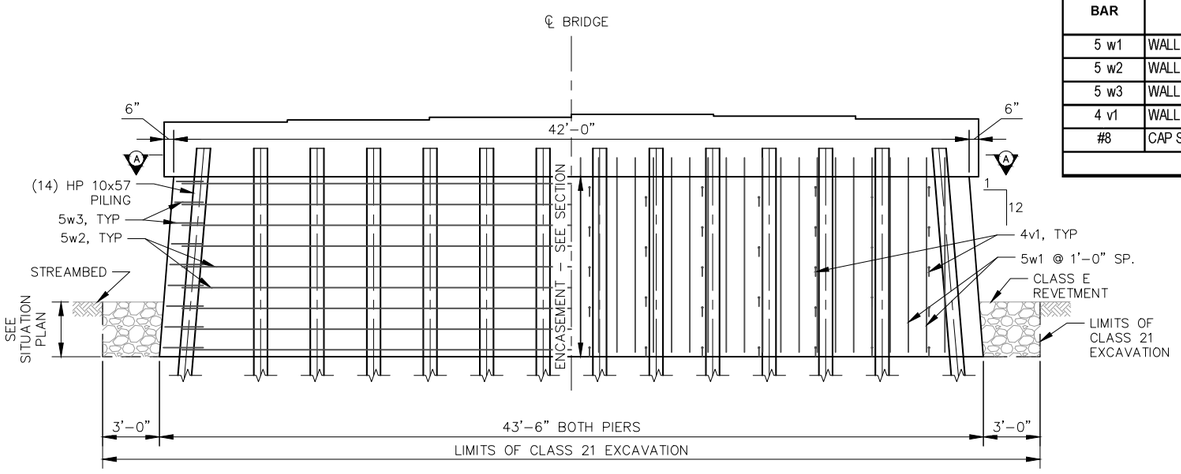


TYPICAL CAP SECTION

BENT BAR DETAILS



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



REINFORCING BAR LIST - ONE SOLID ENCASED PILE BENT PIER					
BAR	LOCATION	SHAPE	NO.	LENGTH ft. - in.	WEIGHT
5 w1	WALL VERTICAL	——	94	9 '-9	956
5 w2	WALL HORIZONTAL, VARIES 40'-0" to 41'-4"	——	18	VARIES	763
5 w3	WALL HORIZONTAL - ENDS	⊃	18	5 '-10	110
4 v1	WALL TIES	⊓	59	2 '-6	99
#8	CAP STEEL	⊓	56	4 '-2	623
TOTAL EPOXY REINFORCING, ONE PIER, LB					2551

PIER ELEVATIONS

LOCATION	B/CAP	B/ENCASEMENT
PIER 1	1003.93	994.93
PIER 2	1003.89	994.89

ESTIMATED QUANTITIES– ONE ENCASED PIER

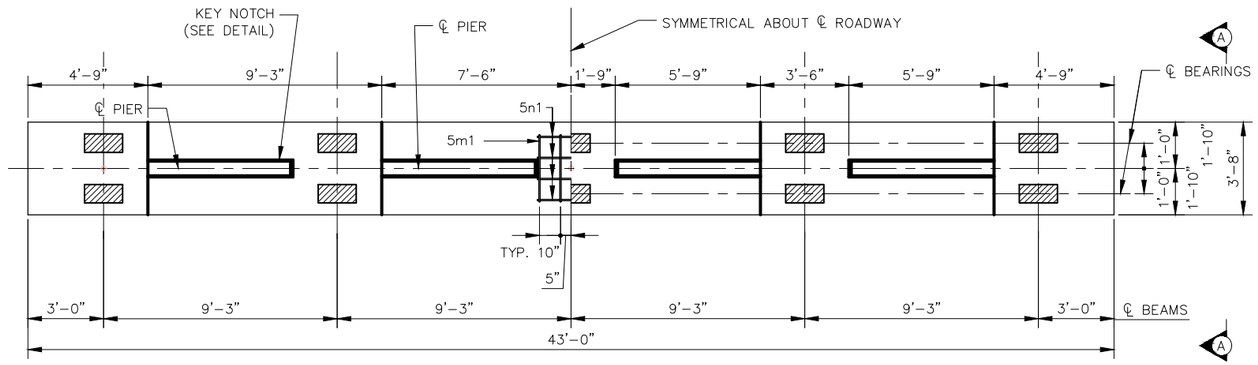
ITEM	UNIT
STRUCTURAL CONCRETE (BRIDGE)	28.2 C.Y.
EPOXY REINFORCING STEEL	2551 LB
CLASS 21 EXCAVATION	53 C.Y.

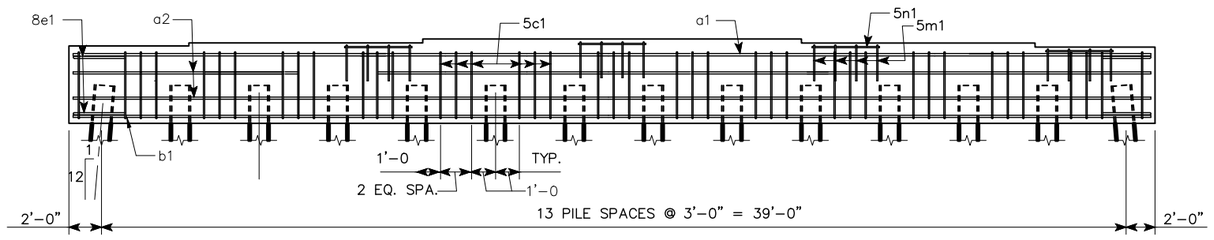
Δ SEE V.7 FOR PIER CAP CONCRETE AND REINFORCING QUANTITIES

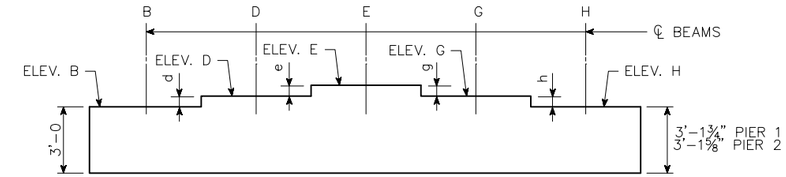
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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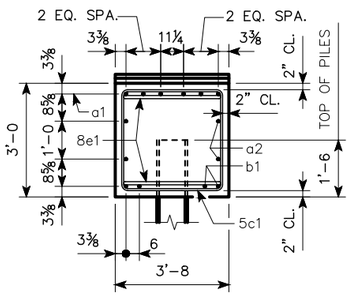
PIER STEP DIAGRAM

(LOOKING UP STATION)

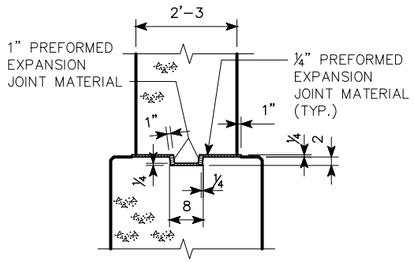
PIER BEAM BEARING ELEVATIONS					
	ELEV. B	ELEV. D	ELEV. E	ELEV. G	ELEV. H
PIER 1	1006.93	1007.09	1007.27	1007.26	1007.08
STEP		1 13/16	2 1/4	1/8	2 1/4
PIER 2	1006.89	1007.04	1007.22	1007.21	1007.03
STEP		1 13/16	2 1/4	1/8	2 1/4

PIER STRUCTURE ELEVATIONS				
	B/FTG.	B/CAP	H, FT.	COLUMN
PIER 1	994.93	1003.93	12.0	9.00
PIER 2	994.89	1003.89	12.0	9.00

REINFORCING BAR LIST - ONE PILE CAP					
BAR	LOCATION	SHAPE	NO.	LENGTH ft. - in.	WEIGHT
9 a1	PILE CAP HORIZ., TOP		6	42 '-8	870
8 a2	PILE CAP HORIZ., SIDES		4	42 '-8	456
8 b1	PILE CAP HORIZ., BOTT.		4	42 '-8	456
5 c1	PILE CAP HOOPS		41	13 '-0	556
8 e1	PILE CAP HORIZ., AT ENDS		4	8 '-9	93
5 m1	PILE CAP HORIZ., AT ENDS		16	6 '-4	106
5 n1	PILE CAP HORIZ., AT ENDS		16	2 '-8	45
	TOTAL EPOXY REINFORCING, ONE PIER PILE CAP				2582

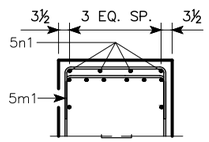


VIEW A–A



KEYED NOTCH DETAIL

(FIXED PIER ONLY)

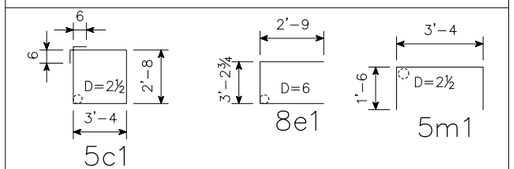


5m1 & 5n1
BAR LAYOUT

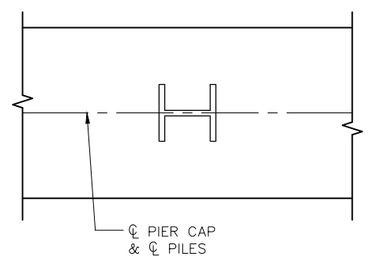
PIER CAP CONCRETE QUANTITY	
LOCATION	QUANTITY
PIER CAP #1	18.9
PIER CAP #2	18.9
TOTAL (CU. YDS.)	37.9

NOTE: CONCRETE QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.

BENT BAR DETAILS



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



PILE ORIENTATION DETAIL

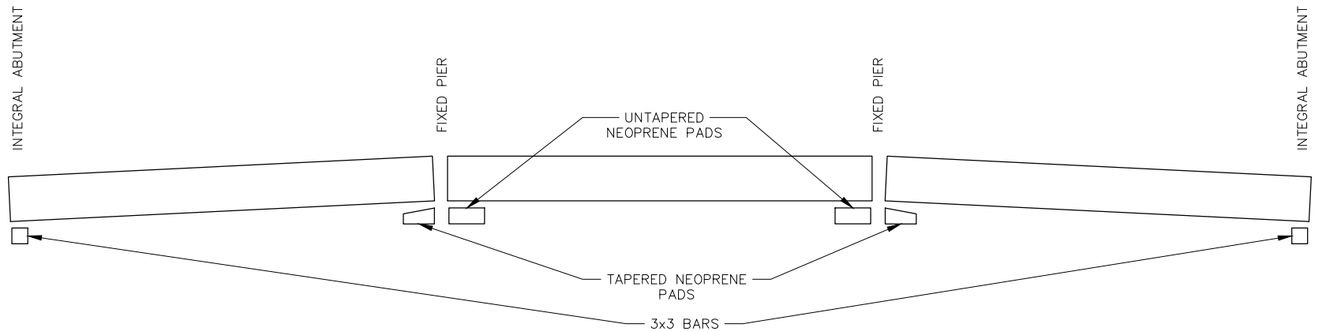
PILE BENT NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

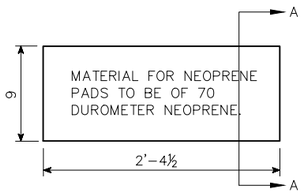
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

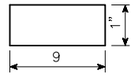
71'–0" END SPANS 97'–0" CENTER SPAN

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BEAM BEARING LAYOUT (NTS)

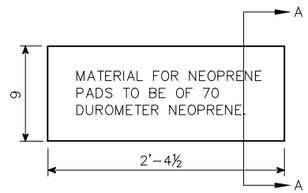


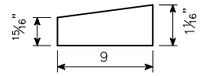


SECTION A–A

NOTE:
COST OF NEOPRENE PADS SHALL BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".

FIXED PIER – SPANS 2 BEAMS
(10 REQUIRED)





SECTION A–A

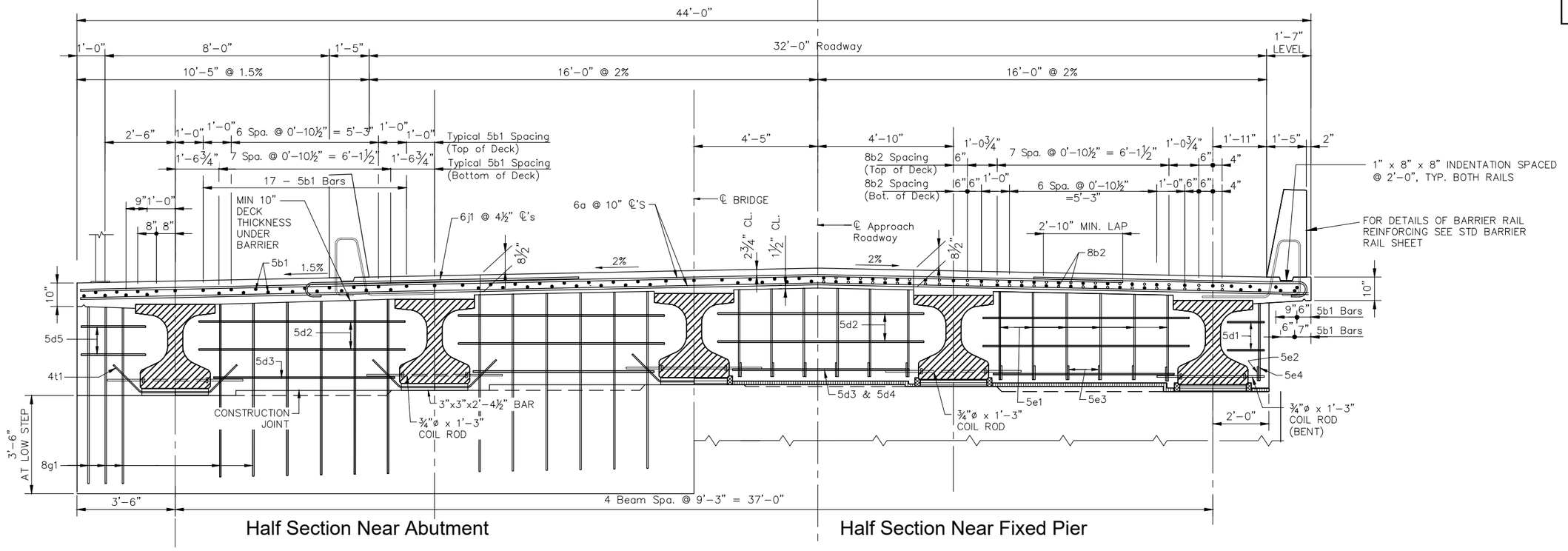
NOTE:
COST OF NEOPRENE PADS SHALL BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".

FIXED PIER – SPANS 1 AND 3 BEAMS
(10 REQUIRED)

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

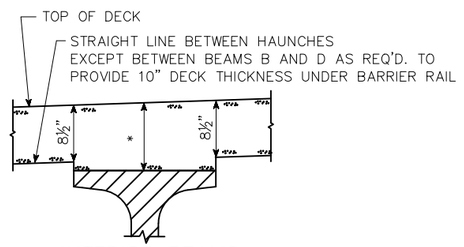
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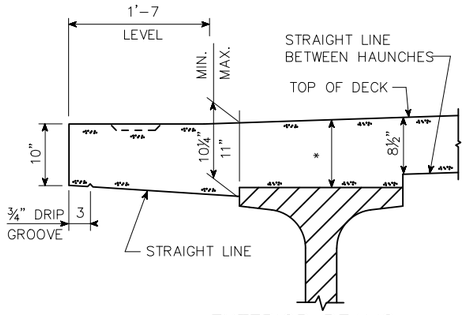
Half Section Near Abutment

Half Section Near Fixed Pier

SLAB AREA = 32.20 SF
SLAB AREA DOES NOT INCLUDE THE HAUNCH



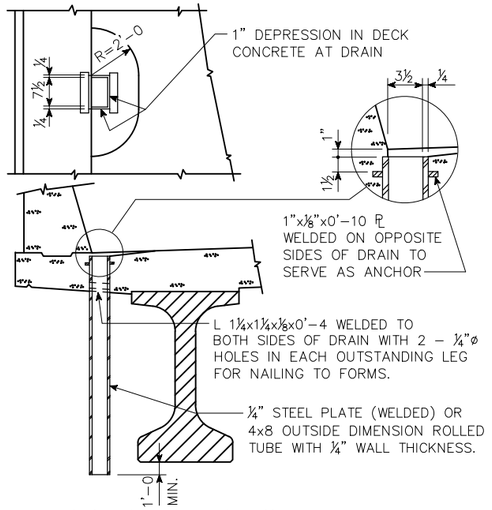
INTERIOR BEAMS



EXTERIOR BEAMS

TYPICAL DECK AND HAUNCH DETAIL

* FOR DECK THICKNESS OVER BEAMS SEE HAUNCH AND CAMBER DETAILS ON DESIGN SHEET V.4



DRAIN DETAILS

NOTE : DRAINS ARE TO BE GALVANIZED. 12 DRAINS REQUIRED. SEE V.17 FOR LOCATION. WEIGHT OF DRAINS IS INCLUDED IN THE QUANTITY FOR "STRUCTURAL STEEL". WEIGHT IS BASED ON ROLLED TUBE.

DATA FOR ONE DRAIN	
BEAM SIZE	BTB
DRAIN WEIGHT (LBS.)	92
DRAIN LENGTH (FT.)	4'-9¾

SUPERSTRUCTURE NOTES:

THE BRIDGE DECK AS SHOWN INCLUDES ¾" INTEGRAL WEARING SURFACE.

THE PIER AND ABUTMENT DIAPHRAGM CONCRETE IS TO BE PLACED MONOLITHICALLY WITH THE BRIDGE DECK.

COST OF ALL RESILIENT JOINT FILLER MATERIAL IS TO BE INCLUDED IN THE PRICE BID FOR "STRUCTURAL CONCRETE (BRIDGE)".

ALL BEAMS ARE TO BE SET VERTICAL.

FORMS FOR THE DECK AND BARRIER RAIL ARE TO BE SUPPORTED BY THE PRESTRESSED CONCRETE BEAMS.

CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

ALL DECK AND DIAPHRAGM REINFORCING IS TO BE WIRED IN PLACE AND ADEQUATELY SUPPORTED BEFORE CONCRETE IS PLACED.

TOP TRANSVERSE REINFORCING STEEL IS TO BE PARALLEL TO AND 2¾" CLEAR BELOW TOP OF DECK. BOTTOM TRANSVERSE REINFORCING STEEL IS TO BE PARALLEL TO AND 1½" CLEAR ABOVE BOTTOM OF DECK. TOP AND BOTTOM REINFORCING STEEL IS TO BE SUPPORTED BY INDIVIDUAL BAR CHAIRS SPACED AT NOT MORE THAN 3'-0 CENTERS LONGITUDINALLY AND TRANSVERSELY, OR BY CONTINUOUS ROWS OF BAR HIGH CHAIRS OR DECK BOLSTERS SPACED 4'-0 APART. I.M. 451.01 REQUIREMENTS SHALL APPLY FOR BAR CHAIRS, BAR HIGH CHAIRS, AND DECK BOLSTERS.

COST OF BEARING MATERIAL IS TO BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".

TRANSVERSE DECK REINFORCING MAY BE SPLICED WITH ONE LAP LOCATED AS FOLLOWS:

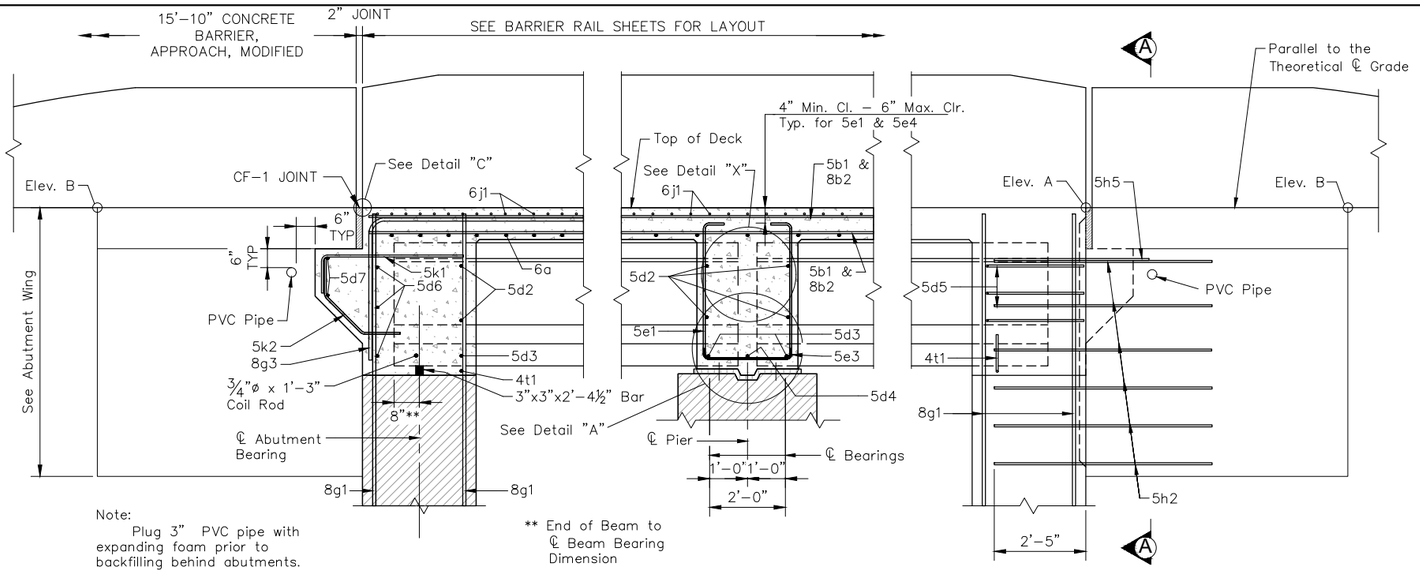
TOP BAR - LAP MIDWAY BETWEEN BEAMS (MIN. LAP = 2'-10).
BOTTOM BARS - LAP OVER BEAMS (MIN. LAP = 3'-7).

PAYMENT FOR REINFORCING BARS SHALL BE BASED ON NO SPLICES, AND NO ALLOWANCE SHALL BE MADE FOR THE ADDITIONAL LENGTH OF BAR REQUIRED FOR THE USE OF SPLICES.

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'-0" END SPANS 97'-0" CENTER SPAN

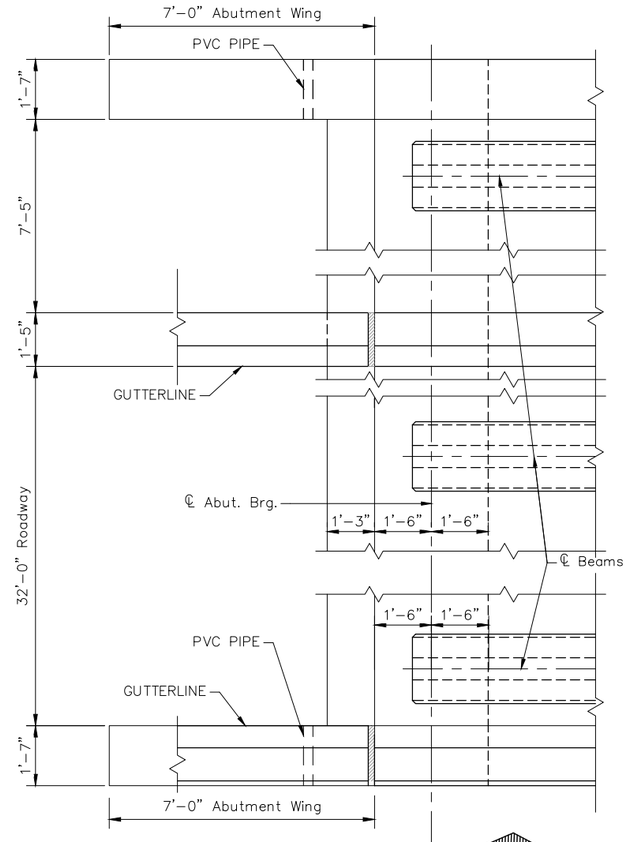
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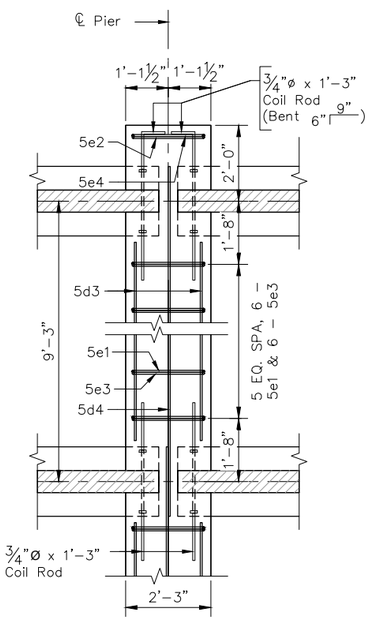
Part Longitudinal Section Near Gutter

Part End View at Abutment

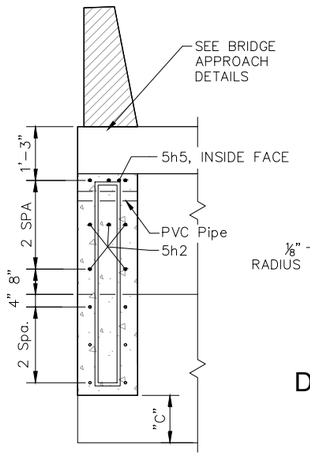
(For details of Intermediate Diaphragm see Design Sheet V.16)



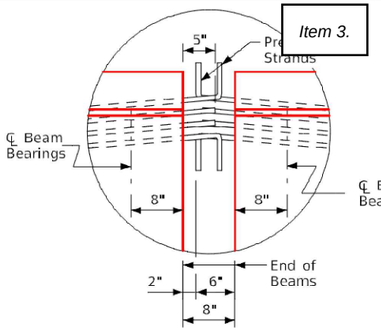
Part Plan



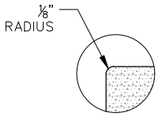
Part Section at Pier



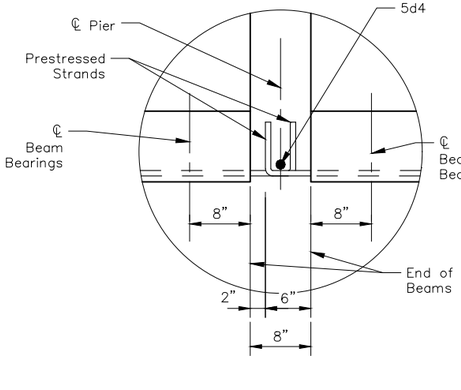
Section A-A



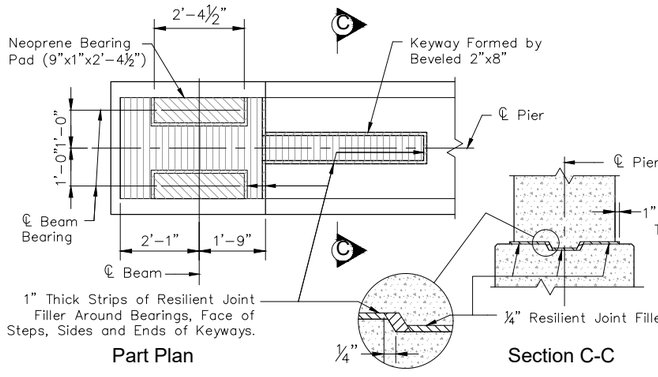
Detail "X"



Detail "C"



Detail "A"



Part Plan

Section C-C

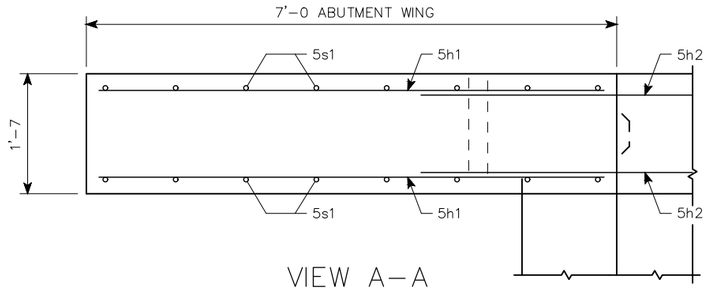
Top of Fixed Pier Details

TABLE OF WINGWALL ELEVATIONS			
LOCATION	DIM "C"	ELEV. A	ELEV. B
N.W. WING	1'–0 5/8"	1009.99	1009.91
S.W. WING	1'–2 1/2"	1010.14	1010.07
N.E. WING	1'–0 5/8"	1009.62	1009.51
S.E. WING	1'–2 1/2"	1009.77	1009.66

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

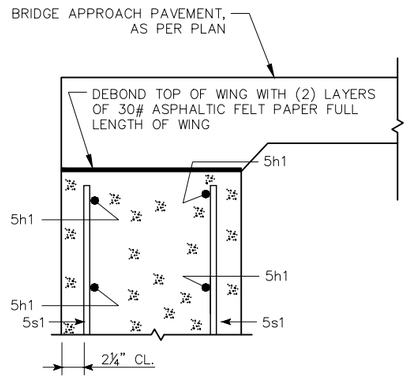
71'–0" END SPANS 97'–0" CENTER SPAN

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VIEW A–A

NOTE:
PLUG 3"ø PVC PIPE WITH EXPANDING FOAM PRIOR TO BACKFILLING BEHIND ABUTMENTS.



SECTION B–B

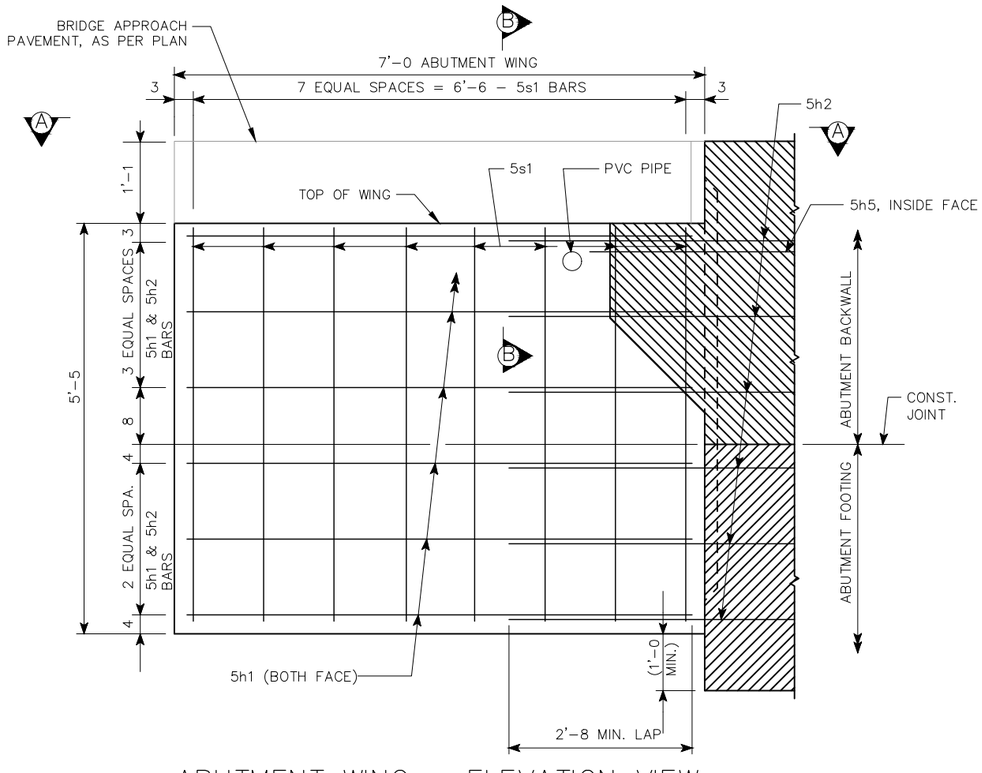
REINFORCING BAR LIST – ONE ABUT. WING

BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
5h1	HORIZONTAL BOTH FACES	——	12	6'–8	83
5s1	VERTICAL BOTH FACES	——	16	4'–11	82
	REINFORCING STEEL EPOXY COATED – TOTAL (LBS.)				165

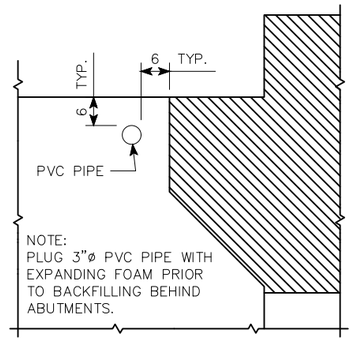
CONCRETE PLACEMENT SUMMARY

CONCRETE	TOTAL
ONE ABUTMENT WING	2.2

NOTE:
CONCRETE AND REINFORCING STEEL QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.



ABUTMENT WING – ELEVATION VIEW

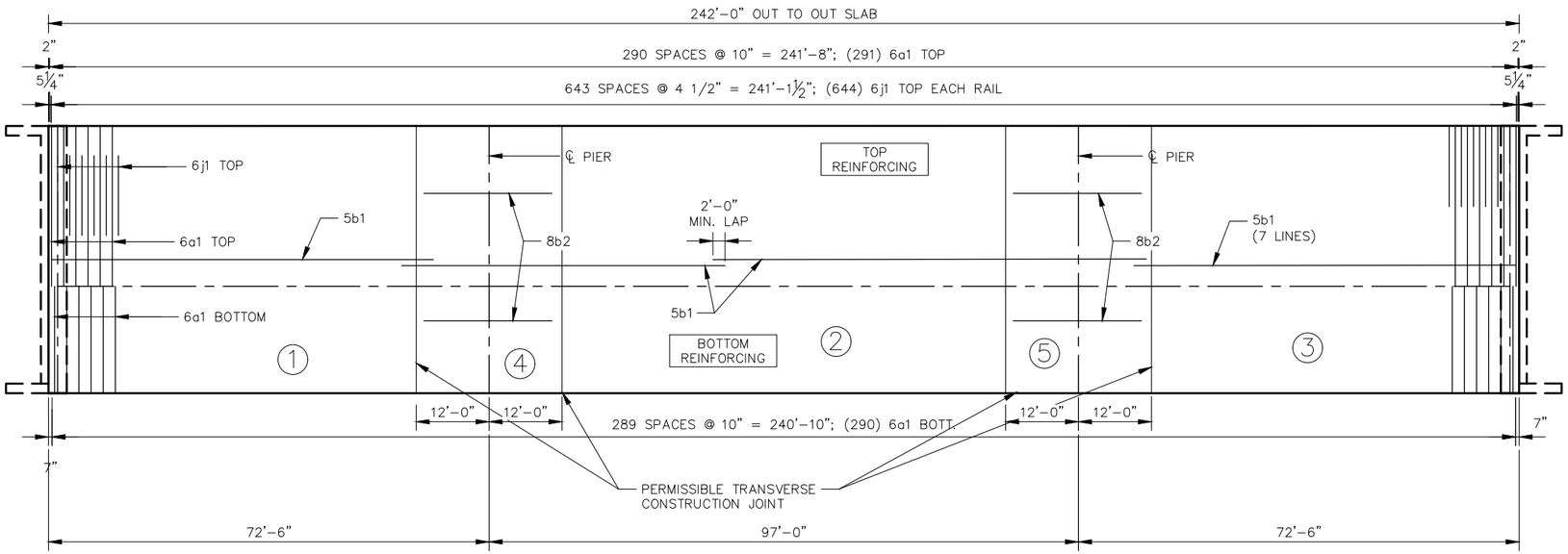


PVC PIPE LOCATION

Design For
239' x 32' 0° SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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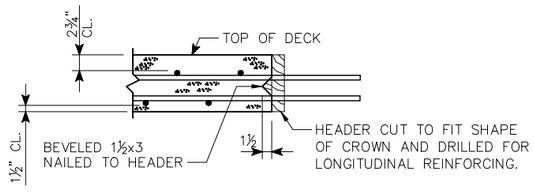


TRANSVERSE REINFORCING LAYOUT AND CONCRETE PLACEMENT DIAGRAM

NORTH

CONCRETE PLACEMENT DIAGRAM

NOTE: CONCRETE DECK SHALL BE PLACED IN SECTIONS AND SEQUENCES INDICATED. ALTERNATE PROCEDURES FOR PLACING DECK CONCRETE MAY BE SUBMITTED FOR APPROVAL TOGETHER WITH A STATEMENT OF THE PROPOSED METHOD AND EVIDENCE THAT THE CONTRACTOR POSSESSES THE NECESSARY EQUIPMENT AND FACILITIES TO ACCOMPLISH THE REQUIRED RESULTS. FOR APPROVED ALTERNATE PROCEDURES THE ENGINEER SHALL DETERMINE IF A RETARDING ADMIXTURE IS REQUIRED TO MAINTAIN PLASTICITY OF THE CONCRETE DECK DURING PLACEMENT.



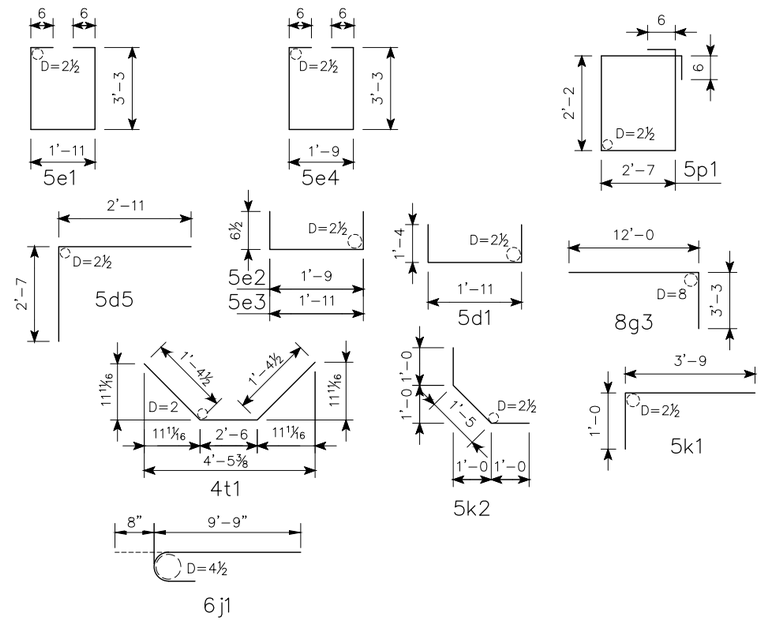
PERMISSIBLE TRANSVERSE DECK CONSTRUCTION JOINT

CONCRETE PLACEMENT QTY	
LOCATION	QUANTITY
SECTION 1, DECK & ABUT. DIAPH.	90.5
SECTION 2, DECK	87
SECTION 3, DECK & ABUT. DIAPH.	90.5
SECTION 4, DECK & PIER DIAPH.	38.6
SECTION 5, DECK & PIER DIAPH.	38.6
HAUNCH*	10.3
TOTAL (CU. YDS.)	355.5

NOTE:
CONCRETE AND REINFORCING STEEL QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.

* HAUNCH QUANTITY IS BASED ON AN AVERAGE HAUNCH THICKNESS OF 1"

BENT BAR DETAILS



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

REINFORCING BAR LIST - ONE SUPERSTRUCTURE & TWO ABUTMENTS

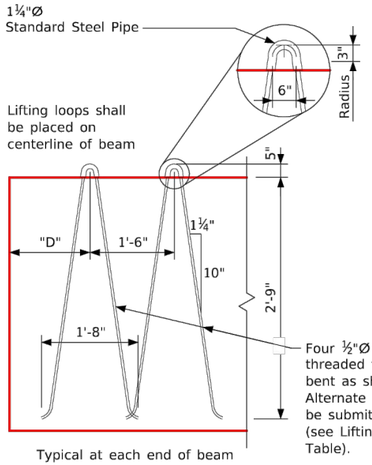
EPOXY COATED REINFORCING

BAR	LOCATION	SHAPE	NO.	LENGTH ft '- in.	WEIGHT
6 a1	SLAB, TRANV. TOP & BOTT.	———	581	43 '- 8	38106
5 b1	SLAB, LONGIT. TOP & BOTT.	———	623	36 '- 3	23555
8 b2	SLAB, LONGIT. TOP & BOTT. AT PIERS*	———	176	23 '- 8	11121
5 d1	PIER DIAPH. ENDS	⌊⌋	8	4 '- 7	38
5 d2	PIER & ABUT. DIAPH. LONGIT.	———	48	8 '- 5	421
5 d3	PIER & ABUT. DIAPH. LONGIT. BOTT.	———	24	6 '- 5	161
5 d4	PIER DIAPH. LONGIT	———	2	40 '- 8	85
5 d5	ABUT. DIAPH. ENDS	⌐	8	5 '- 6	46
5 d6	ABUT. DIAPH. LONGIT. B.F.	———	12	23 '- 1	289
5 d7	PAVING NOTCH, LONGIT.	———	8	23 '- 1	193
5 e1	PIER DIAPH. HOOPS FIXED PIER	[]	48	9 '- 5	471
5 e2	PIER DIAPH. TIES ENDS	⌊⌋	4	2 '- 10	12
5 e3	PIER DIAPH. TIES	⌊⌋	48	3 '- 0	150
5 e4	PIER DIAPH HOOPS FIXED PIER ENDS	[]	4	9 '- 3	39
8 f1	ABUT. FOOTING LONGIT. BOTH FACES	———	36	24 '- 4	2339
8 g1	ABUT. VERT. B.F. & F.F.	———	140	7 '- 1	2648
8 g3	ABUT. DIAPH. VERT. B.F.	⌐	68	15 '- 3	2769
5 h2	ABUT. TO WING ANCHOR, BOTH FACES	———	56	5 '- 9	336
5 h5	ABUT. TO WING ANCHOR, INSIDE FACE, TOP	———	4	4 '- 0	17
6 j1	TOP OF SLAB TRANVSERSE (AT RAILS)	⌐	1288	10 '- 5	20152
5 k1	PAVING NOTCH	⌐	72	4 '- 9	357
5 k2	PAVING NOTCH	◟	72	3 '- 5	257
5 p1	ABUT. HOOPS	▭	148	10 '- 6	1621
4 t1	UNDER BEAMS AT ABUTMENTS	◡	10	5 '- 3	35
#2	Pile Spiral **	(((((((	12	38 '- 6	77
	SPIRAL SPACERS, L 7⁄8 x 7⁄8 x 1⁄8 x 0.70 **	———	36	1 '- 10	46
	TOTAL REINFORCING STEEL EPOXY COATED				105341

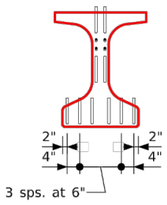
*THE MIDPOINT OF THE b2 BAR IS TO BE PLACED AT CENTERLINE OF PIER
** EPOXY COATING NOT REQUIRED FOR PILE SPIRAL AND SPACERS

Design For
239' x 32' 0" SKEW PPCB BRIDGE
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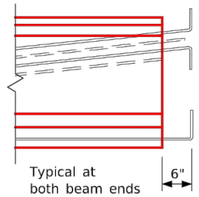
71'–0" END SPANS 97'–0" CENTER SPAN



Lifting Loop Detail



The top and bottom for 2 rows or the top and 3rd rows of deflected strands are to be cut with 1'-2" projections which are to be shop bent as shown. The second row is to be cut with a 5" projection and the remaining top deflected strands in rows 4 and below are to be cut flush with beam face. Six bottom strands are to be cut with 1'-6" projections which are to be shop bent as shown. The remaining bottom strands are to be cut off reasonably flush with the concrete.



Strand Projection at Beam Ends When Embedded in Concrete End Diaphragms

Lifting Loop and Overhang Table

Beams	Lifting Loops Each End	# of Strands Per Loop	D	Beam Overhang (ft.)
BTB30–BTB75	1	4	2'-0"	**
BTB80–BTB85	2	4	2'-0"	7
BTB90	2	4	2'-6"	8.5
BTB95	2	4	2'-6"	11

** In accordance with Article 2407.03, K of the Standard Specifications.

Lifting loops shall carry loads equally.

Design Stresses:

Design stresses for the following materials are to be in accordance with AASHTO LRFD Bridge Design Specifications, Series of 2017.
Reinforcing steel in accordance with Section 5, Grade 60.
Concrete in accordance with Section 5.
Prestressing steel in accordance with Section 5, Grade 270.

Specifications:

Construction: Standard Specifications of the Iowa Department of Transportation, current series, with current applicable special provisions and supplemental specifications.
Design: AASHTO LRFD, Series of 2017 with minor modifications.

Alternate Bar Notes:

Alternate bars shown in Bent Bar Details may be used in lieu of reinforcing bars shown in bar list. No additional payment shall be made for use of alternate bars.

BTB Beam Data

BTB Beam	Span Length ℄-℄ Bearing	Overall Beam Length (L)	Concrete Strength f'ci (ksi.)	Concrete Strength f'c (ksi.)	Strand Size Dia. (in.)	Number of Strands Straight	Number of Strands Deflected	③ Total Initial Prestress (kips)	Hold Down Force (kips)	Camber (in.) ⑤ At Release	Camber (in.) ⑤ After Losses	Deflection (in.) Δ_D Immediate ① (elastic) Δ_I Steel Diaphragm	Deflection (in.) Δ_D Time ② (plastic) Δ_T Steel Diaphragm	Permissible Maximum Spacing HL-93 Loading Steel Diaphragm	Weight (tons)	Concrete (cu. yd.)	Reinforcing Steel (weight lb.)
BTB30	30'-0"	31'-4"	4.50	5.00	0.60"	8	—	340	—	0.12"	0.22"	0.04"	0.01"	9'-3"	10.3	5.1	890
BTB35	35'-0"	36'-4"	4.50	5.00	0.60"	10	—	425	—	0.20"	0.37"	0.08"	0.02"	9'-3"	12.0	5.9	984
BTB40	40'-0"	41'-4"	4.50	5.00	0.60"	12	—	510	—	0.31"	0.58"	0.15"	0.04"	9'-3"	13.6	6.7	1072
BTB45	45'-0"	46'-4"	4.50	5.00	0.60"	12	—	510	—	0.37"	0.68"	0.22"	0.06"	9'-3"	15.2	7.5	1184
BTB50	50'-0"	51'-4"	4.50	5.00	0.60"	14	—	596	—	0.51"	0.94"	0.34"	0.09"	9'-3"	16.9	8.3	1324
BTB55	55'-0"	56'-4"	4.50	5.00	0.60"	16	—	681	—	0.66"	1.22"	0.49"	0.12"	9'-3"	18.5	9.2	1470
BTB60	60'-0"	61'-4"	4.50	5.00	0.60"	16	2	765	8.6	0.81"	1.51"	0.67"	0.17"	9'-3"	20.2	10.0	1557
BTB65	65'-0"	66'-4"	4.50	5.00	0.60"	18	2	851	8.0	1.05"	1.94"	0.95"	0.24"	9'-3"	21.8	10.8	1719
BTB70	70'-0"	71'-4"	5.00	5.50	0.60"	20	4	1021	14.0	1.35"	2.50"	1.18"	0.30"	9'-3"	23.5	11.6	1771
BTB75	75'-0"	76'-4"	5.50	6.50	0.60"	22	6	1191	20.6	1.67"	2.67"	1.54"	0.38"	9'-3"	25.1	12.4	1863
BTB80	80'-0"	81'-4"	6.00	7.00	0.60"	24	8	1361	20.8	1.97"	3.14"	1.94"	0.49"	9'-3"	26.8	13.2	2002
BTB85	85'-0"	86'-4"	6.50	7.50	0.60"	28	8	1531	19.7	2.76"	4.42"	2.41"	0.60"	9'-3"	28.4	14.0	2100
BTB90	90'-0"	91'-4"	7.50	8.50	0.60"	30	8	1616	18.6	3.07"	4.91"	2.90"	0.73"	9'-3"	30.0	14.8	2187
④ BTB95	95'-0"	96'-4"	8.00	9.50	0.60"	34	10	1871	20.1	3.68"	5.88"	3.47"	0.87"	9'-3"	31.7	15.7	2327

① Deflections at mid-span due to weight of deck and diaphragm. The deflections shown are for a deck (8.5") and haunch (1.5") weight of:
1.04 kips/ft. for 9'-3" beam spacing and one steel diaphragm (0.500 kips) at ℄ of span. For different deck and diapragm weights, deflections will be directly proportional.

② Deflections due to the combined effect of creep due to weight of deck and shrinkage of deck.
Total beam deflections at ℄ of span, Δ_D , due to weight of deck and diaphragms for detailing purpose:
(A) $\Delta_D=\Delta_I+\Delta_T$ for simple span.
(B) $\Delta_D=\Delta_I+\frac{3}{4}\Delta_T$ for end spans of continuous bridge.
(C) $\Delta_D=\Delta_I+\frac{1}{2}\Delta_T$ for interior spans of continuous bridge.

③ Total initial prestress is based on 72.6% f's, f's= 270 ksi. and As= 0.217 $in.^2$.

④ Includes partial length debonded strands, see individual Beam Sheets for location and details.

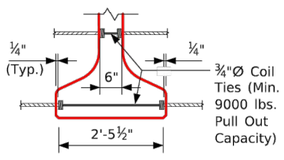
⑤ Calculated design cambers are based on multipliers developed from research in Iowa.

Note: All mild reinforcing steel can be epoxy coated at Contractor's option without modification to bar length or details at no additional cost to the State.

Beam Notes:

These beams are designed for AASHTO live loads as indicated in above table with an allowance of 20 lbs. per square foot of roadway for future wearing surface.
All PPC beams shall use high performance concrete ('HPC') in accordance with the Standard Specifications.
Hold down points for deflected strands may be moved toward ends of beam a distance of 0.05 L maximum at producer's option.
All prestressing strands except lifting loop strands shall be 0.60 in. nominal diameter (nominal steel area = 0.217 $in.^2$) and conform to ASTM A416 Grade 270 Low Relaxation Strands. Minimum strand breaking strength shall be 58.6 kips.
Tops of beams are to be struck off level and finished as per Materials I.M.570.
Bearings shall be as detailed on other design sheets.
Beams to be used in bridges made continuous by the poured in place deck, are to be at least 28 days old before the deck is placed unless a shorter curing time is approved by the Bridge Engineer.
The portions of the prestressed beams that are to be embedded in the abutment and pier diaphragms shall be roughened for a distance of 10" from the beam end by sandblasting or other approved methods to provide suitable bond between the beam and the diaphragm in accordance with Article 2403.03, I, of the Standard Specifications.
All beams are to be increased in length to compensate for elastic shortening, creep and shrinkage.
For transporting, the allowable overhang is shown in the Lifting Loop and Overhang Table.
Holes must be cast in the web to accommodate the steel diaphragm attachments as detailed on the Steel Diaphragm Detail Sheet.
If sole plate is required for bearing, sole plate is to be set in forms when beam is cast and formed out below to exclude concrete as detailed on the Bearing Sheet.
If stub abutments are used, all strands at the ends of beams at stub abutments shall be cut off reasonably flush with the concrete.
Minimum concrete f'c (at 28 days) and minimum f'ci at release are located in the BTB Beam Data Table above.
Four 0.60 in. diameter strands stressed to not more than 5000 lbs. each may be used in lieu of bars 5a1 and 5a2 in the top flange.
When expansion joints are used, concrete sealer shall be applied to the prestressed beam end sections. The sealing shall be in accordance with materials I.M.570 (Fabricator Application) and I.M.491.12 (Contractor Application).

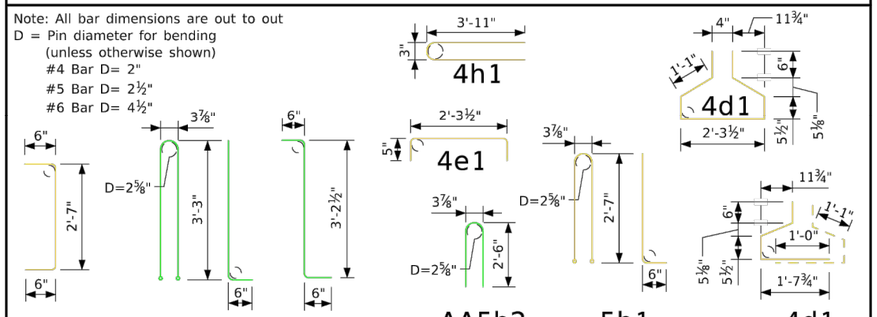
Number and exact location of coil ties to be as detailed on specific bridge design.



Coil Tie Detail

Bent Bar Details

Note: All bar dimensions are out to out
D = Pin diameter for bending (unless otherwise shown)
#4 Bar D= 2"
#5 Bar D= 2½"
#6 Bar D= 4½"



ΔΔ 5b1 and 6b3 bars to be epoxy coated

✱ 6b3 and 6b4 bars to be used in pairs

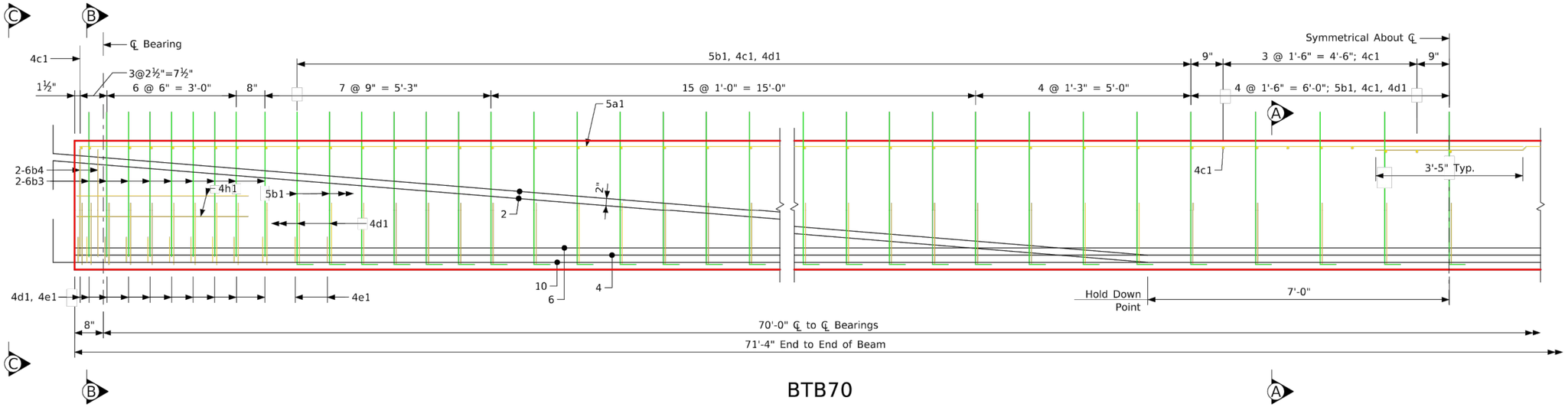
Reinforcing Bar List

	Beam Bar	Beam Shape	BTB30 No.	BTB30 Length	BTB35 No.	BTB35 Length	BTB40 No.	BTB40 Length	BTB45 No.	BTB45 Length	BTB50 No.	BTB50 Length	BTB55 No.	BTB55 Length	BTB60 No.	BTB60 Length	BTB65 No.	BTB65 Length	BTB70 No.	BTB70 Length	BTB75 No.	BTB75 Length	BTB80 No.	BTB80 Length	BTB85 No.	BTB85 Length	BTB90 No.	BTB90 Length	BTB95 No.	BTB95 Length	Beam Bar	
	5a1		6	31'-1"	6	36'-1"	6	41'-1"	12	24'-9"	12	27'-3"	12	29'-9"	12	32'-3"	12	34'-9"	12	37'-3"	12	39'-9"	12	24'-0"	12	26'-6"	12	29'-0"	12	31'-6"	5a1	
	5a2		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6	40'-0"	6	40'-0"	6	40'-0"	6	40'-0"	5a2	
ΔΔ	5b1		17	7'-8"	21	7'-8"	25	7'-8"	29	7'-8"	37	7'-8"	43	7'-8"	47	7'-8"	55	7'-8"	59	7'-8"	63	7'-8"	67	7'-8"	71	7'-8"	75	7'-8"	83	7'-8"	5b1	ΔΔ
ΔΔ✱	6b3		36	4'-3"	36	4'-3"	36	4'-3"	36	4'-3"	36	4'-3"	36	4'-3"	36	4'-3"	40	4'-3"	36	4'-3"	36	4'-3"	32	4'-3"	32	4'-3"	32	4'-3"	32	4'-3"	6b3	ΔΔ✱
✱	6b4		4	3'-7"	4	3'-7"	4	3'-7"	4	3'-7"	4	3'-7"	8	3'-7"	8	3'-7"	8	3'-7"	8	3'-7"	8	3'-7"	16	3'-7"	16	3'-7"	16	3'-7"	16	3'-7"	6b4	✱
	4c1		45	2'-7"	53	2'-7"	57	2'-7"	63	2'-7"	69	2'-7"	73	2'-7"	77	2'-7"	81	2'-7"	87	2'-7"	93	2'-7"	97	2'-7"	107	2'-7"	111	2'-7"	117	2'-7"	4c1	
	4d1		37	6'-5"	41	6'-5"	45	6'-5"	49	6'-5"	57	6'-5"	65	6'-5"	69	6'-5"	77	6'-5"	79	6'-5"	83	6'-5"	89	6'-5"	93	6'-5"	97	6'-5"	105	6'-5"	4d1	
	4e1		24	3'-2"	24	3'-2"	24	3'-2"	24	3'-2"	24	3'-2"	26	3'-2"	26	3'-2"	26	3'-2"	24	3'-2"	24	3'-2"	26	3'-2"	26	3'-2"	26	3'-2"	26	3'-2"	4e1	
	4h1		4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4h1	

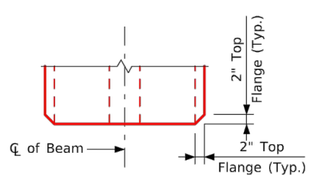
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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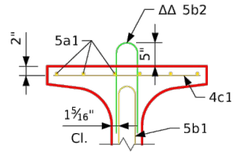


BTB70



Top View

The top flange beam corners are to be chamfered 2" as shown at both ends of the beam.

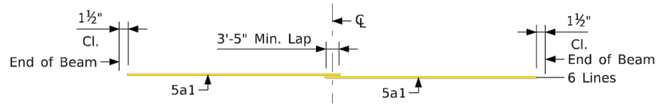


Section A-A
(Alternate)

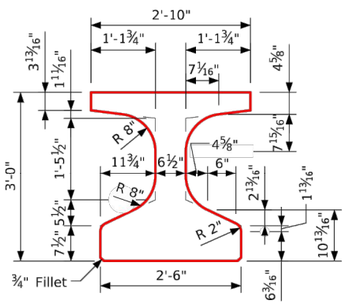
See Alternate Bar Note on Standard Sheet 4750.

Area = 631.7 in.^{2}
$\bar{y}_b$ = 17.14 in.
I = 99,980 in.^{4}

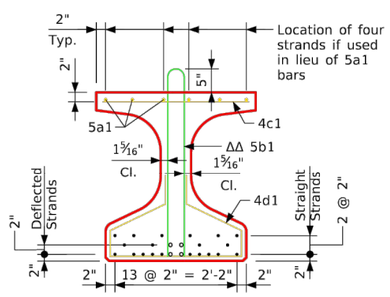
Beam Section Properties



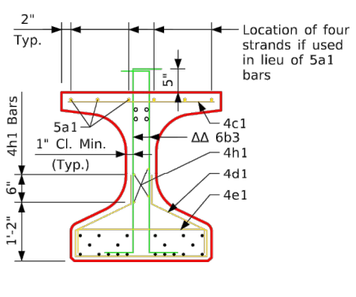
Top Flange Longitudinal Bar Layout



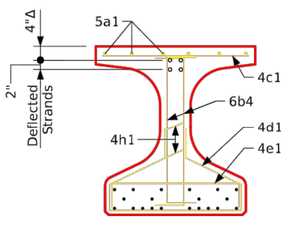
BTB Beam Cross Section



Section A-A



Section B-B



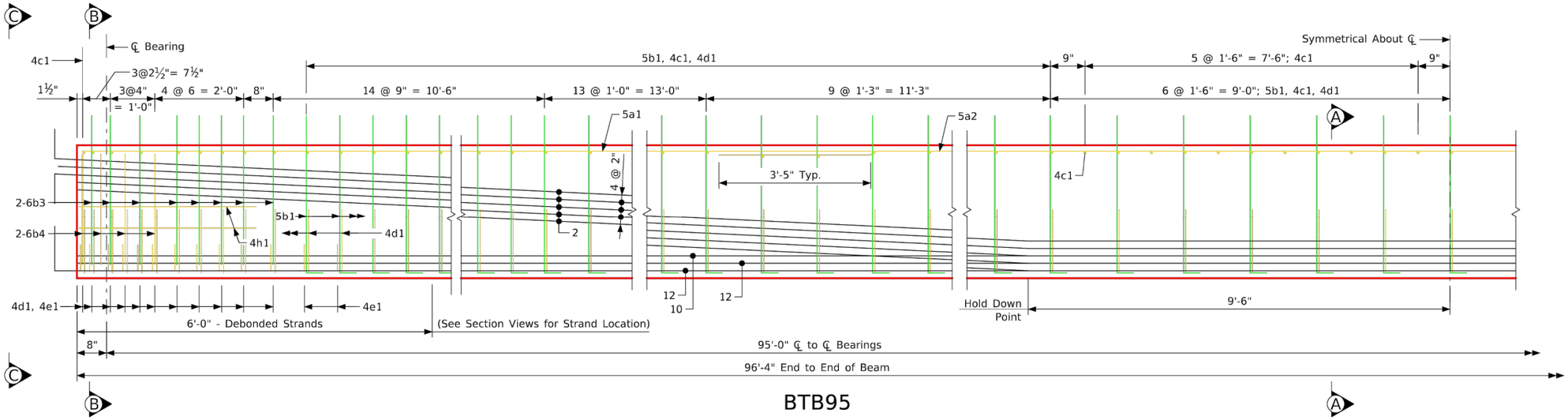
View C-C

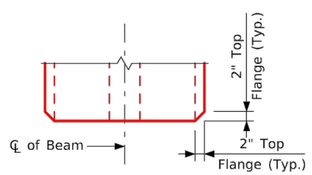
° Deflected Strands
Δ Dimensions at End of Beam
ΔΔ Epoxy Coated Bars

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

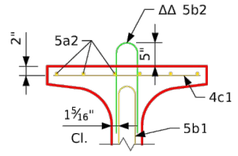
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Top View

The top flange beam corners are to be chamfered 2" as shown at both ends of the beam.

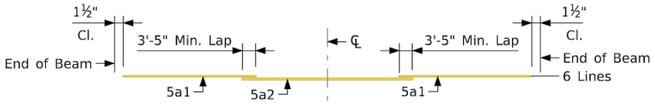


Section A-A
(Alternate)

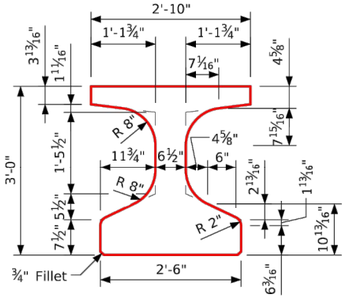
See Alternate Bar Note on Standard Sheet 4750.

Area = 631.7 in.^{2}
$\bar{y}_b$ = 17.14 in.
I = 99,980 in.^{4}

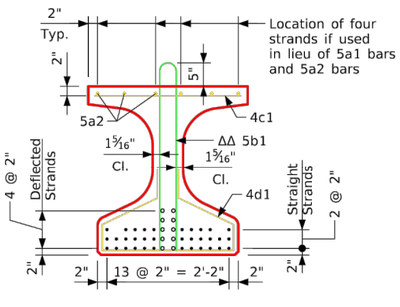
Beam Section Properties



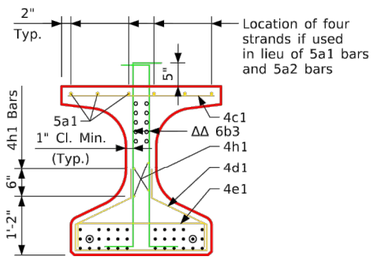
Top Flange Longitudinal Bar Layout



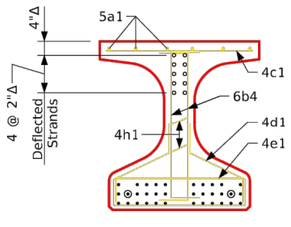
BTB Beam Cross Section



Section A-A



Section B-B



View C-C

° Deflected Strands
Δ Dimensions at End of Beam
ΔΔ Epoxy Coated Bars
⊙ Strands Debonded 6'-0" from Beam Ends

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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BULB TEE "B" BEAM INTERMEDIATE DIAPHRAGM STRUCTURAL STEEL

ONE BEAM CONNECTION (DETAIL "F" AND/OR DETAIL "G")		NO. OF BEAM CONNECTIONS	WEIGHT
4 – ⅞"ø x 9¼ H.S. BOLTS WITH NUTS & WASHERS = 9.6 LBS.		15	144
ONE DETAIL "G"	4 – BENT PL 9 x 6 x ½ x 0'–11 = 93.6 LBS.	9	842.4
ONE DETAIL "F"	1 – BACKING PL 5 x ⅜ x 1'–1⅜ = 7.1 LBS.	6	42.6
	2 – BENT PL 9 x 6 x ½ x 0'–11 = 46.8 LBS.	6	280.8
ONE DIAPHRAGM		NUMBER OF DIAPHRAGMS	
6 – ⅞"ø x 3" H.S.BOLTS WITH NUTS & WASHERS = 7.8 LBS		12	93.6
	LENGTH OF MEMBER		
1 – C15 x 33.9 = 33.9 LBS./FT.	8'–0¾	12	3279.8
INTERMEDIATE DIAPHRAGM STRUCTURAL STEEL – TOTAL (LBS.)			4683.2

NOTES:

ALL DIAPHRAGM MATERIALS, INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.

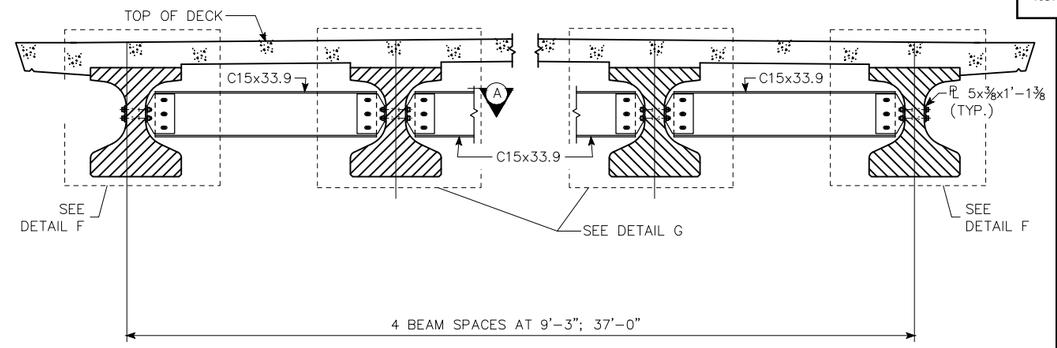
SHOP DRAWINGS OF THE STEEL DIAPHRAGMS SHOWING LAYOUT AND DETAILS OF THE DIAPHRAGMS SHALL BE SUBMITTED FOR APPROVAL.

ALL COSTS FOR FURNISHING AND INSTALLING STEEL INTERMEDIATE DIAPHRAGMS SHALL BE INCLUDED IN THE PRICE BID FOR STRUCTURAL STEEL.

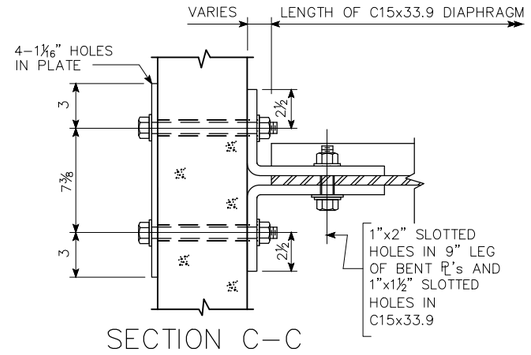
THE 1½"ø HOLES FOR THE ⅞"ø H.S. BOLTS SHALL BE CAST INTO THE WEB. DRILLING IS NOT ALLOWED.

THE ⅞"ø H.S. BOLTS THROUGH THE WEB SHALL HAVE A THREAD LENGTH OF 3" MIN. AND 4" MAX. AND SHALL MEET THE REQUIREMENTS OF ASTM A449.

ALL BOLTS ARE TO BE TIGHTENED PRIOR TO PLACING BRIDGE FLOOR CONCRETE WITH THE FOLLOWING EXCEPTION: BOLTS IN DIAPHRAGMS LOCATED UNDER LONGITUDINAL BRIDGE FLOOR CONSTRUCTION JOINTS SHALL NOT BE TIGHTENED UNTIL STAGE TWO OF THE BRIDGE FLOOR HAS BEEN PLACED.



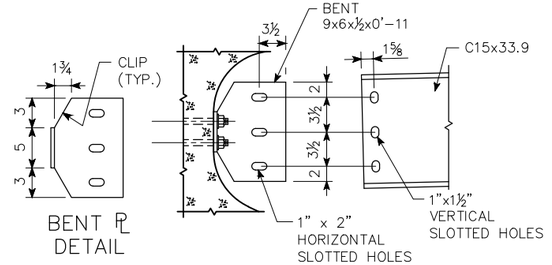
SECTION SHOWING INTERMEDIATE DIAPHRAGMS



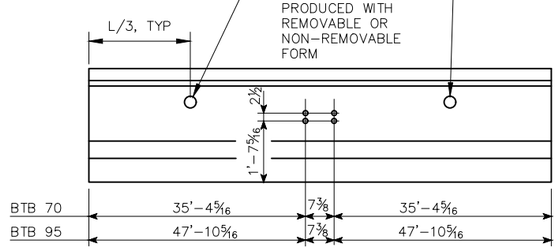
SECTION C–C

STRUCTURAL STEEL	
WEIGHT	4683.2 LBS.

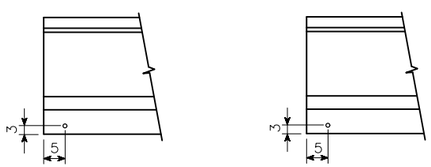
NOTE: STRUCTURAL STEEL WEIGHT IS INCLUDED ON THE SUMMARY QUANTITIES SHEET.



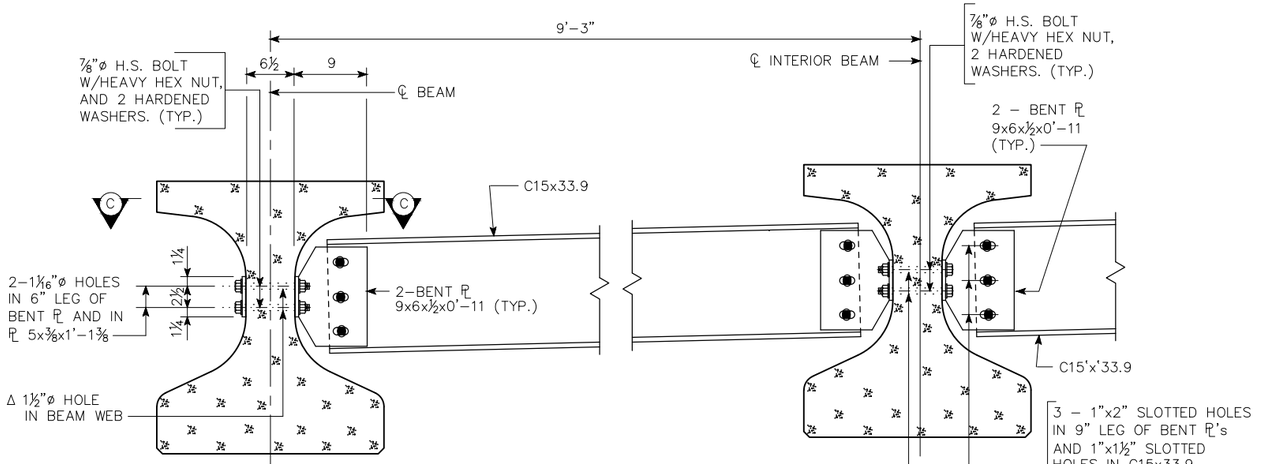
SLOTTED HOLE DETAILS



INTERMEDIATE DIAPHRAGM BOLT HOLE AND BEAM VENT LOCATIONS



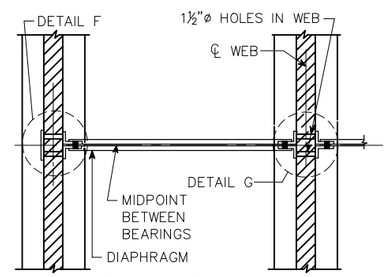
BEAM COIL TIE LOCATIONS



DETAIL F

Δ BOLT HOLES SHALL BE SPACED SO AS TO MISS PRESTRESSED STRANDS IN CONCRETE BEAMS.

DETAIL G



PART SECTION A–A

SECTION SHOWING INTERMEDIATE DIAPHRAGMS AT EXTERIOR BAY

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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BARRIER RAIL NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

THE PERMISSIBLE CONSTRUCTION JOINTS ARE TO BE PLACED BETWEEN VERTICAL BARS AT A MINIMUM SPACING OF 20 FEET. CONSTRUCTION JOINT CONTACT SURFACES ARE TO BE COATED WITH AN APPROVED BOND BREAKER.

COST OF THE JOINT SEALER AND BOND BREAKER SHALL BE CONSIDERED INCIDENTAL TO OTHER CONSTRUCTION.

ALL BARRIER RAIL REINFORCING STEEL IS TO BE EPOXY COATED AS SHOWN.

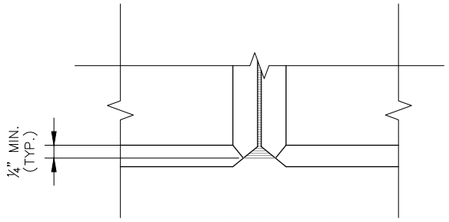
THE CONCRETE BARRIER RAIL IS TO BE BID ON A LINEAL FOOT BASIS. THE NUMBER OF LINEAR FEET OF BARRIER RAIL INSTALLED WILL BE PAID FOR AT THE CONTRACT PRICE PER LINEAL FOOT BASED ON PLAN QUANTITIES. PRICE BID FOR CONCRETE BARRIER RAILING SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIAL, EXCLUDING REINFORCING STEEL, AND ALL OF THE EQUIPMENT AND LABOR REQUIRED TO ERECT THE RAIL IN ACCORDANCE WITH THESE PLANS AND CURRENT SPECIFICATIONS. IF CONDUIT IS REQUIRED IN THIS PLAN THE RIGID STEEL CONDUIT, JUNCTION BOXES AND FITTINGS INCLUDING LABOR AND ANY ADDITIONAL WORK TO DO THE INSTALLATION IS CONSIDERED INCIDENTAL TO THE COST OF THE RAILING.

THE JOINT SEALER SHALL BE LIGHT GRAY NONSAG LATEX CAULKING SEALER MARKETED FOR OUTDOOR USE. NO TESTING OR CERTIFICATION IS REQUIRED.

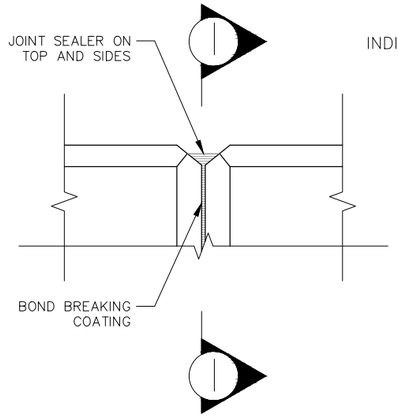
TOP OF THE BARRIER RAIL IS TO BE PARALLEL TO THE THEORETICAL ℄ GRADE.

ALL EXPOSED CORNERS ON THE TOP OF THE BARRIER AND ALL OTHER CORNERS 90° OR SHARPER TO BE FILLETED WITH A ¾" DRESSED AND BEVELED STRIP.

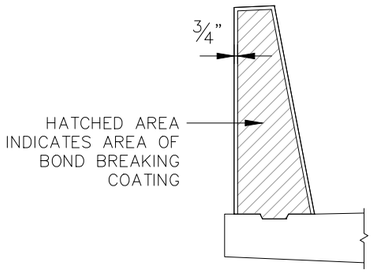
CROSS SECTIONAL AREA OF THE STANDARD AND SPECIAL SECTIONS OF THE BARRIER RAIL = 3.50 SQUARE FEET, EXCEPT THE 2'–10" SLOPED ENDS AT THE END SECTIONS.



PART PLAN VIEW



PART ELEVATION VIEW



SECTION I–I

REINFORCING BAR LIST - TWO BARRIER RAILS

	BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGH
					ft '- in.	
STANDARD SECTION	5 c1	VERTICAL		476	6 '- 8	3310
	5 c2	VERTICAL AT ENDS		4	6 '- 6	27
	5 c3	VERTICAL AT ENDS		4	6 '- 4	26
	5 c4	VERTICAL, LOWER		484	7 '- 3	3660
	5 d1	LONGITUDINAL		126	35 '- 6	4665
	5 d2	LONGITUDINAL AT ENDS		4	10 '- 0	42
	5 d3	LONGITUDINAL AT ENDS		32	10 '- 0	334
				TOTAL EPOXY REINFORCING (LBS.)		12064

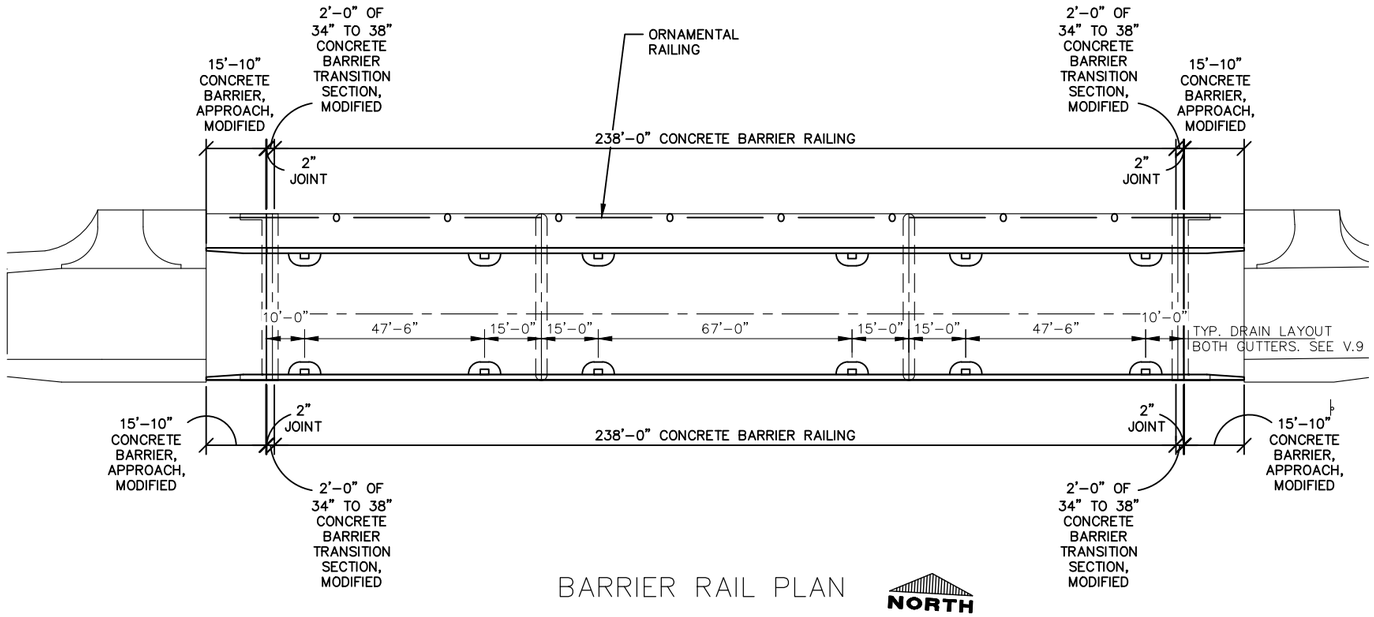
CONCRETE PLACEMENT SUMMARY

SECTION	TOTAL
STANDARD SECTION 238–0" AT 0.130 CY PER FOOT x 2 SIDES	61.9
34" TO 38" CONCRETE BARRIER TRANSITION SECTION, MODIFIED 8–0" AT 0.129 CY PER FOOT	1.0
TOTAL (CY)	62.9

CONCRETE BARRIER RAIL QTYS

ITEM	UNIT	TOTAL
STANDARD CONCRETE BARRIER RAILING	L.F.	476
34" TO 38" CONCRETE BARRIER TRANSITION SECTION, MODIFIED	EACH	4

BARRIER RAIL JOINT DETAILS



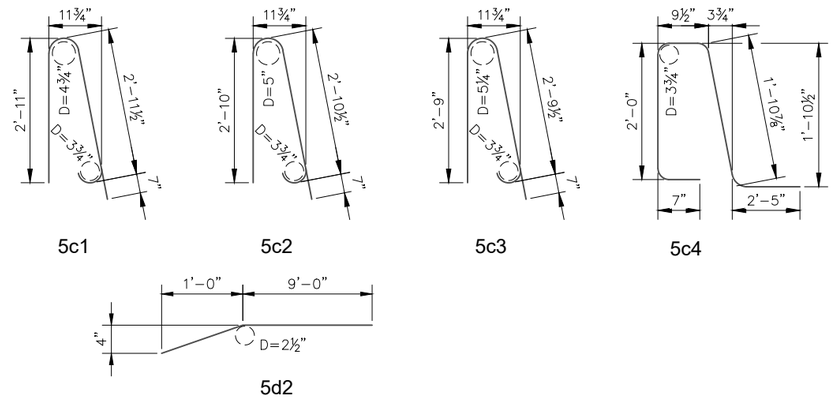
BARRIER RAIL PLAN

NORTH

HORIZONTAL SCALE IN FEET
0 20 40

DRAWING MAY HAVE BEEN REDUCED

BENT BAR DETAILS



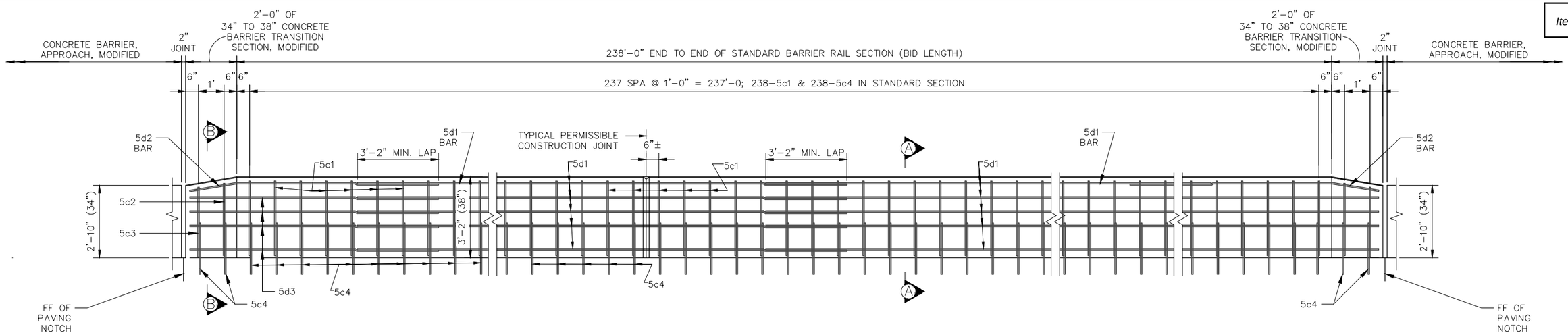
NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER

NOTE: REINFORCING STEEL QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.

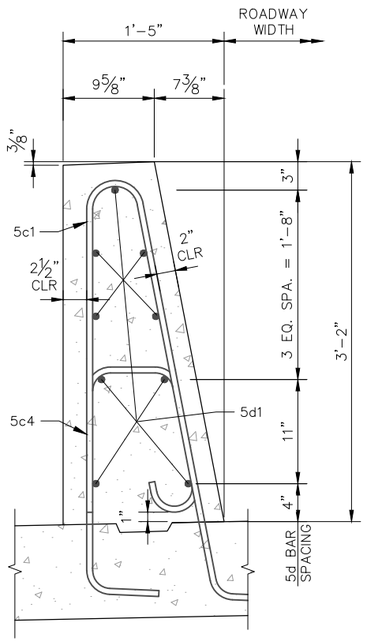
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

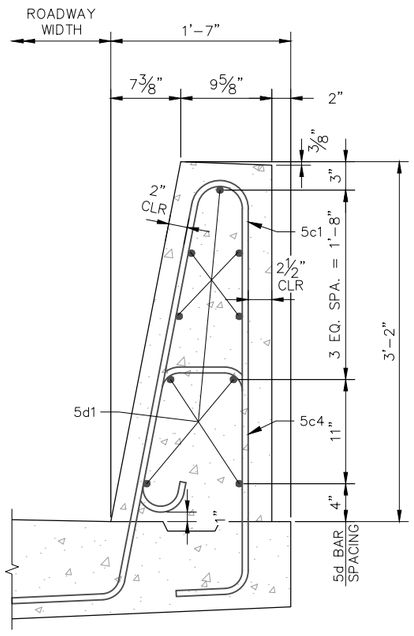
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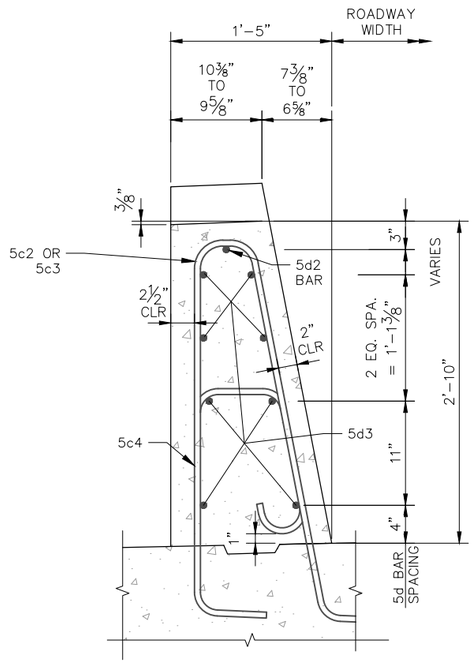
TYPICAL ELEVATION OF BARRIER RAIL



Part Section A-A
(NORTH)



Part Section A-A
(SOUTH)

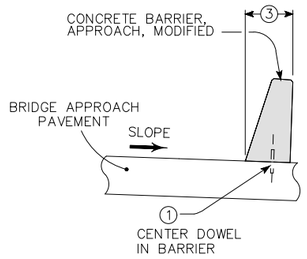


PART SECTION B-B
(NORTH)
(SIM SOUTH)

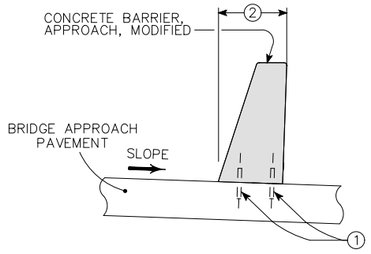
Design For
239' x 32' 0" SKEW PPCB BRIDGE
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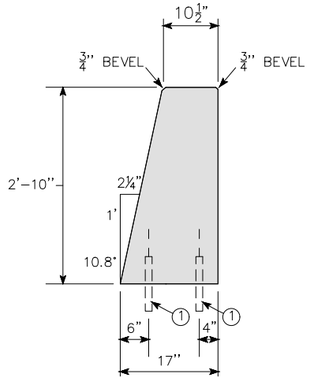
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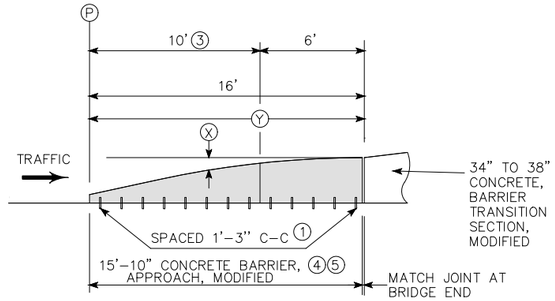
SECTION A-A



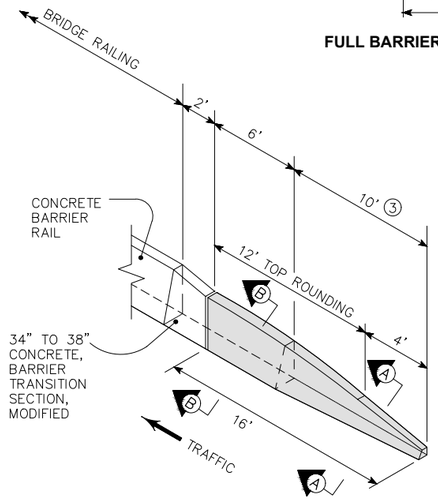
SECTION B-B



FULL BARRIER RAIL SECTION



ELEVATION



ISOMETRIC VIEW

OFFSETS FOR ROUNDED BARRIER TOP																	
Y = DISTANCE FROM Ⓟ	ft.	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0
X = OFFSET TO ROUNDED TOP	ft.	2.13	1.91	1.70	1.48	1.26	1.06	0.87	0.70	0.54	0.42	0.30	0.20	0.12	0.06	0.02	0.00

① #8 X 8 INCH DEFORMED BARS OR 1 INCH DIAMETER SMOOTH.

② BOTTOM WIDTH OF BARRIER IS MAINTAINED AT 17 INCHES.

③ BOTTOM WIDTH OF BARRIER TRANSITIONS FROM 8 TO 17 INCHES.

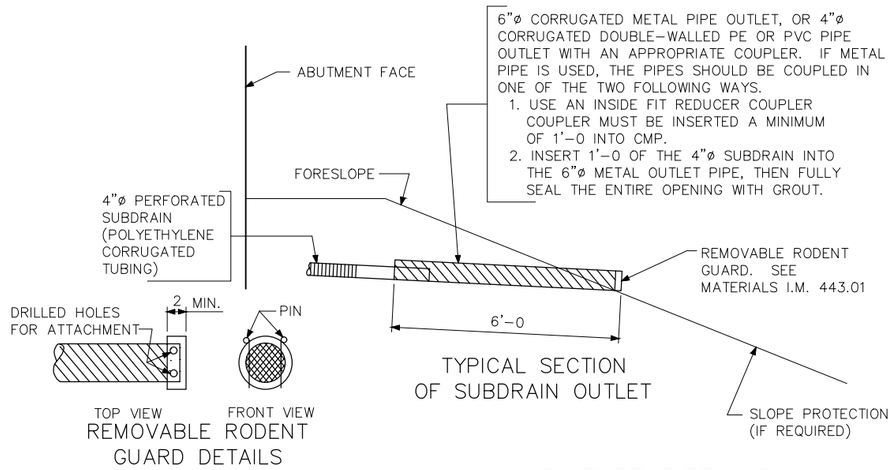
④ PLACE NO DELINEATOR OR OBJECT MARKER IN FRONT OF, OR ON, THE BARRIER.

⑤ APPROXIMATELY 1.3 CUBIC YARDS OF CONCRETE ARE REQUIRED TO CONSTRUCT BARRIER AS SHOWN. AMOUNT MAY VARY DEPENDING ON INDIVIDUAL SITE REQUIREMENTS.

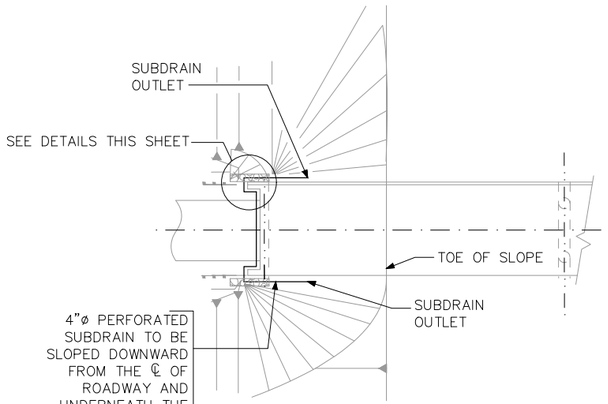
Design For
239' x 32' 0" SKEW PPCB BRIDGE
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71'–0" END SPANS 97'–0" CENTER SPAN

P:\23\036\DRAWINGS\CIVIL\23036 ZZ V SHEETS_5.DWG 12/12/2024 3:59:15 PM JOE RETTENBERGER



OUTLET DETAILS



SITUATION PLAN

REFER TO SITUATION PLAN FOR NORTH ARROW.

SUBDRAIN NOTES:

SEE THIS SHEET FOR DETAILS OF PLACING ALL SUBDRAINS AND SUBDRAIN OUTLETS REQUIRED FOR THIS STRUCTURE.

THE BRIDGE CONTRACTOR IS TO INSTALL SUBDRAINS BEHIND THE ABUTMENT. THE SUBDRAINS SHALL BE 4" IN DIAMETER AND BE IN ACCORDANCE WITH ARTICLE 4143.01, B, OF THE STANDARD SPECIFICATIONS. THE SUBDRAIN OUTLET SHALL CONSIST OF A 6'-0 LENGTH OF PIPE WITH A REMOVABLE RODENT GUARD.

THE DIMENSIONS SHOWN FOR THE PROPOSED SUBDRAINS ARE BASED ON THE PROPOSED GRADING LAYOUT OF BRIDGE BERMS. THE DIMENSIONS SHOWN ARE FOR ESTIMATING ONLY. REQUIRED LENGTHS AND GENERAL LOCATIONS OF SUBDRAINS ARE SUBJECT TO CHANGE DUE TO FIELD ADJUSTMENTS OF THE GRADING LAYOUT.

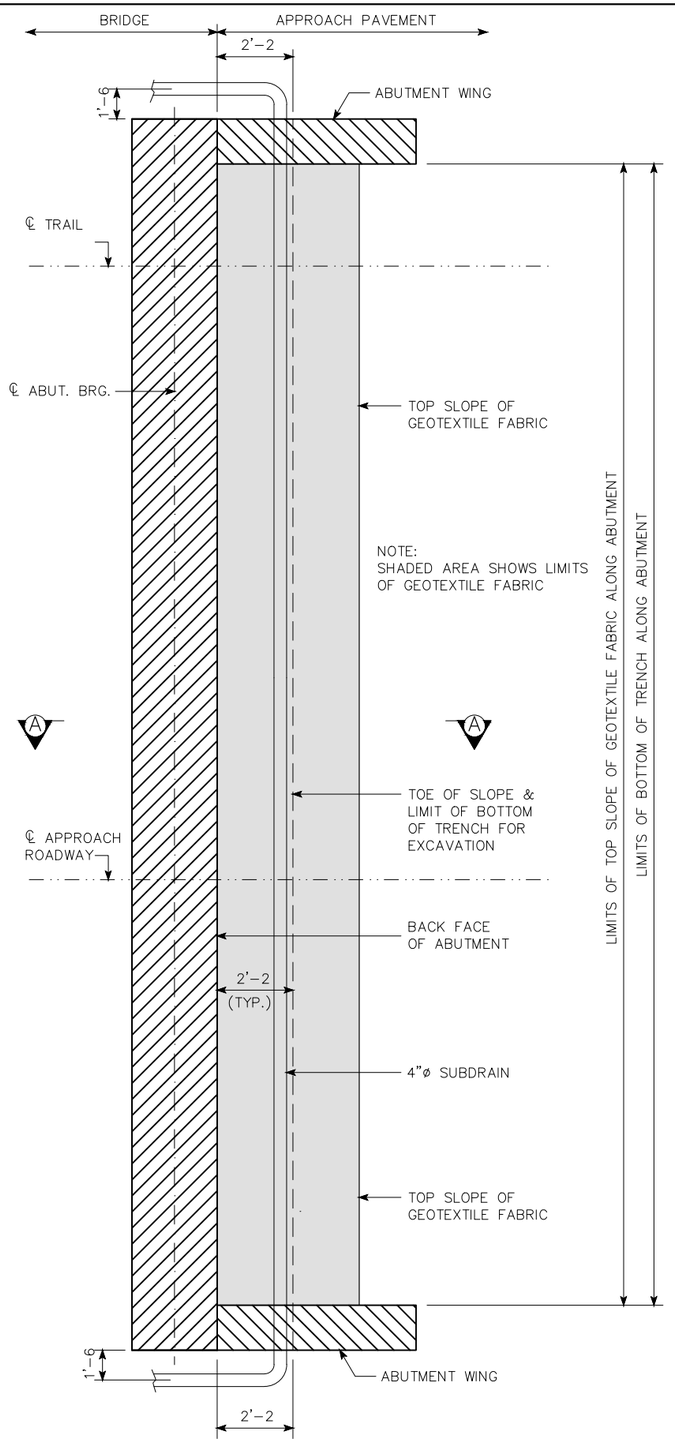
THE COST OF FURNISHING AND PLACING SUBDRAIN (INCLUDING EXCAVATION), GRANULAR BACKFILL, POROUS BACKFILL, AND SUBDRAIN OUTLET IS TO BE INCLUDED IN THE PRICE BID FOR "STRUCTURAL CONCRETE (BRIDGE)". NO EXTRA PAYMENT WILL BE MADE.

NOTE:
SEE ABUTMENT BACKFILL DETAILS SHEET FOR DETAILS NOT SHOWN ON THIS SHEET WHICH ARE PERTINENT TO THIS STRUCTURE.

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'-0" END SPANS 97'-0" CENTER SPAN

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ABUTMENT PLAN WITHOUT WING EXTENSIONS

ABUTMENT BACKFILL PROCESS:

THE BASE OF THE EXCAVATION SUBGRADE BEHIND THE ABUTMENT IS TO BE GRADED WITH A 4% SLOPE AWAY FROM THE ABUTMENT FOOTING AND A 2% CROSS SLOPE IN THE DIRECTION OF THE SUBDRAIN OUTLET. THIS EXCAVATION SHAPING IS TO BE DONE PRIOR TO BEGINNING INSTALLATION OF THE GEOTEXTILE AND BACKFILL MATERIAL.

AFTER THE SUBGRADE HAS BEEN SHAPED, THE GEOTEXTILE FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN. THE FABRIC IS INTENDED TO BE INSTALLED IN THE BASE OF THE EXCAVATION AND EXTENDED VERTICALLY UP THE ABUTMENT BACKWALL, ABUTMENT WING WALLS, AND EXCAVATION FACE TO A HEIGHT THAT WILL BE APPROXIMATELY 1 TO 2 FOOT HIGHER THAN THE HEIGHT OF THE POROUS BACKFILL PLACEMENT AS SHOWN IN THE "BACKFILL DETAILS" ON THIS SHEET. THE STRIPS OF THE FABRIC PLACED SHALL OVERLAP APPROXIMATELY 1 FOOT AND SHALL BE PINNED IN PLACE. THE FABRIC SHALL BE ATTACHED TO THE ABUTMENT BY USING LATH FOLDED IN THE FABRIC AND SECURED TO THE CONCRETE WITH SHALLOW CONCRETE NAILS. THE FABRIC PLACED AGAINST THE EXCAVATION FACE SHALL BE PINNED.

WHEN THE FABRIC IS IN PLACE, THE SUBDRAIN SHALL BE INSTALLED DIRECTLY ON THE FABRIC AT THE TOE OF THE REAR EXCAVATION SLOPE. A SLOT WILL NEED TO BE CUT IN THE FABRIC AT THE POINT WHERE THE SUBDRAIN EXITS THE FABRIC NEAR THE END OF THE ABUTMENT WING WALL.

POROUS BACKFILL IS THEN PLACED AND LEVELED, NO COMPACTION IS REQUIRED.

THE REMAINING WORK INVOLVES BACKFILLING WITH FLOODABLE BACKFILL, SURFACE FLOODING, AND VIBRATORY COMPACTION. THE FLOODABLE BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE FLOODABLE BACKFILL SHALL BE PLACED IN INDIVIDUAL LIFTS, SURFACE FLOODED, AND COMPACTED WITH VIBRATORY COMPACTION TO ENSURE FULL CONSOLIDATION. LIMIT THE LOOSE LIFTS TO NO MORE THAN 2 FEET OF THICKNESS.

START SURFACE FLOODING FOR EACH FLOODABLE BACKFILL LIFT AT THE HIGH POINT OF THE SUBDRAIN AND PROGRESS TO THE LOW POINT WHERE THE SUBDRAIN EXITS THE FABRIC. TO ENSURE UNIFORM SURFACE FLOODING, WATER RUNNING FULL IN A 2-INCH DIAMETER HOSE SHOULD BE SPRAYED IN SUCCESSIVE 6-FOOT TO 8-FOOT INCREMENTS FOR 5 MINUTES WITHIN EACH INCREMENT.

FLOODABLE BACKFILL LIFT PLACEMENT, FLOODING, AND COMPACTION SHALL PROGRESS UNTIL THE REQUIRED FULL THICKNESS OF THE ABUTMENT BACKFILL HAS BEEN COMPLETED.

WATER REQUIRED FOR FLOODING, SUBDRAINS, POROUS BACKFILL, FLOODABLE BACKFILL, AND GEOTEXTILE FABRIC FURNISHED AT THE BRIDGE ABUTMENTS WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

THE COST OF WATER REQUIRED FOR FLOODING, SUBDRAINS, POROUS BACKFILL, FLOODABLE BACKFILL, AND GEOTEXTILE FABRIC FURNISHED AT THE BRIDGE ABUTMENTS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR STRUCTURAL CONCRETE.

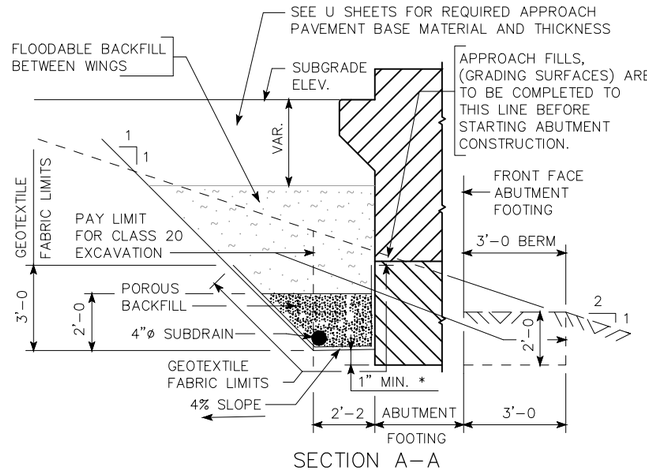
NOTE:
SEE SUBDRAIN DETAILS SHEET FOR DETAILS NOT SHOWN ON THIS SHEET WHICH ARE PERTINENT TO THIS STRUCTURE.

NOTE:

SUBDRAIN SHALL SLOPE DOWNWARD 2% FROM ℄ APPROACH ROADWAY WHEN OUTLETTING BOTH SIDES OF THE ABUTMENT.

SUBDRAIN SHALL SLOPE DOWNWARD 2% FROM HIGH END WHEN OUTLETTING AT ONE END OF THE ABUTMENT.

THE GEOTEXTILE FABRIC SHALL BE IN ACCORDANCE WITH ARTICLE 4196.01, B, 6 OF THE STANDARD SPECIFICATIONS. IF THE ENGINEERING FABRIC IS LAPPED THE LAPS SHALL BE A MINIMUM OF ONE FOOT IN LENGTH, SHINGLE FASHION WITH UP SLOPE LAP PIECE ON TOP AND STAPLED FOR CONTINUITY.



SECTION A-A

BACKFILL DETAILS

NOTE: GEOTEXTILE FABRIC WILL BE ATTACHED TO FACE OF ABUTMENT FOOTING AND WINGS.

*DIMENSION VARIES DUE TO 2% SUBDRAIN SLOPE.

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'-0" END SPANS 97'-0" CENTER SPAN

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Public Hearing Notice

The Council of the City of Oelwein will hold a Public Hearing on Monday, September 8, 2025, at 6:00 P.M. at Oelwein City Hall, 20 2nd Avenue SW, Oelwein, Iowa regarding a lease with Alltel Corporation d/b/a Verizon Wireless for land at 230 4th Street SW (Parcel No. 1821376002) for construction of a cell phone tower. Any person may appear at the Public Hearing to comment on the proposed plans and/or may submit written comments in advance of the Public Hearing by delivery to the City Clerk's Office, at Oelwein City Hall, 20 2nd Ave. SW, Oelwein, IA during regular business hours, by mailing to the City of Oelwein at the same address, or by email to the City Clerk's Office at dmulfinger@cityofoelwein.org, on or before the date and time of the Public Hearing.

Console

City Councel
Oelwein, Iowa
20 2nd Ave S.W.
Oelwein, Ia. 50662

AVERLY
LISHING COMPANY
INDUSTRIAL STREET, P.O. BOX 847, WAVERLY, IOWA 50677

re: proposed Cell Tower near 230 4th St. S.W.
Oelwein Iowa 50662.

Dear Oelwein City Council,

I am writting to express my Concerns regarding the proposed Cell Tower installation in our neighborhood. While I understand the importance of ensuring robust connectivity, I am deeply concerned about the health and environmental effects, and the reduction of property values associated with this project.

There is growing public Concern about the health effects associated with prolonged exposure to radiofrequency (RF) radiation emmited by cell towers. Research suggests a possible link between RF radiation and adverse health effects, including headaches, sleep disturbances, and increased risk of certain cancers.

The construction and operation of cell towers can also have significant environmental consequences. These include habitat disruption, threatens local wildlife, aesthetic degradation of our natural landscape and fire hazard due to lightening strikes and other Concerns. The proposed site is home to 2 historic Cemetaries and our new beautiful nature trail.

I propose we continue with our beautification of said proposed site of Historic landmarks and Nature trail. No Cell Tower here. Thank you.

Sincerely, Jon Latham
230 4th St. S.W.
Oelwein, Iowa 50662

319-238-0455
319-283-5209

319-352-4138

Linda Payne

September 7

Item 4.

AVERLY
LISHING COMPANY

INDUSTRIAL STREET, P.O. BOX 847, WAVERLY, IOWA 50677

R.E. Proposed Verizon Cell Tower near
230 4th St. S.W. Oelwein, Iowa 50662

Dear Oelwein Council Members,

Please consider continuing on with the Nature Trail and Historic landmarks of the cemeteries on and along 4th St. S.W. Oelwein, Iowa.

The cell Tower will disrupt the environment we are creating in this beautiful nature setting.

With the railroad already having one tower there, the environmental impact is minimal at this point, according to the wildlife of many birds and butterflies and other wildlife along that area.

Surely you must have heard and cannot ignore the dangers of cell towers in a neighborhood. Lightening strikes fires, rumors and studies of headaches, sleeplessness, cancers, nervousness and more.

Also it cannot be ignored there is concern of property value decline. So you see, where the city might gain $10,000 a year, your citizens will lose much more than the City will gain.

Thank you for your attention to this matter

Jon Latham

Jon Latham 319-238-0455
230 4th ST SW 319 283 5209
Oelwein

SCOPE OF WORK

PROJECT DESCRIPTION
PROJECT TYPE: 159' MONOPOLE
EQUIPMENT: 4'-0" x 8'-0" CONC. EQUIP. PAD WITH CABINETS
GENERATOR: EXTERIOR DIESEL GENERATOR

RF DESCRIPTION (VERIFY WITH RFDS)
PRO. ANTENNA C/L: 150' ABOVE GRADE
ANTENNAS: (3) PRO. PANEL ANTENNA(S)
(3) PRO. AIR3283 ANTENNA/RADIO(S)
(3) PRO. AIR6419 ANTENNA/RADIO(S)

CABLES: (2) PRO. HYBRID LINE(S)
EQUIPMENT: (1) PRO. SURGE PROTECTOR
(3) PRO. REMOTE RADIO UNIT(S)

STRUCTURAL

TOWER ANALYSIS: N/A

MOUNT ANALYSIS: N/A

CONTRACTOR TO REVIEW STRUCTURAL REPORT IN ITS ENTIRETY. ANY DISCREPANCIES OR DISAGREEMENTS BETWEEN THE REPORT AND THESE PLANS SHOULD BE RESOLVED PRIOR TO CONSTRUCTION.

IA12 DT OELWEIN
OELWEIN, IOWA
RAWLAND CONSTRUCTION DRAWINGS
159' MONOPOLE

ENGINEER SEAL:

- PRELIMINARY - NOT FOR CONSTRUCTION

I HEARBY CERIFY 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.

(SIGNATURE) (DATE)

PRINTED OR TYPED NAME:

LICENSE NUMBER:

MY LICENSE RENEWAL DATE IS DECEMBER 31,

PAGES OR SHEETS COVERED BY THIS SEAL:
G-001, G-002, G003, C-101, C-102, C-501, C-502, A-101, A-102, A-201, T-001, T-002, T-003, T-201, T-301, T-501, V-501, E-001, E-002, E-003, E-004, E-101, E-102, E-501, E-502, E-503, E-504, E-505, E-506

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:

- PRELIMINARY - NOT FOR CONSTRUCTION

I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

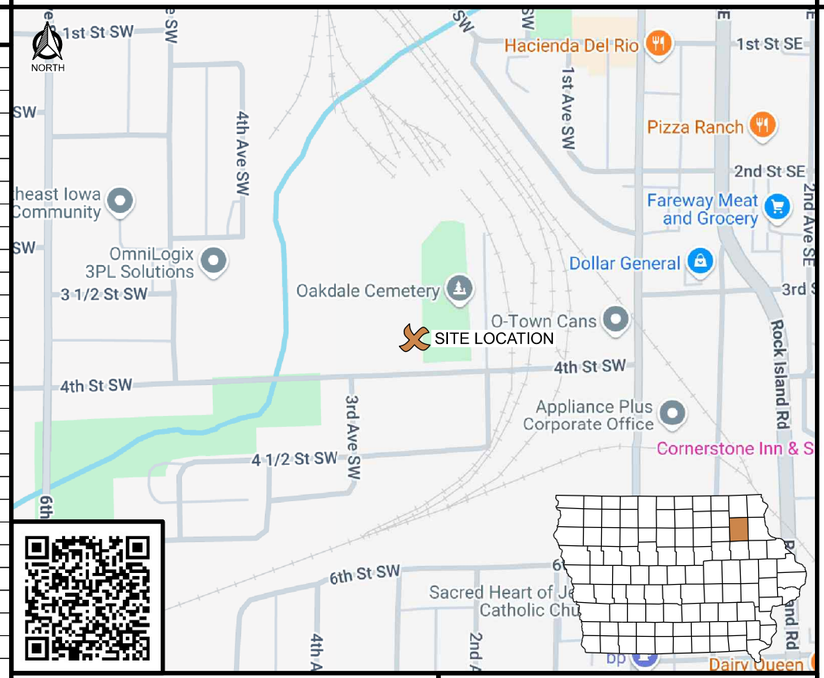
SHEET INDEX

NO.:	SHEET TITLE	REV.
G-001	TITLE SHEET	B
G-002	GENERAL SPECIFICATIONS	A
G-003	GENERAL SPECIFICATIONS	A
-	SURVEY *	A
C-101	SITE PLAN	A
C-102	ENLARGED SITE PLAN	A
C-501	ICE BRIDGE AND GPS DETAILS	A
C-502	FENCE DETAILS	A
A-101	EQUIPMENT PAD LAYOUT	A
A-102	EQUIPMENT PAD DETAILS	A
A-201	EQUIPMENT PAD ELEVATIONS	A
T-001	ANTENNA SPECIFICATIONS	A
T-002	EQUIPMENT SPECIFICATIONS	A
T-003	MOUNTING SPECIFICATIONS	A
T-201	TOWER ELEVATION	B
T-301	ANTENNA CONFIGURATION	A
T-501	ANTENNA AND EQUIPMENT SUMMARY	B
V-501	CABLE ROUTING	B
E-001	GENERATOR SPECIFICATIONS	A
E-002	GENERATOR SPECIFICATIONS	A
E-003	GENERATOR CANOPY DETAILS	A
E-004	LP TANK DETAILS	A
E-101	GROUNDING PLAN	A
E-102	UTILITY PLAN	A
E-501	GROUNDING DETAILS	A
E-502	GROUNDING DETAILS	A
E-503	GROUNDING DETAILS	A
E-504	UTILITY DETAILS	A
E-505	ELECTRICAL DETAILS	A
E-506	UTILITY RACK DETAILS	

* COMPLETED BY OTHERS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS/CONDITIONS ON SITE, IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK OR BE RESPONSIBLE FOR THE SAME.

SITE LOCATION MAP



UTILITY INFORMATION

ELECTRIC SERVICE PROVIDER
ALLIANT ENERGY
505 10TH STREET SE
OELWEIN, IA 50662
CONTACT: TBD
PHONE: 319.283.9023
WORK ORDER #:

FIBER SERVICE PROVIDER
TBD
CONTACT:
PHONE:
WORK ORDER #:

NATURAL GAS PROVIDER
N/A

ONE CALL SYSTEMS INTERNATIONAL

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN IOWA, CALL DIGGER'S HOTLINE

TOLL FREE: 1-800-292-8989
FAX A LOCATE: 1-319-322-2400

IOWA STATUTE 480.4 (1993) REQUIRES MIN. OF 2 WORK DAYS NOTICE BEFORE YOU EXCAVATE

DIRECTORY

CLIENT:
VERIZON WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438

ENGINEERING COMPANY:
EDGE CONSULTING ENGINEERS, INC.
624 WATER STREET
PRAIRIE DU SAC, WI 53578
PROJECT MANAGER: PETER ROTHMEIER, P.E.
PHONE: 608.644.1449
FAX: 608.644.1549

SITE ACQUISITION:
NEVCO WIRELESS
CONTACT: JEFFREY SKINNER
PHONE: 515.299.0736

SURVEYOR:
WIDSETH
610 FILMORE STREET
ALEXANDRIA MN, 56308
PHONE: 320.762.8149

PROJECT INFO

SITE LOCATION:
222 S FREDERICK AVE
OELWEIN, IA 50662

PSLC #: 620320

FCC #: TBD

TOWER OWNER:
VERIZON WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438

PROPERTY OWNER:
CITY OF OELWEIN
CITY HALL 20 2ND AVE. SW
OELWEIN, IA 50662

SITE COORDINATES (PER 1-A CERTIFICATE):
AT TOWER BASE (CENTER OF LEASE PARCEL)
LAT: 42°-40'-24.16" N
LONG: 91°-55'-01.97" W
GROUND ELEVATION (NAVD 88): 1029.2'

PLSS INFORMATION:
PART OF SE1/4 OF THE SW1/4,
SECTION 21, T.91N., R.9W.,
CITY OF OELWEIN,
FAYETTE COUNTY
IOWA

TAX KEY NUMBER:
1821376002

TITLE SHEET
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	G-00

L:\44500\44517\Design\CAD\CD\Plot\G-001.dgn

© EDGE CONSULTING ENGINEERS, INC

GENERAL

THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS ARE INTERRELATED WHEN PERFORMING THE WORK. EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

DIVISION 1: GENERAL REQUIREMENTS

SECTION 01700 - PROJECT CLOSEOUT

PART 1 - GENERAL

1. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES. INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES, AND SIMILAR RELEASES.

2. SUBMIT RECORD DRAWINGS, DAMAGE, OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.

3. COMPLETE FINAL CLEAN-UP REQUIREMENTS, INCLUDING TOUCH-UP PAINTING. TOUCH-UP AND OTHERWISE REPAIR AND RESTORED MARRED EXPOSED FINISHES.

PART 2 - FINAL CLEANING/PROJECT CLOSEOUT

1. COMPLETE THE FOLLOWING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATE OF COMPLETION:

   A. CLEAN THE PROJECT SITE, YARD AND GROUNDS IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT, AREAS OF RUBBISH, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES. SWEEP PAVED AREAS BROOM CLEAN. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED TO A SMOOTH, EVEN-TEXTURED SURFACE.

   B. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY, AND SURPLUS MATERIAL FROM THE SITE.

   C. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT BUILDING.

   D. CLEAN EXPOSED EXTERIOR AND INTERIOR HARD-SURFACED FINISHES TO A DIRT-FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES. AVOID DISTURBING NATURAL WEATHERING OF EXTERIOR SURFACES.

   E. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING ROOFS, EQUIPMENT BUILDING, MANHOLES AND SIMILAR SPACES.

   F. REMOVE LABELS THAT ARE NOT PERMANENT LABELS.

   G. TOUCH-UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES. REPLACE FINISHES AND SURFACES THAT CAN NOT BE SATISFACTORILY BE REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION. DO NO PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING ELECTRICAL NAME PLATES.

   H. LEAVE THE PROJECT CLEAN AND READY FOR OCCUPANCY.

   I. DUST OFF ALL EQUIPMENT, INCLUDING BATTERY PACKS, WITHIN EQUIPMENT BUILDING.

   J. GENERAL CONTRACTOR TO CLEAN AND APPLY STATIC-FREE WAX TO THE FLOORS ONCE FINAL SHELTER EQUIPMENT AND ACCESSORIES ARE COMPLETED.

2. REMOVAL OF PROTECTION

   REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING CONSTRUCTION TO PROTECT PREVIOUSLY COMPLETED INSTALLATIONS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

DIVISION 2: SITE WORK

SECTION 02200 - EARTHWORK AND DRAINAGE

PART 1 - GENERAL

1. WORK INCLUDED - SEE SITE PLAN

2. DESCRIPTIONS

   ACCESS DRIVE WITH TURN-AROUND AREA, LEASE AREA, AND, IF APPLICABLE, UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL-DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR MATERIAL AND EQUIPMENT DELIVERIES AND MAINTENANCE PERSONNEL ACCESS.

3. QUALITY ASSURANCE

   A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED).

   B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (AS NEEDED).

   C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.

4. SEQUENCING

   A. CONFIRM SURVEY STAKES AND SET ELEVATIONS STAKES PRIOR TO ANY CONSTRUCTION.

   B. COMPLETELY GRUB THE ACCESS DRIVE WITH TURN-AROUND, UNDERGROUND UTILITY EASEMENTS (IF APPLICABLE), AND LEASE AREA PRIOR TO FOUNDATION CONSTRUCTION, PLACEMENT OF BACKFILL AND SUB-BASE MATERIAL.

   C. CONSTRUCT TEMPORARY CONSTRUCTION AREA ALONG ACCESS DRIVE.

   D. BRING THE LEASE AREA AND ACCESS DRIVE WITH TURN-AROUND TO BASE COURSE ELEVATION PRIOR TO INSTALLING FOUNDATION.

   E. APPLY SOIL STERILIZER PRIOR TO PLACING BASE MATERIALS SUCH THAT THE STERILIZER ONLY COMES IN CONTACT WITH PROPOSED GRAVEL SURFACES

   F. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILTIY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AND ACCESS DRIVE WITH TURN-AROUND TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.

   G. REMOVE GRAVEL FROM TEMPORARY CONSTRUCTION ZONE TO AN AUTHORIZED AREA OR AS DIRECTED BY THE PROJECT MANAGER.

   H. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO STONE SURFACES.

5. SUBMITTALS

   A. BEFORE CONSTRUCTION
   IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO (2) COPIES OF THE LANDSCAPE PLAN UNDER NURSERY LETTERHEAD. IF LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD. REFER TO PLANS FOR LANDSCAPING REQUIREMENTS.

   G. PLACE FILL OR STONE IN SIX (6) INCH MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.

   B. AFTER CONSTRUCTION

      1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZED.

      2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER.

      3. LANDSCAPING WARRANTY STATEMENT.

6. WARRANTY

   A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND SURROUNDINGS.

   B. SOIL STERILIZATION APPLICATION TO GUARANTEE VEGETATION FREE ROAD AND SITE AREAS FOR ONE YEAR FOM DATE OF FINAL INSPECTION.

   C. DISTURBED AREAS WILL REFLECT GROWTH OF NEW GRASS PRIOR TO FINAL INSPECTION.

   D. LANDSCAPING, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL INSPECTION.

DIVISION 2: SITE WORK (CONTINUED)

SECTION 02200 - EARTHWORK AND DRAINAGE (CONTINUED)

PART 2 - PRODUCTS

1. MATERIALS

   A. SOIL STERILIZER SHALL BE AN EPA REGISTERED, PRE-EMERGENCE LIQUID:
   TOTAL KILL
   PRODUCT 910
   EPA 10292-7
   PHASAR CORPORATION
   P.O. BOX 5123
   DEARBORN, MI 48128
   313.563.8000

   AMBUSH HERBICIDE
   EPA REGISTERED
   FRAMAR INDUSTRIAL PRODUCTS
   1435 MORRIS AVENUE
   UNION, NJ 07083
   800.526.4924

   B. ROAD AND SITE MATERIALS SHALL CONFORM TO DOT SPECIFICATIONS (UNLESS OTHERWISE NOTED). ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY AND TRANSPORTATION STANDARD SPECIFICATIONS.

   C. SOIL STABILIZED FABRIC SHALL BE MIRAFI - 500X.

PART 3 - EXECUTION

1. PREPARATION

   A. CLEAR TREES, BRUSH AND DEBRIS FROM LEASE AREA, ACCESS DRIVE WITH TURN-AROUND, AND UNDERGROUND UTILITY EASEMENTS AS REQUIRED FOR CONSTRUCTION.

   B. PRIOR TO OTHER EXCAVATION AND CONSTRUCTION, GRUB ORGANIC MATERIAL TO A MINIMUM OF SIX (6) INCHES BELOW GRADE.

   C. UNLESS OTHERWISE INSTRUCTED BY LEASEE, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.

   D. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.

   E. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH A STABILIZED MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.

   F. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, REMOVE SOFT SPOTS, PLACE SELECT FILL, AND COMPACT TO 95% MODIFIED PROCTOR.

2. INSTALLATION

   A. GRADE OR FILL THE LEASE AREA AND ACCESS DRIVE WITH TURN-AROUND AS REQUIRED IN ORDER THAT UPON DISTRIBUTION OF SPOILS RESULTING FROM EXCAVATIONS, THE RESULTING GRADE WILL CORRESPOND WITH SAID SUB-BASE COURSE. ELEVATIONS ARE TO BE CALCULATED FROM BENCHMARK, FINISHED GRADES, OR INDICATED SLOPES.

   B. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.

   C. BRING THE ACCESS DRIVE WITH TURN-AROUND TO BASE COURSE ELEVATION TO FACILITATE CONSTRUCTION AND OBSERVATION DURING CONSTRUCTION OF THE SITE.

   D. AVOID CREATING DEPRESSIONS WHERE WATER MAY POND.

   E. THE CONTRACT SHALL INCLUDE GRADING, BANKING, AND DITCHING, UNLESS OTHERWISE NOTED.

   F. WHEN IMPROVING AN EXISTING ACCESS DRIVE, GRADE THE EXISTING DRIVE TO REMOVE ANY ORGANIC MATTER AND SMOOTH THE SURFACE BEFORE PLACING FILL OR STONE.

   H. THE TOP SURFACE COURSE SHALL EXTEND A MINIMUM OF ONE (1) FOOT BEYOND THE SITE FENCE, UNLESS OTHERWISE NOTED, AND SHALL COVER THE AREA AS INDICATED.

   I. NO SLOPES ARE TO BE GREATER THAN 3:1.

   J. APPLY RIP-RAP TO THE SIDES OF DITCHES AND DRAINAGE SWALES WHERE INDICATED ON THE DRAWINGS.

   K. RIP-RAP ENTIRE DITCH FOR SIX (6) FEET IN ALL DIRECTIONS AT CULVERT OPENINGS. (WHEN APPLICABLE)

   L. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIP-RAPPED.

   M. UNDER NO CIRCUMSTANCES WILL DITCHES, SWALES, OR CULVERTS BE PLACED SO THAT THEY DIRECT WATER TOWARDS, OR PERMIT STANDING WATER IMMEDIATELY ADJACENT TO SHELTER OR EQUIPMENT. IF DESIGNS OR ELEVATIONS ARE IN CONFLICT WITH THIS, ADVISE CONSTRUCTION MANAGER IMMEDIATELY.

CONSULTANT:
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CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:
- PRELIMINARY - NOT FOR CONSTRUCTION

I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

GENERAL SPECIFICATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	G-00

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DIVISION 2: SITE WORK (CONTINUED)

SECTION 02200 - EARTHWORK AND DRAINAGE (CONTINUED)

PART 2 - PRODUCTS (CONTINUED)

2. INSTALLATION (CONTINUED)

N. IN DITCHES WITH SLOPES GREATER THAN 10%, MOUND DIVERSIONARY HEADWALLS IN THE DITCH AT AN ANGLE NO GREATER THAN 60° OFF THE DITCH LINE. RIP-RAP THE UPSTREAM SIDE OF THE HEADWALL AS WELL AS THE DITCH FOR SIX (6) FEET ABOVE THE CULVERT ENTRANCE.

O. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.

P. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.

Q. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREAS BY WATERING UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.

3. FIELD QUALITY CONTROL

COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.

4. PROTECTION

A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES, STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATE.

B. ALL TREES PLACED IN CONJUNCTION WITH A LANDSCAPE CONTRACT WILL BE WRAPPED, TIED WITH HOSE PROTECTED WIRE, AND SECURED TO 2" x 2" x 4' - 0" WOODEN STAKES EXTENDING TWO-FEET INTO THE GROUND ON FOUR SIDES OF THE TREE.

C. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

DIVISION 16: UTILITY

SECTION 16050 - BASIC UTILITY MATERIALS AND METHODS

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE UTILITY EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
2. UTILITY PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF UTILITY EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
3. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "J" WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "UL" LISTED.
5. ALL CONDUIT SHALL HAVE A PULL CORD.
6. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE UTILITY "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.

THIS SPACE INTENTIONALLY LEFT BLANK

CONSULTANT:
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GENERAL SPECIFICATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	G-00

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SITE SURVEY

SCHEDULE "B" EXHIBITS:(per U.S. Title Solutions File No. UST75130, dated May 23, 2023)

1–3.) Not related to the survey.

4.1) Resolution by City Council of the City of Oelwein, Iowa Dated February 28, 1966, Recorded May 06, 1966, in Book 13, Page 298.
This document vacates a part of 4th Street SW and the Alley North of Block 1. The vacated alley is as shown the survey.

5.1) Plat of Survey Recorded December 20, 2007, in Book 2007, Page 3927.
The portion of this plat related to the surveyed area is shown on the survey.

5.2) Survey and Plat Recorded July 28, 1981, in Book 6, Page 127.
This survey does not affect the surveyed area and is not shown on the survey.

5.3) Ordinance Dated November 09, 1970, Recorded June 21, 1979, in Book 23, Page 67.
Not a plottable matter of survey.

5.4) Ordinance Dated February 26, 1927, Recorded March 01, 1927, in Book 3, Page 33.
Not a plottable matter of survey.

5.5) Plat of Miles Addition to Oelwein, Iowa Recorded May 22, 1899, in Book 2, Page 64.
The portion of this plat related to the surveyed area is shown on the survey.

5.6) B. H. Bennett's Addition to Oelwein Dated August 04, 1875, Recorded August 10, 1875, in Book 1, Page 81.
The portion of this plat related to the surveyed area is shown on the survey.

6.) Not related to the survey.

PROPERTY DESCRIPTION:(per U.S. Title Solutions File No. UST75130, dated May 23, 2023)

(Per Tax Sale Deed in Book 79, Page 257)
Lots 1 to 11, inclusive, Block 1, MILES ADDITION to Oelwein

(per Tax Sale Deed in Book 79, Page 259)
Lot 5 and the West 34.3 feet of Lot 4, Block 5, BENNETTS ADDITION to Oelwein

(per Town Lot Deed No. 31, Page 211)
Lot Four (4), Block Five (5) of BENNETTS ADDITION to Oelwein, Iowa

(per Town Lot Deed No. 24, Page 73)
Lots One (1) and Two (2), Block Five (5), BENNETTS ADDITION, Oelwein, as shown on the recorded plat thereof

Per Town Lot Deed No. 18, Page 329)
Lot Three (3) in Block Five (5) in BENNETTS ADDITION to the Village of Oelwein, Iowa

LEGEND

- SIGN SINGLE POST
- ELECTRIC POLE
- TREE CONIFER
- CHAIN LINK FENCE
- GAS — UNDERGROUND GAS
- OHE — OVERHEAD ELEC
- UGE — UNDERGROUND ELEC
- BOUNDARY LINE
- SECTION LINE
- QUARTER LINE
- RIGHT OF WAY LINE
- LOT / DEED LINE
- PARCEL LINE
- LEASE AREA
- EASEMENT LINE
- CENTERLINE
- CONCRETE SURFACE
- GRAVEL SURFACE

NORTH

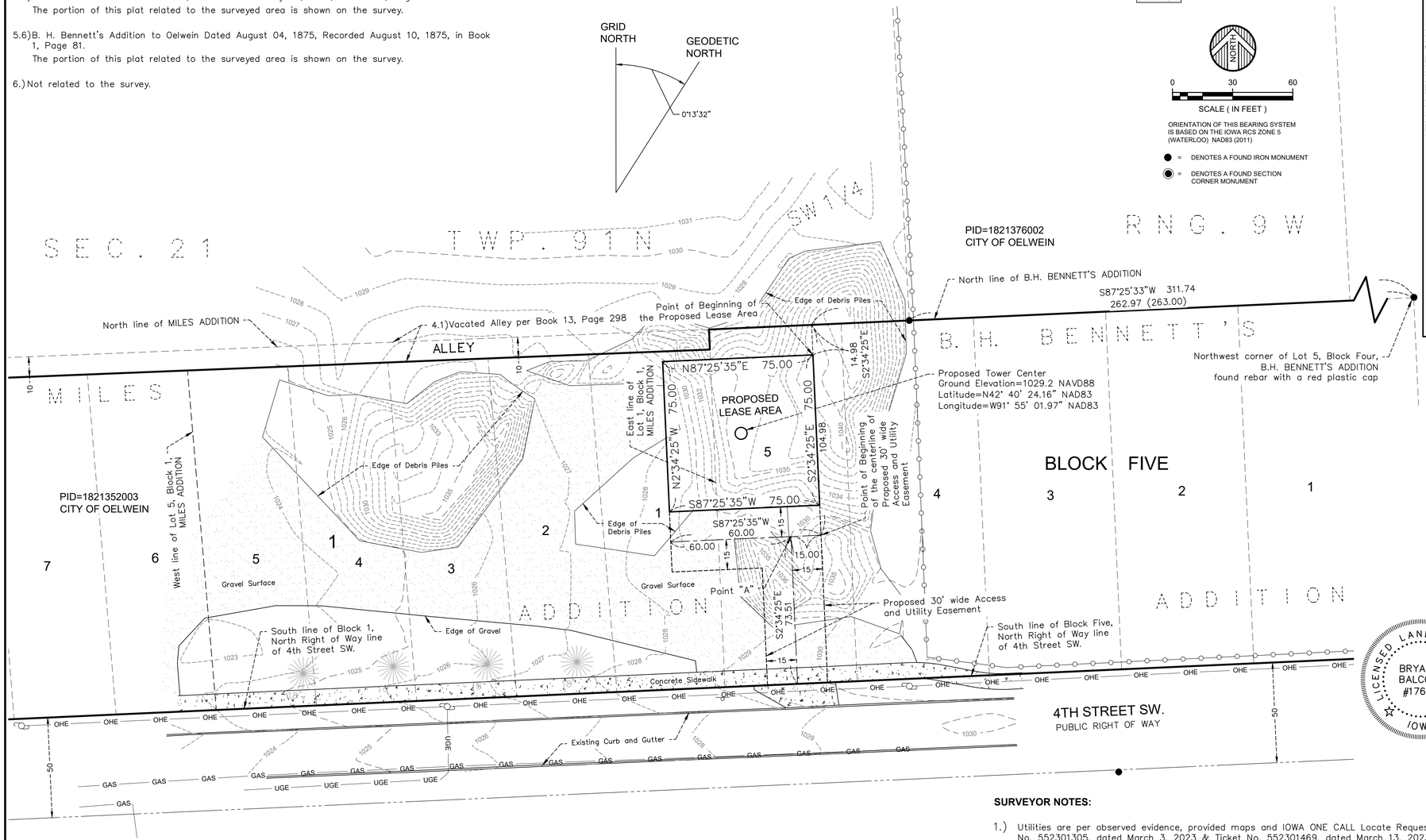
0 30 60

SCALE (IN FEET)

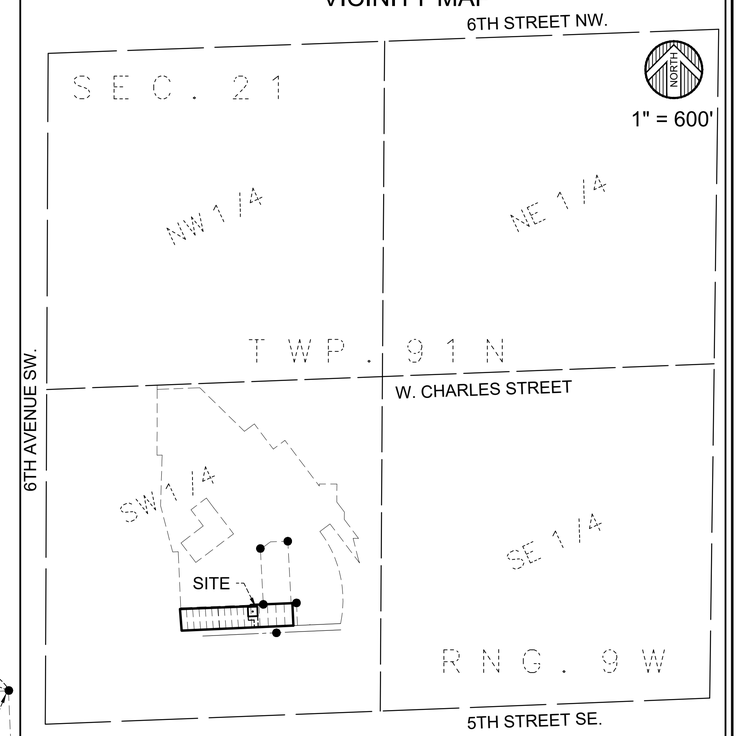
ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE IOWA RCS ZONE 5 (WATERLOO) NAD83 (2011)

● = DENOTES A FOUND IRON MONUMENT

◉ = DENOTES A FOUND SECTION CORNER MONUMENT



VICINITY MAP



PROPOSED LEASE AREA DESCRIPTION:

That part of Lot 5, Block Five, B.H. BENNETT'S ADDITION and Lot 1, Block 1, MILES ADDITION, according to the recorded plats thereof, Fayette County, Iowa, described as follows:

Commencing at the northwest corner of Lot 5, Block Four, said B.H. BENNETT'S ADDITION; thence South 87 degrees 25 minutes 33 seconds West along the North line of said B.H. BENNETT'S ADDITION, a distance of 311.74 feet; thence South 2 degrees 34 minutes 25 seconds East, a distance of 14.98 feet to the Point of Beginning of the lease area to be described; thence continue South 2 degrees 34 minutes 25 seconds East, a distance of 75.00 feet; thence South 87 degrees 25 minutes 35 seconds West, a distance of 75.00 feet; thence North 2 degrees 34 minutes 25 seconds West, a distance of 75.00 feet; thence North 87 degrees 25 minutes 35 seconds East, a distance of 75.00 feet to the Point of Beginning.

PROPOSED ACCESS AND UTILITY EASEMENT DESCRIPTION:

A 30.00 foot wide easement for ingress, egress and utility purposes over, under and across Lot 5, Block Five, B.H. BENNETT'S ADDITION and Lot 1, Block 1, MILES ADDITION, according to the recorded plats thereof, Fayette County, Iowa, the centerline of said easement is described as follows:

Commencing at the northwest corner of Lot 5, Block Four, said B.H. BENNETT'S ADDITION; thence South 87 degrees 25 minutes 33 seconds West along the North line of said B.H. BENNETT'S ADDITION, a distance of 311.74 feet; thence South 2 degrees 34 minutes 25 seconds East, a distance of 104.98 feet to the Point of Beginning of the centerline to be described; thence South 87 degrees 25 minutes 35 seconds West, a distance of 15.00 feet to a point hereinafter referred to as Point "A"; thence continue South 87 degrees 25 minutes 35 seconds West, a distance of 60.00 feet and said centerline there terminating.

TOGETHER WITH

A 30.00 foot wide easement for ingress, egress and utility purposes over, under and across said Lot 5, the centerline of said easement is described as follows:

Beginning at the previously described Point "A"; thence South 2 degrees 34 minutes 25 seconds East, a distance of 73.51 feet to the North right of way line of 4th Street Southwest and said centerline there terminating.

The sidelines of said easement shall be shortened or lengthened to terminate at said North right of way line of 4th Street Southwest.

SURVEYOR NOTES:

1.) Utilities are per observed evidence, provided maps and IOWA ONE CALL Locate Request Ticket No. 552301305, dated March 3, 2023 & Ticket No. 552301469, dated March 13, 2023.

2.) This survey was completed for Edge Consulting Engineers Inc.

LICENSED LAND SURVEYOR
BRYAN T. BALCOME
#17677
IOWA

Edge Consulting Engineers, Inc.

SITE NAME: IA12 DT OELWEIN

Fayette County, IA

No.	Date	REVISIONS	By	CHK	APP'D

FIELD WORK: 3/21/23 | CHECKED BY: BTB | DRAWN BY: JMB

I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE RELATED SURVEY WORK WAS PERFORMED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA

SIGNATURE: Bryan T. Balcome
BRYAN T. BALCOME, L.S.
DATE: 6/28/23 LICENSE # 17677
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2024

FULL SCALE ON 22"x34"
HALF SCALE ON 11"x17"
2023-10340

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WIDSETH
ARCHITECTS ▪ ENGINEERS ▪ SCIENTISTS ▪ SURVEYORS

NORTH

CITY OF OELWEIN IS TO COMPLETE DEBRIS REMOVAL

CITY REQUIRES A NOTICE PERIOD PRIOR TO SCHEDULING THE REMOVAL

NOTICE PERIOD TO BE VERIFIED WITH CITY

PARCEL ID:
1821376002
CITY OF OELWEIN

PARCEL ID:
1821352003
CITY OF OELWEIN

PROPERTY LINE

PROPOSED MONOPOLE TOWER DESIGNED BY OTHERS; SEE T-201 FOR DETAILS

PROPOSED 75'-0" x 75'-0" LEASE AREA

PROPOSED 50'-0" x 50'-0" FENCED COMPOUND

PROPOSED 20'-0" WIDE GRAVEL TURNAROUND

PROPOSED 12' WIDE DOUBLE-SWING ACCESS GATE

PROPOSED 12'-0" WIDE GRAVEL ACCESS DRIVE

EXTENT OF PROPOSED 30' WIDE VERIZON ACCESS AND UTILITY EASEMENT

GRAVEL SURFACE

DEBRIS PILE

DEBRIS PILE

DEBRIS PILE

PROPOSED DIESEL GENERATOR ON 4'-0" x 8'-0" CONCRETE PAD WITH CANOPY

PROPOSED VERIZON EQUIPMENT ON 4'-0" x 8'-0" CONCRETE PAD WITH CANOPY

PROPOSED UNDERGROUND ELECTRICAL CONDUIT ROUTING

PROPOSED UNDERGROUND FIBER OPTIC ROUTING

8'-0" 12'-0" 10'-0" 30'-0"

EXISTING WOOD POWER POLE TO BE POWER SOURCE

EXISTING OVERHEAD UTILITIES (TYP.)

PROPOSED FIBER HANDHOLE INSTALLED IN RIGHT OF WAY BY FIBER PROVIDER

LOT LINE

126'-0"

50'-0"

4TH STREET SW.

RIGHT OF WAY

NOTE:

1. FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.

SCALE: 11" x 17" - 1" = 30'
22" x 34" - 1" = 15'

15' 0 15' 30'

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CONSULTANT:

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CLIENT:

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10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:

- PRELIMINARY - NOT FOR CONSTRUCTION

I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SITE PLAN
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	C-10

© EDGE CONSULTING ENGINEERS, INC

NORTH

PROPERTY LINE

LOT LINE

75'-0" LEASE AREA

PROPOSED
75' x 75' LEASE AREA

50'-0" FENCED COMPOUND

12'-6"

PROPOSED 50'-0" x 50'-0"
FENCED COMPOUND

1030

1032

1040

1027

1028

1034

1035

6'-6"

8'-0"

4'-0"

25'-0"

PROPOSED VERIZON DIESEL GENERATOR
ON 4'-0" x 8'-0" CONCRETE PAD;
SEE E-001 & E-002 FOR DETAILS

PROPOSED VERIZON OVERHEAD
GENERATOR CANOPY TO BE
INSTALLED BY VERIZON CONTRACTOR;
SEE E-003 FOR DETAILS

(3) PROPOSED BURIED CONDUITS
FROM GENERATOR TO ILC;
SEE E-102 FOR DETAILS

PROPOSED VERIZON
INTEGRATED LOAD CENTER (ILC);
SEE E-505 FOR DETAILS

PROPOSED VERIZON CHARLES
CUBE FIBER JUNCTION BOX;
SEE E-505 FOR DETAILS

PROPOSED VERIZON EQUIPMENT
CABINETS ON 4'-0" x 8'-0" CONCRETE PAD;
SEE 'A' SERIES FOR DETAILS

PROPOSED VERIZON OVERHEAD
EQUIPMENT CANOPY TO BE INSTALLED
BY VERIZON CONTRACTOR;
SEE A-201 FOR DETAILS

PROPOSED MONOPOLE
DESIGNED BY OTHERS;
SEE T-201 FOR DETAILS

PROPOSED 8'-0" ± ICE BRIDGE;
SEE C-501 FOR DETAILS

GRAVEL
COMPOUND

PROPOSED VERIZON COMPOUND
FIBER VAULT TO BE INSTALLED BY
VERIZON CONTRACTOR;
SEE E-102 FOR DETAILS

PROPOSED MULTI-METER RACK

19'-0"

12'-0"

2'-6"

7'-0"

PROPOSED
TRANSFORMER

PROPOSED 12' WIDE DOUBLE-
SWING ACCESS GATE

PROPOSED CONCRETE-FILLED
BOLLARD (TYP.)

20'-0" TURNAROUND

GRAVEL
TURNAROUND

PROPOSED UNDERGROUND
UTILITY CONDUIT ROUTING,
APPROX. 100' FROM R.O.W.;
SEE E-102 FOR DETAILS

12'-6"

5' 0 5' 10'

SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

NOTE:

1. FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.



B **PROPOSED LEASE AREA**

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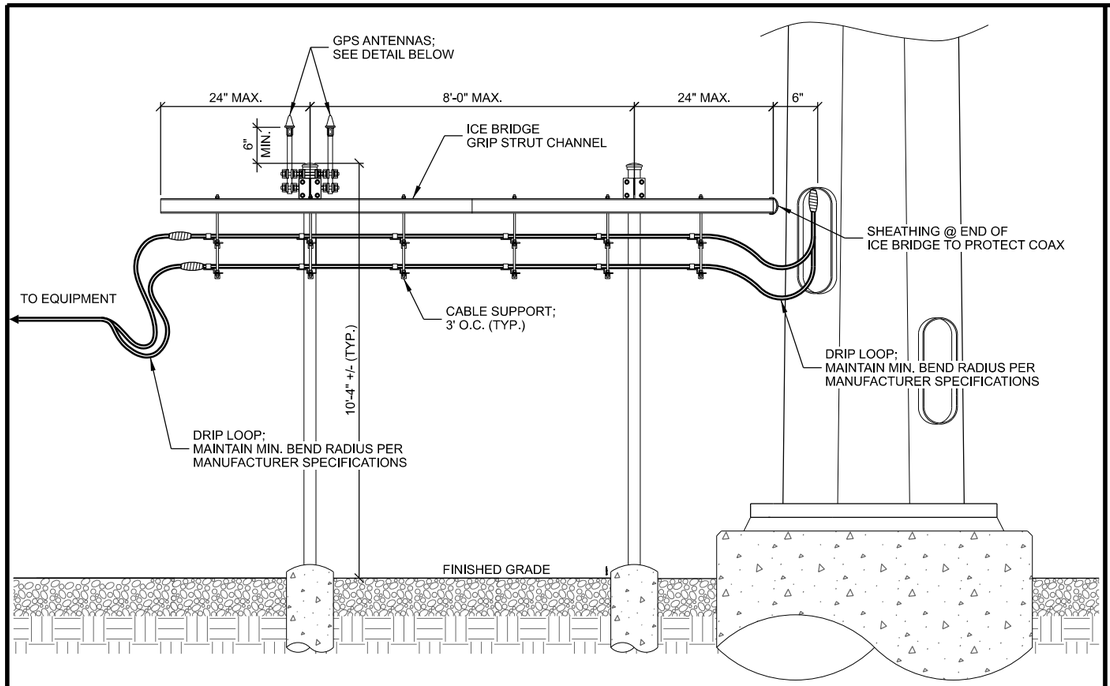
ENLARGED SITE PLAN
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

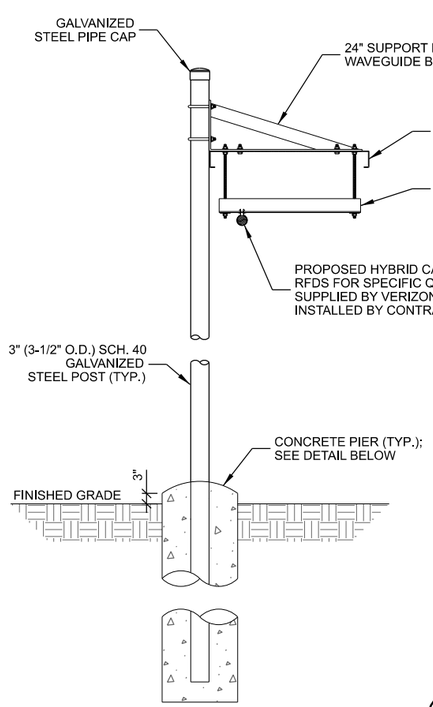
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BSS	08/07/25	REV. B

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EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	C-10

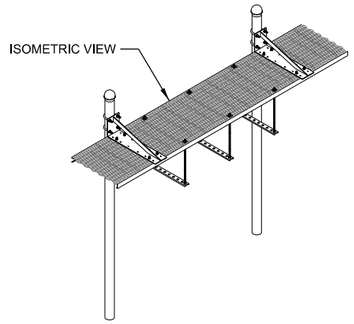
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A **ICE BRIDGE INSTALLATION**

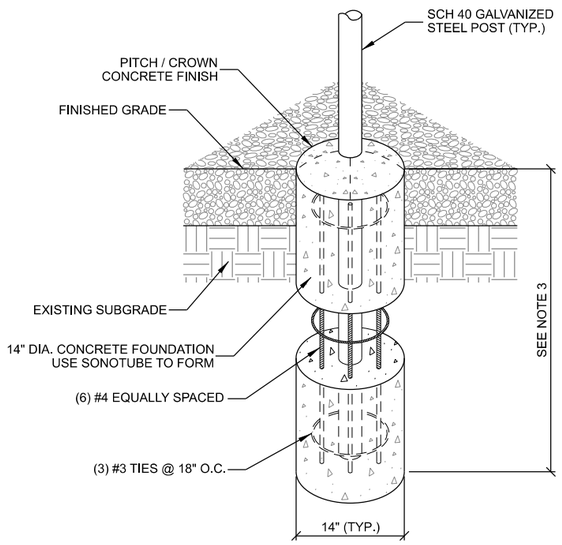


B **ICE BRIDGE**



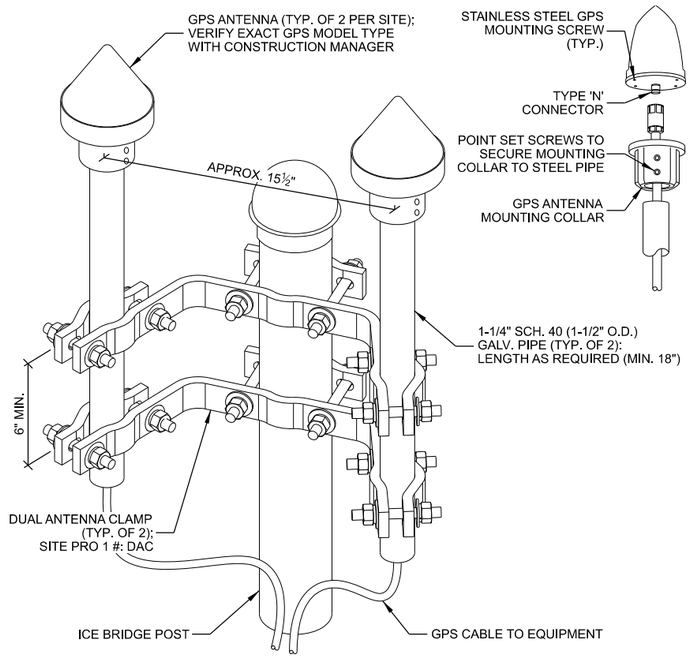
ICE BRIDGE NOTES : (THIS SHEET)

1. FOR COMPONENTS AS SHOWN IN STANDARD DETAILS, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 8' FOR A 10' SECTION.
2. SPLICES IN SECTIONS OF BRIDGE CHANNEL SHALL BE INSTALLED AT SUPPORTS, WHERE POSSIBLE, OR AT MOST 2' FROM A SUPPORT.
3. FREE ENDS OF ICE BRIDGE CHANNELS SHALL NOT EXCEED A CANTILEVER DISTANCE OF 2' FROM A SUPPORT.
4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES TREATED WITH COLD GALVANIZING SPRAY.
5. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH MANUFACTURER'S AND ENGINEER'S APPROVAL.
6. DEVIATIONS FROM ICE BRIDGE FOUNDATIONS SHOWN ON SITE SPECIFIC DRAWINGS OR STANDARD DETAILS REQUIRE ENGINEERING APPROVAL.



NOTES:
1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS.
2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

C **ICE BRIDGE POST PIER FOUNDATION**



D **GPS ANTENNA MOUNTING**

THIS SPACE INTENTIONALLY LEFT BLANK

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ICE BRIDGE AND GPS DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

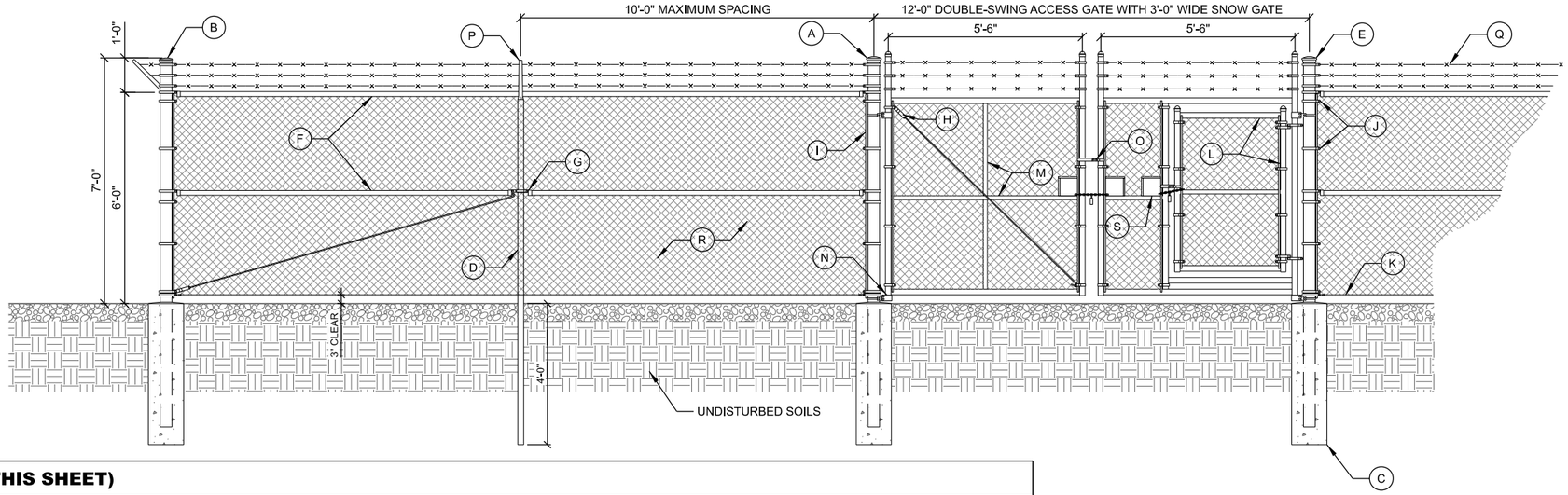
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INT.	DATE:	DESCRIPTION:
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BSS	08/07/25	REV. B

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EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	C-501

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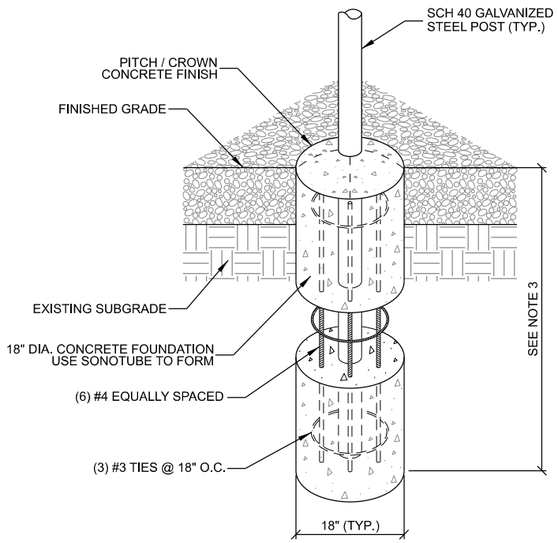
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REFERENCE NOTES: (THIS SHEET)

- (A) 4" (4-1/2" O.D.) SCH. 40 GALV. STEEL GATE POST
- (B) 4" (4-1/2" O.D.) SCH 40 GALV. STEEL CORNER POST
- (C) CONCRETE PIER FOUNDATION AT CORNERS AND GATE; SEE DETAIL BELOW
- (D) 2" (2-3/8" O.D.) SCH. 40 GALV. STEEL INTERMEDIARY LINE POSTS; LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 10'-0" O.C
- (E) FENCE POST CAP (SIZE VARIES)
- (F) 1-1/4" (1.66" O.D.) TOP RAIL & MID BRACE RAIL PIPE
- (G) OFFSET BRACE RAIL ENDS FOR MID BRACE RAIL
- (H) 5/16" O.D. TRUSS ROD WITH TRUSS TIGHTENER ASSEMBLY
- (I) 3/16" x 3/4" STRETCHER BAR; TO EXTEND FULL HEIGHT OF FENCE FABRIC
- (J) 3/4" TENSION BAND (TYP.).
- (K) TENSION WIRE
- (L) 1-1/2" (1.9" O.D.) SCH. 40 GALV. STEEL FENCE GATE FRAME
- (M) 1-1/4" (1.66" O.D.) SCH. 40 GALV. STEEL HORIZONTAL AND VERTICAL GATE BRACES
- (N) MALLEABLE BUTT HINGES (TYP.)
- (O) GATE LATCH; VERIFY REQUIREMENTS WITH FENCE MANUFACTURER
- (P) 45° BARB ARM FENCE POST CAP
- (Q) (3) STRANDS OF 4 PT. GALV. BARB WIRE
- (R) #9 GAUGE GALV. CHAIN LINK FENCE FABRIC WITH TWISTED TOP SELVAGE AND KNUCKELD BOTTOM SELVAGE
- (S) 6" x 6" HANDHOLE FOR CHAIN LOCK

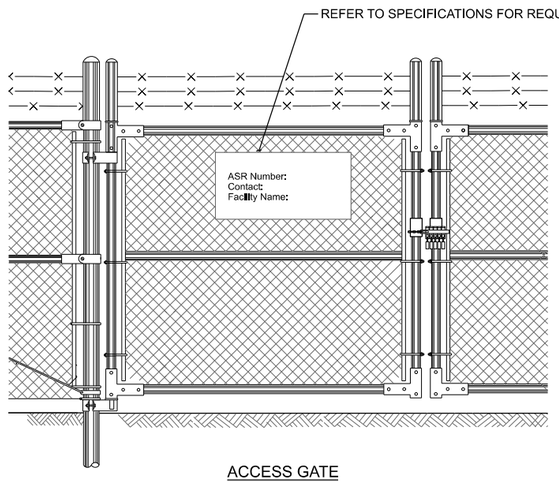
A COMPOUND FENCE



NOTES:

1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS.
2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

B FENCE POST PIER FOUNDATION



ACCESS GATE

GENERAL NOTES:

1. THE ANTENNA STRUCTURE REGISTRATION NUMBER SHALL BE DISPLAYED PER 47 CFR 17.4 (g).
2. THE ASR NUMBER SHALL BE POSTED ON THE PERIMETER FENCE OR ACCESS GATE SO THAT IT IS CONSPICUOUSLY VISIBLE AND LEGIBLE FROM THE PUBLICLY ACCESSIBLE AREA NEAREST THE BASE OF THE ANTENNA STRUCTURE ALONG A PUBLICLY ACCESSIBLE ROADWAY OR PATH.
3. MATERIALS USED TO DISPLAY THE ANTENNA STRUCTURE REGISTRATION NUMBER MUST BE WEATHER-RESISTANT AND OF SUFFICIENT SIZE TO BE EASILY SEEN WHERE POSTED.

C ANTENNA STRUCTURE REGISTRATION (ASR) SIGNAGE

THIS SPACE INTENTIONALLY LEFT BLANK

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FENCE DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

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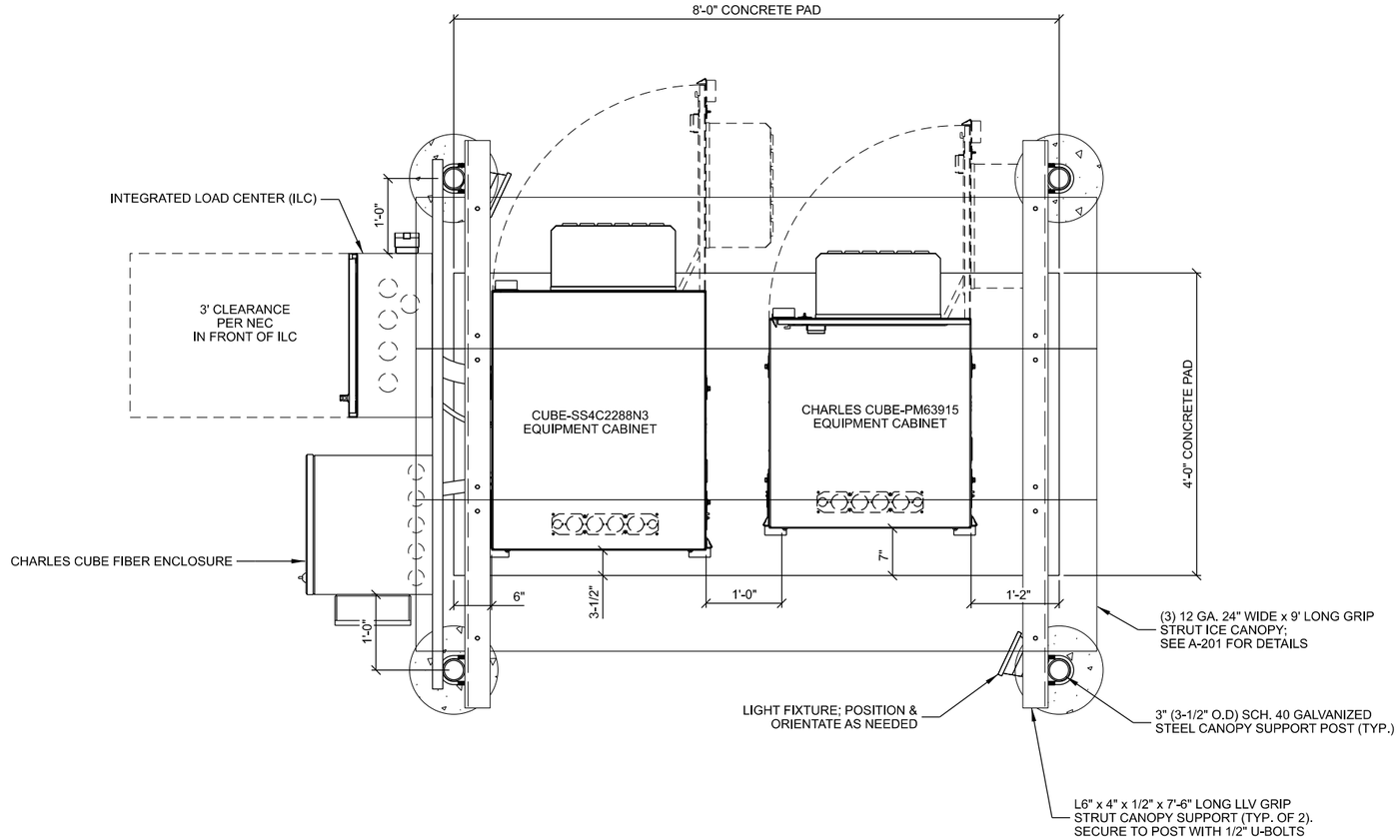
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EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	C-50

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B
A-201



A
A-201

A EQUIPMENT PAD LAYOUT
SCALE: 11" x 17" - 1/2" = 1'-0"
22" x 34" - 1" = 1'-0"

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EQUIPMENT PAD LAYOUT
IA12 DT OELWEIN
OELWEIN, IOWA

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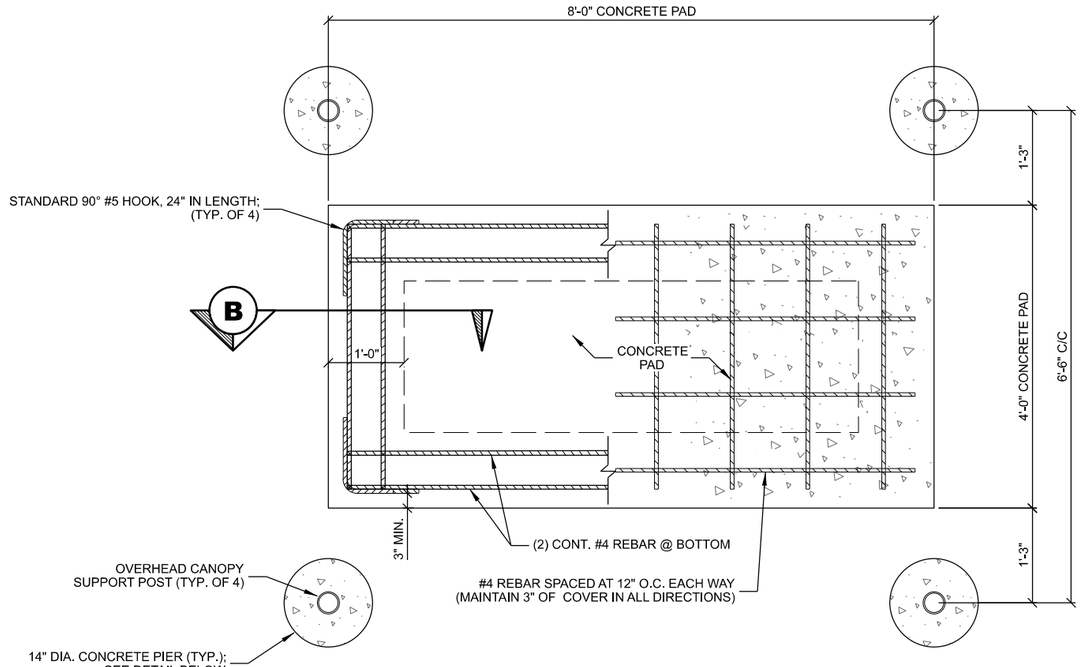
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BSS	08/07/25	REV. B

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EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	A-10

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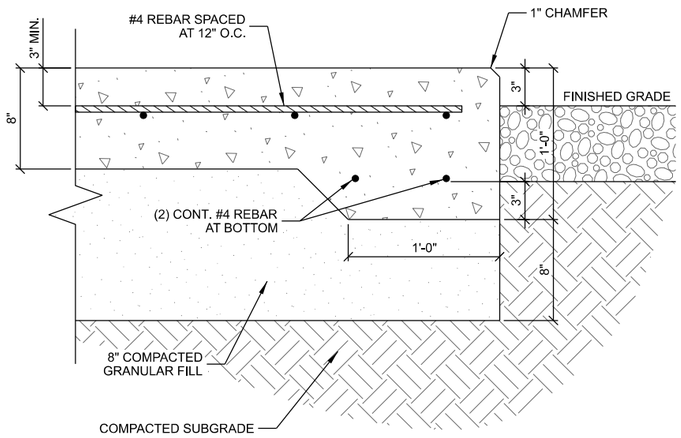
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REBAR SCHEDULE		
SIZE	LENGTH	QTY
#4	7'-6"	8
#4	3'-6"	12
#5	2'-0"	4



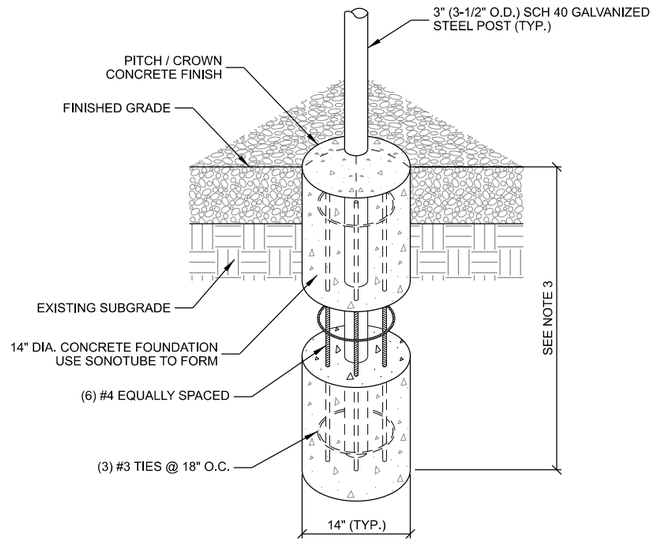
A **EQUIPMENT PAD FOUNDATION**

SCALE: 11" x 17" - 1/2" = 1'-0"
22" x 34" - 1" = 1'-0"



NOTE:
1. 3" MIN. CONCRETE COVER OVER BAR AND WIRE.

B **THICKENED SLAB FOUNDATION**



NOTES:
1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS. 2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS. 3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

C **CANOPY POST PIER FOUNDATION**

CONCRETE AND REINFORCING NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND MOST CURRENT VERSION OF ACI STANDARDS.
2. ALL EXPOSED CONCRETE SURFACES EXPOSED TO VIEW SHALL HAVE A SURFACE FINISH SF-2.0 IN ACCORDANCE WITH ACI 301.
3. ALL CONCRETE UNLESS SPECIFICALLY NOTED SHALL BE NORMAL WEIGHT (145 PCF) AND SHALL ACHIEVE A 28-DAY COMPRESSIVE STRENGTH (f'c) OF 4,000 PSI. EXPOSED EXTERIOR CONCRETE TO BE AIR ENTRAINED WITH 6% AIR CONTENT. CONTRACTOR TO PERFORM CONCRETE SLUMP TEST (4" MAX SLUMP). NO WATER TO BE ADDED AFTER SLUMP HAS BEEN MEASURED.
4. ALL CONCRETE REINFORCING SHALL BE ASTM A615 GRADE 60 AND PLACED IN ACCORDANCE WITH ACI STANDARDS W/ 3" MIN COVERAGE IF CAST AGAINST EARTH AND 2" MIN COVERAGE OTHERWISE.
5. REMOVE ALL ORGANIC MATERIAL, SOFT AREAS, AND POOR SOILS BENEATH FOUNDATION TO A DEPTH OF AT LEAST 2'-0" BELOW FOUNDATION.
6. SLAB NOT SUITABLE AT SITES WITH ORGANIC SOIL, UNCOMPACTED FILL, EXPANSIVE SOIL, OR SOILS SUSCEPTIBLE TO FROST HEAVE.
7. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM ALL FOUNDATIONS.
8. DESIGN BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF. NO GEOTECHNICAL REPORT FOR THE EQUIPMENT PAD HAS BEEN COMPLETED.

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EQUIPMENT PAD DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

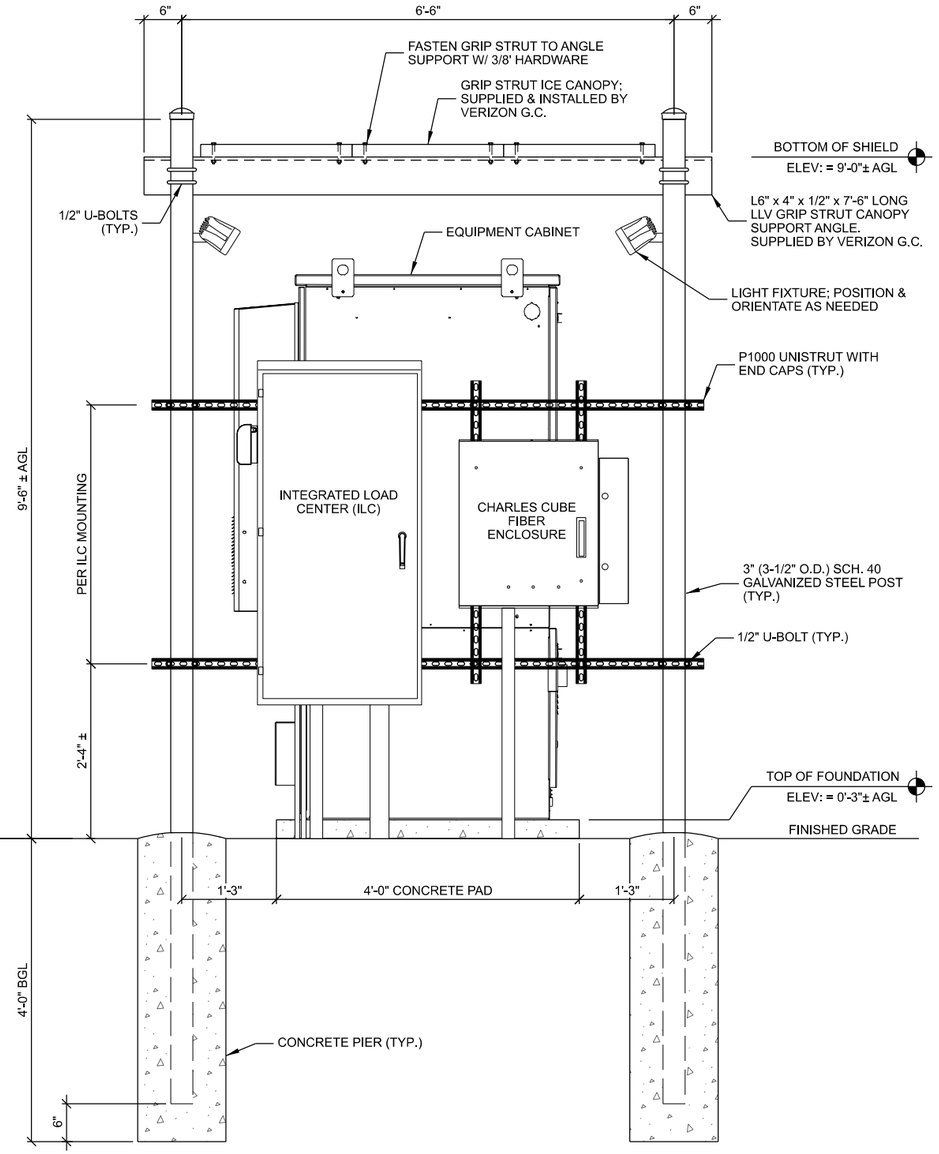
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SHEET NUMBER	A-10

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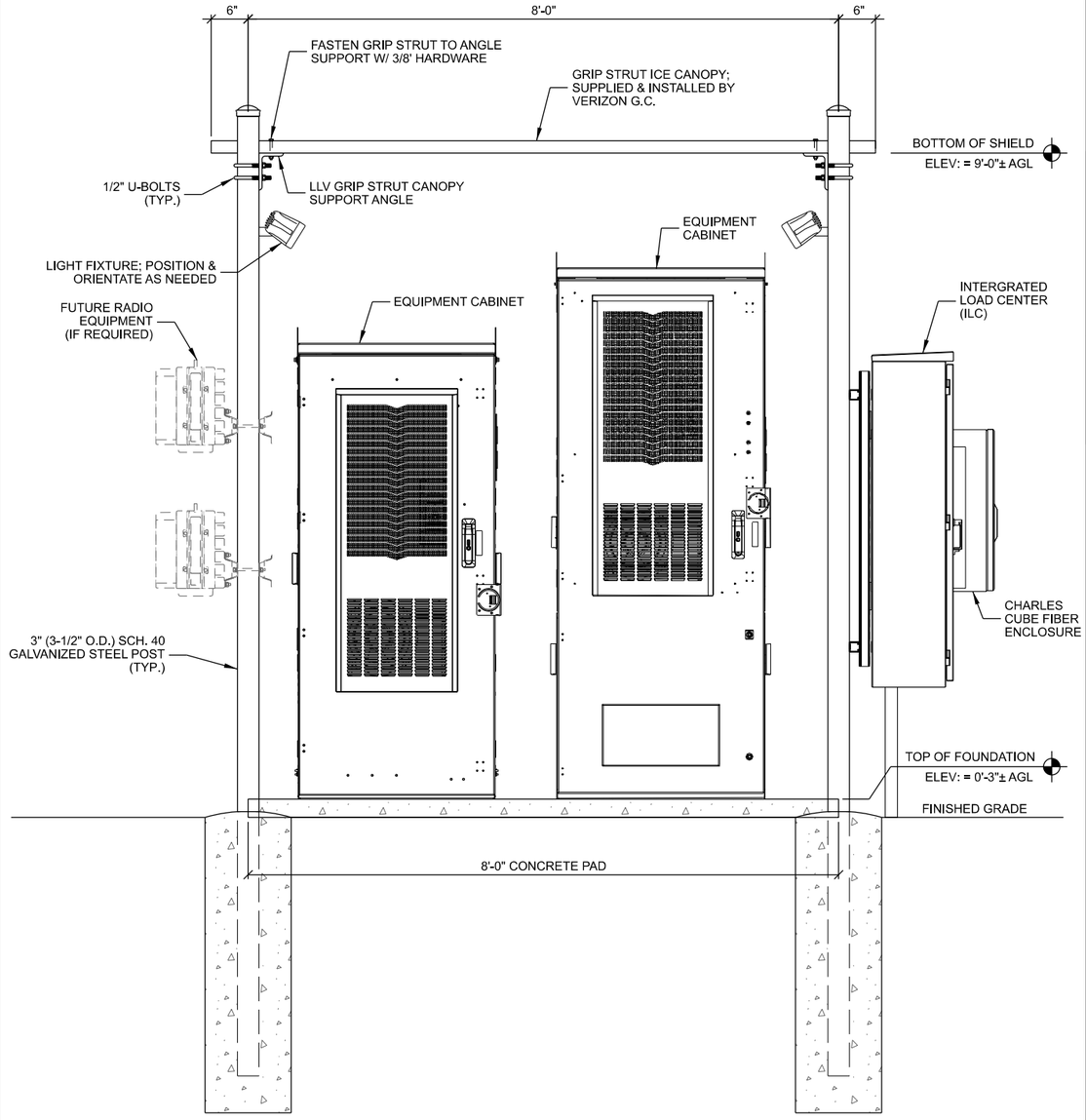
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NOTES:

1. CONDUITS AND CABLING NOT SHOWN FOR CLARITY.
2. ELEVATIONS PROVIDED FOR CONVENIENCE ONLY.
3. SECURE CABINET(S) TO CONCRETE PAD PER MANUFACTURERS SPECIFICATIONS

A EQUIPMENT PAD SIDE ELEVATION



NOTES:

1. CONDUITS AND CABLING NOT SHOWN FOR CLARITY.
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B EQUIPMENT PAD FRONT ELEVATION

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EQUIPMENT PAD ELEVATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

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MX08FHG865-BHG

NWAV™ X-Pol 8-Port Antenna

X-Pol 8-Port 8 ft, 65° Form In Tighter High Gain (FHG) with Smart Bias Ts, 698-4200 MHz:

4 ports 698-894 MHz and 4 ports 3400-4200 MHz

- High efficiency macro panel antenna with optimized 4T4R MIMO performance for low and high band with industry-leading high gain for extended coverage
- Enhanced pattern performance with superior cross-pol performance and front-to-back ratio
- Fully integrated (iRETs) with independent RET control for low band and high band
- Optimized CBRS radiation patterns for improved RSRP and maximum EIRP
- Excellent passive intermodulation (PIM) performance reduces harmful interference.
- Suitable for 4G and 5G interface technologies
- Integrated Smart Bias-Ts reduce leasing costs
- Optimized form factor for reduced wind loading



nwav

Electrical specification (minimum/maximum)	Ports 1, 2, 3, 4	
Frequency bands, MHz	698-806	806-894
Polarization	± 45°	
Maximum gain over all tilts, dBi	17.0	17.3
Average gain over all tilts, dBi	16.7 ± 0.3	17.0 ± 0.3
Horizontal beamwidth (HBW), degrees[1]	67	64
Front-to-back ratio, co-polar power @180°± 30°, dB	>28.0	>28.0
SPR (Sector Power Ratio), %	5	4.5
X-Pol discrimination (CPR) at boresight, dB	>20.0	>20.0
Vertical beamwidth (VBW), degrees[1]	9	8
Electrical downtilt (EDT) range, degrees	0-10	
First upper side lobe (USLS) suppression, dB[1]	≤-18.0	≤-16.0
Cross-polar isolation, port-to-port, dB[1]	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0	
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153	
Max input power per any port, watts	300	
Total composite power all ports, watts	1500	

[1] Typical value over frequency and tilt

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MX08FHG865-BHG
NWAV™ X-Pol 8-Port Antenna

Electrical specification (minimum/maximum)	Ports 5, 6, 7, 8		
Frequency bands, MHz	3400-3550	3550-3980	3980-4200
Polarization	± 45°		
Maximum gain over all tilts, dBi	14.7	14.9	15.1
Average gain over all tilts, dBi	14.5 ± 0.2	14.7 ± 0.2	14.9 ± 0.2
Horizontal beamwidth (HBW), degrees	71	69	67
Front-to-back ratio, co-polar power @180°± 30°, dB	>25	>25	>25
Vertical beamwidth (VBW), degrees[1]	16.7	15.9	15.1
Electrical downtilt (EDT) range, degrees	2-12		
First upper side lobe (USLS) suppression, dB[1]	≤-15	≤-15	≤-15
Cross-polar isolation, port-to-port, dB[1]	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-145		
Max input power per any port, watts	150		

Ordering information	
Antenna model	**Description**
MX08FHG865-BHG	8F X- Pol 8 PORT FIT 65º 0-10º/2-12º, 4.3-10 & SBT
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations
91900314-03	Dual Mount Bracket (see 91900314 bracket document for details)

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10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:
- PRELIMINARY - NOT FOR CONSTRUCTION

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ANTENNA SPECIFICATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

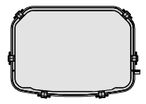
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INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

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EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	T-00

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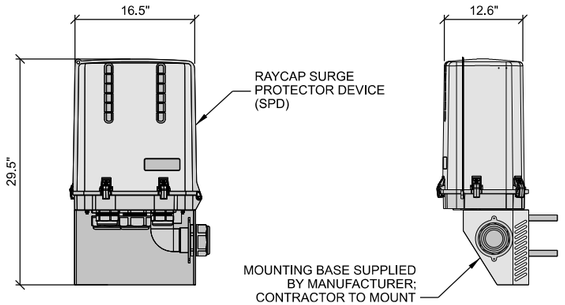
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MANUFACTURER: RAYCAP
MODEL: RCMDC-6627-PF-48
DIMENSIONS: 29.5" x 16.5" x 12.6" (H x W x D)
WEIGHT: 32 LBS



PLAN VIEW



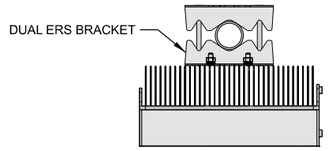


FRONT VIEW

SIDE VIEW

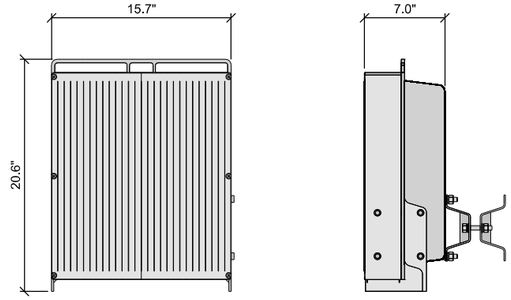
A **RAYCAP SURGE PROTECTOR DEVICE (SPD)**

MANUFACTURER: ERICSSON
MODEL: RADIO 4490
DIMENSIONS: 20.6" x 15.7" x 7.0" (H x W x D)
WEIGHT: 68.4 LBS



PLAN VIEW



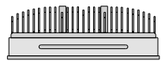


FRONT VIEW

SIDE VIEW

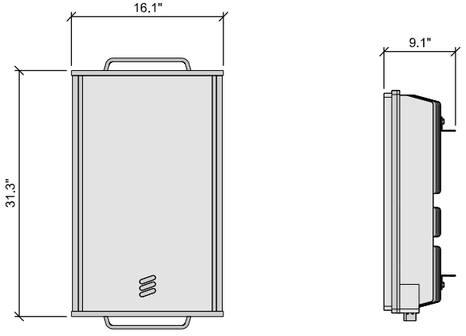
B **ERICSSON RADIO 4490**

MANUFACTURER: ERICSSON
MODEL: AIR6419
DIMENSIONS: 31.3" x 16.1" x 9.1" (H x W x D)
WEIGHT: 71 LBS.



PLAN VIEW



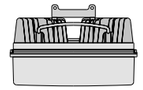


FRONT VIEW

SIDE VIEW

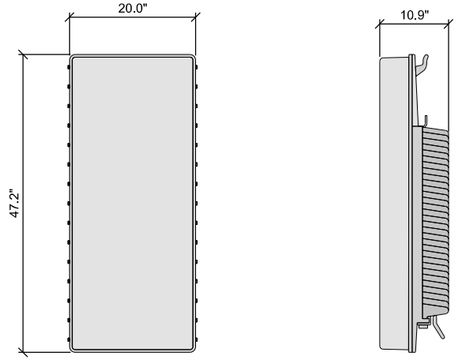
C **ERICSSON AIR6419**

MANUFACTURER: ERICSSON
MODEL: AIR3283 B25 B66
DIMENSIONS: 47.2" x 20.0" x 10.9" (H x W x D)
WEIGHT: 108 LBS.



PLAN VIEW





FRONT VIEW

SIDE VIEW

D **ERICSSON AIR3283 B25 B66**

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THIS SPACE INTENTIONALLY LEFT BLANK

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
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www.edgeconsult.com

CLIENT:
verizon
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BLOOMINGTON, MN 55438

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EQUIPMENT SPECIFICATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

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BSS	08/07/25	REV. B

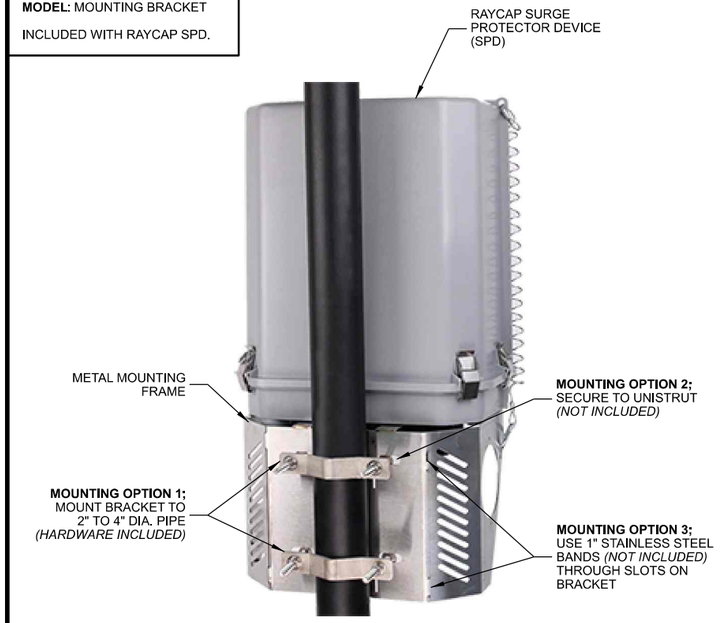
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EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	T-00

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MANUFACTURER: RAYCAP
MODEL: MOUNTING BRACKET

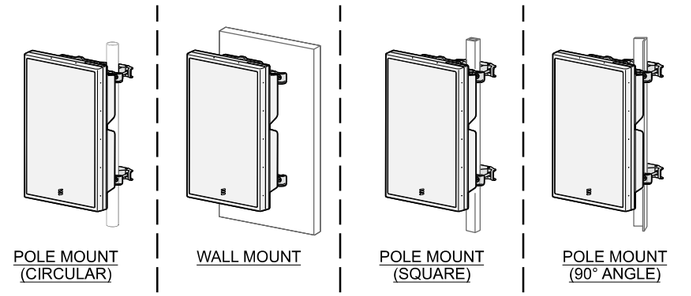
INCLUDED WITH RAYCAP SPD.



A RAYCAP SURGE PROTECTOR DEVICE (SPD) MOUNT

MANUFACTURER: ERICSSON
MODEL: SXK 109 2064/1 (SWIVEL ANGLE)
SXK 109 2065/1 (SWIVEL ANGLE AND TILT ANGLE)
WEIGHT: 9.7 LBS. (SWIVEL ANGLE)
13.0 LBS. (SWIVEL ANGLE AND TILT ANGLE)

POLE	CICULAR	SQUARE	90° ANGLE
MIN. OUTER DIMENSION	3" DIA.	2" x 2"	2" x 2"
MAX. OUTER DIMENSION	4.5" DIA.	3.15" x 3.15"	3.15" x 3.15"



B ERICSSON SWIVEL MOUNT KIT

MANUFACTURER: ERICSSON
MODEL: SXK 109 1973/2
WEIGHT: 3.75 LBS

BRACKET FOR ATTACHING TWO STANDARD OR HEAVY ERS UNITS WITH A HOLE PATTERN OF CC 30 MM AND/OR CC 80 MM., EITHER TO A POLE, WALL, ANGLE TOWER OR SQUARE TUBE.

BOLTS FOR ATTACHING TWO ERS UNITS ARE SUPPLIED IN THE PACKAGE.

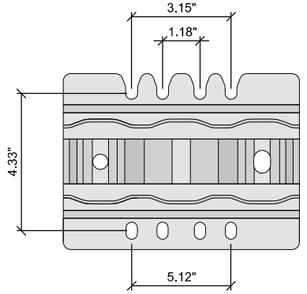


PLATE MOUNTING PATTERN



DUAL RADIO ATTACHMENT



ISOMETRIC VIEW

C DUAL ERS BRACKET

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MOUNTING SPECIFICATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
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BSS	08/07/25	REV. B

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EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	T-00

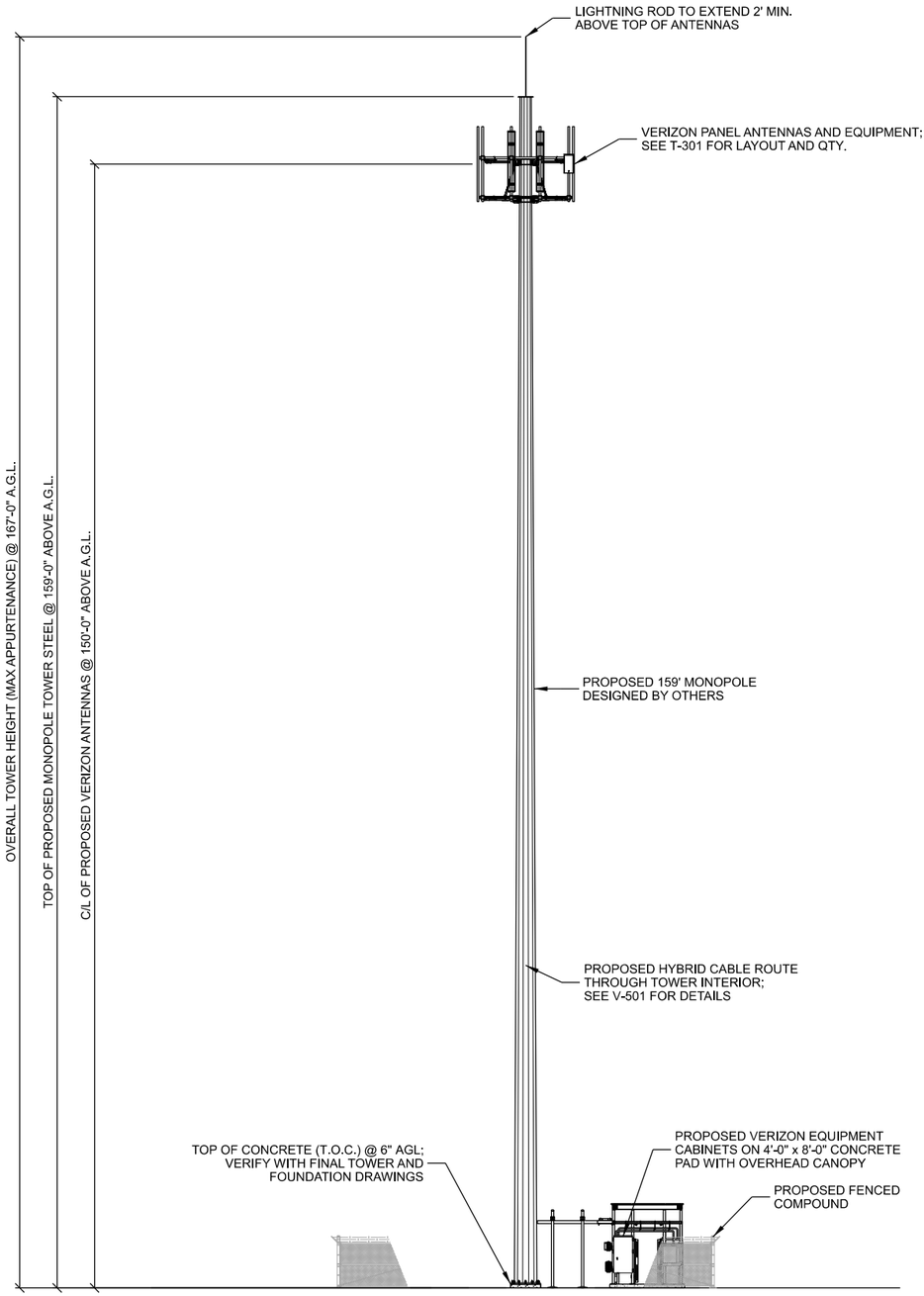
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RF EMISSION REPORT REQUIRED

☐ YES ☐ NO

Date: _____



NOTES:

1. CONTRACTOR TO VERIFY HEIGHT AND DIRECTION OF ANTENNAS WITH PROJECT MANAGER AND FINAL RF DESIGN.
2. CONTRACTOR TO VERIFY LIGHTNING ROD EXTENDS 2' MIN. ABOVE ALL ANTENNAS & EQUIPMENT.
3. REFER TO STRUCTURAL REVIEW NOTE ON G-001.
4. TOWER MANUFACTURER TO INSTALL PORTS NEAR VERIZON ANTENNA C/L. VERIFY FINAL PORT HEIGHT, SIZE, AND ORIENTATION WITH TOWER PLANS.

A SITE ELEVATION

SCALE: 11" x 17" - 1" = 20'-0"
22" x 34" - 1" = 10'-0"

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TOWER ELEVATION
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

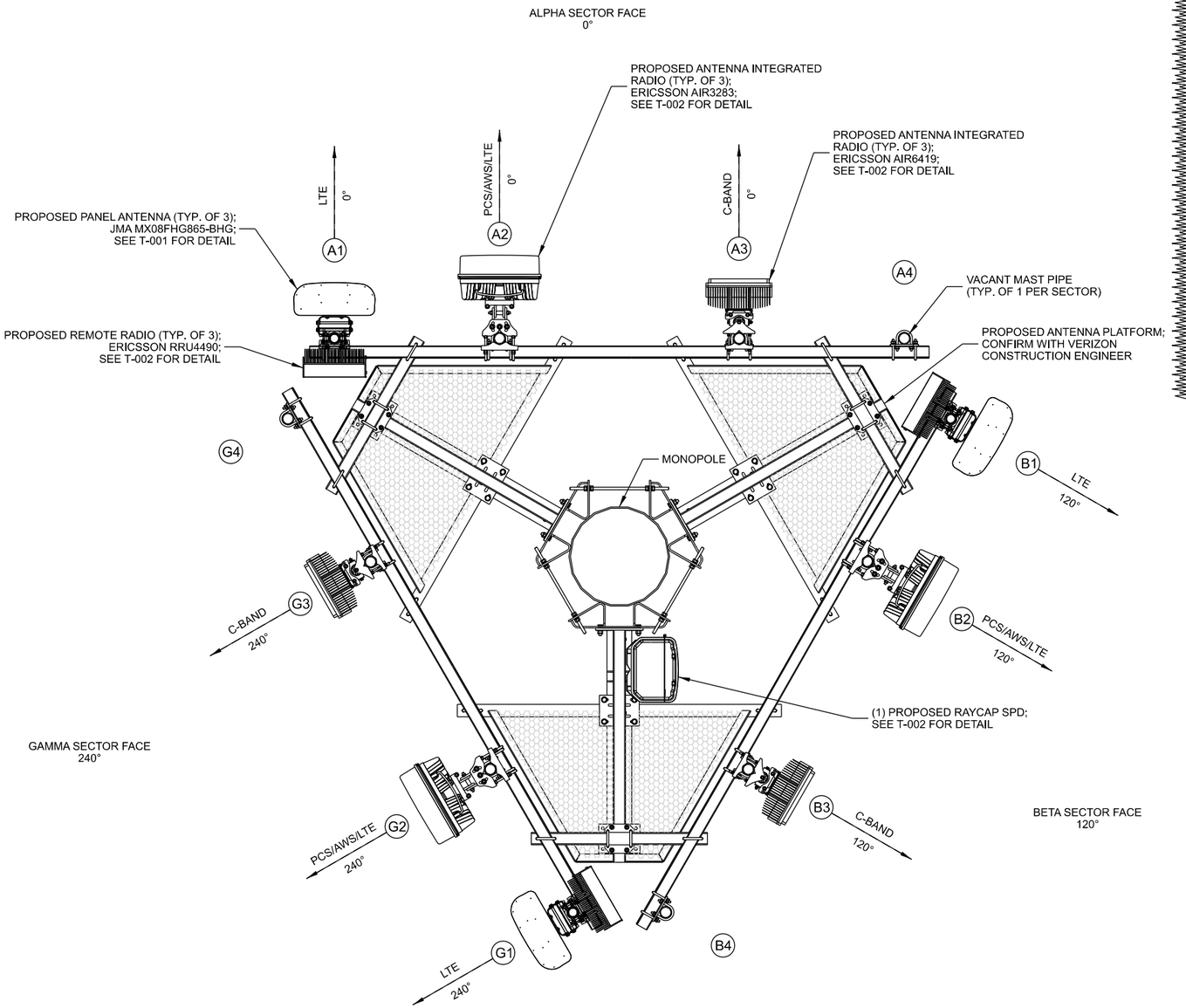
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SET TYPE	DRAFT
SHEET NUMBER	T-20

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NORTH



NOTE:

1. CONTRACTOR SHALL RECORD ALL DIMENSIONS AND MEMBER SIZES REQUESTED IN THE MOUNT GEOMETRY VERIFICATION REQUIREMENTS SECTION OF THE MOUNT ANALYSIS REPORT. CONTRACT EOR IF THESE DOCUMENTS ARE NOT AVAILABLE TO THE GENERAL CONTRACTOR.
2. CONTRACTOR SHALL INSPECT CLIMBING FACILITIES AND SAFETY CLIMB, IF PRESENT, AND ENSURE THEY ARE IN GOOD CONDITION. CONTRACTOR SHALL INSTALL SAFETY CLIMB WIRE ROPE GUIDES IN LOCATIONS WHERE WIRE ROPE IS RUBBING AGAINST THE MOUNT OR MOUNT-TO-TOWER CONNECTION STEEL. WIRE BRUSH CLEAN ANY OBSERVED CORROSION AND PROTECT WITH TWO (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC KOTE). CONTRACTOR SHALL PROVIDE PHOTOS OF WIRE ROPE GUIDE INSTALLATION AS PART OF PMI DOCUMENTS. CONTRACT EOR IF ADDITIONAL GUIDANCE IS REQURED.
3. CONTRACTOR TO PROVIDE AND INSTALL ALL RRU AND ANTENNA MOUNTING HARDWARE AS REQUIRED.
4. CONTRACTOR TO ENSURE MOUNT DOES NOT IMPEDE SAFETY CLIMB
5. VERIZON WIRELESS TO PROVIDE PROPOSED MOUNT. PROPOSED MOUNT TO MEET VERIZON MOUNT STANDARD NSTD-445. GC TO REQUEST MOUNT CLASSIFICATION DOCUMENTATION PRIOR TO CONSTRUCTION TO CONFIRM THE MOUNT MEETS NSTD-445. GC TO BRING ANY CONCERNS OR DISCREPANCIES TO THE ATTENTION OF THE CONSTRUCTION ENGINEER AND ENGINEER OF RECORD.

NOTES:

1. ALL ANTENNA AZIMUTHS TO BE FROM TRUE NORTH.
2. SEE MOUNT ANALYSIS FOR INSTALLATION REQUIREMENTS OF ANTENNAS AND EQUIPMENT.

A ANTENNA AND EQUIPMENT LAYOUT

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
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608,644,1549 FAX
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ANTENNA CONFIGURATION
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

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SET TYPE	DRAFT
SHEET NUMBER	T-30

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FINAL ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY							NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	QTY.	ANTENNA	BAND	ELEC D-TILT	MECH D-TILT	STATUS	QTY.	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	150'	0°	A1	1	JMA MX08FHG865-BHG	700/850	2°	0°	INSTALL	1	ERICSSON RRU4490	INSTALL
	150'	0°	A2	1	ERICSSON AIR3283	1900/AWS	3°	0°	INSTALL	-	-	-
	150'	0°	A3	1	ERICSSON AIR6419	C-BAND	3°	0°	INSTALL	-	-	-
	-	-	A4	-	-	-	-	-	-	-	-	-
BETA	150'	120°	B1	1	JMA MX08FHG865-BHG	700/850	2°	0°	INSTALL	1	ERICSSON RRU4490	INSTALL
	150'	120°	B2	1	ERICSSON AIR3283	1900/AWS	3°	0°	INSTALL	-	-	-
	150'	120°	B3	1	ERICSSON AIR6419	C-BAND	3°	0°	INSTALL	-	-	-
	-	-	B4	-	-	-	-	-	-	-	-	-
GAMMA	150'	240°	C1	1	JMA MX08FHG865-BHG	700/850	2°	0°	INSTALL	1	ERICSSON RRU4490	INSTALL
	150'	240°	C2	1	ERICSSON AIR3283	1900/AWS	3°	0°	INSTALL	-	-	-
	150'	240°	C3	1	ERICSSON AIR6419	C-BAND	3°	0°	INSTALL	-	-	-
	-	-	C4	-	-	-	-	-	-	-	-	-
ANTENNA TOTAL:			9							NON ANTENNA TOTAL:		3

PROPOSED HARDWARE

QTY	MANUFACTURER	MODEL	DESCRIPTION	LOCATION	STATUS
1	RAYCAP	RVZDC-4520-RM-48	DISTRIBUTION BOX	ON ICE BRIDGE POST	INSTALL
1	RAYCAP	RVZDC-6627-PF-48	DISTRIBUTION BOX	ON TOWER	INSTALL
1	RAYCAP	RTF-4575	FIBER MANAGEMENT TRAY	CABINETS	INSTALL
2	HUBER+SUHNER	HFT1206	HYBRID	TRUNK CABLE	INSTALL
5	COMMSCOPE	-	UP-CONVERTER MODULES	CABINETS	INSTALL
1	COMMSCOPE	-	DC-DC UP-CONVERTER	CABINETS	INSTALL

HYBRID CABLE LENGTH	
QUANTITY	2
LENGTH FROM GROUND SURGE PROTECTOR TO TOWER	15 FT
LENGTH FROM T.O.C. TO TOWER TOP SURGE PROTECTOR C/L	150 FT
TOTAL LENGTH OF HYBRID CABLE(S)	165 FT
** HYBRID CABLE LENGTH NOT TO EXCEED 367'	

JUMPER CABLE LENGTH CHECK	
IS THE DISTANCE FROM SURGE PROTECTOR TO RADIO UNIT LESS THAN 30'?	
ALPHA SECTOR	YES
BETA SECTOR	YES
GAMMA SECTOR	YES

NOTE:

1. RF DESIGN DETAILED ON THIS SHEET PROVIDED BY VERIZON AND IS INCLUDED FOR CONVENIENCE ONLY. FINAL RF DESIGN TO BE VERIFIED WITH VERIZON PRIOR TO CONSTRUCTION. IF SIGNIFICANT CHANGES OR DISCREPANCIES ARE IDENTIFIED, CONTACT ENGINEER PRIOR TO INSTALLATION.
2. IF CABLING LENGTH EXCEEDS MAXIMUM ALLOWED LENGTH CONTRACTOR SHALL CONTACT CLIENT AND ENGINEER TO RESOLVE PRIOR TO CONSTRUCTION.

A PROPOSED ANTENNA SUMMARY

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
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ANTENNA & EQUIPMENT SUMMARY

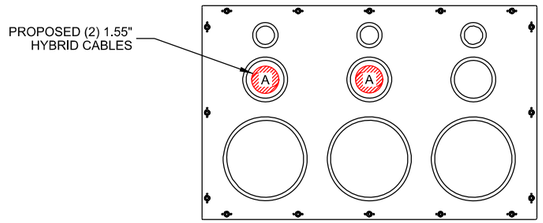
IA12 DT OELWEIN
OELWEIN, IOWA

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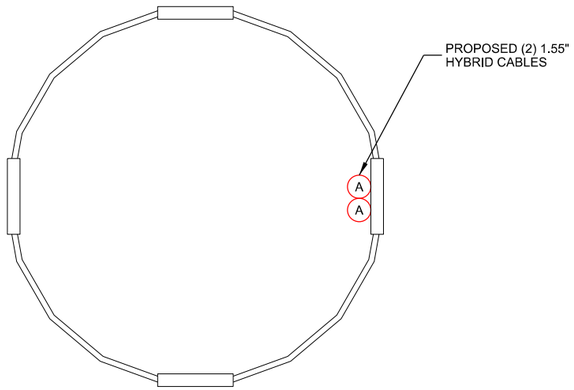
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SHEET NUMBER	T-50

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A PROPOSED CABINET COAX PORT (EXTERIOR VIEW)



CONTRACTOR TO PROVIDE AND INSTALL ALL ENTRY PORT BOOTS FOR PROPOSED HYBRID TRUNK CABLE AND CAPS.

CONTRACTOR TO PROVIDE AND INSTALL ALL ICE BRIDGE HARDWARE REQUIRED FOR PROPOSED COAX/HYBRID TRUNK CABLE

CONTRACTOR TO PROVIDE AND INSTALL ALL COAX/HYBRID TRUNK CABLE ATTACHMENT TO TOWER HARDWARE

B PROPOSED TOWER CABLE LAYOUT

NORTH

COAX SYMBOL	(#) SIZE	MOUNTING TYPE	CARRIER / OWNER	TECHNOLOGY	MOUNT HEIGHT
A	(2) 1.55"	TOWER INTERIOR	VERIZON	HYBRID	150'

CONSULTANT:
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CABLE ROUTING
IA12 DT OELWEIN
OELWEIN, IOWA

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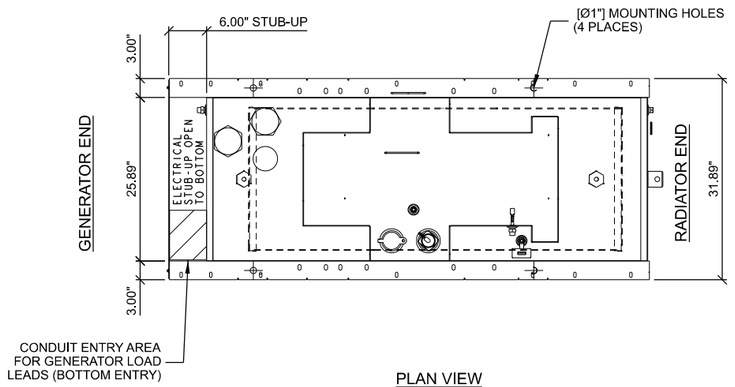
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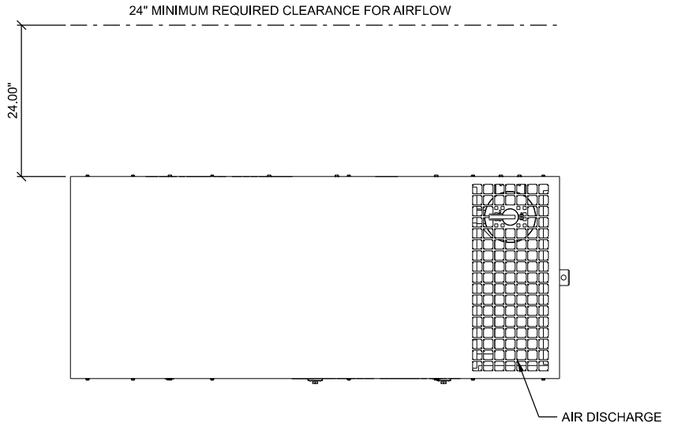
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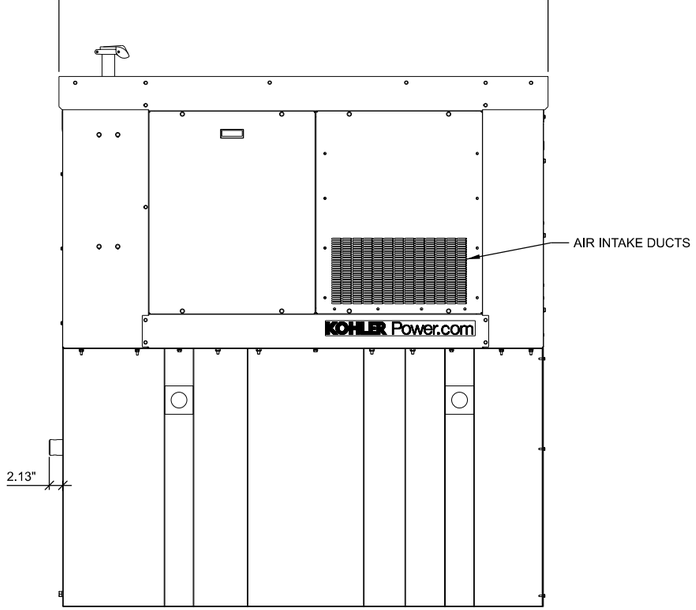
1. THE RIGHT SIDE OF THE GENERATOR IS SERVICE ACCESSIBLE.
2. 6 AMP BATTERY CHARGER.
3. 120VAC ENGINE BLOCK HEATER.
4. GENERATOR MUST BE GROUNDED.
5. SOUND ATTENUATED ENCLOSURE STANDARD WITH GENERATOR.
6. MUST ALLOW FREE FLOW OF DISCHARGE AIR AND EXHAUST.
7. MUST ALLOW FREE FLOW OF INTAKE AIR.
8. EASE ACCESS SERVICE PANEL IS LOCATED ON THE RIGHT SIDE OF GENERATOR ONLY.
9. BASE TANK REQUIRES ALL STUB-UPS TO BE IN RREAR TANK STUB-UP AREA.
10. SEE TABLE FOR SUBBASE FUEL TANK CAPACITY.
11. TANK EQUIPPED WITH FIRE SAFETY VALVE ON FUEL SUPPLY LINE.
12. IT IS THE RESPONSIBILITY OF THE INSTALLATION TECHNICIAN TO ENSURE THAT THE GENERATOR INSTALLATION COMPLIES WITH ALL APPLICABLE CODES, STANDARDS, AND REGULATIONS.
13. GENERATOR IS INSTALLED ON A UL-142 RATE DOUBLE WALL SUBBASE FUEL TANK.



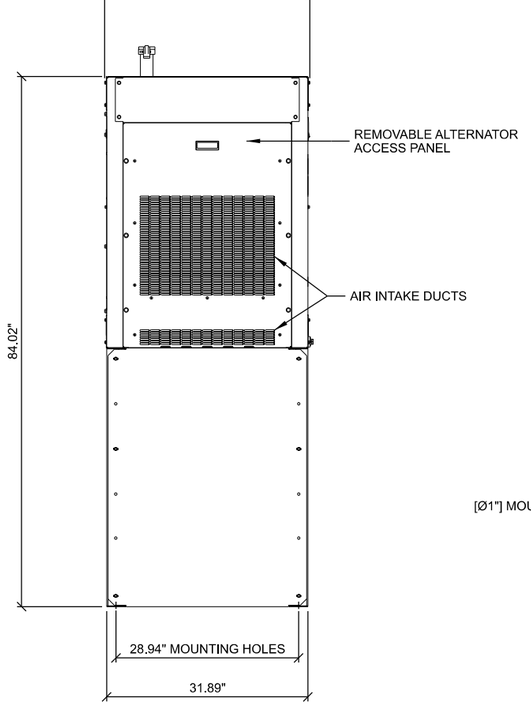
PLAN VIEW



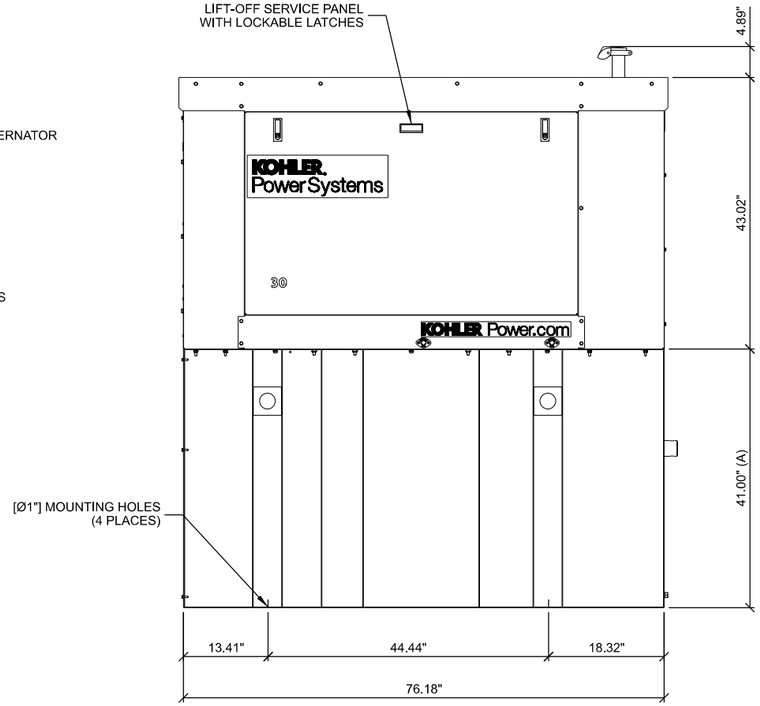
PLAN VIEW W/ ENCLOSURE



RIGHT VIEW



REAR VIEW



LEFT VIEW

GENSET	TANK P/N	TANK HT (A) IN	DESCRIPTION	ASSY WEIGHT
30REOZK	GM97093-MA2	41.0"	SKID/TANK 203 GAL	2114 LBS
30REOZK	GM97093-MA1	32.0"	SKID/TANK 148 GAL	1969 LBS

A **KOHLER 30REOZK DIESEL GENERATOR**

CONSULTANT:
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PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
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www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

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GENERATOR SPECIFICATIONS
IA112 DT OELWEIN
OELWEIN, IOWA

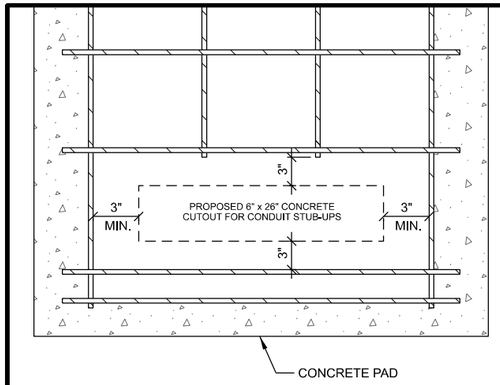
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BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-00

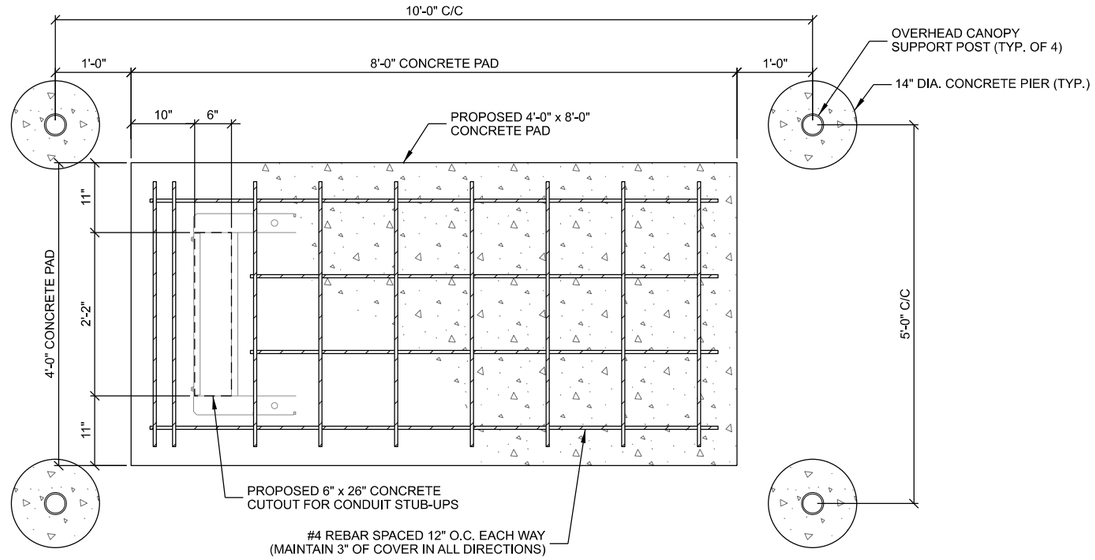
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STUB-UP REINFORCEMENT

NOTE:
VERIFY EXACT CONDUIT STUB-UP LOCATIONS WITH GENSET PLANS



A **KOHLER 30REOZK DIESEL GENERATOR FOUNDATION LAYOUT**

REBAR SCHEDULE		
SIZE	LENGTH	QTY
#4	7'-6"	2
#4	3'-6"	9
#4	6'-2"	2

GENERATOR CLEARANCE NOTE:

- MINIMUM OF 10' OF CLEARANCE FROM COMBUSTIBLE WALL
- MINIMUM OF 5' OF CLEARANCE FROM A NON-COMBUSTIBLE WALL
- MINIMUM OF 20' OF CLEARANCE FROM AN OUTDOOR ELECTRICAL TRANSFORMER OR NORMAL POWER DISTRIBUTION EQUIPMENT

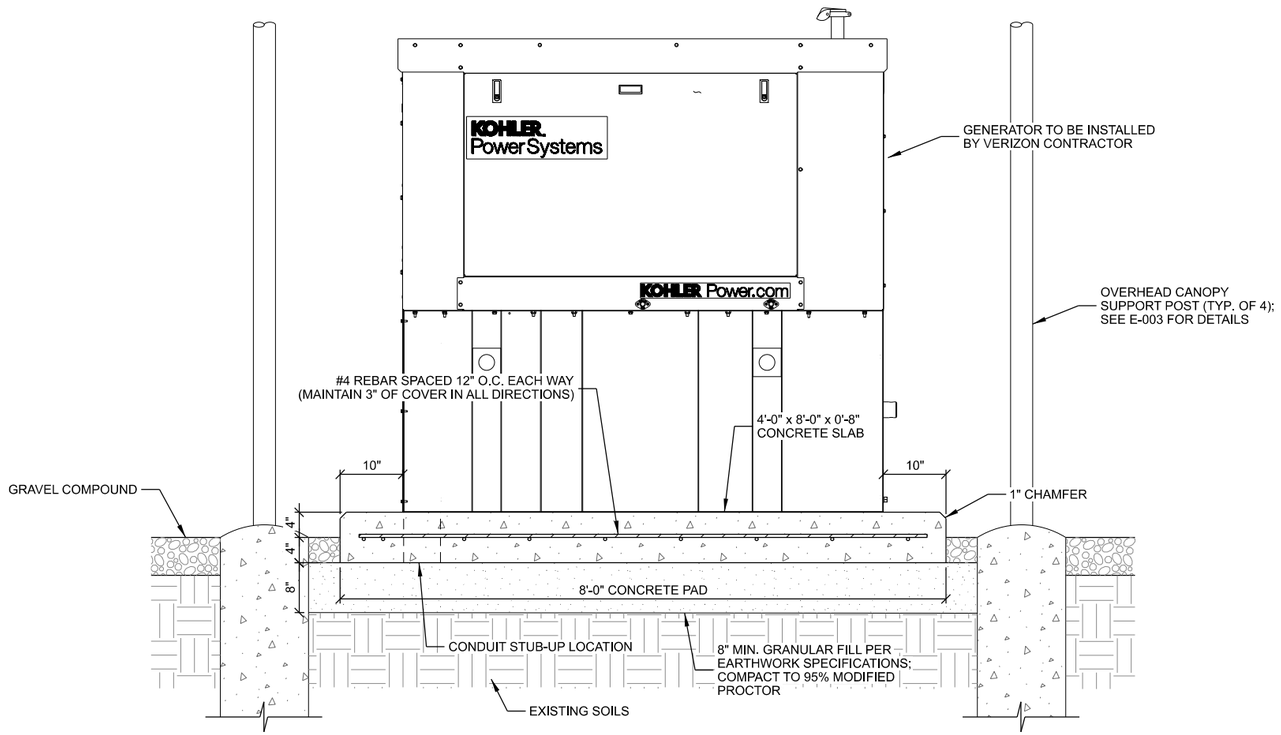
NOTE:

SEE GENERATOR MANUFACTURER'S DRAWINGS FOR PHYSICAL LOCATION OF FUEL LINES, CONTROL AND POWER INTERCONNECTIONS AND OTHER INTERFACES THAT ARE TO BE CAST INTO THE CONCRETE. THE PREFERRED METHOD IS TO BRING THE CONDUIT THROUGH THE CONCRETE PAD TO THE UNDERSIDE OF THE GENERATOR (MINIMIZES RODENT DAMAGE). FINISH CONNECTIONS WITH FLEXIBLE CONDUIT PER GENERATOR MANUFACTURER'S SPECIFICATIONS. RIGID CONDUITS SHALL BE SECURED TO THE EXISTING SLAB, THEN BURIED BETWEEN SLAB AND PLATFORM

NOTE:

SLAB NOT SUITABLE AT SITES WITH ORGANIC SOIL, UNCOMPACTED FILL, EXPANSIVE SOIL, OR SOILS SUSCEPTIBLE TO FROST HEAVE

REMOVE ALL ORGANIC MATERIAL, SOFT AREAS, AND POOR SOILS BENEATH CONCRETE PAD TO A DEPTH OF ATLEAST 2'-0" BELOW CONCRETE PAD



B **KOHLER 30REOZK DIESEL GENERATOR FOUNDATION DETAIL**

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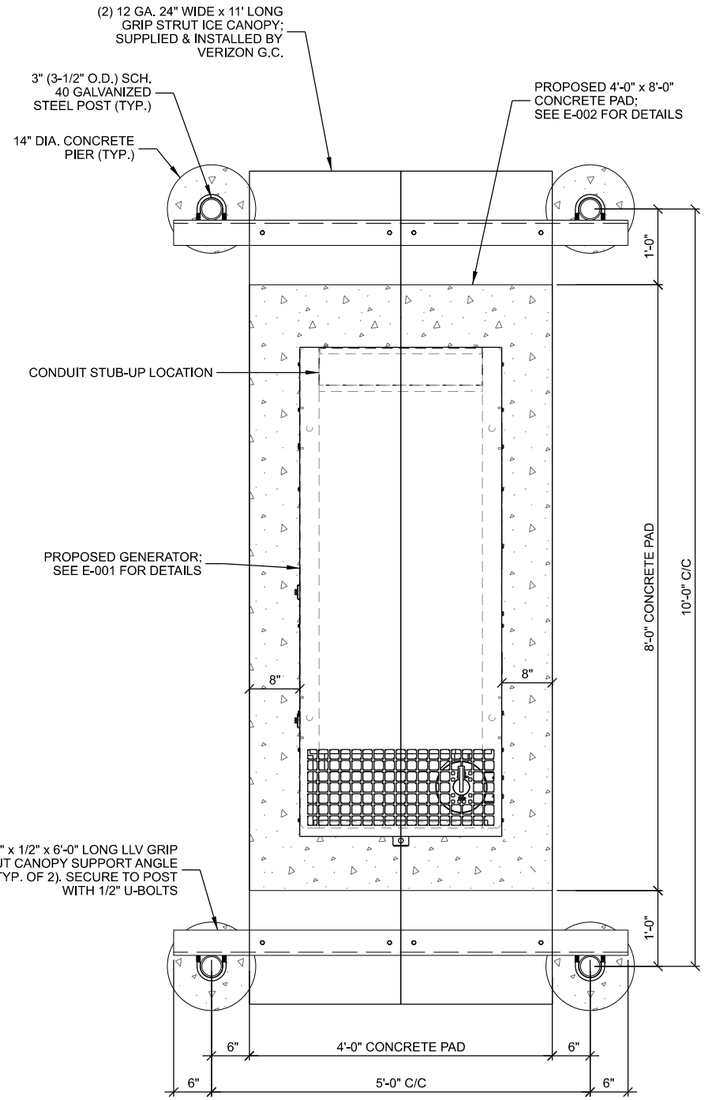
GENERATOR SPECIFICATIONS
IA112 DT OELWEIN
OELWEIN, IOWA

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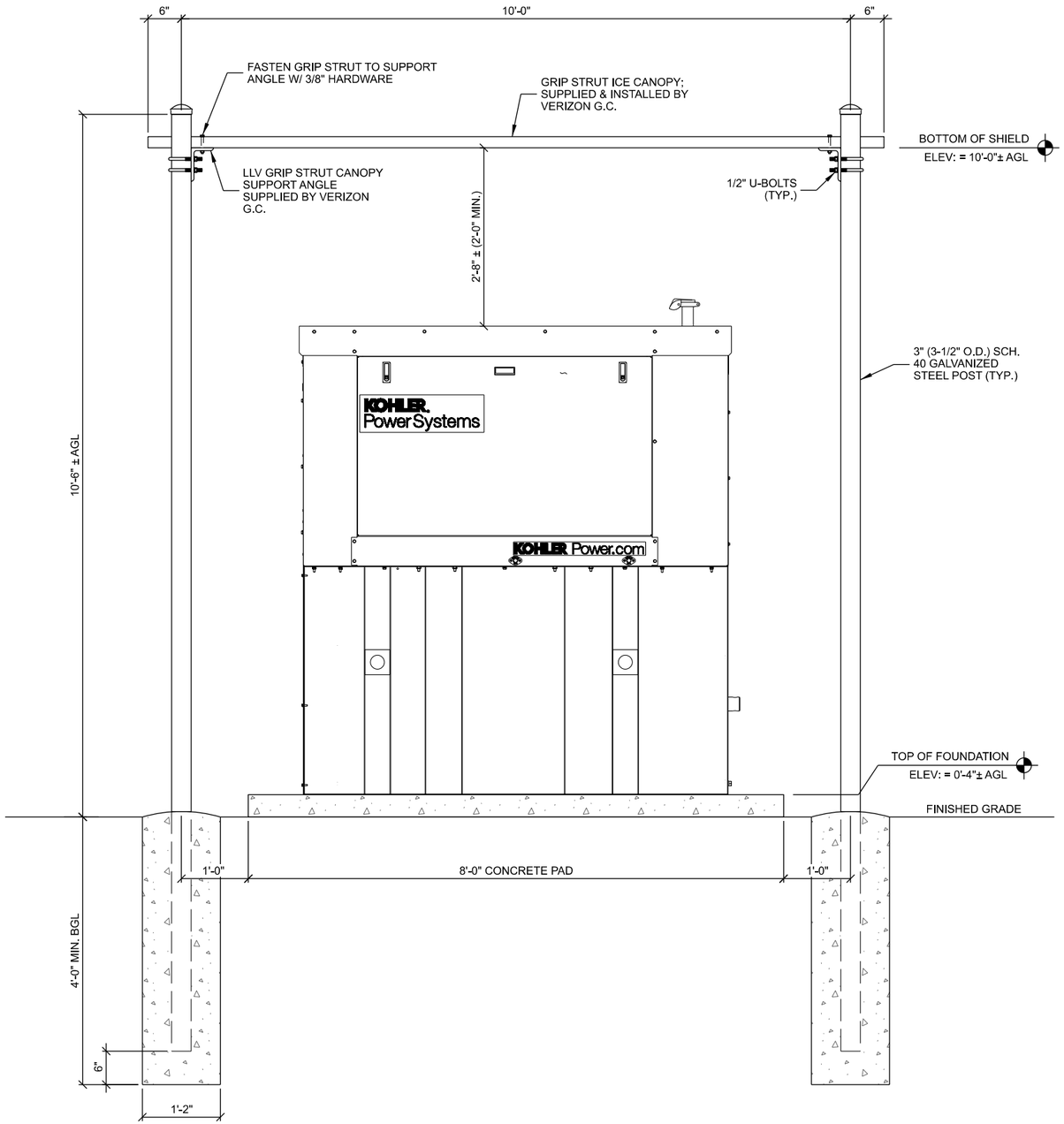
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A **GENERATOR CANOPY PLAN**



B **GENERATOR CANOPY ELEVATION**

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GENERATOR CANOPY DETAILS

IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

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KEYNOTES: (THIS SHEET)

- (A) EQUIPMENT GROUND RING #2 AWG SOLID TINNED COPPER GROUND LEAD MIN. 4'-6" BURY OR 6" BELOW FROST WHICH EVER IS GREATER
- (B) MAINTAIN 2- FOOT CLEARANCE FROM ALL STRUCTURES
- (C) MASTER GROUND BAR (MGB) MOUNTED VERTICALLY TO FIRST ICE BRIDGE POST ON INSULATORS
- (D) 5/8" DIAMETER x 10'-0" LONG COPPER CLAD GROUND ROD; SPACED AT 8' O.C.
- (E) BOND EQUIPMENT GROUND RING TO THE TOWER GROUND RING WITH (2) #2 SOLID BARE TINNED COPPER GROUND LEADS
- (F) EQUIPMENT CABINET GROUND; SEE E-501 FOR DETAILS
- (G) INTEGRATED LOAD CENTER (ILC) GROUND; SEE E-501 FOR DETAILS
- (H) FIBER ENCLOSURE GROUND; SEE E-501 FOR DETAILS
- (I) GENERATOR GROUND; SEE E-501 FOR DETAILS
- (J) EQUIPMENT PAD REBAR GROUND; SEE E-502 FOR DETAILS
- (K) GPS GROUND TO ICE BRIDGE POST; SEE E-501 FOR DETAILS
- (L) ICE BRIDGE POST GROUND; SEE E-501 FOR DETAILS
- (M) ICE BRIDGE SECTION GROUND; SEE E-501 FOR DETAILS
- (N) ICE BRIDGE SECTION TO POST; SEE E-501 FOR DETAILS
- (O) GROUND FENCE POSTS WITHIN 6-FEET OF EQUIPMENT
- (P) INSPECTION WELL (TYP.); SEE E-503 FOR DETAILS
- (Q) TOWER GROUND BAR (TGB) INSTALLED ON TOWER; SEE E-501 FOR DETAILS
- (R) 4" x 12" x 1/4" GROUND BAR INSIDE HAND HOLE; CONTRACTOR TO DRIVE 10' GROUND ROD & CLAMP TO GROUND BAR (IF APPLICABLE)
- (S) GROUND ELECTRIC METER TO (2) INDEPENDENT GROUND RODS, SPACED 10' O.C. WITH #2 AWG SOLID TINNED COPPER (IF APPLICABLE)
- (T) RAYCAP SPD GROUND (TYP.). SEE E-501 FOR DETAILS

NOTES:

1. THE GROUNDING SHALL BE TESTED PRIOR TO FINAL BACKFILLING. DOCUMENTATION OF 5 OHM OR LESS RESISTANCE TO BE PROVIDED TO PROJECT MANAGER.
2. ALL NON-INSULATED GROUND LEADS EXTENDING ABOVE GROUND LEVEL SHALL BE ENCASED IN 3/4" PVC & SEALED WITH SILICONE. PVC SHALL BE MIN. 16" INTO EARTH & EXTEND MIN. 6" ABOVE GROUND.
3. INSTALL 18" X 18" COPPER PLATES IN LIEU OF GROUND RODS WHEN INSTALLING OVER TOWER FOUNDATION OR WHERE DRIVING GROUND RODS IS NOT FEASIBLE.

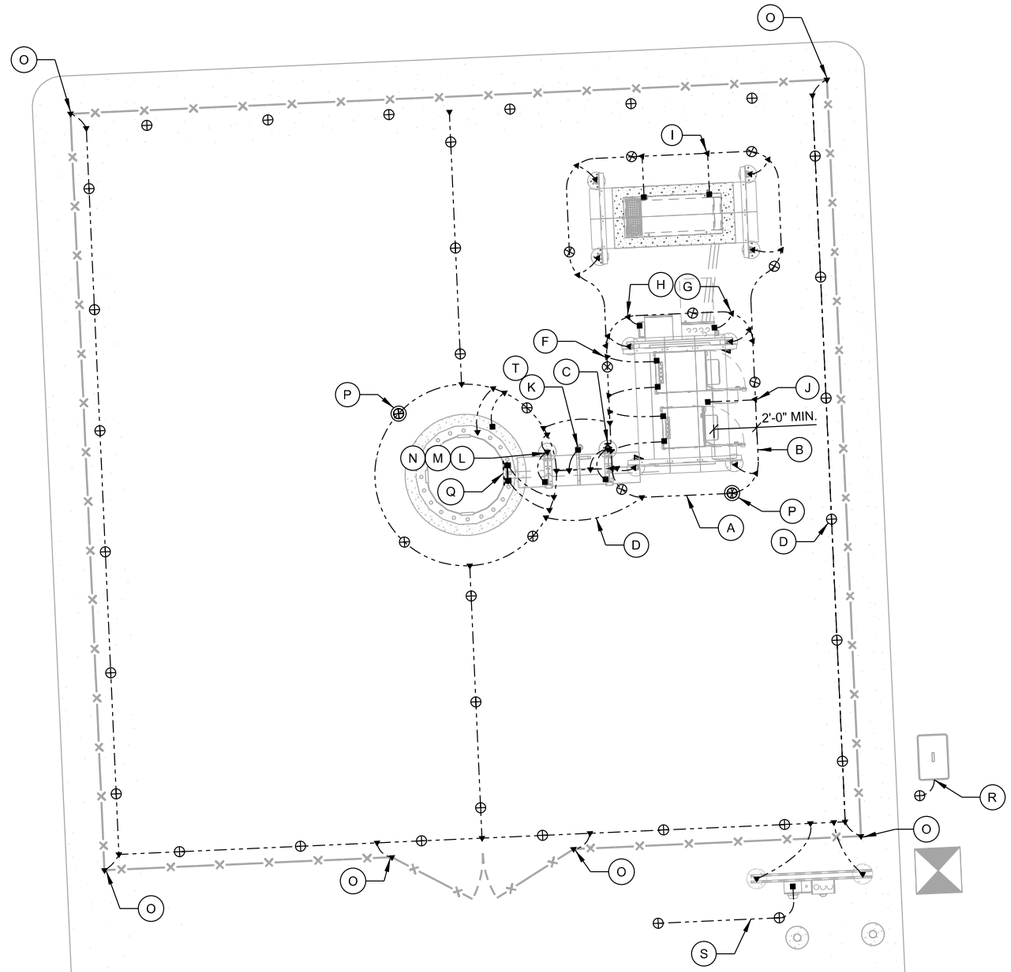
GROUNDING LEGEND: (THIS SHEET)

- ▲ EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION
- ■ MECHANICAL CONNECTION
- — - - GROUND LEAD
- ⊗ INSPECTION WELL
- ⊗ 5/8" DIA. x 10'-0" LONG, STEEL CLAD W/ A PURE COPPER JACKET (10' MAX SEPARATION); TOP OF EACH GROUND ROD SHALL EXTEND NO MORE THAN 6" ABOVE BOTTOM OF TRENCH
- ⊠ 18" X 18" X .032" THK COPPER PLATE (10' MAX SEPARATION)

GROUNDING ELECTRODE SYSTEM NOTES:

1. CONNECTIONS:
   ALL CONNECTIONS SHALL BE EXOTHERMICALLY CONNECTED UNLESS NOTED OTHERWISE. CONTRACTOR TO FOLLOW ALL MANUFACTURER'S GUIDELINES & RECOMMENDATIONS.
2. ALL ELECTRICAL AND MECHANICAL GROUND CONNECTIONS SHALL HAVE ANTI-OXIDANT COMPOUND APPLIED TO CONNECTION.
3. FENCE/GATE:
   GROUND FENCE POSTS WITHIN 6-FEET OF ENCLOSURE AND 25-FEET OF TOWER. GROUND EACH GATE POST AND CORNER POST. GROUND CONNECTIONS TO FENCE POSTS SHALL BE MADE BY THE EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.
4. CONTRACTOR SHALL SUBMIT THE GROUND RESISTANCE TEST REPORT AS FOLLOWS:
   A. ONE (1) COPY TO THE OWNER REPRESENTATIVE
   B. ONE (1) COPY TO THE ENGINEER
   C. ONE (1) COPY TO KEEP INSIDE EQUIPMENT ENCLOSURE

NORTH



GROUNDING NOTE:

1. THIS GROUNDING PLAN WAS PREPARED PRIOR TO THE COMPLETION OF THE GEOTECHNICAL REPORT AND RECEIPT OF THE TOWER FOUNDATION DESIGN. THE LAYOUT OF RADIALS AND GROUND RODS ARE APPROXIMATE IN NATURE AND MAY NEED TO BE ADJUSTED IN THE FIELD. GROUND RODS SHOULD NOT EXTEND THROUGH THE TOWER FOUNDATION OR OTHER STRUCTURAL ELEMENTS WITHOUT PRIOR APPROVAL FROM THE DESIGN ENGINEER. IN ADDITION, SOME ADJUSTMENT TO THE GROUND METHOD MAY BE REQUIRED IN INSTANCES WHERE SHALLOW BEDROCK OR OTHER UNIQUE CIRCUMSTANCES ARE ENCOUNTERED. CONTRACTOR SHALL CONSULT GEOTECHNICAL REPORT FOR FURTHER DESIGN AND CONSTRUCTION RECOMMENDATIONS.

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GROUNDING PLAN
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

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EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-10

5' 0 5' 10'
SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

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NORTH

PROPOSED ACCESS DRIVE

EXISTING SIDEWALK

PROPERTY LINE

EXISTING APRON

PROPOSED FIBER HANDHOLE INSTALLED IN THE R.O.W. BY FIBER PROVIDER. FIBER MMP LAT/LONG:
LAT: 42° 40' 22.9" N
LONG: 91° 55' 01.2" W

4TH ST SW

A FIBER VAULT AT R.O.W.

NORTH

(3) PROPOSED BURIED CONDUITS FROM GENERATOR TO ILC CABINET; (1) 2" DIA. SCH. 40 PVC CONDUIT & (2) 3/4" DIA. SCH. 40 PVC CONDUITS BY VERIZON CONTRACTOR; SEE E-505 FOR DETAILS

PROPOSED (1) 3" & (1) 3/4" LIQUID-TIGHT FLEXIBLE CONDUITS ROUTED ABOVE GRADE FROM ILC TO EQUIPMENT CABINET; BY VERIZON CONTRACTOR. SEE E-505 FOR DETAILS

(1) PROPOSED 3" LIQUID-TIGHT FLEXIBLE CONDUIT ROUTED ABOVE GRADE FROM CHARLES CUBE TO EQUIPMENT CABINET; BY VERIZON CONTRACTOR

PROPOSED ILC CABINET; SEE E-505 FOR DETAIL

PROPOSED CHARLES CUBE; SEE E-505 FOR DETAIL

(1) PROPOSED 3" DIA. SCH. 40 PVC ELECTRICAL CONDUIT W/ (2) #3/0 CU, (1) #1/0 CU NEUTRAL, & (1) #6 GROUND FOR ELECTRIC SERVICE, 42" BELOW GRADE (MIN.); APPROX. 45' +/- FROM UTILITY RACK TO INTEGRATED LOAD CENTER (ILC), BY VERIZON CONTRACTOR

(2) PROPOSED 4" SCH 40 BURIED CONDUITS W/ PULL STRINGS FOR ELECTRIC BETWEEN TRANSFORMER AND UTILITY RACK, APPROX. 10'± IN LENGTH, SCH 80 CONDUITS REQUIRED ABOVE GRADE AT UTILITY RACK; TO BE INSTALLED BY VERIZON CONTRACTOR

PROPOSED MULTI-METER UTILITY RACK BY OTHERS

PROPOSED CONCRETE FILLED BOLLARD (TYP.)

LEASE AREA

LEASE AREA

(1) PROPOSED 2" DIA. SCH. 40 PVC CONDUIT W/ PULL ROPE FOR VERIZON FIBER OPTIC LINE; TO BE INSTALLED BY VERIZON CONTRACTOR; APPROX. 50'± FROM VERIZON FIBER ENCLOSURE BOX (SOURCE TBD)

PROPOSED VERIZON COMPOUND FIBER VAULT TO BE FURNISHED & INSTALLED BY VERIZON CONTRACTOR (SOURCE TBD); SEE E-504 FOR DETAILS

PROPOSED TRANSFORMER (BY OTHERS)

(2) ORANGE 2" DIA. HDPE, SDR 13.5 SMOOTH WALL CONTINUOUS CONDUITS W/ PULL ROPE FOR FIBER OPTIC LINE; APPROX. 110'± FROM RIGHT OF WAY TO PROPOSED FIBER VAULT (SOURCE TBD). TO BE INSTALLED BY VERIZON CONTRACTOR

PROPOSED BURIED 4" DIA. PVC ELECTRIC CONDUIT; APPROX. 155' FROM EXISTING POWER POLE TO TRANSFORMER AT COMPOUND, TO BE INSTALLED BY ALLIANT

UTILITY PROVIDER INFO:	
ELECTRIC PROVIDER:	ALLIANT ENERGY
FIBER OPTIC PROVIDER:	TBD

5' 0 5' 10'
SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

NOTE:
1. FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.

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CONSULTANT:
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UTILITY PLAN
IA12 DT OELWEIN
OELWEIN, IOWA

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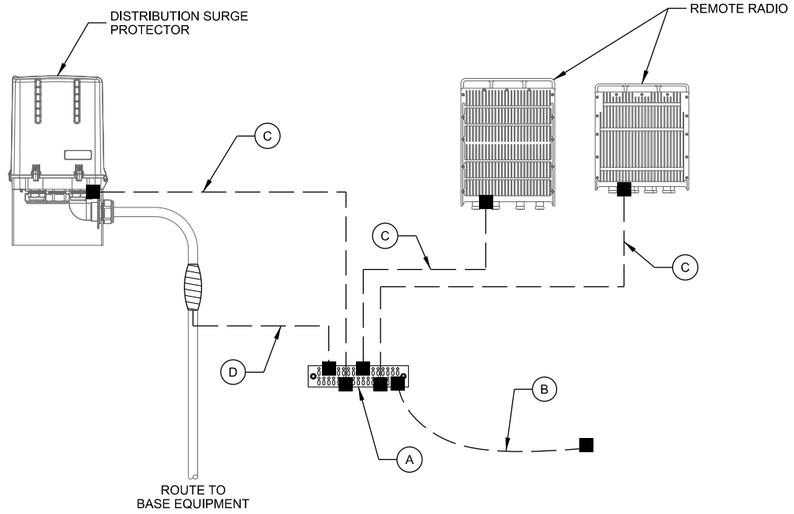
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KEYNOTES: (THIS SHEET)

- (A) 1/4" x 4" x 12" COLLECTOR GROUND BAR (CGB) FOR CONNECTION OF MULTIPLE GROUND KITS AT ONE LEVEL
- (B) CGB GROUND #2 AWG GREEN-INSULATED STRANDED COPPER LEAD WITH 2 HOLE LONG BARREL AND UL LISTED BONDING CLAMP TO TOWER STEEL AND/OR MOUNT STEEL
- (C) ANCILLARY EQUIPMENT GROUND KIT #2 AWG STRANDED INSULATED LEAD TO GROUND BAR WITH 2 HOLE LONG BARREL LUG (TYP.)
- (D) CABLE GROUND #2 AWG STRANDED INSULATED TO GROUND BAR WITH 2 HOLE LONG BARREL LUG (TYP.)
- (E) 1/4" x 4" x 20" MASTER GROUND BAR (MGB) MOUNTED VERTICALLY TO FIRST ICE BRIDGE POST ON INSULATORS
- (F) EQUIPMENT CABINET GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE TO EQUIPMENT PAD GROUND RING (TYP. OF 2 PER CABINET)
- (G) INTEGRATED LOAD CENTER (ILC) GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE TO EQUIPMENT PAD GROUND RING
- (H) FIBER ENCLOSURE GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE TO EQUIPMENT PAD GROUND RING
- (I) GENERATOR GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE TO EQUIPMENT PAD GROUND RING (TYP. OF 2)
- (J) CANOPY POST GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE (TYP. OF 4)
- (K) CANOPY TO POST GROUND #2 AWG GREEN-INSULATED STRANDED COPPER LEAD WITH 2 HOLE LONG BARREL ON EACH END (TYP.);
- (L) EQUIPMENT PAD REBAR GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE
- (M) CONDUIT GROUND #2 AWG SOLID TINNED COPPER LEAD
- (N) GPS GROUND TO ICE BRIDGE POST #2 AWG GREEN-INSULATED STRANDED COPPER LEAD
- (O) ICE BRIDGE POST GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE (TYP.)
- (P) ICE BRIDGE SECTION GROUND #2 AWG GREEN-INSULATED STRANDED COPPER LEAD WITH 2 HOLE LONG BARREL ON EACH END (TYP.)
- (Q) ICE BRIDGE SECTION TO POST GROUND #2 AWG SOLID TINNED COPPER LEAD (TYP.); ORIENT LEAD WITH HIGH SIDE TOWARDS TOWER
- (R) 1/4" x 4" x 20" TOWER GROUND BAR (TGB) INSTALLED ON TOWER; FOR LATTICE TOWERS, MOUNT TGB DIAGONALLY AT 12" ABOVE ICE BRIDGE FOR EASIER HOOK-UP OF GROUNDING KIT LEADS
- (S) TGB GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE FROM TGB TO TOWER GROUND RING (TYP. OF 2)
- (T) TBG GROUND #2 AWG GREEN-INSULATED STRANDED COPPER LEAD WITH 2 HOLE LONG BARREL AND UL LISTED BONDING CLAMP TO FLAT METAL
- (U) SECURE GROUND LEADS TO TOWER WITH BAND STRAPS OR SNAP-IN HANGERS AT GENERAL CONTRACTOR'S DISCRETION. USE MULTIPLE LEVELS OF ATTACHMENT IF GROUND BAR IS ATTACHED HIGH ABOVE GRADE.

GROUNDING LEGEND: (THIS SHEET)

- ▲ EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION
- ■ MECHANICAL CONNECTION
- — - — GROUND LEAD

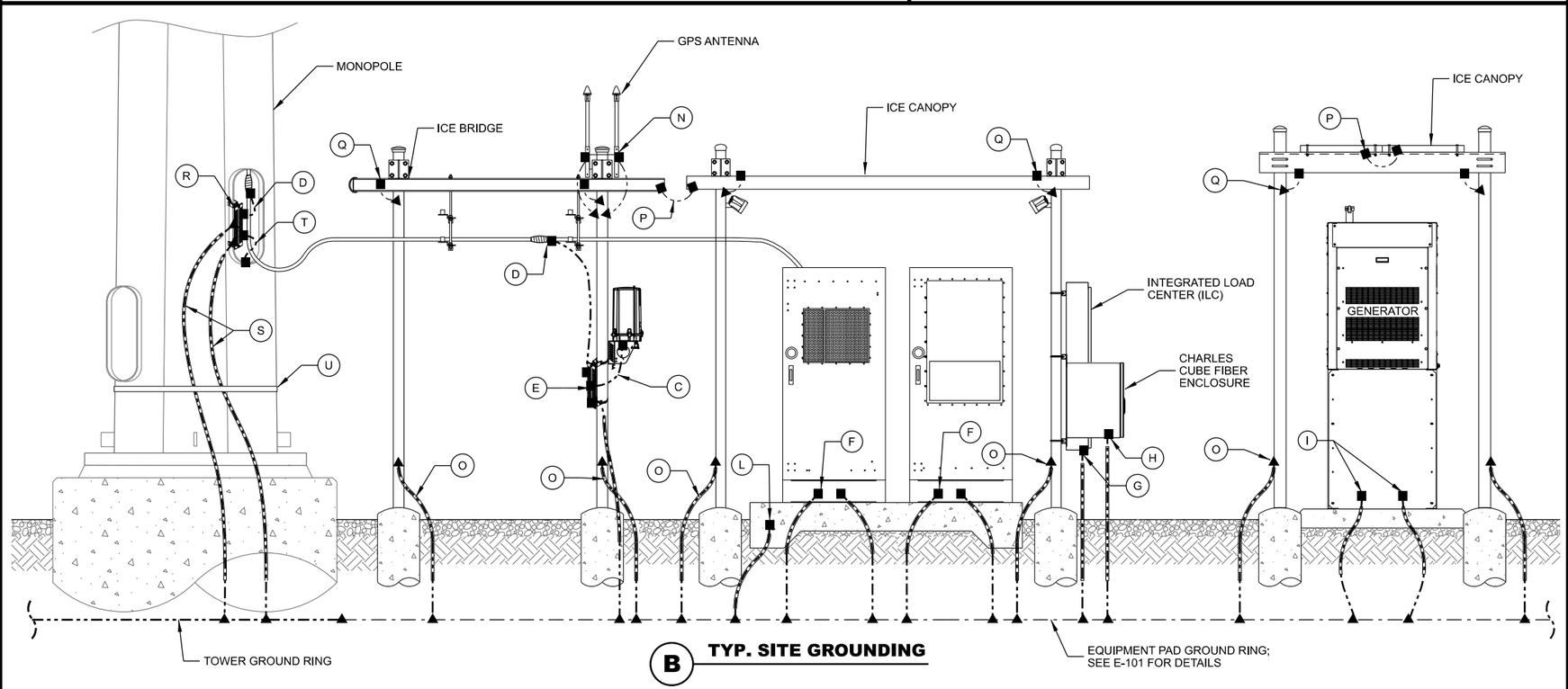


NOTES:
1. ALL CABLING AND/OR GROUNDING RUNS SHALL BE INSTALLED IN A NEAT AND ORDERLY FASHION.
2. CONTRACTOR SHALL INSTALL PER LATEST EDITION OF THE N.E.C.
3. SCHEMATIC DETAIL ONLY. REFER TO ANTENNA AND EQUIPMENT CONFIGURATION FOR EQUIPMENT QUANTITY AND LOCATION.
4. ALL GROUND LEADS TO BE ROUTED IN A DOWNWARD FASHION.

A ANTENNA LEVEL GROUNDING

NOTES: (THIS SHEET)

1. ALL BELOW-GRADE CONNECTIONS ARE TO BE EXOTHERMICALLY WELDED A MINIMUM OF 48" BELOW GRADE.
2. ALL LEADS EXTENDING ABOVE GRADE TO BE ENCASED IN 3/4" CONDUIT AND EXTEND A MINIMUM OF 6" ABOVE FINISHED GRADE AND 24" BELOW FINISHED GRADE.
3. APPLY COLD GALVANIZATION TO ALL ABOVE-GROUND EXOTHERMICALLY WELDED CONNECTIONS.
4. APPLY ANTI OXIDANT COMPOUND TO ALL MECHANICAL CONNECTIONS.
5. UPPER AND LOWER TOWER GROUND BARS TO BE BONDED DIRECTLY TO TOWER STEEL WITH #2 CONDUCTORS.
6. AIR TERMINAL TO EXTEND 2' ABOVE HIGHEST ANTENNA MIN. ON MAST PIPE MECHANICALLY FASTEN AIR TERMINAL TO MAST PIPE, MAST PIPE TO BE MECHANICALLY CONNECTED TO TOWER STEEL



B TYP. SITE GROUNDING

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IA12 DT OELWEIN
OELWEIN, IOWA

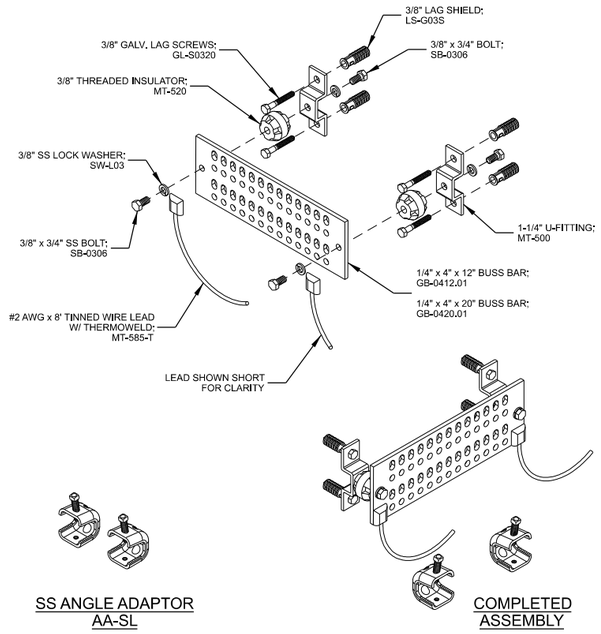
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INT.	DATE:	DESCRIPTION:
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BSS	08/07/25	REV. B

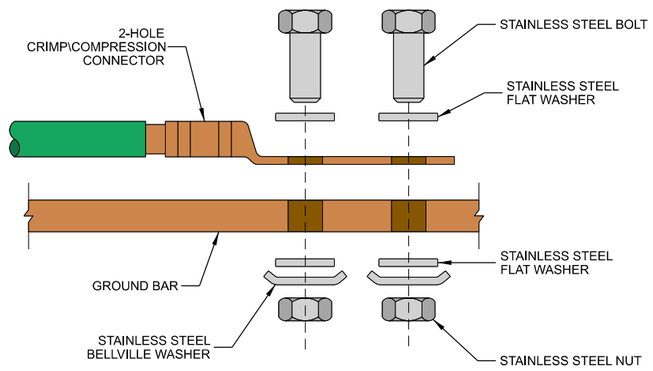
CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-50

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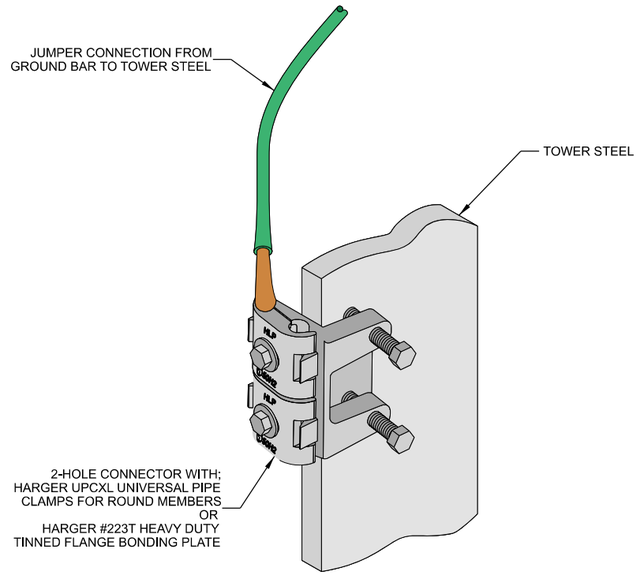
A GROUND AND BUSS BAR



NOTES:

1. ALL OUTDOOR HARDWARE (BOLTS, SCREWS, NUTS, WASHERS) SHALL BE 18-8 STAINLESS STEEL TYPE GRADE. INDOORS, GRADE 5 STEEL HARDWARE MAY BE USED.
2. CHOOSE BOLT LENGTH TO ALLOW THE EXPOSURE OF AT LEAST TWO THREADS.
3. BACK TO BACK LUG CONNECTIONS ARE AN ACCEPTABLE PRACTICE WHEN BONDED TO A GROUND BAR OR STEEL OBJECTS.
4. AT CONNECTIONS MADE TO STEEL OR ANY OTHER DISSIMILAR METALS, A DRAGON TOOTH WASHER MEETING VZW PRACTICES SHALL BE USED BETWEEN THE CONNECTOR AND STEEL.
5. IF NOT USING DRAGON TOOTH WASHERS, THOROUGHLY REMOVE A SECTION OF PAINT OR COATING APPROXIMATELY THE SAME SIZE AS CONNECTOR. REMOVE THE PAINT FROM SURFACE USING A DREMEL TYPE TOOL.
6. USE AN APPROVED ANTI-OXIDATION COMPOUND ON ALL GROUNDING CONNECTIONS. A COPPER COSMOLINE GREASE BASED COMPOUND (NO OX-ID) SHALL BE USED ON ALL COPPER TO COPPER CONNECTIONS. A ZINC BASED (GREY COLORED) COMPOUND SHALL BE USED ON ALL COPPER TO STEEL CONNECTIONS.
7. WHEN BONDING TO A METALLIC OBJECT WHERE ACCESS IS LIMITED TO ONLY ONE SURFACE, DRILLING & TAPPING OR SELF DRILLING SCREWS ARE THE PREFERRED AND ACCEPTABLE MEANS OF CONNECTION. SHEET METAL SCREWS SHALL NOT BE USED.

B GROUNDING LUG

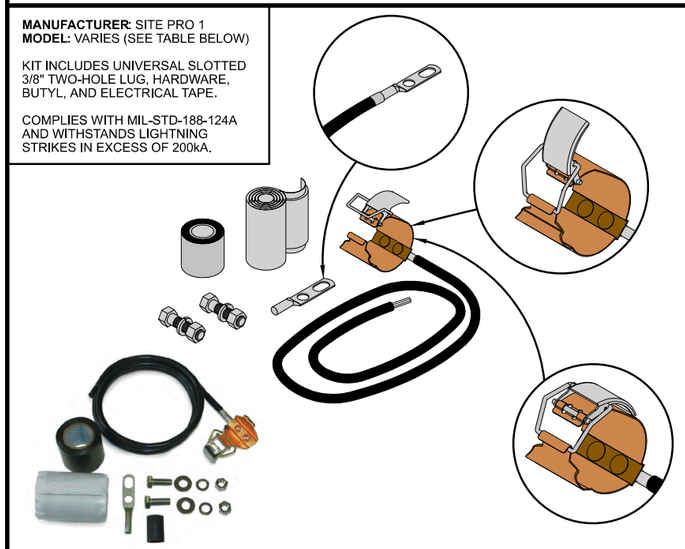


C GROUND BAR CONNECTION TO TOWER STEEL

MANUFACTURER: SITE PRO 1
MODEL: VARIES (SEE TABLE BELOW)

KIT INCLUDES UNIVERSAL SLOTTED 3/8" TWO-HOLE LUG, HARDWARE, BUTYL, AND ELECTRICAL TAPE.

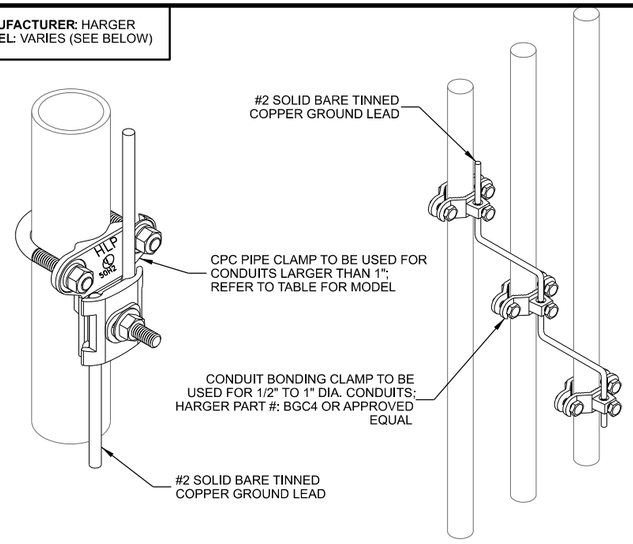
COMPLIES WITH MIL-STD-188-124A AND WITHSTANDS LIGHTNING STRIKES IN EXCESS OF 200kA.



PART #	CABLE SIZE & TYPE	LENGTH	LUG	WEIGHT
GK-C12	1/2" CORRUGATED	5'	UNATTACHED	1.50 LB.
GK-C78	7/8" CORRUGATED	5'	UNATTACHED	1.65 LB.
GK-C114	1-1/4" CORRUGATED	5'	UNATTACHED	1.70 LB.
GK-C158	1-5/8" CORRUGATED	5'	UNATTACHED	1.70 LB.
GK-C214	2-1/4" CORRUGATED	5'	UNATTACHED	1.80 LB.

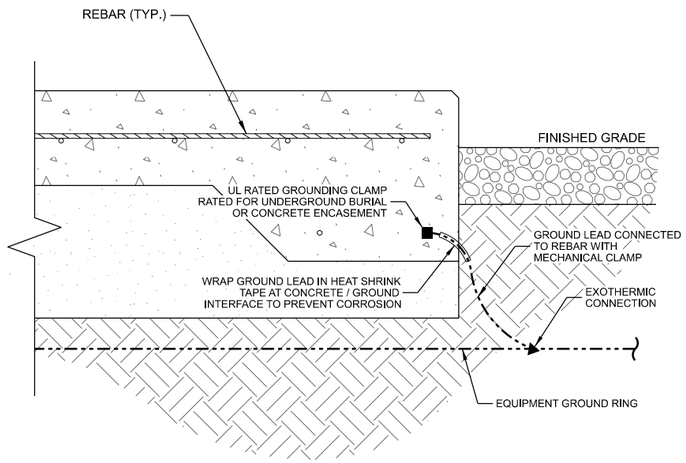
D CLIP ON GROUND KIT

MANUFACTURER: HARGER
MODEL: VARIES (SEE BELOW)



PART #	NOMINAL PIPE SIZE RANGE	PIPE OUTSIDE DIAMETER
CPC1/1.25	1" - 1.25"	0.9375" - 1.7"
CPC1.5/2	1.5" - 2"	1.25" - 2.4"
CPC2.5/3	2.5" - 3"	2.5" - 3.5"
CPC3.5/4	3.5" - 4"	3.375" - 4.5"
CPC5/6	5" - 6"	4.75" - 6.63"

E CONDUIT GROUNDING



NOTES:

1. FOUNDATION SHOWN IS TYPICAL. SEE TOWER FOUNDATION PLANS FOR REINFORCEMENT DETAILS.
2. FOUNDATION GROUNDING PER NEC 250.52(3)(A). GROUNDING CONNECTIONS TO BE COVERED BY A MINIMUM OF 3" CONCRETE AND BE MADE TO A MIN, 20' CONTINUOUS REBAR, IF POSSIBLE.

F EQUIP. PAD FOUNDATION GROUNDING

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

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GROUNDING DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

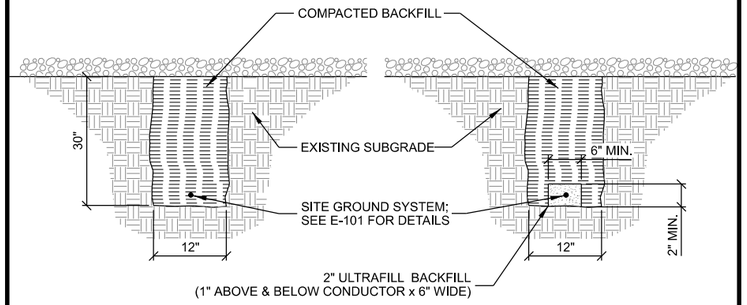
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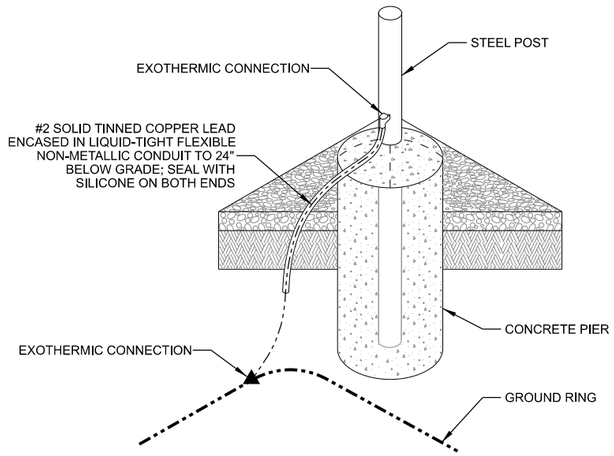


STANDARD GROUND TRENCH ENHANCED GROUND TRENCH

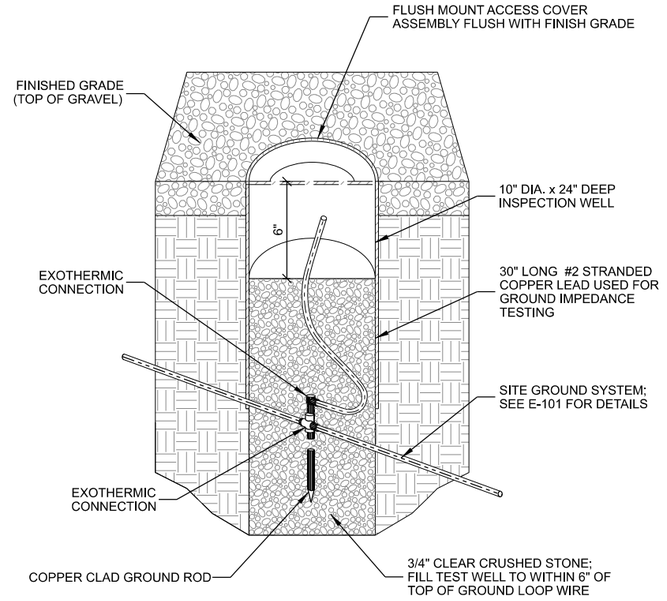
NOTES:

1. GROUNDING TRENCHES TO BE BACK FILLED WITH NATIVE SOIL.
2. COMPACT BACK FILL TO 95% MODIFIED PROCTOR.
3. CONTACT PSC MINIMUM 24HRS NOTICE PRIOR TO BACK FILLING TO ALLOW FOR INSPECTION.

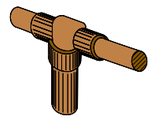
A GROUND TRENCH



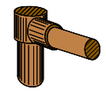
B POST GROUNDING



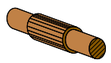
C INSPECTION WELL



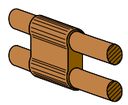
TYPE RT
* NOT PERMITTED *



TYPE GR



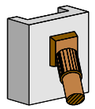
TYPE BS



TYPE PT



TYPE HD

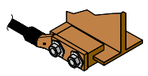


TYPE VA

NOTES:

1. EXOTHERMIC "TYPES" SHOWN ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR OTHER POSSIBLE TYPES OF EXOTHERMIC CONNECTIONS THAT CAN BE USED IN STANDARD OR SPECIALLY DESIGNED GROUNDING PLANS.
2. CONTRACTOR TO PROVIDE ALL REQUIRED EXOTHERMIC CONNECTIONS.

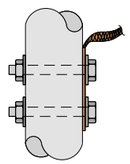
D EXOTHERMIC CONNECTIONS



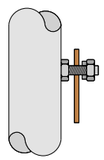
TYPE YGIBS



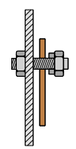
TYPE YGHA



TYPE B



TYPE KC TO PIPE



TYPE KC
* TO FLAT SURFACE *

NOTES:

1. MECHANICAL "TYPES" SHOWN ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR OTHER POSSIBLE TYPES OF MECHANICAL CONNECTIONS THAT CAN BE USED IN STANDARD OR SPECIALLY DESIGNED GROUNDING PLANS.
2. CONTRACTOR TO PROVIDE ALL REQUIRED MECHANICAL CONNECTIONS.

E MECHANICAL CONNECTIONS

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CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
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CLIENT:
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GROUNDING DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

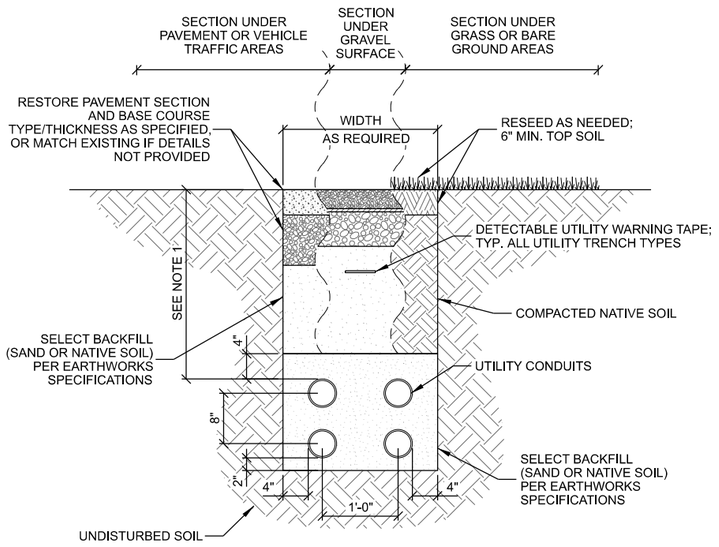
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CHECKED BY	PER
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EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-50

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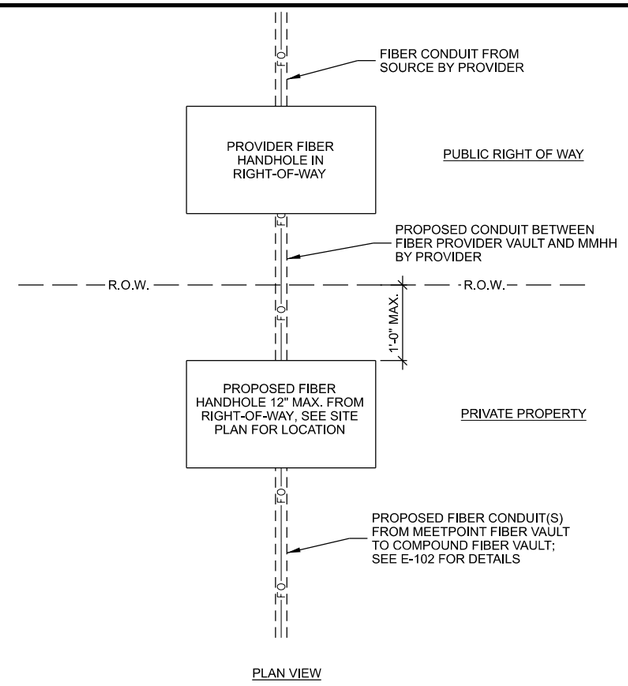
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NOTES:

1. UTILITY CONDUITS TO BE BURIED A MINIMUM DEPTH OF 42" BELOW GROUND LEVEL OR 6" BELOW THE FROST LINE.

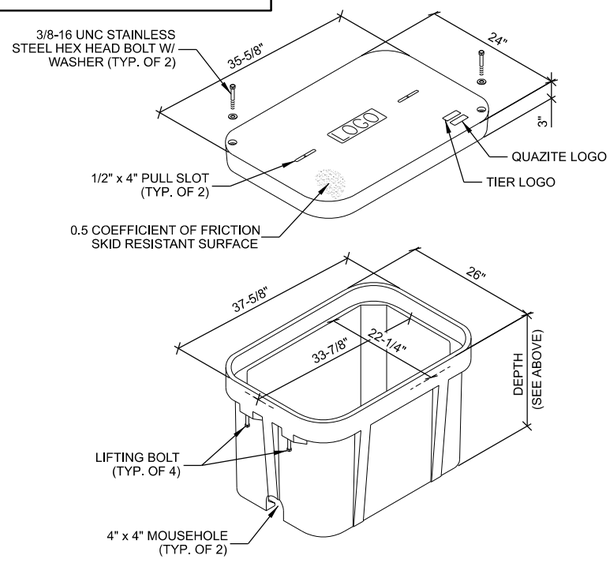
A **UTILITY TRENCH**



B **FIBER HANDHOLE INSTALLATION**

MANUFACTURER: QUAZITE
MODEL: PG2436BA36 (SPLICE BOX)
PG2436BA24 (PULL BOX)
PG2436KK00 (COVER)
INSIDE DIMENSIONS:
36" x 24" x 36" (L x W x D) SPLICE BOX
36" x 24" x 24" (L x W x D) PULL BOX

POLYMER CONCRETE BOX WITH OPEN BOTTOM

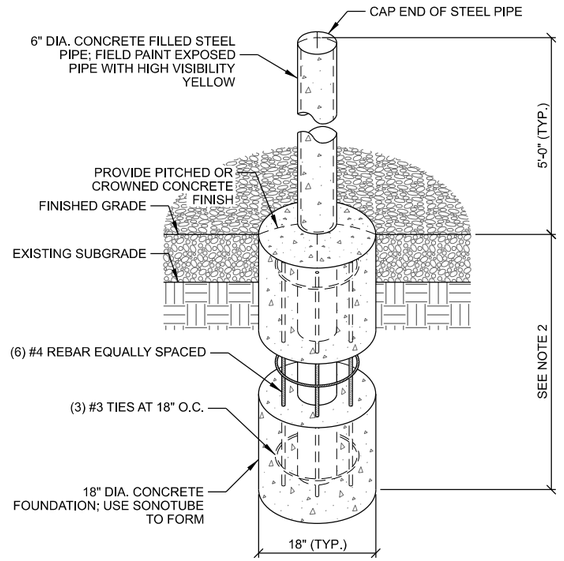


C **UTILITY VAULT**

WARNING TAPE & TRACE WIRE NOTES: (THIS SHEET)

1. WARNING TAPE TO BE INSTALLED ABOVE THE ELECTRICAL RUN FROM THE GENERATOR TO THE PLATFORM AND ABOVE THE FUEL LINE BETWEEN THE GENERATOR AND FUEL SOURCE.
2. WARNING TAPE SHALL BE RUN CONTINUOUSLY ALONG THE ENTIRE LENGTH AND INSTALLED 12 INCHES ABOVE THE TOP OF THE CONDUITS
3. TRACER WIRE SHALL RUN CONTINUOUSLY ALONG THE ENTIRE LENGTH OF THE BURIED GAS AND ELECTRIC CONDUITS
4. TRACER WIRE SHALL BE SECURED TO THE CONDUIT AND MAINTAINED ABOVE THE CONDUIT CENTERLINE DURING TRENCH BACKFILLING.
5. TRACER WIRE TO EXTEND TO THE TOP OF PVC ABOVE CONCRETE ON BOTH ENDS - LOOP AND WRAP AROUND APPROPRIATE CONDUIT.
6. TRACER WIRE SHALL CONSIST OF 14GA. SOLID COPPER WIRE WITH A CORROSION PROTECTIVE COATING.
7. INSTALL TRACER WIRE WITH SPACER AND SECURE PER MNFG. RECOMMENDATIONS - AT A MIN. EVERY 10' AND AT ALL BENDS. - DO NOT WRAP BURIED CONDUIT WITH TRACER WIRE TO AVOID UNNECESSARY STRESS ON TRACER. - CONTRACTOR TO CHECK CONTINUITY OF TRACER WIRE BEFORE AND AFTER BURIAL AND DOCUMENT RESULTS. 12" ABOVE THE TOP OF THE CONDUITS.

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NOTES:

1. MAINTAIN 3" MINIMUM REBAR COVER IN ALL DIRECTION
2. PIER FOUNDATION DEPTH TO BE A MINIMUM OF 48"; DEPTH TO EXCEED LOCAL FROST DEPTH
3. CONCRETE TO BE A MINIMUM OF 4,000 PSI AT 28 DAYS

D **PIPE BOLLARD**

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
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UTILITY DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

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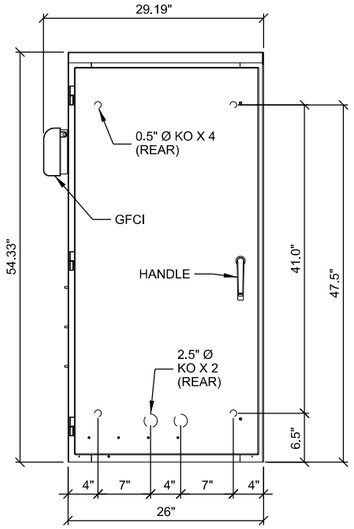
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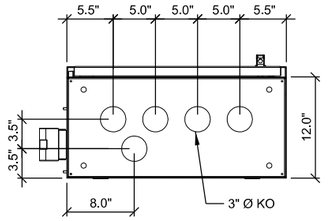
MANUFACTURER: INTERSECT, INC.
MODEL: 112200-30-42-ATS-3R
DIMENSIONS: 54.33" x 26.0" x 12.0" (H x W x D)

TYPE 3R ENCLOSURE

ATS 1-PHASE, 42 POSITION LOAD CENTER



FRONT VIEW

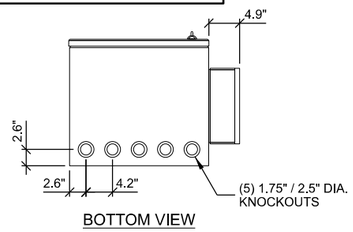


BOTTOM VIEW

A INTEGRATED LOAD CENTER (ILC)

MANUFACTURER: CHARLES INDUSTRIES
MODEL: CUBE-RL1003
DIMENSIONS: 26.3" x 22.1" x 20.0" (H x W x D)
RACK SPACE: 14RU

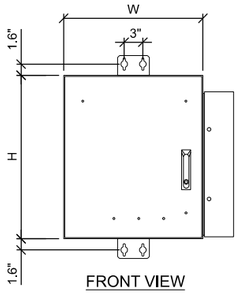
ACCESSORIES
POLE MOUNT KIT: 97-CABPMKIT
H-FRAME HARDWARE KIT: 97-001971-A
SLIDE OUT TRAY: 97-001990-A
10" PLINTH KIT: 97-002127-A



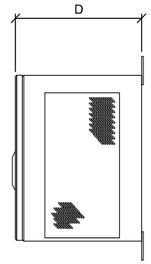
BOTTOM VIEW



SHOWN WITH OPTIONAL SLIDE OUT TRAY



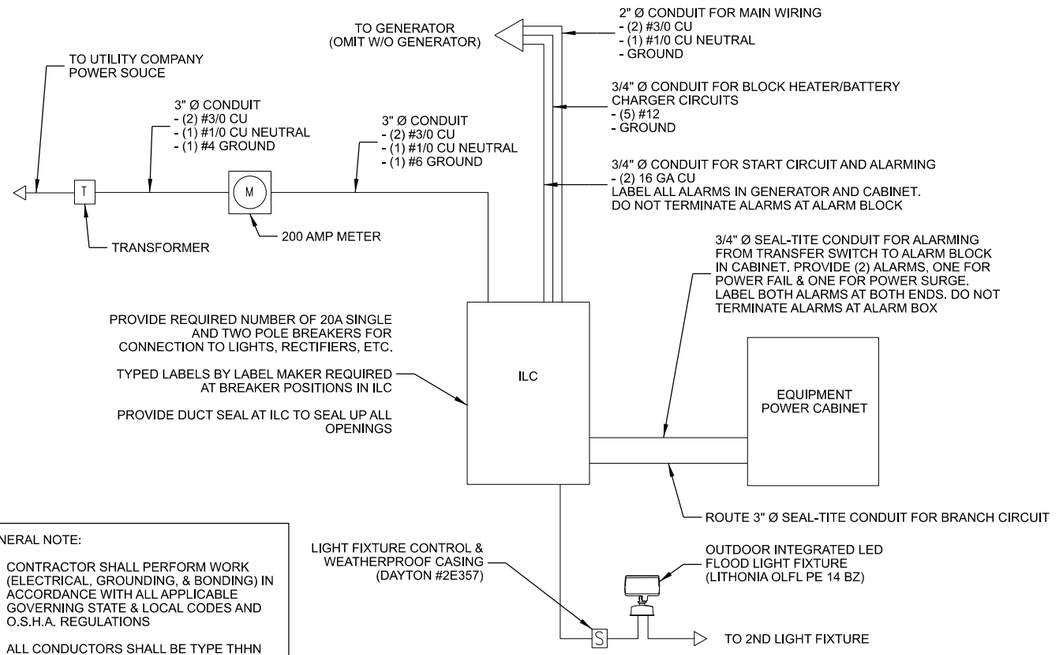
FRONT VIEW



SIDE VIEW

B FIBER ENCLOSURE

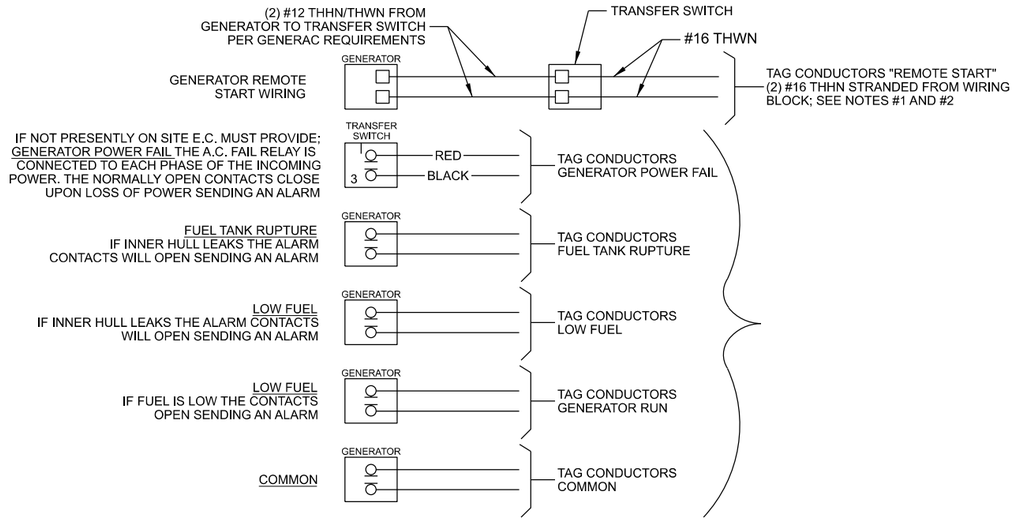
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GENERAL NOTE:

1. CONTRACTOR SHALL PERFORM WORK (ELECTRICAL, GROUNDING, & BONDING) IN ACCORDANCE WITH ALL APPLICABLE GOVERNING STATE & LOCAL CODES AND O.S.H.A. REGULATIONS
2. ALL CONDUCTORS SHALL BE TYPE THHN UNLESS NOTED OTHERWISE
3. LABEL METER & DISCONNECT PER NEC.
4. EQUIPMENT AND MATERIALS SHOWN (OR APPROVED EQUAL) TO BE PROVIDED BY CONTRACTOR UNLESS NOTED OTHERWISE

C ONE-LINE ELECTRICAL DIAGRAM



NOTES:

1. STANDARD DIAGRAM PROVIDED BY CLIENT, INCLUDED HERE FOR CONVENIENCE ONLY.
2. ELECTRICAL CONTRACTOR TO PULL (1) #16 AWG SOLID RED AND (1) #16 AWG SOLID BLACK FROM THE TRANSFER SWITCH TO ALARM WIRING BLOCK FOR REMOTE START.
3. ELECTRICAL CONTRACTOR TO PULL ALL ALARM LEADS TO EXISTING ALARM WIRING BLOCK. LEAVE A MINIMUM OF 24" PIGTAILS AT ALARM WIRING BLOCK AND TAG CONDUCTORS AS INDICATED. TERMINATIONS ON ALARM POINT WIRING BLOCK BY OTHERS. CONDUCTORS CAN BE RUN EXPOSED. THEY SHALL BE BUNDLED NEATLY USING TIES AND SUPPORTED AT 24" INTERVALS FOR NEAT INSTALLATION.

D GENERATOR ALARM WIRING

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
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I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

ELECTRICAL DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

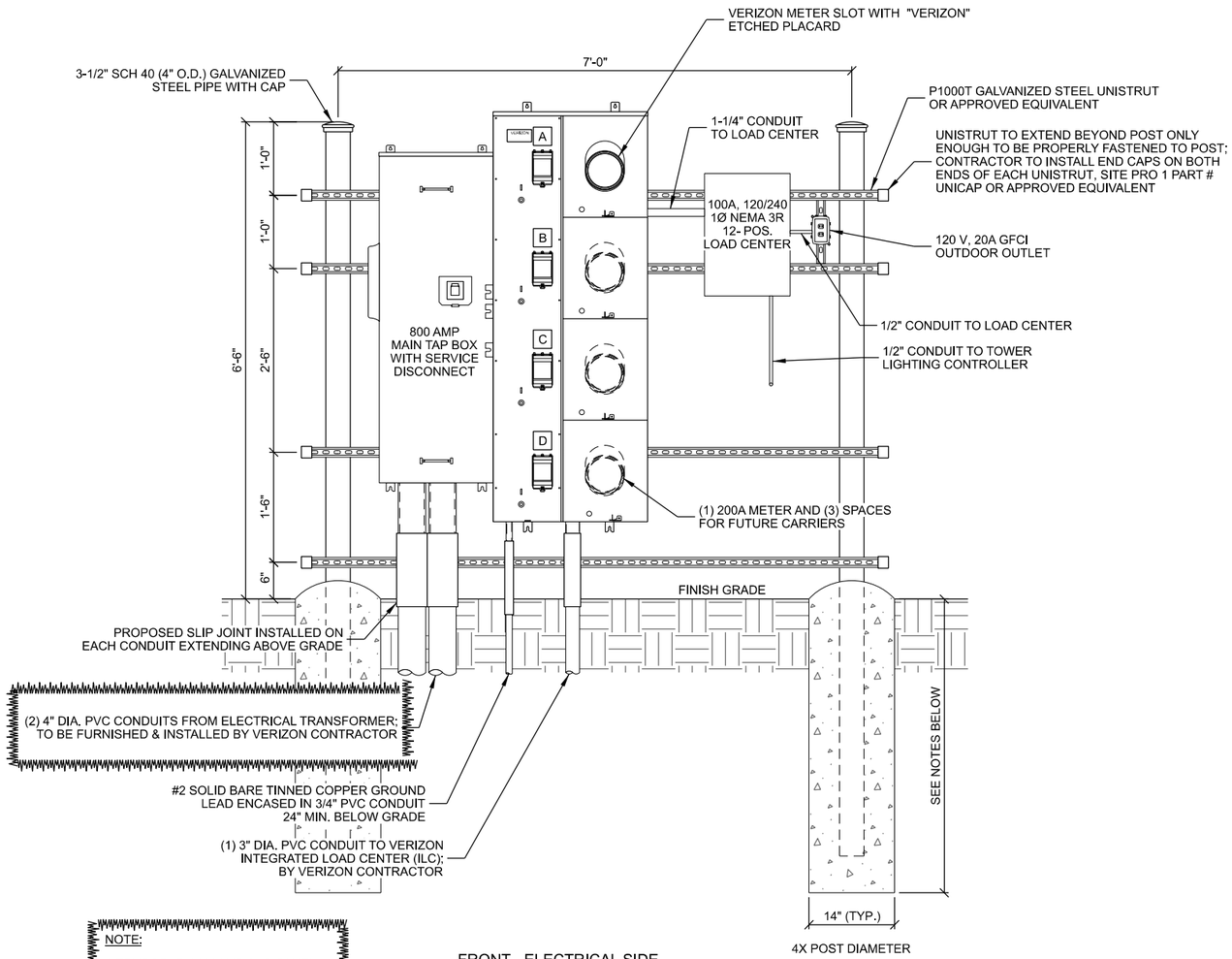
CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-50

L:\44500\44517\Design\CAD\CD\Plot\E-505.dgn

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NOTE:

VERIZON CONTRACTOR RESPONSIBLE FOR INSTALLING VERIZON BREAKER



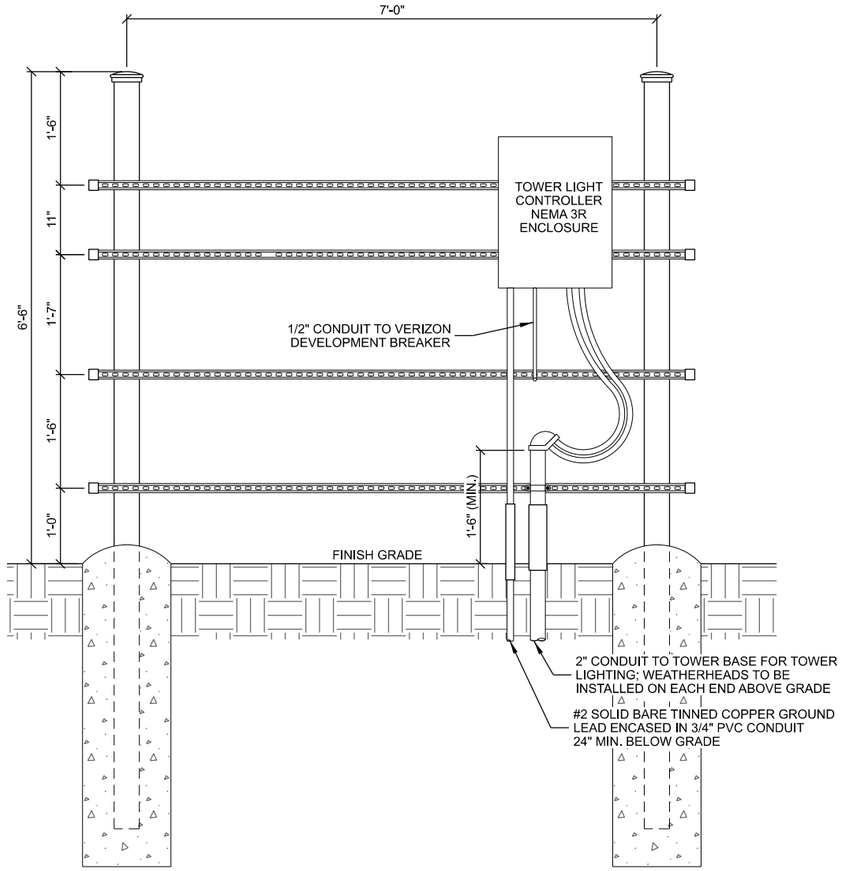
NOTE:

A TEMPORARY 200AMP SUB-PANEL MAY BE REQUIRED IF VERIZON ILC IS NOT INSTALLED

FRONT - ELECTRICAL SIDE

LIGHTING NOTE:

LIGHTING CONTROLS AND SOW DICTATED BY FLASH "NEW CONSTRUCTION TELECOM STRUCTURES FAA LIGHTING INSTALLATIONS GUIDELINES". THIS WILL BE PROVIDED WITH BID DOCUMENTS



REAR - TOWER LIGHTING SIDE

NOTE:

1. INSTALL PVC CONDUITS FOR SERVICE LATERAL CONNECTION TO UTILITY.
2. EXTEND SERVICE LATERAL CONDUITS UNDERGROUND BEYOND FENCELINE. CAP ENDS (NO DUCT TAPE ALLOWED) AND STAKE, EQUIP WITH PULL CORD, VERIFY REQUIREMENTS W/UTILITY PROVIDER.
3. MARK CARRIER METER SLOT @ BREAKER OR SOCKET EXTERIOR WITH PLACARD.
4. SQD EZ METER PAK, 120/240 VAC 1 PHASE, 3 WIRE OR EQUIV.,VERIFY REQUIREMENTS WITH UTILITY PROVIDER
5. FINAL LAYOUT AND DESIGN DETERMINED BY CONTRACTOR/UTILITY & MEET NEC 2020 CODE REQUIREMENTS OR LATEST NEC. VERIFY FINAL DESIGN WITH THE CARRIER.
6. CONCRETE FOR PIER TO BE A MINIMUM OF 2,500 PSI AT 28 DAYS.
7. MAINTAIN 3" MINIMUM REBAR COVER IN ALL DIRECTIONS.
8. PIER FOUNDATION DEPTH TO BE A MINIMUM OF 48"; DEPTH TO EXCEED LOCAL FROST DEPTH.

A MULTI-METER UTILITY RACK

SCALE: 11" x 17" - 1/2" = 1'-0"
22" x 34" - 1" = 1'-0"

NOTES:

- VERIZON CONTRACTOR TO ENSURE LOCAL ELECTRIC CODE REQUIREMENTS ARE MET
- VERIZON CONTRACTOR TO CONTACT ELECTRIC UTILITY TO CONFIRM ALL REQUIREMENTS
- VERIZON CONTRACTOR RESPONSIBLE FOR INSTALLING VERIZON BREAKER
- SQUARE D PRODUCTS SHOWN FOR CLARITY. APPROVED EQUIVALENTS ARE ACCEPTABLE. VERIFY FINAL ELECTRIC EQUIPMENT WITH APPROVED UTILITY LIST
- VERIZON CONTRACTOR TO VERIFY ELECTRIC UTILITY WILL ACCEPT A MAIN TAP BOX WITH SERVICE DISCONNECT INCLUDED

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:
- PRELIMINARY - NOT FOR CONSTRUCTION

I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

UTILITY RACK DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-506

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LAND LEASE AGREEMENT

This Land Lease Agreement (the "Agreement") is made by and between the City of Oelwein, Iowa with a principal address of 20 2nd Ave SW, Oelwein, IA 50662 ("LESSOR"), and Alltel Corporation, a Delaware corporation d/b/a Verizon Wireless with its principal offices at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920 ("LESSEE"). LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party."

WITNESSETH

In consideration of the mutual covenants contained herein and intending to be legally bound hereby, the Parties hereto agree as follows:

1. GRANT. LESSOR hereby grants to LESSEE the right to install, maintain, replace, add and operate communications equipment ("Use") upon a portion of that real property owned, leased or controlled by LESSOR located at 230 4th Street SW, Oelwein, Fayette County, Iowa 50662 (the "Property"). The Property is legally described on Exhibit "A" attached hereto and made a part hereof. The "Premises" is made up of two portions of the Property containing approximately 5,625 square feet and is shown in detail on Exhibit "B" attached hereto and made a part hereof.

2. INITIAL TERM. This Agreement shall be effective as of the date of execution by both Parties ("Effective Date"). The initial term of the Agreement shall be for five (5) years beginning on the first day of the month immediately following the date upon which LESSEE begins installation of its equipment on the Premises, or the first day of the second month following the Effective Date, whichever first occurs, (the "Commencement Date") and will be acknowledged by the Parties in writing, including electronic mail.

3. EXTENSIONS. The initial term of this Agreement shall automatically be extended for four (4) additional five (5) year terms unless LESSEE gives LESSOR written notice of its intent to terminate at least three (3) months prior to the end of the then-current term. The initial term and any extension terms shall be collectively referred to herein as the "Term".

4. RENTAL.

a. This Agreement shall be effective as of the date of execution by both Parties, provided, however, the initial term shall be for five (5) years and shall commence on the Commencement Date at which time rental payments shall commence and the rent for the first five (5) years of this Agreement shall be due in a one-time lump sum payment of Sixty Thousand and 00/100 Dollars ($60,000.00). Commencing on the fifth (5th) anniversary of the Commencement Date (the beginning of the first five year extension term), rent shall be due at a total annual rental of Ten Thousand Five Hundred Sixty and 00/100 Dollars ($10,560.00), to be paid in equal monthly installments on the first day of the month, in advance, to LESSOR at City Hall 20 2nd Avenue SW, Oelwein, Iowa 50662 or to such other person, firm, or place as LESSOR may, from time to time, designate in writing at least 30 days in advance of any rental payment due date by notice given in accordance with Paragraph 19 below. The initial rental payment shall be delivered by LESSEE no later than 90 days after the Commencement Date. Upon agreement of the Parties, LESSEE may pay rent by electronic funds transfer and in such event, LESSOR agrees to provide LESSEE with bank routing information for such purpose upon request of LESSEE.

b. For any party to whom rental payments are to be made, LESSOR or any successor in interest of LESSOR hereby agrees to provide to LESSEE: (i) a completed, current version of Internal Revenue Service Form W-9, or equivalent; (ii) complete and fully executed state and local withholding forms if required; (iii) LESSEE's payment direction form; and (iv) other documentation to verify LESSOR's or such other party's right to receive rental as is reasonably requested by LESSEE. Rental shall accrue in accordance with this Agreement, but LESSEE shall have no obligation to deliver rental payments until the requested documentation has been received by LESSEE. Upon receipt of the requested documentation, LESSEE shall deliver the accrued rental payments as directed by LESSOR.

c. The annual rental for the final three (3) additional five (5) year extension terms shall be increased by an amount equal to ten percent (10%) of the annual rent due during the immediately preceding five (5) year term.

5. ACCESS/UTILITIES. LESSEE shall have the non-exclusive right of ingress and egress to and from the Premises, 7 days a week, 24 hours a day, over that portion of Property described within Exhibit "B" as the "Proposed Access Easement" ("Easement")for the purpose of installation, operation and maintenance of LESSEE's communications equipment. LESSEE may use the Easement for the installation, operation and maintenance of wires, cables, conduits and pipes for all necessary electrical, telephone, fiber and other similar support services (collectively, the "Support Services") as deemed necessary or appropriate by LESSEE for the operation of its communications equipment. In the event it is necessary, LESSOR agrees to grant LESSEE or the service provider the right to install additional, or to upgrade the existing, Support Services, on, through, over and/or under the Property, provided the location of such additional or upgraded Support Services shall be reasonably approved by LESSOR. In the event of any power interruption at the Premises, LESSEE shall be permitted to install, maintain and/or provided access to and use of a temporary power source to be located on the Property, including related equipment and appurtenances, such as conduits connecting the temporary power source to the Premises.

6. CONDITION OF PROPERTY. LESSOR shall deliver the Premises to LESSEE clean and free of debris. LESSOR represents and warrants to LESSEE that as of the Effective Date, the Property is (a) in compliance with all Laws; and (b) in compliance with all EH&S Laws (as defined in Paragraph 24). LESSEE acknowledges that it has inspected Property and Premises in advance of the execution hereof and determined that both were in a condition ready for LESSEE's use, subject to LESSOR's removal of existing construction materials.

7. IMPROVEMENTS. The communications equipment including, without limitation, the tower structure, antennas, conduits, fencing and other screening, and other improvements shall be at LESSEE's expense and installation shall be at the discretion and option of LESSEE. LESSEE shall have the right to replace, repair, add to or otherwise modify its communications equipment, tower structure, antennas, conduits, fencing and other screening, or other improvements or any portion thereof and the frequencies over which the communications equipment operates, at no additional cost to LESSEE, whether or not any of the communications equipment, antennas, conduits or other improvements are listed on any exhibit. LESSEE shall only be required to obtain LESSOR consent for modifications that increase LESSEE's Premises. LESSOR shall respond in writing to any LESSEE consent request within 30 days of receipt or LESSOR's consent shall be deemed granted, provided, any modifications to the overall size or footprint of the Premises shall be memorialized by the Parties in writing. LESSOR is not entitled to a rent increase associated with any LESSEE modification unless the modification includes an increase in the overall size or footprint of the Premises, in which case, any rent increase shall be proportionate to the additional ground space included in the Premises.

8. GOVERNMENT APPROVALS. LESSEE's Use is contingent upon LESSEE obtaining all of the certificates, permits and other approvals (collectively the "Government Approvals") that may be required by any Federal, State or Local authorities (collectively, the "Government Entities") as well as a satisfactory soil boring test, environmental studies, or any other due diligence LESSEE chooses that will permit LESSEE's Use. LESSOR shall cooperate with LESSEE in its effort to obtain and maintain any Government Approvals. Notwithstanding anything contained herein to the contrary, LESSOR hereby agrees to allow LESSEE to install any RF frequency signage and/or barricades on the Premises as are necessary to ensure LESSEE's compliance with Laws (as defined below).

9. TERMINATION. LESSEE may, unless otherwise stated, terminate this Agreement upon sixty (60) day written notice to LESSOR: (a) if any applications for such Government Approvals should be finally rejected; (b) if any Government Approval issued to LESSEE is canceled, expires, lapses or is otherwise withdrawn or terminated by any Government Entity; (c) if LESSEE determines that such Government Approvals may not be obtained in a timely manner; (d) if LESSEE determines any structural analysis is unsatisfactory; (e) if LESSEE, in its sole discretion, determines the Use of the Premises is obsolete or unnecessary; (f) with 3 months prior notice to LESSOR, upon the annual anniversary of the Commencement Date; or (g) at any time before the Commencement Date for any reason or no reason in LESSEE's sole discretion.

10. INDEMNIFICATION. Subject to Paragraph 11, each Party and/or any successor and/or assignees thereof, shall indemnify and hold harmless the other Party, and/or any successors and/or assignees thereof, against (i) all claims of liability or loss from bodily injury or property damage resulting from or arising out of the negligence or willful misconduct of the indemnifying Party, its employees, contractors or agents, except to the extent such claims or damages may be due to or caused by the negligence or willful misconduct of the other Party, or its employees, contractors or agents, and (ii) reasonable attorney's fees, expense, and defense costs incurred by the indemnified Party. The indemnified Party will provide the indemnifying Party with prompt, written notice of any claim that is subject to the indemnification obligations in this paragraph. The indemnified Party will cooperate appropriately with the indemnifying Party in connection with the indemnifying Party's defense of such claim. The indemnifying Party shall defend any indemnified Party, at the indemnified Party's request, against any claim with counsel reasonably satisfactory to the indemnified Party. The indemnifying Party shall not settle or compromise any such claim or consent to the entry of any judgment without the prior written consent of each indemnified Party and without an unconditional release of all claims by each claimant or plaintiff in favor of each indemnified Party. All indemnification obligations shall survive the termination or expiration of this Agreement.

11. INSURANCE. The Parties agree to maintain during the term of this Agreement the following insurance policies:

a. Commercial general liability in the amount of $2,000,000.00 per occurrence for bodily injury and property damage and $4,000,000.00 in the annual aggregate. Each party shall be included as an additional insured as their interest may appear under this Agreement on the other party's insurance policy.

b. "All-Risk" property insurance on a replacement cost basis insuring their respective property with no coinsurance requirement. Where legally permissible, each party agrees to waive subrogation against the other party and to ensure said waiver is recognized by the insurance policies insuring the property.

12. LIMITATION OF LIABILITY. Except for indemnification pursuant to Paragraphs 10 and 23, a violation of Paragraph 26, or a violation of law, neither Party shall be liable to the other, or any of their respective agents, representatives, or employees for any lost revenue, lost profits, diminution in value of business, loss of technology, rights or services, loss of data, or interruption or loss of use of service, incidental, punitive, indirect, special, trebled, enhanced or consequential damages, even if advised of the possibility of such damages, whether such damages are claimed for breach of contract, tort (including negligence), strict liability or otherwise, unless applicable law forbids a waiver of such damages.

13. INTERFERENCE.

a. LESSEE agrees that LESSEE will not cause interference that is measurable in accordance with industry standards to LESSOR's equipment. LESSOR agrees that LESSOR and other occupants of the Property will not cause interference that is measurable in accordance with industry standards to the then existing communications equipment of LESSEE.

b. Without limiting any other rights or remedies, if interference occurs and continues for a period in excess of 48 hours following notice to the interfering party via telephone to LESSEE'S Network Management Center (at (800) 264-6620) or to LESSOR (at (319) 238-0039 the interfering party shall or shall require any other user to reduce power or cease operations of the interfering equipment until the interference is cured.

c. The Parties acknowledge that there will not be an adequate remedy at law for noncompliance with the provisions of this Paragraph and therefore the Parties shall have the right to equitable remedies such as, without limitation, injunctive relief, and specific performance.

14. REMOVAL AT END OF TERM. Within 90 days of the expiration or earlier termination of the Agreement, LESSEE shall remove LESSEE's Communications Equipment (except footings and foundations) and restore the Premises to its original condition, reasonable wear and tear and casualty damage excepted. LESSOR agrees and acknowledges that the communications equipment shall remain the personal property of LESSEE and LESSEE shall have the right to remove the same at any time during the Term, whether or not said items are considered fixtures and attachments to real property under applicable laws.

15. RIGHT OF FIRST REFUSAL. If, at any time after the Effective Date, LESSOR receives an offer or letter of intent from any person or entity that is in the business of owning, managing or operating communications facilities or is in the business of acquiring landlord interests in agreements relating to communications facilities, to purchase fee title, an easement, a lease, a license, or any other interest in the Property or any portion thereof or to acquire any interest in this Agreement, or an option for any of the foregoing, LESSOR shall provide written notice to LESSEE of said offer ("LESSOR's Notice"). LESSOR's Notice shall include the prospective buyer's name, the purchase price being offered, any other consideration being offered, the other terms and conditions of the offer, a description of the portion of and interest in the Property and/or this Agreement which will be conveyed in the proposed transaction, and a copy of any letters of intent or form agreements presented to LESSOR by the third-party offeror. LESSEE shall have the right of first refusal to meet any bona fide offer of sale or transfer on the terms and conditions of such offer or by effectuating a transaction with substantially equivalent financial terms. If LESSEE fails to provide written notice to LESSOR that LESSEE intends to meet such bona fide offer within 60 days after receipt of LESSOR's Notice, LESSOR may proceed with the proposed transaction in accordance with the terms and conditions of such third-party offer, in which event this Agreement shall

continue in full force and effect and the right of first refusal described in this Paragraph shall survive any such conveyance to a third party. If LESSEE provides LESSOR with notice of LESSEE's intention to meet the third party offer within 60 days after receipt of LESSOR's Notice, then if LESSOR's Notice describes a transaction involving greater space than the Premises, LESSEE may elect to proceed with a transaction covering only the Premises and the purchase price shall be prorated on a square footage basis. Further, LESSOR acknowledges and agrees that if LESSEE exercises this right of first refusal, LESSEE may require a reasonable period of time to conduct due diligence and effectuate the closing of a transaction on substantially equivalent financial terms of the third-party offer. LESSEE may elect to amend this Agreement to effectuate the proposed financial terms of the third party offer rather than acquiring fee simple title or an easement interest in the Premises. For purposes of this Paragraph, any transfer, bequest or devise of LESSOR's interest in the Property as a result of the death of LESSOR, whether by will or intestate succession, or any conveyance to LESSOR's family members by direct conveyance or by conveyance to a trust for the benefit of family members shall not be considered a sale for which LESSEE has any right of first refusal.

16. RIGHTS UPON SALE. Should LESSOR, at any time during the Term, decide (a) to sell or otherwise transfer all or any part of the Property, or (b) to grant to a third party by easement or other legal instrument an interest in and to any portion of the Premises, such sale, transfer, or grant of an easement or interest therein shall be under and subject to this Agreement and any such purchaser or transferee shall recognize LESSEE's rights hereunder. In the event that LESSOR completes any such sale, transfer, or grant described in this Paragraph without executing an assignment of the Agreement whereby the third party agrees in writing to assume all obligations of LESSOR under this Agreement, then LESSOR shall not be released from its obligations to LESSEE under this Agreement, and LESSEE shall have the right to look to LESSOR and the third party for the full performance of the Agreement.

17. LESSOR'S TITLE. LESSOR covenants that LESSEE, on paying the rent and performing the covenants herein, shall peaceably and quietly have, hold and enjoy the Premises. LESSOR represents and warrants to LESSEE as of the Effective Date and covenants during the Term that LESSOR has full authority to enter into and execute this Agreement and that there are no liens, judgments, covenants, easements, restrictions or other impediments of title that will adversely affect LESSEE's Use.

18. ASSIGNMENT. Without any approval or consent of the other Party, this Agreement may be sold, assigned or transferred by either Party to (a) any entity in which the Party directly or indirectly holds an equity or similar interest; (b) any entity which directly or indirectly holds an equity or similar interest in the Party; or (c) any entity directly or indirectly under common control with the Party. In addition, LESSEE may, without approval or consent of LESSOR, assign this Agreement to (i) any entity which acquires all or substantially all of LESSEE's assets in the market defined by the FCC in which the Property is located by reason of a merger, acquisition or other business reorganization or (ii) any person or entity that is in the business of owning, managing or operating communications facilities. As to other parties, this Agreement may not be sold, assigned or transferred without the written consent of the other Party, which such consent will not be unreasonably withheld, delayed or conditioned. No change of stock ownership, partnership interest or control of LESSEE or transfer upon partnership or corporate dissolution of either Party shall constitute an assignment hereunder. LESSEE may sublet the Premises in LESSEE's sole discretion.

19. NOTICE. Except for notices permitted via telephone in accordance with Paragraph 13, or via electronic mail in accordance with Paragraph 2, all notices hereunder must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested or by commercial courier, provided

the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice).

LESSOR: The City of Oelwein
City Hall 20 2nd Ave. SW,
Oelwein, Iowa 50662
Attention: Dylan Mulfinger

LESSEE: Alltel Corporation
d/b/a Verizon Wireless
180 Washington Valley Road
Bedminster, New Jersey 07921
Attention: Network Real Estate

Notice shall be effective upon actual receipt or refusal as shown on the receipt obtained pursuant to the foregoing.

20. SUBORDINATION AND NON-DISTURBANCE. Within 15 days of the Effective Date, LESSOR shall obtain a Non-Disturbance Agreement (as defined below) and any required consent from existing mortgagee(s), ground lessors and master lessors, if any, of the Property. At LESSOR's option, this Agreement shall be subordinate to any future master lease, ground lease, mortgage, deed of trust or other security interest (a "Mortgage") by LESSOR which from time to time may encumber all or part of the Property; provided, however, as a condition precedent to LESSEE being required to subordinate its interest in this Agreement to any future Mortgage covering the Property, LESSOR shall obtain for LESSEE's benefit a non-disturbance and attornment agreement for LESSEE's benefit in the form reasonably satisfactory to LESSEE, and containing the terms described below (the "Non-Disturbance Agreement"), and shall recognize LESSEE's rights under this Agreement. The Non-Disturbance Agreement shall include the encumbering party's ("Lender's") agreement that, if Lender or its successor-in-interest or any purchaser of Lender's or its successor's interest (a "Purchaser") acquires an ownership interest in the Property, Lender or such successor-in-interest or Purchaser will honor all of the terms of the Agreement. Such Non-Disturbance Agreement must be binding on all of Lender's participants in the subject loan (if any) and on all successors and assigns of Lender and/or its participants and on all Purchasers. In return for such Non-Disturbance Agreement, LESSEE will execute an agreement for Lender's benefit in which LESSEE (a) confirms that the Agreement is subordinate to the Mortgage or other real property interest in favor of Lender, (b) agrees to attorn to Lender if Lender becomes the owner of the Property, and (c) agrees to accept a cure by Lender of any of LESSOR's defaults, provided such cure is completed within the deadline applicable to LESSOR. In the event LESSOR defaults in the payment and/or other performance of any mortgage or other real property interest encumbering the Property, LESSEE, may, at its sole option and without obligation, cure or correct LESSOR's default and upon doing so, LESSEE shall be subrogated to any and all rights, titles, liens and equities of the holders of such mortgage or other real property interest and LESSEE shall be entitled to deduct and setoff against all rents that may otherwise become due under this Agreement the sums paid by LESSEE to cure or correct such defaults.

21. DEFAULT. It is a "Default" if (a) either Party fails to comply with this Agreement and does not remedy the failure within 30 days after written notice by the other Party or, if the failure cannot reasonably be remedied in such time, if the failing Party does not commence a remedy within the allotted

30 days and diligently pursue the cure to completion within 90 days after the initial written notice, or (b) LESSOR fails to comply with this Agreement and the failure interferes with LESSEE's Use and LESSOR does not remedy the failure within 5 days after written notice from LESSEE or, if the failure cannot reasonably be remedied in such time, if LESSOR does not commence a remedy within the allotted 5 days and diligently pursue the cure to completion within 15 days after the initial written notice. The cure periods set forth in this Paragraph 21 do not extend the period of time in which either Party has to cure interference pursuant to Paragraph 13 of this Agreement.

22. REMEDIES. In the event of a Default, without limiting the non-defaulting Party in the exercise of any right or remedy which the non-defaulting Party may have by reason of such default, the non-defaulting Party may terminate this Agreement and/or pursue any remedy now or hereafter available to the non-defaulting Party under the Laws or judicial decisions of the state in which the Property is located. Further, upon a Default, the non-defaulting Party may at its option (but without obligation to do so), perform the defaulting Party's duty or obligation. The costs and expenses of any such performance by the non-defaulting Party shall be due and payable by the defaulting Party upon receipt of an itemized invoice. If LESSEE undertakes any such performance on LESSOR's behalf and LESSOR does not pay LESSEE the full undisputed amount within 30 days of its receipt of an itemized invoice setting forth the amount due, LESSEE may offset the full undisputed amount due against all fees due and owing to LESSOR under this Agreement until the full undisputed amount is fully reimbursed to LESSEE.

23. ENVIRONMENTAL. LESSEE shall conduct its business in compliance with all applicable laws governing the protection of the environment or employee health and safety ("EH&S Laws"). LESSEE shall indemnify and hold harmless the LESSOR from claims to the extent resulting from LESSEE's violation of any applicable EH&S Laws or to the extent that LESSEE causes a release of any regulated substance to the environment. LESSOR shall indemnify and hold harmless LESSEE from all claims resulting from the violation of any applicable EH&S Laws or a release of any regulated substance to the environment except to the extent resulting from the activities of LESSEE. The Parties recognize that LESSEE is only leasing a small portion of the Property and that LESSEE shall not be responsible for any environmental condition or issue except to the extent resulting from LESSEE's specific activities and responsibilities. In the event that LESSEE encounters any hazardous substances that do not result from its activities, LESSEE may relocate its facilities to avoid such hazardous substances to a mutually agreeable location or, if LESSEE desires to remove at its own cost all or some the hazardous substances or materials (such as soil) containing those hazardous substances, LESSOR agrees to sign any necessary waste manifest associated with the removal, transportation and/or disposal of such substances.

24. CASUALTY. If a fire or other casualty damages the Property or the Premises and impairs LESSEE's Use, rent shall abate until LESSEE'S Use is restored. If LESSEE's Use is not restored within 45 days, LESSEE may terminate this Agreement.

25. CONDEMNATION. If a condemnation of any portion of the Property or Premises impairs LESSEE's Use, LESSEE may terminate this Agreement. LESSEE may on its own behalf make a claim in any condemnation proceeding involving the Premises for losses related to LESSEE's communications equipment, relocation costs and, specifically excluding loss of LESSEE's leasehold interest, any other damages LESSEE may incur as a result of any such condemnation.

26. APPLICABLE LAWS. During the Term, LESSOR shall maintain the Property in compliance with all applicable laws, EH&S Laws, rules, regulations, ordinances, directives, covenants, easements, consent decrees, zoning and land use regulations, and restrictions of record, permits, building codes, and

the requirements of any applicable fire insurance underwriter or rating bureau, now in effect or which may hereafter come into effect (including, without limitation, the Americans with Disabilities Act and laws regulating hazardous substances) (collectively "Laws"). LESSEE shall, in respect to the condition of the Premises and at LESSEE's sole cost and expense, comply with (a) all Laws relating solely to LESSEE's specific and unique nature of use of the Premises and (b) all building codes requiring modifications to the Premises due to the improvements being made by LESSEE in the Premises. It shall be LESSOR's obligation to comply with all Laws relating to the Property, without regard to specific use (including, without limitation, modifications required to enable LESSEE to obtain all necessary building permits).

27. TAXES. If LESSOR is required by law to collect any federal, state, or local tax, fee, or other governmental imposition (each, a "Tax") from LESSEE with respect to the transactions contemplated by this Agreement, then LESSOR shall bill such Tax to LESSEE in the manner and for the amount required by law, LESSEE shall promptly pay such billed amount of Tax to LESSOR, and LESSOR shall remit such Tax to the appropriate tax authorities as required by law; provided, however, that LESSOR shall not bill to or otherwise attempt to collect from, LESSEE any Tax with respect to which LESSEE has provided LESSOR with an exemption certificate or other reasonable basis for relieving LESSOR of its responsibility to collect such tax from LESSEE. Except as provided in this Paragraph 27, LESSOR shall bear the costs of all Taxes that are assessed against or are otherwise the legal responsibility of LESSOR with respect to itself, its property, and the transactions contemplated by this Agreement. LESSEE shall be responsible for all Taxes that are assessed against or are otherwise the legal responsibility of LESSEE with respect to itself, its property, and the transactions contemplated by this Agreement.

28. DISCLOSURE. LESSEE acknowledges that LESSOR is an Iowa Municipality and its' records are considered public records under the Iowa Code, and, therefore, this agreement and any information exchanged between the Parties hereto is not confidential and upon request of any person for a copy of this agreement or communications between the Parties, the LESSOR has a legal obligation to appropriately respond. LESSOR agrees, in the event of a legal request for a copy of this Agreement and/or any information related hereto, to inform LESSEE of said request by email and/or regular mail and to share with LESSEE the information provided in response to said request within fourteen (14) days of responding to said request. To the extent that there are any documents or information deemed confidential under the law and not required to be provided to any person or entity requesting same, the LESSOR will not provide said documents. The determination of confidentiality of any document or communication shall be made in the sole discretion of LESSOR.

29. MISCELLANEOUS. This Agreement contains all agreements, promises and understandings between the LESSOR and the LESSEE regarding this transaction, and no oral agreement, promises or understandings shall be binding upon either the LESSOR or the LESSEE in any dispute, controversy or proceeding. This Agreement may not be amended or varied except in a writing signed by all Parties. This Agreement shall extend to and bind the heirs, personal representatives, successors and assigns hereto. The failure of either party to insist upon strict performance of any of the terms or conditions of this Agreement or to exercise any of its rights hereunder shall not waive such rights and such party shall have the right to enforce such rights at any time. The performance of this Agreement shall be governed, interpreted, construed, litigated, and regulated by the laws of the state in which the Premises is located without reference to its choice of law rules. Except as expressly set forth in this Agreement, nothing in this Agreement shall grant, suggest, or imply any authority for one Party to use the name, trademarks, service marks or trade names of the other for any purpose whatsoever. LESSOR agrees to execute a Memorandum of this Agreement, which LESSEE may record with the appropriate recording officer. The provisions of the Agreement relating to indemnification from one Party to the other Party shall survive

any termination or expiration of this Agreement. This Agreement may be executed in counterparts, including written and electronic forms. All executed counterparts shall constitute one Agreement, and each counterpart shall be deemed an original.

[Signatures appear on the following page.]

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respective seals the day and year first above written.

LESSOR:

The City of Oelwein, Iowa

By: _____

Name: _____

Its: _____

Date: _____

LESSEE:

Alltel Corporation d/b/a Verizon Wireless

By: _____

Name: _____

Its: _____

Date: _____

EXHIBIT "A"

PROPERTY DESCRIPTION

Lots 1 to 5 Blk 5 Bennett's ADD & PC 215'X450" Adj on N Lots 1 to 5 Blk 1 Miles ADD (Oakdale Cemetery)*

EXHIBIT "B"

DEPICTION OF THE PREMISES

(see description below and survey attached hereto)

PROPOSED LEASE AREA DESCRIPTION:
That part of Lot 5, Block Five, B.H. BENNETT'S ADDITION and Lot 1, Block 1, MILES ADDITION, according to the recorded plats thereof, Fayette County, Iowa, described as follows:

> Commencing at the northwest corner of Lot 5, Block Four, said B.H. BENNETT'S ADDITION; thence South 87 degrees 25 minutes 33 seconds West along the North line of said B.H. BENNETT'S ADDITION, a distance of 311.74 feet; thence South 2 degrees 34 minutes 25 seconds East, a distance of 14.98 feet to the Point of Beginning of the lease area to be described; thence continue South 2 degrees 34 minutes 25 seconds East, a distance of 75.00 feet; thence South 87 degrees 25 minutes 35 seconds West, a distance of 75.00 feet; thence North 2 degrees 34 minutes 25 seconds West, a distance of 75.00 feet; thence North 87 degrees 25 minutes 35 seconds East, a distance of 75.00 feet to the Point of Beginning.

PROPOSED ACCESS AND UTILITY EASEMENT DESCRIPTION:

A 30.00 foot wide easement for ingress, egress and utility purposes over, under and across Lot 5, Block Five, B.H. BENNETT'S ADDITION and Lot 1, Block 1, MILES ADDITION, according to the recorded plats thereof, Fayette County, Iowa, the centerline of said easement is described as follows:

> Commencing at the northwest corner of Lot 5, Block Four, said B.H. BENNETT'S ADDITION; thence South 87 degrees 25 minutes 33 seconds West along the North line of said B.H. BENNETT'S ADDITION, a distance of 311.74 feet; thence South 2 degrees 34 minutes 25 seconds East, a distance of 104.98 feet to the Point of Beginning of the centerline to be described; thence South 87 degrees 25 minutes 35 seconds West, a distance of 15.00 feet to a point hereinafter referred to as Point "A"; thence continue South 87 degrees 25 minutes 35 seconds West, a distance of 60.00 feet and said centerline there terminating.

TOGETHER WITH
A 30.00 foot wide easement for ingress, egress and utility purposes over, under and across said Lot 5, the centerline of said easement is described as follows:

> Beginning at the previously described Point "A"; thence South 2 degrees 34 minutes 25 seconds East, a distance of 73.51 feet to the North right of way line of 4th Street Southwest and said centerline there terminating.

The sidelines of said easement shall be shortened or lengthened to terminate at said North right of way line of 4th Street Southwest.

RESOLUTION NO. _____-2025

RESOLUTION APPROVING THE PLANS AND SPECIFICATIONS OF THE 10TH ST. BRIDGE PROJECT FROM ORIGIN DESIGN AND APPROVING THE BID FROM TAYLOR CONSTRUCTION INC. IN THE AMOUNT OF $1,416,351.70

WHEREAS, the city needs to replace the 10th St. Bridge; and

WHEREAS, the city was awarded City Bridge Program funding from the state in the amount of $1,500,000; and

WHEREAS, the city bonded for the project in the amount of $1,450,000 which resulted in an increase in the city's tax levy; and

WHEREAS, the project was estimated at $2,500,000 with design and construction; and

WHEREAS, Origin Design designed the project and had a construction and build estimate of $1,717,454.10; and

WHEREAS, the low bid on the project was from Taylor Construction Inc. in the amount of $1,416,351.70; and

WHEREAS, this bid process was administered by the Iowa Department of Transportation because of the State Bridge Program;

NOW, THEREFORE, BE IT RESOLVED by the city council of Oelwein, Iowa approves the plans and specifications of the 10th St. Bridge Project from origin Design and approving the bid from Taylor Construction Inc. in the amount of $1,416,351.70

Passed and approved by the City Council of the City of Oelwein, Iowa this 8th day of September, 2025.

_____
Brett DeVore, Mayor

Attest:

_____
Dylan Mulfinger, City Administrator

Recorded September 9, 2025

It was moved by _____ and seconded by _____ that the Resolution as read be adopted, and upon roll call there were:

	AYES	NAYS	ABSENT	ABSTAIN
Ricchio				
Weber				
Lenz				
Cantrell				
Seeders				
Payne				

BRIDGE REPLACEMENT – PPCB
LETTING DATE
AUGUST 19, 2025
BRM-5657(614)– –8N–33

281–1
09–28–22

SECTION 404 PERMIT AND CONDITIONS

CONSTRUCT THIS PROJECT ACCORDING TO THE REQUIREMENTS OF U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 14, USACE PROJECT NO. MVR–2024–742. A COPY OF THIS PERMIT IS AVAILABLE FROM THE IOWA DOT WEBSITE (http://www.envpermits.iowadot.gov/). THE U.S. ARMY CORPS OF ENGINEERS RESERVES THE RIGHT TO VISIT THE SITE WITHOUT PRIOR NOTICE.

IOWA DNR FLOODPLAIN CONSTRUCTION PERMIT
THIS PROJECT IS COVERED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES FLOODPLAIN CONSTRUCTION PERMIT NO. FP–2024–1096

IOWA DOT
Highway Division

PLANS OF PROPOSED IMPROVEMENTS ON THE
URBAN ROAD SYSTEM

CITY OF OELWEIN

BRM-5657(614)- -8N-33

BRIDGE REPLACEMENT - PPCB

IN THE CITY OF OELWEIN ON 10th ST SW
OVER OTTER CREEK, S28 T91 R09
SCALES: As Noted

REFER TO THE PROPOSAL FORM FOR LIST OF APPLICABLE SPECIFICATIONS.

SEE SHEET C.4 FOR STANDARD ROAD PLAN TABULATION

TOTAL SHEETS
40

PROJECT NUMBER
BRM–5657(614)– –8N–33

INDEX OF SHEETS

105–3
10–18–05

NO.	DESCRIPTION
A.1 – A.2	TITLE SHEET, LEGENDS AND ABBREVIATIONS
B.1	TYPICAL SECTIONS
C.1 – C.4	ESTIMATE OF QUANTITIES, STANDARD ROAD PLANS, & GENERAL INFORMATION
* D.1	PLAN & PROFILES (MAINLINE)
* H.1	EASEMENT PLAN
J.1	DETOUR PLAN
L.1	PAVING PLANS
* SPS.1–SPS.2	SOIL BORINGS
U.1 – U.6	APPROACH DETAILS, BRIDGE RAILING DETAILS, MISC DETAILS
* V.1	SITUATION PLAN
V.2	BERM GRADING PLAN
V.3 – V.12	BRIDGE DETAILS
* V.13 – V.15	BRIDGE DETAILS
V.16 – V.21	BRIDGE DETAILS

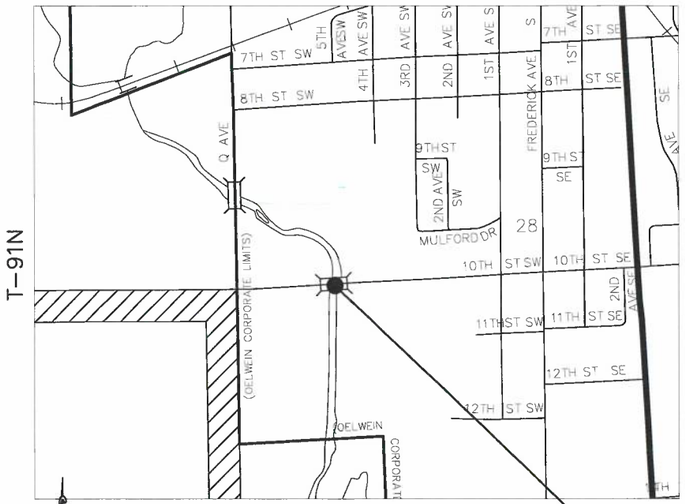
* COLOR PLAN SHEETS

MILEAGE SUMMARY

105–1
09–27–94

DIV.	LOCATION	LIN. FT.	MILES
1	10TH STREET SW STA 08+25 TO 12+00	375	0.07
	TOTAL	375	0.07

R–9W



APPROX. SCALE:
0 1/4 1/2
SCALE IN MILES

LOCATION MAP



DESIGN SPEED: 40 MPH

TRAFFIC CONTROL PLAN
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 ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS 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 8+25
E.O.P. STATION 12+00
FHWA STRUCTURE NO. 8920

IOWA 811 ONE CALL SM
1 (800) 292 - 8989

UTILITY CONTACTS:

ALLIANT ENERGY (GAS & ELECTRIC)
COMPANY NAME: ALLIANT ENERGY
DESIGN CONTACT: CRISTEN GALLUP
PHONE: 319 283 9023
EMAIL: CRISTENGALLUP@ALLIANTENERGY.COM

CENTURYLINK/LUMEN
COMPANY NAME : CENTURYLINK/LUMEN
DESIGN CONTACT: KRYSTAL HUNTER
PHONE: 319 540 1889
EMAIL: KRYSTAL.HUNTER@LUMEN.COM

ALLIANT ENERGY (FIBER)
COMPANY NAME: ALLIANT ENERGY
DESIGN CONTACT: LAURA SEALS
PHONE: 319 786 4198
EMAIL: LAURASEALS@ALLIANTENERGY.COM

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	NOAH HOFRICHTER	CIVIL
U.1	COURTNEY WAND	STRUCTURAL
SPS.1	MATT REISDORFER	GEOTECHNICAL

origin design®
WORKING ON TOMORROW.
800 556-4491
origindesign.com

WORKING DRAWINGS WILL BE CHECKED BY ORIGIN DESIGN
137 MAIN STREET, DUBUQUE, IA 52001
563–556–2464 (PHONE); 563–556–7811 (FAX)
COURTNEY WAND
COURTNEY.WAND@ORIGINDESIGN.COM

AADT 820 V.P.D. 2021

LICENSED PROFESSIONAL ENGINEER
NOAH HOFRICHTER
24665
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 ORIGIN DESIGN CO.

NOAH HOFRICHTER — 5/13/2025
NOAH HOFRICHTER — DATE

PE 24665 — 12/31/2025
LICENSE # — RENEWAL DATE

PAGES OR SHEETS COVERED BY THIS CERTIFICATION:
INDEX THIS SHEET EXCEPT FOR SPS, U, & V SHEETS

CITY OF OELWEIN

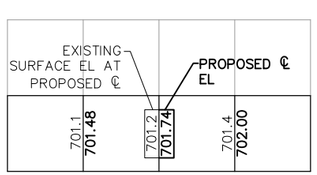
P:\23\036\DRAWINGS\CIVIL\23036 ZZ A SHEETS.DWG 4/1/2025 11:48:42 AM MARY ABBOTT

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
℄ OR 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
HSD	HEADLIGHT STOPPING DISTANCE
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
MP	MILE POST
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
RCAP	REINFORCED CONCRETE ARCH PIPE
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
SSD	STOPPING SIGHT DISTANCE
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/WM	TOP OF WATER MAIN
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



PROFILE LEGEND

LEGEND

EXISTING		PROPOSED
—— – – ——	PROPERTY/ROW 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	
—— 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	—— □ ——
—— SF ——	SILT FENCE	—— SF ——
—— PC ——	PERIMETER CONTROL	—— PC ——
– – -000- – –	CONTOUR LINE	—— 000 ——
	RAILROAD TRACKS	
	GUARD RAIL	
+ 0.00	SPOT ELEVATION	+ 0.00
	DIRECTION OF FLOW	
	TREE LINE	
	REVETMENT EXTENTS	
	EROSION STONE	

EXISTING		PROPOSED
	CATCH BASIN	
	AREA INTAKE	
Ⓓ	STORM MANHOLE	Ⓓ
Ⓢ	SANITARY MANHOLE	Ⓢ
Ⓤ	UTILITY MANHOLE	Ⓤ
Ⓥ	WATER VALVE MANHOLE	Ⓥ
	FIRE HYDRANT	
	WATER SHUT OFF	
WV	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	

UTILITY LINES WITH DESIGNATORS WRAPPED IN PARENTHESIS SUCH AS (W) or (G) ARE LOCATED BASED ON MAP OR GIS DATA

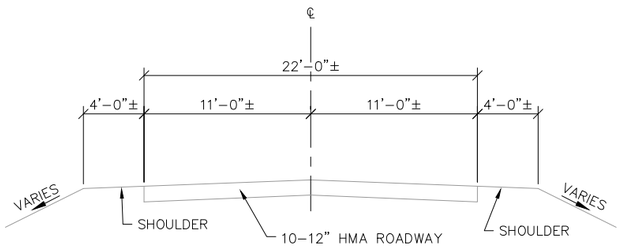
SURVEY

■	FOUND REBAR
●	FOUND IRON PIPE
○	SET REBAR

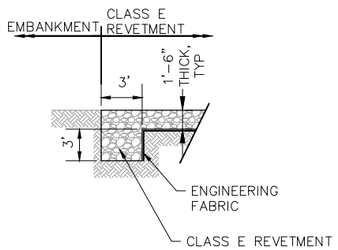
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

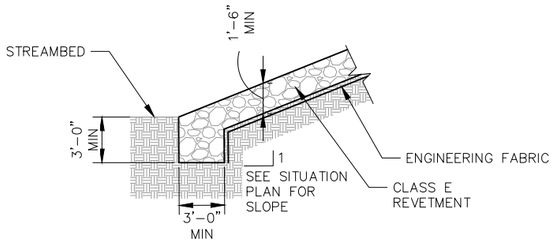
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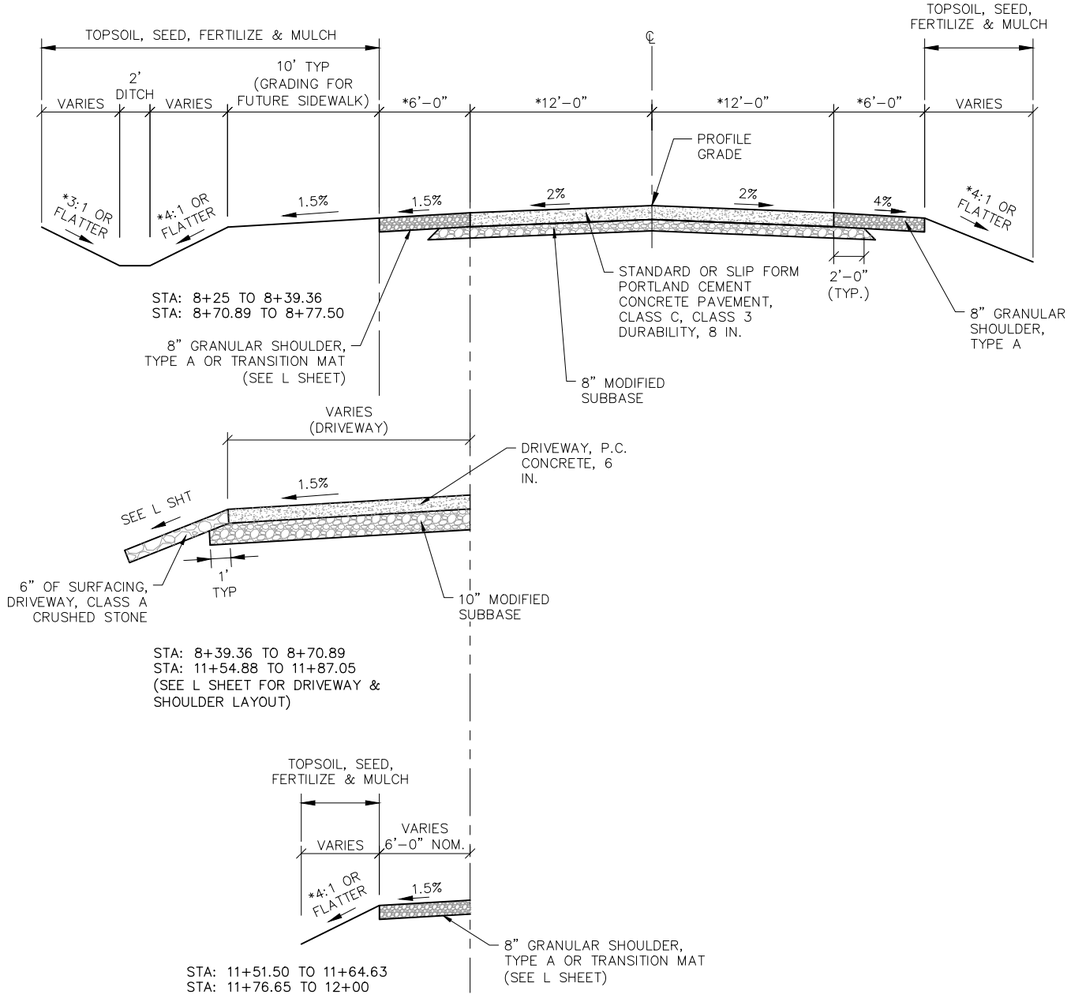
1 B.1 EXISTING SECTION
NOT TO SCALE



3 B.1 TRENCH END ANCHOR DETAIL
NOT TO SCALE



4 B.1 REVETMENT TOE–IN SECTION
NOT TO SCALE



* FROM STATION 8+25 TO 8+39.36, STATION 11+51.50 L TO 12+00 L, & 11+75 R TO 12+00 R, TAPER BACK TO EX GRADES AND PAVING WIDTHS

2 B.1 TYPICAL SECTION
NOT TO SCALE

STA: 8+25 TO 8+77.50
STA: 11+51.50 TO 12+00

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

10th STREET IN OELWEIN BRIDGE REPLACEMENT - BRM-5657(614)- -8N-33						
REF. NO.	ITEM CODE	BID ITEM DESCRIPTION	UNITS	ROADWAY QUANTITIES	BRIDGE QUANTITIES	TOTAL
1	2101-0850001	CLEARING AND GRUBBING	ACRE	0.72		0.72
2	2102-2710070	EXCAVATION, CLASS 10, ROADWAY & BORROW	CY	295		295
3	2104-2713020	EXCAVATION, CLASS 13, CHANNEL	CY		4107	4107
4	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	241		241
5	2115-0100000	MODIFIED SUBBASE	CY	85		85
6	2121-7425010	GRANULAR SHOULDERS, TYPE A	TON	55		55
7	2301-0685550	BRIDGE APPROACH PAVEMENT, AS PER PLAN	SY	154.2		154.2
8	2301-1033080	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN.	SY	268		268
9	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE	TON	42		42
10	2401-6745625	REMOVAL OF EXISTING BRIDGE	LS		1	1
11	2402-2720000	EXCAVATION, CLASS 20	CY		104	104
12	2402-2721000	EXCAVATION, CLASS 21	CY		106	106
13	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY		495.0	495
14	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB		128331	128331
15	2407-0562870	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTB70	EACH		10	10
16	2407-0562895	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTB95	EACH		5	5
17	2408-7800000	STRUCTURAL STEEL	LB		5787.2	5787.2
18	2414-6424110	CONCRETE BARRIER RAILING	LF		476	476
19	2414-6460000	ORNAMENTAL METAL RAILING	LF		261.6	261.6
20	2417-0225024	APRONS, METAL, 24 IN. DIA.	EACH	1		1
21	2417-1040024	CULVERT, CORRUGATED METAL ENTRANCE PIPE, 24 IN. DIA.	LF	28		28
22	2501-0201057	PILES, STEEL, HP 10 X 57	LF		1100	1100
23	2501-6335010	PREBORED HOLES	LF		183.2	183.2
24	2505-4008120	REMOVAL OF STEEL BEAM GUARDRAIL	LF		106	106
25	2507-3250005	ENGINEERING FABRIC	SY		1310	1310
26	2507-6800061	REVETMENT, CLASS E	TON		1250	1250
27	2510-6745850	REMOVAL OF PAVEMENT	SY	529		529
28	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN.	SY	56		56
29	2524-6765010	REMOVE AND REINSTALL SIGN AS PER PLAN	EACH	1		1
30	2528-2518000	SAFETY CLOSURE	EACH	4		4
31	2528-8445110	TRAFFIC CONTROL	LS	1		1
32	2533-4980005	MOBILIZATION	LS	1		1
33	2599-9999005	34" TO 38" CONCRETE BARRIER TRANSITION SECTION, MODIFIED	EACH		4	4
34	2599-9999005	REMOVE AND REINSTALL EXISTING FLAP GATE, 24"	EACH	1		1
35	2599-9999005	CONCRETE BARRIER, APPROACH, MODIFIED, 16 FT	EACH	4		4
36	2599-9999009	CORING ROCK SOCKET	LF		24	24
37	2601-2634100	MULCHING	ACRE	1		1
38	2601-2636043	SEEDING AND FERTILIZING (RURAL)	AC	0.5		0.5
39	2601-2642100	STABILIZING CROP - SEEDING AND FERTILIZING	AC	0.5		0.5
40	2601-2700020	TRANSITION MAT	SF	240		240
41	2602-0000020	SILT FENCE	LF	450		450
42	2602-000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	450		450
43	2602-000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	225		225
44	2602-0000309	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA.	LF	575		575
45	2602-0000351	REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE	LF	575		575

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ESTIMATE REFERENCE INFORMATION

DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS

REF. NO.	DESCRIPTION	BID ITEM DESCRIPTION
1	QUANTITY IN THE PLANS IS BASED ON THE AREAS SHOWN BETWEEN THE EXISTING EDGE OF GRANULAR SHOULDER AND SLOPE LIMITS FROM APPROXIMATELY STA 8+25 TO STA 12+00 BOTH SIDES. DO NOT DISTURB WETLAND AREA NOTED ON SHEET D.1 WITHOUT PRIOR APPROVAL OF THE ENGINEER. CITY WILL FELL ANY POTENTIAL BAT HABITAT TREES PRIOR TO MARCH 31, 2025. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL AND GRUBBING ASSOCIATED WITH ANY REMAINING MATERIALS, AND ALL EFFORTS NEEDED FOR ANY OTHER TREES OR BRUSH WITHIN THE GRADING LIMITS. PRIOR TO BIDDING, CONTRACTOR SHALL REVIEW EXISTING SITE CONDITIONS AND TO IDENTIFY TREES THAT NEED TO BE CLEARED AND GRUBBED TO CONFIRM THE EXTENT OF EFFORT REMAINING. INCLUDES REMOVAL OF ANY FENCE POSTS OR OTHER MISCELLANEOUS LANDSCAPING POSTS ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS.	CLEARING AND GRUBBING
2	SEE SUMMARY TABLE ON C SHEETS FOR A BREAKDOWN OF VOLUMES ON EACH SIDE OF THE CREEK. CLASS 10 EXCAVATION INCLUDES EARTHWORK FOR ROADWAY EMBANKMENT, DITCHES, AND REVETMENT PLACEMENT OTHER THAN BETWEEN THE FACE OF THE PROPOSED BRIDGE ABUTMENTS. QUANTITY INDICATED IN THE PLANS REPRESENTS TOTAL CUT QUANTITY WITHIN THE LIMITS OF CLASS 10. QUANTITIES ARE ADJUSTED FOR PAVEMENT REMOVAL BUT ARE NOT ADJUSTED FOR TOPSOIL. SUFFICIENT CUT MATERIAL WILL BE AVAILABLE FROM THE CLASS 10 AND THE CLASS 13, CHANNEL BID ITEM SUCH THAT NO BORROW IS EXPECTED TO BE REQUIRED. CUT VOLUME ALSO INCLUDES EXCAVATION FOR EMBEDMENT OF REVETMENT, CLASS E AND REVETMENT TOE DETAIL THAT IS WITHIN THE LIMITS OF CLASS 10 EXCAVATION. MATERIAL DETERMINED TO BE SUITABLE BY THE ENGINEER MAY BE USED FOR EMBANKMENT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR WASTING ANY UNSUITABLE OR EXCESS MATERIAL. MATERIAL MAY NOT BE WASTED ON WETLANDS OR WITHIN THE FLOODPLAIN. PAYMENT QUANTITY WILL BE THE QUANTITY SHOWN IN THE CONTRACT DOCUMENTS.	EXCAVATION, CLASS 10, ROADWAY & BORROW
3	SEE SUMMARY TABLE ON C SHEETS FOR A BREAKDOWN OF VOLUMES ON EACH SIDE OF THE CREEK. CLASS 13 CHANNEL EXCAVATION INCLUDES THE AREA BETWEEN THE FACE OF PROPOSED BRIDGE ABUTMENTS. QUANTITY INDICATED IN THE PLANS REPRESENTS TOTAL CUT QUANTITY WITHIN THE LIMITS OF CLASS 13, CHANNEL. QUANTITIES ARE ADJUSTED FOR PAVEMENT REMOVAL BUT ARE NOT ADJUSTED FOR TOPSOIL. CUT VOLUME ALSO INCLUDES EXCAVATION FOR EMBEDMENT OF REVETMENT, CLASS E AND REVETMENT TOE DETAIL THAT IS WITHIN THE LIMITS OF CLASS 13, CHANNEL EXCAVATION. MATERIAL DETERMINED TO BE SUITABLE BY THE ENGINEER MAY BE USED FOR EMBANKMENT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR WASTING ANY UNSUITABLE OR EXCESS MATERIAL. MATERIAL MAY NOT BE WASTED ON WETLANDS OR WITHIN THE FLOODPLAIN. QUANTITY MEASURED FOR PAYMENT WILL BE THE QUANTITY SHOWN IN THE CONTRACT DOCUMENTS.	EXCAVATION, CLASS 13, CHANNEL
4	REPLACE TO A MINIMUM OF 4 INCHES. QUANTITY CALCULATED IS BASED ON AREA WHERE TOPSOIL IS TO BE PLACED WITHIN FINISHED CONSTRUCTION LIMITS. CONSTRUCTION LIMITS FOR THIS PURPOSE ARE THE SLOPE LIMITS SHOWN IN GRADING AREAS.	TOPSOIL, STRIP, SALVAGE AND SPREAD
5	FOR USE UNDER PCC PAVEMENT (ROADWAY AND DRIVEWAY) AS SHOWN ON SHEET B.1. PLAN QUANTITY ASSUMES THAT THERE IS A 2' EXTENSION OF THE SUBBASE ON ROADWAY PAVEMENT. MODIFIED SUBBASE UNDER APPROACH PAVEMENT IS INCLUDED IN BRIDGE APPROACH PAVEMENT ITEM AS NOTED ON U SHEETS AND IS NOT PAID SEPERATELY.	MODIFIED SUBBASE
6	FOR ROADWAY SHOULDER MATERIAL AS SHOWN ON THE B.1 TYPICAL SECTION SHEET.	GRANULAR SHOULDERS, TYPE A
7	SEE DETAILS INCLUDING METHOD OF MEASUREMENT AND BASIS OF PAYMENT ON SHEETS U.1 AND U.2. INCLUDES PAVING UNDER A PORTION OF CONCRETE, BARRIER, APPROACH MODIFIED. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. EVALUATION REQUIREMENTS FOR SMOOTHNESS OF SECTION 2428 OF THE STANDARD SPECIFICATIONS SHALL APPLY FOR THIS PROJECT. EVALUATION REQUIREMENTS FOR THICKNESS OF SECTION 2301 OF THE STANDARD SPECIFICATIONS DO NOT APPLY FOR THIS PROJECT AND NO INCENTIVE FOR THICKNESS WILL BE PAID.	BRIDGE APPROACH PAVEMENT, AS PER PLAN
8	SEE TYPICAL SECTIONS ON SHEET B.1 AND JOINTING AND LAYOUT INFORMATION ON SHEET L.1. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION. EVALUATION REQUIREMENTS FOR SMOOTHNESS OF SECTIONS 2316 AND 2317 OF THE STANDARD SPECIFICATIONS DO NOT APPLY FOR THIS PROJECT AND NO INCENTIVE FOR SMOOTHNESS WILL BE PAID. EVALUATION REQUIREMENTS FOR THICKNESS OF SECTION 2301 OF THE STANDARD SPECIFICATIONS DO NOT APPLY FOR THIS PROJECT AND NO INCENTIVE FOR THICKNESS WILL BE PAID.	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN.
9	FOR USE AS GRANULAR SURFACING ON ENTRANCES AS SHOWN ON SHEET B.1 AND SHEET L.1 CONTRACTOR TO FURNISH AND SPREAD THE MATERIAL AT A TYPICAL 6 INCH THICKNESS.	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE
10	EXISTING BRIDGE ON STATION 10+00 IS A 150'X 24' STEEL BEAM BRIDGE WITH CONCRETE DECK AND ABUTMENTS. CONTRACTOR TO REMOVE ALL SUBSTRUCTURE TO 3 FEET MINIMUM BELOW FINISHED GRADE OR AS NEEDED TO AVOID CONFLICTS WITH PROPOSED STRUCTURE. STRUCTURE BECOMES THE PROPERTY OF THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF THE STRUCTURE OFFSITE. SEE C.4 FOR ASBESTOS AND LEAD AND CHROMIUM TESTING NOTES.	REMOVAL OF EXISTING BRIDGE
11	AT BRIDGE ABUTMENTS	EXCAVATION, CLASS 20
12	AT BRIDGE PIERS	EXCAVATION, CLASS 21
13	CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION. EVALUATION REQUIREMENTS FOR SMOOTHNESS OF SECTION 2428 OF THE STANDARD SPECIFICATIONS SHALL APPLY FOR THIS PROJECT.	STRUCTURAL CONCRETE (BRIDGE)
14	-	REINFORCING STEEL, EPOXY COATED
15	INCLUDES THE COST OF PROVIDING BEAM VENTS PER V. 16 AND PROVIDING BEAM BEARING MATERIALS.	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTB70
16	INCLUDES THE COST OF PROVIDING BEAM VENTS PER V. 16 AND PROVIDING BEAM BEARING MATERIALS.	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTB95
17	FOR BRIDGE BEAM DIAPHRAGMS AND DECK DRAINS PER V SHEETS.	STRUCTURAL STEEL
18	CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION.	CONCRETE BARRIER RAILING
19	ON NORTH DECK EDGE PER U SHEETS. SHOP DRAWING SUBMITTAL REQUIRED. CONTRACTOR SHALL PROVIDE ONE RAILING PANEL AND POST AS A MOCK UP PRIOR TO FABRICATION OF THE ENTIRE SECTION. IF ACCEPTABLE, THE PANEL AND POST MAY BE INCORPORATED INTO THE PROJECT. NO FIELD PAINTING ALLOWED EXCEPT FOR REPAIR OR TOUCH UP PER NOTES IN PLAN SET. FIELD WELDING OR CUTTING IS NOT ALLOWED. METHOD OF MEASUREMENT SHALL BE BY THE LINEAR FEET SHOWN IN THE CONTRACT DOCUMENTS, FROM END OF RAILING TO END OF RAILING. BASIS OF PAYMENT IS FULL COMPENSATION FOR FURNINSHING ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO CONSTRUCT THE RAIL AS SHOWN IN THE CONTRACT DOCUMEENTS.	ORNAMENTAL METAL RAILING
20	FOR INLET END OF DRIVEWAY CULVERT AT STA 8+83.93 LT.	APRONS, METAL, 24 IN. DIA.
21	FOR DRIVEWAY AT STA 8+54.89 LT.	CULVERT, CORRUGATED METAL ENTRANCE PIPE, 24 IN. DIA.
22	CAST IN-ONE-PIECE STEEL PILE POINTS ARE REQUIRED FOR ALL THE STEEL H-PILES EXCEPT FOR PIER PILES THAT ARE IN ROCK CORES. PILE POINTS SHALL BE CONSIDERED INCIDENTAL TO THIS BID ITEM. SEE V SHEETS FOR PILE DRIVING NOTES.	PILES, STEEL, HP 10 X 57
23	AT BRIDGE ABUTMENTS PER V.1 AND AT PIER PILES THAT REQUIRE ROCK CORING PER DETAILS ON V.3. SEE NOTES ON V.3 FOR WHEN PIER PILE PREBORED HOLES SHOULD BE FILLED WITH SATURATED SAND INSTEAD OF BENTONITE. SATURATED SAND IS CONSIDERED INCIDENTAL TO THIS ITEM.	PREBORED HOLES
24	FOR REMOVAL OF STEEL BEAM GUARDRAIL ADJACENT TO EXISITNG BRIDGE ENDS. REMOVAL OF ALL OBJECT MARKERS/HAZARD SIGNS ASSOCIATED WITH THE GUARDRAIL AND BRIDGE ENDS ARE INCIDENTAL TO THIS ITEM.	REMOVAL OF STEEL BEAM GUARDRAIL
25	PLACED UNDER THE REVETMENT AS SHOWN ON SHEET D.1, V.1 AND V.2. NOTE ANCHORAGE OF THE ENGINEERING FABRIC AS PER THE DETAILS ON B.1. FABRIC UNDER REVETMENT SHALL BE INSTALLED AS SOON AS BERM GRADING IS COMPLETE AS EROSION CONTROL MEASURE. IF ENGINEERING FABRIC IS NOT IMMEDIATELY INSTALLED, PERIMETER AND SLOPE CONTROL DEVICE SHALL BE INSTALLED TO PREVENT EROSION INTO THE STREAM.	ENGINEERING FABRIC
26	PLACED AROUND ABUTMENTS AND PIERS AS SHOWN ON SHEET D.1, V.1 AND V.2 INCLUDING AS PER TOE-IN DETAILS ON SHEET B.1.	REVETMENT, CLASS E
27	FOR REMOVAL OF EXISTING HMA PAVEMENT. METHOD OF MEASUREMENT FOR REMOVAL OF PAVEMENT WILL BE THE QUANTITY SHOWN IN THE CONTRACT DOCUMENTS. CONFIRM EXTENTS OF PAVEMENT REMOVAL WITH THE ENGINEER PRIOR OT REMOVAL.	REMOVAL OF PAVEMENT
28	CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION. SEE SHEET D.1 AND SHEET L.1 FOR LAYOUT INFORMATION.	DRIVEWAY, P.C. CONCRETE, 6 IN.
29	FOR EXISTING SPEED LIMIT SIGN AS SHOWN ON SHEET D.1. FIELD VERIFY LOCATION. REINSTALL PER SI-101 TYPE 1 INSTALLATION WITH AN "X" DISTANCE FROM THE EDGE OF PAVEMENT TO EDGE OF SIGN OF A MINIMUM OF 12 FEET. METHOD OF MEASUREMENT IS BY EACH SIGN AND POST INSTALLATION REMOVED AND REINSTALLED AS SHOWN IN THE CONTRACT DOCUMENTS. BASIS OF PAYMENT IS FULL COMPENSATION FOR FURNISHING ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR REMOVAL AND RE-INSTALLATION OF THE EXISTING SIGN AND POST AS SHOWN IN THE CONTRACT DOCUMENTS.	REMOVE AND REINSTALL SIGN AS PER PLAN
30	SEE TABULATION ON C SHEETS.	SAFETY CLOSURE

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REFERENCE NOTES CONTINUED:

ESTIMATE REFERENCE INFORMATION DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS			
REF. NO.	DESCRIPTION	B	BID ITEM DESCRIPTION
31	SEE NOTES ON SHEET A.1 AND SHEET J.1. INCLUDES ALL ITEMS ASSOCIATED WITH PROVIDING A SIGNED DETOUR.		TRAFFIC CONTROL
32	CONTRACTOR SHALL SUBMIT AN UPDATED PROJECT SCHEDULE TO THE CITY MONTHLY THAT INDICATES WHEN THE ROAD WILL BE OPEN TO TRAFFIC.		MOBILIZATION
33	SEE V SHEETS FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION. INCLUDES ALL CONCRETE AND REINFORCING STEEL. METHOD OF CONSTRUCTION SHALL BE AS PER SECTION 2513 OF THE STANDARD SPECIFICATIONS. METHOD OF MEASUREMENT SHALL BE BY COUNT FOR THE BARRIER TRANSITION SECTION. BASIS OF PAYMENT WILL BE THE CONTRACT UNIT PRICE EACH FOR THE TYPE OF END SECTION. REINFORCEMENT IN CONCRETE BARRIER TRANSITION SECTIONS THAT IS NOT PART OF THE BRIDGE STRUCTURE IS NOT PAID FOR SEPARATELY. PAYMENT IS CONSIDERED FULL COMPENSATION FOR ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO CONSTRUCT THE COMPLETE TAPERED END SECTION IN CONFORMANCE WITH THE PLAN DETAILS.		34" TO 38" CONCRETE BARRIER TRANSITION SECTION, MODIFIED
34	THIS ITEM COVERS ALL EFFORTS NEEDED TO REMOVE THE EXISTING FLAP GATE FROM THE EXISTING 24-INCH CMP DRIVEWAY PIPE NEAR STA 8+70 LT AND REINSTALL ON THE END OF THE NEW 24" CMP DRIVEWAY PIPE OUTLET AT APPROXIMATE STA. 8+70, 62.68' LT. SEE D.1 FOR LOCATION. METHOD OF MEASUREMENT IS BY EACH RUBBER FLASH GATE INSTALLED. BASIS OF PAYMENT SHALL BE FULL COMPENSATION FOR MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR REMOVAL AND RE-INSTALLATION OF THE EXISTING FLAP GATE.		REMOVE AND REINSTALL EXISTING FLAP GATE, 24"
35	SEE SHEET V.19 FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION. INCLUDES ALL CONCRETE AND REINFORCING STEEL OR DOWELS. METHOD OF CONSTRUCTION SHALL BE AS PER SECTION 2513 OF THE STANDARD SPECIFICATIONS. METHOD OF MEASUREMENT SHALL BE BY COUNT FOR THE BARRIER END SECTION. BASIS OF PAYMENT WILL BE THE CONTRACT UNIT PRICE EACH FOR THE TYPE OF END SECTION. REINFORCEMENT IN CONCRETE BARRIER END SECTIONS THAT IS NOT PART OF THE BRIDGE STRUCTURE IS NOT PAID FOR SEPARATELY. PAYMENT IS CONSIDERED FULL COMPENSATION FOR ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO CONSTRUCT THE COMPLETE TAPERED END SECTION IN CONFORMANCE WITH THE PLAN DETAILS.		CONCRETE BARRIER, APPROACH, MODIFIED, 16 FT
36	THE QUANTITY OF "CORING ROCK SOCKET" AT THE PIERS IS BASED ON THE ANTICIPATED TOP OF BEDROCK ELEVATIONS AND CORING 3 FEET INTO THE ROCK FOR (4) PILES IN EACH PIER AS NOTED ON V.6. THE NUMBER OF LINEAL FEET OF ROCK CORING WILL BE MEASURED IN THE FIELD AND PAID FOR AT THE CONTRACT UNIT PRICE BID PER LINEAL FOOT. THE PRICE BID INCLUDES THE COST OF PREDRILLING 16 INCH DIAMETER ROCK SOCKETS A MINIMUM 3 FEET INTO BEDROCK. THIS ITEM INCLUDES THE COST OF DISPOSAL OF EXCAVATED MATERIAL AND FURNISHING AND PLACING CLASS "C" STRUCTURAL CONCRETE TO BACKFILL THE SOCKET TO THE REQUIRED ELEVATION. IF PIER PILES CAN BE DRIVEN TO ELEVATION 972 (10 FEET BELOW THE SCOUR ELEVATION), THEN NO MEASUREMENT OR PAYMENT WILL BE MADE FOR "CORING ROCK SOCKET". SEE DETAILS ON V.3.		CORING ROCK SOCKET
37	MULCH ALL DISTURBED AREAS OUTSIDE THE STREAMBED WITHOUT REVETMENT, HARD SURFACING, OR GRANULAR MATERIAL. HYDROMULCHING IS ALLOWABLE. QUANTITY ASSUMES BOTH TEMPORARY AND PERMANENT SEEDING AND WILL BE ADJUSTED IF THE STABILIZING CROP IS NOT NEEDED.		MULCHING
38	ALL DISTURBED AREAS OUTSIDE THE STREAMBED WITHOUT REVETMENT, HARD SURFACING, OR GRANULAR MATERIAL. HYDROSEEDING IS ALLOWABLE.		SEEDING AND FERTILIZING (RURAL)
39	SEED WITH STABILIZING CROP ALL DISTURBED AREAS WITHIN CONSTRUCTION LIMITS WHICH ARE NOT ABLE TO BE SEEDED WITH PERMANENT SEEDING DUE TO CONSTRUCTION OPERATIONS, STAGING, OR IF THE SEEDING SEASON REQUIREMENTS OF STANDARD SPECIFICATIONS DELAYS PLACEMENT OF PERMANENT SEEDING. QUANTITY ESTIMATED IN THE PLANS IS THE SAME AS THE AREA OF THE PERMANENT SEEDING.		STABILIZING CROP - SEEDING AND FERTILIZING
40	FOR USE AT END OF BARRIER RAILS AS SHOWN ON SHEET D.1.		TRANSITION MAT
41	PLACED AT THE TOE OF FILL SLOPE IN AREAS WITHOUT A DITCH, AS SHOWN ON SHEET D.1. BID ITEM INCLUDES 25% ADDITIONAL QUANTITY FOR FIELD ADJUSTMENTS AND REPLACEMENTS.		SILT FENCE
42	REMOVE DEVICES ONLY AS DIRECTED BY THE ENGINEER. THE CITY OF OELWEIN MAY ELECT TO REMOVE SOME OF THE DEVICES STILL IN PLACE AT THE END OF THE PROJECT.		REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS
43	THIS ITEM IS INCLUDED FOR CLEANOUT AND REPAIR OF THE SILT FENCE DURING THE PROJECT. THE BID QUANTITY IS ESTIMATED TO BE 50% OF THE BID QUANTITY FOR SILT FENCE.		MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK
44	FOR USE ON OVERBANKS IN AND ADJACENT TO BRIDGE OPENING, AS SHOWN ON SHEET D.1 BID ITEM INCLUDES 25% ADDITIONAL QUANTITY FOR FIELD ADJUSTMENTS AND REPLACEMENTS.		PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA.
45	REMOVE DEVICES ONLY AS DIRECTED BY THE ENGINEER. THE CITY OF OELWEIN MAY ELECT TO REMOVE SOME OF THE DEVICES STILL IN PLACE AT THE END OF THE PROJECT.		REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE

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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 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 ENGINEER.

NO EXTRA PAYMENT IS ALLOWED FOR COLD WEATHER PROTECTION DURING CONSTRUCTION.

THE OWNER WILL PROVIDE FOR FOUR TRIPS FOR STAKING, ONE OF THESE TRIPS INCLUDES COLLECTING THE IN-PLACE BEAM ELEVATIONS FOR HAUNCH ADJUSTMENTS AFTER THE BEAMS ARE PLACED. SUBGRADE STAKES WILL NOT BE PROVIDED, ONLY THE FINAL PAVEMENT GRADE STAKES. THE SURVEYOR REQUIRES A MINIMUM OF 48 HOURS NOTICE FOR THE SCHEDULING OF STAKING. RE-STAKING WILL BE AN EXTRA SERVICE CHARGED TO THE CONTRACTOR AS A TIME AND MATERIAL FEE AND CHANGE ORDERED INTO THE PROJECT AS A CONTRACTOR EXPENSE.

AN ASBESTOS INSPECTION WAS PERFORMED, AND NO ASBESTOS WAS DETECTED IN THE TESTED MATERIAL.

SCRAPE SAMPLES OF THIS BRIDGE WERE TAKEN TO GET AN INDICATION OF THE EXISTENCE OF AND LEVEL OF TOTAL CHROMIUM AND TOTAL LEAD. THE ANALYSIS OF THE TOTAL CHROMIUM FOUND WAS <220 PART PER MILLION (PPM) ON THE BRIDGE RAILINGS AND <130 PPM ON THE BRIDGE BEAMS. THE ANALYSIS OF THE TOTAL LEAD FOUND WAS 510 PPM ON THE BRIDGE RAILINGS AND <80 PPM ON THE BRIDGE BEAMS. THE ANALYSIS SHOWS THE EXISTENCE OF THESE TWO TOXIC CONSTITUENTS. NO OTHER SUBSTANCES WERE ANALYZED. THE BIDDER SHOULD NOT RELY ON THE LPA'S TESTING AND ANALYSIS FOR ANY PURPOSE OTHER THAN AS AN INDICATION OF THE EXISTENCE OF THESE TWO CONSTITUENTS. IF HAZARDOUS MATERIALS ARE DISCOVERED DURING CONSTRUCTION, CEASE WORK AND NOTIFY THE ENGINEER.

ROAD CONTRACTOR IS TO USE DUE CAUTION IN WORKING OVER AND AROUND ALL TILE LINES. BREAKS IN THE TILE LINE DUE TO THE CONTRACTOR'S CARELESSNESS ARE TO BE REPLACED AT THE CONTRACTOR'S EXPENSE WITHOUT COST TO OWNER. ANY TILE LINES BROKEN OR DISTURBED BY DESIGNATED CUT LINES WILL BE REPLACED AS DIRECTED BY THE ENGINEER AND AT THE OWNER'S EXPENSE.

STANDARD ROAD PLAN EW-401 IS LISTED IN TABULATION 105-4; HOWEVER, IT IS INCLUDED FOR INFORMATION PURPOSES ONLY SINCE IT IS AN OPTION. NO QUANTITIES ASSOCIATED WITH CONSTRUCTING EW-401 ARE INCLUDED IN ANY BID ITEMS. ANY STREAM CROSSING USED SHALL COMPLY WITH PERMIT REQUIREMENTS OF THE USACE NATIONWIDE PERMIT AND IOWA DNR FLOODPLAIN PERMIT REQUIREMENTS OF IOWA ADMINISTRATIVE CODE SECTION 567 IAC 72.1(6).

108-13A
10/4/2023

SAFETY CLOSURES

Station	Road Closure Qty.	Hazard Closure Qty.	Remarks
7+25	1		BEGINNING OF PROJECT
8+80		1	WEST ABUTMENT
11+50		1	EAST ABUTMENT
13+00	1		END OF PROJECT

105-4
10-18-11

STANDARD ROAD PLANS

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

Number	Date	Title
DR-203	04-21-20	Metal Pipe Aprons and Beveled Ends
EC-105	04-17-18	Transition Mat (TM)
EC-201	04-20-21	Silt Fence
EC-204	10-19-21	Perimeter, Slope and Ditch Deck Sediment Control Devices
EW-401	10-20-15	Temporary Stream Crossing, Causeway, or Equipment Pad
PV-101	04-15-25	Joints
SI-101	04-19-16	Locations - Type "A" Signs
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-252	04-21-20	Routes Closed to Traffic

10th Street Bridge
Oelwein

EARTHWORK SUMMARY

LOCATION	A TOTAL ROADWAY CUT UNADJUSTED	B UNUSABLE EXISTING PAVEMENT VOLUME	C TOTAL ROADWAY CUT, ADJUSTED **(EXCAVATION, CLASS 10, ROADWAY & BORROW)**	D TOTAL ROADWAY FILL, ADJUSTED (1.3 SHRINK FACTOR)	E CHANNEL AREA CUT, UNADJUSTED **(EXCAVATION, CLASS 13, CHANNEL)**	F CHANNEL AREA FILL, ADJUSTED (1.3 SHRINK FACTOR)	G **CLASS 20 EXCAVATION**
WEST OF BRIDGE	280	80	201	206	-	-	-
WEST BRIDGE BERM	-	-	-	-	1640	2	-
EAST OF BRIDGE	191	96	94	154	-	-	-
EAST BRIDGE BERM	-	-	-	-	2467	12	-
BRIDGE (WEST ABUTMENT)	-	-	-	-	-	-	52
BRIDGE (EAST ABUTMENT)	-	-	-	-	-	-	52
TOTALS:	471 CY	176 CY	**295 CY**	360 CY	**4107 CY**	14 CY	**104 CY**

NOTES:
- ALL VALUES IN CUBIC YARDS
- BOLD TITLES/VALUES INDICATE PAY ITEMS AND QUANTITIES
- ALL QUANTITIES INCLUDE EXCAVATION FOR EMBEDMENT OF CLASS E REVETMENT AS APPROPRIATE
- QUANTITIES NOT ADJUSTED FOR TOPSOIL

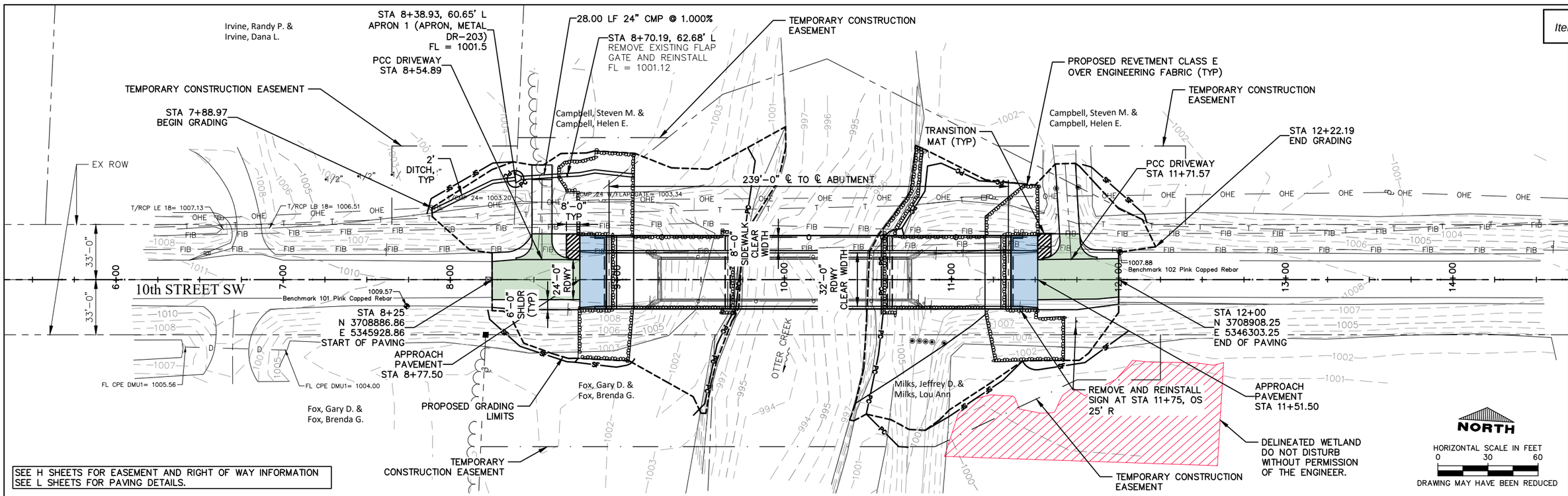
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BRIDGE APPROACH SECTION

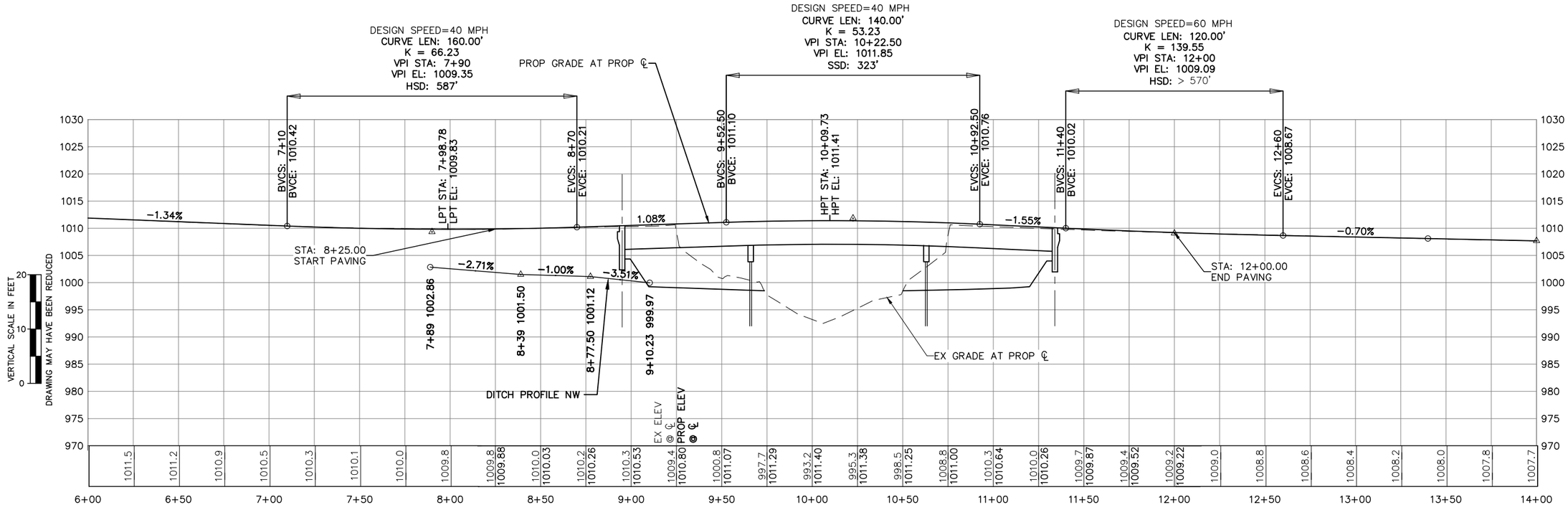
* Not a Bid Item

Line No.	Bridge Station	End	Skew Ahead Left (Degrees)	Skew Ahead Right (Degrees)	(T) Thickness (IN)	Pay Length	Double-Reinf. Area (SY)	Perforated * 4" Subdrain (LF)	Subdrain * Outlet (STA)	Subdrain * Outlet Side	Modified * Subbase (TON)	Remarks
1	8+77.50	W	0	0	10	15.83	77.1				75.1	SEE U SHEETS FOR DETAILS
2	11+51.50	E	0	0	10	15.83	77.1				75.1	SEE U SHEETS FOR DETAILS

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SEE H SHEETS FOR EASEMENT AND RIGHT OF WAY INFORMATION
SEE L SHEETS FOR PAVING DETAILS.



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NORTH

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

Irvine, Randy P. &
Irvine, Dana L.

Campbell, Steven M. &
Campbell, Helen E.

Campbell, Steven M. &
Campbell, Helen E.

STA 10+25.48, 132.14' L

EXISTING ROW

STA 9+62.99, 110.93' L

STA 8+40.49, 85.00' L
STA 8+40.27, 80.00' L
STA 7+65.00, 80.00' L
TEMPORARY EASEMENT

STA 9+30.19, 85.00' L
TEMPORARY EASEMENT

STA 11+27.82, 80.00' L
TEMPORARY EASEMENT

STA 12+40.00, 80.00' L

ø1/2" ø1/2" ø1/2"

STA 7+65.00, 33.00' L
STA 8+64.42, 33.00' L

STA 12+20.05, 33.00' L
STA 12+40.00, 33.00' L

1007.88
Benchmark 102 Pink Capped Rebar

8+00 9+00 10+00 11+00 12+00 13+00

1009.57
101 Pink Capped Rebar

10TH STREET SW ℄

EXISTING ROW

STA 8+21.18, 33.00' R

STA 9+58.30, 33.00' R

STA 12+25.00, 33.00' R

STA 11+75.00, 60.00' R

STA 12+25.00, 60.00' R

Fox, Gary D. &
Fox, Brenda G.

Fox, Gary D. &
Fox, Brenda G.

TEMPORARY EASEMENT

STA 8+18.23, 100.00' R

STA 9+55.35, 100.00' R

STA 10+90.00, 100.00' R

Milks, Jeffrey D. &
Milks, Lou Ann

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SIGN LEGEND

Ⓐ ROAD CLOSED — R11–2, 48"X30" (TO BE PLACED IN ROAD) SAFETY CLOSURE

Ⓑ ROAD CLOSED TO THRU TRAFFIC — R11–4, 60"X30" (TO BE PLACED STAGGERED IN ROAD)

Ⓒ 10TH ST. SW — M1–94H, 12"X24" BLACK ON ORANGE
DETOUR → — M4–9R, 30"X24" BLACK ON ORANGE

Ⓓ DETOUR → — M4–9R, 30"X24" BLACK ON ORANGE

Ⓔ ROAD CLOSED 0.25 MILES AHEAD LOCAL TRAFFIC ONLY — R11–4, 60"X30"

Ⓕ END DETOUR — D3–1, BLACK ON ORANGE 6" UPPERCASE 4.5" LOWERCASE

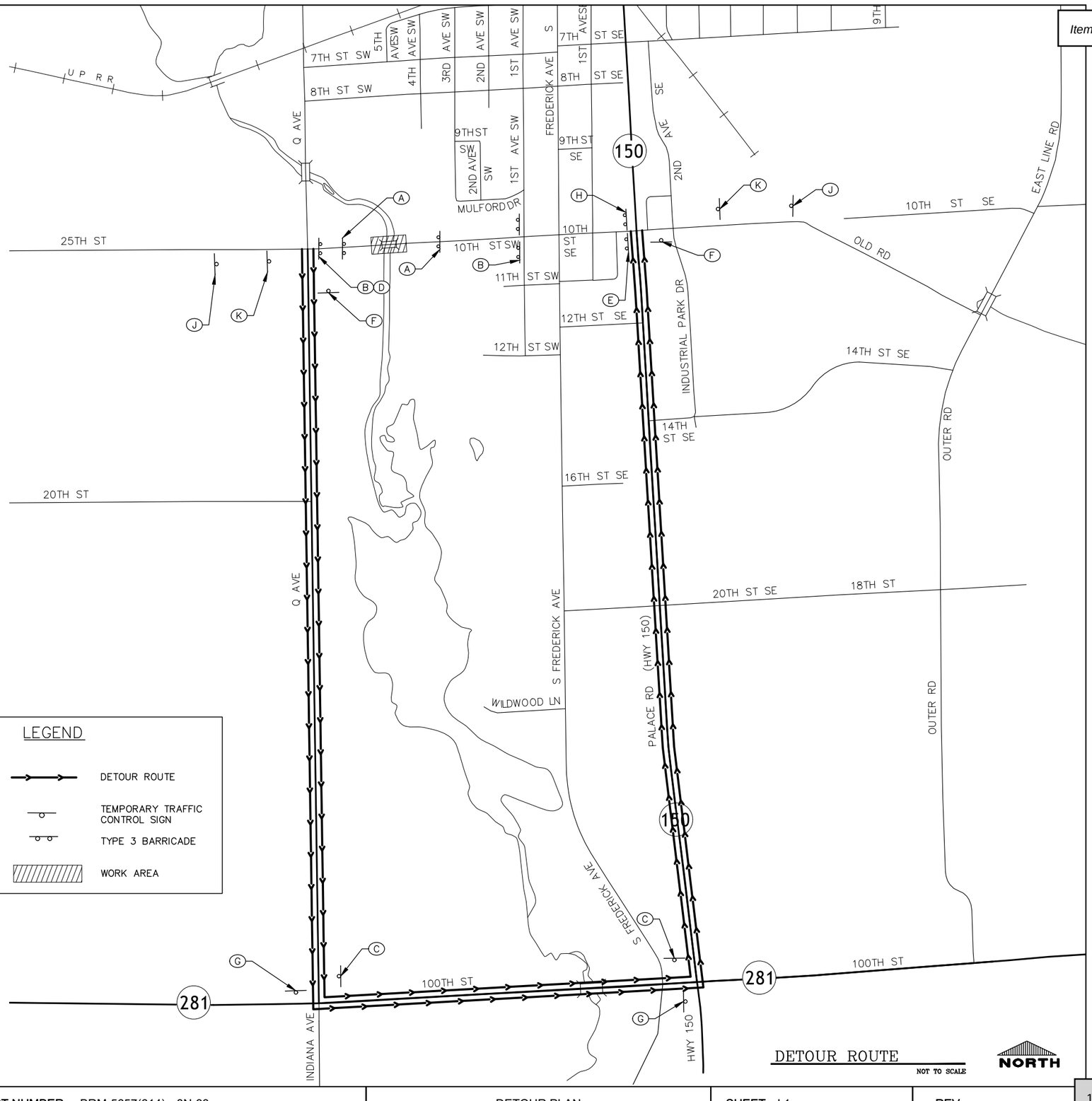
Ⓖ 10TH ST. SE — M1–94H, 12"X24" BLACK ON ORANGE
DETOUR ← — M4–9L, 30"X24" BLACK ON ORANGE

Ⓗ DETOUR ← — M4–9L, 30"X24" BLACK ON ORANGE

Ⓙ ROAD CLOSED AHEAD — W20–3, 48"X48" BLACK ON ORANGE

Ⓚ DETOUR AHEAD — W20–2, 48"X48" BLACK ON ORANGE

TRAFFIC CONTROL NOTES
1. 10th STREET BETWEEN Q AVENUE AND 1ST AVENUE SW WILL BE CLOSED TO VEHICULAR AND PEDESTRIAN TRAFFIC DURING CONSTRUCTION. PROPERTY ACCESS WILL BE MAINTAINED AT ALL TIMES.
2. THE LOCATION FOR STORAGE OF EQUIPMENT AND WORKERS VEHICLES DURING WORKING AND NON–WORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER.
3. WORK SHALL NOT BEGIN WITHOUT ADEQUATE TRAFFIC CONTROL IN PLACE.
4. PROPOSED SIGN SPACING MAY BE MODIFIED IF APPROVED BY THE ENGINEER TO MEET EXISTING FIELD CONDITIONS OR TO PREVENT OBSTRUCTION OF THE MOTORIST'S VIEW OF PERMANENT SIGNING.
5. ALL WORK WITHIN HIGHWAY 150 AND HIGHWAY 281 RIGHT OF WAY SHALL BE PERFORMED BY THE CONTRACTOR BETWEEN THE HOURS OF 30 MINUTES AFTER SUNRISE TO 30 MINUTES BEFORE SUNSET. DETOUR SIGNING MAY BE PLACED WITH IOWA DOT SIGNS IF THE SPACING IS ACCEPTABLE. THE EXISTING SIGNS MUST BE ABLE TO HANDLE THE ADDITIONAL WEIGHT AND TEMPORARY SIGNS MUST BE PLACED OUTSIDE OF THE EXISTING SIGNS, FARTHEST FROM THE ROAD.
6. 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.
7. THE CONTRACTOR SHALL PROVIDE A MINIMUM 2 WEEK NOTICE PRIOR TO INSTALLING THE PROPOSED DETOUR TO ALLOW NOTIFICATION OF AREA RESIDENTS AND BUSINESSES. THE CONTRACTOR SHALL PROVIDE NOTICE TO THE IOWA DOT MAINTENANCE SUPERVISOR:
   GABRIEL ZITTERGRUEN
   EMAIL: GABRIEL.ZITTERGRUEN@IOWADOT.US
   PHONE: 563–880–4519,
   PRIOR TO INSTALLING DETOUR SIGNS ON HIGHWAY 150 AND HIGHWAY 281 SO HE IS AWARE OF WORK ALONG THE HIGHWAY RIGHT OF WAY.
8. BARRICADES AND SAFETY CLOSURES SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD ROAD PLAN TC252



DETOUR ROUTE
NOT TO SCALE

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SEE D.1 FOR PIPE INFO

STA 8+48.89, 68.66'L G 1004.60

STA 8+60.89, 68.66'L G 1005.00

STA 8+77.27, 64.08' L G 1001.11

STA 8+48.89, 59.92' L G 1004.77

STA 8+60.89, 59.92' L G 1004.98

STA 8+25.58, 57.58' L G 1001.87

2'-0" DITCH

3.0:1

12'-0"

6" OF SURFACING, DRIVEWAY, CLASS A CRUSHED STONE

6.9:1

4.0:1

T/CMP 24= 1003.20

T/CMP 24 W/FLAP GATE= 1003.34

STA 8+25.00, 27.41'L G 1009.41

STA 8+48.89, 27.41'L T/P 1009.55

STA 8+60.89, 27.41'L T/P 1009.65

STA 8+77.50, 26.42'L T/P 1009.81

GRADE BREAK

T/P 1009.59

PROPOSED GRANULAR SHOULDER

STA 8+48.89, 23.00'L T/P 1009.61

STA 8+60.89, 22.70'L T/P 1009.72

8'-0" (TYP)

GRANULAR SHOULDER

T/P 1009.70

T/P 1009.74

T/P 1009.85

T/P 1009.94

1.50%

R10'-0"

BT-2 OR L-2

10.0'

7.7'

CT

5.4'

5'-5"

STA 8+39.36, 13.01'L T/P 1009.70

STA 8+70.89, 13.00'L T/P 1009.96

SEE U SHEETS FOR APPROACH PAVEMENT INFORMATION

STA 8+25.00, 10.82'L MATCH EXISTING

STA 8+51.97, 12.00'L T/P 1009.80

STA 8+54.89, 12.00'L T/P 1009.83

T/P 1010.05

T/P 1009.93

2.00%

ED

CD

12.0'

T/P 1009.88 MATCH EX

T/P 1010.15

T/P 1010.29

14.4'

BT-2 OR L-2 (TYP)

12.6'

12.9'

8-50

8-75

24'-0"

T/P 1010.04

STA 8+77.50 START OF BRIDGE APPROACH PAVEMENT, AS PER PLAN

10th STREET SW

JOINT (TYP)

STA 8+24.96, 10.57'R MATCH EXISTING

T/P 1009.91

T/P 1010.05

1'-3" PAVING NOTCH

21'-4¾" FV

10'-9⅞"

10'-6⅞"

B

8-25

STA 8+39.36, 12.00'R T/P 1009.70

STA 8+51.97, 12.00'R T/P 1009.80

STA 8+77.50, 17.41'R T/P 1009.94

4.00%

STA 8+39.36, 18.00'R G 1009.32

PROPOSED GRANULAR SHOULDER

4.0:1

WEST DRIVEWAY

SEE SHEET V.2 FOR GRADING UNDER BRIDGE

STA 11+62.10, 69.27'L G 1003.41

STA 11+74.10, 69.63'L G 1003.42

PAVEMENT JOINTING NOTES, REFER TO PV-101

- ALL LONGITUDINAL JOINTS ARE "BT-2" OR "L-2" JOINTS DEPENDING ON SEQUENCING, TYPICAL
- ALL TRANSVERSE JOINTS IN 8" PAVEMENT ARE TO BE CD JOINTS WITH A MAXIMUM SPACING OF 20' UNLESS OTHERWISE NOTED
- MINIMUM JOINT LENGTH TO BE 2'
- JOINTS SHOULD TERMINATE AT 90° ANGLES TO THE SLAB WHERE POSSIBLE
- MINIMUM JOINT ANGLE TO BE 70°
- KEYED JOINTS ARE NOT ALLOWED
- ROADWAY CENTERLINE JOINTS ARE INTENDED TO LINE UP WITH THE EXISTING CENTER OF ROADWAY PAVEMENT, WHICH DOES NOT ALWAYS MATCH THE CENTERLINE ESTABLISHED BASED ON PROPERTY OWNERSHIP AND EXISTING ROAD RIGHT OF WAY.

STA 11+50.00, 56.65'L G 1001.99

6" OF SURFACING, DRIVEWAY, CLASS A CRUSHED STONE

7.9:1

STA 12+00.02, 42.50'L G 1002.16

STA 11+64.63, 27.42'L T/P 1009.19

PROPOSED GRANULAR SHOULDER

STA 11+51.50, 26.42'L T/P 1009.37

STA 11+76.65, 27.42'L T/P 1009.03

GRANULAR SHOULDER

12'-0⅛"

T/P 1009.10

STA 11+71.24, 17.42'L T/P 1009.25

PROPOSED GRANULAR SHOULDER

T/P 1009.24

T/P 1009.50

T/P 1009.15

STA 11+87.05, 13.42'L T/P 1009.11

STA 11+54.88, 13.00'L T/P 1009.54

T/P 1009.39

STA 12+00.00, 12.58'L MATCH EXISTING

T/P 1009.61

T/P 1009.56

STA 11+87.05, 12.42'L T/P 1009.12

STA 11+71.56, 12.24'L T/P 1009.32

STA 11+79.56, 12.28'L T/P 1009.07

STA 11+51.50 END OF BRIDGE APPROACH PAVEMENT, AS PER PLAN

T/P 1009.85

11+50

11+75

11.8'

12.5'

BT-2 OR L-2 (TYP)

10th STREET SW

JOINT (TYP)

STA 12+00.00, 0.57'L MATCH EXISTING

1'-3" PAVING NOTCH

STA 11+75.00, 11.72'R T/P 1009.29

STA 12+00.00, 10.38'R MATCH EXISTING

10'-11¼"

21'-10⅝" FV

10'-11⅜"

10.9'

STA 11+51.50, 12.00'R T/P 1009.61

STA 11+63.25, 11.86'R T/P 1009.44

STA 11+87.50, 11.57'R T/P 1009.13

STA 11+51.50, 17.42'R T/P 1009.50

PROPOSED GRANULAR SHOULDER

STA 11+75.20, 18.00'R G 1008.98

EAST DRIVEWAY

NORTH

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

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LOG OF BORING

CHOSEN VALLEY TESTING

Chosen Valley Testing, Inc.

PROJECT: 23253.24.IAW
Design Phase Geotechnical Evaluation
Proposed 10th St. SW Bridge Replacement
10th St. SW
Oelwein, Iowa

BORING: **B-01**
LOCATION: See attached sketch
DATE: 5/28/2024
SCALE: 1" = 4'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
1010.2	0.0					
1009.2	1.0		**12" ASPHALT**			Elevations provided by Origin Design.
1008.2	2.0	SP	**POORLY-GRADED SAND** mostly medium grained, black, wet. (Fill) (IADOT: Coarse Sand)			
1006.2	4.0	SP SC	**POORLY-GRADED SAND to CLAYEY SAND** mostly medium grained, trace of gravel, brown, moist, medium dense. (Fill) (IADOT: Coarse Sand)	21		
		SC	**CLAYEY SAND** mostly medium grained, trace of gravel, brown to dark brown to dark grey to black, moist, medium dense. (Alluvium) (IADOT: Clayey Sand)	26		
				28		
998.7	11.5			10		
		SP	**POORLY-GRADED SAND** mostly medium grained, trace of gravel, brown to dark brown to dark grey, waterbearing, loose. (Alluvium) (IADOT: Silty Sand)	5	▽	Water encountered at about 13 feet during drilling.
				6		
992.2	18.0					
		SM	**SILTY SAND with GRAVEL** mostly fine grained, brown, moist, dense to very dense. (Weathered Dolomite) (IADOT: Granular Material)	35		
986.2	24.0			*		* 50 = 1"
			Auger refusal at about 24 feet during drilling, presumably on bedrock. Boring sealed upon completion.			

CVT STANDARD 23253.24.IAW (OELWEIN 10TH ST SW BRIDGE REPLACEMENT).GPJ LOG A GNNN06.GDT 6/10/24

23253.24.IAW B-01 page 1 of 1

LOG OF BORING

CHOSEN VALLEY TESTING

Chosen Valley Testing, Inc.

PROJECT: 23253.24.IAW
Design Phase Geotechnical Evaluation
Proposed 10th St. SW Bridge Replacement
10th St. SW
Oelwein, Iowa

BORING: **B-02**
LOCATION: See attached sketch
DATE: 5/28/2024
SCALE: 1" = 4'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
1011.5	0.0					
1011.0	0.5		**5" ASPHALT**			Elevations provided by Origin Design.
1010.3	1.2		**8" CONCRETE**			
			AIR VOID SPACE			
1000.0	11.5					
		SP SC	**POORLY-GRADED SAND to CLAYEY SAND** mostly medium grained, trace of gravel, trace of wood, dark grey, waterbearing, loose. (Alluvium) (IADOT: Silty Sand)	5	▽	Water encountered at about 12.5 feet during drilling.
997.5	14.0	SC	**CLAYEY SAND with GRAVEL** mostly medium grained, trace of wood, black, waterbearing, medium dense. (Alluvium) (IADOT: Clayey Sand)	16		
995.5	16.0	SP	**POORLY-GRADED SAND** mostly medium grained, trace of gravel, grey, waterbearing, loose. (Alluvium) (IADOT: Fine Sand)	8		
991.5	20.0	SP	**POORLY-GRADED SAND with GRAVEL** mostly medium grained, grey, moist, medium dense. (Alluvium) (IADOT: Gravely Sand)	26		
990.5	21.0	GM	**SILTY GRAVEL** mostly fine grained, light brown, moist, medium dense. (Weathered Dolomite) (IADOT: Granular Material)			
990.0	21.5		Auger refusal at about 21.5 feet during drilling, presumably on bedrock. Boring sealed upon completion.			

CVT STANDARD 23253.24.IAW (OELWEIN 10TH ST SW BRIDGE REPLACEMENT).GPJ LOG A GNNN06.GDT 6/10/24

23253.24.IAW B-02 page 1 of 1

LICENSED PROFESSIONAL ENGINEER
MATTHEW J. REISDORFER
22234
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.

(signature) June 10, 2024 (date)

Printed or typed name: Matthew J. Reisdorfer, PE.
License number: 22234.
My license renewal date is December 31, 2025.
Pages or sheets covered by this seal: SPS.1, SPS.2

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LOG OF BORING

CHOSEN VALLEY TESTING

Chosen Valley Testing, Inc.

PROJECT: 23253.24.IAW
Design Phase Geotechnical Evaluation
Proposed 10th St. SW Bridge Replacement
10th St. SW
Oelwein, Iowa

BORING: **B-03**
LOCATION:
See attached sketch
DATE: 5/28/2024
SCALE: 1" = 4'

Elev. 1010.5	Depth 0.0	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
1010.0	0.5		**5" ASPHALT**			Elevations provided by Origin Design.
1009.3	1.2		**7.5" CONCRETE**			
			AIR VOID SPACE			
1003.0	7.5	SP	**POORLY-GRADED SAND with GRAVEL** mostly fine grained, light grey, moist, medium dense. (Alluvium) (IADOT: Gravely Sand)	16		
999.0	11.5	SP	**POORLY-GRADED SAND** mostly medium grained, trace of gravel, dark grey, waterbearing, loose. (Alluvium) (IADOT: Fine Sand)	8	▽	Water encountered at about 13 feet during drilling.
996.5	14.0	CL	**LEAN CLAY with SAND** trace of gravel, black, wet, rather soft. (Alluvium) (IADOT: Soft Silty Clay)	4		PP = 1.5 tsf
994.5	16.0	SC CL	**CLAYEY SAND to SANDY LEAN CLAY** mostly medium grained, trace of gravel, black, moist, loose to medium dense. (Alluvium) (IADOT: Clayey Sand)	6		
989.5	21.0			14		
		GC GM	**CLAYEY GRAVEL to SILTY GRAVEL** mostly fine grained, light brown, moist, medium dense. (Weathered Dolomite) (IADOT: Granular Material)			
984.0	26.5			13		
			Auger refusal at about 26.5 feet during drilling, presumably on bedrock. Boring sealed upon completion.			

CVT STANDARD 23253.24.IAW (OELWEIN 10TH ST SW BRIDGE REPLACEMENT).GPJ LOG A GNN06.GDT 6/10/24

23253.24.IAW B-03 page 1 of 1

LOG OF BORING

CHOSEN VALLEY TESTING

Chosen Valley Testing, Inc.

PROJECT: 23253.24.IAW
Design Phase Geotechnical Evaluation
Proposed 10th St. SW Bridge Replacement
10th St. SW
Oelwein, Iowa

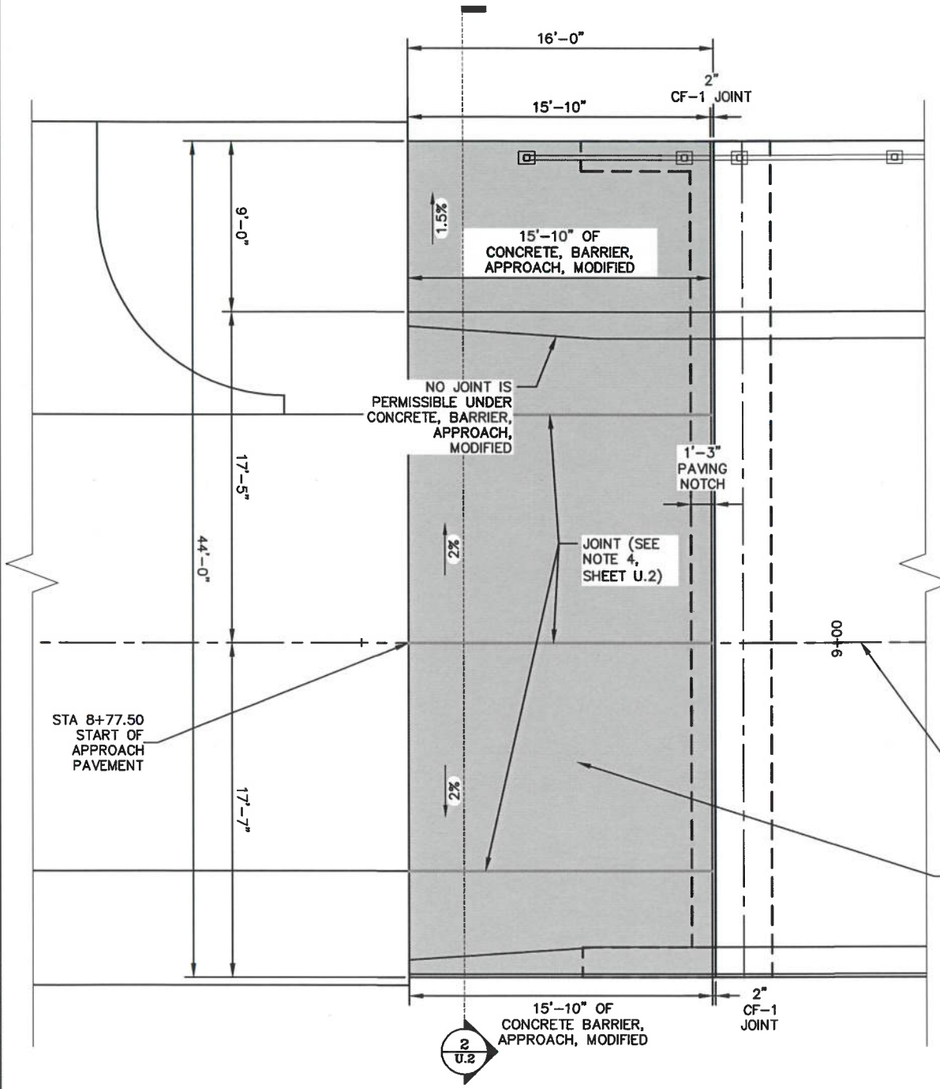
BORING: **B-04**
LOCATION:
See attached sketch
DATE: 5/28/2024
SCALE: 1" = 4'

Elev. 1009.8	Depth 0.0	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
1008.9	0.9		**10" ASPHALT**			Elevations provided by Origin Design.
1007.8	2.0	SP SC	**POORLY-GRADED SAND** mostly medium grained, black, moist. (Fill) (IADOT: Fine Sand)	21		
1005.8	4.0	CL	**CLAYEY SAND** mostly medium grained, trace of gravel, dark brown to dark grey, moist, medium dense. (Alluvium) (IADOT: Clayey Sand)	16		
1003.3	6.5	SC	**SANDY LEAN CLAY** trace of gravel, dark brown to dark grey, wet, stiff. (Alluvium) (IADOT: Firm-Very Firm Glacial Clay)	4		
			CLAYEY SAND mostly medium grained, trace of gravel, black, moist, loose. (Alluvium) (IADOT: Silty Sand)	9		
998.3	11.5	SP SC	**POORLY-GRADED SAND to CLAYEY SAND** mostly medium grained, trace of gravel, black, moist, loose. (Alluvium) (IADOT: Silty Sand)	5		
995.8	14.0	SP	**POORLY-GRADED SAND** mostly medium grained, trace of gravel, dark grey, moist to waterbearing, loose to medium dense. (Alluvium) (IADOT: Silty Sand)	11		
				6	▽	Water encountered at about 20 feet during drilling.
987.8	22.0	SP	**POORLY-GRADED SAND with GRAVEL** mostly medium grained, grey, waterbearing, loose. (Alluvium) (IADOT: Fine Sand)	9		
982.8	27.0	SM	**SILTY SAND with GRAVEL** mostly fine grained, trace of clay, light brown, moist, medium dense. (Weathered Dolomite) (IADOT: Granular Material)	18		
979.3	30.5		Auger refusal at about 30.5 feet during drilling, presumably on bedrock. Boring sealed upon completion.			

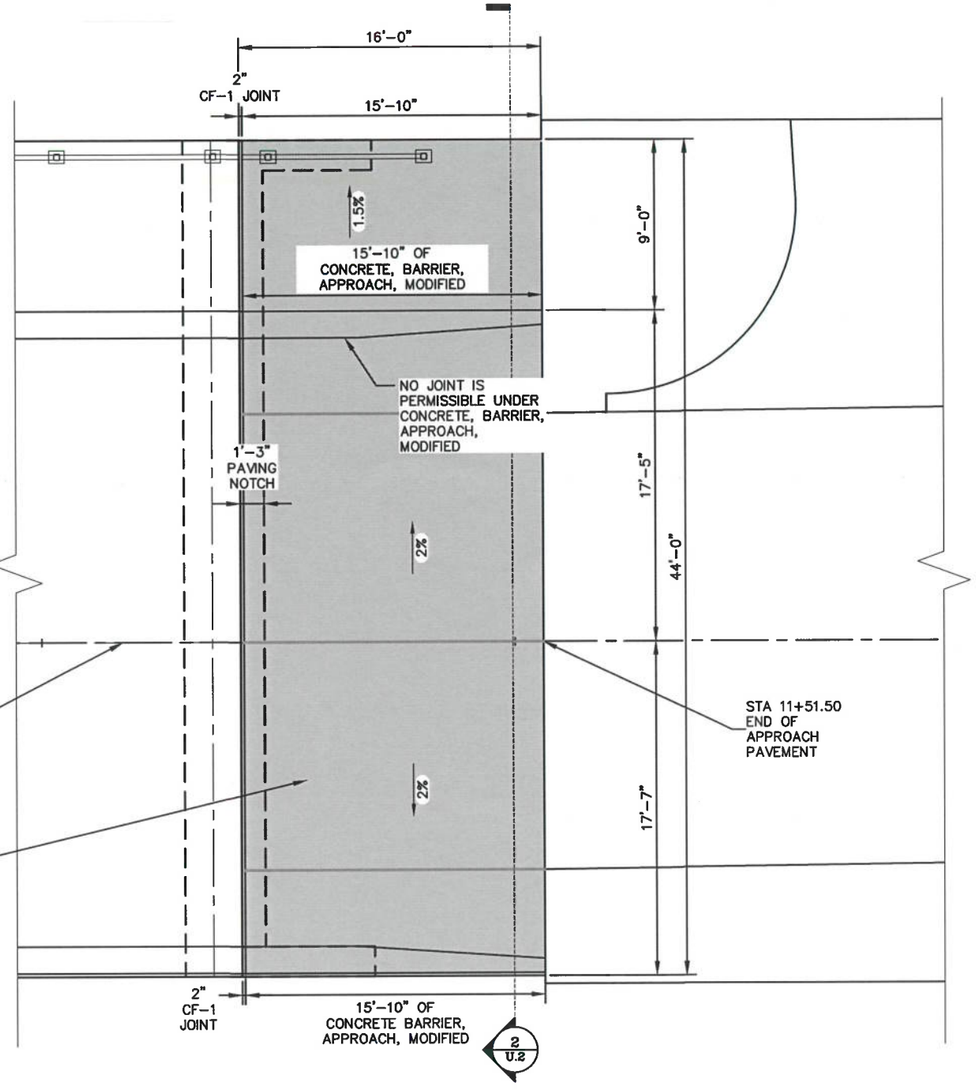
CVT STANDARD 23253.24.IAW (OELWEIN 10TH ST SW BRIDGE REPLACEMENT).GPJ LOG A GNN06.GDT 6/10/24

23253.24.IAW B-04 page 1 of 1

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WEST APPROACH



EAST APPROACH



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 ORIGIN DESIGN CO.

Courtney Wand 12-12-24

COURTNEY E. WAND — DATE

PE 23610 — 12/31/2025

LICENSE # — RENEWAL DATE

PAGES OR SHEETS COVERED BY THIS CERTIFICATION:

U & V SHEETS

NORTH

HORIZONTAL SCALE IN FEET
0 4 8

DRAWING MAY HAVE BEEN REDUCED

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

origin design® 800 556-4491	CITY OF OELWEIN	PROJECT NUMBER BRM-5657(614)- -8N-33	APPROACH DETAILS	SHEET: U.1	REV: .

P:\23\036\DRAWINGS\CIVIL\23036 ZZ U SHEETS.DWG 12/12/2024 3:58:06 PM JOE RETTENBERGER

CONCRETE USED FOR THE BRIDGE APPROACH PAVEMENT SECTION SHALL BE CLASS C, CLASS 3i DURABILITY UNLESS OTHERWISE APPROVED BY ENGINEER.

CONTRACT ITEM:

BRIDGE APPROACH, PAVEMENT, AS PER PLAN

1. METHOD OF MEASUREMENT FOR BRIDGE APPROACH, AS PER PLAN SHALL BE THE SQUARE YARDS SHOWN IN THE CONTRACT DOCUMENTS.
2. BASIS OF PAYMENT FOR BRIDGE APPROACH PAVEMENT, AS PER PLAN IS FULL COMPENSATION FOR:
   - EXCAVATION FOR SPECIFIED STONE MATERIAL
   - SAW CUTTING
   - FURNISHING AND INSTALLING REINFORCED STEEL, TIE BARS, AND DOWEL ASSEMBLIES
   - PLACING, FINISHING, TEXTURING, GROOVING, AND CURING
   - ALL JOINT CONSTRUCTION
   - MODIFIED SUBBASE
   - ALL OTHER MATERIALS AND LABOR TO CONSTRUCT THE APPROACH PAVEMENT SECTION AS SHOWN IN THE CONTRACT DOCUMENTS.

FOR JOINT DETAILS, SEE STANDARD ROAD PLANS PV-101. FOR PROJECT SPECIFIC JOINTING OUTSIDE OF APPROACH PAVEMENT, SEE L SHEETS

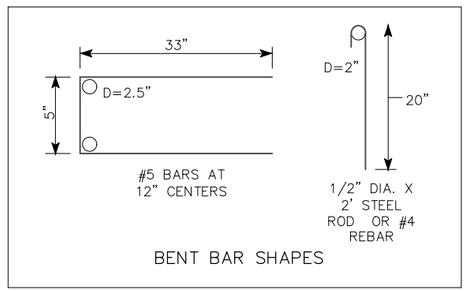
(1) 2" MIN. TO 2 1/2" MAX. CLEAR TO BENT BAR.

(2) MINIMUM LAP LENGTH: #5 Bars – 18"
#6 Bars – 27"
#8 Bars – 48"

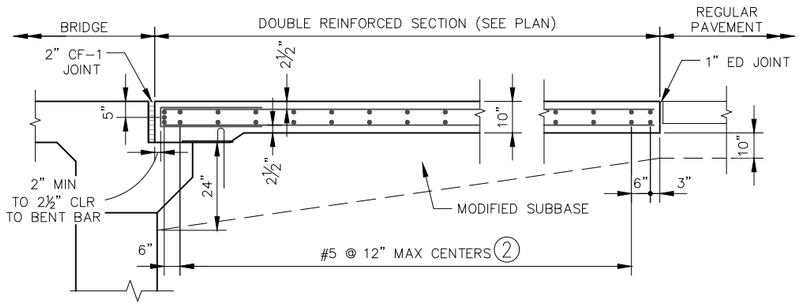
(3) PLACE ADDITIONAL #5 BAR PARALLEL TO SKEWED FACE.

(4) LONGITUDINAL JOINT: (PV-101, IDOT STANDARD ROAD PLANS)

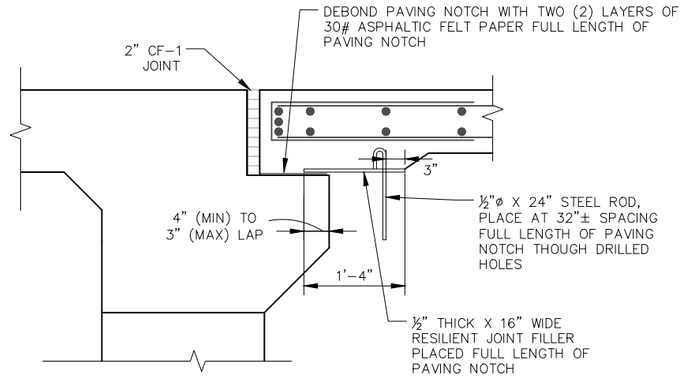
SINGLE POUR – SAW CUT JOINT PER PV-101 DETAIL B.
TWO POURS – USE BT-4 JOINT.



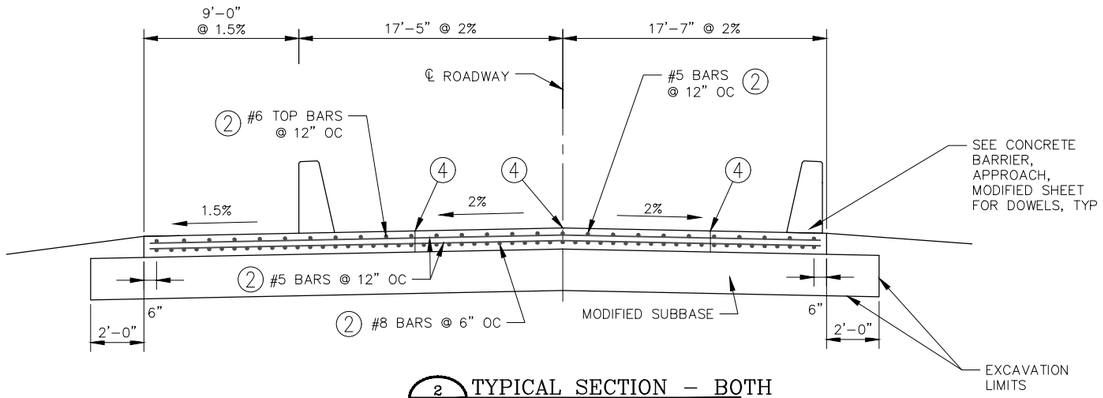
BENT BAR SHAPES



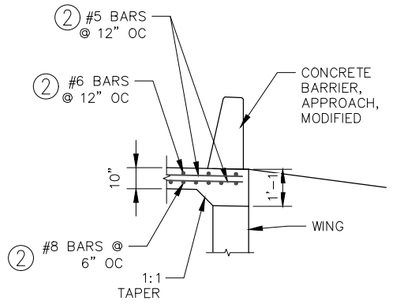
1/U.2 SECTION
NOT TO SCALE



3/U.2 DETAIL
NOT TO SCALE



2/U.2 TYPICAL SECTION – BOTH
NOT TO SCALE

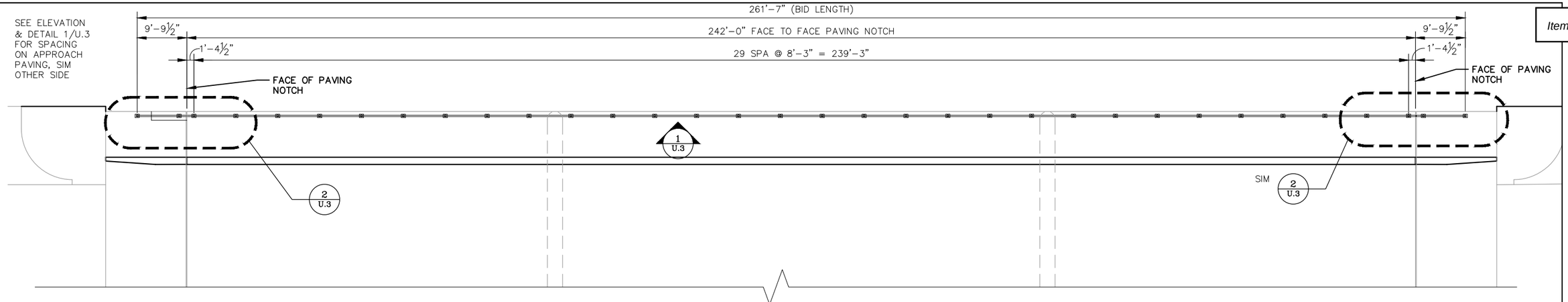


4/U.2 SECTION AT SOUTH WINGS
NOT TO SCALE

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

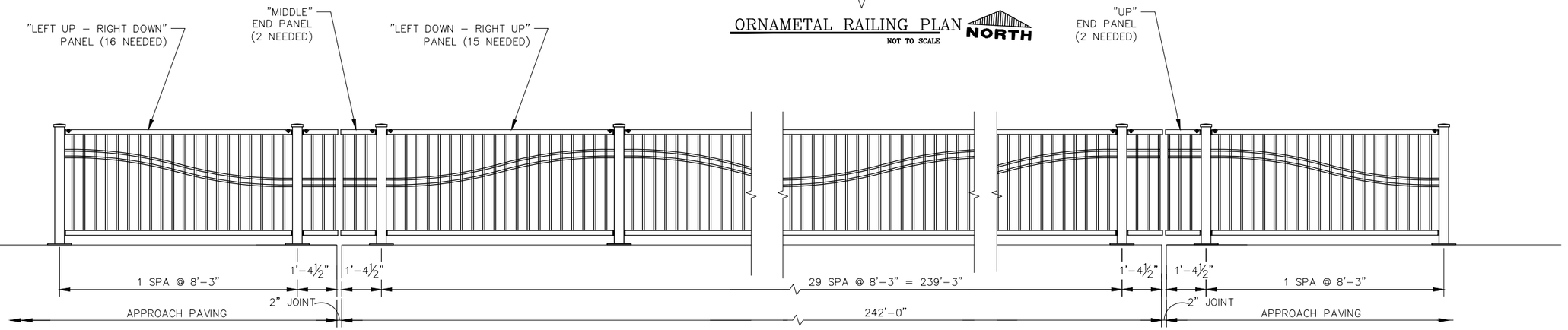
71'-0" END SPANS 97'-0" CENTER SPAN

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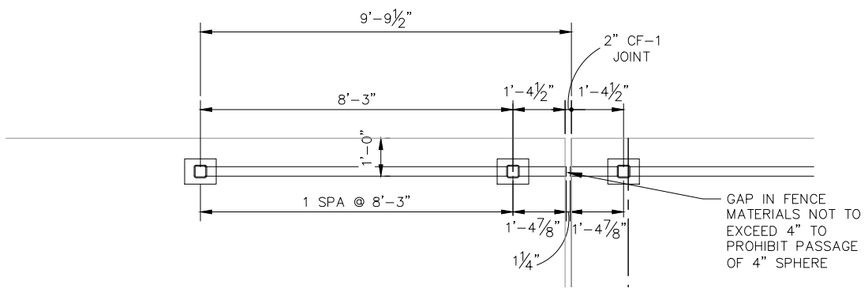


ORNAMETAL RAILING PLAN
NOT TO SCALE

NORTH



1 U.3 ORNAMENTAL METAL RAILING ELEVATION
LOOKING NORTH FROM SIDEWALK SIDE
NOT TO SCALE



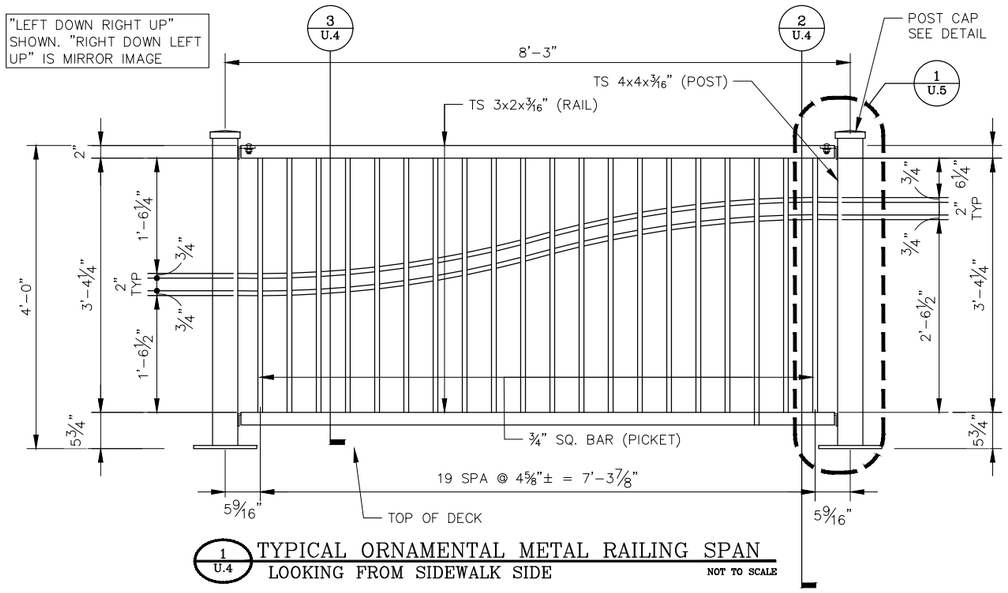
1 U.3 PLAN BLOWUP
AT APPROACH PAVING
NOT TO SCALE

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

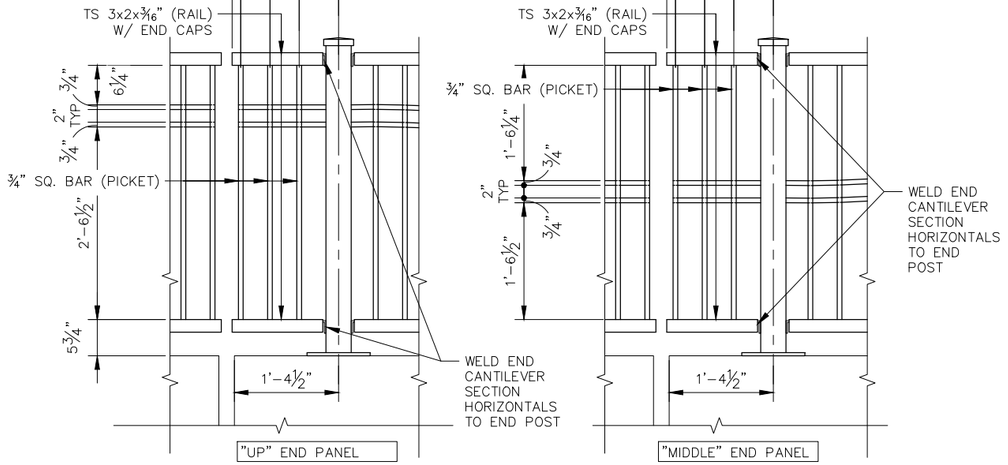
71'–0" END SPANS 97'–0" CENTER SPAN

P:\23\036\DRAWINGS\CIVIL\23036 ZZ U SHEETS2.DWG 12/12/2024 3:58:12 PM JOE RETTENBERGER

"LEFT DOWN RIGHT UP" SHOWN. "RIGHT DOWN LEFT UP" IS MIRROR IMAGE

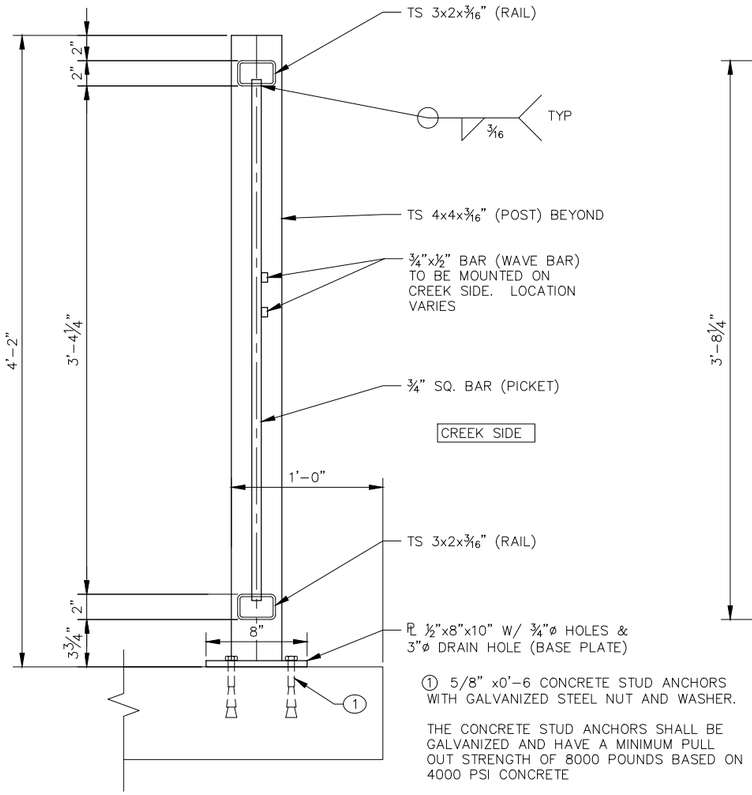


1 U.4 TYPICAL ORNAMENTAL METAL RAILING SPAN
LOOKING FROM SIDEWALK SIDE — NOT TO SCALE



4 U.4 TYP ORNAMENTAL METAL RAILING END
NOT TO SCALE

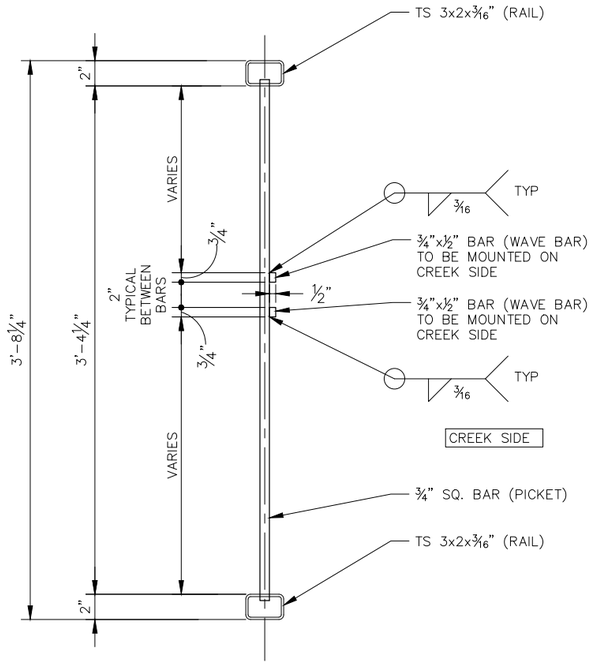
POST CAP NOT SHOWN FOR CLARITY



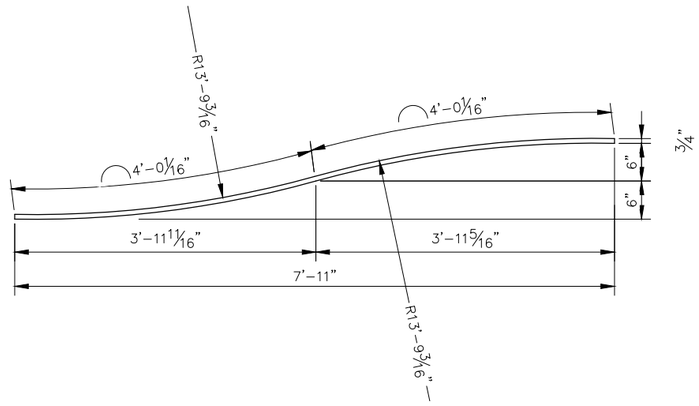
① 5/8" x0'-6 CONCRETE STUD ANCHORS WITH GALVANIZED STEEL NUT AND WASHER.

THE CONCRETE STUD ANCHORS SHALL BE GALVANIZED AND HAVE A MINIMUM PULL OUT STRENGTH OF 8000 POUNDS BASED ON 4000 PSI CONCRETE

2 U.4 ORNAMENTAL METAL RAILING SECTION
NOT TO SCALE



3 U.4 ORNAMENTAL METAL RAILING SECTION
NOT TO SCALE

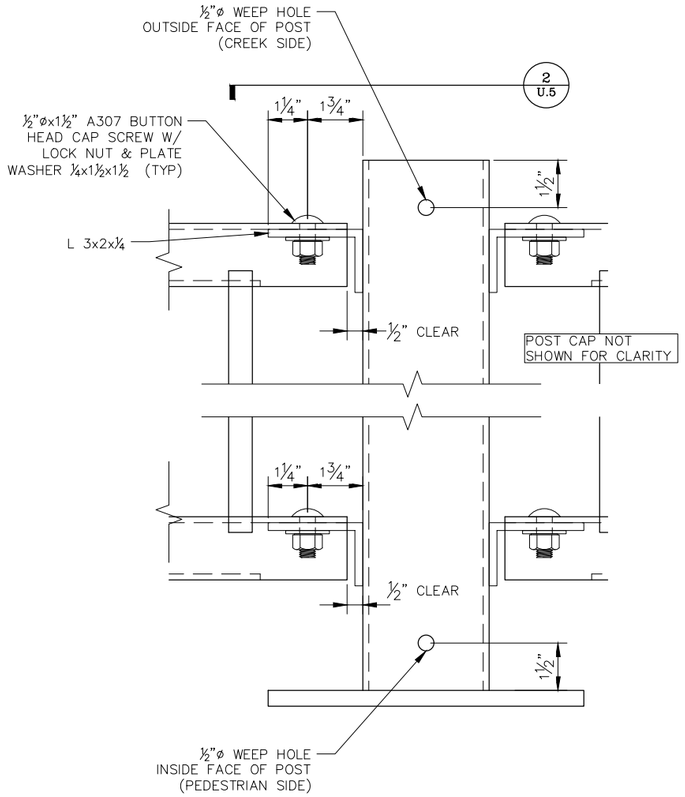


5 U.4 WAVE BAR DETAIL
NOT TO SCALE

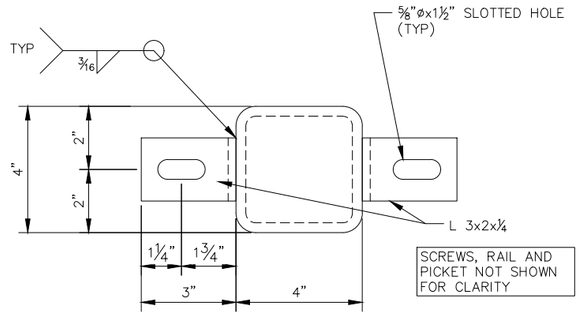
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
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71'-0" END SPANS 97'-0" CENTER SPAN

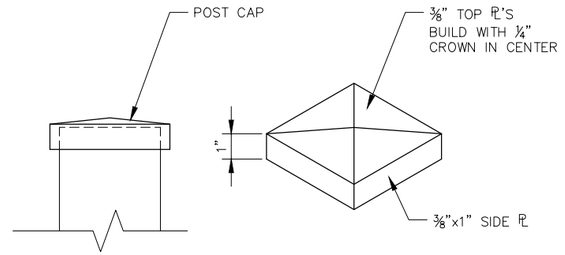
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1 U.5 ANGLE ATTACHMENT DETAIL
TYP BOTH RAILINGS NOT TO SCALE



2 U.5 SECTION
TYP BOTH RAILINGS NOT TO SCALE



3 U.5 POST CAP
TYP BOTH RAILINGS NOT TO SCALE

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239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
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P:\23\036\DRAWINGS\CIVIL\23036 ZZ U SHEETS2.DWG 12/12/2024 3:58:20 PM JOE RETTENBERGER

RAILING GALVANIZE AND PAINTING SPECIFICATIONS

STEEL RAILING COMPONENTS SHALL BE ABRASIVE BLAST CLEANED TO A MINIMUM OF SSPC–SP6 "COMMERCIAL BLAST CLEANING" PRIOR TO HOT–DIP GALVANIZING. GALVANIZE COMPONENTS IN ACCORDANCE WITH ASTM A 123. DO NOT QUENCH OR APPLY CHROMATE CONVERSION COATINGS TO ANY GALVANIZED COMPONENTS THAT WILL RECEIVE PAINTING. FOLLOWING GALVANIZING, PAINT COMPONENTS IN ACCORDANCE WITH MATERIALS I.M. 568.

PREPARATION OF GALVANIZED SURFACES FOR PAINT SHALL BE IN ACCORDANCE WITH MATERIALS I.M. 568, APPENDIX F. COMPLETE "PAINT OVER GALVANIZED SURFACE TRAVEL LOG" IN APPENDIX E.

ALL COATING SHALL BE PERFORMED IN AN APPROVED SHOP IN ACCORDANCE WITH MATERIALS I.M. 568.

PAINT SYSTEM SHALL USE A THREE COAT FLUOROPOLYMER PAINT SYSTEM. APPROVED FLUOROPOLYMER PAINT SYSTEMS FOR THIS PROJECT ARE LISTED IN MATERIALS I.M. 482.09. STANDARD SPECIFICATION 2408.02.Q SHALL APPLY EXCEPT AS MODIFIED HEREIN.

THE PAINT SYSTEM SHALL CONSIST OF THE FOLLOWING:

PRIME COAT:

a. APPLY A COAT OF THE ORGANIC ZINC RICH PAINT FROM THE APPROVED FLUOROPOLYMER PAINT SYSTEM TO ALL SURFACES AS SOON AS POSSIBLE AFTER SURFACE PREPARATION OF GALVANIZED SURFACE.

b. APPLY THE PRIMER AS RECOMMENDED BY THE MANUFACTURER IN A SINGLE APPLICATION TO OBTAIN A DRY FILM THICKNESS (DFT) AS LISTED IN THE MANUFACTURER'S PRODUCT DATA SHEET FOR THE PRIMER MATERIAL. APPLY THE PRIMER ABOVE THE BLAST PROFILE, SO THAT A UNIFORM APPEARANCE IS OBTAINED AFTER THE COATING IS CURED.

c. APPLY A STRIPE COAT BY BRUSH TO EDGES, WELDS, CREVICES, BOLT HEADS, AND OTHER SURFACE IRREGULARITIES WHEN APPLYING THE PRIMER COAT. THE STRIPE COAT MAY BE APPLIED TO THE SURFACE BY SPRAY AS LONG AS IT IS IMMEDIATELY AND THOROUGHLY WORKED INTO THESE AREAS BY BRUSH.

d. ALLOW THE PRIME COAT TO CURE ACCORDING TO THE COATING MANUFACTURER'S RECOMMENDATIONS BEFORE THE INTERMEDIATE COAT IS APPLIED.

e. PERFORM REPAIRS OR BUILD–UP OF THE PAINT FILM AS SOON AS POSSIBLE, AND NO LATER THAN 24 HOURS FROM THE INITIAL APPLICATION.

f. COMPLETELY REBLAST AND REPAINT STEEL MEMBERS WITH COATING AREAS MEASURING LESS THAN THE MANUFACTURER'S MINIMUM RECOMMENDED DRY FILM THICKNESS THAT HAVE NOT BEEN CORRECTED WITHIN 24 HOURS.

g. CORRECT, TO THE ENGINEER'S SATISFACTION, ALL DEFECTS IN APPLICATION SUCH AS RUNS, SAGS, MUD CRACKING, OVER–SPRAY, AND DRY SPRAY.

h. EXCESSIVE COATING THICKNESS IS AS EQUALLY UNDESIRABLE AS UNACCEPTABLY THIN COATING THICKNESS, AND BOTH WILL BE SUFFICIENT CAUSE FOR REJECTION. EXCESSIVE THICKNESS WILL BE EVALUATED ON A CASE–BY–CASE BASIS IN CONSULTATION WITH THE COATING MANUFACTURER.

INTERMEDIATE COAT:

a. SHOP APPLY THE INTERMEDIATE COAT OF THE APPROVED FLUOROPOLYMER PAINT SYSTEM TO ALL PRIMED SURFACES.

b. APPLY THE INTERMEDIATE COAT AS RECOMMENDED BY THE MANUFACTURER IN A SINGLE APPLICATION TO OBTAIN A DRY FILM THICKNESS AS LISTED IN THE MANUFACTURER'S PRODUCT DATA SHEET FOR THE MATERIAL. APPLY THE INTERMEDIATE COAT OVER THE PRIMER, SO THAT A UNIFORM APPEARANCE IS OBTAINED AFTER THE COATING IS CURED. USE A COLOR THAT CONTRASTS WITH THE PRIMER AND TOP COAT.

c. APPLY A STRIPE COAT BY BRUSH TO EDGES, WELDS, CREVICES, BOLT HEADS, AND OTHER SURFACE IRREGULARITIES WHEN APPLYING THE PRIMER COAT AND INTERMEDIATE SECOND COAT. THE STRIPE COAT MAY BE APPLIED TO THE SURFACE BY SPRAY AS LONG AS IT IS IMMEDIATELY AND THOROUGHLY WORKED INTO THESE AREAS BY BRUSH.

d. ALLOW THE INTERMEDIATE COAT TO CURE ACCORDING TO THE COATING MANUFACTURER'S RECOMMENDATIONS BEFORE THE FINISH COAT IS APPLIED.

TOP COAT

a. SHOP APPLY THE FLUOROPOLYMER TOP COAT OF THE APPROVED FLUOROPOLYMER PAINT SYSTEM TO ALL PAINTED SURFACES.

b. APPLY THE TOP COAT AS RECOMMENDED BY THE MANUFACTURER IN A SINGLE APPLICATION TO OBTAIN A DRY FILM THICKNESS AS LISTED IN THE MANUFACTURER'S PRODUCT DATA SHEET FOR THE MATERIAL. APPLY THE TOP COAT OVER THE INTERMEDIATE COAT, SO THAT A UNIFORM APPEARANCE IS OBTAINED AFTER THE COATING IS CURED.

c. APPLY A STRIPE COAT PRIOR TO FULL TOP COAT APPLICATION BY BRUSH TO EDGES, WELDS, CREVICES, BOLT HEADS, AND OTHER SURFACE IRREGULARITIES WHEN APPLYING THE PRIMER COAT AND INTERMEDIATE SECOND COAT. THE STRIPE COAT MAY BE APPLIED TO THE SURFACE BY SPRAY AS LONG AS IT IS IMMEDIATELY AND THOROUGHLY WORKED INTO THESE AREAS BY BRUSH.

SUBMIT PROPOSED PREPARATION METHODS AND PRODUCT DATA FOR ALL COATINGS PROPOSED FOR USE TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO APPLICATION. TOP COAT COLOR SHALL BE AMS–STD 27041 (BLACK) PER AMS STANDARD 595A. SUBMIT PAINT COLOR SAMPLE TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING MATERIALS.

HANDLING

PROTECT ALL PAINTED RAILING SURFACES FROM DAMAGE DURING SHIPPING, HANDLING, AND INSTALLATION.

REPAIRS

FOLLOWING RAILING INSTALLATION, REPAIR ANY DAMAGE TO THE PAINTING FINISH IN ACCORDANCE WITH THE COATING MANUFACTURER'S RECOMMENDATIONS. SUBMIT THE PAINTING MANUFACTURER'S WRITTEN FIELD REPAIR AND RECOATING PROCEDURES TO THE ENGINEER PRIOR TO TOUCH–UP OPERATIONS. FOLLOWING FINAL INSTALLATION AND TOUCH–UP PAINTING, THE FINISHED SURFACES SHALL BE UNIFORM IN COLOR, SHEEN, TEXTURE AND HIDING ACROSS EACH CONTINUOUS SURFACE AREA WHEN VIEWED IN NATURAL DAYLIGHT AT NORMAL VIEWING ANGLES AND FROM DISTANCES NOT LESS THAN 39 INCHES FROM SURFACE. COMPONENTS DEEMED UNACCEPTABLE BY THE ENGINEER SHALL BE REMOVED AND RETURNED TO AN APPROVED COATING SHOP, AND SHALL BE COMPLETELY STRIPPED AND RECOATED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AT NO ADDITIONAL COST TO THE PROJECT.

METHOD OF MEASUREMENT

1. PROTECTIVE COATINGS FOR ORNAMENTAL METAL RAILING AND STEEL PIPE PEDESTRIAN HANDRAILING, INCLUDING BOTH GALVANIZING AND PAINTING, SHALL NOT BE MEASURED SEPARATELY.

BASIS OF PAYMENT

1. PROTECTIVE COATINGS FOR ORNAMENTAL METAL RAILING AND STEEL PIPE PEDESTRIAN HANDRAILING WILL BE INCLUDED IN THE PRICE BID PER LINEAL FOOT FOR ORNAMENTAL METAL RAILING. PAYMENT WILL BE FULL COMPENSATION FOR ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO SATISFACTORILY COMPLETE THE WORK.

RAILING NOTES:

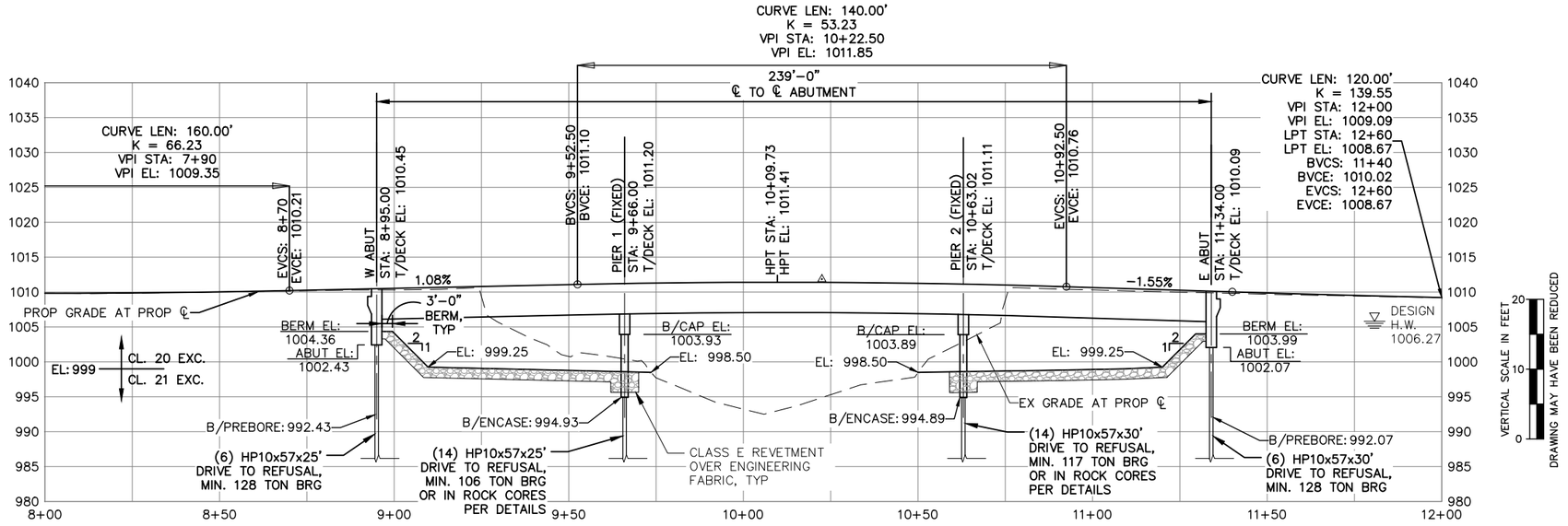
1. WELD ALL COMPONENTS WITH ⅛ INCH FILLET WELDS UNLESS NOTED OTHERWISE. GRIND WELDS AND CONNECTIONS AS REQUIRED TO PROVIDE A SMOOTH SURFACE, FREE OF BURRS.
2. RAILING MEMBERS SHALL COMPLY WITH ASTM A500 GR. C.
3. RAILING PLATES SHALL COMPLY WITH ASTM A572 GR. 50.
4. RAILING BOLTS SHALL COMPLY WITH ASTM A325 AND BE GALVANIZED AND PAINTED TO MATCH RAILING COMPONENTS U.N.O. FOR THE RAILING BOLTS SMALLER THAN ½" DIAMETER, ASTM A307 BOLTS MAY BE USED. OTHER RAILING NOTES AND REQUIREMENTS PER U AND V SHEETS SHALL STILL APPLY.
5. PROVIDE SUITABLE END CAPS FOR RAILINGS.
6. WELDING SHALL COMPLY WITH THE IOWA DOT STANDARD SPECIFICATIONS,. SECTION 2408.03.B.
7. FABRICATOR SHALL CONSULT WITH GALVANIZING FACILITY TO VERIFY PROPOSED RAIL SEGMENT LENGTHS CAN BE ACCOMPLISHED.
8. RAILING LAYOUT AND GEOMETRY SHALL BE FIELD VERIFIED PRIOR TO ORDERING MATERIALS OR INSTALLATION. IF CONTRACTOR ORDERS RAILING PRIOR TO FIELD VERIFICATION IT WILL BE AT THE CONTRACTOR'S RISK AT NO COST REPLACEMENT IF AS–BUILT LAYOUT DOES NOT MATCH DESIGN. SHOP DRAWINGS SHALL BE SUBMITTED SHOWING RAILING GEOMETRY, MATERIALS, AND QUANTITIES PER 1105.03 OF THE STANDARD SPECIFICATIONS.

Design For
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10TH ST SW OVER OTTER CREEK
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71'–0" END SPANS 97'–0" CENTER SPAN

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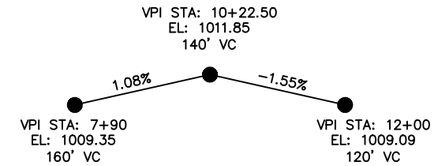
BENCH MARKS			
B.M. NO.	ELEV.	DESCRIPTION	STATION AND OFFSET
101	1009.57	Benchmark 101 Pink Capped Rebar	7+73.90, 15.95' R
102	1007.88	Benchmark 102 Pink Capped Rebar	12+00.83, 16.50' L



FOR TEMPORARY EASEMENTS, REFER TO H SHEETS

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

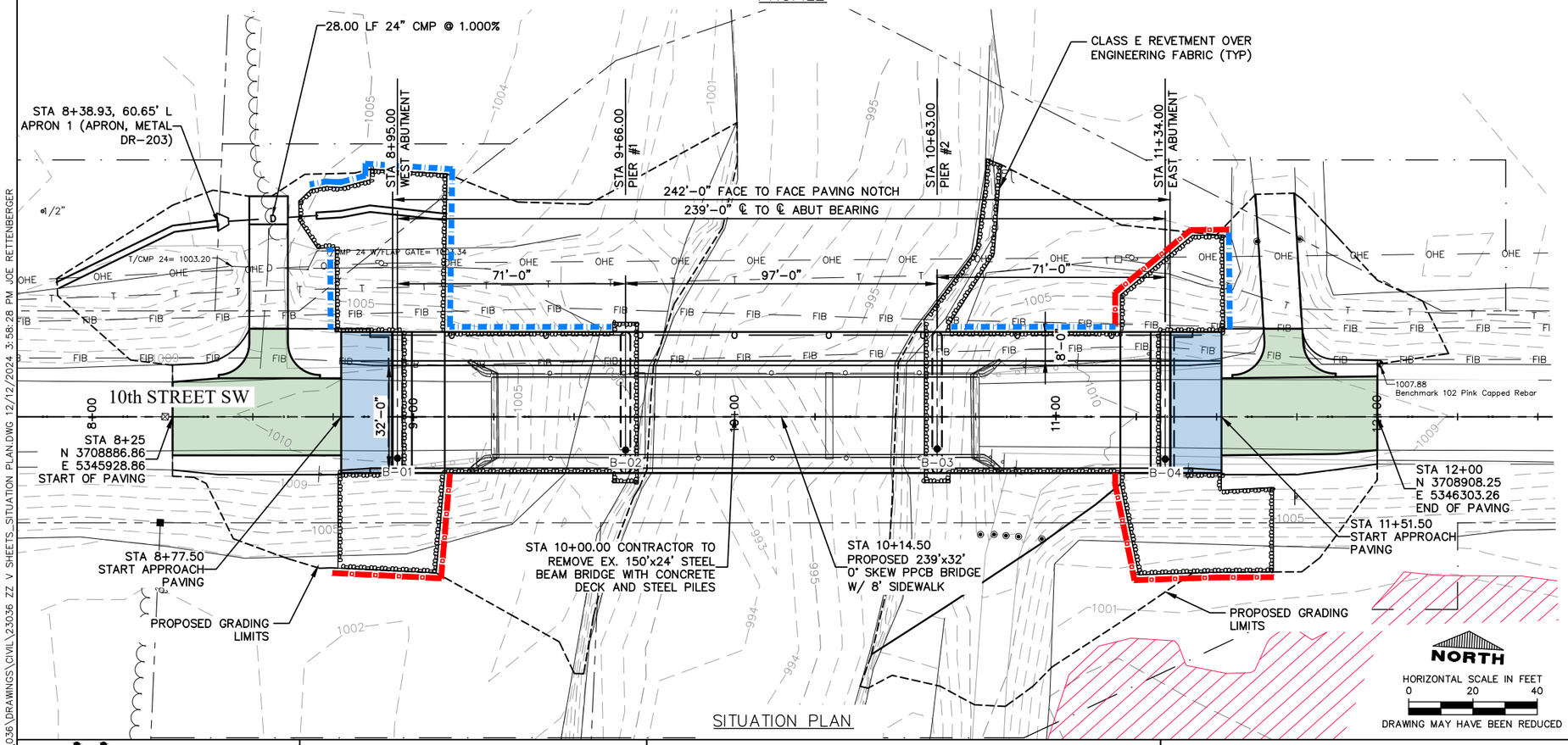
LEGEND	
REVETMENT DETAIL 3/B.1 EXTENTS	
REVETMENT DETAIL 4/B.1 EXTENTS	
WETLANDS	



PROPOSED GRADE ON 10TH ST

NTS

PROFILE



SITUATION PLAN

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

NOTES
TOP OF BRIDGE DECK AT CENTERLINE ROADWAY IS 0.03' BELOW THE PROFILE GRADE TO ACCOUNT FOR DECK CROSS SLOPE AND PARABOLIC
PIER TYPE - ENCASED PILE BENT
CLASS E REVETMENT IS EMBEDDED.

LOCATION
CITY OF OELWEIN, FAYETTE COUNTY
T91N R9W, JEFFERSON TWP.
SW1/4 SEC 28
OVER OTTER CREEK
FHWA STRUCTURE NO. 8920
42.663750 N, -91.920260 E
TRAFFIC: 820 VPD (2021)

HYDRAULIC DATA

DRAINAGE AREA	38.8	SQ. MI.			
MAIN CHANNEL SLOPE	9.5	FT./MI.			
DESIGN DISCHARGE	9290	CFS (100 YR)			
DESIGN HIGH WATER	1006.27	FT. ELEV (100 YR)			
REACH SLOPE (LOCAL)	7.9	FT./MI.			
BRIDGE FLOW AREA	1878	SQ. FT. (100 YR)			
DESIGN VELOCITY	5.0	FPS (100 YR)			
Q_{50}	7900	CFS	NATURAL STAGE	1005.07	FT.
Q_{100}	9290	CFS	NATURAL STAGE	1005.69	FT.
CALCULATED DESIGN SCOUR (100 YR) = ELEV.				982.0	FT.
$Q_{OVERTOPPING}$	10000	CFS	MIN. ROAD ELEV.	1006.07	FT.
Q_{500}	13100	CFS	STAGE WITH BACKWATER	1007.70	FT.
CALCULATED CHECK SCOUR (500 YR) = ELEV.				983.0	FT.

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10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'-0" END SPANS 97'-0" CENTER SPAN

P:\23\036\DRAWINGS\CIVIL\23036 ZZ V SHEETS_SITUATION PLAN.DWG 12/12/2024 3:58:28 PM JOE RETTENBERGER

NORTH

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

STA 8+68.05, 70.84'L
G 1003.50

STA 8+86.63, 77.16'L
G 1004.56

STA 8+64.29, 62.30'L
G 1003.50

G 1001.13

STA 8+70.08, 52.36'L
G 1003.60

T/CMP 24 W/FLAP GATE= 1003.34

STA 8+75.76, 27.42'L
G 1009.80

STA 9+09.72, 26.42'L
G 999.25

PROPOSED GRADING LIMITS

STA 9+54.50, 66.17'L
MATCH EXISTING

STA 9+10.23, 62.18'L
G 999.97

STA 9+44.75, 55.11'L
G 1000.00

STA 10+00.51, 91.46'L
MATCH EXISTING

INTENT IS TO MATCH INTO EXISTING STREAM BANK AT ELEVATION 998.50 ALONG THE LENGTH OF THE STREAM, BOTH SIDES

G 998.50

STA 10+78.33, 80.37'L
MATCH EXISTING

PROPOSED GRADING LIMITS

STA 11+42.50, 56.57'L
G 1002.08

G 998.50

STA 11+20.02, 37.95'L
G 999.30

3.0:1

4.0:1

2.0:1

10'-0"

STA 9+09.72, 0.00'
G 999.25

STA 9+73.56, 0.00'
G 998.50

STA 10+50.15, 0.00'
G 998.50

STA 11+20.02, 0.00'
G 999.25

STA 11+20.02, 20.98'R
G 999.43

STA 9+08.24, 32.94'R
G 1000.00

PROPOSED REVETMENT, CLASS E (TYP)

STA 8+76.50, 47.14'R
G 1002.51

STA 9+07.09, 48.64'R
G 1002.51

PROPOSED GRADING LIMITS

STA 9+55.48, 63.78'R
G 998.50

STA 9+50.04, 79.94'R
MATCH EXISTING

REFER TO SHEETS V.1 AND B.1 FOR REVETMENT TOE LAYOUT DETAILS

STA 10+42.75, 73.86'R
G 998.50

SLOPE END OF EXISTING BERM

STA 10+74.61, 89.68'R
MATCH EXISTING

STA 11+42.50, 48.69'R
MATCH EXISTING

STA 11+25.70, 49.26'R
G 1001.37

STA 11+67.67, 48.35'R
G 1001.51

PROPOSED GRADING LIMITS

DELINEATED WETLAND
DO NOT DISTURB WITHOUT PERMISSION OF THE ENGINEER.

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GENERAL BRIDGE NOTES:

IT IS THE INTENT OF THIS DESIGN TO CONSTRUCT A 239'–0"x44'–0" PPCB BRIDGE WITH A 0° SKEW WITH SOLID BARRIER RAILS ALONG THE ROADWAY. THE BRIDGE CONSISTS OF A 32'–0" ROADWAY WITH A 8'–0" SIDEWALK ALONG THE NORTH EDGE. THE WINGS ARE SHORTENED AND DO NOT EXTEND ABOVE THE PAVING NOTCH TO FACILITATE THE APPROACH SLAB.

THESE BRIDGES ARE DESIGNED FOR HL–93 LOADING PLUS 20LBS. PER SQ.FT. OF ROADWAY FOR FUTURE WEARING SURFACE. SIX FEET OF APPROACH SLAB DEAD AND LIVE LOADS APPLIED TO ABUTMENTS.

THE FLOOR SLAB SHOWN INCLUDES ½" INTEGRAL WEARING SURFACE.

DESIGN STRESSES:

DESIGN STRESSES FOR THE FOLLOWING MATERIALS ARE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, SERIES OF 2017. REINFORCING STEEL IN ACCORDANCE WITH LRFD AASHTO SECTION 5, GRADE 60. CONCRETE IN ACCORDANCE WITH LRFD AASHTO SECTION 5, f'c – 4,000 PSI. FOR STANDARD PRESTRESSED CONCRETE BEAMS, SEE PPCB SHEETS.

SOUNDING AND TEST BORING DATA SHOWN ON THE PLANS WERE ACCUMULATED FOR DESIGNING AND ESTIMATING PURPOSES ONLY. THEIR APPEARANCE ON THE PLANS DOES NOT CONSTITUTE A GUARANTEE THAT CONDITIONS OTHER THAN THOSE INDICATED WILL NOT BE ENCOUNTERED.

ABUTMENT PILE DESIGN NOTES:

THE CONTRACT LENGTH OF 25 FEET FOR THE WEST ABUTMENT PILES AND 30 FEET FOR THE EAST ABUTMENT PILES IS BASED ON A NON–COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 175 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.5 FOR SOIL AND 0.7 FOR ROCK END BEARING.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A NON–COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.5 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF PREBORE.

ABUTMENT PILE DRIVING NOTE:

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR ABUTMENT PILES IS 128 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. IN NO CASE SHALL A PILE BE EMBEDDED LESS THAN 6 FEET INTO DENSE SANDY SOIL BELOW PREBORE WITH AN ADDITIONAL 2 FEET OF PENETRATION INTO BEDROCK. IF MINIMUM EMBEDMENT CANNOT BE ACHIEVED, CONTACT ENGINEER TO DETERMINE IF ROCK CORING WILL BE REQUIRED. CONSTRUCTION CONTROL REQUIRES A MODIFIED IOWA DOT ENR FORMULA.

PIER PILE DESIGN NOTES:

THE CONTRACT LENGTH OF 25 FEET FOR THE PIER 1 PILES AND 30 FEET FOR THE PIER 2 PILES IS BASED ON A NON–COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 138 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.5 FOR SOIL AND 0.7 FOR ROCK END BEARING.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A NON–COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.5 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF ENCASEMENT. FOR PIER 1, THE DESIGN SCOUR (200–YEAR) WAS ASSUMED TO AFFECT THE UPPER 5 FEET OF EMBEDDED PILE LENGTH AND CAUSE 12 KIPS OF DRIVING RESISTANCE. FOR PIER 2, DESIGN SCOUR (200–YEAR) WAS ASSUMED TO AFFECT THE UPPER 11 FEET OF EMBEDDED PILE LENGTH AND CAUSE 30 KIPS OF DRIVING RESISTANCE.

PIER PILE DRIVING NOTE:

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR PIER 1 PILES IS 106 TONS AND FOR PIER 2 PILES IS 117 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. SEE ROCK CORING DETAILS FOR PIER PILES. CONSTRUCTION CONTROL REQUIRES A MODIFIED IOWA DOT ENR FORMULA.

SUMMARY OF CONCRETE QUANTITIES

LOCATION	STRUCTURAL CONCRETE
WEST ABUT. FOOTING	18.3
EAST ABUT. FOOTING	18.2
BRIDGE DECK **	355.5
(4) ABUTMENT WINGS	8.8
PIER 1 CAP & ENCASEMENT	47.1
PIER 2 CAP & ENCASEMENT	47.1
** INCLUDES ABUTMENT & PIER DIAPHRAGMS AND HAUNCHES	
TOTAL (CU. YDS.)	495.0

SUMMARY OF EPOXY COATED REINFORCING STEEL

LOCATION	EPOXY REINFORCING STEEL
SUPERSTRUCTURE AND TWO ABUTMENTS	105341
(4) ABUTMENT WINGS	660
BARRIER RAILS	12064
PIER 1 ENCASEMENT & CAP	5133
PIER 2 ENCASEMENT & CAP	5133
TOTAL (LBS.)	128331

SUMMARY OF EXCAVATION

LOCATION	CLASS 20 EXCAVATION	CLASS 21 EXCAVATION
WEST ABUTMENT	52	
EAST ABUTMENT	52	
PIER 1		53
PIER 2		53
TOTAL (CU. YDS.)	104	106

SUMMARY OF FOUNDATIONS

LOCATION	SUBSTRUCTURE TYPE	PILE TYPE	NUMBER	LENGTH (L.F.)	TOTAL (L.F.)
WEST ABUTMENT	INTEGRAL ABUTMENT	HP10x57	6	25	150
EAST ABUTMENT	INTEGRAL ABUTMENT	HP10x57	6	30	180
PIER 1	ENCASED PILE BENT	HP10x57	14	25	350
PIER 2	ENCASED PILE BENT	HP10x57	14	30	420
				TOTAL (LF)	1100

SUMMARY OF STRUCTURAL STEEL

LOCATION	TOTAL (LBS.)
DIAPHRAGMS	4683.2
DECK DRAINS	1104.0
TOTL (LBS.)	5787.2

SUMMARY OF BEARINGS

LOCATION	BEARING TYPE	NUMBER	ASSOCIATED BID ITEM
WEST ABUTMENT	3x3 BAR	5	INCIDENTAL ITEM
EAST ABUTMENT	3x3 BAR	5	INCIDENTAL ITEM
PIER 1	PLAIN NEOPRENE 1"	5	INCIDENTAL ITEM
PIER 2	PLAIN NEOPRENE 1"	5	INCIDENTAL ITEM

ROCK CORING NOTES:

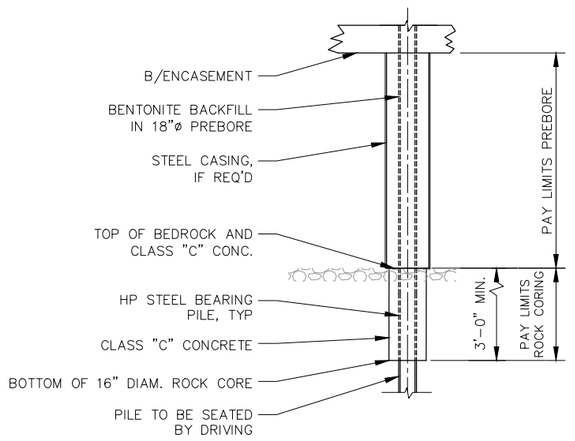
THE BRIDGE CONTRACTOR SHALL PREBORE HOLES FOR (4) PILES IN EACH PIER AS NOTED AND COMPLETE ROCK CORING. HOLES SHALL BE PREBORED AND ROCK CORING PERFORMED UNLESS BEDROCK ELEVATIONS VARY SIGNIFICANTLY FROM ANTICIPATED ELEVATIONS. NOTIFY THE ENGINEER PRIOR TO PREBORING AND ROCK CORING OPERATIONS SO THAT FIELD DEPTHS AND MEASUREMENTS CAN BE VERIFIED.

THE 18 INCH DIAMETER PREBORED HOLE IN THE SOIL SHALL EXTEND FROM THE BOTTOM OF THE PIER ENCASEMENTS TO THE TOP OF THE BEDROCK STRATUM AS SHOWN ON THE SPS SHEETS WHICH IS ANTICIPATED TO BE ELEVATION 990 AT THE WEST PIER AND 984 AT THE EAST PIER. THE 16 INCH DIAMETER ROCK SOCKET SHALL THEN BE CORED SO THAT THE BOTTOM OF THE SOCKET SHALL BE AT LEAST 3 FEET INTO BEDROCK. CONTRACTOR SHALL PROVIDE A SUITABLE CASING IF NEEDED TO MAINTAIN OPEN CORE HOLES. THE EQUIPMENT USED TO PERFORM THE ROCK CORING SHALL BE CAPABLE OF AUGURING THE ANTICIPATED BEDROCK MATERIALS. THE CONTRACTOR SHALL CLEAN THE BOTTOM OF THE ROCK SOCKET BEFORE INSERTING PILES OR PLACING CONCRETE.

SEAT THE PILING IN THE BEDROCK BY DRIVING IT TO THE TARGET DRIVING RESISTANCE. THE NUMBER OF HAMMER BLOWS SHALL BE LIMITED TO PREVENT DAMAGE TO THE PILING. THE SOCKET SHALL BE BACKFILLED WITH 3 FEET OF CLASS "C" STRUCTURAL CONCRETE BEFORE OR AFTER DRIVING PILES. CONCRETE PLACED BEFORE PILES ARE DRIVEN SHALL REMAIN PLASTIC UNTIL PILE DRIVING IS COMPLETE. RETARDER MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. PILES SHALL BE BRACED IN THE CORRECT POSITION UNTIL CONCRETE HAS REACHED 4 KSI COMPRESSIVE STRENGTH.

THE WEST PIER 1 QUANTITIES ASSUME 4.9 FEET OF PREBORE PLUS 3.0 FEET OF ROCK CORING FOR EACH OF THE (4) NOTED PILES. THE EAST PIER 2 QUANTITIES ASSUME 10.9 FEET OF PREBORE PLUS 3.0 FEET OF ROCK CORING FOR EACH OF THE (4) NOTED PILES.

IF BEDROCK IS NOT ENCOUNTERED ABOVE ELEVATION 972, THEN NO ADDITIONAL PREBORING IN THE SOIL IS REQUIRED AND NO "ROCK CORING" QUANTITY SHALL BE MEASURED FOR PAYMENT, AND THE PILE SHALL BE DRIVEN TO THE TARGET DRIVING RESISTANCE. THE LENGTH OF PREBORING SHALL BE MEASURED AND PAID FOR AT THE PRICE BID FOR "PREBORED HOLES" INSTEAD OF "ROCK CORING". PREBORED HOLES SHALL BE FILLED WITH SATURATED SAND IF ROCK CORING IS NOT PERFORMED TO LATERALLY SUPPORT THE PILING.

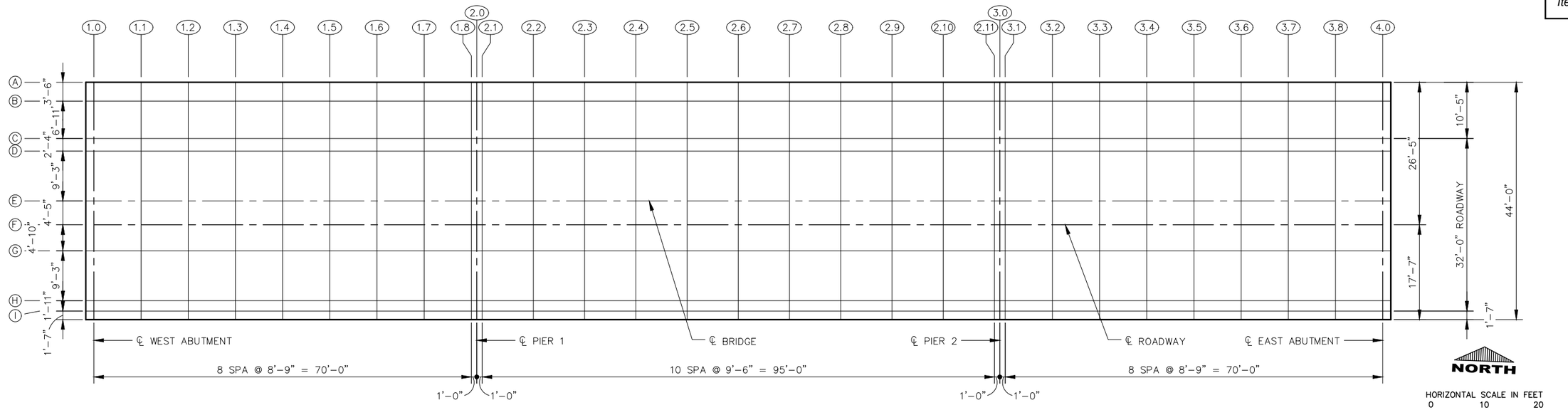


PILE ROCK CORE

Design For
239' x 32' 0° SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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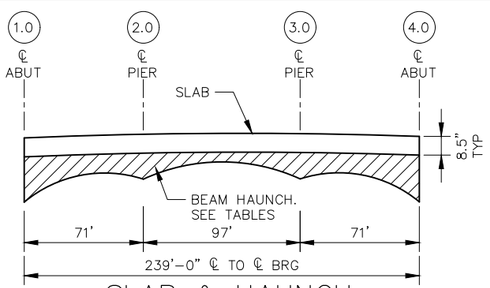


DECK ELEVATION LAYOUT GRID

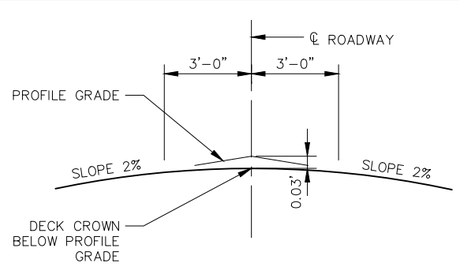
HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

GRID LINE		LINE 1.0	LINE 1.1	LINE 1.2	LINE 1.3	LINE 1.4	LINE 1.5	LINE 1.6	LINE 1.7	LINE 1.8	LINE 2.0	LINE 2.1	LINE 2.2	LINE 2.3	LINE 2.4	LINE 2.5	LINE 2.6	LINE 2.7	LINE 2.8	LINE 2.9	LINE 2.10	LINE 2.11	LINE 3.0	LINE 3.1	LINE 3.2	LINE 3.3	LINE 3.4	LINE 3.5	LINE 3.6	LINE 3.7	LINE 3.8	LINE 4.0
ALL BEAMS	HAUNCH, INCHES	2.00	1.45	0.96	0.60	0.39	0.35	0.45	0.66	0.80		1.00	1.25	1.37	1.40	1.39	1.35	1.30	1.23	1.11	0.91	0.57		0.33	0.47	0.52	0.51	0.53	0.70	1.03	1.48	2.00
ALL BEAMS	HAUNCH, FEET	0.17	0.12	0.08	0.05	0.03	0.03	0.04	0.06	0.07		0.08	0.10	0.11	0.12	0.12	0.11	0.11	0.10	0.09	0.08	0.05		0.03	0.04	0.04	0.04	0.04	0.06	0.09	0.12	0.17
EDGE LINE A	TOP OF DECK	1010.00	1010.10	1010.19	1010.28	1010.38	1010.47	1010.57	1010.66	1010.74	1010.75	1010.76	1010.82	1010.88	1010.91	1010.93	1010.93	1010.91	1010.88	1010.82	1010.76	1010.67	1010.66	1010.65	1010.56	1010.44	1010.32	1010.18	1010.05	1009.91	1009.78	1009.64
EDGE LINE A	EDGE FORM ELEV.	1010.00	1010.14	1010.27	1010.39	1010.50	1010.58	1010.65	1010.71	1010.74		1010.76	1010.93	1011.07	1011.17	1011.24	1011.25	1011.22	1011.14	1011.02	1010.86	1010.67		1010.65	1010.60	1010.53	1010.43	1010.30	1010.16	1010.00	1009.82	1009.64
BEAM LINE B	TOP OF DECK	1010.06	1010.15	1010.24	1010.34	1010.43	1010.53	1010.62	1010.71	1010.79	1010.80	1010.81	1010.88	1010.93	1010.96	1010.98	1010.98	1010.96	1010.93	1010.88	1010.81	1010.72	1010.71	1010.70	1010.61	1010.50	1010.37	1010.24	1010.10	1009.96	1009.83	1009.69
BEAM LINE B	BLH ELEV.	1009.35	1009.49	1009.62	1009.74	1009.84	1009.93	1009.99	1010.05	1010.08		1010.10	1010.27	1010.41	1010.52	1010.58	1010.60	1010.56	1010.48	1010.36	1010.20	1010.02		1010.00	1009.95	1009.87	1009.77	1009.65	1009.50	1009.34	1009.17	1008.98
GUTTER LINE C	TOP OF DECK	1010.16	1010.25	1010.35	1010.44	1010.54	1010.63	1010.72	1010.82	1010.90	1010.91	1010.91	1010.98	1011.03	1011.07	1011.08	1011.08	1011.07	1011.03	1010.98	1010.91	1010.83	1010.82	1010.81	1010.71	1010.60	1010.48	1010.34	1010.20	1010.07	1009.93	1009.80
BEAM LINE D	TOP OF DECK	1010.21	1010.30	1010.39	1010.49	1010.58	1010.68	1010.77	1010.86	1010.94	1010.95	1010.96	1011.03	1011.08	1011.11	1011.13	1011.13	1011.11	1011.08	1011.03	1010.96	1010.88	1010.87	1010.86	1010.76	1010.65	1010.52	1010.39	1010.25	1010.12	1009.98	1009.84
BEAM LINE D	BLH ELEV.	1009.50	1009.64	1009.77	1009.89	1009.99	1010.08	1010.15	1010.20	1010.24		1010.25	1010.42	1010.56	1010.67	1010.73	1010.75	1010.71	1010.63	1010.51	1010.35	1010.17		1010.15	1010.10	1010.02	1009.92	1009.80	1009.65	1009.49	1009.32	1009.13
BEAM LINE E	TOP OF DECK	1010.39	1010.48	1010.58	1010.67	1010.77	1010.86	1010.96	1011.05	1011.13	1011.14	1011.15	1011.21	1011.26	1011.30	1011.31	1011.31	1011.30	1011.26	1011.21	1011.14	1011.06	1011.05	1011.04	1010.94	1010.83	1010.71	1010.57	1010.44	1010.30	1010.16	1010.03
BEAM LINE E	BLH ELEV.	1009.68	1009.82	1009.95	1010.07	1010.18	1010.26	1010.33	1010.39	1010.42		1010.44	1010.61	1010.75	1010.85	1010.92	1010.93	1010.90	1010.82	1010.70	1010.54	1010.35		1010.33	1010.28	1010.21	1010.11	1009.98	1009.84	1009.68	1009.50	1009.32
CENTERLINE F	TOP OF DECK	1010.45	1010.54	1010.64	1010.73	1010.83	1010.92	1011.01	1011.11	1011.19	1011.20	1011.20	1011.27	1011.32	1011.36	1011.37	1011.37	1011.36	1011.32	1011.27	1011.20	1011.12	1011.11	1011.10	1011.00	1010.89	1010.77	1010.63	1010.49	1010.36	1010.22	1010.09
BEAM LINE G	TOP OF DECK	1010.38	1010.48	1010.57	1010.66	1010.76	1010.85	1010.95	1011.04	1011.12	1011.13	1011.14	1011.20	1011.26	1011.29	1011.31	1011.31	1011.29	1011.26	1011.20	1011.14	1011.05	1011.04	1011.03	1010.94	1010.82	1010.70	1010.56	1010.43	1010.29	1010.16	1010.02
BEAM LINE G	BLH ELEV.	1009.67	1009.81	1009.95	1010.06	1010.17	1010.25	1010.32	1010.38	1010.41		1010.43	1010.60	1010.74	1010.85	1010.91	1010.92	1010.89	1010.81	1010.69	1010.53	1010.34		1010.32	1010.27	1010.20	1010.10	1009.97	1009.83	1009.67	1009.49	1009.31
BEAM LINE H	TOP OF DECK	1010.20	1010.29	1010.39	1010.48	1010.57	1010.67	1010.76	1010.85	1010.94	1010.94	1010.95	1011.02	1011.07	1011.10	1011.12	1011.12	1011.10	1011.07	1011.02	1010.95	1010.87	1010.86	1010.85	1010.75	1010.64	1010.51	1010.38	1010.24	1010.11	1009.97	1009.83
BEAM LINE H	BLH ELEV.	1009.49	1009.63	1009.76	1009.88	1009.98	1010.07	1010.14	1010.19	1010.23		1010.24	1010.41	1010.56	1010.66	1010.72	1010.74	1010.71	1010.63	1010.50	1010.35	1010.16		1010.14	1010.09	1010.01	1009.91	1009.79	1009.64	1009.48	1009.31	1009.13
GUTTER LINE I	TOP OF DECK	1010.16	1010.25	1010.35	1010.44	1010.54	1010.63	1010.72	1010.82	1010.90	1010.91	1010.91	1010.98	1011.03	1011.07	1011.08	1011.08	1011.07	1011.03	1010.98	1010.91	1010.83	1010.82	1010.81	1010.71	1010.60	1010.48	1010.34	1010.20	1010.07	1009.93	1009.80
GUTTER LINE I	EDGE FORM ELEV.	1010.16	1010.30	1010.43	1010.55	1010.65	1010.74	1010.81	1010.86	1010.90		1010.91	1011.08	1011.23	1011.33	1011.39	1011.41	1011.38	1011.30	1011.17	1011.02	1010.83		1010.81	1010.76	1010.68	1010.58	1010.46	1010.31	1010.15	1009.98	1009.80

BLH = BEAM LINE HAUNCH ELEVATION = TOP OF DECK - SLAB THICKNESS + DL DEFLECTION = BOTTOM OF SLAB ELEVATION BEFORE DECK PLACEMENT
EDGE FORM ELEV. = TOP OF DECK ELEVATION AT EDGE + DL DEFLECTION



SLAB & HAUNCH THICKNESS AT BEAMS

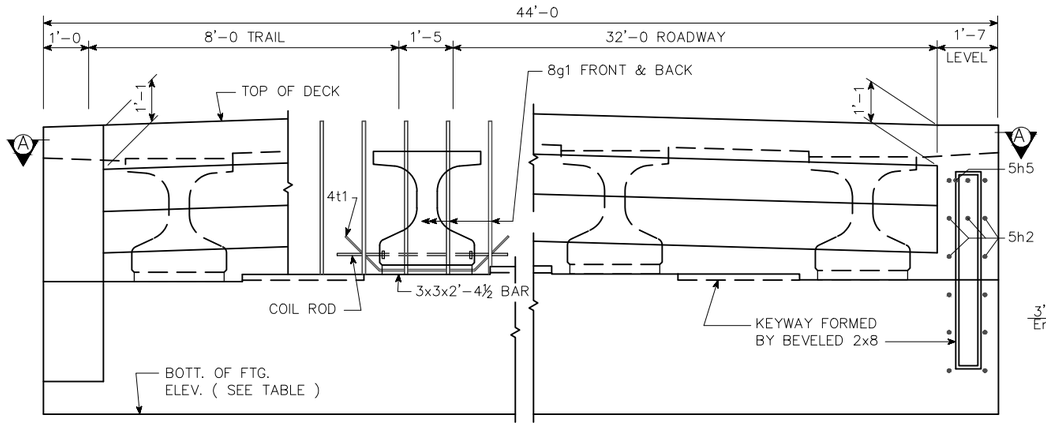


CROWN TEMPLATE

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

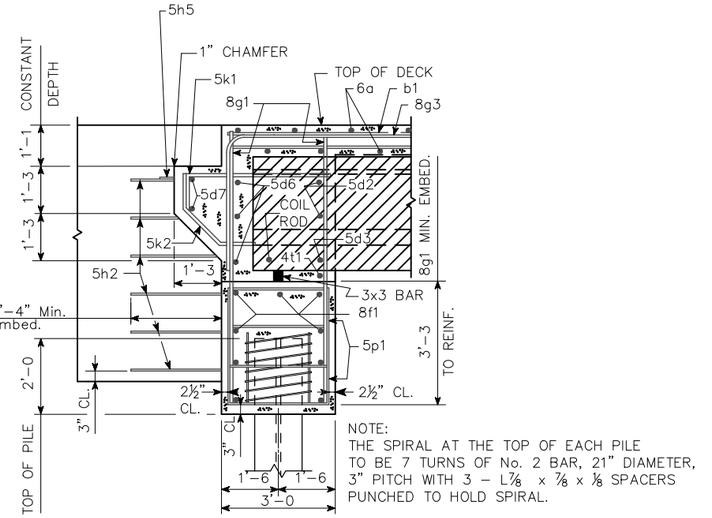
71'-0" END SPANS 97'-0" CENTER SPAN

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PART REAR ELEVATION AT ABUTMENT

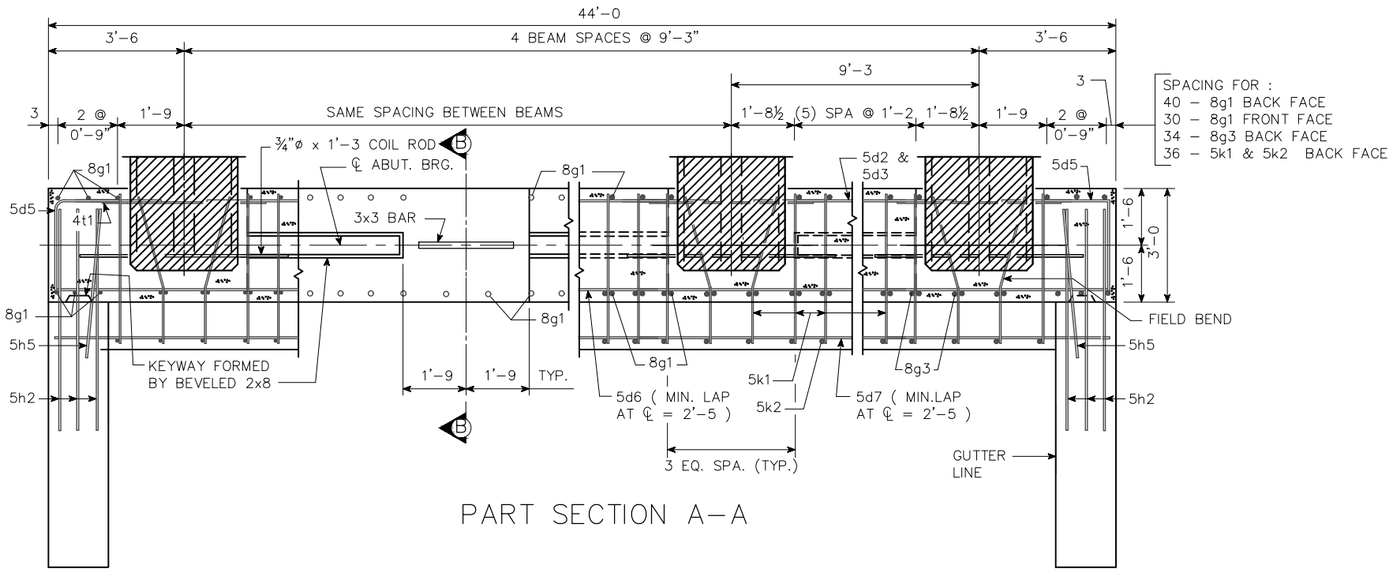
(LOOKING UP STATION)



NOTE:
THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF No. 2 BAR, 21" DIAMETER, 3" PITCH WITH 3 – L⅞ x ⅞ x ⅛ SPACERS PUNCHED TO HOLD SPIRAL.

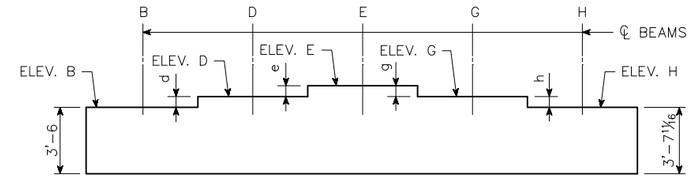
PART SECTION B–B

ABUTMENT BEARING ELEVATIONS						
	ELEV. B	ELEV. D	ELEV. E	ELEV. G	ELEV. H	B/FTG
WEST ABUT	1005.93	1006.08	1006.27	1006.26	1006.07	1002.43
STEP		1 3/4	2 1/4	1/8	2 1/4	
EAST ABUT	1005.57	1005.72	1005.90	1005.89	1005.71	1002.07
STEP		1 3/4	2 1/4	1/8	2 1/4	



SPACING FOR :
40 – 8g1 BACK FACE
30 – 8g1 FRONT FACE
34 – 8g3 BACK FACE
36 – 5k1 & 5k2 BACK FACE

PART SECTION A–A



ABUTMENT STEP DIAGRAM

(LOOKING UP STATION)

ABUTMENT CONCRETE QUANTITY	
LOCATION	QUANTITY
WEST ABUTMENT FOOTING	18.3
EAST ABUTMENT FOOTING	18.2
TOTAL (CU. YDS.)	36.5

NOTE: CONCRETE QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.

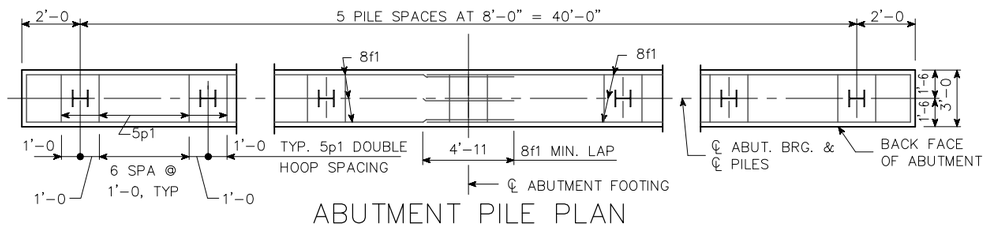
NOTE:
6 – HP 10x57 STEEL BEARING PILING REQUIRED AT EACH ABUTMENT.

NOTE: BARRIER RAIL NOT SHOWN IN DETAILS.

ABUTMENT NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

IF NECESSARY TO PREVENT DAMAGE TO THE END OF THE BRIDGE DECK OR BACKWALL FROM CONSTRUCTION EQUIPMENT, AN APPROPRIATE METHOD OF PROTECTION APPROVED BY THE ENGINEER SHALL BE PROVIDED BY THE BRIDGE CONTRACTOR AT NO EXTRA COST TO THE STATE.

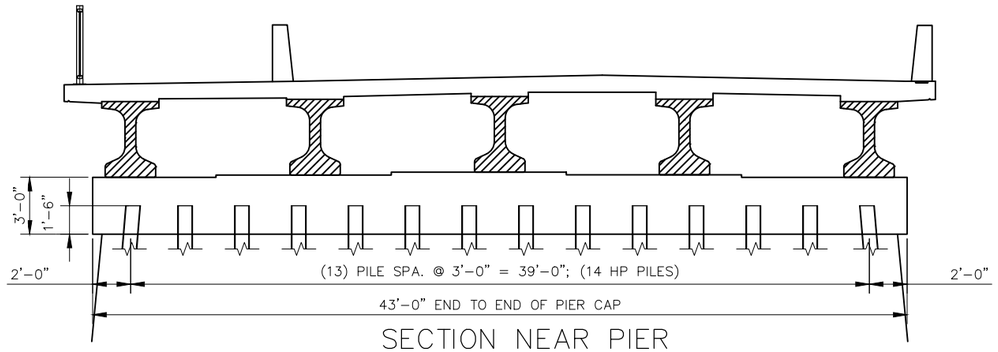


ABUTMENT PILE PLAN

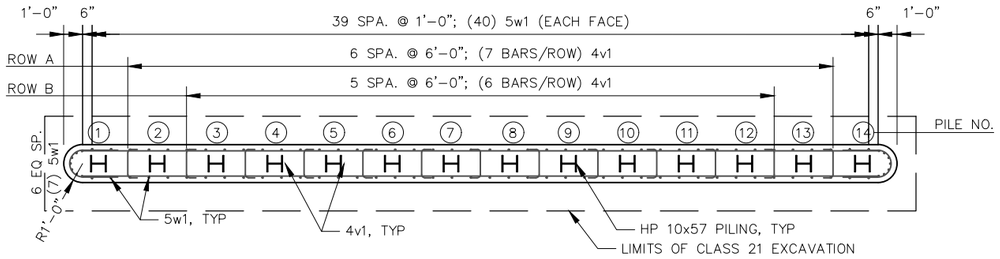
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

P:\23\036\DRAWINGS\CIVIL\23036 ZZ V SHEETS_2.DWG 12/12/2024 3:58:40 PM JOE RETTENBERGER

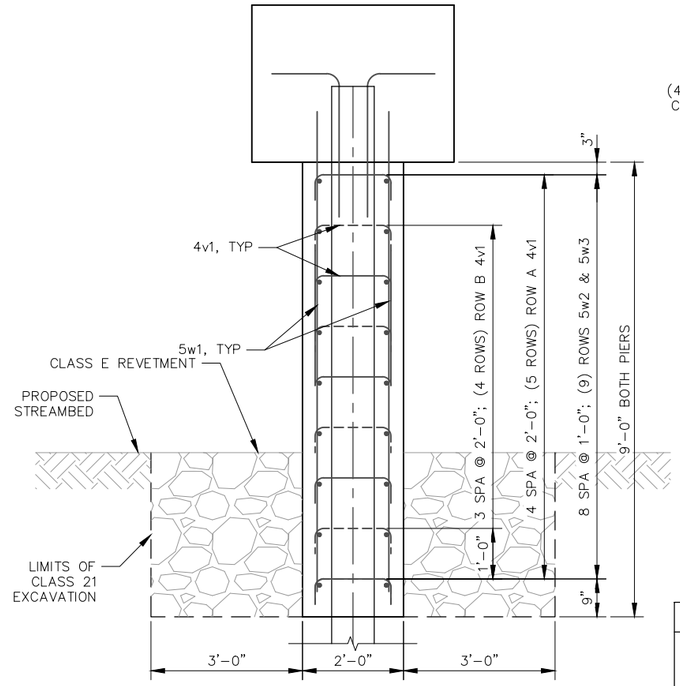


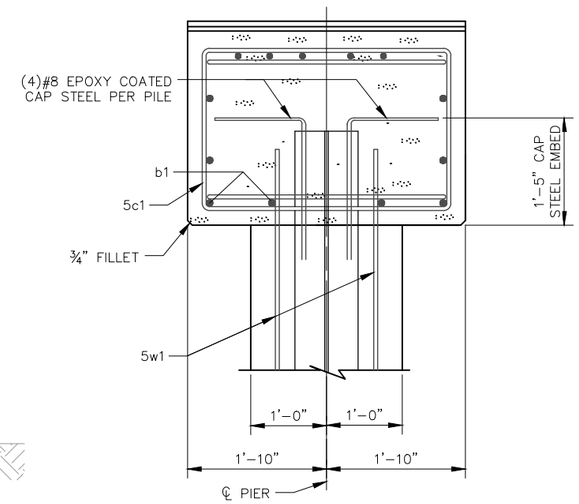
SECTION NEAR PIER
SHOWING NUMBER OF PILING



SECTION A–A

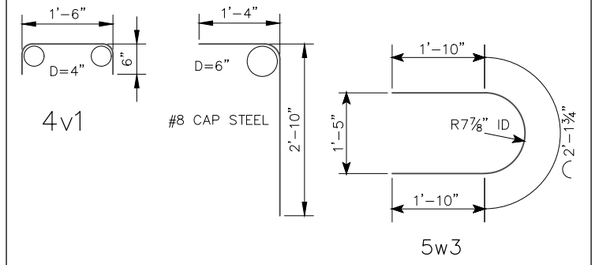
NOTE: INSTALL PILE NUMBERS 2, 6, 9, AND 13 IN ROCK CORES PER "PILE ROCK CORE" DETAILS.



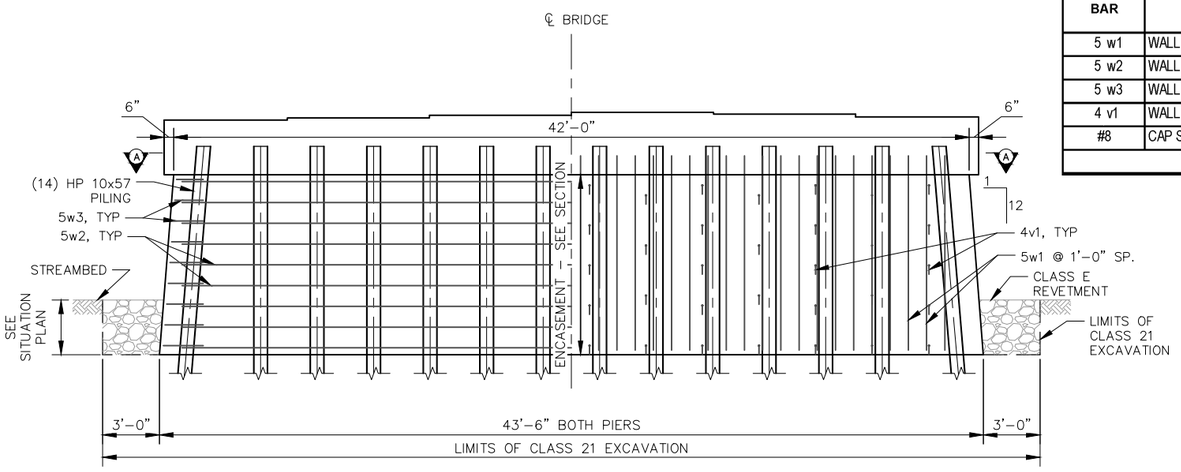


TYPICAL CAP SECTION

BENT BAR DETAILS



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



REINFORCING BAR LIST - ONE SOLID ENCASED PILE BENT PIER					
BAR	LOCATION	SHAPE	NO.	LENGTH ft. - in.	WEIGHT
5 w1	WALL VERTICAL	——	94	9 '-9	956
5 w2	WALL HORIZONTAL, VARIES 40'-0" to 41'-4"	——	18	VARIES	763
5 w3	WALL HORIZONTAL - ENDS	⊃	18	5 '-10	110
4 v1	WALL TIES	⊓	59	2 '-6	99
#8	CAP STEEL	⊓	56	4 '-2	623
TOTAL EPOXY REINFORCING, ONE PIER, LB					2551

PIER ELEVATIONS		
LOCATION	B/CAP	B/ENCASEMENT
PIER 1	1003.93	994.93
PIER 2	1003.89	994.89

ESTIMATED QUANTITIES– ONE ENCASED PIER

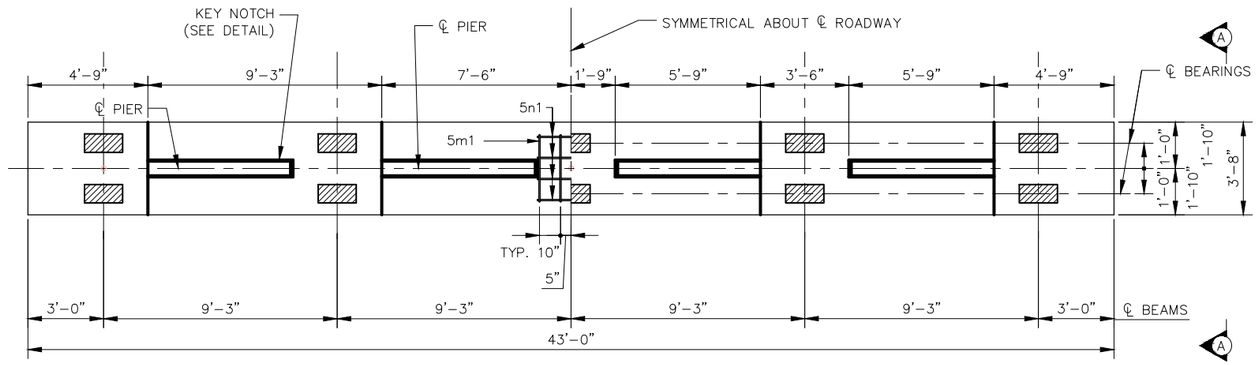
ITEM	UNIT
STRUCTURAL CONCRETE (BRIDGE)	28.2 C.Y.
EPOXY REINFORCING STEEL	2551 LB
CLASS 21 EXCAVATION	53 C.Y.

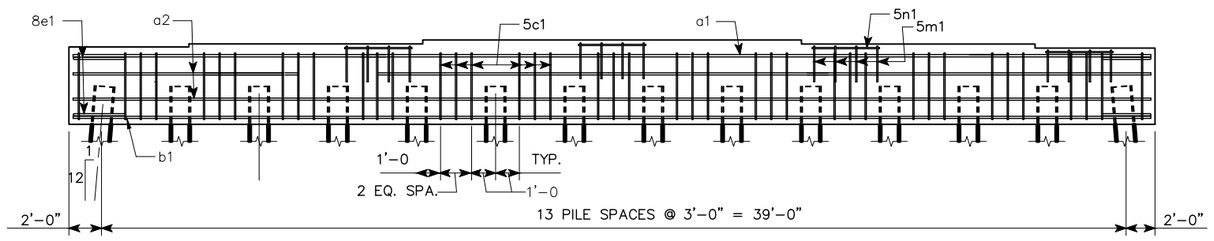
Δ SEE V.7 FOR PIER CAP CONCRETE AND REINFORCING QUANTITIES

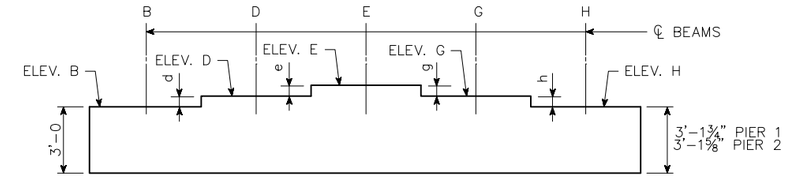
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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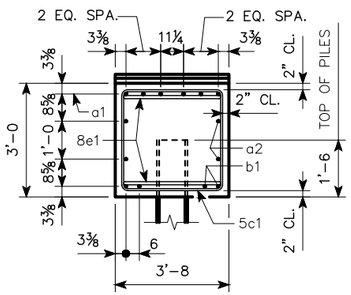
PIER STEP DIAGRAM

(LOOKING UP STATION)

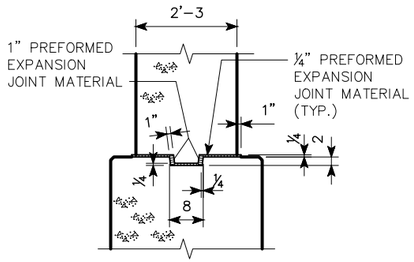
PIER BEAM BEARING ELEVATIONS					
	ELEV. B	ELEV. D	ELEV. E	ELEV. G	ELEV. H
PIER 1	1006.93	1007.09	1007.27	1007.26	1007.08
STEP		1 13/16	2 1/4	1/8	2 1/4
PIER 2	1006.89	1007.04	1007.22	1007.21	1007.03
STEP		1 13/16	2 1/4	1/8	2 1/4

PIER STRUCTURE ELEVATIONS				
	B/FTG.	B/CAP	H, FT.	COLUMN
PIER 1	994.93	1003.93	12.0	9.00
PIER 2	994.89	1003.89	12.0	9.00

REINFORCING BAR LIST - ONE PILE CAP					
BAR	LOCATION	SHAPE	NO.	LENGTH ft. - in.	WEIGHT
9 a1	PILE CAP HORIZ., TOP		6	42 '-8	870
8 a2	PILE CAP HORIZ., SIDES		4	42 '-8	456
8 b1	PILE CAP HORIZ., BOTT.		4	42 '-8	456
5 c1	PILE CAP HOOPS		41	13 '-0	556
8 e1	PILE CAP HORIZ., AT ENDS		4	8 '-9	93
5 m1	PILE CAP HORIZ., AT ENDS		16	6 '-4	106
5 n1	PILE CAP HORIZ., AT ENDS		16	2 '-8	45
	TOTAL EPOXY REINFORCING, ONE PIER PILE CAP				2582

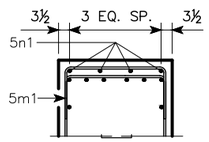


VIEW A–A



KEYED NOTCH DETAIL

(FIXED PIER ONLY)

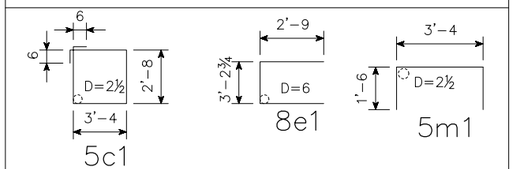


5m1 & 5n1
BAR LAYOUT

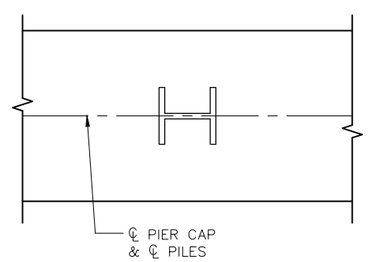
PIER CAP CONCRETE QUANTITY	
LOCATION	QUANTITY
PIER CAP #1	18.9
PIER CAP #2	18.9
TOTAL (CU. YDS.)	37.9

NOTE: CONCRETE QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.

BENT BAR DETAILS



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



PILE ORIENTATION DETAIL

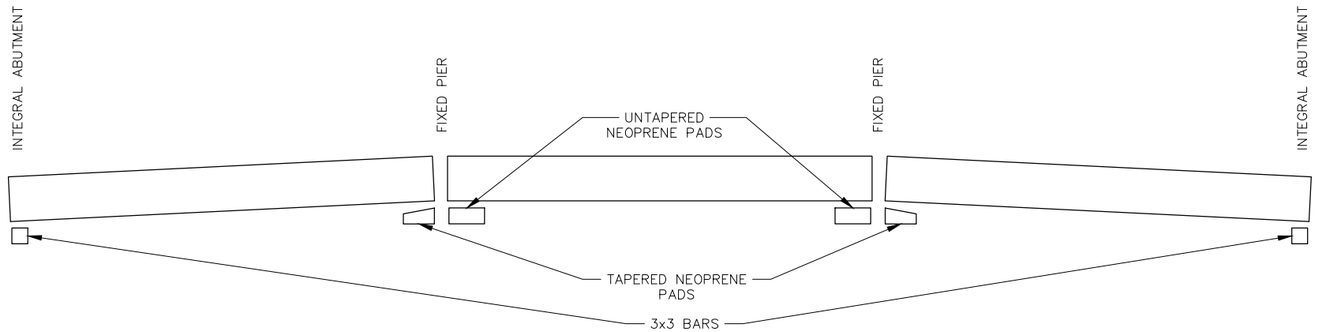
PILE BENT NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

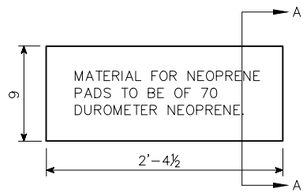
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

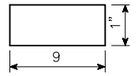
71'–0" END SPANS 97'–0" CENTER SPAN

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BEAM BEARING LAYOUT (NTS)

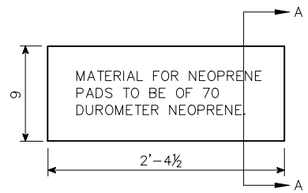


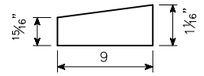


SECTION A–A

NOTE:
COST OF NEOPRENE PADS SHALL BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".

FIXED PIER – SPANS 2 BEAMS
(10 REQUIRED)





SECTION A–A

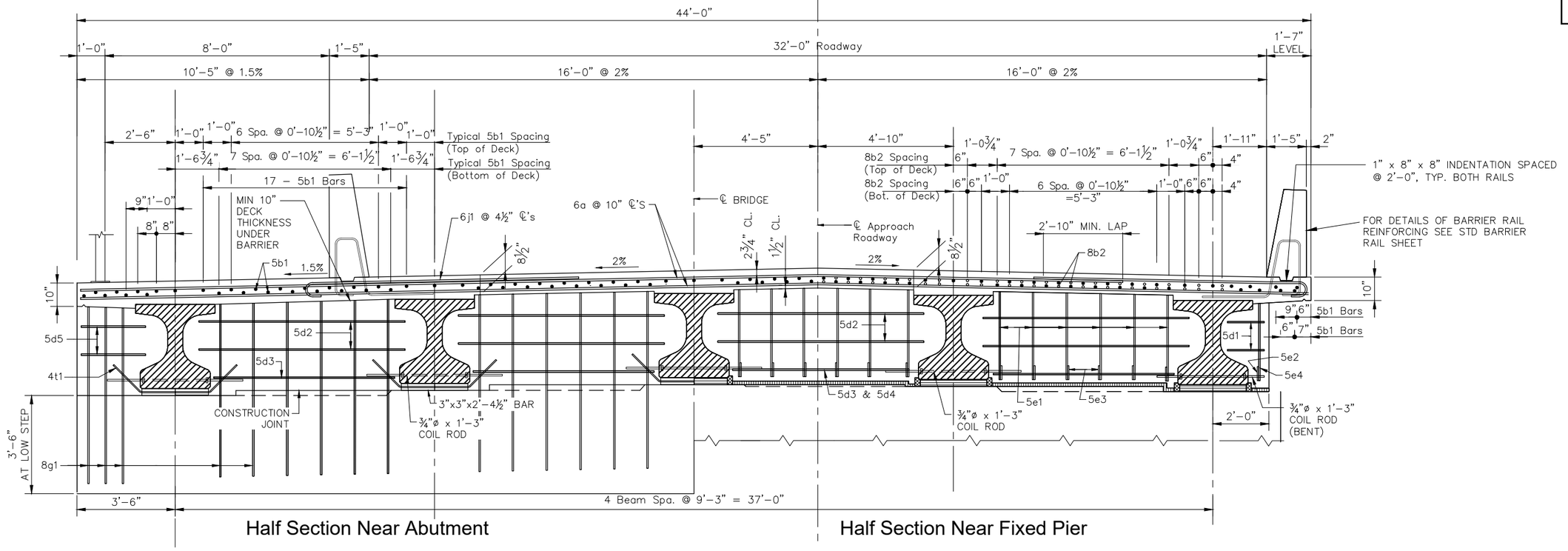
NOTE:
COST OF NEOPRENE PADS SHALL BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".

FIXED PIER – SPANS 1 AND 3 BEAMS
(10 REQUIRED)

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

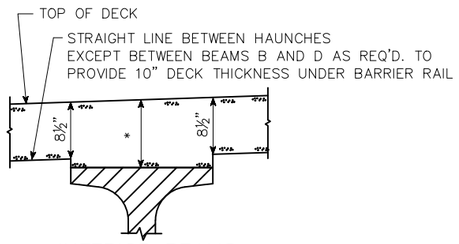
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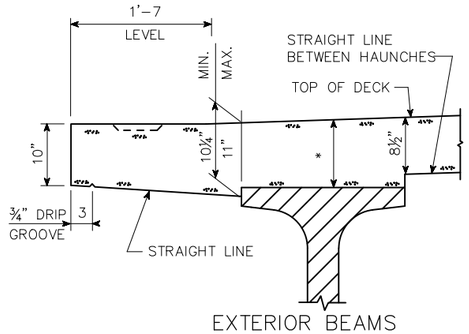
Half Section Near Abutment

Half Section Near Fixed Pier

SLAB AREA = 32.20 SF
SLAB AREA DOES NOT INCLUDE THE HAUNCH



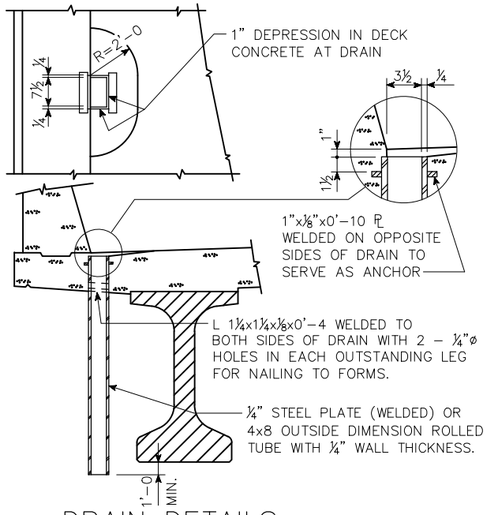
INTERIOR BEAMS



EXTERIOR BEAMS

TYPICAL DECK AND HAUNCH DETAIL

* FOR DECK THICKNESS OVER BEAMS SEE HAUNCH AND CAMBER DETAILS ON DESIGN SHEET V.4



DRAIN DETAILS

NOTE : DRAINS ARE TO BE GALVANIZED. 12 DRAINS REQUIRED. SEE V.17 FOR LOCATION. WEIGHT OF DRAINS IS INCLUDED IN THE QUANTITY FOR "STRUCTURAL STEEL". WEIGHT IS BASED ON ROLLED TUBE.

DATA FOR ONE DRAIN	
BEAM SIZE	BTB
DRAIN WEIGHT (LBS.)	92
DRAIN LENGTH (FT.)	4'-9¾

SUPERSTRUCTURE NOTES:

THE BRIDGE DECK AS SHOWN INCLUDES ¾" INTEGRAL WEARING SURFACE.

THE PIER AND ABUTMENT DIAPHRAGM CONCRETE IS TO BE PLACED MONOLITHICALLY WITH THE BRIDGE DECK.

COST OF ALL RESILIENT JOINT FILLER MATERIAL IS TO BE INCLUDED IN THE PRICE BID FOR "STRUCTURAL CONCRETE (BRIDGE)".

ALL BEAMS ARE TO BE SET VERTICAL.

FORMS FOR THE DECK AND BARRIER RAIL ARE TO BE SUPPORTED BY THE PRESTRESSED CONCRETE BEAMS.

CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

ALL DECK AND DIAPHRAGM REINFORCING IS TO BE WIRED IN PLACE AND ADEQUATELY SUPPORTED BEFORE CONCRETE IS PLACED.

TOP TRANSVERSE REINFORCING STEEL IS TO BE PARALLEL TO AND 2¾" CLEAR BELOW TOP OF DECK. BOTTOM TRANSVERSE REINFORCING STEEL IS TO BE PARALLEL TO AND 1½" CLEAR ABOVE BOTTOM OF DECK. TOP AND BOTTOM REINFORCING STEEL IS TO BE SUPPORTED BY INDIVIDUAL BAR CHAIRS SPACED AT NOT MORE THAN 3'-0 CENTERS LONGITUDINALLY AND TRANSVERSELY, OR BY CONTINUOUS ROWS OF BAR HIGH CHAIRS OR DECK BOLSTERS SPACED 4'-0 APART. I.M. 451.01 REQUIREMENTS SHALL APPLY FOR BAR CHAIRS, BAR HIGH CHAIRS, AND DECK BOLSTERS.

COST OF BEARING MATERIAL IS TO BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".

TRANSVERSE DECK REINFORCING MAY BE SPLICED WITH ONE LAP LOCATED AS FOLLOWS:

TOP BAR - LAP MIDWAY BETWEEN BEAMS (MIN. LAP = 2'-10).

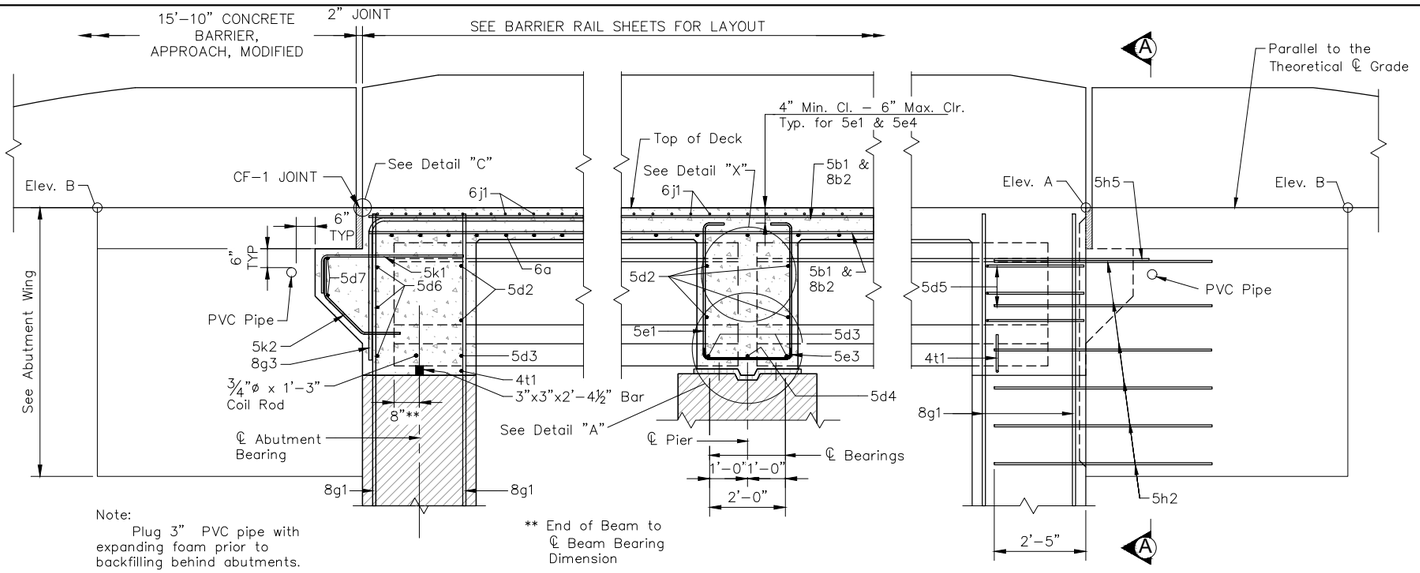
BOTTOM BARS - LAP OVER BEAMS (MIN. LAP = 3'-7).

PAYMENT FOR REINFORCING BARS SHALL BE BASED ON NO SPLICES, AND NO ALLOWANCE SHALL BE MADE FOR THE ADDITIONAL LENGTH OF BAR REQUIRED FOR THE USE OF SPLICES.

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Station: 10+14.50

71'-0" END SPANS 97'-0" CENTER SPAN

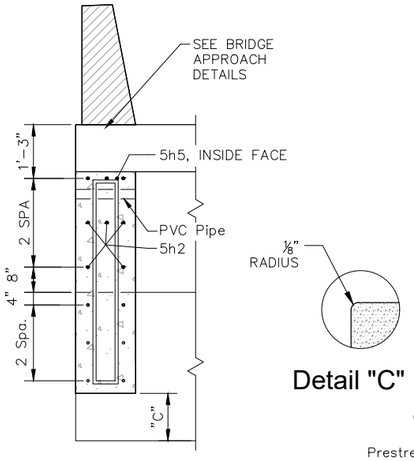
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Part Longitudinal Section Near Gutter

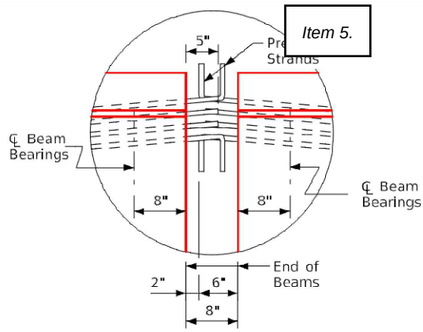
(For details of Intermediate Diaphragm see Design Sheet V.16)

Part End View at Abutment



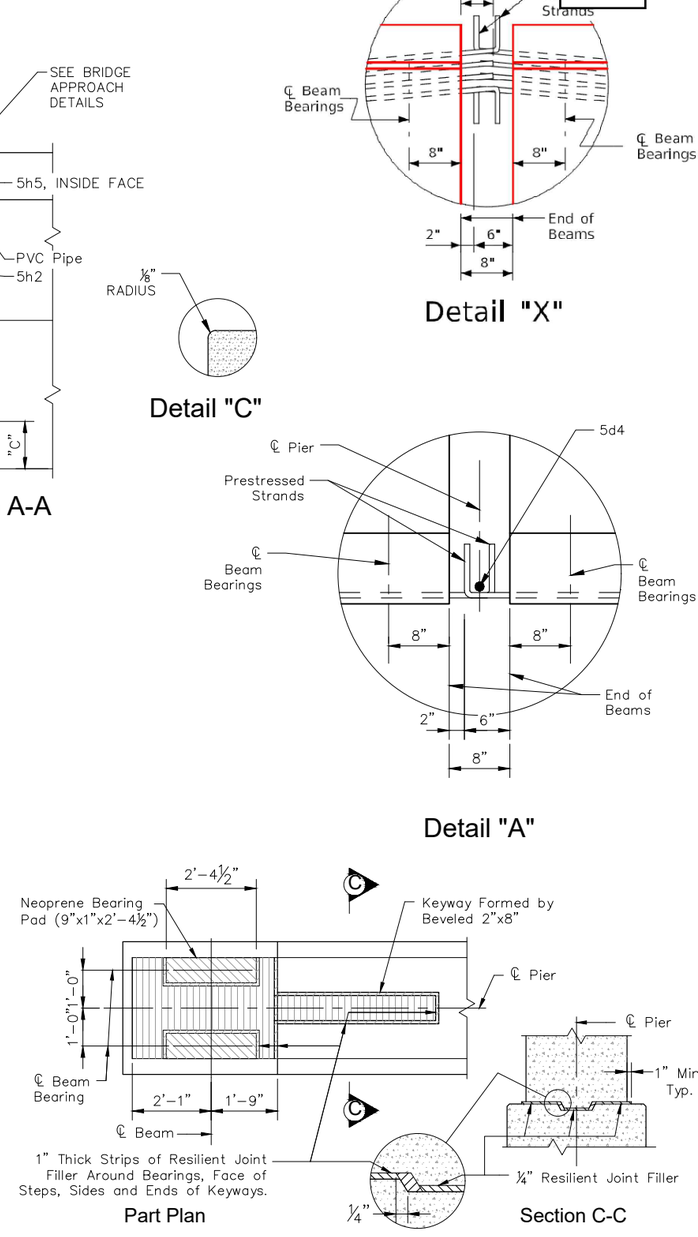
Section A-A

Detail "C"



Detail "X"

Detail "A"



Top of Fixed Pier Details

Part Plan

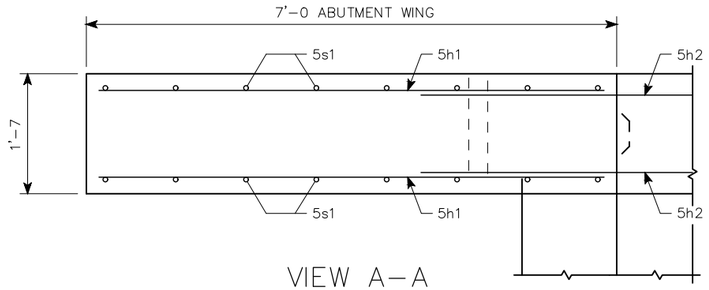
Part Section at Pier

NORTH

TABLE OF WINGWALL ELEVATIONS			
LOCATION	DIM "C"	ELEV. A	ELEV. B
N.W. WING	1'–0 5/8"	1009.99	1009.91
S.W. WING	1'–2 1/2"	1010.14	1010.07
N.E. WING	1'–0 5/8"	1009.62	1009.51
S.E. WING	1'–2 1/2"	1009.77	1009.66

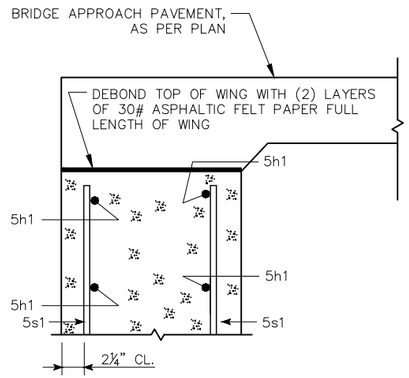
Design For
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10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN



VIEW A–A

NOTE:
PLUG 3"ø PVC PIPE WITH EXPANDING FOAM PRIOR TO BACKFILLING BEHIND ABUTMENTS.



SECTION B–B

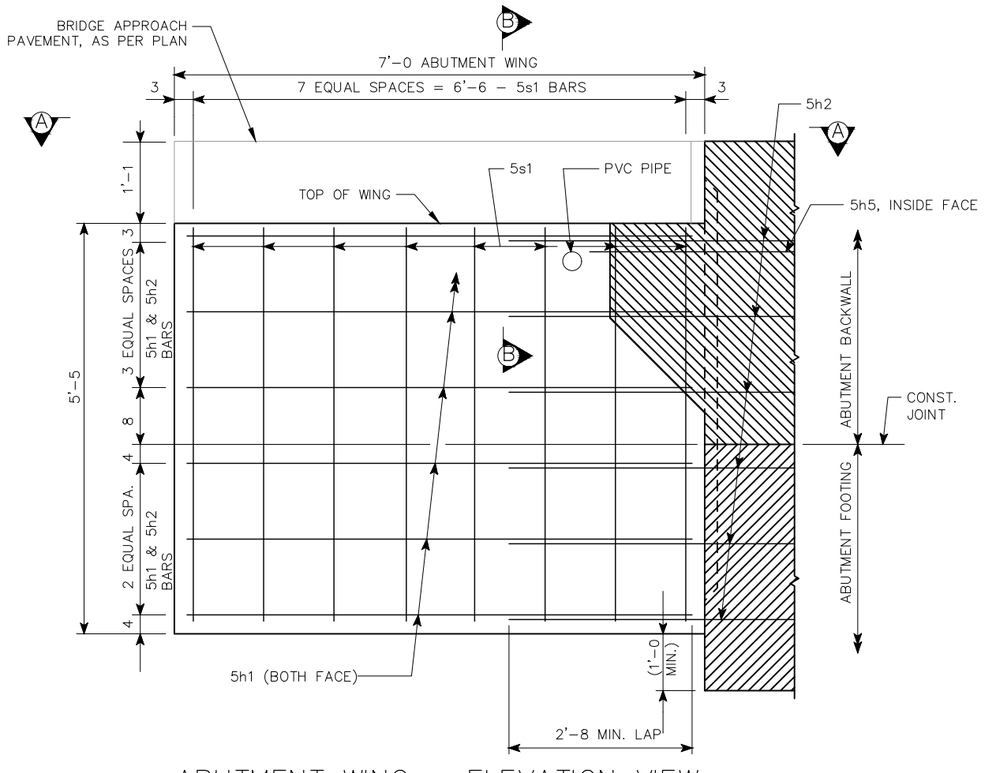
REINFORCING BAR LIST – ONE ABUT. WING

BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
5h1	HORIZONTAL BOTH FACES	——	12	6'–8	83
5s1	VERTICAL BOTH FACES	——	16	4'–11	82
	REINFORCING STEEL EPOXY COATED – TOTAL (LBS.)				165

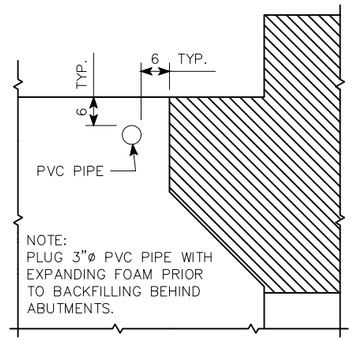
CONCRETE PLACEMENT SUMMARY

CONCRETE	TOTAL
ONE ABUTMENT WING	2.2

NOTE:
CONCRETE AND REINFORCING STEEL QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.



ABUTMENT WING – ELEVATION VIEW

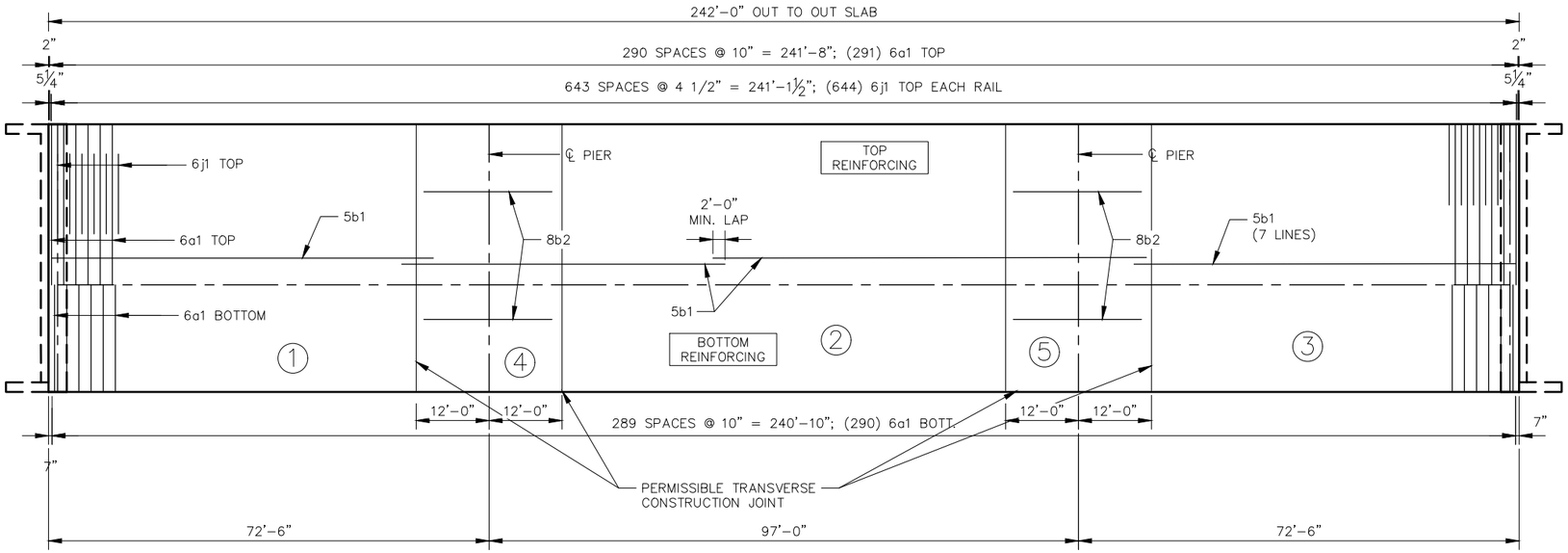


PVC PIPE LOCATION

Design For
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10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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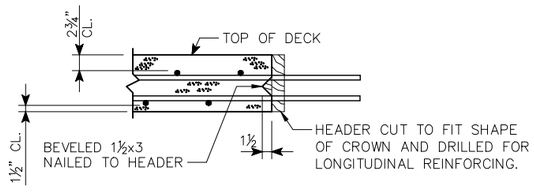


TRANSVERSE REINFORCING LAYOUT AND CONCRETE PLACEMENT DIAGRAM

NORTH

CONCRETE PLACEMENT DIAGRAM

NOTE: CONCRETE DECK SHALL BE PLACED IN SECTIONS AND SEQUENCES INDICATED. ALTERNATE PROCEDURES FOR PLACING DECK CONCRETE MAY BE SUBMITTED FOR APPROVAL TOGETHER WITH A STATEMENT OF THE PROPOSED METHOD AND EVIDENCE THAT THE CONTRACTOR POSSESSES THE NECESSARY EQUIPMENT AND FACILITIES TO ACCOMPLISH THE REQUIRED RESULTS. FOR APPROVED ALTERNATE PROCEDURES THE ENGINEER SHALL DETERMINE IF A RETARDING ADMIXTURE IS REQUIRED TO MAINTAIN PLASTICITY OF THE CONCRETE DECK DURING PLACEMENT.



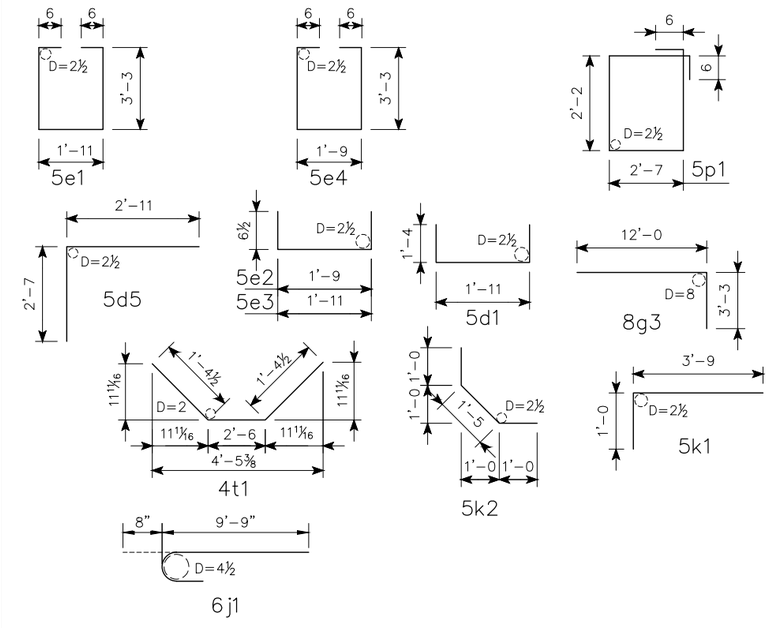
PERMISSIBLE TRANSVERSE DECK CONSTRUCTION JOINT

CONCRETE PLACEMENT QTY	
LOCATION	QUANTITY
SECTION 1, DECK & ABUT. DIAPH.	90.5
SECTION 2, DECK	87
SECTION 3, DECK & ABUT. DIAPH.	90.5
SECTION 4, DECK & PIER DIAPH.	38.6
SECTION 5, DECK & PIER DIAPH.	38.6
HAUNCH*	10.3
TOTAL (CU. YDS.)	355.5

NOTE:
CONCRETE AND REINFORCING STEEL QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.

* HAUNCH QUANTITY IS BASED ON AN AVERAGE HAUNCH THICKNESS OF 1"

BENT BAR DETAILS



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

REINFORCING BAR LIST - ONE SUPERSTRUCTURE & TWO ABUTMENTS

EPOXY COATED REINFORCING

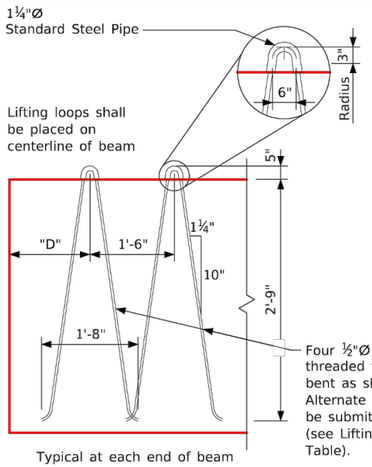
BAR	LOCATION	SHAPE	NO.	LENGTH ft '- in.	WEIGHT
6 a1	SLAB, TRANV. TOP & BOTT.	———	581	43 '- 8	38106
5 b1	SLAB, LONGIT. TOP & BOTT.	———	623	36 '- 3	23555
8 b2	SLAB, LONGIT. TOP & BOTT. AT PIERS*	———	176	23 '- 8	11121
5 d1	PIER DIAPH. ENDS	⌊	8	4 '- 7	38
5 d2	PIER & ABUT. DIAPH. LONGIT.	———	48	8 '- 5	421
5 d3	PIER & ABUT. DIAPH. LONGIT. BOTT.	———	24	6 '- 5	161
5 d4	PIER DIAPH. LONGIT	———	2	40 '- 8	85
5 d5	ABUT. DIAPH. ENDS	⌐	8	5 '- 6	46
5 d6	ABUT. DIAPH. LONGIT. B.F.	———	12	23 '- 1	289
5 d7	PAVING NOTCH, LONGIT.	———	8	23 '- 1	193
5 e1	PIER DIAPH. HOOPS FIXED PIER	[]	48	9 '- 5	471
5 e2	PIER DIAPH. TIES ENDS	⌊	4	2 '- 10	12
5 e3	PIER DIAPH. TIES	⌊	48	3 '- 0	150
5 e4	PIER DIAPH HOOPS FIXED PIER ENDS	[]	4	9 '- 3	39
8 f1	ABUT. FOOTING LONGIT. BOTH FACES	———	36	24 '- 4	2339
8 g1	ABUT. VERT. B.F. & F.F.	———	140	7 '- 1	2648
8 g3	ABUT. DIAPH. VERT. B.F.	⌐	68	15 '- 3	2769
5 h2	ABUT. TO WING ANCHOR, BOTH FACES	———	56	5 '- 9	336
5 h5	ABUT. TO WING ANCHOR, INSIDE FACE, TOP	———	4	4 '- 0	17
6 j1	TOP OF SLAB TRANVSERSE (AT RAILS)	⌐	1288	10 '- 5	20152
5 k1	PAVING NOTCH	⌐	72	4 '- 9	357
5 k2	PAVING NOTCH	◟	72	3 '- 5	257
5 p1	ABUT. HOOPS	▭	148	10 '- 6	1621
4 t1	UNDER BEAMS AT ABUTMENTS	◡	10	5 '- 3	35
#2	Pile Spiral **	(((((((	12	38 '- 6	77
	SPIRAL SPACERS, L 7/8 x 7/8 x 1/8 x 0.70 **	———	36	1 '- 10	46
	TOTAL REINFORCING STEEL EPOXY COATED				105341

*THE MIDPOINT OF THE b2 BAR IS TO BE PLACED AT CENTERLINE OF PIER
** EPOXY COATING NOT REQUIRED FOR PILE SPIRAL AND SPACERS

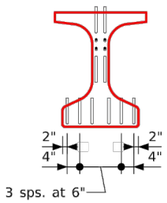
Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

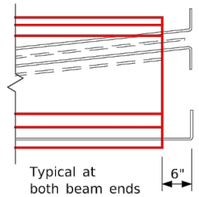
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Lifting Loop Detail



The top and bottom for 2 rows or the top and 3rd rows of deflected strands are to be cut with 1'-2" projections which are to be shop bent as shown. The second row is to be cut with a 5" projection and the remaining top deflected strands in rows 4 and below are to be cut flush with beam face. Six bottom strands are to be cut with 1'-6" projections which are to be shop bent as shown. The remaining bottom strands are to be cut off reasonably flush with the concrete.



Strand Projection at Beam Ends When Embedded in Concrete End Diaphragms

Lifting Loop and Overhang Table

Beams	Lifting Loops Each End	# of Strands Per Loop	D	Beam Overhang (ft.)
BTB30–BTB75	1	4	2'-0"	**
BTB80–BTB85	2	4	2'-0"	7
BTB90	2	4	2'-6"	8.5
BTB95	2	4	2'-6"	11

** In accordance with Article 2407.03, K of the Standard Specifications.

Lifting loops shall carry loads equally.

Design Stresses:

Design stresses for the following materials are to be in accordance with AASHTO LRFD Bridge Design Specifications, Series of 2017.
Reinforcing steel in accordance with Section 5, Grade 60.
Concrete in accordance with Section 5.
Prestressing steel in accordance with Section 5, Grade 270.

Specifications:

Construction: Standard Specifications of the Iowa Department of Transportation, current series, with current applicable special provisions and supplemental specifications.
Design: AASHTO LRFD, Series of 2017 with minor modifications.

Alternate Bar Notes:

Alternate bars shown in Bent Bar Details may be used in lieu of reinforcing bars shown in bar list. No additional payment shall be made for use of alternate bars.

BTB Beam Data

BTB Beam	Span Length ℄-℄ Bearing	Overall Beam Length (L)	Concrete Strength f'ci (ksi.)	Concrete Strength f'c (ksi.)	Strand Size Dia. (in.)	Number of Strands Straight	Number of Strands Deflected	③ Total Initial Prestress (kips)	Hold Down Force (kips)	Camber (in.) ⑤ At Release	Camber (in.) ⑤ After Losses	Deflection (in.) Δ_D Immediate ① (elastic) Δ_I Steel Diaphragm	Deflection (in.) Δ_D Time ② (plastic) Δ_T Steel Diaphragm	Permissible Maximum Spacing HL-93 Loading Steel Diaphragm	Weight (tons)	Concrete (cu. yd.)	Reinforcing Steel (weight lb.)
BTB30	30'-0"	31'-4"	4.50	5.00	0.60"	8	—	340	—	0.12"	0.22"	0.04"	0.01"	9'-3"	10.3	5.1	890
BTB35	35'-0"	36'-4"	4.50	5.00	0.60"	10	—	425	—	0.20"	0.37"	0.08"	0.02"	9'-3"	12.0	5.9	984
BTB40	40'-0"	41'-4"	4.50	5.00	0.60"	12	—	510	—	0.31"	0.58"	0.15"	0.04"	9'-3"	13.6	6.7	1072
BTB45	45'-0"	46'-4"	4.50	5.00	0.60"	12	—	510	—	0.37"	0.68"	0.22"	0.06"	9'-3"	15.2	7.5	1184
BTB50	50'-0"	51'-4"	4.50	5.00	0.60"	14	—	596	—	0.51"	0.94"	0.34"	0.09"	9'-3"	16.9	8.3	1324
BTB55	55'-0"	56'-4"	4.50	5.00	0.60"	16	—	681	—	0.66"	1.22"	0.49"	0.12"	9'-3"	18.5	9.2	1470
BTB60	60'-0"	61'-4"	4.50	5.00	0.60"	16	2	765	8.6	0.81"	1.51"	0.67"	0.17"	9'-3"	20.2	10.0	1557
BTB65	65'-0"	66'-4"	4.50	5.00	0.60"	18	2	851	8.0	1.05"	1.94"	0.95"	0.24"	9'-3"	21.8	10.8	1719
BTB70	70'-0"	71'-4"	5.00	5.50	0.60"	20	4	1021	14.0	1.35"	2.50"	1.18"	0.30"	9'-3"	23.5	11.6	1771
BTB75	75'-0"	76'-4"	5.50	6.50	0.60"	22	6	1191	20.6	1.67"	2.67"	1.54"	0.38"	9'-3"	25.1	12.4	1863
BTB80	80'-0"	81'-4"	6.00	7.00	0.60"	24	8	1361	20.8	1.97"	3.14"	1.94"	0.49"	9'-3"	26.8	13.2	2002
BTB85	85'-0"	86'-4"	6.50	7.50	0.60"	28	8	1531	19.7	2.76"	4.42"	2.41"	0.60"	9'-3"	28.4	14.0	2100
BTB90	90'-0"	91'-4"	7.50	8.50	0.60"	30	8	1616	18.6	3.07"	4.91"	2.90"	0.73"	9'-3"	30.0	14.8	2187
④ BTB95	95'-0"	96'-4"	8.00	9.50	0.60"	34	10	1871	20.1	3.68"	5.88"	3.47"	0.87"	9'-3"	31.7	15.7	2327

① Deflections at mid-span due to weight of deck and diaphragm. The deflections shown are for a deck (8.5") and haunch (1.5") weight of:
1.04 kips/ft. for 9'-3" beam spacing and one steel diaphragm (0.500 kips) at ℄ of span. For different deck and diapragm weights, deflections will be directly proportional.

② Deflections due to the combined effect of creep due to weight of deck and shrinkage of deck.
Total beam deflections at ℄ of span, Δ_D , due to weight of deck and diaphragms for detailing purpose:
(A) $\Delta_D=\Delta_I+\Delta_T$ for simple span.
(B) $\Delta_D=\Delta_I+\frac{3}{4}\Delta_T$ for end spans of continuous bridge.
(C) $\Delta_D=\Delta_I+\frac{1}{2}\Delta_T$ for interior spans of continuous bridge.

③ Total initial prestress is based on 72.6% f's, f's= 270 ksi. and As= 0.217 $in.^2$.

④ Includes partial length debonded strands, see individual Beam Sheets for location and details.

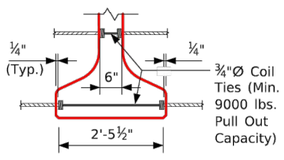
⑤ Calculated design cambers are based on multipliers developed from research in Iowa.

Note: All mild reinforcing steel can be epoxy coated at Contractor's option without modification to bar length or details at no additional cost to the State.

Beam Notes:

These beams are designed for AASHTO live loads as indicated in above table with an allowance of 20 lbs. per square foot of roadway for future wearing surface.
All PPC beams shall use high performance concrete ('HPC') in accordance with the Standard Specifications.
Hold down points for deflected strands may be moved toward ends of beam a distance of 0.05 L maximum at producer's option.
All prestressing strands except lifting loop strands shall be 0.60 in. nominal diameter (nominal steel area = 0.217 $in.^2$) and conform to ASTM A416 Grade 270 Low Relaxation Strands. Minimum strand breaking strength shall be 58.6 kips.
Tops of beams are to be struck off level and finished as per Materials I.M.570.
Bearings shall be as detailed on other design sheets.
Beams to be used in bridges made continuous by the poured in place deck, are to be at least 28 days old before the deck is placed unless a shorter curing time is approved by the Bridge Engineer.
The portions of the prestressed beams that are to be embedded in the abutment and pier diaphragms shall be roughened for a distance of 10" from the beam end by sandblasting or other approved methods to provide suitable bond between the beam and the diaphragm in accordance with Article 2403.03, I, of the Standard Specifications.
All beams are to be increased in length to compensate for elastic shortening, creep and shrinkage.
For transporting, the allowable overhang is shown in the Lifting Loop and Overhang Table.
Holes must be cast in the web to accommodate the steel diaphragm attachments as detailed on the Steel Diaphragm Detail Sheet.
If sole plate is required for bearing, sole plate is to be set in forms when beam is cast and formed out below to exclude concrete as detailed on the Bearing Sheet.
If stub abutments are used, all strands at the ends of beams at stub abutments shall be cut off reasonably flush with the concrete.
Minimum concrete f'c (at 28 days) and minimum f'ci at release are located in the BTB Beam Data Table above.
Four 0.60 in. diameter strands stressed to not more than 5000 lbs. each may be used in lieu of bars 5a1 and 5a2 in the top flange.
When expansion joints are used, concrete sealer shall be applied to the prestressed beam end sections. The sealing shall be in accordance with materials I.M.570 (Fabricator Application) and I.M.491.12 (Contractor Application).

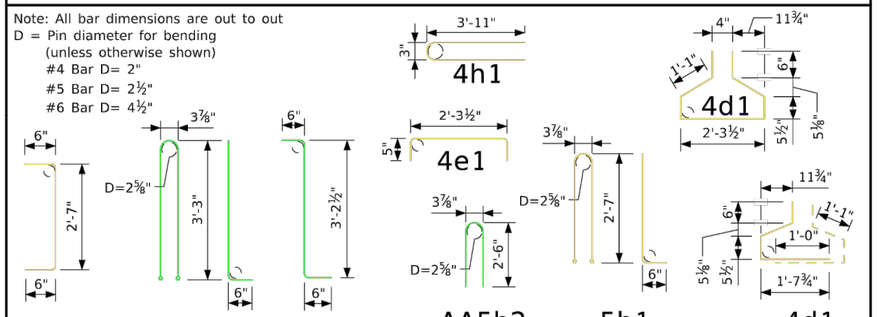
Number and exact location of coil ties to be as detailed on specific bridge design.



Coil Tie Detail

Bent Bar Details

Note: All bar dimensions are out to out
D = Pin diameter for bending (unless otherwise shown)
#4 Bar D= 2"
#5 Bar D= 2½"
#6 Bar D= 4½"



ΔΔ 5b1 and 6b3 bars to be epoxy coated

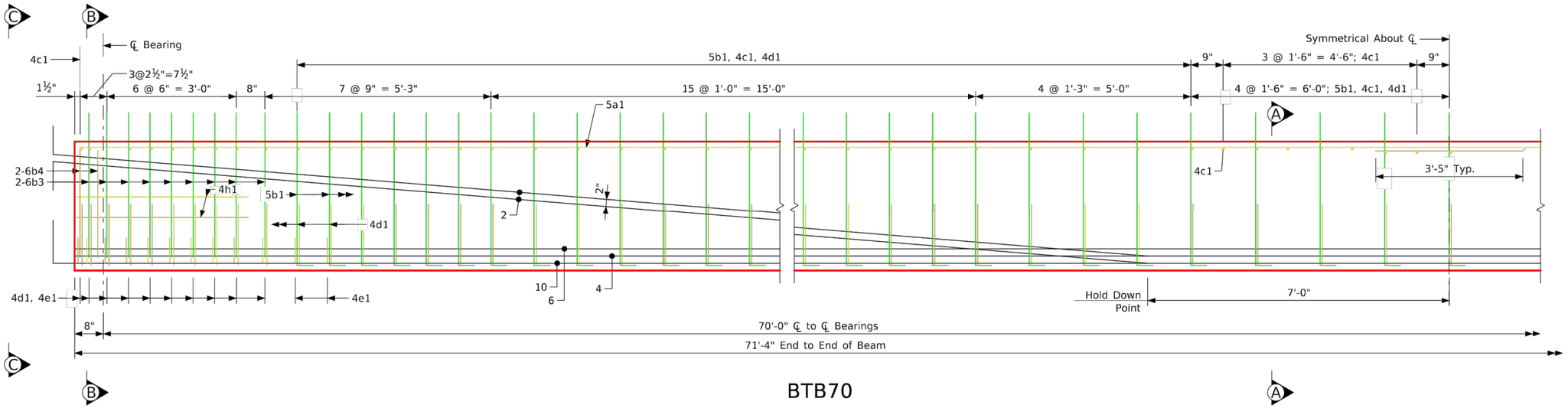
✱ 6b3 and 6b4 bars to be used in pairs

Reinforcing Bar List

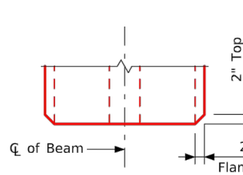
	Beam Bar	Beam Shape	BTB30 No.	BTB30 Length	BTB35 No.	BTB35 Length	BTB40 No.	BTB40 Length	BTB45 No.	BTB45 Length	BTB50 No.	BTB50 Length	BTB55 No.	BTB55 Length	BTB60 No.	BTB60 Length	BTB65 No.	BTB65 Length	BTB70 No.	BTB70 Length	BTB75 No.	BTB75 Length	BTB80 No.	BTB80 Length	BTB85 No.	BTB85 Length	BTB90 No.	BTB90 Length	BTB95 No.	BTB95 Length	Beam Bar	
	5a1		6	31'-1"	6	36'-1"	6	41'-1"	12	24'-9"	12	27'-3"	12	29'-9"	12	32'-3"	12	34'-9"	12	37'-3"	12	39'-9"	12	24'-0"	12	26'-6"	12	29'-0"	12	31'-6"	5a1	
	5a2		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6	40'-0"	6	40'-0"	6	40'-0"	6	40'-0"	5a2	
ΔΔ	5b1		17	7'-8"	21	7'-8"	25	7'-8"	29	7'-8"	37	7'-8"	43	7'-8"	47	7'-8"	55	7'-8"	59	7'-8"	63	7'-8"	67	7'-8"	71	7'-8"	75	7'-8"	83	7'-8"	5b1	ΔΔ
ΔΔ✱	6b3		36	4'-3"	36	4'-3"	36	4'-3"	36	4'-3"	36	4'-3"	36	4'-3"	36	4'-3"	40	4'-3"	36	4'-3"	36	4'-3"	32	4'-3"	32	4'-3"	32	4'-3"	32	4'-3"	6b3	ΔΔ✱
✱	6b4		4	3'-7"	4	3'-7"	4	3'-7"	4	3'-7"	4	3'-7"	8	3'-7"	8	3'-7"	8	3'-7"	8	3'-7"	8	3'-7"	16	3'-7"	16	3'-7"	16	3'-7"	16	3'-7"	6b4	✱
	4c1		45	2'-7"	53	2'-7"	57	2'-7"	63	2'-7"	69	2'-7"	73	2'-7"	77	2'-7"	81	2'-7"	87	2'-7"	93	2'-7"	97	2'-7"	107	2'-7"	111	2'-7"	117	2'-7"	4c1	
	4d1		37	6'-5"	41	6'-5"	45	6'-5"	49	6'-5"	57	6'-5"	65	6'-5"	69	6'-5"	77	6'-5"	79	6'-5"	83	6'-5"	89	6'-5"	93	6'-5"	97	6'-5"	105	6'-5"	4d1	
	4e1		24	3'-2"	24	3'-2"	24	3'-2"	24	3'-2"	24	3'-2"	26	3'-2"	26	3'-2"	26	3'-2"	24	3'-2"	24	3'-2"	26	3'-2"	26	3'-2"	26	3'-2"	26	3'-2"	4e1	
	4h1		4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4	8'-0"	4h1	

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50
71'–0" END SPANS 97'–0" CENTER SPAN

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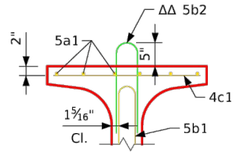


BTB70



Top View

The top flange beam corners are to be chamfered 2" as shown at both ends of the beam.

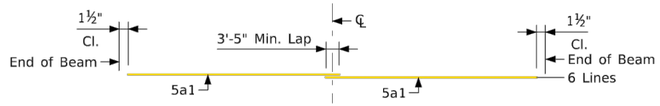


Section A-A
(Alternate)

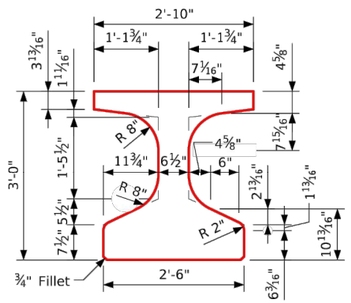
See Alternate Bar Note on Standard Sheet 4750.

Area = 631.7 in.^{2}
$\bar{y}_b$ = 17.14 in.
I = 99,980 in.^{4}

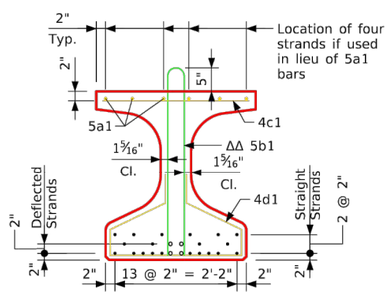
Beam Section Properties



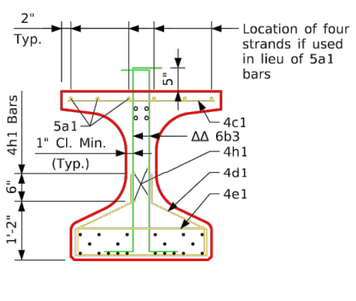
Top Flange Longitudinal Bar Layout



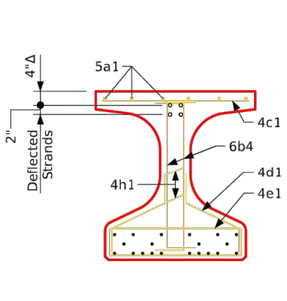
BTB Beam Cross Section



Section A-A



Section B-B



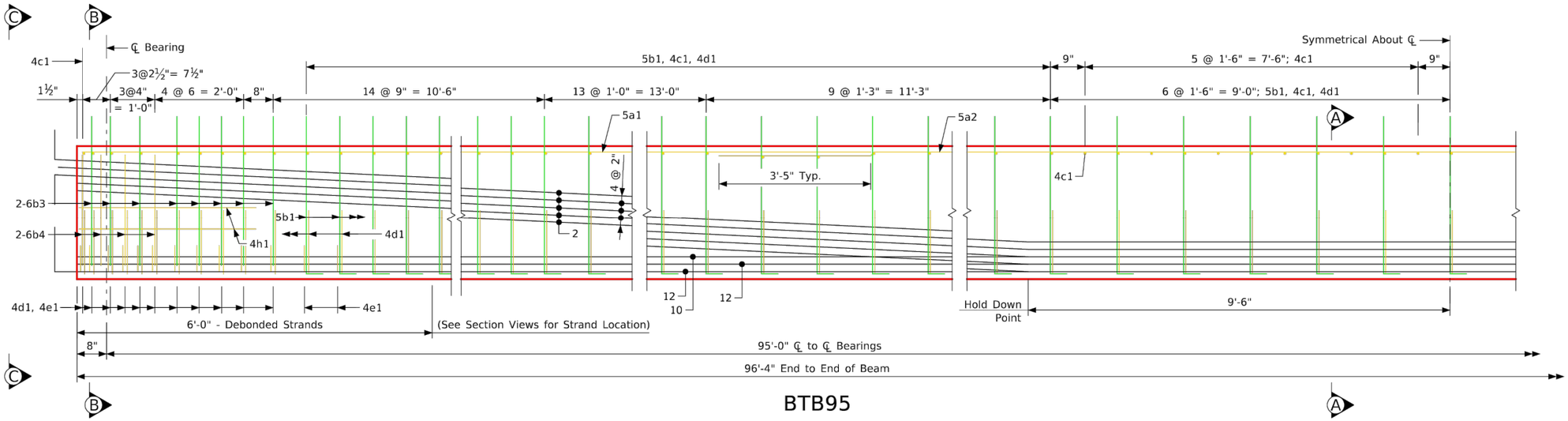
View C-C

° Deflected Strands
Δ Dimensions at End of Beam
ΔΔ Epoxy Coated Bars

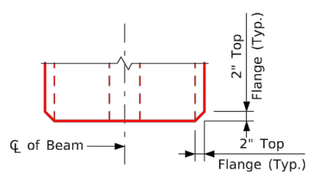
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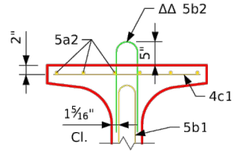


BTB95



Top View

The top flange beam corners are to be chamfered 2" as shown at both ends of the beam.

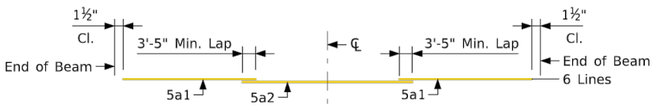


Section A-A
(Alternate)

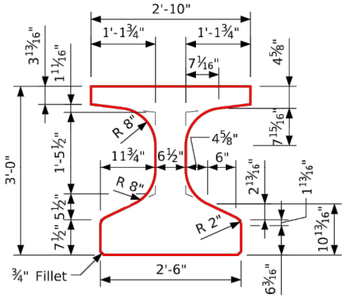
See Alternate Bar Note on Standard Sheet 4750.

Area = 631.7 in.^{2}
$\bar{y}_b$ = 17.14 in.
I = 99,980 in.^{4}

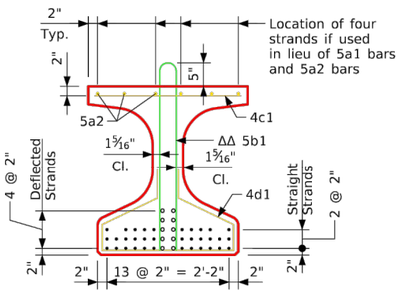
Beam Section Properties



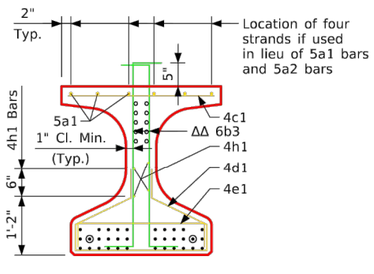
Top Flange Longitudinal Bar Layout



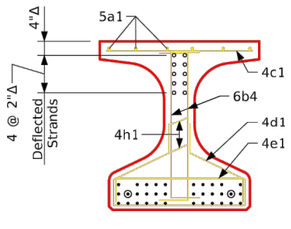
BTB Beam Cross Section



Section A-A



Section B-B



View C-C

° Deflected Strands
Δ Dimensions at End of Beam
ΔΔ Epoxy Coated Bars
⊙ Strands Debonded 6'-0" from Beam Ends

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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BULB TEE "B" BEAM INTERMEDIATE DIAPHRAGM STRUCTURAL STEEL

ONE BEAM CONNECTION (DETAIL "F" AND/OR DETAIL "G")		NO. OF BEAM CONNECTIONS	WEIGHT
4 – ⅞"ø x 9¼ H.S. BOLTS WITH NUTS & WASHERS = 9.6 LBS.		15	144
ONE DETAIL "G"	4 – BENT PL 9 x 6 x ½ x 0'–11 = 93.6 LBS.	9	842.4
ONE DETAIL "F"	1 – BACKING PL 5 x ⅜ x 1'–1⅜ = 7.1 LBS.	6	42.6
	2 – BENT PL 9 x 6 x ½ x 0'–11 = 46.8 LBS.	6	280.8
ONE DIAPHRAGM			
		NUMBER OF DIAPHRAGMS	
6 – ⅞"ø x 3" H.S.BOLTS WITH NUTS & WASHERS = 7.8 LBS		12	93.6
	LENGTH OF MEMBER		
I – C15 x 33.9 = 33.9 LBS./FT.	8'–0¾	12	3279.8
INTERMEDIATE DIAPHRAGM STRUCTURAL STEEL – TOTAL (LBS.)			4683.2

NOTES:

ALL DIAPHRAGM MATERIALS, INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.

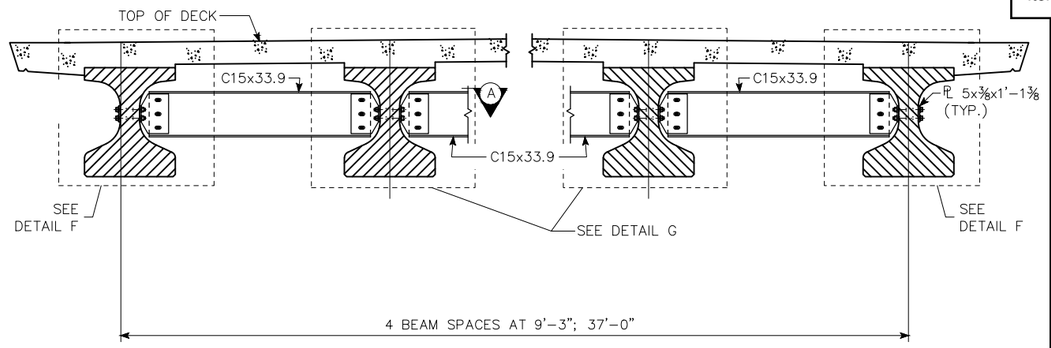
SHOP DRAWINGS OF THE STEEL DIAPHRAGMS SHOWING LAYOUT AND DETAILS OF THE DIAPHRAGMS SHALL BE SUBMITTED FOR APPROVAL.

ALL COSTS FOR FURNISHING AND INSTALLING STEEL INTERMEDIATE DIAPHRAGMS SHALL BE INCLUDED IN THE PRICE BID FOR STRUCTURAL STEEL.

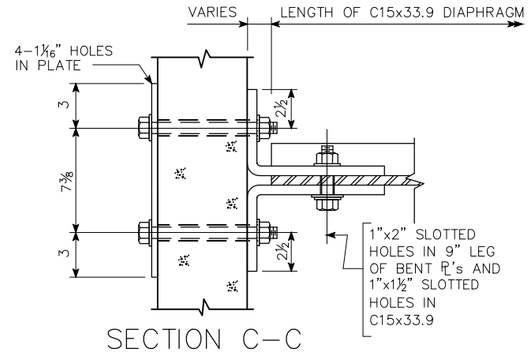
THE 1½"ø HOLES FOR THE ⅞"ø H.S. BOLTS SHALL BE CAST INTO THE WEB. DRILLING IS NOT ALLOWED.

THE ⅞"ø H.S. BOLTS THROUGH THE WEB SHALL HAVE A THREAD LENGTH OF 3" MIN. AND 4" MAX. AND SHALL MEET THE REQUIREMENTS OF ASTM A449.

ALL BOLTS ARE TO BE TIGHTENED PRIOR TO PLACING BRIDGE FLOOR CONCRETE WITH THE FOLLOWING EXCEPTION: BOLTS IN DIAPHRAGMS LOCATED UNDER LONGITUDINAL BRIDGE FLOOR CONSTRUCTION JOINTS SHALL NOT BE TIGHTENED UNTIL STAGE TWO OF THE BRIDGE FLOOR HAS BEEN PLACED.



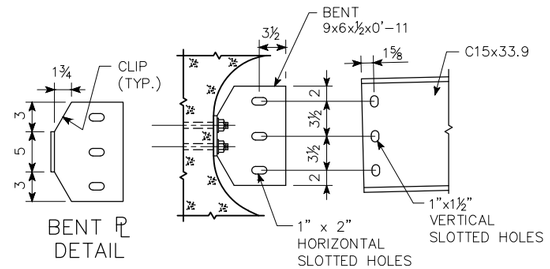
SECTION SHOWING INTERMEDIATE DIAPHRAGMS



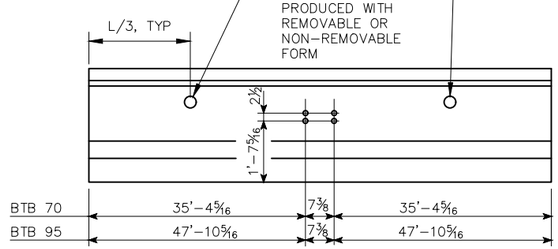
SECTION C–C

STRUCTURAL STEEL	
WEIGHT	4683.2 LBS.

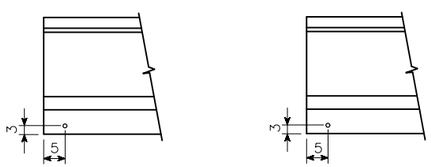
NOTE: STRUCTURAL STEEL WEIGHT IS INCLUDED ON THE SUMMARY QUANTITIES SHEET.



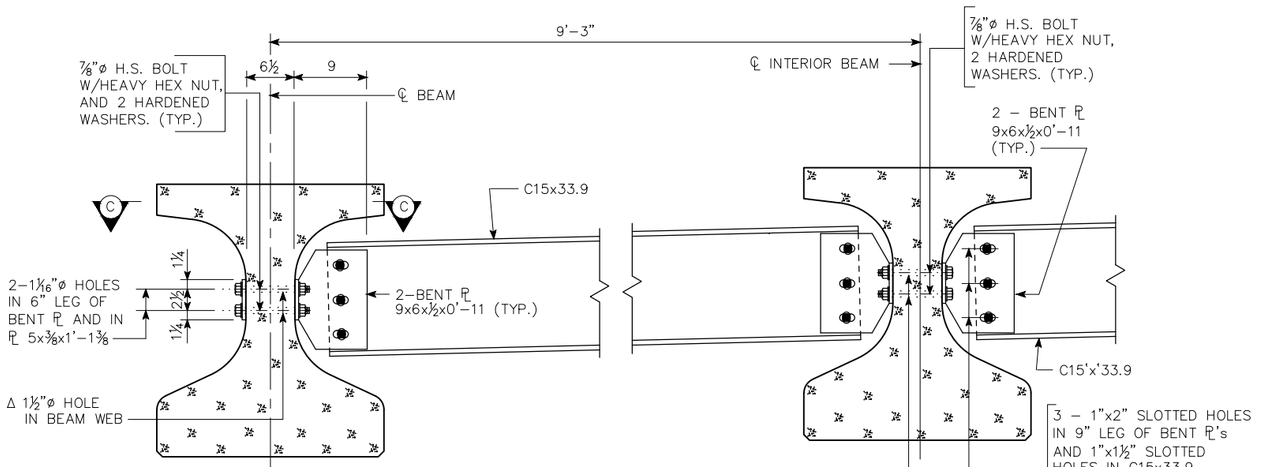
SLOTTED HOLE DETAILS



INTERMEDIATE DIAPHRAGM BOLT HOLE AND BEAM VENT LOCATIONS



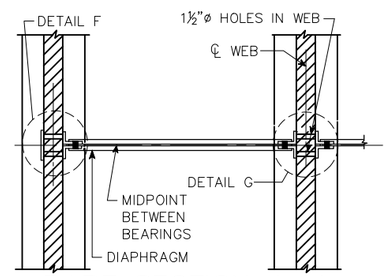
BEAM COIL TIE LOCATIONS



DETAIL F

Δ BOLT HOLES SHALL BE SPACED SO AS TO MISS PRESTRESSED STRANDS IN CONCRETE BEAMS.

DETAIL G



PART SECTION A–A

SECTION SHOWING INTERMEDIATE DIAPHRAGMS AT EXTERIOR BAY

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10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'–0" END SPANS 97'–0" CENTER SPAN

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BARRIER RAIL NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

THE PERMISSIBLE CONSTRUCTION JOINTS ARE TO BE PLACED BETWEEN VERTICAL BARS AT A MINIMUM SPACING OF 20 FEET. CONSTRUCTION JOINT CONTACT SURFACES ARE TO BE COATED WITH AN APPROVED BOND BREAKER.

COST OF THE JOINT SEALER AND BOND BREAKER SHALL BE CONSIDERED INCIDENTAL TO OTHER CONSTRUCTION.

ALL BARRIER RAIL REINFORCING STEEL IS TO BE EPOXY COATED AS SHOWN.

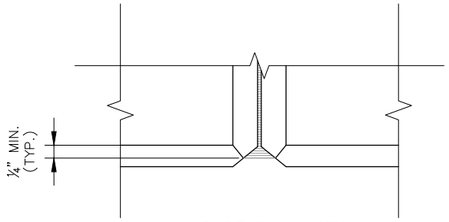
THE CONCRETE BARRIER RAIL IS TO BE BID ON A LINEAL FOOT BASIS. THE NUMBER OF LINEAR FEET OF BARRIER RAIL INSTALLED WILL BE PAID FOR AT THE CONTRACT PRICE PER LINEAL FOOT BASED ON PLAN QUANTITIES. PRICE BID FOR CONCRETE BARRIER RAILING SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIAL, EXCLUDING REINFORCING STEEL, AND ALL OF THE EQUIPMENT AND LABOR REQUIRED TO ERECT THE RAIL IN ACCORDANCE WITH THESE PLANS AND CURRENT SPECIFICATIONS. IF CONDUIT IS REQUIRED IN THIS PLAN THE RIGID STEEL CONDUIT, JUNCTION BOXES AND FITTINGS INCLUDING LABOR AND ANY ADDITIONAL WORK TO DO THE INSTALLATION IS CONSIDERED INCIDENTAL TO THE COST OF THE RAILING.

THE JOINT SEALER SHALL BE LIGHT GRAY NONSAG LATEX CAULKING SEALER MARKETED FOR OUTDOOR USE. NO TESTING OR CERTIFICATION IS REQUIRED.

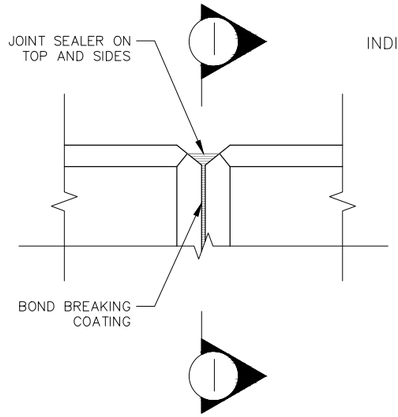
TOP OF THE BARRIER RAIL IS TO BE PARALLEL TO THE THEORETICAL ℄ GRADE.

ALL EXPOSED CORNERS ON THE TOP OF THE BARRIER AND ALL OTHER CORNERS 90° OR SHARPER TO BE FILLETED WITH A ¾" DRESSED AND BEVELED STRIP.

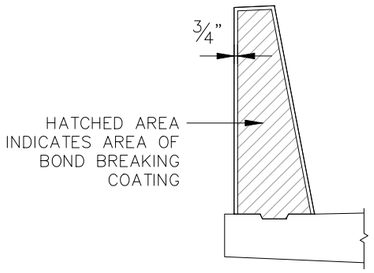
CROSS SECTIONAL AREA OF THE STANDARD AND SPECIAL SECTIONS OF THE BARRIER RAIL = 3.50 SQUARE FEET, EXCEPT THE 2'–10" SLOPED ENDS AT THE END SECTIONS.



PART PLAN VIEW



PART ELEVATION VIEW



SECTION I–I

REINFORCING BAR LIST - TWO BARRIER RAILS

STANDARD SECTION	BAR	LOCATION	SHAPE	NO.	LENGTH ft '- in.	WEIGH
	5 c1	VERTICAL		476	6 '- 8	3310
	5 c2	VERTICAL AT ENDS		4	6 '- 6	27
	5 c3	VERTICAL AT ENDS		4	6 '- 4	26
	5 c4	VERTICAL, LOWER		484	7 '- 3	3660
	5 d1	LONGITUDINAL		126	35 '- 6	4665
	5 d2	LONGITUDINAL AT ENDS		4	10 '- 0	42
	5 d3	LONGITUDINAL AT ENDS		32	10 '- 0	334
					TOTAL EPOXY REINFORCING (LBS.)	12064

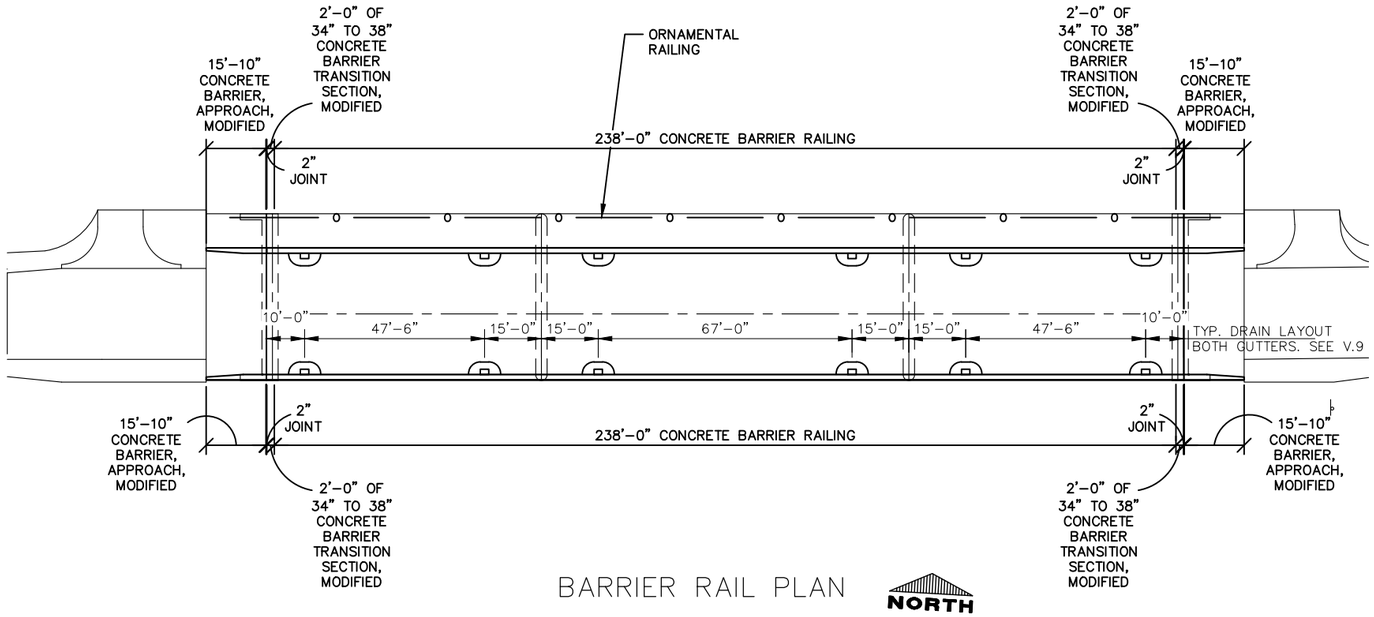
CONCRETE PLACEMENT SUMMARY

SECTION	TOTAL
STANDARD SECTION 238–0" AT 0.130 CY PER FOOT x 2 SIDES	61.9
34" TO 38" CONCRETE BARRIER TRANSITION SECTION, MODIFIED 8–0" AT 0.129 CY PER FOOT	1.0
TOTAL (CY)	62.9

CONCRETE BARRIER RAIL QTYS

ITEM	UNIT	TOTAL
STANDARD CONCRETE BARRIER RAILING	L.F.	476
34" TO 38" CONCRETE BARRIER TRANSITION SECTION, MODIFIED	EACH	4

BARRIER RAIL JOINT DETAILS



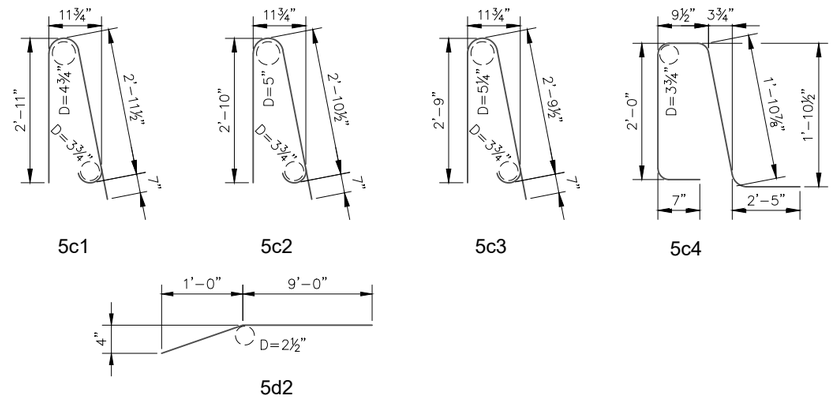
BARRIER RAIL PLAN

NORTH

HORIZONTAL SCALE IN FEET
0 20 40

DRAWING MAY HAVE BEEN REDUCED

BENT BAR DETAILS



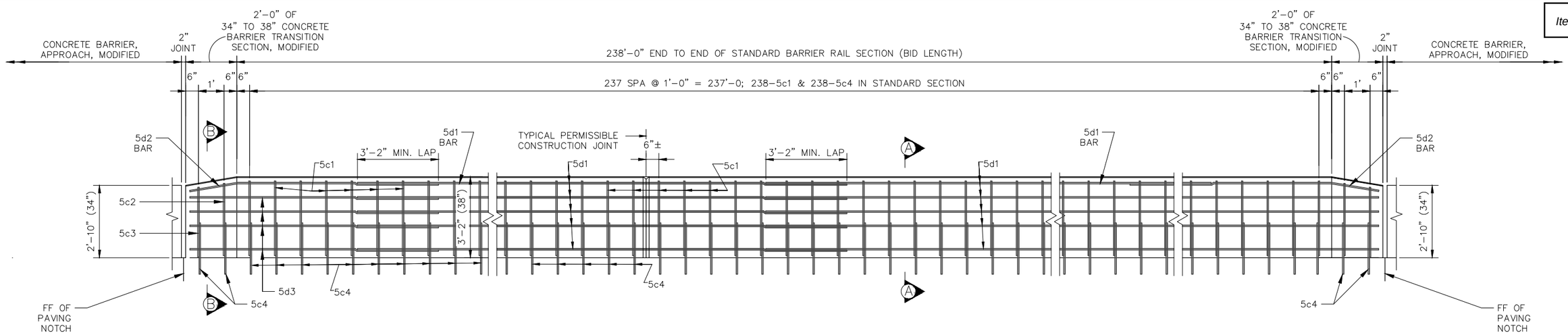
NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER

NOTE: REINFORCING STEEL QUANTITIES ARE INCLUDED ON THE SUMMARY QUANTITIES SHEET.

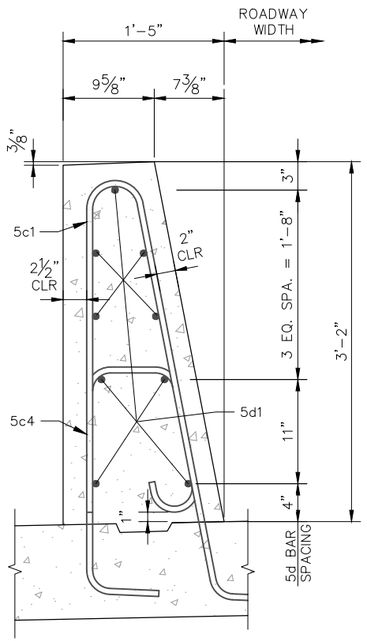
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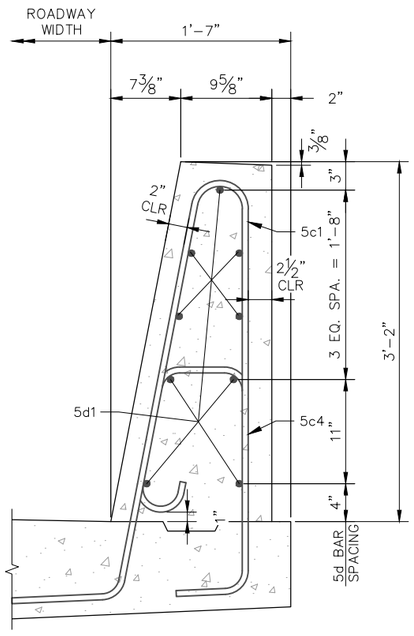
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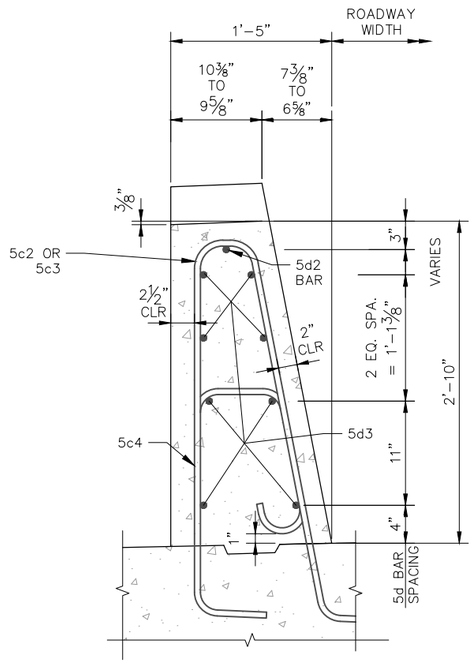
TYPICAL ELEVATION OF BARRIER RAIL



Part Section A-A
(NORTH)



Part Section A-A
(SOUTH)

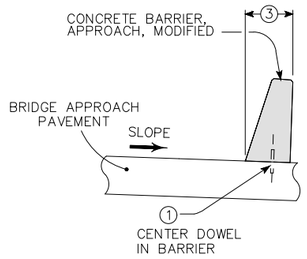


PART SECTION B-B
(NORTH)
(SIM SOUTH)

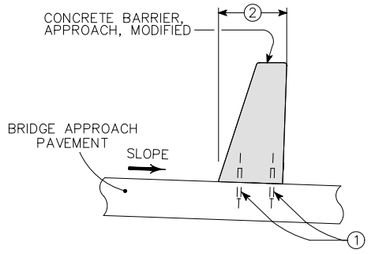
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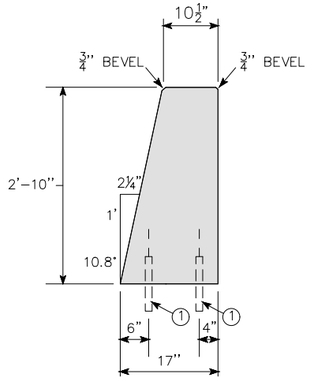
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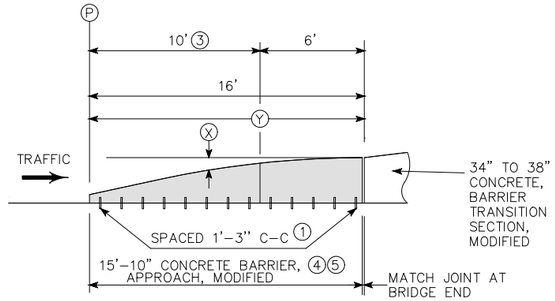
SECTION A-A



SECTION B-B

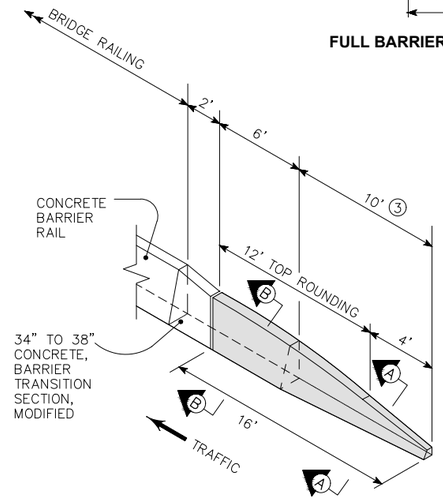


FULL BARRIER RAIL SECTION



ELEVATION

OFFSETS FOR ROUNDED BARRIER TOP																	
Y = DISTANCE FROM Ⓟ	ft.	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0
X = OFFSET TO ROUNDED TOP	ft.	2.13	1.91	1.70	1.48	1.26	1.06	0.87	0.70	0.54	0.42	0.30	0.20	0.12	0.06	0.02	0.00



ISOMETRIC VIEW

① #8 X 8 INCH DEFORMED BARS OR 1 INCH DIAMETER SMOOTH.

② BOTTOM WIDTH OF BARRIER IS MAINTAINED AT 17 INCHES.

③ BOTTOM WIDTH OF BARRIER TRANSITIONS FROM 8 TO 17 INCHES.

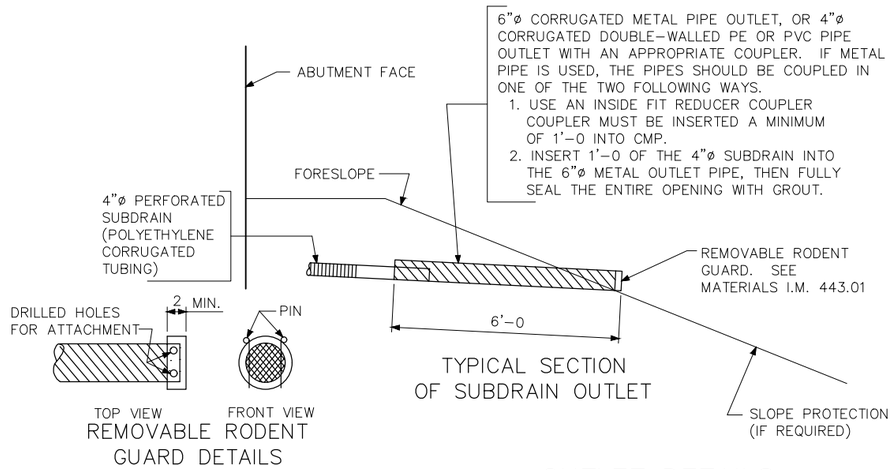
④ PLACE NO DELINEATOR OR OBJECT MARKER IN FRONT OF, OR ON, THE BARRIER.

⑤ APPROXIMATELY 1.3 CUBIC YARDS OF CONCRETE ARE REQUIRED TO CONSTRUCT BARRIER AS SHOWN. AMOUNT MAY VARY DEPENDING ON INDIVIDUAL SITE REQUIREMENTS.

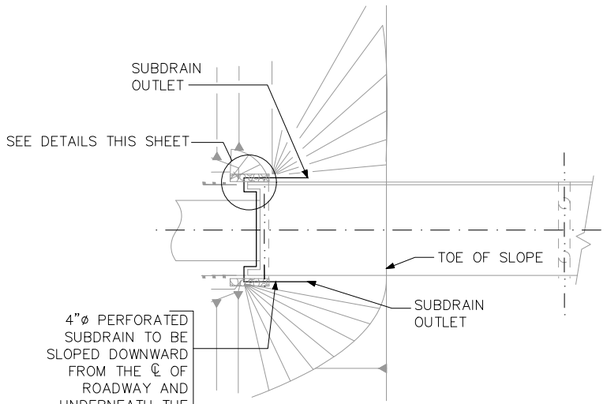
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OUTLET DETAILS



SITUATION PLAN

REFER TO SITUATION PLAN FOR NORTH ARROW.

SUBDRAIN NOTES:

SEE THIS SHEET FOR DETAILS OF PLACING ALL SUBDRAINS AND SUBDRAIN OUTLETS REQUIRED FOR THIS STRUCTURE.

THE BRIDGE CONTRACTOR IS TO INSTALL SUBDRAINS BEHIND THE ABUTMENT. THE SUBDRAINS SHALL BE 4" IN DIAMETER AND BE IN ACCORDANCE WITH ARTICLE 4143.01, B, OF THE STANDARD SPECIFICATIONS. THE SUBDRAIN OUTLET SHALL CONSIST OF A 6'-0 LENGTH OF PIPE WITH A REMOVABLE RODENT GUARD.

THE DIMENSIONS SHOWN FOR THE PROPOSED SUBDRAINS ARE BASED ON THE PROPOSED GRADING LAYOUT OF BRIDGE BERMS. THE DIMENSIONS SHOWN ARE FOR ESTIMATING ONLY. REQUIRED LENGTHS AND GENERAL LOCATIONS OF SUBDRAINS ARE SUBJECT TO CHANGE DUE TO FIELD ADJUSTMENTS OF THE GRADING LAYOUT.

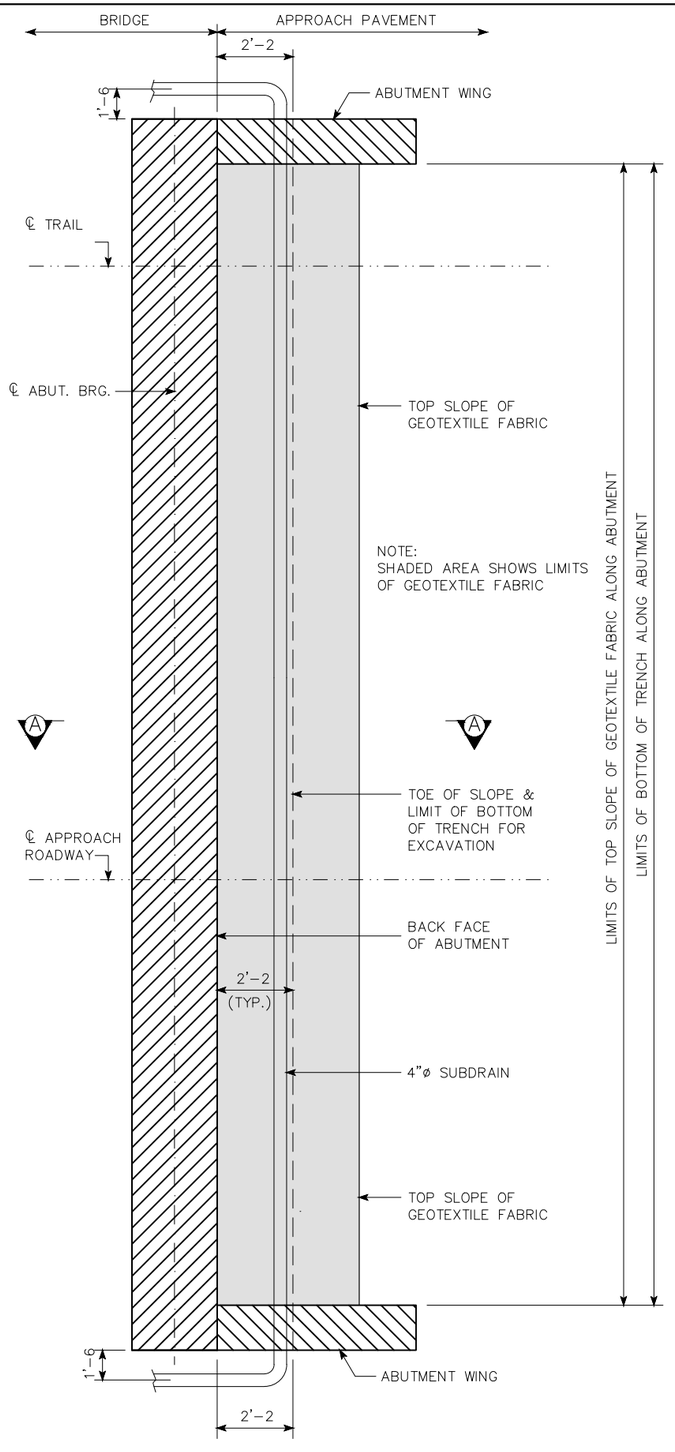
THE COST OF FURNISHING AND PLACING SUBDRAIN (INCLUDING EXCAVATION), GRANULAR BACKFILL, POROUS BACKFILL, AND SUBDRAIN OUTLET IS TO BE INCLUDED IN THE PRICE BID FOR "STRUCTURAL CONCRETE (BRIDGE)". NO EXTRA PAYMENT WILL BE MADE.

NOTE:
SEE ABUTMENT BACKFILL DETAILS SHEET FOR DETAILS NOT SHOWN ON THIS SHEET WHICH ARE PERTINENT TO THIS STRUCTURE.

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ABUTMENT PLAN WITHOUT WING EXTENSIONS

ABUTMENT BACKFILL PROCESS:

THE BASE OF THE EXCAVATION SUBGRADE BEHIND THE ABUTMENT IS TO BE GRADED WITH A 4% SLOPE AWAY FROM THE ABUTMENT FOOTING AND A 2% CROSS SLOPE IN THE DIRECTION OF THE SUBDRAIN OUTLET. THIS EXCAVATION SHAPING IS TO BE DONE PRIOR TO BEGINNING INSTALLATION OF THE GEOTEXTILE AND BACKFILL MATERIAL.

AFTER THE SUBGRADE HAS BEEN SHAPED, THE GEOTEXTILE FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN. THE FABRIC IS INTENDED TO BE INSTALLED IN THE BASE OF THE EXCAVATION AND EXTENDED VERTICALLY UP THE ABUTMENT BACKWALL, ABUTMENT WING WALLS, AND EXCAVATION FACE TO A HEIGHT THAT WILL BE APPROXIMATELY 1 TO 2 FOOT HIGHER THAN THE HEIGHT OF THE POROUS BACKFILL PLACEMENT AS SHOWN IN THE "BACKFILL DETAILS" ON THIS SHEET. THE STRIPS OF THE FABRIC PLACED SHALL OVERLAP APPROXIMATELY 1 FOOT AND SHALL BE PINNED IN PLACE. THE FABRIC SHALL BE ATTACHED TO THE ABUTMENT BY USING LATH FOLDED IN THE FABRIC AND SECURED TO THE CONCRETE WITH SHALLOW CONCRETE NAILS. THE FABRIC PLACED AGAINST THE EXCAVATION FACE SHALL BE PINNED.

WHEN THE FABRIC IS IN PLACE, THE SUBDRAIN SHALL BE INSTALLED DIRECTLY ON THE FABRIC AT THE TOE OF THE REAR EXCAVATION SLOPE. A SLOT WILL NEED TO BE CUT IN THE FABRIC AT THE POINT WHERE THE SUBDRAIN EXITS THE FABRIC NEAR THE END OF THE ABUTMENT WING WALL.

POROUS BACKFILL IS THEN PLACED AND LEVELED, NO COMPACTION IS REQUIRED.

THE REMAINING WORK INVOLVES BACKFILLING WITH FLOODABLE BACKFILL, SURFACE FLOODING, AND VIBRATORY COMPACTION. THE FLOODABLE BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE FLOODABLE BACKFILL SHALL BE PLACED IN INDIVIDUAL LIFTS, SURFACE FLOODED, AND COMPACTED WITH VIBRATORY COMPACTION TO ENSURE FULL CONSOLIDATION. LIMIT THE LOOSE LIFTS TO NO MORE THAN 2 FEET OF THICKNESS.

START SURFACE FLOODING FOR EACH FLOODABLE BACKFILL LIFT AT THE HIGH POINT OF THE SUBDRAIN AND PROGRESS TO THE LOW POINT WHERE THE SUBDRAIN EXITS THE FABRIC. TO ENSURE UNIFORM SURFACE FLOODING, WATER RUNNING FULL IN A 2-INCH DIAMETER HOSE SHOULD BE SPRAYED IN SUCCESSIVE 6-FOOT TO 8-FOOT INCREMENTS FOR 5 MINUTES WITHIN EACH INCREMENT.

FLOODABLE BACKFILL LIFT PLACEMENT, FLOODING, AND COMPACTION SHALL PROGRESS UNTIL THE REQUIRED FULL THICKNESS OF THE ABUTMENT BACKFILL HAS BEEN COMPLETED.

WATER REQUIRED FOR FLOODING, SUBDRAINS, POROUS BACKFILL, FLOODABLE BACKFILL, AND GEOTEXTILE FABRIC FURNISHED AT THE BRIDGE ABUTMENTS WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

THE COST OF WATER REQUIRED FOR FLOODING, SUBDRAINS, POROUS BACKFILL, FLOODABLE BACKFILL, AND GEOTEXTILE FABRIC FURNISHED AT THE BRIDGE ABUTMENTS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR STRUCTURAL CONCRETE.

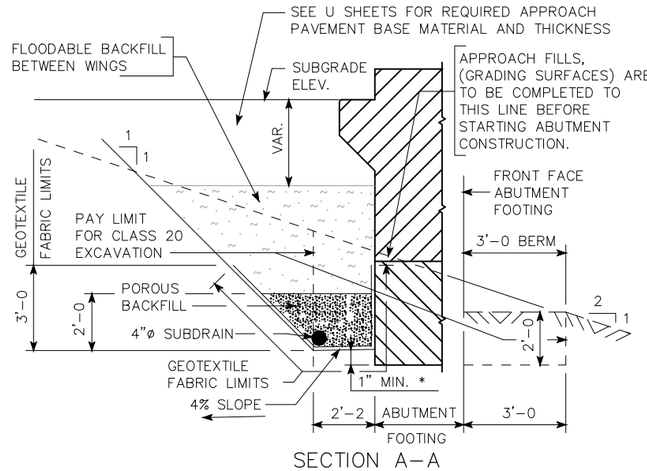
NOTE:
SEE SUBDRAIN DETAILS SHEET FOR DETAILS NOT SHOWN ON THIS SHEET WHICH ARE PERTINENT TO THIS STRUCTURE.

NOTE:

SUBDRAIN SHALL SLOPE DOWNWARD 2% FROM ℄ APPROACH ROADWAY WHEN OUTLETTING BOTH SIDES OF THE ABUTMENT.

SUBDRAIN SHALL SLOPE DOWNWARD 2% FROM HIGH END WHEN OUTLETTING AT ONE END OF THE ABUTMENT.

THE GEOTEXTILE FABRIC SHALL BE IN ACCORDANCE WITH ARTICLE 4196.01, B, 6 OF THE STANDARD SPECIFICATIONS. IF THE ENGINEERING FABRIC IS LAPPED THE LAPS SHALL BE A MINIMUM OF ONE FOOT IN LENGTH, SHINGLE FASHION WITH UP SLOPE LAP PIECE ON TOP AND STAPLED FOR CONTINUITY.



SECTION A-A

BACKFILL DETAILS

NOTE: GEOTEXTILE FABRIC WILL BE ATTACHED TO FACE OF ABUTMENT FOOTING AND WINGS.

*DIMENSION VARIES DUE TO 2% SUBDRAIN SLOPE.

Design For
239' x 32' 0" SKEW PPCB BRIDGE
10TH ST SW OVER OTTER CREEK
Station: 10+14.50

71'-0" END SPANS 97'-0" CENTER SPAN

P:\23\036\DRAWINGS\CIVIL\23036 ZZ V SHEETS_4.DWG 12/12/2024 3:59:20 PM JOE RETTENBERGER

August 26, 2025

City of Oelwein
20 2nd Ave SW
Oelwein, IA 50662

Re: City of Oelwein
10th St. Bridge Replacement
Bid Results
Project No.: 23036

Dear Oelwein City Council Members:

In accordance with owner instructions, bids for the 10th St Bridge Replacement project were received by the Iowa Department of Transportation via the BidExpress platform on August 19, 2025. Ten (10) bids were received for this project. The bid results that Origin Design obtained from the BidExpress platform were as follows:

The low bid was submitted by Taylor Construction. Inc. of New Vienna, Iowa, in the amount of $1,416,351.70.

Taylor Construction, Inc. has the experience, workforce and equipment to properly complete this contract.

The engineer's estimate for this project was $1,717,454.10. The low bid of $1,416,351.70 is $301,102.40 or 18% below the engineer's estimate.

Sincerely,
Origin Design Co.

Courtney Wand, PE, SE
Structural Engineer

RESOLUTION NO. _____-2025

RESOLUTION APPROVING A LEASE WITH ALLTEL CORPORATION D/B/A VERIZON WIRELESS FOR LAND AT PARCEL NUMBER 1821376002, LOTS 1 TO 5 BLK 5 BENNETT'S ADD & PC 215' X 450' ADJ ON N LOTS 1 TO 5 BLK 1 MILES ADD, FOR CONSTRUCTION OF A CELL PHONE TOWER

WHEREAS, Alltel Corporation d/b/a Verizon Wireless wants to construct a monopole cell phone tower; and

WHEREAS, this tower will be built on city property; and

WHEREAS, the city will receive an upfront payment of $60,000 and after five years will collect $10,560.00 annually; and

WHEREAS, the initial term of this agreement is five (5) years with an option to extend the agreement to 25 years; and

WHEREAS, the location of the leased land is west of Oakdale Cemetery on 4th St SW;

NOW, THEREFORE, BE IT RESOLVED by the city council of Oelwein, Iowa approves a lease with Alltel Corporation d/b/a Verizon Wireless for land at parcel number 1821376002, LOTS 1 TO 5 BLK 5 BENNETT'S ADD & PC 215' X 450' ADJ ON N LOTS 1 TO 5 BLK 1 MILES ADD, for construction of a cell phone tower

Passed and approved by the City Council of the City of Oelwein, Iowa this 8th day of September, 2025.

_____
Brett DeVore, Mayor

Attest:

_____
Dylan Mulfinger, City Administrator

Recorded September 9, 2025

It was moved by _____ and seconded by _____ that the Resolution as read be adopted, and upon roll call there were:

	AYES	NAYS	ABSENT	ABSTAIN
Ricchio				
Weber				
Lenz				
Cantrell				
Seeders				
Payne				

LAND LEASE AGREEMENT

This Land Lease Agreement (the "Agreement") is made by and between the City of Oelwein, Iowa with a principal address of 20 2nd Ave SW, Oelwein, IA 50662 ("LESSOR"), and Alltel Corporation, a Delaware corporation d/b/a Verizon Wireless with its principal offices at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920 ("LESSEE"). LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party."

WITNESSETH

In consideration of the mutual covenants contained herein and intending to be legally bound hereby, the Parties hereto agree as follows:

1. GRANT. LESSOR hereby grants to LESSEE the right to install, maintain, replace, add and operate communications equipment ("Use") upon a portion of that real property owned, leased or controlled by LESSOR located at 230 4th Street SW, Oelwein, Fayette County, Iowa 50662 (the "Property"). The Property is legally described on Exhibit "A" attached hereto and made a part hereof. The "Premises" is made up of two portions of the Property containing approximately 5,625 square feet and is shown in detail on Exhibit "B" attached hereto and made a part hereof.

2. INITIAL TERM. This Agreement shall be effective as of the date of execution by both Parties ("Effective Date"). The initial term of the Agreement shall be for five (5) years beginning on the first day of the month immediately following the date upon which LESSEE begins installation of its equipment on the Premises, or the first day of the second month following the Effective Date, whichever first occurs, (the "Commencement Date") and will be acknowledged by the Parties in writing, including electronic mail.

3. EXTENSIONS. The initial term of this Agreement shall automatically be extended for four (4) additional five (5) year terms unless LESSEE gives LESSOR written notice of its intent to terminate at least three (3) months prior to the end of the then-current term. The initial term and any extension terms shall be collectively referred to herein as the "Term".

4. RENTAL.

a. This Agreement shall be effective as of the date of execution by both Parties, provided, however, the initial term shall be for five (5) years and shall commence on the Commencement Date at which time rental payments shall commence and the rent for the first five (5) years of this Agreement shall be due in a one-time lump sum payment of Sixty Thousand and 00/100 Dollars ($60,000.00). Commencing on the fifth (5th) anniversary of the Commencement Date (the beginning of the first five year extension term), rent shall be due at a total annual rental of Ten Thousand Five Hundred Sixty and 00/100 Dollars ($10,560.00), to be paid in equal monthly installments on the first day of the month, in advance, to LESSOR at City Hall 20 2nd Avenue SW, Oelwein, Iowa 50662 or to such other person, firm, or place as LESSOR may, from time to time, designate in writing at least 30 days in advance of any rental payment due date by notice given in accordance with Paragraph 19 below. The initial rental payment shall be delivered by LESSEE no later than 90 days after the Commencement Date. Upon agreement of the Parties, LESSEE may pay rent by electronic funds transfer and in such event, LESSOR agrees to provide LESSEE with bank routing information for such purpose upon request of LESSEE.

b. For any party to whom rental payments are to be made, LESSOR or any successor in interest of LESSOR hereby agrees to provide to LESSEE: (i) a completed, current version of Internal Revenue Service Form W-9, or equivalent; (ii) complete and fully executed state and local withholding forms if required; (iii) LESSEE's payment direction form; and (iv) other documentation to verify LESSOR's or such other party's right to receive rental as is reasonably requested by LESSEE. Rental shall accrue in accordance with this Agreement, but LESSEE shall have no obligation to deliver rental payments until the requested documentation has been received by LESSEE. Upon receipt of the requested documentation, LESSEE shall deliver the accrued rental payments as directed by LESSOR.

c. The annual rental for the final three (3) additional five (5) year extension terms shall be increased by an amount equal to ten percent (10%) of the annual rent due during the immediately preceding five (5) year term.

5. ACCESS/UTILITIES. LESSEE shall have the non-exclusive right of ingress and egress to and from the Premises, 7 days a week, 24 hours a day, over that portion of Property described within Exhibit "B" as the "Proposed Access Easement" ("Easement")for the purpose of installation, operation and maintenance of LESSEE's communications equipment. LESSEE may use the Easement for the installation, operation and maintenance of wires, cables, conduits and pipes for all necessary electrical, telephone, fiber and other similar support services (collectively, the "Support Services") as deemed necessary or appropriate by LESSEE for the operation of its communications equipment. In the event it is necessary, LESSOR agrees to grant LESSEE or the service provider the right to install additional, or to upgrade the existing, Support Services, on, through, over and/or under the Property, provided the location of such additional or upgraded Support Services shall be reasonably approved by LESSOR. In the event of any power interruption at the Premises, LESSEE shall be permitted to install, maintain and/or provided access to and use of a temporary power source to be located on the Property, including related equipment and appurtenances, such as conduits connecting the temporary power source to the Premises.

6. CONDITION OF PROPERTY. LESSOR shall deliver the Premises to LESSEE clean and free of debris. LESSOR represents and warrants to LESSEE that as of the Effective Date, the Property is (a) in compliance with all Laws; and (b) in compliance with all EH&S Laws (as defined in Paragraph 24). LESSEE acknowledges that it has inspected Property and Premises in advance of the execution hereof and determined that both were in a condition ready for LESSEE's use, subject to LESSOR's removal of existing construction materials.

7. IMPROVEMENTS. The communications equipment including, without limitation, the tower structure, antennas, conduits, fencing and other screening, and other improvements shall be at LESSEE's expense and installation shall be at the discretion and option of LESSEE. LESSEE shall have the right to replace, repair, add to or otherwise modify its communications equipment, tower structure, antennas, conduits, fencing and other screening, or other improvements or any portion thereof and the frequencies over which the communications equipment operates, at no additional cost to LESSEE, whether or not any of the communications equipment, antennas, conduits or other improvements are listed on any exhibit. LESSEE shall only be required to obtain LESSOR consent for modifications that increase LESSEE's Premises. LESSOR shall respond in writing to any LESSEE consent request within 30 days of receipt or LESSOR's consent shall be deemed granted, provided, any modifications to the overall size or footprint of the Premises shall be memorialized by the Parties in writing. LESSOR is not entitled to a rent increase associated with any LESSEE modification unless the modification includes an increase in the overall size or footprint of the Premises, in which case, any rent increase shall be proportionate to the additional ground space included in the Premises.

8. GOVERNMENT APPROVALS. LESSEE's Use is contingent upon LESSEE obtaining all of the certificates, permits and other approvals (collectively the "Government Approvals") that may be required by any Federal, State or Local authorities (collectively, the "Government Entities") as well as a satisfactory soil boring test, environmental studies, or any other due diligence LESSEE chooses that will permit LESSEE's Use. LESSOR shall cooperate with LESSEE in its effort to obtain and maintain any Government Approvals. Notwithstanding anything contained herein to the contrary, LESSOR hereby agrees to allow LESSEE to install any RF frequency signage and/or barricades on the Premises as are necessary to ensure LESSEE's compliance with Laws (as defined below).

9. TERMINATION. LESSEE may, unless otherwise stated, terminate this Agreement upon sixty (60) day written notice to LESSOR: (a) if any applications for such Government Approvals should be finally rejected; (b) if any Government Approval issued to LESSEE is canceled, expires, lapses or is otherwise withdrawn or terminated by any Government Entity; (c) if LESSEE determines that such Government Approvals may not be obtained in a timely manner; (d) if LESSEE determines any structural analysis is unsatisfactory; (e) if LESSEE, in its sole discretion, determines the Use of the Premises is obsolete or unnecessary; (f) with 3 months prior notice to LESSOR, upon the annual anniversary of the Commencement Date; or (g) at any time before the Commencement Date for any reason or no reason in LESSEE's sole discretion.

10. INDEMNIFICATION. Subject to Paragraph 11, each Party and/or any successor and/or assignees thereof, shall indemnify and hold harmless the other Party, and/or any successors and/or assignees thereof, against (i) all claims of liability or loss from bodily injury or property damage resulting from or arising out of the negligence or willful misconduct of the indemnifying Party, its employees, contractors or agents, except to the extent such claims or damages may be due to or caused by the negligence or willful misconduct of the other Party, or its employees, contractors or agents, and (ii) reasonable attorney's fees, expense, and defense costs incurred by the indemnified Party. The indemnified Party will provide the indemnifying Party with prompt, written notice of any claim that is subject to the indemnification obligations in this paragraph. The indemnified Party will cooperate appropriately with the indemnifying Party in connection with the indemnifying Party's defense of such claim. The indemnifying Party shall defend any indemnified Party, at the indemnified Party's request, against any claim with counsel reasonably satisfactory to the indemnified Party. The indemnifying Party shall not settle or compromise any such claim or consent to the entry of any judgment without the prior written consent of each indemnified Party and without an unconditional release of all claims by each claimant or plaintiff in favor of each indemnified Party. All indemnification obligations shall survive the termination or expiration of this Agreement.

11. INSURANCE. The Parties agree to maintain during the term of this Agreement the following insurance policies:

a. Commercial general liability in the amount of $2,000,000.00 per occurrence for bodily injury and property damage and $4,000,000.00 in the annual aggregate. Each party shall be included as an additional insured as their interest may appear under this Agreement on the other party's insurance policy.

b. "All-Risk" property insurance on a replacement cost basis insuring their respective property with no coinsurance requirement. Where legally permissible, each party agrees to waive subrogation against the other party and to ensure said waiver is recognized by the insurance policies insuring the property.

12. LIMITATION OF LIABILITY. Except for indemnification pursuant to Paragraphs 10 and 23, a violation of Paragraph 26, or a violation of law, neither Party shall be liable to the other, or any of their respective agents, representatives, or employees for any lost revenue, lost profits, diminution in value of business, loss of technology, rights or services, loss of data, or interruption or loss of use of service, incidental, punitive, indirect, special, trebled, enhanced or consequential damages, even if advised of the possibility of such damages, whether such damages are claimed for breach of contract, tort (including negligence), strict liability or otherwise, unless applicable law forbids a waiver of such damages.

13. INTERFERENCE.

a. LESSEE agrees that LESSEE will not cause interference that is measurable in accordance with industry standards to LESSOR's equipment. LESSOR agrees that LESSOR and other occupants of the Property will not cause interference that is measurable in accordance with industry standards to the then existing communications equipment of LESSEE.

b. Without limiting any other rights or remedies, if interference occurs and continues for a period in excess of 48 hours following notice to the interfering party via telephone to LESSEE'S Network Management Center (at (800) 264-6620) or to LESSOR (at (319) 238-0039 the interfering party shall or shall require any other user to reduce power or cease operations of the interfering equipment until the interference is cured.

c. The Parties acknowledge that there will not be an adequate remedy at law for noncompliance with the provisions of this Paragraph and therefore the Parties shall have the right to equitable remedies such as, without limitation, injunctive relief, and specific performance.

14. REMOVAL AT END OF TERM. Within 90 days of the expiration or earlier termination of the Agreement, LESSEE shall remove LESSEE's Communications Equipment (except footings and foundations) and restore the Premises to its original condition, reasonable wear and tear and casualty damage excepted. LESSOR agrees and acknowledges that the communications equipment shall remain the personal property of LESSEE and LESSEE shall have the right to remove the same at any time during the Term, whether or not said items are considered fixtures and attachments to real property under applicable laws.

15. RIGHT OF FIRST REFUSAL. If, at any time after the Effective Date, LESSOR receives an offer or letter of intent from any person or entity that is in the business of owning, managing or operating communications facilities or is in the business of acquiring landlord interests in agreements relating to communications facilities, to purchase fee title, an easement, a lease, a license, or any other interest in the Property or any portion thereof or to acquire any interest in this Agreement, or an option for any of the foregoing, LESSOR shall provide written notice to LESSEE of said offer ("LESSOR's Notice"). LESSOR's Notice shall include the prospective buyer's name, the purchase price being offered, any other consideration being offered, the other terms and conditions of the offer, a description of the portion of and interest in the Property and/or this Agreement which will be conveyed in the proposed transaction, and a copy of any letters of intent or form agreements presented to LESSOR by the third-party offeror. LESSEE shall have the right of first refusal to meet any bona fide offer of sale or transfer on the terms and conditions of such offer or by effectuating a transaction with substantially equivalent financial terms. If LESSEE fails to provide written notice to LESSOR that LESSEE intends to meet such bona fide offer within 60 days after receipt of LESSOR's Notice, LESSOR may proceed with the proposed transaction in accordance with the terms and conditions of such third-party offer, in which event this Agreement shall

continue in full force and effect and the right of first refusal described in this Paragraph shall survive any such conveyance to a third party. If LESSEE provides LESSOR with notice of LESSEE's intention to meet the third party offer within 60 days after receipt of LESSOR's Notice, then if LESSOR's Notice describes a transaction involving greater space than the Premises, LESSEE may elect to proceed with a transaction covering only the Premises and the purchase price shall be prorated on a square footage basis. Further, LESSOR acknowledges and agrees that if LESSEE exercises this right of first refusal, LESSEE may require a reasonable period of time to conduct due diligence and effectuate the closing of a transaction on substantially equivalent financial terms of the third-party offer. LESSEE may elect to amend this Agreement to effectuate the proposed financial terms of the third party offer rather than acquiring fee simple title or an easement interest in the Premises. For purposes of this Paragraph, any transfer, bequest or devise of LESSOR's interest in the Property as a result of the death of LESSOR, whether by will or intestate succession, or any conveyance to LESSOR's family members by direct conveyance or by conveyance to a trust for the benefit of family members shall not be considered a sale for which LESSEE has any right of first refusal.

16. RIGHTS UPON SALE. Should LESSOR, at any time during the Term, decide (a) to sell or otherwise transfer all or any part of the Property, or (b) to grant to a third party by easement or other legal instrument an interest in and to any portion of the Premises, such sale, transfer, or grant of an easement or interest therein shall be under and subject to this Agreement and any such purchaser or transferee shall recognize LESSEE's rights hereunder. In the event that LESSOR completes any such sale, transfer, or grant described in this Paragraph without executing an assignment of the Agreement whereby the third party agrees in writing to assume all obligations of LESSOR under this Agreement, then LESSOR shall not be released from its obligations to LESSEE under this Agreement, and LESSEE shall have the right to look to LESSOR and the third party for the full performance of the Agreement.

17. LESSOR'S TITLE. LESSOR covenants that LESSEE, on paying the rent and performing the covenants herein, shall peaceably and quietly have, hold and enjoy the Premises. LESSOR represents and warrants to LESSEE as of the Effective Date and covenants during the Term that LESSOR has full authority to enter into and execute this Agreement and that there are no liens, judgments, covenants, easements, restrictions or other impediments of title that will adversely affect LESSEE's Use.

18. ASSIGNMENT. Without any approval or consent of the other Party, this Agreement may be sold, assigned or transferred by either Party to (a) any entity in which the Party directly or indirectly holds an equity or similar interest; (b) any entity which directly or indirectly holds an equity or similar interest in the Party; or (c) any entity directly or indirectly under common control with the Party. In addition, LESSEE may, without approval or consent of LESSOR, assign this Agreement to (i) any entity which acquires all or substantially all of LESSEE's assets in the market defined by the FCC in which the Property is located by reason of a merger, acquisition or other business reorganization or (ii) any person or entity that is in the business of owning, managing or operating communications facilities. As to other parties, this Agreement may not be sold, assigned or transferred without the written consent of the other Party, which such consent will not be unreasonably withheld, delayed or conditioned. No change of stock ownership, partnership interest or control of LESSEE or transfer upon partnership or corporate dissolution of either Party shall constitute an assignment hereunder. LESSEE may sublet the Premises in LESSEE's sole discretion.

19. NOTICE. Except for notices permitted via telephone in accordance with Paragraph 13, or via electronic mail in accordance with Paragraph 2, all notices hereunder must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested or by commercial courier, provided

the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice).

LESSOR: The City of Oelwein
City Hall 20 2nd Ave. SW,
Oelwein, Iowa 50662
Attention: Dylan Mulfinger

LESSEE: Alltel Corporation
d/b/a Verizon Wireless
180 Washington Valley Road
Bedminster, New Jersey 07921
Attention: Network Real Estate

Notice shall be effective upon actual receipt or refusal as shown on the receipt obtained pursuant to the foregoing.

20. SUBORDINATION AND NON-DISTURBANCE. Within 15 days of the Effective Date, LESSOR shall obtain a Non-Disturbance Agreement (as defined below) and any required consent from existing mortgagee(s), ground lessors and master lessors, if any, of the Property. At LESSOR's option, this Agreement shall be subordinate to any future master lease, ground lease, mortgage, deed of trust or other security interest (a "Mortgage") by LESSOR which from time to time may encumber all or part of the Property; provided, however, as a condition precedent to LESSEE being required to subordinate its interest in this Agreement to any future Mortgage covering the Property, LESSOR shall obtain for LESSEE's benefit a non-disturbance and attornment agreement for LESSEE's benefit in the form reasonably satisfactory to LESSEE, and containing the terms described below (the "Non-Disturbance Agreement"), and shall recognize LESSEE's rights under this Agreement. The Non-Disturbance Agreement shall include the encumbering party's ("Lender's") agreement that, if Lender or its successor-in-interest or any purchaser of Lender's or its successor's interest (a "Purchaser") acquires an ownership interest in the Property, Lender or such successor-in-interest or Purchaser will honor all of the terms of the Agreement. Such Non-Disturbance Agreement must be binding on all of Lender's participants in the subject loan (if any) and on all successors and assigns of Lender and/or its participants and on all Purchasers. In return for such Non-Disturbance Agreement, LESSEE will execute an agreement for Lender's benefit in which LESSEE (a) confirms that the Agreement is subordinate to the Mortgage or other real property interest in favor of Lender, (b) agrees to attorn to Lender if Lender becomes the owner of the Property, and (c) agrees to accept a cure by Lender of any of LESSOR's defaults, provided such cure is completed within the deadline applicable to LESSOR. In the event LESSOR defaults in the payment and/or other performance of any mortgage or other real property interest encumbering the Property, LESSEE, may, at its sole option and without obligation, cure or correct LESSOR's default and upon doing so, LESSEE shall be subrogated to any and all rights, titles, liens and equities of the holders of such mortgage or other real property interest and LESSEE shall be entitled to deduct and setoff against all rents that may otherwise become due under this Agreement the sums paid by LESSEE to cure or correct such defaults.

21. DEFAULT. It is a "Default" if (a) either Party fails to comply with this Agreement and does not remedy the failure within 30 days after written notice by the other Party or, if the failure cannot reasonably be remedied in such time, if the failing Party does not commence a remedy within the allotted

30 days and diligently pursue the cure to completion within 90 days after the initial written notice, or (b) LESSOR fails to comply with this Agreement and the failure interferes with LESSEE's Use and LESSOR does not remedy the failure within 5 days after written notice from LESSEE or, if the failure cannot reasonably be remedied in such time, if LESSOR does not commence a remedy within the allotted 5 days and diligently pursue the cure to completion within 15 days after the initial written notice. The cure periods set forth in this Paragraph 21 do not extend the period of time in which either Party has to cure interference pursuant to Paragraph 13 of this Agreement.

22. REMEDIES. In the event of a Default, without limiting the non-defaulting Party in the exercise of any right or remedy which the non-defaulting Party may have by reason of such default, the non-defaulting Party may terminate this Agreement and/or pursue any remedy now or hereafter available to the non-defaulting Party under the Laws or judicial decisions of the state in which the Property is located. Further, upon a Default, the non-defaulting Party may at its option (but without obligation to do so), perform the defaulting Party's duty or obligation. The costs and expenses of any such performance by the non-defaulting Party shall be due and payable by the defaulting Party upon receipt of an itemized invoice. If LESSEE undertakes any such performance on LESSOR's behalf and LESSOR does not pay LESSEE the full undisputed amount within 30 days of its receipt of an itemized invoice setting forth the amount due, LESSEE may offset the full undisputed amount due against all fees due and owing to LESSOR under this Agreement until the full undisputed amount is fully reimbursed to LESSEE.

23. ENVIRONMENTAL. LESSEE shall conduct its business in compliance with all applicable laws governing the protection of the environment or employee health and safety ("EH&S Laws"). LESSEE shall indemnify and hold harmless the LESSOR from claims to the extent resulting from LESSEE's violation of any applicable EH&S Laws or to the extent that LESSEE causes a release of any regulated substance to the environment. LESSOR shall indemnify and hold harmless LESSEE from all claims resulting from the violation of any applicable EH&S Laws or a release of any regulated substance to the environment except to the extent resulting from the activities of LESSEE. The Parties recognize that LESSEE is only leasing a small portion of the Property and that LESSEE shall not be responsible for any environmental condition or issue except to the extent resulting from LESSEE's specific activities and responsibilities. In the event that LESSEE encounters any hazardous substances that do not result from its activities, LESSEE may relocate its facilities to avoid such hazardous substances to a mutually agreeable location or, if LESSEE desires to remove at its own cost all or some the hazardous substances or materials (such as soil) containing those hazardous substances, LESSOR agrees to sign any necessary waste manifest associated with the removal, transportation and/or disposal of such substances.

24. CASUALTY. If a fire or other casualty damages the Property or the Premises and impairs LESSEE's Use, rent shall abate until LESSEE'S Use is restored. If LESSEE's Use is not restored within 45 days, LESSEE may terminate this Agreement.

25. CONDEMNATION. If a condemnation of any portion of the Property or Premises impairs LESSEE's Use, LESSEE may terminate this Agreement. LESSEE may on its own behalf make a claim in any condemnation proceeding involving the Premises for losses related to LESSEE's communications equipment, relocation costs and, specifically excluding loss of LESSEE's leasehold interest, any other damages LESSEE may incur as a result of any such condemnation.

26. APPLICABLE LAWS. During the Term, LESSOR shall maintain the Property in compliance with all applicable laws, EH&S Laws, rules, regulations, ordinances, directives, covenants, easements, consent decrees, zoning and land use regulations, and restrictions of record, permits, building codes, and

the requirements of any applicable fire insurance underwriter or rating bureau, now in effect or which may hereafter come into effect (including, without limitation, the Americans with Disabilities Act and laws regulating hazardous substances) (collectively "Laws"). LESSEE shall, in respect to the condition of the Premises and at LESSEE's sole cost and expense, comply with (a) all Laws relating solely to LESSEE's specific and unique nature of use of the Premises and (b) all building codes requiring modifications to the Premises due to the improvements being made by LESSEE in the Premises. It shall be LESSOR's obligation to comply with all Laws relating to the Property, without regard to specific use (including, without limitation, modifications required to enable LESSEE to obtain all necessary building permits).

27. TAXES. If LESSOR is required by law to collect any federal, state, or local tax, fee, or other governmental imposition (each, a "Tax") from LESSEE with respect to the transactions contemplated by this Agreement, then LESSOR shall bill such Tax to LESSEE in the manner and for the amount required by law, LESSEE shall promptly pay such billed amount of Tax to LESSOR, and LESSOR shall remit such Tax to the appropriate tax authorities as required by law; provided, however, that LESSOR shall not bill to or otherwise attempt to collect from, LESSEE any Tax with respect to which LESSEE has provided LESSOR with an exemption certificate or other reasonable basis for relieving LESSOR of its responsibility to collect such tax from LESSEE. Except as provided in this Paragraph 27, LESSOR shall bear the costs of all Taxes that are assessed against or are otherwise the legal responsibility of LESSOR with respect to itself, its property, and the transactions contemplated by this Agreement. LESSEE shall be responsible for all Taxes that are assessed against or are otherwise the legal responsibility of LESSEE with respect to itself, its property, and the transactions contemplated by this Agreement.

28. DISCLOSURE. LESSEE acknowledges that LESSOR is an Iowa Municipality and its' records are considered public records under the Iowa Code, and, therefore, this agreement and any information exchanged between the Parties hereto is not confidential and upon request of any person for a copy of this agreement or communications between the Parties, the LESSOR has a legal obligation to appropriately respond. LESSOR agrees, in the event of a legal request for a copy of this Agreement and/or any information related hereto, to inform LESSEE of said request by email and/or regular mail and to share with LESSEE the information provided in response to said request within fourteen (14) days of responding to said request. To the extent that there are any documents or information deemed confidential under the law and not required to be provided to any person or entity requesting same, the LESSOR will not provide said documents. The determination of confidentiality of any document or communication shall be made in the sole discretion of LESSOR.

29. MISCELLANEOUS. This Agreement contains all agreements, promises and understandings between the LESSOR and the LESSEE regarding this transaction, and no oral agreement, promises or understandings shall be binding upon either the LESSOR or the LESSEE in any dispute, controversy or proceeding. This Agreement may not be amended or varied except in a writing signed by all Parties. This Agreement shall extend to and bind the heirs, personal representatives, successors and assigns hereto. The failure of either party to insist upon strict performance of any of the terms or conditions of this Agreement or to exercise any of its rights hereunder shall not waive such rights and such party shall have the right to enforce such rights at any time. The performance of this Agreement shall be governed, interpreted, construed, litigated, and regulated by the laws of the state in which the Premises is located without reference to its choice of law rules. Except as expressly set forth in this Agreement, nothing in this Agreement shall grant, suggest, or imply any authority for one Party to use the name, trademarks, service marks or trade names of the other for any purpose whatsoever. LESSOR agrees to execute a Memorandum of this Agreement, which LESSEE may record with the appropriate recording officer. The provisions of the Agreement relating to indemnification from one Party to the other Party shall survive

any termination or expiration of this Agreement. This Agreement may be executed in counterparts, including written and electronic forms. All executed counterparts shall constitute one Agreement, and each counterpart shall be deemed an original.

[Signatures appear on the following page.]

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respective seals the day and year first above written.

LESSOR:

The City of Oelwein, Iowa

By: _____

Name: _____

Its: _____

Date: _____

LESSEE:

Alltel Corporation d/b/a Verizon Wireless

By: _____

Name: _____

Its: _____

Date: _____

EXHIBIT "A"

PROPERTY DESCRIPTION

Lots 1 to 5 Blk 5 Bennett's ADD & PC 215'X450" Adj on N Lots 1 to 5 Blk 1 Miles ADD (Oakdale Cemetery)*

EXHIBIT "B"

DEPICTION OF THE PREMISES

(see description below and survey attached hereto)

PROPOSED LEASE AREA DESCRIPTION:
That part of Lot 5, Block Five, B.H. BENNETT'S ADDITION and Lot 1, Block 1, MILES ADDITION, according to the recorded plats thereof, Fayette County, Iowa, described as follows:

> Commencing at the northwest corner of Lot 5, Block Four, said B.H. BENNETT'S ADDITION; thence South 87 degrees 25 minutes 33 seconds West along the North line of said B.H. BENNETT'S ADDITION, a distance of 311.74 feet; thence South 2 degrees 34 minutes 25 seconds East, a distance of 14.98 feet to the Point of Beginning of the lease area to be described; thence continue South 2 degrees 34 minutes 25 seconds East, a distance of 75.00 feet; thence South 87 degrees 25 minutes 35 seconds West, a distance of 75.00 feet; thence North 2 degrees 34 minutes 25 seconds West, a distance of 75.00 feet; thence North 87 degrees 25 minutes 35 seconds East, a distance of 75.00 feet to the Point of Beginning.

PROPOSED ACCESS AND UTILITY EASEMENT DESCRIPTION:

A 30.00 foot wide easement for ingress, egress and utility purposes over, under and across Lot 5, Block Five, B.H. BENNETT'S ADDITION and Lot 1, Block 1, MILES ADDITION, according to the recorded plats thereof, Fayette County, Iowa, the centerline of said easement is described as follows:

> Commencing at the northwest corner of Lot 5, Block Four, said B.H. BENNETT'S ADDITION; thence South 87 degrees 25 minutes 33 seconds West along the North line of said B.H. BENNETT'S ADDITION, a distance of 311.74 feet; thence South 2 degrees 34 minutes 25 seconds East, a distance of 104.98 feet to the Point of Beginning of the centerline to be described; thence South 87 degrees 25 minutes 35 seconds West, a distance of 15.00 feet to a point hereinafter referred to as Point "A"; thence continue South 87 degrees 25 minutes 35 seconds West, a distance of 60.00 feet and said centerline there terminating.

TOGETHER WITH
A 30.00 foot wide easement for ingress, egress and utility purposes over, under and across said Lot 5, the centerline of said easement is described as follows:

> Beginning at the previously described Point "A"; thence South 2 degrees 34 minutes 25 seconds East, a distance of 73.51 feet to the North right of way line of 4th Street Southwest and said centerline there terminating.

The sidelines of said easement shall be shortened or lengthened to terminate at said North right of way line of 4th Street Southwest.

RESOLUTION NO. _____-2025

RESOLUTION APPROVING FINAL PAY APPLICATION NO. 9 IN THE AMOUNT OF $12,240.75 TO WOODRUFF CONSTRUCTION, INC FOR THE OELWEIN MUNICIPAL AIRPORT AIRFIELD VAULT

WHEREAS, the original contract price for this project is $244,815.00; and

WHEREAS, the final pay application number 9 will cost $12,240.75; and

WHEREAS, the project has been designed and administered by AECOM;

WHEREAS, the contractor is Woodruff Construction; and

WHEREAS, the work done on the project has been satisfactory; and

Now, therefore, be it resolved by the City Council of Oelwein, Iowa approves Final Pay Application No. 9 in the amount of $12,240.75 to Woodruff Construction for the Oelwein Municipal Airport Airfield Vault.

Passed and approved this 8th day of September, 2025.

_____
Brett DeVore, Mayor

Attest:

_____
Dylan Mulfinger, City Administrator

September 9th, 2025

It was moved by _____ and seconded by _____ that the Resolution as read be adopted, and upon roll call there were:

	AYES	NAYS	ABSENT	ABSTAIN
Ricchio				
Weber				
Lenz				
Seeders				
Payne				
Cantrell				

APPLICATION AND CERTIFICATION FOR PAYMENT

AIA DOCUMENT G702 PAGE ONE OF 2 PAGES

TO OWNER REPRESENTATIVE:
Dylan Mulfinger
City of Oelwein
Oelwein, IA 50662

FROM CONTRACTOR:
Woodruff Construction, Inc
1717 Falls Ave
Waterloo, IA 50701

PROJECT: Oelwein Airfield Vault

ARCH / ENG: Tony Hemann
AECOM
501 Sycamore St STE 222
Waterloo, IA 50703

APPLICATION NO: 9
PERIOD TO: 07/09/25
PROJECT #: 24-088
CONTRACT #:
ORDER #:
REQ / REF #:

Distribution to:
[ ] OWNER
[X] ARCHITECT
[ ] CONTRACTOR
[ ]
[ ]

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM		$ 244,815.00
2. Net change by Change Orders		$ 0.00
3. CONTRACT SUM TO DATE (Line 1 ± 2)		$ 244,815.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)		$ 244,815.00
5. RETAINAGE:		
a. 5 % of Completed Work (Column D + E on G703)	$ 12,240.75	
b. 5 % of Stored Material (Column F on G703)	$ 0.00	
Total Retainage (Lines 5a + 5b or Total in Column I of G703)		$ 0.00
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total)		$ 244,815.00
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)		$ 232,574.25
8. CURRENT PAYMENT DUE		$ **12,240.75**
9. BALANCE TO FINISH, INCL RETAINAGE (Line 3 less Line 6)		$ 0.00

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner		
Total approved this Month		
TOTALS	$0.00	$0.00
NET CHANGES by Change Order	$0.00	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: 7/9/2025

State of: Iowa County of: Johnson
Subscribed and sworn to before me this 9 day of July
Notary Public: _____
My Commission expires: 6-4-27

ZACK GREEN
Commission Number 856382
My Commission Expires
June 4, 2027

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED . . . . . $ **12,240.75**

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and onthe Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date: 8-26-25

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

AIA DOCUMENT G702 · APPLICATION AND CERTIFICATION FOR PAYMENT · 1992 EDITION · AIA® · © 1992 THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVE., N.W., WASHINGTON, DC 20006-5292
Users may obtain validation of this document by requesting a completed AIA Document D401 - Certification of Document's Authenticity from the Licensee.

Woodruff Construction does not send nor receive wire instructions via unsecured email without confirming information via reciprocating telephone calls or direct person to person contact. Under no circumstances should you send any funds to any party without first calling Woodruff Construction at 319-545-2410 and verifying the accuracy of wire instructions provided to you.

×

Brett DeVore, City of Oelwein Mayor

CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing
Contractor's signed certification is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 8
APPLICATION DATE: 7/9/2025
PERIOD TO: 7/9/2025

A	B	C	D	E	F	G		H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED FROM PREVIOUS APPLICATION (D + E)	WORK COMPLETED THIS PERIOD	MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)	BALANCE TO FINISH (C - G)	RETAINAGE (IF VARIABLE RATE)
1	**Mobilization**	$20,000.00	$20,000.00			$20,000.00	100.00%		$1,000.00
2	**General Conditions**	$31,017.00	$31,017.00			$31,017.00	100.00%		$1,550.85
3	**Bond**	$1,983.00	$1,983.00			$1,983.00	100.00%		$99.15
4	**Topsoil Stripping/Tree Stump**	$3,230.00	$3,230.00			$3,230.00	100.00%		$161.50
5	**Dig Footings**	$2,500.00	$2,500.00			$2,500.00	100.00%		$125.00
6	**Concrete Footings**	$8,715.00	$8,715.00			$8,715.00	100.00%		$435.75
7	**Concrete Slab**	$4,340.00	$4,340.00			$4,340.00	100.00%		$217.00
8	**Backfill Footings**	$1,700.00	$1,700.00			$1,700.00	100.00%		$85.00
9	**Masonry**	$15,223.00	$15,223.00			$15,223.00	100.00%		$761.15
10	**Equipment Pads**	$300.00	$300.00			$300.00	100.00%		$15.00
11	**Dampers/Louvers**	$3,430.00	$3,430.00			$3,430.00	100.00%		$171.50
12	**Door Frame and Hardware**	$3,000.00	$3,000.00			$3,000.00	100.00%		$150.00
13	**Roof Joists**	$6,240.00	$6,240.00			$6,240.00	100.00%		$312.00
14	**Roof Decking and Panels**	$18,452.00	$18,452.00			$18,452.00	100.00%		$922.60
15	**Metal Wall Panels**	$4,705.00	$4,705.00			$4,705.00	100.00%		$235.25
16	**Sheet Metal Trim**	$3,670.00	$3,670.00			$3,670.00	100.00%		$183.50
17	**Interior Electrical**	$46,851.00	$46,851.00			$46,851.00	100.00%		$2,342.55
18	**Exterior Electrical**	$46,851.00	$46,851.00			$46,851.00	100.00%		$2,342.55
19	**Demo Old Vault**	$11,404.00	$11,404.00			$11,404.00	100.00%		$570.20
20	**Sodding**	$9,204.00	$9,204.00			$9,204.00	100.00%		$460.20
21	**Closeout**	$2,000.00	$2,000.00			$2,000.00	100.00%		$100.00
22		$0.00	$0.00			$0.00			$0.00
23		$0.00	$0.00			$0.00			$0.00
24		$0.00	$0.00			$0.00			$0.00
25		$0.00	$0.00			$0.00			$0.00
26		$0.00	$0.00			$0.00			$0.00
27		$0.00	$0.00			$0.00			$0.00
	GRAND TOTALS	$244,815.00	$244,815.00	$0.00	$0.00	$244,815.00	100.00%	$0.00	$12,240.75

Users may obtain validation of this document by requesting of the license a completed AIA Document D401 - Certification of Document's Authenticity

RESOLUTION NO. _____-2025

RESOLUTION APPROVING A DEMOLITION BID IN THE AMOUNT OF $43,558.00 WITH MATT CONSTRUCTION FOR THE 2025 DEMOLITION PROJECT

WHEREAS, the city needs to demolish 201 9th Ave SW, 14 3rd Ave SE, and 502 East Charles; and

WHEREAS, the city solicited bids and received two; and

WHEREAS, Matt Construction Inc. bid $43,558.00 and Bryan Construction Inc. bid $43,770.00; and

WHEREAS, the city has worked with Matt Cosntrurction in past projects and has had satisfactory results with demolition;

NOW, THEREFORE, BE IT RESOLVED by the city council of Oelwein, Iowa approves a demolition bid in the amount of $43,558.00 with Matt Construction for the 2025 demolition project.

Passed and approved by the City Council of the City of Oelwein, Iowa this 8th day of September, 2025.

_____
Brett DeVore, Mayor

Attest:

_____
Dylan Mulfinger, City Administrator

Recorded September 9, 2025

It was moved by _____ and seconded by _____ that the Resolution as read be adopted, and upon roll call there were:

	AYES	NAYS	ABSENT	ABSTAIN
Ricchio				
Weber				
Lenz				
Cantrell				
Seeders				
Payne				

MÄTT CONSTRUCTION, INC.

Mätt Construction Inc.
203 Y. Ave.
Sumner, IA 50674

Estimate

Date	Estimate #
8/19/2025	2024173

Phone #	Fax #
563-578-8418	563-578-5791
Email	
MattConstructionInc@gmail.com	

Customer
City of Oelwein 20 2nd Ave. SW Oelwein, IA 50662

Project Description and Specifications	Amount
City of Oelwein 2025 Home demolition Project. Competitive quote package. Includes all work in bid documents. Properties Include 201 9th Ave SW 14 3rd Ave. SE 502 East Charles Lump sum total on all properties VALUE OF:	43,558.00
Total	**$43,558.00**

The above price, specifications and conditions are satisfactory. You are authorized to do the work.

Signature Date

Estimate

Bryan Construction Inc
1302 Outer Rd
Oelwein, IA. 50662

DATE	ESTIMATE NO.
8/22/2025	2449

NAME / ADDRESS
City Of Oelwein 20 2 Ave. S.W. Oelwein, Ia 50662

PROJECT

DESCRIPTION	QTY	COST	TOTAL
2025 Residential Demolition Project		43,770.00	43,770.00

Proposal Valid For 30 Days

TOTAL $43,770.00

RESOLUTION NO. _____-2025

RESOLUTION APPROVING A THREE-YEAR CONTRACT WITH NUWAVE FOR VOICE OVER INTERNET PROTOCOL PHONES (VOIP)

WHEREAS, the city's contract with ring central is expiring at the end of October 2025; and

WHEREAS, the city will transition to NUWAVE which sells and supports phones through Microsoft Teams; and

WHEREAS, the plan is cheaper than current Ring Central by $810.34 monthly with a cost of $381.25 monthly and a teams subscription for phones at $480.00; and

WHEREAS, the city will use Microsoft Teams for calling out and receiving calls; and

WHEREAS, this transition is part of the cost savings measures that are being implemented in 2025-2026; and

NOW, THEREFORE, BE IT RESOLVED by the city council of Oelwein, Iowa approves a three-year Contract with NUWAVE for voice over internet protocol phones (VOIP).

Passed and approved by the City Council of the City of Oelwein, Iowa this 8th day of September, 2025.

_____
Brett DeVore, Mayor

Attest:

_____
Dylan Mulfinger, City Administrator

Recorded September 9, 2025

It was moved by _____ and seconded by _____ that the Resolution as read be adopted, and upon roll call there were:

	AYES	NAYS	ABSENT	ABSTAIN
Ricchio				
Weber				
Lenz				
Cantrell				
Seeders				
Payne				

To: Mayor and City Council
From: Dylan Mulfinger
Subject: VoIP Change to Teams
Date: 9/8/2025

The city's three-year contract with Ring Central will end October 31, 2025. The city uses Ring Central for Voice over Internet Protocol (VOIP). VoIP is phones over the internet and not traditional copper phone lines. The cost of Ring Central is rising so the city looked at two new vendors. The recommended vendor is NUWAVE who uses Microsoft Teams.

Company	**Monthly Cost**
NUWAVE	$381.25
Microsoft Teams Phone	$480.00
Total	$861.25

One Time Cost

Company	**One Time Cost**
NUWAVE On Board	$532.00
NUWAVE Phones (Poly)	$6,592.50
Total	$7,124.50

We should also see savings when we port over our exiting phones lines and stop paying Mediacom. While we will not have phones if the internet is out, we lose most of our ability to provide services anyway without internet. This will be a quick transition for the city staff.

Statement of Work (SOW)

Project Title: NUWAVE Teams Customer Onboarding

Project Overview: The NUWAVE Customer Onboarding project aims to facilitate the seamless transition of customers to NUWAVE's services. This involves reviewing agreements, selecting NUWAVE as your preferred carrier, completing necessary documentation, and ensuring a smooth onboarding process.

Scope of Work: The scope of work includes the following tasks and activities:

1. **Agreement Review:** Review and execute the US Teams Service Agreement to ensure the correct user counts, phone number (DID) counts, and configuration.

   Return the signed agreement to: echunn@nuwave.com

2. **Operator Connect - Carrier Selection:** Select NUWAVE as your new carrier within the Microsoft Admin Center for Operator Connect deployment.

   Reference Document(s): SELECT NUWAVE AS YOUR OPERATOR.PDF

3. **Letter of Authorization (LOA):** Complete the Letter of Authorization (LOA) with signature.

   Return the completed LOA to: echunn@nuwave.com

   Reference Document(s):

   - NUWAVE MASTER DID LOA.PDF
   - HELP FILE – NUWAVE PORTING DIDS - LOA FIELDS DEFINED.PDF
   - NUMBER-PORTING GUIDELINES.PDF

4. **DID Spreadsheet:** Complete the DID (phone number) spreadsheet by entering the numbers you wish to port from your existing carrier.

   Return this spreadsheet to: echunn@nuwave.com

   Reference Document(s): DID PORT LIST - MASTER.XLSX

5. **Customer Service Record (CSR):** Providing a Customer Service Record (CSR) from your existing carrier can be beneficial. If the CSR isn't available through your carrier's customer portal, you may need to submit a request to your existing carrier for help.

   Return the CSR to: echunn@nuwave.com

6. **Carrier Invoice:** Provide the most recent invoice from your existing carrier.

   Return it to: echunn@nuwave.com

7. **Order Submission:** Once we receive all formal documentation, it will be forwarded to our ordering team. A NUWAVE porting specialist will confirm the port-out request by ensuring all the fields in the LOA are properly filled out, including your requested port date/time. The team will also begin creating your iPILOT account and provide you with iPILOT administrative login(s) as well as placing temporary DIDs in your account that will be used during a Kickoff call to demonstrate how to provision users, AA, and Call Queues prior to the FOC date.

8. **Customer Kickoff Call:** Once your iPILOT account has been created, a Customer Kickoff Call with a NUWAVE Teams Engineer will be scheduled. This call is to review the iPILOT user pre-provisioning and staging process. This will ensure a smooth transition to MS Teams when the port takes place, minimizing downtime during the cutover.
9. **FOC Confirmation:** Once the kickoff call is complete, the porting specialist will submit the LOA with your requested port date/time. Once we receive FOC confirmation from your existing carrier, our porting specialist will notify you and will place your DIDs into your iPILOT account for you to start the pre-provision/staging prior to the port.
10. **Post-Port Testing:** Once the port is complete, we encourage everyone to perform the following tests to verify that everything is functioning correctly:
    - Call the main office numbers to ensure that call flows are working correctly, including business hours and non-business hours auto attendants and/or call queues.
    - Have several users test dialing out using their Teams client (desktop and/or mobile) to ensure a successful connection where both parties can hear each other.
    - Make a few inbound calls to Teams users assigned DIDs to ensure both parties can hear each other.
    - Let an inbound call roll into the user's voicemail box and leave a voicemail message.
    - Have a Teams user checks their Teams voicemail using the Teams client, ensuring that the same voicemail message also appears in their Outlook inbox.
11. **Bonus Training Material for Teams Users:** We've provided some videos that could be helpful for those new to Teams. Transitioning to a new phone interface can be challenging, and this material may lessen the impact for those users. Please note that these videos were sourced from publicly available YouTube sources.

Timeline: The project is expected to be completed within a specified timeframe, with key milestones including agreement review, carrier selection, document submission, porting confirmation, and post-port testing.

Deliverables: The deliverables for this project include the signed US Teams Service Agreement, completed LOA, DID spreadsheet, CSR, carrier invoice, and confirmation of successful porting and testing.

Roles and Responsibilities:

- **Eric Chunn:** Responsible for receiving and forwarding formal documentation, placing the initial order, and requesting the Customer Kickoff Call.
- **NUWAVE Teams Engineer:** Responsible for reviewing iPILOT user pre-provisioning and ensuring a smooth transition to MS Teams.
- **NUWAVE Porting Specialist:** Responsible for confirming the port request and submitting the LOA to the existing carrier as well as handling any port exceptions from the loosing carrier.

Statement of Work (SOW)

Budget: Will be provided within the NUWAVE Service Agreement.

Acceptance Criteria: The criteria for acceptance include successful completion of all tasks, verification of call flows, and confirmation of functional Teams client and voicemail.

Assumptions and Constraints: Assumptions include the availability of necessary documentation and cooperation from the existing carrier. Constraints may include potential delays in receiving FOC confirmation from the losing carrier.

nuwave LETTER OF AUTHORIZATION

To: NuWave Communications, Etal.

I hereby authorize NUWAVE COMMUNICATIONS, Etal and its affiliate's access to our account information (i.e., customer service records, inventory itemization, rates, charges and copies of billing) in connection with the sales and/or marketing of network services, customer premises equipment (CPE) and enhanced services.

I hereby authorize Dylan Mulfinger to provide any information requested by them pertaining to all Telephone Services used by our company.

Under the terms of this letter, I hereby authorize NUWAVE COMMUNICATIONS, Etal to handle the negotiations of, and submission of requests for all telecommunications services provided to the undersigned*

I hereby request that this authorization to be applied to all of our existing accounts and any new accounts. This authorization does not preclude my company from acting on our own behalf if it is deemed necessary. Any requests for changes, additions, or deletions of our currently existing service will be required to bear the signature of an authorized customer agent. I understand that this authorization will remain effective until modified and/or revoked, in writing, by me or another authorized representative of my company.

This LOA is effective for the numbers below, or see-attached worksheet:

FOR NUWAVE TO FILL:

Authorized Signature (NuWave Representative)	Account Executive (Agency Representative)

FOR CUSTOMER TO FILL:

END USER NAME: Dylan Mulfinger | BILLING TELEPHONE NUMBER (BTN): 3192835440

Print Name	Authorized Signature (Customer Representative)	Title	Date
Dylan Mulfinger	Dyl Mulf	City Administrator	9/9/2025

*For purposes of this agreement, telecommunications services includes, but is not limited to, selections of communications providers and services plans

IMPORTANT: A copy of customer's Local bill summary page may be attached for processing.

nuwave LETTER OF AUTHORIZATION

1. **Company Name**: Your name should appear exactly as it does on your telephone bill. (Company name needs to be the Customer Service Record in which the DIDs are provided under)
2. **ACCOUNT NUMBER**: List your most current account number associated with your numbers. (If you have more than one account number, please list them or identify them on your spreadsheet)
3. **Address**: Primary address where the telephone service(s) is located. (If different from your billing address, it should appear as it does on your local telephone bill)
4. **Telephone Numbers**: All telephone Number(s) for which you authorize change from your current phone service provider to NUWAVE COMMUNICATIONS.

COMPANY INFORMATION

END USER NAME: Dylan Mulfinger	PRIMARY CONTACT NAME:
SERVICE ADDRESS: 20 2nd Ave SW	PHONE: 319-283-5440
Billing Address: 20 2nd Ave SW	EMAIL: dmulfinger@cityofoelwein.org
ACCOUNT NUMBER (If Microsoft please enter Tenant ID for account #)	PORTING PIN: Porting Pins are Mandatory if Porting away from Microsoft. See: Set your Microsoft port out PIN
CURRENT SERVICE PROVIDER: (if more than one provider, please complete a new LOA per provider)	REQUESTED PORTING DATE:

☐ **Check this box, if you have additional numbers on your Account with your Current Service Provider that you do NOT want ported.**

LIST ALL DIDS OR ACCESS NUMBERS TO BE PORTED: (YOU MAY ATTACH AN EXCEL SPREADSHEET)

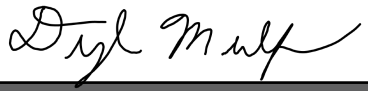
Please do not include any special characters like spaces, (-), or (.)

1)	8)
2)	9)
3)	10)
4)	11)
5)	12)
6)	13)
7)	14)

Please note that your service for the number(s) listed will be changed to NUWAVE COMMUNICATIONS, or its designee, and that any services associated with this number(s) will be lost if you port this number(s).

VERIFICATION – PLEASE READ BEFORE SIGNING BELOW

By signing below, I verify that I am, or represent a business with the above-named local service provider, authorized to change the primary carrier(s) for the telephone number(s) listed. The name and address I have provided is the name and address on record with my local telephone company for each telephone number listed. I warrant that the address that I have provided above is the address of service. I authorize and designate NUWAVE COMMUNICATIONS to act as my agent and notify my current carrier(s) to change my preferred carrier(s) for the listed number(s) and service(s), to obtain any information NUWAVE COMMUNICATIONS deems necessary to make the carrier change(s), including, for example, an inventory of telephone lines billed to the telephone number(s), carrier or customer identifying information, billing addresses, and my credit history. I further understand that after this process is completed NUWAVE COMMUNICATIONS will become my Local and Long Distance provider, as indicated above. I understand that I am authorizing change(s) of my primary carriers for these Service(s), and that I may select only one primary carrier per service, per number. I understand that my local telephone company may bill me a onetime charge for requested service change(s) for each telephone number.

Dylan Mulfinger		9/9/2025
Printed Name	Authorized Signature	Date

MICROSOFT TEAMS US SERVICE AGREEMENT

- Please Select a Service -

DATE: 09/02/2025

QUOTE #:	EC-09022025-0911	EXPIRATION DATE:	09/30/2025
NAME:		EMAIL:	dmulfinger@cityofoelwein.org
COMPANY NAME:	City of Oelwein	PHONE:	319-238-0039
OFFICE 365 ADMIN NAME:		OFFICE 365 ADMIN EMAIL:	
STREET ADDRESS:	20 2nd Ave SW	CITY, STATE, ZIP CODE:	Oelwein, Iowa 50662
MICROSOFT TENANT NAME:		TENANT PROVISIONER:	

MONTHLY RECURRING CHARGES

	DESCRIPTION	QTY	UNIT	TOTAL
1.	**Please select between a Voice Group or per User Calling plan:** ☐ CALL PATH for MS Teams* ■ UNIFIED VOICE for MS Teams** (For details on Pricing Models, see Supplemental Details on Page 3)		5.5	0
2.	1 DID (PORTED or NEW) is included per User account. For additional DID inventory, please fill out the qty needed here: ☐ ☐		0.25	0
3.	**New DID's** (New Numbers to be purchased through NuWave) 1st Option 2nd Option if you need NEW DID's, annotate requested NPA-NXX here:		0	0
4.	**Ported DID's:** (Owned Numbers from another Carrier to be ported over to NuWave) For more details on **PORTS,** see line 16 on Page 2		0	0
5.	**Temp DID's:** (Temp DIDs are procured to assist with validation and for temporary use in the event of a pending port. Numbers will be disconnected once customer has ported active numbers or validation is complete and numbers are no longer needed)		0	0
6.	**Dynamic 911 Emergency Services Location Record(s)** ***MANDATORY*** **Service Location Updated:** Yes Service record must match what is in the MS Admin Center. See Supplemental Details on Page 3 for more information.		0	0
7.	**Inbound Caller ID NAME Display** (This allows the NAME to be displayed on an Incoming call) (For Outbound Name Display see Outbound Caller ID Preferences on Page 3)		2.00	0
8.	**SDWAN Network Upgrade** - Select One -			0
9.	**Enable International Calling?** (See Terms, International Rates, & Offshore Rates. Customer responsible for any International traffic, whether fraud or not.) ☐ Yes ☐ No ☐ ☐			0
10.	**New Toll Free TN's (+per min usage .029)** (New Toll Free Numbers to be purchased through NuWave)		.50	0
11.	**Ported Toll Free TN's** (If you will be **PORTING** (AKA Resp Org), see line 17 on Page 2 for additional details.		0.50	0
12.	iPILOT Single Pane of Glass platform for Microsoft Teams Direct Routing & Microsoft Operator Connect	Included with Unified Voice		0
13.				0
MS Licensing 14.				0
15.				0
OTHER Products/Offers 16.				0
17.				0
18.				0
19.				0
20.				0

MRC SUBTOTAL	0
NRC SUBTOTAL	6710.45

TERM -Select One-

TOTAL 6710.45

MICROSOFT TEAMS US SERVICE AGREEMENT

DATE: 09/02/2025

QUOTE #:	EC-09022025-0911	EXPIRATION DATE:	09/30/2025
NAME:		EMAIL:	dmulfinger@cityofoelwein.org
COMPANY NAME:	City of Oelwein	PHONE:	319-238-0039
TECH POC NAME:		TECH POC EMAIL:	
STREET ADDRESS:	20 2nd Ave SW	CITY, STATE, ZIP CODE:	Oelwein, Iowa 50662
MICROSOFT TENANT NAME:		TENANT PROVISIONER:	

NON-RECURRING CHARGES

	DESCRIPTION	QTY	UNIT	TOTAL
16.	**Microsoft Tenant Provisioning Fee** Click here for more information about iPILOT		7.00	0
17.	**Local Number Portability (LNP)** (If porting numbers please submit LOA and bill copy that is less than 30 days old. See Number Poring Guidelines & LOA.)		6.00	0
18.	**Toll Free Port** (If porting TF numbers please submit TF Resp Org Form and bill copy that is less than 30 days old. See TF Porting Instructions.)		0	0
	Toll Free Provisioning: If you are porting over Toll Free(s) to your Teams Tenant please be sure to identify where your numbers will be provisioned to. Also please identify if the TF number(s) port needs to coincide with any DID's or if Toll Free can be ported over at any time.	**Is there a need to coordinate DID Port with the TF Port?** ☐ Yes ☐ No **If not, what is the Desired TF Port Date:**		
19.	**SDWAN Setup Fee** - Not Applicable -			
20.	Poly Edge E220 IP Phone, PoE-enabled - Mfr#: 82M87AA	46	117.95	5425.7
21.	Poly Edge E550 IP Phone, PoE-enabled - Mfr#:82M91AA	5	256.95	1284.75
22.				0
23.				0
24.				0
25.				0
26.				0
27.				0

NRC SUBTOTAL	6710.45
MRC SUBTOTAL	0
TOTAL	**6710.45**

TERMS AND CONDITIONS:
See www.nuwave.com/policies for Terms and Conditions of this agreement and services. NUWAVE's rates and charges are exclusive of taxes, fees and surcharges.

By signing this document Customer acknowledges that NuWave Communications will seek association to your Microsoft Tenant ID under the Microsoft Partner Incentives program. This association will only be used for the purposes of becoming a claiming partner of record (CPOR). CPOR enables Microsoft to identify and recognize those partners who are helping customers achieve their business objectives and realize value in the O365 cloud.
To accept this agreement place your signature here and return a copy to orders@nuwave.com

Authorized Signature	Print Name	Title	Date
	Brett DeVore	Mayor	9/8/2025

MICROSOFT TEAMS US SERVICE AGREEMENT

DATE: 09/02/2025

PARTNER DETAILS:			
PARTNER COMPANY:	RSPN	PARTNER NAME:	Dave Hansen
PARTNER EMAIL:	dave.hansen@rspn.com	PARTNER PHONE #:	
MASTER AGENT NAME:			
NUWAVE SALES REPRESENTATIVE:	Eric Chunn, Director of UC and Collaboration		

ADDITIONAL CUSTOMER DETAILS:	
SERVICE ADDRESS: (If different from listed, main location)	CITY, STATE, ZIP CODE:
BILLING POINT OF CONTACT: (If different from listed, main point of contact)	BILLING EMAIL: (If different from listed, main contact email)

SUPPLEMENTAL DETAILS

CALL PATH Microsoft Teams calling plan- Microsoft TLS/SRTP Certified SIP Trunks/concurrent call paths/channels. Each Concurrent Call Path includes 750mins outbound (US48 & Canada) per month, UNLIMITED inbound, UNLIMITED Teams to Teams. If minute allocation is exceeded .019 applies. You can add an ADDITIONAL 1,250 minutes*** to your plan for $5 a month per CALL PATH. No Service Interruption or Prepay required. HI is .0095min, AK is .10min

UNIFIED VOICE Microsoft Teams calling plan - Includes 1000 Domestic minutes per user pooled (mobile per minute usage rates apply in EU), 1 DID per user (Ported or New), and 1 Dynamic 911 Service Record per user. Terms & Conditions Apply. International calling rates apply. See our International Rate Sheet for more information on International Rates and mobile per minute usage rates. No Service Interruption or Prepay required. Offshore rates apply. Please refer to our Offshore Rate Sheet.

***ADDITIONAL US48 & Canada OUTBOUND is an optional add-on to the CALL PATH model above.
AUP applies: an additional 1,250mins US48 & Canada Outbound per CALL PATH (for a total of 2,000 shared minutes a month).

Dynamic 911 SERVICE PRE-REQUISITES: Click here for Microsoft's Guide to Adding Your Emergency Service Location

1. In the left navigation of the Microsoft Teams admin center, click Locations > Emergency addresses then click Add.
2. Enter a name and description for the location, select the country or region, and then enter the address.
3. If the address isn't found and you want to manually edit the address, turn on Edit the address manually. Click Save.
4. Please provide the Service Address that matches the address used in the MS Admin Center:

This step must be completed before we can process your order. NOTE: In order to avoid delays, the Service Address here must match EXACTLY what you provided Microsoft for NUWAVE to enable your service.

Outbound Caller ID preferences:

☐ Main DID CNAM ☐ Individual DID CNAM

1) What is outbound desired Outbound Caller ID NAME Display? (15) character limit, including spaces.

Telephony environment migrating from?

SfB (online or on-prem) or MSFT Teams PSTN? ☐ Yes ☐ No

Discovery Questionaire

TeamsVoice licencing Requirements met? ☐ Yes ☐ No

At a minimum, the below TEST licences MUST be in place prior to onboarding with NuWave. As a Direct CSP, NuWave may be able to assist with Licence procurment-pls discuss with your sales partner

Supported TeamsVoice License combinations can be found here: Microsoft Teams Licensing

- Option 1 - (2) E1 or E3 w/ the add on (2) Phone System Licenses
- Option 2 - (2) E5 licenses, as Phone System is included.

Professional Services:

For production agreements only – A Statement of Work will be required and agreed upon prior to any professional services being provided by Nuwave Communications. Professional Services will be calculated at a rate of $225.00 per hour and hours will vary by customer and solution requirements.

MICROSOFT TEAMS US SERVICE AGREEMENT

Microsoft Operator Connect - iPILOT controlled

DATE: 08/28/2025

QUOTE #:	EC-04292025-1741	EXPIRATION DATE:	09/27/2025
NAME:	Dylan Mulfinger	EMAIL:	dmulfinger@cityofoelwein.org
COMPANY NAME:	City of Oelwein	PHONE:	319-238-0039
OFFICE 365 ADMIN NAME:		OFFICE 365 ADMIN EMAIL:	
STREET ADDRESS:	20 2nd Ave SW	CITY, STATE, ZIP CODE:	Oelwein, Iowa 50662
MICROSOFT TENANT NAME:		TENANT PROVISIONER:	

MONTHLY RECURRING CHARGES

	DESCRIPTION	QTY	UNIT	TOTAL
1.	**Please select between a Voice Group or per User Calling plan:** ☐ CALL PATH for MS Teams* ■ UNIFIED VOICE for MS Teams** (For details on Pricing Models, see Supplemental Details on Page 3)	70	5.5	385
2.	1 DID (PORTED or NEW) is included per User account. For additional DID inventory, please fill out the qty needed here: ☐ ☐	7	0.25	1.75
3.	**New DID's** (New Numbers to be purchased through NuWave) 1st Option 2nd Option if you need NEW DID's, annotate requested NPA-NXX here:		0	0
4.	**Ported DID's:** (Owned Numbers from another Carrier to be ported over to NuWave) For more details on **PORTS,** see line 16 on Page 2	77	0	0
5.	**Temp DID's:** (Temp DIDs are procured to assist with validation and for temporary use in the event of a pending port. Numbers will be disconnected once customer has ported active numbers or validation is complete and numbers are no longer needed)		0	0
6.	**Dynamic 911 Emergency Services Location Record(s)** ***MANDATORY*** **Service Location Updated:** Yes Service record must match what is in the MS Admin Center. See Supplemental Details on Page 3 for more information.	70	0	0
7.	**Inbound Caller ID NAME Display** (This allows the NAME to be displayed on an Incoming call) (For Outbound Name Display see Outbound Caller ID Preferences on Page 3)		2.00	0
8.	**SDWAN Network Upgrade** - Select One -			0
9.	**Enable International Calling?** (See Terms, International Rates, & Offshore Rates. Customer responsible for any International traffic, whether fraud or not.) ☐ Yes ☐ No ☐ ☐			0
10.	**New Toll Free TN's (+per min usage .029)** (New Toll Free Numbers to be purchased through NuWave)		.50	0
11.	**Ported Toll Free TN's** (If you will be **PORTING** (AKA Resp Org), see line 17 on Page 2 for additional details.		0.50	0
12.	iPILOT Single Pane of Glass platform for Microsoft Teams Direct Routing & Microsoft Operator Connect	Included with Unified Voice		0
13.				0
14.				0
15.				0
16.				0
17.				0
18.				0
19.				0
20.				0

MS Licensing

OTHER Products/Offers

MRC SUBTOTAL	386.75
NRC SUBTOTAL	539

TERM 3 Yr (as quoted)

TOTAL 925.75

MICROSOFT TEAMS US SERVICE AGREEMENT

DATE: 08/28/2025

QUOTE #:	EC-04292025-1741	EXPIRATION DATE:	09/27/2025
NAME:	Dylan Mulfinger	EMAIL:	dmulfinger@cityofoelwein.org
COMPANY NAME:	City of Oelwein	PHONE:	319-238-0039
TECH POC NAME:		TECH POC EMAIL:	
STREET ADDRESS:	20 2nd Ave SW	CITY, STATE, ZIP CODE:	Oelwein, Iowa 50662
MICROSOFT TENANT NAME:		TENANT PROVISIONER:	

NON-RECURRING CHARGES

	DESCRIPTION	QTY	UNIT	TOTAL
16.	**Microsoft Tenant Provisioning Fee** Click here for more information about iPILOT	77	7.00	539
17.	**Local Number Portability (LNP)** (If porting numbers please submit LOA and bill copy that is less than 30 days old. See Number Poring Guidelines & LOA.)	waived	6.00	0
18.	**Toll Free Port** (If porting TF numbers please submit TF Resp Org Form and bill copy that is less than 30 days old. See TF Porting Instructions.)		0	0
	Toll Free Provisioning: If you are porting over Toll Free(s) to your Teams Tenant please be sure to identify where your numbers will be provisioned to. Also please identify if the TF number(s) port needs to coincide with any DID's or if Toll Free can be ported over at any time.	**Is there a need to coordinate DID Port with the TF Port?** ☐ Yes ☐ No **If not, what is the Desired TF Port Date:**		
19.	**SDWAN Setup Fee** - Not Applicable -			
20.				0
21.				0
22.				0
23.				0
24.				0
25.				0
26.				0
27.				0

NRC SUBTOTAL	539
MRC SUBTOTAL	386.75
TOTAL	925.75

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Authorized Signature	Print Name	Title	Date
	Brett DeVore	Mayor	9/8/2025

MICROSOFT TEAMS US SERVICE AGREEMENT

DATE: 08/28/2025

PARTNER DETAILS:			
PARTNER COMPANY:	RSPN	PARTNER NAME:	Dave Hansen
PARTNER EMAIL:	dave.hansen@rspn.com	PARTNER PHONE #:	319-449-1240
MASTER AGENT NAME:			
NUWAVE SALES REPRESENTATIVE:	Eric Chunn, Director of UC and Collaboration		

ADDITIONAL CUSTOMER DETAILS:	
SERVICE ADDRESS: (If different from listed, main location)	CITY, STATE, ZIP CODE:
BILLING POINT OF CONTACT: (If different from listed, main point of contact)	BILLING EMAIL: (If different from listed, main contact email)

SUPPLEMENTAL DETAILS

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2. Enter a name and description for the location, select the country or region, and then enter the address.
3. If the address isn't found and you want to manually edit the address, turn on Edit the address manually. Click Save.
4. Please provide the Service Address that matches the address used in the MS Admin Center:

This step must be completed before we can process your order. NOTE: In order to avoid delays, the Service Address here must match EXACTLY what you provided Microsoft for NUWAVE to enable your service.

Outbound Caller ID preferences:

☐ Main DID CNAM ☐ Individual DID CNAM

1) What is outbound desired Outbound Caller ID NAME Display? (15) character limit, including spaces.

Telephony environment migrating from?

SfB (online or on-prem) or MSFT Teams PSTN? ☐ Yes ☐ No

Discovery Questionaire

TeamsVoice licencing Requirements met? ☐ Yes ☐ No

At a minimum, the below TEST licences MUST be in place prior to onboarding with NuWave. As a Direct CSP, NuWave may be able to assist with Licence procurment-pls discuss with your sales partner

Supported TeamsVoice License combinations can be found here: Microsoft Teams Licensing

- Option 1 - (2) E1 or E3 w/ the add on (2) Phone System Licenses
- Option 2 - (2) E5 licenses, as Phone System is included.

Professional Services:

For production agreements only – A Statement of Work will be required and agreed upon prior to any professional services being provided by Nuwave Communications. Professional Services will be calculated at a rate of $225.00 per hour and hours will vary by customer and solution requirements.

RESOLUTION NO. _____-2025

RESOLUTION APPROVING THE RELEASE OF MORTGAGES GRANTED BY BBV, LLC AND TIKI PROPERTIES, LLC, TO THE CITY OF OELWEIN, IOWA

WHEREAS, the City of Oelwein ("City") awarded a Downtown Improvement Program loan to BBV, LLC, in the amount of $7,500.00 in 2020 and another to Tiki Properties, LLC in the amount of $10,000 in 2025, and

WHEREAS, BBV, LLC ("BBV") and Tiki Properties, LLC ("Tiki") executed mortgages in favor of the City, granting property owned by said entities as security for the Downtown Improvement Program Loans awarded by the City to BBV and Tiki, as follows:

BBV, LLC Mortgage recorded on June 2, 2020 in Book 2020 Page 1610, records of the Fayette County, Iowa Recorder

TIKI Properties Mortgage recorded on June 30, 2025 in Book 2025 Page 1838, records of the Fayette County, Iowa Recorder

and

WHEREAS, the City finds that the improvements for which the loans were granted have been satisfactorily completed, necessary documentation submitted, and that the Mortgages detailed above should at this time be released.

NOW, THEREFORE, BE IT RESOLVED by the City Council that the Mayor is hereby authorized to execute mortgage releases, releasing the above and foregoing Mortgages at this time.

Passed and approved this 8th day of September, 2025.

_____
Brett DeVore, Mayor

Attest:

_____
Dylan Mulfinger, City Administrator

Recorded September 9, 2025.

It was moved by _____ and seconded by _____ that the Resolution as read be adopted, and upon roll call there were:

	AYES	NAYS	ABSENT	ABSTAIN
Ricchio				
Weber				
Lenz				
Cantrell				
Seeders				
Payne				

Preparer/Return To: Douglas D. Herman, Lynch Dallas, P.C., 316 2nd St. SE, Ste. 124, Cedar Rapids, IA 52401
Phone: 319-365-9101

RELEASE OF REAL ESTATE MORTGAGE

The undersigned, City of Oelwein, Iowa, the present owner(s) of the mortgage hereinafter described, does hereby acknowledge that a certain mortgage bearing date of May 20, 2020, made and executed by Travis Bushaw, BBV, LLC, to City of Oelwein, Iowa, Mortgagee, and Recorded in the records of the office of the Recorder of the County of Fayette, State of Iowa, in Book 2020 Page 1610, is redeemed, satisfied and discharged in full.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine, feminine or neuter gender, according to the context.

Dated September, 8, 2025

_____
Brett DeVore, Mayor of City of Oelwein, Iowa

STATE OF IOWA, COUNTY OF FAYETTE)§

This record was acknowledged before me on September 8, 2025 by Brett DeVore as Mayor of City of Oelwein, Iowa.

_____
Notary Public, State of Iowa

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IowaDocs®

Preparer/Return To: Douglas D. Herman, Lynch Dallas, P.C., 316 2nd St. SE, Ste. 124, Cedar Rapids, IA 52401
Phone: 319-365-9101

RELEASE OF REAL ESTATE MORTGAGE

The undersigned, City of Oelwein, Iowa, the present owner(s) of the mortgage hereinafter described, does hereby acknowledge that a certain mortgage bearing date of June 24, 2025, made and executed by John Kalb, Member, Tiki Properties, LLC, to City of Oelwein, Iowa, Mortgagee, and Recorded in the records of the office of the Recorder of the County of Fayette, State of Iowa, in Book 2025 Page 1838, is redeemed, satisfied and discharged in full.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine, feminine or neuter gender, according to the context.

Dated September 8, 2025

_____
Brett DeVore, Mayor of City of Oelwein, Iowa

STATE OF IOWA, COUNTY OF FAYETTE)§

This record was acknowledged before me on September 8, 2025 by Brett DeVore as Mayor of City of Oelwein, Iowa.

_____
Notary Public, State of Iowa

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IowaDocs®



DECEMBER 2025

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

To: Mayor and City Council
From: Dylan Mulfinger
Subject: City Administrator Agenda Memo
Date: 9/8/2025

Consent Agenda

1. Consideration of a motion to approve the August 25, 2025 minutes.
2. Consideration of a resolution authorizing temporary closure of public ways or grounds for Oelwein Volunteer Fire Department.

Public Hearing

3. Public Hearing on September 8th, 2025 at 6:00 PM at the Oelwein City Council Chambers for the construction plan specifications for the construction of the 10th Street Bridge.
    1. The city is required by the state of Iowa to have a public hearing on large infrastructure projects. This allows the public to provide comment on the project.
4. Public Hearing on September 8, 2025 at 6:00 PM at the Oelwein City Council Chambers for a lease with Alltel Corporation d/b/a Verizon Wireless for land at 230 4th Street SW (Parcel No. 1821376002) for construction of a cell phone tower.
    1. With the proposed lease being longer than three years, a public hearing is required.

Resolutions

5. Consideration of a resolution approving the plans and specifications of the 10th St. Bridge Project from origin Design and approving the bid from Taylor Construction, Inc. in the amount of $1,416,351.70
    1. The city is thrilled to have a low bid with a responsible contractor. This bridge is critical to Oelwein and will be a welcomed replacement. The City Administrator recommends approving the resolution.
6. Consideration of a resolution approving a lease with Alltel Corporation d/b/a Verizon Wireless for land at parcel number 1821376002, LOTS 1 TO 5 BLK 5 BENNETT'S ADD & PC 215' X 450' ADJ ON N LOTS 1 TO 5 BLK 1 MILES ADD, for construction of a cell phone tower
    1. This tower will provide funding to Oelwein for cleanup of the site and future general fund needs. This location is not used currently and will need major investment before it is turned into a new development. The City Administrator recommends approving the resolution.
7. Consideration of a resolution approving Final Pay Application No. 9 in the amount of $12,240.75 to Woodruff Construction for the Oelwein Municipal Airport Airfield Vault.
    1. This project went well. The only delay was waiting for electrical components. With it being a federal project, we have a lot of more steps

for the project. While the project was formally accepted in August, we have one last payout. The City Administrator recommends approving the resolution.

8. Consideration of a resolution approving a demolition bid in the amount of $43,558.00 with Matt Construction for the 2025 Demolition Project.
    1. The city has grant funding for two properties and will be burning the last property. This allows the city to do tear downs, even though the city's tear down funding went to the downtown building. Matt Construction has removed several buildings in town and does satisfactory work. The City Administrator recommends approving the resolution.
9. Consideration of a resolution approving a three-year contract with NUWAVE for Voice over Internet Protocol phones (VOIP).
    1. The city's current contract is expiring, and the carrier is increasing their cost. Even with all new phones, the city will save money after one year on the new contract. The City Administrator recommends approving the resolution.
10. Consideration of a resolution authorizing the release of mortgages granted by BBV, LLC. and Tiki Properties, LLC., to the City of Oelwein.
    1. This property has met all its obligations for the downtown grants. The City Administrator recommends approving the resolution.

Motions

11. Consideration of a motion to move the employee December 24, 2025 holiday to December 26, 2025
    1. This will allow for a four-day weekend for staff in December.

AUGUST 2025 — **CITY OF OELWEIN TREASURER'S REPORT** — Date Printed 9/4/2025

	Fund	Beg Balance	Revenue	Expense	Transfers	Fund Balance	BANK BALANCE
001	General	1,128,072.46	118,349.09	403,119.00	(916.67)	842,385.88	
051	County Emergency Management	6,080.13	56.37	-	-	6,136.50	
110	Road Use Tax	584,877.70	67,700.88	70,985.32	-	581,593.26	
112	Trust and Agency	619,118.32	3,922.19	100,407.80	-	522,632.71	
113	Flex Spending	2,100.56	684.83	1,369.66	-	1,415.73	1,415.73
119	Emergency	-	-	-	-	-	
120	Sidewalks Repaired/Replaced Dwtn	-	-	-	-	-	
121	Sales Tax	129,281.24	53,456.63	-	-	182,737.87	
122	Hotel/Motel Tax	49,718.15	7,248.21	-	-	56,966.36	
123	Gas-Electric Franchise Fee	17,715.81	156,385.15	3,250.00	(21,295.00)	149,555.96	
124	Library Bequest	373,582.03	1,115.09	-	-	374,697.12	
126	Downtown TIF	188,497.97	26.43	-	-	188,524.40	
127	Industrial Park TIF	-	-	-	-	-	
128	Ind Park SubFund TIF East Penn	538,356.17	1,523.11	-	-	539,879.28	
132	DARE	-	-	-	-	-	
136	Trees Forever	9,351.06	-	-		9,351.06	
146	Oelwein Housing Revolving Loan Fund	112,697.45	482.82	50.00	-	113,130.27	
160	Econ Dev ($12,500 Wellness Res)	162,582.25	-	150,039.10	-	12,543.15	
161	IRP Revolving Loan	354,593.36	11,786.43	1,001.67	-	365,378.12	366,379.79
162	Downtown Business Grants	176,516.29	-	-	-	176,516.29	
167	Oelwein Volunteer Fire Dept	13,573.76	-	-	916.67	14,490.43	
177	Forfeit Assets	7,443.11	-	-	-	7,443.11	
200	Debt Service	391,258.37	2,907.19	-	21,295.00	415,460.56	
201	Water Bondsinking	121,601.32	291.26	-	29,287.00	151,179.58	
202	Sewer Bondsinking	101,734.85	188.16	-	62,235.00	164,158.01	
205	Special Assessments	-	-	-	-	-	
282	CDBG Housing Rehab	-	-	-	-	-	
287	2020 GO Bond	6,846.67	-	-	-	6,846.67	
301	HMGP 4483 GRANT	-	-	-	-	-	
302	Oelwein Housing Teardown	44,342.50	-	-	-	44,342.50	
305	Airport Grant	(6,266.38)	-	2,974.19	-	(9,240.57)	
307	Tri Park Trail Extensions	1,142,529.87	-	1,988.75	-	1,140,541.12	
310	Plaza Park Expansion (OCAD Project)	-	-	-	-	-	
314	Dry Run Creek Flooding	(189,993.77)	-	-	-	(189,993.77)	
360	Cares Act NE Sewer Replacement	-	-	-	-	-	
385	Water Main Rpl 1 Av NE 5 & 12 Av SE	5,679.97	-	-	-	5,679.97	
387	'23-24 HMA Paving Imp 1st 12th SF Evnt	232,156.75	-	-	-	232,156.75	
388	2024 GO Bond Const 10th St Bridge	1,304,420.20	7,885.04	-	-	1,312,305.24	
393	2022 GO Bond Construction City Hall	24,354.64	-	-	-	24,354.64	
397	Railroad Grant-Viaduct	37,901.24	-	-	-	37,901.24	
501	Cemetery Perp Care	300,010.88	120.26	-	-	300,131.14	3,131.14
600	Water (2016D Reserve $67,000)	854,423.01	169,507.42	88,111.63	(64,287.00)	871,531.80	
601	Water Infrastructure Fee	389,219.96	(0.30)	40,094.46	35,000.00	384,125.20	
620	Customer Water Deposits	145,311.80	2,949.49	7,282.82	-	140,978.47	
640	Fuel	(7,826.86)	3,703.45	40.00	-	(4,163.41)	
670	Landfill	184,056.05	53,805.59	33,503.66	-	204,357.98	
671	Recycling	49,190.28	6,446.23	82.90	-	55,553.61	
672	ROW Trees Utility Fee	74,892.53	8,198.89	5,510.04	-	77,581.38	
680	Wellness Center	(9,426.96)	11,021.83	19,092.54	-	(17,497.67)	
700	Sewer/Waste Treatment	1,523,841.99	187,285.32	77,971.93	(97,235.00)	1,535,920.38	
701	Sewer Infrastructure Fee	452,239.06	(0.29)	-	35,000.00	487,238.77	
706	Reed Bed Exp - EQ Liner	(37,081.64)	50.44	-	-	(37,031.20)	
		11,609,574.15	**877,097.21**	**1,006,875.47**		**11,479,795.89**	

Fidelity 999-1003 and Community 999-1004 Money Market Accounts	1,822,194.07
CD'S Fidelity 999-1113, Community 999-1114 Cemetery 501-1001	8,397,000.00
Fidelity IRP 999-1001/Flex 999-1002/Cem Perp Bank Ckng 501-1002	369,924.99
Unapplied Accounts Receivable	(10.00)
Balance Checking Account 999-1000	890,686.83
Payroll Liabilities	-
	11,479,795.89 **11,479,795.89**

Signature: _____ Date: 9-4-25

8/1/2025	8/31/2025			7/31/2025
revenue	expense	transfer in	transfer out	
001-____-4____	001-____-6____	001-____-49___	001-____-69___	-
051-____-4____	051-____-6____	051-____-49___	051-____-69___	-
110-____-4____	110-____-6____	110-____-49___	110-____-69___	-
112-____-4____	112-____-6____	112-____-49___	112-____-69___	-
113-____-4____	113-____-6____	113-____-49___	113-____-69___	-
119-____-4____	119-____-6____	119-____-49___	119-____-69___	-
120-____-4____	120-____-6____	120-____-49___	120-____-69___	-
121-____-4____	121-____-6____	121-____-49___	121-____-69___	-
122-____-4____	122-____-6____	122-____-49___	122-____-69___	-
123-____-4____	123-____-6____	123-____-49___	123-____-69___	-
124-____-4____	124-____-6____	124-____-49___	124-____-69___	-
126-____-4____	126-____-6____	126-____-49___	126-____-69___	0.00
127-____-4____	127-____-6____	127-____-49___	127-____-69___	-
128-____-4____	128-____-6____	128-____-49___	128-____-69___	-
132-____-4____	132-____-6____	132-____-49___	132-____-69___	-
136-____-4____	136-____-6____	136-____-49___	136-____-69___	-
146-____-4____	146-____-6____	146-____-49___	146-____-69___	-
160-____-4____	160-____-6____	160-____-49___	160-____-69___	-
161-____-4____	161-____-6____	161-____-49___	161-____-69___	-
162-____-4____	162-____-6____	162-____-49___	162-____-69___	-
167-____-4____	167-____-6____	167-____-49___	167-____-69___	(916.67)
177-____-4____	177-____-6____	177-____-49___	177-____-69___	-
200-____-4____	200-____-6____	200-____-49___	200-____-69___	(21,295.00)
201-____-4____	201-____-6____	201-____-49___	201-____-69___	(29,287.00)
202-____-4____	202-____-6____	202-____-49___	202-____-69___	(62,235.00)
205-____-4____	205-____-6____	205-____-49___	205-____-69___	-
282-____-4____	282-____-6____	282-____-49___	282-____-69___	-
287-____-4____	287-____-6____	287-____-49___	287-____-69___	-
301-____-4____	301-____-6____	301-____-49___	301-____-69___	
302-____-4____	302-____-6____	302-____-49___	302-____-69___	
305-____-4____	305-____-6____	305-____-49___	305-____-69___	-
307-____-4____	307-____-6____	307-____-49___	307-____-69___	-
310-____-4____	310-____-6____	310-____-49___	310-____-69___	
314-____-4____	314-____-6____	314-____-49___	314-____-69___	-
360-____-4____	360-____-6____	360-____-49___	360-____-69___	
385-____-4____	385-____-6____	385-____-49___	385-____-69___	-
387-____-4____	387-____-6____	387-____-49___	387-____-69___	-
388-____-4____	388-____-6____	388-____-49___	388-____-69___	
393-____-4____	393-____-6____	393-____-49___	393-____-69___	-
397-____-4____	397-____-6____	397-____-49___	397-____-69___	-
501-____-4____	501-____-6____	501-____-49___	501-____-69___	-
600-____-4____	600-____-6____	600-____-49___	600-____-69___	-
601-____-4____	601-____-6____	601-____-49___	601-____-69___	(35,000.00)
620-____-4____	620-____-6____	620-____-49___	620-____-69___	-
640-____-4____	640-____-6____	640-____-49___	640-____-69___	-
670-____-4____	670-____-6____	670-____-49___	670-____-69___	-
671-____-4____	671-____-6____	671-____-49___	671-____-69___	-
672-____-4____	672-____-6____	672-____-49___	672-____-69___	-
680-____-4____	680-____-6____	680-____-49___	680-____-69___	-
700-____-4____	700-____-6____	700-____-49___	700-____-69___	-
701-____-4____	701-____-6____	701-____-49___	701-____-69___	(35,000.00)
706-____-4____	706-____-6____	706-____-49___	706-____-69___	-
				(183,733.67)

	890,686.83	9991000	Checking
	0.00	9991111	Utility
	0.00	9991112	Accounts Receivable
001-1301	0.00	0012120	payroll liabilities
	0.00	___-2020	accounts payable
	890,686.83	-	**Ckg Bal to match Col I Line 62**

Revenue check - should equal transfers

PROJECT UPDATE | A Review of MSA Projects in Your Community

City of Oelwein, IA

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DATE:

September 4, 2025



Navigating Legislative Change in Iowa: How Communities Can Stay Ahead in Planning & Zoning - MSA

COMMUNITY CHANGE GRANT – PROJECT #08884014

We have not heard of any further correspondence regarding this grant.

FMA FUNDING – PROJECT #08884015

We have not heard of any further correspondence regarding this grant.

RAIL YARD BROWNFIELD

Eocene has provided options for next steps with cost estimates for each of those options. Please let us know, if you would like to move forward with any of those options.

In addition, MSA and Eocene have begun discussions with Upper Explorerland Regional Planning Commission regarding and EPA Brownfield Assessment Grant application similar to one they secured in 2012. The RPC is very interested and has been talking to other agencies in the region to determine the need beyond Oelwein in order to put forth the strongest application. If successful, this would be an excellent source of funding to move forward with the next steps provided in Eocene's report.

City of Oelwein

Oelwein Reed Bed Expansion and EQ Liner Replacement Project

The City of Oelwein is proud to announce the successful completion of the Reed Bed Expansion and EQ Liner Replacement Project, an essential infrastructure investment that will strengthen the long-term capacity and reliability of our Wastewater Treatment Plant. This project represents a significant step in ensuring the continued protection of our community's water quality and the responsible management of Oelwein's wastewater system.

Project Overview

- **Project Name:** Oelwein Reed Bed Expansion and EQ Liner Replacement
- **Total Project Cost:** $1,683,726
- **Funding Sources:**
  - State Revolving Fund: $1,138,000
  - Wastewater & Drinking Water Treatment Financial Assistance Program: $375,000
  - Sewer and Wastewater Funds: $170,726
- **Engineer:** Fox/Strand
- **Contractor:** Shift Companies LLC
- **Project Timeline:**
  - Bids Received: July 19, 2023
  - Completion: June 2025

Why This Project Was Needed

The Wastewater Treatment Plant is one of the most critical components of Oelwein's infrastructure. Over time, the facility's existing systems had reached their limits, creating both operational and environmental challenges that needed to be addressed.

1. **Reed Bed Expansion:**
   The Reed Bed system is used to store and naturally dry biosolids, a byproduct of wastewater treatment. By expanding the capacity of the Reed Beds, Oelwein can now store more biosolids, which allows for reduced volatile solids and improved stabilization. This additional storage time enables more thorough drying, ultimately reducing the overall volume of biosolids that need to be land applied. This creates long-term cost savings, improves efficiency, and ensures better compliance with environmental regulations.

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2. **EQ Liner Replacement:**
   The Equalization (EQ) Basin liner had reached the end of its useful life. Its replacement was essential to maintaining the plant's ability to manage stormwater surges. The new liner ensures that stormwater can be safely stored, preventing system backups that could otherwise threaten both public health and the environment. This upgrade strengthens Oelwein's resilience during heavy rainfall events and ensures ongoing system reliability.

Impact on the Community

The completion of this project enhances Oelwein's ability to responsibly manage wastewater, safeguard water resources, and maintain regulatory compliance. By making this investment today, the City has positioned itself for long-term sustainability in wastewater treatment while reducing future maintenance and repair costs.

This project also demonstrates the City of Oelwein's commitment to leveraging state and local partnerships to maximize funding opportunities. With significant support from the State Revolving Fund and the Wastewater & Drinking Water Treatment Financial Assistance Program, Oelwein was able to complete this $1.68 million project with minimized impact on local ratepayers.

City of Oelwein
Completion Date: June 2025