

## Technical Memorandum

**To:** John Glatzmaier, CH2M  
**From:** Joni Giese, ASLA, AICP  
**Subject:** Oxbow Park Relocation  
**Date:** 4-26-17  
**Project:** Fargo-Moorhead Diversion: WP43E3 Oxbow Park Relocation  
**C:** Lee Beauvais, P.E.  
Rick Lane, P.E.

In response to your request, this memorandum has been compiled to provide background materials that informed decision-making for the Oxbow City Park relocation project (WP43E3). Design work performed for this project was done in consultation with the City of Oxbow Parks Department and with direction provided by the Diversion Authority's Project Management Consultant.

### Project Description

Oxbow City Park was constructed in 2004. The existing 1.37-acre park is located on the banks of the Red River. Approximately 50 percent of the site is comprised of mature riverbank woodlands and the other 50 percent is open parkland. The park provides outdoor recreational opportunities in the form of a basketball court, two play equipment structures, swings, picnic shelter, warming house, benches, and a skating rink during the winter months (see Figure 1 for photos of the existing park).

The location of the ring levee around much of the communities of Oxbow, Hickson and Bakke, resulted in the existing City of Oxbow Park being located outside of the new levee. To maintain a level of park service to the community comparable to existing conditions, it was determined to relocate the park to a 1.78-acre site within the ring levee that was previously agricultural crop land.



## Park Elements

Through consultation with the play equipment manufacturer, it was determined that the existing park equipment, which was ten years old in 2014, was approximately 50 percent through its useful service life. A subsequent appraisal of the site performed in 2015 estimated the play equipment was 67 percent through its estimated useful service life. It was the Park Board's position that relocating equipment that has less than 50 percent of its service life remaining was not a good use of funds. Out of these discussions, it was determined that the relocated park would provide new facilities that would replicate the recreation opportunities currently available in the existing park. Any betterments that went beyond replacing existing facilities would be paid for by the community.

A public open house was held in Bakke in November 2014 to share initial park concept alternatives with community residents. Presentation boards from the community open house can be found in Attachment A. By September 2015, the park boundaries were established and a preferred concept was selected (see Figure 2). The park continued to be refined through final design. The park design depicted in the construction bid package is shown in Figures 3 - 5.

The final design responds to specific regulations and park location conditions. Sidewalks were included in the park to make it compliant with the Americans with Disabilities Act (ADA) that require accessible pathways be provided to the play equipment and park building. A portion of the sidewalk doubles as the play container edging. In addition, it was felt that traffic volumes along Club House Drive, which is anticipated to be the primary road to the golf course, will have significantly higher traffic volumes and speeds than Riverbend Road adjacent the existing park. Therefore, several off-street parking stalls were provided in the park, including handicap accessible parking.

The Oxbow Park Board requested that shade structures be added to the park building. The existing park has mature trees that provided shade. It will be approximately ten to fifteen years before newly planted trees will provide any significant shade for park users. An analysis was performed that estimated the size of the trees in the existing park (measured in caliper inches). The new park cannot provide enough trees to replace caliper inches lost. The estimated cost to provide new trees of caliper inches equal to the caliper inches of trees not replaced amounted to \$71,000. This estimated cost was more expensive than the estimated cost to provide shade structures on the new park building (estimated cost of \$28,000). Therefore, the cost of the shade structures is not considered a betterment.



As the park design progressed through final design, the City of Oxbow continued to refine what betterments the City wanted to include in the park. The final list of betterments included:

<b>Park Element</b>	<b>Estimated Cost</b>
Landscape Structures Fitcore® Fitness System	\$11,000
Landscape Structures Saddle Spinner®	1,900
Landscape Structures Cozy Dome®	3,500
Warming House: A & S Wood Siding Upgrade Over Aluminum Siding	1,150
Warming House: Restroom with Water and Sewer Connections	21,230
Warming House: Exterior Water Fountain	2,750
Warming House: Second Electric Unit Heater (in Restroom)	1,200
<b>Total Estimated Betterment Costs</b>	<b>\$42,730</b>

Instead of scrapping the existing play equipment, a not-for-profit organization, Kids Around the World, expressed interest in salvaging the play equipment. This organization refurbishes the salvaged equipment and then ships and installs it in foreign countries that have been affected by war, poverty, disease or natural disaster. Due to liability issues associated with re-installing salvaged play equipment, the equipment must be reinstalled in a foreign country. Kids Around the World will also provide a liability waiver to protect the equipment donator.

**Attachments:**

Figure 1 – Existing Park Photographs

Figure 2 – Preferred Concept

Figures 3, 4 & 5 – Select Construction Bid Plan Sheets

Attachment A – November 2014 Open House Presentation Boards



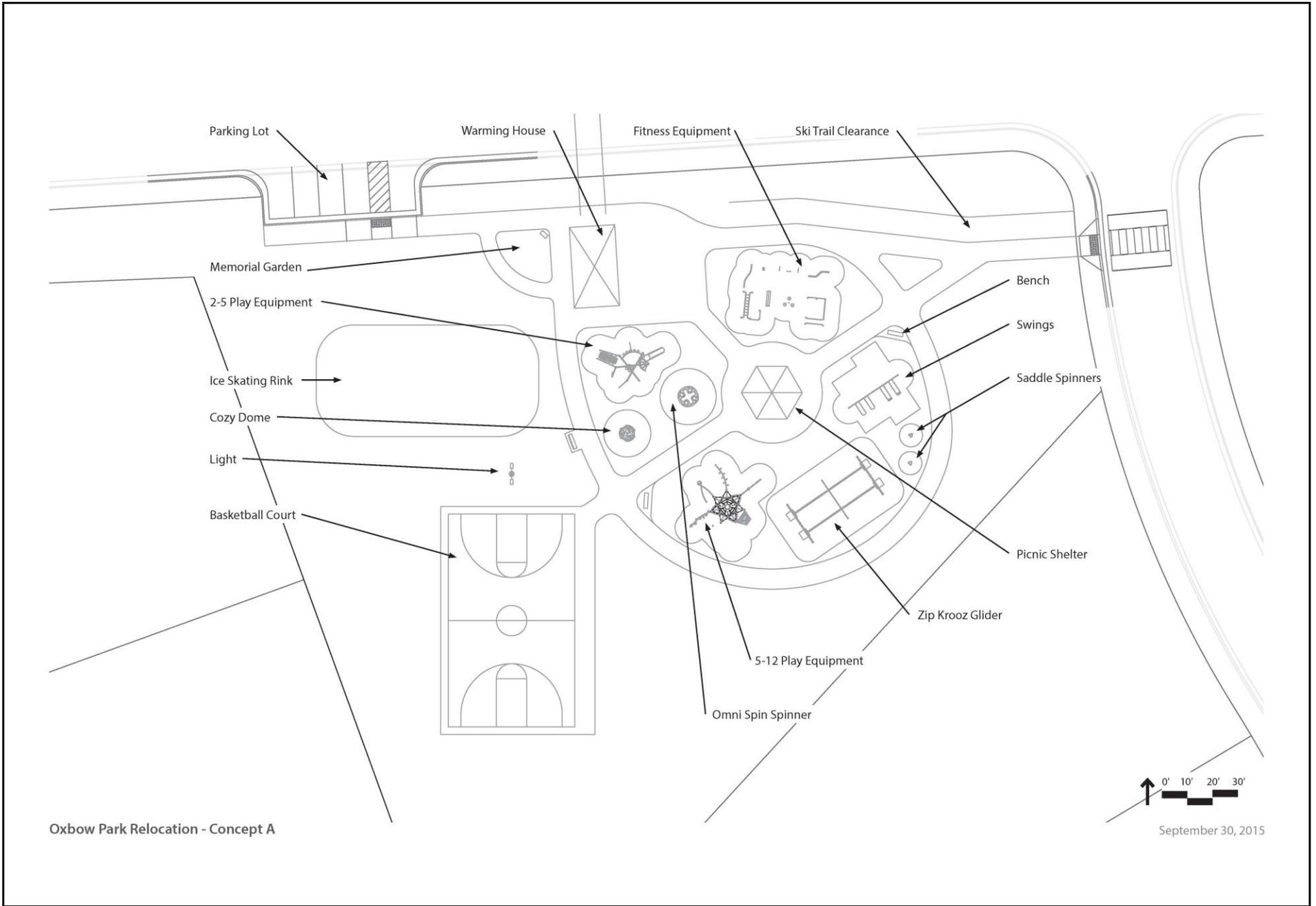


**Existing Park Photographs**

WP43E3 Oxbow Park Relocation Technical Memorandum  
 Oxbow, ND

**Figure 1**

7715.02 4/26/17



Oxbow Park Relocation - Concept A

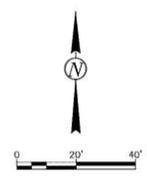
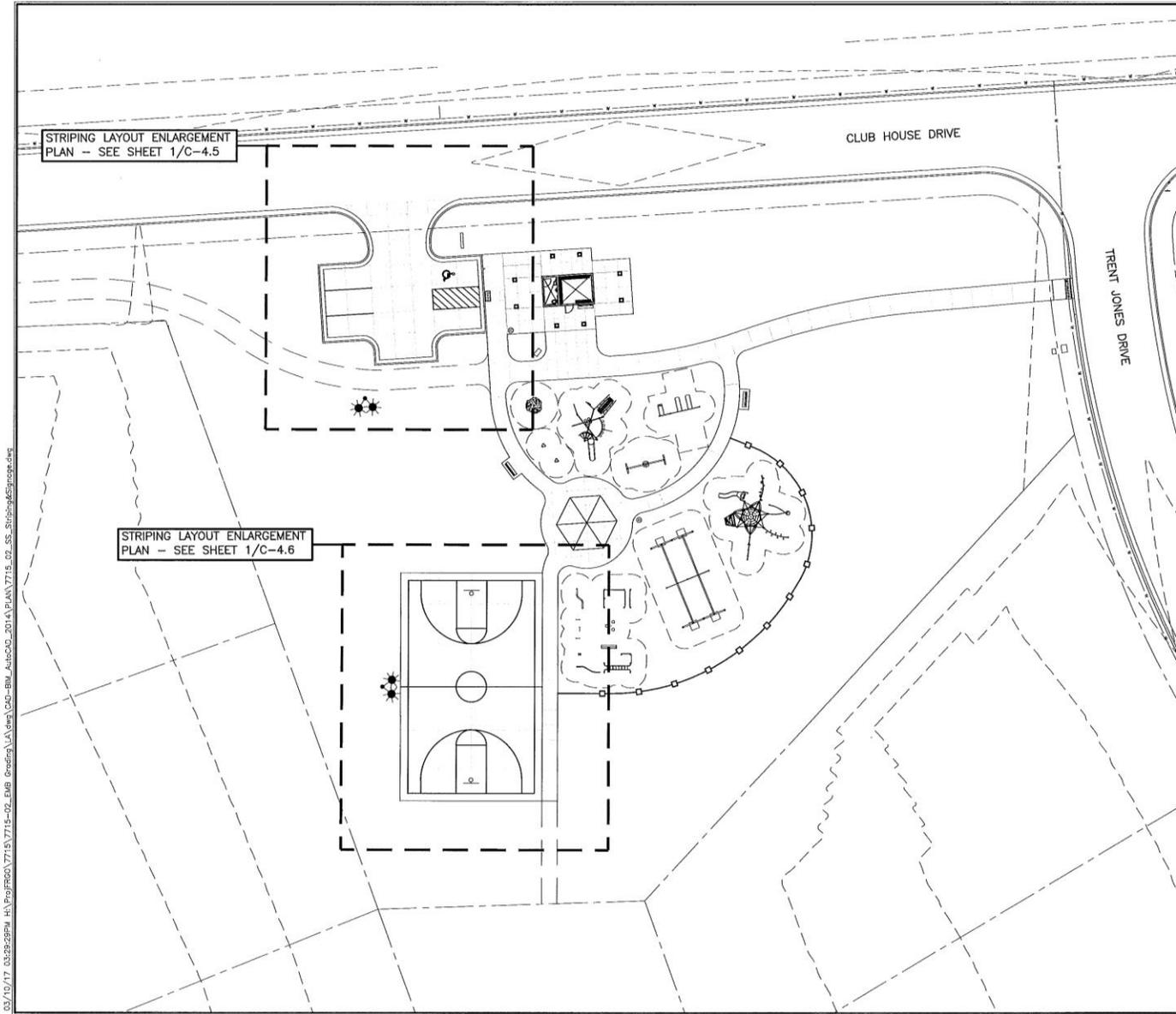
0' 10' 20' 30'  
September 30, 2015

**Preferred Concept**

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Oxbow, ND

**Figure 2**

7715.02 4/26/17



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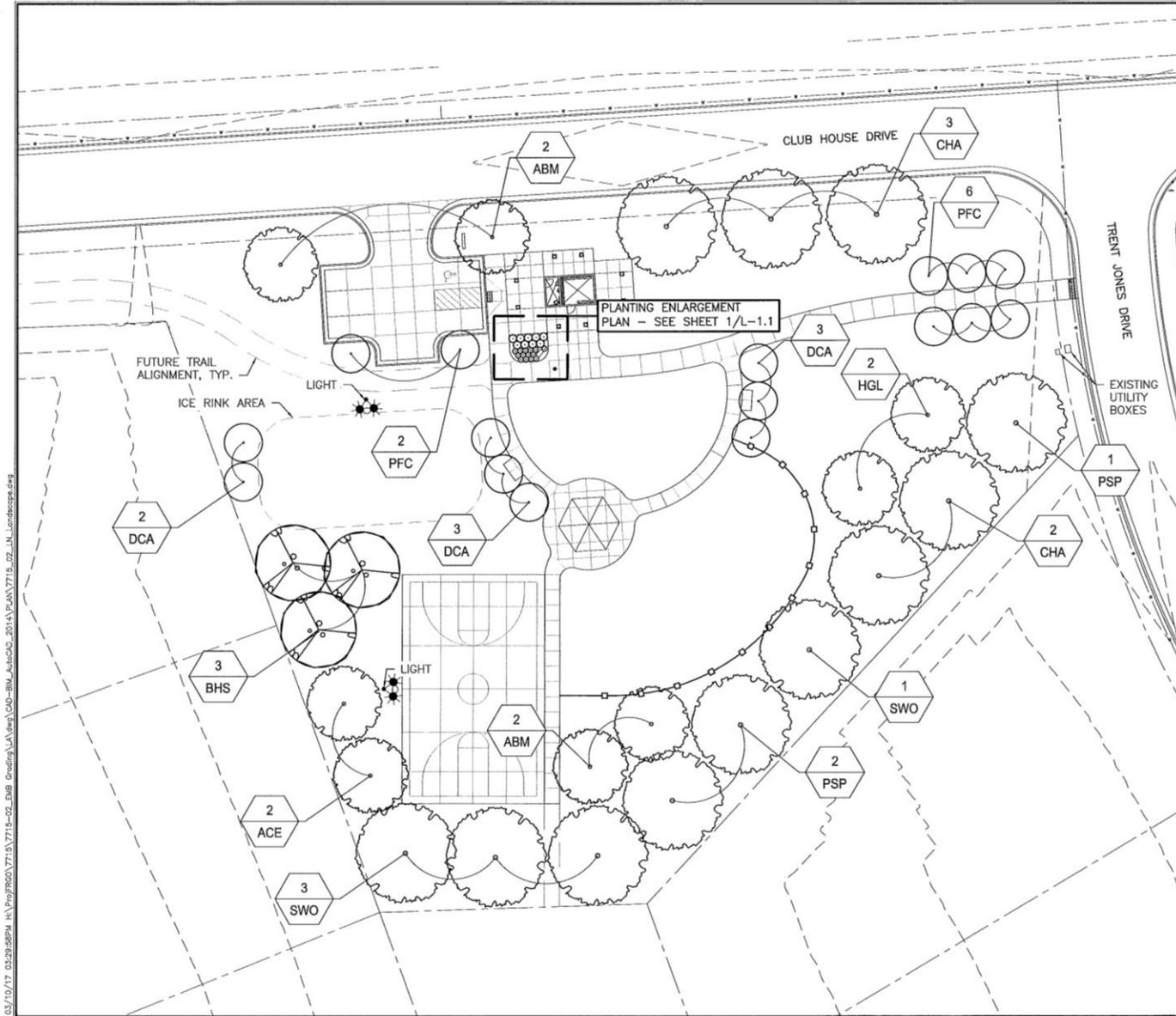
- LEGEND**
- PROPERTY LINE
  - FUTURE TRAILS
  - BUFFER FOR PLAY AREA/EQUIPMENT
  - PLASTIC EDGER

ELEVATION DATUM (VERTICAL CONTROL): NAVD 83 COORDINATE SYSTEM (HORIZONTAL CONTROL): NAD 83 (USRS) FARGO GROUND - US SURVEY FEET	DATE:	03-10-17
	REVISIONS:	
PROJECT No.:	WP-43E3	
DRAWN BY:	FB	
CHECKED BY:	JG, TW	
PROJ. MANAGER:	HMG	
PROJ. ENGINEER:		
<b>C-4.4</b>		

**Select Construction Bid Plan Sheet – Layout**

WP43E3 Oxbow Park Relocation Technical Memorandum  
Oxbow, ND

**Figure 3**



  
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- NOTES:
1. CONTRACTOR SHALL STAKE ALL PLANTINGS IN THE FIELD FOR APPROVAL BY THE ENGINEER.
  2. REPORT ANY DISCREPANCIES IN THE PLANS IMMEDIATELY TO THE ENGINEER.

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**LEGEND**

-  PROPERTY LINE
-  FUTURE TRAILS
-  PLASTIC EDGER
-  DECIDUOUS TREE
-  CONIFEROUS TREE
-  ORNAMENTAL TREE

COORDINATE SYSTEM (HORIZONTAL CONTROL): NAVD 83 (F886) FARGO GRID - US SURVEY FEET  
 ELEVATION DATUM (VERTICAL CONTROL): GEOD3

OXBOW PARK RELOCATION  
GENERAL LANDSCAPING AND PLANTING  
RED RIVER OF THE NORTH RIVER BASIN  
FARGO-MOORHEAD FLOOD RISK MANAGEMENT  
CASS COUNTY, NORTH DAKOTA  
LANDSCAPE PLAN

DATE: 03-16-17

REVISIONS:


FILE NAME:

PROJECT No. WP-43E3  
 DRAWN BY: RB  
 CHECKED BY: JG, TW  
 PROJ. MANAGER: HMG  
 PROJ. ENGINEER:

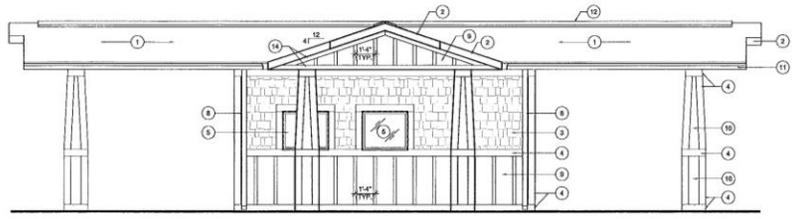
L-1.0

## Select Construction Bid Plan Sheet – Landscape Layout

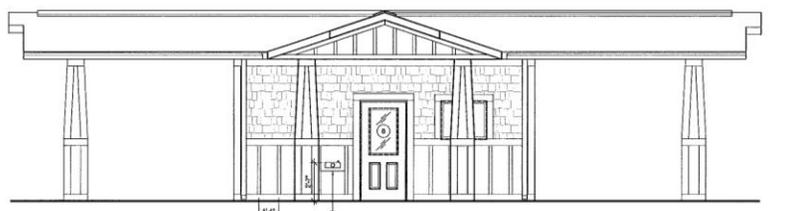
WP43E3 Oxbow Park Relocation Technical Memorandum  
 Oxbow, ND

Figure 4

C:\p1\12\17\_01\55\12PM\_V\p1\p1\12\17\_01\55\12PM\_V\Favorites\USACE\14612100\level\oxbow\warming\_house\Sheets\Exterior - Elevation.dwg

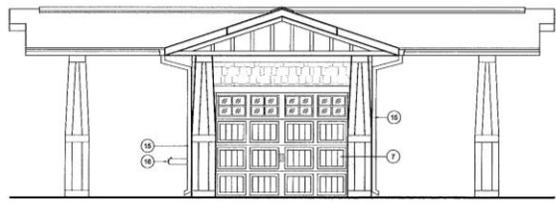


**1 NORTH ELEVATION**  
 SCALE: 1/4" = 1'-0" @ 22x34 SHEET SIZE  
 SCALE: 1/8" = 1'-0" @ 11x17 SHEET



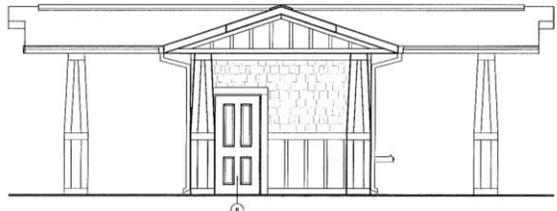
**2 SOUTH ELEVATION**  
 SCALE: 1/4" = 1'-0" @ 22x34 SHEET SIZE  
 SCALE: 1/8" = 1'-0" @ 11x17 SHEET

SEE 1A-A.3.1 FOR ADDITIONAL INFO.



**3 EAST ELEVATION**  
 SCALE: 1/4" = 1'-0" @ 22x34 SHEET SIZE  
 SCALE: 1/8" = 1'-0" @ 11x17 SHEET

SEE 1A-A.3.1 FOR ADDITIONAL INFO.



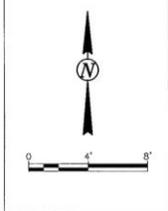
**4 WEST ELEVATION**  
 SCALE: 1/4" = 1'-0" @ 22x34 SHEET SIZE  
 SCALE: 1/8" = 1'-0" @ 11x17 SHEET

SEE 1A-A.3.1 FOR ADDITIONAL INFO.

**GENERAL ELEVATION NOTES:**  
 1. SEE MECHANICAL AND ELECTRICAL FOR ADDITIONAL INFORMATION.

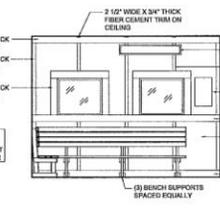
**REFERENCED ELEVATION NOTES:**

- (1) ASPHALT SHINGLES
- (2) PRE-FINISHED METAL FLASHING
- (3) FIBER CEMENT SHAKES SIDING
- (4) 1/2" WIDE X 3/4" THICK FIBER CEMENT TRIM
- (5) ALUM. WINDOW WITH 1/2" WIDE X 3/4" THICK FIBER CEMENT TRIM AROUND THE PERIMETER
- (6) PRE-FINISH STEEL ENTRY DOOR WITH 1/2" WIDE X 3/4" THICK FIBER CEMENT TRIM AROUND THE PERIMETER
- (7) INSULATED, STEEL, MANUAL OVERHEAD DOOR WITH 1/2" WIDE X 3/4" THICK FIBER CEMENT TRIM AROUND THE PERIMETER
- (8) PRE-FINISHED METAL DOWNSPOUT
- (9) FIBER CEMENT BOARD & BATTEN SIDING
- (10) FIBER CEMENT PANEL
- (11) PRE-FINISHED METAL GUTTER
- (12) RIDGE VENT
- (13) WATER FOUNTAIN, SEE MECH.
- (14) 1/2" WIDE X 3/4" THICK FIBER CEMENT TRIM
- (15) PRE-FINISHED METAL DOWNSPOUT BEYOND
- (16) WATER FOUNTAIN BEYOND

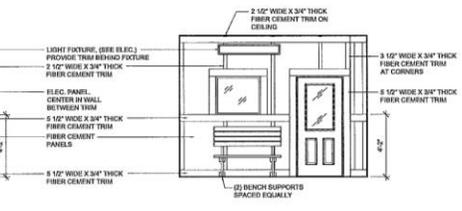


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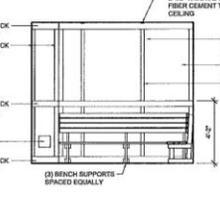
**HMG**  
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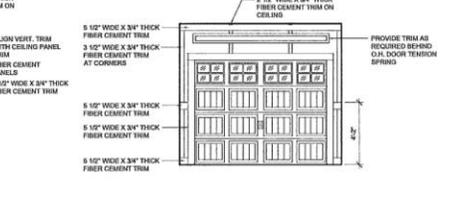
**5 INTERIOR ELEVATION**  
 SCALE: 1/4" = 1'-0" @ 22x34 SHEET  
 SCALE: 1/8" = 1'-0" @ 11x17 SHEET



**6 INTERIOR ELEVATION**  
 SCALE: 1/4" = 1'-0" @ 22x34 SHEET  
 SCALE: 1/8" = 1'-0" @ 11x17 SHEET



**7 INTERIOR ELEVATION**  
 SCALE: 1/4" = 1'-0" @ 22x34 SHEET  
 SCALE: 1/8" = 1'-0" @ 11x17 SHEET



**8 INTERIOR ELEVATION**  
 SCALE: 1/4" = 1'-0" @ 22x34 SHEET  
 SCALE: 1/8" = 1'-0" @ 11x17 SHEET

ELEVATION DATUM (VERTICAL CONTROL) COORDINATE SYSTEM (HORIZONTAL CONTROL)  
 NAVD 83 (USGS) ARROUND - US SURVEY FEET  
 MAD 85 (USGS)

OXBOW PARK RELOCATION  
 CITY PARK WARMING HOUSE STRUCTURE  
 RED RIVER OF THE NORTH RIVER BASIN  
 FARGO-MOORHEAD FLOOD RISK MANAGEMENT  
 CASS COUNTY, NORTH DAKOTA  
 EXTERIOR AND INTERIOR ELEVATIONS

DATE:	03-10-17
REVISION:	
REVISION:	
REVISION:	
REVISION:	
FILE NAME:	
PROJECT No.:	WP-42G
DRAWN BY:	DJS
CHECKED BY:	CLM
PROJ. MANAGER:	HMG
PROJ. ENGINEER:	KLJ

A-3.1

**Select Construction Bid Plan Sheet – Warming House**

WP43E3 Oxbow Park Relocation Technical Memorandum  
 Oxbow, ND

**Figure 5**

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## Attachment A

November 2014 Open House Presentation Boards





**A - Environmental Mitigation**

**B - Oxbow Park**

- Relocate park and replace park features
- Possibly supplement with additional park features by City

**C - Internal Drainage Features**

**D - Trails**

- Snowmobile Trail (both sides of CR 81)

**E - Golf Course (Winter)**

- Cross Country Skiing
- Sledding

**F - Hickson Park**

— Snowmobile Trail

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**Oxbow - Hickson - Bakke Recreation Concept**

Oxbow-Hickson-Bakke Recreation Plan Concepts  
 Fargo-Moorhead Area Diversion

Community Open House - November 17, 2014



Park Location



Concept A: Replacement Park Features

**Oxbow Park Relocation - Concept A**

Oxbow-Hickson-Bakke Recreation Plan Concepts  
 Fargo-Moorhead Area Diversion

Community Open House - November 17, 2014



Park Location



Concept B: Replacement and New Park Features

**Oxbow Park Relocation - Concept B**

Oxbow-Hickson-Bakke Recreation Plan Concepts  
 Fargo-Moorhead Area Diversion

Community Open House - November 17, 2014



2 - 5 Year Play Equipment (Concepts A & B)

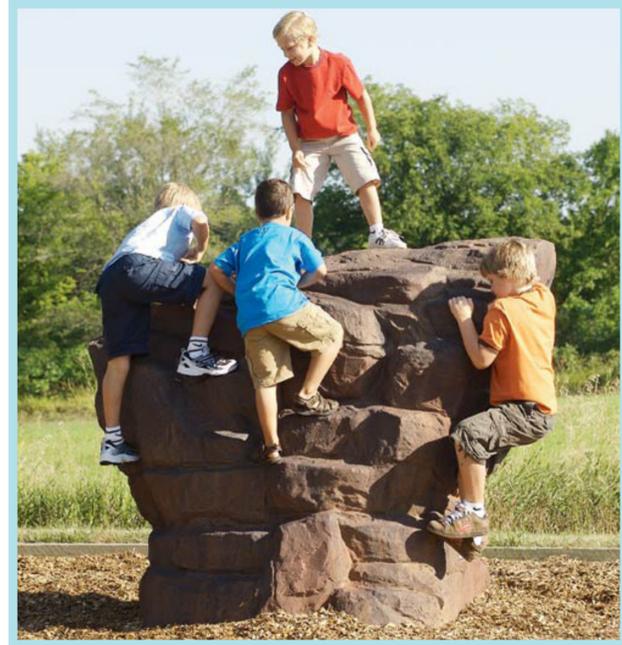
Fitness Equipment (Concept B)

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Oxbow Park Relocation - Representative Potential Recreation Features

Oxbow-Hickson-Bakke Recreation Plan Concepts  
 Fargo-Moorhead Area Division

Community Open House - November 17, 2014



Natural Climbers (Concept B)

5 to 12 Play Equipment (Concepts A & B)

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Oxbow Park Relocation - Representative Potential Recreation Features

Oxbow-Hickson-Bakke Recreation Plan Concepts  
Fargo-Moorhead Area Diversion

Community Open House - November 17, 2014



ZipKrooz Glider (Concept B)

Swings and Independent Equipment (Concepts A & B)

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**Oxbow Park Relocation - Representative Potential Recreation Features**

Oxbow-Hickson-Bakke Recreation Plan Concepts  
 Fargo-Moorhead Area Diversion

Community Open House - November 17, 2014