

SIBLEY ISLAND FLOOD CONTROL PROJECT STATUS UPDATE MEMORANDUM

To: Rod Beck, Manager
From: Michael H. Gunsch, PE, CFM, Senior Project Manager
Date: June 4, 2021
Project: HEI No. 6025-0014

Work on the Sibley Island Flood Control Project Preliminary Engineering Report (PER) has been on hold due to the pending establishment of a break-out floodway on Apple Creek. This floodway is being defined as part of an updated Burleigh County Flood Insurance Study and FEMA Risk Map Program. This new floodway affects a number of residences in the Apple Creek floodplain and crosses the originally proposed alignment for the Sibley Island Flood Control Project. Subsequently, new revised alignments were evaluated for viability and cost. The revised floodway mapping is not included in this memorandum.

While two new alignments were considered, it was recognized that there are properties that were within the originally intended protection area that would no longer be protected. These landowners will be notified during the next project public informational meeting. The three alignments considered in the PER are illustrated on **Figure One**. **Alternative One** is the original alignment, which is no longer viable due to the floodway designation. **Alternative Two** is a township roadway alignment suggested by the Burleigh County Highway Department (BCHD). **Alternative Three** is a natural high ground alignment that provides a lower cost project that also protects properties that the township roadway alignment does not.

Preliminary Opinions of Probable Cost (OPC) were developed for each alternative but are not presented here, as there are multiple factors still under consideration. The least expensive alignment with considerable savings is **Alternative Three**. This alternative requires the use of only small segments of township roadway on South 12th Street and Sibley Drive, as well as acquisition of an easement or ownership across private property. We will still need to contact with the landowner to open discussions regarding the option for this location.

As the project costs are being considered, one element to resolve is the special assessment district boundary. The Burleigh County Highway Department initially committed to contributing to the township roadway grade raises, however under **Alternative Three** those grade raises are now limited. Subsequently, their level of participation is likely to be reconsidered. In addition, the PER budget initially assigned to the BCHD consultant to revise the grade raise options is now required to complete the additional design services by the Burleigh County WRD. This includes additional geotechnical exploration on the preferred alignment.

Two potential special assessment district boundaries are under consideration to fund the project. **Option One** is based on the original northern boundary at 48th Avenue SE, using the revised southern limit created via the **Alternative Three** alignment. The 48th Avenue SE boundary was the line of protection established during the 2011 flood event. The BCHD agreed in principle to pay for the township grade raises as they facilitated the 2011 protection level, therefore properties north of this line would not be included in the special assessment district. **Option Two** would assess all properties protected by the Sibley Island Flood Control Project, including those north of 48th Avenue SE. The exception being those parcels already located within the Missouri River Correctional Center's special assessment district. These two districts are illustrated on **Figure Two**.

The work on the PER continues along the lines noted above. Project information will be transmitted to the USACE related to the geotechnical exploration, river hydraulic evaluation, hydrology update and a request for SHIPO review, for the Sibley Island Flood Control Project.

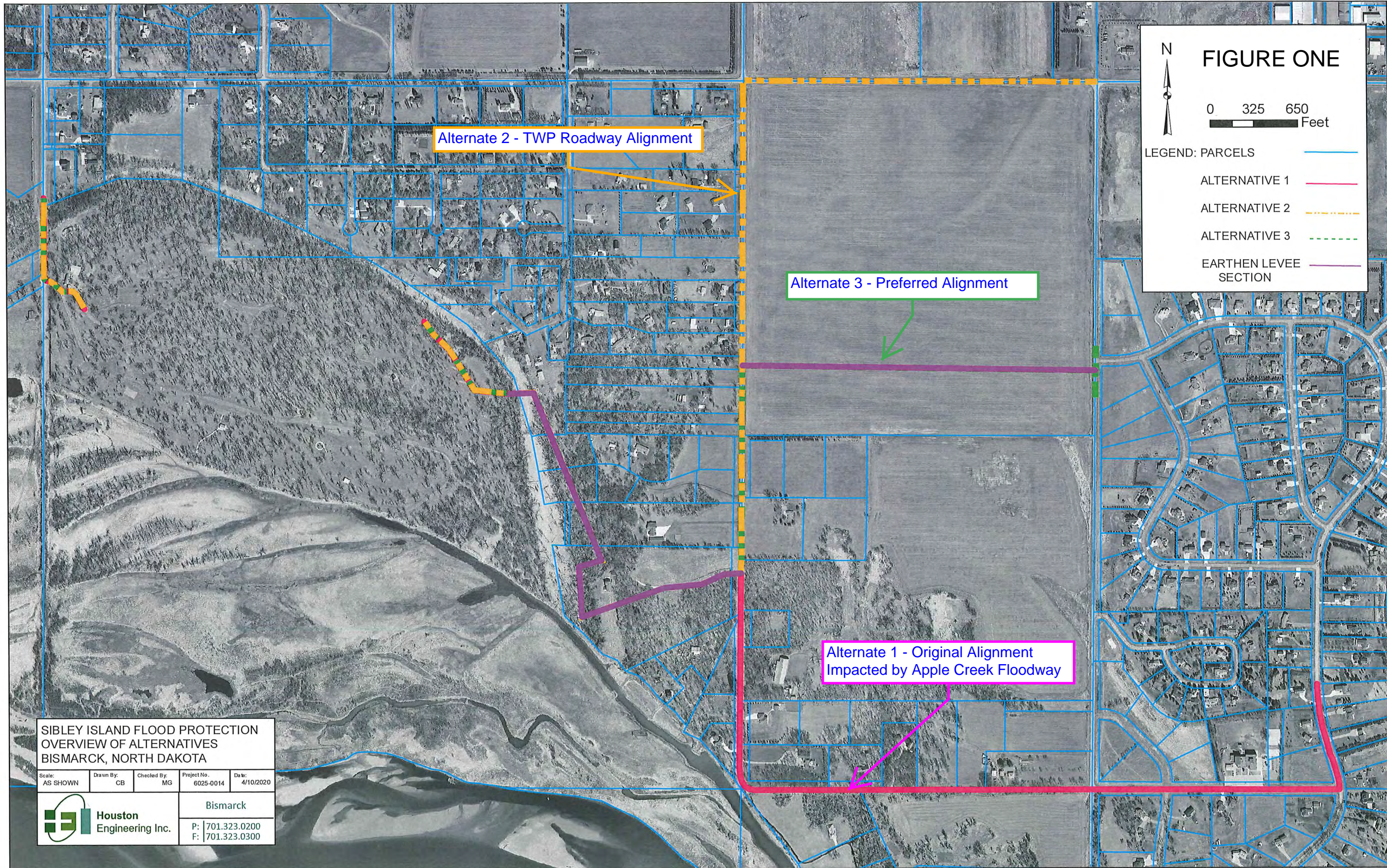


FIGURE ONE

0 325 650 Feet

LEGEND: PARCELS

- ALTERNATIVE 1
- ALTERNATIVE 2
- ALTERNATIVE 3
- EARTHEN LEVEE SECTION

Alternate 2 - TWP Roadway Alignment

Alternate 3 - Preferred Alignment

Alternate 1 - Original Alignment Impacted by Apple Creek Floodway

SIBLEY ISLAND FLOOD PROTECTION
OVERVIEW OF ALTERNATIVES
BISMARCK, NORTH DAKOTA

Scale: AS SHOWN	Drawn By: CB	Checked By: MG	Project No. 6025-0014	Date: 4/10/2020
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	Bismarck
	P: 701.323.0200 F: 701.323.0300

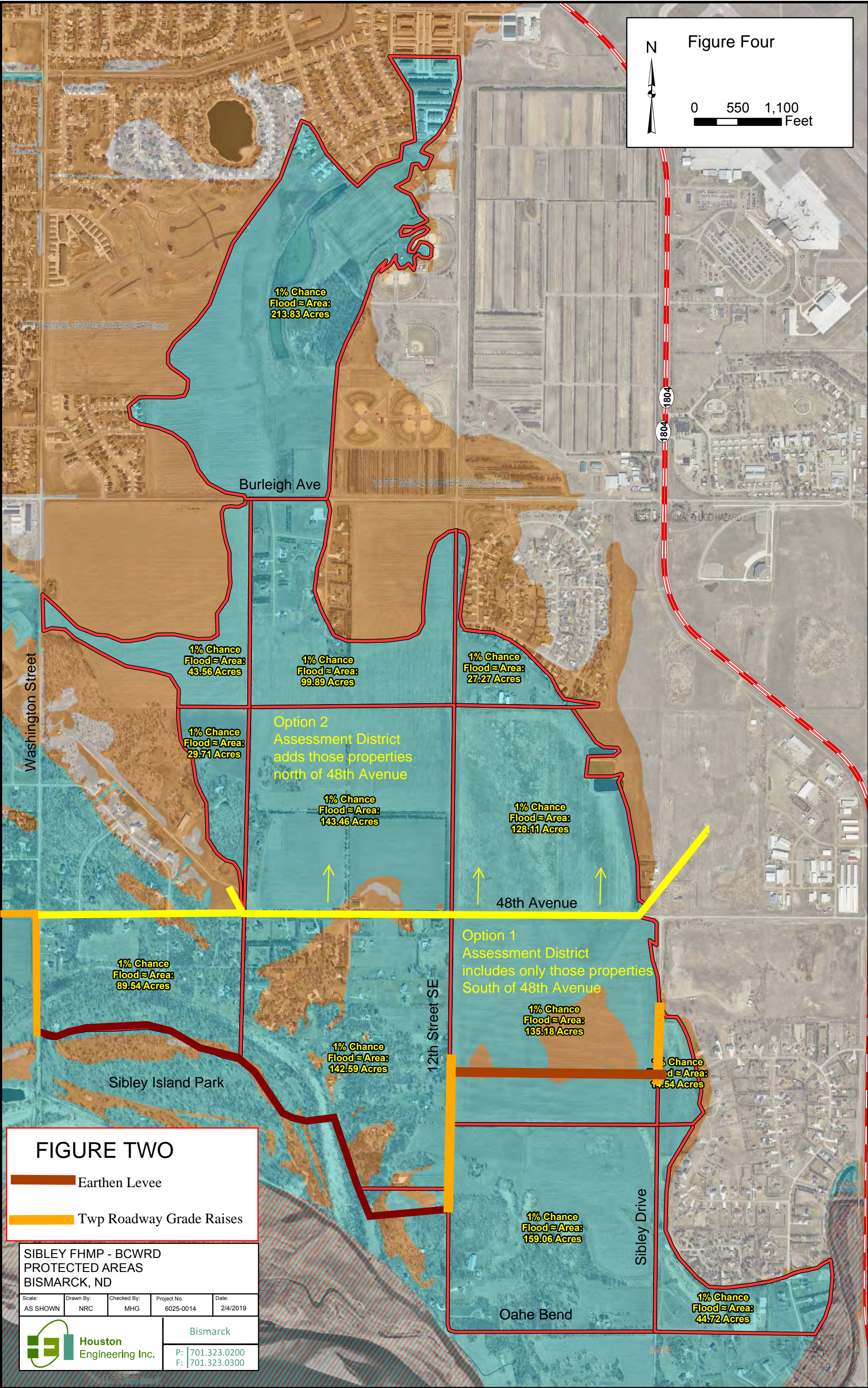
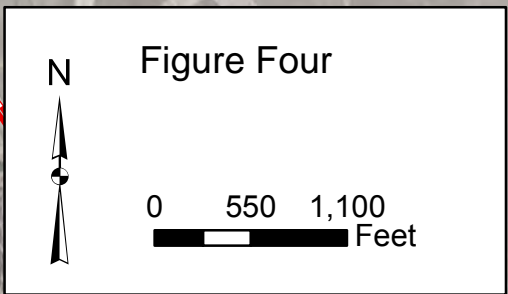


FIGURE TWO

- Earthen Levee
- Twp Roadway Grade Raises

SIBLEY FHMP - BCWRD PROTECTED AREAS BISMARCK, ND

Scale: AS SHOWN	Drawn By: NRC	Checked By: MHG	Project No: 6025-0014	Date: 2/4/2019
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Houston Engineering Inc.

Bismarck

P: 701.323.0200
F: 701.323.0300

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