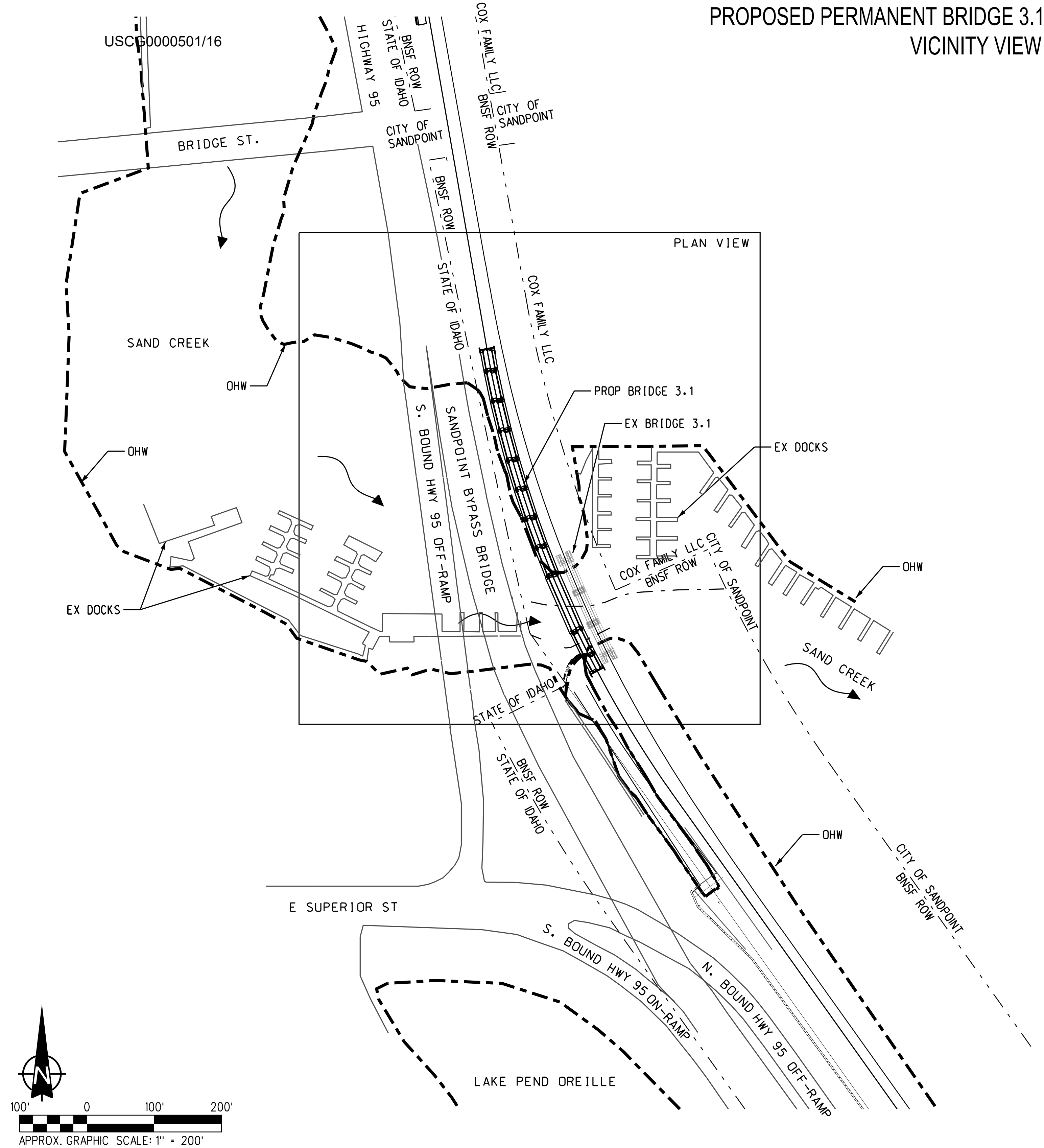
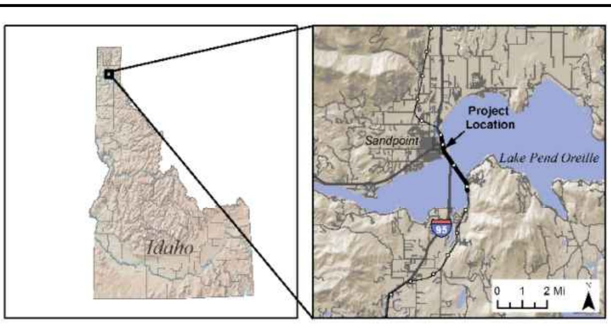
ATTACHMENT C
BRIDGE PERMIT DRAWINGS

PROPOSED PERMANENT BRIDGE 3.1
VICINITY VIEW



USCG0000501/16
HIGHWAY 95
BNSF ROW
STATE OF IDAHO
COX FAMILY LLC
BNSF ROW
CITY OF SANDPOINT
BRIDGE ST.
CITY OF SANDPOINT
BNSF ROW
STATE OF IDAHO
PLAN VIEW
COX FAMILY LLC
SAND CREEK
OHW
PROP BRIDGE 3.1
EX BRIDGE 3.1
EX DOCKS
OHW
S. BOUND HWY 95 OFF-RAMP
SANDPOINT BYPASS BRIDGE
COX FAMILY LLC
BNSF ROW
CITY OF SANDPOINT
OHW
EX DOCKS
SAND CREEK
STATE OF IDAHO
BNSF ROW
STATE OF IDAHO
OHW
CITY OF SANDPOINT
BNSF ROW
E SUPERIOR ST
S. BOUND HWY 95 ON-RAMP
N. BOUND HWY 95 OFF-RAMP
LAKE PEND OREILLE
N
100'
0
100'
200'
APPROX. GRAPHIC SCALE: 1" = 200'

BASED ON: HANSON PROFESSIONAL SERVICES, INC. 90% PLANS. ELEVATIONS ARE RELATIVE TO NAVD88.



PROFESSIONAL ENGINEER
LICENSED
15947
STATE OF IDAHO
MAT FLETCHER

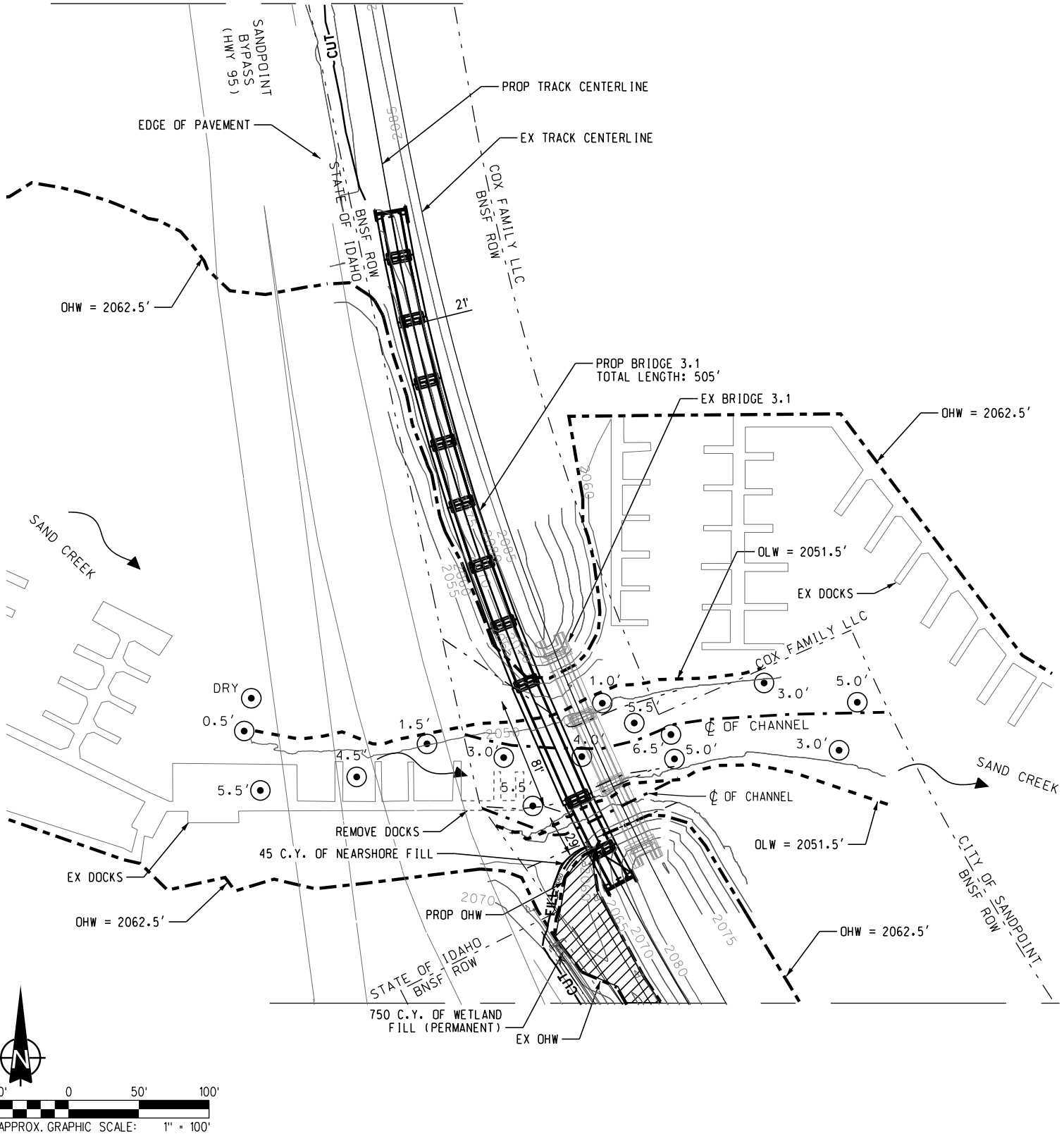
Mat Fletcher
7/12/2019

APPLICANT / OWNER: BNSF RAILWAY COMPANY
CONSULTANT / AGENT: HANSON PROFESSIONAL SERVICES / JACOBS ENGINEERING GROUP
NAME OF BRIDGE: SAND CREEK BRIDGE (BNSF BRIDGE 3.1)
NAME OF WATERWAY: SAND CREEK
MILE POINT OF BRIDGE LOCATION: 0.1
CITY: SANDPOINT **COUNTY:** BONNER **STATE:** IDAHO
DATE: 06/27/2019

6/27/2019 12:17:32 PM $USER$
P:\W3X76600\600DSC\620DESIGN\JARPA\SPJ_CG_BR3-1_Vicinity.dgn

PROPOSED PERMANENT BRIDGE 3.1
PLAN VIEW

USCG0000511/16



N

50' 0 50' 100'

APPROX. GRAPHIC SCALE: 1" = 100'

BASED ON: HANSON PROFESSIONAL SERVICES, INC. 90% PLANS. ELEVATIONS ARE RELATIVE TO NAVD88.

LEGEND

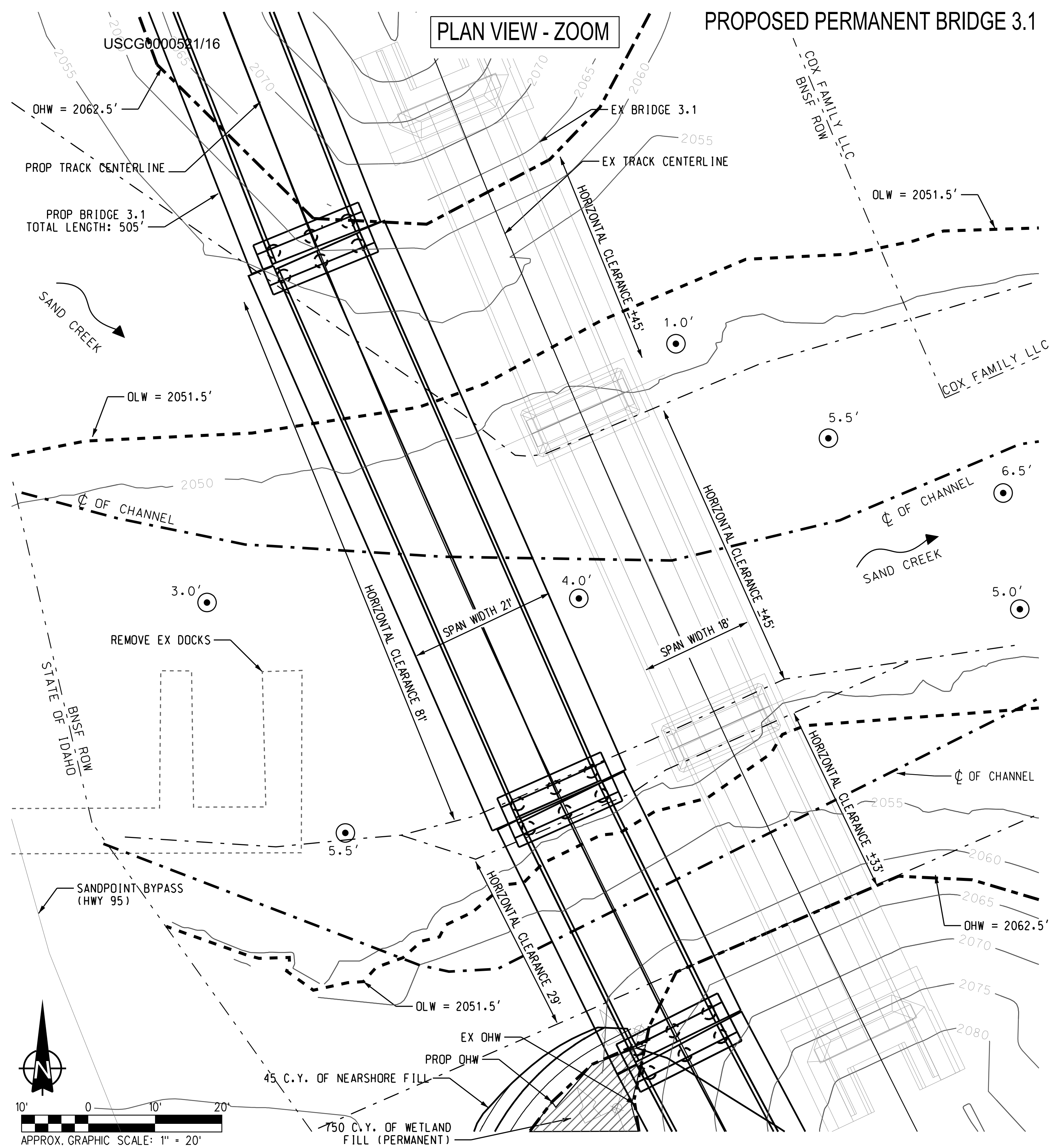
- BNSF RIGHT-OF-WAY (ROW)
- ORDINARY HIGH WATER (OHW)
- ORDINARY LOW WATER (OLW)
- CENTERLINE OF NAVIGATIONAL CHANNEL
- LIMITS OF NAVIGATIONAL CHANNEL
- EXISTING STRUCTURE (ROADS, DOCKS, BRIDGE 3.1)
- 1.0' WATER DEPTH AT OLW
- PERMANENT FILL BELOW OHW

PROFESSIONAL ENGINEER LICENSED 15947 STATE OF IDAHO MAT FLETCHER

7/12/2019

APPLICANT / OWNER: BNSF RAILWAY COMPANY
CONSULTANT / AGENT: HANSON PROFESSIONAL SERVICES / JACOBS ENGINEERING GROUP
NAME OF BRIDGE: SAND CREEK BRIDGE (BNSF BRIDGE 3.1)
NAME OF WATERWAY: SAND CREEK
MILE POINT OF BRIDGE LOCATION: 0.1
CITY: SANDPOINT **COUNTY:** BONNER **STATE:** IDAHO
DATE: 06/27/2019

PROPOSED PERMANENT BRIDGE 3.1



PLAN VIEW - ZOOM
USCG0000521/16
OHW = 2062.5'
PROP TRACK CENTERLINE
PROP BRIDGE 3.1
TOTAL LENGTH: 505'
EX BRIDGE 3.1
EX TRACK CENTERLINE
COX FAMILY LLC
BNSF ROW
OLW = 2051.5'
SAND CREEK
HORIZONTAL CLEARANCE ±45'
1.0'
COX FAMILY LLC
5.5'
6.5'
℄ OF CHANNEL
2050
2055
2060
2065
2070
2075
2080
SAND CREEK
3.0'
4.0'
5.0'
SPAN WIDTH 21'
SPAN WIDTH 18'
HORIZONTAL CLEARANCE 81'
REMOVE EX DOCKS
STATE OF IDAHO
BNSF ROW
℄ OF CHANNEL
HORIZONTAL CLEARANCE ±33'
5.5'
SANDPOINT BYPASS
(HWY 95)
HORIZONTAL CLEARANCE 29'
OHW = 2062.5'
OLW = 2051.5'
EX OHW
PROP OHW
45 C.Y. OF NEARSHORE FILL
750 C.Y. OF WETLAND
FILL (PERMANENT)
N
10' 0 10' 20'
APPROX. GRAPHIC SCALE: 1" = 20'

BASED ON: HANSON PROFESSIONAL SERVICES, INC. 90% PLANS. ELEVATIONS ARE RELATIVE TO NAVD88.

LEGEND

- BNSF RIGHT-OF-WAY (ROW)
- ORDINARY HIGH WATER (OHW)
- ORDINARY LOW WATER (OLW)
- CENTERLINE OF NAVIGATIONAL CHANNEL
- LIMITS OF NAVIGATIONAL CHANNEL
- EXISTING STRUCTURE (ROADS, DOCKS, BRIDGE 3.1)
- 1.0' WATER DEPTH AT OLW
- PERMANENT FILL BELOW OHW

PROFESSIONAL ENGINEER LICENSED 15947 STATE OF IDAHO MAT FLETCHER

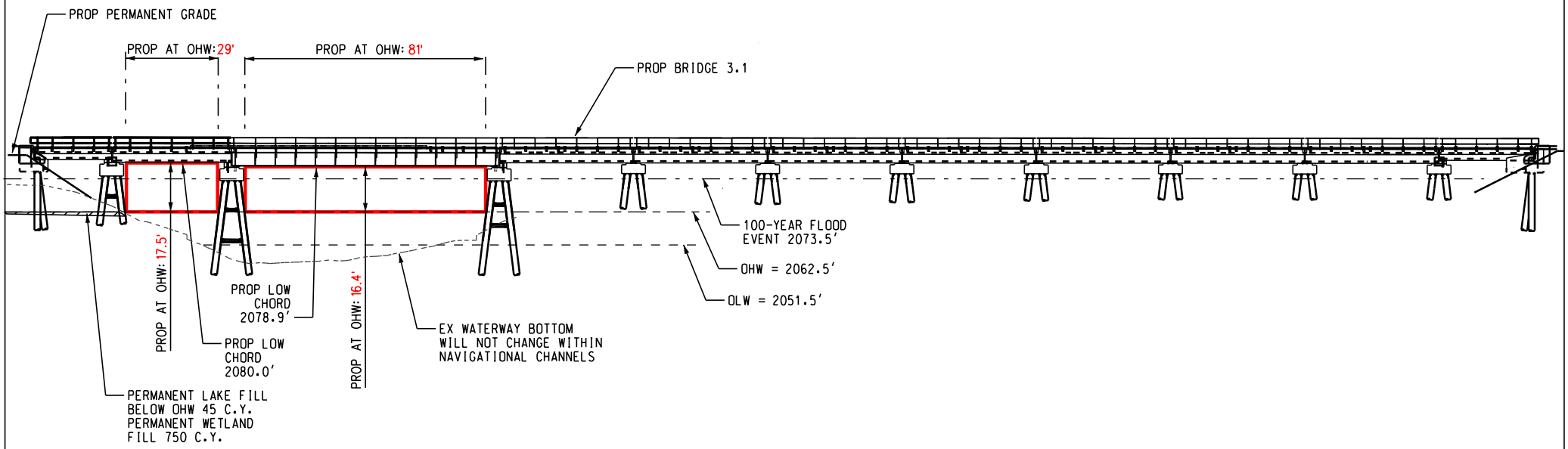
Mat Fletcher
7/12/2019

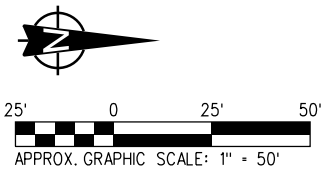
APPLICANT / OWNER: BNSF RAILWAY COMPANY
CONSULTANT / AGENT: HANSON PROFESSIONAL SERVICES / JACOBS ENGINEERING GROUP
NAME OF BRIDGE: SAND CREEK BRIDGE (BNSF BRIDGE 3.1)
NAME OF WATERWAY: SAND CREEK
MILE POINT OF BRIDGE LOCATION: 0.1
CITY: SANDPOINT **COUNTY:** BONNER **STATE:** IDAHO
DATE: 06/27/2019

6/27/2019 12:02:54 PM $USER$
P:\W3X76600\600DISC\620DESIGN\JARPA\SPJ_CG_BR3-1_Plan-01 - Zoom.dgn

USCG0000531/16

PROPOSED PERMANENT BRIDGE 3.1
ELEVATION VIEW





BASED ON: HANSON PROFESSIONAL SERVICES, INC. 90% PLANS. ELEVATIONS ARE RELATIVE TO NAVD88.

LEGEND

- ORDINARY HIGH WATER (OHW)
- ORDINARY LOW WATER (OLW)
- 100-YEAR FLOOD
- LIMITS OF NAVIGATIONAL CHANNEL
- PERMANENT FILL BELOW OHW
- EXISTING GROUND / WATERWAY BOTTOM
- PROPOSED NAVIGATIONAL ENVELOPE

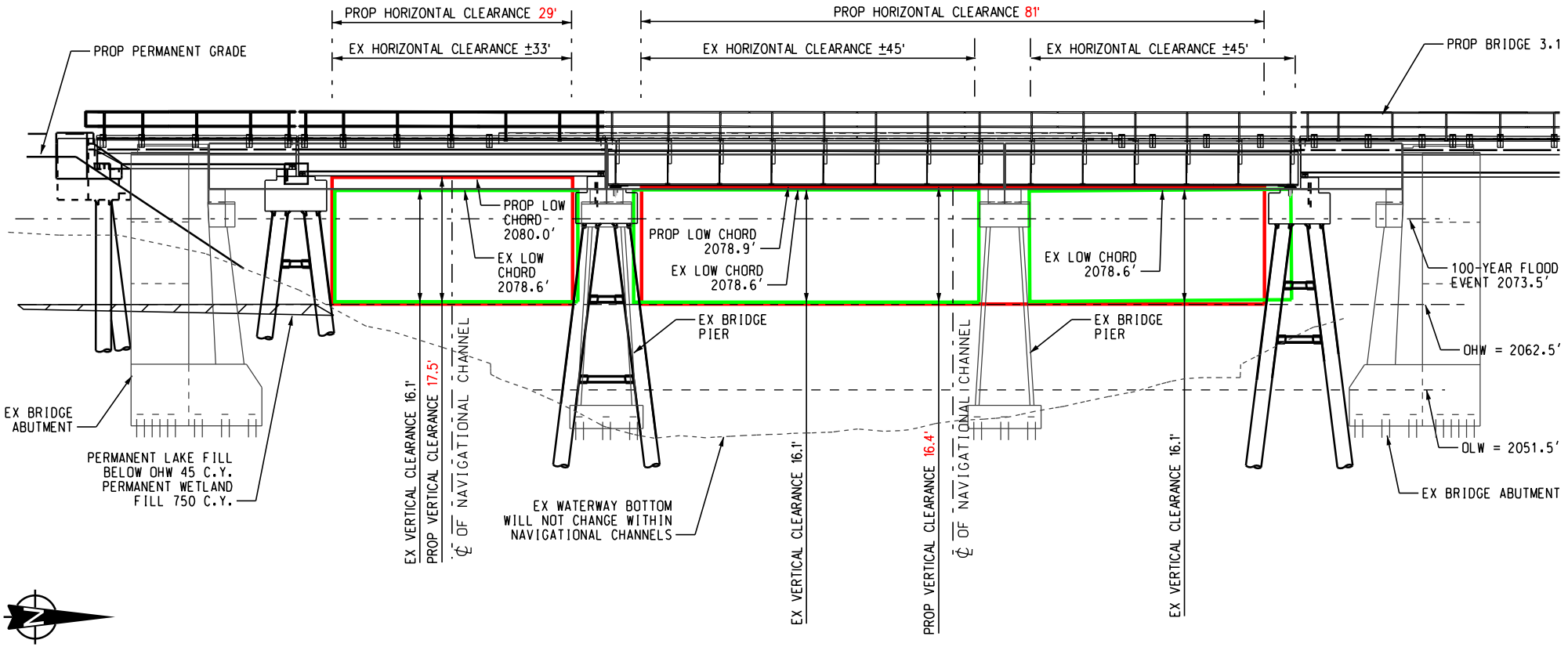
PROFESSIONAL ENGINEER LICENSED 15947 STATE OF IDAHO MAT FLETCHER

7/12/2019

APPLICANT / OWNER: BNSF RAILWAY COMPANY
CONSULTANT / AGENT: HANSON PROFESSIONAL SERVICES / JACOBS ENGINEERING GROUP
NAME OF BRIDGE: SAND CREEK BRIDGE (BNSF BRIDGE 3.1)
NAME OF WATERWAY: SAND CREEK
MILE POINT OF BRIDGE LOCATION: 0.1
CITY: SANDPOINT **COUNTY:** BONNER **STATE:** IDAHO
DATE: 06/27/2019

USCG0000541/16

PROPOSED PERMANENT BRIDGE 3.1
ELEVATION VIEW - ZOOM



BASED ON: HANSON PROFESSIONAL SERVICES, INC. 90% PLANS. ELEVATIONS ARE RELATIVE TO NAVD88.

LEGEND

- ORDINARY HIGH WATER (OHW)
- ORDINARY LOW WATER (OLW)
- 100-YEAR FLOOD
- LIMITS OF NAVIGATIONAL CHANNEL
- PERMANENT FILL BELOW OHW
- EXISTING GROUND / WATERWAY BOTTOM
- PROPOSED NAVIGATIONAL ENVELOPE
- EXISTING NAVIGATIONAL ENVELOPE

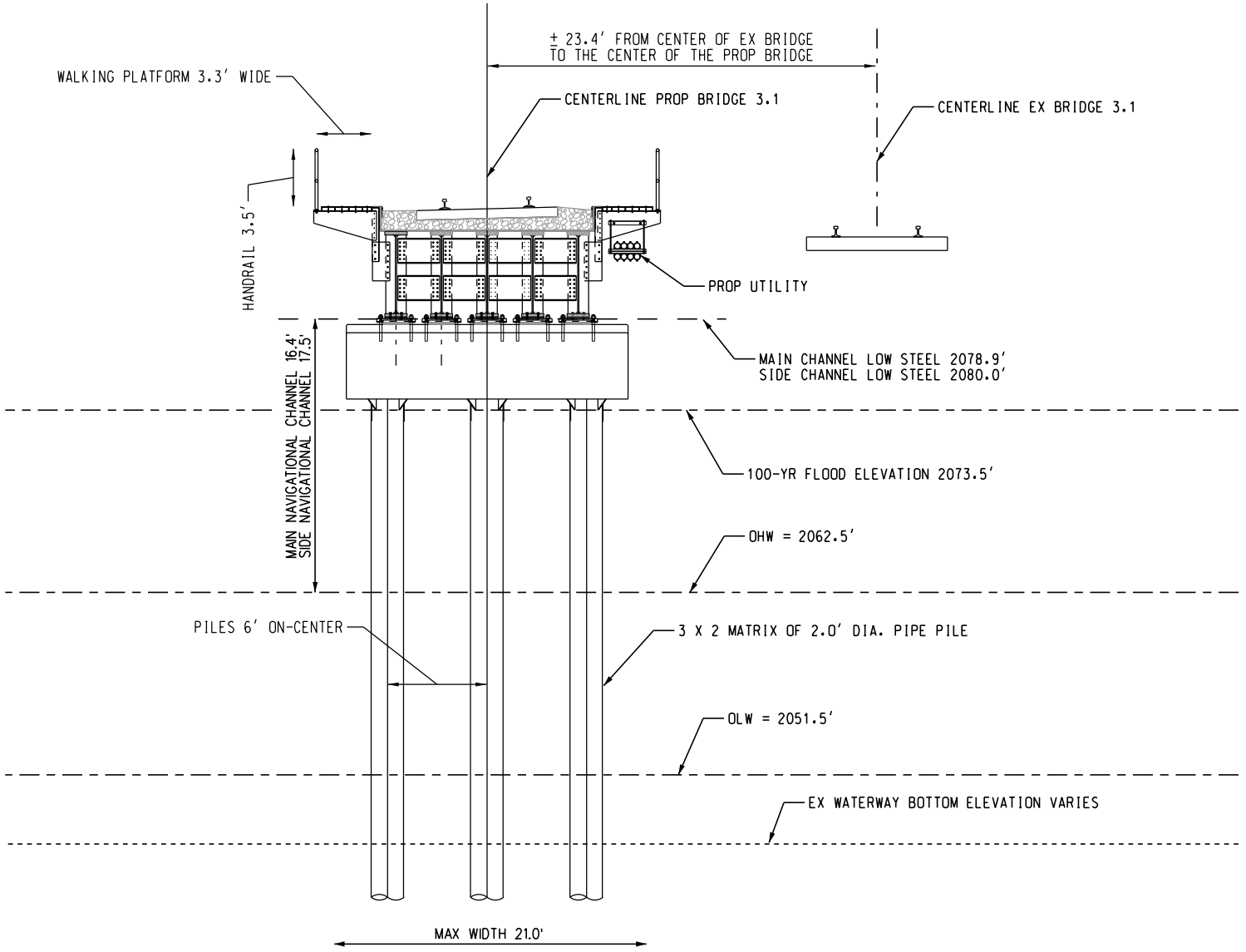
PROFESSIONAL ENGINEER LICENSED 15947 STATE OF IDAHO MAT FLETCHER

Mat Fletcher 7/12/2019

APPLICANT / OWNER: BNSF RAILWAY COMPANY
CONSULTANT / AGENT: HANSON PROFESSIONAL SERVICES / JACOBS ENGINEERING GROUP
NAME OF BRIDGE: SAND CREEK BRIDGE (BNSF BRIDGE 3.1)
NAME OF WATERWAY: SAND CREEK
MILE POINT OF BRIDGE LOCATION: 0.1
CITY: SANDPOINT **COUNTY:** BONNER **STATE:** IDAHO
DATE: 06/27/2019

USCG0000551/16

PROPOSED PERMANENT BRIDGE 3.1
TYPICAL SECTION VIEW



5' 0 5' 10'

APPROX. GRAPHIC SCALE: 1" = 10'

BASED ON: HANSON PROFESSIONAL SERVICES, INC. 90% PLANS. ELEVATIONS ARE RELATIVE TO NAVD88.

LEGEND

- ORDINARY HIGH WATER (OHW)
- ORDINARY LOW WATER (OLW)
- 100-YEAR FLOOD
- EXISTING GROUND / WATERWAY BOTTOM

PROFESSIONAL ENGINEER LICENSED 15947 STATE OF IDAHO MAT FLETCHER

7/12/2019

APPLICANT / OWNER: BNSF RAILWAY COMPANY
CONSULTANT / AGENT: HANSON PROFESSIONAL SERVICES / JACOBS ENGINEERING GROUP
NAME OF BRIDGE: SAND CREEK BRIDGE (BNSF BRIDGE 3.1)
NAME OF WATERWAY: SAND CREEK
MILE POINT OF BRIDGE LOCATION: 0.1
CITY: SANDPOINT **COUNTY:** BONNER **STATE:** IDAHO
DATE: 06/27/2019

C. <u>PLAN SHEETS</u> - Plans submitted with the bridge permit application become an official, and permanent, part of the issued permit or permit amendment. <u>To minimize delays, provide the following information:</u>

1. Plan Sheet Checklist - Use the following checklist for specifics to include with bridge plans:

   a. **<u>General</u>**

   ✓ Provide all plans in standard 8 ½ X 11" size, providing the fewest sheets possible that still show significant project structural details. Plan sheets may be submitted electronically.

   <u>NOTE</u>: Do not show bridge navigational lighting plans on bridge plan and elevation views.

   ✓ Show all dimensions and distances in U.S. linear feet in decimal form (versus feet and inches). For international bridges also show all dimensions in both linear feet and meters.

   ✓ Include the datum used in the plan and elevation view. Use the same datum for all submitted drawings (e.g. NAVD, NGVD). For replacement and modification projects, the datum used may differ between the new plans and the previously approved plans for the existing structure. If this situation occurs, please be sure to show all necessary conversions to demonstrate any change in approved clearances.

   ____ All plan sheets must bear the date, signature and stamp of a professional engineer.

   <u>NOTE</u>: the engineer stamp date must either match or be dated later than the title block date before the permit and plans can be approved by the Coast Guard.

   If desired, it is acceptable for the engineer to add the following statement to the plans, "Conceptual plans utilized to obtain Coast Guard bridge permit".

   ✓ The total number of plan sheets identified in the title block must match the number of plan sheets submitted for approval.

   b. **<u>Title Blocks</u>** - Include the following items in the title blocks (lower right-hand corner on all of the plan sheets):

   ✓ Applicant/Owner;

   ✓ Consultant/Agent;

   ✓ Name of Bridge(s);

   ✓ Name of Waterway;

   ✓ Mile point of bridge(s) location (from confluence of mouth of waterway) in

statute miles;

- ✓ City, county/parish, and state (state whether the bridge(s) is at, near, or between – as appropriate);
- ✓ Date of plans (i.e., mm/dd/yyyy, must either match or be dated prior to the engineer's date stamp); and
- ✓ Sheet number and total number of sheets in set to be approved (i.e., Sheet 1 of 5).

c. **Location/Vicinity Map**

- ✓ Show graphic scale and north arrow;
- ✓ Show location of bridge(s) on waterway;
- ✓ Identify the name of the waterway;
- ✓ Show course of waterway (i.e. ebb/flood, or direction of flow for non-tidal waters);
- ✓ Show structures immediately adjacent to the proposed bridge(s) and their relation to the proposed bridge(s);
- ✓ Identify wildlife and waterfowl refuges and any historical and archaeological sites; and
- ✓ Insert a small map of the state in which the project is located with an arrow showing the location of the proposed project.

d. **Plan View**

- ✓ Show graphic bar scale and north arrow;
- ✓ Identify the adjacent property owners at the four corners of the proposed structure(s);
- ✓ Show existing shorelines (may be defined or established by local or state regulation);
- ✓ Show ebb and flood in tidal waters and direction of flow in non-tidal waterway;
- ✓ Show mean high and low waterlines in tidal areas. Show ordinary high water and ordinary low water elevations if proposed activity is in a non-tidal waterway;
- ✓ Show all portions of existing bridge(s) that will remain in place;
- ✓ Show all portions of existing bridge(s) that will be removed by using dashed lines;
- ✓ Show principal dimensions of structure(s) from grade-to-grade. Show length,

width, etc.;

✓ Show location of dredging, excavation, fill or rip-rap, to include approximate number of cubic yards. Note: The Coast Guard does not approve these activities or items. Contact the U.S. Army Corps of Engineers for approval;

No system proposed Show location of the bridge protective system, piles, cables, etc. existing or to be constructed in the waterway. Identify type of material to be used;

✓ Show limits of navigational channel;

✓ Show axis (centerline) of channel;

✓ Show horizontal clearances, normal to the axis (centerline) of the channel between the bridge protective system, pilings, or abutments;

✓ Show water depth at mean low (or ordinary low if non-tidal) at various locations in the channel, under, upstream and downstream of the bridge(s); and

No system proposed Show the bridge protective system.

e. **Elevation View**

✓ Show graphic bar scale and north arrow;

✓ Show mean high and mean low water elevations in tidal areas. Show ordinary high and low water elevations in non-tidal areas;

✓ Show amount of fill material in cubic yards below mean high water;

✓ Show horizontal clearance normal to the axis (centerline) of the channel between the bridge protective fender system, pilings, or abutments, as appropriate for navigational channel;

✓ Show vertical clearances referenced to the appropriate high water stage either Mean High Water (MHW) or Ordinary High Water (OHW). Show vertical clearances at the center, as well as at the horizontal limits of the navigational channel (the most restrictive vertical clearance in the navigational channel);

No draw If the bridge(s) will have a draw, show the draw in the open and closed positions. Vertical clearances in the open position might not be unlimited, especially for vertical lift bridges and bascule bridges. For bascule bridges, specify which part of the navigation channel has an unlimited clearance in the open position i.e. the center 50 feet of the channel, etc;

✓ Show proposed navigational envelope (opening);

✓ Show proposed and existing contour of waterway bottom;

✓ Show 100-year flood elevation;

✓ Show the location and elevation of the low steel member of the navigation span; and

✓ If the bridge(s) will have a permanent traveler system installed for inspection/maintenance, show the reduction in vertical clearance (traveler height below low steel) and the location of traveler storage when not in use.

f. **Typical Section View**

✓ Show graphic bar scale;

✓ Show out-to-out width of the structure(s). (This is the width of the bridge(s) at its widest point.); and

✓ Include location and dimensions of travel lanes, shoulders, sidewalks, fishing/pedestrian platforms, railings, pipelines, etc.

g. **Details of the Bridge Protective System** (if details are known and ready for CG approval as part of the permit decision)

No system proposed Show bridge pier protective system in plan and elevation views including detail of attachment to pier, countersunk bolts, and relationship to mean high and low waterlines (on elevation view).

h. **Temporary Structures/Falsework** (if details are developed and ready for CG approval as part of the permit decision)

____ Show temporary structures/falsework;

Submitted Separately ____ Show existing bridge(s) to be removed using dashed lines; and

____ Show minimum horizontal and vertical clearances during construction.

WHEN APPLICABLE, PLEASE SUBMIT THE FOLLOWING PERMIT PLAN SHEETS SEPARATELY (do not include the sheets below in the same sequentially numbered package of sheets provided for bridge approval):

i. **Details of the Bridge Protective System** (if details and materials are not known at time of CG permit decision)

____ Show bridge protective system in plan and elevation views including detail of attachment to pier, countersunk bolts, and relationship to mean high and low waterlines (on elevation view).

j. **Temporary Structures/Falsework** (if details and materials are not known at time of CG permit decision)

____ Show temporary structures/falsework;

____ Show existing bridge(s) to be removed using dashed lines; and

____ Show minimum horizontal and vertical clearances during construction.

k. **Bridge Lighting Plan**

____ Submit lighting plan application in accordance with 33 CFR Part 118 and bridge lighting guide (see USCG Bridge Program website: http://www.uscg.mil/hq/cg5/cg551/default.asp). This is a separate application from the bridge permit application. The submission time can vary by District Bridge Office. Applicants should contact their local District Bridge Office to determine at what point is appropriate to submit a bridge lighting plan.