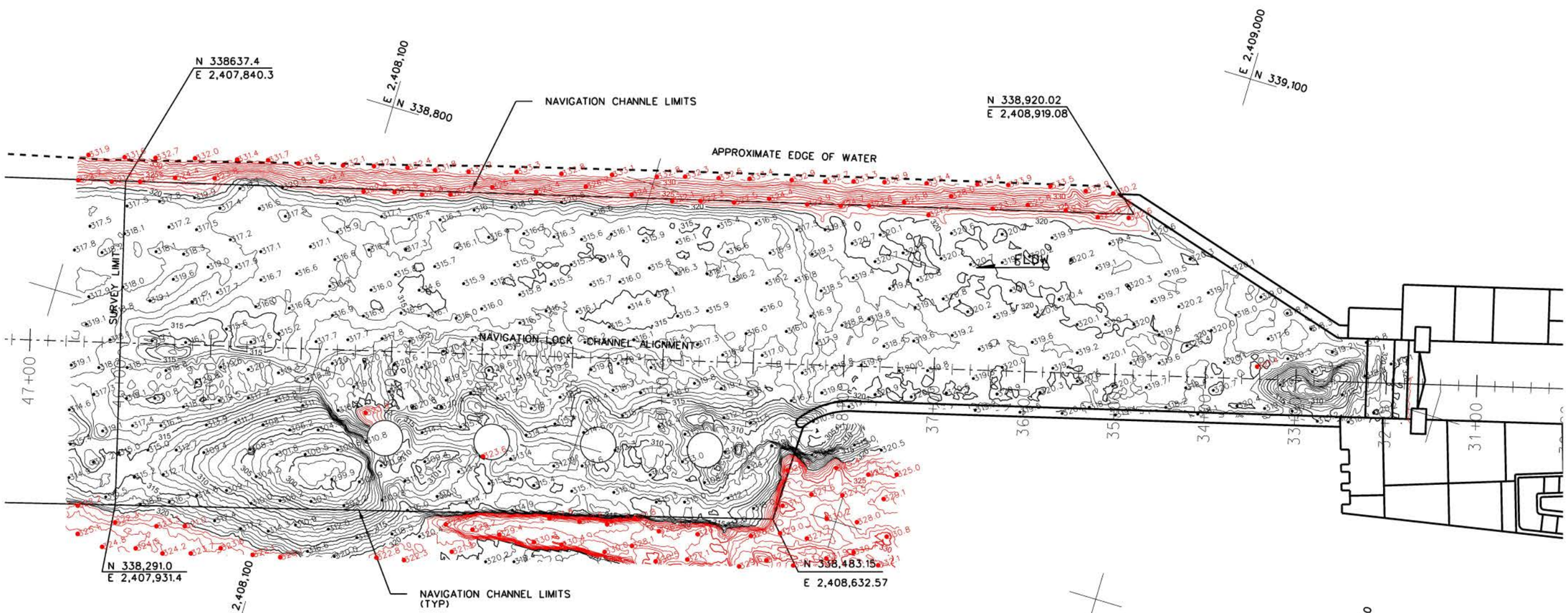

HORIZONTAL AND VERTICAL CONTROL

93-01-01
3-½" ALUMINUM CAP
STAMP "93-01-01"
N 337,956.43
E 2,404,704.10
ELEV. 403.87

NCM-7
SCREW/WASHER IN IRON PIPE
STAMPED "NCM-7 1964"
N 336968.09
E 2400861.69
ELEVATION 374.07

NOTES

1. A MULTIBEAM BATHYMETRIC SURVEY OF ICE HARBOR CUT NAVIGATION CHANNEL WAS CONDUCTED BY TERRASOND LTD. ON FEBRUARY 26, 2015
2. HORIZONTAL DATUM IS NAD27, PROJECTION IS WASHINGTON STATE PLANE SOUTH, VERTICAL DATUM IS NGVD29. ALL UNITS ARE IN US SURVEY FEET
3. HORIZONTAL AND VERITICAL POSITIONING WAS PROVIDED BY REAL-TIME KINEMATIC (RTK) GPS. RTK CORRECTIONS WERE BROADCAST FROM A LOCAL BASE STATION USING A TRIMBLE R8 GPS RECEIVER BASED ON CONTROL POINT "93-01-01"
4. BATHYMETRIC DATA COLLECTION WAS CONDUCTED USING AN R2 SONIC 2024 MULTIBEAM ECHOSOUNDER, APPLANIX POS MV INERTIAL NAVIGATION SYSTEM, AML SVPLUS SOUND VELOCITY PROBE, AND QINSY V8.1 ACQUISITION SOFTWARE. DATA WAS PROCESSED USING CARIS HIPS V8.1
5. CONTOURS SHOWN HEREON WERE GENERATED FROM A 3-FOOT HORIZONTAL RESOLUTION DATASET USING INVERSE WEIGHTED MEAN OF ALL SOUNDINGS WITHIN A 3-FOOT X 3-FOOT CELL
6. PLOTTED SOUNDINGS REPRESENT THE SHALLOWEST DEPTH IN THE 3-FOOT X 3-FOOT CELL. A SHOAL BIASED SORT OF THE MEAN SOUNDINGS WAS PERFORMED USING A 30 FOOT SORT RADIUS
7. THIS MAP REPRESENTS CONDITIONS AT THE TIME OF THE SURVEY
8. CHANNEL DEPTH IS DESIGN AT 14 FEET BELOW MINIMUM OPERATING POOL ELEVATION OF 335 FEET. THE DATA REPRESENTED IN RED INDICATES MATERIAL BUILD-UP ABOVE THE DESIGNED CHANNEL DEPTH.

PRE/POST DREDGING CONDITION SURVEYS

0' 60' 120'

US Army Corps of Engineers
Walla Walla District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

DESIGNED BY: MEYER
DWN. BY: LNL
CHKD. BY: KKM
SUBMITTED BY:
DATE: 27 FEB 2015
TASK ORDER NO. 9
CONTRACT NO. W912EF-10-D-0002
FILE NO.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON

TERRASOND
PREPARED BY TERRASOND LTD.
811 NW ANDERSON STREET, SUITE 15, SEATTLE, WA 98107
WWW.TERRASOND.COM (206) 297-9100

MCNARY LOCK AND DAM
SNAKE RIVER, WASHINGTON

W912EF-10-D-0002, T.O. NO. 9

ICE HARBOR CUT
NAVIGATION CHANNEL
PRE & POST DREDGING SURVEYS

Plate number:

Sheet 1 of 1

L:\Z_SURVEYS\00HYDRO_CONDITION\2014-15 DREDGING\POST-DREDGE2_ICEHARBOR\OPERATIONS\HLD_SH01_1.DGN

BORDER SIZE IS ANSI D

DATE AND TIME PLOTTED:3/10/2015 8:22:10 AM