NOTES

1. A MULTIBEAM BATHYMETRIC SURVEY OF SCHULTZ BAR RIVER MILE 101 WAS CONDUCTED BY TERRASOND LTD. ON SEPTEMBER 7, 2011
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
4. BATHYMETRIC DATA COLLECTION WAS CONDUCTED USING AN R2 SONIC 2024 MULTIBEAM ECHOSOUNDER, CODA F185 INERTIAL NAVIGATION SYSTEM, AML SVPLUS SOUND VELOCITY PROBE, AND QINSY V8.0 ACQUISITION SOFTWARE. DATA WAS PROCESSED USING CARIS HIPS V7.1
5. CONTOURS SHOWN HEREON WERE GENERATED FROM A 5-FOOT HORIZONTAL RESOLUTION DATASET USING INVERSE WEIGHTED MEAN OF ALL SOUNDINGS WITHIN A 5-FOOT X 5-FOOT CELL.
6. PLOTTED SOUNDINGS REPRESENT THE SHALLOWEST DEPTH IN THE 5-FOOT X 5-FOOT CELL. A SHOAL BIASED SORT OF THE SOUNDINGS WAS PERFORMED USING A 50 FOOT SORT RADIUS.
7. THIS MAP REPRESENTS CONDITIONS AT THE TIME OF THE SURVEY

HORIZONTAL AND VERTICAL CONTROL

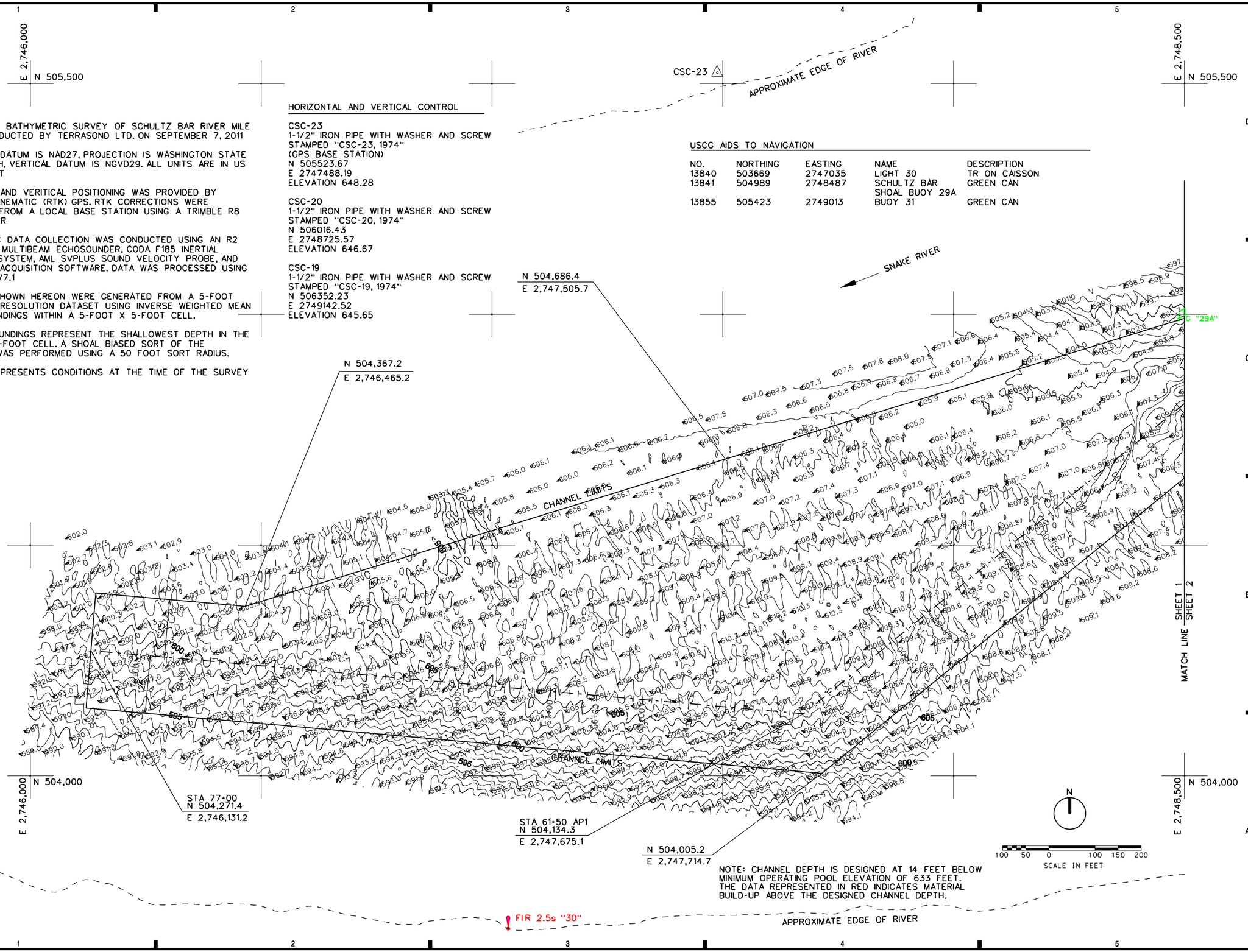
CSC-23
1-1/2" IRON PIPE WITH WASHER AND SCREW
STAMPED "CSC-23, 1974"
(GPS BASE STATION)
N 505523.67
E 2747488.19
ELEVATION 648.28

CSC-20
1-1/2" IRON PIPE WITH WASHER AND SCREW
STAMPED "CSC-20, 1974"
N 506016.43
E 2748725.57
ELEVATION 646.67

CSC-19
1-1/2" IRON PIPE WITH WASHER AND SCREW
STAMPED "CSC-19, 1974"
N 506352.23
E 2749142.52
ELEVATION 645.65

USCG AIDS TO NAVIGATION

NO.	NORTHING	EASTING	NAME	DESCRIPTION
13840	503669	2747035	LIGHT 30	TR ON CAISSON
13841	504989	2748487	SCHULTZ BAR SHOAL BUOY 29A	GREEN CAN
13855	505423	2749013	BUOY 31	GREEN CAN



NOTE: CHANNEL DEPTH IS DESIGNED AT 14 FEET BELOW MINIMUM OPERATING POOL ELEVATION OF 633 FEET. THE DATA REPRESENTED IN RED INDICATES MATERIAL BUILD-UP ABOVE THE DESIGNED CHANNEL DEPTH.

US Army Corps of Engineers
Walla Walla District

Symbol	Description	Date	Appr.

DESIGNED BY:
DWN BY: JFF
CHKED BY: CDK
SUBMITTED BY:
DATE: 14 OCTOBER 11
TASK ORDER NO. 5
CONTRACT NO. W912EF-10-D-0002
FILE NO:

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

TERRASOND
TERRASOND LTD.
#61 1ST AND FRASER, NORTH VANCOUVER, BRITISH COLUMBIA, CANADA V7M 3H7
WWW.TERRASOND.COM

LITTLE GOOSE LOCK AND DAM
SNAKE RIVER, WASHINGTON
W912EF-10-D-0002 T.O. NO. 5
SCHULTZ BAR
RIVER MILE 101
MULTIBEAM BATHYMETRIC SURVEY

Plate number:
V-001
Sheet 1 of 2

BORDER SIZE IS ANSI D

DATE AND TIME PLOTTED:11/3/2011

DESIGN FILE:L:\Z_SURVEYS\00HYDRO_CONDITION\2011_HYDRO_CONDITION\SCHULTZ BAR\SUBMITTALS FOR OPERATIOS\V-HP-101.DGN

L:\Z_SURVEYS\00HYDRO_CONDITION\2011_HYDRO_CONDITION\SCHULTZ BAR\SUBMITTALS FOR OPERATIOS\V-HP-101.DGN

NOTES

1. A MULTIBEAM BATHYMETRIC SURVEY OF SCHULTZ BAR RIVER MILE 101 WAS CONDUCTED BY TERRASOND LTD. ON SEPTEMBER 26, 2010
2. HORIZONTAL DATUM IS NAD27, PROJECTION IS WASHINGTON STATE PLANE SOUTH, VERTICAL DATUM IS NGVD29. ALL UNITS ARE IN US SURVEY FEET
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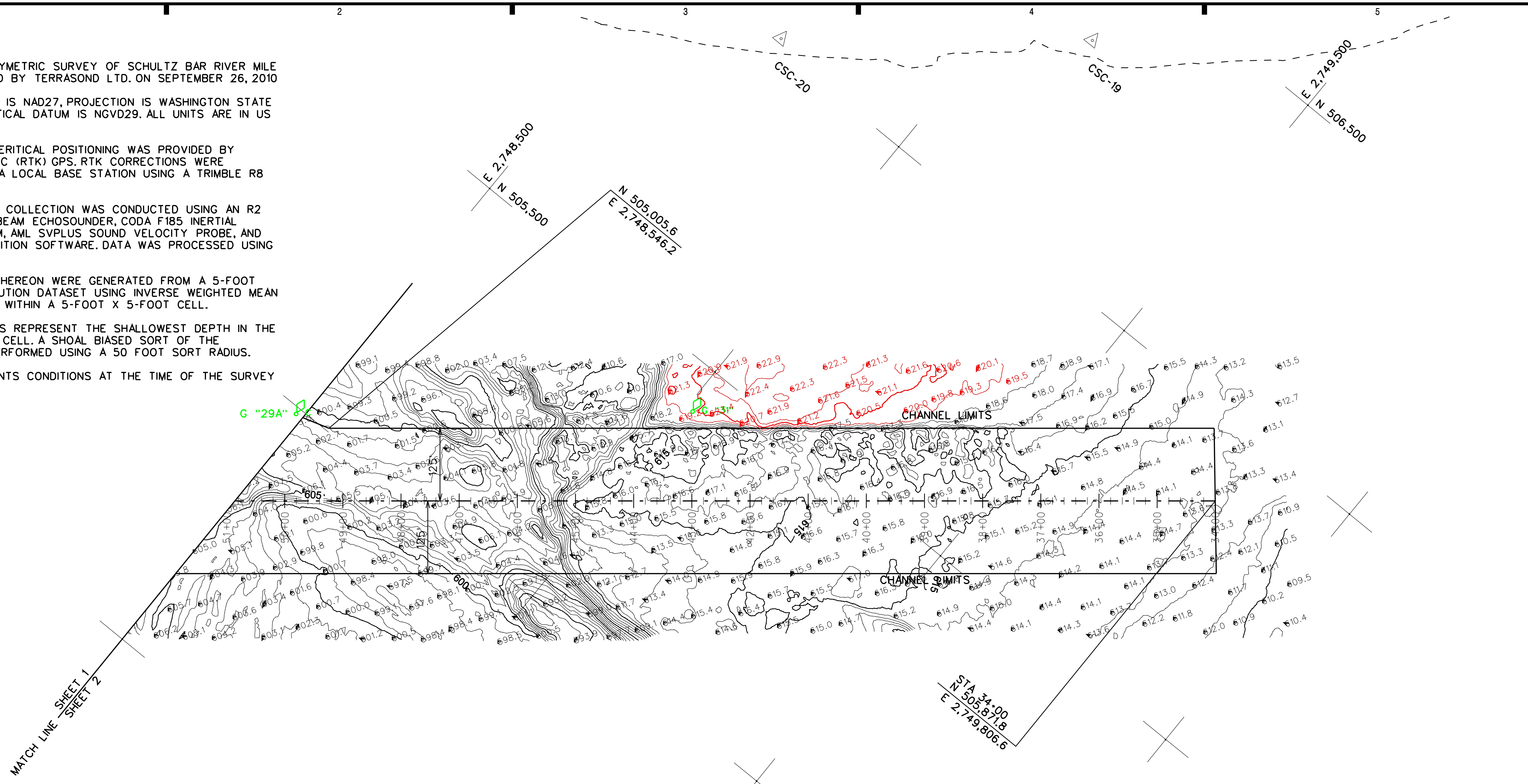

HORIZONTAL AND VERTICAL CONTROL

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STAMPED "CSC-23, 1974"
(GPS BASE STATION)
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USCG AIDS TO NAVIGATION

NO.	NORTHING	EASTING	NAME	DESCRIPTION
13841	504989	2748487	SCHULTZ BAR SHOAL BUOY 29A	GREEN CAN
13855	505423	2749013	BUOY 31	GREEN CAN

101

NOTE: CHANNEL DEPTH IS DESIGNED AT 14 FEET BELOW MINIMUM OPERATING POOL ELEVATION OF 633 FEET. THE DATA REPRESENTED IN RED INDICATES MATERIAL BUILD-UP ABOVE THE DESIGNED CHANNEL DEPTH.

N

100 50 0 100 150 200
SCALE IN FEET

US Army Corps of Engineers
Walla Walla District

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

TERRASOND

DESIGNED BY: | DWN BY: JFF | CHKD BY: CDK | SUBMITTED BY:
DATE: 14 OCTOBER 11 | TASK ORDER NO. 5 | CONTRACT NO. W912EF-10-D-0002
FILE NO.: GG-9-12-29/4

LITTLE GOOSE LOCK AND DAM
SNAKE RIVER WASHINGTON
W912EF-10-D-0002 T.O. NO.5
SCHULTZ BAR
RIVER MILE 101
MULTIBEAM BATHYMETRIC SURVEY

Plate number: V-002

Sheet 2 of 2

BORDER SIZE IS ANSI D

DATE AND TIME PLOTTED:11/3/2011

DESIGN FILE:L:\Z_SURVEYS\00HYDRO_CONDITION\2011_HYDRO_CONDITION\SCHULTZ BAR\SUBMITTALS FOR OPERATIONS\V-HP-102.DGN