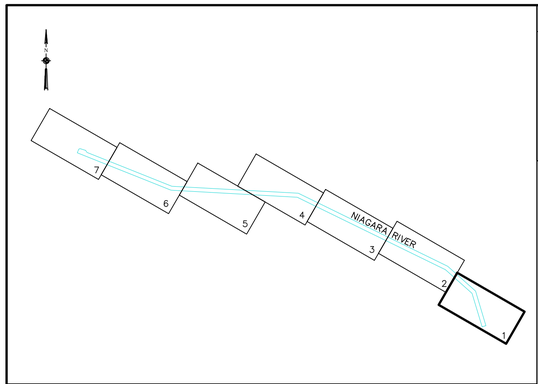

SHEET INDEX
"NOT TO SCALE"

SOUNDING COLOR LEGEND

	DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
	DEPTHS AT OR BELOW PROJECT DEPTH
18.0	PROJECT DEPTH

LEGEND OF SYMBOLS

17+00 (NEW), 17+00 (OLD)	CHANNEL STATIONING
417	CHANNEL CORNER
H.L.F.	HARBOR LINE CORNER
	FEDERAL CHANNEL
	HARBOR LINE
	SUBMARINE CABLE
C	CAN BUOY
N	NUN BUOY
	LIGHTED BUOY
	FIXED LIGHT
	LIGHT HOUSE
W	LIGHT COLOR WHITE
R	LIGHT COLOR RED
G	LIGHT COLOR GREEN
FL	FLASHING LIGHT
F	FIXED LIGHT
Oc	OCCULTING LIGHT
Iso	EQUAL INTERVAL
AL	ALTERNATING
Q	QUICK (FLASHING)
S	LIGHT CYCLE SECONDS

SITE SPECIFIC NOTES:

1. PROJECT DEPTHS AND SOUNDINGS ARE REFERRED TO IGLD85 LOW WATER DATUM STEP AS SHOWN.
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VICINITY MAP
"NOT TO SCALE"

CHANNEL CORNERS COORDINATES

POINT	NORTHING	EASTING
1451(O–N)	1107079.93	1066079.18
1453(A–N)	1109878.70	1065304.10
1455(B–N)	1111532.89	1063218.31
1457(D–N)	1117020.40	1051997.62
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1461(L)	1120089.26	1036139.16
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1465(J)	1120366.72	1035620.94
1464(I)	1120334.18	1035526.41
1462(H)	1120055.60	1035415.07
1460(E–S)	1117247.09	1042441.56
1458(D–S)	1116724.31	1051920.21
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1454(A–S)	1109511.02	1065040.98
1452(O–S)	1106993.87	1065792.30

US Army Corps of Engineers
Buffalo District

Original sheet size = ANSI D

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Drawn by: KPL
Checked by: ACK
Reviewed by: Roman H. Figler III PLS
Chief, Survey Section
Approved by: Edward F. Gawarecki
Date: November 24, 2015
Chief, NY/PA Navigation and Maintenance Section

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207–3199

NIAGARA RIVER, NY

PROJECT CONDITIONS SOUNDINGS 2015

SCALE: 1"=200'

Sheet reference number
VH–101
Sheet 1 of 7

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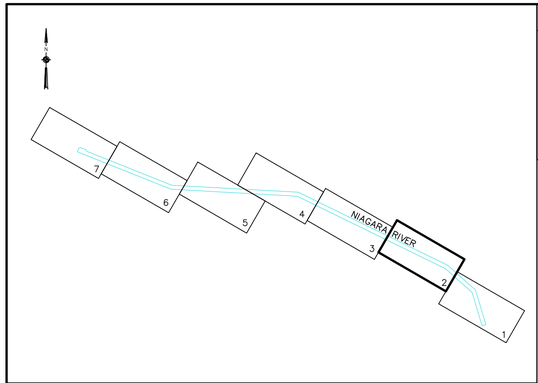
S:\NY–Niagara River\Drawing Files (Civil)\2015\Niagara River 2015.dwg



SHEET INDEX
"NOT TO SCALE"

SOUNDING COLOR LEGEND

	DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
	DEPTHS AT OR BELOW PROJECT DEPTH
18.0	PROJECT DEPTH

LEGEND OF SYMBOLS

17+00 (NEW), 17+00 (OLD)	CHANNEL STATIONING
⊙ 417	CHANNEL CORNER
◎ H.L.F.	HARBOR LINE CORNER
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	HARBOR LINE
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Iso	EQUAL INTERVAL
AL	ALTERNATING
Q	QUICK (FLASHING)
S	LIGHT CYCLE SECONDS

SITE SPECIFIC NOTES:

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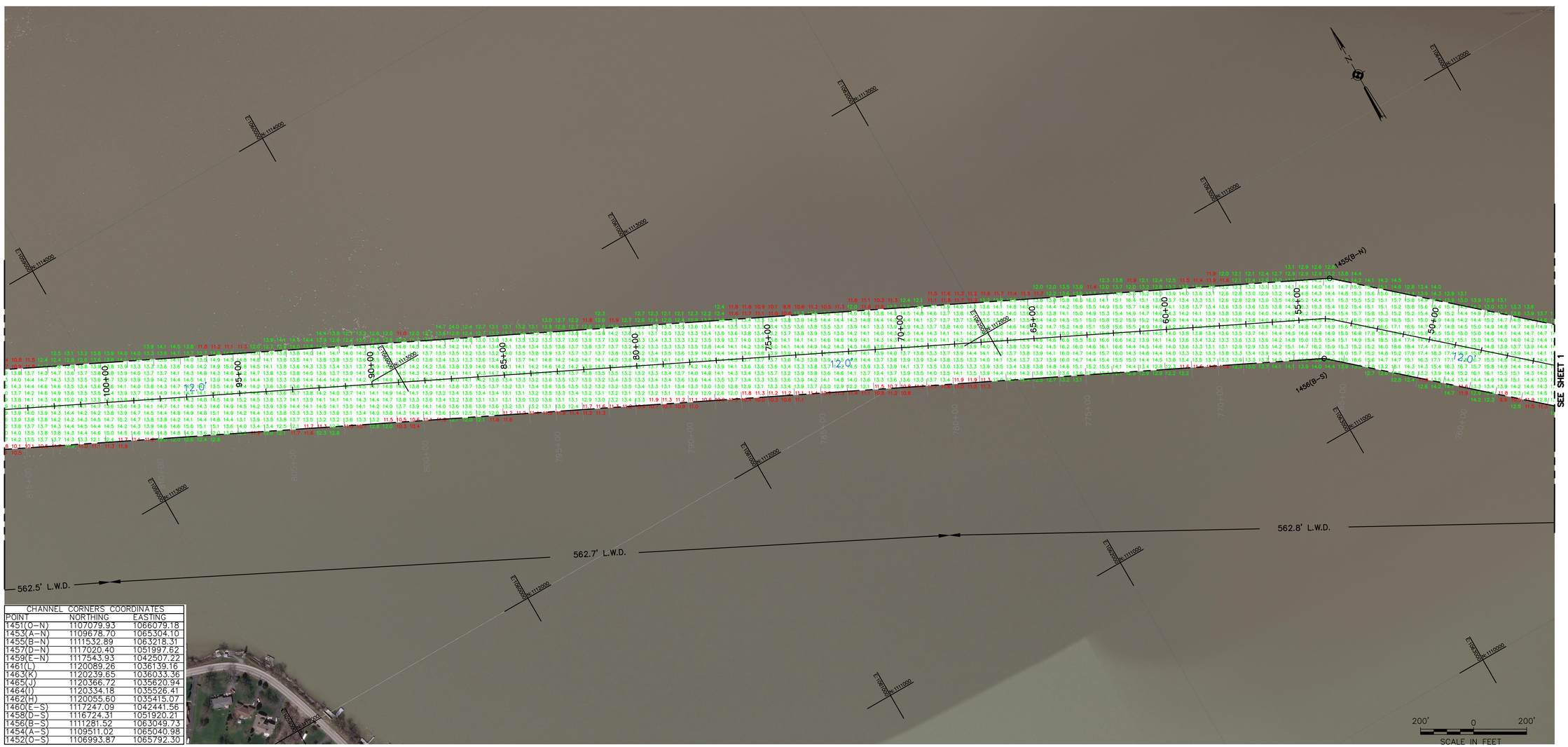
VICINITY MAP
"NOT TO SCALE"



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1454(A–S)	1109511.02	1065040.98
1452(O–S)	1106993.87	1065792.30

US Army Corps of Engineers
Buffalo District

Original sheet size = ANSI D

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Drawn by: KPL
Checked by: ACK
Reviewed by: Ramon H. Figler III PLS
Chief, Survey Section
Approved by: Edward F. Gawarecki
Chief, NY/PA Navigation and Maintenance Section
Date: November 24, 2015

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207–3199

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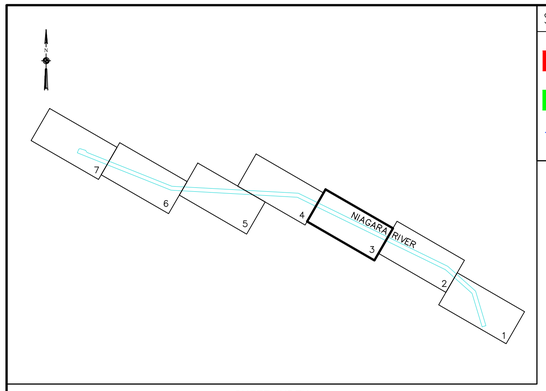
NIAGARA RIVER, NY

PROJECT CONDITIONS SOUNDINGS 2015

SCALE: 1"=200'

Sheet reference number
VH–102
Sheet 2 of 7

S:\NY–Niagara River\Drawing Files (Civil)\2015\Niagara River 2015.dwg



SHEET INDEX
"NOT TO SCALE"

SOUNDING COLOR LEGEND

	DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
	DEPTHS AT OR BELOW PROJECT DEPTH
18.0	PROJECT DEPTH

LEGEND OF SYMBOLS

17+00 (NEW), 17+00 (OLD)	CHANNEL STATIONING
⊙ 417	CHANNEL CORNER
◎ H.L.F.	HARBOR LINE CORNER
	FEDERAL CHANNEL
	HARBOR LINE
	SUBMARINE CABLE
C	CAN BUOY
N	NUN BUOY
	LIGHTED BUOY
	FIXED LIGHT
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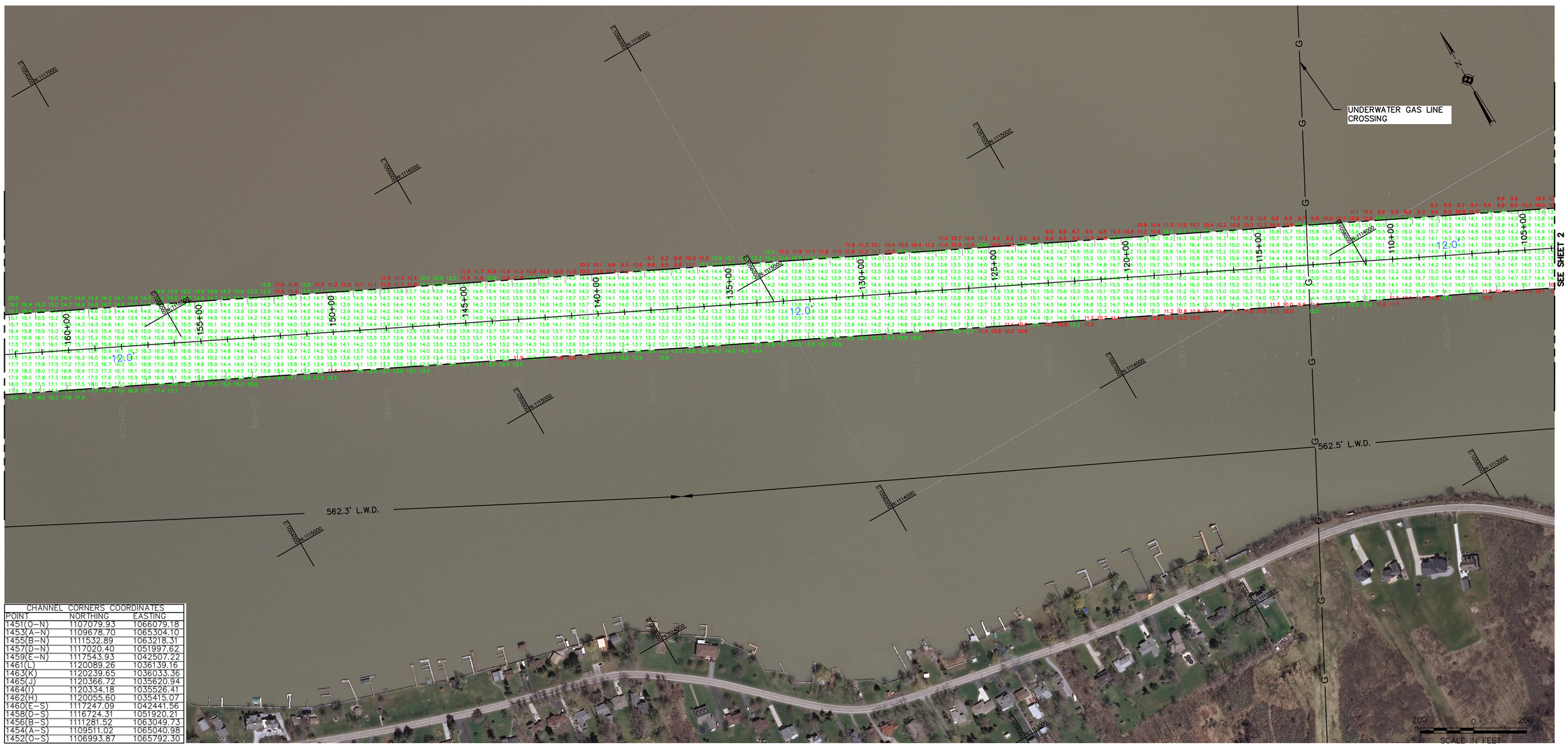
VICINITY MAP
"NOT TO SCALE"



CHANNEL CORNERS COORDINATES		
POINT	NORTHING	EASTING
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US Army Corps of Engineers
Buffalo District

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Drawn by: KPL
Checked by: ACK
Reviewed by: Roman H. Figler III PLS
Chief, Survey Section
Approved by: Edward F. Gawarecki
Date: November 24, 2015
Chief, NY/PA Navigation and Maintenance Section

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207–3199

NIAGARA RIVER, NY

PROJECT CONDITIONS SOUNDINGS 2015

SCALE: 1"=200'

Sheet reference number
VH–103
Sheet 3 of 7

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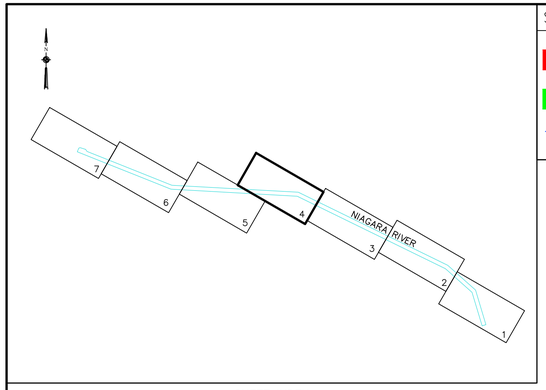
S:\NY–Niagara River\Drawing Files (Cad)\2015\Niagara River 2015.dwg



SHEET INDEX
"NOT TO SCALE"

SOUNDING COLOR LEGEND

	DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
	DEPTHS AT OR BELOW PROJECT DEPTH
18.0	PROJECT DEPTH

LEGEND OF SYMBOLS

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◎ H.L.F.	HARBOR LINE CORNER
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VICINITY MAP
"NOT TO SCALE"

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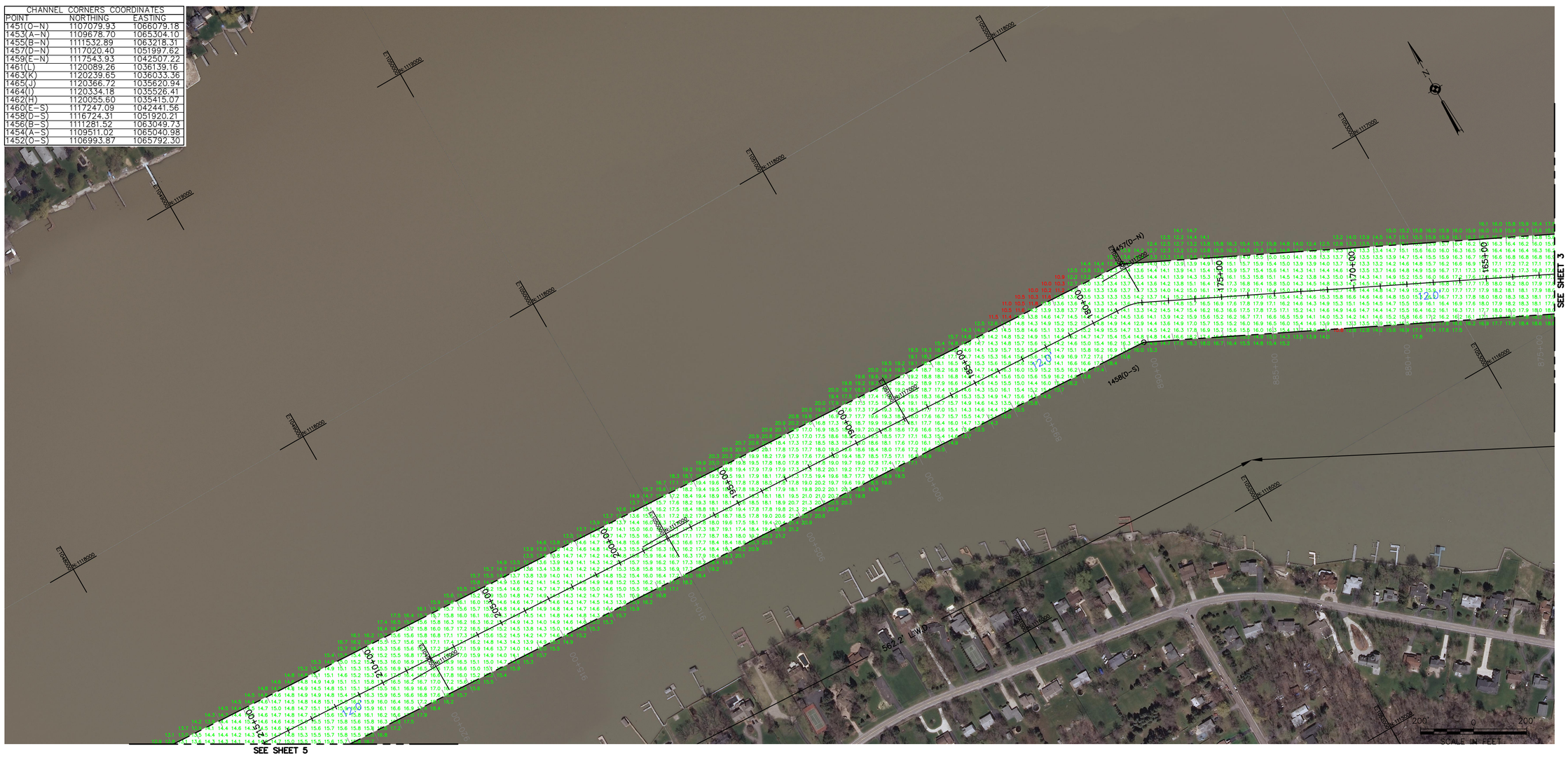

US Army Corps of Engineers
Buffalo District

Original sheet size = ANSI D

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Drawn by: KPL
Checked by: ACK
Reviewed by: Roman H. Figler III PLS
Chief, Survey Section
Approved by: Edward F. Gawarecki
Chief, NY/PA Navigation and Maintenance Section
Date: November 24, 2015

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207–3199

NIAGARA RIVER, NY

PROJECT CONDITIONS SOUNDINGS 2015

SCALE: 1"=200'

Sheet reference number
VH–104
Sheet 4 of 7

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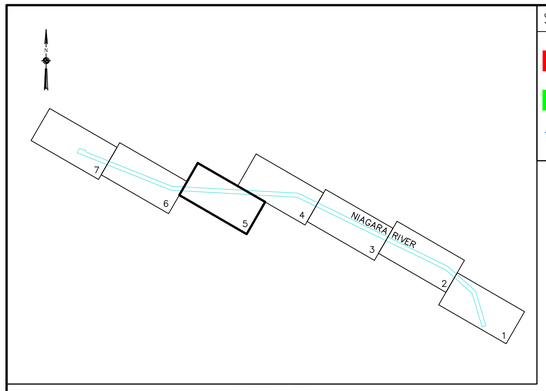

SOUNDING COLOR LEGEND

	DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
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LEGEND OF SYMBOLS

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VICINITY MAP
"NOT TO SCALE"

SHEET INDEX
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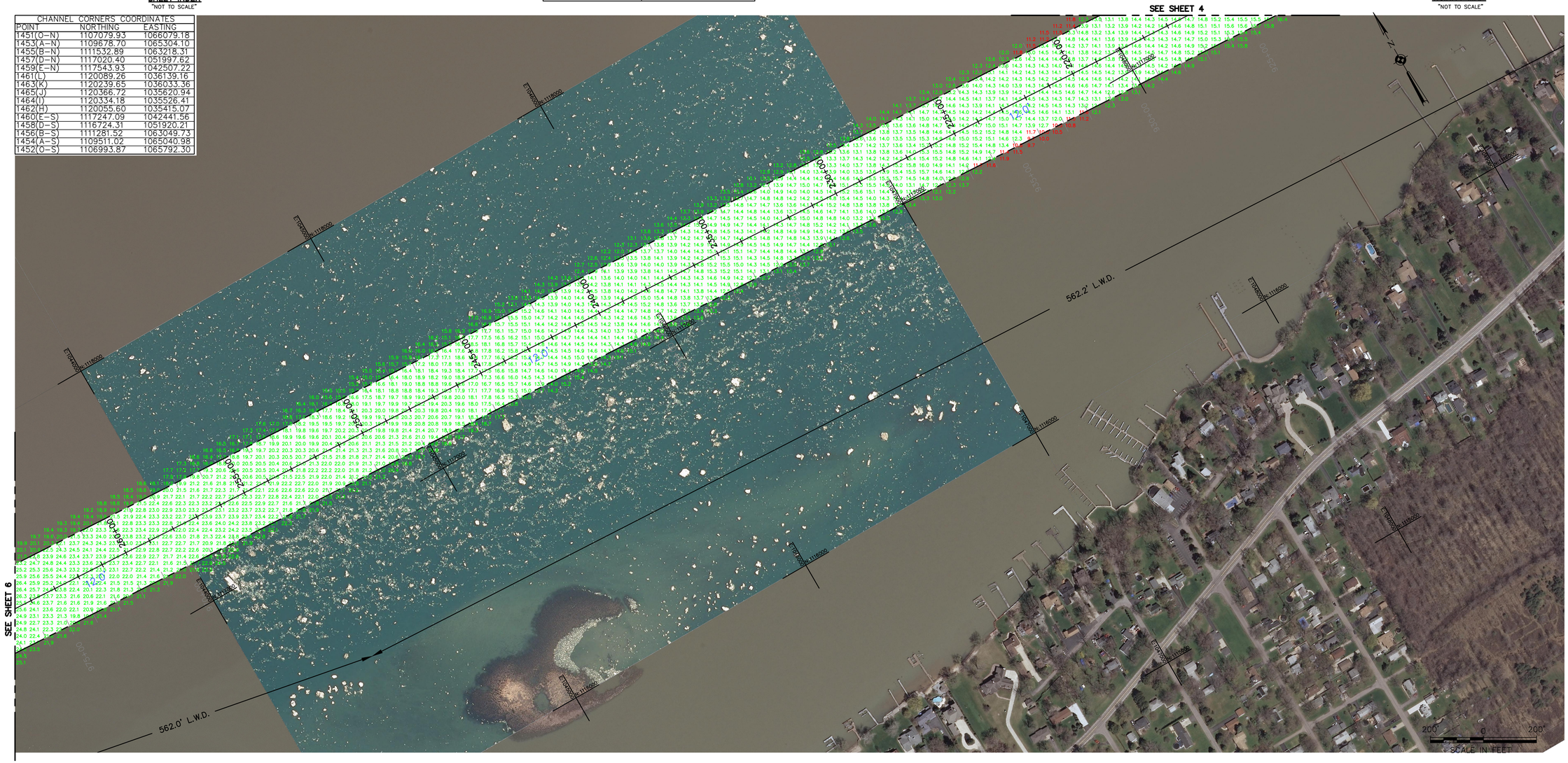

US Army Corps of Engineers
Buffalo District

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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207–3199

NIAGARA RIVER, NY

PROJECT CONDITIONS SOUNDINGS 2015

SCALE: 1"=200'

Sheet reference number
VH–105
Sheet 5 of 7

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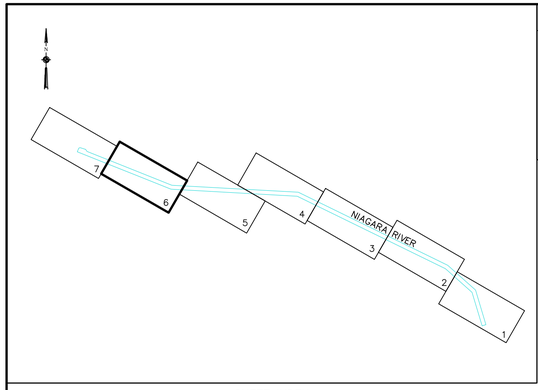

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   GPS POSITIONING, POS–MV VER. 5 W/RTK TIDES
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   0.5 DEGREE BEAMS 160 DEGREE ARC
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   VELOCITY PROFILER; SONTEK CASTAWAY
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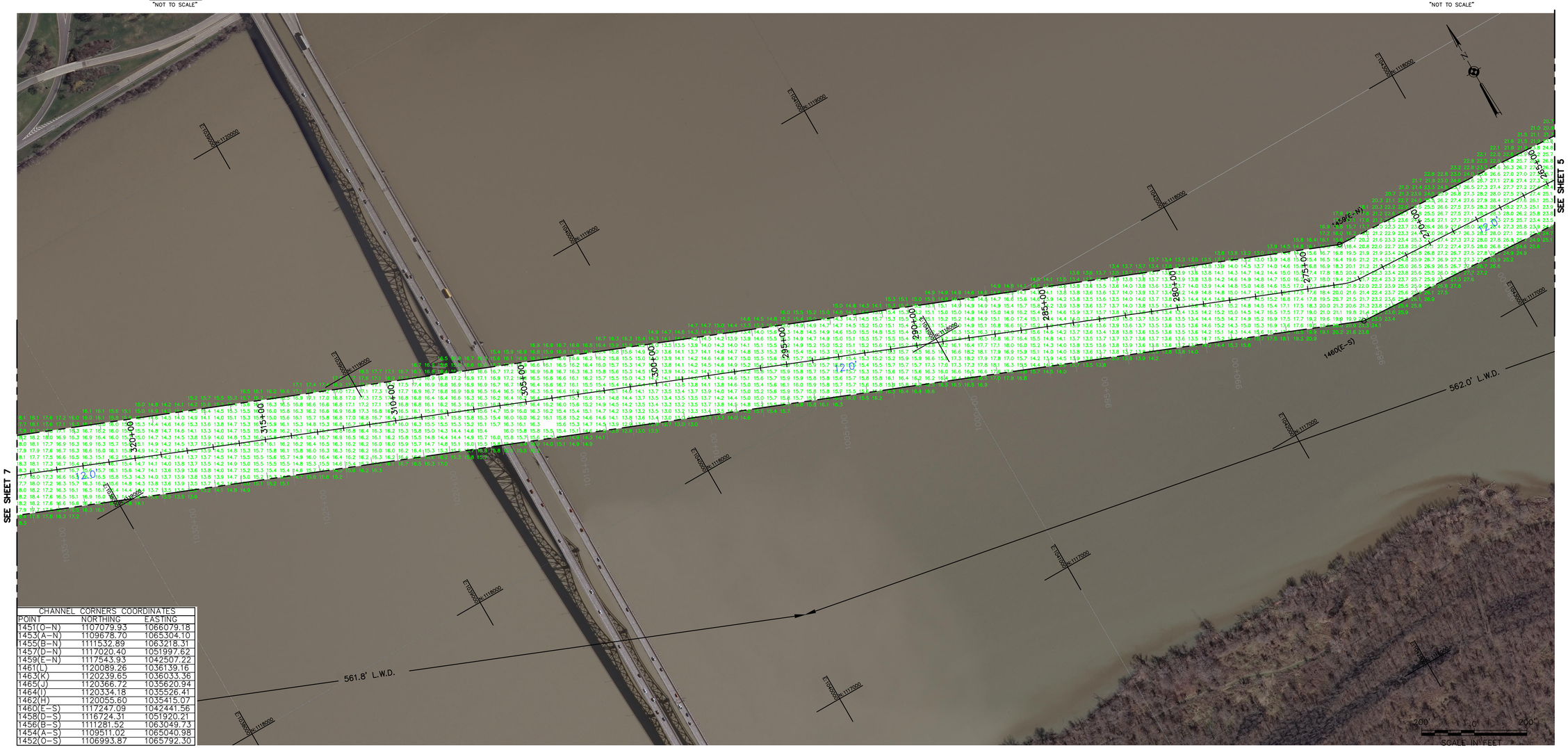
7. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OUTLINED IN CORPS OF ENGINEERS HYDROGRAPHIC SURVEY MANUAL EM 1110–2–1003.

VICINITY MAP
"NOT TO SCALE"



CHANNEL CORNERS COORDINATES		
POINT	NORTHING	EASTING
1451(O–N)	1107079.93	1066079.18
1453(A–N)	1109678.70	1065304.10
1455(B–N)	1111532.89	1063218.31
1457(D–N)	1117020.40	1051997.62
1459(E–N)	1117543.93	1042507.22
1461(L)	1120089.26	1036139.16
1463(K)	1120239.65	1036033.36
1465(J)	1120366.72	1035620.94
1464(I)	1120334.18	1035526.41
1462(H)	1120055.60	1035415.07
1460(E–S)	1117247.09	1042441.56
1458(D–S)	1116724.31	1051920.21
1456(B–S)	1111281.52	1063049.73
1454(A–S)	1109511.02	1065040.98
1452(O–S)	1106993.87	1065792.30

US Army Corps of Engineers
Buffalo District

Original sheet size = ANSI D

** COPY OF SIGNED ORIGINAL **

Drawn by: KPL
Checked by: ACK
Reviewed by: Ramon H. Figler III PLS
Chief, Survey Section
Approved by: Edward F. Gawarecki
Date: November 24, 2015
Chief, NY/PA Navigation and Maintenance Section

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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207–3199

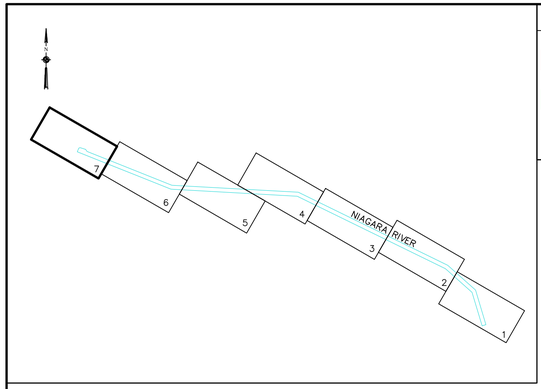
NIAGARA RIVER, NY

PROJECT CONDITIONS SOUNDINGS 2015

SCALE: 1"=200'

Sheet reference number
VH–106
Sheet 6 of 7

S:\NY–Niagara River\Drawing Files (Civil)\2015\Niagara River 2015.dwg



SHEET INDEX
"NOT TO SCALE"

SOUNDING COLOR LEGEND

	DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
	DEPTHS AT OR BELOW PROJECT DEPTH
18.0	PROJECT DEPTH

LEGEND OF SYMBOLS

17+00 (NEW), 17+00 (OLD)	CHANNEL STATIONING
⊙ 417	CHANNEL CORNER
◎ H.L.F.	HARBOR LINE CORNER
	FEDERAL CHANNEL
	HARBOR LINE
	SUBMARINE CABLE
C	CAN BUOY
N	NUN BUOY
	LIGHTED BUOY
	FIXED LIGHT
	LIGHT HOUSE
W	LIGHT COLOR WHITE
R	LIGHT COLOR RED
G	LIGHT COLOR GREEN
FL	FLASHING LIGHT
F	FIXED LIGHT
Oc	OCCULTING LIGHT
Iso	EQUAL INTERVAL
AL	ALTERNATING
Q	QUICK (FLASHING)
S	LIGHT CYCLE SECONDS

SITE SPECIFIC NOTES:

1. PROJECT DEPTHS AND SOUNDINGS ARE REFERRED TO IGLD85 LOW WATER DATUM STEP AS SHOWN.
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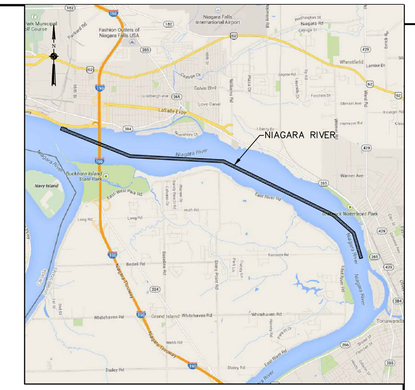

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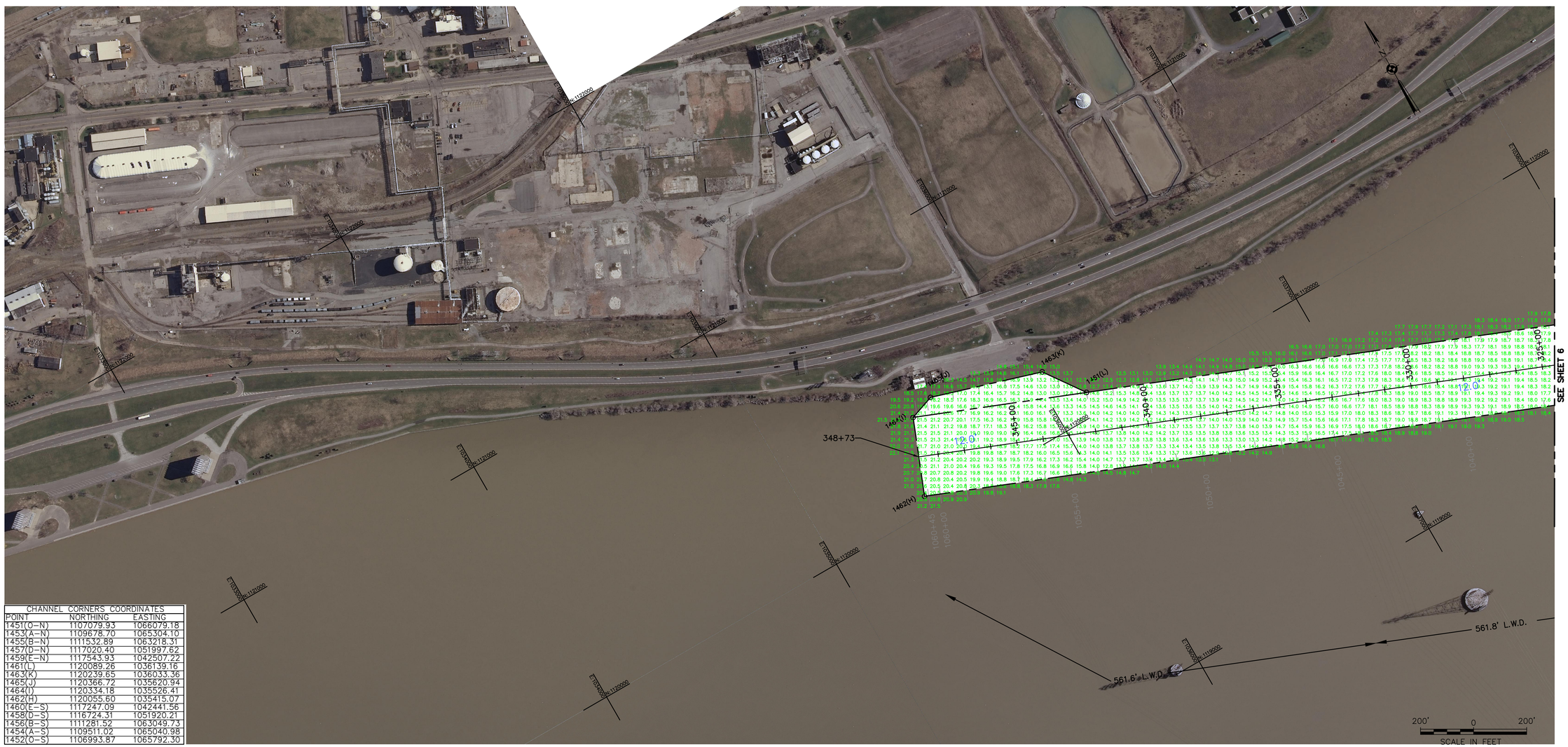

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US Army Corps of Engineers
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NIAGARA RIVER, NY

PROJECT CONDITIONS SOUNDINGS 2015

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VH–107
Sheet 7 of 7

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