

DIVERSION HABITAT COMPENSATION CHANNEL, PHASE 1

ISSUED FOR TENDER, 2025-02-03

DRAWING INDEX

SHEET No.	SHEET DESCRIPTION	REVISION
G-0-001	COVER SHEET	С
G-0-002	NOTES AND SPECIFICATIONS SHEET	С
G-0-003	SITE PLAN	С
C-1-101	PHASE 1 PLAN AND PROFILE	С
C-1-301	SECTIONS	С
C-1-302	TYPICAL SECTIONS AND DETAILS	С
•	·	

NOT FOR CONSTRUCTION

Addendum #4





LIGHT GREY WORKS.	TEXT APPLIES TO FUTURE WORKS, AND DOES NOT APPLY TO PHASE 1
1. GENERAL	
SUPE	PY OF THESE DRAWINGS MUST BE REVIEWED BY ALL CREW RVISOR(S) AND CONTRACTOR(S), AND MUST BE PRESENT ON THE SITE E WORK IS PROCEEDING.
	RIALS AND METHODS ARE TO BE APPROVED BY THE NHC SITE ENGINEER 2 (S PRIOR TO AND DURING CONSTRUCTION.
BY NH CONT OF M	FOLLOWING MILESTONE ACTIVITIES ARE TO BE INSPECTED AND ACCEPTED HC SITE ENGINEER PRIOR TO PROCEEDING TO SUBSEQUENT STEPS. FRACTOR SHOULD PROVIDE 48 HOUR NOTICE OF EXPECTED COMPLETION ILESTONE TO ALLOW NHC SITE ENGINEER ADEQUATE TIME TO PROVIDE LY INSPECTION.
1.3.1.	PRE SITE WORK
	1.3.1.1. SHOP DRAWINGS FOR INTAKE 1.3.1.2. FABRICATION OF INTAKE
	 1.3.1.2. FABRICATION OF INTERACE 1.3.1.3. LAYOUT OF PLANNED SITE ACCESS AND WORK AREAS 1.3.1.4. SITE ISOLATION AND SEDIMENT CONTROL PLAN 1.3.1.5. LWD SOURCE 1.3.1.6. IMPORTED ROCK SOURCE
1.3.2.	SITE WORK
	1.3.2.1. SUB-GRADE EXCAVATION FOR RIPRAP PRIOR TO PLACEMENT OF
	FILTER 1.3.2.2. INSPECTION OF FILTER MATERIAL, THICKNESS AND GRADE PRIOR
	TO PLACEMENT OF RIPRAP 1.3.2.3. INSPECTION OF RIPRAP PLACEMENT, THICKNESS AND GRADE
	PRIOR TO EXCAVATION OF DIVERSION CHANNEL 1.3.2.4. EXCAVATION OF DIVERSION CHANNEL PRIOR TO RIFFLE
	CONSTRUCTION AND CHANNEL COMPLEXING 1.3.2.5. SUB-GRADE EXCAVATION PRIOR TO PLACEMENT OF BASE
	MATERIALS AT INTAKE 1.3.2.6. LINER INSPECTION PRIOR TO PLACEMENT OF OVERLYING
	MATERIALS 1.3.2.7. BASE PREPARATION PRIOR TO INSTALLING INTAKE
	1.3.2.8. INTAKE INSTALLATION PRIOR TO BACKFILL 1.3.2.9. RIPRAP PLACEMENT AT INTAKE PRIOR TO DEMOBILIZING FROM
	SITE 1.3.2.10. PREPARATION OF DISTURBED SLOPES PRIOR TO SEEDING AND
	PLANTING 1.3.2.11. SURVEY LAYOUT OF CHANNEL ALIGNMENT INCLUDING
	CENTERLINE OF CHANNEL AND TOP OF CUT SLOPES 1.3.2.12. PLACEMENT OF COMPLEXING BOULDERS AND LWD CLUSTERS
	1.3.2.13. APPROVAL OF SITE PRIOR TO DEMOBILIZATION
1.4. WOR	K LIMITS
1.4.1.	OTHERWISE MARKED, AND SIGNED, IN THE FIELD PRIOR TO CONSTRUCTION ACTIVITIES. DISTURBANCE TO VEGETATION OTHER THAN WITHIN THE WORK AREA LIMITS REQUIRES PRE-APPROVAL. THIS INCLUDES TREES AND VEGETATION AT THE INTAKE, IMMEDIATELY UPSTREAM OF THE PROJECT, AND DOWNSTREAM IN THE POTENTIAL
1.4.2.	
1.4.3.	REDUCE THE FOOTPRINT OF THE WORK SITE. MATURE TREES ARE NOT TO BE DISTURBED UNLESS WITHIN THE PROJECT FOOTPRINT OR DIRECTED BY THE RMOW REPRESENTATIVE.
1.4.4.	
1.4.5.	TRAILS ARE TO REMAIN OPEN DURING THE CONSTRUCTION PERIOD.
1.4.6.	DETERMINED BY THE RMOW REPRESENTATIVE.
	CAUSED BY THEIR OPERATIONS TO ROADS OR OTHER FACILITIES OUTSIDE OF THOSE OUTLINED IN THE DESIGN DRAWINGS. SUCH REPAIR SHALL INCLUDE FILLING OF HOLES, REMOVAL OF DEBRIS, RE-GRADING AND CONTOURING, CLEAN-OUT OF DITCHES AND RE-SEEDING, AND ANY OTHER WORK AS DIRECTED BY THE RMOW REPRESENTATIVE REQUIRED TO LEAVE THE WORK SITE IN AN ACCEPTABLE CONDITION AT THE CONTRACTOR'S EXPENSE.
1.4.7.	
1.4.8.	
1.4.9.	
1.5. DIME	NSIONS
1.5.1.	ALL ELEVATIONS, DIMENSIONS, AND STATIONING SHALL BE VERIFIED
1.5.2.	
1.5.3.	CGVD2013. TABULATED ESTIMATES OF MASS AND VOLUMES ARE CLEAN-LINE ESTIMATES BASED ON CIVIL 3D DRAWINGS.
2. MATERIAL	
2.1. ROCK	
2.1.1.	TYPE 1 RIPRAP
	2.1.1.1. SHALL BE USED FOR ARMOURING THE BED AND BANKS OF INTAKE CHANNEL AND ADJACENT BANKS OF FITZSIMMONS CREEK BETWEEN VALUEY TRAIL BRIDGE AND CN BAILWAY BRIDGE

2.1.7. TYPE 7 COMPLEXING BOULDERS

- 2.1.7.1. BOULDERS SHALL BE USED TO COMPLEX TH 2.1.7.2. BOULDERS SHALL BE PREDOMINANTLY ROU MATERIAL MAY BE APPROVED BY NHC SITE USES.
- 2.1.8. TYPE 8 ANCHOR BOULDERS
 - 2.1.8.1. BOULDERS SHALL BE USED TO ANCHOR LWE
 - CHANNEL. 2.1.8.2. BOULDERS SHALL BE PREDOMINANTLY ROU MATERIAL MAY BE APPROVED BY NHC SITE USES.
- 2.1.9. GENERAL NOTES ON ROCK
 - 2.1.9.1. ROCK IS TO BE ROUGHLY EQUI-DIMENSIONA THAN 2.4 TIMES THE WIDTH OR THICKNESS MIDDLE OF THE STONE. ROCK IS TO BE HAP ABRASIVE RESISTANT STONE FREE FROM S CLEAVAGE PLANES, LAMINATIONS, ORGANIC GRANITE, QUARTZITE PREFERRED; BASALT, DOLOMITE MAY BE ACCEPTABLE UPON APP ENGINEER.
 - 2.1.9.2. ROCK SOURCE IS TO BE PRE-APPROVED BY ENGINEER.
 - 2.1.9.3. SPECIFIC GRAVITY IS TO BE GREATER OR EC
- 2.2. LARGE WOODY DEBRIS
- 2.2.1. USE CONIFEROUS RED OR YELLOW CEDAR LOGS AN ROOTS ATTACHED OR AS ACCEPTED BY NHC SITE E DOUGLAS FIR MAY BE ACCEPTABLE IN SOME CIRCU SITKA SPRUCE, WESTERN HEMLOCK, DECIDUOUS T DIMENSIONAL LUMBER.
- 2.2.2. ROOT WADS TO HAVE A MINIMUM STEM DIAMETER MINIMUM WAD DIAMETER OF 1.2 METERS, AND MINIM OF 0.5 METERS.
- 2.2.3. LOGS SHALL HAVE A MINIMUM STEM DIAMETER OF STEM LENGTH OF 3 METERS, AND IDEALLY HAVE RC BRANCHES ATTACHED.
- 2.2.4. ROOTBALL SHALL BE SHAKEN OR PRESSURE WASH EXCESS DIRT. ENSURE ANY WASH DOES NOT ENTE WATER COURSE.

DRA	WING REVISION SCHEDULE					CLIENT
REV	DESCRIPTION	DATE	DESIGNER	DRAWN BY	APPROVED	
						V
С	ISSUED FOR TENDER - CHANNEL INVERT ELEVATION REVISED	2025-02-03	AAK	CZZ	NRA	
В	ISSUED FOR TENDER	2025-01-24	AAK	CZZ	NRA	
А	ISSUED FOR REVIEW	2024-12-20	AAK	CZZ	NRA	



RESORT MUNICIPALITY OF WHISTLER 4325 BLACKCOMB WAY WHISTLER, B.C. V8E 0X5

AR AND BLOCKY. OUT BY EXCAVATOR.	2.3. INTAKE	3.6. SEED	ING AND PLANTING
METHODS WILL NOT BE	2.3.1. INTAKE WEIR	3.6.1.	SURFACE OF DISTURBED GROUN
PLACEMENT. ROCK ARMOURING AND	2.3.1.1. INTAKE WEIR CONSTRUCTED USING STANDARD FULL-SIZE		(I.E. A SURFACE OF DEPRESSION FREE OF COMPACTION TO RESIS
	LOCK-BLOCKS. 2.3.1.2. WEIR TO BE CONSTRUCTED ON A BASE OF COMPACTED STRUCTURAL FILL.	3.6.2.	FACILITATE NATURAL VEGETATION PLANTING SHALL BE DONE FOLLON DEVELOPED BY ENVIRONMENTAL
NKS OF THE DIVERSION CULVERT INLETS.	2.3.2. INTAKE RETAINING WALL	4. ENVIRONM	IENT
AR AND BLOCKY. OUT BY EXCAVATOR.	2.3.2.1. INTAKE RETAINING WALLS TO BE CONSTRUCTED USING	4.1. INSTR	EAM WORKS
METHODS WILL NOT BE	STANDARD FULL-SIZE AND HALF-SIZE LOCK-BLOCKS. 2.3.2.2. RETAINING WALLS TO BE CONSTRUCTED ON A BASE OF	4.1.1.	ALL ACTIVITIES, INCLUDING THE FUELS, AND EQUIPMENT OPERAT
PLACEMENT. ROCK ARMOURING AND	COMPACTED STRUCTURAL FILL. 2.3.2.3. LOCK-BLOCKS SHALL BE PLACED ON AND SEPARATED BY		ACCORDANCE WITH THE GOVER PHYSICAL PERMITS MUST BE ON
	GEOGRID. 2.3.2.4. RETAINING WALLS SHALL BE BACKFILLED WITH DRAIN-ROCK	4.1.2.	IT IS THE CONTRACTOR'S RESPO DEWATERING, SITE ISOLATION A
	PRIOR TO BACKFILLING WITH GENERAL FILL.	4.1.3.	EQUIPMENT MUST BE IN GOOD C AND TRAINED PERSONNEL MUST
REFILTER BETWEEN THE ANK MATERIALS. RAVEL, SAND, AND	3. CONSTRUCTION	4.1.4.	ALL INSTREAM CONSTRUCTION A ISOLATION OF FLOWING WATER,
PECTED BY THE NHC	3.1. CLEARING, GRUBBING, AND EXCAVATION		ENVIRONMENTAL MONITOR.
WED BY PLACEMENT OF	3.1.1. TREES REMOVED DURING CLEARING ACTIVITIES SHALL BE RETAINED AND STOCKPILED AT A DESIGNATED LOCATION FOR RE-DISTRIBUTION OF LWD TO CLEARED AREAS WITHIN THE HABITAT RIPARIAN FOLLOWING		IENT AND EROSION CONTROL
NHC SITE ENGINEER AS RADED.	HABITAT CONSTRUCTION. 3.1.2. STOCKPILING AND REDISTRIBUTION OF LARGE ROCK TO BE COMPLETED	4.2.1.	IF WORK IS REQUIRED IN THE WE CREEK, SEDIMENT AND EROSION
	AS DIRECTED BY THE NHC SITE ENGINEER. 3.1.3. EXCESS EXCAVATED MATERIAL IS TO BE TRANSPORTED OFF SITE. TOP		INSTALLED AND MUST MEET OR S THE DFO "LAND DEVELOPMENT O AQUATIC HABITAT". DISCHARGE
IC CONTROLS WITHIN	SOIL TO BE STOCKPILED FOR PLANTING AND REHABILITATION.		NOT EXCEED A CHANGE FROM B ANY ONE TIME FOR A DURATION
R MAY BE ACCEPTED BY	3.2. CHANNELS AND POOLS		CLEAR FLOWS OR IN CLEAR WAT OF MORE THAN 2 NTU AT ANY ON
LING OF VOIDS WITH	3.2.1. CHANNELS AND POOLS SHALL BE CONSTRUCTED AS SHOWN IN DRAWING.	4.2.2.	ALL WATERS DURING CLEAR FLC SLOPE STABILIZATION WORKS M
LOW THROUGH THE	3.2.2. CHANNEL AND POOLS SHALL BE LINED WITH GRAVELS AND COBBLES SALVAGED FROM EXCAVATION TO THE GREATEST EXTENT POSSIBLE.		IMMEDIATELY IMPLEMENTED BY OF CLEARING OF EXISTING VEGE
	THIS MAY BE ACHIEVED BY RAKING THE CHANNEL BED WITH THE EXCAVATOR TO EXTRACT LARGER ROCKS. AREAS WITH EXCESSIVE		SEDIMENT AND EROSION CONTR NOT LIMITED TO: CONSTRUCTION
PLACED AS FOUNDATION	FINES SHALL BE OVER-EXCAVATED AND CAPPED WITH COARSER ROCK. 3.2.3. CHANNEL SHALL BE LINED WITH GRAVEL AND COBBLE TO THE GREATEST		EROSION CONTROL FABRIC OR F OTHER PROVEN SEDIMENT AND
LLS. VITH A PLATE TAMPER	EXTENT POSSIBLE PRIOR TO HABITAT COMPLEXING (INSTALLATION OF LWD AND PLACEMENT OF BOULDERS).	4.3. DELET	ERIOUS SUBSTANCE CONTROL
		4.3.1.	CONSTRUCTION AND EXCAVATIO
	3.3. CHANNEL RIFFLES		OIL, GREASE OR ANY OTHER SUE MUST BE LEGALLY DISPOSED OF
NING WALLS OF THE RIPRAP BANKS IF	3.3.1. CHANNEL RIFFLE SECTIONS MAY NEED ADDITION OF FINE GRAVEL ALONG THE UPSTREAM FACE (DURING CONSTRUCTION OR	4.3.2.	OWNER'S PROPERTY AS ACCEPT ALL DELETERIOUS MATERIAL AN
L, AND POSSIBLY SMALL	COMMISSIONING) TO SEAL VOIDS. 3.3.2. RIFFLES SHALL BE CONSTRUCTED BY EMBEDDING BOULDERS TO NOT		SITE OR PLACED IN A STABLE AR THE STREAM, AS FAR AS POSSIB PROTECTED FROM EROSION BY
	EXCEED 0.3 METERS ABOVE THE GRADED CHANNEL ELEVATION. 3.3.3. CHANNEL RIFFLE SECTIONS MAY REQUIRE HAND ADJUSTMENT OF		TEMPORARILY COVERING EXPOS TARPS, GEOTEXTILE FABRIC, HY
_	STONES ALONG THE CREST AND DOWNSTREAM FACE TO CONCENTRATE FLOW FOR FISH PASSAGE AND TO MAINTAIN UPSTREAM WATER DEPTH		VEGETATION (AS DEEMED APPR
THE HABITAT CHANNEL. DUNDED, SEMI-ANGULAR	AS DETERMINED BY NHC SITE ENGINEER. ADJUSTMENT MAY INCLUDE NARROWING OR WIDENING OPENINGS OR ADJUSTING CREST STONE ELEVATION.	4.4. SPILL	AND SPILL REPORTING
E ENGINEER FOR SOME		4.4.1.	ALL EQUIPMENT AND MACHINER OF ANY WATERCOURSE MUST BI
	3.4. COMPLEXING CHANNEL AND POOLS		WASHED) AND FREE OF LEAKS C LUBRICANTS, CONSTRUCTION W
WD IN THE DIVERSION	3.4.1. LWD AND BOULDERS SHALL BE USED TO CREATE HYDRAULIC COMPLEXITY AND VARIABLE HABITAT CONDITIONS.	4.4.2.	SUBSTANCES MAY ENTER ANY W NO EQUIPMENT REFUELING OR S
OUNDED, SEMI-ANGULAR E ENGINEER FOR SOME	3.4.2. LWD SHALL EXTEND NO MORE THAN 25% OF THE CHANNEL WIDTH INTO THE CHANNEL.		PAINTS ETC. MAY BE UNDERTAKI DITCH, WATERCOURSE, RAVINE,
	3.4.3. LWD SHALL BE PLACED ALONG THE MAIN DIVERSION CHANNEL SO AS TO NOT SIGNIFICANTLY REDUCE FLOW CAPACITY OR CAUSE SCOUR OF ADJACENT BANKS.	4.4.3.	OIL DRIP TRAYS OR ABSORBENT PLACED UNDER ANY HEAVY EQU
NAL; LENGTH NOT MORE	3.4.4. LWD SHALL BE EMBEDDED (1/3 TO 2/3) INTO THE BANKS OR SECURED IN PLACE WITH BOULDERS.		FISHERIES SENSITIVE ZONE (ADJ ENSURE THAT THERE IS NO POTI
S AS MEASURED AT THE ARD, DURABLE, AND	3.4.5. ANCHOR BOULDERS AND OTHER LWD ELEMENTS PLACED ON TOP OR DOWNSTREAM SHALL BE USED TO HELP SUPPORT LWD COMPLEXES TO		STREAM BANKS OR WATERCOUF OFF MACHINERY. OPERATORS A THERE IS NO POTENTIAL FOR OII
SEAMS, CRACKS, IICS, AND DEBRIS.	LIMIT DOWNSTREAM MOVEMENT. 3.4.6. NORMAL HIGH WATER EVENTS WILL LIKELY RESULT IN SOME LOG		SUBSTANCES TO ENTER ANY WA
T, LIMESTONE, AND PROVAL BY NHC SITE	SHIFTING AND SETTLING OF THE STRUCTURE AS IT ADAPTS TO THE STREAMBED AND BANK.	4.4.4.	A SPILL RESPONSE KIT MUST BE EVENT OF RELEASE OF A DELETI
BY THE NHC SITE	3.4.7. THE HABITAT CHANNEL WILL EVENTUALLY BE CONNECTED UPSTREAM AND USED AS A DIVERSION CHANNEL FOR GRAVEL EXTRACTION IN THE		ENVIRONMENT. ANY SPILL OF A ENTERS INTO A DITCH, WATERCO
EQUAL TO 2.65.	MAIN STEM OF FITZSIMMONS CREEK. ALL LWD MUST BE SECURED IN PLACE SUCH THAT IT WILL NOT FLOAT DOWNSTREAM.		SYSTEM MUST BE IMMEDIATELY REPRESENTATIVE. AT LEAST ON
	3.4.8. 50 - 75% OF THE POOL AREAS SHOULD BE COMPLEXED WITH LWD, SECURED IN PLACE BY A COMBINATION OF EMBEDMENT AND BOULDERS.	4.4.5.	CONSTRUCTION MUST HAVE SPE ALL ACTIVITIES, INCLUDING THE
AND STUMPS WITH	AT LEAST 25% OF THE CHANNEL LENGTH SHALL BE COMPLEXED WITH INSTREAM LWD, LOW LWD COVER PROVIDING SHADE, OR BOULDER		FUELS, AND EQUIPMENT OPERAT ACCORDANCE WITH THE REGUL
E ENGINEER (I.E. CUMSTANCES). NO 5 TREE, TIMBERS, OR	CLUSTERS ON THE CHANNEL EDGES. 3.4.9. MAINTAIN CHANNEL AND POOL FLOW THROUGH CAPACITY BY LEAVING A		ENVIRONMENTAL MANAGEMENT
R OF 0.3 METERS, NIMUM STEM LENGTH	CLEAR FLOW PATH. 3.5. INTAKE		
F 0.3 METERS, MINIMUM	3.5.1. INTAKE LOCATION SHALL BE CONFIRMED WITH NHC SITE ENGINEER.		
ROOTS OR LARGE	3.5.2. INTAKE SHALL BE INSTALLED IN THE DRY PRIOR TO REMOVAL OF THE EXISTING DIVERSION BERM.		
SHED TO REMOVE TER A FISH BEARING	3.5.3. IT MAY BE REQUIRED TO BUILD-OUT THE FRONT OF THE EXISTING DIVERSION BERM DURING CONSTRUCTION AS DETERMINED BY NHC SITE		
	ENGINEER. 3.5.4. ALL RIPRAP SHOULD BE PLACED AND INSPECTED DOWNSTREAM OF THE INTAKE PRIOR TO REMOVING THE DIVERSION BERM		
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ENVIRONMENTAL MANAGEMENT PROCEDURE.

PERMIT TO PRACTICE **S**nhc

3.6.1. SURFACE OF DISTURBED GROUND TO BE LEFT ROUGH AND LOOSE. (I.E. A SURFACE OF DEPRESSIONS AND MOUNDS 0.3 TO 0.6 METERS HIGH FREE OF COMPACTION TO RESIST MOVEMENT OF WATER AND

3.6.2. PLANTING SHALL BE DONE FOLLOWING DETAILED PLANTING PLAN

FACILITATE NATURAL VEGETATION ESTABLISHMENT).

DEVELOPED BY ENVIRONMENTAL CONSULTANT.

PHYSICAL PERMITS MUST BE ON SITE.

4.1.1. ALL ACTIVITIES, INCLUDING THE STORAGE OF MATERIALS, HANDLING OF FUELS, AND EQUIPMENT OPERATION WILL BE CONDUCTED IN ACCORDANCE WITH THE GOVERNING ENVIRONMENTAL PERMITS.

4.1.2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SET UP AND MAINTAIN DEWATERING, SITE ISOLATION AND SEDIMENT CONTROL. 4.1.3. EQUIPMENT MUST BE IN GOOD CONDITION WITHOUT LEAKS. SPILL KITS AND TRAINED PERSONNEL MUST BE ON SITE AND ACCESSIBLE. 4.1.4. ALL INSTREAM CONSTRUCTION ACTIVITIES MUST BE CONDUCTED IN ISOLATION OF FLOWING WATER, OR AS DIRECTED BY THE

4.2.1. IF WORK IS REQUIRED IN THE WETTED CHANNEL OF FITZSIMMONS CREEK, SEDIMENT AND EROSION CONTROL MEASURES MUST BE INSTALLED AND MUST MEET OR SURPASS THE STANDARDS OUTLINED IN THE DFO "LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF AQUATIC HABITAT". DISCHARGE OR RUNOFF WATER FROM THE SITE MAY NOT EXCEED A CHANGE FROM BACKGROUND OF MORE THAN 8 NTU AT ANY ONE TIME FOR A DURATION OF 24 HOURS IN ALL WATERS DURING CLEAR FLOWS OR IN CLEAR WATERS, OR A CHANGE FROM BACKGROUND OF MORE THAN 2 NTU AT ANY ONE TIME FOR A DURATION OF 30 DAYS IN ALL WATERS DURING CLEAR FLOWS OR IN CLEAR WATERS. 4.2.2. SLOPE STABILIZATION WORKS MAY BE REQUIRED AND SHOULD BE IMMEDIATELY IMPLEMENTED BY THE CONTRACTOR UPON COMPLETION OF CLEARING OF EXISTING VEGETATION FROM THE SITE. INTERIM SEDIMENT AND EROSION CONTROL MEASURES MAY INCLUDE, BUT ARE NOT LIMITED TO: CONSTRUCTION OF SILT FENCES, PLACEMENT OF EROSION CONTROL FABRIC OR PLASTIC SHEETING OVER SLOPES, OR OTHER PROVEN SEDIMENT AND EROSION CONTROL TECHNIQUES.

4.3.1. CONSTRUCTION AND EXCAVATION WASTES, OVERBURDEN, SOIL, GROUT, OIL, GREASE OR ANY OTHER SUBSTANCE DELETERIOUS TO AQUATIC LIFE MUST BE LEGALLY DISPOSED OF IN A LICENSED FACILITY OR ON OWNER'S PROPERTY AS ACCEPTED BY THE RMOW REPRESENTATIVE. 4.3.2. ALL DELETERIOUS MATERIAL AND DEBRIS MUST BE REMOVED FROM THE SITE OR PLACED IN A STABLE AREA ABOVE THE HIGH WATER MARK OF THE STREAM, AS FAR AS POSSIBLE FROM THE CHANNEL, AND PROTECTED FROM EROSION BY MITIGATING MEASURES INCLUDING TEMPORARILY COVERING EXPOSED SOIL WITH: CLEAR POLYETHYLENE TARPS, GEOTEXTILE FABRIC, HYDRO-SEED AND/OR PLANTING VEGETATION (AS DEEMED APPROPRIATE TO THE SITE AND USE).

4.4.1. ALL EQUIPMENT AND MACHINERY WORKING WITHIN FIFTEEN (15) METERS OF ANY WATERCOURSE MUST BE IN GOOD WORKING CONDITION (POWER WASHED) AND FREE OF LEAKS OR EXCESS OIL AND GREASE. NO FUELS, LUBRICANTS, CONSTRUCTION WASTES OR OTHER DELETERIOUS SUBSTANCES MAY ENTER ANY WATERCOURSE AT ANY TIME. 4.4.2. NO EQUIPMENT REFUELING OR SERVICING OR STORAGE OF FUEL, PAINTS ETC. MAY BE UNDERTAKEN WITHIN FIFTEEN (15) METERS OF ANY DITCH, WATERCOURSE, RAVINE, OR STORM SEWER SYSTEM.

4.4.3. OIL DRIP TRAYS OR ABSORBENT MATERIALS (I.E. PADS) SHALL BE PLACED UNDER ANY HEAVY EQUIPMENT WORKING WITHIN THE FISHERIES SENSITIVE ZONE (ADJACENT TO THE WATERCOURSE) TO ENSURE THAT THERE IS NO POTENTIAL FOR CONTAMINATION OF THE STREAM BANKS OR WATERCOURSE RESULTING FROM LEAKS OR DRIPS

OFF MACHINERY. OPERATORS ARE RESPONSIBLE TO ENSURE THAT THERE IS NO POTENTIAL FOR OIL, GREASE OR OTHER DELETERIOUS SUBSTANCES TO ENTER ANY WATERCOURSE, RAVINE OR STORM SEWER 4.4.4. A SPILL RESPONSE KIT MUST BE READILY ACCESSIBLE ON-SITE IN THE

EVENT OF RELEASE OF A DELETERIOUS SUBSTANCE TO THE ENVIRONMENT. ANY SPILL OF A DELETERIOUS SUBSTANCE THAT ENTERS INTO A DITCH, WATERCOURSE, RAVINE OR STORM SEWER SYSTEM MUST BE IMMEDIATELY REPORTED TO THE RMOW REPRESENTATIVE. AT LEAST ONE PERSON ON-SITE DURING CONSTRUCTION MUST HAVE SPECIFIC TRAINING IN SPILL CONTAINMENT

4.4.5. ALL ACTIVITIES, INCLUDING THE STORAGE OF MATERIALS, HANDLING OF FUELS, AND EQUIPMENT OPERATION SHALL BE CONDUCTED IN ACCORDANCE WITH THE REGULATORY AGENCIES AS APPENDED TO THE

NAME	DESCRIPTION	POTENTIAL SOURCE
TYPE 1 RIPRAP	ANGULAR ROCK	SITE, ABANDONED ROAD, OR IMPORT
TYPE 2 RIPRAP	ANGULAR ROCK	SITE, ABANDONED ROAD, OR IMPORT
TYPE 3 FILTER	WELL GRADED SAND AND GRAVEL (PIT RUN)	PROCESSED FROM EXCAVATION OR IMPORT
TYPE 4 RIFFLE BOULDERS	ROUNDED TO SEMI-ANGULAR BOULDERS	SORTED FROM EXCAVATION OR FROM ABANDONED ROAD
TYPE 5 STRUCTURAL FILL	SAND AND GRAVEL	PROCESSED FROM EXCAVATION OR IMPORT
TYPE 6 GENERAL FILL	SAND AND GRAVEL	FROM EXCAVATION
TYPE 7 COMPLEXING BOULDERS	ROUNDED BOULDERS	SITE, ABANDONED ROAD, OR IMPORT
TYPE 8 ANCHOR BOULDERS	ROUNDED BOULDERS	SITE, ABANDONED ROAD, OR IMPORT

NAME	100%	85%	50%	15%	Fines
TYPE 1 RIPRAP	1220	1030	715	330	-
TYPE 2 RIPRAP	565	475	330	155	-
TYPE 3 FILTER	250	160	100	30	-
TYPE 4 RIFFLE BOULDERS	450	-	300	150	-
TYPE 5 STRUCTURAL FILL	150	-		-	<15%
TYPE 6 GENERAL FILL	150	-		-	<25%
TYPE 7 COMPLEXING BOULDERS	600	-	-	>300	-
TYPE 8 ANCHOR BOULDERS	-	-	-	>800	-

ITEM	DESCRIPTION	UNIT	APPROX. QUANTITY
1	TYPE 1 RIPRAP	CU. M.	532
2	TYPE 2 RIPRAP	CU. M.	345
3	TYPE 3 RIPRAP	CU. M.	251
4	TYPE 4 RIFFLE BOULDERS	CU. M.	41
5	TYPE 5 STRUCTURAL FILL	CU. M.	122
6	TYPE 6 GENERAL FILL	CU. M.	1150
7	TYPE 7 COMPLEXING BOULDERS	NO.	90
8	TYPE 8 ANCHOR BOULDERS	NO.	100
9	BULK EXCAVATION	CU. M.	1800
10	STANDARD LOCK-BLOCKS	NO.	92
11	LWD	NO.	120

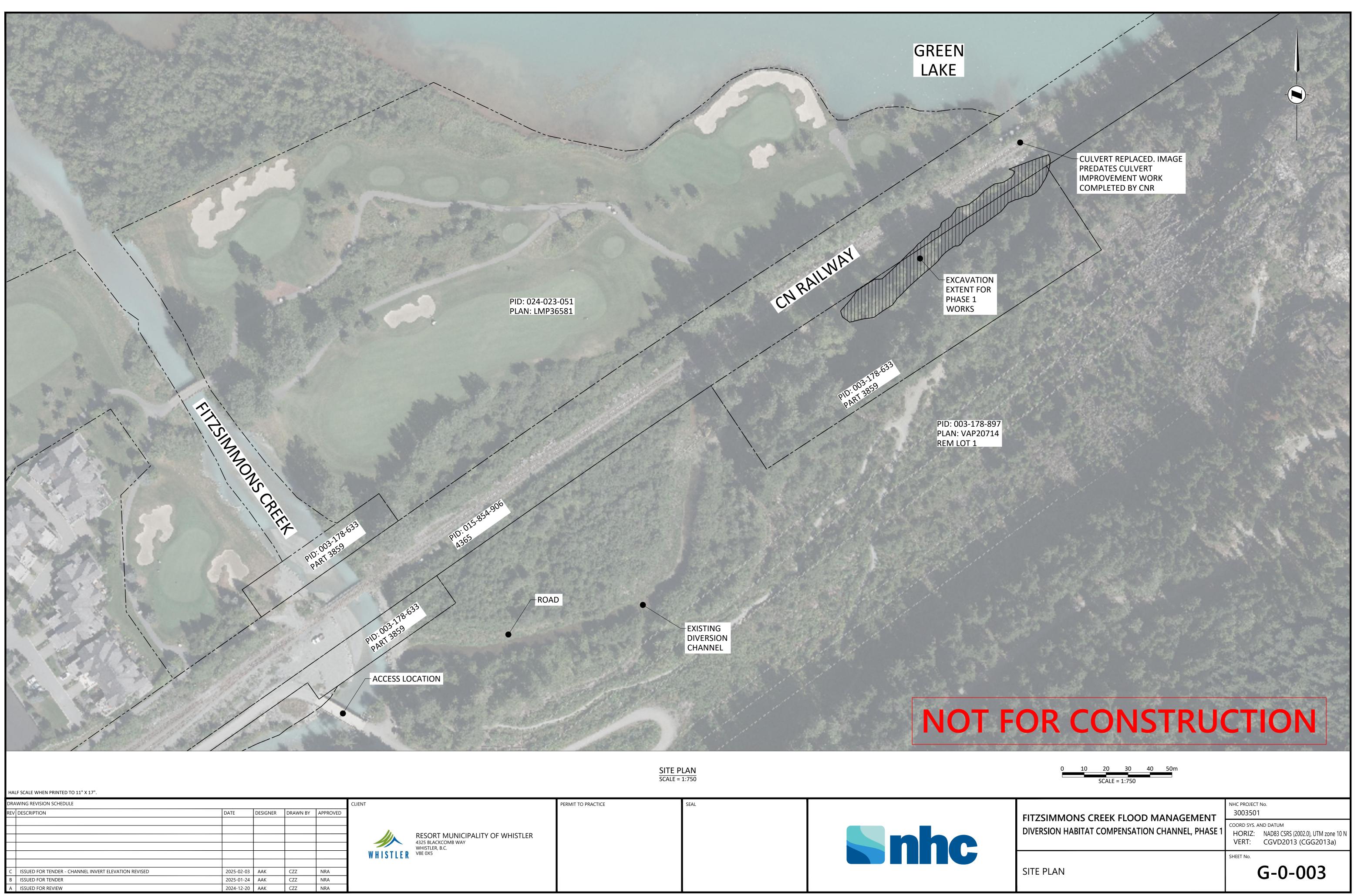
WATER ELEVATION (m)	DESCRIPTION	TOTAL HABITAT (m ²)		
632.8	ESTIMATED MINIMUM POSSIBLE LAKE LEVEL, LOWEST POINT OF GREEN LAKE AT GREEN RIVER	530		
633.5	GREEN LAKE WATER SURFACE, MEASURED JULY 24, 2024.	795		

NOTE:

HABITAT AREAS ARE CALCULATED AS WETTED AREA AND WILL VARY WITH DIFFERING WATER LEVELS. VALUES SHOWN IN THE ABOVE TABLE ARE BASED ON DESIGN CHANNEL CROSS SECTIONS. FINAL HABITAT AREAS WILL DEPEND ON THE AS-BUILT CHANNEL GEOMETRY AND SHOULD BE VERIFIED AFTER CONSTRUCTION. MODIFICATIONS MAY HAVE TO BE MADE AFTER CONSTRUCTION TO ENSURE THAT THE HABITAT REQUIREMENTS ARE MET.

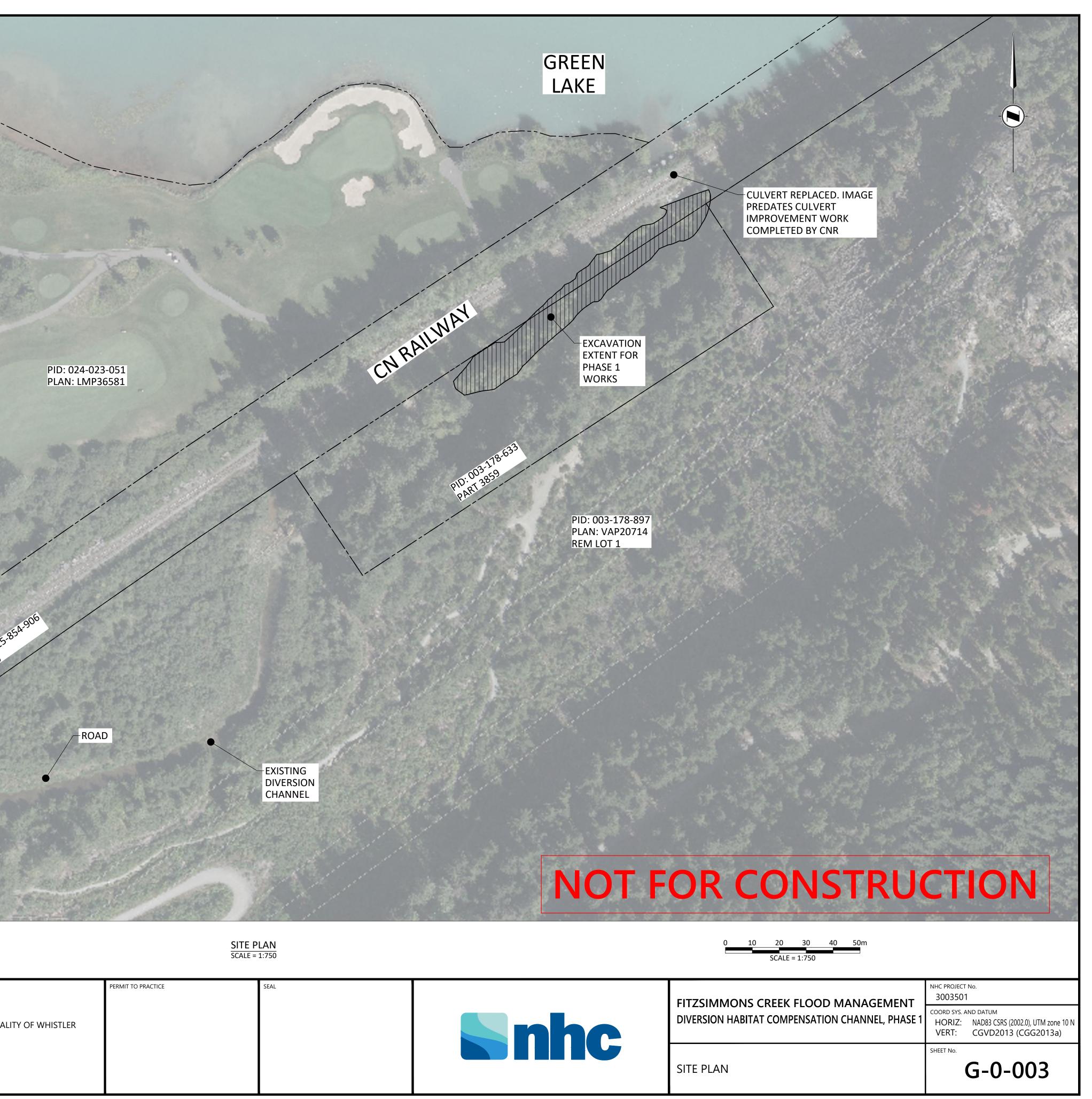
NOT FOR CONSTRUCTION

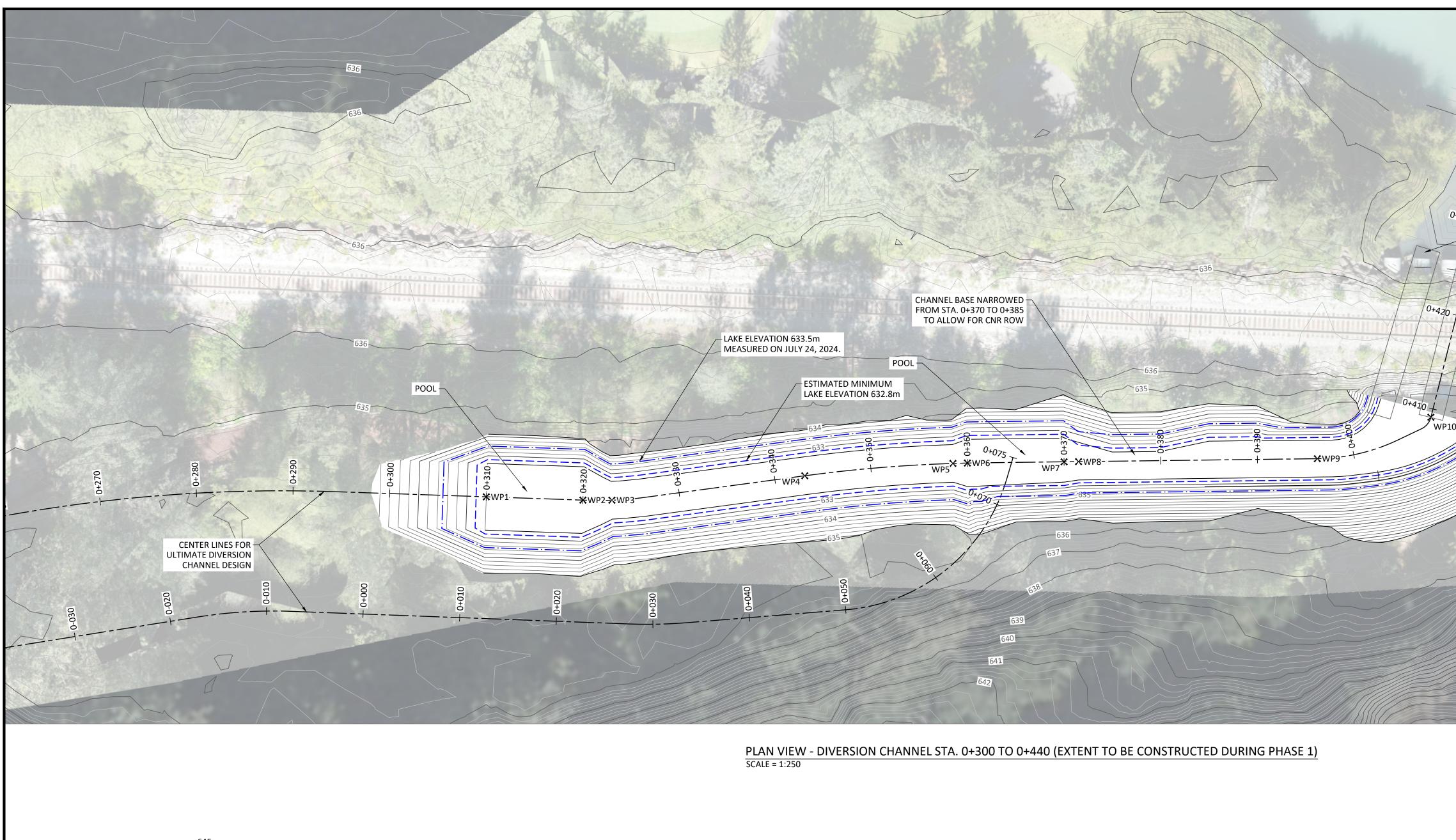
FITZSIMMONS CREEK FLOOD MANAGEMENT	NHC PROJECT No. 3003501			
DIVERSION HABITAT COMPENSATION CHANNEL, PHASE 1	COORD SYS. AND DATUM HORIZ: NAD83 CSRS (2002.0), UTM zone 10 N VERT: CGVD2013 (CGG2013a)			
NOTES AND SPECIFICATIONS SHEET	SHEET NO. G-0-002			

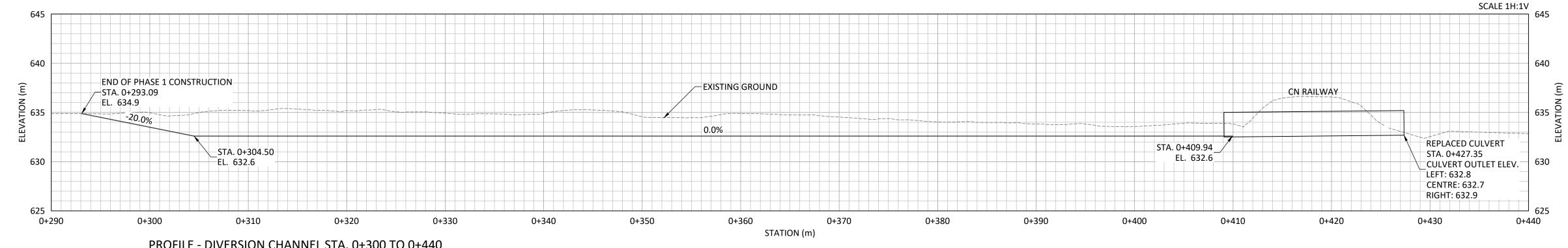


DRA	WING REVISION SCHEDULE				
REV	DESCRIPTION	DATE	DESIGNER	DRAWN BY	APPROVED
С	ISSUED FOR TENDER - CHANNEL INVERT ELEVATION REVISED	2025-02-03	AAK	CZZ	NRA
В	ISSUED FOR TENDER	2025-01-24	AAK	CZZ	NRA
А	ISSUED FOR REVIEW	2024-12-20	AAK	CZZ	NRA











HALF SCALE WHEN PRINTED TO 11" X 17".								
DRAWING REVISION SCHEDULE				CLIENT	PERMIT TO PRACTICE	SEAL		NHC PROJECT No.
REV DESCRIPTION	DATE	DESIGNER DRAWN BY	APPROVED	RESORT MUNICIPALITY OF WHISTLER 4325 BLACKCOMB WAY WHISTLER, B.C.			FITZSIMMONS CREEK FLOOD MANAGEMENT DIVERSION HABITAT COMPENSATION CHANNEL, PHASE 1	3003501 COORD SYS. AND DATUM HORIZ: NAD83 CSRS (2002.0), UTM zone 10 N VERT: CGVD2013 (CGG2013a)
C ISSUED FOR TENDER - CHANNEL INVERT ELEVATION REVISED B ISSUED FOR TENDER A ISSUED FOR REVIEW	2025-02-03 2025-01-24 2024-12-20	4 AAK CZZ	NRA NRA NRA	WHISTLER VBE 0X5			PHASE 1 PLAN AND PROFILE	SHEET NO. C-1-101

0+450				
Oraqo GREEN LA	KE			
the state of the s				
		WORKPO	DINTS TABLE	
	WORKPOINT	EASTING (m)	NORTHING (m)	ELEVATION (m)
	WP1	504270.72	5554748.34	632.6
	WP2	504279.03	5554753.90	632.6
	WP3	504281.48	5554755.64	632.6
	WP4	504296.21	5554769.33	632.6
	WP5	504307.91	5554779.30	632.6
	WP6	504309.11	5554780.21	632.6
	WP7	504317.15	5554786.15	632.6
	WP8	504318.36	5554787.04	632.6
	WP9	504338.25	5554801.69	632.6
	WP10	504345.29	5554812.02	632.6
	0	5	10	15m

SCALE = 1:250

NOTE:

1. RMOW TO CONFIRM EXCAVATION SLOPE DOES NOT IMPEDE CNR ROW.

2. MODIFICATIONS TO EXCAVATION SLOPES MAY BE **REQUIRED BASED ON IN-SITU MATERIALS ENCOUNTERED** IN THE FIELD, AS DETERMINED BY THE NHC SITE ENGINEER

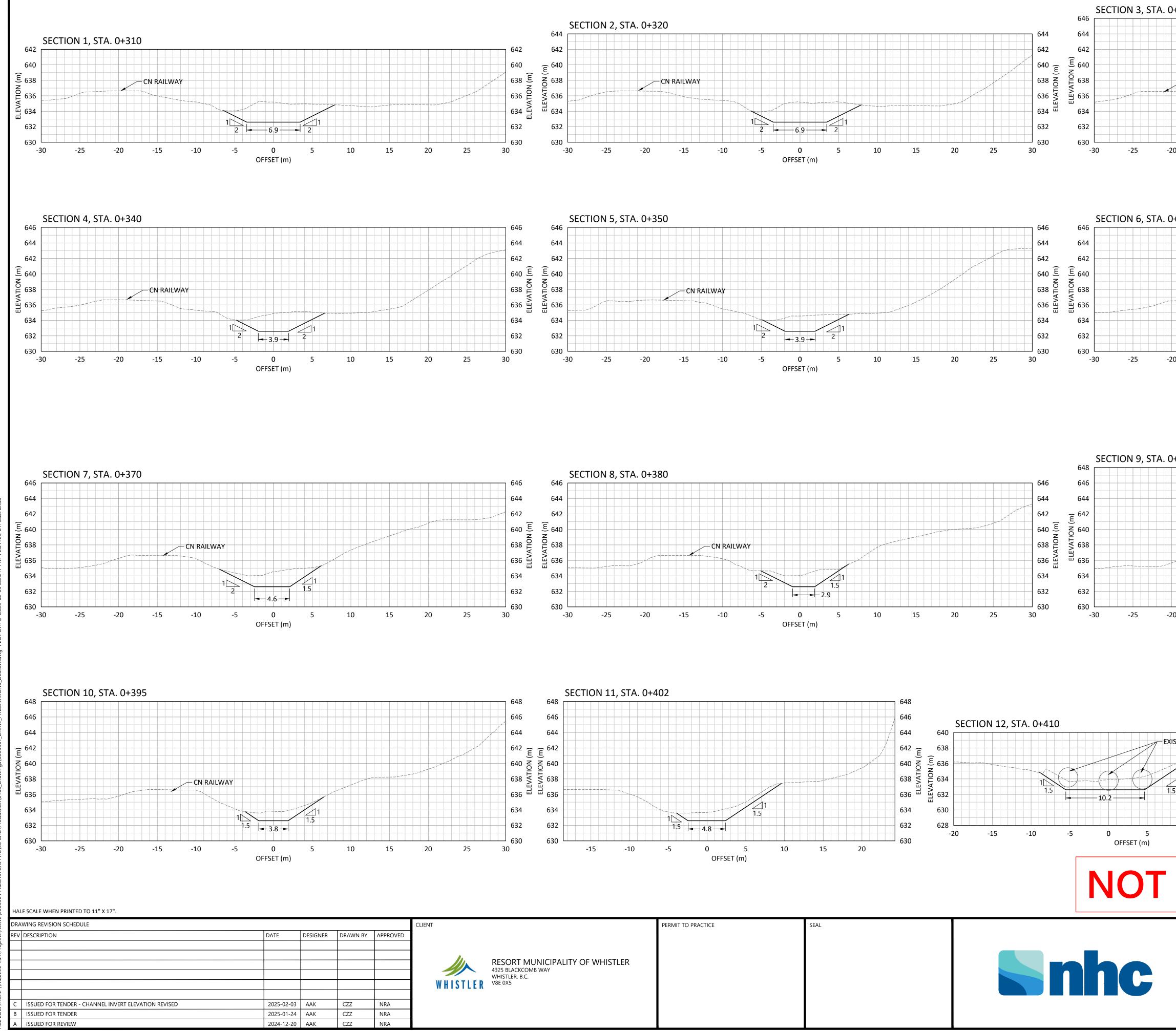
THE EXCAVATION LIMITS SHOWN DO NOT ACCOUNT FOR THE PLACEMENT OF RIPRAP DURING FUTURE PHASES OF WORK. ADDITIONAL EXCAVATION WITHIN THE PHASE 1 AREA WILL BE REQUIRED DURING FUTURE PHASES OF WORK TO ACCOMMODATE RIPRAP.

LEGEND

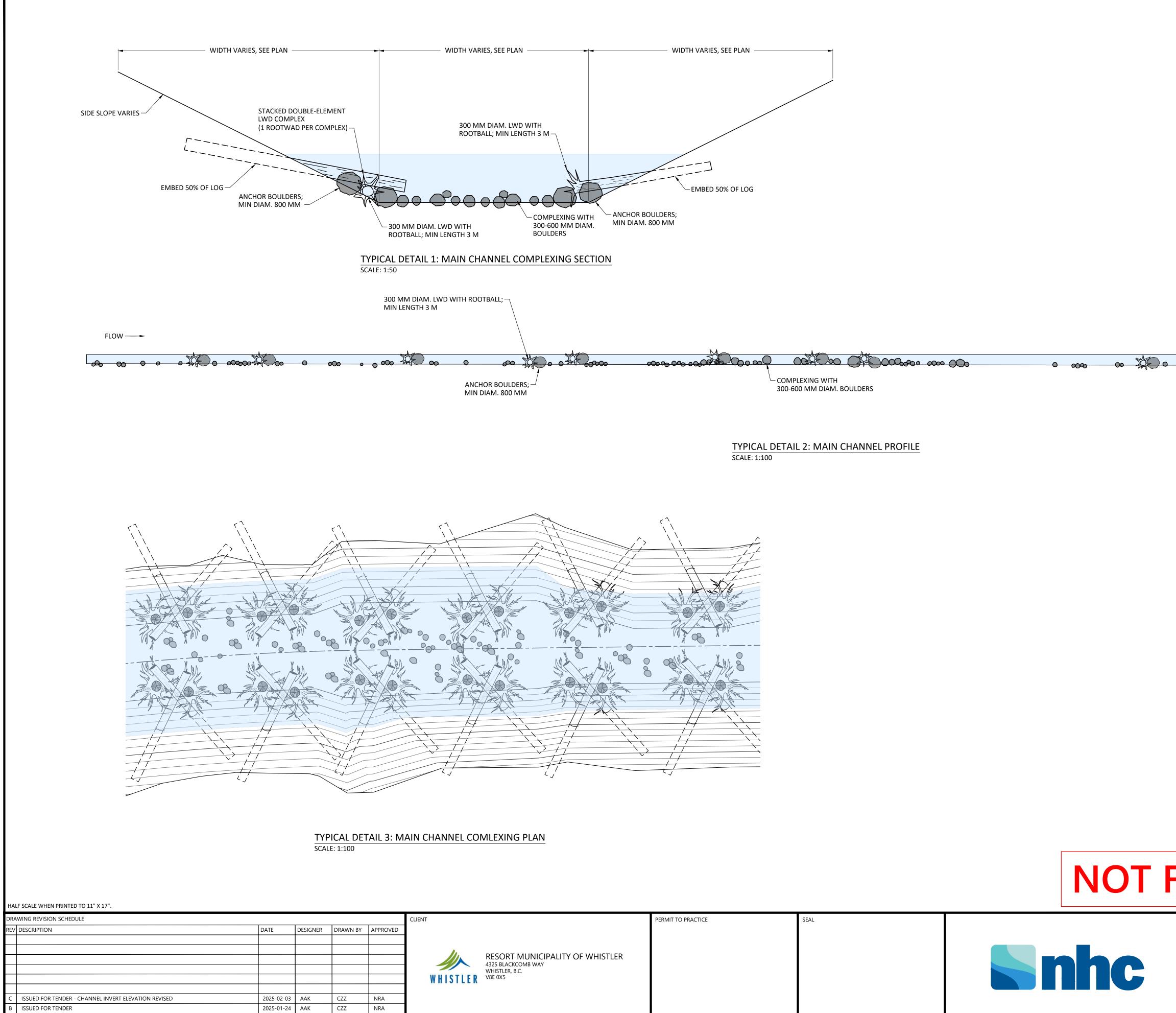
- EXISTING GRADE

– DESIGN GRADE

NOT FOR CONSTRUCTION



0+330				646
	CAILWAY -15 -10 -5 0 5 OFFSET (m)		5 20 25	644 642 640 (u) 638 638 634 634 632 630 30
0+360				
				646
				642
				640 (ш) 638 U
	CN RAILWAY			636 ELEVAT
				634
				632
0+390				648
				646
				644
				642 (E) 640 Z
	CN RAILWAY			642 (ш) 640 OUL 638 638 636 636
				636 634
				632
20	-15 -10 -5 0 5 OFFSET (m)	10 1	.5 20 25	630 30
(ISTING CN	NR CULVERTS 640 638 636 634 634 632 630 630 630 628 15 20 25 640 638 636 638 636 634 632 630 630 630 630 630 632 630 630 632 630 632 630 632 630 632 632 632 632 632 632 632 632	LEGEND	EXISTING GRADE PHASE 1 CUT EXTEN	TS
F	OR CONS	NAGEMENT	NHC PROJECT No. 3003501 COORD SYS. AND DATUM HORIZ: NAD83 CSRS (20 VERT: CGVD2013 SHEET No.)02.0), UTM zone 10 N (CGG2013a)
	JLCHUNJ		C-1-3	



A ISSUED FOR REVIEW

2024-12-20 AAK

CZZ

NRA

CIPALITY OF WHISTLER	PERMIT TO PRACTICE	SEAL	

FOR CONSTRUCTION	
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FITZSIMMONS CREEK FLOOD MANAGEMENT	NHC PROJECT No. 3003501	
DIVERSION HABITAT COMPENSATION CHANNEL, PHASE 1	COORD SYS. AND DATUM HORIZ: NAD83 CSRS (2002.0), UTM zone 10 N VERT: CGVD2013 (CGG2013a)	
TYPICAL SECTIONS AND DETAILS	SHEET NO. C-1-302	