

**From:** Sarah McJannet  
**Sent:** April 7, 2021 1:56 PM  
**To:** [REDACTED]  
**Subject:** RE: Marine Zoning Comments

Hi Darryl,

Thanks so much for taking time to provide comment and thoughts on the marine zoning bylaw. These will be added to the public commentary and brought forward at second reading to share with Council and community.

This process has involved a lot of research and engagement in navigating the many marine interests as well as all the layers of jurisdiction in the marine realm, but will sure be a big step forward for the community in addressing important coastal considerations and stewardship objectives.

On the matter of live-aboards in the zoning, for clarity the proposed bylaw allows up to 10 live-aboards (with subject conditions) recognizing their role and presence in all existing marinas, so this is not a full prohibition. We've been engaging with marina owners and managers on this topic, and inputs received to date are that they are important and that adequate services are needed for them. Some marinas have bylaws/regs restricting the # of live-aboards, and the maximum of 10 fits within this context, but we expect there will be some differing opinions on this. For the provincial aquatic leases for commercial marinas, live-aboards are actually prohibited in the lease agreements in many cases so there is some divergence there. Notwithstanding we tried to take a moderately permissive approach, but with some limitation to keep the use in check. I have toured some dedicated live-aboard marinas that have been designed with fulsome services from the outset (False Creek) so there are great examples out there. Certainly this could be explored locally (and addressed in a site-specific zoning) but within our existing context as a base case we have proposed a max limit to start.

On the long-term mooring prohibition outside of marinas and mooring facilities, this as you note is tactic to address the serious challenges with vessels being left, and in many examples vessels sinking (we are dealing with four sunken boats currently in the Cattermole). Zoning is a tool we can use to enforce as a regulatory backstop where needed (as well as trespass for vessels in private water lots). Temporary anchoring and moorage as part of right to navigate is not being restricted, but in reality there are actually quite limited areas in this part of Howe Sound that are suitable for anchoring and not exposed from high winds/waves. To support spectrum and diversity of housing options, in the case of live-aboards that are a historic and ongoing part of our waterfront areas, this will be a balancing act to ensure adequate infrastructure to support the use.

Thanks again for the inputs and please feel free to reach out anytime with additional questions or comments.

Kind regards,

**Sarah McJannet RPP, MCIP** | Senior Planner  
**District of Squamish** | *Hardwired for Adventure*  
604.815.5096 | [smcjannet@squamish.ca](mailto:smcjannet@squamish.ca) | [www.squamish.ca](http://www.squamish.ca)  
she/her



*I humbly acknowledge and live and work as a guest within the traditional ancestral and unceded territory of the Squamish Nation, Skwxwú7mesh Úxwumixw.*

 Please consider the environment before printing this e-mail.

**From:** [website@squamish.ca](mailto:website@squamish.ca) <[website@squamish.ca](mailto:website@squamish.ca)>

**Sent:** Monday, March 22, 2021 3:01 PM

**To:** Sarah McLannet <[smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)>

**Subject:** Marine Zoning Comments

**Your name**

Darryl Lapaire

**Your email**

[REDACTED]

**Your Comments**

Thank you for the opportunity to submit comments on this matter.

In reading the proposed changes I am encouraged by the obvious thought and effort that went into them, and the care given to the marine environment in particular.

However, I cannot help but be disappointed and discouraged by the lack of allowance for live aboard marine communities. The overall tone is one which seems to paint any person living full time on a vessel as less equal, and certainly less desirable.

While I whole heartedly support efforts to eliminate the impact that derelict vessels have on safe navigation and the environment, simply disallowing long term mooring or live aboards does not address the problem. If someone leaves a vessel as derelict, I suspect being in contravention of zoning is the least of their concerns.

With increasing property prices and no corresponding increase in earnings it is becoming increasingly difficult for young people and families to settle in BC communities. Personally, I would like to see Squamish embrace the full spectrum of affordable housing opportunities for their communities and support live aboard sailors both in marinas as well as at anchor or on moorings. A vibrant, diverse population both in traditional housing and non-traditional can only serve to enhance the community as a whole.

Thank you again for the opportunity to provide feedback.

Darryl Lapaire



File: 18046-40/FSP\_DSQ

April 21, 2021

Sarah McJannet  
Senior Planner  
District of Squamish  
PO Box 310  
Squamish, BC  
V8B 0A3

SENT VIA EMAIL: [smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)

Dear Sarah McJannet:

**Re: BC Timber Sales Proposed Log Dumps in Howe Sound**

Thank you for the opportunity to comment on the new marine zoning regulations proposed for Howe Sound.

BC Timber Sales (BCTS) has been assigned by the Sea to Sky Natural Resource District (the District), a forestry operating area that includes approximately 8,600 hectares on the west side of Howe Sound spanning from Woodfibre Creek north along the west side of Howe Sound toward Fries Creek. The annual allowable cut (m<sup>3</sup>/year of timber) for this area is approximately 10,000 m<sup>3</sup> which represents approximately 10% of BCTS operations within the District. Access to this timber is 100% reliant on water transportation on Howe Sound. The historic forestry access to this area is through the loading facilities on the old pulp mill site, however with the construction of the Woodfibre LNG facility this is no longer possible.

Because this access is no longer available, it is imperative that BCTS utilize alternative log handling sites (log dumps). Two alternative sites have been identified:

1. The first site (southern log dump) is south of the LNG facility within your proposed marine designation I-3. This is an existing site last permitted by Black Mount Logging and will be used to access timber south of Mill Creek. Our interpretation of the marine zoning is that our operations will be consistent with zone I-3.
2. The second site (northern log dump) will be used to access timber located in Mill Creek and north of it. This is a historic log dump but it is not clear when it was last used for this purpose. This site is identified in your proposed marine zoning as M-1.

Page 1 of 2

BCTS is concerned that our use of this site will conflict with this zoning and we request this site be changed in your zoning regulations to “M4 – Marine Log Storage”.

The northern log dump is required to access timber along Mill Creek and north of it; there is no other viable road option for accessing this area. Please note that BCTS has undertaken considerable investment in planning, engineering and environmental assessments for this site in 2016 - 2021 in preparing our applications for constructing and utilizing this site. The habitat assessment from Triton Environmental Consultants and the Onsite Engineering Ltd “Woodfibre Log Dump Reactivation” report for this site is attached to this email.

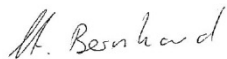
Permitting for the northern log dump is required by 2023 and is critical to meeting BCTS timber volume and pricing goals in our 5-year operating plan. A map is attached to this letter showing the existing and proposed roads that are needed to connect our planned cutblocks with the northern log dump. The blocks with the prefix SQ on the map will be indicated on our next operating plan once the log dump permitting and consultation process have been initiated.

As we determined that the reactivation of the northern log dump, north of Mill Creek, is the only option to move timber from this operating area, we kindly request that the area around the northern log dump be zoned “M4 – Marine Log Storage”.

Note that this site will not be used to store logs, only to transfer logs from land to ocean for transport, either in log booms or via barge. The site will be small and only infrequently used for moving during times there is an active Timber Sale Licence. We anticipate no more than one sale per year on average in the first three years of operation, and after that, sales will be less frequent. Furthermore, we are investigating whether we can load direct to barge, which would eliminate log booms and water transfers. If possible, this will significantly reduce the potential for disruption of marine habitat. However, we are unclear how loading a barge would fit within the proposed zoning and request clarification of this in your zoning bylaw.

For the northern log dump, we expect to submit application for Provincial and Federal authorizations together with consultation with stakeholders and First Nations in early 2022.

Sincerely,



**Stephan Bernhard, MSc, RPF**

Planning Forester

BC Timber Sales - Chinook Business Area

Ministry of Forests, Lands, Natural Resource Operations and Rural Development

Attachments:

- Onsite Engineering Ltd “Woodfibre Log Dump Reactivation” report
- Habitat Assessment from Triton Environmental Consultants
- Map with existing and proposed roads to access the northern log dump




# WOODFIBRE LOG DUMP REACTIVATION

( 49° 40' 26" N , 123° 13' 31" W )



KEY PLAN  
NTS

DWG No:1132-4-WOODFIBRELD-001		SHEET: 1 OF 14		<b>DRAWING INDEX:</b> SHEET 2 OF 13 - NOTES SHEET 1 OF 2 SHEET 3 OF 13 - NOTES SHEET 2 OF 2 SHEET 4 OF 13 - 1:2000 PLAN VIEWS SHEET 5 OF 13 - INDUSTRIAL SITE PLAN VIEW SHEET 6 OF 13 - SKIDWAY CROSS SECTION AND TRANSECT PROFILES SHEET 7 OF 13 - ELEVATION AND ROAD PROFILE VIEWS	SHEET 8 OF 13 - DOCK/BARGE ANCHOR DETAIL AND SECTION SHEET 9 OF 13 - SUMP DETAIL SHEET 10 OF 13 - CONCRETE PAD PLAN AND CROSS SECTIONS SHEET 11 OF 13 - CONCRETE SECTIONS SHEET 12 OF 13 - SKID ARM PIVOT HINGE DETAIL SHEET 13 OF 13 - TRANSFER SKID DETAIL SHEET 14 OF 13 - SITE PHOTOS
PREPARED FOR: 		PREPARED BY: <b>ONSITE</b> ENGINEERING LTD. NORTH VANCOUVER 2 - 252 1ST ST E NORTH VANCOUVER, BC, V7L 1B3 PH.: 778-628-4968 FAX: 866-235-6943	DESIGN BY: MICHAEL FOSTER, P.ENG. DESIGN DATE: MARCH 13, 2017 REVIEWED BY: JEREMY ARAKI, P.ENG. DRAWN BY: TODD FORBES SITE VISIT: MICHAEL FOSTER, P.ENG. SITE VISIT DATES: AUGUST 23, 2016 FILE NAME: WOODFIBRELD.DWG SCALE: AS NOTED REVISION NUMBER: REVISION DATE: ALL MEASUREMENTS IN m UNLESS OTHERWISE NOTED.		



NOTES:

1. SITE:

- 1.1. THE SITE LAYOUT IS INTENDED FOR COASTAL LOGGING OPERATIONS INCLUDING OFF HIGHWAY HAUL TRUCKS (BCFS L-165) AND A FRONT END LOADER FOR PUSHING BUNDLES OFF THE TRUCKS.

2. STRUCTURE:

- 2.1. ANCHOR LOGS MUST BE TIGHTLY LASHED WITH GALVANIZED WIRE ROPE. MIN. 3/4" DIAMETER TO DEADMEN LOGS. USE G-450 CROSBY CLAMPS TO SECURE GALVANIZED WIRE ROPE AROUND LOGS TO MANUFACTURERS SPECIFICATIONS.
- 2.2. DESIGN LIVE LOAD: 2 - 80 TON BUNDLES OF LOGS. AT EXTREME HIGH TIDES IT MAY BE NECESSARY TO HAVE 2 BUNDLES OF LOGS ON THE SKIDWAY FOR THE BUNDLES TO SLIDE.
- 2.3. IT IS RECOMMENDED THAT THE FLOAT STRUCTURE BE SEASONALLY REMOVED TO ENSURE NO DAMAGE DURING PERIODS OF INACTIVITY. CARE MUST BE TAKEN DURING REMOVAL OF THE SKIDWAY TO NOT DAMAGE ANY OF THE COMPONENTS. IT IS RECOMMENDED THAT A LOG LOADER OR OTHER INDUSTRIAL MACHINE BE USED TO LIFT THE STRUCTURE (NOT DRAG) OUT OF THE WATER AND PLACE IT SAFELY AT THE DUMP SITE FOR RE-INSTALLATION DURING THE NEXT LOGGING OPERATIONS.
- 2.4. GENERAL ARRANGEMENT DRAWING.

3. GEOTECHNICAL:

- 3.1. FOUNDATION DESIGN REFERENCES THE CANADIAN FOUNDATION ENGINEERING MANUAL. SUBSURFACE INFORMATION HAS BEEN INFERRED FROM SITE OBSERVATIONS OF SOIL AND BEDROCK EXPOSURES IN ROAD CUTS AND ALONG STREAMBANKS AND FROM SHALLOW HAND DUG TEST PITS AND PROBES (SEE DESCRIPTION ON SHEET 7). NO DETAILED SUBSURFACE FIELD INVESTIGATION WAS CONDUCTED (LARGE TEST PITS OR BORE HOLES). FIELD CONDITIONS MAY VARY FROM THOSE INFERRED. IF, UPON EXCAVATION, FIELD CONDITIONS VARY FROM THOSE INFERRED, THEN CHANGES TO THE FOUNDATION DESIGN OR INSTALLATION MAY BE REQUIRED.

4. MATERIAL SPECIFICATIONS AND FABRICATION:

4.1. STRUCTURAL STEEL:

- SKIDWAY TO BE FABRICATED FROM STEEL I-BEAMS: 350AT STEEL
- STEEL PLATE: 350A

4.2. COMPLETE ALL WELDS IN ACCORDANCE WITH CSA W59.

4.3. FABRICATOR TO BE CERTIFIED FOR DIVISION 1 OR 2 IN ACCORDANCE WITH CSA W47.1.

4.4. FIELD WELDING BY COMPANY CERTIFIED TO CSA W47.1 DIVISION 1, 2 OR 3.

4.5. REINFORCING:

- TO CAN/CSA G30.18M GRADE 400R.
- REINFORCING TO BE GRADE 400 DEFORMED BARS CONFORMING TO CSA G30.18M. PLACEMENT AND FABRICATION TO CONFORM TO CAN/CSA-A231.

4.6. CONCRETE:

- CSA A23.1 AND A23.4 EXPOSURE CLASS C1, f<sub>c</sub> = 30 MPa AT 28 DAYS. NO COLD JOINTS ALLOWED.

4.7. GROUT:

- GROUT MIN f<sub>c</sub> = 35 MPa AT 28 DAYS. INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
- GROUT FOR SKID ARM PIVOT HINGE SHALL BE TARGET TRAFFIC PATCH WITH FINE AGGREGATE, OR ALTERNATE EQUIVALENT PRODUCT. EQUIVALENT PRODUCTS MUST BE APPROVED BY MFR PRIOR TO USE.
- COLD WEATHER GROUTING:
  - WHERE IT IS ANTICIPATED THAT THE TEMPERATURE SHALL DROP BELOW 5°C DURING GROUTING, THE CONTRACTOR SHALL IMPLEMENT COLD WEATHER CONCRETING PROCEDURES IN ACCORDANCE WITH CAN/CSA A23.1. PRIOR TO COMMENCING THE GROUTING OPERATION, THE CONTRACTOR SHALL PROVIDE MFR WITH WRITTEN COLD WEATHER CONCRETING PROCEDURES.

4.8. FLOATING SKIDWAY:

- FLOATING SKIDWAY FABRICATION DRAWINGS REQUIRE P. ENG. SEAL AND REVIEW BY THE DUMP DESIGNER (ONSITE ENGINEERING LTD.) FOR CONFORMANCE TO THE GENERAL ARRANGEMENT DESIGN.
- FLOATING SKIDWAY BALLAST TANK TO BE EQUIPPED WITH PRESSURIZED STEEL AIRLINE C/W QUICK CONNECT TO CONTROL TANK BALLAST.

5. INSTALLATION NOTES:

- 5.1. RIPRAP SOURCE HAS BEEN IDENTIFIED.
- 5.2. THERE ARE BC HYDRO TRANSMISSION LINES AND A NATURAL GAS PIPELINE UPHILL OF THE LOG DUMP AREA. APPROPRIATE SAFETY PRECAUTIONS ARE REQUIRED FOR CONSTRUCTION AND BLASTING OPERATIONS AT THE LOG DUMP SITE.
- 5.3. NOTE THAT WHERE EXCAVATION SPECIFICATIONS ON THESE DRAWINGS CONFLICT WITH WORKSAFEBC REGULATIONS, WORKSAFEBC REGULATIONS ARE TO GOVERN.

6. SURVEY:

- 9.1. SITE SURVEY BY ONSITE ENGINEERING LTD, AUGUST 23, 2016
- 9.2. TRANSECTS BY TRITON ENVIRONMENTAL CONSULTANTS, SEPTEMBER 23, 2015

ENVIRONMENTAL NOTES:

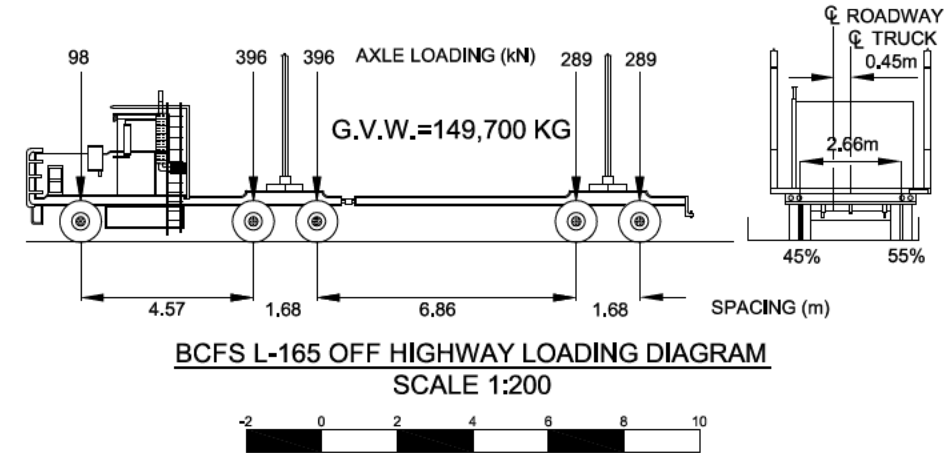
1. WORK APPROVAL FROM FISHERIES AND OCEANS CANADA SHOULD BE SOUGHT
2. ALTERATION BELOW THE HIGH WATER LINE SHOULD BE SUPERVISED BY AN ENVIRONMENTAL MONITOR. SEDIMENT MANAGEMENT TO REDUCE SILTATION IS REQUIRED.
3. DIRECT SUBSURFACE WATER AWAY FROM WORK SITE. SILT FENCING, GEOTEXTILE CLOTH FABRIC AND A ROLL OF PLASTIC SHOULD BE USED ON SITE. STOP WORK DURING EXTREME ADVERSE WEATHER.
4. MACHINERY IS TO BE CLEAN AND LEAK FREE PRIOR TO COMING ON SITE. PETROLEUM PRODUCTS MUST BE CAREFULLY MONITORED.
5. A SEDIMENT AND DEBRIS MANAGEMENT PLAN IS REQUIRED FOR APPROVAL PRIOR TO CONSTRUCTION.
6. REFER TO "HABITAT ASSESSMENT FOR A PROPOSED LOG TRANSFER FACILITY NEAR WOODFIBRE, HOWE SOUND" PREPARED BY TRITON ENVIRONMENTAL CONSULTANTS. A SEDIMENTATION MANAGEMENT PLAN IS REQUIRED FOR CONSTRUCTION. THE PLAN MUST BE PREPARED AND APPROVED BY BCTS PRIOR TO UNDERTAKING ANY CONSTRUCTION WORKS AT THE SITE.

PARTIAL MATERIALS LIST

QTY	ITEM DESCRIPTION
2	ANCHOR LOG: 0.6m Ø X 6m LENGTH Cw. TOP CUT FLAT TO PROVIDE 0.4m BEARING.
2	DEADMAN LOG: 0.6m x 5m LENGTH Cw
6	FLAT TOP CONCRETE BLOCKS (INTERLOCKING): 0.75mX0.75mX1.5m (TYP.)
80m	¾" Ø CABLE FOR ANCHOR LOGS
48	G-450 CROSBY CLAMPS
1	600mm Ø X 5m LONG CSP
1	600mm Ø X 10m LONG CSP
1	1200mm Ø X 13m LONG CSP

SPECIFICATIONS FOR CONCRETE BLOCKS (INTERLOCKING):

- MIN. f<sub>c</sub> = 20MPa AT 28 DAYS TO CAN/CSA A23.1 AND A23.4.
- BLOCKS SHALL BE CAST MONOLITHICALLY, NO COLD JOINTS ALLOWED.
- ALL EXPOSED SURFACES SHALL HAVE A SMOOTH FINISH CONFORMING TO CSA CAN3-A23.4-00 SECTION 24.2 GRADE A.
- THE FINISH MUST NOT BE HONEYCOMBED.
- BLOCK SIZE MUST BE 750mm X 750mm X 1500mm LONG, PROVIDED WITH SHEAR KEY.
- DIMENSIONAL TOLERANCE MUST BE +/- 20mm FOR LENGTH, WIDTH, AND HEIGHT AND THE BLOCKS SHALL BE REASONABLY SQUARE, WITH THE DIAGONAL WITHIN A TOLERANCE OF +/- 15mm OF EACH OTHER.
- THE TOP AND BOTTOM SURFACES MUST BE FLAT TO A TOLERANCE OF +/- 3mm UNDER A 600mm LONG STRAIGHT EDGE.
- CONCRETE SHALL BE AIR ENTRAINED 4-7% TO PROTECT THE SURFACE FROM FREEZE THAW DEGRADATION.
- EACH BLOCK MUST CONTAIN A SATISFACTORY EMBEDDED LIFTING DEVICE.
- INTERLOCK PATTERN AND GEOMETRY MUST BE APPROVED BY THE MINISTRY.
- EDGES SHALL BE CHAMFERED.



BCFS L-165 OFF HIGHWAY LOADING DIAGRAM

SCALE 1:200

DWG No:1132-4-WOODFIBRELD-002

SHEET: 2 OF 14

PREPARED FOR:



PREPARED BY:

**ONSITE**  
ENGINEERING LTD.

**NORTH VANCOUVER**  
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DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
SITE VISIT: MICHAEL FOSTER, P.ENG.  
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**WOODFIBRE LOG DUMP**  
**REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

SEAL OF B.C. P.ENG.

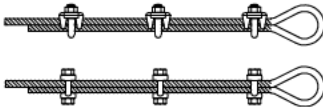


U-BOLT CLIP INSTALLATION PROCEDURES

WIRE ROPE CLIPS

BASIC REQUIREMENTS FOR PROPER TERMINATION:

- SELECT PROPER SIZE CLIPS AND TURN BACK.
- PLACE CLIPS ON IN PROPER SEQUENCE.
- TORQUE ALL CLIPS EVENLY WITH A TORQUE WRENCH.
- APPLY FIRST LOAD AND RE-TORQUE WITH A TORQUE WRENCH.



TURN BACK IS MEASURED FROM THE END OF THE ROPE TO THE BASE OF THE EYE OR TO THE THIMBLE. THIS PART OF THE ROPE IS OFTEN REFERRED TO AS THE DEAD END. SINCE THE U-BOLT CLIP HAS A SINGLE SADDLE, WORKERS MUST NOT SADDLE THE DEAD HORSE.

THE TABLE BELOW DEFINES THE INFORMATION REQUIRED FOR EACH WIRE ROPE CLIP TO ACHIEVE MAXIMUM EFFICIENCY.

TABLE 1				
CLIP SIZE (INCHES)	ROPE SIZE (INCHES)	MIN. NO. OF CLIPS	AMOUNT OF ROPE TO TURN BACK (INCHES)	*TORQUE (Ft. Lbs.)
1/2	1/2	3	11 1/2	65
5/8	5/8	3	12	95
3/4	3/4	4	18	130
7/8	7/8	4	19	225
1	1	5	26	225
IF A GREATER NUMBER OF CLIPS ARE USED THAN SHOWN IN THE TABLE, THE AMOUNT OF TURNBACK SHOULD BE INCREASED PROPORTIONATELY.				
*THE TIGHTENING TORQUE VALUES SHOWN ARE BASED UPON THE THREADS BEING CLEAN, DRY AND FREE OF LUBRICATION.				

1. REFER TO TABLE 1 IN FOLLOWING THESE INSTRUCTIONS. TURN BACK SPECIFIED AMOUNT OF ROPE FROM THIMBLE TO LOOP. APPLY FIRST CLIP ONE BASE WIDTH FROM DEAD END OF ROPE. APPLY U-BOLT OVER DEAD END OF WIRE ROPE - LIVE END RESTS IN SADDLE (NEVER SADDLE A DEAD HORSE!). USE TORQUE WRENCH TO TIGHTEN EVENLY, ALTERNATE FROM ONE NUT TO THE OTHER UNTIL REACHING THE RECOMMENDED TORQUE.
2. WHEN TWO CLIPS ARE REQUIRED, APPLY THE SECOND CLIP AS NEAR THE LOOP OR THIMBLE AS POSSIBLE. USE TORQUE WRENCH TO TIGHTEN EVENLY, ALTERNATING UNTIL REACHING THE RECOMMENDED TORQUE. WHEN MORE THAN TWO CLIPS ARE REQUIRED, APPLY THE SECOND CLIP AS NEAR THE LOOP OR THIMBLE AS POSSIBLE, TURN NUTS ON SECOND CLIP FIRMLY, BUT DO NOT TIGHTEN. PROCEED TO STEP 3.
3. WHEN THREE OR MORE CLIPS ARE REQUIRED, SPACE ADDITIONAL CLIPS EQUALLY BETWEEN FIRST TWO - TAKE UP ROPE SLACK - USE TORQUE WRENCH TO TIGHTEN NUTS ON EACH U-BOLT EVENLY, ALTERNATING FROM ONE NUT TO THE OTHER UNTIL REACHING RECOMMENDED TORQUE.

DWG No:1132-4-WOODFIBRELD-003

SHEET: 3 OF 14

PREPARED FOR:



PREPARED BY:

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WOODFIBRE LOG DUMP  
REACTIVATION  
( 49° 40' 26" N , 123° 13' 31" W )

SEAL OF B.C. P.ENG.







BOOMING GROUNDS TO BE  
30m FROM SHORELINE

APPROXIMATE BOOMING  
GROUNDS SHOWN FOR  
ILLUSTRATIVE PURPOSES ONLY

SATELLITE IMAGE  
~SCALE 1:2000

APPROXIMATE LOCATION OF  
5,000 GALLON (18,900 LITRE)  
FUEL TANK SITE

INSTALL DEBRIS CURTAIN 20m EACH SIDE OF SKIDWAY  
CENTRELINE BUT LEAVE ROOM FOR BARGE. THE DEBRIS  
CURTAINS VARY IN DEPTH, WITH THE SHORTEST (2m DEEP)  
IN THE NEAR SHORE AREA AND THE DEEPEST (4m DEEP)  
ATTACHED TO THE DEEP END OF THE BOOMING GROUNDS.  
DEBRIS CURTAINS TO EXTEND 50m FROM SHORELINE.

APPROXIMATE BOOMING GROUNDS  
SHOWN FOR ILLUSTRATIVE  
PURPOSES ONLY. FINAL BULLPEN  
AND BOOMING GROUNDS TO BE  
DETERMINED BY BCTS.

BOOMING

BOOMSTICKS

BULLPEN

PLAN VIEW  
SCALE 1:2000



PREPARED FOR:



PREPARED BY:

**ONSITE**  
ENGINEERING LTD.

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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-004

SHEET: 4 OF 14

DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
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SEAL OF B.C. P.ENG.



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DRAWING SCALE MAY BE  
DISTORTED WITH PRINTING.

INTENDED TO BE PRINTED ON  
11"X17" PAPER.

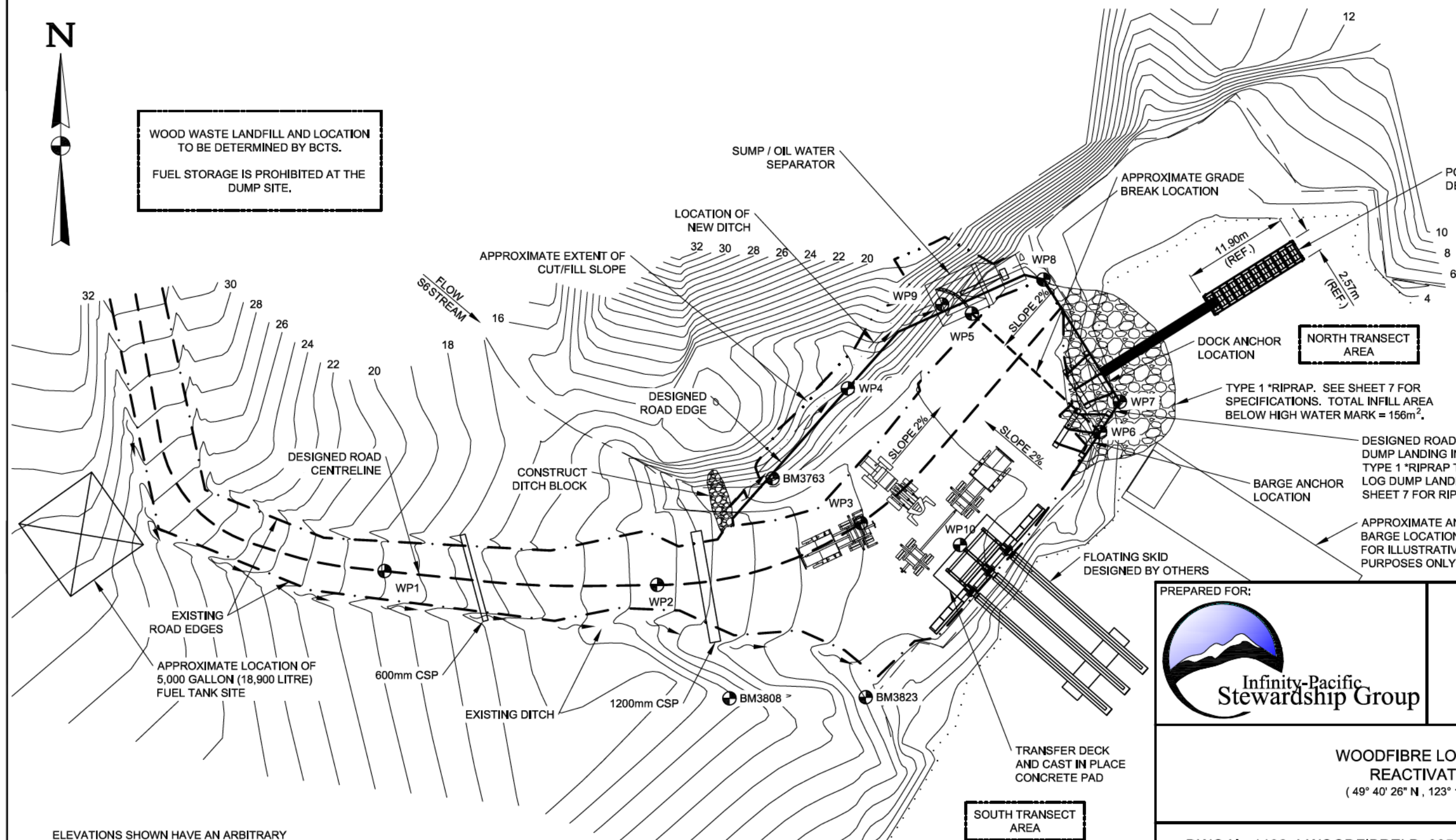
BOOMING GROUNDS

DEBRIS CURTAIN



WOOD WASTE LANDFILL AND LOCATION  
TO BE DETERMINED BY BCTS.

FUEL STORAGE IS PROHIBITED AT THE  
DUMP SITE.



ELEVATIONS SHOWN HAVE AN ARBITRARY  
DATUM AND SHOULD ONLY BE USED TO  
ESTABLISH RELATIVE ELEVATION WITHIN  
THE LOG DUMP FOR CONSTRUCTION  
PURPOSES.

WP	N	E	ELEV
WP1	5001.35	2957.85	19.05
WP2	4999.80	2988.46	12.55
WP3	5006.75	3011.32	7.48
WP4	5021.84	3009.86	7.06
WP5	5030.24	3023.78	6.85
WP6	5016.95	3038.19	7.26
WP7	5020.35	3040.40	7.33
WP8	5034.07	3031.82	7.11
WP9	5031.26	3020.45	6.31
WP10	5004.28	3022.46	7.58
BM3823	4987.19	3011.87	96.93
BM3808	4987.07	2996.57	103.67
BM3763	5011.75	3001.42	98.91

WORKPOINT LOCATION TABLE				
WP	OC	BS	ANG R (deg ° '")	HD (m)
1	BM3823	BM3808	15° 08' 27"	55.85
	BM3808	BM3763	279° 08' 48"	41.28
	BM3763	BM3823	99° 38' 43"	44.79
2	BM3823	BM3808	28° 45' 33"	26.60
	BM3808	BM3763	316° 23' 06"	15.10
	BM3763	BM3823	70° 23' 31"	17.62

PLAN VIEW  
SCALE 1:500



CAUTION:

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SKIDWAY FABRICATION DRAWINGS REQUIRE  
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**WOODFIBRE LOG DUMP  
REACTIVATION**

( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-005

SHEET: 5 OF 14

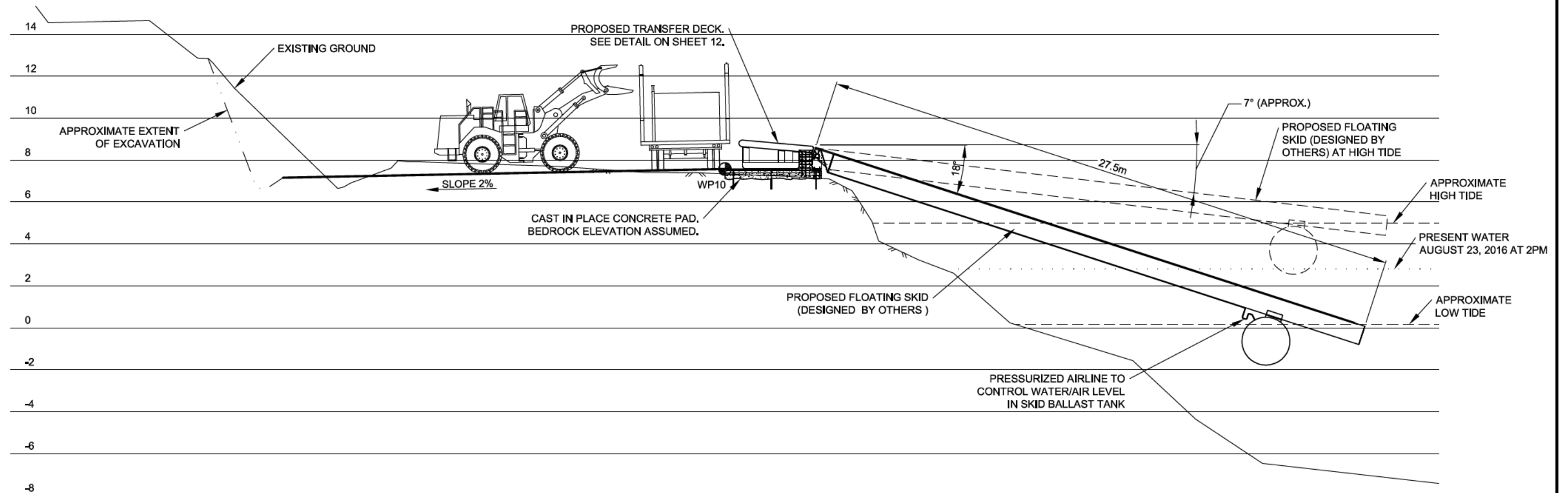
DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
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DESIGNED ROAD EDGES	—————	HIGH WATER LEVEL	—————
DESIGNED ROAD CENTRELINE	—————	STREAM THALWEG	—————
EXISTING ROAD EDGES	- . - . - .	PRESENT WATER LEVEL	.....
APPROXIMATE EXTENT OF CUT/FILL SLOPE	.....	DITCH FLOW	—————>
BENCH MARK	⊙ BM1	EXTENT OF DITCH	—————
WORKPOINT	⊙ WP1		





**FLOATING SKIDWAY CROSS SECTION**  
SCALE 1:200



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**WOODFIBRE LOG DUMP  
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DWG No:1132-4-WOODFIBRELD-006

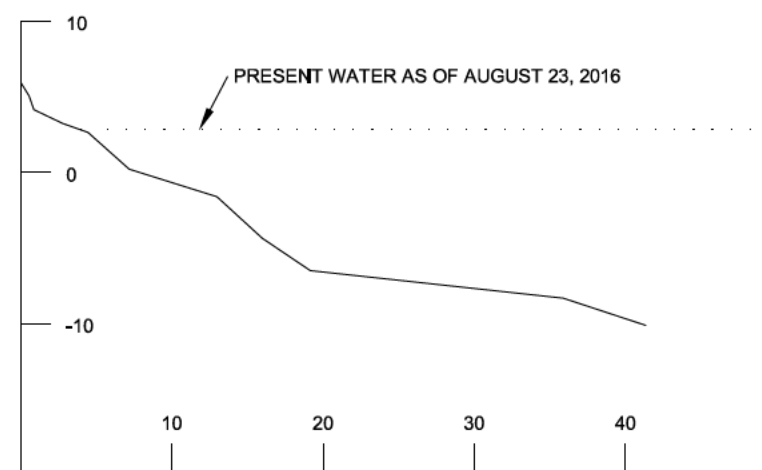
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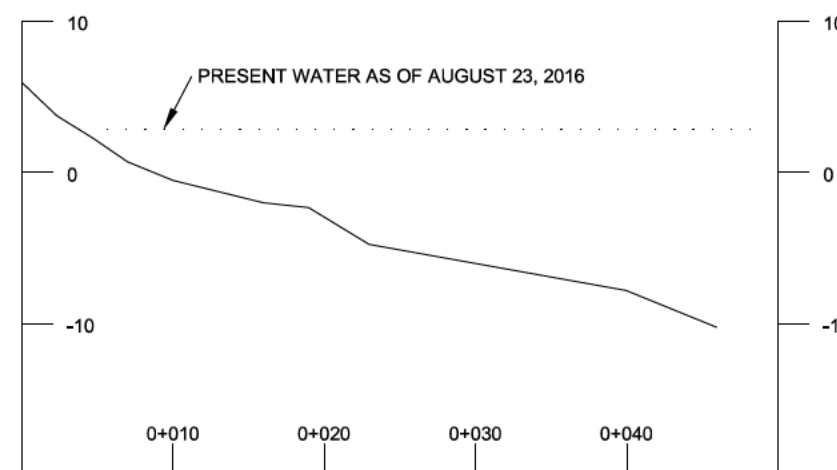
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APPROXIMATE LIMIT OF EXCAVATION	— — — — —	BEDROCK	/// \\
PRESENT WATER	.....		
HIGH TIDE	-----		
LOW TIDE	-----		

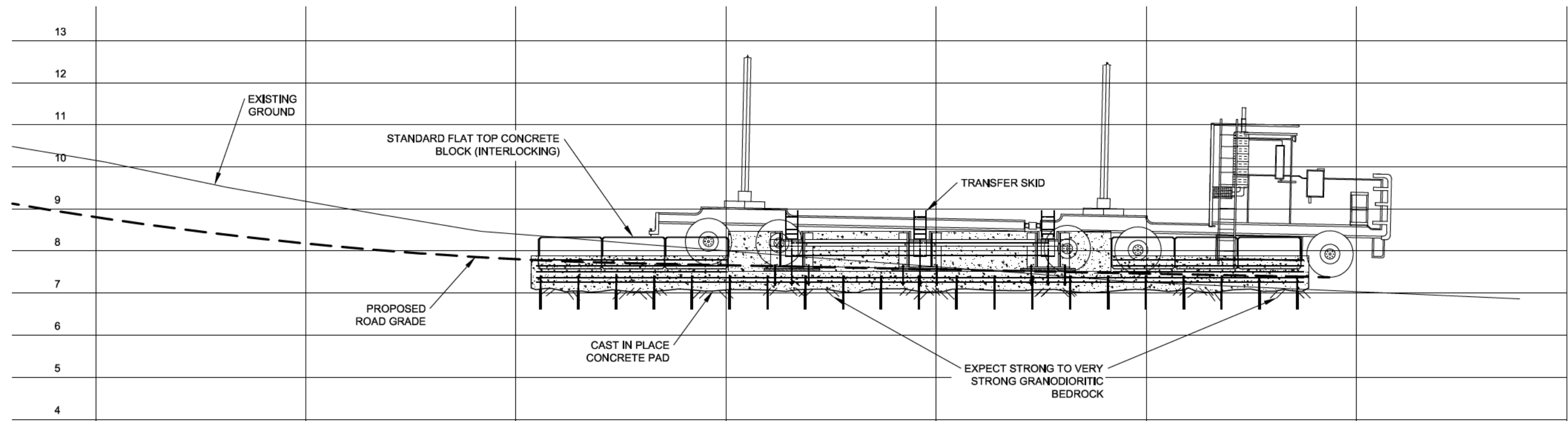


**SOUTH WEST TRANSECT**  
SCALE 1:500

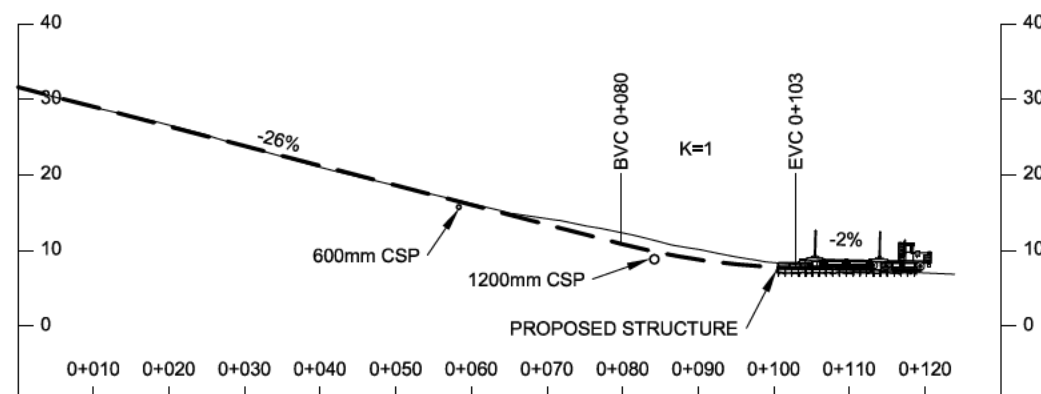
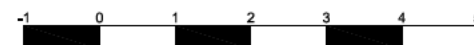


**NORTH EAST TRANSECT**  
SCALE 1:500





**ELEVATION VIEW**  
SCALE 1:100



**ROAD PROFILE VIEW**  
SCALE 1:1000



**ROCK STRENGTH	
EXTREMELY WEAK	INDENTED BY THUMBNAIL
VERY WEAK	CRUMBLES UNDER FIRM BLOW OF HAMMER; CAN BE PEELED WITH A POCKET KNIFE
WEAK	CAN BE PEELED BY POCKET KNIFE (DIFFICULT); SHALLOW INDENTS FROM FIRM BLOW OF HAMMER POINT
MEDIUM STRONG	CANNOT BE SCRAPED OR PEELED WITH KNIFE; FRACTURES WITH SINGLE BLOW OF HAMMER
STRONG	REQUIRES MORE THAN ONE BLOW OF HAMMER TO FRACTURE
VERY STRONG	REQUIRES MANY BLOWS OF HAMMER TO FRACTURE
EXTREMELY STRONG	CAN ONLY BE CHIPPED BY HAMMER

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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

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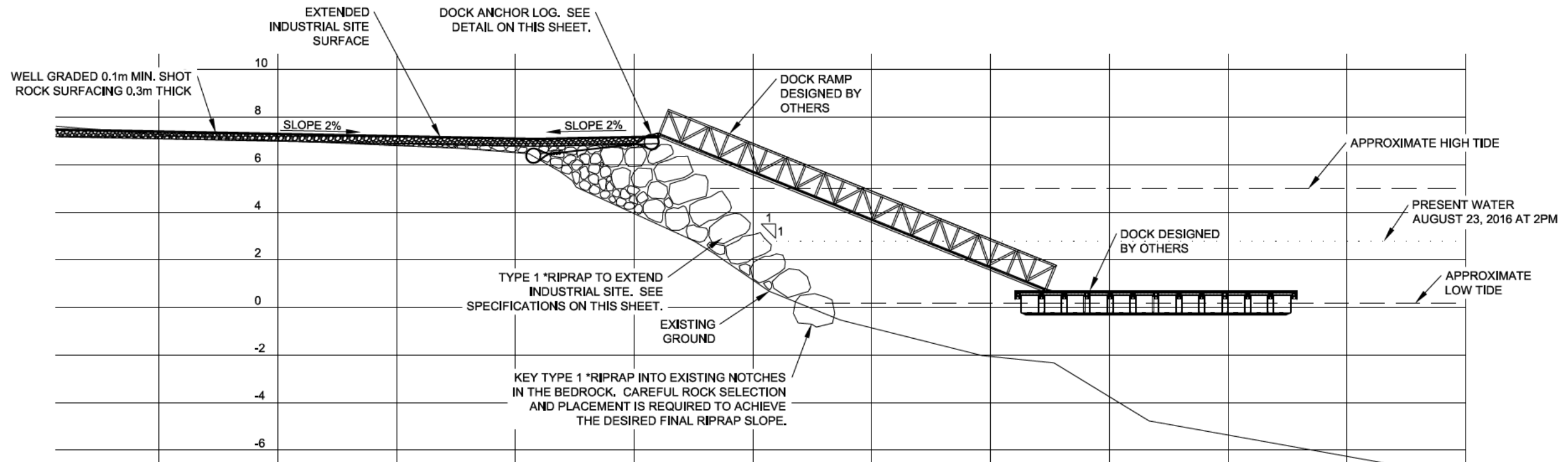
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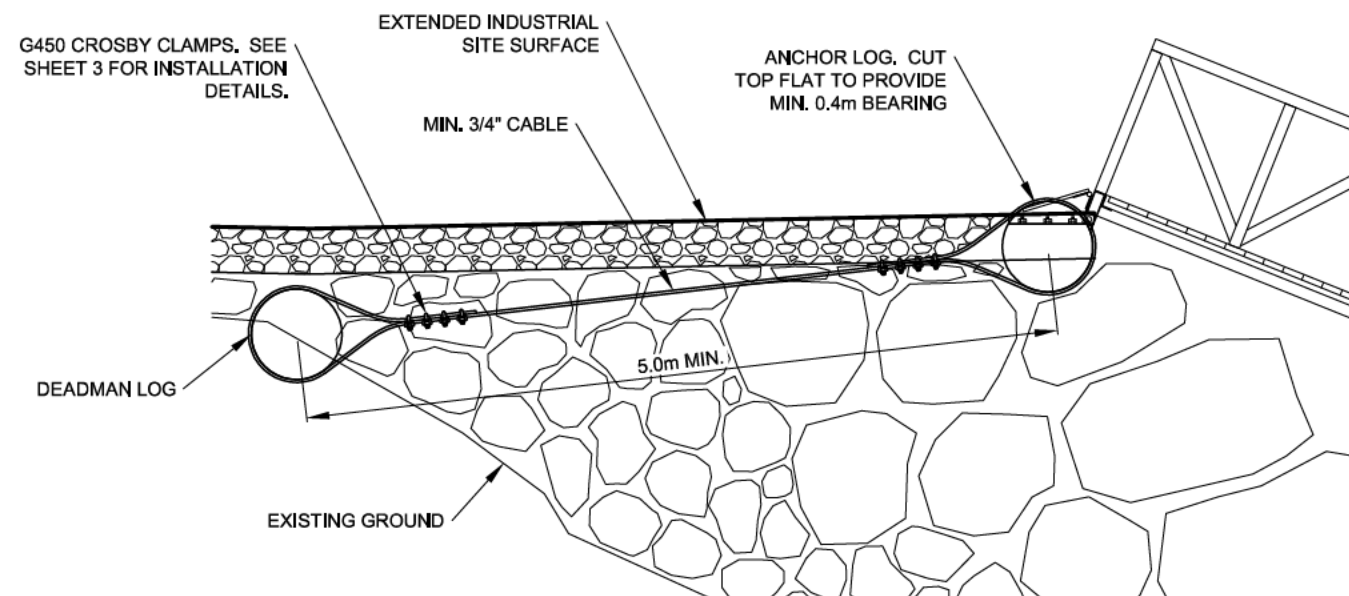
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DESIGNED ROAD GRADE ———  
APPROXIMATE LIMIT OF EXCAVATION ———  
BEDROCK ———



DOCK SECTION  
SCALE 1:200



DOCK / BARGE ANCHOR DETAIL  
SCALE 1:50



TYPE 1 \*RIPRAP: CLEAN ANGULAR ROCK

CLASS 1000kg RIPRAP	
ROCK GRADATION	
PERCENT SMALLER THAN GIVEN	
ROCK MASS kg(mm)	
15%	100(415)
50%	1000(900)
85%	3000(1295)
NOMINAL THICKNESS OF RIPRAP	
1500mm	



ALL ROCK TO BE PLACED TO MAXIMIZE INTERLOCKING BETWEEN PIECES. ALL ROCK TO BE UNDERLAIN WITH MIRAFI 180N OR APPROVED EQUIVALENT NON-WOVEN GEOTEXTILE. APPROXIMATELY 720m³ OF RIPRAP REQUIRED.

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WOODFIBRE LOG DUMP  
REACTIVATION  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-008

SHEET: 8 OF 14

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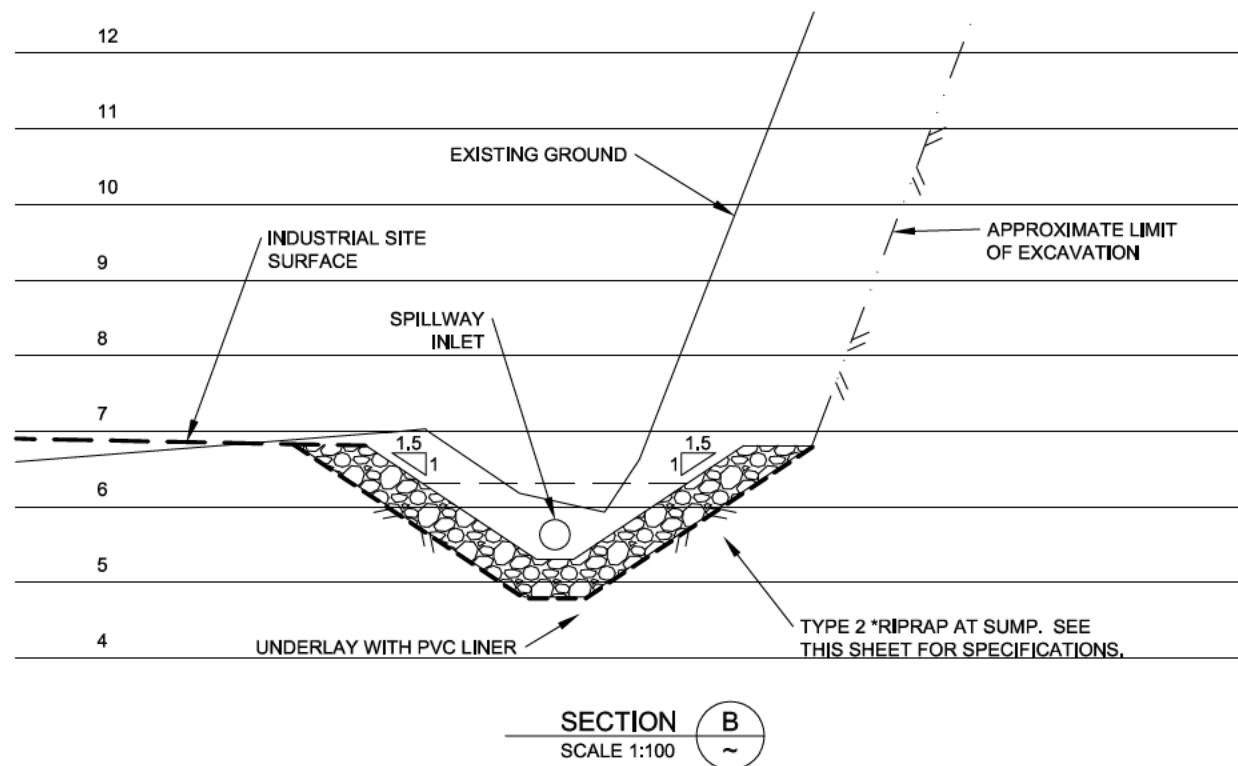
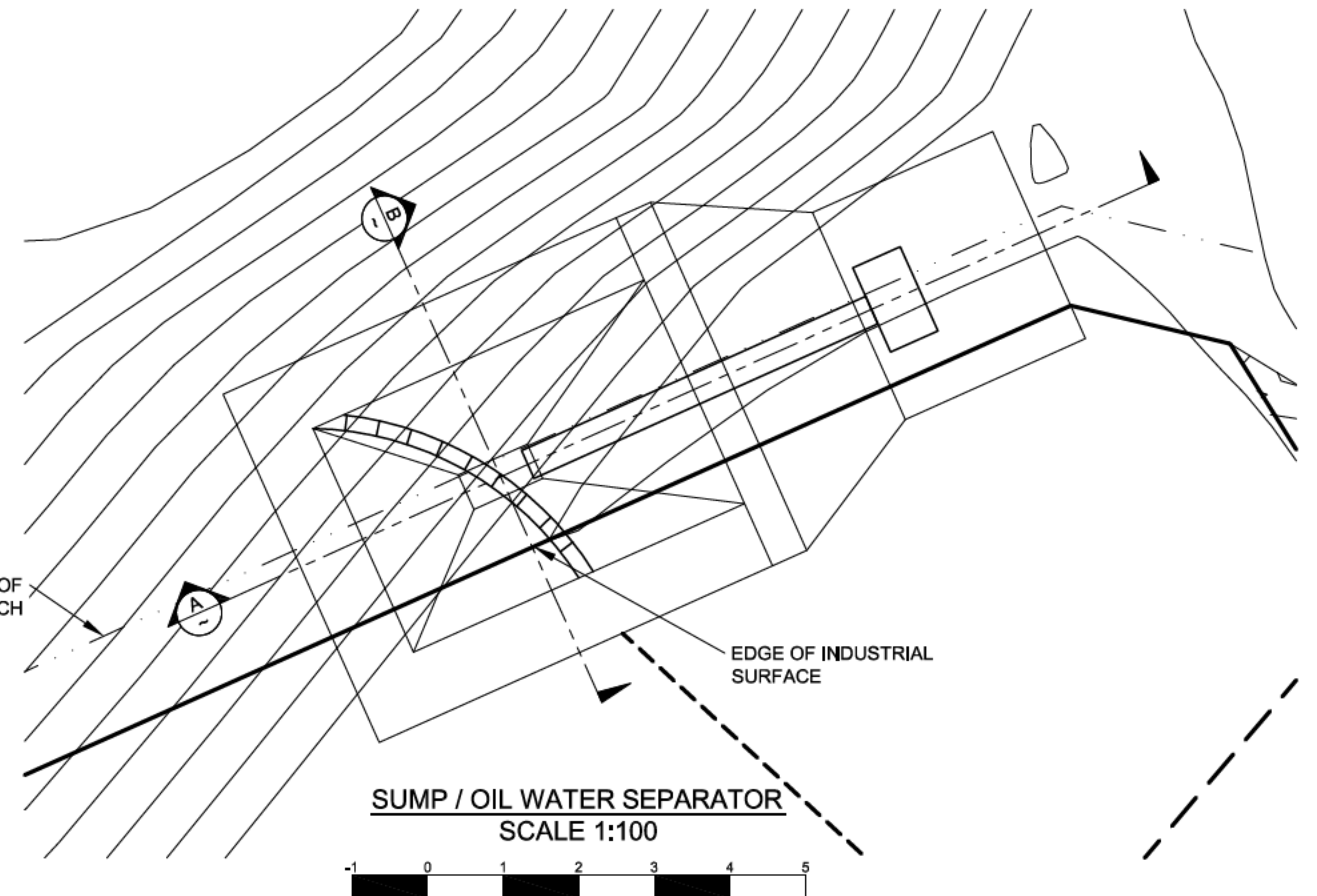
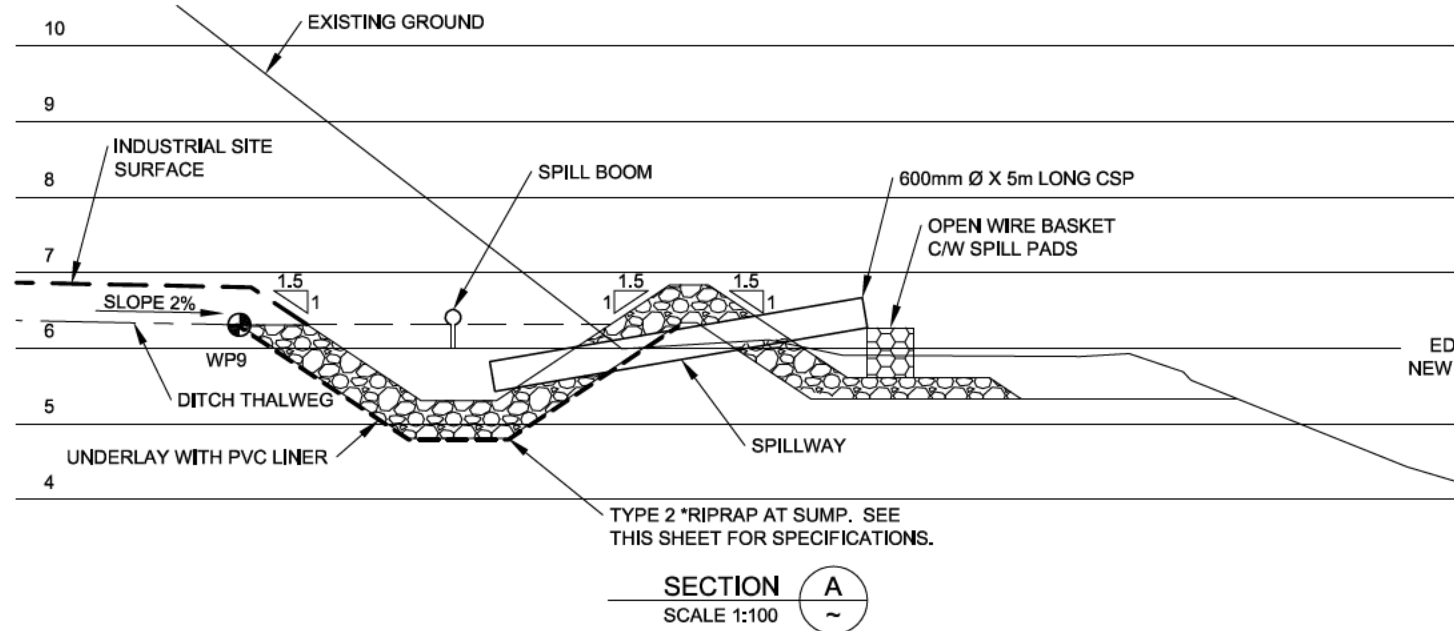


DESIGNED ROAD  
SURFACE

HIGH WATER LEVEL



PRESENT WATER LEVEL

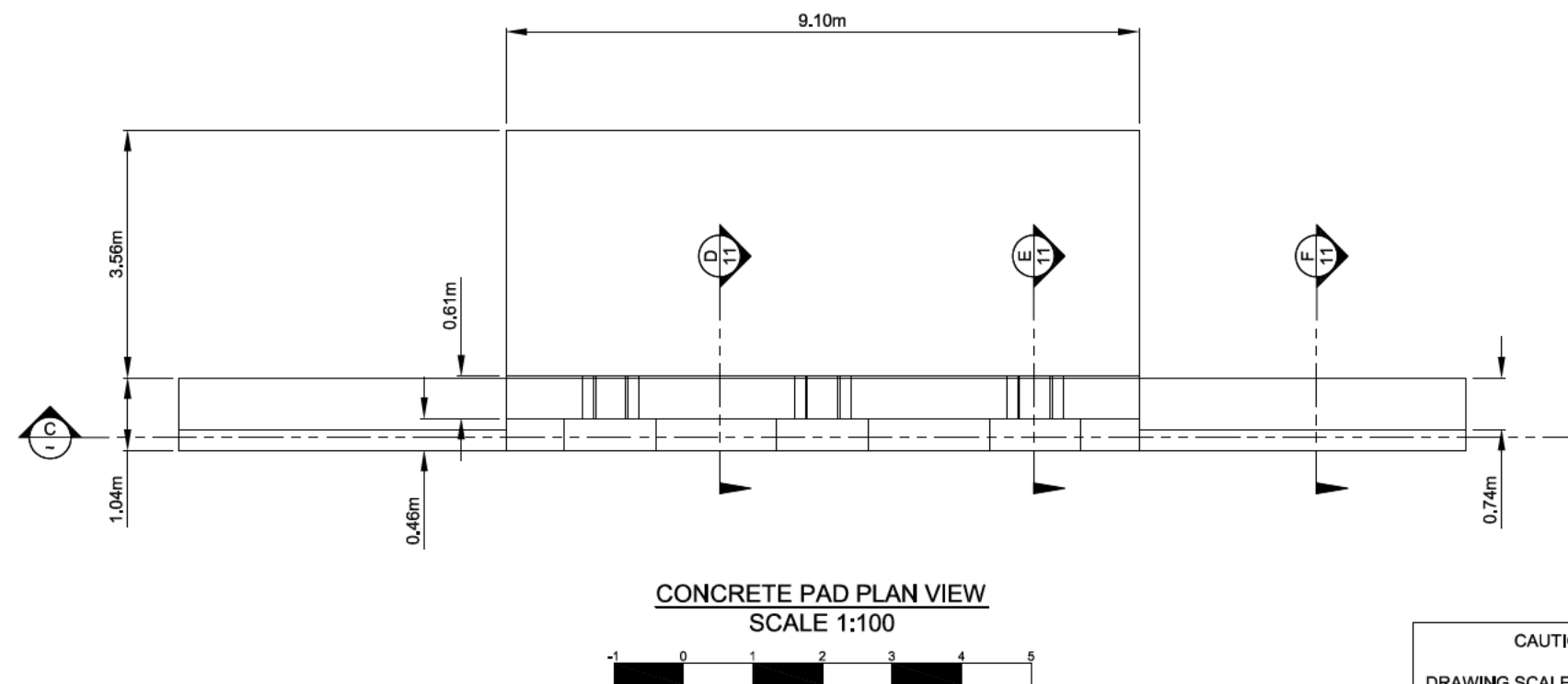
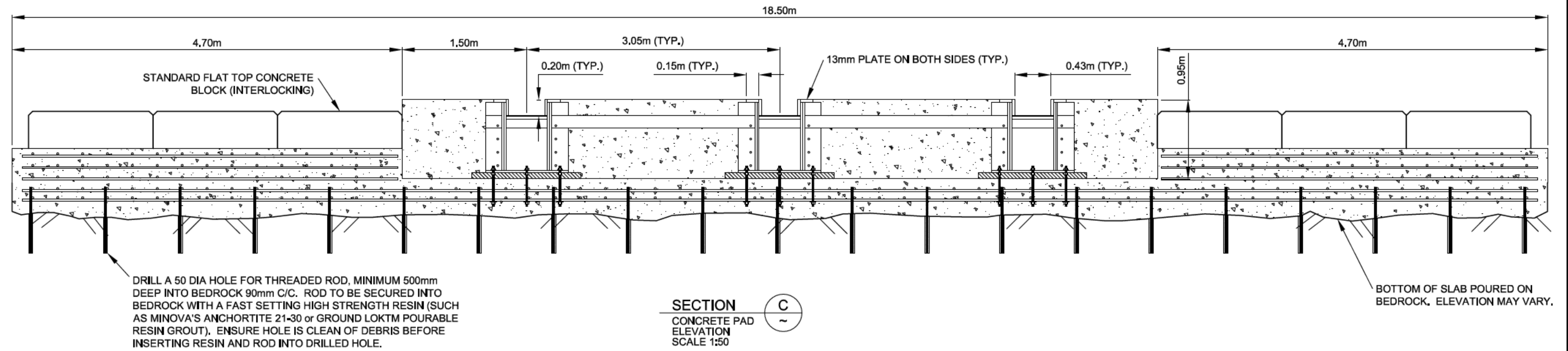




TYPE 2 *RIPRAP: CLEAN ANGULAR ROCK	
CLASS 10kg RIPRAP	
ROCK GRADATION	
PERCENT SMALLER THAN GIVEN	
ROCK MASS kg(mm)	
15%	1(90)
50%	10(195)
85%	30(280)
NOMINAL THICKNESS OF RIPRAP	
350mm	
ALL ROCK TO BE PLACED TO MAXIMIZE INTERLOCKING BETWEEN PIECES. ALL ROCK TO BE UNDERLAIN WITH MIRAFI 180N OR APPROVED EQUIVALENT NON-WOVEN GEOTEXTILE. APPROXIMATELY 50m³ OF RIPRAP REQUIRED.	

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<b>WOODFIBRE LOG DUMP REACTIVATION</b> ( 49° 40' 26" N , 123° 13' 31" W )													
DWG No:1132-4-WOODFIBRELD-009		SHEET: 9 OF 14											
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<table border="0"> <tr> <td>DESIGNED INDUSTRIAL SITE SURFACE</td> <td>---</td> </tr> <tr> <td>APPROXIMATE LIMIT OF EXCAVATION</td> <td>---</td> </tr> <tr> <td>PVC LINER</td> <td>---</td> </tr> <tr> <td>BEDROCK</td> <td>---</td> </tr> <tr> <td>DITCH THALWEG</td> <td>---</td> </tr> </table>				DESIGNED INDUSTRIAL SITE SURFACE	---	APPROXIMATE LIMIT OF EXCAVATION	---	PVC LINER	---	BEDROCK	---	DITCH THALWEG	---
DESIGNED INDUSTRIAL SITE SURFACE	---												
APPROXIMATE LIMIT OF EXCAVATION	---												
PVC LINER	---												
BEDROCK	---												
DITCH THALWEG	---												



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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-010

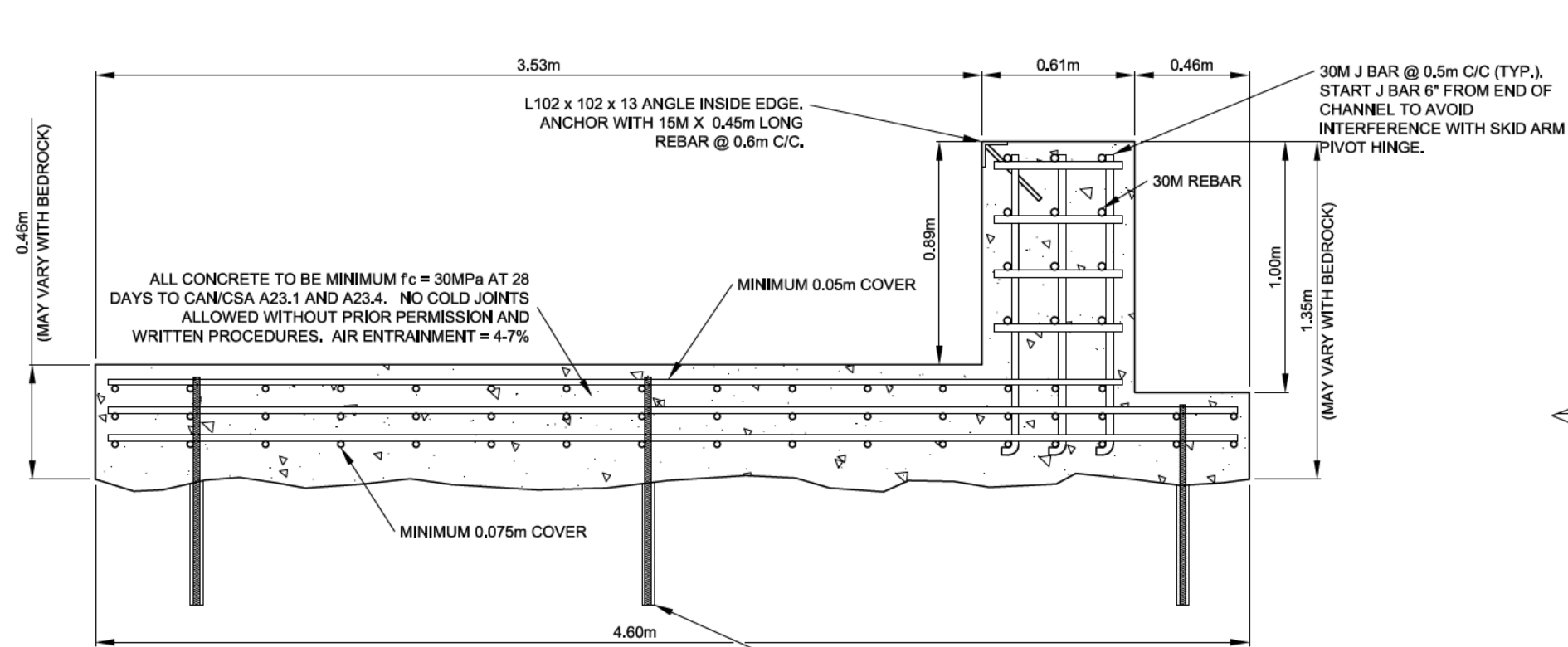
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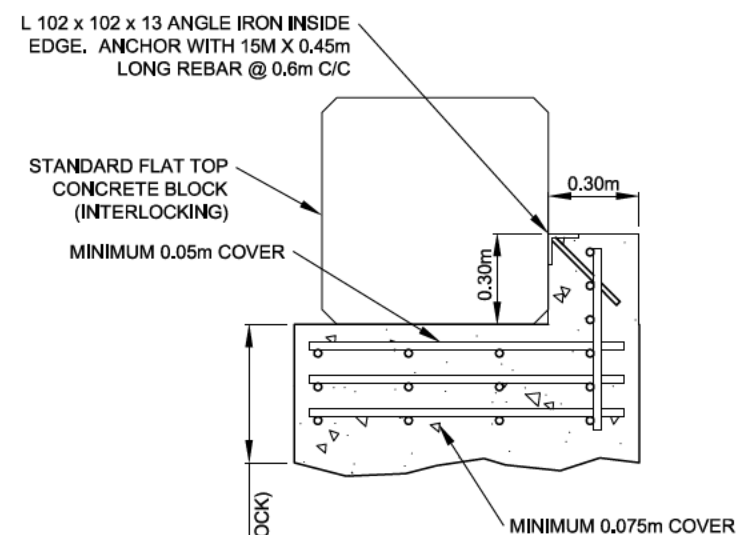


BEDROCK



SECTION D  
SCALE 1:25

DRILL A 50 DIA HOLE FOR THREADED ROD, MINIMUM 500mm DEEP INTO BEDROCK. ROD TO BE SECURED INTO BEDROCK WITH A FAST SETTING HIGH STRENGTH RESIN (SUCH AS MINOVA'S ANCHORTITE 21-30 or GROUND LOKTM POURABLE RESIN GROUT). ENSURE HOLE IS CLEAN OF DEBRIS BEFORE INSERTING RESIN AND ROD INTO DRILLED HOLE.

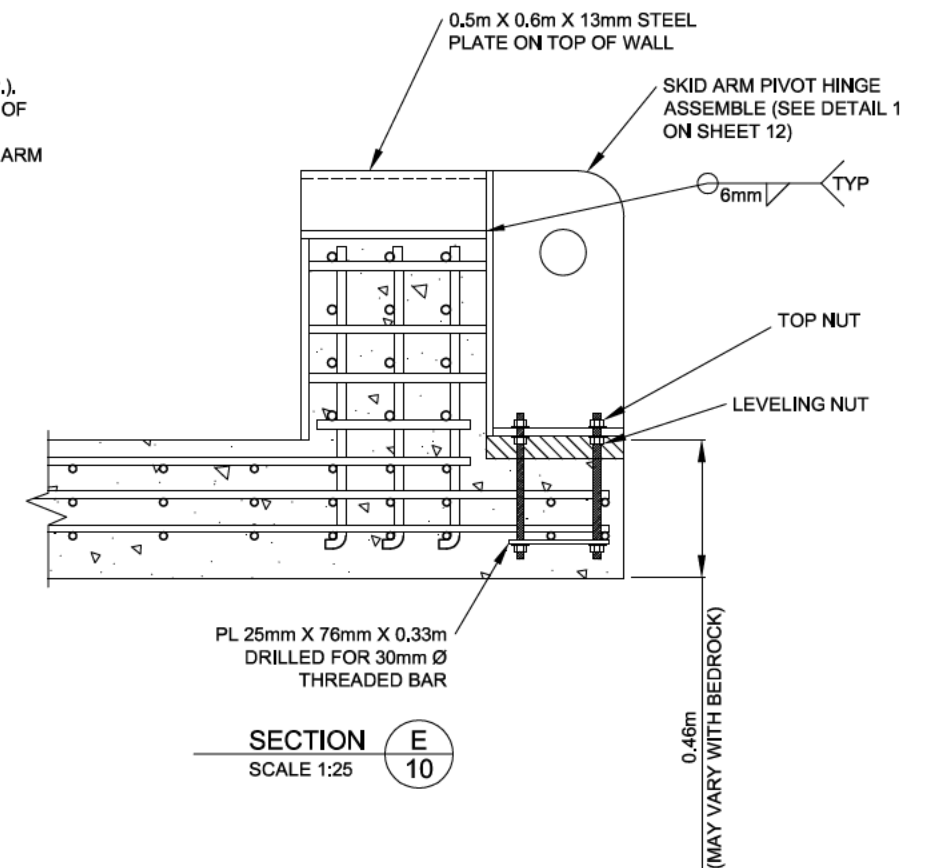


SECTION F  
SCALE 1:25

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SECTION E  
SCALE 1:25

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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-011

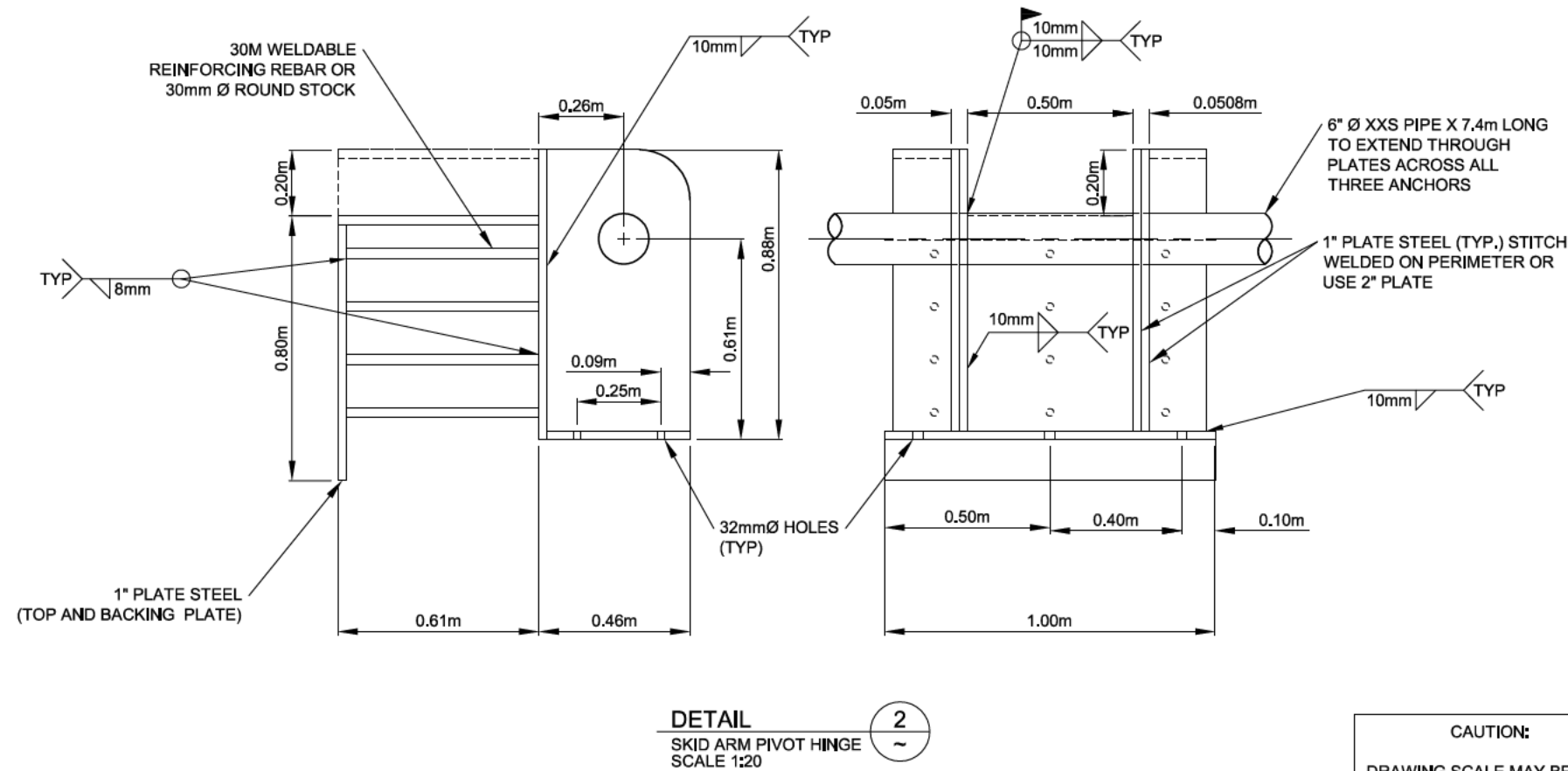
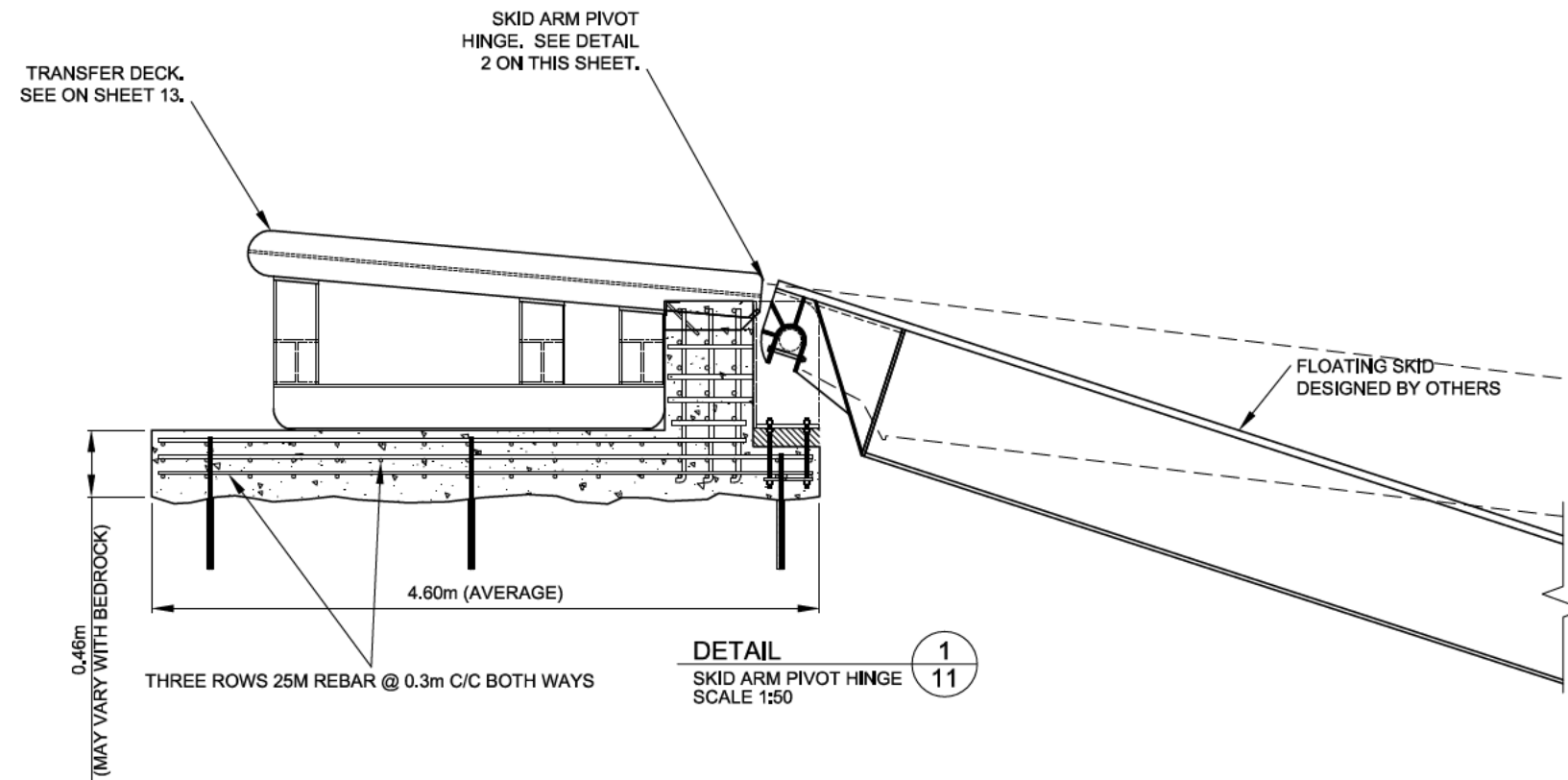
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BEDROCK



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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-012

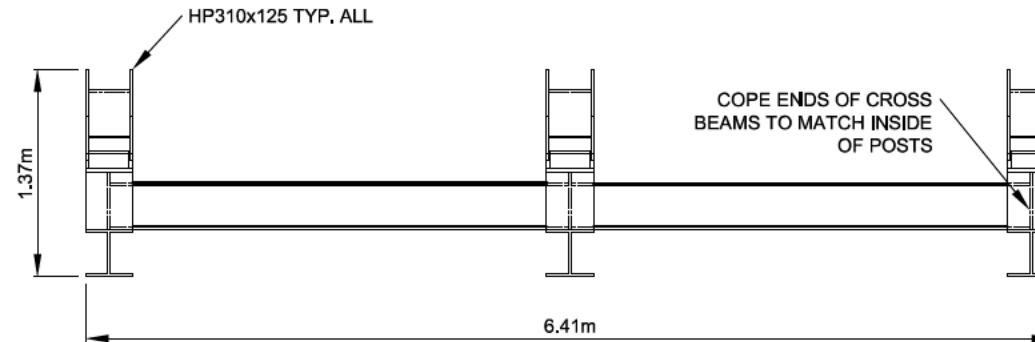
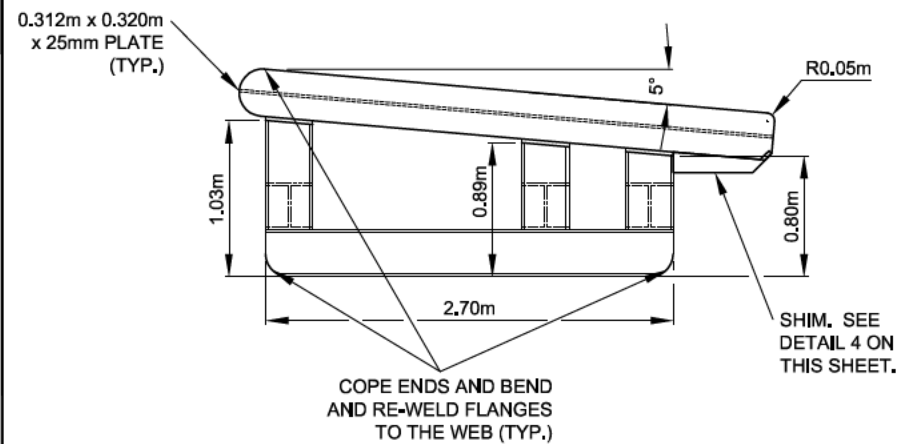
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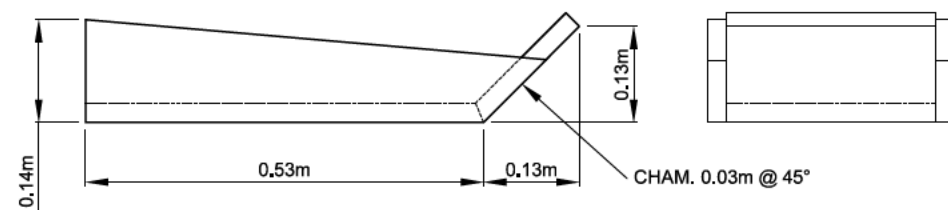
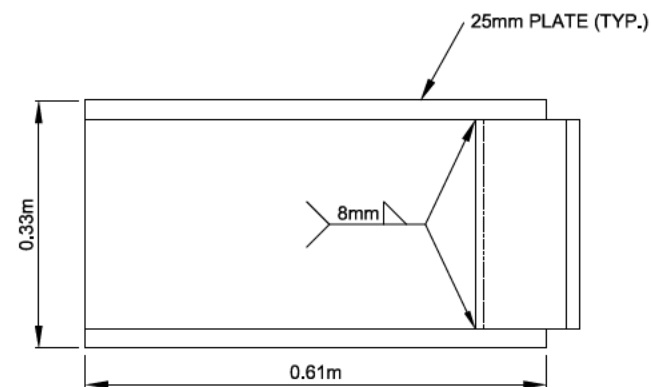
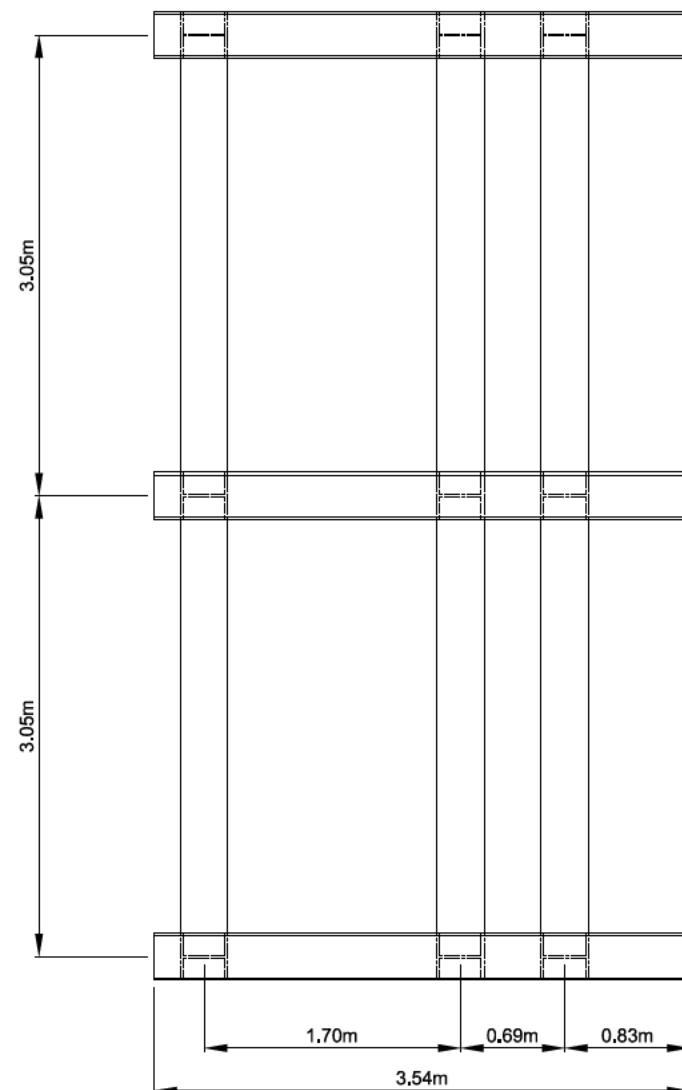
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ALL WELDS TO BE 8mm FILLET WELDS ON ALL CONNECTIONS.  
H-PILE CONNECTIONS TO BE WELDED ON ALL AVAILABLE FACES.



DETAIL 4  
TRANSFER SKID  
SHIM  
SCALE 1:10

DETAIL 3  
TRANSFER SKID  
SCALE 1:50

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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-013

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PHOTO #1 - VIEW OF COVE



PHOTO #2 - VIEW OF COVE LOOKING TOWARDS LOG DUMP LOCATION

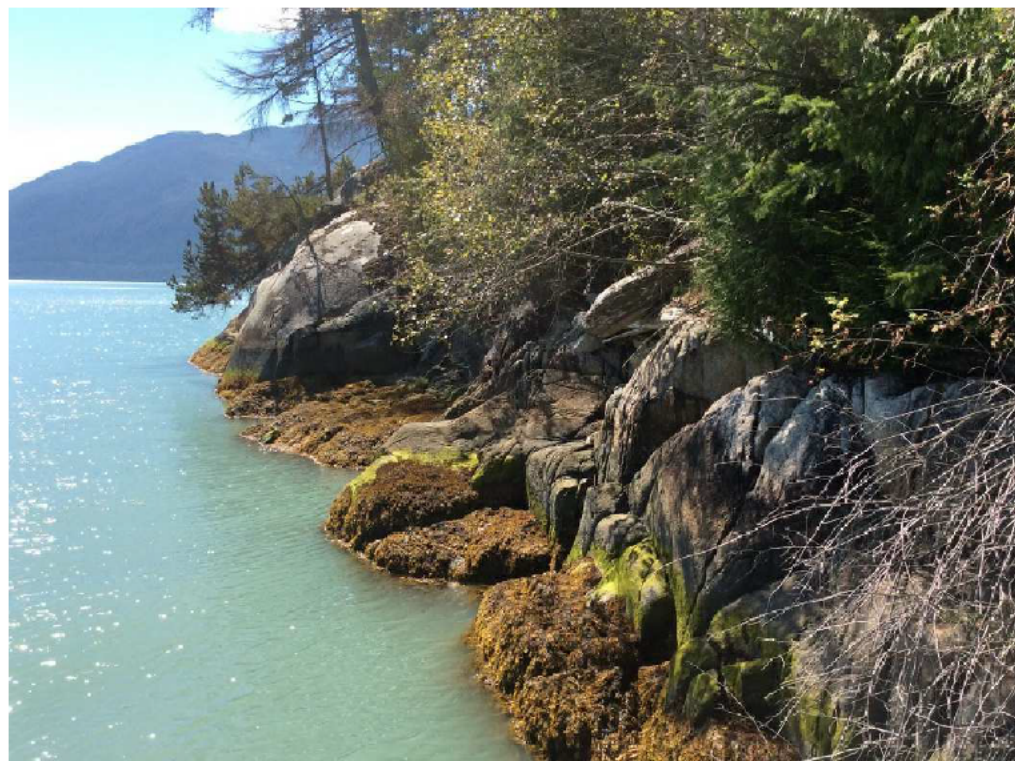


PHOTO #3 - VIEW OF PROPOSE SKIDWAY LOCATION



PHOTO #4 - VIEW TOWARDS WOODS

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**WOODFIBRE LOG DUMP  
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## Habitat Assessment for a Proposed Log Transfer Facility near Woodfibre, Howe Sound

Infinity Pacific Stewardship Group



<b>Revision History and Approvals</b>			
<b>Project Name</b>		Woodfibre Log Dump Assessment	
<b>Project Number</b>		5362	
<b>Report Title</b>		Habitat Assessment for a Proposed Log Transfer Facility near Woodfibre, Howe Sound	
<b>Document #</b>		V3869	
<b>Report Author(s)</b>		John Rithaler / Doug Swanston	
<b>Date</b>	<b>Version</b>	<b>Review Type</b>	<b>Reviewed by</b>
Oct 6, 8, 2015	draft	Document Review	Marilyn Fransen
Oct. 13, 2015	draft	Client	Greg Peterson
Feb, 16, 2016	Final & PDF	Senior	John Rithaler



## Disclaimer

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- The objective of this report is to provide Infinity Pacific Stewardship Group habitat and impact assessments of a proposed log dump facility located in Howe Sound along its western shoreline near Woodfibre.
- This report is based on facts and opinions contained within the referenced documents and facts. We have attempted to identify and consider relevant facts and documents pertaining to the scope of work, as of the time period during which we conducted this analysis. However, our opinions may change if new information is available or if information we have relied on is altered.
- The following assumptions were relied on during the preparation of this report:
  - Accuracy of the site coordinates
  - Site history
  - Accuracy of upland site plans
- We applied accepted professional practices and standards in developing and interpreting data obtained by our field measurement, sampling, and observation. While we used accepted professional practices in interpreting data provided by Client or third party sources we did not verify the accuracy of data provided by Client or third party sources.
- This report should be considered as a whole and selecting only portions of the report for reliance may create a misleading view of our opinions.

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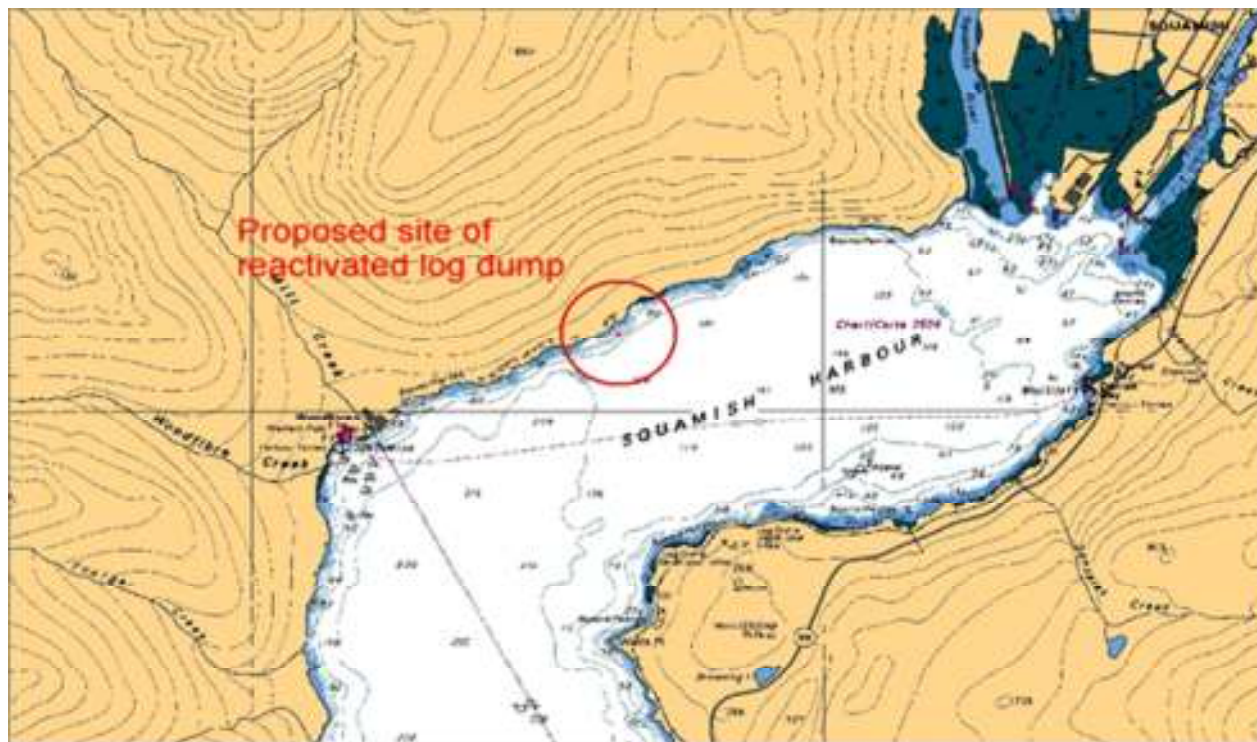
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## 1.0 Introduction

BC Timber Sales (BCTS) proposes to construct a log transfer facility near Woodfibre in Howe Sound. Triton Environmental Consultants Ltd. (Triton) was retained by Infinity Pacific Stewardship Group (IPSG) to conduct the site assessment which was undertaken September 23, 2015.



**Figure 1. Canadian Hydrographic Chart showing survey site location in Howe Sound approximately 6 km west of Squamish, BC**

This report presents an assessment of the subtidal and foreshore areas within the proposed footprint of the log dump facility and provides a marine community inventory as well as an impact assessment based on the operating regime of the facility as we understand it.

## 2.0 Methods

The log dump site was accessed via boat from the marina on Loggers Lane in Squamish BC, September 23, 2015. The site is situated approximately 6 km west of the municipality of Squamish along the western shore of Howe Sound, about 2 km from the previous Woodfibre facility.

The site surveys comprised both foreshore assessments and subtidal SCUBA assessments. Physical and biological features of those areas assessed are presented and supported with digital photography and videography as appropriate. The foreshore was surveyed from the water line with vegetation noted, as well as land form and texture, to describe the physical habitat characterization.

The subtidal surveys were conducted by swimming transects generally perpendicular to the shoreline. Transects at each of the northern and southern portions of the study area were established by extending a 75 m tape from the waterline outward along the sea floor to that horizontal distance intersecting the 18 m (approximately 60 ft) depth. In the southern portion of the site, the swims comprised four transects which proceeded north toward the centre of the site, with the northern area comprising two transects also progressing toward the centre area. Typically, the transect would commence with the divers swimming out from shore. Once the maximum depth was reached, they would swim a short distance traversing the benthic slope and reverse direction shoreward, minimizing time and effort required for unidirectional transects.

The surveys focused on physical and biological attributes along the transects. Physical attributes describe the general slope, sediment textures, and any other natural features observed, while the biological attributes describe the presence of marine organisms as either percent coverage (marine macro-algae, sessile invertebrates) or the number or relative abundance of motile organisms (fish, large crustaceans, etc.) observed.

Photographs and video were captured along transects as visibility (water clarity) and light penetration allowed.

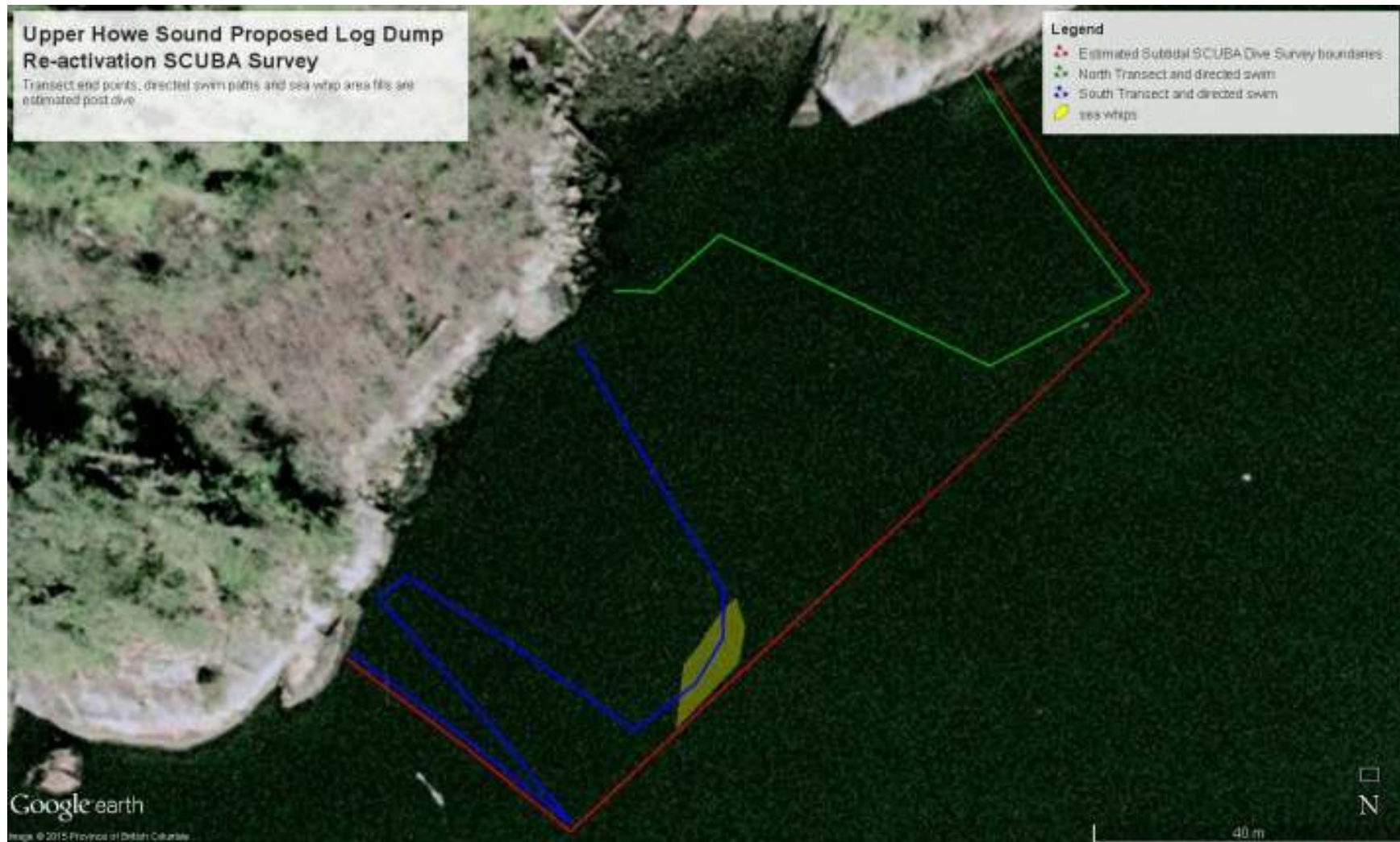
Foreshore assessments and characterization were conducted by the dive tender coincidentally with the SCUBA surveys.

### 3.0 Results

The log dump assessment was conducted September 23, 2015 commencing at 10:28 PDT and concluding 14:45 PDT. A schematic of the transect layout is illustrated in Figure 2. The red line indicates the general study area; the blue and green lines indicate SCUBA transect swims for first and second dives respectively. A yellow shaded box indicates an area of sea whip observations.

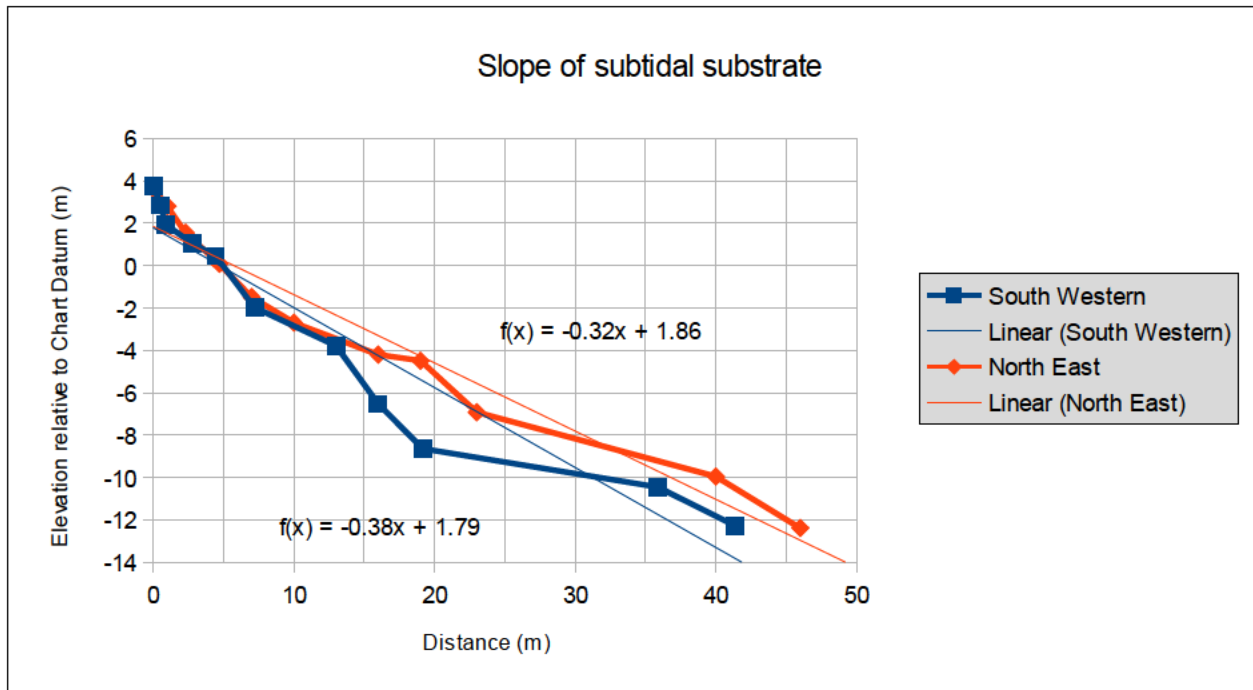
Conditions at the time of the surveys were mild temperatures between 13 and 16°C, light winds from the west, and scattered clouds. The Squamish River is a glacial melt-water drainage and exerts significant influence on the visibility through the upper water column in Howe Sound. On this date, visibility in the top 3 m of the water column was 0.15 m. Visibility below 3 m was estimated at less than 2.0 m, requiring the use of powerful Ike lights.

As a consequence of the poor visibility, observations in the shallow subtidal area were limited to determining the endpoints of distinctive biophysical features such as easily defined intertidal biological zone boundaries; for example, the upper and lower boundaries of a rock weed, *Fucus distichus* band, or the steep rock face observed in the intertidal and shallow subtidal transitioning to a boulder and silt substrate. Depths of the submerged intertidal bands are estimates accurate to 0.5 m elevation, and distance along the metered line was also estimated.



**Figure 2. Transect pattern at Woodfibre site**

Figure 3 depicts the dive transect profiles prior to correction for Chart Datum. The graph is derived from the southernmost and northernmost SCUBA transects where divers recorded depth and distance along a transect line placed on the benthos and deployed to gauge depth not exceeding 18 m (before correction of depth to chart datum).



**Figure 3. Subtidal transect profiles; north and south extremes**

### 3.1 Foreshore Zone

The foreshore encompasses that region adjacent to the study area that exists above the High High Water Mark (HHWM) or highest tide line. The area assessed covers a linear distance of approximately 100 m running along the northwestern shoreline of Howe Sound.





**Figure 4. View looking southwest toward the survey site**

Near vertical bedrock outcrops comprise the southern and northern foreshore zones of the study area. Vegetation cover in these zones is sparse, consisting of small, sporadic coniferous individuals and the occasional alder sapling. A small bay situated mid-site interrupts the dominant bedrock and presents some boulders and fractured rock through a moderate gradient (5 to 10%) foreshore, supporting sedge and grass species. This foreshore zone represents a very small strip at high tide and provides little habitat for terrestrial species and poor substrate for local infauna.

Figure 5 shows a view of the backshore and foreshore areas of the small bay situated central to the study area. A small ephemeral creek cascades down from the southern corner of this bay and percolates through coarse sediments to its confluence in Howe Sound. Coarse sediment textures in the stream bed and very steep channel gradient upstream of the intertidal zone preclude habitat use or access by anadromous species.





**Figure 5. View of the southwestern shoreline of the small bay in the study area footprint; note the small ephemeral creek in the photo centre**

### **3.2 Intertidal Zone**

The intertidal zone represents that area between the Low Low Water Mark (LLWM) or 'zero' tide, also referred to Chart Datum (CD), and the HHWM as discussed in Section 3.1. The physical habitat characteristics of the intertidal zone through the study area are reflective of the shoreline above high tide; specifically, bedrock and boulder. Those areas of exposed intertidal are best demonstrated along the vertical bedrock sections to the immediate north and south of the central embayment referenced in Section 3.1. The predominantly bedrock and boulder substrate extends approximately 2 m below CD.

#### **3.2.1 Intertidal Biological Zonation**

Within this area, a band of green filamentous algae, likely northern sea hair (*Urospora neglecta*), is prevalent, with an 80% coverage between 3.8 m and 3.0 m above CD. This band is visible in Figures 4 and 5. A band of rockweed, *Fucus distichus*, extends from 3.0 m down to 1.5 m above CD. A mixed band of bay mussels (*Mytilus edulis*) and barnacles (*Balanus* sp.) extends from immediately below the rockweed band at 1.5 m above CD to 0.2 m above CD. Red filamentous algae and the brown algae sugar kelp (*Saccharina latissimi*) were present at or near 0 CD with their depth extending into the subtidal zone.



**Figure 6. Northern portion of the small embayment displaying clear biota zonation and bio-bands through the intertidal area**

### **3.3 Subtidal Zone**

The subtidal zone is described as that area of the marine environment situated solely below Chart Datum. Substrates characterizing this zone include a mixed boulder cobble silt substrate to a depth of approximately 5 m below CD, where silt and fines with some woodwaste transition to dominate the substrate textures.

Red filamentous algae was initially noted at or near CD and extended to a depth of 2 m below CD. At this depth the substrate transitions from 50% cobble and boulder cover to 100% silt and may be limiting to the lowest elevation of red filamentous algae.

The brown algae, sugar kelp (*Saccharina latissimi*), was first noted at or near CD and extended to a depth of 5 m. At this depth, substrate texture may also limit the lowest elevation of this brown algae as it requires coarser sediments as anchoring points.

Sea whips (*Halipteris willeomoesi*) were encountered during the second deep leg of the first SCUBA dive (blue transect in Figure 2) 14 m below CD. This is considered to be above the shallow range extent for this species, reported as 36 m to 1,950 m depth (Alaska Fisheries Science Center, nd).

Woodwaste was observed more commonly toward the middle and northern subtidal areas through the survey site. Percent coverage ranged between none visible to 1 m<sup>2</sup> areas of up to 60% coverage. Collectively, the study area demonstrated less than 5% of total area covered with visible woodwaste. Silt was covering most of the woodwaste encountered during the surveys.

Some anthropogenic debris was noted during the surveys, including a rusted item (possibly a log raft dog pin), a 0.5 m long piece of angle iron, and a 220 litre oil drum.



**Figure 7. A small area with high woodwaste coverage; central portion of study area**



**Figure 8. Metal debris observed during the deeper sections of the subtidal transects**

Divers recorded biological taxa during the transect dives. Observed biota are listed below and arranged by group.

### 3.3.1 Fish

Fish common to Howe Sound include anadromous salmonids and marine species. Among the anadromous salmonids, Chum (*Oncorhynchus keta*), Pink (*O. gorbuscha*), Sockeye (*O. nerka*), Coho (*O. kisutch*), Chinook (*O. tshawytscha*), Cutthroat Trout (*O. clarkii*), and Rainbow Trout, (*O. mykiss*) are known to utilize the foreshore of Howe Sound. Dolly Varden Char (*Salvelinus malma*) is also known to upper Howe Sound and penetrates into both the Squamish and Cheakamus rivers. Marine species observed at or near the study site are shown in Table 1.

**Table 1. Marine fish species observed in the study area**

Common Name	Scientific Name
<b>Perch</b>	
Pile Perch	<i>Damalichthys vacca</i>
Striped Perch	<i>Embiotocca lateralis</i>
Shiner Perch	<i>Cymatogaster aggregata</i>
<b>Sculpins</b>	
Buffalo Sculpin	<i>Enophrys bison</i>
Tidepool Sculpin	<i>Oligocottus maculosus</i>
Prickly Sculpin	<i>Cottus asper</i>
<b>Greenlings</b>	
Kelp Greenling	<i>Hexagrammos decagrammus</i>
Whitespotted Greenling	<i>Hexagrammos stelleri</i>
<b>Other</b>	
Copper Rockfish	<i>Sebastes caurinus</i>
Snake Prickleback	<i>Lumpenus sagitta</i>
Bay Goby	<i>Lepidogobius lepidus</i>
Wrymouth	<i>Cryptacanthodes</i> spp.

### 3.3.2 Marine Plants and Algae

Marine plants and algae observed at or near the study site are shown in Table 2.



**Table 2. Marine plants and algae observed in the study area**

Common Name	Scientific Name	Percent Cover
Northern sea hair	<i>Urospora neglecta</i>	80
Sea lettuce, complex	<i>Ulva</i> sp.	1
Rockweed	<i>Fucus distichus</i>	40
Sugar kelp	<i>Saccharina latissima</i>	20
Red filamentous algae	species unidentified.	5

### 3.3.3 Invertebrates

Invertebrate species observed at or near the study site are shown in Table 3.

**Table 3. Invertebrates observed in the study area**

Common Name	Scientific Name	Relative Abundance
Pacific sea peach	<i>Halocynthia aurantium</i>	few
Leather sea star	<i>Dermasterias imbricata</i>	few
Mottled sea star	<i>Evasterias Troschellii</i>	many
Green urchin	<i>Strongylocentrotus droebachiensis</i>	many
Dungeness crab	<i>Metacaurinus magister</i>	few
Barnacles, various species		abundant
Cockle shell, shells	<i>Clinocardium</i> sp.	many
Bay mussel, complex	<i>Mytilus edulis</i>	many
Chiton	<i>Polyplacophora</i>	few
Sea whip	<i>Halopteris willeomoesi</i>	many
Plumose anemone	<i>Metridium farcimen</i>	many

## **4.0 Discussion**

The productivity of the marine community at the proposed site of the log dump reactivation is constrained by the influences of the Squamish River at the head of the inlet. The fresh water in the upper layers may have a negative influence on the potential colonization and establishment of less tolerant marine organisms, and the opacity noted through the water column may also contribute to the low density of macro and encrusting algae noted during the dives.

The presence of submerged patchy and intermittent woodwaste overlain by silt deposition suggests log booming and storage impacts remain; however, this was observed at depths where marine communities are typically less diverse than what is common through shallower and intertidal areas. Woodwaste, other than the expected small woody debris recruited naturally into the system, was not noted through the intertidal bands. As the marine habitat and diversity is not considered sensitive or critical at the site of the proposed log storage, alternate site locations needn't be recommended.

As with any proposed work in or around water, site designs and construction plans must consider potential impacts. Access road construction and upland clearing and brushing will be required, and pose the potential for erosion and migration of significant sediment volumes into Howe Sound without comprehensive mitigation measures in place. Generally, as the site lies within a zone of high precipitation, drainage through the upland construction zone will require diligent planning and management. The facility should also take into account that, although not diverse, the marine community at the site is susceptible to stressors associated with booming and storage operations. The log dump should be designed to ensure the avoidance of log grounding during the off-loading process and storage should be restricted to deeper waters where benthic primary productivity is shown to be absent or minimal. A detailed environmental management plan (EMP) is recommended to support the required permits and authorizations required to develop the site.

## 5.0 References

Alaska Fisheries Science Center, National Oceanic and Atmospheric Association. Sea Pens. [http://www.afsc.noaa.gov/groundfish/HAPC/SeaPens\\_synopsis.htm](http://www.afsc.noaa.gov/groundfish/HAPC/SeaPens_synopsis.htm)

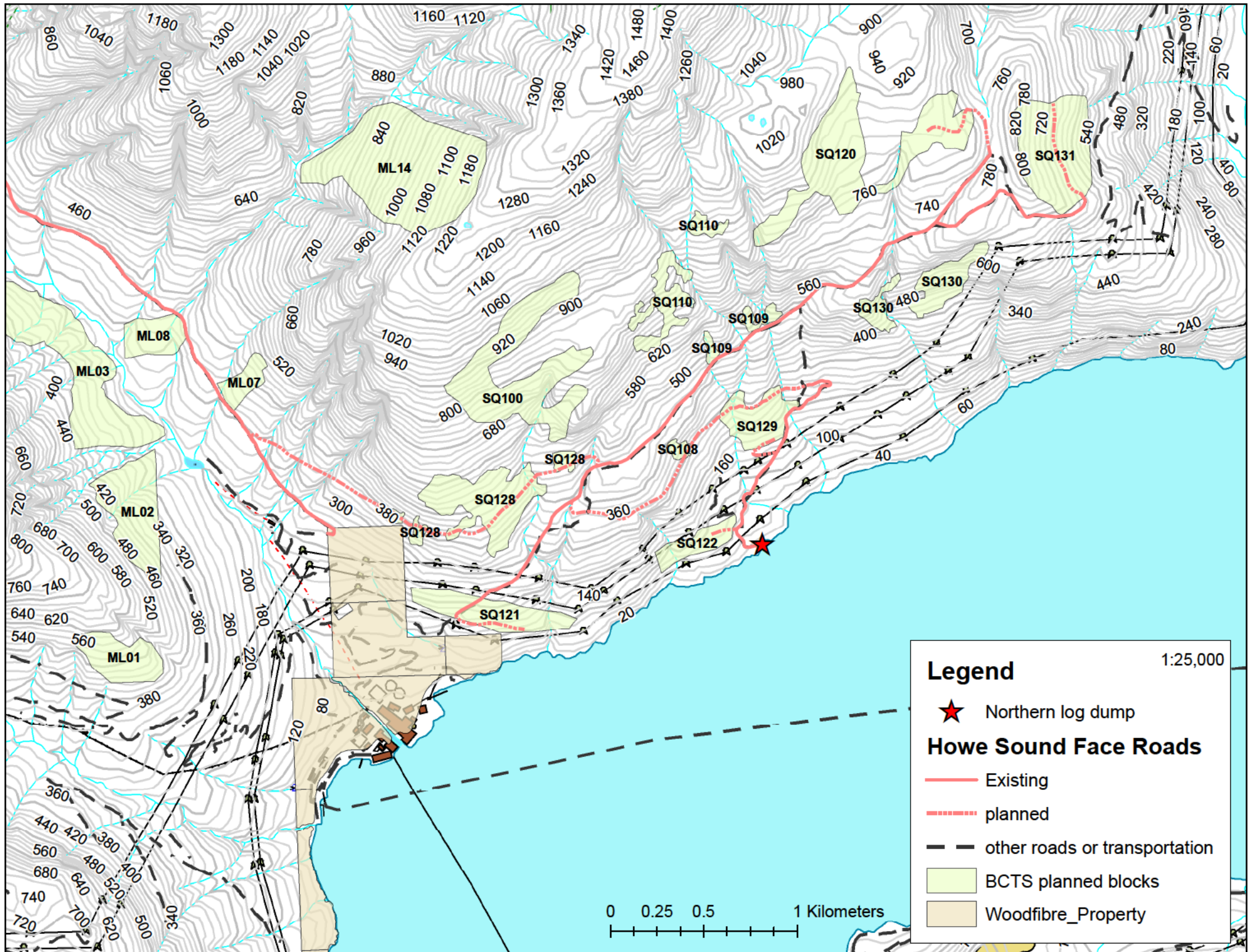
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Lindenberg, Mandy R. and Sandra C. Lindstrom. 2010. Field Guide to Seaweeds of Alaska. Fairbanks Alaska: Alaska Sea Grant College Program, University of Alaska Fairbanks..

McDaniel, Neil. Personal Communication; September 24, 2015, email: [neil.mcd@telus.net](mailto:neil.mcd@telus.net)

Personal observation made during a beach seine study of juvenile Chinook utilization of Howe Sound between 2011 and 2013, see <http://www.squamishwatershed.com/chinook--research-studies.html>







File: 18046-40/FSP\_DSQ

May 12, 2021

Sarah McJannet, Senior Planner  
District of Squamish  
PO Box 310  
Squamish, BC V8B 0A3

Dear Ms McJannet:

**Re: District of Squamish Marine Zoning Bylaw 2771 2020 - Second Reading review May 18 2021**

Further to our meeting on April 30, 2021 and your subsequent summary email on May 7, 2021 the District of Squamish (DOS) planning department will be recommending that the proposed marine zone bylaw amendment maintain the M1 zoning in the area of BC Timber Sales (BCTS) proposed Northern Log Dump (log dump) Site north of the WLNG facility in the area of Woodfibre\Mill Creek and additionally will be recommending that BCTS be required to obtain I-3 Industrial site zoning and Development Permits for the upland portion of the facility BCTS is proposing. Upon further review of this information BCTS would like to summarize our collective thoughts and position regarding the importance of allowing this dump site to proceed as follows:

- The primary goal of BCTS is to provide credible representative price and cost benchmark data for the Market Pricing System (Stumpage) through auctions of timber harvested from public land in British Columbia. BCTS' objectives in supporting this goal are:
  - sell the full BCTS apportionment over the business cycle, consistent with safe practices, sustainable forest management, and reconciliation with Indigenous peoples;
  - generate direct net revenue and indirect revenue for the Province over the business cycle
- Canada is currently in a dispute with USA regarding a Softwood Lumber Trade Agreement. The last agreement expired in October of 2015 and in November of 2017 a 20-25% tariff was applied to BC lumber products entering the USA. The tariff in combination with a poor lumber market resulted in the shutdown of a significant number of manufacturing and harvesting operations throughout BC in 2019.

Page 1 of 5

- A key component of the previous Softwood Lumber Agreement and negotiations for a new agreement was that provinces had to implement a timber auction process similar to what occurs on USA federal lands. Results of the provincial auctioning process is audited annually by the USA Trade Department to ensure it meets the criteria set out in the Softwood Lumber Trade Agreement.
- To achieve a sufficient volume of auctioned timber, the BC provincial government is required to auction at least 20% of the total annual provincial harvest.
- The data acquired through the timber auctions is utilized in the provincial Market Pricing System (MPS) to determine stumpage rates for private forest industry tenure holders on public land who are not subject to the auctioning process.
- The province requires 20% of the annual provincial harvest to be auctioned to ensure it maintains the statistical integrity of the data it collects for the US Trade Department.
- The maintenance of the auctioned timber program is both a multi-provincial and federal trade issue. The Canadian Forest Products sector is a multi-billion-dollar industry that supports significant employment and a primary contributor to both the provincial and federal Gross Domestic Product (GDP)
- Currently the tariffs are costing both industry and government hundreds of millions of dollars in revenue and significantly impacting the viability of the industry throughout Canada particularly during down market cycles.
- The Woodfibre\Mill Creek chart forms part of the core operating area for BCTS's business operations in the Squamish area. The annual allowable cut (m3 /year of timber) for this area is approximately 10,000 m3 which represents approximately 10% of BCTS operations within the Sea to Sky Natural Resource District and provides a notable contribution to BCTS's annual harvesting program to demonstrate to the US Trade Department that it is achieving 20% of the annual provincial harvest.
- The timber harvesting land base within the Woodfibre / Mill Creek area is greatly reduced through protection measures for wildlife, old growth, visual quality and cultural sites and other important values. The 10,000m3 estimated annual average harvest rate factors in these protection measures. This level of reduction to the timber harvest land base occurs throughout the Sea to Sky District and there are no unallocated areas of Provincial Forest in which to operate, meaning it is not a simple solution to go somewhere else to make up this volume.
- Access to this Woodfibre\Mill Creek timber is 100% reliant on water transportation on Howe Sound. The historic forestry access to this area was through the loading facilities on the old pulp mill site, however with the construction of the Woodfibre LNG facility this is no longer possible.
- Under the July 2018 Marine Action Strategy (MAT) developed in collaboration with the DOS Focus Area 3: Marine Economy, **discusses the importance of Local jobs and business opportunities as an important part of a diverse and sustainable economy to improve the quality of life for all.** Focus Area 3 goes on to further state the marine economy opportunities of Squamish, require careful planning and **preservation of critical marine-based employment lands/access, promoting business retention,** growth and innovation as well as a focus on skill development and labour needs.
- Further on in MAT Table 4: Focus Area 3 - Marine Economy, it states in Section 3.1.1 to identify land and water access needs for all marine users and to **secure and coordinate public access / rights of ways with current and future landowners/ interests.** Under Table 5: Focus Area 4 - Marine Gateway, it talks to addressing water-dependent user

infrastructure, amenity, services, and facility needs and **identify and secure locations and investment for current and future marine infrastructure**, facilities and amenities opportunities through (re) development plans and zoning.

- Under the Sea to Sky Land and Resource Management Plan (LRMP) completed in 2008 the Woodfibre\Mill Creek operating areas were identified as a “working forest” and contribute to the Timber Harvesting Land Base (THLB) for the Sea to Sky Resource District. With this designation it was the expectation that economically viable harvesting activities would continue in this area that would contribute to the provincial harvest.
- The District Manager Sea to Sky Resource District supports the continuance of economically viable harvesting in the Woodfibre\Mill Creek operating area and fully supports the business objectives and mandates of the BCTS program.
- With the historic access through the WLNG property no longer available, it is imperative that BCTS utilize alternative log handling sites (log dumps). Two alternative sites have been identified:
  - The first site (southern log dump) is south of the LNG facility within proposed marine designation I-3. This is an existing site last permitted by Black Mount Logging and will be used to access timber south of Mill Creek. Our interpretation of the marine zoning is that our operations will be consistent with zone I-3.
  - The second site (northern log dump) will be used to access timber located in Mill Creek and north of it. This is a historic log dump, but it is not clear when it was last used for this purpose. This site is identified in the proposed marine zoning as M-1 (Marine Navigation) which does not allow for water-based log handling or log storage and are not permitted uses within this designation. BCTS is concerned that our use of this site will conflict with this zoning, and we request this site be changed in your zoning regulations to “M4 – Marine Log Storage”.
- The northern log dump is required to access timber along Mill Creek and north of it; there is no other viable road option for accessing this area.
- The upland portion of the site will not be used for sorting or storage of logs and will only be used to transfer logs from land to ocean with temporary short-term storage occurring offshore in booming grounds then transported in log booms to a dryland sorting or manufacturing facility elsewhere.
- The site will be small and only be periodically and infrequently used for moving logs during times there is an active Timber Sale Licence unlike the large scale, high volume commercial dryland sorting facilities that occur at Watts Point which operate 5-6 days a week year-round. We anticipate no more than one sale per year on average in the first three years of operation, and after that, sales will be less frequent.
- In both your February 22, 2021, *BCTS – Operating Plan 26 Comments* and subsequent May 7, 2021, email rational on maintaining the proposed marine use designation you speak to environmental site conditions related to existing marine habitat conditions (geological substrates, drainage courses), marine life and both historical and potential impacts from marine log handling operations\facilities.
- To address these concerns BCTS has undertaken considerable investment in planning, engineering and environmental assessments for this site in 2016 - 2021 to assist in preparing our applications for constructing and utilizing this site. The habitat assessment from Triton Environmental Consultants and the Onsite Engineering Ltd “*Woodfibre Log Dump Reactivation*” was forwarded to you in our April 21, 2021, response letter related to your February 22, 2021, *BCTS – Operating Plan 26 Comments* summary.

- As part of BCTS's log dump application to the various responsible federal\provincial government agencies BCTS's application submission will undergo a vigorous environmental review to determine if the assessment work and associated mitigation measures will adequately address existing marine habitat conditions (geological substrates, drainage courses), marine life concerns and both past and potential impacts from marine log handling operations\facilities.
- It has been BCTS experience in log dumping operations that the mitigation measures as proposed in our environmental and engineering assessments have been successful in minimizing detrimental impacts to foreshore and intertidal marine habitats under similar siting conditions that were outside the best practice guidelines for siting log dump facilities. Additional opportunities are available to provide compensatory habitat to offset potential detrimental impacts from log handling activities where it is demonstrated that there has been a negative impact to marine habitat or marine productivity.
- Contrary to your comment that consultation has not been initiated, both log dump sites were consulted as part of the BCTS Operating Plan #26, which was circulated to all potentially affected First Nations (FN) and stakeholders including the District of Squamish on December 16, 2020. Upon closure of the review and comment period on March 1, 2021 BCTS did not receive any concerns or comments regarding the log dump or harvesting in this area of Howe Sound from First Nations or any stakeholder other than the District of Squamish. The northern Howe Sound log dump site was also consulted with the District of Squamish and First Nations under Operating Plan #21 from December 16, 2016 to February 28, 2017. At that time, no comments were received from First Nations and the District of Squamish, and only one comment was received from a citizen concerned about Herring habitat.
- While the consultation processes we have undertaken to date meet the requirements for consultation under the First Nation agreements that are in place, BCTS intends to undertake more detailed consultation with all parties as part of the application process for Provincial and Federal permits and licences. These applications are expected to be submitted by July, 2021.
- BCTS is committed to the adoption and implementation of the principles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). BCTS is committed to increasing business partnerships with First Nations' communities, providing better opportunities for collaboration with First Nations during our timber development planning processes and strengthening meaningful, lasting relationships with First Nations that are built on mutual respect, recognition and understanding.

The Woodfibre\Mill Creek operating area is a key and core component of our Squamish business operations and critical to us in meeting data collection objectives related to determining provincial stumpage rates and meeting US Trade Department criteria in the negotiation of a new Softwood Lumber Agreement. Further BCTS public timber sales provide opportunities for local logging contractors to generate revenue\employment and local wood products manufactures a primary or incremental log supply to meet their wood products manufacturing needs. Finally, BCTS provides employment opportunities for local community members and general revenue for the provincial government that can provide funding for local programing such as schools, policing, healthcare and social programs.

As a compromise to both of our positions we ask that at minimum, DOS defer the marine zone designation in the immediate area around the northern log dump to provide BCTS the opportunity to go through the provincial/federal application process. By doing this, the proposed mitigation measures for this site can be fully evaluated and if they are determined to be adequate and accepted by the provincial/federal agencies, it will allow us to forgo the step of amending the marine use designation from M1 to M4 and upland zoning from RE to I-3 and the associated incremental time and paperwork to do so.

Additionally, BCTS wishes to highlight the M4 and I-3 Industrial zoning designations are designed for large scale high volume and daily use operations which do not fit the use proposed by BCTS. BCTS recommends the District of Squamish should consider adding zoning categories that better reflect the intermittent low volume, low impact use common to the type of facility BCTS licence holders require.

In closing BCTS appreciates the dialogue and feedback received to date on this important discussion and wishes to work with the planning department and the DOS to come to an amicable resolution that meets the needs of all parties. We look forward to continuing to work with you and your response to our proposal.

Please feel free to contact me by phone at (604) 845-6746 or by email at [peter.scharf@gov.bc.ca](mailto:peter.scharf@gov.bc.ca) for further discussion.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Peter Scharf', is written over a faint, light blue circular background.

Peter Scharf, Operations Manager  
BC Timber Sales  
Chinook Business Area

Cc: Stacey Gould, Timber Sales Manager, BCTS Chinook Business Area, [sgould@gov.bc.ca](mailto:sgould@gov.bc.ca)  
Dave Southam , District Manager, Sea to Sky Natural Resource District  
Tom Johnson, Woodlands Manager, BCTS Chinook Business Area  
Peter Barss, Planning Team Lead, BCTS Chinook Business Area  
Stephan Bernhard, Planning Forester, BCTS Chinook Business Area



P.O. Box 1704  
Squamish B.C.  
V8B 0B2

May 3, 2021

District of Squamish Council  
PO Box 310, Squamish, BC, V8B 0A3

#### **RE. PROPOSED P4 ZONING FOR UPPER MAMQUAM BLIND CHANNEL**

Dear Mayor and Council,

The Sea to Sky Forestry Centre Society is a leaseholder to land adjacent to Rose Park and the Upper Mamquam Blind Channel. We would like to take this opportunity to comment on the proposed P4 zoning change to the Upper Mamquam Blind Channel.

Two municipal planning processes have addressed land use planning in the Upper Blind Channel.

In 1996-97, a Planning Department led process involving area residents and community stakeholders recommended the upper portion of the Blind Channel become a “people place” park, and “not a pure environmental sanctuary vision”. This was the overwhelming preference of the well-attended public open house held in June 1996. This planning exercise also resulted in the District’s endorsement of schemes to introduce enhanced water flow through the area – the “Mamquam Reunion”.

In 2012, Council endorsed the Upper Mamquam Blind Channel Land Use and Policy Statement, which similarly advocated a “Recreation-Oriented” Guiding Principle to be applied to the area, with a “Recreation Oriented Focal Point” at the top of the channel at Loggers Lane.

The proposed P4 zoning does not take into account the recommended vision and guiding principles of these earlier planning processes.



Also in 2012, Council endorsed the Parks and Recreation Master Plan, which recommended attention to improved waterfront access and storage for kayaks and canoes, a “blueway” status for the Upper Blind Channel, and a put-in place for paddlers at Loggers Lane across from the Adventure Centre. (See the attached Appendix E: Waterfront Access and Dikes Map.)

The Squamish Paddling Club recognizes the recreational potential of the upper reaches of the Mamquam Blind Channel. A “scenic and sheltered 3.5 km loop” from their downtown boathouse to the Adventure Centre and back on a 3m + tide is featured on the club website. This route is accessible at even lower tides.

The P4 zoning would not allow paddling use and public canoe and kayak put-in/ take-out facilities in the Upper Blind Channel.

“Increase year round utilization of our multipurpose space assets and public spaces (parks, public squares) by 2022” is identified as a goal by Squamish Council in its Strategic Plan 2018-2022.

The Sea to Sky Forestry Centre is concerned P4 zoning will severely restrict future recreational opportunities in the park for tourists and locals alike. We also have concerns the new zoning will affect future programming goals of the Forestry Centre.

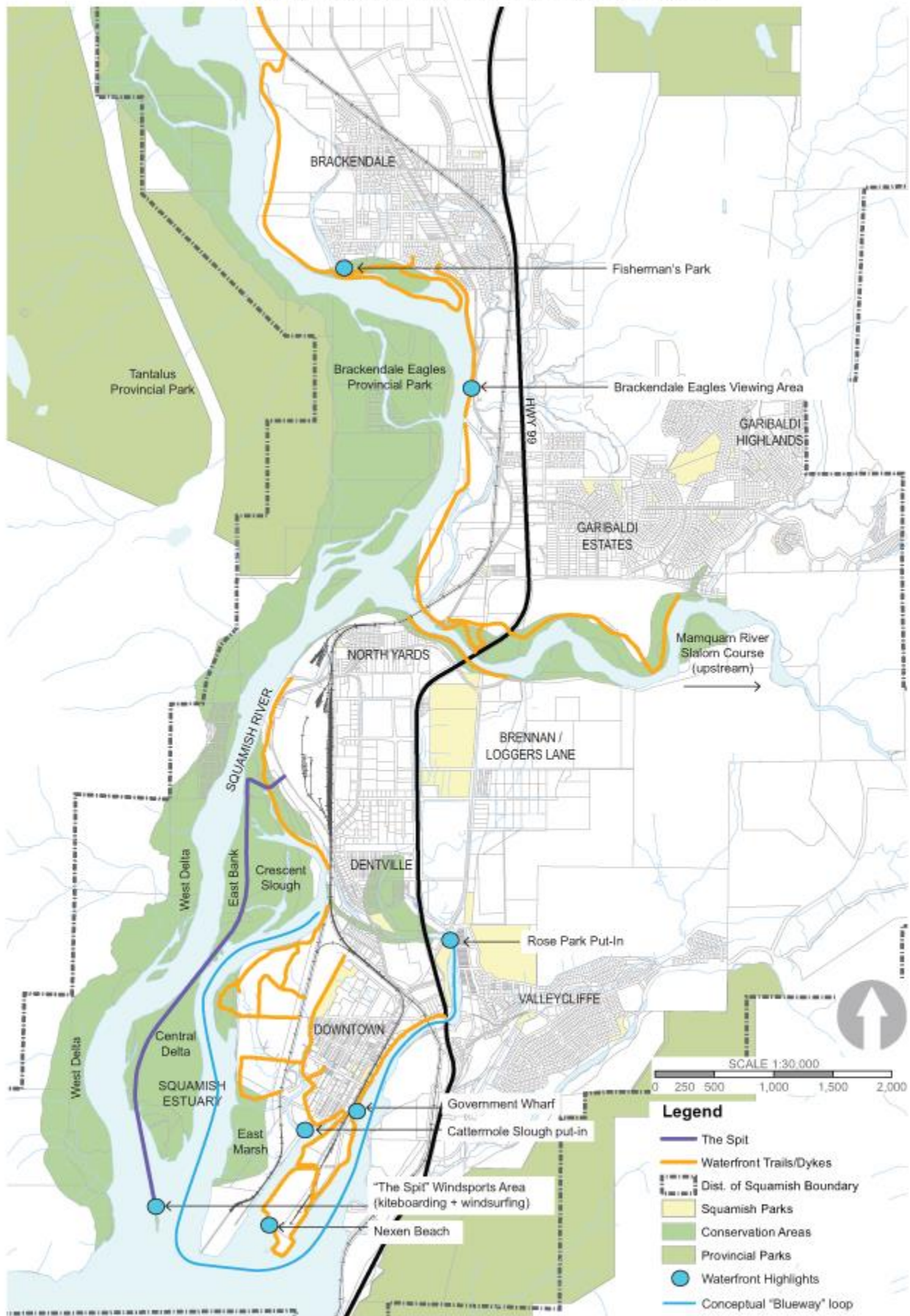
We would also like to express a general concern the public is slowly losing access to our waterfront and this new proposed zoning only heightens our concern.

Sincerely,



Donna Wall  
President  
Sea to Sky Forestry Centre Society

Cc:  
Tourism Squamish  
Squamish Paddling Club  
Squamish Chamber of Commerce





May 4, 2021

**Attention:** Sarah McJannet, RPP, MCIP, Senior Planner  
**District of Squamish**  
37955 Second Avenue  
P.O. Box 310  
Squamish, B.C. V8B 0A3  
VIA EMAIL

Dear Ms. McJannet

**Reference:** Proposed District of Squamish Marine Zoning Bylaw 2771

Woodfibre LNG Limited (Woodfibre LNG) appreciates the notification from the District of Squamish (March 19, 2021) and discussion regarding the development of the proposed Squamish Marine Zoning: Bylaw 2771. As one of the future leading businesses and employers in the Squamish area, marine access and public safety is of interest to both our Company and our employees.

On review of the proposed bylaw internally and with our local contractors, we note the following:

Woodfibre Site Zoning:

- It's acknowledged in bylaw development that tenure and legal boundaries were used to inform the zoning boundaries, however, we request a correction to the boundaries associated with the I-3 / M1 zoning on the eastern portion of the Woodfibre Site (formerly Swiyat).
- As part of its project environmental assessment approval process, Woodfibre LNG was allocated an area to construct and operate its proposed LNG Export Facility, called a "Certified Project Area" or "CPA". The affected portion of the CPA boundary is highlighted in red within figure 1 below.
- Woodfibre LNG has an obligation, as mandated by the BC Government's Oil and Gas Commission, to design its LNG facility within the CPA with the safety of the public being of utmost importance. The current design is aligned with that goal, but contemplates and utilizes the full CPA area.
- Woodfibre LNG respectfully requests the I-3 zoning align with the boundaries of the CPA, as defined by BC Environmental Assessment Certificate #15-02 and would further invite the Municipality give consideration to creating a buffer zone outside the CPA in order to further protect the safety of the public.
- Finally, Woodfibre LNG requests further consideration be given to other industrial users of the I-3 zoning proximal to the Woodfibre site e.g., permitted uses as described in M4. The Woodfibre Site is a brownfield site with over 100 years of heavy industrial use related to the forestry sector. Pursuant to our environmental assessment approvals, Woodfibre LNG has committed to working with forest tenure holders regarding ongoing access and to developing an access management plan.

Darrell Bay Zoning:

- The changes to the zoning around Darrell Bay as proposed are noted, including the extension of M5 into the upland areas, aligning more with District Lots covered by Ministerial Order 127 and affirming the purpose of Darrell Bay for marine transportation facilities. We look forward to further definition and discussion with the District of Squamish and Ministry of Transportation and Infrastructure regarding Darrell Bay.

M-1 Definition:

May 4, 2021

Sarah McJannet, RPP, MCIP, Senior Planner

**Reference:** Woodfibre LNG Project Decision Statement Issued Under Section 54 of the Canadian Environmental Assessment Act, 2012 — Decision Statement Conditions

- The definition of the M1 zone may require additional consideration or division to recognize respective primary uses of navigation and recreation. The proposed M1 zoning definition mixes recreation and navigation. Given the proximity of the M1 zone relative to the more industrially zoned areas e.g., M5, M4 and I-3 and geographic constraints e.g., Mamquam Blind Channel consideration of recreation area/navigation areas may help to further promote marine safety. It's acknowledged marine areas are multi-jurisdictional with respect to marine navigation.

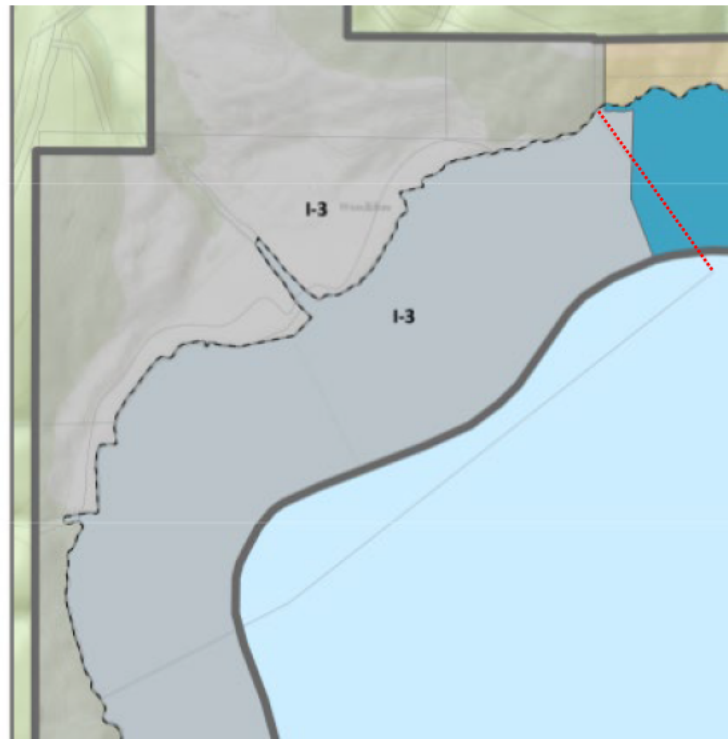


Fig 1: Extract from BYL2771\_Map\_Schedule\_A\_Sheet\_6.pdf. Dashed red line indicates the eastern boundary of the Woodfibre LNG CPA.

The multi-year review and effort put into the Squamish Marine Action Strategy and this amendment to the District zoning bylaw is acknowledged. We look forward to ongoing zoning discussions with the District of Squamish with respect to I-3 zoning.

Respectfully,

**Woodfibre LNG Limited**

Nigel Fisher  
Senior Regulatory Manager



District of Squamish  
PO Box 310  
Squamish, BC, V8B 0A3

May 12, 2021

**Re: Squamish Marine Rezoning**

Dear Mayor and Council,

The Squamish Chamber of Commerce is the oldest and largest business organization in the Squamish community, representing businesses across all sectors, including transportation, tourism, forestry and other marine related businesses. We are dedicated to enhancing the quality of life in Squamish by actively supporting business, economic growth and economic diversification.

On behalf of the Squamish Chamber, I would like to thank staff at the District of Squamish for taking time to explain the proposed marine rezoning and answer our questions. Marine rezoning is clearly a complex initiative, impacting our businesses, residents, visitors and natural habitat. As a waterfront community, Squamish is in a crucial period, with huge opportunities to improve access to the water, whether for recreation, to drive tourism or to support the many possibilities of marine related business.

It is our understanding that a number of studies are planned in the near future related to marine use, including an amenity needs and opportunities assessment. The Squamish Chamber is supportive of these studies and is keen to understand the community's needs and economic opportunities before implementing rezoning that may be irreversible or have unintended consequences. We would like to better understand the potential impact of rezoning on existing businesses that are core to our economy, such as the forestry industry (e.g. commercial transportation, log sorting and storage), and ensure that we do not create barriers for future possibilities.

It is our understanding that the upper blind channel presents many opportunities for recreation water access, especially with the tourism hub at the Adventure Centre, existing parking and established tourism operators, such as kayak / paddle board rentals. However, we understand that the proposed rezoning to P4 would not permit launch or navigation channels, and would be impossible to reverse, even if subsequent studies and assessments identified the economic potential of water access in the upper blind channel.

For many decades the blind channel has been an important economic zone, creating jobs and supporting local businesses. The area has supported the restoration of the Squamish Estuary through the relocation of businesses and is now one of the few remaining areas for water access. The blind channel is in need of dredging.



# CHAMBER OF COMMERCE



The District's Marine Action Strategy refers to the important "gateway" function of the Squamish harbour for tourism as well as commercial goods transport. The Squamish Chamber previously identified the need for dredging in the blind channel, which has not been significantly dredged since March 1986. Our correspondence from July 2018 shared our desire for immediate project planning and the need for an ongoing maintenance strategy. Marine safety, economic development and quality of life are affected by navigation channel constraints related to lack of dredging in the blind channel. It is our understanding that a dredging review is planned. It will be important to review the blind channel in its entirety.

The Squamish Chamber recognizes the potential of waterfront access for our local economy, the health and lifestyle of residents, and Squamish's unique destination positioning as a waterfront mountain town. We are keen to participate in any future engagement and supportive of immediate needs and opportunities assessments in advance of the marine rezoning. Increased consultation with marine businesses and the wider community would be beneficial to ensure rezoning does not negatively impact existing businesses, create barriers for growth or overlook any opportunities to levitate the future potential of our waterfront community.

Yours faithfully,

Louise Walker  
Executive Director,  
Squamish Chamber of Commerce

**From:** Sarah McJannet  
**Sent:** April 7, 2021 1:56 PM  
**To:** [REDACTED]  
**Subject:** RE: Marine Zoning Comments

Hi Darryl,

Thanks so much for taking time to provide comment and thoughts on the marine zoning bylaw. These will be added to the public commentary and brought forward at second reading to share with Council and community.

This process has involved a lot of research and engagement in navigating the many marine interests as well as all the layers of jurisdiction in the marine realm, but will sure be a big step forward for the community in addressing important coastal considerations and stewardship objectives.

On the matter of live-aboards in the zoning, for clarity the proposed bylaw allows up to 10 live-aboards (with subject conditions) recognizing their role and presence in all existing marinas, so this is not a full prohibition. We've been engaging with marina owners and managers on this topic, and inputs received to date are that they are important and that adequate services are needed for them. Some marinas have bylaws/regs restricting the # of live-aboards, and the maximum of 10 fits within this context, but we expect there will be some differing opinions on this. For the provincial aquatic leases for commercial marinas, live-aboards are actually prohibited in the lease agreements in many cases so there is some divergence there. Notwithstanding we tried to take a moderately permissive approach, but with some limitation to keep the use in check. I have toured some dedicated live-aboard marinas that have been designed with fulsome services from the outset (False Creek) so there are great examples out there. Certainly this could be explored locally (and addressed in a site-specific zoning) but within our existing context as a base case we have proposed a max limit to start.

On the long-term mooring prohibition outside of marinas and mooring facilities, this as you note is tactic to address the serious challenges with vessels being left, and in many examples vessels sinking (we are dealing with four sunken boats currently in the Cattermole). Zoning is a tool we can use to enforce as a regulatory backstop where needed (as well as trespass for vessels in private water lots). Temporary anchoring and moorage as part of right to navigate is not being restricted, but in reality there are actually quite limited areas in this part of Howe Sound that are suitable for anchoring and not exposed from high winds/waves. To support spectrum and diversity of housing options, in the case of live-aboards that are a historic and ongoing part of our waterfront areas, this will be a balancing act to ensure adequate infrastructure to support the use.

Thanks again for the inputs and please feel free to reach out anytime with additional questions or comments.

Kind regards,

**Sarah McJannet RPP, MCIP** | Senior Planner  
**District of Squamish** | *Hardwired for Adventure*  
604.815.5096 | [smcjannet@squamish.ca](mailto:smcjannet@squamish.ca) | [www.squamish.ca](http://www.squamish.ca)  
she/her



*I humbly acknowledge and live and work as a guest within the traditional ancestral and unceded territory of the Squamish Nation, Skwxwú7mesh Úxwumixw.*

 Please consider the environment before printing this e-mail.

**From:** [website@squamish.ca](mailto:website@squamish.ca) <[website@squamish.ca](mailto:website@squamish.ca)>

**Sent:** Monday, March 22, 2021 3:01 PM

**To:** Sarah McLannet <[smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)>

**Subject:** Marine Zoning Comments

**Your name**

Darryl Lapaire

**Your email**

[REDACTED]

**Your Comments**

Thank you for the opportunity to submit comments on this matter.

In reading the proposed changes I am encouraged by the obvious thought and effort that went into them, and the care given to the marine environment in particular.

However, I cannot help but be disappointed and discouraged by the lack of allowance for live aboard marine communities. The overall tone is one which seems to paint any person living full time on a vessel as less equal, and certainly less desirable.

While I whole heartedly support efforts to eliminate the impact that derelict vessels have on safe navigation and the environment, simply disallowing long term mooring or live aboards does not address the problem. If someone leaves a vessel as derelict, I suspect being in contravention of zoning is the least of their concerns.

With increasing property prices and no corresponding increase in earnings it is becoming increasingly difficult for young people and families to settle in BC communities. Personally, I would like to see Squamish embrace the full spectrum of affordable housing opportunities for their communities and support live aboard sailors both in marinas as well as at anchor or on moorings. A vibrant, diverse population both in traditional housing and non-traditional can only serve to enhance the community as a whole.

Thank you again for the opportunity to provide feedback.

Darryl Lapaire



File: 18046-40/FSP\_DSQ

April 21, 2021

Sarah McJannet  
Senior Planner  
District of Squamish  
PO Box 310  
Squamish, BC  
V8B 0A3

SENT VIA EMAIL: [smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)

Dear Sarah McJannet:

**Re: BC Timber Sales Proposed Log Dumps in Howe Sound**

Thank you for the opportunity to comment on the new marine zoning regulations proposed for Howe Sound.

BC Timber Sales (BCTS) has been assigned by the Sea to Sky Natural Resource District (the District), a forestry operating area that includes approximately 8,600 hectares on the west side of Howe Sound spanning from Woodfibre Creek north along the west side of Howe Sound toward Fries Creek. The annual allowable cut (m<sup>3</sup>/year of timber) for this area is approximately 10,000 m<sup>3</sup> which represents approximately 10% of BCTS operations within the District. Access to this timber is 100% reliant on water transportation on Howe Sound. The historic forestry access to this area is through the loading facilities on the old pulp mill site, however with the construction of the Woodfibre LNG facility this is no longer possible.

Because this access is no longer available, it is imperative that BCTS utilize alternative log handling sites (log dumps). Two alternative sites have been identified:

1. The first site (southern log dump) is south of the LNG facility within your proposed marine designation I-3. This is an existing site last permitted by Black Mount Logging and will be used to access timber south of Mill Creek. Our interpretation of the marine zoning is that our operations will be consistent with zone I-3.
2. The second site (northern log dump) will be used to access timber located in Mill Creek and north of it. This is a historic log dump but it is not clear when it was last used for this purpose. This site is identified in your proposed marine zoning as M-1.

Page 1 of 2

BCTS is concerned that our use of this site will conflict with this zoning and we request this site be changed in your zoning regulations to “M4 – Marine Log Storage”.

The northern log dump is required to access timber along Mill Creek and north of it; there is no other viable road option for accessing this area. Please note that BCTS has undertaken considerable investment in planning, engineering and environmental assessments for this site in 2016 - 2021 in preparing our applications for constructing and utilizing this site. The habitat assessment from Triton Environmental Consultants and the Onsite Engineering Ltd “Woodfibre Log Dump Reactivation” report for this site is attached to this email.

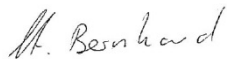
Permitting for the northern log dump is required by 2023 and is critical to meeting BCTS timber volume and pricing goals in our 5-year operating plan. A map is attached to this letter showing the existing and proposed roads that are needed to connect our planned cutblocks with the northern log dump. The blocks with the prefix SQ on the map will be indicated on our next operating plan once the log dump permitting and consultation process have been initiated.

As we determined that the reactivation of the northern log dump, north of Mill Creek, is the only option to move timber from this operating area, we kindly request that the area around the northern log dump be zoned “M4 – Marine Log Storage”.

Note that this site will not be used to store logs, only to transfer logs from land to ocean for transport, either in log booms or via barge. The site will be small and only infrequently used for moving during times there is an active Timber Sale Licence. We anticipate no more than one sale per year on average in the first three years of operation, and after that, sales will be less frequent. Furthermore, we are investigating whether we can load direct to barge, which would eliminate log booms and water transfers. If possible, this will significantly reduce the potential for disruption of marine habitat. However, we are unclear how loading a barge would fit within the proposed zoning and request clarification of this in your zoning bylaw.

For the northern log dump, we expect to submit application for Provincial and Federal authorizations together with consultation with stakeholders and First Nations in early 2022.

Sincerely,



**Stephan Bernhard, MSc, RPF**

Planning Forester

BC Timber Sales - Chinook Business Area

Ministry of Forests, Lands, Natural Resource Operations and Rural Development

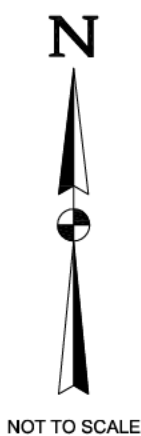
Attachments:

- Onsite Engineering Ltd “Woodfibre Log Dump Reactivation” report
- Habitat Assessment from Triton Environmental Consultants
- Map with existing and proposed roads to access the northern log dump



# WOODFIBRE LOG DUMP REACTIVATION

( 49° 40' 26" N , 123° 13' 31" W )



KEY PLAN  
NTS

DWG No:1132-4-WOODFIBRELD-001

SHEET: 1 OF 14

PREPARED FOR:



PREPARED BY:

**ONSITE**  
ENGINEERING LTD.

**NORTH VANCOUVER**  
2 - 252 1ST ST E  
NORTH VANCOUVER, BC, V7L 1B3  
PH.: 778-628-4968 FAX: 866-235-6943

DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
SITE VISIT: MICHAEL FOSTER, P.ENG.  
SITE VISIT DATES: AUGUST 23, 2016  
FILE NAME: WOODFIBRELD.DWG  
SCALE: AS NOTED  
REVISION NUMBER:  
REVISION DATE:  
ALL MEASUREMENTS IN m UNLESS OTHERWISE NOTED.

**DRAWING INDEX:**  
SHEET 2 OF 13 - NOTES SHEET 1 OF 2  
SHEET 3 OF 13 - NOTES SHEET 2 OF 2  
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SHEET 5 OF 13 - INDUSTRIAL SITE PLAN VIEW  
SHEET 6 OF 13 - SKIDWAY CROSS SECTION AND  
TRANSECT PROFILES  
SHEET 7 OF 13 - ELEVATION AND ROAD PROFILE  
VIEWS

SHEET 8 OF 13 - DOCK/BARGE ANCHOR DETAIL  
AND SECTION  
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SHEET 10 OF 13 - CONCRETE PAD PLAN AND  
CROSS SECTIONS  
SHEET 11 OF 13 - CONCRETE SECTIONS  
SHEET 12 OF 13 - SKID ARM PIVOT HINGE DETAIL  
SHEET 13 OF 13 - TRANSFER SKID DETAIL  
SHEET 14 OF 13 - SITE PHOTOS



NOTES:

1. SITE:

- 1.1. THE SITE LAYOUT IS INTENDED FOR COASTAL LOGGING OPERATIONS INCLUDING OFF HIGHWAY HAUL TRUCKS (BCFS L-165) AND A FRONT END LOADER FOR PUSHING BUNDLES OFF THE TRUCKS.

2. STRUCTURE:

- 2.1. ANCHOR LOGS MUST BE TIGHTLY LASHED WITH GALVANIZED WIRE ROPE. MIN. 3/4" DIAMETER TO DEADMEN LOGS. USE G-450 CROSBY CLAMPS TO SECURE GALVANIZED WIRE ROPE AROUND LOGS TO MANUFACTURERS SPECIFICATIONS.
- 2.2. DESIGN LIVE LOAD: 2 - 80 TON BUNDLES OF LOGS. AT EXTREME HIGH TIDES IT MAY BE NECESSARY TO HAVE 2 BUNDLES OF LOGS ON THE SKIDWAY FOR THE BUNDLES TO SLIDE.
- 2.3. IT IS RECOMMENDED THAT THE FLOAT STRUCTURE BE SEASONALLY REMOVED TO ENSURE NO DAMAGE DURING PERIODS OF INACTIVITY. CARE MUST BE TAKEN DURING REMOVAL OF THE SKIDWAY TO NOT DAMAGE ANY OF THE COMPONENTS. IT IS RECOMMENDED THAT A LOG LOADER OR OTHER INDUSTRIAL MACHINE BE USED TO LIFT THE STRUCTURE (NOT DRAG) OUT OF THE WATER AND PLACE IT SAFELY AT THE DUMP SITE FOR RE-INSTALLATION DURING THE NEXT LOGGING OPERATIONS.
- 2.4. GENERAL ARRANGEMENT DRAWING.

3. GEOTECHNICAL:

- 3.1. FOUNDATION DESIGN REFERENCES THE CANADIAN FOUNDATION ENGINEERING MANUAL. SUBSURFACE INFORMATION HAS BEEN INFERRED FROM SITE OBSERVATIONS OF SOIL AND BEDROCK EXPOSURES IN ROAD CUTS AND ALONG STREAMBANKS AND FROM SHALLOW HAND DUG TEST PITS AND PROBES (SEE DESCRIPTION ON SHEET 7). NO DETAILED SUBSURFACE FIELD INVESTIGATION WAS CONDUCTED (LARGE TEST PITS OR BORE HOLES). FIELD CONDITIONS MAY VARY FROM THOSE INFERRED. IF, UPON EXCAVATION, FIELD CONDITIONS VARY FROM THOSE INFERRED, THEN CHANGES TO THE FOUNDATION DESIGN OR INSTALLATION MAY BE REQUIRED.

4. MATERIAL SPECIFICATIONS AND FABRICATION:

4.1. STRUCTURAL STEEL:

- SKIDWAY TO BE FABRICATED FROM STEEL I-BEAMS: 350AT STEEL
- STEEL PLATE: 350A

4.2. COMPLETE ALL WELDS IN ACCORDANCE WITH CSA W59.

4.3. FABRICATOR TO BE CERTIFIED FOR DIVISION 1 OR 2 IN ACCORDANCE WITH CSA W47.1.

4.4. FIELD WELDING BY COMPANY CERTIFIED TO CSA W47.1 DIVISION 1, 2 OR 3.

4.5. REINFORCING:

- TO CAN/CSA G30.18M GRADE 400R.
- REINFORCING TO BE GRADE 400 DEFORMED BARS CONFORMING TO CSA G30.18M. PLACEMENT AND FABRICATION TO CONFORM TO CAN/CSA-A231.

4.6. CONCRETE:

- CSA A23.1 AND A23.4 EXPOSURE CLASS C1, f<sub>c</sub> = 30 MPa AT 28 DAYS. NO COLD JOINTS ALLOWED.

4.7. GROUT:

- GROUT MIN f<sub>c</sub> = 35 MPa AT 28 DAYS. INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
- GROUT FOR SKID ARM PIVOT HINGE SHALL BE TARGET TRAFFIC PATCH WITH FINE AGGREGATE, OR ALTERNATE EQUIVALENT PRODUCT. EQUIVALENT PRODUCTS MUST BE APPROVED BY MFR PRIOR TO USE.
- COLD WEATHER GROUTING:
  - WHERE IT IS ANTICIPATED THAT THE TEMPERATURE SHALL DROP BELOW 5°C DURING GROUTING, THE CONTRACTOR SHALL IMPLEMENT COLD WEATHER CONCRETING PROCEDURES IN ACCORDANCE WITH CAN/CSA A23.1. PRIOR TO COMMENCING THE GROUTING OPERATION, THE CONTRACTOR SHALL PROVIDE MFR WITH WRITTEN COLD WEATHER CONCRETING PROCEDURES.

4.8. FLOATING SKIDWAY:

- FLOATING SKIDWAY FABRICATION DRAWINGS REQUIRE P. ENG. SEAL AND REVIEW BY THE DUMP DESIGNER (ONSITE ENGINEERING LTD.) FOR CONFORMANCE TO THE GENERAL ARRANGEMENT DESIGN.
- FLOATING SKIDWAY BALLAST TANK TO BE EQUIPPED WITH PRESSURIZED STEEL AIRLINE C/W QUICK CONNECT TO CONTROL TANK BALLAST.

5. INSTALLATION NOTES:

- 5.1. RIPRAP SOURCE HAS BEEN IDENTIFIED.
- 5.2. THERE ARE BC HYDRO TRANSMISSION LINES AND A NATURAL GAS PIPELINE UPHILL OF THE LOG DUMP AREA. APPROPRIATE SAFETY PRECAUTIONS ARE REQUIRED FOR CONSTRUCTION AND BLASTING OPERATIONS AT THE LOG DUMP SITE.
- 5.3. NOTE THAT WHERE EXCAVATION SPECIFICATIONS ON THESE DRAWINGS CONFLICT WITH WORKSAFEBC REGULATIONS, WORKSAFEBC REGULATIONS ARE TO GOVERN.

6. SURVEY:

- 9.1. SITE SURVEY BY ONSITE ENGINEERING LTD, AUGUST 23, 2016
- 9.2. TRANSECTS BY TRITON ENVIRONMENTAL CONSULTANTS, SEPTEMBER 23, 2015

ENVIRONMENTAL NOTES:

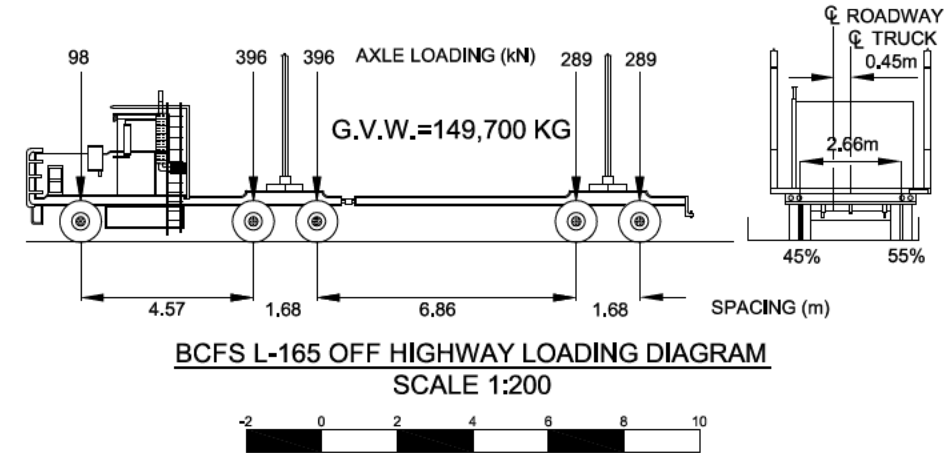
1. WORK APPROVAL FROM FISHERIES AND OCEANS CANADA SHOULD BE SOUGHT
2. ALTERATION BELOW THE HIGH WATER LINE SHOULD BE SUPERVISED BY AN ENVIRONMENTAL MONITOR. SEDIMENT MANAGEMENT TO REDUCE SILTATION IS REQUIRED.
3. DIRECT SUBSURFACE WATER AWAY FROM WORK SITE. SILT FENCING, GEOTEXTILE CLOTH FABRIC AND A ROLL OF PLASTIC SHOULD BE USED ON SITE. STOP WORK DURING EXTREME ADVERSE WEATHER.
4. MACHINERY IS TO BE CLEAN AND LEAK FREE PRIOR TO COMING ON SITE. PETROLEUM PRODUCTS MUST BE CAREFULLY MONITORED.
5. A SEDIMENT AND DEBRIS MANAGEMENT PLAN IS REQUIRED FOR APPROVAL PRIOR TO CONSTRUCTION.
6. REFER TO "HABITAT ASSESSMENT FOR A PROPOSED LOG TRANSFER FACILITY NEAR WOODFIBRE, HOWE SOUND" PREPARED BY TRITON ENVIRONMENTAL CONSULTANTS. A SEDIMENTATION MANAGEMENT PLAN IS REQUIRED FOR CONSTRUCTION. THE PLAN MUST BE PREPARED AND APPROVED BY BCTS PRIOR TO UNDERTAKING ANY CONSTRUCTION WORKS AT THE SITE.

PARTIAL MATERIALS LIST

QTY	ITEM DESCRIPTION
2	ANCHOR LOG: 0.6m Ø X 6m LENGTH Cw. TOP CUT FLAT TO PROVIDE 0.4m BEARING.
2	DEADMAN LOG: 0.6m x 5m LENGTH Cw
6	FLAT TOP CONCRETE BLOCKS (INTERLOCKING): 0.75mX0.75mX1.5m (TYP.)
80m	¾" Ø CABLE FOR ANCHOR LOGS
48	G-450 CROSBY CLAMPS
1	600mm Ø X 5m LONG CSP
1	600mm Ø X 10m LONG CSP
1	1200mm Ø X 13m LONG CSP

SPECIFICATIONS FOR CONCRETE BLOCKS (INTERLOCKING):

- MIN. f<sub>c</sub> = 20MPa AT 28 DAYS TO CAN/CSA A23.1 AND A23.4.
- BLOCKS SHALL BE CAST MONOLITHICALLY, NO COLD JOINTS ALLOWED.
- ALL EXPOSED SURFACES SHALL HAVE A SMOOTH FINISH CONFORMING TO CSA CAN3-A23.4-00 SECTION 24.2 GRADE A.
- THE FINISH MUST NOT BE HONEYCOMBED.
- BLOCK SIZE MUST BE 750mm X 750mm X 1500mm LONG, PROVIDED WITH SHEAR KEY.
- DIMENSIONAL TOLERANCE MUST BE +/- 20mm FOR LENGTH, WIDTH, AND HEIGHT AND THE BLOCKS SHALL BE REASONABLY SQUARE, WITH THE DIAGONAL WITHIN A TOLERANCE OF +/- 15mm OF EACH OTHER.
- THE TOP AND BOTTOM SURFACES MUST BE FLAT TO A TOLERANCE OF +/- 3mm UNDER A 600mm LONG STRAIGHT EDGE.
- CONCRETE SHALL BE AIR ENTRAINED 4-7% TO PROTECT THE SURFACE FROM FREEZE THAW DEGRADATION.
- EACH BLOCK MUST CONTAIN A SATISFACTORY EMBEDDED LIFTING DEVICE.
- INTERLOCK PATTERN AND GEOMETRY MUST BE APPROVED BY THE MINISTRY.
- EDGES SHALL BE CHAMFERED.



DWG No:1132-4-WOODFIBRELD-002

SHEET: 2 OF 14

PREPARED FOR:



PREPARED BY:

**ONSITE**  
ENGINEERING LTD.

**NORTH VANCOUVER**  
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DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
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**WOODFIBRE LOG DUMP**  
**REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

SEAL OF B.C. P.ENG.

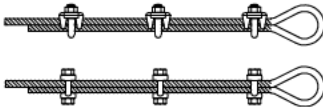


U-BOLT CLIP INSTALLATION PROCEDURES

WIRE ROPE CLIPS

BASIC REQUIREMENTS FOR PROPER TERMINATION:

- SELECT PROPER SIZE CLIPS AND TURN BACK.
- PLACE CLIPS ON IN PROPER SEQUENCE.
- TORQUE ALL CLIPS EVENLY WITH A TORQUE WRENCH.
- APPLY FIRST LOAD AND RE-TORQUE WITH A TORQUE WRENCH.



TURN BACK IS MEASURED FROM THE END OF THE ROPE TO THE BASE OF THE EYE OR TO THE THIMBLE. THIS PART OF THE ROPE IS OFTEN REFERRED TO AS THE DEAD END. SINCE THE U-BOLT CLIP HAS A SINGLE SADDLE, WORKERS MUST NOT SADDLE THE DEAD HORSE.

THE TABLE BELOW DEFINES THE INFORMATION REQUIRED FOR EACH WIRE ROPE CLIP TO ACHIEVE MAXIMUM EFFICIENCY.

TABLE 1				
CLIP SIZE (INCHES)	ROPE SIZE (INCHES)	MIN. NO. OF CLIPS	AMOUNT OF ROPE TO TURN BACK (INCHES)	*TORQUE (Ft. Lbs.)
1/2	1/2	3	11 1/2	65
5/8	5/8	3	12	95
3/4	3/4	4	18	130
7/8	7/8	4	19	225
1	1	5	26	225
IF A GREATER NUMBER OF CLIPS ARE USED THAN SHOWN IN THE TABLE, THE AMOUNT OF TURNBACK SHOULD BE INCREASED PROPORTIONATELY.				
*THE TIGHTENING TORQUE VALUES SHOWN ARE BASED UPON THE THREADS BEING CLEAN, DRY AND FREE OF LUBRICATION.				

1. REFER TO TABLE 1 IN FOLLOWING THESE INSTRUCTIONS. TURN BACK SPECIFIED AMOUNT OF ROPE FROM THIMBLE TO LOOP. APPLY FIRST CLIP ONE BASE WIDTH FROM DEAD END OF ROPE. APPLY U-BOLT OVER DEAD END OF WIRE ROPE - LIVE END RESTS IN SADDLE (NEVER SADDLE A DEAD HORSE!). USE TORQUE WRENCH TO TIGHTEN EVENLY, ALTERNATE FROM ONE NUT TO THE OTHER UNTIL REACHING THE RECOMMENDED TORQUE.

FIGURE 1
2. WHEN TWO CLIPS ARE REQUIRED, APPLY THE SECOND CLIP AS NEAR THE LOOP OR THIMBLE AS POSSIBLE. USE TORQUE WRENCH TO TIGHTEN EVENLY, ALTERNATING UNTIL REACHING THE RECOMMENDED TORQUE. WHEN MORE THAN TWO CLIPS ARE REQUIRED, APPLY THE SECOND CLIP AS NEAR THE LOOP OR THIMBLE AS POSSIBLE, TURN NUTS ON SECOND CLIP FIRMLY, BUT DO NOT TIGHTEN. PROCEED TO STEP 3.

FIGURE 2
3. WHEN THREE OR MORE CLIPS ARE REQUIRED, SPACE ADDITIONAL CLIPS EQUALLY BETWEEN FIRST TWO - TAKE UP ROPE SLACK - USE TORQUE WRENCH TO TIGHTEN NUTS ON EACH U-BOLT EVENLY, ALTERNATING FROM ONE NUT TO THE OTHER UNTIL REACHING RECOMMENDED TORQUE.

FIGURE 3

DWG No:1132-4-WOODFIBRELD-003

SHEET: 3 OF 14

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PH.: 778-628-4968 FAX: 866-235-6943

DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
SITE VISIT: MICHAEL FOSTER, P.ENG.  
SITE VISIT DATES: AUGUST 23, 2016  
FILE NAME: WOODFIBRELD.DWG  
SCALE: AS NOTED  
REVISION NUMBER:  
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WOODFIBRE LOG DUMP  
REACTIVATION  
( 49° 40' 26" N , 123° 13' 31" W )

SEAL OF B.C. P.ENG.







BOOMING GROUNDS TO BE  
30m FROM SHORELINE

APPROXIMATE BOOMING  
GROUNDS SHOWN FOR  
ILLUSTRATIVE PURPOSES ONLY

SATELLITE IMAGE  
~SCALE 1:2000

APPROXIMATE LOCATION OF  
5,000 GALLON (18,900 LITRE)  
FUEL TANK SITE

INSTALL DEBRIS CURTAIN 20m EACH SIDE OF SKIDWAY  
CENTRELINE BUT LEAVE ROOM FOR BARGE. THE DEBRIS  
CURTAINS VARY IN DEPTH, WITH THE SHORTEST (2m DEEP)  
IN THE NEAR SHORE AREA AND THE DEEPEST (4m DEEP)  
ATTACHED TO THE DEEP END OF THE BOOMING GROUNDS.  
DEBRIS CURTAINS TO EXTEND 50m FROM SHORELINE.

APPROXIMATE BOOMING GROUNDS  
SHOWN FOR ILLUSTRATIVE  
PURPOSES ONLY. FINAL BULLPEN  
AND BOOMING GROUNDS TO BE  
DETERMINED BY BCTS.

BOOMING

BOOMSTICKS

BULLPEN

PLAN VIEW  
SCALE 1:2000



PREPARED FOR:



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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-004

SHEET: 4 OF 14

DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
SITE VISIT: MICHAEL FOSTER, P.ENG.  
SITE VISIT DATES: AUGUST 23, 2016  
FILE NAME: WOODFIBRELD.DWG  
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SEAL OF B.C. P.ENG.



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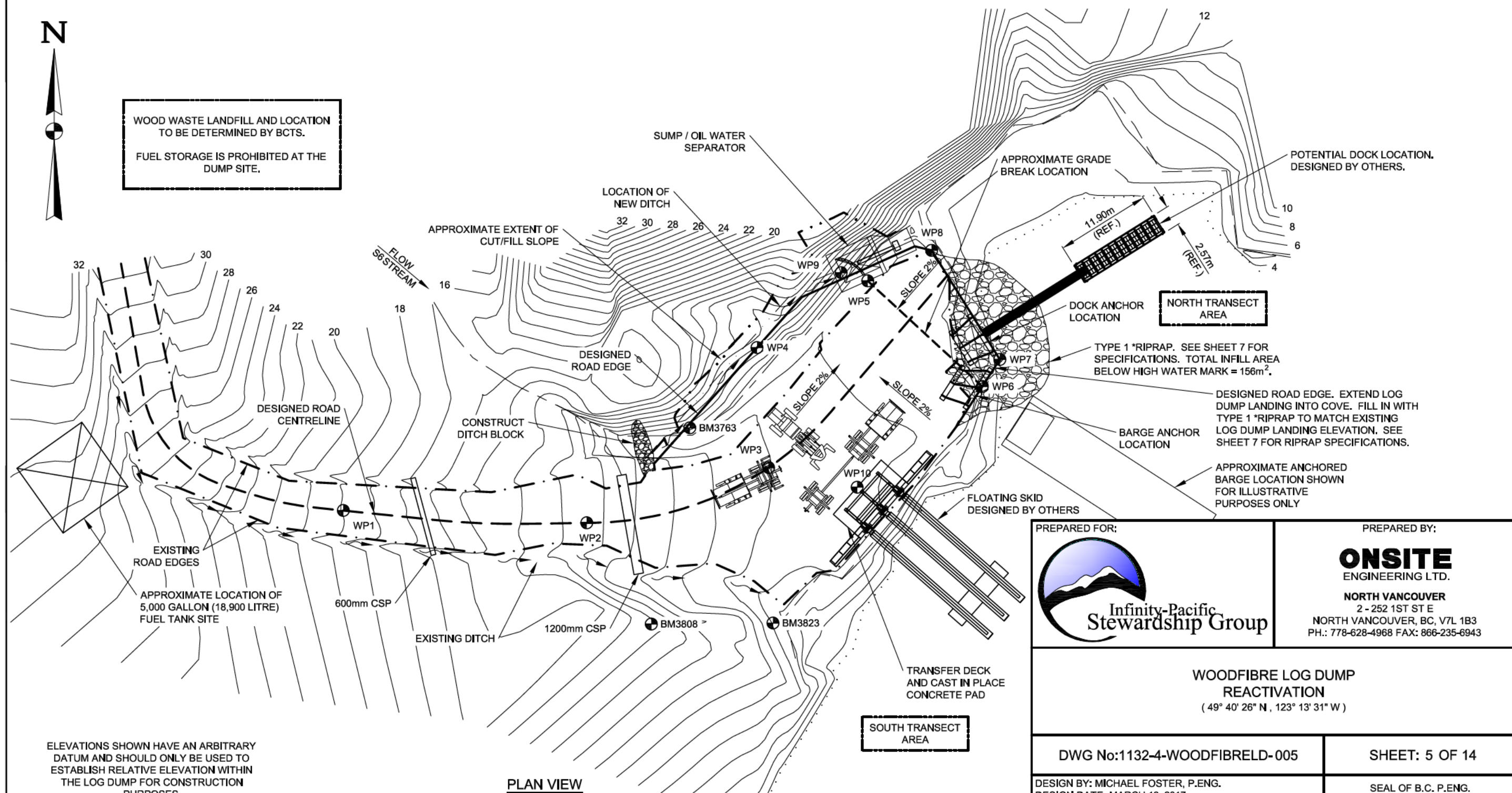
BOOMING GROUNDS

DEBRIS CURTAIN



WOOD WASTE LANDFILL AND LOCATION  
TO BE DETERMINED BY BCTS.

FUEL STORAGE IS PROHIBITED AT THE  
DUMP SITE.



ELEVATIONS SHOWN HAVE AN ARBITRARY  
DATUM AND SHOULD ONLY BE USED TO  
ESTABLISH RELATIVE ELEVATION WITHIN  
THE LOG DUMP FOR CONSTRUCTION  
PURPOSES.

WP	N	E	ELEV
WP1	5001.35	2957.85	19.05
WP2	4999.80	2988.46	12.55
WP3	5006.75	3011.32	7.48
WP4	5021.84	3009.86	7.06
WP5	5030.24	3023.78	6.85
WP6	5016.95	3038.19	7.26
WP7	5020.35	3040.40	7.33
WP8	5034.07	3031.82	7.11
WP9	5031.26	3020.45	6.31
WP10	5004.28	3022.46	7.58
BM3823	4987.19	3011.87	96.93
BM3808	4987.07	2996.57	103.67
BM3763	5011.75	3001.42	98.91

WORKPOINT LOCATION TABLE				
WP	OC	BS	ANG R (deg ° '")	HD (m)
1	BM3823	BM3808	15° 08' 27"	55.85
	BM3808	BM3763	279° 08' 48"	41.28
	BM3763	BM3823	99° 38' 43"	44.79
2	BM3823	BM3808	28° 45' 33"	26.60
	BM3808	BM3763	316° 23' 06"	15.10
	BM3763	BM3823	70° 23' 31"	17.62

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SKIDWAY FABRICATION DRAWINGS REQUIRE  
P.ENG. SEAL AND REVIEW BY THE DUMP  
DESIGNER (ONSITE ENGINEERING LTD.) FOR  
CONFORMANCE TO THE GENERAL  
ARRANGEMENT DESIGN.

PREPARED FOR:



PREPARED BY:

**ONSITE**  
ENGINEERING LTD.

**NORTH VANCOUVER**  
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PH.: 778-628-4968 FAX: 866-235-6943

**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-005

SHEET: 5 OF 14

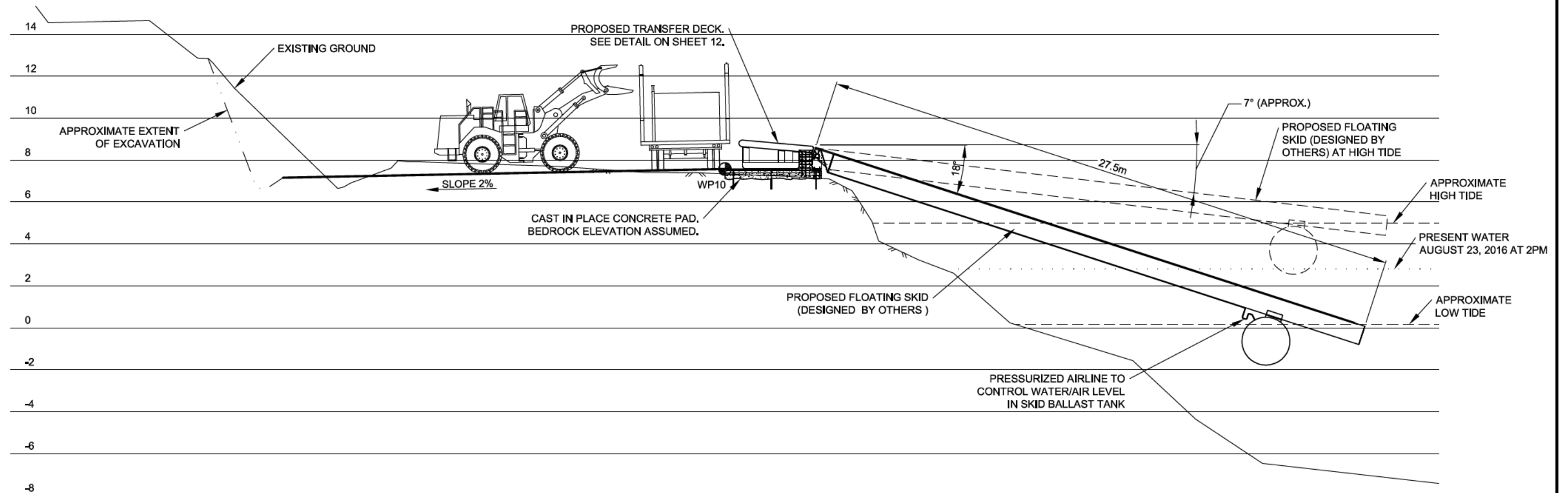
DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
SITE VISIT: MICHAEL FOSTER, P.ENG.  
SITE VISIT DATES: AUGUST 23, 2016  
FILE NAME: WOODFIBRELD.DWG  
SCALE: AS NOTED  
REVISION NUMBER:  
REVISION DATE:  
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DESIGNED ROAD EDGES	---	HIGH WATER LEVEL	---
DESIGNED ROAD CENTRELINE	---	STREAM THALWEG	---
EXISTING ROAD EDGES	- . - . - .	PRESENT WATER LEVEL	...
APPROXIMATE EXTENT OF CUT/FILL SLOPE	- . . -	DITCH FLOW	→
BENCH MARK	⊙ BM1	EXTENT OF DITCH	---
WORKPOINT	⊙ WP1		





**FLOATING SKIDWAY CROSS SECTION**  
SCALE 1:200



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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-006

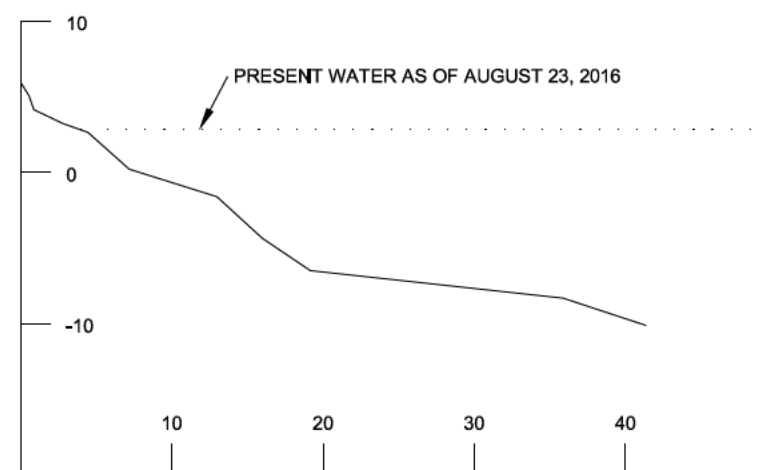
SHEET: 6 OF 14

DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
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SITE VISIT DATES: AUGUST 23, 2016  
FILE NAME: WOODFIBRELD.DWG  
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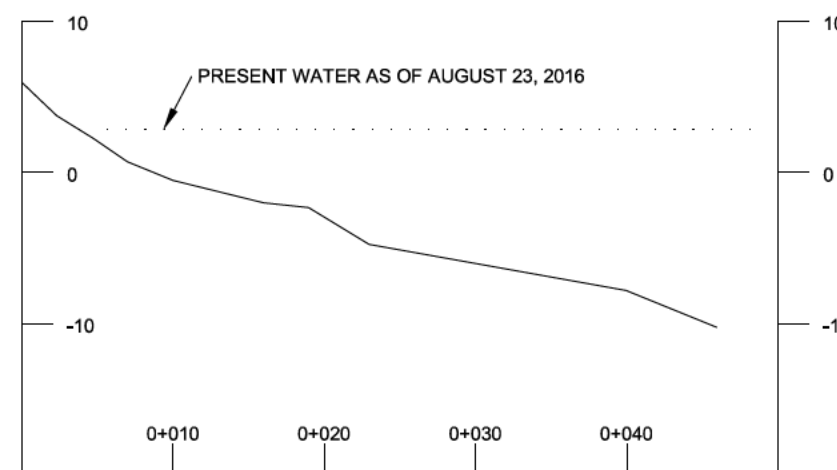
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APPROXIMATE LIMIT OF EXCAVATION	— — — — —	BEDROCK	— — — — —
PRESENT WATER	— — — — —		
HIGH TIDE	— — — — —		
LOW TIDE	— — — — —		

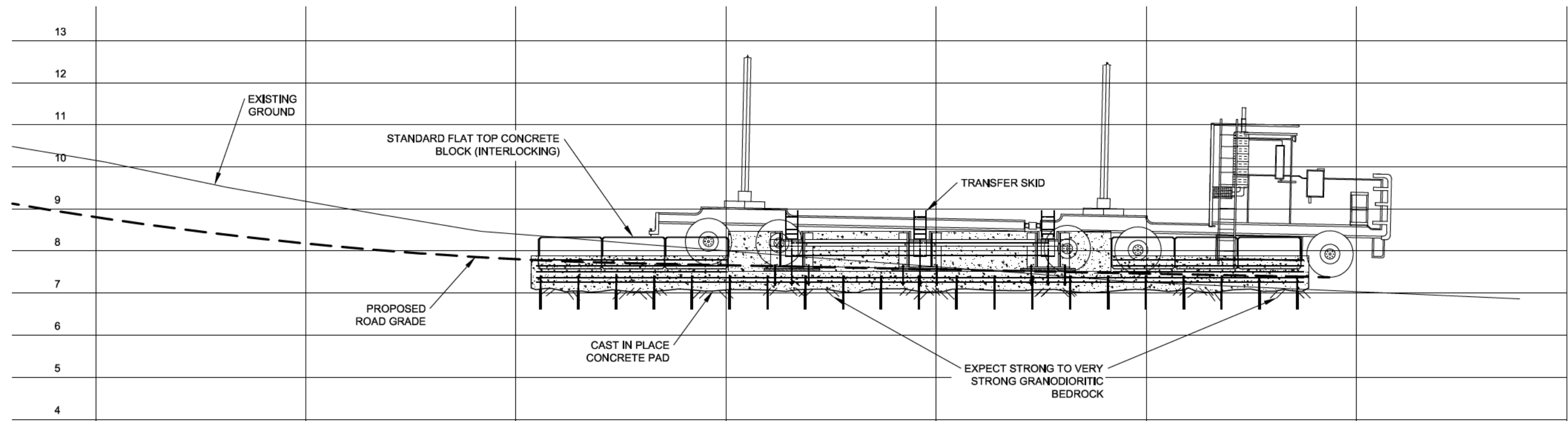


**SOUTH WEST TRANSECT**  
SCALE 1:500

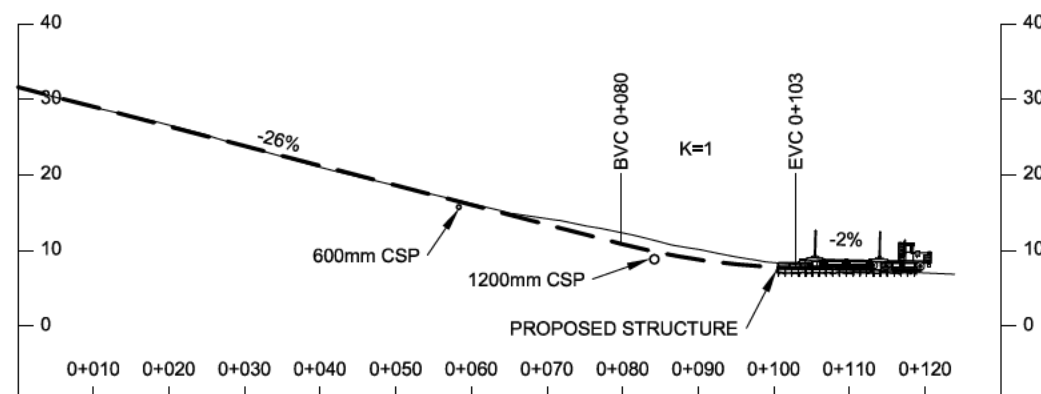
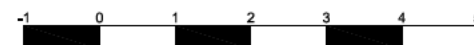


**NORTH EAST TRANSECT**  
SCALE 1:500





**ELEVATION VIEW**  
SCALE 1:100



**ROAD PROFILE VIEW**  
SCALE 1:1000



**ROCK STRENGTH	
EXTREMELY WEAK	INDENTED BY THUMBNAIL
VERY WEAK	CRUMBLES UNDER FIRM BLOW OF HAMMER; CAN BE PEELED WITH A POCKET KNIFE
WEAK	CAN BE PEELED BY POCKET KNIFE (DIFFICULT); SHALLOW INDENTS FROM FIRM BLOW OF HAMMER POINT
MEDIUM STRONG	CANNOT BE SCRAPED OR PEELED WITH KNIFE; FRACTURES WITH SINGLE BLOW OF HAMMER
STRONG	REQUIRES MORE THAN ONE BLOW OF HAMMER TO FRACTURE
VERY STRONG	REQUIRES MANY BLOWS OF HAMMER TO FRACTURE
EXTREMELY STRONG	CAN ONLY BE CHIPPED BY HAMMER

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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-007

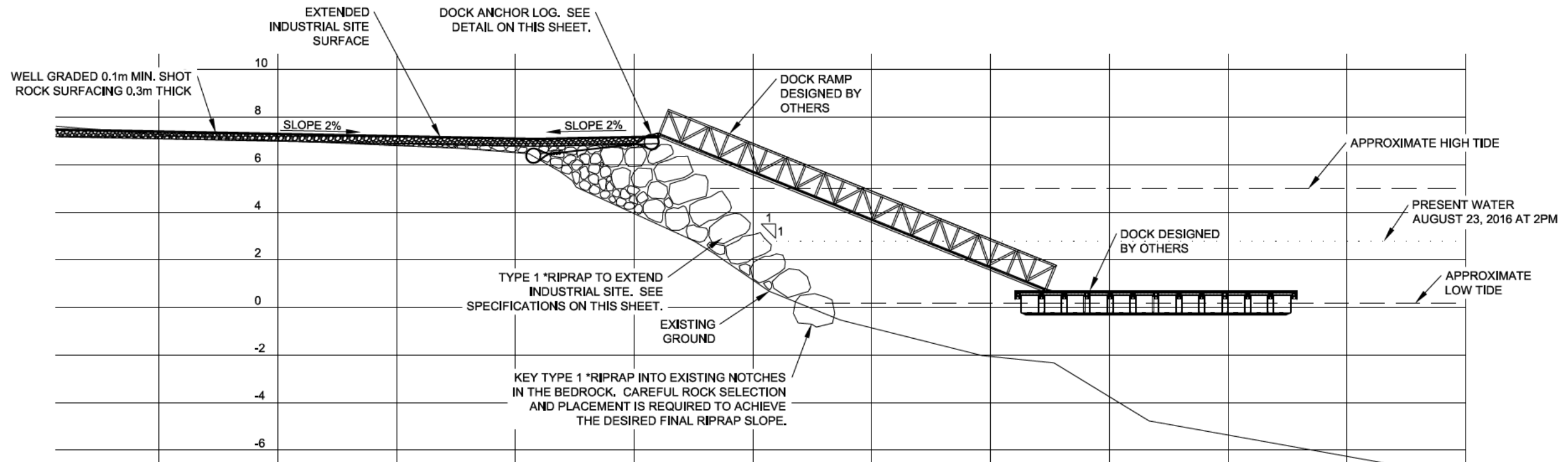
SHEET: 7 OF 14

DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
SITE VISIT: MICHAEL FOSTER, P.ENG.  
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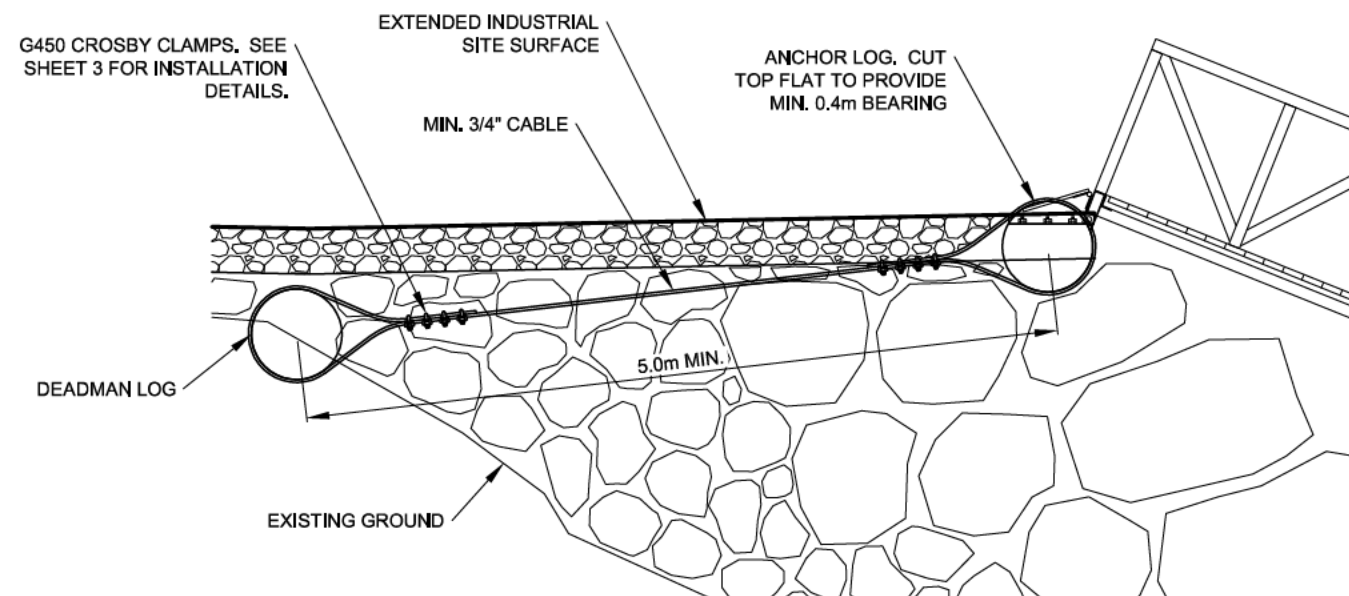
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DESIGNED ROAD GRADE ———  
APPROXIMATE LIMIT OF EXCAVATION ———  
BEDROCK ———



DOCK SECTION  
SCALE 1:200



DOCK / BARGE ANCHOR DETAIL  
SCALE 1:50



TYPE 1 \*RIPRAP: CLEAN ANGULAR ROCK

CLASS 1000kg RIPRAP
ROCK GRADATION
PERCENT SMALLER THAN GIVEN
ROCK MASS kg(mm)
15% 100(415)
50% 1000(900)
85% 3000(1295)

NOMINAL THICKNESS OF RIPRAP  
1500mm



ALL ROCK TO BE PLACED TO MAXIMIZE INTERLOCKING BETWEEN PIECES. ALL ROCK TO BE UNDERLAIN WITH MIRAFI 180N OR APPROVED EQUIVALENT NON-WOVEN GEOTEXTILE. APPROXIMATELY 720m³ OF RIPRAP REQUIRED.

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WOODFIBRE LOG DUMP  
REACTIVATION  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-008

SHEET: 8 OF 14

DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
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SITE VISIT DATES: AUGUST 23, 2016  
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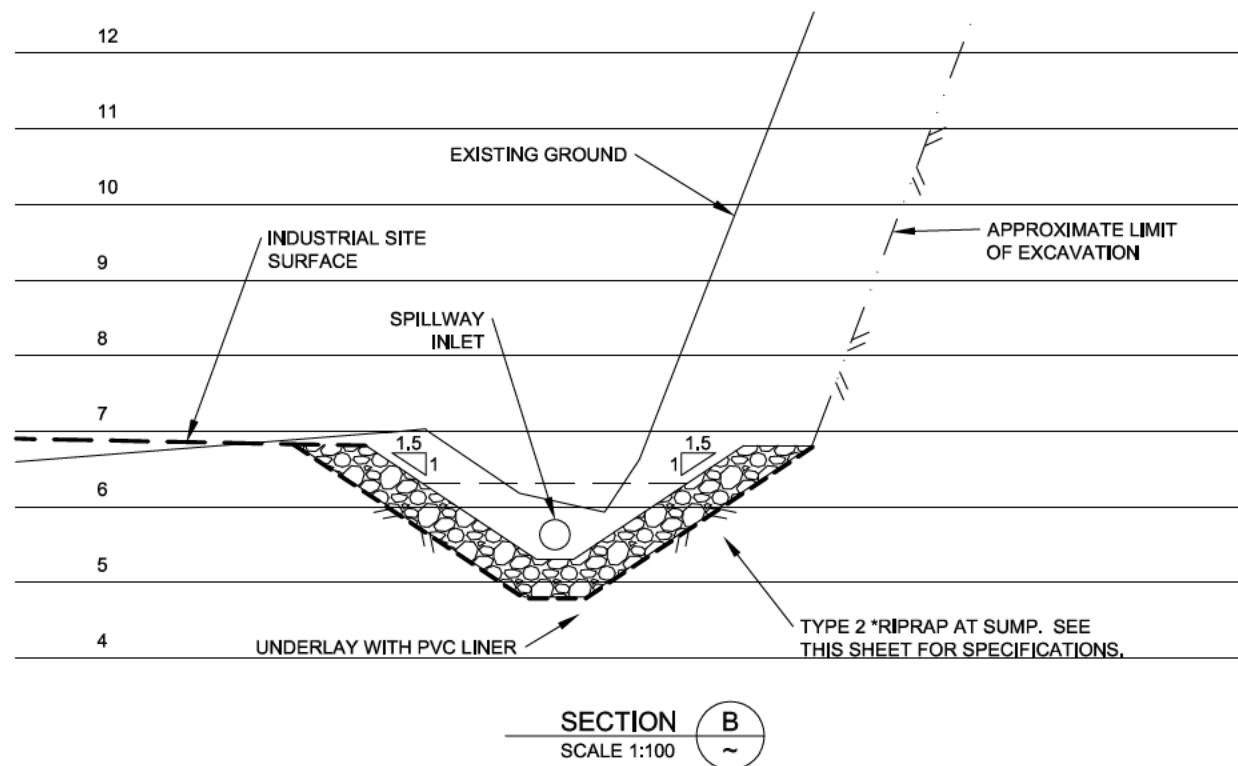
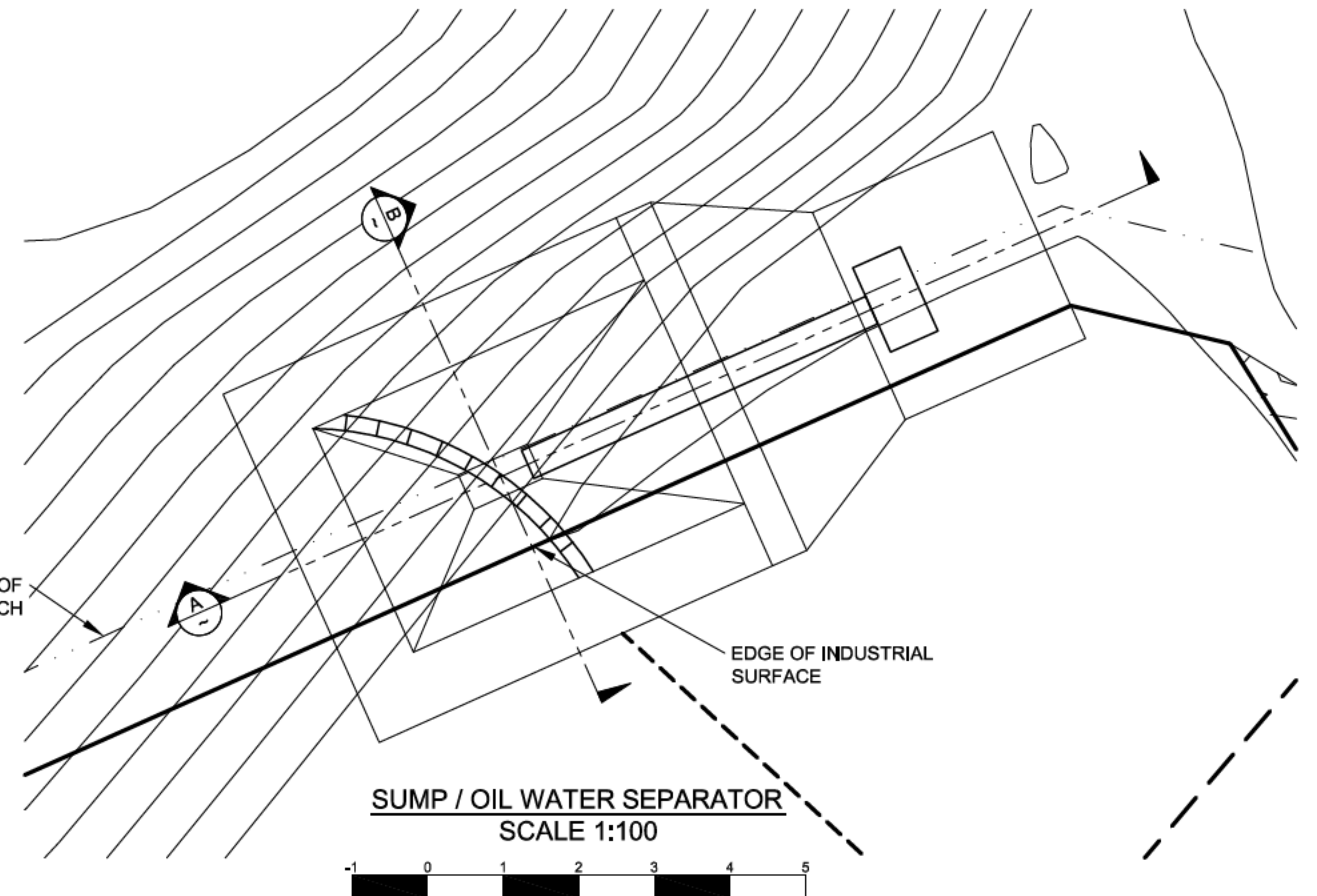
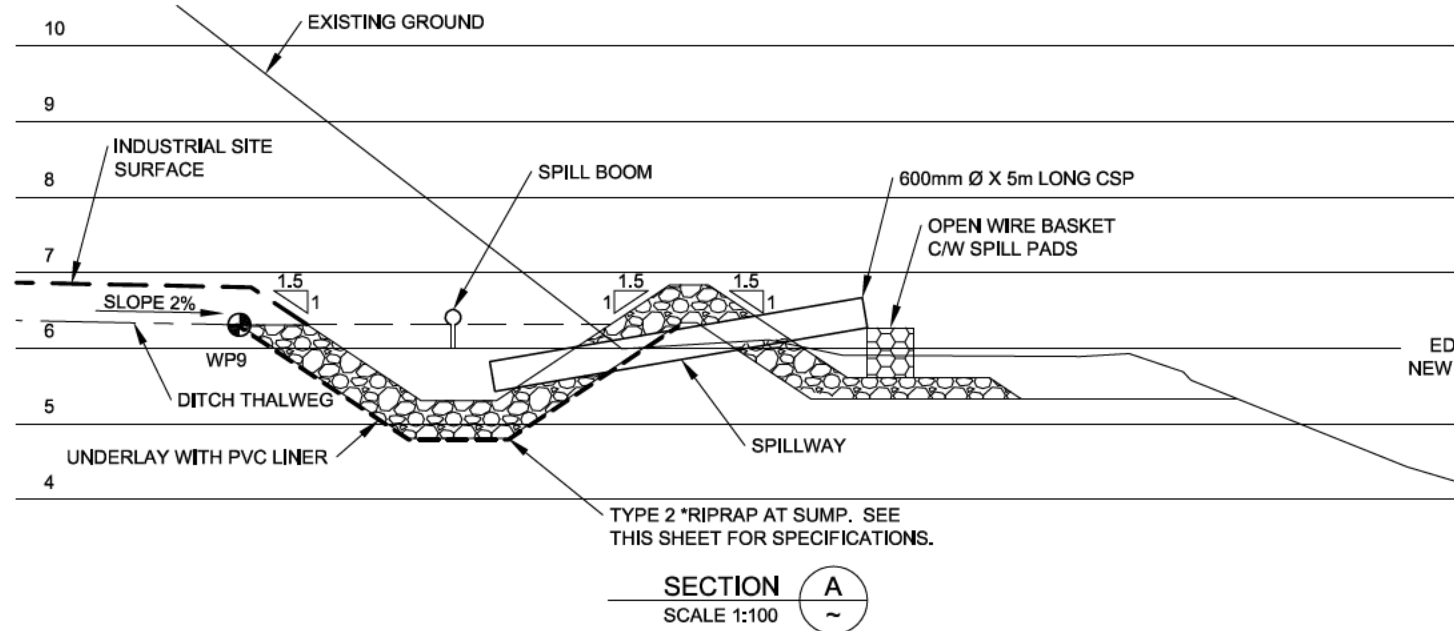


DESIGNED ROAD  
SURFACE

HIGH WATER LEVEL

PRESENT WATER LEVEL







TYPE 2 \*RIPRAP: CLEAN ANGULAR ROCK

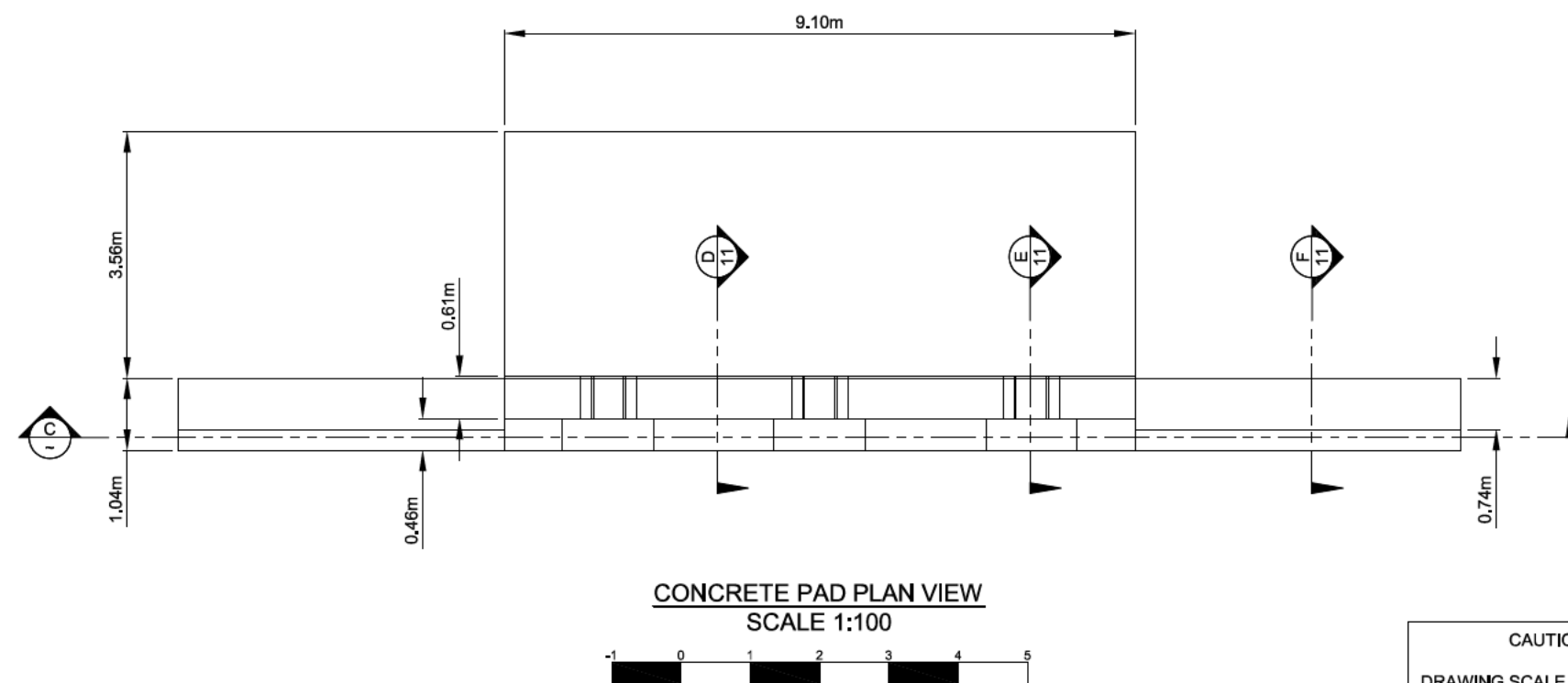
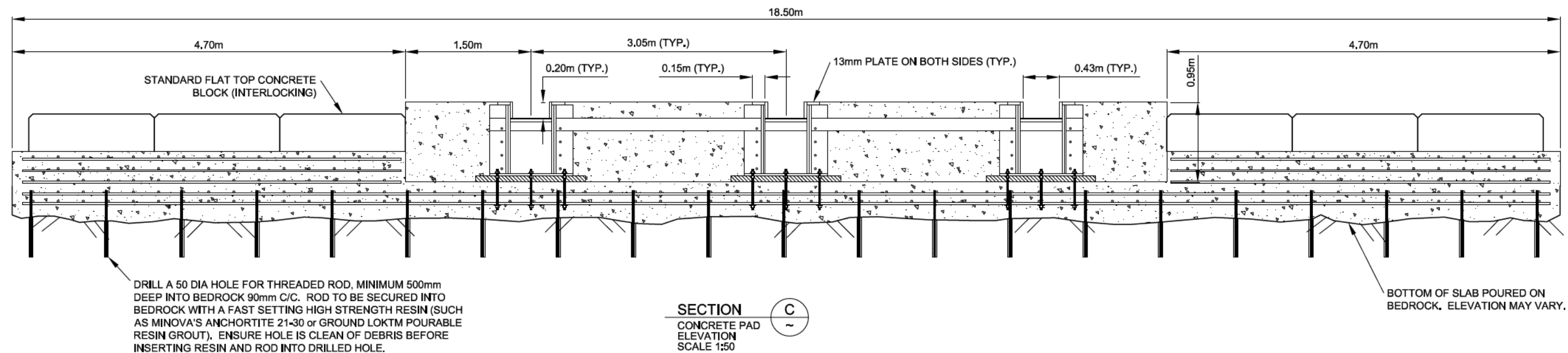
CLASS 10kg RIPRAP	
ROCK GRADATION	
PERCENT SMALLER THAN GIVEN	
ROCK MASS kg(mm)	
15%	1(90)
50%	10(195)
85%	30(280)
NOMINAL THICKNESS OF RIPRAP	
350mm	

ALL ROCK TO BE PLACED TO MAXIMIZE INTERLOCKING BETWEEN PIECES. ALL ROCK TO BE UNDERLAIN WITH MIRAFI 180N OR APPROVED EQUIVALENT NON-WOVEN GEOTEXTILE. APPROXIMATELY 50m<sup>3</sup> OF RIPRAP REQUIRED.

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WOODFIBRE LOG DUMP REACTIVATION ( 49° 40' 26" N , 123° 13' 31" W )													
DWG No:1132-4-WOODFIBRELD-009		SHEET: 9 OF 14											
DESIGN BY: MICHAEL FOSTER, P.ENG. DESIGN DATE: MARCH 13, 2017 REVIEWED BY: JEREMY ARAKI, P.ENG. DRAWN BY: TODD FORBES SITE VISIT: MICHAEL FOSTER, P.ENG. SITE VISIT DATES: AUGUST 23, 2016 FILE NAME: WOODFIBRELD.DWG SCALE: AS NOTED REVISION NUMBER: REVISION DATE: ALL MEASUREMENTS IN m UNLESS OTHERWISE NOTED.		SEAL OF B.C. P.ENG. 											
<table border="0"> <tr> <td>DESIGNED INDUSTRIAL SITE SURFACE</td> <td>---</td> </tr> <tr> <td>APPROXIMATE LIMIT OF EXCAVATION</td> <td>---</td> </tr> <tr> <td>PVC LINER</td> <td>---</td> </tr> <tr> <td>BEDROCK</td> <td>---</td> </tr> <tr> <td>DITCH THALWEG</td> <td>---</td> </tr> </table>				DESIGNED INDUSTRIAL SITE SURFACE	---	APPROXIMATE LIMIT OF EXCAVATION	---	PVC LINER	---	BEDROCK	---	DITCH THALWEG	---
DESIGNED INDUSTRIAL SITE SURFACE	---												
APPROXIMATE LIMIT OF EXCAVATION	---												
PVC LINER	---												
BEDROCK	---												
DITCH THALWEG	---												





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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-010

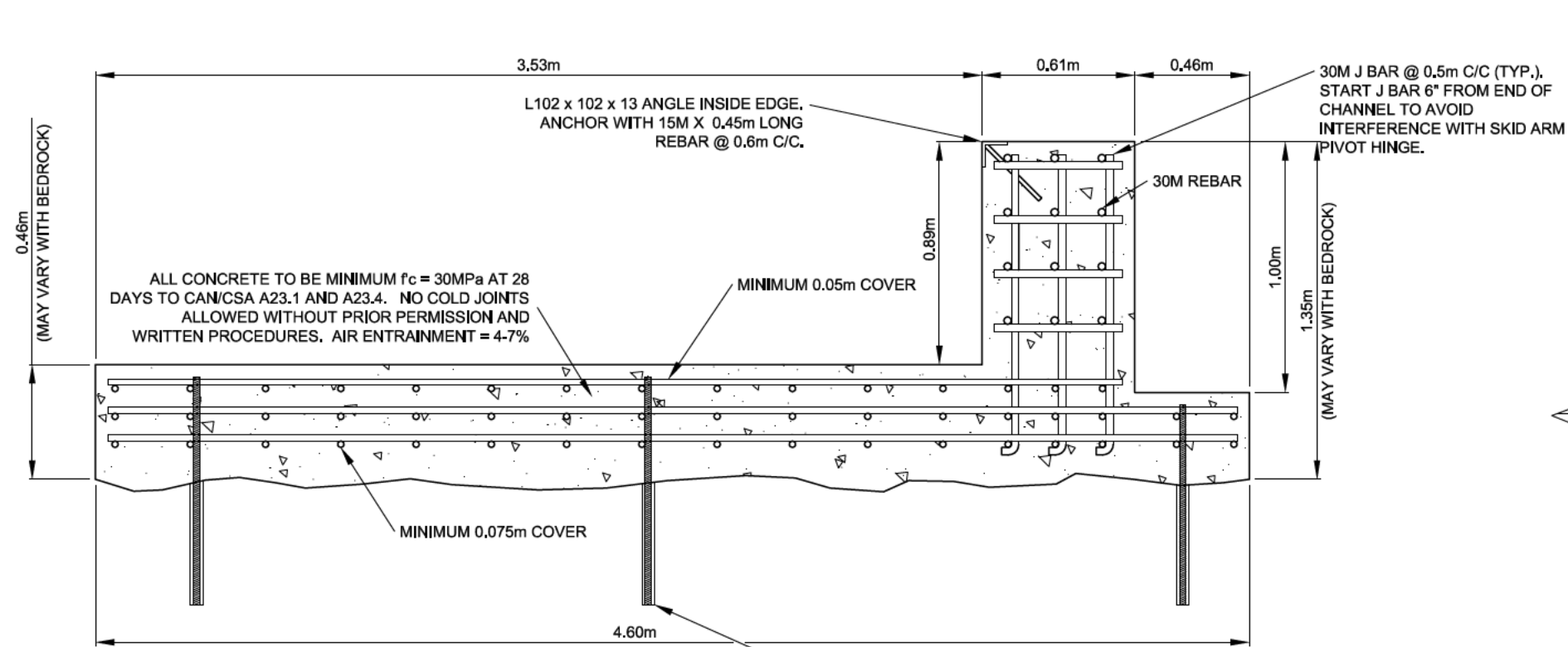
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DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
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DRAWN BY: TODD FORBES  
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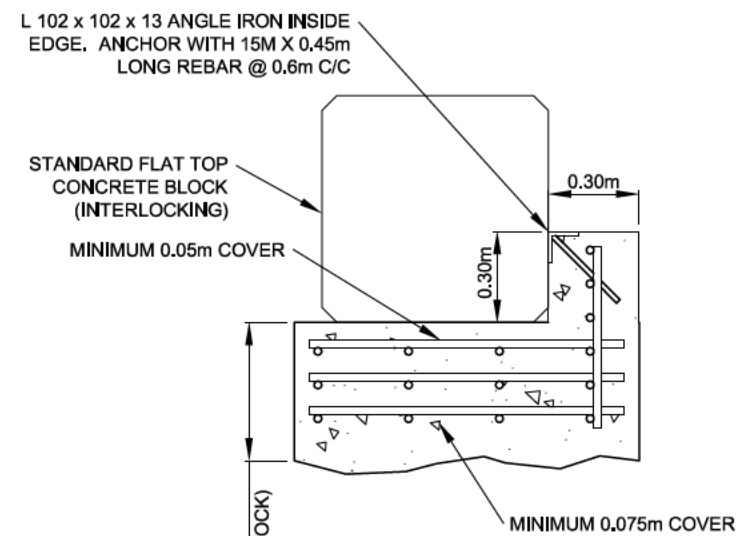


BEDROCK



SECTION **D**  
SCALE 1:25 **10**

DRILL A 50 DIA HOLE FOR THREADED ROD, MINIMUM 500mm DEEP INTO BEDROCK. ROD TO BE SECURED INTO BEDROCK WITH A FAST SETTING HIGH STRENGTH RESIN (SUCH AS MINOVA'S ANCHORTITE 21-30 or GROUND LOKTM POURABLE RESIN GROUT). ENSURE HOLE IS CLEAN OF DEBRIS BEFORE INSERTING RESIN AND ROD INTO DRILLED HOLE.

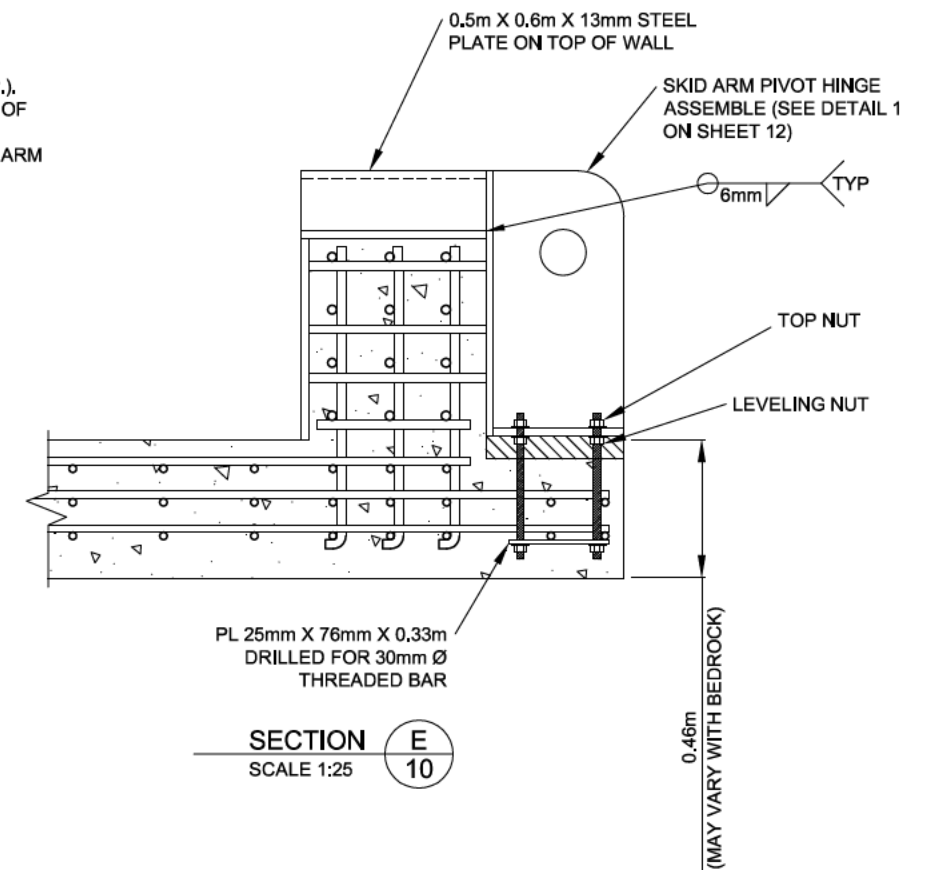


SECTION **F**  
SCALE 1:25 **10**

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SECTION **E**  
SCALE 1:25 **10**

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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-011

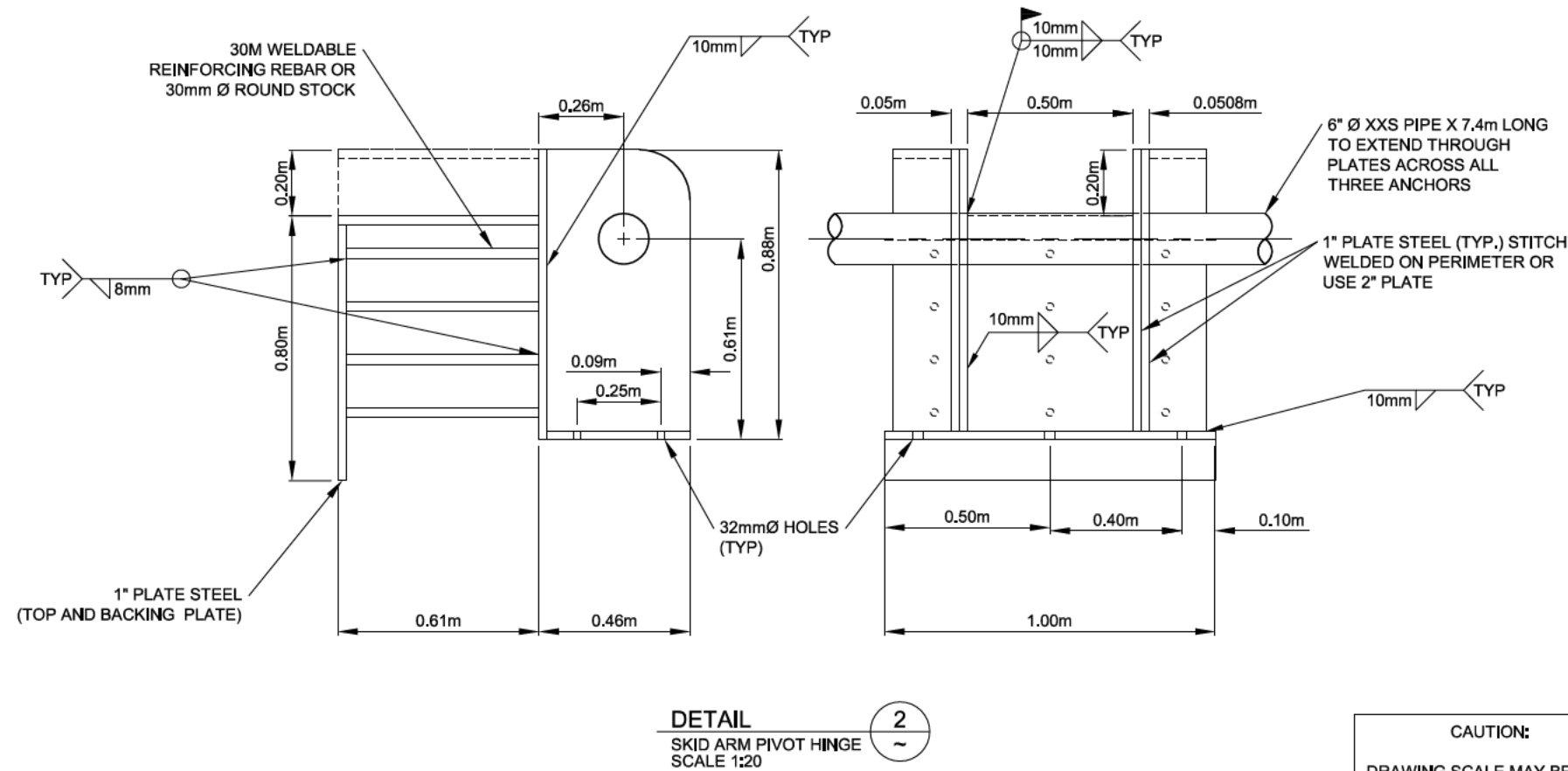
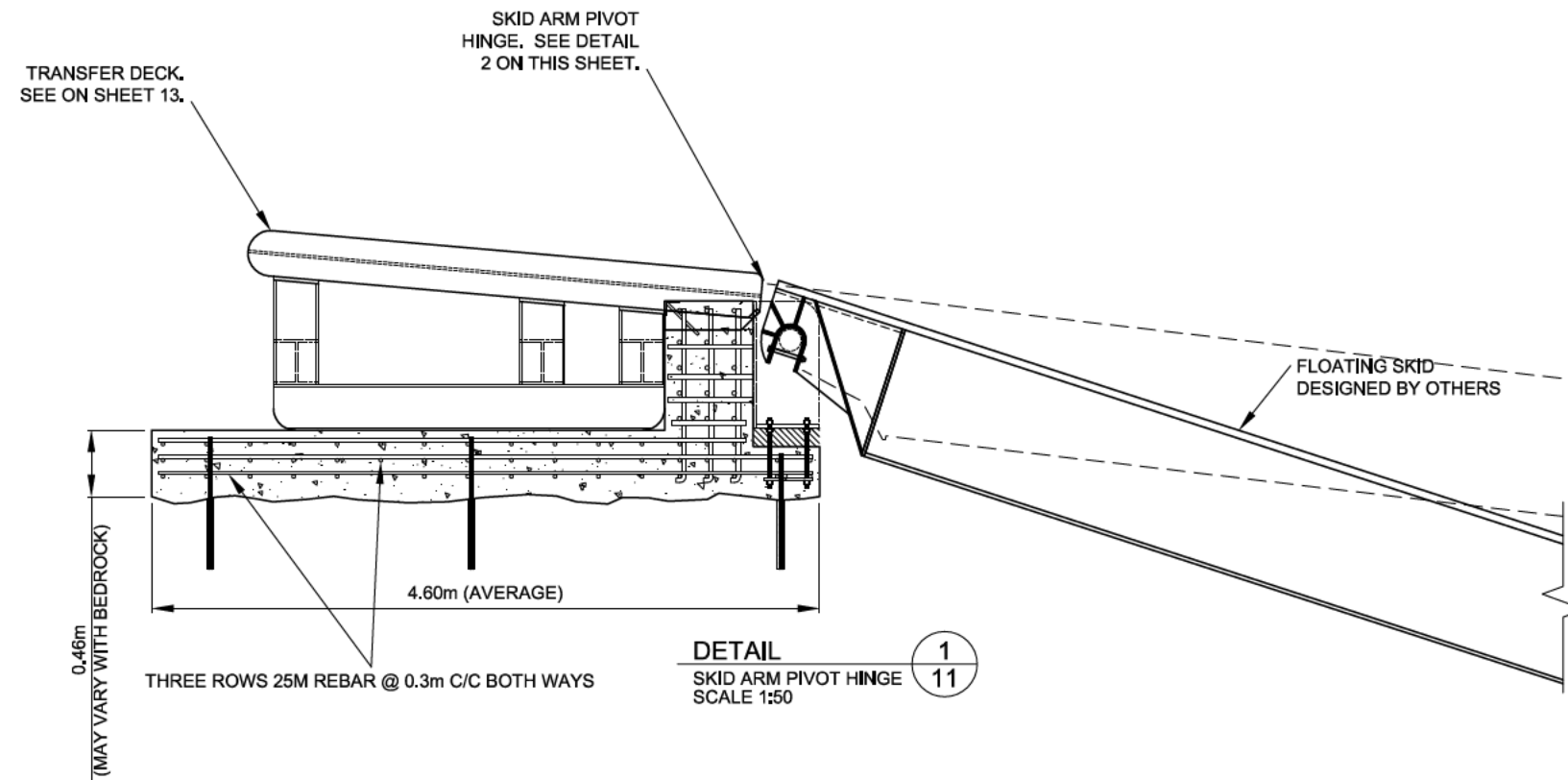
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DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
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BEDROCK

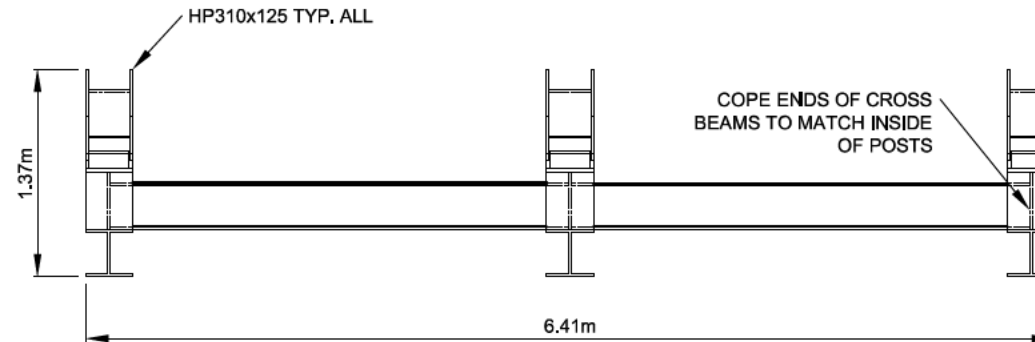
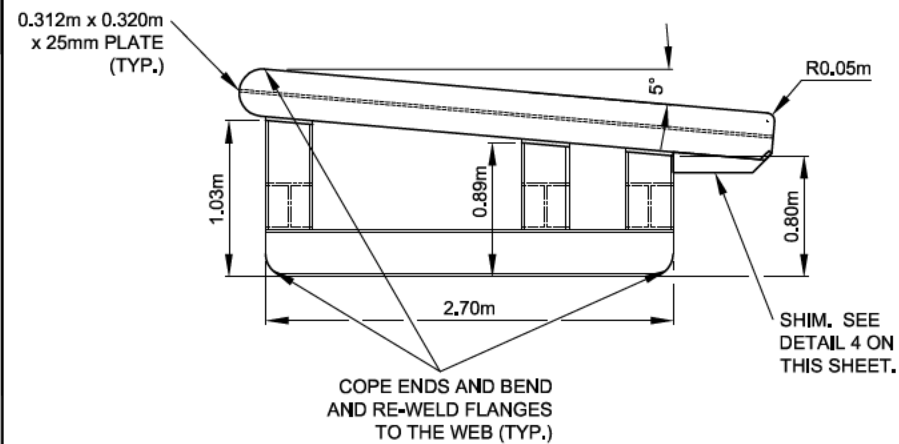


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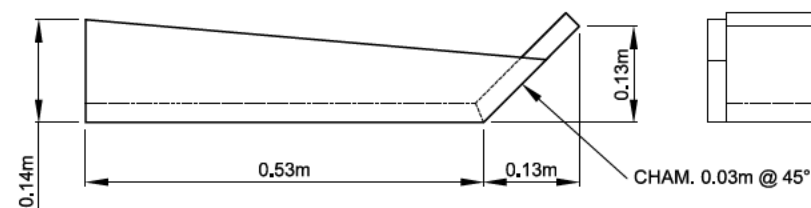
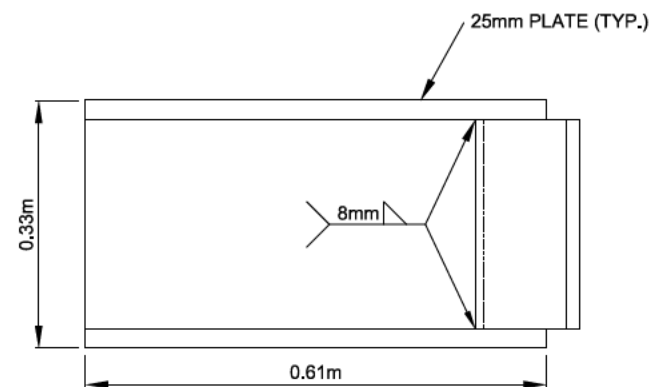
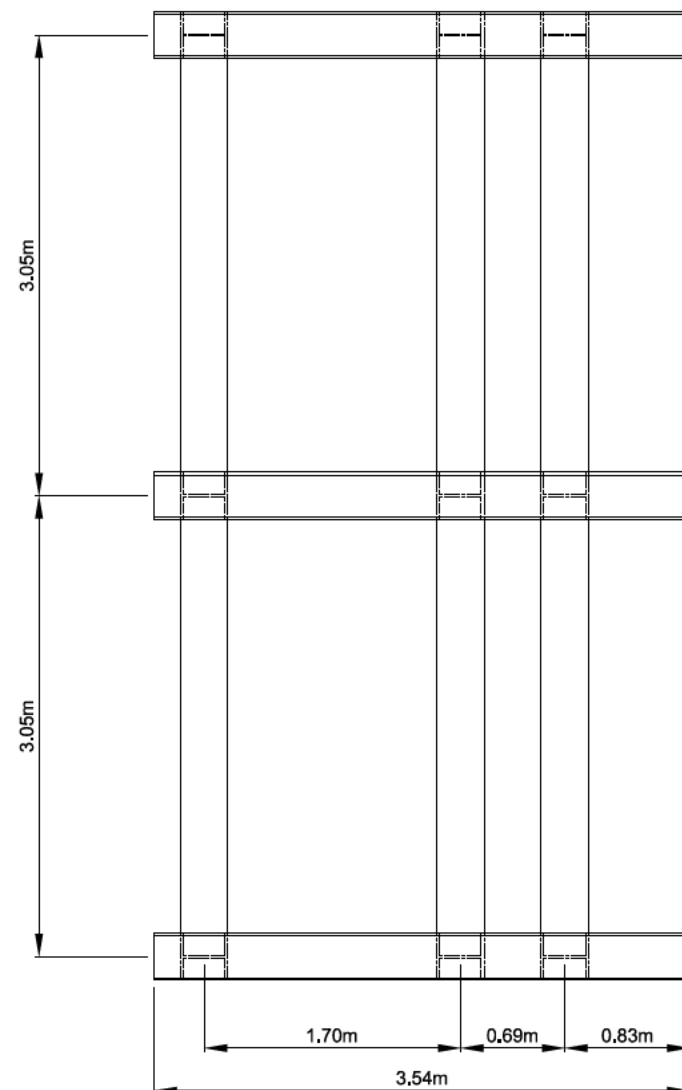
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<p><b>WOODFIBRE LOG DUMP REACTIVATION</b> ( 49° 40' 26" N , 123° 13' 31" W )</p>	
<p>DWG No:1132-4-WOODFIBRELD-012</p>	<p>SHEET:12 OF 14</p>
<p>DESIGN BY: MICHAEL FOSTER, P.ENG. DESIGN DATE: MARCH 13, 2017 REVIEWED BY: JEREMY ARAKI, P.ENG. DRAWN BY: TODD FORBES SITE VISIT: MICHAEL FOSTER, P.ENG. SITE VISIT DATES: AUGUST 23, 2016 FILE NAME: WOODFIBRELD.DWG SCALE: AS NOTED REVISION NUMBER: REVISION DATE: ALL MEASUREMENTS IN m UNLESS OTHERWISE NOTED.</p>	<p>SEAL OF B.C. P.ENG.</p> 



ALL WELDS TO BE 8mm FILLET WELDS ON ALL CONNECTIONS.  
H-PILE CONNECTIONS TO BE WELDED ON ALL AVAILABLE FACES.



DETAIL 4  
TRANSFER SKID  
SHIM  
SCALE 1:10

DETAIL 3  
TRANSFER SKID  
SCALE 1:50

CAUTION:  
DRAWING SCALE MAY BE  
DISTORTED WITH PRINTING.  
INTENDED TO BE PRINTED ON  
11"X17" PAPER.

PREPARED FOR:



PREPARED BY:

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PH.: 778-628-4968 FAX: 866-235-6943

**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-013

SHEET:13 OF 14

DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
SITE VISIT: MICHAEL FOSTER, P.ENG.  
SITE VISIT DATES: AUGUST 23, 2016  
FILE NAME: WOODFIBRELD.DWG  
SCALE: AS NOTED  
REVISION NUMBER:  
REVISION DATE:  
ALL MEASUREMENTS IN m UNLESS OTHERWISE NOTED.

SEAL OF B.C. P.ENG.







PHOTO #1 - VIEW OF COVE



PHOTO #2 - VIEW OF COVE LOOKING TOWARDS LOG DUMP LOCATION

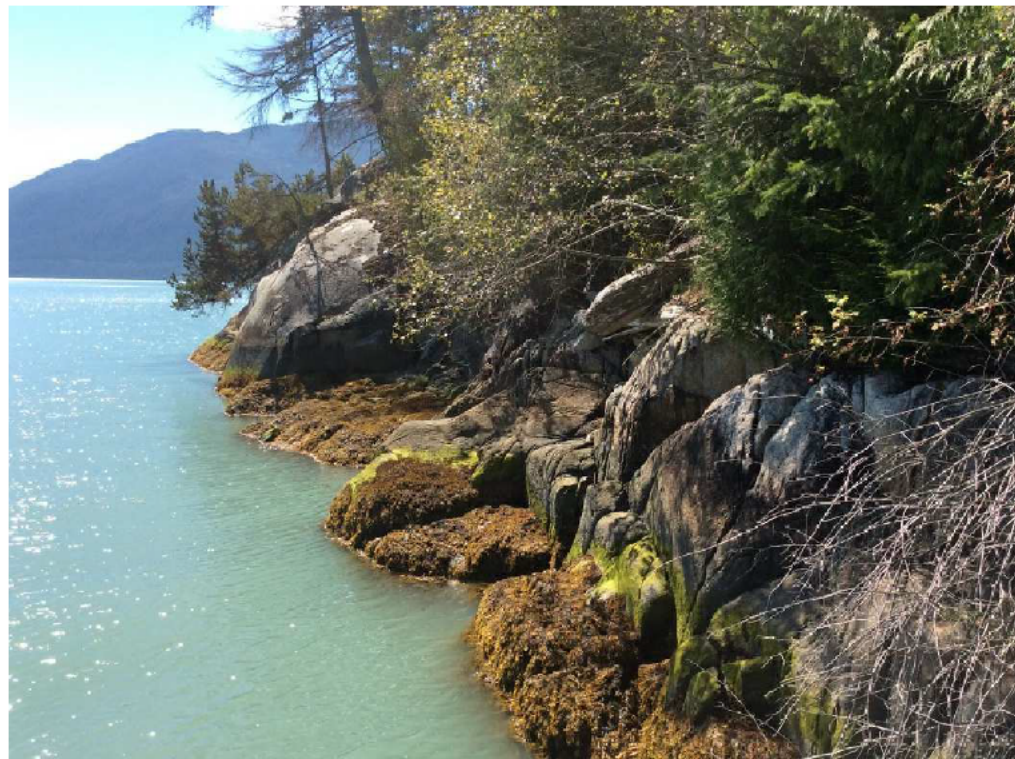


PHOTO #3 - VIEW OF PROPOSE SKIDWAY LOCATION



PHOTO #4 - VIEW TOWARDS WOODS

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**WOODFIBRE LOG DUMP  
REACTIVATION**  
( 49° 40' 26" N , 123° 13' 31" W )

DWG No:1132-4-WOODFIBRELD-014

SHEET:14 OF 14

DESIGN BY: MICHAEL FOSTER, P.ENG.  
DESIGN DATE: MARCH 13, 2017  
REVIEWED BY: JEREMY ARAKI, P.ENG.  
DRAWN BY: TODD FORBES  
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## Habitat Assessment for a Proposed Log Transfer Facility near Woodfibre, Howe Sound

Infinity Pacific Stewardship Group



<b>Revision History and Approvals</b>			
<b>Project Name</b>		Woodfibre Log Dump Assessment	
<b>Project Number</b>		5362	
<b>Report Title</b>		Habitat Assessment for a Proposed Log Transfer Facility near Woodfibre, Howe Sound	
<b>Document #</b>		V3869	
<b>Report Author(s)</b>		John Rithaler / Doug Swanston	
<b>Date</b>	<b>Version</b>	<b>Review Type</b>	<b>Reviewed by</b>
Oct 6, 8, 2015	draft	Document Review	Marilyn Fransen
Oct. 13, 2015	draft	Client	Greg Peterson
Feb, 16, 2016	Final & PDF	Senior	John Rithaler

## Disclaimer

This report is rendered solely for the use of (Client) in connection with (Project), and no person may rely on it for any other purpose without Triton Environmental Consultants Ltd.'s prior written approval. Should a third party use this report without Triton's approval, they may not rely upon it. Triton accepts no responsibility for loss or damages suffered by any third party as a result of decisions made or actions taken based on this report.

- The objective of this report is to provide Infinity Pacific Stewardship Group habitat and impact assessments of a proposed log dump facility located in Howe Sound along its western shoreline near Woodfibre.
- This report is based on facts and opinions contained within the referenced documents and facts. We have attempted to identify and consider relevant facts and documents pertaining to the scope of work, as of the time period during which we conducted this analysis. However, our opinions may change if new information is available or if information we have relied on is altered.
- The following assumptions were relied on during the preparation of this report:
  - Accuracy of the site coordinates
  - Site history
  - Accuracy of upland site plans
- We applied accepted professional practices and standards in developing and interpreting data obtained by our field measurement, sampling, and observation. While we used accepted professional practices in interpreting data provided by Client or third party sources we did not verify the accuracy of data provided by Client or third party sources.
- This report should be considered as a whole and selecting only portions of the report for reliance may create a misleading view of our opinions.



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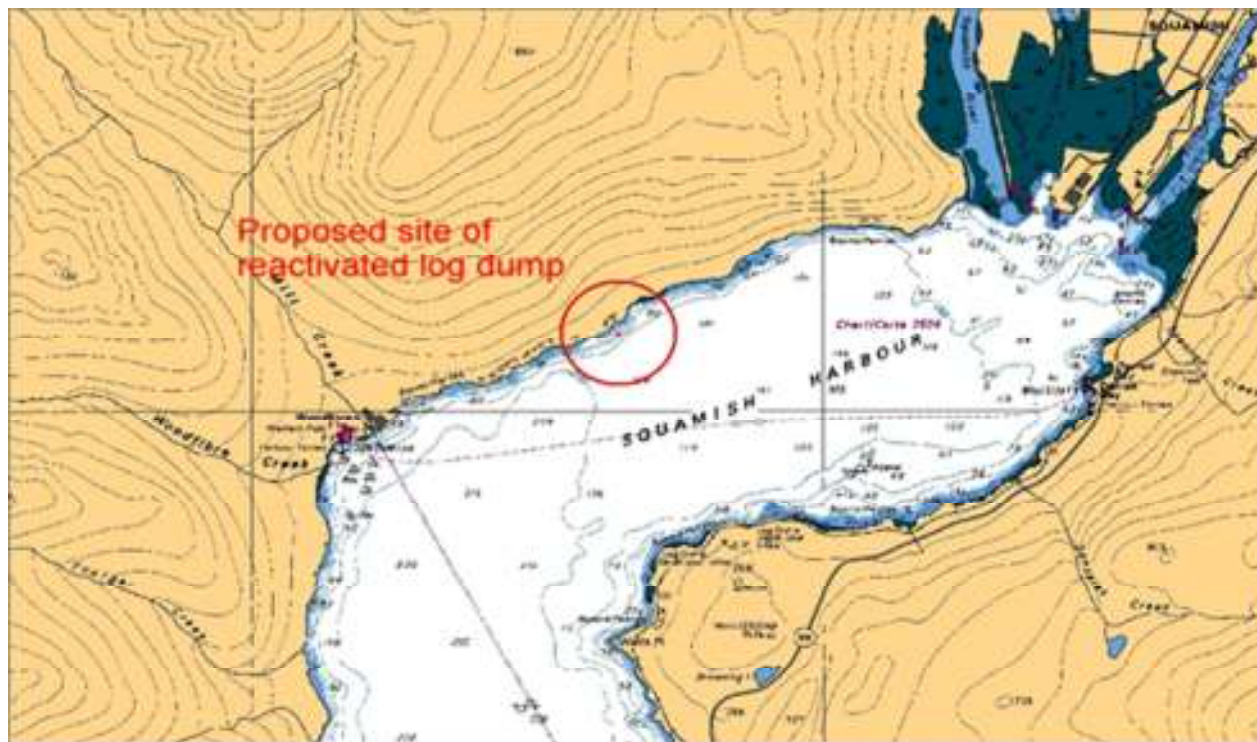
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## 1.0 Introduction

BC Timber Sales (BCTS) proposes to construct a log transfer facility near Woodfibre in Howe Sound. Triton Environmental Consultants Ltd. (Triton) was retained by Infinity Pacific Stewardship Group (IPSG) to conduct the site assessment which was undertaken September 23, 2015.



**Figure 1. Canadian Hydrographic Chart showing survey site location in Howe Sound approximately 6 km west of Squamish, BC**

This report presents an assessment of the subtidal and foreshore areas within the proposed footprint of the log dump facility and provides a marine community inventory as well as an impact assessment based on the operating regime of the facility as we understand it.

## 2.0 Methods

The log dump site was accessed via boat from the marina on Loggers Lane in Squamish BC, September 23, 2015. The site is situated approximately 6 km west of the municipality of Squamish along the western shore of Howe Sound, about 2 km from the previous Woodfibre facility.

The site surveys comprised both foreshore assessments and subtidal SCUBA assessments. Physical and biological features of those areas assessed are presented and supported with digital photography and videography as appropriate. The foreshore was surveyed from the water line with vegetation noted, as well as land form and texture, to describe the physical habitat characterization.

The subtidal surveys were conducted by swimming transects generally perpendicular to the shoreline. Transects at each of the northern and southern portions of the study area were established by extending a 75 m tape from the waterline outward along the sea floor to that horizontal distance intersecting the 18 m (approximately 60 ft) depth. In the southern portion of the site, the swims comprised four transects which proceeded north toward the centre of the site, with the northern area comprising two transects also progressing toward the centre area. Typically, the transect would commence with the divers swimming out from shore. Once the maximum depth was reached, they would swim a short distance traversing the benthic slope and reverse direction shoreward, minimizing time and effort required for unidirectional transects.

The surveys focused on physical and biological attributes along the transects. Physical attributes describe the general slope, sediment textures, and any other natural features observed, while the biological attributes describe the presence of marine organisms as either percent coverage (marine macro-algae, sessile invertebrates) or the number or relative abundance of motile organisms (fish, large crustaceans, etc.) observed.

Photographs and video were captured along transects as visibility (water clarity) and light penetration allowed.

Foreshore assessments and characterization were conducted by the dive tender coincidentally with the SCUBA surveys.

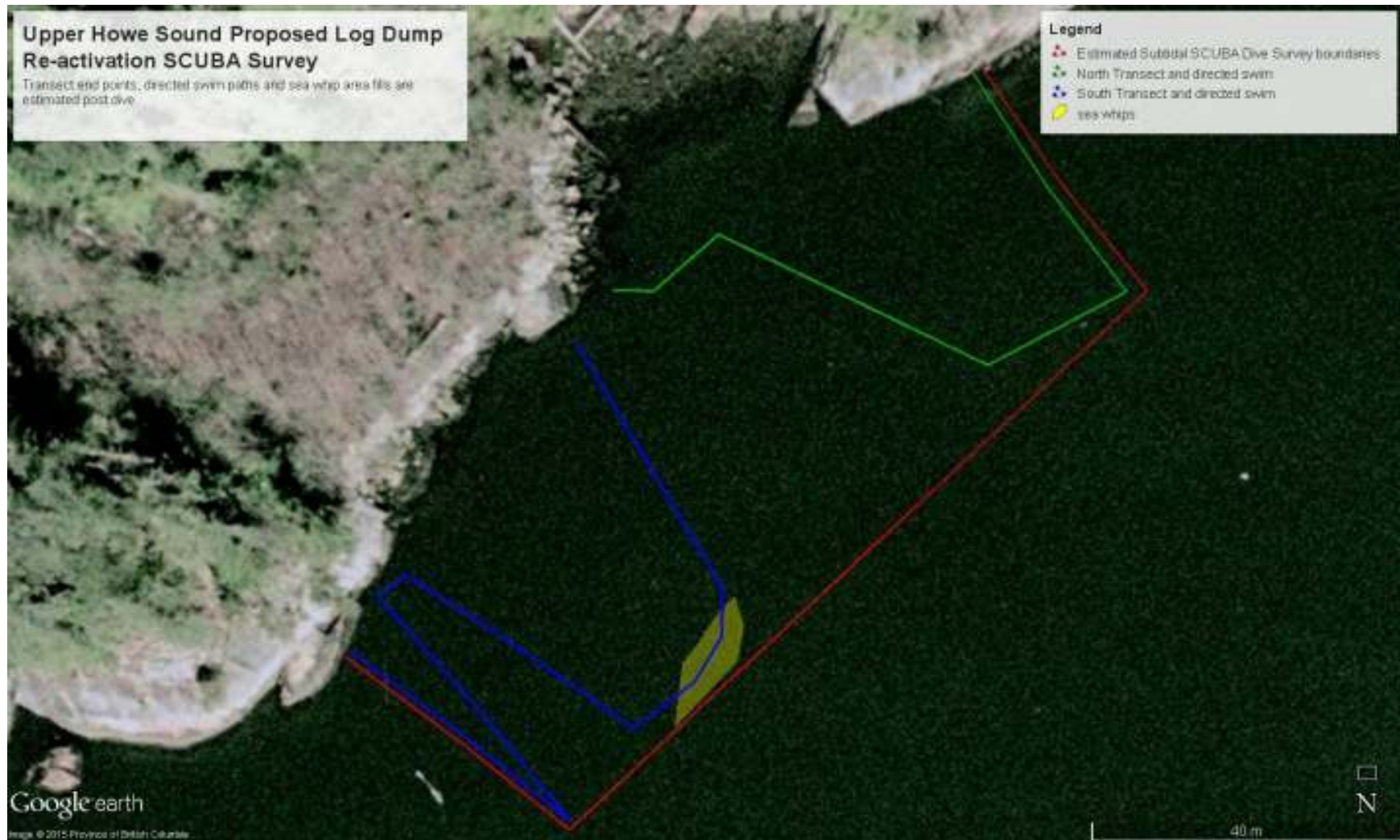
### 3.0 Results

The log dump assessment was conducted September 23, 2015 commencing at 10:28 PDT and concluding 14:45 PDT. A schematic of the transect layout is illustrated in Figure 2. The red line indicates the general study area; the blue and green lines indicate SCUBA transect swims for first and second dives respectively. A yellow shaded box indicates an area of sea whip observations.

Conditions at the time of the surveys were mild temperatures between 13 and 16°C, light winds from the west, and scattered clouds. The Squamish River is a glacial melt-water drainage and exerts significant influence on the visibility through the upper water column in Howe Sound. On this date, visibility in the top 3 m of the water column was 0.15 m. Visibility below 3 m was estimated at less than 2.0 m, requiring the use of powerful Ike lights.

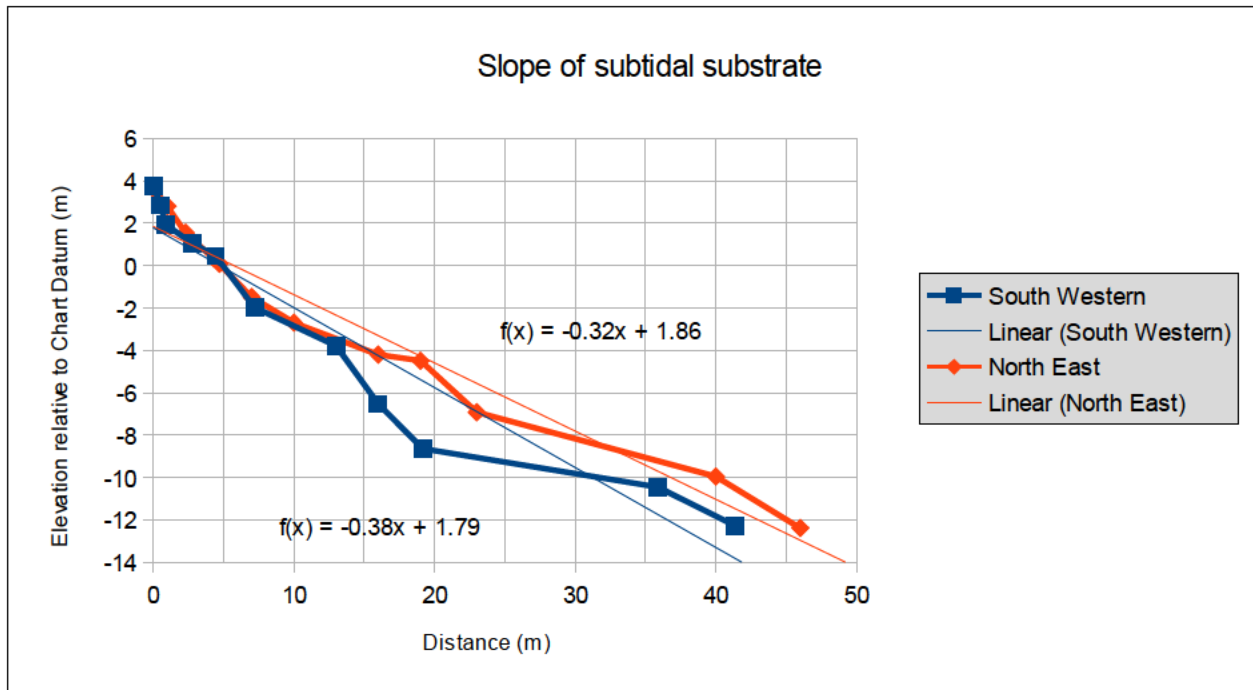
As a consequence of the poor visibility, observations in the shallow subtidal area were limited to determining the endpoints of distinctive biophysical features such as easily defined intertidal biological zone boundaries; for example, the upper and lower boundaries of a rock weed, *Fucus distichus* band, or the steep rock face observed in the intertidal and shallow subtidal transitioning to a boulder and silt substrate. Depths of the submerged intertidal bands are estimates accurate to 0.5 m elevation, and distance along the metered line was also estimated.





**Figure 2. Transect pattern at Woodfibre site**

Figure 3 depicts the dive transect profiles prior to correction for Chart Datum. The graph is derived from the southernmost and northernmost SCUBA transects where divers recorded depth and distance along a transect line placed on the benthos and deployed to gauge depth not exceeding 18 m (before correction of depth to chart datum).



**Figure 3. Subtidal transect profiles; north and south extremes**

### 3.1 Foreshore Zone

The foreshore encompasses that region adjacent to the study area that exists above the High High Water Mark (HHWM) or highest tide line. The area assessed covers a linear distance of approximately 100 m running along the northwestern shoreline of Howe Sound.



**Figure 4. View looking southwest toward the survey site**

Near vertical bedrock outcrops comprise the southern and northern foreshore zones of the study area. Vegetation cover in these zones is sparse, consisting of small, sporadic coniferous individuals and the occasional alder sapling. A small bay situated mid-site interrupts the dominant bedrock and presents some boulders and fractured rock through a moderate gradient (5 to 10%) foreshore, supporting sedge and grass species. This foreshore zone represents a very small strip at high tide and provides little habitat for terrestrial species and poor substrate for local infauna.

Figure 5 shows a view of the backshore and foreshore areas of the small bay situated central to the study area. A small ephemeral creek cascades down from the southern corner of this bay and percolates through coarse sediments to its confluence in Howe Sound. Coarse sediment textures in the stream bed and very steep channel gradient upstream of the intertidal zone preclude habitat use or access by anadromous species.





**Figure 5. View of the southwestern shoreline of the small bay in the study area footprint; note the small ephemeral creek in the photo centre**

### **3.2 Intertidal Zone**

The intertidal zone represents that area between the Low Low Water Mark (LLWM) or 'zero' tide, also referred to Chart Datum (CD), and the HHWM as discussed in Section 3.1. The physical habitat characteristics of the intertidal zone through the study area are reflective of the shoreline above high tide; specifically, bedrock and boulder. Those areas of exposed intertidal are best demonstrated along the vertical bedrock sections to the immediate north and south of the central embayment referenced in Section 3.1. The predominantly bedrock and boulder substrate extends approximately 2 m below CD.

#### **3.2.1 Intertidal Biological Zonation**

Within this area, a band of green filamentous algae, likely northern sea hair (*Urospora neglecta*), is prevalent, with an 80% coverage between 3.8 m and 3.0 m above CD. This band is visible in Figures 4 and 5. A band of rockweed, *Fucus distichus*, extends from 3.0 m down to 1.5 m above CD. A mixed band of bay mussels (*Mytilus edulis*) and barnacles (*Balanus* sp.) extends from immediately below the rockweed band at 1.5 m above CD to 0.2 m above CD. Red filamentous algae and the brown algae sugar kelp (*Saccharina latissimi*) were present at or near 0 CD with their depth extending into the subtidal zone.





**Figure 6. Northern portion of the small embayment displaying clear biota zonation and bio-bands through the intertidal area**

### **3.3 Subtidal Zone**

The subtidal zone is described as that area of the marine environment situated solely below Chart Datum. Substrates characterizing this zone include a mixed boulder cobble silt substrate to a depth of approximately 5 m below CD, where silt and fines with some woodwaste transition to dominate the substrate textures.

Red filamentous algae was initially noted at or near CD and extended to a depth of 2 m below CD. At this depth the substrate transitions from 50% cobble and boulder cover to 100% silt and may be limiting to the lowest elevation of red filamentous algae.

The brown algae, sugar kelp (*Saccharina latissimi*), was first noted at or near CD and extended to a depth of 5 m. At this depth, substrate texture may also limit the lowest elevation of this brown algae as it requires coarser sediments as anchoring points.

Sea whips (*Halipteris willeomoesi*) were encountered during the second deep leg of the first SCUBA dive (blue transect in Figure 2) 14 m below CD. This is considered to be above the shallow range extent for this species, reported as 36 m to 1,950 m depth (Alaska Fisheries Science Center, nd).

Woodwaste was observed more commonly toward the middle and northern subtidal areas through the survey site. Percent coverage ranged between none visible to 1 m<sup>2</sup> areas of up to 60% coverage. Collectively, the study area demonstrated less than 5% of total area covered with visible woodwaste. Silt was covering most of the woodwaste encountered during the surveys.

Some anthropogenic debris was noted during the surveys, including a rusted item (possibly a log raft dog pin), a 0.5 m long piece of angle iron, and a 220 litre oil drum.



**Figure 7. A small area with high woodwaste coverage; central portion of study area**



**Figure 8. Metal debris observed during the deeper sections of the subtidal transects**

Divers recorded biological taxa during the transect dives. Observed biota are listed below and arranged by group.

### 3.3.1 Fish

Fish common to Howe Sound include anadromous salmonids and marine species. Among the anadromous salmonids, Chum (*Oncorhynchus keta*), Pink (*O. gorbuscha*), Sockeye (*O. nerka*), Coho (*O. kisutch*), Chinook (*O. tshawytscha*), Cutthroat Trout (*O. clarkii*), and Rainbow Trout, (*O. mykiss*) are known to utilize the foreshore of Howe Sound. Dolly Varden Char (*Salvelinus malma*) is also known to upper Howe Sound and penetrates into both the Squamish and Cheakamus rivers. Marine species observed at or near the study site are shown in Table 1.

**Table 1. Marine fish species observed in the study area**

Common Name	Scientific Name
<b>Perch</b>	
Pile Perch	<i>Damalichthys vacca</i>
Striped Perch	<i>Embiotocca lateralis</i>
Shiner Perch	<i>Cymatogaster aggregata</i>
<b>Sculpins</b>	
Buffalo Sculpin	<i>Enophrys bison</i>
Tidepool Sculpin	<i>Oligocottus maculosus</i>
Prickly Sculpin	<i>Cottus asper</i>
<b>Greenlings</b>	
Kelp Greenling	<i>Hexagrammos decagrammus</i>
Whitespotted Greenling	<i>Hexagrammos stelleri</i>
<b>Other</b>	
Copper Rockfish	<i>Sebastes caurinus</i>
Snake Prickleback	<i>Lumpenus sagitta</i>
Bay Goby	<i>Lepidogobius lepidus</i>
Wrymouth	<i>Cryptacanthodes</i> spp.

### 3.3.2 Marine Plants and Algae

Marine plants and algae observed at or near the study site are shown in Table 2.

**Table 2. Marine plants and algae observed in the study area**

Common Name	Scientific Name	Percent Cover
Northern sea hair	<i>Urospora neglecta</i>	80
Sea lettuce, complex	<i>Ulva</i> sp.	1
Rockweed	<i>Fucus distichus</i>	40
Sugar kelp	<i>Saccharina latissima</i>	20
Red filamentous algae	species unidentified.	5

### 3.3.3 Invertebrates

Invertebrate species observed at or near the study site are shown in Table 3.

**Table 3. Invertebrates observed in the study area**

Common Name	Scientific Name	Relative Abundance
Pacific sea peach	<i>Halocynthia aurantium</i>	few
Leather sea star	<i>Dermasterias imbricata</i>	few
Mottled sea star	<i>Evasterias Troschellii</i>	many
Green urchin	<i>Strongylocentrotus droebachiensis</i>	many
Dungeness crab	<i>Metacaurinus magister</i>	few
Barnacles, various species		abundant
Cockle shell, shells	<i>Clinocardium</i> sp.	many
Bay mussel, complex	<i>Mytilus edulis</i>	many
Chiton	<i>Polyplacophora</i>	few
Sea whip	<i>Halipteris willeomoesi</i>	many
Plumose anemone	<i>Metridium farcimen</i>	many



## 4.0 Discussion

The productivity of the marine community at the proposed site of the log dump reactivation is constrained by the influences of the Squamish River at the head of the inlet. The fresh water in the upper layers may have a negative influence on the potential colonization and establishment of less tolerant marine organisms, and the opacity noted through the water column may also contribute to the low density of macro and encrusting algae noted during the dives.

The presence of submerged patchy and intermittent woodwaste overlain by silt deposition suggests log booming and storage impacts remain; however, this was observed at depths where marine communities are typically less diverse than what is common through shallower and intertidal areas. Woodwaste, other than the expected small woody debris recruited naturally into the system, was not noted through the intertidal bands. As the marine habitat and diversity is not considered sensitive or critical at the site of the proposed log storage, alternate site locations needn't be recommended.

As with any proposed work in or around water, site designs and construction plans must consider potential impacts. Access road construction and upland clearing and brushing will be required, and pose the potential for erosion and migration of significant sediment volumes into Howe Sound without comprehensive mitigation measures in place. Generally, as the site lies within a zone of high precipitation, drainage through the upland construction zone will require diligent planning and management. The facility should also take into account that, although not diverse, the marine community at the site is susceptible to stressors associated with booming and storage operations. The log dump should be designed to ensure the avoidance of log grounding during the off-loading process and storage should be restricted to deeper waters where benthic primary productivity is shown to be absent or minimal. A detailed environmental management plan (EMP) is recommended to support the required permits and authorizations required to develop the site.

## 5.0 References

Alaska Fisheries Science Center, National Oceanic and Atmospheric Association. Sea Pens. [http://www.afsc.noaa.gov/groundfish/HAPC/SeaPens\\_synopsis.htm](http://www.afsc.noaa.gov/groundfish/HAPC/SeaPens_synopsis.htm)

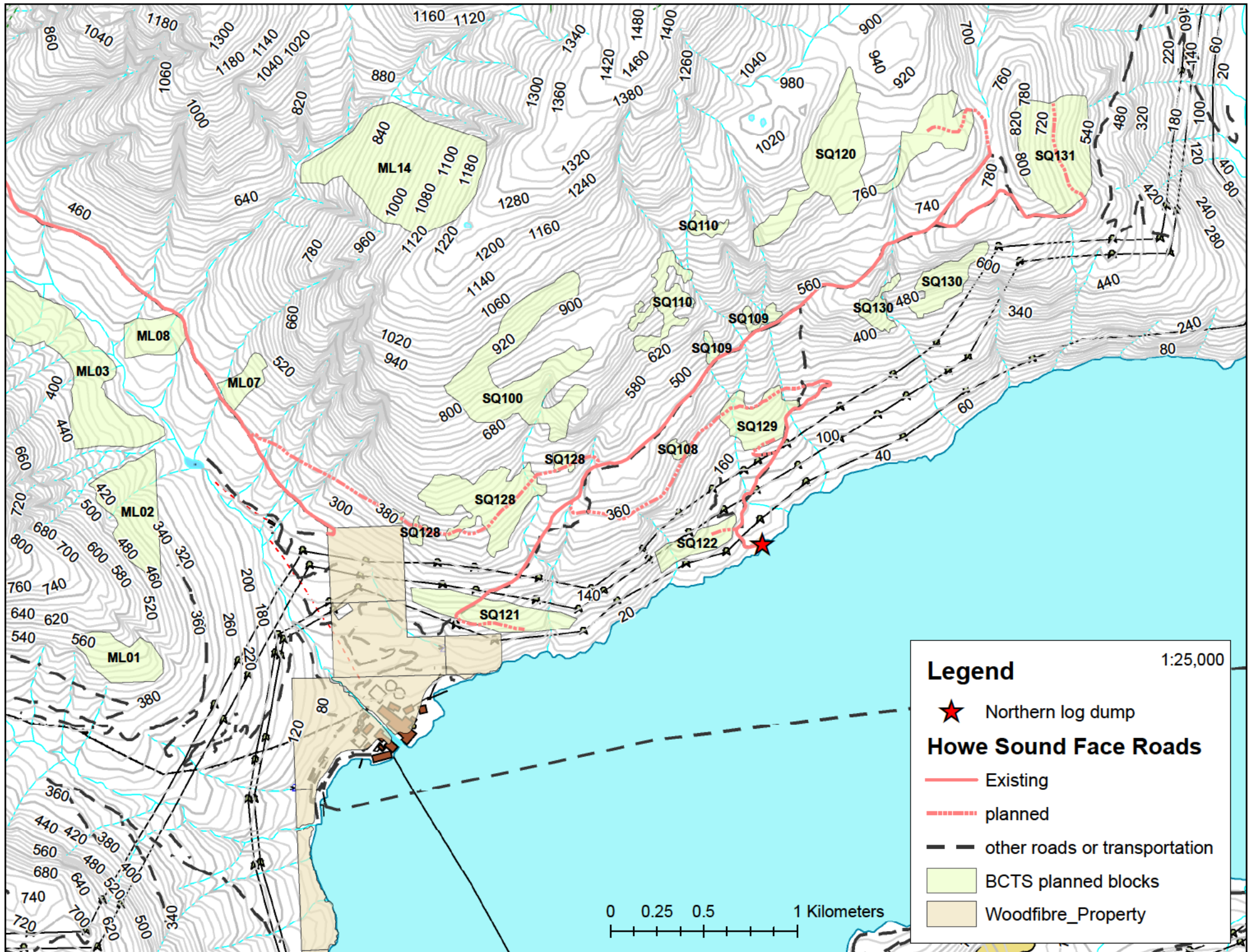
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Lindenberg, Mandy R. and Sandra C. Lindstrom. 2010. Field Guide to Seaweeds of Alaska. Fairbanks Alaska: Alaska Sea Grant College Program, University of Alaska Fairbanks..

McDaniel, Neil. Personal Communication; September 24, 2015, email: [neil.mcd@telus.net](mailto:neil.mcd@telus.net)

Personal observation made during a beach seine study of juvenile Chinook utilization of Howe Sound between 2011 and 2013, see <http://www.squamishwatershed.com/chinook--research-studies.html>





File: 18046-40/FSP\_DSQ

May 12, 2021

Sarah McJannet, Senior Planner  
District of Squamish  
PO Box 310  
Squamish, BC V8B 0A3

Dear Ms McJannet:

**Re: District of Squamish Marine Zoning Bylaw 2771 2020 - Second Reading review May 18 2021**

Further to our meeting on April 30, 2021 and your subsequent summary email on May 7, 2021 the District of Squamish (DOS) planning department will be recommending that the proposed marine zone bylaw amendment maintain the M1 zoning in the area of BC Timber Sales (BCTS) proposed Northern Log Dump (log dump) Site north of the WLNG facility in the area of Woodfibre\Mill Creek and additionally will be recommending that BCTS be required to obtain I-3 Industrial site zoning and Development Permits for the upland portion of the facility BCTS is proposing. Upon further review of this information BCTS would like to summarize our collective thoughts and position regarding the importance of allowing this dump site to proceed as follows:

- The primary goal of BCTS is to provide credible representative price and cost benchmark data for the Market Pricing System (Stumpage) through auctions of timber harvested from public land in British Columbia. BCTS' objectives in supporting this goal are:
  - sell the full BCTS apportionment over the business cycle, consistent with safe practices, sustainable forest management, and reconciliation with Indigenous peoples;
  - generate direct net revenue and indirect revenue for the Province over the business cycle
- Canada is currently in a dispute with USA regarding a Softwood Lumber Trade Agreement. The last agreement expired in October of 2015 and in November of 2017 a 20-25% tariff was applied to BC lumber products entering the USA. The tariff in combination with a poor lumber market resulted in the shutdown of a significant number of manufacturing and harvesting operations throughout BC in 2019.

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- A key component of the previous Softwood Lumber Agreement and negotiations for a new agreement was that provinces had to implement a timber auction process similar to what occurs on USA federal lands. Results of the provincial auctioning process is audited annually by the USA Trade Department to ensure it meets the criteria set out in the Softwood Lumber Trade Agreement.
- To achieve a sufficient volume of auctioned timber, the BC provincial government is required to auction at least 20% of the total annual provincial harvest.
- The data acquired through the timber auctions is utilized in the provincial Market Pricing System (MPS) to determine stumpage rates for private forest industry tenure holders on public land who are not subject to the auctioning process.
- The province requires 20% of the annual provincial harvest to be auctioned to ensure it maintains the statistical integrity of the data it collects for the US Trade Department.
- The maintenance of the auctioned timber program is both a multi-provincial and federal trade issue. The Canadian Forest Products sector is a multi-billion-dollar industry that supports significant employment and a primary contributor to both the provincial and federal Gross Domestic Product (GDP)
- Currently the tariffs are costing both industry and government hundreds of millions of dollars in revenue and significantly impacting the viability of the industry throughout Canada particularly during down market cycles.
- The Woodfibre\Mill Creek chart forms part of the core operating area for BCTS's business operations in the Squamish area. The annual allowable cut (m3 /year of timber) for this area is approximately 10,000 m3 which represents approximately 10% of BCTS operations within the Sea to Sky Natural Resource District and provides a notable contribution to BCTS's annual harvesting program to demonstrate to the US Trade Department that it is achieving 20% of the annual provincial harvest.
- The timber harvesting land base within the Woodfibre / Mill Creek area is greatly reduced through protection measures for wildlife, old growth, visual quality and cultural sites and other important values. The 10,000m3 estimated annual average harvest rate factors in these protection measures. This level of reduction to the timber harvest land base occurs throughout the Sea to Sky District and there are no unallocated areas of Provincial Forest in which to operate, meaning it is not a simple solution to go somewhere else to make up this volume.
- Access to this Woodfibre\Mill Creek timber is 100% reliant on water transportation on Howe Sound. The historic forestry access to this area was through the loading facilities on the old pulp mill site, however with the construction of the Woodfibre LNG facility this is no longer possible.
- Under the July 2018 Marine Action Strategy (MAT) developed in collaboration with the DOS Focus Area 3: Marine Economy, **discusses the importance of Local jobs and business opportunities as an important part of a diverse and sustainable economy to improve the quality of life for all.** Focus Area 3 goes on to further state the marine economy opportunities of Squamish, require careful planning and **preservation of critical marine-based employment lands/access, promoting business retention,** growth and innovation as well as a focus on skill development and labour needs.
- Further on in MAT Table 4: Focus Area 3 - Marine Economy, it states in Section 3.1.1 to identify land and water access needs for all marine users and to **secure and coordinate public access / rights of ways with current and future landowners/ interests.** Under Table 5: Focus Area 4 - Marine Gateway, it talks to addressing water-dependent user

infrastructure, amenity, services, and facility needs and **identify and secure locations and investment for current and future marine infrastructure**, facilities and amenities opportunities through (re) development plans and zoning.

- Under the Sea to Sky Land and Resource Management Plan (LRMP) completed in 2008 the Woodfibre\Mill Creek operating areas were identified as a “working forest” and contribute to the Timber Harvesting Land Base (THLB) for the Sea to Sky Resource District. With this designation it was the expectation that economically viable harvesting activities would continue in this area that would contribute to the provincial harvest.
- The District Manager Sea to Sky Resource District supports the continuance of economically viable harvesting in the Woodfibre\Mill Creek operating area and fully supports the business objectives and mandates of the BCTS program.
- With the historic access through the WLNG property no longer available, it is imperative that BCTS utilize alternative log handling sites (log dumps). Two alternative sites have been identified:
  - The first site (southern log dump) is south of the LNG facility within proposed marine designation I-3. This is an existing site last permitted by Black Mount Logging and will be used to access timber south of Mill Creek. Our interpretation of the marine zoning is that our operations will be consistent with zone I-3.
  - The second site (northern log dump) will be used to access timber located in Mill Creek and north of it. This is a historic log dump, but it is not clear when it was last used for this purpose. This site is identified in the proposed marine zoning as M-1 (Marine Navigation) which does not allow for water-based log handling or log storage and are not permitted uses within this designation. BCTS is concerned that our use of this site will conflict with this zoning, and we request this site be changed in your zoning regulations to “M4 – Marine Log Storage”.
- The northern log dump is required to access timber along Mill Creek and north of it; there is no other viable road option for accessing this area.
- The upland portion of the site will not be used for sorting or storage of logs and will only be used to transfer logs from land to ocean with temporary short-term storage occurring offshore in booming grounds then transported in log booms to a dryland sorting or manufacturing facility elsewhere.
- The site will be small and only be periodically and infrequently used for moving logs during times there is an active Timber Sale Licence unlike the large scale, high volume commercial dryland sorting facilities that occur at Watts Point which operate 5-6 days a week year-round. We anticipate no more than one sale per year on average in the first three years of operation, and after that, sales will be less frequent.
- In both your February 22, 2021, *BCTS – Operating Plan 26 Comments* and subsequent May 7, 2021, email rational on maintaining the proposed marine use designation you speak to environmental site conditions related to existing marine habitat conditions (geological substrates, drainage courses), marine life and both historical and potential impacts from marine log handling operations\facilities.
- To address these concerns BCTS has undertaken considerable investment in planning, engineering and environmental assessments for this site in 2016 - 2021 to assist in preparing our applications for constructing and utilizing this site. The habitat assessment from Triton Environmental Consultants and the Onsite Engineering Ltd “*Woodfibre Log Dump Reactivation*” was forwarded to you in our April 21, 2021, response letter related to your February 22, 2021, *BCTS – Operating Plan 26 Comments* summary.

- As part of BCTS's log dump application to the various responsible federal\provincial government agencies BCTS's application submission will undergo a vigorous environmental review to determine if the assessment work and associated mitigation measures will adequately address existing marine habitat conditions (geological substrates, drainage courses), marine life concerns and both past and potential impacts from marine log handling operations\facilities.
- It has been BCTS experience in log dumping operations that the mitigation measures as proposed in our environmental and engineering assessments have been successful in minimizing detrimental impacts to foreshore and intertidal marine habitats under similar siting conditions that were outside the best practice guidelines for siting log dump facilities. Additional opportunities are available to provide compensatory habitat to offset potential detrimental impacts from log handling activities where it is demonstrated that there has been a negative impact to marine habitat or marine productivity.
- Contrary to your comment that consultation has not been initiated, both log dump sites were consulted as part of the BCTS Operating Plan #26, which was circulated to all potentially affected First Nations (FN) and stakeholders including the District of Squamish on December 16, 2020. Upon closure of the review and comment period on March 1, 2021 BCTS did not receive any concerns or comments regarding the log dump or harvesting in this area of Howe Sound from First Nations or any stakeholder other than the District of Squamish. The northern Howe Sound log dump site was also consulted with the District of Squamish and First Nations under Operating Plan #21 from December 16, 2016 to February 28, 2017. At that time, no comments were received from First Nations and the District of Squamish, and only one comment was received from a citizen concerned about Herring habitat.
- While the consultation processes we have undertaken to date meet the requirements for consultation under the First Nation agreements that are in place, BCTS intends to undertake more detailed consultation with all parties as part of the application process for Provincial and Federal permits and licences. These applications are expected to be submitted by July, 2021.
- BCTS is committed to the adoption and implementation of the principles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). BCTS is committed to increasing business partnerships with First Nations' communities, providing better opportunities for collaboration with First Nations during our timber development planning processes and strengthening meaningful, lasting relationships with First Nations that are built on mutual respect, recognition and understanding.

The Woodfibre\Mill Creek operating area is a key and core component of our Squamish business operations and critical to us in meeting data collection objectives related to determining provincial stumpage rates and meeting US Trade Department criteria in the negotiation of a new Softwood Lumber Agreement. Further BCTS public timber sales provide opportunities for local logging contractors to generate revenue\employment and local wood products manufactures a primary or incremental log supply to meet their wood products manufacturing needs. Finally, BCTS provides employment opportunities for local community members and general revenue for the provincial government that can provide funding for local programing such as schools, policing, healthcare and social programs.

As a compromise to both of our positions we ask that at minimum, DOS defer the marine zone designation in the immediate area around the northern log dump to provide BCTS the opportunity to go through the provincial/federal application process. By doing this, the proposed mitigation measures for this site can be fully evaluated and if they are determined to be adequate and accepted by the provincial/federal agencies, it will allow us to forgo the step of amending the marine use designation from M1 to M4 and upland zoning from RE to I-3 and the associated incremental time and paperwork to do so.

Additionally, BCTS wishes to highlight the M4 and I-3 Industrial zoning designations are designed for large scale high volume and daily use operations which do not fit the use proposed by BCTS. BCTS recommends the District of Squamish should consider adding zoning categories that better reflect the intermittent low volume, low impact use common to the type of facility BCTS licence holders require.

In closing BCTS appreciates the dialogue and feedback received to date on this important discussion and wishes to work with the planning department and the DOS to come to an amicable resolution that meets the needs of all parties. We look forward to continuing to work with you and your response to our proposal.

Please feel free to contact me by phone at (604) 845-6746 or by email at [peter.scharf@gov.bc.ca](mailto:peter.scharf@gov.bc.ca) for further discussion.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Peter Scharf', is written over a faint, light blue circular stamp or watermark.

Peter Scharf, Operations Manager  
BC Timber Sales  
Chinook Business Area

Cc: Stacey Gould, Timber Sales Manager, BCTS Chinook Business Area, [sgould@gov.bc.ca](mailto:sgould@gov.bc.ca)  
Dave Southam , District Manager, Sea to Sky Natural Resource District  
Tom Johnson, Woodlands Manager, BCTS Chinook Business Area  
Peter Barss, Planning Team Lead, BCTS Chinook Business Area  
Stephan Bernhard, Planning Forester, BCTS Chinook Business Area





P.O. Box 1704  
Squamish B.C.  
V8B 0B2

May 3, 2021

District of Squamish Council  
PO Box 310, Squamish, BC, V8B 0A3

#### **RE. PROPOSED P4 ZONING FOR UPPER MAMQUAM BLIND CHANNEL**

Dear Mayor and Council,

The Sea to Sky Forestry Centre Society is a leaseholder to land adjacent to Rose Park and the Upper Mamquam Blind Channel. We would like to take this opportunity to comment on the proposed P4 zoning change to the Upper Mamquam Blind Channel.

Two municipal planning processes have addressed land use planning in the Upper Blind Channel.

In 1996-97, a Planning Department led process involving area residents and community stakeholders recommended the upper portion of the Blind Channel become a “people place” park, and “not a pure environmental sanctuary vision”. This was the overwhelming preference of the well-attended public open house held in June 1996. This planning exercise also resulted in the District’s endorsement of schemes to introduce enhanced water flow through the area – the “Mamquam Reunion”.

In 2012, Council endorsed the Upper Mamquam Blind Channel Land Use and Policy Statement, which similarly advocated a “Recreation-Oriented” Guiding Principle to be applied to the area, with a “Recreation Oriented Focal Point” at the top of the channel at Loggers Lane.

The proposed P4 zoning does not take into account the recommended vision and guiding principles of these earlier planning processes.

Also in 2012, Council endorsed the Parks and Recreation Master Plan, which recommended attention to improved waterfront access and storage for kayaks and canoes, a “blueway” status for the Upper Blind Channel, and a put-in place for paddlers at Loggers Lane across from the Adventure Centre. (See the attached Appendix E: Waterfront Access and Dikes Map.)

The Squamish Paddling Club recognizes the recreational potential of the upper reaches of the Mamquam Blind Channel. A “scenic and sheltered 3.5 km loop” from their downtown boathouse to the Adventure Centre and back on a 3m + tide is featured on the club website. This route is accessible at even lower tides.

The P4 zoning would not allow paddling use and public canoe and kayak put-in/ take-out facilities in the Upper Blind Channel.

“Increase year round utilization of our multipurpose space assets and public spaces (parks, public squares) by 2022” is identified as a goal by Squamish Council in its Strategic Plan 2018-2022.

The Sea to Sky Forestry Centre is concerned P4 zoning will severely restrict future recreational opportunities in the park for tourists and locals alike. We also have concerns the new zoning will affect future programming goals of the Forestry Centre.

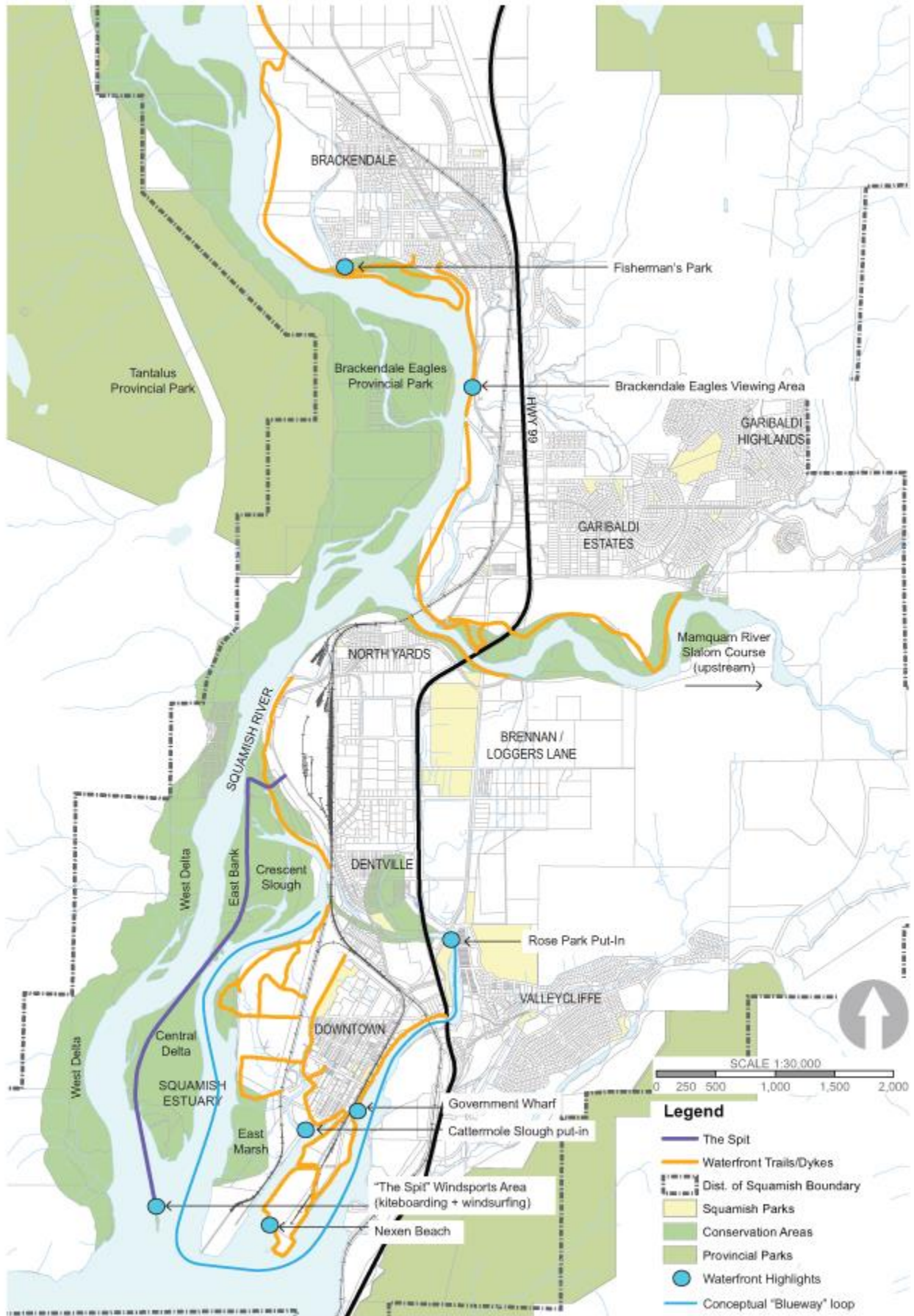
We would also like to express a general concern the public is slowly losing access to our waterfront and this new proposed zoning only heightens our concern.

Sincerely,



Donna Wall  
President  
Sea to Sky Forestry Centre Society

Cc:  
Tourism Squamish  
Squamish Paddling Club  
Squamish Chamber of Commerce





May 4, 2021

**Attention:** Sarah McJannet, RPP, MCIP, Senior Planner  
**District of Squamish**  
37955 Second Avenue  
P.O. Box 310  
Squamish, B.C. V8B 0A3  
VIA EMAIL

Dear Ms. McJannet

**Reference:** Proposed District of Squamish Marine Zoning Bylaw 2771

Woodfibre LNG Limited (Woodfibre LNG) appreciates the notification from the District of Squamish (March 19, 2021) and discussion regarding the development of the proposed Squamish Marine Zoning: Bylaw 2771. As one of the future leading businesses and employers in the Squamish area, marine access and public safety is of interest to both our Company and our employees.

On review of the proposed bylaw internally and with our local contractors, we note the following:

Woodfibre Site Zoning:

- It's acknowledged in bylaw development that tenure and legal boundaries were used to inform the zoning boundaries, however, we request a correction to the boundaries associated with the I-3 / M1 zoning on the eastern portion of the Woodfibre Site (formerly Swiyat).
- As part of its project environmental assessment approval process, Woodfibre LNG was allocated an area to construct and operate its proposed LNG Export Facility, called a "Certified Project Area" or "CPA". The affected portion of the CPA boundary is highlighted in red within figure 1 below.
- Woodfibre LNG has an obligation, as mandated by the BC Government's Oil and Gas Commission, to design its LNG facility within the CPA with the safety of the public being of utmost importance. The current design is aligned with that goal, but contemplates and utilizes the full CPA area.
- Woodfibre LNG respectfully requests the I-3 zoning align with the boundaries of the CPA, as defined by BC Environmental Assessment Certificate #15-02 and would further invite the Municipality give consideration to creating a buffer zone outside the CPA in order to further protect the safety of the public.
- Finally, Woodfibre LNG requests further consideration be given to other industrial users of the I-3 zoning proximal to the Woodfibre site e.g., permitted uses as described in M4. The Woodfibre Site is a brownfield site with over 100 years of heavy industrial use related to the forestry sector. Pursuant to our environmental assessment approvals, Woodfibre LNG has committed to working with forest tenure holders regarding ongoing access and to developing an access management plan.

Darrell Bay Zoning:

- The changes to the zoning around Darrell Bay as proposed are noted, including the extension of M5 into the upland areas, aligning more with District Lots covered by Ministerial Order 127 and affirming the purpose of Darrell Bay for marine transportation facilities. We look forward to further definition and discussion with the District of Squamish and Ministry of Transportation and Infrastructure regarding Darrell Bay.

M-1 Definition:



May 4, 2021

Sarah McJannet, RPP, MCIP, Senior Planner

**Reference:** Woodfibre LNG Project Decision Statement Issued Under Section 54 of the Canadian Environmental Assessment Act, 2012 — Decision Statement Conditions

- The definition of the M1 zone may require additional consideration or division to recognize respective primary uses of navigation and recreation. The proposed M1 zoning definition mixes recreation and navigation. Given the proximity of the M1 zone relative to the more industrially zoned areas e.g., M5, M4 and I-3 and geographic constraints e.g., Mamquam Blind Channel consideration of recreation area/navigation areas may help to further promote marine safety. It's acknowledged marine areas are multi-jurisdictional with respect to marine navigation.

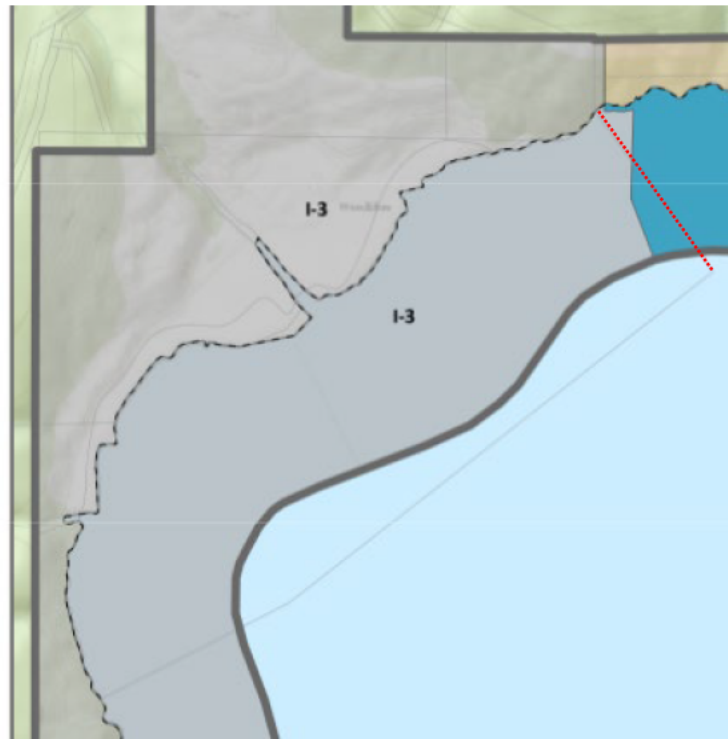


Fig 1: Extract from BYL2771\_Map\_Schedule\_A\_Sheet\_6.pdf. Dashed red line indicates the eastern boundary of the Woodfibre LNG CPA.

The multi-year review and effort put into the Squamish Marine Action Strategy and this amendment to the District zoning bylaw is acknowledged. We look forward to ongoing zoning discussions with the District of Squamish with respect to I-3 zoning.

Respectfully,

**Woodfibre LNG Limited**

Nigel Fisher  
Senior Regulatory Manager



District of Squamish  
PO Box 310  
Squamish, BC, V8B 0A3

May 12, 2021

**Re: Squamish Marine Rezoning**

Dear Mayor and Council,

The Squamish Chamber of Commerce is the oldest and largest business organization in the Squamish community, representing businesses across all sectors, including transportation, tourism, forestry and other marine related businesses. We are dedicated to enhancing the quality of life in Squamish by actively supporting business, economic growth and economic diversification.

On behalf of the Squamish Chamber, I would like to thank staff at the District of Squamish for taking time to explain the proposed marine rezoning and answer our questions. Marine rezoning is clearly a complex initiative, impacting our businesses, residents, visitors and natural habitat. As a waterfront community, Squamish is in a crucial period, with huge opportunities to improve access to the water, whether for recreation, to drive tourism or to support the many possibilities of marine related business.

It is our understanding that a number of studies are planned in the near future related to marine use, including an amenity needs and opportunities assessment. The Squamish Chamber is supportive of these studies and is keen to understand the community's needs and economic opportunities before implementing rezoning that may be irreversible or have unintended consequences. We would like to better understand the potential impact of rezoning on existing businesses that are core to our economy, such as the forestry industry (e.g. commercial transportation, log sorting and storage), and ensure that we do not create barriers for future possibilities.

It is our understanding that the upper blind channel presents many opportunities for recreation water access, especially with the tourism hub at the Adventure Centre, existing parking and established tourism operators, such as kayak / paddle board rentals. However, we understand that the proposed rezoning to P4 would not permit launch or navigation channels, and would be impossible to reverse, even if subsequent studies and assessments identified the economic potential of water access in the upper blind channel.

For many decades the blind channel has been an important economic zone, creating jobs and supporting local businesses. The area has supported the restoration of the Squamish Estuary through the relocation of businesses and is now one of the few remaining areas for water access. The blind channel is in need of dredging.



The District's Marine Action Strategy refers to the important "gateway" function of the Squamish harbour for tourism as well as commercial goods transport. The Squamish Chamber previously identified the need for dredging in the blind channel, which has not been significantly dredged since March 1986. Our correspondence from July 2018 shared our desire for immediate project planning and the need for an ongoing maintenance strategy. Marine safety, economic development and quality of life are affected by navigation channel constraints related to lack of dredging in the blind channel. It is our understanding that a dredging review is planned. It will be important to review the blind channel in its entirety.

The Squamish Chamber recognizes the potential of waterfront access for our local economy, the health and lifestyle of residents, and Squamish's unique destination positioning as a waterfront mountain town. We are keen to participate in any future engagement and supportive of immediate needs and opportunities assessments in advance of the marine rezoning. Increased consultation with marine businesses and the wider community would be beneficial to ensure rezoning does not negatively impact existing businesses, create barriers for growth or overlook any opportunities to levitate the future potential of our waterfront community.

Yours faithfully,

Louise Walker  
Executive Director,  
Squamish Chamber of Commerce

January 23, 2021

Re: Marine Planning

To Mayor and Council,

Our Squamish marine gateway and marine-based tourism development opportunities are very important to Tourism Squamish. This theme is addressed in our organization's strategic plan and in the Sea to Sky Destination Development Strategy.

We wish to take this opportunity to advise you of our interests in relation to the District initiatives: Marine Action Strategy implementation; Marine Zoning; and various infrastructure plans, including for the District's Xwu'nekw Park.

The Marine Action Strategy adopted by Council in 2016 outlines Action Items in four Focus Areas, including Marine Gateway and Marine Economy. We identify these as critically important to tourism development. A number of these Action Items are designated for "Short Term" implementation. Tourism Squamish believes these Action Items are priorities, and we are keen to encourage and be kept informed of attention to them.

There is broad recognition that Squamish is lacking in marine amenities. Experience (e.g., MV Britannia cruise vessel service) and current plans and activities on the part of local business illustrate their importance for tourism and our continued downtown revitalization. We have limited waterfront and adjacent uplands available, with many diverse constraints.

We have followed the District's current Marine Zoning initiative closely, and are concerned that the marine gateway infrastructure, amenity needs, and opportunities are not being fully considered and assessed through a stakeholder engagement process before marine zoning is fixed. It would be unfortunate if the zoning caused unintended consequences or unnecessary additional constraints to the marine gateway development options.

We are also concerned about the current planning for the Xwu'nekw Park waterfront. This District owned property is a rare opportunity, with a considerable marine gateway use history. We believe that multi-use opportunities may be underemphasized, with too heavy a focus on paddle craft uses.

In summary, Tourism Squamish supports the earliest possible implementation of the Marine Action Strategy. We believe that its proposed amenity needs assessments should be undertaken in concert with – or optimally, prior to – marine zoning.

Further, we wish to be consulted regarding ongoing infrastructure plans for the Xwu'nekw waterfront.





Finally, Tourism Squamish is keen to be kept up to date on any advisory committees or initiatives of the District of Squamish relating to our marine gateway so that we can offer the tourism stakeholder perspective to waterfront planning, ongoing.

Thank you for your consideration,  
Kind regards,

Lesley Weeks  
Executive Director, Tourism Squamish

## Carly Simmons

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**From:** Colin Smith [REDACTED]  
**Sent:** December 22, 2020 8:06 PM  
**To:** Council  
**Subject:** Request to Implement Marine Action Strategy

Dear madam or sir,

I hope this email finds you all well, and thank you in advance for your time and efforts! It is my sincere hope that the Squamish Council enacts the Marine Action Strategy. While the entirety of the Strategy warrants implementation, I would like to place special emphasis and attention on infrastructure (covered in Appendix 2). Specifically, Squamish is in dire need of functional and safe boat launch. I am a life-long boater (fishing, prawning, sailing), and the current launch is both highly inadequate and very dangerous at low tides (even mid-tides for tandem trailers!).

There is a huge contingent of boaters in Squamish, and this is a widely discussed and passionately advocated issue. Not only is the current launch on private land, but the launch ramp drops off after a certain point, making it unusable at over half of the tide-based sea levels. I have heard several stories of boats, trailers and vehicles being damaged at this launch. The closest alternative is Porteau Cove, which is actually quite far when under tow! Porteau is also essentially unusable during the summer weekends due to city business.

As our town grows, especially in lieu of Covid (with more people getting into boating and local-based activities), we desperately need a safe launch that can facilitate our needs.

Please let us know if there is more information we can provide, and/or if there is anything I can do personally to help this cause. I am happy and keen to help, however I can.

Thank you for reading, best wishes to the final days of 2020, and have a wonderful start to 2021!

Colin Smith  
[REDACTED]

--

Colin Smith, M.Sc., P.Geo.  
[REDACTED]

## Carly Simmons

---

**From:** [REDACTED]  
**Sent:** September 28, 2020 12:51 PM  
**To:** Sarah McLannet  
**Cc:** Council; Gary Buxton; Jonas Velaniskis  
**Subject:** Squamish Marine Zoning

<https://ca.surveygizmo.com/s3/50083345/Squamish-Marine-Zoning>

Good afternoon Sarah,  
Nite chatting last week regards the Marine Zoning.  
Unfortunately I did not get to complete the Survey and the deadline has now passed.  
However, I read the whole zoning package of various maps and documents and would like to congratulate you on a job well done on a difficult and complex assignment.  
I am in agreement with your conclusions and hope other land owners around the waterfront will also see the value and benefit in preserving our special waterfront areas.  
I'd be pleased to be involved in any continuing discussions on this subject.  
Sincerely,  
Douglas R Day  
Co-Owner  
1400 Vancouver Street lands  
[REDACTED]

Sent from my iPhone

## Carly Simmons

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**From:** website@squamish.ca  
**Sent:** March 22, 2021 3:01 PM  
**To:** Sarah McJannet  
**Subject:** Marine Zoning Comments

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

### Your name

Darryl Lapaire

### Your email

[REDACTED]

### Your Comments

Thank you for the opportunity to submit comments on this matter.

In reading the proposed changes I am encouraged by the obvious thought and effort that went into them, and the care given to the marine environment in particular.

However, I cannot help but be disappointed and discouraged by the lack of allowance for live aboard marine communities. The overall tone is one which seems to paint any person living full time on a vessel as less equal, and certainly less desirable.

While I whole heartedly support efforts to eliminate the impact that derelict vessels have on safe navigation and the environment, simply disallowing long term mooring or live aboards does not address the problem. If someone leaves a vessel as derelict, I suspect being in contravention of zoning is the least of their concerns.

With increasing property prices and no corresponding increase in earnings it is becoming increasingly difficult for young people and families to settle in BC communities. Personally, I would like to see Squamish embrace the full spectrum of affordable housing opportunities for their communities and support live aboard sailors both in marinas as well as at anchor or on moorings. A vibrant, diverse population both in traditional housing and non-traditional can only serve to enhance the community as a whole.

Thank you again for the opportunity to provide feedback.

Darryl Lapaire



## Carly Simmons

---

**From:** Barry Warren [REDACTED]  
**Sent:** July 27, 2020 5:14 PM  
**To:** Sarah McJannet; Matt Gunn  
**Cc:** Paul Fenske; Bahadur Karim (bahadur@middlehaven.com)  
**Subject:** District of Squamish - Input on Marine Zoning Bylaw Update

Hi Sarah and Matt,

Thanks for hosting the Marine Zoning Focus group last month and giving us the opportunity to provide input on the bylaw update process. As mentioned during our discussion, we believe it is important to include appropriate regulations on noise, lighting and operating hours in the marine zones in order to minimize the impact on adjacent tourist commercial zones. We're particularly concerned with the M4-Zoned Marine Log Storage area located just a few hundred metres northeast of the Klahanie campground site and the impact that it may have on the planned Klahanie Resort development.

This site is the location of the proposed Klahanie Resort, a luxury hotel, spa and campsite overlooking the northern end of Howe Sound. Regulating log storage in the M4 Zone to prevent nuisance lighting, noise and hours of operation is critical to the success of the resort, which is expected to provide 80-100 new jobs and bring valuable economic inputs to the District of Squamish. Nuisance lighting, noise and hours of operation from activities associated with log storage may impact other current or future recreational users of the waterfront and it's important to seize the opportunity of the bylaw update to ensure protective regulations are implemented.

We recommend that the M4 Zone include regulations restricting log storage access to daylight hours (one half hour after sunrise until one half hour before sunset), as described in the BC Log Salvage Regulation for the Vancouver Log Salvage District. We also recommend including regulations on noise based on existing construction noise regulations, such as the District of Squamish's own Noise Regulation bylaw, which prohibits construction noise before 7 am or after 8 pm on weekdays, before 8 am or after 7 pm on Saturdays, and before 10 am after 4 pm on Sundays and holidays. The Noise Control Best Practices Guide prepared by the BC Oil & Gas Commission similarly recommends restricting construction to daylight hours, defined as between 7 am and 10 pm. Implementing regulations such as these in the 2020 Marine Zoning Bylaw update will effectively limit nuisance noise and lighting from spoiling the natural serenity of the waterfront for recreational users.

Thanks for your consideration. Best regards,

**Barry Warren**  
Design Coordinator

**EKISTICS**  
1925 Main Street  
Vancouver BC  
V5T 3C1 Canada  
T +1.604.739.7526  
F +1.604.739.7532  
[REDACTED]

[ekistics.com](http://ekistics.com)

### COVID19 Response | EKISTICS

In response to recommendations from the Canadian health agencies regarding the coronavirus outbreak, EKISTICS is moving to a remote work model, taking precautionary measures to reduce the risk of spreading COVID-19 while continuing to collaborate with our Clients and deliver project work. Effective immediately:

- All employees are set up to work remotely, and are reachable by email and telephone;
- Meetings will take place via telephone or web conference. Project teams will be in contact directly with access information.
- All travel is postponed.

We endeavor to exercise the utmost caution while continuing to be open for business. We are closely monitoring communications from Health Canada, Vancouver Coastal Health, and BC Center for Disease Control and will provide regular updates to our valued Clients and Consultants via our website.

If you have any questions or concerns, please contact the Principal in charge of your project. Thank you for your understanding. As has been repeated during times of great uncertainty, we will strive to "*keep calm and carry on*".

This transmission is only intended for the use of the individual or entity to whom it is addressed and may contain information that is privileged and confidential. The dissemination, distribution or copying of any part of this communication is strictly prohibited. Should this transmission be received in error, please notify us immediately. Thank you.

## Carly Simmons

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**From:** Barrie Mowatt [REDACTED]  
**Sent:** September 26, 2020 11:24 AM  
**To:** John Harvey; Sarah McJannet  
**Cc:** Natalia Lebedinskaia; Ammar Mahimwalla; Sammi Wei  
**Subject:** Re: UMBC Marine Zoning

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

John & Sarah

Congrats on having reached this milestone.

Thank you John for your continued support.

I do hope the Biennale & I personally can become more involved in the support & nurturance of the ongoing Squamish trails expansion via collaborative cultural programming as we move forward in the creation of an International Artist Residency Programme & facilities in the DOS.

Best

Barrie Mowatt  
Founder/President/Artistic Director  
Vancouver Biennale

PS : Just nearing completion of a 10 week road trip thru Northern BC, Alberta & the YUKON . The Yukon is as their slogan says LARGER THAN LIFE as is B'C's , SUPER NATURAL BC ! Spectacular country with an abundance of trails, hikes etal

[REDACTED]  
W: [www.vancouverbiennale.com](http://www.vancouverbiennale.com)

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**From:** John Harvey [REDACTED]  
**Sent:** Saturday, September 26, 2020 11:58:13 AM  
**To:** Sarah McJannet <[smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)>  
**Cc:** Barrie Mowatt [REDACTED]  
**Subject:** UMBC Marine Zoning

hello Sarah

I'm proud to have been instrumental for many years writing SBP committee wishes demanding DOS purchase the Drenka lands! Our moving forward with trail connectedness to HH & Valleycliffe, a bridge over the Blind Channel and a trail loop with the Adventure Center is fantastic progress. The Upper Mamquam Blind Channel is another jewel in Squamish's Crown.

I'm happy to hear about Red Bridge's Kayak Launch - I assume it's off their Boardwalk, close to Hwy bridge where low-tide accessibility is

managable ...

The idea that the central Spit become an island refuge was first suggested to me by the Beckhams. I know the Conservation people agree to any refuge without dogs. STS agrees. SAS agrees. This enhances environmental values in UMBC.

The pedestrian bridge is best placed with commuting traffic in mind, coming directly off trail beside the Beckham property and going across Blind Channel to Rose Park (although the longer span costs more). It's crucial that canoes, kayaks and paddle boards have access underneath pedestrian bridge where the creek exists (at lowest water). Low-tide water access to Free & Easy Crag should also be considered. There is already a floating dock.

Access to the Adventure Center from the water cannot be done in low tide conditions. This remains a problem, unless there is potential for some water-course dredging, done at the same time as creating the 'Spit' refuge or perhaps at same time as bridge construction ...

I'm sure you've seen the SBP Carpark Crag developments. This addition to the Smoke Bluffs has huge value. There are a number of rock walls adjacent to the Blind Channel Road which will be brought back into full exposure, re-bolted and "dressed" similarly to Carpark Crag. Increasing capacity is the mandate and the District gets this all for free. The Blind Channel area will overtake Burgers & Fries in popularity. The Red Bridge dev'l and the connected trail to Scott Cres will have thousands of people going through here very quickly.

I've cc'ed Barrie Mowatt of the International Biennale as I'd love to see him somehow connected to the UMBC developments.

thanks for considering my point of view.

John

MRAS



## Carly Simmons

---

**From:** elizabeth g [REDACTED]  
**Sent:** December 26, 2020 1:31 PM  
**To:** Council  
**Subject:** Boat launch

December 26, 2020

To Squamish Mayor and Council,

I am writing this letter in support of Squamish Council enacting the Marine Action Strategy. I would like to place special emphasis and attention on infrastructure (covered in Appendix 2). Specifically, Squamish needs a functional and safe boat launch.

The current launch is both inadequate and dangerous at low tides (even mid-tides for tandem trailers!). There is a huge contingent of boaters in Squamish, and this is a widely discussed and passionately advocated issue. Notably, the launch ramp drops off after a certain point, making it unusable at over half of the tide-based sea levels. Several stories have been shared of boats, trailers and vehicles being damaged at this launch. The closest alternative is Porteau Cove, which is far when under tow. Porteau is also essentially unusable during the summer weekends due to additional traffic and congestion.

As our town and the local boating community grows, we urgently need a safe launch that can facilitate our needs. The demand has been further amplified due to COVID-19 and the prioritization of local-based activities. To not adequately upgrade safe marine infrastructure is a missed opportunity and lacks foresight for the growing needs of this town.

We look forward to hearing positive developments towards the issues presented above.

Sincerely,  
Liz Graves

[REDACTED]

Sent from my iPad

## Carly Simmons

---

**From:** Carl MacNaughton [REDACTED]  
**Sent:** July 2, 2020 3:53 PM  
**To:** Sarah McJannet  
**Subject:** RE: Follow-Up/Make up meeting for Xwu'nekw Park Sea Dike Session with Stewardship and Trails Reps

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Sarah,

Thanks for the good discussion this morning.

As discussed:

1. The Nature Trust of BC would be happy to have the zoning on our Squamish property changed to P4, to ensure consistency with the broader estuary conservation goals and management.
2. Camping is an issue that we face on properties throughout the province, including Squamish. Any linkage to a broader efforts to curb this activity on conservation lands would be most welcome.
3. Regarding long-term management partnerships, as I mentioned, many of our properties are leased to external parties. Most of these leases are with the Province, either through the Fish & Wildlife Branch or BC Parks, but many are leased to municipalities throughout the province, who manage these properties for conservation and nature appreciation.

Examples where NTBC owns land and leases it to municipalities include:

- a. Scout Island in Williams Lake: <https://scoutisland.ca/>
- b. Ferguson Lake in Prince George: <https://accessiblebc.ca/parks/ferguson-lake/>
- c. 100 Mile Marsh in 100 Mile House: <https://bcnatureguide.ca/bc-nature-viewing-sites/cariboo-region/100-mile-house-marsh/>
- d. Morrison Nature Park in Courtenay: <https://bcnatureguide.ca/bc-nature-viewing-sites/vancouver-island-region/morrison-nature-park/>

If the District of Squamish was interested in a similar partnership with our property there, we would be interested in having a discussion, as we have discussed internally that a leasing arrangement with the District or with the Province could be beneficial to the conservation of this property. Just let me know if you'd like to discuss sometime.

All the best to you,  
Carl

**Carleton MacNaughton, M.Sc.**

Interior & Coastal Mainland Conservation Land Manager

The Nature Trust of British Columbia

500 – 888 Dunsmuir Street | Vancouver BC V6C 3K4

Tel: 604.924.9771 ext. 223 | [REDACTED] | 1.866.288.7878

[naturetrust.bc.ca](http://naturetrust.bc.ca)



## Carly Simmons

---

**From:** Sarah McJannet  
**Sent:** April 7, 2021 1:56 PM  
**To:** [REDACTED]  
**Subject:** RE: Marine Zoning Comments

Hi Darryl,

Thanks so much for taking time to provide comment and thoughts on the marine zoning bylaw. These will be added to the public commentary and brought forward at second reading to share with Council and community.

This process has involved a lot of research and engagement in navigating the many marine interests as well as all the layers of jurisdiction in the marine realm, but will sure be a big step forward for the community in addressing important coastal considerations and stewardship objectives.

On the matter of live-aboards in the zoning, for clarity the proposed bylaw allows up to 10 live-aboards (with subject conditions) recognizing their role and presence in all existing marinas, so this is not a full prohibition. We've been engaging with marina owners and managers on this topic, and inputs received to date are that they are important and that adequate services are needed for them. Some marinas have bylaws/regs restricting the # of live-aboards, and the maximum of 10 fits within this context, but we expect there will be some differing opinions on this. For the provincial aquatic leases for commercial marinas, live-aboards are actually prohibited in the lease agreements in many cases so there is some divergence there. Notwithstanding we tried to take a moderately permissive approach, but with some limitation to keep the use in check. I have toured some dedicated live-aboard marinas that have been designed with fulsome services from the outset (False Creek) so there are great examples out there. Certainly this could be explored locally (and addressed in a site-specific zoning) but within our existing context as a base case we have proposed a max limit to start.

On the long-term mooring prohibition outside of marinas and mooring facilities, this as you note is tactic to address the serious challenges with vessels being left, and in many examples vessels sinking (we are dealing with four sunken boats currently in the Cattermole). Zoning is a tool we can use to enforce as a regulatory backstop where needed (as well as trespass for vessels in private water lots). Temporary anchoring and moorage as part of right to navigate is not being restricted, but in reality there are actually quite limited areas in this part of Howe Sound that are suitable for anchoring and not exposed from high winds/waves. To support spectrum and diversity of housing options, in the case of live-aboards that are a historic and ongoing part of our waterfront areas, this will be a balancing act to ensure adequate infrastructure to support the use.

Thanks again for the inputs and please feel free to reach out anytime with additional questions or comments.

Kind regards,

**Sarah McJannet RPP, MCIP** | Senior Planner  
**District of Squamish** | *Hardwired for Adventure*  
604.815.5096 | [smcjannet@squamish.ca](mailto:smcjannet@squamish.ca) | [www.squamish.ca](http://www.squamish.ca)  
she/her



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**From:** website@squamish.ca <website@squamish.ca>  
**Sent:** Monday, March 22, 2021 3:01 PM  
**To:** Sarah McJannet <smcjannet@squamish.ca>  
**Subject:** Marine Zoning Comments

**Your name**

Darryl Lapaire

**Your email**

[REDACTED]

**Your Comments**

Thank you for the opportunity to submit comments on this matter.

In reading the proposed changes I am encouraged by the obvious thought and effort that went into them, and the care given to the marine environment in particular.

However, I cannot help but be disappointed and discouraged by the lack of allowance for live aboard marine communities. The overall tone is one which seems to paint any person living full time on a vessel as less equal, and certainly less desirable.

While I whole heartedly support efforts to eliminate the impact that derelict vessels have on safe navigation and the environment, simply disallowing long term mooring or live aboards does not address the problem. If someone leaves a vessel as derelict, I suspect being in contravention of zoning is the least of their concerns.

With increasing property prices and no corresponding increase in earnings it is becoming increasingly difficult for young people and families to settle in BC communities. Personally, I would like to see Squamish embrace the full spectrum of affordable housing opportunities for their communities and support live aboard sailors both in marinas as well as at anchor or on moorings. A vibrant, diverse population both in traditional housing and non-traditional can only serve to enhance the community as a whole.

Thank you again for the opportunity to provide feedback.

Darryl Lapaire



Hello Mayor and Council,

I am writing today as a concerned resident and a Squamish waterfront enthusiast. Squamish, like many BC coastal towns and cities are experiencing a growing trend of derelict vessels being brought to and anchored in the navigable channels adjacent to our community.

These derelict vessels are often in disrepair when they arrive and are seldom maintained by their owners. In addition to the poor condition of the vessels, it is common that many of these older vessels are not equipped with a black water holding tank(s) and those equipped with a functioning black water holding tank(s) are seldom, if ever, pumped out at a sewage pumping station. I believe it is illegal to discharge black water from a pleasure craft into Canadian waters and yet it is happening every day for most, if not all live-a-boards at anchor in our channels!

Around Squamish's navigable waters, a number of these derelict vessels have broken loose from their anchors, dragged and/or drifted in the channel making them a hazard to navigation, not to mention property or personal damage that may occur. With our local waters becoming increasingly busy with recreational users and visitors alike, these associated risks will also increase.

I have seen many of these vessels sunk in both the Cattermole Slough and Blind Channel. The environmental impacts from these sunken vessels are significant. Every sunken vessel has a multitude of toxic materials degrading in the form of synthetic fabrics, paints, metals and glue, not to mention all the fuel and oils contained in the systems on the vessel. In addition to the above toxic materials, the decks of these vessels are often littered with possessions, fuel containers and garbage, which poses a significant potential for further contaminants entering the water and washing up on our shores.

A good example is Cattermole Slough. I believe the District of Squamish has recently removed a number of sunken derelict vessels, yet two more vessels currently sit at the bottom of the slough with only their masts and rigging above water. Leaving, until recently, one small dark blue derelict sailboat owned by a long term squatter which is currently still afloat and remains at anchor in Cattermole Slough.

I was elated to see the clean-up progress in Cattermole Slough. However, as of last weekend, another large derelict sailboat arrived and is at anchor in Cattermole Slough. I have it on good authority that the person that owns the smaller dark blue derelict sailboat, is also the new owner of this larger derelict sailboat. The newly arrived derelict sailboat has already dragged anchor and had to be temporally tied to a private dock before being re-anchored in Cattermole Slough.

I am deeply saddened and discouraged to see yet another derelict vessel at anchor in the navigable channels around Squamish.

Until the District of Squamish enacts regulations to prevent people from anchoring long-term and/or squatting on vessels in our navigable channels; sunken vessels, contaminants leaching into our waters, and illegal and continuous discharge of black water will be an ongoing significant source of pollutants to our waters and our shoreline.

I am sure you are familiar with other coastal cities and towns around BC that have implemented or are in the process of creating a permitting system, such as the City of Vancouver's Anchoring Permit.

<https://vancouver.ca/streets-transportation/anchoring.aspx>

I believe if the District of Squamish is to be successful in eliminating long term 'boat squatting and derelict vessels being left at anchor', you must, in the very least, require all anchored vessel in navigable waters around Squamish to;

- Provide proof of registration,
- Provide ownership for the hull identification number, or
- Provide proof of ownership under the named vessel.
- Must provide proof of valid insurance.
- Must provide proof that their head seacocks are closed for the duration while at anchor.
- Must use the sewage pump-out to empty their holding tanks prior to anchoring, or
- Show proof of sewage pump-out within 7 days of arrival.
- Must obtain an Anchoring Permit from the District of Squamish or the Harbour Master.
- Must display the Anchoring Permit for the duration while anchored in Squamish.

Durations for Anchoring Permits:

14 day period in 30 days, maximum of 2 nonconsecutive stays May 2 – September 29

- Approved and displayed permit
- Proof of pump out prior to anchoring
- Proof of sealed seacocks for the holding tank(s)

Anchoring Permits: 21 day period in 30 days, maximum of 2 nonconsecutive stays September 30 – May 1

- Approved and displayed permit
- Proof of pump out prior to anchoring
- Proof of sealed seacocks for the holding tank(s), and
- Proof of pump out services submitted on the 14th day at anchor

Owners/operators of vessels that anchor and do not provide the required documentation or exceed the permitted durations at anchor should be subject to an immediate and significant fine.

If it is not already in the work plan for 2021, I strongly urge the District of Squamish to prioritize this serious environmental issue by regulating anchoring with a permit system that only permits short-term anchoring.

I look forward to seeing the District of Squamish prioritize efforts to resolve this ongoing environmental issue.

Sincerely,

Wanda Bradbury

## Carly Simmons

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**From:** Vanessa Jenkins  
**Sent:** June 3, 2021 11:07 AM  
**To:** Carly Simmons  
**Subject:** FW: Requesting that the District of Squamish create an Anchoring Permit

---

**From:** Robin Arthurs <RARTHURS@squamish.ca>  
**Sent:** June 1, 2021 5:33 PM  
**To:** Hearing <Hearing@squamish.ca>  
**Subject:** FW: Requesting that the District of Squamish create an Anchoring Permit

Please ensure this is in the public hearing package for June 8.  
R

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**From:** Sarah McJannet <[smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)>  
**Sent:** May 14, 2021 4:47 PM  
**To:** Wanda Bradbury [REDACTED] Council <[Council@squamish.ca](mailto:Council@squamish.ca)>  
**Cc:** Meagan Leicht <[mleicht@squamish.ca](mailto:mleicht@squamish.ca)>; Kate Brandon <[kbrandon@squamish.ca](mailto:kbrandon@squamish.ca)>  
**Subject:** RE: Requesting that the District of Squamish create an Anchoring Permit

Hello Wanda

This is to confirm the District has received your incoming message and letter to Council. Thank you for taking the time to provide input and share concern and ideas for addressing derelict vessels and mooring/anchoring outside of marina facilities. As this connects to proposed marine regulations currently under consideration by the District (District of Squamish Zoning Amendment Bylaw (Marine Zones) No 2771, 2020) staff will be adding your correspondence to the Public Hearing folder with public comments. For more information about the proposed bylaw, please see the [dedicated project page for the marine zoning](#) update.

Notably, the new proposed marine zoning Bylaw 2771 includes a prohibition on [long-term](#) anchoring and moorage outside of marinas and moorage facilities. The intent of these general regulations are to focus long-term moorage within designated and adequately serviced moorage areas within the District of Squamish, while proactively addressing the ongoing issue of derelict vessels in local designated navigation channels and sensitive marine areas. While *temporary* anchoring/mooring cannot be legally restricted as it is ancillary or incidental to navigation (common law right; federal jurisdiction), local governments' ability to restrict long-term anchoring and mooring through land use regulation has been upheld by the Courts.

Bylaw 2771 (subsection 45.1 c) specifies the threshold for long-term moorage as anchoring or moorage of a vessel for a continuous period exceeding 48 hours or 72 hours within a 30-day period (even if the vessel is moved within the 30-day period to a different marine location within the Squamish District). This effectively allows for temporary moorage outside of marina or moorage facility for up to two days (continuous period) or up to three days total in a 30-day period, after which point it would be deemed long-term moorage and technically prohibited outside of marinas or moorage facilities in all marine zones per the bylaw. These regulations help backstop and compliment private owners' or lease holders' efforts to take action on trespass issues occurring within fee simple or leasehold water lots. The zoning bylaw also compliments Transport Canada's efforts, who has the authority and federal mandate to enforce against impediments to navigation, and ensure safety in the defined navigable channel in the MBC particularly.



Over the years the District has reviewed various approaches and available tools for addressing the derelict vessel issue. Action to date includes inventories of vessels of concern, working with private waterfront landowners to jointly fund removal of old creosote pilings that enabled easy mooring in the MBC, and coordinating with Transport Canada in federal enforcement efforts and ongoing derelict vessel removal. At this point we have not yet contemplated a permit system for anchoring and mooring, such as in False Creek, or in Mannion Bay, Bowen Island Municipality (BIM). BIM has a provincial license of occupation for Mannion Bay with associated management plan which enables them to regulate moorages within the bay through their land use bylaw (charge a fee, require registration and levy fines where non-compliance with BIM bylaws). The license does not give BIM the authority to prohibit new mooring buoys in Mannion Bay (federal private buoy regulations exist for placement of mooring buoys). Additional regulatory and management tools for Squamish (and costs/benefits, administration etc) will be explored as we continue to manage these issues over time, which is an identified priority in the [Marine Action Strategy](#).

On Tuesday May 18 2021 (6 p.m.) staff will be bringing forward the marine zoning bylaw for consideration of second reading. You can view the staff report, bylaw and mapping included on the upcoming agenda (See Bylaws, Item 10.B. (i)): [Squamish - Document Center \(civicweb.net\)](#)


Please don't hesitate to reach out to me with further comments, questions or to advise on derelict vessel issues. I am also CC'ing our Environment Dept staff Meagan Leight and Kate Brandon as future contacts as well.

Hope to see you on the water soon, Sarah

Sarah McLannet RPP, MCIP | Senior Planner  
District of Squamish | *Hardwired for Adventure*  
604.815.5096 | [smcjannet@squamish.ca](mailto:smcjannet@squamish.ca) | [www.squamish.ca](http://www.squamish.ca)  
she/her



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**From:** Wanda Bradbury [REDACTED]  
**Sent:** Thursday, May 13, 2021 4:13 PM  
**To:** Council <[Council@squamish.ca](mailto:Council@squamish.ca)>; Sarah McLannet <[smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)>  
**Subject:** Requesting that the District of Squamish create an Anchoring Permit

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon Mayor and Council,  
Please find the attached letter and photos.  
I look forward to hearing from you.  
Gratefully yours,  
Wanda Bradbury

## Carly Simmons

---

**From:** Vanessa Jenkins  
**Sent:** June 3, 2021 11:07 AM  
**To:** Carly Simmons  
**Subject:** FW: Proposed Marine Zoning

---

**From:** Robin Arthurs <RARTHURS@squamish.ca>  
**Sent:** June 1, 2021 5:33 PM  
**To:** Hearing <Hearing@squamish.ca>  
**Subject:** FW: Proposed Marine Zoning

Please ensure that this is in the Public Hearing Package for next week, June 8

---

**From:** Sarah McJannet <[smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)>  
**Sent:** May 13, 2021 4:49 PM  
**To:** Lesley Weeks Tourism [REDACTED]; Council <[Council@squamish.ca](mailto:Council@squamish.ca)>  
[REDACTED] Louise Walker  
<[louise@squamishchamber.com](mailto:louise@squamishchamber.com)>; [info@squamishpaddlingclub.com](mailto:info@squamishpaddlingclub.com); [hasquamish@gmail.com](mailto:hasquamish@gmail.com); Linda Glenday  
<[lglenday@squamish.ca](mailto:lglenday@squamish.ca)>; Gary Buxton <[GBuxton@squamish.ca](mailto:GBuxton@squamish.ca)>  
**Subject:** RE: Proposed Marine Zoning

Thank you Lesley, this confirms letter received and is being added to the Council agenda for Tuesday May 18 (6pm). As always, we value and greatly appreciate your inputs, and staff will follow up with ongoing engagement through the process.

We will relay the identified needs, opportunities and concerns to Council. To the specific concern that water access infrastructure is not included in the P4 Zone, in advance I wanted to offer one point of clarification respecting the statement 'The P4 zoning does not permit docks or public boat launch and as written would not allow for recreational use of the waterway', also the connected highlight of Squamish Paddling Club's scenic 'Adventure Centre Loop' from the boathouse. It is correct that the P4 Zone does not permit docks or boat launch infrastructure; in the proposed bylaw however, marine navigation and marine navigation aids are permitted in all marine zones (section 45.1a). Further (per section 45.1b), '*without limiting 45.1 a, marine navigation and navigation aids are also permitted within navigable marine waters in the P-4 Zone*'. So water-based navigation in and of itself (actively traveling in on or through the water) is permitted in all marine zones, as well as in the P4 Zone inclusive of uppermost reaches of the blind channel, in case this wasn't clear. Of course, practically speaking navigating these upper reaches at lower tide levels is another matter along with other challenges as we know...

Please don't hesitate to reach out with any other questions or interpretation items at any time.

Sincerely, Sarah

**Sarah McJannet RPP, MCIP** | Senior Planner  
**District of Squamish** | *Hardwired for Adventure*  
604.815.5096 | [smcjannet@squamish.ca](mailto:smcjannet@squamish.ca) | [www.squamish.ca](http://www.squamish.ca)  
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**From:** Lesley Weeks <[lesley@tourismsquamish.com](mailto:lesley@tourismsquamish.com)>

**Sent:** Thursday, May 13, 2021 2:48 PM

**To:** Council <[Council@squamish.ca](mailto:Council@squamish.ca)>

**Cc:**

rah McJannet

<[smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)>

**Subject:** Proposed Marine Zoning

Good afternoon,

Our Squamish marine gateway and marine-based tourism development opportunities are very important to Tourism Squamish.

Please find a letter regarding the proposed marine zoning attached.

Thank-you for your consideration, we look forward to engaging further on this and other marine related projects.

Warm Regards,  
Lesley

---

**Lesley Weeks** | Executive Director

**Tourism Squamish** | *Hardwired for Adventure*

w.604.815.5080 | e. [lesley@tourismsquamish.com](mailto:lesley@tourismsquamish.com)

[www.exploresquamish.com](http://www.exploresquamish.com)



*Tourism Squamish works on the unceded lands of the Squamish Nation, Sk̓wx̓wú7mesh Úxwumixw.*

May 11, 2021

Re: Proposed Marine Zoning

To Mayor and Council,

Our Squamish marine gateway and marine-based tourism development opportunities are very important to Tourism Squamish. This theme is addressed in our organization's strategic plan and in the Sea to Sky Destination Development Strategy. We would like to highlight the importance of our waterfront and marine resource as a vital community asset for its social and economic benefits in addition to its ecological values.

We have followed closely and engaged with the District's current Marine Zoning initiative. We would like to acknowledge staff's response to our previous comments and the resulting amended zoning description to consider future ferry uses at Xwu'nekw Park water lot. However, we are still concerned that the amenity needs, and opportunities are not being fully considered and assessed before marine zoning is fixed.

Specifically, we are most alarmed with the proposed P4 zoning for the Upper Mamquam Blind Channel (UMBC). The "P4" zoning applies Ecological Reserve and protection to the area. The P4 zoning intent is to "protect and enhance land and water areas with high ecological value and to provide for limited public access and use".<sup>1</sup> The P4 zoning does not permit docks or public boat launch and as written would not allow for recreational use of the waterway.

The UMBC can provide a much-needed recreation venue for families and novice paddlers, with the adjacent Squamish Adventure Centre (restrooms, cafe), Smoke Bluffs Park trail network and ample parking. This has been recommended in the Parks and Recreation Master Plan, and other UMBC planning processes. Rose Park is currently underutilized, opening access to the UMBC will add vibrancy and align with Council's Strategic Plan 2018-22 which includes: "increasing year-round utilization of our multipurpose space assets and public spaces (parks, public squares) by 2022." The Squamish Paddling Club has also expressed that the UMBC is an excellent venue for some of their youth programming (especially if selective dredging was completed). In addition, the Squamish Paddling Club currently promotes the "Adventure Centre Loop" as one of their three suggested routes – "a scenic sheltered 3.5 km loop from their boathouse."

The current water conditions in the UMBC are not natural, there is restoration work required. It is filled with dredge spoils from previous uses, and from the 1986 dredging operation in the waters in front of the former sawmill which deposited large quantities of material in the channel above the two bridges. This material is laden with organic debris, as can be seen in discolouration of the waters and bottom surface in the area, with negative effects for aquatic life and fisheries.

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<sup>1</sup> Report to Council, February 23, 2021 – Squamish Marine Zoning Update: Complete Draft Bylaw Review  
Tourism Squamish Society  
104-38551 Loggers Lane  
Squamish BC V0B 0H7

If a better streamflow gradient could be established through the UMBC by selective dredging of areas of high ground holding back tidal waters and tributary flows (as recommended by environmental consultants), the following benefits could occur:

- More efficient flushing which would expose cleaner substrates for aquatic invertebrate production. (as well as add to the recreational and visual appeal of the UMBC at all water levels)
- Contaminated sediments could be removed, thereby improving water quality, not only in the UMBC but throughout the entire channel north of the Stawamus River outlet. The improved water quality would also add to the recreational and visual appearance of the UMBC at all tide levels.
- Re-establishing the natural streamflow gradient would mean that the flushing action would be self-maintained, without the need for regular dredging. (Also of note is that neither the Loggers Lane nor the Wilson Crescent/ Carson Place sloughs bring gravel material into the UMBC, so this area is not a deposition zone for silt and gravel materials).
- Navigability for recreational paddlers would be much improved.
- It's possible that the improved water flows and flushing of the channel and contaminated sediments would restore the area to the recreation zone it once was which included water play, splashing and swimming in addition to a variety of watersports.

Funding for restoring improved streamflow in the UMBC could come from various private or public sources, including possibly in connection with further work in the ongoing initiative to restore freshwater flow to the Mamquam Blind Channel, which was launched by the District in 1997.

To quote the Marine Action Strategy vision - "Squamish supports and celebrates its connections to the ocean, as a source of life, vitality, culture and identity – sustaining our coastal communities across generations. Shared marine resources are responsibly stewarded and enhanced so natural systems in Howe Sound thrive, in tandem with industry, economy, tourism and recreational opportunities that depend on a healthy marine ecosystem, and access for all."

How important is marine culture to our community? If we are truly an oceanfront community, we can not allow the land around the water to be zoned and developed without an integrated plan for our waterway. We need a diversity of water access points with public water access being integrated into all our planning.

We encourage you to consider pausing the marine zoning to allow for the amenity needs, economic opportunities, and dredging studies to be completed.





Or, at the minimum, we request that the UMBC be removed from the proposed marine zoning package to allow for further consideration. Perhaps a new zone could be devised that blends the P4 and M1 zoning to allow for a canoe/ kayak /SUP launch for recreational access and use.

Tourism Squamish is eager to participate in any future engagement on this topic and we are supportive of the proposed studies to assist in guiding the marine zoning process. It would be very unfortunate if the zoning caused unintended consequences or unnecessary additional constraints to the marine gateway development options.

Thank you for your consideration,  
Kind regards,

Lesley Weeks  
Executive Director, Tourism Squamish

Cc:  
Squamish Chamber of Commerce  
Squamish Paddling Club  
Squamish Harbour Authority  
Howe Sound Biosphere Initiative  
Nch'ka'y Development Corporation

Tourism Squamish Society  
104-38551 Loggers Lane  
Squamish BC V0B 0H7

## Carly Simmons

---

**From:** Robin Arthurs  
**Sent:** June 8, 2021 3:06 PM  
**To:** Council; Hearing  
**Subject:** Fwd: Marine Zoning Public Hearing

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**From:** Allan Barr <allan@west-barr.com>  
**Sent:** Tuesday, June 8, 2021 2:45:17 PM  
**To:** Robin Arthurs <RARTHURS@squamish.ca>; Karen Elliott <kelliott@squamish.ca>; Linda Glenday <lglenday@squamish.ca>  
**Subject:** Marine Zoning Public Hearing

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Members of Council

With this new Marine bylaw, it appears that the District is proposing a number of zoning restrictions on land and water needed for our minimum needs.

If adopted, it could imperil the orderly operations of forestry in the SOO Forest District.

While I do not believe you have deliberate intentions to harm the industry, the impact of your actions likely will.

I wish you to be on notice regarding this ahead of any final decisions you might make.

While I appreciate a great deal of work has been put into the new Marine Zone there is an important aspect that has not received sufficient study and consideration

Without going into a lot of history I believe everyone is aware that Squamish is the marine terminus for log grading, measuring, watering and storage of the logs harvested in the Soo Forest District

There is a sustainable Annual Allowable Cut (AAC) for the district

Given the history of log handling there has historically been plenty of choice in Squamish for both handling and watering the logs.

This is no longer the case. Land use changes in the last 20 years has reduced both the size and area of log handling, log watering and storage operations.

It is very important therefore that ahead of further use restrictions on the affected lands/water, that the parties connected to the Soo AAC meet to agree on the *minimum area requirements* for handling and processing those logs on a perpetual annual basis. Then build your zoning around that.

I am very concerned that you do not know what those requirements are and yet you are moving forward as if you do, or perhaps without adequate consideration to the importance of this exercise.

Moving forward without stopping to do this first will risk creating a great deal of uncertainty, chaos and disruption to an industry that is already trying hard to work within the new normal.

I therefore ask you to please table this bylaw until more factual information regarding land and water requirements for the Soo AAC are better known.

Thank you

Allan Barr,

President

West-Barr Contracting Ltd.

--

**Allan Barr**

Severed Section  
22

## Carly Simmons

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**From:** David Williams **Severed Section 22**  
**Sent:** June 4, 2021 2:15 PM  
**To:** Hearing  
**Subject:** Bylaw No. 2771, 2020

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To the Squamish City Council, concerning Bylaw No. 2771, 2020,

We strongly urge the Council to vote against passing this new bylaw as is, and to consider amending the bylaw according to the suggestions listed in this letter.

### History

We represent The Squamish Adventure Inn, a family-owned and locals-owned business that has been operating in Squamish for six years. The Squamish Adventure Inn took over the business formerly known as The Inn On the Water, which for many years had been operating as a work camp for companies hosting out-of-town workers. Our aim was to create a community hub for travellers that would showcase the best and most beautiful aspects Squamish has to offer, while providing a safe, fun, and comfortable place for them to base their adventures. We wanted our hostel to be family-friendly, budget-friendly and adventure-focused rather than party-focused. Since we took over, the Squamish Adventure Inn has become one of the most consistently high-rated accommodations in Squamish. It has hosted thousands of travellers (many of whom have made Squamish their permanent home), and additionally, it has become a community gathering spot with the recently established Narwhal's Ice Cream.

Unfortunately, running our small business has been challenging, and we'd like to provide some background information to give context to this letter:

When we purchased the Inn in June of 2015, we had many plans for the development of what is an absolutely spectacular piece of waterfront property in one of the most beautiful cities in BC, but the Integrated Flood Hazard Management Plan (IFHMP) was adopted two years after we took ownership. Unfortunately, much of the public engagement involved for this occurred prior to our ownership, and we were not invited to or included in the highly affected landowners meeting that occurred on November 16, 2015, and thus were subsequently not aware of this change. Because of that we've been surprised in the last few years to find that making improvements or additions to our location is now very difficult, as it's now identified as a Primary Floodplain. This caught us unawares and makes lateral change very difficult (with challenges like Covid-19, as an example).

Therefore, the IFHMP has made developing our property for tourism very challenging, but the proposed Marine Zoning for our part of the Upper Mamquam Blind Channel (UMBC) would significantly add to those challenges.

### **For the following reasons, we believe the Bylaw No. 2771, 2020, is problematic:**

- Most other commercial properties along the Blind Channel have water lots listed as M2 (Commercial Marine Zoning) except the Squamish Adventure Inn property, which is listed as M1. We are the property located just east of the highway. This seems needlessly restrictive to a locally owned business that has always striven to integrate with its community.
- One of the M2 allowances is "marine oriented tourist and recreation uses," which would be denied to us if we were zoned as M1. We cannot imagine a business that better supports this facet of M2 than us. For the past 3 years we have operated a kayak and paddleboard rental business out of the Inn, essentially a "marine oriented tourist and recreation use." In fact, in the past we had wanted to build a private dock for this activity but were told through correspondence with the municipality that it would not likely be

approved because of this incoming zoning change. This was challenging for us at the time, as we were inquiring before the zoning change was approved.

- Another of the M2 allowances is "Restaurants." With our incredible scenery and position alongside one of the busiest pedestrian routes in the city, we have long entertained the idea of opening some version of a restaurant in our location. We are primarily traveller focused with the hostel business, but we wish to contribute to the vibrancy of our community and interact more with our friends and neighbours. A restaurant would be ideal for this. Without M2 zoning, this dream would become impossible. (We had also looked into this, but again, we were advised this would be unlikely to be approved because of this incoming zoning.)

-That we would not be able to utilize our attached water rights for most of the things our C-3 zoning allows seems unreasonable, especially since that sort of access is granted just a short distance away in the adjacent M2 zoning. We believe everyone along the Blind Channel should have the same zoning (M2).  
**We urge the council to please amend the M-1 zoning to M-2 for our property.**

**- Additionally, we strongly feel the P-4 Marine Zoning on the Upper Mamquam Blind Channel should be denied or at least paused until the merits and faults of this plan can be more accurately weighed.**

First, this is an area of Squamish that is tragically under-utilized. It is located beside the busiest and most picturesque section of the local bike path that council has been striving to develop in order to connect Squamish and provide a recreational experience that can rival what has been achieved in Whistler with their Valley Trail.

- For context, we were contacted years ago about this path and an agreement was made in which the city would provide various services in exchange for the easement on our property to be widened to accommodate the new bike path. [ i\$ i vi\$z iv}\$ \$ | g m i h \$ } \$ d i \$ t w s w e p f y x \$ d i \$ y r n t e m } \$ v s g i i h i h \$ m l \$ d i \$ i e w i q i r x \$ | t e r w m r \$ f i j s v i \$ i \$ z i v \$ m k r i h \$ j j s r \$ m 2 l i \$ y r n t e m } \$ r i z i v \$ y p m i h \$ e j i { \$ j \$ d i \$ t v s q n w i w \$ d i } \$ q e h i \$ r \$ | g l e r k i \$ s v \$ d i \$ e w i q i r x \$ | t e r w m r \$ i \$ l e z i \$ r i z i v \$ s q t p e r i h \$ f i g e y w i \$ d i \$ t e d \$ w e r \$ e w i x \$ s s y v \$ g s q q y r m \$ e r h \$ i \$ e v i \$ l e t t } \$ s s g s r x w f y x i \$ s \$ d i \$ f i x i v q i r x \$ s y v \$ s q q y r m } \$ f y x \$ d i \$ r x w i \$ | t i v i r g i \$ e w \$ z i v } \$ w x i w w j y p \$ s v \$ w e r h \$ i \$ l e z i \$ r i z i v \$ f i i r \$ y p } \$ s q t i r w e x i h \$ s v \$ d i \$ e r h \$ i \$ s w \$ s v \$ d i \$ | t e r w m r \$

We feel P-4 zoning would very much do the opposite to improving that recreational experience:

- With P-4 zoning (Protected), that area of the Channel is untouchable. With a less restrictive zoning, some options exist that would not be possible with the current proposal. For example:

- dredging
- the channel so that it remains a functioning waterway instead of a mud pit for half of each day,
- 
- adding
- a non-motorized launch site for SUPs and kayaks, or public docks and picnic shelters on the water.
- 
- making
- the water off of Rose Park a focus for non-motorized water sport rather than trying to funnel them further up the channel where they'll have to compete with motorized watercraft.
- 

We feel that there are many ways for the wilderness to be enjoyed by our city without jeopardizing the ecosystems that thrive there. Additionally, giving citizens more access to these places and allowing them to enjoy them will only increase their desire to preserve them. Please refer to the excellent letter from Tourism Squamish executive director Lesley Weeks for detailed information on how this area can be revitalized from both a recreational and environmental perspective simultaneously without P-4 zoning.



However, currently people have little reason to spend time in this beautiful area of Squamish. There is no playground in Rose Park. There is no access to activities (such as a non-motorized launch), and for much of the day, the Blind Channel truly is a mud pit. Rose park bike path is often seen simply as a thoroughfare to get to and from Downtown, rather than a destination in itself. A P-4 zoning will ensure that never changes. Please don't let this happen. **We urge the council to vote "No" on the P-4 amendment for the Upper Mamquam Blind Channel.**

In closing, for the reasons listed above, **we urge council to amend the M-1 zoning to M-2 for the property owned by the Squamish Adventure Inn, and we urge council to vote "No" on the P-4 amendment for the Upper Mamquam Blind Channel.**

Thank you for your consideration,

David Williams (Owner/Operator)

Denton Hirsh (Owner)

Kristi Hirsh (Owner)

Mallory Eddy (Family Member and Concerned Citizen)

**This letter was presented to, and is unanimously supported by, the Squamish Board of Tourism**

## Carly Simmons

---

**From:** Heather Kawaguchi **Severed Section 22**  
**Sent:** June 8, 2021 2:56 PM  
**To:** Hearing  
**Subject:** Marine Zoning and Commercial Moorage space.

Dear Squamish Council,

I am writing to you to ask you to consider businesses like mine and other water users in your Marine Zoning plans.

I am running a Sailing School, teaching adults to operate sailboats safely. This is especially valuable in Squamish where we have consistently strong winds and large tides which can make sailing hazardous for boaters without formal training or much experience.

In my business I also educate people on running their own boats in an environmentally conscious way. Such as using natural products for cleaning and maintenance, disposing of waste responsibly and techniques to avoid spills when refueling.

I have been struggling to find moorage I can operate my business from. I have recently left the Squamish Yacht Club due to not being allowed to operate commercially from their docks.

I have been told I am not allowed to use the Squamish Harbour Authority loading dock since I do not moor my boat at the Harbour Authority.

The Squamish Harbour Authority wait list is currently closed to me due to being 10 years plus.

I would Very much like zoning to allow for Commercial dock space and Public loading and unloading docks.

(Many boaters from other areas do not visit Squamish due to lack of temporary moorage options.)

I also feel strongly that the upper Mamquam Blind Channel could be used more as a safe paddling area as it is well protected from the strong winds found in the harbour. It could be a very safe area for children, families and people of all ages to enjoy the water. However it is not accessible or enjoyable at low tides. If the whole channel was dredged it would help to clean it up and make it more user friendly.

I do not think any of this would impact the local wildlife negatively.

Allowing for more people to enjoy the local waters safely will teach more more the importance of respecting our oceans and its wildlife.

Sincerely,  
Ben Biswell

**Severed Section 22**

[www.squamishsailingventures.com](http://www.squamishsailingventures.com)

## Carly Simmons

---

**From:** Jeff Levine **Severed Section 22**  
**Sent:** June 8, 2021 3:05 PM  
**To:** Hearing  
**Subject:** Objection to Squamish Marine Zone - P4 Upper Mamquam Blind Channel

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I sent the email below to the Council email address inadvertently. Please add my letter to the Public Hearing Official Record

Begin forwarded message:

**From:** Jeff Levine **Severed Section 22**  
**Subject:** Objection to Squamish Marine Zone - P4 Upper Mamquam Blind Channel  
**Date:** June 8, 2021 at 3:00:29 PM PDT  
**To:** [council@squamish.ca](mailto:council@squamish.ca)

Squamish Council,

Objection to Marine Zoning of Upper Mamquam Blind Channel to P4

My name is Jeff Levine, I am the owner of Sea to Sky Adventure Company, located at the Squamish Adventure Centre. In addition to mountain bike rentals, tours, hiking tours we provide water sport rentals and tours. We have been tenants of the Adventure Centre for the past 9 years.

I participated in some of the stake holder engagements for the new Marine Zoning Updates. However, at no time was it explained or shown that the new marine zoning would make the Upper Mamquam Blind Channel a P4 zoning, which would make this area an Ecological Reserve, with the intention of limiting public access or use.

This new zoning would prevent my customers from launching kayayaks, paddleboards and canoes into the Mamquam Blind Channel, directly adjacent to the Adventure's gravel parking lot. I am shocked and disappointed that the District of Squamish, did not reach out to me or my company as an existing water sport outfitter.

Currently, our customers are able to launch kayaks, paddleboards and canoes, at a mid to high tide. It is not ideal, but it works. Not everyone in Squamish has a vehicle that can be used to transport kayaks, canoes and SUPs. We plan according to the tides.

As the owner of a paddle outfitting company, that started 11 years ago in Squamish, I would have thought, it would have been appropriate for the DoS staff, to talk with me directly (called “stakeholder engagement”). However, this did not happen. I was not provided any opportunity to discuss this with DoS staff and only found out about it recently.

In the past there has been much community consultation and environmental reports completed about the Upper Mamquam Blind Channel.

Firstly, it does **not have a high ecological value**. The mud that you can see and smell is not natural to the area. It is the dredge spoils from a suction dredge barge from the lower Mamquam Blind Channel. There is a report that I read from Cascade Environmental, that directly states this fact. Where is the contrarian environmental report that refutes Cascade’s report. The Cascade report recommends the removal of the dredge spoils, to allow for the proper flushing of the area with both the high tide water from the ocean and the fresh water from the Mamquam Blind Channel Reunification Project.

Secondly, the DoS staff have advised that they have consulted paddle outfitters in Squamish and they are of the opinion that this area has poor paddling opportunities. I completely disagree. At a mid-tide to high tide, the paddling experience is incredible. It is a calm and protected area, that has no motorized boats. It may not have the same experience as paddling in the Howe Sound or down the Squamish River, but beginners and families need this type of area. Where else can a beginner or family go for a paddle in Squamish, without having to worry about motorized boats, currents, and windy conditions? The only other options other than the Upper Mamquam Blind Channel, are to go to Alice Lake, Brohm Lake or Murrin Park. However, these areas get so busy, that it is difficult to access due to the crowds.

If the P4 zoning goes ahead, any future removal of the old dredge spoils or construction of a community dock will be eliminated.

It is obvious the DoS have not been in Squamish long enough to understand or remember the plans for Rose Park and making the Upper Mamquam Blind Channel more accessible from Rose Park and the Adventure Centre.

Before the 2010 Olympics there was even talk of putting a culvert under Highway 99 to make a big paddle route around the Adventure Centre. From what I remember, the idea took a little longer than expected and the Highway 99 improvements went ahead without it.

Thanks,

Jeff Levine, MBA

Sea to Sky Adventure Company

Owner

Squamish Adventure Centre.

Home Address:

Severed Section 22

Brackendale BC.

Jeff Levine, MBA

Chief Adventure Officer

Sea to Sky Adventure Company

Beaver Boards Canada

Severed Section  
22

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## Carly Simmons

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**From:** Robin Arthurs  
**Sent:** June 7, 2021 8:58 AM  
**To:** Hearing  
**Subject:** FW: Upper Mamquam Blind Channel Marine Rezoning

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**From:** Jacki Willcox **Severed Section 22**  
**Sent:** June 6, 2021 10:46 PM  
**To:** Council <Council@squamish.ca>  
**Subject:** Upper Mamquam Blind Channel Marine Rezoning

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mayor and Council,

I am writing with regards to the proposed P-4 zoning for the top end of the Upper Mamquam Blind Channel. This P-4 zoning will not only eliminate paddling put-in/ take-out facilities near the Adventure Centre, but it will also negatively impact any ecological restoration in the Upper Channel.

With access to the ocean now threatened by removal of the Spit and closure due to construction at Nexan Beach, public access to the waterways is a crucial element of Squamish's recreation and tourism and needs to be enhanced, not diminished.

The P-4 zoning is based on the assumption that the Upper Blind channel is in a natural condition, and should therefore be protected. I read that the UMBC is full of contaminated dredge spoil and could use attention to restoring better freshwater flow.

New zoning should be DEFERRED until further assessment of the area is completed. I do not believe there is any urgency in passing this zoning change.

Please vote NO to the Marine Zoning change for the Upper Blind Channel.  
Thank you,

Jacki Willcox  
**Severed Section 22**  
Squamish

## Carly Simmons

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**From:** Klay Tindall [Severed Section 22](#)  
**Sent:** June 8, 2021 10:59 AM  
**To:** Council; Hearing  
**Subject:** Squamish Marine Zoning Amendment Bylaw 2771

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mayor Elliott and District of Squamish Council,

We received an update this week on your proposed Squamish Marine Zoning Amendment Bylaw 2771 and Public Hearing scheduled for today. We would like to express the concerns of the Lil'wat Nation's Forestry company, Lil'wat Forestry Ventures LP and request a deferral on third reading until adequate consultation can be completed with First Nations and Industry. The Squamish Forest District is unique in that forest tenure is entirely held by local families and First Nations with significant investments in their local communities. We do not believe the impact of this proposed by-law on the commercial viability of their respective operations has been taken into consideration and would note that your stakeholder log does not include those reliant on Squamish log sorts such as Lil'wat Forestry Ventures LP. While conservation is something that we are incredibly supportive of, we believe that many of the restrictions proposed are beyond what is recommended by science including DFO guidelines. With over 30 Indigenous employees, significant investments into our business and community, and the inescapable economic component to Indigenous Title and Rights, we believe that the correct decision is to defer this decision until full consultation occurs.

Regards,  
Klay

---

Klay Tindall, RPF  
G.M. Forestry Operations  
Lil'wat Forestry Ventures LP



407 IR#10 Rd, [Severed Section 22](#)  
Email: [Severed Section 22](#)

BC, V0N 2K0

## Carly Simmons

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**From:** Tracey Saxby [Severed Section 22](#)  
**Sent:** June 8, 2021 2:24 PM  
**To:** Hearing  
**Subject:** Marine Zoning Plan  
**Attachments:** Herring Spawn Woodfibre in background photo credit John Buchanan.jpg

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mayor and Council,

I am writing to you on behalf of My Sea to Sky which currently represents more than 25,000 supporters in Howe Sound; and as a stakeholder for the environmental focus group for the Marine Zoning Plan.

It has been my great pleasure to participate in this process over the last ~1.5 years, and I highly commend Sarah McLannet and DoS staff for their work to develop a Marine Zoning Plan for Squamish.

I watched council's discussions regarding the Marine Zoning Plan on May 18<sup>th</sup> 2021.

As recommended by DoS staff, I urge you to keep the proposed M1 zoning for western Howe Sound given that the tenure for log handling and storage has not yet been approved.

As per the [2017 OceanWatch report for Howe Sound](#), it is important to note that log booms have many environmental impacts on the marine environment, including:

- Shade from log booms eliminates essential sunlight required for healthy algae, kelp, and eelgrass and the marine life that depend on these ecosystems;
- Bark waste from log booms smothers bottom-dwelling organisms and changes the chemical, physical, and biological health of the sediments.
- Movement of the logs during operations or storms can cause physical damage to the shore and organisms on the shore.
- Disturbance from log booms are partly responsible for the historic decline in herring, salmon, and ground fish stocks in Howe Sound.

To minimize some of these impacts, it is recommended to store logs in deeper waters or on land. It is critical that the formal process to approve tenure for log handling and storage is completed before pre-emptively changing the current Marine Zoning Plan for a tenure that may never be approved.

Since 2011, citizen scientist John Buchanan has tracked herring spawn in this area, and the intertidal area is particularly important for herring spawn. I have attached a photograph showing the herring spawn on intertidal kelp in western Howe Sound. The Howe Sound Marine Reference Guide is continuing these herring spawn surveys, and a report will be released soon documenting herring spawn within Howe Sound.

For any and all terrestrial and marine zoning within the District of Squamish, it is critical for us to take an [ecosystem-based management approach](#) that recognizes connections within and across ecosystems; utilizes an ecosystem services perspective; addresses cumulative impacts; manages for multiple objectives, and embraces change, learning and adaptation to foster better stewardship of our local environment.

I may not be able to attend the public hearing this evening due to a conflicting meeting, and submit this written comment as part of the public hearing.

Best Regards,  
Tracey

**Tracey Saxby**  
**Executive Director**  
**Severed**  
**Section 22**

Web: <http://myseatosky.org>

*We respectfully acknowledge that we work in the traditional, unceded territories and ancestral lands of the xʷməθkʷəŋəm (Musqueam), Skwxwú7mesh (Squamish), and Selilwitulh (Tsleil-Waututh) Nations.*

## Carly Simmons

---

**From:** Sarah McJannet  
**Sent:** June 8, 2021 3:18 PM  
**To:** Hearing  
**Subject:** FW: Marine zoning

**From:** Sarah McJannet  
**Sent:** Tuesday, June 8, 2021 3:16 PM  
**To:** Severed Section 22

Kerry Hamilton

<khamilton@squamish.ca>

**Subject:** RE: Marine zoning

Hi Ron, thanks so much for the email. I am forwarding to Council as part of the public record of submissions for tonight's hearing.

I have a couple points of clarification on the proposed zoning under Bylaw 2771:

1. RE: Redbridge pedestrian bridge. The alignment of this future bridge alignment was expressly considered in the marine zoning bylaw, such that the bridge would be within the proposed M1 zone, as opposed to the P4 Zone. If through the detailed design there is a portion of the bridge that appears to be within the P4, then we can look at this and adjust in future as needed.
2. For clarity, the small dock +non-motorized kayak launch as shown in the Redbridge project proposal would be considered 'Community Water Access' per the definition in the [bylaw](#), as opposed to 'Public Boat Launch' which is a more substantive public boat ramp facility for launching by [means of a trailer](#) or hand launching small crafts. M1 Zone permits community water access and does not have an associated upland parking component.

**COMMUNITY WATER ACCESS** means any structure that provides public water access and recreation opportunities for the general public, including wharves, docks, piers, boardwalks and other marine access facilities.

**PUBLIC BOAT LAUNCH** means a public boat ramp facility to launch and retrieve vessels or watercraft from the water by means of a boat trailer or hand launching of small crafts.

I trust these clarifications will address raised concerns but if they don't please let me know.

Sincerely, Sarah

**Sarah McJannet RPP, MCIP** | Senior Planner  
**District of Squamish** | *Hardwired for Adventure*  
604.815.5096 | [smcjannet@squamish.ca](mailto:smcjannet@squamish.ca) | [www.squamish.ca](http://www.squamish.ca)  
she/her



*I humbly acknowledge and live and work as a guest within the traditional ancestral and unceded territory of the Squamish Nation, Skwxwú7mesh Úxwumixw.*



---

**Severed Section 22**

**Sent:** Tuesday, June 8, 2021 3:01 PM

**To:** Kerry Hamilton <[khamilton@squamish.ca](mailto:khamilton@squamish.ca)>; Sarah McLannet <[smcjannet@squamish.ca](mailto:smcjannet@squamish.ca)>

**Cc:** **Severed Section 22**

**Subject:** Marine zoning

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

We have reviewed the proposed Marine Zoning bylaw and would like to express two concerns related to the proposed M1 provisions.

- 1) A significant component of our Redbridge project (CD-77, currently south site in DP review, north site subject to DP application) is the provision of a pedestrian bridge across the Upper Mamquam Blind Channel. The bridge would largely pass over the M1 zone, and might impinge on the P4 zone at the west end. No provisions are made to address the bridge in the proposed bylaw.
- 2) An second component of the project is a proposed public kayak launch. No requirement for public parking was identified throughout the rezoning and development permitting process. As a result, we will not be able to provide public parking for the kayak launch as provided for in the bylaw. We would recommend removing public parking from the requirement of a public boat launch from the M1 zone, or identify a kayak launch as distinct from a boat launch, and exempt a kayak launch from requiring public parking.

Regards;

Ron Bijok, Architect AIBC, CP

**Severed Section**

**Zoom:** <https://us02web.zoom.us/j/4947198421>



**Radiant City Architecture**

#222-1118 Homer St.

Vancouver BC V6B 6L5

[www.radiant-city.com](http://www.radiant-city.com)

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**From:** Scott Kennedy **Severed Section 22**

**Sent:** June 8, 2021 2:05 PM

**To:** Kerry Hamilton <[khamilton@squamish.ca](mailto:khamilton@squamish.ca)>

**Cc:** **Severed Section 22**

**Subject:** Mamquam Chanel Rezoning

Kerry

We have been made aware of and Agenda Item today that would rezone the Upper Mamquam. Is there anything that will impact either or rezoning, setbacks, kayak Launch or the bridge that formed part of our rezoning application and conditions? Do we need to speak at the meeting?

## Carly Simmons

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**From:** Robin Arthurs  
**Sent:** June 8, 2021 11:02 AM  
**To:** Hearing  
**Subject:** FW: Marine Zoning  
**Attachments:** Marine Tourism\_DOS.pdf; Proposed Marine Zoning Tourism Squamish.pdf

Sorry – the other one forwarded as a link. Try this one.

---

**From:** rick allan **Severed Section 22**  
**Sent:** June 8, 2021 11:00 AM  
**To:** Council <Council@squamish.ca>  
**Subject:** Marine Zoning

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Squamish Council,

I fully support the following email and letter written by Lesley Weeks.

Sincerely,  
Richard Boden

## Pubic Hearing – New Marine Zoning: Tuesday, June 8th, 6pm

What's at stake for the residents / tourism industry?

You decide!

The proposed "P4" zoning applies Ecological Reserve and protection to the area. The P4 zoning intent is to "protect and enhance land and water areas with high ecological value and to provide for limited public access and use". The P4 zoning does not permit docks or public boat launch nor would it allow for contemplation of selective dredging to assist with water flow.

The Upper Mamquam Blind Channel (UMBC) can provide a much-needed recreation venue for families and novice paddlers, with the adjacent Squamish Adventure Centre (restrooms, cafe), Smoke Bluffs Park trail network and ample parking in addition to the Squamish Adventure Inn and Narwhals Ice Cream just down the channel. This has been recommended in the Parks and Recreation Master Plan, and other UMBC planning processes. Rose Park is currently underutilized, opening access to the UMBC will add vibrancy and align with Council's Strategic Plan 2018-22 which includes: "increasing year-round utilization of our multipurpose space assets and public spaces by 2022."

The Squamish Paddling Club has also expressed that the UMBC is an excellent venue for some of their youth programming (especially if selective dredging was completed). In addition, the Squamish Paddling Club currently promotes the "Adventure Centre Loop" as one of their three suggested routes – "a scenic sheltered 3.5 km loop from their boathouse."

The current water conditions in the UMBC are not natural, there is restoration work required. It is filled with dredge spoils from previous uses, and from the 1986 dredging operation in the waters in front of the former sawmill which deposited large quantities of material in the channel above the two bridges. This material is laden with organic debris, as can be seen in discolouration of the waters and bottom surface in the area, with negative effects for aquatic life and fisheries.

If a better streamflow gradient could be established through the UMBC by selective dredging of areas of high ground holding back tidal waters and tributary flows (as recommended by environmental consultants), the following benefits could occur:

- More efficient flushing which would expose cleaner substrates for aquatic invertebrate production. (as well as add to the recreational and visual appeal of the UMBC at all water levels)
- Contaminated sediments could be removed, thereby improving water quality, not only in the UMBC but throughout the entire channel north of the Stawamus River outlet. The improved water quality would also add to the recreational and visual appearance of the UMBC at all tide levels.
- Re-establishing the natural streamflow gradient would mean that the flushing action would be self-maintained, without the need for regular dredging. (Also of note is that neither the Loggers Lane nor the Wilson Crescent/ Carson Place sloughs bring gravel material into the UMBC, so this area is not a deposition zone for silt and gravel materials).
- Navigability for recreational paddlers would be much improved.
- It's possible that the improved water flows and flushing of the channel and contaminated sediments would restore the area to the recreation zone it once was which included water play, splashing and swimming in addition to a variety of watersports.

How important is marine culture to our community? If we are truly an oceanfront community, we can not allow the land around the water to be zoned and developed without an integrated plan for our waterway. We need a diversity of water access points with public water access being integrated into all our planning.

Three more councillors (among Council members Elliott, Race, Stoner, Pettingill, Hurford and French) would need to be convinced of a deferral and further examination/ consultation with Industry.

Marine Zoning Package and info from DOS website:

<https://squamish.ca/yourgovernment/projects-and-initiatives/2020-zoning-bylaw-update/marine-zoning/>

Public Hearing – Bylaw (Marine Zones) No. 2771, 2020:

<https://squamish.ca/yourgovernment/meetings/council-meeting-schedule/public-hearing-3/>

Backgrounder on how to participate:

<https://squamish.ca/yourgovernment/meetings/public-hearings-and-meetings/>

Cheers,

L.

---

**Lesley Weeks** |Executive Director

**Tourism Squamish** | *Hardwired for Adventure*

**Severed Section 22**

[www.exploresquamish.com](http://www.exploresquamish.com)



*Tourism Squamish works on the unceded lands of the Squamish Nation, Sk̓wx̓wú7mesh Úxwumixw.*

## Carly Simmons

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**From:** Scott Graham <[Severed Section 22](#)>  
**Sent:** June 8, 2021 4:05 PM  
**To:** Council; Hearing  
**Subject:** Re: Upper Mamquam Blind Channel

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello

I do not support changing the Upper Mamquam Blind Channel to a Ecological Reserve.

Access to the water is paramount just as access to trails.

Thank you





District of Squamish  
PO Box 310  
Squamish, BC, V8B 0A3

June 8, 2021

**Re: Squamish Marine Rezoning**

Dear Mayor and Council,

The Squamish Chamber of Commerce is the oldest and largest business organization in the Squamish community, representing hundreds of businesses across all sectors, including transportation, tourism, forestry and other marine related businesses. We are dedicated to enhancing the quality of life in Squamish by actively supporting business, economic growth and economic diversification.

The Squamish Chamber recognizes the potential of waterfront access for our local economy, the health and lifestyle of residents, and Squamish's unique destination positioning as a waterfront mountain town. Further to our correspondence dated May 12, we would like to confirm our perspective on the proposed marine rezoning and share some subsequent concerns we have received from the business community.

**Impact on Businesses, Jobs and the Economy**

The Squamish Chamber is aware of a number of concerns from the forestry industry around the impact of M4 rezoning and lack of consultation with key stakeholders. The Squamish Forest District tenure is held by First Nations and local families. There is an integrated forestry supply chain, which impacts Squamish and the wider Sea to Sky Corridor, and which is not being considered. Council's Strategic Plan identifies a focus on the economy and jobs, and so it is imperative that rezoning does not negatively impact the viability of existing operations, their resulting jobs and our collective economy.

**Mamquam Blind Channel Dredging**

For many decades the Mamquam Blind channel has been an important economic zone, creating jobs and supporting local businesses. The District's Marine Action Strategy refers to the important "gateway" function of the Squamish harbour for tourism as well as commercial goods transport.

Marine safety, economic development and quality of life are affected by navigation channel constraints related to lack of dredging in the blind channel, including the Upper Blind Mamquam Channel. The Squamish Chamber previously identified the need for dredging in the blind channel, which has not been significantly dredged since March 1986. Our correspondence from July 2018 shared our desire for immediate project planning and the need for an ongoing maintenance strategy.

**Tourism Vision**

The tourism industry sees huge potential in the Upper Blind Mamquam Channel, with a vision for a vibrant tourism hub, with safe water access linking to Rose Park, Smoke Bluffs Park, tourism operators, the amenities at the Adventure Centre and, importantly, creating connecting with the Squamish downtown. A public dock and selective navigation is required to realize this vision, which the proposed P4 would not permit.

**Resident Access to Gathering Spaces, Parks and Marine Waterfront**

As a waterfront community, Squamish is in a crucial period, with huge opportunities to improve access to the water, whether for recreation, to drive tourism or to support the many possibilities of marine related business. The upper blind channel can also provide increased resident use of public spaces and marine waterfront areas, which are key goals in the 2019 – 2020 Council Strategic Plan. The pandemic has demonstrated the importance of outdoor spaces. There are many ways for recreation, business and the environment to work together to achieve collective goals.

**Understanding Needs and Potential**

It is our understanding that a number of studies are planned in the near future related to marine use, including an amenity needs and opportunities assessment. The Squamish Chamber is supportive of these studies and is keen to understand the community's needs and economic opportunities before implementing rezoning that may have negative consequences.

The Squamish Chamber would like to ensure marine rezoning does not negatively impact existing businesses that are core to our community (e.g. the forestry industry) or create barriers for future possibilities (e.g. tourism and other marine based businesses). Increased consultation, needs assessments and a further review of zoning is required to meet the diverse needs of businesses, stakeholders and residents.

Yours faithfully,

Louise Walker  
Executive Director,  
Squamish Chamber of Commerce

## Carly Simmons

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**From:** Robin Arthurs  
**Sent:** June 5, 2021 8:03 AM  
**To:** Hearing  
**Subject:** Fwd: Marine Zoning and Commercial Moorage space.

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**From:** Squamish Sailing Ventures **Severed Section 22**  
**Sent:** Saturday, June 5, 2021 7:12:37 AM  
**To:** Council <Council@squamish.ca>  
**Subject:** Marine Zoning and Commercial Moorage space.

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Squamish Council,

I am writing to you to ask you to consider businesses like mine and other water users in your Marine Zoning plans.

I am running a Sailing School, teaching adults to operate sailboats safely. This is especially valuable in Squamish where we have consistently strong winds and large tides which can make sailing hazardous for boaters without formal training or much experience.

In my business I also educate people on running their own boats in an environmentally conscious way. Such as using natural products for cleaning and maintenance, disposing of waste responsibly and techniques to avoid spills when refueling.

I have been struggling to find moorage I can operate my business from. I have recently left the Squamish Yacht Club due to not being allowed to operate commercially from their docks.

I have been told I am not allowed to use the Squamish Harbour Authority loading dock since I do not moor my boat at the Harbour Authority.  
The Squamish Harbour Authority wait list is currently closed to me due to being 10 years plus.

I would Very much like zoning to allow for Commercial dock space and Public loading and unloading docks.  
(Many boaters from other areas do not visit Squamish due to lack of temporary moorage options.)

I also feel strongly that the upper Mamquam Blind Channel could be used more as a safe paddling area as it is well protected from the strong winds found in the harbour. It could be a very safe area for children, families and people of all ages to enjoy the water. However it is not accessible or enjoyable at low tides. If the whole channel was dredged it would help to clean it up and make it more user friendly.

I do not think any of this would impact the local wildlife negatively.  
Allowing for more people to enjoy the local waters safely will teach more more the importance of respecting our oceans and its wildlife.

Sincerely,  
Ben Biswell

## Carly Simmons

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**From:** Tina Currie **Severed Section 22**  
**Sent:** June 7, 2021 3:52 PM  
**To:** Hearing  
**Subject:** Re: Proposed Marine Bylaw

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks for taking the time. I also sent a letter and used your attachments and shared my status in community and concerns.

I hope we continue to do the right things for the ocean and our community for generations to come!

Tina

On Mon, Jun 7, 2021 at 3:48 PM Tina Currie <[coastalstokesup@gmail.com](mailto:coastalstokesup@gmail.com)> wrote:

Attached is a letter that I am forwarding to you that one of my clients had sent to you. I am also expressing my opposition to this bylaw. I have submitted her letter with the same concerns and ask that this be forwarded to Council and Mayor when this proposal is discussed.

Also I am a local Standup Paddle guide that accesses these waterways daily and know how important the ocean and access is to our community. Please I hope these decisions are not rushed and will affect a long term issue for public access. If access is not available to public the safety of the community will also be affected. I like to help be part of the solution not more problems for the ocean and the people in the community and hope you take the proper action to this point.

Thank you

Tina Currie  
**Severed**  
**Section 22**  
Squamish, BC V8B 0A4  
**Severed Section**  
**22**

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**From:** Pauline Skiffington **Severed Section 22**  
**Sent:** June 7, 2021 11:25 AM  
**To:** [hearing@squamish.ca](mailto:hearing@squamish.ca)  
**Subject:** Proposed Marine Bylaw

Attached please find my letter expressing my opposition to this bylaw.

I ask that this be forwarded to Council and Mayor when this proposal is being discussed.



June 4, 2021,  
Re: Marine Zoning Bylaw No.2771

Dear Mayor and Council,

Tourism Squamish is the non-profit, member-based destination marketing and management organization representing Squamish. Formed in 2008 - Tourism Squamish is responsible for promoting Squamish as a world-class, four-season destination. We work collaboratively with our industry partners to foster and support remarkable visitor experiences while also focussing on destination development and visitor management to protect and preserve our natural and cultural assets. We provide industry leadership and create awareness within our community of the value of tourism and ultimately have a goal of increasing overnight visitation.

We represent more than 125 members who own, manage, and operate tourism-based businesses in the Squamish area including hotels, restaurants, activity operators, attractions, and retail shops. Eleven elected individuals represent the various sector interests on the Board of Directors.

Tourism Squamish sees huge potential in the Upper Mamquam Blind Channel. Imagine a vibrant waterway with a variety of users in canoes, kayaks, and stand-up paddleboards. We envision people paddling up the channel from Xwu'nekw Park to the dock adjacent to the Adventure Centre to meet for coffee or a hike/climb in Smoke Bluffs Park. Or perhaps a family renting kayaks from the Adventure Centre and paddling down to Xwu'nekw Park to pop over to the Farmers Market or a restaurant for lunch before enjoying a paddle back to the dock in the Upper Mamquam Blind Channel.

There are several companies in Squamish offering canoe, kayak, and SUP rentals in addition to tours and lessons. If there was a public dock installed in tandem with selective dredging, this would enable safe and reliable launching location for their clients as well as our residents. We spoke with many operators in addition to the Squamish Paddling Club who confirmed their interest and excitement about the possibility and opportunities that could come along with a dock and selective dredging.

The UMBC can provide a much-needed recreation venue for families and novice paddlers, with the adjacent Squamish Adventure Centre (restrooms, cafe), Smoke Bluffs Park trail network and ample parking. Rose Park is currently underutilized, opening access to the UMBC and encouraging use of it will add vibrancy and align with Council's Strategic Plan 2018-22 which includes: "increasing year-round utilization of our multipurpose space assets and public spaces by 2022."





Our marine-based tourism and recreation development opportunities are very important to Tourism Squamish and we believe that the proposed P4 zoning for the UMBC is short sighted and does not align with two of Council's four strategic priority areas. Specifically:

- 1) Neighbourhood Connectivity and Public Spaces
- 2) The Economy and Local Jobs

As was referenced in our two previous letters, we are concerned about the proposed "P4" zoning for the Upper Mamquam Blind Channel (UMBC) which applies Ecological Reserve and protection to the area. The P4 zoning intent is to "protect and enhance land and water areas with high ecological value and to provide for limited public access and use". The P4 zoning does not permit docks, a public boat launch or the opportunity for selective dredging to enhance waterflow.

We encourage you to vote against the P4 zoning in the Upper Mamquam Blind Channel to allow for further exploration of the opportunities in that area and to consider other zoning options which meet the needs of Squamish residents, Squamish visitors and the tourism economy.

Thank you for your consideration,  
Kind regards,

Lesley Weeks  
Executive Director, Tourism Squamish



# AJ FOREST PRODUCTS LTD.

*Member of Probyn Group*

Telephone 604.898.3712  
Facsimile 604.898.9312

[www.ajforest.com](http://www.ajforest.com)

P.O. Box 3831  
Garibaldi Highlands, BC Canada V0N 1T0

Dear Mayor & Council,

It has recently come to our attention that there is a movement to change the zoning and add restrictions related to the log storage areas. It is quite concerning that council has been working on this without consultation of the forest industry and the businesses that this will impact. It is also quite concerning that many of the "facts" presented to council are not accurate.

Some of our specific concerns are as follows:

- A minimum 12 meter water depth is the DFO recommendation for general log storage areas – not 20 meters
- DFO recommended BMPs for general log storage areas do not specify 100 meter setbacks.
- The zoning proposal package does not mention Industry's need for protected waters with suitable salinity levels for safe log storage.
- Grandfathering of current log storage tenures as legal non-conforming uses is not a sufficient protection for the industry as a whole due to growing scarcity of available suitable sites and various increasing constraints.

AJ Forest Products is a Squamish manufacturing facility employing 30 fulltime local people for 12 months a year. There are numerous local companies and contractors that support the running of the mill. We are also regular supporters of local sports and community events. AJ Forest Products is dependent on the local dry land sorts and access to the water to bring our logs to the mill. However, the proposed changes that have been presented will have a detrimental impact to our business along with the many other related businesses.

As a minimum, we ask that you defer the new M-4 Log Storage zoning pending further consultation with Industry.

Respectfully,

Todd Kion  
General Manager  
AJ Forest Products/Probyn Group



File: 18046-40/FSP\_DSQ

June 8, 2021

Mayor Elliot and District of Squamish Council,  
District of Squamish  
PO Box 310  
Squamish, BC V8B 0A3

Dear Mayor and Council:

**Re: District of Squamish Marine Zoning Bylaw Amendment No. 2771, 2020 – Public Hearing June 8 2021**

BC Timber Sales (BCTS) supports the stewardship objectives of the District of Squamish as set out in the District's Official Community Plan and supports the spirit and intent of the marine zoning bylaw amendment. However, there are aspects of the bylaw that are not aligned with well researched and tested best management practices and will have unintended negative consequences to BCTS operations and to the local forest industry. This may have resulted from incomplete consultation with forestry stakeholder groups that work day to day in Howe Sound, under the stringent requirements of existing federal and provincial marine zoning regulations: these individuals and company's who's business interests will be impacted by this can provide important information to contribute to a more encompassing bylaw that better serves the interests of all users. For these reasons, BCTS recommends Council defers their decision to proceed with this bylaw to provide time for this consultation to take place and the necessary changes to be made.

The bylaw proposes to modify current zoning on the west side of Howe Sound to M1 zoning, which does not support the use by BCTS or anyone in the forest industry to access a proposed log transfer facility (a log dump) north of Mill Creek. This very small site that already exists, but is not currently permitted, would then require a bylaw amendment to change it to I-3 or M-4 zoning, neither of which are appropriate for the intended use BCTS has for this site. Further to this, the industrial M4 zoning as proposed, unnecessarily imposes site constraints that will prohibit the permitting of this site, where as it would be approved under Provincial and Federal guidelines.

Specific to the concerns affecting BCTS operations, I would like to offer the following information.

- The primary goals of BCTS are to (1) provide representative price and cost benchmark data for the Market Pricing System to determine stumpage rates through auctions of approximately 20% of the timber harvested from public land in British Columbia, (2) conduct

Page 1 of 5

reconciliation with Indigenous peoples and (3) generate direct net revenue and indirect revenue for the Province.

- Canada is currently in a dispute with USA regarding a Softwood Lumber Trade Agreement which expired in October of 2015 resulting in a tariff being imposed on BC lumber products shipped to the USA. The tariff contributed to the shutdown of a significant number of manufacturing and harvesting operations throughout BC in 2019.
- A key component of the previous Softwood Lumber Agreement and negotiations for a new agreement was that provinces had to implement a timber auction system. Results of the provincial auctioning process is audited annually by the USA Trade Department to ensure it meets the criteria set out in the Softwood Lumber Trade Agreement.
- The maintenance of the auctioned timber program is both a multi-provincial and federal trade issue. The Canadian Forest Products sector is a multi-billion-dollar industry that supports significant employment and a primary contributor to both the provincial and federal Gross Domestic Product (GDP)
- Woodfibre\Mill Creek form part of the core operating area for BCTS's business operations in the Squamish area. The annual allowable cut (m3 /year of timber) for this area is approximately 10,000 m3 and provides a notable contribution to BCTS's annual harvesting program and our goal to provide pricing data under the auction system.
- The available area to harvest in Woodfibre / Mill Creek area is greatly reduced through protection measures for wildlife, old growth, visual quality and cultural sites and other important values. There are no unallocated areas of Provincial Forest in which to operate, meaning it is not a simple solution to go somewhere else to make up this volume.
- Access to the Woodfibre\Mill Creek timber is 100% reliant on water transportation on Howe Sound. The historic forestry access to this area was through the loading facilities on the old pulp mill site, however with the construction of the Woodfibre LNG facility this is no longer possible.
- Under the Sea to Sky Land and Resource Management Plan (LRMP) completed in 2008 the Woodfibre\Mill Creek operating areas were identified as a "working forest". With this designation it was the expectation that economically viable harvesting activities would continue in this area.

#### **BCTS Proposed log dump north of Mill Creek (Site 5):**

- With the historic access through the WLNG property no longer available, it is imperative that BCTS utilize alternative log handling sites (log dumps). The Mill Creek site (Site #5) will be used to access timber located in Mill Creek and north of it. This is a historic log dump that the bylaw will rezone as M-1 (Marine Navigation) which does not allow for water-based log handling or log storage and are not permitted uses within this designation. BCTS is concerned that our use of this site will conflict with this zoning, and we request this site be changed in your zoning regulations to "M4 – Marine Log Storage" or a new zoning type be

created for this type of use. There is no other viable road option for accessing this area.

- On May 5, 1997 the District of Squamish Council reviewed a referral to use the Mill Creek site (Site 5) as a log dump and advised the Squamish Forest District that council had no objection to the proposed log dump and booming grounds.
- The site will be small and only infrequently used for moving logs during times there is an active Timber Sale Licence unlike the large scale, high volume commercial dryland sorting facilities located on the east side of Howe Sound that operate year-round.
- By comparison, Site 5 will have a footprint of less than 0.2 hectares and handle less than 20,000 m<sup>3</sup>/yr in the near term. See pictures below of proposed site.



- This is roughly 1/10th or less of the land area of a typical industrial log sort operation found on the east side of Howe Sound that utilize multiple log dumps, large upland log storage



areas and significant log boom water storage. These sites sort and transport roughly 100,000 m<sup>3</sup> or more of logs per year. See picture below of large dryland sort on Blind Channel



- BCTS has undertaken considerable investment in planning, engineering and environmental assessments for this site from 2016 - 2021 to assist in preparing our applications for constructing and utilizing this site. The habitat assessment from Triton Environmental Consultants and the Onsite Engineering Ltd *“Woodfibre Log Dump Reactivation”* was forwarded to DOS on April 21, 2021
- As part of BCTS’s log dump application to the various responsible federal\provincial government agencies, BCTS’s application submission will undergo a vigorous environmental review to determine if the assessment work and associated mitigation measures will adequately address existing marine habitat conditions (geological substrates, drainage courses), marine life concerns and both past and potential impacts from marine log handling operations\facilities.
- It has been BCTS experience in log dumping operations that the mitigation measures as proposed in our environmental and engineering assessments have been successful in minimizing detrimental impacts to foreshore and intertidal marine habitats under similar siting conditions.

The Woodfibre\Mill Creek operating area is a key and core component of our Squamish business operations and critical to us in meeting data collection objectives to support BC requirements under the Softwood Lumber Agreement. Further, BCTS public timber sales provide opportunities for local logging contractors to generate revenue\employment and provides local wood products manufactures a primary or incremental log supply to meet their wood products manufacturing needs. Finally, BCTS provides employment opportunities for local community members and general revenue for the provincial government that can provide funding for local programing such as schools, policing, healthcare and social programs.

As a compromise to both of our positions we ask that at minimum, DOS defer the marine zone designation in the immediate area around the northern log dump to provide BCTS the opportunity to

go through the provincial\ federal application process. By doing this, the proposed mitigation measures for this site can be fully evaluated by provincial and federal marine biologists to determine if they are adequate. This information can be forwarded to DOS for review and follow-up discussion with BCTS can be had.

Additionally, BCTS wishes to highlight the M4 and I-3 Industrial zoning designations are designed for large scale high volume and daily use operations which do not fit the use proposed by BCTS. BCTS recommends the District of Squamish consider adding zoning categories that better reflect the intermittent low volume, low impact use common to the type of facility BCTS licence holders require.

In closing BCTS appreciates the dialogue and feedback received to date on this important discussion and wishes to work with the planning department and the DOS to come to an amicable resolution that meets the needs of all parties. We look forward to continuing to work with you and your response to our proposal.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Peter Scharf', is written over a faint, circular official stamp.

Peter Scharf, Operations Manager  
BC Timber Sales  
Chinook Business Area

Pauline Skiffington  
2001 Glacier Heights Place  
PO Box 3773  
Garibaldi Highlands, BC V0N 1T0  
Email: [Severed Section 22](#)

June 4, 2021

To: Mayor and Council  
District of Squamish

Re: Proposed Marine Zoning

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I am writing to express my concerns regarding the P4 Zoning for the Upper Mamquam Blind Channel.

I have lived in Squamish for more than forty years. My husband and I raise our son here, are property stakeholders and operate our business within this community. Including my parents, it's the third generation of my family (and my husband's) that have called Squamish "home". As a child, my parents were avid boaters and I spent a lot of time on our waterways. Our waterfront looked very different then - industry everywhere and housing/tourism was non-existent. That ratio today has flipped - residential development everywhere and very little industry.

With the recent developments along the Blind Channel, public access to the water is hard to find. The old decrepit boat launch area is over-crowded and there is no parking. The Nexen area is just so windy and more of an elite tourism location with high-speed kite boarders, jet skis, etc. Squamish is in desperate need of a quiet community waterfront access. One specifically designed for non-motorized activities and one that families can enjoy. The Upper Mamquam Blind Channel seems like an obvious spot for such an access with the close proximity of the Adventure Centre (with food and with restrooms), the trail networks from the Smoke Bluff and Brennan Park area and the ample parking. Combine that with the under-utilized green space that already exists at Rose Park, this would be a great opportunity to revitalize that area and create a year-round, low maintenance, accessible amenity in our town.

The Upper Mamquam Blind Channel in its present day state is unappealing. The current sludge/water in that area is not natural. Being a long time Squamish resident, I remember years of previous dredging operations where materials were deposited north of the rail and road bridges. That area today smells terrible at low tide due to the organic matter and is simply not attractive. If there is an opportunity to clean up that area, which would provide better streamflow and get our beautiful tidal waters back to what they use to be, I implore Council to evaluate this opportunity further. Do not prohibit the use of this area under "ecological reserve" protection. The land around the waterfront has, for the most part, been sold off to developers and this proposal for the P4 zoning seems backwards, in that public space was not negotiated as part of the development processes. While I do not want to see developers be able to build docks and floats that benefit their residents only, I also do not want Council to pass such zoning so hastily that would prohibit any use of the Upper Mamquam Blind Channel by anyone at any time in the future.

I am opposed to Council including the Upper Mamquam Blind Channel as part of this zoning package. I would ask that Council continue to work with stakeholders and community supporters to further explore the potential of that area that would benefit our town's residents and businesses.

Thank you,

Pauline Skiffington



June 8, 2021

Mayor Elliot & District of Squamish Council.  
PO BOX 310, Squamish, BC, V8B 0A3

**Email:** [council@squamish.ca](mailto:council@squamish.ca);

**Re: District of Squamish Zoning Bylaw 2200, 2011 Amendment Bylaw (Marine Zones) No. 2771, 2020**

Black Mount Logging Inc., Inlailawatash Limited Partnership, Lil'wat Forestry Ventures Limited Partnership and Sqomish LP (the "Group") have reviewed the above referenced Bylaw and have great concern over the impact these changes would have on the viability of the forest sector in the Sea-to-Sky Natural Resource District. Forestry and logging have been a long-time fixture in the Sea-to-Sky corridor and along with mining were what the community was founded on. We understand that the community has transformed since that time, with population growth and the increase in recreational and wilderness adventure, however, forestry has developed and changed over this period as well. This has been accomplished through increased attention to sustainable harvesting, changed practices and the continual development & implementation of legislative frameworks to ensure our social license to operate continues.

Premier Horgan and Forests minister Katrine Conroy recently announced a Intentions Paper on June 1st, with a mandate of diversity, competitiveness, sustainability, and community-orientation for the forest sector. The Sea-to-Sky is a model for what Premier Horgan and Minister Conroy are trying to achieve. Of the approximate 470,000 m3 AAC, less than 150,000 m3 is managed by longtime local family run logging companies and a mill operator. The remaining 320,000 m3 is managed through Community Forest Agreements, First Nations Woodlot Licences, and other Forest Licences and tenure held by First Nations throughout the District. This far and exceeds the Provincial goal of 20% First Nations representation.

Recreation and wilderness experiences are significant economic drivers in the regions but the ability of First Nations to succeed through their controlling interest in the forest sector and the associated employment, revenue and taxes generated cannot be over looked by the District of Squamish Council.

Based on the geography of the Sea-to-Sky National Resource District there are only two routes to get the harvested volume to the Vancouver Log Market, Harrison Lake and Howe Sound. Harrison Lake is not a viable option for the majority of the District's volumes due to hauling distances and its short operating window due to Fraser river water levels and fisheries restriction.

Howe Sound is key to the continued success of the forest sector in Squamish. Any reduction to the sorting and dumping capacity within the Sea-to-Sky District will have a significant impact to forest operations, employment and tax revenue for the District. If the proposed changes to the minimum water depths and set-backs are approved there will be a catastrophic impact to currently viable and long established log storage and handling facilities.

After reviewing the documentation available regarding the new Marine Zones, we believe there has been a misinterpretation of the existing Best Management Practices and other Guidelines generated by

the Department of Fisheries and Oceans regarding water depths and the introduction of additional setbacks. In addition, based on the potential impacts to the tenure holders in the District, further and more active consultation and scientific review must be conducted prior to the implementation of *District of Squamish Zoning Bylaw 2200, 2011 Amendment Bylaw (Marine Zones) No. 2771, 2020*.

We appreciate you providing us with an opportunity to comment on the proposed Bylaw changes and look forward to developing a science-based plan moving forward that meets requirements of the Forest Sector in the Squamish District while achieving the goals of the community.

Yours Truly

Severed Section 22

Severed Section 22

Dave Rollins, RPF, P.Eng  
Operations Engineer  
BLACK MOUNT LOGGING INC.

Rick Jaccard, RPF  
Forestry Manager  
SQOMISH FORESTRY LP

On the behalf of:

LIL'WAT FORESTRY VENTURES  
LIMITED PARTNERSHIP, as represented  
by its general partner, LIL'WAT  
FORESTRY VENTURES INC.

and

INLAILAWATASH  
LIMITED PARTNERSHIP, as represented  
by its general partner, INLAILAWATASH GP LTD.

CC: Dave Southam, District Manager, Sea-to-sky District, email: [FLNR.Minister@gov.bc.ca](mailto:FLNR.Minister@gov.bc.ca)  
Katrine Conroy, Minister FLNRORD, email: [FLNR.Minister@gov.bc.ca](mailto:FLNR.Minister@gov.bc.ca)  
Honorable John Horgan, Premier email: [premier@gov.bc.ca](mailto:premier@gov.bc.ca)

Severed Section 22



## Carly Simmons

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**From:** Tracey and Steve [Severed Section 22](#)  
**Sent:** June 9, 2021 3:56 PM  
**To:** Council  
**Cc:** Hearing  
**Subject:** Opposition to marine zoning of upper blind channel

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi DOS,

I just heard that you will be discussing the zoning of the upper blind channel tonight. I wanted to voice both my husbands & my opposition to this proposed plan at this time.

As we are all aware, Squamish is growing rapidly and while the environment is a huge focus & concern of ours, so to is to actually have areas in our community to recreate, socialize and bond as a community.

With all the building being allowed, we are quickly losing our community feel and replacing it with concrete.

The Upper Mamquam Blind Channel (UMBC) is right in the center of our town & where we have already invested in building our "adventure" centre. This part of the blind channel could be an amazing community hub & a huge draw to tourists who enter the corridor. The "limited public access", would in our opinions be a detriment to the community and those that live and enjoy the area. Instead of limiting the access to this area we should put money into building it up! Dredging this area would we believe be a valuable benefit to Squamish. I understand, Environmental Reports have shown that the ecological value of this area is negligible and dredging or removing this old dredge spoils with an excavator would improve the habitat.

Wasn't one of the intents of Rose Park to provide public access to the water??

This area should be improved on and developed for public access while also taking into consideration the ecology & marine life. We can make it work for all!! Please at minimum allow more time & community members to voice their opinions on this matter. All members of our community deserve a say & to have access and use of public spaces.

If this zoning is approved, never will the often discussed plan of dredging or having a community dock be realized. It should be a community discussion or vote. This is HUGE for our community!

The P4 zoning does not permit docks or public boat launch nor would it allow for contemplation of selective dredging to assist with water flow.

The Upper Mamquam Blind Channel can provide a much-needed recreation venue for families. Opening access to the UMBC will add vibrancy and align with Council's Strategic Plan 2018-22 which includes: "increasing year-round utilization of our multipurpose space assets and public spaces by 2022."

The current water conditions in the UMBC are not natural, there is restoration work required. It is filled with dredge spoils from previous uses, and from the 1986 dredging operation in the waters in front of the former sawmill which deposited large quantities of material in the channel above the two bridges. This material is laden with organic debris, as can be seen in discolouration of the waters and bottom surface in the area, with negative effects for aquatic life and fisheries.

Re-establishing the natural streamflow gradient would mean that the flushing action would be self-maintained, without the need for regular dredging.

Please let's work together to make Squamish the community we all want to raise our families in. Our kids need safe access to spaces to play & recreate. The UMBC is a great start!

Thank you!  
Kindly,  
Tracey Heer & Steve Woelfle