

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

LOWER CHURCHILL PROJECT

CH0009

NORTH AND SOUTH DAMS

SCOPE OF WORK SPECIFICATION

Prepared by: Abdellah El Bensi
(Package Engineer)

Approved by: Greg Snyder
(Engineering Manager)

Approved by: Scott O'Brien
(Project Manager)

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

REVISION LIST

Revision						Remarks
N ^o	By	Verif.	Appr.	Appr.	Date DD-MMM-YYYY	
C1	AEB	GS	MT		15-Jul-2015	Issued for Construction
B1	AEB	GS	MT		15-MAY-2014	Issued for Bid
A1	AEB	GS	MT		09-JAN-2014	Issued for internal coordination

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

TABLE OF CONTENTS

	PAGE
1 GENERAL.....	1
1.1 Project Description.....	1
1.2 General Description Of Work.....	3
1.3 Language And Units.....	3
1.4 Climatic Data	3
1.5 Hydrometeorological Data.....	3
2 SCOPE OF WORK	4
2.1 Work Included	4
3 SPECIAL REQUIREMENTS	8
3.1 General.....	8
3.2 Site Conditions	8
3.3 Company Supplied Documents	8
3.4 Setting-Out Or Implementation Of Survey Points And Lines.....	9
3.5 Site Information	9
3.6 Specialist Subcontractor.....	11
3.7 Environmental Requirements	11
3.8 Documents	11
3.9 Schedule Constraints.....	12
3.10 Batch Plants.....	13
3.11 Tailrace Rock Plug And Access Road To Laydown Area J.....	13

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

1 GENERAL

1.1 PROJECT DESCRIPTION

Nalcor is developing Phase I of the LCP, which includes an 824 MW hydroelectric generating facility at Muskrat Falls and associated transmission links to Churchill Falls and the Island of Newfoundland.

The scope of the physical facilities to be constructed during Phase I of the Project includes the following:

- Muskrat Falls Generation (MFG)
- Labrador Transmission Assets (LTA)
- Labrador – Island Transmission Link (LIL)

1.1.1 Muskrat Falls Generation (MFG)

Muskrat Falls Generation includes the following:

- 22 km of permanent access roads on the south side of the river, including upgrading and new construction, and temporary bridges;
- A 1,500 person accommodations complex;
- A north Roller Compacted Concrete (RCC) overflow dam;
- A south rock fill dam;
- River diversion during construction via the spillway;
- 5 vertical gate spillway;
- Reservoir preparation and reservoir clearing;
- Replacement of fish and terrestrial habitat;
- North spur stabilization works; and,
- A close coupled intake and powerhouse, including:
 - 4 intakes with gates and trash racks
 - 4 turbine/generator units at approximately 206 MW each with associated ancillary electrical/mechanical and protection/control equipment
 - 5 power transformers (includes 1 spare), located on the draft tube deck of the powerhouse
 - 2 Overhead cranes each rated at 450 Tonnes

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

1.1.2 Labrador Island Transmission Link (LIL)

The LIL consists of the overland high voltage direct current (HVdc – 350kV) Transmission system and associated HVdc converter station systems, the Strait of Belle Isle (SOBI) Crossing and a new synchronous condenser facility. Specifically it includes:

- AC Switchyard at Soldier’s Pond on the Avalon Peninsula;
- Muskrat Falls HVdc converter stations: HVdc bipolar converter station; 315 kV ac, converted to ± 350 kV dc; Pole capacity of 450 MW;
- Shoreline pond electrode located on the Labrador side of the Strait of Belle Isle. The L’Anse-au-Diable shoreline pond electrode will be connected to the converter station at Muskrat Falls with dual overhead conductors supported on a wood pole line from the pond electrode site to the HVdc transmission line Right of Way and from there on will be supported on the HVdc line structures;
- Soldiers Pond HVdc converter station: HVdc bipolar converter station; 230 kV ac, converted from ± 350 kV dc; pole capacity of 450 MW; and Shoreline pond electrode located on the east shore of Conception Bay;
- The Dowden’s Point shoreline pond electrode will be connected to the converter station at Soldiers Pond with dual overhead conductors supported on a wood pole line;
- HVdc Transition Compounds for the Strait of Belle Isle submarine cable terminations;
- Three Mass Impregnated 450MW capacity each submarine cables crossing the SOBI protected using HDD boreholes and seabed rocking dumping;
- One transition compound for each side of the Strait of Belle Isle submarine cable crossing, with associated switch works to manage the junction of multiple submarine cables and the overhead transmission line;
- Overhead transmission line from the Muskrat Falls converter station to Soldiers Pond converter station: 900 MW, ± 350 kV dc, bipolar line, single conductor per pole; galvanized lattice steel guyed suspension and rigid angle towers; 1100 km long; and,
- New synchronous condenser at Soldiers Pond – 3 x 175 MVar units.

1.1.3 Labrador Transmission Asset (LTA)

LTA consists of the AC transmission line system form Churchill Falls to Muskrat Falls, specifically:

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

- A new 315/735 kV switchyard at Churchill Falls connected to the existing 735 kV switchyard with two overhead lines of 735 kV of approximately 0.6 km and switchyard extension;
- Muskrat Falls switchyard 315 kV; and,
- Transmission lines from Muskrat Falls to Churchill Falls: double-circuit 315 kV ac, 3 phase lines, double bundle conductor, single circuit galvanized lattice steel guyed suspension and rigid angle towers; 247 km long.

1.2 General Description Of Work

The Construction of the North and South Dams (CH0009) consists of the construction of the South Dam and the North Dam, construction and removal of Cofferdams, construction and removal of a temporary access bridge over spillway approach channel as well as excavation of Tailrace Rock Plug. The package also includes foundation preparation, exploitation of sources of materials (borrow pits and stockpile areas), production of aggregates, Conventional Vibrated Concrete (CVC) and Roller Compacted Concrete (RCC) as well as the construction of permanent access roads including the powerhouse parking area as described herein, in the Technical Specification and as shown on the drawings.

1.3 Language And Units

The language to be used for all nameplates and documentation is English.

All designs and drawings shall be prepared in accordance with the International System of Units (SI units) and the units of measurement will be the SI Metric System.

1.4 Climatic Data

1.4.1 The Climatological Data is included in Exhibit 11 - Company Supplied Documents.

1.5 Hydrometeorological Data

1.5.1 Hydrometeorological data is summarized on Drawing MFA-SN-CD-2340-CV-DD-0002-01, Exhibit 1.

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

2 SCOPE OF WORK

2.1 Work Included

2.1.1 The work listed in this Scope of Work Specification includes the supply of all labour, materials and equipment and the execution of all Work required to construct all structures and related works for package CH0009 as shown on the Drawings, as indicated in the Technical Specification, and as specified herein or as directed by the Engineer.

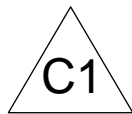
2.1.2 The term Technical Specification refers to the document MFA-SN-CD-2000-CV-TS-0020-01 and all its related sections, Exhibit 1.

2.1.3 The Work includes but is not limited to:

.1 General

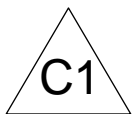


.1 Design, construction, maintenance, relocation, if required and removal of all temporary construction roads, access ramps and work areas necessary for the execution of the Work;



.2 Construction of the construction access road to the laydown area C, if required;

.3 Construction of the permanent access and service road to the South Dam and completion of the final grading of the permanent access road including the placement of the fill in the parking area;



.4 Design, construction, maintenance, relocation, if required, and removal of all temporary construction roads to borrow pits, quarries, stockpiles and spoil disposal areas;

.5 Preparation and restoration of the designated spoil disposal area;

.6 Clearing, grubbing and stripping of the structure areas and borrow areas and their access roads;

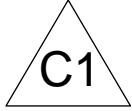


.7 Exploiting borrow areas, quarry if required, and rockfill stockpile areas, preparing the spoil disposal areas, drainage, excavation, selection, processing if required, of materials and final restoration of these areas at the end of the works.

.8 Design, supply, installation, operation, maintenance, relocation and removal if required, of dewatering systems required to perform the works in dry conditions in structure areas, borrow areas, quarry and stockpile areas;

.9 Decommissioning and backfilling of the Sedimentation Ponds 1 and 2 in compliance with Environmental & Regulatory Compliance Requirements, Exhibit 6; and

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

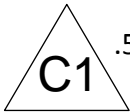


- .10 Design, supply, installation and subsequent removal of the Temporary Upstream Bridge over the approach channel of the spillway and its related access ramps including all elements from foundation preparation to substructures and superstructure. Piers and abutments shall be removed, except as permitted by the Engineer. The temporary Upstream Bridge is to be handed over to the Company after removal. The storage place will be designated within 5 km from the actual location of the bridge.
- .2 Excavation
- .1 Overburden excavation in dry and underwater conditions at the Tailrace Rock Plug, Upstream Cofferdam, Downstream Cofferdam, Intake Channel Cofferdam, South Dam, and North Dam;
 - .2 Open cut excavations of rock in dry and underwater conditions at the Tailrace Rock Plug, including the existing access ramp to powerhouse;
 - .3 Open cut excavation of rock for foundation preparation at the footprint of North Dam, South Dam, Intake Channel Cofferdam, Upstream Cofferdam and Downstream Cofferdam;
 - .4 Removal of the existing Cofferdam 1 and Cofferdam 2 to the bedrock foundation and Cofferdam 3 to the natural ground elevation or as directed by the Engineer;
 - .5 Removal to the bedrock foundation of all existing rockfill access ramps and any new rockfill access ramps installed for Contractor's own use ;
 - .6 Removal of the downstream section of the Riverside RCC Cofferdam; and
 - .7 Cleaning to bedrock asperities, in dry conditions, of tailrace channel and footprint of the existing ramps.
- .3 Rock Stabilization and Surface Protection
- .1 Supply and installation of rock stabilization and surface protection on the excavated surfaces at the Tailrace Channel;
 - .2 Removal of all existing chain link wire mesh on the walls of the Powerhouse channels and Spillway channels prior to watering up; and
 - .3 Removal of all existing temporary fences around the top of Powerhouse and Spillway channels and supply and installation of the permanent chain link fences and gates.

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

.4 Foundation Preparation, Grouting and Drainage

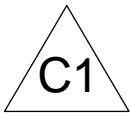
- .1 Foundation preparation including rock excavation, dental concrete, dry pack and slush grout at the North Dam, South Dam, Upstream Cofferdam, Intake Channel Cofferdam and Downstream Cofferdam;
- .2 Drilling for grouting, drainage, exploration and instrumentation, as indicated on the Drawings or as required by the Engineer; and
- .3 Curtain grouting, consolidation grouting and contact grouting in the North Dam, South Dam and Upstream Cofferdam foundations, if required, including supply, installation and removal of the temporary instrumentation for grouting.



.5 Jet Grouting (If required)

- .1 Supply material, equipment and labour to perform the jet grouting of the cut-off wall, if required, in the Upstream Cofferdam including drilling, grouting and cleaning.

.6 Embankment Construction



- .1 Construction of the starter groin of the Upstream Cofferdam, which may be undertaken in the year before the river closure;
- .2 Construction of Upstream Cofferdam and South Dam including the exploitation of sources of materials, processing, loading, transporting, unloading, placing and compacting as well as the control of moisture content of the material; and
- .3 Construction and removal at the end of the Work of the Intake Channel Cofferdam and Downstream Cofferdam, including the exploitation of sources of materials, processing, loading, transporting, unloading, placing and compacting as well as the control of moisture content of the material.

.7 RCC Concrete

- .1 Production of the concrete coarse and fine aggregates using the rockfill stockpiled in Stockpile Area A.
- .2 Production of concrete natural fine aggregates from GD11, if required.
- .3 Construction of the North Dam including concreting, reinforcement, waterstops, drains, contraction joints, guardrails, stairs and other aspects outlined on the drawings and specifications and as required by the Engineer.

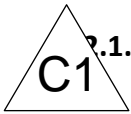


- .4 Development of the RCC mix, including construction of the Trial Demonstration Sections.

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

.8 CVC Concrete

- .1 Production of the concrete coarse aggregates using the rockfill stockpiled in Stockpile Area A.
- .2 Production of the concrete fine aggregate from borrow areas GD11.
- .3 Production and placement of CVC concrete for the North Dam, Upstream Bridge foundations, dental concrete, slush grout and dry pack for foundation preparation.



2.1.4 Batch Plants

- .1 Provide, operate and maintain batch plants for RCC production.
- .2 Provide, operate and maintain batch plant for CVC production. Batch plant for RCC may be utilized for production of CVC provided there is no compromise in RCC completion.

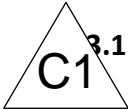
2.1.5 Geotechnical Instrumentation

- .1 Supply and installation of the geotechnical instrumentation in the North and South Dams as indicated in the Technical Specification, as shown on the drawings and as required by the Engineer.

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

3 SPECIAL REQUIREMENTS

3.1 General



3.1.1 If Contractor chooses that some of the Work be performed during the winter period, then Contractor shall be responsible to take all necessary measures for carrying out Work in winter conditions.



3.1.2 If Contractor undertakes concrete work during the winter, then Contractor shall be responsible to make provisions for winter concreting, including the use of heated shelters. The Contractor shall design, supply, install and remove temporary shelters.

3.1.3 Where an area is used by the Contractor as shelter for the execution of its Work before the area is completed, it is the responsibility of the Contractor to supply, install and subsequently remove any temporary walls and enclosure as may be required.

3.1.4 All temporary works shall be designed by a qualified Professional Engineer registered in the Province of Newfoundland and Labrador. The Professional Engineer shall be approved by the Engineer prior to starting any Work. Drawings and specifications shall be sealed by the Professional Engineer. All engineering designs and drawings shall be submitted to the Engineer for review and Acceptance before starting any Work.



3.1.5 The removal of the cofferdams, temporary upstream bridge and access ramps shall be coordinated with the Engineer. Contractor shall obtain a written authorization prior to start of the work to remove these structures.

3.1.6 The Contractor shall submit the required documentation to the Engineer for review and Acceptance in accordance with the Technical Specification and with Exhibit 4 - Supplier Document Requirement List (SDRL)

3.1.7 Where there are conflicts between or within the Technical Specification and the Drawings, the Technical Specification takes precedence. Where there are conflicts between or within Codes, Standards or Acts, priority shall be given to the more stringent.

3.2 Site Conditions

3.2.1 This Scope of Work Specification shall be read in conjunction with Exhibit 12 – Site Conditions.

3.3 Company Supplied Documents

3.3.1 Company supplied documents are listed in Exhibit 11 - Company Supplied Documents. The Contractor shall observe all requirements of the Company Supplied Documents.

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

3.4 Setting-Out Or Implementation Of Survey Points And Lines

3.4.1 The Contractor shall be responsible for:

- .1 Surveying required for setting-out the structures and for as-built profile of the excavation and structures;
- .2 Locate, confirm and protect control points prior to starting Site Work. Preserve permanent reference points during construction;
- .3 Establish permanent benchmarks on Site, referenced to established bench marks by survey control points. Record locations, with horizontal and vertical data in Project Record documents;
- .4 The accurate setting-out of the Work in relation to reference points, lines and levels given by the Engineer in writing;
- .5 The correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of the Work;
- .6 The provision of all necessary instruments, appliances and labour in connection with the foregoing responsibilities;
- .7 If, at any time during the execution of the Work, any error appears in the position, levels, dimensions or alignment of any part of the Work, the Contractor, on being required to do so by the Engineer, shall, at its own cost, rectify such error to the satisfaction of the Engineer, unless such error is based on incorrect data supplied in writing by the Engineer, in which case the Engineer shall recommend a Change to the Work in accordance with Article 14; and
- .8 The checking of any setting-out or of any line or level by the Engineer shall not in any way relieve the Contractor of its responsibility for the accuracy thereof and the Contractor shall carefully protect and preserve all bench-marks, sight-rails, pegs and other reference points used in setting-out the Work.

3.5 Site Information

- #### 3.5.1
- The Company has made available to the Contractor, Site information in Exhibit 11 – Company Supplied Documents. Field information has been obtained by or on behalf of the Company from investigations carried out in project area, the Contractor shall be responsible for its own interpretation thereof.

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

3.5.2 The Contractor shall be deemed to have inspected and examined the Site and its surroundings, be fully knowledgeable of the information available in connection therewith and to have satisfied itself before submitting its Proposal, as to:

- .1 The form and nature thereof, including the subsurface conditions;
- .2 The hydrological and climatic conditions;
- .3 The extent and nature of Work and materials necessary for the execution and completion of the Work and the remedying of any defects therein; and
- .4 The means of access to the Site and the accommodation it may require, when not provided for (Refer to Exhibit 12 – Site Conditions);

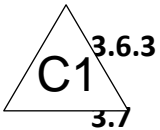
3.5.3 In addition, the Contractor, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect the Agreement.

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

3.6 Specialist Subcontractor

3.6.1 The Contractor may subcontract specialized services, such as design engineering services, but it shall obtain the Approval of the Engineer prior to the award of any such Subcontract. Such Approval shall not relieve the Contractor from any liability or obligation under the Agreement and it shall be responsible for the acts, default and neglects of the Sub-Contractor, its agents, personnel as fully as if they were the acts, defaults and neglect of the Contractor. The Engineer reserves the right to refuse the services of a Sub-Contractor proposed by the Contractor.

3.6.2 The Contractor shall submit to the Engineer for Approval, details on the history of the Sub-Contractor (previous work done in similar conditions, etc), on the personnel the Sub-Contractor intends to use, inclusive of their detailed resumes, membership in professional organizations, their authority to sign and approve Drawings, registration and/or eligibility to register with the Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL). All calculations and such like shall be in accordance with Newfoundland and Labrador Regulations. Such Approval by the Engineer does not change the full responsibility of the Contractor in the execution of the Work.



Deleted.

3.7 Environmental Requirements

3.7.1 Contractor shall comply with Exhibit 6 - Environmental & Regulatory Compliance Requirements.

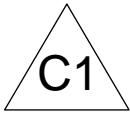
3.7.2 Prior to the start of Work, the Contractor shall prepare a Contract Specific Environmental Protection Plan (C-SEPP) for review and Acceptance by the Engineer. The C-SEPP will detail the environmental protection measures that will be implemented by the Contractor for all components of the Work. The Contractor shall reference the General Environmental Requirements of the Specification, as well as Contract Drawings, as required. The template for preparation of the C-SEPP is attached in Exhibit 11 – Company Supplied Documents.

3.8 Documents

3.8.1 Drawings Provided to the Contractor

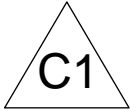
.1 Before the beginning of the Work, the Contractor shall submit for the Engineer’s Acceptance, the Documents required as per the Technical Specification and as required by the SDRL (Exhibit 4 - Supplier Document Requirement List). The Contractor shall submit for review by the Engineer all test certificates, purchase orders, Drawings and all details necessary for the execution of the Work as specified in the Technical Specification.

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	



.2 The turnaround time for Engineer’s review of Contractor Documents is 21 calendar days. Company will endeavor to reduce this duration where possible, and will prioritize the processing of documents identified by Contractor.

.3 The Drawings are included in Exhibit 1 and are listed in the Technical Document List; document number MFA-SN-CD-2000-CV-LS-0003-01.



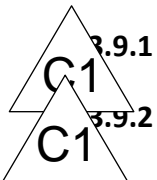
.4 Contractor shall only execute the Work based on stamped and signed Issued for Construction (IFC) Drawings.

3.8.2 Technical Specification



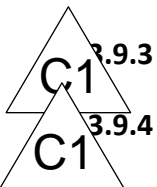
.1 The Technical Specification’s sections are included in Exhibit 1.

3.9 Schedule Constraints



3.9.1 Deleted.

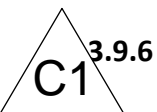
3.9.2 The construction of the Upstream Cofferdam and the North Dam are on the critical path for the project. Contractor may construct the starter groin, the upstream temporary bridge and the related access ramps and foundation during the year before the river closure in order to advance as much Work as possible to help ensure early closure of the river in the following year.



3.9.3 Deleted.

3.9.4 Contractor may start clearing, excavation and foundation preparation in the areas of the Upstream Cofferdam and North Dam above the water limits as soon as there is access to any portion of the foundation.

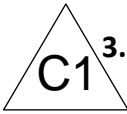
3.9.5 The Contractor shall use appropriate methods, equipment and sequencing to achieve the river closure and work to obtain manageable water downstream of the cofferdam as soon as possible after closure. Manageable water means the volume of seepage through the upstream cofferdam can be pumped or efficiently directed outside the Work area in order to allow the completion of foundation preparation work in the North Dam area during the year of river closure.



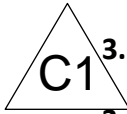
3.9.6 Contractor may commence work on North Dam as soon as possible in the year of river closure, prior to winter shut down. Winter protection to allow early start Work in the next year will be required.

LOWER CHURCHILL PROJECT	Scope of Work	Rev	Date
	Nalcor Doc. No.: MFA-SN-CD-2000-CV-SP-0002-01	C1	15-Jul-2015
	SLI Doc. No.: 505573-3231-4GEW-0001	00	

3.10 Batch Plants



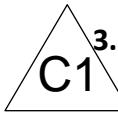
3.10.1 Laydown areas A, B and J could be available for CH0009 Contractor for the installation of batch plants and crushers. The surface of the laydown Area J as shown on the drawings is currently 1 ha. The Contractor can increase Area J surface by using excavated materials from the removal of Cofferdams No 2 and No 3 and / or importing other material as needed.



3.10.2 Deleted.

3.11 Tailrace Rock Plug And Access Road To Laydown Area J

3.11.1 If the Contractor chooses to setup the RCC batch plants in laydown Area J, the excavation of the tailrace rock plug in dry conditions shall be completed while maintaining efficient access to Area J at all times. The minimum elevation of the watertight access road shall not be less than El. 9.0 m across the tailrace channel. During blasting works, the Contractor shall take all the necessary precautions not to damage directly (fly rocks) or indirectly (vibrations, air blasts), buildings, structures, equipment and transmission facilities located near excavation works.



3.11.2 Deleted.

END OF SECTION