

APPENDIX 4-7

Lower Churchill Project

CH0032 Site Mobilization

12-Jun-2015

Boundless Energy



Take a
MOMENT
for Safety

3.0 Introduction & Meeting Objectives

Introduction

- LCP is committed to completing river closure and diversion next year – we are not exploring any other alternatives.
- We expect the full support and commitment of all our Contractors to meet this goal.

Introduction

- CH0032 diversion readiness currently defined as:

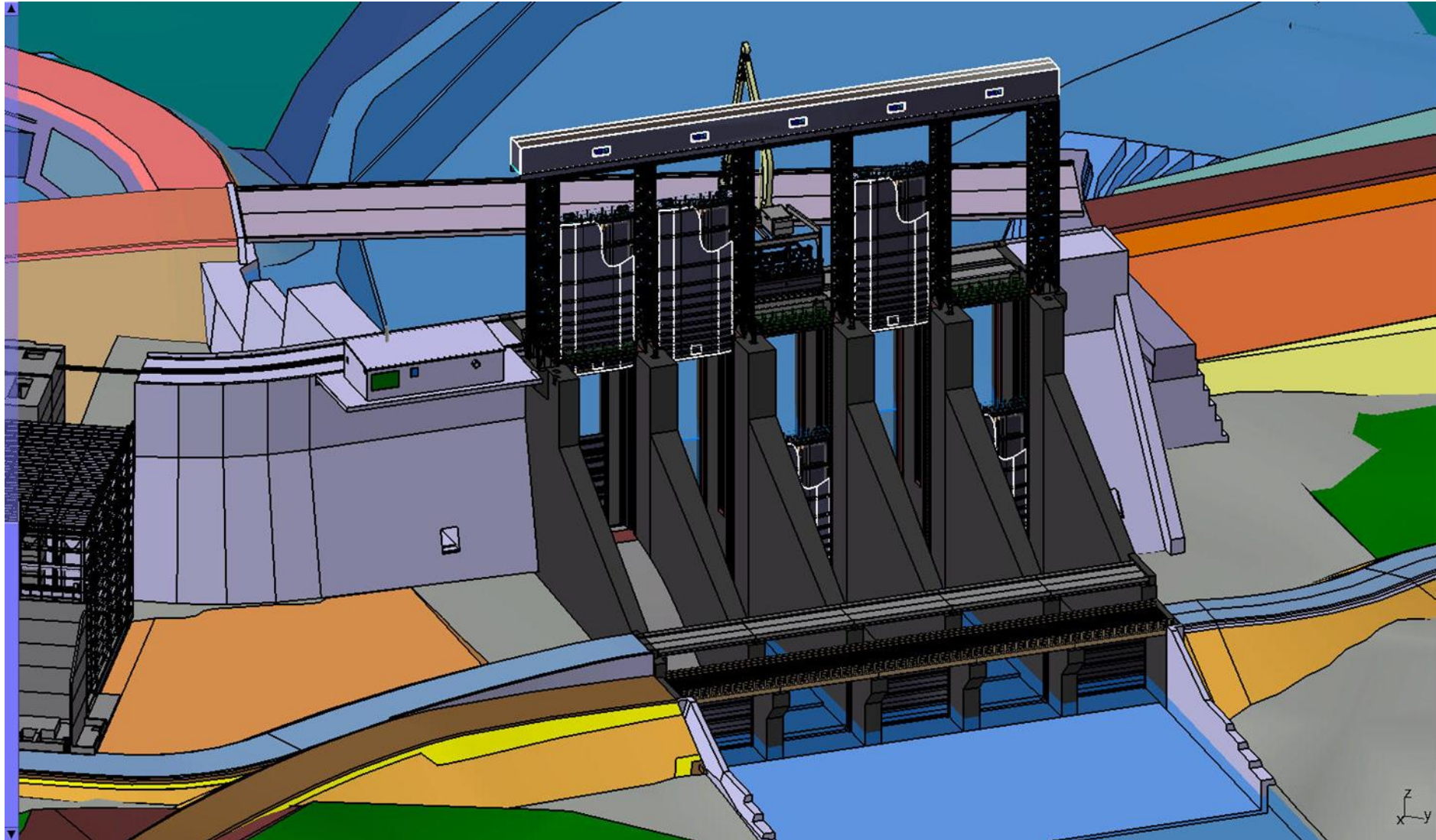
“Spillway all hydro-mechanical and electrical systems (including Trash Cleaner hoist) commissioned and ready for river diversion”

- With less than 3 months to complete mobilization, LCP and Andritz will have to work closely and cooperatively to be ready for a successful start of work in September

Meeting Objectives

- Primary Meeting Objective is develop an action plan to support the earliest and most efficient mobilization and start of work in the spillway.
 - Clear Responsibilities & Timelines
- Specific discussion related to scope reduction, schedule acceleration and other opportunities to support earliest CH0032 ready for diversion date are secondary and will be limited in favor of the primary objective.
- Meeting to focus on how to achieve the objectives. Commercial discussions to follow separately.

10. Spillway Completion and Handover

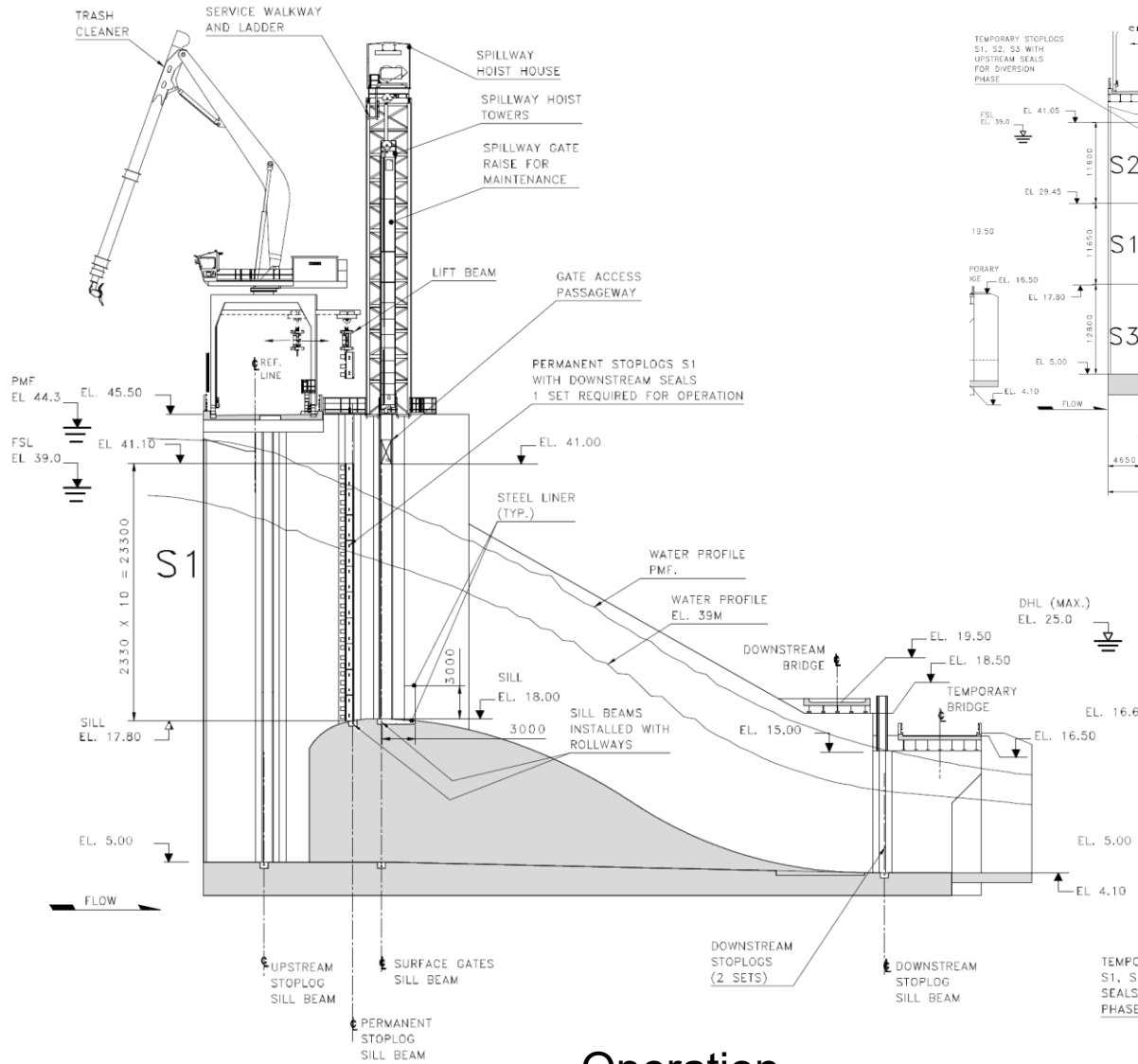


Spillway Description

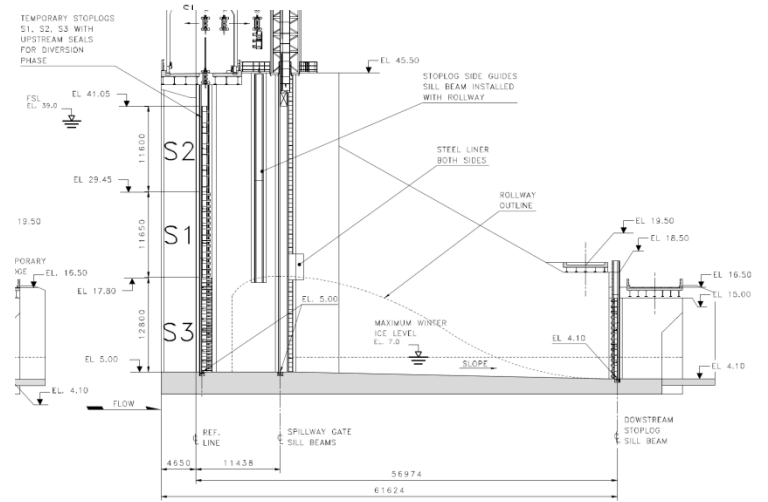
- The Spillway has five bays each with a Spillway Gate and hoist.
- Final Spillway configuration, when combined with overflow discharge at the North RCC Dam, will be able to pass the Probable Maximum Flood for this project, 25,060 m³/s.

Spillway Description

- Spillway Building located on concrete deck supported by center transition dam and steel columns, that houses:
 - 25 kV/600 Vac step down transformer
 - AC distribution for the Spillway equipment
 - Spillway gate controls
 - 600 kW backup diesel generator
- Diesel storage tank and fuel transfer skid located at the downstream base of the transition dam near or under the spillway building



Operation



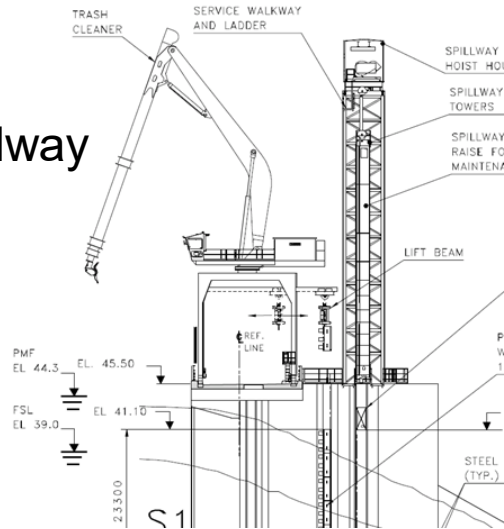
SECTION D-D (DURING DIVERSION AT FSL EL. 39.0)
FROM 2400-ME-EL-0001-01
1:250

Diversion – No Rollway

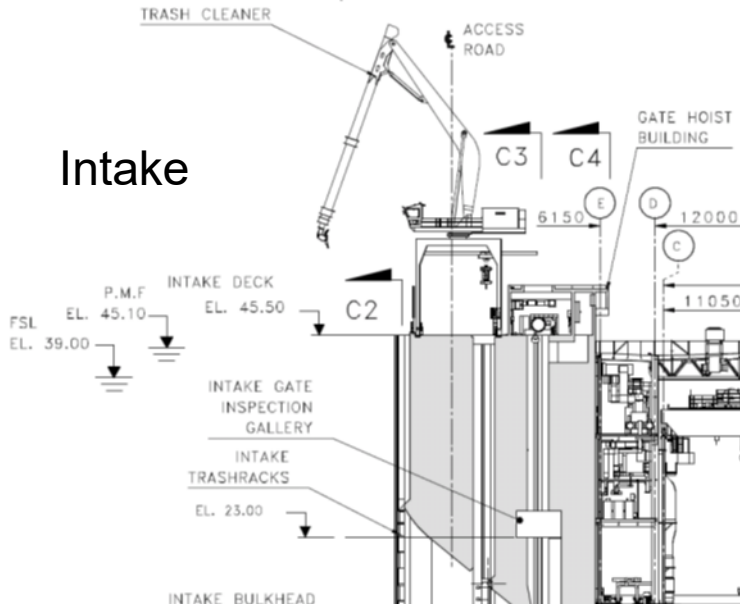
Spillway Description

- Initially configured without rollways for diversion of the river during construction of the North RCC Dam
- Permanent and temporary stoplogs to isolate:
 - Two bays during diversion to construct rollways
 - One bay during operation

Spillway



Intake



Intake

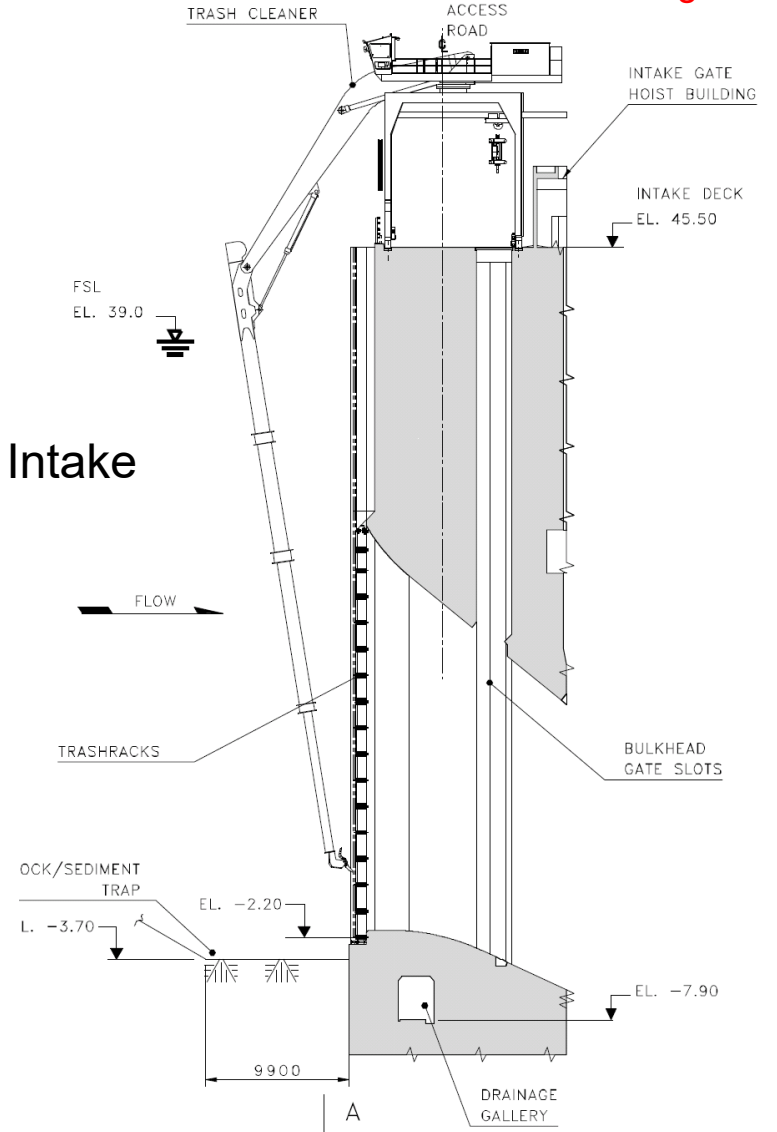


Exhibit 9 Interfaces

I1A	Upstream of Spillway ready for start of Hydromechanical Works	16 Feb 2015
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Spillway and Related Works required for upstream guides installation and concreting, including:

Completion of Spillway piers and walls (upstream 2/3 portion only), including upstream bridge;

Spillway Upstream Channel free for Hydro-Mechanical Contractor CH0032 occupation.

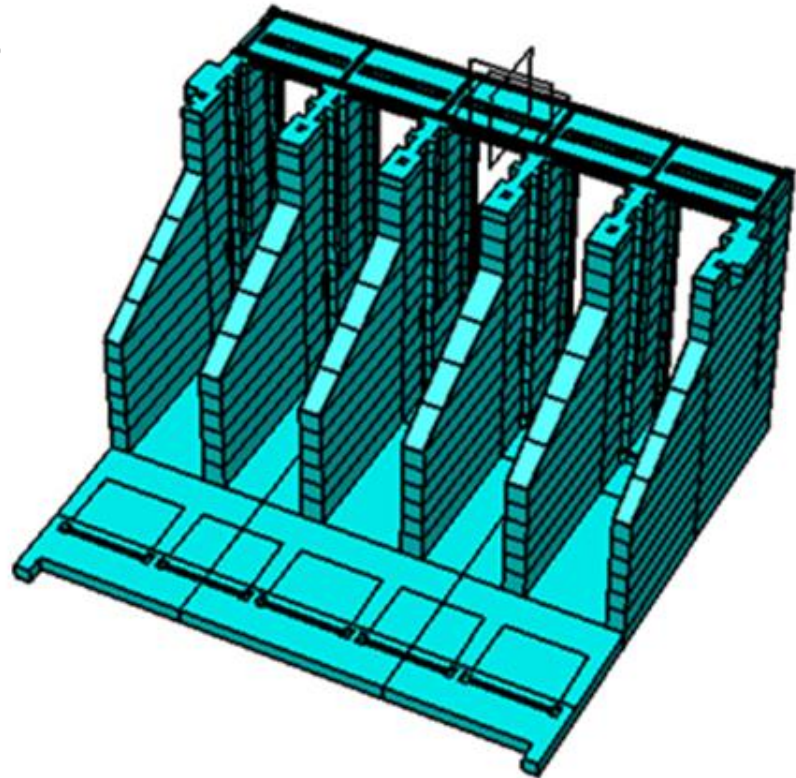
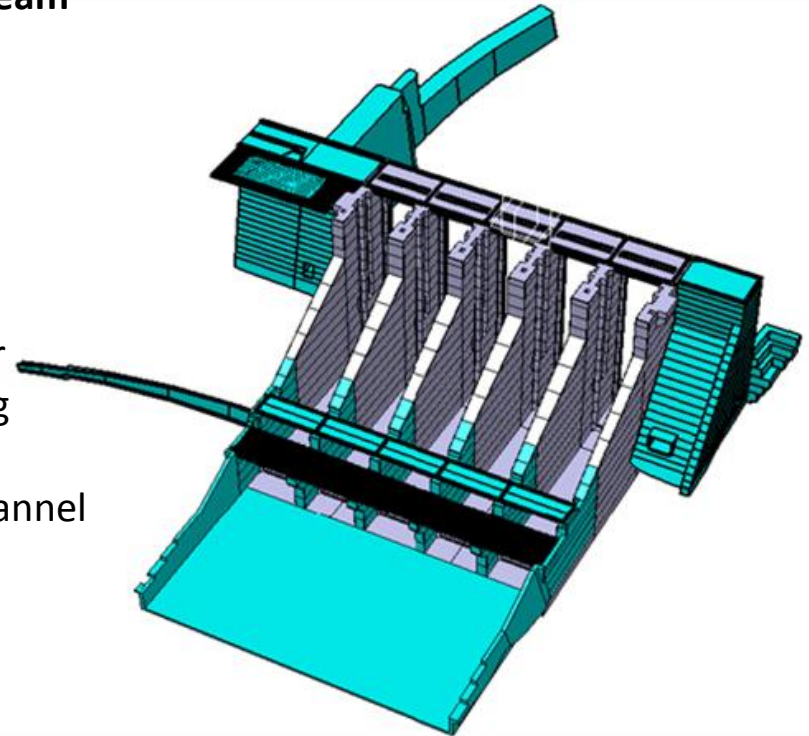


Exhibit 9 Interfaces

I1B**Downstream of Spillway ready for start of Hydromechanical Works****1 Aug 2015**

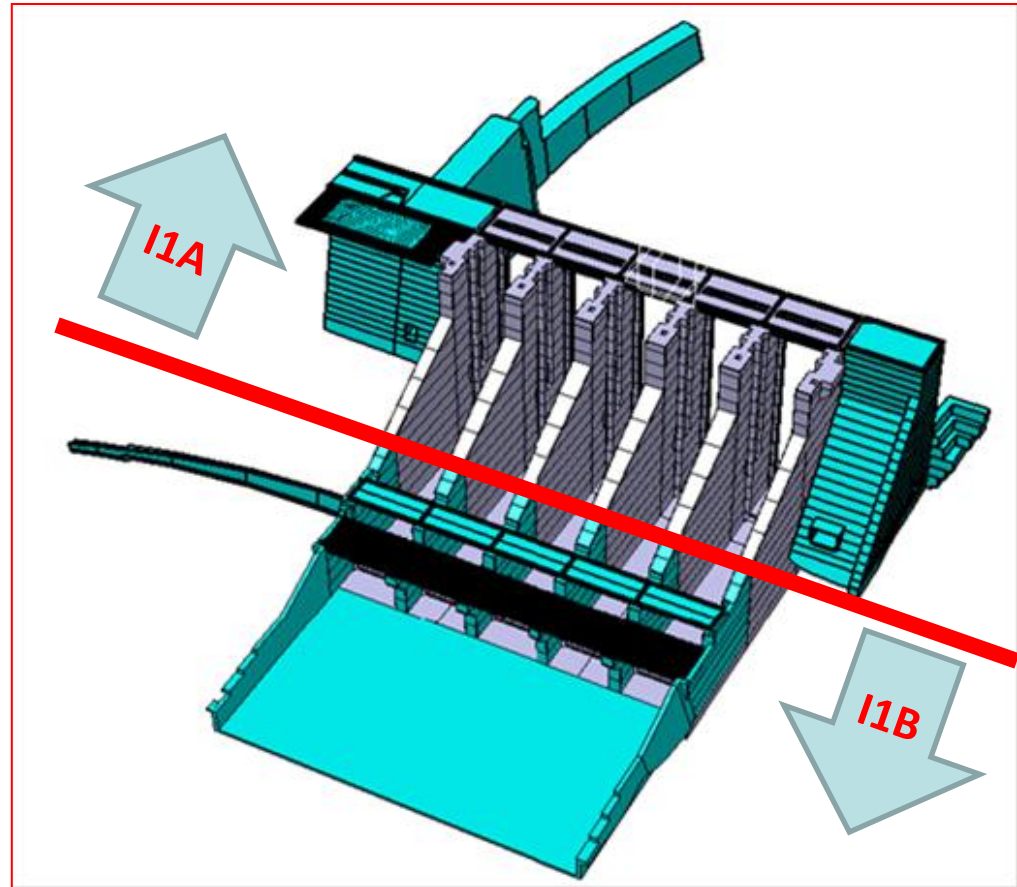
Spillway and related works required for downstream stoplog guides, gates and hoists installation, including:

- Completion of Spillway piers and walls (downstream 1/3) including both Downstream Bridges and Access Ramp Retaining Wall;
- Completion of North Transition Dam;
- Completion of Northern 2 Monoliths of Center Transition Dam including the Electrical Building Platform;
- Completion of Spillway concrete Discharge Channel Phase 1;
- Completion of Separation Wall;
- Spillway Discharge Channel free for CH0032 occupation.



Proposed Changes

- I1b Occurs First
- Some Scope of I1b removed – to be transferred to I1a or possibly new I1c



I1B – Forecast 1-Sep-2015

Spillway and related works required for downstream stoplog guides, gates and hoists installation, including:

- Completion of Spillway piers and walls (downstream 1/3) including both Downstream Bridges and Access Ramp Retaining Wall;
- ~~Completion of North Transition Dam;~~
- ~~Completion of Northern 2 Monoliths of Center Transition Dam including the Electrical Building Platform;~~
- Completion of Spillway concrete Discharge Channel Phase 1;
- ~~Completion of Separation Wall;~~
- Spillway Discharge Channel free for CH0032 occupation.

I1A – Forecast 1-Nov-2015

- **Spillway and Related Works required for upstream guides installation and concreting, including:**
- Completion of Spillway piers and walls (upstream 2/3 portion only), including upstream bridge;
- Spillway Upstream Channel free for Hydro-Mechanical Contractor CH0032 occupation.

I1A - Priority 2 Scope

The following are removed from I1B and added to I1A. These scopes are required for the electrical building and TCM installation and are considered lower priority for handover.

- Completion of North Transition Dam;
- Completion of Northern 2 Monoliths of Center Transition Dam including the Electrical Building Platform;
- Completion of Separation Wall;

The following was not explicit in Exhibit 9 and is added here:

- *TCM rails ready for TCM installation*

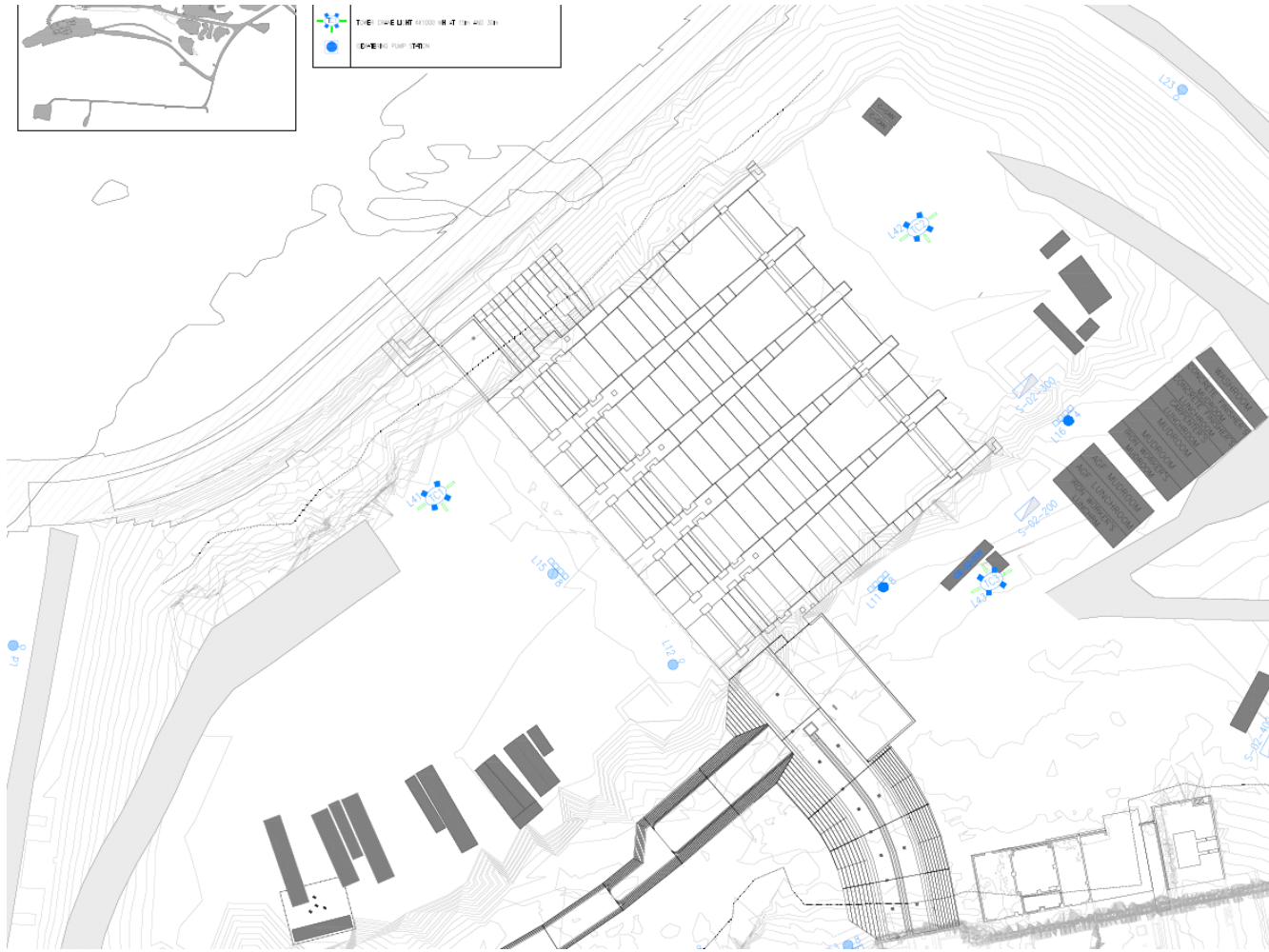
Strategy

- Avoid work areas adjacent to other contractors
 - This includes work fronts on the spillway structure and in the upstream and downstream channels.
- One handover for an area – leave and don't come back

Condition of Work area

- Cranes, Crane foundations, trailers, and other temporary infrastructure, unused material etc. are to be removed from the upstream or downstream area by Astaldi before it is occupied by Andritz.
- Access Ramps, fill etc to be left in place for Andritz

Spillway Temporary Works - Current



Condition of Work area

- LCP can facilitate discussions between Andritz and Astaldi to take over any temporary infrastructure that is beneficial to Andritz.
(power distribution?)

Exhibit 9 M4: 13 Feb 2016

- **Spillway all hydro-mechanical and electrical systems (including Trash Cleaner hoist) commissioned and ready for river diversion**

Planned Start of River Closure

- **Scope and timing of CH0032 “Ready For Diversion” to be reviewed to allow river closure to proceed as planned.**
- **Closure to start in July 2016.**

Completions and Transfer of Responsibility

- MC presentation

Mobilization

- Organization and Manpower
 - Site management in support of the above
 - Labour sourcing strategy
 - Camp forecast

Sharing our ideas in an open and supportive manner to achieve excellence.

Teamwork

Open Communication

Fostering an environment where information moves freely in a timely manner.

Honesty and Trust

Being sincere in everything we say and do.

Relentless commitment to protecting ourselves, our colleagues, and our community.

Safety

Respect and Dignity

Appreciating the individuality of others by our words and actions.

Leadership

Empowering individuals to help, guide and inspire others.

Holding ourselves responsible for our actions and performance.

Accountability