

EVERGREEN LINE RAPID TRANSIT PROJECT

MONTH END REPORT JUNE 2016

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Document No.	511325-00000-SWSL-30RM	M-0042	Revision:	0
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DISCLAIMER NOTE:

Nothing in this report constitutes a formal notice of claim by the Primary Contractor under its Agreement with the Province, including without limitation notice of claim arising from Supervening Event or Province Change.



1.0 PROGRESS OVERVIEW

This report covers project progress for the month of June 2016 (Payment Period 42). Design and construction progress is summarized below:

Project Summary:

Scope: 11 km of guideway, 6 new stations, 1 expanded station, 1 tunnel

Owner: Province of British Columbia / Translink

Physical Progress:

With the exception of the tunnel, all other areas of the project reached substantial completion by 29 February 2016 in accordance with the original schedule.

Overall 98% complete; working on 8 fronts; 42 months into the 46 month construction schedule.

Manpower: approximately 175 management and 525 craft labour.

Desian

Overall design is 100% complete

Construction

- Segment 1: Testing & Commissioning near completion
- Segment 2: Mainline Track Install Complete, LIM well underway, Power Rail Started
- Segment 3: Testing & Commissioning Underway
- Segment 4: Testing & Commissioning Underway
- Segment 5: Testing & Commissioning Underway
- Stations: All stations are complete, only deficiencies remain.

1.1 SUMMARY OF ISSUES

Overall Schedule: an overall schedule update was conducted in April 2016 and results in a Substantial Completion date of 31 October 2016. This represents an 8 month extension from the baseline schedule. These 8 months are attributed as follows:

- 9 months for delays to tunnel excavation
- 1 month gain for tunnel finishes



The new Substantial Completion date of 31 October 2016 is 3 months later than the Substantial Completion Target Date in the Project Agreement. EGRT continues to assess the schedule and will mitigate impacts to the fullest extent possible.

The month of June 2016 showed good progress in the walkway and rail installation and gains in schedule were maintained.



2.0 DESIGN AND CONSTRUCTION - PROGRESS AGAINST PROJECT SCHEDULE

2.1 SUMMARY OF CONSTRUCTION EVENTS – BY SEGMENT

Segment	Name	Total	Previous to Date	Progress This Month	Total to Date
1	Caissons	64	64	Complete	64
	Columns	63	63	Complete	63
	Spans	57	57	Complete	57
	Trackwork Installed	4524	4524	Complete	4524
	Walkways Installed	4683	4683	Complete	4683
	LIM Rail Installed	4524	4524	Complete	4524
	Power Rail Installed	4524	4524	Complete	4524
2	Meters of Tunnel Excavation	1944	1944	Complete	1944
	Infill Material Placed	23477	23477	Complete	23477
	Concrete Slab Poured	4127	4127	Complete	4127
	Trackwork Installed	5540	2087	3453	5540
	Walkways Installed	5540	1000	3891	4891
	LIM Rail Installed	5540	0	2770	2770
	Power Rail Installed	5540	0	1811	1811
3	Number of SMX Columns	1826	1826	Complete	1826
	Meters of Track Slab	3725	3725	Complete	3725
	Trackwork Installed	3964	3964	Complete	3964
	Walkways Installed	3964	3964	Complete	3964
	LIM Rail Installed	3964	3964	Complete	3964
	Power Rail Installed	3964	3964	Complete	3964
4	Number of Timber Piles	6345	6345	Complete	6345
	Meters of Track Slab	2112	2112	Complete	2112
	Trackwork Installed	5282	5282	Complete	5282
	Walkways Installed	5282	5282	Complete	5282
	LIM Rail Installed	5282	5282	Complete	5282
	Power Rail Installed	5282	5282	Complete	5282
5	Piles/Caissons	73	73	Complete	73
	Columns	73	73	Complete	73
	Spans	52	52	Complete	52
	Trackwork Installed	3315	3315	Complete	3315
	Walkways Installed	3315	3315	Complete	3315
	LIM Rail Installed	3315	3315	Complete	3315
	Power Rail Installed	3315	3315	Complete	3315

Month End Report – June 2016



Segment	PPS Name	Total (%)	Previous to Date	Progress This Month	Total to Date
1	LHZ	100	100	Complete	100
	BQZ	100	100	Complete	100
3	NPZ	100	100	Complete	100
4	FCZ	100	100	Complete	100
5	LAZ	100	100	Complete	100
Segment	Station Name	Total (%)	Previous to Date	Progress This Month	Total to Date
1	Lougheed Station	100	100	Complete	100
	Burquitlam Station	100	100	Complete	100
3	Port Moody Station	100	100	Complete	100
4	Inlet Centre Station	100	100	Complete	100
5	Coquitlam Central Station	100	100	Complete	100
	Lincoln Station	100	100	Complete	100
	Douglas/Lafarge Station	100	100	Complete	100

2.2 MAJOR PROJECT MILESTONES

The schedule progress occurring for the period from May 25th to June 27th has an unchanged Anticipated Substantial Completion date of October 31st, 2016 from the past months progress.

Milestone	Dec 12, 2012 Baseline	Jun 27, 2016 Progress Update	Δ (Business Days)
Substantial Completion Target	29-Jul-16	31-Oct-16	-94
Service Commencement Target	30-Aug-16	30-Nov-16	-92
Total Completion Target	31-Oct-16	31-Jan-17	-91
Availability Demonstration Completion Target	30-Aug-17	29-Nov-17	n/a
TIDS Performance Demonstration Completion Target	30-Aug-17	29-Nov-17	n/a

2.3 PROJECT-WIDE

2.3.1 Design

Please refer to Sections 2.3 through 2.8 for a more detailed breakdown of the design status per area. Design progress can be seen under the Design and Engineering Section of the ELRT Project Schedule Update (DD.27JUN2016).



2.3.2 Changes to the EGRT Project Schedule

No major changes were made to the project schedule.

2.3.3 Activity Changes

Key changes made to Segment 2, Track, Systems & Testing & Commisioning schedule are as follows;

Tunnel Fit Out / Track

· No changes this past period.

Systems

• Systems activities broken out into main activities driving T&C.

Testing & Commissioning

Activities have been revised to show current T&C schedule.

2.3.4 Logic Changes

The systems activities were broken out into more detail to better illustrate that path through T&C and to ATC testing.

2.3.5 Critical Path

The critical path is determined by activities that have 14 or less days of float. The critical path continues to pass through the tunnel activities.

The critical path is as follows: center walkway, track, LIM rail, power rail, system-wide cabling, and other tunnel finishes, before the start of testing and commissioning in Test Zone 2.

To date, the tunnel fit out activities are substantially completed excluding the portal roofs, the center walkway lids, and the installation of the cross passage doors. These completed activities, reflected in the lastest Progress Update Schedule, are: design and approvals for the north tunnel approach, utility relocations, construction of the north tunnel approach, TBM pit and assembly of the TBM, Tunnel Boring, TBM Breakthrough, demob of the TBM at the south portal, Tunnel Infill, the South Portal Invert Slab, the tunnel track slab, tunnel center fire wall, and inbound mainline track.

2.3.6 Schedule Impacts

Test Zone 2 has been impacted due to the delay of the tunnel breakthrough which occurred on November 27th, 2015. The tunnel fit out works are substantially complete with both the south and north portal roofs remaining. Tunnel trackwork has commenced and is ongoing,



along with systems installation and scheduled to be completed toward the end of August. The remaining works will be monitored closely and tracked against the currently shown project completion date of October 31st, 2016.

Other activities discussed in this report are monitored for potential impact or delays due to the overall EGRT Project Schedule.

2.4 PASSENGER STATIONS

All seven of the stations on the Evergreen Line are substantially completed with the majority of the deficiencies expected to be completed by the end of July.

2.5 OTHER FIXED FACILITIES

All five of the Propolsion Power Stations on the Evergreen Line are substantially completed. The final tie-in work between BQZ and NPZ will occur concurrently with the trackwork and systems installation in Segment 2.

Facility	Design / Construction / Procurement
Sec 428 – VCIF	Construction substantially completed.
Sec 428 – VSF Yard	Construction substantially completed.
Sec 428 – VSF Staff Facility	Construction substantially completed.

2.6 ALIGNMENT

2.6.1 Segment 1 – Elevated Guideway / Lougheed Special Structure / South Portal Approach

Segment 1 is substantially completed with the majority of the deficiencies expected to be completed by the end of July.

2.6.2 Segment 2 – South Portal / Bored Tunnel / North Portal

Area	Design / Construction / Procurement		
Segment Wide			
Sec 210 Cut and Cover South Portal	 Completed Type 1 Precast and Handrail Installation. Completed Type 3 CIP Parapets. Completed Type 3 Steel Installation. 		
Sec 220 TBM Tunnel	Installed duct bank conduit and encased in concrete for SIB/NIB/NOB/SOB.		



	Completed center wall deficiencies.
	 Completed standpipe main header installation through tunnel and nearly completed with standpipe valves and drops.
	 Installed Fan Support Steel, Support Steel Seismic Braces, and Fans at both South and North portions of the tunnel.
	 Placed disconnect switch platforms.
	 Completed drilling for main rail in IB portion of tunnel along with grouting and DF fastener inserts.
	 Pulled and placed SIB main rail. Currently fine tuning track.
	Starting NIB main rail pull.
	 Drilled both IB and OB portion of tunnel for LIM rail.
	 Commenced with SOB tunnel ventilation cable pulls.
	 Installation of electrical local devices and radio brackets is ongoing in SOB quadrant.
Sec 230	Completed center wall at North portal.
Cut and Cover	 Formed and poured both IB and OB parapet walls.
Tunnel North	Starting transition beam.

2.6.3 Segment 3 – Reichhold Special Structure / At-Grade Guideway

Segment 3 is substantially completed.

2.6.4 Segment 4 – At-Grade Guideway / CPR / Fortis Bridge / Aberdeen and Coquitlam

Segment 4 is substantially completed.

2.6.5 Segment 5 – Elevated Guideway / Coquitlam Station / Pinetree / CIP / Lafarge Douglas Station – Special Structures

Segment 5 is substantially completed.

2.7 TRACKWORK

SPECIAL TRACKWORK:

Reichhold Crossover East – Minor re-work on switch machines (re-grout switch machine bases) to be completed and final PICO of the turnouts remains to be completed.

Reichhold West Crossover – Final deficiency repairs have been completed. Switch machine PICOs are complete on 3 of 4 machines. Final switch machine installation requires reorientation of the TFO access location (turnstyle and ramp to guideway), and is anticipated to be done in July 2016.



MAINLINE TRACKWORK:

Segment 1 – Track activities are substantially complete.

Segment 2 – IB track fine tuning is complete. All OB rail has been placed and fine tuning is underway.

Segment 3 - Trackwork activities are substantially complete.

Segment 4 - Trackwork activities are substantially complete.

Segment 5 – Trackwork activities are substantially complete.

2.7.1 LIM

Segment 2 – LIM Installation is complete on the IB guideway in Segment 2. LIM Drilling is progressing on OB at the South Portal in Segment 2. LIM grouting has commenced on the OB through the Reichold Switch.

Issues with LIM stud corrosion have been identified, and repair procedures are being developed. Repair work has commenced.

2.7.2 Power Rail

Power Rail installation is complete at Section 150 IB. Power Rail installation is 50% complete through IB Section 220 (Tunnel).

Final coverboard installation will be completed at the Reichhold Crossovers, as well as some miscellaneous installation in Section 150 starting in August 2016.

2.7.3 Walkway

Steel walkway installation (excluding Segment 2 and tunnel operational areas) is 99% complete, with minor areas remaining for rework and completion based on access.

Final fabrication of precast walkway lids for tunnel installation is underway. Fabrication is ongoing, with delivery to meet tunnel installation schedule.

Steel and CIP walkway installation at Section 150 and South Portal are complete, and are scheduled to be completed. This also includes the balance of Type 1 precast walkways and steel handrail in Section 150. Final installation of PCW lids in the tunnel some time in Summer/Fall 2016.

There is one location in Section 140 where sound barrier panels will need to be installed following T&C fence removal, and there are approximately 22 brackets in Section 410 that encroach into the train clearance envelope. Brackets have been ordered for the sound barriers further from the guideway parapets.



2.8 SYSTEMS

2.8.1 Systems General

2.8.1.1 Subsystem Design

The FDR process is complete with the issuance of the Heritage Mountain Monitor Receiver FDR package scheduled early next month.

2.8.1.2 Installation Design

VSF Interface design: Working to resolve an interface issue with respect to the Buffer Stops. Thales has been provided with the details and working to implement a software change to address this.

Tunnel Interface design: Weekly coordination meetings are being fully supported by SLCW-SW. A South portal drainage sump has been recently added. Electrical designs are nearly complete.

2.8.1.3 Contractual Plan Submissions

A list of required plans and managerial documents are required in Appendix G of the Project Agreement (Systems General Requirements), and the DBC hosts a monthly meeting to coordinate the delivery of this documentation. The progress of these plans is updated monthly and issued to the Client by the DBC.

2.8.2 Power Supply and Distribution

PS&D FDR Packages have all been submitted to the Client.

2.8.3 Signalling / ATC

The signalling/ATC design process is substantially complete.

2.8.4 Communications, SCADA, FLSS and WMS

All FDR submissions are complete.

2.8.5 Tunnel Ventilation Systems and Stand Pipe System

The Tunnel Ventilation SFDR process is complete.

2.8.6 Design for BC Hydro Related Works

All BC Hydro Related Works are complete.



2.8.7 Testing and Commissioning Planning and Procedures

The Systems Test Plan defined the Systems Integration Board. The Board is a joint Systems, T&C, and TransLink task group which will review test plans and schedules, and coordinate cutovers and configuration changes. This group commenced meetings in January 2015.

The Systems Cutover Plan has been updated in response to Client questions, and detailed planning of the cutover process will continue via the FMI log, which tracks configuration changes, and the T&C & Cutover schedule.

2.8.8 Systems Procurement

The following packages were issued out for tender/pricing in June:

- SP9000-05 EMC/EMI Survey.
- SC7075-02 Heritage Mountain Monitor Receiver Installation.
- Pricing for specific elements of TIMS requested from existing vendors and also requested from WPE. WPE pricing to be incorporated into SC9000-08 Segment 2 Equipment Installation Contract.

2.8.8.1 Subcontract and Supply Contract Awards

The following equipment were issued out for award in June:

- SP7075-03 Heritage Mountain Service (BC Hydro)
- SP8000-04 Supply of South Portal Sump Pump.

2.8.8.2 Supplier Design

NA

2.8.8.3 Equipment Deliveries

The following equipment was received at the warehouse in June:

- No major equipment.
- Original Warehouse closed and moved to Vintner site.



2.8.9 Warranty and Training

Continue to develop training dates with the Province. Clarification of warranty requirements is being sought through the DBC and the Province.

2.8.10 Spare Parts

Non-long-lead item spare parts list have been provided and SW is currently awaiting the PO from Translink, expected July 15th.

2.8.11 Construction

The pricing for the TIMS package in the SC9000-08 Tunnel electrical installation subcontract was received and was under review.

Tunnel Lighting, receptacle and power distribution component installation in the Tunnel South Outbound was turned over to T&C on June 14th. SAT testing proceeded on June 21st. South inbound quadrant installations are proceeding where possible around power rail installation operators. Turnover of the South Inbound subsystems is expected June 30th. Tunnel vent cable pulling in the North tunnel began on June 20th and concluded June 30th. Repairs to the BQZ MCC unit were completed this month. The South Portal tunnel vent PICO is expected early next month.

The permanent 36 strand ATC-dedicated fibre optic cable was placed between BQZ and NPZ on June 17th. Continuity verification and dressing for permanent termination at BQZ and NPZ are underway. A temporary OTN link shall be established between BQS and MCS using a spare fibre pair on this 36 strand cable, early in July. This temporary link will support network connectivity until the permanent 192 strand fibre backbone is installed, terminated and tested, in early August.

Systemwide Mainline deficiency resolution continued during non-test windows. Completion of exterior touch-up paint deficiencies is targeted for mid-July due to weather and painting subcontractor availability.

Station crews continued on minor added scope clean-up items. The Lafarge Station SEEIP device arrival is scheduled for mid-July. Replacement of four (4) CCTV end posts, presently encroaching on walkway clearance, is scheduled for early July.

WPE suffered a cable theft from the Clarke St staging yard on June 27th. Approximately 150m of ground cable was taken. WPE personnel had miscomunicated in securing a reel of cable on previous Friday end of shift. Locked storage containers and nightly patrol check-ins had previously been effective to prevent significant losses.



2.9 TESTING AND COMMISSIONING

2.9.1 Progress Overview

ATC - Since the May report, Thales has completed efforts on testing with automatic Mark I trains in Test Zones 1, 3, 4 & 5. ATC testing was suspended the last week of April and the first two weeks of May while waiting for class 3 release of VCC 14.03.00. This was required to correct issues discovered in Test Zone 1 such as SGSCS and CESB performance and additional guideway data issues at a number of switches in TZ 1, 3, 4 & 5. All testing was conducted in 2 CPU mode due to the lack of sufficient FPGA cards.

At the end of June, the following activities were accomplished;

VCC4

 The Close-up/Coupling testing at Lougheed had some issues with MKI trains during previous testing and it has been confirmed during the June 11 testing that 2 car to 4 car MKI coupling will not work at LHI and LHS due to track geometry. This will be stated in the Common Definitions Table.

VCC5

- All testing in Test Zone 1 is now complete;
 - The FRACAS 193 for switch 203 was retested and is now considered passed.
- Testing in Test Zone 3:
 - The testing with MKI trains is now complete. Awaiting delivery of MKII trains for further testing.
- Testing in Test Zone 4:
 - Speed limits through switch 226 are incorrect and have been speed limited by Go-Slow Zones. This will be corrected in the next VCC release (end of August).
 - The length of track 915 beyond switch 223 is uncertain and automatic trains could contact bumpstop (T&C Restriction 018)
 - Awaiting delivery of MKII trains for further testing.
- VCC6
 - Testing in Test Zone 5:



- The bumpstops at the ends of VS6 & VS7 are located incorrectly and rather than extend the rail to slide the stops back, Thales will correct the train stopping points through VCC software
- Awaiting delivery of MKII trains for further testing

PS&D - Wayside equipment SAT testing is in progress. This includes tunnel lighting and tunnel mini-power centers.

Communications – The vast majority of testing is complete with some systems still being optimized. Above ground radio and fire alarm testing is on-going.

TIDS/TIMS – TransLink performed independent tests at BQS for intentional and unintentional intrusions on June 23.

TVS – The smoke test was conducted at Inlet Centre the evening of June 22 with a 6-car MKI train.

2.9.2 Submissions

The following submissions were made during June;

- Travel Time Demonstration rev. 0
- Test Zone Transition Plan rev. 1

2.9.3 Beneficial Occupancy

In addition to areas reported previously, T&C took Beneficial Occupancy of:

 All remaining station areas and the VSF. T&C now has BO of the entire alignment with the exception of the Tunnel Works (Test Zone 2)

2.9.4 Summary of Issues This Month

- Shortage of 3 reprogrammed Thales FPGA cards for VCC 6 has been temporarily resolved by testing in 2 CPU mode – on-going
- Switch 226 has incorrect speed profile and is temporarily restricted by a Go Slow Zone of 15 km/h – on-going
- Incorrect bump stop locations at VS6, VS7 and stub track beyond switch 223 are being investigated for a solution by Thales rather than relocating the bump stops. – on-going
- Approval from BCRTC to supply two MKII married pairs to be towed through the tunnel so that MKII testing can be conducted north of the tunnel.



2.9.5 Changes Since Last Month

- Test Zone 1 Complete
- Test Zone 2 Remains mid-September 2016
- Test Zone 3 Complete
- Test Zone 4 Complete
- Test Zone 5 (VSF) Complete
- All communication testing (except tunnel related) Deficiency work in progress
- All PS&D testing (except tunnel related) Deficiency work in progress

2.10 CONCLUSION

Our current EGRT Project Schedule is based on the best information available and our current plan for construction. Changes to the final construction plans and methods, and their respective schedules, sequences and durations are expected as work progresses on all fronts. Any future changes or revisions to the schedule will be detailed in this narrative.



3.0 ENVIRONMENTAL MANAGEMENT

3.1 PERMITTING STATUS

A Notification was prepared and submitted to Ministry of Forests, Lands and Natural Resource Operations (FLNR) on June 21, to allow repairs to a Metro Vancouver concrete culvert situated in Ottley Creek (the culvert was apparently damaged during construction of the Reichhold Special Structure). The culvert repairs will entail instream work and will therefore be conducted during the August 1st – September 30th, 2016 "least-risk fisheries window".

Permit Description	Act/Regulation	Application or Expiry Date	Status
Federal			
No current or planne	ed federal permitting a	ctions this reporting pe	eriod.
Provincial			
Notification to undertake culvert repairs in Ottley Creek.	Water Sustainability Act	The Notification will be submitted to FLNR on June 21.	FLNR requires 45 days to process the Notification after which construction can proceed.

The status of all permits acquired to date on the Project is summarized in Attachment F.

3.2 ENVIRONMENTAL MANAGEMENT SUMMARY

EGRT's Environmental Manager continued to conduct routine environmental management activities including but not limited to: advising on environmental planning and implementation issues, preparing environmental submittals and deliverables, participating in environmental quality activities, and overseeing the Environmental Inspectors (Els).

Construction of habitat compensation at Schoolhouse Creek: the work has been awarded to a Subcontractor. It is expected that the Subcontractor will mobilize to the site in mid-July 2016 in order to complete instream works during the August 1 – September 30th, 2016 "least-risk fisheries window". Planting of the riparian zone is planned for the fall of 2016.

Going forward, the following environmental requirements remain to be completed on the Project:



- Environmental Inspection: environmental inspection of construction will continue until
 construction of the Schoolhouse Creek habitat compensation is completed, with
 related reporting to the Province and to applicable regulatory agencies once every
 two weeks. Assuming concurrence from the Province and applicable regulatory
 agencies, environmental inspection on the Project should conclude in October 2016.
- Completion of general site restoration and planting of "replacement trees" as required by PTOC item #52: landscaping along Clarke Street (including tree replacement) has been completed but additional landscaping remains to be done in the fall of 2016.
- Water quality monitoring (as required by PTOC items #42 and #43): EGRT has periodically assessed water quality sampling in watercourses potentially affected by construction. Samples have been tested for metals, hydrocarbons, Volatile Organic Compounds (VOCs), turbidity, suspended solids, pH, dissolved oxygen, conductivity and water temperature. The monitoring program has so far included a round of "baseline" water quality monitoring (conducted during the earliest stages of construction to capture the pre-project condition), followed by two rounds of "during construction" water quality sampling. To complete the program, EGRT conducted a final round of sampling in June to assess the "post-construction" condition. EGRT will prepare and submit to the Province a brief summary of the monitoring program results, identifying potential Project-induced water quality effects (if any such effects can be identified). This report is planned to be submitted to the Province in July or August 2016.
- Close-out of environmental permits including the DFO Authorization (see Appendix F for permit expiry dates): A "close-out" permit tracking matrix is being used to document the close-out status of all key environmental permits. The Permit close-out tracking document will be attached to the Environmental Final Completion Report (see bullet below).
- Preparation of an Environmental Final Completion Report as required by PA, Schedule 5, Subsection 3.8: Further discussion with the Province is needed to determine the contents, format and submission date of this report. The PA indicates this report is to follow Substantial Completion.
- Annual Certificate of Compliance with Environmental Laws: It is expected that one additional and final Certificate of Compliance will be required, covering the period December 11th, 2015 to December 10th, 2016. This final Certificate of Compliance would be submitted to the Province at the end of December 2016.
- Continuation of the monthly environmental management report (i.e., in the form of this
 environmental management section of EGRT's monthly progress report): Further
 discussion with the Province is required to determine when this monthly
 environmental reporting would end.
- Preparation of a detailed post-construction monitoring and assessment report documenting site-specific landscaping and restoration measures implemented during construction, as per PTOC #50 requirement: this report is required one year after contract completion. Further discussion with the Province is needed to determine exactly when this report would be submitted to the Province.
- Monitoring and annual reporting of the performance of constructed compensatory habitats: the DFO Authorization requires this monitoring to continue until the end of



2019 with a final annual monitoring report submitted to the Province and to applicable agencies in January 2020.

3.3 ENVIRONMENTAL SUBMITTALS TO PROVINCE

Submittals to the Province during this reporting period:

Biweekly Environmental Inspection Report (BEIR) Nos. 150 and 151.

3.4 AMENDMENT TO ENVIRONMENTAL ASSESSMENT CERTIFICATE

No changes in design or construction occurred during this reporting period that warranted consideration of an amendment to the Project's Environmental Assessment Certificate (T10-01).

3.5 ENVIRONMENTAL REVIEW OF DESIGN

Environmental design and environmental review of non-environmental design were completed in a previous reporting period.

3.6 ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION

Tunnel water and construction affected run-off flowing through/from TFO work sites have been directed to a Waste Water Treatment Plant (WWTP) located in the Tunnel Operations Yard. The effluent from the WWTP has been discharged to a Metro Vancouver sanitary sewer as per Metro Vancouver Waste Discharge Permit No. SC-100914-FSA. In recent months, EGRT's Environmental Inspector (EI) became responsible for monthly sampling of the WWTP effluent and for quarterly reporting of laboratory test results to Metro Vancouver. During this reporting period, the WWTP system was deemed no longer necessary given construction at this stage of the Project is environmentally benign and in any case no discharge to sanitary had occurred since March 2016. Therefore the WWTP was decommissioned in June. The EI was on site to witness and report the system's final discharge to sanitary. Close-out of the waste discharge permit will be completed with Metro Vancouver during the next reporting period.

3.7 ENVIRONMENTAL INCIDENTS

One environmental incident occurred during this reporting period, on June 27 (details in table below).



Table: Incident Tracking Summary

Tracking No.	Date	Incident Type	Incident Description
EIN-051 (SLCW)	27-Jun- 2016	Spill to Guideway	Approximately 10 L of hydraulic oil was spilled to the guideway in Section 320. The incident was caused by a leaking hydraulic line from a high-rail excavator. Sorbent material was used to contain and clean up
			the spilled hydraulic oil. The spill was contained on the guideway with no threat of being conveyed to a sensitive environment or storm sewer. The used sorbent material was collected for off-site disposed at a facility approved to receive this hazardous waste. A Notification of the incident was provided to the Province. No regulatory agencies required Notification.

3.8 ENVIRONMENTAL INSPECTION

Bi-Weekly Environmental Inspection Report (BEIR) Nos. 150 and 151 were submitted to the Province "for Information" during this reporting period. As reported by EGRT's Environmental Inspectors, construction generally complied with Project environmental requirements during this reporting period (see "Issue Tracking" Summary below).

Issue Tracking Summary

No issues were carried over into this monthly reporting period from the previous monthly reporting period (May 2016). Six new issues were opened during this reporting period (see table below). One of the six issues (#236) was closed during this reporting period but five issues remained opened at the end of this reporting period.

Table: Environmental Inspection Issue Tracking Summary

Issue No.	Date Opened	Description	Status at June 30/16
236	June 01/16	Deficient fuel storage at South Portal	Closed
237	June 07/16	Deficient housekeeping at South Portal	Open
238	June 09/16	Deficient Hazardous Substances Storage at North Portal tunnel support yard	Open



Issue No.	Date Opened	Description	Status at June 30/16
239	June 29/16	Remnant used sorbent material present on guideway near North Portal (left over from a spill that occurred on June 27).	Open
240	June 29/16	Hydrocarbon staining on View Street (primarily as a result of leaking equipment used for Project related utility works)	Open
241	June 29/16	Hydrocarbon staining on guideway near South Portal (caused by leaking Pettibone)	Open

3.9 COMPLIANCE SUMMARY

No significant environmental compliance issues occurred during this reporting period.



4.0 COMMUNICATIONS AND COMMUNITY RELATIONS

No community meetings and/or Business Liaison Committee meetings were held in June 2016.

As the project nears completion, there are no immediate plans for additional Business Liaison Committee meetings. Should any further community meetings be required, the EGRT Construction Communications team will support the Province and attend as required.

4.1 TRAFFIC MANAGEMENT COMMUNICATIONS

The EGRT Construction Communications team prepared and distributed one Construction and Traffic Bulletin in June 2016:

- Landscaping Restoration Clarke Street Area June 24
 - This notice was distributed to businesses and residents on Clarke Street between Moody Street and Elgin Street.

EGRT Construction issued the following Community Notice in June 2016:

- Road Restoration and Paving Work on Clarke Road June 30
 - This notice was emailed to the property manager of 751 Clarke Road and the strata manager for Anskar Court Co-op, the s.22 at 661 Clarke Road, the s.22 at 647 Kemsley Avenue and distributed to homes on Clarke Road and Kemsley Avenue.

Please note that this notice was also posted on the egrtconstruction.ca website and distributed to stakeholders.

EGRT Construction issued the following Community Notice in June 2016:

- Ventilation Systems Test Inlet Centre Station June 20
 - This notice was distributed to EComm, City of Port Moody (emergency responders and city staff), City of Coquitlam (emergency responders and city staff), residents on Dewdney Trunk Road, Westwood Honda, Corbeau Park townhomes, residents off of Brookside Drive that are closest to St Johns Street, The Square condos on St Johns Street and businesses at ground level (Jokers Pizza, insurance company etc), emailed to property manager at The Residences at Suter Brook and delivered to residents on Edinburgh Drive and Edinburgh Place that back onto Barnet Highway.



No Traffic Alerts were distributed by EGRT Construction in June 2016.

4.2 PUBLIC CONSULTATION

No public consultation is required by the Province of BC.

4.3 MEDIA RELATIONS

All media inquiries, including inquiries from traffic reporters, will continue to be referred to the Province for first comment. EGRT Construction will only answer routine traffic questions and only when queries have been referred to the EGRT Construction Communications Manager directly by the Province.

One Traffic Reporters Advisory was sent by the EGRT Construction Communications team in June 2016 regarding the Ventilation Systems Test at Inlet Centre Station. The intent of the advisory was to alert traffic reporters and/or motorists that the smoke was part of a standard test and not cause for public concern.



5.0 FIRST NATION ENGAGEMENT

5.1 PERFORMANCE OVERVIEW BY SUB-CONTRACTOR

NATION	Procurement Target (\$/project)	Opportunities to Date (est. \$ value)	Awarded to Date	Awarded this Period
Tsleil Waututh	s.16,s.17			
Musqueam	-			
Kwikwetlem				
OTHER				

NATION	Employment Target	Employment to Date	Employment this Period	Total Active Employees
	(hrs/project)	(hrs)	(hrs)	(qty)
Tsleil Waututh	s.16,s.17			
Musqueam	-			
Kwikwetlem	_			
OTHER	-			

¹ Employment This Period and Awarded This Period updated quarterly.

All First Nations procurement targets have been exceeded.

Employment targets for Musqueam have been exceeded, and targets for Tsleil Waututh continue to be pursued. Labour availability from Tsleil Waututh is limited.



5.2 BID REPORT – PROCUREMENT OPPORTUNITIES & AWARDS DETAILED

Package Number/Title/PO	Bid Close Date	Company Name (Bidder)	Affiliated First Nation	Awarded Contract (Actual)	Procurement Opportunity (Est. Value)	Status
SGJV PROCUREMENT						
Supply/Install Piles (Pinetree)	22/Nov/13	s.16,s.17				
Soil Removal (various PO's)	1/Oct/13	•				
Supply/Install Piles (CPR)	18/Sep/13					
Supply/Install Piles (Reichhold)	5/Mar/13	•				
Supply/Install Caissons	29/Apr/13	•				
Clearing, Grubbing & Access Road (511326-C-002)	1/Mar/13					
Supply/Install Timber Piles	13/Dec/13					
Supply/Install Landscaping & Irrigation Seg 1	4/Jun/14					
Supply/Install Landscaping & Irrigation Seg 1	4/Jun/14	:				
Supply/Install Timber Piles	22/Nov/13					
Supply/Install Timber Piles	18/Sep/13					
Supply/Install Timber Piles	3/May/13					
Supply/Install Timber Piles	13/Dec/13	-				
Supply/Install Landscaping & Irrigation Seg 1	4/Jun/14					
SSJV PROCUREMENT						
Water Treatment Plant	1/Sep/13	s.16,s.17				
Tunnel Spoils Mgmt & Removal	27/Jun/13					
Water Treatment Plant	1/Sep/13					
Tunnel Spoils Mgmt & Removal	27/Jun/13					

Month End Report - June 2016



SLCW-EG PROCUREMEN	T		
Traffic Signs-Part 1	ongoing	s.16,s.17	
Traffic Signs-Part 2	ongoing		
Site Security (3 mo. Trial)	ongoing		
Site Security (15 mo.)	ongoing		
Site Security (15 mo.)	ongoing	_	
Traffic Management (3 mo. Trial)	ongoing		
Traffic Management (15 mo.)	ongoing		
Crane Services for Truss Assembly	19/Aug/13		
Trailer rental (ongoing)	ongoing	_	
Trailer Rental-New Office	ongoing		
Traffic Management (15 mo.)	ongoing		
Trailer Relocation	ongoing		
Traffic Management	ongoing	_	
Traffic Management	ongoing		
Trailer rental (ongoing)	ongoing		
Trailer rental (ongoing)	ongoing		
Trailer rental (ongoing)	ongoing		
Elec. Services	ongoing	_	
Elec. Services	ongoing	-	

CI CIA	$I \sim CT$	DDOOL	JREMENT
SI 1. W	/	PRULI	IKEWENI

3EC44-03111K	CONLINE	.14 1
GC009- Stn Elec. Work	1/Oct/13	s.16,s.17
Office Trailer Rentals(0000143)	ongoing	
Lougheed Stn Demo	31/May/13	-
GC003- Piles & Caissons	3/Jun/13	-
Elec. & data–Poco Warehse	1/Apr/13	
GC400-Port	1/Mar/13	-
Moody Demo GC009- Stn Elec. Work	30/Jan/14	
GC037-	0/10=/14	-
Supply/Install Piling	8/Jan/14	-
GC039-PPS & VSF Elec. Work	17/Apr/14	_
GC048-Moody Piling	17/Apr/14	_
GP500-Supply Retaining Wall	9/Sep/14	
GP500-CO No. 1	17/Aug/15	-
GP500-CO No. 2	13/Nov/15	-
GC063-Modular Buildings	9/Mar/15	•
GC063-CO No. 1	8/Oct/15	-
GC063-CO No. 2	7/Nov/15	-
GC063-CO No. 3	24/Feb/16	-
Elec. Work for Stns	6/Jan/14	
GC009-CO No. 1	11/Jun/14	
GC009-CO No. 2	2/Oct/14	-



00000 00 N 0		a 16 a 17
GC009-CO No. 3	3/Oct/14	s.16,s.17
GC009-CO No. 4	16/Dec/14	-
GC009-CO No. 5	13/Jan/15	-
GC009-CO No. 6	13/Jan/15	_
GC009-CO No. 7	14/Jan/15	-
GC009-CO No. 8	19/Jan/15	-
GC009-CO No. 9	23/Mar/15	-
GC009-CO No. 10	30/Mar/15	-
GC009-CO No. 11	9/Apr/15	-
GC009-CO No. 12	4/Jun/15	-
GC009-CO No. 13	7/Aug/15	-
GC009-CO No. 14	7/Dec/15	-
GC009-CO No. 15	12/Jan/16	-
Inlet Ctr Exc (511414-GC401)	1/May/13	
Supply Masonry Grout Fill	16/Jan/14	-
Earthworks Coq.	4/Dec/13	-
GC039 Stn Elec. Work	16/Jan/14	-
GC035-CO No. 1	30/Sep/14	-
GC035-CO No. 2	15/Jan/15	-
GC035-CO No. 3	22/May/15	-
GC035-CO No. 4	3/Jun/15	-
GC035-CO No. 5	24/Dec/15	-
GC035-CO No. 6	11/May/16	_
GC039-SubStn & VSF Elec.	17/Apr/14	-
GC039-CO No. 1	30/Sep/14	-
GC039-CO No. 2	14/Jan/15	_
GC039-CO No. 3	15/May/15	_
GC039-CO No. 4	3/Jun/15	-
GC039-CO No. 5	28/Oct/15	-
GC039-CO No. 6	24/Dec/15	-
GC039-CO No. 7	28/Oct/15	-
GC039-CO No. 8	11/May/16	_

SLCW-GST PROCUREMENT (Continued) Lougheed Stn s.16,s.17

Lougheed Stn Demo (51414- GC404)	31/May/13
Supply/Install Piling	8/Jan/14
GC047-Moody Piling	17/Apr/14

SLCW-SW PROCUREMEN

SC9000-04	
Lougheed Stn	13/Mar/14
Brownfield	13/10/14
Investigation	
SC9000-05	
Lougheed Stn	10/Apr/14
Brownfield Installs	
SC9000-05	
Lougheed Stn	30/Sep/14
Brownfield Installs	30/3ep/14
CO #2	
SC9000-05	6/Nov/14
Lougheed Stn	0/NOV/14



Brownfield Installs				
CO #3		_		
SC9000-05		_s.16,s.17		
Lougheed Stn	0/Apr/15			
Brownfield Installs	8/Apr/15			
CO #4				
SC9000-06 T&C		_		
Support	11/May/15			
SC9000-06 T&C		_		
	14/Mar/16			
Support CO#1		_		
SC9000-06 T&C				
Support	26/May/16			
Change Order No.	20/May/10			
2		_		
SC9025-01 OMC	29/May/14			
Install	29/May/14			
SC9025-01 OMC		_		
Install-CO#1	4/May/15			
SC9000-08		_		
Segment 2	16/Feb/16			
	10/1-60/16			
Installation		_		
SC9000-01	5/Aug/14			
Systemwide Install		_		
SC9000-01				
Systemwide	17/Nov/14			
Install-CO #1				
SC9000-01		_		
Systemwide	28/Jan/15			
Install-CO #2				
SC9000-01		_		
Systemwide	17/Mar/15			
Install-CO #3	17/1VIAI/13			
		_		
SC9000-01	45/1/45			
Systemwide	15/Jun/15			
Install-CO #4		_		
SC9000-01				
Systemwide	15/Jul/15			
Install-CO #5		_		
SC9000-01				
Systemwide	15/Sep/15			
Install-CO #6				
SC9000-01		_		
Systemwide	16/Nov/15			
Install-CO #7	10,1101,10			
SC9000-01		_		
Systemwide	9/Dec/15			
Install-CO #8	3/Dec/13			
SC9000-01		_		
	10/10=/10			
Systemwide	12/Jan/16			
Install-CO #9		_		
SC9000-01				
Systemwide	7/Mar/16			
Install-CO #10		_		
SC9000-01				
Systemwide	22/Mar/16			
Install-CO #11				
SC9000-01		_		
Systemwide	9/May/16			
Install-CO #12				
SC9000-02 CO #1	27/Mar/14	-		
		-		
SC9000-02 CO #3	3/Oct/14	_		
SC9000-02 CO #4	3/Oct/14	_		
SC9000-02 CO #5	25/Aug/15			



		_					
SC9000-08		s.16,s.17					
Segment 2	16/Feb/16						
Equipment	10/1 05/10						
Installation							
SLCW-SW PROCUREMEN							
SC9000-08							
Segment 2	2016/0516						
Equipment	2010/0310						
Installation CO#1		-					
SC9000-08							
Segment 2	2/May/16						
Equipment	,						
Installation CO#2 SC6000-01		-					
SubStn Equip.	12/Son/14						
Install	12/Sep/14						
SC6000-01		-					
SubStn Equip.	28/Nov/14						
Install-C#1	20/1101/11						
SC6000-01		-					
SubStn Equip.	28/Jan/15						
Install-C#2							
SC6000-01		-					
SubStn Equip.	18/Feb/15						
Install-C#3							
SC6000-01							
SubStn Equip.	17/Mar/15						
Install-C#4		-					
SC6000-01							
SubStn Equip.	30/Apr/15						
Install-C#5 SC6000-01		-					
SubStn Equip.	11/Sep/15						
Install-C#6	11/3ep/13						
SC6000-01		-					
SubStn Equip.	16/Nov/15						
Install-C#7							
SC6000-01		-					
SubStn Equip.	9/Mar/16						
Install-C#8		_					
SC6000-01							
Substation	22/Mar/16						
Equipment Install-	ZZ/Wai/10						
C#9		-					
SC6000-01							
Substation	9/May/16						
Equipment Install- C#7							
SC7000-01 Stn		-					
Communication	8/Dec/14						
Install	0,200,11						
SC7000-01 Stn		-					
Communication	5/May/15						
Install-CO #1	,						
SC7000-01 Stn		-					
Communication	25/Aug/15						
Install-CO #2		_					
SC7000-01 Stn							
Communication	28/Sep/15						
Install-CO #3							
SC7000-01 Stn	16/Nov/15						
Communication Install-CO #4	16/Nov/15						
1113ta11-00 #4	L	-					



SC7000-01		-
Station Communications Install - CO #5	22/Mar/16	
SC7000-01 Station Communications Install - CO #6	9/May/16	
OTHER FN PR	OCUREME	i
511325- Environmental Services Sumas Remediation	5/Aug/14	=

Summary of Activities

- To date there is been great success of engaging aboriginal businesses in project construction with over \$48 million awarded.
- Employment values have begun reduce as the project winds down.
- At least once per quarter, project updates are provided to the Tsleil Waututh and Musqueam Nations through the Economic Development offices.

Challenges/Risks

Work Planned

Continue to respond to needs of the client and the identified First Nations as the project winds down.



6.0 HEALTH AND SAFETY

6.1 SUMMARY OF SAFETY ACTIVITIES

- Trackworks have now pushed rail up both the IB tunnel & OB tunnels. Lim & Power rail is near competition on IB side.
- Permanent lighting is operational on OB side.
- Stations are employing a couple of workers who are performing deficiency repairs.
- Wesley Fan, our tunnel ventilation engineer came June 28th to take air flow measurements. A final ventilation report is expected by June 30th, 2016.
- Silica dust exposure levels have been tested four times and all test results indicated low levels of silica. The last silica dust test came in high for the rock drill operation. Workers performing this work were not over exposed to silica as they use a ½ mask respirator. One last test is being conducted during the first week of July.
- The TFO Joint Occupational Safety & Health Committee continues to meet monthly at the TFO office.
- T&C are continuing with testing in segments 4 & 5. A test train is expected to travel through the tunnel on July 3rd on the OB track.
- Our contract Industrial Hygienist is working with us to resolve administrative orders written on the tunnel entry program. The meeting with WorkSafeBC on June 1st, 2016, was productive and WorkSafeBC requests all orders are complied with by end of June.

6.2 INJURY AND INCIDENT SUMMARY

Environmental:

See Environmental Section of Report

Property/Equipment Damage:

None to report this month

- Lost Time Incident:
 - SLCW TFO 16/04/20 LTI from 16/04/20 incident carried over. Worker was struck in the back of the head with a chain fall that fell from an elevated platform as it ascended. Doctor's assessment on 16/05/09 determined worker suffering from symptoms post concussion and has not been cleared to work.



Hours Worked	First Aid	Medical Aid	Lost Time Days
This Month	This Month	This Month	This Month
54,048	4	0	24
Hours Worked	First Aid	Medical Aid	Lost Time Days
To Date	To Date	To Date:	To Date
4,890,957	477	63	94



7.0 FINANCIAL

7.1 PERFORMANCE INCENTIVE PAYMENTS

Refer to the Performance Mechanism Report for full details.

7.2 MILESTONE PAYMENTS

See attached Statement of Progress.

7.3 CHANGE MANAGEMENT

Pricing has been approved for the following Province Changes/Events this month:

- Non-Standard Walkway Covers at Switch Machines
- Minor Works Requested by Province 6
- Public Art Installation Coquitlam Station

Pricing has been submitted for the following Province Changes:

None Currently Open

Additional Province Changes active this month include:

None Currently Open

7.4 RISK MANAGEMENT

Risk registers for each area of work are updated on a monthly basis.



8.0 QUALITY ASSURANCE

The following is a summary of activities.

8.1 STATUS OF QUALITY MANAGEMENT SYSTEM ACTIVITIES

- EGRT Construction continues to work closely with the Province to address quality issues as they arise. Representatives from both sides continue to meet regularly to discuss project quality issues.
- EGRT Construction continues to extend the invite to the Province for internal and external audits.
- The table below shows the current status of the Management Plans

Table 1 - Management Plan Status

Table I - Management Flan S	rtatas		
Plan	Latest Date of Issue	Latest Revision	Status
Quality Manual	20-Mar-14	2	Received
Design Quality Management Plan	6-May-14	3	Received
Environmental Quality Management Plan	21-Jul-14	2	Received
Traffic Quality Management Plan	1-May-14	2	Received
Construction Quality Management Plan – SGJV	23-Jun-14	2	Received
Construction Quality Management Plan – SLCW – GST	23-Apr-15	3	Received
Construction Quality Management Plan – SLCW – EG	16-Mar-15	1	Received
Construction Quality Management Plan – SSJV	11-Mar-15	2	Received
Construction Quality Management Plan – SLCW – SW	16-Dec-13	0	Accepted

8.2 AUDIT PROGRAMME

The tables below show the current status of the Audit Programme.



Table 2 – Audit Programme Status

Audit Programme	Latest Date of Issue	Latest Revision	Status
Quality Audit Programme	04-Mar-13	0	Received with comments from the Province. Detailed audit programmes were issued separately.
Design Quality Management Audit Programme	20-Jan-15	2	Received
Environmental Audit Programme	04-Dec-15	3	Issued to the Province for Information
Traffic Management Audit Programme	04-Dec-15	4	Issued to the Province for Information
Transit Facilities Audit Programme	05-Dec-14	4	Issued to the Province for Information
Construction Quality Management Audit Programme	4-Feb-16	4	Received

- To date, 157 quality audits have been completed by EGRT, Joint Ventures and Subcontractors. They are listed on Attachment H.
- There were no audits completed this reporting period.

Table 3 - Quality Audits

Audit Report Number	Discipline	Auditor	Auditee	Audit Date	NCR's Raised	OFI's Raised
511325-00000-SWSL- 38QB-0394	Construction	DBC	SLCW- GST	19-Apr- 16	0	0

Table 4 – Four Month Look Ahead Audit Schedule

• The Four Month Look Ahead Audit Schedule is provided in Attachment G.

8.3 PREVENTATIVE ACTION LOG

- There were no preventive actions initiated at this reporting period.
- Below is the tracking log for preventive action.

Table 5 – Preventive Action Log

PAR No.	Project Team	Brief Description	Response	Date Opened	Verified



8.4 SUMMARY OF INSPECTION AND TESTING ACTIVITIES

 Below is a table showing the Inspection and Testing summary for this reporting period.

Table 6 - Summary of Inspection and Testing

Project Team	Location	Description of Inspection and Testing
SLCW- GST	Lafarge Lake – Douglas Station	 Inspection of the following work: Site deficiency repairs. Door hardware installation. Egress staircase painting. Chaseway and way-finding signage installation. Electrical and Mechanical works.
SLCW- GST	Lincoln Station	 Inspection of the following work: Site deficiency repairs Door hardware installation Stainless steel handrail installation Chaseway and way-finding signage installation Electrical and Mechanical works
SLCW- GST	Coquitlam Centre Station	 Inspection of the following work: Site deficiency repairs Chaseway and way-finding signage installation Stainless steel handrail installation Electrical and mechanical works Parking lot line painting and sign installation
SLCW- GST	Aberdeen Ave. Reconstruction	- Inspection of site deficiency repairs
SLCW- GST	Vehicle Staff Facility	- Inspection of site deficiency repairs
SLCW- GST	VCIF	- Inspection of site deficiency repairs
SLCW- GST	Vehicle Storage Facility	 Inspection of the following work: Road construction Chain link fence installation Precast barrier placement in the parking lot Curb and sidewalk construction
SLCW- GST	Inlet Centre Station	 Inspection of the following work: Site deficiency repairs Glazing installation Electrical and mechanical works Door hardware installation
SLCW- GST	Moody Centre Station	 Inspection of the following work: Concrete placement for sidewalk, bench and planter construction Site deficiency repairs Structural steel installation



		Installation of glazing Electrical and mechanical works
SLCW- GST	North Portal PPS	 Inspection of the following works: Site deficiency repairs Door hardware installation
SLCW- GST	Burquitlam PPS	 Inspection of the following works: Site deficiency repairs Door hardware installation
SLCW- GST	Burquitlam Station	- Inspection of site deficiency repairs.
SLCW- GST	Lougheed Station	- Inspection of site deficiency repairs.

8.4.1 DBC

There were no ITPs issued by DBC this reporting period.

8.4.2 SLCW-GST

• There were no ITPs issued by SLCW-GST this reporting period.

8.4.3 SLCW-SW

There were no ITPs issued by SLCW-SW this reporting period.

8.5 NONCONFORMITY REPORTS AND CORRECTIVE ACTION

- The table below shows the current status of active NCRs.
- Associated Corrective Action for any NCR can be referred to the NCR Tracking System. Below is the link to the website.

http://csc.snclavalin.com/sites/EvergreenNCRTS/default.aspx

Table 7 -NCR and CAR Status

NCR No.	Description of Nonconformity	Date Open	Date Ended	Status	Description of Correction
SSJV-0035	Additional Segments With Curing Temperatures Exceeded 70 °C, Installed In The Tunnel	24-Mar-15		Final Quality Review	Use-as-is

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SLCW-GST- 0073	Drainage issue at DF pads locations in Section 330	26-May-15		Correction Implementation	Repair
SLCW-GST- 0074	Escalators – Sound Absorption Material "all stations"	15-Jun-15		Correction Implementation	Rework
SLCW-GST- 0085	Staircase Grating Openings at Moody Station	11-Mar-16	13-June-16	Ended	Repair
SLCW-GST- 0086	Projectwide Lighting Fixtures Ballast	21-Mar-16		Correction Implementation	Rework
SLCW-GST- 0087	Moody Mezzanine Lighting Level	21-Mar-16	13-June-16	Ended	Repair
SLCW-GST- 0088	Deficient Implementation of Incident Notification and Spill Reporting Procedures	13-Apr-16	7-June-16	Ended	Use as is
SLCW-GST- 0089	Corrosion of LIM Studs at Stud-Grout Interface	25-May-16		Correction Implementation	Repair
SLCW- Systems- 0009	Interface tolerance between running rail and expansion joint	15-June-16		Correction Implementation	Repair
DBC-0006	Bird Nesting Survey	17-June-16		Assigned	
SLCW-GST- 0090	Station Floor Drainage	22-June-16		Activated	

8.6 CONTINUAL IMPROVEMENT INITIATIVES

Improvement initiatives are presently done through Opportunity for Improvements and Corrective Actions related to NCRs.



9.0 PROJECT PHOTOGRAPHS



Figure 1 - Main Rail, LIM Rail, and Power Rail Completed Portion in Inbound Tunnel



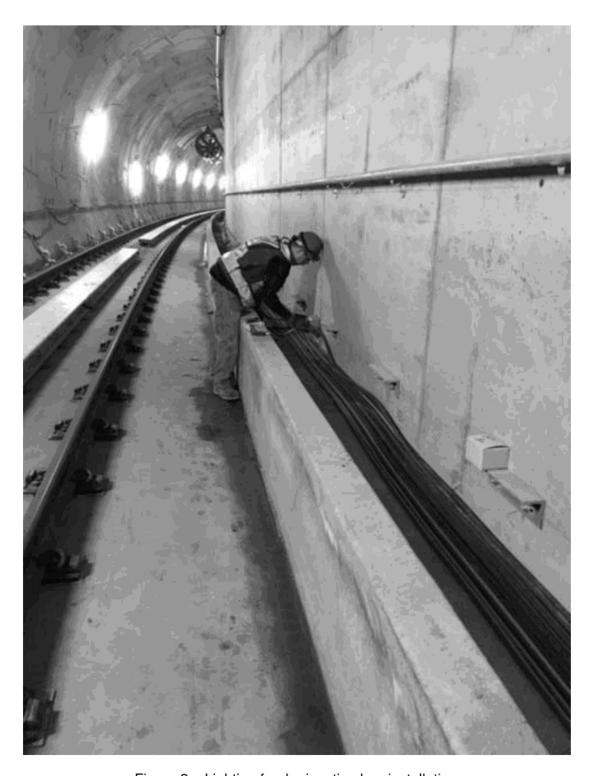


Figure 2 – Lighting feeder junction box installation





Figure 3 – Cross-passage Blue light station, ETEL and FLSS connection panel



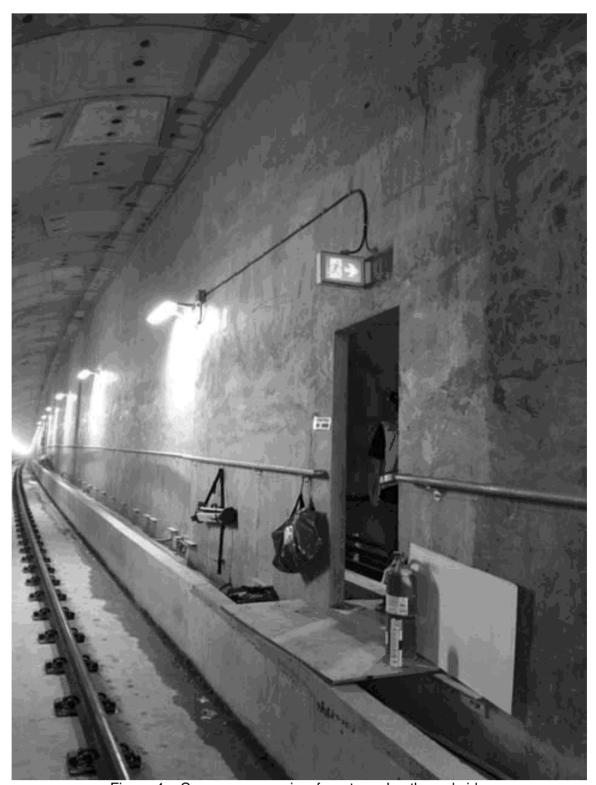


Figure 4 – Cross-passage view from tunnel outbound side





Figure 5 - Tunnel Inbound Propulsion Power Disconnect Switch Platform



Attachments

Attachment A – Submission List – Systems - Discontinued

Attachment B - Project Schedule

Attachment C – Activity Changes - *Discontinued*

Attachment D - Logic Changes - Discontinued

Attachment E – Alignment Key Plan

Attachment F - Environmental Existing Permits

Attachment G - Four Month Look Ahead Audit Schedule

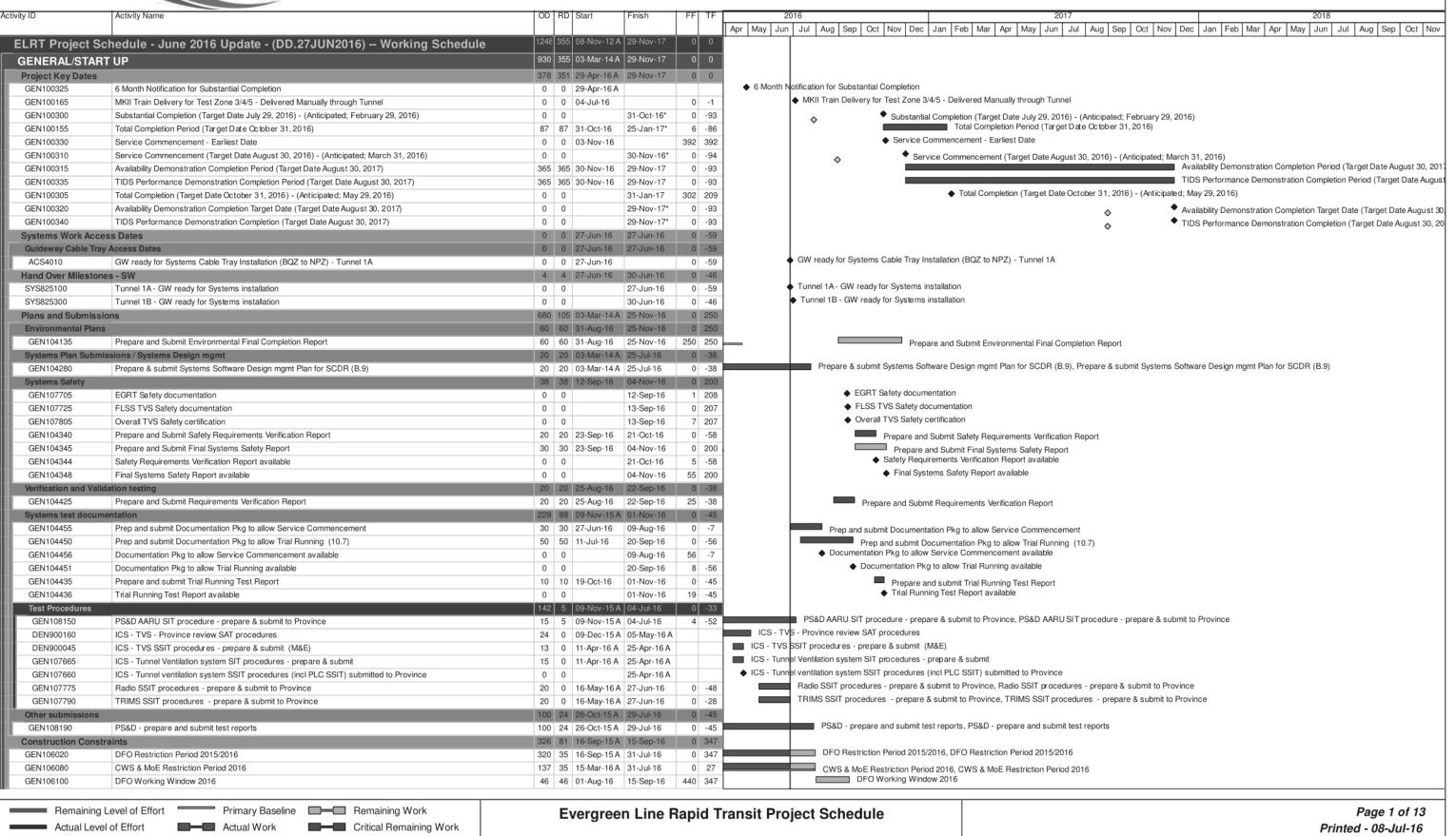
Attachment H - Quality Audits

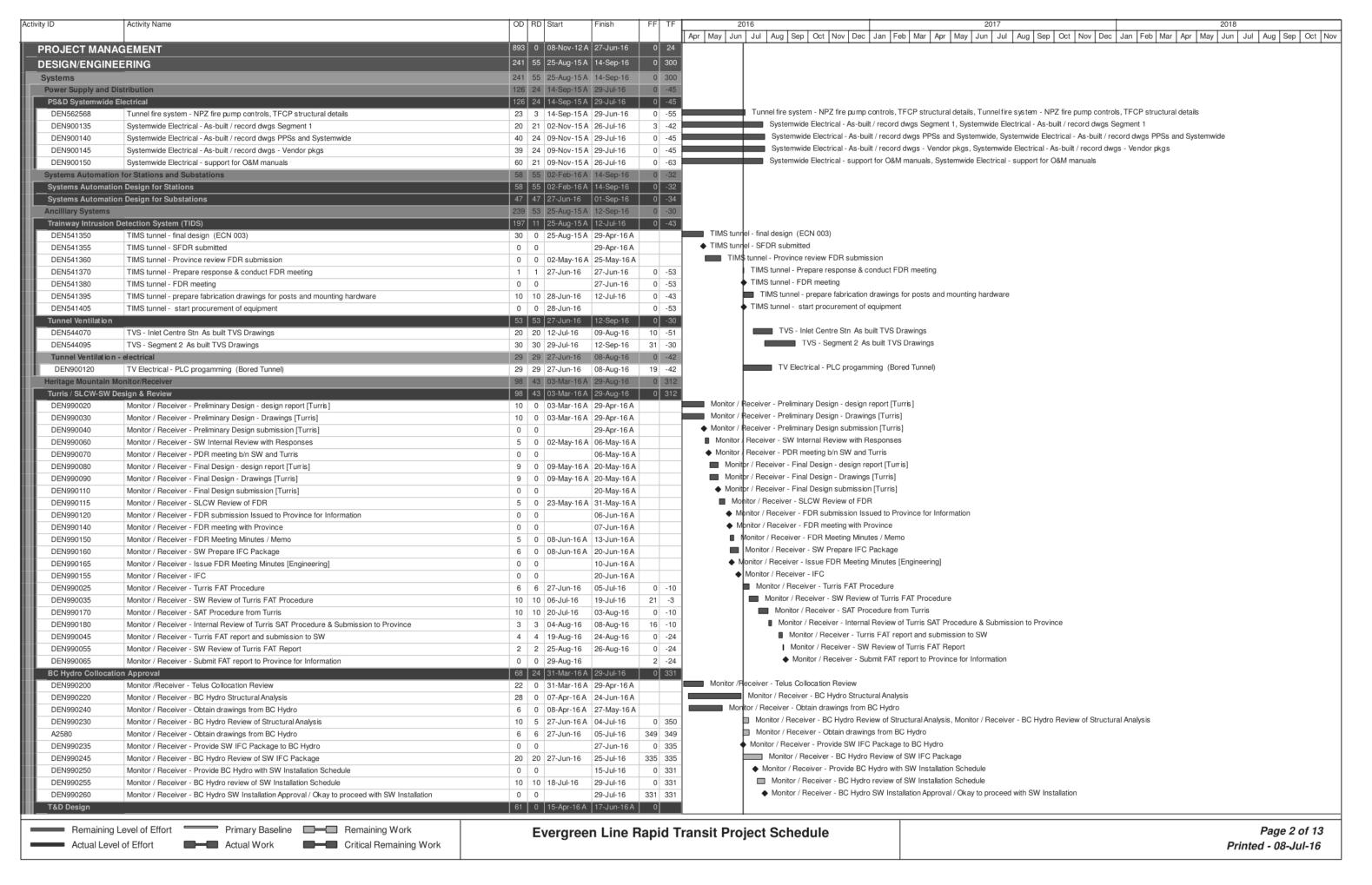
ATTACHMENT A SYSTEM MANAGEMENT PLAN DISCONTINUED

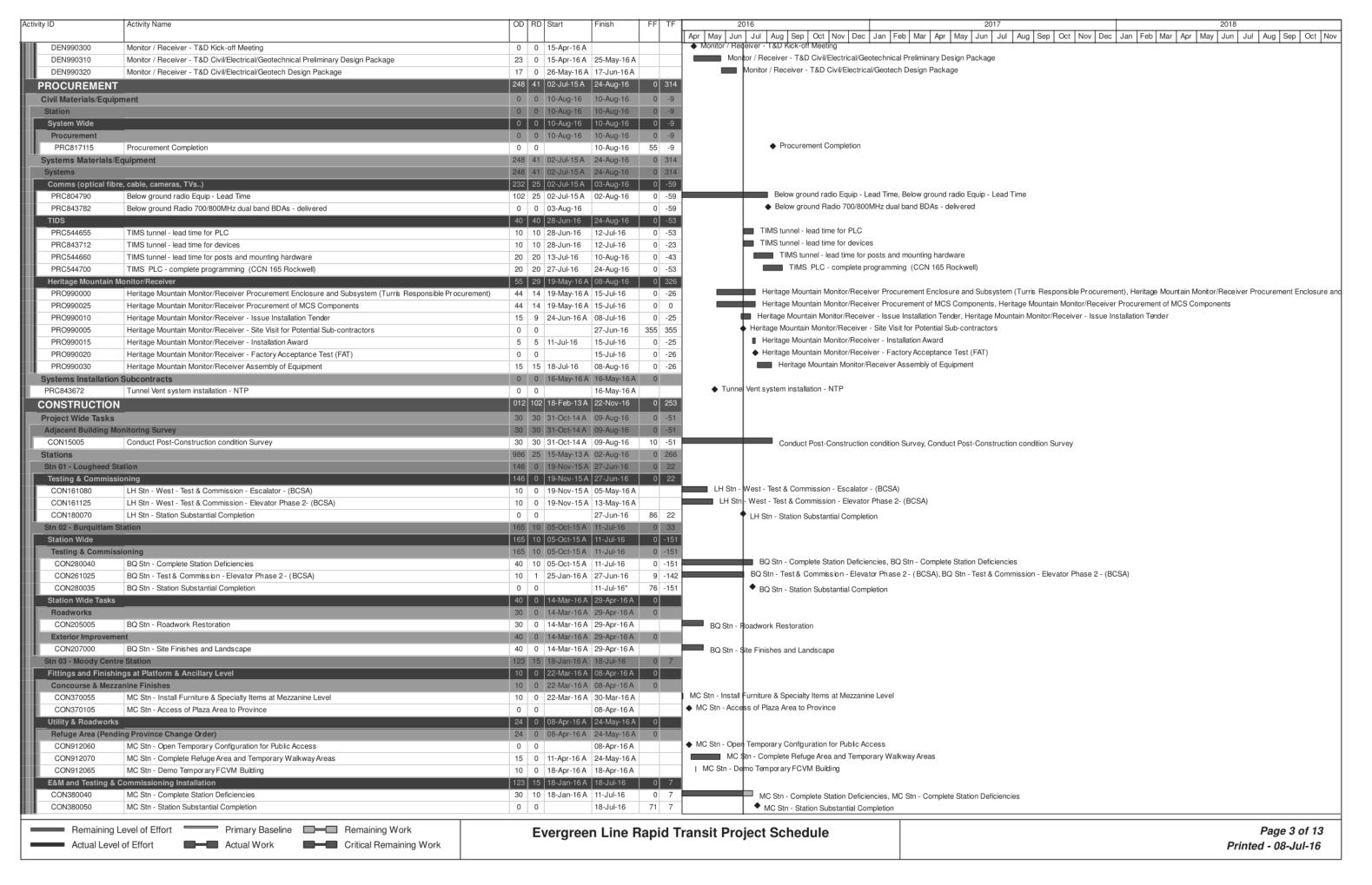


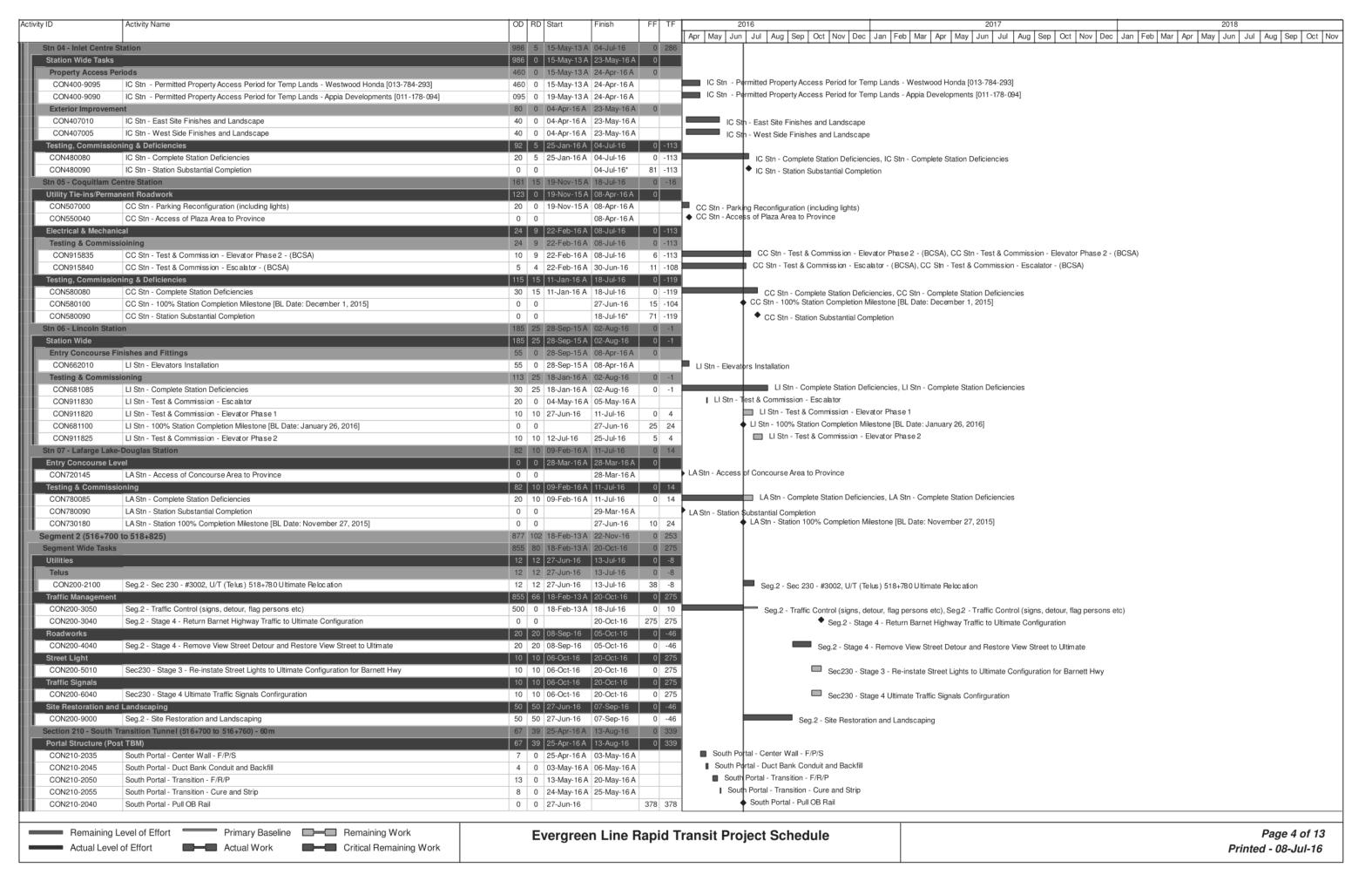
EVERGREEN LINE RAPID TRANSIT PROJECT ELRT Project Schedule Update - (DD. 27JUN2016) Condensed Schedule

Date	Revision	Checked	Approved
08-Jul-16	Project Schedule Update (DD.27JUN2016) Rev.0	JS	JS

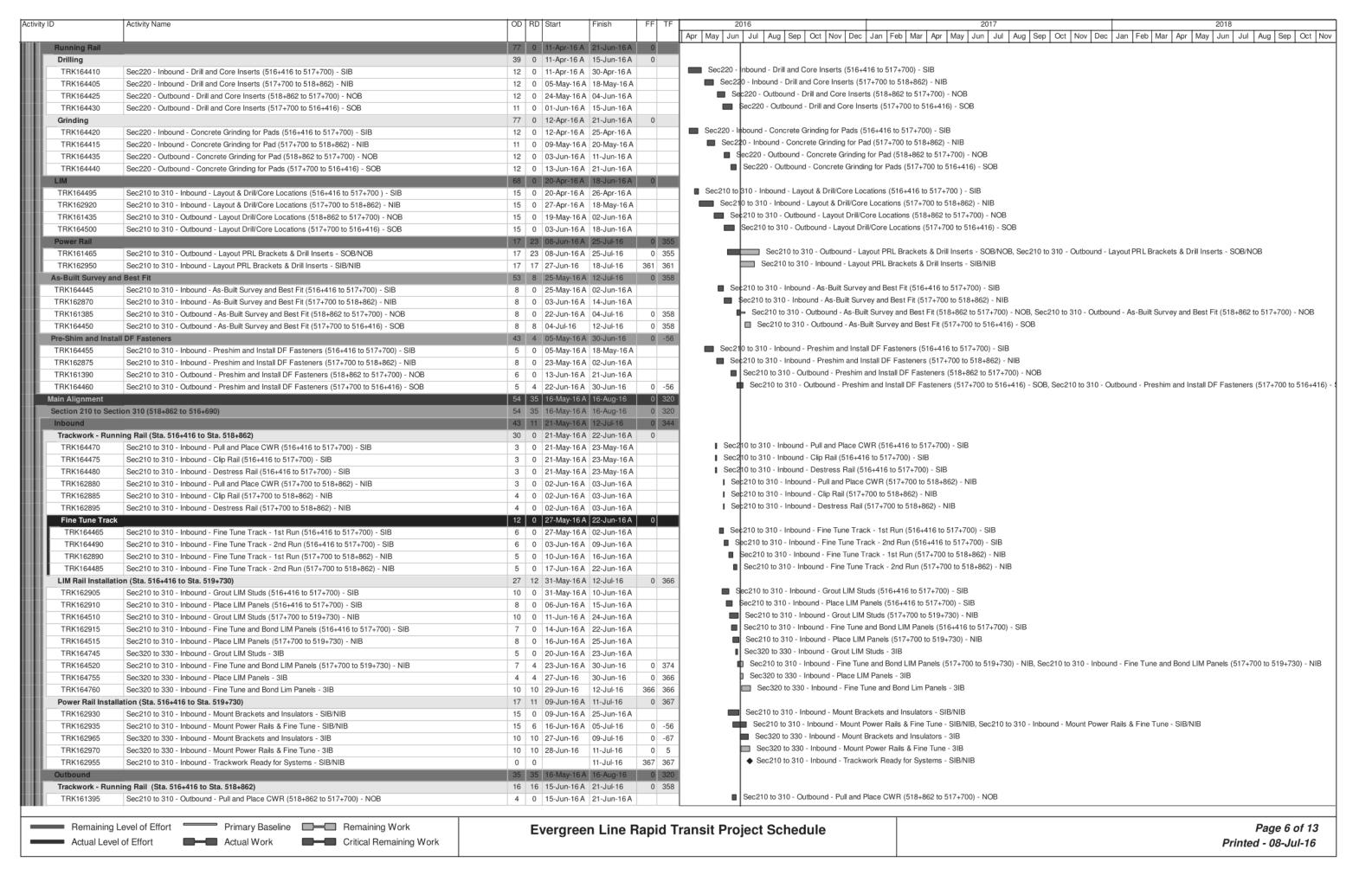


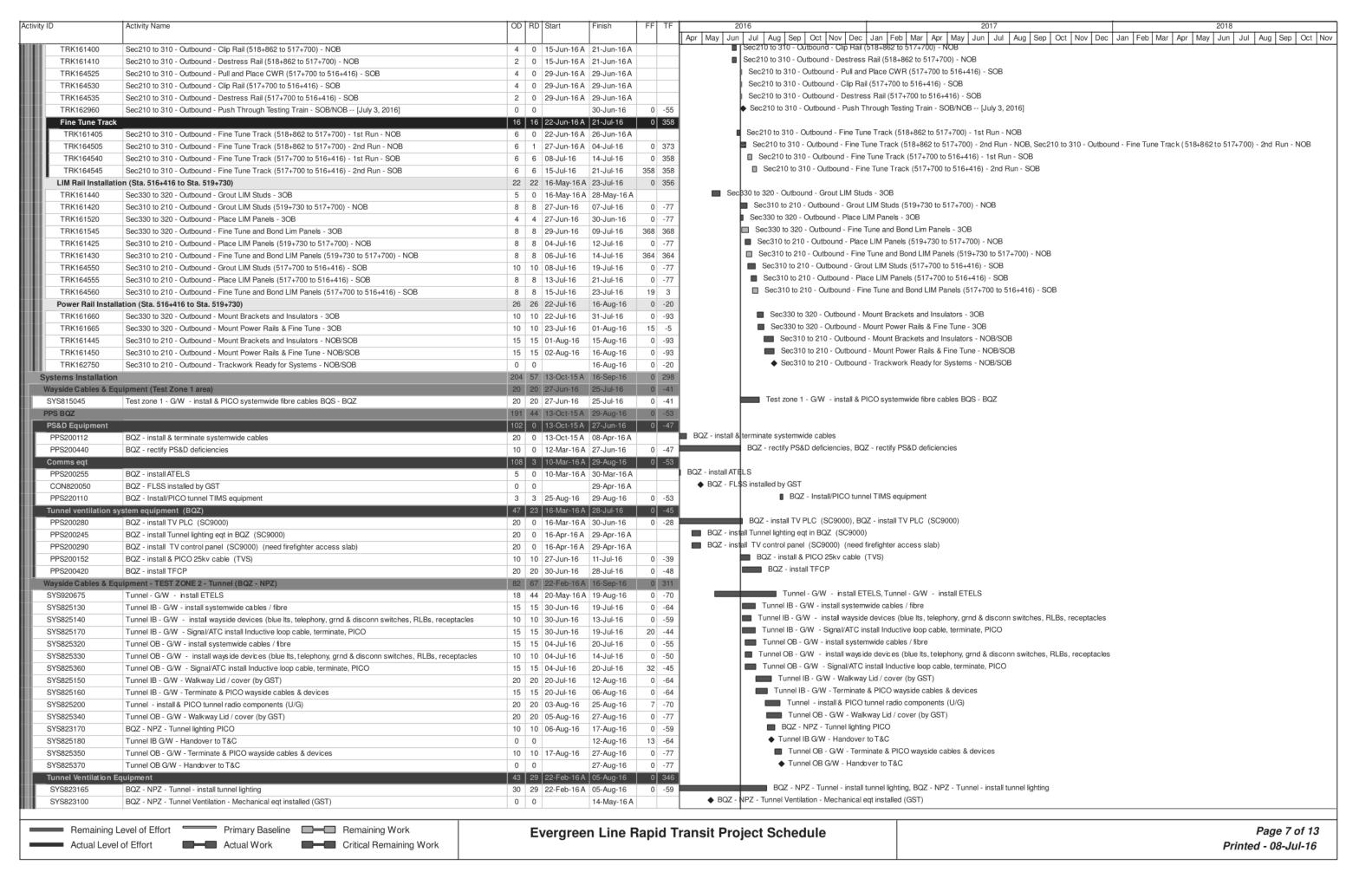


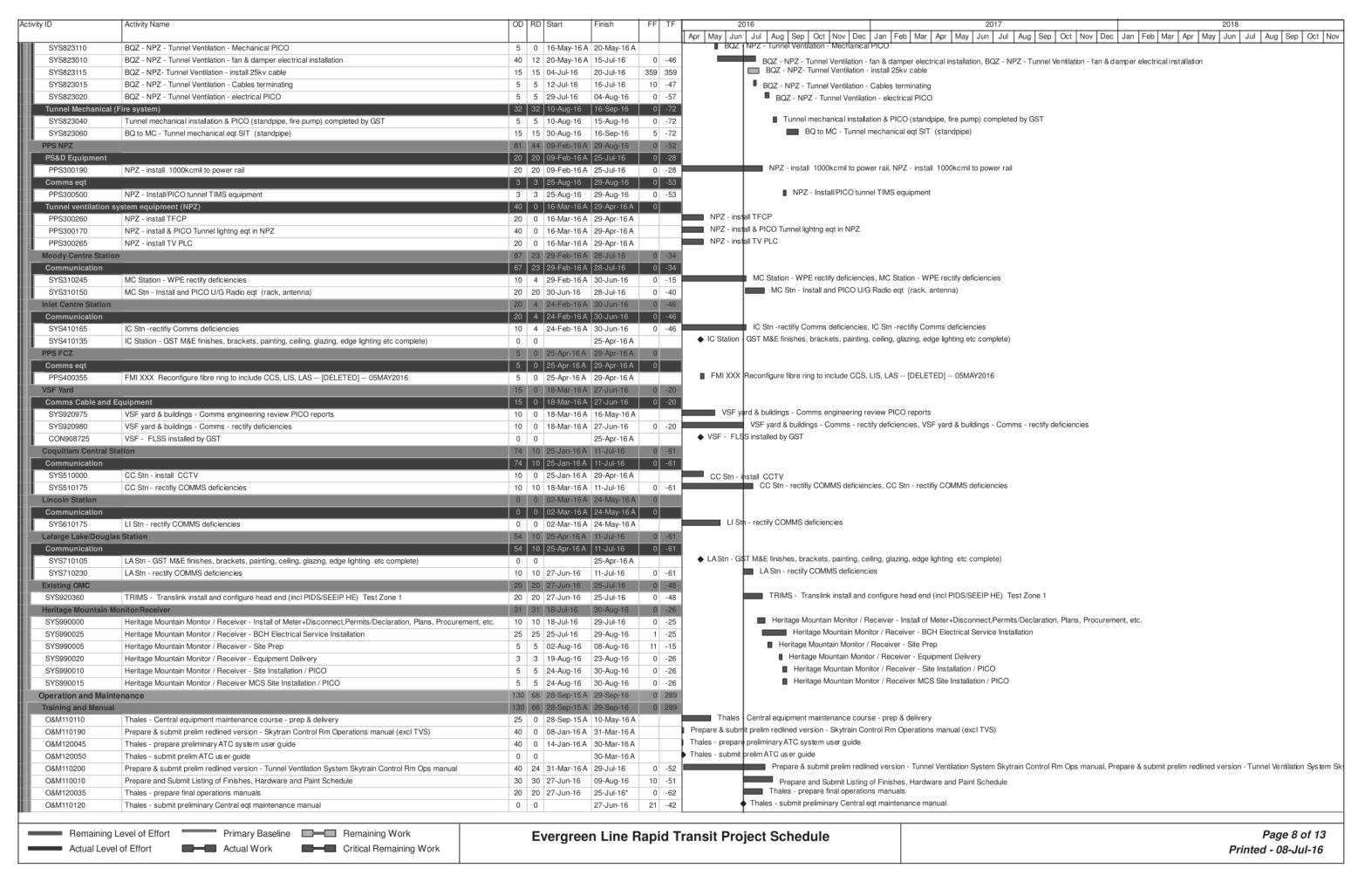


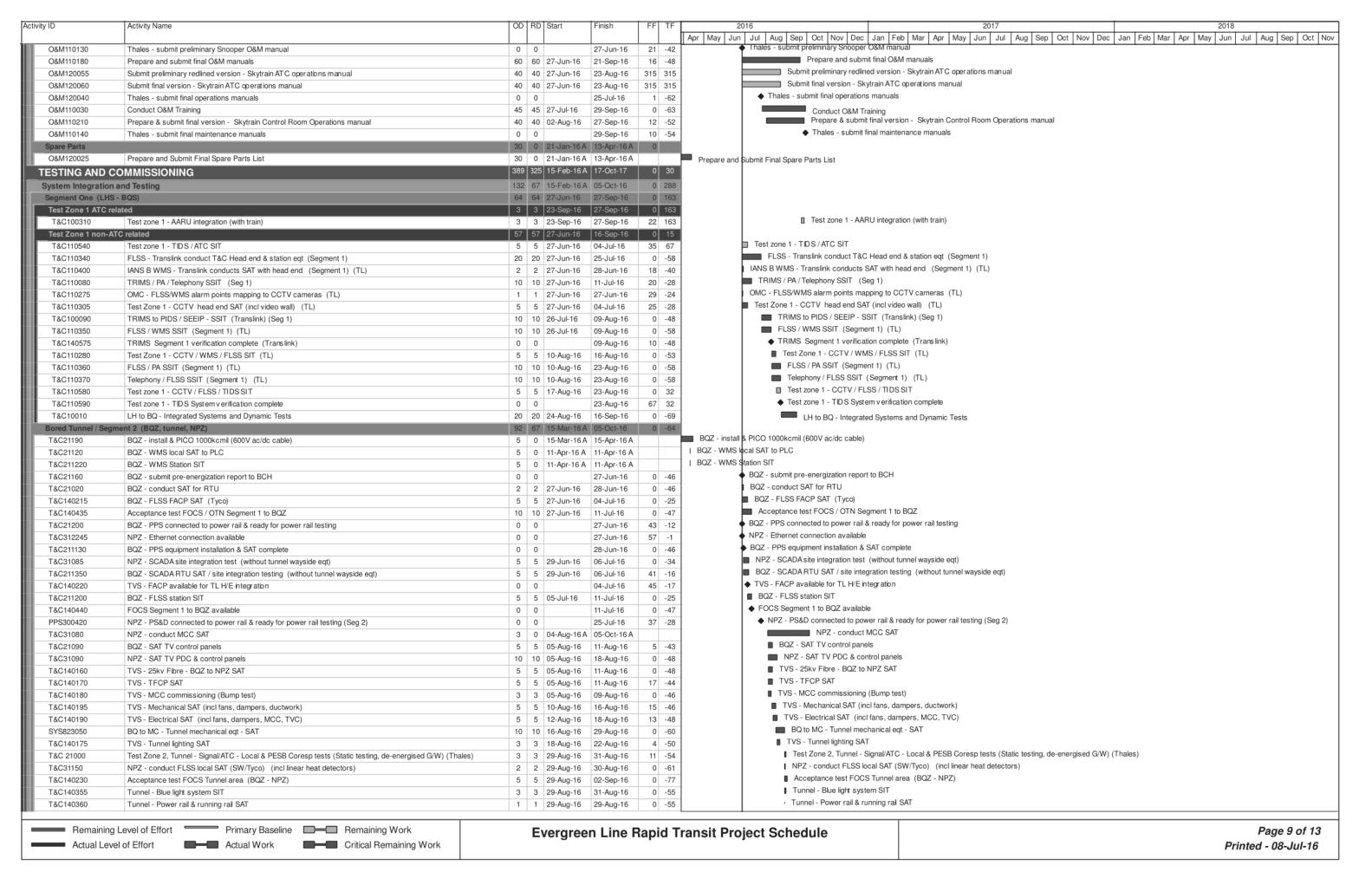


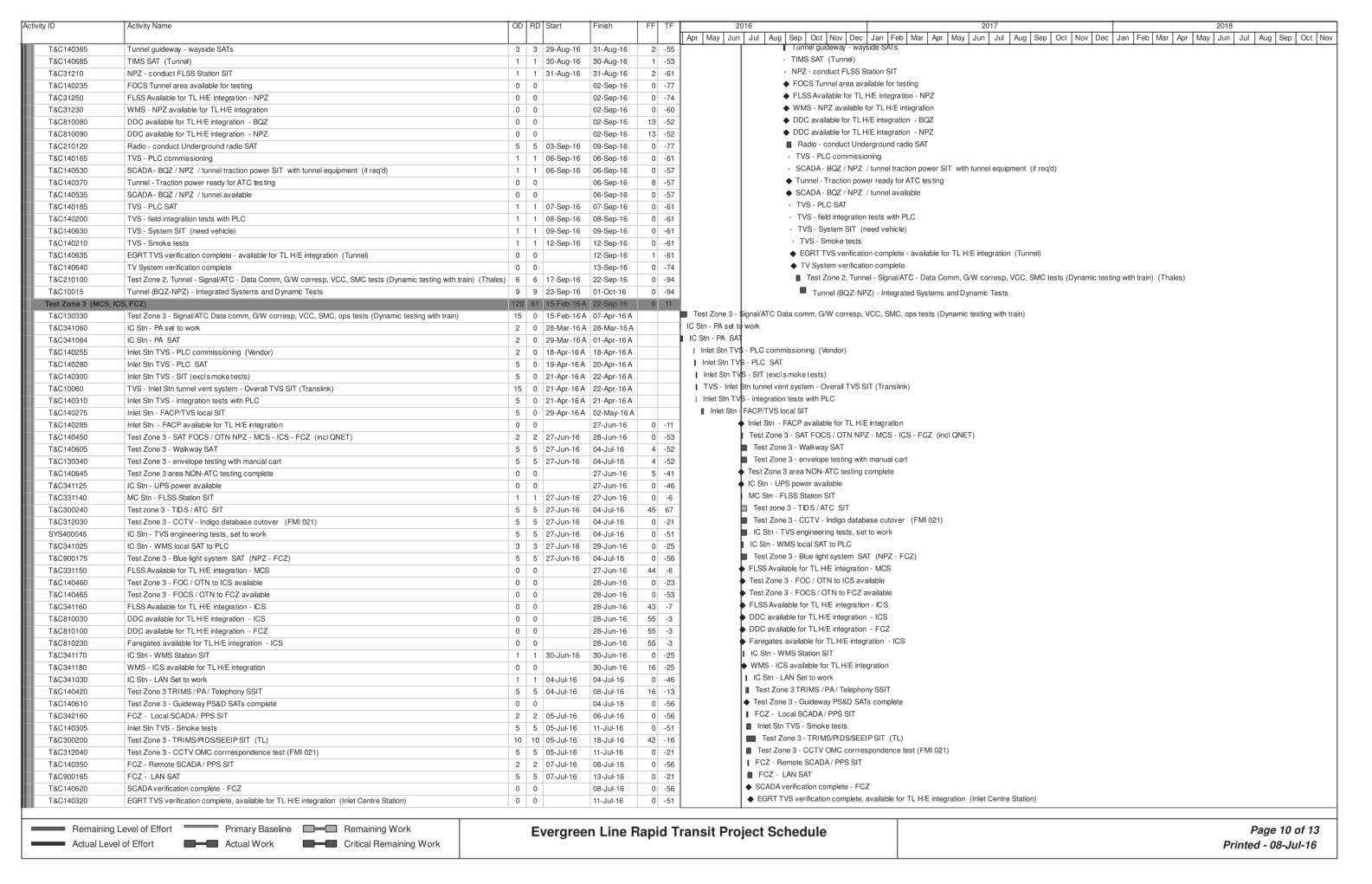
Activity ID	Activity Name	OD RD	Start	Finish	FF TF	2016 2017 2018
,						Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Sep
CON210-2060	South Portal - Roof - F/R/P - (Double Shift)	9 9	04-Jul-16	13-Jul-16	0 33	
CON210-2065	South Portal - Roof - Cure and Strip		14-Jul-16	26-Jul-16	0 33	South Portal - Roof - Cure and Strip
CON210-2070	South Portal - Chamfers		27-Jul-16	05-Aug-16	0 33	E Carth Data! Observer
				_		B. Outh Buthl. Obustics
CON210-2075	South Portal - Standpipe			12-Aug-16	340 34	E Curt Part Corre
CON210-2080	South Portal - Sump Pump		06-Aug-16	-	340 34	To Could Bookel Bookell
CON210-2085	South Portal - Backfill	7 7	06-Aug-16	13-Aug-16	339 33	South Portal - Backfill
Section 220 - Tunn	nel Finishes	65 30	14-Mar-16 A	09-Aug-16	0 -2	
CON220-2070	South Center Fire Wall (1000m @ 30LM/day)	17 0	14-Mar-16 A	08-Apr-16 A		South Center Fire Wall (1000m @ 30LM/day)
CON220-2080	Handrails / Doors / Waterline	35 35	23-Mar-16 A	09-Aug-16	0 -72	Handrails / Doors / Waterline, Handrails / Doors / Waterline
CON220-2105	Fan Support Steel Seismic Braces - SIB	3 0	23-Mar-16 A	11-Apr-16 A		Fan Support \$teel Seismic Braces - SIB
CON220-2075	North Center Fire Wall (1000m @ 30LM/day or 500m3 @ 8m3/day - 2 shifts/day)	25 0	05-Apr-16 A	30-Apr-16 A		North Center Fire Wall (1000m @ 30LM/day or 500m3 @ 8m3/day - 2 shifts/day)
CON220-2085	South Walkway Walls and Utility Corridor (1000m @ 30LM/day or 500m3 @8m3/day - 2 shifts/day) - SIB		06-Apr-16 A			South Walkway Walls and Utility Corridor (1000m @ 30LM/day or 500m3 @8m3/day - 2 shifts/day) - SIB
			· ·	-		Fan Installation - NIB
CON220-2165	Fan Installation - NIB		18-Apr-16 A			
CON220-2060	South Walkway Walls and Utility Corridor (1000m @ 30LM/day or 500m3 @ 8m3/day - 2 shifts/day) - SOB		21-Apr-16 A	-		South Walkway Walls and Utility Corridor (1000m @ 30LM/day or 500m3 @ 8m3/day - 2 shifts/day) - SOB
CON220-2175	Disconnect Switch Platform - NOB	3 0	27-Apr-16 A	30-May-16 A		Disconnect Switch Platform - NOB
CON220-2145	Fan Support Steel - NOB	4 0	02-May-16 A	11-May-16 A		Fan Support Steel - NOB
CON220-2095	North Walkway Walls and Utility Corridor (1000m @ 30LM/day or 500m3 @ 8m3/day - 2 shifts/day) - NOB	14 0	04-May-16 A	09-May-16 A		■ North Walkway Walls and Utility Corridor (1000m @ 30LM/day or 500m3 @ 8m3/day - 2 shifts/day) - NOB
CON220-2115	Fan Support Steel Seismic Braces - SOB	3 0	05-May-16 A	07-May-16 A		Fan Support Steel Seismic Braces - SOB
CON220-2125	Fan Installation - SIB		06-May-16 A	-		■ Fan Installation - SIB
CON220-2123	Fan Support Steel - NIB		-	-		■ Fan Support Steel - NIB
			06-May-16 A	- '		North Walkway Walls and Utility Corridor (1000m @ 30LM/day or 500m3 @ 8m3/day - 2 shifts/day) - NIB
CON220-2065	North Walkway Walls and Utility Corridor (1000m @ 30LM/day or 500m3 @ 8m3/day - 2 shifts/day) - NIB		09-May-16 A			
CON220-2135	Fan Installation - SOB	3 0	09-May-16 A	11-May-16 A		Fan Installation - SOB
CON220-2160	Fan Support Steel Seismic Braces - NIB	3 0	11-May-16 A	13-May-16 A		
CON220-2155	Fan Support Steel Seismic Braces - NOB	3 0	14-May-16 A	14-May-16 A		Fan Support Steel Seismic Braces - NOB
CON220-2170	Fan Installation - NOB	3 0	14-May-16 A	14-May-16 A		Fan Installation - NOB
CON220-2180	Disconnect Switch Platform - NIB	3 0	16-May-16 A	18-May-16 A		■ Disconnect Switch Platform - NIB
CON220-2185	Tunnel Fit Out Complete	0 0		30-May-16 A		◆ Turnel Fit Out Complete
	th Transition Tunnel (518+735 to 518+825) - 90m		1 14-Mar-16 A	,	0 25	
H <i>r</i>						
Transition Tunnel			1 14-Mar-16 A		-	
	ucture (Post TBM)		1 14-Mar-16 A		0 25	
CON230-2115	North Portal - Outside Walls	1 0	14-Mar-16 A	01-Apr-16 A		North Portal - Outside Walls
CON230-2125	North Portal - Second Pour & Screeding	13 0	04-Apr-16 A	13-Apr-16 A		North Portal - Second Pour & Screeding
CON230-2185	North Portal - Center Wall - F/P/S	10 0	16-May-16 A	27-Jun-16	0 25	North Portal - Center Wall - F/P/S, North Portal - Center Wall - F/P/S
CON230-2135	North Portal - Inbound Parapet - F/P/S	5 5	27-Jun-16	04-Jul-16	0 25	■ North Portal - Inbound Parapet - F/P/S
CON230-2190	North Portal - Outbound Parapet - F/P/S	5 5	27-Jun-16	04-Jul-16	0 25	□ North Portal - Outbound Parapet - F/P/S
CON230-2130	North Portal - Duct Bank Conduit and Backfill		05-Jul-16	11-Jul-16	367 36	
						- N - N - N - N - N - N - N - N - N - N
CON230-2145	North Portal - Transition - F/R/P - (Double Shift)		05-Jul-16	12-Jul-16	0 25	Month Pontal Day (FDD) (Ponthle Child)
CON230-2150	North Portal - Roof - F/R/P - (Double Shift)	9 9	13-Jul-16	22-Jul-16	0 25	North Bodyl, Bodyl, Own and Orde
CON230-2155	North Portal - Roof - Cure and Strip	11 11	23-Jul-16	05-Aug-16	0 25	
CON230-2160	North Portal - Chamfers	8 8	06-Aug-16	15-Aug-16	0 25	■ North Portal - Chamfers
CON230-2165	North Portal - Standpipe	6 6	16-Aug-16	22-Aug-16	332 33	■ North Portal - Standpipe
CON230-2170	North Portal - Backfill	12 12	16-Aug-16	29-Aug-16	0 25	North Portal - Backfill
CON230-2175	North Portal - Slope Restoration		30-Aug-16			Mouth Portal Clans Postavation
CON230-2180	North Portal and Restoration		24-Sep-16			North Postel and Posterolina
			-			
	r Substations (PPS)		27-Jun-16		0 -4	
1———	Substation (stand alone)		27-Jun-16		-	
General Mech/Ele			27-Jun-16		0 -4	
CON909060	BQZ - Electical & Mechanical - Testing & Commissioning	10 10	27-Jun-16*	11-Jul-16	0 -4	BQZ - Electical & Mechanical - Testing & Commissioning
Trackwork (track	, LIM, power rail, walkway)	79 35	14-Mar-16 A	16-Aug-16	0 32	
	ssioning Area 2 (Sta. 516+416 to Sta. 519+730)	79 35	14-Mar-16 A	16-Aug-16	0 32	
Milestone Dates			16-May-16 A			
TRK164400	Sec220 - Guideway Ready for Trackwork / Early Systems Access			16-May-16 A		◆ Sec220 - Guideway Ready for Trackwork / Early Systems Access
		0 0		-		s construction and production and productions and productions and productions and productions are also and productions and productions are also also also are also also also also also also also also
Special Trackworl			14-Mar-16 A		-	
	nold West Crossover (518+906 to 518+962)		14-Mar-16 A		0	<u></u>
TRK161695	Reichhold West Crossover - Hoist, Assemble, Set Crossover	18 0	14-Mar-16 A	14-Apr-16 A		Reichhold West Crossover - Hoist, Assemble, Set Crossover
TRK161710	Reichhold West Crossover - Pour Special Trackwork	5 0	15-Apr-16 A	22-Apr-16 A		Reichhold West Crossover - Pour Special Trackwork
TRK161700	Reichhold West Crossover - Form, Pour, Strip Icosit	20 0	25-Apr-16 A	13-May-16 A		Reichhold West Crossover - Form, Pour, Strip Icosit
TRK161705	Reichhold West Crossover - Install Switch Machines		09-May-16 A	-		Reichhold West Crossover - Install Switch Machines
Prep for Mainline			14-Mar-16 A		-	
	ation (In Tunnel Section)		14-Mar-16 A	_	0	Sec310 to 335 - CIP Walkway
TRK131040	Sec310 to 335 - CIP Walkway		14-Mar-16 A			Sec310 to 335 - CIP Walkway
TRK161380	Sec150 - CIP Walkway		16-May-16 A	-		Sec 50 - CIP Walkway
Drilling and Cori	ring	77 23	11-Apr-16 A	25-Jul-16	0 35	<u> </u>
Domoinin	primary Pacalina Demaining Work				.	Secreta Buede de Octobro de de
Remainin		E	vergree	n Line R	Rapid	Fransit Project Schedule Page 5 of
Remainin Actual Le		E	vergree	n Line F	Rapid	Fransit Project Schedule Page 5 of Printed - 08-Jun

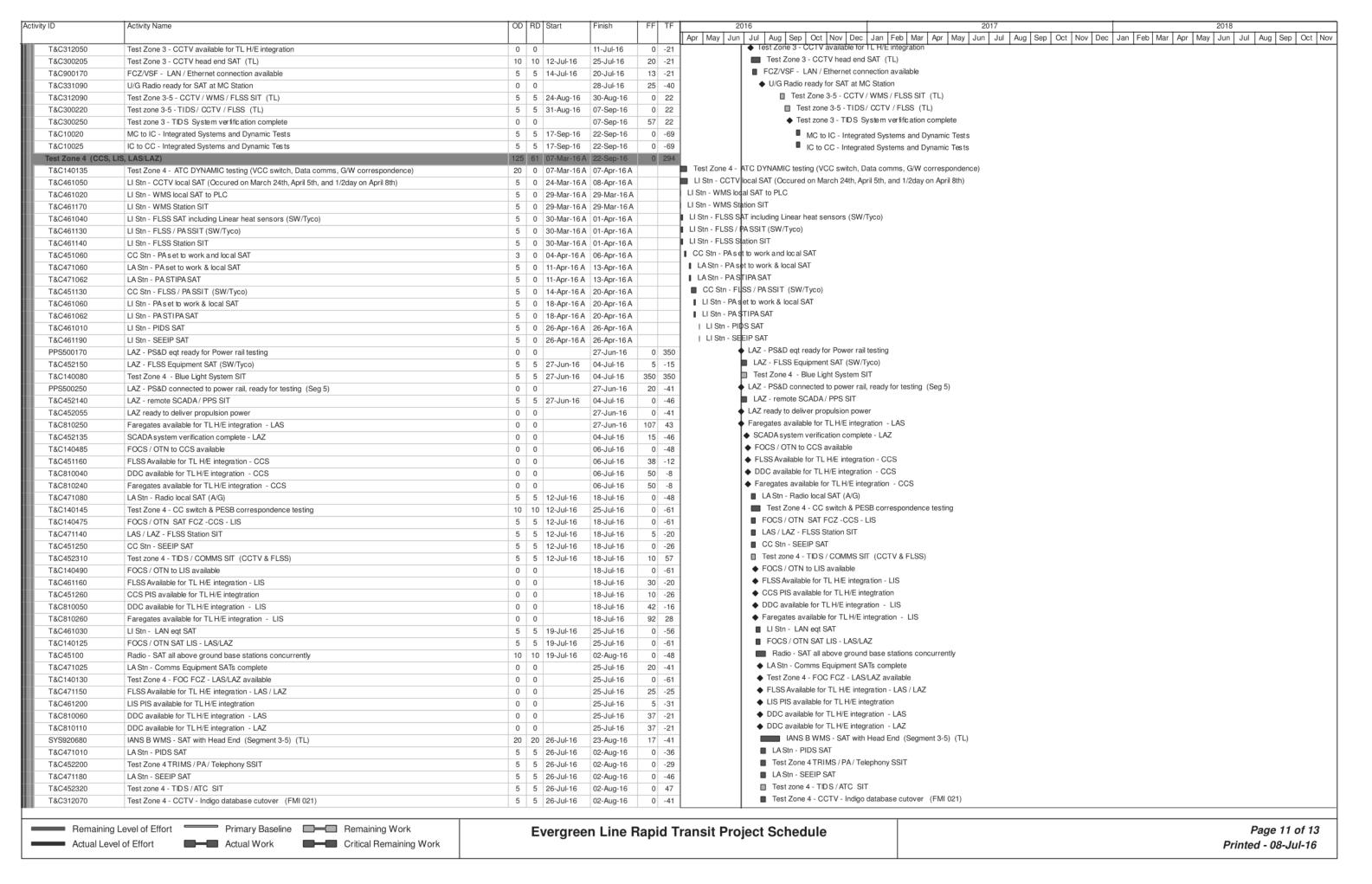


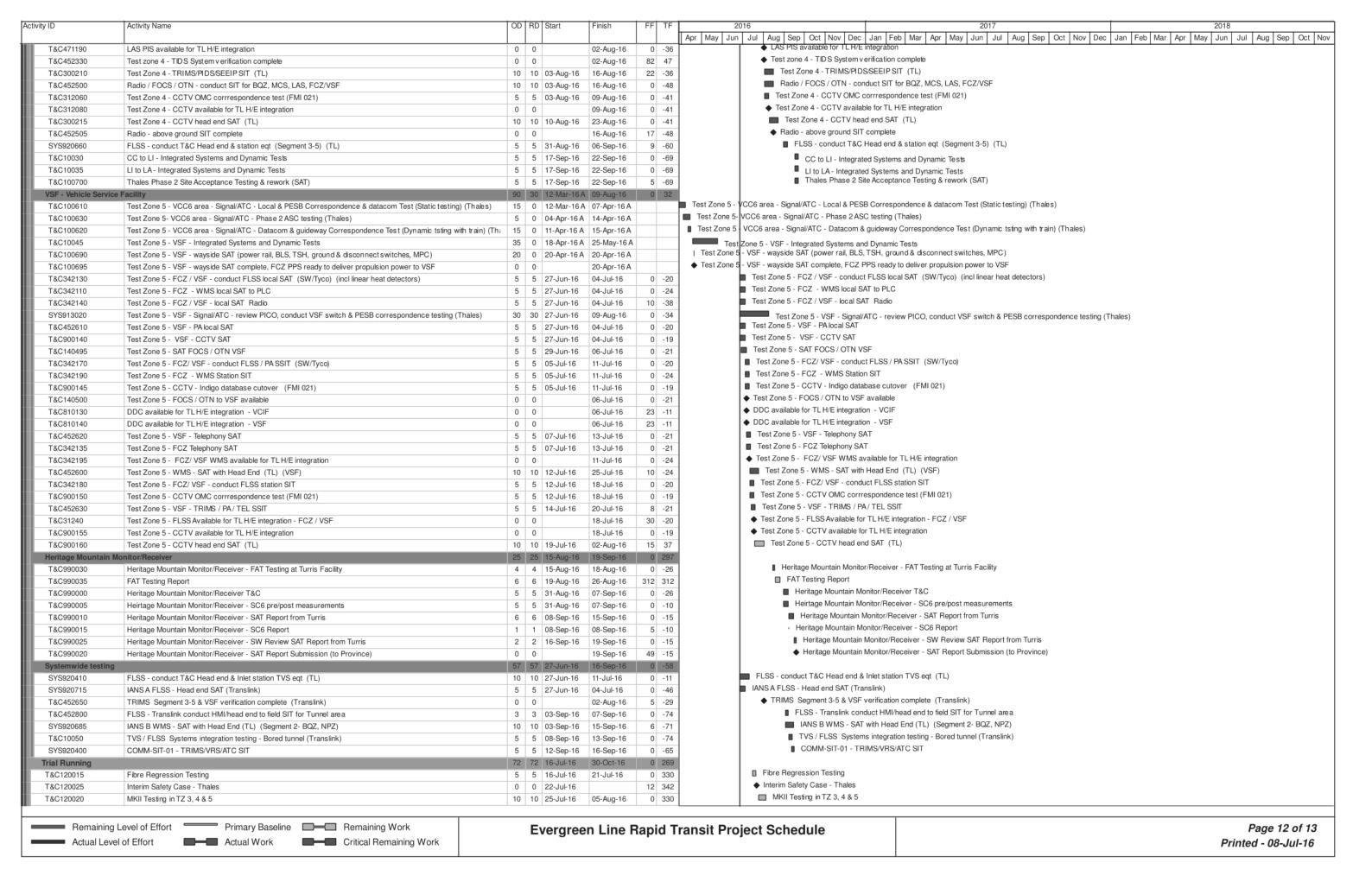


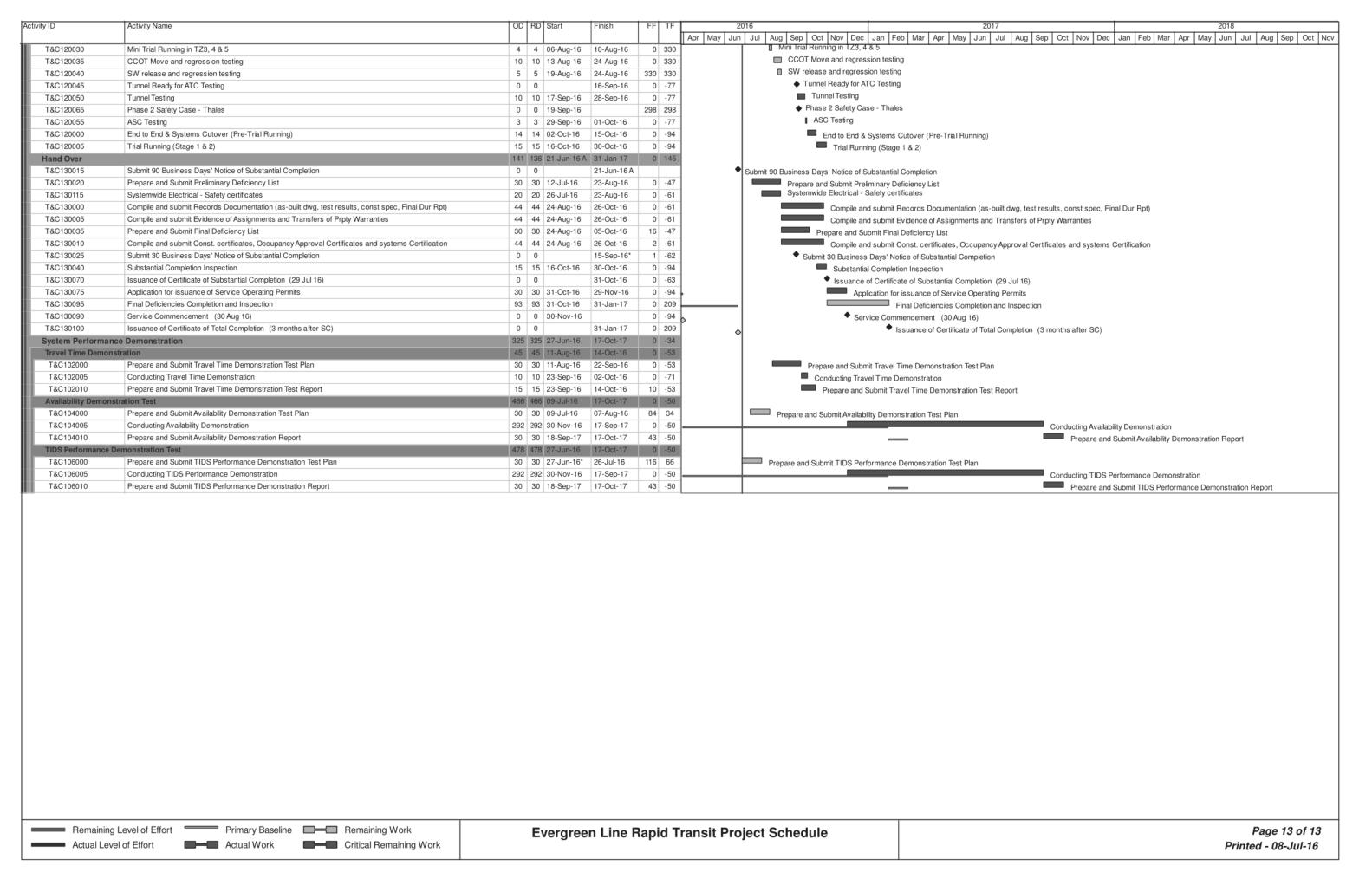












ATTACHMENT C ACTIVITY CHANGES DISCONTINUED

ATTACHMENT D LOGIC CHANGES DISCONTINUED

Page 063

Withheld pursuant to/removed as

s.15

Attachment F

Environmental Management

Permitting Status – Key Active Permits (expired or otherwise inactive permits are shown in grayscale font)

Permit Description	Act/Regulation	Application Date	Status
Federal			
DFO Authorization – to authorize harmful alteration or disruption, or the destruction, of fish habitat (HADD)	Fisheries Act ¹ , Subsection 35(2)(b)	July 11, 2013	The DFO Authorization (#06-HPAC-PA1-00001) was signed by DFO and the Ministry of Transportation and became effective on July 18, 2013. The Permit expires on Dec. 31, 2016.
Amendment to the Authorization to address design developments and method changes that occurred after issuance of the Authorization on July 18, 2013	Fisheries Act, Subsection 35(2)(b)	January 24, 2014	DFO amended Authorization No. 06- HPAC-PA1-00001 on January 27, 2014. The Amendment expires on Dec. 31, 2016.
Request for DFO review of final proposed habitat compensation for the Project (including various changes to habitat compensation as compared to the habitat compensation described in the Project Authorization #06-HPAC-PA1-00001 as amended on January 27, 2014).	Fisheries Act, Subsection 35(2)(b)	April 30, 2015	On May 21, 2015 DFO issued a letter to the Province accepting all of EGRT's proposed changes. The updated habitat compensation supersedes the compensation described in the Project Authorization #06-HPAC-PA1-00001 (as amended on January 27, 2014) but all other conditions of the Authorization continue to apply. The Authorization expires on Dec. 31, 2016.
DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	June 25, 2013	The permit (#XR 239-2013) was received on July 8, 2013. The permit expired on June 30 2014. A new permit was obtained (see row below).

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¹ Amendments to the *Fisheries Act* came into effect on November 2013 that repealed the HADD provisions of Subsection 35(2). However, DFO Authorization #06-HPAC-PA1-00001 is grandfathered under the amended Act and remains in effect.

Permit Description	Act/Regulation	Application Date	Status
Amendment to DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	March 18, 2014	The permit (#XR 239-2014) was received on March 21, 2014. Note this permit supersedes #XR 239-2013 (see row above).
Amendment to DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	January 8, 2015	The permit (#XR 71 2014 – Amendment 2) was received on January 15, 2015. Subsequently, the Permit was further amended to include road works and culvert installation at Pinnacle Creek, The Permit expired on December 31, 2015.
DFO Permit to allow fish salvage during habitat compensation construction at Schoolhouse Creek.	Fisheries Act, Fishery (General) Regulation	December 24, 2015	The permit (XR 376 2015) was received on December 28, 2015. The permit expires on Dec. 31, 2016.
Amendment to the Authorization to allow instream works at Kyle Creek from Oct. 1 – 15, 2013	Fisheries Act, Subsection 35(2)	Sept. 30, 2013	Email amendment was received from DFO on Sept. 30, 2013. The relevant work is complete.
Request for DFO review of proposed out-of-window instream work at Tributary to Suterbrook Creek (to begin construction of instream Pier P3-15)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	January 27, 2014	DFO issued a "no objection" email to the Province on January 28, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct instream works to build Utility 4011 outside the least risk window specified in DFO Authorization #06-HPAC-PA1-00001)	Fisheries Act, Subsection 35(2)(b)	March 25, 2014	DFO issued a "no objection" email to the Province on March 25, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Scott Creek (work to be completed no later than October 10, 2014)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	August 20, 2014	DFO issued a "no objection" email to EGRT on August 21, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Pigeon Creek (work to be completed no later than October 30, 2014)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	August 28, 2014	DFO issued a "no objection" email to the Province on August 28, 2014. The relevant work is complete.
Request for DFO review of EGRT	Fisheries Act,	October 28, 2014	DFO issued a "no

Permit Description	Act/Regulation	Application Date	Status
proposal to conduct out-of-window instream work at Pigeon Creek (work to be completed no later than November16, 2014)	Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001		objection" email to the Province on October 28, 2014. The relevant work is complete.
Request to DFO to allow instream works to occur outside the least-risk fisheries window at Scott Creek (to install bank stabilization).	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	January 29, 2015	DFO issued a "no objection" email to the EGRT on January 30, 2015. The relevant work is complete.
Provincial			
Ministry of Forests, Lands and Natural Resource Operations (FLNR) Approval to allow changes in and about a stream (major works) at Kyle Creek, Suterbrook Creek, Scott Creek and "Mariner Pond"	Water Sustainability Act ² , Section 11	May 27, 2013	Approval (#A2006043) was received on July 24, 2013. The Approval expires Dec. 31, 2016.
Order amending Approval A2006043 to allow instream works to occur outside the least-risk fisheries window	Water Sustainability Act, Section 11	September 30, 2013	The Order was received on Sept. 30, 2013. The Order applies to all watercourses affected by the Project. The Order expires Dec. 31, 2016.
Approval to construct habitat compensation at Hoy Creek.	Water Sustainability Act, Section 11	May 14, 2015	Approval (#A2006297) was received on July 23, 2015. The Approval expires Dec. 1, 2016.
Approval to construct habitat compensation at Schoolhouse Creek.	Water Sustainability Act, Section 11	May 15, 2015	Approval (#2006301) was received on December 21, 2015. The Approval expires Dec. 1, 2017.
Notification to FLNR Habitat Officer to allow changes in and about a stream (GVSDD storm system repairs) – Ottley Creek	Water Sustainability Act, Section 11 Water Sustainability Regulation, Part 3	June 21, 2016	Notification was assigned file # 100169648. FLNR has 45 calendar days to review the Notification.
Notification to FLNR to allow changes in and about a stream (guideway works) – Schoolhouse Creek	Water Sustainability Regulation, Part 3	May 17, 2013	The Permit (FLRN tracking #2013-104) has expired and is superseded by a new Notification (see row below).

-

A new *Water Sustainability Act* came into force in early 2016 that updated and replaced the historic *Water Act*. Approvals shown in this matrix were all issued pursuant to section 9 of the *Water Act*. Those that remain active are grandfathered under the WSA. Section 11 of the WSA is now the relevant Section. The matrix has been updated to show the Approvals are pursuant to the WSA, Section 11. Similarly, the Water Regulation was replaced by the Water Sustainability Regulation. Except for the Notification shown for culvert repairs at Ottley Creek (June 21, 2016), all the Notifications shown in the matrix were originally submitted pursuant to Part 7 of the Water Regulation. The applicable regulation is now Part 3 of the Water Sustainability Regulation, as shown in this matrix.

Permit Description	Act/Regulation	Application Date	Status	
Notification to FLNR to allow changes in and about a stream (drainage, PPS and road works) – Schoolhouse Creek	Water Sustainability Regulation, Part 3	Dec. 10, 2013	The Permit (FLRN tracking #124843) is now in place and supersedes #2013-104 (see row above). The Notification expired Dec. 31, 2014.	
Notification to FLNR to allow changes in and about a stream (guideway works) – Slaughterhouse Creek	Water Sustainability Regulation, Part 3	May 31, 2013	The Permit (FLRN tracking #111384) has expired and is superseded by a new Notification (see row below).	
Notification to FLNR to allow changes in and about a stream (changes to guideway works) – Slaughterhouse Creek	Water Sustainability Regulation, Part 3	November 14, 2013	The Permit (FLRN tracking #120176) is now in place and supersedes #111384 (see row above). The Notification expired on Dec. 31, 2014.	
Notification to FLNR to allow changes in and about a stream (guideway works) – Pigeon Creek	Water Sustainability Regulation, Part 3	April 16, 2014	The Permit (FLRN tracking #112669) expired on September 30, 2014.	
Notification to FLNR to allow changes in and about a stream (guideway works) – Pigeon Creek	Water Sustainability Regulation, Part 3	August 15, 2014	The Notification was accepted by FLNR (tracking number 145189) and became active on October 1, 2014 superseding the previous Notification. The Notification expired Dec. 31, 2015.	
Notification to FLNR to allow changes in and about a stream (guideway works) – Pinnacle Creek	Water Sustainability Regulation, Part 3	June 14, 2013	The Permit (FLRN tracking #112669) is now in place. The Notification expired on May 15, 2014.	
Notification to FLNR to allow changes in and about a stream (guideway works) – Pinnacle Creek	Water Sustainability Regulation, Part 3	April 16, 2014	The Notification expired on December 31, 2015.	
Notification to FLNR to allow changes in and about a stream (guideway works) – Hoy Creek	Water Sustainability Regulation, Part 3	May 31, 2013	The Notification (FLNR Tracking #111383) expired on September 30, 2014 and is superseded by an updated Notification which becomes active on Oct 1, 2014 (see row	

Permit Description	Act/Regulation	Application Date	Status
			below).
Notification to FLNR to allow changes in and about a stream (guideway works) – Hoy Creek	Water Sustainability Regulation, Part 3	August 15, 2014	The Notification was accepted by FLNR (tracking number 145190) and became active on October 1, 2014 superseding the previous Notification. The new Notification expired on Apr. 30, 2015.
FLNR Permit to allow fish salvage (intended for habitat construction at Schoolhouse Creek)	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	December 23, 2015	The Permit (#SU16-223632) was issued on February 9, 2016. It expires Dec. 31, 2016.
FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	June 25, 2013	The Permit (#SU13-88489) was issued on July 16, 2013. The Permit is superseded by the Amendment extension (see row below).
Amendment to FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	March 4, 2014	The Permit (#SU13-88489) was issued on March 6, 2014. The Permit expired on June 29, 2015.
Amendment to FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	January 15, 2015	The Permit (#SU15-165242) was issued on February 12, 2015 Note this permit superseded #SU13-88489 (see row above). The Permit expired on December 31, 2015.
FLNR Permit to allow wildlife salvage	Wildlife Act, Permit Regulation, Section 2	May 13, 2013	The Permit (#SU13-87792) was issued on July 9, 2013. The Permit expired on July 1, 2014 and has not been renewed as wildlife salvage is no longer required.
FLNR Heritage Inspection Permit (HIP) to allow archaeological monitoring	Heritage Conservation Act, Section 14	April 4, 2013	The Permit was issued on June 18, 2013. The Permit expired Dec. 31, 2014.

Permit Description	Act/Regulation	Application Date	Status	
FLNR Heritage Inspection Permit (HIP) to allow archaeological monitoring	Heritage Conservation Act, Section 14	August, 2014	The Permit was amended on August 28, 2014. The Permit expired June 30, 2015. The final report has been submitted to Archaeology Branch and relevant First Nations.	
Regional/Municipal				
Waste Discharge Permit	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	November 26, 2013	The Permit (#SC-100914-FSA) was issued on February 17, 2014. The Permit does not specify an end-date. As of June 2016, the Permit is being closed out.	
Waste Discharge Permit – amendment to include additional scope.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	April 10, 2014	The Permit (#SC-100914-FSA) was amended on April 28, 2014. The Amendment does not specify an enddate. As of June 2016, the Permit is being closed out.	
Waste Discharge Permit – Minor Amendment to include additional treatment components (including a clarifier, mixing tank and filter press) and to address a change in sampling location.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	July 29, 2014	The Minor Amendment to the Permit (#SC-100914-FSA) was issued on August 13, 2014. The Permit does not specify an end-date. As of June 2016, the Permit is being closed out.	
Waste Discharge Permit (one time request to discharge groundwater associated with the dewatering operation at Clarke Rd and Seaview Dr.).	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	March 27, 2015	Metro Vancouver issued a Waste Discharge Permit (No. SC-100990-FSA) to EGRT on April 2, 2015. The Permit expired on May 15, 2015.	
Waste Discharge Permit – Minor Amendment to extend the Permit end-date to July 31, 2015.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	May 2, 2015	Metro Vancouver issued a Minor Amendment to Permit No. SC-100990-FSA on May 15, 2015. The Permit expired on July 31, 2015.	
Waste Discharge Permit – Major	Greater Vancouver	July 22, 2015	Metro Vancouver	

Permit Description	Act/Regulation	Application Date	Status	
Amendment to extend the Permit end-date to Sept. 30, 2015 and increase the total allowed discharge to sanitary system.	Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).		issued a Major Amendment to Permit No. SC-100990-FSA on Aug. 11, 2015. The Permit expired on Sept. 30, 2015.	
Other				
Tsleil-Waututh Nation - Heritage Investigation Permit	N/A	July 2, 2014	An amendment to the Permit (#2013-014) was issued on October 3, 2014. Archaeological investigation and monitoring are complete.	
Sto:Lo First Nation - Heritage Investigation Permit	N/A	May 6, 2013	Permit (#2013-031) was issued on June 4, 2013. Archaeological investigation and monitoring are complete.	

Attachment G

Table 4 – Four Month Look Ahead Audit Schedule

Month	Project Team (Auditor)	Project Team (Auditee)	Audit Scope
July	SLCW-SW	SLCW-SW	Change Management
August	SLCW-SW	SLCW-SW	QSP – Red Line Drawings



EVERGREEN LINE RAPID TRANSIT PROJECT

MONTH END REPORT JULY 2016

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Document No.	511325-00000-SWSL-30R	M-0043	Revision:	0
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DISCLAIMER NOTE:

Nothing in this report constitutes a formal notice of claim by the Primary Contractor under its Agreement with the Province, including without limitation notice of claim arising from Supervening Event or Province Change.



1.0 PROGRESS OVERVIEW

This report covers project progress for the month of July 2016 (Payment Period 43). Design and construction progress is summarized below:

Project Summary:

Scope: 11 km of guideway, 6 new stations, 1 expanded station, 1 tunnel

Owner: Province of British Columbia / Translink

Physical Progress:

With the exception of the tunnel, all other areas of the project reached substantial completion by 29 February 2016 in accordance with the original schedule.

Overall 99% complete; working on 8 fronts; 43 months into the 46 month construction schedule.

Manpower: approximately 175 management and 525 craft labour.

Design

Overall design is 100% complete

Construction

- Segment 1: Testing & Commissioning near completion
- Segment 2: Mainline Track Install Complete, LIM 100% IB, 70% OB, Power Rail 85% IB, 40% OB
- Segment 3: Testing & Commissioning Continues
- Segment 4: Testing & Commissioning Continues
- Segment 5: Testing & Commissioning Continues
- Stations: All stations are complete, only deficiencies remain.

1.1 SUMMARY OF ISSUES

Overall Schedule: an overall schedule update was conducted in April 2016 and results in a Substantial Completion date of 31 October 2016. This represents an 8 month extension from the baseline schedule. These 8 months are attributed as follows:

- 9 months for delays to tunnel excavation
- 1 month gain for tunnel finishes



The new Substantial Completion date of 31 October 2016 is 3 months later than the Substantial Completion Target Date in the Project Agreement. EGRT continues to assess the schedule and will mitigate impacts to the fullest extent possible.

The month of July 2016 showed good progress in tunnel finishes and gains in schedule were maintained.



2.0 DESIGN AND CONSTRUCTION - PROGRESS AGAINST PROJECT SCHEDULE

2.1 SUMMARY OF CONSTRUCTION EVENTS – BY SEGMENT

Segment	Name	Total	Previous to Date	Progress This Month	Total to Date
1	Caissons	64	64	Complete	64
	Columns	63	63	Complete	63
	Spans	57	57	Complete	57
	Trackwork Installed	4524	4524	Complete	4524
	Walkways Installed	4683	4683	Complete	4683
	LIM Rail Installed	4524	4524	Complete	4524
	Power Rail Installed	4524	4524	Complete	4524
2	Meters of Tunnel Excavation	1944	1944	Complete	1944
	Infill Material Placed	23477	23477	Complete	23477
	Concrete Slab Poured	4127	4127	Complete	4127
	Trackwork Installed	5540	5540	Complete	5540
	Walkways Installed	5540	4891	0	4891
	LIM Rail Installed	5540	2770	1364	4134
	Power Rail Installed	5540	1811	1474	3285
3	Number of SMX Columns	1826	1826	Complete	1826
	Meters of Track Slab	3725	3725	Complete	3725
	Trackwork Installed	3964	3964	Complete	3964
	Walkways Installed	3964	3964	Complete	3964
	LIM Rail Installed	3964	3964	Complete	3964
	Power Rail Installed	3964	3964	Complete	3964
4	Number of Timber Piles	6345	6345	Complete	6345
	Meters of Track Slab	2112	2112	Complete	2112
	Trackwork Installed	5282	5282	Complete	5282
	Walkways Installed	5282	5282	Complete	5282
	LIM Rail Installed	5282	5282	Complete	5282
	Power Rail Installed	5282	5282	Complete	5282
5	Piles/Caissons	73	73	Complete	73
	Columns	73	73	Complete	73
	Spans	52	52	Complete	52
	Trackwork Installed	3315	3315	Complete	3315
	Walkways Installed	3315	3315	Complete	3315
	LIM Rail Installed	3315	3315	Complete	3315
	Power Rail Installed	3315	3315	Complete	3315

Month End Report - July 2016



Segment	PPS Name	Total (%)	Previous to Date	Progress This Month	Total to Date
1	LHZ	100	100	Complete	100
	BQZ	100	100	Complete	100
3	NPZ	100	100	Complete	100
4	FCZ	100	100	Complete	100
5	LAZ	100	100	Complete	100
Segment	Station Name	Total (%)	Previous to Date	Progress This Month	Total to Date
1	Lougheed Station	100	100	Complete	100
	Burquitlam Station	100	100	Complete	100
3	Port Moody Station	100	100	Complete	100
4	Inlet Centre Station	100	100	Complete	100
5	Coquitlam Central Station	100	100	Complete	100
	Lincoln Station	100	100	Complete	100
	Douglas/Lafarge Station	100	100	Complete	100

2.2 MAJOR PROJECT MILESTONES

The schedule progress occurring for the period from June 27^{th} to July 25^{th} has a revised Anticipated Substantial Completion date of October 17^{th} , 2016 from the past months progress.

Milestone	Dec 12, 2012 Baseline	Jul 25, 2016 Progress Update	(Business Days)
Substantial Completion Target	29-Jul-16	17-Oct-16	-54
Service Commencement Target	30-Aug-16	17-Nov-16	-54
Total Completion Target	31-Oct-16	31-Jan-17	-91
Availability Demonstration Completion Target	30-Aug-17	16-Nov-17	n/a
TIDS Performance Demonstration Completion Target	30-Aug-17	16-Nov-17	n/a

2.3 PROJECT-WIDE

2.3.1 Design

Please refer to Sections 2.3 through 2.8 for a more detailed breakdown of the design status per area. Design progress can be seen under the Design and Engineering Section of the ELRT Project Schedule Update (DD.25JUL2016).



2.3.2 Changes to the EGRT Project Schedule

No major changes were made to the project schedule.

2.3.3 Activity Changes

Key changes made to Segment 2, Track, Systems & Testing & Commisioning schedule are as follows;

Tunnel Fit Out / Track

· No changes this past period.

Systems

Systems activities broken out into main activities driving T&C.

Testing & Commissioning

Activities have been revised to show current T&C schedule.

2.3.4 Logic Changes

The systems activities were broken out into more detail to better illustrate the path through T&C and to ATC testing.

2.3.5 Critical Path

The critical path is determined by activities that have 14 or less days of float. The critical path continues to pass through the tunnel activities.

The critical path is as follows: center walkway, track, LIM rail, power rail, system-wide cabling, and other tunnel finishes, before the start of testing and commissioning in Test Zone 2.

To date, the tunnel fit out activities are substantially completed excluding the portal roofs, the center walkway lids, and the installation of the cross passage doors. These completed activities, reflected in the lastest Progress Update Schedule, are: design and approvals for the north tunnel approach, utility relocations, construction of the north tunnel approach, TBM pit and assembly of the TBM, Tunnel Boring, TBM Breakthrough, demob of the TBM at the south portal, Tunnel Infill, the South Portal Invert Slab, the tunnel track slab, tunnel center fire wall, and inbound mainline track, power rail, and LIM rail along with outbound mainline track.

2.3.6 Schedule Impacts

Test Zone 2 has been impacted due to the delay of the tunnel breakthrough which occurred on November 27th, 2015. The tunnel fit out works are substantially complete with both the south and north portal roofs remaining. Tunnel trackwork has commenced and is ongoing,



along with systems installation and scheduled to be completed toward the end of August. The remaining works will be monitored closely and tracked against the currently shown project completion date of October 17th, 2016.

Other activities discussed in this report are monitored for potential impact or delays due to the overall EGRT Project Schedule.

2.4 PASSENGER STATIONS

All seven of the stations on the Evergreen Line are substantially completed.

2.5 OTHER FIXED FACILITIES

All five of the Propolsion Power Stations on the Evergreen Line are substantially completed. The final tie-in work between BQZ and NPZ will occur concurrently with the trackwork and systems installation in Segment 2.

Facility	Design / Construction / Procurement		
Sec 428 – VCIF	Construction substantially completed.		
Sec 428 – VSF Yard	Construction substantially completed.		
Sec 428 – VSF Staff Facility	Construction substantially completed.		

2.6 ALIGNMENT

2.6.1 Segment 1 – Elevated Guideway / Lougheed Special Structure / South Portal Approach

Segment 1 is substantially completed.

2.6.2 Segment 2 – South Portal / Bored Tunnel / North Portal

Area	Design / Construction / Procurement
Segment Wide	
Sec 210 Cut and Cover South Portal	 Completed south portal roof Completed outbound chamfer
Sec 220 TBM Tunnel	 Completed fine tunning of inbound and outbound mainline trackwork. Completed inbound installation of LIM rail. Completed inbound power rail installation.



Sec 230	Completed north portal roof.
Cut and Cover Tunnel North	

2.6.3 Segment 3 – Reichhold Special Structure / At-Grade Guideway

Segment 3 is substantially completed.

2.6.4 Segment 4 – At-Grade Guideway / CPR / Fortis Bridge / Aberdeen and Coquitlam

Segment 4 is substantially completed.

2.6.5 Segment 5 – Elevated Guideway / Coquitlam Station / Pinetree / CIP / Lafarge Douglas Station – Special Structures

Segment 5 is substantially completed.

2.7 TRACKWORK

SPECIAL TRACKWORK:

Reichhold Crossover East – Substantially completed.

Reichhold West Crossover – Substantially completed.

MAINLINE TRACKWORK:

Mainline Trackwork is substantially completed.

2.7.1 LIM

Segment 2 – LIM Installation is complete on the IB guideway in Segment 2. LIM Drilling is progressing on OB at the South Portal in Segment 2. LIM panel placing and fine tuning on the OB guideway is ongoing.

Issues with LIM stud corrosion have been identified, and repair procedures are being developed. Repair work has commenced.

2.7.2 Power Rail

Power Rail installation is complete on the IB Section 220 (Tunnel) and 40% complete through OB Section 220 (Tunnel).

Final coverboard installation will be completed at the Reichhold Crossovers, as well as some miscellaneous installation in Section 150 starting in August 2016.



2.7.3 Walkway

Steel walkway installation (excluding Segment 2 and tunnel operational areas) is 99% complete, with minor areas remaining for rework and completion based on access.

Final fabrication of precast walkway lids for tunnel installation is underway. Fabrication is ongoing, with delivery to meet tunnel installation schedule.

Steel and CIP walkway installation at Section 150 and South Portal are complete, and are scheduled to be completed. This also includes the balance of Type 1 precast walkways and steel handrail in Section 150. Final installation of PCW lids in the tunnel sometime in Summer/Fall 2016.

There is one location in Section 140 where sound barrier panels will need to be installed following T&C fence removal, and there are approximately 22 brackets in Section 410 that encroach into the train clearance envelope. Brackets have been ordered for the sound barriers further from the guideway parapets.

2.8 SYSTEMS

2.8.1 Systems General

2.8.1.1 Subsystem Design

The FDR process is complete with outstanding SFDR action items being addressed.

2.8.1.2 Installation Design

The installation design is underway:

 Engineering is working on an update to the Segment 2 installation package due to a supplier tunnel design deficiency regarding redundant loop communication to tunnel FLSS devices and enclosures.

2.8.1.3 Interface Design

VSF Interface design: Thales has been provided with the details of an interface issue with respect to the buffer stops and working to implement a software change to address this.

Tunnel Interface design: Weekly coordination meetings are being fully supported by SLCW-SW. A South portal drainage sump has been incorporated. Electrical designs are nearly complete.

2.8.1.4 Contractual Plan Submissions

A list of required plans and managerial documents are required in Appendix G of the Project Agreement (Systems General Requirements), and the DBC hosts a monthly meeting to



coordinate the delivery of this documentation. The progress of these plans is updated monthly and issued to the Client by the DBC.

2.8.2 Power Supply and Distribution

PS&D FDR Packages have all been submitted to the Client.

2.8.3 Signalling / ATC

The signalling/ATC design process is substantially complete.

2.8.4 Communications, SCADA, FLSS and WMS

All FDR submissions are complete.

Design Packages planned for Province Review in August 2016:

Reichhold Alarm Tie-in

2.8.5 Tunnel Ventilation Systems and Stand Pipe System

The Tunnel Ventilation SFDR process is complete.

2.8.6 Design for BC Hydro Related Works

All BC Hydro Related Works are complete.

2.8.7 Testing and Commissioning Planning and Procedures

The Systems Test Plan defined the Systems Integration Board. The Board is a joint Systems, T&C, and TransLink task group which will review test plans and schedules, and coordinate cutovers and configuration changes. This group commenced meetings in January 2015.

The Systems Cutover Plan has been updated in response to Client questions, and detailed planning of the cutover process will continue via the FMI log, which tracks configuration changes, and the T&C & Cutover schedule.

2.8.8 Systems Procurement

The following packages were issued out for tender/pricing in July:

N/A

2.8.8.1 Subcontract and Supply Contract Awards

The following equipment were issued out for award in July:



SP9000-05 EMC Compatibility Survey

SC7075-02 Heritage Mountain Receiver Installation

2.8.8.2 Supplier Design

NA

2.8.8.3 Equipment Deliveries

The following equipment was received at the warehouse in July:

No major equipment.

2.8.9 Warranty and Training

Training dates have been confirmed with the Province. Clarification of warranty requirements requested is being reviewed.

2.8.10 Spare Parts

Non-long-lead item spare parts list have been provided and SW is currently awaiting the PO from Translink, which was expected by July 15th and has not been received yet.

2.8.11 Construction

The pricing for the TIMS package in the SC9000-08 Tunnel electrical installation subcontract shall be processed in a change order.

Tunnel Lighting, receptacle and power distribution in the Tunnel South Inbound were energized in July. Tunnel ventilation systems at NPZ and BQZ have been turned over to Testing and commissioning for SAT.

The permanent 192 strand fibre backbone was installed, terminated and tested. PICOs shall be delivered in early August. OTN network traffic is now operating on this permanent backbone. The Q-net temporary link has now been fully abandoned.

Systemwide Mainline deficiency resolution continued during non-test windows. Completion of exterior touch-up paint deficiencies is targeted for the first week of August.

Station crews continued on minor added scope clean-up items. The Lafarge Station SEEIP device was installed July15th. Replacement of four (4) CCTV end posts, two at MCS, two at LAS, concluded on July 6th.



WPE has heightened attention to removal and storage of cable end waste. Security audits have noted increased visitation from thieves assessing targets.

2.9 TESTING AND COMMISSIONING

2.9.1 Progress Overview

ATC - Since the June report, Thales has completed testing with both Mark I and Mark II trains in Test Zones 1, 3, 4 & 5. During the July long weekend, an exchange of 2 Mark I trains was made for 2 Mark II trains by use of the Pettibone locomotive towing trains through the O/B tunnel. With the completion of ATC testing, a letter of Safety Certification was provided by Thales to allow "unattended operation" during the Mini Trail Run which is scheduled for the first week of August. The Mini Trial Run is three days of automatic train operation from Lafarge to Moody on scheduled runs. All VCC testing was conducted in 3 CPU mode with modified FPGA cards.

At the end of July, the following activities were accomplished

VCC4

 Discussions were held with EGRT, the Province, Bombardier, TransLink and BCRTC to explore the possibility of MKIII testing to occur in Test Zone 1 while EGRT is not testing. The Province will take the lead on moving this activity forward.

VCC5

- All testing in Test Zone 1 is now complete;
- All testing in Test Zone 3 is now complete;
- All testing in Test Zone 4 is now complete with the following restrictions to be corrected in the next VCC release
 - Speed limits through switches 221 & 226 are incorrect and have been speed limited by Go-Slow Zones.
 - The length of track 915 beyond switch 223 is uncertain and automatic trains could contact the bump stop.
 - Positional uncertainty around switch 216 requires closing of track 658 until the train is confirmed clear of the switch.

VCC6

 All ATC testing in Test Zone 5 is now complete with the following restriction to be corrected in the next VCC release



 The bump stops at the ends of VS6 & VS7 are located incorrectly and rather than extend the rail to slide the stops back, the positioning will be corrected in the VCC software

PS&D - Wayside equipment SAT testing is in progress. This includes tunnel lighting, tunnel mini-power centers and switch heaters. The power rail high potential (hi-pot) test for power rail in Test Zones 3, 4 & 5 was conducted in dry weather and were successful.

Communications – The vast majority of testing is complete with some systems still being optimized. Above ground radio and fire alarm testing is on-going. The permanent fiber connection is now installed and most systems using it have been successfully regressed.

TIDS/TIMS – EGRT has installed a laptop based "head-end" control device at BQS to monitor TIDS performance from BQS to LAS. The Mini Trial Run in August will be used to gauge TIDS performance during train operation. The guideway in station platforms and the TIDS projector lenses were cleaned the prior to the Mini Trial Run.

TVS – The tunnel TVS equipment was handed over to T&C and SAT testing will commence in August

2.9.2 Submissions

The following submissions were made during July;

- Travel Time Demonstration rev. 1
- Test Zone Transition Plan rev. 2
- Availability Demonstration rev. 0

2.9.3 Beneficial Occupancy

In addition to areas reported previously, T&C took Beneficial Occupancy of:

Tunnel TVS equipment

2.9.4 Summary of Issues This Month

- Shortage of 3 reprogrammed Thales FPGA cards for VCC 6 has been temporarily resolved by modifying 3 additional FPGA cards – on-going until final version FPGA cards are installed
- Above ground radio testing is on-going while deficiencies are rectified. Once all deficiencies are cleared then the radio system optimization can commence. The Heritage Mountain repeater installation is on-going



 A hi-rail vehicle loaded with power rail ran away and de-railed in the O/B tunnel on July 27 due to failed brakes causing damage to the installed power rail.

2.9.5 Changes Since Last Month

- Test Zone 1 Complete
- Test Zone 2 Remains mid-September 2016
- Test Zone 3 Complete
- Test Zone 4 Complete
- Test Zone 5 (VSF) Complete
- All communication testing (except tunnel related) Deficiency work in progress
- All PS&D testing (except tunnel related) Deficiency work in progress

2.10 CONCLUSION

Our current EGRT Project Schedule is based on the best information available and our current plan for construction. Changes to the final construction plans and methods, and their respective schedules, sequences and durations are expected as work progresses on all fronts. Any future changes or revisions to the schedule will be detailed in this narrative.



3.0 ENVIRONMENTAL MANAGEMENT

3.1 PERMITTING STATUS

Federal

On July 18, EGRT sent an email to DFO (Brian Naito) requesting DFO to review an EGRT proposal to begin the water line relocation in Schoolhouse Creek in the last week of July, before the start of the Aug. 1st to Sept. 30th least-risk fisheries window (this early start would be a variance from the requirements of the DFO Authorization for the Project). On July 20, DFO responded they had no objection to this proposal.

Provincial

On June 21 (previous reporting period), EGRT submitted a Notification to Ministry of Forests, Lands and Natural Resource Operations (FLNRO), for proposed repairs to a Metro Vancouver concrete culvert situated in Ottley Creek (the culvert was apparently damaged during construction of the Reichhold Special Structure). FLNRO green-lighted the work in an email dated July 21, 2016. The culvert repairs will entail instream work and will therefore be conducted during the August 1st – September 30th, 2016 "least-risk fisheries window".

Permit Description	Act/Regulation	Application or Expiry Date	Status
Federal			
Request to DFO for a variance from the requirements of the DFO Authorization, asking to start water line relocation at Schoolhouse Creek during the last week of July 2016 (prior to the start of the 2016 least-risk fisheries window).	Fisheries Act	EGRT requested the variance on July 18, 2016 (by email).	DFO responded with a "no objection" on July 20, 2016 (also by email).
Provincial			
Notification to undertake culvert	Water	A Notification for this work was	FLNRO gave the go ahead for this



repairs in Ottley Creek.	Sustainability Act	submitted to FLNRO on June 21 (previous reporting period).	work in an email dated July 21, 2016.
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The status of all permits acquired to date on the Project is summarized in Attachment F.

3.2 ENVIRONMENTAL MANAGEMENT SUMMARY

EGRT's Environmental Manager continued to conduct routine environmental management activities including but not limited to: advising on environmental planning and implementation issues, preparing environmental submittals and deliverables, participating in environmental quality activities, and overseeing the Environmental Inspectors (Els).

Construction of Habitat Compensation at Schoolhouse Creek

EGRT's Subcontractor began clearing and grubbing the worksite during the last week of July (see related variance from DFO described in previous subsection). The DFO Authorization for the Project requires that instream works be completed in the least-risk fisheries window (Aug. 1st to September 30th of any given year). Planting of the riparian zone is planned for the fall of 2016.

Remaining Environmental Obligations

Going forward, the following environmental requirements remain to be completed on the Project:

- Environmental Inspection: environmental inspection of construction will continue until
 construction of the Schoolhouse Creek habitat compensation is completed, with
 related reporting to the Province and to applicable regulatory agencies once every
 two weeks. Assuming concurrence from the Province and applicable regulatory
 agencies, environmental inspection on the Project should conclude in October 2016.
- Completion of general site restoration and planting of "replacement trees" as required by PTOC item #52: Landscaping along Clarke Street (including tree replacement) has been completed but additional landscaping elsewhere on the Project remains to be done and will be completed in the fall of 2016.
- Water quality monitoring (as required by PTOC items #42 and #43): EGRT has periodically assessed water quality sampling in watercourses potentially affected by construction. Samples have been tested for metals, hydrocarbons, Volatile Organic Compounds (VOCs), turbidity, suspended solids, pH, dissolved oxygen, conductivity and water temperature. The monitoring program has so far included a round of "baseline" water quality monitoring (conducted during the earliest stages of construction to capture the pre-project condition), followed by two rounds of "during construction" water quality sampling. To complete the program, EGRT conducted a final round of sampling in June to assess the "post-construction" condition. EGRT will



prepare and submit to the Province a brief summary of the monitoring program results, identifying potential Project-induced water quality effects (if any such effects can be identified). This report is planned to be submitted to the Province in August 2016.

- Close-out of environmental permits including the DFO Authorization (see Appendix F for permit expiry dates): A "close-out" permit tracking matrix is being used to document the close-out status of all key environmental permits. The Permit close-out tracking document will be attached to the Environmental Final Completion Report (see bullet below).
- Preparation of an Environmental Final Completion Report as required by PA, Schedule 5, Subsection 3.8: Further discussion with the Province is needed to determine the contents, format and submission date of this report. The PA indicates this report is to follow Substantial Completion.
- Annual Certificate of Compliance with Environmental Laws: One additional and final Certificate of Compliance will be required, covering the period December 11th, 2015 to December 10th, 2016. This final Certificate of Compliance would be submitted to the Province in December 2016.
- Continuation of the monthly environmental management report (i.e., in the form of this
 environmental management section of EGRT's monthly progress report): Further
 discussion with the Province is required to determine when this monthly
 environmental reporting would end.
- Preparation of a detailed post-construction monitoring and assessment report documenting site-specific landscaping and restoration measures implemented during construction, as required by PTOC #50: this report is required one year after contract completion. Further discussion with the Province is needed to determine exactly when this report would be submitted to the Province.
- Monitoring and annual reporting of the performance of constructed compensatory habitats: the DFO Authorization requires this monitoring to continue until the end of 2019 with a final annual monitoring report submitted to the Province and to applicable agencies in January 2020.

3.3 ENVIRONMENTAL SUBMITTALS TO PROVINCE

Submittals to the Province during this reporting period:

Biweekly Environmental Inspection Report (BEIR) Nos. 152 and 153.

3.4 AMENDMENT TO ENVIRONMENTAL ASSESSMENT CERTIFICATE

No changes in design or construction occurred during this reporting period that warranted consideration of an amendment to the Project's Environmental Assessment Certificate (T10-01).

3.5 ENVIRONMENTAL REVIEW OF DESIGN

Environmental design and environmental review of non-environmental design have mostly been completed, as documented in previous monthly reports. However, during this



reporting period EGRT's Environmental Manager reviewed EGRT's FDR submission of "North Portal Geotechnical-Slope Reinstatement Design Segment 2". The Province had no comments on the environmental aspects of this submission.

3.6 ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION

During this reporting period, EGRT completed the decommissioning and removal of the Waste Water Treatment Plan that had been in place at the North Portal tunnel support yard. Treated water had been discharged to Metro Vancouver's sanitary system under Metro Vancouver Waste Discharge Permit No. SC-100914-FSA. EGRT wrote at letter to Metro Vancouver (dated July 27, 2016) to confirm that discharge to the Metro Vancouver sanitary system had ceased and to ask Metro Vancouver to cancel the Permit. The Permit is now considered to be closed out.

3.7 ENVIRONMENTAL INCIDENTS

One environmental incident occurred during this reporting period, on July 13 (details in table below).

Table: Incident Tracking Summary

Tracking No.	Date	Incident Type	Incident Description
EIN-052 (SLCW)	13-Jul-16	Spill to Guideway	Approximately 3L of hydraulic oil was spilled to the guideway in Section 320. The incident was caused by a leaking hydraulic valve on a rail mounted Pettibone. The spill was contained on the guideway with no threat of being conveyed to a sensitive environment or storm sewer. The used sorbent material has been cleaned up and disposed off-site at an approved facility.
			at an approved facility.

3.8 ENVIRONMENTAL INSPECTION

Bi-Weekly Environmental Inspection Report (BEIR) Nos. 152 and 153 were submitted to the Province "for Information" during this reporting period. BEIR No. 154 (covering the period July 18 to Aug 1 inclusive) was in draft form at the end of this reporting period and has been considered in preparing this report.

As reported by EGRT's Environmental Inspectors, construction generally complied with Project environmental requirements during this reporting period.

See Table below. Five issues were carried over into this monthly reporting period from the previous monthly reporting period (June 2016). All five issues were corrected during this reporting period. Three new issues were opened during this reporting period. Two of these were corrected. One issue (#242) remains open at the end of this reporting period.



Table: Environmental Inspection Issue Tracking Summary

Issue No.	Date Opened	Description	Status at July 31/16
237	June 07/16	Deficient housekeeping at South Portal. The housekeeping issues were corrected by July 14.	Closed
238	June 09/16	Deficient Hazardous Substances Storage at North Portal tunnel support yard. Hazardous Substances were collected into the designated Hazardous Substances storage area; secondary containment, signage and labels were installed. The issue was corrected by July 27.	Closed
239	June 29/16	Used sorbent material present on guideway near North Portal (left over from a 10 L spill of hydraulic oil that occurred on June 27). The sorbent material was cleaned up by July 14 and will be disposed off-site at a suitably licensed facility.	Closed
240	June 29/16	Hydrocarbon staining on View Street. The staining was cleaned up by July 26.	Closed
241	June 29/16	Hydrocarbon staining on guideway near South Portal. The staining was cleaned up by July 8.	Closed
242	July 5/16	Hydrocarbon staining on soil/gravel at South Portal. Clean-up was not yet completed at end of this reporting period.	Open
243	July 8/16	Pick-up truck with leaky tidy tank. Drip tray and sorbent pads placed under truck and cleaned up once the truck left the site. Used sorbent material will be disposed off-site at a suitably licensed facility. Issue was resolved on July 8.	Closed
244	July 14/16	Residual used sorbent material (left over from a 3L spill of hydraulic oil reported July 13, 2016) requires clean-up. The used sorbent material was cleaned by by July 19. The matieral will be disposed off-site at a suitably licensed facility.	Closed

3.9 COMPLIANCE SUMMARY

No significant environmental compliance issues occurred during this reporting period.



4.0 COMMUNICATIONS AND COMMUNITY RELATIONS

No community meetings and/or Business Liaison Committee meetings were held in July 2016.

As the project nears completion, no additional Business Liaison Committee (BLC) meetings are scheduled. Should any further BLC or community meetings be required, the EGRT Construction Communications team will support the Province and attend as required.

4.1 TRAFFIC MANAGEMENT COMMUNICATIONS

The EGRT Construction Communications team prepared and distributed the following Construction and Traffic Bulletins in July 2016:

- North Tunnel Portal Area Restoration July 27
 - This notice was distributed to residents on View Street, View Court, Columbia Street, Clarke Street and Charles Street.
- South Tunnel Portal Area Restoration July 29
 - This notice was distributed to residents on Elmwood Street, Westley Avenue, Kemsley Avenue and on Clarke Road between Kemsley Avenue and Como Lake Avenue.

EGRT Construction issued the following Community Notice in July 2016:

- Temporary Closure of a Section of the Trans Canada Trail July 19
 - This notice was laminated and posted on fencing by sub-contractor, delivered to a View Street resident that had past concerns re: construction and trails in the area and sent to Trans Canada Trail general info email.

Please note that these notices were also posted on the egrtconstruction.ca website and distributed to stakeholders.

No Traffic Alerts were distributed by EGRT Construction in July 2016.

4.2 PUBLIC CONSULTATION

No public consultation is required by the Province of BC.

4.3 MEDIA RELATIONS

All media inquiries, including inquiries from traffic reporters, will continue to be referred to the Province for first comment. EGRT Construction will only answer routine traffic questions and



o d	nly when quirectly by the	ueries have e Province.	been refe	rred to the	EGRT C	Construction	Communica	tions Manager



5.0 FIRST NATION ENGAGEMENT

5.1 PERFORMANCE OVERVIEW BY SUB-CONTRACTOR

NATION	Procurement Target	Opportunities to Date	Awarded to Date	Awarded this Period
	(\$/project)	(est. \$ value)		
Tsleil Waututh	s.16,s.17			
Musqueam				
Kwikwetlem				
OTHER				

NATION	Employment Target	Employment to Date	Employment this Period	Total Active Employees
	(hrs/project)	(hrs)	(hrs)	(qty)
Tsleil Waututh	s.16,s.17			
Musqueam				
Kwikwetlem				
OTHER				

¹ Employment This Period and Awarded This Period updated quarterly.

All First Nations procurement targets have been exceeded.

Employment targets for Musqueam have been exceeded, and targets for Tsleil Waututh continue to be pursued. Labour availability from Tsleil Waututh is limited.



5.2 BID REPORT – PROCUREMENT OPPORTUNITIES & AWARDS DETAILED

Bid Close Date	Company Name (Bidder)	Affiliated First Nation	Awarded Contract (Actual)	Procurement Opportunity (Est. Value)	Status
22/Nov/13	s.16,s.17				
1/Oct/13					
18/Sep/13					
5/Mar/13					
29/Apr/13					
1/Mar/13					
13/Dec/13					
4/Jun/14					
4/Jun/14					
22/Nov/13					
18/Sep/13					
3/May/13					
13/Dec/13					
4/Jun/14					
1/Sep/13					
27/Jun/13					
1/Sep/13					
27/Jun/13					
	Close Date 22/Nov/13 1/Oct/13 18/Sep/13 5/Mar/13 29/Apr/13 1/Mar/13 13/Dec/13 4/Jun/14 22/Nov/13 18/Sep/13 3/May/13 13/Dec/13 4/Jun/14 1/Sep/13 27/Jun/13	Close Date 22/Nov/13 1/Oct/13 18/Sep/13 5/Mar/13 29/Apr/13 1/Mar/13 13/Dec/13 4/Jun/14 22/Nov/13 18/Sep/13 3/May/13 13/Dec/13 4/Jun/14 1/Sep/13 27/Jun/13	Close Date 22/Nov/13 s.16,s.17 1/Oct/13 18/Sep/13 5/Mar/13 29/Apr/13 1/Mar/13 13/Dec/13 4/Jun/14 4/Jun/14 22/Nov/13 18/Sep/13 3/May/13 13/Dec/13 4/Jun/14 1/Sep/13 27/Jun/13 1/Sep/13	Close Date Close Date (Bidder) First Nation Contract (Actual)	Close Date (Bidder) First Nation Contract (Actual) Opportunity (Est. Value) 22/Nov/13 1/Oct/13 18/Sep/13 5/Mar/13 29/Apr/13 1/Mar/13 13/Dec/13 4/Jun/14 22/Nov/13 18/Sep/13 3/May/13 13/Dec/13 4/Jun/14 1/Sep/13 27/Jun/13

Month End Report - July 2016



Traffic Signs-Part 1	SLCW-EG PRO	CUREMEN	т	
Traffic Signs-Part 2		CONLINEN		0.16 0.17
Site Security (3 mo. Trial) ongoing Site Security (15 mo.) ongoing Site Security (15 mo.) ongoing Fraffic Management (3 mo. Trial) ongoing Fraffic Management (15 mo.) ongoing Fraffic Management (15 mo.) ongoing Frailer Rental (15 mo.) ongoing Frailer Relocation ongoing Frailer Relocation ongoing Frailer Relocation ongoing Frailer Rental (15 mo.) ongoing Frailer Relocation ongoing Frailer rental (ongoing) ongoing Frailer Rental (0000143) ongoing Frailer Rental (5.10,5.1/
Site Security (15 mo.) ongoing		Trial)		
Site Security (15 mo.)	Site Security (15 mg	.)		
Traffic Management (3 mo. Trial)				
Traffic Management (15 mo.)				
Crane Services for Truss 19/Aug/13 19/Aug/13 17/Aug/13 17/Aug/13 17/Aug/13 17/Aug/15 19/Aug/13 17/Aug/15 19/Aug/13 17/Aug/15 1				
Assembly Trailer rental (ongoing) Trailer Rental-New Office Traffic Management (15 mo.) Trailer Relocation Traffic Management Traffic Management Traffic Management Trailer rental (ongoing) Trailer			origoing	
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Trailer Rental-New Office		aa)	ongoing	
Traffic Management (15 mo.)				
Trailer Relocation				
Traffic Management		(131110.)		
Traffic Management Ongoing Ong				
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Trailer rental (ongoing)				
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	GC009-CO No. 2	2/Oct/14		



GC009-CO No. 3	3/Oct/14	s.16,s.17
GC009-CO No. 4	16/Dec/14	
GC009-CO No. 5	13/Jan/15	
GC009-CO No. 6	13/Jan/15	
GC009-CO No. 7	14/Jan/15	
GC009-CO No. 8	19/Jan/15	-
GC009-CO No. 9	23/Mar/15	-
GC009-CO No. 10	30/Mar/15	-
GC009-CO No. 11		-
GC009-CO No. 12	9/Apr/15 4/Jun/15	-
GC009-CO No. 12		-
GC009-CO No. 13	7/Aug/15 7/Dec/15	-
		-
GC009-CO No. 15	12/Jan/16	-
Inlet Ctr Exc (511414-GC401)	1/May/13	_
Supply Masonry Grout Fill	16/Jan/14	
Earthworks Coq. Stn	4/Dec/13	
GC039 Stn Elec. Work	16/Jan/14	•
GC035-CO No. 1	30/Sep/14	•
GC035-CO No. 2	15/Jan/15	•
GC035-CO No. 3	22/May/15	-
GC035-CO No. 4	3/Jun/15	-
GC035-CO No. 5	24/Dec/15	-
GC035-CO No. 6	11/May/16	
GC039-SubStn &		-
VSF Elec.	17/Apr/14	
GC039-CO No. 1	30/Sep/14	-
GC039-CO No. 2	14/Jan/15	
GC039-CO No. 3	15/May/15	
GC039-CO No. 4	3/Jun/15	-
GC039-CO No. 5	28/Oct/15	-
GC039-CO No. 6	24/Dec/15	
GC039-CO No. 7	28/Oct/15	-
GC039-CO No. 8	11/May/16	-
	1 1/11/23/10	
21 2111 227 27		<u></u>
	OCUREME	ENT (Continued)
Lougheed Stn		s.16,s.17
Demo (51414- GC404)	31/May/13	
Supply/Install Piling	8/Jan/14	_
GC047-Moody Piling	17/Apr/14	
OLOW OW PEO	OUDENE	
SLCW-SW PRO	CUREME	
SC9000-04		s.16,s.17
Lougheed Stn	13/Mar/14	
Brownfield		
Investigation		-
SC9000-05	10/4==/14	
Lougheed Stn Brownfield Installs	10/Apr/14	
SC9000-05		-
Lougheed Stn Brownfield Installs	30/Sep/14	
CO #2		
SC9000-05		•
Lougheed Stn	6/Nov/14	
Lougheed offi	I	



Brownfield Installs						
CO #3						
SC9000-05		s.16,s.17	ı	1	1	•
Lougheed Stn						
Brownfield Installs	8/Apr/15					
CO #4						
SC9000-06 T&C		-				
	11/May/15					
Support						
SC9000-06 T&C	14/Mar/16					
Support CO#1		-				
SC9000-06 T&C						
Support	26/May/16					
Change Order No.						
2						
SC9025-01 OMC	29/May/14					
Install	20/May/14	_				
SC9025-01 OMC	4/May/15					
Install-CO#1	4/Iviay/13					
SC9000-08						
Segment 2	16/Feb/16					
Installation						
SC9000-01	E/A/1.4	-				
Systemwide Install	5/Aug/14					
SC9000-01						
Systemwide	17/Nov/14					
Install-CO #1						
SC9000-01		-				
Systemwide	28/Jan/15					
Install-CO #2						
SC9000-01		•				
Systemwide	17/Mar/15					
Install-CO #3						
SC9000-01		-				
Systemwide	15/Jun/15					
Install-CO #4						
SC9000-01						
Systemwide	15/Jul/15					
Install-CO #5						
SC9000-01		-				
Systemwide	15/Sep/15					
Install-CO #6	-					
SC9000-01						
Systemwide	16/Nov/15					
Install-CO #7						
SC9000-01		•				
Systemwide	9/Dec/15					
Install-CO #8						
SC9000-01		-				
Systemwide	12/Jan/16					
Install-CO #9						
SC9000-01						
Systemwide	7/Mar/16					
Install-CO #10						
SC9000-01						
Systemwide	22/Mar/16					
Install-CO #11						
SC9000-01						
Systemwide	9/May/16					
Install-CO #12						
SC9000-02 CO #1	27/Mar/14	-				
SC9000-02 CO #3	3/Oct/14	-				
SC9000-02 CO #4	3/Oct/14	•				
SC9000-02 CO #5	25/Aug/15					



		_
SC9000-08		s.16,s.17
Segment 2	16/Feb/16	
Equipment	10/1 65/10	
Installation		
SLCW-SW PRO	CUREME	•
SC9000-08		-
Segment 2	2016/0516	
Equipment	2010/0310	
Installation CO#1		_
SC9000-08		
Segment 2	2/May/16	
Equipment		
Installation CO#2		-
SC6000-01	10/0/11	
SubStn Equip.	12/Sep/14	
Install SC6000-01		-
SubStn Equip.	28/Nov/14	
Install-C#1	20/11/07/14	
SC6000-01		-
SubStn Equip.	28/Jan/15	
Install-C#2	20/04/1/10	
SC6000-01		-
SubStn Equip.	18/Feb/15	
Install-C#3		
SC6000-01		-
SubStn Equip.	17/Mar/15	
Install-C#4		_
SC6000-01		
SubStn Equip.	30/Apr/15	
Install-C#5		-
SC6000-01	11/0/15	
SubStn Equip.	11/Sep/15	
Install-C#6 SC6000-01		-
SubStn Equip.	16/Nov/15	
Install-C#7	10/1404/13	
SC6000-01		-
SubStn Equip.	9/Mar/16	
Install-C#8		
SC6000-01		-
Substation	22/Mar/16	
Equipment Install-	22/IVIAI/10	
C#9		-
SC6000-01		
Substation	9/May/16	
Equipment Install-		
C#7 SC7000-01 Stn		-
Communication	8/Dec/14	
Install	0/Dec/14	
SC7000-01 Stn		-
Communication	5/May/15	
Install-CO #1		
SC7000-01 Stn		-
Communication	25/Aug/15	
Install-CO #2		
SC7000-01 Stn		_
Communication	28/Sep/15	
Install-CO #3		_
SC7000-01 Stn		
Communication	16/Nov/15	
Install-CO #4		-



SC7000-01 Station Communications Install - CO #5	s.16,s.17 6	
SC7000-01 Station Communications Install - CO #6	6	
OTHER FN PROCURE	ENT.	
511325-	s.16,s.17	
Environmental Services Sumas Remediation 5/Aug/1	1	

Summary of Activities

- To date there is been great success of engaging aboriginal businesses in project construction with over \$48 million awarded.
- Employment values have begun reduce as the project winds down.
- At least once per quarter, project updates are provided to the Tsleil Waututh and Musqueam Nations through the Economic Development offices.

Challenges/Risks

Work Planned

 Continue to respond to needs of the client and the identified First Nations as the project winds down.



6.0 HEALTH AND SAFETY

6.1 SUMMARY OF SAFETY ACTIVITIES

- Trackwork is working on completing the IB tunnel for LIM & Power Rail
- Permanent lighting is operational on OB side
- Emergency walkway lids will be placed in August
- Stations have Fujitec in some locations and a few tile workers are performing deficiency repairs
- The project submitted responses for all 7 WorkSafeBC orders written against the tunnel. Peter Ficzycz, the contract Industrial Hygienist, wrote the tunnel entry procedure which is required to close out orders 1, 2 and 3. WorkSafeBC has not responded to his submitted documentation to date.
- The last silica dust exposure levels resulted in low levels of silica. The TFO Joint Occupational Safety & Health Committee continues to meet monthly at the TFO office
- T&C are continuing with testing in segments 3, 4 & 5
- Limb Bolt crews are working in segments 1 & 3 and segments 4 and 5 to follow. Safety
 inspections of the crews are being performed to ensure crews are compliant to all safety
 standards
- Mission Contracting has started to perform the school house creek restoration work

6.2 INJURY AND INCIDENT SUMMARY

Environmental:

See Environmental Section of Report

- Property/Equipment Damage:
 - SLCW GST 16/07/27 hi-rail truck and trailers loaded with power rail equipment & materials lost power of brakes and ran away. The truck struck a de-rail and came to a stop 45m further down the tunnel. Damage occurred to hi-rail equipment, track components, and power rail equipment and supplies.
- Lost Time Incident:
 - s.22



s.22

Hours Worked	First Aid	Medical Aid/LTI	Lost Time Days
This Month	This Month	This Month	This Month
44,255	2	1	2
Hours Worked	First Aid	Medical Aid	Lost Time Days
To Date	To Date	To Date:	To Date
4,935,212	479	63/1	96



7.0 FINANCIAL

7.1 PERFORMANCE INCENTIVE PAYMENTS

Refer to the Performance Mechanism Report for full details.

7.2 MILESTONE PAYMENTS

See attached Statement of Progress.

7.3 CHANGE MANAGEMENT

Pricing has been approved for the following Province Changes/Events this month:

None Approved this month

Pricing has been submitted for the following Province Changes:

T9 Decals outside Faregates (SI37)

Additional Province Changes active this month include:

- Design of Wired Connection to Evacuation Alarm (SI35)
- Charles Street As-Builts (SI38)
- Moody Station PTZ Camera to monitor FCP (SI39)
- Additional Coverboard for Port Moody/Burquitlam Areas

7.4 RISK MANAGEMENT

Risk registers for each area of work are updated on a monthly basis.



8.0 QUALITY ASSURANCE

The following is a summary of activities.

8.1 STATUS OF QUALITY MANAGEMENT SYSTEM ACTIVITIES

- EGRT Construction continues to work closely with the Province to address quality issues as they arise. Representatives from both sides continue to meet regularly to discuss project quality issues.
- EGRT Construction continues to extend the invite to the Province for internal and external audits.
- The table below shows the current status of the Management Plans

Table 1 - Management Plan Status

Table 1 – Management Plan Status						
Plan	Latest Date of Issue	Latest Revision	Status			
Quality Manual	20-Mar-14	2	Received			
Design Quality Management Plan	6-May-14	3	Received			
Environmental Quality Management Plan	21-Jul-14	2	Received			
Traffic Quality Management Plan	1-May-14	2	Received			
Construction Quality Management Plan – SGJV	23-Jun-14	2	Received			
Construction Quality Management Plan – SLCW – GST	23-Apr-15	3	Received			
Construction Quality Management Plan – SLCW – EG	16-Mar-15	1	Received			
Construction Quality Management Plan – SSJV	11-Mar-15	2	Received			
Construction Quality Management Plan – SLCW – SW	16-Dec-13	0	Accepted			

8.2 AUDIT PROGRAMME

The tables below show the current status of the Audit Programme.



Table 2 – Audit Programme Status

Audit Programme	Latest Date of Issue	Latest Revision	Status
Quality Audit Programme	04-Mar-13	0	Received with comments from the Province. Detailed audit programmes were issued separately.
Design Quality Management Audit Programme	20-Jan-15	2	Received
Environmental Audit Programme	04-Dec-15	3	Issued to the Province for Information
Traffic Management Audit Programme	04-Dec-15	4	Issued to the Province for Information
Transit Facilities Audit Programme	05-Dec-14	4	Issued to the Province for Information
Construction Quality Management Audit Programme	4-Feb-16	4	Received

- To date, 157 quality audits have been completed by EGRT, Joint Ventures and Subcontractors. They are listed on Attachment H.
- There were no audits completed this reporting period.

Table 3 - Four Month Look Ahead Audit Schedule

Month	Project Team (Auditor)	Project Team (Auditee)	Audit Scope	
August	SLCW-SW	SLCW-SW	QSP – Red Line Drawings	

8.3 PREVENTATIVE ACTION LOG

- There were no preventive actions initiated at this reporting period.
- Below is the tracking log for preventive action.

Table 4 - Preventive Action Log

PAR No.	Project Team	Brief Description	Response	Date Opened	Verified



8.4 SUMMARY OF INSPECTION AND TESTING ACTIVITIES

 Below is a table showing the Inspection and Testing summary for this reporting period.

Table 5 – Summary of Inspection and Testing

Project Team	Location	Description of Inspection and Testing	
SLCW- GST	Stations	- Deficiency repair	
SLCW- GST	Substations	- Deficiency repair	
SLCW- GST	Vehicle Storage Facilities	- Deficiency repair	

8.4.1 DBC

There were no ITPs issued by DBC this reporting period.

8.4.2 SLCW-GST

There were no ITPs issued by SLCW-GST this reporting period.

8.4.3 SLCW-SW

There were no ITPs issued by SLCW-SW this reporting period.

8.5 NONCONFORMITY REPORTS AND CORRECTIVE ACTION

- The table below shows the current status of active NCRs.
- Associated Corrective Action for any NCR can be referred to the NCR Tracking System. Below is the link to the website.

http://csc.snclavalin.com/sites/EvergreenNCRTS/default.aspx



Table 6 -NCR and CAR Status

14510 0 110	n and CAN Status				
NCR No.	Description of Nonconformity	Date Open	Date Ended	Status	Description of Correction
SSJV-0035	Additional Segments With Curing Temperatures Exceeded 70 °C, Installed In The Tunnel	24-Mar-15		Final Quality Review	Use-as-is
SLCW-GST- 0073	Drainage issue at DF pads locations in Section 330	26-May-15		Correction Implementation	Repair
SLCW-GST- 0074	Escalators – Sound Absorption Material "all stations"	15-Jun-15		Correction Implementation	Rework
SLCW-GST- 0086	Projectwide Lighting Fixtures Ballast	21-Mar-16		Correction Implementation	Rework
SLCW-GST- 0089	Corrosion of LIM Studs at Stud-Grout Interface	25-May-16		Correction Implementation	Repair
SLCW- Systems- 0009	Interface tolerance between running rail and expansion joint	15-June-16		Correction Implementation	Repair
DBC-0006	Bird Nesting Survey	17-June-16	14-July-16	Ended	Use-as-is
SLCW-GST- 0090	Station Floor Drainage	22-June-16		Activated	

8.6 CONTINUAL IMPROVEMENT INITIATIVES

Improvement initiatives are presently done through Opportunity for Improvements and Corrective Actions related to NCRs.



9.0 PROJECT PHOTOGRAPHS



Figure 1 – Formwork in Preparation of South Portal Transition Pour





Figure 2 - Power Rail Offloading and Installation





Figure 3 – Tunnel Section with completed Running Rail, LIM and Power Rail





Figure 4 – North Portal Roof Slab Pour



Attachments

Attachment A - Submission List - Systems - Discontinued

Attachment B – Project Schedule

Attachment C – Activity Changes - *Discontinued*

Attachment D - Logic Changes - Discontinued

Attachment E – Alignment Key Plan

Attachment F - Environmental Existing Permits

Attachment G - Four Month Look Ahead Audit Schedule - **Discontinued(See 8.2 Table 3)**

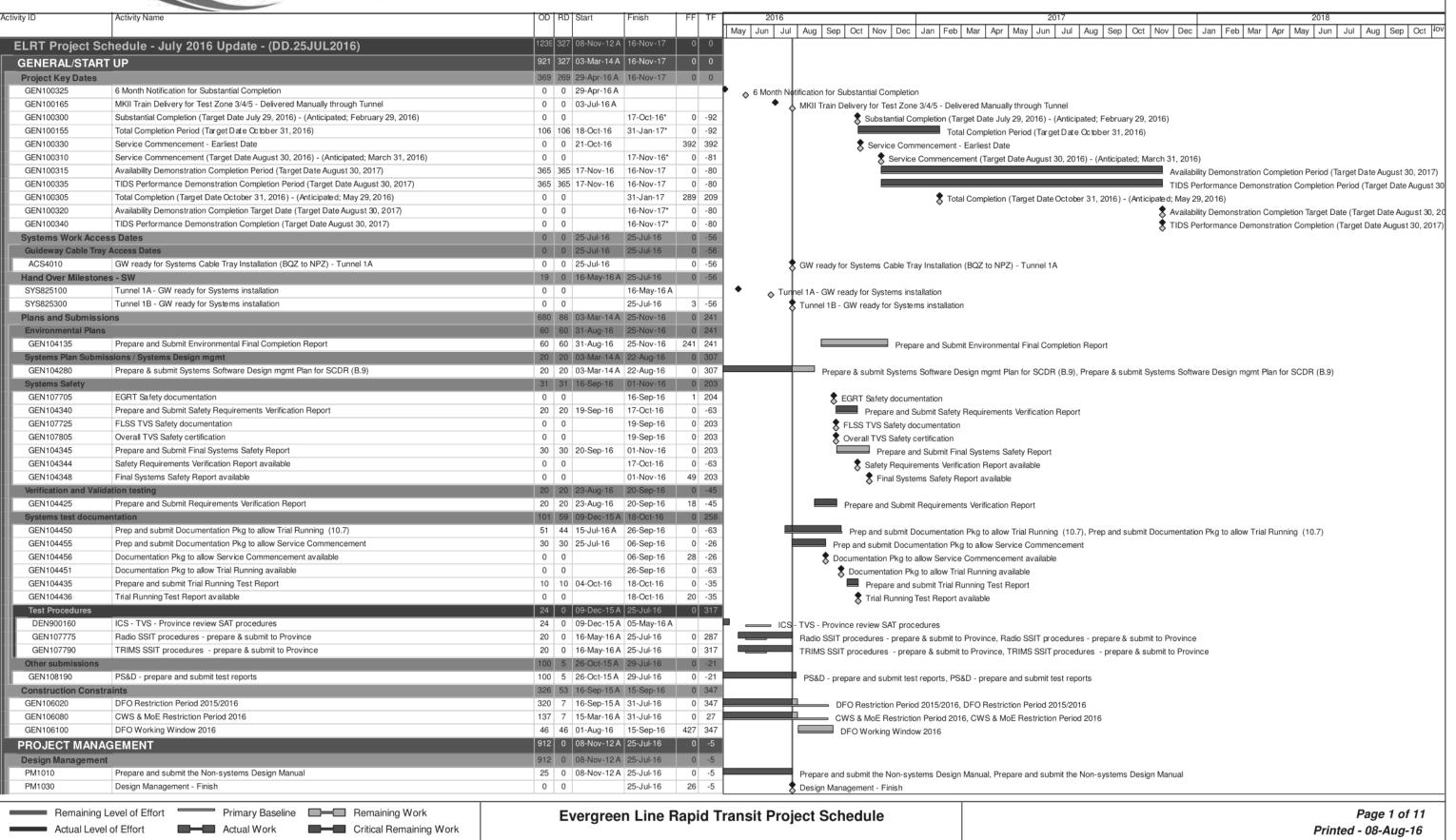
Attachment H - Quality Audits

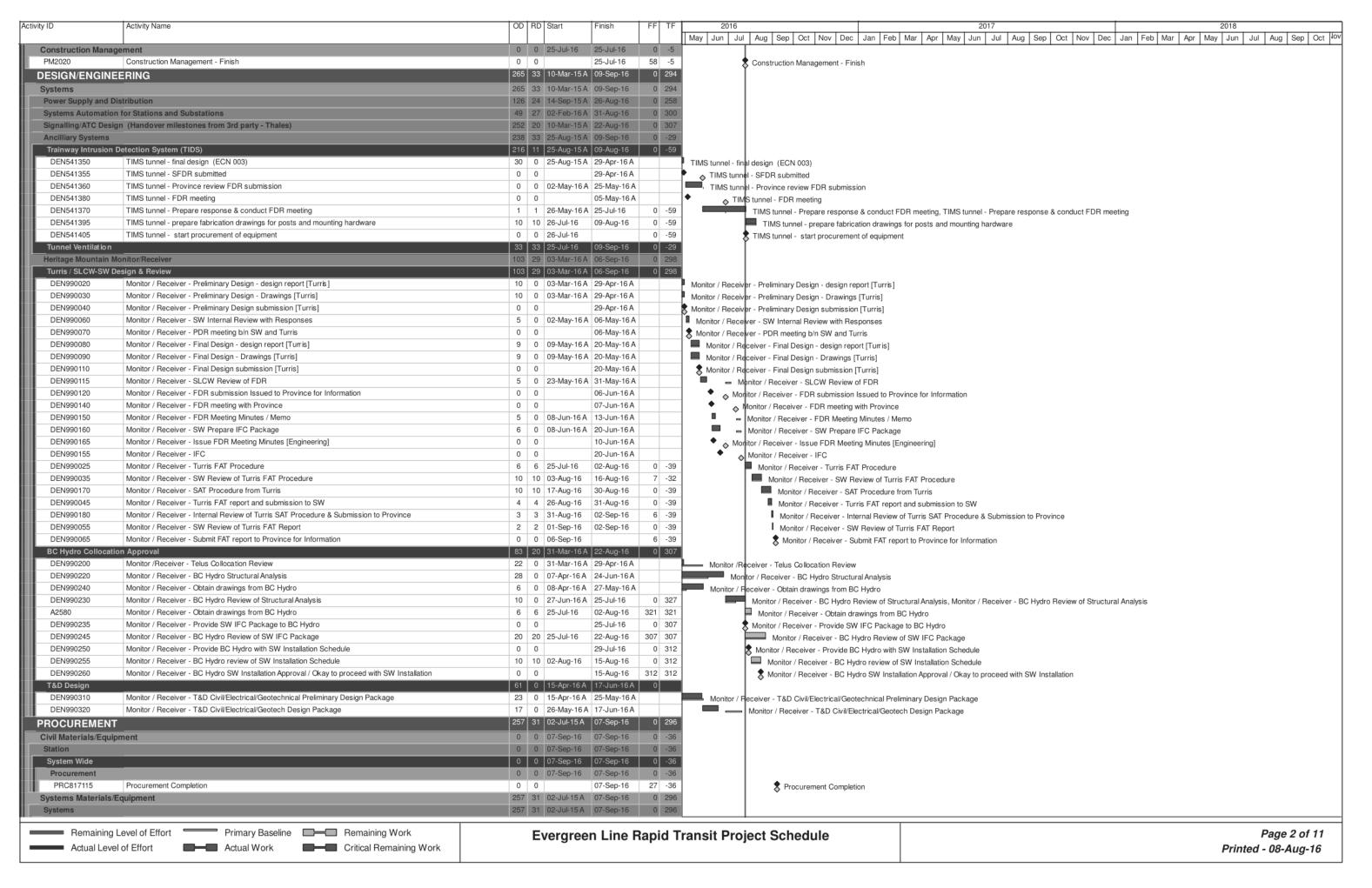
ATTACHMENT A SYSTEM MANAGEMENT PLAN DISCONTINUED

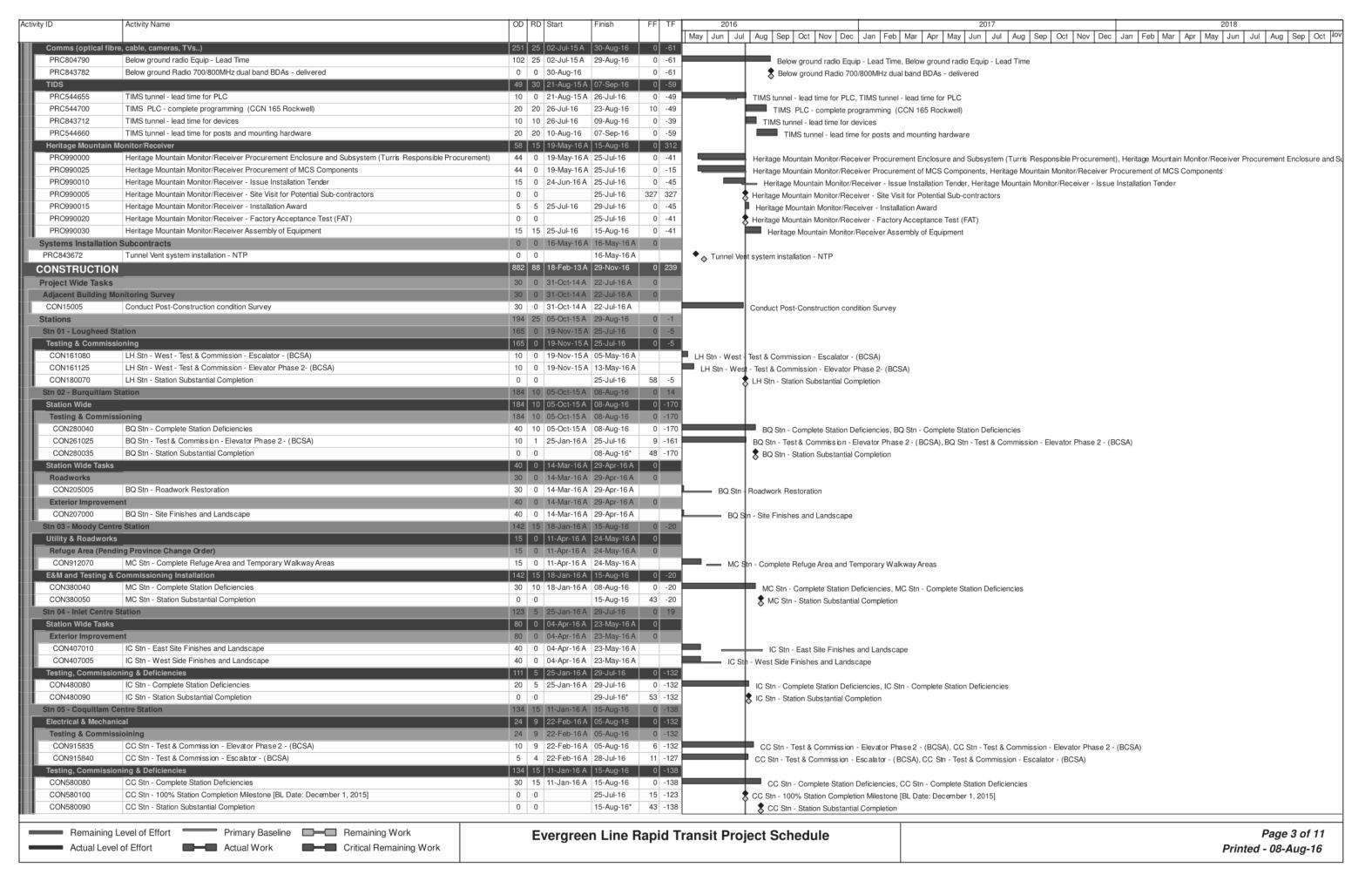


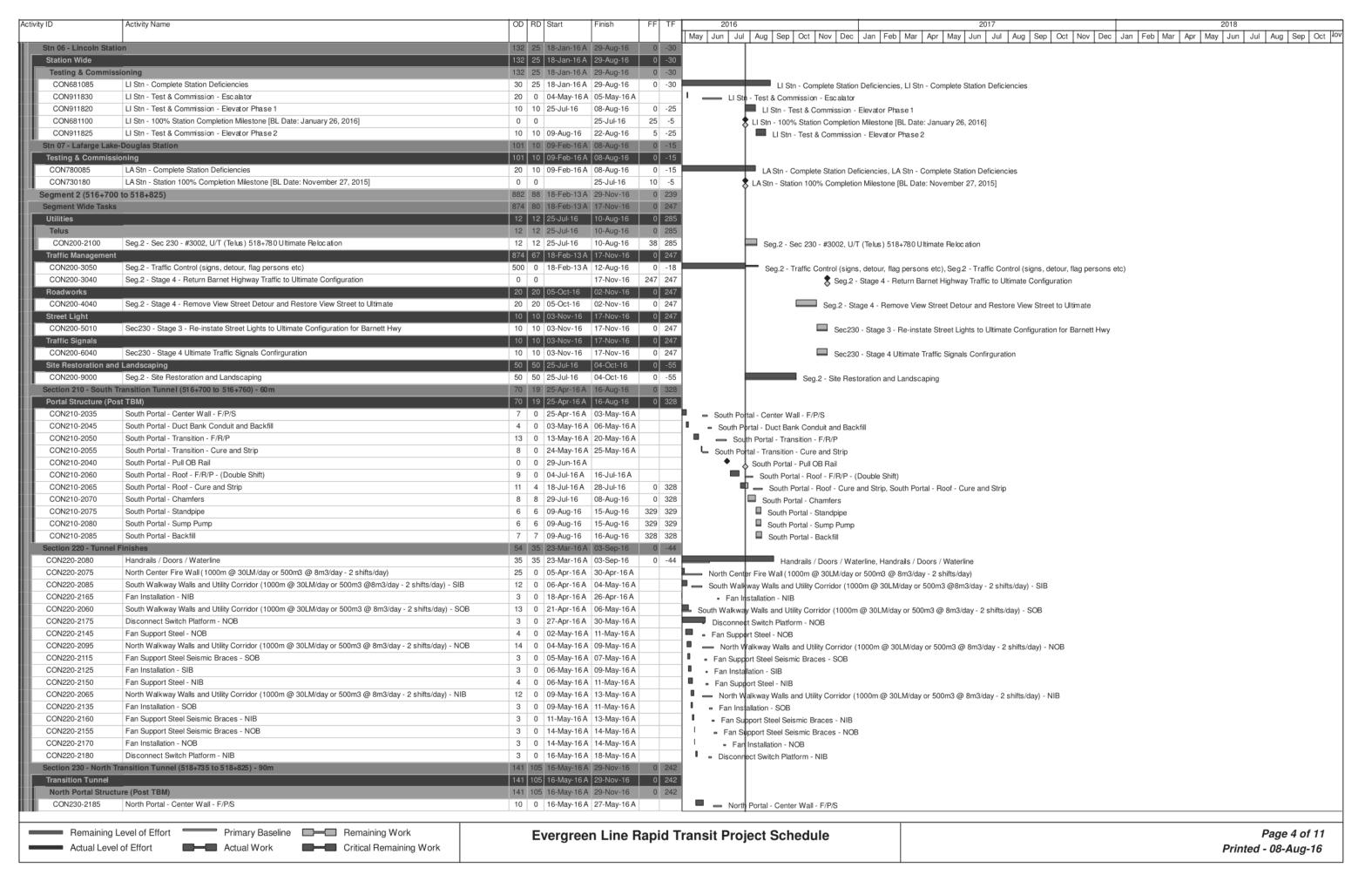
EVERGREEN LINE RAPID TRANSIT PROJECT ELRT Project Schedule Update - (DD. 25JUL2016) Condensed Schedule

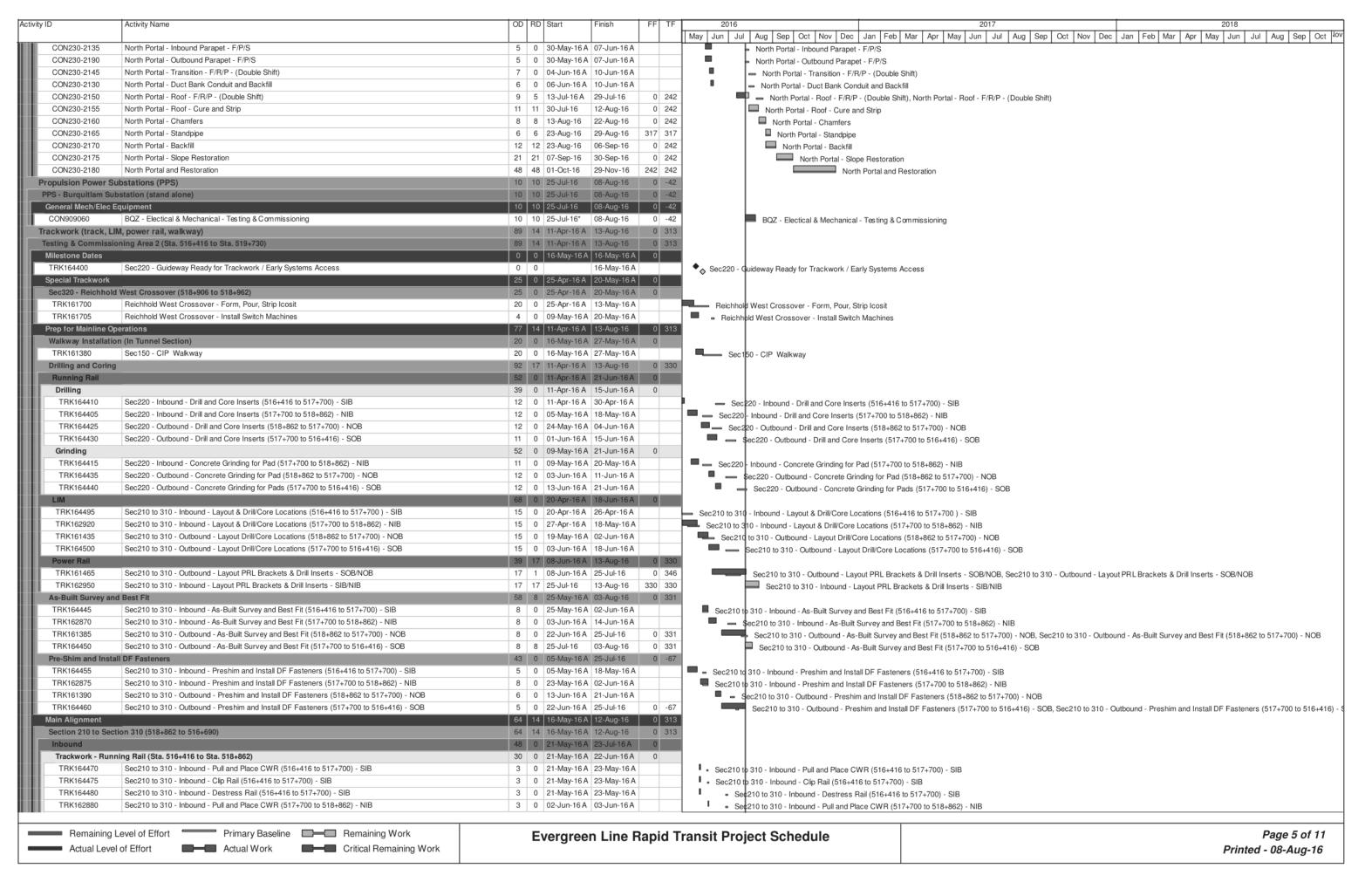
Date	Revision	Checked	Approved
08-Aug-16	Project Schedule Update (DD.25JUL2016) Rev.1	JS	JS

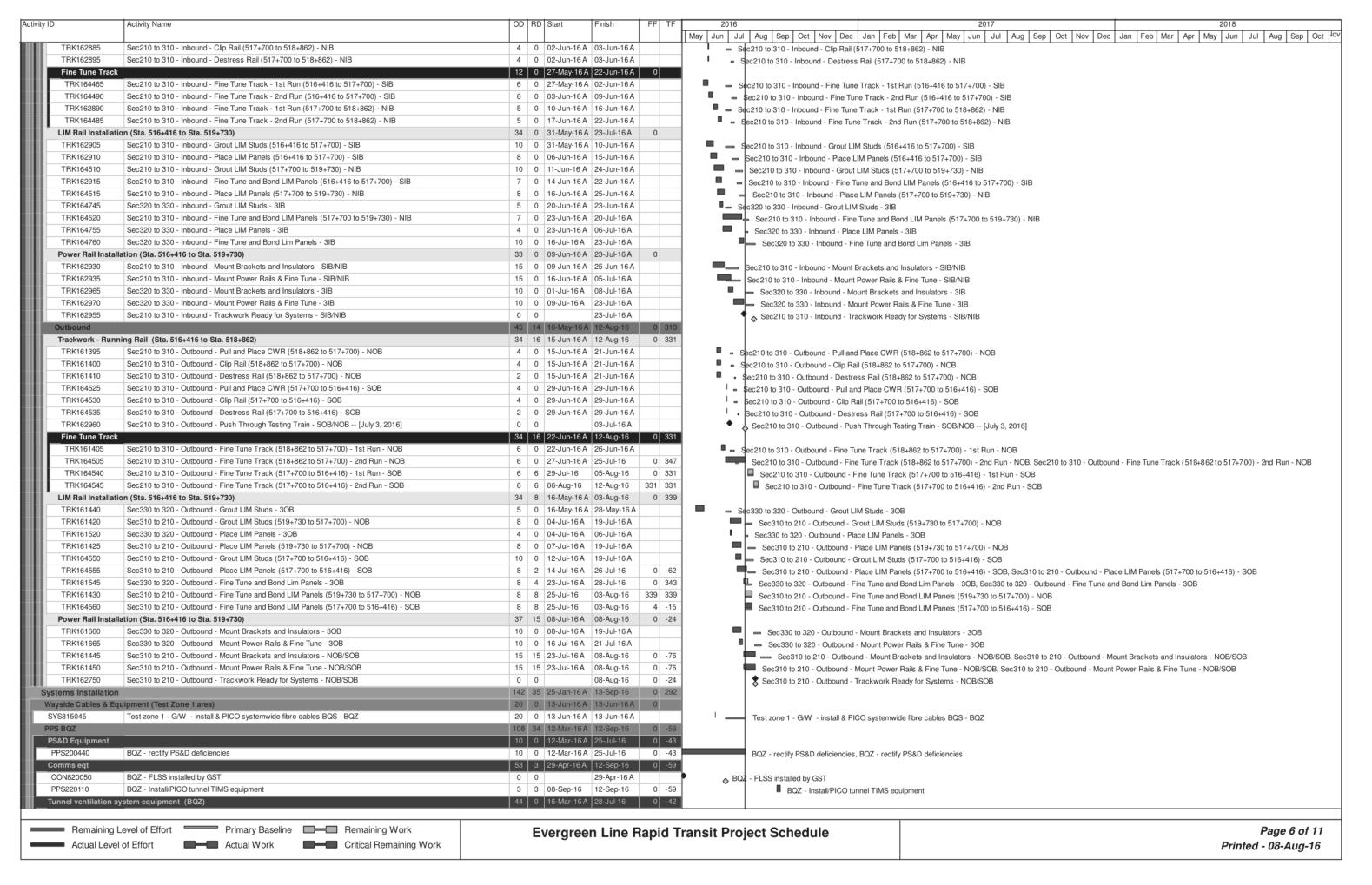


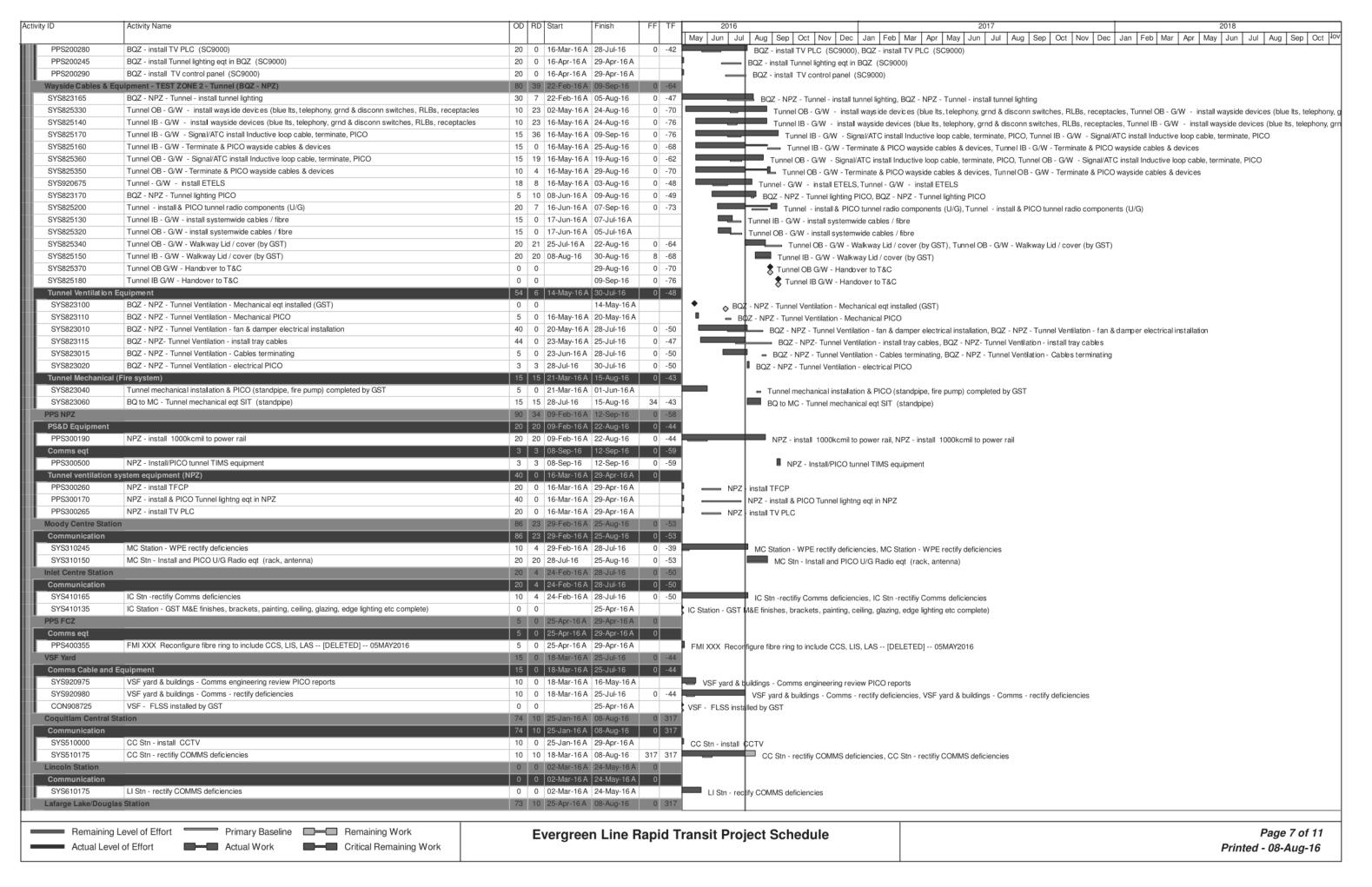


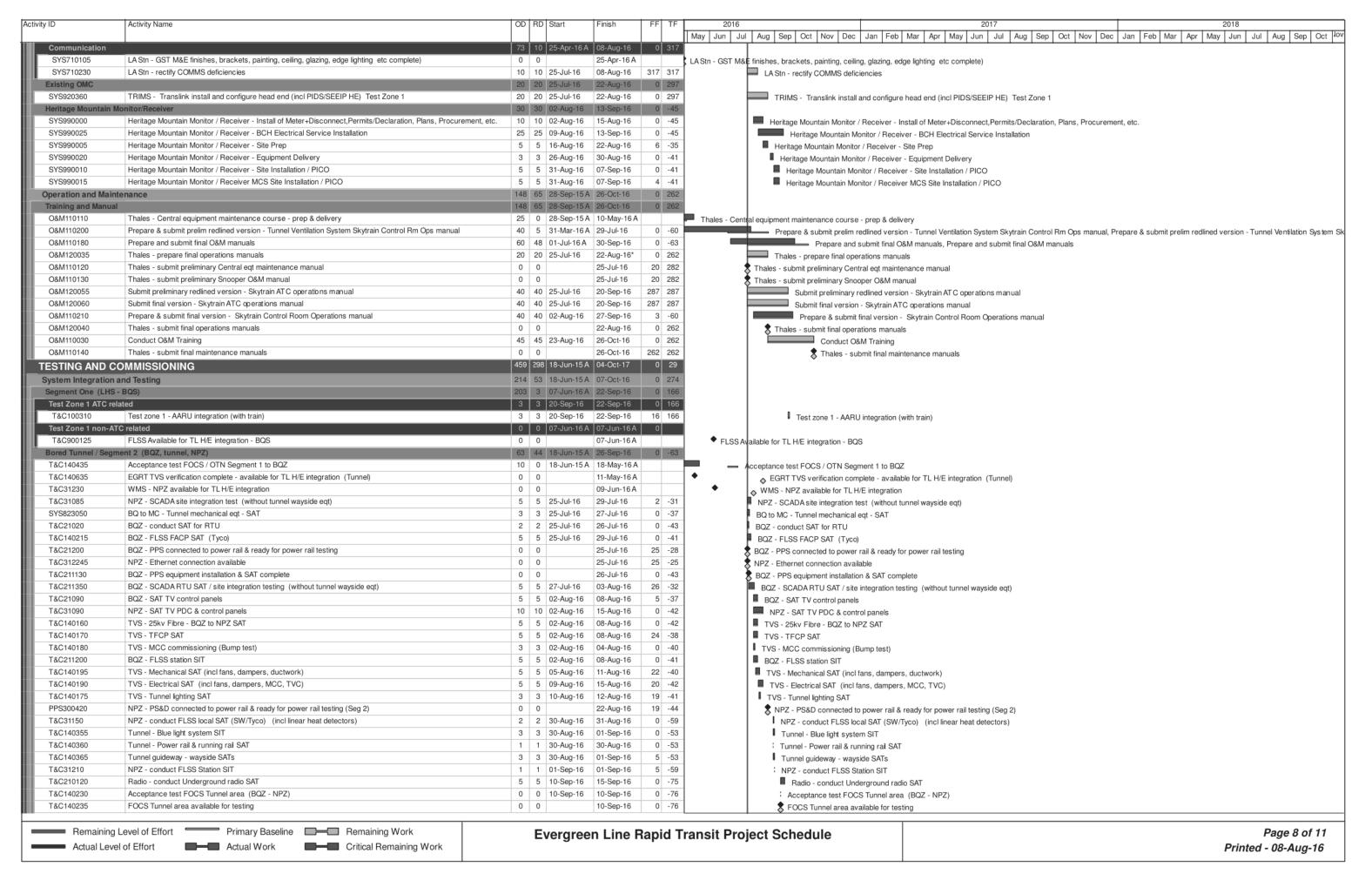


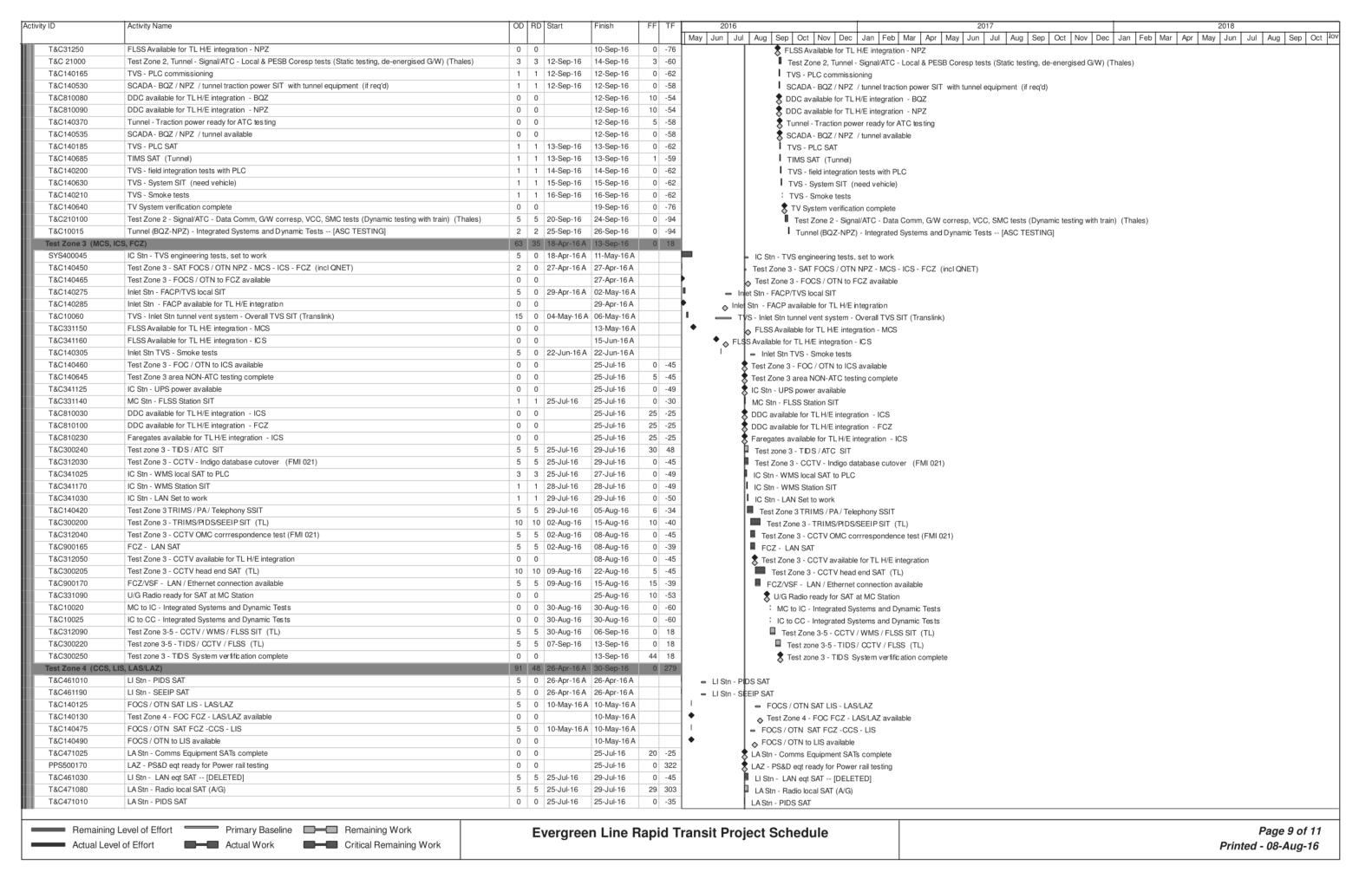


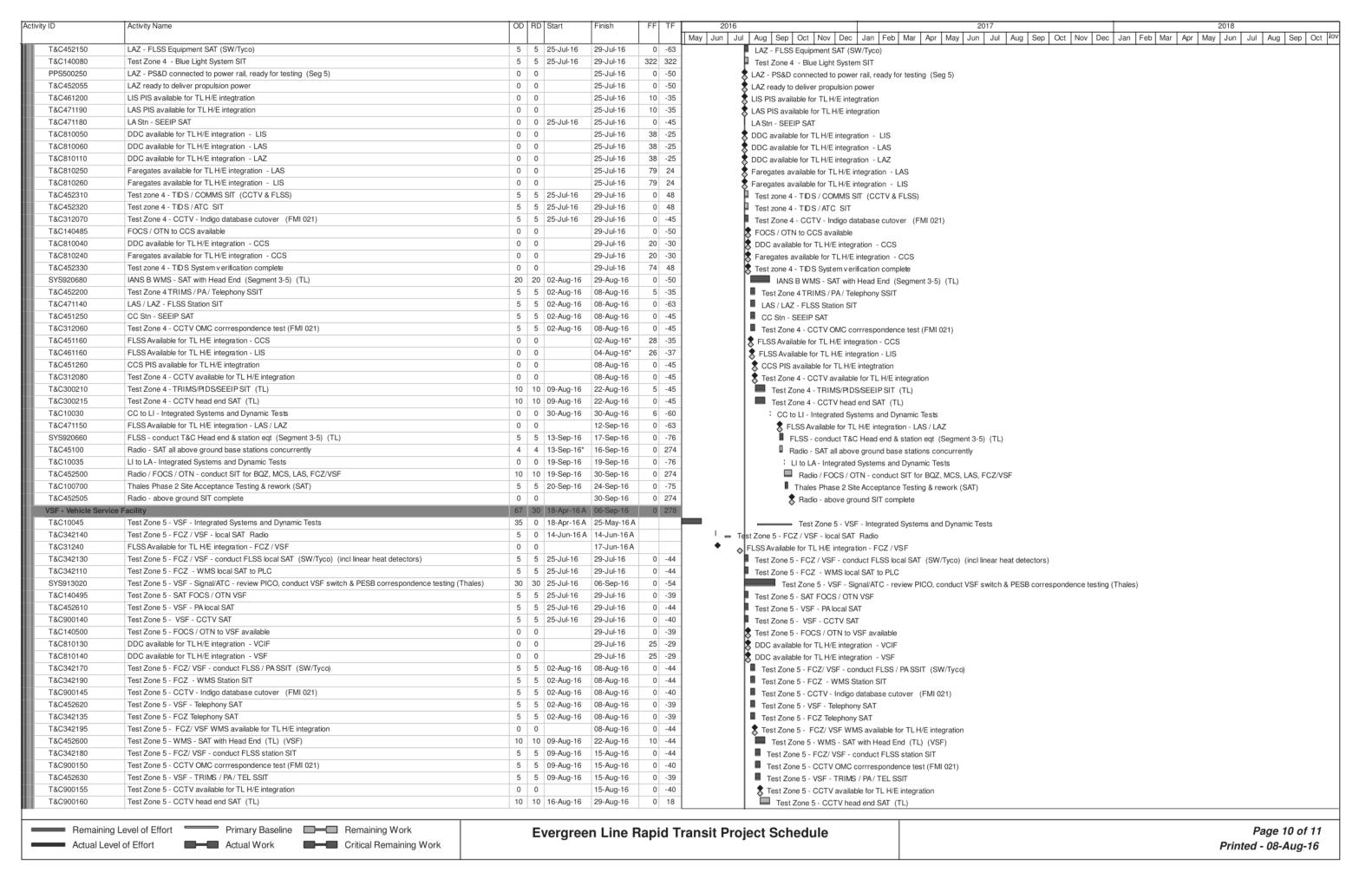


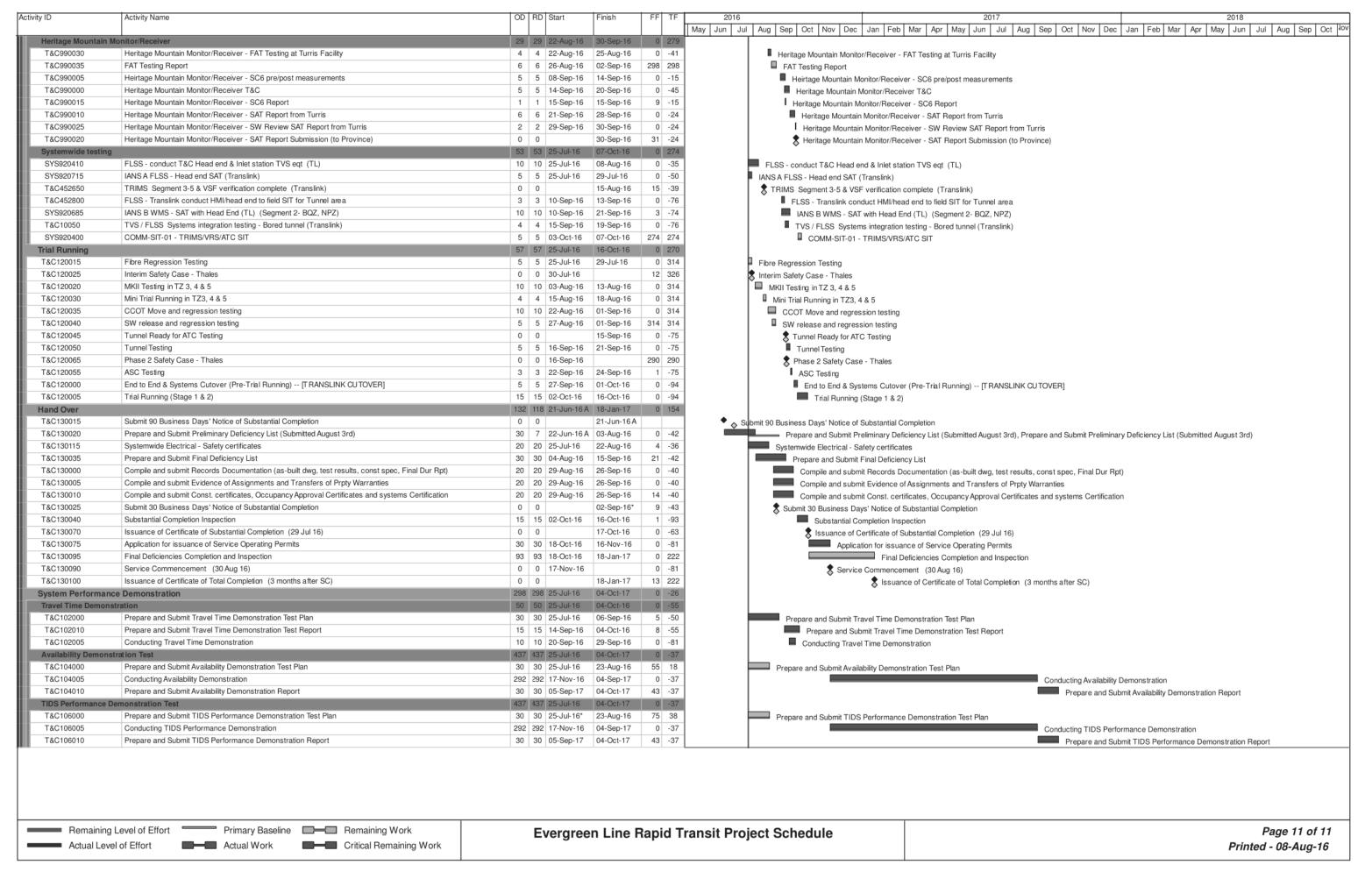












ATTACHMENT C ACTIVITY CHANGES DISCONTINUED

ATTACHMENT D LOGIC CHANGES DISCONTINUED

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Withheld pursuant to/removed as

s.15

Attachment F

Environmental Management

Permitting Status – Key Active Permits (expired or otherwise inactive permits are shown in grayscale font)

Permit Description	Act/Regulation	Application Date	Status
Federal			
DFO Authorization – to authorize harmful alteration or disruption, or the destruction, of fish habitat (HADD)	Fisheries Act ¹ , Subsection 35(2)(b)	July 11, 2013	The DFO Authorization (#06-HPAC-PA1-00001) was signed by DFO and the Ministry of Transportation and became effective on July 18, 2013. The Permit expires on Dec. 31, 2016.
Amendment to the Authorization to address design developments and method changes that occurred after issuance of the Authorization on July 18, 2013	Fisheries Act, Subsection 35(2)(b)	January 24, 2014	DFO amended Authorization No. 06- HPAC-PA1-00001 on January 27, 2014. The Amendment expires on Dec. 31, 2016.
Request for DFO review of final proposed habitat compensation for the Project (including various changes to habitat compensation as compared to the habitat compensation described in the Project Authorization #06-HPAC-PA1-00001 as amended on January 27, 2014).	Fisheries Act, Subsection 35(2)(b)	April 30, 2015	On May 21, 2015 DFO issued a letter to the Province accepting all of EGRT's proposed changes. The updated habitat compensation supersedes the compensation described in the Project Authorization #06-HPAC-PA1-00001 (as amended on January 27, 2014) but all other conditions of the Authorization continue to apply. The Authorization expires on Dec. 31, 2016.
Request to DFO for variance from DFO Authorization No. 06-HPAC-PA1-00001: request to start water line relocation at Schoolhouse Creek in last week of July 2016, prior to the start of the 2016 least-risk fisheries window.	Fisheries Act, Subsection 35(2)(b)	July 18, 2016	DFO issued a "no objection" on July 20, 2016. The variance applies only to the last week of July 2016, which is now past.

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¹ Amendments to the *Fisheries Act* came into effect on November 2013 that repealed the HADD provisions of Subsection 35(2). However, DFO Authorization #06-HPAC-PA1-00001 is grandfathered under the amended Act and remains in effect.

Permit Description	Act/Regulation	Application Date	Status
DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	June 25, 2013	The permit (#XR 239-2013) was received on July 8, 2013. The permit expired on June 30 2014. A new permit was obtained (see row below).
Amendment to DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	March 18, 2014	The permit (#XR 239-2014) was received on March 21, 2014. Note this permit supersedes #XR 239-2013 (see row above).
Amendment to DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	January 8, 2015	The permit (#XR 71 2014 – Amendment 2) was received on January 15, 2015. Subsequently, the Permit was further amended to include road works and culvert installation at Pinnacle Creek, The Permit expired on December 31, 2015.
DFO Permit to allow fish salvage during habitat compensation construction at Schoolhouse Creek.	Fisheries Act, Fishery (General) Regulation	December 24, 2015	The permit (XR 376 2015) was received on December 28, 2015. The permit expires on Dec. 31, 2016.
Amendment to the Authorization to allow instream works at Kyle Creek from Oct. 1 – 15, 2013	Fisheries Act, Subsection 35(2)	Sept. 30, 2013	Email amendment was received from DFO on Sept. 30, 2013. The relevant work is complete.
Request for DFO review of proposed out-of-window instream work at Tributary to Suterbrook Creek (to begin construction of instream Pier P3-15)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	January 27, 2014	DFO issued a "no objection" email to the Province on January 28, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct instream works to build Utility 4011 outside the least risk window specified in DFO Authorization #06-HPAC-PA1-00001)	Fisheries Act, Subsection 35(2)(b)	March 25, 2014	DFO issued a "no objection" email to the Province on March 25, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Scott Creek (work to be completed no later than	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	August 20, 2014	DFO issued a "no objection" email to EGRT on August 21, 2014. The relevant

Permit Description	Act/Regulation	Application Date	Status
October 10, 2014)			work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Pigeon Creek (work to be completed no later than October 30, 2014)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	August 28, 2014	DFO issued a "no objection" email to the Province on August 28, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Pigeon Creek (work to be completed no later than November16, 2014)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	October 28, 2014	DFO issued a "no objection" email to the Province on October 28, 2014. The relevant work is complete.
Request to DFO to allow instream works to occur outside the least-risk fisheries window at Scott Creek (to install bank stabilization).	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	January 29, 2015	DFO issued a "no objection" email to the EGRT on January 30, 2015. The relevant work is complete.
Provincial			
Ministry of Forests, Lands and Natural Resource Operations (FLNR) Approval to allow changes in and about a stream (major works) at Kyle Creek, Suterbrook Creek, Scott Creek and "Mariner Pond"	Water Sustainability Act ² , Section 11	May 27, 2013	Approval (#A2006043) was received on July 24, 2013. The Approval expires Dec. 31, 2016.
Order amending Approval A2006043 to allow instream works to occur outside the least-risk fisheries window	Water Sustainability Act, Section 11	September 30, 2013	The Order was received on Sept. 30, 2013. The Order applies to all watercourses affected by the Project. The Order expires Dec. 31, 2016.
Approval to construct habitat compensation at Hoy Creek.	Water Sustainability Act, Section 11	May 14, 2015	Approval (#A2006297) was received on July 23, 2015. The Approval expires Dec. 1, 2016.
Approval to construct habitat compensation at Schoolhouse Creek.	Water Sustainability Act, Section 11	May 15, 2015	Approval (#2006301) was received on December 21, 2015. The Approval expires Dec. 1, 2017.
Notification to FLNR Habitat Officer to allow changes in and about a stream (GVSDD storm system repairs) – Ottley Creek	Water Sustainability Act, Section 11 Water Sustainability Regulation, Part 3	June 21, 2016	Notification was assigned file # 100169648. FLNR green-lighted the work

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² A new *Water Sustainability Act* came into force in early 2016 that updated and replaced the historic *Water Act*. Approvals shown in this matrix were all issued pursuant to section 9 of the *Water Act*. Those that remain active are grandfathered under the WSA. Section 11 of the WSA is now the relevant Section. The matrix has been updated to show the Approvals are pursuant to the WSA, Section 11. Similarly, the Water Regulation was replaced by the Water Sustainability Regulation. Except for the Notification shown for culvert repairs at Ottley Creek (June 21, 2016), all the Notifications shown in the matrix were originally submitted pursuant to Part 7 of the Water Regulation. The applicable regulation is now Part 3 of the Water Sustainability Regulation, as shown in this matrix.

Permit Description	Act/Regulation	Application Date	Status
			in an email dated July 21, 2016.
Notification to FLNR to allow changes in and about a stream (guideway works) – Schoolhouse Creek	Water Sustainability Regulation, Part 3	May 17, 2013	The Permit (FLRN tracking #2013-104) has expired and is superseded by a new Notification (see row below).
Notification to FLNR to allow changes in and about a stream (drainage, PPS and road works) – Schoolhouse Creek	Water Sustainability Regulation, Part 3	Dec. 10, 2013	The Permit (FLRN tracking #124843) is now in place and supersedes #2013-104 (see row above). The Notification expired Dec. 31, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Slaughterhouse Creek	Water Sustainability Regulation, Part 3	May 31, 2013	The Permit (FLRN tracking #111384) has expired and is superseded by a new Notification (see row below).
Notification to FLNR to allow changes in and about a stream (changes to guideway works) – Slaughterhouse Creek	Water Sustainability Regulation, Part 3	November 14, 2013	The Permit (FLRN tracking #120176) is now in place and supersedes #111384 (see row above). The Notification expired on Dec. 31, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pigeon Creek	Water Sustainability Regulation, Part 3	April 16, 2014	The Permit (FLRN tracking #112669) expired on September 30, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pigeon Creek	Water Sustainability Regulation, Part 3	August 15, 2014	The Notification was accepted by FLNR (tracking number 145189) and became active on October 1, 2014 superseding the previous Notification. The Notification expired Dec. 31, 2015.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pinnacle Creek	Water Sustainability Regulation, Part 3	June 14, 2013	The Permit (FLRN tracking #112669) is now in place. The Notification expired on May 15, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pinnacle Creek	Water Sustainability Regulation, Part 3	April 16, 2014	The Notification expired on December 31, 2015.

Permit Description	Act/Regulation	Application Date	Status
Notification to FLNR to allow changes in and about a stream (guideway works) – Hoy Creek	Water Sustainability Regulation, Part 3	May 31, 2013	The Notification (FLNR Tracking #111383) expired on September 30, 2014 and is superseded by an updated Notification which becomes active on Oct 1, 2014 (see row below).
Notification to FLNR to allow changes in and about a stream (guideway works) – Hoy Creek	Water Sustainability Regulation, Part 3	August 15, 2014	The Notification was accepted by FLNR (tracking number 145190) and became active on October 1, 2014 superseding the previous Notification. The new Notification expired on Apr. 30, 2015.
FLNR Permit to allow fish salvage (intended for habitat construction at Schoolhouse Creek)	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	December 23, 2015	The Permit (#SU16-223632) was issued on February 9, 2016. It expires Dec. 31, 2016.
FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	June 25, 2013	The Permit (#SU13-88489) was issued on July 16, 2013. The Permit is superseded by the Amendment extension (see row below).
Amendment to FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	March 4, 2014	The Permit (#SU13-88489) was issued on March 6, 2014. The Permit expired on June 29, 2015.
Amendment to FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	January 15, 2015	The Permit (#SU15-165242) was issued on February 12, 2015 Note this permit superseded #SU13-88489 (see row above). The Permit expired on December 31, 2015.
FLNR Permit to allow wildlife salvage	Wildlife Act, Permit Regulation, Section 2	May 13, 2013	The Permit (#SU13-87792) was issued on July 9, 2013. The Permit expired on July 1, 2014 and has not been renewed as wildlife salvage is no

Permit Description	Act/Regulation	Application Date	Status
			longer required.
FLNR Heritage Inspection Permit (HIP) to allow archaeological monitoring	Heritage Conservation Act, Section 14	April 4, 2013	The Permit was issued on June 18, 2013. The Permit expired Dec. 31, 2014.
FLNR Heritage Inspection Permit (HIP) to allow archaeological monitoring	Heritage Conservation Act, Section 14	August, 2014	The Permit was amended on August 28, 2014. The Permit expired June 30, 2015. The final report has been submitted to Archaeology Branch and relevant First Nations.
Regional/Municipal			
Waste Discharge Permit	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	November 26, 2013	The Permit (#SC-100914-FSA) was issued on February 17, 2014. The Permit does not specify an end-date. As of June 2016, discharge to sanitary is no longer necessary and the Permit was cancelled on July 27, 2016.
Waste Discharge Permit – amendment to include additional scope.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	April 10, 2014	The Permit (#SC-100914-FSA) was amended on April 28, 2014. The Amendment does not specify an enddate. As of June 2016, discharge to sanitary is no longer necessary and the Permit was cancelled on July 27, 2016.
Waste Discharge Permit – Minor Amendment to include additional treatment components (including a clarifier, mixing tank and filter press) and to address a change in sampling location.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	July 29, 2014	The Minor Amendment to the Permit (#SC-100914-FSA) was issued on August 13, 2014. The Permit does not specify an end-date. As of June 2016, discharge to sanitary is no longer necessary and the Permit was cancelled on July 27, 2016.
Waste Discharge Permit (one time	Greater Vancouver	March 27, 2015	Metro Vancouver

Permit Description	Act/Regulation	Application Date	Status
request to discharge groundwater associated with the dewatering operation at Clarke Rd and Seaview Dr.).	Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).		issued a Waste Discharge Permit (No. SC-100990-FSA) to EGRT on April 2, 2015. The Permit expired on May 15, 2015.
Waste Discharge Permit – Minor Amendment to extend the Permit end-date to July 31, 2015.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	May 2, 2015	Metro Vancouver issued a Minor Amendment to Permit No. SC-100990-FSA on May 15, 2015. The Permit expired on July 31, 2015.
Waste Discharge Permit – Major Amendment to extend the Permit end-date to Sept. 30, 2015 and increase the total allowed discharge to sanitary system.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	July 22, 2015	Metro Vancouver issued a Major Amendment to Permit No. SC-100990-FSA on Aug. 11, 2015. The Permit expired on Sept. 30, 2015.
Other	'		'
Tsleil-Waututh Nation - Heritage Investigation Permit	N/A	July 2, 2014	An amendment to the Permit (#2013-014) was issued on October 3, 2014. Archaeological investigation and monitoring are complete.
Sto:Lo First Nation - Heritage Investigation Permit	N/A	May 6, 2013	Permit (#2013-031) was issued on June 4, 2013. Archaeological investigation and monitoring are complete.

Attachment H

Table 3 – Quality Audits

Audit Report Number	Discipline	Auditor	Auditee	Audit Date	NCR's Raised	OFI's Raised
511325-00000-SWSL-38QB-0001	Design	EGRT	SNC Lavalin	23-Apr- 13	0	1
511325-00000-SWSL-38QB-0002	Design	EGRT	SNC Lavalin	03-May- 13	0	0
511325-00000-SWSL-38QB-0003	Design	EGRT	IBT	11-Jun- 13	0	1
511325-00000-SWSL-38QB-0004	Design	EGRT	MMM	06-Jun- 13	0	0
511325-00000-SWSL-38QB-0005	Design	EGRT	EBA	04-Jun- 13	0	1
511325-00000-SWSL-38QB-0006	Design	EGRT	Fast+Epp	25-Jun- 13	1	0
511325-00000-SWSL-38QB-0007	Design	EGRT	Jacobs	18-Jun- 13	1	1
511325-00000-SWSL-38QB-0008	Design	EGRT	RJC	18-Jul-13	0	0
511325-00000-SWSL-38QB-0009	Design	EGRT	Francl Architect ure	23-Jul-13	0	1
511325-00000-SWSL-38QB-0010	Design	EGRT	Perkin + Will	14-Aug- 13	0	0
511325-00000-SWSL-38QB-0011	Design	EGRT	Dialogue	22-Aug- 13	0	0
511325-00000-SWSL-38QB-0012	Design	EGRT	AES	24-Sep- 13	0	0
511325-00000-SWSL-38QB-0013	Design	EGRT	SNC Lavalin	19-Dec- 13	0	2
511325-00000-SWSL-38QB-0014	Design	EGRT	SNC Lavalin	30-Jan-14	0	0
511325-00000-SWSL-38QB-0015	Design	EGRT	SNC Lavalin	10-Oct- 13	0	0
511325-00000-SWSL-38QB-0016	Design	EGRT	SNC Lavalin	06-Nov- 13	0	0
511325-00000-SWSL-38QB-0017	Design	EGRT	SNC Lavalin	25-Oct- 13	0	0
511325-00000-SWSL-38QB-0018	Design	EGRT	SNC Lavalin	27-Feb- 14	0	0
511325-00000-SWSL-38QB-0019	Design	EGRT	SNC Lavalin	25-Mar- 14	0	0
511325-00000-SWSL-38QB-0020	Design	EGRT	Jacobs	12-May- 15	0	0
511325-00000-SWSL-38QB-0021	Design	EGRT	MMM Group	23-Sept- 14	1	0
511325-00000-SWSL-38QB-0022	Design	EGRT	SNCL Electrical	27-Nov- 14	0	0
511325-00000-SWSL-38QB-0023	Design	EGRT	SNC Lavalin	6-Feb-15	2	1

511325-00000-SWSL-38QB-0025	Design	EGRT	SLCW- SW	5-Aug-15	-	1
511325-00000-SWSL-38QB-0026	Design	EGRT	SLCW- SW	2-Nov-15	0	0
511325-00000-SWSL-38QB-0101	Environment al	EGRT	EGRT	20-Aug- 13	0	4
511325-00000-SWSL-38QB-0102	Environment al	EGRT	SGJV	13-Sep- 13	1	14
511325-00000-SWSL-38QB-0103	Environment al	EGRT	SLCW- GST	03-Oct- 13	0	11
511325-00000-SWSL-38QB-0104	Environment al	EGRT	EGRT	25-Nov- 13	0	0
511325-00000-SWSL-38QB-0105	Environment al	EGRT	SLCW- GST	16-Jan-14	0	3
511325-00000-SWSL-38QB-0106	Environment al	EGRT	SGJV	04-Feb- 14	0	3
511325-00000-SWSL-38QB-0107	Environment al	EGRT	SLCW- EG	07-Feb- 14	0	4
511325-00000-SWSL-38QB-0108	Environment al	EGRT	SSJV	28-Feb- 14	0	10
511325-00000-SWSL-38QB-0109	Environment al	EGRT	EGRT	11-Apr- 14	0	1
511325-00000-SWSL-38QB-0110	Environment al	EGRT	SLCW- GST	6-May-14	0	2
511325-00000-SWSL-38QB-0111	Environment al	EGRT	SGJV	8-May-14	0	4
511325-00000-SWSL-38QB-0112	Environment al	EGRT	SSJV	24-Jun- 14	0	4
511325-00000-SWSL-38QB-0113	Environment al	EGRT	SLCW- EG	8-Sept-14	0	1
511325-00000-SWSL-38QB-0114	Environment al	EGRT	SLCW- GST	25-Sept- 14	2	2
511325-00000-SWSL-38QB-0115	Environment al	EGRT	SGJV	27-Oct- 14	2	2
511325-00000-SWSL-38QB-0116	Environment al	EGRT	SSJV	9-Jan-15	0	1
511325-00000-SWSL-38QB-0117	Environment al	EGRT	SLCW- GST	30-Jan-15	0	0
511325-00000-SWSL-38QB-0118	Environment al	EGRT	SGJV	6-Mar-15	0	0
511325-00000-SWSL-38QB-0119	Environment al	EGRT	SLCW- EG	30-Apr- 15	0	0
511325-00000-SWSL-38QB-0120	Environment al	EGRT	SLCW- GST	4-May-15	0	0
511325-00000-SWSL-38QB-0121	Environment al	EGRT	SSJV	26-Jun- 15	0	0
511325-00000-SWSL-38QB-0122	Environment al	EGRT	DBC	24-Aug- 15	-	-
511325-00000-SWSL-38QB-0123	Environment al	EGRT	SSJV	5-Nov-15	1	1
511325-00000-SWSL-38QB-0124	Environment al	EGRT	SLCW- GST- TFO	16-Apr- 08	1	3
511325-00000-SWSL-38QB-0201	Traffic	EGRT	SGJV	04-Jun- 13	0	2

511325-00000-SWSL-38QB-0202	Traffic	EGRT	SLCW- GST	09-Jul-13	0	1
511325-00000-SWSL-38QB-0203	Transit Facility	EGRT	SLCW- GST	25-Sep- 13	0	1
511325-00000-SWSL-38QB-0204	Traffic	EGRT	SLCW- GST	26-Sep- 13	0	2
511325-00000-SWSL-38QB-0205	Traffic	EGRT	SGJV	13-Nov- 13	2	1
511325-00000-SWSL-38QB-0206	Transit Facility	EGRT	SLCW- GST	22-Nov- 13	0	0
511325-00000-SWSL-38QB-0207	Transit Facility	EGRT	SLCW- GST	09-Jan-14	0	0
511325-00000-SWSL-38QB-0208	Traffic	EGRT	SLCW- GST	23-Jan-14	0	0
511325-00000-SWSL-38QB-0209	Transit Facility	EGRT	SLCW- GST	20-Feb- 14	0	0
511325-00000-SWSL-38QB-0210	Traffic	EGRT	SLCW- EG	12-Mar- 14	0	0
511325-00000-SWSL-38QB-0211	Traffic	EGRT	SLCW- EG	13-Jan-15	0	0
511325-00000-SWSL-38QB-0212	Traffic	EGRT	SSJV	15-Jan-15	0	0
511325-00000-SWSL-38QB-0213	Traffic	EGRT	SSJV	15-Dec- 15	1	0
511325-00000-SWSL-38QB-0214	Traffic	EGRT	SLCW- GST	23-Feb- 16	0	0
511326-00000-SWSG-38QB-0301	Construction	SGJV	SGJV	30-May- 13	0	3
511325-00000-SWSL-38QB-0302	Construction	EGRT	EGRT	13-Jun- 13	0	3
511327-00000-SWSR-38QB-0303	Construction	SLCW- EG	Armtec	14-Jun- 13	0	2
511414-00000-SWGS-38QB-0304	Construction	SLCW- GST	SLCW- GST	24-Jun- 13	0	3
511414-00000-SWGS-38QB-0305	Construction	SLCW- GST	SLCW- GST	23-Jul-13	0	2
511414-00000-SWGS-38QB-0306	Construction	SLCW- GST	Canron	28-Aug- 13	0	0
511326-00000-SWSG-38QB-0307	Construction	SGJV	SGJV	13-Aug- 13	0	2
511326-00000-SWSG-38QB-0308	Construction	SGJV	SGJV	15-Aug- 13	0	0
511326-00000-SWSG-38QB-0309	Construction	SGJV	Pedre	09-Aug- 13	0	6
511326-00000-SWSG-38QB-0310	Construction	SGJV	Armtec	27-Sep- 13	0	3
511414-00000-SWGS-38QB-0311	Construction	SLCW- GST	Metro Testing	03-Oct- 13	0	1
511326-00000-SWSG-38QB-0312	Construction	SGJV	SGJV	25-Oct- 13	0	1
511326-00000-SWSG-38QB-0313	Construction	SGJV	SGJV	14-Nov- 13	0	0
511328-00000-SWSS-38QB-0314	Construction	SSJV	SSJV	08-Nov- 13	1	3

511414-00000-SWGS-38QB-0315	Construction	SLCW- GST	SLCW- GST	03-Dec- 13	0	2
511414-00000-SWGS-38QB-0316	Construction	SLCW- GST	SLCW- GST	05-Dec- 13	0	0
511326-00000-SWSG-38QB-0317	Construction	SGJV	SGJV	21-Nov- 13	0	1
511327-00000-SWSR-38QB-0318	Construction	SLCW- EG	Harris PT	25-Nov- 13	0	4
511327-00000-SWSR-38QB-0319	Construction	SLCW- EG	SLCW- EG	28-Nov- 13	0	0
511326-00000-SWSG-38QB-0320	Construction	SGJV	SGJV	12-Dec- 13	0	0
511327-00000-SWSR-38QB-0321	Construction	SLCW- EG	SLCW- EG	13-Jan-14	0	0
511328-00000-SWSS-38QB-0322	Construction	SSJV	SSJV	06-Dec- 13	0	4
511326-00000-SWSG-38QB-0323	Construction	SGJV	SGJV	29-Jan-14	0	1
511326-00000-SWSG-38QB-0324	Construction	SGJV	AGI	4-Mar-14	0	3
511328-00000-SWSS-38QB-0325	Construction	SSJV	SSJV	21-Jan-14	0	3
511328-00000-SWSS-38QB-0326	Construction	SSJV	SSJV	28-Jan-14	0	1
511326-00000-SWSG-38QB-0327	Construction	SGJV	SGJV	25-Feb- 14	0	3
511326-00000-SWSG-38QB-0328	Construction	SGJV	Keller Pile Driving	24-Apr- 14	0	2
511414-00000-SWGS-38QB-0329	Construction	SLCW- GST	Stasuk Testing & Inspection Ltd.	12-Mar- 14	0	1
511325-00000-SWSL-38QB-0030	Construction	EGRT	SLCW- GST	28-Mar- 14	0	1
511327-00000-SWSR-38QB-0331	Construction	SLCW- EG	SLCW- EG	7-Mar-14	0	0
511328-00000-SWSS-38QB-0332	Construction	SSJV	APS	20-Mar- 14	0	15
511326-00000-SWSG-38QB-0333	Construction	SGJV	SGJV	25-Apr- 14	0	3
511414-00000-SWGS-38QB-0334	Construction	SLCW- GST	AMEC	15-Apr- 14	0	0
511414-00000-SWGS-38QB-0335	Construction	SLCW- GST	Armtec	16-May- 14	0	1
511326-00000-SWSG-38QB-0336	Construction	SGJV	SGJV	19-Jun- 14	0	0
511327-00000-SWSR-38QB-0337	Construction	SLCW- EG	SLCW- EG	20-Jun- 14	0	1
511327-00000-SWSR-38QB-0338	Construction	SLCW- EG	SLCW- EG	26-Jun- 14	0	1
511325-00000-SWSL-38QB-0339	Construction	DBC	SLCW- GST	8-Jul-14	0	1
511414-00000-SWSW-38QB-0340	Construction	SLCW- SW	SLCW- SW	24-Jul-14	0	0

511414-00000-SWGS-38QB-0341	Construction	SLCW- GST	Surespan	12-Aug-	0	2
511327-00000-SWSR-38QB-0342	Construction	SLCW- EG	Harris-PT	31-Jul-14	0	0
511326-00000-SWSG-38QB-0343	Construction	SGJV	SGJV	12-Aug- 14	0	3
511414-00000-SWSG-38QB-0344	Construction	SLCW- GST	SLCW- GST	19-Aug- 14	0	0
511414-00000-SWSW-38QB-0345	Construction	SLCW- SW	Prime Engineeri ng	9-Oct-14	0	0
511327-00000-SWSR-38QB-0346	Construction	SLCW- EG	Metro Testing Ltd.	10-Oct- 14	1	3
511328-00000-SWSS-38QB-0347	Construction	SSJV	SSJV	23-Sept- 14	0	6
511414-00000-SWGS-38QB-0348	Construction	SLCW- GST	LMS Reinforci ng Steel Group	07-Oct- 14	0	2
511414-00000-SWGS-38QB-0349	Construction	SLCW- GST	SLCW- GST	15-Oct- 14	1	0
511328-00000-SWSS-38QB-0350	Construction	SSJV	SSJV	21-Oct- 14	0	3
511325-00000-SWSL-38QB-0351	Construction	DBC	SLCW- GST	7-Nov-14	0	1
511328-00000-SWSS-38QB-0352	Construction	SSJV	APS	6-Nov-14	0	8
511326-00000-SWSG-38QB-0353	Construction	SGJV	SGJV	7-Nov-14	0	0
511326-00000-SWSG-38QB-0354	Construction	SGJV	Harris Rebar	22-Oct- 14	0	1
511328-00000-SWSS-38QB-0355	Construction	SSJV	SSJV	4-Nov-14	0	8
511325-00000-SWSL-38QB-0356	Construction	DBC	SLCW- GST	28-Nov- 14	0	0
511414-00000-SWGS-38QB-0357	Construction	SLCW- GST	SLCW- GST	05-Dec- 14	0	0
511327-00000-SWSR-38QB-0358	Construction	SLCW- EG	SLCW- EG	20-Nov- 14	0	0
511328-00000-SWSS-38QB-0359	Construction	SSJV	SSJV	14-Nov- 14	0	5
511414-00000-SWGS-38QB-0360	Construction	SLCW- GST	SLCW- GST	28-Nov- 14	0	1
511414-00000-SWSW-38QB-0361	Construction	SLCW- SW	SLCW- SW	09-Dec- 14	0	1
511326-00000-SWSG-38QB-0362	Construction	SGJV	SGJV	12-Dec- 14	0	0
511414-00000-SWSW-38QB-0363	Construction	SLCW- SW	SLCW- SW	22-May- 15	0	1
511414-00000-SWSW-38QB-0364	Construction	SLCW- SW	WPE	22-May- 15	0	0
511414-00000-SWGS-38QB-0365	Construction	SLCW- GST	Western Archib	10-Feb- 15	0	2

511414-00000-SWGS-38QB-0366	Construction	SLCW- GST	Pattison Sign	18-Feb- 15	0	1
511327-00000-SWSR-38QB-0367	Construction	SLCW- EG	Group SLCW- EG	16-Feb- 15	0	0
511326-00000-SWSG-38QB-0368	Construction	SGJV	SGJV	5-Mar-15	0	0
511414-00000-SWGS-38QB-0369	Construction	DBC	SLCW- GST	16-Mar- 15	0	0
511414-00000-SWGS-38QB-0370	Construction	SLCW- GST	Acuren Group Inc	8-Apr-15	0	1
511414-00000-SWGS-38QB-0371	Construction	SLCW- GST	SLCW- GST	24-Apr- 15	0	0
511414-00000-SWGS-38QB-0372	Construction	SLCW- GST	Metro Testing Laborator ies	29-Apr- 15	0	0
511328-00000-SWSS-38QB-0373	Construction	SLCW- GST	SLCW- GST	5-May-15	0	0
511414-00000-SWGS-38QB-0374	Construction	SLCW- GST	Houle Electric	28-Aug- 15	0	2
511328-00000-SWSS-38QB-0375	Construction	SSJV	SSJV	22-Apr- 15	0	2
511327-00000-SWSR-38QB-0376	Construction	SLCW- EG	SLCW- EG	13-Jul-15	0	0
511325-00000-SWSL-38QB-0377	Construction	DBC	SLCW- GST	2-Jun-15	0	1
511414-00000-SWGS-38QB-0378	Construction	SLCW- GST	Flynn Canada Ltd	16-Jul-15	0	0
511414-00000-SWGS-38QB-0379	Construction	DBC	SLCW- GST	6-Aug-15	-	2
511414-00000-SWGS-38QB-0380	Construction	SLCW- GST	SLCW- GST	22-Dec- 15	0	2
511414-00000-SWGS-38QB-0381	Construction	SLCW- GST	SLCW- GST	29-Sep- 15	0	0
511414-00000-SWGS-38QB-0382	Construction	SLCW- GST	SLCW- GST	29-Sep- 15	0	0
511414-00000-SWSW-38QB-0383	Construction	SLCW- SW	WPE	4-Dec-15	-	-
511414-00000-SWSW-38QB-0384	Construction	SLCW- SW	Thales	27-Nov- 15	-	1
511414-00000-SWGS-38QB-0385	Construction	SLCW- GST	SLCW- GST	28-Jan-16	0	0
511414-00000-SWSW-38QB-0386	Construction	SLCW- SW	SLCW- SW	26-Jan-16	0	0
511414-00000-SWGS-38QB-0387	Construction	SLCW- GST	SLCW- GST	11-Feb- 16	0	0
511414-00000-SWGS-38QB-0388	Construction	SLCW- GST	SLCW- GST	16-Feb- 16	0	0
511414-00000-SWGS-38QB-0389	Construction	SLCW- GST	WPE	19-Feb- 16	0	2
511414-00000-SWSW-38QB-0390	Construction	DBC	SLCW- SW	26-Feb- 16	0	0

511328-00000-SWSS-38QB-0391	Construction	DBC	SSJV	3-Mar-16	0	0
511414-00000-SWGS-38QB-0392	Construction	SLCW- GST	SLCW- GST	17-Mar- 16	0	2
511414-00000-SWSW-38QB-0393	Construction	EGRT	SLCW- SW	16-Apr- 08	0	0
511325-00000-SWSL-38QB-0394	Construction	DBC	SLCW- GST	19-Apr- 16	0	0

ATTACHMENT G

Four Month Look Ahead Audit Schedule

DISCONTINUED See Section 8.2

Attachment H

Table 3 – Quality Audits

Audit Report Number	Discipline	Auditor	Auditee	Audit Date	NCR's Raised	OFI's Raised
511325-00000-SWSL-38QB-0001	Design	EGRT	SNC Lavalin	23-Apr- 13	0	1
511325-00000-SWSL-38QB-0002	Design	EGRT	SNC Lavalin	03-May- 13	0	0
511325-00000-SWSL-38QB-0003	Design	EGRT	IBT	11-Jun- 13	0	1
511325-00000-SWSL-38QB-0004	Design	EGRT	MMM	06-Jun- 13	0	0
511325-00000-SWSL-38QB-0005	Design	EGRT	EBA	04-Jun- 13	0	1
511325-00000-SWSL-38QB-0006	Design	EGRT	Fast+Epp	25-Jun- 13	1	0
511325-00000-SWSL-38QB-0007	Design	EGRT	Jacobs	18-Jun- 13	1	1
511325-00000-SWSL-38QB-0008	Design	EGRT	RJC	18-Jul-13	0	0
511325-00000-SWSL-38QB-0009	Design	EGRT	Francl Architect ure	23-Jul-13	0	1
511325-00000-SWSL-38QB-0010	Design	EGRT	Perkin + Will	14-Aug- 13	0	0
511325-00000-SWSL-38QB-0011	Design	EGRT	Dialogue	22-Aug- 13	0	0
511325-00000-SWSL-38QB-0012	Design	EGRT	AES	24-Sep- 13	0	0
511325-00000-SWSL-38QB-0013	Design	EGRT	SNC Lavalin	19-Dec- 13	0	2
511325-00000-SWSL-38QB-0014	Design	EGRT	SNC Lavalin	30-Jan-14	0	0
511325-00000-SWSL-38QB-0015	Design	EGRT	SNC Lavalin	10-Oct- 13	0	0
511325-00000-SWSL-38QB-0016	Design	EGRT	SNC Lavalin	06-Nov- 13	0	0
511325-00000-SWSL-38QB-0017	Design	EGRT	SNC Lavalin	25-Oct- 13	0	0
511325-00000-SWSL-38QB-0018	Design	EGRT	SNC Lavalin	27-Feb- 14	0	0
511325-00000-SWSL-38QB-0019	Design	EGRT	SNC Lavalin	25-Mar- 14	0	0
511325-00000-SWSL-38QB-0020	Design	EGRT	Jacobs	12-May- 15	0	0
511325-00000-SWSL-38QB-0021	Design	EGRT	MMM Group	23-Sept- 14	1	0
511325-00000-SWSL-38QB-0022	Design	EGRT	SNCL Electrical	27-Nov- 14	0	0
511325-00000-SWSL-38QB-0023	Design	EGRT	SNC Lavalin	6-Feb-15	2	1

511325-00000-SWSL-38QB-0025	Design	EGRT	SLCW- SW	5-Aug-15	-	1
511325-00000-SWSL-38QB-0026	Design	EGRT	SLCW- SW	2-Nov-15	0	0
511325-00000-SWSL-38QB-0101	Environment al	EGRT	EGRT	20-Aug- 13	0	4
511325-00000-SWSL-38QB-0102	Environment al	EGRT	SGJV	13-Sep- 13	1	14
511325-00000-SWSL-38QB-0103	Environment al	EGRT	SLCW- GST	03-Oct- 13	0	11
511325-00000-SWSL-38QB-0104	Environment al	EGRT	EGRT	25-Nov- 13	0	0
511325-00000-SWSL-38QB-0105	Environment al	EGRT	SLCW- GST	16-Jan-14	0	3
511325-00000-SWSL-38QB-0106	Environment al	EGRT	SGJV	04-Feb- 14	0	3
511325-00000-SWSL-38QB-0107	Environment al	EGRT	SLCW- EG	07-Feb- 14	0	4
511325-00000-SWSL-38QB-0108	Environment al	EGRT	SSJV	28-Feb- 14	0	10
511325-00000-SWSL-38QB-0109	Environment al	EGRT	EGRT	11-Apr- 14	0	1
511325-00000-SWSL-38QB-0110	Environment al	EGRT	SLCW- GST	6-May-14	0	2
511325-00000-SWSL-38QB-0111	Environment al	EGRT	SGJV	8-May-14	0	4
511325-00000-SWSL-38QB-0112	Environment al	EGRT	SSJV	24-Jun- 14	0	4
511325-00000-SWSL-38QB-0113	Environment al	EGRT	SLCW- EG	8-Sept-14	0	1
511325-00000-SWSL-38QB-0114	Environment al	EGRT	SLCW- GST	25-Sept- 14	2	2
511325-00000-SWSL-38QB-0115	Environment al	EGRT	SGJV	27-Oct- 14	2	2
511325-00000-SWSL-38QB-0116	Environment al	EGRT	SSJV	9-Jan-15	0	1
511325-00000-SWSL-38QB-0117	Environment al	EGRT	SLCW- GST	30-Jan-15	0	0
511325-00000-SWSL-38QB-0118	Environment al	EGRT	SGJV	6-Mar-15	0	0
511325-00000-SWSL-38QB-0119	Environment al	EGRT	SLCW- EG	30-Apr- 15	0	0
511325-00000-SWSL-38QB-0120	Environment al	EGRT	SLCW- GST	4-May-15	0	0
511325-00000-SWSL-38QB-0121	Environment al	EGRT	SSJV	26-Jun- 15	0	0
511325-00000-SWSL-38QB-0122	Environment al	EGRT	DBC	24-Aug- 15	-	-
511325-00000-SWSL-38QB-0123	Environment al	EGRT	SSJV	5-Nov-15	1	1
511325-00000-SWSL-38QB-0124	Environment al	EGRT	SLCW- GST- TFO	16-Apr- 08	1	3
511325-00000-SWSL-38QB-0201	Traffic	EGRT	SGJV	04-Jun- 13	0	2

511325-00000-SWSL-38QB-0202	Traffic	EGRT	SLCW- GST	09-Jul-13	0	1
511325-00000-SWSL-38QB-0203	Transit Facility	EGRT	SLCW- GST	25-Sep- 13	0	1
511325-00000-SWSL-38QB-0204	Traffic	EGRT	SLCW- GST	26-Sep- 13	0	2
511325-00000-SWSL-38QB-0205	Traffic	EGRT	SGJV	13-Nov- 13	2	1
511325-00000-SWSL-38QB-0206	Transit Facility	EGRT	SLCW- GST	22-Nov- 13	0	0
511325-00000-SWSL-38QB-0207	Transit Facility	EGRT	SLCW- GST	09-Jan-14	0	0
511325-00000-SWSL-38QB-0208	Traffic	EGRT	SLCW- GST	23-Jan-14	0	0
511325-00000-SWSL-38QB-0209	Transit Facility	EGRT	SLCW- GST	20-Feb- 14	0	0
511325-00000-SWSL-38QB-0210	Traffic	EGRT	SLCW- EG	12-Mar- 14	0	0
511325-00000-SWSL-38QB-0211	Traffic	EGRT	SLCW- EG	13-Jan-15	0	0
511325-00000-SWSL-38QB-0212	Traffic	EGRT	SSJV	15-Jan-15	0	0
511325-00000-SWSL-38QB-0213	Traffic	EGRT	SSJV	15-Dec- 15	1	0
511325-00000-SWSL-38QB-0214	Traffic	EGRT	SLCW- GST	23-Feb- 16	0	0
511326-00000-SWSG-38QB-0301	Construction	SGJV	SGJV	30-May- 13	0	3
511325-00000-SWSL-38QB-0302	Construction	EGRT	EGRT	13-Jun- 13	0	3
511327-00000-SWSR-38QB-0303	Construction	SLCW- EG	Armtec	14-Jun- 13	0	2
511414-00000-SWGS-38QB-0304	Construction	SLCW- GST	SLCW- GST	24-Jun- 13	0	3
511414-00000-SWGS-38QB-0305	Construction	SLCW- GST	SLCW- GST	23-Jul-13	0	2
511414-00000-SWGS-38QB-0306	Construction	SLCW- GST	Canron	28-Aug- 13	0	0
511326-00000-SWSG-38QB-0307	Construction	SGJV	SGJV	13-Aug- 13	0	2
511326-00000-SWSG-38QB-0308	Construction	SGJV	SGJV	15-Aug- 13	0	0
511326-00000-SWSG-38QB-0309	Construction	SGJV	Pedre	09-Aug- 13	0	6
511326-00000-SWSG-38QB-0310	Construction	SGJV	Armtec	27-Sep- 13	0	3
511414-00000-SWGS-38QB-0311	Construction	SLCW- GST	Metro Testing	03-Oct- 13	0	1
511326-00000-SWSG-38QB-0312	Construction	SGJV	SGJV	25-Oct- 13	0	1
511326-00000-SWSG-38QB-0313	Construction	SGJV	SGJV	14-Nov- 13	0	0
511328-00000-SWSS-38QB-0314	Construction	SSJV	SSJV	08-Nov- 13	1	3

511414-00000-SWGS-38QB-0315	Construction	SLCW- GST	SLCW- GST	03-Dec- 13	0	2
511414-00000-SWGS-38QB-0316	Construction	SLCW- GST	SLCW- GST	05-Dec- 13	0	0
511326-00000-SWSG-38QB-0317	Construction	SGJV	SGJV	21-Nov- 13	0	1
511327-00000-SWSR-38QB-0318	Construction	SLCW- EG	Harris PT	25-Nov- 13	0	4
511327-00000-SWSR-38QB-0319	Construction	SLCW- EG	SLCW- EG	28-Nov- 13	0	0
511326-00000-SWSG-38QB-0320	Construction	SGJV	SGJV	12-Dec- 13	0	0
511327-00000-SWSR-38QB-0321	Construction	SLCW- EG	SLCW- EG	13-Jan-14	0	0
511328-00000-SWSS-38QB-0322	Construction	SSJV	SSJV	06-Dec- 13	0	4
511326-00000-SWSG-38QB-0323	Construction	SGJV	SGJV	29-Jan-14	0	1
511326-00000-SWSG-38QB-0324	Construction	SGJV	AGI	4-Mar-14	0	3
511328-00000-SWSS-38QB-0325	Construction	SSJV	SSJV	21-Jan-14	0	3
511328-00000-SWSS-38QB-0326	Construction	SSJV	SSJV	28-Jan-14	0	1
511326-00000-SWSG-38QB-0327	Construction	SGJV	SGJV	25-Feb- 14	0	3
511326-00000-SWSG-38QB-0328	Construction	SGJV	Keller Pile Driving	24-Apr- 14	0	2
511414-00000-SWGS-38QB-0329	Construction	SLCW- GST	Stasuk Testing & Inspection Ltd.	12-Mar- 14	0	1
511325-00000-SWSL-38QB-0030	Construction	EGRT	SLCW- GST	28-Mar- 14	0	1
511327-00000-SWSR-38QB-0331	Construction	SLCW- EG	SLCW- EG	7-Mar-14	0	0
511328-00000-SWSS-38QB-0332	Construction	SSJV	APS	20-Mar- 14	0	15
511326-00000-SWSG-38QB-0333	Construction	SGJV	SGJV	25-Apr- 14	0	3
511414-00000-SWGS-38QB-0334	Construction	SLCW- GST	AMEC	15-Apr- 14	0	0
511414-00000-SWGS-38QB-0335	Construction	SLCW- GST	Armtec	16-May- 14	0	1
511326-00000-SWSG-38QB-0336	Construction	SGJV	SGJV	19-Jun- 14	0	0
511327-00000-SWSR-38QB-0337	Construction	SLCW- EG	SLCW- EG	20-Jun- 14	0	1
511327-00000-SWSR-38QB-0338	Construction	SLCW- EG	SLCW- EG	26-Jun- 14	0	1
511325-00000-SWSL-38QB-0339	Construction	DBC	SLCW- GST	8-Jul-14	0	1
511414-00000-SWSW-38QB-0340	Construction	SLCW- SW	SLCW- SW	24-Jul-14	0	0

511414-00000-SWGS-38QB-0341	Construction	SLCW- GST	Surespan	12-Aug- 14	0	2
511327-00000-SWSR-38QB-0342	Construction	SLCW- EG	Harris-PT	31-Jul-14	0	0
511326-00000-SWSG-38QB-0343	Construction	SGJV	SGJV	12-Aug- 14	0	3
511414-00000-SWSG-38QB-0344	Construction	SLCW- GST	SLCW- GST	19-Aug- 14	0	0
511414-00000-SWSW-38QB-0345	Construction	SLCW- SW	Prime Engineeri ng	9-Oct-14	0	0
511327-00000-SWSR-38QB-0346	Construction	SLCW- EG	Metro Testing Ltd.	10-Oct- 14	1	3
511328-00000-SWSS-38QB-0347	Construction	SSJV	SSJV	23-Sept- 14	0	6
511414-00000-SWGS-38QB-0348	Construction	SLCW- GST	LMS Reinforci ng Steel Group	07-Oct- 14	0	2
511414-00000-SWGS-38QB-0349	Construction	SLCW- GST	SLCW- GST	15-Oct- 14	1	0
511328-00000-SWSS-38QB-0350	Construction	SSJV	SSJV	21-Oct- 14	0	3
511325-00000-SWSL-38QB-0351	Construction	DBC	SLCW- GST	7-Nov-14	0	1
511328-00000-SWSS-38QB-0352	Construction	SSJV	APS	6-Nov-14	0	8
511326-00000-SWSG-38QB-0353	Construction	SGJV	SGJV	7-Nov-14	0	0
511326-00000-SWSG-38QB-0354	Construction	SGJV	Harris Rebar	22-Oct- 14	0	1
511328-00000-SWSS-38QB-0355	Construction	SSJV	SSJV	4-Nov-14	0	8
511325-00000-SWSL-38QB-0356	Construction	DBC	SLCW- GST	28-Nov- 14	0	0
511414-00000-SWGS-38QB-0357	Construction	SLCW- GST	SLCW- GST	05-Dec- 14	0	0
511327-00000-SWSR-38QB-0358	Construction	SLCW- EG	SLCW- EG	20-Nov- 14	0	0
511328-00000-SWSS-38QB-0359	Construction	SSJV	SSJV	14-Nov- 14	0	5
511414-00000-SWGS-38QB-0360	Construction	SLCW- GST	SLCW- GST	28-Nov- 14	0	1
511414-00000-SWSW-38QB-0361	Construction	SLCW- SW	SLCW- SW	09-Dec- 14	0	1
511326-00000-SWSG-38QB-0362	Construction	SGJV	SGJV	12-Dec- 14	0	0
511414-00000-SWSW-38QB-0363	Construction	SLCW- SW	SLCW- SW	22-May- 15	0	1
511414-00000-SWSW-38QB-0364	Construction	SLCW- SW	WPE	22-May- 15	0	0
511414-00000-SWGS-38QB-0365	Construction	SLCW- GST	Western Archib	10-Feb- 15	0	2

511414-00000-SWGS-38QB-0366	Construction	SLCW- GST	Pattison Sign	18-Feb- 15	0	1
511327-00000-SWSR-38QB-0367	Construction	SLCW- EG	Group SLCW- EG	16-Feb- 15	0	0
511326-00000-SWSG-38QB-0368	Construction	SGJV	SGJV	5-Mar-15	0	0
511414-00000-SWGS-38QB-0369	Construction	DBC	SLCW- GST	16-Mar- 15	0	0
511414-00000-SWGS-38QB-0370	Construction	SLCW- GST	Acuren Group Inc	8-Apr-15	0	1
511414-00000-SWGS-38QB-0371	Construction	SLCW- GST	SLCW- GST	24-Apr- 15	0	0
511414-00000-SWGS-38QB-0372	Construction	SLCW- GST	Metro Testing Laborator ies	29-Apr- 15	0	0
511328-00000-SWSS-38QB-0373	Construction	SLCW- GST	SLCW- GST	5-May-15	0	0
511414-00000-SWGS-38QB-0374	Construction	SLCW- GST	Houle Electric	28-Aug- 15	0	2
511328-00000-SWSS-38QB-0375	Construction	SSJV	SSJV	22-Apr- 15	0	2
511327-00000-SWSR-38QB-0376	Construction	SLCW- EG	SLCW- EG	13-Jul-15	0	0
511325-00000-SWSL-38QB-0377	Construction	DBC	SLCW- GST	2-Jun-15	0	1
511414-00000-SWGS-38QB-0378	Construction	SLCW- GST	Flynn Canada Ltd	16-Jul-15	0	0
511414-00000-SWGS-38QB-0379	Construction	DBC	SLCW- GST	6-Aug-15	-	2
511414-00000-SWGS-38QB-0380	Construction	SLCW- GST	SLCW- GST	22-Dec- 15	0	2
511414-00000-SWGS-38QB-0381	Construction	SLCW- GST	SLCW- GST	29-Sep- 15	0	0
511414-00000-SWGS-38QB-0382	Construction	SLCW- GST	SLCW- GST	29-Sep- 15	0	0
511414-00000-SWSW-38QB-0383	Construction	SLCW- SW	WPE	4-Dec-15	-	-
511414-00000-SWSW-38QB-0384	Construction	SLCW- SW	Thales	27-Nov- 15	-	1
511414-00000-SWGS-38QB-0385	Construction	SLCW- GST	SLCW- GST	28-Jan-16	0	0
511414-00000-SWSW-38QB-0386	Construction	SLCW- SW	SLCW- SW	26-Jan-16	0	0
511414-00000-SWGS-38QB-0387	Construction	SLCW- GST	SLCW- GST	11-Feb- 16	0	0
511414-00000-SWGS-38QB-0388	Construction	SLCW- GST	SLCW- GST	16-Feb- 16	0	0
511414-00000-SWGS-38QB-0389	Construction	SLCW- GST	WPE	19-Feb- 16	0	2
511414-00000-SWSW-38QB-0390	Construction	DBC	SLCW- SW	26-Feb- 16	0	0

511328-00000-SWSS-38QB-0391	Construction	DBC	SSJV	3-Mar-16	0	0
511414-00000-SWGS-38QB-0392	Construction	SLCW- GST	SLCW- GST	17-Mar- 16	0	2
511414-00000-SWSW-38QB-0393	Construction	EGRT	SLCW- SW	16-Apr- 08	0	0
511325-00000-SWSL-38QB-0394	Construction	DBC	SLCW- GST	19-Apr- 16	0	0



EVERGREEN LINE RAPID TRANSIT PROJECT

MONTH END REPORT AUGUST 2016

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Document No.	511325-00000-SWSL-30RM	1-0044	Revision:	0
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DISCLAIMER NOTE:

Nothing in this report constitutes a formal notice of claim by the Primary Contractor under its Agreement with the Province, including without limitation notice of claim arising from Supervening Event or Province Change.



1.0 PROGRESS OVERVIEW

This report covers project progress for the month of August 2016 (Payment Period 44). Design and construction progress is summarized below:

Project Summary:

Scope: 11 km of guideway, 6 new stations, 1 expanded station, 1 tunnel

Owner: Province of British Columbia / Translink

Physical Progress:

With the exception of the tunnel, all other areas of the project reached substantial completion by 29 February 2016 in accordance with the original schedule.

Overall 99% complete; working on 8 fronts; 44 months into the 46 month construction schedule.

Manpower: approximately 175 management and 525 craft labour.

Design

Overall design is 100% complete

Construction

- Segment 1: Testing & Commissioning near completion
- Segment 2: Mainline Track, LIM and Power Rail now 100% Complete
- Segment 3: Testing & Commissioning Continues
- Segment 4: Testing & Commissioning Continues
- Segment 5: Testing & Commissioning Continues
- Stations: All stations are complete, only deficiencies remain.

1.1 SUMMARY OF ISSUES

Overall Schedule: an overall schedule update was conducted in April 2016 and results in a Substantial Completion date of 31 October 2016. This represents an 8 month extension from the baseline schedule. These 8 months are attributed as follows:

- 9 months for delays to tunnel excavation
- 1 month gain for tunnel finishes



The new Substantial Completion date of 31 October 2016 is 3 months later than the Substantial Completion Target Date in the Project Agreement. EGRT continues to assess the schedule and will mitigate impacts to the fullest extent possible.

The month of August 2016 showed good progress in tunnel finishes and gains in schedule were maintained.



2.0 DESIGN AND CONSTRUCTION - PROGRESS AGAINST PROJECT SCHEDULE

2.1 SUMMARY OF CONSTRUCTION EVENTS – BY SEGMENT

Segment	Name	Total	Previous to Date	Progress This Month	Total to Date
1	Caissons	64	64	Complete	64
	Columns	63	63	Complete	63
	Spans	57	57	Complete	57
	Trackwork Installed	4524	4524	Complete	4524
	Walkways Installed	4683	4683	Complete	4683
	LIM Rail Installed	4524	4524	Complete	4524
	Power Rail Installed	4524	4524	Complete	4524
2	Meters of Tunnel Excavation	1944	1944	Complete	1944
	Infill Material Placed	23477	23477	Complete	23477
	Concrete Slab Poured	4127	4127	Complete	4127
	Trackwork Installed	5540	5540	Complete	5540
	Walkways Installed	5540	4891	372	5263
	LIM Rail Installed	5540	4134	1406	5540
	Power Rail Installed	5540	3285	2255	5540
3	Number of SMX Columns	1826	1826	Complete	1826
	Meters of Track Slab	3725	3725	Complete	3725
	Trackwork Installed	3964	3964	Complete	3964
	Walkways Installed	3964	3964	Complete	3964
	LIM Rail Installed	3964	3964	Complete	3964
	Power Rail Installed	3964	3964	Complete	3964
4	Number of Timber Piles	6345	6345	Complete	6345
	Meters of Track Slab	2112	2112	Complete	2112
	Trackwork Installed	5282	5282	Complete	5282
	Walkways Installed	5282	5282	Complete	5282
	LIM Rail Installed	5282	5282	Complete	5282
	Power Rail Installed	5282	5282	Complete	5282
5	Piles/Caissons	73	73	Complete	73
	Columns	73	73	Complete	73
	Spans	52	52	Complete	52
	Trackwork Installed	3315	3315	Complete	3315
	Walkways Installed	3315	3315	Complete	3315
	LIM Rail Installed	3315	3315	Complete	3315
	Power Rail Installed	3315	3315	Complete	3315

Month End Report - August 2016



Segment	PPS Name	Total (%)	Previous to Date	Progress This Month	Total to Date
1	LHZ	100	100	Complete	100
	BQZ	100	100	Complete	100
3	NPZ	100	100	Complete	100
4	FCZ	100	100	Complete	100
5	LAZ	100	100	Complete	100
Segment	Station Name	Total (%)	Previous to Date	Progress This Month	Total to Date
1	Lougheed Station	100	100	Complete	100
	Burquitlam Station	100	100	Complete	100
3	Port Moody Station	100	100	Complete	100
4	Inlet Centre Station	100	100	Complete	100
5	Coquitlam Central Station	100	100	Complete	100
	Lincoln Station	100	100	Complete	100
	Douglas/Lafarge Station	100	100	Complete	100

2.2 MAJOR PROJECT MILESTONES

The schedule progress occurring for the period from July 25th to August 25th has a revised Anticipated Substantial Completion date of October 31st, 2016 from the past months progress.

Milestone	Dec 12, 2012 Baseline	Aug 25, 2016 Progress Update	(Business Days)
Substantial Completion Target	29-Jul-16	31-Oct-16	-63
Service Commencement Target	30-Aug-16	30-Nov-16	-63
Total Completion Target	31-Oct-16	31-Jan-17	-62
Availability Demonstration Completion Target	30-Aug-17	29-Nov-17	n/a
TIDS Performance Demonstration Completion Target	30-Aug-17	29-Nov-17	n/a

2.3 PROJECT-WIDE

2.3.1 Design

Design is substantially complete. Design progress can be seen under the Design and Engineering Section of the ELRT Project Schedule Update (DD.25AUG2016).



2.3.2 Changes to the EGRT Project Schedule

No major changes were made to the project schedule.

2.3.3 Activity Changes

No major activity changes were made to the project schedule.

2.3.4 Logic Changes

No major changes were made to the project schedule.

2.3.5 Critical Path

The critical path is determined by activities that have 14 or less days of float. The critical path continues to pass through the tunnel activities.

The critical path is as follows: center walkway, and system-wide cabling before the start of testing and commissioning in Test Zone 2.

To date, the tunnel fit out activities are substantially completed excluding the center walkway lids, and the installation of the cross passage doors. These completed activities, reflected in the lastest Progress Update Schedule, are: design and approvals for the north tunnel approach, utility relocations, construction of the north tunnel approach, TBM pit and assembly of the TBM, Tunnel Boring, TBM Breakthrough, demob of the TBM at the south portal, Tunnel Infill, the South Portal Invert Slab, the tunnel track slab, tunnel center fire wall, inbound and outbound mainline track, power rail, and LIM rail.

2.3.6 Schedule Impacts

Test Zone 2 has been impacted due to the delay of the tunnel breakthrough which occurred on November 27th, 2015. The tunnel fit out works are substantially complete. Tunnel systems installation is scheduled to be completed by early September. The remaining works will be monitored closely and tracked against the currently shown project completion date of October 31st, 2016.

Other activities discussed in this report are monitored for potential impact or delays due to the overall EGRT Project Schedule.

2.4 PASSENGER STATIONS

All seven of the stations on the Evergreen Line are substantially completed.

2.5 OTHER FIXED FACILITIES

All five of the Propolsion Power Stations and the VSF Yard on the Evergreen Line are substantially completed.



2.6 ALIGNMENT

2.6.1 Segment 1 – Elevated Guideway / Lougheed Special Structure / South Portal Approach

Segment 1 is substantially completed.

2.6.2 Segment 2 – South Portal / Bored Tunnel / North Portal

Area	Design / Construction / Procurement
Segment Wide	
Sec 210 Cut and Cover South Portal	 Formed and poured portal chamfers. Installed south portal sump pump, line, heat trace, and insulation. Placed precast lids. Placed exterior waterproofing. Backfilled roof.
Sec 220 TBM Tunnel	 Completed outbound installation of LIM rail. Completed outbound installation of power rail. Completed installation of cross passage doors. Commenced with precast lid installation.
Sec 230 Cut and Cover Tunnel North	 Formed and poured portal roof. Formed and poured portal chamfers. Placed precast lids. Placed exterior waterproofing. Placed remaining power rail. Commenced with north portal restoration works.

2.6.3 Segment 3 – Reichhold Special Structure / At-Grade Guideway

Segment 3 is substantially completed.

2.6.4 Segment 4 – At-Grade Guideway / CPR / Fortis Bridge / Aberdeen and Coquitlam

Segment 4 is substantially completed.

2.6.5 Segment 5 – Elevated Guideway / Coquitlam Station / Pinetree / CIP / Lafarge Douglas Station – Special Structures

Segment 5 is substantially completed.



2.7 TRACKWORK

2.7.1 Special Trackwork:

Special Trackwork is substantially completed.

2.7.2 Mainline Trackwork:

Mainline Trackwork is substantially completed.

2.7.3 LIM Rail

LIM rail installation is substantially completed.

2.7.4 Power Rail

Power rail installation is substantially completed. Coverboard delivery and installation for segment 3 due to the province change is schedule to be completed by mid September.

2.7.5 Walkway

Precast walkway lids are scheduled to be completed by August 31st in the tunnel.

2.8 SYSTEMS

2.8.1 Systems General

2.8.1.1 Subsystem Design

The FDR process is complete with outstanding SFDR action items being addressed.

2.8.1.2 Installation Design

The installation design is substantially completed.

2.8.1.3 Interface Design

VSF Interface design: Thales has been provided with the details of an interface issue with respect to the buffer stops and working to implement a software change to address this in September.

Tunnel Interface design: Weekly coordination meetings are being fully supported by SLCW-SW. A South portal drainage sump has been incorporated. Electrical designs are nearly complete.



2.8.1.4 Contractual Plan Submissions

A list of required plans and managerial documents are required in Appendix G of the Project Agreement (Systems General Requirements), and the DBC hosts a monthly meeting to coordinate the delivery of this documentation. The progress of these plans is updated monthly and issued to the Client by the DBC.

2.8.2 Power Supply and Distribution

PS&D FDR Packages have all been submitted to the Client.

2.8.3 Signalling / ATC

The signalling/ATC design process is substantially complete.

2.8.4 Communications, SCADA, FLSS and WMS

All FDR submissions are complete.

Design Packages planned for Province Review in September 2016:

Reichhold Alarm Tie-in

2.8.5 Tunnel Ventilation Systems and Stand Pipe System

The Tunnel Ventilation SFDR process is complete.

2.8.6 Design for BC Hydro Related Works

All BC Hydro Related Works are complete.

2.8.7 Testing and Commissioning Planning and Procedures

The Systems Test Plan defined the Systems Integration Board. The Board is a joint Systems, T&C, and TransLink task group which will review test plans and schedules, and coordinate cutovers and configuration changes. This group commenced meetings in January 2015.

The Systems Cutover Plan has been updated in response to Client questions, and detailed planning of the cutover process will continue via the FMI log, which tracks configuration changes, and the T&C & Cutover schedule.

2.8.8 Systems Procurement

The following packages were issued out for tender/pricing in August:

N/A



2.8.8.1 Subcontract and Supply Contract Awards

The following equipment were issued out for award in August:

SP9000-05 EMC Compatibility Survey

2.8.8.2 Supplier Design

NA

2.8.8.3 Equipment Deliveries

The following equipment was received at the warehouse in August:

No major equipment.

2.8.9 Warranty and Training

Warranty summary is currently being compiled for submission to the Province next month.

Training dates have been confirmed with the Province. Clarification of warranty requirements requested is being reviewed.

2.8.10 Spare Parts

EGRT has has received the PO from BCRTC for the required non-long-lead and long lead recommended spare parts. The respective Change Orders are being issued. In addition procurement has received Change Orders Requisitions and will be preparing the requisite Change Orders. EGRT is still awaiting another PO for the outstanding non long lead items that was not included in their original PO.

2.8.11 Construction

Tunnel Intrusion Monitoring System components have been received and installation is underway at North and South Portals. The PLC Cabinet delivery is expected in mid-September to enable completion within BQZ.

Tunnel Lighting, receptacle and power distribution in the Tunnel were energized in August. Tunnel ventilation systems at NPZ and BQZ have successfully passed SAT.



Automatic Train control Loop cables were installed in the tunnel and interfaces to Segments 1 and 3. PICO for cabling will be expedited to THALES in the first week of September. PICO for the remaining switch machines was received on August 24th.

Fibre optic cabling for underground radio and CCTV systems were installed and tested in August. Underground radio radiating coaxial cables were installed and pre-tested in preparation for Sept 1st start of Site acceptance testing (SAT).

Heritage Mountain Monitor-Receiver site equipment was installed and PICOed in August. Corresponding equipment installed in Moody Centre station was prepared for early-September SAT.

Systemwide Mainline deficiency resolution continued during non-test windows. Disconnect switch exterior touch-up paint deficiencies, track switch heater junction box elevation and were completed August. Track switch heating element replacement (4), several signage modifications and switch machine heater cable waterproofing will conclude in September.

Station crews continued on minor added scope clean-up items. The Inlet Centre Station West SEEIP clear screen was replaced due to a blemish that was noted. Brackets for Burquitlam station platform speakers were added.

WPE's heightened attention to removal and storage of cable end waste seems to have reduced trespassing.

2.9 TESTING AND COMMISSIONING

2.9.1 Progress Overview

ATC - Since the July report, the Mini Trial Run was conducted on August 2, 3 and 4. The three days of automatic train operation from Lafarge to Moody on scheduled runs provided an opportunity to operate the 2 MKII and single MKI married pairs in automatic mode with the TIDS activated.

At the end of August, the following activities were accomplished

VCC4

- No activities other than LIM stud painting and other deficiencies
- VCC5
 - No activities other than train jacking, stud painting and other deficiencies
 - Waiting for final VCC release to correct the following restrictions:
 - Speed limits through switches 221 & 226 are incorrect and have been speed limited by Go-Slow Zones



- The length of track 915 beyond switch 223 is uncertain and automatic trains could contact the bump stop
- Positional uncertainty around switch 216 requires closing of track 658 until the train is confirmed clear of the switch

VCC6

- Train coupling and uncoupling retests
- Waiting for final VCC release to correct the following restriction:
 - The bump stops at the ends of VS6 & VS7 are located incorrectly and rather than extend the rail to slide the stops back, the positioning will be corrected in the VCC software

PS&D - Wayside equipment SAT testing in the tunnel was the primary focus of PS&D testing. The Power Rail through Test Zone 1 and 2 was connected and will be segregated through the disconnects at the Burquitlam crossover

Communications – Closing deficiencies for FLSS and WMS was the primary focus of the T&C activities in August. Above and below ground radio testing/installation including Heritage Mountain was the secondary focus

TIDS/TIMS – TIDS were monitored from the head end equipment located at BQS during the Mini Trial Run. A problem with the Thales SCS self test function would leave tracks equipped with a PESB closed. It was determined that Thales will have to correct this issue which is not related To TIMS

TVS – SAT testing in progress

2.9.2 Submissions

The following submissions were made during August;

- Travel Time Demonstration rev. 1 was approved
- Test Zone Transition Plan rev. 2 was approved
- Availability Demonstration rev. 0 was approved

2.9.3 Beneficial Occupancy

In addition to areas reported previously, T&C took Beneficial Occupancy of:

Switch machines 204 and 205



2.9.4 Summary of Issues This Month

- Shortage of 3 reprogrammed Thales FPGA cards for VCC 6 has been temporarily resolved by modifying 3 additional FPGA cards – on-going until final version FPGA cards are installed
- Above ground radio testing is on-going while deficiencies are rectified. Once the below ground radio system is ready to be integrated, then the radio system optimization can commence. The Heritage Mountain repeater installation was completed with SAT testing in progress
- BCRTC has not yet installed Evergreen VOBC firmware (3.05 or 3.08) into the entire fleet of MKII trains

2.9.5 Changes Since Last Month

- Test Zone 1 Complete
- Test Zone 2 Completion is moved to end of September
- Test Zone 3 Complete
- Test Zone 4 Complete
- Test Zone 5 (VSF) Complete
- All communication testing (except tunnel related) Deficiency work in progress
- All PS&D testing completed (except tunnel related)
- Trial Running is now scheduled to commence October 16
- Delivery of final version of VCC has slipped from mid-August to mid-September

2.10 CONCLUSION

Our current EGRT Project Schedule is based on the best information available and our current plan for construction. Changes to the final construction plans and methods, and their respective schedules, sequences and durations are expected as work progresses on all fronts. Any future changes or revisions to the schedule will be detailed in this narrative.



3.0 ENVIRONMENTAL MANAGEMENT

3.1 PERMITTING STATUS

No permitting activities (for new Permits) occurred during this reporting period. The status of all permits acquired to date is summarized in Attachment F.

3.2 ENVIRONMENTAL MANAGEMENT SUMMARY

EGRT's Environmental Manager continued to conduct routine environmental management activities including but not limited to: advising on environmental planning and implementation issues, preparing environmental submittals and deliverables, participating in environmental quality activities, and overseeing the Environmental Inspectors (EIs).

Construction of Habitat Compensation at Schoolhouse Creek

EGRT's Subcontractor continued constructing habitat compensation works during this reporting period. The DFO Authorization for the Project requires that instream works be completed during the least-risk fisheries window (Aug. 1st to September 30th of any given year) of any particular year. Channel reconstruction is being completed in three phases. Phase 1 and most of Phase 2 were complete by the end of August. Phase 2 and Phase 3 will be completed by end of September. Planting of the riparian zone will follow the end of channel reconstruction.

Remaining Environmental Obligations

Going forward, the following environmental requirements remain to be completed on the Project:

- Environmental Inspection: environmental inspection of construction will continue until
 construction of the Schoolhouse Creek habitat compensation is completed, with
 related reporting to the Province and to applicable regulatory agencies once every
 two weeks. Assuming concurrence from the Province and applicable regulatory
 agencies, environmental inspection on the Project should conclude in October 2016.
- Completion of general site restoration and planting of "replacement trees" as required by PTOC item #52: Landscaping along Clarke Street (including tree replacement) has been completed but additional landscaping elsewhere on the Project remains to be done and will be completed in the fall of 2016.
- "Trend" water quality monitoring (as required by PTOC items #42 and #43): EGRT has periodically assessed water quality sampling in watercourses potentially affected by construction. Samples have been tested for metals, hydrocarbons, Volatile Organic Compounds (VOCs), turbidity, suspended solids, pH, dissolved oxygen, conductivity and water temperature. The monitoring program has so far included a round of "baseline" water quality monitoring (conducted during the earliest stages of construction to capture the pre-project condition), followed by two rounds of "during construction" water quality sampling. To complete the program, EGRT conducted a final round of sampling in June 2016 to assess the "post-construction" condition at all



watercourses except Schoolhouse Creek where construction of habitat compensation is underway. EGRT will prepare and submit to the Province a brief summary of the monitoring program results, identifying potential Project-induced water quality effects (if any such effects can be identified). This report is planned to be submitted to the Province in October 2016, after the end of habitat compensation construction at Schoolhouse Creek.

- Close-out of environmental permits including the DFO Authorization (see Appendix F for permit expiry dates): A "close-out" permit tracking matrix is being used to document the close-out status of all key environmental permits. The Permit close-out tracking document will be attached to the Environmental Final Completion Report (see bullet below).
- Preparation of an Environmental Final Completion Report as required by PA, Schedule 5, Subsection 3.8: The PA indicates this report is to follow Substantial Completion. Further discussion with the Province occurred during this reporting period to determine the contents, format and submission date of this report.
- Annual Certificate of Compliance with Environmental Laws: One additional and final Certificate of Compliance will be required, covering the period December 11th, 2015 to December 10th, 2016. This final Certificate of Compliance would be submitted to the Province in December 2016.
- Continuation of the monthly environmental management report (i.e., in the form of this
 environmental management section of EGRT's monthly progress report): Further
 discussion with the Province is required to determine when this monthly
 environmental reporting would end.
- Preparation of a detailed post-construction monitoring and assessment report documenting site-specific landscaping and restoration measures implemented during construction, as required by PTOC #50: This report is required one year after contract completion. Further discussion with the Province is needed to determine exactly when this report would be submitted to the Province.
- Monitoring and annual reporting of the performance of constructed compensatory habitats: The DFO Authorization requires this monitoring to continue until the end of 2019 with a final annual monitoring report submitted to the Province and to applicable agencies in January 2020.

3.3 ENVIRONMENTAL SUBMITTALS TO PROVINCE

Submittals to the Province during this reporting period:

Biweekly Environmental Inspection Report (BEIR) Nos. 154, 155 and 156.

3.4 AMENDMENT TO ENVIRONMENTAL ASSESSMENT CERTIFICATE

No changes in design or construction occurred during this reporting period that warranted consideration of an amendment to the Project's Environmental Assessment Certificate (T10-01).



3.5 ENVIRONMENTAL REVIEW OF DESIGN

Environmental design and environmental review of non-environmental design are complete.

3.6 ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION

During the previous reporting period, EGRT completed the decommissioning and removal of the Waste Water Treatment Plan that had been in place at the North Portal tunnel support yard. Treated water had been discharged to Metro Vancouver's sanitary system under Metro Vancouver Waste Discharge Permit No. SC-100914-FSA. EGRT wrote at letter to Metro Vancouver (dated July 27, 2016) to confirm that discharge to the Metro Vancouver sanitary system had ceased and to ask Metro Vancouver to cancel the Permit. During this reporting periond, on August 24, Metro Vancouver issued EGRT with a letter that officially cancelled the Permit.

The Permit is now considered to be closed out.

3.7 ENVIRONMENTAL INCIDENTS

No environmental incidents occurred during this reporting period.

3.8 ENVIRONMENTAL INSPECTION

Bi-Weekly Environmental Inspection Report (BEIR) Nos. 154 and 155 were submitted to the Province "for Information" during this reporting period. BEIR No. 156 (covering the period Aug 15-28 inclusive) was in final draft at the end of this reporting period and has been considered in preparing this report.

As reported by EGRT's Environmental Inspectors, construction generally complied with Project environmental requirements during this reporting period.

See Table below. One issue (#242) remained open at the end of the previous reporting period and was carried over into this reporting period. The issue had still not been resolved by the end of August and remains open at end of this reporting period. Three new issues (#245, #246 and #247) were opened during this reporting period. One of the issues (#247) was closed by the end of this reporting period. Two of the new issues (#245, #246) remain open at the end of this reporting period.

Altogether, three issues (#242, #245 and #246) remain open at the end of this reporting period.



Table: Environmental Inspection Issue Tracking Summary

Issue No.	Date Opened	Description	Status at Aug 31/16
242	July 5/16	Hydrocarbon staining on soil/gravel at South Portal. Clean-up was not yet completed at end of this reporting period.	Open
245	Aug 9/16	Hydrocarbon staining at the North Portal tunnel support yard. Clean-up was not yet completed at end of this reporting period.	Open
246	Aug 9/16	Deficient housekeeping at South Portal (crew garbage strewn around the site). The garbage had not yet been cleaned up at end of this reporting period.	Open
247	Aug 15/16	Construction induced elevated turbidity was observed in Schoolhouse Creek, caused by the overnight failure of a pump that was being used to dewater the instream habitat compensation work site. An effective creek diversion system was quickly re-established thus ending the period of elevated turbidity (which lasted approximately 4 hours).	Closed

3.9 COMPLIANCE SUMMARY

No significant environmental compliance issues occurred during this reporting period.



4.0 COMMUNICATIONS AND COMMUNITY RELATIONS

No community meetings and/or Business Liaison Committee meetings were held in August 2016.

As the project nears completion, no additional Business Liaison Committee (BLC) meetings are scheduled. Should there be any BLC or community meetings, the EGRT Construction communications team will support the Province and attend as required.

4.1 TRAFFIC MANAGEMENT COMMUNICATIONS

The EGRT Construction communications team prepared and distributed the following Construction and Traffic Bulletin in August 2016:

- Landscaping Restoration Clarke Street Area UPDATED August 8
 - This notice was distributed to businesses and residents on Clarke Street closest to the Queens Street Plaza.

Please note that this updated notice was also posted on the egrtconstruction.ca website.

EGRT Construction did not issue any Community Notices in August 2016.

No Traffic Alerts were distributed by EGRT Construction in August 2016.

4.2 PUBLIC CONSULTATION

No public consultation is required by the Province of BC.

4.3 MEDIA RELATIONS

All media inquiries, including inquiries from traffic reporters, will continue to be referred to the Province for first comment. EGRT Construction will only answer routine traffic questions and only when queries have been referred to the EGRT Construction Communications Manager directly by the Province.

EGRT Construction was asked to provide the completion date (end of June) for the installation of the rail within the tunnel for SandHouse (a local rail fan publication) on August 12.

EGRT Construction was approached by the Canadian Wood Council and Wood *WORKS!* BC to provide information on the use of wood in the Evergreen Line station designs. Technical sheets outlining wood use for the six new stations were sent August 22 and the Evergreen Line be nominated in the Canadian Wood Council's Wood Design Awards this year. Nominations will be opening sometime in December.



5.0 FIRST NATION ENGAGEMENT

5.1 PERFORMANCE OVERVIEW BY SUB-CONTRACTOR

NATION	Procurement Target	Opportunities to Date	Awarded to Date	Awarded this Period
	(\$/project)	(est. \$ value)		
Tsleil Waututh	s.16,s.17			
Musqueam	_			
Kwikwetlem				
OTHER	-			
]

NATION	Employment Target	Employment to Date	Employment this Period	Total Active Employees
	(hrs/project)	(hrs)	(hrs)	(qty)
Tsleil Waututh	s.16,s.17			
Musqueam				
Kwikwetlem				
OTHER				

¹ Employment This Period and Awarded This Period updated quarterly.

All First Nations procurement targets have been exceeded.

Employment targets for Musqueam have been exceeded, and targets for Tsleil Waututh continue to be pursued. Labour availability from Tsleil Waututh is limited.



5.2 BID REPORT – PROCUREMENT OPPORTUNITIES & AWARDS DETAILED

Package Number/Title/PO	Bid Close Date	Company Name (Bidder)	Affiliated First Nation	Awarded Contract (Actual)	Procurement Opportunity (Est. Value)	Status
SGJV PROCUREMENT						
Supply/Install Piles (Pinetree)	22/Nov/13	s.16,s.17				
Soil Removal (various PO's)	1/Oct/13					
Supply/Install Piles (CPR)	18/Sep/13					
Supply/Install Piles (Reichhold)	5/Mar/13					
Supply/Install Caissons	29/Apr/13					
Clearing, Grubbing & Access Road (511326-C-002)	1/Mar/13					
Supply/Install Timber Piles	13/Dec/13					
Supply/Install Landscaping & Irrigation Seg 1	4/Jun/14					
Supply/Install Landscaping & Irrigation Seg 1	4/Jun/14					
Supply/Install Timber Piles	22/Nov/13					
Supply/Install Timber Piles	18/Sep/13					
Supply/Install Timber Piles	3/May/13	•				
Supply/Install Timber Piles	13/Dec/13					
Supply/Install Landscaping & Irrigation Seg 1	4/Jun/14					
SSJV PROCUREMENT						
Water Treatment Plant	1/Sep/13					
Tunnel Spoils Mgmt & Removal	27/Jun/13					
Water Treatment Plant	1/Sep/13					
Tunnel Spoils Mgmt & Removal	27/Jun/13					

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SLCW-EG PROCUREMENT	T			
Traffic Signs-Part 1	ongoing	s.16,s.17		
Traffic Signs-Part 2	ongoing			
Site Security (3 mo. Trial)	ongoing			
Site Security (15 mo.)	ongoing			
Site Security (15 mo.)	ongoing			
Traffic Management (3 mo. Trial)	ongoing			
Traffic Management (15 mo.)	ongoing			
Crane Services for Truss	19/Aug/13			
Assembly				
Trailer rental (ongoing) Trailer Rental-New Office	ongoing			
	ongoing			
Traffic Management (15 mo.) Trailer Relocation	ongoing			
Traffic Management	ongoing			
Traffic Management	ongoing			
Trailer rental (ongoing)	ongoing ongoing			
Trailer rental (ongoing)	ongoing			
Trailer rental (ongoing)	ongoing			
Trailer Terriar (originity)	origonig			
Elec. Services	ongoing			
Elec. Services	ongoing			

02011 001 111	JOOI (EIII)	
GC009- Stn Elec. Work	1/Oct/13	s.16,s.17
Office Trailer Rentals(0000143)	ongoing	•
Lougheed Stn Demo	31/May/13	•
GC003- Piles & Caissons	3/Jun/13	
Elec. & data-Poco Warehse	1/Apr/13	
GC400-Port Moody Demo	1/Mar/13	-
GC009- Stn Elec. Work	30/Jan/14	
GC037- Supply/Install Piling	8/Jan/14	•
GC039-PPS & VSF Elec. Work	17/Apr/14	
GC048-Moody Piling	17/Apr/14	
GP500-Supply Retaining Wall	9/Sep/14	-
GP500-CO No. 1	17/Aug/15	•
GP500-CO No. 2	13/Nov/15	-
GC063-Modular Buildings	9/Mar/15	•
GC063-CO No. 1	8/Oct/15	
GC063-CO No. 2	7/Nov/15	
GC063-CO No. 3	24/Feb/16	
Elec. Work for	6/Jan/14	

Stns

GC009-CO No. 1

GC009-CO No. 2

6/Jan/14

11/Jun/14

2/Oct/14

SLCW-GST PROCUREMENT

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GC009-CO No. 3	3/Oct/14
GC009-CO No. 4	16/Dec/14
GC009-CO No. 5	13/Jan/15
GC009-CO No. 6	13/Jan/15
GC009-CO No. 7	14/Jan/15
GC009-CO No. 8	19/Jan/15
GC009-CO No. 9	23/Mar/15
GC009-CO No. 10	30/Mar/15
GC009-CO No. 11	9/Apr/15
GC009-CO No. 12	4/Jun/15
GC009-CO No. 13	7/Aug/15
GC009-CO No. 14	7/Dec/15
GC009-CO No. 15	12/Jan/16
Inlet Ctr Exc	1/May/13
(511414-GC401)	
Supply Masonry	16/Jan/14
Grout Fill	
Earthworks Coq.	4/Dec/13
Stn	
GC039 Stn Elec.	16/Jan/14
Work	00/0/14
GC035-CO No. 1	30/Sep/14
GC035-CO No. 2	15/Jan/15
GC035-CO No. 3	22/May/15
GC035-CO No. 4	3/Jun/15
GC035-CO No. 5	24/Dec/15
GC035-CO No. 6	11/May/16
GC039-SubStn &	17/Apr/14
VSF Elec.	<u> </u>
GC039-CO No. 1	30/Sep/14
GC039-CO No. 2	14/Jan/15
GC039-CO No. 3	15/May/15
GC039-CO No. 4	3/Jun/15
GC039-CO No. 5	28/Oct/15
GC039-CO No. 6	24/Dec/15
GC039-CO No. 7	28/Oct/15
GC039-CO No. 8	11/May/16

SLCW-GS	PROCUREMENT ((Continued)	ı
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s.16,s.17

Lougheed Stn Demo (51414- GC404)	31/May/13
Supply/Install Piling	8/Jan/14
GC047-Moody Piling	17/Apr/14

SLCW-SW PROCUREMEN					
SC9000-04					
Lougheed Stn	13/Mar/14				
Brownfield	13/IVIAI/ 14				
Investigation					
SC9000-05					
Lougheed Stn	10/Apr/14				
Brownfield Installs					
SC9000-05					
Lougheed Stn	30/Sep/14				
Brownfield Installs	30/Sep/14				
CO #2					
SC9000-05	6/Nov/14				
Lougheed Stn	6/NOV/14				



Brownfield Installs				
CO #3				
SC9000-05		s.16,s.17		
Lougheed Stn	8/Apr/15			
Brownfield Installs	5// Ipi/ 10			
CO #4		_		
SC9000-06 T&C	11/May/15			
Support	11/iviay/15			
SC9000-06 T&C	14/140=/16	_		
Support CO#1	14/Mar/16			
SC9000-06 T&C		_		
Support	00/14 /40			
Change Order No.	26/May/16			
2				
SC9025-01 OMC		-		
Install	29/May/14			
SC9025-01 OMC		_		
Install-CO#1	4/May/15			
SC9000-08	-	-		
	16/Eab/10			
Segment 2	16/Feb/16			
Installation		_		
SC9000-01	5/Aug/14			
Systemwide Install		_		
SC9000-01				
Systemwide	17/Nov/14			
Install-CO #1		_		
SC9000-01				
Systemwide	28/Jan/15			
Install-CO #2		_		
SC9000-01		_		
Systemwide	17/Mar/15			
Install-CO #3				
SC9000-01		_		
Systemwide	15/Jun/15			
Install-CO #4				
SC9000-01		-		
Systemwide	15/Jul/15			
Install-CO #5	.0,000,00			
SC9000-01		_		
Systemwide	15/Sep/15			
Install-CO #6	10/0ep/10			
SC9000-01		-		
	16/Nov/15			
Systemwide	16/Nov/15			
Install-CO #7		-		
SC9000-01	0/0 = 45			
Systemwide	9/Dec/15			
Install-CO #8		-		
SC9000-01	40/1 /45			
Systemwide	12/Jan/16			
Install-CO #9		-		
SC9000-01				
Systemwide	7/Mar/16			
Install-CO #10		_		
SC9000-01				
Systemwide	22/Mar/16			
Install-CO #11		_		
SC9000-01				
Systemwide	9/May/16			
Install-CO #12				
SC9000-02 CO #1	27/Mar/14	-		
SC9000-02 CO #3	3/Oct/14	_		
SC9000-02 CO #4	3/Oct/14	-		
SC9000-02 CO #5	25/Aug/15	-		



SC9000-08		s.16,s.17
Segment 2		
Equipment	16/Feb/16	
Installation		
SLCW-SW PRO	CUREME	
SC9000-08		1
Segment 2		
Equipment	2016/0516	
Installation CO#1		
SC9000-08		-
Segment 2		
Equipment	2/May/16	
Installation CO#2		
SC6000-01		-
SubStn Equip.	12/Sep/14	
Install		
SC6000-01		-
SubStn Equip.	28/Nov/14	
Install-C#1		
SC6000-01		-
SubStn Equip.	28/Jan/15	
Install-C#2		
SC6000-01		-
SubStn Equip.	18/Feb/15	
Install-C#3		
SC6000-01		-
SubStn Equip.	17/Mar/15	
Install-C#4		
SC6000-01		
SubStn Equip.	30/Apr/15	
Install-C#5		_
SC6000-01		
SubStn Equip.	11/Sep/15	
Install-C#6		_
SC6000-01		
SubStn Equip.	16/Nov/15	
Install-C#7		_
SC6000-01	0/14 /40	
SubStn Equip.	9/Mar/16	
Install-C#8		_
SC6000-01		
Substation	22/Mar/16	
Equipment Install- C#9		
SC6000-01		-
Substation		
Equipment Install-	9/May/16	
C#7		
SC7000-01 Stn		-
Communication	8/Dec/14	
Install	0,200,14	
SC7000-01 Stn		-
Communication	5/May/15	
Install-CO #1	o may re	
SC7000-01 Stn		-
Communication	25/Aug/15	
Install-CO #2		
SC7000-01 Stn		-
Communication	28/Sep/15	
Install-CO #3		
SC7000-01 Stn		-
Communication	16/Nov/15	
Install-CO #4		_

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Summary of Activities

- To date there is been great success of engaging aboriginal businesses in project construction with over \$48 million awarded.
- Employment values have begun reduce as the project winds down.
- At least once per quarter, project updates are provided to the Tsleil Waututh and Musqueam Nations through the Economic Development offices.

Challenges/Risks

Work Planned

Continue to respond to needs of the client and the identified First Nations as the project winds down.



6.0 HEALTH AND SAFETY

6.1 SUMMARY OF SAFETY ACTIVITIES

s.13

5.1

- Track works is scheduled to complete the tunnel operations by the end of August and man power will be reduced as work is completed.
- The North Portal concrete pour was the last major concrete operation. Concrete crews have moved into the tunnel to install tunnel doors.
- T&C will take BO of the tunnel and all Confined Space protocols will remain in place. Tunnel entry permits will then be issued by T&C.
- Stations have Fujitec at Inlet Station replacing escalator treads. Very few Station deficiencies remain.
- WorkSafeBC has not responded to the last submission relating to the tunnel orders written in June.
- The TFO Joint Occupational Safety & Health Committee continues to meet monthly at the TFO office. If manpower numbers drop below twenty workers the August meeting will close out the project.
- T&C are continuing with testing in segments 3, 4 & 5.
- Lim Bolt Crews are now working in segments 4 and 5. Safety inspections of the crews are continuing and non-compliance issues are being resolved.
- Mission Contracting is performing very well at the School House Creek restoration area.

6.2 INJURY AND INCIDENT SUMMARY

Environmental:

See Environmental Section of Report



- Property/Equipment Damage:
 - None Reported
- Lost Time Incident:
 - s.22

Hours Worked	First Aid	Medical Aid/LTI	Lost Time Days
This Month	This Month	This Month	This Month
41,234	4	0/0	21
Hours Worked	First Aid	Medical Aid/LTI To Date*:	Lost Time Days
To Date	To Date		To Date
4,976,446	483	63/10	117

^{*}LTI to Date monitoring added this month



7.0 FINANCIAL

7.1 PERFORMANCE INCENTIVE PAYMENTS

Refer to the Performance Mechanism Report for full details.

7.2 MILESTONE PAYMENTS

See attached Statement of Progress.

7.3 CHANGE MANAGEMENT

Pricing has been approved for the following Province Changes/Events this month:

- PC93 Additional Operations and Maintenance Training
- PC94 Additional Coverboard at Moody and Burquitlam Areas
- PC88 R1 Tree Clearing Part 2
- PC13 R1 Additional Fencing at Moody Egress
- PC79 R4 T9 Vinyl Decals for Outside Fairgates

Pricing has been submitted for the following Province Changes:

None

Additional Province Changes active this month include:

- Design of Wired Connection to Evacuation Alarm (SI35)
- Charles Street As-Builts (SI38)
- Moody Station PTZ Camera to monitor FCP (SI39)
- Station Lighting Enhancements Moody/Coq (SI40)
- Supply of Tunnel Signage BCRTC (SI43)

7.4 RISK MANAGEMENT

Risk registers for each area of work are updated on a monthly basis.



8.0 QUALITY ASSURANCE

The following is a summary of activities.

8.1 STATUS OF QUALITY MANAGEMENT SYSTEM ACTIVITIES

- EGRT Construction continues to work closely with the Province to address quality issues as they arise. Representatives from both sides continue to meet regularly to discuss project quality issues.
- EGRT Construction continues to extend the invite to the Province for internal and external audits.
- The table below shows the current status of the Management Plans

Table 1 - Management Plan Status

Table 1 - Management Flan Status					
Plan	Latest Date of Issue	Latest Revision	Status		
Quality Manual	20-Mar-14	2	Received		
Design Quality Management Plan	6-May-14	3	Received		
Environmental Quality Management Plan	21-Jul-14	2	Received		
Traffic Quality Management Plan	1-May-14	2	Received		
Construction Quality Management Plan – SGJV	23-Jun-14	2	Received		
Construction Quality Management Plan – SLCW – GST	23-Apr-15	3	Received		
Construction Quality Management Plan – SLCW – EG	16-Mar-15	1	Received		
Construction Quality Management Plan – SSJV	11-Mar-15	2	Received		
Construction Quality Management Plan – SLCW – SW	16-Dec-13	0	Accepted		

8.2 AUDIT PROGRAMME

The tables below show the current status of the Audit Programme.



Table 2 – Audit Programme Status

Audit Programme	Latest Date of Issue	Latest Revision	Status
Quality Audit Programme	04-Mar-13	0	Received with comments from the Province. Detailed audit programmes were issued separately.
Design Quality Management Audit Programme	20-Jan-15	2	Received
Environmental Audit Programme	04-Dec-15	3	Issued to the Province for Information
Traffic Management Audit Programme	04-Dec-15	4	Issued to the Province for Information
Transit Facilities Audit Programme	05-Dec-14	4	Issued to the Province for Information
Construction Quality Management Audit Programme	4-Feb-16	4	Received

- To date, 157 quality audits have been completed by EGRT, Joint Ventures and Subcontractors. They are listed on Attachment H.
- There were no audits completed this reporting period.

Table 3 - Four Month Look Ahead Audit Schedule

Month	Project Team (Auditor)	Project Team (Auditee)	Audit Scope

8.3 PREVENTATIVE ACTION LOG

- There were no preventive actions initiated at this reporting period.
- Below is the tracking log for preventive action.

Table 4 - Preventive Action Log

PAR No.	Project Team	Brief Description	Response	Date Opened	Verified



8.4 SUMMARY OF INSPECTION AND TESTING ACTIVITIES

 Below is a table showing the Inspection and Testing summary for this reporting period.

Table 5 – Summary of Inspection and Testing

Project Team	Location	Description of Inspection and Testing
SLCW- GST	Stations	- Deficiency repair
SLCW- GST	Substations	- Deficiency repair
SLCW- GST	Vehicle Storage Facilities	- Deficiency repair

8.4.1 DBC

There were no ITPs issued by DBC this reporting period.

8.4.2 SLCW-GST

There were no ITPs issued by SLCW-GST this reporting period.

8.4.3 SLCW-SW

There were no ITPs issued by SLCW-SW this reporting period.

8.5 NONCONFORMITY REPORTS AND CORRECTIVE ACTION

- The table below shows the current status of active NCRs.
- Associated Corrective Action for any NCR can be referred to the NCR Tracking System. Below is the link to the website.

http://csc.snclavalin.com/sites/EvergreenNCRTS/default.aspx



Table 6 -NCR and CAR Status

NCR No.	Description of Nonconformity	Date Open	Date Ended	Status	Description of Correction
SSJV-0035	Additional Segments With Curing Temperatures Exceeded 70 °C, Installed In The Tunnel	24-Mar-15		Final Quality Review	Use-as-is
SLCW-GST- 0073	Drainage issue at DF pads locations in Section 330	26-May-15		Correction Implementation	Repair
SLCW-GST- 0074	Escalators – Sound Absorption Material "all stations"	15-Jun-15	18-Aug-16	Ended	Rework
SLCW-GST- 0086	Projectwide Lighting Fixtures Ballast	21-Mar-16		Correction Implementation	Rework
SLCW-GST- 0089	Corrosion of LIM Studs at Stud-Grout Interface	25-May-16		Correction Implementation	Repair
SLCW- Systems- 0009	Interface tolerance between running rail and expansion joint	15-June-16		Correction Implementation	Repair
SLCW-GST- 0090	Station Floor Drainage	22-June-16		Activated	

8.6 CONTINUAL IMPROVEMENT INITIATIVES

Improvement initiatives are presently done through Opportunity for Improvements and Corrective Actions related to NCRs.



9.0 PROJECT PHOTOGRAPHS



Figure 1 – Completed Trackwork at North Portal Transition





Figure 2 - Completed Cut and Cover Tunnel at North Portal





Figure 3 - Completed LIM/Power/Running Rail on OB Track





Figure 4 – T&C Test Train at Moody Station



Attachments

 $Attachment \ A-Submission \ List-Systems \ -\ \textbf{\textit{Discontinued}}$

Attachment B – Project Schedule

Attachment C – Activity Changes - *Discontinued*

Attachment D - Logic Changes - Discontinued

Attachment E – Alignment Key Plan

Attachment F - Environmental Existing Permits

Attachment G - Four Month Look Ahead Audit Schedule - **Discontinued(See 8.2 Table 3)**

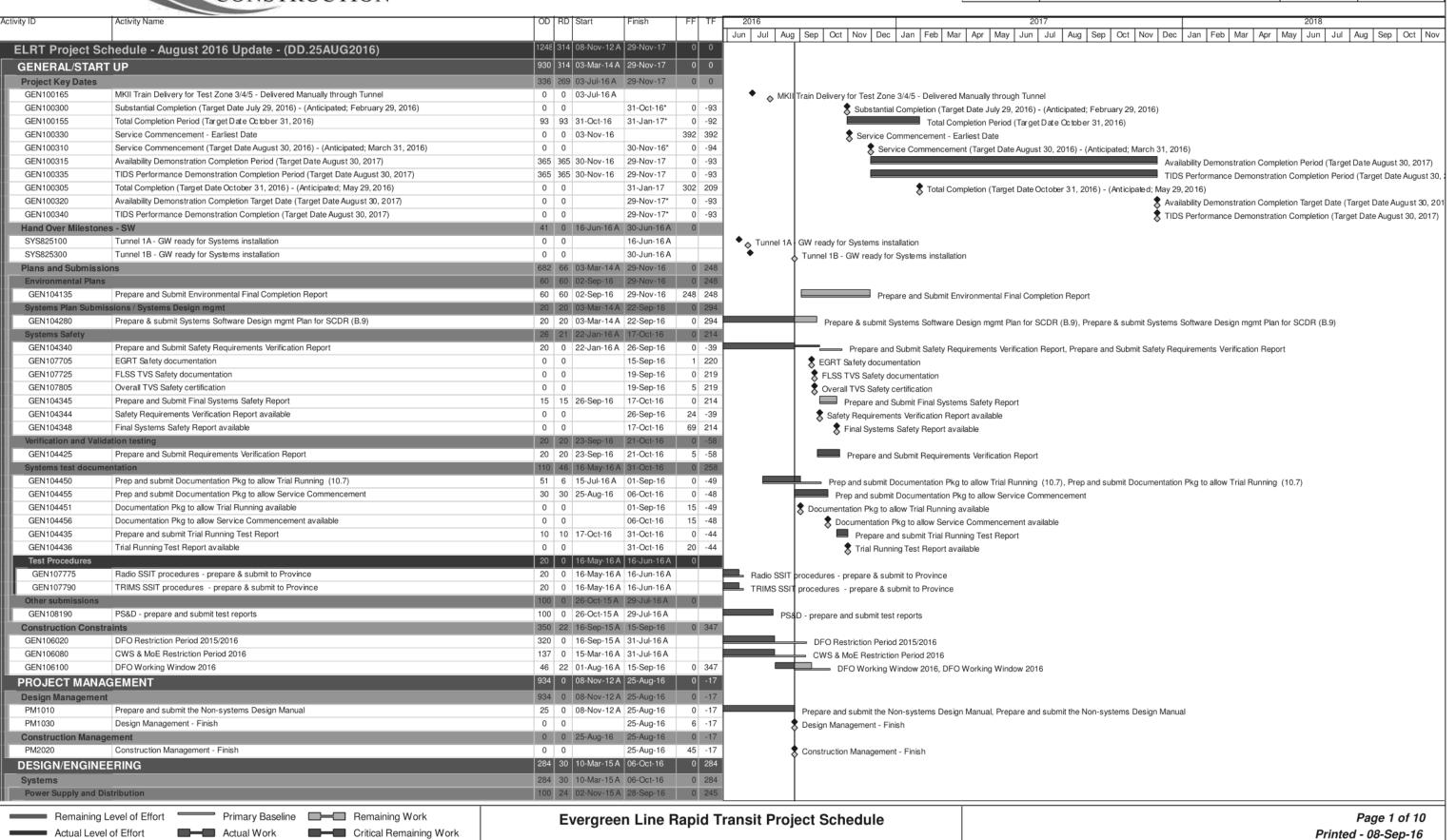
Attachment H - Quality Audits

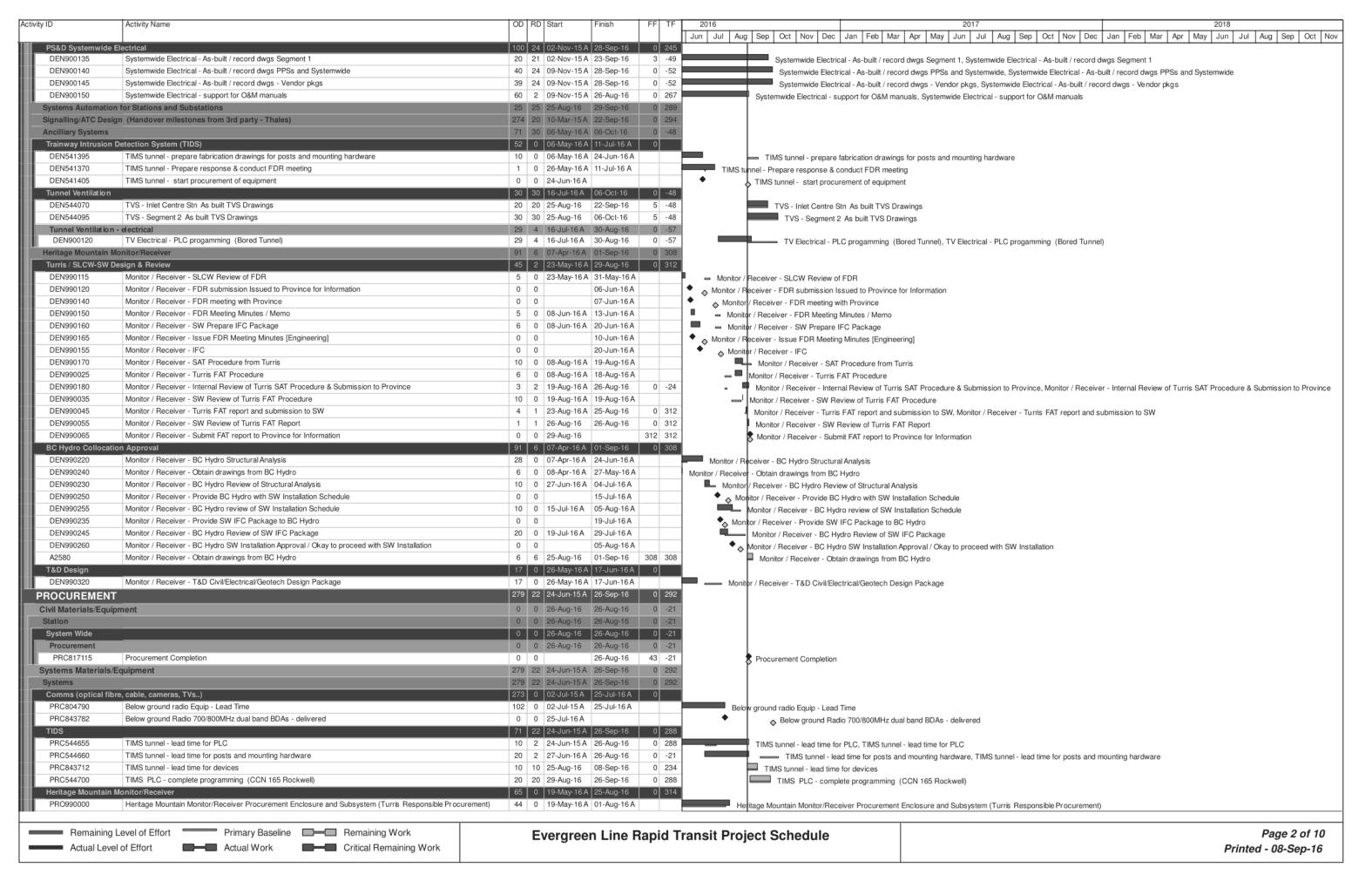
ATTACHMENT A SYSTEM MANAGEMENT PLAN DISCONTINUED

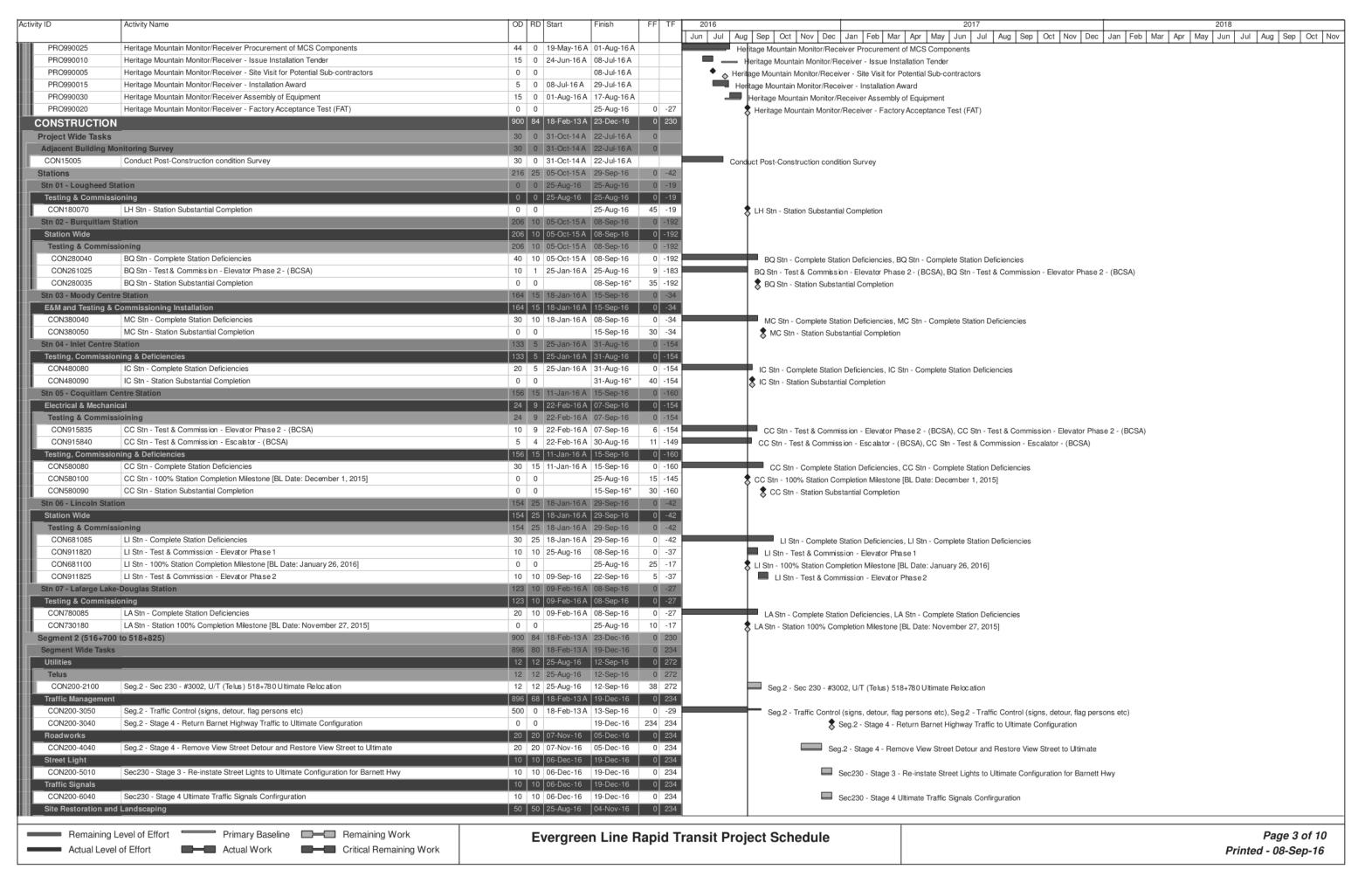


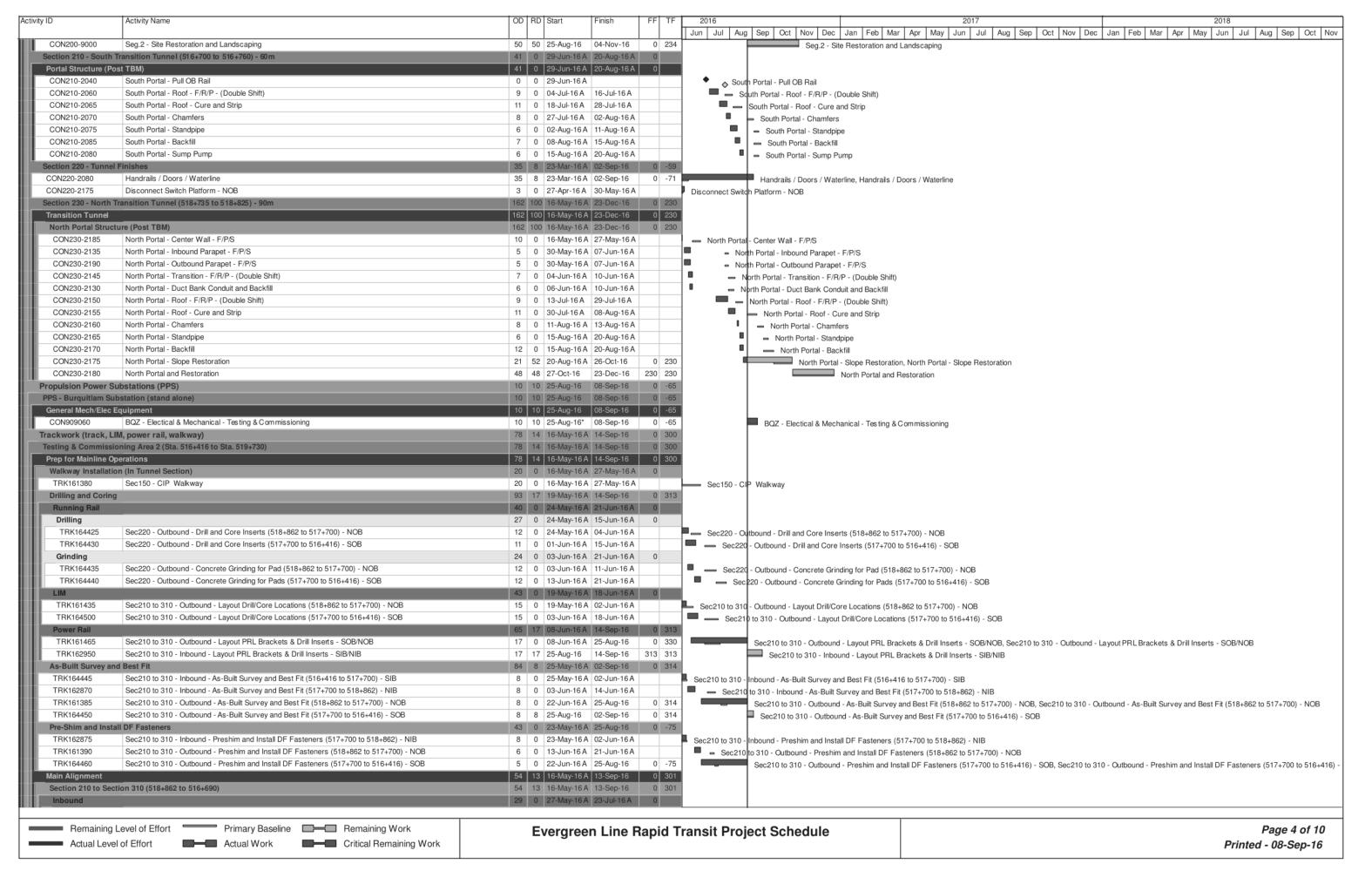
EVERGREEN LINE RAPID TRANSIT PROJECT ELRT Project Schedule Update - (DD. 25AUG2016) Condensed Schedule

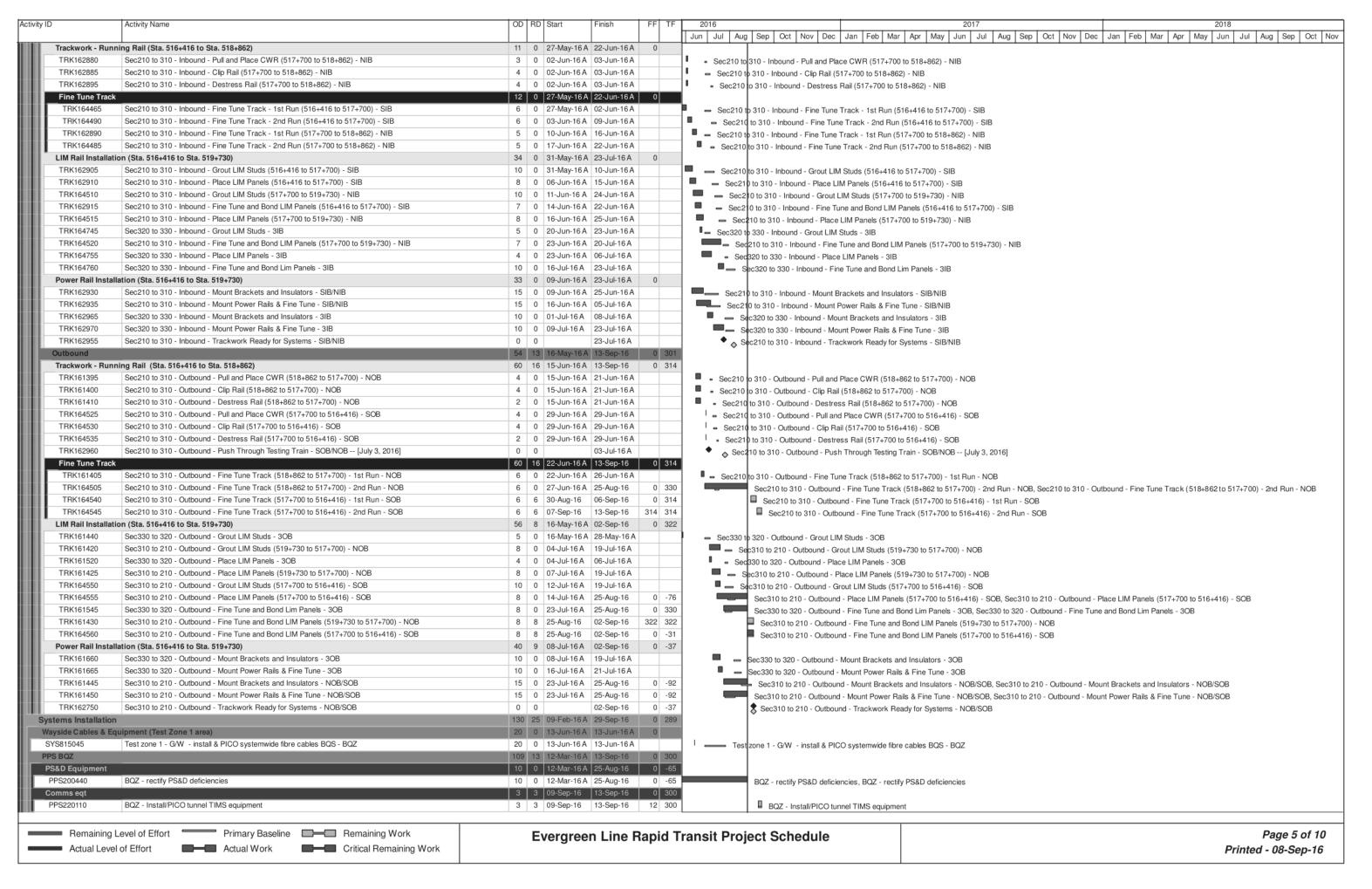
Date	Revision	Checked	Approved
01-Sep-16	Project Schedule Update (DD.25AUG2016) Rev.0	JS	JS
08-Sep-16	Project Schedule Update (DD.25AUG2016) Rev.1	JS	JS

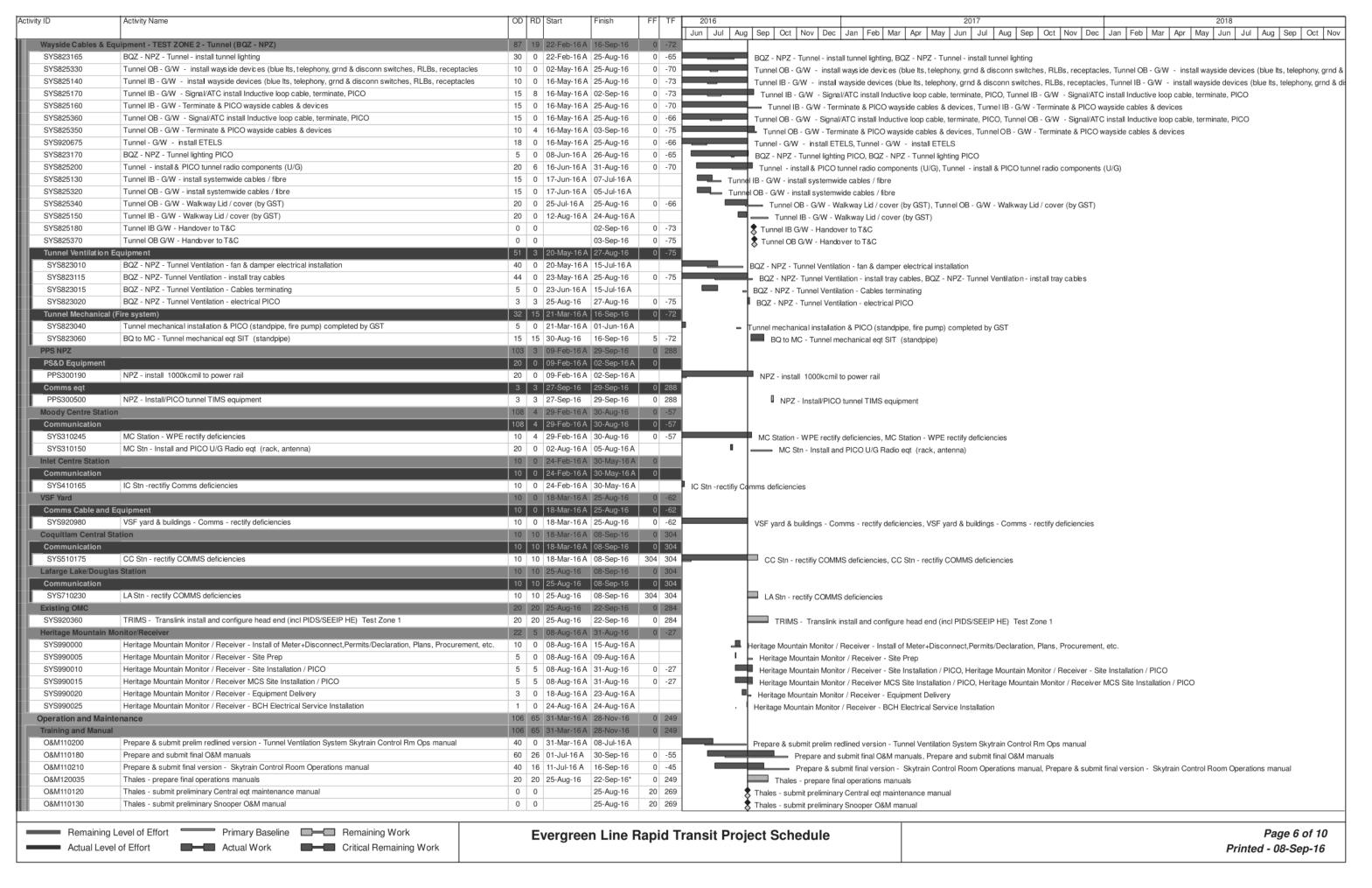


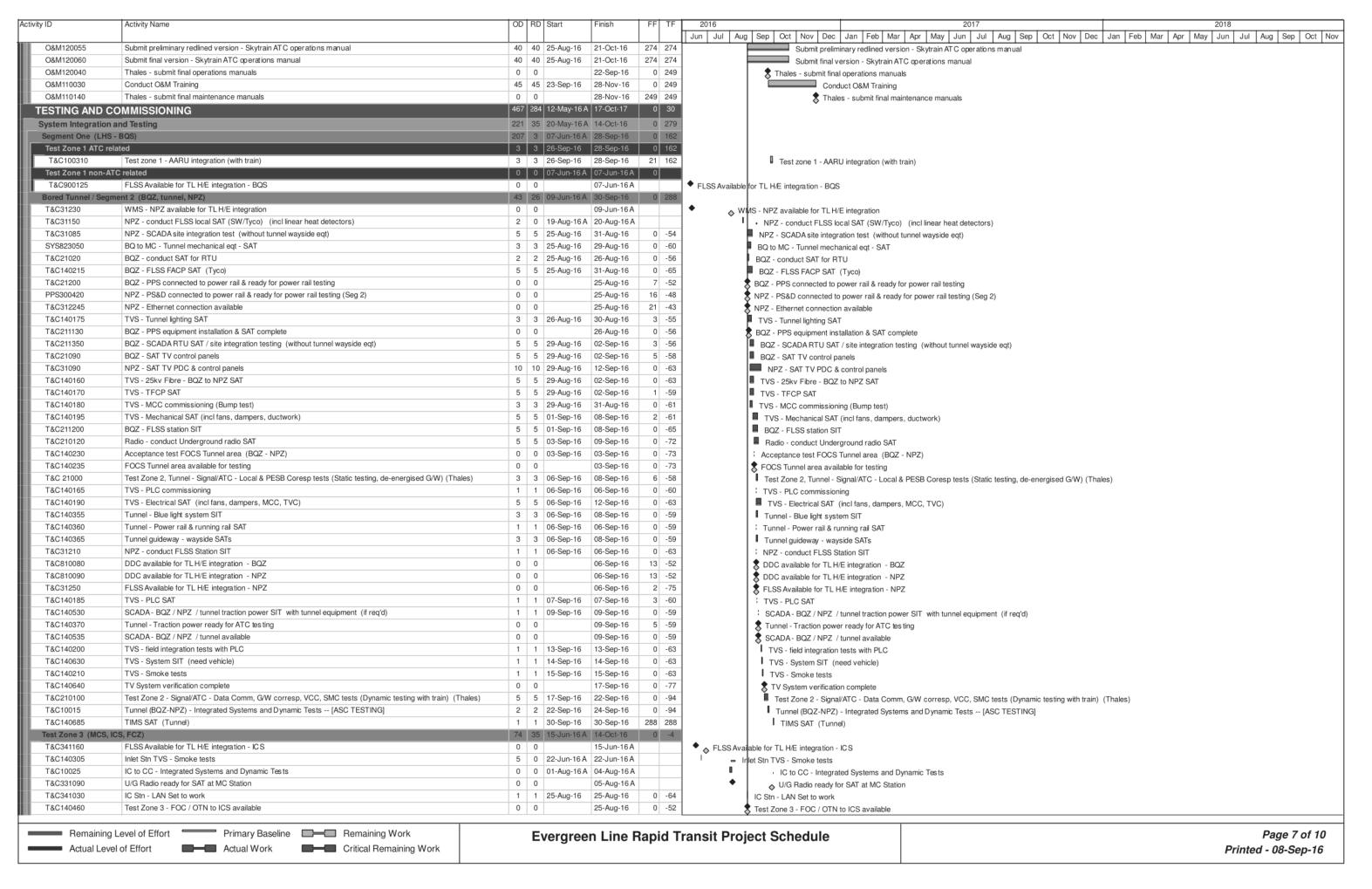


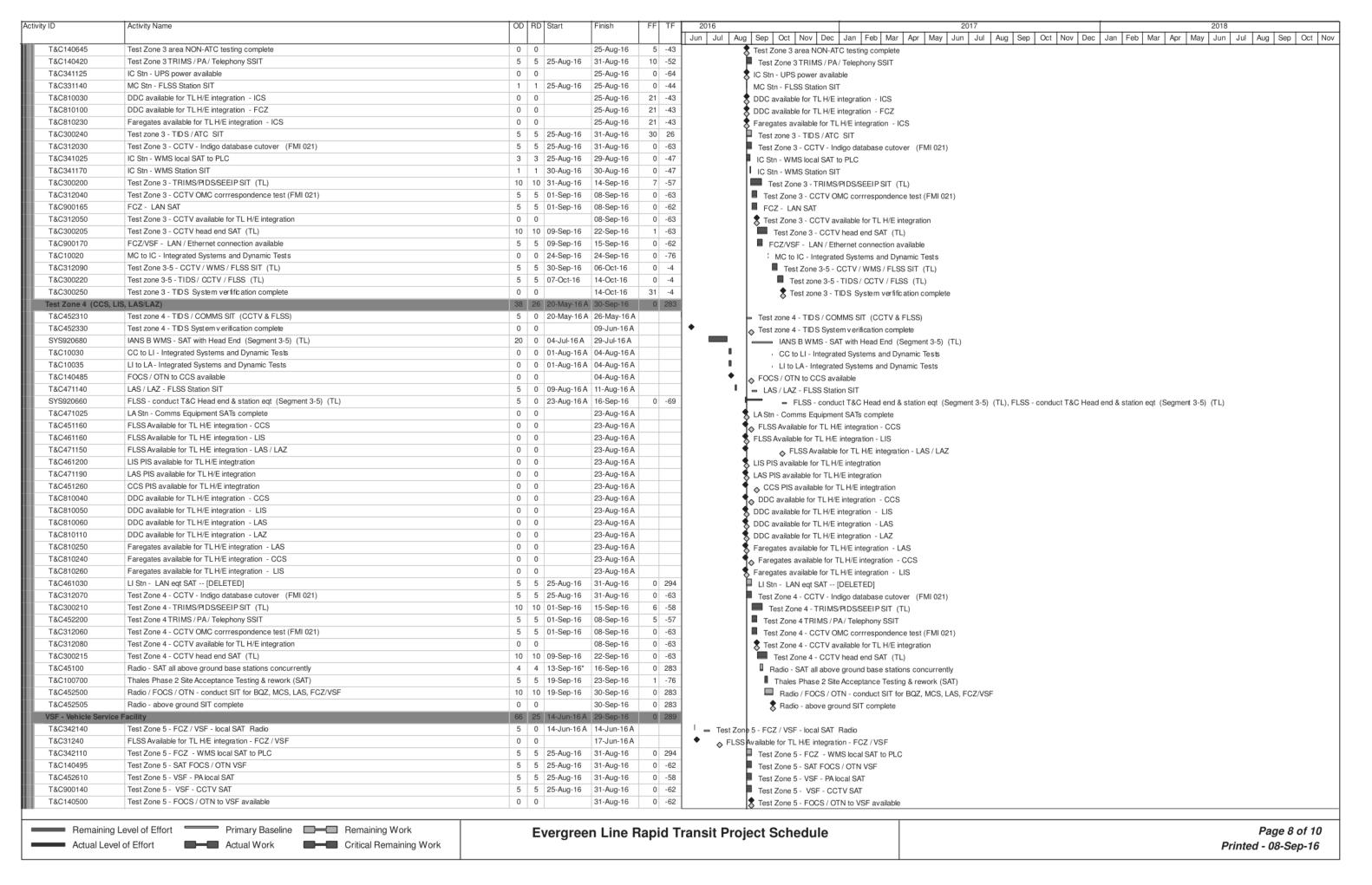


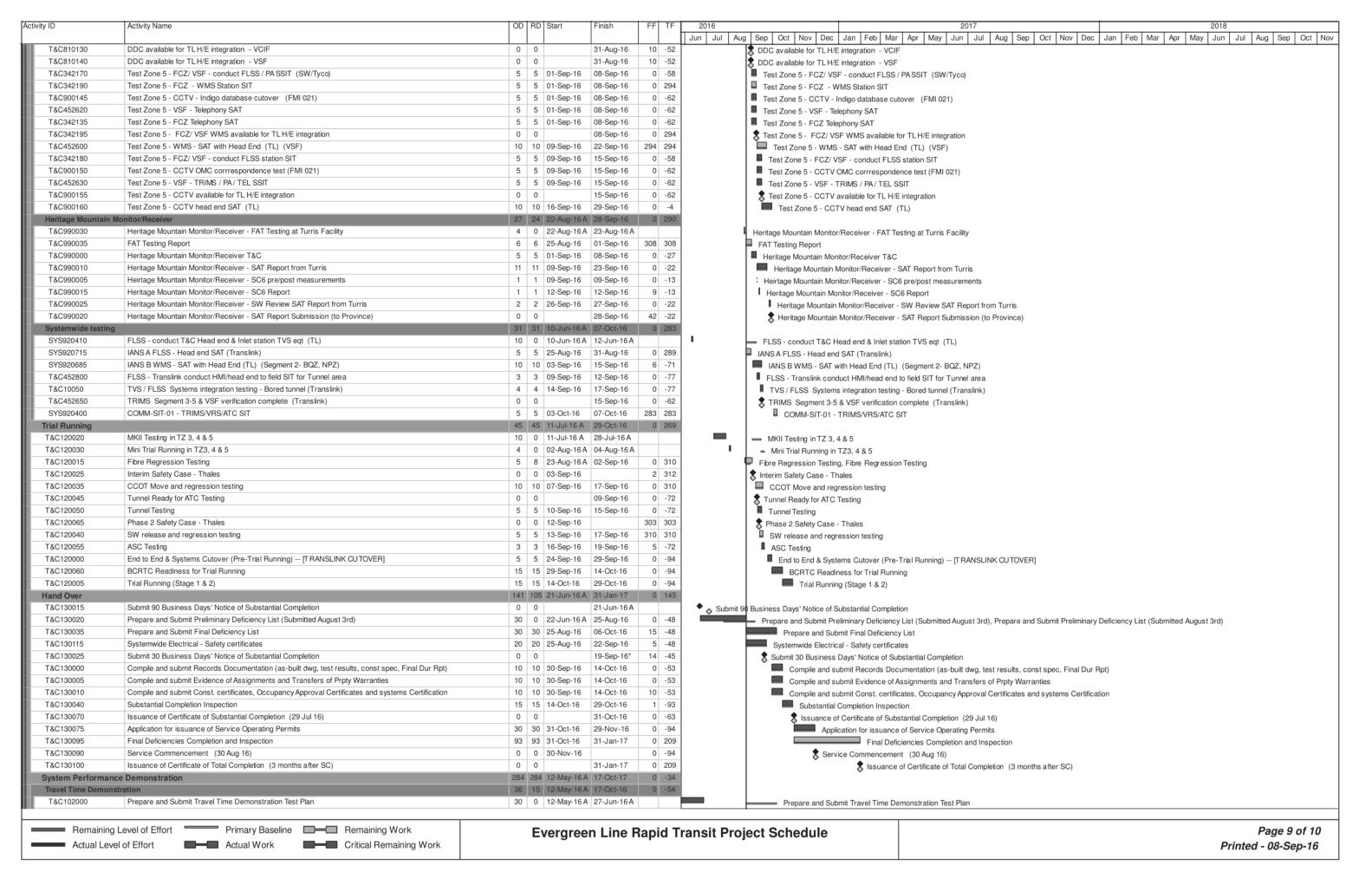


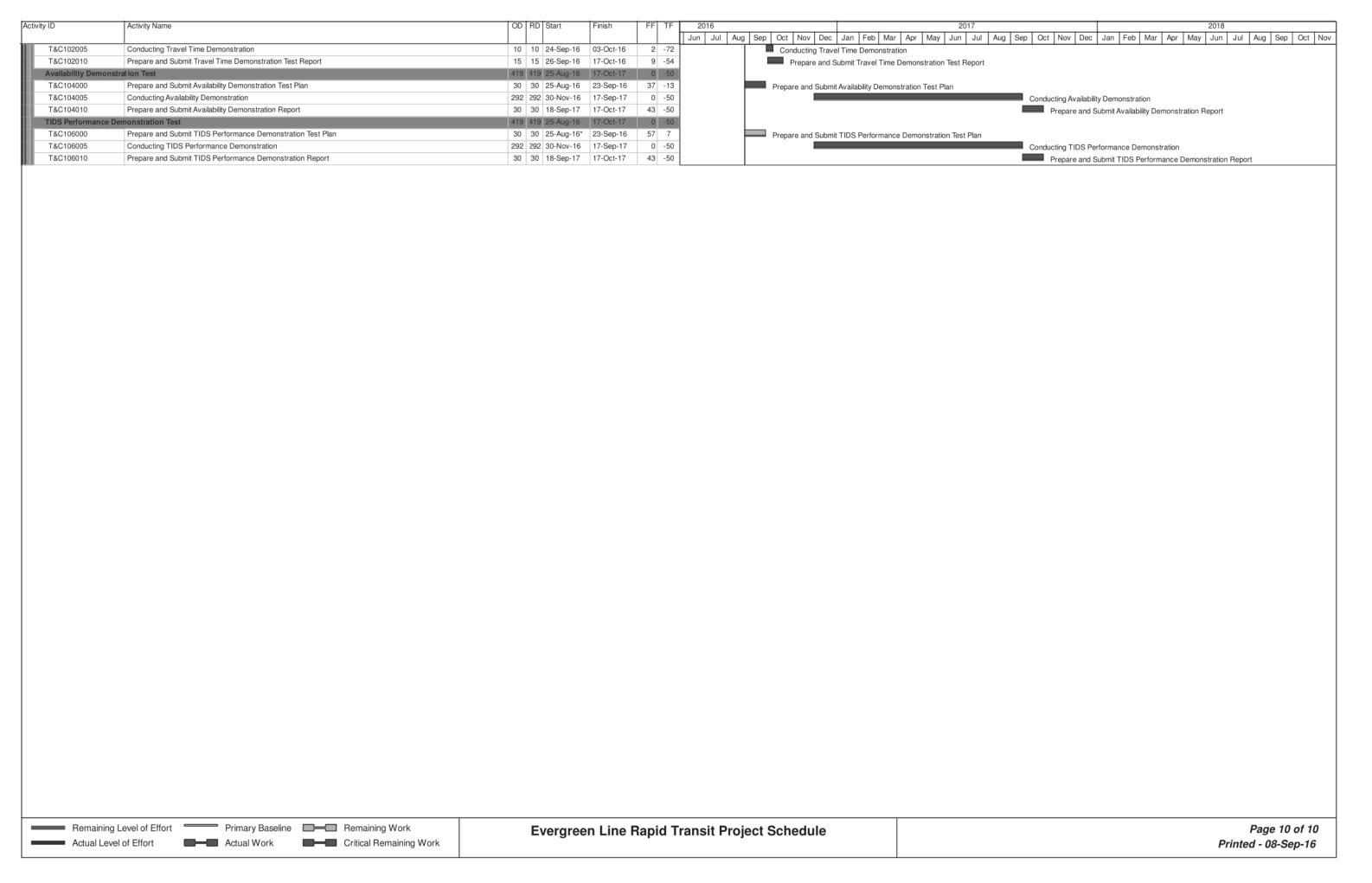












ATTACHMENT C ACTIVITY CHANGES DISCONTINUED

ATTACHMENT D LOGIC CHANGES DISCONTINUED

Page 206

Withheld pursuant to/removed as

s.15

Attachment F

Environmental Management

Permitting Status – Key Active Permits (expired or otherwise inactive permits are shown in grayscale font)

Permit Description	Act/Regulation	Application Date	Status				
Federal							
DFO Authorization – to authorize harmful alteration or disruption, or the destruction, of fish habitat (HADD)	Fisheries Act ¹ , Subsection 35(2)(b)	July 11, 2013	The DFO Authorization (#06-HPAC-PA1-00001) was signed by DFO and the Ministry of Transportation and became effective on July 18, 2013. The Permit expires on Dec. 31, 2016.				
Amendment to the Authorization to address design developments and method changes that occurred after issuance of the Authorization on July 18, 2013	Fisheries Act, Subsection 35(2)(b)	January 24, 2014	DFO amended Authorization No. 06- HPAC-PA1-00001 on January 27, 2014. The Amendment expires on Dec. 31, 2016.				
Request for DFO review of final proposed habitat compensation for the Project (including various changes to habitat compensation as compared to the habitat compensation described in the Project Authorization #06-HPAC-PA1-00001 as amended on January 27, 2014).	Fisheries Act, Subsection 35(2)(b)	April 30, 2015	On May 21, 2015 DFO issued a letter to the Province accepting all of EGRT's proposed changes. The updated habitat compensation supersedes the compensation described in the Project Authorization #06-HPAC-PA1-00001 (as amended on January 27, 2014) but all other conditions of the Authorization continue to apply. The Authorization expires on Dec. 31, 2016.				
Request to DFO for variance from DFO Authorization No. 06-HPAC-PA1-00001: request to start water line relocation at Schoolhouse Creek in last week of July 2016, prior to the start of the 2016 least-risk fisheries window.	Fisheries Act, Subsection 35(2)(b)	July 18, 2016	DFO issued a "no objection" on July 20, 2016. The variance applies only to the last week of July 2016, which is now past.				

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¹ Amendments to the *Fisheries Act* came into effect on November 2013 that repealed the HADD provisions of Subsection 35(2). However, DFO Authorization #06-HPAC-PA1-00001 is grandfathered under the amended Act and remains in effect.

Permit Description	Act/Regulation	Application Date	Status
DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	June 25, 2013	The permit (#XR 239-2013) was received on July 8, 2013. The permit expired on June 30 2014. A new permit was obtained (see row below).
Amendment to DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	March 18, 2014	The permit (#XR 239-2014) was received on March 21, 2014. Note this permit supersedes #XR 239-2013 (see row above).
Amendment to DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	January 8, 2015	The permit (#XR 71 2014 – Amendment 2) was received on January 15, 2015. Subsequently, the Permit was further amended to include road works and culvert installation at Pinnacle Creek, The Permit expired on December 31, 2015.
DFO Permit to allow fish salvage during habitat compensation construction at Schoolhouse Creek.	Fisheries Act, Fishery (General) Regulation	December 24, 2015	The permit (XR 376 2015) was received on December 28, 2015. The permit expires on Dec. 31, 2016.
Amendment to the Authorization to allow instream works at Kyle Creek from Oct. 1 – 15, 2013	Fisheries Act, Subsection 35(2)	Sept. 30, 2013	Email amendment was received from DFO on Sept. 30, 2013. The relevant work is complete.
Request for DFO review of proposed out-of-window instream work at Tributary to Suterbrook Creek (to begin construction of instream Pier P3-15)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	January 27, 2014	DFO issued a "no objection" email to the Province on January 28, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct instream works to build Utility 4011 outside the least risk window specified in DFO Authorization #06-HPAC-PA1-00001)	Fisheries Act, Subsection 35(2)(b)	March 25, 2014	DFO issued a "no objection" email to the Province on March 25, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Scott Creek (work to be completed no later than	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	August 20, 2014	DFO issued a "no objection" email to EGRT on August 21, 2014. The relevant

Permit Description	Act/Regulation	Application Date	Status
October 10, 2014)			work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Pigeon Creek (work to be completed no later than October 30, 2014)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	August 28, 2014	DFO issued a "no objection" email to the Province on August 28, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Pigeon Creek (work to be completed no later than November16, 2014)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	October 28, 2014	DFO issued a "no objection" email to the Province on October 28, 2014. The relevant work is complete.
Request to DFO to allow instream works to occur outside the least-risk fisheries window at Scott Creek (to install bank stabilization).	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	January 29, 2015	DFO issued a "no objection" email to the EGRT on January 30, 2015. The relevant work is complete.
Provincial			
Ministry of Forests, Lands and Natural Resource Operations (FLNR) Approval to allow changes in and about a stream (major works) at Kyle Creek, Suterbrook Creek, Scott Creek and "Mariner Pond"	Water Sustainability Act ² , Section 11	May 27, 2013	Approval (#A2006043) was received on July 24, 2013. The Approval expires Dec. 31, 2016.
Order amending Approval A2006043 to allow instream works to occur outside the least-risk fisheries window	Water Sustainability Act, Section 11	September 30, 2013	The Order was received on Sept. 30, 2013. The Order applies to all watercourses affected by the Project. The Order expires Dec. 31, 2016.
Approval to construct habitat compensation at Hoy Creek.	Water Sustainability Act, Section 11	May 14, 2015	Approval (#A2006297) was received on July 23, 2015. The Approval expires Dec. 1, 2016.
Approval to construct habitat compensation at Schoolhouse Creek.	Water Sustainability Act, Section 11	May 15, 2015	Approval (#2006301) was received on December 21, 2015. The Approval expires Dec. 1, 2017.
Notification to FLNR Habitat Officer to allow changes in and about a stream (GVSDD storm system repairs) – Ottley Creek	Water Sustainability Act, Section 11 Water Sustainability Regulation, Part 3	June 21, 2016	Notification was assigned file # 100169648. FLNR green-lighted the work

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² A new *Water Sustainability Act* came into force in early 2016 that updated and replaced the historic *Water Act*. Approvals shown in this matrix were all issued pursuant to section 9 of the *Water Act*. Those that remain active are grandfathered under the WSA. Section 11 of the WSA is now the relevant Section. The matrix has been updated to show the Approvals are pursuant to the WSA, Section 11. Similarly, the Water Regulation was replaced by the Water Sustainability Regulation. Except for the Notification shown for culvert repairs at Ottley Creek (June 21, 2016), all the Notifications shown in the matrix were originally submitted pursuant to Part 7 of the Water Regulation. The applicable regulation is now Part 3 of the Water Sustainability Regulation, as shown in this matrix.

Permit Description	Act/Regulation	Application Date	Status
			in an email dated July 21, 2016.
Notification to FLNR to allow changes in and about a stream (guideway works) – Schoolhouse Creek	Water Sustainability Regulation, Part 3	May 17, 2013	The Permit (FLRN tracking #2013-104) has expired and is superseded by a new Notification (see row below).
Notification to FLNR to allow changes in and about a stream (drainage, PPS and road works) – Schoolhouse Creek	Water Sustainability Regulation, Part 3	Dec. 10, 2013	The Permit (FLRN tracking #124843) is now in place and supersedes #2013-104 (see row above). The Notification expired Dec. 31, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Slaughterhouse Creek	Water Sustainability Regulation, Part 3	May 31, 2013	The Permit (FLRN tracking #111384) has expired and is superseded by a new Notification (see row below).
Notification to FLNR to allow changes in and about a stream (changes to guideway works) – Slaughterhouse Creek	Water Sustainability Regulation, Part 3	November 14, 2013	The Permit (FLRN tracking #120176) is now in place and supersedes #111384 (see row above). The Notification expired on Dec. 31, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pigeon Creek	Water Sustainability Regulation, Part 3	April 16, 2014	The Permit (FLRN tracking #112669) expired on September 30, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pigeon Creek	Water Sustainability Regulation, Part 3	August 15, 2014	The Notification was accepted by FLNR (tracking number 145189) and became active on October 1, 2014 superseding the previous Notification. The Notification expired Dec. 31, 2015.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pinnacle Creek	Water Sustainability Regulation, Part 3	June 14, 2013	The Permit (FLRN tracking #112669) is now in place. The Notification expired on May 15, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pinnacle Creek	Water Sustainability Regulation, Part 3	April 16, 2014	The Notification expired on December 31, 2015.

Permit Description	Act/Regulation	Application Date	Status		
Notification to FLNR to allow changes in and about a stream (guideway works) – Hoy Creek	Water Sustainability Regulation, Part 3	May 31, 2013	The Notification (FLNR Tracking #111383) expired on September 30, 2014 and is superseded by an updated Notification which becomes active on Oct 1, 2014 (see row below).		
Notification to FLNR to allow changes in and about a stream (guideway works) – Hoy Creek	Water Sustainability Regulation, Part 3	August 15, 2014	The Notification was accepted by FLNR (tracking number 145190) and became active on October 1, 2014 superseding the previous Notification. The new Notification expired on Apr. 30, 2015.		
FLNR Permit to allow fish salvage (intended for habitat construction at Schoolhouse Creek)	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	December 23, 2015	The Permit (#SU16-223632) was issued on February 9, 2016. It expires Dec. 31, 2016.		
FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	June 25, 2013	The Permit (#SU13-88489) was issued on July 16, 2013. The Permit is superseded by the Amendment extension (see row below).		
Amendment to FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	March 4, 2014	The Permit (#SU13-88489) was issued on March 6, 2014. The Permit expired on June 29, 2015.		
Amendment to FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	January 15, 2015	The Permit (#SU15-165242) was issued on February 12, 2015 Note this permit superseded #SU13-88489 (see row above). The Permit expired on December 31, 2015.		
FLNR Permit to allow wildlife salvage	Wildlife Act, Permit Regulation, Section 2	May 13, 2013	The Permit (#SU13-87792) was issued on July 9, 2013. The Permit expired on July 1, 2014 and has not been renewed as wildlife salvage is no		

Permit Description	Act/Regulation	Application Date	Status		
			longer required.		
FLNR Heritage Inspection Permit (HIP) to allow archaeological monitoring	Heritage Conservation Act, Section 14	April 4, 2013	The Permit was issued on June 18, 2013. The Permit expired Dec. 31, 2014.		
FLNR Heritage Inspection Permit (HIP) to allow archaeological monitoring	Heritage Conservation Act, Section 14	August, 2014	The Permit was amended on August 28, 2014. The Permit expired June 30, 2015. The final report has been submitted to Archaeology Branch and relevant First Nations.		
Regional/Municipal					
Waste Discharge Permit	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	November 26, 2013	The Permit (#SC-100914-FSA) was issued on February 17, 2014. The Permit does not specify an end-date. As of June 2016, discharge to sanitary is no longer necessary and EGRT advised Metro Vancouver of this on July 27, 2016. Metro Vancouver sent a letter to EGRT dated August 24, 2016 cancelling the Permit.		
Waste Discharge Permit – amendment to include additional scope.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	April 10, 2014	The Permit (#SC-100914-FSA) was amended on April 28, 2014. The Amendment does not specify an enddate. As of June 2016, discharge to sanitary is no longer necessary and the Permit was cancelled on July 27, 2016.		
Waste Discharge Permit – Minor Amendment to include additional treatment components (including a clarifier, mixing tank and filter press) and to address a change in sampling location.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	July 29, 2014	The Minor Amendment to the Permit (#SC-100914-FSA) was issued on August 13, 2014. The Permit does not specify an end-date. As of June 2016, discharge to sanitary is no longer necessary and		

Permit Description	Act/Regulation	Application Date	Status		
			the Permit was cancelled on July 27, 2016.		
Waste Discharge Permit (one time request to discharge groundwater associated with the dewatering operation at Clarke Rd and Seaview Dr.).	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	March 27, 2015	Metro Vancouver issued a Waste Discharge Permit (No. SC-100990-FSA) to EGRT on April 2, 2015. The Permit expired on May 15, 2015.		
Waste Discharge Permit – Minor Amendment to extend the Permit end-date to July 31, 2015.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	May 2, 2015	Metro Vancouver issued a Minor Amendment to Permit No. SC-100990-FSA on May 15, 2015. The Permit expired on July 31, 2015.		
Waste Discharge Permit – Major Amendment to extend the Permit end-date to Sept. 30, 2015 and increase the total allowed discharge to sanitary system.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	July 22, 2015	Metro Vancouver issued a Major Amendment to Permit No. SC-100990-FSA on Aug. 11, 2015. The Permit expired on Sept. 30, 2015.		
Other					
Tsleil-Waututh Nation - Heritage Investigation Permit	N/A	July 2, 2014	An amendment to the Permit (#2013-014) was issued on October 3, 2014. Archaeological investigation and monitoring are complete.		
Sto:Lo First Nation - Heritage Investigation Permit	N/A	May 6, 2013	Permit (#2013-031) was issued on June 4, 2013. Archaeological investigation and monitoring are complete.		

ATTACHMENT G

Four Month Look Ahead Audit Schedule

DISCONTINUED See Section 8.2

Attachment H

Table 3 – Quality Audits

Audit Report Number	Discipline	Auditor	Auditee	Audit Date	NCR's Raised	OFI's Raised
511325-00000-SWSL-38QB-0001	Design	EGRT	SNC Lavalin	23-Apr- 13	0	1
511325-00000-SWSL-38QB-0002	Design	EGRT	SNC Lavalin	03-May- 13	0	0
511325-00000-SWSL-38QB-0003	Design	EGRT	IBT	11-Jun- 13	0	1
511325-00000-SWSL-38QB-0004	Design	EGRT	MMM	06-Jun- 13	0	0
511325-00000-SWSL-38QB-0005	Design	EGRT	EBA	04-Jun- 13	0	1
511325-00000-SWSL-38QB-0006	Design	EGRT	Fast+Epp	25-Jun- 13	1	0
511325-00000-SWSL-38QB-0007	Design	EGRT	Jacobs	18-Jun- 13	1	1
511325-00000-SWSL-38QB-0008	Design	EGRT	RJC	18-Jul-13	0	0
511325-00000-SWSL-38QB-0009	Design	EGRT	Francl Architect ure	23-Jul-13	0	1
511325-00000-SWSL-38QB-0010	Design	EGRT	Perkin + Will	14-Aug- 13	0	0
511325-00000-SWSL-38QB-0011	Design	EGRT	Dialogue	22-Aug- 13	0	0
511325-00000-SWSL-38QB-0012	Design	EGRT	AES	24-Sep- 13	0	0
511325-00000-SWSL-38QB-0013	Design	EGRT	SNC Lavalin	19-Dec- 13	0	2
511325-00000-SWSL-38QB-0014	Design	EGRT	SNC Lavalin	30-Jan-14	0	0
511325-00000-SWSL-38QB-0015	Design	EGRT	SNC Lavalin	10-Oct- 13	0	0
511325-00000-SWSL-38QB-0016	Design	EGRT	SNC Lavalin	06-Nov- 13	0	0
511325-00000-SWSL-38QB-0017	Design	EGRT	SNC Lavalin	25-Oct- 13	0	0
511325-00000-SWSL-38QB-0018	Design	EGRT	SNC Lavalin	27-Feb- 14	0	0
511325-00000-SWSL-38QB-0019	Design	EGRT	SNC Lavalin	25-Mar- 14	0	0
511325-00000-SWSL-38QB-0020	Design	EGRT	Jacobs	12-May- 15	0	0
511325-00000-SWSL-38QB-0021	Design	EGRT	MMM Group	23-Sept- 14	1	0
511325-00000-SWSL-38QB-0022	Design	EGRT	SNCL Electrical	27-Nov- 14	0	0
511325-00000-SWSL-38QB-0023	Design	EGRT	SNC Lavalin	6-Feb-15	2	1

511325-00000-SWSL-38QB-0025	Design	EGRT	SLCW- SW	5-Aug-15	-	1
511325-00000-SWSL-38QB-0026	Design	EGRT	SLCW- SW	2-Nov-15	0	0
511325-00000-SWSL-38QB-0101	Environment al	EGRT	EGRT	20-Aug- 13	0	4
511325-00000-SWSL-38QB-0102	Environment al	EGRT	SGJV	13-Sep- 13	1	14
511325-00000-SWSL-38QB-0103	Environment al	EGRT	SLCW- GST	03-Oct- 13	0	11
511325-00000-SWSL-38QB-0104	Environment al	EGRT	EGRT	25-Nov- 13	0	0
511325-00000-SWSL-38QB-0105	Environment al	EGRT	SLCW- GST	16-Jan-14	0	3
511325-00000-SWSL-38QB-0106	Environment al	EGRT	SGJV	04-Feb- 14	0	3
511325-00000-SWSL-38QB-0107	Environment al	EGRT	SLCW- EG	07-Feb- 14	0	4
511325-00000-SWSL-38QB-0108	Environment al	EGRT	SSJV	28-Feb- 14	0	10
511325-00000-SWSL-38QB-0109	Environment al	EGRT	EGRT	11-Apr- 14	0	1
511325-00000-SWSL-38QB-0110	Environment al	EGRT	SLCW- GST	6-May-14	0	2
511325-00000-SWSL-38QB-0111	Environment al	EGRT	SGJV	8-May-14	0	4
511325-00000-SWSL-38QB-0112	Environment al	EGRT	SSJV	24-Jun- 14	0	4
511325-00000-SWSL-38QB-0113	Environment al	EGRT	SLCW- EG	8-Sept-14	0	1
511325-00000-SWSL-38QB-0114	Environment al	EGRT	SLCW- GST	25-Sept- 14	2	2
511325-00000-SWSL-38QB-0115	Environment al	EGRT	SGJV	27-Oct- 14	2	2
511325-00000-SWSL-38QB-0116	Environment al	EGRT	SSJV	9-Jan-15	0	1
511325-00000-SWSL-38QB-0117	Environment al	EGRT	SLCW- GST	30-Jan-15	0	0
511325-00000-SWSL-38QB-0118	Environment al	EGRT	SGJV	6-Mar-15	0	0
511325-00000-SWSL-38QB-0119	Environment al	EGRT	SLCW- EG	30-Apr- 15	0	0
511325-00000-SWSL-38QB-0120	Environment al	EGRT	SLCW- GST	4-May-15	0	0
511325-00000-SWSL-38QB-0121	Environment al	EGRT	SSJV	26-Jun- 15	0	0
511325-00000-SWSL-38QB-0122	Environment al	EGRT	DBC	24-Aug- 15	-	-
511325-00000-SWSL-38QB-0123	Environment al	EGRT	SSJV	5-Nov-15	1	1
511325-00000-SWSL-38QB-0124	Environment al	EGRT	SLCW- GST- TFO	16-Apr- 08	1	3
511325-00000-SWSL-38QB-0201	Traffic	EGRT	SGJV	04-Jun- 13	0	2

511325-00000-SWSL-38QB-0202	Traffic	EGRT	SLCW- GST	09-Jul-13	0	1
511325-00000-SWSL-38QB-0203	Transit Facility	EGRT	SLCW- GST	25-Sep- 13	0	1
511325-00000-SWSL-38QB-0204	Traffic	EGRT	SLCW- GST	26-Sep- 13	0	2
511325-00000-SWSL-38QB-0205	Traffic	EGRT	SGJV	13-Nov- 13	2	1
511325-00000-SWSL-38QB-0206	Transit Facility	EGRT	SLCW- GST	22-Nov- 13	0	0
511325-00000-SWSL-38QB-0207	Transit Facility	EGRT	SLCW- GST	09-Jan-14	0	0
511325-00000-SWSL-38QB-0208	Traffic	EGRT	SLCW- GST	23-Jan-14	0	0
511325-00000-SWSL-38QB-0209	Transit Facility	EGRT	SLCW- GST	20-Feb- 14	0	0
511325-00000-SWSL-38QB-0210	Traffic	EGRT	SLCW- EG	12-Mar- 14	0	0
511325-00000-SWSL-38QB-0211	Traffic	EGRT	SLCW- EG	13-Jan-15	0	0
511325-00000-SWSL-38QB-0212	Traffic	EGRT	SSJV	15-Jan-15	0	0
511325-00000-SWSL-38QB-0213	Traffic	EGRT	SSJV	15-Dec- 15	1	0
511325-00000-SWSL-38QB-0214	Traffic	EGRT	SLCW- GST	23-Feb- 16	0	0
511326-00000-SWSG-38QB-0301	Construction	SGJV	SGJV	30-May- 13	0	3
511325-00000-SWSL-38QB-0302	Construction	EGRT	EGRT	13-Jun- 13	0	3
511327-00000-SWSR-38QB-0303	Construction	SLCW- EG	Armtec	14-Jun- 13	0	2
511414-00000-SWGS-38QB-0304	Construction	SLCW- GST	SLCW- GST	24-Jun- 13	0	3
511414-00000-SWGS-38QB-0305	Construction	SLCW- GST	SLCW- GST	23-Jul-13	0	2
511414-00000-SWGS-38QB-0306	Construction	SLCW- GST	Canron	28-Aug- 13	0	0
511326-00000-SWSG-38QB-0307	Construction	SGJV	SGJV	13-Aug- 13	0	2
511326-00000-SWSG-38QB-0308	Construction	SGJV	SGJV	15-Aug- 13	0	0
511326-00000-SWSG-38QB-0309	Construction	SGJV	Pedre	09-Aug- 13	0	6
511326-00000-SWSG-38QB-0310	Construction	SGJV	Armtec	27-Sep- 13	0	3
511414-00000-SWGS-38QB-0311	Construction	SLCW- GST	Metro Testing	03-Oct- 13	0	1
511326-00000-SWSG-38QB-0312	Construction	SGJV	SGJV	25-Oct- 13	0	1
511326-00000-SWSG-38QB-0313	Construction	SGJV	SGJV	14-Nov- 13	0	0
511328-00000-SWSS-38QB-0314	Construction	SSJV	SSJV	08-Nov- 13	1	3

511414-00000-SWGS-38QB-0315	Construction	SLCW- GST	SLCW- GST	03-Dec- 13	0	2
511414-00000-SWGS-38QB-0316	Construction	SLCW- GST	SLCW- GST	05-Dec- 13	0	0
511326-00000-SWSG-38QB-0317	Construction	SGJV	SGJV	21-Nov- 13	0	1
511327-00000-SWSR-38QB-0318	Construction	SLCW- EG	Harris PT	25-Nov- 13	0	4
511327-00000-SWSR-38QB-0319	Construction	SLCW- EG	SLCW- EG	28-Nov- 13	0	0
511326-00000-SWSG-38QB-0320	Construction	SGJV	SGJV	12-Dec- 13	0	0
511327-00000-SWSR-38QB-0321	Construction	SLCW- EG	SLCW- EG	13-Jan-14	0	0
511328-00000-SWSS-38QB-0322	Construction	SSJV	SSJV	06-Dec- 13	0	4
511326-00000-SWSG-38QB-0323	Construction	SGJV	SGJV	29-Jan-14	0	1
511326-00000-SWSG-38QB-0324	Construction	SGJV	AGI	4-Mar-14	0	3
511328-00000-SWSS-38QB-0325	Construction	SSJV	SSJV	21-Jan-14	0	3
511328-00000-SWSS-38QB-0326	Construction	SSJV	SSJV	28-Jan-14	0	1
511326-00000-SWSG-38QB-0327	Construction	SGJV	SGJV	25-Feb- 14	0	3
511326-00000-SWSG-38QB-0328	Construction	SGJV	Keller Pile Driving	24-Apr- 14	0	2
511414-00000-SWGS-38QB-0329	Construction	SLCW- GST	Stasuk Testing & Inspection Ltd.	12-Mar- 14	0	1
511325-00000-SWSL-38QB-0030	Construction	EGRT	SLCW- GST	28-Mar- 14	0	1
511327-00000-SWSR-38QB-0331	Construction	SLCW- EG	SLCW- EG	7-Mar-14	0	0
511328-00000-SWSS-38QB-0332	Construction	SSJV	APS	20-Mar- 14	0	15
511326-00000-SWSG-38QB-0333	Construction	SGJV	SGJV	25-Apr- 14	0	3
511414-00000-SWGS-38QB-0334	Construction	SLCW- GST	AMEC	15-Apr- 14	0	0
511414-00000-SWGS-38QB-0335	Construction	SLCW- GST	Armtec	16-May- 14	0	1
511326-00000-SWSG-38QB-0336	Construction	SGJV	SGJV	19-Jun- 14	0	0
511327-00000-SWSR-38QB-0337	Construction	SLCW- EG	SLCW- EG	20-Jun- 14	0	1
511327-00000-SWSR-38QB-0338	Construction	SLCW- EG	SLCW- EG	26-Jun- 14	0	1
511325-00000-SWSL-38QB-0339	Construction	DBC	SLCW- GST	8-Jul-14	0	1
511414-00000-SWSW-38QB-0340	Construction	SLCW- SW	SLCW- SW	24-Jul-14	0	0

511414-00000-SWGS-38QB-0341	Construction	SLCW- GST	Surespan	12-Aug- 14	0	2
511327-00000-SWSR-38QB-0342	Construction	SLCW- EG	Harris-PT	31-Jul-14	0	0
511326-00000-SWSG-38QB-0343	Construction	SGJV	SGJV	12-Aug- 14	0	3
511414-00000-SWSG-38QB-0344	Construction	SLCW- GST	SLCW- GST	19-Aug- 14	0	0
511414-00000-SWSW-38QB-0345	Construction	SLCW- SW	Prime Engineeri ng	9-Oct-14	0	0
511327-00000-SWSR-38QB-0346	Construction	SLCW- EG	Metro Testing Ltd.	10-Oct- 14	1	3
511328-00000-SWSS-38QB-0347	Construction	SSJV	SSJV	23-Sept- 14	0	6
511414-00000-SWGS-38QB-0348	Construction	SLCW- GST	LMS Reinforci ng Steel Group	07-Oct- 14	0	2
511414-00000-SWGS-38QB-0349	Construction	SLCW- GST	SLCW- GST	15-Oct- 14	1	0
511328-00000-SWSS-38QB-0350	Construction	SSJV	SSJV	21-Oct- 14	0	3
511325-00000-SWSL-38QB-0351	Construction	DBC	SLCW- GST	7-Nov-14	0	1
511328-00000-SWSS-38QB-0352	Construction	SSJV	APS	6-Nov-14	0	8
511326-00000-SWSG-38QB-0353	Construction	SGJV	SGJV	7-Nov-14	0	0
511326-00000-SWSG-38QB-0354	Construction	SGJV	Harris Rebar	22-Oct- 14	0	1
511328-00000-SWSS-38QB-0355	Construction	SSJV	SSJV	4-Nov-14	0	8
511325-00000-SWSL-38QB-0356	Construction	DBC	SLCW- GST	28-Nov- 14	0	0
511414-00000-SWGS-38QB-0357	Construction	SLCW- GST	SLCW- GST	05-Dec- 14	0	0
511327-00000-SWSR-38QB-0358	Construction	SLCW- EG	SLCW- EG	20-Nov- 14	0	0
511328-00000-SWSS-38QB-0359	Construction	SSJV	SSJV	14-Nov- 14	0	5
511414-00000-SWGS-38QB-0360	Construction	SLCW- GST	SLCW- GST	28-Nov- 14	0	1
511414-00000-SWSW-38QB-0361	Construction	SLCW- SW	SLCW- SW	09-Dec- 14	0	1
511326-00000-SWSG-38QB-0362	Construction	SGJV	SGJV	12-Dec- 14	0	0
511414-00000-SWSW-38QB-0363	Construction	SLCW- SW	SLCW- SW	22-May- 15	0	1
511414-00000-SWSW-38QB-0364	Construction	SLCW- SW	WPE	22-May- 15	0	0
511414-00000-SWGS-38QB-0365	Construction	SLCW- GST	Western Archib	10-Feb- 15	0	2

511414-00000-SWGS-38QB-0366	Construction	SLCW- GST	Pattison Sign Group	18-Feb- 15	0	1
511327-00000-SWSR-38QB-0367	Construction	SLCW- EG	SLCW- EG	16-Feb- 15	0	0
511326-00000-SWSG-38QB-0368	Construction	SGJV	SGJV	5-Mar-15	0	0
511414-00000-SWGS-38QB-0369	Construction	DBC	SLCW- GST	16-Mar- 15	0	0
511414-00000-SWGS-38QB-0370	Construction	SLCW- GST	Acuren Group Inc	8-Apr-15	0	1
511414-00000-SWGS-38QB-0371	Construction	SLCW- GST	SLCW- GST	24-Apr- 15	0	0
511414-00000-SWGS-38QB-0372	Construction	SLCW- GST	Metro Testing Laborator ies	29-Apr- 15	0	0
511328-00000-SWSS-38QB-0373	Construction	SLCW- GST	SLCW- GST	5-May-15	0	0
511414-00000-SWGS-38QB-0374	Construction	SLCW- GST	Houle Electric	28-Aug- 15	0	2
511328-00000-SWSS-38QB-0375	Construction	SSJV	SSJV	22-Apr- 15	0	2
511327-00000-SWSR-38QB-0376	Construction	SLCW- EG	SLCW- EG	13-Jul-15	0	0
511325-00000-SWSL-38QB-0377	Construction	DBC	SLCW- GST	2-Jun-15	0	1
511414-00000-SWGS-38QB-0378	Construction	SLCW- GST	Flynn Canada Ltd	16-Jul-15	0	0
511414-00000-SWGS-38QB-0379	Construction	DBC	SLCW- GST	6-Aug-15	-	2
511414-00000-SWGS-38QB-0380	Construction	SLCW- GST	SLCW- GST	22-Dec- 15	0	2
511414-00000-SWGS-38QB-0381	Construction	SLCW- GST	SLCW- GST	29-Sep- 15	0	0
511414-00000-SWGS-38QB-0382	Construction	SLCW- GST	SLCW- GST	29-Sep- 15	0	0
511414-00000-SWSW-38QB-0383	Construction	SLCW- SW	WPE	4-Dec-15	-	-
511414-00000-SWSW-38QB-0384	Construction	SLCW- SW	Thales	27-Nov- 15	-	1
511414-00000-SWGS-38QB-0385	Construction	SLCW- GST	SLCW- GST	28-Jan-16	0	0
511414-00000-SWSW-38QB-0386	Construction	SLCW- SW	SLCW- SW	26-Jan-16	0	0
511414-00000-SWGS-38QB-0387	Construction	SLCW- GST	SLCW- GST	11-Feb- 16	0	0
511414-00000-SWGS-38QB-0388	Construction	SLCW- GST	SLCW- GST	16-Feb- 16	0	0
511414-00000-SWGS-38QB-0389	Construction	SLCW- GST	WPE	19-Feb- 16	0	2
511414-00000-SWSW-38QB-0390	Construction	DBC	SLCW- SW	26-Feb- 16	0	0

511328-00000-SWSS-38QB-0391	Construction	DBC	SSJV	3-Mar-16	0	0
511414-00000-SWGS-38QB-0392	Construction	SLCW- GST	SLCW- GST	17-Mar- 16	0	2
511414-00000-SWSW-38QB-0393	Construction	EGRT	SLCW- SW	16-Apr- 08	0	0
511325-00000-SWSL-38QB-0394	Construction	DBC	SLCW- GST	19-Apr- 16	0	0



EVERGREEN LINE RAPID TRANSIT PROJECT

MONTH END REPORT SEPTEMBER 2016

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Document No.	511325-00000-SWSL-30RM	1-0045	Revision:	0
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DISCLAIMER NOTE:

Nothing in this report constitutes a formal notice of claim by the Primary Contractor under its Agreement with the Province, including without limitation notice of claim arising from Supervening Event or Province Change.



1.0 PROGRESS OVERVIEW

This report covers project progress for the month of September 2016 (Payment Period 45). Design and construction progress is summarized below:

Project Summary:

Scope: 11 km of guideway, 6 new stations, 1 expanded station, 1 tunnel

Owner: Province of British Columbia / Translink

Physical Progress:

With the exception of the tunnel, all other areas of the project reached substantial completion by 29 February 2016 in accordance with the original schedule.

Overall 99% complete; working on 8 fronts; 45 months into the 46 month construction schedule.

Manpower: approximately 175 management and 525 craft labour.

Design

Overall design is 100% complete

Construction

- Segment 1: Testing & Commissioning near completion
- Segment 2: Testing & Commissioning underway
- Segment 3: Testing & Commissioning continues
- Segment 4: Testing & Commissioning continues
- Segment 5: Testing & Commissioning continues
- Stations: All stations are complete, only minor deficiencies remain.

1.1 SUMMARY OF ISSUES

Overall Schedule: an overall schedule update was conducted in April 2016 and results in a Substantial Completion date of 31 October 2016. This represents an 8 month extension from the baseline schedule. These 8 months are attributed as follows:

- 9 months for delays to tunnel excavation
- 1 month gain for tunnel finishes



The new Substantial Completion date of 31 October 2016 is 3 months later than the Substantial Completion Target Date in the Project Agreement. EGRT continues to assess the schedule and will mitigate impacts to the fullest extent possible.

The month of September 2016 showed good progress in tunnel finishes and gains in schedule were maintained. The Tunnel was turned over to the Testing and Commissioning group in early September.

2.0 DESIGN AND CONSTRUCTION - PROGRESS AGAINST PROJECT SCHEDULE

2.1 SUMMARY OF CONSTRUCTION EVENTS – BY SEGMENT

Segment	Name	Total	Previous to Date	Progress This Month	Total to Date
1	Caissons	64	64	Complete	64
	Columns	63	63	Complete	63
	Spans	57	57	Complete	57
	Trackwork Installed	4524	4524	Complete	4524
	Walkways Installed	4683	4683	Complete	4683
	LIM Rail Installed	4524	4524	Complete	4524
	Power Rail Installed	4524	4524	Complete	4524
2	Meters of Tunnel Excavation	1944	1944	Complete	1944
	Infill Material Placed	23477	23477	Complete	23477
	Concrete Slab Poured	4127	4127	Complete	4127
	Trackwork Installed	5540	5540	Complete	5540
	Walkways Installed	5540	5263	277	5540
	LIM Rail Installed	5540	5540	Complete	5540
	Power Rail Installed	5540	5540	Complete	5540
3	Number of SMX Columns	1826	1826	Complete	1826
	Meters of Track Slab	3725	3725	Complete	3725
	Trackwork Installed	3964	3964	Complete	3964
	Walkways Installed	3964	3964	Complete	3964
	LIM Rail Installed	3964	3964	Complete	3964
	Power Rail Installed	3964	3964	Complete	3964
4	Number of Timber Piles	6345	6345	Complete	6345
	Meters of Track Slab	2112	2112	Complete	2112
	Trackwork Installed	5282	5282	Complete	5282
	Walkways Installed	5282	5282	Complete	5282
	LIM Rail Installed	5282	5282	Complete	5282
	Power Rail Installed	5282	5282	Complete	5282
5	Piles/Caissons	73	73	Complete	73
	Columns	73	73	Complete	73
	Spans	52	52	Complete	52
	Trackwork Installed	3315	3315	Complete	3315
	Walkways Installed	3315	3315	Complete	3315
	LIM Rail Installed	3315	3315	Complete	3315
	Power Rail Installed	3315	3315	Complete	3315

Month End Report – September 2016



Segment	PPS Name	Total (%)	Previous to Date	Progress This Month	Total to Date
1	LHZ	100	100	Complete	100
	BQZ	100	100	Complete	100
3	NPZ	100	100	Complete	100
4	FCZ	100	100	Complete	100
5	LAZ	100	100	Complete	100
Segment	Station Name	Total (%)	Previous to Date	Progress This Month	Total to Date
1	Lougheed Station	100	100	Complete	100
	Burquitlam Station	100	100	Complete	100
3	Port Moody Station	100	100	Complete	100
4	Inlet Centre Station	100	100	Complete	100
5	Coquitlam Central Station	100	100	Complete	100
	Lincoln Station	100	100	Complete	100
	Douglas/Lafarge Station	100	100	Complete	100

2.2 MAJOR PROJECT MILESTONES

The schedule progress occurring for the period from August 25th to September 26th has an unchanged Anticipated Substantial Completion date of October 31st, 2016 from the past months progress.

Milestone	Dec 12, 2012 Baseline	Sep 26, 2016 Progress Update	(Business Days)
Substantial Completion Target	29-Jul-16	31-Oct-16	-63
Service Commencement Target	30-Aug-16	30-Nov-16	-63
Total Completion Target	31-Oct-16	31-Jan-17	-62
Availability Demonstration Completion Target	30-Aug-17	29-Nov-17	n/a
TIDS Performance Demonstration Completion Target	30-Aug-17	29-Nov-17	n/a

2.3 PROJECT-WIDE

2.3.1 Design

Design is substantially complete.



2.3.2 Changes to the EGRT Project Schedule

No major changes were made to the project schedule.

2.3.3 Activity Changes

No major activity changes were made to the project schedule.

2.3.4 Logic Changes

No major changes were made to the project schedule.

2.3.5 Critical Path

The critical path is determined by activities that have 14 or less days of float. The critical path continues to pass through the tunnel activities.

The critical path is as follows: center walkway, and system-wide cabling before the start of testing and commissioning in Test Zone 2.

To date, the tunnel fit out activities have been completed except for a few remaining deficiencies. These completed activities, reflected in the lastest Progress Update Schedule, are: design and approvals for the north tunnel approach, utility relocations, construction of the north tunnel approach, TBM pit and assembly of the TBM, Tunnel Boring, TBM Breakthrough, demob of the TBM at the south portal, Tunnel Infill, the South Portal Invert Slab, the tunnel track slab, tunnel center fire wall, inbound and outbound mainline track, power rail, and LIM rail, and systems installation.

2.3.6 Schedule Impacts

Test Zone 2 was impacted due to the delay of the tunnel breakthrough which occurred on November 27th, 2015.

2.4 PASSENGER STATIONS

All seven of the stations on the Evergreen Line are substantially completed.

2.5 OTHER FIXED FACILITIES

All five of the Propulsion Power Stations and the VSF Yard on the Evergreen Line are substantially completed.

2.6 ALIGNMENT

2.6.1 Segment 1 – Elevated Guideway / Lougheed Special Structure / South Portal Approach

Segment 1 is substantially completed.



2.6.2 Segment 2 – South Portal / Bored Tunnel / North Portal

Segment 2 is substantially completed.

2.6.3 Segment 3 – Reichhold Special Structure / At-Grade Guideway

Segment 3 is substantially completed.

2.6.4 Segment 4 – At-Grade Guideway / CPR / Fortis Bridge / Aberdeen and Coquitlam

Segment 4 is substantially completed.

2.6.5 Segment 5 – Elevated Guideway / Coquitlam Station / Pinetree / CIP / Lafarge Douglas Station – Special Structures

Segment 5 is substantially completed.

2.7 TRACKWORK

2.7.1 Special Trackwork:

Special Trackwork is substantially completed.

2.7.2 Mainline Trackwork:

Mainline Trackwork is substantially completed.

2.7.3 LIM Rail

LIM rail installation is substantially completed.

2.7.4 Power Rail

Power Rail installation is substantially completed.

2.7.5 Walkway

Walkways and lids is substantially completed.

2.8 SYSTEMS

2.8.1 Systems General

2.8.1.1 Subsystem Design

The FDR process is complete with outstanding SFDR action items being addressed.



2.8.1.2 Installation Design

The installation design is substantially completed.

2.8.1.3 Interface Design

The interface design is substantially completed.

2.8.1.4 Contractual Plan Submissions

A list of required plans and managerial documents are required in Appendix G of the Project Agreement (Systems General Requirements), and the DBC hosts a monthly meeting to coordinate the delivery of this documentation. The progress of these plans is updated monthly and issued to the Client by the DBC.

2.8.2 Power Supply and Distribution

PS&D FDR Packages have all been submitted to the Client.

2.8.3 Signalling / ATC

The signalling/ATC design process is substantially completed.

2.8.4 Communications, SCADA, FLSS and WMS

All FDR submissions are complete.

Design Packages issued for Province Review in September 2016:

· Reichhold Alarm Tie-in

2.8.5 Tunnel Ventilation Systems and Stand Pipe System

The Tunnel Ventilation SFDR process is complete.

2.8.6 Design for BC Hydro Related Works

All BC Hydro Related Works are complete.

2.8.7 Testing and Commissioning Planning and Procedures

The Systems Test Plan defined the Systems Integration Board. The Board is a joint Systems, T&C, and TransLink task group which will review test plans and schedules, and coordinate cutovers and configuration changes. This group commenced meetings in January 2015.

The Systems Cutover Plan has been updated in response to Client questions, and detailed planning of the cutover process will continue via the FMI log, which tracks configuration changes, and the T&C & Cutover schedule.



2.8.8 Systems Procurement

The following packages were issued out for tender/pricing in September:

N/A

2.8.8.1 Subcontract and Supply Contract Awards

The following equipment were issued out for award in September:

N/A

2.8.8.2 Supplier Design

NA

2.8.8.3 Equipment Deliveries

The following equipment was received at the warehouse in September:

No major equipment.

2.8.9 Warranty and Training

The warranty summary is currently being compiled for submission to the Province in October.

Training sessions, provided by the different vendors, have begun. Where applicable, change orders have been issued.

2.8.10 Spare Parts

Change orders continue to be issued for the required spares as per the BCRTC Purchase orders.

2.8.11 Construction

Tunnel Intrusion Monitoring System (TIMS) components were installed at the North and South Portals and testing is already underway.

Minor adjustments to installed tunnel lighting, receptacle and power distribution were performed in September. Crews successfully supported the SAT of Tunnel ventilation systems at NPZ and BQZ.



Automatic Train control Loop cables were amended within the Moody pocket track area to add a new loop cross-over and route a return loop through parapet-mounted rigid galvanized conduit.

Fibre optic cabling for underground radio and CCTV systems were installed and tested in August. Several design revisions resulted in rework and re-testing of radio fibre in September.

Heritage Mountain Monitor-Receiver site minor clean up civil works items was completed in September including construction of access stairs, and drop-pin sleeve embedded in concrete at the site gate.

Systemwide Mainline deficiency resolution continued during non-test windows. Track switch heating element replacement (4), several signage modifications and switch machine heater cable waterproofing progressed in September.

Station crew members (1-2) continued to support T&C tests and performed added scope, clean-up items as required.

WPE down-sized construction crews by 50% after the bulk of tunnel installations completed in the first week of September. The remaining crews have been split 40/60 between day shift and night-shift (for guideway access during testing program).

WPE's continued attention to removal and storage of cable end waste seems to have reduced trespassing at the Clarke Street construction access yard. No security incidents were reported in September.

2.9 TESTING AND COMMISSIONING

2.9.1 Progress Overview

ATC - The bored tunnel (Test Zone 2) was handed over to T&C on September 6 for remaining test activities. Test Zone 2 is the final phase of the T&C works and should lead directly into the Trial Running phase of the project of which Stage 1 is scheduled to commence on October 17. At the end of September, the following ATC test activities were accomplished

VCC5

- The final VCC release (ver 14.03.03) was installed September 13 and tested to confirm that the following restrictions could be lifted:
 - Speed limits through switches 221 & 226 are incorrect and have been speed limited by Go-Slow Zones
 - The length of track 915 beyond switch 223 is uncertain and automatic trains could contact the bump stop



- Positional uncertainty around switch 216 requires closing of track 658 until the train is confirmed clear of the switch
- When testing with an automatic train through the tunnel for the first time, it was discovered that the O/B tunnel gradient had been incorrectly input into the VCC guideway data. An automatic train would consistently over speed (FC8) when going O/B or downhill on the O/B guideway. The I/B guideway data was correct and automatic trains had no over speeds. The root cause was quickly diagnosed and a "hot fix" will be ready for a VCC5 engineering release test the first week of October. If successful, the VCC ver. will update to 14.03.04

VCC6

- The final VCC release (ver. 14.03.03) was installed September 13 and tested to confirm that the following restrictions could be lifted:
 - The bump stops at the ends of VS6 & VS7 are located incorrectly and rather than extend the rail to slide the stops back

PS&D - Power-on testing of Test Zone 2 power rail (Meggar, Hi-pot and segmentation), Blue Light SAT, AARU static SAT, Test Case 1 of the Single Substation Failure Simulation, were all successfully completed. Test Case 2 of the Single Substation Failure Simulation cannot be performed until the tunnel gradient issue is resolved and allows automatic train operation through the tunnel.

Communications – FLSS deficiencies were corrected and TransLink is ready for cutover to the Control Room the first week of October so that SIT testing can be completed with the EGRT works. Radio integration with the ATC/TRIMS/VRS is ready for final testing but BCRTC has reservations with trains crossing the Lougheed interchange during revenue service. Tunnel emergency telephones were found to be noisy during testing and an FMI for grounding will have to be completed before retesting.

SCADA – The final update of software from Survalent was tested with minor deficiencies noted. Specifically, colour of graphics and other GUI issues. BCRTC and EGRT will perform one final round of testing and once these issues are corrected the partition will be removed and SCADA cutover to the Control Room.

TIDS/TIMS – TIDS are monitored from the head end equipment which was relocated from BQS to the MCR of the OMC. The problem with the Thales SCS self test function which left tracks closed after the self-test function was corrected with new STC software ver. 1.03. TIMS at the portals is experiencing problems and testing is still in progress.

TVS – SAT testing is complete with velocity measurements recorded and the smoke test demonstrations completed for the Fire Departments and other agencies.

Fire Fighters Standpipe and Pump – The tunnel standpipe and water pump have been SAT tested and will be integrated with FLSS once the FLSS is cutover.



2.9.2 Submissions

The following submissions were made during August;

- Travel Time Demonstration rev. 1 was approved
- Test Zone Transition Plan rev. 2 was approved
- Availability Demonstration rev. 0 was approved

2.9.3 Beneficial Occupancy

In addition to areas reported previously, T&C took Beneficial Occupancy of:

Switch machines 204 and 205

2.9.4 SUMMARY OF MAJOR ACCOMPLISHMENTS THIS MONTH

Trial Running Working Group

Weekly meetings to discuss Trial Running issues have superseded the T&C Working Group.

Beneficial Occupancy

In addition to areas reported previously, T&C took BO of Test Zone 2 which completes the entire project.

2.9.5 Summary of Issues This Month

- Shortage of 3 reprogrammed Thales FPGA cards for VCC 6 has been temporarily resolved by modifying 3 additional FPGA cards – on-going until final version FPGA cards are installed.
- Above ground/underground radio SAT testing is complete. Integration testing of the above ground/underground radio at the portals and ATC/VRS/TRIMS testing is to occur in October.
- BCRTC installed VOBC firmware (3.08) into the entire fleet of MKII trains.

2.9.6 Changes Since Last Month

- Test Zone 2 Completion is moved to October 11th.
- Trial Running Stage 1 is now scheduled to commence October 17th with Stage 2 October 22nd.



2.9.7 TRAINING

- Several containment training exercises were held at Inlet Centre for the police.
- BCRTC operational staff received internal training on the Evergreen Line.
- BCRTC Power Techs received contractor training on Disconnect, grounding and transfer switch, AC/DC Switchgear, AARU and Xformer/Rectifier, UPS, 125 VDC and 600 VAC equipment.
- BCRTC Electronic Techs received contractor training on TRIMS, ATC Central Equipment, ATC Wayside Equipment and Public Address.

2.10 CONCLUSION

Our current EGRT Project Schedule is based on the best information available and our current plan for construction. Changes to the final construction plans and methods, and their respective schedules, sequences and durations are expected as work progresses on all fronts. Any future changes or revisions to the schedule will be detailed in this narrative.



3.0 ENVIRONMENTAL MANAGEMENT

3.1 PERMITTING STATUS

No permitting activities (for new Permits) occurred during this reporting period and at this stage it is anticipated that no new Permits will be needed to finish out the Project. The status of all permits acquired to date on the Project is summarized in Attachment F.

3.2 ENVIRONMENTAL MANAGEMENT SUMMARY

EGRT's Environmental Manager continued to conduct routine environmental management activities including but not limited to: advising on environmental planning and implementation issues, preparing environmental submittals and deliverables, participating in environmental quality activities, and overseeing the Environmental Inspectors (EIs).

Construction of Habitat Compensation

At Schoolhouse Creek, EGRT's Subcontractor completed instream construction of the compensation works during this reporting period, consistent with the requirements of the DFO Authorization for the Project which requires that instream works be completed during the least-risk fisheries window (Aug. 1st to September 30th of any given year). At end of this reporting period, top soil and woody debris were being placed in riparian areas with planting to begin in October 2016.

At Suterbrook Creek, two weirs remain to be installed in the mainstem of the Tributary to Suterbrook Creek. This work is expected to be completed in October 2016.

All other habitat compensation for the Project has been completed.

Remaining Environmental Obligations

Going forward, the following environmental obligations remain to be completed on the Project:

- Environmental Inspection: environmental inspection of construction will continue until environmentally sensitive construction is complete. Remaining environmentally sensitive construction includes: completion of the Schoolhouse Creek habitat compensation (instream work is completed but top-soil placement and planting remain to be done); installation of two rock weirs in the Tributary to Suterbrook Creek; installation of a new stormceptor at Coquitlam Central Station; and completion of planting at the North Portal. Environmental Inspection reporting to the Province and to applicable regulatory agencies will continue once every two weeks until the above listed works are completed (likely by end of October). Assuming concurrence from the Province and applicable regulatory agencies, environmental inspection and inspection reporting should conclude at end of October 2016.
- Completion of general site restoration and planting of "replacement trees" as required by PTOC item #52: Landscaping along Clarke Street (including tree replacement) has



been completed but additional landscaping elsewhere on the Project (e.g., at the CP Wye) remains to be done and will be completed in October-November, 2016.

- "Trend" water quality monitoring (as required by PTOC items #42 and #43): EGRT has periodically assessed water quality sampling in watercourses potentially affected by construction. Samples have been tested for metals, hydrocarbons, Volatile Organic Compounds (VOCs), turbidity, suspended solids, pH, dissolved oxygen, conductivity and water temperature. The monitoring program included a round of "baseline" water quality monitoring at the start of the Project (to assess the pre-project condition), followed by two rounds of water quality sampling during the construction phase. To complete the program, EGRT conducted a final round of sampling in June 2016 to assess the post-construction condition at all watercourses except Schoolhouse Creek (where construction of habitat compensation is still ongoing). EGRT will prepare and submit to the Province a brief summary of the monitoring program results. This report is planned to be submitted to the Province in October 2016, after the end of habitat compensation construction at Schoolhouse Creek.
- Close-out of environmental permits including the DFO Authorization (see Appendix F for permit expiry dates): A "close-out" permit tracking matrix is being used to document the close-out status of all key environmental permits. The Permit close-out tracking document will be attached to the Environmental Final Completion Report (see bullet below).
- Preparation of an Environmental Final Completion Report as required by PA, Schedule 5, Subsection 3.8: The PA indicates this report is to follow Substantial Completion. Further discussion with the Province occurred during this reporting period to determine the contents, format and submission date of this report.
- Annual Certificate of Compliance with Environmental Laws: One additional Certificate
 of Compliance will be required, covering the period December 11th, 2015 to
 December 10th, 2016. This final Certificate of Compliance would be submitted to the
 Province in December 2016.
- Continuation of the monthly environmental management report (i.e., in the form of this
 environmental management section of EGRT's monthly progress report): Further
 discussion with the Province is required to determine when this monthly
 environmental reporting would end.
- Preparation of a detailed post-construction monitoring and assessment report documenting site-specific landscaping and restoration measures implemented during construction, as required by PTOC #50: This report, which will document completion of EGRT's tree replacement obligations, is required one year after contract completion.
- Monitoring and annual reporting of the performance of constructed compensatory habitats: The DFO Authorization requires this monitoring to continue until the end of 2019 with a final annual monitoring report submitted to the Province and to applicable agencies in January 2020.

3.3 ENVIRONMENTAL SUBMITTALS TO PROVINCE

Submittals to the Province during this reporting period:

Biweekly Environmental Inspection Report (BEIR) Nos. 156, 157 and 158.



3.4 AMENDMENT TO ENVIRONMENTAL ASSESSMENT CERTIFICATE

No changes in design or construction occurred during this reporting period that warranted consideration of an amendment to the Project's Environmental Assessment Certificate (T10-01).

3.5 ENVIRONMENTAL REVIEW OF DESIGN

Environmental design and environmental review of non-environmental design are complete.

3.6 ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION

EGRT has begun testing and adjusting the bored tunnel's fire suppression system. The testing involves flushing, using water obtained from the municipal potable water system. The resultant waste water is being captured and dechlorinated prior to discharge to the municipal storm sewer system. Testing is also being done to verify that the chlorine concentration of the treated water is suitable for discharge to storm.

3.7 ENVIRONMENTAL INCIDENTS

No environmental incidents occurred during this reporting period.

3.8 ENVIRONMENTAL INSPECTION

Bi-Weekly Environmental Inspection Report (BEIR) Nos. 156, 157 and 158 were submitted to the Province "for Information" during September. As reported by EGRT's Environmental Inspectors, construction generally complied with Project environmental requirements during this reporting period.

See Table below. Four issues (#242, #245, #246 and #248) were carried over from August into September. Two of those issues (#242 and #246) were closed during this reporting period. Two other carried-over issues (#245, #248) remain open at the end of this reporting period. There were no new issues in September.



Table: Environmental Inspection Issue Tracking Summary

Issue No.	Date Opened	Description	Status at Sept 30/16
242	July 5/16	Hydrocarbon staining on soil/gravel at South Portal. Clean-up was completed during this reporting period; contaminated material was disposed offsite at a facility licensed to receive the material.	Closed
245	Aug 9/16	Hydrocarbon staining at the North Portal tunnel support yard. Clean-up was not yet completed at end of this reporting period.	Open
246	Aug 9/16	Deficient housekeeping at South Portal (crew garbage strewn around the site). The garbage was cleaned up during this reporting period.	Closed
248	Aug 31/16	Deficient management of non-hazardous waste at tunnel support yard: a construction debris pile including crew garbage is present at the north end of the yard under the guideway.	Open

3.9 COMPLIANCE SUMMARY

No significant environmental compliance issues occurred during this reporting period.



4.0 COMMUNICATIONS AND COMMUNITY RELATIONS

No community meetings and/or Business Liaison Committee meetings were held in September 2016.

With the project nearing completion, no additional Business Liaison Committee (BLC) meetings are scheduled. Should there be any BLC or community meetings, the EGRT Construction communications team will support the Province and attend as required.

4.1 TRAFFIC MANAGEMENT COMMUNICATIONS

No Construction and Traffic Bulletins were issued by the EGRT Construction communications team in September 2016.

The EGRT Construction communications team issued the following Community Notices in September 2016:

- Intermittent Nighttime Work in Port Moody September 2
 - This notice was distributed to the businesses/residents on Clarke Street between Douglas Street and Moody Street, including the new condo development just north of Clarke Street on the west side of Moody Street.
- Intermittent Nighttime Work at the South Tunnel Portal Area September 6
 - This notice was distributed to residents on Kemsley Avenue, Elmwood Street, Clarke Street and Westley Avenue.
- Temporary Nighttime Work in Port Moody September 9
 - o This notice was emailed to Klahanie property manager s.22 who will distribute to 301 Klahanie Drive, 200 Klahanie Drive. Emailed to the Canoe Club, to the Sahalee building property manager (651 Nootka) s.22 s.22 emailed to s.22 Property Manager for The Residences at Suter Brook, distributed to the residents at The Square on St Johns Street and to Sonrisa residents. It was also emailed to businesses in the area that we have contact information for OpenRoad Auto Group and at the new Brew Street pub.
- Ventilation Systems Test North Tunnel Portal Area September 15
 - This notice was distributed to residents on View Street, View Court, Charles Street, Clarke Street near Douglas Street, EComm and the City of Port Moody – emergency responders and city staff.
- Ventilation Systems Test South Tunnel Portal Area September 15



 This notice was distributed to residents on Elmwood Street, Westley Avenue, Kemsley Avenue, Clarke Road between Kemsley Avenue and Como Lake Avenue, EComm and the City of Coquitlam – emergency responders and city staff.

Please note that these notices were also posted on the egrtconstruction.ca website.

No Traffic Alerts were distributed by EGRT Construction in September 2016.

4.2 PUBLIC CONSULTATION

No public consultation is required by the Province of BC.

4.3 MEDIA RELATIONS

All media inquiries, including inquiries from traffic reporters, will continue to be referred to the Province for first comment. EGRT Construction will only answer routine traffic questions and only when queries have been referred to the EGRT Construction Communications Manager directly by the Province.

EGRT Construction issued one Traffic Reporters Advisory on September 19 related to the ventilation systems tests at the south and north tunnel portal area.



5.0 FIRST NATION ENGAGEMENT

5.1 PERFORMANCE OVERVIEW BY SUB-CONTRACTOR

NATION	Procurement Target	Opportunities to Date	Awarded to Date	Awarded this Period
	(\$/project)	(est. \$ value)		
Tsleil Waututh	s.16,s.17			
Musqueam				
Kwikwetlem				
OTHER				
				j

NATION	Employment Target	Employment to Date	Employment this Period	Total Active Employees
	(hrs/project)	(hrs)	(hrs)	(qty)
Tsleil Waututh	s.16,s.17			
Musqueam				
Kwikwetlem				
OTHER				

¹ Employment This Period and Awarded This Period updated quarterly.

All First Nations procurement targets have been exceeded.

Employment targets for Musqueam have been exceeded, and targets for Tsleil Waututh continue to be pursued. Labour availability from Tsleil Waututh is limited.



5.2 BID REPORT - PROCUREMENT OPPORTUNITIES & AWARDS DETAILED

Bid Close Date	Company Name (Bidder)	Affiliated First Nation	Awarded Contract (Actual)	Procurement Opportunity (Est. Value)	Status
22/Nov/13	s.16,s.17				
1/Oct/13					
18/Sep/13					
5/Mar/13					
29/Apr/13					
1/Mar/13					
13/Dec/13					
4/Jun/14					
4/Jun/14					
22/Nov/13					
18/Sep/13					
3/May/13					
13/Dec/13					
4/Jun/14					
1/Sep/13					
27/Jun/13					
1/Sep/13					
27/Jun/13					
	22/Nov/13 1/Oct/13 18/Sep/13 5/Mar/13 29/Apr/13 1/Mar/13 13/Dec/13 4/Jun/14 22/Nov/13 18/Sep/13 3/May/13 13/Dec/13 4/Jun/14 1/Sep/13 27/Jun/13	Close Date 22/Nov/13 1/Oct/13 18/Sep/13 5/Mar/13 29/Apr/13 1/Mar/13 13/Dec/13 4/Jun/14 22/Nov/13 18/Sep/13 3/May/13 13/Dec/13 4/Jun/14 1/Sep/13 27/Jun/13	Close Date (Bidder) First Nation 22/Nov/13 1/Oct/13 18/Sep/13 5/Mar/13 29/Apr/13 1/Mar/13 13/Dec/13 4/Jun/14 22/Nov/13 18/Sep/13 3/May/13 13/Dec/13 4/Jun/14 1/Sep/13 27/Jun/13	Close Date (Bidder) First Nation Contract (Actual) 22/Nov/13 1/Oct/13 18/Sep/13 5/Mar/13 29/Apr/13 1/Mar/13 13/Dec/13 4/Jun/14 22/Nov/13 18/Sep/13 3/May/13 13/Dec/13 4/Jun/14 1/Sep/13 27/Jun/14	Close Date (Bidder) (Bidder) (Bidder) (Contract (Actual)) 22/Nov/13 1/Oct/13 18/Sep/13 5/Mar/13 29/Apr/13 1/Mar/13 13/Dec/13 4/Jun/14 22/Nov/13 18/Sep/13 3/May/13 13/Dec/13 4/Jun/14 22/Nov/13 13/Dec/13 27/Jun/14



SLCW-EG PROCUREMEN	т		
Traffic Signs-Part 1	ongoing	s.16,s.17	
Traffic Signs-Part 2	ongoing		
Site Security (3 mo. Trial)	ongoing	-	
Site Security (3 mo.)	ongoing	-	
Site Security (15 mo.)	ongoing	-	
Traffic Management (3 mo. Trial)	ongoing	-	
Traffic Management (15 mo.)	ongoing		
Crane Services for Truss		-	
Assembly	19/Aug/13		
Trailer rental (ongoing)	ongoing	-	
Trailer Rental-New Office	ongoing	•	
Traffic Management (15 mo.)	ongoing		
Trailer Relocation	ongoing		
Traffic Management	ongoing	_	
Traffic Management	ongoing		
Trailer rental (ongoing)	ongoing		
Trailer rental (ongoing)	ongoing		
Trailer rental (ongoing)	ongoing	:	
Elec. Services	ongoing		
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Elec. Services	ongoing		
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SLU	- vv −	GST	PRU	CUH	ENI

SLCW-GST Ph	OCUREMENT
GC009- Stn Elec. Work	1/Oct/13 s.16,s.17
Office Trailer Rentals(0000143)	ongoing
Lougheed Stn Demo	31/May/13
GC003- Piles & Caissons	3/Jun/13
Elec. & data-Poco Warehse	1/Apr/13
GC400-Port Moody Demo	1/Mar/13
GC009- Stn Elec. Work	30/Jan/14
GC037- Supply/Install Piling	8/Jan/14
GC039-PPS & VSF Elec. Work	17/Apr/14
GC048-Moody Piling	17/Apr/14
GP500-Supply Retaining Wall	9/Sep/14
GP500-CO No. 1	17/Aug/15
GP500-CO No. 2	13/Nov/15
GC063-Modular Buildings	9/Mar/15
GC063-CO No. 1	8/Oct/15
GC063-CO No. 2	7/Nov/15
GC063-CO No. 3	24/Feb/16
Elec. Work for Stns	6/Jan/14
GC009-CO No. 1	11/Jun/14
GC009-CO No. 2	2/Oct/14

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GC009-CO No. 3 3/Oct/14 GC009-CO No. 4 16/Dec/14 GC009-CO No. 5 13/Jan/15 GC009-CO No. 6 13/Jan/15 GC009-CO No. 7 14/Jan/15 GC009-CO No. 8 19/Jan/15 GC009-CO No. 9 23/Mar/15 GC009-CO No. 10 30/Mar/15 GC009-CO No. 11 9/Apr/15 GC009-CO No. 12 4/Jun/15 GC009-CO No. 12 4/Jun/15 GC009-CO No. 13 7/Aug/15 GC009-CO No. 14 7/Dec/15 GC009-CO No. 15 12/Jan/16 Inlet Ctr Exc (511414-GC401) 16/Jan/14 GC009-CO No. 1 16/Jan/14 GC039-CO No. 1 30/Sep/14 GC035-CO No. 2 15/Jan/15 GC0035-CO No. 1 30/Sep/14 GC035-CO No. 3 22/May/15 GC035-CO No. 5 24/Dec/15 GC035-CO No. 6 11/May/16 GC039-CO No. 1 30/Sep/14 GC039-CO No. 2 14/Jan/15 GC039-CO No. 2 14/Jan/15 GC039-CO No. 2 14/Jan/15 GC039-CO No. 3 15/May/15 GC039-CO No. 2 28/Oct/15 GC039-CO No. 3 15/May/15 GC039-CO No. 6 24/Dec/15 GC039-CO No. 6 24/Dec/15 GC039-CO No. 6 24/Dec/15 GC039-CO No. 7 28/Oct/15 GC039-CO No. 8 11/May/16 SLCW-SW PROCUREME Lougheed Stn Demo (51414- GC039-CO No. 8 11/May/16 GC039-CO No. 9 28/Oct/15 GC039-CO No. 1 30/Sep/14 GC039-CO No. 1 30/Sep/14 GC039-CO No. 1 30/Sep/14 GC039-CO No. 2 30/Sep/14 GC039-CO No. 3 30/Sep/14 GC039-CO No. 6 30/Sep/14 GC039-		
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Lougheed Stn Brownfield Installs CO #2 SC9000-05 6/Nov/14		
Brownfield Installs CO #2 SC9000-05 6/Nov/14		
CO #2 SC9000-05 6/Nov/14		30/Sep/14
SC9000-05 6/Nov/14		
1 6/NOV/1/I		
		6/Nov/14



Brownfield Installs				
CO #3		_[_
SC9000-05		s.16,s.17		_
Lougheed Stn	0/4/45			
Brownfield Installs	8/Apr/15			
CO #4				
SC9000-06 T&C		-		_
Support	11/May/15			
Support		-		_
SC9000-06 T&C	14/Mar/16			
Support CO#1		_		_
SC9000-06 T&C				
Support	26/May/16			
Change Order No.	20/Way/10			
2				
SC9025-01 OMC	00/Marr/14	-		_
Install	29/May/14			
SC9025-01 OMC	404 (45	-		_
Install-CO#1	4/May/15			
SC9000-08		-		_
Segment 2	16/Feb/16			
Installation	10/160/10			
SC9000-01		-		_
	5/Aug/14			
Systemwide Install		-		_
SC9000-01				
Systemwide	17/Nov/14			
Install-CO #1		_		_
SC9000-01				
Systemwide	28/Jan/15			
Install-CO #2				
SC9000-01		-		_
Systemwide	17/Mar/15			
Install-CO #3				
SC9000-01		-		_
Systemwide	15/Jun/15			
Install-CO #4				
SC9000-01		-		-
Systemwide	15/Jul/15			
Install-CO #5	10,000,10			
SC9000-01		-		_
Systemwide	15/Sep/15			
Install-CO #6	13/3ep/13			
		-		-
SC9000-01	40/N/45			
Systemwide	16/Nov/15			
Install-CO #7		-		_
SC9000-01				
Systemwide	9/Dec/15			
Install-CO #8		_		_
SC9000-01				
Systemwide	12/Jan/16			
Install-CO #9				
SC9000-01		-		
Systemwide	7/Mar/16			
Install-CO #10				
SC9000-01		-		_
Systemwide	22/Mar/16			
Install-CO #11				
SC9000-01		-		_
Systemwide	9/May/16			
Install-CO #12	J/Way/10			
	07/Max/4.4	-		-
SC9000-02 CO #1	27/Mar/14	-		_
SC9000-02 CO #3	3/Oct/14			_
SC9000-02 CO #4	3/Oct/14			_
SC9000-02 CO #5	25/Aug/15	_		_



SC9000-08 s.16,s.17

SC9000-08	
Segment 2	16/Feb/16
Equipment	10/1 65/10
Installation	
SLCW-SW PRO	CUREMEN
SC9000-08	
Segment 2	0010/0510
Equipment	2016/0516
Installation CO#1	
SC9000-08	
Segment 2	2/May/16
Equipment	2/1Vlay/10
Installation CO#2	
SC6000-01	
SubStn Equip.	12/Sep/14
Install	
SC6000-01	
SubStn Equip.	28/Nov/14
Install-C#1	
SC6000-01	00/1/45
SubStn Equip.	28/Jan/15
Install-C#2	
SC6000-01	10/5 1 // 5
SubStn Equip.	18/Feb/15
Install-C#3	
SC6000-01	
SubStn Equip.	17/Mar/15
Install-C#4	
SC6000-01	00/4/45
SubStn Equip.	30/Apr/15
Install-C#5	
SC6000-01	11/Con/15
SubStn Equip.	11/Sep/15
Install-C#6 SC6000-01	
SubStn Equip.	16/Nov/15
Install-C#7	10/1407/13
SC6000-01	
SubStn Equip.	9/Mar/16
Install-C#8	3/IVIQI/ TO
SC6000-01	
Substation	
Equipment Install-	22/Mar/16
C#9	
SC6000-01	
Substation	
Equipment Install-	9/May/16
C#7	
SC7000-01 Stn	
Communication	8/Dec/14
Install	
SC7000-01 Stn	
Communication	5/May/15
Install-CO #1	
SC7000-01 Stn	
Communication	25/Aug/15
Install-CO #2	
SC7000-01 Stn	
Communication	28/Sep/15
Install-CO #3	
SC7000-01 Stn	
Communication	16/Nov/15
Install-CO #4	



SC7000-01	
Station Communications Install - CO #5	22/Mar/16
SC7000-01 Station Communications Install - CO #6	9/May/16
OTHER FN PR	OCUREME
511325- Environmental Services Sumas Remediation	5/Aug/14

Summary of Activities

- To date there is been great success of engaging aboriginal businesses in project construction with over \$48 million awarded.
- Employment values have begun reduce as the project winds down.
- At least once per quarter, project updates are provided to the Tsleil Waututh and Musqueam Nations through the Economic Development offices.

Challenges/Risks

Work Planned

 Continue to respond to needs of the client and the identified First Nations as the project winds down.



6.0 HEALTH AND SAFETY

6.1 SUMMARY OF SAFETY ACTIVITIES

s.22

- The North Portal restoration is under way with Hall performing the work.
- T&C has taken BO of the tunnel and all Confined Space protocols will remain in place. Tunnel entry permits are being issued by T&C.
- WorkSafeBC has responded to the last submission relating to the tunnel orders written in June. All orders have been complied/closed.
- T&C are continuing with testing in segments the entire alignment.
- Mission Contracting is performing very well at the Schoohouse Creek restoration area. The work is nearing completion.

6.2 INJURY AND INCIDENT SUMMARY

Environmental:

See Environmental Section of Report

- Property/Equipment Damage:
 - None Reported
- Medical Aid:

s.22



• Lost Time Incident:

• s.22

Hours Worked	First Aid	Medical Aid/LTI	Lost Time Days
This Month	This Month	This Month	This Month
41,530	5	1/0	25
Hours Worked	First Aid	Medical Aid/LTI	Lost Time Days
To Date	To Date	To Date:	To Date
5,017,976	488	64/10	142



7.0 FINANCIAL

7.1 PERFORMANCE INCENTIVE PAYMENTS

Refer to the Performance Mechanism Report for full details.

7.2 MILESTONE PAYMENTS

See attached Statement of Progress.

7.3 CHANGE MANAGEMENT

Pricing has been approved for the following Province Changes/Events this month:

None

Pricing has been submitted for the following Province Changes:

None

Additional Province Changes active this month include:

- Design of Wired Connection to Evacuation Alarm (SI35)
- Charles Street As-Builts (SI38)
- Moody Station PTZ Camera to monitor FCP (SI39)
- Station Lighting Enhancements Moody/Coq (SI40)
- Supply of Tunnel Signage BCRTC (SI43)

7.4 RISK MANAGEMENT

Risk registers for each area of work are updated on a monthly basis.



8.0 QUALITY ASSURANCE

The following is a summary of activities.

8.1 STATUS OF QUALITY MANAGEMENT SYSTEM ACTIVITIES

- EGRT Construction continues to work closely with the Province to address quality issues as they arise. Representatives from both sides continue to meet regularly to discuss project quality issues.
- EGRT Construction continues to extend the invite to the Province for internal and external audits.
- The table below shows the current status of the Management Plans

Table 1 - Management Plan Status

Plan	Latest Date of Issue	Latest Revision	Status
Quality Manual	20-Mar-14	2	Received
Design Quality Management Plan	6-May-14	3	Received
Environmental Quality Management Plan	21-Jul-14	2	Received
Traffic Quality Management Plan	1-May-14	2	Received
Construction Quality Management Plan – SGJV	23-Jun-14	2	Received
Construction Quality Management Plan – SLCW – GST	23-Apr-15	3	Received
Construction Quality Management Plan – SLCW – EG	16-Mar-15	1	Received
Construction Quality Management Plan – SSJV	11-Mar-15	2	Received
Construction Quality Management Plan – SLCW – SW	16-Dec-13	0	Accepted

8.2 AUDIT PROGRAMME

The tables below show the current status of the Audit Programme.



Table 2 – Audit Programme Status

Audit Programme	Latest Date of Issue	Latest Revision	Status
Quality Audit Programme	04-Mar-13	0	Received with comments from the Province. Detailed audit programmes were issued separately.
Design Quality Management Audit Programme	20-Jan-15	2	Received
Environmental Audit Programme	04-Dec-15	3	Issued to the Province for Information
Traffic Management Audit Programme	04-Dec-15	4	Issued to the Province for Information
Transit Facilities Audit Programme	05-Dec-14	4	Issued to the Province for Information
Construction Quality Management Audit Programme	4-Feb-16	4	Received

- To date, 157 quality audits have been completed by EGRT, Joint Ventures and Subcontractors. They are listed on Attachment H.
- There were no audits completed this reporting period.

8.3 PREVENTATIVE ACTION LOG

- There were no preventive actions initiated at this reporting period.
- Below is the tracking log for preventive action.

Table 3 – Preventive Action Log

PAR No.	Project Team	Brief Description	Response	Date Opened	Verified

8.4 SUMMARY OF INSPECTION AND TESTING ACTIVITIES

 Below is a table showing the Inspection and Testing summary for this reporting period.



Table 4 – Summary of Inspection and Testing

Project Team	Location	Description of Inspection and Testing
SLCW- GST	Stations	- Deficiency repair
SLCW- GST	Substations	- Deficiency repair
SLCW- GST	Vehicle Storage Facilities	- Deficiency repair

8.4.1 DBC

• There were no ITPs issued by DBC this reporting period.

8.4.2 SLCW-GST

There were no ITPs issued by SLCW-GST this reporting period.

8.4.3 SLCW-SW

There were no ITPs issued by SLCW-SW this reporting period.

8.5 NONCONFORMITY REPORTS AND CORRECTIVE ACTION

- The table below shows the current status of active NCRs.
- Associated Corrective Action for any NCR can be referred to the NCR Tracking System. Below is the link to the website.

http://csc.snclavalin.com/sites/EvergreenNCRTS/default.aspx



Table 6 -NCR and CAR Status

NCR No.	Description of Nonconformity	Date Open	Date Ended	Status	Description of Correction
SSJV-0035	Additional Segments With Curing Temperatures Exceeded 70 °C, Installed In The Tunnel	24-Mar-15		Final Quality Review	Use-as-is
SLCW-GST- 0073	Drainage issue at DF pads locations in Section 330	26-May-15		Correction Implementation	Repair
SLCW-GST- 0086	Projectwide Lighting Fixtures Ballast	21-Mar-16	7-Sep-16	Ended	Rework
SLCW-GST- 0089	Corrosion of LIM Studs at Stud-Grout Interface	25-May-16	19-Sep-16	Ended	Repair
SLCW- Systems- 0009	Interface tolerance between running rail and expansion joint	15-June-16	6-Sep-16	Ended	Repair
SLCW-GST- 0090	Station Floor Drainage	22-June-16	30-Sep-16	Ended	Repair

8.6 CONTINUAL IMPROVEMENT INITIATIVES

Improvement initiatives are presently done through Opportunity for Improvements and Corrective Actions related to NCRs.



9.0 PROJECT PHOTOGRAPHS



Figure 1 - Completed Trackwork and Walkways at North Portal Transition





Figure 2 – Completed Tunnel Fitout





Figure 3 – Completed Walkway installation at South Portal Transition





Figure 4 - North Portal/View Street Slope Restoration





Figure 5 – Habitat Restoration at Schoolhouse Creek



Attachments

Attachment A - Submission List - Systems - Discontinued

Attachment B - Project Schedule

Attachment C – Activity Changes - *Discontinued*

Attachment D - Logic Changes - Discontinued

Attachment E – Alignment Key Plan

Attachment F - Environmental Existing Permits

Attachment G - Four Month Look Ahead Audit Schedule - **Discontinued(See 8.2 Table 3)**

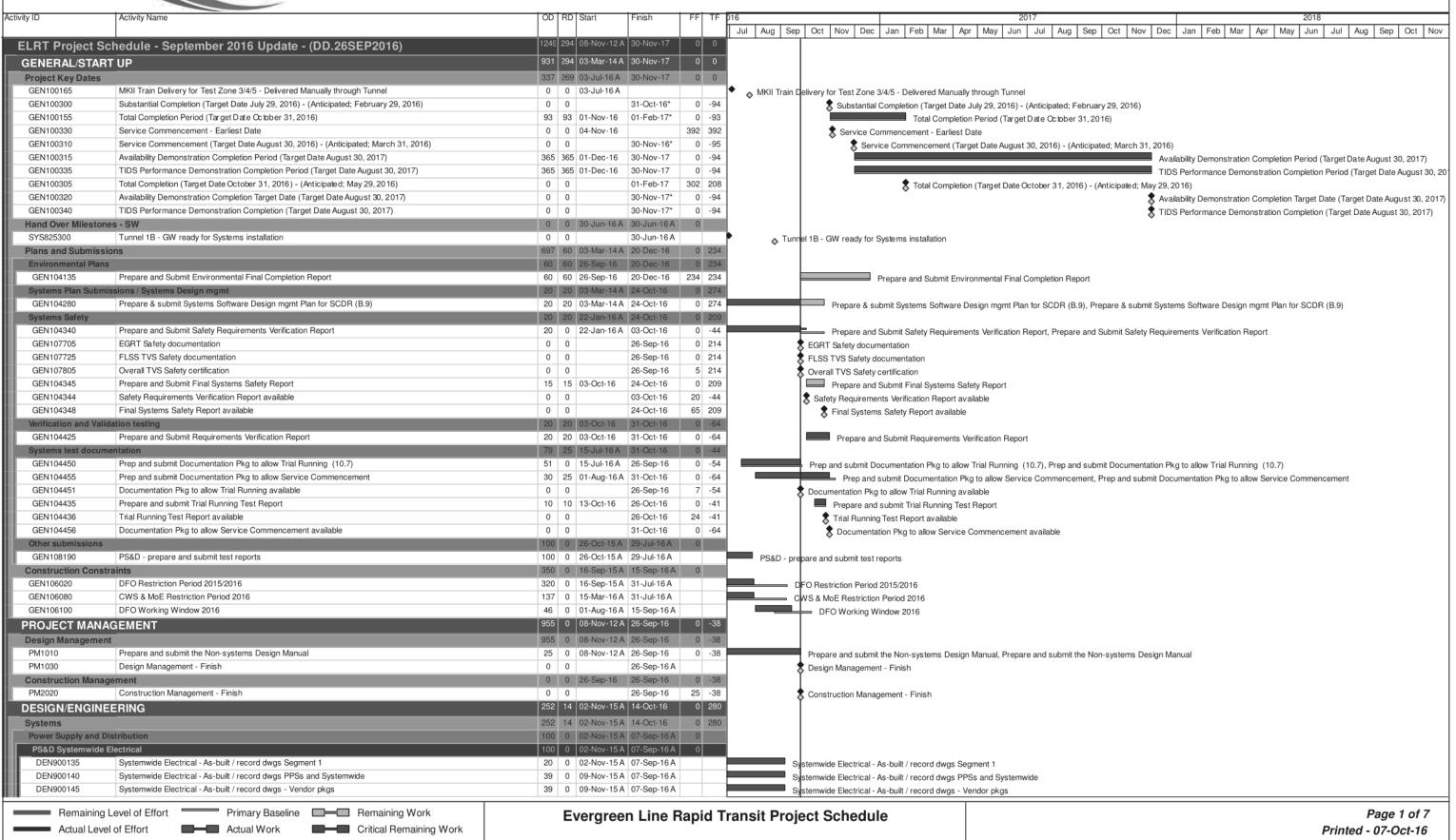
Attachment H - Quality Audits

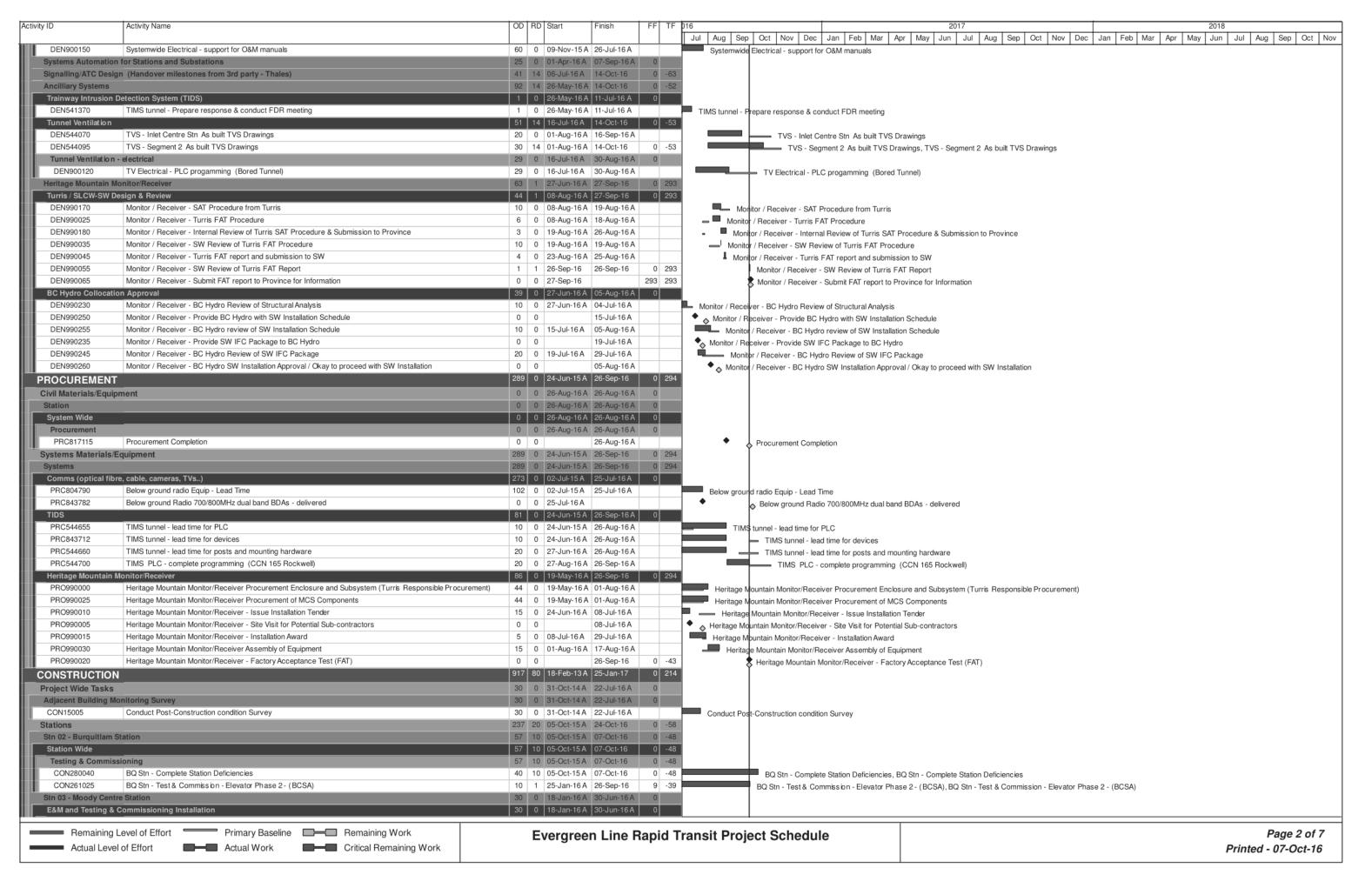
ATTACHMENT A SYSTEM MANAGEMENT PLAN DISCONTINUED

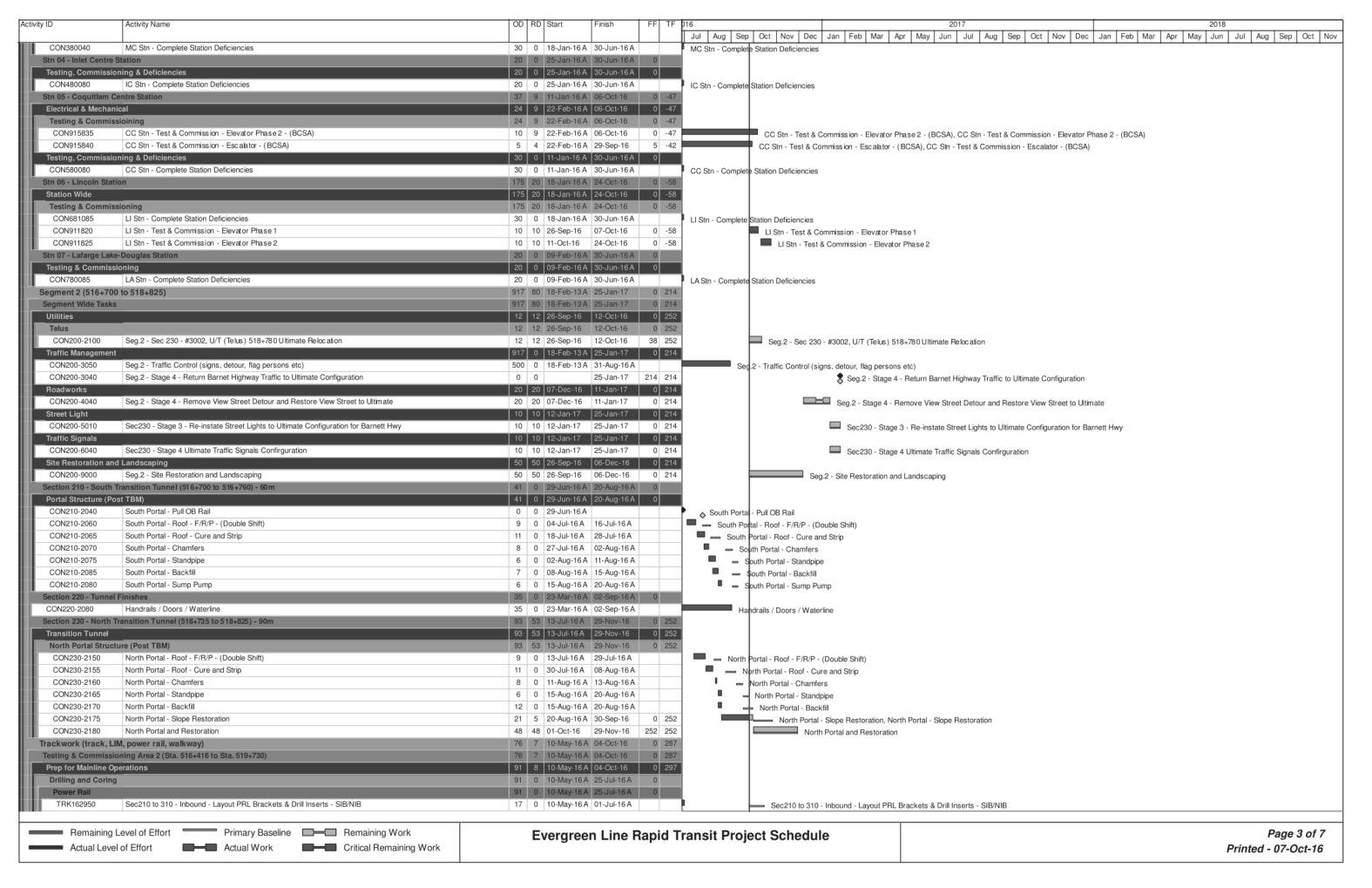


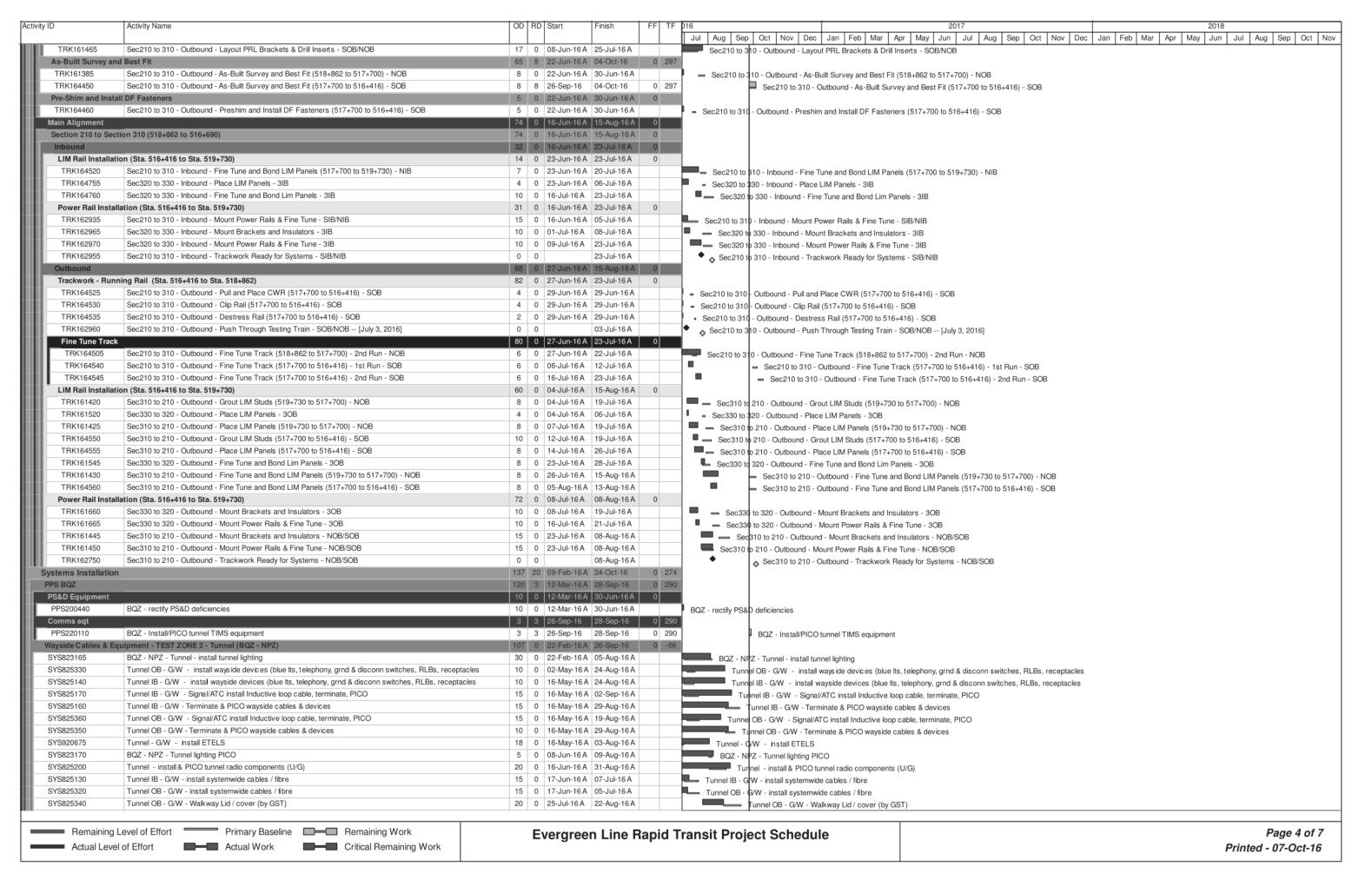
EVERGREEN LINE RAPID TRANSIT PROJECT ELRT Project Schedule Update - (DD. 26SEP2016) Condensed Schedule

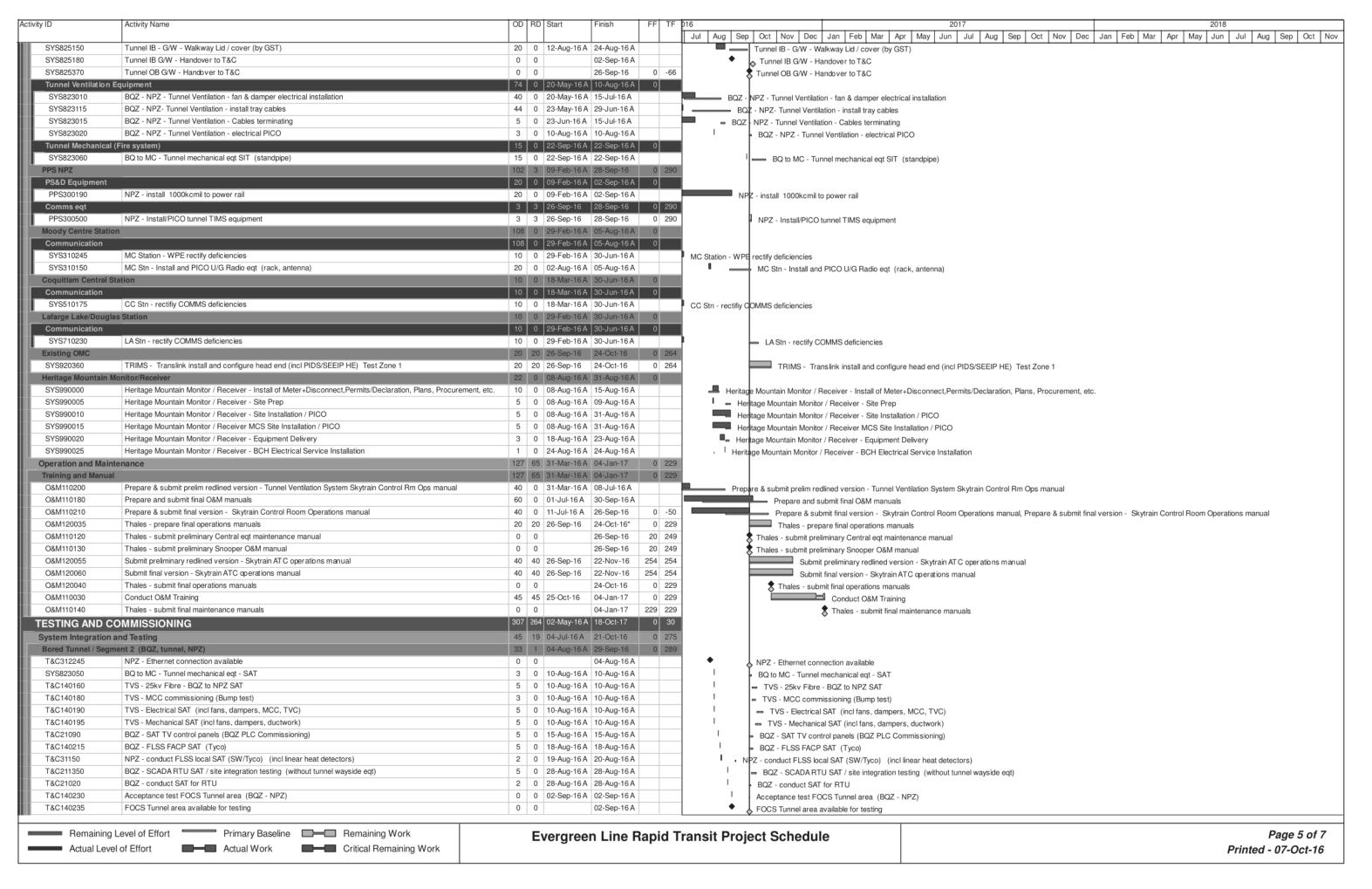
Date	Revision	Checked	Approved
04-Oct-16	Project Schedule Update (DD.26SEP2016) Rev.0	JS	AM
09-Oct-16	Project Schedule Update (DD.26SEP2016) Rev.1	JS	AM

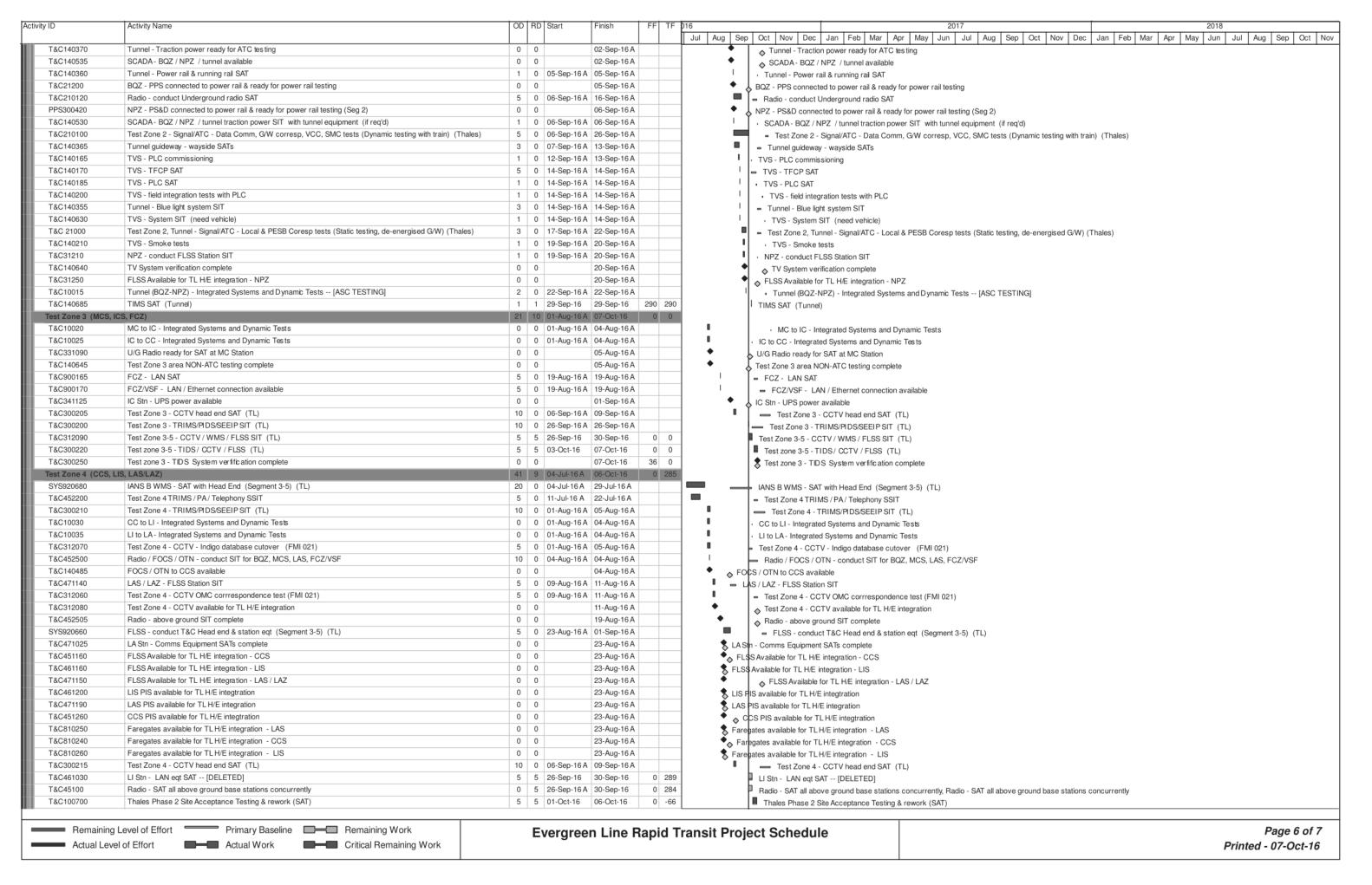


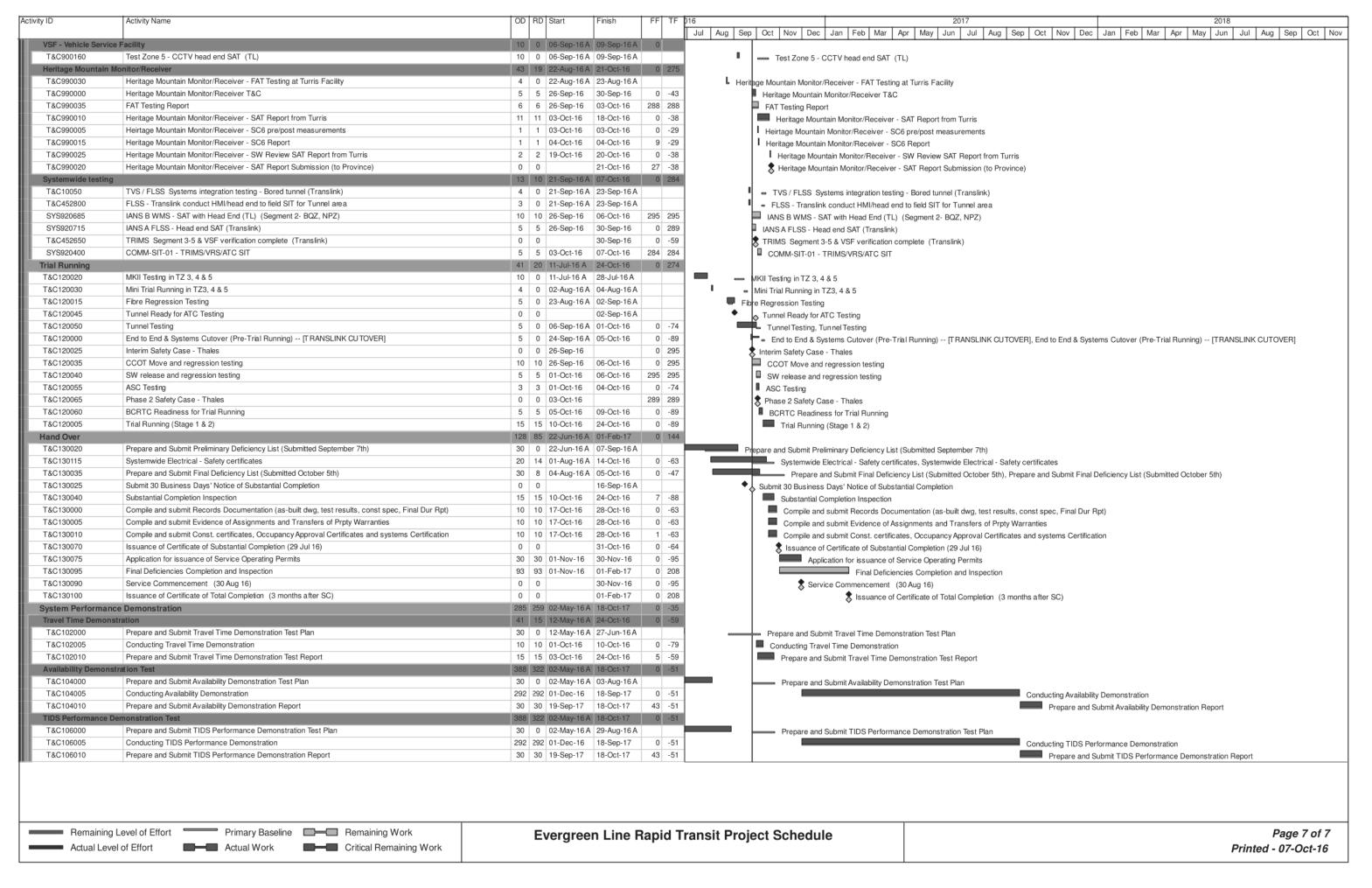












ATTACHMENT C ACTIVITY CHANGES DISCONTINUED

ATTACHMENT D LOGIC CHANGES DISCONTINUED

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Withheld pursuant to/removed as

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Attachment F

Environmental Management

Permitting Status – Key Active Permits (expired or otherwise inactive permits are shown in grayscale font)

Permit Description	Act/Regulation	Application Date	Status			
Federal						
DFO Authorization – to authorize harmful alteration or disruption, or the destruction, of fish habitat (HADD)	Fisheries Act ¹ , Subsection 35(2)(b)	July 11, 2013	The DFO Authorization (#06-HPAC-PA1-00001) was signed by DFO and the Ministry of Transportation and became effective on July 18, 2013. The Permit expires on Dec. 31, 2016.			
Amendment to the Authorization to address design developments and method changes that occurred after issuance of the Authorization on July 18, 2013	Fisheries Act, Subsection 35(2)(b)	January 24, 2014	DFO amended Authorization No. 06- HPAC-PA1-00001 on January 27, 2014. The Amendment expires on Dec. 31, 2016.			
Request for DFO review of final proposed habitat compensation for the Project (including various changes to habitat compensation as compared to the habitat compensation described in the Project Authorization #06-HPAC-PA1-00001 as amended on January 27, 2014).	Fisheries Act, Subsection 35(2)(b)	April 30, 2015	On May 21, 2015 DFO issued a letter to the Province accepting all of EGRT's proposed changes. The updated habitat compensation supersedes the compensation described in the Project Authorization #06-HPAC-PA1-00001 (as amended on January 27, 2014) but all other conditions of the Authorization continue to apply. The Authorization expires on Dec. 31, 2016.			
Request to DFO for variance from DFO Authorization No. 06-HPAC-PA1-00001: request to start water line relocation at Schoolhouse Creek in last week of July 2016, prior to the start of the 2016 least-risk fisheries window.	Fisheries Act, Subsection 35(2)(b)	July 18, 2016	DFO issued a "no objection" on July 20, 2016. The variance applies only to the last week of July 2016, which is now past.			

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¹ Amendments to the *Fisheries Act* came into effect on November 2013 that repealed the HADD provisions of Subsection 35(2). However, DFO Authorization #06-HPAC-PA1-00001 is grandfathered under the amended Act and remains in effect.

Permit Description	Act/Regulation	Application Date	Status
DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	June 25, 2013	The permit (#XR 239-2013) was received on July 8, 2013. The permit expired on June 30 2014. A new permit was obtained (see row below).
Amendment to DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	March 18, 2014	The permit (#XR 239-2014) was received on March 21, 2014. Note this permit supersedes #XR 239-2013 (see row above).
Amendment to DFO Permit to allow fish salvage during construction	Fisheries Act, Fishery (General) Regulation	January 8, 2015	The permit (#XR 71 2014 – Amendment 2) was received on January 15, 2015. Subsequently, the Permit was further amended to include road works and culvert installation at Pinnacle Creek, The Permit expired on December 31, 2015.
DFO Permit to allow fish salvage during habitat compensation construction at Schoolhouse Creek.	Fisheries Act, Fishery (General) Regulation	December 24, 2015	The permit (XR 376 2015) was received on December 28, 2015. The permit expires on Dec. 31, 2016.
Amendment to the Authorization to allow instream works at Kyle Creek from Oct. 1 – 15, 2013	Fisheries Act, Subsection 35(2)	Sept. 30, 2013	Email amendment was received from DFO on Sept. 30, 2013. The relevant work is complete.
Request for DFO review of proposed out-of-window instream work at Tributary to Suterbrook Creek (to begin construction of instream Pier P3-15)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	January 27, 2014	DFO issued a "no objection" email to the Province on January 28, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct instream works to build Utility 4011 outside the least risk window specified in DFO Authorization #06-HPAC-PA1-00001)	Fisheries Act, Subsection 35(2)(b)	March 25, 2014	DFO issued a "no objection" email to the Province on March 25, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Scott Creek (work to be completed no later than	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	August 20, 2014	DFO issued a "no objection" email to EGRT on August 21, 2014. The relevant

Permit Description	Act/Regulation	Application Date	Status
October 10, 2014)			work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Pigeon Creek (work to be completed no later than October 30, 2014)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	August 28, 2014	DFO issued a "no objection" email to the Province on August 28, 2014. The relevant work is complete.
Request for DFO review of EGRT proposal to conduct out-of-window instream work at Pigeon Creek (work to be completed no later than November16, 2014)	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	October 28, 2014	DFO issued a "no objection" email to the Province on October 28, 2014. The relevant work is complete.
Request to DFO to allow instream works to occur outside the least-risk fisheries window at Scott Creek (to install bank stabilization).	Fisheries Act, Subsection 35(2)(b); DFO Authorization No. 06-HPAC-PA1-00001	January 29, 2015	DFO issued a "no objection" email to the EGRT on January 30, 2015. The relevant work is complete.
Provincial			
Ministry of Forests, Lands and Natural Resource Operations (FLNR) Approval to allow changes in and about a stream (major works) at Kyle Creek, Suterbrook Creek, Scott Creek and "Mariner Pond"	Water Sustainability Act ² , Section 11	May 27, 2013	Approval (#A2006043) was received on July 24, 2013. The Approval expires Dec. 31, 2016.
Order amending Approval A2006043 to allow instream works to occur outside the least-risk fisheries window	Water Sustainability Act, Section 11	September 30, 2013	The Order was received on Sept. 30, 2013. The Order applies to all watercourses affected by the Project. The Order expires Dec. 31, 2016.
Approval to construct habitat compensation at Hoy Creek.	Water Sustainability Act, Section 11	May 14, 2015	Approval (#A2006297) was received on July 23, 2015. The Approval expires Dec. 1, 2016.
Approval to construct habitat compensation at Schoolhouse Creek.	Water Sustainability Act, Section 11	May 15, 2015	Approval (#2006301) was received on December 21, 2015. The Approval expires Dec. 1, 2017.
Notification to FLNR Habitat Officer to allow changes in and about a stream (GVSDD storm system repairs) – Ottley Creek	Water Sustainability Act, Section 11 Water Sustainability Regulation, Part 3	June 21, 2016	Notification was assigned file # 100169648. FLNR green-lighted the work

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² A new *Water Sustainability Act* came into force in early 2016 that updated and replaced the historic *Water Act*. Approvals shown in this matrix were all issued pursuant to section 9 of the *Water Act*. Those that remain active are grandfathered under the WSA. Section 11 of the WSA is now the relevant Section. The matrix has been updated to show the Approvals are pursuant to the WSA, Section 11. Similarly, the Water Regulation was replaced by the Water Sustainability Regulation. Except for the Notification shown for culvert repairs at Ottley Creek (June 21, 2016), all the Notifications shown in the matrix were originally submitted pursuant to Part 7 of the Water Regulation. The applicable regulation is now Part 3 of the Water Sustainability Regulation, as shown in this matrix.

Permit Description	Act/Regulation	Application Date	Status
			in an email dated July 21, 2016.
Notification to FLNR to allow changes in and about a stream (guideway works) – Schoolhouse Creek	Water Sustainability Regulation, Part 3	May 17, 2013	The Permit (FLRN tracking #2013-104) has expired and is superseded by a new Notification (see row below).
Notification to FLNR to allow changes in and about a stream (drainage, PPS and road works) – Schoolhouse Creek	Water Sustainability Regulation, Part 3	Dec. 10, 2013	The Permit (FLRN tracking #124843) is now in place and supersedes #2013-104 (see row above). The Notification expired Dec. 31, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Slaughterhouse Creek	Water Sustainability Regulation, Part 3	May 31, 2013	The Permit (FLRN tracking #111384) has expired and is superseded by a new Notification (see row below).
Notification to FLNR to allow changes in and about a stream (changes to guideway works) – Slaughterhouse Creek	Water Sustainability Regulation, Part 3	November 14, 2013	The Permit (FLRN tracking #120176) is now in place and supersedes #111384 (see row above). The Notification expired on Dec. 31, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pigeon Creek	Water Sustainability Regulation, Part 3	April 16, 2014	The Permit (FLRN tracking #112669) expired on September 30, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pigeon Creek	Water Sustainability Regulation, Part 3	August 15, 2014	The Notification was accepted by FLNR (tracking number 145189) and became active on October 1, 2014 superseding the previous Notification. The Notification expired Dec. 31, 2015.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pinnacle Creek	Water Sustainability Regulation, Part 3	June 14, 2013	The Permit (FLRN tracking #112669) is now in place. The Notification expired on May 15, 2014.
Notification to FLNR to allow changes in and about a stream (guideway works) – Pinnacle Creek	Water Sustainability Regulation, Part 3	April 16, 2014	The Notification expired on December 31, 2015.

Permit Description	Act/Regulation	Application Date	Status
Notification to FLNR to allow changes in and about a stream (guideway works) – Hoy Creek	Water Sustainability Regulation, Part 3	May 31, 2013	The Notification (FLNR Tracking #111383) expired on September 30, 2014 and is superseded by an updated Notification which becomes active on Oct 1, 2014 (see row below).
Notification to FLNR to allow changes in and about a stream (guideway works) – Hoy Creek	Water Sustainability Regulation, Part 3	August 15, 2014	The Notification was accepted by FLNR (tracking number 145190) and became active on October 1, 2014 superseding the previous Notification. The new Notification expired on Apr. 30, 2015.
FLNR Permit to allow fish salvage (intended for habitat construction at Schoolhouse Creek)	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	December 23, 2015	The Permit (#SU16-223632) was issued on February 9, 2016. It expires Dec. 31, 2016.
FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	June 25, 2013	The Permit (#SU13-88489) was issued on July 16, 2013. The Permit is superseded by the Amendment extension (see row below).
Amendment to FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	March 4, 2014	The Permit (#SU13-88489) was issued on March 6, 2014. The Permit expired on June 29, 2015.
Amendment to FLNR Permit to allow fish salvage	Wildlife Act, Section 19; and Angling and Scientific Regulations, Section 18	January 15, 2015	The Permit (#SU15-165242) was issued on February 12, 2015 Note this permit superseded #SU13-88489 (see row above). The Permit expired on December 31, 2015.
FLNR Permit to allow wildlife salvage	Wildlife Act, Permit Regulation, Section 2	May 13, 2013	The Permit (#SU13-87792) was issued on July 9, 2013. The Permit expired on July 1, 2014 and has not been renewed as wildlife salvage is no

Permit Description	Act/Regulation	Application Date	Status
			longer required.
FLNR Heritage Inspection Permit (HIP) to allow archaeological monitoring	Heritage Conservation Act, Section 14	April 4, 2013	The Permit was issued on June 18, 2013. The Permit expired Dec. 31, 2014.
FLNR Heritage Inspection Permit (HIP) to allow archaeological monitoring	Heritage Conservation Act, Section 14	August, 2014	The Permit was amended on August 28, 2014. The Permit expired June 30, 2015. The final report has been submitted to Archaeology Branch and relevant First Nations.
Regional/Municipal			
Waste Discharge Permit	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	November 26, 2013	The Permit (#SC-100914-FSA) was issued on February 17, 2014. The Permit does not specify an end-date. As of June 2016, discharge to sanitary is no longer necessary and EGRT advised Metro Vancouver of this on July 27, 2016. Metro Vancouver sent a letter to EGRT dated August 24, 2016 cancelling the Permit.
Waste Discharge Permit – amendment to include additional scope.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	April 10, 2014	The Permit (#SC-100914-FSA) was amended on April 28, 2014. The Amendment does not specify an enddate. As of June 2016, discharge to sanitary is no longer necessary and the Permit was cancelled on July 27, 2016.
Waste Discharge Permit – Minor Amendment to include additional treatment components (including a clarifier, mixing tank and filter press) and to address a change in sampling location.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended)	July 29, 2014	The Minor Amendment to the Permit (#SC-100914-FSA) was issued on August 13, 2014. The Permit does not specify an end-date. As of June 2016, discharge to sanitary is no longer necessary and

Permit Description	Act/Regulation	Application Date	Status
			the Permit was cancelled on July 27, 2016.
Waste Discharge Permit (one time request to discharge groundwater associated with the dewatering operation at Clarke Rd and Seaview Dr.).	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	March 27, 2015	Metro Vancouver issued a Waste Discharge Permit (No. SC-100990-FSA) to EGRT on April 2, 2015. The Permit expired on May 15, 2015.
Waste Discharge Permit – Minor Amendment to extend the Permit end-date to July 31, 2015.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	May 2, 2015	Metro Vancouver issued a Minor Amendment to Permit No. SC-100990-FSA on May 15, 2015. The Permit expired on July 31, 2015.
Waste Discharge Permit – Major Amendment to extend the Permit end-date to Sept. 30, 2015 and increase the total allowed discharge to sanitary system.	Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw #299, 2007 (as amended).	July 22, 2015	Metro Vancouver issued a Major Amendment to Permit No. SC-100990-FSA on Aug. 11, 2015. The Permit expired on Sept. 30, 2015.
Other			
Tsleil-Waututh Nation - Heritage Investigation Permit	N/A	July 2, 2014	An amendment to the Permit (#2013-014) was issued on October 3, 2014. Archaeological investigation and monitoring are complete.
Sto:Lo First Nation - Heritage Investigation Permit	N/A	May 6, 2013	Permit (#2013-031) was issued on June 4, 2013. Archaeological investigation and monitoring are complete.

ATTACHMENT G

Four Month Look Ahead Audit Schedule

DISCONTINUED See Section 8.2

Attachment H

Table 3 – Quality Audits

Audit Report Number	Discipline	Auditor	Auditee	Audit Date	NCR's Raised	OFI's Raised
511325-00000-SWSL-38QB-0001	Design	EGRT	SNC Lavalin	23-Apr- 13	0	1
511325-00000-SWSL-38QB-0002	Design	EGRT	SNC Lavalin	03-May- 13	0	0
511325-00000-SWSL-38QB-0003	Design	EGRT	IBT	11-Jun- 13	0	1
511325-00000-SWSL-38QB-0004	Design	EGRT	MMM	06-Jun- 13	0	0
511325-00000-SWSL-38QB-0005	Design	EGRT	EBA	04-Jun- 13	0	1
511325-00000-SWSL-38QB-0006	Design	EGRT	Fast+Epp	25-Jun- 13	1	0
511325-00000-SWSL-38QB-0007	Design	EGRT	Jacobs	18-Jun- 13	1	1
511325-00000-SWSL-38QB-0008	Design	EGRT	RJC	18-Jul-13	0	0
511325-00000-SWSL-38QB-0009	Design	EGRT	Francl Architect ure	23-Jul-13	0	1
511325-00000-SWSL-38QB-0010	Design	EGRT	Perkin + Will	14-Aug- 13	0	0
511325-00000-SWSL-38QB-0011	Design	EGRT	Dialogue	22-Aug- 13	0	0
511325-00000-SWSL-38QB-0012	Design	EGRT	AES	24-Sep- 13	0	0
511325-00000-SWSL-38QB-0013	Design	EGRT	SNC Lavalin	19-Dec- 13	0	2
511325-00000-SWSL-38QB-0014	Design	EGRT	SNC Lavalin	30-Jan-14	0	0
511325-00000-SWSL-38QB-0015	Design	EGRT	SNC Lavalin	10-Oct- 13	0	0
511325-00000-SWSL-38QB-0016	Design	EGRT	SNC Lavalin	06-Nov- 13	0	0
511325-00000-SWSL-38QB-0017	Design	EGRT	SNC Lavalin	25-Oct- 13	0	0
511325-00000-SWSL-38QB-0018	Design	EGRT	SNC Lavalin	27-Feb- 14	0	0
511325-00000-SWSL-38QB-0019	Design	EGRT	SNC Lavalin	25-Mar- 14	0	0
511325-00000-SWSL-38QB-0020	Design	EGRT	Jacobs	12-May- 15	0	0
511325-00000-SWSL-38QB-0021	Design	EGRT	MMM Group	23-Sept- 14	1	0
511325-00000-SWSL-38QB-0022	Design	EGRT	SNCL Electrical	27-Nov- 14	0	0
511325-00000-SWSL-38QB-0023	Design	EGRT	SNC Lavalin	6-Feb-15	2	1

511325-00000-SWSL-38QB-0025	Design	EGRT	SLCW- SW	5-Aug-15	-	1
511325-00000-SWSL-38QB-0026	Design	EGRT	SLCW- SW	2-Nov-15	0	0
511325-00000-SWSL-38QB-0101	Environment al	EGRT	EGRT	20-Aug- 13	0	4
511325-00000-SWSL-38QB-0102	Environment al	EGRT	SGJV	13-Sep- 13	1	14
511325-00000-SWSL-38QB-0103	Environment al	EGRT	SLCW- GST	03-Oct- 13	0	11
511325-00000-SWSL-38QB-0104	Environment al	EGRT	EGRT	25-Nov- 13	0	0
511325-00000-SWSL-38QB-0105	Environment al	EGRT	SLCW- GST	16-Jan-14	0	3
511325-00000-SWSL-38QB-0106	Environment al	EGRT	SGJV	04-Feb- 14	0	3
511325-00000-SWSL-38QB-0107	Environment al	EGRT	SLCW- EG	07-Feb- 14	0	4
511325-00000-SWSL-38QB-0108	Environment al	EGRT	SSJV	28-Feb- 14	0	10
511325-00000-SWSL-38QB-0109	Environment al	EGRT	EGRT	11-Apr- 14	0	1
511325-00000-SWSL-38QB-0110	Environment al	EGRT	SLCW- GST	6-May-14	0	2
511325-00000-SWSL-38QB-0111	Environment al	EGRT	SGJV	8-May-14	0	4
511325-00000-SWSL-38QB-0112	Environment al	EGRT	SSJV	24-Jun- 14	0	4
511325-00000-SWSL-38QB-0113	Environment al	EGRT	SLCW- EG	8-Sept-14	0	1
511325-00000-SWSL-38QB-0114	Environment al	EGRT	SLCW- GST	25-Sept- 14	2	2
511325-00000-SWSL-38QB-0115	Environment al	EGRT	SGJV	27-Oct- 14	2	2
511325-00000-SWSL-38QB-0116	Environment al	EGRT	SSJV	9-Jan-15	0	1
511325-00000-SWSL-38QB-0117	Environment al	EGRT	SLCW- GST	30-Jan-15	0	0
511325-00000-SWSL-38QB-0118	Environment al	EGRT	SGJV	6-Mar-15	0	0
511325-00000-SWSL-38QB-0119	Environment al	EGRT	SLCW- EG	30-Apr- 15	0	0
511325-00000-SWSL-38QB-0120	Environment al	EGRT	SLCW- GST	4-May-15	0	0
511325-00000-SWSL-38QB-0121	Environment al	EGRT	SSJV	26-Jun- 15	0	0
511325-00000-SWSL-38QB-0122	Environment al	EGRT	DBC	24-Aug- 15	-	-
511325-00000-SWSL-38QB-0123	Environment al	EGRT	SSJV	5-Nov-15	1	1
511325-00000-SWSL-38QB-0124	Environment al	EGRT	SLCW- GST- TFO	16-Apr- 08	1	3
511325-00000-SWSL-38QB-0201	Traffic	EGRT	SGJV	04-Jun- 13	0	2

511325-00000-SWSL-38QB-0202	Traffic	EGRT	SLCW- GST	09-Jul-13	0	1
511325-00000-SWSL-38QB-0203	Transit Facility	EGRT	SLCW- GST	25-Sep- 13	0	1
511325-00000-SWSL-38QB-0204	Traffic	EGRT	SLCW- GST	26-Sep- 13	0	2
511325-00000-SWSL-38QB-0205	Traffic	EGRT	SGJV	13-Nov- 13	2	1
511325-00000-SWSL-38QB-0206	Transit Facility	EGRT	SLCW- GST	22-Nov- 13	0	0
511325-00000-SWSL-38QB-0207	Transit Facility	EGRT	SLCW- GST	09-Jan-14	0	0
511325-00000-SWSL-38QB-0208	Traffic	EGRT	SLCW- GST	23-Jan-14	0	0
511325-00000-SWSL-38QB-0209	Transit Facility	EGRT	SLCW- GST	20-Feb- 14	0	0
511325-00000-SWSL-38QB-0210	Traffic	EGRT	SLCW- EG	12-Mar- 14	0	0
511325-00000-SWSL-38QB-0211	Traffic	EGRT	SLCW- EG	13-Jan-15	0	0
511325-00000-SWSL-38QB-0212	Traffic	EGRT	SSJV	15-Jan-15	0	0
511325-00000-SWSL-38QB-0213	Traffic	EGRT	SSJV	15-Dec- 15	1	0
511325-00000-SWSL-38QB-0214	Traffic	EGRT	SLCW- GST	23-Feb- 16	0	0
511326-00000-SWSG-38QB-0301	Construction	SGJV	SGJV	30-May- 13	0	3
511325-00000-SWSL-38QB-0302	Construction	EGRT	EGRT	13-Jun- 13	0	3
511327-00000-SWSR-38QB-0303	Construction	SLCW- EG	Armtec	14-Jun- 13	0	2
511414-00000-SWGS-38QB-0304	Construction	SLCW- GST	SLCW- GST	24-Jun- 13	0	3
511414-00000-SWGS-38QB-0305	Construction	SLCW- GST	SLCW- GST	23-Jul-13	0	2
511414-00000-SWGS-38QB-0306	Construction	SLCW- GST	Canron	28-Aug- 13	0	0
511326-00000-SWSG-38QB-0307	Construction	SGJV	SGJV	13-Aug- 13	0	2
511326-00000-SWSG-38QB-0308	Construction	SGJV	SGJV	15-Aug- 13	0	0
511326-00000-SWSG-38QB-0309	Construction	SGJV	Pedre	09-Aug- 13	0	6
511326-00000-SWSG-38QB-0310	Construction	SGJV	Armtec	27-Sep- 13	0	3
511414-00000-SWGS-38QB-0311	Construction	SLCW- GST	Metro Testing	03-Oct- 13	0	1
511326-00000-SWSG-38QB-0312	Construction	SGJV	SGJV	25-Oct- 13	0	1
511326-00000-SWSG-38QB-0313	Construction	SGJV	SGJV	14-Nov- 13	0	0
511328-00000-SWSS-38QB-0314	Construction	SSJV	SSJV	08-Nov- 13	1	3

511414-00000-SWGS-38QB-0315	Construction	SLCW- GST	SLCW- GST	03-Dec- 13	0	2
511414-00000-SWGS-38QB-0316	Construction	SLCW- GST	SLCW- GST	05-Dec- 13	0	0
511326-00000-SWSG-38QB-0317	Construction	SGJV	SGJV	21-Nov- 13	0	1
511327-00000-SWSR-38QB-0318	Construction	SLCW- EG	Harris PT	25-Nov- 13	0	4
511327-00000-SWSR-38QB-0319	Construction	SLCW- EG	SLCW- EG	28-Nov- 13	0	0
511326-00000-SWSG-38QB-0320	Construction	SGJV	SGJV	12-Dec- 13	0	0
511327-00000-SWSR-38QB-0321	Construction	SLCW- EG	SLCW- EG	13-Jan-14	0	0
511328-00000-SWSS-38QB-0322	Construction	SSJV	SSJV	06-Dec- 13	0	4
511326-00000-SWSG-38QB-0323	Construction	SGJV	SGJV	29-Jan-14	0	1
511326-00000-SWSG-38QB-0324	Construction	SGJV	AGI	4-Mar-14	0	3
511328-00000-SWSS-38QB-0325	Construction	SSJV	SSJV	21-Jan-14	0	3
511328-00000-SWSS-38QB-0326	Construction	SSJV	SSJV	28-Jan-14	0	1
511326-00000-SWSG-38QB-0327	Construction	SGJV	SGJV	25-Feb- 14	0	3
511326-00000-SWSG-38QB-0328	Construction	SGJV	Keller Pile Driving	24-Apr- 14	0	2
511414-00000-SWGS-38QB-0329	Construction	SLCW- GST	Stasuk Testing & Inspection Ltd.	12-Mar- 14	0	1
511325-00000-SWSL-38QB-0030	Construction	EGRT	SLCW- GST	28-Mar- 14	0	1
511327-00000-SWSR-38QB-0331	Construction	SLCW- EG	SLCW- EG	7-Mar-14	0	0
511328-00000-SWSS-38QB-0332	Construction	SSJV	APS	20-Mar- 14	0	15
511326-00000-SWSG-38QB-0333	Construction	SGJV	SGJV	25-Apr- 14	0	3
511414-00000-SWGS-38QB-0334	Construction	SLCW- GST	AMEC	15-Apr- 14	0	0
511414-00000-SWGS-38QB-0335	Construction	SLCW- GST	Armtec	16-May- 14	0	1
511326-00000-SWSG-38QB-0336	Construction	SGJV	SGJV	19-Jun- 14	0	0
511327-00000-SWSR-38QB-0337	Construction	SLCW- EG	SLCW- EG	20-Jun- 14	0	1
511327-00000-SWSR-38QB-0338	Construction	SLCW- EG	SLCW- EG	26-Jun- 14	0	1
511325-00000-SWSL-38QB-0339	Construction	DBC	SLCW- GST	8-Jul-14	0	1
511414-00000-SWSW-38QB-0340	Construction	SLCW- SW	SLCW- SW	24-Jul-14	0	0

511414-00000-SWGS-38QB-0341	Construction	SLCW- GST	Surespan	12-Aug- 14	0	2
511327-00000-SWSR-38QB-0342	Construction	SLCW- EG	Harris-PT	31-Jul-14	0	0
511326-00000-SWSG-38QB-0343	Construction	SGJV	SGJV	12-Aug- 14	0	3
511414-00000-SWSG-38QB-0344	Construction	SLCW- GST	SLCW- GST	19-Aug- 14	0	0
511414-00000-SWSW-38QB-0345	Construction	SLCW- SW	Prime Engineeri ng	9-Oct-14	0	0
511327-00000-SWSR-38QB-0346	Construction	SLCW- EG	Metro Testing Ltd.	10-Oct- 14	1	3
511328-00000-SWSS-38QB-0347	Construction	SSJV	SSJV	23-Sept- 14	0	6
511414-00000-SWGS-38QB-0348	Construction	SLCW- GST	LMS Reinforci ng Steel Group	07-Oct- 14	0	2
511414-00000-SWGS-38QB-0349	Construction	SLCW- GST	SLCW- GST	15-Oct- 14	1	0
511328-00000-SWSS-38QB-0350	Construction	SSJV	SSJV	21-Oct- 14	0	3
511325-00000-SWSL-38QB-0351	Construction	DBC	SLCW- GST	7-Nov-14	0	1
511328-00000-SWSS-38QB-0352	Construction	SSJV	APS	6-Nov-14	0	8
511326-00000-SWSG-38QB-0353	Construction	SGJV	SGJV	7-Nov-14	0	0
511326-00000-SWSG-38QB-0354	Construction	SGJV	Harris Rebar	22-Oct- 14	0	1
511328-00000-SWSS-38QB-0355	Construction	SSJV	SSJV	4-Nov-14	0	8
511325-00000-SWSL-38QB-0356	Construction	DBC	SLCW- GST	28-Nov- 14	0	0
511414-00000-SWGS-38QB-0357	Construction	SLCW- GST	SLCW- GST	05-Dec- 14	0	0
511327-00000-SWSR-38QB-0358	Construction	SLCW- EG	SLCW- EG	20-Nov- 14	0	0
511328-00000-SWSS-38QB-0359	Construction	SSJV	SSJV	14-Nov- 14	0	5
511414-00000-SWGS-38QB-0360	Construction	SLCW- GST	SLCW- GST	28-Nov- 14	0	1
511414-00000-SWSW-38QB-0361	Construction	SLCW- SW	SLCW- SW	09-Dec- 14	0	1
511326-00000-SWSG-38QB-0362	Construction	SGJV	SGJV	12-Dec- 14	0	0
511414-00000-SWSW-38QB-0363	Construction	SLCW- SW	SLCW- SW	22-May- 15	0	1
511414-00000-SWSW-38QB-0364	Construction	SLCW- SW	WPE	22-May- 15	0	0
511414-00000-SWGS-38QB-0365	Construction	SLCW- GST	Western Archib	10-Feb- 15	0	2

511414-00000-SWGS-38QB-0366	Construction	SLCW- GST	Pattison Sign	18-Feb- 15	0	1
511327-00000-SWSR-38QB-0367	Construction	SLCW- EG	Group SLCW- EG	16-Feb- 15	0	0
511326-00000-SWSG-38QB-0368	Construction	SGJV	SGJV	5-Mar-15	0	0
511414-00000-SWGS-38QB-0369	Construction	DBC	SLCW- GST	16-Mar- 15	0	0
511414-00000-SWGS-38QB-0370	Construction	SLCW- GST	Acuren Group Inc	8-Apr-15	0	1
511414-00000-SWGS-38QB-0371	Construction	SLCW- GST	SLCW- GST	24-Apr- 15	0	0
511414-00000-SWGS-38QB-0372	Construction	SLCW- GST	Metro Testing Laborator ies	29-Apr- 15	0	0
511328-00000-SWSS-38QB-0373	Construction	SLCW- GST	SLCW- GST	5-May-15	0	0
511414-00000-SWGS-38QB-0374	Construction	SLCW- GST	Houle Electric	28-Aug- 15	0	2
511328-00000-SWSS-38QB-0375	Construction	SSJV	SSJV	22-Apr- 15	0	2
511327-00000-SWSR-38QB-0376	Construction	SLCW- EG	SLCW- EG	13-Jul-15	0	0
511325-00000-SWSL-38QB-0377	Construction	DBC	SLCW- GST	2-Jun-15	0	1
511414-00000-SWGS-38QB-0378	Construction	SLCW- GST	Flynn Canada Ltd	16-Jul-15	0	0
511414-00000-SWGS-38QB-0379	Construction	DBC	SLCW- GST	6-Aug-15	-	2
511414-00000-SWGS-38QB-0380	Construction	SLCW- GST	SLCW- GST	22-Dec- 15	0	2
511414-00000-SWGS-38QB-0381	Construction	SLCW- GST	SLCW- GST	29-Sep- 15	0	0
511414-00000-SWGS-38QB-0382	Construction	SLCW- GST	SLCW- GST	29-Sep- 15	0	0
511414-00000-SWSW-38QB-0383	Construction	SLCW- SW	WPE	4-Dec-15	-	-
511414-00000-SWSW-38QB-0384	Construction	SLCW- SW	Thales	27-Nov- 15	-	1
511414-00000-SWGS-38QB-0385	Construction	SLCW- GST	SLCW- GST	28-Jan-16	0	0
511414-00000-SWSW-38QB-0386	Construction	SLCW- SW	SLCW- SW	26-Jan-16	0	0
511414-00000-SWGS-38QB-0387	Construction	SLCW- GST	SLCW- GST	11-Feb- 16	0	0
511414-00000-SWGS-38QB-0388	Construction	SLCW- GST	SLCW- GST	16-Feb- 16	0	0
511414-00000-SWGS-38QB-0389	Construction	SLCW- GST	WPE	19-Feb- 16	0	2
511414-00000-SWSW-38QB-0390	Construction	DBC	SLCW- SW	26-Feb- 16	0	0

511328-00000-SWSS-38QB-0391	Construction	DBC	SSJV	3-Mar-16	0	0
511414-00000-SWGS-38QB-0392	Construction	SLCW- GST	SLCW- GST	17-Mar- 16	0	2
511414-00000-SWSW-38QB-0393	Construction	EGRT	SLCW- SW	16-Apr- 08	0	0
511325-00000-SWSL-38QB-0394	Construction	DBC	SLCW- GST	19-Apr- 16	0	0