City of Ottawa Confederation Line Extension Project

Confederati	on Line Structures	-									_	_	_		ana -fur			_	_	
	Structure Name	NMI or SI	I Relevant Authority	y Structure Type		Minimum Vertical Clearance Exceptions ^{1,2}	Bridge Aesthetic Level and Classification	Geometric Struc	tural Requirements	~ ~	<u> </u>	0	1	50	ope of Wo	ork _	P.	habilitation ³		4
Structure Number					Structure Conveyance			Cross Section to Accommodate	Structure to Span Over	New Design { Constructior	Removal Replace	Accommodat OCS	Structural Evaluation	Install Crash Walls at Pier	Install Security Fence ⁴	Requires Architectura Concrete ⁵	Concrete Patch Repairs	Concrete Crack Repairs	Replace Bearings	Additional Comments/Requirements
							Con	federation Line East Structur	es								•	•		•
SN226780	Blair Road Bridge over Transitway	NMI	City of Ottawa	Concrete Rigid Frame	Roadway	No Exceptions	-	 Existing Blair Road configuration 	EB & WB Track Alignment Emergency walkways Future Cumberland Transitway			x			x		x	x		Replace longitudinal seal in median.
SN226790	Blair Road E-NS Ramp	NMI	City of Ottawa	Post-tensioned Voided Concrete Slab	Roadway	No Exceptions	-	Existing Ramp configuration	EB & WB Track Alignment Emergency walkways			x		x			x	x	x	
SN224880	Transitway Bridge over OR174	-	City of Ottawa	Post-tensioned Voided Concrete Slab	Transitway	-	-	-	-		х									Includes the removal of culverts A224636 and A224635
SN224980	Montreal Road Flyover	SI	City of Ottawa	New Elevated Guideway	Railway	No Exceptions	1 - High	EB & WB track Alignment Emergency walkways	Future widening of OR174 WB lanes	х										
SN224850	Westbound OR174 Bridge over Montreal Rd	NMI	City of Ottawa	New Overpass Bridge	Roadway	No Exceptions	1 - High	Future widening of OR174 WB lanes	Future widening of Montreal Road		x									
SN224855	Montreal Road Station Bridge	SI	City of Ottawa	New Elevated Guideway	Railway	No Exceptions	1 - High	EB & WB track Alignment Train platform	 Future widening of Montreal Road Montreal Station 	x						x				 Shall be Designed in conjunction with Montreal Road Station
SN224851	Eastbound OR174 Bridge over Montreal Rd	NMI	City of Ottawa	New Overpass Bridge	Roadway	No Exceptions	3 - Low	 Future widening of OR174 EB lanes 	 Future widening of Montreal Road 		х									
SN227110	Greens Creek Culvert under OR174	NMI	City of Ottawa	New Culvert	Roadway/ Railway	-	3 - Low	EB & WB track Alignment Emergency walkways Future Widening of OR174 North MUP	Greens Creek Culvert	x										 Design and construct a new culvert section to carry the alignment over the existing Green's Creek Culvert
SN221250	Green's Creek Pedestrian Bridge	NMI	City of Ottawa	New Pedestrian Bridge	Pedestrian/ Maintenance Vehicle	-		• MUP	Greens Creek	x										
SN224860	Sir George-Etienne Cartier Parkway Bridge over OR174	NMI	NCC/City of Ottawa	Post-tensioned Voided Concrete Slab	Roadway	No Exceptions	-	 Existing Parkway configuration 	 EB & WB track Alignment Emergency walkways Future widening of OR174 			x		x	x			x		
SN224870	Jeanne d'Arc Blvd Bridge over OR174	NMI	City of Ottawa	Pre-stressed Concrete Voided Slab	Roadway	No Exceptions	-	 Existing Jeanne d'Arc Blvd configuration 	 EB & WB track Alignment Train platform Future widening of OR174 			x	x	x	x		x	x	x	 Modify existing structure to accommodate new opening for station access
SN224240	Orleans Boulevard Bridge over OR174	NMI	City of Ottawa	Pre-stressed Concrete I-Girder and Slab	Roadway	No Exceptions	-	 Existing Orleans Boulevard configuration 	 EB & WB track Alignment Train platform Future widening of OR174 			x	x	x	x					 Modify existing structure to accommodate new opening for station access
SN224510	Billberry Creek Culvert under OR174	NMI	City of Ottawa	Concrete Box Culvert with CSP extension	Roadway/ Railway	-	-	Future Widening of OR174	Billberry Creek				х							
SN228030	Place d'Orléans Pedestrian Bridge over OR174	NMI	City of Ottawa	Post Tensioned Voided Slab	Pedestrian	No Exceptions	-	 Existing configuration 	EB & WB track Alignment Train platform Future widening of OR174			x	x	x			x	x		Concrete repairs to the exposed pier foundations. Modify existing structure to accommodate new opening for station access
SN228025	Place d'Orléans Station Pedestrian Bridge over EB OR174	SI	City of Ottawa	New Enclosed Pedestrian Bridge	Pedestrian	-	1 - High	Pedestrian Traffic Maintenance Vehicle	Future widening of OR174 EB lanes	х						х				Shall be Designed in conjunction with the Place d'Orléans Station
SN224890	Champlain Street Bridge over OR174	NMI	City of Ottawa	Post-tensioned Voided Concrete Slab	Roadway	No Exceptions	-	 Existing Champlain Street configuration 	EB & WB Track Alignment Emergency walkways Future widening of OR174			x		x	x			x		
SN894010	Tenth Line Road Bridge over OR174	NMI	City of Ottawa	Pre-stressed Concrete I-Girder and Slab Bridge	Roadway	No Exceptions	-	 Existing Tenth Line Road configuration 	EB & WB Track Alignment Emergency walkways Future Widening of OR174			x		x	x			x		
SN894040	Box Culvert under OR174	NMI	City of Ottawa	Concrete Box Culvert	Roadway/ Railway	-	-	 EB & WB track Alignment Emergency walkways Future Widening of OR174 	Existing Creek				x							
SN894050	Taylor Creek Culvert under OR174	NMI	City of Ottawa	Concrete Box Culvert	Roadway/ Railway	-	-	EB & WB track Alignment Emergency walkways Future Widening of OR174	Taylor Creek				x							

¹Exceptions to the minimum clearance requirements per Schedule 15-2 Part 2, Article 4 - Structural Design Criteria and Requirements, Clause 4.4 ²OCS placement under the Structure shall be as indicated in Schedule 15-2, Part 3, Article 14.

⁴Substructure and Soffit repairs Based on the requirements of the most recent OSIM Inspection Report ⁴Install Security fence in accordance with Schedule 15-2, Part 6, Article 2 - Landscape Design Criteria, Clause 2.7 ⁵Architectural concrete shall be in accordance with the requirements in Schedule 15-2. Part 4, Article 2 - Architectural Design Criteria

NTD: Bundled Project, details to follow

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City of Ottawa Confederation Line Extension Project

Confederation Line Structures Bridge Structure Structure Minimum Vertical Aesthetic NMI or SI Relevant Authority Structure Type ucture Name Number Conveyance Clearance Exceptions Level and Cross Section to Acco Structure to Span Over Confederation Line West Structures SN018231 and Box Culvert under West Transitway SI City of Ottawa Concrete Box Culvert Railway х SN018232 SN019991 West Transitway South Rock Wall NMI City of Ottawa Rock Face/Concrete Wall SN019992 West Transitway North Rock Wall NMI City of Ottawa Rock Face/Concrete Wall EB & WB track Alignment Future Goldenrod Driveway NMI SN016255 Goldenrod Bridge at Tunney's Pasture City of Ottawa New Overhead Bridge Roadway 4.3m 1 - High х х Emergency walkways configuration erhead Concrete Rigid Fra Existing Ross Avenue EB & WB track Alignment SN016260 Ross Avenue Bridge NMI City of Ottawa Roadway No Exception х х Bridge configuration Emergency walkways Existing Northwestern Avenue EB & WB track Alignmen rhead Concrete Rigid Fr SN016270 Northwestern Avenue Bridge NM City of Ottawa х х Roadway No Exception Bridge configuration Emergency walkways EB & WB track Alignment NMI rhead Concrete Rigid Fra Existing Carleton Avenue SN016330 Carleton Avenue Bridge City of Ottawa Roadway No Exception х х Bridge configuration mergency walkways rhead Concrete Rigid Fra Existing Island Park Drive EB & WB track Alignment SN016280 land Park Drive Bridge NMI City of Ottawa Roadway 4.4m х х Bridge configuration Emergency walkways erhead Concrete Rigid Fr Existing Lanark Avenue EB & WB track Alignment SN016290 anark Avenue Bridge NMI City of Ottawa Roadway No Exception х х Bridge erhead Steel Truss Utili configuration Emergency walkways
EB & WB track Alignment NMI Existing configuratio SN019890 lydro Utility Bridge Utility 4.2m х City of Ottawa Bridge Emergency walkways Existing Tweedsmuir Avenue erhead Concrete Rigid Fra EB & WB track Alignment NMI х х SN016300 eedsmuir Avenue Bridge City of Ottawa Roadway 4.2m х Bridge configuration mergency walkways nclosed Concrete Pede EB & WB track Alignment SN018240 Westboro Station Pedestrian Bridge NMI City of Ottawa Pedestrian Approximate 4.1m Existing configuration х Underpass Station elements Existing Athlone Avenue EB & WB track Alignment rhead Concrete Rigid Fr SN016310 thlone Avenue Bridge NMI City of Ottawa Roadway 4.075m х х Bridge configuration Emergency walkways Existing Churchill Avenue rhead Concrete Rigid Fra EB & WB track Alignment х NMI х SN016320 hurchill Avenue Bridge City of Ottawa Roadway 4.075m Emergency walkways Bridge configuration Pedestrian, Existing configuration EB & WB track Alignment erhead Concrete Rigid Fran SN018220 osevelt Avenue Bridge NMI City of Ottawa No Exception 1 - High Emergency walkways Х Maintenanc Pedestrian Bridge Vehicle • MUP SN018620 & Concrete Rigid Frame Existing SJAM Parkway NMI SJAM Parkway at Carleton Avenue Pedestrian Overpass NCC Roadway SN018621 Pedestrian Overpass configuration Existing SJAM Parkway • MUP configuration 5N018610 & Concrete Rigid Frame SJAM Parkway at Lanark Avenue Pedestrian Overpass NMI NCC Roadway -SN018611 Pedestrian Overpass NB & SB track Alignment SI U Approach - Depressed Guideway Parkway East Portal City of Ottawa Portal/Retaining Structure Railway х SN019212 - East & west Emergency х walkway NB & SB track Alignment SN019213 U Approach - Depressed Guideway Parkway West Portal SI City of Ottawa Railway х х Portal/Retaining Structure - East & west Emergency walkway Proposed SJAM Parkway MUP SN018920 SJAM Parkway at Churchill Avenue Pedestrian Overpass NMI NCC New Pedestrian Overpass Roadway 3.0m 1 - High х configuration roposed SJAM Parkway • MUP SN018910 JAM Parkway at Cleary Avenue Pedestrian Overpass NMI 3.0m х NCC New Pedestrian Overpass Roadway 1 - High configuration closed Concrete Pedestria SN018400 incoln Fields Station Pedestrian Bridge -City of Ottawa Pedestrian Overpass Proposed Carling Avenue EB & WB track Alignment NMI SN016070 Carling Avenue Bridge at Lincoln Fields Station City of Ottawa New Overhead Bridge Roadwav No Exception 3 - Low х х х configuration Emergency walkways MUP 100 year flood plair • WB, EB & SB track Pedestrian Alignment SN018470 NMI No Exception 1 - High х х х Pedestrian Bridge at [REDACTED] City of Ottawa New Pedestrian Overhead Maintenance Emergency walkways Vehicle Existing Transitway configuration WB & EB Track Alignment SB track Alignment Emergency walkways Emergency walkways Existing Transitway SN015050 Lincoln Fields Split Structure City of Ottawa New Elevated Guideway Railway х SI No Exception 1 - High х configuration Pinecrest Creek MUP EB & WB track Alignment SN015130 J Approach - Depressed Guideway Connaught East Portal SI City of Ottawa Portal/Retaining Structure Railway х х Emergency walkways EB & WB track Alignment SN015140 U Approach - Depressed Guideway Connaught West Portal SI City of Ottawa Portal/Retaining Structure Railway х х Emergency walkways Pedestrian Traffic New Enclosed Pedestrian Proposed Highway 417 Pedestrian Bridge at Queensview Station SI City of Ottawa/MTO Maintenance Vehicle SN018460 Pedestria No Exception 1 - High Х Underpass configuration and Baxter Road EB & WB track Alignment rhead Concrete Rigid Fra xisting Off-Ramp configuration SN116410 Highway 417 Westbound Off-Ramp at Richmond Road NMI Roadway No Exception х City of Ottawa/MTO Bridge Emergency walkways Reconfigured Richmond Road cross • EB & WB track Alignment NMI rhead Concrete Rigid Fra х SN116420 Richmond Road Bridge City of Ottawa/MTO Roadway No Exception х х Bridge Emergency walkways Reconfigured Richmond Road cross SN116110 chmond Road O/P Bayshore Drive NMI City of Ottawa Concrete Overpass Roadway Bayshore Drive х section verhead Concrete Rigid Fran Existing On-Ramp configuration EB & WB track Alignment SN116430 Highway 417 Westbound On-Ramp at Richmond Road NMI City of Ottawa/MTO Roadway No Exception х Bridge Emergency walkways Existing Highway 417 EB and Roadway WB configuration SN117020 NMI Graham Creek Culvert City of Ottawa/MTO Concrete Box Culvert Graham Creek Railway • EB & WB track Alignment Emergency walkways

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	habilitation ³											
Concrete Patch Repairs	Concrete Crack Repairs	Replace Bearings	Additional Comments/Requirements									
X X	X X											
~												
х	х											
x	x		 Mitigate and repair undermining of wingwall 									
X	x											
Х	x											
x	x											
			Modify existing structure to accommodate new									
	X		station entrance									
х	x		Modify existing structure to accommodate new station or remove structure									
х	х		 Modify existing structure to accommodate new station entrance 									
			 Design and install a temporary Structure as part of the Scott Street detour 									
х	х		Replace barrier									
x	x		Replace barrier If maintained, evaluate WB structure to ensure capacity is not exceeded following MUP and lane reconfiguration									
			Structure shall be Designed in conjunction with the Parkway Tunnel									
			Structure shall be Designed in conjunction with the Parkway Tunnel									
			Includes the removal of existing pedestrian bridge (SN018380)									
			 Structure shall be designed to span over Highway 417 in one span 									
х	x											
x	х		 Undertake structural evaluation for the reconfigured Richmond Road cross section 									
			Undertake structural evaluation for the reconfigured Richmond Road cross section									
х	x		Stabilize southeast retaining wall									
			Verify the capacity of the Structure									

City of Ottawa Confederation Line Extension Project

	Structure Name		Relevant Authority	Structure Type		Minimum Vertical Clearance Exceptions ^{1,2}		Geometric Structural Requirements											
Structure Number		NMI or SI			Structure Conveyance		Bridge Aesthetic Level and Classification	Cross Section to Accommodate	Structure to Span Over	New Design & Construction Removal	Replace	OCS	Structural Evaluation	Install Crash Walls at Piers Install Security Fence ⁴	Requires Architectural Concrete ⁵	Concrete Patch Repairs	Concrete Crack Repairs	Replace Bearings	Additional Comments/Requirements
SN117440	Stillwater Creek Culvert 1	SI	City of Ottawa/MTO	Concrete Box Culvert	Roadway/ Railway	-	-	Existing Highway 417 EB and WB configuration EB & WB track Alignment Emergency walkways	• Stillwater Creek										Verify the capacity of the Structure
SN117450	Stillwater Creek Culvert 2	SI	City of Ottawa/MTO	Concrete Box Culvert	Roadway/ Railway	-	-	Existing Highway 417 EB and WB configuration EB & WB track Alignment Emergency walkways	• Stillwater Creek										Verify the capacity of the Structure
SN116390	Highway 417 E-N/S Ramp at Moodie Drive	NMI	City of Ottawa/MTO	3 Span Post-Tensioned Concrete Overhead Bridge	Roadway	-	-	Existing E-N/S Off-Ramp configuration	EB & WB track Alignment Emergency walkways Bus access to Moodie Station			x							
SN014490	Queensway (Hwy 417) Bridge	NMI	City of Ottawa/MTO	2 Span Precast Concrete Box Girder Overhead Bridge	Roadway	No Exception	-	 Proposed Highway 417 configuration 	EB & WB track Alignment Emergency walkways	x		х		х					Remove Station Platforms
SN015210	Iris Street Bridge	NMI	City of Ottawa	New Overhead Bridge	Roadway	No Exception	3 - Low	Proposed Iris Road Configuration	NB & SB track Alignment East & west train platforms West MUP	x				x x	x				 Structure shall be Designed in conjunction with the Iris Station.
SN018350	Pinecrest Creek Iris Street Culvert	-	City of Ottawa	Twin Cell Concrete Box Culvert	Roadway	-	-	-	-	x									
SN017710	Pinecrest Creek Culvert under Iris	NMI	City of Ottawa	New Concrete Culvert	Roadway	-	3 - Low	 Proposed Iris Road Configuration 	Pinecrest Creek	x									
SN017720	Pinecrest Creek Culvert under Alignment	SI	City of Ottawa	New Concrete Culvert	Railway	-	3 - Low	 NB & SB track Alignment Emergency walkways MUP Embankment Slopes 	Pinecrest Creek	x									
SN018360	Pinecrest Creek Kenson Park Culvert	SI	City of Ottawa	Twin Cell Concrete Box Culvert	Railway	-	-	NB & SB track Alignment Emergency walkways MUP Embankment Slopes	Pinecrest Creek				x			x	x		 Ensure Structure has adequate length to accommodate any grade raises over culvert
SN018370	Pinecrest Creek Baseline Road Culvert	SI	City of Ottawa	Twin Cell Concrete Box Culvert	Railway	-	-	NB & SB track Alignment Emergency walkways MUP Embankment Slopes	Pinecrest Creek				x						 Ensure Structure has adequate length to accommodate any grade raises over culvert
SN016080	Baseline Road Bridge	NMI	City of Ottawa	3 Span Steel Girder Overhead Bridge	Roadway	No Exception	-	Existing Baseline Road configuration	NB & SB track Alignment Emergency walkways			x		x x		x	x	x	 The need for crash walls shall be dependent on the proximity of the Alignment to the piers and shall follow the requirements in [Schedule 15-2, Part 2, Article 4 - Structural Design Criteria and Requirements, Clause 4.4]
New	Pinecrest Stormwater Management Facility Inlet Chamber	NMI	City of Ottawa	New Inlet Chamber	Pedestrian	-	3-Low	• MUP	Baseline Storm Sewer Outfall Flow to Pond Bypass weir	x									
New	Pinecrest Stormwater Management Facility Inlet Culvert	NMI	City of Ottawa	New Culvert	Roadway	-	3 - Low	Maintenance Road MUP	Baseline Storm Sewer Outfall Flow to Pond	x									 Culvert shall be design to carry CHBDC Truck loading

¹Exceptions to the minimum clearance requirements per Schedule 15-2 Part 2, Article 4 - Structural Design Criteria and Requirements, Clause 4.4 ²OCS placement under the Structure shall be as indicated in Schedule 15-2, Part 3, Article 14. ³Substructure and Soffit repairs Based on the requirements of the most recent OSIM Inspection Report

⁴Install Security fence in accordance with Schedule 15-2, Part 6, Article 2 - Landscape Design Criteria, Clause 2.7

⁵ Architectural concrete shall be in accordance with the requirements in Schedule 15-2. Part 4, Article 2 - Architectural Design Criteria

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