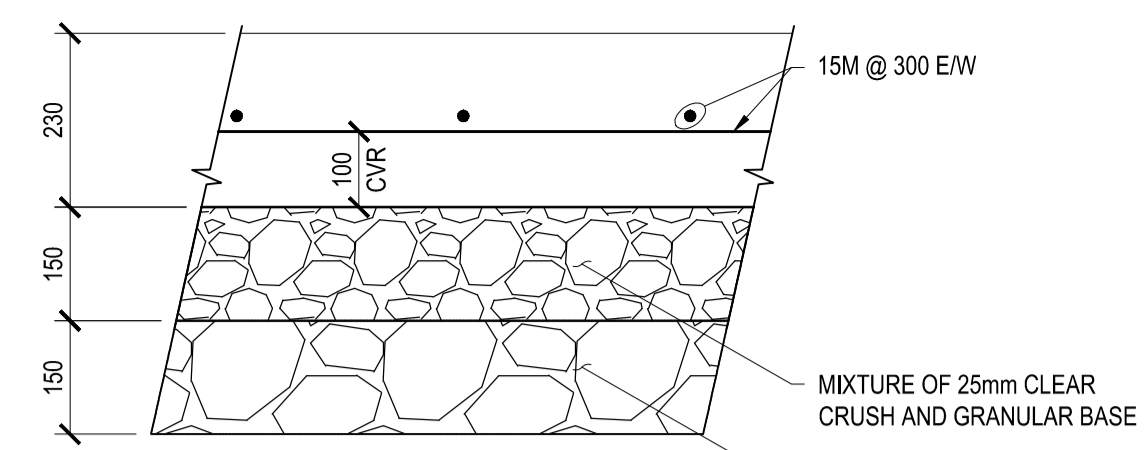
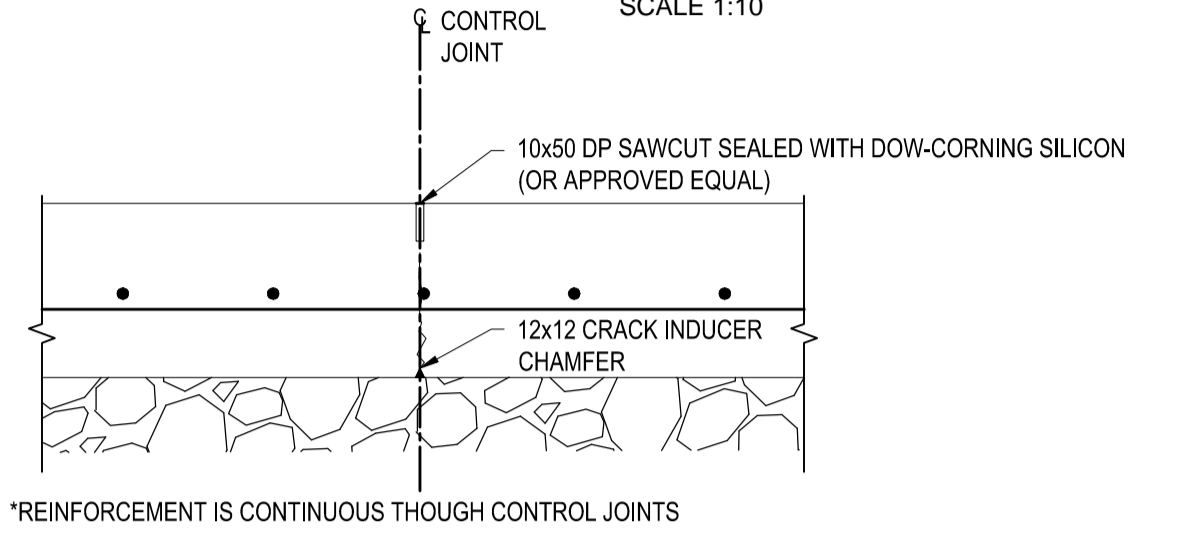


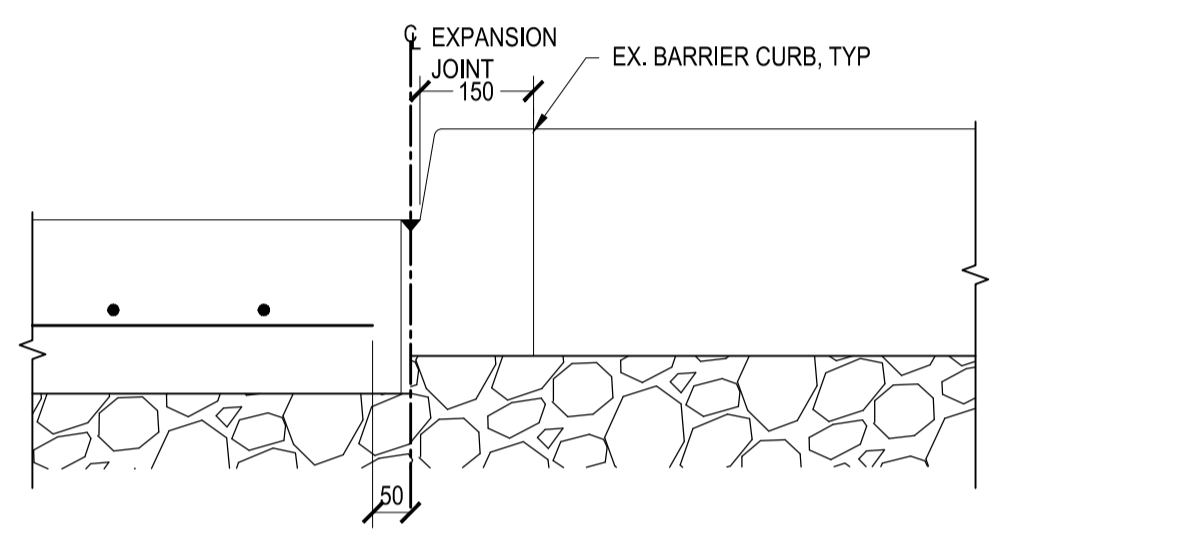
CONCRETE SLAB PLAN
SCALE 1:200
*FOR LOCATION, REFER TO CIVIL DRAWINGS
CONCRETE SLAB TO BE INSTALLED IN 2 PHASES.
AT LEAST ONE (1) LANE TO REMAIN OPEN AT ALL TIMES.



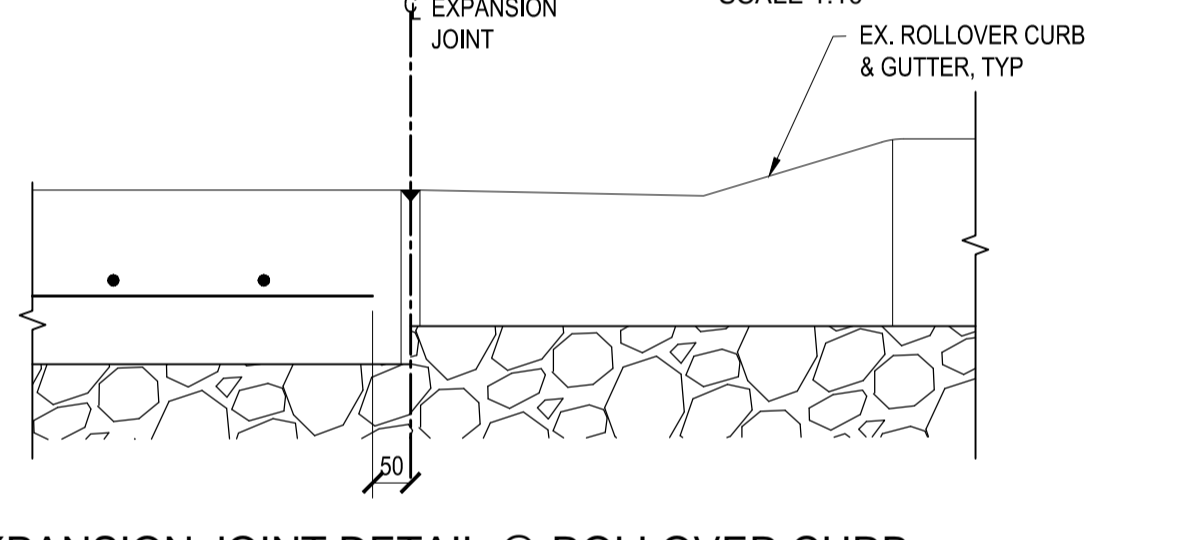
CONCRETE SLAB DETAIL
SCALE 1:10



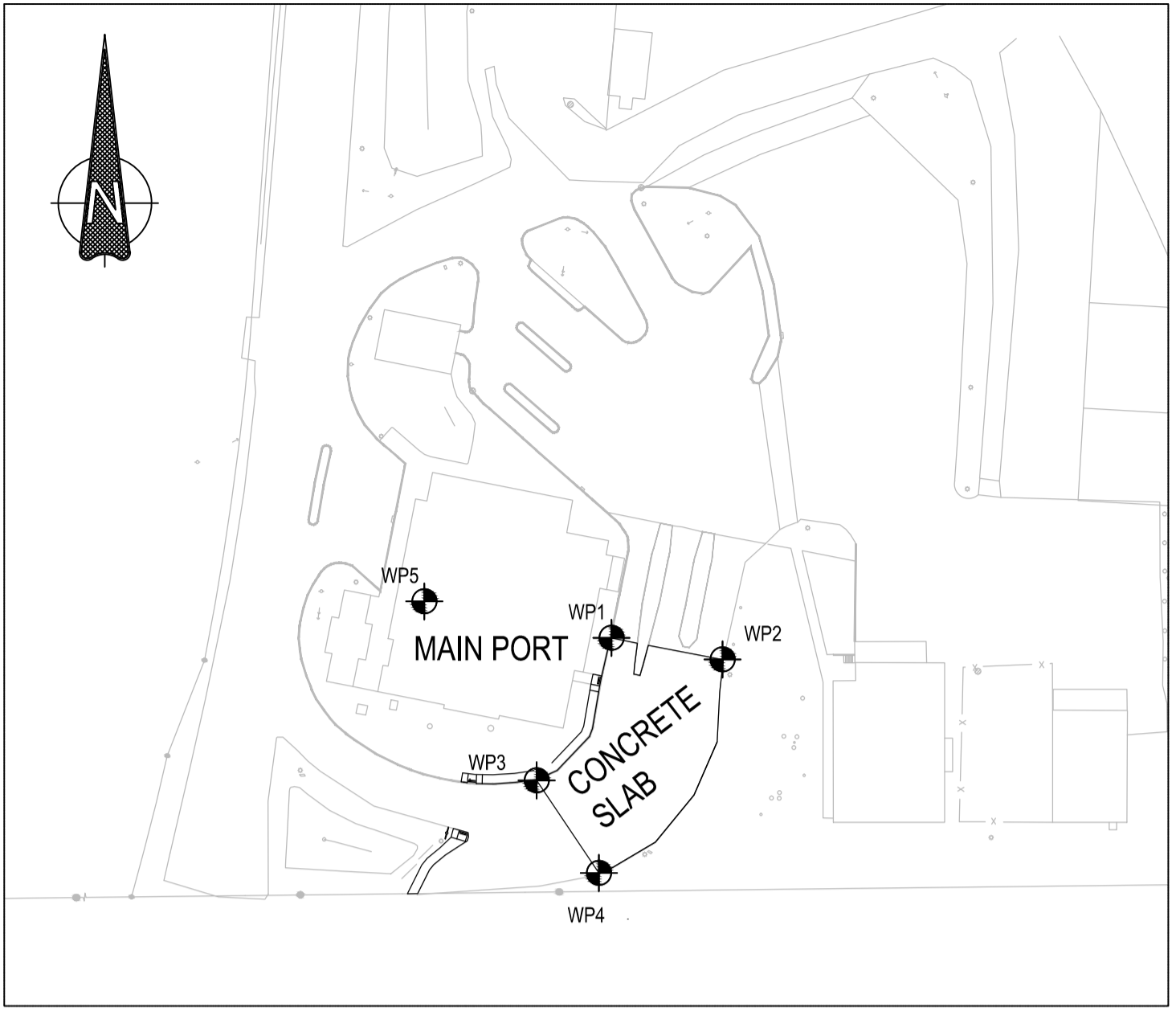
CONTROL JOINT DETAIL
SCALE 1:10



EXPANSION JOINT DETAIL @ BARRIER CURB
SCALE 1:10



EXPANSION JOINT DETAIL @ ROLLOVER CURB
SCALE 1:10



STRUCTURAL SITE PLAN
SCALE 1:1000

LEGEND:

1. CJ= CONTROL JOINT	-----
2. EJ = EXPANSION JOINT	—————

	NORTHING (m)	EASTING (m)
WP1	430487.462	560185.656
WP2	430483.905	560203.937
WP3	430464.001	560173.335
WP4	430448.778	560183.588
WP5	430493.449	560154.857

GENERAL NOTES

- ALL DIMENSIONS IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
- ALL ELEVATIONS ARE GIVEN IN METERS (m) UNLESS NOTED OTHERWISE.
- SCALE INDICATED ON DRAWING IS APPROPRIATE SCALE AT FULL SIZE.
- THE CONTRACTOR SHALL EXAMINE ALL CONTRACT DOCUMENTS, CHECK DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER FOR CLARIFICATION PRIOR TO COMMENCING CONSTRUCTION. DISCREPANCIES NOT REPORTED ARE THE RESPONSIBILITY OF THE CONTRACTOR. CHECK AND VERIFY ALL DIMENSIONS BEFORE COMMENCING WITH ANY WORK. NOTIFY THE ENGINEER OF ANY ERRORS OR OMISSIONS.
- DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED 'ISSUED FOR CONSTRUCTION'.
- ALL COMPONENTS, STRUCTURAL OR OTHERWISE, NOT INCLUDED IN THESE DRAWINGS ARE THE RESPONSIBILITIES OF THEIR RESPECTIVE DESIGNER.

CAST-IN-PLACE CONCRETE

- CONCRETE MEMBERS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTHS OF 35MPa @ 28 DAYS. MAXIMUM NOMINAL AGGREGATE SIZE SHALL BE 20mm. EXPOSURE CLASS C-XL.
- THE CONTRACTOR SHALL SUBMIT A REPORT OUTLINING THE PROPOSED MIX DESIGN FOR EACH CLASSIFICATION OF CONCRETE TO THE ENGINEER FOR REVIEW AND ACCEPTANCE AT LEAST 2 WEEKS IN ADVANCE OF WHEN CONCRETE PRODUCTION IS SCHEDULED TO COMMENCE. REVIEW AND ACCEPTANCE OF THE MIX DESIGN BY THE DESIGN ENGINEER DOES NOT CONSTITUTE ACCEPTANCE OF THE CONCRETE. ACCEPTANCE OF THE CONCRETE WILL BE BASED SOLELY ON THE TEST RESULTS OF THE CONCRETE PLACED ON THE PROJECT. NO CONCRETE SHALL BE PLACED PRIOR TO RECEIVING ENGINEER ACCEPTANCE OF THE MIX DESIGN. EACH MIX DESIGN SUBMITTAL SHALL INCLUDE THE FOLLOWING:
 - NAME OF THE PROPOSED SUPPLIER.
 - PROJECT SPECIFICS
 - DISTANCE AND EXPECTED TRAVEL TIME FROM BATCH PLANT TO PROJECT SITE.
 - EXPECTED METHOD OF BATCHING, TRANSPORTING AND PLACING CONCRETE.
 - SPECIFIED MIX PARAMETER REQUIREMENTS.
 - NAME AND CONTACT INFORMATION OF INDEPENDENT, CERTIFIED QUALITY CONTROL TESTING FIRM AND/OR CERTIFIED TESTING PERSONNEL.
- ADDENDUM TO A23.1-04 "CONCRETE MIX PROPORTIONS" SHALL MEET THE REQUIREMENTS GIVEN IN THE FOLLOWING TABLE:

MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS (MPa)	NOMINAL SIZE OF COARSE AGGREGATE (mm)	AIR CONTENT (%)	SLUMP (mm)	MAXIMUM W/C RATIO BY MASS	ADMIXTURE AS REQUIRED
35	20	6 ± 1	60 ± 20	0.45	AEA WRA

- THE MAXIMUM PROPORTION OF AGGREGATE PASSING 5mm SCREEN SHALL BE 38% OF THE TOTAL MASS OF AGGREGATE.
- ALL CEMENT SHALL BE TYPE 10 NORMAL PORTLAND CEMENT, UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- FLY ASH OR OTHER POZZOLANS USED AS ADMIXTURES SHALL CONFORM TO ASTM C618-12 "STANDARD SPECIFICATION FOR FLY ASH AND RAW OR CALCINED NATURAL POZZOLAN FOR USE IN CONCRETE".
- AIR ENTRAINMENT ADMIXTURES, AEA, SHALL CONFORM TO ASTM C260/C260M-10a "STANDARD SPECIFICATION FOR AIR-ENTRAINING ADMIXTURES FOR CONCRETE".
- REDUCE AIR CONTENT TO 3% FOR SLABS TO BE STEEL TROWELED.
- SLUMP TO BE MEASURED BEFORE ADDITION OF WATER REDUCING ADMIXTURES, WRA.
- DIMENSIONAL TOLERANCES FOR CONCRETE WORK SHALL BE GIVEN IN CAN/CSA A 23.1-09 "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION".
- ALL CONCRETE SHALL BE CURED IN ACCORDANCE WITH CAN/CSA A23.1-09 "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION".
- ALL FORMWORK SHALL BE DESIGNED, SUPPLIED, AND INSTALLED IN ACCORDANCE WITH CAN/CSA-S269.3-M92-(R2013), "CONCRETE FORMWORK".

REINFORCEMENT

- REINFORCING STEEL SHALL CONFORM TO CAN/CSA-G30.18 GRADE 400W, AND SHALL MEET THE REQUIREMENTS OF S5412.
- SPACING OF BARS SHOWN ON THE DRAWINGS IS FROM CENTER-TO-CENTER OF BARS..
- DEVELOPMENT LENGTH AS FOLLOWS:

	UNCOATED VERTICAL BARS	UNCOATED HORIZONTAL BARS	UNCOATED TOP HORIZONTAL BARS *
15M	400mm	500mm	650mm

- LAP SPLICES SHALL BE STAGGERED WITH MINIMUM LAP LENGTH AS FOLLOWS:

	UNCOATED	UNCOATED TOP BARS *
15M	500mm	650mm

- * TOP BARS DEFINED AS BARS WITH MORE THAN 300mm OF FRESH CONCRETE BELOW THE DEVELOPMENT LENGTH OR SPLICE
- SPLICES SHALL BE STAGGERED SO THAT NO MORE THAN 50% OF THE REINFORCING IS SPLICED AT ANY ONE LOCATION, UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

STRUCTURAL FILL

- PRIOR TO BACKFILL, EXCAVATIONS SHALL BE FREE OF STANDING WATER AND CLEAN OF ALL SHORING MATERIALS, FORMING MATERIALS, TRASH AND DEBRIS. NO SUCH MATERIALS SHALL BE INCLUDED IN THE BACKFILL MATERIAL. ANY LOOSE SOIL SHALL EITHER BE COMPACTED OR REMOVED.
- THE STRUCTURAL BACKFILL MATERIAL SHALL BE CLEAN, WELL GRADED, SAND AND GRAVEL MATERIAL AS APPROVED BY THE GEOTECHNICAL ENGINEER AND SHALL BE PLACED WITHIN 2% OF OPTIMUM MOISTURE CONTENT IN UNIFORM HORIZONTAL LOOSE LAYERS NOT EXCEEDING 150mm, COMPACTED TO A MINIMUM DENSITY EQUIVALENT TO 95 PERCENT OF MODIFIED PROCTOR MAXIMUM DRY DENSITY. THE BACKFILL MATERIAL SHOULD HAVE A FINES CONTENT OF LESS THAN 5% PASSING SIEVE #200.

FOUNDATION

- A MAXIMUM FACTORED BEARING CAPACITY OF 100kPa WAS ASSUMED IN DESIGN. GROUND CONDITIONS MAY VARY. THE FOUNDATION REQUIREMENTS ARE TO BE COORDINATED AND VERIFIED WITH THE GEOTECHNICAL ENGINEER ON SITE.
- PLACE A MINIMUM 300 mm THICK LEVELING CRUSHED BASE COURSE (<25 mm) BENEATH ALL CONCRETE AND COMPACT TO 98% OF STANDARD PROCTOR DENSITY.

BACKFILL AND COMPACTION

- THE ZONE OF COMPACTION SHALL BE AS SHOWN ON THE DRAWING(S) AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY, AT OPTIMUM MOISTURE CONTENT. MATERIAL COMPACTION TESTING MAY BE REQUIRED BY THE ENGINEER'S REPRESENTATIVE. BASE & SUB-BASE TO BE APPROVED BY GEOTECHNICAL ENGINEER.
- BACKFILLING MATERIAL IS TO BE FREE DRAINING GRANULAR MATERIAL THAT IS APPROVED BY THE ENGINEER'S REPRESENTATIVE PRIOR TO ALL BACKFILLING OPERATIONS.

QUALITY CONTROL

- QUALITY CONTROL DOCUMENTS SHALL BE PROVIDED TO THE ENGINEERS REPRESENTATIVE. THE DOCUMENTS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
 - STEEL MILL TEST CERTIFICATED (OR EQUIVALENT) FOR EACH COMPONENT.
 - CONCRETE TEST RESULTS FOR EACH COMPONENT.
- REBAR SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER'S REPRESENTATIVE FOR REVIEW AT LEAST FOURTEEN (14) DAYS PRIOR TO CONCRETE POUR. CONCRETE POUR SHALL NOT PROCEED WITHOUT REVIEWED SHOP DRAWINGS.



Revision/	Description/Description	Date/Date
6		
5		
4		
3		
2	ISSUED FOR TENDER	16/08/19
1	ISSUED FOR REVIEW	16/07/12

Client/client
PUBLIC WORKS & GOVERNMENT SERVICES CANADA (PWGSC)

Project title/Titre du projet
**KINGSGATE, BC
6917 HIGHWAY 95**

KINGSGATE PORT OF ENTRY STAFF PARKING PAVING AND PIL IMPROVEMENTS

Consultant Signature Only

Designed by/Concept par
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Drawn by/Dessiné par
C. PHAM & M. CHAMBERS

PWGSC Project Manager/Administrateur de Projets TPSCG
JERRY CHEN

Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architectural et de génie, TPSCG
REGIONAL MANAGER AES

Drawing title/Titre du dessin

CONCRETE SLAB DETAILS

Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
R.082785.001	3 OF 3	2

