

KEY NOTES:

- SAW-CUT/CHIP-OUT 1200x500dp TRENCH IN EXISTING BULK CONCRETE. REMOVE AND DISPOSE OF WASTE MATERIAL. PLACE NEW ELECTRICAL & COMMUNICATIONS CONDUITS IN A FREE-DRAINING WELL GRADED SAND BED. COMPACT SAND TO 98% PROCTOR DENSITY.
- 2 CLEAN AND INTENTIONALLY ROUGHEN CONCRETE (5mm AMPLITUDE). 2 VERTICAL TO 1 HORIZONTAL, PRIOR TO PLACING NEW CONCRETE.
- (3) 250mm CONCRETE LID OVER TRENCH.
- (4) 3-15M CONT.
- (5) 15M @300mm O.C. DRILL AND DOWEL TO EXISTING CONCRETE WITH APPROVED ADHESIVE. MIN. 200mm EMBED.
- (6) MAINTAIN MIN. 305mm DISTANCE BETWEEN POWER & COMM. CONDUITS.
- (7) EXISTING CONCRETE SURFACE.

NOTES

- 1. SCAN CONCRETE PRIOR TO CUTTING AND REPORT FINDINGS TO DEPARTMENTAL REPRESENTATIVE PRIOR TO PROCEEDING.
- 2. TRENCH TO BE REVIEWED BY DEPARTMENTAL REPRESENTATIVE PRIOR TO PLACING CONDUIT AND POURING FINAL CONCRETE COVER.
- 3. TRENCH LID SLAB DESIGNED FOR AXIAL LOAD OF 54 KN CORRESPONDING TO A MAX 11,500kg VEHICLE.



CONCRETE TRENCH DETAIL (INDICATIVE)

:102 / SCALE: N.T.S.

CAST-IN-PLACE REINFORCED CONCRETE

- 1 CONCRETE MATERIALS, QUALITY, MIXING, PLACING, FORMWORK AND OTHER CONSTRUCTION PRACTICES TO CONFORM TO CSA-A23.1.
- 2 SUPPLY CONTROLLED CONCRETE IN ACCORDANCE WITH CSA-A23.1 WITH PROPERTIES NOTED IN CONTROLLED CONCRETE TABLE.
- 3 ADD MIXTURES NEED TO BE REVIEWED/ APPROVED BY DEPARTMENTAL REPRESENTATIVE.
- 4 FIELD AND LABORATORY TESTING OF CONCRETE TO BE COMPLETED BY A THIRD PARTY TESTING AND INSPECTION AGENCY APPROVED BY AND RESPONSIBLE TO THE DEPARTMENTAL REPRESENTATIVE. TESTING AGENCY SHALL BE CERTIFIED TO CSA-A283. ONE SET OF 3 CYLINDERS SHALL BE MADE FOR EACH DAY'S POUR. COPIES OF TEST RESULTS SHALL BE SENT TO THE DEPARTMENTAL REPRESENTATIVE AND CONTRACTOR.
- 5 COLD WEATHER REQUIREMENTS FOR POURING CONCRETE AS DEFINED BY CAN/CSA-A23.1, CLAUSE 7.4.2.5 MUST BE MET. CONTRACTOR SHALL ENSURE THAT ALL PRECAUTIONS ARE TAKEN TO ADEQUATELY CURE CONCRETE IN COLD WEATHER INCLUDING BUT NOT LIMITED TO: HEATING THE MIXING WATER, ADDING ACCELERATOR TO THE CONCRETE MIX, COVERING THE CONCRETE AND HEATING THE CONCRETE. WHEN THERE IS A PROBABILITY OF THE TEMPERATURE FALLING BELOW 5°C, AN ADDITIONAL CONCRETE CYLINDER (4 TOTAL) SHALL BE MADE. A MINIMUM OF 2 28 DAY SAMPLES SHALL BE LEFT ON SITE FOR 28 DAYS MINIMUM AND STORED UNDER SIMILAR TEMPERATURE AND HUMIDITY CONDITIONS AS THE IN-PLACE CONCRETE.
- 6 HOT WEATHER REQUIREMENTS FOR POURING CONCRETE AS DEFINED BY CAN/CSA-A23.1, CLAUSE 7.4.1.8.1 MUST BE MET. WHEN THERE IS A PROBABILITY OF THE TEMPERATURE RISING ABOVE 27°C, AN ADDITIONAL CONCRETE CYLINDER (4 TOTAL) SHALL BE MADE. A MINIMUM OF 2 28 DAY SAMPLES SHALL BE LEFT ON SITE FOR 28 DAYS MINIMUM AND STORED UNDER SIMILAR TEMPERATURE AND HUMIDITY CONDITIONS AS THE IN-PLACE CONCRETE.

CONCRETE REINFORCEMENT

- 1 REINFORCEMENT STEEL TO CONFORM TO CSA-G30.18 GRADE 400.
- 2 REINFORCEMENT SPLICES MIN 750mm FOR 15M BARS. MIN 1000mm FOR 20M BARS.
- 3 OPENINGS IN WALLS AND SLABS PROVIDE TWO 15M BARS EACH SIDE, ONE EACH FACE, EXTENDING 600mm PAST THE OPENINGS, PLUS TWO 15M DIAGONAL BARS AT EACH CORNER, EACH FACE 1200mm LONG UNLESS NOTED OTHERWISE.
- 4 DO NOT CUT REINFORCEMENT AT OPENINGS WHERE IT CAN BE SPREAD CONTINUOUS AROUND OPENING.
- 5 ALL REINFORCEMENT TO BE SUPPORTED AT 900mm MAXIMUM SPACING.

CLEAR CONCRETE COVER TO REINFORCEMENT								
TO BE READ IN CONJUNCTION WITH CONCRETE REINFORCEMENT DESIGN NOTES								
	EXPOSURE CLASS							
		F-1, F-2, S-1,	C-XL, C-1, C-2,					
EXPOSURE CONDITION	N	S-2, S-3	C-3, A-1, A-2, A-3					
CAST AGAINST FORMWORK OR EXPOSED	-	40 mm	60 mm					
SURFACE OF SLABS								
CAST AGAINST SOIL	-	75 mm	75 mm					

CONTROLLED CONCRETE									
TO BE READ IN CONJUNCTION WITH CAST-IN-PLACE REINFORCED CONCRETE DESIGN NOTES									
	CLASS OF	MINIMUM COMPRESSIVE STRENGTH AT	MAXIMUM AGGREGATE	AIR CONTENT	MAX W/C	CEMENT			
CONCRETE ELEMENT	EXPOSURE	28 DAYS (MPa)	SIZE (mm)	%	RATIO	TYPE			
TRENCH LID SLAB	C-1	35	20	5 - 8	0.40	GU			

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OR**I**GINAL SHEET - ANSI B

Stantec

Legend

Notes

DEPT. OF FISHERIES AND OCEANS
IOS TIMBER AND CONCRETE FLOATS
A, B, C & D

Figure No.

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ELECTRICAL ADDENDUM #01 ADD-E01-SKE01