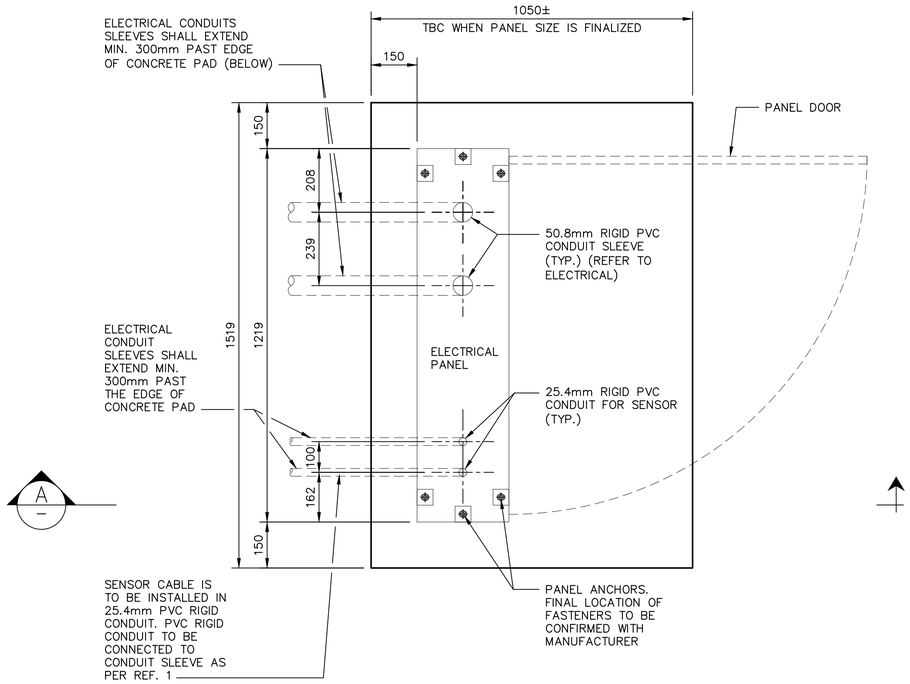
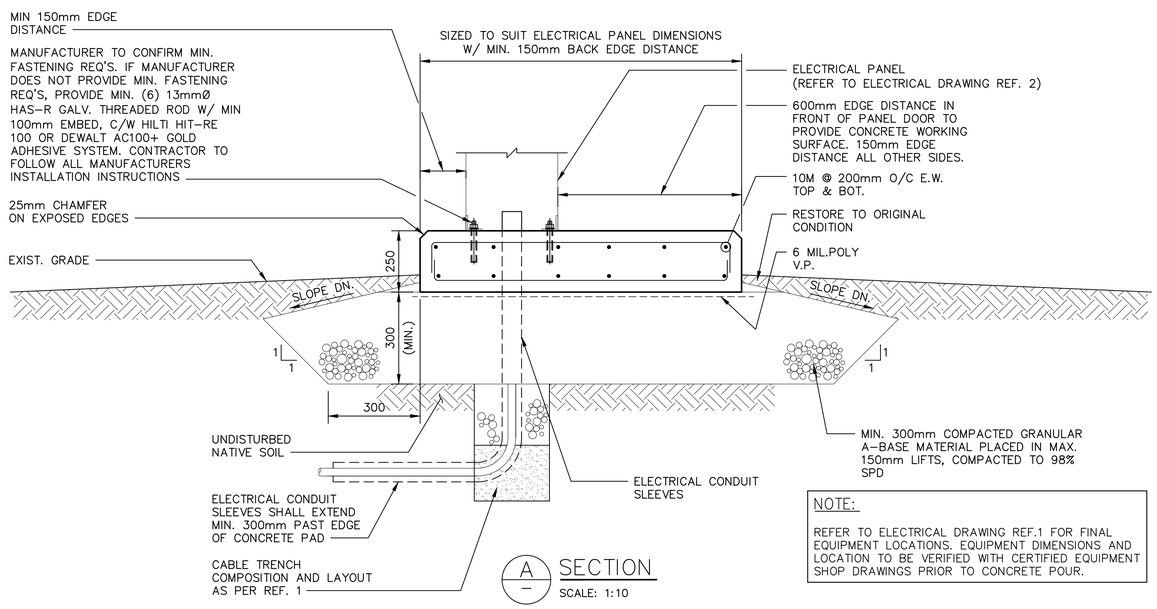


SRB PAD FOUNDATION – MOUNTED PANEL PLAN – SITE 4

SCALE: 1:10



A SECTION

SCALE: 1:10

NOTE:

RESTORE ALL DISTURBED SURFACES IMPACTED BY CONSTRUCTION ACTIVITIES TO ORIGINAL CONDITIONS PRIOR TO CONSTRUCTION, WITH THE EXCEPTION OF MODIFICATIONS/UPGRADES INDICATED ON THE CONTRACT DRAWINGS.

NOTE:

REFER TO ELECTRICAL DRAWING REF.1 FOR FINAL EQUIPMENT LOCATIONS. EQUIPMENT DIMENSIONS AND LOCATION TO BE VERIFIED WITH CERTIFIED EQUIPMENT SHOP DRAWINGS PRIOR TO CONCRETE POUR.

GENERAL NOTES:

1. SITE VERIFY ALL DIMENSIONS, ELEVATIONS, DETAILS, QUANTITIES AND CONDITIONS PRIOR TO START OF ANY DEMOLITION, CONSTRUCTION OR PREFABRICATION OF ANY BUILDING OR STRUCTURAL COMPONENT.
2. SHIP, STORE, HANDLE, ERECT, INSTALL, ETC. ALL BUILDING MATERIALS, COMPONENTS, FIXTURES, EQUIPMENT, ETC. AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
3. ALL DEMOLITION, FABRICATION, CONSTRUCTION, ETC. SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL PERTINENT BUILDING CODES, AND LOCAL BYLAWS AND ORDINANCES.
4. EACH TRADE SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE PROTECTION FOR THE EXISTING FACILITY/PROPERTY TO PREVENT PHYSICAL DAMAGE AND LOSS OF VALUE OR USE OF ANY KIND, AS A RESULT OF DEMOLITION, CONSTRUCTION AND RELATED ACTIVITIES.
5. TIME AND DURATION OF ANY NECESSARY DISRUPTION IN THE USE OF ANY ROOM, SPACE, SERVICE, EQUIPMENT, ETC. SHALL BE COORDINATED WITH, AND APPROVED BY THE OWNER AT THE START OF THE PROJECT. PROVIDE OWNER WITH MINIMUM ONE WEEK NOTICE (OR AS REQUIRED) PRIOR TO EACH ACTUAL OCCURRENCE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE OWNER AND THE DESIGN ENGINEER OF ANY PREVIOUSLY UNNOTICED PRE-EXISTING FLAW OR CONDITION THAT MIGHT INCREASE THE SCOPE OF WORK OR COMPROMISE NEW CONSTRUCTION, PRIOR TO THE START OF DEMOLITION AND CONSTRUCTION, OR AS SOON AS IT IS DISCOVERED.
7. CONTRACTOR TO SCHEDULE REINFORCEMENT INSPECTIONS WITH CONSULTANT AT LEAST 24 HRS BEFORE CONCRETE POUR. 24 HRS NOTICE TO BE GIVEN TO CONSULTANT PRIOR TO INSPECTION.

EXCAVATION & BACKFILL:

1. REMOVE ALL FILL MATERIALS, DELETERIOUS SOILS AND ORGANICS IN AREAS THAT REQUIRE GRANULAR BASE MATERIALS. COMPACT SUBGRADE TO 95% STANDARD PROCTOR DENSITY. SUB-EXCAVATE AND REPAIR ALL AREAS EXHIBITING UNSUITABLE DEFLECTIONS.
2. GRANULAR BASE TO BE PLACED ON GRADE SHALL BE COMPACTED TO 98% STANDARD PROCTOR DENSITY IN MAXIMUM 150mm LIFTS.
3. DO NOT COMPACT FROZEN BACKFILL OR PLACE ON FROZEN SUBGRADE.
4. SUB-GRADE, SUB-BASE AND BASE COURSE MATERIALS AND CONSTRUCTION METHODS SHALL BE AS PER CITY OF WINNIPEG SPECIFICATION CW3110, SPECIFICATION UNLESS NOTED.
5. SUBGRADE AND BASE COURSE INSTALLATION SHALL BE INSPECTED AND APPROVED BY A GEOTECHNICAL ENGINEER, REGISTERED IN THE PROVINCE OF MANITOBA, AT CONSTRUCTION PHASES AS DETERMINED BY THE GEOTECHNICAL ENGINEER, BEFORE WORK IS TO COMMENCE. CONTRACTOR SHALL PAY COST OF INSPECTIONS.
6. CONTRACTOR SHALL ARRANGE AND PAY FOR COMPACTION TESTING. PROVIDE COMPACTION TEST REPORTS TO CONSULTANT FOR REVIEW PRIOR TO INSTALLING REINFORCEMENT.

CONCRETE MIX DESIGNS:

CONCRETE MIX DESIGN SHALL BE PROPORTIONED TO MEET THE FOLLOWING PERFORMANCE REQUIREMENTS:

EXTERIOR SLABS (STRUCTURAL):

EXPOSURE CLASS	C-1
MIN. 56 DAY COMP. STRENGTH	35 MPa

REINFORCING STEEL:

1. REINFORCING STEEL SHALL BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18-09 (R2014). GRADE 400 MPa.
2. REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
3. SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATED BAR SIZES, SPACINGS, LOCATIONS & QUANTITIES OF REINFORCING STEEL, BENDING & CUTTING SCHEDULES, SUPPORTING & SPACING DEVICES, ETC. FOR REVIEW PRIOR TO FABRICATION. DETAIL, FABRICATE AND PLACE REINFORCING IN ACCORDANCE WITH CSA A23.1-09 (R2014), CSA A23.3-14 AND ACI SP-66 (2004) UNLESS NOTED. LAP STEEL 36 BAR DIAMETERS (MINIMUM) AS REQUIRED, UNLESS NOTED.
4. TIE, SUPPORT AND SPACE ALL REINFORCING STEEL WITH PROPER APPROVED DEVICES DESIGNED FOR USE IN REINFORCED CONCRETE, TO PREVENT DISPLACEMENT OF REINFORCING AND ENSURE SPECIFIED CONCRETE COVER.
5. PROVIDED MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:

   SLAB-ON-GRADE (TOP/BOT/SIDES) 60mm

CONCRETE:

1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA A23.1-09. SEE BELOW FOR MIX REQUIREMENTS.
2. ADMIXTURES SHALL NOT BE USED UNLESS SPECIFIED HEREIN OR APPROVED BY THE DESIGN ENGINEER. CALCIUM CHLORIDE SHALL NOT BE USED.
3. MIX WATER SHALL BE POTABLE.
4. DESIGN, FABRICATE AND ERECT FORMWORK/SHORING IN ACCORDANCE WITH CAN/CSA-S269.1-09. ALLOW SUFFICIENT CONCRETE CURING TIME PRIOR TO REMOVAL.
5. CONCRETE FINISHING SHALL MEET THE REQUIREMENTS OF CSA A23.1-09.
6. FORM RELEASE AGENT SHALL BE BIODEGRADABLE, NON-STAINING AND NON-VOLATILE.
7. PROVIDE ADEQUATE COLD/HOT WEATHER PROTECTION AS REQUIRED DURING CURING PERIOD.
8. PLACE AND SECURE ALL EMBEDDED ANCHORS, WELD PLATES, SLEEVES, BUCKS, DOWELS, INSERTS, WATERSTOPS, ETC., PRIOR TO PLACING CONCRETE. CO-ORDINATE WITH ALL TRADES FOR EMBEDDING OF ALL OTHER, CONDUIT, SERVICES, BLOCKING, ETC.
9. LOCATE AND FABRICATE ALL CONSTRUCTION JOINTS, CONTROL JOINTS AND EXPANSION JOINTS AS DETAILED ON THE DRAWINGS. JOINTS NOT SHOWN SHALL BE APPROVED BY THE DESIGN ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE.
10. ALL EXPOSED CORNERS TO HAVE 25mm CHAMFER UNLESS NOTED.
11. THE CONCRETE SUPPLIER SHALL BE CERTIFIED TO MEET THE REQUIREMENTS OF CSA A23.1-09.
12. THE CONCRETE SUPPLIER SHALL SUBMIT CONCRETE MIX DATA SUBMISSION FORMS FOR EACH TYPE OF CONCRETE SPECIFIED FOR REVIEW PRIOR TO BATCHING ANY CONCRETE.
13. CONCRETE STRENGTH TESTS SHALL BE ARRANGED BY THE CONTRACTOR. PROVIDE ONE SET OF TEST CYLINDERS IN ACCORDANCE WITH CSA A23.1-09 FOR EVERY 50 CUBIC METERS OF CONCRETE PLACED AND A MINIMUM OF ONE SET PER STRUCTURAL COMPONENT.

NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE
10	–	–
9	–	–
8	–	–
7	–	–
6	–	–
5	–	–
4	–	–
3	–	–
2	1-0425B-E0003-001	EQUIPMENT ARRANGEMENT AND DISTRIBUTION
1	1-0425B-E0002-001	SITE PLAN AND DETAILS

REFERENCE DRAWINGS

200 0 200 400 600 800

SCALE: 1:10mm

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
KGS Group
No. 245

B.M.
ELEV.

NO.	REVISIONS	DATE (YYYY/MM/DD)	BY
0	ISSUED FOR CONSTRUCTION	2024/01/11	DS

KGS GROUP

DESIGNED BY	D. SCHMIDT	CHECKED BY	C. SIEPMAN
DRAWN BY	E. MALANG	APPROVED BY	C. SIEPMAN
SCALE: HORIZONTAL / VERTICAL	AS SHOWN	RELEASED FOR CONSTRUCTION	
DATE	2023/03/07	DATE	

PLOT DATE: 2024 01 11

ENGINEER'S SEAL
PROVINCE OF MANITOBA
C.V. SIEPMAN
Member
20813
REGISTERED PROFESSIONAL ENGINEER
2024-01-11

CONSULTANT DRAWING NUMBER
22-0107-022_S04

Winnipeg

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

STORM RETENTION BASIN 3-5 (RIVERBEND)
SRB 2023 WATER LEVEL MONITORING UPGRADES
STRUCTURAL

FOUNDATION PLAN AND DETAILS
OUTDOOR MONITORING ENCLOSURE

CITY DRAWING NUMBER 1-0425B-S0001-001

SHEET 1 OF 1

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