GENERAL

1. DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL COMPLY WITH THE ONTARIO BUILDING CODE LATEST EDITION AND NATIONAL BUILDING CODE LATEST EDITION.
2. CONTRACTOR SHALL CHECK ALL DIMENSIONS ON WORKING DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ANY CHANGES, ALTERATIONS OR REVISIONS MUST BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. DRAWINGS SHALL NOT BE SCALED.
3. THESE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE BY THE PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS ENTERED INTO A CONTRACT AND THERE ARE NO REPRESENTATIONS OF ANY KIND MADE BY THE DESIGN PROFESSIONAL TO ANY PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS NOT ENTERED INTO A CONTRACT.
4. UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISION HAS BEEN MADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING AND SHORING REQUIRED FOR THE STRESSES AND INSTABILITY OCCURRING FROM ANY CAUSE DURING CONSTRUCTION. THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR ALL SUCH MEASURES. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL NECESSARY BRACING, SHORING, SHEET, PILING OR STRUCTURES AFFECTED BY THIS WORK.
5. DESIGN LIVE LOADS SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
6. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS - O.REG.213.
7. THESE DRAWINGS SHALL BE COORDINATED AND READ IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
8. WHERE THERE IS A CONFLICT IN THE SPECS AND/OR DRAWINGS THE MORE STRINGENT SHALL APPLY UNLESS APPROVED OTHERWISE IN WRITING BY THE ENGINEER.
9. ALL SPECIFICATIONS LISTED ARE TO LATEST EDITIONS IN FORCE AT TIME OF TENDERING.

FOUNDATIONS

1. REFER TO STRUCTURAL DESIGN DATA MATRIX ON DRAWING S1.1 FOR GEOTECHNICAL INVESTIGATION REPORT.
2. REMOVE ALL TOPSOIL, ORGANIC AND LOOSE FILL MATERIAL FROM BUILDING AREA BEFORE STARTING CONSTRUCTION.
3. PROOF ROLL EXISTING FILL MATERIAL. REMOVE ANY LOOSE OR SOFTENED AREAS BENEATH SLAB ON GRADE BEFORE PLACING GRANULAR FILL.
4. ALL CONTINUOUS STRIP AND ISOLATED SPREAD FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL WITH A MINIMUM SERVICEABILITY LIMIT STATE (SLS) BEARING CAPACITY AND A MINIMUM FACTORED ULTIMATE LIMIT STATE (ULS) BEARING CAPACITY SPECIFIED IN STRUCTURAL DESIGN DATA MATRIX. THIS IS TO BE CONFIRMED BY GEOTECHNICAL ENGINEER PRIOR TO POURING FOOTINGS.
5. APPROVED ENGINEERED FILL UNDER FOOTINGS AND FLOOR SLABS SHALL BE COMPACTED IN 150mm LAYERS TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
6. ALL EXTERIOR FOOTINGS SHALL BE MINIMUM 1200mm WITH NATURALLY INSULATED (I.E. SNOW COVER) AND 1200mm BELOW EXPOSED SURFACE (I.E. ADJACENT SIDEWALKS, ETC.) BELOW FINISHED EXTERIOR GRADE TO PROTECT THESE FOOTINGS FROM FROST ACTION. CONSULT GEOTECHNICAL ENGINEER FOR INSULATION REQUIREMENTS WHERE SOIL COVER CANNOT BE ATTAINED.
7. ANY NECESSARY PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT EXISTING FOOTINGS ARE NOT DISTURBED OR UNDERMINED IN ANY WAY DURING EXCAVATION.
8. SOIL CONDITIONS, REINFORCING STEEL AND FORMWORK SHALL BE INSPECTED BY THE ENGINEER BEFORE POURING CONCRETE. CONTRACTOR SHALL GIVE ENGINEER A MINIMUM 24 HOURS NOTICE TO CARRY OUT INSPECTION.
9. THE LINE OF SLOPE BETWEEN ADJACENT FOOTING OR EXCAVATIONS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10 UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER.
10. DO NOT BACKFILL AGAINST FOUNDATION WALLS UNTIL SUPPORTING SLABS HAVE BEEN POURED, UNLESS BRACING DETAILS ARE SUBMITTED. WHERE POSSIBLE BACKFILL BOTH SIDES OF WALLS SIMULTANEOUSLY.

CONCRETE

1. CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM TO CSA STANDARD A23.3.
2. CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO CSA STANDARD A23.1/A23.2.
3. FORMWORK SHALL CONFORM TO CSA STANDARD A23.1 AND FALSE WORK SHALL CONFORM TO CSA S269.1.
4. CONCRETE EXPOSED TO THE WEATHER SHALL HAVE 5%-8% AIR ENTRAINMENT.
5. REINFORCEMENT SHALL BE DEFORMED BARS AND CONFORM TO CAN/CSA G30.18, GRADE 400MPa.
6. REINFORCING STEEL SHALL BE DETAILED, BENT, PLACED AND SUPPORTED TO CONFORM TO ACI STANDARDS 315 AND THE MANUAL OF STANDARD PRACTICE PUBLISHED BY THE REINFORCING STEEL INSTITUTE OF ONTARIO.
7. WELDING OF REINFORCING STEEL SHALL NOT BE PERMITTED.
8. UNLESS NOTED OTHERWISE MINIMUM REINFORCING STEEL TENSION / COMPRESSION LAP LENGTHS TO BE:
   10M 450 mm (18") / 450 mm (18")
   15M 600 mm (24") / 450 mm (18")
   20M 800 mm (32") / 600 mm (24")
   25M 1200 mm (48") / 750 mm (30")
   30M 1400 mm (56") / 900 mm (36")
9. ALL REINFORCING STEEL FABRICATION AND PLACEMENT DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW BEFORE FABRICATION.
10. CONCRETE COVER FOR REINFORCEMENT SHALL CONFORM TO CSA STANDARD A23.3:19 TABLE 17 AS FOLLOWS UNLESS OTHERWISE NOTED.
    "C" CLASSES PERTAIN TO CHLORIDE EXPOSURE;
    "F" CLASSES PERTAIN TO FREEZING AND THAWING EXPOSURE WITHOUT CHLORIDE;
    "N" CLASS IS EXPOSED NEITHER CHLORIDES NOR FREEZING AND THAWING;

	EXPOSURE CLASS N	EXPOSURE CLASS F-1&F-2	EXPOSURE CLASS C-1&C-3
FOOTINGS (CAST AGAINST & PERMANENTLY EXPOSED TO EARTH)	75 mm	75 mm	75 mm
BEAMS, GIRDERS & COLUMNS	30 mm	40 mm	60 mm
SLABS	20 mm	40 mm	60 mm
WALLS	30 mm	40 mm	60 mm
RATIO OF COVER TO NOMINAL BAR DIAMETER	1.0	1.5	2.0
RATIO OF COVER TO MAXIMUM AGGREGATE SIZE	1.0	1.5	2.0

11. CONCRETE:
    a. ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 25MPa MINIMUM AND CLASS OF EXPOSURE IS CLASS N UNLESS OTHERWISE SPECIFIED. DESIGN MIX SHALL BE SUBMITTED FOR PROJECT ENGINEER'S REVIEW PRIOR TO USE AT JOB SITE.
    b. CONCRETE FOR EXTERIOR SLABS ON GRADE, GARAGE FLOORS, PORCHES, STEPS, PAVEMENTS, SIDEWALKS, CURBS AND GUTTERS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 32MPa C/W 5-8% AIR ENTRAINMENT AND CLASS OF EXPOSURE IS CLASS C-2, MAXIMUM WATER-TO-CEMENTING MATERIALS RATIO IS 0.45.
    c. CONCRETE FOR INTERIOR SLABS ON GRADE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 25MPa AND CLASS OF EXPOSURE IS CLASS N, MAXIMUM WATER-TO-CEMENTING MATERIALS RATIO IS 0.45. IF SUPERPLASTICIZER ("SUPER P") IS USED SLUMP BEFORE ADDING "SUPER P" IS 50mm~100mm. AFTER "SUPER P" IS 120mm~175mm. "SUPER P" TO BE INCLUDED IN CONTRACT PRICE.
    d. CONCRETE FOR EXTERIOR WALLS & COLUMNS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 25MPa C/W 4~7% AIR ENTRAINMENT AND CLASS OF EXPOSURE IS CLASS F-2, MAXIMUM WATER-TO-CEMENTING MATERIALS RATIO IS 0.55.
    e. CONCRETE FOR FOOTINGS, INTERIOR WALLS & COLUMNS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 25MPa AND CLASS OF EXPOSURE IS CLASS N.
    f. STRUCTURALLY REINFORCED CONCRETE EXPOSED TO CHLORIDES WITH OR WITHOUT FREEZING AND THAWING CONDITIONS SHALL HAVE A 56 DAY COMPRESSIVE STRENGTH OF 35MPa C/W 5~8% AIR ENTRAINMENT AND CLASS OF EXPOSURE IS CLASS C-1, MAXIMUM WATER-TO-CEMENTING MATERIALS RATIO IS 0.40, FOR EXAMPLE PARKING DECKS AND RAMPS.
12. SLUMP OF CONCRETE TO BE 50mm~100mm OR AS OTHERWISE SPECIFIED. CONCRETE (WITHOUT SUPERPLASTICIZER "SUPER P") WITH 110mm SLUMP OR MORE IS TO BE REJECTED.
13. SPACING OF CONTROL JOINTS IN CONCRETE SLABS SHALL NOT EXCEED 4.5m (15'-0") O.C.
14. ALL CONCRETE FORMS TO BE WET THOROUGHLY BEFORE POURING CONCRETE.
15. DO NOT ADD WATER TO CONCRETE ON SITE UNLESS WRITTEN APPROVAL GIVEN BY THE ENGINEER. IF HIGHER SLUMP CONCRETE IS DESIRED, CONCRETE SUPPLIER SHALL DESIGN AND SUPPLY ACCORDINGLY.
16. SLOPE ALL FLOORS AS SHOWN ON ARCHITECTURAL OR MECHANICAL DRAWINGS.
17. CONSTRUCTION JOINTS FOR FOUNDATION WALLS ARE BASED ON VERTICAL JOINTS AT A MAXIMUM SPACING OF 10m (32'-10"). CONSTRUCTION JOINTS IN FOUNDATION WALLS SHALL MATCH CONTROL JOINTS IN SLABS WHERE FOUNDATION WALLS ARE NOT SEPARATED FROM SLABS. CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE ENGINEER BEFORE CONSTRUCTION. GENERALLY, JOINTS IN SLABS SHALL BE AT RIGHT ANGLES TO THE SPANS, AT MID-SPAN IF POSSIBLE AND BE CLEAR OF SUPPORTS AND POINT LOADS.
18. INSTALL STANDARD ADJUSTABLE INSERT AND ALL OTHER CAST-IN INSERT AS REQUIRED BY THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
19. PROVIDE SLEEVES IN WALLS FOR MECHANICAL PIPING.
20. INSERTS, FRAME-OUTS, SLEEVES, BRACKETS, CONDUITS AND FASTENING DEVICES, SHALL BE INSTALLED AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT SHALL NOT IMPAIR THE STRUCTURAL STRENGTH OF THE SYSTEM. BE SO INSTALLED THEY SHALL NOT REQUIRE THE CUTTING, BENDING OR DISPLACEMENT OF THE REINFORCING OTHER THAN AS SHOWN ON THE TYPICAL DETAILS.
21. ELECTRICAL CONDUIT SHALL NOT PASS THROUGH A COLUMN, SHALL NOT BE LARGER THAN ONE-THIRD THE SLAB THICKNESS OR GRADE BEAM IN WHICH IT IS EMBEDDED, SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS ON CENTER UNLESS APPROVED AND HAVE A MINIMUM CONCRETE COVER OF 25mm (1") AND UNLESS SPECIFICALLY PERMITTED OTHERWISE, SHALL NOT RUN HORIZONTALLY IN A FOUNDATION WALL.
22. PROVIDE OPENINGS OR DEPRESSIONS IN SLABS AS REQUIRED BY OTHER TRADES.
23. OPENINGS AND DRIVEN FASTENERS REQUIRED IN THE CONCRETE AFTER THE CONCRETE IS PLACED IT SHALL BE APPROVED BY THE ENGINEER BEFORE PROCEEDING.
24. WATER CURING OF CONCRETE SLAB ON GRADE IS REQUIRED, MINIMUM 7 DAYS.
25. NON-SHRINK GROUT SHALL BE AN APPROVED PREMIXED PROPRIETARY PRODUCT.
26. DRY-PACKED GROUT SHALL BE 1 PART PORTLAND CEMENT TO 1.5 PARTS OF SAND TO 2 PARTS OF 9mm PEA GRAVEL WITH ONLY SUFFICIENT WATER TO DAMPEN THE MIXTURE. COMPRESSIVE STRENGTH SHALL BE 50MPa AT 28 DAYS.
27. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED FINISH TO EXPOSED CONCRETE. FLOOR FINISHES SHALL CONFORM TO CSA STANDARD A23.1 CLASS A FINISH UNLESS NOTED.
28. ALL HONEYCOMBING SHALL BE CUT OUT AND FILLED TO THE SATISFACTION OF THE ENGINEER.
29. APPLY A HARDENER AS SPECIFIED TO ALL CONCRETE FLOOR SLABS THAT ARE TO REMAIN EXPOSED AS NOTED. APPLY CURING/SEALING COMPOUND, CONFORMING TO ASTM C309, AS SPECIFIED TO ALL FLOOR SLABS UNLESS A TOPPING IS TO BE APPLIED.

JOINTS

CONSTRUCTION JOINT

1. SUBMIT PROPOSED JOINT LOCATION TO THE ENGINEER FOR APPROVAL UNLESS SHOWN ON DRAWINGS.
2. DO NOT PLACE SLABS OR WALLS IN ONE CONTINUOUS POUR IN LENGTHS EXCEEDING 30.0m (100'-0").
3. LOCATE SLAB CONSTRUCTIONS JOINTS AT HIGH POINTS.
4. UNLESS NOTED, ALL WALLS AND COLUMNS SHALL BE POURED IN ONE LIFT (FLOOR TO FLOOR). FOR WALLS AND COLUMNS OVER 3.7m, SUBMIT SHOP DRAWINGS FOR FORMWORK AND PLACING.

CONTROL JOINT

IN CONCRETE WALLS:
CONTROL JOINTS IN PERIMETER FOUNDATION WALLS BELOW GRADE SHALL BE @ 9.0m (30'-0") MAXIMUM UNLESS SHOWN OTHERWISE ON ARCHITECTURAL AND/OR STRUCTURAL DRAWINGS.

IN CONCRETE SLABS:
REFER TO SLAB NOTES AND DETAILS FOR SAWCUTS. WHERE NOT SHOWN, CONTROL JOINTS (SAWCUTS) IN CONCRETE SLABS SHALL NOT EXCEED 4.5m (15'-0") O.C.

EXPANSION JOINT

FILL JOINTS IN SLABS WITH SPECIFIED BACKING AND JOINT FILLER AS SOON AS POSSIBLE OR PROTECT JOINTS FROM DAMAGE AT SLAB EDGES DURING CONSTRUCTION.

SLAB ON GRADE (INTERIOR)

1. SLAB ON GRADE TO BE PLACED ON COMPACTED GRANULAR MATERIAL. COMPACTION TESTS ON FILL MATERIAL TO BE CARRIED OUT PRIOR TO SLAB ON GRADE PLACEMENT.
2. REINFORCEMENT TO SLAB ON GRADE MUST BE SUPPORTED BY CHAIRS AT MID-DEPTH UNLESS OTHERWISE LEVEL INDICATED ON DRAWINGS.
3. PROVIDE SAWCUTS WITHIN 24 HOURS OF FINISHING AT LOCATIONS SHOWN ON DRAWINGS. SAWCUT DEPTH TO BE 1/4 OF SLAB THICKNESS. SAWCUT AS CLOSE TO COLUMNS OR WALLS AS PRACTICAL. FILL SAWCUTS WITH NON-METALLIC CONTROL JOINT FILLER (RIGID JOINT SEALANTS SIKA LOADFLEX OR SEMI-RIGID EPOXY JOINT FILLER RE2I-WELD FLEX BY W. R. MEADOWS OR ALTERNATE MATERIALS APPROVED EQUAL).
4. PROVIDE 10mm ASPHALT IMPREGNATED FIBRE BOARD AND CAULKING AROUND ALL COLUMNS AND ALONG ALL WALLS.
5. MAINTAIN MINIMUM SPECIFIED THICKNESS AT ALL DEPRESSION AND CHANGES IN ELEVATIONS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT AND LOCATIONS OF ALL FINISHES AND DEPRESSIONS.
7. PROVIDE COLD WEATHER PROTECTION TO PREVENT SLAB ON GRADE FROM HEAVING AND FROZEN.

GENERAL SLAB NOTES

1. ENSURE MINIMUM 1-15M TOP AND 1-15M BOTTOM CONTINUOUS AT ALL SLAB EDGES BY ADJUSTING BAR LENGTH OR PROVIDING ADDITIONAL TOP & BOTTOM EDGE BARS AS REQUIRED.
2. LAP TEMPERATURE REINFORCEMENT (CLASS 'B' LAP) BUT NOT LESS THAN 300 mm. STAGGER LAPS OR LAP AT SUPPORTS.

REINFORCING STEEL

1. REINFORCEMENT STEEL DETAILING TO BE IN ACCORDING WITH RSIO MANUAL OF STANDARD PRACTICE AND WITH THE LATEST EDITION OF CSA CAN3-A23.1 AND CAN3 WITH THE FOLLOWING REQUIREMENTS FOR SPLICING NOTED:

SPLICES: ALL REINFORCING STEEL LAP SPLICES SHALL CONFORM TO LATEST CSA A23.3.

COLUMNS: COMPRESSION SPLICES UNLESS NOTED OTHERWISE.
WALLS & ALL OTHERS: CLASS 'B' TENSION SPLICES UNLESS NOTED OTHERWISE.
INCREASE HORIZONTAL SPLICE LENGTHS BY 1.3 TIMES WHERE MORE THAN 300mm OF FRESH CONCRETE IS CAST BELOW SPLICE.

REINFORCING CHAIRS

1. PROVIDE CHAIRS, SPACER BARS, SUPPORT BARS AND OTHER ACCESSORIES TO SUPPORT REINFORCING IN ACCORDANCE WITH THE LATEST EDITIONS OF CSA A23.1 AND A23.3. CHAIRS TO BE PLASTIC, PLASTIC TIPPED OR CONCRETE. ALL TIE WIRE, CHAIRS AND BAR SUPPORTS USED FOR COATED REINFORCING SHALL BE NON-METALLIC OR PROTECTED WITH AN ACCEPTABLE COATING.
2. CHAIRS SHALL BE SPACED AT 1200mm O.C. MAXIMUM. PROVIDE CONTINUOUS CHAIRS WHERE POSSIBLE.

OPENING AND SLEEVES

1. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND TO SHOP DRAWINGS OF ALL TRADES FOR EXACT LOCATION AND EXTENT OF OPENINGS AND SLEEVES REQUIRED BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS.
2. OBTAIN THE APPROVAL OF THE STRUCTURAL ENGINEER FOR OPENINGS REQUIRED BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS. DO NOT CORE DRILL, SAWCUT OR OTHERWISE PRODUCE OPENINGS OF ANY SIZE, IN ANY STRUCTURAL MEMBER WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
3. ALL REQUIRED OPENINGS SHALL BE SLEEVED OR FORMED PRIOR TO PLACING CONCRETE. CORING OR SAW CUTTING FOR OPENINGS AFTER CASTING SHALL NOT BE PERMITTED AS AN ALTERNATE METHOD OF PROVIDING OPENINGS. ALL DRAINS SHALL BE SET PRIOR TO CONCRETE PLACING.
4. CAST IN SLEEVES SHALL GENERALLY NOT BE PERMITTED WITHIN 600mm OF A COLUMN FACE UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER. CORED OPENINGS SHALL GENERALLY NOT BE PERMITTED WITHIN 10 TIMES THE SLAB (PLUS DROP PANEL) THICKNESS FROM THE FACE OF THE COLUMNS OR WALLS, UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER, AND WILL REQUIRE VERIFICATION OF THE REINFORCING BAR LOCATION PRIOR TO CORING.
5. ADDITIONAL REINFORCING AT OPENINGS IN FOUNDATION WALLS: FOR OPENING WIDTH 400~600 REINFORCE OPENING WITH ADDITIONAL 3-15M AT TOP AND BOTTOM, EXTEND 600 BEYOND EACH SIDE OF OPENING. FOR OPENING WIDTH 600~800 REINFORCE OPENING WITH ADDITIONAL 3-20M AT TOP AND BOTTOM, EXTEND 800 BEYOND EACH SIDE OF OPENING. FOR OPENING WIDTH 800~1000 REINFORCE OPENING WITH ADDITIONAL 3-25M AT TOP AND BOTTOM, EXTEND 1200 BEYOND EACH SIDE OF OPENING. UNLESS NOTED ON THE PLAN, IN NO CASE SHOULD OPENING WIDTH EXCEED 1000. MINIMUM WALL HEIGHT ABOVE OPENING IS 600, MINIMUM WALL LENGTH BETWEEN ADJACENT OPENINGS IS 400.

MISCELLANEOUS CONCRETE

CONCRETE PADS

PROVIDE CAST IN PLACE EQUIPMENT BASES FOR MECHANICAL AND ELECTRICAL HARDWARE. CONTRACTOR TO COORDINATE EXTENT, LOCATION AND DIMENSION FROM MECHANICAL/ELECTRICAL SHOP DRAWINGS. SUBMIT LAYOUT DRAWING TO CONSULTANTS FOR REVIEW.

CONCRETE CURBS

PROVIDE CONCRETE CURBING AS SHOWN ON THE ARCHITECTURAL AND/OR STRUCTURAL DRAWINGS.

CHAMFERS AND REGLETS

PROVIDE CHAMFERS, REGLETS, REVETS, REVEALS, RECESSES AND THE LIKE AS SHOWN ON THE ARCHITECTURAL AND/OR STRUCTURAL DRAWINGS.

MASONRY

1. ALL MASONRY WALLS SHALL BE REINFORCED WITH DUR-O-WALL LADDER DESIGN (OR APPROVED EQUAL) HOT DIPPED GALVANIZED CONTINUOUS REINFORCEMENT AT EVERY SECOND COURSE 400mm. REINFORCEMENT SHALL BE INSTALLED IN THE FIRST AND SECOND BED JOINTS 200mm APART, IMMEDIATELY ABOVE LINTELS AND BELOW SILLS. REINFORCEMENT IN THE SECOND BED JOINT ABOVE LINTELS AND BELOW SILLS SHALL EXTEND 600mm BEYOND THE JAMB, ALL OTHER REINFORCEMENT SHALL BE CONTINUOUS AND SIDE RODS SHALL BE LAPPED AT LEAST 150mm AT SPLICES. REINFORCEMENT SHALL BE PLACED AS TO ASSUME 16mm MORTAR COVER ON THE EXTERIOR FACE OF WALL AND 12mm COVER ON THE INTERIOR FACE OF WALL. (SEE MASONRY REINFORCING SCHEDULE).
2. TYPE S MORTAR SHALL BE USED THROUGHOUT FOR ALL LOAD BEARING WALLS & TYPE N MORTAR SHALL BE USED FOR NON-LOAD BEARING PARTITIONS AND BRICK OR BLOCK VENEER.
3. MORTAR COMPRESSIVE STRENGTHS: (JOB PREPARED MIX)

   TYPE S: MINIMUM 28 DAY STRENGTH = 8.5MPa, MAXIMUM 28 DAY STRENGTH = 12.0MPa
   TYPE N: MINIMUM 28 DAY STRENGTH = 3.5MPa, MAXIMUM 28 DAY STRENGTH = 7.5MPa
   MORTAR MIX PROPORTIONS:
   MIX ACCORDING TO CURRENT CSA STANDARD A179. MORTAR MIX SHALL BE TESTED FOR STRENGTH AND APPROVED BY THE ENGINEER PRIOR TO USE ON THE JOB.
   FOR EXTERIOR BRICK OR BLOCK VENEER ONLY USE PORTLAND CEMENT LIME TYPE N MORTAR - 1 PART PORTLAND CEMENT: 1 PART HYDRATED LIME: 6 PARTS SAND (1:1:6 BY VOLUME) IN ACCORDANCE WITH TABLE 3 OF CSA STANDARD A179.
4. ALL MASONRY WALL TO BE CONSTRUCTED WITH FULL MORTAR JOINTS.
5. SPACING OF MASONRY CONTROL JOINTS IN ALL WALLS SHALL NOT EXCEED 6.0m (20'-0") O.C.
6. MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF LOAD BEARING CONCRETE BLOCK MASONRY UNITS SHALL BE: 20MPa FOR HOLLOW UNITS. BASED ON NET AREA.
7. ALL MASONRY UNDER CONCENTRATED LOADS SHALL HAVE VOIDS FILLED WITH 20MPa GROUT FOR WIDTH AND DEPTH EQUAL TO 3 TIMES THE LENGTH OF BEARING, MINIMUM 600mm WIDE x 400mm DEEP.
8. FOR MASONRY OPENINGS NOT SHOWN ON DRAWINGS PROVIDED 1L-89x89x6.4 FOR EACH 100mm THICKNESS OF WALL OPENINGS UP TO 600mm. IF OPENING IS WIDER THAN 600mm NOTIFY ENGINEER FOR LINTEL SIZE VERIFICATION PRIOR TO FABRICATION AND INSTALLATION.
9. ALL MASONRY WALL SHALL BE PROPERLY SHORED DURING CONSTRUCTION UNTIL STRUCTURAL STEEL AND SLABS ARE IN PLACE.
10. PROVIDE BEARING PLATES FOR JOISTS SUPPORTED BY MASONRY WALLS. ALL BEARING PLATES SHALL BE DESIGNED ACCORDING TO THE REQUIREMENTS OF CSA S16.1. THEY SHALL BE ANCHORED WITH MINIMUM 1-20mm DIAMETER x450mm HOOKED RODS WELDED TO PLATES AND EMBEDDED INTO GROUT FILL WITH A MINIMUM STRENGTH OF 20MPa. ALLOWABLE BEARING STRESS ON MASONRY FOR DESIGN OF BEARING PLATES SHALL NOT EXCEED 175PSI (1.2MPa).
11. TESTING: MORTAR AND GROUT SHALL BE TESTED IN ACCORDANCE WITH CSA STANDARD A179.
    CONCRETE MASONRY UNITS SHALL BE TESTED IN ACCORDANCE WITH CSA STANDARD A165 SERIES.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL CONFORM TO CSA G40.21 WITH ONE SHOP COAT AND FIELD TOUCH-UP OF ZINC CHROMATE PRIMER, CONFORMING TO CISC/CPMA STANDARD 1-73A OR 2-75. AND IT SHALL BE PAINTED TO OWNERS SPECIFICATION.
   ALL W-SHAPES & S-SHAPES SECTIONS SHALL CONFORM TO ASTM A992 & ASTM A572 GRADE 50 Fy=345MPa.
   ALL C-SHAPES SECTIONS & ANGLES SHALL CONFORM TO G40.21-350W Fy=350MPa.
   ALL HSS HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO G40.21-350W CLASS C Fy=350MPa.
   ALL OTHERS (PLATES, RODS) SHALL CONFORM TO G40.21-300W Fy=300MPa.
2. FABRICATION AND ERECTION SHALL CONFORM TO LATEST EDITION OF CSA STANDARD S16. NO SPLICING WILL BE PERMITTED UNLESS OTHERWISE NOTED ON STRUCTURAL DRAWINGS.
3. DESIGN AND INSTALLATION OF ALL BRIDGING SHALL BE IN ACCORDANCE WITH LATEST EDITION OF CSA STANDARD S16. COMBINED DIAGONAL AND HORIZONTAL BRIDGING SHALL BE PROVIDED AT THE ENDS OF BRIDGING LINES AS REQUIRED. ENDS OF BRIDGING LINES SHALL BE ANCHORED TO STEEL, MASONRY OR OTHERWISE SHOWN.
4. ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE ANY CONSTRUCTION LOADS ARE PLACED ON JOISTS.
5. ALL FIELD BOLTS SHALL BE ASTM A325 HIGH STRENGTH BOLTS IN BEARING TYPE CONNECTIONS.
6. ALL BEAM-TO-BEAM CONNECTIONS AND BEAM-TO-COLUMN CONNECTIONS SHALL HAVE DOUBLE ANGLE CONNECTIONS UNLESS NOTED OTHERWISE AND BE IN ACCORDANCE TO CSA STANDARD CONNECTIONS.
7. WELD ALL BEAMS/JOISTS TO BEARING PLATES OR SUPPORTING MEMBERS WITH MINIMUM 50mm x5mm FILLET WELDS ON BOTH SIDES OF MEMBER, UNLESS NOTED OTHERWISE.
8. FOR JOIST LOADS REFER TO PLAN.
9. JOISTS SHALL BE CAMBERED FOR DEAD LOAD.
10. ALL JOISTS AT COLUMNS SHALL BE TIE JOISTS UNLESS NOTED OTHERWISE.
11. EXTEND BOTTOM CHORDS OF ALL OPEN WEB STEEL JOISTS IN AREAS DESIGNATED FOR SUSPENDED CEILINGS, OR AS REQUIRED TO BRACE MASONRY WALLS OR OTHER STEEL FRAMING MEMBER.
12. WELDING OF STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF LATEST EDITION OF CSA STANDARD W59 AND SHALL BE UNDERTAKEN BY A FABRICATOR AND ERECTOR FULLY APPROVED BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF LATEST EDITION OF CSA STANDARD W47, DIVISION 1 OR DIVISION 2.1.
13. ALL ROOF OPENINGS TO BE REINFORCED BY CONTINUOUS C130x10 CHANNEL FRAMES AT PERIMETER OF OPENINGS UNLESS NOTED OTHERWISE.
14. SUBMIT SHOP DRAWINGS, INCLUDING CONNECTIONS DETAILS AND LOCATIONS OF ALL SPLICES FOR REVIEW BEFORE PROCEEDING WITH FABRICATION. ALL SHOP DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL ENGINEERING LICENSED IN THE PROVINCE OF ONTARIO.
15. SHOP DRAWINGS OF JOIST DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW BEFORE FABRICATION. JOISTS TO BE DESIGNED FOR THE LOADS AND WIND UPLIFTING AS SPECIFIED ON DRAWING AND/OR BUILDING CODE. JOIST DESIGN AND DETAILS SHALL BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER IN ONTARIO. JOIST DESIGN CALCULATIONS SHALL BE SUBMITTED FOR RECORD PURPOSES.
16. ALL CONNECTIONS SHALL BE DESIGNED FOR MIN. 50% OF THE FULL SHEAR CAPACITY OF THE MEMBER UNLESS MEMBER CONNECTION LOADS ARE SHOWN ON THE DRAWINGS.
17. STEEL BEAMS AND LINTELS SHALL HAVE 200mm MINIMUM END BEARING ON MASONRY AND 65mm MINIMUM BEARING ON STEEL UNLESS INDICATED OTHERWISE.
18. ALL BEAMS CANTILEVERED OR CONTINUOUS OVER A COLUMN OR OTHER SUPPORT SHALL HAVE A MINIMUM OF 2-10mm STIFFENERS EACH SIDE FULL HEIGHT & FULL WIDTH UNLESS OTHERWISE NOTED.
19. UNDERSIDE OF COLUMN BASE PLATES AND BEAM BEARING PLATES SHALL BE GROUTED WITH 40mm NON-SHRINK GROUT.
20. ALL COLUMNS BUILT INTO MASONRY WALLS SHALL HAVE ADJUSTABLE ANCHORS @ 400mm O.C.
21. TOP OF COLUMNS WHICH ARE NOT BRACED BY JOISTS SHALL BE BRACED DIAGONALLY TO THE ROOF OR FLOOR BY A MINIMUM OF 4-76x76x6.4 ANGLES. BRACING SHALL BE BETWEEN TOP OF COLUMN AND TOP CHORD OF JOISTS OR TOP FLANGE OF BEAM.
22. WHERE STRUCTURAL STEEL MEMBERS ARE CALLED FOR ON ARCHITECTURAL DRAWINGS BUT NOT ON STRUCTURAL DRAWINGS USE 6.4mm THICKNESS MIN. FOR ANGLES AND PLATES AND MIN. BEAM WEIGHT FOR TENDERING PURPOSES.
23. U.N.O. ROOF DECK SHALL BE 38x0.91, 20 GAUGE, GRADE 275 (Fy=275MPa) CANAM GROUP INC. P-3615 OR APPROVED EQUAL, MINIMUM 3 SPANS CONTINUOUS. WELD DECK TO SUPPORTING STEEL WITH 19mm DIAMETER PUDDLE WELDS @300mm O.C. MAXIMUM. MARGINAL (PERIMETER) WELDS @150mm O.C. MAXIMUM, BUTTON PUNCH SIDE LAPS @400mm O.C. ROOF DECK IS DESIGNED AS A DIAPHRAGM.
24. U.N.O. FLOOR DECK SHALL BE 76x0.76, 22 GAUGE, GRADE 275 (Fy=275MPa) CANAM GROUP INC. P-2432 COMPOSITE OR APPROVED EQUAL, MINIMUM 3 SPANS CONTINUOUS. WELD DECK TO SUPPORTING STEEL WITH 19mm DIAMETER PUDDLE WELDS @300mm O.C. MAXIMUM. MARGINAL (PERIMETER) WELDS @150mm O.C. MAXIMUM, BUTTON PUNCH SIDE LAPS @600mm O.C.

INSPECTIONS AND TESTING

THE FOLLOWING ITEMS SHALL BE INSPECTED OR TESTED BY INDEPENDENT INSPECTION/TESTING AGENCIES DESIGNATED BY THE CLIENT. MATERIALS AND WORKMANSHIP NOT CONFORMING TO THE SPECIFICATIONS SHALL BE REJECTED BY THE CONTRACTOR. REPORTS AND TEST RESULTS SHALL BE PROMPTLY SUBMITTED TO THE ENGINEER FOR REVIEW. TESTING SHALL INCLUDE BUT NOT BE LIMITED TO:

SOILS

ALL TESTING AND INSPECTION (COMPACTION, BEARING CAPACITY ETC.) AS PER THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.

CONCRETE

CONCRETE AND GROUT TESTING IN ACCORDANCE WITH CSA A23.2 LATEST EDITION AND THE SPECIFICATIONS, INCLUDING THE REQUIREMENTS O

LINTEL SCHEDULE

WALL TYPE	MARK	DESCRIPTION	DETAIL
90 (4") BRICK OR STONE VENEER	{L4.1}	1L-102x102x6.4 Sx=17.3x10³mm³ HOT DIPPED GALVANIZED ANGLE VERTICAL LEG AT BACKSIDE OF VENEER	
	{L4.2}	1L-102x102x7.9 Sx=21.3x10³mm³ HOT DIPPED GALVANIZED ANGLE VERTICAL LEG AT BACKSIDE OF VENEER	
	{L4.3}	1L-102x102x9.5 Sx=25.2x10³mm³ HOT DIPPED GALVANIZED ANGLE VERTICAL LEG AT BACKSIDE OF VENEER	
	{L4.4}	1L-152x102x9.5 (LLV) Sx=54.2x10³mm³ HOT DIPPED GALVANIZED ANGLE VERTICAL LEG AT BACKSIDE OF VENEER	
	{L4.5}	1L-178x102x13 (LLV) Sx=93.6x10³mm³ +EXTRA 1L-76x51x7.9 (LLV) HOT DIPPED GALVANIZED ANGLE VERTICAL LEG AT BACKSIDE OF VENEER	5 5 50-150 50-150
	{L4.6}	1L-203x102x16 (LLV) Sx=151x10³mm³ +EXTRA 1L-102x76x9.5 (LLV) HOT DIPPED GALVANIZED ANGLE VERTICAL LEG AT BACKSIDE OF VENEER	6 6 50-150 50-150
140 (6") BLOCK	{L6.1}	2L-89x64x6.4 (LLV) Sx=24.7x10³mm³ BACK TO BACK ANGLES	
	{L6.2}	2L-89x64x9.5 (LLV) Sx=35.9x10³mm³ BACK TO BACK ANGLES	
190 (8") BLOCK	{L8.1}	2L-89x89x6.4 Sx=26x10³mm³ BACK TO BACK ANGLES	
	{L8.2}	2L-102x89x7.9 (LLV) Sx=41.7x10³mm³ BACK TO BACK ANGLES	
	{L8.3}	2L-127x89x9.5 (LLV) Sx=75.2x10³mm³ BACK TO BACK ANGLES	
	{L8.4}	2L-152x89x9.5 (LLV) Sx=106x10³mm³ BACK TO BACK ANGLES	
	{L8.5}	W200x27 C/W 180x6 BOTTOM PLATE + RODS ON TOP	
	{L8.6}	W200x42 + RODS ON TOP	
	{L8.7}	W410x46 C/W 180x6 BOTTOM PLATE + RODS ON TOP + ADJUSTABLE MASONRY ANCHORAGE	
	{L8.8}	W410x54 + RODS ON TOP + ADJUSTABLE MASONRY ANCHORAGE	

LINTEL SCHEDULE

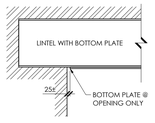
WALL TYPE	MARK	DESCRIPTION	DETAIL
240 (10") BLOCK	{L10.1}	2L-102x102x7.9 Sx=42.6x10³mm³ BACK TO BACK ANGLES	
	{L10.2}	2L-152x102x9.5 (LLV) Sx=108x10³mm³ BACK TO BACK ANGLES	
	{L10.3}	W200x27 C/W 230x8 BOTTOM PLATE + RODS ON TOP	
	{L10.4}	W200x42 C/W 230x8 BOTTOM PLATE + RODS ON TOP	
	{L10.4a}	W200x52 C/W 230x8 BOTTOM PLATE + RODS ON TOP	
	{L10.5}	W410x**39** C/W 230x8 BOTTOM PLATE + RODS ON TOP + ADJUSTABLE MASONRY ANCHORAGE	
	{L10.6}	W410x54 C/W 230x8 BOTTOM PLATE + RODS ON TOP + ADJUSTABLE MASONRY ANCHORAGE	
	{L10.7}	W610x101 + RODS ON TOP + ADJUSTABLE MASONRY ANCHORAGE	

LINTEL SCHEDULE

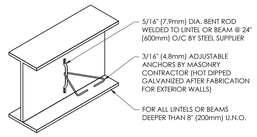
WALL TYPE	MARK	DESCRIPTION	DETAIL
290 (12") BLOCK	{L12.1}	2L-127x127x9.5 Sx=79.4x10³mm³ BACK TO BACK ANGLES	
	{L12.2}	W200x27 C/W 280x8 BOTTOM PLATE + RODS ON TOP	
	{L12.3}	W200x42 C/W 280x8 BOTTOM PLATE + RODS ON TOP	
	{L12.4}	W200x46 C/W 280x8 BOTTOM PLATE + RODS ON TOP	
	{L12.5}	W410x39 C/W 280x8 BOTTOM PLATE + RODS ON TOP + ADJUSTABLE MASONRY ANCHORAGE	
	{L12.6}	W410x54 C/W 280x8 BOTTOM PLATE + RODS ON TOP + ADJUSTABLE MASONRY ANCHORAGE	
	{L12.7}	**W760x147 + 20M WELDABLE RODS @400 LONG @400 O/C** TO TOP FLANGE + ADJUSTABLE MASONRY ANCHORAGE	400 LG. ROD 13 13

TYPICAL NOTES FOR LINTEL SCHEDULES:

1. ALL EXTERIOR LINTELS TO BE HOT DIPPED GALVANIZED, WHERE EXTERIOR LINTELS ARE JOINED WITH STIFFENER PLATES ALL PARTS ARE TO BE HOT DIPPED GALVANIZED.
2. BACK TO BACK ANGLES SHALL BE STITCH WELDED OR BOLTED @ 600 O/C MAXIMUM.
3. BOTTOM PLATE SHALL BE SHOP WELDED TO UNDERSIDE OF BEAM USING MINIMUM WELD SIZE 6mm FILLET WELD x50mm LONG AT 600mm O.C. BOTH SIDES, SEE DETAIL 101 FOR LINTEL WITH BOTTOM PLATE.
4. LINTEL BEARING LENGTH IS 200mm MINIMUM AT EACH END UNLESS NOTED OTHERWISE. PROVIDE 190mm 140mm BEARING LENGTH ON 190mm 140mm MASONRY WALL WHERE LINTEL IS PERPENDICULAR TO WALL AND 200mm BEARING LENGTH IS IMPOSSIBLE.
5. AT ALL LINTELS FOR BLOCK WALL ABOVE WELD 15M WELDABLE RODS x200 LONG @600 O/C TO TOP FLANGE OF LINTEL.
6. ANGLE TO BEAR ON BRICK EACH END WHERE IT'S POSSIBLE.
7. LINTEL BEARING PLATES ARE NOT REQUIRED UNLESS SPECIFICALLY SHOWN IN SCHEDULE/ON PLAN. ALL LINTELS SHALL BE FIELD WELDED TO BEARING PLATES USING MINIMUM 6mm FILLET WELDS ON BOTH SIDES OF MEMBER UNLESS NOTED OTHERWISE.
8. TYPICAL ADJUSTABLE MASONRY ANCHORAGE SEE DETAIL 102.
9. CONNECT LINTELS TO COLUMNS WHERE APPLICABLE. (FOR EXAMPLE (L12-2)).
10. FOR ELEVATOR PROVIDE LOWER LINTEL (L8.1) FOR CLEAR OPENINGS & UPPER LINTEL (L8.5) FOR ROUGH OPENINGS AT ALL FLOORS UNLESS NOTED OTHERWISE.



101 - TYPICAL DETAIL FOR LINTEL WITH BOTTOM PLATE
N.T.S.



102 - TYPICAL MASONRY ANCHORAGE TO STEEL LINTEL OR BEAM DETAIL
N.T.S.

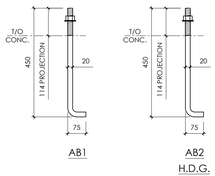
MISCELLANEOUS LINTEL SCHEDULE (NOTE 1)

WALL TYPE	CLEAR OPENING LENGTH	LINTEL
140 BLOCK	UP TO 300	BLOCK LINTEL C/W 2-10M
	300 ~ 900	2L-89x64x6.4 (LLV)
	900 ~ 1200	2L-89x64x9.5 (LLV)
	GREATER THAN 1200 (NOTE 5)	C200x17 + 130x6 BOTTOM PLATE
190 BLOCK	UP TO 300	BLOCK LINTEL C/W 2-15M
	300 ~ 600	2L-89x89x6.4
	600 ~ 900	2L-127x89x9.5 (LLV)
	900 ~ 1200	W200x27 + 180x6 BOTTOM PLATE
	GREATER THAN 1200 (NOTE 5)	W200x36 + 180x6 BOTTOM PLATE
240 BLOCK	UP TO 300	BLOCK LINTEL C/W 2-20M
	300 ~ 600	2L-102x102x7.9
	600 ~ 900	2L-152x102x9.5 (LLV)
	900 ~ 1200	W200x27 + 230x8 BOTTOM PLATE
	GREATER THAN 1200 (NOTE 5)	W200x42 + 230x8 BOTTOM PLATE
290 BLOCK	UP TO 300	BLOCK LINTEL C/W 2-20M
	300 ~ 600	2L-127x127x7.9
	600 ~ 900	2L-127x127x9.5
	900 ~ 1200	W200x27 + 280x8 BOTTOM PLATE
	GREATER THAN 1200 (NOTE 5)	W200x42 + 280x8 BOTTOM PLATE
90 BRICK OR 90 BLOCK (ANGLE VERTICAL LEG AT BACKSIDE OF BRICK OR BLOCK)	UP TO 900	L-89x89x6.4 HOT DIPPED GALVANIZED
	900 ~ 1200	L-102x89x7.9(LLV) HOT DIPPED GALVANIZED
	1200 ~ 1800	L-127x89x9.5(LLV) HOT DIPPED GALVANIZED
	1800 ~ 2400	L-152x89x9.5(LLV) HOT DIPPED GALVANIZED
	2400 ~ 3000	L-178x102x13(LLV) HOT DIPPED GALVANIZED

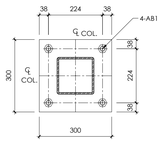
NOTES:

1. WHERE LINTELS FOR MECHANICAL OPENINGS OR LINTELS IN LOAD BEARING WALLS AND NON-LOAD BEARING PARTITION WALLS ARE NOT SHOWN ON STRUCTURAL FRAMING PLANS OR LINTEL LAYOUTS PROVIDE LINTELS IN ACCORDANCE WITH MISCELLANEOUS LINTEL SCHEDULE ABOVE. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF THESE OPENINGS.
2. ALL EXTERIOR LINTELS TO BE HOT DIPPED GALVANIZED.
3. BACK TO BACK ANGLES SHALL BE STITCH WELDED OR BOLTED @ 600 O/C MAXIMUM.
4. MINIMUM BEARING LENGTH = 150mm UNLESS NOTED OTHERWISE.
5. NOTIFY PROJECT ENGINEER PRIOR TO FABRICATION & PLACEMENT OF BLOCK.

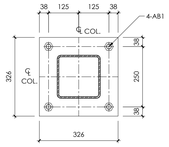
NOTE:
ANCHOR BOLTS AB1 & AB2 TO BE HOT ROLLED CARBON STEEL ASTM F1554 GRADE 36 (Fy=250MPa) OR APPROVED EQUAL.



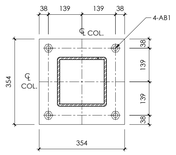
AB - TYPICAL ANCHOR BOLT
S1.2
0 100 200 500mm



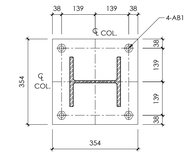
A - COLUMN BASE PLATE BASE-A FOR HSS-152x152
S1.2
0 100 200 500mm



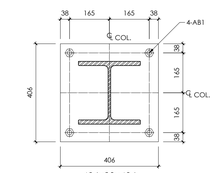
B - COLUMN BASE PLATE BASE-B FOR HSS-178x178
S1.2
0 100 200 500mm



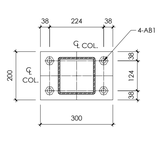
C - COLUMN BASE PLATE BASE-C FOR HSS-203x203
S1.2
0 100 200 500mm



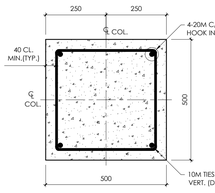
D - COLUMN BASE PLATE BASE-D FOR W200
S1.2
0 100 200 500mm



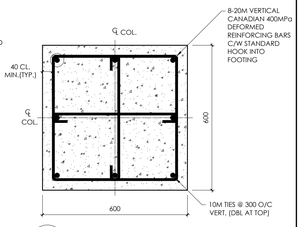
E - COLUMN BASE PLATE BASE-E FOR W250x89
S1.2
0 100 200 500mm



F - COLUMN BASE PLATE BASE-F FOR HSS-152x152
S1.2
0 100 200 500mm



P1 - CONCRETE PIER - P1 DETAIL
S1.2
0 100 200 500mm



P2 - CONCRETE PIER - P2 DETAIL
S1.2
0 100 200 500mm

CONCRETE WALL FOOTING SCHEDULE

MARK	DESCRIPTION	MARK	DESCRIPTION
INT.WF6	600 WIDE x 200 DEEP C/W 2-15M BOTTOM CONTINUOUS	EXT.WF6	600 WIDE x 200 DEEP C/W 2-15M BOTTOM CONTINUOUS
INT.WF8	800 WIDE x 300 DEEP C/W 2-15M BOTTOM CONTINUOUS	EXT.WF8	800 WIDE x 200 DEEP C/W 2-15M BOTTOM CONTINUOUS
INT.WF10	1000 WIDE x 400 DEEP C/W 3-15M BOTTOM CONTINUOUS	EXT.WF10	1000 WIDE x 300 DEEP C/W 3-15M BOTTOM CONTINUOUS
INT.WF12	1200 WIDE x 300 DEEP C/W 3-15M CONTINUOUS B.U.L. + 15Mx1050LG @ 300 O/C B.L.L. (TRANSVERSE)	EXT.WF12	1200 WIDE x 400 DEEP C/W 3-15M BOTTOM CONTINUOUS
INT.WF14	1400 WIDE x 350 DEEP C/W 3-15M CONTINUOUS B.U.L. + 20Mx1250LG @ 350 O/C B.L.L. (TRANSVERSE)	EXT.WF14	1400 WIDE x 300 DEEP C/W 3-15M CONTINUOUS B.U.L. + 15Mx1050LG @ 300 O/C B.L.L. (TRANSVERSE)
INT.WF16	1600 WIDE x 350 DEEP C/W 4-15M CONTINUOUS B.U.L. + 20Mx1450LG @ 300 O/C B.L.L. (TRANSVERSE)	EXT.WF16	1600 WIDE x 350 DEEP C/W 4-15M CONTINUOUS B.U.L. + 20Mx1450LG @ 300 O/C B.L.L. (TRANSVERSE)

NOTES:
1. ALL INTERIOR FOOTINGS ARE TYPE INT.WF6 UNLESS NOTED OTHERWISE.
2. ALL EXTERIOR FOOTINGS ARE TYPE EXT.WF8 UNLESS NOTED OTHERWISE.
3. WET SET 10M DOWELS x 450mm LONG AT 450mm O/C ALONG CENTER LINE OF WALL, WITH 125mm LONG INTO FOOTINGS, TYPICAL FOR ALL TYPES OF WALL FOOTINGS UNLESS NOTED OTHERWISE.

CONCRETE PIER SCHEDULE

MARK	DESCRIPTION	T/O PIER	
P1	500 x 500 C/W 4-20M VERTICAL 10M TIES @ 300 (DOUBLE @ TOP) REFER TO DETAIL P1 ON S1.2	200 BELOW FINISHED FLOOR	
P2 (6) AT Gym	600 x 600 C/W 8-20M VERTICAL 10M TIES @ 300 (DOUBLE @ TOP) REFER TO DETAIL P2 ON S1.2	400 BELOW FINISHED FLOOR	
P3 (4)AT LEARNING COMMONS	500 x 500 C/W 4-20M VERTICAL 10M TIES @ 300 (DOUBLE @ TOP) REFER TO DETAIL P1 ON S1.2	400 BELOW FINISHED FLOOR	
P4 (2)@ STAGE	500 x 500 C/W 4-20M VERTICAL 10M TIES @ 300 (DOUBLE @ TOP) SIMILAR TO DETAIL P1 ON S1.2	200 BELOW FINISHED FLOOR	
P5 (2)AT CANOPY	435 x 500 C/W 4-20M VERTICAL 10M TIES @ 300 (DOUBLE @ TOP) SIMILAR TO DETAIL P1 ON S1.2	400 BELOW FINISHED FLOOR	

CONCRETE COLUMN FOOTING SCHEDULE

MARK	DESCRIPTION	MARK	DESCRIPTION
CF1	900 x 900 x 300 DEEP C/W 4-10M BOTTOM EACH WAY	CF5	2100 x 2100 x 400 DEEP C/W 10-20M BOTTOM EACH WAY
CF2	1200 x 1200 x 300 DEEP C/W 5-15M BOTTOM EACH WAY	CF6	2400 x 2400 x 450 DEEP C/W 8-25M BOTTOM EACH WAY
CF3	1500 x 1500 x 300 DEEP C/W 8-15M BOTTOM EACH WAY	CF7	2700 x 2700 x 500 DEEP C/W 9-25M BOTTOM EACH WAY
CF4	1800 x 1800 x 350 DEEP C/W 8-20M BOTTOM EACH WAY		

NOTES:
1. AT ALL FOOTINGS PROVIDE DOWELS FOR PIERS (WHERE APPLICABLE). SIZE AND NUMBER TO MATCH PIER VERTICALS. DOWELS SHOULD BE IN PLACE PRIOR TO POURING CONCRETE. WET SETTING L-SHAPE DOWELS IS NOT ACCEPTABLE.
2. COLUMN (AND PIER) CENTER TO BE AT FOOTING CENTER U.N.O. ON FOUNDATION PLAN.

STEEL COLUMN SCHEDULE

MARK	SIZE	BASE PLATE	U/S BASE PLATE	T/O COL.
C1 GRID-10/G	HSS-152x152x9.5	BASE-A 300x20x300 C/W 4-AB1 DETAIL A/S1.2	360 BELOW FINISHED LEVEL 1 FLOOR	LEARNING COMMONS ROOF
C2 (2)COLs 2/C-J/6y	HSS-152x152x9.5	BASE-A 300x20x300 C/W 4-AB1 DETAIL A/S1.2	160 BELOW FINISHED LEVEL 1 FLOOR	LOW ROOF
C3 STAGE (2)COLs	HSS-178x178x9.5	BASE-B 326x20x326 C/W 4-AB1 DETAIL B/S1.2	160 BELOW FINISHED LEVEL 1 FLOOR	GYM ROOF
C4 (4)COLs @LOBBY	HSS-178x178x9.5	BASE-B 326x20x326 C/W 4-AB1 DETAIL B/S1.2	160 BELOW FINISHED LEVEL 1 FLOOR	LOBBY ROOF
C5 (6)COLs @ Gym	W250x89 tp=25& d=260	BASE-E 406x20x406 C/W 4-AB1 DETAIL E/S1.2	360 BELOW FINISHED LEVEL 1 FLOOR	GYM ROOF
C6 (2)COLs @ LEARNING COMMONS	W200x59 tp=205 d=210	BASE-D 354x20x354 C/W 4-AB1 DETAIL D/S1.2	360 BELOW FINISHED LEVEL 1 FLOOR	LEARNING COMMONS ROOF
C7 (2)COLs 4/E&4/H	HSS-152x152x9.5	BASE-A 300x20x300 C/W 4-AB1 DETAIL A/S1.2	160 BELOW FINISHED LEVEL 1 FLOOR	MAIN ROOF
C8 (1)COL Canopy	HSS-152x152x6.4	BASE-F 200x20x300 C/W 4-AB1 DETAIL F/S1.2	360 BELOW FINISHED LEVEL 1 FLOOR	MAIN ROOF

NOTES:
1. SEE ANCHOR BOLT (AB*) AND BASE PLATE (BASE-*) DETAILS ON S1.2.
2. UNDERSIDE OF COLUMN BASE PLATE TO BE 40mm ABOVE TOP OF FOUNDATION WALL OR CONCRETE PIER TO ALLOW FOR NON-SHRINK GROUT UNLESS NOTED OTHERWISE.
3. WHERE COLUMN IS NOT FITTED WITH AT LEAST 4 ANCHOR BOLTS, FOR ERECTION SAFETY REQUIREMENT, SPECIAL PRECAUTIONS SHALL BE TAKEN BY CONTRACTOR.
4. CONNECT BOTTOM OF COLUMN TO TOP OF STEEL BEAM. FIELD WELD WHERE REQUIRED.
5. WELD COLUMN TO BASE PLATE ALL AROUND USING MINIMUM 6mm THICK CONTINUOUS WELDS U.N.O.
6. ALL HOLLOW SECTION STEEL (HSS) TO HAVE END ENCLOSURE PLATE U.N.O.
7. ALL STEEL COLUMNS EXPOSED TO WEATHER OR IN CONTACT WITH GROUND TO BE HOT DIPPED GALVANIZED U.N.O.

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
2	2026.02.20	ISSUED FOR 80% REVIEW
3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
5		

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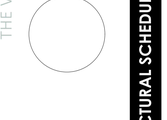
NOTES:

KEY PLAN:



CLIENT:

BLUEWATER DISTRICT SCHOOL BOARD
351 1st AVENUE NORTH
CHESLEY, ONTARIO.

PROJECT:

22562

NEW PORT ELGIN COMMUNITY SCHOOL

WATERLOO STREET
PORT ELGIN, ONTARIO

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

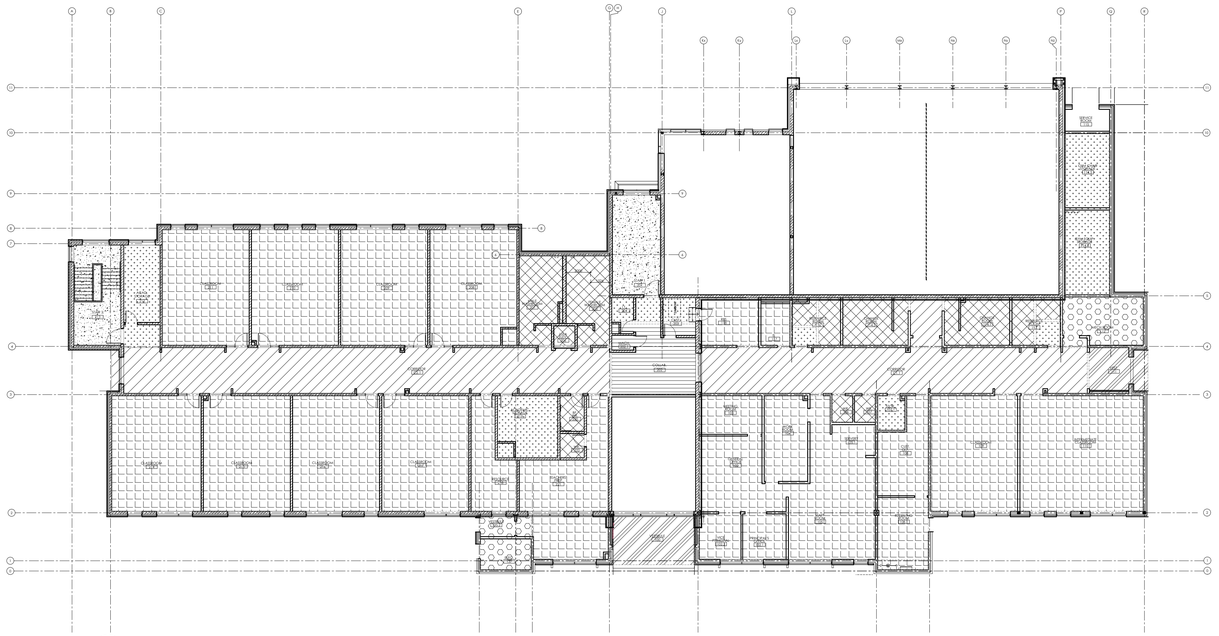
STRUCTURES+VG
THE VENTIN GROUP LTD.

STRUCTURAL SCHEDULE AND DETAILS

S1.2

K:\VG-Brantford\Port Elgin PF 22562\Drawings\Struct\Port Elgin Struct.dwg
Tuesday, August 25, 2026 8:37:27 AM

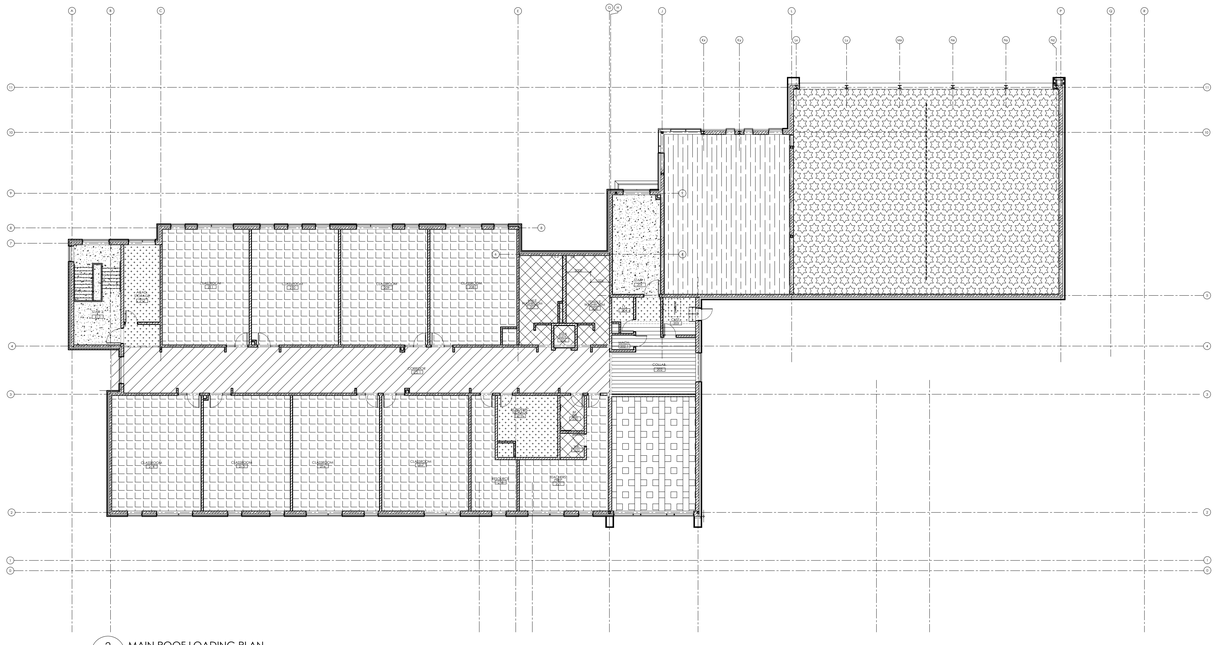
DRAWN BY : ML
CHECKED BY : ML



1 / S1.3 LEVEL 2 FLOOR AND LOW ROOF LOADING PLAN
1:200

UN-FACTORED (SPECIFIED) DESIGN LOAD TABLE **#1** - FOR **CONCRETE SLAB** FLOOR(S)												
AREA	BUILDING AREA	DEAD	SUPERIMPOSED DEAD LOAD						LIVE LOAD (NOTE 5)			LOAD DUE TO SNOW (NOTES 6 & 7)
			FINISHES	50 TOPPING	BEAMS	MECH/ELEC	CEILING	TOTAL	UNIFORM	PARTITIONS	CONCENTRATED (AREA)	
F1	CLASSROOMS	3.55 KPa	0.2 KPa	1.25 KPa	0.15 KPa	0.2 KPa	0.2 KPa	2.0 KPa	2.4 KPa	1.2 KPa	4.5 KN (750mmx750mm)	
F2	CORRIDORS	3.55 KPa	0.2 KPa	1.25 KPa	0.15 KPa	0.5 KPa	0.2 KPa	2.3 KPa	4.8 KPa		4.5 KN (750mmx750mm)	
F3	COLLAB.	3.55 KPa	0.2 KPa	1.25 KPa	0.15 KPa	0.5 KPa	0.2 KPa	2.3 KPa	4.8 KPa		4.5 KN (750mmx750mm)	
F4	STORAGE ROOMS	3.55 KPa	0.1 KPa	1.25 KPa	0.15 KPa	0.2 KPa		1.7 KPa	4.8 KPa		4.5 KN (750mmx750mm)	
F5	WASHROOMS	3.55 KPa	1.2 KPa	1.25 KPa	0.15 KPa	0.2 KPa	0.2 KPa	3.0 KPa	2.4 KPa	1.2 KPa	4.5 KN (750mmx750mm)	
F6	STAIRS	7.2 KPa			0.15 KPa	0.25 KPa	0.25 KPa	0.65 KPa	4.8 KPa		4.5 KN (750mmx750mm)	

NOTES (ALL LOADS ARE UN-FACTORED/SPECIFIED LOADS):
1. DESIGN LOADS THAT ARE INDICATED ON THE DRAWINGS ARE IN ADDITION TO THE TABULATED VALUES ABOVE, EXCEPT AS NOTED OTHERWISE.
2. BUILDING AREAS SHOWN ON THE LOADING PLANS OR IN SCHEDULES ARE SCHEMATIC ONLY. REFER TO THE ARCHITECTURAL DRAWINGS FOR ACCURATE EXTENTS OF BUILDING AREAS.
3. MECHANICAL & ELECTRICAL ROOMS ARE DESIGNED FOR THE AVERAGE UNIFORM LOAD DENOTED IN THIS TABLE. WHICH ACCOUNTS FOR A 100mm HOUSEKEEPING PAD TO ACCOMPANY EACH UNIT.
4. ROOF LIVE LOAD DOES NOT OCCUR SIMULTANEOUSLY WITH SNOW LOADING.
5. ALL LIVE LOADS INDICATED IN THIS SCHEDULE SATISFY THE MINIMUM REQUIREMENTS OF TABLE 4.1.5.3 OF **2024 ONTARIO BUILDING CODE**.
6. LOADS DUE TO SNOW AND ASSOCIATED RAIN ACCUMULATION: (**PORT ELGIN**, ONTARIO Ss=**2.8**KPa; Sr=0.4KPa; Is=**1.15** ULS, 0.9 SLS)
   ULS S=Is[Ss(CbCwCsCa)+Sr]=1.15[2.8(0.8*1.0*1.0*1.0)+0.4]=**3.04**KPa;
   SLS S=Is[Ss(CbCwCsCa)+Sr]=0.9*[2.8(0.8*1.0*1.0*1.0)+0.4]=2.38KPa;
   PLUS SNOW DRIFTING WHERE APPLICABLE SHOWN ON SNOW DRIFT PLAN. SNOW DRIFTS EXPRESSED ON THE ROOF OR LOADING PLANS ARE TOTAL SNOW DRIFT LOADS
7. LOADS DUE TO RAIN: (BASED ON 1/50 ONE DAY RAINFALL)
   RAIN LOAD LESS THAN SNOW LOAD AND NEEDS NOT TO BE CONSIDERED TO ACT SIMULTANEOUSLY WITH SNOW LOAD.
8. SEE MECHANICAL DRAWINGS FOR ROOF TOP UNIT LOCATIONS. WEIGHTS SHOULD BE PROVIDED OR CONFIRMED BY MECHANICAL ENGINEER & GENERAL CONTRACTOR.
9. CONCRETE PAVER SELF-WEIGHT 1.20KPa SEE ARCHITECTURAL ROOF PLAN FOR LOCATIONS.
10. WIND UPLIFTING PRESSURES OVER ROOF REFER TO "SPECIFIED DESIGN WIND LOAD TABLE - UPLIFTING ON ROOF SYSTEM".
11. OPEN WEB STEEL JOIST TO BE DESIGNED FOR THE FOLLOWING SERVICE LOADS, DUE TO PIPING, IN ADDITION TO THE GIVEN FLOOR AND ROOF LOADS: SCHEDULE 40 PIPE PLUS WATER PLUS FITTINGS
   a) 200mm DIA. (62plf) 760 N/m,
   b) 150mm DIA. (40plf) 490 N/m,
   c) 100mm DIA. (22plf) 250 N/m.



2 / S1.3 MAIN ROOF LOADING PLAN
1:200

UN-FACTORED (SPECIFIED) DESIGN LOAD TABLE **#2** - FOR **STEEL** ROOF									
AREA	BUILDING AREA	DEAD		SUPERIMPOSED DEAD			TOTAL DEAD	LIVE LOAD (NOTES 4 & 5)		LOAD DUE TO SNOW
		STEEL DECK	FRAMING	ROOFING	MECH/ELEC	CEILING		UNIFORM	CONCENTRATED (AREA)	(NOTES 6 & 7)
R1	GENERAL ROOF	0.15 KPa	0.25 KPa	1.0 KPa	0.2 KPa	0.2 KPa	1.8 KPa	1.0 KPa	1.3 KN (200x200mm)	ULS=**3.04** KPa SLS=2.38 KPa
R2	CORRIDORS	0.15 KPa	0.15 KPa	1.0 KPa	0.5 KPa	0.2 KPa	2.0 KPa			
R3	COLLAB.	0.15 KPa	0.15 KPa	1.0 KPa	0.5 KPa	0.2 KPa	2.0 KPa			
R4	STORAGE ROOMS	0.15 KPa	0.25 KPa	1.0 KPa	0.2 KPa		1.6 KPa			
R5	WASHROOMS	0.15 KPa	0.25 KPa	1.0 KPa	0.2 KPa	0.2 KPa	1.8 KPa			
R6	STAIRS	0.15 KPa	0.25 KPa	1.0 KPa	0.2 KPa	0.2 KPa	1.8 KPa			
R7	LEARNING COMMONS	0.15 KPa	0.35 KPa	1.0 KPa	0.3 KPa	0.2 KPa	2.0 KPa			
R8	GYMNASIUM	0.15 KPa	0.35 KPa	1.0 KPa	0.2 KPa		1.7 KPa			
R9	LOBBY ROOF	0.15 KPa	0.25 KPa	1.0 KPa	0.4 KPa	0.6 KPa	2.4 KPa			
R10	MECH/ELEC ROOMS	0.15 KPa	0.25 KPa	1.0 KPa	1.2 KPa		2.6 KPa			
R11	VESTIBULE ROOF	0.15 KPa	0.25 KPa	1.0 KPa	0.2 KPa	0.3 KPa	1.9 KPa			
R12										
R13										

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
2	2026.02.20	ISSUED FOR 80% REVIEW
3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
5		

NOTES:

KEY PLAN:

CLIENT:

BLUEWATER
DISTRICT SCHOOL BOARD
351 1st AVENUE NORTH
CHESLEY, ONTARIO.

PROJECT:

22562

NEW PORT ELGIN COMMUNITY SCHOOL

WATERLOO STREET
PORT ELGIN, ONTARIO

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

KEY TO DETAIL LOCATION:
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LOADING PLANS

S1.3

DRAWN BY : ML CHECKED BY : ML

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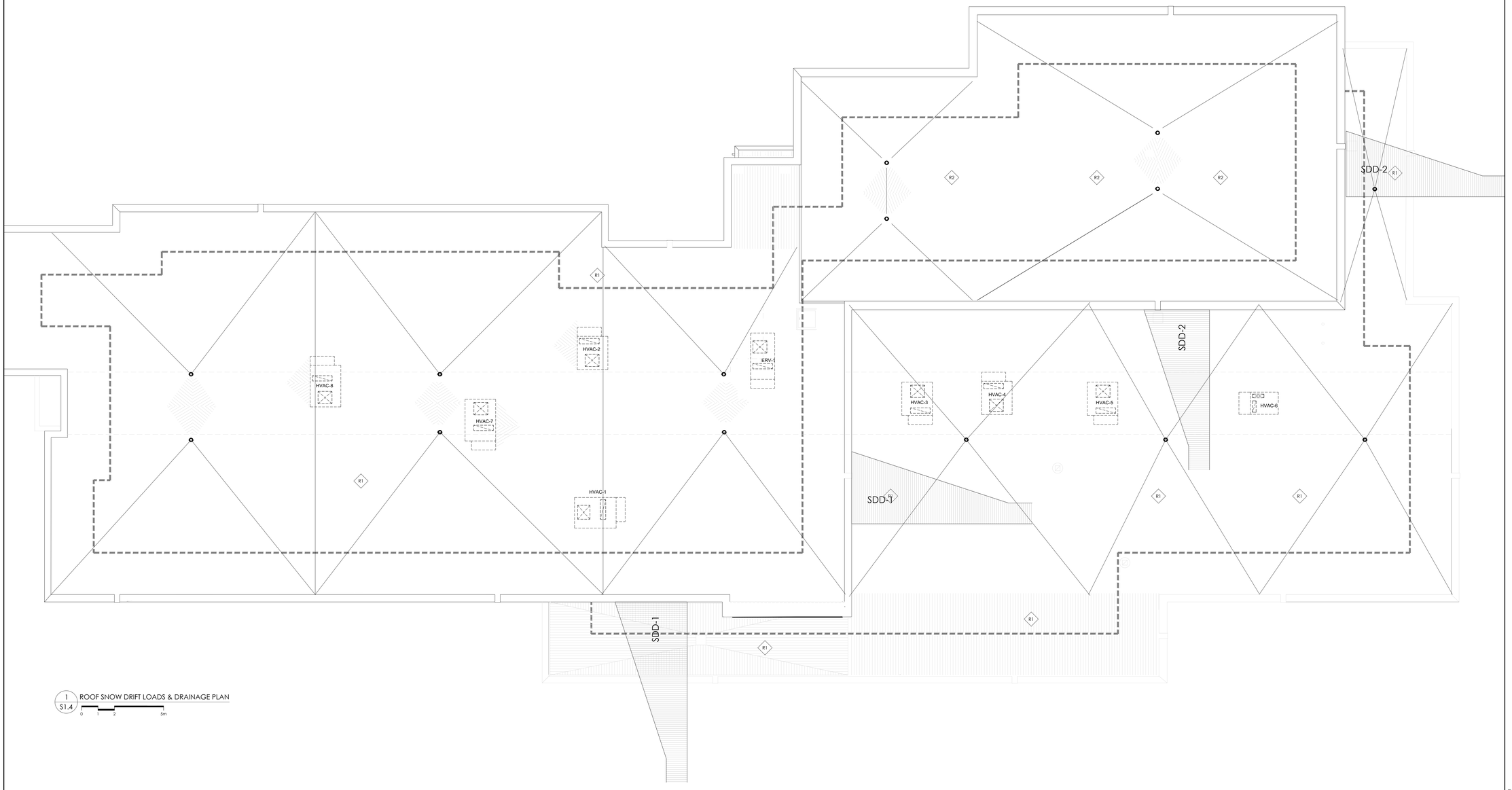
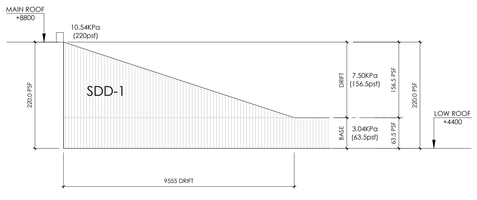
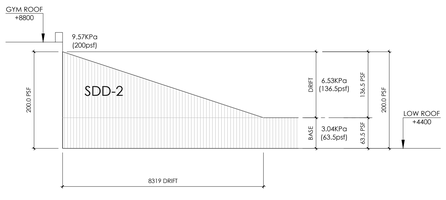


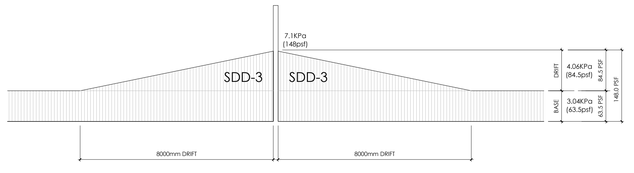
1 S1.4 ROOF SNOW DRIFT LOADS & DRAINAGE PLAN
0 1 2 5m



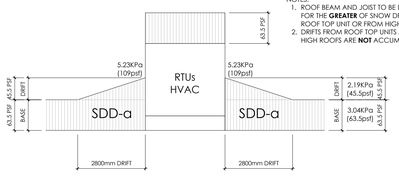
SDD-1 S1.4 TYPICAL SNOW DRIFT LOAD DIAGRAM ADJACENT TO HIGH ROOF
0 1 2 5m MAIN ROOF TO LOW ROOF



SDD-2 S1.4 TYPICAL SNOW DRIFT LOAD DIAGRAM ADJACENT TO HIGH ROOF
0 1 2 5m GYM ROOF TO LOW ROOF



SDD-3 S1.4 TYPICAL SNOW DRIFT DIAGRAM ADJACENT TO ROOF SCREEN FOR MECH. R.T.U.
0 1 2 5m



SDD-a S1.4 TYPICAL SNOW DRIFT DIAGRAM AROUND R.T.U. (4 SIDES)* N.T.S.
HVAC-????

*DRIFT SURCHARGE NEED NOT BE CONSIDERED ADJACENT TO UNIT WHICH ITS LONGEST HORIZONTAL DIMENSION IS LESS THAN 3000mm.

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NOTES:

All dimensions are measured/ must be checked and verified by the General Contractor

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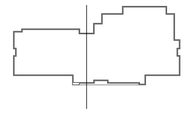

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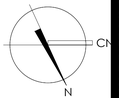

ROOF SNOW DRIFT LOADS & DRAINAGE PLAN

S1.4

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FOUNDATION NOTES:

1. ALL INTERIOR WALL FOOTINGS ARE TYPE INT.WF6 UNLESS NOTED OTHERWISE.
   ALL EXTERIOR WALL FOOTINGS ARE TYPE EXT.WF8 UNLESS NOTED OTHERWISE.
2. UNDERSIDE OF ALL EXTERIOR FOOTINGS TO HAVE MINIMUM 1400 FROST PROTECTION. REFER TO FOUNDATION DETAILS ON SHEET S3.1.
3. FOR UNDERSIDE OF FOOTING ELEVATIONS CONTRACTOR ALSO TO REFER TO FOUNDATION DISCUSSION AND RECOMMENDATIONS AND ELEVATIONS OF PROPOSED COMPETENT SOILS IN LOGS OF BOREHOLES IN GEOTECHNICAL INVESTIGATION REPORT NOTED ON FOUNDATION NOTE 1 ON S1.1.
4. TOP OF ALL EXTERIOR FOOTINGS IS 1400 MINIMUM BELOW FINISHED FLOOR UNLESS NOTED OTHERWISE.
5. TOP OF ALL INTERIOR FOOTINGS IS 1200 MINIMUM BELOW FINISHED FLOOR UNLESS NOTED OTHERWISE. INTERIOR FOOTINGS SHALL BE STEPPED AT EXTERIOR FOOTINGS.
6. GROUND FLOOR CONCRETE SLABS ON GRADE SEE SCHEDULE.
7. FOOTING THICKNESS SHOWN IS MINIMUM, ALL SIDES OF FOOTINGS ARE TO BE PROPERLY FORMED TO PREVENT OUTWARD FLOW OF CONCRETE BELOW FORMWORK. EARTH FORMS ARE NOT PERMITTED ON THIS PROJECT.
8. REFERENCE: FINISHED FIRST FLOOR ELEVATION IS 0.00.
9. STEP FOOTINGS DOWN AT SITE SERVICES WHERE IT IS REQUIRED. "S.F." DENOTES STEPPED FOOTING LOCATION, SEE DETAIL 5 ON SHEET S3.1, FOR ALL SITE SERVICE LOCATIONS SEE CIVIL DRAWINGS.
10. PROVIDE SAWCUT CONTROL JOINTS IN SLAB ON GRADE NOTED THUS: "S.C." ON PLAN. REFER TO DETAIL 7/S3.1. TYPICALLY SAWCUTS TO BE PROVIDED AT DOOR OPENINGS.
11. PLACE A THIN CONCRETE "MUD SLAB MAT" (MINIMUM 50mm THICK 10MPa LEAN CONCRETE FILL) BELOW ALL FOOTINGS IMMEDIATELY FOLLOWING FOUNDATION EXCAVATION AND EVALUATION ON NATIVE SOILS TO MAINTAIN UNDERSIDE OF FOOTING ELEVATIONS AS SHOWN ON DRAWINGS. AS WELL AS ANY SUPPLEMENTAL COMPACTION TO MINIMIZE DISTURBANCE TO FOUNDING SOILS DUE TO CONSTRUCTION AND FOOT TRAFFIC IN AND AROUND FOOTING BEDS. AS WELL AS POTENTIAL GROUNDWATER SEEPAGE.
12. PROVIDE SLEEVES IN FOUNDATION WALLS FOR STORM AND SANITARY LINES. SEE SITE SERVICES DRAWING FOR SIZE AND LOCATION.
13. AT ALL NIBS OR PROJECTIONS AND OUTSIDE CORNERS PENETRATING SLAB ON GRADE WHICH DO NOT HAVE CONTROL JOINTS, PROVIDE 2-15M x 900 LONG IN SLAB TO HELP PREVENT CRACKING.
14. PROVIDE 100mm HIGH HOUSE KEEPING PADS REINFORCED WITH 10M AT 300 O/C EACH WAY WHERE REQUIRED. FOR LOCATIONS, REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS.
15. PROVIDE THICKENED SLAB UNDER ALL NON-LOAD BEARING MASONRY PARTITION WALLS. SEE DETAIL 4/S3.1 & ARCHITECTURAL DRAWINGS FOR ALL WALL LOCATIONS.
16. ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE **STIFF CLAYEY SILT/COMPACTED SILTY SAND** IN ACCORDANCE WITH **SECTION 4.2**, BUILDING FOUNDATION IN GEOTECHNICAL INVESTIGATION REPORT SPECIFIED ON S1.1, ENGINEERED FILL MAYBE REQUIRED WITHIN AREAS DEPTH TO NATIVE SOIL IS DEEPER THAN DESIGN U/S OF FOOTINGS. REFER TO **TABLE** FOR HIGHEST SUITABLE FOUNDATION GRADES AND RESPECTIVE SOIL BEARING CAPACITIES.
17. PLACE A THIN CONCRETE "**MUD SLAB MAT**" (MINIMUM 50mm THICK 10MPa LEAN CONCRETE FILL) BELOW ALL FOOTINGS IMMEDIATELY FOLLOWING FOUNDATION EXCAVATION AND EVALUATION ON NATIVE SOILS TO MAINTAIN UNDERSIDE OF FOOTING ELEVATIONS AS SHOWN ON DRAWINGS. AS WELL AS ANY SUPPLEMENTAL COMPACTION TO MINIMIZE DISTURBANCE TO FOUNDING SOILS DUE TO CONSTRUCTION AND FOOT TRAFFIC IN AND AROUND FOOTING BEDS. AS WELL AS POTENTIAL GROUNDWATER SEEPAGE.
18. ENTRANCE FROST SLAB: MINIMUM 150mm THICK CONCRETE SLAB REINFORCED WITH 10M @ 300 O.C. BOTTOM EACH WAY, TYPICAL AT ALL ENTRANCES IN ACCORDANCE WITH SECTION 3/S3.1, COORDINATED WITH ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS.
19. TYPICAL CORNER & INTERSECTION SPLICE BARS SHALL BE PROVIDED IN CONCRETE WALLS IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE FOR REINFORCING STEEL. SPLICE BARS DETAILS SHOULD BE PROVIDED ON REBAR SHOP DRAWINGS FOR APPROVAL.
20. PROVIDE 300~400mm WIDE x 65mm DEEP CONTINUOUS GROOVE ON TOP OF 700~800mm WIDE x 200mm THICK THICKENED SLAB (SIMILAR TO DETAIL 4/S3.1) AT BEARING LOCATION OF PRECAST CONCRETE STAIR SLAB BASE, TYPICAL.

GENERAL WINTER PROCEDURES FOR CONSTRUCTION OF ENGINEERED FILL/ SITE SERVICE INSTALLATION

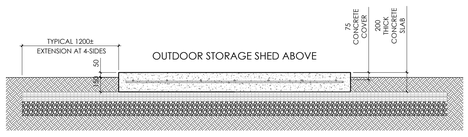
THE FOLLOWING LIST OF PROCEDURES MUST BE FOLLOWED BY THE CONTRACTOR AND MONITORED BY CERTIFIED TESTING COMPANY IN ORDER TO SUITABLY CONSTRUCT ENGINEERED FILL OR INSTALL PROPOSED SITE SERVICES TO MEET THE REQUIRED SPECIFICATIONS:

1. THE DAILY AIR TEMPERATURE IS TO BE NO LOWER THAN -5.0 C FOR ENGINEERED FILL OPERATIONS TO PROCEED.
2. ALL FILL PLACEMENT AND COMPACTION OPERATIONS MUST BE SUPERVISED ON A FULL-TIME BASIS BY QUALIFIED GEOTECHNICAL PERSONNEL TO APPROVE FILL MATERIAL AND ENSURE THE SPECIFIED DEGREE OF COMPACTION HAS BEEN ACHIEVED.
3. ALL SNOW, ICE, FROST, VEGETATION AND TOPSOIL ARE TO BE STRIPPED OUT OF THE DESIGNATED WORK AREA TO EXPOSE THE NATIVE INORGANIC EARTH SUBGRADE OR FROST FREE SUBGRADE.
4. THE EXPOSED NATIVE SUBGRADE SURFACE IS TO BE THOROUGHLY RE-COMPACTED/PROOF-ROLLED BY LARGE HEAVY COMPACTION EQUIPMENT (10 TONNE RECOMMENDED) AND INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL, ANY LOOSE OR SOFT AREAS IDENTIFIED SHOULD BE EXCAVATED TO THE LEVEL OF COMPETENT SOIL.
5. THE INITIAL LIFT TO RAISE THE GRADE MAY REQUIRE COARSE PIT RUN SAND AND GRAVEL, 450 TO 600 MM THICK AND STATICALLY ROLLED IN ORDER TO STABILIZE AND "BRIDGE" THE PREPARED SUBGRADE.
6. ALL SNOW, ICE AND FROST FROM THE PREVIOUS NIGHT IS TO BE STRIPPED OUT OF THE WORK AREA TO EXPOSE A FROST FREE SUBGRADE BEFORE PLACEMENT OF ENGINEERED FILL AT THE BEGINNING OF EACH WORK DAY. THE EXPOSED SUBGRADE IS TO BE RE-COMPACTED BEFORE PLACEMENT OF NEW ENGINEERED FILL. THERMAL INSULATING BLANKETS SHOULD BE USED TO MINIMIZE FROST PENETRATION.
7. THE WORK AREA SHOULD BE OF A CONTROLLABLE SIZE TO ALLOW FOR MAXIMUM PRODUCTION DURING FROST REMOVAL WITH MINIMAL LOSS OF FILL MATERIALS.
8. THE BORROW SOURCE FILL IS TO BE FREE OF FROST, NOT FROZEN, SNOW, AND ICE AND PLACED WITHIN 3% OF ITS OPTIMUM MOISTURE CONTENT.
9. THE BORROW SOURCE FILL IS TO BE PLACED AND COMPACTED WITHIN ONE (1) HOUR FROM EXCAVATION TO PLACEMENT. OTHERWISE, HEATED BOX IS TO BE PROVIDED WITH THE HAUL TRUCK.
10. ALL FILL MATERIAL IS TO BE COMPACTED TO THE SPECIFIED DEGREE BEFORE LEAVING THE SITE AT THE END OF THE WORK DAY. THE FILL IS TO BE PLACED IN MAXIMUM 300 MM THICK LIFTS AND EACH LIFT IS TO BE COMPACTED TO AT LEAST 98% STANDARD PROCTOR MAXIMUM DRY DENSITY THROUGHOUT ALL AREAS OF ENGINEERED FILL PLACEMENT AND AT LEAST 95% STANDARD PROCTOR DRY DENSITY FOR ALL SERVICE TRENCH AREAS.
11. IF THE IMPORTED/EXCAVATED MATERIALS ARE ABOVE OPTIMUM MOISTURE CONTENT, THEN A PROVISION MUST BE MADE TO IMPORT SAND AND GRAVEL OR SAND FILL TO BACKFILL THE SERVICE TRENCH AREAS.

FIRST FLOOR CONCRETE SLAB SCHEDULE

MARK	LOCATIONS	DESCRIPTION
S-1	GYMNASIUM A & B (SEE NOTE 3)	AS CROSSED AND NOTED ON PLAN SLAB ON GRADE IS TO BE MINIMUM 150mm THICK 25MPa CONCRETE REINFORCED WITH FLAT SHEETS WELDED WIRE MESH 152x152 MW18.7/MW18.7 (6x6 W2.9/W2.9=6 GAUGE) ON 'W.R. MEADOWS PREMOULDED MEMBRANE 'PERMINATOR' VAPOUR BARRIER OR APPROVED ALTERNATE OVER 'NOTE 2'
S-2	LOBBY, CORRIDORS, VESTIBULES, STAIRS, STORAGE ROOMS, LEARNING COMMONS	SLAB ON GRADE IS TO BE MINIMUM 125mm THICK 25MPa CONCRETE REINFORCED WITH FLAT SHEETS WELDED WIRE MESH 152x152 MW18.7/MW18.7 (6x6 W2.9/W2.9=6 GAUGE) ON '15 mil W.R. MEADOWS PERMINATOR' VAPOUR BARRIER OR APPROVED ALTERNATE OVER 'NOTE 2'
S-3	OTHER REMAINING SLABS	SLAB ON GRADE IS TO BE MINIMUM 100mm THICK 25MPa CONCRETE ON '15 mil W.R. MEADOWS PERMINATOR' VAPOUR BARRIER OR APPROVED ALTERNATE OVER 'NOTE 2'

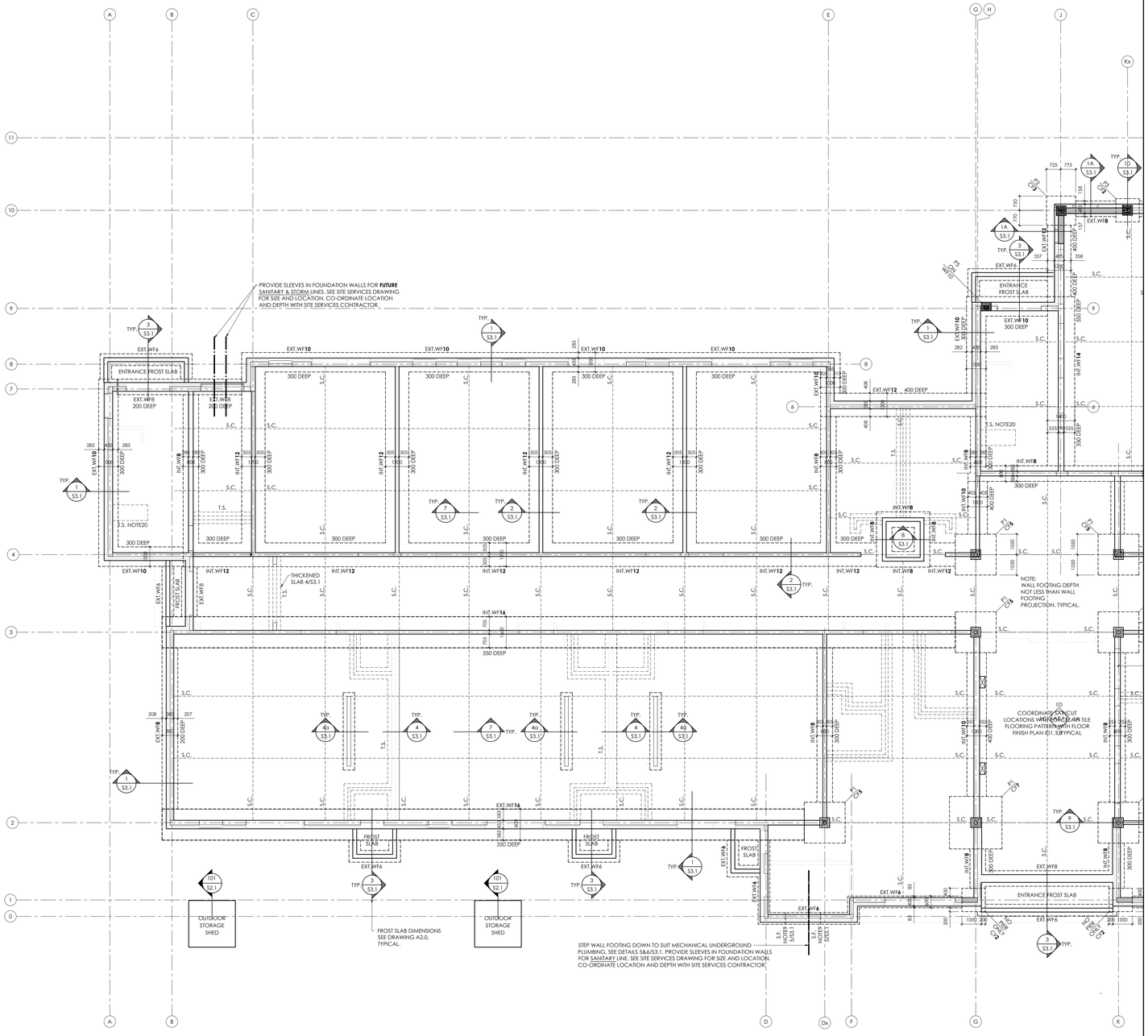
NOTES:
1. CONCRETE TO BE NORMAL WEIGHT 150pcf CONCRETE, AND REFER TO CONCRETE NOTE 11.c ON S1.1 FOR CONCRETE MIX.
2. "OVER **200**mm THICK WELL-GRADED, FREE-DRAINING GRANULAR '**A**' (NATURAL) COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY OVER GRANULAR 'B', THICKNESS AS REQUIRED, COMPACTED TO 100% STANDARD PROCTOR DRY DENSITY OVER PROOF ROLLED NATIVE UNDISTURBED SUBGRADE."
3. PROVIDE THICKENED FLOOR SLABS 600x600x350 THICK AT ALL GYM FLOOR SOCKET LOCATIONS. REFER TO CONTRACT DOCUMENTS (SUCH AS ARCHITECTURAL DRAWINGS) FOR NUMBER AND LOCATION OF FLOOR SOCKETS. FORM VAPOUR BARRIER TO SHAPE OF SLAB DEPRESSION. CORE DRILL AND GROUT FLOOR SOCKET SLEEVE IN PLACE. SEE REVIEWED EQUIPMENT SHOP DRAWINGS FOR DETAILS.
4. THE TRANSITIONS BETWEEN DIFFERENT TILE FLOORINGS NEED TO BE FLUSH. THIS CAN BE ACHIEVED EITHER BY LOWERING THE AREAS OF THICKER TILE OR BY FEATHERING THE SLAB IN THE VICINITY OF THE TRANSITIONS. REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT OF ALL SLAB AND CONCRETE TOPPING DEPRESSIONS. DEPRESS FLOOR SLABS AT TILE LOCATIONS. FOR FLUSH FLOORING CONDITION WITH OTHER FLOORS COORDINATE EXACT DEPRESSION DEPTH WITH FLOORING TRADES PRIOR TO POURING CONCRETE. SLAB ON GRADE THICKNESS SPECIFIED ON DRAWINGS IS MINIMUM THICKNESS NOT INCLUDING DEPRESSION.
5. WIRE MESH SHALL BE PROPERLY HOOKED UP TO 50mm BELOW CONCRETE SLAB SURFACE DURING POURING CONCRETE.



TYPICAL CONSTRUCTION NOTE: (REFERENCE ARCHITECTURAL DRAWING A2.1)

1. POUR 200mm THICK 35MPa CLASS C-1 CONCRETE SLAB WITH 5~8% AIR ENTRAINMENT REINFORCED WITH 15M @ 350mm O/C EACH WAY WITH 75 CLEAR CONCRETE COVER AT TOP ON 100mm THICK RIGID INSULATION (EXTRUDED POLYSTYRENE RIGID INSULATION TO BE 'STYROFOAM SM' WITH RSI 0.87 (R-5.0) MINIMUM THERMAL RESISTANCE VALUES PER INCH, MINIMUM COMPRESSIVE STRENGTH 30PSI, 207KPa BY DOW OR APPROVED EQUAL) ON 150mm FREE DRAINING GRANULAR MATERIAL ON UNDISTURBED SOIL OR APPROVED ENGINEERED FILL FOR OUTDOOR STORAGE SHEDS IN ACCORDANCE WITH SECTION ABOVE. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.

101 / S2.1.1 SECTION THROUGH EXTERIOR REINFORCED CONCRETE SLAB ON GRADE FOR OUTDOOR STORAGE SHEDS
0 250 500 1250mm



1 / S2.1.1 PARTIAL FOUNDATION PLAN - NORTH
0 1 2 5m

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
2	2026.02.20	ISSUED FOR 80% REVIEW
3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
5		

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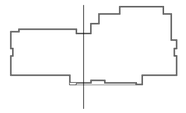
KEY PLAN:



CLIENT:

BLUEWATER DISTRICT SCHOOL BOARD
351 1st AVENUE NORTH
CHESLEY, ONTARIO.

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

WATERLOO STREET
PORT ELGIN, ONTARIO

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

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PARTIAL FOUNDATION PLAN - NORTH

S2.1.1

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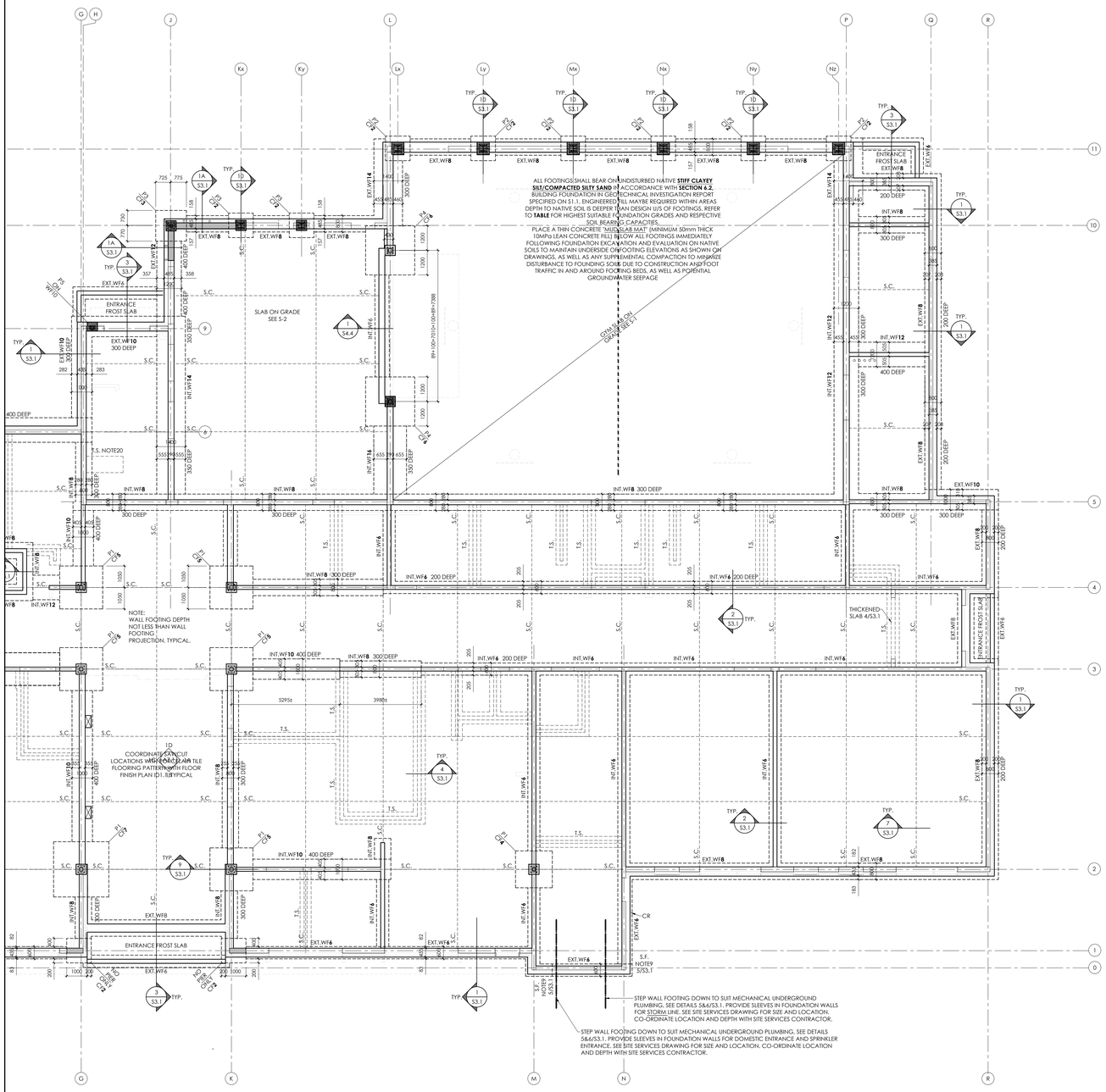
ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE STIFF CLAYEY SILT/COMPACTED SILTY SAND IN ACCORDANCE WITH SECTION 6.2, BUILDING FOUNDATION IN GEOTECHNICAL INVESTIGATION REPORT SPECIFIED ON S1.1. ENGINEERED FILL MAYBE REQUIRED WITHIN AREAS DEPTH TO NATIVE SOIL IS DEEPER THAN DESIGN U/S OF FOOTINGS. REFER TO TABLE FOR HIGHEST SUITABLE FOUNDATION GRADES AND RESPECTIVE SOIL BEARING CAPACITIES.
PLACE A THIN CONCRETE "MUD SLAB MAT" (MINIMUM 50mm THICK 10MPa LEAN CONCRETE FILL) BELOW ALL FOOTINGS IMMEDIATELY FOLLOWING FOUNDATION EXCAVATION AND EVALUATION ON NATIVE SOILS TO MAINTAIN UNDERSIDE OF FOOTING ELEVATIONS AS SHOWN ON DRAWINGS, AS WELL AS ANY SUPPLEMENTAL COMPACTION TO MINIMIZE DISTURBANCE TO FOUNDING SOILS DUE TO CONSTRUCTION AND FOOT TRAFFIC IN AND AROUND FOOTING BEDS, AS WELL AS POTENTIAL GROUNDWATER SEEPAGE
SLAB ON GRADE SEE S-2
ENTRANCE FROST SLAB
EXT.WF8
INT.WF8
INT.WF6
INT.WF12
INT.WF14
EXT.WF10
INT.WF10
EXT.WF14
EXT.WF6
INT.WF8 300 DEEP
INT.WF6 200 DEEP
EXT.WF8 200 DEEP
INT.WF10 400 DEEP
EXT.WF10 300 DEEP
INT.WF12 300 DEEP
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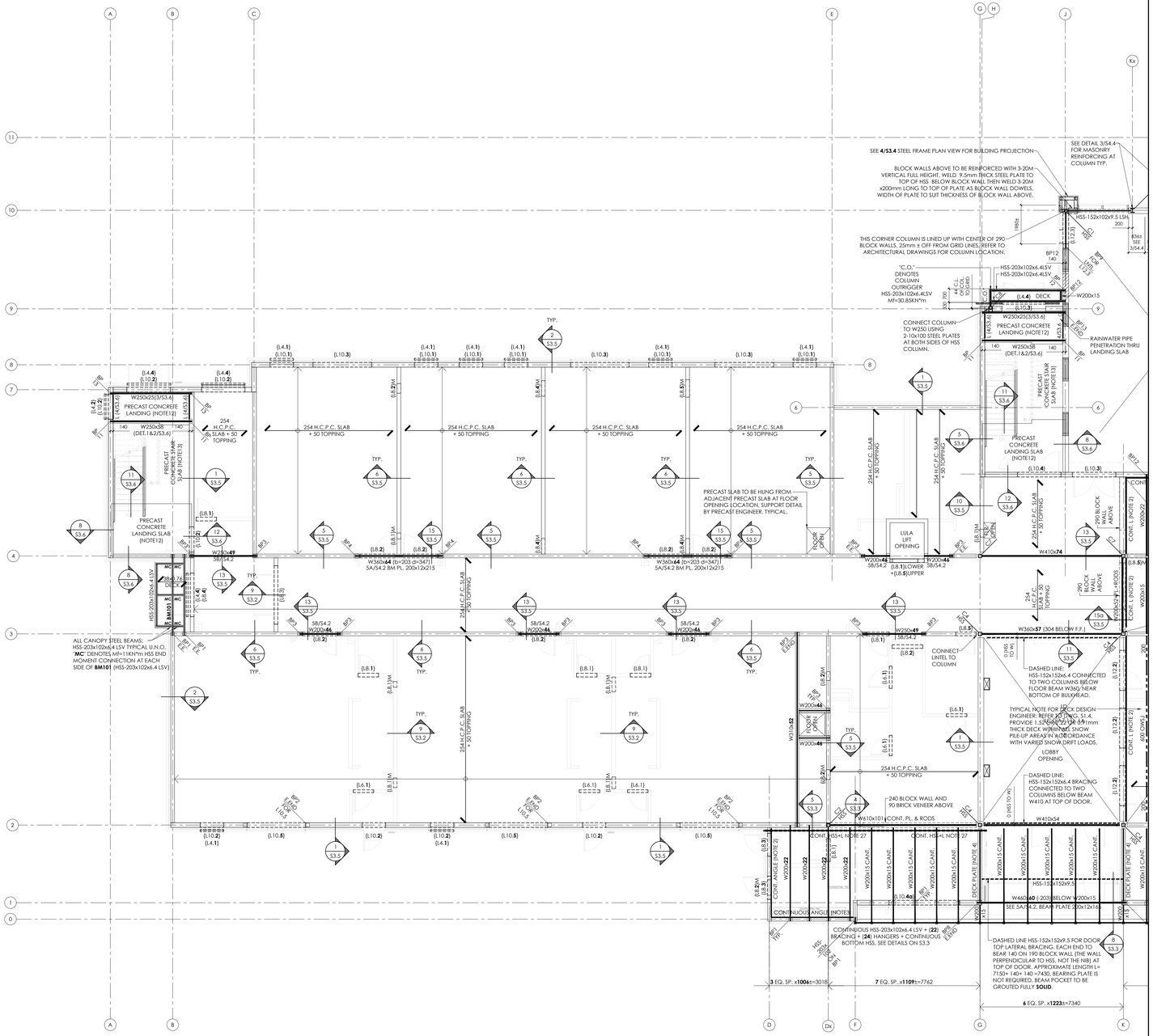
INT.WF16 300 DEEP
EXT.WF16 300 DEEP
INT.WF16 400 DEEP
EXT.WF16

FLOOR FRAMING NOTES:

1. DESIGN LOADS SEE FLOOR DESIGN LOAD TABLE ON S2.0.
2. CONTINUOUS L76x76x6.4 ANGLES FOR DECK SUPPORT ARE TO BE BOLTED TO WALL USING 16mm DIAMETER HILTI HLC SLEEVE ANCHORS @ 300 O/C MAXIMUM. MINIMUM EMBEDMENT DEPTH IS 50mm. FILL BLOCK SOLID WITH 20 MPa GROUT FULL LENGTH AT ANCHOR LOCATIONS.
3. CONTINUOUS ANGLES L76x76x6.4 FOR ROOF DIAPHRAGM. WELD ANGLE TO TOP OF JOISTS OR BEAMS THEN WELD STEEL DECK TO ANGLE. ENSURE ANGLE AS A TENSION & COMPRESSION CHORD FOR ROOF DIAPHRAGM PURPOSE SHALL BE CONTINUOUS, STEEL ENGINEER TO INCLUDE FIELD WELDED SPLICE DETAIL IN SHOP DRAWING TO DEVELOP **100%** OF ITS TENSION CAPACITY.
4. CONTINUOUS 100x6 DECK PLATES FOR DECK SUPPORT ARE TO BE ANCHORED TO WALL USING 16Ø ANCHORS x 300 LONG + 50 HOOK AT 600 o/c MAXIMUM. FILL TOP 2 COURSES BLOCK SOLID AT ANCHOR LOCATIONS AND TOP COURSE SOLID FULL LENGTH WITH 20MPa GROUT AT DECK PLATE.
5. WELD L-127x89x9.5 (LLV) AT BEAM LOCATIONS (REF. SHEET S3.1) TO SUPPORT DECK IN OPPOSITE DIRECTION. TYPICAL WHERE NO DECK SUPPORT IS SHOWN, WHERE NO BEAM TO WELD, BOLT L-127x89x9.5 (LLV) TO WALL USING 16 DIAMETER SLEEVE ANCHORS AT 300 O/C, MAX. FILL BLOCK SOLID WITH 20MPa GROUT FULL LENGTH AT ANCHOR LOCATIONS.
6. PROVIDE BEARING PLATE BP2 AT ALL FLOOR BEAM BEARING LOCATIONS UNLESS NOTED OTHERWISE. SEE BEARING PLATE SCHEDULE. ALL FLOOR FRAMING BEARING PLATES TO BE PROVIDED WITH 1-20 DIAMETER ANCHOR x300 LONG + 50 HOOK.
7. BEAMS AND JOISTS NOT TO BE EXPOSED IN GYM. BEAMS AND JOISTS TO BE KEPT SHORT OF INSIDE OF GYM WALL BY MINIMUM 50mm TO ALLOW FOR 40mm BLOCK SOAP PAST END OF BEAM OR JOIST. (TYPICAL)
8. WHERE BEAMS SUPPORT MASONRY ABOVE PROVIDE 15M x MIN. 200 LONG WELDABLE RODS AT 600 O/C TO TOP FLANGE FOR BLOCK. (TYPICAL)
9. WHERE WALL BETWEEN OPENINGS IS 600mm OR LESS OR SPECIFICALLY SHOWN ON PLAN, PROVIDE 3-15M/20M VERTICAL AND GROUT WALL SOLID FULL HEIGHT WITH 20MPa GROUT (TYPICAL).
10. PROVIDE 2-15M/2-20M AT EACH FACE OF OPENING FULL HEIGHT PAST END OF LINTEL BEARING FROM FLOOR TO ROOF FOR ALL EXTERIOR & INTERIOR OPENINGS. GROUT SOLID WITH 20MPa GROUT. DOWEL TO FOUNDATION WALL. (SEE MASONRY WALL REINFORCING SCHEDULE & DETAIL)
11. WHERE WALL IS REINFORCED WITH 15M OR 20M VERTICALS, GROUT CORES SOLID WITH 20MPa GROUT. THE VERTICALS TO BE DOWELED 150 FOR 15M & 300 FOR 20M MINIMUM INTO FOOTING OR FOUNDATION WALL BELOW.
12. FOR STAIRS #1&#2 ALL INTERMEDIATE PRECAST SOLID CONCRETE STAIR LANDING AND FLOOR LANDING SLABS TO BE DESIGNED AND STAMPED BY PRECAST CONTRACTOR'S ENGINEER AND SUPPLIED, INSTALLED BY PRECAST CONTRACTOR.
13. FOR STAIRS #1&#2 ALL PRECAST CONCRETE STAIR SLABS TO BE DESIGNED AND STAMPED BY PRECAST CONTRACTOR'S ENGINEER AND SUPPLIED, INSTALLED BY PRECAST CONTRACTOR.
14. PROVIDE CONTINUOUS BOND BEAM C/W 2-15M OR 2-20M CONTINUOUS AT BLOCK COURSE BELOW ALL LANDINGS, ROOF AND FLOOR LEVEL, AND AT EACH FLOOR OF THE ELEVATOR SHAFT/STAIRWELLS ALL AROUND SHAFT/STAIRWELLS. PROVIDE ADDITIONAL BOND BEAM AT MID-HT. BETWEEN FLOORS FOR ELEVATOR RAIL ATTACHMENT.
15. ALL VERTICAL REINFORCING IN BLOCK TO HAVE TENSION SPLICE MINIMUM 600 FOR 15M & 750 FOR 20M.
16. PROVIDE ADJUSTABLE STRAPS FOR MASONRY ANCHORS TO SIDE OF BEAM @ 400 O/C (FOR LINTELS OR BEAMS DEEPER THAN 200mm). PROVIDE ADJUSTABLE STRAPS FOR MASONRY ANCHORS TO SIDE OF COLUMN AT 400 O/C. SEE DETAILS 12. 15 & 16 ON S3.1.
17. COORDINATE SLAB OPENINGS WITH MECHANICAL DRAWINGS. PROVIDE 100mm HIGH HOUSE KEEPING PADS REINFORCED WITH 10M AT 300 o/c EACH WAY. FOR LOCATIONS, REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS.
18. AT ALL NIBS OR PROJECTIONS AND OUTSIDE CORNERS PENETRATING THE SLAB WHICH DO NOT HAVE CONTROL JOINTS, PROVIDE 2-15M x 900 LONG IN SLAB TO HELP PREVENT CRACKING.
19. WHERE LOAD BEARING BLOCK WALLS BEAR ON TOP OF CONCRETE SLABS, PROVIDE 15M DOWELS INTO SLAB. (75 EMBEDMENT MIN.) DRILL & FRICTION FIT IN PLACE. SPACING TO SUIT MASONRY REINFORCING SCHEDULE.
20. THE TRANSITIONS BETWEEN QUARRY TILE AND VINYL TILE FLOORING NEED TO BE FLUSH. THIS CAN BE ACHIEVED EITHER BY LOWERING THE AREAS OF QUARRY TILE OR BY FEATHERING THE SLAB IN THE VICINITY OF THE TRANSITIONS.
21. WELD ANGLE L-127x127x9.5 TO COLUMN OR WELD HSS-102x51x6.4 L.S.H. TO TIE BEAM FOR PRECAST SLAB BEARING AT ALL COLUMN NOTCH LOCATIONS WHERE SUPPORT IS NOT PROVIDED BY BEAM. EXTEND ANGLE OR HSS 6mm BEYOND FACE OF COLUMN. TYPICAL AT ALL COLUMNS THAT PENETRATE PRECAST SLABS. REFER TO TYPICAL DETAIL FOR SUPPLEMENTAL PRECAST SLAB SUPPORT ON S3 SERIES DRAWINGS.
22. UNFACTORED DESIGN LOAD FOR 190 BLOCK PARTITION ABOVE PRECAST SLAB IS 2.11KPa: UNFACTORED DESIGN LOAD FOR 140 BLOCK PARTITION ABOVE PRECAST SLAB IS 1.67KPa. PRECAST ENGINEER PLEASE REFER TO ARCHITECTURAL FLOOR PLANS AND SECTIONS FOR BLOCK PARTITION LOCATIONS AND HEIGHTS WHERE IT IS NOT SHOWN ON STRUCTURAL PLANS. TYPICAL.
23. TOP OF ALL MASONRY PARTITION WALLS SHALL BE LATERAL BRACED TO UNDERSIDE OF PRECAST SLABS IN ACCORDANCE WITH DETAILS ON S3.2 OR APPROVED EQUAL DETAIL. BRACING TO BE SPACED AT 10 TIMES OF WALL THICKNESS MAXIMUM AND MAY BE PROVIDED BY STRUCTURAL COLUMNS OR INTERSECTING WALLS. BRACING TO TIGHT TO EACH SIDE OF PARTITION WALLS AND ALLOW FOR VERTICAL MOVEMENT FROM PARTITION WALLS (DO NOT LOAD ON PARTITION WALLS).
24. PROVIDE DRILLED IN WEEP HOLES IN STRUCTURAL PRECAST CONCRETE FLOOR SLABS TO ENSURE ALL WATER THAT MAY ACCUMULATE WITHIN CORES OF STRUCTURAL PRECAST CONCRETE FLOOR SLABS DURING CONSTRUCTION IS REMOVED BEFORE OCCUPANCY OF THE SCHOOL.
25. SHOP DRAWINGS FOR LIGHTWEIGHT, COLD-FORMED GALVANIZED STRUCTURAL STEEL STUD FRAMING, EXTERIOR AND INTERIOR, SHALL BE STAMPED AND SUBMITTED TO PROJECT ENGINEER FOR REVIEW PRIOR TO FABRICATION IN ACCORDANCE WITH DETAILS PROVIDED ON ARCHITECTURAL AND/OR STRUCTURAL DRAWINGS. SEE STEEL STUDS NOTE ON S1.1. TYPICAL.
26. PRECAST FLOOR SLABS ARE DESIGNED AS DIAPHRAGMS TO TRANSFER LATERAL FORCES TO LFRS (LATERAL FORCE RESISTING SYSTEM) ELEMENTS. PRECAST SLAB VOIDS SHOULD BE FILLED SOLID WITH GROUT AT WALL AND COLUMN LOCATIONS. ALL JOINTS BETWEEN ADJACENT SLAB PANELS AND ALL GAPS BETWEEN SLAB PANELS & STRUCTURAL ELEMENTS TO BE FULLY GROUTED. PROVIDE 10M ANTI-ROTATION RODS AT 1880mm O/C MAXIMUM (SLABS NOTCHED IN PLANT. BARS INSTALLED ON SITE) FOR ALL JOINTS BETWEEN ADJACENT SLAB PANELS WHERE IS SHOWN ON PLANS U.N.O. PRECAST ENGINEER TO DESIGN AND STAMP CONNECTIONS BETWEEN PRECAST SLABS AND LFRS ELEMENTS.
27. PROVIDE CONTINUOUS HSS-89x89x6.4 C/W L-76x76x6.4 BEARING ON OPEN WEB STEEL JOISTS OR STEEL CHANNELS/BEAMS FOR SUPPORT OF BRICK. BRICK LOAD ON JOIST OR CHANNEL/BEAM IS 1.9KPax4.8mx1.83m =16.7KN (UN-FACTORED) DENOTED THUS.

ROOF FRAMING NOTES:

1. SEE DRAWING S2.3.



1 S2.2.1 PARTIAL LEVEL 2 FLOOR & LOW ROOF FRAMING PLAN - NORTH

0 1 2 5m

(L*.*)M DENOTES LINTEL FOR MECHANICAL DUCT OPENING, TYPICAL.

NOTE FOR **BLOCK COURSING**:
REFER TO NOTES IN ARCHITECTURAL DRAWINGS. MINOR CHANGES IN DOOR AND WINDOW LOCATIONS IS PERMITTED TO SUIT BLOCK COURSING, TYPICAL.

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
2	2026.02.20	ISSUED FOR 80% REVIEW
3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
5		

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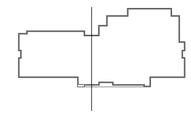
KEY PLAN:



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PROJECT:

22562

NEW PORT ELGIN COMMUNITY SCHOOL

WATERLOO STREET
PORT ELGIN, ONTARIO

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

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PARTIAL LEVEL 2 FLOOR & LOW ROOF FRAMING PLAN - NORTH

S2.2.1

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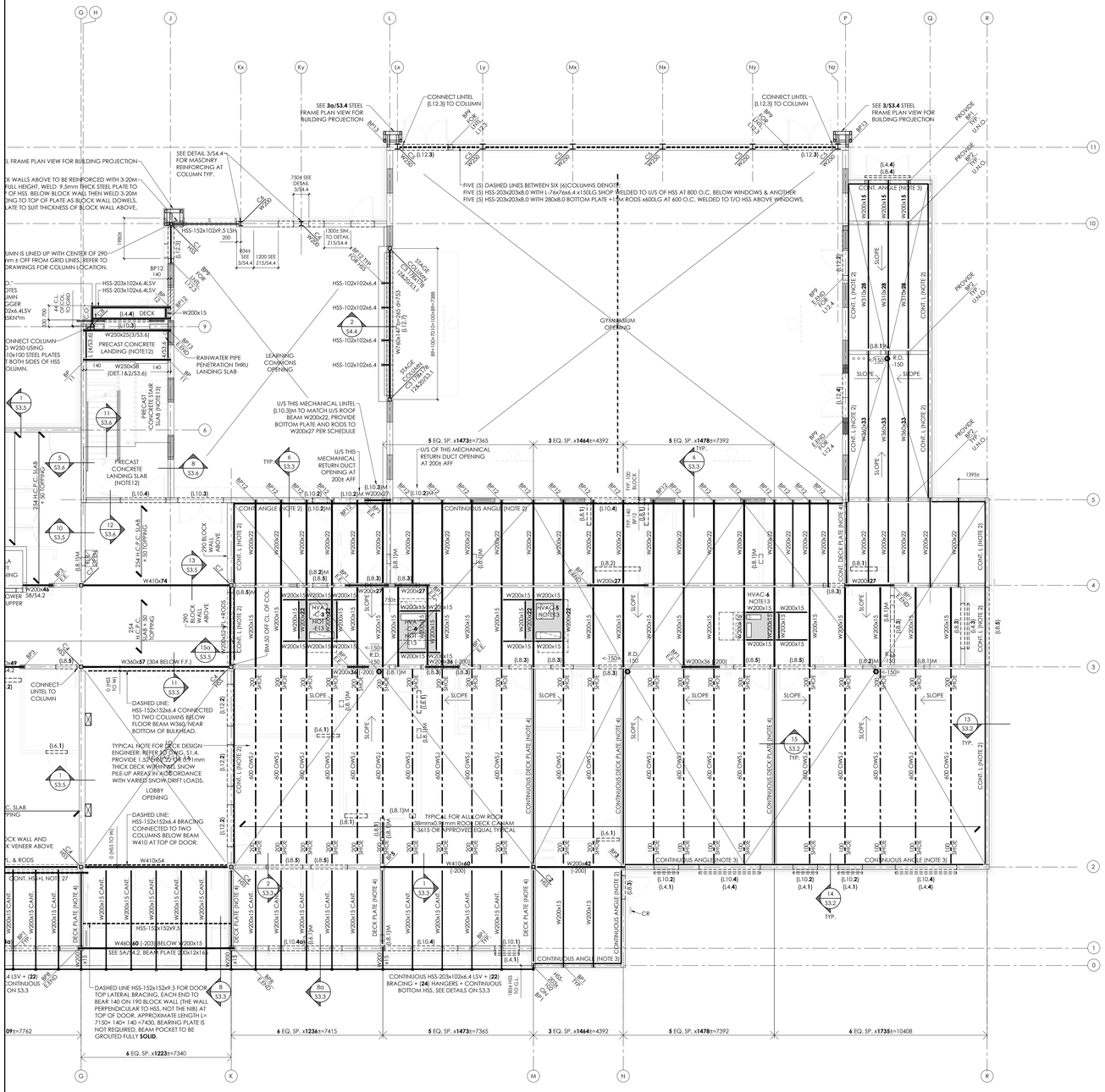

1 PARTIAL LEVEL 2 FLOOR & LOW ROOF FRAMING PLAN - SOUTH
S2.2.2
0 1 2 5m

(L*.*)M DENOTES LINTEL FOR MECHANICAL DUCT OPENING, TYPICAL.

NOTE FOR **BLOCK COURSING:**
REFER TO NOTES IN ARCHITECTURAL DRAWINGS, MINOR CHANGES IN DOOR AND WINDOW LOCATIONS IS PERMITTED TO SUIT BLOCK COURSING, TYPICAL.

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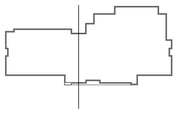

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PARTIAL LEVEL 2 FLOOR & LOW ROOF FRAMING PLAN - SOUTH

S2.2.2

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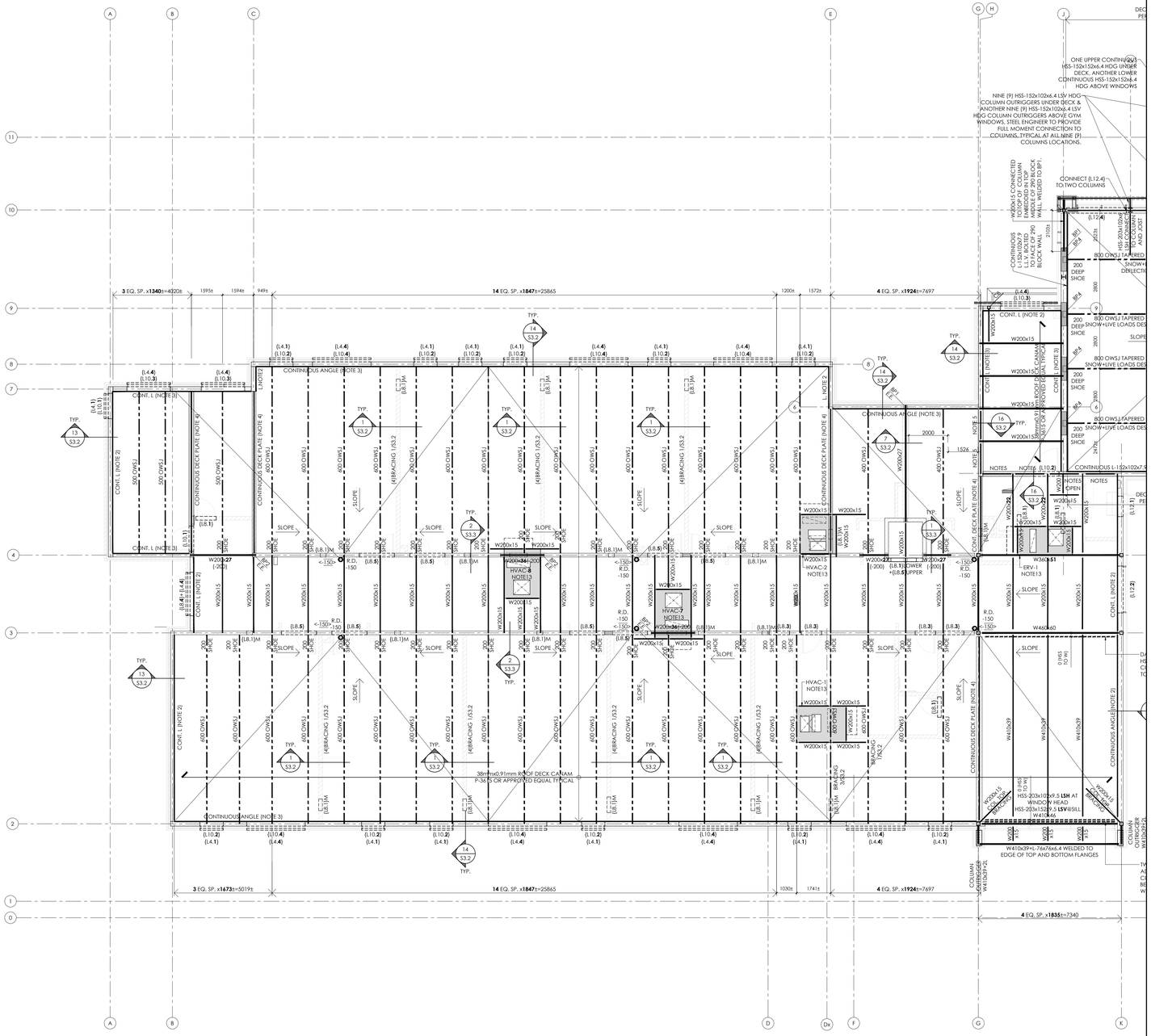
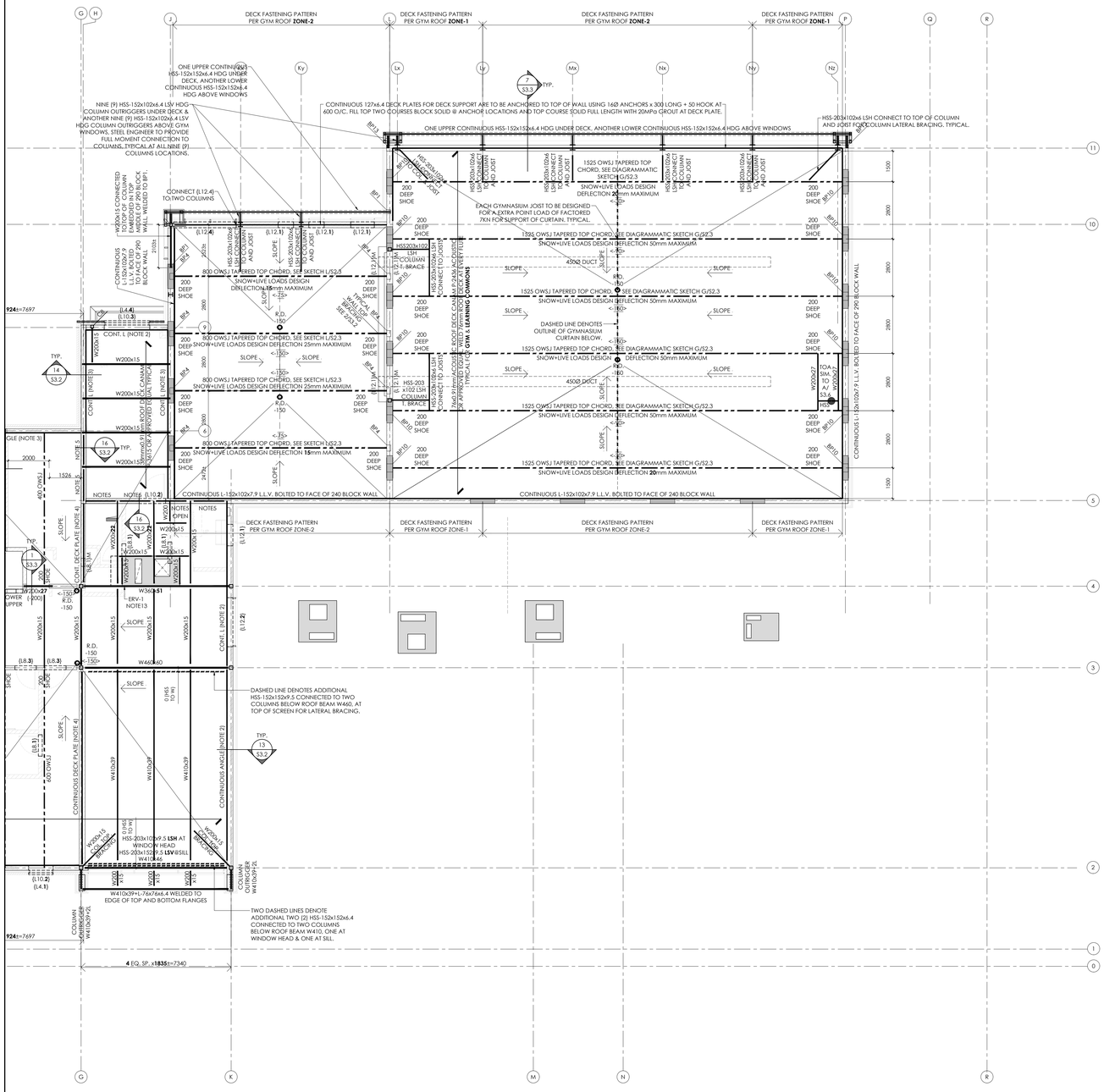
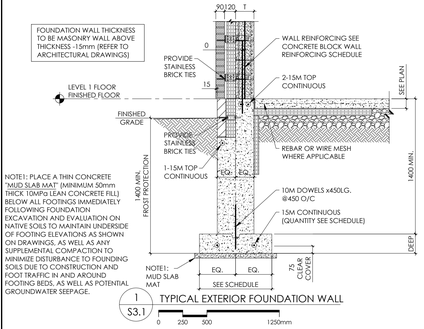
ROOF FRAMING NOTES:

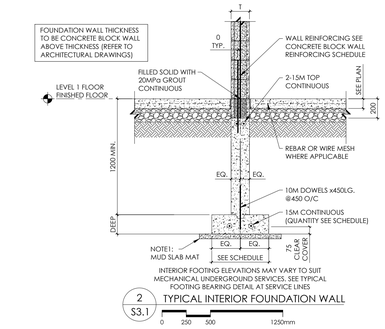
1. DESIGN LOADS SEE ROOF DESIGN LOAD TABLE ON S2.2.1.
2. CONTINUOUS L-76x76x6.4 ANGLES FOR STEEL DECK SUPPORT ARE TO BE BOLTED TO MASONRY BLOCK WALL USING 16mm DIAMETER HILTI HLC SLEEVE ANCHORS @ 400 O/C, MINIMUM EFFECTIVE EMBEDMENT DEPTH IS 50mm. FILL BLOCK SOLID WITH 20MPa GROUT FULL LENGTH AT ANGLE LOCATIONS.
3. CONTINUOUS L-76x76x6.4 ANGLES FOR ROOF DIAPHRAGM. WELD ANGLE TO TOP OF JOISTS OR BEAMS THEN WELD STEEL DECK TO ANGLE.
4. CONTINUOUS 100x6 DECK PLATES FOR DECK SUPPORT ARE TO BE ANCHORED TO WALL USING 16Ø ANCHORS x 300 LONG + 50 HOOK @ 600 O/C MAXIMUM. FILL TOP TWO COURSES BLOCK SOLID @ ANCHOR LOCATIONS AND TOP COURSE SOLID FULL LENGTH WITH 20MPa GROUT AT DECK PLATE. CUT BLOCK TO SUIT ROOF SLOPES WHERE REQUIRED.
5. PROVIDE CONTINUOUS STEEL DECK PLATES (SEE NOTE 4) BETWEEN JOIST OR BEAM BEARINGS FOR DECK SUPPORT WHERE STEEL ROOF DECK SPANS CHANGE DIRECTION. INSTALL CONTINUOUS STEEL CLOSURE PLATES ALONG ALL JOINTS. REFER TO DETAIL 16/S3.2. TYPICAL WHERE DECK CHANGES DIRECTION AND NO DECK SUPPORT IS SHOWN.
6. PROVIDE BEARING PLATE BP2 AT ALL ROOF BEAM OR JOIST BEARING LOCATIONS UNLESS NOTED OTHERWISE. REFER TO SHEET S4.2 FOR BEARING PLATE SCHEDULE. ALL ROOF FRAMING BEARING PLATES TO BE PROVIDED WITH 1-20Ø ANCHOR x 450 LONG + 50 HOOK.
7. ALL JOIST SHOES TO BE 200mm DEEP, EXCEPT FOR GYMNASIUM, IN NO CASE SHOULD JOIST SPACING EXCEED 2000.
8. WHERE BEAMS SUPPORT MASONRY ABOVE PROVIDE 15M x200 LONG WELDABLE RODS AT 600 O/C TO TOP FLANGE FOR BLOCK. (TYPICAL)
9. WHERE WALL BETWEEN OPENINGS IS 600mm OR LESS, PROVIDE 3-15M VERTICAL AND GROUT WALL SOLID FULL HEIGHT WITH 20MPa GROUT. (TYPICAL)
10. TOP OF STEEL BEAMS SUPPORT OWSJ IS TO BE **200mm** BELOW UNDERSIDE OF DECK & NOTED THUS (**-200**) ON PLAN, THIS IS NOT FOR PURPOSED ROOF SLOPE USE. PROVIDE **200mm** FOR JOIST SHOE U.N.O. (**-200**) IS TO BE CONFIRMED BY CONTRACTOR WITH OWSJ FINAL SHOP DRAWINGS.
11. ROOF JOIST AND BEAM TO SUIT ROOF SLOPE AS SHOWN ON ARCHITECTURAL ROOF PLAN. ROOF SLOPE IS NOTED THUS **<-150>** & TO BE COORDINATED WITH FINAL ARCHITECTURAL ROOF PLAN PRIOR TO FABRICATION.
12. FOR TWO JOISTS SUPPORT FOLDING PARTITION PANELS AT GYMNASIUM MAXIMUM LIVE LOAD (FOLDING PARTITION PANELS + SNOW) DEFLECTION U.N.O.= L/720 OR 25.4mm WHICH IS LESSER. DESIGN WEIGHT OF FOLDING PARTITION PANELS IS MINIMUM 5.0KN/m. TO BE CONFIRMED BY SUPPLIER THROUGH GENERAL CONTRACTOR. FOR ALL OTHER JOISTS MAXIMUM LIVE LOAD DEFLECTION = L/360. IN ADDITIONAL TO SPECIFIED LOADS BOTTOM CHORD OF ALL GYMNASIUM JOISTS ARE TO BE DESIGNED FOR A FACTORED LOAD OF 7.5KN AT ANY POINT.
13. OPENING IN ROOF FOR ROOF TOP UNITS TO SUIT MECHANICAL REQUIREMENTS (SEE MECHANICAL DRAWINGS) NO ALL ROOF OPENINGS ARE SHOWN ON STRUCTURAL FRAMING PLANS, CONTRACTOR TO SEE MECHANICAL DRAWINGS FOR ALL ROOF OPENINGS INCLUDE **EXHAUST FAN** OPENINGS. ALL ROOF OPENINGS TO BE REINFORCED BY CONTINUOUS C 150x12 (OR C130x10 FOR OPENINGS UP TO 1200mm) CHANNEL FRAMES AT PERIMETER OF OPENINGS UNLESS NOTED OTHERWISE. ALL EXHAUST FAN ROOF OPENINGS GREATER THAN 300x300 TO BE REINFORCED AS NOTED ABOVE BY STEEL CONTRACTOR, LESS THAN 300x300 TO BE REINFORCED BY DECK CONTRACTOR, SEE MECHANICAL DRAWINGS FOR ALL EXHAUST FAN LOCATIONS
14. **ROOF SLOPES:** IT IS REQUIRED TO SLOPE THE ROOF STRUCTURE TO ROOF DRAINS (RD). REFER TO S2.3, SEE ARCHITECTURAL ROOF PLAN FOR EXACT DRAINS LOCATIONS. WHERE SHOWN ON PLAN TOP OF STEEL BEAMS AND JOISTS ARE TO BE SHAPED TO PROVIDE ROOF SLOPE. BEAMS MAY BE CRANKED FOR THIS PURPOSE AND JOIST TOP CHORD SHAPED BY USING BACK SLOPE ANGLES OR TAPERED TOP CHORD. JOIST DEPTH SHOWN IS THE MINIMUM DEPTH. CUT BLOCK & SLOPE STEEL TO SUIT ROOF SLOPES WHERE REQUIRED. INSTALL STEEL BEARING PLATES AT PROPER ELEVATIONS TO SUIT VARIED ELEVATIONS OF BEAM FOR ROOF SLOPE.
15. PROVIDE 2-15M/2-20M AT EACH FACE OF OPENING FULL HEIGHT PAST END OF LINTEL BEARING FROM FLOOR TO ROOF FOR ALL EXTERIOR & INTERIOR OPENINGS. GROUT SOLID WITH 20MPa GROUT. DOWEL TO FOUNDATION WALL. (SEE MASONRY WALL REINFORCING SCHEDULE & DETAIL).
16. PROVIDE ADDITIONAL C150x12 CHANNEL FRAMES WHERE ROOF BEAM/JOIST DOES NOT OCCUR AT EDGE OF ROOF TOP UNIT (TYPICAL). ALL ROOF OPENINGS TO BE REINFORCED BY C130x10 CHANNEL FRAMES (TYPICAL). SEE ROOF PLAN AND MECHANICAL DRAWINGS FOR LOCATION OF UNITS.
17. PROVIDE CONTINUOUS BOND BEAM AT TOP OF ALL MASONRY BLOCK WALLS C/W 2-15M OR 2-20M CONTINUOUS & GROUTED SOLID WITH 20MPa GROUT.
18. LINTELS FOR MECHANICAL OPENINGS MAY NOT BE SHOWN ON STRUCTURAL DRAWINGS, REFER TO MECHANICAL DRAWINGS FOR LOCATIONS AND PROVIDE LINTELS IN ACCORDANCE WITH MISCELLANEOUS LINTEL SCHEDULE FOR MECHANICAL OPENINGS.
19. GENERAL CONTRACTOR PLEASE CO-ORDINATE LOCATION OF MECHANICAL OPENINGS IN WALLS SO THAT THEY DO NOT OCCUR DIRECTLY BELOW BEAM OR JOIST BEARING LOCATIONS. IF OTHERWISE, NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF BLOCK. MINIMUM LINTEL REQUIRED WILL BE TYPES **(L8.5)/(L10.3)/(L12.2)**.
20. ROOF STEEL DECK IS IN ACCORDANCE WITH STRUCTURAL STEEL NOTES ON S1.1 UNLESS NOTED OTHERWISE.
21. JOIST BRIDGING IN GYMNASIUM SHALL STOP AT JOISTS ADJACENT TO FOLDING CURTAIN. AT THESE LOCATIONS PROVIDE CROSS BRIDGING IN COMBINATION WITH HORIZONTAL BRIDGING.
22. TOP OF COLUMNS WHICH ARE NOT BRACED BY JOISTS OR BEAMS SHALL BE BRACED DIAGONALLY TO THE ROOF BY A MINIMUM OF 4-L76x76x6.4 ANGLES. BRACING SHALL BE BETWEEN TOP OF COLUMN AND TOP CHORD OF JOISTS.
23. PROVIDE ADJUSTABLE STRAPS FOR MASONRY ANCHORS TO SIDE OF BEAM @ 400 O/C (FOR LINTELS OR BEAMS DEEPER THAN 200mm). PROVIDE ADJUSTABLE STRAPS FOR MASONRY ANCHORS TO SIDE OF COLUMN AT 400 O/C, SEE DETAILS 12, 15 & 16 ON S3.1.
24. **TOP** OF ALL MASONRY PARTITION WALLS SHALL BE **LATERAL BRACED** TO ROOF STRUCTURE IN ACCORDANCE WITH DETAILS ON S3.2 OR APPROVED EQUAL DETAIL. BRACING MAY BE PROVIDED BY STRUCTURAL COLUMNS OR INTERSECTING WALLS. BRACING TO TIGHT TO EACH SIDE OF PARTITION WALLS AND ALLOW FOR VERTICAL MOVEMENT FROM PARTITION WALLS (DO NOT LOAD ON PARTITION WALLS). ALL WALL TOP BRACING TO BE SUPPLIED AND INSTALLED BY MISCELLANEOUS METALS CONTRACTOR, TO INSTALL BRACING ANGLES TIGHT TO WALLS, BRACING TO BE INSTALLED AFTER WALLS ARE INSTALLED. MASON TO LEAVE HOLES FOR STEEL TUBE PENETRATIONS. NO ALL WALL TOP BRACING LOCATIONS ARE SHOWN IN STRUCTURAL FRAMING PLANS, CONTRACTOR TO PROVIDE BRACING PER SPECIFIED SPACING BASED ON WALL THICKNESS. TYPICAL.
25. PROVIDE CONTINUOUS HSS-89x89x6.4 C/W L-76x76x6.4 BEARING ON OPEN WEB STEEL JOISTS OR STEEL BEAMS FOR SUPPORT OF BRICK. BRICK LOAD ON JOIST OR BEAM IS 1.9KPa×4.8m×1.8m=16.4KN (UN-FACTORED) DENOTED THUS. REFER TO DETAIL 6/S3.3.


3 EQ. SP. x1340±=4020±
14 EQ. SP. x1847±=25865
4 EQ. SP. x1924±=7697
3 EQ. SP. x1673±=5019±
14 EQ. SP. x1847±=25865
4 EQ. SP. x1924±=7697
4 EQ. SP. x1835±=7340
CONTINUOUS ANGLE (NOTE 3)
CONTINUOUS DECK PLATE (NOTE 4)
CONT. L (NOTE 2)
CONT. L (NOTE 3)
CONT. L (NOTE 5)
38mmx0.91mm ROOF DECK CANAM P-36.75 OR APPROVED EQUAL TYPICAL
HSS 203x102x9.5 LSH AT WINDOW HEAD HSS-203x152x9.5 LSV@SILL
W410x39+L-76x76x6.4 WELDED TO EDGE OF TOP AND BOTTOM FLANGES
ONE UPPER CONTINUOUS HSS-152x152x6.4 HDG UNDER DECK, ANOTHER LOWER CONTINUOUS HSS-152x152x6.4 HDG ABOVE WINDOWS
NINE (9) HSS-152x102x6.4 LSV HDG COLUMN OUTRIGGERS UNDER DECK & ANOTHER NINE (9) HSS-152x102x6.4 LSV HDG COLUMN OUTRIGGERS ABOVE GYM WINDOWS, STEEL ENGINEER TO PROVIDE FULL MOMENT CONNECTION TO COLUMNS, TYPICAL AT ALL NINE (9) COLUMNS LOCATIONS.
CONNECT (L12.4) TO TWO COLUMNS
W200x15 CONNECTED TO TOP OF COLUMN EMBEDDED PLATE & MIDDLE OF 290 BLOCK WALL, NEEDED TO BF1.
CONTINUOUS L-152x102x9.5 LSV FROM TOP OF COLUMN TO FACE OF 290 BLOCK WALL
HSS 203x102x9.5 LSH TO COLUMN AND JOIST
800 OWSJ TAPERED
200 DEEP SHOE
SNOW+ DRIFT
SNOW+LIVE LOADS DES
CONTINUOUS L-152x102x7.9
W200x15
W200x22
W200x27
W360x51
W460x60
W410x39
W410x46
W410x54
HVAC-1 NOTE13
HVAC-2 NOTE13
HVAC-7 NOTE13
HVAC-8 NOTE13
ERV-1 NOTE13
OPEN
SLOPE
R.D.
-150
<-150>
CONT. DECK PLATE (NOTE 4)
CONTINUOUS ANGLE (NOTE 2)
CONTINUOUS OUTRIGGER W410x39+2L
COLUMN BELOW W410x39+2L
W200x15 STRUCTURAL STUD BRACING
W200x15 STRUCTURAL STUD BRACING
W200x15 STRUCTURAL STUD BRACING

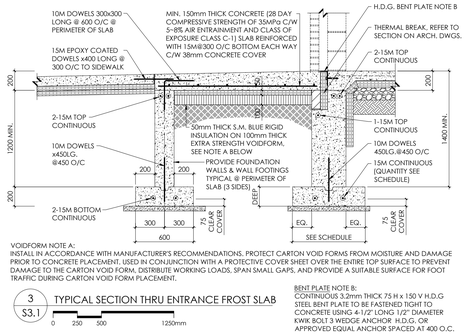

DECK FASTENING PATTERN PER GYM ROOF ZONE-2
DECK FASTENING PATTERN PER GYM ROOF ZONE-1
ONE UPPER CONTINUOUS HSS-152x152x6.4 HDG UNDER DECK, ANOTHER LOWER CONTINUOUS HSS-152x152x6.4 HDG ABOVE WINDOWS
NINE (9) HSS-152x102x6.4 LSV HDG COLUMN OUTRIGGERS UNDER DECK & ANOTHER NINE (9) HSS-152x102x6.4 LSV HDG COLUMN OUTRIGGERS ABOVE GYM WINDOWS. STEEL ENGINEER TO PROVIDE FULL MOMENT CONNECTION TO COLUMNS. TYPICAL AT ALL NINE (9) COLUMNS LOCATIONS.
CONTINUOUS 127x6.4 DECK PLATES FOR DECK SUPPORT ARE TO BE ANCHORED TO TOP OF WALL USING 16Ø ANCHORS x 300 LONG + 50 HOOK AT 600 O/C. FILL TOP TWO COURSES BLOCK SOLID W/ ANCHOR LOCATIONS AND TOP COURSE SOLID FULL LENGTH WITH 20MPa GROUT AT DECK PLATE.
HSS-203x102x6 LSH CONNECT TO TOP OF COLUMN AND JOIST FOR COLUMN LATERAL BRACING. TYPICAL.
CONNECT (L12.4) TO TWO COLUMNS
EACH GYMNASIUM JOIST TO BE DESIGNED FOR A EXTRA POINT LOAD OF FACTORED 7KN FOR SUPPORT OF CURTAIN. TYPICAL.
1525 OWSJ TAPERED TOP CHORD, SEE DIAGRAMMATIC SKETCH G/S2.3 SNOW+LIVE LOADS DESIGN DEFLECTION 50mm MAXIMUM
800 OWSJ TAPERED TOP CHORD, SEE SKETCH L/S2.3 SNOW+LIVE LOADS DESIGN DEFLECTION 25mm MAXIMUM
800 OWSJ TAPERED TOP CHORD, SEE SKETCH L/S2.3 SNOW+LIVE LOADS DESIGN DEFLECTION 15mm MAXIMUM
800 OWSJ TAPERED TOP CHORD, SEE SKETCH L/S2.3 SNOW+LIVE LOADS DESIGN DEFLECTION 25mm MAXIMUM
1525 OWSJ TAPERED TOP CHORD, SEE DIAGRAMMATIC SKETCH G/S2.3 SNOW+LIVE LOADS DESIGN DEFLECTION 20mm MAXIMUM
4500 DUCT
DASHED LINE DENOTES OUTLINE OF GYMNASIUM CURTAIN BELOW.
CONTINUOUS L-152x102x7.9 L.L.V. BOLTED TO FACE OF 240 BLOCK WALL
CONTINUOUS L-152x102x7.9 L.L.V. BOLTED TO FACE OF 290 BLOCK WALL
DASHED LINE DENOTES ADDITIONAL HSS-152x152x9.5 CONNECTED TO TWO COLUMNS BELOW ROOF BEAM W460, AT TOP OF SCREEN FOR LATERAL BRACING.
HSS-203x102x9.5 LSH AT WINDOW HEAD
HSS-203x152x9.5 LSV @SILL
W410x46
W410x39+L-76x76x6.4 WELDED TO EDGE OF TOP AND BOTTOM FLANGES
TWO DASHED LINES DENOTE ADDITIONAL TWO (2) HSS-152x152x6.4 CONNECTED TO TWO COLUMNS BELOW ROOF BEAM W410. ONE AT WINDOW HEAD & ONE AT SILL.
4 EQ. SP. x1835=7340
924=7697
2000
1526
2470
2800
2100
2600
1500
2900
W200x15
W200x22
W360x51
W460x60
W410x39
W410x46
W410x67
W410x85
COLUMN ABOVE W410x39*2L
COLUMN BELOW W410x39*2L
CONT. L (NOTE 2)
CONT. L (NOTE 3)
CONT. DECK PLATE (NOTE 4)
CONTINUOUS ANGLE (NOTE 3)
ERV-1 NOTE13
NOTES OPEN
NOTES
SLOPE
R.D. +150
TYP.
200 DEEP SHOE
(L12.1)
(L12.2)
(L12.4)
(L10.2)
(L4.4)
(L10.3)
(L8.3)
(L4.1)
(L1.3)
(L1.2)
HSS203x102x6 LSH CONNECT TO TOP OF COLUMN AND JOIST
HSS203x102x6 LSH CONNECT TO COLUMN AND JOIST
HSS203x102x6 LSH CONNECT TO JOIST
HSS203x102x6 LSH CONNECT TO COLUMN AND JOIST
HSS203x102x6 LSH CONNECT TO JOIST
HSS520x10 LSH COLUMN T- BRACE
HSS-203 x102 LSH COLUMN T- BRACE
76x0.91mm ACOUSTIC ROOF DECK CAN X-P-2436 ACOUSTIC PERFORATED DECK OR APPROVED EQUAL TYPICAL FOR GYM & LEARNING COMMON
TOP OF SIMILAR TO W200x27
HSS 152x102x6.4 LSH
W200x27
W200x15
W200x39
W200x46
W200x59
W200x71
W200x86
W200x100
W200x52
W200x31
W200x19
W200x22



1 S3.1 TYPICAL EXTERIOR FOUNDATION WALL

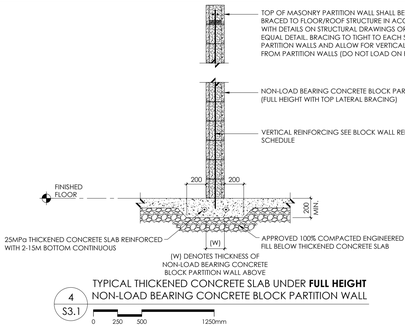


2 S3.1 TYPICAL INTERIOR FOUNDATION WALL

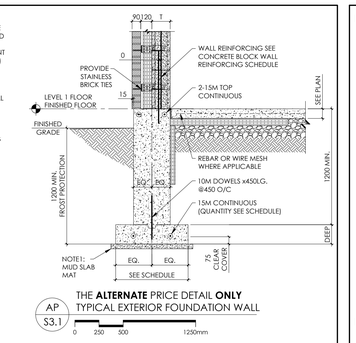


VOIDFORM NOTE A:
INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROTECT CARTON VOID FORMS FROM MOISTURE AND DAMAGE PRIOR TO CONCRETE PLACEMENT. USED IN CONJUNCTION WITH A PROTECTIVE COVER SHEET OVER THE ENTIRE TOP SURFACE TO PREVENT DAMAGE TO THE CARTON VOID FORM. DISTRIBUTE WORKING LOADS, SPAN SMALL GAPS, AND PROVIDE A SUITABLE SURFACE FOR FOOT TRAFFIC DURING CARTON VOID FORM PLACEMENT.

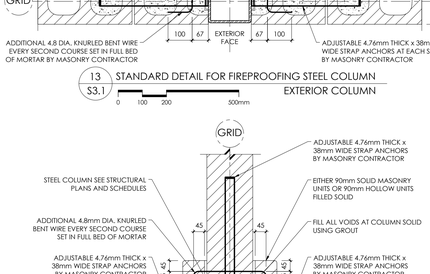
3 S3.1 TYPICAL SECTION THRU ENTRANCE FROST SLAB



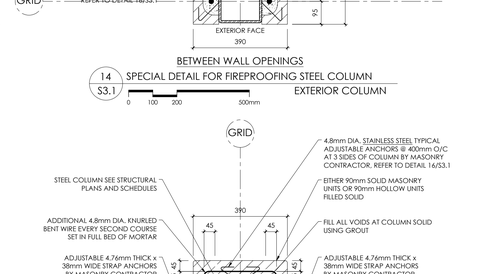
4 S3.1 TYPICAL THICKENED CONCRETE SLAB UNDER **FULL HEIGHT** NON-LOAD BEARING CONCRETE BLOCK PARTITION WALL



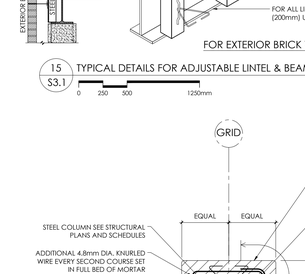
AP S3.1 THE **ALTERNATE** PRICE DETAIL **ONLY** TYPICAL EXTERIOR FOUNDATION WALL



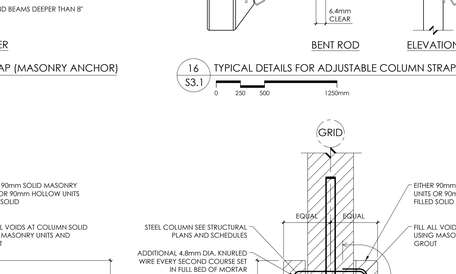
5 S3.1 TYPICAL STEPPED CONCRETE WALL FOOTING SECTION DETAIL ("S.F." IN FOUNDATION PLAN DENOTES STEPPED FOOTING)



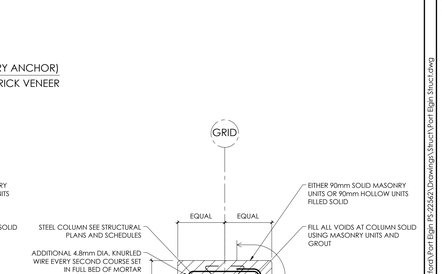
6 S3.1 TYPICAL FOOTING BEARING DETAIL AT SERVICE LINES AND MINIMUM SPACING FOR DIFFERENT FOOTING ELEVATIONS
N.T.S.



7 S3.1 TYPICAL SAWCUT DETAIL FOR SLAB ON GRADE
N.T.S.



8 S3.1 SECTION THROUGH LU/LA ELEVATOR BASE



4a S3.1 TYPICAL THICKENED CONCRETE SLAB UNDER **PARTIAL HEIGHT** NON-LOAD BEARING CONCRETE BLOCK PARTITION WALL

9 S3.1 TYPICAL INTERIOR PIER & COLUMN FOOTING

10 S3.1 TYPICAL EXTERIOR PIER & COLUMN FOOTING

11 S3.1 TYPICAL DETAIL FOR SLAB ON GRADE AT CONSTRUCTION JOINT

12 S3.1 TYPICAL DETAILS FOR ADJUSTABLE COLUMN STRAP (MASONRY ANCHOR) FOR BLOCK WALL

1A S3.1 SPECIAL EXTERIOR FOUNDATION WALL

BETWEEN WALL OPENINGS

BETWEEN WALL OPENINGS

13 S3.1 STANDARD DETAIL FOR FIREPROOFING STEEL COLUMN EXTERIOR COLUMN
0 100 200 500mm

BETWEEN WALL OPENINGS

14 S3.1 SPECIAL DETAIL FOR FIREPROOFING STEEL COLUMN EXTERIOR COLUMN
0 100 200 500mm

15 S3.1 TYPICAL DETAILS FOR ADJUSTABLE LINTEL & BEAM STRAP (MASONRY ANCHOR)
0 250 500 1250mm

16 S3.1 TYPICAL DETAILS FOR ADJUSTABLE COLUMN STRAP (MASONRY ANCHOR) FOR BRICK VENEER
0 250 500 1250mm

17 S3.1 STANDARD DETAIL FOR FIREPROOFING STEEL COLUMN EXTERIOR COLUMN
0 100 200 500mm

18 S3.1 STANDARD DETAIL FOR FIREPROOFING STEEL COLUMN EXTERIOR COLUMN
0 100 200 500mm

19 S3.1 STANDARD DETAIL FOR FIREPROOFING STEEL COLUMN INTERIOR COLUMN
0 100 200 500mm

20 S3.1 STANDARD DETAIL FOR FIREPROOFING STEEL COLUMN INTERIOR COLUMN
0 100 200 500mm

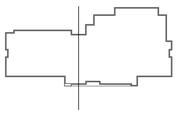
21 S3.1 STANDARD DETAIL FOR FIREPROOFING STEEL COLUMN INTERIOR COLUMN
0 100 200 500mm

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
2	2026.02.20	ISSUED FOR 80% REVIEW
3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
5		

NOTES:

KEY PLAN:



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All dimensions and conditions must be verified by the Contractor and reported to the Consultant before proceeding with the work. Do not scale drawings. Use figured dimensions only.

CLIENT:

BLUEWATER DISTRICT SCHOOL BOARD
351 1st AVENUE NORTH
CHESLEY, ONTARIO,

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

WATERLOO STREET
PORT ELGIN, ONTARIO

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

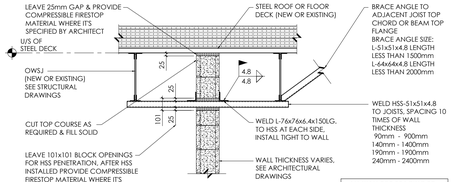
STRUCTURES+VG
THE VENTIN GROUP LTD.

STRUCTURAL DETAILS

S3.1

Tuesday, August 25, 2026 8:57:27 AM
K:\VG-Brantford\Port Elgin PS 22562\Drawings\Struct\Port Elgin Struct.dwg

DRAWN BY : ML
CHECKED BY : ML



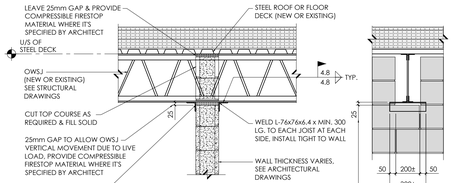
BRACING MAY BE PROVIDED BY COLUMNS OR INTERSECTING WALLS. EXTEND MASONRY PARTITION TO U/S OF DECK AS SHOWN.

ALL WALL TOP BRACING TO BE SUPPLIED AND INSTALLED BY MISCELLANEOUS METAL'S CONTRACTOR, TO INSTALL BRACING ANGLES TIGHT TO WALLS, BRACING TO BE INSTALLED AFTER WALLS ARE INSTALLED. MASON TO LEAVE HOLES FOR STEEL TUBE PENETRATIONS, TYPICAL.

NO ALL WALL TOP BRACING LOCATIONS ARE SHOWN IN STRUCTURAL FRAMING PLANS, CONTRACTOR TO PROVIDE BRACING PER SPECIFIED SPACING BASED ON WALL THICKNESS. TYPICAL.

1 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PARALLEL TO OWSJ

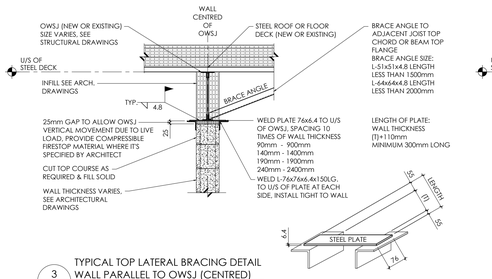
0 200 500 1000mm



BRACING MAY BE PROVIDED BY COLUMNS OR INTERSECTING WALLS. EXTEND MASONRY PARTITION TO U/S OF DECK AS SHOWN.

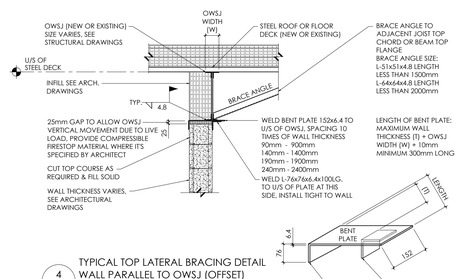
2 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PERPENDICULAR TO OWSJ

0 200 500 1000mm



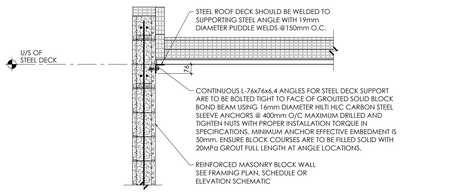
3 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PARALLEL TO OWSJ (CENTRED)

0 200 500 1000mm



4 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PARALLEL TO OWSJ (OFFSET)

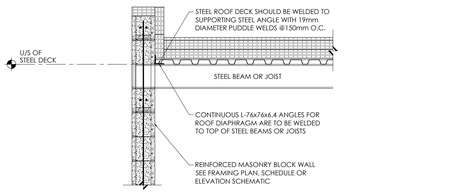
0 200 500 1000mm



BRACING MAY BE PROVIDED BY COLUMNS OR INTERSECTING WALLS. EXTEND MASONRY PARTITION TO U/S OF DECK AS SHOWN.

5 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PARALLEL TO STEEL BEAM

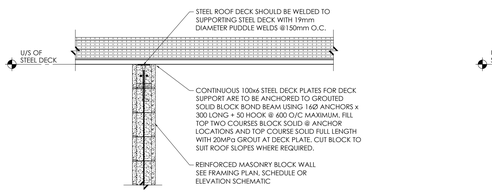
0 200 500 1000mm



BRACING MAY BE PROVIDED BY COLUMNS OR INTERSECTING WALLS. EXTEND MASONRY PARTITION TO U/S OF DECK AS SHOWN.

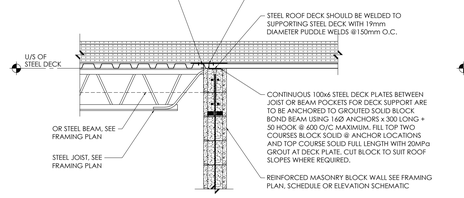
6 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PERPENDICULAR TO STEEL BEAM

0 200 500 1000mm



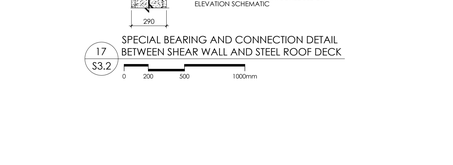
7 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PARALLEL TO STEEL BEAM (CENTRED)

0 200 500 1000mm



8 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PARALLEL TO STEEL BEAM (OFFSET)

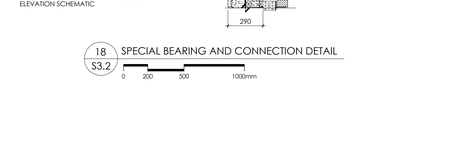
0 200 500 1000mm



BRACING MAY BE PROVIDED BY COLUMNS OR INTERSECTING WALLS. EXTEND MASONRY PARTITION TO U/S OF CONCRETE SLAB AS SHOWN.

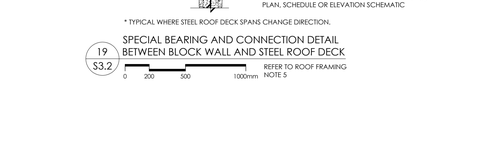
9 S3.2 TYPICAL WALL TOP LATERAL BRACING DETAIL WALL UNDER HOLLOW CORE PRECAST CONCRETE SLAB

0 200 500 1000mm



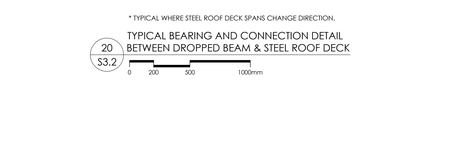
10 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PARALLEL TO TIE BEAM

0 200 500 1000mm



11 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PARALLEL TO STEEL BEAM (CENTRED)

0 200 500 1000mm



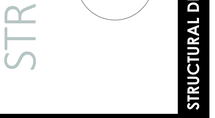
12 S3.2 TYPICAL TOP LATERAL BRACING DETAIL WALL PARALLEL TO STEEL BEAM (OFFSET)

0 200 500 1000mm

NIB S3.2 TYPICAL PARTITION WALL TOP LATERAL BRACING DETAIL AT END OF **LONG NIB WALL** IS HIGHER THAN CEILING BUT NOT EXTENDED UP TO FLOOR/ROOF STRUCTURE

0 200 500 1000mm AT WHERE TOP LATERAL BRACING CANT BE PROVIDED FROM FLOOR/ROOF STRUCTURE

**** ITS REQUIRED WHERE NIB WALL IS LONGER THAN 5 TIMES OF WALL THICKNESS
90mm - 450mm
140mm - 700mm
190mm - 950mm
240mm - 1200mm



***** REFER TO ROOF FRAMING NOTE 2

13 S3.2 TYPICAL BEARING AND CONNECTION DETAIL BETWEEN BLOCK WALL AND STEEL ROOF DECK

0 200 500 1000mm REFER TO ROOF FRAMING NOTE 2

14 S3.2 TYPICAL BEARING AND CONNECTION DETAIL BETWEEN BLOCK WALL AND STEEL ROOF DECK

0 200 500 1000mm REFER TO ROOF FRAMING NOTE 3

15 S3.2 TYPICAL BEARING AND CONNECTION DETAIL BETWEEN BLOCK WALL AND STEEL ROOF DECK

0 200 500 1000mm REFER TO ROOF FRAMING NOTE 4

* TYPICAL WHERE STEEL ROOF DECK SPANS CHANGE DIRECTION.

16 S3.2 TYPICAL BEARING AND CONNECTION DETAIL BETWEEN BLOCK WALL AND STEEL ROOF DECK

0 200 500 1000mm REFER TO ROOF FRAMING NOTE 5

15a S3.2 TYPICAL BEARING AND CONNECTION DETAIL BETWEEN BLOCK WALL AND STEEL ROOF DECK

0 200 500 1000mm SIMILAR TO ROOF FRAMING NOTE 4

17 S3.2 SPECIAL BEARING AND CONNECTION DETAIL BETWEEN SHEAR WALL AND STEEL ROOF DECK

0 200 500 1000mm

18 S3.2 SPECIAL BEARING AND CONNECTION DETAIL

0 200 500 1000mm

* TYPICAL WHERE STEEL ROOF DECK SPANS CHANGE DIRECTION.

19 S3.2 SPECIAL BEARING AND CONNECTION DETAIL BETWEEN BLOCK WALL AND STEEL ROOF DECK

0 200 500 1000mm REFER TO ROOF FRAMING NOTE 5

* TYPICAL WHERE STEEL ROOF DECK SPANS CHANGE DIRECTION.

20 S3.2 TYPICAL BEARING AND CONNECTION DETAIL BETWEEN DROPPED BEAM & STEEL ROOF DECK

0 200 500 1000mm

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
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5		

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ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

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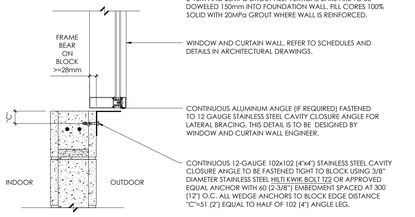
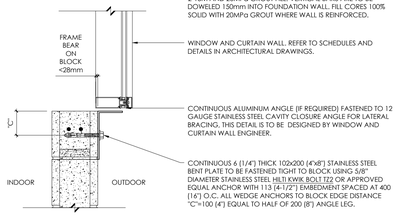
STRUCTURES+VG



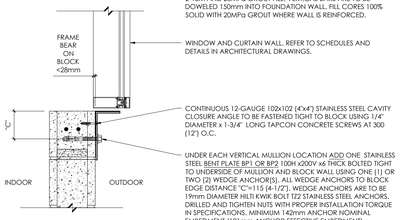
101 S3.3 TYPICAL WINDOW/CURTAIN WALL FRAME SUPPORT AT SILL

SECTION CASE #1
FRAME BEAR ON BLOCK >=28mm



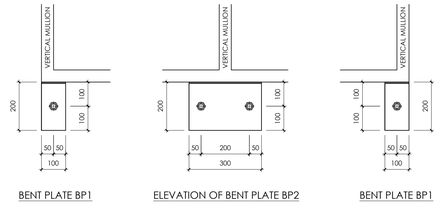
102 S3.3 TYPICAL WINDOW/CURTAIN WALL FRAME SUPPORT AT SILL

SECTION CASE #2
FRAME BEAR ON BLOCK <28mm

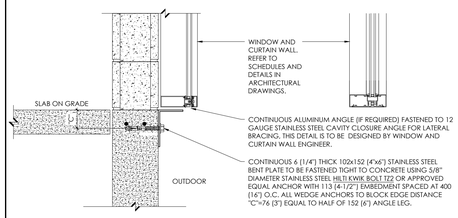


102A S3.3 TYPICAL WINDOW/CURTAIN WALL FRAME SUPPORT AT SILL (ALTERNATE)

ALTERNATE SECTION CASE #2
FRAME BEAR ON BLOCK <28mm

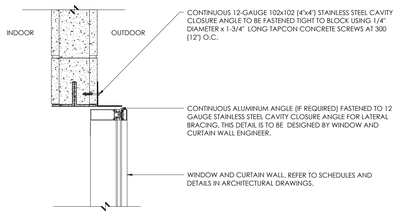


102B S3.3 TYPICAL ELEVATIONS OF BENT PLATE BP1 AND BP2



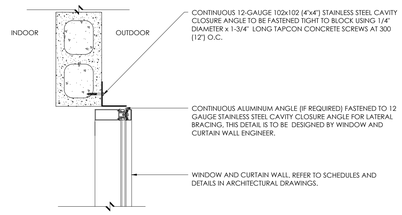
105 S3.3 TYPICAL WINDOW/CURTAIN WALL FRAME SUPPORT TO T/O FOUNDATION WALL

SECTION CASE #3



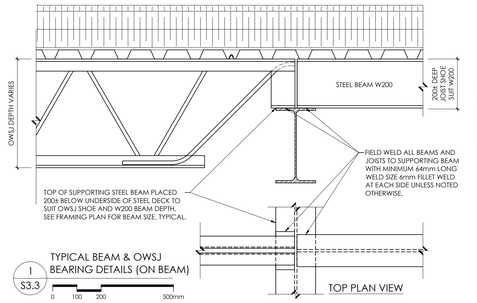
107 S3.3 TYPICAL WINDOW/CURTAIN WALL FRAME SUPPORT AT HEAD

SECTION

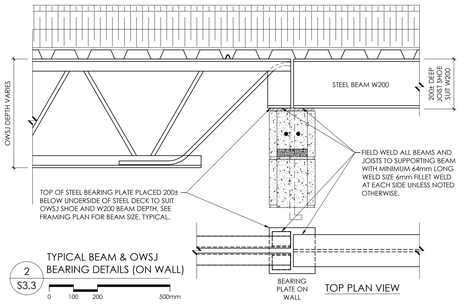


108 S3.3 TYPICAL WINDOW/CURTAIN WALL FRAME SUPPORT AT JAMB

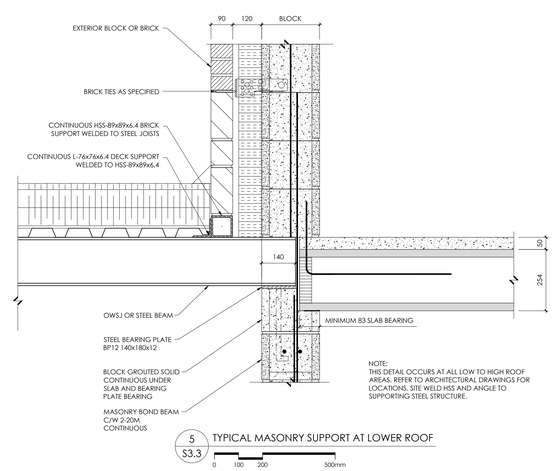
PLAN VIEW



1 S3.3 TYPICAL BEAM & OWSJ BEARING DETAILS (ON BEAM)

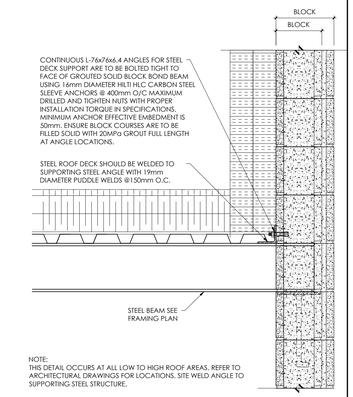


2 S3.3 TYPICAL BEAM & OWSJ BEARING DETAILS (ON WALL)



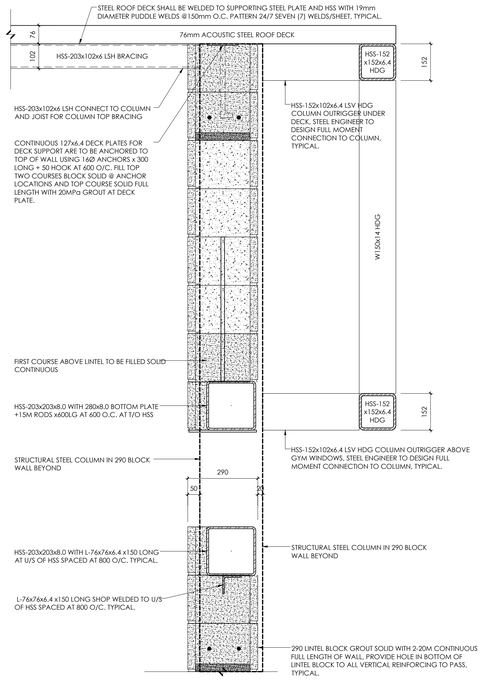
NOTE:
THIS DETAIL OCCURS AT ALL LOW TO HIGH ROOF AREAS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS. SITE WELD HSS AND ANGLE TO SUPPORTING STEEL STRUCTURE.

5 S3.3 TYPICAL MASONRY SUPPORT AT LOWER ROOF

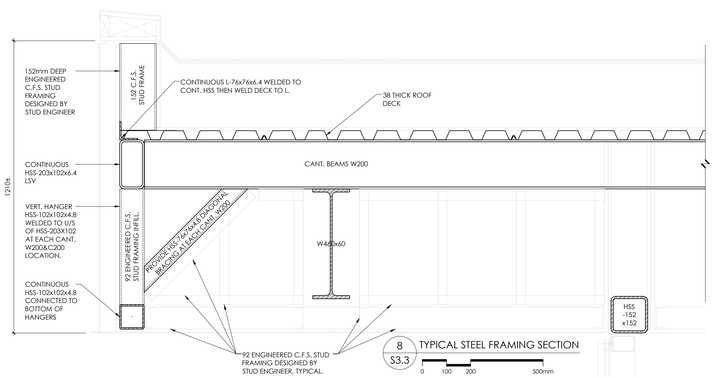


NOTE:
THIS DETAIL OCCURS AT ALL LOW TO HIGH ROOF AREAS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS. SITE WELD ANGLE TO SUPPORTING STEEL STRUCTURE.

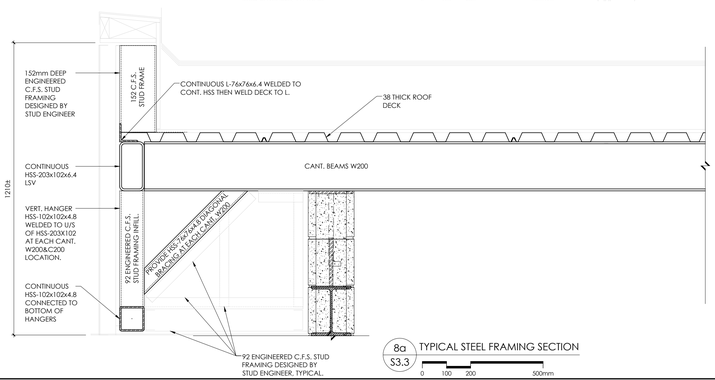
6 S3.3 TYPICAL DECK SUPPORT AT LOWER ROOF



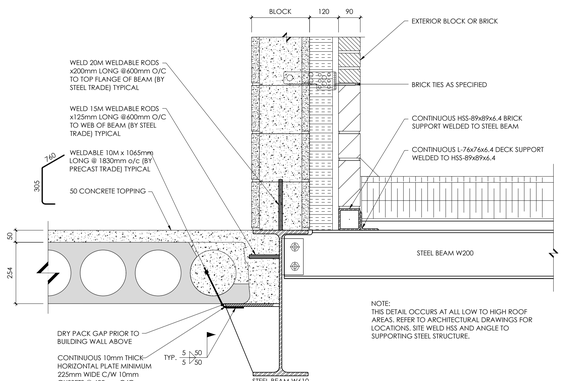
7 S3.3 TYPICAL STEEL FRAMING SECTION



8 S3.3 TYPICAL STEEL FRAMING SECTION



8a S3.3 TYPICAL STEEL FRAMING SECTION



NOTE:
THIS DETAIL OCCURS AT ALL LOW TO HIGH ROOF AREAS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS. SITE WELD HSS AND ANGLE TO SUPPORTING STEEL STRUCTURE.

4 S3.3 TYPICAL MASONRY SUPPORT AT LOWER ROOF

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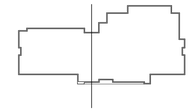

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STRUCTURAL DETAILS

S3.3

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CHECKED BY : ML

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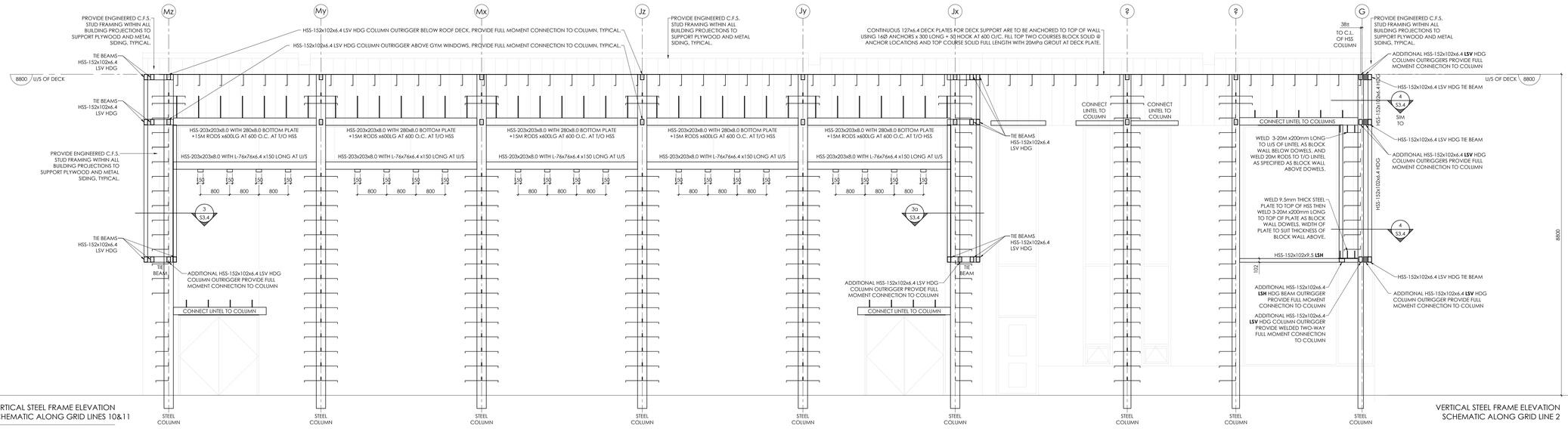
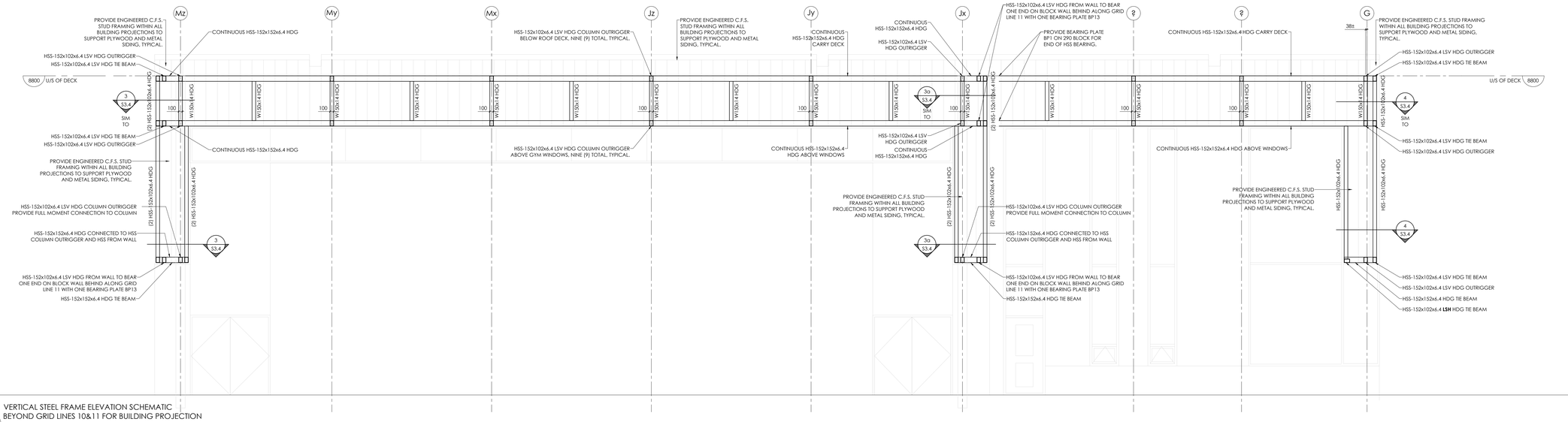


1 S3.4 VERTICAL STEEL FRAME ELEVATION SCHEMATIC ALONG GRID LINES 10&11

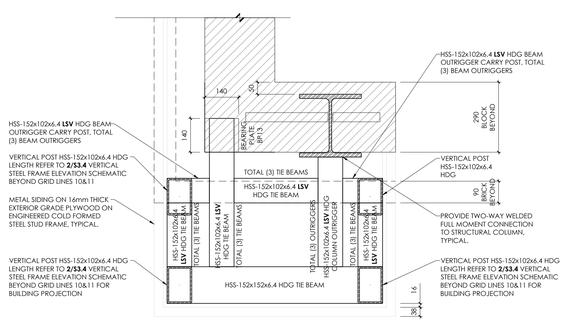
0 500 1000 2.5m

VERTICAL STEEL FRAME ELEVATION SCHEMATIC ALONG GRID LINE 2



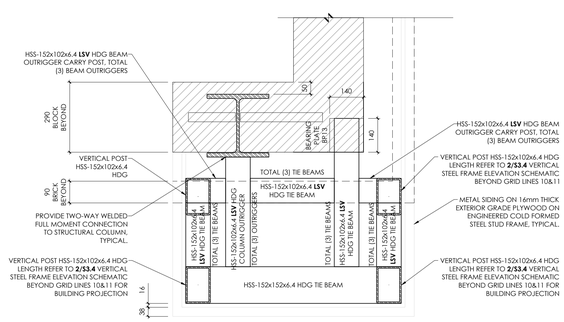
2 S3.4 VERTICAL STEEL FRAME ELEVATION SCHEMATIC BEYOND GRID LINES 10&11 FOR BUILDING PROJECTION

0 500 1000 2.5m



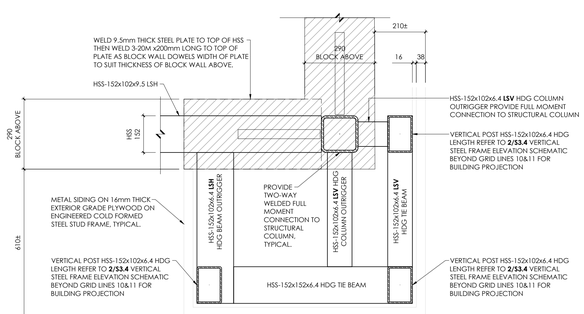
3 S3.4 STEEL FRAME PLAN VIEW FOR BUILDING PROJECTION

0 100 200 500mm



3a S3.4 STEEL FRAME PLAN VIEW FOR BUILDING PROJECTION

0 100 200 500mm



4 S3.4 STEEL FRAME PLAN VIEW FOR BUILDING PROJECTION

0 100 200 500mm

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STRUCTURAL DETAILS

S3.4

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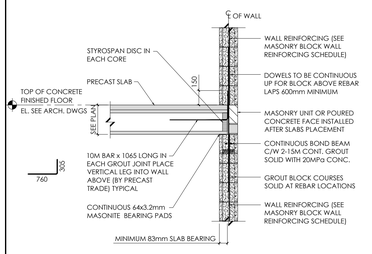
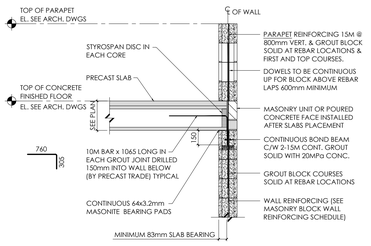


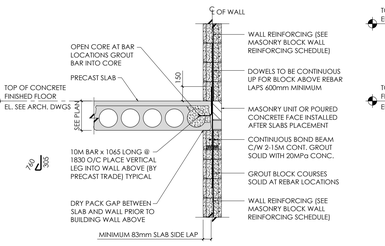
1 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL WITH BLOCK WALL ABOVE

0 250 500 1250mm



2 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL WITH OR WITHOUT PARAPET

0 250 500 1250mm



3 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL WITH BLOCK WALL ABOVE

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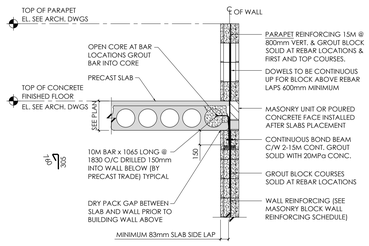

4 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL WITH OR WITHOUT PARAPET

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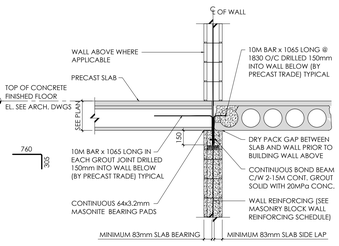
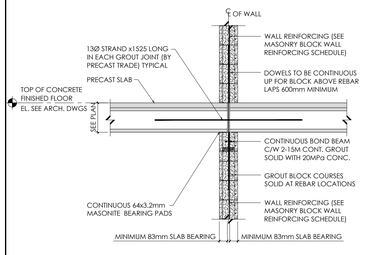


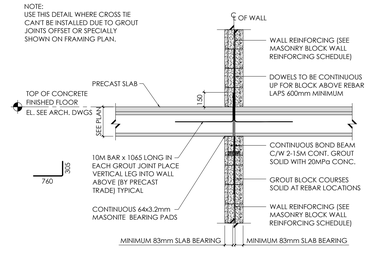
5 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL WITH OR WITHOUT BLOCK WALL ABOVE

0 250 500 1250mm



6 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL WITH BLOCK WALL ABOVE TIE ACROSS TYPICAL U.N.O.

0 250 500 1250mm



7 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL WITH BLOCK WALL ABOVE

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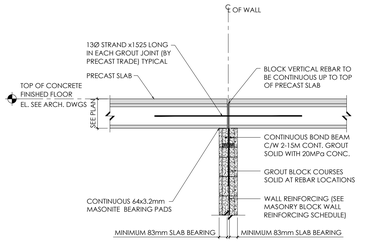
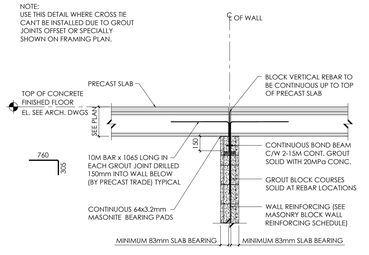


8 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL NOT BLOCK WALL ABOVE TIE ACROSS TYPICAL U.N.O.

0 250 500 1250mm



9 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL NOT BLOCK WALL ABOVE

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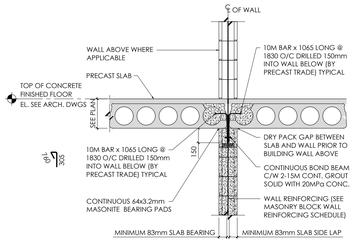

10 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON BLOCK WALL WITH OR WITHOUT BLOCK WALL ABOVE

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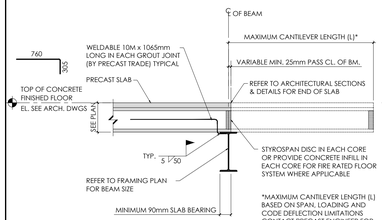

11 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM END BEARING / TIE DOWN

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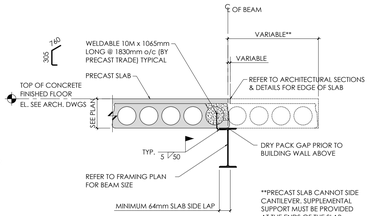
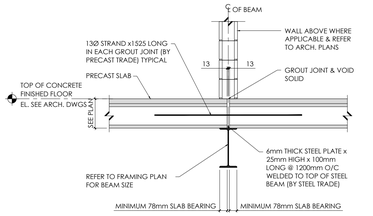


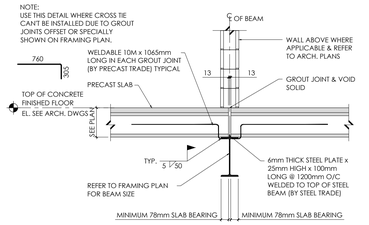
12 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM SLAB SIDE LAP / TIE DOWN

0 250 500 1250mm



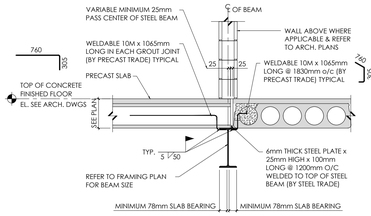
13 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM SHARED BEARING/TIE ACROSS

0 250 500 1250mm



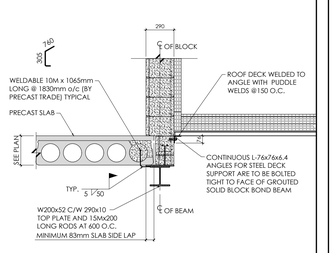
14 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM SHARED BEARING/TIE DOWN

0 250 500 1250mm



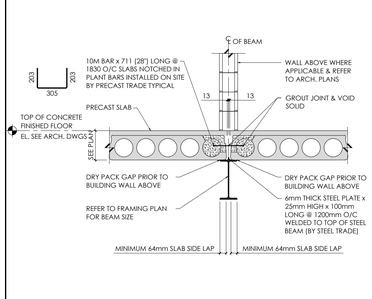
15 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM PERPENDICULAR/TIE DOWN

0 250 500 1250mm



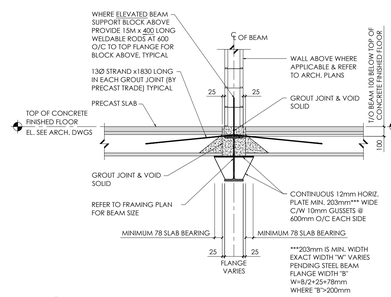
15a S3.5 PRECAST SLAB BEARING ON STEEL BEAM

0 250 500 1250mm



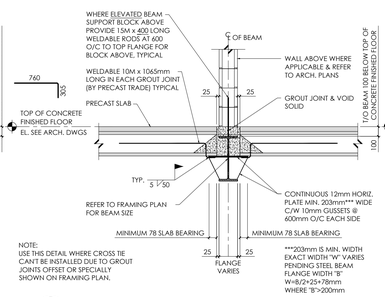
16 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM SLAB SIDE LAP WITH TIES

0 250 500 1250mm



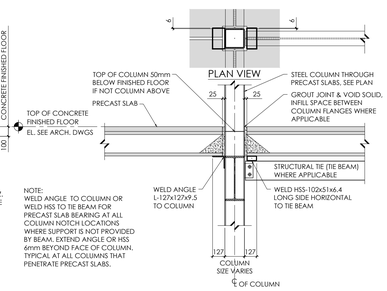
17 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM ELEVATED BEAM/TIE ACROSS

0 250 500 1250mm



18 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM ELEVATED BEAM/TIE DOWN

0 250 500 1250mm



19 S3.5 TYPICAL DETAIL FOR SUPPLEMENTAL PRECAST SLAB SUPPORT AT STEEL COLUMN THROUGH PRECAST SLABS

0 250 500 1250mm

20 S3.5 TYPICAL DETAIL FOR SUPPLEMENTAL PRECAST SLAB SUPPORT AT COLUMN THROUGH SLABS WITH RWL - RAIN WATER PIPE

0 250 500 1250mm

21 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM ELEVATED BEAM/TIE DOWN

0 250 500 1250mm

22 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM ELEVATED BEAM/TIE ACROSS

0 250 500 1250mm

23 S3.5 TYPICAL DETAIL PRECAST SLAB BEARING ON STEEL BEAM ELEVATED BEAM/TIE DOWN

0 250 500 1250mm

24 S3.3 TYPICAL DETAIL FOR SUPPLEMENTAL PRECAST SLAB SUPPORT AT COLUMN THROUGH SLABS WITH RWL - RAIN WATER PIPE

0 250 500 1250mm

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
2	2026.02.20	ISSUED FOR 80% REVIEW
3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
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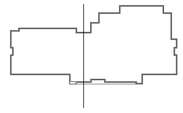

CLIENT:

BLUEWATER DISTRICT SCHOOL BOARD
351 1st AVENUE NORTH
CHESLEY, ONTARIO.

PROJECT:

22562

NEW PORT ELGIN COMMUNITY SCHOOL

WATERLOO STREET
PORT ELGIN, ONTARIO

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

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STRUCTURAL DETAILS

S3.5

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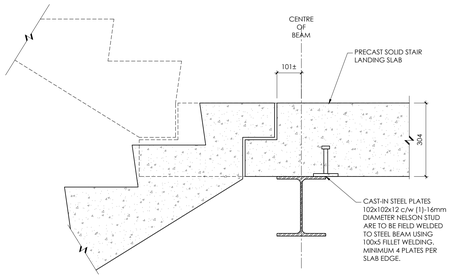
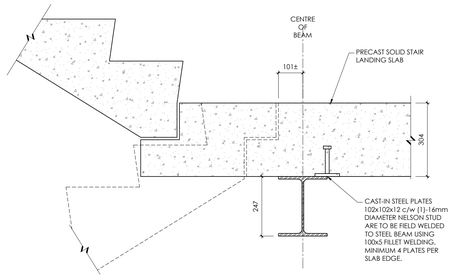


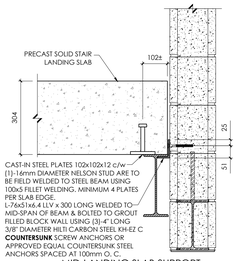
1 S3.6 SUPPORT STEEL UNDER PRECAST CONCRETE MID-LANDING SLAB

0 100 200 500mm



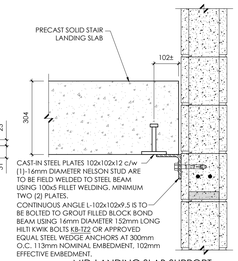
2 S3.6 SUPPORT STEEL UNDER PRECAST CONCRETE MID-LANDING SLAB

0 100 200 500mm



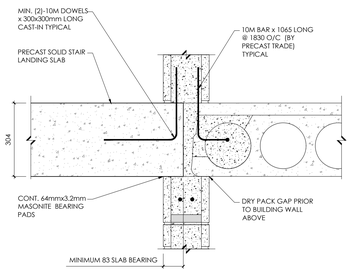
3 S3.6 MID-LANDING SLAB SUPPORT BEARING AT BACK SIDE

0 100 200 500mm



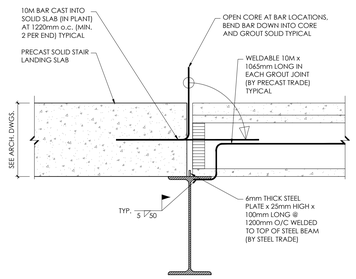
4 S3.6 MID-LANDING SLAB SUPPORT BEARING AT BOTH SIDES

0 100 200 500mm



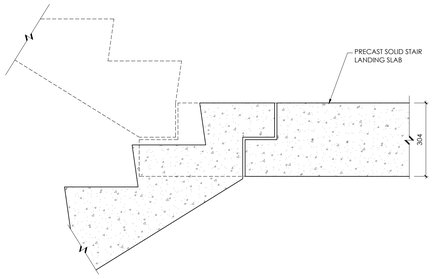
5 S3.6 FLOOR LANDING SLAB SUPPORT BEARING SIDE & BACK SIDE

0 100 200 500mm



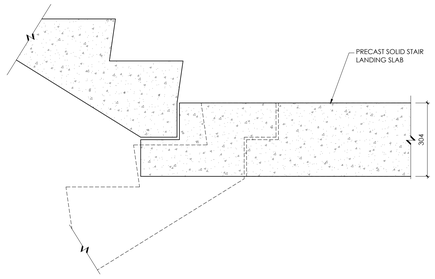
15 S3.6 FLOOR LANDING SLAB SUPPORT BEARING SIDE & BACK SIDE

0 100 200 500mm



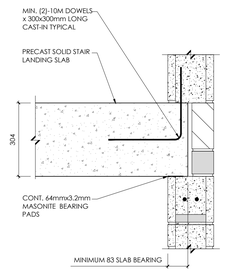
6 S3.6 SUPPORT DETAIL AT PRECAST CONCRETE FLOOR LANDING SLAB

0 100 200 500mm



7 S3.6 SUPPORT STEEL UNDER PRECAST CONCRETE MID-LANDING SLAB

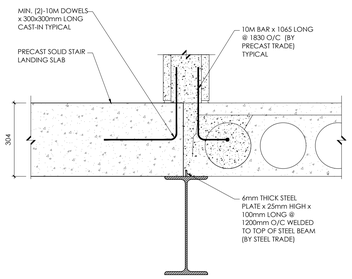
0 100 200 500mm



8 S3.6 FLOOR LANDING SLAB SUPPORT BEARING AT SIDE & BACK SIDES

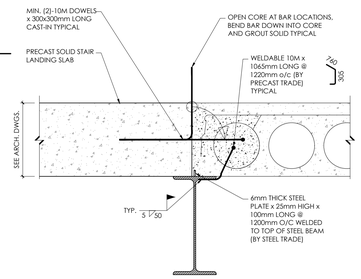
0 100 200 500mm

(NOT USED)



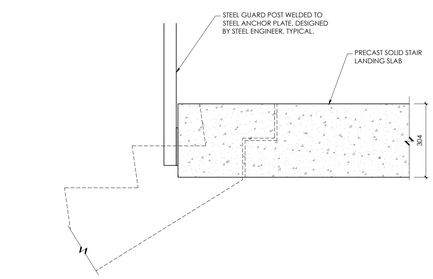
10 S3.6 FLOOR LANDING SLAB SUPPORT BEARING SIDE & BACK SIDE

0 100 200 500mm



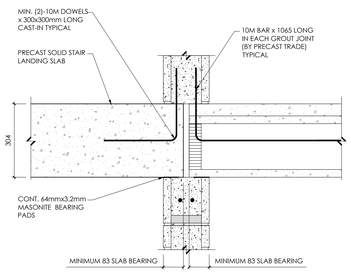
16 S3.6 FLOOR LANDING SLAB SUPPORT BEARING SIDE & BACK SIDE

0 100 200 500mm



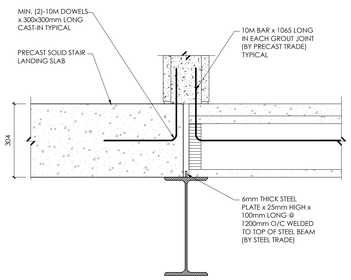
11 S3.6 GUARD POST CONNECTED TO EDGE OF PRECAST FLOOR SLAB

0 100 200 500mm



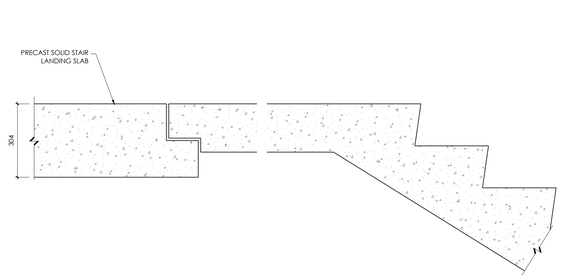
12 S3.6 FLOOR LANDING SLAB SUPPORT BEARING SIDE & BACK SIDE

0 100 200 500mm



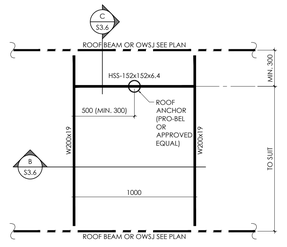
13 S3.6 FLOOR LANDING SLAB SUPPORT BEARING SIDE & BACK SIDE

0 100 200 500mm



14 S3.6 SUPPORT DETAIL AT PRECAST CONCRETE FLOOR LANDING SLAB

0 100 200 500mm



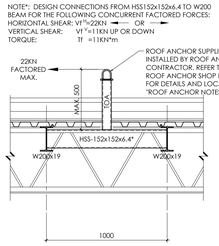
A S3.6 TYPICAL ROOF ANCHOR STEEL FRAMING PLAN

0 200 500 1000mm

ROOF ANCHOR NOTES:

1. ROOF ANCHORS SHOWN ON STRUCTURAL PLANS ARE FOR GENERAL GUIDANCE ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT NUMBER AND PRECISE LOCATIONS OF ROOF ANCHORS.
2. GENERAL CONTRACTOR IS TO COORDINATE ROOF ANCHOR LOCATIONS BETWEEN THE ROOF ANCHOR SUB-TRADE, STRUCTURAL STEEL AND STEEL DECK SUB-TRADES PRIOR TO SUBMITTING STRUCTURAL SHOP DRAWINGS FOR CONSULTANTS REVIEW.
3. STRUCTURAL STEEL SUB-TRADE IS TO PROVIDE THE APPROPRIATE DETAIL FROM THOSE SHOWN HERE, BASED ON THE ROOF ANCHOR'S LOCATION AND THE TYPE OF STRUCTURE THE ROOF ANCHOR IS TO BE ATTACHED TO.
4. ROOF ANCHORS ARE NOT TO BE ATTACHED TO THE TOP CHORD OF OPEN WEB STEEL JOIST. LOCATE ROOF ANCHOR OFF OF OPEN WEB STEEL JOIST AND PROVIDE FRAME AS SHOWN IN DETAILS.
5. THE STRUCTURAL CONSULTANT IS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION REVIEW OF THE STRUCTURE THAT THE ROOF ANCHOR IS ATTACHED TO. THE ROOF ANCHOR'S ATTACHMENT TO THE STRUCTURE IS THE ROOF ANCHOR SUB-TRADE'S DESIGN AND CONSTRUCTION REVIEW RESPONSIBILITY.
6. THE ROOF ANCHOR SUB-TRADE IS RESPONSIBLE FOR ALL MINISTRY OF LABOUR REQUIREMENTS PERTAINING TO THE DESIGN, INSTALLATION AND INITIAL CERTIFICATION OF THE ROOF ANCHOR SYSTEM FOR USE BY THE OWNER'S AGENT(S), INCLUDING BUT NOT LIMITED TO:
   A. INSPECTION OF THE ROOF ANCHOR SYSTEM AT THE TIME OF INSTALLATION.
   B. ALL MINISTRY OF LABOUR FORMS, AND
   C. PREPARATION AND SUPPLY TO THE OWNER OF REQUIRED PLANS AND DETAILS REGARDING RIGGING AND USE OF THE ROOF ANCHOR SYSTEM.
7. ROOF ANCHOR (TOA) FOR FALL ARREST SYSTEM DESIGN LOAD IS 16.0KN (3600LBS) (UNFACTORED, WITHOUT PERMANENT DEFORMATION) & 22.0KN (5000LBS) (FACTORED, WITHOUT FRACTURE OR PULLOUT OR BOTH) IN ANY DIRECTION & ROOF ANCHOR FOR TRAVEL RESTRAINT SYSTEM DESIGN LOAD IS 4.0KN (900LBS) (INCLUDES A SAFETY FACTOR OF 2.0) (UNFACTORED, WITHOUT PERMANENT DEFORMATION) & 8.9KN (2000LBS) (FACTORED, WITHOUT FRACTURE OR PULLOUT OR BOTH) IN ANY DIRECTION IN ACCORDANCE WITH LATEST CAN/CSA Z259 DESIGN OF ACTIVE FALL-PROTECTION SYSTEMS. LOAD IS TO BE APPLIED APPROXIMATELY 400mm ABOVE ROOF DECK. (MINIMUM 200mm ABOVE ROOFING).

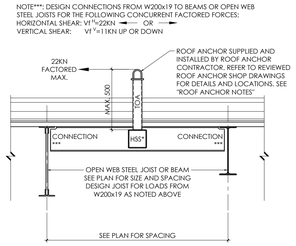
NOTE*: DESIGN CONNECTIONS FROM HSS152x152x6.4 TO W200 BEAM FOR THE FOLLOWING CONCURRENT FACTORED FORCES:
HORIZONTAL SHEAR: V_f^{Hor}=22KN → OR ←
VERTICAL SHEAR: V_f^{ver}=11KN UP OR DOWN
TORQUE: T_f =11KN*m



B S3.6 TYPICAL ROOF ANCHOR STEEL FRAMING SECTION

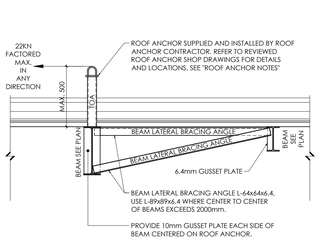
0 200 500 1000mm

NOTE***: DESIGN CONNECTIONS FROM W200x19 TO BEAMS OR OPEN WEB STEEL JOISTS FOR THE FOLLOWING CONCURRENT FACTORED FORCES:
HORIZONTAL SHEAR: V_f^{Hor}=22KN → OR ←
VERTICAL SHEAR: V_f^{ver}=11KN UP OR DOWN



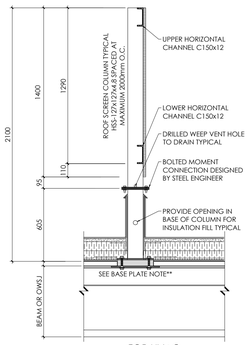
C S3.6 TYPICAL ROOF ANCHOR STEEL FRAMING SECTION

0 200 500 1000mm



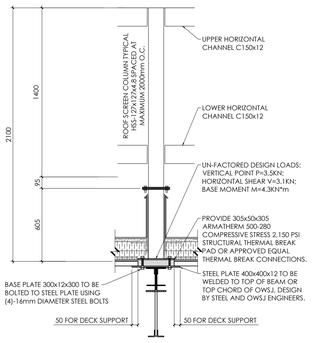
D S3.6 TYPICAL SECTION FOR ROOF ANCHOR DIRECTLY CONNECTED TO STEEL BEAM

0 200 500 1000mm



RS1 S3.6 TYPICAL ROOF SCREEN STEEL FRAME SECTION

0 200 500 1000mm



RS2 S3.6 TYPICAL ROOF SCREEN STEEL FRAME SECTION

0 200 500 1000mm

ROOF SCREEN STEEL FRAME NOTES:

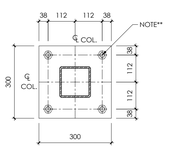
NOTE 1:

REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR PROPOSED ROOF TOP UNIT SCREEN LOCATIONS. CONTRACTOR TO COORDINATE POST LOCATIONS WITH FINAL SCREEN SHOP DRAWINGS PRIOR TO STEEL FABRICATION. ANY CHANGES, ALTERATIONS OR REVISIONS MUST BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

NOTE 2:

ALL EXPOSED STEEL TO BE HOT DIPPED GALVANIZED WITH BOLTED CONNECTIONS, ALL HOLLOW SECTION STEEL (HSS) TO HAVE END ENCLOSURE PLATE. ALL COLUMNS TO HAVE WELDED COLLAR FOR FLASHING TERMINATION. INSTALL ROOFING MEMBRANES & PRE-FIN. METAL SKIRT FLASHING UP U/S & PROVIDE CONTINUOUS CAULK, TYPICAL.

NOTE** BASE PLATE TO BE BOLTED TO STEEL PLATE USING (4)-16mm DIAMETER STEEL BOLTS.



300x12x300

RS3 S3.6 STEEL BASE PLATE FOR COLUMN HSS-127x127

0 100 200 500mm

REVISIONS		
NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
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3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
5		

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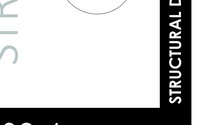
KEY PLAN:



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STRUCTURAL DETAILS

S3.6

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Tuesday, August 25, 2026 8:37:27 AM

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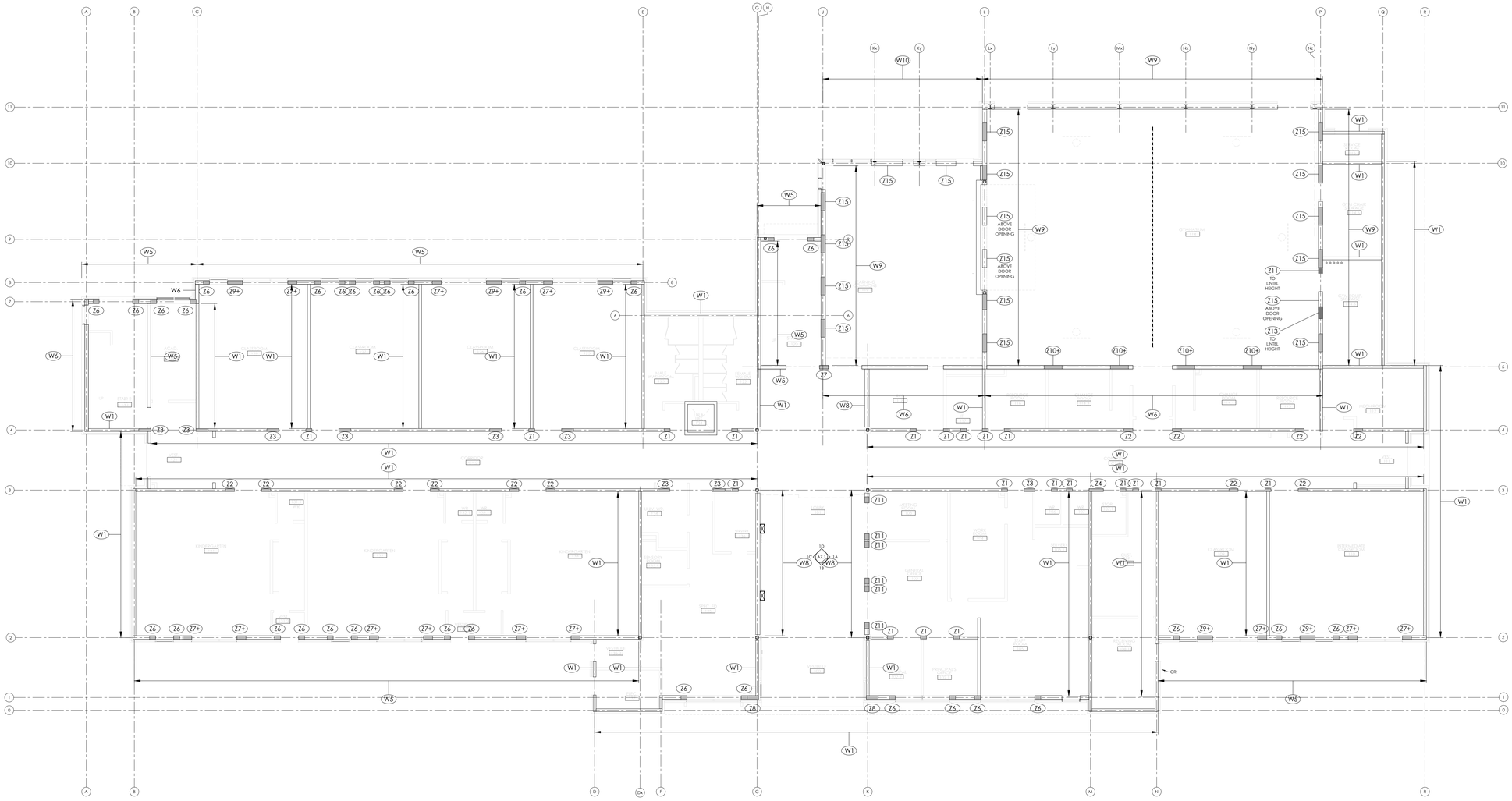
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W9
W5
W6
W1
W8
Z15
Z6
Z1
Z2
Z3
Z10+
Z11
Z13
Z7
Z8
Z9+
Z7+
Z6 26
Z15 ABOVE DOOR OPENING
Z11 TO LINTEL HEIGHT
Z13 TO LINTEL HEIGHT
CR
CLOSET
CLOSET
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MASONRY PARTITION WALL REINFORCING SCHEDULE

WALL TYPE	HORIZONTAL	VERTICAL
90 BLOCK	STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C (SEE NOTE 4 FOR STACK BOND) WIRE SIZE Ø3.65mm x Ø3.65mm	
140 BLOCK	STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm CONTINUOUS BOND BEAM C/W 1-15M AT TOP	1-15M AT FACE OF EACH OPENING 1-15M AT ENDS OF EACH WALL
190 BLOCK	STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm CONTINUOUS BOND BEAM C/W 2-15M AT TOP	1-15M AT FACE OF EACH OPENING 1-15M AT ENDS OF EACH WALL

PARTITION WALL NOTE: (ALSO REFER TO MASONRY NOTES ON S1.1)

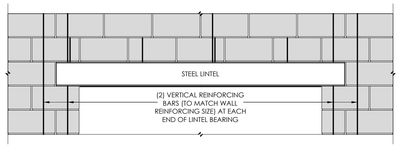
1. ALL VERTICAL BARS ARE TO BE FULL HEIGHT, TIE BASE OF BLOCK WALL TO TOP OF CONCRETE FLOOR SLAB WITH 15M x 400 LONG DOWELS AT 1200 O/C U.N.O. WITH 100mm EMBEDMENT, EPOXY IN PLACE. GROUT CORES 100% SOLID W/ 20MPa GROUT WHERE COURSE IS REINFORCED.
2. ALL NON-LOAD BEARING MASONRY WALLS ARE PARTITION WALLS.
3. TOP OF ALL MASONRY PARTITION WALLS SHALL BE LATERAL BRACED TO UNDERSIDE OF PRECAST SLABS OR ROOF STRUCTURE IN ACCORDANCE WITH DETAILS ON S3.2 OR APPROVED EQUAL DETAIL. BRACING TO BE SPACED AT 10 TIMES OF WALL THICKNESS MAXIMUM AND MAY BE PROVIDED BY STRUCTURAL COLUMNS OR INTERSECTING WALLS. BRACING TO TIGHT TO EACH SIDE OF PARTITION WALLS AND ALLOW FOR VERTICAL MOVEMENT FROM PARTITION WALLS (DO NOT LOAD ON PARTITION WALLS).
4. FOR STACK OR DECORATIVE PATTERNS WHERE BONDING OVERLAP IS 50mm OR LESS, CHANGE MASONRY WALL HORIZONTAL JOINT REINFORCEMENT SPACING FROM 400mm TO 200mm.

MASONRY VENEER REINFORCING SCHEDULE

WALL TYPE	HORIZONTAL REINFORCING IF STACK BOND (NOTE 1)
90 BLOCK VENEER	REINFORCE STACK BOND BLOCK VENEER WITH CONTINUOUS LONGITUDINALLY ADDITIONAL HORIZONTAL JOINT REINFORCEMENT (STANDARD WEIGHT LADDER REINFORCEMENT WIRE SIZE Ø3.65mm x Ø3.65mm) IN BED JOINT ALONG CENTER OF UNIT @ 400mm VERTICAL SPACING.
90 BRICK VENEER	REINFORCE STACK BOND BRICK VENEER WITH CONTINUOUS LONGITUDINALLY ADDITIONAL HORIZONTAL JOINT REINFORCEMENT Ø3.65mm SINGLE-ROD IN BED JOINT ALONG CENTER OF UNIT @ 200mm VERTICAL SPACING.

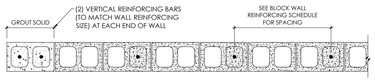
NOTE 1: HORIZONTAL REINFORCING IS REQUIRED ONLY FOR STACK OR DECORATIVE PATTERNS WHERE BONDING OVERLAP IS 50mm OR LESS.

1. FOR UNIT MASONRY WALLS AND VENEERS, FOR STACK OR DECORATIVE PATTERNS WHERE BONDING OVERLAP IS 50mm OR LESS, FOR A WYTHE OF SOLID MASONRY UNITS NOT MORE THAN 90mm THICK, EACH WYTHE OF MASONRY SHALL BE CONTINUOUS REINFORCED LONGITUDINALLY WITH ADDITIONAL HORIZONTAL JOINT REINFORCEMENT Ø3.65mm SINGLE-ROD IN BED JOINT ALONG CENTER OF UNIT @ 400mm VERTICAL SPACING.

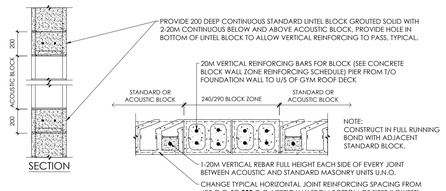


1 S4.2 TYPICAL BLOCK WALL REINFORCING ELEVATION @ FACES OF EACH OPENING
N.T.S.

2 S4.2 TYPICAL BLOCK WALL REINFORCING PLAN VIEW @ FACES OF EACH OPENING
N.T.S.



3 S4.2 TYPICAL BLOCK WALL REINFORCING PLAN VIEW @ ENDS OF EACH WALL
N.T.S.

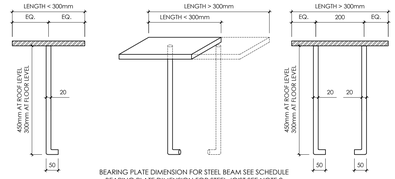


ACO - TYPICAL BLOCK WALL REINFORCING PLAN VIEW @ GYM ACOUSTIC BLOCK
N.T.S.

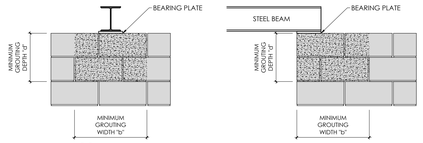
STEEL BEARING PLATE SCHEDULE

MARK	PLATE SIZE WIDTH x LENGTH x THICKNESS	MINIMUM GROUTING WIDTH x DEPTH (b x d)	ANCHORAGE
BP1	180x180x12	600x400	1-20mm DIAMETER ROD
BP2	190x190x16	600x400	1-20mm DIAMETER ROD
BP3	190x250x16	600x400	1-20mm DIAMETER ROD
BP4	190x300x20	800x400	2-20mm DIAMETER RODS
BP5	190x350x25	800x400	2-20mm DIAMETER RODS
BP6	190x400x25	800x400	2-20mm DIAMETER RODS
BP7	190x450x30	800x400	2-20mm DIAMETER RODS
BP8	240x300x20	800x400	2-20mm DIAMETER RODS
BP9	240x240x16	600x400	1-20mm DIAMETER RODS
BP10	290x400x25	1000x600	2-20mm DIAMETER RODS
BP11	140x230x16	600x400	1-20mm DIAMETER ROD
BP12	140x180x12	600x400	1-20mm DIAMETER ROD
BP13	140x140x12	600x400	1-20mm DIAMETER ROD

NOTES:
1. ALL STEEL BEAMS AND JOISTS SHOWN ON FRAMING PLANS REQUIRE STEEL BEARING PLATES. (BUT FOR STEEL LINTELS SHOWN IN LINTEL SCHEDULES. BEARING PLATES ARE NOT REQUIRED UNLESS IT IS SPECIFICALLY SHOWN ON FRAMING PLANS). WHERE NOT SHOWN, PROVIDE BP1 AT ROOF LEVEL & BP2 AT FLOOR LEVEL.
2. ALL STEEL BEARING PLATE FOR OPEN WEB STEEL JOISTS (OWSJ) SHOULD BE DESIGNED, REVIEWED, APPROVED BY JOIST ENGINEER. ENSURE BEARING PLATES ARE WIDE ENOUGH FOR PROPOSED JOIST SHOES. GENERAL CONTRACTOR TO DO THIS COORDINATION.
3. MINIMUM 2 MASONRY BLOCK COURSES TO BE GROUTED SOLID BENEATH ALL STEEL BEARING PLATES U.N.O.
4. BEARING PLATES SHALL BE PROPERLY INSTALLED AND TO LINE UP CENTERLINE OF BEAMS, JOISTS AND LINTELS. FIELD WELD ALL BEAMS, JOISTS AND LINTELS TO BEARING PLATES WITH 100mm LONG MINIMUM WELD SIZE 6mm FILLET WELD AT EACH SIDE OF MEMBER UNLESS NOTED OTHERWISE.
5. STEEL ANCHORAGE ROD FOR BEARING PLATE SEE TYPICAL DETAILS BELOW. WHEN USED AT ROOF PROVIDE HOLD DOWN BAR(S) 1-15M (OR 2-15M WHERE 2-20M RODS USED) FULL HEIGHT OF WALL, MINIMUM 400mm LAP LENGTH AT BAR SPLICE LOCATIONS.
6. FOR W BEAM USED AS BEARING PLATE, PROVIDE 10 STIFFENER PLATE EACH SIDE OF W BEAM UNDER BEAM BEARING LOCATION.



5 S4.2 TYPICAL BEARING PLATE ELEVATION DETAILS
N.T.S.



6 S4.2 MINIMUM GROUTING WIDTH x DEPTH (b x d)
N.T.S.

MASONRY LOAD BEARING WALL REINFORCING SCHEDULE

WALL MARK	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20
UNIT SIZE	190				240			290			190				240			290		
VERTICAL	15M@1200	15M@800	15M@600	15M@400	20M@800	20M@600	20M@400	20M@800	20M@600	20M@400	15M@1200	15M@800	15M@600	15M@400	20M@800	20M@600	20M@400	20M@800	20M@600	20M@400
OR GYM ROOF +8800 U/S DECK — MAIN ROOF +8800 U/S DECK AT HIGH POINTS											190mm BLOCK REINFORCED WITH HORIZONTAL STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm & VERTICAL 15M @ 1200 O/C	190mm BLOCK REINFORCED WITH HORIZONTAL STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm & VERTICAL 15M @ 800 O/C	190mm BLOCK REINFORCED WITH HORIZONTAL STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm & VERTICAL 15M @ 600 O/C	190mm BLOCK REINFORCED WITH HORIZONTAL STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm & VERTICAL 15M @ 400 O/C	240mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 800 O/C	240mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 600 O/C	240mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 400 O/C	290mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 800 O/C	290mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 600 O/C	290mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 400 O/C
SECOND FLOOR +4400 FINISHED FLOOR	190mm BLOCK REINFORCED WITH HORIZONTAL STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm & VERTICAL 15M @ 1200 O/C	190mm BLOCK REINFORCED WITH HORIZONTAL STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm & VERTICAL 15M @ 800 O/C	190mm BLOCK REINFORCED WITH HORIZONTAL STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm & VERTICAL 15M @ 600 O/C	190mm BLOCK REINFORCED WITH HORIZONTAL STANDARD WEIGHT LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø3.65mm x Ø3.65mm & VERTICAL 15M @ 400 O/C	240mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 800 O/C	240mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 600 O/C	240mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 400 O/C	290mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 800 O/C	290mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 600 O/C	290mm BLOCK REINFORCED WITH HORIZONTAL SUPER HEAVY LADDER REINFORCEMENT @ 400mm O/C WIRE SIZE Ø4.76mm x Ø4.76mm & VERTICAL 20M @ 400 O/C									
FIRST FLOOR 0000 FINISHED FLOOR SLAB																				

MASONRY LOAD BEARING WALL REINFORCING NOTES:
(ALSO REFER TO MASONRY NOTES ON S1.1)

1. UNLESS NOTED OTHERWISE LEVEL 1 FLOOR MASONRY LOAD BEARING WALLS TO BE REINFORCED IN ACCORDANCE WITH **W1-190 BLOCK, W5-240 BLOCK, W8-290 BLOCK**. LEVEL 2 FLOOR MASONRY LOAD BEARING WALLS TO BE REINFORCED IN ACCORDANCE WITH **W11-190 BLOCK, W15-240 BLOCK, W18-290 BLOCK**. STRUCTURAL WALL MARKS ARE DIFFERENT FROM ARCHITECTURAL WALL MARKS, ONLY TO SPECIFY WALL REINFORCING BY DIFFERENT WALL THICKNESS AND LEVEL.
2. ALL VERTICAL BARS ARE TO BE FULL HEIGHT, DOWELED 150mm FOR 15M & 300mm FOR 20M INTO FOUNDATION WALL OR FLOOR SLAB. ALL BARS ARE TO BE DOWELED IN PLACE USING HILTI HIT-HY 200-R V3 OR HILTI HIT-RE 500 V3 OR APPROVED EQUAL ADHESIVE IF THEY ARE NOT WET SET AT TIME OF POURING CONCRETE. FILL CORES 100% SOLID WITH 20MPa GROUT WHERE WALL IS REINFORCED.
3. PROVIDE MASONRY BLOCK BOND BEAM AT TOP OF WALL, NEAR UNDERSIDE OF FLOOR SLABS, OWSJ OR BEAM POCKETS, MINIMUM ONE (1) BOND BEAM IS REQUIRED FOR EACH LEVEL. ALL BOND BEAMS TO HAVE 20MPa GROUT FILL. FOR 190 BLOCK BOND BEAM, REINFORCED WITH 2-15M CONTINUOUS, FOR 240 AND 290 BLOCK BOND BEAMS, REINFORCED WITH 2-20M CONTINUOUS.
4. ALL EXTERIOR WALLS ARE MASONRY LOAD BEARING WALLS UNLESS NOTED OTHERWISE.
5. AT CHANGE TABLE LOCATION REINFORCE BLOCK WALL AS PER W4, W7, W10 & W14, W17, W20.
6. FOR STACK OR DECORATIVE PATTERNS WHERE BONDING OVERLAP IS 50mm OR LESS, CHANGE MASONRY WALL HORIZONTAL JOINT REINFORCEMENT SPACING FROM 400mm TO 200mm.
7. PROVIDE TWO (2) VERTICAL REINFORCING BARS IN INDIVIDUAL BLOCK CORES FULL HEIGHT AT EACH FACE OF EACH OPENING AND ENDS OF EACH WALL FOR ALL SHEAR WALLS.
8. WHERE WALLS START FROM SECOND FLOOR TIE BASE OF BLOCK WALL TO TOP OF CONCRETE FLOOR SLAB WITH 15M x 400 LONG DOWELS SPACING AS PER SCHEDULE U.N.O. WITH 100mm EMBEDMENT, EPOXY IN PLACE.

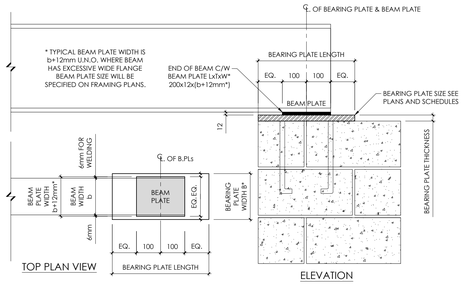
MASONRY CONNECTORS FOR **EXTERIOR** BRICK/BLOCK

BACK-UP WALL	DESCRIPTION
NEW BLOCK WALL	90mm BRICK/BLOCK TO BE TIED TO BACK-UP WALL USING STAINLESS STEEL FERO THERMAL BLOCK SHEAR CONNECTOR HOLED WITH 4.76mm DIAMETER V-TIE (OR APPROVED EQUAL CONNECTORS) SPACED AT 800mm HORIZONTAL x 400mm VERTICAL.
NEW CONCRETE WALL	90mm BRICK/BLOCK TO BE TIED TO BACK-UP WALL USING STAINLESS STEEL FERO THERMAL HEAVY DUTY HOLED RAP-TIE WITH 4.76mm DIAMETER V-TIE (OR APPROVED EQUAL CONNECTORS) MINIMUM 2 FASTENERS PER L-PLATE. SPACED AT 800mm HORIZONTAL x 400mm VERTICAL.

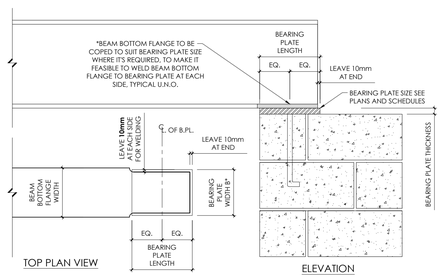
MASONRY CONNECTORS FOR **INTERIOR** BRICK/BLOCK

BACK-UP WALL	DESCRIPTION
NEW CONCRETE WALL NEW BLOCK WALL	90mm BRICK/BLOCK TO BE TIED TO BACK-UP WALL USING HOT-DIP GALVANIZED FERO HEAVY DUTY HOLED RAP-TIE WITH 4.76mm DIAMETER V-TIE (OR APPROVED EQUAL CONNECTORS) SPACED AT 800mm HORIZONTAL x 400mm VERTICAL.

NOTE:
MAXIMUM SPACING AND MINIMUM EMBEDMENT SHALL PER MANUFACTURER'S RECOMMENDATION AS WELL. THE MORE STRINGENT SHALL APPLY. CONTRACTOR TO SELECT PROPER TIES TO SUIT CAVITIES SHOWN IN ARCHITECTURAL DETAILS.



5A S4.2 TYPICAL BEARING PLATE WITH BEAM PLATE PLAN & ELEVATION DETAILS
0 100 200 500mm



5B S4.2 TYPICAL BEARING PLATE WITH COPED BOTTOM FLANGE PLAN & ELEVATION DETAILS
0 100 200 500mm

NOTE:
THIS IS APPLIED TO WHERE BEAM BOTTOM FLANGE IS WIDER THAN BEARING PLATE WIDTH MINUS **20mm**. HENCE WELDING BEAM END TO BEARING PLATE BECOMES NOT FEASIBLE. TYPICAL, U.N.O.

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
2	2026.02.20	ISSUED FOR 80% REVIEW
3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
5		

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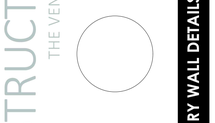
All dimensions are the responsibility of the Contractor to be checked and verified by the General Contractor

KEY PLAN:



CLIENT:

BLUEWATER DISTRICT SCHOOL BOARD
351 1st AVENUE NORTH
CHESLEY, ONTARIO.

PROJECT:

22562

NEW PORT ELGIN COMMUNITY SCHOOL

WATERLOO STREET
PORT ELGIN, ONTARIO

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

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MASONRY WALL DETAILS AND SCHEDULES

S4.2

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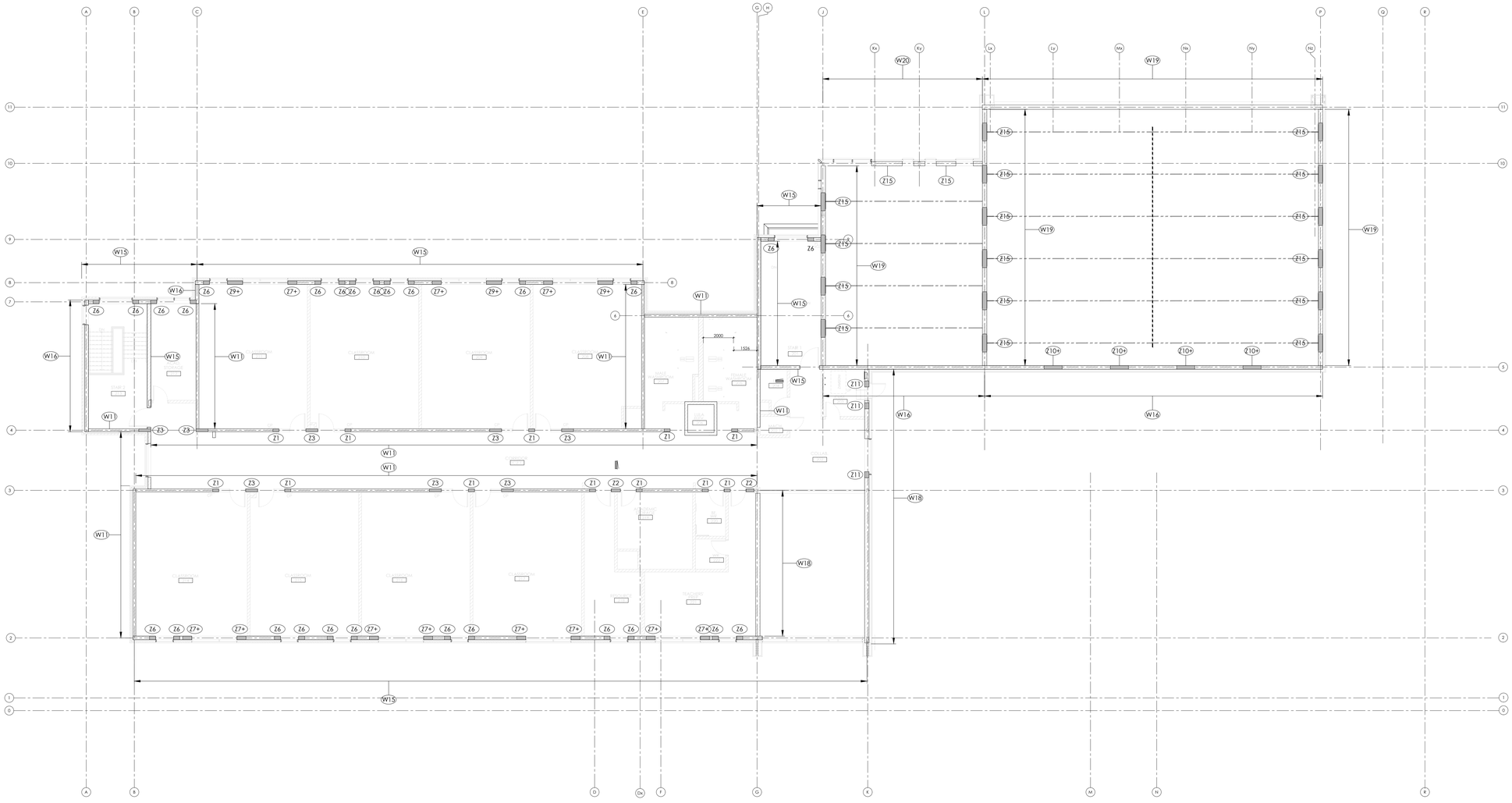
CHECKED BY : ML



1 LEVEL 2 FLOOR MASONRY WALL PLAN
S4.3 1:125

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
2	2026.02.20	ISSUED FOR 80% REVIEW
3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
5		

NOTES:

All dimensions are measured/verified by the Contractor

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KEY PLAN:

CLIENT:

BLUEWATER
DISTRICT SCHOOL BOARD
351 1st AVENUE NORTH
CHESLEY, ONTARIO.

PROJECT:

22562

NEW PORT ELGIN COMMUNITY SCHOOL

WATERLOO STREET
PORT ELGIN, ONTARIO

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

STRUCTURES+VG
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LEVEL 2 FLOOR MASONRY WALL PLAN

S4.3

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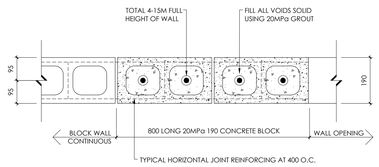
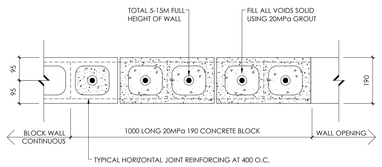


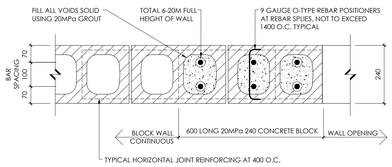
Z3 STANDARD DETAIL FOR BLOCK ZONE REINFORCING Z3

0 100 200 500mm



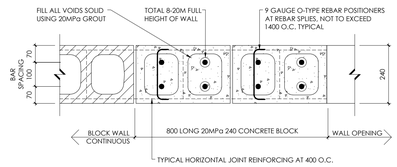
Z4 STANDARD DETAIL FOR BLOCK ZONE REINFORCING Z4

0 100 200 500mm



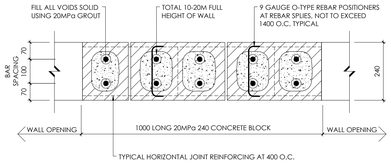
Z7+ STANDARD DETAIL FOR BLOCK ZONE REINFORCING Z7+

0 100 200 500mm



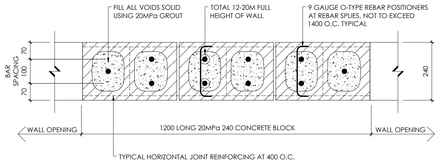
Z8+ STANDARD DETAIL FOR BLOCK ZONE REINFORCING Z8+

0 100 200 500mm



Z9+ STANDARD DETAIL FOR BLOCK ZONE REINFORCING Z9+

0 100 200 500mm



Z10+ STANDARD DETAIL FOR BLOCK ZONE REINFORCING Z10+

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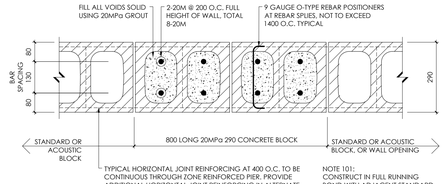
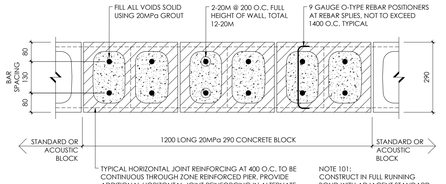


Z13 STANDARD DETAIL FOR BLOCK ZONE REINFORCING Z13

0 100 200 500mm



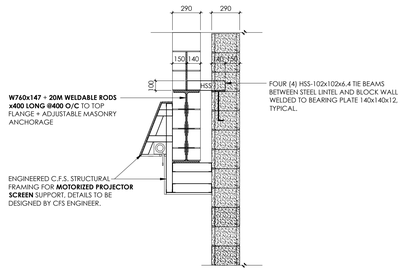
Z15 STANDARD DETAIL FOR BLOCK ZONE REINFORCING Z15

0 100 200 500mm

CONCRETE BLOCK WALL ZONE REINFORCING SCHEDULE

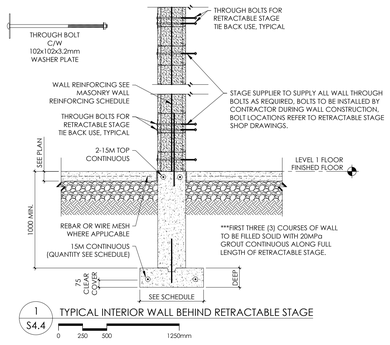
MARK	REINFORCING	WALL TYPE	LENGTH	DETAIL
Z1	VERTICAL 2-15M	190	400	
Z2	VERTICAL 3-15M		600	
Z3	VERTICAL 4-15M		800	
Z4	VERTICAL 5-15M		1000	
Z5	VERTICAL 6-15M		1200	
Z6	VERTICAL 2-20M	240	400	
Z7	VERTICAL 3-20M		600	
Z7+	VERTICAL 6-20M			
Z8	VERTICAL 4-20M		800	
Z8+	VERTICAL 8-20M			
Z9	VERTICAL 5-20M		1000	
Z9+	VERTICAL 10-20M			
Z10	VERTICAL 6-20M		1200	
Z10+	VERTICAL 12-20M			
Z11	VERTICAL 2-20M	290	400	
Z12	VERTICAL 3-20M		600	
Z13	VERTICAL 8-20M		800	
Z14	VERTICAL 10-20M		1000	
Z15	VERTICAL 12-20M		1200	

ZONE REINFORCING NOTE: (ALSO REFER TO MASONRY NOTES ON S1.1)
ALL ZONE VERTICAL BARS ARE TO BE FULL HEIGHT AND DOWELED 150mm FOR 15M AND 300mm FOR 20M INTO WALL FOOTING OR FOUNDATION WALL. GROUT CORES 100% SOLID W/ 20MPa GROUT WHERE COURSE IS REINFORCED.



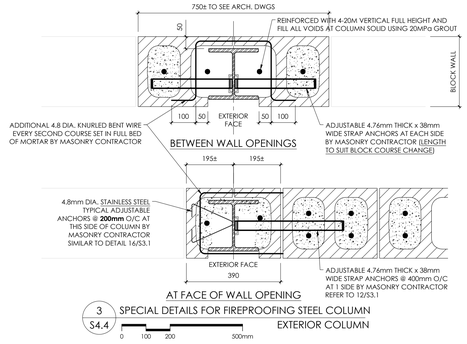
2 S4.4 SECTION THRU WALL ABOVE STAGE

0 250 500 1250mm



1 S4.4 TYPICAL INTERIOR WALL BEHIND RETRACTABLE STAGE

0 250 500 1250mm



3 S4.4 SPECIAL DETAILS FOR FIREPROOFING STEEL COLUMN EXTERIOR COLUMN

0 100 200 500mm

REVISIONS

NO.	DATE	PARTICULAR
1	2025.12.19	60% CLIENT REVIEW SET
2	2026.02.20	ISSUED FOR 80% REVIEW
3	2026.06.09	ISSUED FOR PERMIT
4	2026.08.27	ISSUED FOR TENDER
5		

NOTES:

All dimensions are measured/verified by the Contractor

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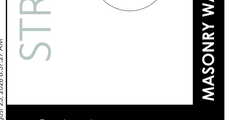
KEY PLAN:



CLIENT:

BLUEWATER DISTRICT SCHOOL BOARD
351 1st AVENUE NORTH
CHESLEY, ONTARIO.

PROJECT:

22562

NEW PORT ELGIN COMMUNITY SCHOOL

WATERLOO STREET
PORT ELGIN, ONTARIO

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

KEY TO DETAIL LOCATION:
A - DETAIL NO.
B - DETAIL NO. ORIGIN

STRUCTURES+VG
THE VENTIN GROUP LTD.

MASONRY WALL DETAILS AND SCHEDULES

S4.4

DRAWN BY : ML CHECKED BY : ML

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Tuesday, August 25, 2026 8:37:27 AM

PACKAGE AIR SOURCE HEAT PUMP UNIT SCHEDULE (ITEMIZED PRICE - REFER TO SPECIFICATION)

*ESP IS EXTERNAL TO THE CABINET

Item	Type	Service	Supply Air Fan Data: Capacity cfm	Size hp	Drive	ESP supply in wc	ESP return in wc	ESP total in wc	Exhaust Air Fan Data: Capacity cfm	Size hp	Drive	Max. Outdoor Air %	Electrical Data: Voltage	MCA	MOCP	COOLING: Medium	Coil Type	Sens.Cap MBH	Total Cap MBH	Rows Fins/in.	Ent db/wb	LVG db/wb	Face Vel fpm	PD. Air in.	HEATING: Medium	Capacity MBH	EAT db °F	LAT db °F	HEAT RECOVERY: Type	Heating Capacity (MBH) @ 0° db	Cooling Capacity (MBH) @ 95° db/75° wb	PD. Air in.	Manufacturer	Model	Weight (lbs) (approx.)	Remarks
HVAC-1	BUILT-UP OUTDOOR AIR HANDLING UNIT	GROUND FLOOR CLASSROOMS	4,800	7.0	Direct Drive (VAV)	1.5	1.0	2.5	4,800	4.3	Direct Drive	40%	575/3/60	36.6	50	R32	DX	119	146	4/15	76/63	52/52	311	0.65	GAS	400	40	102.2	ENERGY RECOVERY WHEEL	151	69	0.86	DAIKIN	DPSH12B	3,500±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 18.9 IEER) & ERW ECONOMIZER BYPASS
HVAC-2	BUILT-UP OUTDOOR AIR HANDLING UNIT	GROUND FLOOR CLASSROOMS	5,600	10.0	Direct Drive (VAV)	1.5	1.2	2.7	5,600	4.3	Direct Drive	40%	575/3/60	44.4	60	R32	DX	147	193	4/15	80/67	56/56	296	0.21	GAS	450	40	100.0	ENERGY RECOVERY WHEEL	165	75	0.60	DAIKIN	DPSH16B	4,800±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 18.9 IEER) & ERW ECONOMIZER BYPASS
HVAC-3	BUILT-UP OUTDOOR AIR HANDLING UNIT	LEARNING COMMONS	2,400	7.0	Direct Drive (VAV)	1.0	1.5	2.5	2,400	3.0	Direct Drive	40%	575/3/60	26.4	35	R32	DX	67	89	4/15	81/67	54/54	155	0.20	GAS	200	40	102.2	ENERGY RECOVERY WHEEL	82	38	0.45	DAIKIN	DPSH07B	3,200±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS, DEHUMIDIFICATION FUNCTION W/ HUMIDISTAT, VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 20.7 IEER)
HVAC-4	BUILT-UP OUTDOOR AIR HANDLING UNIT	GYMNASIUM	7,000	7.5	Direct Drive (CV)	1.0	0.75	1.75	7,000	7.0	Direct Drive	30%	575/3/60	44.7	60	R32	DX	169	202	4/15	78/66	55/55	370	0.29	GAS	450	47	95.0	ENERGY RECOVERY WHEEL	157	72	0.56	DAIKIN	DPSH16B	5,000±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 18.9 IEER)
HVAC-5	BUILT-UP OUTDOOR AIR HANDLING UNIT	ADMIN	3,750	7.0	Direct Drive (VAV)	1.2	1.5	2.7	3,750	7.0	Direct Drive	25%	575/3/60	29.3	35	R32	DX	87	98	4/15	78/65	52/52	243	0.43	GAS	200	51	90.8	ENERGY RECOVERY WHEEL	81	37	0.44	DAIKIN	DPSH07B	3,200±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS, DEHUMIDIFICATION FUNCTION W/ HUMIDISTAT, VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 20.7 IEER)
HVAC-6	BUILT-UP OUTDOOR AIR HANDLING UNIT	GROUND FLOOR CLASSROOM	2,400	7.0	Direct Drive (CV)	1.0	1.5	2.5	2,400	3.0	Direct Drive	40%	575/3/60	26.3	35	R32	DX	65	95	4/15	80/67	57/57	156	0.20	GAS	200	40	102.2	ENERGY RECOVERY WHEEL	82	38	0.45	DAIKIN	DPSH07B	3,200±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 21.4 IEER) & ERW ECONOMIZER BYPASS
HVAC-7	BUILT-UP OUTDOOR AIR HANDLING UNIT	SECOND FLOOR CLASSROOM	6,400	10.0	Direct Drive (VAV)	1.2	0.9	2.1	6,400	7.0	Direct Drive	40%	575/3/60	46.3	60	R32	DX	159	200	4/15	76/63	53/53	338	0.26	GAS	450	40	92.5	ENERGY RECOVERY WHEEL	182	83	0.68	DAIKIN	DPSH16B	4,800±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 19.5 IEER) & ERW ECONOMIZER BYPASS
HVAC-8	BUILT-UP OUTDOOR AIR HANDLING UNIT	SECOND FLOOR CLASSROOM	5,200	7.0	Direct Drive (VAV)	1.2	0.9	2.1	5,200	4.3	Direct Drive	40%	575/3/60	31.4	40	R32	DX	118	132	4/15	76/63	52/52	337	0.74	GAS	400	40	97.4	ENERGY RECOVERY WHEEL	152	72	0.93	DAIKIN	DPSH10B	3,300±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 18.9 IEER) & ERW ECONOMIZER BYPASS

PACKAGE AIR SOURCE HEAT PUMP UNIT SCHEDULE (ALTERNATE PRICE - REFER TO SPECIFICATION)

*ESP IS EXTERNAL TO THE CABINET

Item	Type	Service	Supply Air Fan Data: Capacity cfm	Size hp	Drive	ESP supply in wc	ESP return in wc	ESP total in wc	Exhaust Air Fan Data: Capacity cfm	Size hp	Drive	Max. Outdoor Air %	Electrical Data: Voltage	MCA	MOCP	COOLING: Medium	Coil Type	Sens.Cap MBH	Total Cap MBH	Rows Fins/in.	Ent db/wb	LVG db/wb	Face Vel fpm	PD. Air in.	HEATING: Medium	Capacity MBH	EAT db °F	LAT db °F	HEAT RECOVERY: Type	Heating Capacity (MBH) @ 0° db	Cooling Capacity (MBH) @ 95° db/75° wb	PD. Air in.	Manufacturer	Model	Weight (lbs) (approx.)	Remarks
HVAC-1	BUILT-UP OUTDOOR AIR HANDLING UNIT	GROUND FLOOR CLASSROOMS	4,800	7.5	Direct Drive (VAV)	1.5	1.0	2.5	4,800	3.0	Direct Drive	40%	575/3/60	36.0	40	R-454B	DX	110	140	6/14	76/63	52/52	321	0.37	GAS	390	40	102.2	ENERGY RECOVERY WHEEL	157	47	0.68	AAON	RNA-013	3,000±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 18.9 IEER) & ERW ECONOMIZER BYPASS
HVAC-2	BUILT-UP OUTDOOR AIR HANDLING UNIT	GROUND FLOOR CLASSROOMS	5,600	7.5	Direct Drive (VAV)	1.5	1.2	2.7	5,600	5.0	Direct Drive	40%	575/3/60	47.0	60	R-454B	DX	140	186	6/16	80/67	56/56	282	0.37	GAS	405	40	102.2	ENERGY RECOVERY WHEEL	177	53	0.40	AAON	RNA-016	4,000±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 18.9 IEER) & ERW ECONOMIZER BYPASS
HVAC-3	BUILT-UP OUTDOOR AIR HANDLING UNIT	LEARNING COMMONS	2,400	3.0	Direct Drive (VAV)	1.0	1.5	2.5	2,400	2.0	Direct Drive	40%	575/3/60	22.0	30	R-454B	DX	57	75	4/14	81/67	54/54	282	0.22	GAS	210	40	102.2	ENERGY RECOVERY WHEEL	79	24	0.50	AAON	RNA-007	1,800±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS, DEHUMIDIFICATION FUNCTION W/ HUMIDISTAT, VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 20.7 IEER)
HVAC-4	BUILT-UP OUTDOOR AIR HANDLING UNIT	GYMNASIUM	7,000	7.5	Direct Drive (CV)	1.0	0.75	1.75	7,000	5.0	Direct Drive	30%	575/3/60	47.0	60	R-454B	DX	158	190	6/16	78/66	55/55	352	0.48	GAS	405	47	103	ENERGY RECOVERY WHEEL	165	50	0.37	AAON	RNA-016	4,000±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 18.9 IEER)
HVAC-5	BUILT-UP OUTDOOR AIR HANDLING UNIT	ADMIN	3,750	5.0	Direct Drive (VAV)	1.2	1.5	2.7	3,750	3.0	Direct Drive	25%	575/3/60	25.0	30	R-454B	DX	78	90	4/14	78/65	52/52	257	0.16	GAS	195	51	113.2	ENERGY RECOVERY WHEEL	81	25	0.34	AAON	RNA-009	2,500±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS, DEHUMIDIFICATION FUNCTION W/ HUMIDISTAT, VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 20.7 IEER)
HVAC-6	BUILT-UP OUTDOOR AIR HANDLING UNIT	GROUND FLOOR CLASSROOM	2,400	3.0	Direct Drive (CV)	1.0	1.5	2.5	2,400	2.0	Direct Drive	40%	575/3/60	22.0	30	R-454B	DX	57	75	4/14	80/67	57/57	282	0.22	GAS	210	40	89.8	ENERGY RECOVERY WHEEL	79	23	0.50	AAON	RNA-007	1,800±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 21.4 IEER) & ERW ECONOMIZER BYPASS
HVAC-7	BUILT-UP OUTDOOR AIR HANDLING UNIT	SECOND FLOOR CLASSROOM	6,400	7.5	Direct Drive (VAV)	1.2	0.9	2.1	6,400	5.0	Direct Drive	40%	575/3/60	47.0	60	R-454B	DX	151	187	6/16	76/63	53/53	322	0.44	GAS	405	40	89.8	ENERGY RECOVERY WHEEL	93	28	0.65	AAON	RNA-016	4,000±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 19.5 IEER) & ERW ECONOMIZER BYPASS
HVAC-8	BUILT-UP OUTDOOR AIR HANDLING UNIT	SECOND FLOOR CLASSROOM	5,150	7.5	Direct Drive (VAV)	1.2	0.7	2.1	5,200	3.0	Direct Drive	40%	575/3/60	42.0	50	R-454B	DX	121	156	6/14	76/63	52/52	341	0.43	GAS	390	40	102.2	ENERGY RECOVERY WHEEL	170	50	0.75	AAON	RNA-015	3,000±	C/W 600mm HIGH ROOF CURB, VIBRATION RAIL & DIRECT DRIVE ECM MOTORS. VARIABLE SPEED COMPRESSORS & FLOATING HEAD PRESSURE CONTROL (MIN 18.9 IEER) & ERW ECONOMIZER BYPASS

ENERGY RECOVERY UNIT SCHEDULE

CAPACITY INDICATED ON SCHEDULE REFER TO SPECIFICATION FOR CONSTRUCTION STANDARDS, ACCESSORIES AND ADDITIONAL INFORMATION.

Item	Type	Capacity: Supply (cfm)	Capacity: Exhaust (cfm)	ESP (in wc)	Fan Speed: Supply (rpm)	Fan Speed: Exhaust (rpm)	Electrical Data: Voltage	MCA	MOCP	Acceptable Manufacturer	Remarks
ERV-1	ENERGY RECOVERY VENTILATION	1400	2000	1.5	2259	2120	575/3/60	8.3	15	DAIKIN DAHA07A	C/W 600mm (24") HIGH ROOF CURB

GRILLE SCHEDULE

CAPACITY INDICATED ON SCHEDULE REFER TO SPECIFICATION FOR CONSTRUCTION STANDARDS, ACCESSORIES AND ADDITIONAL INFORMATION.

Item	Type	Equalizing Grid	Volume Damper	Acceptable Manufacturer	Description
LD1	LINEAR CEILING DIFFUSER	NO	NONE	EH PRICE SDS-100	5 SLOT (1" WIDE) LINEAR DIFFUSER, EXTRUDED ALUMINUM CONSTRUCTION, 180° AIR PATTERN ADJUSTMENT, SUITABLE FOR BEING FREELY SUSPENDED (TYPE 9 MOUNTING) & INSULATED PLENUM. LENGTH AS INDICATED.
D1	SQUARE CEILING DIFFUSER	YES	NONE	EH PRICE SCDA	4-CONE, FULLY ADJUSTABLE, 24x24, STEEL CEILING DIFFUSER W/ ROUND NECK. SUITABLE FOR LAY-IN T-BAR CEILING, OR DRYWALL CEILING WHEN C/W FRAME.
D2	ROUND DIFFUSER (EXPOSED)	YES	NONE	EH PRICE RCDA	4-CONE, FULLY ADJUSTABLE, STEEL DIFFUSER W/ ROUND NECK. SUITABLE FOR EXPOSED, HUNG INSTALLATION. PROVIDE CONCEALED SAFETY CHAIN FROM DIFFUSER UP INTO DUCTWORK.
S1	SUPPLY GRILLE	NO	NONE	EH PRICE 32-FLA	DOUBLE DEFLECTION, 1/2" SPACING, ALUMINUM AIRFOIL BLADES PARALLEL TO LONG DIMENSION, C/W 1 1/4" FLAT BORDER & SCREWED FASTENING FOR SURFACE MOUNTING.
S2	SPOT SA DIFFUSER	NO	NONE	EH PRICE ND	ALUMINUM CONSTRUCTION, SIDEWALL MOUNTED. SIZE AS NOTED ON PLANS.
R1	CEILING RETURN GRILLE (NON-DUCTED)	NO	NONE	EH PRICE 80-CH	1/2x1/2x1/2 ALUMINUM EGGCRATE CORE, C/W CHANNEL BORDER FOR LAY-IN T-BAR CEILING.
R2	SIDEWALL RETURN GRILLE	NO	NONE	EH PRICE 900	STEEL HEAVY DUTY GYM RETURN GRILLE.
E1	EXHAUST GRILLE (DUCTED)	NO	NONE	EH PRICE 80-FA	1/2x1/2x1/2 ALUMINUM EGGCRATE CORE, C/W 1 1/4" FLAT BORDER & SCREWED FASTENING FOR SURFACE MOUNTING.
E2	SIDEWALL RETURN GRILLE	NO	NONE	EH PRICE 530-FLA	FIXED BLADE AT 45°, 3/4" SPACING, STEEL BLADES PARALLEL TO LONG DIMENSION, C/W 1 1/4" FLAT BORDER & SCREWED FASTENING FOR SURFACE MOUNTING.

GENERAL GRILLE SCHEDULE NOTES:

1. ACCEPTABLE MANUFACTURERS: EH PRICE, NAILOR, TITUS, KRUEGER, CARNES, METALAIRE, TUTTLE & BAILEY.
2. GRILLE COLOURS ARE SELECTED BY ARCHITECT FROM STANDARD COLOUR CHART, UNLESS OTHERWISE NOTED.
3. PAINT INTERIOR OF DUCTWORK BEHIND GRILLE MATTE BLACK (WHERE VISIBLE THRU GRILLE).

FAN SCHEDULE

CAPACITY INDICATED ON SCHEDULE REFER TO SPECIFICATION FOR CONSTRUCTION STANDARDS, ACCESSORIES AND ADDITIONAL INFORMATION.

Item	Type	Capacity (cfm)	ESP (in wc)	Fan Speed (rpm)	Motor: hp	Motor: Voltage	Acceptable Manufacturer	Remarks
EF-1	RANGEHOOD (DUCTED)	210	0.2	3 SPD	Fhp	120/1/60	BROAN SAHALE BKDF1	CONTOURED STEEL HOUSING, FULLY ENCLOSED BOTTOM, TOP DISCHARGE, CENTIFUGAL BLOWER WHEELS, WASHABLE ALUMINUM FILTERS, 3 SPEED BLOWER CONTROL, PROVIDE 2 LEVEL LED LIGHTING. COLOUR SELECTED BY CONSULTANT.
EF-2	CEILING EXHAUST FAN	200	0.2	715	Fhp	120/1/60	BROAN L200MG	ACOUSTICALLY INSULATED STEEL HOUSING, CENTIFUGAL BLOWER WHEEL, 90° DISCHARGE OUTLET W/BACKDRAFT DAMPER, C/W WHITE PAINTED ENAMEL STEEL GRILLE, VIBRATION ISOLATORS. 2.3 SONES
EF-3	ROOF EXHAUST FAN	200	0.5	1387	Fhp	120/1/60	GREENHECK G-080-VG	SPUN ALUMINUM MOTOR COVER & FAN SHROUD, DOWN DISCHARGE, W/BELT DRIVE CENTRIFUGAL BACKWARD INCLINED FAN, GALV BIRD SCREEN, 24" HIGH INSULATED ROOF CURB, & BACKDRAFT DAMPER
EF-4	CEILING EXHAUST FAN	100	0.2	640	Fhp	120/1/60	BROAN L100	ACOUSTICALLY INSULATED STEEL HOUSING, CENTIFUGAL BLOWER WHEEL, 90° DISCHARGE OUTLET W/BACKDRAFT DAMPER, C/W WHITE PAINTED ENAMEL STEEL GRILLE, VIBRATION ISOLATORS. 1.1 SONES
EF-5	CEILING EXHAUST FAN	300	0.2	860	Fhp	120/1/60	BROAN L300MG	ACOUSTICALLY INSULATED STEEL HOUSING, CENTRIFUGAL BLOWER WHEEL, 90° DISCHARGE OUTLET W/BACKDRAFT DAMPER, C/W WHITE PAINTED ENAMEL STEEL GRILLE, VIBRATION ISOLATORS. 2.9 SONES
EF-6	CEILING EXHAUST FAN	200	0.2	715	Fhp	120/1/60	BROAN L200MG	ACOUSTICALLY INSULATED STEEL HOUSING, CENTIFUGAL BLOWER WHEEL, 90° DISCHARGE OUTLET W/BACKDRAFT DAMPER, C/W WHITE PAINTED ENAMEL STEEL GRILLE, VIBRATION ISOLATORS. 2.3 SONES
EF-7	ROOF EXHAUST FAN	200	0.5	1387	Fhp	120/1/60	GREENHECK G-080-VG	SPUN ALUMINUM MOTOR COVER & FAN SHROUD, DOWN DISCHARGE, W/DIRECT DRIVE CENTRIFUGAL BACKWARD INCLINED FAN, GALV BIRD SCREEN, 24" HIGH INSULATED ROOF CURB, & BACKDRAFT DAMPER. PROVIDE SPEED CONTROLLER.
EF-8	ROOF EXHAUST FAN	260	0.3	1300	Fhp	120/1/60	GREENHECK G-080-VG	SPUN ALUMINUM MOTOR COVER & FAN SHROUD, DOWN DISCHARGE, W/DIRECT DRIVE CENTRIFUGAL BACKWARD INCLINED FAN, GALV BIRD SCREEN, 24" HIGH INSULATED ROOF CURB, & BACKDRAFT DAMPER. PROVIDE SPEED CONTROLLER.
EF-9	ROOF EXHAUST FAN	550	0.5	1600	1/4	120/1/60	GREENHECK G-090-VG	SPUN ALUMINUM MOTOR COVER & FAN SHROUD, DOWN DISCHARGE, W/BELT DRIVE CENTRIFUGAL BACKWARD INCLINED FAN, GALV BIRD SCREEN, 24" HIGH INSULATED ROOF CURB, & BACKDRAFT DAMPER. PROVIDE SPEED CONTROLLER.
EF-10	ROOF EXHAUST FAN	200	0.5	1387	Fhp	120/1/60	GREENHECK G-080-VG	SPUN ALUMINUM MOTOR COVER & FAN SHROUD, DOWN DISCHARGE, W/BELT DRIVE CENTRIFUGAL BACKWARD INCLINED FAN, GALV BIRD SCREEN, 24" HIGH INSULATED ROOF CURB, & BACKDRAFT DAMPER
EF-11	INLINE DCT MTD. DRYER BOOSTER FAN	150	0.2	2500	Fhp	120/1/60	REVERSOMATIC TLD200	C/W DRYER AMP SENSOR FAN CONTROL (MODEL DAS200). INSTALLED BY DIVISION 16. REFER TO PLAN FOR NUMBER AND LOCATION.
EF-12	ROOF EXHAUST FAN	600	0.375	1600	1/4	120/1/60	GREENHECK G-090-VG	SPUN ALUMINUM MOTOR COVER & FAN SHROUD, DOWN DISCHARGE, W/BELT DRIVE CENTRIFUGAL BACKWARD INCLINED FAN, GALV BIRD SCREEN, 24" HIGH INSULATED ROOF CURB, & BACKDRAFT DAMPER. PROVIDE SPEED CONTROLLER.

GENERAL FAN SCHEDULE NOTES:

1. ACCEPTABLE MANUFACTURERS: GREENHECK, PENN-BARRY, COOK, CARNES, ACME, TWIN CITY, JENCO, BUFFALO. (CEILING FANS: BROAN, GREENHECK, ZONEX)
2. PROVIDE 24" TALL PREFABRICATED, INSULATED ROOF CURB FOR ALL ROOF MOUNTED FANS.

WATER HEATER SCHEDULE

Item	Type	Input: Capacity	Input: Medium	Water Side: Storage Litres	Water Side: Recovery l/h	Manufacturer & Model	Remarks
WH-1	DOMESTIC WATER HEATER	100 MBH	N. Gas	280	488	A.O. SMITH HDHE-75	HIGH EFFICIENCY, 120/1/60, fhp
WH-2	DOMESTIC WATER HEATER	100 MBH	N. Gas	280	488	A.O. SMITH HDHE-75	HIGH EFFICIENCY, 120/1/60, fhp

PUMP SCHEDULE

CAPACITY INDICATED ON SCHEDULE REFER TO SPECIFICATION FOR CONSTRUCTION STANDARDS, ACCESSORIES AND ADDITIONAL INFORMATION.

Item	Type	Capacity (Usgpm)	Head (ft)	Size (hp)	Speed (rpm)	Acceptable Manufacturer	Remarks
P-1	IN-LINE DOMESTIC RECIRC.	5	10	Fhp	1800	ARMSTRONG H32	SUITABLE FOR POTABLE WATER, 120/1/60

SPLIT AIR CONDITIONING UNIT SCHEDULE

CAPACITY INDICATED ON SCHEDULE REFER TO SPECIFICATION FOR CONSTRUCTION STANDARDS, ACCESSORIES AND ADDITIONAL INFORMATION.

Item	Type	Capacity: tons	Capacity: cfm	Cooling Capacity MBH	SP in wc	Size hp	Electrical: Voltage	Electrical: MCA	Electrical: Fuse	Manufacturer (or Approved Alternate)	Remarks
AC-1	INDOOR WALL HUNG AC UNIT (ELEV. MACH. 204)	2.0	605	24	0.2	"	208/1/60	1	15	DAIKIN FTK24BXVJU	INTERCONNECTED TO CU-1. SUITABLE FOR PROVIDING COOLING IN LOW AMBIENT CONDITIONS. MAXIMUM SYSTEM CHARGE OF 5 LBS.
CU-1	OUTDOOR CONDENSING UNIT	2.0	"	24	"	"	208/1/60	13.5	20	DAIKIN RK24BXVJU	INTERCONNECTED TO AC-1. HORIZONTAL AIR DISCHARGE. PROVIDE BAS INTEGRATION. SUITABLE FOR LOW AMBIENT OPERATION. PROVIDE POWER FOR AC UNIT THROUGH CU.
AC-2	INDOOR WALL HUNG AC UNIT (ELEC. 137)	2.0	605	24	0.2	"	208/1/60	1	15	DAIKIN FTK24BXVJU	INTERCONNECTED TO CU-1. SUITABLE FOR PROVIDING COOLING IN LOW AMBIENT CONDITIONS. MAXIMUM SYSTEM CHARGE OF 5 LBS.
CU-2	OUTDOOR CONDENSING UNIT	2.0	"	24	"	"	208/1/60	13.5	20	DAIKIN RK24BXVJU	INTERCONNECTED TO AC-1. HORIZONTAL AIR DISCHARGE. PROVIDE BAS INTEGRATION. SUITABLE FOR LOW AMBIENT OPERATION. PROVIDE POWER FOR AC UNIT THROUGH CU.

GENERAL NOTES

- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PREPARED SPECIFICATION.
- SANITARY VENT PIPING IS NOT SHOWN. PROVIDE ALL NECESSARY VENT PIPING FROM ALL FIXTURES FOR A COMPLETE SYSTEM TO ALL LOCAL PLUMBING CODE & LOCAL AUTHORITY REQUIREMENTS. CONNECTED TO EXISTING VENTS OR NEW VENTS AS REQUIRED. CO-ORDINATE VENT LOCATION(S) WITH GENERAL CONTRACTOR. MAINTAIN MIN 14'-0" FROM ANY AIR INLET. INSTALL VENT PIPING HIGH IN JOIST SPACE.
- ALL EQUIPMENT SHALL BE MINIMUM 3.0M FROM EDGE OF ROOF.
- WHERE DUCTWORK PENETRATES CORRIDOR WALL, CENTER DUCT(S) BETWEEN OWSJ.
- REFER TO SPECIFICATIONS FOR CONFORMANCE REQUIREMENTS.

MECHANICAL LEGEND

Item	Description	Item	Description
	ITEM TO BE REMOVED	SOL	SOLENOID VALVE
	CUT EXISTING & CONNECT NEW PIPING		VALVE ON RISER
	FLOW DIRECTION	BV	BALANCING VALVE
	POTABLE COLD WATER	S	SUPERVISED VALVE
	POTABLE HOT WATER		INLINE PUMP
T	POTABLE TEMPERED HOT WATER	I	INDICATING VALVE
	POTABLE HOT WATER RECIRC.	TBV	THERMOSTATIC BALANCING VALVE
SAN	SANITARY ABOVE FLOOR	FEC	RECESSED CABINET MOUNTED FIRE EXTINGUISHER
SAN	SANITARY BELOW FLOOR	FE	WALL MOUNTED FIRE EXTINGUISHER
STM	STORM ABOVE FLOOR	FB	FIRE BLANKET IN CABINET MOUNTED ON WALL
STM	STORM BELOW FLOOR		WATER METER
CD	CONDENSATE DRAIN	CO	FLOOR CLEANOUT
V	VENT	CO	LINE CLEANOUT
SP	SPRINKLER	TP	TEMPERATURE & PRESSURE RELIEF VALVE
	NATURAL GAS		PRESSURE GAUGE
HPG	HIGH PRESSURE NATURAL GAS		TEMPERATURE GAUGE
RL	REFRIGERANT LIQUID		THERMOMETER
RS	REFRIGERANT SUCTION	PRV	PRESSURE REDUCING VALVE
TB	THRUST BLOCK		THERMOSTAT (WITH GUARD WHERE INDICATED)
EXPOSED / FLUSH MTD	FIRE DEPT CONNECTION	RA	REVERSE ACTING THERMOSTAT
FD	FLOOR DRAIN		TEMPERATURE SENSOR (WITH GUARD WHERE INDICATED)
	TRAP PRIMER		TURNING VANES
	TEE CONNECTION		SUPPLY AIR DUCT
	PIPE DOWN		RETURN/EXHAUST AIR DUCT
	PIPE UP		ACOUSTIC DUCT LINING
	FLEXIBLE CONNECTION		THERMAL INSULATION
	REDUCER/INCREASER		BRANCH LINE SPIN-IN COLLAR C/W BALANCING DAMPER
	CHECK VALVE		TRUNK MAIN BRANCH COLLAR C/W BALANCING DAMPER
	BALL DRIP CHECK VALVE	BD	BALANCING DAMPER
	DOUBLE CHECK BACKFLOW PREVENTOR	OBD	OPPOSED BLADE DAMPER
	REDUCED PRESSURE BACKFLOW PREVENTOR		MOTORIZED DAMPER
	UNION	FD	FIRE DAMPER
	STRAINER	FSD	FIRE/SMOKE DAMPER
	PRESSURE & TEMPERATURE TEST STATION	SD	SMOKE DAMPER
	DRAIN (SCHEMATICS)		RECTANGULAR DUCTWORK
VB	VACUUM BREAKER		RIGID ROUND DUCT
	PLUG VALVE		FLEXIBLE ROUND DUCT
	BALL VALVE		ACOUSTICAL, FLEXIBLE ROUND DUCT
	BUTTERFLY VALVE	AL	ALUMINUM DUCT
AV	AIR VENT	Type / Size / Capacity	DIFFUSER/GRILLE SIZE (imp), TYPE & CAPACITY (cfm)
	GLOBE VALVE	AD	ACCESS DOOR
MOT	MOTORIZED VALVE ACTUATOR	AFF	ABOVE FINISHED FLOOR
CTL	CONTROL VALVE ACTUATOR	AFR	ABOVE FINISHED ROOF
			TRANSFER DUCT (SIZE AS INDICATED)

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

NOTES:

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.

Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale this drawing.

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CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENCED PROFESSIONAL ENGINEER
26-Aug-26
M.L. DEMAITER
100505917
PROVINCE OF ONTARIO

MECHANICAL NOTES, LEGEND & SCHEDULES

M1.1

Plot Date: Aug 26, 2026 - 2:07pm By: dfeener
Filename: C:\...drawn\Archpublish_64b\25426 M1 Schedules, Legend, Notes.dwg

PLUMBING FIXTURE SCHEDULE

Item	Type	Connection Sizes					Fixture		Trim		Accessories	
		HW	CW	TW	Drain	Vent	Acceptable Manufacturer	Fixture Description	Acceptable Manufacturer	Trim Description	Acceptable Manufacturer	Accessory Description
WC-1	WATER CLOSET FLUSH VALVE		1		3	1 1/2	AMERICAN STANDARD MADERA 3451.001 (NO ALTERNATES)	VITREOUS CHINA, ELONGATED RIM, TOP SPUD FOR FLUSH VALVE, BOLT CAP, BOTTOM OUTLET, FLOOR-MOUNTED, 12" ROUGH-IN, MIN 2" TRAP WAY, MAXIMUM 6 litres (1.5 gal) PER FLUSH.	DELTA 81T201-WMBT (NO ALTERNATES)	EXPOSED, POLISHED CHROME PLATTED, DIAPHRAGM TYPE MANUAL FLUSH VALVE WITH 25mm (1") SCREWDRIVER ANGLE STOP, OSCILLATING HANDLE, FLUSH CONNECTION AND COUPLING FOR 40mm (1 1/2") TOP STUD, WALL AND STUD ESCUTCHEONS, SEAT BUMPER, AND VACUUM BREAKER, MAXIMUM 6 LITERS (1.5 GAL) FLUSH CYCLE.	SEAT: BEMIS 2155CT CENTOCO AM500STSCCSS	SEAT: WHITE, ELONGATED, OPEN FRONT, LESS COVER, MOLDED SOLID ANTIMICROBIAL PLASTIC, STAINLESS STEEL CHECK HINGES, STAINLESS STEEL OR SOLID BRASS INSERT POST.
WC-2	BARRIER FREE WATER CLOSET FLUSH VALVE, 16" HIGH		1		3	1 1/2	AMERICAN STANDARD MADERA 3461.001 (NO ALTERNATES)	BARRIER FREE, VITREOUS CHINA, ELONGATED RIM, TOP SPUD FOR FLUSH VALVE, BOLT CAP, BOTTOM OUTLET, FLOOR-MOUNTED, 12" ROUGH-IN, MIN 2" TRAP WAY, MAXIMUM 6 litres (1.5 gal) PER FLUSH. 16" TALL BOWL TO RIM.	DELTA 81T201-WMBT (NO ALTERNATES)	EXPOSED, POLISHED CHROME PLATTED, DIAPHRAGM TYPE MANUAL FLUSH WITH 25mm (1") SCREWDRIVER ANGLE STOP, OSCILLATING HANDLE, FLUSH CONNECTION AND COUPLING FOR 40mm (1 1/2") TOP STUD, WALL AND STUD ESCUTCHEONS, SEAT BUMPER, AND VACUUM BREAKER, MAXIMUM 6 LITERS (1.5 GAL) FLUSH CYCLE.	SEAT: BEMIS 7850TDG CENTOCO AM820STS	SEAT: WHITE, ELONGATED, OPEN FRONT WITH COVER, MOLDED SOLID ANTIMICROBIAL PLASTIC, STAINLESS STEEL CHECK HINGES, STAINLESS STEEL OR SOLID BRASS INSERT POST.
WC-3	WATER CLOSET FLUSH TANK ROUND FRONT FOR PRE-SCHOOL / TODDLER		1/2		3	1 1/2	AMERICAN STANDARD CADET 3 2384.012 (NO ALTERNATES)	VITREOUS CHINA, TANK WITH LINER & FLAPPER TYPE VALVE ASSY, SIPHON JET, ROUND RIM, BOLT CAP, BOTTOM OUTLET, FLOOR-MOUNTED, 12" ROUGH-IN, MIN 2" TRAP WAY, MAXIMUM 6 litres (1.6 gal) PER FLUSH.			SEAT: CHURCH 2055SSCT CENTOCO	SEAT: WHITE, ROUND, OPEN FRONT, NO COVER, MOLDED SOLID ANTIMICROBIAL PLASTIC, STAINLESS STEEL CHECK HINGES, STAINLESS STEEL INSERT POSTS AND PINTLES.
U-1	URINAL WITH FLUSHING SYSTEM		3/4		2	1 1/2	AMERICAN STANDARD WASHBROOK 6515.005 (NO ALTERNATES)	VITREOUS CHINA, WASHOUT TYPE, INTEGRAL FLUSHING RIM, EXTENDED SHIELDS, INTEGRAL TRAP, BACK OUTLET, WALL-MOUNTED, BACK SUPPLY SPUD, MIN 2" TRAP WAY, MAXIMUM 1.9 litres (0.5 gal) PER FLUSH. C/W FLOOR MOUNTED CARRIER PROVIDE 400 mm (16") LONG x 20Ø (3/4"), STAINLESS STEEL FLEXIBLE SUPPLY CONNECTOR		REFER TO SPEC FOR AUTOMATIC URINAL FLUSHING SYSTEM. PROVIDE FLOOR MOUNTED WALL CARRIER.		
U-2	BARRIER FREE URINAL WITH FLUSHING SYSTEM		3/4		2	1 1/2	AMERICAN STANDARD WASHBROOK 6515.005 (NO ALTERNATES)	VITREOUS CHINA, WASHOUT TYPE, INTEGRAL FLUSHING RIM, EXTENDED SHIELDS, INTEGRAL TRAP, BACK OUTLET, WALL-MOUNTED, BACK SUPPLY SPUD, MIN 2" TRAP WAY, MAXIMUM 1.9 litres (0.5 gal) PER FLUSH. C/W FLOOR MOUNTED CARRIER PROVIDE 400 mm (16") LONG x 20Ø (3/4"), STAINLESS STEEL FLEXIBLE SUPPLY CONNECTOR		REFER TO SPEC FOR AUTOMATIC URINAL FLUSHING SYSTEM. PROVIDE FLOOR MOUNTED WALL CARRIER.		
L-1	WALL HUNG LAV (ELECTRONIC FAUCET)	1/2	1/2		1 1/4	1 1/4	AMERICAN STANDARD LUCERNE 355.012 (NO ALTERNATES)	WALL-HUNG SINK, VITREOUS CHINA, WITH SPLASH LIP, SUPPLY OPENINGS ON 100 MM (4") CENTRES, OVERFLOW. SIZE: 557 MM X 502 MM (21 15/16" X 19 3/4").	DELTA 591T022 (NO ALTERNATES)	HARDWIRED ELECTRONIC FAUCET. CAST BRASS ONE PIECE BODY WITH INTEGRAL WATER PROOF INFRA-RED SENSOR AND CONNECTOR. ADJUSTABLE SENSING RANGE 76mm TO 381mm (3" TO 15") AND TIME OUT 7 TO 75 SECONDS CHROME FINISH. VANDAL RESISTANT AERATOR HAVING INTEGRAL FLOW CONTROL FOR 1.5gpm (5.7 L/MIN) @ 413 KPA (60 PSI) MAX. FOR RETROFIT APPLICATIONS PROVIDE UNDER COUNTER PLASTIC SURFACE MOUNTED HOUSING FOR SOLENOID AND CONTROLLER. PROVIDE RECESSED HOUSING IN NEW CONSTRUCTION. SENSOR ACTIVATES IN PRESENCE OF PERSON'S HANDS IN LAVATORY. C/W PLUG-IN TRANSFORMER.	INSULATION: MCGUIRE PROWRAP PWV8902 TRUEBRO LAV GUARD	INSULATION: INSULATE WASTE AND SUPPLIES WITH UL LISTED PREFORMED INSULATION SYSTEM COMPLETE WITH SEAMLESS JACKET. WASTE FITTING: GRID STRAINER. PROVIDE FLOOR MOUNTED WALL CARRIER THERMOSTATIC MIXING VALVE UNDER LAV. DELTA R3070-MIXLF, POWERS LM490 OR EQUAL.
L-2	B.F. WHEELCHAIR LAV (ELECTRONIC FAUCET)	1/2	1/2		1 1/4	1 1/4	AMERICAN STANDARD WHEELCHAIR 9141.011 (NO ALTERNATES)	WALL-HUNG SINK, VITREOUS CHINA, LOW SHELF, WITH INTEGRAL BACK, CONTOURED FRONT, SHALLOW FRONT BASIN, OVERFLOW, SOAP DEPRESSIONS, SUPPLY OPENINGS ON 100 MM (4") CENTRES, CONCEALED SUPPORTS. SIZES: 686 MM X 500 MM (27" X 20").	DELTA 591T022 (NO ALTERNATES)	HARDWIRED ELECTRONIC FAUCET. CAST BRASS ONE PIECE BODY WITH INTEGRAL WATER PROOF INFRA-RED SENSOR AND CONNECTOR. ADJUSTABLE SENSING RANGE 76mm TO 381mm (3" TO 15") AND TIME OUT 7 TO 75 SECONDS CHROME FINISH. VANDAL RESISTANT AERATOR HAVING INTEGRAL FLOW CONTROL FOR 1.5gpm (5.7 L/MIN) @ 413 KPA (60 PSI) MAX. FOR RETROFIT APPLICATIONS PROVIDE UNDER COUNTER PLASTIC SURFACE MOUNTED HOUSING FOR SOLENOID AND CONTROLLER. PROVIDE RECESSED HOUSING IN NEW CONSTRUCTION. SENSOR ACTIVATES IN PRESENCE OF PERSON'S HANDS IN LAVATORY. C/W PLUG-IN TRANSFORMER.	INSULATION: MCGUIRE PROWRAP PWV8902 TRUEBRO LAV GUARD	INSULATION: INSULATE WASTE AND SUPPLIES WITH UL LISTED PREFORMED INSULATION SYSTEM COMPLETE WITH SEAMLESS JACKET. WASTE FITTING: NPS 32 MM (1¼") OFFSET WASTE WITH GRID STRAINER. PROVIDE FLOOR MOUNTED WALL CARRIER THERMOSTATIC MIXING VALVE UNDER LAV. DELTA R3070-MIXLF, POWERS LM490 OR EQUAL.
L-3	WALL HUNG LAV (KINDERGARTEN)	1/2	1/2		1 1/4	1 1/4	BRADLEY SS-1/IR NO ALTERNATES	WALL-HUNG SINGLE STATION FIXTURE CONSTRUCTED OF VANDAL RESISTANT SOLID SURFACE POLYESTER RESIN MATERIAL. SPRAYHEAD MODULE TO BE ADAPTIVE INFRARED TYPE FAUCET THAT ACTIVATES WATER WHEN HANDS ENTER THE DETECTION ZONE WITHIN THE LAVATORY BOWL. ACCESSORIES TO LIMIT MAXIMUM FLOW RATE TO 1.89 l/min (0.5 gpm). JUVENILE HEIGHT MOUNTING. OVERALL SIZES: 533 x 533 x 127 (21" x 21" x 5"). PROVIDE WITH COAL HIGH IMPACT POLYMER ACCESS PANEL AND REQUIRED SURFACE MOUNTED BRACKET.		- NO FAUCET DRILLING - NO SOAP DISPENSER - TMA THERMOSTATIC MIXING VALVE - C/W FLOOR MOUNTED WALL CARRIER - C/W TRAP COVER - COLOUR SELECTED BY ARCHITECT	TRAP: DELTA 33T311 ZURN MCGUIRE CARRIER: ZURN WATTS	WASTE FITTING: NPS 32 MM (1 1/4") OFFSET WASTE WITH GRID STRAINER. PROVIDE WALL HUNG MOUNTED FRAME TO SUIT REQUIRED INSTALLATION HEIGHT. INSULATION: INSULATE WASTE AND SUPPLIES WITH UL LISTED PREFORMED INSULATION SYSTEM COMPLETE WITH SEAMLESS JACKET.
S-1	STAINLESS STEEL SINGLE SINK (C/W ONLY)		1/2		1 1/2	1 1/4	KINDRED LBS6808-1/1 NOVANNI 1017I	SINK: SINGLE COMPARTMENT, LEDGE-BACK. FROM 1.0 mm (20 GAUGE) THICK TYPE 302 POLISHED STAINLESS STEEL, SELF-RIMMING, UNDERCOATED, CLAMPS. OVERALL SIZES: 520 mm X 510 mm X 200 mm (20½" X 20" X 8").	DELTA 27C643-LS (NO ALTERNATES)	FAUCET: CHROME PLATED BRASS, WITH GOOSENECK SPOUT, AERATOR, LEVER HANDLE, WASHERLESS CONTROLS, ACCESSORIES TO LIMIT MAXIMUM FLOW RATE TO 5.7 L/MIN (1.5 GPM) AT 413 KPA (60 PSI). SINGLE COLD WATER SUPPLY. 120° MAXIMUM SPOUT SWIVEL.		WASTE FITTING: INTEGRAL STAINLESS STEEL BASKET STRAINER/STOPPER, TAILPIECE, CAST BRASS P-TRAP WITH CLEANOUT.
S-2	STAINLESS STEEL KINDERGARTEN TEACHER'S SINK	1/2	1/2		1 1/2	1 1/4	KINDRED LBS6808 NOVANNI 1017I	SINK: SINGLE COMPARTMENT, LEDGE-BACK. FROM 1.0 MM (20 GAUGE) THICK TYPE 302 POLISHED STAINLESS STEEL, SELF-RIMMING, UNDERCOATED, CLAMPS. OVERALL SIZES: 500 MM x 500 MM x 200 MM (20½" x 20" x 8").	DELTA 26C3933 (NO ALTERNATES)	FAUCET: CHROME PLATED BRASS, WITH GOOSENECK SPOUT, AERATOR, LEVER HANDLES, WASHERLESS CONTROLS, ACCESSORIES TO LIMIT MAXIMUM FLOW RATE TO 8.35 l/min (2.2 gpm) AT 413 kPa (60 psi). 120° MAXIMUM SPOUT SWIVEL.		WASTE FITTING: INTEGRAL STAINLESS STEEL BASKET STRAINER/STOPPER, TAILPIECE, CAST BRASS P-TRAP WITH CLEANOUT.
S-3	STAINLESS STEEL SINGLE SINK (LOW MILLWORK IN KINDERGARTEN WITH ELECTRONIC FAUCET)	1/2	1/2		1 1/2	1 1/4	KINDRED LBS6808 NOVANNI 1017I	SINK: SINGLE COMPARTMENT, LEDGE-BACK. FROM 1.0 MM (20 GAUGE) THICK TYPE 302 POLISHED STAINLESS STEEL, SELF-RIMMING, UNDERCOATED, CLAMPS. OVERALL SIZES: 500 MM x 500 MM x 200 MM (20" x 20" x 8").	DELTA 3000T332 (NO ALTERNATES)	GOOSENECK ELECTRONIC FAUCET: ACTIVATED BY INFRA-RED SENSOR RESPONDING TO PRESENCE OF PERSON'S HANDS IN LAVATORY. SENSOR: WATERPROOF, INCORPORATED IN BODY OF UNIT DECK-MOUNTED WITH IMPACT-RESISTANT PLASTIC LENS WITH ANTI-SCRATCH COATING, SENSITIVITY ADJUSTABLE FROM 100 MM TO 450 MM (4" TO 18"). WATER CONSERVATION: 30 SECOND MAXIMUM RUN TIME. CONTROLS: VANDAL-PROOF. SPOUT: CAST GOOSENECK SPOUT WITH 3 HOLE INSTALLATION AND 8" COVER PLATE. CHROME PLATED, WITH AERATOR HAVING INTEGRAL FLOW CONTROL. FOR 5.7 l/m (1.5 gpm) AT 413 kPa (60 psi) MAXIMUM. C/W UNDER SINK THERMOSTATIC MIXING VALVE (FOR 105°F) & CONTROLS BOX MOUNTED IN CUPBOARD UNDER SINK.		WASTE FITTING: INTEGRAL STAINLESS STEEL BASKET STRAINER/STOPPER, TAILPIECE, CAST BRASS P-TRAP WITH CLEANOUT.
S-4	STAINLESS STEEL SINK (ART/MUSIC ROOM)	1/2	1/2		1 1/2	1 1/4	KINDRED LBS6810-1/3 NOVANNI 1017J	SINK: SINGLE COMPARTMENT, LEDGE-BACK. FROM 1.0 mm (20 GAUGE) THICK TYPE 302 POLISHED STAINLESS STEEL, SELF-RIMMING, UNDERCOATED, CLAMPS. OVERALL SIZES: 520 mm X 510 mm X 250 mm (20½" X 20" X 10").	DELTA W6720 (NO ALTERNATES)	FAUCET: CHROME PLATED BRASS, LABORATORY TYPE WITH GOOSENECK SWING SPOUT WITH SERRATED NOZZLE, VACUUM BREAKER, AERATOR, INDEXED HOODED LEVER HANDLES, ACCESSORIES TO LIMIT MAXIMUM FLOW RATE TO 8.35 l/min (2.2 gpm) AT 413 kPa (60 psi). PROVIDE STOP/LOCK NUT KIT TO LIMIT SWING TO 120°	INTERCEPTOR: ZURN Z1183 WATTS SI-770	INTERCEPTOR: PROVIDE SOLIDS INTERCEPTOR UNDER COUNTER.
S-5	STAINLESS STEEL (SPEC. ED.)	1/2	1/2		1 1/2	1 1/4	KINDRED LBS6808 NOVANNI 1017I	SINK: SINGLE COMPARTMENT, LEDGE-BACK. FROM 1.0 MM (20 GAUGE) THICK TYPE 302 POLISHED STAINLESS STEEL, SELF-RIMMING, UNDERCOATED, CLAMPS. OVERALL SIZES: 500 MM x 500 MM x 200 MM (20" x 20" x 8").	DELTA 26C3933 (NO ALTERNATES)	FAUCET: CHROME PLATED BRASS, WITH GOOSENECK SPOUT, AERATOR, LEVER HANDLES, WASHERLESS CONTROLS, ACCESSORIES TO LIMIT MAXIMUM FLOW RATE TO 8.35 l/min (2.2 gpm) AT 413 kPa (60 psi). 120° MAXIMUM SPOUT SWIVEL.		WASTE FITTING: INTEGRAL STAINLESS STEEL BASKET STRAINER/STOPPER, TAILPIECE, CAST BRASS P-TRAP WITH CLEANOUT. C/W TMV UNDER SINK
DS-1	STAINLESS STEEL DOUBLE SINK (STAFF/KITCHEN)	1/2	1/2		1 1/2	1 1/4	KINDRED LBD6408-1/3 NOVANNI 2007I	SINK: DOUBLE COMPARTMENT, LEDGE-BACK. FROM 1.0 mm (20 GAUGE) THICK TYPE 302 POLISHED STAINLESS STEEL, SELF-RIMMING, UNDERCOATED, CLAMPS. OVERALL SIZES: 790 mm X 520 mm X 200 mm (31½" X 20 3/4" X 8").	DELTA 100 (NO ALTERNATES)	FAUCET: CHROME PLATED BRASS, WITH SWING SPOUT, AERATOR, SINGLE LEVER HANDLE, WASHERLESS CONTROLS, ACCESSORIES TO LIMIT MAXIMUM FLOW RATE TO 8.35 l/min (2.2 gpm) AT 413 kPa (60 psi).		WASTE FITTING: INTEGRAL STAINLESS STEEL BASKET STRAINER/STOPPER, TAILPIECE, CAST BRASS P-TRAP WITH CLEANOUT.
WF-1	WASH FOUNTAIN (4-USERS)	1/2	1/2		1 1/2	1 1/4	BRADLEY MF2944 (NO ALTERNATIVES)	SUITABLE FOR FOUR USERS. FLOOR MOUNTED. TERREON SOLID SURFACE MATERIAL BOWL. VANDAL RESISTANT, STANDARD FRAME. THERMOSTATIC MIXING ASSEMBLY. COMPLETE WITH HARDWIRED INFRARED ACTIVATION. COLOUR TO BE EMPIRE GREY. PROVIDE JUVENILE HEIGHT OPTION WHERE INDICATED ON ARCHITECTURAL DRAWINGS.		ELECTRONIC INFRARED SENSOR ACTIVATED BY PRESENCE OF PERSON'S HAND IN LAVATORY. WATER FLOWS WHEN SENSOR IS ACTIVATED AND STOPS UPON DE-ACTIVATION OF SENSOR. C/W 120V PLUG-IN ADAPTER	INSULATION: MCGUIRE PROWRAP PWV8902 TRUEBRO LAV GUARD TRAP: DELTA 33T311 ZURN MCGUIRE	INSULATION: INSULATE WASTE AND SUPPLIES WITH UL LISTED PREFORMED INSULATION SYSTEM COMPLETE WITH SEAMLESS JACKET. WASTE FITTING: NPS 32 MM (1 1/4") OFFSET WASTE WITH GRID STRAINER.
MS-1	MOP SINK	1/2	1/2		3	1 1/2	FIAT MSB 2424 ZURN 1996-24 STERN WILLIAMS MTB-2424	SINK: MOLDED HIGH DENSITY COMPOSITE BASIN WITH 80 mm (3") CHROME PLATED CAST BRASS DOME STRAINER AND GASKETED OUTLET CONNECTION. OVERALL SIZE: 600 mm X 600 mm X 260 mm HIGH (24" X 24" X 10").	FIAT 830-AA ZURN Z842M1-5H DELTA 28T9	WALL MOUNTED FAUCET: CHROME PLATED CAST BRASS WALL MOUNTED FAUCET WITH WALL BRACE, 20 mm (3/4") THREADED OUTLET SPOUT WITH PAIL HOOK, 200 mm (8") CENTRESET LEVER HANDLES, VACUUM BREAKER, ESCUTCHEONS, UNION INLETS, AERATOR, & INTEGRAL STOP VALVES. PROVIDE ACCESSORIES TO LIMIT MAXIMUM FLOW RATE TO 8.35 l/min (2.2 gpm) AT 413 KPA (60 psi).	FIAT ZURN STERN WILLIAMS DELTA	HOSE AND HOSE BRACKET: 1200 mm (48") LONG RUBBER HOSE MOP HANGER WALL GUARD: STAINLESS STEEL 600 mm (24") HIGH CONTINUOUS ON ADJACENT WALLS.
EW-1	EYE WASH	1/2	1/2		1 1/4	1 1/4	HAWS 7260BT-7270BT BRADLEY S19-220 GUARDIAN G1750P-TMV	250 MM (10") DIAMETER IMPACT RESISTANT BOWL CHROME PLATED BRASS SPRAY HEADS COMPLETE WITH COVERS, AND WALL MOUNTING BRACKET. TEPID WATER MIXING VALVE MEETING REQUIREMENTS OF ANSI STANDARD Z358.1-2004. MIXING VALVE IS TO PROVIDE WATER TEMPERATURE BETWEEN 15.5°C (60°) AND 38°C (100°F). 15 MM (1/2") CHROME PLATED BRASS STAY OPEN BALL VALVE COMPLETE WITH PUSH HANDLE.			HAWS TWBS.EWE BRADLEY S19-2000 GUARDIAN G3600	TEMPERING VALVE TO BLEND HOT AND COLD WATER TO DELIVER TEPID WATER. AS REQUIRED BY ANSI Z358.1
DF-1	BARRIER-FREE BOTTLE FILLING STATION (REFRIGERATED)		1/2		1 1/4	1 1/4	OASIS VERICOOLER PGF8EBF (NO ALTERNATES)	STAINLESS STEEL CONSTRUCTION HANDS FREE, WALL MOUNTED (IN/WALL FRAME/PLATE), WITH ELECTRONIC BOTTLE FILLER SENSOR. REAL DRAIN ELIMINATES STANDING WATER, ANTIMICROBIAL PROTECTION, LAMINAR FLOW, LEAD FREE, ADA COMPLIANT. FILL RATE OF 1.1 GPM. C/W 120V RECEPTACLE WITH 20A GFCI. SIZE: 19 3/4" X 3 1/2" X 40 13/16" CHILLING CAPACITY OF 8.0 GPH				
WS-1	WASHER SUPPLY VALVE	1/2	1/2				WATTS DWB ZURN WM2961 DELTA	ENCASED WASHING MACHINE VALVE COMPLETE WITH SINGLE LEVER HANDLE VALVE, HEAVY-DUTY MOUNTING STRAPS, KNOCKOUTS FOR A RIGHT OR LEFT MOUNTING, AND A TAILPIECE THAT ADAPTS EASILY TO EITHER ABS OR PVC STANDPIPE.				

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
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Project Number: 25426

Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENCED PROFESSIONAL ENGINEER
26-Aug-26
M.L. DEMAITER
100505917
PROVINCE OF ONTARIO

MECHANICAL SCHEDULES (1 OF 2)

M1.2

Plot Date: Aug 26, 2026 - 2:07pm By: dfeener Filename: C:\...drawn\Architdish_64b\25426 M1 Schedules, Legend, Notes.dwg

PLUMBING FIXTURE SCHEDULE

Item	Type	Connection Sizes					Fixture		Trim		Accessories	
		HW	CW	TW	Drain	Vent	Acceptable Manufacturer	Fixture Description	Acceptable Manufacturer	Trim Description	Acceptable Manufacturer	Accessory Description
FD-1	FLOOR DRAIN				NOTED	1 1/2	ZURN ZN415B MIFAB F1100-C CONTOUR C2000-R6 WATTS FD-100-C-A	GENERAL DUTY CAST IRON BODY, ADJUSTABLE HEAD, NICKEL BRONZE STRAINER, INTEGRAL SEEPAGE PAN, AND CLAMPING COLLAR. USE SQUARE STRAINER IN TILED AREAS AND ROUND STRAINER ELSEWHERE. C/W TRAP PRIMER				
FD-2	FLOOR DRAIN (HEAVY DUTY)				NOTED	1 1/2	ZURN Z-536 MIFAB F1000-C CONTOUR C2400 WATTS FD-100-C OR FD-100-L	HEAVY-DUTY CAST IRON BODY, ADJUSTABLE HEAD, NICKEL BRONZE STRAINER, INTEGRAL SEEPAGE PAN, AND CLAMPING COLLAR. USE SQUARE STRAINER IN TILED AREAS AND ROUND STRAINER ELSEWHERE. C/W TRAP PRIMER.				
HD-1	HUB DRAIN				NOTED	1 1/2	ZURN Z415 C/W Z-400-S MIFAB F1100-C-DD CONTOUR C2000-F WATTS FD-100-C-DD	GENERAL DUTY HUB DRAIN CAST IRON BODY, CLAMPING COLLAR, NICKEL-BRONZE ADJUSTABLE HEAD HUB. C/W TRAP PRIMER.				
FFD-1	FUNNEL FLOOR DRAIN				NOTED	1 1/2	ZURN ZN-415-BF MIFAB F1100-C-EG CONTOUR C2000-RSHNB WATTS FD-100-C-EG-1	COMBINATION FUNNEL FLOOR DRAIN CAST IRON BODY WITH INTEGRAL SEEPAGE PAN, CLAMPING COLLAR, NICKEL-BRONZE ADJUSTABLE HEAD STRAINER WITH INTEGRAL FUNNEL. C/W TRAP PRIMER.				
RD-1	ROOF DRAIN (FLOW CONTROL)				NOTED		ZURN ZACF121-CR MIFAB R1200-FBU CONTOUR C1000DMPX WATTS RD-100-ABDK SMITH 1016-C-R-AD	CONTROLLED FLOW; CAST IRON BODY, UNDER DECK CLAMP AND SUMP RECEIVER TO SUIT ROOF CONSTRUCTION, FLASHING CLAMP RING WITH INTEGRAL GRAVEL STOP, BEARING PAN, FLOW CONTROL WEIR ASSEMBLY, ALUMINUM DOME.				
HB-1	WALL HYDRANT		3/4				WATTS BD SERIES DELTA WALTEC WILKINS EMCO	20 MM (3/4") DIAMETER BRASS CONSTRUCTION, 200 PSI, 180°F PRESSURE AND TEMPERATURE LIMITS, COMPLETE WITH HOSE CONNECTION, AND WHEEL HANDLE STRAIGHT/ANGLE PATTERN TO SUIT. PROVIDE VACUUM BREAKER COMPLETE WITH HOSE CONNECTION.				
NFHB-1	NON-FREEZE WALL HYDRANT		3/4				ZURN Z-1300 MIFAB MHY-20 ANCON HY-725	RECESSED, ENCASED, ALL BRONZE CONSTRUCTION, ANTI-SYPHON, NON FREEZE WALL HYDRANT WITH NON-TURNING OPERATING ROD, FREE FLOATING COMPRESSION VALVE, INTEGRAL VACUUM BREAKER, SELF DRAINING, REPLACEABLE SEAT AND SEAT WASHER, NICKEL BRONZE BOX AND HINGED COVER WITH OPERATING KEY LOCK. NPS 20 MM (¾") HOSE OUTLET.				

CAPACITY INDICATED ON SCHEDULE REFER TO SPECIFICATION FOR CONSTRUCTION STANDARDS, ACCESSORIES AND ADDITIONAL INFORMATION.

VAV CONTROL DAMPER SCHEDULE

Item	Type	Airflow Capacity						Size		Electric Heat				Acceptable Manufacturer & Model	Remarks
		Design (cfm)	Min. Vent (cfm)	Heating		Cooling		Neck (in)	Box (in)	Air Temp.		Capacity (kW)	Voltage		
				Min. (cfm)	Max. (cfm)	Min. (cfm)	Max. (cfm)			T in (°F)	T out (°F)				
VAV-1.1	SINGLE TERMINAL CONTROL BOX	100	60	60	80	30	130	6	6	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-1.2	SINGLE TERMINAL CONTROL BOX	100	60	60	80	30	130	6	6	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-1.3	SINGLE TERMINAL CONTROL BOX	1000	600	600	800	300	1300	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-1.4	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-1.5	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-1.6	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-2.1	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-2.2	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-2.3	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-2.4	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-2.5	SINGLE TERMINAL CONTROL BOX	400	240	240	320	120	520	8	10	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-3.1	SINGLE TERMINAL CONTROL BOX	250	150	150	200	75	325	6	8	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-4.1	SINGLE TERMINAL CONTROL BOX	300	180	180	240	90	390	6	8	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-4.2	SINGLE TERMINAL CONTROL BOX	300	180	180	240	90	390	6	8	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.1	SINGLE TERMINAL CONTROL BOX	800	480	480	640	240	1040	10	12	65	90	16.0	208/3/60	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, ELECTRIC REHEAT & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.2	SINGLE TERMINAL CONTROL BOX	400	240	240	320	120	520	8	10	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.3	SINGLE TERMINAL CONTROL BOX	400	240	240	320	120	520	8	10	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.4	SINGLE TERMINAL CONTROL BOX	200	120	120	160	60	260	8	8	65	90	13.0	208/3/60	KRUGER: LMHS-LC EH PRICE: SDV	C/W 36" ATTENUATOR, ELECTRIC REHEAT & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.5	SINGLE TERMINAL CONTROL BOX	200	120	120	160	60	260	8	8	65	90	13.0	208/3/60	KRUGER: LMHS-LC EH PRICE: SDV	C/W 36" ATTENUATOR, ELECTRIC REHEAT & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.6	SINGLE TERMINAL CONTROL BOX	100	60	60	80	30	130	6	6	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.7	SINGLE TERMINAL CONTROL BOX	400	240	240	320	120	520	8	10	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.8	SINGLE TERMINAL CONTROL BOX	150	90	90	120	45	195	6	8	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.9	SINGLE TERMINAL CONTROL BOX	300	180	180	240	90	390	6	8	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.10	SINGLE TERMINAL CONTROL BOX	300	180	180	240	90	390	6	8	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-5.11	SINGLE TERMINAL CONTROL BOX	300	180	180	240	90	390	6	8	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-6.1	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-6.2	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-7.1	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-7.2	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-7.3	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-7.4	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-7.5	SINGLE TERMINAL CONTROL BOX	400	240	240	320	120	520	8	10	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-7.6	SINGLE TERMINAL CONTROL BOX	400	240	240	320	120	520	8	8	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-7.7	SINGLE TERMINAL CONTROL BOX	800	480	480	640	240	1040	10	10	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-8.1	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-8.2	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-8.3	SINGLE TERMINAL CONTROL BOX	400	240	240	320	120	520	8	10	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-8.4	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.
VAV-8.5	SINGLE TERMINAL CONTROL BOX	1200	720	720	960	360	1560	12	14	-	-	-	-	KRUGER: LMHS-LC EH PRICE: SDV-0S	C/W 36" ATTENUATOR, & 2 ACCESS DOORS C/W CAM LATCHES.

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Project Number: 25416

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MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

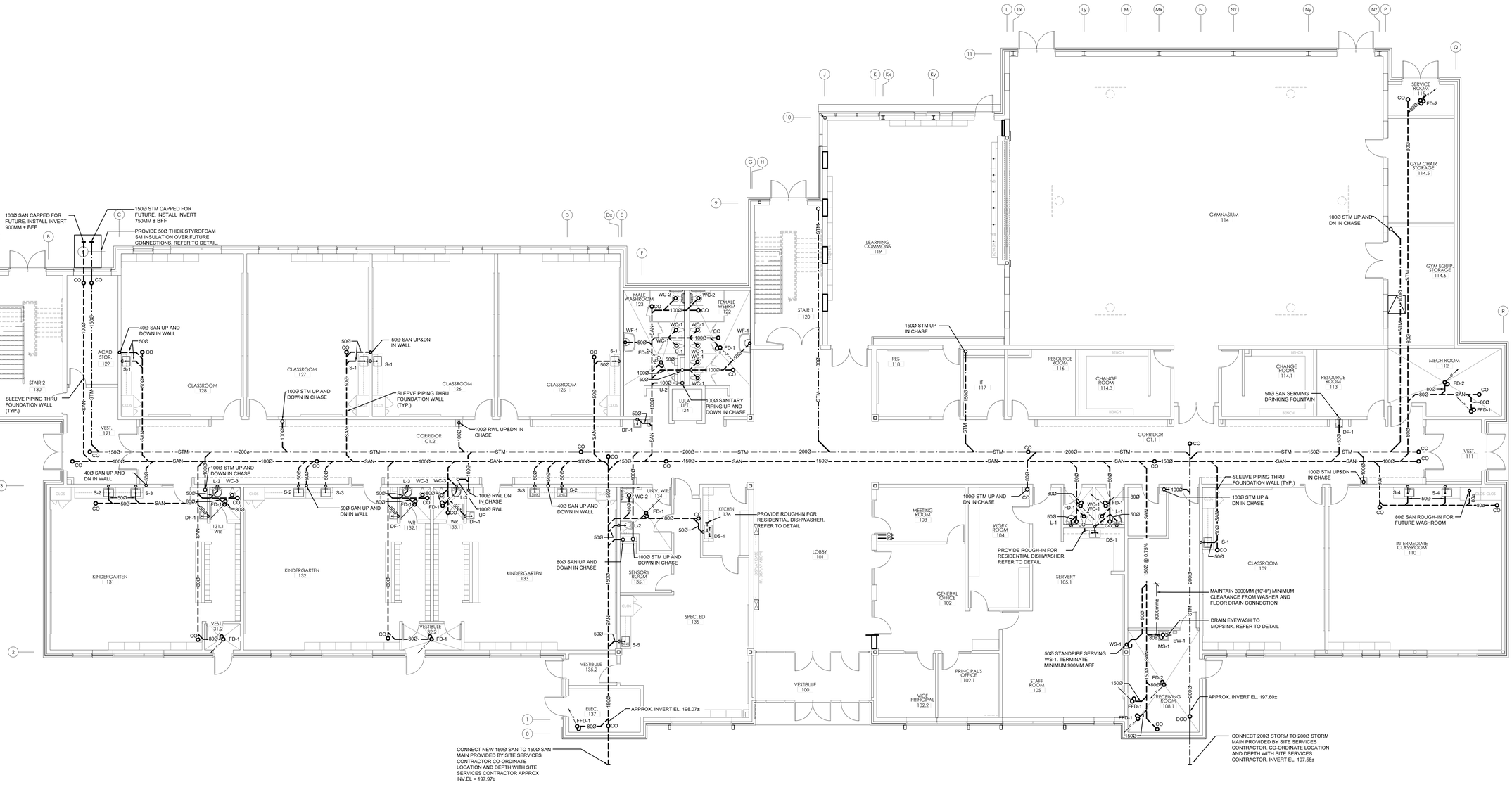
ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENSED PROFESSIONAL ENGINEER
26-Aug-26
M.L. DEMAITER
100505917
PROVINCE OF ONTARIO

MECHANICAL SCHEDULES (2 OF 2)

M1.3

Plot Date: Aug 26, 2026 - 2:07pm By: dfesner
Filename: C:\...drawVAcPublish_648\25426 M1 Schedules, Legend, Notes.dwg



LEVEL 1 PLAN - BELOW GRADE DRAINAGE

SCALE: 1:100 FIN. FLOOR ELEV. = 199.65

REVISIONS

NO.	DATE	PARTICULAR
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ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENSED PROFESSIONAL ENGINEER
26-Aug-26
M.L. DEMAITER
100505917
PROVINCE OF ONTARIO

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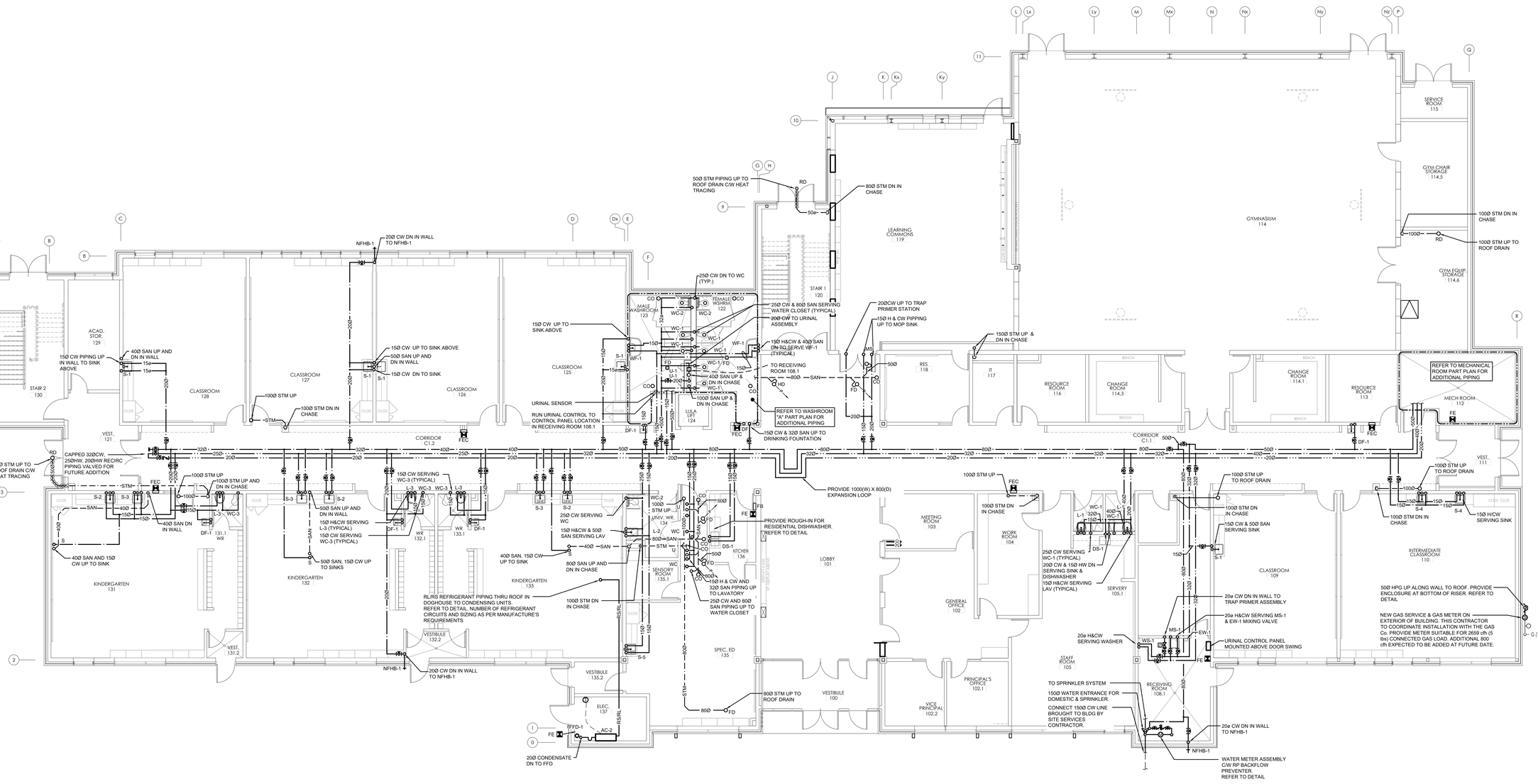
LEVEL 1 PLAN - BELOW GRADE DRAINAGE

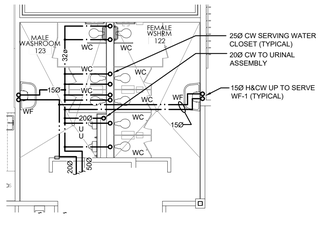
M2.1

Plot Date: Aug 26, 2026 - 2:07pm By: dfeener Filename: C:\...drawVArchPublish_64B\25426 M2 Drainage.dwg



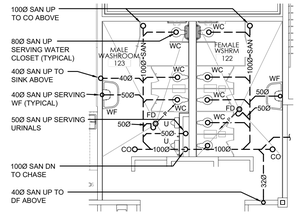
LEVEL 1 PLAN - ABOVE GRADE DRAINAGE & DOMESTIC

SCALE: 1:100 FIN. FLOOR ELEV. = 199.65



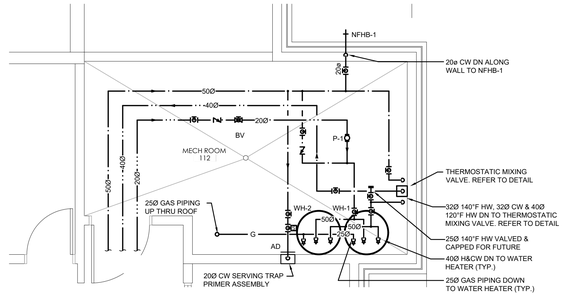
WASHROOM "A" PART PLAN PIPING SERVING ABOVE

SCALE: 1:100 FIN. FLOOR ELEV. = 199.65



WASHROOM "A" PART PLAN HIGH LEVEL DRAINAGE

SCALE: 1:100 FIN. FLOOR ELEV. = 199.65



MECHANICAL ROOM PART PLAN

SCALE: 1:50

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

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Project Number: 24548

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CLIENT:

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PROJECT:

22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENCED PROFESSIONAL ENGINEER
26-Aug-26
M.L. DEMAITER
100505917
PROVINCE OF ONTARIO

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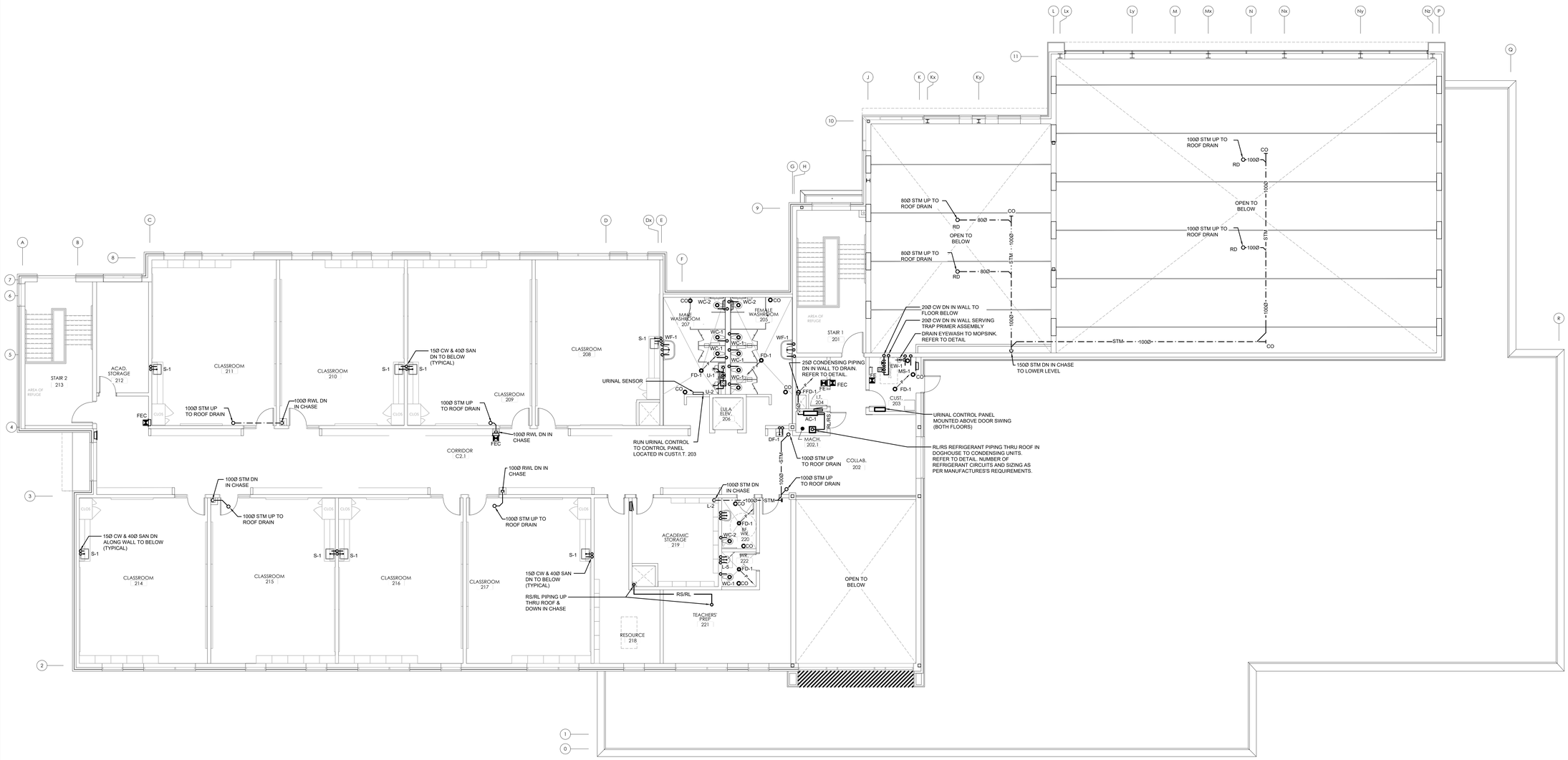
LEVEL 1 PLAN - ABOVE GRADE DRAINAGE & DOMESTIC

M2.2

Plot Date: Aug 26, 2026 - 2:07pm By: dfeener Filename: C:\...drow\Ac\Publish 64b\25426 M2 Drainage.dwg



LEVEL 2 PLAN - ABOVE GRADE DRAINAGE & DOMESTIC

SCALE: 1:100

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
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Project Number: 25416

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PROJECT:
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N0H 2C3

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100505917
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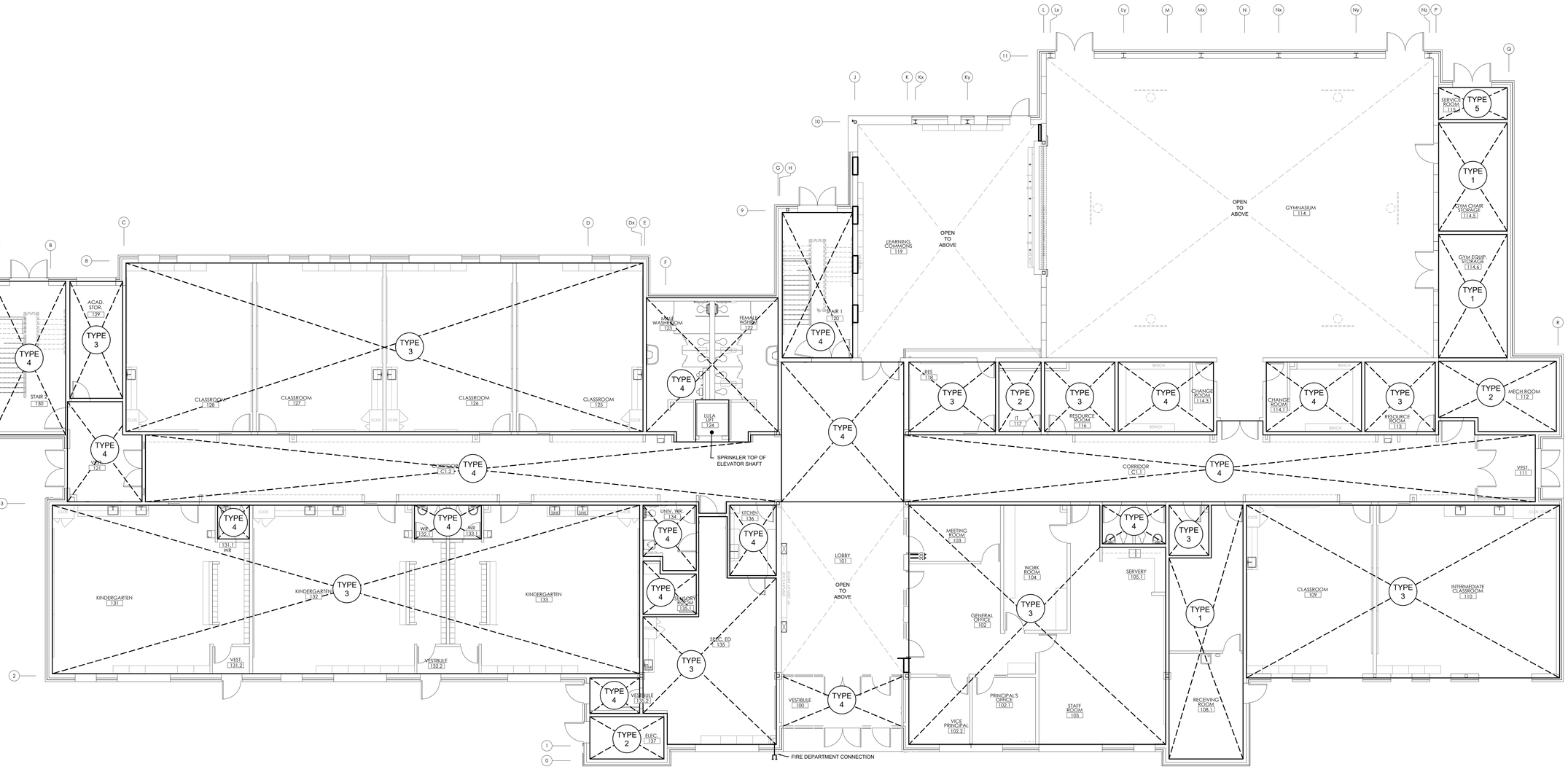
LEVEL 2 PLAN - ABOVE GRADE DRAINAGE & DOMESTIC

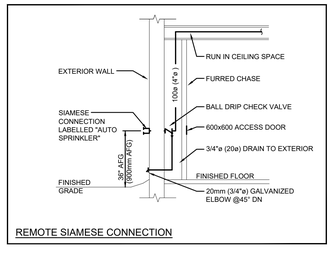
M2.3

Plot Date: Aug 26, 2026 - 2:07pm By: dfeener
Filename: C:\...drawn\Acr\Publish_64B\25426 M2 Drainage.dwg

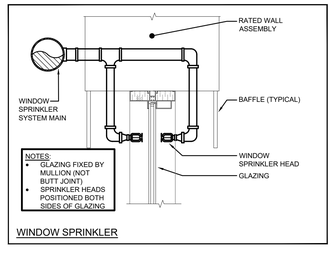


LEVEL 1 PLAN - FIRE PROTECTION

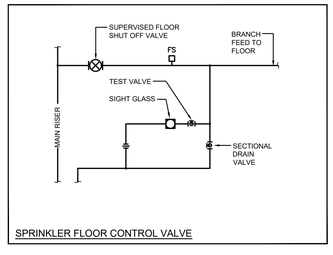
SCALE: 1:100 FIN. FLOOR ELEV. = 199.65



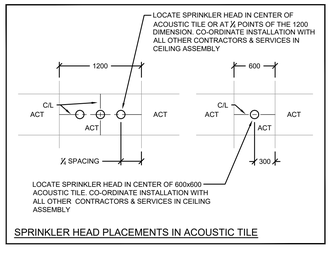
REMOTE SIAMESE CONNECTION



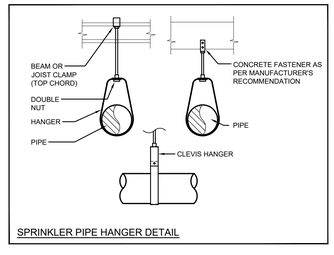
WINDOW SPRINKLER



SPRINKLER FLOOR CONTROL VALVE



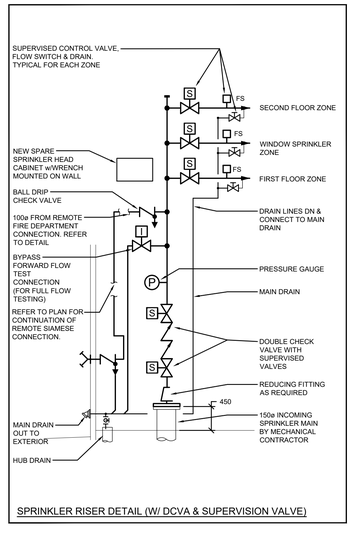
SPRINKLER HEAD PLACEMENTS IN ACOUSTIC TILE



SPRINKLER PIPE HANGER DETAIL

SPRINKLER SCHEDULE

TYPE	SPRINKLER HEAD	COLOUR	REMARKS
1	UPRIGHT	BRASS	C/W GUARD
2	UPRIGHT	BRASS	C/W GUARD HIGH TEMPERATURE
3	RECESSED PENDENT	WHITE	
4	CONCEALED PENDENT	WHITE	
5	NON-FREEEZE SIDEWALL	BRASS	



SPRINKLER RISER DETAIL (W/ DCVA & SUPERVISION VALVE)

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
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PROJECT:
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NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

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100505917
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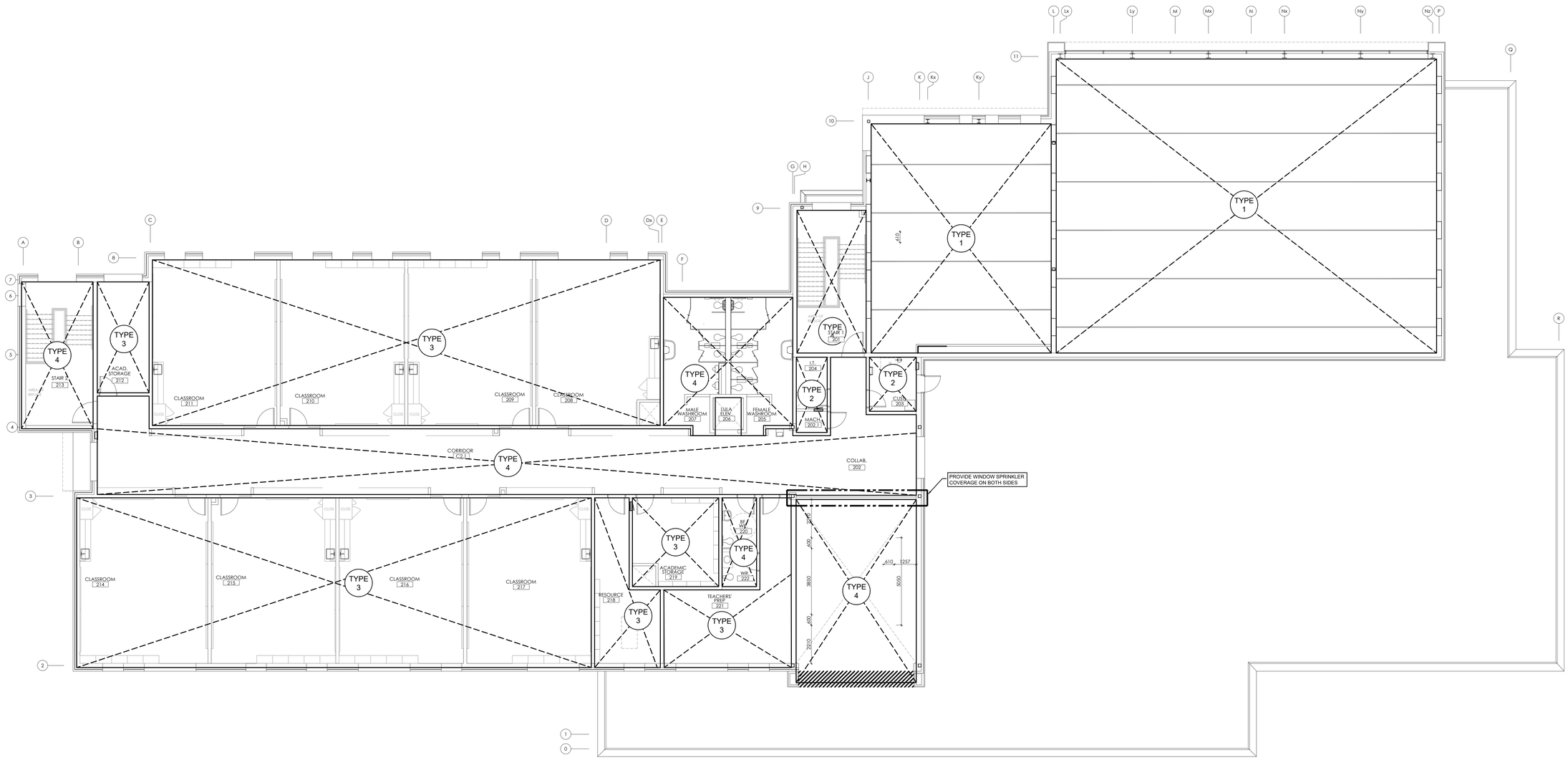
LEVEL 1 PLAN - FIRE PROTECTION PLAN

M3.1

Plot Date: Aug 26, 2026 - 2:07pm By: dfeener Filename: C:\...drawVArchPublish_64\22424 M3 Fire Protection.dwg



LEVEL 2 PLAN - FIRE PROTECTION
SCALE: 1:100

SPRINKLER SCHEDULE

TYPE	SPRINKLER HEAD	COLOUR	REMARKS
1	UPRIGHT	BRASS	C/W GUARD
2	UPRIGHT	BRASS	C/W GUARD HIGH TEMPERATURE
3	RECESSED PENDENT	WHITE	
4	CONCEALED PENDENT	WHITE	
5	NON-FREEEZE SIDEWALL	BRASS	

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LEVEL 2 PLAN - FIRE PROTECTION PLAN

M3.2

Plot Date: Aug 26, 2026 - 2:07pm By: dleener
Filename: C:\...drawVArchPublish_64bV2540r.vx3 Fire Protection.dwg

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
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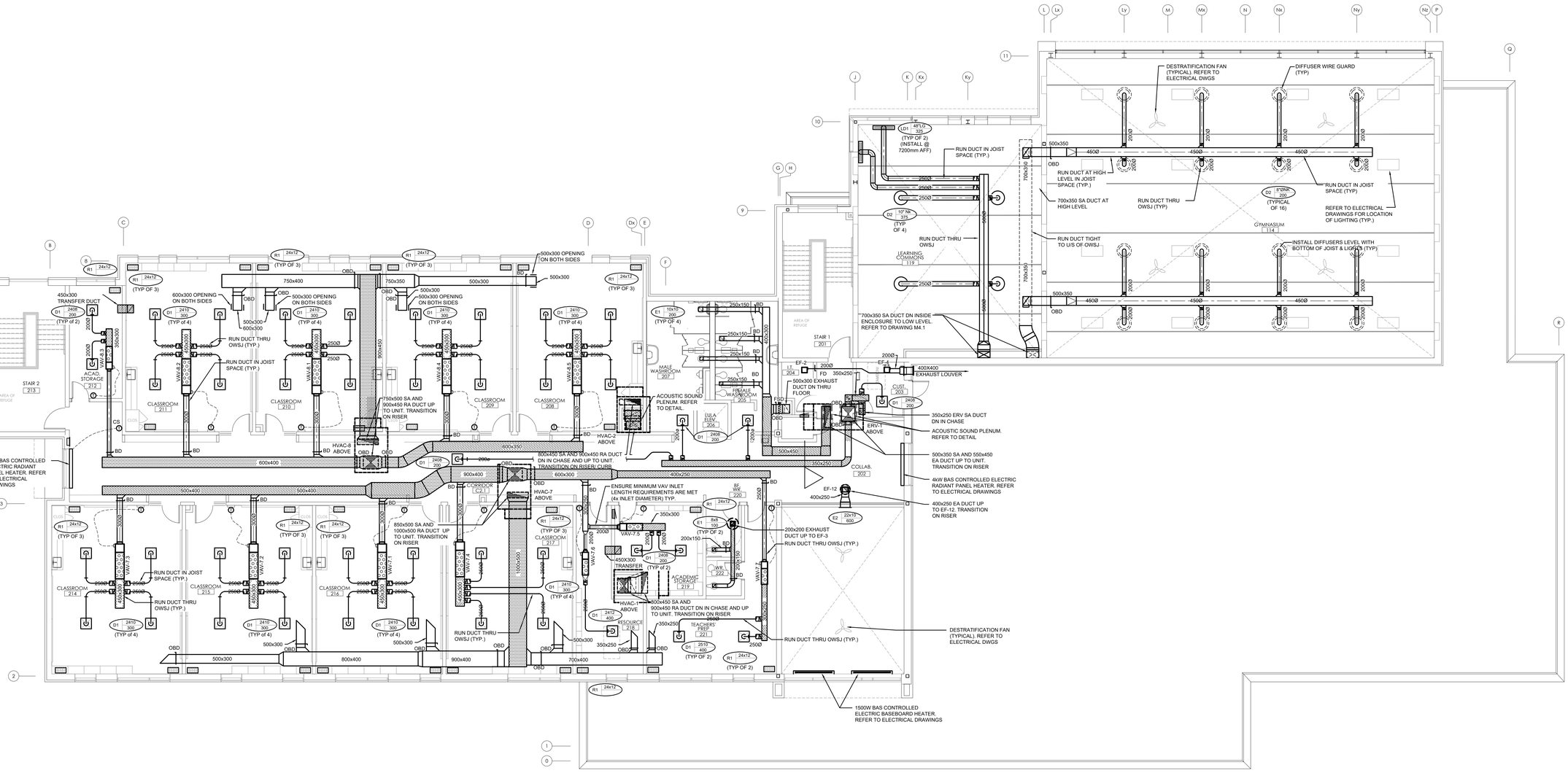
LEVEL 1 PLAN - VENTILATION

M4.1

Plot Date: Aug 26, 2026 - 2:07pm By: dfeener
Filename: C:\...drawn\Achubish_64B\25426 M4 Ventilation.dwg

LEVEL 1 PLAN - VENTILATION

SCALE: 1:100 FIN. FLOOR ELEV. = 199.65



LEVEL 2 PLAN - VENTILATION

SCALE: 1:100

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
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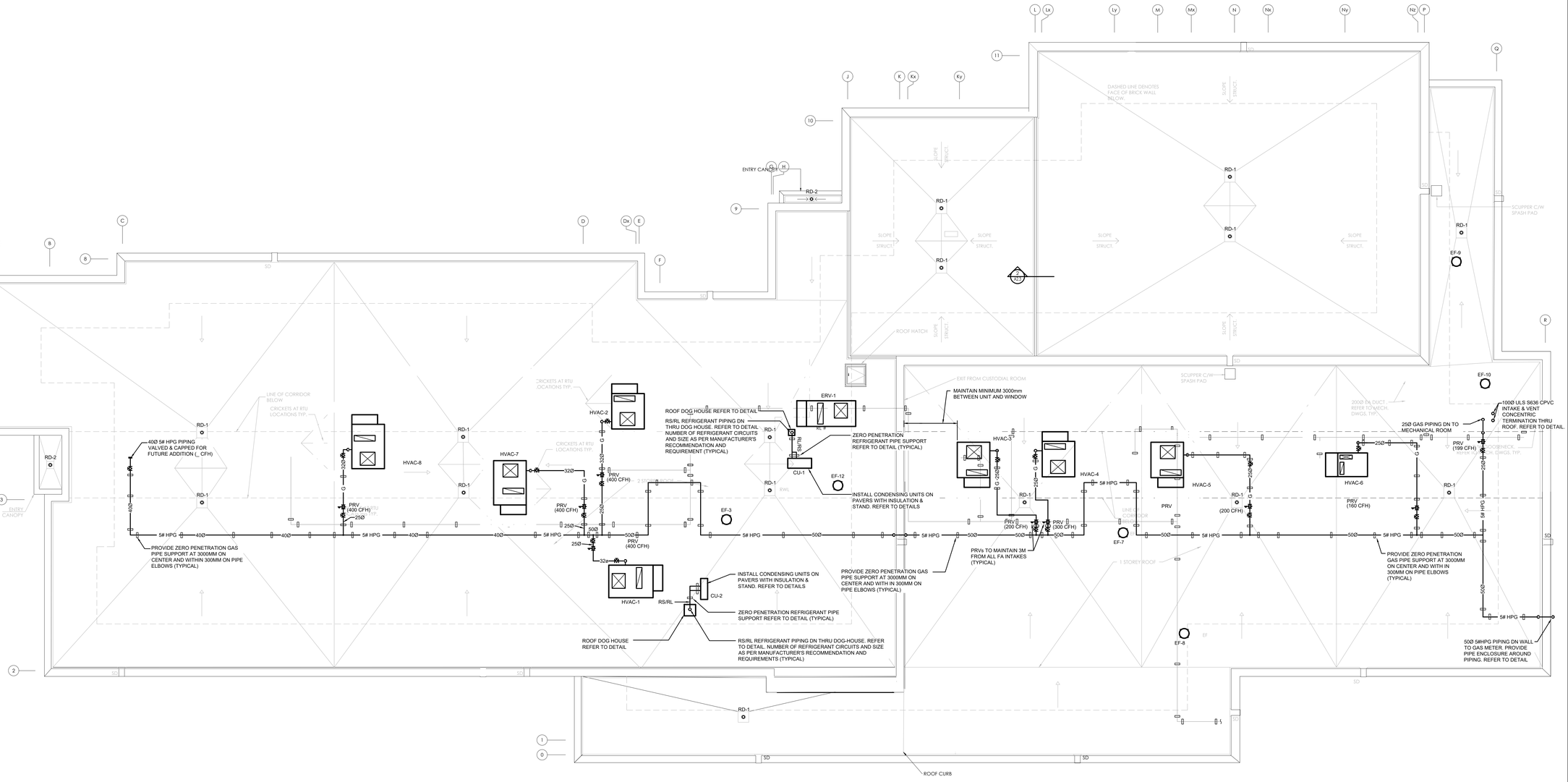
LEVEL 2 PLAN - VENTILATION

M4.2

Plot Date: Aug 26, 2026 - 2:07pm By: dfeener
Filename: C:\...drawVAcPublish_64B\25426 M4 Ventilation.dwg



ROOF PLAN
SCALE: 1:100

REVISIONS

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01	25.12.19	ISSUED FOR 60% REVIEW
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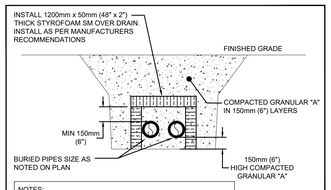
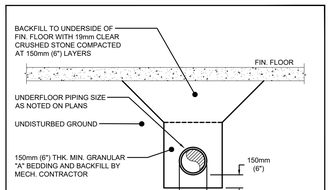
ROOF PLAN

M5.1

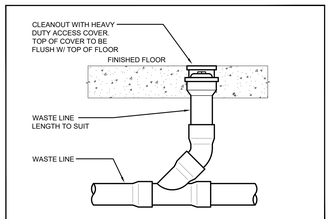
Plot Date: Aug 26, 2026 - 2:07pm By: dfesner
Filename: C:\...drawVAcPublish_648\25426 M5 Roof.dwg



BURIED SANITARY/STORM PIPING INSULATION



INTERIOR PIPE BEDDING



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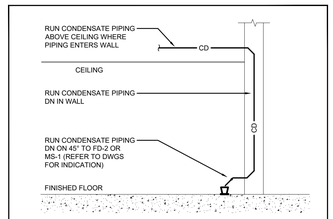
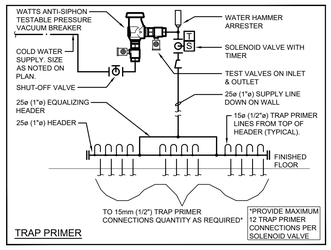
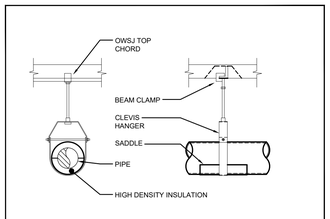


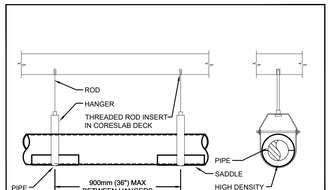
CONDENSATE DRAIN PIPING



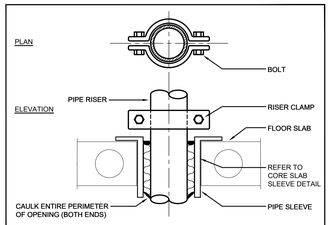
TRAP PRIMER



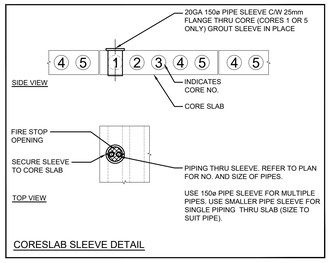
PIPE HANGER



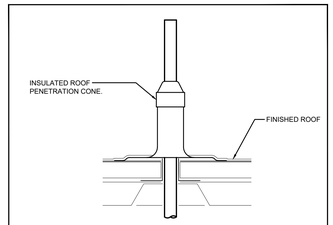
PIPE HANGER (CORESLAB)



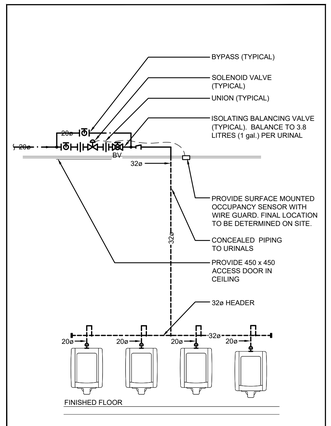
RISER CLAMP (CORE SLAB)



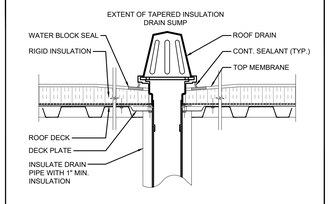
CORESLAB SLEEVE DETAIL



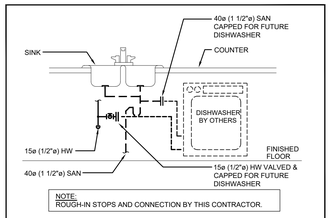
SANITARY VENT THRU ROOF



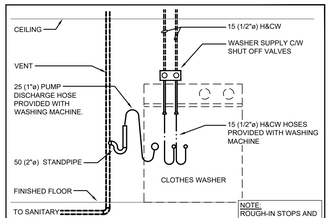
BOY'S WR URINAL PIPING DETAILS



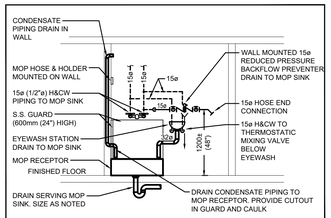
ROOF DRAIN DETAIL



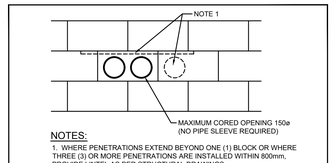
RESIDENTIAL DISHWASHER ROUGH-IN



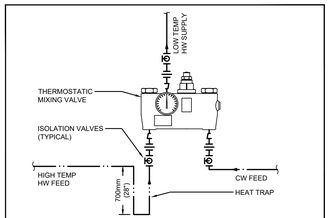
WASHER ROUGH-IN



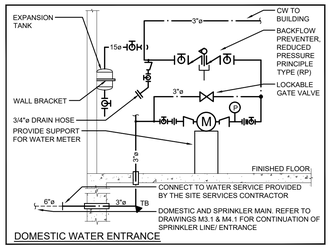
MOP SINK WITH REDUCED PRESSURE ASSEMBLY



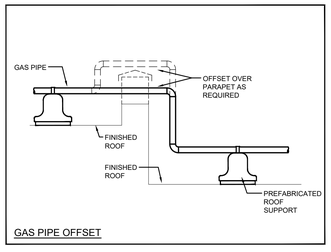
PIPE PENETRATION THROUGH BLOCK WALL (NON RATED BLOCK WALL)



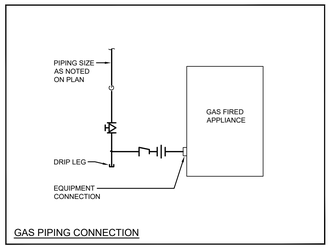
THERMOSTATIC MIXING VALVE INSTALLATION



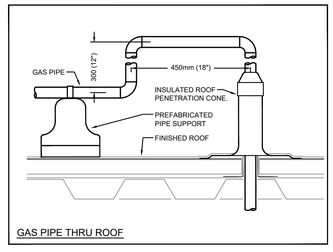
DOMESTIC WATER ENTRANCE



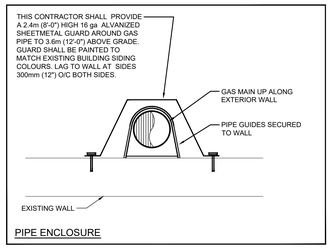
GAS PIPE OFFSET



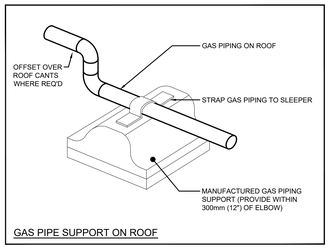
GAS PIPING CONNECTION



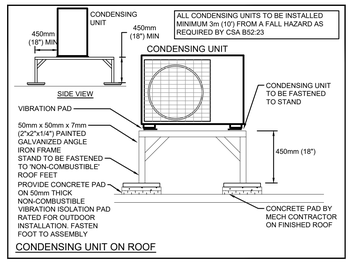
GAS PIPE THRU ROOF



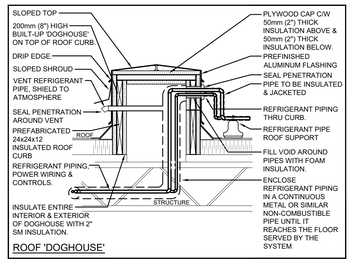
PIPE ENCLOSURE



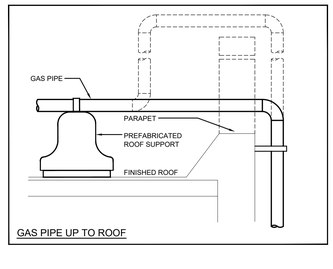
GAS PIPE SUPPORT ON ROOF



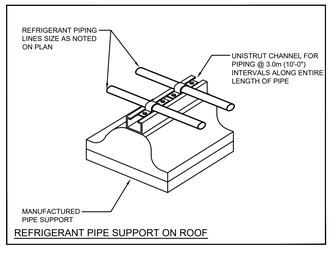
CONDENSING UNIT ON ROOF



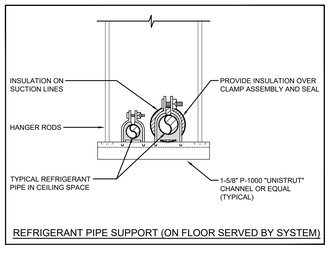
ROOF 'DOGHOUSE'



GAS PIPE UP TO ROOF



REFRIGERANT PIPE SUPPORT ON ROOF



REFRIGERANT PIPE SUPPORT (ON FLOOR SERVED BY SYSTEM)

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

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Do not scale this drawing.

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Phone: 519-725-3555
Website: deiassociates.ca
Project Number: 25426

DEI Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENCED PROFESSIONAL ENGINEER
26-Aug-26
M.L. DEMAITER
100505917
PROVINCE OF ONTARIO

DETAILS (1 OF 2)

M6.1

Plot Date: Aug 26, 2026 - 2:07pm By: dfeener
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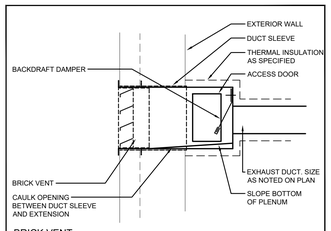
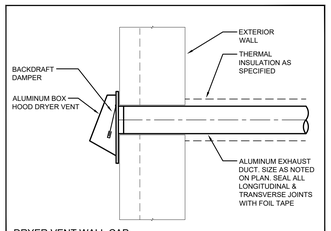
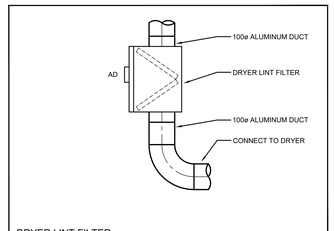


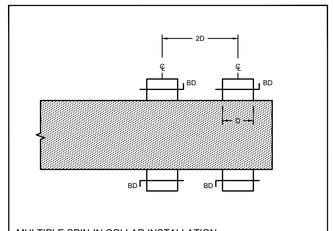
BRICK VENT



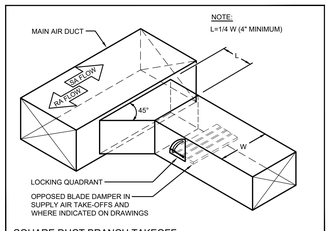
DRYER VENT WALL CAP



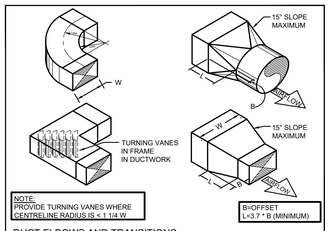
DRYER LINT FILTER



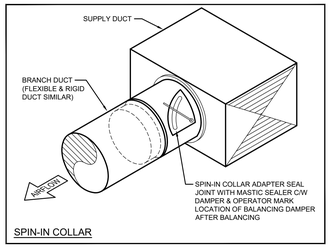
MULTIPLE SPIN-IN COLLAR INSTALLATION



SQUARE DUCT BRANCH TAKEOFF



DUCT ELBOWS AND TRANSITIONS



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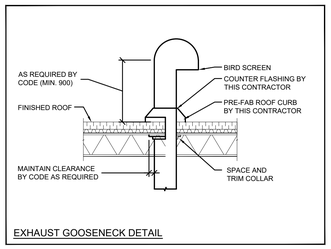
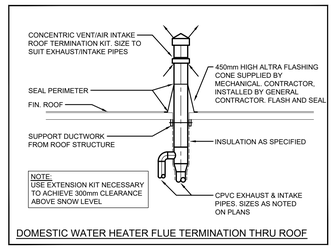
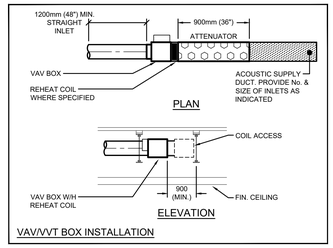


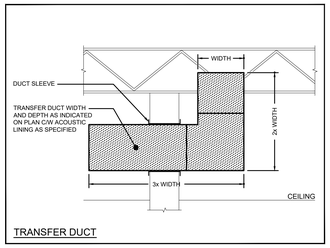
EXHAUST GOOSENECK DETAIL



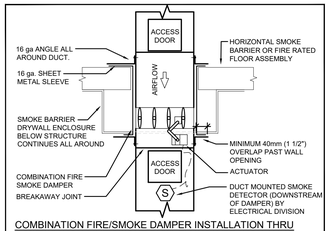
DOMESTIC WATER HEATER FLUE TERMINATION THRU ROOF



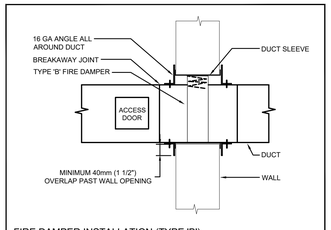
VAV/VVT BOX INSTALLATION



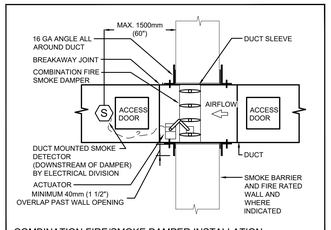
TRANSFER DUCT



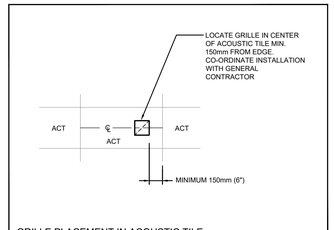
COMBINATION FIRE/SMOKE DAMPER INSTALLATION THRU FLOOR



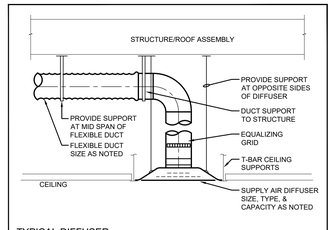
FIRE DAMPER INSTALLATION (TYPE 'B')



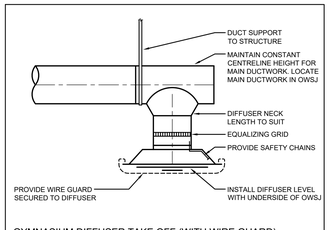
COMBINATION FIRE/SMOKE DAMPER INSTALLATION



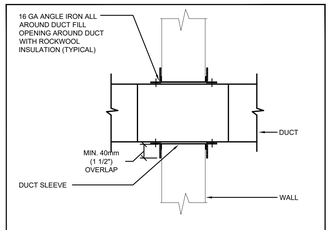
GRILLE PLACEMENT IN ACOUSTIC TILE



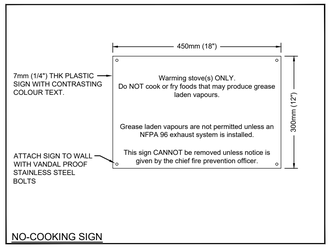
TYPICAL DIFFUSER



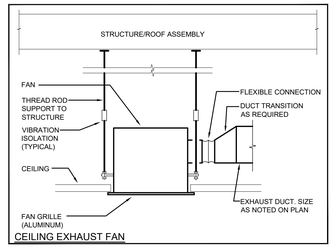
GYMNASIUM DIFFUSER TAKE OFF (WITH WIRE GUARD)



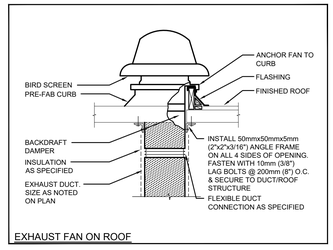
DUCT THRU NON RATED FIRE SEPERATION



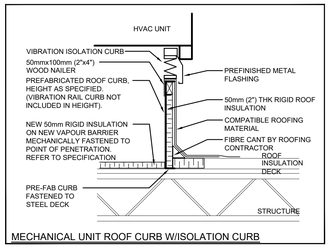
NO-COOKING SIGN



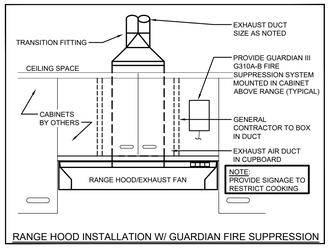
CEILING EXHAUST FAN



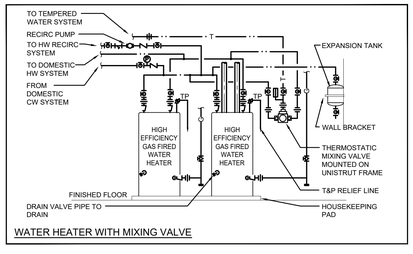
EXHAUST FAN ON ROOF



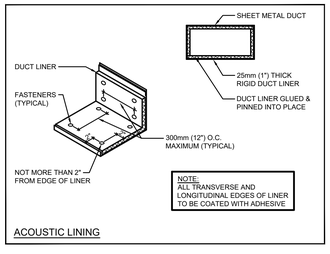
MECHANICAL UNIT ROOF CURB W/ISOLATION CURB



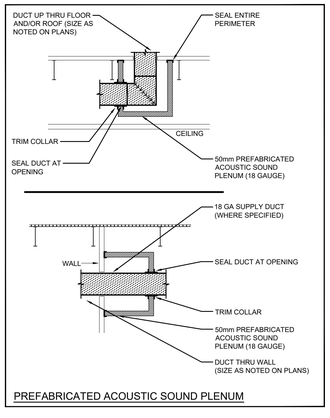
RANGE HOOD INSTALLATION W/ GUARDIAN FIRE SUPPRESSION



WATER HEATER WITH MIXING VALVE



ACOUSTIC LINING



PREFABRICATED ACOUSTIC SOUND PLENUM

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
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MECHANICAL | ELECTRICAL | AQUATIC

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PROJECT:
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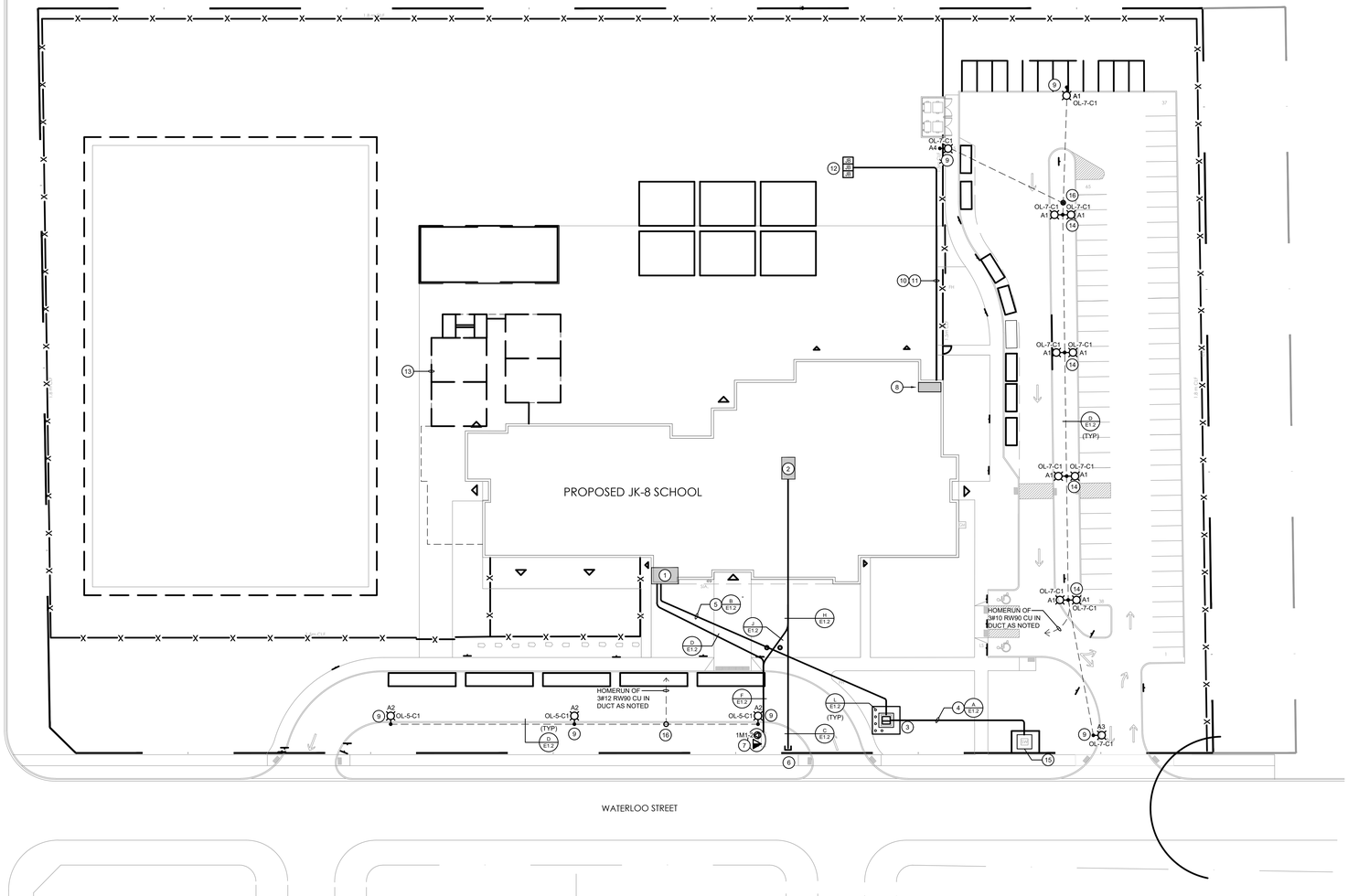
ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENCED PROFESSIONAL ENGINEER
26-Aug-26
M.L. DEMAITER
100505917
PROVINCE OF ONTARIO

DETAILS (2 OF 2)

M6.2

Plot Date: Aug 26, 2026 - 2:07pm By: dleener
Filename: C:\...drawn\Architdish_64B\25426 M4 Details.dwg



SITE PLAN
SCALE: 1:400

GENERAL NOTES

- ALL DUCTBANK INSTALLATIONS MUST CONFORM TO WESTARIO UTILITIES STANDARDS. CONFIRM ALL REQUIREMENTS PRIOR TO INSTALLATION.
- ALL UNDERGROUND ELECTRICAL DUCTS AND SERVICES SHALL BE COORDINATED WITH SITE LANDSCAPING AND OTHER SITE SERVICES.

SPECIFIC NOTES

1 INDICATES THE APPROXIMATE LOCATION OF GROUND FLOOR MAIN ELECTRICAL ROOM. REFER TO FLOOR PLANS FOR EXACT LOCATION.

2 INDICATES THE APPROXIMATE LOCATION OF GROUND FLOOR MAIN I.T. ROOM. REFER TO FLOOR PLANS FOR EXACT LOCATION

3 INDICATES LOCATION OF NEW PAD MOUNTED TRANSFORMER ON NEW CONCRETE BASE, REFER TO DETAIL K/E1.2 FOR FURTHER INFORMATION.

4 INDICATES PROPOSED ROUTING OF PRIMARY DUCTS.

5 INDICATES PROPOSED ROUTING OF UNDERGROUND SECONDARY DUCT BANK.

6 TERMINATE ALL INCOMING COMMUNICATIONS DUCTS (TELEPHONE/FIBRE/SPARE) DUCTS AT PROPERTY LINE FOR FUTURE EXTENSION BY LOCAL AUTHORITIES. REFER TO FLOOR PLANS FOR TERMINATION OF DUCTS WITHIN BUILDING.

7 INDICATES LOCATION OF PYLON SIGN. PROVIDE DUCTS FROM INTERNAL SERVICE POINT IN ELECTRICAL ROOM FOR POWER AND DATA. CONFIRM EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN, PROVIDE SEALED PULL BOXES AS REQUIRED.

8 APPROXIMATE LOCATION OF PORTABLE SERVING SERVICE ROOM. REFER TO FLOOR PLANS.

9 INDICATES PARKING LOT FIXTURE MOUNTED ON CONCRETE POLE BASE AND SET BACK MIN. 1000mm FROM CURB OR SIDEWALK (WHERE APPLICABLE). REFER TO DETAIL N/E1.2.

10 INDICATES PROPOSED ROUTING OF POWER AND FIRE ALARM DUCTS FOR PORTABLES FROM ELECTRICAL ROOM. REFER TO DETAIL G/E1.2 FOR FURTHER INFORMATION.

11 INDICATES PROPOSED ROUTING OF COMMUNICATION DUCTS FOR PORTABLES FROM DEMARCATION ROOM. REFER TO DETAIL E/E1.2 FOR FURTHER INFORMATION.

12 INDICATES THREE UNDERGROUND PRECAST ELECTRICAL JUNCTION BOXES FOR TERMINATION OF DUCTS TO PORTABLES AS NOTED. TERMINATE POWER AND AUXILIARY SERVICE DUCTS IN SEPARATE BOXES AT EACH GROUPING OF PORTABLES. TERMINATE IN BELL ENDS. JUNCTION BOX SHALL BE EQUAL TO ACTON PRECAST 610MM (24") SQUARE HANDWELL C/W 6-100MM OPENINGS PER SIDE AND SQUARE CAST IRON WITH CIRCULAR CLOSED MANHOLE COVER EQUAL TO ONTARIO PROVINCIAL STANDARD DRAWING #OPSD 401.010. INSTALL BOXES ON 150MM GRANULAR 'B' BASE. ENSURE COVER OF JUNCTION BOX IS INSTALLED FLUSH WITH ASPHALT SURFACE. CONFIRM EXACT LOCATION WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN. REFER TO DETAIL M/E1.2.

13 INDICATES OUTLINE FOR FUTURE ADDITION, UNDERGROUND SERVICES ARE TO AVOID THE NOTED AREA.

14 CENTER FIXTURE WITHIN PARKING ISLAND.

15 APPROXIMATE LOCATION OF UTILITY VISTA SWITCH FOUNDATION. COORDINATE EXACT LOCATION ON SITE WITH UTILITY.

16 PROVIDE POLYMER CONCRETE HAND HOLE WITH 20K LID. MARKED WITH "ELECTRIC" LOGO. MOUNT FLUSH WITH GROUND. HUBBELL OR APPROVED ALTERNATE. MINIMUM HAND HOLE SIZE OF 12"X12"X12" (310MM X 310MM X 310MM) TYPICAL.

ELECTRICAL SERVICE-SCOPE OF WORK

HYDRO ONE (UTILITY) SHALL COMPLETE THE FOLLOWING WORK. COSTS SHALL BE PAID BY OWNER DIRECTLY :

H1 CONNECTION OF PRIMARY CONDUCTORS TO PAD MOUNT TRANSFORMER.

H2 CONNECTION OF PRIMARY CONDUCTORS AT SWITCHGEAR.

H3 SUPPLY AND INSTALLATION PAD MOUNT TRANSFORMER(S) ON CUSTOMER SUPPLIED CONCRETE BASE(S).

H4 SUPPLY AND INSTALLATION OF METERING INSTRUMENTATION AND P-BASE EXTERIOR METERING ENCLOSURE.

H5 CONNECTION OF SECONDARY CONDUCTORS TO TRANSFORMER.

H6 PROVIDE SWITCHGEAR.

CONTRACTOR SERVICE-SCOPE OF WORK

THE ELECTRICAL CONTRACTOR FOR THE BUILDING OWNER (CUSTOMER) SHALL BE RESPONSIBLE FOR THE FOLLOWING:

C1 SUPPLY AND INSTALLATION OF CONCRETE ENCASED PRIMARY DUCTBANK AS SHOWN ON PLANS.

C2 SUPPLY AND INSTALLATION CONCRETE BASE FOR PAD MOUNT TRANSFORMER PER DETAILS.

C3 SUPPLY SECONDARY DUCTS FROM TRANSFORMER TO MAIN SWITCHBOARD.

C4 CONNECTION OF SECONDARY CABLES AT MAIN SWITCHBOARD.

C5 SUPPLY AND INSTALLATION OF PROTECTIVE BOLLARDS PER DETAIL.

C6 SUPPLY AND INSTALLATION OF P-BASE EXTERIOR METERING ENCLOSURE AND METER CABINET TO SUIT UTILITY REQUIREMENTS.

C7 GROUNDING AT SWITCHBOARD PER ELECTRICAL CODE AND AS SHOWN. PROVIDE COORDINATION STUDY PER SPECIFICATIONS.

C8 ALL WORK SHALL MEET UTILITY REQUIREMENTS & INSPECTION. ELECTRICAL CONTRACTOR TO CO-ORDINATE WITH UTILITY PRIOR TO PROCEEDING.

C9 SUPPLY AND INSTALLATION OF PRIMARY CONDUCTORS FROM TRANSFORMER TO SWITCHGEAR VAULT. PROVIDE 10'-0" (3000mm) SLACK CONDUCTORS AT TRANSFORMER BASE WITH BELL ENDS.

ELECTRICAL SYMBOLS

NOTE: ALL SYMBOLS MAY NOT BE USED

LIGHTING CONTROL

- SINGLE POLE SWITCH (3=3 WAY, 4=4 WAY, P=PILOT LIGHT, K=KEYED, DM=DIMMER, M=MOTOR RATED)
- OS — OCCUPANCY SENSOR (PASSIVE)
- OSD/OSR — OCCUPANCY SENSOR: OSD=DUAL TECHNOLOGY OSR=DUAL CIRCUIT/DUAL TECHNOLOGY
- CEILING MOUNTED MOTION SENSOR
- WALL MOUNTED MOTION SENSOR
- DIGITAL LIGHTING RELAY / CONTROLLER
- PHOTOCELL
- DIGITAL WALL DIMMER STATION
- LIGHTING NETWORK BRIDGE
- EMERGENCY LIGHTING RELAY
- LIGHTING INPUT/OUTPUT RELAY
- ANALOG POWER PACK

PUBLIC ADDRESS

- DIGITAL MESSAGING BOARD
- COMBO DIGITAL MESSAGING BOARD

STANDARD CIRCUIT LABELING

A-1-C1
POWER PANEL LABEL
CIRCUIT INDICATION
CONTACTOR LABEL

LIGHTING

- LIGHT FIXTURE TYPE AS INDICATED
- CEILING OR WALL MOUNTED LIGHT FIXTURE TYPE AS INDICATED
- POLE MOUNTED LIGHT FIXTURE
- LIGHT FIXTURE (HATCHING DENOTES NIGHTLIGHT)

LIFE SAFETY LIGHTING

- COMBINATION EMERGENCY/EXIT TYPE AS INDICATED (EM-X INDICATES BATTERY UNIT TYPE, DC-X INDICATES DC CIRCUIT, AND X-X INDICATES AC SOURCE CIRCUIT)
- WALL MOUNTED EXIT LIGHT SHADING INDICATES FACE 'SP' DENOTES SELF-POWERED
- CLG. EXIT LIGHT ARROWS DENOTE DIRECTION SHADING INDICATES FACE 'SP' DENOTES SELF-POWERED
- SINGLE OR TWIN EMERGENCY LIGHTING FIXTURE
- RECESSED REMOTE EMERGENCY FIXTURES
- BATTERY UNIT WITH INTEGRAL EMERGENCY FIXTURE (EM-X INDICATES BATTERY UNIT TYPE, DC-X INDICATES DC CIRCUIT, AND X-X INDICATES AC SOURCE CIRCUIT)

ELECTRIC HEAT

- BASEBOARD ELECTRIC HEATER (TYPE AS INDICATED)
- FAN FORCED ELECTRIC HEATER (TYPE AS INDICATED)
- UNIT HEATER (TYPE AS INDICATED)

FIRE ALARM MISCEALLENOUS

- SV — SUPERVISED VALVE
- FS — FLOW SWITCH
- MM — MONITORING MODULE
- RM — RELAY MODULE
- CM — CONTROL MODULE
- EOL — END-OF-LINE RESISTOR
- DH — DOOR HOLD OPEN DEVICE
- AV — ALARM VALVE
- PS — PRESSURE SWITCH
- FSD — FIRE SMOKE DAMPER

GENERAL

- ER — INDICATED EXISTING ITEM TO REMAIN
- D — INDICATES EXISTING ITEM TO BE DELETED
- R — INDICATES EXISTING ITEM TO BE RELOCATED/IN RELOCATED POSITION
- WG — WIREGUARD
- GF — GROUND FAULT
- WP — WEATHERPROOF

FIRE ALARM INITIATING

- HEAT DETECTOR (135 DEGREE RATE OF RISE AND FIXED TEMPERATURE)
- HEAT DETECTOR (135 DEGREE FIXED TEMPERATURE)
- HEAT DETECTOR (194 DEGREE FIXED TEMPERATURE)
- HEAT DETECTOR (195 DEGREE RATE OF RISE AND FIXED TEMPERATURE)
- DUCT TYPE SMOKE DETECTOR
- SMOKE DETECTOR (RL=RELAY BASE)
- SMOKE ALARM C/W BATTERY BACK UP, INTEGRAL STROBE LIGHT, AND CARBON MONOXIDE DETECTION.
- CO — CARBON MONOXIDE DETECTOR C/W BATTERY BACK UP
- PULLSTATION
- COMBINATION HORN/STROBE

GENERAL

- IG — ISOLATED GROUND
- SR — SURGE PROTECTED
- TR — TAMPER RESISTANT
- CLG — CEILING MOUNTED
- N.I.C. — NOT IN CONTRACT
- A.F.F. — ABOVE FINISHED FLOOR
- A.F.G. — ABOVE FINISHED GRADE

FIRE ALARM SIGNALLING

- ALARM BELL
- ALARM BELL (S = COMBINATION BELL/STROBE DEVICE)
- CEILING FIRE SPEAKER C/W STROBE
- WALL FIRE SPEAKER
- CEILING ALARM SPEAKER
- WALL ALARM SPEAKER/STROBE
- ALARM HORN
- ALARM STROBE
- COMBINATION HORN/STROBE

SAFE WELCOME DEVICES

- JB — JUNCTION BOX
- PB — PULLBOX
- POWER SUPPLY
- PP — POWER POLE
- CSS — CALL SWITCH STATION

ABBREVIATIONS

- MECHANICAL ITEM NO.
- OWNERS EQUIPMENT ITEM NO.
- DESTRATIFICATION FAN
- SURFACE RACEWAY C/W DEVICES AS NOTED (REFER TO SPECIFICATIONS)
- HAND DRYER

POWER

- WALL MOUNTED RECEPTACLE (15A-120V)
- WALL MOUNTED T-SLOT RECEPTACLE (20A-120V)
- T-SLOT RECEPTACLE MTD. ABOVE COUNTER (20A-120V)
- RECEPTACLE MTD. ABOVE COUNTER S=SPLIT (15A-120V)
- STOVE RECEPTACLE
- DRYER RECEPTACLE
- SPECIAL RECEPTACLE
- QUAD RECEPTACLE
- WALL MOUNTED DUPLEX RECEPTACLE C/W TOP HALF SWITCHED (15A-120 VOLT)
- DIRECT CONNECTION
- FBX — FLOOR BOX 'X' DENOTES NUMBER

DISTRIBUTION, STARTERS, AND CONTROLS

- PANEL AS INDICATED
- FUSED DISCONNECT
- UNFUSED DISCONNECT
- VFD — VARIABLE FREQUENCY DRIVE
- SPD — SURGE PROTECTION DEVICE. REFER TO SPECIFICATIONS.
- TSEN — LOW TEMPERATURE SENSOR. ROUGHIN AS A SINGLE GANG BOX MOUNTED HORIZONTALLY AT 150mm BELOW FINISHED CEILING LEVEL.
- DUAL VOLTAGE RELAY
- TIME CLOCK
- 0-15 MINUTE INTERVAL TIMER
- SPEED CONTROLLER
- MANUAL STARTER
- MAGNETIC STARTER
- COMBINATION MAGNETIC STARTER
- THERMOSTAT (RA=REVERSE ACTING)
- CURRENT SENSOR
- CONTACTOR
- PUSH-BUTTON STATION (QUANTITY OF BUTTONS AS PER PLANS)
- MOTOR CONNECTION
- SOLENOID VALVE
- TRANSFORMER

SECURITY

- SECURITY DETECTOR (SURFACE MOUNTED)
- SECURITY SIREN (INSTALL 2400mm AFF) C/W 19mmC TO NEAREST SECURITY JUNCTION BOX
- SECURITY KEYPAD (INSTALL 1100mm AFF) C/W 19mmC TO NEAREST SECURITY JUNCTION BOX
- DOOR CONTACT C/W 19mmC TO NEAREST SECURITY JUNCTION BOX (REFER TO DETAIL)
- SJB — SECURITY JUNCTION BOX. 150mm (6") SQUARE C/W COVER
- CEILING MOUNTED CAMERA
- CPS — CAMERA POWER SUPPLY
- MSCP — MAIN SECURITY CONTROL PANEL

ACCESS CONTROL

- ML — MAG LOCK
- ES — ELECTRIC STRIKE. CONFIRM ROUGHIN WITH DOOR HARDWARE.
- KIS — INTERCOM DOOR STATION C/W PTZ CAMERA ROUGHIN AS A SINGLE GANG BOX MOUNTED AT 1100mm AFF
- EPB — EMERGENCY PUSH BUTTON STATION
- DH — "ASSISTANCE REQUIRED" DOME LIGHT WITH SOUNDER
- "ASSISTANCE REQUIRED" INDICATOR LIGHT WITH SOUNDER
- CARD/FOB READER ROUGH-IN AS A SINGLE GANG BOX AT 1100mm AFF C/W 13mmC TO ELECTRIC STRIKE IN ADJACENT DOOR FRAME. CONFIRM ROUGH-IN WITH DOOR HARDWARE.

COMMUNICATIONS

- SINGLE WALL MOUNTED TELEPHONE OUTLET C/W 3/4" (19mm) C TO CABLE MANAGEMENT SYSTEM.
- SINGLE COMPUTER OUTLET C/W 3/4" (21mm) C TO CABLE MANAGEMENT SYSTEM.
- COMBINATION SINGLE VOICE/ SINGLE COMPUTER OUTLET UNLESS OTHERWISE NOTED C/W 1" (27mm) C TO CABLE MANAGEMENT SYSTEM. # INDICATES THE QUANTITY OF ACTIVE PARTS. LEFT VALUE ALWAYS INDICATES VOICE.
- WAP — WIRELESS ACCESS POINT. PROVIDE 3/4" (21mm) C TO CABLE MANAGEMENT SYSTEM
- CLOCK AS PER SPECIFICATIONS
- TV — TELEVISION OUTLET C/W 1"C (27mm) TO CABLE MANAGEMENT SYSTEM.
- CABLE MANAGEMENT TRAY (REFER TO DETAILS)
- ADMINISTRATIVE CONTROL CONSOLE
- HANDSET (ND = NON-DIAL STYLE)
- P.A. CALL SWITCH
- WALL MOUNTED SPEAKER (CS=COLUMN SPEAKER)
- WALL MOUNTED SPEAKER C/W CALL-IN SWITCH
- CEILING MOUNTED SPEAKER
- PROGRAM BELL
- HORN SPEAKER
- MICROPHONE OUTLET
- DOOR BELL
- AUXILIARY ROUGH-IN FOR USE AS NOTED.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

NOTES:

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.

Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale this drawing.

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Website: deiassociates.ca
Project Number: 35426

Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" X 42"

LICENSED PROFESSIONAL ENGINEER
L. EDWARD JACKSON
100011324
08/27/26
PROVINCE OF ONTARIO

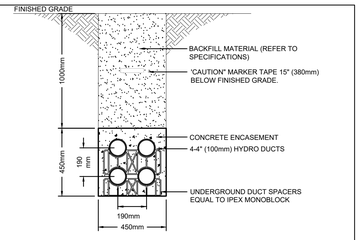
CN N

ELECTRICAL SITE PLAN AND LEGEND

E1.1

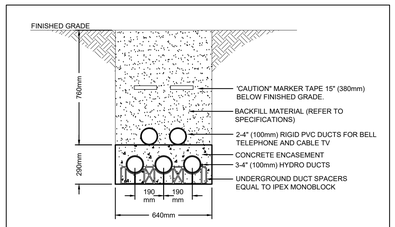
Plot Date: Aug 27, 2026 - 10:22:0pm By: etollett Filename: C:\Users\etollett\appdata\local\temp\AcPublish_36624\22426 E1.1 Site Plan.dwg

DRAWN BY : MT CHECKED BY : SD



1. ENCASE DUCTS IN 20 MPa CONCRETE ON 1/2" (13mm) PEA GRAVEL.
2. SLOPE DUCT BANK A MIN. OF 3" (75mm) PER 100' (30.5m) (AWAY FROM BUILDING).
3. CONCRETE ENCASED DUCTS SHALL BE CSA APPROVED PVC TYPE II.
4. DUCTS NOT ENCASED IN CONCRETE SHALL BE CSA APPROVED RIGID PVC TYPE.
5. PROVIDE 1-3/16" (4.75mm) MIN. POLYPROPYLENE FISH ROPE IN EACH CONCRETE ENCASED OR DIRECT BURIED DUCT. DUCT ENDS MUST BE SEALED WITH AN APPROVED DUCT PLUG.

A-PRIMARY DUCTBANK DETAIL
SCALE: NTS



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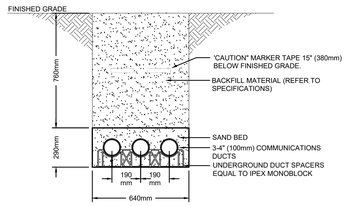
B-SECONDARY DUCTBANK DETAIL
SCALE: NTS



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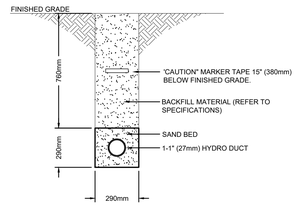
C-COMMUNICATION DUCTBANK DETAIL
SCALE: NTS



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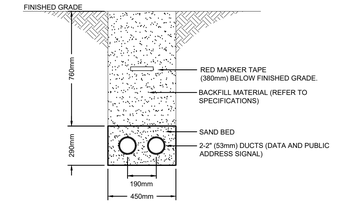
2. DUCTS SHALL BE CSA APPROVED RIGID PVC TYPE.
3. PROVIDE 1-3/16" (4.75mm) MIN. POLYPROPYLENE FISH ROPE IN EACH DIRECT BURIED DUCT. DUCT ENDS MUST BE SEALED WITH AN APPROVED DUCT PLUG.

D-SITE POWER DUCTBANK DETAIL
SCALE: NTS



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E-PORTABLE COMMS./LIGHTING DUCTBANK DETAIL
SCALE: NTS

1. SLOPE DUCT BANK A MIN. OF 3" (75mm) PER 100' (30.5m) (AWAY FROM BUILDING).
2. DUCTS SHALL BE CSA APPROVED RIGID PVC TYPE.
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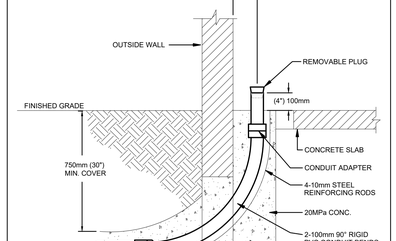
F-PYLON SIGN DUCTBANK DETAIL
SCALE: NTS



1. ENCASE DUCTS IN 20 MPa CONCRETE ON 1/2" (13mm) PEA GRAVEL.
2. SLOPE DUCT BANK A MIN. OF 3" (75mm) PER 100' (30.5m) (AWAY FROM BUILDING).
3. CONCRETE ENCASED DUCTS SHALL BE CSA APPROVED PVC TYPE II.
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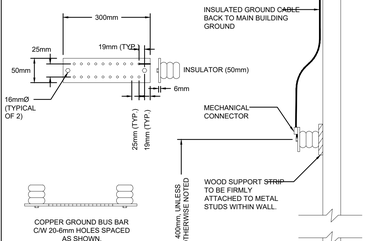
G-POWER & FIRE ALARM PORT DUCTBANK DETAIL
SCALE: NTS



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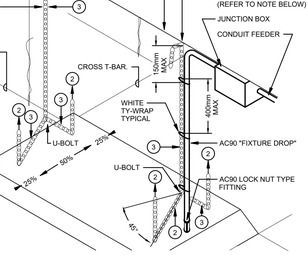
H-COMMUNICATIONS/PYLON SIGN DUCTBANK DETAIL
SCALE: NTS



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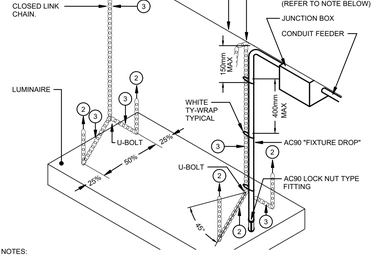
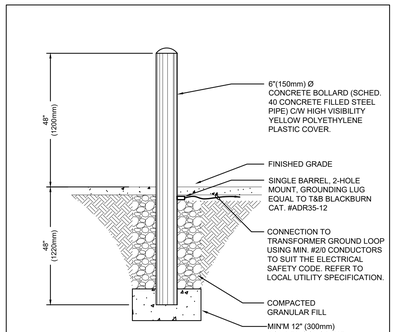
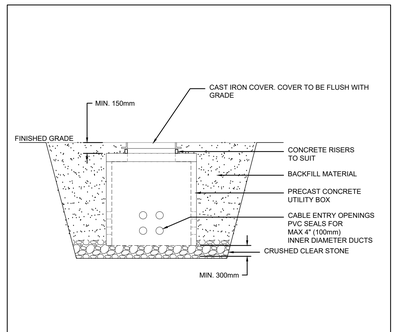
J-PYLON SIGN COMMUNICATIONS DUCTBANK DETAIL
SCALE: NTS



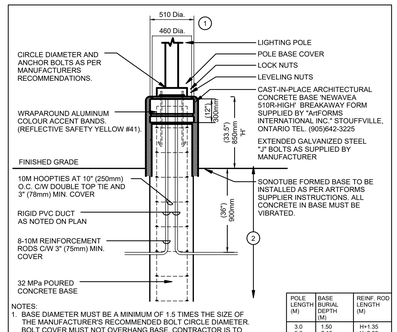
K-3PH PAD MTD. TRANSFORMER GROUNDING
SCALE: NTS



L-GROUNDED BOLLARD MOUNTING DETAIL
SCALE: NTS



M-PRECAST CONCRETE UTILITY BOX DETAIL
SCALE: NTS



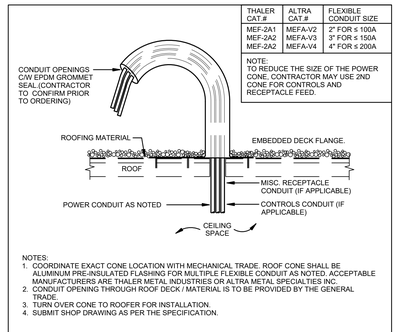
NOTES:
1. BASE DIAMETER MUST BE A MINIMUM OF 1.5 TIMES THE SIZE OF THE MANUFACTURER'S RECOMMENDED BOLT CIRCLE DIAMETER. BOLT COVER MUST NOT OVERHANG BASE. CONTRACTOR IS TO CONFIRM BASE DIAMETER ON FIXTURE SHOP DRAWINGS.
2. REFER TO CHART INDICATING BASE BURIAL DEPTH.

POLE LENGTH (M)	BASE BURIAL DEPTH (M)	REINF ROD LENGTH (M)
3.0	1.50	H+1.35
5.6	2.15	H+2.00
7.0	2.15	H+2.00
7.5	2.15	H+2.00
8.7	2.45	H+2.30
9.0	2.45	H+2.30
10.5	2.60	H+2.45
12.0	2.75	H+2.60
13.5	2.90	H+2.90
15.1	3.05	H+2.90

N-LIGHT STANDARD DETAIL
SCALE: NTS

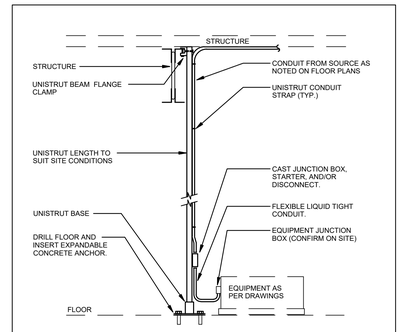
THALER CAT.#	ALTRA CAT.#	FLEXIBLE CONDUIT SIZE
MEF-2A1	MEFA-V2	2" FOR ≤ 100A
MEF-2A2	MEFA-V3	3" FOR ≤ 150A
MEF-2A2	MEFA-V4	4" FOR ≤ 200A

NOTE:
TO REDUCE THE SIZE OF THE POWER CONE, CONTRACTOR MAY USE 2ND CONE FOR CONTROLS AND RECEPTACLE FEED.

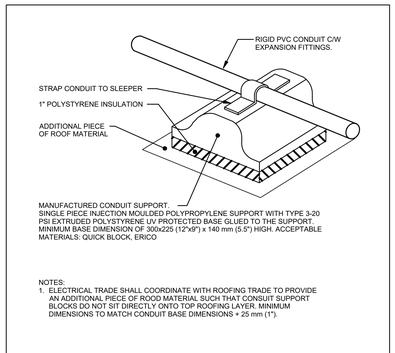


NOTES:
1. COORDINATE EXACT CONE LOCATION WITH MECHANICAL TRADE. ROOF CONE SHALL BE ALUMINUM PRE-INSULATED FLASHING FOR MULTIPLE FLEXIBLE CONDUIT AS NOTED. ACCEPTABLE MANUFACTURERS ARE THALER METAL INDUSTRIES OR ALTRA METAL SPECIALTIES INC.
2. CONDUIT OPENING THROUGH ROOF DECK / MATERIAL IS TO BE PROVIDED BY THE GENERAL TRADE.
3. TURN OVER CONE TO ROOFER FOR INSTALLATION.
4. SUBMIT SHOP DRAWING AS PER THE SPECIFICATION.

P-ROOF PENETRATION DETAIL
SCALE: NTS



Q-TYPICAL EQUIPMENT CONNECTION DETAIL
SCALE: NTS



NOTES:
1. ELECTRICAL TRADE SHALL COORDINATE WITH ROOFING TRADE TO PROVIDE AN ADDITIONAL PIECE OF ROOD MATERIAL SUCH THAT CONSUIT SUPPORT BLOCKS DO NOT SIT DIRECTLY ONTO TOP ROOFING LAYER. MINIMUM DIMENSIONS TO MATCH CONDUIT BASE DIMENSIONS + 25 mm (1").

R-CONDUIT SUPPORT DETAIL
SCALE: NTS

S-TERMINATION THROUGH FLOOR DETAIL
SCALE: NTS

T-GROUND BUS BAR
SCALE: NTS

NOTES:
1. IF STRUCTURE DOES NOT EXIST IMMEDIATELY ABOVE FIXTURE. PROVIDE UNISTRUT CHANNEL SPANNING ACROSS STRUCTURE FOR FIXTURE SUSPENSION.
2. INDICATES INDEPENDENT SUSPENSION TO STRUCTURE THAT IS TO BE INCLUDED IN BASE TENDER TO SUIT SEISMIC RESTRAINT REQUIREMENTS.
3. IF SEISMIC RESTRAINT REQUIREMENTS ARE NOT REQUIRED AS PART OF THE SPECIFICATION, THEN THE FIXTURES ARE TO BE SUSPENDED TO STRUCTURE USING THIS METHOD.

U-LUMINAIRE SUSPENSION DETAIL
SCALE: NTS

NOTES:
1. IF STRUCTURE DOES NOT EXIST IMMEDIATELY ABOVE FIXTURE. PROVIDE UNISTRUT CHANNEL SPANNING ACROSS STRUCTURE FOR FIXTURE SUSPENSION.
2. INDICATES INDEPENDENT SUSPENSION TO STRUCTURE THAT IS TO BE INCLUDED IN BASE TENDER TO SUIT SEISMIC RESTRAINT REQUIREMENTS.
3. IF SEISMIC RESTRAINT REQUIREMENTS ARE NOT REQUIRED AS PART OF THE SPECIFICATION, THEN THE FIXTURES ARE TO BE SUSPENDED TO STRUCTURE USING THIS METHOD.

V-LUMINAIRE SUSPENSION DETAIL
SCALE: NTS

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

NOTES:

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

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Do not scale this drawing.

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Website: deiassociates.ca
Project Number: 25426
Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENSED PROFESSIONAL ENGINEER
J.J. JACKSON
100011324
08/27/26
PROVINCE OF ONTARIO

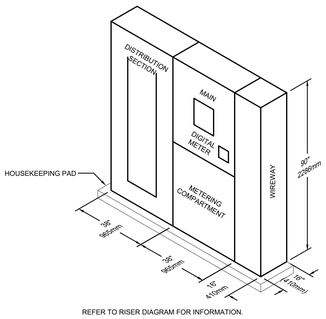
ELECTRICAL DETAILS PAGE 1 OF 2

E1.2

DRAWN BY : ST
CHECKED BY : SD

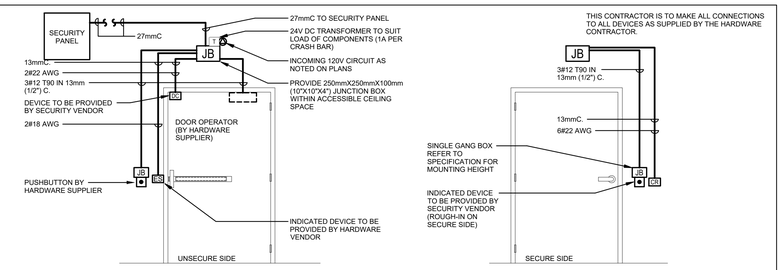
Plot Date: Aug 27, 2026 - 10:22pm By: eblott Filename: X:\2025 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\02 Dwgs\03 Elec\25426 E1.2 Electrical Schedules and Details.dwg

A-DETAIL NOT USED
SCALE: NTS



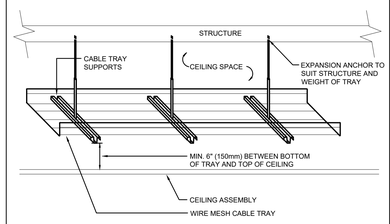
REFER TO RISER DIAGRAM FOR INFORMATION.

B-SECONDARY SWITCHBOARD ELEVATION
SCALE: NTS



NOTES:
1. THIS CONTRACTOR IS TO ROUGH-IN SUITABLE BACK BOXES FOR ALL SECURITY DEVICES. ADDITIONALLY, THIS CONTRACTOR IS TO PROVIDE ALL CONDUIT, JUNCTION BOXES, AND 24VDC TRANSFORMER AS NOTED. THIS CONTRACTOR IS TO INSTALL WIRE PROVIDED BY SECURITY CONTRACTOR. FINAL CONNECTIONS ARE TO BE BY SECURITY CONTRACTOR.
2. COORDINATE EXACT DEVICE LOCATIONS AND QUANTITIES WITH SECURITY/DOOR HARDWARE VENDORS PRIOR TO ROUGH-IN.
3. ALL DEVICES ARE NOT REQUIRED AT ALL DOORS. REFER TO FLOOR PLANS FOR LOCATION AND QUANTITY OF DEVICES.

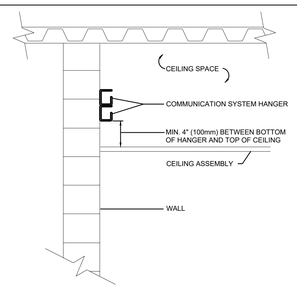
C-TYPICAL ELECTRIC DOOR STRIKE DETAIL
SCALE: NTS



1 INSTALLATION OF TRAY IS TO BE COORDINATED WITH MECHANICAL AND ALL OTHER TRADES.

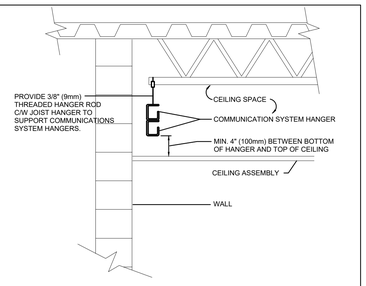
2 REFER TO SPECIFICATION FOR DIMENSIONAL INFORMATION.

D-CABLE TRAY SUSPENSION DETAIL
SCALE: NTS



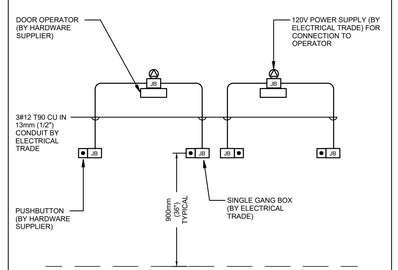
1. INSTALLATION OF HANGERS IS TO BE COORDINATED WITH MECHANICAL AND ALL OTHER ASSOCIATED TRADES.
2. HANGERS ARE TO BE INSTALLED IN LINE ALONG LENGTH OF CORRIDOR AT MAXIMUM 4'-0" (1200mm) INTERVALS.

E-WALL MOUNTED CABLE HANGER DETAIL
SCALE: NTS



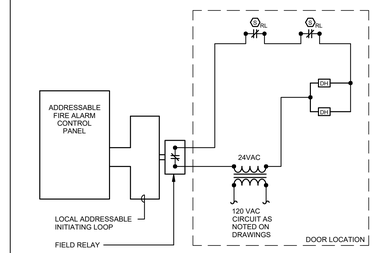
1. INSTALLATION OF HANGERS IS TO BE COORDINATED WITH MECHANICAL AND ALL OTHER ASSOCIATED TRADES.
2. HANGERS ARE TO BE INSTALLED IN LINE ALONG LENGTH OF CORRIDOR AT MAXIMUM 4'-0" (1200mm) INTERVALS.

F-CEILING MOUNTED CABLE HANGER DETAIL
SCALE: NTS



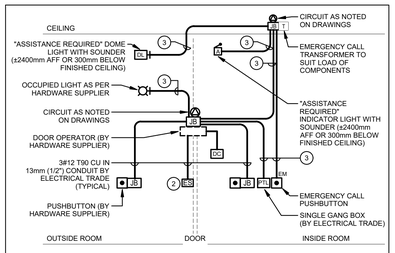
NOTE: THIS CONTRACTOR IS TO MAKE ALL CONNECTIONS TO ALL DEVICES AS SUPPLIED BY THE HARDWARE CONTRACTOR.

G-DOOR OPERATOR DETAIL
SCALE: NTS



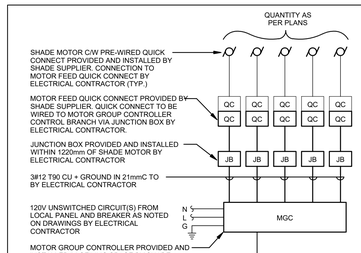
NOTE: THE DOOR HOLDER MUST RELEASE WHEN THE SMOKE DETECTORS LOCAL TO THE DOOR ARE IN ALARM OR WHEN THERE IS AN ALARM CONDITION ON THE FIRE ALARM SYSTEM.

H-DOOR HOLDER WIRING SCHEMATIC (ADDRESSABLE)
SCALE: NTS

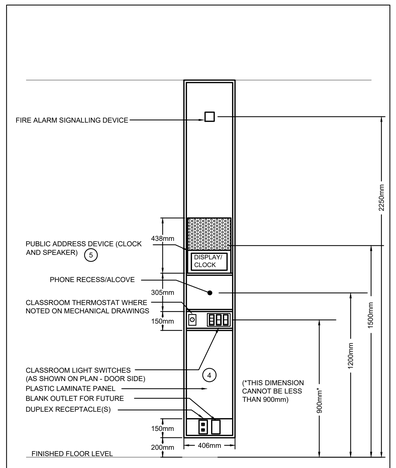


NOTES:
1. THIS CONTRACTOR IS TO MAKE ALL CONNECTIONS TO ALL DEVICES AS SUPPLIED BY THE HARDWARE CONTRACTOR, ALL OTHER DEVICES BY HARDWARE CONTRACTOR.
2. WHEN EMERGENCY CALL STATION IS ENGAGED, ELECTRIC STRIKE IS TO DISENGAGE TO ALLOW FOR ACCESS TO ROOM. CO-ORDINATE REQUIRED CONNECTIONS WITH THE HARDWARE SUPPLIER. REFER TO NOTE 3.
3. PROVIDE LOW VOLTAGE INTERCONNECT WIRING TO SUIT SUPPLIER. FOR PRICING PURPOSES ALLOW 4c#18 IN 13mmC.

K-UNIVERSAL WASHROOM DEVICE INSTALLATION
SCALE: NTS

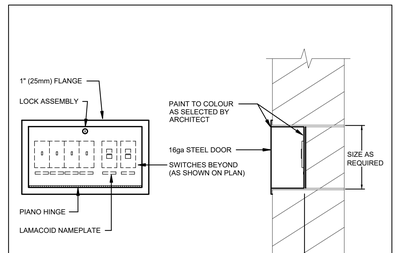


L-SHADE MOTOR CONTROLLER WIRING DETAIL
SCALE: NTS

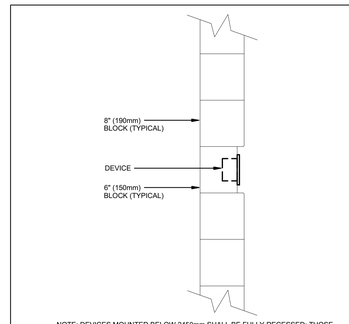


NOTES:
1. ALL DIMENSIONS TO BE CONFIRMED ON SITE WITH ARCHITECT AND CONSULTANT.
2. PROVIDE SHOP DRAWING INDICATING DEVICES ON A ROOM BY ROOM BASIS.
3. CONSOLE PROVIDED BY ELECTRICAL CONTRACTOR. REFER TO SPECIFICATION.
4. MOUNTING HEIGHT OF CONTROL SWITCHES/DEVICES AS INDICATED ABOVE TO SUIT OBC (BARRIER-FREE DESIGN/CONTROLS) ADJUST LAMINATE PANEL SIZE TO SUIT.
5. COORDINATE REQUIRED OPENING WITH THE SUCCESSFUL PUBLIC ADDRESS VENDOR.

J-CLASSROOM CONTROL PANEL
SCALE: NTS

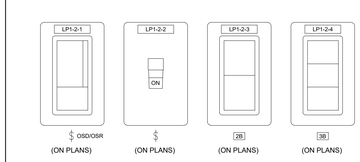


M-CONCEALED SWITCH HOUSING DETAIL
SCALE: NTS



NOTE: DEVICES MOUNTED BELOW 2450mm SHALL BE FULLY RECESSED, THOSE ABOVE 2450mm SHALL BE PROTECTED BY WIRE GUARDS UNLESS OTHERWISE SPECIFIED.

N-GYM DEVICE MOUNTING DETAIL
SCALE: NTS



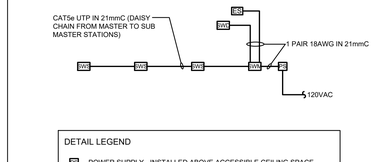
NOTES:

1 LIGHT SWITCHES ARE TO BE C/W P-TOUCH LABEL.

2 LABEL IS TO BE WHITE WITH TYPE-WRITTEN BLACK LETTERING AND PLACED CENTERLINE OF SWITCH AS SHOWN.

3 CIRCUIT DESCRIPTOR IS TO BE C/W POWER PANEL, CIRCUIT INDICATION, AND SWITCH LEG.

S-LIGHT SWITCH LABELLING DETAIL
SCALE: NTS

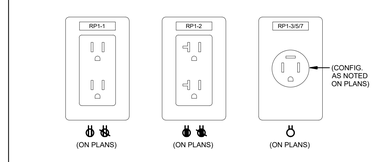


DETAIL LEGEND

PS	POWER SUPPLY - INSTALLED ABOVE ACCESSIBLE CEILING SPACE
SWS	3-GANG DEEP BOX MOUNTED AT 1200mm A.F.F.
SWM	2-GANG BOX MOUNTED AT RECEPTACLE HEIGHT
SWC	1-GANG BOX MOUNTED AT 1200mm A.F.F.
DS	INTERCOM DOOR STATION
M	MONITOR

NOTES:
1. PROVIDE ONE POWER SUPPLY PER TREE MASTER & SUB MASTER STATIONS

R-SAFE WELCOME SYSTEM DETAIL
SCALE: NTS



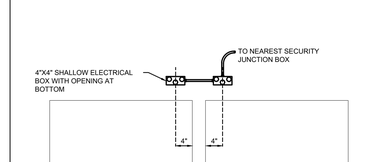
NOTES:

1 RECEPTACLES ARE TO BE C/W P-TOUCH LABEL.

2 LABEL IS TO BE WHITE WITH TYPE-WRITTEN BLACK LETTERING AND PLACED CENTERLINE OF RECEPTACLE AS SHOWN.

3 CIRCUIT DESCRIPTOR IS TO BE C/W POWER PANEL AND CIRCUIT INDICATION.

P-RECEPTACLE LABELLING DETAIL
SCALE: NTS



Q-DOOR CONTACT ROUGH-IN
SCALE: NTS

REVISIONS

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01	25.12.19	ISSUED FOR 60% REVIEW
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Project Number: 25426

DEI Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENCE PROFESSIONAL ENGINEER J.J. JACKSON 100011324 08/27/26 PROVINCE OF ONTARIO

ELECTRICAL DETAILS PAGE 2 OF 2

E1.3

DRAWN BY : ST
CHECKED BY : SD

Plot Date: Aug 27, 2026 - 10:22am By: eblelt1
Filename: X:\2025 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\02 Dwgs\03 Elec\25426 E1.2 Electrical Schedules and Details.dwg

LIGHT FIXTURE SCHEDULE (EXTERIOR)

Item	Manufacturer/Catalog Number	Voltage	Lamp					Mounting	Listings	Description
			Type	Lumens	Colour Temperature	Wattage	CRI			
A1	COOPER CAT. #GLEON-SA2C-730-9-T4W-HSS SIGNIFY CAT. #P15-P-A06-730-T4S-AR1-347-HIS-XX LITHONIA CAT. #DSX1-LED-P4-30K-80CRI-BLC4-HS-HVOLT-FA0 POLE: VALMONT CAT. #S160040406YH-D1-DDB-313	347V	LED	11567	3000K	108W	70	POLE	N/A	POLE MOUNTED DECORATIVE LED FIXTURE, EXTRUDED ALUMINUM ENCLOSURE, TWO LED SQUARES, TYPE 'BLC4' DISTRIBUTION OPTICS AND 15° (4.572M) STRAIGHT SQUARE ALUMINUM POLE C/W DECORATIVE ROUND BASE COVER. NOTES: FIXTURE MUST BE SET TO FIELD ADJUSTABLE OUTPUT POSITION #5 PRIOR TO INSTALLATION.
A2	COOPER CAT. #GLEON-SA2C-730-9-T4W-HSS SIGNIFY CAT. #P15-P-A07-730-T4S-AR1-347-HIS-XX LITHONIA CAT. #DSX1-LED-P4-30K-80CRI-T2M--HS-HVOLT-FA0 POLE: VALMONT CAT. #S160040406YH-D1-DDB-313	347V	LED	15207	3000K	108W	70	POLE	N/A	POLE MOUNTED DECORATIVE LED FIXTURE, EXTRUDED ALUMINUM ENCLOSURE, TWO LED SQUARES, TYPE 'T2M' DISTRIBUTION OPTICS AND 15' (4.572M) STRAIGHT SQUARE ALUMINUM POLE C/W DECORATIVE ROUND BASE COVER. NOTES: FIXTURE MUST BE SET TO FIELD ADJUSTABLE OUTPUT POSITION #5 PRIOR TO INSTALLATION.
A3	COOPER CAT. #GLEON-SA1A-730-9-SLR SIGNIFY CAT. #P15-P-A02-730-T2M-AR1-347-XX LITHONIA CAT. #DSX1-LED-P1-30K-80CRI-RCCO-HVOLT-FA0 POLE: VALMONT CAT. #S160040406YH-D1-DDB-313	347V	LED	5348	3000K	108W	70	POLE	N/A	POLE MOUNTED DECORATIVE LED FIXTURE, EXTRUDED ALUMINUM ENCLOSURE, TWO LED SQUARES, TYPE 'T2M' DISTRIBUTION OPTICS AND 15' (4.572M) STRAIGHT SQUARE ALUMINUM POLE C/W DECORATIVE ROUND BASE COVER. NOTES: FIXTURE MUST BE SET TO FIELD ADJUSTABLE OUTPUT POSITION #5 PRIOR TO INSTALLATION.
A4	COOPER CAT. #GLEON-SA1B-730-9-T2 SIGNIFY CAT. #P15-P-A03-730-T2M-AR1-347-XX LITHONIA CAT. #DSX1-LED-P1-30K-80CRI-T2M-HVOLT-FA0 POLE: VALMONT CAT. #S160040406YH-D1-DDB-313	347V	LED	7203	3000K	108W	70	POLE	N/A	POLE MOUNTED DECORATIVE LED FIXTURE, EXTRUDED ALUMINUM ENCLOSURE, TWO LED SQUARES, TYPE 'T2M' DISTRIBUTION OPTICS AND 15' (4.572M) STRAIGHT SQUARE ALUMINUM POLE C/W DECORATIVE ROUND BASE COVER. NOTES: FIXTURE MUST BE SET TO FIELD ADJUSTABLE OUTPUT POSITION #5 PRIOR TO INSTALLATION.
P	LITHONIA CAT. #LDN6-30/90-L06AR-LSS-TRW-347-GZ10 COOPER CAT. #LD6C3090303D010M1H	347V	LED	2800	3000K	35W	70	RECESSED	WET LOC.	6" RECESSED ROUND DOWNLIGHT C/W TRIM FLANGE. MUST BE WET LOCATION LISTED.
W1	COOPER CAT. #ISC-SA1B-830-9-T2-X LITHONIA CAT. #WSRLED-P2-30K-SR2-347-XXXXX GARDCO CAT. #104L-16L-530-WW-G1-2-347-XX	347V	LED	2761	3000K	25.4W	70	WALL	N/A	WALL MOUNTED SCONCE FIXTURE C/W CAST ALUMINUM HOUSING AND TYPE 'T2' DISTRIBUTION. MOUNTED PER ARCHITECTURAL DRAWINGS.
W2	COOPER CAT. #ISC-SA1B-830-9-T4W LITHONIA CAT. #WSRLED-P2-30K-SR4-347-XXXXX GARDCO CAT. #104L-16L-530-WW-G1-4-347-XX	347V	LED	2759	3000K	25.4W	70	WALL	N/A	WALL MOUNTED SCONCE FIXTURE C/W CAST ALUMINUM HOUSING AND TYPE 'T4W' DISTRIBUTION. MOUNTED PER ARCHITECTURAL DRAWINGS.

Notes:

1. LED LUMEN VALUES QUOTED FOR FIXTURES ARE TO BE CONSIDERED MINIMUM, AND AS ABSOLUTE OR DELIVERED LUMENS. LUMEN VALUES SHOULD NOT EXCEED MORE THAN 10% OF SPECIFIED OUTPUT.
2. TENDER PRICE TO INCLUDE ONLY APPROVED MANUFACTURERS LISTED ON SCHEDULE. EQUAL MANUFACTURERS ARE NOT BEING CONSIDERED FOR THIS TENDER UNLESS SPECIFICALLY IDENTIFIED ON SCHEDULE FOR NOTED FIXTURE TYPES. FOR NOTED APPROVED EQUALS TO BE CONSIDERED APPROVED, MANUFACTURERS/SUPPLIERS MUST CONFIRM THE PROPOSED EQUAL BY EMAIL WITH CONSULTANTS OFFICE PRIOR TO PROJECT ADDENDUM PERIOD CLOSE. THEY MUST THEN PROVIDE PHOTOMETRIC ANALYSIS FOR THE EXTERIOR FIXTURE LAYOUT INDICATED USING THEIR PROPOSED FIXTURE.
3. WHERE NOTED ABOVE THAT FIXTURES ARE TO HAVE FINISH TO SUIT ARCHITECT THE FINISH WILL BE SELECTED FROM MANUFACTURER'S AVAILABLE STANDARD FINISHES.
4. ALL FIXTURES OPERATING ON 347 VOLTS MUST BE PROVIDED WITH AN INTEGRAL DISCONNECTING MEANS CONFORMING TO RULE #30-308(4) OF THE ELECTRICAL SAFETY CODE
5. IT IS THE RESPONSIBILITY OF THIS ELECTRICAL CONTRACTOR TO IDENTIFY TO THE ELECTRICAL CONSULTANT'S ATTENTION ANY DISCREPANCIES BETWEEN THE FIXTURE CATALOG NUMBER AND FIXTURE DESCRIPTION, AND OR VOLTAGE, OUTPUT, OR MOUNTING, PRIOR TO TENDER CLOSE. NO EXTRAS WILL BE ENTERTAINED FOR FAILURE TO DO SO. FINAL FIXTURE CHARACTERISTICS AND DESCRIPTION WILL BE MARKED BY CONSULTANT AT THE TIME OF SHOP DRAWING REVIEW. FOR THE PURPOSES OF BIDDING, INCLUDE FOR A FIXTURE MATCHING THE VOLTAGE, MOUNTING, LOCATION AND NOTATIONS SHOWN ON LIGHTING DESIGN DRAWINGS.
6. EXTERIOR FIXTURES WHERE NOTED ARE TO BE C/W FIELD ADJUSTABLE LUMENS/WATTAGE FEATURE. FIXTURES TO BE SET TO FULL OUTPUT AT TIME OF STARTUP AND COMMISSIONING.

GYMNASIUM EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	POWER REQUIREMENTS			CONNECTION TYPE		COMMENTS
		VOLTAGE	PHASE	LOAD	HARDWIRED	NEMA CONFIG.	
G1	BASKETBALL NET #1	120	1	12A	YES		PROVIDE 21mmC TO KEYED SWITCH FOR CONTROL.
G2	BASKETBALL NET #2	120	1	12A	YES		PROVIDE 21mmC TO KEYED SWITCH FOR CONTROL.
G3	BASKETBALL NET #3	120	1	12A	YES		PROVIDE 21mmC TO KEYED SWITCH FOR CONTROL.
G4	BASKETBALL NET #4	120	1	12A	YES		PROVIDE 21mmC TO KEYED SWITCH FOR CONTROL.
G5	BASKETBALL NET #5	120	1	12A	YES		PROVIDE 21mmC TO KEYED SWITCH FOR CONTROL.
G6	BASKETBALL NET #6	120	1	12A	YES		PROVIDE 21mmC TO KEYED SWITCH FOR CONTROL.
G7	RETRACTABLE STAGE	208	1	12A	YES		PROVIDE 21mmC TO KEYED SWITCH FOR CONTROL.
G8	PROJECTOR	120	1	12A	YES		PROVIDE 21mmC TO SOUND SYSTEM BACKBOARD.
G9	MOTORIZED PARTITION	208	3	8A	YES		PROVIDE 21mmC TO KEYED THREE-WAY SWITCH FOR CONTROL.

Schedule Notes:

1. CONTRACTOR SHALL COORDINATE ALL FINAL EQUIPMENT CONNECTIONS WITH EQUIPMENT ON SITE. REFER TO GYMNASIUM EQUIPMENT SHOP DRAWINGS FOR ADDITIONAL EQUIPMENT INFORMATION. EXACT LOCATIONS OF DEVICES SHALL BE COORDINATED WITH GYM EQUIPMENT INSTALLER ON SITE.
2. CONTRACTOR SHALL PROVIDE LOCAL DISCONNECT FOR ALL HARDWIRED EQUIPMENT NOTED WITHIN SCHEDULE.

LIGHT FIXTURE SCHEDULE (INTERIOR)

Item	Manufacturer/Catalog Number	Voltage	Lamp					Mounting	Listings	Description
			Type	Lumens	Colour Temperature	Wattage	CRI			
C	COOPER CAT. #24CZ2-LD5-40-UNV-L840-CD-1 LITHONIA CAT. #2BLT4 40L ADSM MVOLT GZ1 LP840 SIGNIFY CAT. #2EVG38L840-4-DS-UNV-DIM	120V	LED	3000	4000K	22.4W	80	RECESSED	N/A	2'X4' (610mmX1220mm) VOLUMETRIC LED TROFFER C/W SMOOTH FROSTED ACRYLIC CENTRE LENS, 1% 0-10V DIMMING DRIVER, AND WHITE FINISH.
C1	COOPER CAT. #22C2Z-LD5-32-UNV-L840-CD-1 LITHONIA CAT. #2BLT2 33L ADSM MVOLT GZ1 LP840 SIGNIFY CAT. #2EVG30L840-2-DS-UNV-DIM FMA22	120V	LED	3200	4000K	24.2W	80	RECESSED	N/A	2'X2' (610mmX610mm) VOLUMETRIC LED TROFFER C/W SMOOTH FROSTED ACRYLIC CENTRE LENS, 1% 0-10V DIMMING DRIVER, AND WHITE FINISH.
C2	COOPER CAT. #24CZ2-LD5-40-UNV-L840-CD-1 LITHONIA CAT. #2BLT4 40L ADSM MVOLT GZ1 LP840 SIGNIFY CAT. #2EVG38L840-4-DS-UNV-DIM	120V	LED	4063	4000K	31.7W	80	RECESSED	N/A	2'X4' (610mmX1220mm) VOLUMETRIC LED TROFFER C/W SMOOTH FROSTED ACRYLIC CENTRE LENS, 1% 0-10V DIMMING DRIVER, AND WHITE FINISH.
E1	COOPER CAT. #8SNX LW UNV CC83 CD1 C/W WG-SNX/SN-4FT-B LITHONIA CAT. #CSS L96 ALO4 MVOLT SWW3 80CRI C/W WGCSS SIGNIFY CAT. #SDS84998L8CST-UN3-DIM C/W FKR-126-& SDS8WG (SET TO 4000K AND 8000LM)	120V	LED	8500	4000K	91W	80	SUSPENDED	N/A	8' (2440mm) SURFACE LED STRIP LIGHT C/W WIDE LENSED OPTICAL DISTRIBUTION, CHAIN SUSPENSION KIT, 10% 0-10V DIMMING DRIVER, AND WIRE GUARD. NOTE: SUSPEND TO MAINTAIN MAXIMUM HEADROOM.
E2	COOPER CAT. #4SNX LW UNV CC83 CD1 C/W WG-SNX/SN-4FT-B LITHONIA CAT. #CSS L48 ALO3 UVOLT SWW3 80CRI C/W WGCSS SIGNIFY CAT. #SDS42448L8CST-UN3-DIM C/W FKR-126-& SDS4WG (SET TO 4000K AND 4850LM)	120V	LED	3700	4000K	25w	80	SURFACE	N/A	4' (1220mm) SURFACE LED STRIP LIGHT C/W WIDE LENSED OPTICAL DISTRIBUTION, CHAIN SUSPENSION KIT, 10% 0-10V DIMMING DRIVER, AND WIRE GUARD. NOTE: SUSPEND TO MAINTAIN MAXIMUM HEADROOM.
F	COOPER CAT. #14CGT-NUV C/W DF-14W-U LITHONIA CAT. #CPX 1X4 ALO7 SWW7 SWL 120 C/W DGA14 SIGNIFY CAT. #1SBP3040L8CS-4-UN3-DIM-FMA14FP	120V	LED	3742	4000K	31.9W	80	RECESSED (DRYWALL)	N/A	1'X4' (305mmX1220mm) LED BACKLIT FLAT PANEL FIXTURE C/W FIELD SELECTABLE LUMENS AND COLOUR TEMPERATURE, WHITE FROSTED LENS, 10% 0-10V DIMMING DRIVER, WHITE FINISH, AND DRYWALL TRIM KIT.
G1	COOPER CAT. #HBLED-LD5-24SE-W-A/WG-UNV-L840-2-CD-2- WG/HBL6-4FT-B LITHONIA CAT. #IBG 24000LM SEF AFL GND 120V GZ10 40K 80CRI WGX SIGNIFY CAT. #FBZ24L840-UNV-W-LFA-FBZ-WG2	120V	LED	24000	4000K	147W	80	SUSPENDED	N/A	LED HIGHBAY FIXTURE C/W WIDE DISTRIBUTION OPTICS, SEMI-DIFFUSE ACRYLIC LENS, WIRE GUARD, AND TWO 0-10V DIMMING DRIVERS. NOTE FIXTURE TO BE FASTENED TO UNISTRUT CHANNELS SPANNING ACROSS THE TOP OF THE BOTTOM CHORD OF THE JOISTS. SUSPEND FIXTURE EVEN WITH THE BOTTOM OF JOISTS. ENTIRE FIXTURE ASSEMBLY IS TO HAVE A WHITE FINISH.
G2	COOPER CAT. #HBLED-LD5-18SE-W-A/WG-UNV-L840-2-CD-2- WG/HBL6-4FT-B LITHONIA CAT. #IBG 15000LM SEF AFL GND 120V GZ10 40K 80CRI WGX SIGNIFY CAT. #FBZ18L840-UNV-W-LFA-FBZ-WG2	120V	LED	15000	4000K	96W	80	SUSPENDED	N/A	LED HIGHBAY FIXTURE C/W WIDE DISTRIBUTION OPTICS, SEMI-DIFFUSE ACRYLIC LENS, WIRE GUARD, AND TWO 0-10V DIMMING DRIVERS. NOTE FIXTURE TO BE FASTENED TO UNISTRUT CHANNELS SPANNING ACROSS THE TOP OF THE BOTTOM CHORD OF THE JOISTS. SUSPEND FIXTURE EVEN WITH THE BOTTOM OF JOISTS. ENTIRE FIXTURE ASSEMBLY IS TO HAVE A WHITE FINISH.
H	COOPER CAT. #HC620D010-HM612840-61MDHWF LITHONIA CAT. #LDN6 40/20 L06AR LSS MVOLT GZ1 TRW LIGHTOLIER CAT. #6RN-C6L20840MZ10U-C6RDLXX SIGNIFY CAT. #M6RDL209CSMCLZ10U	120V	LED	2000	4000K	29.1	80	RECESSED	N/A	RECESSED 6" (150mm) DIAMETER LED DOWNLIGHT C/W SELF-FLANGED 60 DEGREE BEAM REFLECTOR, SEMI-SPECULAR CLEAR FINISH, AND 1% 0-10V DIMMING DRIVER. ARCHITECT TO CONFIRM FLANGE FINISH.
H1	COOPER CAT. #HC610D010-HM612840-61MDHWF LITHONIA CAT. #LDN6 40/10 L06AR LSS MVOLT GZ1 TRW LIGHTOLIER CAT. #6RN-C6L10840MZ10U-C6RDLXX SIGNIFY CAT. #M6RDL109CSMCLZ10U	120V	LED	1000	4000K	13.8W	80	RECESSED	N/A	RECESSED 6" (150mm) DIAMETER LED DOWNLIGHT C/W SELF-FLANGED 60 DEGREE BEAM REFLECTOR, SEMI-SPECULAR CLEAR FINISH, AND 1% 0-10V DIMMING DRIVER. ARCHITECT TO CONFIRM FLANGE FINISH.
M1.XX M1.4 M1.12	MARK CAT. #SL4L LOP XXFT FLP XX 80CRI 40K 400LMF NODIM 120 COOPER CAT. #S124DR-S-350D840-XXXFT-1-UDD-X AXIS CAT. #BMRLED-300-80-40-FL-4-X-UNV-DP-1-X	120V	LED	341 LUMENS/FT	4000K	4 W/FT	80	RECESSED	N/A	4" (102mm) WIDE DIRECT RECESSED LUMINAIRE IN METAL SOFFIT C/W EXTRUDED ALUMINUM HOUSING, AND SATIN WHITE FLUSH DIFFUSERS. CEILING TRIM TO BE CONFIRMED WITH MANUFACTURER. STANDARD FINISH TO BE SELECTED BY ARCHITECT. 'XX' DENOTES LENGTH IN FEET.
M2.X M2.4	MARK CAT. #S4WID LLP XFT 4' 80CRI 40K 400LMF WG I80CRI I40K I300LMF SCT NODIM FLL DC MVOLT XX COOPER CAT. #S124DW-C350D470U840-XFT-1-UDD-X AXIS CAT. #TB3WDILED-300-300-80-40-SO-GZ-XX-X-UNV-DP-1	120V	LED	394 LUMENS/FT	4000K	3.14 W/FT	80	WALL	N/A	4" (102mm) WIDE DIRECT/INDIRECT WALL MOUNTED LUMINAIRE IN METAL SOFFIT C/W EXTRUDED ALUMINUM HOUSING, AND SATIN WHITE FLUSH DIFFUSERS. STANDARD FINISH TO BE SELECTED BY ARCHITECT. 'XX' DENOTES LENGTH IN FEET.
M1.XX M1.8	MARK CAT. #SL4L LOP XXFT FLP XX 80CRI 40K 400LMF NODIM 120 COOPER CAT. #S124DR-S-350D840-XXXFT-1-UDD-X AXIS CAT. #BMRLED-300-80-40-FL-4-X-UNV-DP-1-X	120V	LED	341 LUMENS/FT	4000K	4 W/FT	80	SUSPENDED	N/A	4" (102mm) WIDE DIRECT RECESSED LUMINAIRE IN METAL SOFFIT C/W EXTRUDED ALUMINUM HOUSING, AND SATIN WHITE FLUSH DIFFUSERS. CEILING TRIM TO BE CONFIRMED WITH MANUFACTURER. STANDARD FINISH TO BE SELECTED BY ARCHITECT. 'XX' DENOTES LENGTH IN FEET.
N	COOPER CAT. #14-GR-LD5-40-A125-UNV-L840-CD-1 LITHONIA CAT. #GTL-4-33L-EZ1-LP840 CFI CAT. #1TG32L840-4-FS-02F-UNV-DIM	120V	LED	4000	4000K	38.8W	80	RECESSED	N/A	1X4 (305mmX1220mm) LED TROFFER C/W PATTERN 12 LENS, WHITE FINISH, AND 0-10V DIMMING DRIVER.
P	LLI ARCHITECTURAL LIGHTING CAT. FIXTURE: LLI-ICNS-F-HI-6W-40K-24V-96IN DRIVER: LLI-PS-NDE-060W-24V-KO	120/24V	LED	2728	4000K	52.8W	80	SURFACE	N/A	1.4"x1.4" EXTRUDED CHANNEL WITH LED TAPE LIGHT AND LENS. PROVIDE SEPARATE REMOTE DRIVER. NOTE: DRIVER SHALL BE LOCATED ABOVE CEILING SPACE OR WITHIN MILLWORK.
Q1	PEACHTREE CAT. #C6BLR-23-DMLV1-40K-W-RC-WH-CAB-C-10-120/277 LEVITON CAT. #GC6D0R-L3-40-D101-WF-W-C-C144 LUMENPULSE CAT.# LACYM-A-PMF-MWH-ACC100WH-D-120-13-DL20-40K- CR80-M-DA1-NA-MWH	120V	LED	2000	4000K	27W	80	PENDENT	N/A	6" LED PENDANT MOUNT CYLINDER C/W MATTE WHITE FINISH, 6' CORD, AND 0-10V DIMMING DRIVER. ARCHITECT TO CONFIRM FINISH.
Q2	PEACHTREE CAT. #C6BLR-23-DMLV1-40K-W-RC-WH-CAB-C-10-120/277 LEVITON CAT. #GC6D0R-L3-40-D101-WF-W-C-C144 LUMENPULSE CAT.# LACYM-A-PMF-MWH-ACC100WH-D-120-13-DL20-40K- CR80-M-DA1-NA-MWH	120V	LED	2000	4000K	27W	80	PENDENT	N/A	6" LED PENDANT MOUNT CYLINDER C/W MATTE WHITE FINISH, 6' CORD, AND 0-10V DIMMING DRIVER. ARCHITECT TO CONFIRM FINISH.
EXIT LIGHTS	AIMLITE CAT. #RPALWUMWHTUNVDC STANPRO CAT. #RMXL0WH-UDC LUMACELL CAT. #LA3WUX	12V/120V	LED	-	-	2.5 WATT (MAX.)AC 3.6 WATT (MAX.)DC	N/A	SURFACE	N/A	LED EXTRUDED ALUMINUM PICTOGRAM FIXTURE C/W GREEN FACE AND WHITE LEGEND, UNIVERSAL MOUNTING TO SUIT WALL, END OR CEILING, AND MAXIMUM 2.5" (63mm) THICKNESS. FACES AND CHEVRONS TO SUIT DRAWINGS.
EMERG. LIGHTS	AIMLITE CAT. #RMSM212V4WLJWHT STANPRO CAT. #N2-06-12V4WLJWH LUMACELL CAT. #MQM2LD7	12V	LED	-	-	2.4W PAR18	N/A	SURFACE	N/A	TWIN HEAD LED REMOTE MR16 FIXTURE C/W COMPACT DESIGN, THERMOPLASTIC CONSTRUCTION, WHITE COLOUR, FULL AIMING ADJUSTMENT, AND 360° ROTATION.
COMBO UNIT	AIMLITE CAT. #CARPW SERIES EM-1 #CARPW12036X2SM4WLJATD EM-2 #CARPW12072X2SM4WLJATD STANPRO CAT. #PRMXL SERIES EM-1 #PRMXL10361-2N4LJ-AT EM-2 #PRMXL10721-2N4LJ-AT LUMACELL CAT. #LAC SERIES EM-1 #LACXW12502LD7ATN EM-2 #LACXW12722LD7ATN	12V/120V	LED	-		2.4W PAR18	N/A	SURFACE	N/A	LED EXTRUDED ALUMINUM PICTOGRAM FIXTURE C/W GREEN FACE AND WHITE LEGEND, UNIVERSAL MOUNTING TO SUIT WALL, END OR CEILING, MAXIMUM 2.5" (63mm) THICKNESS, 12V INTERNAL SEALED RECHARGABLE BATTERY PROVIDING MINIMUM EMERGENCY WATTAGE AS NOTED BY THE CATALOGUE NUMBER AND AUTOTEST FEATURE. INTEGRAL 12V LED HEADS TO HAVE COMPACT DESIGN WITH WHITE COLOUR, FULL AIMING ADJUSTMENT, AND 360° ROTATION. WHERE NOTED UNIT SHALL BE C/W WIREGUARD. FACES AND CHEVRONS TO SUIT DRAWINGS.
COMBO UNIT (WEATHER PROOF)	AIMLITE CAT. #CRPN SERIES EM-8 #CRPN12036XWHT24WLRATDCW1 STANPRO CAT. #PRMRN SERIES EM-8 #PRMRN1036XWH-24LRATCW1 LUMACELL CAT. #LNC1W12N60LD1	12V/120V	LED		-	2.4W MR16	N/A	SURFACE	N/A	LED PICTOGRAM FIXTURE C/W GREEN FACE AND WHITE LEGEND, UNIVERSAL MOUNTING TO SUIT WALL, END OR CEILING, WHITE FINISH, COLD WEATHER RATING, 12V INTERNAL SEALED RECHARGABLE BATTERY PROVIDING MINIMUM EMERGENCY WATTAGE AS NOTED BY THE CATALOGUE NUMBER, AND AUTOTEST FEATURE. INTEGRAL 12V LED HEADS TO HAVE COMPACT DESIGN WITH WHITE COLOUR, FULL AIMING ADJUSTMENT, AND 360° ROTATION. WHERE NOTED UNIT SHALL BE C/W WIREGUARD. FACES AND CHEVRONS TO SUIT DRAWINGS.
EMERG. BATT.	AMILITE #EBST12 SERIES: EM-3 #EBST12036-2SM4WLRWHT-ATD EM-4 #EBST12100-2SM4WLRWHT-ATD EM-5 #EBST12200-2SM4WLRWHT-ATD EM-6 #EBST12360-2SM4WLRWHT-ATD STANPRO CAT. #SLX12 SERIES EM-3 #SLA12036-2N4LJ/AT EM-4 #SLA12100-2N4LJ/AT EM-5 #SLA12200-2N4LJ/AT EM-6 #SLA12360-2N4LJ/AT LUMACELL CAT. #RGS SERIES EM-3 #RG12S361LD7ATN EM-4 #RG12S1002LD7ATN EM-5 #RG12S2002LD7ATN EM-6 #RG12S3602LD7ATN	12V/120V	LED	-	-	2.4W MR16	N/A	SURFACE	N/A	LONG LIFE, SEALED RECHARGABLE BATTERY PROVIDING MINIMUM EMERGENCY WATAGE AS NOTED BY THE CATALOGUE NUMBER C/W MICRO SIZE 12V 4W (MINIMUM) LED HEADS AND AUTOTEST FEATURE.

Notes:

1. LED LUMEN VALUES QUOTED FOR FIXTURES ARE TO BE CONSIDERED MINIMUM, AND AS ABSOLUTE OR DELIVERED LUMENS. LUMEN VALUES SHOULD NOT EXCEED MORE THAN 10% OF SPECIFIED OUTPUT.
2. TENDER PRICE TO INCLUDE ONLY APPROVED MANUFACTURERS LISTED ON SCHEDULE. EQUAL MANUFACTURERS ARE NOT BEING CONSIDERED FOR THIS TENDER UNLESS SPEIFICALLY IDENTIFIED ON SCHEDULE FOR NOTED FIXTURE TYPES. FOR NOTED APPROVED EQUALS TO BE CONSIDERED APPROVED, MANUFACTURERS/SUPPLIERS MUST CONFIRM THE PROPOSED EQUAL BY EMAIL WITH CONSULTANTS OFFICE PRIOR TO PROJECT ADDENDUM PERIOD CLOSE.
3. WHERE NOTED ABOVE THAT FIXTURES ARE TO HAVE FINISH TO SUIT ARCHITECT THE FINISH WILL BE SELECTED FROM MANUFACTURER'S AVAILABLE STANDARD FINISHES.
4. IT IS THE RESPONSIBILITY OF THIS ELECTRICAL CONTRACTO4 TO IDENTIFY TO THE ELECTRICAL CONSULTANT'S ATTENTION ANY DISCREPANCIES BETWEEN THE FIXTURE CATALOG NUMBER AND FIXTURE DESCRIPTION, AND OR VOLTAGE, OUTPUT, OR MOUNTING, PRIOR TO TENDER CLOSE. NO EXTRAS WILL BE ENTERTAINED FOR FAILURE TO DO SO. FINAL FIXTURE CHARACTERISTICS AND DESCRIPTION WILL BE MARKED BY CONSULTANT AT THE TIME OF SHOP DRAWING REVIEW. FOR THE PURPOSES OF BIDDING, INCLUDE FOR A FIXTURE MATCHING THE VOLTAGE, MOUNTING, LOCATION AND NOTATIONS SHOWN ON LIGHTING DESIGN DRAWINGS.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

NOTES:

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.

Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale this drawing.

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Project Number: 25426

Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

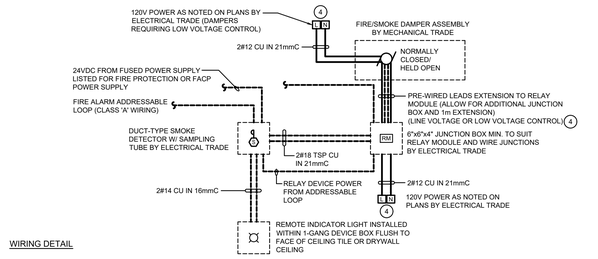
LICENSED PROFESSIONAL ENGINEER
J. S. JACKSON
100011324
08/27/26
PROVINCE OF ONTARIO

LIGHT FIXTURE AND GYM EQUIPMENT SCHEDULE

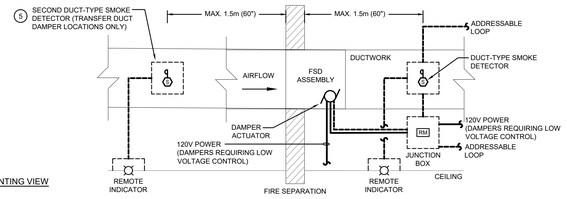
E1.4

DRAWN BY : ST CHECKED BY : SD

Plot Date: Aug 27, 2026 - 10:22:0am By: etoilet1 Filename: X:\2022\ Project\1\25426 BW\DSB Port Elgin Elementary School- Port Elgin\V02 D:\wip\V03 Elec\125426 E1.2 Electrical Schedules and Details.dwg



WIRING DETAIL



MOUNTING VIEW

NOTES

1. DETAIL IS SCHEMATIC. DIVISION 26 TO PROVIDE ALL NECESSARY COMPONENTS INCLUDING, BUT NOT LIMITED TO, ADDRESSABLE DUCT DETECTOR W/ SAMPLING TUBE, RELAY MODULE, REMOTE INDICATOR LIGHT, ALL CONTROLS AND LINE VOLTAGE FIELD WIRING, AND AC POWER SOURCE AS SHOWN. CONFIRM EXACT REQUIREMENTS WITH FIRE ALARM SYSTEM DUCT DETECTOR MANUFACTURER AND DAMPER PROVIDER TO ACHIEVE THE NOTED SEQUENCE OF OPERATION.
2. DAMPER ASSEMBLY IS PROVIDED AND INSTALLED BY DIVISION 23. REFER TO HVAC DESIGN DRAWINGS FOR PROPOSED DAMPER LOCATIONS AND DUCTWORK CONFIGURATION.
3. INSTALL DUCT DETECTOR DOWNSTREAM AND WITHIN 1.5m OF DAMPER IN ACCORDANCE WITH OBC 3.1.8.9A. MOUNT ASSOCIATED RELAY MODULE AT ACCESSIBLE LOCATION IN VICINITY OF DUCT DETECTOR. COORDINATE OPTIMAL DETECTOR MOUNTING IN DUCTWORK WITH DIVISION 23.
4. CONFIRM DAMPER AC CONNECTION CONFIGURATION AND ACTUATOR CONTROL VOLTAGE WITH DIVISION 23. FOR DAMPERS WITH LINE VOLTAGE CONTROL, PROVIDE AC POWER THROUGH RELAY MODULE OUTPUT TO DAMPER ACTUATOR. FOR DAMPERS WITH LOW VOLTAGE CONTROL CONTACTS, PROVIDE DC POWER CONTACT SIGNAL RELAY MODULE OUTPUT TO DAMPER, AND CONNECT AC CIRCUIT DIRECTLY TO DAMPER.
5. FOR DAMPER ASSEMBLY AT TRANSFER GRILLES PROVIDE SECOND DUCT DETECTOR C/W INDICATOR LIGHT AND PROGRAM TO OPERATE THE RELAY MODULE CONNECTED TO THE DAMPER.

SEQUENCE OF OPERATION

NORMAL CONDITION:
DUCT DETECTOR ALARM CONTACT IS OPEN, RELAY MODULE OUTPUT IS CLOSED, AC POWER IS PROVIDED TO DAMPER ACTUATOR, DAMPER IS OPEN, REMOTE INDICATOR IS OFF.

ALARM CONDITION:
DUCT DETECTOR ALARM CONTACT IS CLOSED, BUILDING FIRE ALARM IS ACTIVATED, RELAY MODULE OUTPUT IS OPEN, AC POWER IS REMOVED FROM DAMPER ACTUATOR, DAMPER CLOSES, REMOTE INDICATOR IS ON.

RESET:
IT SHALL BE POSSIBLE TO RESET THE DAMPER VIA THE FIRE ALARM CONTROL PANEL.

REFER ALSO TO FIRE ALARM SEQUENCE OF OPERATION.

A-DUCT DETECTOR FOR COMBINATION FIRE/SMOKE DAMPER INSTALLATION DETAIL(FSD ON PLANS AND RISER DIAGRAM)

SCALE: NTS

EQUIPMENT WIRING SCHEDULE

E = ELECTRICAL
M = MECHANICAL
O = OTHERS

Description			Electrical Data				Starter						Ctrl Device				Isolating Device			Remote Items																Other		Interlock	
Mechanical Item	Description	Provided By	Voltage	Size hp/kW/Amps	Phase	MOCP	Magnetic	Manual	Combination	Contactor	VFD	ECM	Hand/Off/Auto	On/Off Selector	Start/Stop PB.	High/Low/Off	Pilot Light	Motor Rated Switch c/w Pilot Light	Disconnect	Wiring Disconnect	Breaker/Fuse	Starter/Device Wired by	Thermostat	RA Thermostat	Programmable Time Clock	Variable Speed Control	Current Sensor	Occ. Sensor	Dual Voltage Relay	Interval Timer	VRF System Control Panel	Smoke Control System Panel	Control Panel	Wired by	Bldg Auto System	Wired By	Miscellaneous 1	Miscellaneous 2	Interlock to	Interlock by
AHU-1	ROOFTOP AHU	M	575	92.5 A	3	50													E	E	E	E												M	M				
AHU-2	ROOFTOP AHU	M	575	35.7	3	50													E	E	E	E												M	M				
AHU-3	ROOFTOP AHU	M	575	19.5	3	25													E	E	E	E												M	M				
AHU-4	ROOFTOP AHU	M	575	27.6	3	40													E	E	E	E	M										M	M	M				
AHU-5	ROOFTOP AHU	M	575	19.5	3	25													E	E	E	E												M	M				
AHU-6	ROOFTOP AHU	M	575	15.3	3	20													E	E	E	E												M	M				
AHU-7	ROOFTOP AHU	M	575	43.6	3	60													E	E	E	E												M	M				
AHU-8	ROOFTOP AHU	M	575	36.6	3	50													E	E	E	E												M	M				
EF-1	RANGE HOOD	M	120	FHP	1													E		E	E					M													
EF-2	CEILING EXHAUST FAN	M	120	FHP	1													E		E	E							E					M/E	M	M				
EF-3	CEILING EXHAUST FAN	M	120	FHP	1													E		E	E							E					M/E	M	M				
EF-4	CEILING EXHAUST FAN	M	120	FHP	1													E		E	E							E					M/E	M	M				
EF-5	CEILING EXHAUST FAN	M	120	FHP	1													E		E	E							E					M/E	M	M				
EF-6	CEILING EXHAUST FAN	M	120	FHP	1													E		E	E							E					M/E	M	M				
EF-7	ROOF TOP EXHAUST FAN	M	120	FHP	1														E	E	E							E					M/E	M	M				
EF-8	ROOF TOP EXHAUST FAN	M	120	FHP	1														E	E	E							E					M/E	M	M				
EF-9	ROOF TOP EXHAUST FAN	M	120	1/4 HP	1														E	E	E							E					M/E	M	M				
EF-10	ROOF TOP EXHAUST FAN	M	120	FHP	1														E	E	E							E					M/E	M	M				
EF-11	CEILING EXHAUST FAN	M	120	FHP	1													E		E	E							E					M/E	M	M				
EF-12	DRYER BOOSTER FAN	M	120	FHP	1													E		E	AMP SENSOR												E						
EF-13	ROOF TOP EXHAUST FAN	M	120	FHP	1														E	E	E							E					M/E	M	M				
EF-14	CEILING EXHAUST FAN	M	120	FHP	1													E		E	E							E					M/E	M	M				
ERV-1	OUTDOOR ERV	M	575	8.3	3	15													E	E	E													M	M				
WH-1	WATER HEATER	M	120	FHP	1													E		E	E													M	M				
P-1	RECIRC. PUMP	M	120	FHP	1													E		E	E							E					M/E	M	M				
AC-1	AC UNIT	M	208	1 MCA	1	15												E		E	E	M											E	M	M			CU-1	E
CU-1	CONDENSING UNIT	M	208	13.5 MCA	1	20													E	E	E													M	M			AC-1	M/E
CP-1	A/C UNIT CONDENSATE PUMP	M	208	FHP	1													E		E	E																		
VAV-5.1	VAV-5.1 DUCT HEATER	M	208	16 KW	3													E		E	E	M											M	M	M				
VAV-5.4	VAV-5.4 AND VAV-5.5 DUCT HEATER	M	208	13 KW	3													E		E	E	M											M	M	M				
SINK	SINK W/ ELECTRIC FAUCET	M	120	FHP	1															E	E																		
TRAP	TRAP PRIMER	M	120	FHP	1															E	E																		
EF-15	CEILING EXHAUST FAN	M	120	FHP	1													E		E	E								E				M/E	M	M				
BAS	BAS PANEL	M	120	FHP	1															E	E																		
DF	REFRIGERATED DRINKING FOUNTAIN	M	120	FHP	1															E	E																		
EF-16	ROOFTOP EXHAUST FAN	M	120	1/4 HP	1														E	E	E								E				M/E	M	M				

ELECTRIC HEATER SCHEDULE

Item	Catalog Number	Wattage	Voltage	Mounting	Type	CONTROL	Description
A1	OUELLET CAT. #OAC06036-RT	6000	600V 3Ø	RECESSED	FAN FORCED	24V RELAY	FAN FORCED HEATER C/W RECESSED MOUNTING BOX, 24V RELAY AND STANDARD FACTORY FINISH TO SUIT THE ARCHITECT.
A2	OUELLET CAT. #OAC03007-RT	3000	347V 1Ø	RECESSED	FAN FORCED	24V RELAY	FAN FORCED HEATER C/W RECESSED MOUNTING BOX, 24V RELAY AND STANDARD FACTORY FINISH TO SUIT THE ARCHITECT.
B1	OUELLET CAT. #OAS05036AM-RT	5000	600V 3Ø	SUSPENDED	UNIT HEATER	24V RELAY	FAN FORCED HEATER C/W RECESSED MOUNTING BOX, 24V RELAY AND STANDARD FACTORY FINISH TO SUIT THE ARCHITECT.
B2	OUELLET CAT. #OAS07536AM-RT	7500	600V 3Ø	SUSPENDED	UNIT HEATER	24V RELAY	SUSPENDED UNIT HEATER WITH STANDARD FACTORY FINISH TO SUIT ARCHITECT.
C	OUELLET CAT. #AS2448-500-120PW C/W #RC840	500W	120V-1Ø	RECESSED	CEILING RADIANT	24V RELAY	RECESSED CEILING RADIANT PANEL C/W REMOTE THERMOSTAT AND STANDARD FACTORY FINISH.

NOTES:
- REFER TO SPECIFICATIONS FOR ALTERNATE MANUFACTURERS.
- 24V RELAY SHALL BE CONTROLLED VIA BAS SYSTEM. COORDINATE REALY INSTALLATION WITH BAS TRADE.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

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Website: deiassociates.ca
Project Number: 25426

Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

EQUIPMENT WIRING AND ELECTRIC HEAT SCHEDULES

E1.5

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Plot Date: Aug 27 - 2026 - 10:22am By: etoilett
Filename: X:\2025 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\02 Dwgs\03 Elec\25426 E1.2 Electrical Schedules and Details.dwg

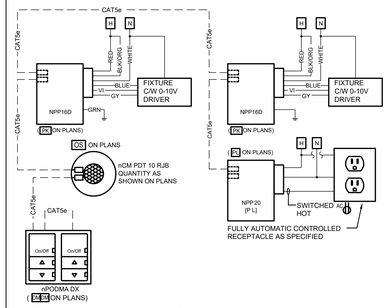
LIGHTING CONTROL WIRING LEGEND	
———	SOLID LINE INDICATES LINE VOLTAGE CONNECTION
– – – – – –	DASHED LINE INDICATES LOW VOLTAGE WIRING

GENERAL NOTES:

1) ALL CATALOG NUMBERS REFERENCED ON LIGHTING CONTROL SEQUENCE ARE FOR SENSORSWITCH UNLESS OTHERWISE NOTED.
2) REFER TO SPECIFICATION SECTION 26 27 26 FOR LINE VOLTAGE CONTROLS (SENSORSWITCH DEVICES).
3) REFER TO SPECIFICATIONS FOR APPROVED EQUALS.
4) WALL STATION BUTTONS TO BE ENGRAVED WITH LABELS ACCORDING TO LIGHTING CONTROL DETAILS.
5) ALL CONTROL WIRING SHALL BE PLENUM RATED (FT6).
6) ALL SENSORS SHALL BE MOUNTED TO OCTAGON BOX AND MOUNTED A MINIMUM OF 24" FROM DIFFUSERS.
7) ALTERNATIVE MANUFACTURER'S MAY UTILIZE A SINGLE ROOM CONTROLLER OR MULTIPLE ROOM CONTROLLER. IT IS THE RESPONSIBILITY OF THE TRADE TO PROVIDE A COMPLETE SOLUTION AND INCLUDE ALL COSTS IN TENDER FOR ALTERNATIVE PRODUCTS TO SUIT THE DEVIATION FROM THE BASIS OF DESIGN.

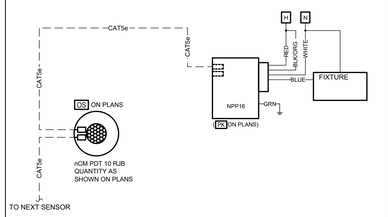
LIGHTING CONTROL SEQUENCE NOTES & LEGEND
SCALE: NTS

COMMISSIONING:
AUTOMATIC ON: GROUP #1 TURN TO 50% LEVEL UPON SIGNAL FROM OCCUPANCY SENSOR.
AUTOMATIC OFF: ALL FIXTURES TURN OFF AFTER 30 MINUTES OF VACANCY.
PLUG LOAD: SWITCH PLUG LOADS WITH VACANCY SENSOR
MANUAL ADJUSTMENT: USER MAY ADJUST LIGHTING AT LIGHTING CONTROL STATION.



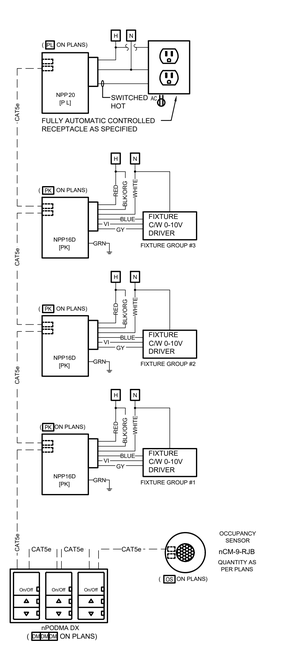
LIGHTING CONTROL SEQUENCE #1 ①
SCALE: NTS

COMMISSIONING:
AUTOMATIC ON: ALL FIXTURES TURN ON UPON SIGNAL FROM OCCUPANCY SENSORS.
AUTOMATIC OFF: ALL FIXTURES TURN OFF AFTER 30 MINUTES OF VACANCY.
MANUAL ADJUSTMENT: N/A



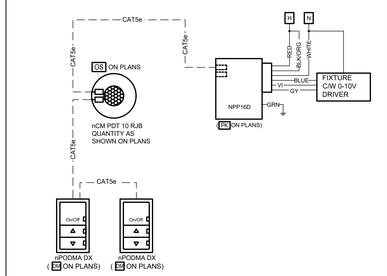
LIGHTING CONTROL SEQUENCE #2 ②
SCALE: NTS

COMMISSIONING:
AUTOMATIC ON: GROUP #1 TURN TO 50% LEVEL UPON SIGNAL FROM OCCUPANCY SENSOR.
AUTOMATIC OFF: ALL FIXTURES TURN OFF AFTER 30 MINUTES OF VACANCY.
PLUG LOAD: SWITCH PLUG LOADS WITH VACANCY SENSOR.
MANUAL ADJUSTMENT: USER MAY ADJUST LIGHTING AT LIGHTING CONTROL STATION.



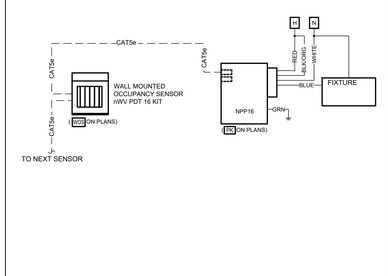
LIGHTING CONTROL SEQUENCE #3 ③
SCALE: NTS

COMMISSIONING:
AUTOMATIC ON: FIXTURES TURN TO 50% LEVEL UPON SIGNAL FROM OCCUPANCY SENSOR.
AUTOMATIC OFF: ALL FIXTURES TURN OFF AFTER 30 MINUTES OF VACANCY.
MANUAL ADJUSTMENT: USER MAY ADJUST LIGHTING AT LIGHTING CONTROL STATION.



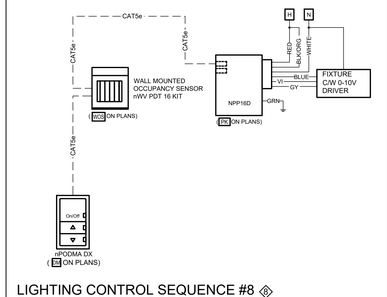
LIGHTING CONTROL SEQUENCE #5 ④
SCALE: NTS

COMMISSIONING:
AUTOMATIC ON: ALL FIXTURES TURN ON UPON SIGNAL FROM OCCUPANCY SENSORS.
AUTOMATIC OFF: ALL FIXTURES TURN OFF AFTER 30 MINUTES OF VACANCY.
MANUAL ADJUSTMENT: N/A



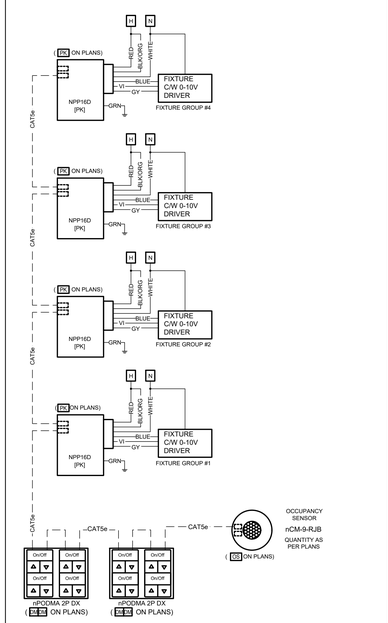
LIGHTING CONTROL SEQUENCE #6 ⑥
SCALE: NTS

COMMISSIONING:
AUTOMATIC ON: FIXTURES TURN TO 50% LEVEL UPON SIGNAL FROM OCCUPANCY SENSOR.
AUTOMATIC OFF: ALL FIXTURES TURN OFF AFTER 30 MINUTES OF VACANCY.
MANUAL ADJUSTMENT: USER MAY ADJUST LIGHTING AT LIGHTING CONTROL STATION.



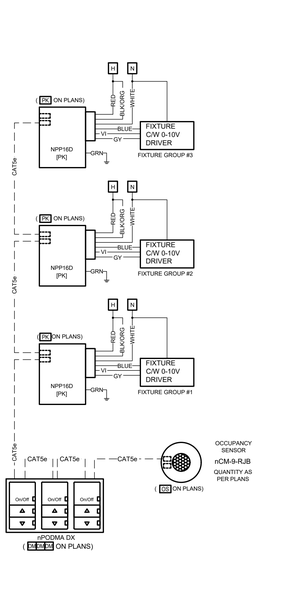
LIGHTING CONTROL SEQUENCE #8 ⑧
SCALE: NTS

COMMISSIONING:
AUTOMATIC ON: GROUP #1 TURN TO 50% LEVEL UPON SIGNAL FROM OCCUPANCY SENSOR.
AUTOMATIC OFF: ALL FIXTURES TURN OFF AFTER 30 MINUTES OF VACANCY.
MANUAL ADJUSTMENT: USER MAY ADJUST LIGHTING AT LIGHTING CONTROL STATION.



LIGHTING CONTROL SEQUENCE #4 ④
SCALE: NTS

COMMISSIONING:
AUTOMATIC ON: GROUP #1 TURN TO 50% LEVEL UPON SIGNAL FROM OCCUPANCY SENSOR.
AUTOMATIC OFF: ALL FIXTURES TURN OFF AFTER 30 MINUTES OF VACANCY.
MANUAL ADJUSTMENT: USER MAY ADJUST LIGHTING AT LIGHTING CONTROL STATION.



LIGHTING CONTROL SEQUENCE #7 ⑦
SCALE: NTS

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
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PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

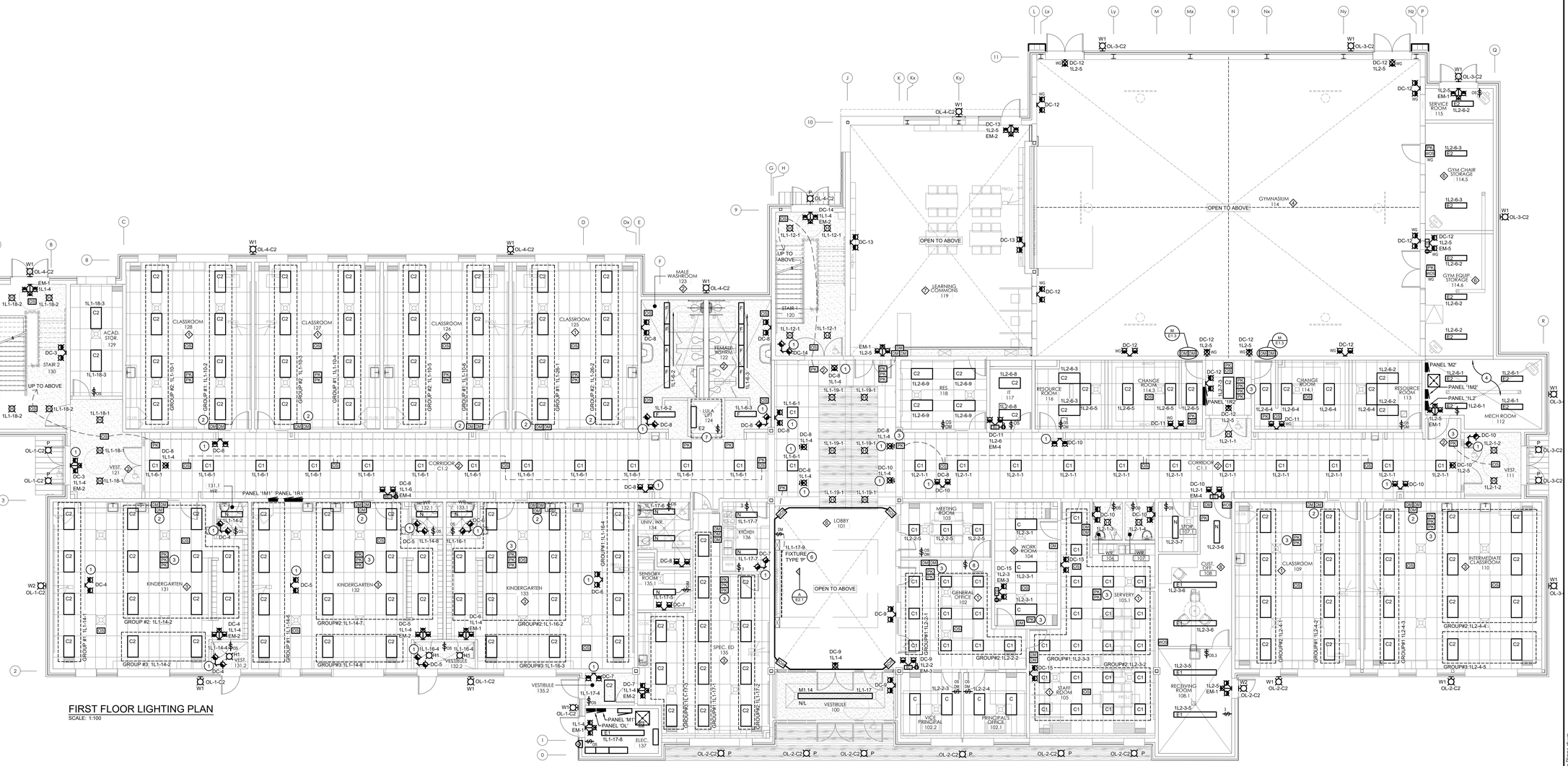
LICENSED PROFESSIONAL ENGINEER
S.J. JACKSON
100011324
08/27/26
PROVINCE OF ONTARIO

LIGHTING CONTROL DETAILS

E1.6

DRAWN BY : ST
CHECKED BY : SD

Plot Date: - Aug 27, 2026 - 10:22am By: etollett
Filename: X:\2025 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\02 Dwgs\03 Elec\25426 E1.2 Electrical Schedules and Details.dwg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LEARNING COMMONS 119
LOBBY 101
STAIR 1 120
STAIR 2 130
CLASSROOM 128
CLASSROOM 127
CLASSROOM 126
CLASSROOM 125
KINDERGARTEN 131
KINDERGARTEN 132
KINDERGARTEN 133
CORRIDOR C1.2
CORRIDOR C1.1
MEETING ROOM 103
WORK ROOM 104
GENERAL OFFICE 102
STAFF ROOM 105
PRINCIPALS OFFICE 102.1
VICE PRINCIPALS OFFICE 102.2
RECEIVING ROOM 108.1
CLASSROOM 109
INTERMEDIATE CLASSROOM 110
MECH ROOM 112
SERVICE ROOM 115
GYM CHAIR STORAGE 114.5
GYM EQUIP STORAGE 114.6
RESOURCE ROOM 116
RESOURCE ROOM 113
CHANGE ROOM 114.3
CHANGE ROOM 114.1
IT 117
RES. 118
SENSORY ROOM 135.1
SPEC. ED. 135
KITCHEN 136
ELEC. 137
VESTIBULE 100
VESTIBULE 132.2
VESTIBULE 135.2
PANEL 'M1'
PANEL 'OL'
PANEL 'M2'
PANEL 'L2'
PANEL 'M1' PANEL '1R1'
PANEL '1M1'
PANEL '1M2'
PANEL '1L2'
1L1-17-9 FIXTURE TYPE 'P'
OPEN TO ABOVE
UP TO ABOVE
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MALE WASHROOM 123
ACAD. STOR. 129
VEST. 121
VEST. 111
UNIV. WR. 134
WR 132.1
WR 133.1
131.1 WR
131.2 VEST.
WR 104
WR 107
STOR. 107.1
CUST. OFF. 106
SERVERY 105.1
LULA LIFT 124
E1
E2
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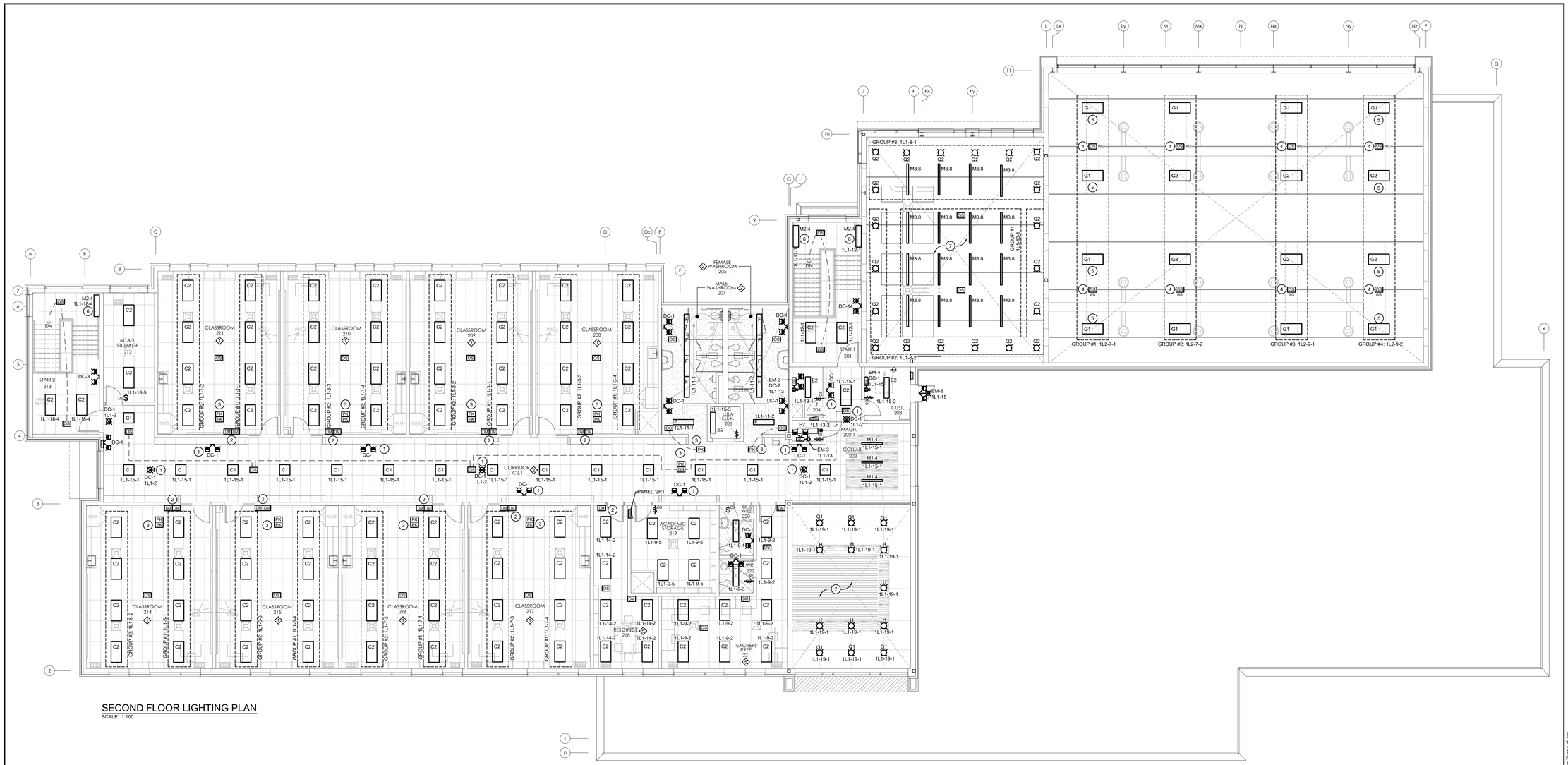

SECOND FLOOR LIGHTING PLAN
SCALE: 1:100

SPECIFIC NOTES

1. DEVICE IS CEILING MOUNTED. PROVIDE ADEQUATE SUPPORT.
2. DEVICES ARE MOUNTED IN PRE-FABRICATED CLASSROOM CONTROL PANEL. PROVIDE CLASSROOM CONTROL PANEL AT LOCATION. REFER TO CLASSROOM CONTROL PANEL DETAIL J/E1.3 FOR ADDITIONAL INFORMATION
3. LIGHTING POWER PACKS INSTALLED ABOVE ACCESSIBLE CEILING SPACE. REFER TO NOTED LIGHTING CONTROL SEQUENCE FOR ADDITIONAL INFORMATION.
4. MOUNT DEVICE TO THE BOTTOM OF THE OPEN WEB STEEL JOIST. PROVIDE THREADED ROD THROUGH JOIST TO JUNCTION BOX TO SECURE. PROVIDE 16GA PAINTED METAL BACKPLATE SUITABLE FOR WIREGUARD INSTALLATION.
5. FIXTURES ALONG THE EAST AND WEST WALL IN THIS ROOM ARE TO BE FASTENED TO UNISTRUT CHANNELS SPANNING ACROSS THE TOP OF THE BOTTOM CHORD OF JOIST TO WALL. AT WALL PROVIDE AN ADDITIONAL UNISTRUT CHANNEL AND ANGLE BRACKET TO SUIT.
6. MOUNT INDICATED DEVICE TO MID-HEIGHT OF WALL.
7. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS.

REVISIONS

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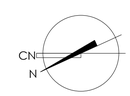
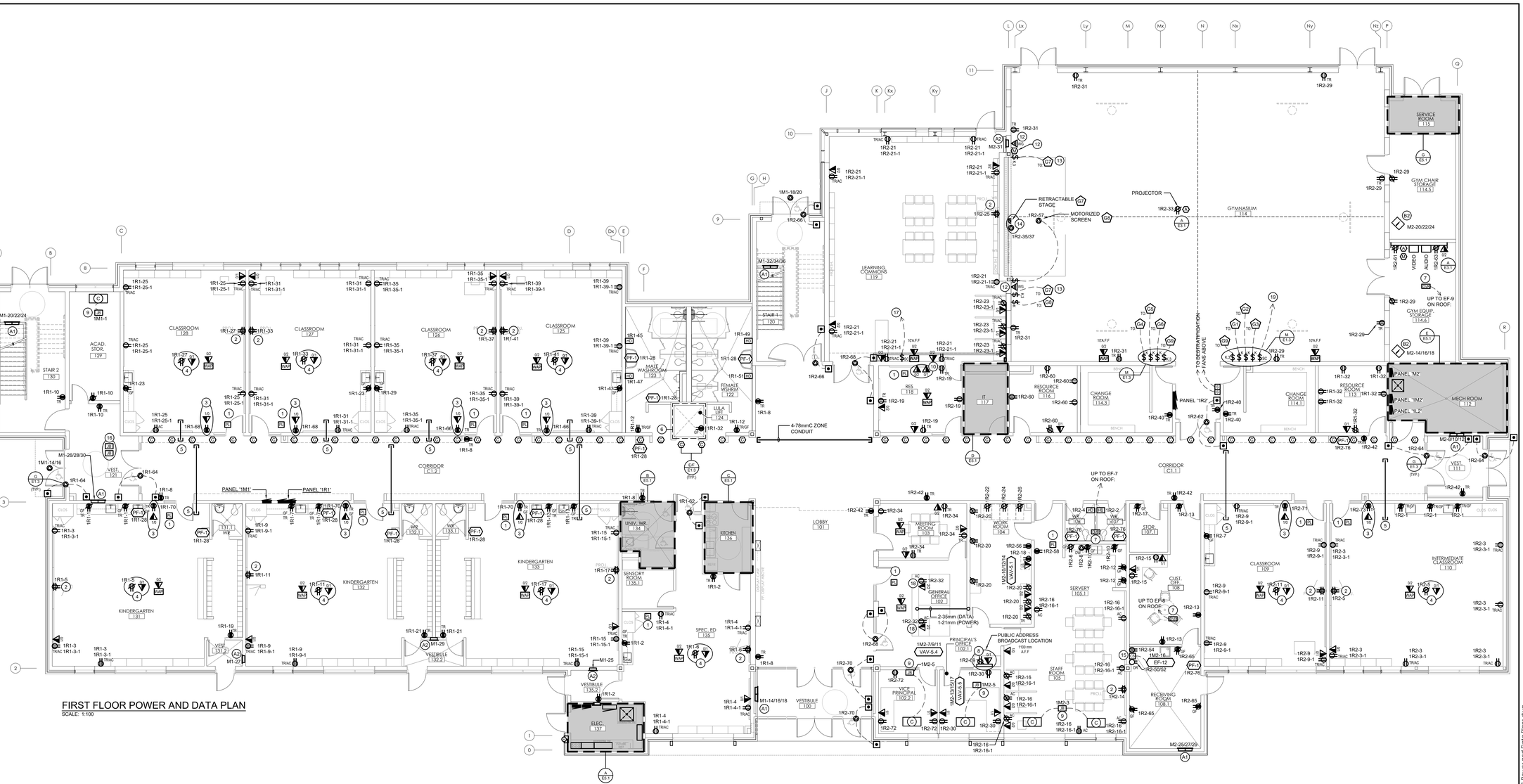


SECOND FLOOR LIGHTING PLAN

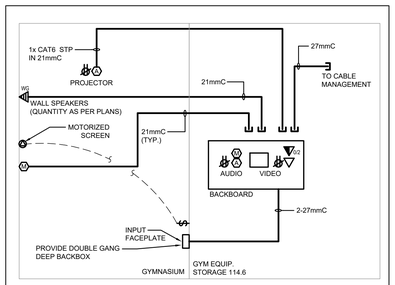
E2.2

DRAWN BY : ST CHECKED BY : SD

Plot Date: Aug 27, 2026 - 10:22am By: etollett Filename: X:\2022 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\V02 Dwgs\03 Elec\25426 E2.1 Lighting Plans.dwg



FIRST FLOOR POWER AND DATA PLAN
SCALE: 1:100



A-PARTIAL GYM AUDIO SYSTEM RISER DIAGRAM
SCALE: NTS

SPECIFIC NOTES

1. INDICATES PLUG LOAD CONTROLLER INSTALLED ABOVE ACCESSIBLE CEILING SPACE. CONNECT TO LOCAL LIGHTING CONTROLS. REFER TO LIGHTING CONTROL SEQUENCE ON LIGHTING DRAWINGS FOR ADDITIONAL INFORMATION.
2. QUAD RECEPTACLE IS TO BE MOUNTED 6" ABOVE THE WHITEBOARD. OFFSET 6" FROM CENTERLINE OF WHITEBOARD REFER TO ARCHITECTURAL ELEVATIONS.
3. MOUNT DEVICES IN PRE-FABRICATED PANEL. REFER TO CLASSROOM CONTROL PANEL DETAIL J/E1.3.
4. PROVIDE RECEPTACLE IN CEILING TILE. PROVIDE DATA OUTLET TERMINATED WITHIN KEYSTONE, LEFT ABOVE ACCESSIBLE CEILING SPACE. PROVIDE 30' OF SLACK W1R1NG COILED NEATLY.
5. PROVIDE 35mm DATA CONDUIT COMPLETE WITH BUSHING INSTALLED ABOVE ACCESSIBLE CLASSROOM CEILING SPACE TO CORRIDOR CABLE HANGER SYSTEM.
6. PROVIDE DEVICES TO BE MOUNTED IN LIFT PIT. REFER TO LIFT SHOP DRAWINGS.
7. PROVIDE DUAL VOLTAGE RELAY INSTALLED ABOVE ACCESSIBLE CEILING SPACE FOR CONTROL OF ADJACENT MECHANICAL DEVICE.
8. PROVIDE 2-GANG BOX C/W 2-27mmC FOR PA CABINET TO CABLE MANAGEMENT SYSTEM C/W BRUSH PLATES. MOUNT AT 1100mm A.F.F.
9. PROVIDE LOCAL 24V RELAY MOUNTED TO JUNCTION BOX ABOVE LOCAL BAS THERMOSTAT. COORDINATE CONNECTION OF CONTROL WIRING WITH BUILDING AUTOMATION VENDOR.
10. MOUNT DEVICE AT 1100mm A.F.F.
11. PROVIDE 120VAC CONNECTION TO MOTORIZED PROJECTOR SCREEN. FROM MOTOR PROVIDE 21mmC TO SWITCH ROUGH-IN LOCATION. PROVIDE SINGLE GANG BOX FOR LOW VOLTAGE SWITCH. SWITCH TO BE SUPPLIED BY SCREEN SUPPLIER AND INSTALLED BY ELECTRICAL TRADE. PROVIDE SUITABLE STAINLESS STEEL COVERPLATE TO SUIT DEVICE.
12. CONTRACTOR TO COORDINATE WITH OWNER AND SUPPLIER FOR EXACT MOUNTING LOCATION AND HEIGHT.
13. PROVIDE 4C#22AWG FROM 3 POSITION KEYED SWITCH (SUPPLIED BY STAGE MANUFACTURER) TO ELECTRIC WINCH ASSEMBLY. PROVIDE SINGLE GANG ROUGH-IN FOR KEYED SWITCH.
14. PROVIDE CONDUIT AND WIRING TO UNFUSED DISCONNECT. CONNECT POWER SUPPLY CORD TO STAGE POWER CONNECTION LOCATION. COORDINATE EXACT LOCATION WITH SHOP DRAWINGS.
15. INDICATED DEVICE IS TO BE WIRED THROUGH CURRENT SENSING RELAY PROVIDED BY MECHANICAL CONTRACTOR AS INDICATED ON THE EQUIPMENT WIRING SCHEDULE CONTROLS COLUMN. THIS CONTRACTOR IS TO PROVIDE A JUNCTION BOX COMPLETE WITH STAINLESS STEEL COVERPLATE TO MOUNT CURRENT SENSING RELAY WITHIN. JUNCTION BOX IS TO BE FLUSH MOUNTED BESIDE DRYER RECEPTACLE JUNCTION BOX.
16. PROVIDE 1-27MMC BACK TO LOCAL IT ROOM FOR FUTURE ADDITION (FIBER). PROVIDE 1-35MMC TO MAIN SWITCHBOARD 'AA'. PROVIDE 1-53MMC TO DP-1.
17. PROVIDE 21MMC UP TO MOTORIZED SHADES. PROVIDE SINGLE GANG BACKBOX. COORDINATE CONTROL WIRING WITH SHADE INSTALLATION PRIOR TO INSTALLATION.
18. PROVIDED DEVICES TO BE MOUNTED WITHIN MILLWORK AS PER ARCHITECTURAL DRAWINGS.
19. LV SHADE CONTROL SWITCH PROVIDED BY SHADE SUPPLIER. SWITCH TO BE INSTALLED IN LOCATION NOTED AND WIRED BY ELECTRICAL CONTRACTOR. REFER TO DETAIL L/E1.3.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

NOTES:

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Project Number: 25426
Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

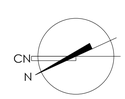
CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"



FIRST FLOOR POWER AND DATA PLAN

E3.1

Plot Date: Aug 27, 2026 - 10:22am By: etollett Filename: X:\2022\Project\1\25426 BW\DSB Port Elgin Elementary School, Port Elgin\02 Dwgs\03 Elec\25426 E3.1 Power and Data Plans.dwg

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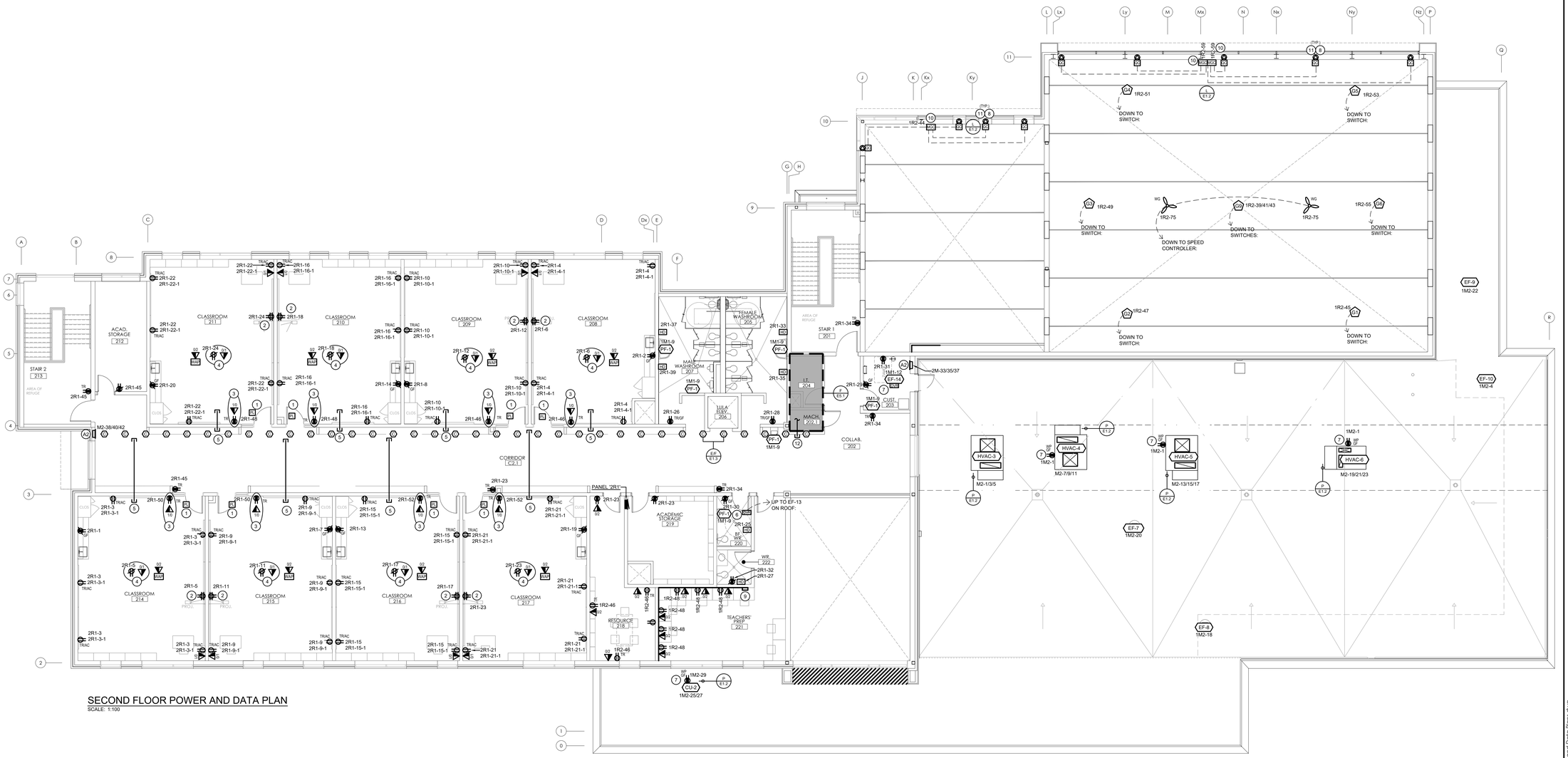

SECOND FLOOR POWER AND DATA PLAN

SCALE: 1:100

SPECIFIC NOTES

1. INDICATES PLUG LOAD CONTROLLER INSTALLED ABOVE ACCESSIBLE CEILING SPACE. CONNECT TO LOCAL LIGHTING CONTROLS. REFER TO LIGHTING CONTROL SEQUENCE ON LIGHTING DRAWINGS FOR ADDITIONAL INFORMATION.
2. QUAD RECEPTACLE IS TO BE MOUNTED 6" ABOVE THE WHITEBOARD. OFFSET 6" FROM CENTERLINE OF WHITEBOARD REFER TO ARCHITECTURAL ELEVATIONS.
3. MOUNT DEVICES IN PRE-FABRICATED PANEL. REFER TO CLASSROOM CONTROL PANEL DETAIL 2/E1.3.
4. PROVIDE RECEPTACLE IN CEILING TILE. PROVIDE DATA OUTLET TERMINATED WITHIN KEYSTONE, LEFT ABOVE ACCESSIBLE CEILING SPACE. PROVIDE 30' OF SLACK WIRING COILED NEATLY.
5. PROVIDE 35mm DATA CONDUIT COMPLETE WITH BUSHING INSTALLED ABOVE ACCESSIBLE CLASSROOM CEILING SPACE TO CORRIDOR CABLE HANGER SYSTEM. 6 DATA CONDUIT FROM CABLE HANGER SYSTEM TO I.T. ROOM CABLE TRAY. REFER TO HORIZONTAL CABLING RISER DIAGRAM FOR SIZING.
6. PROVIDE DUAL VOLTAGE RELAY INSTALLED ABOVE ACCESSIBLE CEILING SPACE FOR CONTROL OF ADJACENT MECHANICAL DEVICE.
7. PROVIDE T-SLOT GROUND FAULT RECEPTACLE COMPLETE WITH "IN-USE" WEATHER-PROOF COVER. COORDINATE PLACEMENT WITH MECHANICAL TRADE PRIOR TO ROUGH-IN. INDICATED DEVICE IS TO BE MOUNTED 900mm ABOVE FINISHED ROOF LEVEL. PROVIDE SUITABLE SUPPORT AT MECHANICAL EQUIPMENT.
8. APPROXIMATE LOCATION OF SHADE MOTOR C/W PRE-WIRED QUICK CONNECT. SHADE MOTOR TO BE INSTALLED BY SHADE PROVIDER. CONNECTION FROM MOTOR'S PRE-WIRED QUICK CONNECT TO MOTOR FEED QUICK CONNECT TO BE BY ELECTRICAL CONTRACTOR. COORDINATE EXACT LOCATION WITH SHADE SUPPLIER AND ON-SITE. REFER TO DETAIL L/E1.3.
9. RUN TWO COMPONENT SURFACE MOUNTED NON-METALLIC RACEWAY ABOVE WORKSTATIONS. CONFIRM EXACT LOCATION/ MOUNTING HEIGHT WITH ARCHITECTURAL SECTIONS. AT FEED POINTS(WITHIN WALL) PROVIDE 2-27mmC TO CABLE MANAGEMENT IN CORRIDOR AND 19mmC TO BRANCH CIRCUIT AS NOTED.
10. PROVIDE SHADE MOTOR GROUP CONTROLLER MOUNTED IN CEILING SPACE. GROUP CONTROLLER TO BE PROVIDED AND INSTALLED BY SHADE SUPPLIER AND WIRED PER DETAIL E/E 1.2 BY ELECTRICAL CONTRACTOR. COORDINATE EXACT LOCATION WITH SHADE SUPPLIER AND ON-SITE.
11. SHADE MOTOR FEED QUICK CONNECT PROVIDED BY SHADE SUPPLIER. MOTOR FEED QUICK CONNECT TO BE WIRED TO MOTOR GROUP CONTROLLER CONTROL BRANCH VIA JUNCTION BOX AS SHOWN BY ELECTRICAL CONTRACTOR. MOUNT JUNCTION BOX WITHIN 1220mm OF ASSOCIATED SHADE MOTOR. COORDINATE EXACT LOCATION WITH SHADE SUPPLIER AND ON-SITE. REFER TO DETAIL L/E1.3.
12. DATA CONDUIT FROM CABLE HANGER SYSTEM TO I.T. ROOM CABLE TRAY. REFER TO HORIZONTAL CABLING RISER DIAGRAM FOR SIZING.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
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04	26.06.11	ISSUED FOR BUILDING PERMIT
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NOTES:

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Project Number: 25426

Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

PROFESSIONAL ENGINEER
J.J. JACKSON
100011324
08/27/26
PROVINCE OF ONTARIO

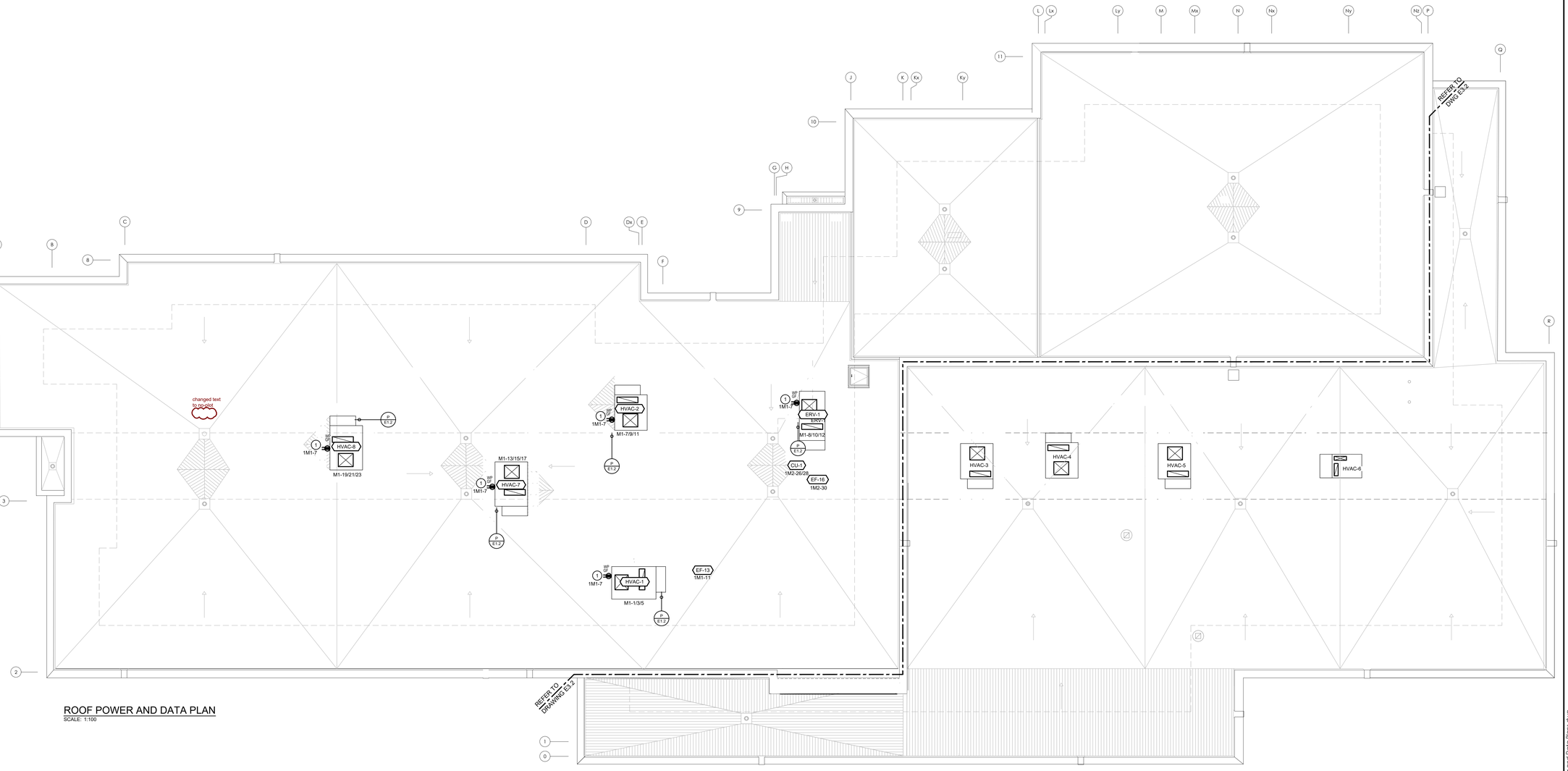
CN
N

SECOND FLOOR POWER AND DATA PLAN

E3.2

DRAWN BY : ST
CHECKED BY : SD

Plot Date: Aug 27, 2026 - 10:22am By: ehallett
Filename: X:\2025 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\02 Design\03 Elec\25426 E3.1 Power and Data Plans.dwg



ROOF POWER AND DATA PLAN
SCALE: 1:100

SPECIFIC NOTES

1 PROVIDE T-SLOT GROUND FAULT RECEPTACLE COMPLETE WITH "IN-USE" WEATHER-PROOF COVER. COORDINATE PLACEMENT WITH MECHANICAL TRADE PRIOR TO ROUGH-IN. INDICATED DEVICE IS TO BE MOUNTED 900mm ABOVE FINISHED ROOF LEVEL. PROVIDE SUITABLE SUPPORT AT MECHANICAL EQUIPMENT.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
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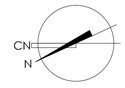

ROOF POWER AND DATA PLAN

E3.3

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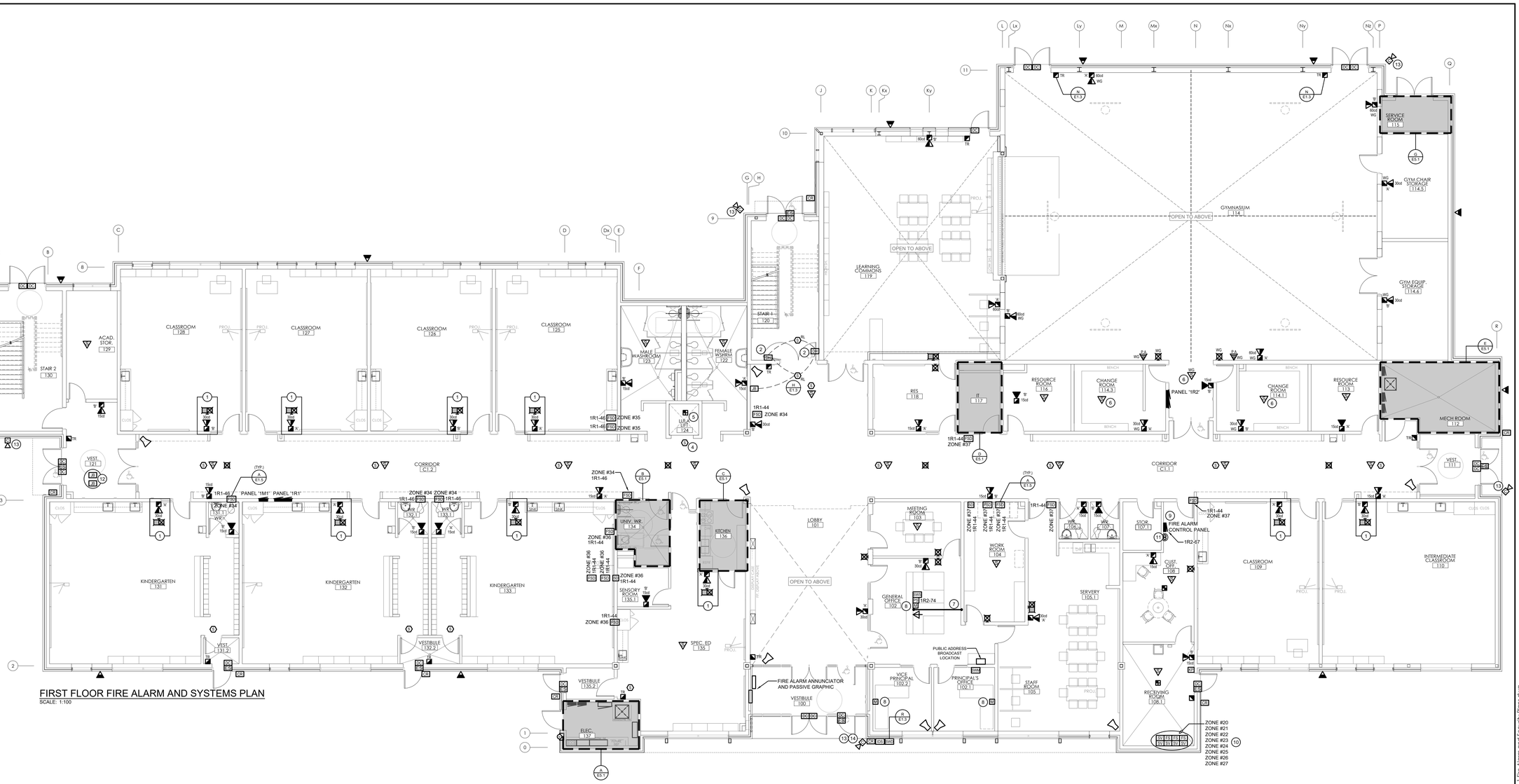
Plot Date: Aug 27, 2026 - 10:22am By: etiolet1
Filename: X:\2025 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\02 Dwgs\03 Elec\25426 E3.1 Power and Data Plans.dwg



FIRST FLOOR FIRE ALARM AND SYSTEMS PLAN

SCALE: 1:100

SPECIFIC NOTES

1. MOUNT DEVICES IN PRE-FABRICATED PANEL. REFER TO CLASSROOM CONTROL PANEL DETAIL.
2. COORDINATE LOCATION OF DOOR HOLDER TO SUIT DOOR SWING.
3. WITHIN CEILING SPACE PROVIDE STEPDOWN TRANSFORMER (120V-24V). RUN NOTED CIRCUIT THROUGH TRANSFORMER AND 24V CIRCUIT THROUGH AUXILIARY CONTACTS OF FIRE ALARM PANEL, THEN ONTO RELAY BASES OF SMOKE DETECTORS AND TO DOOR HOLDERS. INSTALL SMOKE DETECTORS A MAXIMUM OF 1.5M FROM NOTED DOORS. REFER TO DETAIL H/E1.3.
4. THROUGH PROGRAMMING WHEN PROVIDED DETECTOR IS IN ALARM, ASSOCIATED RELAY IN CONTROL PANEL IS TO CLOSE AND SEND SIGNAL TO ELEVATOR CONTROLLER.
5. PROVIDED DEVICES TO BE MOUNTED IN LIFT PIT. REFER TO LIFT SHOP DRAWINGS.
6. CONNECT TO LOCAL GYM SPEAKER CIRCUIT.
7. FEED INDICATED DEVICES WITH WIREMOLD DOWN INTERIOR WALL. DRILL WALL AND FEED DEVICES FROM BACK.
8. COORDINATE EXACT LOCATION OF MONITOR WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
9. PROVIDE 2'x10" H WIRING TROUGH. BELOW FIRE ALARM CONTROL PANEL, TERMINATE DUCTS TO SERVICE ROOM 115 WITHIN.
10. ALL SPRINKLER VALVES SHALL BE COORDINATED WITH THE SUCCESSFUL SPRINKLER TRADE AND FIRE PROTECTION SHOP DRAWINGS. NAMING OF FIRE ALARM ZONES AND EXACT QUANTITY SHALL BE BY FIRE PROTECTION. REFER TO FIRE ALARM SPECIFICATION FOR ALLOWANCE OF ADDITIONAL CONNECTED DEVICES.
11. PROVIDE 2-53mmC TO SERVICE ROOM FOR FUTURE PORTABLES. REFER TO G/ES.1 FOR ADDITIONAL INFORMATION.
12. PROVIDE JUNCTION BOXES ABOVE CEILING SPACE, PROVIDE 1-1" TO MAIN SECURITY PANEL. PROVIDE 2-1"C TO FIRE ALARM CONTROL PANEL FOR FUTURE ADDRESSABLE LOOP. PROVIDE 1-1"C FOR FUTURE SIGNAL CIRCUITS.
13. PROVIDE 4"X4" JUNCTION BOX ABOVE ACCESSIBLE CEILING SPACE. PROVIDE 21MMC FROM JUNCTION BOX BACK TO CABLE HANGER SYSTEM. PROVIDE 13MMC FROM BOX AND PENETRATE THROUGH EXTERIOR WALL. TERMINATE KEYSTONE JACK WITHIN JUNCTION BOX FOR FUTURE CONNECTION BY CCTV VENDOR. COORDINATE EXACT PENETRATION HEIGHT WITH CCTV VENDOR TO SUIT OPTIMAL CAMERA MOUNTING HEIGHTS AS DIRECTED BY THE CCTV VENDOR. INSTALL CCTV BRACKET ON EXTERIOR WALL AND/OR CANOPY AS SUPPLIED BY CCTV VENDOR.
14. PROVIDED DEVICE TO BE MOUNTED TO THE UNDERSIDE OF CANOPY.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
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Website: deiassociates.ca
Project Number: 25426

DEI Consulting Engineers
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CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

I CERTIFY THAT: PROFESSIONAL ENGINEER J. D. JACKSON 100011324 08/27/26 PROVINCE OF ONTARIO

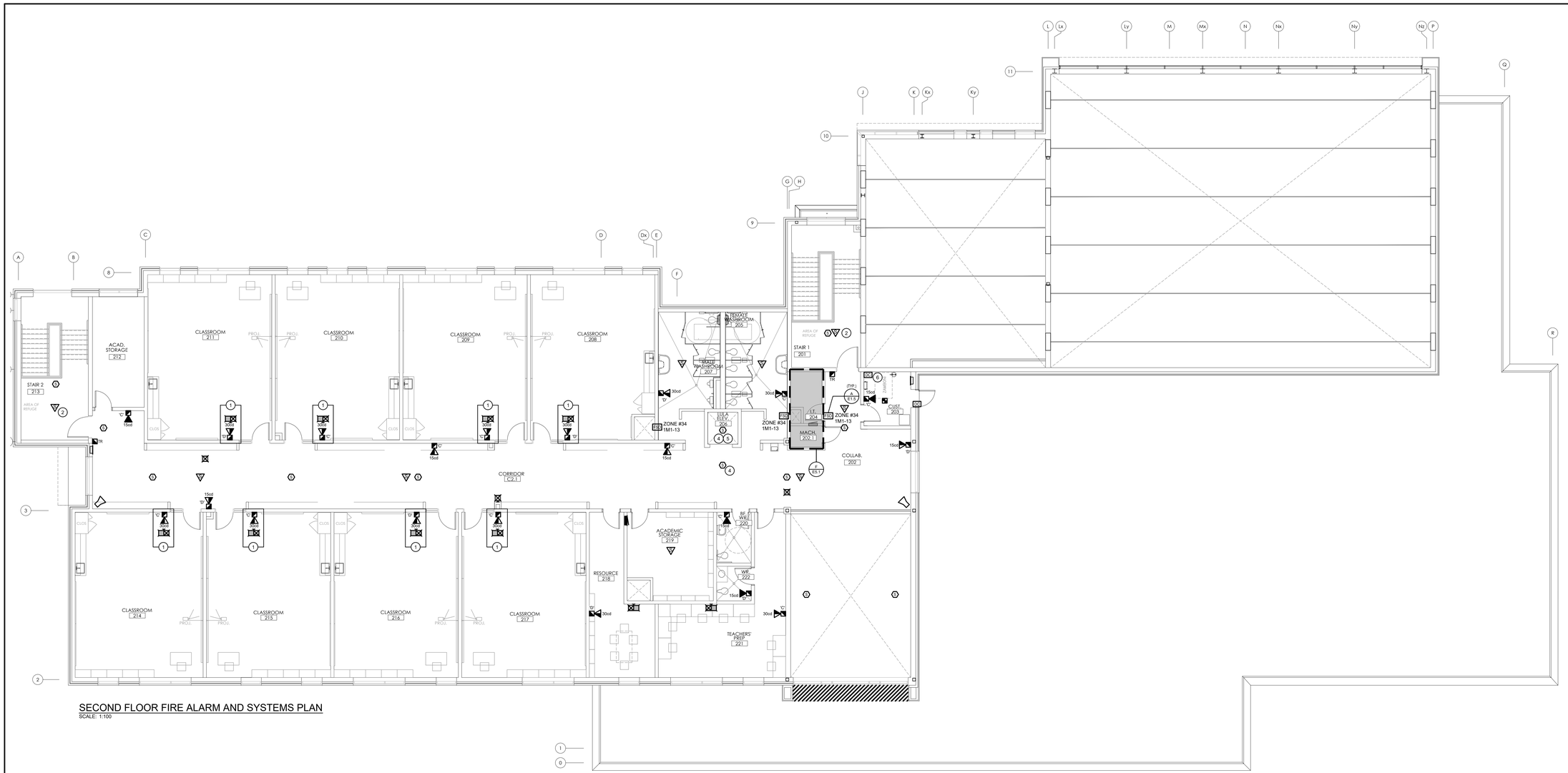
CN N

FIRST FLOOR FIRE ALARM AND SYSTEMS PLAN

E4.1

DRAWN BY : ST CHECKED BY : SD

Plot Date: Aug 27, 2026 - 10:22am By: etollett Filename: X:\2022 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\V02 Dwgs\03 Elec\25426 E4.1 Fire Alarm and Security Plans.dwg



SPECIFIC NOTES

1. MOUNT DEVICES IN PRE-FABRICATED PANEL. REFER TO CLASSROOM CONTROL PANEL DETAIL P/E1.3.
2. PROVIDED DEVICE IS TO BE MOUNTED ABOVE LANDING (FOR ACCESSIBILITY).
3. WITHIN CEILING SPACE PROVIDE STEPDOWN TRANSFORMER (120V-24V). RUN NOTED CIRCUIT THROUGH TRANSFORMER AND 24V CIRCUIT THROUGH AUXILIARY CONTACTS OF FIRE ALARM PANEL, THEN ONTO RELAY BASES OF SMOKE DETECTORS AND TO DOOR HOLDERS. INSTALL SMOKE DETECTORS A MAXIMUM OF 1.5M FROM NOTED DOORS. REFER TO DETAIL H/E1.3.
4. THROUGH PROGRAMMING WHEN PROVIDED DETECTOR IS IN ALARM, ASSOCIATED RELAY IN CONTROL PANEL IS TO CLOSE AND SEND SIGNAL TO ELEVATOR CONTROLLER.
5. MOUNT PROVIDED DEVICE AT TOP OF LIFT SHAFT.
6. PROVIDE DOOR CONTACT ON ROOF HATCH.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
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1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

LICENSED PROFESSIONAL ENGINEER
J.J. JACKSON
100011324
08/27/26
PROVINCE OF ONTARIO

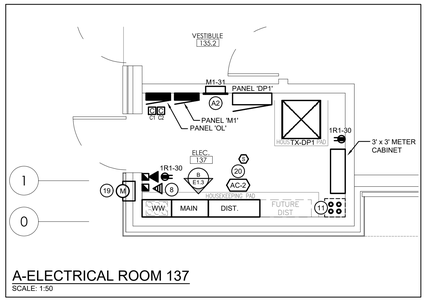
CN
N

SECOND FLOOR FIRE ALARM AND SYSTEMS PLAN

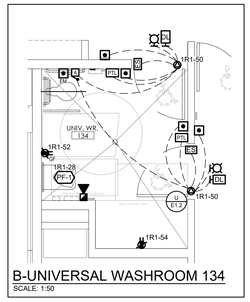
E4.2

DRAWN BY : ST CHECKED BY : SD

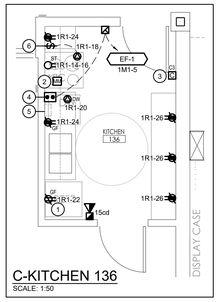
Plot Date: Aug 27, 2026 - 10:22am By: eholett Filename: K:\2025 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\02 Dwgs\03 Elec\25426 E4.1 Fire Alarm and Security Plans.dwg



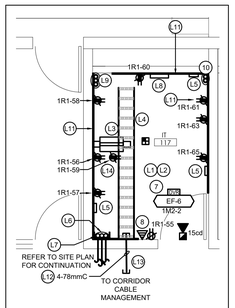
A-ELECTRICAL ROOM 137
SCALE: 1:50



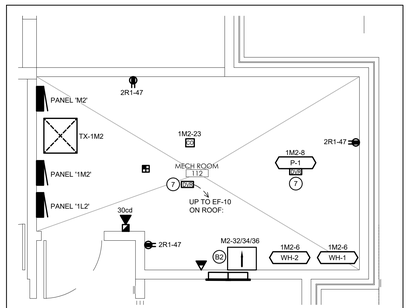
B-UNIVERSAL WASHROOM 134
SCALE: 1:50



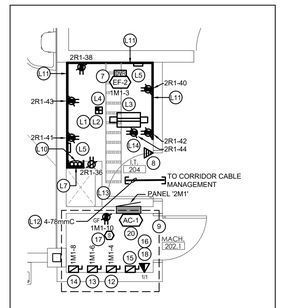
C-KITCHEN 136
SCALE: 1:50



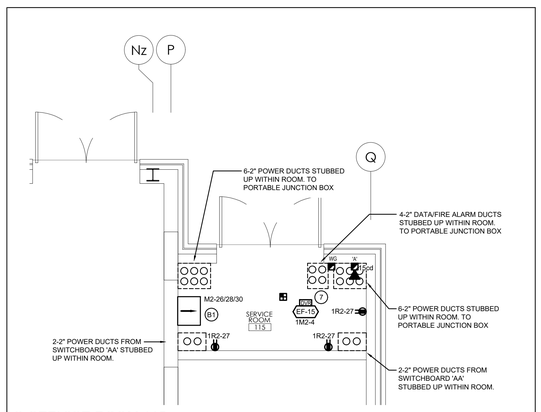
D-IT ROOM 117
SCALE: 1:50



E-MECHANICAL ROOM 112
SCALE: 1:50



F-IT ROOM 204 & ELEV. MACH. 202.1
SCALE: 1:50



G-SERVICE ROOM 115
SCALE: 1:50

I.T. NOTES

L1 EQUIPMENT PLACEMENT SHOWN FOR RELATIVE EQUIPMENT POSITIONING ONLY. COORDINATE WITH SCHOOL BOARD I.T. REPRESENTATIVE.

L2 PROVIDE GROUNDING OF ALL CABLE TRAY, CONDUIT STUBS AND EQUIPMENT ENCLOSURES WITHIN HUB ROOM PER SPECIFICATIONS. ALL POTENTIAL CURRENT CARRYING COMPONENTS TO BE GROUNDED PER ANSI/EIA/TIA-607 UTILIZING #6 (MIN.) CU. INSULATED GROUND WIRE.

L3 INDICATES LOCATION OF DATA NETWORK CONNECTION RACK.

L4 INDICATES 305mm (12") SIDE BRACKET MOUNT LADDER TRAY, ANCHORED TO BOTH WALLS. MOUNT AT 2250mm AFF. COORDINATE MOUNTING HEIGHT WITH RACK, LIGHTING AND DUCTWORK.

L5 INDICATES 127mmx50mmx6mm (5"x2"x1/4") CU GROUND BUS MOUNTED AT TOP OF PLYWOOD BACKBOARD C/W #6 CU. (MIN.) INSULATED GROUND WIRE TO MAIN BUILDING GROUND.

L6 INDICATES LOCATION OF INCOMING CONDUITS FROM EXTERIOR. TERMINATE 100mm AFF ABOVE CONCRETE RISER CURB. COORDINATE STUB LOCATIONS WITH VERTICAL TRAY MOUNTING. REFER TO TELECOMM RISER AND SITE PLAN FOR CONTINUATION.

L7 INDICATES 305mm (12") CABLE MANAGEMENT LADDER TRAY MOUNTED VERTICALLY TO WALL FROM FLOOR TO CEILING. PROVIDE UNISTRUT SUPPORT STRUCTURES BEHIND EACH RUN OF VERTICAL TRAY. PROVIDE COUPLING BETWEEN VERTICAL AND HORIZONTAL TRAY WHERE APPROPRIATE. POSITION VERTICAL TRAY RUNS TO SUIT RISER CONDUITS AT FLOOR LEVEL. COORDINATE LAYOUT ON SITE.

L8 INDICATES LOCATION OF BELL TELEPHONE EQUIPMENT RACK AT 2438mmH X 1219mmL X 19mmD PAINTED PLYWOOD BACKBOARD. PROVIDE DUPLEX RECEPTACLES ON BACKBOARD TO SUIT. REFER TO SPECIFICATIONS.

L9 INDICATES 3-78mmC RISERS TO IT ROOM IN SECOND FLOOR, COORDINATE EXACT ROUTING ON SITE.

L10 INDICATES LOCATION OF RISER CONDUITS FROM FLOOR BELOW. TERMINATE 100mm AFF ABOVE CONCRETE RISER CURB. COORDINATE STUB LOCATIONS WITH VERTICAL TRAY MOUNTING. REFER TO TELECOMM RISER AND SITE PLAN FOR CONTINUATION.

L11 INDICATES 2400mmH X LENGTH AS SHOWN X 19mm PAINTED PLYWOOD BACKBOARD FOR AUXILIARY SERVICES AS NOTED.

L12 INDICATES RISER CONTUIT(S) C/W BUSHINGS BETWEEN I.T. CLOSETS OR TO NEAREST CABLE MANAGEMENT SYSTEM. REFER TO TELECOMM RISER DIAGRAM.

L13 PROVIDE PIPECLAMP C/W GROUNDING CONNECTOR FOR INCOMING CONDUITS TO HUB ROOM.

L14 INDICATED RECEPTACLES FOR DATA RACKS TO BE MOUNTED AT TOP AND MID-POINT OF PLYWOOD BACKBOARD RESPECTIVELY. ADJUST HEIGHT OF TOP RECEPTACLE AS TO NOT INTERFERE WITH OVERHEAD TRAY.

GENERAL NOTES

- ALL RECEPTACLES OF CSA CONFIGURATION 5-15R AND 5-20R SHALL BE TAMPER-RESISTANT RECEPTACLES AND SHALL BE SO MARKED.

SPECIFIC NOTES

1 INDICATED DEVICE FOR OWNER FRIDGE. CONFIRM EXACT LOCATION/MOUNTING HEIGHT ON SITE PRIOR TO ROUGH-IN.

2 FROM FIRE ALARM MONITORING MODULE PROVIDE CONNECTION TO NFPA HOOD SUPPRESSION SYSTEM. REFER TO FIRE ALARM RISER DIAGRAM FOR ADDITIONAL INFORMATION.

3 PROVIDE 60A-2P CONTACTOR, ROUTE STOVE CIRCUIT THROUGH CONTACTOR. PROVIDE CONNECTION TO NFPA HOOD CONTROLLER. CONTACTOR TO SHUNT POWER UPON SUPPRESSION SYSTEM ACTIVATION.

4 PROVIDE REMOTE START/STOP PUSHBUTTON FOR EXHAUST FAN EF-X.

5 PROVIDE CONNECTION TO NFPA HOOD CONTROLLER.

6 PROVIDE LOCAL SWITCH AND CONNECT TO NFPA HOOD LIGHTS.

7 PROVIDE DUAL VOLTAGE RELAY INSTALLED ABOVE ACCESSIBLE CEILING SPACE FOR CONTROL OF ADJACENT MECHANICAL DEVICE..

8 INDICATES WALL MOUNTED P.A. SPEAKER C/W CONDUIT TO CORRIDOR CABLE MANAGEMENT SYSTEM. COORDINATE MOUNTING LOCATION WITH PA VENDOR SPEAKER BACKBOX (PART OF SEPARATE TENDER).

9 ALL DEVICE LOCATIONS WITHIN ELEVATOR MACHINE ROOM TO BE CONFIRMED WITH ELEVATOR SHOP DRAWINGS AND ELEVATOR INSTALLER PRIOR TO ROUGH-IN.

10 PROVIDE 2-4"C TO SERVICE ROOM FOR FUTURE PORTABLES. REFER TO G/E5.1 FOR ADDITIONAL INFORMATION.

11 PROVIDE 4-2"C TO SERVICE ROOM FOR FUTURE PORTABLES. REFER TO G/E5.1 FOR ADDITIONAL INFORMATION.

12 PROVIDE 30A-1P FUSIBLE DISCONNECT G/W 15A FUSE FOR ELEVATOR COMMUNICATION DISCONNECT. DEDICATED CIRCUIT AS NOTED. CONFIRM EXACT LOCATION/REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS.

13 PROVIDE 30A-1P FUSIBLE DISCONNECT C/W 15A FUSE FOR ELEVATOR IN-CAR GF DUPLEX RECEPTACLE. DEDICATED CIRCUIT AS NOTED. CONFIRM EXACT LOCATION REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS.

14 PROVIDE 30A-1P FUSIBLE DISCONNECT C/W 15A FUSE FOR ELEVATOR IN-CAR LIGHTING. DEDICATED CIRCUIT AS NOTED. CONFIRM EXACT LOCATION/REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS

15 PROVIDE FUSED DISCONNECT (C/W TWO SETS OF AUXILIARY CONTACTS) FOR ELEVATOR CONTROLLER FED FROM PANEL 'M1'. REFER TO DISTRIBUTION RISER DIAGRAM FOR MORE INFORMATION.

16 PROVIDE PHONE OUTLET MOUNTED AT 1220MM (4'-0") AFF. CONFIRM EXACT LOCATION WITH ELEVATOR INSTALLER.

17 THROUGH PROGRAMMING WHEN INDICATED DETECTOR IS IN ALARM, ASSOCIATED RELAY IN THE FIRE ALARM CONTROL PANEL IS TO CLOSE AND SEND SIGNAL TO ELEVATOR CONTROLLER TO INITIATE RECALL.

18 PROVIDE DATA OUTLET FOR IN-CAR COMMUNICATIONS MOUNTED AT 1220MM (4'-0") AFF. CONFIRM EXACT LOCATION WITH ELEVATOR INSTALLER.

19 PROVIDE METER BASE ASSEMBLY EQUAL TO HYDEL CAT. #74820585. MOUNT SO VIEWING WINDOW IS AT 1750MM A.F.G.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

NOTES:

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.

Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale this drawing.

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Phone: 519-725-3555
Website: deiassociates.ca
Project Number: 25426

Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

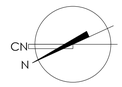
CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

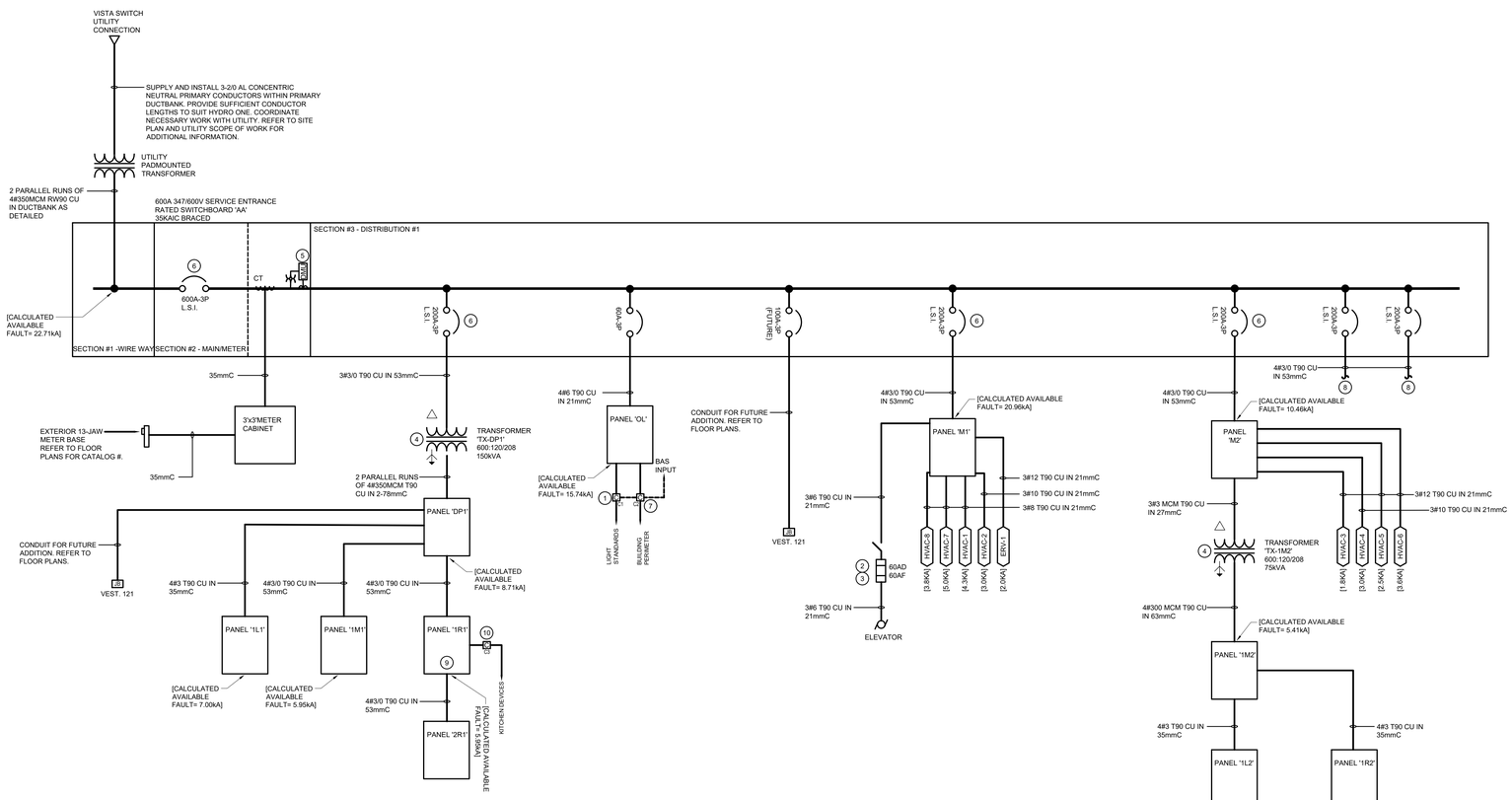


ENLARGED PLANS

E5.1

DRAWN BY : ST CHECKED BY : SD

Plot Date: - Aug 27, 2026 - 10:22am By: eholett Filename: X:\2025 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\02 Dwgs\03 Elec\25426 E5.1 Enlarged Plans.dwg



DISTRIBUTION RISER DIAGRAM
SCALE: NTS

DISTRIBUTION RISER NOTES

1. REFER TO SPECIFICATION FOR INFORMATION REGARDING MOULDED CASE CIRCUIT BREAKERS.
2. ALL DISTRIBUTION EQUIPMENT ARE TO BE PROVIDED WITH WARNING LABELS CONFORMING TO THE ONTARIO ELECTRICAL SAFETY CODE RULE #2-306(1),(2).
3. INSTALL GROUND WIRE TO SUIT THE ELECTRICAL SAFETY CODE IN ALL CONDUIT.
4. ALL LIGHTING CIRCUITS ARE TO BE PROVIDED WITH SEPARATE NEUTRALS. SIZE BRANCH CONDUITS ACCORDINGLY.
5. ALL NOTED FEEDERS ARE FOR OVERHEAD RUNS OF CONDUIT. IF THE CONTRACTOR WISHES TO FEED UNDERGROUND, THE FEEDER MUST BE REVISED. THE CONTRACTOR IS TO PROPOSE REVISIONS TO THE CONSULTANT FOR PRE-APPROVAL.

SPECIFIC DISTRIBUTION RISER NOTES

1. PROVIDE 15A-2P LIGHTING CONTACTOR C/W INTERNAL TRANSFORMER, 24V COIL, HAND/OFF/AUTO SELECTOR SWITCH AND RED PILOT LIGHT.
2. PROVIDE ELEVATOR CONTROLLER DISCONNECT. PROVIDE C/W TWO SETS OF AUXILIARY CONTACTS TO SUIT THE ELEVATOR SUPPLIER.
3. CONFIRM EXACT REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS PRIOR TO INSTALLATION.
4. TRANSFORMER SHALL BE WITH NAME, KVA RATING, PRIMARY, SECONDARY, AND CONFIGURATION AS INDICATED. MINIMUM IMPEDANCE SHALL BE 3% AND A K-FACTOR OF 1.
5. PROVIDE DIGITAL METERING UNIT AS PER SPECIFICATION. COORDINATE WITH BUILDING AUTOMATION SYSTEMS VENDOR FOR CONNECTION.
6. BREAKER SHALL BE SOLID STATE TYPE (L.S.I.), SET FINAL SETTINGS PER COORDINATION STUDY. INCLUDE PHOTOS OF BREAKER SETTING IN MAINTENANCE MANUALS. REFER TO SPECIFICATION.
7. PROVIDE 15A-4P LIGHTING CONTACTOR C/W INTERNAL TRANSFORMER, 24V COIL, HAND/OFF/AUTO SELECTOR SWITCH AND RED PILOT LIGHT.
8. INDICATES MINIMUM MOUNTING SPACE FOR FUTURE BRANCH DEVICES. INCLUDE MOUNTING HARDWARE. CONDUIT TO BE CAPPED WITHIN SERVICE ROOM 115 FOR FUTURE PORTABLE USE.
9. PANELBOARD SHALL BE PROVIDED WITH A SUBFEED LUG KIT TO SUIT FEED THROUGH TO NEXT PANELBOARD.
10. REFER TO ENLARGED PLAN C/E5.1 FOR CONTACTOR INFORMATION.

REVISIONS

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01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
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NOTES:

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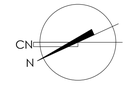

DISTRIBUTION RISER DIAGRAM

E6.1

DRAWN BY : ST
CHECKED BY : SD

Plot Date: Aug 27, 2026 - 10:22am By: etollett
Filename: X:\2022 Projects\25426 BWDSB Port Elgin Elementary School Port Elgin\V02 Dwgs\03 Elec\25426 E6.1 Distribution Riser Diagram.dwg

PANEL 'M1'

MAINS: 225A
VOLTAGE: 347/600V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: SURFACE
ACCESSORIES:

CONTRACTOR TO COORDINATE FINAL ROOM NAMES AND NUMBERS NOTED WITH INFORMATION ISSUES DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
			1	●			2			
HVAC-1	50A-3P	--	3		●		4	--	60A-3P	ELEVATOR MOTOR
			5			●	6			
			7	●			8			
HVAC-2	50A-3P	--	9		●		10	--	15A-3P	ERV-1
			11			●	12			
			13	●			14			
HVAC-7	60A-3P	--	15	●			16	--	15A-3P	VEST. 100 HTR
			17			●	18			
			19	●			20			
HVAC-8	50A-3P	--	21		●		22	--	15A-3P	STAIR 2 130 HTR
			23			●	24			
VEST 135.2 HTR	15A-1P	--	25	●			26			
KINDERGARTEN 131 HTR	15A-1P	--	27		●		28	--	15A-3P	VEST. 121 HTR
KINDERGARTEN 132/133 HTR	15A-1P	--	29			●	30			
ELEC. 137 HTR	15A-1P	--	31	●			32			
SPACE		--	33		●		34	--	15A-3P	STAIR 1 HTR
SPACE		--	35			●	36			
SPACE		--	37	●			38	--		SPACE
SPACE		--	39		●		40	--		SPACE
SPACE		--	41			●	42	--		SPACE
SPACE		--	43	●			44	--		SPACE
SPACE		--	45		●		46	--		SPACE
SPACE		--	47			●	48	--		SPACE
SPACE		--	49	●			50	--		SPACE
SPACE		--	51		●		52	--		SPACE
SPACE		--	53			●	54	--		SPACE
SPACE		--	55	●			56	--		SPACE
SPACE		--	57		●		58	--		SPACE
SPACE		--	59			●	60	--		SPACE

NOTES:
THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 AIC. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

PANEL 'M2'

MAINS: 225A
VOLTAGE: 347/600V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: SURFACE
ACCESSORIES:

CONTRACTOR TO COORDINATE FINAL ROOM NAMES AND NUMBERS NOTED WITH INFORMATION ISSUES DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
			1	●			2			
HVAC-3	25A-3P	--	3		●		4	--	90A-3P	TRANSFORMER TX-1M2
			5			●	6			
			7	●			8			
HVAC-4	40A-3P	--	9		●		10	--	15A-3P	VEST. 111 HTR
			11			●	12			
			13	●			14			
HVAC-5	25A-3P	--	15		●		16	--	15A-3P	GYM EQ. STORAGE HTR
			17			●	18			
			19	●			20			
HVAC-6	20A-3P	--	21		●		22	--	15A-3P	GYM CHAIR STORAGE HTR
			23			●	24			
			25	●			26			
RECEIVING ROOM HEATER	15A-3P	--	27		●		28	--	15A-3P	SERVICE RM. HTR
			29			●	30			
LEARNING COMMONS HTR.	15A-1P	--	31	●			32			
			33		●		34	--	15A-3P	MECH RM. FAN FORCE HEATER
CUST. 203 HTR	15A-3P	--	35			●	36			
SPACE		--	37	●			38			SPACE
SPACE		--	39		●		40	--	15A-3P	CORRIDOR C2.1 HTR.
SPACE		--	41			●	42			
SPACE		--	43	●			44	--		SPACE
SPACE		--	45		●		46	--		SPACE
SPACE		--	47			●	48	--		SPACE
SPACE		--	49	●			50	--		SPACE
SPACE		--	51		●		52	--		SPACE
SPACE		--	53			●	54	--		SPACE
SPACE		--	55	●			56	--		SPACE
SPACE		--	57		●		58	--		SPACE
SPACE		--	59			●	60	--		SPACE

NOTES:
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PANEL '1L1'

MAINS: 100A
VOLTAGE: 120/208V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: SURFACE
ACCESSORIES:

CONTRACTOR TO COORDINATE FINAL ROOM NAMES AND NUMBERS NOTED WITH INFORMATION ISSUES DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
CLASSROOM 210 / 211 LTG	15A-1P	--	1	●			2	--	15A-1P	2ND FL. EXIT SIGNS
CLASSROOM 209 / 208 LTG	15A-1P	--	3		●		4	--	15A-1P	GROUND FL. EXIT SIGNS
CLASSROOM 214 / 215 LTG	15A-1P	--	5			●	6	--	15A-1P	WEST. CORR. LTG
CLASSROOM 216 / 217 LTG	15A-1P	--	7	●			8	--	15A-1P	LIBRARY LIGHTING
RESOURCE AND WASHROOM LTG	15A-1P	--	9		●		10	--	15A-1P	CLASSROOM 126/127/128
2ND FL. WASHROOM 205/207	15A-1P	--	11			●	12	--	15A-1P	STAIR 1 LTG
LIBRARY/IT RM LTG	15A-1P	--	13	●			14	--	15A-1P	KINDERGARTEN 131/132 LTG
2ND. FL. CORR LTG	15A-1P	--	15		●		16	--	15A-1P	KINDERGARTEN 133 LTG
SPECIAL ED/KITCHEN LTG	15A-1P	--	17			●	18	--	15A-1P	VESTIBULE 121 LTG
LOBBY LIGHTING	15A-1P	--	19	●			20	--		SPACE
SPACE		--	21		●		22	--		SPACE
SPACE		--	23			●	24	--		SPACE
SPACE		--	25	●			26	--		SPACE
SPACE		--	27		●		28	--		SPACE
SPACE		--	29			●	30	--		SPACE
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SPACE		--	49	●			50	--		SPACE
SPACE		--	51		●		52	--		SPACE
SPACE		--	53			●	54	--		SPACE
SPACE		--	55	●			56	--		SPACE
SPACE		--	57		●		58	--		SPACE
SPACE		--	59			●	60	--		SPACE

NOTES:
THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 AIC. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

PANEL '1L2'

MAINS: 100A
VOLTAGE: 120/208V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: SURFACE
ACCESSORIES:

CONTRACTOR TO COORDINATE FINAL ROOM NAMES AND NUMBERS NOTED WITH INFORMATION ISSUES DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
CORRIDOR C1.1 LIGHTING	15A-1P	--	1	●			2	--	15A-1P	OFFICE LIGHTING
STAFF / CUSTODIAL LTG	15A-1P	--	3		●		4	--	15A-1P	CLASSROOM 109/110
GROUND FLOOR EXIT SIGNS	15A-1P	--	5			●	6	--	15A-1P	GYM CHANGE RM LTG
GYM LIGHTING	15A-1P	--	7	●			8	--		SPACE
GYM LIGHTING	15A-1P	--	9		●		10	--		SPACE
SPACE		--	11			●	12	--		SPACE
SPACE		--	13	●			14	--		SPACE
SPACE		--	15		●		16	--		SPACE
SPACE		--	17			●	18	--		SPACE
SPACE		--	19	●			20	--		SPACE
SPACE		--	21		●		22	--		SPACE
SPACE		--	23			●	24	--		SPACE
SPACE		--	25	●			26	--		SPACE
SPACE		--	27		●		28	--		SPACE
SPACE		--	29			●	30	--		SPACE
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SPACE		--	53			●	54	--		SPACE
SPACE		--	55	●			56	--		SPACE
SPACE		--	57		●		58	--		SPACE
SPACE		--	59			●	60	--		SPACE

NOTES:
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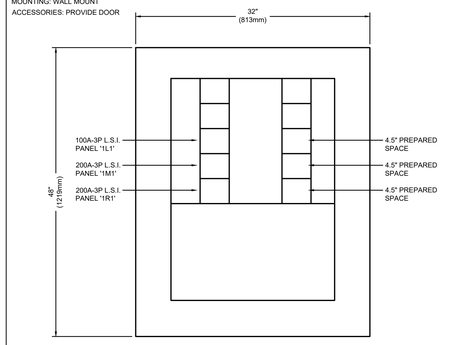
PANEL 'DP1'

MAINS: 600A
VOLTAGE: 120/208V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: WALL MOUNT
ACCESSORIES: PROVIDE DOOR



NOTES:
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PANEL '1M1'

MAINS: 225A
VOLTAGE: 120/208V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: RECESSED
ACCESSORIES:

CONTRACTOR TO COORDINATE FINAL ROOM NAMES AND NUMBERS NOTED WITH INFORMATION ISSUES DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
ACAD STORAGE HTR	15A-1P	--	1	●			2	--	15A-1P	OUTDOOR PYLON SIGN
IT 204 EXHAUST EF-2	15A-1P	--	3		●		4	--	15A-1P	ELEVATOR COMM. DISC.
CEILING EXHAUST FAN EF-1	15A-1P	--	5			●	6	20A-1P		ELEVATOR CAB REC.
ROOFTOP MAINTENANCE REC.	20A-1P	--	7	●			8	--	15A-1P	ELEVATOR LIGHTING
WR PLUMBING FIXTURES	15A-1P	--	9		●		10	--	20A-1P	ELEVATOR MACHINE RM. REC.
CEILING EXHAUST FAN EF-13	15A-1P	--	11			●	12	--	15A-1P	CEILING EXHAUST FAN CUST 203
ERV-1 FIRE SMOKE DAMPERS	15A-1P	--	13	●			14	33mA	30A-2P	VEST. 121 HEAT TRACING
SPACE		--	15		●		16			
SPACE		--	17			●	18	33mA	30A-2P	VEST. 121 HEAT TRACING
SPACE		--	19	●			20			
SPACE		--	21		●		22	--		SPACE
SPACE		--	23			●	24	--		SPACE
SPACE		--	25	●			26	--		SPACE
SPACE		--	27		●		28	--		SPACE
SPACE		--	29			●	30	--		SPACE
SPACE		--	31	●			32	--		SPACE
SPACE		--	33		●		34	--		SPACE
SPACE		--	35			●	36	--		SPACE
SPACE		--	37	●			38	--		SPACE
SPACE		--	39		●		40	--		SPACE
SPACE		--	41			●	42	--		SPACE
SPACE		--	43	●			44	--		SPACE
SPACE		--	45		●		46	--		SPACE
SPACE		--	47			●	48	--		SPACE
SPACE		--	49	●			50	--		SPACE
SPACE		--	51		●		52	--		SPACE
SPACE		--	53			●	54	--		SPACE
SPACE		--	55	●			56	--		SPACE
SPACE		--	57		●		58	--		SPACE
SPACE		--	59			●	60	--		SPACE

NOTES:
THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 AIC. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

PANEL '1M2'

MAINS: 400A
VOLTAGE: 120/208V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: SURFACE
ACCESSORIES:

CONTRACTOR TO COORDINATE FINAL ROOM NAMES AND NUMBERS NOTED WITH INFORMATION ISSUES DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
GND. FL. ROOFTOP UNIT REC.	20A-1P	--	1	●			2	--	15A-1P	CEILING EXHAUST FAN EF-6
STAFF RM. 105 HTR	15A-1P	--	3		●		4	--	15A-1P	CEILING EXHAUST FAN EF-10
PRINC/VP OFFICE HTR	15A-1P	--	5			●	6	--	15A-1P	MECH. RM. WATER HEATER
			7	●			8	--	15A-1P	MECH. RM. RECIRC. PUMP
DUCT HEATER	50A-3P	--	9		●		10			
			11			●	12	--	60A-3P	DUCT HEATER
			13	●			14			
DUCT HEATER	50A-3P	--	15		●		16	--	15A-1P	EF-12 RECEIVING RM.
			17			●	18	--	15A-1P	EF-8 CUST. OFFICE
SPACE		--	19	●			20	--	15A-1P	EF-7 WR 106/107
SPACE		--	21		●		22	--	15A-1P	GYM EQUIP. STOR EF-9
CARBON MONOXIDE DETECTOR	15A-1P	--	23			●	24	--	15A-1P	EF-15 SERVICE RM. 115
ROOFTOP CU-2	20A-2P	--	25	●			26	--	20A-2P	ROOFTOP CU-1
			27		●		28	--		
ROOFTOP MAINTENANCE REC.	20A-1P	--	29			●	30	--	15A-1P	ROOFTOP EXHAUST EF-16
SPACE		--	31	●			32	--		SPACE
SPACE		--	33		●		34	--		SPACE
SPACE		--	35			●	36	--		SPACE
SPACE		--	37	●			38	--		SPACE
SPACE		--	39		●		40	--		SPACE
SPACE		--	41			●	42	--		SPACE
SPACE		--	43	●			44	--		SPACE
SPACE		--	45		●		46	--		SPACE
SPACE		--	47			●	48	--		SPACE
SPACE		--	49	●			50	--		SPACE
SPACE		--	51		●		52	--		SPACE
SPACE		--	53			●	54	--		SPACE
SPACE		--	55	●			56	--		SPACE
SPACE		--	57		●		58	--		SPACE
SPACE		--	59			●	60	--		SPACE

NOTES:
THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 AIC. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

PANEL '2R1'

MAINS: 225A
VOLTAGE: 120/208V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: RECESSED
ACCESSORIES:

CONTRACTOR TO COORDINATE FINAL ROOM NAMES AND NUMBERS NOTED WITH INFORMATION ISSUES DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
CLASS 214 SINK T-SLOT	20A-1P	--	1	●			2	--	20A-1P	CLASS 208 SINK T-SLOT
CLASS 214 REC.	15A-1P	--	3		●		4	--	15A-1P	CLASS 208 REC.
CLASS 214 PROJ. REC.	15A-1P	--	5			●	6	--	15A-1P	CLASS 208 PROJ. REC.
CLASS 215 SINK T-SLOT	20A-1P	--	7	●			8	--	20A-1P	CLASS 209 SINK T-SLOT
CLASS 215 REC.	15A-1P	--	9		●		10	--	15A-1P	CLASS 209 REC.
CLASS 215 PROJ. REC.	15A-1P	--	11			●	12	--	15A-1P	CLASS 209 PROJ. REC.
CLASS 216 SINK T-SLOT	20A-1P	--	13	●			14	--	20A-1P	CLASS 210 SINK T-SLOT
CLASS 216 REC.	15A-1P	--	15		●		16	--	15A-1P	CLASS 210 REC.
CLASS 216 PROJ. REC.	15A-1P	--	17			●	18	--	15A-1P	CLASS 210 PROJ. REC.
CLASS 217 SINK T-SLOT	20A-1P	--	19	●			20	--	20A-1P	CLASS 211 SINK T-SLOT
CLASS 217 REC.	15A-1P	--	21		●		22	--	15A-1P	CLASS 211 REC.
CLASS 217 PROJ. REC.	15A-1P	--	23			●	24	--	15A-1P	CLASS 211 PROJ. REC.
WR. 220 HAND DRYER	20A-1P	33mA	25	●			26	--	20A-1P	MALE WIR 207 REC.
WR. 222 HAND DRYER	20A-1P	33mA	27		●		28	--	20A-1P	WOMAN WIR 205 REC.
CUSTODIAL RM. T-SLOT	20A-1P	--	29			●	30	--	20A-1P	BF. WIR REC.
CUSTODIAL RM. ZAM. T-SLOT	20A-1P	--	31	●			32	--	20A-1P	WIR 222 REC.
FEMALE WR 205 HAND DRYER	20A-1P	33mA	33		●		34	--	20A-1P	STAIR 1 REC.
FEMALE WR 205 HAND DRYER	20A-1P	33mA	35			●	36	--	15A-1P	IT 204 REC.
MALE WR 207 HAND DRYER	20A-1P	33mA	37	●			38	--	20A-1P	IT 204 REC.
MALE WR 207 HAND DRYER	20A-1P	33mA	39		●		40	--	20A-1P	IT 204 REC.
IT 204 REC.	20A-1P	--	41			●	42	--	20A-1P	IT 204 REC.
IT 204 REC.	20A-1P	--	43	●			44	--	20A-1P	IT 204 REC.
CORR./STOR/STAIR T-SLOT	20A-1P	--	45		●		46	--	20A-1P	CLASSROOM 208/209 CP
MECH ROOM 112 T-SLOT	20A-1P	--	47			●	48	--	20A-1P	CLASSROOM 210/211 CP
SPACE		--	49	●			50	--	20A-1P	CLASSROOM 214/215 CP
SPACE		--	51		●		52	--	20A-1P	CLASSROOM 216/2179 CP
SPACE		--	53			●	54	--		SPACE
SPACE		--	55	●			56	--		SPACE
SPACE		--	57		●		58	--		SPACE
SPACE		--	59			●	60	--		SPACE

NOTES:
THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 AIC. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

PANEL '1R1'

MAINS: 225A
VOLTAGE: 120/208V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: RECESSED
ACCESSORIES:

CONTRACTOR TO COORDINATE FINAL ROOM NAMES AND NUMBERS NOTED WITH INFORMATION ISSUES DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
KINDERGARTEN 131 SINK T-SLOT	20A-1P	--	1	●			2	--	20A-1P	SPEC. ED. SINK T-SLOT
KINDERGARTEN 131 REC.	15A-1P	--	3		●		4	--	15A-1P	SPEC. ED. GEN. REC.
KINDERGARTEN 131 PROJ. REC.	15A-1P	--	5			●	6	--	15A-1P	SPEC. ED. PROJ.
KINDERGARTEN 132 SINK T-SLOT	20A-1P	--	7	●			8	--	20A-1P	WEST CORR. T-SLOT REC.
KINDERGARTEN 132 REC.	15A-1P	--	9		●		10	--	20A-1P	ACAD ST. 129 T-SLOT
KINDERGARTEN 132 PROJ. REC.	15A-1P	--	11			●	12	--	20A-1P	GRP. WR T-SLOT REC.
KINDERGARTEN 133 SINK T-SLOT	20A-1P	--	13	●			14	--	50A-2P	STOVE RECEPTACLE
KINDERGARTEN 133 REC.	15A-1P	--	15		●		16	--		
KINDERGARTEN 133 PROJ. REC.	15A-1P	--	17			●	18	--	15A-1P	HOOD RANGE
KINDERGARTEN MAINT. T-SLOT	20A-1P	--	19	●			20	--	15A-1P	DISHWASHER
KINDERGARTEN MAINT. T-SLOT	20A-1P	--	21		●		22	--	15A-1P	FRIDGE
CLASSROOM 128 SINK REC.	20A-1P	--	23			●	24	--	20A-1P	COUNTER TOP REC.
CLASSROOM 128 GENERAL REC.	15A-1P	--	25	●			26	--	20A-1P	COUNTER TOP REC.
CLASSROOM 128 PROJ.	15A-1P	--	27		●		28	--	15A-1P	PLUMBING FIXTURE
CLASSROOM 127 SINK REC.	20A-1P	--	29			●	30	--	20A-1P	ELEC. 137 T-SLOT
CLASSROOM 127 GENERAL REC.	15A-1P	--	31	●			32	--	15A-1P	RESOURCE ROOM 113 REC.
CLASSROOM 127 PROJ.	15A-1P	--	33		●		34	--		SPACE
CLASSROOM 126 GENERAL REC.	15A-1P	--	35			●	36	--	20A-1P	GYM ENTRANCE REC.
CLASSROOM 126 PROJ.	15A-1P	--	37	●			38	--		SPACE
CLASSROOM 125 GENERAL REC.	15A-1P	--	39		●		40	--	20A-1P	GYM EQUIP. STORAGE REC.
CLASSROOM 125 PROJ.	15A-1P	--	41			●	42	--	20A-1P	GYM EQUIP. STORAGE REC.
CLASSROOM 125 T-SLOT	20A-1P	--	43	●			44	--	20A-1P	FIRE SMOKE DAMPERS
MALE WR 123 HAND DRYER	20A-1P	33mA	45		●		46	--	20A-1P	FIRE SMOKE DAMPERS
MALE WR 123 HAND DRYER	20A-1P	33mA	47			●	48	--	15A-1P	ELECTRICAL RM 137 REC.
FEMALE WR 122 HAND DRYER	20A-1P	33mA	49	●			50	--	15A-1P	UNIV. W/R DOOR WIRE
FEMALE WR 122 HAND DRYER	20A-1P	33mA	51		●		52	--	20A-1P	UNIV. W/R REC.
GROUND FL. WR SENSORS	15A-1P	5mA	53			●	54	--	20A-1P	UNIV. W/R REC.
IT 117 REC.	15A-1P	--	55	●			56	--	20A-1P	IT 117 REC.
IT 117 REC.	20A-1P	--	57		●		58	--	20A-1P	IT 117 REC.
IT 117 REC.	20A-1P	--	59			●	60	--	20A-1P	IT 117 REC.

NOTES:
THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 AIC. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

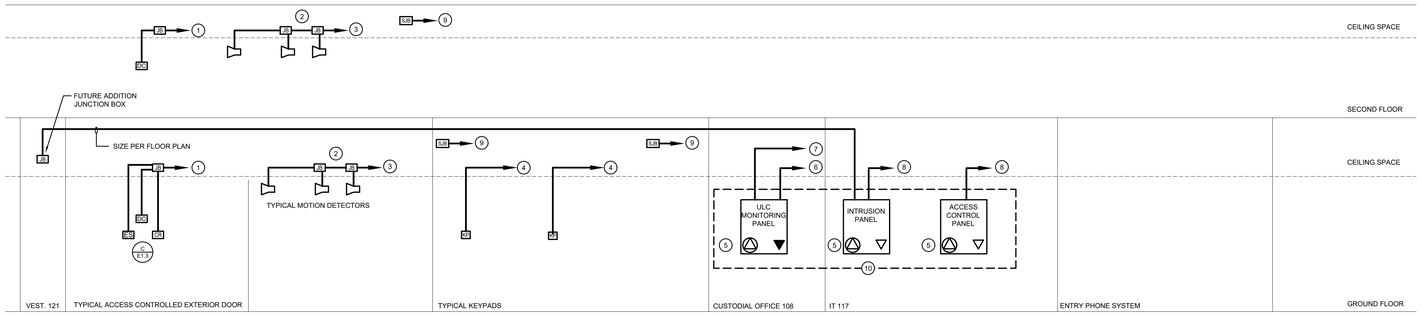
Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
IT 117 REC.	20A-1P	--	61	●			62	--	15A-1P	SPEC ED 135 DOOR OPERATOR
IT 117 REC.	20A-1P	--	63		●		64	--	15A-1P	VEST. 121 DOOR OPERATOR
IT 117 REC.	20A-1P	--	65			●	66	--	20A-1P	CLASSROOM 125/126 CP
SPACE		--	67	●			68	--	20A-1P	CLASSROOM 127/128 CP
SPACE		--	69		●		70	--	20A-1P	CLASSROOM 131/132/133 CP
SPACE		--	71			●	72	--		SPACE
SPACE		--	73	●			74	--		SPACE
SPACE		--	75		●		76	--		SPACE
SPACE		--	77			●	78	--		SPACE
SPACE		--	79	●			80	--		SPACE
SPACE		--	81		●		82	--		SPACE
SPACE		--	83			●	84	--		SPACE
SPACE		--	85	●			86	--		SPACE
SPACE		--	87		●		88	--		SPACE
SPACE		--	89			●	90	--		SPACE
SPACE		--	91	●			92	--		SPACE
SPACE		--	93		●		94	--		SPACE
SPACE		--	95			●	96	--		SPACE
SPACE		--	97	●			98	--		SPACE
SPACE		--	99		●		100	--		SPACE
SPACE		--	101			●	102	--		SPACE
SPACE		--	103	●			104	--		SPACE
SPACE		--	105		●		106	--		SPACE
SPACE		--	107			●	108	--		SPACE
SPACE		--	109	●			110	--		SPACE
SPACE		--	111		●		112	--		SPACE
SPACE		--	113			●	114	--		SPACE
SPACE		--	115	●			116	--		SPACE
SPACE		--	117		●		118	--		SPACE
SPACE		--	119			●	120	--		SPACE

PANEL '1R2'

MAINS: 100A
VOLTAGE: 120/208V
RATING: 3P 4W
NEUTRAL: FULL
MOUNTING: RECESSED
ACCESSORIES:

CONTRACTOR TO COORDINATE FINAL ROOM NAMES AND NUMBERS NOTED WITH INFORMATION ISSUES DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

Description	Breaker	Type	Circuit#	A	B	C	Circuit#	Type	Breaker	Description
CLASSROOM 110 SINK REC.	20A-1P	--	1	●			2	33mA	20A-1P	WR 107 HAND DRYER
CLASSROOM 110 GENERAL REC.	15A-1P	--	3		●		4	33mA	20A-1P	WR 106 HAND DRYER
CLASSROOM 110 PROJ.	15A-1P	--	5			●	6	--	15A-1P	SERVERY 105 FRIDGE
CLASSROOM 109 SINK REC.	20A-1P	--	7	●			8	--	15A-1P	SERVERY 105 DISHWASHER
CLASSROOM 109 GENERAL REC.	15A-1P	--	9		●		10	--	20A-1P	SERVERY 105 COUNTER T-SLOT
CLASSROOM 109 PROJ.	15A-1P	--	11			●	12	--	20A-1P	SERVERY 105 COUNTER T-SLOT
CUSTODIAL OFFICE T-SLOT	20A-1P	--	13	●			14	--	15A-1P	STAFF RM. PROJ. REC.
CUSTODIAL OFFICE REC.	15A-1P	--	15		●		16	--	15A-1P	STAFF RM. GENERAL REC.
STORAGE T-SLOT	20A-1P	--	17			●	18	--	20A-1P	WORK RM



SECURITY RISER DIAGRAM

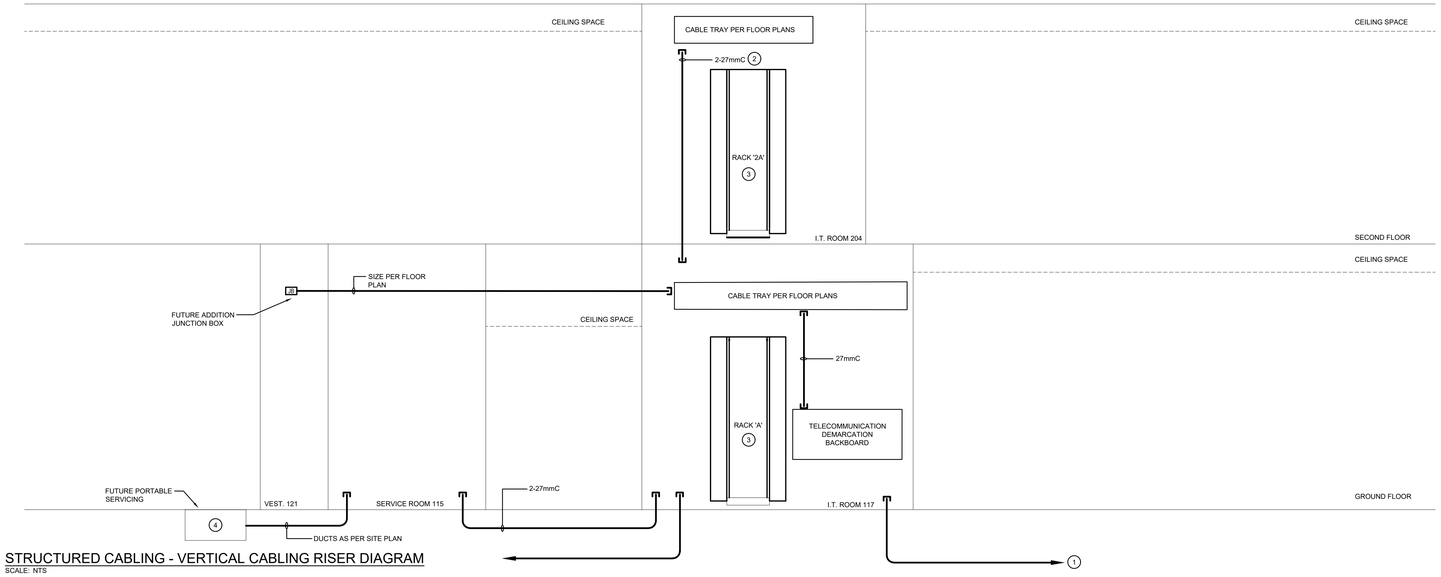
SCALE: NTS

GENERAL SECURITY RISER NOTES

- ALL WIRING SHALL BE PROVIDED BY SECURITY CONTRACTOR UNLESS OTHERWISE NOTED.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL 120VAC CONNECTIONS TO SECURITY DEVICES REQUIRED.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL ROUGH-IN AND ASSOCIATED CONDUIT REQUIRED FOR DEVICES.
- COORDINATE FINAL EQUIPMENT REQUIREMENTS WITH THE SECURITY VENDOR.

SPECIFIC SECURITY RISER NOTES

1. PROVIDE 13mmC FROM DOOR JUNCTION BOX TO SECURITY GATHERING JUNCTION BOX.
2. DAISY CHAIN 27mmC FROM MOTION DETECTOR TO MOTION DETECTOR.
3. PROVIDE 27mmC FROM LAST MOTION DETECTOR TO SECURITY PANEL.
4. PROVIDE 21mmC FROM KEYPAD TO SECURITY PANEL.
5. PROVIDE 120VAC CIRCUIT AS PER FLOOR PLANS.
6. PROVIDE 21mmC TO TELEPHONE DEMARCATION BOARD FROM ULC MONITORING PANEL.
7. PROVIDE 21mmC TO FIRE ALARM CONTROL PANEL. ELECTRICAL CONTRACTOR TO PROVIDE 4C#18 AWG FOR "ALARM" AND "TROUBLE" CONTACTS
8. PROVIDE 21mmC TO I.T. ROOM CABLE TRAY. DATA CONTRACTOR TO PROVIDE HORIZONTAL CABLING TO SECURITY BACKBOARD FOR SECURITY CONTRACTOR'S USE.
9. PROVIDE 27mmC FROM SECURITY JUNCTION BOX TO SECURITY BACKBOARD.
10. PROVIDE FIRE RATED PLYWOOD BACKBOARD AS PER FLOOR PLAN FOR SECURITY VENDOR'S USE.

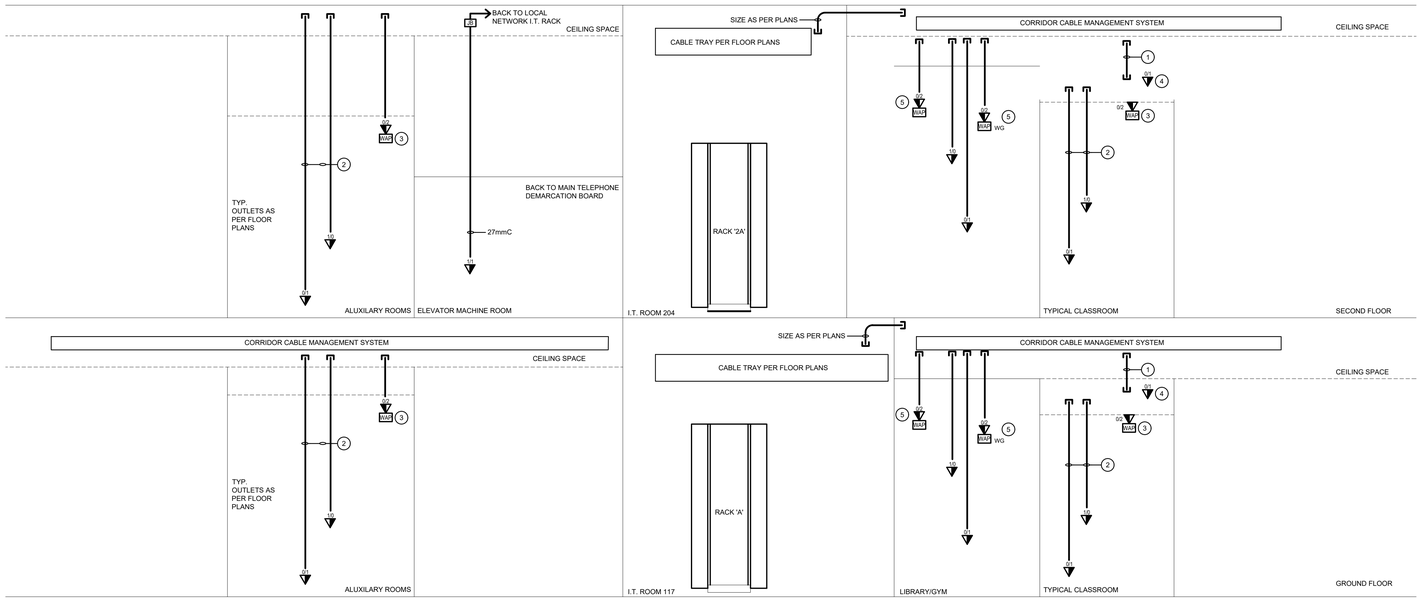


STRUCTURED CABLING - VERTICAL CABLING RISER DIAGRAM

SCALE: NTS

SPECIFIC VERTICAL RISER NOTES

1. REFER TO SITE PLAN FOR INCOMING COMMUNICATIONS SERVICES. DUCTBANK TO STUB UP 305mm A.F.F. WITHIN I.T. ROOM BELOW DEMARCATION BACKBOARD
2. PROVIDE VERTICAL STRUCTURED CABLE AS SPECIFIED. PROVIDE AN ADDITIONAL HORIZONTAL CAT. 6 CABLE AS SPECIFIED AS FAIL-OVER CABLE IN SEPARATE CONDUIT.
3. 2-POST RACK AS SPECIFIED COMPLETE WITH VERTICAL AND HORIZONTAL CABLE MANAGEMENT SYSTEMS
4. INDICATES SERVICING FUTURE ADDITION, UNDERGROUND SERVICES ARE TO AVOID THE NOTED AREA.



STRUCTURED CABLING - HORIZONTAL CABLING RISER DIAGRAM

SCALE: NTS

RACK SCHEDULE - EXAMPLE

PATCH PANEL #	CABLE #	ROOM NAME	ROOM #	DESCRIPTION
1	1	JUNIOR KINDERGARTEN	40	VOICE LINE - DOOR
1	2	JUNIOR KINDERGARTEN	40	SMARTBOARD
1	3	JUNIOR KINDERGARTEN	40	ACCESS POINT
1	4	JUNIOR KINDERGARTEN	40	TEACHERS DESK

NOTES:
PROVIDE A COMPLETE SCHEDULE FOR ALL DATA CABLES FOR THE RACK PRIOR TO PROJECT COMPLETION TO ALLOW OWNER'S ICT DEPARTMENT TO COMPLETE PHONE LINE COMMISSIONING PRIOR TO OCCUPANCY.

RACK # - PATCH PANEL # - CABLE #

CONFIRM RACK # WITH OWNER'S REPRESENTATIVE

A—CABLING LABELS

SCALE: N.T.S.

GENERAL HORIZONTAL RISER NOTES

A PROVIDE 21mmC TO SINGLE GANG JUNCTION BOX FOR ALL ROUGH-INS UNLESS OTHERWISE NOTED.

SPECIFIC HORIZONTAL RISER NOTES

1. PROVIDE 35mmC ZONE CONDUIT FROM CLASSROOM ACCESSIBLE CEILING SPACE TO CORRIDOR CABLE MANAGEMENT SYSTEM.
2. TERMINATE CONDUIT ABOVE ACCESSIBLE CEILING SPACE. RUN FREE AIR NEATLY ABOVE CEILING TO CLASSROOM ZONE CONDUIT.
3. PROVIDE 10' OF SLACK CABLING. TERMINATE TO KEYSTONE JACK AND LEAVE COILED NEATLY ABOVE ACCESSIBLE CEILING SPACE FOR FUTURE CONNECTION TO WIRELESS ACCESS POINT.
4. PROVIDE SLACK CABLING. TERMINATE TO KEYSTONE JACK AND LEAVE COILED NEATLY ABOVE ACCESSIBLE CEILING SPACE. PROVIDE LABEL ON CABLE "SPARE".
5. REFER TO FLOOR PLANS FOR SPECIFIC INSTALLATION REQUIRMENTS.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
04	26.06.11	ISSUED FOR BUILDING PERMIT
05	26.08.27	ISSUED FOR TENDER

NOTES:

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.

Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale this drawing.

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Project Number: 25426

DEI Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

I LOYA JACKSON 100011324 08/27/26 PROFESSIONAL ENGINEER PROVINCE OF ONTARIO

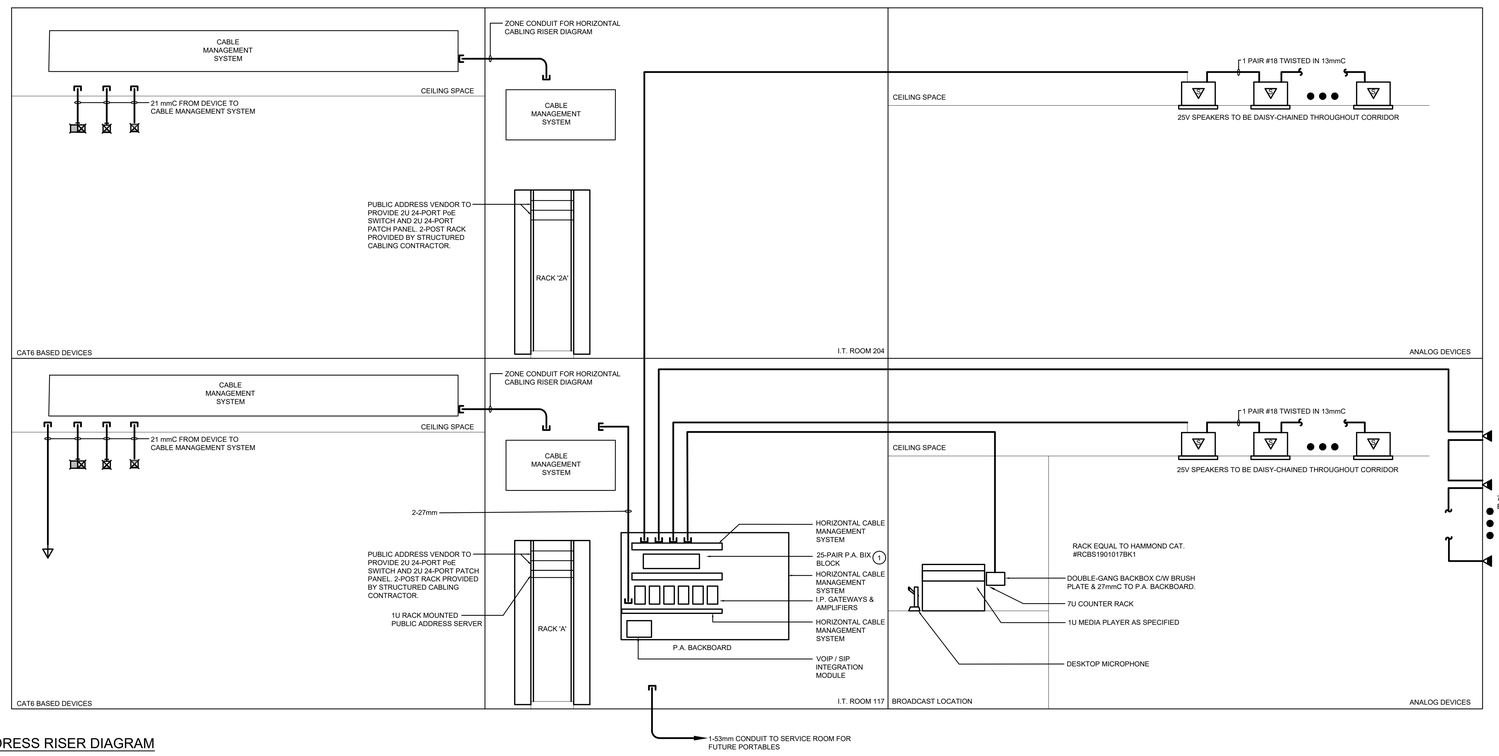
CN N

ELECTRICAL RISER DIAGRAMS PAGE 1 OF 2

E7.1

Plot Date: Aug 27, 2026 - 10:22am By: etollett Filename: X:\2025 Projects\25426 BWDSB Port Elgin Elementary School, Port Elgin\V02 Dwgs\03 Elec\25426 E7.1 Low Voltage Riser.dwg

DRAWN BY : ST CHECKED BY : SD



PUBLIC ADDRESS RISER DIAGRAM
SCALE: NTS

GENERAL PUBLIC RISER NOTES

1 PROVIDE ALL DEVICES AS PER FLOOR PLANS.

- ELECTRICAL TRADE SHALL BE RESPONSIBLE FOR THE FOLLOWING:
- PROVIDE ALL CONDUIT C/W PULLSTRINGS AND BUSHINGS
- PROVIDE ALL ELECTRICAL BACKBOXES (UNLESS OTHERWISE NOTED)
- PROVIDE ALL 120VAC POWER
- INSTALLATION OF SPEAKER BACKBOXES
- INSTALLATION OF DIGITAL MESSAGING BOARD BACKBOXES
- INSTALLATION OF PUBLIC ADDRESS HORN BACKBOXES.

- PUBLIC ADDRESS VENDOR SHALL PROVIDE THE FOLLOWING:
- ALL CABLING.
- ALL SPEAKERS.
- ALL PUBLIC ADDRESS COMPONENTS
- ALL NETWORKING EQUIPMENT FOR A FULLY FUNCTIONAL SYSTEM.
- ALL OTHER WORK REQUIRED FOR A FULLY FUNCTIONAL SYSTEM.
- TRAINING AS PER SPECIFICATION TO OWNER'S STAFF AND SYSTEM USERS.

- PUBLIC ADDRESS VENDOR SHALL SUPPLY THE FOLLOWING:
- ALL SPEAKER, DIGITAL MESSAGING BOARD, AND PUBLIC ADDRESS HORN BACKBOXES.

SPECIFIC VERTICAL RISER NOTES

1 PROVIDE THE FOLLOWING PUBLIC ADDRESS ZONES:
- FIRST FLOOR CORRIDOR SPEAKERS
- SECOND FLOOR CORRIDOR SPEAKERS
- EXTERIOR P.A. HORNS
- GYMNASIUM
- INDIVIDUAL CLASSROOMS AND LIBRARY.

THE USERS SHALL BE ABLE TO SELECTIVELY BROADCAST MESSAGING TO EACH ZONE INDIVIDUALLY THROUGH THE USE OF THE PUBLIC ADDRESS HANDSET.

REVISIONS

NO.	DATE	PARTICULAR
01	25.12.19	ISSUED FOR 60% REVIEW
02	26.02.20	ISSUED FOR 80% REVIEW
03	26.04.10	ISSUED FOR CLASS A COST EST.
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05	26.08.27	ISSUED FOR TENDER

NOTES:

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

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Do not scale this drawing.

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DEI
55 Northland Road,
Waterloo, ON, N2V 1Y8
Phone: 519-725-3555
Website: deiassociates.ca
Project Number: 25426

Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

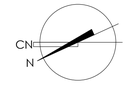
CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"



ELECTRICAL RISER DIAGRAMS PAGE 2 OF 2

E7.2

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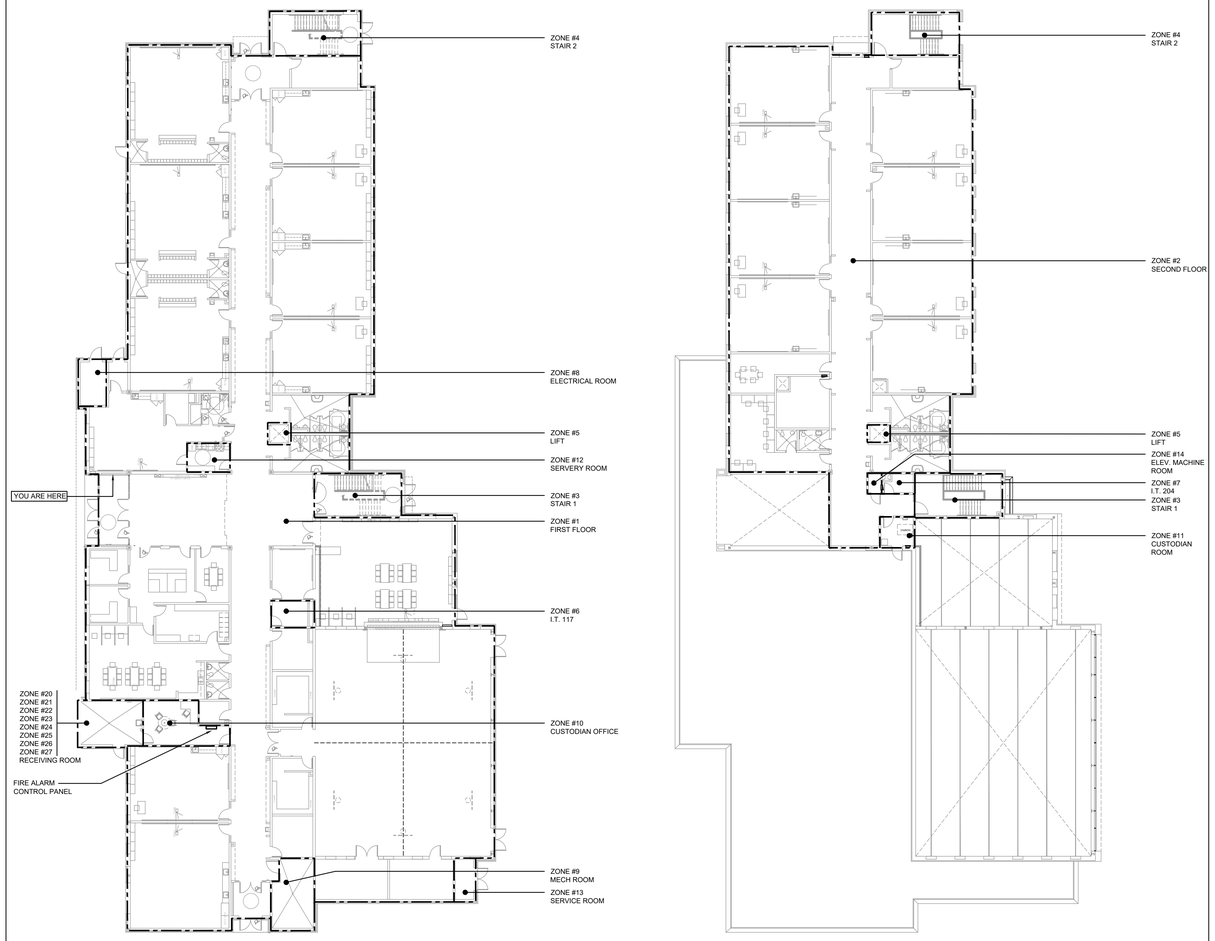
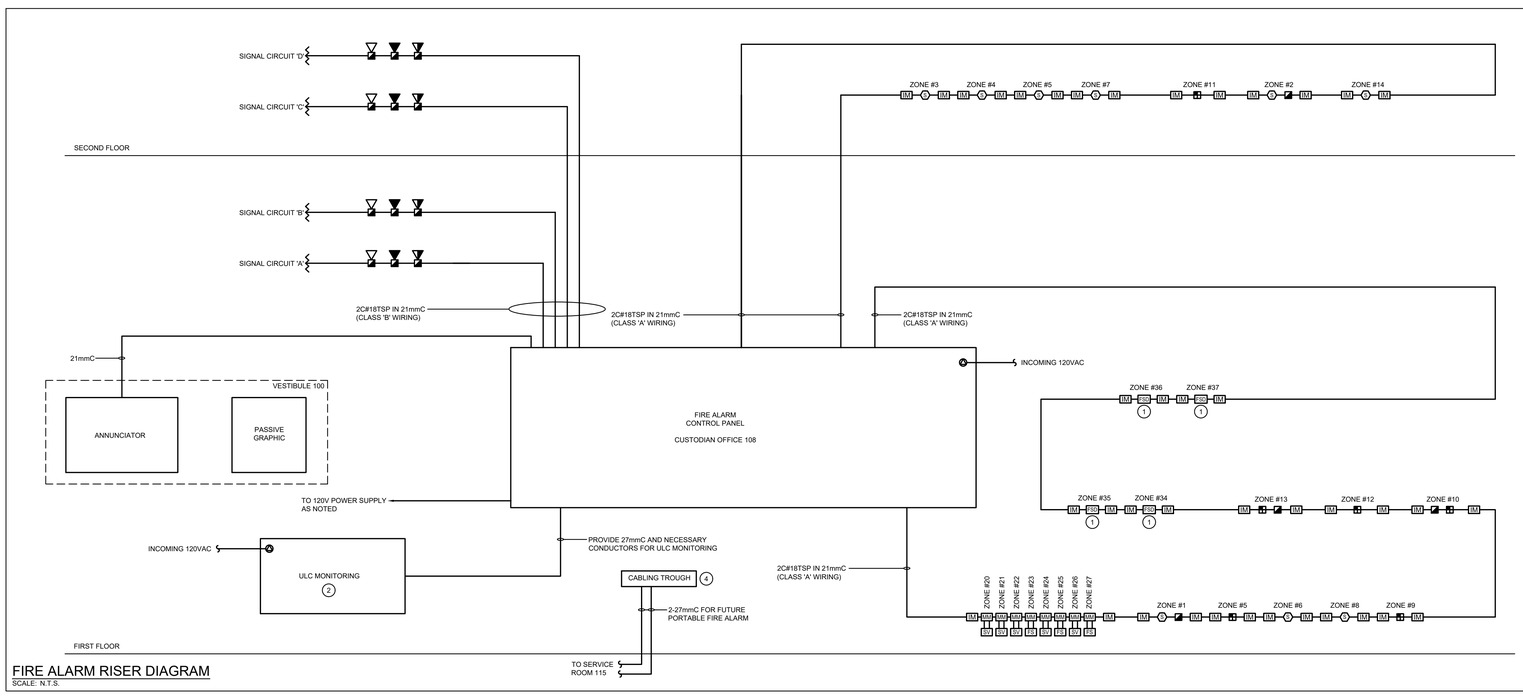


FIRE ALARM PASSIVE GRAPHIC

SCALE: N.T.S



FIRE ALARM RISER DIAGRAM

SCALE: N.T.S

FIRE ALARM ANNUNCIATOR SCHEDULE

ZONE	DESCRIPTION	ALARM	SUPERVISORY
	BUILDING ZONES		
1	FIRST FLOOR	X	
2	SECOND FLOOR	X	
3	STAIR 'A'	X	
4	STAIR 'B'	X	
5	ELEVATOR SHAFT	X	
6	FIRST FLOOR I.T. CLOSET	X	
7	SECOND FLOOR I.T. CLOSET	X	
8	FIRST FLOOR ELECTRICAL ROOM	X	
9	MECHANICAL ROOM	X	
10	FIRST FLOOR CUSTODIAL	X	
11	SECOND FLOOR CUSTODIAL	X	
12	FIRST FLOOR KITCHEN SUPPRESSION SYSTEM	X	
13	GYM EXTERIOR SERVICE ROOM	X	
14	ELEVATOR MACHINE ROOM	X	
15	SPARE ZONE		
	FIRE PROTECTION ZONES		
20	INCOMING DOUBLE CHECK VALVE ASSEMBLY		X
21	OUTGOING DOUBLE CHECK VALVE ASSEMBLY		X
22	FIRST FLOOR SPRINKLER SUPERVISED VALVE		X
23	FIRST FLOOR FLOW SWITCH	X	
24	SECOND FLOOR SPRINKLER SUPERVISED VALVE		X
25	SECOND FLOOR SPIRNKLER FLOW SWITCH	X	
26	SECOND FLOOR ATRIUM WINDOW SUPERVISED VALVE		X
27	SECOND FLOOR ATRIUM WINDOW FLOW SWITCH	X	
28	FUTURE SPRINKLER ZONE		
29	FUTURE SPRINKLER ZONE		
30	FUTURE SPRINKLER ZONE		
	MECHANICAL ZONES		
34	ERV-1 FIRE SMOKE DAMPER	X	
35	HVAC-2 FIRE SMOKE DAMPER	X	
36	HVAC-1 FIRE SMOKE DAMPER	X	
37	HVAC-5 FIRE SMOKE DAMPER	X	
38			
39			
40			

GENERAL NOTES

A REFER TO FLOOR PLANS FOR EXACT LOCATION AND QUANTITIES OF DEVICES.

B CONTRACTOR IS TO CONFIRM WIRE SIZE (BASED UPON LENGTH OF CIRCUIT RUN AND QUANTITY OF SIGNALS) FOR SIGNAL CIRCUITS WITH MANUFACTURER.

D ALL SIGNAL CIRCUITS SHALL BE ALTERNATED BETWEEN DEVICES WITHIN A COMMON AREA. PROVIDE ADDITIONAL SIGNAL CIRCUITS WHERE REQUIRED. COORDINATE WITH FIRE ALARM MANUFACTURER.

E ALL END OF LINE RESISTORS AND ISOLATION MODULES SHALL BE INSTALLED IN SERVICE ROOMS AT 1800mm A.F.F. PROVIDE LAMICOID LABEL INDICATING CIRCUIT / ZONE LABEL AND NUMBER.

F AS PART OF SHOP DRAWING SUBMITTAL PROCESS THE DRAWING FOR THE ANNUNCIATOR AND FIRE ALARM PASSIVE GRAPHIC IS TO BE FORWARDED TO THE LOCAL BUILDING DEPARTMENT FOR REVIEW/APPROVAL PRIOR TO RELEASE INTO PRODUCTION.

K ADDRESSABLE LOOPS ARE DIAGRAMMATIC. ADDRESSABLE LOOP SHOWN REPRESENTS THE MINIMUM BASIS OF DESIGN AND SHALL BE INCREASED TO SUIT THE CAPABILITY AND CAPACITY OF THE SELECTED FIRE ALARM MANUFACTURER CARRIED IN TENDER PRICING ADJUST LOOP QUANTITIES AND DEVICES SERVED EACH ADDRESSABLE LOOP SHALL BE PROVIDED WITH A MINIMUM 25% SPARE CAPACITY, EACH FLOOR MUST BE SERVED BY A DEDICATED LOOP NO COST SAVING MEASURES SHALL BE ACCEPTED FOR REDUCED QUANTITY OF ADDRESSABLE LOOPS.

SPECIFIC NOTES

1 PROVIDE FIRE ALARM CONNECTION TO SMOKE DAMPER INTEGRAL DUCT DETECTOR. PROVIDE DUAL INPUT MONITOR/CONTACT MODULE AND DUAL VOLTAGE RELAY. FROM ONE SET OF CONTACTS MONITOR INTEGRAL DUCT DETECTOR ALARM SIGNAL (ALARM SIGNAL SHALL BE PROGRAMMED AS AN ALARM ZONE). FROM ONE SET OF CONTACTS MONITOR DUAL VOLTAGE RELAY FOR AC POWER LOSS (AC POWER LOSS SHALL BE MONITORED AS A TROUBLE SIGNAL). PROVIDE A SEPARATE MONITORING MODULE FOR EACH FIRE SMOKE DAMPER (FIRE SMOKE DAMPERS SHALL BE FULLY ADDRESSABLE TO IDENTIFY SPECIFIC DEVICES).

2 COORDINATE WITH SECURITY CONTRACTOR AND PROVIDE THE NECESSARY CONDUCTORS TO INTERFACE THE TWO PANELS TO ALLOW ALARM AND TROUBLE CONDITIONS TO BE MONITORED AND REPORTED BY THE SECURITY SYSTEM. OWNER PROVIDED SECURITY SYSTEM SHALL PROVIDE CENTRAL MONITORING OF FIRE ALARM IN COMPLIANCE WITH THE REQUIREMENTS OF CAN/ULC S561 AND OBC 3.2.4.8.

3 FIRE ALARM CONTROL PANEL SHALL BE PROVISIONED FOR THE FUTURE CONNECTIONS.
- 2 ADDITIONAL CONVENTIONAL FIRE ALARM ZONES
- 2 ADDITIONAL NOTIFICATION APPLICANCE CIRCUITS.

4 PROVIDE 2'L X 6"H X 6"D CABLE TROUGH. TERMINATE FUTURE PORTABLE FIRE ALARM CONDUITS WITHIN.

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Project Number: 25426

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MECHANICAL | ELECTRICAL | AQUATIC

CLIENT:
BLUEWATER DISTRICT SCHOOL BOARD

PROJECT:
22562

NEW PORT ELGIN COMMUNITY SCHOOL

1107 WATERLOO ST., SAUGEEN SHORES, ON
N0H 2C3

ORIGINAL PAGE SIZE ARCH E1 - 30" x 42"

PROFESSIONAL ENGINEER
J.J. JACKSON
100011324
08/27/26
PROVINCE OF ONTARIO

CN
N

FIRE ALARM RISER DIAGRAM

E8.1

DRAWN BY : ST CHECKED BY : SD

Plot Date: Aug 27, 2026 - 10:22am By: etoilet Filename: X:\2025 Project\25426 BWDSB Port Elgin Elementary School - Port Elgin\02 Dwgs\03 Elec\25426 E8.1 Fire Alarm Riser Diagram.dwg

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PORT ELGIN ELEMENTARY SCHOOL
1107 WATERLOO STREET
BLUEWATER DISTRICT SCHOOL BOARD

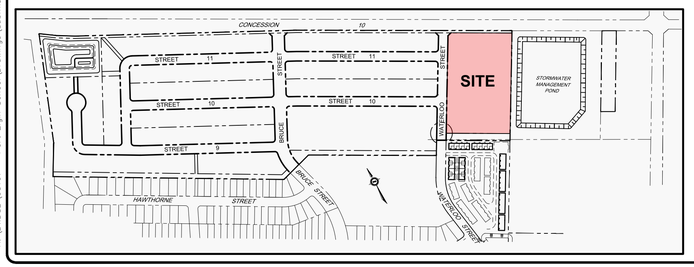
CONTRACT NO: 2026-05107-01

MAYOR: MR. LUKE CHARBONNEAU
CHIEF ADMINISTRATIVE OFFICER: MS. KARA VAN MYALL
DIRECTOR OF DEVELOPMENT SERVICES: MR. MARK PAOLI

OWNER :
BLUEWATER DISTRICT SCHOOL BOARD

INDEX

SHEET No.	DESCRIPTION
05107-C1	EXISTING CONDITIONS & REMOVALS PLAN
05107-C2	EROSION AND SEDIMENT CONTROL PLAN
05107-C3	DEVELOPMENT SITE PLAN
05107-C4	SITE GRADING PLAN
05107-C5	SITE SERVICING PLAN
05107-C6	STORM CATCHMENT AREAS
05107-C7	MISCELLANEOUS DETAILS 1



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REVISION / ISSUE

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517 10th Street, Hanover, Ontario N4N 1R4
Telephone: (519) 506-5959
www.cobideeng.com

Title:
PORT ELGIN ELEMENTARY SCHOOL
1107 WATERLOO STREET
TOWN OF SAUGEEN SHORES
TITLE SHEET

Client: BLUEWATER DISTRICT SCHOOL BOARD

Design:	TLB	Scale:	NTS
Drawn:	ID	Approved:	
Checked:	TLB		
Date:	AUGUST 2026		Design Engineer

DRAWING No. 05107-TS

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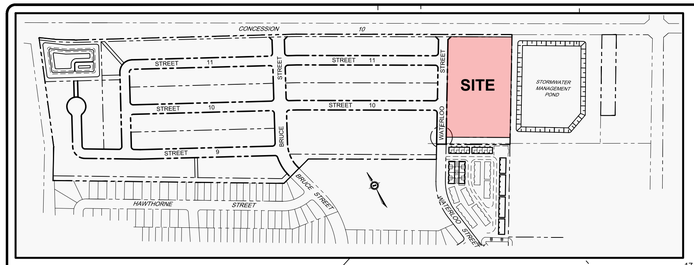

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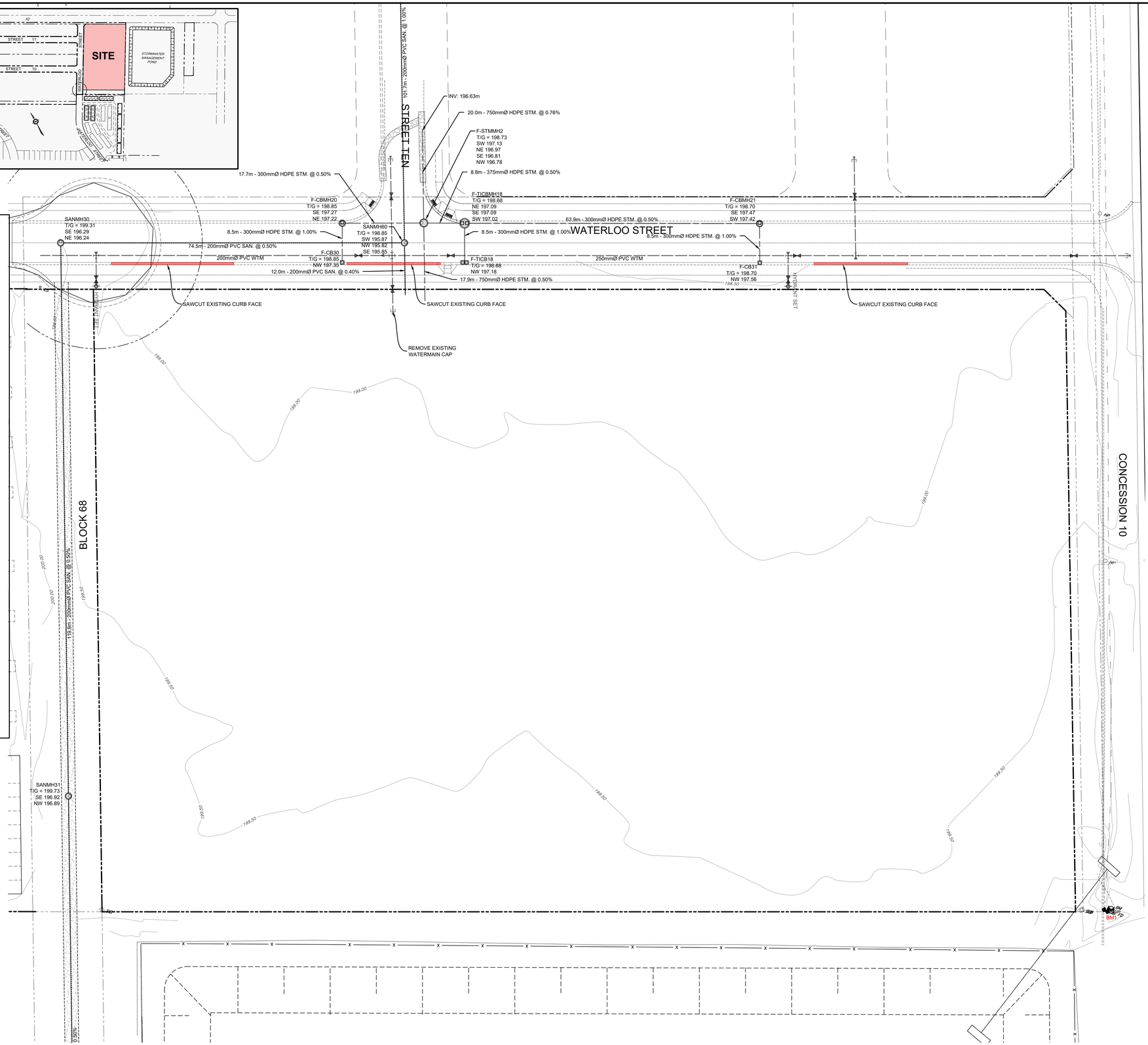

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Notes

1. TOPOGRAPHIC SURVEY COMPLETED BY D. CULBERT LTD. ONTARIO LAND SURVEYOR ON DECEMBER 11, 2025.
2. ALL ORGANIC MATERIAL WITHIN 1.2m OF FINISHED PROFILE GRADE TO BE REMOVED FROM ALL AREAS UNDER THE TRAVELLED PORTION OF THE ROAD.
3. COVER OVER WATERMAIN 1.8m MINIMUM AT ALL POINTS.
4. SANITARY SEWER TO BE PVC SDR 35.
5. ALL STORM CATCHBASINS TO HAVE A MINIMUM SUMP OF 600mm AND ALL STORM MANHOLES TO HAVE A MINIMUM SUMP OF 300mm.
6. MAINTAIN 2.50m CLEARANCE BETWEEN STORM SEWER AND WATERMAIN.
7. ALL WATERMAINS TO BE PVC DR 18 WITH 25mmØ REHAU MUNICIPEX SERVICE TUBING FOR WATER SERVICES.
8. WATER SERVICES TO BE INSTALLED UNDER STORM SEWERS.
9. ALL HYDRANT SETS REQUIRE TEST POINT AND HYDRANT MARKER.
10. ALL JOINTS OF SANITARY MANHOLES TO BE CAULKED WITH MIN. 15mm BEAD, INSTALLED ON THE TOP OF JOINT OF EACH SECTION PRIOR TO SECTION ABOVE BEING INSTALLED. CAULKING TO BE SIKAFLEX 1A OR APPROVED EQUIVALENT.
11. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNTIL STAMPED 'ISSUED FOR CONSTRUCTION'.
12. ALL CONSTRUCTION TO BE COMPLETED TO TOWN OF SAUGEEN SHORES ENGINEERING STANDARDS.

SCALE 1:400

15 0 10 20 35 50 20 METRES
15 0 10 20 35 50 75 FEET

Benchmark Information

BM1
NAIL IN HYDRO POLE ON CONCESSION 10 (AS SHOWN ON DRAWING)
ELEVATION **200.203m**

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PORT ELGIN ELEMENTARY SCHOOL
1107 WATERLOO STREET
TOWN OF SAUGEEN SHORES
EXISTING CONDITIONS & REMOVALS PLAN

Client:
BLUEWATER DISTRICT SCHOOL BOARD

Design:	TLB	Scale:	1:400
Drawn:	ID	Approved:	
Checked:	TLB		
Date:	AUGUST 2026		Design Engineer

DRAWING No. 05107-C1

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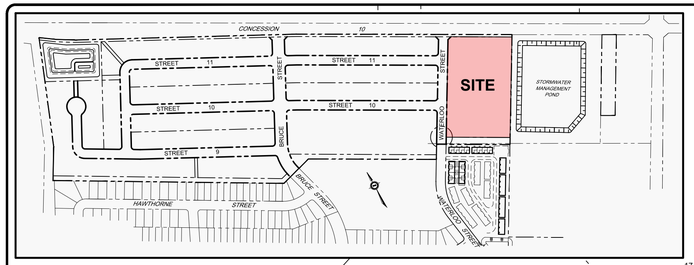

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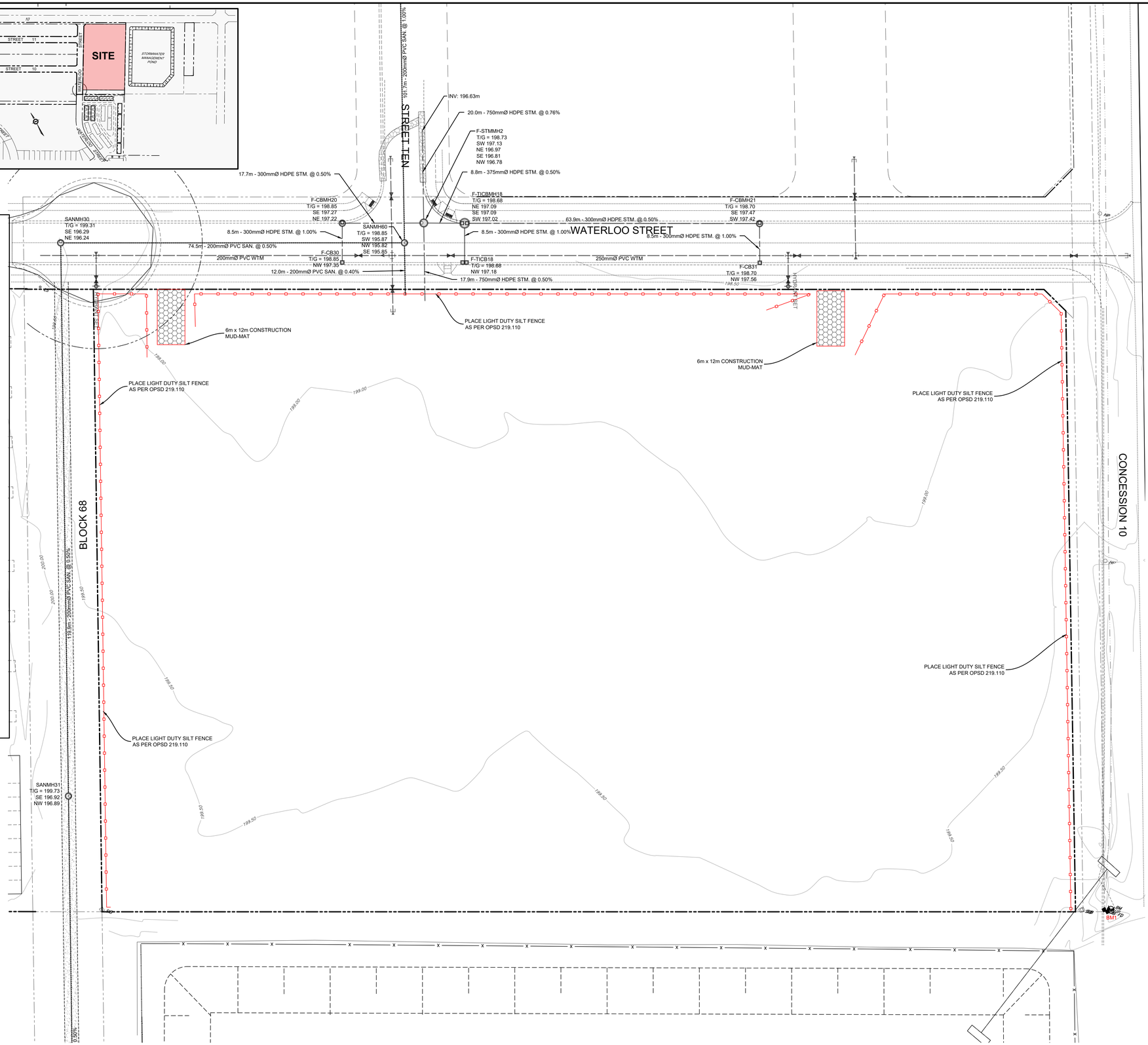

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SCALE 1:400

15 0 10 5 0 5 10 20 METRES
15 0 10 20 35 50 75 FEET

Benchmark Information

BM1
NAIL IN HYDRO POLE ON CONCESSION 10 (AS SHOWN ON DRAWING)
ELEVATION **200.203m**

No.	DATE	DESCRIPTION	BY	APPD
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REVISION / ISSUE

Seal not valid unless signed and dated

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517 10th Street, Hanover, Ontario N4N 1R4
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www.cobideeng.com

Title:
PORT ELGIN ELEMENTARY SCHOOL
1107 WATERLOO STREET
TOWN OF SAUGEEN SHORES
EROSION & SEDIMENT CONTROL PLAN

Client: BLUEWATER DISTRICT SCHOOL BOARD

Design: TLB	Scale: 1:400
Drawn: ID	Approved:
Checked: TLB	
Date: AUGUST 2026	Design Engineer

DRAWING No. 05107-C2

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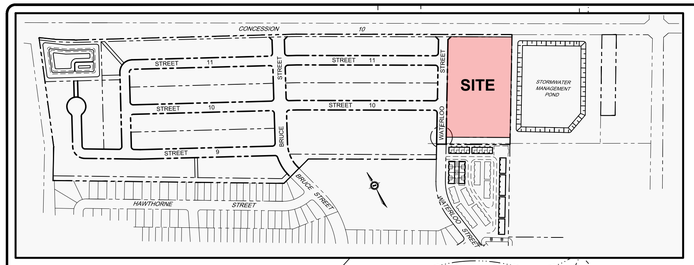

LEGEND

- SUBDIVISION BOUNDARY
- PROPOSED RIGHT OF WAY
- PROPOSED PROPERTY LINES
- EDGE OF EXISTING PAVEMENT
- EDGE OF EXISTING GRAVEL
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER
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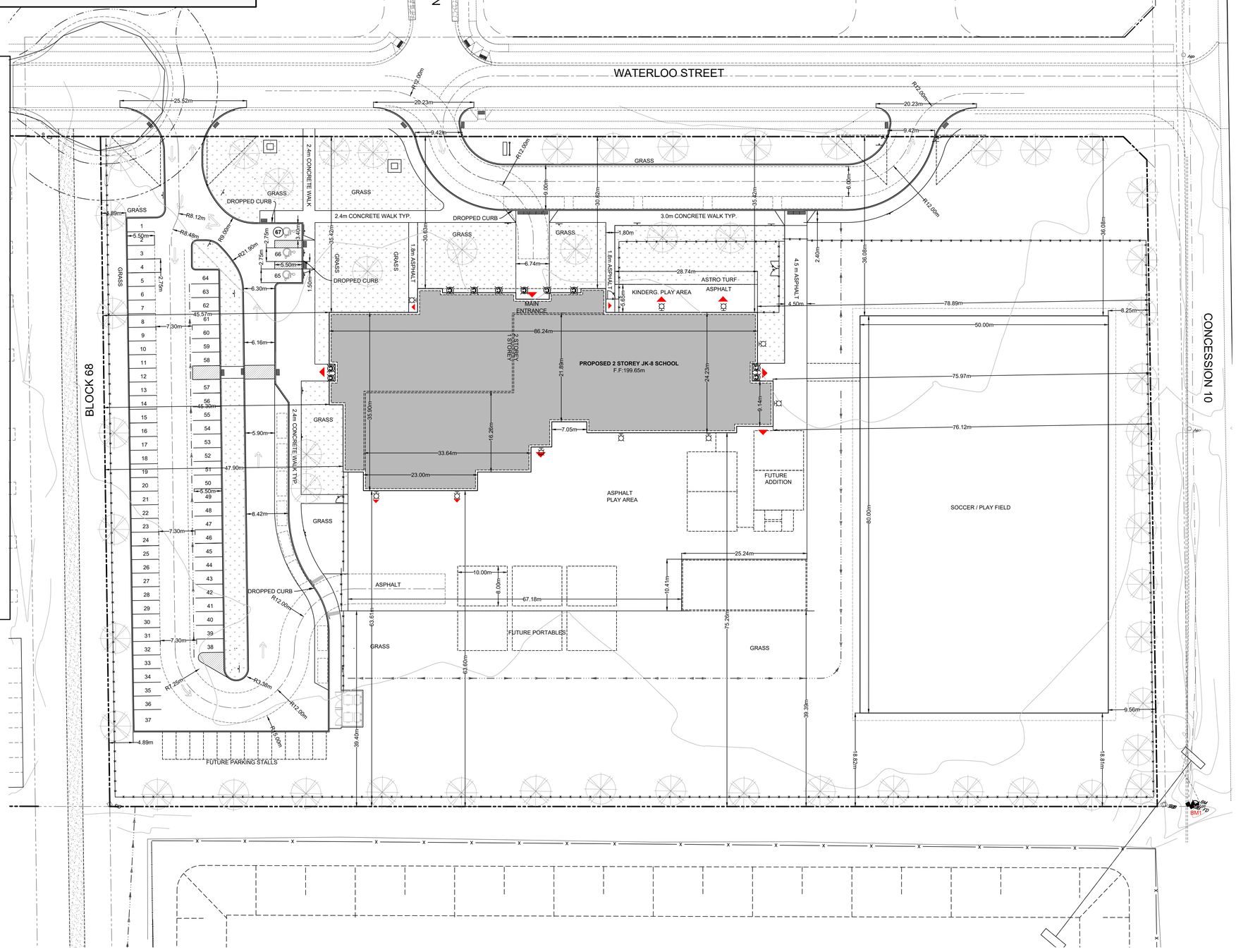

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SCALE 1:400

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Title:
PORT ELGIN ELEMENTARY SCHOOL
1107 WATERLOO STREET
TOWN OF SAUGEEN SHORES
DEVELOPMENT SITE PLAN

Client: BLUEWATER DISTRICT SCHOOL BOARD

Design:	TLB	Scale:	1:400
Drawn:	ID	Approved:	
Checked:	TLB		
Date:	AUGUST 2026		Design Engineer

DRAWING No. 05107-C3

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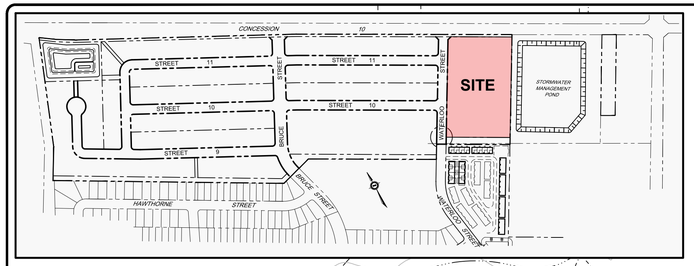

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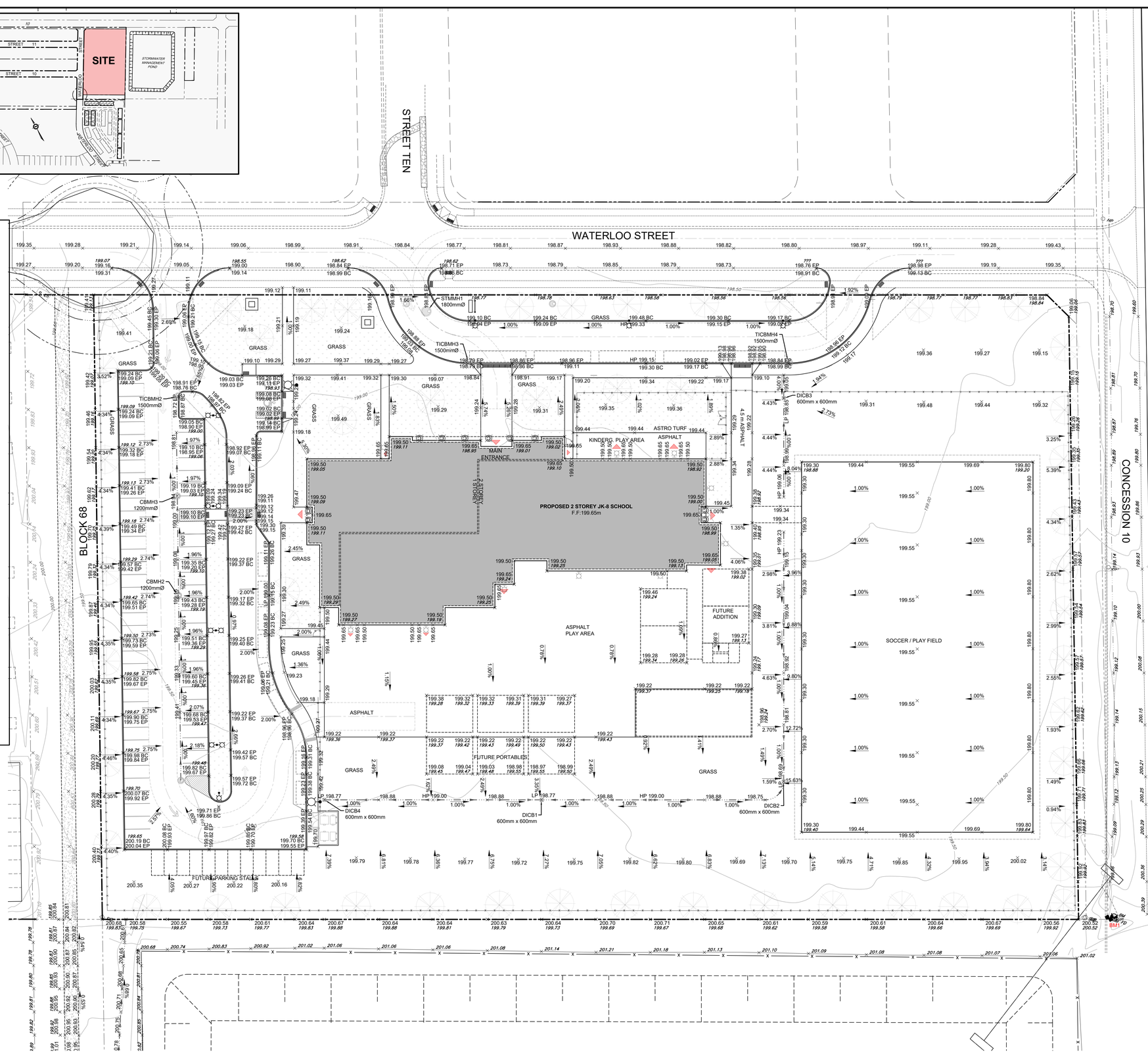

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Title:
PORT ELGIN ELEMENTARY SCHOOL
1107 WATERLOO STREET
TOWN OF SAUGEEN SHORES
SITE GRADING PLAN

Client: BLUEWATER DISTRICT SCHOOL BOARD

Design:	TLB	Scale:	1:400
Drawn:	ID	Approved:	
Checked:	TLB		
Date:	AUGUST 2026		Design Engineer

DRAWING No. 05107-C4

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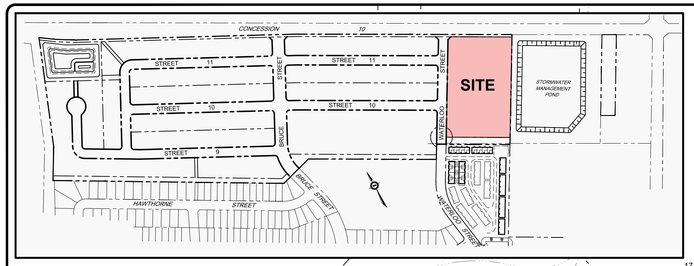

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STREET TEN
WATERLOO STREET
CONCESSION 10
BLOCK 68
1017.7m - 200mmØ PVC SAN. @ 1.00%
INV: 196.63m
20.0m - 750mmØ HDPE STM. @ 0.76%
F-STMMH2 T/G = 198.73 SW 197.13 NE 196.97 SE 196.81 NW 196.78
8.8m - 375mmØ HDPE STM. @ 0.50%
17.7m - 300mmØ HDPE STM. @ 0.50%
F-TICBMH18 T/G = 198.68 NE 197.09 SE 197.09 SW 197.02
F-CBMH20 T/G = 198.85 SE 197.27 NE 197.22
F-CBMH21 T/G = 198.70 SE 197.47 SW 197.42
63.9m - 300mmØ HDPE STM. @ 0.50%
SANMH30 T/G = 199.31 SE 196.29 NE 196.24
SANMH60 T/G = 198.85 SW 195.87 NW 195.82 SE 195.85
8.5m - 300mmØ HDPE STM. @ 1.00%
74.5m - 200mmØ PVC SAN. @ 0.50%
8.5m - 300mmØ HDPE STM. @ 1.00%
8.5m - 300mmØ HDPE STM. @ 1.00%
F-CB30 T/G = 198.85 NW 197.35
200mmØ PVC WTM
250mmØ PVC WTM
F-TICB18 T/G = 198.68 NW 197.18
F-CB31 T/G = 198.70 NW 197.56
12.0m - 200mmØ PVC SAN. @ 0.40%
17.9m - 750mmØ HDPE STM. @ 0.50%
SANMH2 T/G = 198.83 NW 195.90 NE 196.98 SE 195.92
c/w INTERNAL DROP STRUCTURE
31.5m - 200mmØ PVC SAN. @ 1.00%
SANMH1 T/G = 199.17 SE 197.40 SW 197.30
STMMH1 T/G = 198.89 S 196.98 NW 196.90 E 196.93 SE 197.30
28.7m - 150mmØ PVC SAN. @ 2.00%
TICBMH4 T/G = 198.84 SE 197.48 SW 197.40
14.5m - 450mmØ HDPE STM. @ 0.50%
69.0m - 450mmØ HDPE STM. @ 0.50%
TICBMH3 T/G = 198.76 NE 197.05 W 197.00
56.7m - 600mmØ HDPE STM. @ 0.50%
PROPOSED 200x150x200mmØ TEE c/w RESTRAINTS
HYDRANT SET
TICBMH2 T/G = 198.72 SE 197.41 N 197.26
PROPOSED 200mmØ PVC WATERMAIN
PROPOSED 200mmØ VALVE
GAS SERVICE
ELEC. SERVICE
7.7m - 450mmØ HDPE STM. @ 0.50%
DICB3 T/G = 198.85 SE 197.54 NW 197.51
4.5 m ASPHALT
PROPOSED 150mmØ PVC WATERMAIN
27.9m - 200mmØ PVC STM. @ 1.00%
21.5m - 450mmØ HDPE STM. @ 0.50%
INV: 197.58m
MAIN ENTRANCE
KINDERG. PLAY AREA
ASPHALT
INV: 197.97m
PROPOSED 150mmØ PVC WATERMAIN
PROPOSED 50mmØ WATER SERVICE
PROPOSED 200x150x150mmØ TEE c/w RESTRAINTS
PROPOSED 90° BEND c/w RESTRAINTS
CBMH3 T/G = 198.94 SE 197.55 NW 197.52
2 STOREY
PROPOSED 2 STOREY JK-8 SCHOOL F.F:199.65m
21.5m - 450mmØ HDPE STM. @ 0.50%
19.5m - 300mmØ HDPE STM. @ 0.50%
PROPOSED 150mmØ PVC WATERMAIN
CBMH2 T/G = 199.16 SE 197.69 NW 197.66 NE 197.72
TICBMH1 T/G = 199.00 SW 197.82 E 197.90
ASPHALT PLAY AREA
SOCCER / PLAY FIELD
82.8m - 450mmØ HDPE STM. @ 0.50%
26.2m - 375mmØ HDPE STM. @ 0.50%
INSULATE STORM SEWER
PROPOSED 90° BEND c/w RESTRAINTS
40.0m - 375mmØ HDPE STM. @ 0.50%
TICB1 T/G = 198.96 W 198.03
ASPHALT
HYDRANT SET
PROPOSED 150mmØ PVC WATERMAIN
CBMH1 T/G = 199.56 NW 197.85 NE 197.97
31.3m - 300mmØ HDPE STM. @ 0.50%
INSULATE STORM SEWER
DICB4 T/G = 198.77 SW 198.13
SANMH31 T/G = 199.73 SE 196.92 NW 196.89
DICB1 T/G = 198.95 NE 198.26
52.5m - 375mmØ HDPE STM. @ 0.50%
INSULATE STORM SEWER
DICB2 T/G = 198.71 NW 197.95 SW 198.00
BM1

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10. ALL JOINTS OF SANITARY MANHOLES TO BE CAULKED WITH MIN. 15mm BEAD, INSTALLED ON THE TOP OF JOINT OF EACH SECTION PRIOR TO SECTION ABOVE BEING INSTALLED. CAULKING TO BE SIKAFLEX 1A OR APPROVED EQUIVALENT.
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12. ALL CONSTRUCTION TO BE COMPLETED TO TOWN OF SAUGEEN SHORES ENGINEERING STANDARDS.

SCALE 1:400

5 0 5 10 20 METRES
15 0 10 20 35 50 75 FEET

Benchmark Information

BM1
NAIL IN HYDRO POLE ON CONCESSION 10 (AS SHOWN ON DRAWING)
ELEVATION **200.203m**

No.	DATE	DESCRIPTION	BY	APPD
5	AUG 27/26	ISSUED FOR TENDER	ID	TLB
4	JUNE 09/26	ISSUED FOR BUILDING PERMIT	ID	TLB
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REVISION / ISSUE

Seal not valid unless signed and dated

COBIDE ENGINEERING INC
517 10th Street, Hanover, Ontario N4N 1R4
Telephone: (519) 506-5959
www.cobideeng.com

Title:
PORT ELGIN ELEMENTARY SCHOOL
1107 WATERLOO STREET
TOWN OF SAUGEEN SHORES
SITE SERVICING PLAN

Client: BLUEWATER DISTRICT SCHOOL BOARD

Design:	TLB	Scale:	1:400
Drawn:	ID	Approved:	
Checked:	TLB		
Date:	AUGUST 2026		Design Engineer

DRAWING No. 05107-C5

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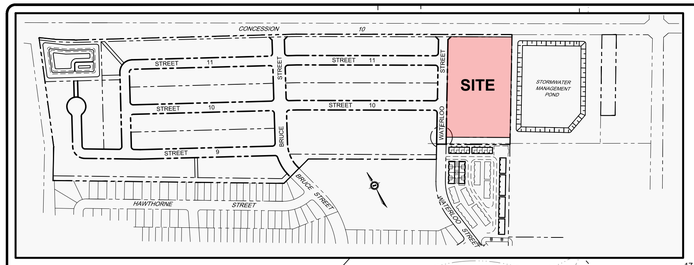
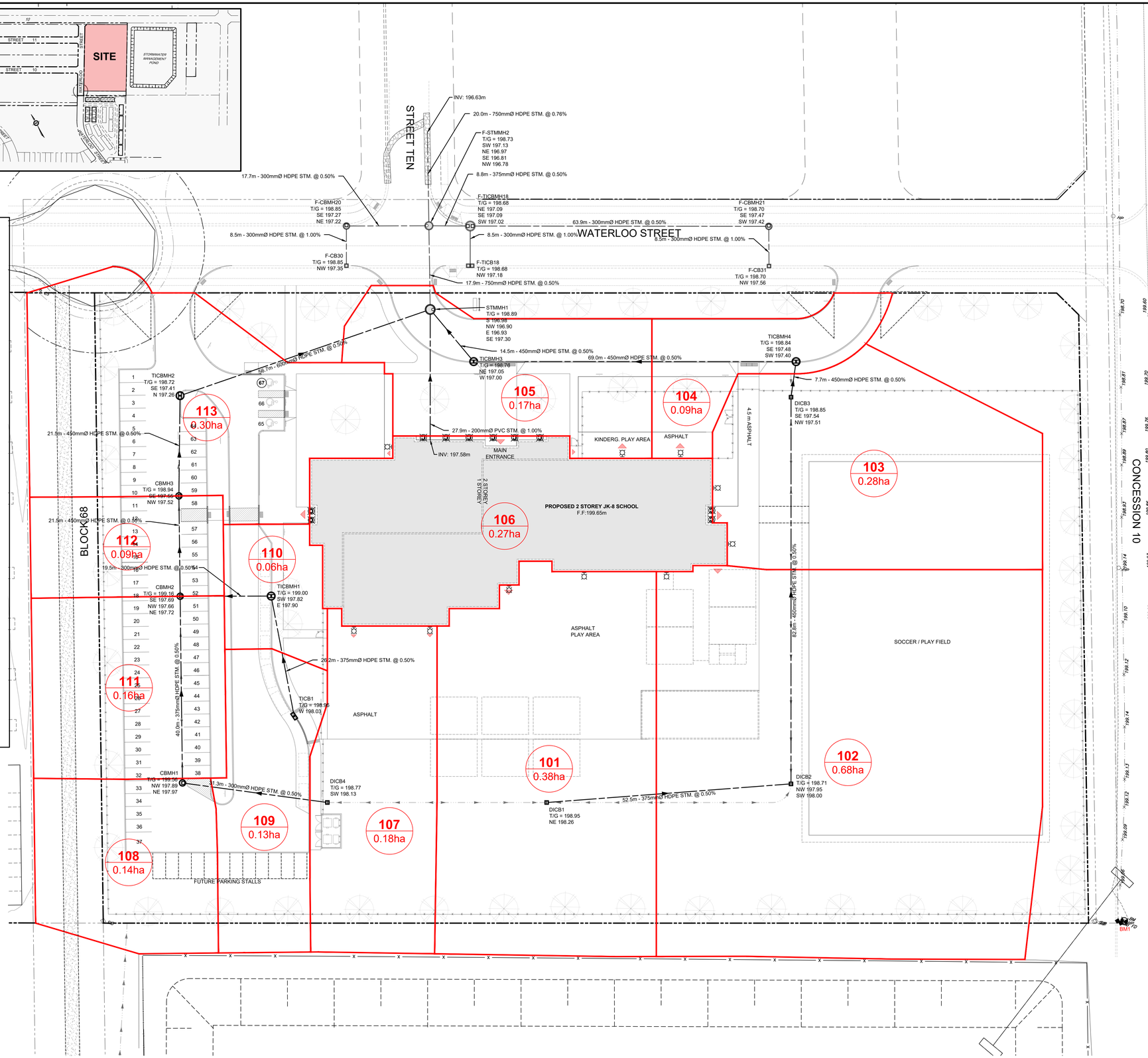


LEGEND

- SUBDIVISION BOUNDARY
- PROPOSED RIGHT OF WAY
- PROPOSED PROPERTY LINES
- EDGE OF EXISTING PAVEMENT
- EDGE OF EXISTING GRAVEL
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED SUBDRAIN
- PROPOSED WATERMAIN
- EXISTING WATERMAIN
- PROPOSED SANITARY SERVICE
- PROPOSED WATER SERVICE
- CATV — EXISTING UNDERGROUND TV CABLE
- GAS — EXISTING UNDERGROUND GAS LINE
- H — H — EXISTING UNDERGROUND HYDRO CABLE
- T — T — EXISTING UNDERGROUND TELEPHONE CABLE
- SANMH — PROPOSED SANITARY MANHOLE
- SANMH — EXISTING SANITARY MANHOLE
- STMMH — PROPOSED STORM MANHOLE
- STMMH — EXISTING STORM MANHOLE
- CBMH — PROPOSED CATCHBASIN MANHOLE
- TICBMH — PROPOSED TWIN INLET CATCHBASIN MANHOLE
- TICB — PROPOSED TWIN INLET CATCHBASIN
- CB — PROPOSED CATCH BASIN
- CB — EXISTING CATCH BASIN
- DICB — PROPOSED DITCH INLET CATCHBASIN
- IB — PROPOSED REAR YARD INLET BASIN
- CO — PROPOSED SAN. CLEANOUT (CAPPED WYE)
- CSV — PROPOSED CURB STOP VALVE
- CSV — EXISTING CURB STOP VALVE
- PDC — PROPOSED STORM SERVICE
- HYD — PROPOSED HYDRANT SET
- HYD — EXISTING FIRE HYDRANT
- PROPOSED CAP C/W THRUST BLOCK
- PROPOSED BLOWOFF
- EXISTING HYDRO GUY WIRE
- HYD — EXISTING HYDRO POLE
- CATV — EXISTING CABLE TV PEDESTAL
- BPED — EXISTING TELEPHONE PEDESTAL
- SUB — STANDARD IRON BAR
- IB — IRON BAR
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- EXISTING GAS MARKER
- EXISTING WELL
- BM — BENCHMARK
- BH — BOREHOLE
- 486.21 / 486.27 — PROPOSED ELEVATION / EXISTING ELEVATION
- ASPHALT REMOVAL
- PROPOSED GATE VALVE
- WV — EXISTING GATE VALVE
- PROPOSED VERTICAL BEND

SEPARATION DISTANCES BETWEEN SEWERS/SEWER SERVICES AND WATERMAIN/WATER SERVICES SHALL BE AS PER MECP PROCEDURE F-6-1; IN GENERAL, 2.5m MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL INSTALLATIONS AND 0.5m VERTICAL SEPARATION AT CROSSINGS WHERE THE WATERMAIN OR WATER SERVICE CROSSES UNDER THE SEWER/SERVICE AND PLACE WATER PIPE JOINTS A MINIMUM OF 2.5m HORIZONTALLY FROM OUTSIDE EDGE OF SEWER PIPE.

GEOTEXTILE CLOTH TO BE INSTALLED UNDER ALL CB AND CBMH GRATES AND TO REMAIN IN PLACE UNTIL PAVING IS COMPLETED



CAUTION:
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Notes

1. TOPOGRAPHIC SURVEY COMPLETED BY D. CULBERT LTD. ONTARIO LAND SURVEYOR ON DECEMBER 11, 2025.
2. ALL ORGANIC MATERIAL WITHIN 1.2m OF FINISHED PROFILE GRADE TO BE REMOVED FROM ALL AREAS UNDER THE TRAVELLED PORTION OF THE ROAD.
3. COVER OVER WATERMAIN 1.8m MINIMUM AT ALL POINTS.
4. SANITARY SEWER TO BE PVC SDR 35.
5. ALL STORM CATCHBASINS TO HAVE A MINIMUM SUMP OF 600mm AND ALL STORM MANHOLES TO HAVE A MINIMUM SUMP OF 300mm.
6. MAINTAIN 2.50m CLEARANCE BETWEEN STORM SEWER AND WATERMAIN.
7. ALL WATERMAINS TO BE PVC DR 18 WITH 25mmØ REHAU MUNICIPEX SERVICE TUBING FOR WATER SERVICES.
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1107 WATERLOO STREET
TOWN OF SAUGEEN SHORES
STORM CATCHMENT AREAS

Client: BLUEWATER DISTRICT SCHOOL BOARD

Design:	TLB	Scale:	1:400
Drawn:	ID	Approved:	
Checked:	TLB		
Date:	AUGUST 2026		Design Engineer

DRAWING No. 05107-C6

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TOWN OF SAUGEEN SHORES ENGINEERING STANDARDS

GENERAL - CONSTRUCTION

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH TOWN OF SAUGEEN SHORES STANDARDS AND OPSS. WHERE CONFLICT OCCURS, TOWN STANDARDS GOVERN.
2. DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS 517 AND 518 TO MAINTAIN ALL TRENCHES IN A DRY CONDITION.
3. ALL ENGINE DRIVEN PUMPS TO BE ADEQUATELY SILENCED, SUITABLE FOR OPERATION IN A RESIDENTIAL DISTRICT.
4. DISTURBED AREAS TO BE REINSTATED TO PREVIOUS CONDITION OR BETTER.
5. ALL MAINTENANCE HOLE FRAMES AND COVERS TO BE INITIALLY SET TO BASE COURSE HL4 ASPHALT ELEVATION AND ULTIMATELY RAISED BY ADDING SOLID ONE PIECE CAST IRON ADJUSTMENT RINGS PRIOR TO PLACING SURFACE COURSE HL3 ASPHALT.
6. ALL EXISTING MAINTENANCE HOLES TO BE RAISED OR LOWERED TO PROPOSED GRADE. MAXIMUM ALLOWABLE HEIGHT OF ADJUSTMENT TO BE 300mm.
7. ALL EXISTING HYDRANTS AND VALVES TO BE RAISED OR LOWERED TO PROPOSED GRADE.
8. TRENCHES FOR UTILITIES TO BE MINIMUM 600mm WIDE BACKFILLED WITH APPROVED NATIVE MATERIAL AND COMPACTED ALL TO THE SATISFACTION OF THE LOCAL UTILITY.
9. CONDUITS FOR ROAD CROSSINGS TO EXTEND 1.0m BEYOND CURB c/w PULL ROPES. INSTALL CONDUITS TO LOCAL STANDARDS.
10. MAINTAIN A 150mm VERTICAL SEPARATION (MINIMUM) BETWEEN SEWERS AT CROSSINGS.
11. CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK AND COORDINATE CONSTRUCTION ACCORDINGLY.
12. TOPSOIL TO BE STRIPPED FROM SITE SHALL BE STOCKPILED AS DIRECTED BY ENGINEER.

ROADWAYS

1. CONCRETE CURB AND GUTTER TO OPSD 600.040, 600.060 OR 600.100 AS INDICATED.
2. CURB AND GUTTER TERMINATION TO OPSD 608.010.
3. CURB AND GUTTER CONSTRUCTION SHALL CONFORM TO OPSS 353, NOV. 2006. STREET AND TRAFFIC SIGNS TO TOWN STANDARD TO BE UNISTRUT CANADA
4. CONTRACTOR TO SUPPLY AND INSTALL LTD. TELESPAR YIELDING BREAKAWAY SYSTEM 3.75m x 50mm SQUARE METAL POLE OR APPROVED EQUIVALENT.
5. SUBGRADE TO BE COMPACTED TO A MAXIMUM DRY DENSITY OF 95% OF THE MATERIAL'S MAXIMUM DRY DENSITY (MDD). COMPACTION PER OPSS 501, NOV. 2005.
6. GRANULAR 'A' AND 'B' MATERIALS TO BE COMPACTED TO 100% MDD, PER OPSS 501, NOV. 2005.
7. BOULEVARD COMPACTION TO 95% OF MATERIAL'S MDD.
8. ROADWAY SUBGRADE TO BE PROOF ROLLED IN PRESENCE OF GEOTECHNICAL ENGINEER.
9. STANDARD ROAD BASE SHALL CONSIST OF 300mm GRANULAR 'B' AND 150mm GRANULAR 'A'.
10. PAVEMENT ON NEW ROADS TO BE HOT MIX HL4 (50mm) BASE COURSE AND HL3 (40mm) PER OPSS 310, NOV. 2003.

SANITARY SEWERS AND SERVICES

1. MAINTENANCE HOLES TO OPSS 1001.01 (1200mmØ)
2. BENCHING TO OPSD 1004.01
3. FRAMES AND COVERS TO BE OPSD 401.01 TYPE 'A', CLOSED COVER.
4. SERVICE CONNECTIONS TO BE 125mm, TERMINATED AT THE PROPERTY LINE WITH A 125x125x100mm WYE C/W CAP, A 100mm Ø RISER C/W 100mmØ LONG SWEEP CAPPED AT SURFACE. SEE TOWN STANDARDS DRAWING.
5. SERVICE CONNECTIONS TO OPSD 1006.020 WITH SUITABLE NATIVE BEDDING OR GRANULAR 'A'. SEE TOWN STANDARD ON DWG. No. 308015-09.
6. BEDDING FOR SEWER SHALL BE PER OPSD 1005.02. BEDDING MATERIAL FOR SANITARY SEWER AND SERVICES SHALL BE APPROVED NATIVE MATERIAL OR GRANULAR 'A'.
7. BACKFILL PER OPSD 803.04 USING APPROVED NATIVE BACKFILL.
8. BACKFILL AND BEDDING MATERIAL TO BE COMPACTED PER OPSS 410 AND 514.
9. TESTING TO OPSS 410, APRIL 2008.
10. 200mm LONG 13mmØ SS 314 BOLTS WITH NUTS AND WASHERS TO BE INSTALLED IN MANHOLE COVERS LIFT HOLES.

WATERMAIN AND WATER SERVICES

1. THRUST BLOCKS PER OPSD 1103.010 AND 1103.020.
2. SERVICE CONNECTIONS PER OPSD 1104.01.
3. HYDRANT, INSTALLATION PER OPSD 1105.01 AND TO TOWN STANDARDS.
4. USE APPROVED NATIVE MATERIAL OR GRANULAR 'A' BEDDING PER OPSD - 1102.02. BACKFILL TO BE APPROVED NATIVE MATERIAL PER OPSD 803.04.
5. WATERMAIN, SERVICES, AND HYDRANTS TO BE INSTALLED PER OPSS 701, NOV. 2006.
6. ALL PVC WATERMAIN TO HAVE TRACER WIRE BETWEEN HYDRANTS AND OTHER CONDUCTING APPURTENANCES.
7. MINIMUM COVER TO BE 1.8m.

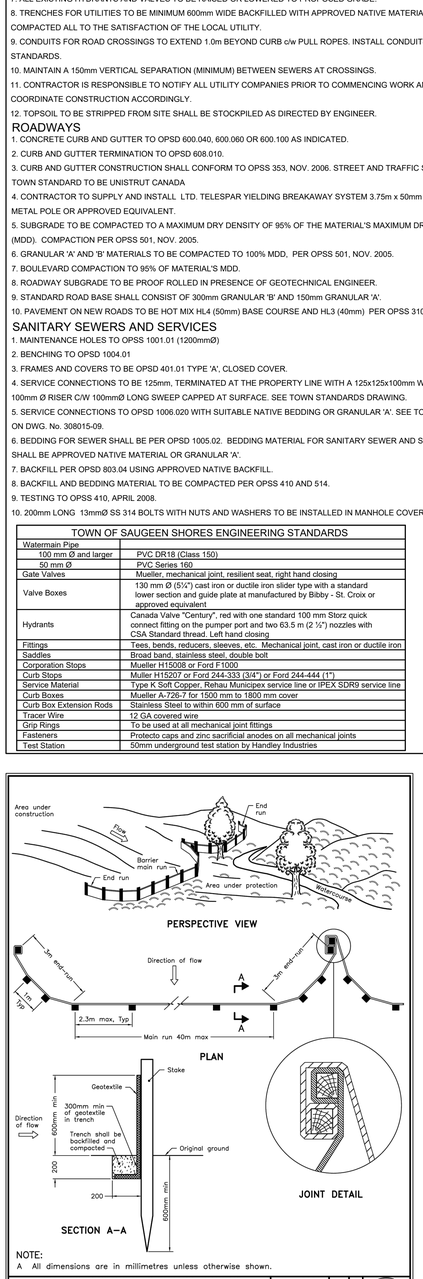
STORM SEWERS AND SERVICES

1. MAINTENANCE HOLES TO OPSS 1001.01 (1200mmØ)
2. BENCHING TO OPSD 1004.01
3. FRAMES AND COVERS TO BE OPSD 401.011YPE 'A', CLOSED COVER.
4. SERVICE CONNECTIONS TO BE 150mm, TERMINATED AT THE PROPERTY LINE WITH A 150mmØ RISER C/W 150mmØ LONG SWEEP CAPPED AT SURFACE. SEE TOWN STANDARD.
5. SERVICE CONNECTIONS TO OPSD 1006.020 WITH SUITABLE NATIVE BEDDING OR GRANULAR 'A'.
6. BEDDING FOR SEWER SHALL BE PER OPSD 1005.02. BEDDING MATERIAL FOR STM SHALL BE APPROVED NATIVE MATERIAL OR GRANULAR 'A'.
7. BACKFILL PER OPSD 803.04 USING APPROVED NATIVE BACKFILL.
8. BACKFILL AND BEDDING MATERIAL TO BE COMPACTED PER OPSS 410 AND 514.

MATERIALS

1. SANITARY SEWER - SDR35 PVC.
2. SANITARY SERVICES - SDR28 PVC, 125Ø USING TEE CONNECTIONS TO MAIN.
3. STORM SEWER - PE (PS 320).
4. ALL DRAINAGE PIT MATERIAL TO BE PERFORATED P.E. (PS 320) STORM SEWER.
5. WATERMAIN - DR18 PVC INCLUDING 12 AWG TWU TRACER WIRE. ALL MECHANICAL JOINTS TO BE EQUIPPED WITH GRIP RINGS.
6. WATERMAIN SERVICES - 20mmØ, REHAU MUNICIPEX, MAIN STOP MEULLER 15008, CURB STOP (MEULLER H 15209) C/W CURB BOX (MEULLER A-726). SERVICE SADDLES SHALL BE ROBAR S.S. -2616 DB.
7. HYDRANTS - CENTURY WITH 2-63.5mm PORTS AND 100Ø STORTZ PUMPER PORT, OR AS APPROVED BY THE FIRE CHIEF OF TOWN OF SAUGEEN SHORES. MUELLER A2360-3 WEDGE STYLE GATE VALVE SHALL BE PLACED 1.0m FROM HYDRANT. EACH HYDRANT TO BE C/W 50mm DIA. UNDERGROUND TEST STATION PER TOWN STANDARDS.
8. ALL HYDRANT INSTALLATIONS WILL ALSO INCLUDE A 50mm DIA. UNDERGROUND TEST STATION. THE TEST STATION WILL BE APPROX. 300m BEHIND EACH HYDRANT AND COME COMPLETE WITH 2 TERMINALS ON THE TERMINAL BLOCK THAT IS FASTENED TO THE LID. THE LID SHALL HAVE A PERMANENT MAGNET AND/OR A METAL LID FOR EASY DETECTION WITH AN ELECTRONIC LOCATOR. THE TOP OF THE TEST STATION SHALL BE INSTALLED FLUSH TO THE PROPOSED FINISH GRADE ELEVATION. TEST STATIONS SHALL BE SUPPLIED BY HANDLEY INDUSTRIES OR APPROVED EQUIVALENT.
9. VALVES - AWWA C509 RESILIENT SEATED GATE VALVES (RIGHT HAND CLOSING) WITH MECHANICAL JOINT ENDS. VALVE BOX SHALL BE 130 MAX. DIA. CAST OR DUCTILE IRON SLIDER TYPE WITH STANDARD LOWER SECTION AND GUIDE PLATE BY BIBBY-ST. CROIX. PREFABRICATED HOLES SHALL BE PLACED NEAR TOP OF VALVE BOX FOR TRACER WIRE.
10. "STOP AND DRAIN" VALVES ARE TO BE USED AT BLOW-OFFS. MUELLER H-15219 OR APPROVED EQUIVALENT TO BE USED.
11. HYDRANTS TO BE PAINTED YELLOW BARREL WITH YELLOW TOP. 100mm(4") DIAMETER CONNECTION CAP IN BLACK, OTHER CONNECTION CAPS TO BE YELLOW. SUPPLY AND PLACE FIBERGLASS POST AND SIGN ON 63.5mm(2-1/2") PORT TO INDICATE LOCATION IN WINTER WEATHER.
12. UTILITY ROAD CROSSING CONDUITS - 100mmØ TYPE II PVC.

TOWN OF SAUGEEN SHORES ENGINEERING STANDARDS	
Watermain Pipe	
100 mm Ø and larger	PVC DR18 (Class 150)
50 mm Ø	PVC Series 160
Gate Valves	Mueller, mechanical joint, resilient seat, right hand closing
Valve Boxes	130 mm Ø (5¼") cast iron or ductile iron slider type with a standard lower section and guide plate at manufactured by Bibby - St. Croix or approved equivalent
Hydrants	Canada Valve "Century", red with one standard 100 mm Storz quick connect fitting on the pumper port and two 63.5 m (2 ½") nozzles with CSA Standard thread. Left hand closing
Fittings	Tees, bends, reducers, sleeves, etc. Mechanical joint, cast iron or ductile iron
Saddles	Broad band, stainless steel, double bolt
Corporation Stops	Mueller H15008 or Ford F1000
Curb Stops	Muller H15207 or Ford 244-333 (3/4") or Ford 244-444 (1")
Service Material	Type K Soft Copper, Rehau Municipex service line or IPEX SDR9 service line
Curb Boxes	Mueller A-726-7 for 1500 mm to 1800 mm cover
Curb Box Extension Rods	Stainless Steel to within 600 mm of surface
Tracer Wire	12 GA covered wire
Grip Rings	To be used at all mechanical joint fittings
Fasteners	Protecto caps and zinc sacrificial anodes on all mechanical joints
Test Station	50mm underground test station by Handley Industries



NOTE:
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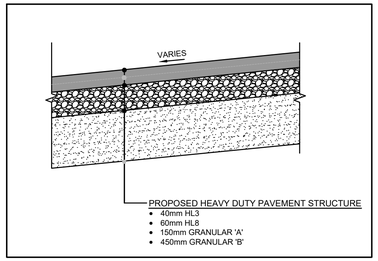
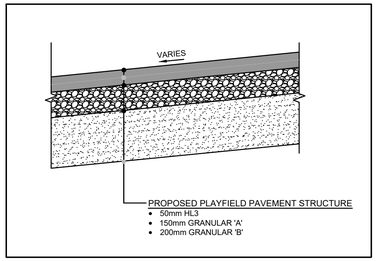
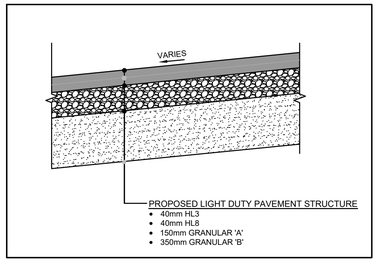
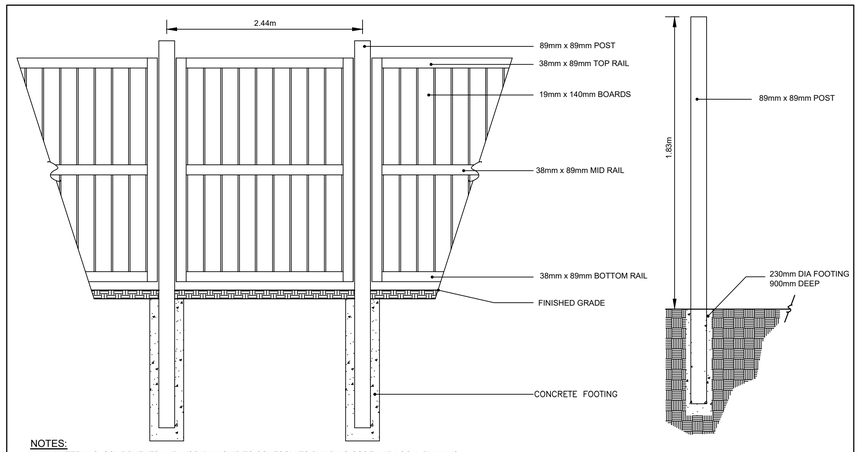
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2021	Rev	3
LIGHT-DUTY SILT FENCE BARRIER			
	OPSD 219.110		









NOTES:
1. ALL MATERIALS, COMPONENTS AND WORKMANSHIP TO CONFORM TO BUILDING CODE AND LOCAL BY-LAWS.
2. ALL WOOD TO BE S.P.F. MIX CCA PRESSURE TREATED TO RETENTION OF 6.35 KG/m³ SELECTED MAINLY FOR GOOD APPEARANCE. ALL MEMBERS SHALL BE FREE OF WANE AND BARK POCKETS . ALL TORN GRAIN SHALL BE ELIMINATED BY SANDING AND PLANING. MEMBERS EXHIBITING MODERATE TO HEAVY KNOTS SHALL BE WELL DISTRIBUTED THROUGHOUT THE SITE INSTALLATION.
3. ALL WOOD TO BEAR LUMBER GRADING STAMP.
4. ALL FASTENERS SHALL BE TREATED WITH APPROVED COATINGS (E.G., NAILS - HOT DIPPED GALVANIZED) FOR OUTDOOR USE IN CONFORMANCE WITH CSA STANDARDS.
5. DRIVE ALL NAIL OR SCREW HEADS BELOW SURFACE OF WOOD.
6. USE SUFFICIENT SIZE AND QUANTITY OF FASTENERS TO ENSURE A STABLE, SECURE STRUCTURE.
7. ALL LUMBER SIZES ARE ACTUAL SIZES RATHER THAN NOMINAL SIZES.
8. THE SECTION OF POST EMBEDDED IN THE CONCRETE FOOTING SHALL BE SOAKED IN END TREAT SOLUTION (CSA APPROVED).
9. CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPA AT 20 DAYS WITH 5 TO 7 PERCENT AIR ENTRAINMENT.
10. STAIN ALL EXPOSED WOOD WITH TWO COATS OF MOORWOOD 1550, SEMI-TRANSPARENT OR APPROVED EQUIVALENT. COLOUR TO COMPLEMENT BUILDING FINISH.
11. SEE SITE AND LANDSCAPE PLANS FOR FENCE LOCATIONS.

PRIVACY FENCE DETAIL

N.T.S.

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TOWN OF SAUGEEN SHORES
MISCELLANEOUS DETAILS 1

Client: BLUEWATER DISTRICT SCHOOL BOARD

Design:	TLB	Scale:	NTS
Drawn:	ID	Approved:	
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DRAWING No. 05107-C7

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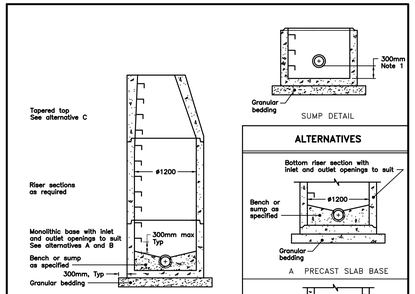


SUMP DETAIL

ALTERNATIVES

A PRECAST SLAB BASE

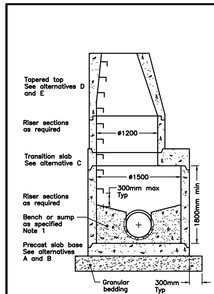
B CAST-IN-PLACE BASE

C PRECAST FLAT CAP

NOTES:

1 The sump is measured from the lowest invert.
A Granular backfill shall be placed to a minimum thickness of 300mm all around the maintenance hole.
B Precast concrete components shall be according to OPSD 701.030, 701.031, or 701.032.
C Structure exceeding 5.0m in depth shall include safety platform according to OPSD 404.020.
D Pipe support according to OPSD 708.020.
E For benching and pipe opening details, see OPSD 701.021.
F For adjustment unit and frame installation, see OPSD 704.010.
G All dimensions are nominal.
H All dimensions are in millimetres unless otherwise shown.

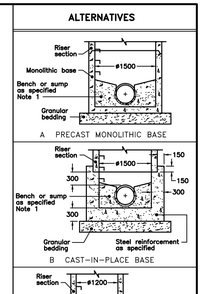
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 5
PRECAST CONCRETE MAINTENANCE HOLE 1200mm DIAMETER		**OPSD 701.010**



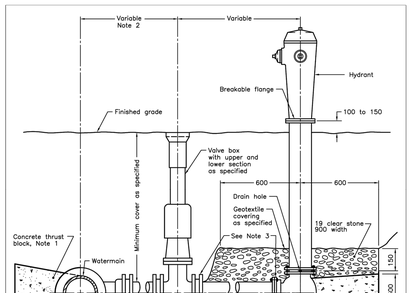
NOTES:

1 For sump detail, see OPSD 701.010.
A Granular backfill shall be placed to a minimum thickness of 300mm all around the maintenance hole.
B Precast concrete components shall be according to OPSD 701.030, 701.031, 701.040, 701.041, 703.011, 703.021, and 706.010.
C Structures exceeding 5.0m in depth shall include safety platform according to OPSD 404.020 or 404.021.
D Pipe support shall be according to OPSD 708.020.
E For benching and pipe opening details, see OPSD 701.021.
F For adjustment unit and frame installation, see OPSD 704.010.
G All dimensions are nominal.
H All dimensions are in millimetres unless otherwise shown.

ALTERNATIVES



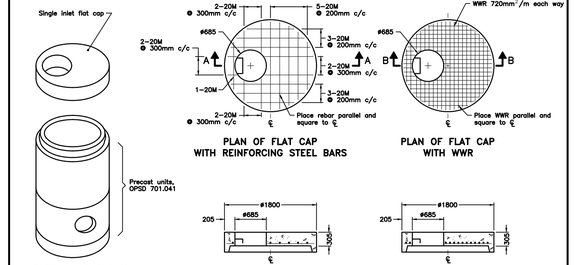
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 5
PRECAST CONCRETE MAINTENANCE HOLE 1500mm DIAMETER		**OPSD 701.011**



NOTES:

1 All concrete thrust blocks shall be poured against undisturbed ground.
2 When specified, for watermains 400mm and less, locate valve within 1.0m of centreline of watermain. Retaining and restraining devices shall be utilized. For watermains 600mm and over, bolt valve with flanged end directly to flanged tee.
3 Retaining and restraining devices shall be as specified.
A Bond breaker shall be used between the concrete and the fittings and appurtenances.
B Bolts and nuts for buried flange to flange connections shall be stainless steel.
C When required, flange of standpipe extensions shall not be in frost zone.
D This OPSD shall be read in conjunction with OPSD 1103.010 and 1103.020.
E Backfill material within 500mm of service box shall be native or imported, as specified.
F Tracer wire shall be installed as specified.
G All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 3
HYDRANT INSTALLATION		**OPSD 1105.010**



NOTES:

A All reinforcing steel shall have 25mm minimum cover.
B All dimensions are nominal.
C All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 2
PRECAST CONCRETE SINGLE INLET FLAT CAP 1500mm DIAMETER		**OPSD 703.011**

CAUTION:
THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM THEMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

Notes

1. TOPOGRAPHIC SURVEY COMPLETED BY D. CULBERT LTD. ONTARIO LAND SURVEYOR ON DECEMBER 11, 2025.
2. ALL ORGANIC MATERIAL WITHIN 1.2m OF FINISHED PROFILE GRADE TO BE REMOVED FROM ALL AREAS UNDER THE TRAVELLED PORTION OF THE ROAD.
3. COVER OVER WATERMAIN 1.8m MINIMUM AT ALL POINTS.
4. SANITARY SEWER TO BE PVC SDR 35.
5. ALL STORM CATCHBASINS TO HAVE A MINIMUM SUMP OF 600mm AND ALL STORM MANHOLES TO HAVE A MINIMUM SUMP OF 300mm.
6. MAINTAIN 2.50m CLEARANCE BETWEEN STORM SEWER AND WATERMAIN.
7. ALL WATERMAINS TO BE PVC DR 18 WITH 25mmØ REHAU MUNICIPEX SERVICE TUBING FOR WATER SERVICES.
8. WATER SERVICES TO BE INSTALLED UNDER STORM SEWERS.
9. ALL HYDRANT SETS REQUIRE TEST POINT AND HYDRANT MARKER.
10. ALL JOINTS OF SANITARY MANHOLES TO BE CAULKED WITH MIN. 15mm BEAD, INSTALLED ON THE TOP OF JOINT OF EACH SECTION PRIOR TO SECTION ABOVE BEING INSTALLED. CAULKING TO BE SIKAFLEX 1A OR APPROVED EQUIVALENT.
11. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNTIL STAMPED 'ISSUED FOR CONSTRUCTION'.
12. ALL CONSTRUCTION TO BE COMPLETED TO TOWN OF SAUGEEN SHORES ENGINEERING STANDARDS.

NOTES:

1 Outlet hole size 525mm diameter maximum, location as required.
2 300mm diameter knockout to accommodate subdrain. Knockout shall be 60mm deep.
A Centre reinforcing in base slab and walls ±20mm.
B Granular backfill shall be placed to a minimum thickness of 300mm all around the catch basin.
C Frame, grate, and adjustment units shall be installed according to OPSD 704.010.
D Pipe support shall be according to OPSD 708.020.
E All dimensions are nominal.
F All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2019	Rev 4
PRECAST CONCRETE CATCH BASIN 600x600mm		**OPSD 705.010**

NOTES:

1 Anode shall be placed at least 1.0m away from the water system pipe and appurtenances and as deep as the bottom of the pipe and appurtenances or as specified in Contract Documents.
2 Anode connecting wire shall be loosely wrapped around pipes and fittings and knotted.
3 Protective coating shall be applied to all thermite welds.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2020	Rev 3
CATHODIC PROTECTION FOR PVC WATERMAIN SYSTEMS		**OPSD 1109.011**

Grating Type	Grating Size Length L	Width W
A	762	768
B	1338	768
C	1465	768

NOTES:

1 Equivalent (13x100mm Galvanized J-Bolt) cast-in-place anchor may be used.
A Fastener shall be inserted to maintain minimum concrete cover requirements.
B All steel components and rivets shall be galvanized.
C All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2017	Rev 3
GALVANIZED STEEL HONEYCOMB GRATING FOR DITCH INLETS		**OPSD 403.010**

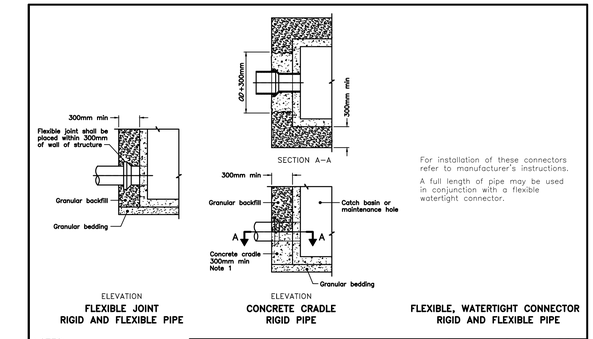
MAXIMUM SIZE HOLE IN THE WALL IN PRECAST RISER SECTIONS

Maintenance Hole Diameter	No. 1–4	No. 5 and 6	No. 8	No. 7 Inlet Hole	No. 7 Outlet Hole
1200	700	860	780	700	860
1500	860	1220	960	860	1170
1800	1220	1485	1220	1220	1485
2400	1485	2020	1760	1485	2020
3000	1930	2450	2300	1930	2450
3600	2470	3085	2730	2470	3085

NOTES:

1 Slopes shall be maintained from the outlet hole opening for top of benching.
A Concrete for benching shall be 30MPa.
B When benching is hand-finished, it shall be given wood float finish, channel shall be given steel trowel finish.
C Benching slope and height shall be as specified.
D When specified, maintenance holes that are 1200mm in diameter with a uniform channel for 200 or 250mm pipe may be prebenched at the manufacturer with standardized benching slope and channel orientation.
E All dimensions are nominal.
F All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 4
MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES		**OPSD 701.021**



NOTES:

1 Pipe shall be supported with concrete or unshrinkable fill to the first pipe joint.
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2016	Rev 4
SUPPORT FOR PIPE AT CATCH BASIN OR MAINTENANCE HOLE		**OPSD 708.020**

NOTES:

A This OPSD shall be read in conjunction with OPSD 610.010 and 610.020.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 3
CAST IRON, SQUARE FRAME WITH SQUARE OVERFLOW TYPE FLAT GRATE FOR CATCH BASINS, PERFORATED OPENINGS		**OPSD 400.110**

NOTES:

A Covers shall be Type A or Type B, as specified.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 4
CAST IRON, SQUARE FRAME WITH CIRCULAR CLOSED OR OPEN COVER FOR MAINTENANCE HOLES		**OPSD 401.010**

NOTES:

1 If first step is in an adjustment unit, the adjustment unit shall be of the type manufactured with a step in place.
2 Centre reinforcing in adjustment unit ±10mm.
3 Round and square adjustment units are available in sizes of 50, 75, 100, 150, and 300mm.
A Adjustment units shall not extend beyond the outside edge of the structure.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 3
PRECAST CONCRETE ADJUSTMENT UNITS FOR MAINTENANCE HOLES, CATCH BASINS, AND VALVE CHAMBERS		**OPSD 704.010**

No.	DATE	DESCRIPTION	BY	APPD
5	AUG 27/26	ISSUED FOR TENDER	ID	TLB
4	JUNE 09/26	ISSUED FOR BUILDING PERMIT	ID	TLB
3	MAY 21/26	THIRD SUBMISSION	ID	TLB
2	MAR 10/26	SECOND SUBMISSION	ID	TLB
1	FEB 17/26	FIRST SUBMISSION	ID	TLB

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Title:
PORT ELGIN ELEMENTARY SCHOOL
1107 WATERLOO STREET
TOWN OF SAUGEEN SHORES
MISCELLANEOUS DETAILS 2

Client: BLUEWATER DISTRICT SCHOOL BOARD

Design:	TLB	Scale:	NTS
Drawn:	ID	Approved:	
Checked:	TLB		
Date:	AUGUST 2026		Design Engineer

DRAWING No. 05107-C8

H: \BWDSB\05107 – Port Elgin School\Drawings\Submissions\2026-08-27 Issued for Tender\05107 – Port Elgin School Details 2026-08-27.dwg

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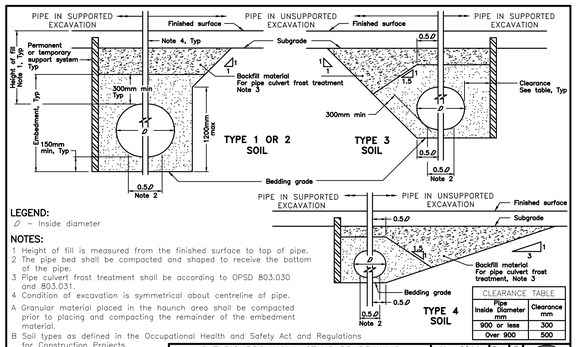
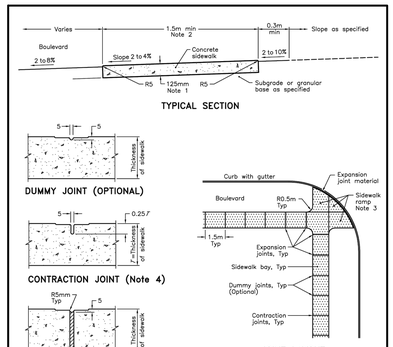


LEGEND:
D – Inside diameter

NOTES:
1 Height of fill is measured from the finished surface to top of pipe.
2 The pipe bed shall be compacted and shaped to receive the bottom of the pipe.
3 Pipe culvert frost treatment shall be according to OPSD 803.030 and 803.031.
4 Condition of excavation is symmetrical about centreline of pipe.
A Granular material placed in the haunch area shall be compacted prior to placing and compacting the remainder of the embedment material.
B Soil types as defined in the Occupational Health and Safety Act and Regulations for Construction Projects.
C All dimensions are in metres unless otherwise shown.

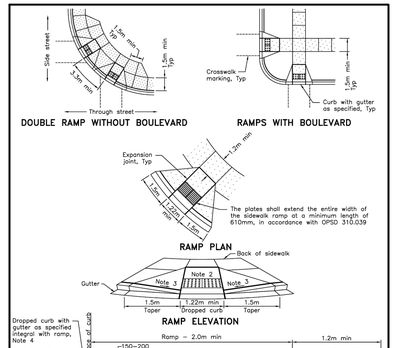
CLEARANCE TABLE	
Pipe Inside Diameter mm	Clearance mm
900 or less	300
Over 900	500

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 3
FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION		
	OPSD 802.010	



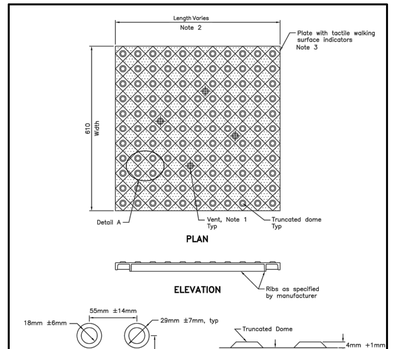
NOTES:
1 Sidewalk thickness at residential driveways and adjacent to curb shall be 150mm. At commercial and industrial driveways, the thickness shall be 200mm.
2 Sidewalk width shall be wider when specified.
3 This OPSD shall be read in conjunction with OPSD 310.030, 310.031, 310.033, and 310.039.
4 Contraction Joint may be tooled or sawcut.
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2019	Rev 3
CONCRETE SIDEWALK		
	OPSD 310.010	



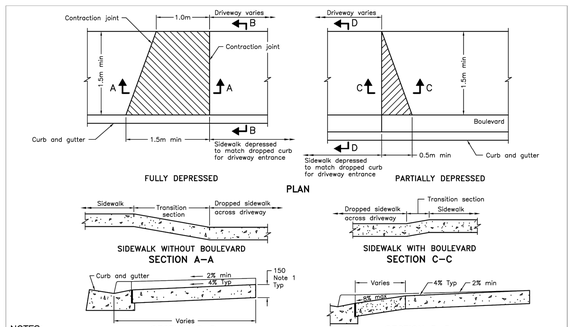
NOTES:
1 Slope of ramp shall not exceed 8%.
2 Cross slope of ramp shall not exceed 2% in either direction.
3 Cross slope of flared side of ramp shall not exceed 8%.
4 Dropped curb at ramp shall be modified to eliminate 30 mm step at gutter line.
5 Minimum thickness of ramp is 200mm. Minimum thickness of sidewalk and flared sides adjacent to ramp is 150mm.
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2019	Rev 1
CONCRETE SIDEWALK RAMPS AT UNSIGNALIZED INTERSECTIONS		
	OPSD 310.033	



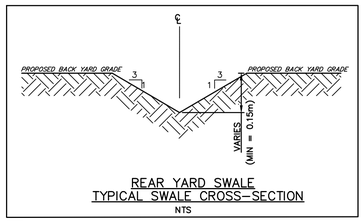
NOTES:
1 Vents shall be as specified by the manufacturer.
2 Length of plate may be increased to suit the curb depression width.
3 Material of plate shall be as specified in Contract Documents.
A Adjacent cast iron plates shall be permanently connected using a locking mechanism and any hardware shall be hot dipped galvanized.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2019	Rev 1
CONCRETE SIDEWALK RAMPS TACTILE WALKING SURFACE INDICATORS COMPONENT		
	OPSD 310.039	

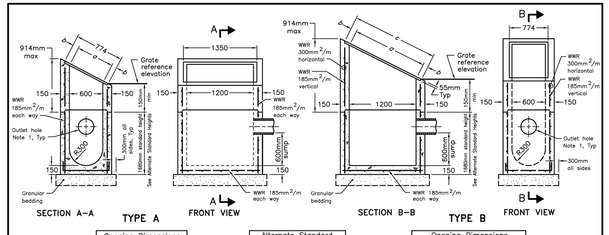


NOTES:
1 At commercial and industrial driveways, the thickness shall be 200mm.
A For contraction joint detail, see OPSD 310.010.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2019	Rev 3
CONCRETE SIDEWALK DRIVEWAY ENTRANCE DETAILS		
	OPSD 310.050	



REAR YARD SWALE
TYPICAL SWALE CROSS–SECTION
NTS



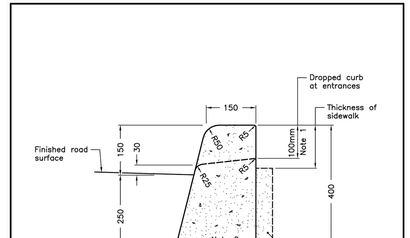
Opening Dimensions			
Grate Type	Slope	a	b
B	2H:1V	670	52
	3H:1V	632	71
	4H:1V	618	78
	HOR	600	87

Alternate Standard Heights	
Alternate	Dimension
A	1980
B	1520
C	1380

Opening Dimensions				
Grate Type	Slope	a	b	c
C	2H:1V	1341	66	1473
	3H:1V	1265	104	1473
	4H:1V	1237	118	1473
B	6H:1V	1216	65	1346
	HOR	1200	73	1346

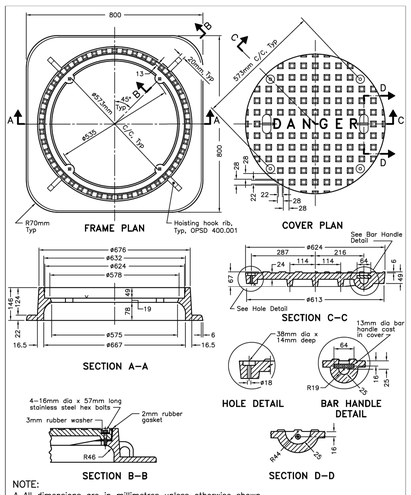
NOTES:
1 Outlet hole size 525mm max diameter.
A Where inlet is placed across ditch and is accessible to vehicular traffic, grating slope shall be 6H:1V or flatter.
B Center reinforcing in wall and base slab ±25mm.
C Lap riser horizontal wires 300mm. Laps shall be placed at corners.
D Granular backfill shall be placed to a minimum thickness of 300mm all around the ditch inlet.
E Grating shall be according to OPSD 403.010.
F Pipe support shall be according to OPSD 708.020.
G All dimensions are nominal.
H All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2019	Rev 4
PRECAST CONCRETE DITCH INLETS 600 x 1200mm		
	OPSD 705.040	



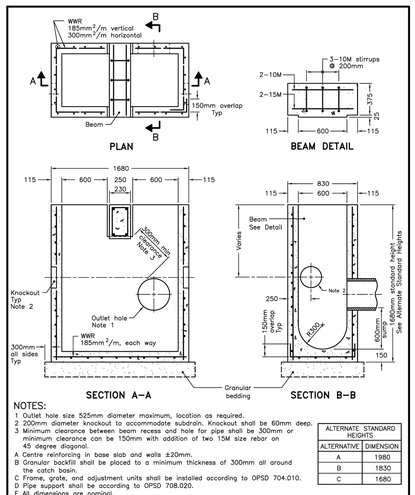
NOTES:
1 When sidewalk is continuously adjacent, the dropped curb at entrances shall be reduced to 75mm.
2 For slipforming procedure a 5% batter is acceptable.
A Treatment at entrances shall be according to OPSD 351.010.
B Outlet treatment shall be according to the OPSD 610 Series.
C The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail where it shall be according to the OPSD 900 Series.
D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2012	Rev 2
CONCRETE BARRIER CURB		
	OPSD 600.110	



NOTE:
A All dimensions are in millimetres unless otherwise shown.

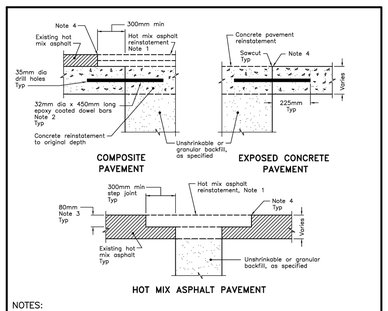
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 4
CAST IRON, SQUARE FRAME WITH CIRCULAR WATERTIGHT COVER FOR MAINTENANCE HOLES		
	OPSD 401.030	



NOTES:
1 Outlet hole size 525mm diameter maximum, location as required.
2 200mm diameter knockout to accommodate subdrain. Knockout shall be 60mm deep.
3 Minimum clearance between beam recess and hole for pipe shall be 300mm or minimum clearance can be 150mm with addition of two 15M size rebar on 45 degree diagonal.
A Centre reinforcing in base slab and walls ±20mm.
B Granular backfill shall be placed to a minimum thickness of 300mm all around the catch basin.
C Frame, grate, and adjustment units shall be installed according to OPSD 704.010.
D Pipe support shall be according to OPSD 708.020.
E All dimensions are nominal.
F All dimensions are in millimetres unless otherwise shown.

ALTERNATE STANDARD HEIGHTS	
ALTERNATIVE	DIMENSION
A	1980
B	1830
C	1680

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2019	Rev 4
PRECAST CONCRETE TWIN INLET CATCH BASIN 600 x 1450mm		
	OPSD 705.020	



NOTES:
1 Hot mix asphalt type and thickness as specified. The surface course shall not be less than 40mm.
2 Dowels shall be installed at 300mm intervals along all transverse faces. The dowel bars shall be placed mid–depth of the specified slab thickness and parallel to the longitudinal axis and the horizontal plane of the pavement within the following tolerances:
a) Vertical Alignment: ± 15mm along the length of the dowel bar.
b) Horizontal Alignment: ± 15mm along the length of the dowel bar.
c) Side Shift: The centre of the dowel bar shall lie within ± 40mm from the transverse joint.
Tie bars shall be installed at 600mm intervals along all longitudinal faces and shall be aligned perpendicular to the longitudinal axis of the pavement. The tie bars shall be installed within a tolerance of ± 15mm from the specified depth.
Where reinforcement is present, dowel and tie bars may be adjusted 25mm horizontally and raised or lowered 10mm to avoid drilling reinforcement.
All dowels and tie bars shall be set with epoxy grout.
3 If the total pavement thickness is less than 80mm, step joint is not required.
4 Joint treatment as specified.
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2020	Rev 3
PAVEMENT REINSTATEMENT FOR UTILITY CUTS		
	OPSD 509.010	

CAUTION:
THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM THEMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

Notes

1. TOPOGRAPHIC SURVEY COMPLETED BY D. CULBERT LTD. ONTARIO LAND SURVEYOR ON DECEMBER 11, 2025.
2. ALL ORGANIC MATERIAL WITHIN 1.2m OF FINISHED PROFILE GRADE TO BE REMOVED FROM ALL AREAS UNDER THE TRAVELLED PORTION OF THE ROAD.
3. COVER OVER WATERMAIN 1.8m MINIMUM AT ALL POINTS.
4. SANITARY SEWER TO BE PVC SDR 35.
5. ALL STORM CATCHBASINS TO HAVE A MINIMUM SUMP OF 600mm AND ALL STORM MANHOLES TO HAVE A MINIMUM SUMP OF 300mm.
6. MAINTAIN 2.50m CLEARANCE BETWEEN STORM SEWER AND WATERMAIN.
7. ALL WATERMAINS TO BE PVC DR 18 WITH 25mmØ REHAU MUNICIPEX SERVICE TUBING FOR WATER SERVICES.
8. WATER SERVICES TO BE INSTALLED UNDER STORM SEWERS.
9. ALL HYDRANT SETS REQUIRE TEST POINT AND HYDRANT MARKER.
10. ALL JOINTS OF SANITARY MANHOLES TO BE CAULKED WITH MIN. 15mm BEAD, INSTALLED ON THE TOP OF JOINT OF EACH SECTION PRIOR TO SECTION ABOVE BEING INSTALLED. CAULKING TO BE SIKAFLEX 1A OR APPROVED EQUIVALENT.
11. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNTIL STAMPED 'ISSUED FOR CONSTRUCTION'.
12. ALL CONSTRUCTION TO BE COMPLETED TO TOWN OF SAUGEEN SHORES ENGINEERING STANDARDS.

No.	DATE	DESCRIPTION	BY	APPD
5	AUG 27/26	ISSUED FOR TENDER	ID	TLB
4	JUNE 09/26	ISSUED FOR BUILDING PERMIT	ID	TLB
3	MAY 21/26	THIRD SUBMISSION	ID	TLB
2	MAR 10/26	SECOND SUBMISSION	ID	TLB
1	FEB 17/26	FIRST SUBMISSION	ID	TLB

REVISION / ISSUE

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Title:
PORT ELGIN ELEMENTARY SCHOOL
1107 WATERLOO STREET
TOWN OF SAUGEEN SHORES
MISCELLANEOUS DETAILS 3

Client: BLUEWATER DISTRICT SCHOOL BOARD

Design:	TLB	Scale:	NTS
Drawn:	ID	Approved:	
Checked:	TLB		
Date:	AUGUST 2026		Design Engineer

DRAWING No. 05107-C9

H:\BW05B\05107 – Port Elgin School\Drawings\Submissions\2026-08-27 Issued for Tender\05107 – Port Elgin School Details 2026-08-27.dwg

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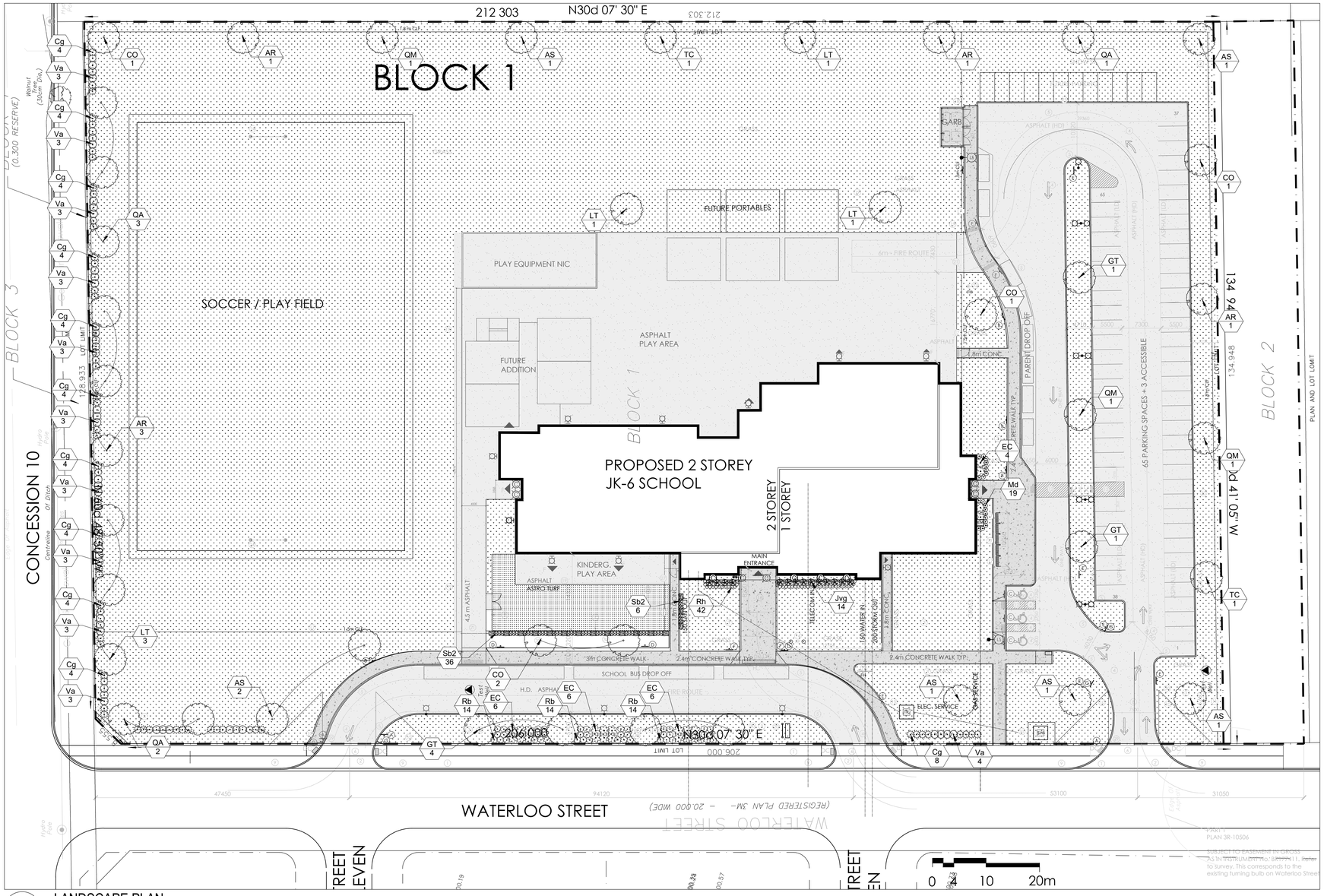


1 L-1 LANDSCAPE PLAN

1:400

PLANT_SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	NATIVE	DRGHT TOL	SALT TOL.
DECIDUOUS TREES								
AR	6	ACER RUBRUM	RED MAPLE	70MM CAL.	W.B.	X		
AS	7	ACER SACCHARUM	SUGAR MAPLE	70MM CAL.	W.B.	X	X	
CO	5	CELTIS OCCIDENTALIS	COMMON HACKBERRY	70MM CAL.	W.B.	X	X	X
GT	6	GLEDITSIA TRIACANTHOS	HONEY LOCUST	70MM CAL.	W.B.	X		X
LT	6	LIRIODENDRON TULIPIFERA	TULIP TREE	70MM CAL.	W.B.	X	X	
TC	2	TILIA CORDATA	LITTLELEAVED LINDEN	70MM CAL.	W.B.	X		
QM	3	QUERCUS MACROCARPA	BURR OAK	70MM CAL.	W.B.	X	X	X
QA	6	QUERCUS ALBA	WHITE OAK	70MM CAL.	W.B.	X		
	41	SUBTOTAL:						
DECIDUOUS SHRUBS								
EC	4	EUONYMUS ALATUS 'COMPACTUS'	COMPACT BURNING BUSH	3 GAL.	POT	X	X	
Cg	60	CORNUS RACEMOSA	GRAY DOGWOOD	3 GAL.	POT	X	X	
Rb	42	ROSA BLANDA	SMOOTH ROSE	3 GAL.	POT	X	X	
Va	40	VIBURNUM TRILOBUM	AMERICAN CRANBERRYBUSH	3 GAL.	POT	X	X	
	106	SUBTOTAL:						
EVERGREEN SHRUBS								
Jvg	14	JUNIPERUS VIRGINIANA 'GREY OWL'		1 GAL.	POT		X	
	14	SUBTOTAL:	GREY OWL JUNIPER					
GRASSES								
Cak	42	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	1 GAL.	POT			
	45	SUBTOTAL:						
PERENNIALS								
Md	19	MONARDA DIDYMA	SCARLET BEE BALM	1 GAL.	POT	X		
Rh	42	RUDBECKIA HIRTA	BLACK-EYED SUSAN	1 GAL.	POT	X	X	
	61	SUBTOTAL:						

LEGEND

- PROPERTY BOUNDARY
- DECIDUOUS TREE
- SHRUBS / PERENNIALS
- SOD
- Armour Stone

General Notes

1. Do not scale the drawings. All dimensions are in millimetres unless noted otherwise.
2. This drawing is to be read in conjunction with the survey prepared by the project architect and project engineer.
3. The contractor shall check and verify all existing and proposed grading and conditions on the project and immediately report any discrepancies to the consultant before proceeding with any work.
4. The contractor is to be aware of all existing and proposed services and utilities. The contractor is responsible for having all underground services and utility lines staked by each agency having jurisdiction prior to commencing work.
5. Final location of the street trees to be determined on site by the Landscape Architect based on final locations of utilities. All boulevard deciduous trees shall have rodent protection collars installed at initial planting.
6. This drawing is to be used for development approval only. For layout of all work refer to construction drawings.
7. Do not leave any holes open overnight.
8. Keep area outside construction zone clean and useable by others at all times. Contractor shall throughly clean areas surrounding the construction zone at the end of each work day.
9. Contractor to make good any and all damages outside of the development area that may occur as a result of construction at no extra cost.
10. This drawing is Copyright MHBC Planning, 2026.

Revision No.	Date	Issued / Revision	By
6.	August 27, 2026	Issued for IFT	PD
5.	June 11, 2026	Issued for SPA	PD
4.	May 22, 2026	Issued for SPA	PD
3.	March 24, 2026	Issued for SPA	PD
2.	February 19, 2026	Issued for SPA	PD
1.	February 05, 2026	Issued for Council Revision	PD

230-7050 WESTON ROAD
WOODBRIDGE, ON, L4L 8G7
P: 905 761 5588 F: 905 761 5589
WWW.MHBCPLAN.COM
PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
MHBC PLANNING

Stamp

ONTARIO ASSOCIATION OF LANDSCAPE ARCHITECTS — PHILIP G. DIXON — OALA — MEMBER

All drawings and specifications are instruments of service and will remain the property of MHBC Planning and must be returned at the completion of the work. This drawing shall not be used for construction purposes unless the drawings are marked 'Issued for Construction' and the professional seal is signed and dated by the landscape architect.

Date	July 2025
Drawn By	P.D.
Plan Scale	1:400
File No.	08143 HY
Checked By	P.D.
Other	

Project

PORT ELGIN
COMMUNITY SCHOOL
1107 WATERLOO ST
PORT ELGIN, ONTARIO

north

File Name

LANDSCAPE PLAN

Dwg No.

L-1

Z:\08143\HY - Port Elgin Community School\Landscape\2026.06.11\08143 HY - Landscape Plan - 2026-08-27.dwg

LANDSCAPE SPECIFICATIONS:

All sod shall conform to the standards of the Nursery Sod Growers Association of Ontario. All sodded areas shall be prepared with a minimum of 100mm of topsoil and sodded with #1 bluegrass - fescue nursery sod. On slopes, lay the turf pieces horizontally across the slope, starting at the bottom. For areas with a 2:1 slope or greater stake sod to hold in place with 1/2" x 1" x 12" pegs at two-foot spacings.

Unless soil tests suggest otherwise, fertilizer shall be applied as follows:
Sodded areas: 11-8-4 (11% nitrogen, 8% phosphorous, 4% potash) at 4.5 kg/m2.
Planting beds: 7-7-7 (7% nitrogen, 7% phosphorous, 7% potash) at 0.12 kg/m2, and bone meal at 0.58 kg/m2 of planting soil mixture as outlined below.

All planting beds are to be continuous, and excavated to a minimum depth of 450mm unless noted otherwise. Planting beds are to be filled with a soil mixture composed of six (6) parts sand loam, two (2) parts well rotted manure, and one (1) part peat moss, in addition to the fertilizers specified above.

All plant material shall conform to the standards of the Canadian Nursery Trades Association. All plant material is to be clay grown stock. Install all plant material as shown on the planting plan and details. Use only viable nursery stock grown in strict accordance with proper horticultural practices which is free from damage, pests, and disease.

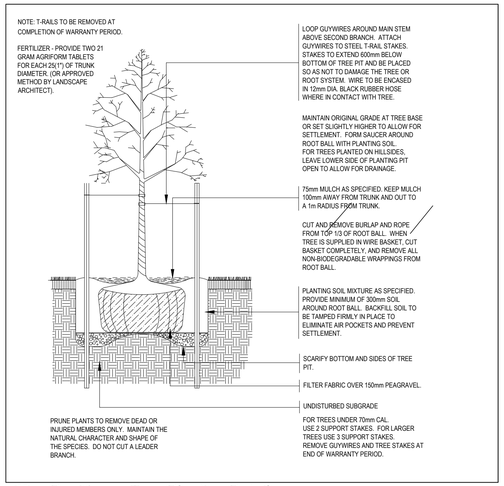
All beds are to be covered with a 75mm depth of clean, shredded pine bark mulch by Gro-Bark or approved equal unless noted otherwise. Guying and staking of trees shall conform to the planting details. Wrap all deciduous trees as per the specifications of the Ontario Landscape Contractors Association.

The contractor will observe proper maintenance procedures for all newly constructed landscape work as per Section 1E (Maintenance Work) of Landscape Ontario's specifications. Unless otherwise noted, this will apply during the construction period only. The contractor shall maintain all planting and sodding until final acceptance is granted by the Landscape Architect.

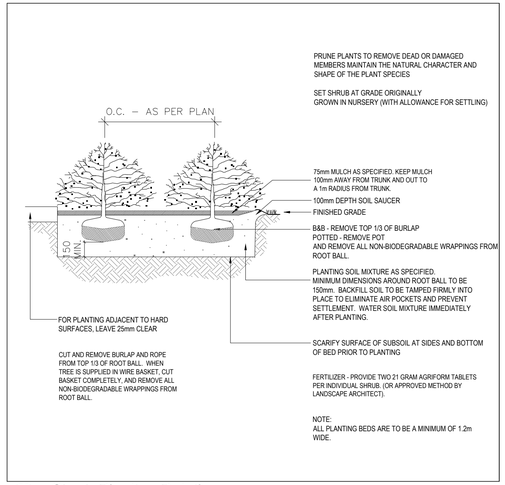
The contractor will be responsible for the protection of all plant material from damages resulting from winter conditions as well as rodents during the warranty period. Apply "Skoot" rodent deterrent formula (or approved equal) to all coniferous trees and all shrubs in late October as per manufacturer's directions.

The contractor shall provide a full one year guarantee (or two years if required by the municipality or owner) on all landscape works, beginning on the date that final acceptance is granted by the Landscape Architect.

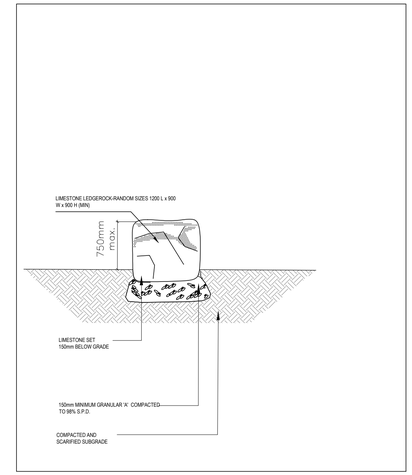
1 L2 Landscape Specifications
n.t.s.



2 L2 Deciduous Tree Planting Detail
n.t.s.



3 L2 Shrub Planting Detail
n.t.s.



4 L2 Armour Stone
NTS

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Date	July 2025
Drawn By	P.D.
Plan Scale	N.T.S
File No.	08143 HY
Checked By	P.D.
Other	

Project

PORT ELGIN
COMMUNITY SCHOOL
1107 WATERLOO ST
PORT ELGIN, ONTARIO

north

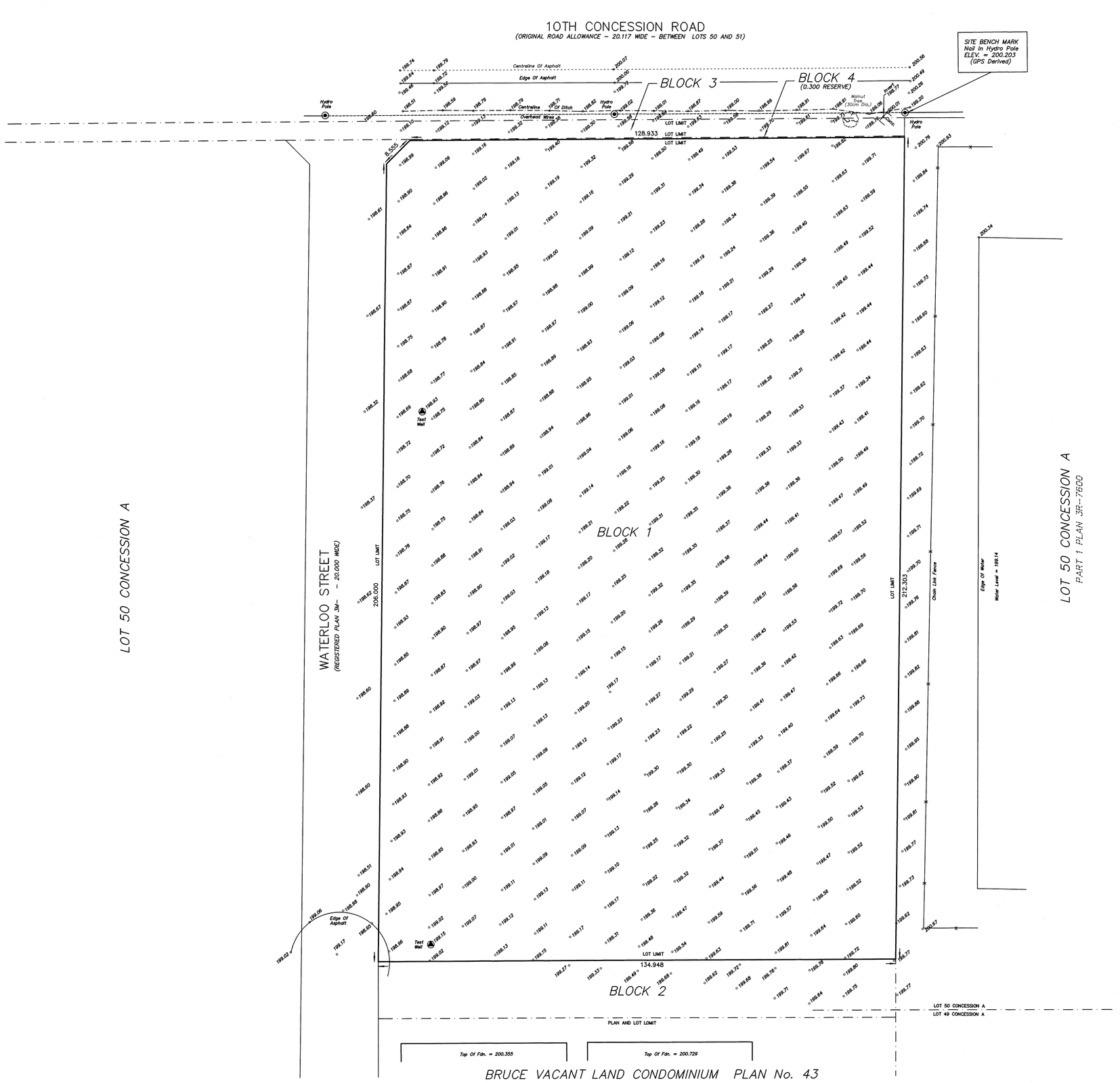
File Name

LANDSCAPE DETAILS

Dwg No.

L-2

Z:\08143\HY – Port Elgin Community School\Landscape\2026.08.11\08143 HY – Landscape Plan – 2026-08-27.dwg



TOPOGRAPHIC SKETCH
PROPOSED BLOCK 1
WATERLOO STREET
SCALE 1:500
0 10 30 50
Metric
2025
D. CULBERT LTD.
ONTARIO LAND SURVEYOR

NOTES AND LEGEND

198.00 DENOTES EXISTING SPOT ELEVATION (GPS DERIVED)
—o— DENOTES DIRECTION OF SURFACE WATER FLOW

TOTAL LOT AREA = 2.86 Ha.

THIS SKETCH SHOWS PART OF
LOT 50 CONCESSION A
BEING ALL OF PROPOSED BLOCK 1
REGISTERED PLAN 3M–
GEOGRAPHIC TOWNSHIP OF SAUGEEN
TOWN OF SAUGEEN SHORES
COUNTY OF BRUCE

CAUTION

(A) THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE USED EXCEPT FOR THE PURPOSE INDICATED IN THE TITLE BLOCK
(B) THIS SKETCH IS PROTECTED BY COPYRIGHT ©

THE DIMENSIONS SHOWN ARE FROM A PLAN BY D. CULBERT LTD., O.L.S. PLAN 8–GL–1719

METRIC: DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

THIS SKETCH IS AN ORIGINAL IF EMBOSSED BY THE SURVEYOR'S SEAL (OR CERTIFIED IN AN ELECTRONIC VERSION)

DATE: DEECEMBER 9, 2025

D. CULBERT LTD.
ONTARIO LAND SURVEYOR
GODERICH, ONTARIO PHONE: 519–524–5321
DCL LAND SURVEYOR

THIS SKETCH WAS PREPARED FOR BLUEWATER DISTRICT SCHOOL BOARD

DRAWN BY: BDCS	DIGITAL FILE: SG259701	PLAN No: 8–GL–1748
CHECKED BY: DAC	FILE No: SAU–LR–49–4	

PLAN OF SUBDIVISION
OF PART OF
LOTS 49 and 50, LAKE RANGE OR CONCESSION A SAUGEEN
(GEOGRAPHIC TOWNSHIP OF SAUGEEN)
TOWN OF SAUGEEN SHORES
COUNTY OF BRUCE

SCALE 1:1250

0 5 10 15 20 25 50 75 METRES

D. CULBERT LTD.
ONTARIO LAND SURVEYORS

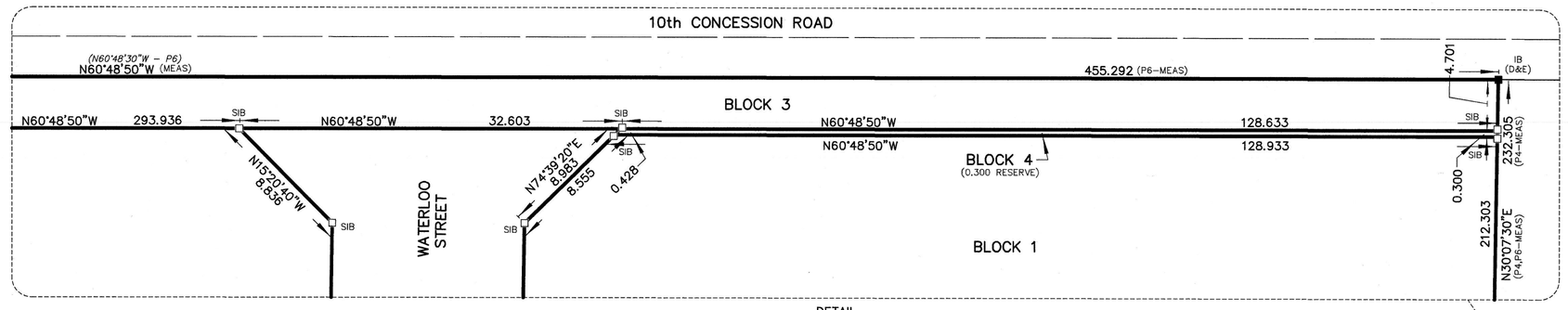
METRIC:
DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

PLAN 3M–

I CERTIFY THAT THIS PLAN IS REGISTERED IN THE LAND REGISTRY OFFICE FOR THE LAND TITLES DIVISION OF BRUCE (No. 3) AT _____ O'CLOCK ON THE _____ DAY OF _____, 2025 AND ENTERED IN THE REGISTER(S) FOR P.I.N. 33268–2185(LT) AND THE REQUIRED CONSENTS ARE REGISTERED AS PLAN DOCUMENT No. _____ .

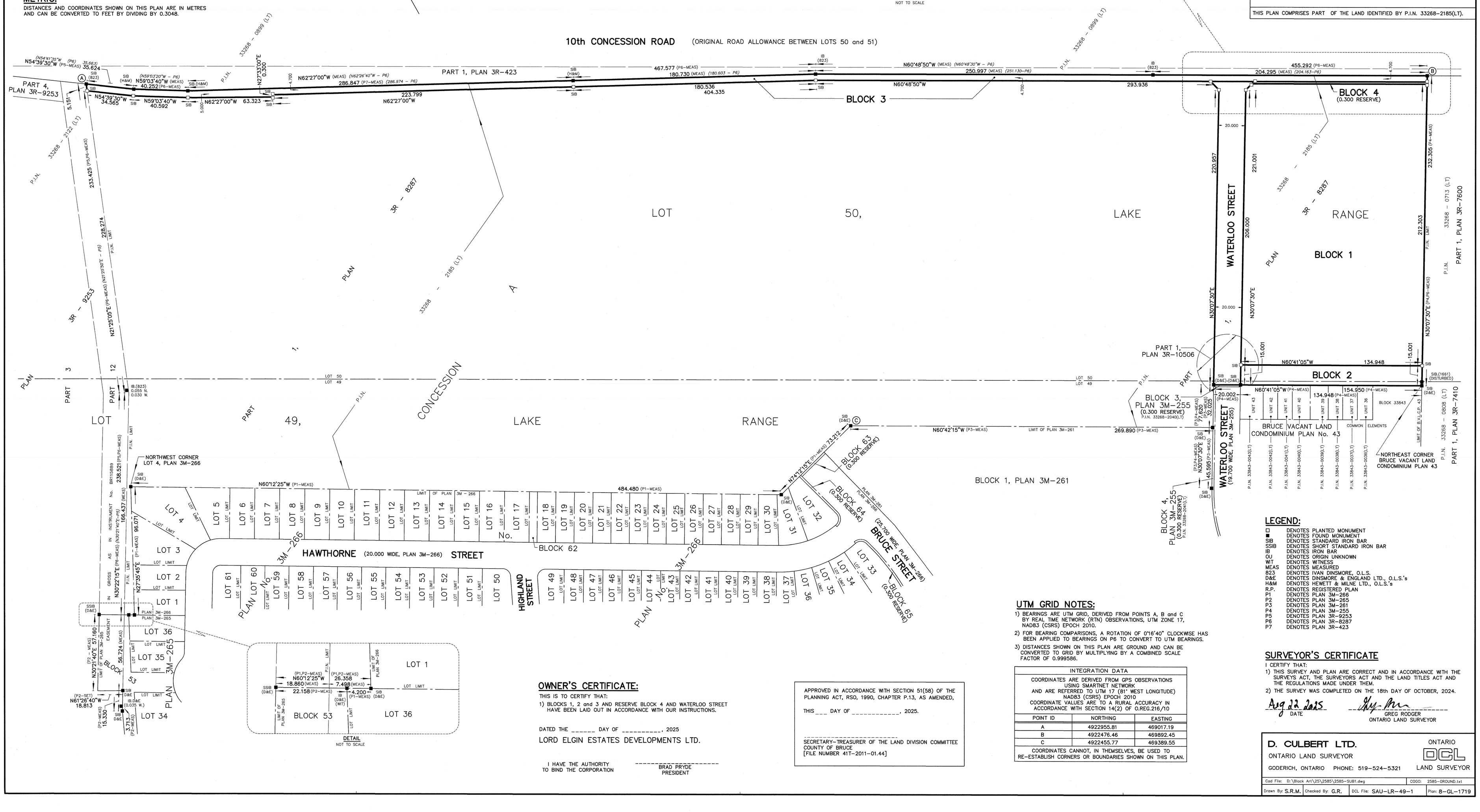
_____
REPRESENTATIVE FOR THE LAND REGISTRAR FOR THE LAND TITLES DIVISION OF BRUCE (No. 3)

THIS PLAN COMPRISES PART OF THE LAND IDENTIFIED BY P.I.N. 33268–2185(LT).



DETAIL
NOT TO SCALE

10th CONCESSION ROAD (ORIGINAL ROAD ALLOWANCE BETWEEN LOTS 50 and 51)



DETAIL
NOT TO SCALE

LEGEND:

□	DENOTES PLANTED MONUMENT
■	DENOTES FOUND MONUMENT
SIB	DENOTES STANDARD IRON BAR
SSIB	DENOTES SHORT STANDARD IRON BAR
IB	DENOTES IRON BAR
OU	DENOTES ORIGIN UNKNOWN
WIT	DENOTES WITNESS
MEAS	DENOTES MEASURED
823	DENOTES IVAN DINSMORE, O.L.S.
D&E	DENOTES DINSMORE & ENGLAND LTD., O.L.S.'s
H&M	DENOTES HEWETT & MILNE LTD., O.L.S.'s
R.P.	DENOTES REGISTERED PLAN
P1	DENOTES PLAN 3M–266
P2	DENOTES PLAN 3M–265
P3	DENOTES PLAN 3M–261
P4	DENOTES PLAN 3M–255
P5	DENOTES PLAN 3R–9253
P6	DENOTES PLAN 3R–8287
P7	DENOTES PLAN 3R–423

OWNER'S CERTIFICATE:

THIS IS TO CERTIFY THAT:
1) BLOCKS 1, 2 and 3 AND RESERVE BLOCK 4 AND WATERLOO STREET HAVE BEEN LAID OUT IN ACCORDANCE WITH OUR INSTRUCTIONS.

DATED THE _____ DAY OF _____, 2025

LORD ELGIN ESTATES DEVELOPMENTS LTD.

I HAVE THE AUTHORITY TO BIND THE CORPORATION

_____
BRAD PRYDE
PRESIDENT

APPROVED IN ACCORDANCE WITH SECTION 51(58) OF THE PLANNING ACT, RSO, 1990, CHAPTER P.13, AS AMENDED,

THIS ___ DAY OF _____, 2025.

_____
SECRETARY–TREASURER OF THE LAND DIVISION COMMITTEE COUNTY OF BRUCE
[FILE NUMBER 41T–2011–01.44]

UTM GRID NOTES:

1) BEARINGS ARE UTM GRID, DERIVED FROM POINTS A, B and C BY REAL TIME NETWORK (RTN) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) EPOCH 2010.
2) FOR BEARING COMPARISONS, A ROTATION OF 0°16'40" CLOCKWISE HAS BEEN APPLIED TO BEARINGS ON P6 TO CONVERT TO UTM BEARINGS.
3) DISTANCES SHOWN ON THIS PLAN ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.999586.

INTEGRATION DATA		
COORDINATES ARE DERIVED FROM GPS OBSERVATIONS USING SMARTNET NETWORK AND ARE REFERRED TO UTM 17 (81° WEST LONGITUDE) NAD83 (CSRS) EPOCH 2010 COORDINATE VALUES ARE TO A RURAL ACCURACY IN ACCORDANCE WITH SECTION 14(2) OF O.REG.216/10		
POINT ID	NORTHING	EASTING
A	4922955.81	469017.19
B	4922476.46	469892.45
C	4922455.77	469389.55
COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE–ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.		

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
1) THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
2) THE SURVEY WAS COMPLETED ON THE 18th DAY OF OCTOBER, 2024.

Aug 22 2025
DATE

GREG RODGER
ONTARIO LAND SURVEYOR

D. CULBERT LTD.
ONTARIO LAND SURVEYOR
GODERICH, ONTARIO PHONE: 519–524–5321
ONTARIO DCL LAND SURVEYOR

Cad File: D:\Block Art\25\2585\2585–SUB1.dwg		COGO:	2585–GROUND.txt
Drawn By: S.R.M.	Checked By: G.R.	DCL File: SAU–LR–49–1	Plan: 8–GL–1719