CHANDOS

www.chandos.com • 9604 20 Ave NW, Edmonton, Alta.,• Canada • Tel: 780.436.8617 • Fax: 780.436.1797

# TP2 ADDENDUM # (5) Five

| | |
|---|---|
| **Project:** | **Drayton Valley Brazeau Aquatic Centre** |
| **Tender Package:** | **TP2** |
| **Issued By:** | **Harry Hanson** |
| **Date Issued:** | **May 31, 2021** |
| **Tender Closing:** | **June 2, 2021** |

This Addendum forms part of the contract documents and is to be read, interpreted, and coordinated with all other parts. The cost of all contained herein is to be included in the contract sum. The following revisions supersede the information contained in the original drawings and specifications and previous instructions to the extent referenced and shall become part thereof. Acknowledge receipt of this Addendum by inserting its number and date on the Bid Form. Failure to do so may subject bidder to disqualification.

**ITEM NO. DESCRIPTION**

1. Please see the attached Architectural Addendum #3.
2. Please see the attached Architectural Addendum #4.

**END OF ADDENDUM**

Group2
Architecture
Interior Design

# Addendum No. 03
## DRAYTON VALLEY BRAZEAU AQUATIC CENTRE

May 28, 2021
File No. 19046

Group2
Architecture Interior Design Ltd.
900-10150 100th Street NW
Edmonton AB T5J 0P6
T +1 780 447 2990
general@group2.ca

This addendum forms part of, and will be included with, bidding documents for this project. No consideration will be given to requests for extra costs as a result of contractor being unfamiliar with this addendum. Acknowledge receipt of addendum in space provided in submitted tender.

## 1. ARCHITECTURAL

### 1.1 Specifications

.1 REPLACE Section 07 42 13 entirely with the enclosed Spec Section 07 42 13 (7 pages)

.2 REPLACE Section 08 80 50 entirely with the enclosed Spec Section 08 80 50 (14 pages)

.3 REPLACE Section 09 99 00 entirely with the enclosed Spec Section 09 99 00 (6 pages)

.4 REPLACE Section 10 51 13 entirely with the enclosed Spec Section 10 51 13 (4 pages)

### 1.2 Architectural drawings (8 SHEETS)

.1 A004 – Curtainwall & Kalwall Elevations

.1 **REVISED:** GLAZING TYPES AND NOTES

.2 A203 – Roof Plan

.1 **REVISED:** PARAPET SCHEDULE

.3 A209 – Enlarged Floor Plans & Elevations

.1 **CLARIFICATION:** Models provided for WA7, WA10, WA11

.4 A301 – Reflected Ceiling Plans

.1 **REVISED:** CEILING MOUNTED ACOUSTIC PANELS QUANTITY UPDATED

.5 A401 – Exterior Elevations

.1 **CLARIFICATION**: MS2 COLOUR UPDATED

.6 A512 – Wall Sections

.1 **REVISED**: Section 17

.7 A612 – Section Detail

.1 **REVISED**: Detail 25

.8 A803 – Millwork Elevations & Sections

.1 – **CLARIFICATION**: DETAILS 6 & 7 – FINISH UPDATES

Group2
Architecture
Interior Design

# Addendum No. 03
## DRAYTON VALLEY BRAZEAU AQUATIC CENTRE

## 2. CLARIFICATIONS

1. **Question:** Rm.117 Natatorium; Rm. 103 Lobby: Item: 2.2.2.6 "Panels to be installed…100 to 150mm below deck."A501 Sections; A216 Elevations: Plans clearly depict the Clouds suspended over 2000mm. below the deck. What is the final mounting postion to be?
    a. **Response:** Items shown suspended in A501 and A216 are light fixtures. Install acoustic panels as specified.
2. **Queston**: Item 2.2.2.5 " Basis…Euromat White…" Euromat is a painted fibreglass scrim applied to the panel face with a foil backer. Is this the intended finish for an aquatic environment as opposed to a vinyl or polyethylene facing?
    a. **Response:** The specified product is Euromat White. Alternates may be considered if appropriate documentation is provided explicitly demonstrating the product meets or exceeds the specifications.
3. **Question**: What is the component of SG-C? Section 08 80 50 Show only 2 type of Sealed Units TYPE SG-A AND TYPE SG-B. A004 – Curtain wall and Kalwall Elevation Shows SG-C
    a. **Response**: Refer to revised Section 08 80 50
4. **Question**: What gauge of metal cladding is required? Division 07 42 13 calls for 22 gauge, while Division 09 99 00 calls for 26 and 28 gauge.
    a. **Response**: Refer to Division 07 42 13.
5. **Question**: What finish of 7/8" Corrugated is required? The drawings call for Carbon, while Division 09 99 00 calls for Charcoal.
    a. **Response:** Charcoal
6. **Question**: Division 09 99 00 calls for Vicwest Prestige as the standing seam profile, however Division 07 42 13 calls for a snap cap, which Prestige does not have. Please confirm that the Prestige profile is what the Architect is looking for.
    a. **Response**: Prestige Profile is correct.
7. **Question:** WASHROOM ACCESSORIES (Section 10 28 14) No models were provided. Please provide models if available, or confirm that we are to suggest product for this project. Specification refers to drawings however no models are listed.
    a. **Response**: Refer to revised drawing A209. Suggest for items where no model is specified.
8. **Question:** LOCKERS (Section 10 51 13) Please confirm only WA17 and WA18 benches are to be included in scope, and benches WA19, 20 and 21 are to be millwork.
    a. **Respone:** Only WA17 and WA18 benches are to be included in scope.
9. **Question:** Item 1.1.1 calls for solid phenolic lockers, however specification details indicate these are solid plastic (specified Tufftec by Scranton is a plastic locker and this manufacturer does not make a phenolic locker). Please confirm material requirement for lockers.
    a. **Response**: Refer to revised section 10 51 13.
10. **Question**: Addendum 1 requests an option for metal lockers, and states that the specified product is phenolic. Please confirm this is an error as the specification calls for plastic, not phenolic. Is an option for phenolic required as well, making this 3 options?
    a. **Response**: No option for phenolic required.
11. **Question:** TOILET PARTITIONS (Section 10 21 13) As there is a discrepancy in material for the lockers, can you please confirm that it is phenolic that is required for alternate pricing in addendum 1, or if that should have read solid plastic?
    a. **Response:** Solid plastic is required.
12. **Question**: What is the life guard countertop finish as per elevations 6 & 7/A803?
    a. **Response**: PL-3 as per section H/A803. Refer to revised drawings 6 & 7/A803.

Group2
Architecture
Interior Design

# Addendum No. 03
## DRAYTON VALLEY BRAZEAU AQUATIC CENTRE

13. **Question:** Metal grommet Richelieu #20692710 is not available. Is there an alternate the designer will accept?
    a. **Response:** Substitute with a minimum 67mm diameter grommet in black.
14. **Question:** In the Natatorium, the reflected ceiling plan shows 111 ceiling mounted acoustic panels that are 4'x8'. However, the RCP legend on this drawing states that there should be 121 panels of this size in the Natatorium. Please confirm the quantity of 4'x8' panels required in the Natatorium.
    a. **Response:** Refer to revised drawing A301.
15. **Question:** In the Lobby, the reflected ceiling plan shows 14 ceiling mounted acoustic panels that are 4'x8' in size. However, the RCP legend states that there should be 13 panels in the 4'x4' size in the lobby. Please confirm the quantity and size of panels required in the Lobby.
    a. **Response:** Refer to revised drawing A301.
16. **Question:** Drawing E201 shows a light suspended directly below one of the acoustic panels. The location of this is between gridlines 2 and 3 just below gridline D. Please confirm how this conflict should be resolved.
    a. Response: Acoustic Ceiling Panel removed. Refer to revised drawing A301.

## 3. REQUESTS FOR ALTERNATES

1. **Request:** I am just wondering if we can use Oldcastle Arctic 6500 Anodized aluminum frame? This is similar to Kawneer 1600UT and Alumicor 2600 Series.
    a. **Response:** Oldcastle Arctic 6500 Anodized aluminum frame appears to be an acceptable alternate.

Total Attached Pages: 39

**End of Addendum**

## Part 1 General

### 1.1 RELATED REQUIREMENTS

.1 Section 05 50 00 – Metal Fabrications

.2 Section 07 62 00 – Sheet Metal Flashing and Trim

.3 Section 07 92 00 – Sealants

.4 Section 09 99 00 – Finish Schedule

### 1.2 REFERENCES

.1 American Association Inc. (AAI)

.1 DAF-45-03, Designation System for Aluminum Finishes.

.2 American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

.3 American National Standards Institute (ANSI)

.1 ANSI/ASME B18.6.3-2013, Machine Screws, Tapping Screws, and Metallic Drive Screws (Inch Series).

.4 American Society for Testing and Materials International, (ASTM)

.1 ASTM A653/A653M-19, Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

.2 ASTM A792/A792M-10(2015), Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.

.3 ASTM B209-14, Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate

.4 ASTM D523-14(2018), Standard Test Method for Specular Gloss.

.5 ASTM D822/D822M-13(2018), Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings.

.6 ASTM D2369-10 (2015)e1, Standard Test Method for Volatile Content of Coatings.

.7 ASTM D2832-92(2016), Standard Guide for Determining Volatile and Nonvolatile Content of Paint and Related Coatings.

.8 ASTM F1667-18a, Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.

.5 Canadian General Standards Board (CGSB)

.1 CAN/CGSB-51.32-M77, Sheathing, Membrane, Breather Type.

.6 Canadian Standards Association (CSA International)

.1 CSA S136-12, North American Specification for the Design of Cold-Formed Steel Structural Members, Includes Update No. 1 (2014) Update No. 2 (2015) Update No. 3 (2015).

.2 CSA S136.1-12, Commentary on North American Specification for the Design of Cold-Formed Steel Structural Members.

.7 Environmental Choice Program (ECP)

.1 UL 2761, (formerly CCD-045) Sealants and Caulking Compounds.

.2 UL 2762, (formerly CCD-046) Adhesives.

## 1.3 ADMINISTRATIVE REQUIREMENTS

.1 Convene pre-installation meeting one week prior to beginning work of this Section and on-site installation, with Contractor, Consultant, installer, manufacturer's representative to:

.1 Verify project requirements.

.2 Review installation and substrate conditions.

.3 Co-ordination with other building subtrades.

.4 Review manufacturer's installation instructions and warranty requirements.

.2 Manufacturer's representative shall also provide frequent inspection visits during the course of work of this Section to assure quality and competence of membrane installation and panel alignment.

## 1.4 ACTION SUBMITTALS / INFORMATIONALSUBMITTALS

.1 Submit product data in accordance with Section 01 33 00 – Submittal Procedures:

.1 Submit manufacturer's printed product literature, specifications and datasheet.

.2 Submit WHMIS MSDS - Material Safety Data Sheets acceptable to Labour Canada, and Health and Welfare Canada. Indicate VOC's:

.1 Caulking and sealant materials during application and curing.

.2 Finishing materials.

.3 Insulation adhesives.

.4 Paints.

.5 Isolation coatings.

.2 Submit shop drawings in accordance with Section 01 33 00 – Submittal Procedures:

.1 Indicate arrangement of cladding system including dimensions, wall openings, location of joints, profiles of inner and outer skin, types and locations of supports, fasteners, flashing, closures, compliance with design criteria and requirements of related work.

.3 Submit samples in accordance with Section 01 33 00 – Submittal Procedures:

.1 Submit duplicate 300 x 300 mm samples of wall system, representative of materials, finishes and colours.

.2 Prior to ordering materials, provide to consultant the following for verification purposes: three samples of colour of finish specified.

.4 Manufacturer's Instructions:

.1 Submit manufacturer's installation instructions.

.5 Manufacturers' Field Reports: Submit copies of manufacturers field reports.

## 1.5 QUALITY ASSURANCE

.1 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.

.2 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

.3 Installer Qualifications: Engage experienced installer, with a minimum of 5 years experience, who has completed systems similar in material, design, and extent to that indicated for Project and with record of successful performance.

.4 Mock-ups

.1 Construct mock-up in accordance with Section 01 45 00 – Quality Control.

.2 Construct a portion of one exterior wall in location agreed upon by Consultant to establish a standard of construction, workmanship, and appearance.

.3 Construct mock-up indicating relationship between wall panels, air spaces, air/vapour retarder membrane, windows, and doors.

.4 Do not continue with work of this Section until Consultant has approved mock-up.

## 1.6 DELIVERY, STORAGE, AND HANDLING

.1 Deliver and store materials in accordance with manufacturer's instructions.

.2 Protect panels during transportation, unloading, storing, and erecting to prevent bending, warping, twisting, and surface damage.

## 1.7 WASTE MANAGEMENT AND DISPOSAL

.1 Separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management and Disposal.

## 1.8 WARRANTY

.1 Manufacturers Warranty for Finishes: Twenty (20) years from date of Substantial Performance.

# Part 2 Products

## 2.1 MANUFACTURERS

.1 Acceptable Manufacturers: Subject to compliance with requirements specified in this Section and as established by the Basis-of-Design Materials, manufacturers offering products that may be incorporated into the Work include; but are not limited to, the following:

.1 Behlen Industries

.2 Gentek Building Products

.3 Igloo Erectors

.4 LKMe Products

.5 Longboard

.6 VicWest Steel

.7 Westform Metals

## 2.2 PERFORMANCE/DESIGN CRITERIA

.1 Design metal panel wall system in accordance with CSA S136.

.2 Design metal panel wall to provide for thermal movement of component materials caused by ambient temperature range of 60 degrees C without causing buckling, failure of joint seals, undue stress on fasteners or other detrimental effects.

.3 Include expansion joints to accommodate movement in wall system and between wall system and building structure, caused by structural movements, without permanent distortion, damage to infills, racking of joints, breakage of seals, or water penetration.

.4 Design members to withstand dead load and wind loads calculated in accordance with Alberta Building Code 2019 and applicable local regulations, to maximum allowable deflection of 1/180th of span.

.5 Provide for positive drainage of condensation occurring within wall construction and water entering at joints, to exterior face of wall in accordance with NRC "Rain Screen Principles".

.6 Provide minimum thermal resistance of RSI 2.1 W/m2K.

.7 Permeance through wall system not to exceed 1 ng/(Pa.s.$m^2$).

.8 Design wall system to accommodate specified erection tolerances of structure.

.9 Design wall system to allow for movement of air between exterior and interior side of metal cladding.

.10 Provide an effective air barrier, to prevent infiltration and/or exfiltration of air through wall assembly.

## 2.3 STEEL CLADDING MATERIALS

.1 Galvanized sheet steel cladding: Z275 galvanized sheet steel applied to both sides, commercial steel (CS), type A, grade 230 to ASTM A653/A653M and as follows:

.1 Nominal Core Thickness: 0.76 mm or thicker to meet design loads. Provide thicker material on garbage enclosure.

.2 Profile: as indicated in Section 09 99 00 – Finish Schedule

.3 Finish: as indicated in Section 09 99 00 – Finish Schedule

.2 Formed Metal Panels

.1 Metal Sheet: brake formed in twin-bend brake to reduce or eliminate differential stress in the sheet and to minimize handling. Profiles as shown on drawings, and fabricated from minimum 0.75 mm aluminum extrusions to ASTM B221, alloy 6063-T6 and/or 6061-T6.

.2 Tolerances

.1 Panel dimensions shall be such that there will be an allowance for field adjustment and thermal movement.

.2 Panel lines, breaks and curves shall be sharp, smooth and free from unnecessary warps or buckles.

.3 Panel surfaces shall be free of scratches or marks caused during fabrication.

.4 Ensure that entire project is manufactured from single coil run to ensure uniformity.

.5 If a directional (metallic) color is selected panel grain direction is maintained. Under no circumstances are panel blank sizes to be rotated even if material waste is increased (unless otherwise specified).

.6 Condensation: Fabricate panels for control of condensation, including vapor inclusion of seals and provisions for breathing, venting, weeping and draining.

.7 Length: single lengths as indicated on drawings, no joints allowed in vertical zones.

## 2.4 PREFINISHED STEEL SHEET

.1 Prefinished steel with factory applied silicone modified polyester.

.1 Class: F1S.

.2 Colour: as indicated in Section 09 99 00 – Finish Schedule.

.3 Specular gloss: 30 units +/-5 to ASTM D523.

.4 Coating thickness: not less than 25 micrometres.

.5 Resistance to accelerated weathering for chalk rating of 8, colour fade 5 units or less and erosion rate less than 20% to ASTM D822 as follows:

.1 Outdoor exposure period 1000 hours.

.2 Humidity resistance exposure period 1000 hours.

## 2.5 ACCESSORIES

.1 Thermal Spacers: low-conductivity, fibreglass thermal spacers as follows:

.1 Depth: 150 mm and as indicated on Drawings.

.2 Spacing: as indicated on Drawings or as required to suit conditions.

.3 Fasteners: as recommended by manufacturer in length to suit wall construction.

.4 Acceptable Materials:

.1 Cascadia Clip, by Cascadia Windows Ltd.

.2 ISO Clip, Northern Facades

.3 T150 TCLIP, Engineered Assemblies

.2 Sub-girts: minimum 1.21 mm base metal thickness, galvanized steel to ASTM A653/A653M, grade 230 with Z275 zinc coating; profiled to accept insulation exterior sheet with structural attachment to building frame. Exposed materials of wall assembly to match panels.

.3 ~~Snap Cap~~ (Snap Cap not required – Addendum #3)

~~.1 Provide 25 mm high snap caps for full length of the wall panel and retained by panel clips, fabricated from Z275 galvanized (zinc coated) sheet steel conforming to ASTM A653M structural quality Grade 230 having a nominal core thickness 0.76 mm. Finish and colour to match wall sheet.~~

.4 Fasteners: Manufacturer's standard to suit design loads and applications.

.1 Screws to ANSI B18.6.4. Purpose made aluminum alloy; exposed parts to match finish of exterior sheet.

.5 Sealant: as indicated in Section 07 92 00 and as recommended by manufacturer. Colour of exposed sealant to match adjacent panel.

.6 Isolation coating: bituminous paint.

.7 Exterior corners: of same profile, material and finish as adjacent cladding material, shop cut and brake formed to required angle, concealed corner brace, mechanically fasten connections with painted head to match cladding.

.8 Exposed joint (perpendicular to profile): ends of cladding sheet shop cut clean and square, backed with tight fitting filler lapping back of joint, exposed components colour matched to cladding.

.9 Accessories: cap flashings, drip flashings, internal corner flashings, copings and closures for head, jamb, sill and corners, of same material, thickness and finish as exterior cladding, brake formed to shape.

.10 Expansion joints: as recommended by Manufacturers Instructions.

## Part 3 Execution

### 3.1 MANUFACTURER'S INSTRUCTIONS

.1 Compliance: Comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

### 3.2 PREPARATION

.1 Protect metal surfaces in contact with concrete, masonry mortar, plaster or other cementitious surface with isolation coating.

.2 Touch up building framing members with primer as required.

### 3.3 INSTALLATION

.1 Install continuous starter strips, inside and outside corners, edgings, soffit, drip, cap, sill and window/door opening flashings as indicated.

.2 Install outside corners, fillers and closure strips with carefully formed and profiled work.

.3 Maintain joints in exterior cladding, true to line, tight fitting, hairline joints.

.4 Attach components in manner not restricting thermal movement.

.5 Caulk junctions with adjoining work with sealant. Do work in accordance with Section 07 92 00 - Joint Sealing.

.6 Control/ Expansion Joints

.1 Construct control and expansion joints as indicated.

.2 Use cover sheets, of brake formed profile, of same material and finish as adjacent material.

.3 Use mechanical fasteners to secure sheet materials.

.4 Assemble and secure wall system to structural frame so stresses on sealants are within manufacturers' recommended limits.

.7 Construction

.1 Installation Tolerances: Shim and align panels and cladding system within installed tolerance of 6 mm in 6100 mm on level, plumb, and location lines as

indicated, and within 3 mm offset of adjoining faces and of alignment of matching profiles.

## 3.4 FIELD QUALITY CONTROL

.1 Have manufacturer of products supplied under this Section review Work involved in handling, installation/application, protection and cleaning of its products, and submit written reports in acceptable format to verify compliance of Work with Contract.

.2 Manufacturer's field services: Provide manufacturer's field services consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer's instructions.

.3 Schedule site visits to review Work at stages listed:

.1 After delivery and storage of products, and when preparatory Work on which Work of this Section depends is complete, but before installation begins.

.2 Twice during progress of Work at 25% and 60% complete.

.3 Upon completion of Work, after cleaning is carried out.

.4 Submit reports to Consultant within three days of review and submit.

## 3.5 CLEANING

.1 Perform cleaning after installation to remove construction and accumulated environmental dirt.

.2 Wash down exposed interior and exterior surfaces using solution of mild domestic detergent in warm water, applied with soft clean wiping cloths. Wipe interior surfaces clean as part of final clean-up.

.3 Remove excess sealant with recommended solvent.

.4 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

**END OF SECTION**

## Part 1 General

### 1.1 SECTION INCLUDES

.1 Glass and glazing for sections referencing this section for Products and installation.

.2 Mirrors for sections referencing this section for Products and installation.

### 1.2 RELATED SECTIONS

.1 Section 06 41 11: Architectural Cabinetwork.

.2 Section 07 28 00: Air Barriers / Vapour Retarders.

.3 Section 07 92 00: Joint Sealants: Sealant and back-up material.

.4 Section 08 13 13: Hollow Metal Doors: Glazed doors.

.5 Section 08 41 13: Aluminum Framed Entrances and Storefronts.

.6 Section 08 44 13: Glazed Aluminum Curtain Walls.

.7 Section 08 45 23: Translucent Panel Wall and Roof Assemblies.

.8 Section 10 28 14: Toilet and Bath Accessories: Mirrors.

### 1.3 REFERENCES

.1 All Standards listed below are to be the most current edition at the time of tender regardless of any older dates that may be listed herein unless specifically noted otherwise. Withdrawn or obsolete standards may still apply unless it has been replaced with a different Standard in which case the new Standard shall apply. Report any withdrawn Standards to the Consultant for instructions.

.2 ANSI Z97.1 -2015: Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test

.3 CAN/CGSB 2.55 -97: Glass Cleaner

.4 CAN/CGSB-12.1 -2017: Safety Glazing.

.5 CAN/CGSB-12.3 -M91(R2017): Flat, Clear Float Glass.

.6 CAN/CGSB-12.4 -M91(R2017): Glass Heat Absorbing.

.7 CAN/CGSB-12.8 -2017: Insulating Glass Units.

.8 CSA A440 -17: NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights

.9 CAN4-S104/UL 10b, Fire Tests of Door Assemblies

.10 ASTM C542 -05(2017): Standard Specification for Lock-Strip Gaskets

.11 ASTM C864 -05(2015): Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers

.12 ASTM C920 -18: Standard Specification for Elastomeric Joint Sealants

.13 ASTM C1036 -16: Standard Specification for Flat Glass.

.14 ASTM C1048 -12e1: Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass

.15 ASTM C1172 -14: Standard Specification for Laminated Architectural Flat Glass

.16 ASTM C1265 -17: Standard Test Method for Determining the Tensile Properties of an Insulating Glass Edge Seal for Structural Glazing Applications

.17 ASTM C1279 -13: Standard Test Method for Non-Destructive Photoelastic Measurement of Edge and Surface Stresses in Annealed, Heat-Strengthened, and Fully Tempered Flat Glass.

.18 ASTM C1503 -18: Standard Specification for Silvered Flat Glass Mirror.

.19 ASTM D412 -16: Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension

.20 ASTM D1149 -18: Standard Test Methods for Rubber Deterioration-Cracking in an Ozone Controlled Environment

.21 ASTM E84 -18a: Standard Test Method for Surface Burning Characteristics of Building Materials

.22 ASTM E119 -18a: Standard Test Methods for Fire Tests of Building Construction and Materials

.23 ASTM E283 -04(2012): Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen

.24 ASTM E330/E330M -14: Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference

.25 ASTM E546 -14: Standard Test Method for Frost/Dew Point of Sealed Insulating Glass Units

.26 ASTM E998 -12: Standard Test Method for Structural Performance of Glass in Windows, Curtain Walls, and Doors Under the Influence of Uniform Static Loads by Non-destructive Method.

.27 ASTM E1300 -16: Standard Practice for Determining Load Resistance of Glass in Buildings.

.28 ASTM E2010-01: Standard Test Method for Positive Pressure Fire Tests of Window Assemblies.

.29 ASTM E2188 -10: Standard Test Method for Insulating Glass Unit Performance.

.30 ASTM E2190 -10: Standard Specification for Insulating Glass Unit Performance and Evaluation.

.31 ASTM E2353 -16: Standard Test Methods for Performance of Glass in Permanent Glass Railing Systems, Guards, and Balustrades

.32 ASTM E2358 -17: Standard Specification for the Performance of Glass in Permanent Glass Railing Systems, Guards, and Balustrades

.33 ASTM E2431 -12: Standard Practice for Determining the Resistance of Single Glazed Annealed Architectural Flat Glass to Thermal Loadings.

.34 GANA (Glass Association of North America)

.1 GANA Glazing Manual (50th Anniversary Edition)

.2 GANA Guide to Architectural Glass (2010 Edition)

.3 GANA Laminated Glazing Reference Manual (2009 Edition)

.4 GANA/PGC International Protective Glazing Manual (2010 Edition)

.5 GANA Sealant Manual (2008 Edition)

.6 GANA Fully Tempered Heavy Glass Door and Entrance System Design Guide (1999 Edition)

.35 IGMAC (Insulating Glass Manufacturers Association of Canada) - Certification Program for the CGSB 12.8 Standard.

.36 NFPA 80-2019, Standard for Fire Doors and Other Opening Protectives.

.37 NFPA 257-2017 – Fire Tests of Window and Glass Block Assemblies

.38 ULC CAN4-S106-M80(R1985): Fire Tests of Window Assemblies

.39 Canadian Glass Association (CGA) - Glazing Specification Manual 2010 National Version

.40 Glass & Architectural Metals Association (GAMA)

.41 If requested by the Consultant provide a PDF digital copy of any or all of the Standards above as selected by the Consultant at no additional cost.

## 1.4 PERFORMANCE REQUIREMENTS

.1 Provide glass and glazing materials for continuity of building enclosure vapour retarder and air barrier:

.1 In conjunction with materials described in Section 07 28 00 and 07 92 00.

.2 To utilize the inner pane of multiple pane sealed units for the continuity of the air barrier and vapour retarder seal.

.3 To maintain a continuous air barrier and vapour retarder throughout the glazed assembly from glass pane to heel bead of glazing sealant.

.2 Size glass to withstand dead loads and positive and negative live loads acting normal to plane of glass as calculated in accordance with the National Building Code, Alberta Edition 2019, as measured in accordance with ASTM E330.

.3 Where glass extends from 1070 mm to floor, design lateral loads, in addition to other load requirements, in accordance with applicable codes.

.4 Limit glass deflection to 1/200 or flexure limit of glass with full recovery of glazing materials, whichever is less.

.5 Provide tempered, laminated, laminated-tempered glass and related fittings and hardware in doors, side lites, screens, storefronts, glazed curtain walls, and glazed guard rails accordance with applicable codes and as indicated or scheduled.

.1 Unless otherwise specified or indicated, use tempered glass where sill of glass is less than 300 mm above finished floor.

.6 Sealed Insulating Glass Units: Provide units free of the following characteristics:

.1 Appearance of condensation between panes.

.2 Obstruction of vision at unit perimeter.

.3 More than 10 percent measurable deterioration of thermal transmission or shading coefficient values.

.4 Chipping, cracking, or breakage of glass panes occurring due to manufacturing defects or under specified service conditions.

.5 Migration of edge spacer.

## 1.5 SUBMITTALS FOR REVIEW

.1 Section 01 33 00: Submission procedures.

.2 Product Data on Glass and Plastic Types: Provide structural, physical and environmental characteristics, size limitations, special handling or installation requirements.

.3 Product Data on Glazing Compounds: Provide chemical, functional, and environmental characteristics, limitations, special application requirements. Identify available colours.

.4 Certificates of compliance from glass and glazing materials manufacturers attesting that glass and glazing materials furnished for project comply with requirements. Separate certification will not be required for glazing materials bearing manufacturer's permanent label designating type and thickness of glass, provided labels represent a quality control program involving a recognized certification agency or independent testing laboratory acceptable to authority having jurisdiction.

.5 Product Test Listings: From UL indicating fire-rated glass complies with requirements, based on comprehensive testing of current product.

.6 Shop Drawings: For glass indicated to comply with performance requirements and design criteria.

.1 Clearly indicate glass types, configurations, thicknesses, translucent finishes, treatments, coatings, gaskets, hardware and accessories.

.2 Indicate forces applied to connections at structure and analysis data.

.3 Apply signature and sealed by a qualified professional engineer responsible for their preparation, and who is licensed in the Province where the Project is located.

.7 Samples:

.1 Submit two samples 200 x 200 mm in size, exampling each type of glass except clear single glass, insulating glass units and film covered glass specified.

.2 Glazing Accessory Samples: Samples of each type. For structural glazing sealants, install 300 mm length of sealant between two edges of representative glass samples.

.8 Glazing Schedule: List glass types and thicknesses for each size opening and location. Use same designations indicated or scheduled.

## 1.6 SUBMITTALS FOR INFORMATION

.1 Section 01 33 00: Submission procedures.

.2 Certificates: Certify that Products meet or exceed specified requirements.

.3 Manufacturer's Certificate: Certify that sealed insulated glass, meets or exceeds specified requirements.

## 1.7 QUALITY ASSURANCE

.1 Products of This Section: Manufactured to ISO 9000 certification requirements.

.2 Perform Work in accordance with Canadian Glass Association Glazing Systems Specification Manual, supplemented by GANA (Glass Association of North America) Glazing Manual, and GANA Laminated Glazing Reference Manual, for design and fabrication of glazing and installation methods.

.3 Perform Work in accordance with Insulating Glass Manufacturer's Association of Canada (IGMAC) Glazing Guidelines for Sealed Insulating Glass Units, including requirements for guaranteed service life for manufacture and installation of sealed insulating glass units.

.4 Manufacturer Qualifications for Insulating-Glass Units with Sputter-Coated, Low-E Coatings: A qualified insulating-glass manufacturer who is approved and certified by coated-glass manufacturer.

.5 Fire Protective Rated Glass: Each lite shall bear permanent, nonremovable label of ULC certifying it for use in tested and rated fire protective assemblies.

.6 Installer Qualifications: Company specializing in performing the work of this section with minimum five years continuous documented experience on projects of similar scope and size, approved by the manufacturer, and a member in good standing with the Provincial Glaziers Association.

.7 Labelling:

.1 Label glass including mirrors with manufacturer’s labels identifying glass type and thickness.

.2 Safety Glazing: Permanently mark glazing with certification label of the manufacturer. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.

.3 Insulating Glass Units: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of IGMAC. This article includes statements that require quality applicable to the whole section. If it is desirable or required for a manufacturer of a product to be ISO 9000/14000 certified, include such statement below.

## 1.8 PERFORMANCE REQUIREMENTS

.1 Fire-rated glass ceramic clear and wireless glazing material listed for use in non-impact safety-rated locations such as transoms and borrowed lites with fire rating requirements ranging from 20 to 90 minutes with required hose stream test.

## 1.9 MOCK-UP

.1 Section 01 45 00: Requirements for mock-up.

.2 Provide mock-up of sealed units to curtain wall assembly including glass and air barrier and vapour retarder seal.

.3 Locate where directed by Consultant.

.4 Approved mock-up may remain as part of the Work.

**1.10 PRE-INSTALLATION CONFERENCE**

.1 Section 01 31 00: Administrative Requirements.

.2 Convene minimum one week before starting Work of this section.

**1.11 ENVIRONMENTAL REQUIREMENTS**

.1 Section 01 61 00: Environmental conditions affecting storage and protection of Products on site.

.2 Do not install glazing when ambient temperature is less than 10 degrees C.

.3 Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

**1.12 DELIVERY, STORAGE, HANDLING AND PROTECTION**

.1 Section 01 61 00: Product Requirements

.2 Coordinate Work of this Section with Work of other Sections so as not to delay construction schedule.

.3 Deliver, store and handle all components to prevent damage.

.4 Provide secure, temporary, dry enclosed structure for storage of glass units.

.5 All individual cases of glass to be secured, blocked and braced to prevent falls.

.6 Replace any broken, scratched, or damaged materials at Contractor’s expense.

.7 Protect all exposed surfaces from stain, discolouration, corrosion, and other abuse.

.8 At completion of Work, remove and dispose of all protections, clean down all exposed aluminum surfaces, replace all damaged members, including members with damaged finishes.

**1.13 WARRANTY**

.1 Section 01 78 10: Warranties.

.2 Provide written warranty, stating that factory-sealed double –glazing units specified in this Section will be warranted against failure of seal of enclosed air space for period of ten (10) years from date of Certificate of Substantial Performance, and that any such defective units will be replaced, including labour and materials and making good of

adjacent glazing frame and adjacent surfaces or materials which may be damaged by such replacement of glazing defects.

.3 Submit letter stating that all glazing has been designed in accordance with the present "state of the art" design, and that design is warranted accordingly.

.4 Provide a ten-year warranty to include coverage for delamination of laminated glass and replacement of same.

.5 Provide a five (5) year warranty to include coverage for reflective coating on mirrors and replacement of same.

## Part 2 Products

### 2.1 MANUFACTURERS - FLAT GLASS MATERIALS

.1 Acceptable manufacturers offering functionally and aesthetically equivalent Products:

- .1 AFG
- .2 Guardian Industries
- .3 Pilkington
- .4 PPG
- .5 Unicel Architectural Corp
- .6 Pyran Platinum by Glassopolis
- .7 FireLite® as manufactured by Nippon Electric Glass Company, Ltd.,
- .8 Glassopolis Specialty Glass

.2 Substitutions: Refer to Section 01 62 00 – Product Exchange Procedures.

### 2.2 FLAT GLASS MATERIALS

.1 Float Glass (Type FG-A): To CAN/CGSB 12.3, clear, minimum 6 mm thick.

.2 Safety Glass (Type FG-B6): Clear; fully tempered; conforming to CAN/CGSB-12.1; minimum 6 mm thick; for use in windows and doors as noted.

.3 Safety Glass (Type FG-B10): Clear, fully tempered; conforming to CAN/CGSB-12.1; minimum 10 mm thick; for use as detailed.

.4 Safety Glass (Type FG-B13): Clear, fully tempered; conforming to CAN/CGSB-12.1; minimum 13 mm thick; for use as detailed

.5 Low E Glass (Type FG-G): Float type, heat strengthened, soft, sputtered coating on inner surface, PPG Solarban 60 or approved alternative. Minimum 6 mm thick; clear glass.

.6 Fire-protective safety-rated ceramic glass (Type FP-A): conforming to CAN4-S104/UL 10b, Fire Tests of Door Assemblies, and 10c/CAN4-S104/UL 9, Fire Tests of Window Assemblies; limited to 64,516 $mm^2$ (100 sq. in.) in 90-minute rated doors.

.7 Fire-resistive glass (Type FR-A): conforming to CAN/ULC-S101,

.1 Thickness: 5 mm to 37 mm thickness to suit fire rating requirements

.2 Grade: standard

.3 Fire-rating: Fire rating classified and labeled by UL for fire rating scheduled at opening locations on drawings, when tested in accordance with ULC Standards CAN4 S-104 and CAN4 S-106; 20 minutes to 90 minutes

.4 Temperature Rise Rated: conforming to ASTM E119 and UL 263

.5 Acceptable Products:

.1 FireLite®,

.2 Pyran Platinum,

.3 Pilkington Pyrostop.

.4 Glassopolis Protect3

.8 Mirror Glass (Type FG-M): To ASTM C1503, Mirror Glazing Quality, clear float, safety backed, with copper and silver coating, organic overcoating, polished/flat edges, minimum 6 mm thick, sizes as scheduled.

.1 Safety Backing: to ANSI Z97.1, composite copolymer film laminated to a bi-directional woven copolymer alloy, providing Category II impact resistance.

## 2.3 SEALED INSULATING GLASS MATERIALS

.1 Insulated Glass Units (Type SG-A): CAN/CGSB-12.8; double pane with glass elastomer or silicone sealant edge seal; outer pane of FG-A glass, inner pane of FG-A glass; purge interpane space with dry hermetic air; total unit minimum thickness of 25 mm.

.2 Insulated Glass Units - Low E (Type SG-B): CAN/CGSB 12.8; double pane with glass elastomer or silicone sealant edge seal; outer pane of FG-B6 glass, inner pane of Low E FG-G glass on clear glass cover plate, purge interpane space with dry hermetic air with argon gas; total unit minimum thickness of 25 mm.

.3 Tempered Insulated Glass Units – Low E (Type SG-C): CAN/CGSB-12.8 double pane with glass elastomer or silicone sealant edge seal; outer pane of FG-B6 glass, inner pane of Low-E FG-B6 glass on clear glass cover plate, purge interpane space with dry hermetic air with argon gas; total unit minimum thickness of 25 mm.

.4 Edge Seal Construction: Stainless steel, closed cell polymer foam warm edge seal, bent and soldered corners.

## 2.4 GLAZING COMPOUNDS

.1 Modified Oil (Type GC-A): non-hardening, knife grade consistency; Grey colour.

.2 Butyl Sealant (Type GC-B): CGSB 19-GP-14M single Component; Shore A hardness of 10 to 20; black colour; non-skinning.

.3 Acrylic Sealant (Type GC-C): single component, solvent curing, non-bleeding; cured Shore A hardness of 40 to 50; colour as selected from manufacturer’s standard range.

.4 Polysulfide Sealant (Type GC-D): two-component; chemical curing, non-sagging type; cured Shore A hardness of 15 to 25; colour as selected.

.5 Polyurethane Sealant (Type GC-E): single component, chemical curing, non-staining, non-bleeding, Shore A Hardness Range 25 to 35; colour as selected from manufacturer's standard range.

.6 Silicone Sealant (Type GC-F): single component; chemical moisture curing; capable of water immersion without loss of properties; non-bleeding, non-staining, cured Shore A hardness of 15 to 25; colour as selected from manufacturer's standard range.

## 2.5 GLAZING COMPOUND FOR FIRE-RATED GLAZING MATERIALS

.1 Glazing Tape: Closed cell polyvinyl chloride (PVC) foam, coiled on release paper over adhesive on two sides, maximum water absorption by volume of 2 percent. Glass panels that exceed 1,393 sq. inches for 90-minute ratings must be glazed with fire-rated glazing tape supplied by manufacturer.

.2 Glazing Compound: DAP 33 putty.

.3 Silicone Sealant: One-part neutral curing silicone, medium modulus sealant, Type S; Grade NS; Class 25 with additional movement capability of 50 percent in both extension and compression (total 100 percent); Use (Exposure) NT; Uses (Substrates) G, A, and O as applicable. Available Products:

.1 Dow Corning 795 - Dow Corning Corp.

.2 Silglaze-II 2800 - General Electric Co.

.3 Spectrem 2 - Tremco Inc.

## 2.6 GLAZING ACCESSORIES

.1 Lock Strip Gaskets: ASTM C542, ozone-resistant neoprene compound, with lock-strip (zipper) component that friction-fits into position to retain glass pane/unit, H-shape, tensile strength of 14 MPa (2000 psi) tested to ASTM D412, Durometer hardness of 75 tested to ASTM D1149, sized to accommodate glass thickness.

.2 Setting Blocks: Neoprene, 80 to 90 Shore A durometer hardness, length of 25 mm for each square metre of glazing or minimum 100 mm x width of glazing rabbet space minus 1.5 mm x height to suit glazing method and pane weight and area; tested for compatibility with glazing compound; of 70 to 90 Shore A hardness.

.3 Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness, minimum 75 mm long x one half the height of the glazing stop x thickness to suit application.

.4 Glazing Tape: Preformed butyl compound with integral resilient tube spacing device; 10 to 15 Shore A durometer hardness; coiled on release paper; 9 x 9 mm size; black colour.

.5 Glazing Clips: Manufacturer's standard type.

.6 Mirror Attachment Accessories: Stainless steel clips.

.7 Mirror Adhesive: Chemically compatible with mirror coating and wall substrate.

.8 Cleaners, Primers, and Sealers: Type recommended by manufacturer of glass and gaskets.

**2.7 SOURCE QUALITY CONTROL AND TESTS**

.1 Section 01 45 00: Provide testing and analysis of glass.

.2 Provide shop inspection and testing for glass.

.3 Test samples in accordance with ANSI Z97.1 and ASTM E546.

**Part 3 Execution**

**3.1 EXAMINATION**

.1 Verify existing conditions before starting Work.

.2 Verify that openings for glazing are correctly sized and within tolerance.

.3 Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and ready to receive glazing.

**3.2 PREPARATION**

.1 Clean contact surfaces with solvent and wipe dry.

.2 Seal porous glazing channels or recesses with substrate compatible primer or sealer.

.3 Prime surfaces scheduled to receive sealant.

.4 Install sealant in accordance with manufacturer's instructions.

**3.3 INSTALLATION - EXTERIOR WET/DRY METHOD (PREFORMED TAPE AND SEALANT)**

.1 Cut glazing tape to length and set against permanent stops, 5 mm below sight line. Seal corners by butting tape and dabbing with butyl sealant.

.2 Apply heel bead of butyl sealant along intersection of permanent stop with frame ensuring full perimeter seal between glass and frame to complete the continuity of the air and vapour seal.

.3 Place setting blocks at 1/4 points with edge block no more than 150 from corners.

.4 Rest glazing on setting blocks and push against tape and heel bead of sealant with sufficient pressure to attain full contact at perimeter of pane or glass unit.

.5 Install removable stops, with spacer strips inserted between glazing and applied stops, 6 mm below sight line. Place glazing tape on glazing pane or unit with tape flush with 6 mm sight line.

.6 Fill gap between glazing and stop with GC-F type sealant to depth equal to bite of frame on glazing, but not more than 9 mm below sight line.

.7 Apply cap bead of GC-C type sealant along void between the stop and the glazing, to uniform line, flush with sight line. Tool or wipe sealant surface smooth.

**3.4 INSTALLATION - EXTERIOR WET METHOD (SEALANT AND SEALANT)**

.1 Place setting blocks at 1/4 points and install glazing pane or unit.

.2 Install removable stops with glazing centred in space by inserting spacer shims both sides at 600 mm intervals, 6 mm below sight line.

.3 Fill gaps between glazing and stops with GC-F type sealant to depth of bite on glazing, but not more than 9 mm below sight line to ensure full contact with glazing and continue the air and vapour seal.

.4 Apply sealant to uniform line, flush with sight line. Tool or wipe sealant surface smooth.

**3.5 INSTALLATION - EXTERIOR BUTT GLAZED METHOD (SEALANT ONLY)**

.1 Temporarily brace glass in position for duration of glazing process. Mask edges of glass at adjoining glass edges and between glass edges and framing members.

.2 Temporarily secure a small diameter non-adhering foamed rod on back side of joint.

.3 Apply sealant to open side of joint in continuous operation; thoroughly fill the joint without displacing the foam rod. Tool the sealant surface smooth to concave profile.

.4 Permit sealant to cure then remove foam backer rod. Apply sealant to opposite side, tool smooth to concave profile.

.5 Remove masking tape.

**3.6 INSTALLATION - INTERIOR DRY METHOD (TAPE AND TAPE)**

.1 Cut glazing tape to length and set against permanent stops, projecting 1.6 mm above sight line.

.2 Place setting blocks at 1/4 points with edge block no more than 150 mm from corners.

.3 Rest glazing on setting blocks and push against tape for full contact at perimeter of pane or unit.

.4 Place glazing tape on free perimeter of glazing in same manner described above.

.5 Install removable stop without displacement of tape. Exert pressure on tape for full continuous contact.

.6 Knife trim protruding tape.

**3.7 INSTALLATION - INTERIOR WET/DRY METHOD (TAPE AND SEALANT)**

.1 Cut glazing tape to length and install against permanent stops, projecting 1.6 mm above sight line.

.2 Place setting blocks at 1/4 points with edge block no more than 150 mm from corners.

.3 Rest glazing on setting blocks and push against tape to ensure full contact at perimeter of pane or unit.

.4 Install removable stops, spacer shims inserted between glazing and applied stops at 600 mm intervals, 6 mm below sight line.

.5 Fill gaps between pane and applied stop with GC-F type sealant to depth equal to bite on glazing, to uniform and level line.

.6 Trim protruding tape edge.

## 3.8 INSTALLATION - INTERIOR WET METHOD (COMPOUND AND COMPOUND)

.1 Install glazing resting on setting blocks. Install applied stop and centre pane by use of spacer shims at 600 mm centres, kept 6 mm below sight line.

.2 Locate and secure glazing pane using glazers' clips.

.3 Fill gaps between glazing and stops with glazing compound until flush with sight line. Tool surface to straight line.

## 3.9 MIRROR INSTALLATION

.1 Adhesive Method:

.1 Set mirrors with adhesive, applied in accordance with adhesive manufacturer's instructions.

.2 Place plumb and level without visible distortion.

.3 Store, protect, and install mirrors in accordance with NAMM.

.2 Mechanical Method:

.1 Set mirrors with clips. Anchor rigidly to wall construction.

.2 Place plumb and level without visible distortion.

.3 Store, protect, and install mirrors in accordance with NAAMM.

.3 Installation – General:

.1 Set mirrors plumb and level, free of optical distortion.

.2 Set mirrors with edge clearance free of surrounding construction including countertops or backsplashes.

## 3.10 INSTALLATION - PLASTIC FILM

.1 Install plastic film with adhesive, applied in accordance with film manufacturer's instructions.

.2 Place without air bubbles, creases or visible distortion.

.3 Fit film edge tight to glass perimeter with razor cut edge.

## 3.11 FIELD QUALITY CONTROL

.1 Section 01 45 00: Field inspection and testing.

.2 Inspection will monitor quality of glazing.

## 3.12 MANUFACTURER'S FIELD SERVICES

.1 Glass and glazing product manufacturers to provide field surveillance of the installation of their Products.

.2 Monitor and report installation procedures and unacceptable conditions.

## 3.13 FIRE RATED GLAZING SCHEDULE

| Rating | Assembly | Max. Exposed Area (Sq. In.) | Max. Width Of Exposed Glazing (In.) | **OR** | Max. Height Of Exposed Glazing (In.) | Stop Height |
|---|---|---|---|---|---|---|
| 20 to 60 min. | Other than doors | | | | | |
| | HMS or wood* | 3,325 | 95 | | 95 | 5/8” |
| | Fireframes® D.S. | 3,325 | 95 | | 95 | 3/4" |
| 90 min. | | | | | | |
| | Other than doors | 2,627 | 56 ½” | | 56 ½” | 5/8” |
| | HMS Fireframes D.S. | 2,627 | 56 ½” | | 56 ½” | 3/4" |

* HMS indicates hollow metal steel framing. Fireframes® D.S. indicates Designer Series narrow profile framing available from TGP. For wood frames, check

## 3.14 CLEANING

.1 Remove glazing materials from finish surfaces.

.2 Remove labels after Work is complete.

.3 Clean glass and adjacent surfaces.

.4 Immediately remove sealant and compound droppings from finished surfaces.

.5 On completion replace broken, cracked and otherwise defective glass and glazing prior to final acceptance, without cost to the Owner.

.6 Replace, at no cost to Owner, all broken or defective glass and glazing that appears during warranty period due to incorrectly cut edges, loose setting, binding in frames, uneven bedding, pinching by glazing clips, or similar causes.

## 3.15 PROTECTION OF FINISHED WORK

.1 After installation, mark pane with an 'X' by using removable plastic tape or paste. Use tape on interior glass surfaces only. Do not mark heat absorbing or reflective glass units.

**END OF SECTION**

## 1. General

### 1.1 SUMMARY

.1 The contents of this section complement and complete other technical sections which make reference to this section.

.2 Finishes List is intended for colour choice selection. Refer to full extent of specifications for full product description, installation and accessories.

.3 Use this section in conjunction with Room Finish Schedule and Finishes Plans on A9.01 for locations and extent of all finishes.

.4 Generally, throughout, and unless otherwise noted, metal door frames shall be painted the same as walls in which they occur.

.5 At doorways, any change to floor finishes shall occur at the centerline of the door when in a closed position.

.6 For specific layouts of flooring patterns and location of accent paints, refer to drawings.

.7 Contractor responsible to ensure products with long lead times are ordered in a timely manner to avoid delays.

### 1.3 PRODUCT OPTIONS AND SUBSTITUTIONS

.1 Where products are named, Consultant may consider substitute products meeting or exceeding the properties of the named products. Substitute materials shall not change the overall appearance, thickness or compatibility with other products associated with the assembly. Refer to Division 01 for requirements pertaining to product options and substitutions.

.2 Technical Specification Sections may list additional acceptable materials. Refer to appropriate Technical Specification Section.

.3 Substitutions must be approved by Consultant prior to proceeding with any work.

### 1.4 LEGEND

.1 The following Finishes List applies to finish materials listed in Technical Specification Sections.

| Section | Code | Area | Description | Manufacturer | Remarks |
|---|---|---|---|---|---|
| 04 81 00 | Concrete Block | Natatorium | Concrete Block | | Pattern: Running bond |
| 05 12 00 | | Throughout | Exposed structural steel basecoat | | White |
| 05 21 00 | | Throughout | Exposed steel joists | | White |
| 05 31 00 | | Throughout | Exposed steel roof deck | | White |
| 05 50 00 | | Throughout | Metal Fabrications | | White |
| 06 40 00 | CSQ-1 | Counters | Solid Surface | Formica | Colour: 737 Gray Galaxy |
| | PL-1 | Reception Desk | Plastic Laminate | Wilsonart | Colour: 4926-07 Black Alicante |
| | PL-2 | Lowers | Plastic Laminate | Wilsonart | Colour: D25-60 Atlantis |
| | PL-3 | Uppers/ Cabinets | Plastic Laminate | Wilsonart | Colour: D381-60 Fashion Grey |
| | PL-4 | Lifeguard Upper Cabinets | Plastic Laminate | Wilsonart | Colour: D354-60 Designer White |
| | PVC-1 | Lifeguard Counter | Edge banding | Wilsonart | Colour: D381 Fashion Grey |
| | PVC-2 | Reception Desk | Edge banding | Wilsonart | Colour: 1595 Black |
| | | Millwork | Pulls | Richelieu | Contemporary Steel Pull – 305<br>Colour: Matte Black |
| | | Changerooms, Washrooms | Wall Hooks | Richelieu | RH115302190<br>Contemporary Metal Hook – 1143<br>Colour: Black |
| | | Millwork | Grommets | Richelieu | Minimum 67mm grommet in Black |
| | | Millwork | Reception Desk Legs | Richelieu | 780128170<br>28” Stainless Steel Square Leg |
| | | Millwork | Reception Wall Shelf Bracket | Richelieu | 68081001900<br>Kolossus Decorative Bracket |

| Section | Code | Area | Description | Manufacturer | Remarks |
|---|---|---|---|---|---|
| 07 42 13 | | | | | |
| | MS1 | Exterior | Standing Seam Metal Cladding | Vicwest | Profile: Prestige 16" (406mm)<br>Colour: White-White |
| | MS2 | Exterior | Corrugated Metal Cladding | Vicwest | Profile: 7/8" Corrugated<br>Colour: Charcoal 56072 |
| | MP1 | Exterior | Architectural Metal Panel | Lkme | Profile: Refer to drawings<br>Colour: Sapphire Blue |
| | MP2 | Exterior | Architectural Metal Panel | Lkme | Profile: Refer to drawings<br>Colour : Royal Blue |
| | MP3 | Exterior | Architectural Metal Panel | Lkme | Profile: Refer to drawings<br>Colour: Labrador Blue |
| | MP4 | Exterior | Architectural Metal Panel | Lkme | Profile: Refer to drawings<br>Colour: Silver Metallic |
| 07 46 90 | | Exterior | Metal Soffit Panels | Lux | Profile: V-Groove 6" Panel<br>Colour: Fir |
| 07 62 00 | | Exterior | Sheet Metal Flashing + Trim | | Match adjacent cladding |
| 07 62 00 | | Roof | Metal Flashings | | Match wall colour |
| 08 11 00 | | Steel Doors | Steel Doors and Frames | | Match wall colour. When a frame is two colors, the colour of the opposite side shall not be visible when the door is closed. |
| 08 11 00 | | Aluminum Doors | Aluminum Entrances & Storefronts | | Colour: Anodized Clear |
| 08 44 13 | CW# | Exterior | Aluminum Curtain Walls | Kawneer | System: UT 1600<br>Mullion Depth: 190.5mm<br>Colour: Anodized Clear |
| | S# | Interior | Aluminum Curtain Walls | Kawneer | System: 1600<br>Mullion Depth: 190.5mm<br>Colour: Anodized Clear |
| 08 45 00 | WP1 | Exterior | Fibreglass Sandwich Panel Assembly | Kalwall | Profile: 2-3/4"<br>Colour: White<br>U-Value: 0.8 Max |
| 08 80 50 | | Exterior Glazing | | PPG | Solarban 60 clear+clear |
| 09 30 13 | T1 | Field | Natatorium, Changeroom, Steam room Floor | Daltile | Series: Keystones<br>Style #: D617<br>Color: Arctic White<br>Size: 2x2 Mosaic<br>Finish: Matte |
| | T2 | Pool Field | Pool Tile | Agrob-Buchtal | Series: Chroma<br>Model #: 91i-38110H<br>Colour: Neutral 10 (Active White)<br>Size: 12.5x25cm<br>Finish: Matte |

| Section | Code | Area | Description | Manufacturer | Remarks |
|---|---|---|---|---|---|
| | T2a | Pool Walls | Pool Tile Lower Walls Lap Pool | Agrob-Buchtal | Series: Chroma<br>Model #: 700i-18120H<br>Colour: Neutral 10 (Active White)<br>Size: 12.5x25cm<br>Finish: Gloss |
| | T2b | Pools | Pool Walls Coved | Agrob-Buchtal | Series: Chroma<br>Model #: 701-17190<br>Colour: Neutral 10 (Active White)<br>Size: 244 x 6<br>Finish: Matte |
| | T3 | Lap Pool | Lane Markers | Agrob-Buchtal | Series: Chroma<br>Model #: 340i-38110H<br>Colour: Neutral 1 (Black)<br>Size: 12.5x25cm<br>Finish: Matte |
| | T4 | Pool | Pool Accent | Agrob-Buchtal | Series: Chroma<br>Model #: 553115-38110H<br>Colour: Neutral 5<br>Size: 12.5x25cm<br>Finish: Matte |
| | T5a | Pool | Pool Edge | Topcer | Series:<br>Model #: PE 4414<br>Colour: Black<br>Size:<br>Finish: Matte |
| | T5b | Pool | Pool Edge | Topcer | Series:<br>Model #: ST4416<br>Colour: Black<br>Size:<br>Finish: Matte |
| | T6 | Pool | Nosing | Agrob-Buchtal | Series: Finnland II<br>Model #: 340-55820<br>Colour: Neutral 1 (Black)<br>Size: 25cm<br>Finish: Matte |
| | T7 | Pool | Pools | Topcer | Series: Smooth Texture<br>Model #:<br>Colour: White<br>Size: 96mmx96mm<br>Finish: Matte |
| | T8 | Wall | Wall Accent | Agrob-Buchtal | Series: Chroma<br>Model #: 552013-18120H<br>Colour: Active Green<br>Size: 12.5cm x 25cm<br>Finish: Gloss |
| | T9 | Pool Depth Markers | Pools | Daltile | Series: Keystones<br>Model #: D311 / D617<br>Colour: Black / Arctic White<br>Size: 1” x 1”<br>Finish: Matte |
| | T10a | Changeroom | Wall Tile | American Olean | Series: Perspecta<br>Model #: PE10<br>Colour: Gravity Grey<br>Size: 8x24<br>Finish: Matte |
| | T10b | Changeroom | Wall Tile | American | Series: Perspecta |

| Section | Code | Area | Description | Manufacturer | Remarks |
|---|---|---|---|---|---|
| | | | | Olean | Model #: PE11<br>Colour: Pacific Blue<br>Size: 8x24<br>Finish: Matte |
| | T10c | Changeroom | Wall Tile | American Olean | Series: Perspecta<br>Model #: PE17<br>Colour: Global Green<br>Size: 8x24<br>Finish: Matte |
| | T11 | Floor Accent | Floor Tile | Daltile | Series: Keystones<br>Model #: D208<br>Colour: Suede Grey Spec<br>Size: 2x2 Mosaic<br>Finish: Matte |
| | T12 | Viewing Area | Floor Tile | Olympia | Series: Titan<br>Model #: BC.TT.ALU.2448.MT<br>Colour: Aluminum<br>Size: 12x24<br>Finish: Matte |
| | T13 | Janitor Room | Wall Tile | Olympia | Series: Colour and Dimension<br>Colour: Arctic or Warm White<br>Size: 6” x 6”<br>Finish: Gloss |
| | | Field | Grout | | Confirm grout colour with consultant |
| | | Pool | Grout | | Confirm grout colour with consultant |
| | TR-3 | Tile to Concrete | Transition Strip | Profilitec | Zeroteck, ZR-AN 8mm, natural aluminum |
| 09 51 13 | ACT1 | Throughout | Acoustic Ceiling Tile | Armstrong | Style: Ceramaguard Fine Fissured Perforated<br>Size: 610x610x16<br>Suspension System: Prelude 15/16” Exposed Tee |
| 09 52 00 | | | Acoustic Ceiling Panels | Sound Concepts | Product: Shapes<br>Model: Rectangular 48” x 96”, Square 48” x 48”<br>Colour: White |
| 09 65 00 | WSF1 | Lobby, Admin & MPR | LVT | Shaw Contract | Collection: Native Origins<br>Colour: Golden Oak 00260<br>Size: 15cm x 122cm |
| 09 65 00 | | | | | |
| | RB1 | | Resilient Base | Johnsonite | Profile: Duracove 4”<br>Colour: TG3 Iron Mountain |
| | N1 | | Nosing | Tarkett | Style: RCN 40 B<br>Colour: Black |
| 09 91 00 | PT-1 | Field | Paint | General Paint | Colour: CLW 1047W Deer Feather<br>Finish: Eggshell |
| | PT-2 | Accent | Paint | Benjamin Moore | Colour: Huntington Green 406<br>Finish: Eggshell |
| | PT-3 | Natatorium | Paint | General Paint | Colour: To be selected by |

| Section | Code | Area | Description | Manufacturer | Remarks |
|---|---|---|---|---|---|
| | | Accent | | | Consultant |
| | PT-4 | Interior Doors and Frames | Paint | General Paint | Colour: To be selected by Consultant |
| | PT-5 | SE Natatorium Door Exterior | Paint | General Paint | Colour: Match MP1. To be selected by Consultant. |
| 10 11 00 | E-WB1 | MP Room | Whiteboard | | White |
| 10 11 23 | E-TB1 | Admin | Tackboard | | Natural |
| 10 21 13 | | Changerooms | Toilet Compartments | Hadrian | System: Elite Max<br>Material: Prefinished Metal<br>Colour: 833 Tricorn Black, anti-graffiti<br>Style: Floor mounted with pedestals, head-rail braced |
| 10 51 13 | | Changerooms | Lockers | Scranton | Material: Plastic<br>Colour: Grey<br>Style: Triple-tier |
| 10 41 00 | | | Signage | | |
| 10 80 00 | WA17 / WA18 | | Benches | Scranton | Tufftec Plastic Benches<br>Colour: Grey |
| 12 48 43 | | Lobby & Vestibule | Debris Trap | Edgewood | Debris Trap Extreme |

**END OF SECTION**

## Part 1 General

### 1.1 SECTION INCLUDES

.1 Solid locker units with hinged doors:

.1 3 tier lockers

.2 Bases, tops, and filler panels.

### 1.2 RELATED SECTIONS

.1 Section 03 30 00: Cast-in-place Concrete.

.2 Section 04 26 13: Unit Masonry.

.3 Section 06 10 00: Rough Carpentry

.4 Section 09 21 16: Gypsum Board Assemblies.

.5 Section 09 22 16: Non-Structural Metal Stud Framing

.6 Section 09 65 00: Resilient Flooring

.7 Section 09 99 00: Finish Schedule

### 1.3 REFERENCES

.1 American Society of Testing and Materials (ASTM)

.1 ASTM A666 – 15, Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.

.2 ASTM D1972-97 (2005), Standard Practice for Generic Marking of Plastic Products. (Withdrawn 2014)

.3 ASTM E84-20, Standard Test Method for Surface Burning Characteristics of Building Materials.

.2 National Building Code, Alberta Edition 2019, Barrier Free Design Section 3.8

.3 National Fire Protection Agency (NFPA)

.1 NFPA 286 – 209, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.

.4 South Coast Air Quality Management District (SCAQMD), California State

.1 SCAQMD Rule 1168-05, Adhesives and Sealants Applications.

### 1.4 SUBMITTALS FOR REVIEW

.1 Product Data: Provide data on locker types, sizes, colours, number plate font styles and accessories.

.2 Shop Drawings: Indicate locker plan layout, numbering plan and key codes.

.3 Samples: Submit two samples 75 x 150 mm in size, of each colour selected; applied to specified base metal.

**1.5 SUBMITTALS FOR INFORMATION**

.1 Manufacturer's Installation Instructions: Indicate component installation assembly.

**1.6 MOCK-UP**

.1 Provide mock-up of one full size of each locker in selected colours.

.2 Mock-up may remain as part of the Work.

**1.7 DELIVERY, STORAGE, AND PROTECTION**

.1 Protect locker finish and adjacent surfaces from damage.

**Part 2 Products**

**2.1 MANUFACTURERS**

.1 Basis of Design Materials:

.1 Scranton Lockers

.2 Acceptable Manufacturers:

.1 Bradley.
.2 Canadian Locker Company Limited.
.3 General Storage Systems.
.4 Hadrian Manufacturing Inc.
.5 Summit

**2.2 MATERIALS**

.1 High Density Polyethylene (HDPE): 30 percent pre-consumer recycled content polyethylene thermoplastic formed under high pressure into solid plastic components.

.2 Stainless-Steel Sheet: ASTM A 666, Type 304.

.3 Fasteners: Tamper-Resistant Fasteners: Stainless steel torx-head screws.

.1 Locker Connectors: No. 10-24 hex bolts.
.2 Anchors: Type and size required for secure anchorage.
.3 Drilled-in-place Masonry Anchors: Minimum 6 mm x 44 mm screws.

**2.3 MANUFACTURED UNITS**

.1 Lockers: to CAN/CGSB-44.40, Three-tier, Standard locker, Class Two - A bank of two or more lockers, freestanding.

.1 Material: HDPE plastic, 30 percent recycled material.
.2 Size: as indicated on Drawings.
.3 Top: flat.

.4 Sides, Tops, Bottoms, Dividers, and Shelves: 10 mm thick HDPE plastic with smooth finish.

.5 Doors and Frame: 13 mm thick HDPE plastic with matte texture finish with ventilation slots door.

.6 Door handle: ADA/ABA Compliant handle fabricated from injection molded plastic.

.7 Latch Bar: Full-height latch bar constructed of 13 mm HDPE plastic secured to locker with stainless steel tamper-resistant screws.

.8 Hinges: Continuous, opening 180°; fabricated from 1.27 mm type 304 stainless steel, fabricated to wrap around edges of door and frame and attached with stainless steel tamper-resistant screws.

.9 Colours: as indicated in Section 09 99 00 – Finish Schedule.

**2.4 CUBBY BENCH**

.1 Bench: Solid HDPE plastic bench, top 25 mm thick, sides and bottom 10 mm thick, 292 mm deep, 508 mm high, and as follows:

.1 Length: as indicated on Drawings.

.2 Colour: as indicated in Section 09 99 00 – Finish Schedule.

.3 Acceptable Materials:

.1 Tufftec Plastic Benches, Scranton

.2 Lenox Cubby Bench, Bradley.

**2.5 ACCESSORIES**

.1 Locking system: Coin return lock supplied by locker manufacturer.

.2 Accessories: Meeting CGSB-44.40.

.3 Coat Hooks: Black polycarbonate double hook.

.4 End Panels: 13 mm thick, with colour and finish matching locker body.

.5 Filler Panels: 13 mm HDPE filler panel, with colour and finish matching locker body, attached with 10 mm thick HDPE solid plastic angle bracket.

.6 Number Plate: White acrylic with black film coating, laser etched with number specified. Provide one per locker. Finish: Baked enamel or powder coat to match colour listed above.

**Part 3 Execution**

**3.1 PREPARATION**

.1 Wood Support Base: To provide toe space. Constructed from framed preservative treated wood, to suit locker manufacturer's standard design. Construct base in accordance with requirements of Division 06 Section Wood Blocking and Curbing.

## 3.2 INSTALLATION

.1 Install in accordance with manufacturer's instructions.

.2 Install lockers plumb and square.

.3 Secure lockers with anchor devices to suit floor and wall substrate materials. Minimum Pullout Force: 445 N.

.4 Bolt adjoining locker units together to provide rigid installation.

.5 Install end panels, filler panels, tops, and bases.

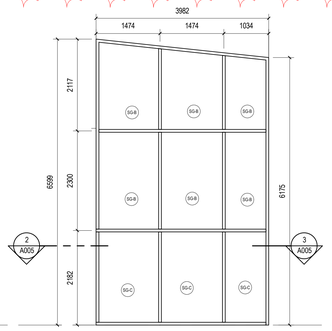
.6 Install accessories.

.7 Replace components that do not operate smoothly.

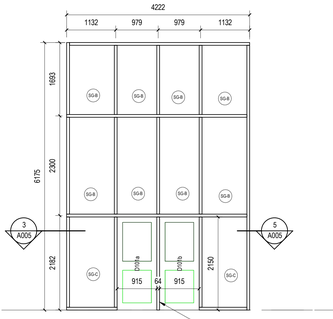
## 3.3 CLEANING

.1 Clean locker interiors and exterior surfaces.

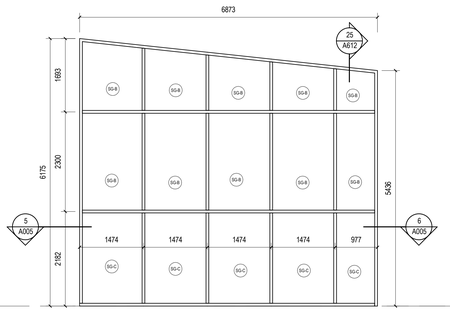
**END OF SECTION**



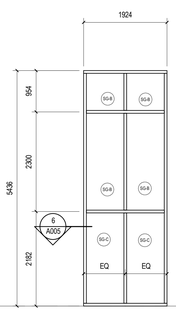

1 | CW1
SCALE: 1 : 50




2 | CW2
SCALE: 1 : 50

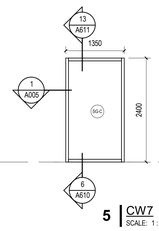



3 | CW3
SCALE: 1 : 50

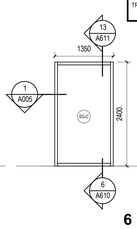



4 | CW4
SCALE: 1 : 50

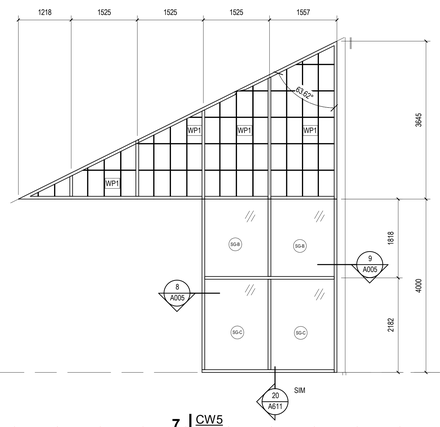
12
GLAZING TYPE UPDATE



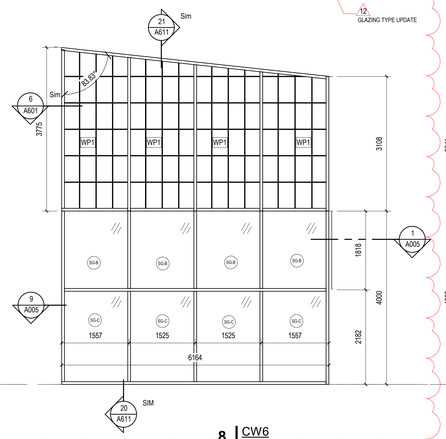

5 | CW7
SCALE: 1 : 50




6 | CW8
SCALE: 1 : 50

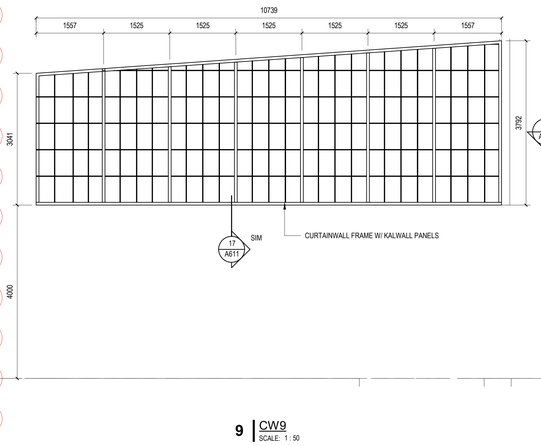



7 | CW5
SCALE: 1 : 50

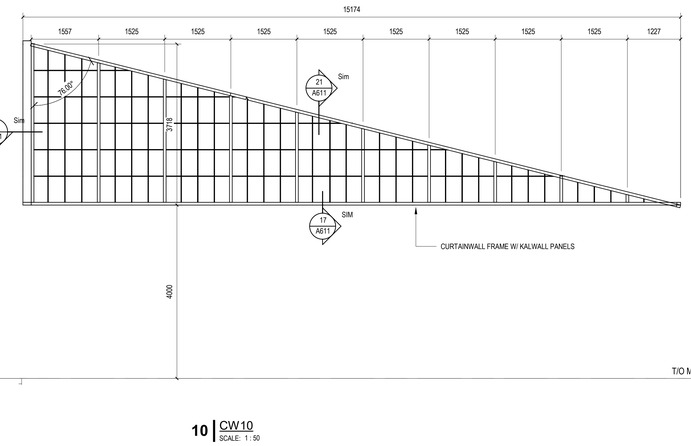



12
GLAZING TYPE UPDATE

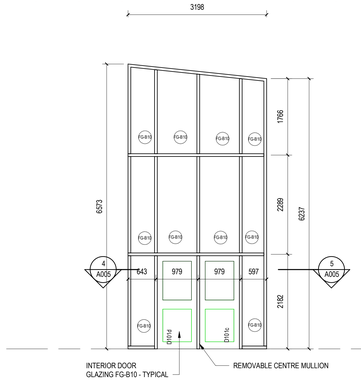
8 | CW6
SCALE: 1 : 50




9 | CW9
SCALE: 1 : 50

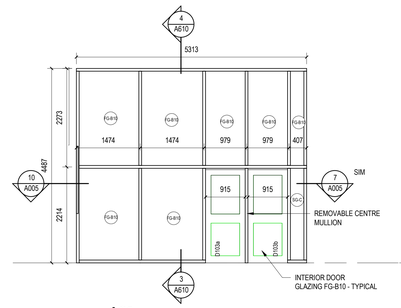



10 | CW10
SCALE: 1 : 50

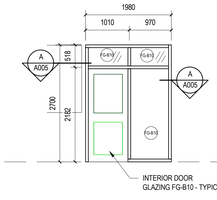



11 | S1
SCALE: 1 : 50

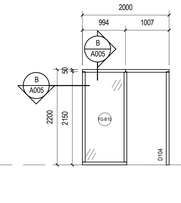
12
GLAZING NOTES UPDATE



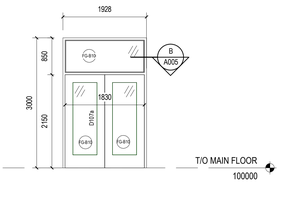

12 | S2
SCALE: 1 : 50



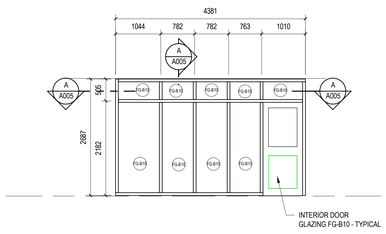

13 | S3
SCALE: 1 : 50



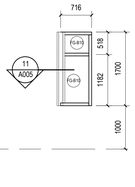

14 | S4
SCALE: 1 : 50



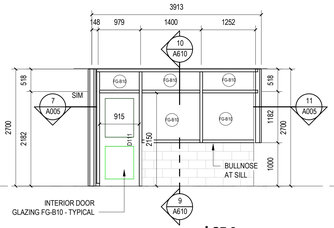

15 | S5
SCALE: 1 : 50



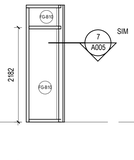

16 | S6
SCALE: 1 : 50



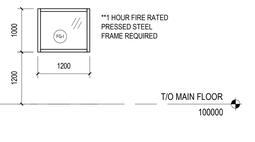

17 | S7.1
SCALE: 1 : 50




18 | S7.2
SCALE: 1 : 50




19 | S7.3
SCALE: 1 : 50




20 | S8
SCALE: 1 : 50

## GLAZING ABBREVIATION LIST

| | |
|---|---|
| FLOAT GLASS | FG-A |
| TEMPERED SAFETY 6mm | FG-B6 |
| TEMPERED SAFETY 10mm | FG-B10 |
| TEMPERED SAFETY 13mm | FG-B13 |
| TEMPERED SAFETY - OBSCURE | FG-BB-O |
| TINTED GLASS | FG-C |
| HEAT ABSORBING GLASS | FG-D |
| REFLECTIVE GLASS | FG-E |
| ONE-WAY REFLECTIVE MIRROR GLASS | FG-F |
| LOW-E GLASS | FG-G |
| CERAMIC GLASS | FG-I |
| SPANDREL GLASS | FG-J |
| LAMINATED GLASS | FG-L |
| MIRROR | FG-M |
| | |
| DOUBLE GLAZED | SG-A |
| DOUBLE GLAZED (LOW-E) | SG-B |
| DOUBLE GLAZED TEMPERED (LOW-E) | SG-C |
| TRIPLE GLAZED | SG-D |
| TRIPLE GLAZED (LOW-E) | SG-E |
| TRIPLE GLAZED TEMPERED (LOW-E) | SG-F |


Group2
Architecture
Interior Design


ISSUES / REVISIONS

| NO. | DATE | REVISION |
|---|---|---|
| 5 | 26.03.2021 | ISSUED FOR BP FINAL REVIEW |
| 6 | 06.04.2021 | ISSUED FOR BUILDING PERMIT |
| 7 | 29.04.2021 | ISSUED FOR TENDER PACKAGE REVIEW |
| 9 | 11.05.2021 | ISSUED FOR TENDER PACKAGE #2 |
| 10 | 19.05.2021 | ARCHITECTURAL ADDENDUM #1 |
| 12 | 28.05.2021 | ARCHITECTURAL ADDENDUM #3 |

Group2 Architecture Interior Design Ltd.

SEAL

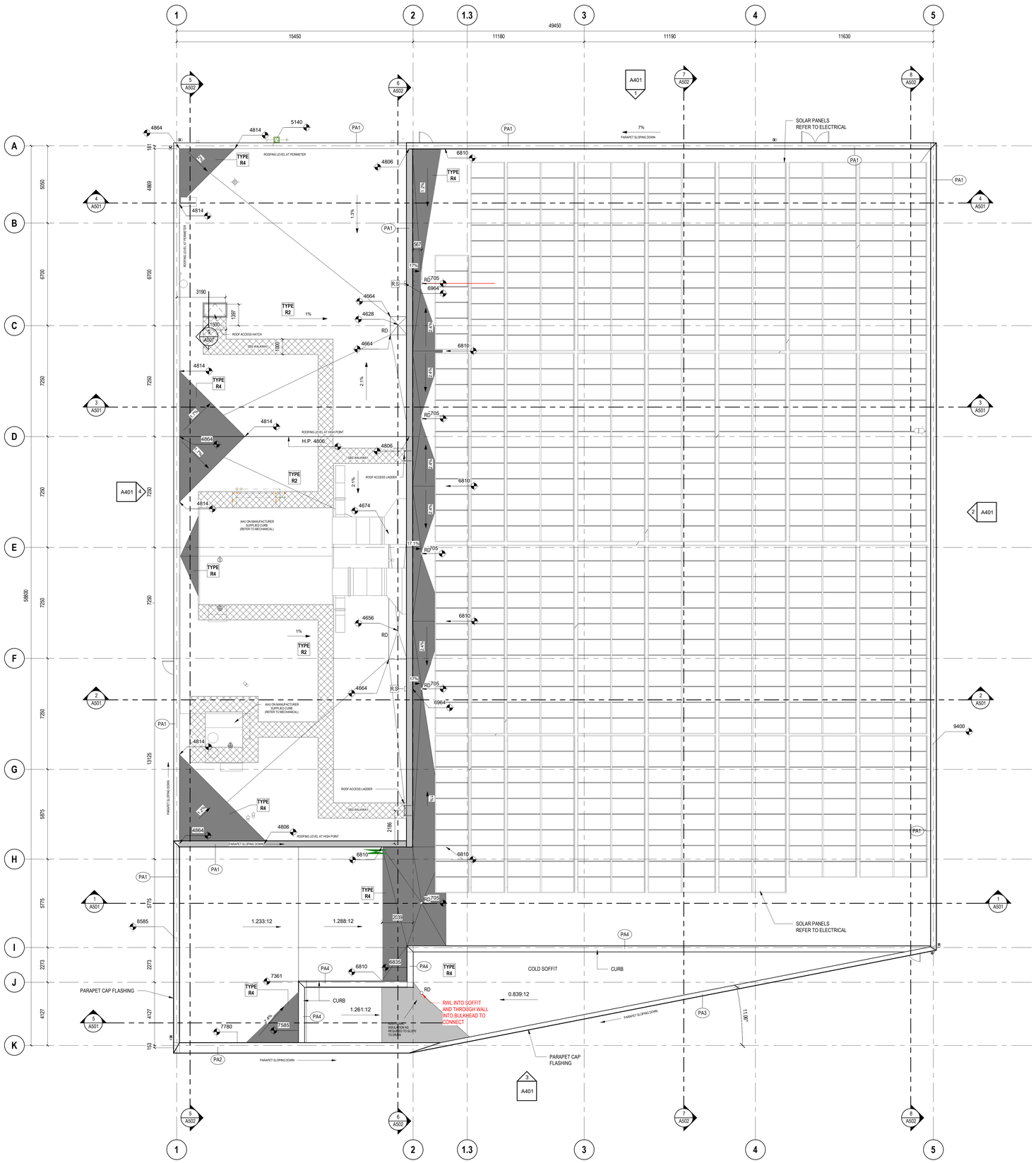
KEY PLAN

PROJECT TITLE
**DRAYTON VALLEY & BRAZEAU AQUATIC CENTRE**

DRAWING TITLE
CURTAINWALL & KALWALL ELEVATIONS

| CHECKED | DRAWN | DRAWING | REVISION |
|---|---|---|---|
| TS/SF | DS | A004 | 12 |

FILE
19046




1 | OVERALL ROOF PLAN
SCALE: 1 : 100

## GENERAL NOTES - ROOF

1. ADHERE AN ADDITIONAL 900mm WIDE LAYER OF CAP SHEET MEMBRANE AT TOP AND BOTTOM OF ALL ROOF ACCESS LADDERS AND SURROUNDING ALL MECHANICAL EQUIPMENT.
2. ROOF SLOPE, INCLUDING SLOPED INSULATION, TO HAVE MINIMUM 2% NET SLOPE.
3. CONFIRM ALL ROOF PENETRATIONS WITH MECHANICAL DRAWINGS
4. EXTENTS OF SLOPED INSULATION ON THIS DRAWING ARE INDICATIVE. EXACT LOCATIONS AND QUANTITY TO BE PROVIDED FOR REVIEW AND APPROVAL AS REQUIRED SUBMITTAL.
5. MECHANICAL EQUIPMENT AND PENETRATIONS ARE TO HAVE SURROUNDING CURBS, TYPICAL.
6. FINAL LOCATIONS AND TYPE OF ROOF LADDERS TO BE CONFIRMED.
7. CONFIRM LOCATIONS AND TYPE OF MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS.

## ROOF LEGEND

| | | |
|---|---|---|
| | R.D | ROOF DRAIN |
| | R.S | OVERFLOW ROOF SCUPPER |
| XXXX | H.P. | HIGH POINT |
| XXXX | | TOP OF PARAPET / CURB |
| | | SLOPED INSULATION (slope to drain) |
| SLOPE | | SLOPE DIRECTION OF INSULATION |
| | | TOP OF PARAPET / CURB |

## ROOF SCHEDULE

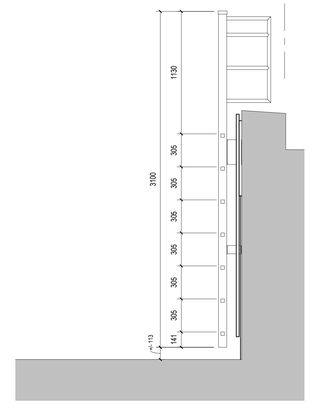
| TYPE | ASSEMBLY |
|---|---|
| TYPE R1 | NATATORIUM ROOF<br>2-PLY SBS MEMBRANE ROOFING<br>13mm FACTORY LAMINATED INSULATING FIBREBOARD<br>50mm POLYISO RIGID INSULATION ON<br>200mm EPS Type II RIGID INSULATION C/W SLOPING PACKAGE PER PLANS<br>VAPOUR BARRIER MEMBRANE<br>13mm EXTERIOR SHEATHING<br>SLOPED STRUCTURAL METAL DECK & SUPPORTING STRUCTURE |
| TYPE R2 | 2-PLY SBS MEMBRANE ROOFING<br>13mm FACTORY LAMINATED INSULATING FIBREBOARD<br>50mm POLYISO RIGID INSULATION ON<br>200mm EPS Type II RIGID INSULATION C/W SLOPING PACKAGE PER PLANS<br>VAPOUR BARRIER MEMBRANE<br>13mm EXTERIOR SHEATHING<br>SLOPED STRUCTURAL METAL DECK & SUPPORTING STRUCTURE |
| TYPE R3 | COLD SOFFIT LOCATION<br>2-PLY SBS MEMBRANE ROOFING<br>13mm FACTORY LAMINATED INSULATING FIBREBOARD<br>50mm POLYISO RIGID INSULATION<br>VAPOUR BARRIER MEMBRANE<br>13mm EXTERIOR SHEATHING<br>SLOPED STRUCTURAL METAL DECK & SUPPORTING STRUCTURE |
| TYPE R4 | CRICKET<br>2-PLY SBS MEMBRANE ROOFING<br>13mm FACTORY LAMINATED INSULATING FIBREBOARD<br>POLYISO RIGID INSULATION AS REQUIRED TO ACHIEVE SLOPE |

## PARAPET SCHEDULE

| TYPE | ASSEMBLY DESCRIPTION |
|---|---|
| PA1 | STANDING SEAM - VERTICAL INSTALL<br>38mm Z-GIRT / AIR SPACE<br>THERMALLY BROKEN CLIP SYSTEM<br>150mm MINERAL WOOL INSULATION<br>AIR/ VAPOUR BARRIER MEMBRANE, SELF-ADHERED<br>13mm EXTERIOR GYPSUM SHEATHING<br>152 METAL STUDS @ 400 O.C.<br>BATT INSULATION IN CAVITY<br>16mm EXTERIOR PLYWOOD SHEATHING<br>ROOFING MEMBRANE<br>FLASHING |
| PA2 | STANDING SEAM - VERTICAL INSTALL<br>89mm Z-GIRT / AIR SPACE<br>AIR BARRIER MEMBRANE, SELF-ADHERED<br>13mm EXTERIOR GYPSUM SHEATHING<br>152 METAL STUDS @ 400 O.C.<br>BATT INSULATION IN CAVITY<br>16mm EXTERIOR PLYWOOD SHEATHING<br>ROOFING MEMBRANE<br>FLASHING |
| PA3 | STANDING SEAM - VERTICAL INSTALL<br>89mm Z-GIRT / AIR SPACE<br>AIR BARRIER MEMBRANE, SELF-ADHERED<br>13mm EXTERIOR GYPSUM SHEATHING<br>152 METAL STUDS @ 400 O.C.<br>BATT INSULATION IN CAVITY<br>16mm EXTERIOR PLYWOOD SHEATHING<br>ROOFING MEMBRANE<br>FLASHING |
| PA4 | CURB AT COLD/WARM ROOF BREAK<br>ROOFING MEMBRANE<br>16mm EXTERIOR PLYWOOD SHEATHING<br>92 METAL STUDS @ 400 O.C.<br>AIR SPACE AS REQUIRED - REFER TO SECTION DETAILS<br>92 METAL STUDS @ 400 O.C.<br>BATT INSULATION IN ALL CAVITIES<br>16mm EXTERIOR PLYWOOD SHEATHING<br>ROOFING MEMBRANE |

12
DESCRIPTION UPDATE

2




2 | ROOF LADDER SECTION
SCALE: 1 : 20

Group2
Architecture
Interior Design

ISSUES / REVISIONS

| NO. | DATE | REVISION |
|---|---|---|
| 1 | 09.02.2021 | ISSUED FOR DEVELOPMENT PERMIT |
| 2 | 23.02.2021 | ISSUED FOR BP REVIEW |
| 5 | 26.03.2021 | ISSUED FOR BP FINAL REVIEW |
| 6 | 06.04.2021 | ISSUED FOR BUILDING PERMIT |
| 7 | 29.04.2021 | ISSUED FOR TENDER PACKAGE REVIEW |
| 9 | 11.05.2021 | ISSUED FOR TENDER PACKAGE #2 |
| 10 | 19.05.2021 | ARCHITECTURAL ADDENDUM #1 |
| 12 | 28.05.2021 | ARCHITECTURAL ADDENDUM #3 |

Group2 Architecture Interior Design Ltd.
SEAL

KEY PLAN

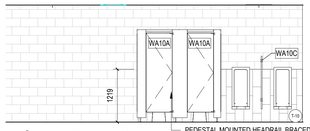
PROJECT NORTH TRUE NORTH

PROJECT TITLE
**DRAYTON VALLEY & BRAZEAU AQUATIC CENTRE**

DRAWING TITLE
ROOF PLAN

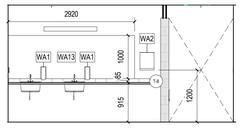
| CHECKED | DRAWN | DRAWING | REVISION |
|---|---|---|---|
| TS/SF | DS | A203 | 12 |

FILE
19046

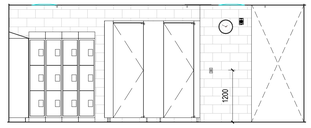



1 | 114 - NORTH WC ELEV.
SCALE: 1 : 50

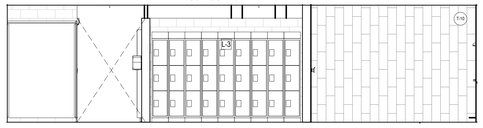
PEDESTAL MOUNTED HEADRAIL BRACED TOILET PARTITION
PARTITION HEIGHT 84"
PEDESTAL HEIGHT 9"
DOOR HEIGHT 72"



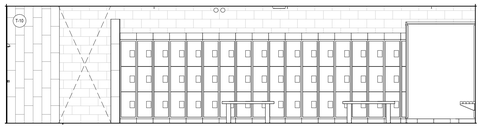

2 | 114 - SOUTH WC ELEV.
SCALE: 1 : 50



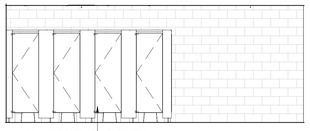

3 | 114 - WEST LOCKER ELEV.
SCALE: 1 : 50




4 | 114 - NORTH LOCKER ELEV.
SCALE: 1 : 50

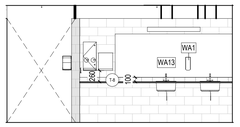



5 | 114 - SOUTH LOCKER ELEV.
SCALE: 1 : 50

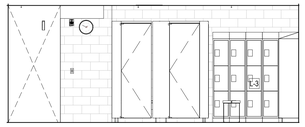


8 | 118 - SOUTH WC ELEV.
SCALE: 1 : 50

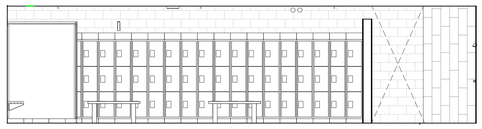
PEDESTAL MOUNTED HEADRAIL BRACED TOILET PARTITION
PARTITION HEIGHT 84"
PEDESTAL HEIGHT 9"
DOOR HEIGHT 72"



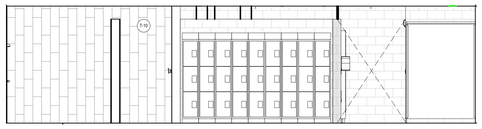

9 | 118 - NORTH WC ELEV.
SCALE: 1 : 50



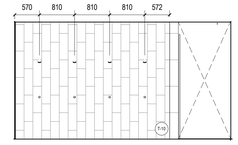

10 | 118 - WEST LOCKERS ELEV.
SCALE: 1 : 50



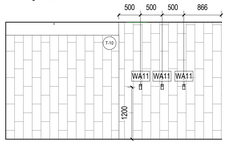

11 | 118 - NORTH LOCKER ELEV.
SCALE: 1 : 50



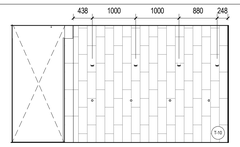

12 | 118 - SOUTH LOCKERS ELEV.
SCALE: 1 : 50



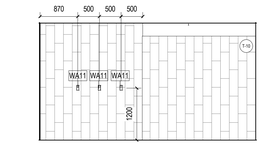

6 | 116 - EAST SHOWER ELEV.
SCALE: 1 : 50



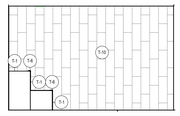

7 | 116 - WEST SHOWER ELEV.
SCALE: 1 : 50




13 | 119 - EAST SHOWER ELEV.
SCALE: 1 : 50



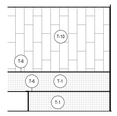

14 | 119 - WEST SHOWER ELEV.
SCALE: 1 : 50



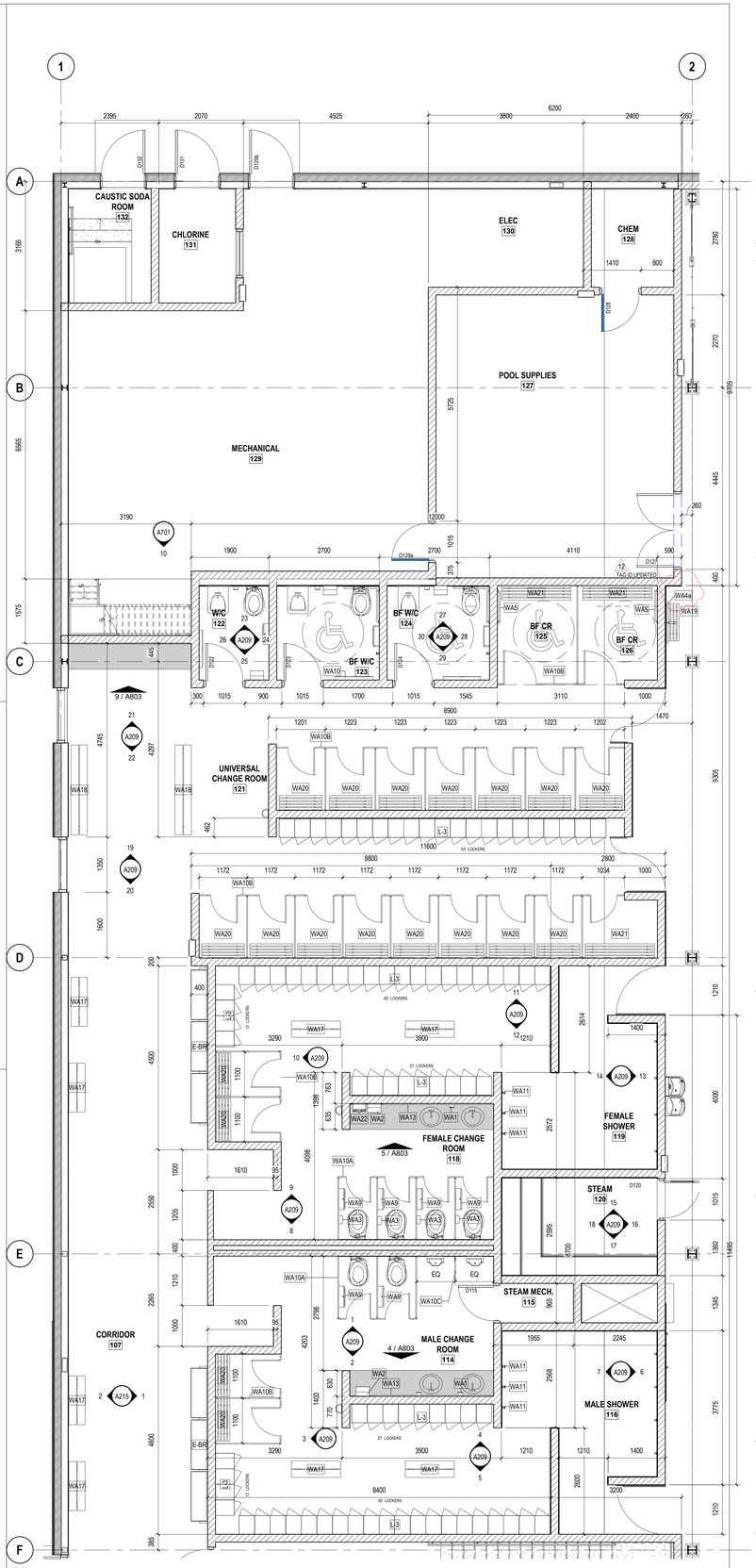

15 | 120 - NORTH ELEV.
SCALE: 1 : 50


16 | 120 - EAST ELEV.
SCALE: 1 : 50


17 | 120 - SOUTH ELEV.
SCALE: 1 : 50




18 | 120 - WEST ELEV.
SCALE: 1 : 50




32 | ENLARGED PLAN GRID F TO C
SCALE: 1 : 50

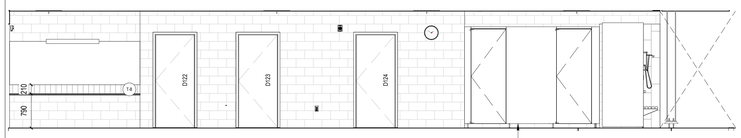



19 | 121 NORTH ELEV. 2
SCALE: 1 : 50



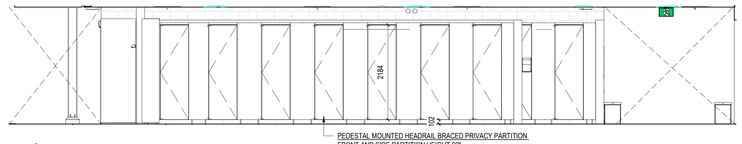

PEDESTAL MOUNTED HEADRAIL BRACED PRIVACY PARTITION
FRONT AND SIDE PARTITION HEIGHT 92"
PEDESTAL HEIGHT 4"
DOOR HEIGHT 86"

20 | 121 SOUTH ELEV. 2
SCALE: 1 : 50



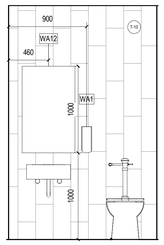

PEDESTAL MOUNTED HEADRAIL BRACED PRIVACY PARTITION
FRONT AND SIDE PARTITION HEIGHT 92"
PEDESTAL HEIGHT 4"
DOOR HEIGHT 86"

21 | 121 NORTH ELEV. 1
SCALE: 1 : 50

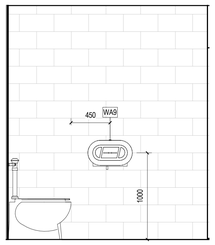



PEDESTAL MOUNTED HEADRAIL BRACED PRIVACY PARTITION
FRONT AND SIDE PARTITION HEIGHT 92"
PEDESTAL HEIGHT 4"
DOOR HEIGHT 86"

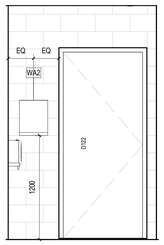
22 | 121 SOUTH ELEV. 1
SCALE: 1 : 50



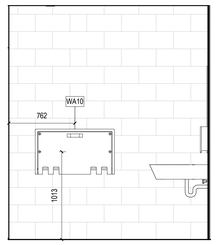

23 | 122 NORTH ELEV.
SCALE: 1 : 25




24 | 122 EAST ELEV.
SCALE: 1 : 25




25 | 122 SOUTH ELEV.
SCALE: 1 : 25




26 | 122 WEST ELEV.
SCALE: 1 : 25

12
UPDATED MODEL INFORMATION

## WASHROOM ACCESSORY SCHEDULE

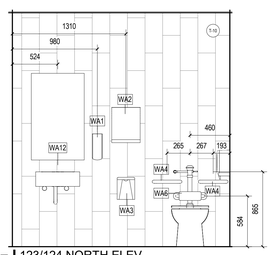
SUPPLIED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE

| ANNO | DESCRIPTION | COUNT | SUPPLIED BY |
|---|---|---|---|
| WA1 | SOAP DISPENSER- SURFACE MOUNT | 8 | OWNER |
| WA2 | PAPER TOWEL DISPENSER-SURFACE MOUNT | 8 | OWNER |
| WA3 | SANITARY NAPKIN DISPOSAL-SURFACE MOUNT | 8 | OWNER |
| WA4 | GRAB BAR-305 LENGTH | 6 | CONTRACTOR |
| WA4a | GRAB BAR-1000 LENGTH | 1 | CONTRACTOR |
| WA5 | L SHAPED GRAB BAR 762x762mm | 5 | CONTRACTOR |
| WA6 | TOILET BACK-REST-900 LENGTH | 3 | CONTRACTOR |
| WA7 | STAINLESS STEEL SHELF 7510- 18 BY BRADLEY CORP | 4 | CONTRACTOR |
| WA9 | TOILET ROLL DISPENSER-SURFACE MOUNT | 12 | OWNER |
| WA10 | BABY CHANGING STATION SURFACE MOUNT 962-11 STAINLESS STEEL BY BRADLEY CORP OR 9013-9 ROVAL BY ASI | 4 | CONTRACTOR |
| WA10A | PEDESTAL MOUNTED HEAD RAIL BRACED TOILET PARTITION | 6 | CONTRACTOR |
| WA10B | PEDESTAL MOUNTED HEAD RAIL BRACED CHANGE ROOM PARTITION | 22 | CONTRACTOR |
| WA10C | WALL MOUNTED URINAL SCREEN | 1 | CONTRACTOR |
| WA11 | COAT HOOK RICHELIEU RH115302190 CONTEMPORARY METAL HOOK 1143 IN BLACK | 12 | CONTRACTOR |
| WA12 | MIRROR 610x1000mm | 6 | CONTRACTOR |
| WA13 | MIRROR CUSTOM LENGTH X 1000mm HIGH | 3 | CONTRACTOR |
| WA17 | CHANGE ROOM BENCH - FLOOR MOUNTED - 1200L | 10 | CONTRACTOR |
| WA18 | CHANGE ROOM BENCH - FLOOR MOUNTED - 2200L | 2 | CONTRACTOR |
| WA19 | CHANGE ROOM BENCH - WALL MOUNT - 915L - MILLWORK | 2 | CONTRACTOR |
| WA20 | CHANGE ROOM BENCH - WALL MOUNT - 1050w - MILLWORK | 19 | CONTRACTOR |
| WA21 | CHANGE ROOM BENCH - WALL MOUNT - 1700w - MILLWORK | 3 | CONTRACTOR |
| WA22 | SANITARY NAPKIN DISPENSER - 25 CENT - SURFACE MOUNT | 1 | CONTRACTOR |
| WA24 | HAND DRYER | 3 | ELECTRICAL |

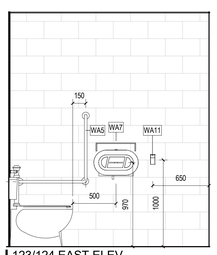
## LOCKER SCHEDULE

SUPPLIED AND INSTALLED BY CONTRACTOR

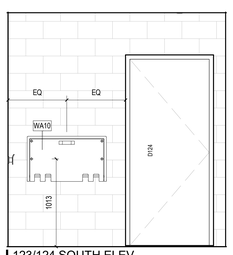
| ANNO | DESCRIPTION | TOTAL UNITS | TOTAL # OF LOCKERS |
|---|---|---|---|
| L-3 | THREE TIERED LOCKER 381X457X1830mm COIN LOCK | 95 | 285 |
| TOTAL LOCATIONS =: 9 | | 95 | 285 |



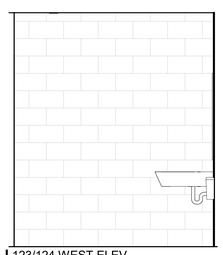

27 | 123/124 NORTH ELEV.
SCALE: 1 : 25




28 | 123/124 EAST ELEV.
SCALE: 1 : 25




29 | 123/124 SOUTH ELEV.
SCALE: 1 : 25



30 | 123/124 WEST ELEV.
SCALE: 1 : 25

# Group2

Architecture
Interior Design

ISSUES / REVISIONS

| NO. | DATE | REVISION |
|---|---|---|
| 2 | 23.02.2021 | ISSUED FOR BP REVIEW |
| 5 | 26.03.2021 | ISSUED FOR BP FINAL REVIEW |
| 6 | 06.04.2021 | ISSUED FOR BUILDING PERMIT |
| 7 | 29.04.2021 | ISSUED FOR TENDER PACKAGE REVIEW |
| 8 | 29.04.2021 | ISSUED FOR AHS SUBMISSION |
| 9 | 11.05.2021 | ISSUED FOR TENDER PACKAGE #2 |
| 12 | 28.05.2021 | ARCHITECTURAL ADDENDUM #3 |

Group2 Architecture Interior Design Ltd.
SEAL

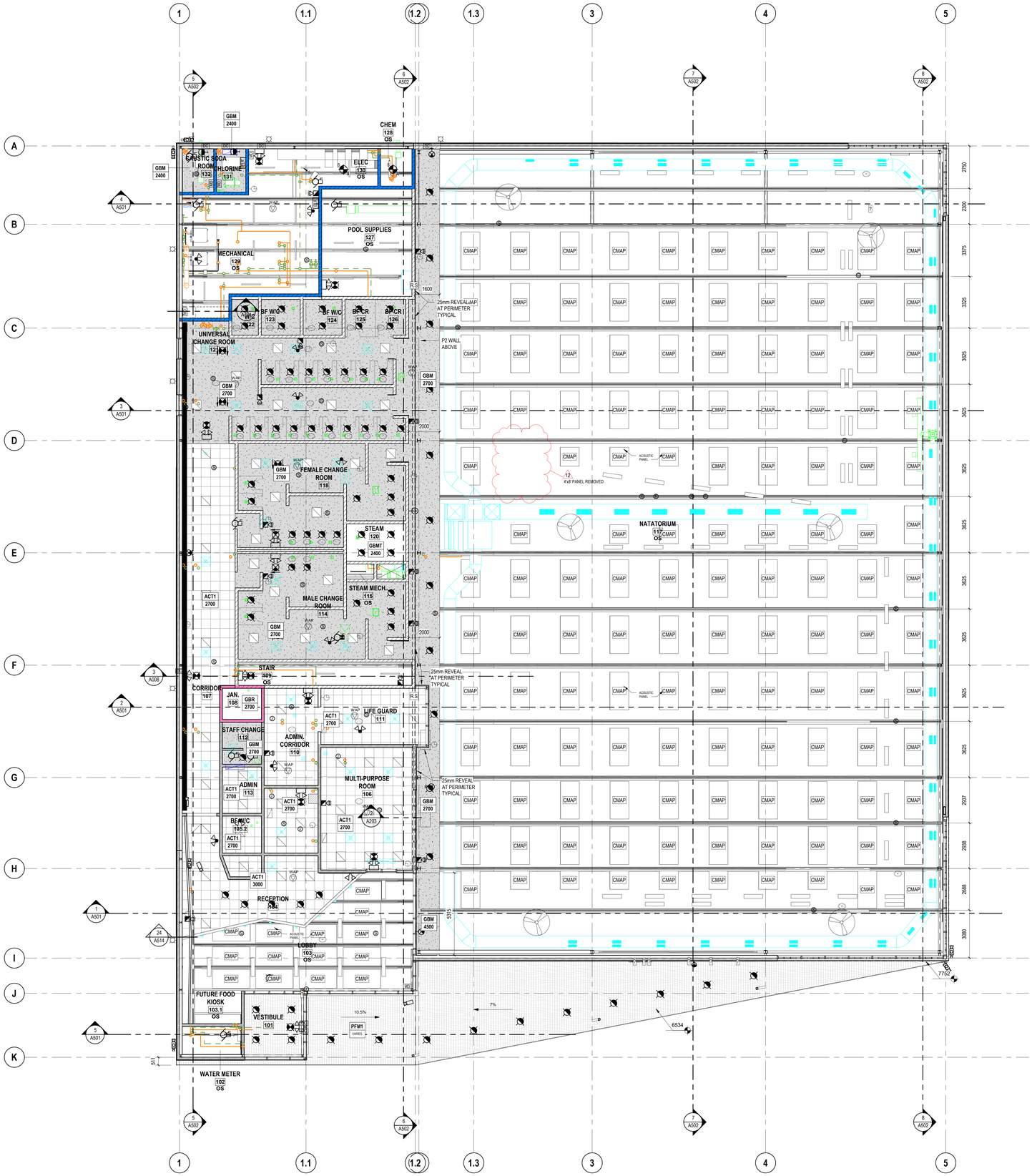
KEY PLAN

PROJECT TITLE
**DRAYTON VALLEY & BRAZEAU AQUATIC CENTRE**

DRAWING TITLE
ENLARGED FLOOR PLANS & ELEVATIONS

| CHECKED | DRAWN | DRAWING | REVISION |
|---|---|---|---|
| TS/SF | AR/DS | A209 | 12 |

FILE
19046




1 MAIN FLOOR REFLECTED CEILING PLAN
SCALE: 1 : 100

## RCP LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | SUPPLY AIR DUCT, REFER TO MECH. |
| | EXHAUST FAN, REFER TO MECH. |
| | RETURN GRILLE, REFER TO MECH. |
| | SQUARE SUPPLY DUCT, REFER TO MECH. |
| | ROUND SUPPY DUCT, REFER TO MECH. |
| | SQUARE RETURN DUCT, REFER TO MECH. |
| | ROUND RETURN DUCT, REFER TO MECH. |
| | RECESSED TROFFER, REFER TO ELEC. |
| | RECESSED POT LIGHT, REFER TO ELEC. |
| | SUSPENDED LIGHT, REFER TO ELEC. |
| | HORN STROBE, REFER TO ELEC. |
| | SECURITY CAMERA, REFER TO ELEC. |
| | SPEAKER, REFER TO ELEC. |

CEILING MOUNTED ACOUSTIC PANELS (CMAP)

**NATATORIUM**
- 110 - 4'-0" x 8'-0" PANELS
- 17 - 4'-0" x 4'-0" PANELS

**LOBBY**
- 14 - 4'-0" x 8'-0" PANELS
- ACT ON UNDERSIDE OF RECEPTION BULKHEAD

12 PANEL QUANTITY AND SIZE UPDATED TO MATCH RCP

## GENERAL NOTES - CEILING

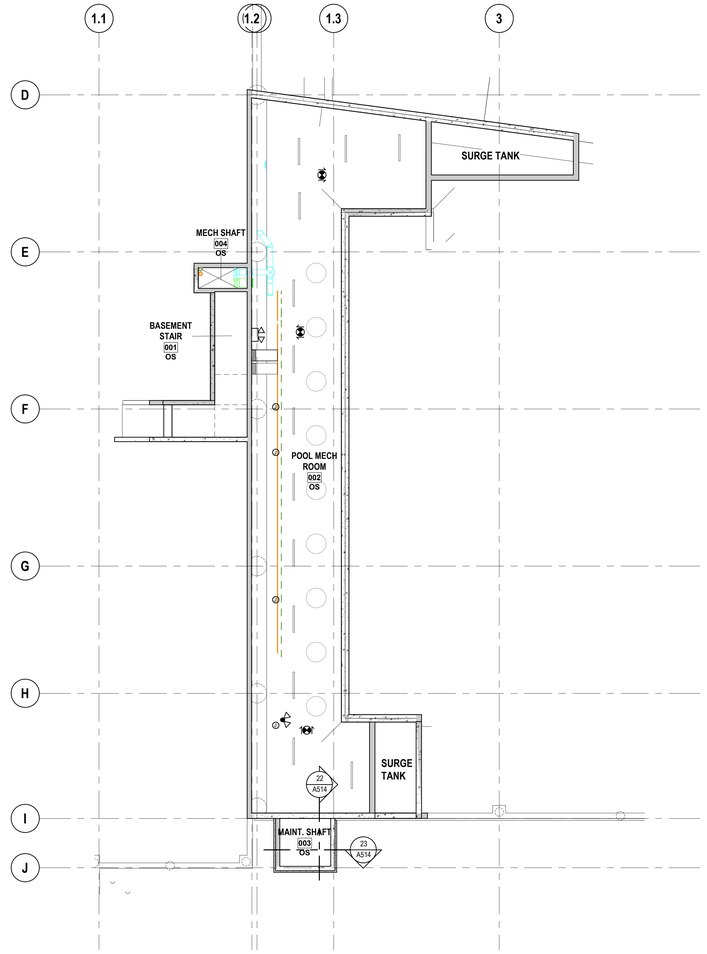
1. REFLECTED CEILING PLANS ARE TO BE USED IN CONJUNCTION WITH THE MECHANICAL & ELECTRICAL DRAWINGS.
2. ALL CEILING HEIGHTS SHOWN ON THE REFLECTED CEILING PLANS ARE RELATED TO A CLEAR DIMENSION ABOVE THE FINISHED FLOOR LEVEL OF THE FLOOR LOCATED DIRECTLY BELOW THE CEILING INDICATED.

## SPECIFIC NOTES - CEILING

A. GYPSUM BOARD TRADE TO ALLOW FOR THE INSTALLATION OF 16 - 600 X 600 CEILING ACCESS PANELS, FIELD LOCATED, SUPPLIED BY OTHERS

## CEILING SCHEDULE

| TYPE | G2_ASSEMBLY | COMMENTS |
|---|---|---|
| ACT1 | 600 x 600 ACOUSTIC TILE - SUSPENDED | |
| GBM | 12.7mm MOISTURE RESISTANT GYPSUM BOARD<br>METAL SUSPENSION SYSTEM | |
| GBMT | 6mm 50mm X 50mm TILE T-1<br>6mm MORTAR BED<br>12.7mm MOISTURE RESISTANT GYPSUM BOARD<br>METAL SUSPENSION SYSTEM | |
| GBR | SMOKE SEPARATION ASSEMBLY<br>12.7mm TYPE X GYPSUM BOARD<br>METAL SUSPENSION SYSTEM | |
| PFM1 | 140mm METAL SOFFIT<br>25mm HAT CHANNELL @ 400mm O.C.<br>STEEL STUD FRAMING | |




2 BASEMENT REFLECTED CEILING PLAN
SCALE: 1 : 100

Group2
Architecture
Interior Design

ISSUES / REVISIONS

| NO. | DATE | REVISION |
|---|---|---|
| 5 | 26.03.2021 | ISSUED FOR BP FINAL REVIEW |
| 6 | 06.04.2021 | ISSUED FOR BUILDING PERMIT |
| 7 | 29.04.2021 | ISSUED FOR TENDER PACKAGE REVIEW |
| 9 | 11.05.2021 | ISSUED FOR TENDER PACKAGE #2 |
| 10 | 19.05.2021 | ARCHITECTURAL ADDENDUM #1 |
| 11 | 25.05.2021 | ARCHITECTURAL ADDENDUM #2 |
| 12 | 28.05.2021 | ARCHITECTURAL ADDENDUM #3 |

Group2 Architecture Interior Design Ltd.
SEAL

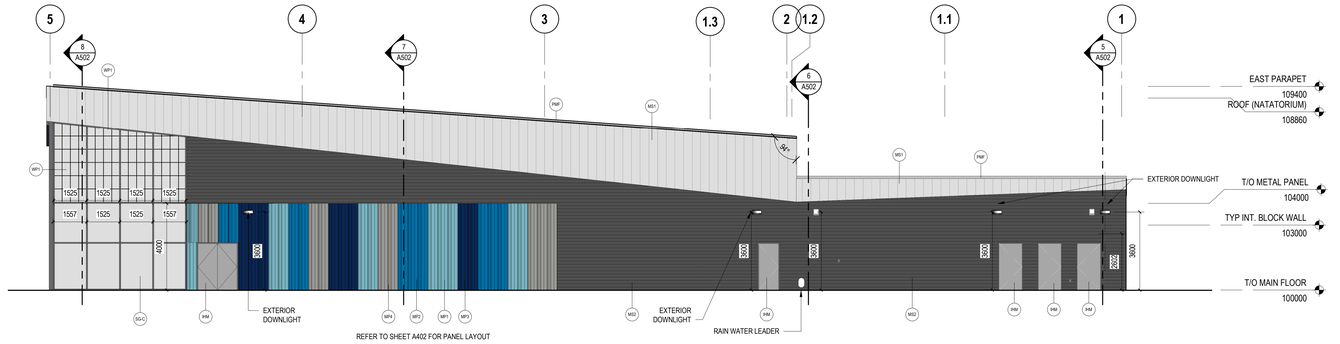
KEY PLAN

PROJECT TITLE
**DRAYTON VALLEY & BRAZEAU AQUATIC CENTRE**

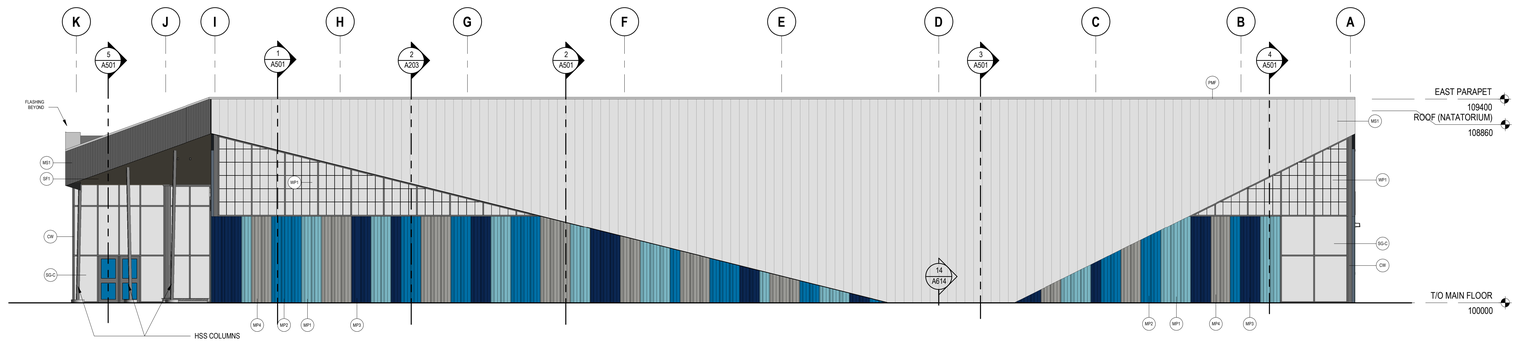
DRAWING TITLE
REFLECTED CEILING PLANS

| CHECKED | DRAWN | DRAWING | REVISION |
|---|---|---|---|
| TS/SF | JN/DS | A301 | 12 |

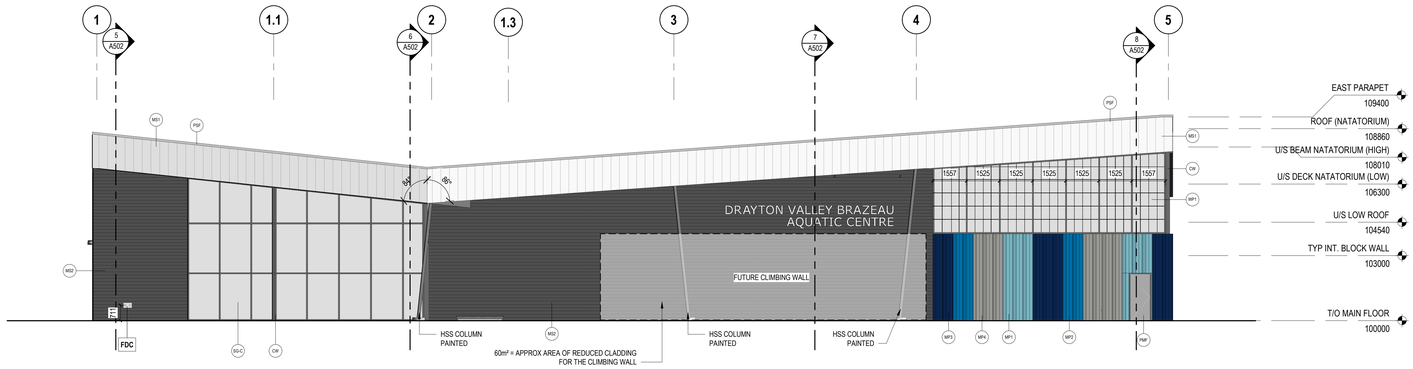
FILE
19046



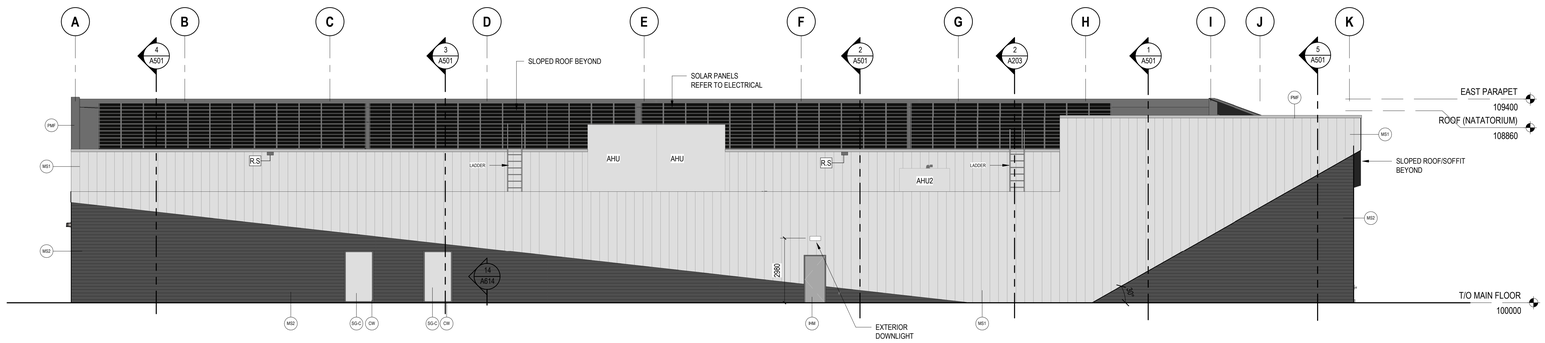

1 NORTH ELEVATION
SCALE: 1 : 100




2 EAST ELEVATION
SCALE: 1 : 100




3 SOUTH ELEVATION
SCALE: 1 : 100




4 WEST ELEVATION
SCALE: 1 : 100

## EXTERIOR FINISH SCHEDULE

| MARK | DESCRIPTION |
|---|---|
| CW | CURTAIN WALL - ANODIZED ALUMINUM |
| MP1 | METAL PANEL - SAPPHIRE BLUE |
| MP2 | METAL PANEL - ROYAL BLUE |
| MP3 | METAL PANEL - LABRADOR BLUE |
| MP4 | METAL PANEL - SILVER METALLIC |
| MS1 | METAL SIDING - STANDING SEAM - VERTICAL - WHITE |
| MS2 | METAL SIDING - CORRUGATED - HORIZONTAL - CHARCOAL |
| PMF | PREFINISHED METAL FLASHING |
| SG-C | EXTERIOR GLAZING - DOUBLE PANE - CURTAINWALL SYSTEM |

12 COLOUR REVISED TO MATCH 09 99 00 FINISH SCHEDULE

Group2
Architecture
Interior Design

ISSUES / REVISIONS

| NO. | DATE | REVISION |
|---|---|---|
| 1 | 09.02.2021 | ISSUED FOR DEVELOPMENT PERMIT |
| 2 | 23.02.2021 | ISSUED FOR BP REVIEW |
| 5 | 26.03.2021 | ISSUED FOR BP FINAL REVIEW |
| 6 | 06.04.2021 | ISSUED FOR BUILDING PERMIT |
| 7 | 29.04.2021 | ISSUED FOR TENDER PACKAGE REVIEW |
| 9 | 11.05.2021 | ISSUED FOR TENDER PACKAGE #2 |
| 12 | 28.05.2021 | ARCHITECTURAL ADDENDUM #3 |

Group2 Architecture Interior Design Ltd.
SEAL

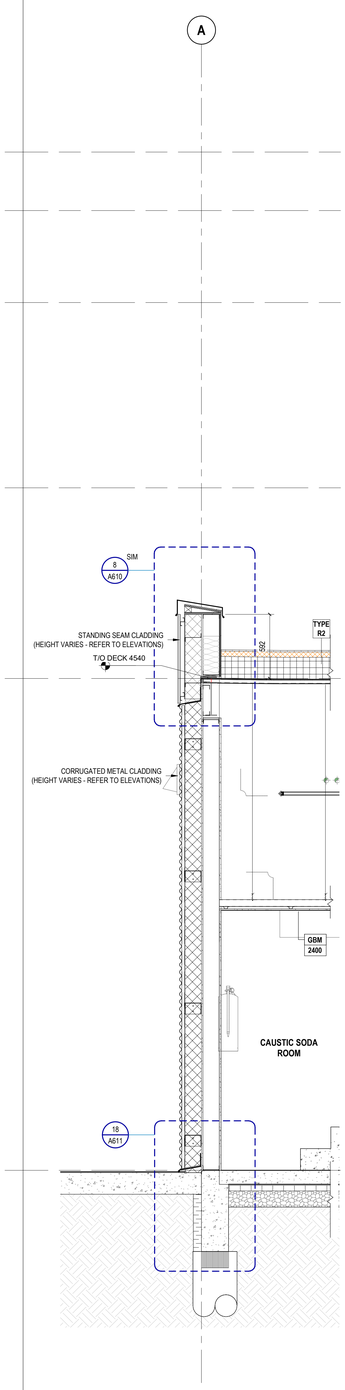
KEY PLAN

PROJECT TITLE
**DRAYTON VALLEY & BRAZEAU AQUATIC CENTRE**

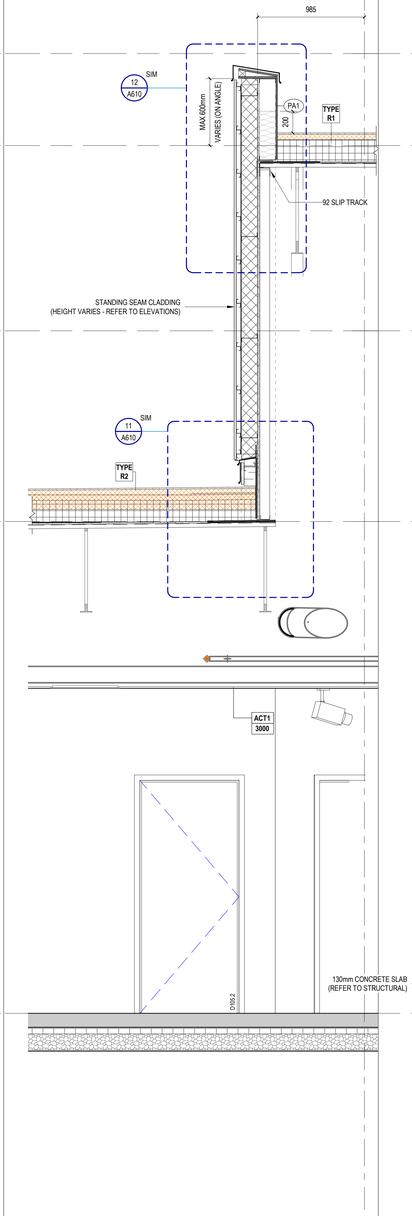
DRAWING TITLE
BUILDING ELEVATIONS

| CHECKED | DRAWN | DRAWING | REVISION |
|---|---|---|---|
| TS/SF | JN/DS | A401 | 12 |

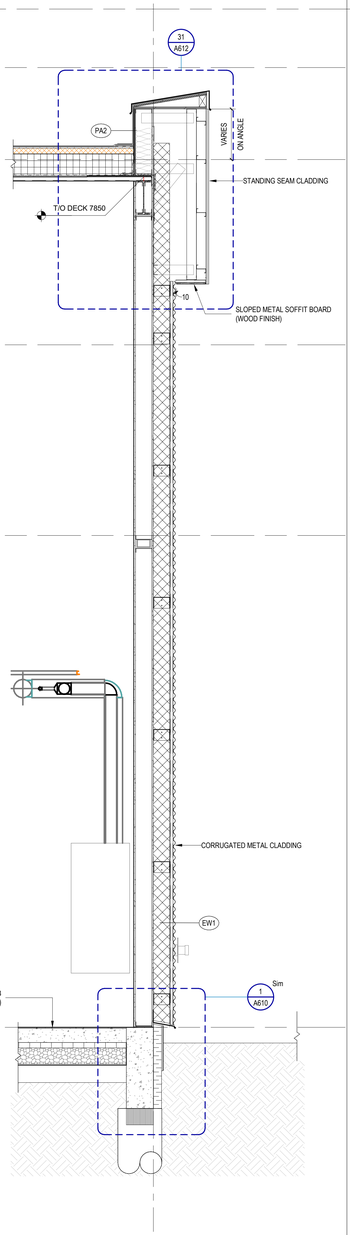
FILE
19046



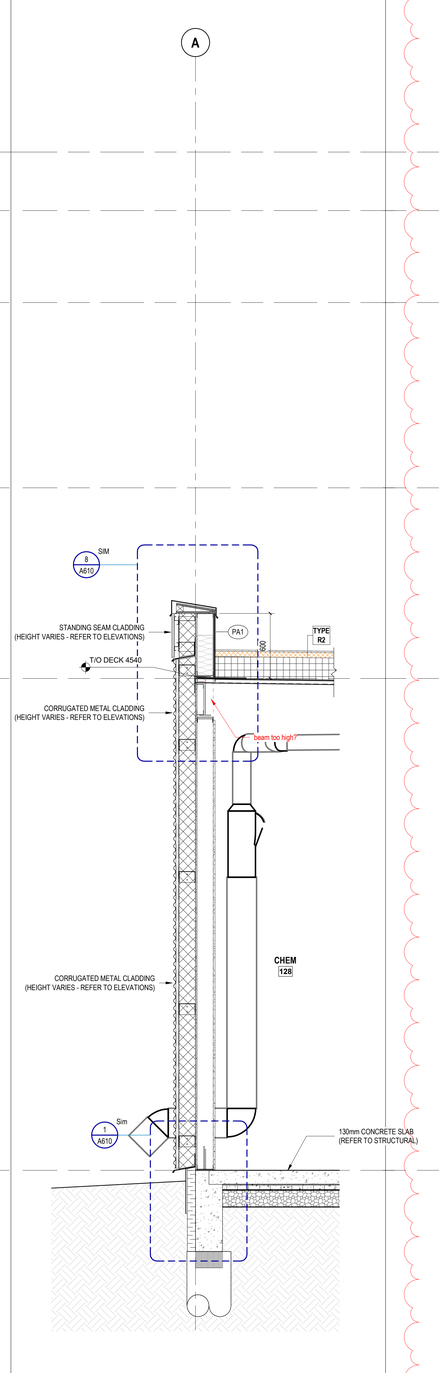

13 | GRIDS 1-2 AT GRID A
SCALE: 1 : 20



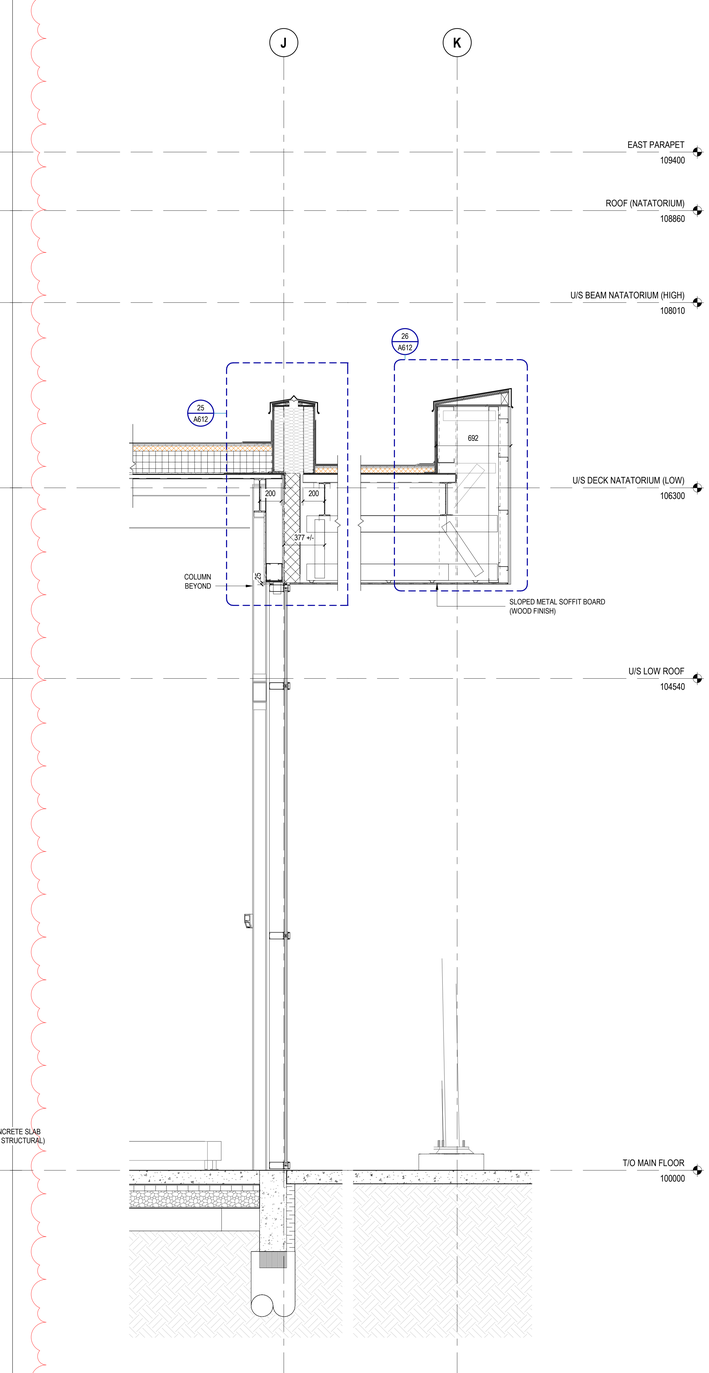

14 | GRIDS 1-2 AT GRIDS G-H
SCALE: 1 : 20




15 | GRIDS 1-2 AT GRID K
SCALE: 1 : 20




16 | GRIDS 2-3 AT GRID A
SCALE: 1 : 20




17 | 17-SECTION - GRIDS 2-3 AT GRIDS H-J
SCALE: 1 : 20

# Group2
Architecture
Interior Design

ISSUES / REVISIONS

| NO. | DATE | REVISION |
|---|---|---|
| 5 | 26.03.2021 | ISSUED FOR BP FINAL REVIEW |
| 6 | 06.04.2021 | ISSUED FOR BUILDING PERMIT |
| 7 | 29.04.2021 | ISSUED FOR TENDER PACKAGE REVIEW |
| 9 | 11.05.2021 | ISSUED FOR TENDER PACKAGE #2 |
| 11 | 25.05.2021 | ARCHITECTURAL ADDENDUM #2 |
| 12 | 28.05.2021 | ARCHITECTURAL ADDENDUM #3 |

Group2 Architecture Interior Design Ltd.
SEAL

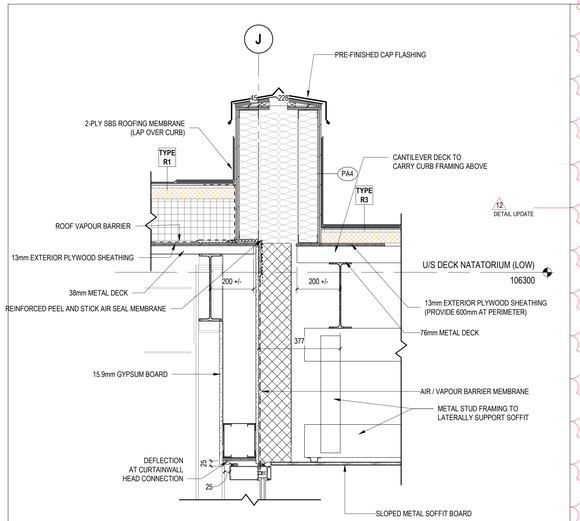
KEY PLAN

PROJECT TITLE
**DRAYTON VALLEY & BRAZEAU AQUATIC CENTRE**

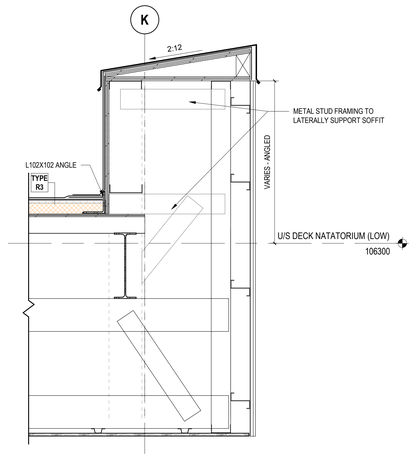
DRAWING TITLE
WALL SECTIONS

| CHECKED | DRAWN | DRAWING | REVISION |
|---|---|---|---|
| TS/SF | JN | A512 | 12 |

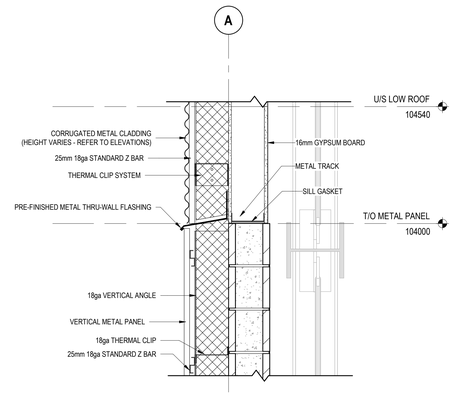
FILE
19046



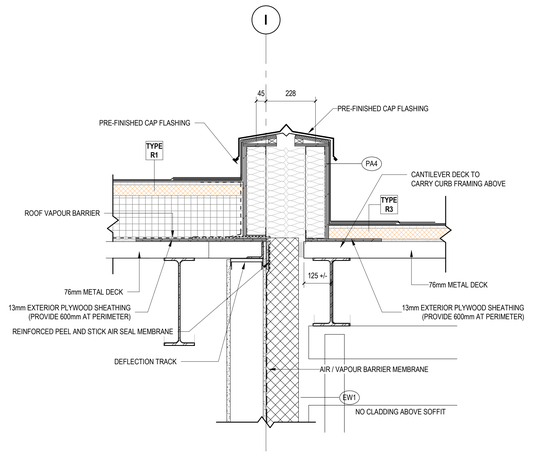

**25** | EXTERIOR GLAZING @ ROOF & SOFFIT
SCALE: 1 : 10 REF: A004




**26** | PARAPET @ OVERHANG
SCALE: 1 : 10 REF: A512




**27** | CMU - METAL PANEL @ STUD - STANDING SEAM
SCALE: 1 : 10 REF: A513




**28** | CORRUGATED @ ROOF OVERHANG
SCALE: 1 : 10 REF: A513




**29** | METAL PANEL @ IHM DOOR HEAD
SCALE: 1 : 10 REF: A513




**31** | DETAIL AT PARAPET/SOFFIT
SCALE: 1 : 10 REF: A512

**Group2**
Architecture
Interior Design

ISSUES / REVISIONS

| NO. | DATE | REVISION |
|---|---|---|
| 5 | 26.03.2021 | ISSUED FOR BP FINAL REVIEW |
| 6 | 06.04.2021 | ISSUED FOR BUILDING PERMIT |
| 7 | 29.04.2021 | ISSUED FOR TENDER PACKAGE REVIEW |
| 9 | 11.05.2021 | ISSUED FOR TENDER PACKAGE #2 |
| 11 | 25.05.2021 | ARCHITECTURAL ADDENDUM #2 |
| 12 | 28.05.2021 | ARCHITECTURAL ADDENDUM #3 |

Group2 Architecture Interior Design Ltd.
SEAL

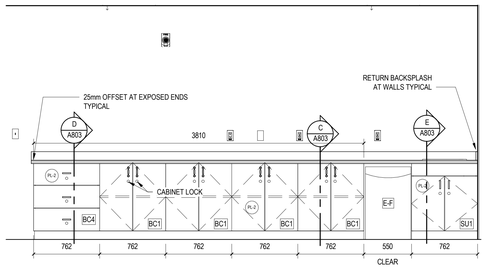
KEY PLAN

PROJECT TITLE
**DRAYTON VALLEY & BRAZEAU AQUATIC CENTRE**

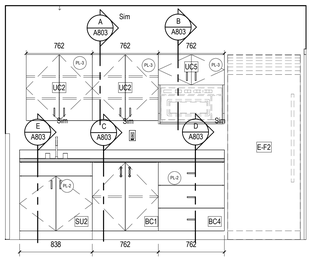
DRAWING TITLE
SECTION DETAILS

| CHECKED | DRAWN | DRAWING | REVISION |
|---|---|---|---|
| TS/SF | JN | A612 | 12 |

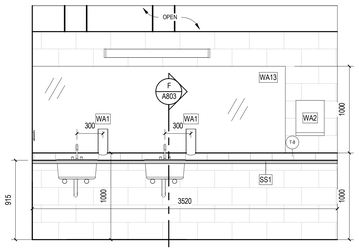
FILE
19046



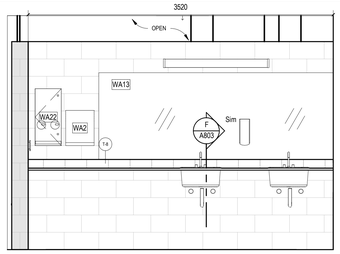

2 | MP MILLWORK
SCALE: 1 : 25



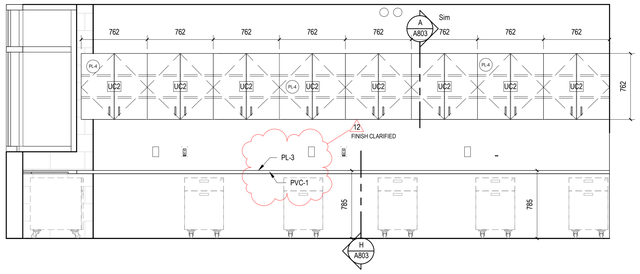

3 | ADMIN KITCHENETTE
SCALE: 1 : 25



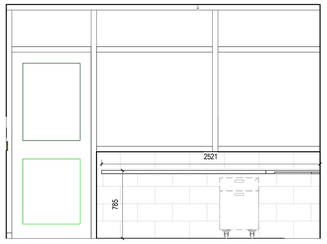

4 | MALE CHANGEROOM COUNTER
SCALE: 1 : 25



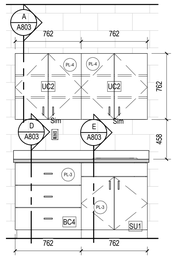

5 | FEMALE CHANGE ROOM COUNTER
SCALE: 1 : 25



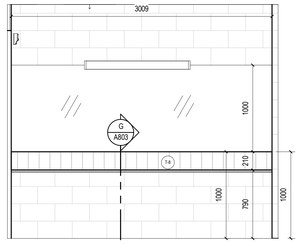

6 | LIFE GUARD DESK
SCALE: 1 : 25



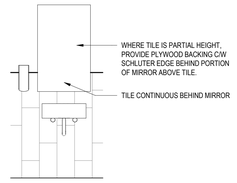

7 | LIFEGUARD DESK
SCALE: 1 : 25




8 | LIFEGUARD MEDICAL CABINET
SCALE: 1 : 25




9 | UNIVERSAL CHANGE ROOM COUNTER
SCALE: 1 : 25




10 | MIRROR AT PARTIAL TILE HEIGHT
SCALE: 1 : 25

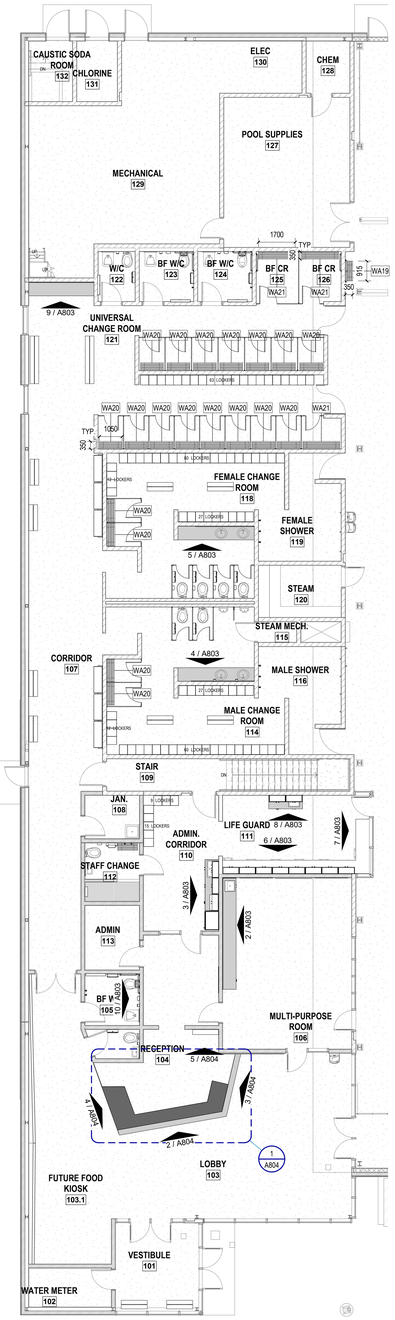
**LOCKER SCHEDULE**

SUPPLIED AND INSTALLED BY CONTRACTOR

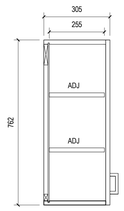
| ANNO | DESCRIPTION | TOTAL UNITS | TOTAL # OF LOCKERS |
|---|---|---|---|
| L-3 | THREE TIERED LOCKER 381X457X1830mm COIN LOCK | 95 | 285 |
| TOTAL LOCATIONS =: 9 | | 95 | 285 |

**INTERIORS ABBREVIATION LIST**

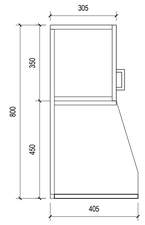
| | |
|---|---|
| Acoustic Ceiling Tile | ACT |
| Architectural Exposed Concrete | AEC |
| Adjustable | ADJ |
| Baseboard | BB |
| Concrete Stain | CS |
| Counter Solid Quartz | CSQ |
| Epoxy Paint | EPT |
| Glazing Film | GLF |
| Paint | PT |
| Painted | PTD |
| Plastic Laminate | PL |
| Resilient Sheet Flooring | RSF |
| Rubber Base | RB |
| Suspended Acoustic Panel | SAP |
| Tile | T |
| Transition Strip | TS |
| Wall Covering | WC |
| Wall Protection | WP |
| Walk Off Matt | WOM |
| Wall Graphic | WG |



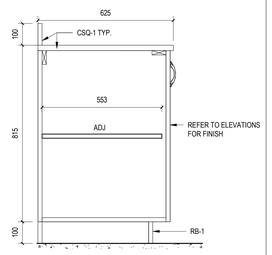

1 | MAIN FLOOR MILLWORK & EQUIPMENT PLAN
SCALE: 1 : 100



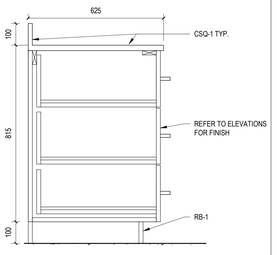

A | UC2 TYP. FULL
SCALE: 1 : 10



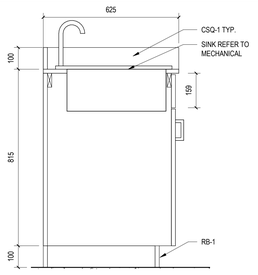

B | UC5 TYP. FULL MICROWAVE
SCALE: 1 : 10



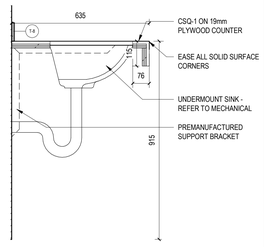

C | BC1 TYP. DOOR
SCALE: 1 : 10



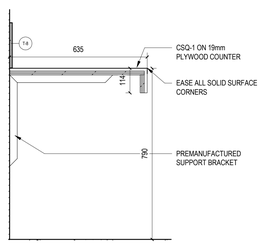

D | BC4 TYP. 3 DRAWERS
SCALE: 1 : 10



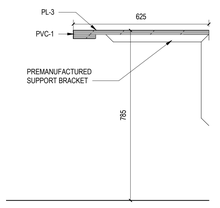

E | SU1 - TYP. SINK
SCALE: 1 : 10



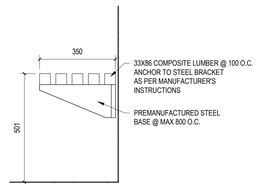

F | TYP. CHANGE ROOM COUNTER
SCALE: 1 : 10




G | UNIVERSAL CHANGE ROOM COUNTER
SCALE: 1 : 10




H | LIFEGUARD COUNTER
SCALE: 1 : 10




I | WA-20/21 - BENCH WALL MOUNTED
SCALE: 1 : 10

**Group2**
Architecture
Interior Design

ISSUES / REVISIONS

| NO. | DATE | REVISION |
|---|---|---|
| 5 | 26.03.2021 | ISSUED FOR BP FINAL REVIEW |
| 6 | 06.04.2021 | ISSUED FOR BUILDING PERMIT |
| 7 | 29.04.2021 | ISSUED FOR TENDER PACKAGE REVIEW |
| 9 | 11.05.2021 | ISSUED FOR TENDER PACKAGE #2 |
| 12 | 28.05.2021 | ARCHITECTURAL ADDENDUM #3 |

Group2 Architecture Interior Design Ltd.
SEAL

KEY PLAN

PROJECT TITLE
**DRAYTON VALLEY & BRAZEAU AQUATIC CENTRE**

DRAWING TITLE
MILLWORK ELEVATIONS & SECTIONS

| CHECKED | DRAWN | DRAWING | REVISION |
|---|---|---|---|
| Checker | Author | A803 | 12 |

FILE
19046

Group2
Architecture
Interior Design

# Addendum No. 04

**DRAYTON VALLEY BRAZEAU AQUATIC CENTRE**

May 31, 2021
File No. 19046

Group2
Architecture Interior Design Ltd.
900-10150 100th Street NW
Edmonton AB T5J 0P6
T +1 780 447 2990
general@group2.ca

This addendum forms part of, and will be included with, bidding documents for this project. No consideration will be given to requests for extra costs as a result of contractor being unfamiliar with this addendum. Acknowledge receipt of addendum in space provided in submitted tender.

## 1. ARCHITECTURAL

### 1.1 Specifications

.1 **ADD:** Section 05 41 13 in its entirety. (5 pages)

.2 **MODIFY:** Section 08 71 01 as follows:

.1 Hardware Group No. 017 shall have 15 second delayed egress.

.2 Hardware Group No. 023 and No. 025 do not require delayed egress. Provide alternate pricing for 15 second delayed egress hardware.

### 1.2 Architectural drawings (1 sheet)

.1 A301 – Reflected Ceiling Plans

.1 **ADDED:** General Note

## 2. CLARIFICATIONS

1. **Question:** Pertaining to Door Hardware Schedule: Group 028 – Specwriter is not aware of factory requirements with 4040XP closer (no arm specified) and 100 series overhead stops with ST-1630 templating.
    a. **Response:** The ST1630 templating allows the 4040XP closer to mount on the pull side of the door with the 100 series concealed overhead stop. The 4040XP-18TJ drop plate will be required for the application. More standard application 4040XP closer is parallel arm mount (push side) with 100 series concealed overhead stop - no additional plates required.

## 3. REQUESTS FOR ALTERNATES

1. **Request:** What is required to be submitted for an alternate to be considered.
    **a. Response:** If a bidder is requesting an alternate the bidder would need to provide a comparison breakdown. i.e. We propose Material B as a replacement for specified Material A and these are the reasons alternate Material B is equal to or exceeds Material A. This should be in the form of an itemized comparison of the spec'd vs. the substitution, listing any significant variations. The specification lists products that meet the performance requirements, it is incumbent on the bidder to prove their product meets or exceeds these.

Total Attached Pages: 6
**End of Addendum**

## Part 1 General

### 1.1 DOCUMENTS

.1 This section, along with the drawings, forms part of the Contract Documents and is to be read, interpreted, and coordinated with all other parts.

### 1.2 RELATED WORK SPECIFIED ELSEWHERE

.1 Section 01 74 11: Site Cleaning

.2 Section 05 50 00: Steel Fabrications

.3 Section 09 21 19: Gypsum Board Assemblies

### 1.3 REFERENCE STANDARDS

.1 Structural steel shall conform to the requirements of the following Building Code and Reference Standards unless otherwise required by this specification:

- .1 National Building Code – 2019 Alberta Edition (NBC(AE))
- .2 ASTM A653/A653M - Standard Specification for Sheet Steel, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
- .3 ASTM A792/A792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process
- .4 CAN/CGSB-1.181 - Ready-Mixed Organic Zinc-Rich Coating (Withdrawn)
- .5 CAN/CGSB-7.1 - Lightweight Steel Wall Framing Components
- .6 CSSBI 51 - Lightweight Steel Framing Design Manual
- .7 CSSBI Fact Sheet #3 - Care and Maintenance of Prefinished Sheet Steel Building Products
- .8 CSSBI Technical Bulletin Vol. 7, No. 2 - Changing Standard Thicknesses for Canadian Lightweight Steel Framing Applications
- .9 CSSBI S5 - Wind Bearing Steel Studs
- .10 CSA G164 - Hot Dip Galvanizing of Irregularly Shaped Articles
- .11 CSA W47.1 - Certification of Companies for Fusion Welding of Steel
- .12 CSA W55.3 - Certification of Companies for Resistance Welding of Steel and Aluminum
- .13 CSA W59 - Welded Steel Construction (Metal Arc Welding)
- .14 CSA S136 - North American Specification for the Design of Cold-Formed Steel Structural Members

.2 Revision date of all referenced codes, standards, and guidelines shall be as indicated in the above referenced Building Code. Where no reference is made within the Building Code, the latest published edition shall be used.

.3 Where the Standard is referenced in this specification, it shall mean the documents specified in this clause, and their referenced Standards.

## 1.4 DESCRIPTION OF SYSTEM

.1 Provide exterior wall stud framing system to resist wind loads, consisting of the following components:

.1 Studs.

.2 Top and bottom tracks.

.3 Bridging and bracing.

.4 Top and bottom track connections to main structure, including fabrications to accommodate main structure deflections.

.5 Head, sill, and jamb members at wall openings.

.6 Framing component connections.

## 1.5 ADMINISTRATIVE REQUIREMENTS

.1 Coordination:

.1 Coordinate work of this Section with fixtures supported by wind load bearing metal stud systems. Such fixtures may include, but are not limited to: architectural woodwork, premanufactured casework, plumbing fixtures, and electrical fixtures and panels.

## 1.6 SUBMITTALS

.1 Product Data:

.1 Upon request, submit manufacturer's printed product literature, specifications, and data sheets.

.2 Upon request, submit product data for mechanical fasteners, indicating sizes, shear, and pull-over loading capacity where applicable. Provide data indicating thickness and type of corrosion protection coating.

.3 Upon request, submit product data indicating suitability of explosive powder actuated fasteners for application.

.2 Shop Drawings:

.1 Submit shop drawings prepared under direction of a Specialty Structural Engineer licenced in the province of Alberta and with a minimum of five years experience in metal stud design. Drawings of components and connections designed by the Contractor shall be sealed and signed by this Specialty Structural Engineer.

.1 Design criteria for the metal stud system includes:

.1 Wind loads applied to the wall surfaces in accordance with the NBC(AE), the associated Structural Commentaries, and as indicated on structural drawings.

.2 Exposure of the building for the purposes of calculation of the Coefficient Ce shall be taken as open terrain. For internal pressures, Coefficient Cpi shall be taken as -0.45 to +0.30.

.3 Unless where indicated on architectural or structural drawings, connections to base structure shall include provision for elastic deformation of the structure above, taken as 1/360 of the span of that member.

.4 Additional loads from mechanical components as indicated on architectural and structural drawings.

.5 Base structure connections shall be at locations indicated on architectural and structural drawings, or as otherwise approved by the Consultant.

.6 Deflection of wall studs shall be limited to 1/360 of the span.

.2 Shop drawings shall detail all components of the wind-bearing metal stud system, including anchorage and framing connections. Indicate type, size, and spacing of fastening devices.

**1.7 DELIVERY, STORAGE, AND HANDLING**

.1 Waste Management and Disposal:

.1 Separate waste materials for reuse and recycling in accordance with practices in place onsite.

**Part 2 Products**

**2.1 FRAMING MEMBERS**

.1 Cold-formed Sheet Steel: To ASTM A653M. Thicknesses of framing members specified or indicated on drawings is exclusive of galvanized coating.

.2 Configuration and Cutouts: To CAN/CGSB-7.1, centres of cutouts shall be minimum 300 mm from stud ends.

.3 Galvanized Zinc Coating: To ASTM A653M, minimum Z275 coating.

.4 Colour Coding: In accordance with Lightweight Steel Framing Manual, published by Canadian Sheet Steel Building Institute, 1988 edition.

.5 Stud Sizes and Spacing: As indicated on Drawings.

.6 Top and Bottom Track Sizes: As indicated on Drawings and to match stud size.

**2.2 ANCHORING DEVICES**

.1 Drilled Inserts: Steel, cadmium plated or hot-dip galvanized, sizes as indicated on drawings.

.2 Bolts and Nuts: To ASTM A307, sizes as indicated on drawings, with large flat type steel washers, sized to suit fasteners, hot-dip galvanized.

.3 Explosive Powder Actuated Fasteners: As recommended by manufacturer for the application, subject to approval by Consultant.

**2.3 FRAMING CONNECTION DEVICES**

.1 Screws: Self-drilling and tapping, sizes as specified by the metal stud engineer, and as follows:

.1 Material: Stainless steel or steel with minimum 0.008 mm cadmium or zinc coating.

.2 Head Profile: Hex, pan, and low-profile type.

.3 Length: Adequate to penetrate not less than 3 fully exposed threads beyond joined materials.

**Part 3 Execution**

**3.1 ERECTION**

.1 Provide continuous top and bottom tracks.

.2 Space studs at maximum 400 mm on centre and as indicated on engineered shop drawings. Coordinate spacing with panel products to be applied against framing.

.3 Cut members using saw or shear. Flame cutting is not permitted.

.4 Except as indicated otherwise on Drawings, provide double studs at wall openings greater than stud space in width, and at door and window jambs. Locate studs not more than 50 mm from each side of openings.

.5 Provide minimum of three studs at corners.

.6 Provide cross-studs secured to studs, and additional framing as required for support of fixtures mounted to walls.

.7 After erection, refinish damaged finishes, welds, fastener heads and nuts with zinc-rich paint, in accordance with paint manufacturer's instructions.

**3.2 ANCHORAGE AND CONNECTIONS**

.1 Securely anchor metal stud systems to main structure with fasteners located as indicated on engineered shop drawings and not more than 50 mm from track ends. Unless otherwise indicated, anchor components as follows:

.1 To concrete with drilled inserts.

.2 To steel with screws, welds, explosive powder actuated fasteners, or bolts.

.2 Install powder actuated fasteners in accordance with manufacturer's instructions, strictly observing minimum recommended edge distances for applicable substrate.

.3 Connect framing members using bolts, screws, or welds and as detailed on engineered shop drawings.

.4 Use wafer head screws or welds where panel products will be installed against fastening devices.

.5 Do welding in accordance with ANSI/AWS D1.3 - Structural Welding Code - Sheet Steel.

**3.3 ERECTION TOLERANCES**

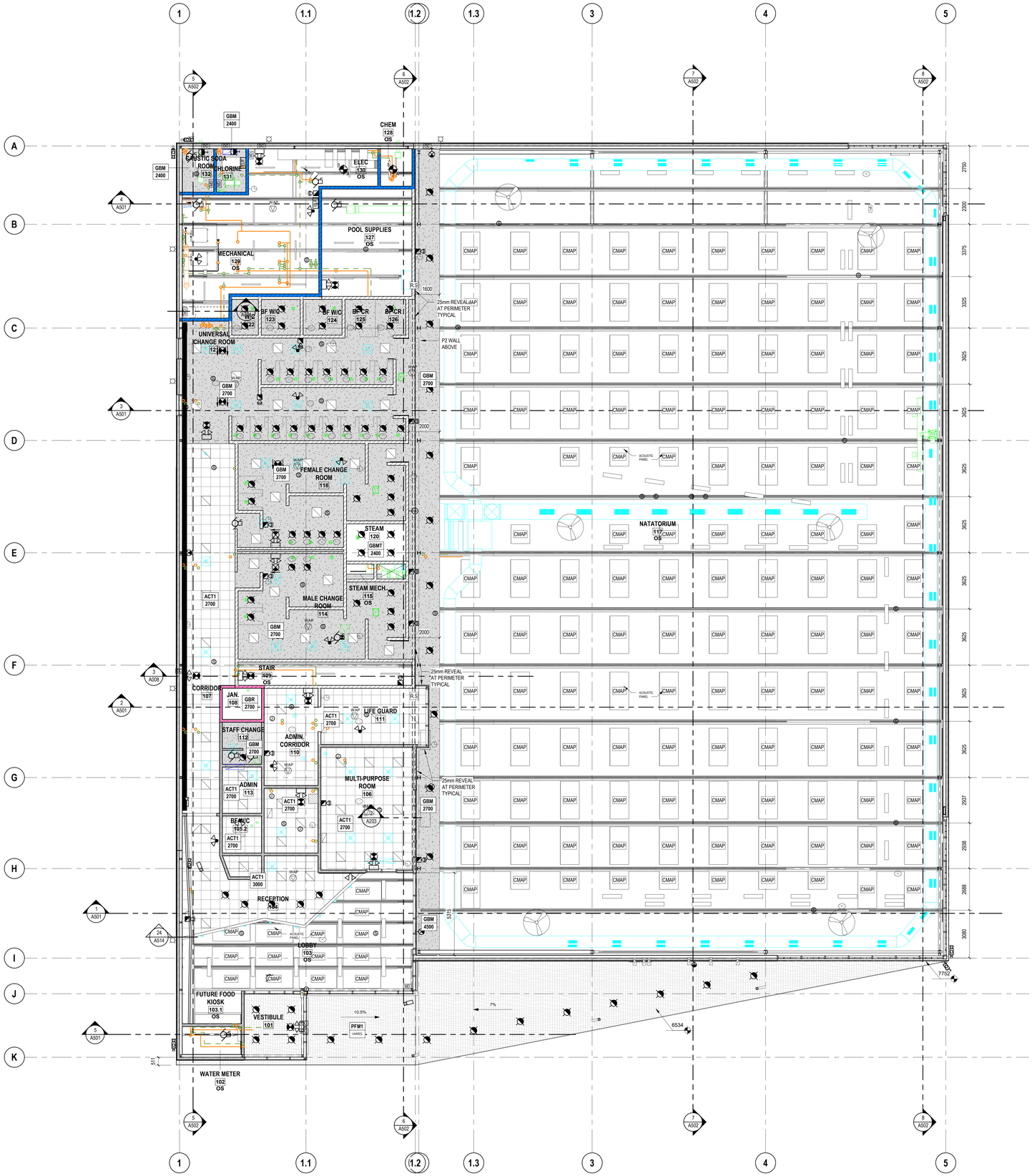
.1 Out of Plumb: Maximum 1/500 of member length.

.2 Track Camber: Maximum 1/1000 of member length.

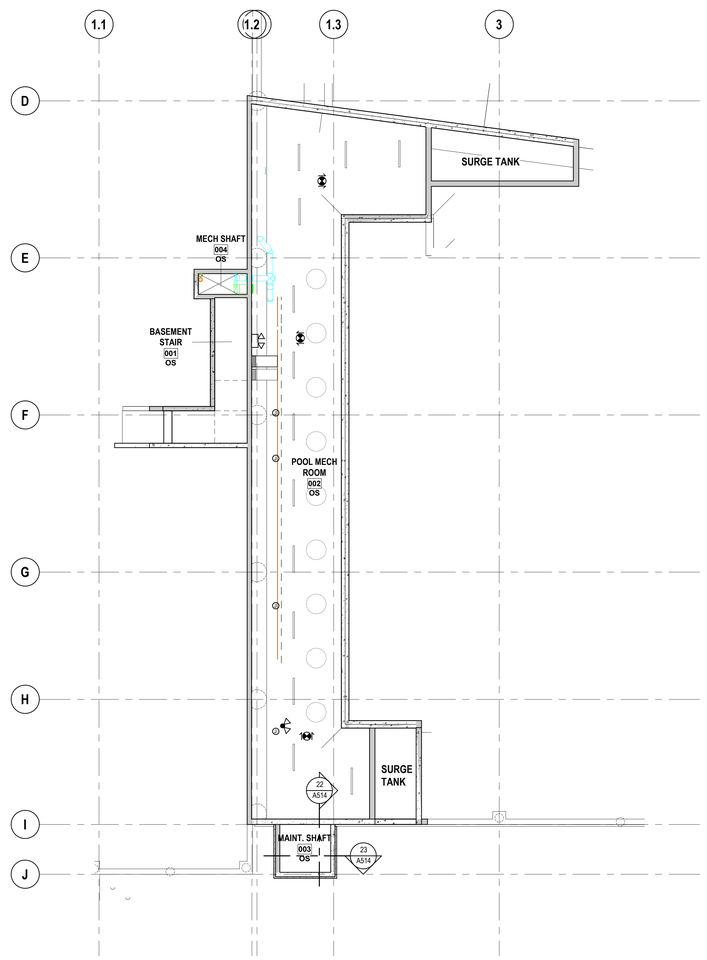
.3 Gap Between End of Studs and Web of Tracks: Maximum 4 mm.

.4 Stud Spacing: Plus or minus 3 mm from specified spacing. Cumulative error in spacing shall not exceed requirements for applied panel products.

**END OF SECTION**




1 MAIN FLOOR REFLECTED CEILING PLAN
SCALE: 1 : 100




2 BASEMENT REFLECTED CEILING PLAN
SCALE: 1 : 100

## GENERAL NOTES - CEILING

1. REFLECTED CEILING PLANS ARE TO BE USED IN CONJUNCTION WITH THE MECHANICAL & ELECTRICAL DRAWINGS.
2. ALL CEILING HEIGHTS SHOWN ON THE REFLECTED CEILING PLANS ARE RELATED TO A CLEAR DIMENSION ABOVE THE FINISHED FLOOR LEVEL OF THE FLOOR LOCATED DIRECTLY BELOW THE CEILING INDICATED.
3. ALL EXPOSED CEILINGS, OPEN WEB STEEL JOISTS, ELECTRICAL CONDUITS, AND DUCTWORK TO BE PAINTED PT-1 THROUGHOUT MAIN FLOOR, TYPICAL.

13 ADDED NOTE

## SPECIFIC NOTES - CEILING

A. GYPSUM BOARD TRADE TO ALLOW FOR THE INSTALLATION OF 16 - 600 X 600 CEILING ACCESS PANELS, FIELD LOCATED, SUPPLIED BY OTHERS

## RCP LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | SUPPLY AIR DUCT, REFER TO MECH. |
| | EXHAUST FAN, REFER TO MECH. |
| | RETURN GRILLE, REFER TO MECH. |
| | SQUARE SUPPLY DUCT, REFER TO MECH. |
| | ROUND SUPPY DUCT, REFER TO MECH. |
| | SQUARE RETURN DUCT, REFER TO MECH. |
| | ROUND RETURN DUCT, REFER TO MECH. |
| | RECESSED TROFFER, REFER TO ELEC. |
| | RECESSED POT LIGHT, REFER TO ELEC. |
| | SUSPENDED LIGHT, REFER TO ELEC. |
| | HORN STROBE, REFER TO ELEC. |
| | SECURITY CAMERA, REFER TO ELEC. |
| | SPEAKER, REFER TO ELEC. |

## CEILING MOUNTED ACOUSTIC PANELS (CMAP)

**NATATORIUM**
- 110 - 4'-0" x 8'-0" PANELS
- 17 - 4'-0" x 4'-0" PANELS

**LOBBY**
- 14 - 4'-0" x 8'-0" PANELS
- ACT ON UNDERSIDE OF RECEPTION BULKHEAD

## CEILING SCHEDULE

| TYPE | G2_ASSEMBLY | COMMENTS |
|---|---|---|
| ACT1 | 600 x 600 ACOUSTIC TILE - SUSPENDED | |
| GBM | 12.7mm MOISTURE RESISTANT GYPSUM BOARD<br>METAL SUSPENSION SYSTEM | |
| GBMT | 6mm 50mm X 50mm TILE T-1<br>6mm MORTAR BED<br>12.7mm MOISTURE RESISTANT GYPSUM BOARD<br>METAL SUSPENSION SYSTEM | |
| GBR | SMOKE SEPARATION ASSEMBLY<br>12.7mm TYPE X GYPSUM BOARD<br>METAL SUSPENSION SYSTEM | |
| PFM1 | 140mm METAL SOFFIT<br>25mm HAT CHANNELL @ 400mm O.C.<br>STEEL STUD FRAMING | |

Group2
Architecture
Interior Design

ISSUES / REVISIONS

| NO. | DATE | REVISION |
|---|---|---|
| 5 | 26.03.2021 | ISSUED FOR BP FINAL REVIEW |
| 6 | 06.04.2021 | ISSUED FOR BUILDING PERMIT |
| 7 | 29.04.2021 | ISSUED FOR TENDER PACKAGE REVIEW |
| 9 | 11.05.2021 | ISSUED FOR TENDER PACKAGE #2 |
| 10 | 19.05.2021 | ARCHITECTURAL ADDENDUM #1 |
| 11 | 25.05.2021 | ARCHITECTURAL ADDENDUM #2 |
| 12 | 28.05.2021 | ARCHITECTURAL ADDENDUM #3 |
| 13 | 31.05.2020 | ARCHITECTURAL ADDENDUM #4 |

Group2 Architecture Interior Design Ltd.
SEAL

KEY PLAN

PROJECT TITLE
**DRAYTON VALLEY & BRAZEAU AQUATIC CENTRE**

DRAWING TITLE
REFLECTED CEILING PLANS

| CHECKED | DRAWN | DRAWING | REVISION |
|---|---|---|---|
| TS/SF | JN/DS | A301 | 13 |

FILE
19046