

ST VITAL PARK WASHROOMS 190 RIVER ROAD, WINNIPEG, MANITOBA

GENERAL CONDITIONS

GENERAL PROVISIONS

Notwithstanding the terms of the Contract between the City of Winnipeg and the Contractor, the general terms, definitions, conditions of that Contract are read in conjunction with these Specifications and the Drawings listed on A-00 these are, in their entirety, the Contract Documents.

The Specifications include all the written instructions herein and on the drawings.

General Notes and Specifications on one drawing apply to all drawings unless specifically noted otherwise.

In the Contract Documents, "supply" means: deliver to the site and place as directed by the Contractor. "Install" means: accommodate in the Work, receive, store, assemble, adjust, trim, and fit as necessary to make fully operational. "Provide" means: supply and install.

ADMINISTRATION OF THE CONTRACT

The Contract Administrator will be the first interpreter of the Contract Documents and give findings to all parties. The findings shall not be partial to the Contractor or the City of Winnipeg.

The General Conditions of the Contract apply to the Drawings and Specifications included here.

00 31 00 AVAILABLE PROJECT INFORMATION

SOILS INVESTIGATION

Any information pertaining to soils and all borehole logs are furnished by the Consultant as a matter of general information only and borehole descriptions or logs are not to be interpreted as descriptive of conditions at locations other than those described by the boreholes themselves.

Included within the Bid Opportunity is the following report:
The geotechnical investigation report titled "St Vital Park - Summer Washroom Replacement Project Geotechnical Investigation" and prepared by Dyregrov Robinson Inc. Consulting Geotechnical Engineers (dated 16 June, 2015, Dyregrov Robinson Inc. File No. 153878)

The purpose of these reports is to provide geotechnical information of the site, and recommendations for the design of the permanent foundation engineering work.

The report may not reveal all conditions that exist or can occur on the site. The Contractor should conduct further investigation, as he deems necessary.

01 93 00 FACILITY MAINTENANCE

MAINTENANCE & COMMISSIONING

System Start-up and First Year Winterization:

A. Contractor to perform the system start-up with training for City staff in accordance with the information contained in the Operation and Maintenance Manuals in order to have the Work fully operational for public use by the date of Substantial Performance.

B. After the operation of the Work for the season, the Contractor shall perform the first year winterization of the Work with training for City staff.

C. The Contractor shall provide the Contract Administrator with 48 hours notice prior to commencing the start-up and winterization procedures in order that the City staff may attend.

Operation and Maintenance Manuals:

A. The Contractor shall provide in a format acceptable to the Contract Administrator three (3) bound copies as well as one electronic copy (in pdf format) detailing the operation and maintenance instructions for all elements of the Construction including:

(i) Manufacturers' written instructions, warranties, shop drawings, schedules, wire diagram and a listing of persons to contact for repairs during the warranty period.

(ii) Descriptions of day to day operations, preventative maintenance, annual and periodic maintenance, and procedures for seasonal shut down and start-up.

Staff Training:

A. Provide On-Site training to City staff and maintenance personnel in proper operation and maintenance procedures for the system.

B. Trainers shall be qualified trades persons or consultants knowledgeable of the equipment and familiar with the installation.

C. Legible documentation shall be provided to City staff during the training.

MATERIALS AND METHODS

05 50 00 METAL FABRICATIONS

Fabrication:

Fabricate work square, true, straight and accurate to required size, with joints closely fitted and properly secured.

Use self-tapping shake-proof round headed screws on items requiring assembly by screws or as indicated.

Where possible, fit and shop assemble work, ready for erection.

Ensure exposed welds are continuously sealed for length of each joint. File or grind exposed welds smooth and flush with adjacent finish surface. Ease exposed edges to small uniform radius.

Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.

Supply components required for anchorage of fabrications. Fabricate anchors and relate components of same material and finish as fabrication, except where specifically noted otherwise.

Site confirm field dimensions prior to fabrication.

Fabrication Tolerances:

Squareness: 3 mm (1/8 inch) maximum difference in diagonal measurements.
Maximum Offset Between Faces: 1.6 mm (1/16 inch).
Maximum Misalignment of Adjacent Members: 1.6 mm (1/16 inch).
Maximum Bow: 3 mm in 1.2 m (1/8 inch in 4 ft).
Maximum Deviation From Plane: 1.6 mm in 1.2 m (1/16 inch in 4 ft).

Finishes:

Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.

Do not prime surfaces in direct contact bond with concrete or where field welding is required.

Apply coatings in shop and before assembly. Where size permits, galvanize components after assembly.

Prime paint items with one coat. Apply two coats of primer to areas inaccessible after final installation.

Hot dip galvanize components where indicated after fabrication in accord with requirements of CSA Standard G164-M1981.

Apply one coat of bituminous enamel to contact surfaces of metal components in contact with cementitious materials and dissimilar metals.

Miscellaneous Steel Sections:

Supply all miscellaneous steel angles, plates, brackets, lintels, etc., as indicated and noted on the drawings. Size according to loads, set plumb and true and securely fix. Continuously weld and grind smooth exposed connections. Also refer to structural drawings for connections

Isolation Coating:

Isolate aluminum from following components, by means of bituminous paint:

- 1 Dissimilar metals except stainless steel, zinc, or white bronze of small area.
- 2 Concrete, mortar and masonry.
- 3 Wood.

Shop Painting:

Apply one shop coat of primer to metal items, with exception of galvanized or concrete encased items.

Use primer unadulterated, as prepared by manufacturer. Paint on dry surfaces, free from rust, scale, grease. Do not paint when temperature is lower than 7°C.

Clean surfaces to be field welded; do not paint.

Non-ferrous metals shall be finished as specified by item.

Stainless Steel Trough Sink (L-2):

Basin to be fabricated by Kustom Metal Kraft Manufacturing Inc., or equivalent.

06 10 00 ROUGH CARPENTRY

Include in this Section all rough carpentry work as required to complete the project, including but not limited to:

- A. Walls, partitions, floors and ceilings.
- B. Roof framing, roof sheathing, fascias and soffits.
- C. All nails, screws, staples, blocking, furring, shims, fasteners, hardware, anchors and straps as required.

Store and install wood materials that must maintain dimensional stability for successful installation of later work in dry areas and where further work will not contribute to high humidity conditions.

Framing and rough carpentry shall be carried out using S,P,F No. 1 & 2 grade wood, unless otherwise specifically required by the Drawings or Specifications.

All new stud walls, furring blocking, structural framing, door and window frames and rough carpentry as well as all nails, screws, bolts, metal joist hangers and other connectors shall be provided as required to carry out the work of this Bid Opportunity.

All exterior materials shall be installed with hot dipped galvanized or aluminum nails in compliance with wood type.

Install work plumb, square, level, permanently secured, accurately and closely fitted, and aligned in locations required by other Work.

Install permanent bracing and bridging prior to application of any loads.

Install 20 mil reinforced plastic sheet damproof membrane between wood members and concrete or masonry. Provide solid blocking for attachment of the vapour barrier where mechanical stacks, electrical conduits, or any other services penetrate the vapour barrier. Protect all wood from wetting and moisture gain. Receive and store all products with care, preventing damage. Store indoors in secure, dry area off the floor, under wrap.

Install all door hardware in strict conformance with manufacturer's instructions and as dictated by hardware schedule.

Make provisions in all cabinetry for electrical, water services and electrical outlets and provide concealment of service lines in the work except where service must be exposed.

07 17 13 WATERPROOFING

Include all waterproofing work as required to properly complete the work of the project.

Ensure that surfaces to receive membrane have been smoothed and are firm, dry and free of dew frost, voids, projections, loose material, oil, grease, asphalt, curing compounds, and other foreign matter.

07 21 00 THERMAL INSULATION

FOAMED-IN-PLACE INSULATION

- 1 Spray-foam insulation: spray polyethylene to CAN/ULC-S705.1
- 2 Primer (if required): in accordance with manufacturer's recommendations for surface conditions.

07 25 00 VAPOUR AND AIR BARRIER

Vapour barrier shall be 10 mil polyethylene installed as a combination vapour/air barrier as indicated in the contract documents.

Polyethylene vapour/air barriers shall conform to CAN/CGSB-51, 34-M "Vapor Barriers, Polyethylene Sheet for Use in Building Construction"

07 53 50 MODIFIED BITUMINOUS MEMBRANE ROOFING

1. Base Sheet: Thermofusible elastomeric bitumen (SBS modified bitumen) reinforced with non-woven polyester reinforcement, coated on both sides with SBS polymerized asphalt with thermofusible plastic film on top side and self-adhesive on the underside, conforming to CGSB 37-GP-56M, Type 2, Class C, Grade 2. Thickness: 2.2-mm Acceptable product: Soprema Colvent 810 or IKO Modiflex MP-180-FS-Base.

Cap Sheet and Cap Sheet Stripping (Flashing): Thermofusible elastomeric bitumen (SBS modified bitumen) reinforced with a non-woven polyester reinforcement, topside self-protected with coloured granules, underside protected by a thermofusible plastic film, conforming to CGSB 37-GP-56M, Type 2, Class C, Grade 2. Thickness 4.0-mm. Acceptable product: Soprema Sopralene Flam 250 GR or IKO Torchflex TP-250 Cap.

Colour: protective membrane to the modified bituminous roof to be selected by the Contract Administrator. To ASTM D6083 or latest.

Roofing nails: In compliance with CSA B111, Table 12, nails shall be made of galvanized steel, long enough to penetrate wood substrate by at least 20-mm.

Mechanical fasteners:

A. Round top cap nails, 25 or 38-mm or equivalent stainless steel or galvanized fastenings as recommended by material manufacturers or as required for the purpose.

B. In compliance with CSA B111, Table 12, nails shall be long enough to penetrate the substrate by at least 20 mm on flashings and parapet walls.

C. Insulation fasteners as recommended by the insulation manufacturer, long enough to penetrate the decking at least 20-mm.

Loose granules, composition and colour to match granule surface of roofing membranes. Granules to be embedded into heated asphalt surfaces at joints between rolls or at any other locations where the visual continuity of the granule surface is interrupted.

Metal flashings, vents and pipe sleeves: Refer to Section 07 62 00 "Metal Flashing and Trim".

Apply vapour barrier to Manufacturer's specification and as detailed.

It is intended that the roof vapour barrier be fully lapped and sealed together with the wall vapour barrier to ensure a complete seal of the building envelope. Roof vapour barrier should also be lapped out and over air barrier to create single effect for proper drainage.

07 62 00 SHEET METAL FLASHING AND TRIM

Flashings and Bent Closures: 0.6 mm (24 ga.) steel, shop pre-coated.

Flashing colour at openings and parapet/caps will be selected by Contract Administrator from standard 8000 series colours.

Fascia: shop pre-coated steel

Scupper and downspouts: pre-coated steel of 24 gauge as per drawings. Colour as selected by Contract Administrator from standard colours.

Fasteners: Prefinished steel with fiberglass reinforced nylon head and soft neoprene washer, at exposed locations.

Finish exposed fasteners to be same colour as flashing and fascias.

Form sections true to shape, accurate in size, square, and free from distortion or defects. Fabricate chases, clips, and starter strips of same material as sheet, inter-lockable with sheet. Form pieces in longest practical lengths. Hem exposed edges on underside 13 mm; miter and seam corners and form material with flat lock seam.

Seal all joints with clear silicone sealant.

Fabricate corners from one piece with minimum 450 mm long legs; solder for rigidity, seal continuously with silicone sealant. Fabricate vertical faces with bottom edge formed outward 6 mm and hemmed to form drip.

On exposed faces, return drip edge hem back to form interlock with concealed clip. Provide continuous clips at all exposed faces.

Fabricate flashings to allow toe to extend 50 mm over roofing. Return and brake edges.

07 92 00 JOINT SEALANTS

Seal at every joint as required to make the building weather tight, including but not limited to, windows, doors, between electrical / mechanical ducts, conduits or pipes.

Unless noted otherwise, sealant shall be one part acrylic solvent release mono (555) by Tremco Manufacturing Co., in a colour to match the adjacent window/door frames, or the surrounding materials.

Fill voids with loose glass fibre insulation and back the sealant with polyethylene rope as required.

Fully seal joints and finish free of ridges, wrinkles, air pockets and embedded foreign matter.

Do not allow sealants to cover or spot adjacent surfaces, protect as necessary.

Clean all areas of drops, splatters or smudges as a result of this work.

08 11 16 ALUMINUM DOORS AND FRAMES

Aluminum extrusions: Aluminum Association alloy AA6063-T6 anodizing quality.

Steel reinforcement: to CAN/CSA-G40.21, grade 300 W.

Fasteners: stainless steel, finished to match adjacent material.

Weatherstrip: mohair pile.

Door bumpers: black neoprene.

Isolation coating: alkali resistant.

Glass: Factory sealed double glazing unit to 25mm overall thickness and as specified in Glazing section.

Sealants: to CAN/CGSB 19.13-M87 or latest.

Sheet Aluminum to AA6063-T5 alloy, 2mm thick, bonded to substrate where noted.

Exterior door with NO centre rail: KAWNEER AA 250 series, or approved equal in accordance with B7.

Hardware: (see Drawing A-01 for Hardware)

ALUMINUM FRAMES

Exterior curtain wall framing: Extruded aluminum with thermal break to meet CAN A440 performance levels for air leakage (fixed), water leakage (B7), wind load (C4), and condensation resistance (frame I71, glass I64); KAWNEER AA 250 Series, or approved equal in accordance with B7.

ALUMINUM FINISHES

Finish exposed surfaces of aluminum components in accordance with Aluminum Association Designation System for Aluminum Finishes. Anodized Aluminum Finish. Colour to be selected by Contract Administrator.

Flashings: refer to Section 07 62 00 "Sheet Metal Flashing and Trim" and provide isolation coating.

STEEL FINISHES

Finish steel clips and reinforcing steel with zinc coating to CSA G164.

Doors and framing to be by same manufacturer.

Fabricate doors and frames to profiles and maximum face sizes as shown on drawings, with allowance for glazing and spandrel panels.

Provide structural steel reinforcement as required.

Fit joints tightly and secure mechanically.

Conceal fastenings.

Mortise, reinforce, drill and tap doors, frames and reinforcements to receive hardware

Isolate aluminum from direct contact with dissimilar metals, concrete and masonry.

08 80 00 GLAZING

Insulated Glass Units: CAN2-12.8M or latest. Tempered, double-pane. Outer surface of outer pane to be grey reflective. Concealed surface of inner to be pane acid etched obscure glass such as Matelux or Velour.

Comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, cleaning, preparation, and data sheets.

Aluminum assembly and glass assembly is to be supplied and installed by an aluminum glass expert experienced with shipping container manipulations.

09 29 00 GYPSUM WALLBOARD

Include all gypsum wallboard work as called for on the drawings and as otherwise penetrate to properly complete the work.

All work is to be done by skilled trades persons, in accordance with CSA Standard A82.31, approved manufacturer's trade specifications and to the Manual of Gypsum Wallboard Construction by Gypsum Drywall Contractors International.

Examine site conditions and other underlying work. Ensure that all bucks, anchors, blocking, electrical and mechanical work which are to be installed in or behind gypsum wallboard have been installed and approved.

Start no work until conditions are satisfactory. Commencement of work shall imply acceptance of conditions.

Abuse resistant gypsum board is to be used in bathrooms.

Apply wallboard using vertical method, with the board parallel to bearing. Fixing is to be used. Screw fixing at 1' o.c. for ceilings and 16" o.c. for walls.

Install metal accessories as follows: corner beads to be installed at all external corners, using longest practical lengths and fixed at max. 6" o.c. on alternate sides; metal edge trim shall be installed to all cased openings and wherever gypsum wallboard abuts a dissimilar material, using longest practical lengths, fixed at max. 1' o.c.

To finish gypsum wallboard, tape, fill and sand all exposed joints, edges and corners, openings and fixings to produce an acceptable surface ready for decoration. Metal corner beads, casing beads and trim shall be used wherever detailed or specified or otherwise required to carry out the work in accordance with good construction practice. All such items shall be filled and finished unless specifically noted otherwise. Taping and filling of all joints and other items shall be with a minimum of three coats.

09 65 16 RESILIENT SHEET FLOORING

Provide all parts of manufacturer's slip resistant sheet vinyl flooring: Altro Walkway 20 hard-wearing safety flooring, 2.0mm thick, 2.0m wide rolls. Colours to be selected by Contract Administrator, max. of two colours.

Sell (cove) base: flooring coved up wall 100mm (4" complete w/ round vinyl resilient cove cap and 22mm (7/8") radius vinyl cove filler strip.

Reducer strips: 25mm (1") wide, thickness of tile, rubber, colour to be selected from full range of colours. Standard of acceptance: Johnsson "Colour Match" system.

Primers and adhesives:

- 1 Waterproof, or types recommended by resilient flooring manufacturer for specific material on applicable substrate, above, on or below grade.
- 2 Two-part polyurethane adhesive shall be used in areas with high risk of water or frost penetration.
- 3 Primers and adhesives to be low VOC and meet SCAQMD Rule #1168.

Sub floor filler and leveler: polymer modified cementitious-based floor patch, with acrylic additive. Standard of acceptance: Mapei Plan-Patch, Roberts R-Krete, or as recommended by flooring manufacturer for use with their product, subject to Contract Administrator approval.

Stripper, sealer, and wax: type recommended by flooring manufacturer, subject to Contract Administrator approval. Sealer to be low VOC and meet SCAQMD Rule #1168.

Provide 12"x12" sample to full depth of the this application.

09 90 00 PAINTING

Provide paint finish where called for on the Drawings. Allow for (1) base colour, and (2) distinct accent colours in each publicly accessible room. Note this does not include pre-finished items, e.g. flashing, windows, etc.

All paint colours to be selected by Contract Administrator.

Provide small area with specified number of coats of each colour selected by Contract Administrator prior to complete application or two weeks minimum prior to painting.

Prepare all surfaces (existing and new) according to paint manufacturer's specifications for warrantable adhesion and smooth professional finish.

Allow for (2) painted supergraphics for each publicly accessible room. Approximate size 2'-0" x 6'-0" each. Contract Administrator to provide CAD cutting file for template.

Paint type and method

A. Interior Gypsum Board walls and ceilings:
Paint Requirements: One coat Primer;
Two coats epoxy paint using Pro Industrial, Pre Catalyzed water based Epoxy by Sherwin Williams or equal in accordance with B7.

B. Interior Container walls and interior exposed steel
Paint Requirements: One coat primer using Pro Industrial Pro-Cryl Universal Acrylic Primer by Sherwin Williams or equal.
Two coats epoxy paint using Pro Industrial, Pre Catalyzed water based Epoxy by Sherwin Williams or equal in accordance with B7.

C. Interior Wood Trim including Doors:
Paint Requirements: One coat primer. Two coats epoxy paint using Pro Industrial, Pre Catalyzed water based Epoxy by Sherwin Williams or equal in accordance with B7.

D. Exterior Paint:
Paint Requirements: One coat primer,
Two coats epoxy paint using Pro Industrial DTM Acrylic by Sherwin Williams or equal in accordance with B7. Colour by Contract Administrator.

10 14 00 SIGNAGE

As manufactured by Mirtec and supplied by Pixel8, model Mir 0905 complete with symbols Mir132 and symbol Mir 133 on the main floor washroom door. Model Mir 0905 complete with Mir 130 at men's and Mir 131 at Women's. Three signs total. Graphics colour and sign colour to be chosen after contract award from manufacturer's standard colour and icon range. Mounting heights in conformance with Winnipeg 2010 Accessibility Guidelines.

Sign graphics to be well defined, arranged for balanced appearance, and properly word and letter spaced. Graphics and text size and contrast will conform to Winnipeg 2010 Accessibility Guidelines.

Fabricate signs in accordance with details, specifications and shop drawings. Build units square, true, accurate to size, free from visual or performance defects. Accurately fit and securely join sections to obtain tight, closed joints. Allow for thermal movement without distortion of components. Exposed fasteners permitted only where indicated or approved by Contract Administrator and to be inconspicuous and same finish and colour as base material, or as noted.

Manufacturer's nameplates on sign surface locations visible in completed work is not acceptable.

10 99 90 MISCELLANEOUS SPECIALTIES

METAL TOILET PARTITIONS & URINAL SCREENS
Metal Toilet Partitions HADRIAN STANDARD SERIES - Floor Mounted Powder Coated Galvalume Steel type: GSW.

Headrail-braced metal with anodized finish and anti-grip design. Include panel brackets, three (3) plaster attachments per panel, concealed gravity type hinges, two (2) door stops, one (1) hook per door, latches, pilaster shoes, and bumpers (heavy duty cast vandal-proof chrome-plated non-ferrous hinges and brackets). Tack-weld and interlock all joints for continuous bonding and a permanent hygienic seal with "rust-out" warranty. Finish shall be factory electrostatically applied powder coat with no solvent emissions. Colour to be selected from standard range available by Contract Administrator.

12 48 13 ENTRANCE FLOOR MATS AND FRAMES

RECESSED MATTING
Gateway Recessed Well Matting, GTW_0400 Gateway 122cm x 14 mm. Manufacturer: Canada Mats. Colour to be selected by Contract Administrator.

Provide Perimeter J Frame @ all sides of well matting.

Install as per manufacturer's written instructions.

31 22 00 SITE GRADING

Fill material: Use clean fill only.

Excavated or graded material existing on site may be suitable to use as fill for grading work if approved by Contract Administrator.

STRIPPING OF TOPSOIL

Do not handle topsoil while in wet or frozen condition or in any manner in which soil structure is adversely affected as determined by Contract Administrator.

Commence topsoil stripping of areas as indicated after area has been cleared of grasses and removed from site.

Strip topsoil to depths as indicated. Rototill weeds and grasses and retain as topsoil on site. Avoid mixing topsoil with subsoil.

Stockpile in locations as directed by Contract Administrator. Stockpile height not to exceed 2 m.

Dispose of unused topsoil off site.

Rough grade to levels, profiles, and contours allowing for surface treatment as indicated.

Rough grade to following depths below finish grade as indicated for grassed areas and asphalt paving, concrete paving, walks, and precast paving units.

Slope rough grade away from building as indicated.

Grade ditches to depth required for maximum run-off.

Prior to placing fill over existing ground, scarify surface to depth of 150 mm. Maintain fill and existing surface at approximately same moisture content to facilitate bonding.

Compact filled and disturbed areas to maximum dry density to ASTM D698, as follows:
A. 85% under landscaped areas.
B. 95 % under paved and walk areas.

Do not disturb soil within branch spread of trees or shrubs to remain.

1. Remove surplus material and material unsuitable for fill, grading or landscaping as directed by Contract Administrator.

END OF ARCHITECTURAL SPECIFICATIONS

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