

Architectural - Basis of Design

Waverley West Fire Paramedic Station 15

Bison Drive at Ruth Crossing

City of Winnipeg Project Number 2022-097

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A	SITE WORK	
		• Provide new Domestic Water, Land Drainage and Sanitary Sewer services to existing utilities located under Ruth Crossing • Site grading as shown • New concrete approach, curbs, sidewalks and asphalt paving as shown. Heavy duty asphalt required for movement of fire apparatus and refuse collection. • Sod, planting beds and landscape features as shown. Plantings to meet minimum requirements of Zoning Bylaw • Site lighting, electrical outlets in parking area for block heaters, electrical for 2x EV charging stations
B	STRUCTURAL	
1.0	Cast-in-place Concrete	• Concrete vehicular approach: 200mm thick, similar to Slab type SL-3 (see Drawing S3.0) • Provide concrete pads: 250mm slab on grade for refuse bin (if applicable), electrical equipment (transformer, emergency generator) • Provide concrete pads at exterior swing doors: 150mm thickened edge, slab on grade. Keyed, dowelled to concrete foundation • Concrete Apron slab: 200mm thick, similar to Slab type SL-3 (see Drawing S3.0) • Apparatus Bays floor slab: Slab type SL-3 • Basement floor slab: Slab type SL-3 • Main floor: 250mm prestressed hollow core planks • Mezzanine floor: 250mm prestressed hollow core planks • Foundation ○ basement walls: 250mm, as described Drawing S2.0 ○ grade beams: per schedule, Drawing S3.0 • Pile Caps: as described Drawing S2.0
2.0	Structural Steel	Drawings indicate loadbearing CMU exterior walls • Alternate Framing: steel beams, OWSJ (same), columns, bracing • Roof deck: perforated (acoustic) steel deck c/w 'flute filler' insulation.
C	BUILDING EXTERIOR / ENVELOPE	
		Exterior floor, wall and roof insulation values to meet Energy Code minimums (hybrid wall system to consist of full-depth cavity insulation and continuous rigid exterior insulation. Air/Vapour barriers as appropriate. Flat Roof: shall achieve R40 effective – refer to Drawing A1 Exterior wall types per Drawing A2 • Walls above grade: R27 minimum • Walls below grade: R20 minimum Overhead Doors: • Insulated steel doors / overhead doors • Each overhead door shall have 3 fully glazed rows

		Aluminum storefront entry door at public entrance vestibule. Auto operator on each vestibule door (2) c/w WIKK 36" bar actuators. Aluminum Curtain wall assemblies c/w triple glazing, insulated spandrel panels – refer to Elevation Drawings
D	INTERIOR	
1.0	Interior Partitions	Typical interior partitions: - Gypsum board on steel studs 16mm gypsum board - painted 92mm steel studs, 400mm o.c. - Acoustic batt insulation full depth – STC range 50-55 16mm gypsum board 16mm Aqua board – shower rooms and washrooms - Concrete Masonry Units 200 concrete block Refer to plans for locations of required fire separations. Suggested wall types per NBC. Wall number S5a to achieve 1 hr and 1.5 hr as indicated: 16mm Type X gypsum board 92mm steel studs, 600mm o.c. - Mineral wool insulation 89mm depth (for 1.5hr) 16mm Type X gypsum board (2 layers for 1.5hr)
2.0	Flooring	Domestic areas: - Porcelain Tile QT-1, size 12"x24"; brick layout with Epoxy Grout and Cut tile base with Schluter 4" trim on top edge. Provide Schluter Silex-AHK profile between floor and cut tile wall base to create a coved base profile - Porcelain Tile QT-2, size 2"x2"; with built up integral matching 6" coved base in all wet areas (shower rooms, washrooms), with Epoxy Grout - Rubber Floor Tile RF-1: for use in IT/server Rooms, with 4" rubber coved base - Rubber Fitness Flooring RF-3; with 4" rubber base in Gym - Carpet Tile CPT-3 anti static; 24"x24", or 9"x36"; in lower level training room, with 4" rubber coved base Entry Vestibule: - Entrance Matting CPT-1: heavy traffic Apparatus Bays: - Polyurethane cement coating - Design Standard: Sika Purcem 22 system, with 33 topcoat - Provide all necessary transitions Stairs RST-1: - Provide rubber stair treads with integrated riser and contrasting tactile edge strip that meets WADS requirements
3.0	Ceilings	Acoustical Ceiling Tile: - ACT-1: 24" x 48" scored for 24" x 24" appearance - Mineral fibre, min. 35% recycled content; Mould and Mildew protection; anti-sag resist; NRC rating of 0.70/40 CAC - Edges: square tegular 15/16" grid/suspension system

		- ACT-2: Smooth Texture tile above Kitchen 112 area; <u>Design Standard</u>: Armstrong Kitchen Zone #673; Lay in tile; provide painted bulkhead as a division between different ACT types - Mineral fibre, min. 35% recycled content; Mould and Mildew protection; anti-sag resist with Humiguard Plus; washable; soil resistant; water repellent - Must meet USDA/FSIS guidelines for use in food processing areas - Fire Performance: Class A, ASTM E84; CAN/ULC S102; ASTM E1264 15/16" grid/suspension system Gypsum Board - In Dormitory Rooms, service, wet areas, corridors and bulkheads where indicated. To be painted finishes; 1 primer coat; 2 finish coats. Shower rooms and washrooms to receive water repellent paint. Painted Ceilings - Apparatus Bays: 1 primer coat; 2 finish coats on metal deck - Gypsum Board ceilings: 1 primer coat; 2 finish coats Acrylic Latex - Stair Areas: 1 primer coat; 2 finish coats
4.0	Walls	Paint - Gypsum Board: 1 primer coat; 2 finish coats - Concrete Block: 1 primer coat water-based Alkyd primer; 2 finish coats semi-gloss - Metal Doors & Frames: 2 finish coats - Apparatus Bay area, Stairwells, Compressor Room, Gear Locker, Hose Tower/Storage Room: 1 primer coat water-based Alkyd primer; 1 topcoat of pre-Catalyzed semi-gloss Epoxy Paint Colours - Allow for minimum of five (5) different accent walls of colour throughout the Station
5.0	Interior Doors & Frames	- Pressed steel frames. Fire resistance ratings as required – see Drawings and Door & Frame Schedule - Steel Doors – hollow metal, insulated. Fire resistance ratings as required – see Door & Frame Schedule. - Door closer devices on fire-rated doors. - Laminate Doors (woodgrain look) in domestic area. <u>Design Standard</u>: Formica Laminate, Aged Ash 8844-58, vertical grain direction, solid core.
6.0	Interior Glazing	Fully tempered, 6mm thickness – locations per drawings
E	MILLWORK	
	Areas	Kitchen - Stainless Steel (SS) 16 ga. cabinets without doors, c/w open SS adjustable shelving on SS pilaster slips and strips - Base of kitchen cabinets to be 16 ga. SS tubular legs with adjustable feet - SS countertops SS-1: 16 ga. T304 #4 stainless with wrapped edge at front and sides - SS drawers required, 18 ga. SS fronts. Drawer slides to be full extension weight capacity of 80-100 lbs. SS handles to be integral

		• All welds for countertop to be polished and cleaned • Commercial grade double bowl SS sink c/w grease interceptor • Faucet FCT-2: Commercial style pull down faucet with pre-rinse sprayer; deck mounted; SS lever handles; 44" flexible SS hose; 8" centre and 12" swing faucet. Faucet must be supported vertically • Pot filler is required Kitty Lockers (crew food storage lockers) • 4 kitty lockers per shift for storage of dry goods. Min. 18"d x 20"w (24"w preferred)x 40"h. High pressure laminate finish Watch Desk / Fire Prevention Millwork / Captains Office • Built-in solid surface countertop with undercounter fixed in pace laminate box/box/file units (1 per seat) • Overhead upper cabinet, doors required Janitor • Provide wall mounted high pressure laminate open adjustable shelving Medical Supply Room • Provide a minimum of 3FT long counter for charging with multiple accessible electrical outlets. Metal shelving required (see Furniture) Locker Area • Provide floor mounted benches as per Drawings. Bench top to be a composite panel board similar to Trex, with metal bases painted an Epoxy paint finish Provide custom Framed Tackboards: Forbo Flooring Systems Bulletin Board
	Construction	• All Millwork to be ¾" regular grade plywood with high pressure laminate finish. Colours to be selected from typical manufacturers: Formica, Arborite, Pionite, Nevamar • Solid surface countertops SSC-1: required on all built-in millwork items. Matte finish, ½" thick product, polished edges. <u>Design Standard</u>: Wilsonart Solid Surface, Chilled Earth 9228 SS
	Hardware	• Drawer slides: full extension slide with soft close. Side of undermount to suit install. Chrome finish. Weigh capacity 40 kg – 70 kg • Pulls/Handles: <u>Design Standard</u>: Hafele Veranda Collection, SS finish, 152mm (6") wide • Hinges: soft close, knoc-in type hinge with 110 swing, nickel finish • Shelf Supports: <u>Design Standard</u>: Knappe & Vogt recessed/flush shelf support, bright zinc finish • Grommet Holes for countertops: 2" diameter opening, black finish
F	MISC. SPECIALITIES	
1.0	Washroom Accessories	One per toilet room: • Toilet tissue dispenser • Soap dispenser • Paper Towel Dispenser • Mirror

		• Sanitary Napkin Disposal • Stainless steel shelf • Collapsible hook for back of door, anti-ligature Universal Toilet Room • One of each above • Hinged adjustable tilt mirror • Full length mirror • Stainless steel grab bars • Baby change table / Adult change table • Coat hook to be located on a side wall Shower rooms • Robe/towel hook (4 per shower room) • Stainless steel shower curtain rod, fixed to walls, c/w shower curtain to suit opening. Shower system/accessories must be designed to prevent water from migrating out of the shower • Stainless steel shelf • Soap shelf • Mirror • Fold down wall-mounted seat outside of shower proper
2.0	Window Coverings	• Blackout Roller Blinds RS-1: on all Dormitory/Office windows (includes Watch Desk, Captain & Lieutenant Quarters, Multipurpose Room, Training Room and Lounge) • Light Filtering Blinds RS-2: Dining Room and Gym
3.0	Lockers	Metal Lockers in Dormitory Locker Area and Corridor LK-1 (for staff street clothes) • Size: 18"w (457mm) x 24"d (609mm) x 72"h (1829mm) • Configuration: one tier • 3 hooks per locker, standard padlock locking system • 1 inside shelf • Lockers required to have 4" high base and sloped top Gear Lockers (in Apparatus Bay area) • Size: 24"w (609mm) x 24"d (609mm) x 72"h (1829mm) • Wall-mounted, steel cage type. Central back to back lockers are free standing • 3 apparel hooks, 2 shelves per locker, c/w nameplate holder • Optional doors required
4.0	Tackboards & Whiteboards	Tackboard TB-1: • 6mm thick with 2" wide millwork frame, in PLAM frame with plywood backing • Locations: Entrance Vestibule 101, Fire Prevention 103, Captains Office 108, Dining 113, Training 004 Whiteboard: • 4'x6' porcelain whiteboard with marker rail • Locations: Captain's Office 108 (4' x 4'), Kitchen 112, Lounge 114 (*'w x 4'h), Training 004, Gym 007
5.0	Mirror Panels	• Provide full height wall mounted clear mirror panels in Gym area
6.0	Dormitory Accessories	• Provide minimum two (2) wall hooks for clothes, and one (1) wall mounted mirror per Dorm Room

7.0	Flag Pole	• Provide one (1) flag pole outside the Station • 9.1m height • Drilled concrete pile foundation ○ 500mm diameter x 6.1m deep drilled cast-in-place concrete piles ○ 35 MPa concrete with sulfate resistance cement ○ Reinforced with 6-20M bars full depth, and 10M ties @ 900mm O.C. (double tie @ top)
G	SIGNAGE	
1.0	Interior Signage	• Brushed aluminum signs with black lettering and braille • Signs must confirm to WADS for installation heights, and have pictographs for rooms as well as formal room names • Dormitory Room to receive a Room number only (no pictograph) and braille • Approx. 38 total signs: 8 Dorm Rooms, 30 other interior rooms
2.0	Exterior Building Signage	• Sign must show both English and French wording, and must conform to WADS • Allow for illumination
3.0	Pylon Sign	• Allow for illumination • Cash Allowance for Exterior Signage \$35,000
H	FURNITURE & APPLIANCES	
1.0	Furniture	• All furniture shall be supplied, delivered and installed to the Station directly. All furniture warranties shall be transferrable to the City of Winnipeg upon installation, and acceptance by the City. Furniture listed below references WFPS Station Standards, has been standardized throughout WFPS, and has been proved to be durable and comfortable. All finishes to be vinyl, anti-bacterial, and easy to clean Design Standards: • Desk Chairs CH-1: fully adjustable lumbar support with mesh back, upholstered seat with vinyl fabric. Qty = 9 • Sleeper Sofa: Design Standard: Palliser, Charli Sleeper. Qty = 1 • 2.0Recliner (Lounge) Chairs: (not CH-3?) Design Standard: Palliser, Oakwood Leather Recliner model 41049-35. Qty = 10 • Nesting Dining Chairs: poly back with flip up vinyl seat. Design Standard: KI Torsion on the Go! Chair (City of Winnipeg Standing Order). Qty = 10 • Dining Tables: Design Standard: KI Manhattan series. Qty = 2 • Bed Frames / Mattresses: Twin XL, City of Winnipeg Standing Order. Qty = 10 • Dorm Side Tables: Cash Allowance \$2,000 • Dorm Desks: plastic laminate finish with PVC edges, 42"w x 24"d x 29.5"h. Design Standard: Global Furniture, Adaptabilities series # A2442T. Qty = 10 • Dorm Chairs: poly back with vinyl seat. Design Standard: KI Strive Nesting Chair. Qty = 10 • Training Room Chairs: poly back with vinyl flip up seat. Design Standard: KI Torsion on the Go! Chair (City of Winnipeg Standing Order, budget \$379/each). Qty = 20 • Training Room Tables: laminate flip top with metal base, castors, nesting. Design Standard: KI Pirouette. Qty = 10 • Lateral Filing Cabinets: 2 drawer locking lateral file units with full extension drawers and safety interlock system. Size: 36"w x 24"d x 28"h. Qty = 2

		Patio Tables: Design Standard: Uline # H-9130 Composite Picnic Table, cedar tone. Size: 72" x 62" x 29". Qty = 2
2.0	Specialty Furniture	Metal Freestanding Shelving: - Size: 36"w (914mm) x 24"d (610mm), 5-shelf unit - Enamel baked finish - Shelf capacity uniform distributed load of 1,300 kg minimum - Locations: Medical Supply 105, Janitor 106, Storage 003, Hose Tower/Storage 133 Tool Bench / Work Table: - Design Standard: Uline Industrial Packing Table with SS top and edges, with locking castors - Qty = 3
3.0	Appliances	- Glass Door Refrigerator RFG-1: Qty = 2, provide one (1) extra wire shelf per fridge - Dishwasher DW-1: 24"w under-counter commercial grade. Qty = 1 - Range: minimum 4-burner stove c/w central grill, non-convection required, residential oven (elec or gas?) - Range Exhaust Hood: refer to Mechanical Basis of Design and Mechanical Drawings - Microwave: full size, Qty = 1 - Laundry LS-1: full size stackable washer and dryer. Design Standard: Maytag Combination Stackable Washer Dryer (Non-Vending Option)