GENERAL:

DO NOT SCALE DRAWINGS.

VERIFY ALL DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION. VERIFY ALL MECHANICAL AND ELECTRICAL REQUIREMENTS WITH RESPECTIVE DISCIPLINES. VERIFY ALL MAJOR OPENINGS WHICH

ARE REQUIRED BUT ARE NOT SHOWN ON THE DRAWINGS WITH

- THE CONTRACT ADMINISTRATOR. SHOP DRAWINGS AND PRODUCT DATA: SUBMIT OR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS AND PRODUCT DATA REQUIRED FOR THIS PROJECT INCLUDE:
- INSULATED CONCRETE PANELS ROOFING
- STEEL DOORS AND FRAMES
- OVERHEAD DOORS
- .5 UNLESS NOTED OTHERWISE, INSTALL PRODUCTS IN ACCORDANCE WITH MANUFACTURES WRITTEN INSTRUCTIONS.

PRESSURE TREATED LUMBER AND PLYWOOD:

- WOOD STUDS AND PLATES TO BE GROUP D, #2 OR BETTER, (SPF).
- ALL WOOD TO BE KILN DRIED.
- PLYWOOD THICKNESS AS SHOWN ON DRAWINGS. - PRESSURE PRESERVATIVE: CHROMATED COPPER ARSENATE TO
- CSA 080-74. - SURFACE-APPLIED WOOD PRESERVATIVE: CLEAR SOLUTION, WATER
- REPELLENT PRESERVATIVE. - ALL FASTENERS TO BE GALVANIZED TO CAN/CSA-G164.

INSULATED CONCRETE PANELS

MANUFACTURER QUALIFICATIONS:

- MANUFACTURER OF PRECAST CONCRETE ELEMENTS SHALL BE CERTIFIED BY THE CANADIAN STANDARDS ASSOCIATION (CSA) ACCORDING TO CSA-A23.4 "PRECAST CONCRETE - MATERIALS AND CONSTRUCTION.
- MANUFACTURER SHALL BE A MEMBER IN GOOD STANDING WITH THE CANADIAN PRECAST/PRESTESSED CONCRETE INSTITUTE (CPCI).

.2 FIELD VERIFICATION:

- CONTRACTOR SHALL FIELD VERIFY ALL DETAILS AND DIMENSIONS RELATED TO THE MANUFACTURING AND INSTALLATION OF NEW PANELS. - ENSURE PROFILES AND DIMENSIONS OF EXISTING CONCRETE WALLS AND SOFFITS/OVERHANGS ARE ACCOMMODATED.
- SAMPLES: - PROVIDE 300x200x25mm SAMPLES OF PANELS FOR APPROVAL. - PROVIDE FINISHES AS DESCRIBED BELOW.

.4 MATERIALS:

- OVERALL PANEL THICKNESS: 254mm (10") - 76mm (3") EXTERIOR CONCRETE
 - 102mm (4") INSULATION RSI 3.52 (R-20)
- 76mm (3") INTERIOR CONCRETE - CONCRETE MIXES:
- 28 DAY COMPRESSIVE STRENGTH: 35 MPa (CSA-A23.4)
- EXPOSURE CLASS: C-2 (CSA-A23.1) - CEMENT, AGGREGATES WATER AND ADMIXTURES: TO CSA-A23.4 AND CSA-A23.1
- AIR ENTRAINMENT ADMIXTURE: TO ASTM C260 (CSA-A23.1)
- USE OF CALCIUM CHLORIDE IS NOT PERMITTED - INSULATION: EXTRUDED POLYSTYRENE TO CAN/CGSB-51.20-M87 TYPE 2 - COLOUR AND EXTERIOR FINISH: TO MATCH EXISTING CONCRETE PANELS - LOWER PORTION - SMOOTH
- UPPER PORTION SANDBLASTED - ANCHORS AND SUPPORTS: TO CSA-G40.21, TYPE 400W.

.4 INSTALLATION:

- INSTALL IN ACCORDANCE WITH ACCEPTED SHOP DRAWINGS AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

MODIFIED BITUMINOUS ROOFING:

- ACCEPTABLE SYSTEMS: SOPREMA, IKO.
- .1 GYPSUM BOARD SHEATHING:
- TO CSA A82.27, EXTERIOR GRADE, 1/2" THICKNESS.
 FASTEN TO STEEL DECK USING No. 10 FLAT HEAD, SELF-TAPPING, TYPE A OR TYPE AB. CADMIUM PLATED SCREWS TO CSA B35.3.
- .2 VAPOUR BARRIER: - TO CGSB 37-GP-56M, STYRENE-BUTADIENE-STYRENE (SBS) ELASTOMERIC POLYMER, PREFABRICATED SHEET, GLASS REINFORCEMENT, WEIGHING 95 g/m².
- TOP SANDED, BOTTOM POLYPROPYLENE. .3 ROOF MEMBRANE:

BASE SHEET:

- TO CGSB 37-GP-56M, STYRENE-BUTADIENE-STYRENE (SBS) ELASTOMERIC POLYMER, PREFABRICATED SHEET, POLYESTER REINFORCEMENT. WEIGHING 180 a/m². - TOP POLYETHYLENE, BOTTOM SANDED.
- CAP SHEET:
- TO CGSB 37-GP-56M, STYRENE-BUTADIENE-STYRENE (SBS) ELASTOMERIC POLYMER, PREFABRICATED SHEET, POLYESTER REINFORCEMENT, WEIGHING 250 g/m². - TOP GRANULE SURFACE, BOTTOM POLYETHYLENE.
- AS RECOMMENDED BY ROOFING SYSTEM MANUFACTURER.
- ASPHALT TO CSA A123.4, TYPE 2.
- .6 INSULATION BOARD: - POLYISOCYANURATE BOARD INSULATION TO CAN/CGSB-51.26, THICKNESS AS INDICATED ON THE DRAWINGS, SHIPLAPPED EDGES.
- FELT FACERS. - ADHERED TO ROOF IN FULL BED OF ASPHALT. - ACCEPTABLE PRODUCT: FIRESTONE ISO 95+, "E'NRG'Y 2" BY NRG BARRIERS, EXELTHERM Rx ISO, JOHNS MANVEL.
- HIGH DENSITY WOOD FIBREBOARD, 1/2" THICKNESS.
- .8 INSTALLATION:
 - INSTALL FIBREBOARD AND INSULATION IN FULL BED OF ASPHALT. - DO ALL ROOF WORK IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND CRCA STANDARDS.

OVERHEAD DOORS:

- MATERIALS:
- GALVANIZED STEEL SHEET WITH Z275 ZINC COATING.
 0.41mm (0.016") SKINS AND 1.52mm (16 GA) END CAPS.
- 2 COAT BAKED ON POLYESTER FINISH.
- INSULATION TO PROVIDE R-14 VALUE.
- 3" 14 ga. GALVANIZED STEEL TRACKS, HEAVY DUTY HARDWARE - GLAZING: 610x305 (24"x12") INSULATED PANELS, 3 PER DOOR. - INTERIOR MOUNTED SLIDE LOCK AND WEATHERSTRIPPED.
- AUTO-REVERSING BOTTOM SAFETY EDGE. - MOTORIZED OPERATION W/ MANUAL CHAIN HOIST OVERRIDE.
- MIN. 3/4 HP, 208V/3 PH MOTOR - INDUCTION LOOP "SWITCHES" (2 PER DOOR) CUT INTO CONCRETE FLOOR AND APPROACH SLABS ON INTÈRIOR AND EXTERIOR OF DOOR.
- INTERIOR SURFACE—MOUNTED 3—BUTTON DOOR CONTROL STATION IN NEMA 1 ENCLOSURE - "OPEN-CLOSE-STOP" - TRAFFIC LIGHT INDICATORS MOUNTED ON APPROACH SIDE OF DOOR.
- "GREEN" TO INCIDATE DOOR IS OPEN - "RED" TO INDICATE DOOR IN MOTION
- BOTH LIGHTS OFF WHEN DOOR IS CLOSED - ACCEPTABLE PRODUCTS: THERMO-DOR TD-134 BY RELIABLE OVERHEAD DOORS, OR CLOPLAY #3720 BY WALLACE & WALLACE
- .2 INSTALLATION:
 - COORDINATE INSTALLATION WITH ELECTRICAL TO ENSURE PROPER OPERATION OF DOOR AND CONTROL/SAFETY COMPONENTS.

STEEL DOORS AND FRAMES

- HOT DIPPED GALVANIZED STEEL SHEET: TO ASTM A653M, Z275 COATING. - REINFORCEMENT CHANNEL: TO CSA G40.20/G40.21, TYPE 44W, COATING DESIGNATION TO ASTM A653M, Z275 COATING.
- FACE SHEETS: 1.2mm (18 GA) BASE METAL THICKNESS.
- 2. FABRICATION:
 - FABRICATE DOORS WITH POLYURETHANE INSULATED CORE - FABRICATE DOORS WITH LONGITUDINAL EDGES CONTINUOUSLY WELDED. - SEAMS: GRIND WELDED JOINTS TO A FLAT PLANE. FILL WITH METALLIC
 - PASTE FILLER AND SAND TO A UNIFORM SMOOTH FINISH - BLANK, REINFORCE, DRILL DOORS AND TAP FOR TEMPLATED HARDWARE - PROVIDE FLUSH STEEL TOP CAP
- FRAMES: - 16 GA FULLY WELDED CONSTRUCTION.
- EXTERIOR DOOR FRAME THERMALLY BROKEN
- 4. FABRICATION:
 - BLANK, REINFORCE, DRILL AND TAP FRAMES FOR HARDWARE USING TEMPLATES PROVIDED BY FINISH HARDWARE SUPPLIER.
 - REINFORCE FRAMES FOR SURFACE MOUNTED HARDWARE
 - PREPARE FRAME FOR DOOR SILENCERS, 3 PER DOOR - WELDING IN ACCORDANCE WITH CSA W59
 - GRIND WELDED JOINTS AND CORNERS TO A FLAT PLANE, FILL WITH METALLIC PASTE AND SAND TO UNIFORM SMOOTH FINISH

DOOR HARDWARE:

- ALL LOCKS TO BE KEYED TO MATCH EXISTING DOORS AND THE CITY'S REQUIREMENTS.
- .1 CODE 1 HINGES CB191 NRP STANLEY SUPPLY AND INSTALLATION BY CITY ELECTRIC STRIKE PREP DOOR FRAME TO RECEIVE STRIKE VON DUPRIN **EXIT DEVICE** 88TP 629 CLOSER LCN 4111 689 OH STOP 100S SERIES 630 GLYNN JOHNSON WEATHERSTRIP W13 K.N. CROWDER BOTTOM SWEEP W13S K.N. CROWDER CT45 K.N. CROWDER
- THRESHOLD CODE 2 HINGES PASSAGE SET

CLOSER

THRESHOLD

26D 626 26D 26D CB179 114x101 D10S SURFACE BOLTS 1631/1632 WEATHERSTRIP W21

6mm CHECKERPLATE

ROOM / AREA FINISHING SCHEDULE

SEALANTS:

PAINTING:

- TO CAN/CGSB-19.24.

- TO CAN/CGSB-19.18.

- TO CGSB 19-GP-14M.

- COLOURS TO BE SELECTED

ONE-PART SILICONES (FOR METAL)

CONCRETE (PRECAST & CAST-IN-PLACE):

GALVANIZED AND ZINC COATED METAL:

GALVANIZED AND ZINC COATED METAL:

STRUCTURAL STEEL AND METAL FABRICATIONS:

MULTICOMPONENT URETHANES (FOR CONCRETE AND MASONRY)

– MPI SYSTEM INT 3.1A, PREMIUM GRADE, GLOSS LEVEL 3.

- MPI SYSTEM INT 5.1Q, PREMIUM GRADE, GLOSS LEVEL 3.

- MPI SYSTEM INT 5.3M, PREMIUM GRADE, GLOSS LEVEL 3.

- MPI SYSTEM EXT 5.1C, PREMIUM GRADE, GLOSS LEVEL 3.

BUTYL SEALANT (SETTING ALUMINUM THRESHOLDS).

	ROOM / AREA		FLOOR		NORTH	WALL	EAST	WALL	SOUTH	WALL	WEST	WALL		CEILING	
ROOM #	ROOM / AREA NAME	MAT	FIN	BASE	MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN	HT
101	MAINTENACE BAY	С	-		C(e)	Р	C	Р	С	Р	С	Р	STR	Р	7925±
		PAINTIN	G TO IN	CLUDE A	LL CON	CRETE W	ALLS, ST	EEL BEA	MS, COL	LUMNS,	JOISTS A	AND STEE	L ROOF	DECK.	

DOOR / WINDOW SCHEDULE

STANLEY

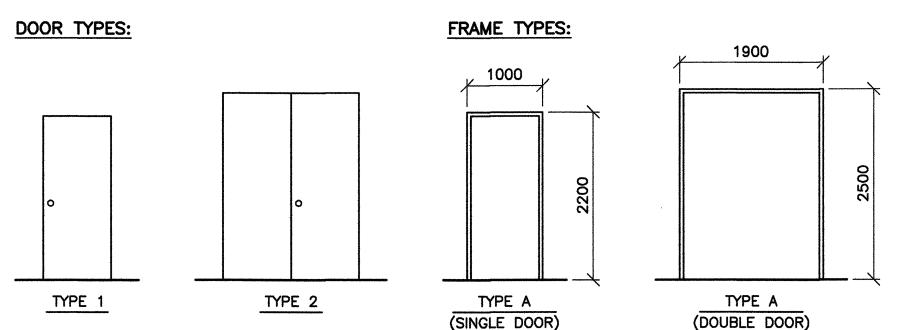
SCHLAGE

GLYNN JOHNSON

K.N. CROWDER

LCN

	000R /	WINDOW	•		FRAM	E	DOOR SIZE	HARDWARE CODE	F.R. RATING (HOURS)	REMARKS
NUMBER	TYPE	MAT	FIN	TYPE	MAT	FIN				
D101A	INSULA	TED OVE	RHEAD [OOR			4270 x 4270 (14'x14')		_	
D101B	INSULA	TED OVE	RHEAD [DOOR			4270 x 4270 (14'x14')	_		
D101C	1	НМ	Р	Α	PS	Р	900 x 2150 x 45	1	_	INSUL DOOR AND FRAME
D101D	1	НМ	Р	Α	PS	Р	900 × 2150 × 45	1	-	INSUL DOOR AND FRAME
D101E	2	НМ	Р	Α	PS	Р	2 - 1050 x 2450 x 45	2	1.5	



ABBREVIATIONS:

STR

- CONCRETE BLOCK EXISTING - FINISH GALVANIZED **GALV** - GYPSUM BOARD - HOLLOW METAL HEIGHT INSUL - INSULATED - LAY-IN ACOUSTIC TILE MATERIAL MAT PAINT PRESSED STEEL - RUBBER BASE - RESILIENT SHEET FLOORING

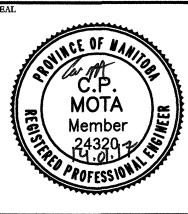
STRUCTURE

- THERMALLY BROKEN

- CONCRETE

REFERENCE DRAWINGS DESCRIPTION

						A			
00	14.01.17	ISSUED FOR CONSTRUCTION	EV	cu	DLP				
NO.	DATE	DESCRIPTION	PREPARED	REVIEW	DESIGN	AUTHORIZE			
REVIS	SIONS/ISSUE	DRAFT	DRAFTING		ENGINEERING				
SEAT		SEAT PERMIT STAMP							



APEGIN Certificate of Authorization TETRA TECH WEI Inc. No. 5313 Date: April 30, 2014

DESIGNED BY:	PREPARED BY:	REVIEWED BY:		
DLP	EV	DLP		
AUTHORIZED BY	DATE:	SCALE:		
	13.11.06	AS NOTED		

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CITY OF WINNIPEG TRANSIT DEPARTMENT



TETRA TECH

CITY OF WINNIPEG TRANSIT - FORT ROUGE GARAGE **BUS MAINTENANCE ADDITION**

BUILDING SPECIFICATIONS

1329720500-DWG-B0007