

DOOR SCHEDULE

MARK	DOOR				FRAME						HARDWARE GROUP	RATING (HR)	REMARKS
	WIDTH	HEIGHT	THICKNESS	TYPE	MAT.	FINISH	GLASS	MAT.	FINISH	TYPE			
DR101A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	2	.75 FRR	NO THERMAL BREAK
DR101B	1100x2150x45	D2	HM	PNT	GWG	HM	PNT	F2	J2	H2	2A	.75 FRR	EXIT TO LINK
DR102A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR102B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR103A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	4	1.5 FRR	NO THERMAL BREAK
DR103B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR103C	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR103D	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR103E	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	-	
DR103F	2-900x2150x45	D1	HM	PNT	-	HM	PNT	F3	J1	H1	1	-	RH ACTIVE
DR104A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	4	1.5 FRR	NO THERMAL BREAK
DR104B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR105	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	4	1.5 FRR	NO THERMAL BREAK
DR106A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J3	H3	2A	-	
DR106B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J3	H3	2A	-	
DR106C	5000x7000x45	D4	-	PREFIN	-	-	-	-	-	-	-	-	O/H COILING DOOR
DR106D	5000x7000x45	D4	-	PREFIN	-	-	-	-	-	-	-	-	O/H COILING DOOR
DR201A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	3	1.5 FRR	NO THERMAL BREAK
DR201B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	3	1.5 FRR	NO THERMAL BREAK
DR201C	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	5	-	
DR202A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR202B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR203	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	6	-	
DR204	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	-	
DR301A	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	3	1.5 FRR	NO THERMAL BREAK
DR301B	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR301C	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J2	H2	3	1.5 FRR	
DR301D	900x2150x45	D1	HM	PNT	-	HM	PNT	F1	J1	H1	3	1.5 FRR	NO THERMAL BREAK
DR301E	900x2150x45	D1	HM	PNT	GWG	HM	PNT	F1	J2	H2	5	.75 FRR	EXIT TO BRIDGE

HARDWARE SCHEDULE

GROUP	DESCRIPTION	QUANTITY	UNIT	MANUFACTURER
GROUP 1	6 BUTT HINGES TA386 4 1/2 x 4 NRP	32D		MCKINNEY
	1 EXIT DEVICE 8831 ETL x 644 STRIKE	32D		SARGENT
	2 FLUSHBOLTS GSH 401	26D		GSH
	1 CLOSER P7500	689		NORTON
	2 CONCEALED O/H STOP 6-346	32D		RIXSON
	2 KICKPLATES GSH 80A 10 x 35.25	32D		GSH
	1 ASTRAGAL 351CP 7"	CP		PEMCO
	1 WEATHER STRIP 297SNS 1/6 x 2/7	ANB		PEMCO
	2 SWEEPS 345ANB 3'	ANB		PEMCO
	1 THRESHOLD 172AK 3'	PEMKOTE		PEMCO
GROUP 2	3 BUTT HINGES TA386 4 1/2 x 4 NRP	32D		MCKINNEY
	1 EXIT DEVICE-EXIT ONLY 12-8810	32D		SARGENT
	1 CLOSER P7500	689		NORTON
	1 CONCEALED O/H STOP 6-346	32D		RIXSON
	1 KICKPLATE GSH 80A 10x34.5	32D		GSH
	1 WEATHER STRIP 297SNS 1/3x2/7	ANB		PEMCO
	1 SWEEP 345ANB 3'	ANB		PEMCO
	1 THRESHOLD 172AK 3'	PEMKOTE		PEMCO
GROUP 2A	3 BUTT HINGES TA386 4 1/2x4 NRP	32D		MCKINNEY
	1 EXIT DEVICE-EXIT ONLY 8810	32D		SARGENT
	1 CLOSER P7500	689		NORTON
	1 CONCEALED O/H STOP 6-346	32D		RIXSON
	1 KICKPLATE GSH 80A 10x34.5	32D		GSH
	1 WEATHER STRIP 297SNS 1/3x2/7	ANB		PEMCO
	1 SWEEP 345ANB 3'	ANB		PEMCO
	1 THRESHOLD 172AK 3'	PEMKOTE		PEMCO
GROUP 3	3 BUTT HINGES TA 314 4 1/2x4	32D		MCKINNEY
	1 PASSAGE 11U15LL	26DCPC		SARGENT
	1 CLOSER 7500	689		NORTON
	1 KICKPLATE GSH 80A 10x34.5	32D		GSH
	1 WALLSTOP GSH 250	26D		GSH
GROUP 3A	4 BUTT HINGES TA 314 4 1/2x4	32D		MCKINNEY
	1 PASSAGE 11U15LL	26DCPC		SARGENT
	1 CLOSER 7500	689		NORTON
	1 KICKPLATE GSH 80A 10x34.5	32D		GSH
	1 WALLSTOP GSH 250	26D		GSH
GROUP 4	3 BUTT HINGES TA 386 4 1/2x4	32D		MCKINNEY
	1 EXIT DEVICE 12-8813 ETL	32D		SARGENT
	1 CLOSER 7500	689		NORTON
	1 CONCEALED O/H STOP 6-346	32D		RIXSON
	1 KICKPLATE GSH 80A 10x34.5	32D		GSH
	1 WEATHER STRIP 297SNS 1/3x2/7	ANB		PEMCO
	1 SWEEP 345 ANB 3'	ANB		PEMCO
	1 THRESHOLD 172AK 3'	PEMKOTE		PEMCO
GROUP 5	3 BUTT HINGES TA 386 4 1/2x4	32D		MCKINNEY
	1 EXIT DEVICE 11G04 LL	26DCPC		SARGENT
	1 CLOSER 7500	689		NORTON
	1 CONCEALED O/H STOP 6-346	32D		RIXSON
	1 KICKPLATE GSH 80A 10x34.5	32D		GSH
	1 WEATHER STRIP 297SNS 1/3x2/7	ANB		PEMCO
	1 SWEEP 345 ANB 3'	ANB		PEMCO
	1 THRESHOLD 172AK 3'	PEMKOTE		PEMCO
GROUP 6	4 BUTT HINGES TA 314 4 1/2x4	32D		MCKINNEY
	1 PASSAGE 11U15LL	26DCPC		SARGENT
	1 KICKPLATE GSH 80A 10x34.5	32D		GSH
	1 WALLSTOP GSH 250	26D		GSH

ABBREVIATIONS:

- ALUM = ALUMINUM
- FR = FIRE RATING
- GYP BD = GYPSUM BOARD
- GWG = GEORGIAN WIRED GLASS
- HM = HOLLOW METAL
- MTL = METAL
- N/A = NOT APPLICABLE
- PNT = PAINTED
- PREFIN = PREFINISHED
- STL = STEEL
- TSG = TEMPERED SAFETY GLASS

BUILDING CODE ANALYSIS

Winnipeg Water Treatment Plant Bulk Chemical Building Winnipeg, Manitoba

Building Code Analysis

1.0 General

.1 The building is a two-storey, non-combustible structure utilized for the storage of non-combustible chemicals (which are for use in the nearby treatment plant). The building is located to the south of the main water treatment plant by means of a bridge with a two-hour separation at each end. The building is also joined to the "Hypochlorite Building" to the west by means of another bridge which includes a one-hour separation at each end.

2.0 Description

- Storeys: Two (2)
- Building Area: 1134.7m² (12,209.3 sf)
- Sprinklered: No
- Occupancy Type: Group F, Division 3
- Occupant Load: None (0) (intermittent use only)
- Streets: One (1)

3.0 Regulation

.1 This project may be regulated under 3.2.2.69., Group F, Division 3, Two Storeys

2. Classification

.1 Requirements:

- ≤ 5,600 m² (60,256 sf) Building Area (Conforms @ 1,134.7m²)
- Two (2) Storeys (Conforms)
- Unsprinklered (Conforms)
- Type "F-3" Occupancy (Conforms)
- One (1) Street (Conforms)

.2 Stipulations:

- May be Combustible or Non-combustible construction
- Floor Assemblies - 45 minutes FRR, (Conforms)
- Load bearing Elements - 45 minutes FRR, (Conforms)

4.0 General Conformance

.1 **3.4.2.4 - Travel Distance**

.1 Maximum travel distance to an exit is 30 m (98') - Conforms (maximum travel of 25.5 m (83')).

.2 **3.4.2.1 - Number of Exits**

.1 Conforms (two (2) required - five (5) provided).

.3 **3.2.3.1 - Limiting Distance**

.1 To the west, building has a 4.0m limiting distance to a virtual property line at the east face of the adjacent Hypochlorite building. As such, the west face of the Bulk Chemical building is required to be rated with a 1 HR fire resistance rating (conforms).

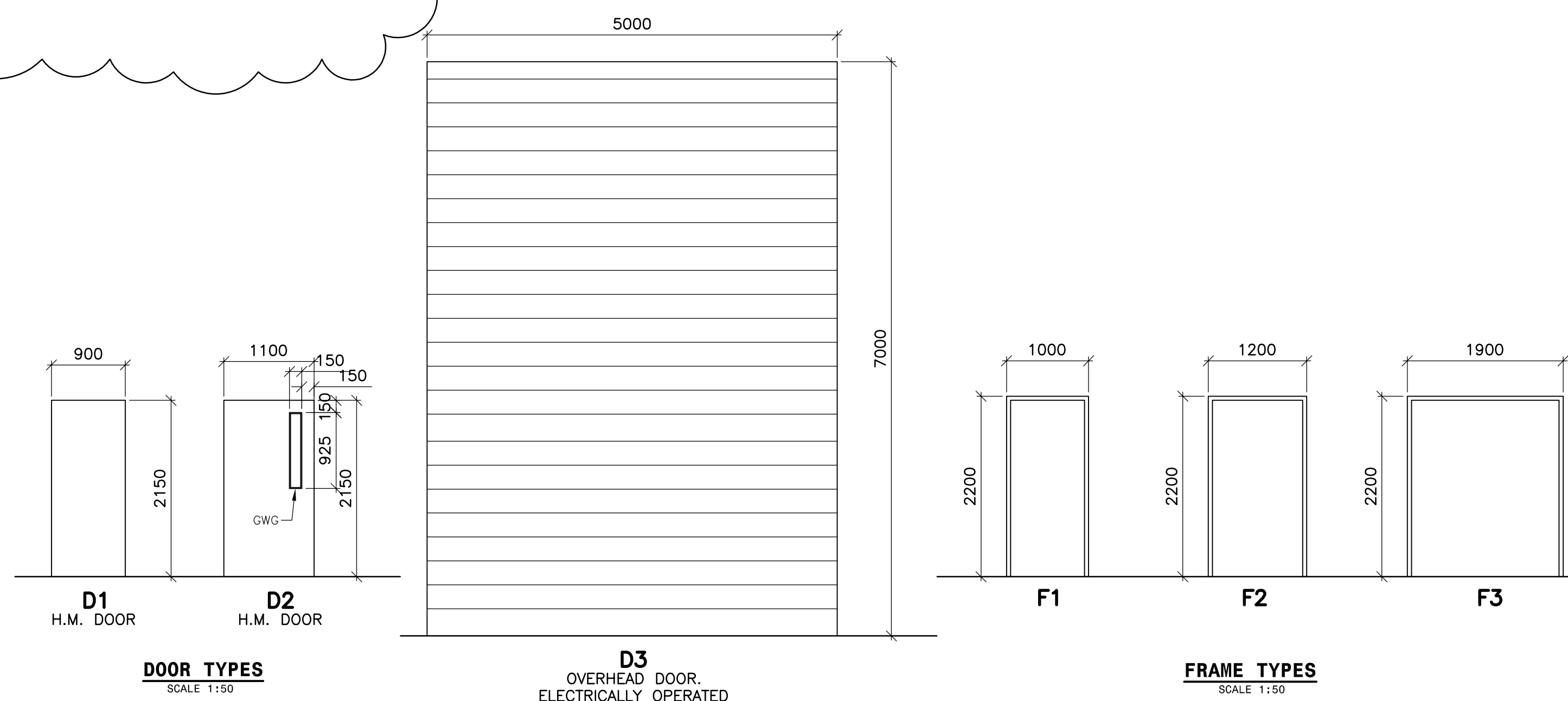
.4 **Fire Rating Separations**

.1 2 HR FRR separation required between:

- Ferric Chloride Storage Room (RN101) and Sulphuric Acid Storage Room (RN102) (conforms).
- Sulphuric Acid Storage Room (RN102) and Service/Workshop Area (RN103) (conforms)
- Sodium Hydroxide Storage Room (RN104) and Service/Workshop Area (RN103) (conforms)
- Sodium Hydroxide Storage Room (RN104) and Aqua Ammonia Room (RN105) (conforms)
- Railcar Station (RN106) and all adjacent rooms (conforms).

ROOM FINISH SCHEDULE

ROOM No.	ROOM NAME	FLOOR			NORTH WALL		SOUTH WALL		EAST WALL		WEST WALL		CEILING		HGT. AFF	REMARKS
		MAT.	FIN.	BASE	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.		
101	FERRIC CHLORIDE STORAGE RM	CONC	SEAL	SEAL	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	10368	
102	SULPHURIC ACID STORAGE RM	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	10368	
103	SERVICE/WORKSHOP AREA	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	3995	
103A	STAIR WELL AND LANDINGS	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC	PNT	-	
104	SODIUM HYDROXIDE STORAGE RM	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	10368	
105	AQUA AMMONIA STORAGE RM	CONC	SEAL	SEAL	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	CONC BLK/ GYP BD	PNT	STL DECK	PNT	7645	
106	RAILCAR STATION	CONC	SEAL	SEAL	PF METAL	PNT	PF METAL	PNT	PF METAL	PNT	PF METAL	PNT	STL DECK	PNT	7168	
201	ELECTRICAL ROOM	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC	PNT	4790	
202	WORK STATION	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC	PNT	4790	
203	WASHROOM	TILES	-	TILES	TILES	-	TILES	-	TILES	-	TILES	-	ACT	PNT	2726	
204	STAIR WELL AND LANDINGS	CONC	SEAL	SEAL	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC BLK	PNT	CONC	PNT	-	



B.M. ELEV.					
DESIGNED BY	NC	CHECKED BY	LK		
DRAWN BY	AL	APPROVED BY	AHL		
SCALE:	AS SHOWN	RELEASED FOR CONSTRUCTION BY:	R. SOROKOWSKI		
NO. REVISIONS	DATE	BY	DATE	2006/09/01	DATE
				2007/01/31	

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION

WATER TREATMENT PLANT BULK CHEMICAL BUILDING SODIUM HYPOCHLORITE AND CHEMICAL STORAGE BUILDING

ARCHITECTURAL SCHEDULES AND CODE ANALYSIS

CITY FILE NUMBER: SHEET OF

CITY DRAWING NUMBER: 1-0601S-A-B0501-001-02D

ENGINEER'S SEAL: ORIGINAL SIGNED BY NEIL COOPER 2007/01/31

CONSULTANT DRAWING NO. WS-B0501