LEGEND	
CONCRETE, NIC	

GENERAL NOTES

- 1. READ THE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER PERTINENT CONTRACT DOCUMENTS.
- 2. DIMENSIONS IN MILLIMETRES. ELEVATIONS IN METRES.
- 3. DO NOT SCALE DRAWINGS.
- 4. CONSTRUCTION METHODS REQUIRING TEMPORARY SHORING OR BRACING OF ROOF SYSTEM AND SUBSTRUCTURE SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR FOR REVIEW. THE CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER, EXPERIENCED AND REGISTERED IN THE PROVINCE OF MANITOBA, TO PERFORM AND TAKE RESPONSIBILITY FOR ANY SHORING AND OTHER DESIGNS REQUIRED TO COMPLETE THE CONSTRUCTION.
- 5. ALL PLANS AND SECTIONS SHALL BE READ IN ON JUNCTION WITH STANDARD DESIGN DETAILS SHOWN ON DRAWING WB-S5451 AND THE CONTRACT DOCUMENTS UNLESS NOTED OTHERWISE.
- 6. OTHER CONTRACTS WILL BE EXECUTED CONCURRENTLY WITH THIS CONTRACT. WORK ON THOSE CONTRACTS WILL AFFECT THIS CONTRACT. COORDINATE WITH CONTRACT ADMINISTRATOR LOCATION OF ALL OPENINGS, EMBEDDED ITEMS, BLOCKOUTS, DOWELS, SLEEVES, AND INSERTS PRIOR TO FABRICATION OF PRECAST ROOF ELEMENTS.
- 7. SMALL OPENINGS UP TO 125mm DIAMETER, WILL BE CORED IN THE DOUBLE-TEE DECKS ON SITE. THE FOLLOWING STIPULATIONS APPLY:
 - a. HOLES MUST BE LOCATED BETWEEN THE STEMS OF INDIVIDUAL DOUBLE-TEE'S
 - b. LOCATIONS MUST BE COORDINATED WITH THE CONTRACT ADMINISTRATOR.
 - c. MANUFACTURER SHALL CONSIDER THE RANDOM OPENINGS IN THIS DESIGN.

DESIGN NOTES

(NOTE: THIS INFORMATION IS FOR REFERENCE PURPOSES ONLY. CONTRACTOR TO REFER TO SPECIFICATIONS.)

- 1. CONCRETE REINFORCEMENT: CAN/CSA-G30.18-M92 (R2002); GRADE 400R, 400W WHERE INDICATED
- SNOW LOAD DATA: GROUND SNOW LOADING

ASSOCIATED RAIN LOADING

Sr = 0.2 kPa

Ss = 1.7 kPa

WIND LOAD DATA:

1/100 YEAR PRESSURE (q 100)

0.49 kPa

4. SEISMIC DATA:

ACCELERATION-RELATED SEISMIC ZONE VELOCITY-RELATED SEISMIC ZONE ZONAL VELOCITY RATIO

 $Z_q = 0$ $Z_{V} = 0$ v = 0

5. REFERENCE CODES:

- i) NATIONAL BUILDING CODE OF CANADA 1995 (R2003) WITH THE 1999 MANITOBA AMENDMENTS.
- ii) CONCRETE AND REINFORCEMENT:
- iii) PRECAST CONCRETE CSA A23.4-05

CAN/CSA A23.1-04/A23.2-04, CSA A23.3-04

AB AL	ANCHOR BOLT ALUMINUM	JT	JOINT
ADD	ADDITIONAL	LG	LONG
ALT	ALTERNATE	LL	LIVE LOAD
ARCH	ARCHITECTURAL	LLH	LONG LEG HORIZONTAL
DI DO	DI III DINIO	LLV	LONG LEG VERTICAL
BLDG BLL	BUILDING BOTTOM LOWER LAYER	LPT	LOW POINT
BM	BEAM	LSSJ	LONG SPAN STEEL JOIST
BOC	BOTTOM OF CONCRETE	MAX	MAXIMUM
BOP	BOTTOM OF CONCRETE BOTTOM OF PIPE	MC MC	MOMENT CONNECTION
BOT	BOTTOM OF FIFE	MECH	MECHANICAL
B PL	BASE OR BEARING PLATE	MEZZ	MEZZANINE
BUL	BOTTOM UPPER LAYER	MH	MANHOLE
DOL	BOTTOM OFFER EATER	MID	MIDDLE
с то с	CENTRE TO CENTRE	MIN	MINIMUM
CB	CATCH BASIN	MISC	MISCELLANEOUS
CHKD PL	CHECKERED PLATE	MPDD	MODIFIED PROCTOR
CJ	CONSTRUCTION JOINT		DRY DENSITY
CL	CENTRE LINE		
CLJ	CONTROL JOINT	MW	MEMBRANE WATERPROOFING
CLSM	CONTROLLED LOW		
	STRENGTH MATERIAL	NF	NEAR FACE
CO	CLEAN OUT	NIC	NOT IN CONTRACT
COL	COLUMN	NO.	NUMBER
CONC	CONCRETE	NTS	NOT TO SCALE
CONN	CONNECTION		ON OFFITTE
CONT	CONTINUOUS	00	ON CENTRE
CW	CAPILLARY WATERPROOFING	OD	OUTSIDE DIAMETER
		O.F.	OUTSIDE FACE
D	DIAMETER	OPNG	OPENING
DIA	DIAMETER	OPP	
DBS	DOWEL BAR SPLICER(S)	OWSJ	OPEN-WEB STEEL JOIST
DIM	DIMENSION	5015	DU E. 045
DL	DEAD LOAD	PCAP	
DN	DOWN		PRECAST CONCRETE
DO.	DITTO	PE	POLYETHYLENE
DWG DWL	DRAWING(S) DOWEL(S)		PERFORATED
DWL	DOWEL(S)	PL PLCS	PLATE PLACES
EA	EACH		PIPE SUPPORT
EF	EACH FACE	PVC	POLYVINYL CHLORIDE
EL .	ELEVATION		TOLIVINIE GILGINDE
EQL	EQUAL	R	RISERS
EQPT	EQUIPMENT	R	RADIUS
ES	EACH SIDE		REINFORCING
EW	EACH WAY	REQD	
EXST	EXISTING		
EXP JT	EXPANSION JOINT	SEP JT	SEPARATION JOINT
		SIM	SIMILAR
FD	FLOOR DRAIN	SP	SPACING
FF	FAR FACE	SPS	
FIN.	FINISH	SPEC	•
FL FRP	FLOOR FIBRE REINFORCED	SPDD	STANDARD PROCTOR
FRE	PLASTIC		DRY DENSITY
FTG	FOOTING	SQ	SQUARE
1 10	1 00 11110	SST	STAINLESS STEEL
GALV	GALVANIZED	STD	STANDARD
GL	GRID LINE	STL	STEEL
GD	GUTTER DRAIN	STGR	STAGGERED
GID	GROUTED-IN DOWEL	STIF	STIFFENER
GRAN	GRANULAR	STIRR	
		SYMM	SYMMETRICAL
HEF	HORIZONTAL EACH FACE	_	TDE: : : : :
HORIZ	HORIZONTAL	T	TREADS
HPT	HIGH POINT	T&B	TOP AND BOTTOM
HSS		TJ	TIE JOIST
HWL	HIGH WATER LEVEL	TLL	TOP LOWER LAYER
H	HIGH	T/O	TOP OF TOP OF CONCRETE
H&V	HORIZONTAL AND VERTICAL	TOC TOS	TOP OF CONCRETE
ID	INCIDE DIAMETER	TUL	TOP UPPER LAYER
ID LE	INSIDE DIAMETER	TYP	TYPICAL
I.F. INSUL	INSIDE FACE INSULATION		
INSUL INV	INSULATION INVERT	U/S	UNDERSIDE
11 V	HAAFIY I	UNO	UNLESS NOTED OTHERWISE
		VERT	VERTICAL
		VEF	VERTICAL EACH FACE
		VIF	VERTICAL INSIDE FACE
		VOF	VERTICAL OUTSIDE FACE
		W	WIDE
		W/	WITH
			WITHOUT
		WS WWF	WATER STOP WELDED WIRE FABRIC
			vvc , , , c , , , , , , , , , , , , , ,

ABBREVIATIONS

B.M. ELEV. ENGINEER'S SEAL © CH2MHILL THE CITY OF WINNIPEG **⑤** Earth Tech Winnipeg WATER AND WASTE DEPARTMENT ENGINEERING DIVISION Frederickson Cooper ORIGINAL SIGNED BY D. KRUGER CHECKED WATER TREATMENT PLANT DESIGNED CITY FILE NUMBER **Certificate of Authorization** MAIN BUILDING APPROVED AHL 2006/10/11 CH2M HILL Canada Ltd. DRAWN SHEET OF CR SUPPLY AND INSTALLATION OF PRECAST ROOF PANELS No. 1441 Expiry: April 30, 2007 RELEASED FOR CONSTRUCTION BY: NTS CITY DRAWING NUMBER SCALE: STRUCTURAL CONSULTANT DRAWING NO. LEGEND R. SOROKOWSKI 00 ISSUED FOR TENDER 06/10/11 DK 1-0601M-D-S5001-001-00D WM-S5001 GENERAL NOTES AND ABBREVIATIONS NO. REVISIONS DATE BY DATE 2006/08/30 DATE 2006/10/11