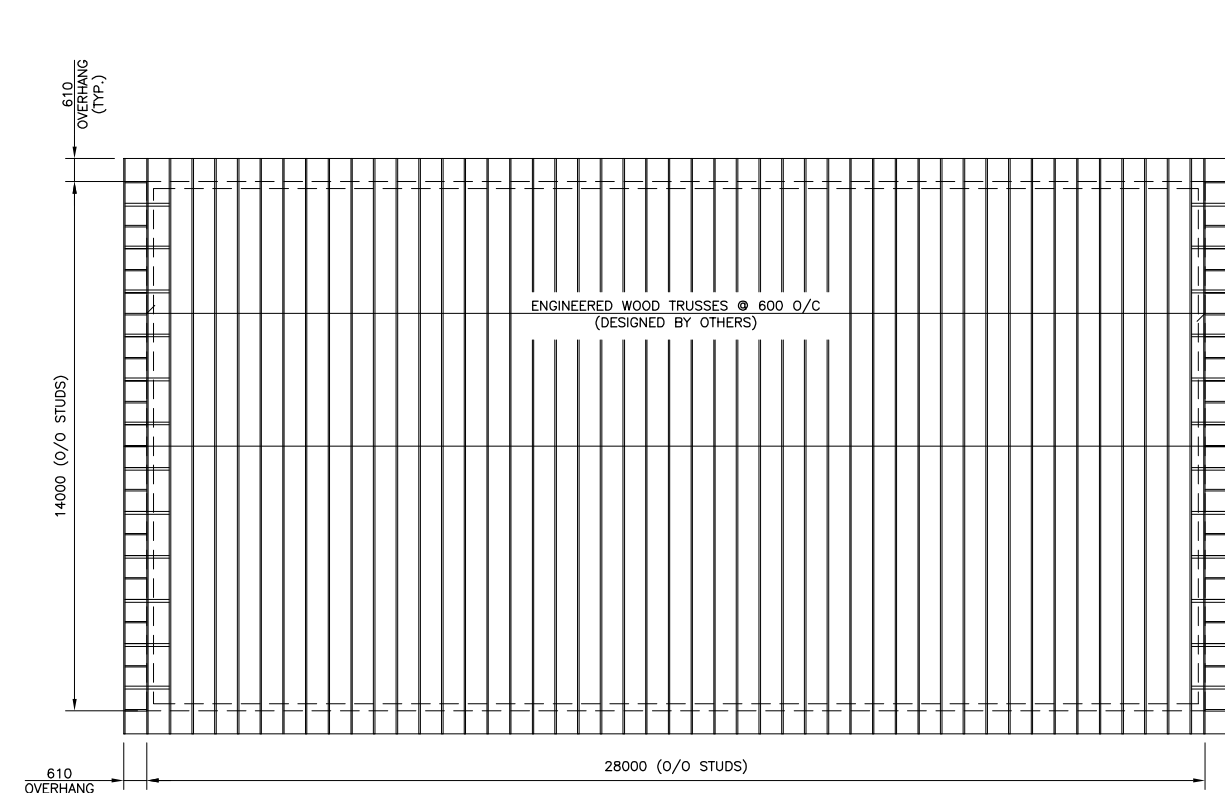


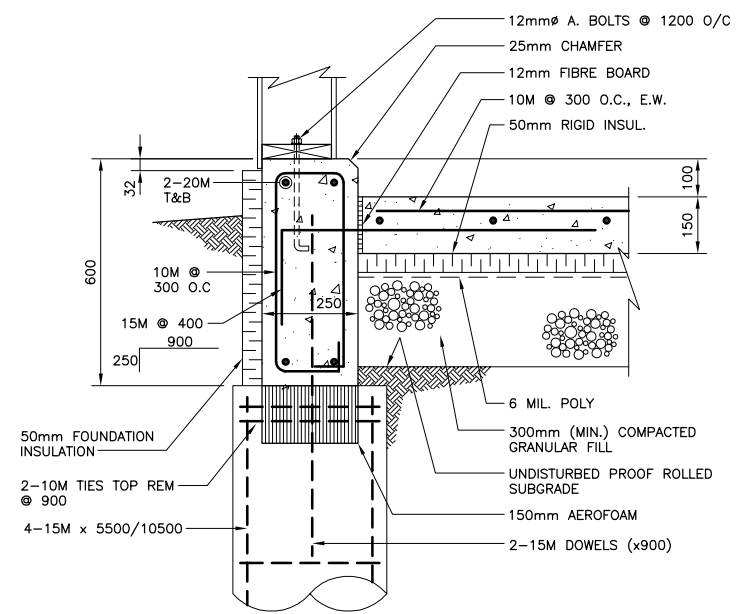
SCALE: 1:1



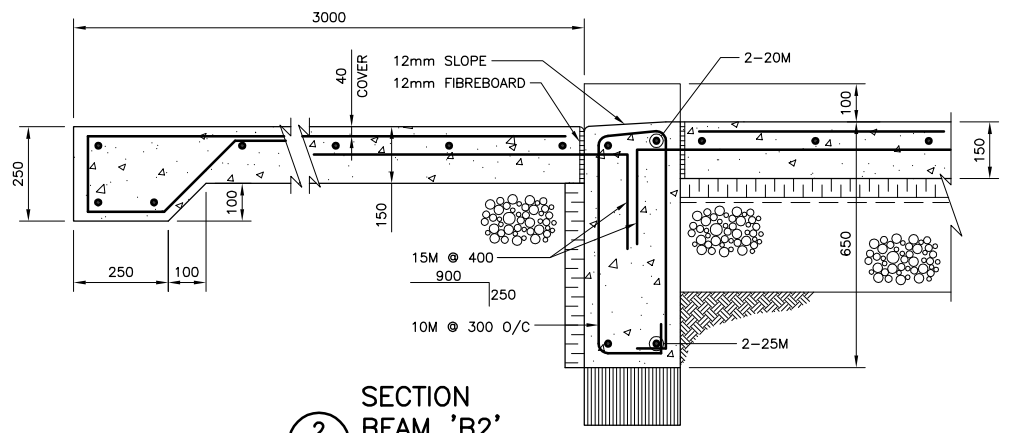
ROOF FRAMING PLAN
SCALE: 1:100

NOTE: SEE DRAWING B2 FOR TRUSS NOTES

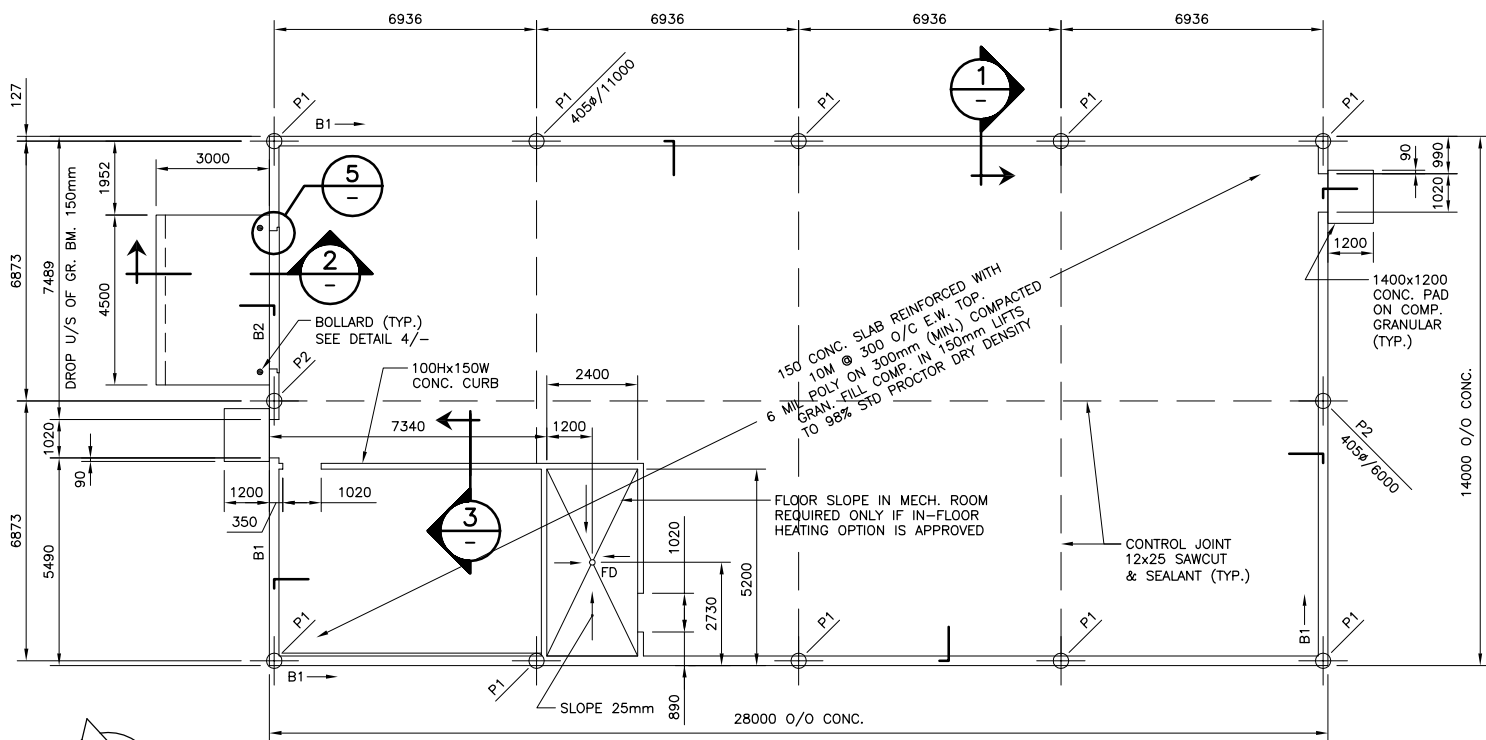
ROOF DESIGN LOADS
DEAD LOAD = 0.75 kPa
SNOW LOAD = 1.75 kPa



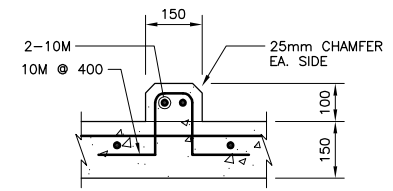
SECTION 1 - BEAM 'B1'
SCALE: 1:10



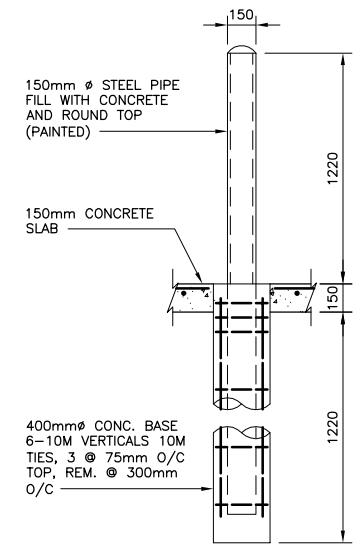
SECTION 2 - BEAM 'B2'
SCALE: 1:10



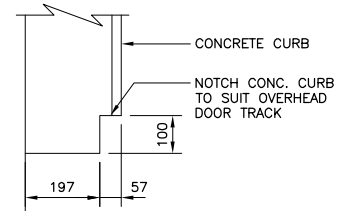
FOUNDATION PLAN
SCALE: 1:100



TYPICAL CURB SECTION
SCALE: 1:10



BOLLARD DETAIL
SCALE: 1:20



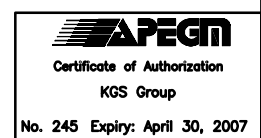
DETAIL 5
SCALE: 1:10

STRUCTURAL NOTES

- GRANULAR**
- GRANULAR FILL TO BE 'A' BASE, WELL GRADED, 20mm DOWN.
- CONCRETE**
- CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CAN/CSA-A23.1, A23.3 (LATEST). SEE BELOW FOR MIX REQUIREMENTS.
 - MIX WATER SHALL BE POTABLE. CALCIUM CHLORIDE SHALL NOT BE USED.
 - REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF CSA G30.12-M88. GRADE, 300 MPa FOR 10M BARS, 400 MPa FOR 15M AND LARGER.
 - CAST-IN-PLACE ANCHOR BOLTS SHALL MEET REQUIREMENTS OF ASTM A307.
 - EXPANSION ANCHORS SHALL BE HILTI OR APPROVED EQUAL, OR AS OTHERWISE NOTED, AND INSTALLED AS PER MANUFACTURER'S INSTRUCTIONS.
 - PROVIDE ADEQUATE COLD/HOT WEATHER PROTECTION AS REQUIRED DURING CURING PERIOD.
- REINFORCING STEEL**
- REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CAN/CSA G30.18-M92. GRADES TO BE: 400 MPa FOR 15M BARS AND LARGER; 300 MPa FOR 10M BARS.
 - SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATE BAR SIZES, SPACINGS, LOCATIONS & QUANTITIES OF REINFORCING STEEL, BENDING & CUTTING SCHEDULES, SUPPORTING & SPACING DEVICES, ETC. FOR REVIEW PRIOR TO FABRICATION. DETAIL, FABRICATE AND PLACE REINFORCING IN ACCORDANCE CSA A23.1, CSA A23.3 AND ACI 315-80 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" EXCEPT AS NOTED. LAP STEEL 36 BAR DIAMETERS (MINIMUM) UNLESS NOTED OTHERWISE.
 - REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
- FOUNDATIONS (C.I.P. CONCRETE PILES)**
- FOUNDATIONS SHALL BE CAST-IN-PLACE CONCRETE FRICTION PILES AS SHOWN ON DRAWINGS.
 - CONCRETE PILES HAVE BEEN DESIGNED FOR AN AVERAGE ALLOWABLE SKIN FRICTION VALUE OF 300 PSF.
 - THE PILING SUBCONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND SERVICES IN PILING AREA WHETHER SHOWN OR NOT. EXPOSE ALL SERVICES CLOSE TO PILING AS REQUIRED.
 - PILES SHALL NOT BE MORE THAN 2" OUT OF POSITION LATERALLY AT THE TOP AND NOT MORE THAN 2% OUT OF PLUMB.
 - REINFORCE ALL PILES AS DETAILED ON THE DRAWINGS. REFER TO CONCRETE NOTES FOR CONCRETE REQUIREMENTS. INSTALL EACH PILE AS A CONTINUOUS POUR.
 - VIBRATE TOP 15'-0" OF CONCRETE IN ALL PILES.
 - SLEEVING WHERE REQUIRED SHALL BE INCLUDED IN THE PILING CONTRACT.

CONCRETE MIX DESIGN

C.I.P. PILES, BOLLARDS	28 DAY COMP. STRENGTH	30 MPa
	CEMENT	TYPE 50
	W/C RATIO	0.45
	AGGREGATE SIZE (MAX.)	20mm
	ENTRAINED AIR	4%-6%
	SLUMP (MAX.)	90mm (±10mm)
GRADE BEAMS	28 DAY COMP. STRENGTH	30 MPa
	CEMENT	TYPE 10
	W/C RATIO	0.45
	AGGREGATE SIZE (MAX.)	20mm
	ENTRAINED AIR	4%-6%
	SLUMP (MAX.)	90mm (±10mm)
SLABS, ON-GRADE (INTERIOR)	28 DAY COMP. STRENGTH	30 MPa
	CEMENT	TYPE 10
	W/C RATIO	0.45
	AGGREGATE SIZE (MAX.)	20mm
	ENTRAINED AIR	2%-4%
	SLUMP (MAX.)	90mm (±10mm)
SLABS (EXTERIOR)	28 DAY COMP. STRENGTH	35 MPa
	CEMENT	TYPE 10
	W/C RATIO	0.45
	AGGREGATE SIZE (MAX.)	20mm
	ENTRAINED AIR	4%-6%
	SLUMP (MAX.)	90mm (±10mm)



DESIGNED BY	RJL	CHECKED BY	
DRAWN BY	JG	APPROVED BY	
HOR. SCALE		RELEASED FOR CONSTRUCTION	
VERTICAL	AS NOTED		
NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	NOV.16/06	RJL

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THE CITY OF WINNIPEG
PLANNING PROPERTY AND DEVELOPMENT
Winnipeg SERVICES DEPARTMENT

RIVER PATROL BOAT STORAGE BUILDING
FOUNDATION PLAN, ROOF FRAMING PLAN AND STRUCTURAL NOTES

SHEET 1 OF 1
CAD FILE DRAWING NUMBER 06-107-17-5-01-r0.dwg
PROJECT NUMBER 2005-081

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