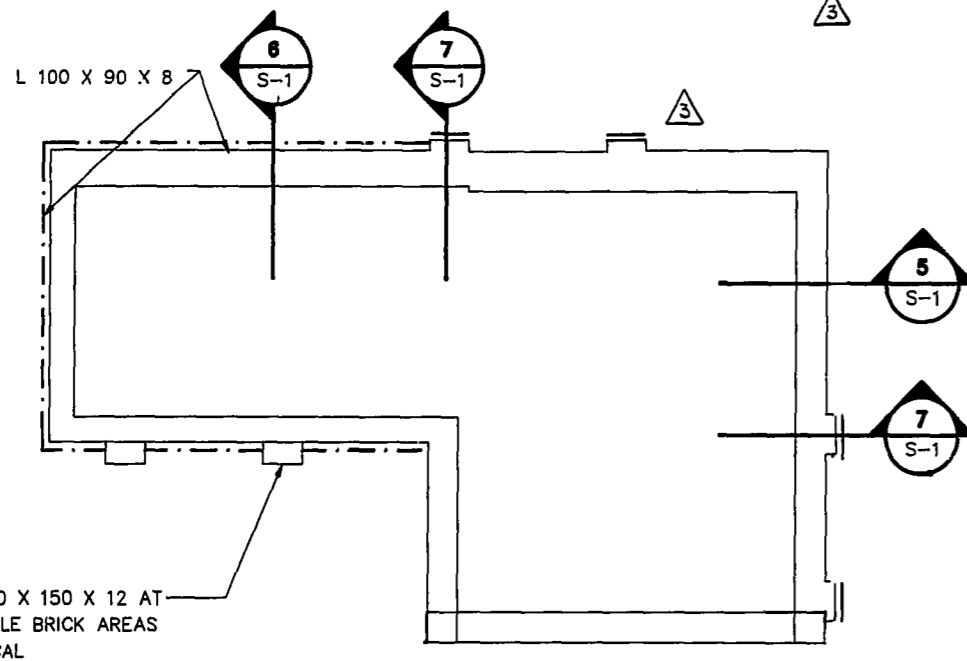


ROOF FRAMING PLAN

SCALE 1:50

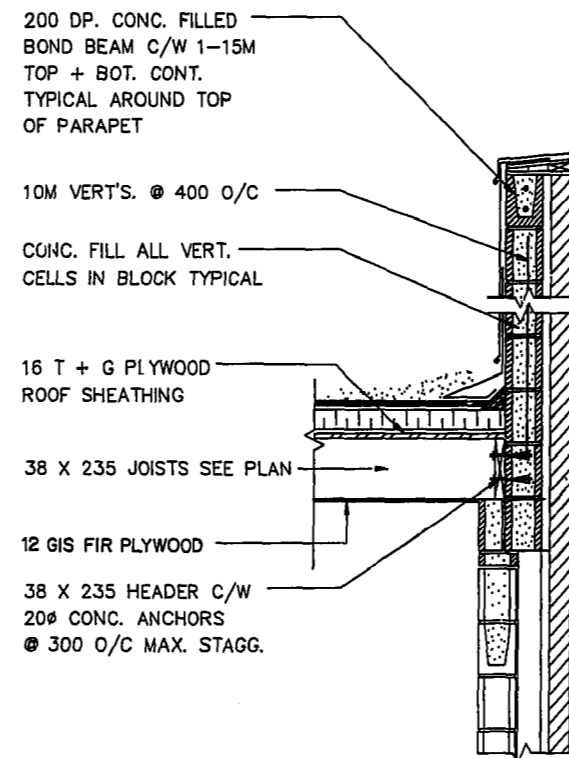


PLAN AT BRICK SILL LEVEL

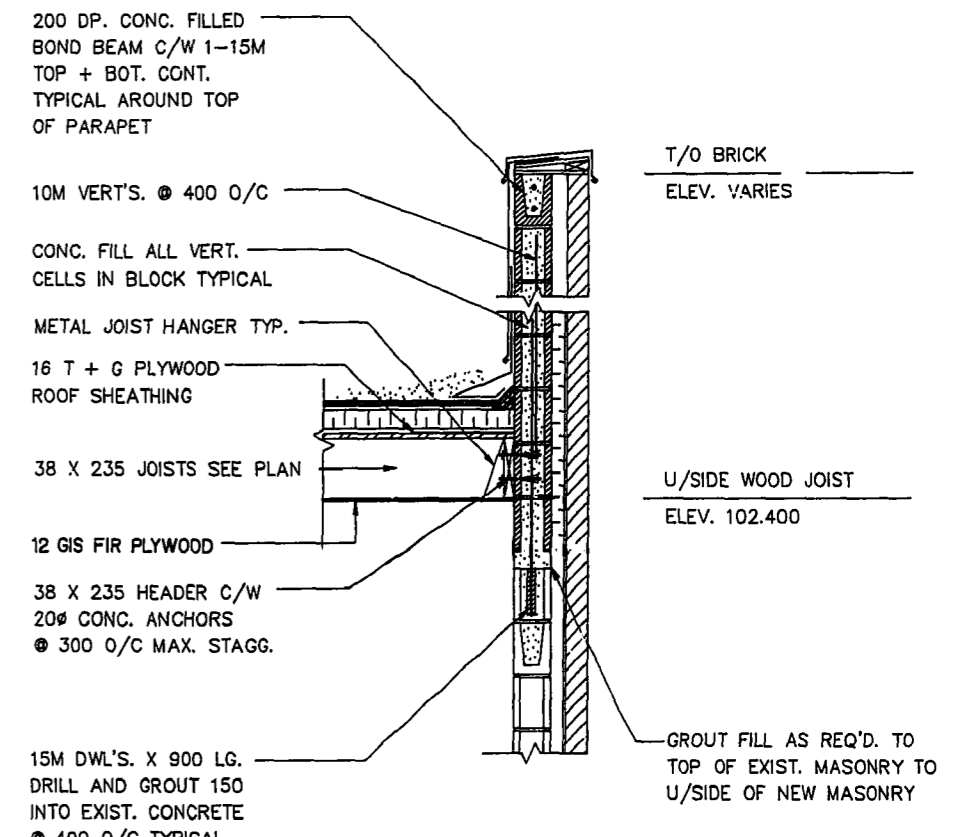
SCALE 1:50

STRUCTURAL NOTES:

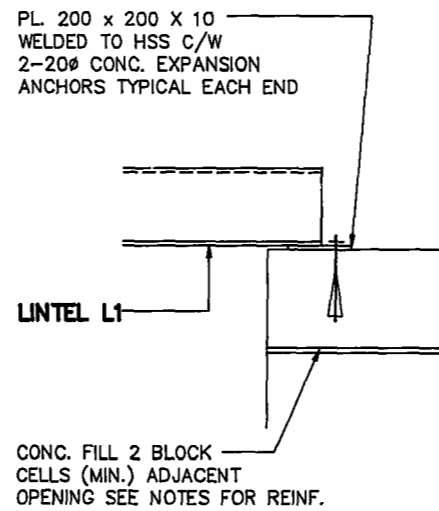
- A. GENERAL
- THESE GENERAL NOTES ARE TO BE READ AS PART OF THE SPECIFICATIONS.
 - THE DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE ARE THE PROPERTY OF THE ENGINEER. THE COPYRIGHT IN SAME BEING RESERVED TO HIM. NO REPRODUCTION IS PERMITTED WITHOUT HIS WRITTEN PERMISSION AND WHEN MADE SHALL BEAR THE ENGINEER'S NAME.
 - THE MANUFACTURING AND CONSTRUCTION OF THE COMPONENTS AND OF THE BUILDING, AND THE MATERIALS USED, TO BE VERIFIED BY A QUALIFIED PERSON TO MEET SPECIFICATION.
 - DO NOT SCALE DRAWINGS.
 - PRIOR TO CONSTRUCTION, VERIFY DIMENSIONS ON DRAWINGS AND REPORT INCONSISTENCIES.
 - DESIGN OF STRUCTURE CONFORMS TO MANITOBA BUILDING CODE.
 - LIVELOAD ROOF: 1.76 kN/m² WITH PROVISIONS AS PER BUILDING CODE FOR SNOW ACCUMULATION.
 - DEADLOAD AS INDICATED BY CONSTRUCTION.
- B. CAST IN PLACE CONCRETE
- CONCRETE WORK TO BE DONE IN ACCORDANCE WITH CAN 3 A23.1-M90, A23.2-M90, A23.3-M84, INCLUDING COLD WEATHER REQUIREMENTS WHEN THE MEAN DAILY TEMPERATURE FALLS BELOW 0 DEG. CEL.
 - CONCRETE MIXES SHALL BE PROPORTIONED IN ACCORDANCE WITH CAN 3 A23.1 M90 TO MEET THE FOLLOWING REQUIREMENTS:
- | 28 DAY AGGREGATE | CEMENT | MAXIMUM STRENGTH | SLUMP |
|------------------|--------|------------------|-------|
| All Conc. | 25 MPa | 20 | 10 |
| | 20 | 10 | 90±20 |
- MAXIMUM ENTRAINED AIR IN CONCRETE 5±1%.
 - THE USE OF CALCIUM CHLORIDE NOT PERMITTED.
- C. REINFORCING STEEL
- USE DEFORMED BARS CSA C30.12 M77, GRADE 400 EXCEPT 10M BARS GRADE 300.
 - ALL REINFORCING STEEL TO BE DETAILED IN ACCORDANCE WITH CSA A23.1 M90, A23.3-M84, AND THE LATEST ACI DETAILING MANUAL.
 - CONCRETE COVER TO MAIN REINFORCING UNLESS NOTED ON DRAWINGS:
- | BEAMS | 50 mm |
|-----------------------------------|-------|
| ALL LAPS TO BE 30 X BAR DIAMETER. | |
- D. MASONRY
- DO MASONRY CONSTRUCTION TO CAN3-S304-M78, CAN3 A371 M84 AND CAN3-A370-M84.
 - CONCRETE MASONRY UNITS TO CONFORM TO CSA A185.1 M1977, CLASSIFICATION 1/7.5/A/M.
 - FILL LINTELS, PLASTER AND BOND BEAMS WITH CONCRETE HAVING A 28 DAY STRENGTH OF 25 MPa.
 - USING MINIMUM 9 GA. GALVANIZED DEFORMED WIRE TRUSS TYPE REINFORCING EVERY SECOND COURSE. ADDITIONAL REINFORCING AS INDICATED.
 - USE 4.78 mm DIAMETER GALVANIZED MASONRY TIES SPACED AT 400 mm VERTICAL AND 800 mm HORIZONTALLY IN INSULATION FILLED WALLS.
 - ALL MASONRY WALLS TO BE PROPERLY BRACED UNTIL COMPLETE STRUCTURE HAS BEEN CLOSED IN.
- E. STRUCTURAL STEEL
- DO FABRICATION, BOLTING, WELDING, ERECTION, TORQUING TO CSA S16 1 M78 AND S136 1979.
 - SHOP PAINT STEEL TO CSA S16 1M78 AFTER CLEANING TO SSPC SP3. FIELD TOUCH UP AFTER ERECTION.
 - STRUCTURAL STEEL TO CONFORM TO CSA G40.21 M 350W EXCEPT HOLLOW STRUCTURAL SECTIONS WHICH SHALL CONFORM TO CSA G40.21 M 350W.
 - ALL STEEL ANGLES AND STEEL LINTEL MEMBERS TO BE GALVANIZED.
- F. CARPENTRY
- DO CARPENTRY TO CONFORM TO CSA 086 M80.
 - LUMBER GRADING TO NLGA GRADING RULES.
 - FRAMING LUMBER TO BE DRY DIMENSIONAL LUMBER; JOISTS, TO BE DOUGLAS FIR, GRADE 2.
 - JOIST HANGERS AND FRAMING ANCHORS CAPABLE TO SUPPORT LOADS INDICATED WITH A MINIMUM CAPACITY OF 3.5 kN AND TO BE MINIMAL FROM 1.21 mm GALVANIZED SHEET METAL MATERIAL: NAIL TO MANUFACTURER'S INSTRUCTIONS.
 - USE COATED SPIRAL NAILS TO CSA B111.
 - DO NAILING TO STANDARD PRACTICE AS SUMMARIZED IN PART 9 OF THE MANITOBA BUILDING CODE, SUB SECTION 9.23.3.
 - ROOF SHEATHING TO BE DOUGLAS FIR PLYWOOD SHEATHING GRADE TO CSA 0121.



1 SECTION SCALE 1:20

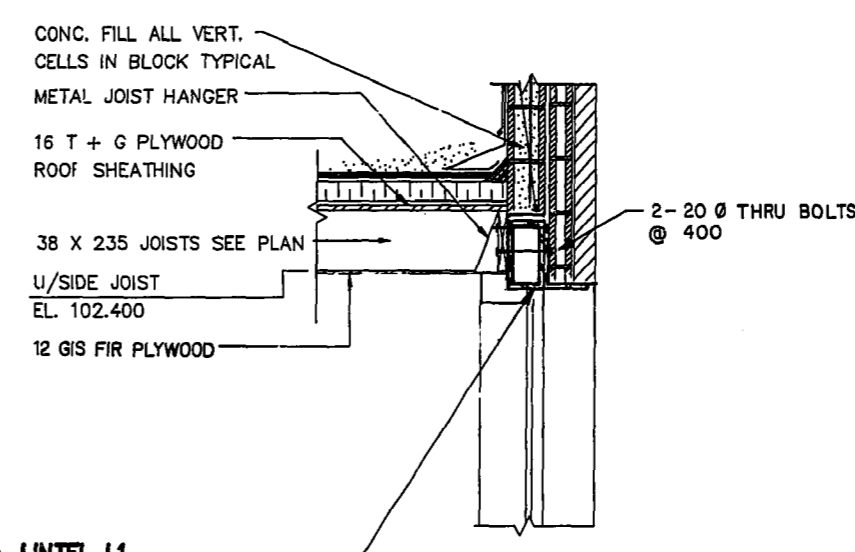


2 SECTION SCALE 1:20

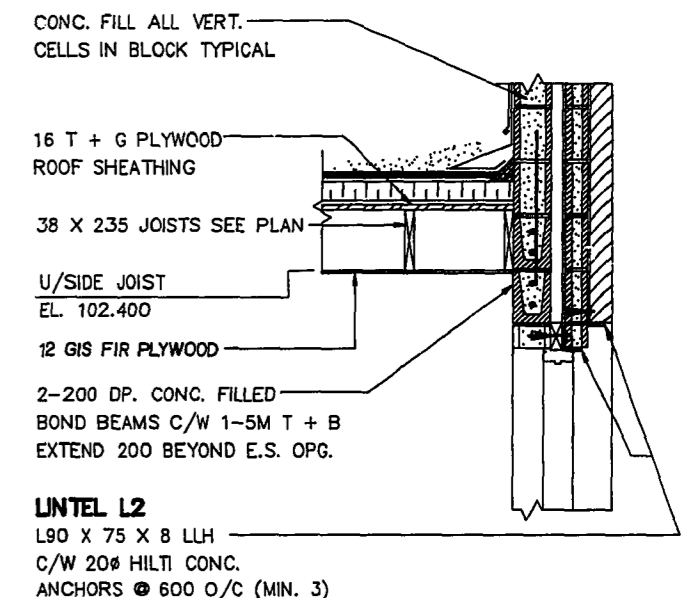


8 ELEVATION DETAIL SCALE 1:10

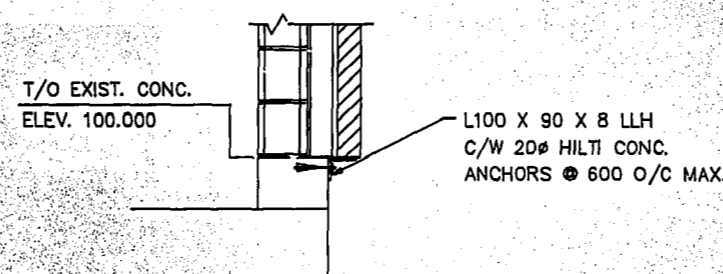
NOTE: INSTALL CONC. 'HILTI' ANCHORS TO THE MANUF'S. SPECIFICATIONS



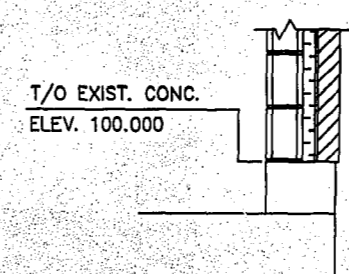
3 SECTION SCALE 1:20



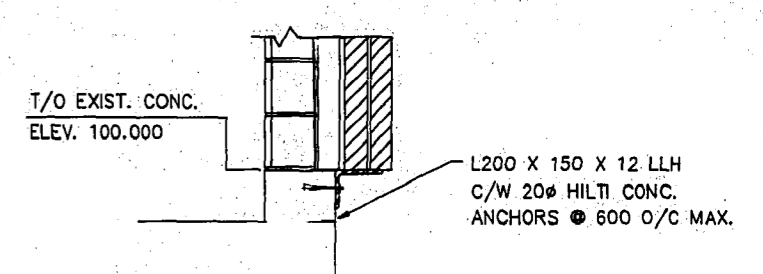
4 SECTION SCALE 1:20



6 SECTION SCALE 1:20



5 SECTION SCALE 1:20



7 SECTION SCALE 1:20

AS-CONSTRUCTED

INSPECTION SURVEY

WATERWORKS, WASTE & DISPOSAL DEPARTMENT

NO.	REVISIONS	DATE	BY
4	REVISED AS-BUILT	93.09	WKT
3	REVISE LINTEL L1 & BRICK LEDGE	9/11/91	
2	GENERAL REVISIONS	8/16/91	NH
1	GENERAL REVISIONS	8/16/91	NH

Reid Crowther	
DESIGNED BY T. McDUGAL	CHECKED BY <i>T. L. McDougal</i>
DRAWN BY N. H. KLASSEN	APPROVED BY <i>T. L. McDougal</i>
HOR. SCALE AS NOTED	RELEASED FOR CONSTRUCTION
VERTICAL SAME AS VERT.	<i>T. L. McDougal</i>
DATE AUGUST, 1991	DATE 19 91 09 27

ENGINEER'S SEAL

PROVINCE OF MANITOBA

REGISTERED ENGINEER

T. L. McDUGAL

CONSULTANT DRAWING NO. 61368-000-S1

THE CITY OF WINNIPEG

WORKS AND OPERATIONS DIVISION

WATERWORKS WASTE AND DISPOSAL DEPT.

WESTWOOD PUMPING STATION

CITY DRAWING NUMBER 1350

SHEET 4 OF 4

ROOF FRAMING AND SILL LAYOUT PLANS SECTIONS AND STRUCTURAL NOTES

9101-S1