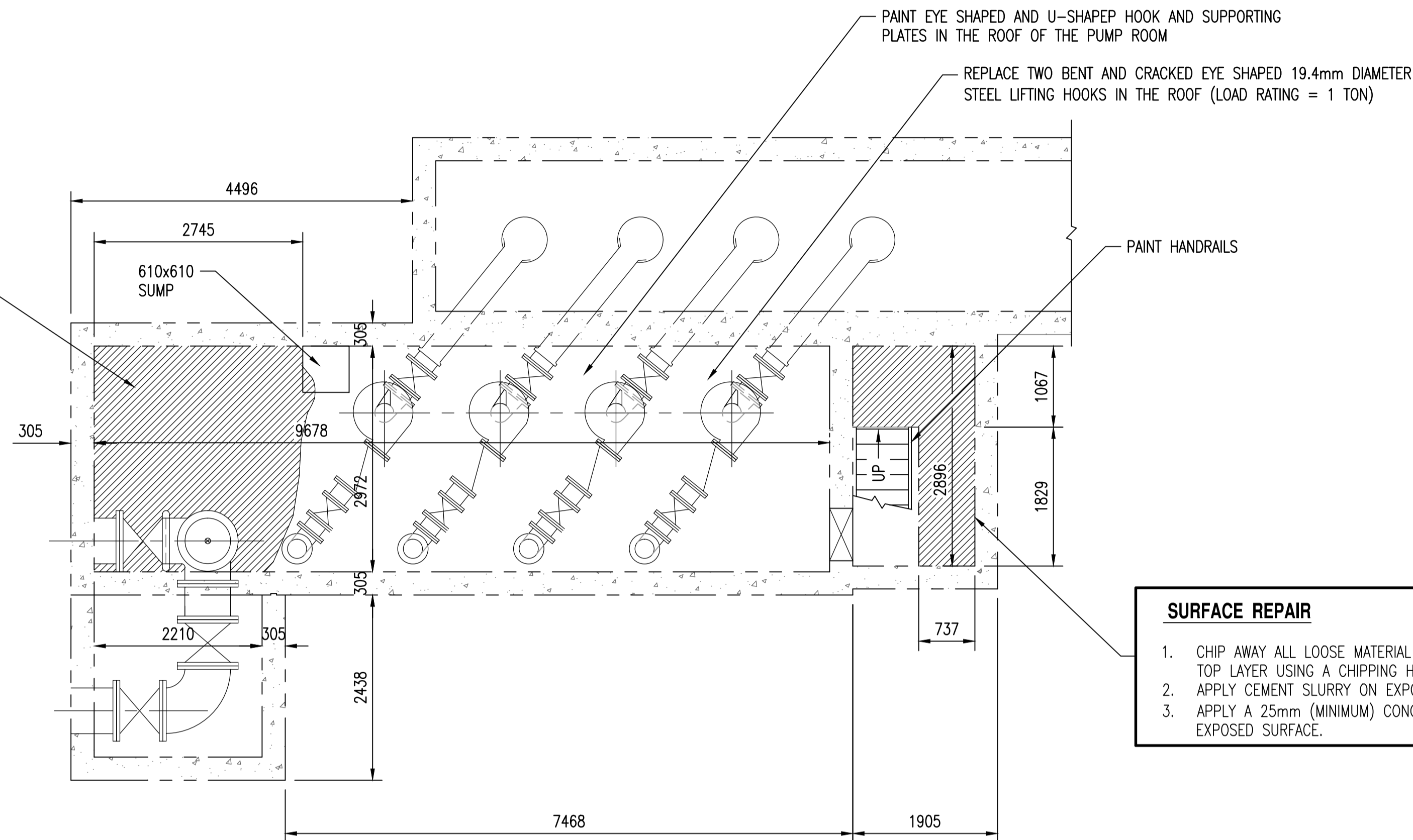


**REPAIR OF CONCRETE FLOOR AND SUMP**

1. CHIP AWAY ALL LOOSE MATERIAL OR A MINIMUM 50mm OF TOP LAYER USING A CHIPPING HAMMER.
2. APPLY CEMENT SLURRY ON EXPOSED CONCRETE SURFACE.
3. APPLY A 50mm (MINIMUM) CONCRETE OVERLAY ON THE PREPARED SURFACE.
4. MAINTAIN PROPER SLOPE FOR DRAINAGE.



**SURFACE REPAIR**

1. CHIP AWAY ALL LOOSE MATERIAL OR A MINIMUM 25mm OF TOP LAYER USING A CHIPPING HAMMER.
2. APPLY CEMENT SLURRY ON EXPOSED SURFACE
3. APPLY A 25mm (MINIMUM) CONCRETE OVERLAY ON TOP OF EXPOSED SURFACE.

**SECTION (PUMP ROOM - PLAN AT ELEV. 220.443)**  
SCALE: 1 : 50

**NOTES:**

1. SEE DRAWING 1-0164L-S0001 FOR GENERAL NOTES.

**CAST - IN - PLACE CONCRETE :**  
(FOR PUMPING STATION REPAIRS ONLY)

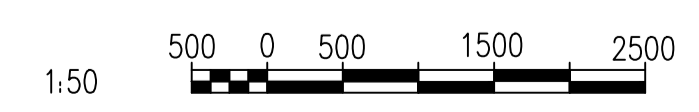
1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO CSA STANDARD CAN/CSA-A23.1-M.
2. CONCRETE MIXES SHALL BE PROPORTIONED IN ACCORDANCE WITH CSA A23.1, ALTERNATIVE 1, TO GIVE THE FOLLOWING PROPERTIES:

|  |           |
|--|-----------|
| MINIMUM 28 DAY COMPRESSIVE STRENGTH              | -30MPA    |
| CEMENT TYPE:                                     | -TYPE H5b |
| NOMINAL SIZE OF AGGREGATES                       | -10mm     |
| SLUMP  | -100mm    |
| ENTRAINED AIR CONTENT                            | -5 TO 8%  |
| MAXIMUM FLYASH SUBSTITUTION TO BE 20% BY WEIGHT. |           |

3. REINFORCING STEEL SHALL CONFORM TO CAN/CSA G30.18-M, GRADE 400W. 10M TIES AND BEAM STIRRUPS MAY BE GRADE 300W.
4. CLEAR COVER TO REINFORCING STEEL SHALL BE 50MM UNLESS NOTED OTHERWISE.

LAST SAVE: 2012/02/24 - 10:56am  
PATH: M:\508042\ENGIN\423TR\DD - General DWG\1-0164L-S0018-001-00.dwg

|                |                            |
|----------------|----------------------------|
| 264            | CONCRETE AND STEEL DETAILS |
| DRAWING NUMBER | REFERENCE DRAWINGS         |



| NO. | REVISIONS                           | DATE       | DESIGN | CHECK |
|-----|-------------------------------------|------------|--------|-------|
| 00  | ISSUED FOR TENDER BID OPP. 907-2011 | 2012/02/24 | DS     | RB    |

**SNC-LAVALIN INC.**  
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DESIGNED BY: D. SIDHU  
CHECKED BY: R. C. BEAN  
DRAWN BY: M. TUGADE  
APPROVED BY: C. J. REIMER  
SCALE: 1:50  
RELEASED FOR CONSTRUCTION BY: K.R. ZUREK  
DATE: 2011/09/19  
DATE: 2012/02/24  
CONSULTANT NO.: 508042-0000-42DD-0018

ENGINEER'S SEAL

ORIGINAL DRAWING  
SEALED BY:  
D. S. SIDHU  
SNC-LAVALIN  
MEMBER #24837  
2012/02/23  
REV. 00

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT

MONTCALM WASTEWATER PUMPING STATION  
2011 UPGRADE  
PLAN  
PUMP ROOM REPAIRS

|                     |       |      |      |
|---------------------|-------|------|------|
| CITY DRAWING NUMBER | SHEET | REV. | SIZE |
| 1-0164L-S0018       | 001   | 00   | A1   |