

BASEMENT PLAN
SCALE: 1/4"=1'-0"

DRAWING NOTES

- 1 EXISTING WATER SLIDE SUPPLY PUMP TO BE REPLACED. SIZE AND PERFORMANCE TO BE DETERMINED BY SLIDE SUPPLIER.
- 2 EXISTING POOL FILTER (CARTRIDGE) TO BE REPLACED. SIZE AND PERFORMANCE TO BE DETERMINED BY SLIDE SUPPLIER.
- 3 EXISTING 8" (200 MM) PVC WATER SUPPLY RISER UP TO EXISTING WATER SLIDE TO BE REPLACED AS REQUIRED. CONFIRM EXACT LOCATION ON SITE.
- 4 EXISTING 8" (200MM) BUTTERFLY VALVES TO BE REPLACED UNDER THIS CONTRACT. REFER TO SPECIFICATION FOR REQUIREMENTS.
- 5 EXISTING 10" (250MM) PVC POOL WATER RETURNS TO BE REPLACED.
- 6 EXISTING DUPLEX (2) - 8" (200MM) PVC WATER SLIDE RETURNS TO BE REPLACED. CONFIRM EXACT LOCATION ON SITE.
- 7 EXISTING PVC POOL RETURN WATER PIPING OF SIZE INDICATED. PIPING TO BE REPLACED.
- 8 EXISTING 8" (200MM) PVC PIPING OFFSET AT 45 DEGREE BENDS INTO RETURN AIR PLENUM.
- 9 POOL RETURN WATER TO CHLORINATION SYSTEM IN WEST MECHANICAL ROOM TO REMAIN. CONNECT TO PIPING AS REQUIRED.
- 10 EXISTING PVC SUPPLY (BY-PASS) LINES FROM EXISTING SUPPLY PIPING TO BE REPLACED. SIZE AS INDICATED ON DRAWINGS.
- 11 EXISTING PVC PIPING AND CHECK VALVES TO BE REPLACED.
- 12 APPROXIMATE LOCATION OF ACOUSTIC AIR PLENUM SURROUNDING PIPING.
- 13 APPROXIMATE LOCATION OF DUCT WORK ABOVE PUMP LOCATION.

MECHANICAL SPECIFICATION

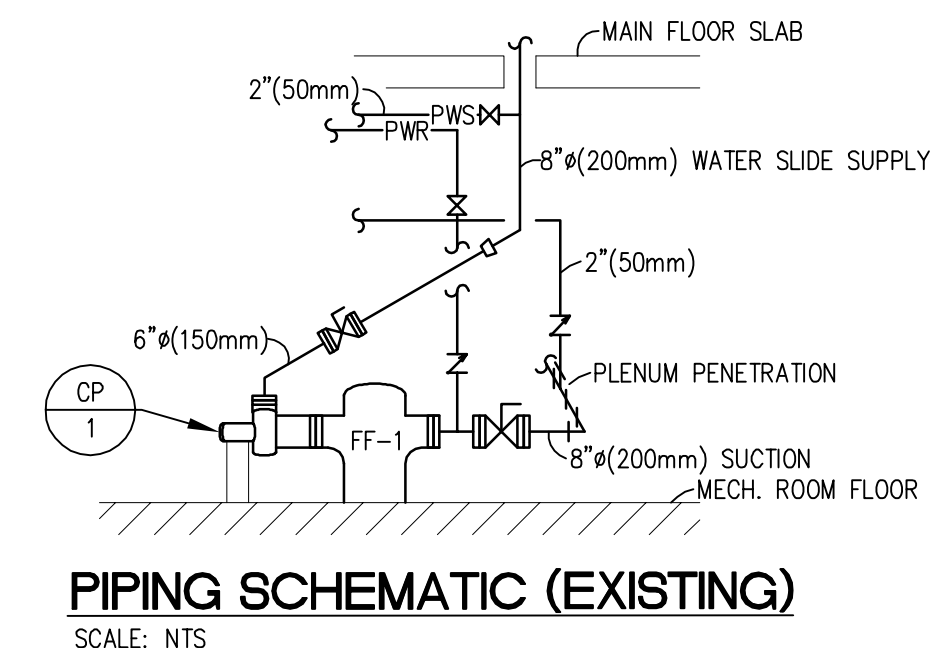
MECHANICAL SUB-CONTRACTOR SHALL SUBMIT PRICE FOR THE COST OF SUPPLY AND INSTALLATION OF EQUIPMENT AND MATERIAL NECESSARY TO PROVIDE A COMPLETE AND OPERATING MECHANICAL PACKAGE. BASED ON A "DESIGN-BUILD" PROPOSED FOR THE SUPPLY AND INSTALLATION OF A NEW WATER SLIDE AS IDENTIFIED ON THE CONTRACT DOCUMENTS. MECHANICAL PACKAGE TO CONSIST OF EQUIPMENT AND MATERIALS AS DESCRIBED IN THIS OUTLINE SPECIFICATION. REFER TO MECHANICAL PLANS FOR ACTUAL REQUIREMENTS OF EQUIPMENT.

SECTION 15005 MECHANICAL SCOPE OF WORK

- 1 INCLUDE IN MECHANICAL SECTION, PROVISION OF LABOUR, NEW MATERIALS, TOOLS, TRANSPORTATION, SERVICES AND FACILITIES FOR A COMPLETE MECHANICAL INSTALLATION. THE INSTALLATION SHALL BE LEFT COMPLETE IN ALL RESPECTS AND READY FOR OPERATION. FINAL INSTALLATION SHALL BE INSTALLED TO COMPLETE SATISFACTION OF THE CONTRACT ADMINISTRATOR.
- 2 THE MECHANICAL SCOPE OF WORK INCLUDES, BUT IS NOT NECESSARILY LIMITED TO THE FOLLOWING PROVISION:
 - 1 PROVISION OF ALL PIPING, VALVES, FLUSH VALVES, PIPE SLEEVES, PUMPS, CONTROLS, FIRE STOPPING AND ELECTRICAL WIRING, INCLUDING LABOUR AND MISCELLANEOUS MATERIALS AS REQUIRED TO COMPLETE THE PROJECT.
 - 2 FAMILIARIZE CREW WITH SITE IN ORDER TO DETERMINE APPROPRIATE LOCATIONS, SITE CONDITIONS, ETC. THAT MAY AFFECT WORK.
 - 3 WORK MAY NEED TO BE PERFORMED AT NON-STANDARD HOURS. DETERMINE SCHEDULE WITH THE CONTRACT ADMINISTRATOR.

SECTION 15010 GENERAL CONDITIONS

- 1 PROVIDE ALL LABOUR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHOWN ON DRAWINGS AND AS SPECIFIED IN CONTRACT DOCUMENTS.
- 2 ALL NECESSARY PERMITS SHALL BE OBTAINED AND ALL FEES SHALL BE PAID TO CARRY OUT THE SPECIFIED WORK.
- 3 ALL WORK SHALL COMPLY IN EVERY RESPECT WITH ALL NATIONAL, PROVINCIAL AND LOCAL CODES AND BY-LAWS, WHICH SHALL BE CONSIDERED PART OF THIS SPECIFICATION. IN THE CASE OF CONFLICTING REQUIREMENTS, BE GOVERNED BY THE MOST STRINGENT REGULATIONS.
- 4 THE MECHANICAL CONTRACTOR SHALL INSTALL WATER FEATURE PIPING SYSTEMS IN COMPLETE ACCORDANCE WITH THE RECOMMENDATIONS OF THE NATIONAL/PROVINCIAL BUILDING CODE, AND LOCAL PLUMBING CODES, AND ASTM AND CSA STANDARDS.
- 5 ALL WIRING, SUPPLY AND INSTALLATION OF DISCONNECT SWITCHES FOR EQUIPMENT SPECIFIED HEREIN SHALL BE PERFORMED BY THE ELECTRICAL SUB-CONTRACTOR WHO IS A SUB-TRADE TO THE MECHANICAL SUB-CONTRACTOR, UNLESS OTHERWISE NOTED.
- 6 CONTRACTOR SHALL EXAMINE THE SITE AND CONDITIONS AFFECTING WORK, METHODS OF CONNECTION AND LOCATION OF ALL SERVICES INVOLVED UNDER THIS CONTRACT. FAILURE TO MAKE THIS VISIT IN NO WAY ALLEVIATES THE MECHANICAL SUB-CONTRACTOR FROM RESPONSIBILITY FOR COMPLETING THE MECHANICAL WORK OF THIS CONTRACT IN A WORKMANLIKE MANNER. NO ALLOWANCE WILL BE MADE AFTER CONTRACT AWARD FOR ANY EXPENSE INCURRED THROUGH A FAILURE TO MAKE THIS EXAMINATION AND INVESTIGATION.
- 7 IDENTIFY ALL NEW PIPING WITHIN BUILDING INSTALLED IN THIS CONTRACT SHOWING SERVICE, PIPE SIZE, AND FLOW DIRECTION. USE CAPITAL LETTERS USING EITHER FIRE RESISTANT HIGH GLOSS INTERIOR ENAMEL PAINT OR WATERPROOF, HEAT RESISTANT PLASTIC MARKER TAGS (SIMILAR TO: W.H. BRADY IDENTIFICATION TAPES, BANDS, MARKERS). IDENTIFY AT MAXIMUM OF EVERY 50 FT. AND AT LEAST ONCE IN EACH ROOM. LOCATE AND SIZE LETTERING SUCH THAT IT CAN BE SEEN FROM FLOOR.
- 8 MECHANICAL SUB-CONTRACTOR SHALL COORDINATE PROVISION OF POWER TO BUILDING CONTROL TRANSFORMERS WITH DIVISION 16 AND CARRY ALL INCREMENTAL COSTS.
- 9 PROVIDE FIRE STOPPING AT ALL PIPING, CONDUIT (CONTROLS) AND DUCTWORK PENETRATIONS OF ALL REQUIRED FIRE SEPARATIONS WITH APPROVED MATERIAL SYSTEMS. ACCEPTABLE MATERIALS: 3M, DOW, CORNING, AFS.



PIPING SCHEMATIC (EXISTING)
SCALE: NTS

SECTION 15400 PIPING

- 1 PROVIDE COMPLETE FUNCTIONAL PLUMBING SYSTEM COMPRISED OF POOL SYSTEM WATER PIPING, ETC.
- 2 POOL SYSTEM PIPING INSIDE BUILDING SHALL BE IPEX XIRTEC 140, SCH-80, PVC CONFORMING TO ASTM D-1785 AND CSA B137.3. FITTINGS SHALL CONFORM TO ASTM D-2467. METHOD OF JOINING SHALL BE SOLVENT CEMENTING IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PRODUCTS SHALL BE IPEX XIRTEC 17 CEMENT AND XIRTEC 17 PRIMER. ALL PIPE FITTINGS SHALL BE OF ONE SUPPLIER.
- 3 MECHANICAL SUB-CONTRACTOR SHALL VERIFY ON SITE ALL CONNECTION POINTS TO EXISTING POOL SYSTEMS. COORDINATE ALL NEW PIPING RUNS WITH CONTRACT ADMINISTRATOR.
- 4 ALL VALVES TO BE BY ONE MANUFACTURER. STANDARD OF ACCEPTANCE: JENKINS, SERIES 200 RESILIENT SEATED BUTTERFLY VALVE, PHENOLIC BACKED SEAT, BUBBLE-TIGHT SHUT-OFF, ONE-PIECE THROUGH SHAFT C/W LOCKING HANDLE WITH THROTTLE ADJUSTMENT STOPS.
- 5 MECHANICAL SUB-CONTRACTOR SHALL ALLOW FOR IN TENDER QUOTATION ANY ADDITIONAL LABOUR, MATERIALS, ETC. DEEMED NECESSARY DUE TO EXACT SITE CONDITIONS WHICH HAVE NOT BEEN REFLECTED IN MECHANICAL DRAWING OR IN MECHANICAL SPECIFICATION. NOTIFY CONTRACT ADMINISTRATOR OF ALL DISCREPANCIES PRIOR TO TENDER CLOSE.
- 6 ON COMPLETION, ALL PIPING SYSTEMS SHALL BE CLEANED & FLUSHED OUT TO REMOVE ANY FOREIGN MATERIAL IN THE PIPING.

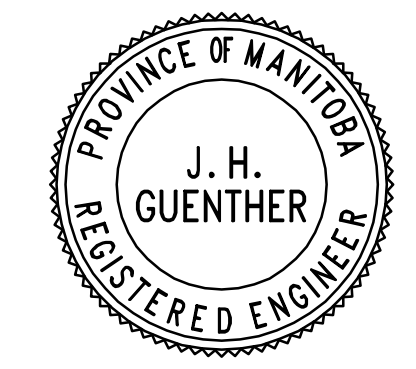
7. USE THE FOLLOWING ROD DIAMETER AND SPACING SCHEDULE TO ESTABLISH MINIMUM HANGING STANDARDS FOR HORIZONTAL PIPING:

PIPE SIZE	ROD DIA.	STEEL COPPER
UP TO 3/4"	3/8"	6' 6'
1" TO 1 1/4"	3/8"	8' 6'
1 1/2" & 2"	3/8"	10' 8'
2 1/2" & 3"	1/2"	12' 8'
4" & 5"	5/8"	12' 8'
6"	3/4"	12'
8" & 10"	7/8"	18'
12"	7/8"	22'

8. PIPE HANGERS WHERE REQUIRED SHALL BE GRINNEL FIG.65 FOR STEEL PIPE AND FIG.117 EXPANSION CASE SET IN HOLES DRILLED IN CONCRETE OR ATTACHED TO FIG.225 OR 227 CLAMP ATTACHED TO FLOOR JOIST AND ROOF JOIST. FOR INSULATED PIPING, PROVIDE PROTECTION FIG.167 SADDLES SIZE HANGER TO ACCOMMODATE INSULATION WHERE APPLIED.

EQUIPMENT SCHEDULE:

CP-1 (EXIST.): WATER SLIDE SUPPLY PUMP:
BERKELEY MODEL: B52PL, 10 HP MOTOR, 1800 RPM, 575/3/60.
1. ORIGINAL PERFORMANCE: 1000 GPM @28 FT. HEAD
2. PUMP INFORMATION CAN BE OBTAINED FROM:
MR. GARY BELL
BAKER MFG. LTD.
1333 RICHARD AVE.
WINNIPEG, MANITOBA R3E 0L1
TEL: 786-8721
FAX: 786-8721



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NO.	REVISIONS	BY	DATE
D	TEXT REVISIONS	JHG	SEPT. 28/07
C	ISSUED FOR TENDER	JHG	SEPT. 21/07
B	MEETING/REVIEW CHANGES	JHG	AUG. 8/07
A	ISSUED FOR REVIEW	JHG	JULY 18/07

F.A. Roberts & Associates
Engineering Consultants

CLIENT	CITY OF WINNIPEG
PROJECT	ELMWOOD - KILDONAN POOL WATERSLIDE
LOCATION	WINNIPEG, MANITOBA
DRAWING TITLE	MECHANICAL BASEMENT PLAN

DGN/DWN BY JC	DATE JULY07	DWG NO.	REVISED
CHECKED BY FAR	DATE	M-1	C