



CHASTER WELL AND PUMP IMPROVEMENTS

SUNSHINE COAST REGIONAL DISTRICT, INFRASTRUCTURE DIVISION
SP100738 - ISSUED FOR TENDER August-2024

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CONTACT INFORMATION

MANAGER CAPITAL PROJECTS

Jesse Waldorf
Sunshine Coast Regional District (SCRD)
1975 Field Road Sechelt, BC V0N 3A1
TEL: 604-885-6800 EXT.6493

WATER - UTILITIES SUPERINTENDENT

Codi Abbott
Sunshine Coast Regional District (SCRD)
Works Division
5920 Mason Rd, Sechelt, BC V0N 3A8
TEL: 604-885-6800 EXT.6311

NATURAL GAS

FortisBC Energy Inc.
16705 Fraser Highway
Surrey, BC V4N 0E8
604 576 7000

POWER

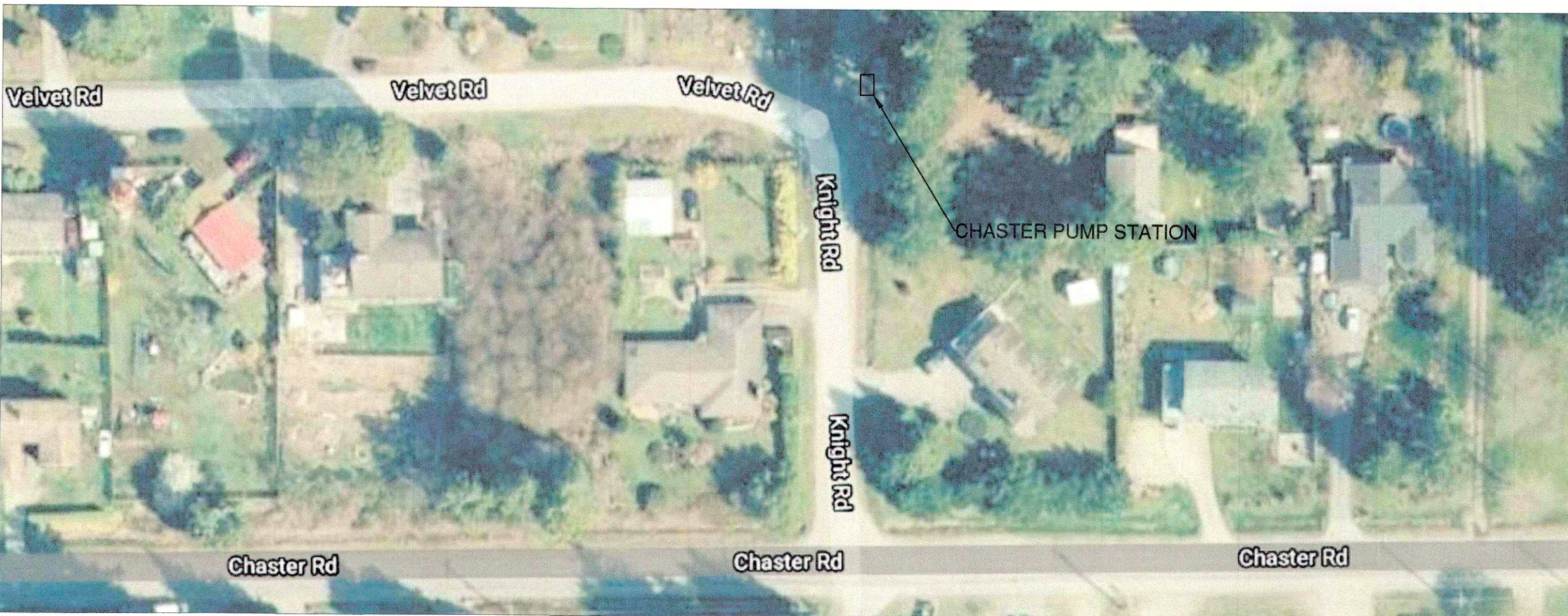
BC Hydro
8475 128th Street,
Surrey BC, V3W 0G1
800 667 1517

TELECOMMUNICATIONS

TELUS #1700-13408 108th Ave.
Surrey BC, V3T 5V6
604 885 6804

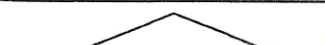



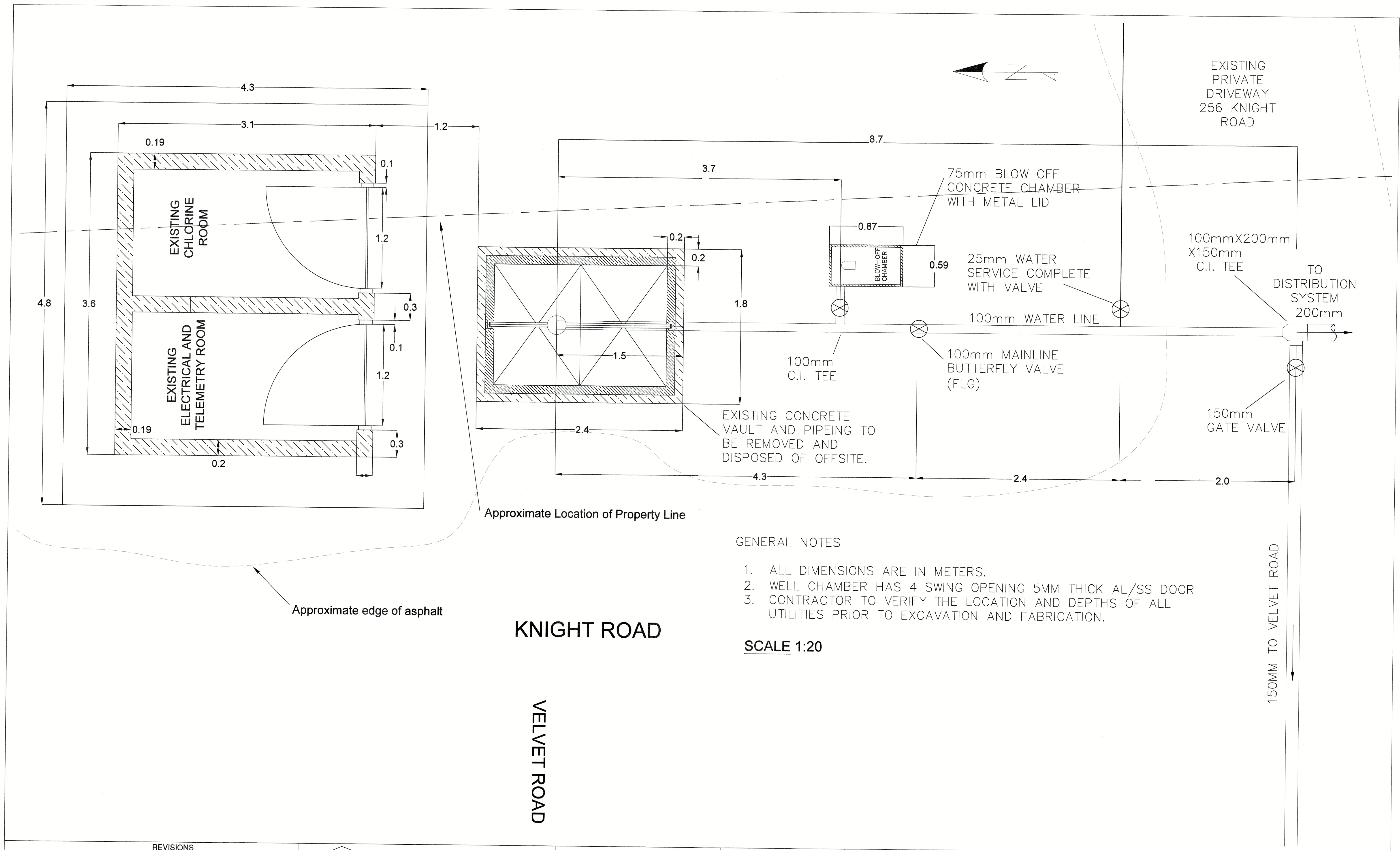
SITE LOCATION | NTS



SITE PLAN

OBJECT	SUNSHINE COAST REGIONAL DISTRICT LEGEND	
	SURVEYED	PROPOSED
WATER MAN		
WATER SERVICE		
WATER METER		
WATER VALVE		
HYDRANT		
FITTINGS		
BLOW-OFF		
SANITARY SEWER		
SANITARY SEWER SERVICE		
FORCEMAIN		
STORM SEWER		
STORM SEWER SERVICE		
DITCHING		
CULVERT		
LEGAL LOT LINES		
FENCE LINE		
ROAD EDGE		
ROAD CENTERLINE		
ASPHALT RESTORATION		
ELECTRICAL		
COMMUNICATIONS		
GAS		
NATURAL WATER		
UTILITY POLE		
MANHOLE SANITARY/STORM		
CLEAN OUT		
IRON PIN		
SURVEY HUB		

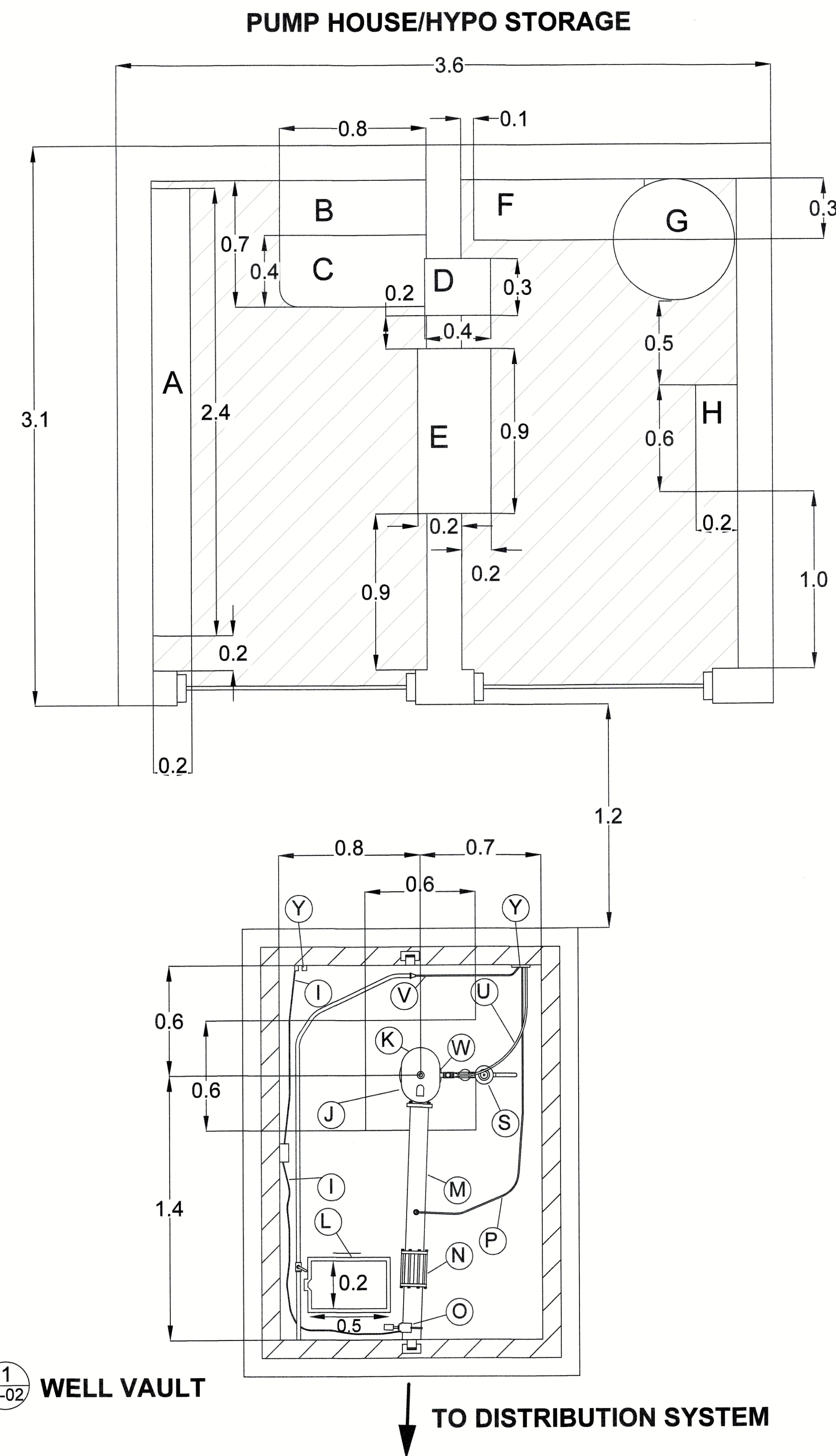
REVISIONS		<div><div>SUNSHINE COAST REGIONAL DISTRICT</div><div>INFRASTRUCTURE DEPARTMENT PERMIT TO PRACTICE No. 1003260</div><div>1975 Field Road Sechelt, BC V0N 3A1 Ph: 604-885-6800 1-800-687-5753 Fax: 604-885-7909</div></div>	DESIGNED BY:		SM	CHASTER ROAD WELL AND PUMP IMPROVEMENTS	DRAWING : COVER SHEET	<div>SEAL :  2024-08-26</div>	WORK ORDER NO.	
			DRAWN BY:		JM/MM				DRAWING NO: G-01	
			CHECKED BY:		MO					
			APPROVED BY:		SM					
			SCALE	H n/a	V n/a					
			PLOT DATE:		2024-07-26					



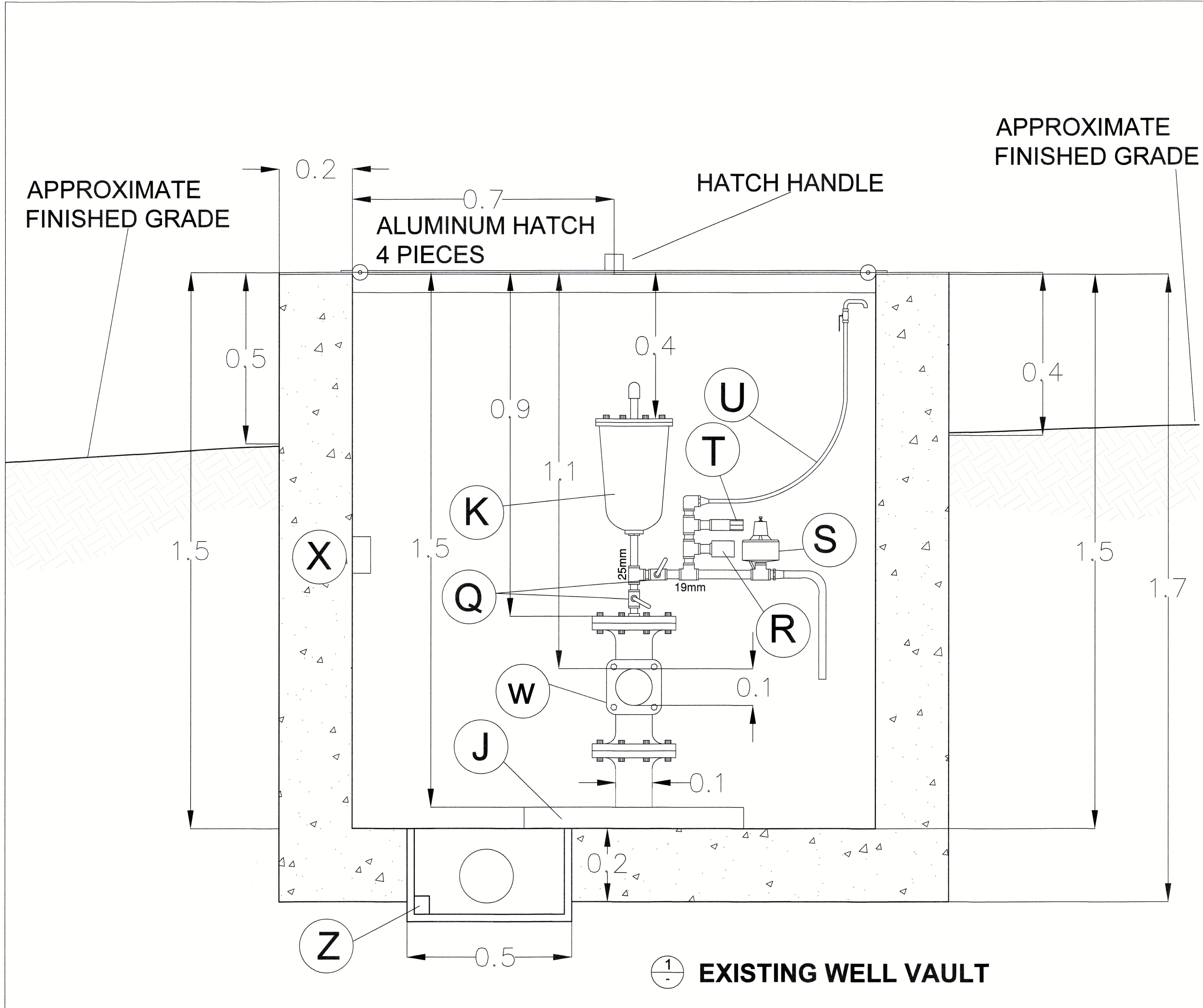
- GENERAL NOTES**
1. ALL DIMENSIONS ARE IN METERS.
 2. WELL CHAMBER HAS 4 SWING OPENING 5MM THICK AL/SS DOOR
 3. CONTRACTOR TO VERIFY THE LOCATION AND DEPTHS OF ALL UTILITIES PRIOR TO EXCAVATION AND FABRICATION.

SCALE 1:20

REVISIONS		SUNSHINE COAST REGIONAL DISTRICT INFRASTRUCTURE DEPARTMENT PERMIT TO PRACTICE No. 1003260 1975 Field Road Sechelt, BC V0N 3A1 Ph: 604-885-6800 1-800-687-5753 Fax: 604-885-7909	DESIGNED BY:	SM	CHASTER ROAD WELL AND PUMP IMPROVEMENTS	DRAWING : EXISTING SITE PLAN	SEAL : 	WORK ORDER NO.	
			DRAWN BY:	JM/MM				DRAWING NO:	G-02
			CHECKED BY:	MO					
			APPROVED BY:	SM					
			SCALE	H 1:20	V NTS			SHEET NO :	2 OF 10
			PLOT DATE:	2024-07-26					




SCHEDULE OF DRAWING ELEMENTS		
ITEM	DESCRIPTION	QUANTITY
A	ELECTRICAL CONTROL PANEL	1
B	BOOK SHELF	1
C	TABLE	1
D	HYPOCHLORITE INJECTION CONTROL PANEL	1
E	PUMP CONTROL PANEL	1
F	HYPOCHLORITE INJECTION UNIT	1
G	HYPOCHLORITE BARREL	1
H	FIRST AID KIT	1
I	MAGNETIC FLOW METER COMMUNICATION CABLE	1
J	WELL HEAD	1
K	VAL MATIC AIR-VAC	1
L	SUMP CHAMBER	1
M	100mm Dia. D.I. SPOOL PIPE	1
N	NON RESTRAINED MECHANICAL COUPLER	1
O	MAGNETIC FLOW METER SENSOR	1
P	HYPOCHLORITE INJECTOR PIPE	1
Q	BALL VALVES 25mm A.V. & 19mm PSV	2
R	PRESSURE GAUGE	1
S	SURGE PRESSURE RELIEF VALVE	1
T	DISCHARGE PRESSURE RELIEF VALVE	1
U	6mm RAW WATER SAMPLE LINE WITH SHUTOFF VALVE	1
V	25mm TREATED WATER SAMPLE LINE FOR RESIDUAL CHLORINE ANALYZER	1
W	WELL DISCHARGE C.I. TEE 100mmX100mmX100mm (FLG)	1
X	COMMUNICATION CABLE JUNCTION BOX	1
Y	25mm CONDUITS AND VAULT PENETRATIONS	3
Z	100mm SUMP DRAIN	1



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G	HYPOCHLORITE BARREL	1
H	FIRST AID KIT	1
I	MAGNETIC FLOW METER COMMUNICATION CABLE	1
J	WELL HEAD BASE PLATE	1
K	VAL MATIC AIR-VAC	1
L	SUMP CHAMBER	1
M	100mm Dia. D.I. SPOOL PIPE	1
N	MECHANICAL COUPLER	1
O	MAGNATIC FLOW METER SENSOR	1
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REVISIONS




**SUNSHINE COAST
REGIONAL DISTRICT**
INFRASTRUCTURE DEPARTMENT
PERMIT TO PRACTICE No. 1003260
1975 Field Road
Sechelt, BC V0N 3A1
Ph: 604-885-6800 1-800-687-5753 Fax: 604-885-7909

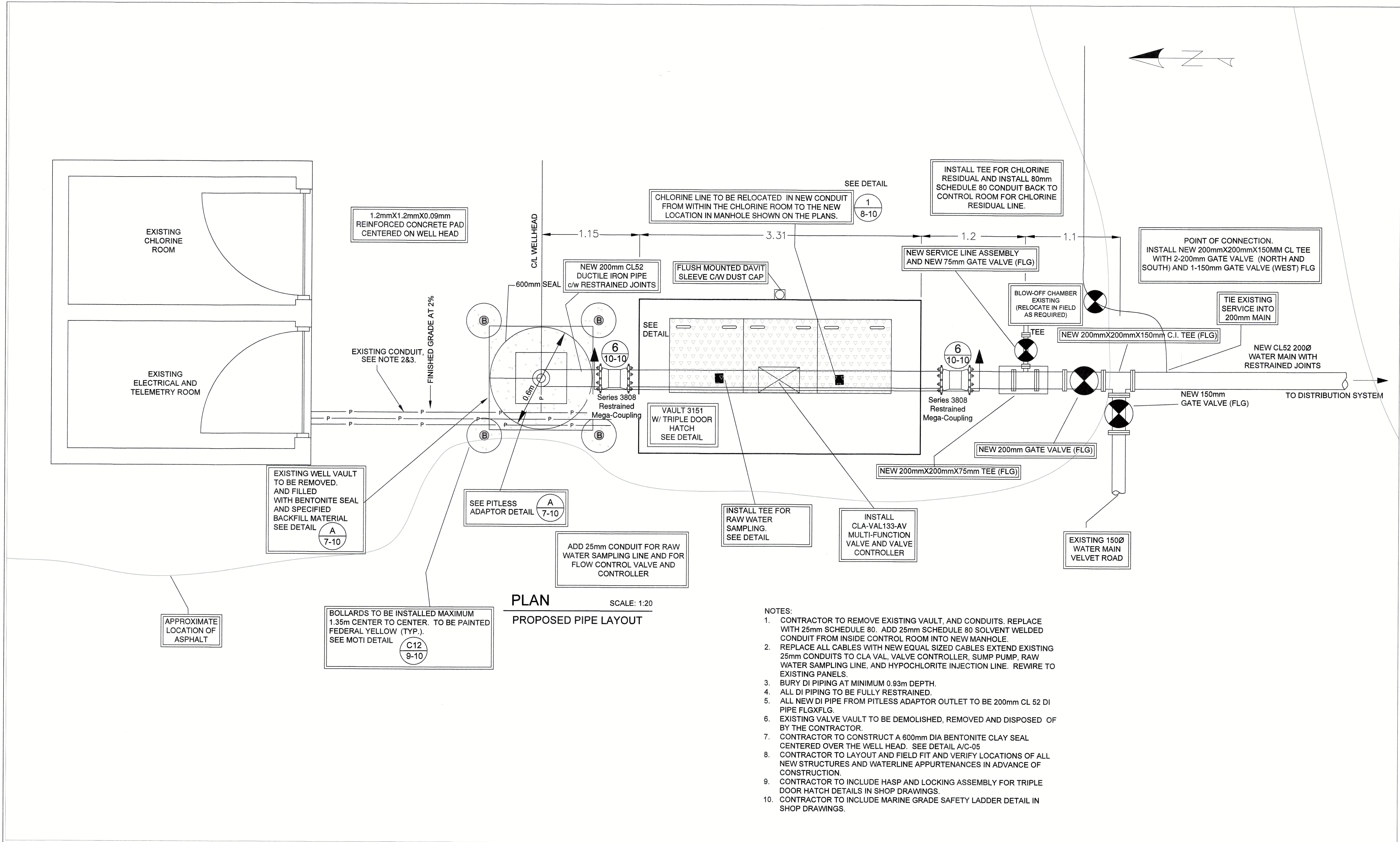
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**CHASTER
ROAD WELL
AND PUMP
IMPROVEMENTS**

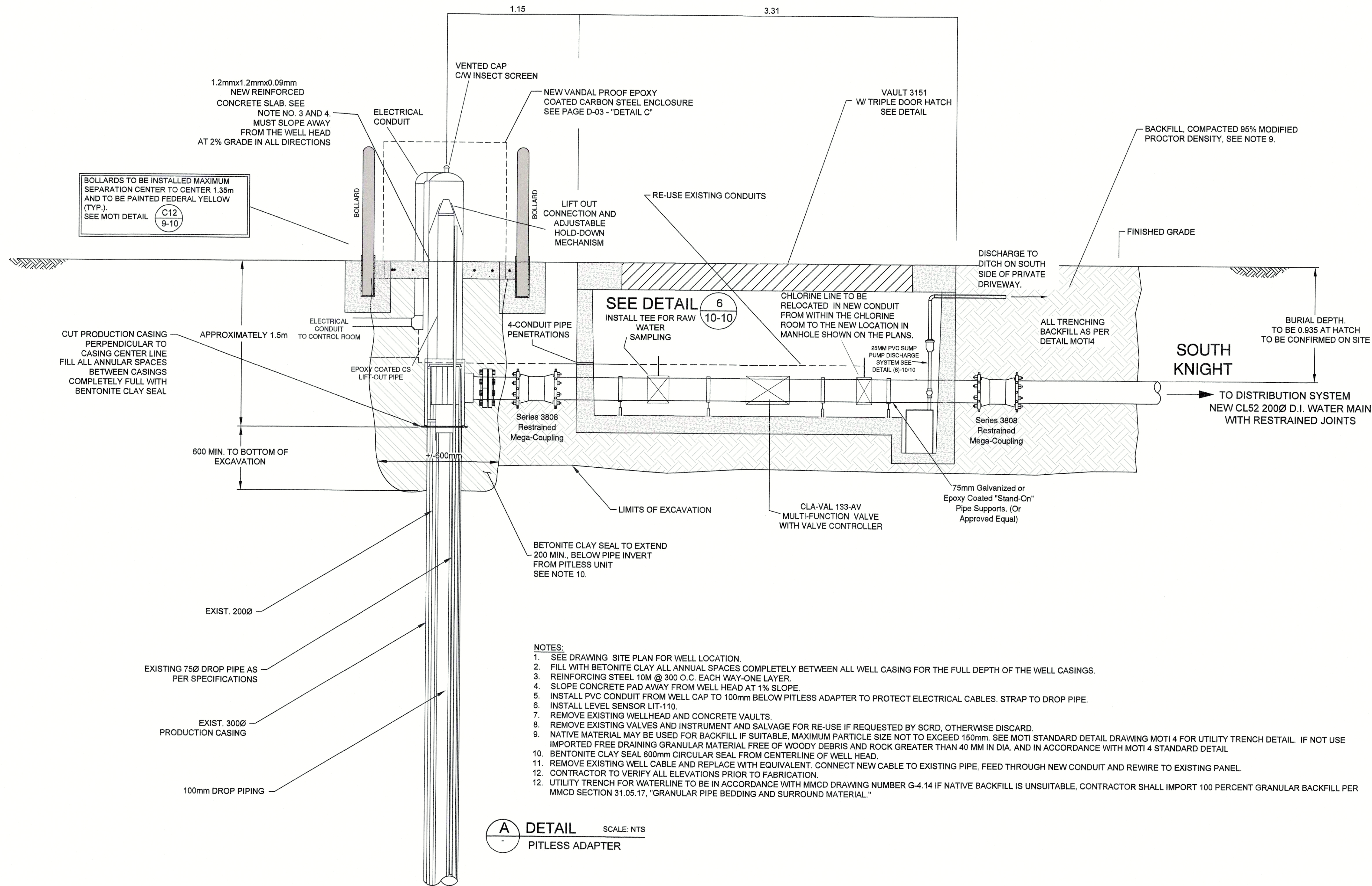
DRAWING :
**EXISTING WELL VAULT
PROFILE VIEW**

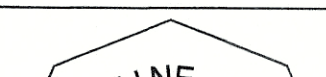
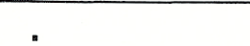
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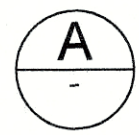
WORK ORDER NO.	
DRAWING NO:	C-02
SHEET NO :	4 OF 10



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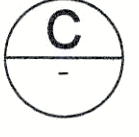
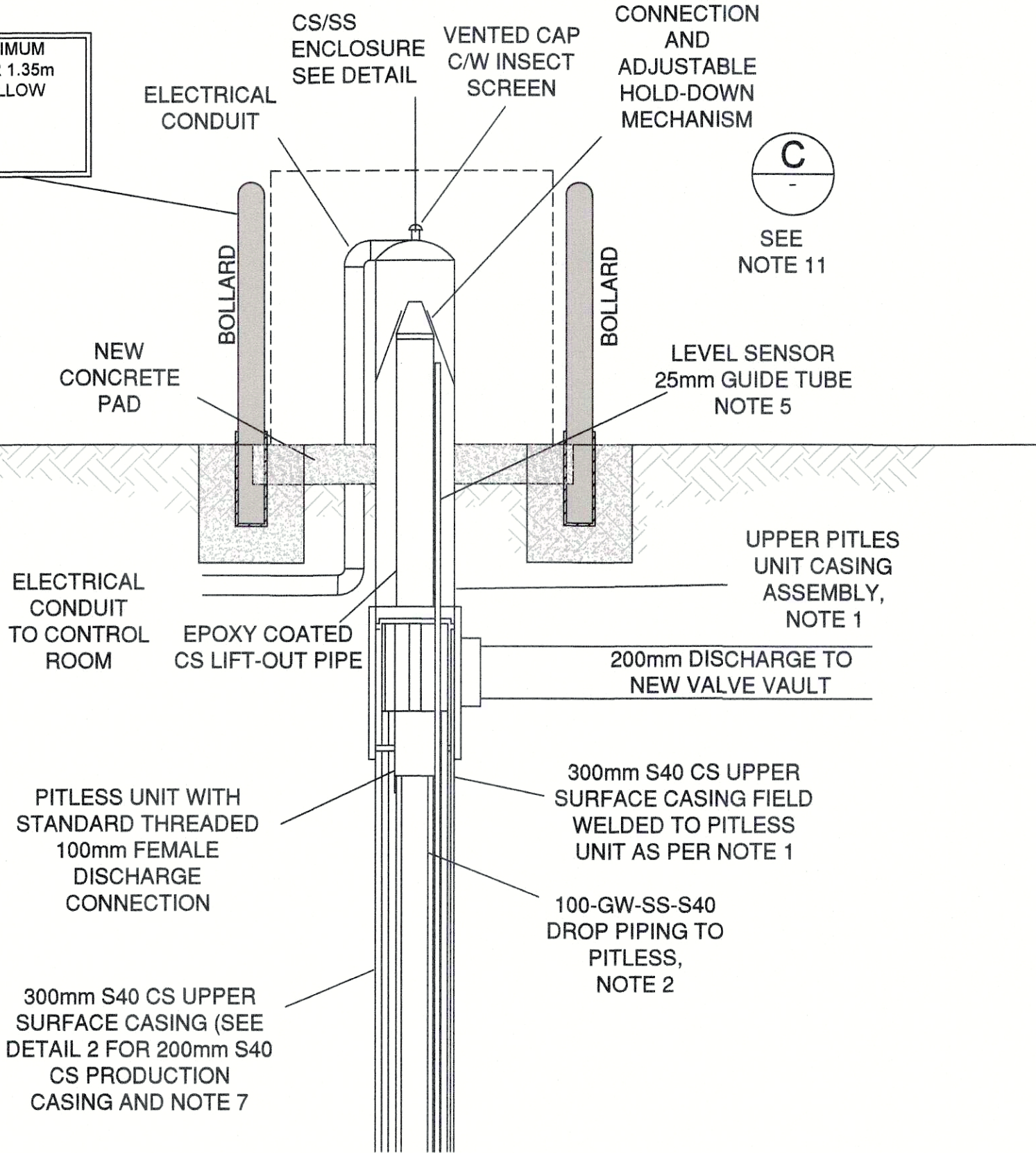


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			CHECKED BY:		MO					
			APPROVED BY:		SM				SHEET NO :	6 OF 10
			SCALE	H n/a	V n/a					
			PLOT DATE:		2024-07-26					



DETAIL
WELL HEAD AND PITLESS UNIT

BOLLARDS TO BE INSTALLED MAXIMUM SEPARATION CENTER TO CENTER 1.35m AND TO BE PAINTED FEDERAL YELLOW (TYP). SEE MOTI DETAIL C12 9-10



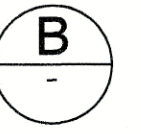
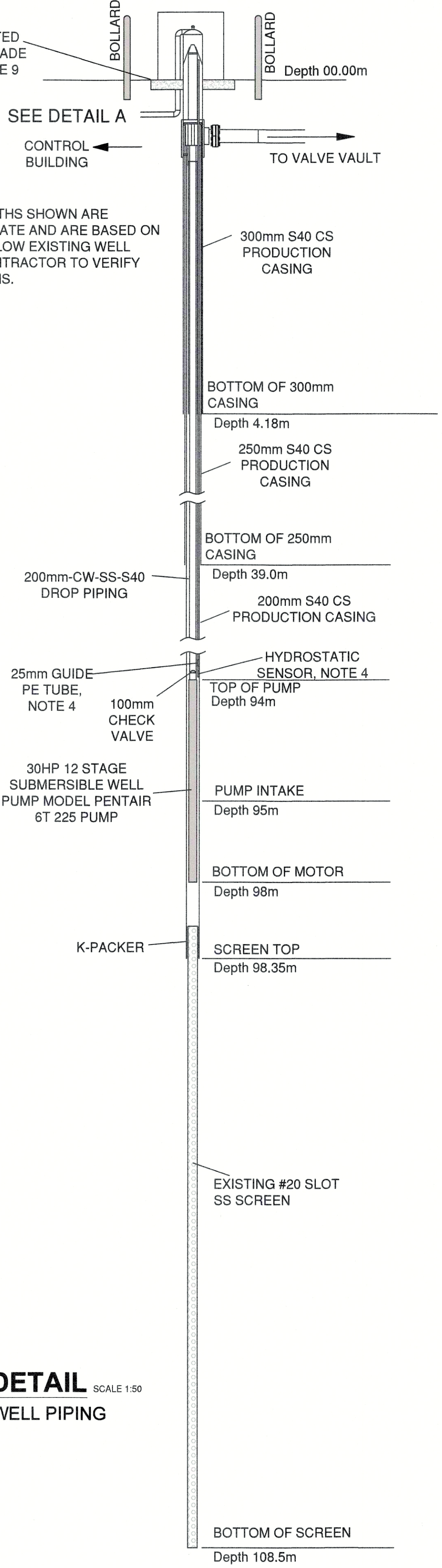
SEE NOTE 11

NOTE: WELL DEPTHS SHOWN ARE APPROXIMATE AND ARE BASED ON DEPTH BELOW EXISTING WELL HEAD. CONTRACTOR TO VERIFY ALL DEPTHS.

SEE DETAIL A

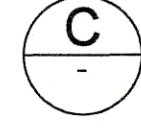
CONTROL BUILDING

TO VALVE VAULT



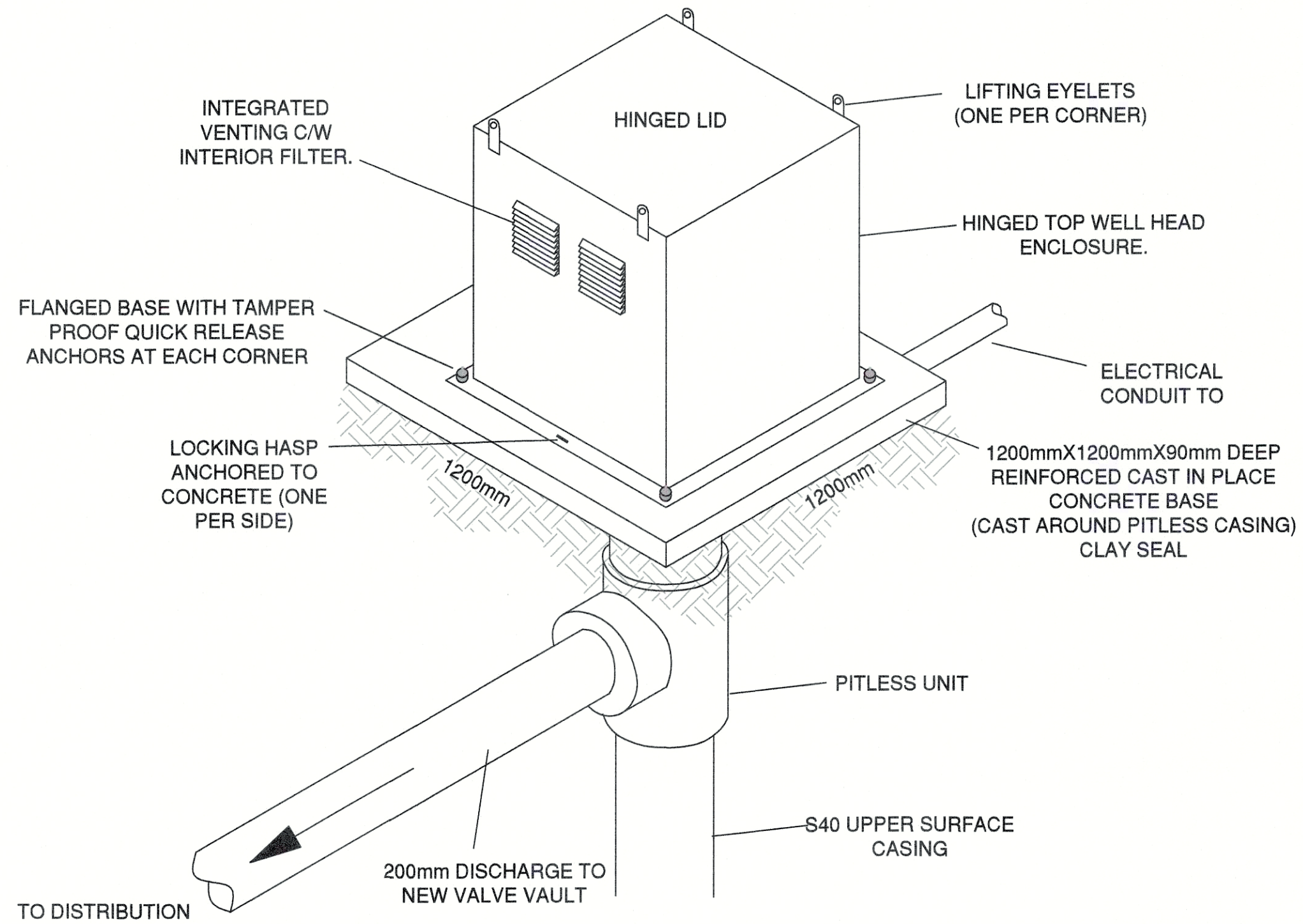
DETAIL
WELL PIPING

SCALE 1:50



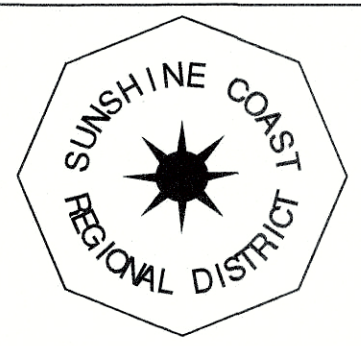
DETAIL
WELL HEAD KIOSK

SCALE 1:20



- NOTES:
1. PROVIDE BAKER MUNICIPAL/MONITOR INDUSTRIAL STYLE PITLESS UNIT SUITABLE FOR DRINKING WATER APPLICATIONS AND CARRYING THE ANSI/NSF61 CERTIFICATION. PROVIDE UNIT SIZED FOR 200mm WELL HEAD STICKUP ABOVE FINISHED GRADE AND A 1200mm DEPTH OF BURY TO DISCHARGE PIPE. PROVIDE UNIT WITH OPTIONAL FUSION BONDED EPOXY, SEALED CONDUIT CONNECTIONS AND LEVEL SENSOR PROBE TUBE.
 2. PROVIDE UPPER PITLESS UNIT TO BE FILLET OR BUTT FIELD WELDED TO EXISTING UPPER 200mm S40 CARBON STEEL CASTING. CONTRACTOR SHALL SUBMIT FIELD WELD PROCEDURE SPECIFICATION WITH THE PROPOSED PITLESS UNIT SHOP DRAWINGS SUBMITTAL.
 3. DROP PIPING SHALL CONSIST OF SCHEDULE 40S TYPE 304L STAINLESS STEEL, STANDARD 6m LENGTH WITH NPT MALE THREADED ENDS. JOINTS SHALL CONSIST OF 150# FORGED THREADED COUPLINGS SEALED WITH NSF61 CERTIFIED PTFE THREADING COMPOUND.
 4. PROVIDE LOW PROFILE HYDROSTATIC LEVEL TRANSDUCER SET TO THE ELEVATION INDICATED. PROVIDE SENSOR WITH A 25mm PE OR S40 PVC GUIDE TUBE AS SHOWN. ADDITIONALLY PROVIDE A LOW-LOW LEVEL FIXED POINT LEVEL PROBE TIED TO DROP TUBE AND SET 3.0m ABOVE PUMP (NOT SHOWN IN DETAIL 2). SEE ELECTRICAL DRAWINGS AND DIVISION 26 AND 40 OF THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 5. PROVIDE PITLESS ADAPTER WITH GUIDE TUBE CHANNELS. PROVIDE 25MM POLY GUIDE TUBE TO ALLOW EASY ACCESS TO THE HYDROSTATIC LEVEL SENSOR ELEMENT. PROVIDE SPARE 25mm FOR MANUAL LEVEL SOUNDING TUBE.
 6. INSTALLATION OF PITLESS UNIT SHALL INCLUDE THE RESTORATION/ENLARGEMENT OF THE SURFACE SEAL IN ACCORDANCE WITH THE BC GROUNDWATER PROTECTION REGULATION.
 7. MAXIMUM PUMPING OUTPUT AND CONTROL SET-POINTS WILL BE CONFIRMED DURING COMMISSIONING. THESE WILL BE SET TO ENSURE THE PUMP OPERATES WITHIN ITS ALLOWABLE OPERATING REGION (AOR) BUT ALSO ACHIEVES SUFFICIENT FLOW TO MAINTAIN MOTOR COOLING.
 8. CONTRACTOR TO EXPOSE EXISTING WATER MAIN TO DETERMINE ALIGNMENT AND DEPTHS.
 9. CONTRACTOR TO RAISE WELL HEAD TOP OF CASING TO BE FLUSH WITH PROJECTED FINISH GRADE OVER CENTERLINE OF WELLHEAD, WITH VAULT REMOVED.
 10. CONTRACTOR TO VERIFY ALL ELEVATIONS AND DIMENSIONS FOR ALL NEW PIPING AND PITLESS ADAPTOR PRIOR TO EXCAVATION AND FABRICATION.
 11. SEE MMCD STANDARD DRAWING C12 FOR REMOVABLE BOLLARD DETAIL.
 12. SEE SUPPLEMENTARY SPECIFICATIONS FOR CONCRETE SLAB SPECIFICATIONS.
 13. CONCRETE TO BE CLASS 3000 CP,ERCOA; CONCRETE 20Mpa.
 14. GRADE SUBGRADE TO INSURE 2% FINISHED CROSS GRADE.

REVISIONS



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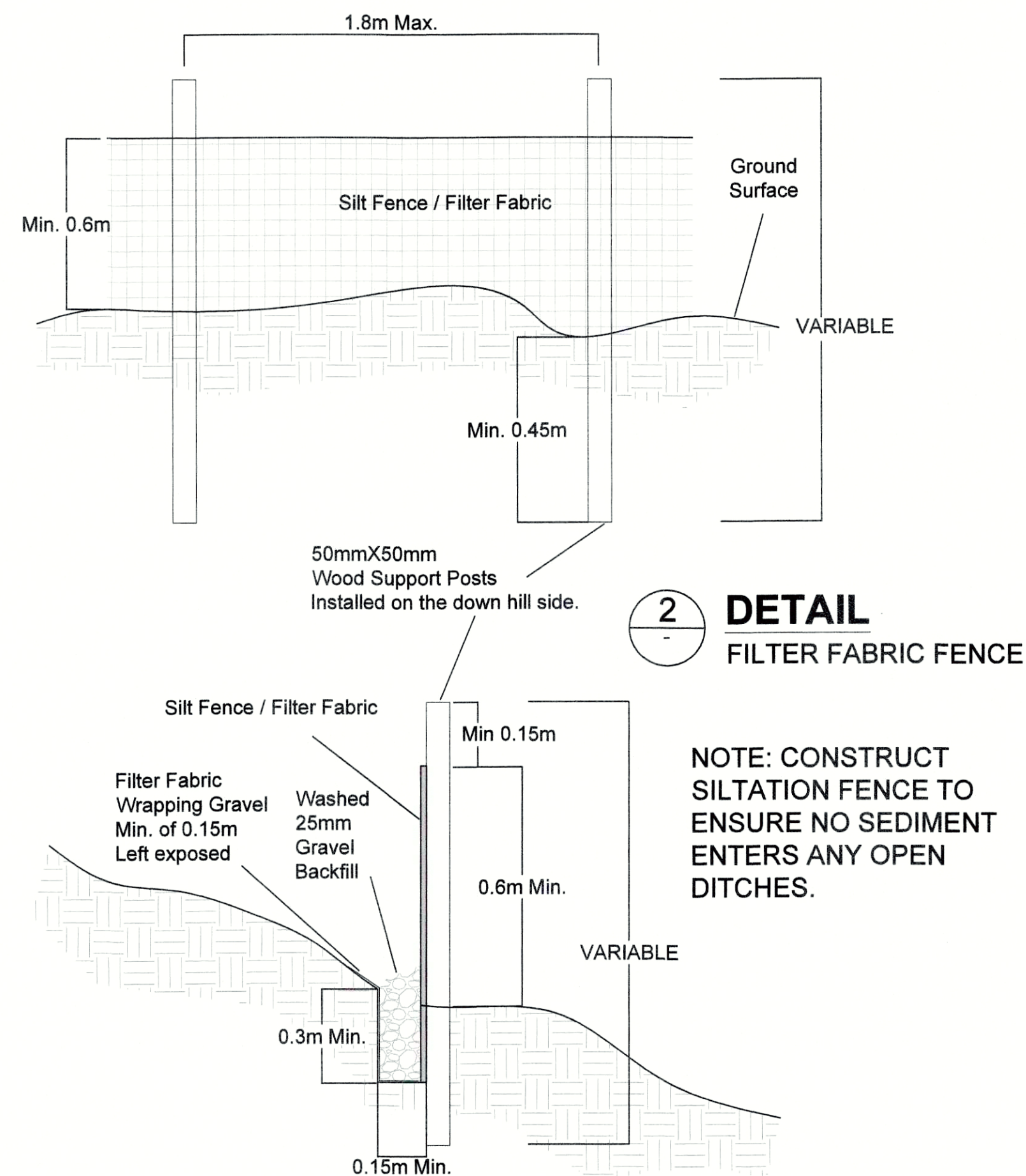
DESIGNED BY:	SM
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CHECKED BY:	MO
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SCALE	H n/a V n/a
PLOT DATE:	2024-07-26

**CHASTER
ROAD WELL
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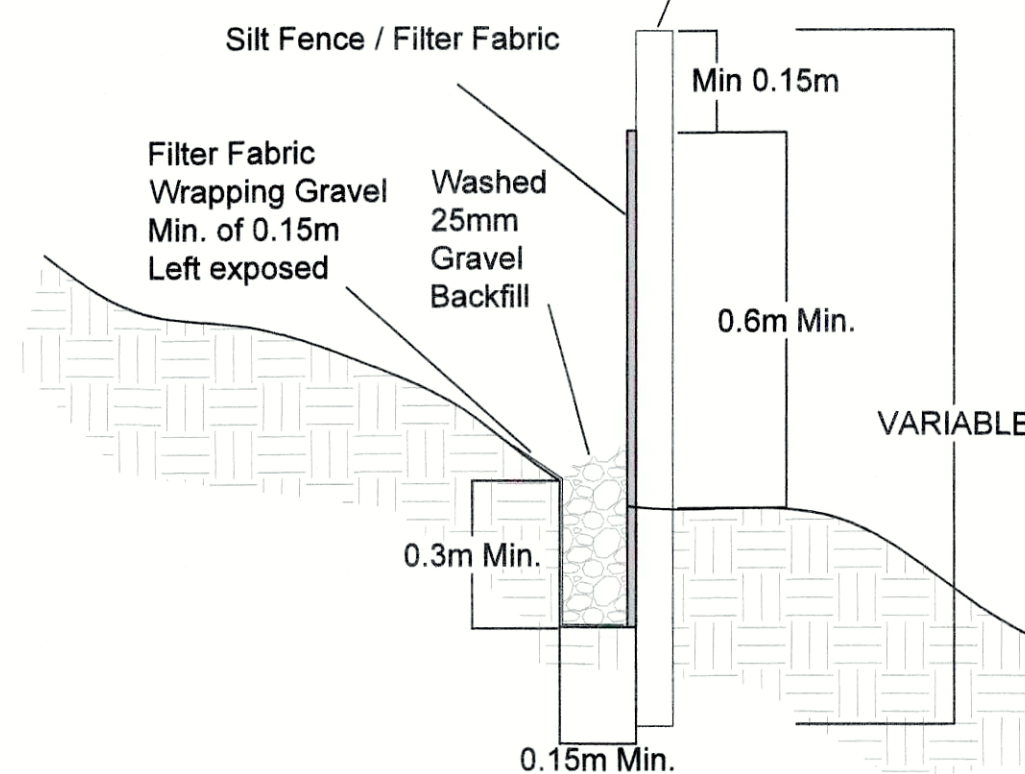
DRAWING :
WELL HEAD DETAILS

SEAL :

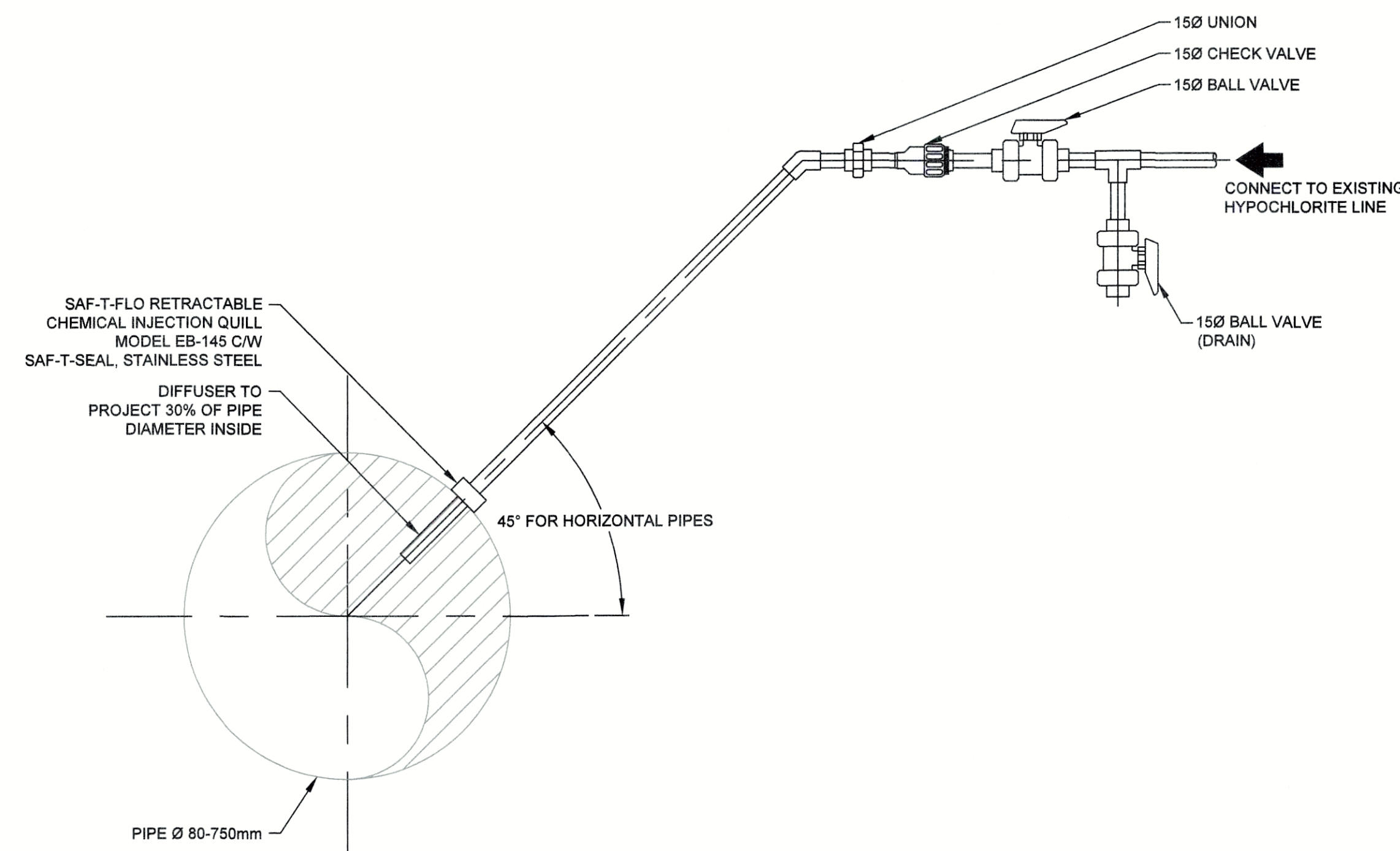
WORK ORDER NO.
DRAWING NO: D-01
SHEET NO : 7 OF 10



2 **DETAIL**
FILTER FABRIC FENCE



3 **DETAIL**
CONSTRUCTION ENTRANCE





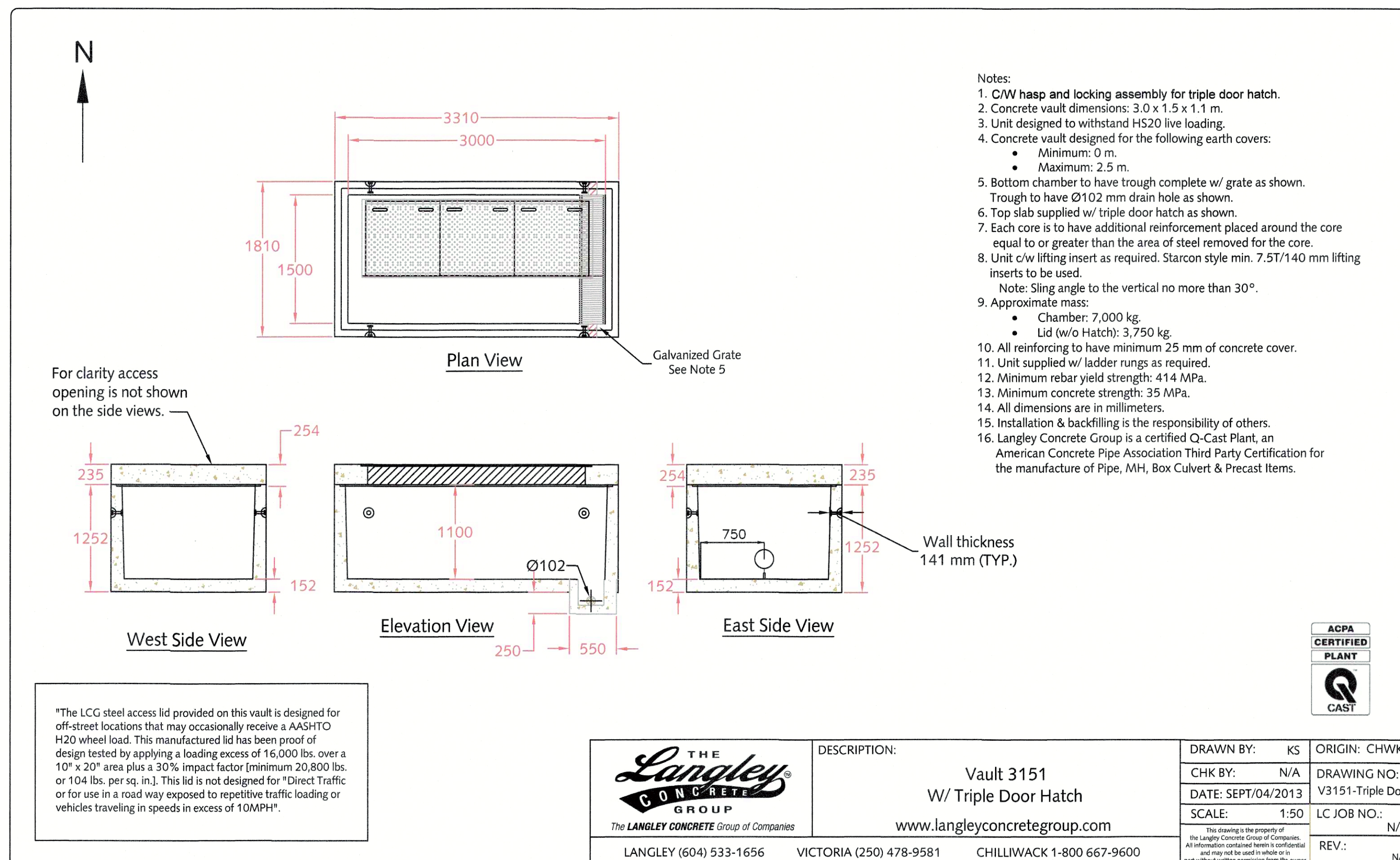
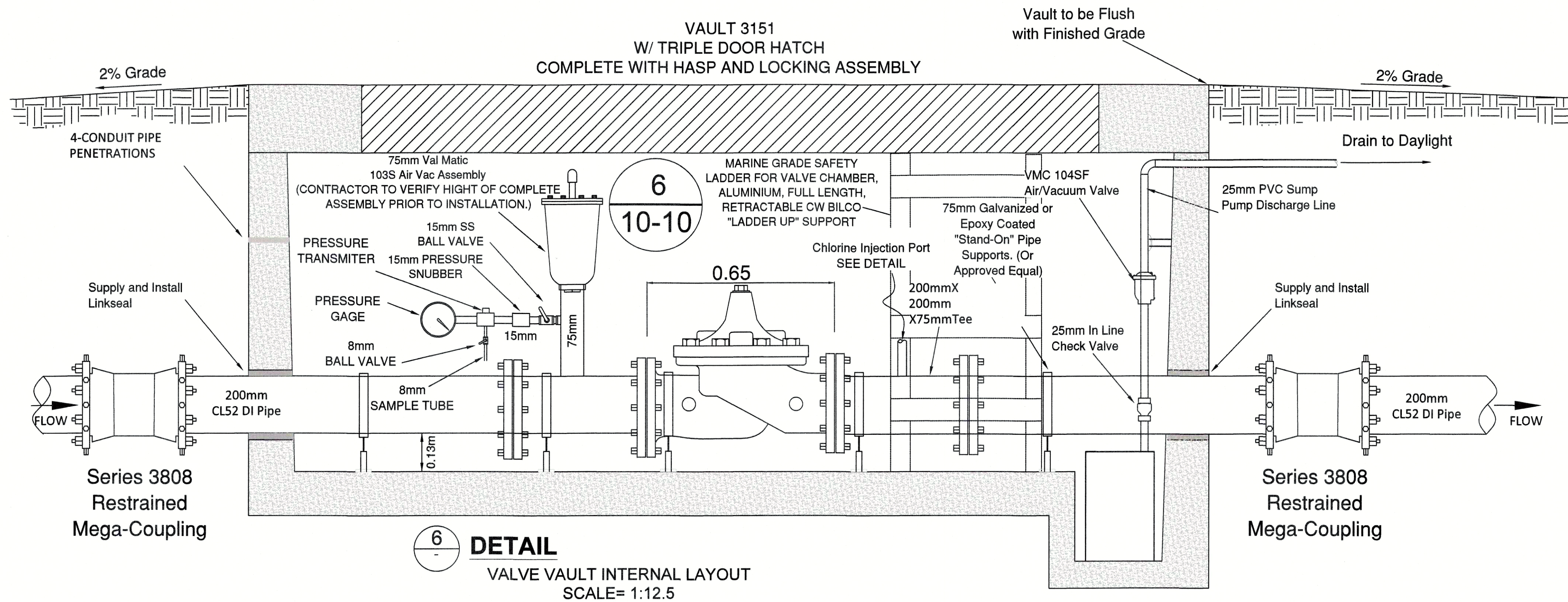
1 **DETAIL**
CHLORINE RESIDUAL LINE INJECTION NOZZLE (QUILL), SINGLE NOZZLE



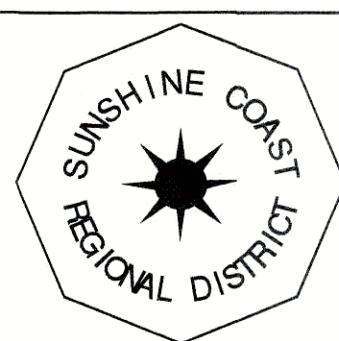
5 **DETAIL**
BUILDING SIGNAGE

- NOTE:**
1. SIGN TO BE TYPE III RETROREFLECTIVE HIGH INTENSITY PRISMATIC SHEETING.
 2. CONTRACTOR TO SUBMIT CHECK PRINT PRIOR TO FABRICATION.
 3. BLUE LETTERING ON WHITE BACKGROUND.

REVISIONS		 SUNSHINE COAST REGIONAL DISTRICT INFRASTRUCTURE DEPARTMENT PERMIT TO PRACTICE No. 1003260 1975 Field Road Sechelt, BC V0N 3A1 Ph: 604-885-6800 1-800-687-5753 Fax: 604-885-7909	DESIGNED BY:	SM	CHASTER ROAD WELL AND PUMP IMPROVEMENTS	DRAWING : MISCELLANEOUS DETAILS	SEAL : 	WORK ORDER NO.	
			DRAWN BY:	JM/MM				DRAWING NO:	D-02
			CHECKED BY:	MO				SHEET NO :	8 OF 10
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REVISIONS



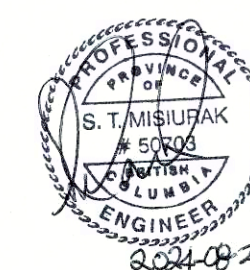
SUNSHINE COAST
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CHASTER
ROAD WELL
AND PUMP
IMPROVEMENTS

DRAWING :
VALVE VAULT DETAILS

SEAL :



WORK ORDER NO.
DRAWING NO: D-04
SHEET NO : 10 OF 10