1. DRAWINGS

- A. THE NOTES ON THIS SHEET APPLY TO ALL WORKS UNDER THIS CONTRACT UNLESS OTHERWISE NOTED ON THE SPECIFIC DETAIL DWGS.
- B. THE STANDARD DRAWINGS OF THE CITY OF OTTAWA,
 ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS,
 (OPSS) AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD)
 CONSTITUTE PART OF THE PLANS OF THIS CONTRACT.
- C. THE STANDARD DRAWINGS INCLUDED WITH THESE PLANS ARE PROVIDED FOR CONVENIENCE ONLY AND ARE NOT TO BE CONSTRUED TO BE A COMPLETE SET FOR THE PURPOSE OF THE CONTRACT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL RELEVANT STANDARD DRAWINGS AND SPECIFICATIONS AS REQUIRED FOR THIS CONTRACT.

MEASUREMENTS

- A. ALL DIMENSIONS ARE IN METRES, EXCEPT PIPE DIAMETERS, WHICH ARE IN MILLIMETRES, UNLESS SPECIFIED OTHERWISE.
- B. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION, AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.

3 GENERAI

- A. EXISTING SERVICES AND UTILITIES SHOWN ON THESE CONTRACT DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE AND THEIR LOCATIONS ARE NOT GUARANTEED. THE CONTRACTOR SHALL INTERPRET THIS INFORMATION AS HE WISHES WITH THE UNDERSTANDING THAT THE OWNER DISCLAIMS ALL RESPONSIBILITY FOR ITS ACCURACY AND/OR SUFFICIENCY. THE CONTRACTOR IS REQUIRED TO NOTIFY THE VARIOUS UTILITY COMPANIES 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- B. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- C. GRANULAR MATERIAL, USED FOR BACKFILL, SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- D. ALL DISTURBED AREAS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE ENGINEER. ALL GRASS AND VEGETATION COVERED AREAS SHALL BE RESTORED BY PLACING 200mm OF APPROVED TOPSOIL AND NURSERY SOD UNLESS NOTED OTHERWISE.

4. SANITARY & STORM SEWERS

- A. STORM SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD-802.010, (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD-802.030 OR 802.031 CLASS B (GRAN. 'A' BEDDING MATERIAL) FOR RIGID PIPES UNLESS OTHERWISE APPROVED BY THE CITY OF OTTAWA.
- B. PRECAST MANHOLES SHALL BE 1200mm DIAMETER UNLESS OTHERWISE SPECIFIED, AND SHALL BE IN ACCORDANCE WITH OPSD-701.010, FRAME AND COVER SHALL BE IN ACCORDANCE WITH OPSD-401.010.
- C. SINGLE CATCHBASINS TO BE 600mm SQUARE PRECAST CONCRETE TO OPSD-705.010. FRAME AND GRATE TO OPSD-400.020.
- D. PLACE ALL CATCHBASIN LATERALS AT 2% GRADE UNLESS OTHERWISE NOTED PIPE SIZE MINIMUM 250mm DIAMETER SINGLE, 300mm DIAMETER DOUBLE.
- E. FOR ALL PVC PIPES CONNECTING INTO CONCRETE MH's AND CB's USE PVC
- MH ADAPTER COATED WITH SAND.
- F. ALL CONNECTIONS TO THE STORM MAIN SHALL BE MADE WITH A STOM MANHOLE OR APPROVED FACTORY TEE CONNECTION AS PER OPSD-701.10 OR 708.03.
- G. MANHOLE BENCHING SHALL CONFORM WITH OPSD-701.021.
- H. MAINTENANCE HOLE TOPS (FRAMES) AND CATCH BASIN (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACED. ALL ADJUSTMENT WILL BE IN ACCORDANCE WITH OPSD-704.010.
- . ALL PIPE HANDLING INSTALLATIONS MUST BE IN STRICT COMPLIANCE WITH MANUFACTURERS INSTALLATION GUIDES AND THE O.C.P.A. OR UNIBELL GUIDELINES.
- J. ALL SEWERS WITH LESS THAN 1.2m OF COVER MUST BE INSULATED.
- K. PVC STORM PIPE MATERIAL TO BE PVC SDR 35, CERTIFIED TO C.S.A. STANDARDS 182.2 AND 182.4 LATEST AMENDMENT.
- L. CONCRETE STORM SEWER PIPE TO BE EQUAL TO CSA SPECIFICATION A257.1 (LATEST AMENDMENT)
- M. SANITARY MAINTENANCE HOLE SHALL HAVE WATERTIGHT GRAME AND COVER IN PONDING AREAS AS PER OPSD 401.030
- N. SERVICE CONNECTIONS AND UTILITY CUTS TO BE BACKFILLED WITH UNSHRINKABLE FILL.
- O. SEWER PIPES TO BE BACKFILLED UP TO 300mm ABOVE TOP, WITH A GRANULAR MATERIAL TO AIDE COMPACTION IN TIGHT SPACES WITHOUT

5. WATERMAIN

DAMAGING PIPES.

- A. WATERMAIN SHALL BE CONSTRUCTED TO THE LATEST CITY OF OTTAWA STANDARDS, AND OR THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS)
- B. ALL WATER SERVICES LESS THAN OR EQUAL TO 50mm DIA SHALL BE TYPE "K" COPPER.
- C. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17. UNLESS SPECIFIED OTHERWISE
- D. VALVE BOXES SHALL BE INSTALLED PER CITY OF OTTAWA STD W24.
- E. THRUST BLOCKS FOR WATERMAINS TO BE INSTALLED PER CITY OF OTTAWA STD. W25.3 AND W25.4.
- F. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TEMPORARY CAPS, PLUGS, BLOW-OFFS, AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF THE WATERMAIN.
- G. WATERMAIN CROSSING OVER AND BELOW SEWERS SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STD. W25,2 AND W25.
- H. WATER SERVICES ARE TO BE INSULATED PER CITY STD. W23 WHERE SEPARATION BETWEEN SERVICES AND MAINTENANCE HOLES ARE LESS THAN 2.4M.
- I. THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.5m AS PER MOE GUIDELINES.
- J. ALL WATERMAINS SHALL HAVE A MINIMUM COVER OR 2.4M, OTHERWISE THERMAL INSULATION IS REQUIRED AS PER STD DWG W22.
- K. FIRE HYDRANT INSTALLATION AS PER STD DWG W19, ALL BOTTOM OF HYDRANT FLANGE ELEVATIONS TO BE INSTALLED 0.10M ABOVE PROPOSED FINISHED GRADE AT HYDRANT; FIRE HYDRANT LOCATION AS PER STD DWG
- L. ALL WATERMAIN STUBS SHALL BE TERMINATED WITH A PLUG AND 50MM BLOW OFF UNLESS OTHERWISE NOTED.
- M. ALL WATERMAINS SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH THE CITY OF OTTAWA AND ONTARIO GUIDELINES UNLESS OTHERWISE DIRECTED. PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC.

PAVEMENT STRUCTURE

REFERENCED FROM GEOTECHNICAL REPORT COMPLETED BY PATERSON GROUP

CAR PARKING AREAS

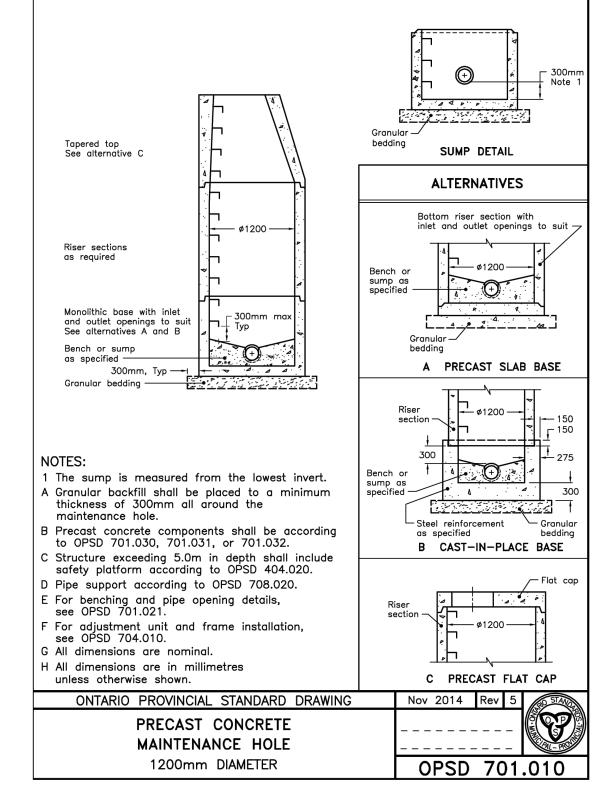
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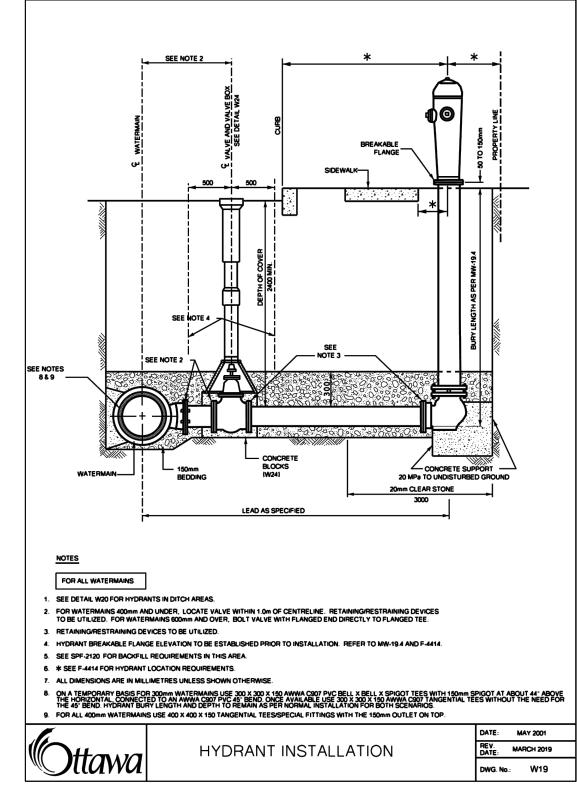
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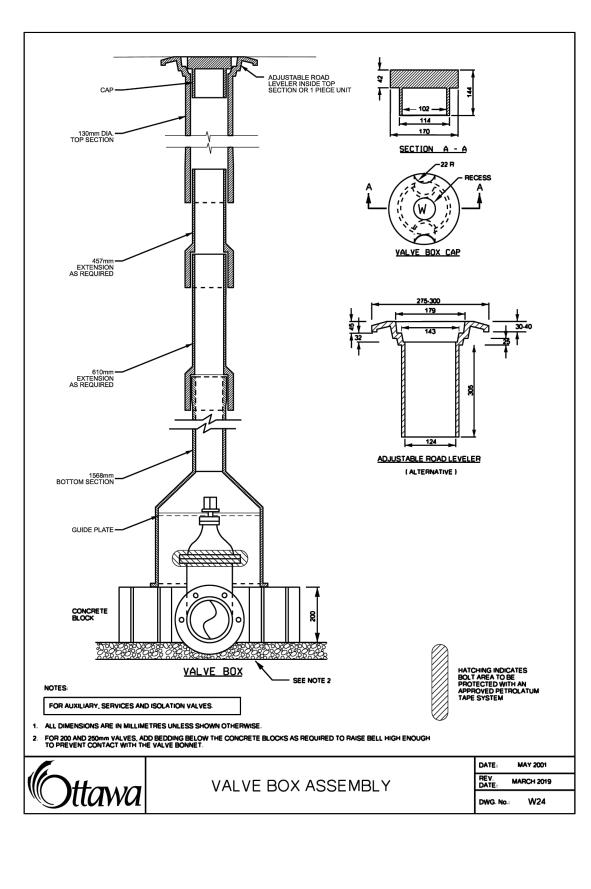
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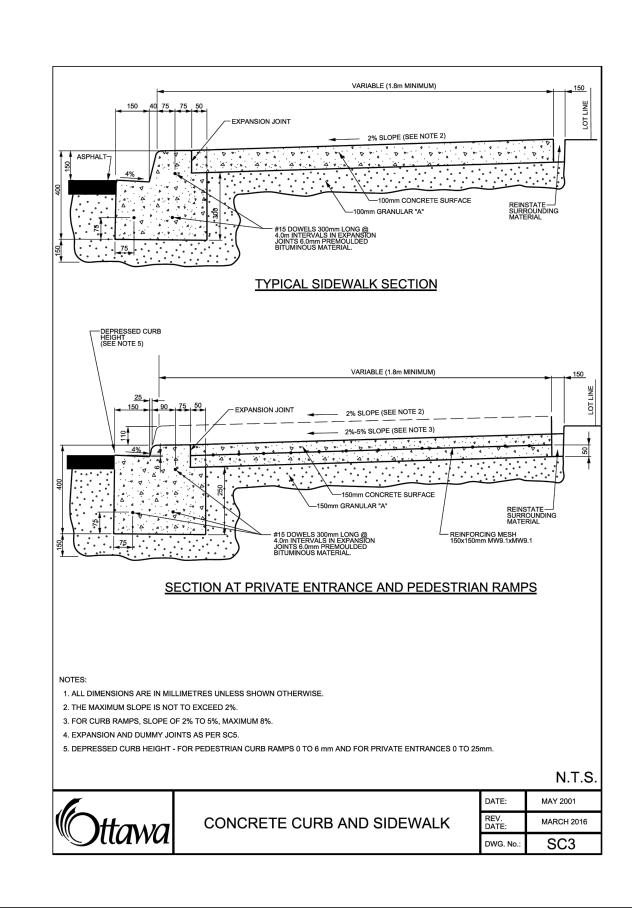
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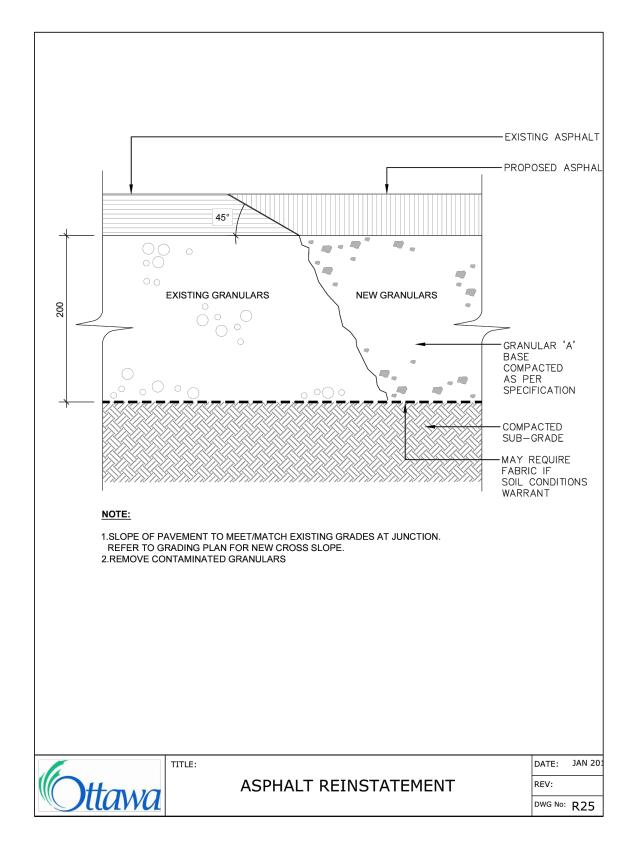


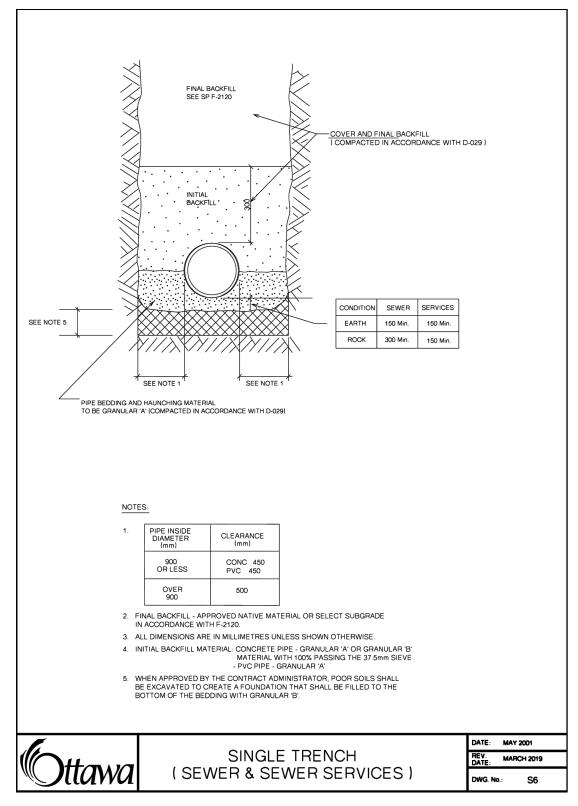


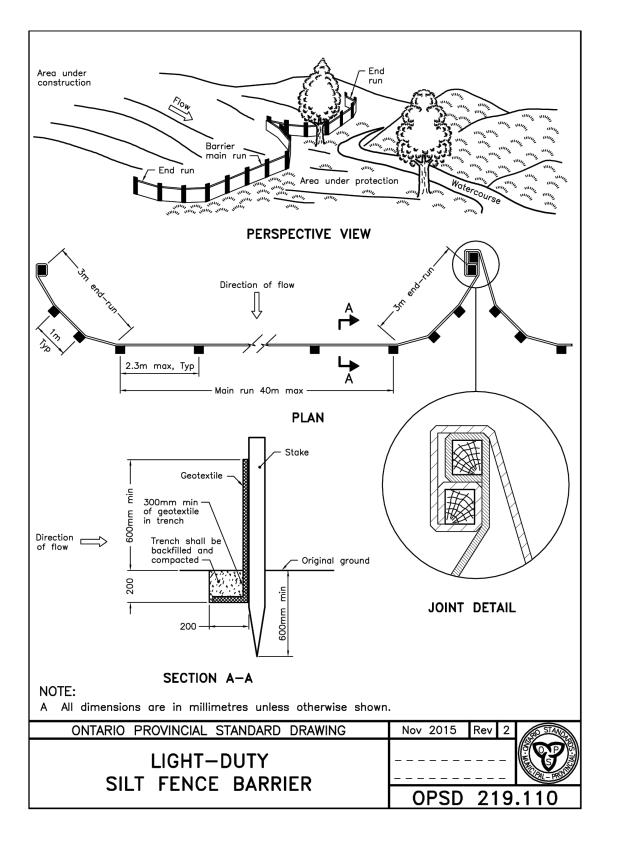












10.	AS PER UPDATED ARCHITECTURE	04/10/25	JM	BENCHMARK SPIKE IN UTILI
09.	ADDITION OF WATERMAIN TABLE	04/01/25	JM	AND PROMENA ELEV: 92.96
08.	AS PER 5th SUBMISSION COMMENTS	03/20/25	JM	
07.	ISSUED FOR TENDER	03/03/25	JM	
06.	PHASE 1 BUILDING LAYOUT	02/11/25	JM	
NO.	REVISION NOTE	DATE	BY	

PIKE IN UTILITY POLE LOCATED ON THE SE CORNER OF THE BORRISOKANE RD. ND PROMENADE FLAGSTAFF DR. INTERSECTION. LEV: 92.96

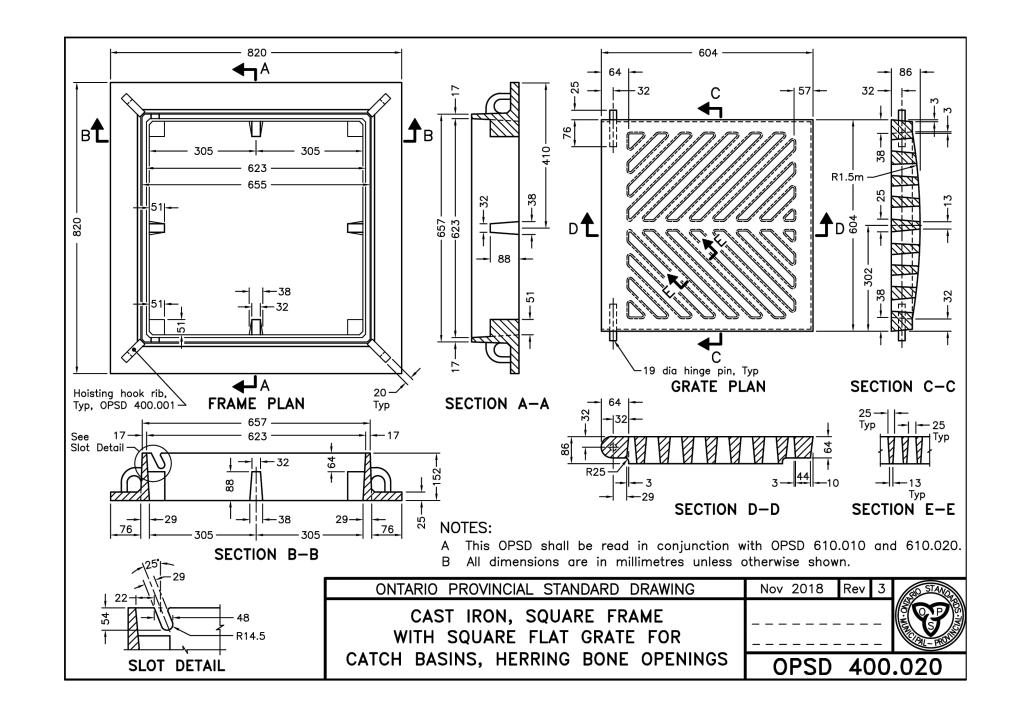


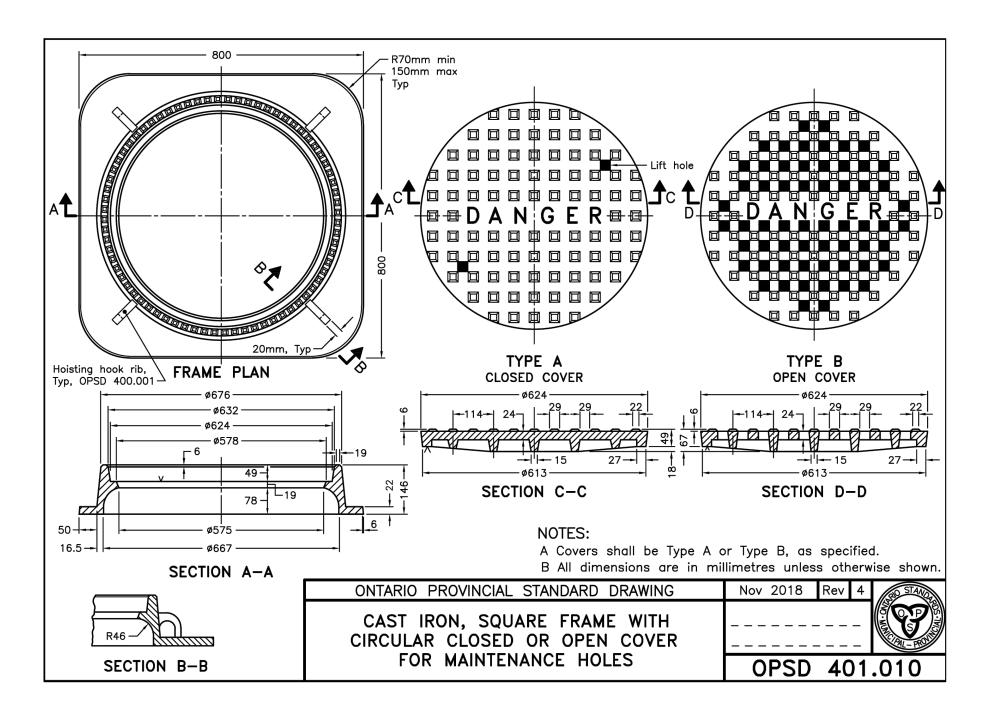
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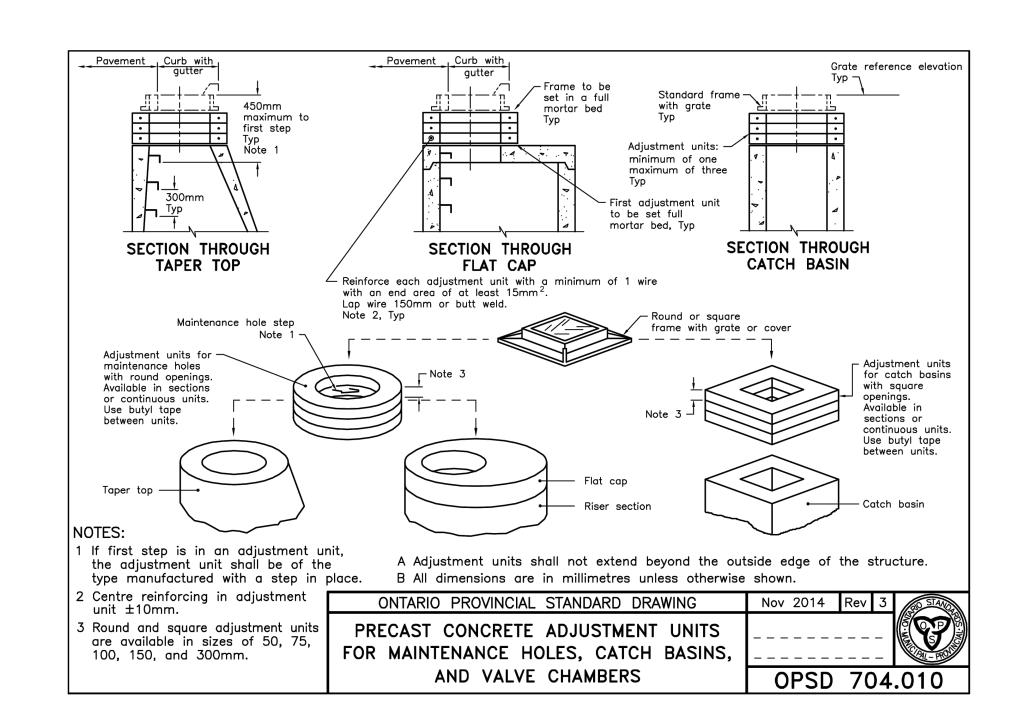
NOTES AND DETAILS
(1 OF 3)

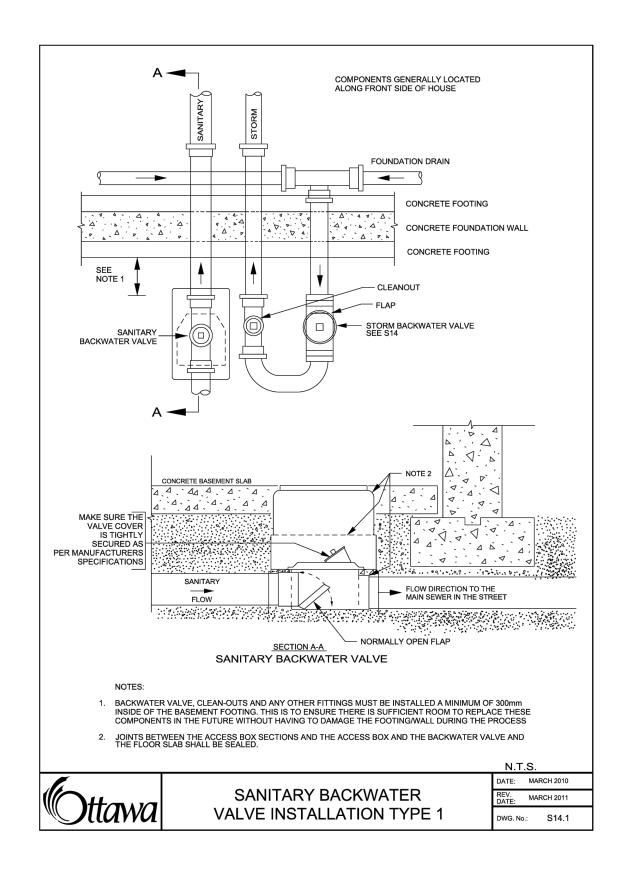
PEARSON
ENGINEERING PEARSONENG.COM PH. 705.719.4785

DESIGNED BY	NW/MWD	HORIZ SCALE	N/A	PROJECT #	22099
DRAWN BY	JM	VERT SCALE	N/A	DRAWING #	ND-1
CHECKED BY	MWD	DATE	JUNE 2023	REVISION #	9

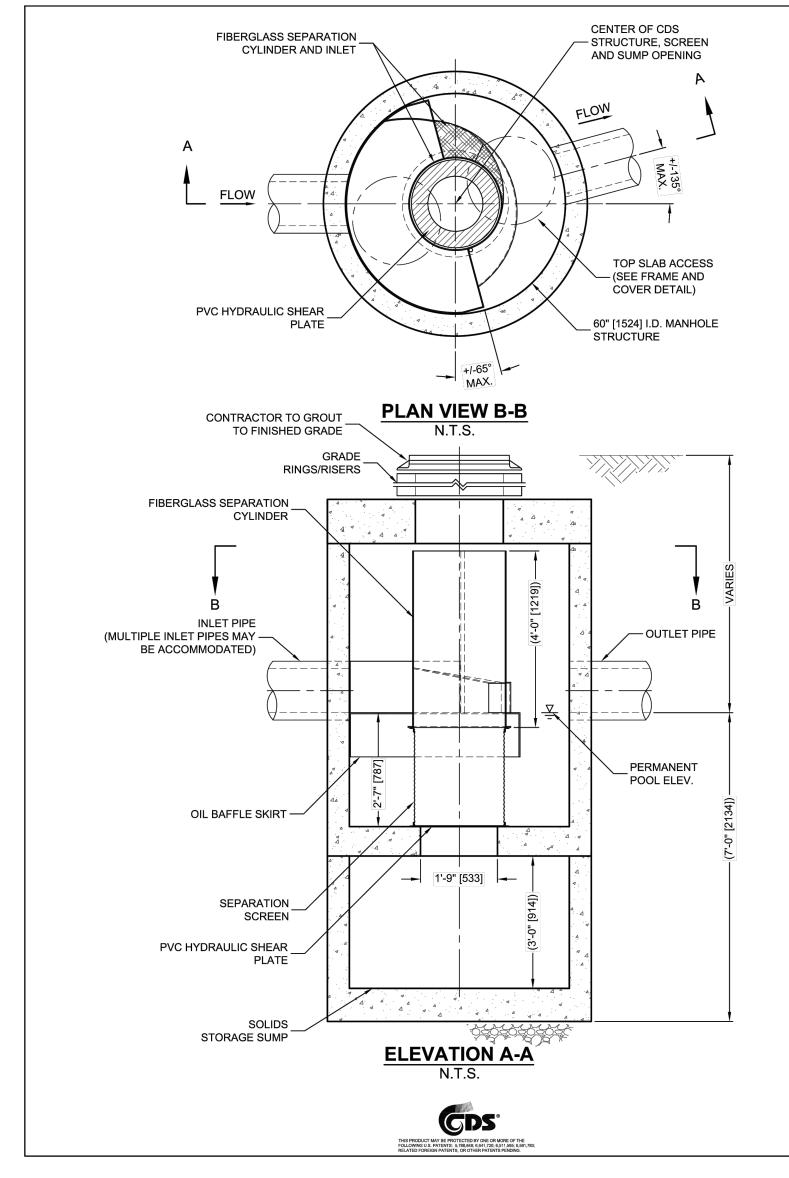


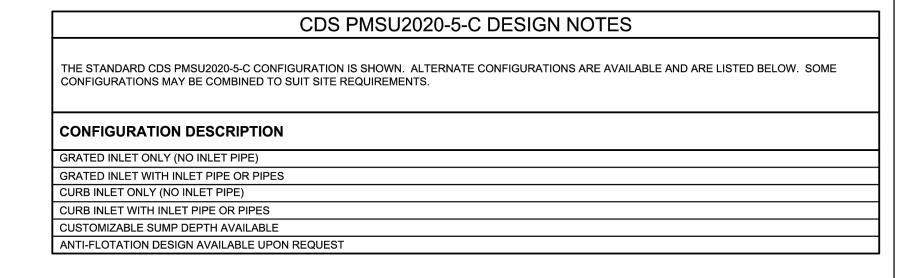


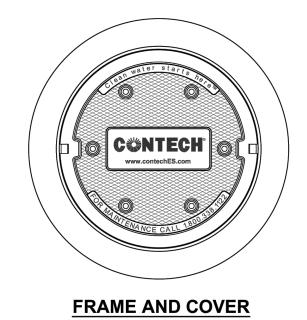












(DIAMETER VARIES)

STRUCTURE ID							
WATER QUALITY FLOW RATE (CFS OR L/s) *							
PEAK FLOW RATE (CFS OR L/s) *							
RETURN PERIOD OF PEAK FLOW (YRS) *							
SCREEN APERTURE (2400 OR 4700) *							
PIPE DATA:	I.E.	MATERIAL	D	DIAMETER			
INLET PIPE 1	*	*	*				
INLET PIPE 2	*	*					
OUTLET PIPE * * *							
RIM ELEVATION							
ANTI-FLOTATION	HEIGHT						
	*	\neg	*				

* PER ENGINEER OF RECORD

GENERAL NOTES

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.

- 2. DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- 3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
- 4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION
- AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. 6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING
- MAINTENANCE CLEANING.
- INSTALLATION NOTES

 A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE. D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

www.contechES.com 9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

800-338-1122 513-645-7000 513-645-7993 FAX

CDS PMSU2020-5-C **INLINE CDS** STANDARD DETAIL

10.	AS PER UPDATED ARCHITECTURE	04/10/25	JM	
09.	ADDITION OF WATERMAIN TABLE	04/01/25	JM	
08.	AS PER 5th SUBMISSION COMMENTS	NTS 03/20/25 JM		
07.	ISSUED FOR TENDER	03/03/25	JM	
06.	PHASE 1 BUILDING LAYOUT	02/11/25	JM	
NO.	REVISION NOTE	DATE	BY	

SPIKE IN UTILITY POLE LOCATED ON THE SE CORNER OF THE BORRISOKANE RD. AND PROMENADE FLAGSTAFF DR. INTERSECTION. ELEV: 92.96

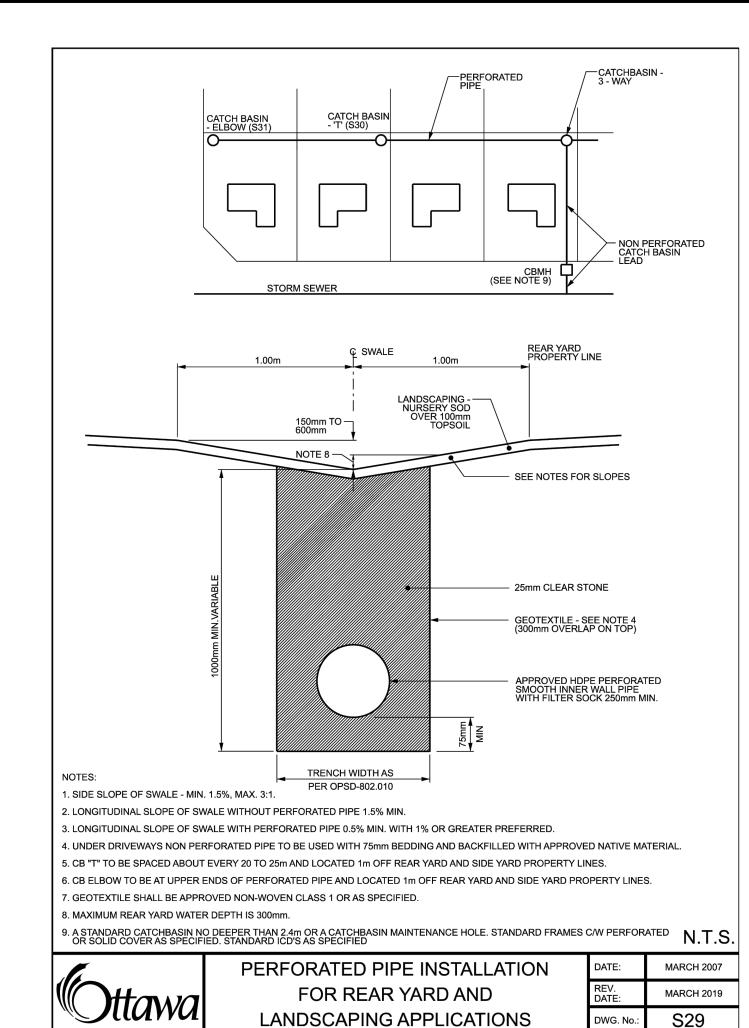


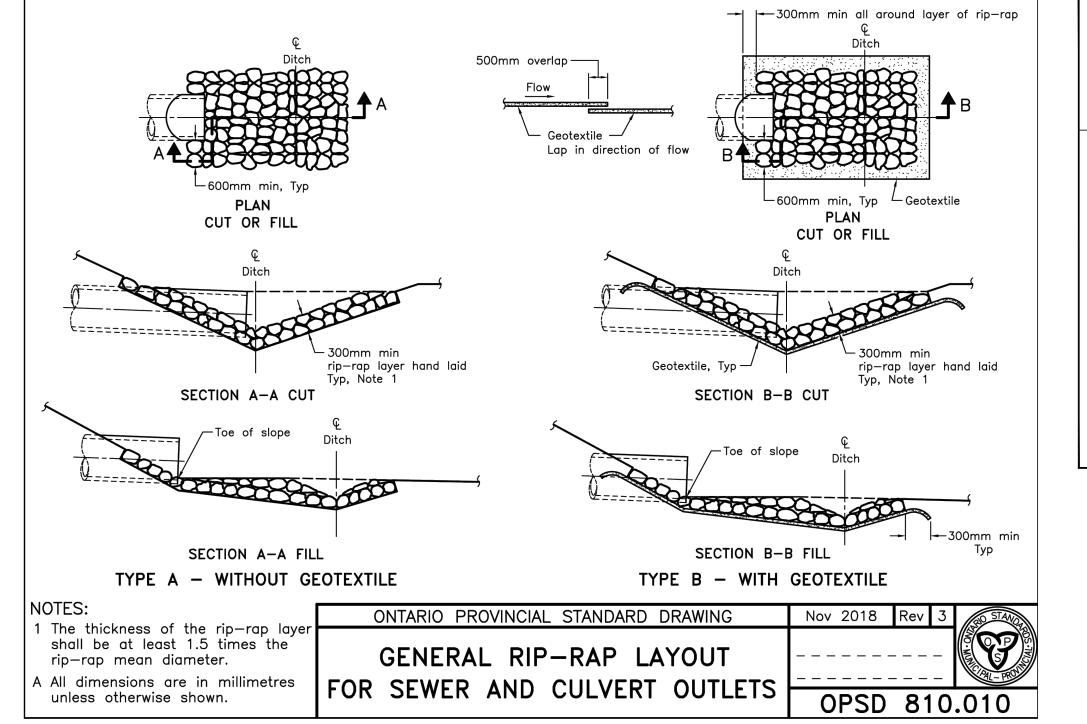
KOREAN COMMUNITY CHURCH 3555 BORRISOKANE ROAD CITY OF OTTAWA

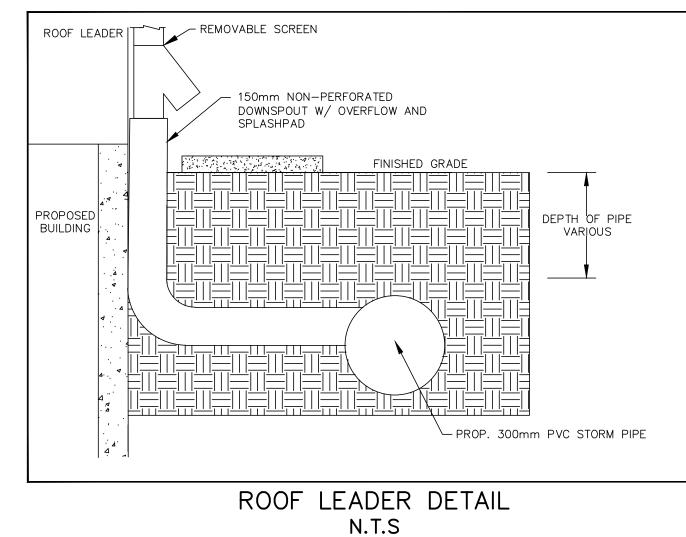
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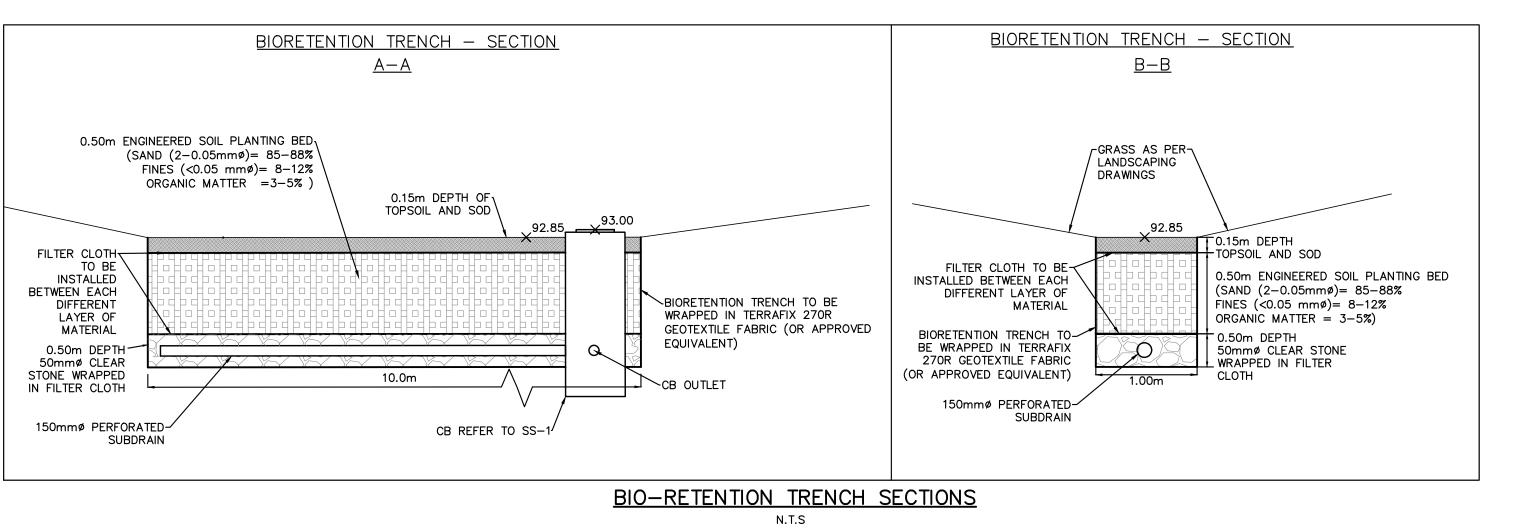


DESIGNED BY PROJECT # 22099 NW/MWD DRAWN BY VERT SCALE DRAWING # JUNE 2023 REVISION # CHECKED BY MWD









APPROVED
By Lily Xu at 2:07 pm, May 05, 2025

LILY XU, MCIP, RPP
MANAGER, DEVELOPMENT REVIEW SOUTH
PLANNING, DEVELOPMENT, AND BUILDING SERVICES
DEPARTMENT, CITY OF OTTAWA

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KOREAN COMMUNITY CHURCH 3555 BORRISOKANE ROAD CITY OF OTTAWA

NOTES AND DETAILS (3 OF 3)



DESIGNED BY	NW/MWD	HORIZ SCALE	N/A	PROJECT #	22099
DRAWN BY	JM	VERT SCALE	N/A	DRAWING #	ND-3
CHECKED BY	MWD	DATE	JUNE 2023	REVISION #	9

