

- DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY,
- SHOWN HEREON HAVE BEEN DERIVED INFORMATION SUPPLIED BY (OR SHOWN ON) FARLEY, SMITH & DENIS SURVEYING LTD DRAWING COMPLETE. THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN
- PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING
- CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.

- CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN
- 2. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A INSULATION IS REQUIRED AS PER CITY STANDARDS (IF
- ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION
- STRUCTURES AS PER CITY STANDARDS (IF AVAILABLE) OR
- COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM CONNECTION. CONNECTION, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR.
- 7. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WATERMAIN CONNECTION(S) REQUIRED. DESIGNATED MUNICIPAL WATER OPERATOR AND THE

- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS. 11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL
- OF THE ENGINEER/CITY 12. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
- 13. CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR
- 14. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY. 15. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
- ELECTRICAL SERVICE HYDRO ONE, GAS SERVICE ENBRIDGE, TELEPHONE SERVICE BELL CANADA, • TELEVISION SERVICE - ROGERS.
- 16. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO ONE, BELL AND THE
- 17. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE OLLOWED DURING CONSTRUCTION
- 18. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.
- 19. THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION COMPLETED BY PATERSON GROUP DATED OCTOBER 19, 2020.

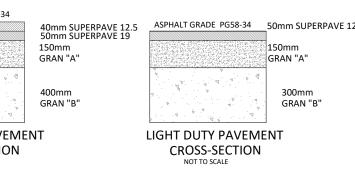
SEWER NOTES:

- 1. CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.
- 2. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE 2.1. BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95%
- STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED. 2.2. SUB-BEDDING, IF REQUIRED SHALL CONSIST OF
- 450mm OF COMPACTED GRANULAR "B" TYPE 1. 2.3. BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE
- WITH GRANULAR "A" OR GRANULAR "B" TYPE 1. 2.4. TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE T 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
- 3. SANITARY SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-28.
- 4. SEWERS AND CONNECTIONS 200mmØ AND LARGER TO BE PVC SDR-35. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.
- 5. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER OPSD 1109.030.
- 6. SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2. 7. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES
- AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"X8' LONG MARKER
- 8. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- 9. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

GRAN "A'

300mm

GRAN "B"



ASPHALT CROSS-SECTIONS TO CONFORM TO GEOTECHNICAL REPORT COMPLETED BY PATERSON, DATED OCTOBER 19, 2020

NOT TO SCALE

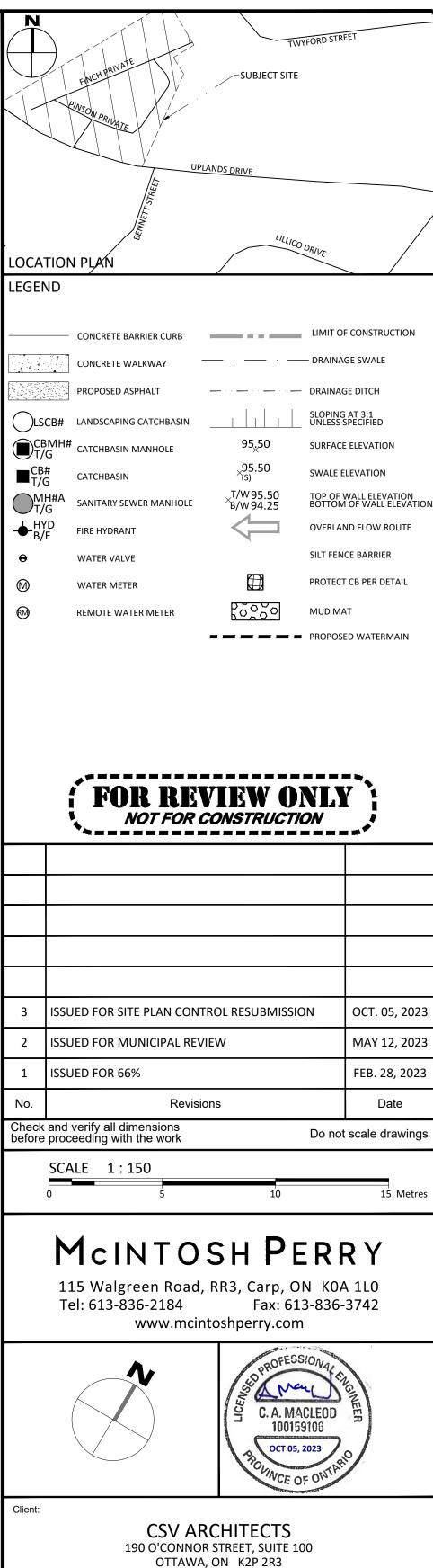
CROSSING CONFLICT TABLE

DESCRIPTION	SEPARATION
150mmØ SAN SERVICE INV 97.86 200mmØ WTR MAIN TOP 97.36	0.50
300mmØ STM SERVICE INV 97.78 200mmØ SAN MAIN TOP 97.39	0.39
300mmØ STM SERVICE INV 97.84 200mmØ WTR MAIN TOP 97.34	0.50
250mmØ STM SERVICE INV 97.77 200mmØ WTR MAIN TOP 97.27	0.50
EX. STORM SERVICE INV ± 97.55 200mmØ WTR MAIN TOP ±96.95	0.60
EX. STORM SERVICE INV ± 97.45 200mmØ WTR MAIN TOP ±96.95	0.50

STM STRUCTURE TABLE

RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
99.47	E98.730	SW98.710	RELOCATED CB
99.20		W98.776	
99.86	NE97.670		
99.92		W98.916	PER CITY STANDARD S31
99.80	E98.796	NW98.776	PER CITY STANDARD S30
99.92	SE98.740	NW98.717	PER CITY STANDARD S30

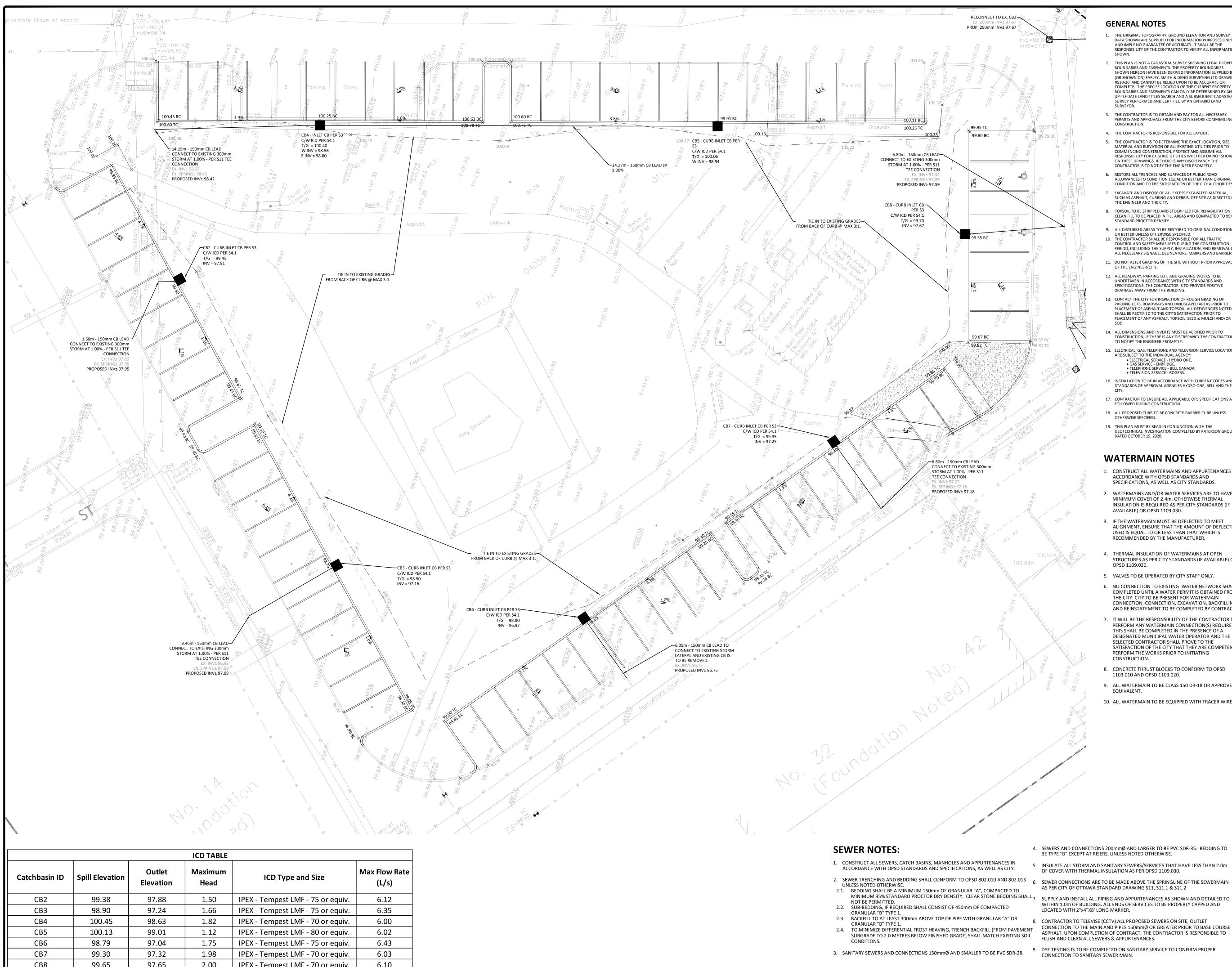
RIM ELEV INV IN INV OUT DESC. OPSD 701.010 99.93 NE 97.94 SW97.89 FRAME: CITY S25 COVER: CITY S24



Project

RESIDENTIAL DEVELOPMENT 1 FINCH PRIVATE

Drawing Title: LOT GRADING, DRAINAGE, & SERVICING PLAN roject Number: Scale 1:150 CCO-23-1408 Drawn By FV rawing Number: Checked By: AM C101 Designed By: NV



ICD TABLE					
Catchbasin ID	Spill Elevation	Outlet Elevation	Maximum Head	ICD Type and Size	Max Flow Rate (L/s)
CB2	99.38	97.88	1.50	IPEX - Tempest LMF - 75 or equiv.	6.12
CB3	98.90	97.24	1.66	IPEX - Tempest LMF - 75 or equiv.	6.35
CB4	100.45	98.63	1.82	IPEX - Tempest LMF - 70 or equiv.	6.00
CB5	100.13	99.01	1.12	IPEX - Tempest LMF - 80 or equiv.	6.02
CB6	98.79	97.04	1.75	IPEX - Tempest LMF - 75 or equiv.	6.43
CB7	99.30	97.32	1.98	IPEX - Tempest LMF - 70 or equiv.	6.03
CB8	99.65	97.65	2.00	IPEX - Tempest LMF - 70 or equiv.	6.10

GENERAL NOTES

99.79 BC

- 1. THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
- 2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED INFORMATION SUPPLIED BY (OR SHOWN ON) FARLEY, SMITH & DENIS SURVEYING LTD DRAWING #520-20 AND CANNOT BE RELIED UPON TO BE ACCURATE OR COMPLETE. THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN UP-TO-DATE LAND TITLES SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
- 3. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT. 5. THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- 6. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINA CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES. 7. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL,
- SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY. 8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION.
- CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY. 9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION
- OR BETTER UNLESS OTHERWISE SPECIFIED. 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
- 11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY. 12. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE
- UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING. 13. CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF
- PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOE
- 14. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- 15. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY: • ELECTRICAL SERVICE - HYDRO ONE, • GAS SERVICE - ENBRIDGE, TELEPHONE SERVICE - BELL CANADA,
 TELEVISION SERVICE - ROGERS.
- 16. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO ONE, BELL AND THE
- 17. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE
- FOLLOWED DURING CONSTRUCTION 18. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.
- 19. THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION COMPLETED BY PATERSON GROUP, DATED OCTOBER 19, 2020.

WATERMAIN NOTES

- 1. CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS.
- 2. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
- 3. IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
- 4. THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
- 5. VALVES TO BE OPERATED BY CITY STAFF ONLY.
- 6. NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CITY TO BE PRESENT FOR WATERMAIN CONNECTION. CONNECTION, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR.
- 7. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WATERMAIN CONNECTION(S) REQUIRED. THIS SHALL BE COMPLETED IN THE PRESENCE OF A DESIGNATED MUNICIPAL WATER OPERATOR AND THE SELECTED CONTRACTOR SHALL PROVE TO THE SATISFACTION OF THE CITY THAT THEY ARE COMPETENT TO PERFORM THE WORKS PRIOR TO INITIATING CONSTRUCTION.
- 8. CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.
- 9. ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT. 10. ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.
- TWYFORD STREE -SUBJECT SITE UPLANDS DRIVE LOCATION PLAN LEGEND LIMIT OF CONSTRUCTION CONCRETE BARRIER CURB ----- DRAINAGE SWALE CONCRETE WALKWAY PROPOSED ASPHALT — — — DRAINAGE DITCH SLOPING AT 3:1 UNLESS SPECIFIED)LSCB# LANDSCAPING CATCHBASIN 95<u>.</u>50 SURFACE ELEVATION CATCHBASIN MANHOLE _×95.50 SWALE ELEVATION CATCHBASIN T/W95.50 TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATI MH#A SANITARY SEWER MANHOLE [^]B/W 94.25 OVERLAND FLOW ROUTE FIRE HYDRANT SILT FENCE BARRIER WATER VALVE \bigcirc PROTECT CB PER DETAIL WATER METER 6000 MUD MAT REMOTE WATER METER (RM) PROPOSED WATERMAIN ______ FOR REVIEW ONLY NOT FOR CONSTRUCTION **=============================== ISSUED FOR SITE PLAN CONTROL RESUBMISSION OCT. 05, 2023 ISSUED FOR MUNICIPAL REVIEW MAY 12, 2023 FEB. 28, 2023 ISSUED FOR 66% Date Revisions Check and verify all dimensions Do not scale drawings before proceeding with the work SCALE 1:150 15 Metre MCINTOSH PERRY 115 Walgreen Road, RR3, Carp, ON KOA 1L0 Tel: 613-836-2184 Fax: 613-836-3742 www.mcintoshperry.com Mar C. A. MACLEOD 100159106 OCT 05, 202 Client: CSV ARCHITECTS 190 O'CONNOR STREET, SUITE 100 OTTAWA, ON K2P 2R3 Project: PARKING AREA RECONSTRUCTION **1 FINCH PRIVATE**

Drawing Title:		RADING, DRAINAGE, SERVICING PLAN	062
Scale:	1:150	Project Number:	C C
Drawn By:	RP	CCO-23-1408	
Checked By:	AM	Drawing Number:	
Designed By:	RP	C103	

- 4. SEWERS AND CONNECTIONS 200mmØ AND LARGER TO BE PVC SDR-35. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.
- 5. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER OPSD 1109.030.
- AS PER CITY OF OTTAWA STANDARD DRAWING \$11, \$11.1 & \$11.2.
- SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"X8' LONG MARKER.
- 8. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

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