

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 TO 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
- 5. SEWERS AND WATERMAINS LOCATED PARALLEL TO EACH OTHER SHOULD BE CONSTRUCTED IN SEPARATE TRENCHES. WHEN IT IS IMPOSSIBLE OR NOT PRACTICAL TO MAINTAIN VERTICAL AND/OR HORIZONTAL SEPARATION PER MECP STANDARDS, ALL SEWERS SHOULD BE CONSTRUCTED OF WATERMAIN QUALITY PIPE, PRESSURE TESTED IN PLACE AT A PRESSURE OF 350 kPa (50 psi) WITHOUT LEAKAGE USING THE TESTING METHODOLOGY IN ONTARIO PROVINCIAL STANDARD SPECIFICATION 701 (OPSS 701) OF THE OPS.
- 6. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER CITY DETAIL S35, OPTION A.
- 7. SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2.
- 8. 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.
- 9. 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.
- 10. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

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

2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY

SHOWN HEREON HAVE BEEN DERIVED INFORMATION SUPPLIED BY

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

PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.

PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING

TITLES SEARCH AND A SUBSEQUENT CADASTRAL SURVEY

3. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY

5. THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE,

CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.

7. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL,

8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95%

9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION

6. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION FOUAL OR BETTER THAN ORIGINAL

THE ENGINEER AND THE CITY.

STANDARD PROCTOR DENSITY.

OR BETTER UNLESS OTHERWISE SPECIFIED. 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC

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

CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.

SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY

4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.

(OR SHOWN ON) J.D. BARNES LIMITED DRAWING 22-10-082-00 AND

BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES

RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION

GENERAL NOTES

WATERMAIN NOTES

- 1. CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY
- WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. INSULATE ALL WATERMAINS AND SERVICES THAT HAVE LESS THAN 2.4m COVER WITH THERMAL INSULATION AS PER CITY DETAIL W22. 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 DETAIL W23.
- 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
- 9. ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT. 10. ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.

CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION

11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL

UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE

PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO

SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO

PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED

PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR

15. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS

16. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND

17. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE

18. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS

STANDARDS OF APPROVAL AGENCIES HYDRO ONE, BELL AND THE

CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS

12. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE

13. CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF

14. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO

ELECTRICAL SERVICE - HYDRO ONE,
 GAS SERVICE - ENBRIDGE,
 TELEPHONE SERVICE - BELL CANADA,
 TELEVISION SERVICE - ROGERS.

DRAINAGE AWAY FROM THE BUILDING.

TO NOTIFY THE ENGINEER PROMPTLY.

ARE SUBJECT TO THE INDIVIDUAL AGENCY:

FOLLOWED DURING CONSTRUCTION

PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.

11. AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER. AS PER CITY DETAIL W25.2 FOR CROSSING UNDER SEWER. THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

ROOF DF	RAIN (B1A)			ROOF DR	AIN (B1B)	
TYPE OF CONTROL DEVICE	WATTS DRAINAGE RD-100-A-ADJ			TYPE OF CONTROL DEVICE	WATTS DRAINAGE RD-100-A-ADJ	
NUMBER OF ROOF DRAINS		1	1 [NUMBER OF ROOF DRAINS		1
OPENING SETTING	1/4 O	PEN	1 [OPENING SETTING	3/4 O	PEN
	5-YEAR	100-YEAR	1 [5-YEAR	100-YEAR
CONTROLLED FLOW (L/s)	0.68	0.95] [CONTROLLED FLOW (L/s)	0.87	1.48
ROOF DF	RAIN (B1C)] [ROOF DR	AIN (B1D)	
TYPE OF CONTROL DEVICE	WATTS DRAINAGE RD-100-A-ADJ TYPE OF CONTROL DE		TYPE OF CONTROL DEVICE	WATTS DRAINAGE RD-100-A-ADJ		
NUMBER OF ROOF DRAINS	1		1 [NUMBER OF ROOF DRAINS	1	
OPENING SETTING	1/4 OPEN		1 [OPENING SETTING	1/4 O	PEN
	5-YEAR	100-YEAR	1 [5-YEAR	100-YEAF
CONTROLLED FLOW (L/s)	0.63	0.90] [CONTROLLED FLOW (L/s)	0.65	0.90
ROOF DF	RAIN (B1E)] [ROOF DR	AIN (B1F)	
TYPE OF CONTROL DEVICE		WATTS DRAINAGE RD-100-A-ADJ TYPE OF CONTRO		TYPE OF CONTROL DEVICE		PRAINAGE D-A-ADJ
NUMBER OF ROOF DRAINS		1	1 [NUMBER OF ROOF DRAINS	:	1
OPENING SETTING	1/4 O	PEN	1 [OPENING SETTING	FULLY E	XPOSED
	5-YEAR	100-YEAR	1 [5-YEAR	100-YEAF
			7 F	CONTROLLED FLOW (L/s)	1.01	1.89

WATTS DRAINAGE

RD-100-A-ADJ

 $\frac{1}{4}$ OPEN

TYPE OF CONTROL DEVICE

OPENING SETTII

NUMBER OF ROOF DRAI

	STM STRUCTURE TABLE					
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION		
CB-201	74.08		\$73.088	STRUC: OPSD 705.01 FRAME: CITY S19 COVER: CITY S19		
СВМН-202	74.27	N72.980	S72.970	STRUC: OPSD 701.01 FRAME: CITY S25 COVER: CITY S28.1 C/W TEMPEST LMF8 ICD AT OUTLET 600mm SUMP		
LSCB-205	74.25		NE73.240	PER CITY STANDARD S31		
OGS-203	74.41	N72.949 N72.920	SE72.909	HYDRO-INTERNATION FD-4HC OR APPROVED EQUIVALENT.		

	SAN STRUCTURE TABLE				
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION	
SAMH-101	74.34	E72.328	\$72.300	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S24	
SAMH-102	74.45	N71.740	SE71.710	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S24	

	CROSSING CONFLICT TABLE	
LOCATION	DESCRIPTION	SEPARATION
1	300mmØ STM SERVICE INV 73.03 150mmØ SAN SERVICE OBV 72.39	0.47
2	250mmØ STM SERVICE INV 73.05 150mmØ WTR SERVICE OBV 71.99	1.06
3	150mmØ WTR SERVICE INV 71.92 350mmØ SANITARY SEWER OBV 70.30	1.62
4	300mmØ STM SERVICE INV 72.87 350mmØ SANITARY SEWER OBV 70.28	2.59
5	300mmØ STM SERVICE INV 72.81 406mmØ WTR MAIN OBV 72.31	0.50

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CB-201	74.08		S73.088	STRUC: OPSD 705.010 FRAME: CITY S19 COVER: CITY S19	
CBMH-202	74.27	N72.980	\$72.970	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S28.1 C/W TEMPEST LMF85 ICD AT OUTLET 600mm SUMP	
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4	ISSUED FOR SITE PLAN CONTROL		JULY 7, 20
3	66% ISSUED FOR COORDINATION		APR. 21, 2
2	ISSUED FOR SITE PLAN CONTROL		JAN. 20, 2
1	ISSUED FOR SITE PLAN CONTROL		DEC. 16, 2
No.	Revisions		Date
Check	and verify all dimensions proceeding with the work	Do not	scale draw

∕−SUBJECT SITE

LIMIT OF CONSTRUCTION

— — DRAINAGE DITCH

- SILT FENCE BARRIER

SURFACE ELEVATION

SWALE ELEVATION

TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION

OVERLAND FLOW ROUTE

STRAW BALE CHECK DAM

MUD MAT

---- · ---- DRAINAGE SWALE

CONCRETE BARRIER CURB

CONCRETE WALKWAY

PROPOSED ASPHALT

CATCHBASIN MANHOLE

SANITARY SEWER MANHOLE

FIRE HYDRANT

WATER VALVE

WATER METER

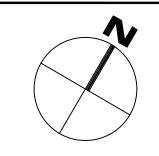
SUMP PUMP

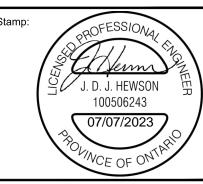
REMOTE WATER METER

SCALE	1:150			
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McINTOSH PERRY 115 Walgreen Road, RR3, Carp, ON KOA 1L0

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8743169 Canada Ltd

4-STOREY MIXED USE BUILDING 2663 INNES ROAD

Drawing Title:

SITE SERVICING PLAN

Scale:	1:150	Project Number:		0
Drawn By:	FV		CCO-23-1884	して
Checked By:	JH	Drawing Number:		7
Designed By:	JH		C102	ĮÇ