DRAWING NOTES

1.0 GENERAL

1.1 CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

1.8 REFER TO SITE PLAN BY M. DAVID BLAKELY ARCHITECTS INC.

1.2 DO NOT SCALE DRAWINGS.

1.3 CONTRACTOR TO REPORT ALL DISCOVERIES OF ERRORS, OMISSIONS OR DISCREPANCIES TO THE ARCHITECT OR DESIGN ENGINEER AS APPLICABLE.

1.4 USE ONLY THE LATEST REVISED DRAWINGS OR THOSE THAT ARE MARKED "ISSUED FOR

CONSTRUCTION".

1.5 ALL CONSTRUCTION SHALL COMPLY WITH CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. 1.6 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS. 1.7 FOR LEGAL SURVEY INFORMATION REFER TO REGISTERED PLAN FROM J.D. BARNES LTD.

1.9 CONTRACTOR TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES AS IDENTIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.). DURING ALL PHASES OF THE SITE PREPARATION AND CONSTRUCTION THE MEASURES ARE TO BE MAINTAINED TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL. SHOULD ANY ADDITIONAL MEASURES BE REQUIRED TO ADDRESS FIELD CONDITIONS THEY SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER OR THE CITY OF OTTAWA. SUCH ADDITIONAL MEASURES MAY INCLUDE BUT NOT BE LIMITED TO INSTALLATION OF SEDIMENT

1.10 ALL IRON WORK ELEVATIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MINOR ADJUSTMENTS AS DETERMINED BY THE ENGINEER.

CAPTURE FILTER SOCKS WITHIN MANHOLES AND CATCHBASINS TO PREVENT SEDIMENT FROM ENTERING THE STRUCTURE AND INSTALLATION AND MAINTENANCE OF A LIGHT DUTY SILT FENCE BARRIER AS

1.11 ALL CONCRETE CURBS AND SIDEWALKS TO CONFORM TO O.P.S. AND CONSTRUCTED TO CITY

STANDARDS. ALL ONSITE CURBS TO BE BARRIER TYPE, WITH DEPRESSIONS AS NOTED. 1.12 ALL CONCRETE SHALL BE "NORMAL PORTLAND CEMENT" IN ACCORDANCE WITH O.P.S.S. 1350 AND SHALL ACHIEVE A MINIMUM STRENGTH OF 30MPa AT 28 DAYS.

1.13 ALL CONSTRUCTION TRAFFIC TO ACCESS SITE FROM ROTARY WAY.

ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

1.14 FOR GEOTECHNICAL REPORT SEE GEOTECHNICAL INVESTIGATION BY GOLDER ASSOCIATES LTD. 1.15 CONTRACTOR TO PROTECT EXISTING INFRASTRUCTURE AND PROPERTY SUCH AS TREES, PARKING METERS, SIDEWALKS, CURBS, ASPHALT, AND STREET SIGNS FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR TO PAY THE COST TO REINSTATE OR REPLACE ANY DAMAGED INFRASTRUCTURE OR

PROPERTY TO THE SATISFACTION OF THE CITY. 1.16 THE POSITION OF POLE LINES, CONDUITS, WATERMAIN, SEWERS, AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK THE CONTRACTOR SHALL INFORM ITSELF OF THE EXACT LOCATION

1.17 CONTRACTOR TO SUPPLY SUITABLE FILL MATERIAL WHERE REQUIRED TO ROUGH GRADE THE SITE. ALL IMPORTED FILL MATERIAL TO BE CERTIFIED AS ACCEPTABLE BY THE GEOTECHNICAL ENGINEER.

OF ALL SUCH UTILITIES AND STRUCTURES, SHALL PROTECT ALL UTILITIES AND STRUCTURES, AND SHALL

1.18 CONTRACTOR TO HAUL EXCESS MATERIAL OFFSITE AS NECESSARY TO GRADE SITE TO MEET THE PROPOSED GRADES. ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF AT AN APPROVED DUMP SITE. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIAL, CONTRACTOR IS TO NOTIFY ENGINEER. ENGINEER TO DETERMINE APPROPRIATE DISPOSAL METHOD/LOCATION.

1.19 FILL MATERIAL WITHIN THE PARKING LOT AND BUILDING PAD AREAS, AND SUPPORTING BUILDING FOUNDATIONS SHALL BE COMPACTED TO 98% STANDARD MODIFIED PROCTOR DENSITY AND TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.

1.20 ALL COMPACTION METHODS TO BE PERFORMED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER TO INCLUDE BUT NOT BE LIMITED TO THE THICKNESS OF LIFTS, AND COMPACTION EQUIPMENT

1.21 ALL DISTURBED BOULEVARDS TO BE REINSTATED WITH SOD ON 100mm TOPSOIL. 1.22 UTILITY DUCTS TO BE INSTALLED PRIOR TO ROAD BASE CONSTRUCTION.

1.23 CLAY DIKES TO BE INSTALLED WHERE INDICATED ON THE DRAWINGS OR AS APPROVED AND DIRECTED BY THE GEOTECHNICAL ENGINEER ALL IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS AND

1.24 BACKWATER VALES, PER CITY STANDARDS S14, S14.1 AND S14.2 RE TO BE INSTALLED FOR ALL STORM AND SANITARY SERVICE CONNECTIONS.

LEGEND:

2.1 ALL SANITARY SEWER MAINS TO BE CSA CERTIFIED, BELL AND SPIGOT TYPE. ONLY FACTORY FITTINGS TO BE USED. SEWER TO BE INSTALLED AS PER OSPD 1005.01. SANITARY SEWER MATERIALS TO BE: 250mm@ AND SMALLER - PVC DR 35

2.2 ALL SANITARY MAINTENANCE HOLES TO BE 1.2m DIAMETER AS PER CITY OF OTTAWA STANDARDS COMPLETE WITH BENCHING, RUNGS, FRAME AND COVER, DROP PIPES AND LANDINGS WHERE NEEDED. 2.3 SANITARY MANHOLE COVERS TO BE CITY OF OTTAWA STD. S25 (MOD. OPSD. 401.020). SANITARY

2.4 SANITARY SEWER LEAKAGE TEST AND CCTV INSPECTION SHALL BE COMPLETED AS PER CITY SPECIFICATIONS PRIOR TO INSTALLATION OF BASE COURSE ASPHALT.

MANHOLE COVER TO BE CLOSED COVER TYPE, AS PER CITY STANDARD S24.

SANITARY MANHOLE

CATCHBASIN c/w TOP OF GRATE

REAR YARD "END" CATCHBASIN

HYDRANT c/w BOTTOM OF FLANGE ELEVATION

C/W TOP OF GRATE 300Ø)

VALVE AND VALVE BOX

VALVE AND CHAMBER

D.C. DEPRESSED BARRIER CURB AS PER SC1.1

200mmØ SAN SANITARY SEWER & FLOW DIRECTION

250mmØ SUBDRAIN

REMOTE METER

PRESSURE REDUCING VALVE

20000 WATERMAIN WATERMAIN

RED 150Ø WATERMAIN REDUCER

2 VBENDS VERTICAL BEND LOCATION

BARRIER CURB AS PER SC1.1

MOUNTABLE CURB AS PER SC1.3

STORM SEWER & FLOW DIRECTION

PROPOSED CONCRETE SIDEWALK

SIAMESE CONNECTION (IF REQUIRED)

2.5 ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.

2.6 CONNECTION TO THE EXISTING SANITARY SEWER TO BE INCLUDED IN THE COST FOR SANITARY SEWER INSTALLATION. THIS INCLUDES REINSTATEMENT OF ROAD CUTS TO CITY STANDARDS. 2.7 ALL SANITARY CONNECTION TO INCLUDE BACKWATER VALVE TYPE 1 PER CITY STANDARD S14.1

3.1 ALL STORM SEWERS TO BE CSA CERTIFIED, BELL AND SPIGOT TYPE, ALL STORM SEWERS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. ONLY FACTORY FITTINGS TO BE USED. STORM SEWER MATERIALS TO BE: 375mmØ AND SMALLER - PVC DR 35 - 450mmØ AND LARGER - 100-D REINFORCED CONCRETE. UNLESS NOTED OTHERWISE 3.2 ALL STORM MAINTENANCE HOLES TO BE SIZED IN ACCORDANCE WITH THE PLANS AND AS PER CITY OF OTTAWA

STANDARDS COMPLETE WITH BENCHING, RUNGS, AND FRAME AND COVER. 3.3 STORM MH COVERS TO BE OPEN TYPE, AS PER CITY STANDARD S24, FRAMES TO BE PER CITY OF OTTAWA STD. S25. CONTRACTOR TO INSTALL FILTER FABRIC UNDER STORM MH COVER UNTIL SODDING IS COMPLETE.

3.4 STORM MAINTENANCE HOLES TO BE OPSD, SIZE AS SPECIFIED, TAPER TOP.

3.5 ALL CATCH BASINS TO BE AS PER OPSD 705.010, FRAME & FISH TYPE GRATE AS PER CITY OF OTTAWA STD. S19.1. 3.6 3m 150mm DIAMETER SOCK-WRAPPED PERFORATED PVC SUBDRAINS TO BE INSTALLED ALL CB'S. TO EXTEND PARALLEL TO CURB IN CBS ADJACENT TO CURB AND IN 4 DIRECTIONS FOR CBS IN CENTER OF PARKING LOT. SUBDRAINS TO

3.7 ANY STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.

3.8 CONNECTION TO THE EXISTING STORM SEWER TO BE INCLUDED IN THE COST FOR STORM SEWER INSTALLATION. THIS INCLUDES REINSTATEMENT OF ROAD CUT TO CITY STANDARDS.

3.9 CONTRACTOR TO PROVIDE IPEX-TEMPEST MHF ICD'S SHOP DRAWINGS, OR EQUIVALENT, FOR ENGINEERS REVIEW PRIOR

3.10 ALL STORM CONNECTION TO INCLUDE FOUNDATION BACKWATER VALVE TYPE 1 PER CITY STANDARD S14.1 3.11 LANDSCAPE SUBDRAIN AND APPURTENANCES TO BE INSTALLED PER CITY OF OTTAWA STANDARDS INCLUDING BUT NOT LIMITED TO S29, S30, S31

4 1 ALL WATERMAINS 100mmØ OR GREATER TO BE PVC DR 18 LESS THAN 100mm Ø TO BE COPPER OR APPROVED FOUAL WITH MINIMUM COVER OF 2.4m AND INSTALLED PER CITY OF OTTAWA STANDARDS. ALL DOMESTIC WATER SERVICES ARE TO BE 25mmØ.

4.2 THRUST BLOCKS TO BE INSTALLED AT ALL BENDS, TEES, AND CAPS ALL AS PER OPSD 1103.01 AND 1103.02.

4.3 CONTRACTOR TO CONDUCT PRESSURE AND LEAKAGE TESTING OF ALL WATERMAINS AND DISINFECT AND CHLORINATE ALL WATERMAINS TO THE SATISFACTION OF M.O.E. AND THE CITY OF OTTAWA.

4.4 TRACER WIRE TO BE INSTALLED ALONG THE FULL LENGTH OF WATERMAIN AND ATTACHED TO EACH MAIN STOP AS PER

4.5 ALL COMPONENTS OF THE WATER DISTRIBUTION SYSTEM SHALL BE CATHODICALLY PROTECTED AS PER CITY OF

4.7 ANY WATERMAIN WITH LESS THAN 2.4m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.

4.6 ALL VALVES & VALVE BOXES AND CHAMBERS, HYDRANTS, AND HYDRANT VALVES AND ASSEMBLIES SHALL BE INSTALLED

4.8 CONTRACTOR IS RESPONSIBLE FOR ACQUIRING THE WATER PERMIT FROM THE CITY OF OTTAWA AND PAYMENT OF ANY FEES ASSOCIATED WITH SECURING THE WATER PERMIT. OWNER IS RESPONSIBLE FOR REIMBURSING THE CONTRACTOR FOR THE ACTUAL COST OF ACQUIRING THE WATER PERMIT.

4.9 CONNECTION TO EXISTING WATERMAIN TO BE INCLUDED IN THE COST FOR THE WATERMAIN INSTALLATION. THIS COST

INCLUDES REINSTATEMENT OF ROAD CUTS TO CITY STANDARDS. 4.10 ALL WATERMAIN CROSSINGS TO BE COMPLETED AS PER CITY OF OTTAWA STANDARDS W25 AND W25.2

5.0 PARKING LOT AND WORK IN PUBLIC RIGHTS OF WAY

5.1 CONTRACTOR TO REINSTATE ROAD CUTS PER CITY OF OTTAWA STANDARD R-10.

5.2 THE CONTRACTOR SHALL PREPARE A TRAFFIC MANAGEMENT PLAN FOR REVIEW AND APPROVAL BY THE CITY OF OTTAWA. CONTRACTOR TO MAINTAIN TRAFFIC FLOW DURING THE ENTIRE CONSTRUCTION PERIOD. MAINTENANCE OF ROAD CUTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PROVISION OF FLAGMEN, DETOURS AS NECESSARY, BARRICADES AND SIGNS TO THE FULL SATISFACTION OF THE ENGINEER AND ROAD AUTHORITY SHALL BE THE

5.3 CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROOFROLLING, TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER PRIOR TO THE COMMENCEMENT OF PLACEMENT OF GRANULAR B MATERIAL.

5.4 FILL TO BE PLACED AND COMPACTED PER THE GEOTECHNICAL REPORT REQUIREMENTS.

SPECIFIED IN THE GEOTECHNICAL REPORT AND SHOWN ON THE PLANS.

EXISTING UTILITIES

EXISTING DUCT BANK

SLOPE C/W FLOW DIRECTION

PROPOSED SPOT GRADE

PROPOSED SWALE GRADE

TIE INTO EXISTING GRADE

TOP OF RETAINING WALL

CLAY DYKES PER S8

PROTECTIVE BOLLARD

WATERMAIN IDENTIFICATION

PIPE CROSSING IDENTIFICATION

INLET CONTROL DEVICE LOCATION

NOISE FENCE AND GATE LOCATION

HEAVY DUTY ASPHALT / FIRE ROUTE

FULL STATIC PONDING GRADE

PROPOSED SWALE HIGH POINT

LOT CORNER GRADE C/W EXISTING GROUND

PROPOSED BOTTOM OF RETAINING WALL

PRELIMINARY ROOF DRAIN LOCATION

TEST PITS (SEE GEOTECHNICAL REPORT)

TERRACING 3:1 MAXIMUM UNLESS NOTED OTHERWISE

MAJOR OVERLAND FLOW ROUTE

H/B/T/G

1.3%

×104.40 (S)

×104.50 (S)HP

86.45 EX ×

105.30 T/W

5.5 CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR B MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOFTCHNICAL ENGINEER CONTRACTOR TO PROVIDE ENGINEER WITH SAMPLES OF GRANULAR B MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL ENGINEER THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT

5.6 GRANULAR A MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL ENGINEER OF GRANULAR B PLACEMENT.

5.8 CONTRACTOR TO SUPPLY, PLACE AND COMPACT ASPHALT MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF

5.7 ASPHALT MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL ENGINEER OF GRANULAR A

THE GEOTECHNICAL ENGINEER, CONTRACTOR TO PROVIDE ENGINEER WITH SAMPLES OF ASPHALT MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL ENGINEER THAT THE MATERIAL MEETS THE REQUIREMENTS SPECIFIED IN

5.9 CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING LINE AND GRADE IN ACCORDANCE WITH THE PLANS, AND FOR PROVIDING THE ENGINEER WITH VERIFICATION PRIOR TO PLACEMENT.

5.10 DITCHES AND CULVERTS DISTURBED DURING ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION AND FLOWLINE

5.11 PAVEMENT STRUCTURE (MATERIAL TYPES AND THICKNESSES) FOR HEAVY DUTY AND LIGHT DUTY AREAS TO BE AS

		ST	M STRU	CTURE TAI	BLE	
NAME	RIM ELEV.	INVERT IN	INVERT IN AS-BUILT	INVERT OUT	INVERT OUT AS-BUILT	DESCRIPTION
CBMH10	104.65	SW102.170 NE102.170		SE102.045		1200Ø OPSD 701.0
CBMH11	104.65	SE102.270		NE102.150		1200Ø OPSD 701.0
MH1	104.96	S102.650		NE102.400		1200Ø OPSD 701.0
MH2	105.01	SW102.276 SE102.800 NE102.327		NW102.127		1200Ø OPSD 701.0
МН3	104.98	SE101.750 SW101.890		NE101.690		1200Ø OPSD 701.0
MH4	104.75	NW101.996		NE101.936		1200Ø OPSD 701.0
MH5	104.70	SW101.619		NW101.450		1200Ø OPSD 701.0
MH6	104.84	SE101.324		NW100.989		1200Ø OPSD 701.0
MH7	104.65	SE100.938 SW100.568		NE100.568		1200Ø OPSD 701.0
МН8	104.68	NW102.000 SE103.029		NE101.900		1200Ø OPSD 701.0
MH12	104.75	SE102.370		NE102.270		1200Ø OPSD 701.0
MH13	104.94	NE102.507		SW102.382		1200Ø OPSD 701.0
MH14	104.89	SW102.600		SE102.500		1200Ø OPSD 701.0
XMH100	106.17			NE101.170		1200Ø OPSD 701.0
XMH101	106.78	SW100.925		NE100.650		1200Ø OPSD 701.0
XMH102	105.82	SW100.490				1200Ø OPSD 701.0

		SAI	N STRUC	TURE TAE	5LE 	
NAME	RIM ELEV.	INVERT IN	INVERT IN AS-BUILT	INVERT OUT	INVERT OUT AS-BUILT	DESCRIPTION
MH1A	105.17	SW101.908		NW101.848		1200Ø OPSD 701.01
MH2A	105.16	SW101.889		SE101.829		1200Ø OPSD 701.01
МНЗА	104.93	SW100.841		NW100.781		1200Ø OPSD 701.01
MH4A	104.85	SE100.657 SW102.170		NW100.637		1200Ø OPSD 701.01
MH5A	104.69	SW100.391 SE100.541		NE100.391		1200Ø OPSD 701.0°
MH6A	104.99	SE102.532		NE102.432		1200Ø OPSD 701.0°
MH7A	104.79	NE102.570		SE102.510		1200Ø OPSD 701.01
MH8A	104.81	NW102.389		NE102.329		1200Ø OPSD 701.01
МН9А	104.97	NW102.518		SW102.458		1200Ø OPSD 701.0°
MH10A	104.70	NE102.199		NW102.139		1200Ø OPSD 701.0°
MH11A	104.88	SE101.974 NE102.015		NW101.954		1200Ø OPSD 701.01
MH12A	104.78	SE101.431		NE101.391		1200Ø OPSD 701.0°
MH13A	104.80	SW101.236 SE101.276		NE101.216		1200Ø OPSD 701.0°
MH14A	104.98	SW101.142 SE101.102		NW101.082		1200Ø OPSD 701.0°
MH15A	104.99	NE102.410		NW102.356		1200Ø OPSD 701.0°
MH16A	104.85	SW101.901		NW101.841		1200Ø OPSD 701.01
MH17A	105.01	SE102.326		SW102.268		1200Ø OPSD 701.01
MH18A	103.59	SW102.085 SE101.002		NE100.942		1200Ø OPSD 701.0°
MH24A	103.67	SW101.349		NE101.319		1200Ø OPSD 701.0°
MH25A	103.38	SE101.574 NW101.574		SW101.514		1200Ø OPSD 701.0°
MH26A	103.59	SE102.081 NE101.383		NW101.323		1200Ø OPSD 701.0°
XMH1O1A	100.82			NE100.600		1200Ø OPSD 701.0°
XMH102A	100.45	SW100.230				1200Ø OPSD 701.01

J.D. BARNES LTD. TOPOGRAPHIC LEGEND

DENOTES CONCRETE PAD

DENOTES CHAIN LINK FENCE

DENOTES CONCRETE DENOTES FOUNDATION

DENOTES CENTERLINE

DENOTES DIAMETER

DENOTES INVERT DENOTES CURB CUT

DENOTES GUTTER

DENOTES BOREHOLE

DENOTES HYDRO POLE

DENOTES LIGHT STANDARD

DENOTES TRAFFIC LIGHTS DENOTES ANCHOR

DENOTES FIRE HYDRANT

DENOTES WATER VALVE

DENOTES CATCH BASIN

☑ EL-TRANS DENOTES HYDRO TRANSFORMER

HWELL DENOTES HANDWELL

MH_WAT DENOTES WATER MANHOLE

MH_STM DENOTES STORM MANHOLE MH_SAN DENOTES SANITARY MANHOLE

MH_TRAF DENOTES TRAFFIC MANHOLE

DENOTES MAJOR CONTOUR
DENOTES MINOR CONTOUR

N=NORTH S=SOUTH E=EAST W=WEST

DENOTES TELEPHONE JUNCTION BOX

DENOTES OVERHEAD UTILITY CABLE

DENOTES SPOT ELEVATION

DENOTES DECIDUOUS TREE

DENOTES CONIFEROUS TREE

DENOTES UNDERGROUND SANITARY SEWER

CONTOUR INTERVALS ARE SHOWN AS 1.00m FOR MAJOR AND 0.25m FOR MINOR

DENOTES UNDERGROUND STORM SEWER DENOTES UNDERGROUND WATER LINE

		ST	M STRU	CTURE TAI	BLE	
NAME	RIM ELEV.	INVERT IN	INVERT IN AS-BUILT	INVERT OUT	INVERT OUT AS-BUILT	DESCRIPTION
CBMH10	104.65	SW102.170 NE102.170		SE102.045		1200Ø OPSD 701.010
CBMH11	104.65	SE102.270		NE102.150		1200Ø OPSD 701.010
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МН3	104.98	SE101.750 SW101.890		NE101.690		1200Ø OPSD 701.010
MH4	104.75	NW101.996		NE101.936		1200Ø OPSD 701.010
MH5	104.70	SW101.619		NW101.450		1200Ø OPSD 701.010
МН6	104.84	SE101.324		NW100.989		1200Ø OPSD 701.010
MH7	104.65	SE100.938 SW100.568		NE100.568		1200Ø OPSD 701.010
МН8	104.68	NW102.000 SE103.029		NE101.900		1200Ø OPSD 701.010
MH12	104 75	SE102 370		NF102 270		1200Ø OPSD 701 010

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	SAI	NSTRUC	TURE TAB	3LE 	
RIM ELEV.	INVERT IN	INVERT IN AS-BUILT	INVERT OUT	INVERT OUT AS-BUILT	DESCRIPTION
105.17	SW101.908		NW101.848		1200Ø OPSD 701.010
105.16	SW101.889		SE101.829		1200Ø OPSD 701.010
104.93	SW100.841		NW100.781		1200Ø OPSD 701.010
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104.99	SE102.532		NE102.432		1200Ø OPSD 701.010
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104.81	NW102.389		NE102.329		1200Ø OPSD 701.010
104.97	NW102.518		SW102.458		1200Ø OPSD 701.010
104.70	NE102.199		NW102.139		1200Ø OPSD 701.010
104.88	SE101.974 NE102.015		NW101.954		1200Ø OPSD 701.010
104.78	SE101.431		NE101.391		1200Ø OPSD 701.010
104.80	SW101.236 SE101.276		NE101.216		1200Ø OPSD 701.010
104.98	SW101.142 SE101.102		NW101.082		1200Ø OPSD 701.010
104.99	NE102.410		NW102.356		1200Ø OPSD 701.010
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103.38	SE101.574 NW101.574		SW101.514		1200Ø OPSD 701.010
103.59	SE102.081 NE101.383		NW101.323		1200Ø OPSD 701.010
100.82			NE100.600		1200Ø OPSD 701.010
100.45	SW100.230				1200Ø OPSD 701.010

PAVEMENT STRUCTURE **

CAR ONLY PARKING AREAS:

50mm WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE 150mm BASE - OPSS GRANULARGRANULAR "A" CRUSHED STONE 300mm SUBBASE - OPSS GRANULAR "B" TYPE II SUBGRADE - IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II MATERIAL PLACED OVER IN SITU SOIL

HEAVY TRUCK PARKING AREAS AND ACCESS LANES:

40mm WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE 50mm BINDER COURSE - HL-8 OR SUPERPAVE 19.0 ASPHALTIC CONCRETE

150mm BASE COURSE - OPSS GRANULAR "A" CRUSHED STONE 450mm SUBBASE - OPSS GRANULAR "B" TYPE II

** REFER TO GEOTECHNICAL REPORT BY GOLDER ASSOCIATES LTD.

SUBGRADE - IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II MATERIAL PLACED OVER IN SITU SOIL

CROSSING SCHEDULE

1	450	mm ø	STM	0.230 r	m	CLEARAN	NCE	OVER	200	mm ø	SAN
$\overline{2}$	300	mm ø	W/M	0.576 r	m	CLEARAN	NCE	OVER	450	mm ø	STM
(3)	300	mm ø	W/M	1.331 r	m	CLEARAN	NCE	OVER	200	mm ø	SAN
(4)	250	mm ø	W/M	0.345 r	m	CLEARAN	ICE	OVER	200	mm ø	SAN
<u>(5)</u>	200	mm ø	SAN	0.312 r	m	CLEARAN	ICE	OVER	450	mm ø	STM
(6)	250	mm ø	W/M	0.849 r	m	CLEARAN	NCE	OVER	450	mm ø	STM
$\overline{\bigcirc}$	250	mm ø	W/M	0.325 r	m	CLEARAN	ICE	OVER	450	mm ø	STM
<u>(8)</u>	200	mm ø	SAN	0.283 r	m	CLEARAN	ICE	OVER	450	mm ø	STM
9	250	mm ø	W/M	1.033 r	m	CLEARAN	ICE	OVER	200	mm ø	STM
10	100	mm ø	W/M	0.804 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
11)	200	mm ø	STM	0.804 r	m	CLEARAN	1CE	OVER	200	mm ø	STM
12	450	mm ø	STM	0.324 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
13	450	mm ø	STM	0.317 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
14	250	mm ø	W/M	1.261 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
(15)	250	mm ø	W/M	0.305 r	m	CLEARAN	1CE	OVER	450	mm ø	STM
(16)	250	mm ø	W/M	0.698 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
17	200	mm ø	STM	1.429 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
(18)	200	mm ø	STM	0.369 r	m	CLEARAN	1CE	OVER	250	mm ø	W/M
(19)	250	mm ø	STM	2.044 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
20	100	mm ø	W/M	0.828 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
(21)	250	mm ø	STM	0.515 r		CLEARAN	1CE	OVER	100	mm ø	W/M
22	250	mm ø	STM	0.675 r		CLEARAN	1CE	OVER	200	mm ø	SAN
23	250	mm ø	STM	0.461 r	m	CLEARAN	1CE	OVER		mm ø	
24	200	mm ø	STM	1.185 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
25	200	mm ø	STM	0.369 r	m	CLEARAN	1CE	OVER	250	mm ø	W/M
26		mm ø		1.344 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
(27)	200	mm ø	STM	0.532 r	m	CLEARAN	1CE	OVER	250	mm ø	W/M
28		mm ø		0.312 r		CLEARAN					SAN
29	100	mm ø	W/M	0.339 r	m	CLEARAN	1CE	OVER	450	mm ø	STM
KNIKAKOKOKOKOKOKOKOKOKOKOKOKOKOKOKOKOKOKOK		mm ø		1.106 r		CLEARAN			200	mm ø	SAN
(31)	200	mm ø	STM	0.351 r		CLEARAN		_			W/M
(32)		mm ø		0.750 r		CLEARAN			200	mm ø	SAN
(33)		mm ø		0.311 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN
(34)		mm ø		0.472 r	m	CLEARAN	1CE	OVER		mm ø	SAN
3	100	mm ø	W/M	0.305 r	m	CLEARAN	1CE	OVER	200	mm ø	SAN

APPROVED By Sean Moore at 9:32 am, Oct 20, 2021

SEAN MOORE (A) MANAGER, SOUTH BRANCH PLANNING, INFRASTRUCTURE & ECONOMIC **DEVELOPMENT DEPARTMENT, CITY OF OTTAWA**

Station	WATERAIN SCHEDU		Ton of As	Built CLIENT
Station A 0+000.00 0+005.45	Description TEE 300mmx250mm 11.25° BEND 250mm	Finished 104.62 104.79	102.22 102.39	GLENVIEW HOMES
0+009.03 0+011.36 0+013.81	VB 250mm DMA V-BEND 250mm	104.85 104.84 104.84	102.45 102.44 102.44	Glenview
0+014.11 B 0+017.21 0+019.03	V-BEND 250mm TEE 250mm V-BEND 250mm	104.84 104.84 104.83	103.00 103.00 103.00	homes 190 O'Connor St., 11th floor, Ottawa, ON
0+019.33 C 0+038.11 0+038.71	V-BEND 250mm TEE 250mm V-BEND 250mm	104.68 104.77 104.77	102.28 102.37 102.37	613-748-3700
0+039.01 0+041.21	V-BEND 250mm V-BEND 250mm	104.77 104.75	102.55 102.55	COPYRIGHT This drawing has been prepared solely for the intended use, thus any
0+041.51 0+048.17 0+050.17	V-BEND 250mm 45° BEND 250mm 22.5° BEND 250mm	104.75 104.70 104.69	102.35 102.30 102.29	reproduction or distribution for any purpose other than authorized by IBI Group is forbidden. Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions do conditions on the job, and IBI Group shall be informed of any variations from the dimensions and
0+064.35 0+066.85	22.5° BEND 250mm 45° BEND 250mm	104.80 104.98	102.40 102.58 102.72	conditions shown on the drawing. Shop drawings shall be submitted to IBI Group for general conformance before proceeding with fabrication.
0 0+069.10 0+070.46 0+076.57	TEE 250mm REDUCER 250mm-100mm SERVICE TEE	105.12 105.10 105.09	102.72 102.70 102.69	IBI Group Professional Services (Canada) Inc. is a member of the IBI Group of companies ISSUES
0+081.25 0+094.86 0+099.54	SERVICE TEE SERVICE TEE SERVICE TEE	105.12 105.09 105.09	102.72 102.69 102.69	No. DESCRIPTION DATE 1 SUBMITTED FOR ZBA AND SPA 2020-09-11
0+114.90 0+124.27	TEE 100mm SERVICE TEE	105.09 105.12	102.69 102.72	2 REVISED PER CITY COMMENTS 2020-12-04 3 REVISED PER CITY COMMENTS 2021-01-25
0+128.95 0+142.56 0+145.34	SERVICE TEE SERVICE TEE V-BEND 100mm	105.18 105.19 105.19	102.78 102.79 102.79	4 UPDATED CMB 2021-01-28 5 REMOVED TWSI 2021-10-06
0+145.64 0+147.24 0+147.84	V-BEND 100mm SERVICE TEE V-BEND 100mm	105.20 105.19 105.17	103.20 103.20 103.20	
0+148.14 0+154.30	V-BEND 100mm 45° BEND 100mm	105.16 105.18	102.76 102.78	
0+157.28 0+157.43 0+157.73	45° BEND 100mm V-BEND 100mm V-BEND 100mm	105.14 105.14 105.14	102.74 102.74 103.05	
0+159.90 0+160.20 0+170.04	V-BEND 100mm V-BEND	105.14 105.14 105.00	103.05 102.74 102.60	
0+170.52 0+172.01	VB 100mm REDUCER 100mm-250mm HYDANT TEE	105.01 105.02	102.61 102.62	
0+173.97 0+181.84 0+188.06	TEE 250mm SERVICE TEE SERVICE TEE	105.07 105.08 105.07	102.67 102.68 102.67	ROTARY WAY
0+194.68 0+195.28 0+195.58	CROSS 250mm V-BEND 250mm	105.02 104.98	102.62 102.58	SITE SITE
0+196.53 0+197.68	V-BEND 250mm DMA VB 250mm	104.96 104.89 104.98	102.65 102.65 102.65	SII E NECESTRATE AND A STATE OF THE STATE OF
0+198.58 0+198.88 1 0+228.66	V-BEND 250mm V-BEND 250mm TVS 250mm	104.94 104.92 104.62	102.65 102.52 102.22	
0+000.00 0+002.41	TEE 250mm REDUCER 250mm-50mm	104.84 104.81	103.00 103.00	WHITE ALDER DRIVE ANALDEA DRIVE
0+002.99 0+003.29 0+017.73	V-BEND 50mm V-BEND 50mm SERVICE TEE	104.80 104.80 105.05	103.00 102.40 102.65	CONSULTANTS
0+023.94 0+032.66 0+034.26	SERVICE TEE SERVICE TEE REDUCER 50mm-25mm	105.05 105.05 105.04	102.65 102.65 102.64	Project Coordinator Terrain Development Consulting
0+038.88 C 0+000.00	SERVICE TEE 250mm	105.05 104.77	102.65 102.37	Architect: M. David Blakely Architects Inc.
0+002.98 0+017.73 0+023.94	REDUCER 250mm-100mm SERVICE TEE SERVICE TEE	104.74 104.99 104.99	102.34 102.59 102.59	Landscape: James B. Lennox & Assoc. Inc.
0+028.38 0+032.65 0+038.88	REDUCER 100mm-50mm SERVICE TEE	104.99 104.99 104.99	102.59 102.59 102.59	Surveyor: J.D.Barnes Ltd. Geotech:
0+053.18 0+053.92	SERVICE TEE BEND 50mm BEND 50mm	104.98 104.99	102.58 102.59	Golder Associates Ltd. OWNER:
0+061.46 0+063.13 J 0+067.68	SERVICE TEE REDUCER 50mm-25mm SERVICE	104.99 104.89 104.96	102.59 102.49 102.56	Glenview Homes 190 O'Conner St, 11th Floor
0+000.00 0+000.60	TEE 250mm V-BEND 250mm	105.12 105.00	102.72 102.60	Ottawa, On K2P 1T6 613-748-3700
0+000.90 0+004.72 0+005.03	V-BEND 250mm V-BEND 250mm V-BEND 250mm	104.95 104.83 104.83	102.87 102.87 102.43	
0+015.10 (0+018.80 0+022.42	HY DANT TEE TEE 250mm REDUCER 250mm-100mm	104.76 104.98 105.03	102.36 102.58 102.63	
0+026.67 0+032.89	SERVICE TEE SERVICE TEE	105.03 105.01	102.63 102.61	
0+036.31 0+037.11 0+039.91	REDUCER 100mm-50mm BEND 50mm BEND 50mm	105.02 104.99 104.94	102.62 102.59 102.54	SEAL
0+053.06 0+059.28 0+067.99	SERVICE TEE SERVICE TEE SERVICE TEE	105.04 105.04 105.05	102.64 102.64 102.65	RROF ESS I ON AL CIA
0+070.33 . 0+074.21	REDUCER 50mm-25mm SERVICE	105.05 105.05	102.65 102.65	D. K. Yannoulopoulos To
0+000.00 0+014.59 0+020.81	TEE 250mm SERVICE TEE SERVICE TEE	104.98 105.00 105.01	102.58 102.60 102.61	2021/10/06
0+029.52 0+035.74	SERVICE TEE SERVICE TEE	105.00 104.99	102.60 102.59	30 LINCE OF ONTARIO
0+040.35 0+049.86 0+056.08	HYDANT TEE 250mm SERVICE TEE SERVICE TEE	104.97 105.05 105.05	102.57 102.65 102.65	
0+064.80 0+071.01 0+081.62	SERVICE TEE SERVICE TEE V-BEND 250mm	105.07 105.07 105.06	102.67 102.67 102.66	
0+081.92 0+085.06 0+085.36	V-BEND 250mm V-BEND 250mm	105.07 105.07 105.07	102.80 102.80 102.67	
0+087.30 0+000.00	V-BEND 250mm TEE 250 TEE 100mm	105.07 105.09	102.67 102.69	
M 0+016.21 M 0+000.00 0+002.55	TEE 100mm TEE 100mm REDUCER 100mm-50mm	105.09 105.09 104.96	102.69 102.69 102.56	
0+015.36 0+020.04 0+033.65	SERVICE TEE SERVICE TEE	105.15 105.15 105.15	102.75 102.75 102.75	
0+036.22 0+038.33	SERVICE TEE REDUCER 50mm-25mm SERVICE	105.15 105.15	102.75 102.75	IBI GROUP Suite 400 – 333 Preston Street
0+000.00 0+002.68 0+009.36	TEE 100mm REDUCER 100mm-50mm SERVICE TEE	105.09 105.22 105.23	102.69 102.82 102.83	Ottawa ON K1S 5N4 Canada tel 613 225 1311 / 613 241 3300 fax 613 225 9868 ibigroup.com
0+014.04 0+027.65	SERVICE TEE SERVICE TEE	105.23 105.23	102.83 102.83	
0+029.00 0 0+032.33 0 0+000.00	REDUCER 50mm-25mm SERVICE CROSS 250mm	105.23 105.23 105.02	102.83 102.83 102.62	4639 BANK STREET
0+001.36 0+016.29 0+022.51	REDUCER 250-50 SERVICE TEE SERVICE TEE	105.05 105.10 105.10	102.65 102.70 102.70	
0+031.22 0+033.15	SERVICE TEE REDUCER 50mm-25mm	105.10 105.09	102.70 102.69	4639 Bank Street
0+037.44 0+000.00 0+001.36	SERVICE CROSS 250mm REDUCER 250-100	105.10 105.02 104.90	102.70 102.62 102.50	PROJECT NO:
0+019.40 0+027.52	TEE 100mm SERVICE TEE	105.07 105.18	102.67 102.78	125600 DRAWN BY: CHECKED BY:
0+033.74 0+039.72 0+040.33	SERVICE TEE REDUCER 100mm-50mm BEND 50mm	105.18 104.98 104.97	102.78 102.58 102.57	D.D./E.H. R.M. PROJECT MGR: APPROVED BY:
0+041.08 0+054.64	BEND 50mm SERVICE TEE	105.01 105.16	102.61 102.76	D.Y. D.Y.
0+060.86 0+069.57 0+071.75	SERVICE TEE SERVICE TEE REDUCER 50mm-25mm	105.18 105.18 105.17	102.78 102.78 102.77	DETAILS AND NOTES
R 0+075.79 Q 0+000.00 0+001.85	SERVICE TEE 100mm REDUCER 100mm-50mm	105.14 105.07 105.17	102.74 102.67 103.20	
0+001.85 0+014.09 0+020.31	SERVICE TEE SERVICE TEE	105.16 105.18	102.76 102.78	
	SERVICE TEE	105.18	102.78	SHEET NUMBER ISSUE
0+029.02 0+030.99 0+035.24	REDUCER 50mm-25mm SERVICE	105.17 105.18	102.77 102.78	C-010 5

CITY PLAN No. 18243