CATCHBASIN ICD TABLE

ICD #	OUTLET PIPE DIA. (mm)	Qr (L/s)	OUTLET INVERT (m)	TOP OF GRATE (m)	1:100 YR PONDING (m)	DESIGN HEAD (m)	HYDROVEX MODEL #
CB1 - ICD1	200	6.00	92.20	94.00	94.14	1.84	75 VHV-1
CB3 - ICD2	200	19.00	91.73	93.63	93.80	1.97	125 VHV -2
CBMH1 - ICD3	375	8.00	91.43	93.45	93.63	2.01	75 VHV-1

WATERMAIN TABLE-Sta. 1+000.00 TO 1+090.40

PVC DR-18 CL.150

SIZE	STATION ALONG WM	DETAIL	FINISHED GRADE	TOP OF WM
50mmØ	1+000.00	CONNECTION TO EXISTING 50mmØ CAP	94.19	91.79
	1+005.50	WM CROSSING UNDER ST SERVICE	94.11	91.71
	1+009.60	WM CROSSING OVER SAN SERVICE	94.07	91.67
	1+013.70	WM CROSSING OVER SAN SERVICE	94.14	91.74
	1+023.50	WM CROSSING OVER SAN SERVICE	94.17	91.77
	1+037.00	50 x 50 TEE CONNECTION	94.01	91.61
	1+040.00	WM CROSSING UNDER SAN	93.94	90.86
	1+041.50	WM CROSSING UNDER ST	93.91	91.28
	1+055.20	WM CROSSING UNDER ST SERVICE	93.72	91.32
	1+069.80	45° HORIZONTAL BEND	93.54	91.14
	1+071.80	45° HORIZONTAL BEND	93.78	91.38
	1+075.50	WM CROSSING UNDER SAN SERVICE	93.96	91.56
	1+084.80	WM CROSSING UNDER SAN SERVICE	93.95	91.55
	1+089.10	WM CROSSING UNDER SAN SERVICE	93.96	91.55
	1+090.40	CAP	93.95	91.55

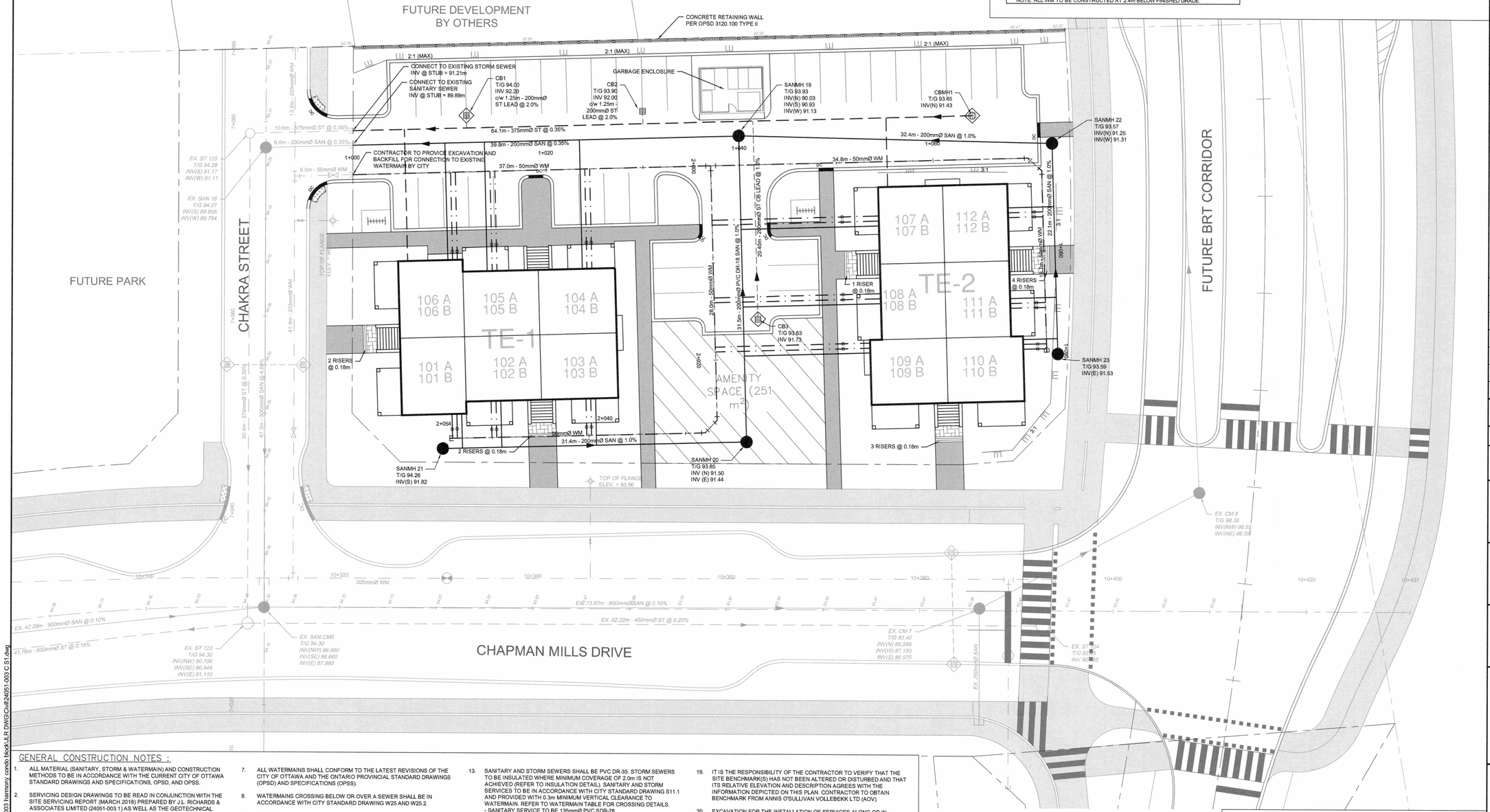
NOTE: ALL WM TO BE CONSTRUCTED AT 2.4m BELOW FINISHED GRADE.

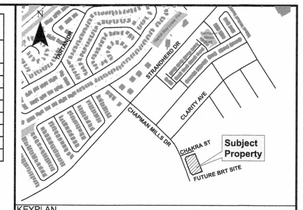
WATERMAIN TABLE-Sta. 2+000.00 TO 2+054.40

PVC DR-18 CL.150

SIZE	STATION ALONG WM	DETAIL	FINISHED GRADE	TOP OF WM
50mmØ	2+000.00	50 x 50 TEE CONNECTION	94.01	91.61
	2+026.20	45° HORIZONTAL BEND	93.94	91.54
	2+028.00	45° HORIZONTAL BEND	93.93	91.53
	2+039.20	WM CROSSING OVER SAN SERVICE	94.26	91.86
	2+049.00	WM CROSSING OVER SAN SERVICE	94.30	91.90
	2+053.10	WM CROSSING UNDER SAN SERVICE	94.32	91.92
	2+054.40	CAP	94.33	91.93

NOTE: ALL WM TO BE CONSTRUCTED AT 2.4m BELOW FINISHED GRADE.





KEYPLAN

LEGEND

- EXISTING CATCH BASIN
- CATCH BASIN c/w ICD
- CATCH BASIN MAINTENANCE HOLE c/w ICD
- PROPOSED CATCH BASIN LEAD
- PROPOSED WATERMAIN, HYDRANT, VALVE & VALVE BOX AND REDUCER
- PROPOSED WATERMAIN c/w STAND POST
- EXISTING WATERMAIN, VALVE & HYDRANT
- PROPOSED STORM SEWER & MANHOLE
- EXISTING STORM SEWER & MANHOLE
- PROPOSED SANITARY SEWER & MANHOLE
- EXISTING SANITARY SEWER & MANHOLE
- PROPOSED TERRACING (MAX 2:1)
- ASPHALT WALKWAY
- CONCRETE SURFACE (HARMONY STAGE 1)
- INTERLOCK PAVING STONES
- CONCRETE RISERS
- CONCRETE BARRIER CURB
- DEPRESSED CURB
- CONCRETE RETAINING WALL c/w WOOD PRIVACY SCREEN
- BICYCLE RACK
- TACTILE WALKING SURFACE INDICATOR

No.	ISSUE / REVISION	DD/MM/YY
1	ISSUED FOR SITE PLAN SUBMISSION	08/03/18

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VERIFY SHEET SIZE AND SCALES. BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING. 0 25mm

SCALE: 1:200

CLIENT:
MINTO COMMUNITIES INC.
200-180 KENT STREET
OTTAWA, ON
K1P 0B6

CONSULTANT: www.jlrichards.ca
J.L.Richards ENGINEERS · ARCHITECTS · PLANNERS

CONSULTANT:

PROFESSIONAL STAMP
LICENSED PROFESSIONAL ENGINEER
H. R. MACKAY
100186588
PROVINCE OF ONTARIO
March 8/18

PROJECT NORTH

PROJECT:
MINTO COMMUNITIES INC.
HARMONY STAGE 1
BLOCK 104
4025 STRANDHERD DRIVE

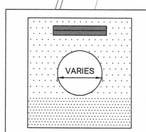
DRAWING:
SITE SERVICING PLAN

DESIGN: JW
DRAWN: CJM
CHECKED: HM
JLR #: 24051-003
DRAWING #: S1

PLOT DATE: March 8, 2018 12:01:30 PM

GENERAL CONSTRUCTION NOTES :

1. ALL MATERIAL (SANITARY, STORM & WATERMAIN) AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS, OPSD, AND OPSS.
2. SERVICING DESIGN DRAWINGS TO BE READ IN CONJUNCTION WITH THE SITE SERVICING REPORT (MARCH 2018) PREPARED BY J.L. RICHARDS & ASSOCIATES LIMITED (24051-003.1) AS WELL AS THE GEOTECHNICAL INVESTIGATION REPORT (JUNE 29, 2016) PREPARED BY PATERSON GROUP INC. (PG1984-2).
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL, REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION AND ALL ASSOCIATED WORKS TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA.
5. ALL CONNECTIONS TO EXISTING WATERMAIN STUBS TO BE COMPLETED BY CITY OF OTTAWA FORCES. CONTRACTOR TO PROVIDE EXCAVATION BACKFILLING, COMPACTION AND REINSTATEMENT, IN ACCORDANCE WITH CURRENT CITY SPECIFICATIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE, VIA EXCAVATION, THE EXACT LOCATION AND ELEVATION OF THE EXISTING WATERMAINS, SEWERS AND UNDERGROUND STRUCTURES AS REQUIRED FOR ALL CONNECTIONS, RELOCATIONS AND BLANKINGS.
7. ALL WATERMAINS SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
8. WATERMAINS CROSSING BELOW OR OVER A SEWER SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWING W25 AND W25.2.
9. PROVIDE A MINIMUM OF 2.4m COVER ON ALL WATERMAINS AND WATER SERVICES. OTHERWISE PROVIDE THERMAL INSULATION AS PER CITY STANDARD DRAWING W22 (IN SHALLOW TRENCHES) AND W23 (AT OPEN STRUCTURES).
10. WATERMAIN THRUST BLOCKS TO BE CONSTRUCTED PER CITY STANDARD DRAWINGS W25.3 AND W25.4.
11. AT ALL CONNECTION POINTS, REINSTATE SURFACES TO EXISTING CONDITION OR BETTER.
-ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING No. R10.
-THICKNESS OF GRANULARS AND ASPHALT LAYERS SHALL MATCH EXISTING
-BOULEVARDS SHALL BE REINSTATED WITH MINIMUM 100mm TOPSOIL AND SOD.
12. WATERMAIN SERVICES TO BE 19mmØ PEX c/w CURB STOP AS PER CITY STANDARD DRAWING W26. WHERE SERVICES CROSS SEWERS, SERVICES TO BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DRAWING W38.
13. SANITARY AND STORM SEWERS SHALL BE PVC DR-35. STORM SEWERS TO BE INSULATED WHERE MINIMUM COVERAGE OF 2.0m IS NOT ACHIEVED (REFER TO INSULATION DETAIL). SANITARY AND STORM SERVICES TO BE IN ACCORDANCE WITH CITY STANDARD DRAWING S11.1 AND PROVIDED WITH 0.3m MINIMUM VERTICAL CLEARANCE TO WATERMAIN. REFER TO WATERMAIN TABLE FOR CROSSING DETAILS.
- SANITARY SERVICE TO BE 135mmØ PVC SDR-28
- STORM SERVICE TO BE TO BE 100mmØ PVC SDR-28
14. ALL STORM & SANITARY MANHOLES TO BE 1200Ø UNLESS OTHERWISE NOTED AS PER OPSD 701.010 c/w FRAME AND COVERS AS PER CITY STANDARD DRAWINGS 24 AND 24.1. SANITARY MAINTENANCE HOLES TO HAVE WATERTIGHT COVERS AS PER OPSD 401.030. STORM CATCHBASIN MAINTENANCE HOLES TO HAVE COVERS AS PER CITY OF OTTAWA STANDARD DRAWING S28.1.
15. ALL ONSITE CATCH BASINS TO BE 600x600mm PRECAST CONCRETE PER OPSD 705.010 c/w FRAME AND COVER AS PER CITY STANDARD DRAWING S19.
16. SERVICES TO BE TERMINATED 1.0m FROM BUILDING WALL (TYPICAL).
17. CONCRETE CURB TO BE BARRIER TYPE AS PER CITY STANDARD DRAWING SC1.1.
18. CONCRETE SIDEWALKS AND WALKWAYS TO BE CONSTRUCTED AS PER CITY OF OTTAWA DETAIL SC2 (OR SC1.4) AND SC4.
19. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION DEPICTED ON THIS PLAN. CONTRACTOR TO OBTAIN BENCHMARK FROM ANNIS O'SULLIVAN VOLLEBEKK LTD (AOV).
20. EXCAVATION FOR THE INSTALLATION OF SERVICES ALONG OR IN PROXIMITY OF A BUILDING OR A STRUCTURE IS TO BE CONTAINED WITHIN A TRENCH BOX WIDTH AND IS TO ENSURE NO CONFLICT WITH ANY FUTURE FOOTINGS. SELECT SUBGRADE MATERIAL, COMPACTED TO 100% SPD TO 1.0m BELOW EXISTING GRADE FOR FULL TRENCH WIDTH OF DISTURBED AREA SHALL BE USED FOR BACKFILL, INCLUDING ALONG ANY SEWERS AND WATERMAINS ADJACENT TO A BUILDING OR OTHER STRUCTURE.
21. BUILDERS TO INSTALL PRESSURE REDUCING VALVES ON ALL WATER SERVICES.
22. PAVEMENT DESIGN TO BE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT (JUNE 29, 2016) PREPARED BY PATERSON GROUP INC. (PG1984-2):
- 40mm WEAR COURSE - SP12.5
- 50mm BINDER COURSE - SP19.0
- 150mm BASE - OPSS GRANULAR A
- 375mm SUBBASE - OPSS GRANULAR B, TYPE II
23. REFER TO LANDSCAPING PLANS PREPARED BY NOVATECH FOR DETAILS REGARDING THE AMENITY SPACE.



INSULATION REFERENCE TABLE	
EARTH COVER	REQUIRED INSULATION THICKNESS
2.0m - 1.8m	25mm
1.8m - 1.5m	50mm
1.5m - 1.2m	75mm

1. SEWER INSTALLATION (INCLUDING BEDDING AND COVER) TO BE PER CITY OF OTTAWA TRENCH DETAIL S6
2. INSULATION POINTS TO BE STAGGERED, WITH MINIMUM 0.3 OVERLAP
3. INSULATION TO BE CENTERED OVER PIPE WITH MINIMUM WIDTH OF 1.2m
4. INSULATION TO BE PROVIDED AT ALL SEWER LOCATIONS WHERE MINIMUM COVERAGE OF 2.0m IS NOT ACHIEVED.

INSULATION DETAIL

N.T.S.

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