## WATERMAIN

- . ALL WATERMAIN AND WATER SERVICE MATERIALS AND INSTALLATION SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS.
- 2. ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m. THERMAL INSULATION SHALL BE INSTALLED WHERE ADEQUATE SEPARATION CANNOT BE ACHIEVED AS PER CITY STANDARD W21, W22
- 3. ALL WATERMAIN WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS. NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS INSPECTOR IS ON SITE. WATERMAIN CONNECTIONS BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION BACKFILL AND ROAD REINSTATEMENT BY CONTRACTOR.
- 4. WATERMAIN IS TO BE PVC DR18 WITH TRACER WIRE AS PER CITY OF OTTAWA STANDARD W36 UNLESS OTHERWISE NOTED.
- 5. VALVE BOXES AS PER CITY OF OTTAWA DETAIL W24.
- 6. ALL FIRE HYDRANTS TO BE INSTALLED AS PER CITY STANDARD W19 AND LOCATED AS PER CITY STANDARD W18 AND/OR CITY STANDARD CROSS
- 7. WATERMAIN BEDDING IS TO BE AS PER CITY OF OTTAWA DETAIL W17.
- 8. THRUST BLOCKS AND RESTRAINT AS PER CITY OF OTTAWA DWGS: W25.3, W25.4, W25.5 AND W25.6.
- 9. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS PER CITY OF OTTAWA DWGS: W39, W40,
- 10. IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.
- 11. DISINFECTION AND TESTING OF WATERMAIN TO BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.

## 12. WATER SERVICES TO BE INSTALLED AS PER CITY OF

THE SUBGRADE.

OF OTTAWA STANDARDS.

OTTAWA STANDARD W26 AND W35. 13. WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN

RECEPTACLE SHALL BE IN ACCORDANCE WITH CITY

- 2. SEWER BEDDING AS PER CITY STANDARD S6 & S7. 14. INSTALLATION OF WATER METER AND REMOTE
  - 3. ALL SANITARY SEWERS ARE TO BE THE SIZES INDICATED AND THE MATERIAL SHALL BE PVC SDR35.

1. SANITARY AND STORM SEWER MATERIALS AND INSTALLATION

STANDARD DRAWINGS AND SPECIFICATIONS AND OPSS 407

SHALL CONFORM TO THE CURRENT CITY OF OTTAWA

STORM AND SANITARY SEWERS

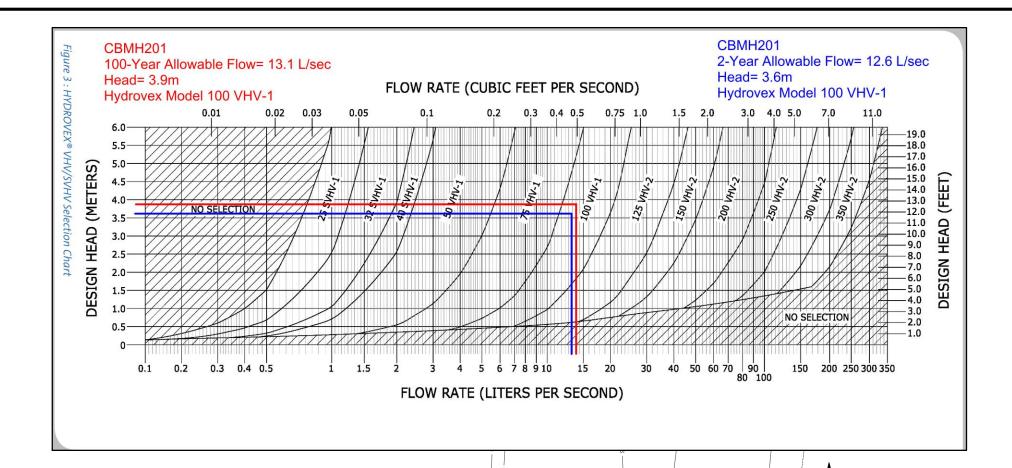
AND 410.

GRANULAR 'A'.

- 4. ALL STORM SEWERS ARE TO BE THE SIZES INDICATED AND THE MATERIAL SHALL BE PVC SDR35 OR REINFORCED CONCRETE IN ACCORDANCE WITH CSA STANDARDS A257.2
- AND A257.3 (JOINTS). 5. ALL MANHOLES, CATCHBASINS AND CATCHBASIN MANHOLES TO BE BACKFILLED WITH MIN. 0.3m HORIZONTAL THICKNESS
- 6. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN TO WITHIN 1.0m OF BUILDING WALLS AND PROVIDE TEMPORARY CAPS.
- 7. THE CONTRACTOR SHALL CONDUCT INFILTRATION/EXFILTRATION (AS PER CURRENT OPSS) TESTING ON ALL NEWLY INSTALLED SANITARY SEWERS. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWER INSTALLATION AND SUPERVISED BY
- 8. THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED STORM AND SANITARY SEWERS AND EXISTING SEWERS CONNECTED TO. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED AND SUPERVISED BY THE ENGINEER.
- 9. ALL SERVICE CONNECTIONS TO BE CONSTRUCTED AS PER CITY STANDARD S11 & S11.1.
- 10. ALL SANITARY BUILDING DRAINS TO BE EQUIPPED WITH SANITARY BACKWATER VALVES INSTALLED PER CITY OF OTTAWA STANDARD DRAWING S14.1.
- 11. MINIMUM SOIL COVER TO BE 2.0m TO PROTECT SEWERS FROM FROST DAMAGE. IN AREAS WHERE ADEQUATE COVER CANNOT BE ACHIEVED, THERMAL INSULATION TO BE INSTALLED AS PER OPSD 514.010.

- 12. SUBDRAINS LOCATED IN THE AREA OF PAVEMENT SHALL HAVE INVERTS APPROXIMATELY 300mm BELOW THE SUBGRADE LEVEL AS PER THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY PATERSON GROUP DATED NOVEMBER 2018.
- 13. AN UNDERFLOOR DRAINAGE SYSTEM IS REQUIRED TO BE INSTALLED AS PER THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY PATERSON GROUP DATED NOVEMBER 2018.
- 14. PROPOSED PHASE 2 BUILDING ROOF DRAINS TO BE WATTS ACCUTROL MODEL# RD-200-A-ADJ.

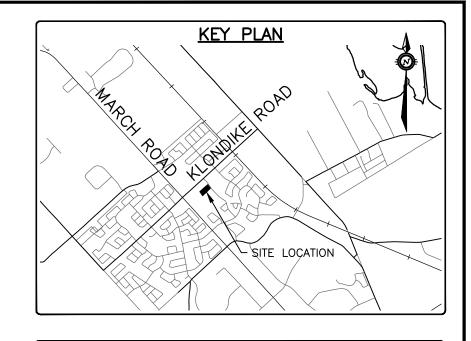
WATERMAIN TABLE									
STATION	FIN/GRADE	T/W GRADE	COMMENT						
0+03.25	76.90	74.50	THRUST BLOCK						
0+05.09	76.75	74.35	THRUST BLOCK						
0+06.09	76.75	74.35	THRUST BLOCK						
0+010	76.85	74.45	TOP OF WATERMAIN						
0+011.75	76.90	74.50	WM CAPPED						



I EX STMMH

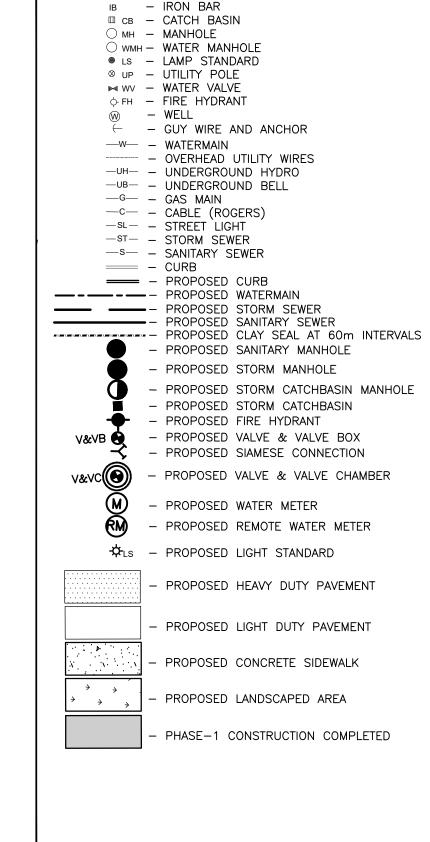
|NW|/NV=7

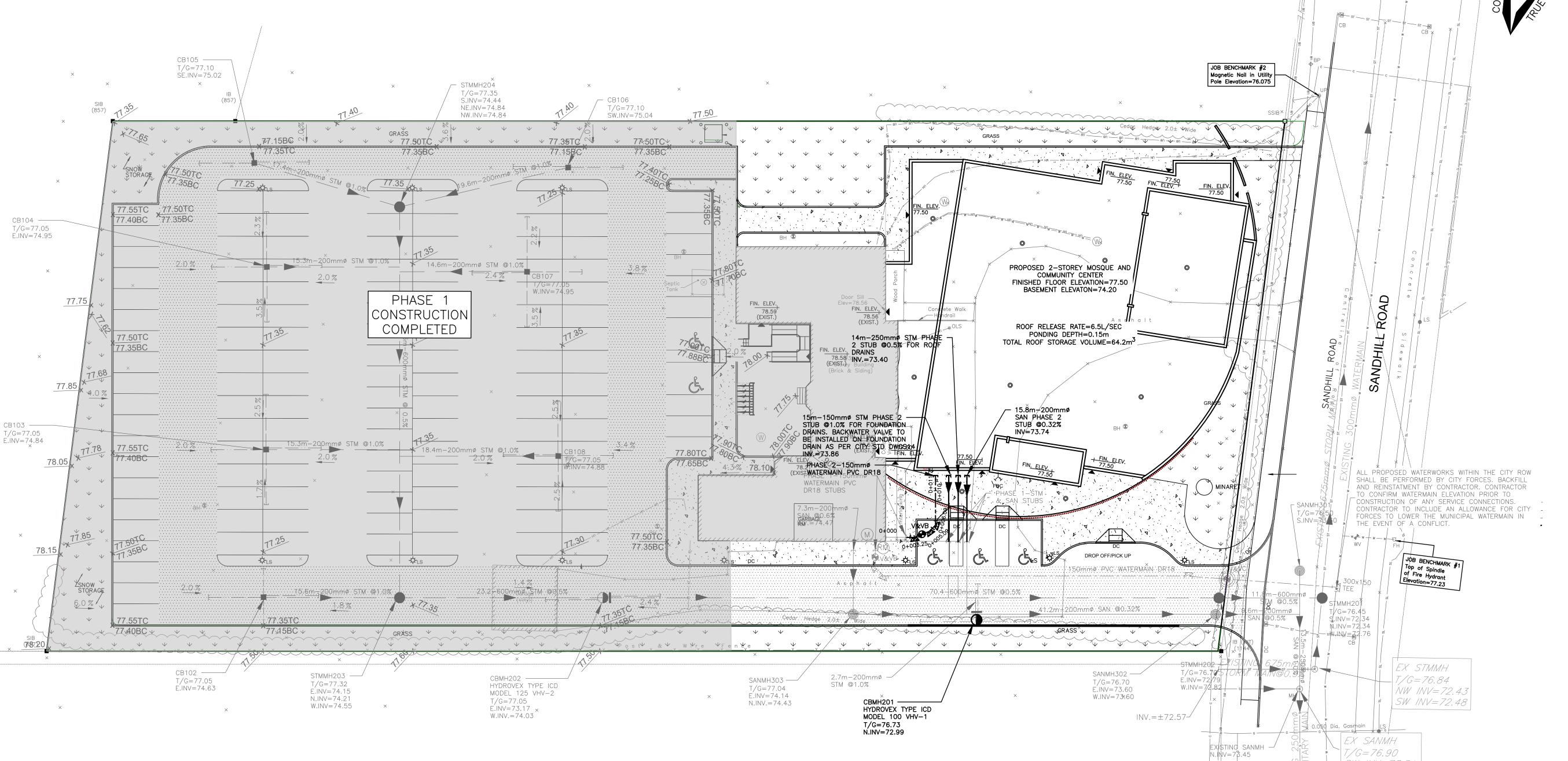
SE //V=71.



<u>LEGEND</u>

SIB - STANDARD IRON BAR





IE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE OSITION OF SUCH UTILITIES AND TRUCTURES IS NOT GUARANTEED. BEFORE TARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND

STRUCTURES AND ASSUME ALL LIABILITY FOR

AMAGE TO THEM.

**PRELIMINARY** NOT FOR CONSTRUCTION

I						6	REVISED AS PER CITY COMMENTS	19/02/19	ΑE	AA	SCALE
	11	REVISED AS PER THE REVISED PHASE 2 SITE PLAN	10/02/22	AJ	AA	5	REVISED AS PER CITY COMMENTS	02/11/18	ΑE	AA	0 2m 4m 10m
	10	REVISED GRADING & STRUCTURES TOP OF GRATES	15/10/19	ΑE	AA	4	ISSUED FOR COORDINATION	02/10/18	ΑE	AA	HORIZONTAL 1:250
	9	REMOVED RETAINING WALL AT SOUTH PROPERTY LINE	24/05/19	ΑE	AA	3	ISSUED FOR SITE APPROVAL	29/06/18	ΑE	AA	NORTH
I	8	REVISED AS PER CITY COMMENTS	16/04/19	ML	AA	2	ISSUED FOR COORDINATION	06/06/18	ML	AA	
	7	REVISED PHASE 2 SERVICE STBUS	09/04/19	ML	AA	1	ISSUED FOR COORDINATION	10/05/18	ML	AA	
I	NO.	REVISION DESCRIPTION	DATE	BY	APPD	NO.	REVISION DESCRIPTION	DATE	BY	APPD	

KANATA MUSLIM ASSOCIATION 832 MARCH ROAD, OTTAWA, ON. K2W 0C9 613.973.5000  **POJECT KMA MOSQUE AND COMMUNITY CENTRE 351 SANDHILL ROAD, OTTAWA, ON  CHECKED AA  CAD  SURVEY F M & W  DATE 2016-12-09  DRAWING No.  SITE SERVICING PROJECT No. OTT-00238504-A0 SURVEY F M & W  DATE 2016-12-09  DRAWING No.  SST-2	915   1511/	//// <u>=</u> 73 51				
**EXP OC9 613.973.5000    ML	CLIENT KANATA N	MUSLIM ASSOCIATION			MOSOLIF AND COMMUNITY	
613.973.5000    Exp Services Inc.   CAD   ML   PROJECT MANAGER   AA   SITE SERVICING   SITE SERVICING   PROJECT MANAGER   AA   APPROVED   AA   AA   AA   AA   AA   AA   AA	832 MAR	· · · · · · · · · · · · · · · · · · ·				
** EXPOSE THE ASSABLE SERVICING District, Unit 100 Ottawa, ON K2B 8H6 Canada www.exp.com  ** BUILDINGS • EARTH & ENVIRONMENT • ENERGY • DISTRICT CANADA AND SITE SERVICING PHASE 2  ** BUILDINGS • EARTH & ENVIRONMENT • ENERGY • DISTRICT CANADA AND PROVED AND PHASE 2  ** BUILDINGS • EARTH & ENVIRONMENT • ENERGY • DISTRICT CANADA AND PROVED AND PHASE 2						
	<b>*</b> ехр.	t +1.613.688.1899   f: +1.613.225.7330 2650 Queensview Drive, Unit 100 Ottawa, ON K2B 8H6 Canada www.exp.com  • BUILDINGS • EARTH & ENVIRONMENT • ENERGY •	ML PROJECT MANAGER AA APPROVED	TITLE		