## GENERAL NOTES

- . CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION.
- 3. JOB BENCH MARK CONFIRM WITH exp SERVICES INC. PRIOR TO

2. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS.

- 4. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED. ALL DRAWINGS SHOULD NOT BE SCALED BY THE CONTRACTOR. ANY MISSING
- OR QUESTIONABLE DIMENSIONS ARE TO BE CONFIRMED WITH THE CONSULTANT IN WRITING. CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARD DRAWING SUPPLEMENTS WHERE
- APPLICABLE AND ONTARIO PROVINCIAL STANDARDS SHALL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE. ANY DISCREPANCIES, INTERPRETATIONS, CHANGES AND ADDITIONS TO THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE
- ENGINEER, WHEN NOTED AND BEFORE PROCEEDING WITH CONSTRUCTION REFER TO ARCHITECT'S SITE PLAN FOR BUILDING DIMENSIONS AND SITE
- PRIOR TO COMMENCEMENT OF CONSTRUCTION. REFER TO THE LANDSCAPE ARCHITECT'S PLAN FOR SIDEWALK, PATHWAYS,

LAYOUT. DIMENSIONS AND LAYOUT INFORMATION SHALL BE CONFIRMED

PLANTING AND OTHER LANDSCAPE FEATURE MATERIALS AND LOCATIONS.

AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR

- 9. FOR GEOTECHNICAL INFORMATION REFER TO THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY PATERSON GROUP DATED AUGUST
- 10. ALL DISTURBED AREAS TO BE REINSTATED TO EQUAL OR BETTER CONDITION. ALL NEW WORK SHALL TIE INTO EXISTING. 1. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING
- 12. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAWCUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT.

CATCHBASIN OUTLETS ARE PROVIDED.

T/G=77.05

CB103 -

T/G=77.05

E.INV=74.50

E.INV=74.65

77.8

- 13. CONTRACTOR IS TO COMPLY WITH THE CITY OF OTTAWA REQUIREMENTS FOR TRAFFIC CONTROL WHEN WORKING ON CITY STREETS.
- 4. ALL MATERIAL SUPPLIED AND PLACED FOR PARKING LOT AND ACCESS ROAD CONSTRUCTION SHALL BE TO CITY OF OTTAWA AND OPSS STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED (CONSTRUCTION OPSS 206, 310 & 314 MATERIALS OPSS 1001, 1003 & 1010).

T/G=77.05

2.0%

CB102 ---

T/G=77.05

E.INV=74.26

SE.INV=74.68

- 15. THE CONTRACTOR SHALL CONFIRM LOCATIONS AND ELEVATIONS OF EXISTING SERVICES AND STRUCTURES TO BE CONNECTED TO AND EXISTING SERVICES THAT MAY BE DAMAGED OR CAUSE CONFLICTS PRIOR TO CONSTRUCTION OF ANY NEW SEWER, WATER AND/OR STORM WATER WORKS. THE ENGINEER SHALL BE INFORMED IMMEDIATELY OF ANY ERRORS, DISCREPANCIES, CONFLICTS, OMISSIONS etc THAT ARE FOUND. DO NOT CONTINUE CONSTRUCTION IN AREAS WHERE DISCREPANCIES APPEAR UNTIL SUCH DISCREPANCIES HAVE BEEN RESOLVED.
- 16. THE CONTRACTOR SHALL PROTECT ANY SUCH EXISTING SERVICES & FACILITIES. SUCH REQUIRED MEASURES INCLUDE, BUT ARE NOT LIMITED TO: ENSURE ALL CONCERNED UTILITIES HAVE LOCATED THEIR PLANT PRIOR TO ANY EXCAVATING, LOCATE AND FLAG/PAINT THE LOCATIONS OF OTHER U/G PLANT WHICH MIGHT BE DAMAGED BY EXCAVATION AND CONSTRUCTION TRAFFIC, HAND DIG IN PROXIMITY TO EXISTING BURIED SERVICES TO LOCATE THEM WITHOUT ANY RESULTING DAMAGE, BRACE AND SUPPORT WHERE REQUIRED.
- 17. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES FOR THE PROTECTION OF THE AREA'S DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, USING FILTER CLOTH UNDER GRATES OF CATCHBASINS AND MANHOLES AND INSTALLING SILT FENCES AND OTHER EFFECTIVE SEDIMENT TRAPS. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE 5. VALVE BOXES AS PER CITY OF OTTAWA DETAIL REGULATORY AGENCY.
- 18. DESIGN ELEVATIONS GIVEN ON THESE PLANS ARE TO BE ADHERED TO WITH NO CHANGES WITHOUT PRIOR WRITTEN APPROVAL BY exp SERVICES INC. SURFACE PONDING STORAGE VOLUMES AND INLET CONTROL DEVICE DIMENSIONS MUST COMPLY WITH THE DESIGN REPORT PREPARED BY exp SERVICES INC FOR THIS PROJECT.
- 19. THE CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE FOR DEWATERING, SUPPORT AND PROTECTION OF EXCAVATIONS AND TRENCHING AS WELL AS RELEASE OF ANY PUMPED GROUND WATER IN A CONTROLLED AND APPROVED MANNER. THE CONTRACTOR SHALL APPLY FOR A PERMIT TO TAKE WATER FROM THE MINISTRY OF ENVIRONMENT IF MORE THAN 50,000 LITRES PER/DAY OF GROUNDWATER IS PUMPED FOR CONSTRUCTION ACTIVITIES.
- 20. FOR TOPOGRAPHICAL INFORMATION REFER TO PLAN PREPARED BY FAIRHALL MOFFATT & WOODLAND LTD. FOR LEGAL PROPERTY LINE
- 21. CITY INSPECTOR IS TO NOTIFIED OF ANY WORKS IN THE ROW WITH SUFFICIENT NOTICE.

T/G=77.35

S.INV=74.34

NE.INV=74.59

NW.INV=74.59

- 0

CB107

W.INV=74.6

BT/G=77.05

12.8m-200mmø STM @ 0.5%

17.1m-200mmø STM @ 0.5%

CBMH203 c/w PLUG

TYPE ICD 90mmø

T/G=77.00

E.INV=74.00

W.INV.=74.03

22. CLAY SEAL TO BE AS PER OPSD 802.095.

17.1m-200mme STM @ 0.5%

1m-200mmø STM @ 0.5%

17.1m-200mmø STM @ 0.5%

1.8%

CBMH204

T/G=77.35

E.INV=74.14

N.INV=74.17

W.INV=74.36 ×

2.0%

- ALL WATERMAIN AND WATER SERVICE MATERIALS AND INSTALLATION SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS.
- . 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 AND W23,
- ALL WATERMAIN WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS. NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS INSPECTOR ON SITE. WATERMAIN CONNECTIONS BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION BACKFILL AND ROAD REINSTATEMENT BY CONTRACTOR.
- WATERMAIN IS TO BE PVC DR18 WITH TRACER WIRE AS PER CITY OF OTTAWA STANDARD W36 UNLESS OTHERWISE NOTED.
- 6. ALL FIRE HYDRANTS TO BE INSTALLED AS PER CITY STANDARD W19 AND LOCATED AS PER CITY STANDARD W18 AND/OR CITY STANDARD CROSS SECTIONS.
- 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
- 9. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS PER CITY OF OTTAWA DWGS:
- 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.

CB106

T/G=77.05

SW.INV=74.69

- 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 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
- 14. INSTALLATION OF WATER METER AND REMOTE RECEPTACLE SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.

FROST HEAVING IN THE SUBGRADE.

## ROADWAYS & CURBS

- 1. ASPHALT REINSTATEMENT AS PER CITY OF OTTAWA STANDARD DRAWING R10.
- 2. CURBS TO BE CONCRETE BARRIER CURBS AS PER CITY OF OTTAWA STANDARD DRAWING
- 3. THE CONTRACTOR SHALL COMPLETE ALL RESTORATION WITHIN CITY ROW'S TO A CONDITION EQUAL TO ORIGINAL OR BETTER AND TO THE SATISFACTION OF THE MUNICIPAL AUTHORITIES.

## STORM AND SANITARY SEWERS

- 1. SANITARY AND STORM SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS AND OPSS 407 AND 410.
- 2. SEWER BEDDING AS PER CITY STANDARD S6 & S7.
- 3. ALL SANITARY SEWERS ARE TO BE THE SIZES INDICATED AND THE MATERIAL SHALL BE PVC SDR35.
- 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
- 5. ALL MANHOLES, CATCHBASINS AND CATCHBASIN MANHOLES TO BE BACKFILLED WITH MIN. 0.3m HORIZONTAL THICKNESS GRANULAR 'A'.
- 6. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN TO WITHIN 1.0m OF BUILDING WALLS AND PROVIDE TEMPORARY CAPS.

(Brick & Siding)

FFL=78.57

TOP OF BASEMENT

SLAB=75.59

18.05 WATER SERVICE

SERVICE POST ASSEMBLY

AS PER CITY OF OTTAWA

T/G=76.65

E.INV=73.95

N.INV.=74.60

STD DWG W35

SAN @0.6% INV.=74.56

AND WATERMAIN TO BE

REMOVED IN PHASE II

7.3m-150mmø

OPSD No. OR OPSD No. STRUCTURE OR CITY LABEL CITY STD DWG SANMH 301 | 1200mmØ 701.010 401.010-A SANMH 302 | 1200mmØ 701.010 401.010-A SANMH 303 | 1200mmØ 701.010 401.010-A 600mm 705.010 x 600mm STMMH 201 | 1500mmØ | 701.010 STMMH 202 | 1200mmØ 701.010 CBMH 203 | 1200mmØ | 701.010 701.010 CBMH 204 | 1200mmØ CBMH 204 | 1200mmØ | 701.010

TRUCTURE

STRUCTURE TABLE

		WATERMAIN / SEWER CROSSING TABLE											
	400.020												
	401.010-B	-		SANITARY SEWER			STORM SEWER			WATERMAIN			
	401.010-B	LOCATION	LOCATION		Dia.	Obvert	Invert	Dia.	Obvert	Invert	Dia.	Obvert	CLEARANCES
	401.010-B		Elev	(mm)	Elev	Elev	(mm)	Elev	Elev	(mm)	Elev	(mm)	
	401.010-B	F	Λ	73.83	150	73.98				74.23	200	74.43	250mm (SAN Below
_	401.010-B	F	A				73.74	200	73.94	74.19	200	74.39	250mm (STM Below
		F	<b>A</b>				73.74	150	73.89	74.14	200	74.34	250mm (STM Below
		r	4	74.43	150	74.58	73.73	600	74.33				100mm (STM Below
			<u>A</u>	73.55	150	73.7	73.93	200	74.13				230mm (SAN Below
			<b>₽</b>	73.5	150	73.65				73.90	200	74.10	250mm (SAN Below
			Δ				73.83	600	74.43	73.90	200	74.10	470mm (STM Below
			<u> </u>	74.59	150	74.74	73.85	600	74.45	*			140mm (STM Below

3elow) 3elow 3elow) Below) Below) Below)

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 THE ENGINEER. 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

10. ALL SANITARY BUILDING DRAINS TO BE EQUIPPED WITH SANITARY BACKWATER VALVES INSTALLED PER CITY OF OTTAWA STANDARD DRAWING S14.1.

STANDARD S11 & S11.1.

OPSD 514.010.

SAWCUT EXISTING

EXISTING GRADES

ASPHALT AND MÂTCH

15m-200mmø

STM @0.5%

15m-150mm

STM @1.0%

0+040 200mmø PVC WATERMAIN DR18/

SANMH302

T/G=76.80

E9NV=73.62

W.INV=73.65

N.INV.=74.43

1.7%

STMMH202

T/G=76.55°

E.INV=73.64

W.INV=73.67

INV.=73.82

. 77.27

WATERMETER AND REMOTE

PHASE II CONSTRUCTION

RECEPTACLE TO BE

RELOCATED DURING

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

Asphalt

SAN @0.5%

INV=74.51

PVC DR18

T/G = 76.50

W.INV=73.56

SE.INV=73.53

T.V.S. CONNECTION

c/w 200X50mm

REDUCER

JOB BENCHMARK #2 Magnetic Nail in Utility

Pole Elevation=76.075

X STMMH NW INV=71. SE INV=71.4

SITE LOCATION **LEGEND** SIB - STANDARD IRON BAR ıв — IRON BAR Ш св − CATCH BASIN Эмн — MANHOLE WMH - WATER MANHOLE ⊕ LS − LAMP STANDARD ₩ W - WATER VALVE ் FH - FIRE HYDRANT w − WELL — GUY WIRE AND ANCHOR ---w-- - WATERMAIN - OVERHEAD UTILITY WIRES --UH- - UNDERGROUND HYDRO -UB- - UNDERGROUND BELL -G- - GAS MAIN -c- - CABLE (ROGERS) -sl- - STREET LIGHT

KEY PLAN

-st- - STORM SEWER —s— - SANITARY SEWER - CURB - PROPOSED CURB - PROPOSED STORM SEWER - PROPOSED SANITARY SEWER ----- PROPOSED CLAY SEAL - PROPOSED SANITARY MANHOLE - PROPOSED STORM MANHOLE

 PROPOSED STORM CATCHBASIN MANHOLE - PROPOSED STORM CATCHBASIN PROPOSED FIRE HYDRANT - PROPOSED VALVE & VALVE BOX PROPOSED SIAMESE CONNECTION

 PROPOSED WATER METER - PROPOSED REMOTE WATER METER PROPOSED ELEVATION

PROPOSED HEAVY DUTY PAVEMENT

EXISTING ELEVATION

PROPOSED CONCRETE SIDEWALK

PROPOSED LIGHT DUTY PAVEMENT

TERRACING 3:1 MAX

- - - - - - 150mm PERFORATED SUBDRAIN

HIGH POINT

WATERMAIN TABLE STATION | FIN/GRADE COMMENT T/W GRADE 0+000 76.45 TIE INTO EXISTING WATERMAIN ON SANDHILL RD VALVE AND VALVE BOX 0+012.5 76.51 0+016.9 THRUST BLOCK THRUST BLOCK AND 150mmØ WM CONNECTION 0+027 76.56 74.30 0+029.5\* 76.54 74.43 SAN CROSSING 0+030.5\* 76.54 STM CROSSING STM CROSSING 0+031.5\* 76.53 74.34 0+040 76.60 TOP OF WATERMAIN 74.53 76.50 THRUST BLOCK AND FH CONNECTION 0+049.3

76.55 \* NOTE: THERMAL INSULATION SHALL BE INSTALLED WHERE MINIMUM COVER CANNOT BE ACHIEVED AS PER CITY OF OTTAWA STD DWG W21, W22 AND W23

TO CONFIRM WATERMAIN ELEVATION PRIOR TO CONSTRUCTION OF ANY SERVICE CONNECTIONS CONTRACTOR TO INCLUDE AN ALLOWANCE FOR CITY FORCES TO LOWER THE MUNICIPAL WATERMAIN IN THE EVENT OF A CONFLICT.

SAWCUT EXISTING ASPHALT

OF OTTAWA STD DWG R10

T/G=76.45

S.INV=72.33

N.INV = 72.33

WINV.=73.56

'G=76.90

SW INV=73.57

SE INV=73.42

BREAK INTO EXISTING

1500mmø STMMH201

└-600mmø STM AND INSTALL

AND REINSTATE AS PER CITY

76.84

ALL PROPOSED WATERWORKS WITHIN THE CITY ROW

SHALL BE PERFORMED BY CITY FORCES. BACKFILL

AND REINSTATMENT BY CONTRACTOR, CONTRACTOR

ROA

FIRE ROUTE (HEAVY DUTY) PARKING AREAS (LIGHT DUTY) BARRIER CURB PER-CITY STANDARD SC1.1 - 40mm HL 3 --- 50mm HL 3 - 50mm HL 8 150mm OPSS GRANULAR "A" 150mm OPSS GRANULAR "A" OPSS GRANULAR "B" TYPE II - 300mn OPSS GRANULAR "B" TYPE II - 450mm INS ITU SOIL SUBASE OR OPSS GRANULAR B TYPE I OR II ATERIAL PLACED OVER IN SITU SOIL OPSS GRANULAR B TYPE I OR II MATERIAL PLACED OVER IN SITU SOIL

REMOVE ALL ORGANICS AND DELETERIOUS MATERIALS UNDERLYING PAVEMENT CONSTRUCTION.
SUPPLY AND INSTALL SUBGRADE FILL THAT HAS PRIOR APPROVAL BY GEOTECHNICAL CONSULTANT.
PLACE AND COMPACT SUBGRADE FILL IN MAX 300mm LIFTS. COMPACT TO MIN. 98% SPMDD. PROOF ROLL SUBGRADE IN PRESENCE OF GEOTECHNICAL CONSULTANT DIRECTED BY GEOTECHNICAL CONSULTANT.

0+051.3

EXCAVATE SOFT AREAS AND REPLACE WITH APPROVED NATIVE OR GRANULAR MATERIAL AS COMPACT GRANULARS TO MIN. 98% SPMDD. SUPPLY AND PLACE WATER NECESSARY TO ACHIEVE SPECIFIED COMPACTION. INSTALLED GRANULAR "B" TO BE APPROVED BY GEOTECHNICAL CONSULTANT PRIOR TO INSTALLATION OF GRANULAR "A".

MINIMUM PERFORMANCE GRADED 58-34 ASPHALT CEMENT TO BE USED. INSTALLED GRANULAR "A" SHALL BE APPROVED BY GEOTECHNICAL CONSULTANT PRIOR TO INSTALLATION OF ASPHALT. PAVEMENT MAKE-UP AND INSTALLATION TO COMPLY WITH THE GEOTECHNICAL REPORT REPORT PREPARED BY PATERSON GROUP, DATED AUGUST 25 2017

PAVEMENT DETAIL

E 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 POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

TARTING WORK, DETERMINE THE EXACT

STRUCTURES AND ASSUME ALL LIABILITY FOR

OCATION OF ALL SUCH UTILITIES AND

DAMAGE TO THEM.

APPROVED

REFUSED

DERRICK MOODIE, MANAGER

DEVELOPMENT REVIEW WEST

PLANNING INFRASTRUCTURE AND ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

> **PRELIMINARY** NOT FOR CONSTRUCTION

HORIZONTAL ISSUED FOR SITE PLAN APPROVAL 29/06/18 AE 13/09/17 | ML ISSUED FOR SITE PLAN APPROVAL DATE BY APP REVISION DESCRIPTION

CB101 c/w PLUG

TYPE ICD 75mmø

T/G=76.25

S.INV=73.93

Ma Cara M.A. ANSARI June 29,201

EXISTING SANMH

NW.INV=73.45

KANATA MUSLIM ASSOCIATION 832 MARCH ROAD, OTTAWA, ON. K2W 0C9 613.973.5000 t: +1.613.688.1899 | f: +1.613.225.7330 2650 Queensview Drive, Unit 100 Ottawa, ON K2B 8H6

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •

KMA MOSQUE AND COMMUNITY CENTRE 351 SANDHILL ROAD, OTTAWA, ON SITE SERVICING AND GRADING PLAN AA PHASE

TT-00238504-A F M & W 2016-12-09 SSGP-1