GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE PROEJCT AGREEMENT (PA) AND ALL CODES, BY-LAWS, REGULATIONS AND STANDARDS INCLUDING ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD), THE NATIONAL BUILDING CODE, ONTARIO BUILDING CODE, THE "OCCUPATIONAL HEALTH AND
- SAFETY ACT", AS APPLICABLE. ALL TRENCHING AND TUNNELING WORK SHALL BE DONE IN ACCORDANCE WITH THE ONTARIO HEALTH AND SAFETY ACT AND REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE TO CO-ORDINATE HIS SCHEDULE AND WORK ACTIVITIES WITHIN THE AREA OF THE CONTRACT.
- DO NOT USE LOCAL STREETS OR GRAVEL ROADS FOR STORAGE OF CONSTRUCTION MATERIAL UNLESS AUTHORIZED, IN WRITING, BY LOCAL MUNICIPALITY, ALL AUTHORITIES HAVING JURISDICTION AND MOBILINX CONSTRUCTION.
- ALL TRENCH EXCAVATIONS SHALL BE BACKFILLED AS PER CONTRACT DOCUMENTS INCLUDING SPECIFICATIONS AND THE DESIGN DRAWINGS. ALL EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OFF-SITE.
- CONSTRUCTION LAYDOWN AREAS INCLUDING PARKING, TEMPORARY OFFICES, AND MATERIALS STORAGE SHALL HAVE A MINIMUM 150mm DEPTH 19mm CRUSHED STONE SURFACE. MAINTAIN EXISTING DRAINAGE. UPON COMPLETION OF CONTRACT, RESTORE AREA TO ORIGINAL CONDITION OR AS PER
- DURING NON-CONSTRUCTION PERIODS, ALL OPEN EXCAVATIONS ALONG THE STREETS TO BE COMPLETELY COVERED WITH ADEQUATE TIMBER OR STEEL BEAMS SUPPORTING STEEL PLATES DESIGNED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN ONTARIO AND SUBMITTED TO THE
- 9. CONTRACTOR SHALL PREVENT CONSTRUCTION DEBRIS FROM ENTERING EXISTING CATCH BASINS, MAINTENANCE HOLES AND STORM AND SANITARY SEWERS WITHIN THE AREA OF THE CONTRACT. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, IN A TIMELY MANNER, OF ANY CONSTRUCTION
- DEBRIS THAT ENTER THE EXISTING CATCH BASINS, MAINTENANCE HOLES AND STORM AND SANITARY SEWERS.
- IO. ACCESS TO PRIVATE AND PUBLIC PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.
- 12. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY THE AGENCY'S ENGINEERING STANDARDS, SECONDLY THE CITY OF OTTAWA AS APPICABLE, STANDARD DRAWINGS, AND THIRDLY ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).
- 13. LENGTHS OF SERVICE LINES INDICATED ON DRAWINGS ARE NOT EXACT. THE CONTRACTOR SHALL CONFIRM TOTAL LENGTHS AND PROVIDE THE FULL EXTENT OF LINES (INCLUDING REQUIRED CONNECTIONS) EVEN IF ACTUAL LENGTHS VARY FROM DESIGN VALUES.
- 14. THE CONTRACTOR SHALL COORDINATE ITS SCHEDULE AND WORK ACTIVITIES WITH ALL OTHER STAKEHOLDERS IN THE PROJECT AREA.
- 15. PROVIDE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING UTILITIES DURING EXECUTION OF WORK. 16. GRANULAR MATERIAL, USED FOR BACKFILL WHERE INDICATED ON THE DESIGN DRAWINGS, SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND
- BE COMPACTED TO 100% S.P.M.D.D. AND AS NOTED IN THE SPECIFICATIONS. 17. CONTRACTOR SHALL MAINTAIN FLOW IN ALL EXISTING SERVICES DURING CONSTRUCTION.
- 18. BENCHMARKS TO BE OBTAINED FROM THE CONTRACT DRAWINGS.
- 19. CATCH BASINS TO BE MAINTAINED DURING CONSTRUCTION UNLESS OTHERWISE SPECIFIED. 20. ALL MATERIALS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS & SPECIFICATIONS OR
- OPSD / OPSS IF CITY DRAWINGS AND SPECIFICATIONS DO NOT APPLY. 21. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION AND SHALL PROTECT AND ASSUME RESPONSIBILITY OF ALL UTILITIES WHETHER OR NOT SHOW ON THESE
- 22. ALL SEWER SERVICE LATERALS DEEPER THAN 5.0m REQUIRE A CONTROLLED SETTLEMENT JOINT. 23. ALL EXISTING SITE SEWERS THAT WILL BE DECOMMISSIONED WILL BE REMOVED FROM SITE.

- 1.1 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE. 1.2 ALL SANITARY SEWERS AND BUILDING SERVICES TO BE CSA CERTIFIED PVC SDR 35, BELL AND SPIGOT TYPE, WITH ELSATOMERIC GASKET AS PER OPSS 1841 AND CSA B182.2 M1990. ONLY
- FACTORY FITTINGS TO BE USED, SEWER TO BE INSTALLED AS PER OPSD 1005.01. 1.3 MINIMUM DEPTH OF COVER FOR SANITARY SEWER MAINS AND LATERALS IS 1.5m.
- 1.4 SANITARY LATERAL TO BE CONNECTED TO EXISTING SEWER WITH WYE FITTING AND A LONG RADIUS BEND. 1.5 CONTRACTOR TO VERIFY EXISTING SANITARY PIPE CONDITION, LOCATION, AND ELEVATION PRIOR TO CONSTRUCTION, AND TO PROVIDE GRAVITY DRAIN FOR PROPOSED BUILDING
- 1.6 EXISTING SANITARY SEWER SERVICES PROPOSED FOR REMOVAL SHALL BE DISCONNECTED AND ABANDONED AT THE MAIN (UNLESS OTHERWISE STATED) TO THE SATISFACTION OF CITY OF OTTAWA. A NOTIFICATION OF 48 HRS IN ADVANCED SHALL BE PROVIDED TO THE CITY OF OTTAWA PRIOR TO ANY CONSTRUCTION WORKS.

- 1 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE. 2.2 WATERMAIN PIPE AND SERVICES TO BE PVC OR COPPER AS PER ONTARIO BUILDING CODE. ALL PIPE AND FITTINGS SHALL BE CERTIFIED CSA B137.3. PROVIDE A MINIMUM COVER OF 2.4m
- AND INSTALL AS PER OPSD 1102.02 TYPE 2. PROVIDE A MINIMUM OF 0.5m VERTICAL SEPARATION BETWEEN WATERMAIN CROWN AND SEWER INVERT AT ALL CROSSINGS. 2.3 WATER SERVICE TIE-IN (LIVE TAP) TO BE PERFORMED BY AUTHORIZED PERSONNEL AS PER APPROVAL OF CITY OF OTTAWA. ALL SITE WORKS FOR COMPLETION OF LIVE TAP ARE TO BE PERFORMED BY THE CITY, CONTRACTOR TO BACKFILL AND PROVIDE RESTORATIONS.
- 2.4 ALL VALVES TO COMPLY WITH CITY OF OTTAWA DESIGN GUIDELINES . 2.5 THE PROPOSED WATER SERVICE PROVIDES DOMESTIC WATER SUPPLY ONLY. ALL PROPOSED BUILDING FIRE WATER SUPPLY AND PROTECTION MEASURES/SPRINKLER SYSTEMS ARE TO BE DESIGNED IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS.
- 2.6 A NOTIFICATION OF 48 HRS IN ADVANCED SHALL BE PROVIDED TO CITY OF OTTAWA PRIOR TO ANY CONSTRUCTION WORKS.
- 2.7 WATER SERVICE LINE CONNECTION FROM WATERMAIN SHALL BE PVC DR18, AWWA C900 w/ STANDARD GATE VALVE SHUT OFF LOCATED AT PROPERTY LINE. 2.8 ALL CONNECTIONS TO EXISTING WATERMAINS ARE TO BE COMPLETED BY CITY FORCES. CONTRACTOR IS TO EXCAVATE, BACKFILL, COMPACTAND REINSTATE.

3.1 WATER SERVICE LINE CONNECTION FROM WATERMAIN SHALL BE PVC DR18, AWWA C900 w/ STANDARD GATE VALVE SHUT OFF LOCATED AT PROPERTY LINE.

- 4.1 ALL STORM SEWER MAINS TO BE CSA CERTIFIED HDPE UNLESS OTHERWISE APPROVED/NOTED. ALL SEWERS TO BE INSTALLED AS PER MANUFACTURERS INSTRUCTIONS, USING ONLY
- 4.2 STORM MAINTENANCE HOLES TO BE AS PER OPSD 701.01 FOR 1.2mØ, OPSD 701.012 FOR 1.8mØ, OPSD 701.013 FOR 2.4mØ, ALL c/w BENCHING. 4.3 ALL CATCH BASINS TO BE AS PER OPSD 705.01, FRAME & GRATE AS PER 400.01, LEAD TO BE HDPE
- 4.4 STORM MH FRAMES AND COVERS TO BE OPEN TYPE, AS PER OPSD 401.01 TYPE B. CONTRACTOR TO INSTALL FILTER CLOTH UNDER STORM MH COVERS UNTIL THE BASE COURSE OF
- 4.5 STRAW BALE CHECK DAMS SHALL BE PLACED AROUND CB'S TEMPORARILY UNTIL SITE VEGETATION HAS BEEN STABLIZED.
- 4.6 ALL CB LEADS TO BE AT LEAST 0.5m FROM WATER AND SANITARY SEWER MAIN. 4.7 ALL PROPOSED CATCH BASIN COVER FRAMES (CB1, CB2 & CB3) LOCATED IN THE BIOSWALE NEED TO BE ANCHORED DIRECTLY TO THE TOP OF THE PRECAST CONCRETE AS PER S.P. No F-4070 TO PREVENT DISPLACEMENT.

TEMPORARY EROSION AND SEDIMENT CONTROLS

- INSTALL SILT FENCE AT THE DOWNSLOPE SIDE OF DISTURBED AREAS AND SNOW FENCE ALONG PERIMETER OF THE DEVELOPMENT SITE, PRIOR TO THE STOCKPILE TOPSOIL AT DESIGNATED LOCATIONS NEAR THE NORTH-EAST REGION OF THE SITE. STOCKPILES WILL BE CONTAINED BY SILT FENCES ON
- THE DOWNSLOPE SIDE TEMPORARY SWALES WITH CHECK DAMS ARE TO BE CONSTRUCTED PRIOR TO THE BEGINNING OF SITE GRADING.
- THE ACCUMULATED SILT SHALL BE REMOVED FROM ALL SEDIMENT CONTROL DEVICES AS REQUIRED DURING CONSTRUCTION AND DISPOSED IN THE
- LOCATIONS APPROVED BY THE CITY AND CRCA. ALL EXPOSED SOILS ARE TO BE STABILIZED AND VEGETATED AS SOON AS POSSIBLE USING SEED AND MULCH APPLICATION ON 100mm OF TOPSOIL, AS DIRECTED BY THE ENGINEER.
- ADDITIONAL EROSION/SEDIMENT CONTROLS MAY BE REQUIRED ON SITE AS DETERMINED BY THE ENGINEER. NO CONSTRUCTION ACTIVITY/MACHINERY SHALL INTRUDE BEYOND THE SILT/SNOW FENCE OR PROPERTY LIMIT. EXCEPT, WHERE NECESSARY TO
- COMPLETE THE WORKS. ALL INTRUSIONS ARE TO BE KEEP TO A MINIMUM AND MUST BE APPROVED WITH THE ENGINEER PRIOR TO INTRUSION BEYOND
- SILT FENCE/PROPERTY LIMITS. ALL CONSTRUCTION VEHICLES SHALL ENTER AND LEAVE THE SITE VIA DESIGNATED ENTRANCES. ALL REGRADED AREAS THAT ARE NOT OCCUPIED BY DWELLINGS, ROADS, SIDEWALKS, DRIVEWAYS, PARKS AND OTHER SERVICES SHALL BE COVERED
- BY 100mm TOPSOIL, AND SODDED/SEEDED IMMEDIATELY AFTER COMPLETION OF FINAL GRADING OPERATIONS, AS DIRECTED BY THE ENGINEER. 9. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO THE COMMENCEMENT OF SITE GRADING, MUST BE INSPECTED ON
- A REGULAR BASIS AND AFTER EVERY RAINFALL EVENT, AND MUST BE CLEANED AND MAINTAINED AS REQUIRED TO PREVENT THE MIGRATION OF
- 10. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED AFTER CONSTRUCTION ONCE THE DEVELOPMENT SITE HAS BEEN STABILIZED TO THE CITY'S SATISFACTION. ALL AREAS DISTURBED BY EROSION OR SEDIMENT CONTROL DEVICES ARE TO BE RESTORED WITH 100mm TOPSOIL AND
- SODDED/SEEDED AFTER CONSTRUCTION. 11. THE CONTRACTOR SHALL KEEP PUBLIC ROADWAYS FREE OF DEBRIS DURING CONSTRUCTION. ANY MATERIAL TRACKED FROM THE SITE SHALL BE
- PROMPTLY REMOVED FROM ROADWAYS AT THE CONTRACTOR'S EXPENSES. 12. PROPOSED WORKS WILL BE OCCURRING WITHIN THE REGULATED FLOOD PLAIN, THEREFORE IT IS IMPORTANT TO MONITOR THE WEATHER FOR LARGE STORM EVENTS BEFORE COMMENCING WORK
- 13. CONSTRUCTION ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OF PETROLEUM PRODUCTS, DEBRIS. RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCE INTO THE EXISTING WATERCOURSE(S), VEHICULAR REFUELING AND MAINTENANCE WILL BE CONDUCTED 30 METERS FROM EXISTING WATERCOURSE
- 14. ALL CONSTRUCTION MATERIALS, EQUIPMENT, VEHICLES AND MACHINERY ARE TO BE STORED OUTSIDE THE FLOODPLAIN LIMITS
- 15. SILT FENCE TO BE ERECTED PRIOR TO EARTH WORKS BEING COMMENCED. SILT FENCE TO BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR
- 16. FABRIC TO BE PLACED AND MAINTAINED UNDER COVER OF ALL CATCHBASINS. GEOTEXTILE FABRIC IN STREET CBS TO REMAIN UNTIL ALL CURBS ARE CONSTRUCTED. GEOTEXTILE FABRIC IN RYCBS TO REMAIN UNTIL VEGETATION IS ESTABLISED. ALL CATCHBASINS TO BE REGULARLY INSPECTED AND CLEANED, AS NECESSARY, UNTIL SOD AND CURBS ARE CONSTRUCTED
- 17. CONTRACTOR IS RESPONSIBLE TO KEEP THE ROADS FREE AND CLEAN FROM MUD OR DEBRIS. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE
- RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY. 19. SEDIMENT AND EROSION CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY OF OTTAWA SITE INSPECTOR OR

CONSERVATION AUTHORITY.

- ALL LOTS AND BLOCKS FOR PRIVATE USE ON THE LANDS CORRESPONDING TO THIS DESIGN ARE TO BE DEVELOPED IN ACCORDANCE WITH THE PLAN
- THE DEVELOPER SHALL NOT BE CONSIDERED RESPONSIBLE TO THE CONTRACTOR IN ANY RESPECT FOR THE AMOUNT OF GRADING OR EARTHWORK REQUIRED TO BE PERFORMED BY THE CONTRACTOR DUE TO THE INFORMATION PROVIDED ON THESE DRAWINGS EXCEPT WHERE REQUIRED TO
- PROMOTE INTERIM DRAINAGE ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALES ARE
- THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE ALONG SIDE LOT LINES AS REQUIRED TO MAINTAIN THE INTENT OF THE GRADING PLAN. THE CONTRACTOR SHALL COMPLETE THE DRAINAGE SWALES IN THE LOCATIONS AND TO THE GRADES AND ELEVATIONS, DEPTHS AND SECTIONS SPECIFIED ON THE PLAN, PRIOR TO FINAL LANDSCAPING BY THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE THAT THE REQUIRED SWALES ARE CONSTRUCTED IN ACCORDANCE WITH THE GRADING PLAN.
- ANY EMBANKMENT REQUIRED FOR INTERNAL GRADING IS TO BE COMMENCED ALONG THE INSIDE EDGE OF THE PROPERTY. THE GRADING OF ALL LOTS AND BLOCKS IS TO BE PERFORMED TO PROVIDE FINISHED PERIMETER SURFACES WHICH ARE FLUSH WITH GIVEN STREET
- FINAL PERIMETER GRADES FOR A LOT OR BLOCK WHERE NOT OTHERWISE SHOWN HEREON SHALL BE COINCIDENT WITH THE ADJOINING PERIMETER GRADES OF AN ADJACENT LOT OR BLOCK WHICH SHALL HAVE BEEN PREVIOUSLY ESTABLISHED BY, OR CONSTRUCTED IN ACCORDANCE WITH A
- MUNICIPAL SITE PLAN APPROVAL OR DEVELOPER GRADING APPROVAL MAXIMUM LOT OR BLOCK GRASS SURFACE GRADE AT ANY LOCATION SHALL BE 8.0% WITH EMBANKMENTS (3:1 MAX.) OR RETAINING STRUCTURES PROVIDED AS REQUIRED TO TAKE UP GRADE DIFFERENTIALS IN EXCESS OF SUCH SLOPES.
- EMBANKMENTS FORMED DURING THE GRADING OF LOTS AND BLOCKS SHALL HAVE THE FOLLOWING MAXIMUM GRADES:
- (A) ADJACENT TO DRIVEWAYS OR SWALE SIDE SLOPES 4:1 MAXIMUM (B) ELSEWHERE - 3:1 MAXIMUM
- MAXIMUM DRIVEWAY GRADES TO BE 10.0%. MAXIMUM PARKING AREA PAVEMENT GRADES TO BE 6%. UNLESS OTHERWISE INDICATED, THE LOT LINE AND CORNER ELEVATIONS SHOWN HEREON ARE GENERALLY THE MINIMUM ELEVATIONS FOR THE
- SPECIFIED DRAINAGE PATTERN. ANY ALTERATIONS REQUIRE THE WRITTEN APPROVAL OF THE DESIGN ENGINEER. GIVEN THE PROPOSED BUILDING GRADES MAY BE RAISED TO COMPENSATE FOR DIFFERENCES BETWEEN ASSUMED AND ACTUAL BUILDING DIMENSIONS IN ACCORDANCE WITH THE ESTABLISHED CRITERIA FOR THE DRAINAGE PATTERN. REAR SPECIFIED BUILDING GRADE TO BE ESTABLISHED BY CONTRACTOR TO SUIT BUILDING TYPE HOWEVER ALL GRADING REQUIREMENTS IDENTIFIED ON THIS PLAN AND AS REQUIRED BY THE MUNICIPALITY
- GRADING AND SODDING OF ADJACENT ROADWAY BOULEVARDS WILL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH MUNICIPAL
- 14. CONTRACTOR IS RESPONSIBLE TO KEEP THE ROADS FREE AND CLEAN FROM MUD OR DEBRIS.

ENVIRONMENTAL NOTES

CONTRACTOR PER CUBIC METER OF DISCHARGE.

- 1. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL EROSION AND SEDIMENT CONTROLS (ESC) AS PER CONTRACT SPECIFICATIONS AND AT LOCATIONS AS DIRECTED BY THE ENGINEER. ALL DAMAGED EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE REPAIRED AND/OR REPLACED WITHIN 48
- 2. CONTRACTOR TO PROVIDE SEDIMENT CONTROL MEASURES AND PRECAUTIONS TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING EXISTING CATCH
- BASINS, MAINTENANCE HOLES, CULVERTS, CREEKS, ROAD SIDE DITCHES, AND STORM AND SANITARY SEWERS WITHIN THE AREA OF THE CONTRACT. 3. DISTURBED AREAS WILL BE MINIMIZED TO THE EXTENT POSSIBLE AND TEMPORARILY OR PERMANENTLY STABILIZED OR RESTORED AS THE WORK
- 4. THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO MINIMIZE SEDIMENT LADEN RUNOFF FROM LEAVING THE WORK AREAS. IF THE PRESCRIBED MEASURES ON THE PLANS ARE NOT EFFECTIVE IN PREVENTING THE RELEASE OF A DELETERIOUS SUBSTANCE, INCLUDING SEDIMENT, THEN ALTERNATIVE MEASURES MUST BE IMPLEMENTED IMMEDIATELY TO MINIMIZE POTENTIAL ECOLOGICAL IMPACTS. ADDITIONAL ESC MEASURES TO BE KEPT ON SITE AND PLACED AS
- INSTRUCTED BY THE ENGINEER. SEDIMENT AND EROSION CONTROL MEASURES TO BE INSPECTED DAILY AND ANY REQUIRED REPAIRS DONE PROMPTLY.
- ROADS ARE TO BE CLEANED AT A MINIMUM ONCE A WEEK OR AS INSTRUCTED BY THE ENGINEER. IT WILL NOT BE CONSIDERED ACCEPTABLE TO HAVE 7. RESTORATION OF ANY DISTURBED AREAS TO BE DONE IN ACCORDANCE WITH CONTRACT SPECIFICATIONS. RESTORATION OF DISTURBED GRASS AREAS
- WITHIN THE EXISTING RIGHT-OF-WAY TO CONSIST OF SODDING AS PER OPSS 803. ALL DEWATERING DISCHARGE EFFLUENT SHALL BE TREATED TO MEET PROVINCIAL WATER QUALITY OBJECTIVES PRIOR TO BEING DISCHARGED TO THE NATURAL ENVIRONMENT. IN CASE WATER QUALITY IS NOT SUITABLE FOR DISCHARGE INTO THE STORM SEWER, THE CONTRACTOR SHALL ACQUIRE AGENCY APPROVAL PRIOR TO DISCHARGING EFFLUENT TO THE LOCAL SANITARY SEWER SYSTEM WITH ADDITIONAL COSTS BACKCHARGED TO THE

- CONTRACTOR IS SOLELY RESPONSIBLE FOR SITE SURVEY AND CONSTRUCTION LAYOUT THE ACCURACY OF ALL BENCHMARKS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DEVIATIONS ARE TO BE REPORTED TO
- THE ENGINEER IMMEDIATELY CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUFFICIENT SURVEY MARKERS AND GRADE SHEETS AS MAY BE REQUIRED FOR THE PROPER EXECUTION OF THE WORKS. ALL STAKES, MARKERS AND REFERENCE POINTS SHALL BE CAREFULLY PRESERVED BY THE CONTRACTOR THROUGHOUT THE
- 4. DRAWING STATIONS SHOWN ON PLAN VIEWS AND ALL LENGTHS OF PROPOSED INFRASTRUCTURE INDICATED ON THESE DRAWINGS ARE FOR DESIGN PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CALCULATING THE EXACT LENGTHS AND SHOWING THESE ON THEIR SHOP DRAWINGS
- (INCLUDING REQUIRED CONNECTIONS) EVEN IF THE ACTUAL LENGTHS VARY FROM THE DESIGN VALUES. THE UTILITY DESIGNS ARE BASED ON TOPOGRAPHICAL SURVEYS, BASE PLANS, AERIAL DIGITAL TERRAIN MODELS, TEST PITS, AND OTHER INFORMATION
- RELATED TO EXISTING INFRASTRUCTURE PROVIDED BY OTHERS. THE PERFORMING CONTRACTOR SHALL VERIFY THE ACCURACY OF THE INFORMATION PRIOR TO PROCEEDING WITH CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ENGINEER.

<u>UTILITIES NOTES</u>

- CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UNDER/ABOVEGROUND UTILITIES PRIOR TO AND DURING CONSTRUCTION WHERE SERVICES CROSS EXISTING CONCRETE OR ASPHALT ROADWAYS OR WALKWAYS, CONTRACTOR TO SAWCUT SURFACE AND RESTORE TO
- 3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR, AS PART OF THEIR WORK SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES WITH THE UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE
- CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS REQUIRED TO OBTAIN STAKEOUTS OF ALL UTILITIES AND CONFIRM THE EX. SEWER INVERTS AS WELL AS THE DEPTH AND
- LOCATIONS OF UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION. EXISTING SEWER INVERTS AND UTILITY DEPTHS SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO ISSUANCE OF SHOP DRAWINGS. PERFORM TEST PIT EXCAVATIONS AT ALL LOCATIONS WHERE EXISTING UTILITIES MAY BE DISTURBED. HAND DIG AS REQUIRED TO PREVENT DAMAGE TO
- EXISTING UTILITIES. NOTIFY UTILITY OWNERS AND AGENCY'S DEPARTMENTS IN ADVANCE OF SCHEDULED WORK NEAR THESE UTILITIES. CONTRACTOR TO COORDINATE TIMING OF NOTIFICATION WITH EACH UTILITY OWNER AT TIME OF CONSTRUCTION. 7. REPORT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES NOT SHOWN ON THE DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO
- COMMENCING WORK THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY DAMAGED UTILITY. THE OWNER MAY, AT ITS DISCRETION AND AT THE CONTRACTOR'S EXPENSE, REPAIR THE DAMAGED UTILITY OR DIRECT THE CONTRACTOR TO REPAIR THE DAMAGED UTILITY.
- THE CONTRACTOR SHALL ALLOW ACCESS BY UTILITY OWNERS TO THEIR UTILITIES FOR INSPECTION PURPOSES AT ALL TIMES DURING CONSTRUCTION. 10. WHERE UNSHRINKABLE FILL IS USED AS BACKFILL MATERIAL, ALL EXPOSED UNDERGROUND UTILITIES MUST BE PROTECTED BY PLACING CLEARSTONE
- 11. DUE TO UNKNOWN EMBEDMENT DEPTH OF UTILITY POLES, CONTRACTOR TO SUPPORT AS REQUIRED. CONTRACTOR TO MINIMIZE AMOUNT OF OPEN TRENCH IN THE VICINITY OF UTILITY POLES.
- 12. ABANDONED WET UTILITIES TO BE REMOVED AND DISPOSED OF OFF SITE IF LOCATED UNDER TREE ZONE WITH LESS THAN 2.0M CLEARANCE BETWEEN TOP OF OD TO FINAL BLVD GRADE
- 13. ONTARIO ONE CALL AT 1-800-400-2255 FOR LOCATE REQUIREMENTS.

STANDARD DETAILS AND REFERENCE

WATERMAIN	DETAIL / REFERENCE
WATERMAIN PIPE (150mm)	PVC DR18, C900/AWWA
WATERMAIN TRENCHING	W17 (CITY OF OTTAWA)
HYDRANT INSTALLATION	W19 (CITY OF OTTAWA)
WATERMAIN INSULATION	W22 (CITY OF OTTAWA)
WATERMAIN VALVE BOX ASSEMBLY	W24 (CITY OF OTTAWA)
WATERMAIN CROSSING BELOW SEWER	W25 (CITY OF OTTAWA)
WATERMAIN CROSSING OVER SEWER	W25.2 (CITY OF OTTAWA)
WATERMAIN THRUST BLOCK DETAILS	W25.3 (CITY OF OTTAWA)
WATERMAIN THRUST BLOCK DIMENSIONS	W25.4 (CITY OF OTTAWA)
PIPE RESTRAINTS DETAILS	W25.5 (CITY OF OTTAWA)
PIPE RESTRAINTS LENGTHS	W25.6 (CITY OF OTTAWA)
TRACER WIRE INSTALLATION	W36 (CITY OF OTTAWA)
CATHODIC PROTECTION	W40 (CITY OF OTTAWA)
ANODE INSTALLATION	W42 (CITY OF OTTAWA)
TRACER WIRE WATER PROOFING SPLICES	W47 (CITY OF OTTAWA)

STORM PIPE (150-450mm) PVC DR35 / AWWA MANHOLES (1200mm) 701.010 / OPSD CATCH BASIN (600x600mm) 705.010 / OPSD S24.1 (CITY OF OTTAWA) MANHOLE COVER MANHOLE CIRCULAR FRAME S25 (CITY OF OTTAWA) CATCH BASIN COVER S19.1 (CITY OF OTTAWA) VORTEX ICD INSTALLATION S4.1 (CITY OF OTTAWA) S6 / S7 (CITY OF OTTAWA) SEWER TRENCHING

DETAIL / REFERENCE

SANITARY PIPE (150-200mm) PVC DR35 / AWWA MANHOLES (1200mm) 701.010 / OPSD S24 (CITY OF OTTAWA) MANHOLE COVER MANHOLE CIRCULAR FRAME S25 (CITY OF OTTAWA) SEWER SERVICE CONNECTION S11.1 (CITY OF OTTAWA) S12 (CITY OF OTTAWA) SEWER INTERNAL DROP STRUCTURE

ROAD / SURFACE WORKS DETAIL / REFERENCE

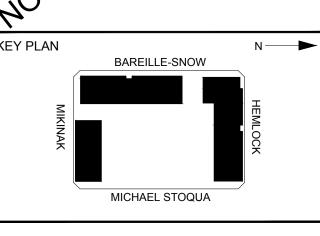
BARRIER CURB	SC1.1 (CITY OF OTTAWA)
SIDEWALK	SC4 (CITY OF OTTAWA)
SIDEWALK CONSTRUCTION JOINT	SC5 (CITY OF OTTAWA)
SIDEWALK RAMP	SC6 (CITY OF OTTAWA)
TWSI DETAIL	SC7.3 (CITY OF OTTAWA)
STANDARD TRENCH REINSTATEMENT IN PAVED SURFACE	R10 (CITY OF OTTAWA)
ASPHALT REINSTATEMENT	R25 (CITY OF OTTAWA)



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MIKINAK REDEVELOPMENT

PROJECT NO: AS SHOWN DRAWN BY: CHECKED BY: PROJECT MGR: APPROVED BY:

SHEET TITLE

GENERAL NOTES & STANDARD DETAIL REFERENCE

SHEET NUMBER

ISSUE

