## 2. ALL DIMENSIONS GIVEN ARE IN METRES UNLESS OTHERWISE GIVEN IN MILLIMETRES. 22. STREET REINSTATEMENT TO BE PER SECTION 6.0 OF GUIDELINES. 21. EXISTING ASPHALT CURBING TO BE REPLACE EXISTING CURB AND SIDEWALK 15. FOR TRENCH WIDTHS AND PIPE BEDDING REQUIREMENTS SEE DETAIL HWSD 1440 11. CONDUCT WORK IN ACCORDANCE GUIDELINES. 10. PROVIDE TEMPORARY SUPPORT FOR UTILITY POLES TO ALIANT. 9. PLACE SURPLUS FILL MATERIALS OFF 3. EXISTING UNDERGROUND PIPING SHOWN IS APPROXIMATE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CONFIRM LOCATION OF WATER, SANITARY STORM LINES ON PRIMROSE STREET THRU HALIFAX WATER. GENERAL NOTES/SPECIFICATIONS 9. MAINTAIN MINIMUM 1600mm AND N SERVICES UNLESS OTHERWISE NOTED. TOP OF SEWER LATERALS, PROVIDE 3 5. WHERE WATER LINES CROSS SANITARY OR STORM SEWERS PROVIDE MINIMUM 450mm VERTICAL CLEARANCE BETWEEN PIPES (UNLESS OTHERWISE NOTED). GENERAL 4. CATCH BASIN LEADS ARE TO BE MINIMUM 2000 PVC DR35 PIPE AT A MINIMUM SLOPE CONNECTED TO A MANHOLE OR MAIN WITH APPROVED TEE, FITTINGS TO CSA B182.1. 3. SEWER LATERALS CONSTRUCTED IN ROCK SHALL HAVE CAPPED END FOR THE FULL TRENCH WIDTH. 5. ENVIRONMENTAL PROTECTION MEASURES TO BE IN ACCORDANCE WITH REQUIREMENTS OF NSE MANUAL FOR CONSTRUCTION SITES AND THE TOPSOIL REMOVAL PERMIT. INCLUDE COSTS FOR ENVIRONMENTAL AND STORM WATER CONTROL MEASURES IN THE CONTRACT PRICE. 12. PROVIDE MINIMUM 1000mm HORIZONTAL THE SAME TRENCH. 11. ROOF DRAINS ARE TO BE DISCHARGED TO THE SURFACE AND DIRECTED TO THE REAR PROPERTY. 15. CONTRACTOR TO PROVIDE CCTV INSPECTION REPORT FOR ALL AND LATERALS. 14. ALL SANITARY MANHOLES, SEWERS AND LATERALS TO BE PRESSURE PRESSURE TESTED PRIOR TO CONNECTION TO BUILDING PLUMBING. 10. LATERAL CONNECTIONS . ALL WATERMAIN MATERIALS AND INSTALLATION TO BE IN ACCORDANCE WITH HALIFAX WATER DESIGN AND CONSTRUCTION SPECIFICATIONS (LATEST EDITION). UNLESS OTHERWISE NOTED HYDROSEED ALL DISTURBED AND CONSTRUCTED SLOPES. OPES STEEPER THAN 3H:1V TO BE STABILIZED WITH RIP RAP 300mm THK. EXISTING INFORMATION FOR THIS DESIGN WAS OBTAINED FROM RECORD DRAWINGS PROVIDED OTHERS. CONTRACTOR SHALL CONFIRM EXISTING SERVICE INFORMATION BEFORE CONSTRUCTION EXISTING SERVICE INFORMATION BEFORE CONSTRUCTION EXISTING SERVICE INFORMATION BEFORE CONSTRUCTION SERVICES. DO NOT INSTALL CURB STOPS OR VALVES IN DRIVEWAY OPENINGS. OBTAIN NECESSARY PERMITS FROM THE HALIFAX REGION TO INITIATING WORK. ALL ELEVATIONS GIVEN AND NOTED ARE IN METRES CATCH BASIN LEADS ARE TO BE INSTALLED UNDER THE WATERMAIN CONTOUR ELEW LY, TOPS AND TO NSTRUCTED TO S ALL MATERIALS AND INSTALLATION TO BE IN ACCORDANCE WITH THE HALIFAX REGIONAL JNICIPALITY MUNICIPAL DESIGN GUIDELINES, HALIFAX WATER DESIGN AND CONSTRUCTION FECIFICATIONS, NSRBA/NSCEA STANDARD SPECIFICATIONS FOR MUNICIPAL SERVICES (LATEST ITONS), AND THE CONTRACT DOCUMENTS. IF REQUIRED, SITE GRADING, FILLING AND FOUNDATIONS SHALL BE AS DIRECTED BY A ALIFIED PROFESSIONAL. COMPLETE SITE GRADING SUCH THAT NO STREET SURFACES. DRIVEWAY RAMP SHAL THE VALVES ARE TO CLOSE COUNTER-STORM SEWER -FOR TRENCH WIDTHS AND PIPE BEDDING REQUIREMENTS SEE DETAIL HWSD 1440. CATCH BASINS TO BE INSTALLED AS PER STANDARD DETAIL HWSD 1570. PROVIDE CURB OPENINGS FOR DRIVEWAYS AS FOLLOWS SINGLE — N/A ASPHALT - SEE LANDSCAPE CONCRETE FOR CURBS AND SIDEWALKS ALL BENDS ON SEWER LATERALS TO BE LONG RADIUS ROVIDE PIPE BEDDING IN OTHERWISE NOTED REINSTATE EXISTING FEATURES EQUAL WHICH EXISTED PRIOR TO CONSTRUCTION. IN VEGETATED TOPSOIL AND SOD. WATER R — 2000 OR GREATER — F E NOTED) PVC DR35 PIPE AND FITTINGS TO CSA B182.1 (UNLESS OTHERWISE NOTED) JOINT RESTRAINTS AT INDICATED LOCATIONS AND SPOT ELEVATIONS ARE SLOPES SHOWN ON THE DIE ACTUAL GROUND ELEVATION SHALL BE FLUSH WITH INSIDE OF TOPSOIL AND NURSERY SOD. SPECIFICATIONS SPECIFICATIONS: ALL BENDS, TEES, CAPS, AND HYDRANTS TO HWSD MAXIMUM OF 2000mm OF COVER OVER WATER 1. WHERE WATER LATERAL IS NOT 300mm ABO 2. METRE SEPARATION TO SEWER LATERALS. WITH OCCUPATIONAL HEALTH REPAIRED AND REPLACED AT SERVICE LATERALS TO SITE. CLOCKWISE AS INDICATED ON HWSD DRAINAGE IS DIRECTED ONTO L SLOPE TOWARDS STREET FR SEPARATION BETWEEN WATER SEE LANDSCAPE DRAWING TO HAVE A MINIMI DR35 PIPE AND FITTINGS TO CSA B182.1. INTERPOLATED AND ARE APPROXIMATE DRAWINGS ARE APPROXIMATE AND SHALL ONS AND SPECIFIED SIDE SLOPES. THE HRM MUNICIPAL DESIGN THE ROCK BROKEN 3m PAST THE SATISFACTION OF NSPI AND BELL MAIN. STORM AND AS DIRECTED BY HRM. HRM STANDARD DETAILS OR BETTER THAN AREAS REINSTATE PALITY AND HALIFAX WATER AS SAFETY REGULATIONS RIGHT P 유 BY OTHERS. INSTALLED IN TO 유 OF THE O AND 1% BE BΕ PLAN SCALE: 4. CONSTRUCT SILT CONTROL AND COLLECTION STRUCTURES AS AND WHERE REQUIRED TO SUIT THE METHODS AND PROGRESS OF THE WORKS. 10. DEWATERING OF EXCAVATIONS WILL BE DIRECTED THRO AND/OR GRAVEL AND STRAW BERMS. NO WATER SHALL BE STORM SEWER SYSTEM PRIOR TO FINAL STABILIZATION. 7. CONTRACTOR SHALL EXPOSE A MINIMUM PRACTICAL AREA AT ONE TIME, COMPLETE IT PROMPTLY AND STABILIZE SURFACE BEFORE MOVING TO NEXT AREA 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMEDIAL ACTION TO MITIGATE ANY EROSION OR SLOPE FAILURE DUE TO ACTIONS OF THE CONTRACTOR. 1. THE FOLLOWING MEASURES ARE PROVIDED AS A SUGGESTED APPROACH TO EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION. THE CONTRACTOR SHALL IMPLEMENT THESE MEASURES AS A MINIMUM. THE CONTRACTOR SHALL IMPLEMENT ALL OTHER MEASURES NECESSARY TO PROTECT THE RECEIVING WATERS DURING CONSTRUCTION AND PRIOR TO FINAL STABILIZATION. 6. ANY SURPLUS TOPSOIL OR EXCAVATION IS TO BE REMOVED FROM THE SITE, AND ANY TEMPORARY STOCKPILES STABILIZE WITH SEED AND STRAW MULCH. PROVIDE SILT FENCE DOWNSLOPE OF ANY STOCK PILES. 2. INSTALL SILT FENCE AT ALL DOWNSTREAM/DOWN SLOPE RIGHT-OF-WAYS PRIOR TO GRUBBING AND EXCAVATION. SILT FENCE LOCATIONS ILLUSTRATED OR NOTED ON THE PLAN ARE TO BE USED AS A GUIDE. THE CONTRACTOR SHALL INSTALL PROTECTIVE MEASURES WHICH SUIT SITE CONDITIONS. 15. MUD CONTROL MAT TO BE CONSTRUCTED AT ALL SHALL CONSIST OF 300mm THK 150 CLEAR SURGE DURING CONSTRUCTION TO LIMIT TRACKING OF MUD ( . CONSTRUCT PERMANENT AND TEMPORARY INTERCEPTOR DITCHES, AND DIRECT UNOFF AROUND PROPOSED WORKS, AND TO SUIT CONSTRUCTION METHODS AND CHEDULING. 4. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE NVIRONMENTAL CONSTRUCTION SPECIFICATIONS" AND "THE ONTROL HANDBOOK FOR CONSTRUCTION SITES". DISTURBED AREAS WHICH MAY REQUIRE REWORKING TO BE STABILIZED BY MULCH OR OTHER APPROVED METHODS WITHIN ONE WEEK OF INITIAL STURBANCE OR PRIOR TO A FORECASTED SIGNIFICANT RAINFALL EVENT. ABILIZATION TO REMAIN IN PLACE UNTIL COMPLETION OF STRUCTURES AND ACEMENT OF PERMANENT LANDSCAPING. . SURFACE WATER DISCHARGES SHALL MEET PROVINCIAL GULATIONS. CONTRACTOR SHALL SAMPLE AND ANALYZE FAMPALL AND IN ACCORDANCE WITH TOPSOIL REMOVAL PE SILT FENCE (TYP) UNLESS OTHERWISE NOTED A MINIMUM 6 METRE BUFF WATER COURSES. THIS BUFFER IS TO BE MAINTAINED A OF NATURAL VEGETATION. JILT ACCUMULATIONS TO BE REMOVED FROM SILT CONTROL JCTURES/MEASURES ON A REGULAR BASIS. SILT TO BE HAND EXCAVATED DISPOSED OF OFF-SITE OR STABILIZED IN DISTURBED AREAS. CIVIC #5679 P.I.D. 00170076 LOT 29 EXISTING DRIVEWAY L ENVIRONMENTAL PROTECTION MEASURES FOR A PERIOD OF ONE MAINTAINED. 1:200 SEDIMENT MH2951 (NOT SHOWN) ROBERTS PODIUM WALL ■ CANDSCAPED PODIUM 0 BUILDING WALL MITIGATION PODIUM DR. SEE MECH S TRUCK ENTRANCES AND MIN 6m LONG. MAINTAIN STREET. UGH FILTER BAGS DIRECTED TO THE AND FEDERAL RUNOFF QUALITY DURING RMIT. CIVIC #2482 P.I.D. 40357238 LOT C-1 LOWER PARKING EL 47.58 UPPER PARKING EL 50.12 LEVEL 100 EL 53.12 10 쁌 EX 1500 DI SPRINKLER -SED AT MAIN SURFACE CLASSIFICATION TABLE OF STORMWATER SURFACE CLASSIFICATIONS PVC DR35 CB LEAD AT 1% INV=51.33 Soft Surface Runoff Runoff Hard Surface Runoff Runoff Total Drainage Runoff Time of Coefficient Area (ha) Coefficient Area (Coefficient Area (Coefficient Area)) Coefficient Concentration Coefficient (Concentration) Coefficient (Concentration) 0.000 0.20 0.156 0.80 0.156 0.80 10.00 0.055 0.20 0.101 0.80 0.156 0.59 10.00 / ccs STORMWATER MANAGEMENT PVC DR35 SANITARY PVC DR35 STORM SMH1 IN-PLACE BASE TO DETAIL 2 CB1 TOP=52.65 INV OUT=51.35 INV IN=51.35 Runoff Coefficient C Runoff Coefficient C | Total | Composite | Time of | Intensity | Peak | Area | Coefficient | Concentration | i | Runoff | Coefficient | Coeffici Total Drainage Runoff Area Coefficient A (ha) C 0.156 0.80 0.156 0.59 Total Drainage Area A (ha) 0.156 PODIUM WALL 500 INLINE TEE SOLID SLEEVE Intensity Peak n i Runoff Q (mm/hr) (m³/s) 67.7 0.023 MIN 600 150 DETAIL—TRENCH DRAIN F.C. JU AMAR SIDEWALK OVERHEAD WIRES HB. 300 1 2000 WATERMAIN EX 19¢ WATER - TO BE PLUGGEI AT MAIN EX DRIVEWAY MAYNARD ST. OPE DOWN 150 Dia · PERFORATED PIPE 53 45 50 51 52 46 47 49 A-LOK GASKET OR APPROVED "O" RING GASKETS (TYPICAL) INSTALL WATERPROOF MEMBRANE TO CAST IN PLACE BASE (REFER TP HWSD-1450 FOR PRECAST REQUIREMENTS. 1050 DIA PRECAST MANHOLE SECTION PROFILE H SCALE: V 1050 DIA PRECAST MANHOLE SECTION NOTES: 1. MINIMUM OF 100 mm ABOVE LARGEST PIPE. 2. BELL END OF PRECAST SECTION TO BE FULLY EMBEDDED IN PARTIALLY SET CAST—IN—PLACE BASE. FINISH INTERFACE WITH GROUT OR CONCRETE ON INSIDE AND OUTSIDE OF MANHOLE, SLOPING UP AT 1:1 TO MEET PRECAST SECTION. 3. BACKFILL AROUND MANHOLES SHALL BE TYPE 2 GRAVEL EXTENDING A MIN. OF 300 mm OUTWARD FROM MANHOLE AND VERTICALLY FROM BEDDING MATERIAL TO UNDERSIDE OF ROADBED GRAVELS. SANITARY STORM EX 300 CONC MBINED SEWER-INV = ±50.44 ROTATE TEE VERTICALLY EX. 150¢ CI\_ WATER KLER 50mm thk RIGID-INSULATION 1.2m WIDE CAST-IN-PLACE BASE FOR DETAIL-PRECAST MANHOLE 200 DIA SANITARY 1: 500 1: 50 0+000 150X150X150 TEE 250 50.54 50.54 CL OF ROBERTS ST 22 1/2° V BEND GATE VALVE 150 Dia SECTION A-A mm TYPE I GRAVEL PLAN 50.63 AWWA C151 SPECIAL CLASS DI SPRINKLER (STORM) FACE OF PODIUM WALL 9.4m 250 Dia PVC DR35 SEWER AT 1.00% 9.4m 200 Dia PVC DR35 SEWER AT 1.00% UPPER PARKING= LOWER 47.58m 0+020 PROVIDE MIN 450mm CLEARANCE AT COMBINED SEWER CROSSING FACE OF WALL LEVEL 100= 53.12m CAST IN PLACE MANHOLE BASE - CONSTRUCT CHANNEL AND SMOOTH BENCHING TO SUIT INLETS & OUTLET CAST IN PLACE MANHOLE BASE 88 EX 300 DIA COMBINED 6 Key Nov 1, 2017 7. SEE ARCHITECTURAL FOR FLOOR AND TOP OF PODIUM WALL ELEVATIONS. 5. PROVIDE MIN 450mm SEPARATION BETWEEN PIPES WHERE SPRINKLER CROSSES COMBINED SEWER. 2. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR PODIUM LANDSCAPING AND DRAINAGE DESIGN. 3. SPRINKLER AND DOMESTIC SERVICES TO BE PER DETAIL HWSD-1220. AND PESS/ONAL 19 OCT 20 16 SEP 20 13 JUL 20 Plan AS SHOWN EXISTING KVM CONSULTANTS LIMITED RESPONSIBILITY IS LIMITED TO THE WATER SERVICE LATERALS, SANITARY SEWER AND STORM SEWER LATERALS EXTERNAL TO THE STRUCTURE. REFER TO ARCHITECTURAL DRAWINGS FOR LANDSCAPING, RETAINING WALLS, LANDINGS, STAIRS AND RAMP DETAILS. UNUSED EXISTING DRIVEWAY RAMPS TO BE REINSTATED TO HRM DESIGN GUIDELINES C/W FULL HEIGHT CURB AND GUTTER. SMH1 TO BE USED AS SAMPING MANHOLE 2480 CP\_ CPJ CONSTRUCTION MANAGEMENT LTD. ATA Approved STORMWATER CALCULATIONS & FLOC FLOOR ELEVATIONS/GRADING MAYNARD STREE HALIFAX, NOVA SCOTIA SITE PROPERTY BOUNDARY FENCE STORM SEWER SANITARY FORCEMAIN WATER WALVE HYDRANT STORM MANHOLE SANITARY MANHOLE CATCHBASIN CULVERT TRAFFIC SIGN UTILITY POLE SPOT EVEVATIONS ACE DRAINAGE FLOW DIRECT PLAN STAFF ELEVS, LIGHT STAND EDGE OF ASPHALT RIGHT OF WAY FACE OF CURB TOP OF WALL NOTES DRAINAGE SWALE SERVICING LEGEND GRADING & WATER ENTRANCE 51 Cobequid Road, Lwr Sackville, NS Phone (902)864-2267 Fax (902)864-3632 E-Mail KVMconsultants@eastlink.ca FILE NAME: FLOOR ELEV PROPOSED 615-S01.dwg XX.XX • EOA ROW FOC OLP ( $\dashv$