

## GENERAL NOTES:

- CONTRACTOR TO REMOVE AND DISPOSE OF OFF-SITE AT NO ADDITIONAL COST TO THE CONTRACT ITEMS NOTED FOR REMOVAL INCLUDING BUT NOT LIMITED TO ALL ASPHALT PAVING, CONCRETE CURBS, CONCRETE PAVING, STUMPS, SOD, TOPSOIL, SIGNAGE AND FILL AS REQUIRED TO FACILITATE THE IMPLEMENTATION OF CHANGES AS PER PLANS AND DETAILS. ANY SIGNAGE OR ANY OTHER ITEMS IDENTIFIED BY THE CLIENT TO BE SALVAGED, SHALL BE STORED AT A LOCATION ON-SITE AS IDENTIFIED BY THE CLIENT.
- CONTRACTOR TO MAKE GOOD TO CONTRACT ADMINISTRATOR'S APPROVAL ALL DAMAGES THAT OCCUR DURING CONSTRUCTION.
- CONTRACTOR TO REVIEW DRAWINGS AND REPORT ANY ERRORS, OMISSIONS, AND / OR DISCREPANCIES TO CONTRACT ADMINISTRATOR IN WRITING PRIOR TO CONSTRUCTION. PROPERTY LINES TO BE VERIFIED PRIOR TO INITIATING ANY CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY LOCATES. CONTRACTOR TO VERIFY LOCATION AND PROTECT ALL SERVICES PRIOR TO ANY EXCAVATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CALL A PRIVATE LOCATING COMPANY AND PAY ALL COSTS RELATING TO ALL SERVICES NOT STAKED OUT BY GAS, HYDRO, BELL, AND CABLE.
- EXTENT OF WORK SHOWN IS TO CONVEY INTENT ONLY. EXTENT OF CONSTRUCTION IS TO BE VERIFIED ON SITE PRIOR TO CONSTRUCTION. IF THERE IS AMBIGUITY OR LACK OF INFORMATION, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE CONTRACT ADMINISTRATOR. THE CONTRACTOR MAY BE HELD RESPONSIBLE TO REMOVE ANY CHANGES MADE WITHOUT WRITTEN PERMISSION OF THE CONTRACT ADMINISTRATOR.
- ALL CONSTRUCTION TO BE CARRIED OUT IN ACCORDANCE WITH THE MOST CURRENT DESIGN STANDARDS, CRITERIA, AND SPECIFICATIONS FORM THE ONTARIO BUILDING CODE, THE ONTARIO PROVINCIAL STANDARD DETAIL, THE ONTARIO PROVINCIAL STANDARD SPECIFICATION AND LANDSCAPE ONTARIO.
- CONTRACTOR TO ENSURE PROPER DEPTH OF EXCAVATIONS ACCOMMODATE HARD SURFACE AND LANDSCAPING AS SPECIFIED ON THESE DRAWINGS.
- CONTRACTOR IS RESPONSIBLE FOR ALL FEES ARISING FROM THE COMPLETION OF WORKS CONVEYED BY THESE DRAWINGS AND IN THE SPECIFICATION PACKAGE. FEES INCLUDE BUT ARE NOT LIMITED TO SECURITIES, PERMIT FEES, DEPOSITS, APPLICATION FEES, LETTERS OF CREDIT, OR ANY OTHER RELATED FUNDING REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ALL UNDERGROUND SERVICES INCLUDING LIGHT STANDARD ELECTRICAL LINES.
- QUALIFIED REGISTERED LAND SURVEYOR (OLS), ACCEPTABLE TO OWNER, TO LOCATE, CONFIRM AND PROTECT CONTROL POINTS PRIOR TO STARTING SITE WORK. PRESERVE PERMANENT REFERENCE POINTS DURING CONSTRUCTION.
- ESTABLISH TWO PERMANENT BENCH MARKS ON SITE. REFERENCED TO ESTABLISHED BENCH MARKS BY SURVEY CONTROL POINTS. RECORD LOCATIONS, WITH HORIZONTAL AND VERTICAL DATA IN PROJECT RECORD DOCUMENTS.
- ESTABLISH LINES AND LEVELS, LOCATED AND LAY OUT, BY INSTRUMENTATION.
- THE CONTRACTOR SHALL RETAIN AN INDEPENDENT INSPECTION AND TESTING COMPANY TO ENSURE THAT ALL WORK IS DONE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. TESTING SHALL INCLUDE REINFORCING STEEL PLACEMENT, CONCRETE TESTS, SOIL BEARING AND COMPACTION TESTS AND STRUCTURAL STEEL.
- SUBSTITUTIONS FROM SPECIFIED PRODUCTS AND MATERIALS MUST BE APPROVED BY THE CONTRACT ADMINISTRATOR PRIOR TO THE ORDERING OF MATERIALS.
- THESE DESIGN DRAWINGS ARE PREPARED SOLELY FOR THE USE BY THE PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS ENTERED INTO A CONTRACT WITH.

## SITE PREPARATION NOTES:

- CONTRACTOR TO ENSURE POSITIVE DRAINAGE OF ALL AREAS WITHIN THE LIMIT OF THE CONTRACT.
- CONTRACTOR TO WORK WITHIN GUIDELINES FOR THE MUNICIPALITY'S NOISE BY-LAWS.
- ANY REFUSE, GARBAGE, OR OTHER DEBRIS ON SITE MUST BE REMOVED AND DISPOSED OF OFF SITE AT THE EXPENSE OF THE CONTRACTOR.
- AREAS TO BE SODDED SHALL BE BACKFILLED WITH NATIVE SOIL TO 150mm BELOW FINISHED GRADE TO ALLOW FOR TOPSOIL INSTALLATION.
- CONTRACTOR TO DETERMINE A SINGLE POINT OF CONSTRUCTION ACCESS AND RESTORE BOULEVARD TO EXISTING OR BETTER CONDITION AFTER THE COMPLETION OF CONSTRUCTION.
- ABSOLUTELY NO STORAGE OF EQUIPMENT OR MATERIALS OUTSIDE OF CONSTRUCTION FENCING.

## TREE PROTECTION NOTES:

- WHERE TREES LOCATED WITHIN THE PROJECT AREA THAT IT HAS BEEN DETERMINED THE FEASIBILITY FOR PRESERVATION IS GOOD, TREE PROTECTION BARRIERS ARE PROPOSED TO ESTABLISH A TREE PROTECTION ZONE (REFER TO CONSTRUCTION DRAWINGS). ALL TREES LOCATED ON ADJACENT PROPERTIES SHALL BE PRESERVED.
- THE TREE PROTECTION ZONE SHALL BE ESTABLISHED BY THE INSTALLATION OF TREE PROTECTION FENCING. THE TREE PROTECTION FENCING SHALL FOLLOW MUNICIPAL GUIDELINES AND/OR REQUIREMENTS UNLESS STATED OTHERWISE WITHIN THE CONSTRUCTION DRAWINGS.
- TREE PROTECTION BARRIERS ARE TO BE ERECTED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OR GRADING ACTIVITIES ON THE SITE AND ARE TO REMAIN IN PLACE THROUGHOUT THE ENTIRE DURATION OF THE PROJECT. THE APPLICANT SHALL NOTIFY THE MUNICIPALITY PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES TO CONFIRM THAT THE TREE PROTECTION BARRIERS ARE IN PLACE.
- ALL SUPPORTS AND BRACING USED TO SAFELY SECURE THE BARRIER SHOULD BE LOCATED OUTSIDE THE TREE PROTECTION ZONE. ALL SUPPORTS AND BRACING SHOULD MINIMIZE DAMAGE TO ROOTS.
- WHERE SOME FILL OR EXCAVATED MATERIAL MUST BE TEMPORARILY LOCATED NEAR THE TREE PROTECTION ZONE, A WOODEN BARRIER MUST BE USED TO ENSURE NO MATERIAL(S) ENTERS THE TREE PROTECTION ZONE.
- ALL TREES LOCATED WITHIN THE PROJECT AREA DESIGNATED FOR PRESERVATION, OR DENOTED EXISTING, AND ALL TREES LOCATED ON ADJACENT PROPERTIES SHALL BE PRESERVED. IN THE EVENT THAT ANY TREES DESIGNATED FOR PRESERVATION LOCATED WITHIN THE PROJECT AREA OR ON ADJACENT PROPERTIES ARE DAMAGED OR KILLED BY THE ACTIONS OF A CONTRACTOR OR THEIR AGENTS/SUB-CONTRACTORS, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPLACEMENT OF THE DESTROYED PLANT MATERIAL WITH MATERIAL OF EQUAL VALUE AND COMPARABLE SPECIES TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR AND/OR PROJECT ARBORIST.
- AREAS WITHIN THE DRIPLINE OF THE TREES DESIGNATED FOR PRESERVATION ARE NOT TO BE USED FOR ANY TYPE OF STORAGE (I.E. STORAGE OF DEBRIS, CONSTRUCTION MATERIAL, SURPLUS SOILS, AND CONSTRUCTION EQUIPMENT). NO TRENCHING OR TUNNELING FOR UNDERGROUND SERVICES SHALL BE LOCATED WITHIN THE TREE PROTECTION ZONE OR DRIPLINE OF TREES DESIGNATED FOR PRESERVATION WITHIN OR ADJACENT TO CONSTRUCTION ZONE.
- NO GRADE CHANGES SHALL OCCUR WITHIN TREE PROTECTION ZONE. IN THE EVENT THAT GRADE CHANGES MAY OCCUR THE CONSULTING ARBORIST MUST BE NOTIFIED SO THAT PRECAUTIONS TO PRESERVE THE TREE, SUCH DRY WELLING OR ROOT FEEDING CAN BE DETERMINED PRIOR TO THE PLACEMENT OF FILL OR EXCAVATION ACTIVITIES.
- TREES SHALL NOT HAVE ANY RIGGING CABLES OR HARDWARE OF ANY SORT ATTACHED OR WRAPPED AROUND THEM, NOR SHALL ANY CONTAMINANTS BE DUMPED WITHIN THE PROTECTIVE AREAS. FURTHERMORE, NO CONTAMINANTS SHALL BE DUMPED OR FLUSHED WHERE THEY MAY COME IN CONTACT WITH THE FEEDER ROOTS OF THE TREES.
- THE CONTRACTOR WILL TAKE EVERY PRECAUTION TO PREVENT DAMAGE TO TREES OR SHRUBS. THE CONTRACTOR WILL TAKE EVERY PRECAUTION TO PROTECT PLANT AND ROOT SYSTEMS FROM DAMAGE, COMPACTION AND CONTAMINATION RESULTING FROM THE CONSTRUCTION TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR AND/OR CONSULTING ARBORIST.
- TREES THAT REQUIRE PRUNING PRIOR TO CONSTRUCTION TO PERMIT CONSTRUCTION ACTIVITIES, HAVE BEEN IDENTIFIED IN THE CONSTRUCTION DRAWINGS. IN THE EVENT THAT IT IS NECESSARY TO REMOVE ADDITIONAL LIMBS OR PORTIONS OF TREES AFTER CONSTRUCTION HAS COMMENCED, TO ACCOMMODATE CONSTRUCTION, THE CONTRACT ADMINISTRATOR AND/OR CONSULTING ARBORIST IS TO BE INFORMED AND THE REMOVAL IS TO BE EXECUTED CAREFULLY AND IN FULL ACCORDANCE WITH ARBORICULTURAL TECHNIQUES BY A CERTIFIED ARBORIST.
- DURING EXCAVATION OPERATIONS IN WHICH ROOTS ARE AFFECTED, THE CONTRACTOR IS TO PRUNE ALL EXPOSED ROOTS CLEANLY. PRUNE ENDS TO POINT OBLIQUELY DOWNWARDS. THE EXPOSED ROOTS SHOULD NOT BE ALLOWED TO DRY OUT, AND THE CONTRACTOR SHALL DISCUSS WATERING THE ROOTS WITH THE OWNER AND CONTRACT ADMINISTRATOR SO THAT THE ROOTS SHALL MAINTAIN OPTIMUM SOIL MOISTURE DURING CONSTRUCTION AND BACKFILLING OPERATIONS. BACKFILLING MUST BE WITH CLEAN UNCONTAMINATED TOPSOIL FROM AN APPROVED SOURCE.
- THE CONTRACTOR MUST REPORT IMMEDIATELY ANY DAMAGE TO TREES SUCH AS BROKEN LIMBS, DAMAGE TO ROOTS OR WOUNDS TO THE MAIN TURN OR STEM SYSTEMS SO THAT THE DAMAGE CAN BE ADDRESSED IMMEDIATELY.
- ANY ROOTS OR BRANCHES WHICH EXTEND BEYOND THE TREE PROTECTION ZONE(S) INDICATED ON THIS PLAN WHICH REQUIRE PRUNING, MUST BE PRUNED BY A CERTIFIED ARBORIST OR OTHER TREE PROFESSIONAL AS APPROVED BY THE GOVERNING MUNICIPALITY. ALL PRUNING OF TREE ROOTS AND BRANCHES MUST BE IN ACCORDANCE WITH GOOD ARBORICULTURAL STANDARDS.
- ALL TREE REMOVALS MUST BE COMPLETED OUTSIDE OF NESTING SEASON WHICH WILL EXTEND FROM APRIL 1ST TO AUGUST 31ST.

## SEDIMENTATION CONTROL:

- ALL SILTATION CONTROL FENCING SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF EXCAVATION OR GRADING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SILTATION CONTROL DEVICES IN GOOD WORKING ORDER AT ALL TIMES. CONTRACTOR SHALL INSPECT SUCH DEVICES DAILY AND AFTER EACH RAINFALL EVENT.
- FOLLOWING COMPLETION OF CONSTRUCTION, COLLECTED SILT SHALL BE DISPOSED OFF-SITE, SILT FENCE SHALL BE REMOVED AND THE AFFECTED AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DRAWINGS.
- ALL ON-SITE STORAGE OF GRANULAR MATERIALS WILL BE ISOLATED AND SECURED WITH SILT FENCING
- NO IN-WATER WORKS ARE PERMITTED.
- NO VEHICLES OR EQUIPMENT WILL BE REFUELLED WITHIN 30 METRES OF THE WATERCOURSE.
- NO MATERIAL WILL BE STOCKPILED ON THE WATERCOURSE BANKS.
- 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 PREVENT SEDIMENT RELEASES TO THE NATURAL ENVIRONMENT. THE CONTRACT ADMINISTRATOR ENFORCEMENT OFFICER SHOULD BE IMMEDIATELY CONTACTED SHOULD THE EROSION AND SEDIMENT CONTROL PLANS CHANGE FROM THE APPROVED PLANS. FAILED EROSION AND SEDIMENTATION CONTROL MEASURES SHOULD BE REPAIRED IMMEDIATELY.

## UNDERGROUND SERVICING AND UTILITIES:

- ALL UNDERGROUND SERVICE INFORMATION IS DERIVED FROM RECORDS AND SERVICES HAVE NOT BEEN LOCATED BY THE UTILITY COMPANIES OR BY DAYLIGHTING. WSP GEOMATICS AND WSP CANADA GROUP LIMITED ASSUME NO RESPONSIBILITY AS TO THE ACCURACY, CORRECTNESS AND COMPLETENESS OF THE UNDERGROUND SERVICE INFORMATION SHOWN ON THE FACE OF THIS PLAN. UTILITIES MUST BE LOCATED BY THE UTILITY COMPANIES BEFORE CONSTRUCTION BEGINS. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES WHICH OCCUR TO EXISTING SERVICES DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES ON THE SITE.
- CONTRACTOR MUST CHECK & VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB, REPORTING ALL DISCREPANCIES TO THE CONTRACT ADMINISTRATOR BEFORE PROCEEDING WITH THE WORK.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING SERVICES WHEN EXCAVATING.

## GRADING NOTES:

- CONTRACTOR TO ENSURE POSITIVE DRAINAGE OF ALL AREAS WITHIN THE LIMIT OF THE CONTRACT.
- ENSURE TRANSITION OF EXISTING AND NEW GRAD ELEVATIONS IS SMOOTH.
- MINIMUM PERMITTED HARDSCAPE SLOPE IS 2%; MAXIMUM PERMITTED IS 5%.
- MINIMUM GROUND SLOPE TO BE 2%, MAXIMUM PERMITTED 33%.
- PROPOSED ELEVATIONS ALONG LIMIT OF CONTRACT MUST MATCH EXISTING ELEVATIONS.
- NOTIFY CONTRACT ADMINISTRATOR IMMEDIATELY, IN WRITING, IF ANY DISCREPANCIES WITH STATED REQUIREMENTS ARE DISCOVERED.

## LAYOUT NOTES:

- LAYOUT TO BE STAKED BY CONTRACTOR AND APPROVED BY THE CONTRACT ADMINISTRATOR.
- ALL PLANT MATERIAL TO BE INSPECTED BY CONTRACT ADMINISTRATOR PRIOR TO INSTALLATION. ALL PLANT MATERIAL MAY BE REJECTED AT ANY TIME DURING CONSTRUCTION AND WARRANTY PERIOD.
- CONTRACTOR TO REVIEW DRAWINGS AND REPORT ANY ERRORS, OMISSIONS, OR DISCREPANCIES TO THE CONTRACT ADMINISTRATOR IN WRITING.
- PROPERTY LINES TO BE VERIFIED PRIOR TO INITIATING CONSTRUCTION.
- SITE FURNISHINGS TO BE AS SPECIFIED UNLESS SUBSTITUTION IS APPROVED IN WRITING BY CONTRACT ADMINISTRATOR.
- NOTIFY CONTRACT ADMINISTRATOR IMMEDIATELY, IN WRITING, IF ANY DISCREPANCIES WITH STATED REQUIREMENTS ARE DISCOVERED.

## TOPSOIL PLANTING BED PREPARATION:

- MIX TOPSOIL AS RECOMMENDED BY SOIL TEST RESULTS AND RECOMMENDATIONS OF SOIL TESTING AGENCY.
- TOPSOIL SHALL NOT BE USED TO CONSTRUCT PERMANENT BERMS.
- ALL TOPSOIL SHOULD BE FREE OF SUBSOILS, CLAY, STONES, ROOTS, EXCESS WATER, FROST AND OTHER EXTRANEOUS MATTER.
- PREPARE PLANTING BEDS PRIOR TO ARRIVAL OF PLANT MATERIAL ON SITE.
- EXCAVATE PER PLANTING DETAILS. THE FOREGOING PROPORTIONS ARE SUBJECT TO CHANGE UPON RECEIPT OF TOPSOIL ANALYSIS.
- PREPARE PLANTING SOIL BY EVENLY MIXING:
  - PARTS NATIVE SOIL
  - 1 PART SHARP SAND
  - 2 PARTS 3/4" SCREENED COMPOST
  - 500g OF BONE MEAL PER CUBIC METRE.
  - MIX THOROUGHLY

## SODDING NOTES:

- ALL SOD SHALL BE GUARANTEED FOR 3 MONTHS FROM DATE OF SUBSTANTIAL PERFORMANCE.
- SODDING SHALL CONFORM TO LANDSCAPE ONTARIO'S 'GENERAL LANDSCAPE SPECIFICATIONS'.
- TOPSOIL SHALL BE EVENLY SPREAD OVER SUB-GRADE AND LOOSELY COMPACTED TO 150mm MINIMUM DEPTH.
- ALL STONES AND DEBRIS OVER 25mm DIA. SHALL BE REMOVED.
- TOPSOIL SHALL BE SUPPLEMENTED WITH A 10-6-4 FERTILIZER AND 20% SUPERPHOSPHATE APPLIED AT A RATE OF 5 KILOS PER 100 SQUARE METRES EACH, PRIOR TO PLACEMENT OF SOD.
- SOD SHALL BE PLACED WITH STAGGERED BUTT JOINTS, WATERED THOROUGHLY, AND ROLLED WHEN DRY.
- LAY SOD SECTIONS PERPENDICULAR ON SLOPES GREATER THAN 3:1 AND SECURE WITH WOODEN PEGS. WOODEN PEGS TO BE 17 X 17 X 300mm. PLACE PEGS 3 PER SQUARE METRE. 100mm BELOW TOP EDGE TO PREVENT SHIFTING OF SOD AND DRIVE PEGS FLUSH WITH TOP OF SOD SOIL. PROVIDE A MINIMUM OF 2 STAKES PER ROLL OF SOD.
- MAINTAIN SODDED AREA FROM THE TIME OF INSTALLATION UNTIL THIRTY (30) CALENDAR DAYS AFTER ALL SODDED AREAS HAVE BEEN INSPECTED BY THE CONTRACT ADMINISTRATOR AND A CERTIFICATE OF COMPLETION IS ISSUED. MINIMUM OF TWO CUTS.
- MAINTENANCE SHALL INCLUDE ALL NECESSARY MEASURES TO ESTABLISH AND MAINTAIN GRASS IN A HEALTHY, VIGOROUS GROWING CONDITION.
- MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING WORK:
  - MOWING AT REGULAR INTERVALS TO MAINTAIN A MAXIMUM HEIGHT OF 60MM. DO NOT CUT MORE THAN 1/3 OF THE GRASS HEIGHT AT ANY ONE MOWING. TRIM AND CLIP EDGES. REMOVE CLIPPINGS AFTER MOWING AND TRIMMING.
  - WATERING WHEN REQUIRED IN SUFFICIENT QUANTITIES AND AT A FREQUENCY TO PREVENT SOD FROM DRYING OUT AND TO MAINTAIN SOIL UNDER SOD CONTINUOUSLY MOIST TO A DEPTH OF 75 TO 100MM.
  - FERTILIZE SODDED AREAS ONE MONTH AFTER SODDING WITH 2:1:1 RATIO FERTILIZER. SPREAD EVENLY AT A RATE AS PER MANUFACTURER'S INSTRUCTIONS AND WATER IN WELL, WITH A MINIMUM OF 50CM INFILTRATION AS PREVIOUSLY MENTIONED.

## PLANT MATERIAL ORDER, DELIVERY AND INSPECTION:

- CONTRACTOR TO CHECK ALL QUANTITIES AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR IN WRITING. THE QUANTITIES INDICATED ON THE PLAN SUPERCEDE THE TOTALS OF THE PLANT LIST.
- OBTAIN CONTRACT ADMINISTRATOR'S APPROVAL ON ALL PLANT MATERIAL AT SOURCE OR UPON DELIVERY, PRIOR TO COMMENCEMENT OF PLANTING WORK.
- APPROVAL OF PLANT MATERIAL PRIOR TO PLANTING SHALL NOT IMPAIR THE RIGHT OF THE CONTRACT ADMINISTRATOR TO REJECT PLANTS AFTER PLANTING, WHICH HAVE BEEN DAMAGED, OR WHICH IN ANY WAY DO NOT CONFORM TO THE SPECIFICATIONS.
- SUBSTITUTIONS OF SIZE, OR WITH OTHER PLANT MATERIAL WILL ONLY BE ALLOWED WITH THE WRITTEN APPROVAL OF THE CONTRACT ADMINISTRATOR.
- ALL MATERIAL MUST CONFORM TO THE SIZES SHOWN ON THE PLANT LIST, EXCEPT WHERE LARGER PLANT MATERIAL IS USED WHEN APPROVED BY THE CONTRACT ADMINISTRATOR. USE OF LARGER PLANTS WILL NOT INCREASE THE CONTRACT PRICE. UNDERSIZED MATERIAL WILL BE REJECTED.
- ALL SHRUBS AND TREES SHALL CONFORM TO THE PRESENT STANDARDS OF THE CANADIAN NURSERY TRADES ASSOCIATION FOR SIZE AND SPECIES.
- PLANTS ARE TO BE NURSERY GROWN UNDER PROPER CULTURAL CONDITIONS, IN PARTICULAR WITH RESPECT TO SPACING, PEST AND DISEASE CONTROL, AND BRANCH AND ROOT PRUNING.
- TREES ARE TO HAVE STRAIGHT STURDY TRUNKS.
- TREES SHALL BE WELL BRANCHED AND BALANCED WITH A STRONG CENTRAL LEADER.
- DECIDUOUS SHADE TREES SHALL BE FREE OF BRANCHES FROM GROUND LEVEL TO A HEIGHT OF 1.8M ABOVE THE GROUND.
- TREES WITH OPEN SCARS ARE NOT ACCEPTABLE.
- KEEP ALL ROOTS AND ROOTBALLS MOIST PRIOR TO PLANTING.

## PLANT MATERIAL GUARANTEE AND FINAL INSPECTION:

- AT THE COMPLETION OF PLANTING OPERATIONS, REMOVE ALL SURPLUS MATERIAL FROM THE SITE AT NO EXTRA CHARGE TO THE PROJECT.
- MAKE GOOD ALL DAMAGE RESULTING FROM PLANTING OPERATIONS AT NO EXTRA CHARGE TO THE PROJECT.
- PLANT MATERIAL SHALL BE GUARANTEED FOR A MINIMUM OF TWO YEARS FROM THE ISSUE DATE OF THE CERTIFICATE OF COMPLETION.
- ALL PLANTS SHALL BE INSPECTED TWICE, ONCE HALFWAY THROUGH THE GUARANTEE PERIOD, AND AGAIN AT THE END OF THE GUARANTEE PERIOD. PLANTS WHICH, AT THAT TIME, ARE NOT IN HEALTHY VIGOROUS GROWING CONDITION, TO THE CONSULTANT'S APPROVAL, SHALL BE REPLACED AT NO EXTRA CHARGE TO THE PROJECT.
- CONTRACTOR TO CONTACT CONTRACT ADMINISTRATOR AND/OR APPROVAL AGENCY/MUNICIPALITY TO REVIEW PROJECT FOR GUARANTEE INSPECTIONS.

## CONCRETE NOTES:

- ALL CONCRETE WORK SHALL CONFORM TO CSA STANDARDS A23.1, A23.2, & A23.3.
- CONFORM TO THE REQUIREMENTS OF CAN/CSA G30.18 SERIES OF REINFORCING STEEL. REINFORCING BARS SHALL BE DEFORMED HI-BOND HARD GRADE WITH MINIMUM YIELD STRENGTH OF  $F_y = 400\text{MPa}$ . ALL REINFORCING STEEL SHALL BE EPOXY COATED.
- CONFORM TO THE CONCRETE COVER REQUIREMENTS OF CSA A23.1 AND THE FOLLOWING, UNLESS OTHERWISE NOTED:
  - CONCRETE CAST AGAINST EARTH: 100mm (4")
  - PIERS AND WALL: 100mm (4")
  - EXPOSED TO DE-ICING CHEMICALS: 100mm (4")
- WELDING OF REINFORCING STEEL SHALL NOT BE PERMITTED UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.
- ALL REINFORCING STEEL FABRICATION AND PLACEMENT DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
- CONCRETE PROPERTIES:
  - EXPOSED CONCRETE TO BE CLASS C-2 CONCRETE (28 DAY COMPRESSIVE STRENGTH OF 32MPa) WITH AIR ENTRAINMENT.
  - FOUNDATION WALLS AND CONCRETE EXPOSED TO FREEZE THAW SHALL BE CLASS F-2, HAVE A 28 DAY COMPRESSIVE STRENGTH OF 25 MPa, 0.55 WATER-CEMENT RATIO WITH AIR ENTRAINMENT.
  - CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE AT JOB SITE.
- ALL CONCRETE FORMS TO BE WET THOROUGHLY BEFORE POURING CONCRETE.
- DO NOT ADD WATER TO CONCRETE UNLESS WRITTEN APPROVAL GIVEN BY THE ENGINEER. IF HIGHER SLUMP CONCRETE IS DESIRED, CONCRETE SUPPLIER SHALL DESIGN AND SUPPLY ACCORDINGLY.
- SLUMP OF CONCRETE TO BE 75mm +/- 25mm (3" +/- 1") OR AS OTHERWISE SPECIFIED. CONCRETE WITH 110mm (4.5") SLUMP OR MORE IS TO BE REJECTED.
- WATER SURING OF CONCRETE IS RECOMMENDED. CURE ALL CONCRETE IN ACCORDANCE WITH CSA A23.1 SECTION 7.4
- ALL OIL, GREASE, MUD AND DEBRIS SHALL BE ENTIRELY REMOVED FROM THE REINFORCING STEEL AND ANCHOR BOLTS PRIOR TO THE PLACEMENT OF THE CONCRETE. REBAR SHALL BE STORED ON-SITE IN A MANNER TO BE KEPT CLEAN AND FREE FROM DELETERIOUS MATERIALS.
- REINFORCING BARS, DOWELS AND ANCHOR BOLTS SHALL BE SECURELY TIED IN PLACE SO AS TO MAINTAIN THEIR EXACT POSITION BEFORE AND DURING PLACEMENT OF THE CONCRETE. BAR SUPPORTS SHALL ONLY BE MADE OF PRECAST CONCRETE BLOCKS, PLASTIC OR WIRE.
- ALL CONCRETE EXCEPT SLABS ON GRADE 125mm THICK OR LESS SHALL BE MECHANICALLY VIBRATED SO AS TO COMPLETELY FILL THE FORM WITHOUT CAUSING UNDU SEGREGATION. ANY DEFECTS IN THE HARDENED CONCRETE SHALL BE SATISFACTORY REPAIRED OR SHALL BE REPLACED.

## CONCRETE FOUNDATION NOTES:

- REMOVE ALL TOPSOIL, ORGANIC LOOSE FILL AND OTHER DELETERIOUS MATERIAL FROM BUILDING AREA BEFORE STARTING CONSTRUCTION.
- ALL FOOTINGS SHALL BEAR DIRECTLY ON NATURALLY CONSOLIDATED, UNDISTURBED SOIL OR COMPACTED FILL WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 150 kPa.
- PROOF-ROLL EXISTING FILL MATERIAL. REMOVE ANY LOOSE OR SOFTENED AREAS BENEATH SLAB-ON-GRADE BEFORE PLACING GRANULAR FILL.
- FOUND ALL FOOTINGS BELOW THE LEVEL AT WHICH POTENTIAL DAMAGE RESULTING FROM FROST ACTION CAN OCCUR, BUT A MINIMUM 1200mm (4 FT.) BELOW FINISHED EXTERIOR GRADE UNLESS OTHERWISE NOTED.
- APPROVED GRANULAR FILL UNDER FOOTINGS SHALL BE COMPACTED IN 150mm (6") LAYERS TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
- ANY NECESSARY PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT EXISTING FOOTINGS ARE NOT DISTURBED OR UNDERMINED IN ANY WAY DURING EXCAVATION.
- SOIL CONDITIONS, REINFORCING STEEL AND FORMWORK SHALL BE INSPECTED BY THE CONSULTANT BEFORE PLACING CONCRETE. CONTRACTOR SHALL GIVE CONSULTANT A MINIMUM 24 HOURS NOTICE TO CARRY OUT INSPECTION.
- CARRY OUT BACKFILLING AGAINST FOUNDATION WALLS WHERE THERE IS GRADE ON BOTH SIDES IN SUCH A MANNER THAT THE LEVEL OF BACKFILLING ON ONE SIDE OF THE WALL IS NEVER MORE THAN 500mm DIFFERENT FROM THE LEVEL ON THE OTHER SIDE OF THE WALL.
- IN NO CASE SHALL HORIZONTAL CONTROL JOINTS BE ALLOWED IN ANY VERTICALLY SPANNING CONCRETE WALLS WITHOUT THE CONSENT OF THE ENGINEER.

## CONCRETE WALL NOTES:

- ALL WALL LOCATIONS AND BASE ELEVATIONS TO BE STAKED AND APPROVED BY CONTRACT ADMINISTRATOR PRIOR TO INSTALLATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL EXCESS SOILS FROM EXCAVATION.
- CONTRACTOR TO BACKFILL AND BLEND INTO ADJACENT GRADES, ENSURING UPPER 150mm IS CLEAN TOPSOIL. ENSURE POSITIVE DRAINAGE AWAY FROM ALL WALLS.
- ENSURE ALL JOINTS ARE COMPRESSED AND TOOLED CLEAN ALL EXPOSED FACES TO REMOVE DIRT AND STAINS AFTER COMPLETION OF JOINT TREATMENTS. DO NOT USE CLEANING PROCESS THAT COULD CHANGE THE CHARACTER OF EXPOSED CULTURED STONE AND CONCRETE SURFACES.
- EXPOSED CONCRETE FACE OF THE WALL (SINGLE FACE OF DECORATIVE STONE) SHALL BE ABRASIVE BLAST AND SACK RUBBED TO PRODUCE EVEN TEXTURE AND FILL ALL PITS AND AIR HOLES.
- CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR LANDSCAPE WALLS SEALED AND SIGNED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN ONTARIO FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. SHOP DRAWINGS SHALL INCLUDE LOCATION AND SPACING OF REBAR, REBAR BENDING, AS WELL AS LOCATION AND SPACING OF CONTROL AND EXPANSION JOINTS.
- DO NOT LEAVE ANY EXCAVATION OPEN OVERNIGHT. DO NOT LEAVE UNFINISHED WALLS UNCOVERED OVERNIGHT DURING DELAYS IN CONSTRUCTION.
- WEEP HOLE VENTS AT BOTTOM OF OUTER WYTHES AT 400mm MAXIMUM SPACING O.C.

NO	DATE	DESCRIPTION	BY
6	24-04-18	ISSUED FOR ZBLA AND SPC	TM
5	24-04-10	ISSUED FOR PHASE 3 RE-SUBMISSION	TM
4	24-02-26	ISSUED FOR PHASE 3 RE-SUBMISSION	TM
3	23-12-01	ISSUED FOR SPA	TM
2	23-11-06	ISSUED FOR PRICING PROPOSAL	JC
1	23-10-12	ISSUED FOR CITY PRE-CONSULTATION	JC
NO	DATE	DESCRIPTION	BY



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### CLIENTS:

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### PROJECT TITLE:

## ADVANCED MEDICAL RESEARCH CENTRE

### SITE ADDRESS:

451 SMYTH ROAD, OTTAWA, ONTARIO

### DRAWING TITLE:

## NOTES

DESIGNED	JC	DRAWN	JC	CHECKED	AL
SCALE	N.T.S.	DATE	NOVEMBER 2023	PROJECT NUMBER	
PROJECT NUMBER				DWG. NUMBER	
CA0009956.0165-CA				L-000	