

LANDSCAPING
OVERHEAD OR UNDERGROUND

THIS SPECIFICATION COVERS THE REQUIREMENTS FOR THE INSTALLATION OF FLOWERS, PLANTS, TREES, SHRUBS, EVERGREENS AS PART OF THE ELECTRIC LANDSCAPE WORK ASSOCIATED WITH OVERHEAD AND UNDERGROUND LINES AND RELATED FACILITIES IN ACCORDANCE WITH THE JOB DRAWINGS.

- I. GENERAL**
- 1) THE NUMBER, TYPE AND LOCATION OF PLANTINGS SHALL BE AS SHOWN ON THE JOB OR DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR SHALL GIVE HIS PERSONAL ATTENTION TO THE FAITHFUL CARRYING OUT THE WORK. COMPETENT AND SKILLFUL MEN SHALL BE EMPLOYED TO EXECUTE THE WORK WHICH SHALL BE SUPERVISED BY AN EXPERIENCED ARBORIST FOREMAN AT ALL TIMES.
 - 3) THE CONTRACTOR SHALL HAVE AVAILABLE AND IN GOOD CONDITION ALL EQUIPMENT NECESSARY FOR THE SAFE TRANSPORTING OF PLANTINGS TO THE SITE AND FOR SETTING PLANTINGS IN FINAL POSITION.
 - 4) THE CONTRACTOR SHALL CONTAIN HIS OPERATION WITHIN THE OWNER'S PROPERTY AND SHALL AVOID OR MINIMIZE ANNOYANCE OR DISTURBANCE TO THE PUBLIC.
 - 5) CARE SHALL BE TAKEN TO AVOID DISTURBANCE OF ALL AREAS OUTSIDE OF THE WORK AREAS AND ANY DAMAGE THEREOF SHALL BE IMMEDIATELY REPAIRED AND RESTORED TO THE ORIGINAL CONDITION.
 - 6) WHEN THE WORK IS COMPLETED, THE CONTRACTOR SHALL RESTORE THE SURFACE OF OWNER'S PROPERTY AND/OR ANY OTHER LAND USED BY THE CONTRACTOR TO ITS ORIGINAL CONDITION. ALL EXCESS EXCAVATED MATERIAL, AND ALL OTHER MATERIAL WHICH COLLECTS AS A RESULT OF THE CONTRACTOR'S OPERATION, SHALL BE REMOVED IMMEDIATELY.
 - 7) ALL BRICKS, MORTAR, DECORATIVE STONE, CONCRETE, SIGNS, SAND GRAVEL, MOUNTAIN BRICK FORMS, MULCH OF ALL TYPES, PULVERIZED BLACK DIRT, TREES, FENCE INSTALLATION AND REMOVAL, FLOWERS, SHRUBS, EVERGREEN TREES AND TO BE FURNISHED BY THE CONTRACTOR WITH LABOR TO INSTALL.
 - 8) THE CONTRACTOR SHALL REMOVE ONLY THOSE TREES AND SHRUBS SO DESIGNATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, OR THOSE THAT DIRECTLY INTERFERE WITH THE SAFETY OR QUALITY OF CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF TWO DAYS IN ADVANCE OF REMOVAL OF TREES THAT AFFECT SAFETY. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN WORKING NEAR EXISTING TREES AND SHRUBS TO AVOID DAMAGING THOSE NOT SCHEDULED FOR REMOVAL. ANY UNWANTED PLANTS AT HIS OWN EXPENSE, THE CONTRACTOR SHALL PROTECT ALL OTHER TREES, BUSHES AND LANDSCAPING FEATURES. TREES REMOVED OR DAMAGED BY THE CONTRACTOR THAT HAVE NOT BEEN DESIGNATED FOR REMOVAL, SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE CITY. TREES TO HAVE BRANCHES OR ROOTS PRUNED SHALL BE DONE IN A NEAT AND CLEAN MANNER (i.e., WITH A SAW DESIGNED FOR PRUNING OR SHEARS OR LOPPERS) AND NOT TOXIN, PULLED, OR BROKEN WITH CONSTRUCTION EQUIPMENT. THE CONTRACTOR SHALL HAVE THE SERVICES OF A REGISTERED AND CERTIFIED ARBORIST ON SITE DURING THE TREE REMOVAL, TRIMMING AND PRUNING WORK. THE ARBORIST SHALL IDENTIFY THE TYPE, SIZE, DIAMETER AND CONDITION OF ALL TREES AND EVERGREENS PRIOR TO REMOVAL, TRIMMING AND/OR PRUNING AND PROVIDE A REPORT FOR EACH TREE OR EVERGREEN WORKED ON. THE REPORT SHALL BE PROVIDED IN DUPLICATE AND GIVEN TO THE ENGINEER FOR REVIEW. SEE DETAILS OF TREE REQUIREMENTS IN PLAN DRAWINGS OR AS DIRECTED BY THE ENGINEER.

| | | |
|--|--|---|
| NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS | LANDSCAPING OVERHEAD OR UNDERGROUND (CONSTRUCTION SPECIFICATION) | DATE: 06-01-06 Page 6 of 11 58199-104 |
|--|--|---|

- III. TREES AND EVERGREENS (CONTINUED)**
- 8) THE CONTRACTOR SHALL NOTE THAT SOME LANDSCAPING MATERIALS MAY BE REQUIRED TO BE TRANSPORTED THAN ALL RULES, REGULATIONS, PAYMENT, GUARANTEES, WATERING FOR 2 MONTHS, CARE OF TREES, BASS SIZE, PREP AREA SHALL HAVE THE SAME REQUIREMENTS AS IF INSTALLING NEW LANDSCAPING MATERIALS. ALL TRANSPORTED LANDSCAPING MATERIALS ACTIVITIES SHALL BE DIRECTED AND PERFORMED UNDER THE SUPERVISION OF THE ARBORIST AND LANDSCAPE ARCHITECT. SEE DRAWING FOR PARTICULARS, TRANSPORTING SHOWN ON THE DRAWING, AND NOT IDENTIFIED UNDER A UNIT PRICE ARE CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT AND SHALL NOT BE PAID FOR SEPARATELY.

- IV. PLANTING**
- 1) IF THE SOIL AT HAND IS NOT SUITABLE FOR PLANTING, A SUITABLE LIGHT RICH SOIL SHALL BE SUPPLIED. THE BACKFILL SOIL SHALL BE FREE OF SOIL, LIMES, CLODS, STONES, AND ALL OTHER TYPES OF FOREIGN MATERIALS AND SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO DELIVERY ON THE SITE. BACKFILL SHALL BE MIXED WITH PEAT MOSS, OR EQUIVALENT, AND SHALL BE WELL COMPACTED BY TAMING AND WATERING ACCORDING TO ACCEPTED PRACTICE SO THAT ALL VOIDS AND AIR POCKETS ARE ELIMINATED. A SLIGHT DEPRESSION SHALL BE LEFT AROUND THE PLANTING TO FACILITATE WATERING.
 - 2) PLANTING PITS FOR BALLED AND BURLAPPED TREES SHALL BE PREPARED AT THE TIME THE STOCK IS DUG SO THAT NO DELAY OCCURS WHEN THE STOCK IS READY TO BE PLANTED. ALL PITS SHALL BE DUG AT LEAST ONE FOOT WIDER THAN THE DIAMETER OF THE BALL. THE PLANTING PIT SHALL BE DEEP ENOUGH TO PROVIDE PROPER DRAINAGE, TO ALLOW FOUR INCHES OF GOOD SOIL BENEATH THE BALL, AND TO PERMIT THE PLANTING WHEN IT HAS SETTLED TO STAND AT THE ESTABLISHED GRADE AT THE SAME DEPTH AS IT ORIGINALLY GREW. IF THE SOIL CONDITION IN THE PITS ARE SUCH THAT ADDITIONAL DRAINAGE IS REQUIRED TO ENSURE SUCCESSFUL GROWTH, SUITABLE DRAINAGE SHALL BE PROVIDED BY THE CONTRACTOR. WHATEVER TYPE OF DRAINAGE IS PROVIDED SHALL ELIMINATE SUPERFLUOUS WATER IN THE PIT AND DRAIN AWAY FROM THE PLANTING SITE. EACH TREE SHALL BE PLANTED SO AS TO STAND DIRECTLY WHERE PLANTED AND AT THE ESTABLISHED GRADE. IMMEDIATELY AFTER BEING PLANTED, THE TRUNKS OF ALL DECIDUOUS TREES SHALL BE WRAPPED SPIRALLY WITH CREPE PAPER MANUFACTURED FOR THIS PURPOSE. WRAPPING SHALL BE APPLIED FROM TOP DOWN AND STARTED AT A POINT FAR ENOUGH UP IN THE TREE TO BE WELL SHADED BY BRANCHES ABOVE. LARGE LOWER LIMBS SHALL BE BOUND AND REINFORCED WITH STOUT CORD WOUND SPIRALLY IN THE OPPOSITE DIRECTION OF THE WRAPPING PAPER.
 - 3) ALL BALLED AND BURLAPPED SHRUBS SHALL BE PLANTED IN HOLES TWELVE INCHES LARGER IN DIAMETER THAN THE BALL, OF ADEQUATE DEPTH, AND WITH PERPENDICULAR WALLS. THE BALL SHALL BE COVERED TO APPROXIMATELY THREE QUARTERS OF THE BALL WITH SOIL. THE REMAINING QUARTER SHALL BE FILL WITH THE REMAINING ONE QUARTER FILL SHALL BE DRY SOIL WELL COMPACTED INTO PLACE.
 - 4) IN AREAS WHERE THE PLANTING OF BALLED STOCK HAS RESULTED IN AN EXCESSIVE AMOUNT OF EXTRA SOIL, SUCH EXCESS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR AND DISPOSED OF OFF SITE.
 - 5) PLANTING PITS FOR BARE ROOTED STOCK SHALL BE AMPLE TO RECEIVE THE ROOTS WITHOUT CROWDING. AFTER PLACING THE PLANTS IN THE HOLES, THE LATTER SHALL BE THREE QUARTERS FILLED WITH TOP SOIL, WATERED AND THEN FILLED WITH COMPACTED DRY EARTH TO THE LEVEL OF THE FINISHED GRADE. THE PLANTS SHALL BE PLANTED PLUMB AND STRAIGHT. ALL DECIDUOUS BARE ROOTED STOCK SHALL BE PROPERLY ROOT PRUNED BEFORE PLANTING TO REMOVE UNDESIRABLE ROOT GROWTH AND TO IMPROVE GROWTH CHARACTERISTICS.

| | | |
|--|--|---|
| NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS | LANDSCAPING OVERHEAD OR UNDERGROUND (CONSTRUCTION SPECIFICATION) | DATE: 06-01-06 Page 6 of 11 58199-104 |
|--|--|---|

- I. GENERAL (CONTINUED)**
- 9) TREES SHALL BE INSTALLED A MINIMUM OF FIVE FEET HORIZONTALLY FROM SANITARY SEWERS, SANITARY SERVICES, WATER MAINS, AND WATER SERVICES. TREES SHALL BE INSTALLED A MINIMUM OF TEN FEET HORIZONTALLY FROM UTILITY STRUCTURES AND APPURTENANCES, INCLUDING, BUT NOT LIMITED TO, MANHOLES, VALVE VAULTS, VALVE BOXES AND FIRE HYDRANTS.
 - 10) THE CONTRACTOR SHALL PROVIDE THE SERVICES OF A LICENSED AND REGISTERED ARBORIST, A REGISTERED LANDSCAPER ARCHITECT, PLUS A STATE AND COUNTY LICENSED, CERTIFIED AND APPROVED LANDSCAPER SERVICE ASSIGNED AND PERFORM SERVICES FOR THE DURATION OF THE PROJECT. THE ARBORIST AND REGISTERED LANDSCAPER ARCHITECT SHALL OVERSEE ALL RESTORATION REQUIRED FOR THE PROJECT AS THE PLANTS OR AS SPECIFIED BY THE ENGINEER. VEGETATION, DECORATIVE FEATURES, PROVIDE LANDSCAPING DESIGNS, GARDENS, AND TREES AND SHRUBS AND EVERGREENS AND SODDING, SEEDING AND BLACK DIRT INSTALLATION, AND SHALL DIRECT PRUNING AND TRIMMING OPERATIONS TO FOLLOW THE BEST PRACTICES AND METHODS WHEN IT COMES TO SURFACE RESTORATION, VEGETATION, TREES AND PLANTS. THE ARBORIST AND/OR ARCHITECT SHALL WRITE REPORTS WITH RECOMMENDATIONS, CAUSE AND EFFECT RELATION SHIPS, PROVIDE LANDSCAPING DESIGNS FOR CUSTOMER APPROVAL AND PROVIDE POSSIBLE SOLUTIONS WITH OPTIONS OF ALL WORK BEING DONE OR PROPOSED WHEN REQUESTED TO DO SO BY THE OWNER. THE REGISTRATION NUMBER AND NAME OF THE REGISTERED LANDSCAPE ARCHITECT SHALL BE PROVIDED PRIOR TO STARTING WORK. IN ADDITION, THE CONTRACTOR SHALL PROVIDE THE ARBORIST NAME AND CREDENTIALS. THE COST OF PROVIDING THIS SERVICE IS INCIDENTAL TO THE COST OF THE CONTRACT.
 - 11) ALL RESTORATION SHALL NOT BE DONE EXCEPT FOR PREP WORK OF THE AREA, PRUNING OR TRIMMING WHEN THE SUMMER SEASON TEMPERATURE SHALL EXCEED 85 DEGREES FAHRENHEIT OR BE 20 TO 40 DEGREES FAHRENHEIT WINTER TEMPERATURE. ALL RESTORATION SHALL START BY APRIL 1 AND STOP BY NOVEMBER 15, OR SOONER AS WEATHER PERMITS. IF WINTER CONDITIONS PREVENT THE WORK FROM BEING COMPLETED BY APRIL 1, THE CONTRACTOR SHALL RESUME RESTORATION WORK BY APRIL 1, WEATHER PERMITTING, OF THE NEXT YEAR OR IN ACCORDANCE WITH LOCAL AGENCIES. THE OWNER SHALL RETAIN FUNDS OF A MINIMUM EQUAL TO THE WORK TO BE DONE OR MORE, AND SHALL BE PAID WHEN THE WORK IS COMPLETED. THE GUARANTEE SHALL BE FROM THE DATE THE ENGINEER HAS SIGNED THAT ALL SURFACE RESTORATION IS COMPLETED.
 - 12) THIS WORK SHALL CONSIST OF THE CUTTING, GRUBBING, REMOVAL AND DISPOSAL OF TREES AND EVERGREENS AT THE LOCATIONS SHOWN ON THE PLANS OR SPECIFIED BY THE ENGINEER. NO TREES SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER. TREE REMOVAL METHODS SHALL BE IN CONFORMANCE WITH IDOT ARTICLE 201.04 OF THE STANDARD SPECIFICATIONS.
 - 13) CLEARING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE UTILITY INSTALLATION REQUIRED IN THE CONTRACT.
 - 14) THE CONTRACTOR SHALL REMOVE ALL STUMPS, TREES AND EVERGREENS AND DISPOSE OFF SITE, PLUS RESTORE SURFACE WITH A 6" LAYER OF BLACK DIRT AND SOIL.
 - 15) THE CONTRACTOR SHALL REQUIRE THAT AN ARBORIST AND ARCHITECT LANDSCAPER LOOK AT EACH TREE FOR DISEASE, FUNGUS OR BEETLE INFESTATION AND SOUND TREE FOR STRUCTURAL SUITABILITY AND GENERAL CONDITION OF TREE BEFORE CLIMBING OR SAWING. A REPORT SHALL BE GIVEN TO THE ENGINEER INDICATING HIS FINDINGS.
 - 16) TREES TO BE REMOVED OR INSTALLED WILL BE MEASURED IN INCH-DIAMETER. THE DIAMETER WILL BE MEASURED AT A POINT FOUR FEET ABOVE THE HIGHEST GROUND LEVEL AT THE BASE OF THE TREE AND WILL BE ASSURED BY ASSURING THE CIRCUMFERENCE OF THE TREE AND DIVIDING THIS MEASURE CIRCUMFERENCE BY 3.1416.
 - 17) TREE REMOVAL OR INSTALLATION WILL BE PAID FOR AT THE CONTRACT UNIT PRICES PER UNIT DIAMETER FOR TREE REMOVAL/INSTALLATION: 6-12 INCH DIAMETER, AND 13-30 INCH DIAMETER, WHICH SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT AND APPURTENANCES NECESSARY TO COMPLETE THE WORK.
 - 18) CONTRACTOR IS ADVISED TREE REMOVAL OR INSTALLATION REQUIRES THAT ALL UTILITIES ARE TO BE IDENTIFIED PRIOR TO REMOVAL AND PROVIDE PROPER PROTECTION (WOOD LAGGING GROUND TREES).
 - 19) CONTRACTOR SHALL SUPPLY ALL LANDSCAPING MATERIALS.

| | | |
|--|--|---|
| NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS | LANDSCAPING OVERHEAD OR UNDERGROUND (CONSTRUCTION SPECIFICATION) | DATE: 06-01-06 Page 6 of 11 58199-104 |
|--|--|---|

- IV. PLANTING (CONTINUED)**
- 6) THIS WORK SHALL CONSIST OF PLANTING TREES AND EVERGREENS OF VARIOUS SIZES AND TRUNK DIAMETER. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE PROPOSED LOCATION FOR FOREIGN UTILITIES, ROOM FOR GROWTH, SUITABLE DRAINAGE AND SUNLIGHT OR SHADE. THE ARBORIST SHALL BE ON THE PROJECT DURING THE ENTIRE PROCESS AND SHALL DIRECT THE PLANTING.
 - 7) PRIOR TO PLANTING, EXAMINE THE AREA FOR OVERHEAD OBSTRUCTIONS WHEN DIGGING AND MOVING. CONTRACTOR SHALL UNDERTAKE ANY PRUNING REQUIRED TO REMOVE POORLY POSITIONED OR DAMAGED LIMBS. THE CONTRACTOR SHALL IDENTIFY IF THE SPECIES, OR SOME PORTION THEREOF, IS DISEASED. THE CONTRACTOR SHALL DETERMINE IF THE TREE OR EVERGREEN IS A SAFETY CONCERN PRIOR TO PERFORMING ANY WORK. FOR EXAMPLE, IF IT CREATES A LINE OF SIGHT PROBLEM FOR VEHICLES, IF IN THE OPINION OF THE ARBORIST THE TREE OR EVERGREEN IS NOT PLANTABLE THEN THE TREE SHALL NOT BE PLANTED.
 - 8) CONTRACTOR SHALL EXAMINE THE NEW SITE FOR THE TREE'S HABITAT REQUIREMENTS. FOR EXAMPLE, WIND PROTECTION, TIME OF YEAR, SOIL PH, SUNLIGHT AND MOISTURE REQUIREMENTS. PLANT IN EARLY FALL, BEFORE FIRST FREEZE OR IN THE SPRING BEFORE THE BUDS ON THE TREES OR EVERGREENS BEGIN TO SWELL.
 - 9) THE CONTRACTOR SHALL BE REQUESTED TO PLANT THE FOLLOWING TREE OR EVERGREEN SPECIES: USE 15 GALLON SIZE OR 4" HIGH ON 4" DIA. AS MEASURES (DWARF RED BUCK EYE).
- | | |
|---|---|
| RIVER BIRCH HACKBERRY HAWTHORN AMERICAN LINDEN SILVER MAPLE PIN OAK RED OAK GREEN ASH SUMAC COLORADO SPRUCE BALSAM SPRUCE PINES OF VARIOUS SPECIES CRAB MYRTLE TREE EMERALD ARBORVITAE | SARGENT CRAB TREE NINE BARK DARTS GOLD SUMAC SMOOTH ARROW WOOD VIBURNUM WIGWAGA FLORIDA JAPANESE YEW SUMAIRAIN YEW ARBORVITAE GLOBE ARBORVITAE TECHNY ARBORVITAE AMERICAN MUGHO FIVE BOXWOOD WINTERGREEN DWARF RED BUCK EYE CRANBERRY VIBURNUM |
|---|---|
- 10) THE CONTRACTOR SHALL PREPARE A DESIGN OF THE PLANTED TREE AS IT FITS ON THE PROPERTY BY AN ARCHITECT LANDSCAPER. THE DRAWING SHALL BE GIVEN TO THE ENGINEER.
 - 11) THE CONTRACTOR SHALL GET APPROVAL FOR PLANTING FROM THE CITY OF NAPERVILLE PRIOR TO PLANTING.
 - 12) THE CONTRACTOR SHALL IDENTIFY WHAT TYPE OF TREE SHALL BE PLANTED AND PREPARE TREE FOR SHIPPING AND PLANTING.
 - 13) THE CONTRACTOR SHALL MAINTAIN ALL ACTIVITIES WITHIN THE EASEMENTS OR PUBLIC WAYS AND ALL OTHER MEANS TO PERFORM THE WORK IS AT THE CONTRACTOR'S EXPENSE AND SHALL OBTAIN PERMISSION FROM ALL LAND OWNERS TO USE THEIR PROPERTY.
 - 14) THE CONTRACTOR UNDER THE DIRECTION OF AN ARBORIST SHALL PREPARE THE SITE FOR THE PLANTING, FERTILIZE, WATER, TRIM AND MULCH, STAKE AS NECESSARY, PROVIDE DRAINAGE AND MAINTAIN FOR ONE YEAR.
 - 15) TREES AND EVERGREENS TO BE PLANTED SHALL BE MEASURED IN INCH DIAMETER. THE DIAMETER WILL BE MEASURED AT A POINT FOUR FEET ABOVE THE HIGHEST GROUND LEVEL AT THE BASE OF THE TREE OR EVERGREEN AND WILL BE DETERMINED BY ASSURING THE CIRCUMFERENCE OF THE TREE AND DIVIDING THIS MEASURE CIRCUMFERENCE BY 3.1416.

| | | |
|--|--|---|
| NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS | LANDSCAPING OVERHEAD OR UNDERGROUND (CONSTRUCTION SPECIFICATION) | DATE: 06-01-06 Page 6 of 11 58199-104 |
|--|--|---|

- II. PLANT MATERIAL**
- 1) THE CONTRACTOR SHALL INVESTIGATE SOURCES OF SUPPLY TO ENSURE THAT ALL THE PLANTS DESIGNATED ON THE PLANNING LIST IN THE SIZE, VARIETY, AND QUALITY NOTED AND SPECIFIED ARE AVAILABLE. FAILURE TO TAKE THIS PRECAUTION WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY TO FURNISH AND INSTALL ALL THE PLANT MATERIAL INSTANT ACCORDANCE WITH THE CONTRACT REQUIREMENTS, AND WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
 - 2) ALL STOCK FURNISHED SHALL BE WELL SHAPED PLANTS AND MUST BELONG TO NAME, ONE OF EACH SIZE SHALL BE LEGIBLY TAGGED WITH A WEATHER PROOF TAG STATING THE SIZE AND STANDARD BOTANICAL NAME AS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
 - 3) ALL BALLED AND BURLAPPED STOCK SHALL CONFORM FULLY TO THE SPECIFICATIONS AS SET FORTH BY THE AMERICAN NURSERYMEN'S ASSOCIATION AND THE ILLINOIS LANDSCAPE CONTRACTOR'S ASSOCIATION.
 - 4) THE CALIPER OF TREE TRUNKS SHALL BE TAKEN SIX INCHES ABOVEGROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR INCHES ALPER AND 12 INCHES ABOVE GROUND LEVEL FOR TREES OF LARGER CALIPER.
 - 5) NO SUBSTITUTION SHALL BE MADE WITHOUT WRITTEN AUTHORIZATION BY THE OWNER'S REPRESENTATIVE.
 - 6) UPON NOTICE FROM THE OWNER'S REPRESENTATIVE, ALL PLANTS NOT TRUE TO SIZE, QUALITY, VARIETY AND COLOR SPECIFIED SHALL BE REMOVED BY THE CONTRACTOR AND IMMEDIATELY REPLACED AT THE CONTRACTOR'S EXPENSE WITH PLANTS MEETING THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. THE DECISION OF THE OWNER'S REPRESENTATIVE SHALL BE FINAL.
 - 7) ALL PLANTS SHALL BE DUG WITH REASONABLE CARE AND SKILL IMMEDIATELY PREVIOUS TO SHIPMENT OR, IF DUG IN ADVANCE, ROOTS MUST BE CAREFULLY PROTECTED AT ALL TIMES TO PREVENT EXCESSIVE DRYING AND LOSS OF VITALITY. ROOTS SHALL NOT BE SPLIT AND ANY ROOTS OVER ONE-HALF INCH DIAMETER BE CUT OR BROKEN. SPECIAL PRECAUTIONS SHALL BE TAKEN TO AVOID ANY UNNECESSARY INJURY TO OR REMOVAL OF FIBROUS ROOTS.
 - 8) EACH SPECIES OR VARIETY SHALL BE HANDLED AND PACKED IN THE APPROVED MANNER FOR THAT PLANT, HAVING REGARD TO THE SOIL AND CLIMATIC CONDITIONS AT THE TIME AND PLACE OF DIGGING, THE TYPE OF TRUNK, THE DELIVERY SITE, AND THE TIME THAT WILL BE CONSUMED IN TRANSIT OR DELIVERY. ALL PRECAUTIONS THAT ARE CUSTOMARY IN GOOD TRADE PRACTICE SHALL BE TAKEN TO ENSURE THAT UPON ARRIVAL AT THE DESTINATION THE PLANTS ARE IN GOOD CONDITION FOR SUCCESSFUL GROWTH.
- III. TREES AND EVERGREENS**
- 1) IDENTIFY SPECIES USING AN ARBORIST, INSTALL ALL WORK USING A REGISTERED, LICENSED, LANDSCAPING SERVICE, REMOVE, FURNISH, DELIVER, MAKE READY WORK, GRADE, LEVEL, DISPOSE OF EXCAVATED MATERIALS OFF SITE, AND PLANT A TREE OR EVERGREEN OF THE SAME SPECIES, VARIETY AND SAME SIZE. INSTALL SUITABLE BLACK DIRT FILL, GRADE, INSTALL WITH MULCH AND WATER. IF THIS IS NOT POSSIBLE FOR TREE REPLACEMENT DO THE FOLLOWING: FURNISH, DELIVER AND PLANT WITH THE SAME AT LOCATIONS DESIGNATED BY THE ENGINEER, A NUMBER OF TREES OF THE SAME SPECIES AND VARIETY HAVING A MINIMUM DIAMETER OF 4 INCHES, WHOSE TOTAL INCH DIAMETER EQUALS THE INCH DIAMETER OF THE TREE REMOVED. DIAMETER OF THE PRESENT TREE 4" AND LESS IN DIAMETER SHALL BE MEASURED AT 6 INCHES FROM THE TOP OF ROOT BALL OR AS DENOTED ON THE DRAWINGS. TREES 4" AND LARGER IN DIAMETER SHALL BE MEASURED AT 12 INCHES FROM THE TOP OF ROOT BALL OR AS DENOTED ON THE DRAWINGS. THE EXCAVATION FOR THE TREE OR EVERGREEN SHALL BE THREE TIMES THE DIAMETER SIZE OF THE ROOT BALL, PLUS 3 TO 4 FEET DEEP AND THE EXCAVATED AND EXISTING GROUND MATERIALS REMOVED FROM THE SITE AND DISPOSED OF OFF SITE. DECORATIVE EDGING INSTALLED, AND NEW PULVERIZED DIRT WITH PROPER NUTRIENTS ADDED, SUPPORTED BY ROPE THE DOWNS, AND 3 INCH THICK BED OF MULCH COVERING THE EXCAVATED AREA, PLUS WATERING FOR 2 MONTHS UNDER THE DIRECTION OF AN ARBORIST ENGINEER. ALL TREES AND EVERGREENS PLANTED SHALL BE IDENTIFIED AND DATED AND PUT ON A DRAWING AND THE TREE OR EVERGREEN IDENTIFIED BY SPECIES AND SIZE WITH THE STREET ADDRESS AND GIVEN TO THE ENGINEER FOR THE RECORD. ALL TREES OR EVERGREENS SHALL BE GUARANTEED TO GROW FOR ONE YEAR AND 6 MONTHS FROM THE DATE OF THE AS BUILT DRAWING, WHICH IS SIGNED AND DATED BY THE ENGINEER.

| | | |
|--|--|---|
| NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS | LANDSCAPING OVERHEAD OR UNDERGROUND (CONSTRUCTION SPECIFICATION) | DATE: 06-01-06 Page 6 of 11 58199-104 |
|--|--|---|

- IV. PLANTING (CONTINUED)**
- 17) ALL TREES AND SHRUBS SHALL BE TOP THINNED OR PRUNED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. PRUNING SHALL BE ONLY FOR THE PURPOSE OF BALANCING TOPS TO ROOTS AND FOR THE REMOVAL OF INTERFERING BRANCHES AND BAD CROTCHES, BUT SHALL NOT CHANGE THE NATURAL GROWTH OR APPEARANCE OF THE PLANT.
 - 18) ALL TOP THINNING OR PRUNING SHALL BE PERFORMED WITH THE PROPER TOOLS, PRUNING SHEARS OR LOPPING TOOLS. NORMAL TOP PRUNING OF BALLED STOCK WILL REQUIRE REMOVAL OF APPROXIMATELY ONE QUARTER OF THE BRANCHES; OF BARE ROOTED STOCK APPROXIMATELY ONE THIRD OF THE BRANCHES. ALL PRUNING WOUNDS SHALL BE PAINTED WITH AN APPROVED TREE WOUND DRESSING.
- V. FERTILIZER**
- FERTILIZER SHALL BE A CONTROLLED RELEASE TYPE, SUCH AS MAGAMP, DISTRIBUTED BY JIFFY PRODUCTS OF AMERICA, P.O. BOX 338, WEST CHICAGO, ILLINOIS 60785, OR APPROVED EQUAL. THE FERTILIZER SHALL BE FLAGGED DIRECTLY INTO PLANTING PITS IN QUANTITIES AND METHOD AS SHOWN ON PLAN.
- APPLICATION RATES AND METHODS FOR MAGAMP**
- | | | |
|-----------------------|-------------------------|--|
| a) 10 IN. BALL | 2 OZS. COARSE | PLACE IN BOTTOM OF PLANTING PIT PRIOR TO PLANTING. |
| b) 12-16 IN. BALL | 4 OZS. COARSE | PLACE IN BOTTOM OF PLANTING PIT PRIOR TO PLANTING. |
| c) 16-20 IN. BALL | 8 OZS. COARSE | PLACE IN BOTTOM OF PLANTING PIT PRIOR TO PLANTING. |
| d) 2 FT. BALL | 10-12 OZS. COARSE | PLACE IN BOTTOM OF PLANTING PIT PRIOR TO PLANTING. |
| e) 3 FT. BALL | 1 TO 2 LBS. COARSE | PLACE IN BOTTOM OF PLANTING PIT PRIOR TO PLANTING. |
| f) BARE ROOT PLANTING | 2 OZS. TO 2 LBS. COARSE | PLACE IN BOTTOM OF PLANTING PIT AND COVER WITH 1/2 TO 2 FT. TALL |
- VI. INSPECTION**
- 1) INSPECTION OF ALL STOCK MAY BE MADE AT POINT OF ORIGIN OR POINT OF DELIVERY, OR BOTH BY OWNER'S REPRESENTATIVE. STOCK WHICH CANNOT BE SHOWN FOR INSPECTION ON TWENTY-FOUR HOUR NOTICE MAY BE REJECTED. AN INSPECTION DURING DIGGING WILL BE MADE WHENEVER SUCH EXAMINATION IS DEEMED DESIRABLE. FINAL INSPECTION WILL BE MADE BY THE SAID REPRESENTATIVE WHEN THE MATERIAL IS DELIVERED. THE OWNER RESERVES THE RIGHT TO REJECT ALL STOCK WHICH IS FOUND UNSATISFACTORY UPON DELIVERY.
- VII. DELIVERY**
- 1) ALL PLANTS SHALL BE PACKED FOR DELIVERY TO ENSURE ADEQUATE PROTECTION AGAINST CLIMATIC, SEASONAL, OR ANY OTHER INJURY DURING TRANSPORT. THE ROOTS OF BARE-ROOTED STOCK SHALL BE CAREFULLY PROTECTED WITH WET STRAW, MOSS OR OTHER SUITABLE PACKING MATERIAL WHICH WILL ENSURE THE ARRIVAL OF PLANTS AT THE DESTINATION IN GOOD CONDITION. SPECIAL ATTENTION SHALL BE GIVEN TO ENSURE PROMPT DELIVERY, CAREFUL HANDLING IN LOADING, PROTECTION BY CANVAS OR OTHER ACCEPTED METHODS IN TRANSIT, AND UNLOADING AT THE POINT OF DELIVERY.
 - 2) THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR ALL UNPLANTED STOCK ON THE SITE BY CAREFULLY HEELING IN OR BY OTHER STANDARD APPROVED PRACTICES.

| | | |
|--|--|---|
| NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS | LANDSCAPING OVERHEAD OR UNDERGROUND (CONSTRUCTION SPECIFICATION) | DATE: 06-01-06 Page 7 of 11 58199-104 |
|--|--|---|

| | | | | |
|---------------------|-----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1545 | 00-00115-00-BR | DUPAGE | 97 | 84 |
| STA. 1+31.77 | TO STA. 5+50.00 | | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |

- II. TREES AND EVERGREENS (CONTINUED)**
- 2) THE CONTRACTOR, UPON APPROVAL OF THE ENGINEER, MAY ELECT TO AUGUR UNDER ANY TREE OR EVERGREEN WITH A TRUNK SIZE OF 6 INCHES OR LARGER. HOWEVER, ALL TREES OR EVERGREENS WITH A TRUNK SIZE OF 12 INCHES AND LARGER SHALL BE AUGURED. AUGURING SHALL EXTEND THE FULL LENGTH OF THE DRIP LINE OF THE TREE AND PASS NO CLOSER THAN 4 FEET TO THE OUT SIDE DIAMETER OF THE TRUNK. DEVIATION TO FROM THE CONDUIT CENTERLINE TO AVOID TREE TRUNKS WILL BE PERMITTED WHERE POSSIBLE, BUT AT NO ADDITIONAL COST TO THE OWNER. THE DIRECTIONAL BORING TECHNIQUE MAY BE CONSIDERED AND PERFORMED WITH THE ENGINEER'S APPROVAL AT NO COST TO THE OWNER. ALL WORK TO REMOVE THE TREES OR EVERGREENS ARE UNDER THE SUPERVISION OF AN ARBORIST PROVIDED BY THE CONTRACTOR. ALL EXCAVATION SHALL BE BACKFILLED WITH 6 INCHES OF BLACK DIRT AND LEVELED AND GRADED.
 - 3) SHRUBS, BUSHES, FLOWERS, PLANTS, SMALL TREES AND SMALL EVERGREENS SHALL BE FURNISHED, DELIVERED, AREA PREPARED, BLACK DIRT BACK FILL SHALL MADE LEVEL, GRADE, AND COMPACT AND PROMOTE DRAINAGE, AND PLANT A PLANT OF THE SAME SPECIES VARIETY, SAME SIZE IN HEIGHT, SAME SIZE IN WIDTH, AS GOVERNED BY ARTICLE 1081.01 (c), TYPES 1, 2, 3 AND 4. OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION OR FURNISH, DELIVER AND PLANT AT LOCATIONS DESIGNATED BY THE ENGINEER, A NUMBER OF PLANTS OF THE SAME SPECIES AND VARIETY WHOSE TOTAL MEASUREMENTS SHALL EQUAL THE MEASUREMENT OF THE PLANT TO BE REPLACED, MEASURED ABOVE. THE EXCAVATION FOR THE SHRUBS, BUSHES, FLOWERS, PLANTS, SMALL TREES AND SMALL EVERGREENS SHALL BE TWICE THE SIZE OF THE ROOT BALL AND THE EXISTING GROUND MATERIALS REMOVED FROM THE SITE AND NEW PULVERIZED DIRT WITH THE PROPER NUTRIENTS ADDED, SUPPORTED BY ROPE THE DOWNS, STICKS AND 3 INCH THICK BED OF MULCH AROUND THE PLANT COVERING THE EXCAVATED AREA, PLUS WATERING FOR 2 MONTHS UNDER THE DIRECTION OF AN ARBORIST. ALL SHRUBS, BUSHES, FLOWERS, PLANTS, SMALL TREES, SMALL EVERGREENS PLANTED SHALL BE IDENTIFIED AND DATED AND PUT ON A DRAWING AND THE SHRUBS, BUSHES, FLOWERS, PLANTS, OR SMALL EVERGREENS AND SMALL TREES SHALL BE IDENTIFIED BY SPECIES AND SIZE WITH THE STREET ADDRESS AND GIVEN TO THE ENGINEER FOR THE RECORD. ALL SHRUBS, BUSHES, FLOWERS, PLANTS, SMALL TREES, OR SMALL EVERGREENS SHALL BE GUARANTEED TO GROW FOR ONE YEAR FROM THE DATE OF THE AS BUILT DRAWING, WHICH IS SIGNED AND DATED BY THE ENGINEER.
 - 4) THE CONTRACTOR SHALL REPLACE ALL EXISTING LANDSCAPING SUCH AS: BLACK DIRT, GRASS, PLANTS, TREES, SHRUBS, EVERGREENS, GARDENS, VEGETABLE GARDENS, VINES, BUSHES, FLOWERS AND ROCK GARDENS REMOVED OR DAMAGED. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE ALL THE TYPES OF LANDSCAPING PRIOR TO STARTING THE WORK. FAILURE TO DO SO SHALL REQUIRE THAT ALL LANDSCAPING CLAIMED TO BE DAMAGED SHALL BE CONSIDERED DAMAGED AND REPLACED AT THE CONTRACTOR'S COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LANDSCAPING CARE OF ALL TYPES AND VARIETY OF LANDSCAPING MATERIALS DURING THE PERIOD OF ESTABLISHMENT FOR INITIAL AND REPLACED LANDSCAPING AND SHALL COMPLY WITH REQUIREMENTS FOR REMOVAL AND REPLACEMENT OF UNACCEPTABLE AND/OR DEAD LANDSCAPING MATERIALS.
 - 5) ALL LANDSCAPING MATERIALS SHALL CARRY A ONE YEAR AND SIX MONTHS GUARANTY FROM FINAL PAYMENT AND/OR FROM THE DATE THE ENGINEER SIGNS THE AS BUILT DRAWING ACCEPTING THE WORK.
 - 6) AT THE TIME OF SELECTION AT THE NURSERY THE LANDSCAPING MATERIALS MUST BE:
 - A) IN A LIVE HEALTHY CONDITION.
 - B) CHECK AND RECORD THE DIAMETER FROM TOP OF ROOT BALL.
 - C) BALANCED AND SYMMETRIC APPEARANCE.
 - D) REPRESENTATIVE OF ITS SPECIES IN COLOR, SIZE AND STRAIGHTNESS.
 - E) SUFFICIENT DIRT TO PROMOTE GROWTH.
 - F) NOT INFECTED WITH INSECTS OR FUNGI.
 - G) ALL LANDSCAPING MATERIALS SHALL BE APPROVED FOR PLANTING BY THE ARBORIST AND/OR LANDSCAPE ARCHITECT.
 - 7) ALL LANDSCAPING, PLANTS, ETC., THAT DO NOT MEET THE REQUIREMENTS FOR ACCEPTANCE SHALL BE REPLACED AT THE CONTRACTOR'S COST AT ITS OWN EXPENSE AND SHALL CARRY THE SAME GUARANTEE. TREES, PLANTS, GRASS, SHRUBS, EVERGREENS, GARDENS, VEGETABLE GARDENS, BUSHES, FLOWERS, AND VINES RESTORATION IDENTIFIED ON THE CONSTRUCTION DRAWINGS, SHALL BE PAID BY UNIT PRICING, HOWEVER ALL DISTURBED AREAS CAUSED DURING CONSTRUCTION AND/OR NOT SHOWN ON THE DRAWINGS SHALL BE RESTORED BY THE CONTRACTOR AND IS INCIDENTAL TO THE WORK. THE CONTRACTOR IS ADVISED THE WORK AREA IS ON THE ROADWAY PROPERTY AND SHALL BE DONE TO THE ROADWAY COUNTY DEPARTMENT OF TRANSPORTATION REQUIREMENTS; THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL AREAS.

| | | |
|--|--|---|
| NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS | LANDSCAPING OVERHEAD OR UNDERGROUND (CONSTRUCTION SPECIFICATION) | DATE: 06-01-06 Page 6 of 11 58199-104 |
|--|--|---|

- VIII. ROOT PRUNING**
- 1) THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, A REGISTERED ARBORIST, A REGISTERED LANDSCAPE ARCHITECT, AND APPURTENANCES NECESSARY TO PERFORM TREE AND EVERGREEN ROOT PRUNING WORK. SHALL BE COMPLETED IN CONFORMANCE WITH SECTION 201 OF THE STANDARD ROAD SPECIFICATIONS. LATEST EDITION. THIS SHALL BE COMPLETED FOR ALL TREES ENROACHING UPON THE CONSTRUCTION AREA. ANY ROOTS ENCOUNTERED SHALL BE TREATED WITH THIS METHOD AS DIRECTED BY THE CITY.
 - 2) ROOT PRUNING USING AN APPROVED MECHANICAL ROOT PRUNING SAW, OR LOPPER AS DIRECTED BY A REGISTERED ARBORIST, SHALL BE PERFORMED PRIOR TO DIGGING WHERE NOTED ON THE PLANS, PER CUSTOMER REQUEST OR AS DIRECTED BY THE ENGINEER. WHENEVER ROOTS OF PLANT MATERIAL ARE TO REMAIN EXPOSED DURING CONSTRUCTION, THE DAMAGED ROOTS ARE TO BE REMOVED BY CUTTING THEM OFF CLEARLY. PRUNING SHALL BE DONE IN THE PRESENCE OF THE ENGINEER AND/OR REGISTERED ARBORIST AND IN SUCH A MANNER AS TO PRESERVE THE NATURAL GROWTH HABIT.
 - 3) ANY DAMAGE TO THE ROOT ZONE, AS DETERMINED BY THE ENGINEER AND/OR ARBORIST SHALL BE COMPENSATED BY PRUNING AN EQUIVALENT AMOUNT OF THE PLANT MATERIAL OF THE PLANT MATERIAL WITHIN 1 WEEK FOLLOWING ROOT DAMAGE. FERTILIZER NUTRIENTS SHALL BE APPLIED WITHIN 48 HOURS AFTER ROOT DAMAGE OCCURS. A FERTILIZER WITH A 1:1:1 RATION SHALL BE APPLIED AT THE RATE OF 5 LBS. OF NUTRIENTS PER 1000 SQ. FT.
 - 4) APPLICATION SHALL BE ACCOMPLISHED BY PLACING DRY FERTILIZER IN HOLES IN THE SOIL. HOLES SHALL BE 8 TO 12 INCHES DEEP AND SPACED 2 FEET APART IN AN AREA BEGINNING 30 INCHES FROM THE BASE OF THE PLANT. HOLES CAN BE PUNCHED WITH A PUNCH BAR, DUG WITH A SPADE, DRILLED WITH AN AUGER OR ANY METHOD APPROVED BY THE ENGINEER. APPROXIMATELY 0.02 LB. OF FERTILIZER NUTRIENTS SHALL BE PLACED BY IN EACH HOLE (250 HOLES PER 1000 SQ. FT.).
 - 5) IF THE ENGINEER OR ARBORIST DETERMINE THAT THE HOLE METHOD OF FERTILIZER PLACEMENT IS NOT PRACTICAL OR DESIRABLE, AN APPROVED METHOD OF UNIFORM SURFACE APPLICATION WILL BE ALLOWED.
 - 6) IN THE CASE OF INADEQUATE RAINFALL, AS DETERMINED BY THE ENGINEER, SUPPLEMENTAL WATER SHALL BE APPLIED WITHIN 48 HOURS OF ANY ROOT DAMAGE. THE WATER SHALL BE APPLIED AT THE RATE OF 2 GALLONS PER SQ. YD. OF SURFACE WITHIN THE ROOT ZONE OF PLANT MATERIAL HAVING SUSTAINED DAMAGE TO THE ROOT ZONE. THREE SUBSEQUENT WEEKLY WATERING AT 2 GALLONS PER SQ. YD. SHALL BE APPLIED IF DEEMED NECESSARY BY THE ENGINEER. ADDITIONAL WATERING MAY BE REQUIRED. THE ENGINEER SHALL DIRECT THIS WORK.
- IX. SUPPLEMENTAL WATERING**
- 1) THIS WORK SHALL CONSIST OF FURNISHING SUPPLEMENTAL WATERING IN CONFORMANCE WITH IDOT ARTICLE 252.09 OF THE STANDARD SPECIFICATIONS.
 - 2) SUPPLEMENTAL WATERING WILL BE MEASURED FOR PAYMENT IN UNITS OF 1000 GALLONS OF WATER APPLIED ON THE SODDED AREAS.
 - 3) CONTRACTOR IS ADVISED SUPPLEMENTAL WATERING IS INCLUDED IN THE UNIT PRICING PER STRUCTURES, ERECTION, OR OTHER REMOVAL AND/OR FOUNDATION INSTALLATION. SUPPLEMENTAL WATERING IS AT THE DIRECTION OF THE ENGINEER.

| | | |
|--|--|---|
| NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS | LANDSCAPING OVERHEAD OR UNDERGROUND (CONSTRUCTION SPECIFICATION) | DATE: 06-01-06 Page 6 of 11 58199-104 |
|--|--|---|

CITY OF NAPERVILLE/DEPARTMENT OF PUBLIC UTILITIES - ELECTRIC

CALL J.U.L.I.E. 48 HRS. PRIOR TO CONSTRUCTION

| | | |
|---|-------------------------|----------------------------------|
| PROJECT FILE BAILEY RD. BRIDGE DUCTBANK INSTALLATION | APP NO. JK | CD FILE NO. 0058199001C18.DWG |
| PROJECT DESCRIPTION COORDINATED WITH BRIDGE IMPROVEMENT | DRAWN BY JK | PROJECT NO. EU12-06-04 |
| DATE 06-15-06 | WORK ORDER NO. 58199 | COMPLETED BY |
| ISSUED PZ | APPROV. | SCALE NTS |
| DESIGNED PZ | | SHEET 18 OF 23 |