

COX ARBORETUM METROPARK SHRUB GARDEN RENOVATION

SEPTEMBER 15, 2023

LANDSCAPE ARCHITECT



409 E. MONUMENT AVE, THIRD FLOOR
DAYTON, OHIO 45402

937.274-3107 OFFICE
937.262.7106 FAX

WWW.METROPARKS.ORG

GENERAL NOTES

THE PROJECT CONSISTS OF GENERAL DEMOLITION OF A GAZEBO, CONCRETE, PLANT REMOVAL AND GRADING TO PREPARE TO INSTALL NEW MODULAR POND EDGE WALLS, PERMEABLE PAVERS AND MIXED PLANTINGS.

IT IS INTENDED THAT THE CONTRACTOR COMPLETE BASE BID WORK DURING THE END OF 2023 OR FIRST QUARTER OF 2024 WITH PLANTINGS TO FOLLOW. THE CONTRACTOR WILL PHASE APPROXIMATELY HALF THE PLANTINGS IN THE SPRING AND THE OTHER HALF IN EARLY FALL OF 2024 TO ALLOW OPERATIONS STAFF THE ABILITY TO MAINTAIN NEW PLANTINGS IN AN EFFECTIVE MANNER. PRIOR TO CONTRACT AWARD, METROPARKS WILL WORK WITH THE CONTRACTOR TO DETERMINE A MUTUALLY ACCEPTABLE PHASING SCHEDULE.

CONTRACTOR TO SUBMIT BIDS INCLUDING BID ALTERNATES AS OUTLINED IN THESE DRAWINGS AND BID DOCUMENTS. METROPARKS WILL BE AWARDED WORK FROM THE ALTERNATE BID ITEMS UP TO THE FULL BUDGET AMOUNT.

PAVERS FOR THE PROJECT WILL BE PROVIDED BY THE OWNER ON SITE AT COX ARBORETUM METROPARK.

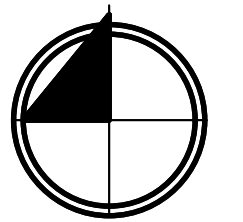
A SOURCE FOR THE NATIVE PLUGS LISTED ON THE PLANT SHEET ARE AVAILABLE FROM SPENCE RESTORATION NURSERY:

2220 EAST FUSON ROAD
MUNCIE, IN 47302
PHONE: (765) 286-7154
FAX: (765) 286-0264
EMAIL: SALES@SPENCENURSERY.COM
HTTPS://WWW.SPENCENURSERY.COM/INDEX/HOME.PHP

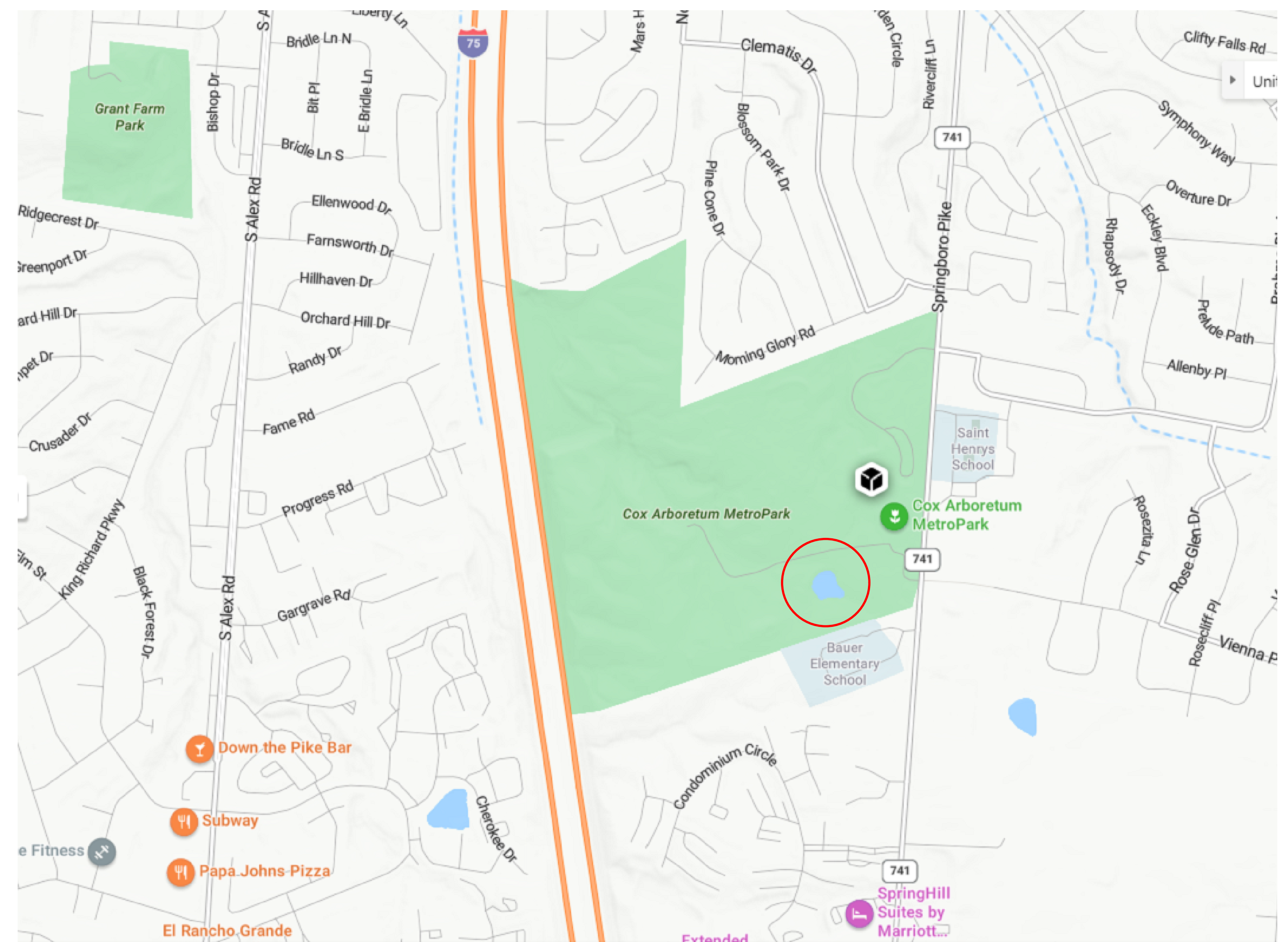
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- LS-103 - PLANTING PLAN
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- LS-105 - WALL DETAILS
- LS-106 - PLANTING DETAILS

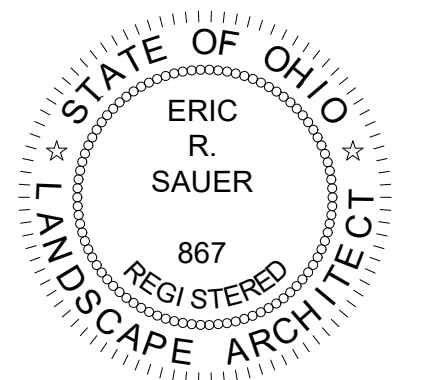
VICINITY MAP



NORTH



SEAL

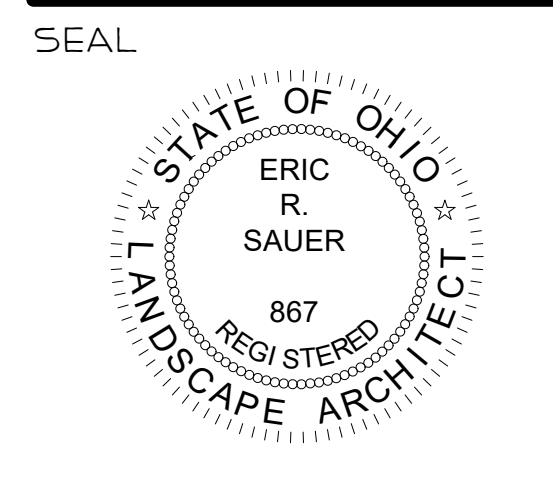




- GENERAL DEMOLITION NOTES**
1. IT IS THE INTENT OF THE DEMOLITION DRAWINGS TO CONVEY THE EXTENT OF DEMOLITION AND CLEARING OPERATIONS. DRAWINGS MAY NOT SHOW OR DESCRIBE ALL EXISTING SITE ELEMENTS THAT REQUIRE REMOVAL FOR THE CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME TOTALLY FAMILIAR WITH THE PROJECT SITE AND THE EXTENT OF THE PROPOSED IMPROVEMENTS.
 2. DEMOLITION WORK TO INCLUDE THE REMOVAL OF THE GAZEBO AND ASSOCIATED CONCRETE, TRELLIS, PLANT MATERIALS AND TURF AS NEEDED TO COMPLETE THE PLANTING PLAN. CONTRACTOR TO VERIFY REMOVAL OF ALL PLANT MATERIAL WITH OWNER PRIOR TO REMOVING PLANTS. GENERALLY, ALL EXISTING TREES ARE TO REMAIN. TREES WILL BE MARKED BY OWNER FOR REMOVAL.
 3. ALL DEBRIS FROM DEMOLITION AND CLEARING OPERATIONS SHALL BE REMOVED AND DISPOSED OF IN COMPLIANCE WITH LOCAL JURISDICTIONS AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE. PLANT AND VEGETATION REMOVAL MAY BE BY MECHANICAL AND CHEMICAL MEANS. ANY CHEMICALS UTILIZED SHALL BE SELECTED TO ENSURE COMPLIANCE WITH AQUATIC HABITATS WHERE APPROPRIATE AND BE APPLIED OR SUPERVISED BY LICENSED APPLICATORS IN ACCORDANCE WITH STATE LAW.
 4. THE CONTRACTOR SHALL SALVAGE EXISTING SITE ELEMENTS IF NOTED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
 5. REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING DEMOLITION WORK.
 6. SAW CUT AND REMOVE PAVEMENTS TO THE NEAREST CONTROL JOINT UNLESS JOINT IS MORE THAN 5' FROM LIMITS OF NEW CONSTRUCTION.
 7. PROTECT EXISTING TREES AND VEGETATION TO REMAIN. CONTACT OWNER IF DAMAGE IS ANTICIPATED OR OCCURS DURING CONSTRUCTION.
 8. ALL PAVEMENT AREAS ADJACENT TO AREA OF REMOVAL SHALL BE SAW CUT PRIOR TO REMOVAL.

PROJECT
**COX ARBORETUM
 METROPARK
 SHRUB GARDEN
 RENOVATION**

6733 SPRINGBORO PIKE
 DAYTON, OHIO 45449



ISSUE
**CONSTRUCTION
 DRAWINGS**

ISSUE NOTES

DATE	COMMENT

DATE: 9/15/2023

DRAWN BY: ERS
 CHECKED BY: ERS

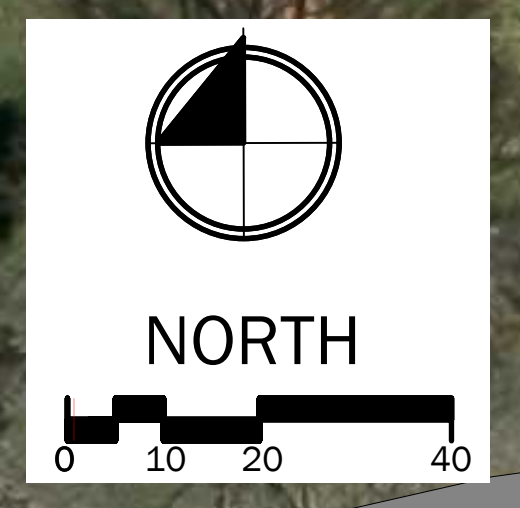
DRAWING TITLE
DEMOLITION PLAN

SHEET NO.
 LS-101



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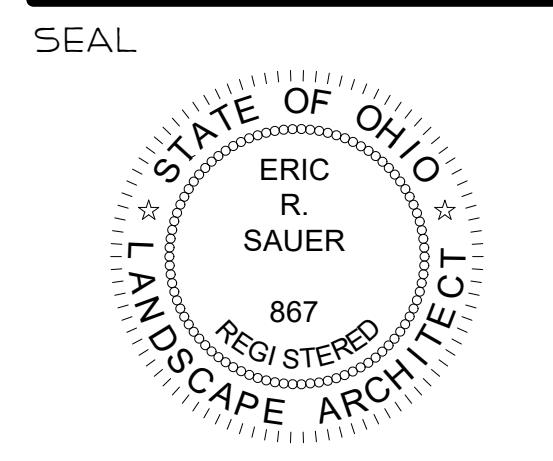
EXISTING POND WALL

PROPOSED POND WALL - 65 LF
PAVER AREA - 14' RADIUS
SEE DETAIL
BASE BID

PROPOSED PAVER AREA -
10' DIAMETER
SEE DETAILS
ALTERNATE AREA F

PROPOSED POND WALL - 65 LF
SEE DETAIL
BASE BID

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ISSUE
CONSTRUCTION
DRAWINGS

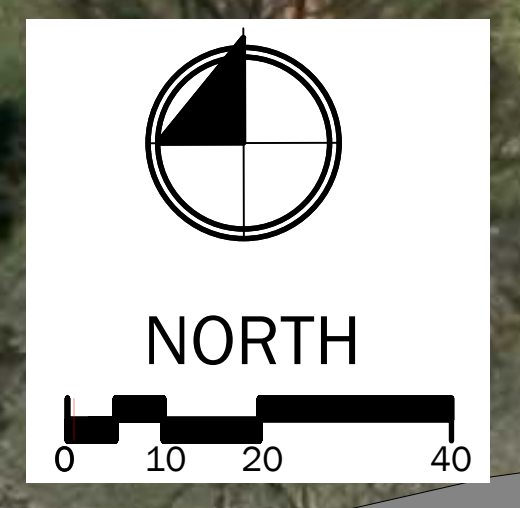
ISSUE NOTES

DATE	COMMENT

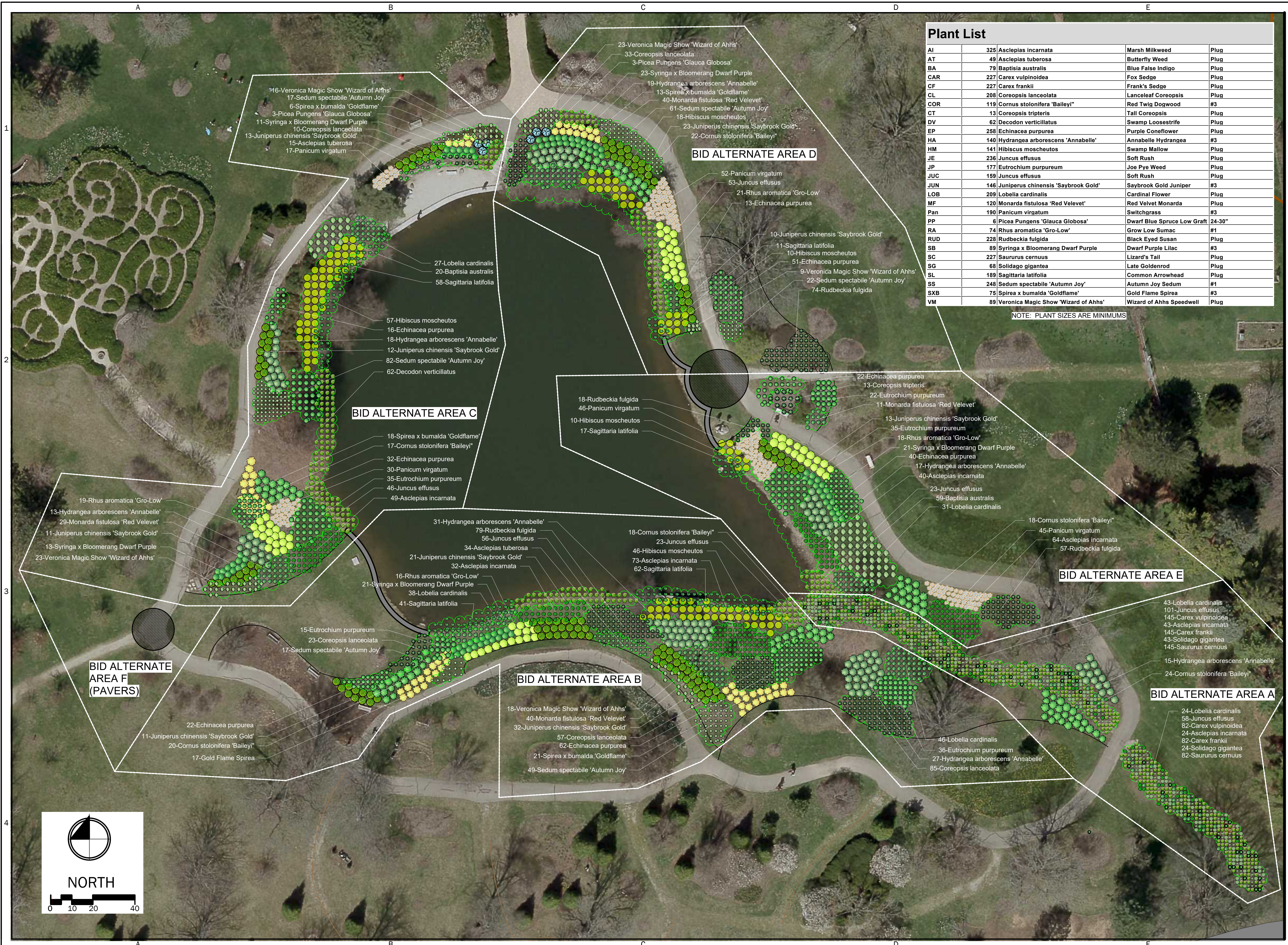
DATE: 9/15/2023
DRAWN BY: ERS
CHECKED BY: ERS

DRAWING TITLE
HARDSCAPE PLAN

SHEET NO.
LS-102



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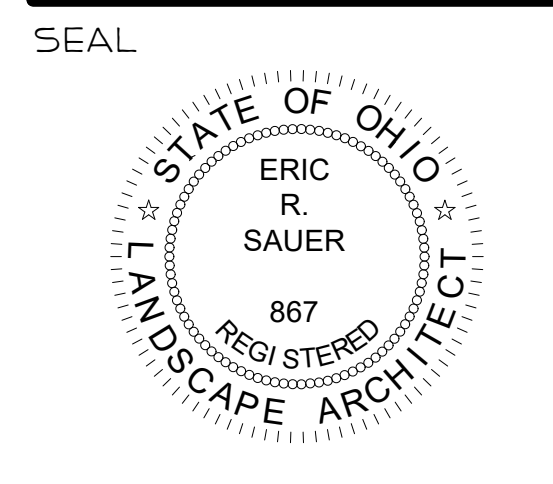


Plant List

Code	Quantity	Plant Name	Plant Name	Quantity
AI	325	Asclepias incarnata	Marsh Milkweed	Plug
AT	49	Asclepias tuberosa	Butterfly Weed	Plug
BA	79	Baptisia australis	Blue False Indigo	Plug
CAR	227	Carex vulpinoidea	Fox Sedge	Plug
CF	227	Carex frankii	Frank's Sedge	Plug
CL	208	Coreopsis lanceolata	Lanceleaf Coreopsis	Plug
COR	119	Cornus stolonifera 'Bailey'	Red Twig Dogwood	#3
CT	13	Coreopsis tripteris	Tall Coreopsis	Plug
DV	62	Decodon verticillatus	Swamp Loosetrife	Plug
EP	258	Echinacea purpurea	Purple Coneflower	Plug
HA	140	Hydrangea arborescens 'Annabelle'	Annabelle Hydrangea	#3
HM	141	Hibiscus moscheutos	Swamp Mallow	Plug
JE	236	Juncus effusus	Soft Rush	Plug
JP	177	Eutrochium purpureum	Joe Pye Weed	Plug
JUC	159	Juncus effusus	Soft Rush	Plug
JUN	146	Juniperus chinensis 'Saybrook Gold'	Saybrook Gold Juniper	#3
LOB	209	Lobelia cardinalis	Cardinal Flower	Plug
MF	120	Monarda fistulosa 'Red Velevet'	Red Velvet Monarda	Plug
Pan	190	Panicum virgatum	Switchgrass	#3
PP	6	Picea pungens 'Glaucia Globosa'	Dwarf Blue Spruce Low Graft	24-30"
RA	74	Rhus aromatica 'Gro-Low'	Grow Low Sumac	#1
RUD	228	Rudbeckia fulgida	Black Eyed Susan	Plug
SB	89	Syringa x Bloomerang Dwarf Purple	Dwarf Purple Lilac	#3
SC	227	Saururus cernuus	Lizard's Tail	Plug
SG	68	Solidago gigantea	Late Goldenrod	Plug
SL	189	Sagittaria latifolia	Common Arrowhead	Plug
SS	248	Sedum spectabile 'Autumn Joy'	Autumn Joy Sedum	#1
SXB	75	Spirea x bumalda 'Goldflame'	Gold Flame Spirea	#3
VM	89	Veronica Magic Show 'Wizard of Ahhs'	Wizard of Ahhs Speedwell	Plug

NOTE: PLANT SIZES ARE MINIMUMS

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ISSUE NOTES

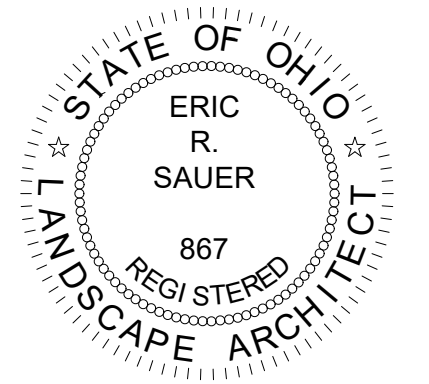
DATE	COMMENT

DATE: 9/15/2023
 DRAWN BY: ERS
 CHECKED BY: ERS
 DRAWING TITLE
 PLANTING PLAN

SHEET NO.
 LS-103

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SEAL



ISSUE
 CONSTRUCTION
 DRAWINGS

ISSUE NOTES

DATE	COMMENT

DATE: 9/15/2023

DRAWN BY: ERS
 CHECKED BY: ERS

DRAWING TITLE
 HARDSCAPE AND
 GRADING DETAILS

SHEET NO.

LS-104



409 E. MONUMENT AVE, THIRD
 FLOOR
 DAYTON, OHIO 45402

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GENERAL NOTES:

CLAY BRICK PAVERS WILL BE SUPPLIED BY OWNER BUT ARE MANUFACTURED BY WHITACRE-GREER, 1400 S. MAHONING AVE., ALLIANCE, OH 44601. PHONE: 330-823-1610, FAX: 330-823-5502, E-MAIL: INFO@WGPFAVER.COM. PAVERS WERE SUPPLIED BY SNYDER BRICK AND BLOCK, MIKE MECUM, 937-671-1157

PAVERS TO BE 4X8X2 1/2" OR OTHER SPECIFIED SIZE AS PER ASTM C 902 CLASS SX, TYPE 1, APPLICATION PS. PAVERS SHALL BE NON-EXTRUDED AND FACTORY SEALED.

FINAL GRADES FOR THE WESTERN PAVER AREA SHALL BE AS EXISTING AND BE ADJUSTED TO MEET EXISTING PATHWAY ELEVATIONS WITH A SMOOTH AND EVEN TRANSITION. FINAL GRADE FOR THE EASTERN PAVER AREA SHALL ALSO MEET EXISTING PATHWAY GRADES WITH SMOOTH AND EVEN TRANSITIONS AND WILL ALSO MEET THE LOWER EDGE OF THE PROPOSED POND EDGE WALL TO PROVIDE A CURB LIKE EDGE BETWEEN THE PAVERS AND POND.

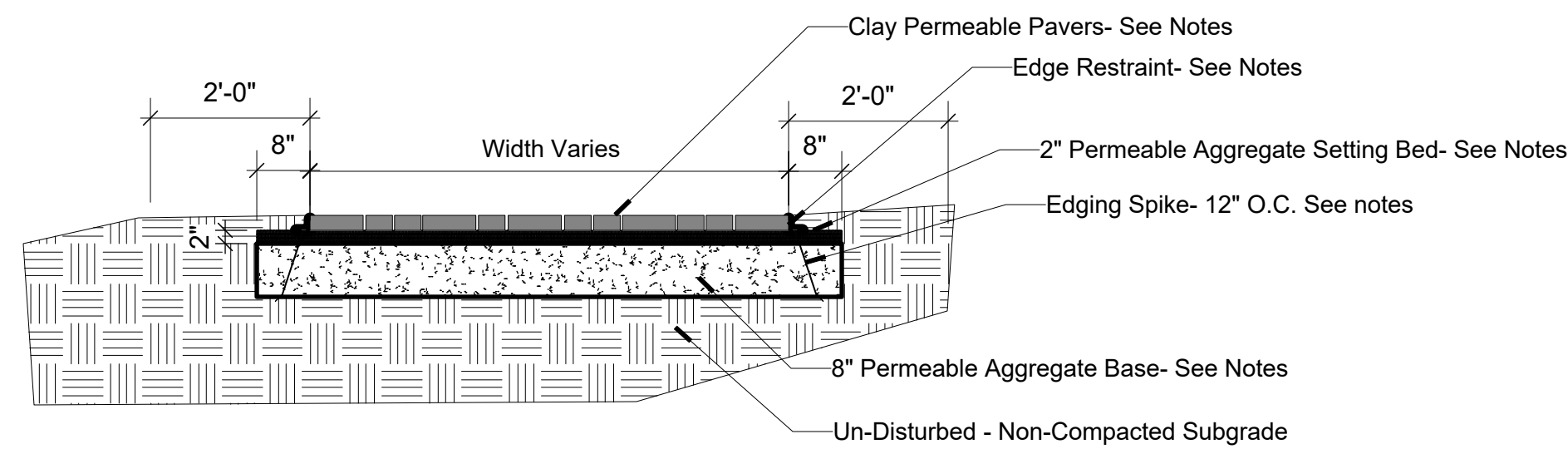
THE EXISTING PLANTINGS ADJACENT TO THE PROJECT AREA SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. EXTREME CARE SHALL BE USED AT ALL TIMES TO PROTECT EXISTING PLANT MATERIALS DURING THE INSTALLATION PROCESS.

CONTRACTOR SHALL USE CUSTOMARY CARE AND PROVIDE NEEDED CAUTION TAPE OR EQUIVALENT TO PROTECT PARK VISITORS DURING THE INSTALLATION PROCESS. CONSTRUCTION SITE SHALL BE LEFT EACH NIGHT IN A CLEAN AND SAFE MANNER.

VEHICULAR ACCESS IS AVAILABLE TO THE PROJECT SITE.

INTERPRETIVE CIRCLE AREAS:

INSTALL PAVERS IN A BASKET WEAVE PATTERN WITH A SINGLE 8" SOLDIER ALONG ALL OUTSIDE EDGES AND ALONG OTHER PAVER EDGES. COLOR SHALL BE SOLID #54 CHOCOLATE. PATTERN SHALL BE LAID APPROXIMATELY 90 DEGREES FROM THE MAIN PATHWAY SECTION THAT BISECTS THE CIRCLE.



NOTES:

EXCAVATION SHALL BE WASTED ON SITE PER THE DIRECTION OF THE LANDSCAPE ARCHITECT. SUB BASE SHALL BE UN-DISTURBED AND NON-COMPACTED PRIOR TO INSTALLING BASE MATERIALS.

PAVERS TO BE CLAY PERMEABLE 4X8 NON-EXTRUDED AND FACTORY SEALED. COLORS AND LAYOUT ARE PER PLANS AND NOTES.

EDGE RESTRAINT SHALL BE APPROVED FOR LIGHT VEHICULAR USE AND FOR PERMEABLE PAVER APPLICATIONS. EDGE RESTRAINT SHALL BE SPIKED EVERY 12" ALONG ENTIRE LENGTH USING 10" ROUND STEEL STAKES THAT HAVE A 15 DEGREE BENT TIP STARTING AT 1.25" FROM THE TIP, AS AVAILABLE FROM EDGETITE PRODUCTS, INC., 14475 S. RAVINIA AVE., ORLAND PARK, IL. 60462, (630) 514-0052, WWW.EDGETITE.COM, OR APPROVED EQUAL. SUBMIT SAMPLES FOR APPROVAL BY LANDSCAPE ARCHITECT.

PERMEABLE AGGREGATE SETTING BED SHALL BE 2" THICK AND AN OPEN GRADED, CRUSHED AND WASHED AGGREGATE SUCH AS ASTM D448 NO. 8 OR NO. 9 LIMESTONE. THIS MATERIAL SHALL ALSO BE USED FOR THE FILLING OF PAVER JOINTS. SUPPLY SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL. SETTING BED SHALL EXTEND A MINIMUM OF 8" OUTSIDE OF PAVER EDGE EXCEPT WHERE PAVERS MEET A WALL STRUCTURE.

PERMEABLE AGGREGATE BASE SHALL BE A MINIMUM OF 8" THICK AND COMPOSED OF AN OPEN GRADED, CRUSHED AND WASHED AGGREGATE SUCH AS ASTM D448 #57. SUPPLY SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL. BASE SHALL BE INSTALLED AND COMPACTED IN 4" LIFTS. BASE SHALL EXTEND A MINIMUM OF 8" OUTSIDE OF PAVER EDGE EXCEPT WHERE PAVERS MEET A WALL STRUCTURE.

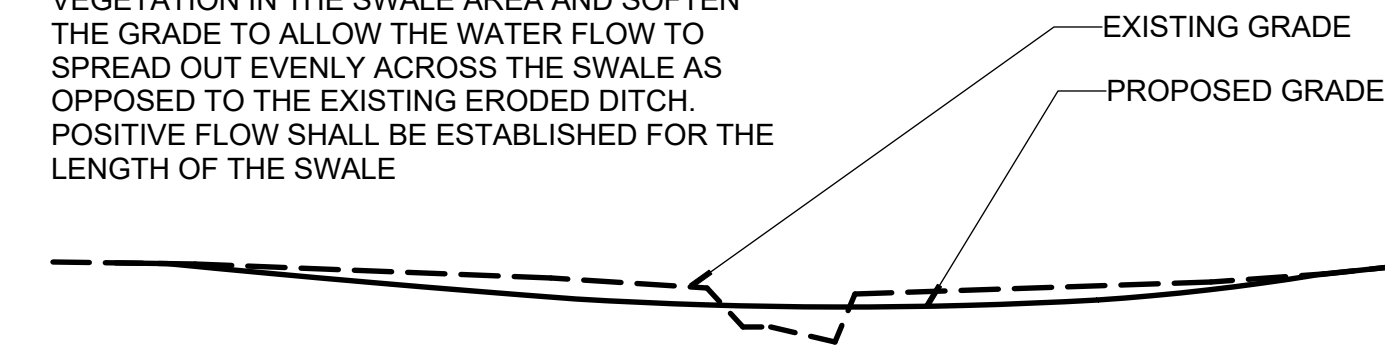
CONTRACTOR SHALL SUPPLY AND INSTALL A PERFORATED AND WRAPPED 4" PIPE SET APPROXIMATELY 1.25" ABOVE THE BOTTOM OF THE PERMEABLE AGGREGATE BASE. PIPE SHALL RUN ALONG THE CENTERLINE OF THE WALKWAYS AND DAYLIGHTED PER PLANS. CONTRACTOR MAY USE ADS ADVANEDGE 12" DRAINAGE PRODUCT INSTALLED FLAT AS AN ALTERNATE TO THE PERFORATED 4" PIPE.

ALL PAVERS TO HAVE A MINIMUM OF 2' OF LEVEL OR RISING GRADE FROM ALL EDGES OF PAVERS UNLESS ABUTTING A WALL OR PATHWAY.

TOPSOIL BACKFILL AND FINAL GRADE SHALL BE BY CONTRACTOR.

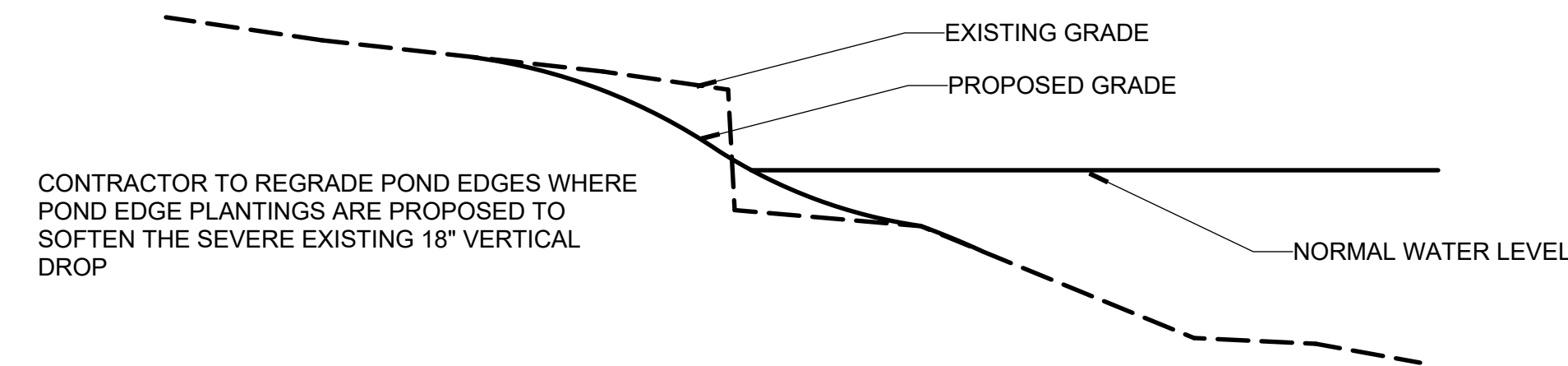
PERMEABLE PAVER DETAIL
 Scale: 1/2" = 1'-0"

CONTRACTOR WILL REMOVE EXISTING VEGETATION IN THE SWALE AREA AND SOFTEN THE GRADE TO ALLOW THE WATER FLOW TO SPREAD OUT EVENLY ACROSS THE SWALE AS OPPOSED TO THE EXISTING ERODED DITCH. POSITIVE FLOW SHALL BE ESTABLISHED FOR THE LENGTH OF THE SWALE



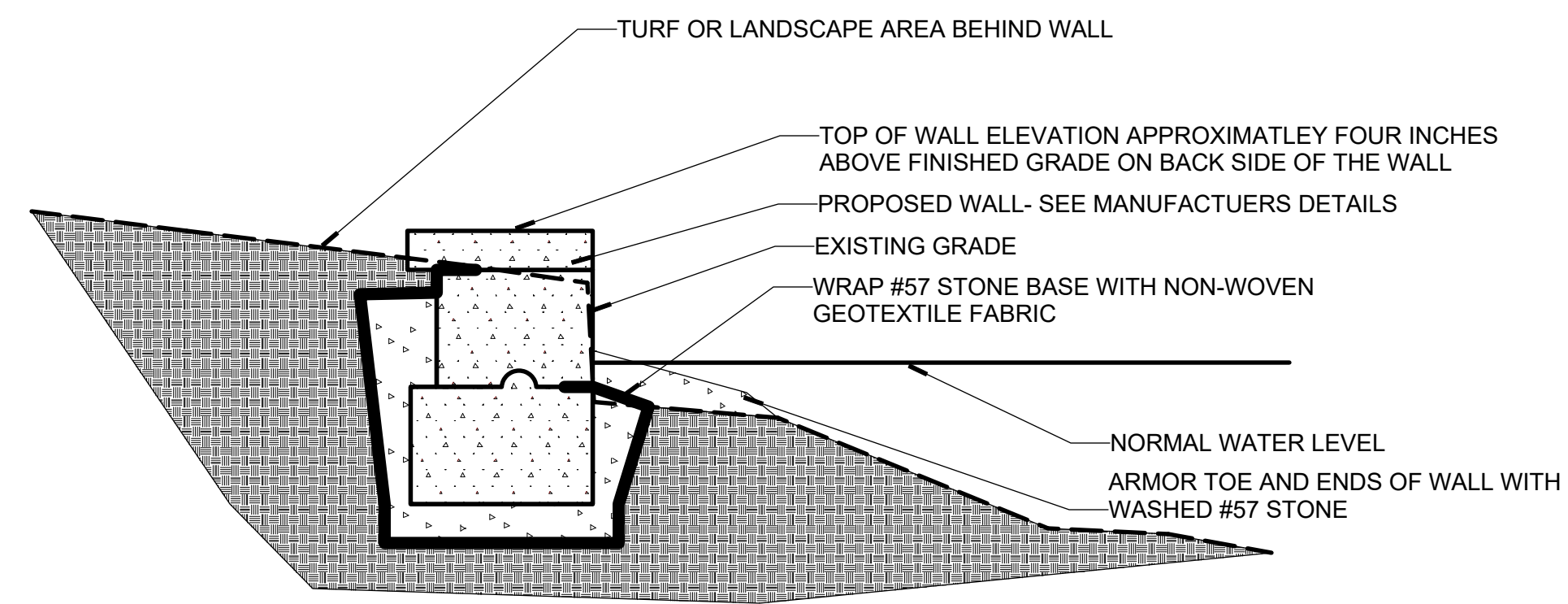
TYPICAL SWALE SECTION DETAIL

NOT TO SCALE



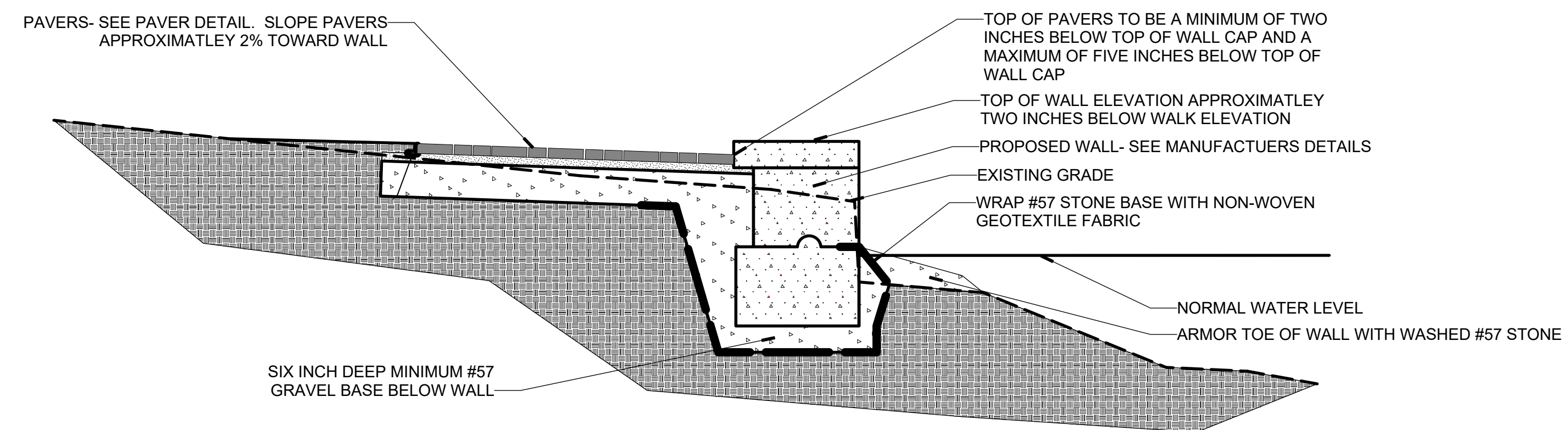
POND EDGE SECTION- GRADING DETAIL

NOT TO SCALE



POND EDGE SECTION- WALL DETAIL

NOT TO SCALE



POND EDGE SECTION- WALL AND PAVER DETAIL

NOT TO SCALE

NURSERY STOCK SPECIFICATIONS

1. ALL SUPPLIED NURSERY STOCK TO BE PER THE LATEST VERSION OF THE ANSI A300 (ALL PARTS) STANDARDS.
2. LANDSCAPE ARCHITECT SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF PLANT MATERIAL BEING DELIVERED TO THE JOB SITE. LANDSCAPE ARCHITECT RETAINS THE RIGHT TO REFUSE ALL OR PART OF ANY GROUP OF PLANT MATERIALS DEEMED UNACCEPTABLE OR NOT MEETING NORMAL ANLA STANDARDS.
3. CONTRACTOR SHALL PERFORM A MINIMUM OF TWO SOIL TESTS ON THE SOIL TO BE USED FOR PLANTING BED AREAS. SOIL SHALL HAVE A PH BETWEEN 6.5 AND 7.4. CATION EXCHANGE CAPACITY SHALL BE ABOVE 18. NO PLANTING SHALL OCCUR UNTIL SOIL CONDITIONS MEET THESE SPECIFICATIONS. OWNER SHALL BE NOTIFIED IF SOIL CONDITIONS ARE OUTSIDE OF THESE RANGES FOR CORRECTIVE MEASURES TO BE TAKEN.
4. ALL BALLED AND BURLAPPED MATERIALS SHALL BE DUG WITH FIRM, NATURAL BALLS OF EARTH IN WHICH THEY WERE GROWN, WITH A BALL SIZE OF AT LEAST 12 INCHES FOR EACH INCH CALIPER OF TRUNK SIZE. ALL ROOT BALLS TO BE WRAPPED, TIED, RIGIDLY SUPPORTED AND DRUM LACED AS RECOMMENDED BY ANLA STANDARDS.
5. DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY, EXCEPT AS APPROVED BY LANDSCAPE ARCHITECT. PROTECT PLANTS AND ROOT BALLS FROM SUN SCALD, DRYING, SWEATING, WHIPPING AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF ALL MATERIALS DURING DELIVERY.
6. DO NOT DROP ANY PLANT MATERIALS.
7. HANDLE ALL PLANT MATERIALS BY ROOT BALL ONLY.
8. DELIVER PLANT MATERIALS ONLY AFTER ALL PREPARATIONS HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET MATERIALS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST. CONTRACTOR RESPONSIBLE FOR MAINTENANCE OF MATERIALS DURING STORAGE INCLUDING WATERING AS NECESSARY TO ENSURE ROOT SYSTEMS REMAIN MOIST.
9. FAILURE OF ANY PROPER HANDLING SPECIFICATION WILL RESULT IN REJECTION OF PLANT MATERIALS.
10. WARRANT ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM PROJECT ACCEPTANCE. THE WARRANTY INCLUDES FULL MATERIAL AND LABOR AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM LACK OF ADEQUATE MAINTENANCE, NEGLIGENCE, OR ABUSE BY OWNER, OR INCIDENTS THAT ARE BEYOND CONTRACTOR'S CONTROL. REMOVE DEAD PLANTS IMMEDIATELY. REPLACE IMMEDIATELY UNLESS REQUIRED TO PLANT IN THE SUCCEEDING PLANTING SEASON. REPLACE EXTERIOR PLANTS THAT ARE MORE THAN 25 PERCENT DEAD OR IN AN UNHEALTHY CONDITION AT END OF WARRANTY PERIOD.
11. THREE SITE VISITS PER GUARANTEE YEAR ARE REQUIRED DURING THE WARRANTY PERIOD WITH LANDSCAPE ARCHITECT. THESE VISITS WILL BE USED TO DETERMINE PROPER MAINTENANCE BY OWNER, INSECT AND DISEASE ISSUES AND GENERAL PERFORMANCE OF THE INSTALLATION. ANY REQUIRED REPLACEMENTS WILL BE MADE AFTER EACH SITE VISIT.
12. CONTRACTOR TO SUPPLY TO OWNER A MONTHLY MAINTENANCE SCHEDULE DURING A CALENDAR YEAR. SCHEDULE MUST BE SUBMITTED TO OWNER PRIOR TO REQUESTING FINAL JOB ACCEPTANCE.
13. CONTRACTOR TO MAINTAIN ALL PLANT MATERIALS (INCLUDING WATERING) UNTIL PROJECT ACCEPTANCE BY OWNER, UNLESS SPECIFIED OTHERWISE.
14. CONTRACTOR TO NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO SUBMITTING BID FOR THE PROJECT IF ANY SPECIFIED PLANT IS OF CONCERN RELATED TO GUARANTEE ISSUES. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT PRIOR TO SUBMITTING BID FOR PROJECT OF ANY CONCERNS REGARDING AVAILABILITY OF ANY SPECIFIED PLANT.
15. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE OWNER'S REPRESENTATIVE TO SCHEDULE A PROJECT WALK THROUGH AFTER ALL PLANT MATERIALS HAVE BEEN INSTALLED. THE PROJECT WALK THROUGH WILL INCLUDE INSPECTION OF ALL NEWLY-INSTALLED PLANT MATERIALS TO ENSURE THAT ALL PLANTS MEET NURSERY STOCK SPECIFICATIONS. PROJECT ACCEPTANCE WILL OCCUR AFTER A FORMAL DOCUMENT OF ACCEPTANCE IS ISSUED BY THE OWNER OR OWNER'S REPRESENTATIVE AND THE CONTRACTOR IS NOTIFIED OF PROJECT ACCEPTANCE.
16. ALL PLANT MATERIALS MUST BE SUPPLIED WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DEFECTS DISFIGUREMENT. PROVIDE TREES AND SHRUBS OF SIZES AND GRADES COMPLYING WITH ANLA STANDARDS FOR TYPE OF TREES AND SHRUBS REQUIRED. TREES AND SHRUBS OF A LARGER SIZE MAY BE USED IF ACCEPTABLE TO LANDSCAPE ARCHITECT, WITH A PROPORTIONATE INCREASE IN SIZE OF ROOTS OR BALLS. IF FORMAL ARRANGEMENTS OR CONSECUTIVE ORDER OF TREES OR SHRUBS IS SHOWN, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD. ALL STEMS TO BE LOCATED IN THE CENTER OF THE ROOT BALL.
17. ALL SINGLE STEM PLANTS MUST BE DELIVERED WITH STRAIGHT TRUNK, WELL-BALANCED CROWN, AND INTACT LEADER, OF HEIGHT AND CALIPER INDICATED.
18. ALL MULTI-STEM PLANTS MUST BE DELIVERED WITH WELL-BALANCED CROWN, AND INTACT LEADERS, OF HEIGHT AND CALIPER INDICATED.
19. ALL NURSERY STOCK SHIPPED IN ACCORDANCE WITH THE REQUIRED SPECIFICATIONS SHALL BE DEEMED TO BE ACCEPTABLE WITHIN THE TERMS OF THIS SECTION IF IT IS TYPICAL IN SIZE AND HABIT FOR THE SPECIES IN THE REGION OF THE COUNTRY IN WHICH IT IS GROWN UNLESS SPECIFIED OTHERWISE.
20. ALL NURSERY STOCK TO ORIGINATE AND BE GROWN WITHIN ONE USDA HARDINESS ZONE TO THE SOUTH AND TWO HARDINESS ZONES TO THE NORTH.
21. ANY TREATMENTS, PRUNING OR CORRECTIVE MEASURES REQUIRED FOR EXISTING TREES MUST BE COMPLETED BY AN ISA CERTIFIED ARBORIST.

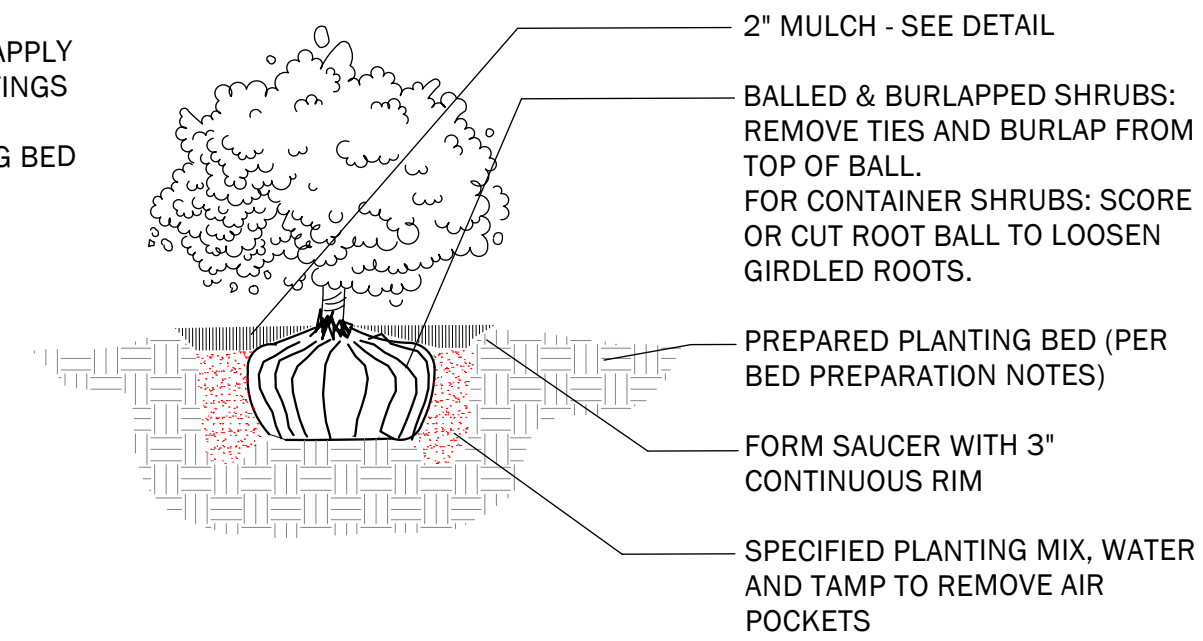
BED PREPARATION SPECIFICATIONS

1. MECHANICALLY LOOSENING SOILS SHALL ONLY TO NEW BED AREAS BEING CONVERTED FROM LAWN ONLY. EXISTING BEDS SHALL HAVE AMENDMENTS ADDED AND INCORPORATED.
2. ALL PLANTING BEDS ARE TO BE MECHANICALLY LOOSENEDED PREFERABLY USING A DISC TO A MINIMUM DEPTH OF 8 INCHES. ONCE THE BEDS HAVE BEEN LOOSENEDED, THE FOLLOWING AMENDMENTS SHALL BE ADDED:
 - 1.1. ORGANIC COMPOST - CONTRACTOR SHALL APPLY A MINIMUM OF 2" OF ORGANIC COMPOST SUCH AS LEAF OR MUSHROOM COMPOST WITH A PH LEVEL OF 5.5 TO 6.5. CONTRACTOR SHALL SUPPLY A PH CERTIFICATION TO THE LANDSCAPE ARCHITECT FOR VERIFICATION.
 - 1.2. FERTILIZER - CONTRACTOR SHALL APPLY A 14-14-14 SLOW RELEASE FERTILIZER LABELED FOR ORNAMENTAL USE.
 - 1.3. CONTRACTOR SHALL ALSO APPLY ONE OF THE FOLLOWING PRODUCTS:
 - 1.3.1. PROPLUS BIOPRIME AT THE RATE OF 1 POUND PER 1000 SF, AS AVAILABLE FROM PROFILE, 800.508.8681.
 - 1.3.2. ROOTS HEALTHY START 3-4-3 AT THE RATE OF 25 POUNDS PER 1000 SF, 800.421.9051.
 - 1.3.3. ROOTS PLANT CARE GROUP M-ROOTS AT THE RATE OF 50 POUNDS PER 1000 SF, 800.342.6173.
3. AFTER THE ABOVE AMENDMENTS HAVE BEEN ADDED, THE BEDS ARE TO BE DISCED A SECOND TIME TO INCORPORATE THE AMENDMENTS INTO THE TOP 4 INCHES OF THE PLANTING BEDS.
4. ONCE PLANTING IS COMPLETED AND THE BEDS HAVE BEEN THOROUGHLY WATERED, PRIOR TO MULCHING, THE CONTRACTOR SHALL APPLY A GRANULAR WEED PREVENTER CONTAINING ISOXABEN AND TRIFLURALIN SUCH AS SNAPSHOT 2.5 TG AT THE RATE OF 5 POUNDS PER 1000 SF.
5. BETWEEN SIX AND NINE MONTHS AFTER INITIAL INSTALLATION, CONTRACTOR TO APPLY ROOTS, INC. dry-ROOTS, 800.342.6173, PLANT HEALTH CARE BIOPAC, 800.421.9051, OR PROPLUS BIOPRIME, 800.508.8681, PER MANUFACTURER'S SPECIFICATION TO REFRESH MYCORRHIZA IN PLANTING BEDS.
6. CONTRACTOR SHALL PROVIDE EVIDENCE THAT THE ABOVE MATERIALS WERE SUPPLIED AND INSTALLED ON THE PROJECT SITE.

TURF GRASS SEEDING AND REPAIR SEEDING SPECIFICATIONS

1. IN ALL TURF AREAS, THE CONTRACTOR SHALL LOOSEN ALL SOIL TO A DEPTH OF AT LEAST 6 INCHES BY MECHANICAL METHODS TO ELIMINATE THE COMPACTION PRESENT IN THE PROPOSED LAWN AREAS. CONTRACTOR TO ALSO ENSURE THAT ALL BASE GRAVEL HAS BEEN REMOVED IN THE PARKING LOT ISLANDS. THESE AREAS SHOULD THEN BE ROCK HOUNDED OR HARLEY RAKED TO REMOVE ALL MATERIALS LARGER THAN 3/4" IN SIZE FROM ALL AREAS.
2. CONTRACTOR SHALL PERFORM A MINIMUM OF TWO SOIL TESTS ON THE SOIL TO BE USED FOR ESTABLISHING TURF. SOIL SHALL HAVE A PH BETWEEN 6.5 AND 7.4. CATION EXCHANGE CAPACITY SHALL BE ABOVE 18. NO SEEDING SHALL OCCUR UNTIL SOIL CONDITIONS MEET THESE SPECIFICATIONS. OWNER SHALL BE NOTIFIED IF SOIL CONDITIONS ARE OUTSIDE OF THESE RANGES FOR CORRECTIVE MEASURES TO BE TAKEN.
3. SEED SHALL BE SPORTS MIX TURF TYPE TALL FESCUE AS AVAILABLE FROM GREEN VELVET SOD FARMS AT A RATE OF 8-10 POUNDS PER 1000 SF, OR APPROVED EQUAL.
4. THE CONTRACTOR SHALL INSTALL THE SEED USING ANY INDUSTRY ACCEPTABLE METHOD. IF HYDROSEEDING IS USED, SEED SHALL BE APPLIED FIRST TO ENSURE CONTACT WITH THE SOIL FOLLOWED BY THE APPLICATION OF HYDROMULCH. SEED SHALL BE INSTALLED IN CONTACT WITH THE SOIL TO ENSURE GERMINATION AND ESTABLISHMENT.
5. ON ALL SLOPED AREAS GREATER THAN A 3:1 SLOPE, CONTRACTOR SHALL ADD 32 POUNDS PER ACRE OF ADDITIONAL TACKIFIER TO THE MIX IF HYDROSEEDING IS USED.
6. NO SEEDING SHALL OCCUR UNLESS THE CONTRACTOR IS ABLE TO PROVIDE PROPER WATERING TO THE NEWLY SEEDED AREAS.
7. THE CONTRACTOR SHALL APPLY AN APPLICATION OF 18-24-12 25% POLYPLUS FERTILIZER AT THE RATE OF 1 POUND PER 1000 SF APPROXIMATELY 5 WEEKS AFTER SEEDING IS COMPLETED.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE ESTABLISHMENT OF ALL SEEDED TURF AREAS WITH THE EXCEPTION OF MECHANICAL DAMAGE BY OTHERS. THIS RESPONSIBILITY INCLUDES WATERING UNTIL ESTABLISHMENT AND OWNER ACCEPTANCE. ALL BARE AREAS LARGER THAN SIX INCHES IN ANY DIRECTION WILL BE RESEDED AT THE CONTRACTOR'S SOLE EXPENSE.
9. CONTRACTOR SHALL PROVIDE EVIDENCE THAT THE ABOVE MATERIALS WERE SUPPLIED AND INSTALLED ON THE PROJECT SITE.
10. ALL EXISTING TURF AREAS IN THE PROJECT AREA SHALL BE PREPARED PER THESE SPECIFICATIONS AND SEEDED AS A PART OF THIS PROJECT.

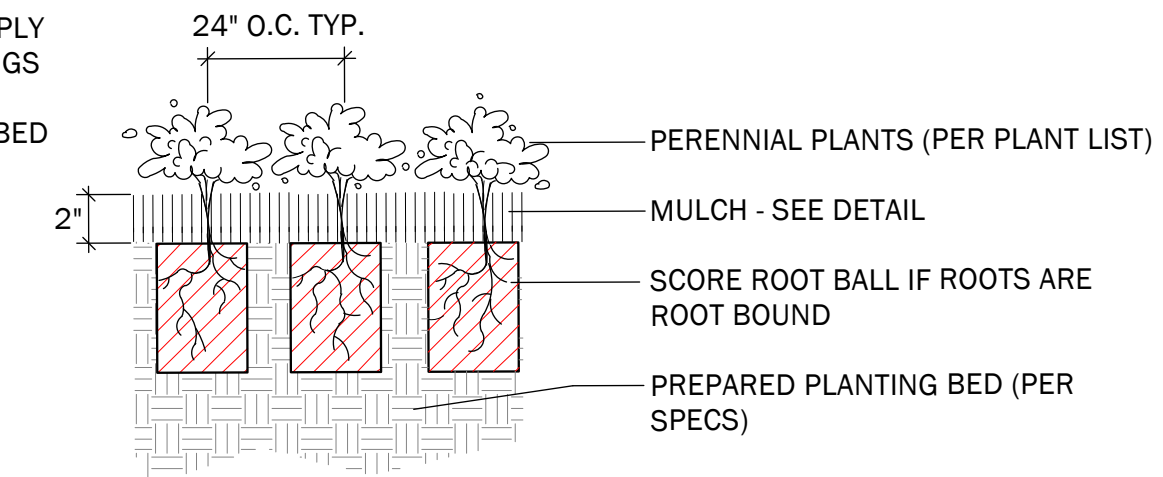
AFTER BEDS ARE PREPARED APPLY SOIL ADDITIVES TO ALL PLANTINGS PER MANUFACTURER'S SPECIFICATION. SEE PLANTING BED PREPARATION NOTES.



SHRUB PLANTING DETAIL

NOT TO SCALE

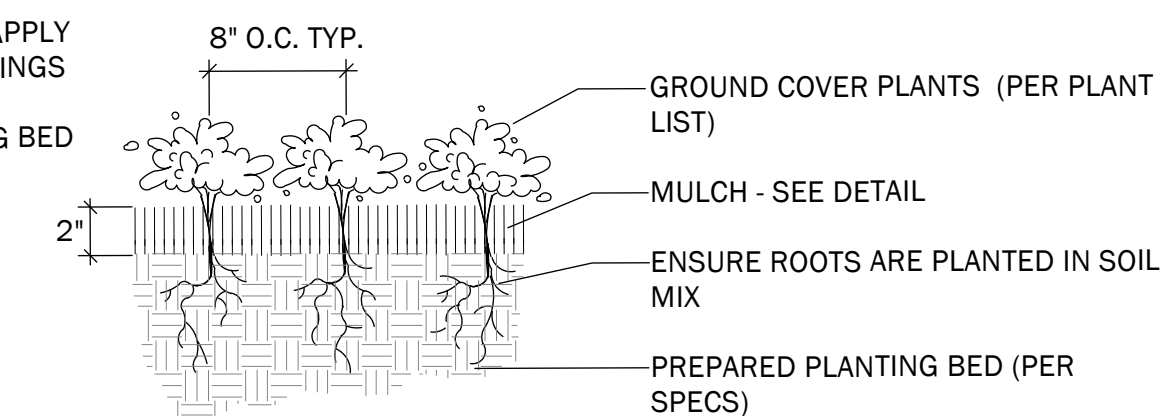
AFTER BEDS ARE PREPARED APPLY SOIL ADDITIVES TO ALL PLANTINGS PER MANUFACTURER'S SPECIFICATION. SEE PLANTING BED PREPARATION NOTES.



PERENNIAL PLANTING DETAIL

NOT TO SCALE

AFTER BEDS ARE PREPARED APPLY SOIL ADDITIVES TO ALL PLANTINGS PER MANUFACTURER'S SPECIFICATION. SEE PLANTING BED PREPARATION NOTES.



GROUND COVER PLANTING DETAIL

NOT TO SCALE

NOTES:

ALL BED AREAS TO BE MULCHED USING A SHREDDED HARDWOOD AGED A MINIMUM OF ONE YEAR AND BE OF UNIFORM TEXTURE AND SIZE. MULCH TO BE INSTALLED AT A MINIMUM DEPTH OF TWO (2) INCHES AND A MAXIMUM DEPTH OF THREE (3) INCHES.

ALL TREES IN LAWN AREAS SHALL BE MULCHED USING A SHREDDED HARDWOOD AGED A MINIMUM OF ONE YEAR AND BE OF UNIFORM TEXTURE AND SIZE.

FINAL GRADE OF ALL BED AND MULCHED AREAS SHALL BE EVEN WITH SURROUNDING WALKS AND CURBS.

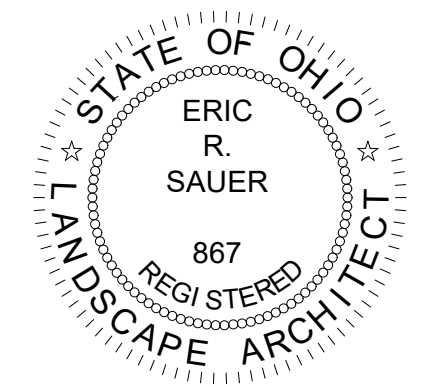
MULCH DETAIL

NOT TO SCALE

PROJECT
 COX ARBORETUM
 METROPARK
 SHRUB GARDEN
 RENOVATION

6733 SPRINGBORO PIKE
 DAYTON, OHIO 45449

SEAL



ISSUE

**CONSTRUCTION
 DRAWINGS**

ISSUE NOTES

DATE	COMMENT

DATE: 9/15/2023

DRAWN BY: ERS
 CHECKED BY: ERS

DRAWING TITLE

PLANTING DETAILS

SHEET NO.

LS-106



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