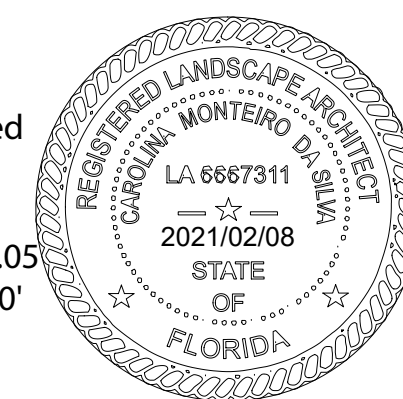
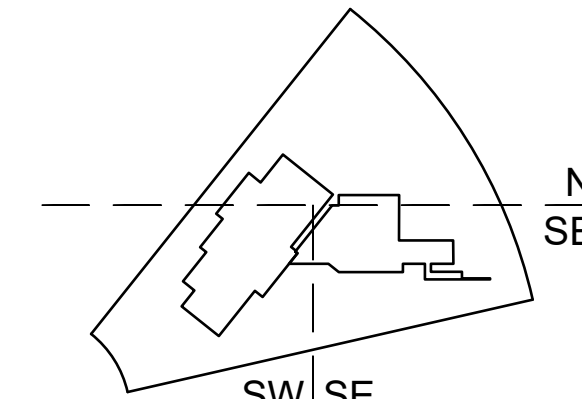


- LEGEND:
- XX XX EXISTING TREES/ PALMS TO REMAIN
  - XX XX PROPOSED TREES/ PALMS
  - XX XX RELOCATED TREES/ PALMS



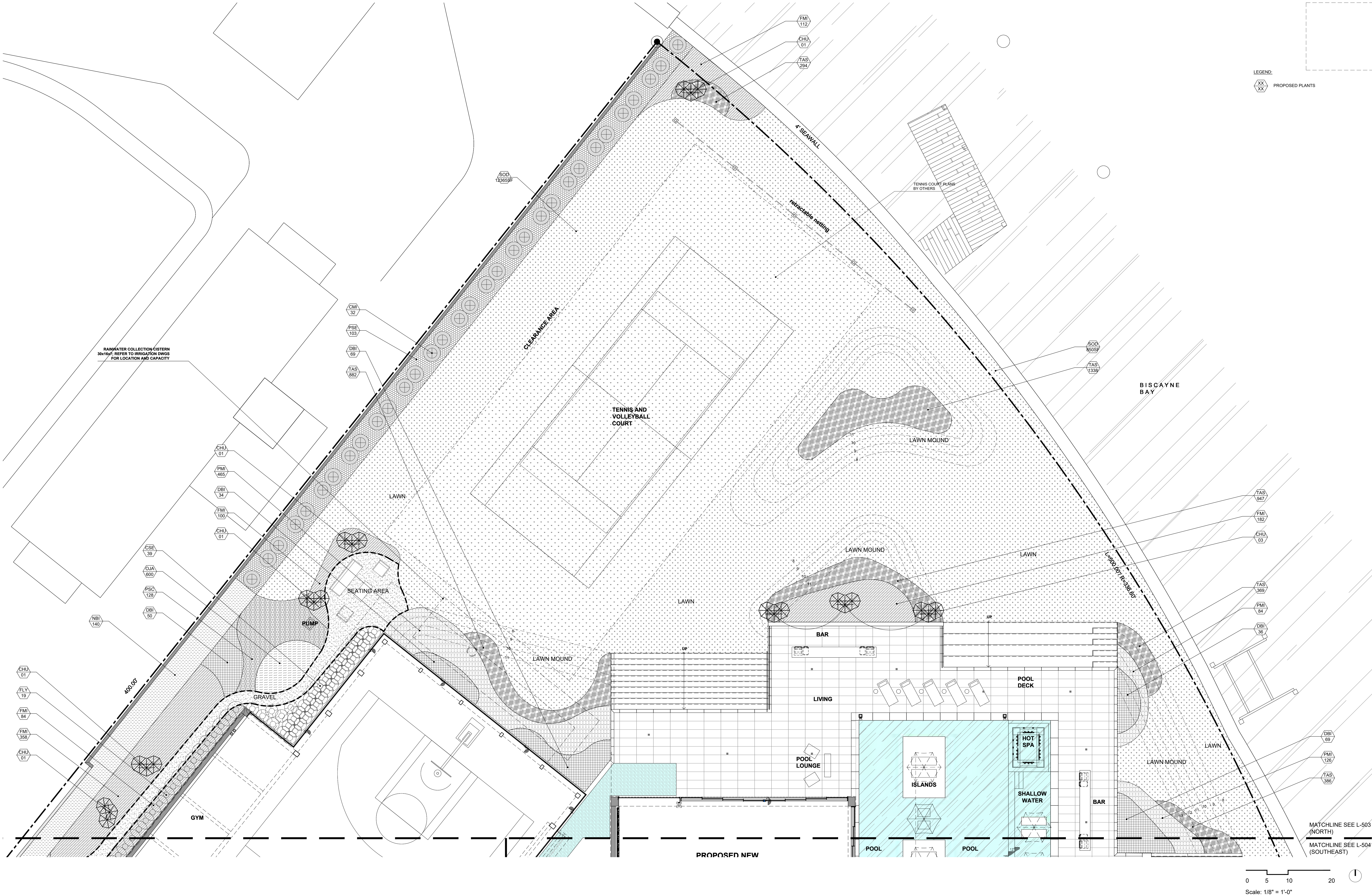




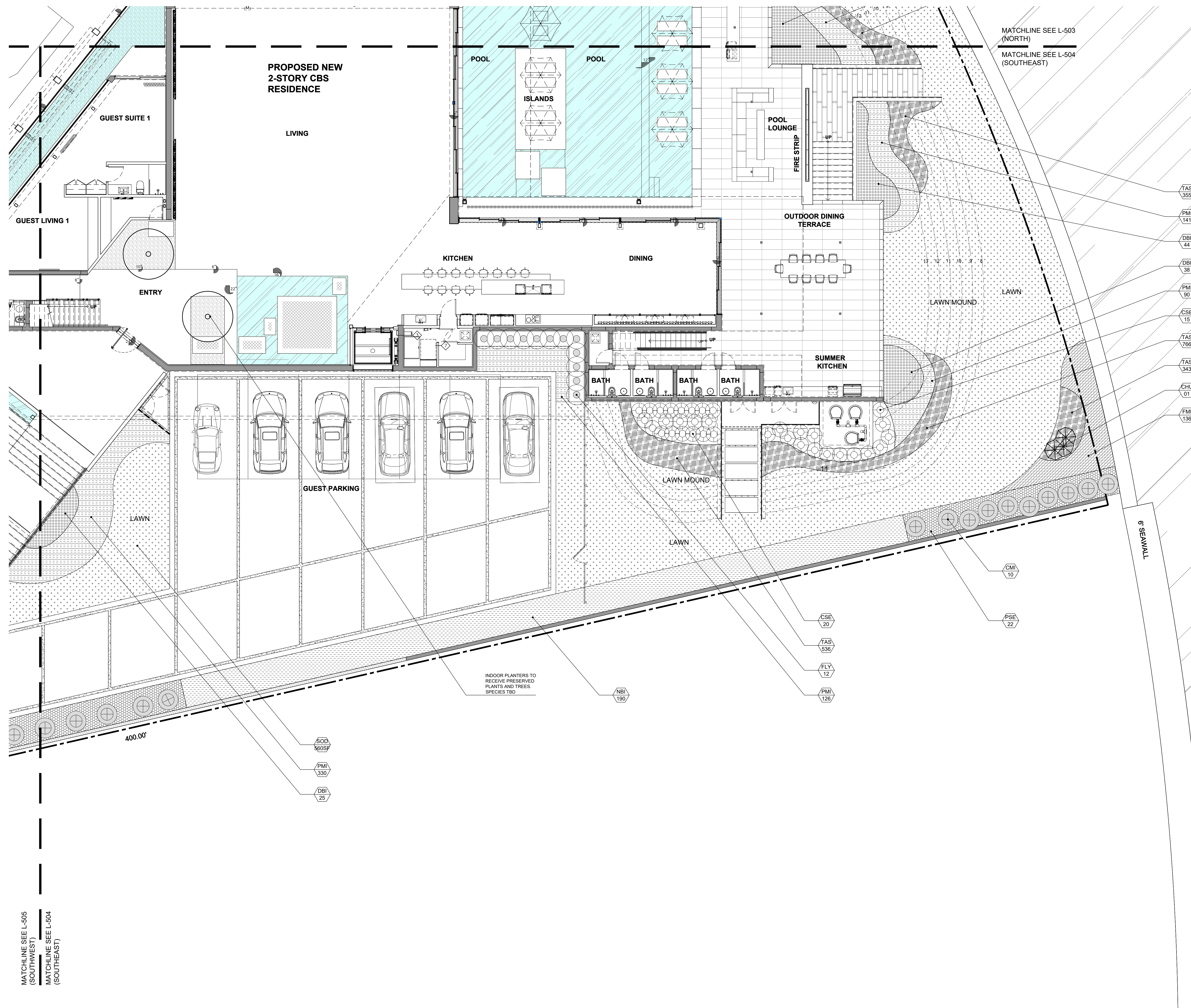




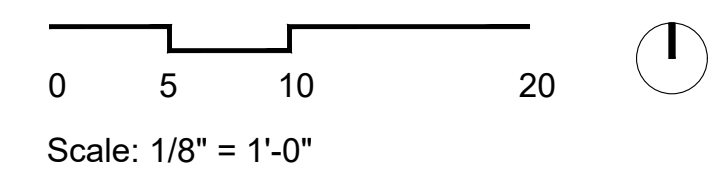








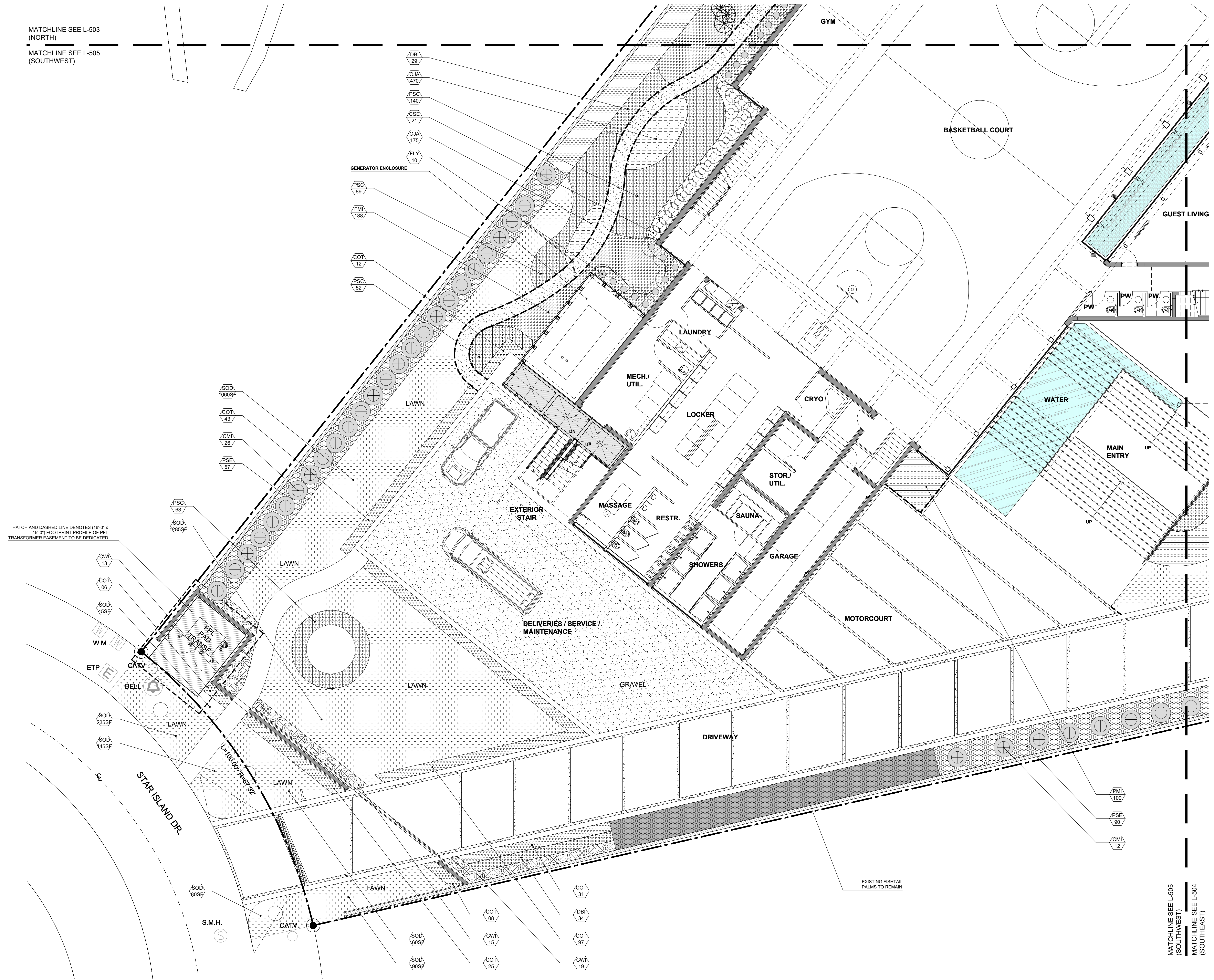
LEGEND:  
XX  
XX  
PROPOSED PLANTS





MATCHLINE SEE L-503  
(NORTH)  
MATCHLINE SEE L-505  
(SOUTHWEST)

LEGEND:  
XX  
XX  
PROPOSED PLANTS

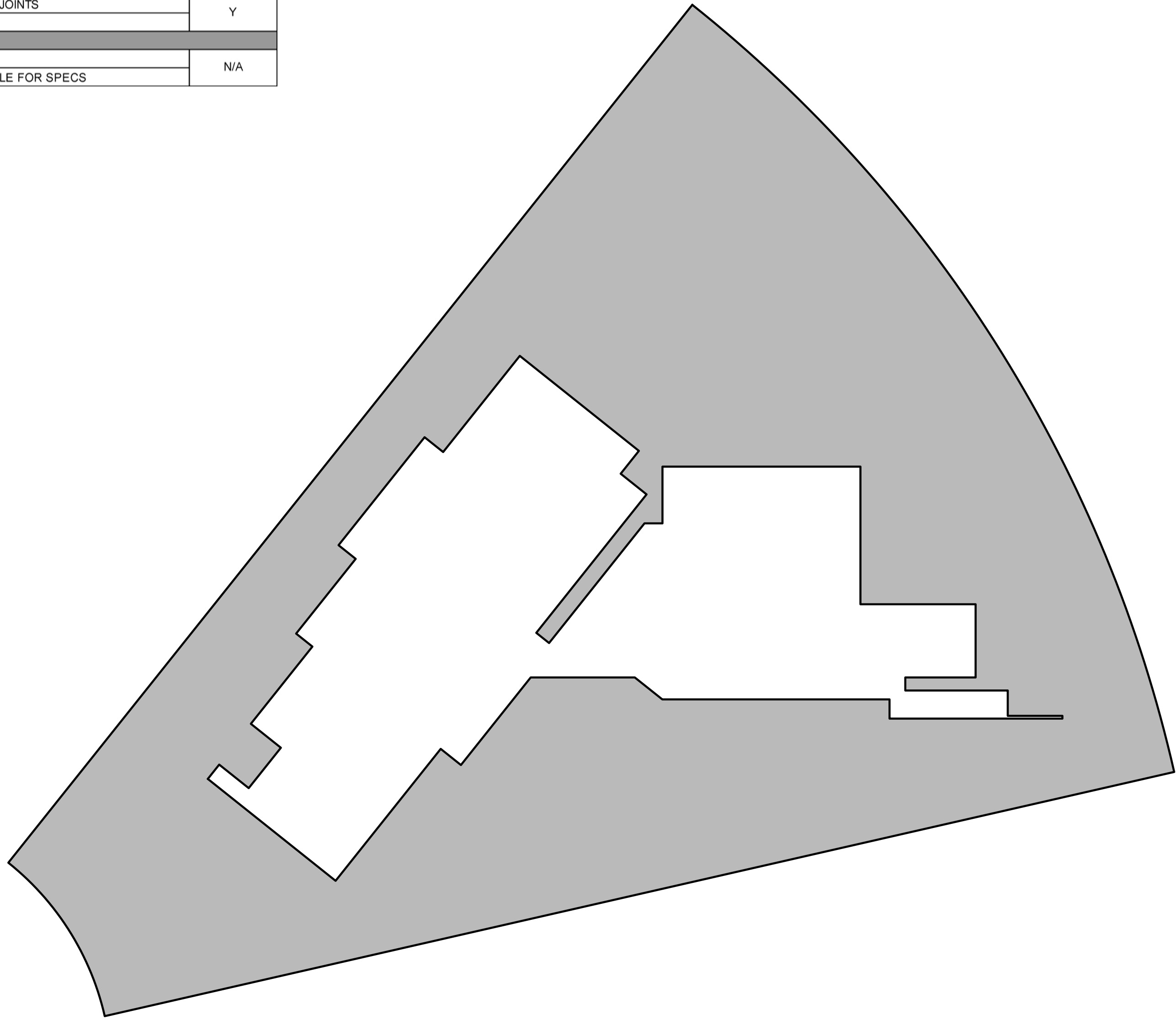


0 5 10 20  
Scale: 1/8" = 1'-0"



| LANDSCAPE SCHEDULE - CANOPY |     |                               |  |
|-----------------------------|-----|-------------------------------|--|
| SYMBOL                      | QTY | PROPOSED MATERIAL             | DESCRIPTION AND NOTES                        |
| TREES AND PALMS             |     |                               |  |
| CD                          | 14  | <i>Coccoloba diversifolia</i> | MIN. 16' HT, 4" DBH, 8' spread               |
|                             |     | PIGEON PLUM                   | FG   |
| BA                          | 4   | <i>Bulnesia arborea</i>       | MIN. 16' HT, 4" DBH, 8' spread               |
|                             |     | VERAWOOD                      | 25G  |
| MF1                         | 6   | <i>Myrcianthes fragrans</i>   | MIN. 16' HT, 4" DBH, 8' spread               |
|                             |     | SIMPSONS STOPPER              | 65G  |
| MF2                         | 19  | <i>Myrcianthes fragrans</i>   | MIN. 16' HT, 4" DBH, 8' spread, Full to base |
|                             |     | SIMPSONS STOPPER              | 65G  |
| PE                          | 5   | <i>Pinus Elliottii</i>        | 20' HT, 8" DBH, 14' spread, Character tree   |
|                             |     | SLASH PINE                    | FG   |
| KF                          | 11  | <i>Krugiodendron ferreum</i>  | MIN. 16' HT, 4" DBH, 8' spread               |
|                             |     | BLACK IRONWOOD                | FG   |
| TC                          | 7   | <i>Tabebuia caribba</i>       | 20' HT, 8" DBH, 14' spread, Character tree   |
|                             |     | YELLOW TABEBUIA               | FG   |
| SP                          | 6   | <i>Sabal palmetto</i>         | 20' CT (2), 25' CT (2), 30' CT (2), 10' SP   |
|                             |     | CABBAGE PALM                  | FG   |
| TR                          | 7   | <i>Thrinax radiata</i>        | 20' CT, 8' SP                                |
|                             |     | THATCH PALM                   | FG   |

| LANDSCAPE SCHEDULE - UNDERSTORY |           |  |                                  |
|---------------------------------|-----------|--|----------------------------------|
| SYMBOL                          | QTY       | PROPOSED MATERIAL                      | DESCRIPTION AND NOTES            |
| SHRUBS                          |           |  |                                  |
| CMI                             | 80        | <i>Caryota mitis</i>                   | 14' HT, 4" SP, 4" O.C            |
|                                 |           | FISHTAIL PALM                          | 45G                              |
| CSE                             | 95        | <i>Chamaedorea seifrizii</i>           | 6' HT, 3" SP, 24" O.C            |
|                                 |           | BAMBOO PALM                            | 7G                               |
| FLY                             | 41        | <i>Ficus lyrata</i>                    | 6' HT, 4" SP, 30" O.C            |
|                                 |           | FIDDLE-LEAF FIG                        | 15G                              |
| CWI                             | 47        | <i>Canella winterana</i>               | 6' HT, 2" SP, 24" O.C            |
|                                 |           | CANELLA                                | 15G                              |
| PSE                             | 272       | <i>Philodendron selloum "Hope"</i>     | 3' HT, 30" O.C                   |
|                                 |           | PHILODENDRON HOPE                      | 7G                               |
| DBI                             | 428       | <i>Dietes bicolor</i>                  | 2' HT, 18" O.C                   |
|                                 |           | DIETES BICOLOR                         | 3G                               |
| PSC                             | 452       | <i>Phymatosorus scolopendria</i>       | 18" HT, 18" O.C                  |
|                                 |           | WART FERN                              | 3G                               |
| NBI                             | 330       | <i>Nephrolepis biserrata "Macho"</i>   | 18" HT, 24" O.C                  |
|                                 |           | MACHO FERN                             | 3G                               |
| FMI                             | 1160      | <i>Ficus microcarpa "Green Island"</i> | 12-18" HT, FULL, 15" O.C         |
|                                 |           | GREEN ISLAND FIGUS                     | 7G                               |
| COT                             | 222       | <i>Cotoneaster ssp.</i>                | 12" HT, 12" O.C                  |
|                                 |           | COTONEASTER                            | 3G                               |
| PMI                             | 1464      | <i>Pilea microphylla</i>               | 12" HT, 12" O.C                  |
|                                 |           | GREEN FRESCURA                         | 3G                               |
| ACCENTS                         |           |  |                                  |
| CHU                             | 9         | <i>Chamaerops humilis</i>              | 3'-6" HT TRIPLE PALMS            |
|                                 |           | EUROPEAN FAN PALM                      | 25G                              |
|                                 | 30        | <i>Orchid</i>                          | SPECIES AND LOCATION TBD         |
|                                 |           | ORCHIDS                                |                                  |
| GROUNDCOVERS                    |           |  |                                  |
| TAS                             | 6216      | <i>Trachelospermum asiaticum</i>       | 4" HT, 6" O.C                    |
|                                 |           | ASIATIC JASMINE                        | 1G                               |
| OJA                             | 1245      | <i>Ophiopogon japonicus</i>            | 4" HT, 6" O.C                    |
|                                 |           | MONDO GRASS                            | 1G                               |
| SOD                             |           |  |                                  |
| SOD                             | 16,845 SF | <i>Panicum vaginatum</i>               | STAGGERED AND BUTTED JOINTS      |
|                                 |           | SEASHORE PASPALUM                      |                                  |
| PRESERVED PLANTS                |           |  |                                  |
|                                 |           | Preserved plants                       | SPECIES TBD                      |
|                                 |           | TREES AND PLANTS                       | SEE HARDSCAPE SCHEDULE FOR SPECS |



OPEN SPACE CALCULATION :  
80,784.00 - 22,456.00 = 58,328.00 SQFT

#### CITY OF MIAMI BEACH

#### LANDSCAPE LEGEND

INFORMATION REQUIRED TO BE PERMANENTLY AFFIXED TO PLANS

Zoning District RS-1 Lot Area 80,784 SQFT Acres 1.855

#### OPEN SPACE

- A. Square feet of required Open Space as indicated on site plan:  
Lot Area = 80,784 s.f. x 50 % = 40,392 s.f.
- B. Square feet of parking lot open space required as indicated on site plan:  
Number of parking spaces N/A x 10 s.f. parking space = N/A
- C. Total square feet of landscaped open space required: A+B= 40,392 58,328

#### LAWN AREA CALCULATION

- A. Square feet of landscaped open space required 40,392 58,328
- B. Maximum lawn area (sod) permitted= 50 % x 40,392 s.f. 20,196.00 15,535.00

#### TREES

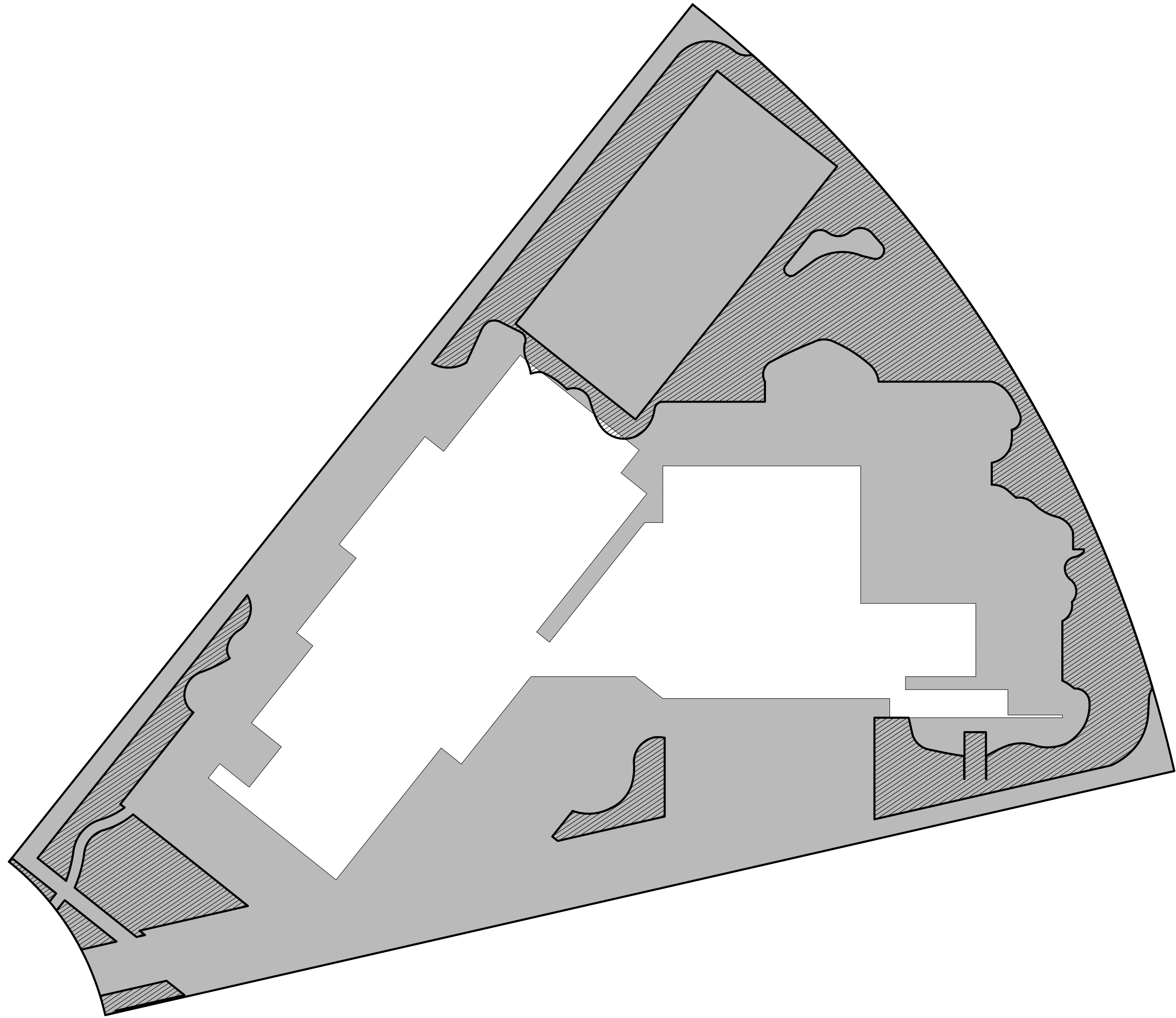
- A. Number of trees required per lot or net lot acre, less existing number of trees meeting minimum requirements= 5 trees + 75 net lot acres - number of existing trees 16 = 64 64
- B. % Natives required: Number of trees provided x 30% = 20 59
- C. % Low maintenance / drought and salt tolerant required:  
Number of trees provided x 50%= 32 59
- D. Street Trees (maximum average spacing of 20' o.c.)  
60 linear feet along street divided by 20' = 3 3
- E. Street tree species allowed directly beneath power lines:  
(maximum average spacing of 20' o.c.):  
N/A linear feet along street divided by 20' = N/A N/A

#### SHRUBS

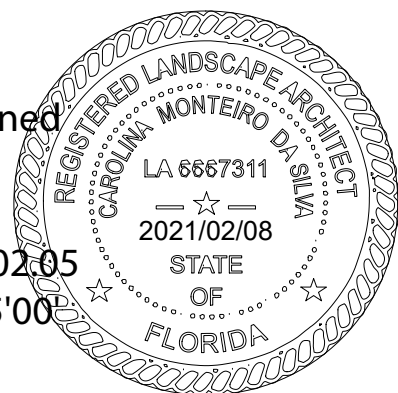
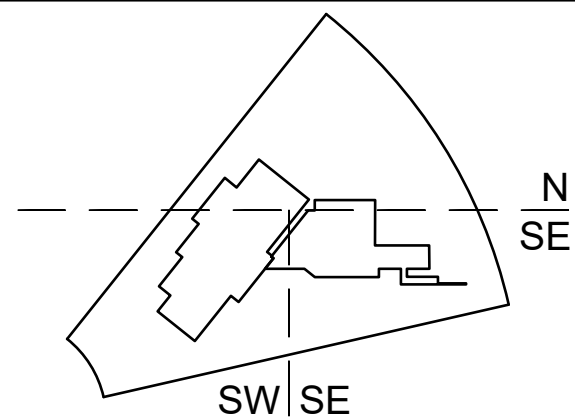
- A. Number of shrubs required: Sum of lot and street trees required x 12= 804 3176
- B. % Native shrubs required: Number of shrubs provided x 50%= 1588 1794

#### LARGE SHRUBS OR SMALL TREES

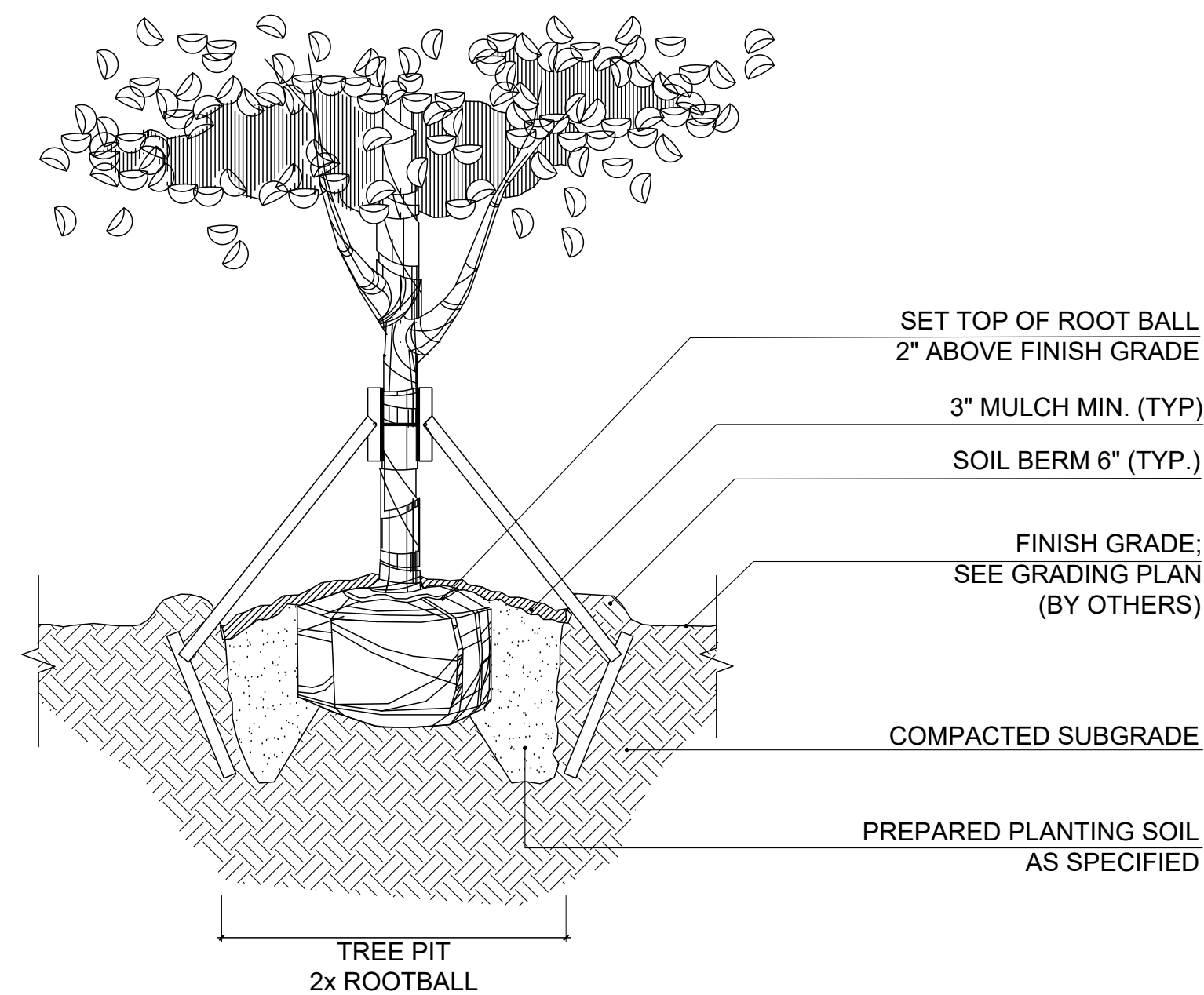
- A. Number of large shrubs or small trees required: Number of required shrubs x 10%= 81 88
- B. % Native large shrubs or small trees required: Number of large shrubs or small trees provided x 50%= 44 47



LAWN AREA CALCULATION = 15,535.00 SQFT

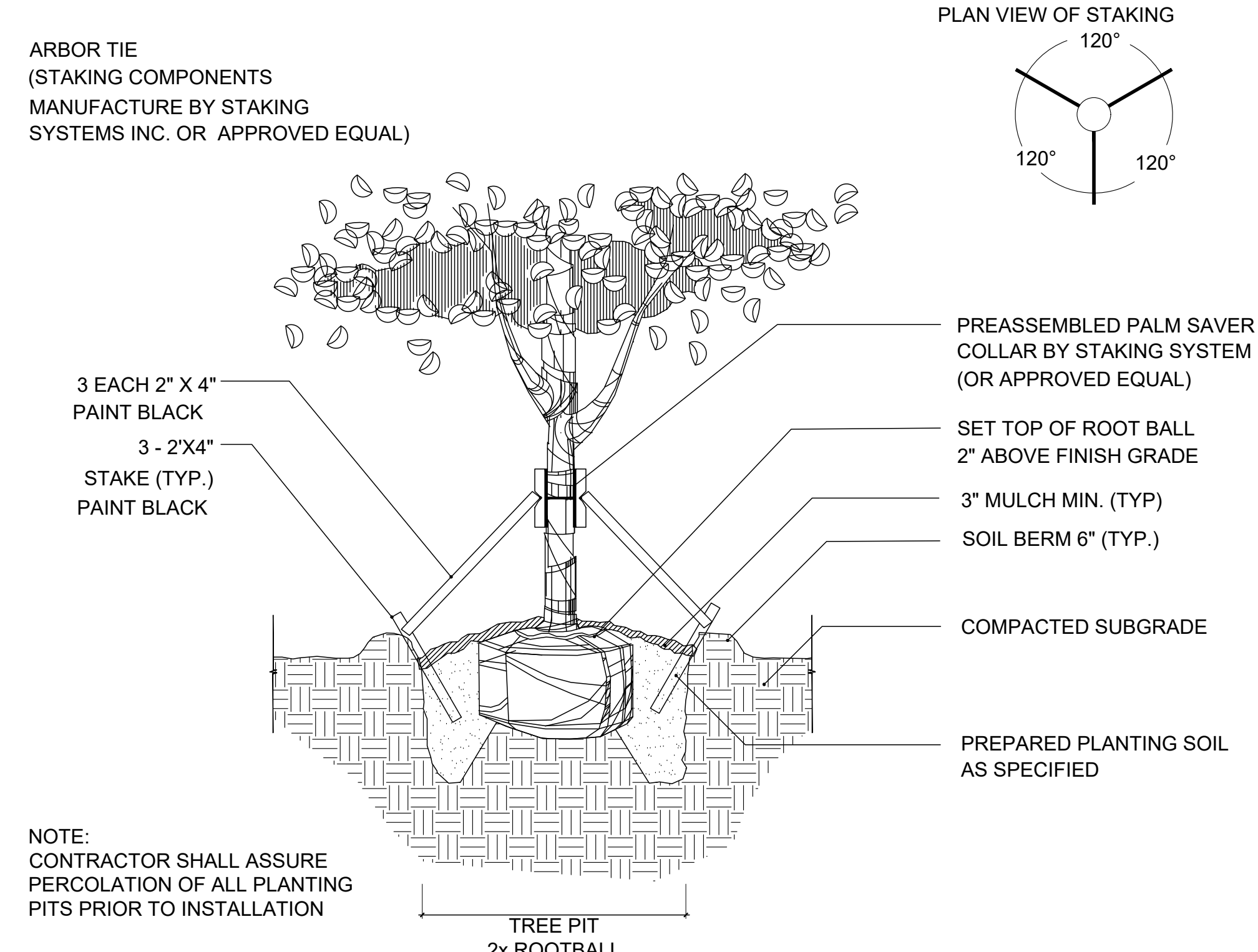






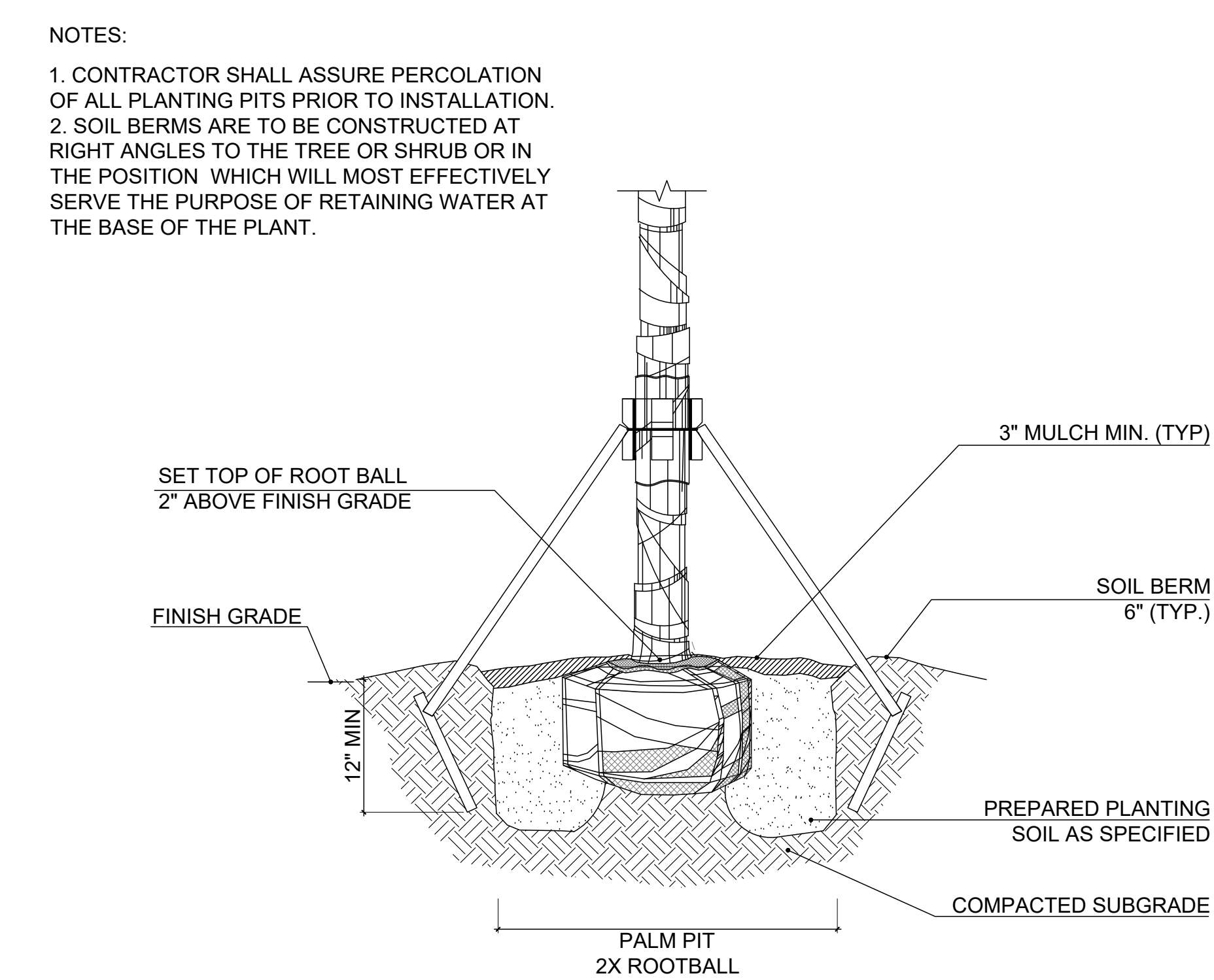
NOTE:  
CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION

1 SPECIMEN TREE PLANTING DETAIL  
SCALE: N.T.S.



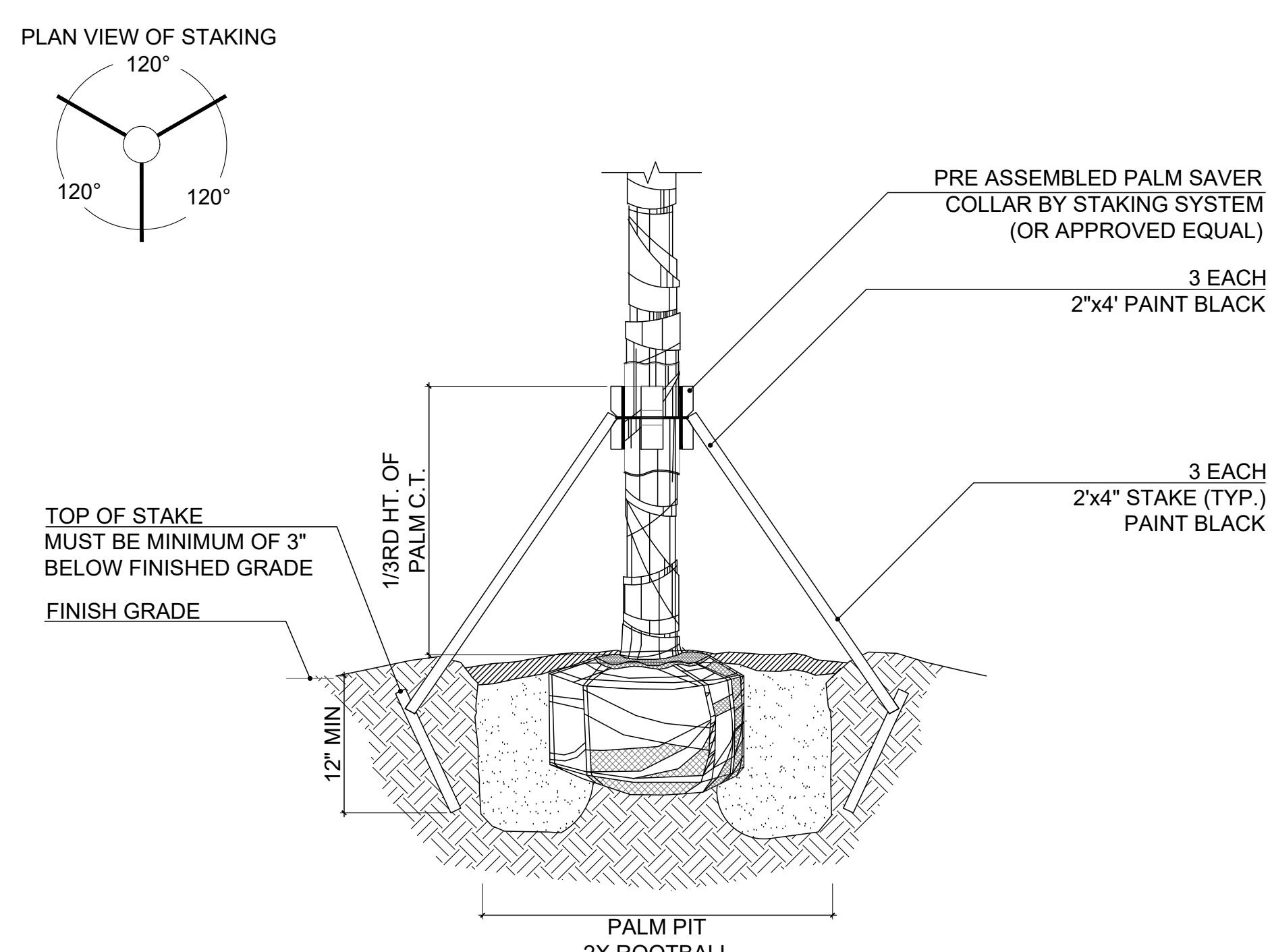
NOTE:  
CONTRACTOR SHALL ASSURE  
PERCOLATION OF ALL PLANTING  
PITS PRIOR TO INSTALLATION

2 SPECIMEN TREE STAKING DETAIL  
SCALE: N.T.S.



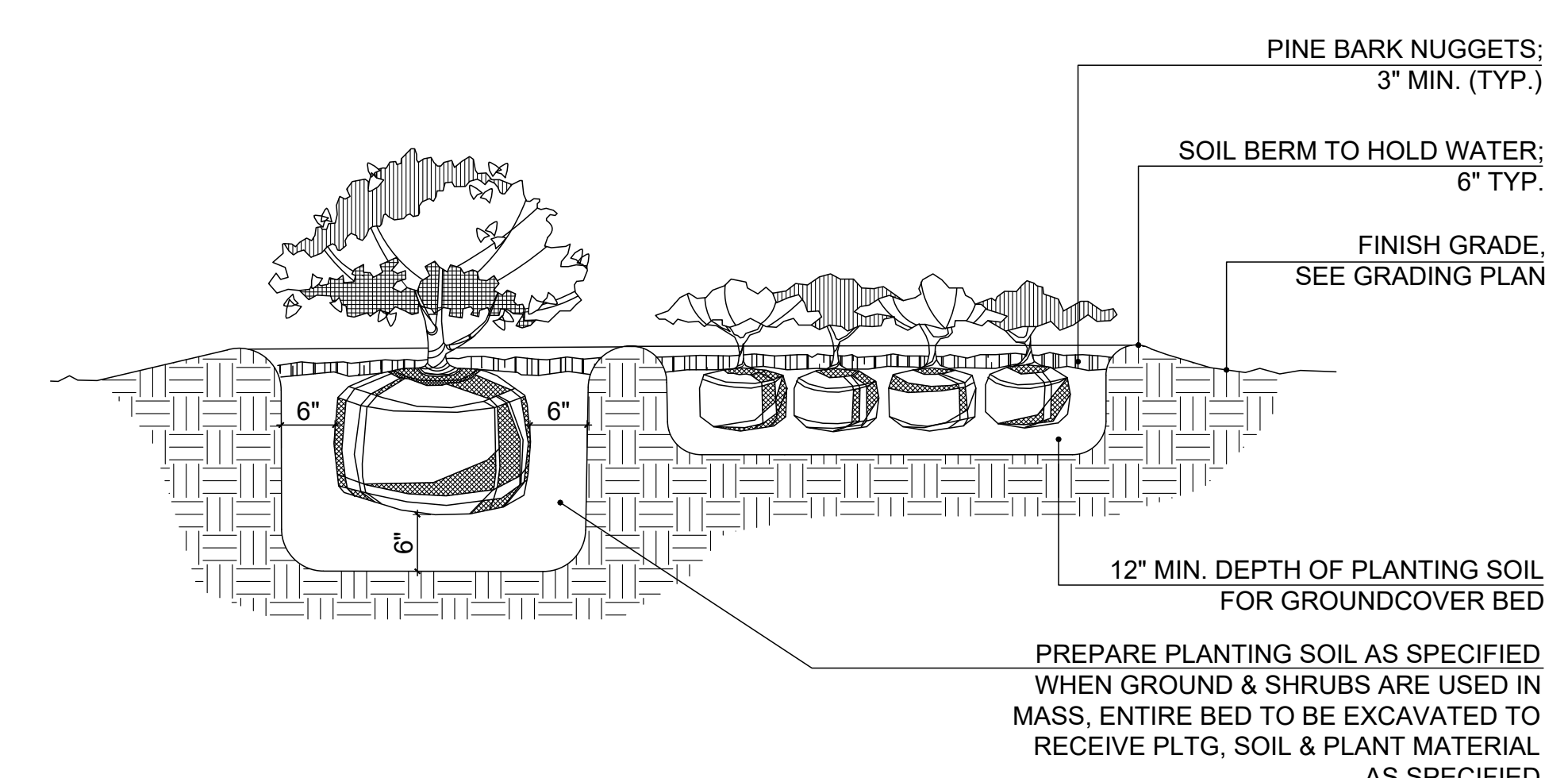
NOTES:  
1. CONTRACTOR SHALL ASSURE PERCOLATION  
OF ALL PLANTING PITS PRIOR TO INSTALLATION.  
2. SOIL BERMS ARE TO BE CONSTRUCTED AT  
RIGHT ANGLES TO THE TREE OR SHRUB OR IN  
THE POSITION WHICH WILL MOST EFFECTIVELY  
SERVE THE PURPOSE OF RETAINING WATER AT  
THE BASE OF THE PLANT.

3 PALM PLANTING DETAIL  
SCALE: N.T.S.



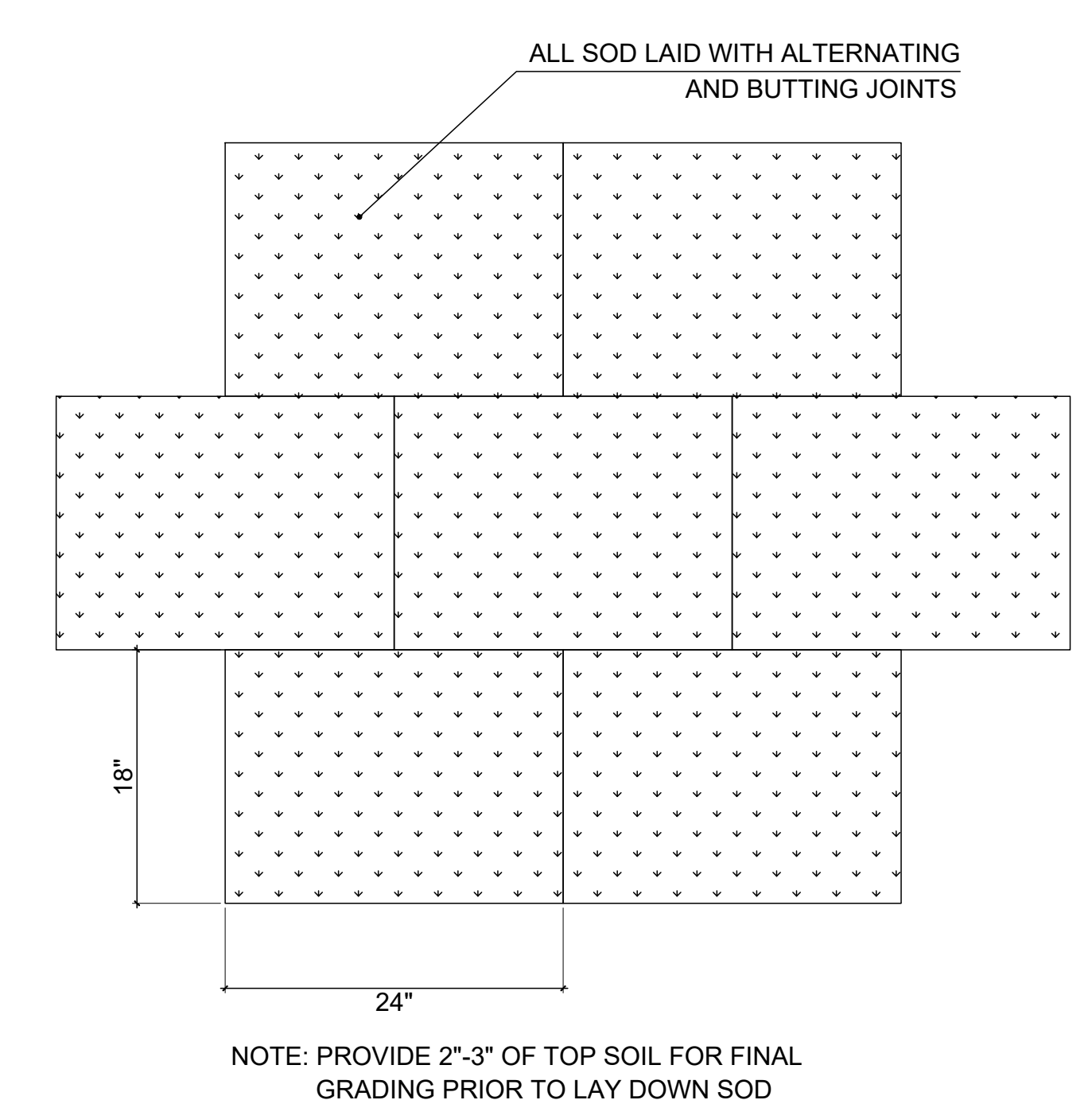
NOTES:  
1. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS  
PRIOR TO INSTALLATION.  
2. SOIL BERMS ARE TO BE CONSTRUCTED AT RIGHT ANGLES TO THE  
TREE OR SHRUB OR IN THE POSITION WHICH WILL MOST EFFECTIVELY  
SERVE THE PURPOSE OF RETAINING WATER AT THE BASE OF THE  
PLANT.

4 PALM STAKING DETAIL  
SCALE: N.T.S.



NOTE:  
CONTRACTOR SHALL ASSURE PERCOLATION OF ALL  
PLANTING PITS/ BEDS PRIOR TO INSTALLATION

5 SHRUB AND GROUNDCOVER PLANTING DETAIL  
SCALE: N.T.S.



6 SOD PLANTING DETAIL  
SCALE: N.T.S.

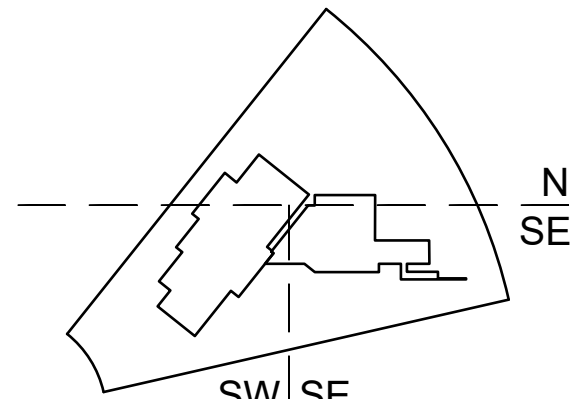


LANDSCAPE NOTES


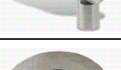








1. Scope of work
- i. The work consists of furnishing all labor, materials, equipment, tools, transportation, and any other appurtenances necessary for and incidental to the completion of this project as shown on the drawings, as included in the plant list, and as herein specified.
- ii. Work shall include maintenance and watering of all planting areas of this drawing set until certification of acceptability by the owner and/or the Landscape Architect.
- iii. Protection of existing structures, all existing buildings, walks, walls, paving, piping, and other items of construction and planting already completed or established shall be protected from damage by the contractor unless otherwise specified. All damage resulting from negligence shall be repaired or replaced to the satisfaction of the owner with costs by contractor.
- iv. All work shall be performed to specifications written in accordance with the most current version of the ANSI A-300, ANSI Z-133, government, and local standards.
2. Tree Protection:
- i. It is the contractor's responsibility to note and protect the existing trees to remain on site.
- ii. Prior to commencement of any work, contractor shall perform routine maintenance, per ANSI A-300, on the existing trees to remain including removal of dead and decayed wood, removal of attached branches and structurally unsound limbs, and subordinate branches where included bark is present and removal of branches to increase light and air penetration within the canopy.
- iii. Do not remove more than 25% of the canopy within a twelve-month period.
- iv. Root pruning shall be completed prior to commencement of the construction activities. The root system shall not be subject to tearing, ripping or any other method except clean cuts as described in ANSI A-300.
- v. Protective barriers shall be placed at the drip line of each tree, cluster of trees, or preservation area, and in no case less than ten (10) feet from the trunk of any protected tree, tree cluster or preservation area.
- vi. All protective barriers shall be installed prior to the start of any construction or site development, including tree removal, demolition or land-clearing activities, and shall remain in place throughout all phases of construction.
- vii. Any tree whose root system is impacted shall be watered according to the tree relocation specifications.
- viii. Where construction activity impacts the existing tree root system, the contractor, under the guidance of an ASCA Arborist, shall only root prune in the impacted areas per specifications written in accordance with ANSI A-300 Standards.
- ix. Natural grade shall be maintained on areas surrounded by protective barriers in the event that the natural grade of the site is changed.
- x. Underground utility lines, including, but not limited to, irrigation, plumbing, electrical, or telecommunication lines, shall be placed outside the areas enclosed by protective barriers
- xi. No vehicles, equipment, or stockpiling/storage of materials shall be permitted within areas surrounded by protective barriers
- xii. Fences, walkways, and walls shall be constructed to avoid disturbance to any protected tree.
3. Tree Relocation:
- 3a. Relocations, General: Transplanting shall consist of on-site transplanting of existing plant materials from proposed construction areas to permanent positions as noted on drawings.
- i. All planting, transplanting and relocating of trees or palms shall, at minimum, be done in compliance with standards set forth in the most recently published edition of ANSI A-300 Standards.
- ii. Verify the presence of vigorous feeder roots prior to relocation operations.
- iii. Soak tree root balls to the full depth daily for seven consecutive days prior to relocating
- iv. Locate position and elevation where trees are intended to be planted for verification by the Landscape Architect
- v. Notify the owner's representative and Landscape Architect 24 hrs in advance of each relocation to allow for observation of procedures.
- vi. Materials to be transplanted shall be root pruned a minimum of six months prior to re-location.
- vii. Contractor shall maintain transplanted materials during construction period by watering, weeding, mowing, spraying, fertilizing, pruning, and other horticultural practices.
- viii. Owner and/or Landscape Architect shall regularly inspect the relocated materials to ensure that all horticultural practices are being adhered to. Owner shall submit a written report to landscape contractor notifying him of any deficiencies found during the maintenance period. Any loss of plant materials due to the negligence of the Landscape Contractor shall result in the replacement of the material at no additional cost to the owner. Said plant materials shall be replaced with the same species of equal size.
- 3b. Quality assurance:
- i. The supervisors for transplanting existing trees, palms and/ or shrubs shall have a minimum of 5 years experience in the field of relocation of similar type plant materials and shall be a member of the American Association of Nurseryman.
- ii. Contractor must verify the locations of all existing utilities, structures and plant material
- iii. Contractor shall obtain all permits required prior to commencement of work
- iv. Contractor shall verify that trees in the field match trees designated in the drawings.
- v. Verify percolation rates and soils acceptability at locations to which the trees are to be transplanted.
- vi. All trees shall be pre-tied in or tied back to prevent breakage and scraping of limbs in order to facilitate machinery movement
- 3c. Preparation:
- i. Fertilization and watering:
- a. Inject fertilizer mixture within 24 hrs after crown pruning, and at a minimum of 14 days prior to relocation
- b. Inject the deep root fertilizer mixture at a rate recommended by the manufacturer into the plant material to be relocated
- ii. Crown Pruning:
- a. Do not reduce crown dimensions; trim trees to be relocated by thinning the crown only
- b. Remove seed pods from Sabal Palms, and all but the youngest fronds. Trim boots to a clean regular pattern.
- c. There should be no canopy pruning or a minimum of canopy pruning before or after root pruning. Only dead, diseased or damaged branches shall be pruned at this time
- iii. Root pruning:
- a. Perform rough pruning at no less than half the distance between the drip line and the trunk.
- b. Provide a min of 10" of root ball diameter for every 1" of trunk caliper measured at 12" above grade.
- c. Trees with a caliper more than 12" shall be root pruned by hand
- d. Prior to transplanting, prune root systems in thirds, 8 weeks apart.
- 3d. Submittals:
- i. Submit a list of equipment, procedures and labor force used for transplanting the work.
- ii. Arborist must provide to the owner weekly reports including:
- a. Site activities summary and conditions relating to all trees on site
- b. Evaluation of each tree's condition
- c. Recommendations for survivability of relocated trees
- iii. Submit manufacturer's literature on wetting agents, fertilizers, conditioners and injection equipment information.
- 3e. Water and Irrigation:
- i. Contractor shall provide water from a legal source
- ii. Contractor is responsible for hand watering all relocated plant material
- iii. Daily watering and monitoring shall be performed during the term of the construction contract and until final acceptance. Rate of water application: A minimum of 20 gallons/ inch caliper per application.
- iv. Water shall be free of substances harmful to plant growth, objectionable odor or staining agents.
- v. The water shall be clean, free of soil, debris, poisons, pesticides, contaminants, and any other material that is harmful or inhibits vigorous plant growth
- vi. For trees that will be relocated, irrigation must be present and applied effectively for two to four weeks prior to root pruning, through the period of root pruning, and after root pruning and transplantation until the tree has been completely reestablished at the new planting space.
- vii. A tensiometer shall be used to measure and monitor available moisture in the ground. Weekly observation shall be noted in arborist's report.
- 3f. Transplanting Operations:
- i. The landscape contractor shall take all precautions to minimize shock of root pruning and transplanting in accordance with nursery trade procedures including the following:
- a. Root prune one third of ball at a time.
- b. Thin out the interior crown of dicots, in a similar sequence, to compensate for root loss, leaving the entire canopy intact.
- c. Leave monocot leaves alone, allowing plant to balance itself. Protect growing point as required.
- d. After root pruning, backfill with good organic rooting medium. Fertilize with organic fertilizer to promote root growth and use "Root Stimulator and Starter" by Green Light or approved equal.
- e. Mulch to reduce weeds, discourage foot traffic and its compacting effect, conserve moisture and minimize temperature fluctuation.
- f. Brace trunk and leave in place until trees are wind form (+/-1 Year).
- g. At the time of planting, fill air pockets to keep roots, especially feeder roots moist, alive and healthy. Use soil needle for watering new transplant. Direct fine spray at foliage to help harden off new leaves.
- 3g. Equipment:
- i. All transplanting machines will have clean, tight fitting and sharp blades.
- ii. Trees to be relocated in excess of 12" caliper shall be relocated via box or other approved method.
- 3h. Digging and Moving:
- i. Dig pits to a minimum of 42" deep with vertical sides and bottoms.
- ii. Handle trees to avoid damage to bark and limbs. Attach support straps, cables, or chain at multiple points for weight distribution.
- iii. Do not force tree from ground prior to undercutting root balls. Determine final ball depth upon assessing conditions at time of trenching. Notify Landscape Architect if ball depth varies for specified depth.
- iv. Place trees in heavy grade baskets lined with two layers of burlap for relocation procedures.
- v. Plant top of root ball 3" above finish grade.
- vi. All transplanted trees shall be watered in, sanded, mulched, and untied on the same day.
- vii. Stake or brace relocated trees/ palms as shown on the drawings.
- viii. Support tree with machinery until bracing is complete.
- 3i. Post relocation:
- i. The contractor shall maintain all transplanted material in a healthy condition until final acceptance
- ii. The contractor shall prepare all operations necessary to ensure that plants are healthy, vigorous and undamaged.
- 3j. Guarantee:
- i. Death of any relocated plant material shall be replaced with the same size and species and approved by the Landscape Architect. Determination of survivability shall be made at the end of the warrantee period
- ii. Relocated plant material installed by the contractor shall be warranted in writing for a period of one (1) year from the date of final acceptance.
4. Materials
- 4a. Submittals:
- i. General samples of materials as listed below shall be submitted for approval, on the site or as otherwise determined by the owner or Landscape Architect, at least fourteen (14) working days prior to its intended delivery to the site. Upon approval of submittals, delivery of materials may begin.
- a. Mulch - One (1) Cubic foot
- b. Root Stimulator - One (1) container
- c. Fertilizer - One (1) Container
- d. Topsoil - One (1) Cubic Yard
- e. Plants - One (1) representative photograph of each shrub and groundcover for approval prior to tagging.
- f. Trees - One photograph w/ clearly legible measuring rod of actual contractor pre-tagged trees. Upon approval of tree submittal, landscape contractor shall provide at least one week notice to schedule tree tagging.
- g. Planting mix - One (1) Cubic Yard

- 4b. Mulch:
- i. Mulch type: pine bark mini nuggets
- ii. Mulch material shall be moistened at the time of application.
- iii. All trees, shrubs, and ground cover beds shall receive a minimum of 2" of mulch immediately after planting.
- iv. Mulch shall be maintained below the elevation of adjacent finished surfaces and swept clear of paths.
- 4c. Fertilizer:
- i. Commercial Fertilizer: Commercial fertilizer shall be a complete formula; it shall be uniform in composition, dry and free flowing. This fertilizer shall be delivered to the site in the original unopened containers, each bearing the manufacturer's guaranteed statement of analysis.
- ii. Fertilizer shall be organic in material containing nitrogen, phosphoric acid and potash in equal percentages of plant food by weight, in the following form:
- iii. Containerized material (i.e. shrubs, vines, ground covers) shall receive a granular such as "Tri-nite" or approved equal.
- iv. Specimens shall receive time-released fertilizer, such as osmocote, or approved equal.
- v. This instruction shall supersede other notes regarding fertilizers on the drawings or details.
- 4d. Plants:
- i. Plant species and size shall conform to those indicated on the drawings and cited herein. All sizes shown for plant material on the plan are to be considered as minimums.
- ii. All plants shall be Florida grade No.1 or better, graded in accordance with Grades and Standards for Nursery plants, published by the State of Florida, Department of Agriculture. Trees and shrubs shall have pronounced symmetry of foliage crown. Plants judged to be not in accordance with these standards will be rejected and shall be immediately removed from the site of the work and replaced at the contractor's expense.
- iii. All quantities indicated on the plant list are intended as a guide for the bidders and does not relieve the bidder of their responsibility to do a comprehensive plant take off. Should a discrepancy occur between the bidder's take off and the plant list quantity, the Landscape Architect is to be notified for clarification prior to final bid acceptance.
- 4e. Planting mix:
- i. Planting mix shall be 70/30 mix. 70% crushed oolitic limestone or sand, and 30% organic material (composed of 15% decomposed wood chips and 15% everglades peat).
- ii. The Landscape Architect reserves the right to reject planting mix utilized that fails to meet the specification at any time during execution of work.
- 4f. Sod:
- i. Selection:
- a. Grass species: *Paspalum spp*
- b. American Sod Producers Association Grade: Nursery grown or approved. Field grown sod is not acceptable.
- c. Furnished in pads: 18" x 24" x 1" thick excluding top growth and thatch.
- d. Not stretched, broken or torn.
- e. Uniformly mowed height when harvested.
- f. Inspected and found free of diseases, nematodes, pests, and pest larvae.
- g. Uniform in color, leaf texture, and density.
- h. Do not deliver more sod than can be installed within 24 hours.
- i. Begin installation of sod after completion of preceding work (i.e. earth work, underground sprinkler system, soil preparation, installation of trees, shrubs and ground covers, etc.)
- ii. Installation:
- a. Transplant sod within 48 hours after harvesting
- b. Contractor shall sod all areas that are not paved or planted as designated on the drawings herein
- c. Begin sodding at bottom of slopes
- d. Lay first row of sod in straight line with long dimension of pads parallel to slope contours
- e. Lay all rows with alternating and abutting joints.
- f. Do not stretch or overlap rows
- g. Roll sod, except pegged areas, with roller weighing no more than 100lbs per foot of roller width.
- h. During rolling, all depressions caused by settlement of rolling shall be filled with additional soil, and the surface shall be re-graded and rolled until presenting a smooth and even finish that is up to the required grade.
- iii. Soil Preparation:
- a. Prepare loose bed four (4) inches deep. Apply fertilizer at rate of twenty (20) pounds per one thousand (1000) square feet. Application shall be uniform, utilizing approved mechanical spreaders.
- b. Mix fertilizer thoroughly with the soil to a depth of three (3) inches. Hand rake until all bumps and depressions are removed.
- iv. Soil Watering:
- a. Water sod and soil to depth of 6" within four hours after rolling.
- b. Keep sod moist during first week after planting.
- c. After first week, supplement rainfall to produce a total of 2" per day.
- d. It is the contractor's responsibility to water all plant material.
5. Trees:
- i. Trees and palms shall be freshly dug, balled and burlapped. All plant material shall be free of broken or damaged root balls, or root bound conditions. Plant materials shall be sound, healthy, vigorous, free from plant disease, insect pests or their eggs, and shall have healthy, normal root systems.
- ii. Trees are noted on plans and herein as approved by the Landscape Architect.
- a. Landscape Architect shall tag all trees. Tags shall not be removed. Absence of tag at delivery to project site will be grounds for rejection of the tree
- iii. Substitutions in plant species or sizes shall be made only after written authorization by the Landscape Architect.
- v. The height and/or width of trees shall be measured from the top of the root ball to the top of canopy. This measurement shall not include the immediate terminal growth.
- vi. Plants larger in size than those specified in the plant list may be used if approved by the owner and/or Landscape Architect.
- vii. If the use of larger plants is approved, the ball of earth or spread of roots shall be increased in proportion to the size of the plant.
- viii. Plants shall be subject to inspection and approval at the place of growth, or upon delivery to the site, as determined by the owner and/or Landscape Architect, for quality, size, and variety; such approval shall not impair the right of inspection and rejection at the site during progress of the work or after completion for size and condition of balls or roots, latent defects or injuries. Rejected plants shall be removed immediately from the site. Notice requesting inspection shall be submitted in writing at least one (1) week prior to anticipated date.
- ix. Caliper measurement (DBH, 54" above crown of root ball), height and spread measurements, root ball dimensions, and container size when applicable, shall conform to the applicable standards established within reference documents cited herein, and the requirements for this project.
6. Execution
- 6a. Inspection:
- i. In the event of discrepancy, immediately notify Landscape Architect in writing.
- ii. Do not proceed with installation of materials or plants in areas of discrepancy until all such discrepancies have been fully resolved to the satisfaction of the owner and/or Landscape Architect.
- 6b. Preparation:
- i. Verify locations of all utilities, conduits, supply lines and cables, including but not limited to: electrical, gas (lines and tanks), water, sanitary sewer, storm water lines, cable and telephone. Properly maintain and protect existing utilities.
- ii. Stake or mark with paint the proposed location of all trees and palms to be planted.
- iii. Excavate plant beds.
- iv. Ensure all planting areas are freely draining.
- v. Provide plant materials, fertilizer, sod, planting mix, and incidental materials as specified.
- vi. Set Plants, backfill, and guy or brace plants as required.
- vii. Complete incidental work related to planting operations, and as specified.
- 6c. Application:
- i. Finish sub-grade: upon acceptance of rough grading elevations, establish fine sub-grade with smooth and even finish. Remove rocks exceeding one (1) inch diameter, sticks, debris, deleterious material, grass and soil clods, and vegetation.
- 6d. Excavation:
- i. Excavations identified as having potential utility or service line conflicts shall be excavated with hand tools to determine the location of, and avoid damage to, such utilities.
- ii. Excavate tree and palm planting pits a minimum of 24" greater in diameter than the root ball, and minimum of 12" deeper than vertical depth of the root ball. Test soil for quality of percolation. If drainage is inadequate, create underground seepage/drainage. Notify Landscape Architect for approval. Budget should allocate an allowance to cover this possibility and should be part of the original bid.
- iii. Barricade or mark excavations to prevent hazards to mechanical equipment, vehicles, and pedestrians.
- 6e. Planting:
- i. Set trees in vertical position with the top of the root ball flush with the adjacent, finish grade. After settlement, the plant crown will stand one (1) to two (2) inches above grade.
- ii. Set plant in upright position in center of planting pit and place specified planting mix under and around the root ball. For burlapped root balls, cut top 1/3 of burlap away from root ball, and turn down into the side of the planting pit, before placing planting mix around the root ball.
- iii. Proper "Jetting in" shall be assured to eliminate air pockets around the roots. "Jet stick" or equal is recommended.
- iv. Prune trees, removing no more than 1/3 of twigs and branches, while maintaining the uniform character and shape of the tree. Remove all dead, diseased, rubbing, and dying branches. All plant material shall meet specifications after pruning.
- v. Earth shall be banked at edge of each planting pit to form a watering saucer approximately 6" in depth. Flush planting soil into place with slow hose stream until air pockets are eliminated around root ball, and pit is filled with Planting Mix to top of root ball.
- vi. Place mulch in loose measure 2" min. layer within each watering saucer.
- vii. If planting is performed after sod placement, proper protection shall be provided and damage resulting from planting operations shall be repaired promptly.
- viii. Tree Guying: For materials to 12" in height, a minimum of four woven anchor strap lines each at ninety degrees from and connected to tree trunk and anchored below grade with pressure treated stakes. Secure tree against movement in wind.
- ix. Tree Bracing: For materials greater than 12" in height, a minimum of three 2x4 appearance grade braces, set at 60 degrees to the ground plane, equidistant around the trunk of the tree, and secured into the ground plane with one, 12" #4 rebar or 1/2" galvanized pipe passing through each such 2x4 brace, driven into the ground, and set flush with the top of the brace. Secure each angled brace to one 12" long 2x4 vertical block over four layers of burlap. Secure blocks with two metal or plastic straps, one 3" from the top and one 3" from the bottom of each block. Nail brace to block with four 16d nails. See planting details sheet for additional information and bracing details. Braces to be painted with Benjamin Moore 2118-10 Universal Black, flat/matte exterior.
- x. There will be no plant material planted into root balls of trees and palms.
- xi. Shrubs and ground covers shall be evenly spaced in accordance with the drawing and as indicated on the plant list. Cultivate all planting areas to a minimum depth of 6", remove and dispose of all debris. Till into top 4" the planting soil mix as specified. Thoroughly water all plants after installation.
- 6f. Water and Irrigation:
- i. Contractor shall provide water from a legal source.
- ii. Daily watering and monitoring shall be performed during the term of the construction contract and until final acceptance.
- iii. Water shall be free of substances harmful to plant growth, objectionable odor or staining agents.
- iv. The water shall be clean, free of soil, debris, poisons, pesticides, contaminants, and any other material that is harmful or inhibits vigorous plant growth
- v. All landscaped areas within limits of work shall be irrigated with an automatic irrigation system which shall utilize wet and/or domestic water supply. If domestic water is used, a backflow preventer shall be installed.
- vi. Irrigation system shall be equipped with a rain sensor.
- vii. Installation of irrigation systems shall conform to specifications provided with irrigation plans.

7. Warranty of Work
- 7a. Warranty:
- i. Contractor is responsible for maintenance on all Landscape materials, including sod, for no less than ninety (90) days after acceptance by owner.
- ii. After ninety (90) days, contractor must visit the site once every month for twelve (12) months, and shall provide the Owner with a written letter notifying the owner of any wrong doing, negligence, or issues that might affect the Owner's warranty. Contractor shall warranty all landscape material for no less than (12) months after final acceptance by the Owner.
- 7b. Maintenance:
- i. Owner is responsible to ensure that landscaping required to be planted pursuant to City of Miami Beach Code is installed in compliance with the Landscape requirements; maintained as to present a healthy, vigorous, and neat appearance free from refuse and debris; and sufficiently fertilized and watered to maintain the plant material in a healthy condition.
- ii. If any tree or plant dies which is being used to satisfy current landscape code requirements, such tree or plant shall be replaced with the same landscape material or an approved substitute meeting code requirements.
- iii. Trees shall be pruned in the following matter:
- a. All cuts shall be clean, flush, and at junctions, laterals or crotches. All cuts shall be made as close as possible to the trunk or parent limb
- b. Removal of dead wood, crossing branches, weak or insignificant branches, and sucker shall be accomplished simultaneously without any reduction in crown.
- c. Cutting of lateral branches that results in the removal of more than one-third (1/3) of all branches on one (1) side of a tree shall only be allowed if required for hazard reduction or clearance pruning.
- d. Lifting of branches or tree thinning shall be designed to distribute over half of the tree mass in the lower two-thirds (2/3) of the tree.
- e. No more than one-third (1/3) of a tree's living canopy shall be removed within a one (1) year period.
- f. Trees shall be pruned according to the current ANSI A300 Standards and the Landscape Manual.
- iv. Trees shall receive regular maintenance for a minimum of one (1) year following installation.
- a. A contracted maintenance service shall be responsible for fertilization and pest control
- b. Check irrigation heads and lines for breaks and regular function, check timer and irrigation schedule, adjust for seasonal water usage. Check and make sure that rain sensor is working at all times.
- c. Check all drains for proper drainage. Address clogs and resolve maintenance issues.
- d. Observe all plants to ensure that no abnormal yellowing or discoloration occurs which indicate nutrient deficiencies.
- e. Replace or repair bracing as necessary. Maintain until landscape contractor deems appropriate for removal so that tree has developed a substantial root mass and has natural stability. Do not remove during hurricane season.
- f. Trees shall be maintained in a firm position in the ground and all stakes and guys shall be checked regularly.
- g. Provide mulch over roots to drip line of tree if applicable or within tree planting ring/planter bed. Add fresh mulch as necessary per note herein.
- h. Maintain all beds free of debris and deleterious material.
- i. Landscape inspections shall occur after strong winds, tropical storms, hurricanes, and other disturbances of nature.
8. Certificates:
- j. Grass species, and location of nursery from which sod is cut.
- ii. Compliance with state and federal quarantine restrictions.
- iii. Manufacturer's certificate of fertilizer and herbicide composition.
- iv. Certificates from suppliers stating that the delivered planting mix, delivered plant materials, and fertilizer comply with requirements specified.
- v. Certificates of inspections: Shipments or orders of plant material shall be properly inspected at nursery or growing site by authorized federal and state authorities; include certificates with shipment.
9. General Submittals:
- 9a. Shop Drawings, Product data, Mock-ups, or Samples for the following:
- i. Fence/gates - Sample, 2' length with all members and connections
- ii. Electrical Fixtures - Product Data, and foundation details (Shall be included in contractor's bid)
- iii. Furniture - Product Data
- iv. Landscape Materials - Samples per documents herein
- v. Geotextile materials - Sample and Product Data
- vi. Landscape Irrigation Data - Shop Drawings and Product Data
- vii. Root barriers - Product Data
- viii. Concrete mix and colors - Design Mix Sample and Product Sample. Create on site a mock up 6'x6' of the finished concrete slab and do not destroy or remove from the job site until completion of all slabs on grade and acceptance by owner and Landscape Architect.
- ix. Storm drainage materials - Product Data
- x. Caulks and sealants - Product Data
- xi. Stain and paint - Sample
- xii. Steel edging - Product Data
- xiii. Fertilizer - Product Data
- xiv. Root stimulators - Product Data
- xv. Fill material for rough and fine grading - Product Data and Sample
- xvi. Tree bracing details - Shop Drawings
- xvii. Ipe deck fasteners and hardware. Ipe products - Sample
- xviii. Sand stabilizer - Product Data
- xix. Soil mixture documentation and certification identifying the job and contractor, including testing of pH, key nutrients, and recommendations of soil amendments for proposed landscape planting
- xx. Nursery certification for all plant materials.
- 9b. All mock ups, samples, and shop drawings shall be a part of the original contract cost.
10. Fencing:
- 10a. Submittals:
- i. Shop Drawings: Submit for approval, complete shop drawings showing fencing layout including all attachment methods and devices showing sizes, edge details, and attachment details.
- ii. Manufacturer's literature: Submit for approval properly identified literature giving material specifications, gate hardware, and installation details.
- iii. Samples: Submit sample of fencing component parts and manufacturer's fencing specification for Landscape Architect's approval.
- 10b. Products:
- i. Gates, posts and rails: As per details on drawing sheets. Working Hardware: As per details on drawings. Use all 316 stainless steel hardware, connectors, and fasteners. Minimum (2) screws at each ipe/wood connection if applicable. #8 Deck screws, stainless steel 316, square drive, Head #2 by Simpson Strong Tie or approved equal.
- ii. Gates: 316 stainless steel bar bearing hinges size 4 1/2" x 4 1/2" min., minimum (3) per gate. Self closing stainless steel hardware, include stainless steel cane bolt as required. Brace gates as required to prevent distortion and/or sagging.





| LANDSCAPE LIGHTING SCHEDULE |   |   |                            |              |     |           |                   |                        |                   |                 |                          |   |
|-----------------------------|---|---|----------------------------|--------------|-----|-----------|-------------------|------------------------|-------------------|-----------------|--------------------------|---|
| ITEM #                      | SYMBOL  | REF. IMAGE  | FIXTURE TYPE               | MANUFACTURER | QTY | VOLT-AMPS | LAMP              | MODEL                  | MOUNTING TYPE     | MOUNTING HEIGHT | FINISH                   | NOTES   |
| 1                           |  |  | ACCENT FLOODLIGHT          | GARDEN LIGHT | 49  | 10VA      | 6W LED WARM WHITE | V2 - SPOT LIGHT        | STAKE MOUNTED     | 12 - 24"        | BLACK (BLK)              | ADJUST HEIGHT AS NECESSARY TO CLEAR SHRUB/GROUND COVER              |
| 2                           |  |  | IN-GROUND MARKER           | GARDEN LIGHT | 29  | 7VA       | 4W WARM WHITE     | WL - WELL LIGHT        | IN-GROUND MOUNTED | FLUSH           | STAINLESS ALUMINUM (SSA) |   |
| 3                           |  |  | GROUND MOUNTED WALL WASHER | GARDEN LIGHT | 35  | 5VA       | 2W WARM WHITE     | MWW - MINI WALL WASHER | SURFACE MOUNTED   | 4"              | STAINLESS ALUMINUM (SSA) | FACING UP<br>ADJUST HEIGHT AS NECESSARY TO CLEAR SHRUB/GROUND COVER |
| 4                           |  |  | GROUND MOUNTED PATH LIGHT  | GARDEN LIGHT | 15  | 5VA       | 2W WARM WHITE     | P10 - PATH LIGHT       | SURFACE MOUNTED   | 12"             | STAINLESS ALUMINUM (SSA) |   |
| 5                           |  |  | ACCENT FLOODLIGHT          | GARDEN LIGHT | 6   | 10VA      | 6W LED WARM WHITE | V2 - SPOT LIGHT        | TREE MOUNT        |                 | BLACK (BLK)              | ADD ABS TREE MOUNT WITH STRAPS                                      |

