

INDEX OF ROADWAY PLANS

SHEET NO. SHEET DESCRIPTION

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STATE OF FLORIDA
CITY OF TAMPA

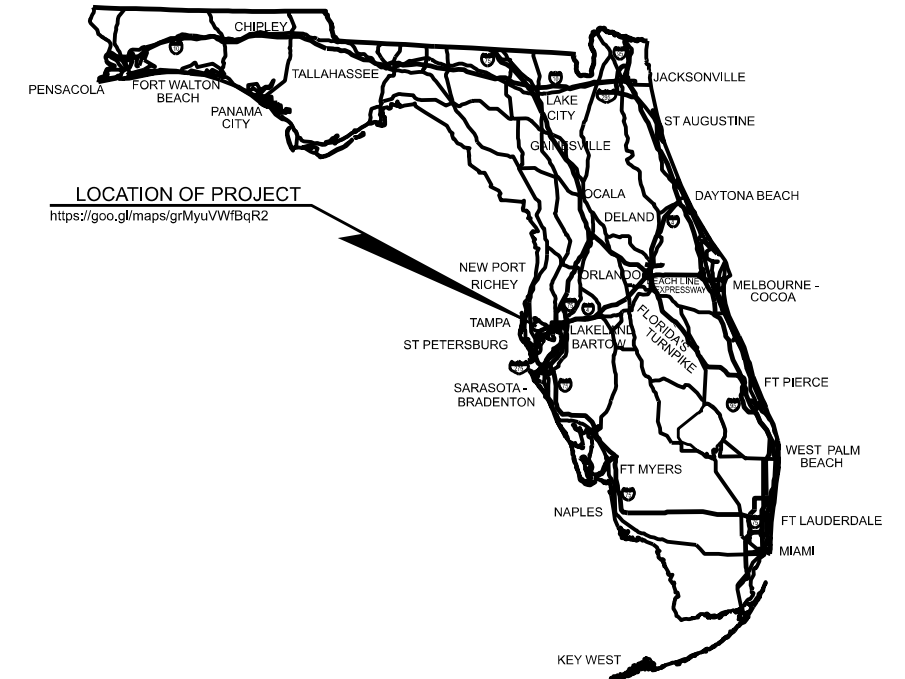
WALK-BIKE LAP PROJECT
LANDSCAPE PLANS

FINANCIAL PROJECT ID 437246-1-58-01

CITY PROJECT NO. 1001220

HILLSBOROUGH COUNTY

46TH STREET FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)



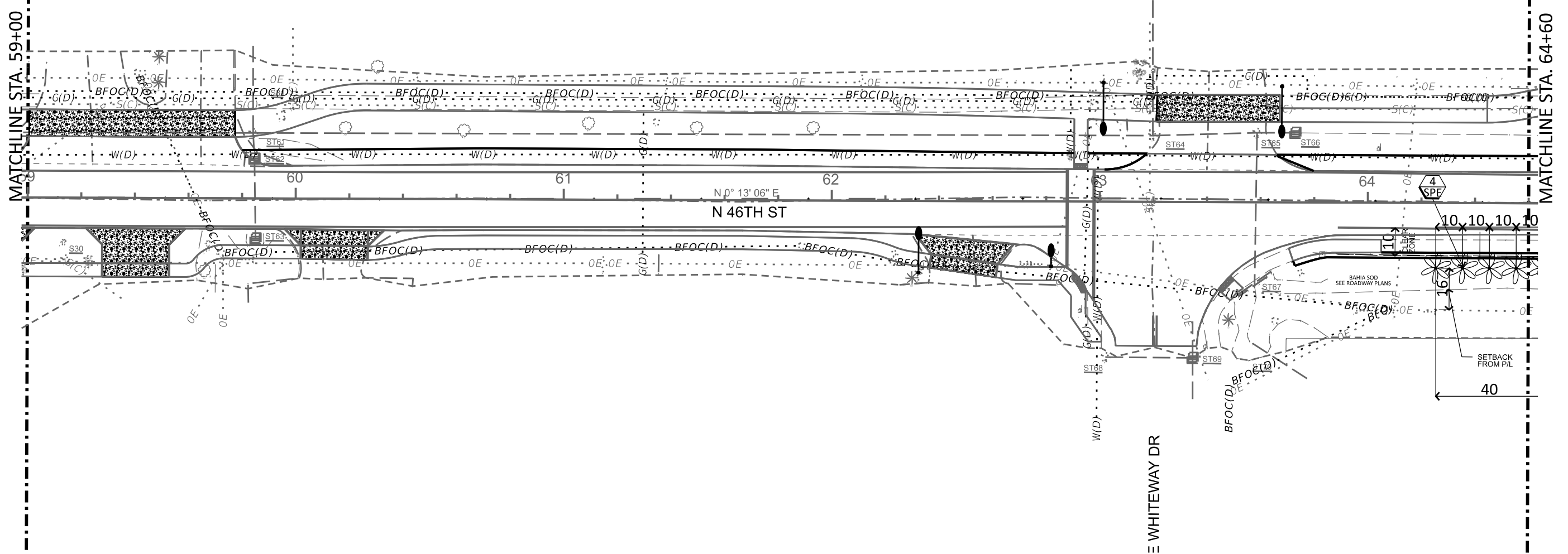
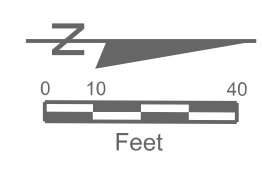
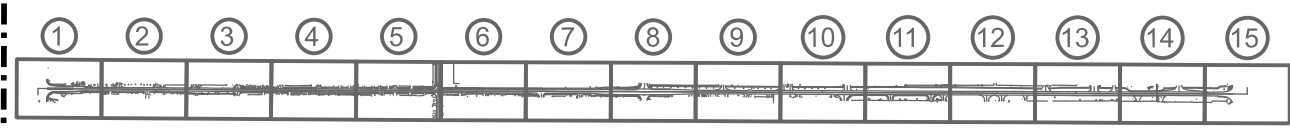
100% PLANS
09/23/2019

LANDSCAPE PLANS
LANDSCAPE ARCHITECT OF RECORD:

JONATHAN H. TONER, RLA
LIC# FL0001123
TERRA TECTONICS DESIGN GROUP, INC.
1188 KAPP DRIVE
CLEARWATER, FLORIDA 33765
CERTIFICATE OF AUTHORIZATION: #254

PROJECT MANAGER:
NINA MABILLEAU, E.I.
City of Tampa Transportation and Stormwater Services

| FISCAL YEAR | SHEET NO. |
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| 21 | L1 |



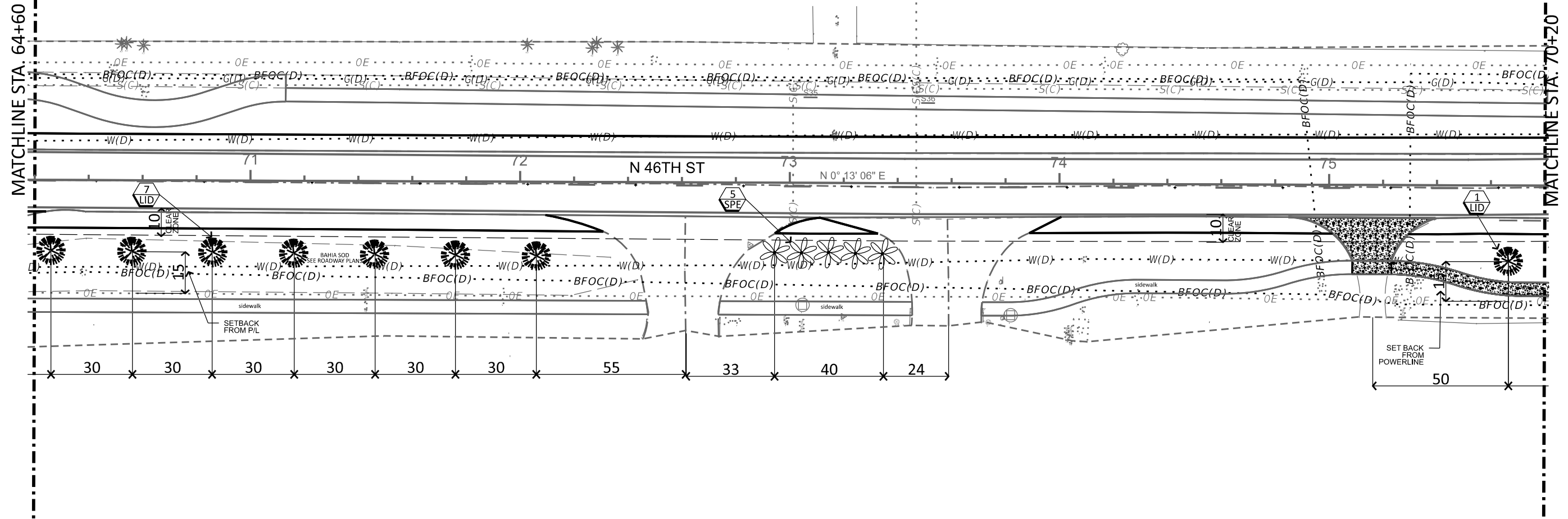
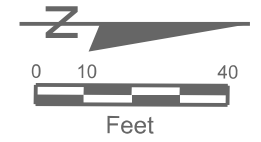
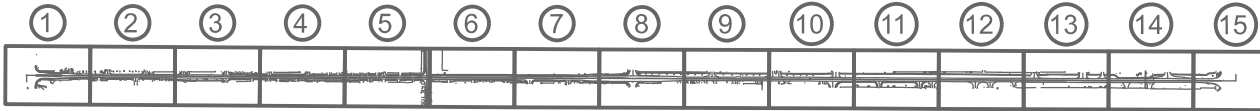
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PLANTING PLAN 10
 SHEET NO.
L2

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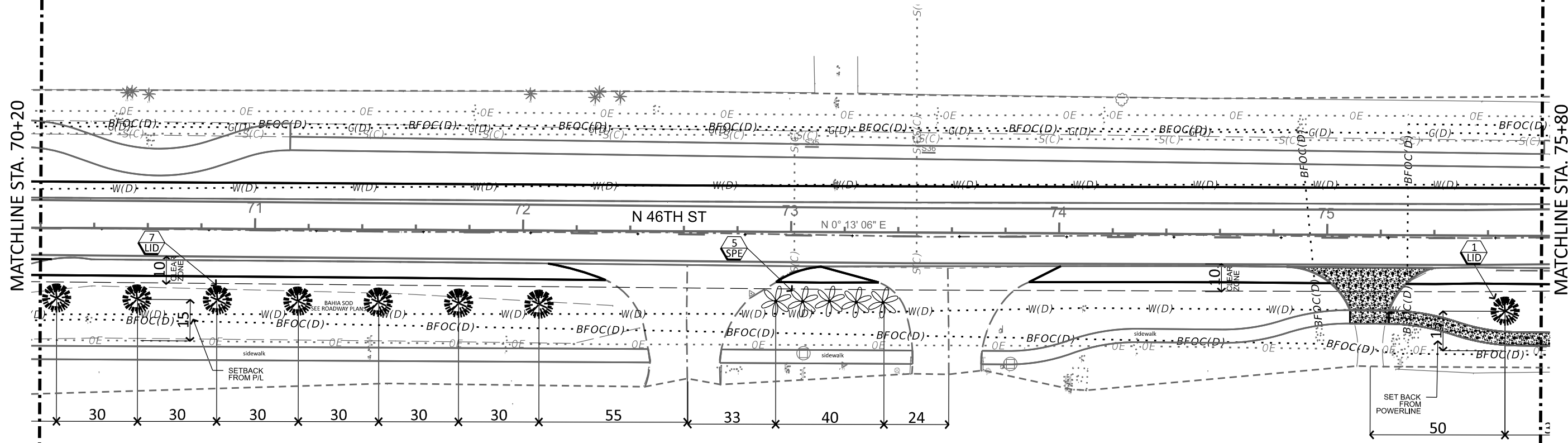
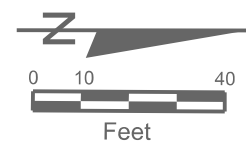
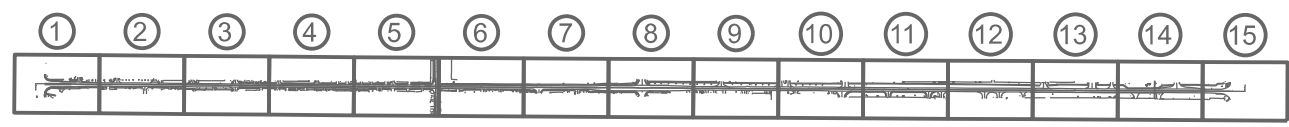
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| PLANTING PLAN 11 | |
| L3 | |

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| L3 |

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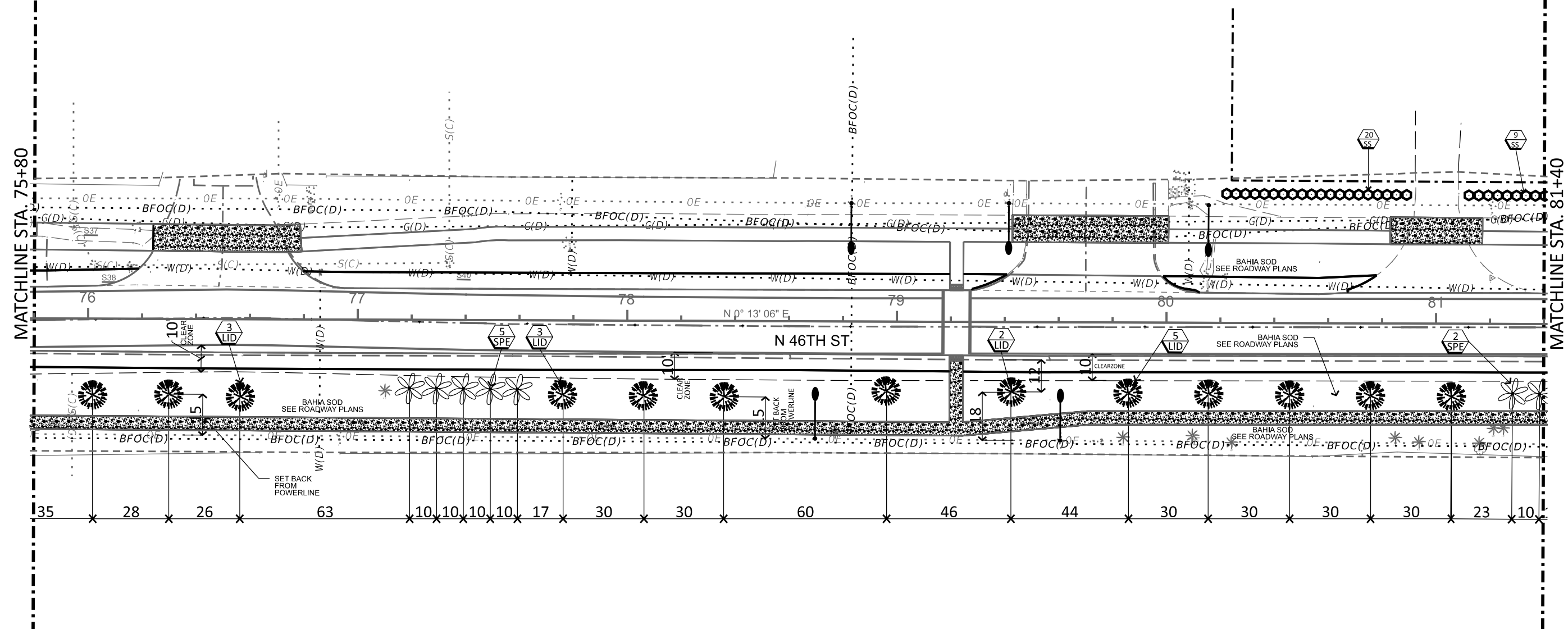
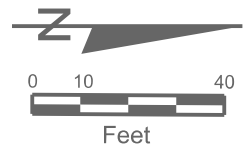
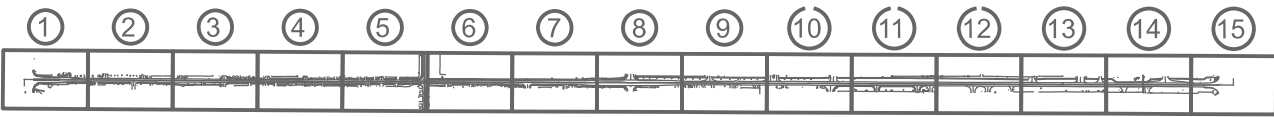
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PLANTING PLAN 12

L4

SHEET NO.
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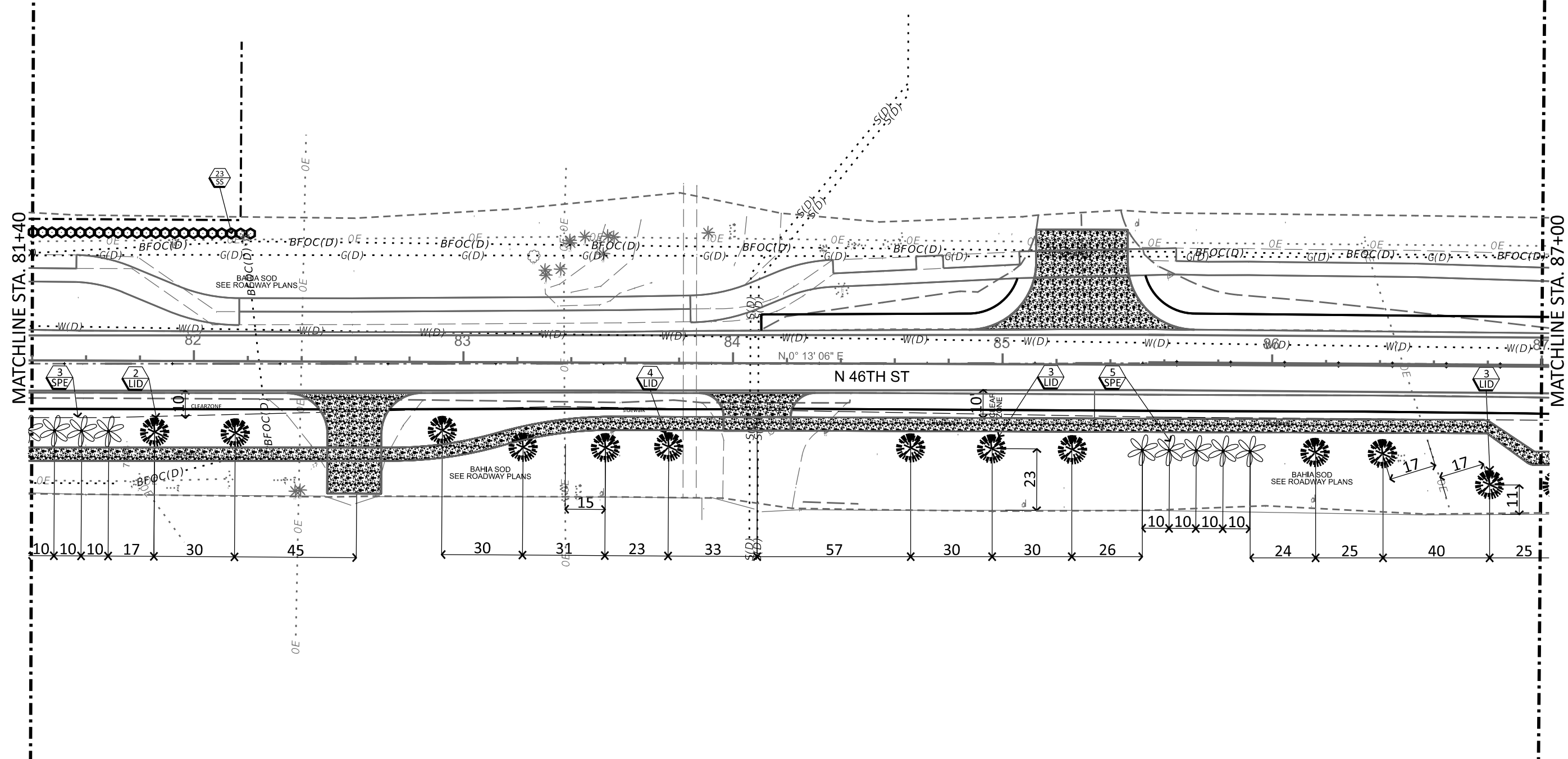
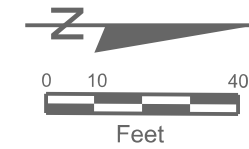
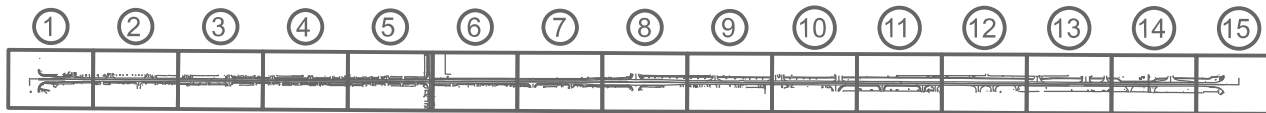
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Florida LIC #0001123
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PLANTING PLAN 13

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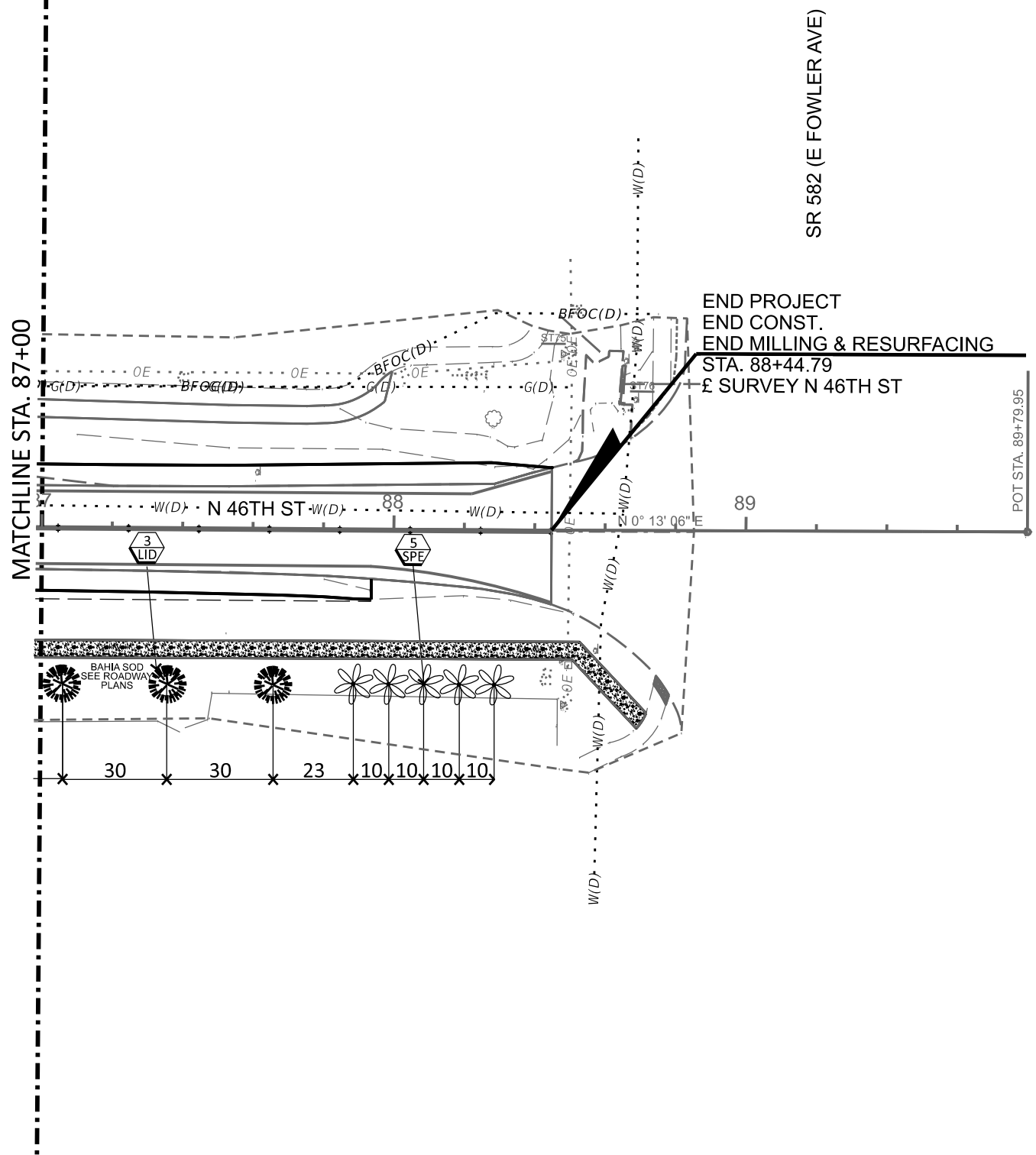
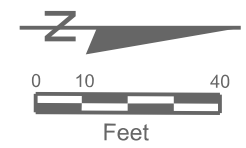
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PLANTING PLAN 14

SHEET NO.
L6

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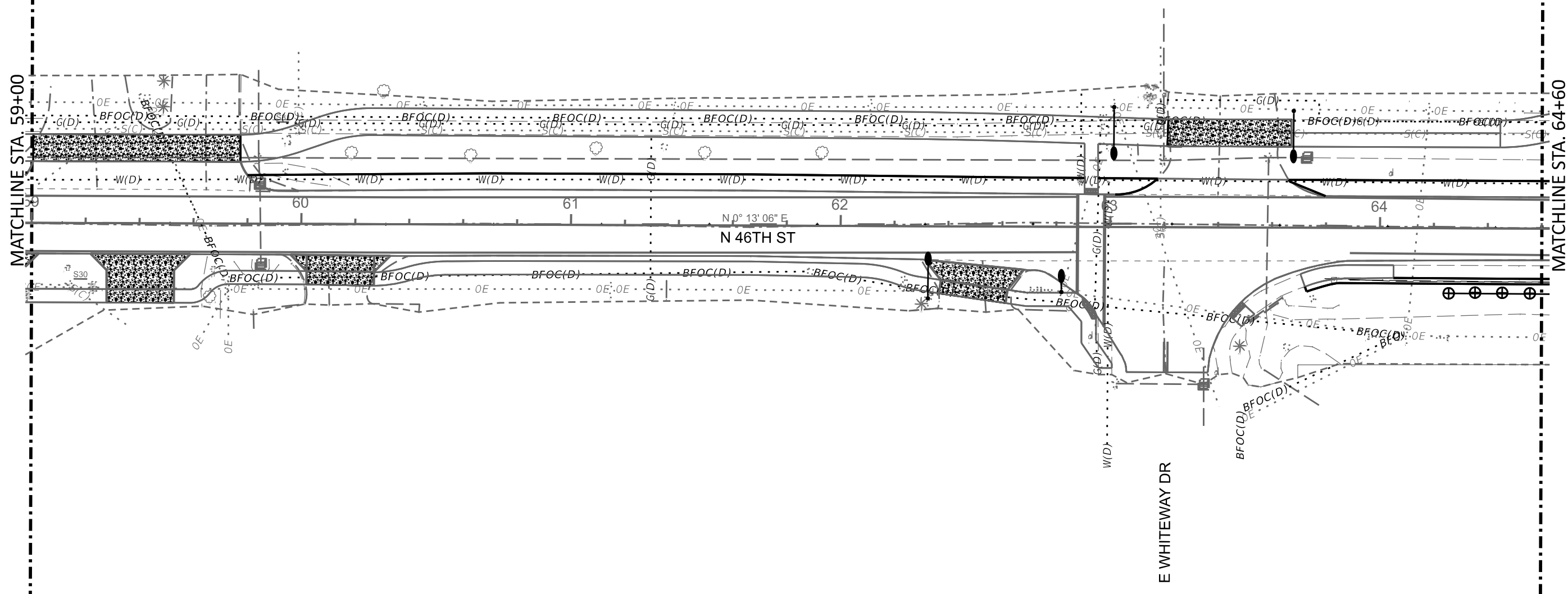
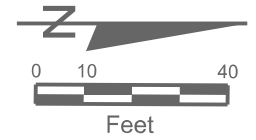
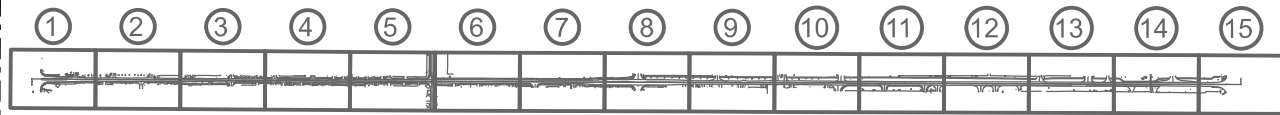

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PLANTING PLAN 15

SHEET NO.
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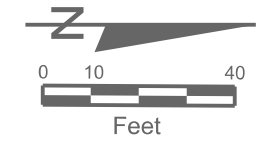
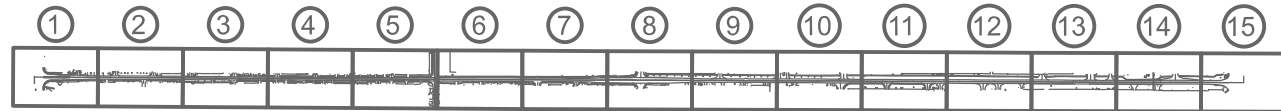

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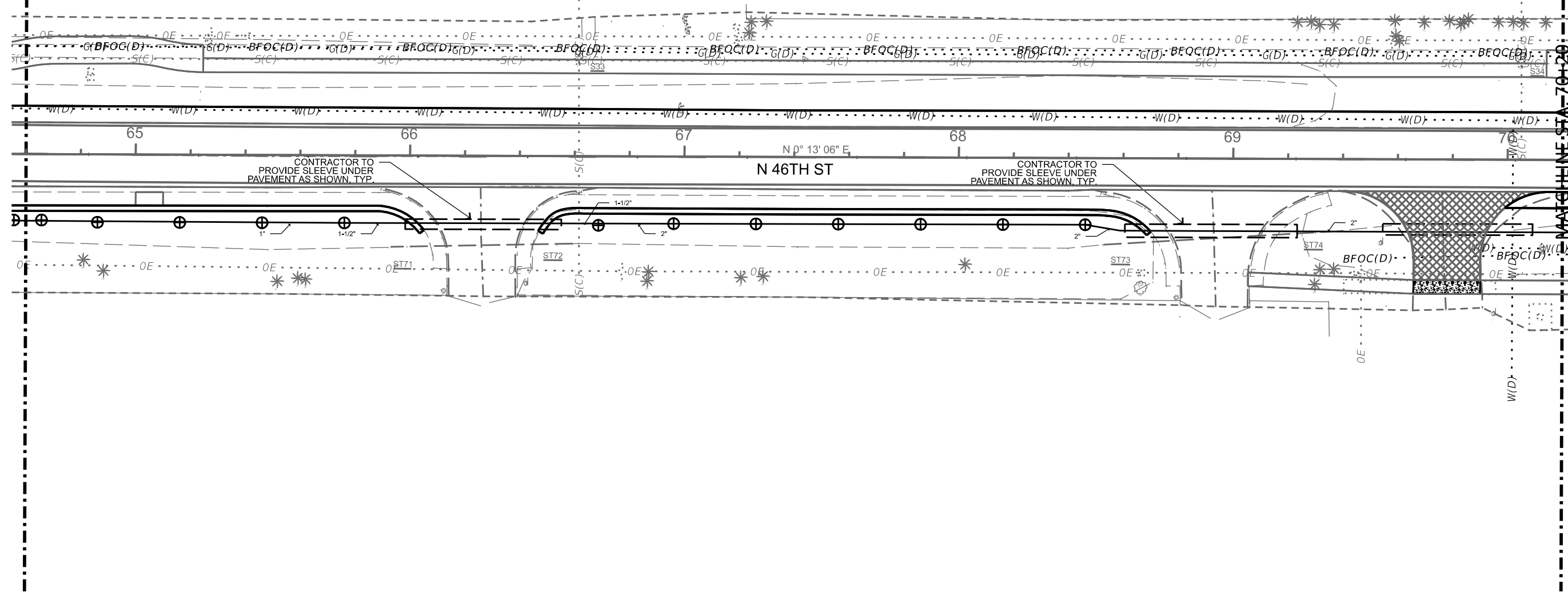
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| <p>IRRIGATION PLAN 10</p> <p>SHEET NO.</p> <p>L8</p> |
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MATCHLINE STA. 64+60

MATCHLINE STA. 70+20



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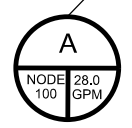
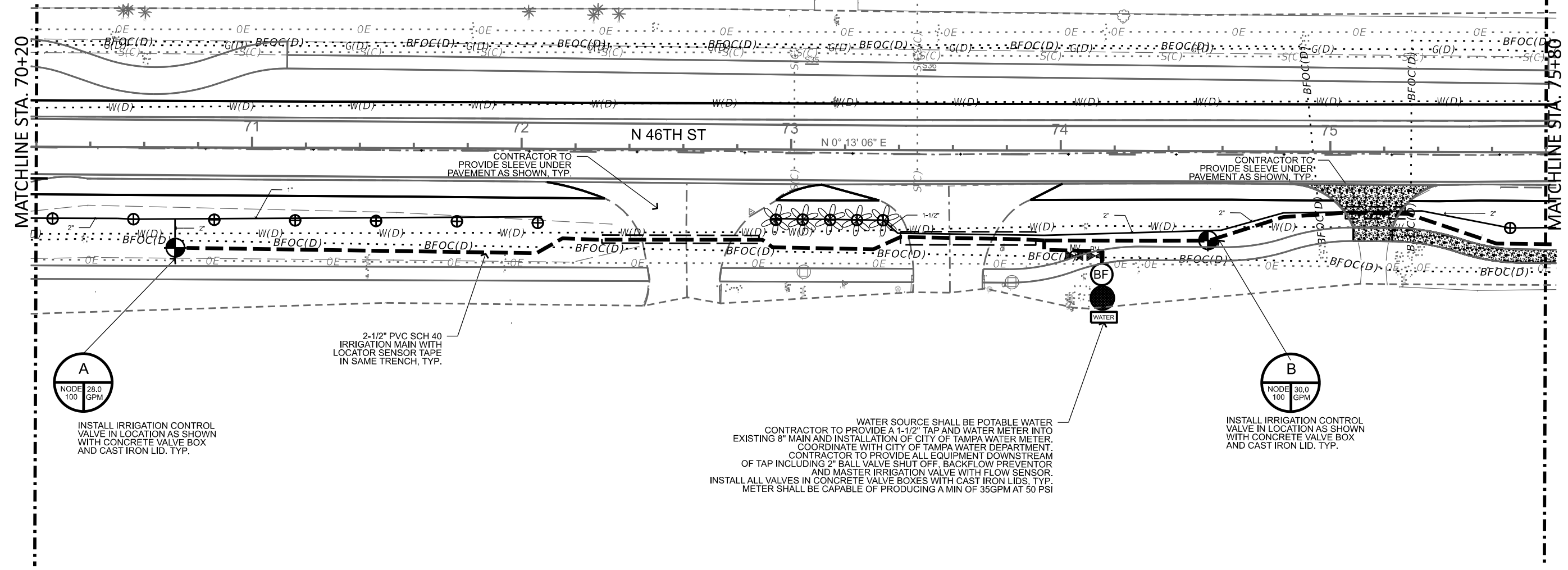
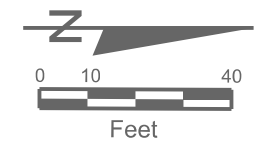
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IRRIGATION PLAN 11

SHEET NO.
L9

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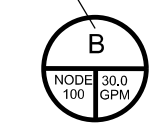
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INSTALL IRRIGATION CONTROL VALVE IN LOCATION AS SHOWN WITH CONCRETE VALVE BOX AND CAST IRON LID. TYP.

2-1/2" PVC SCH 40 IRRIGATION MAIN WITH LOCATOR SENSOR TAPE IN SAME TRENCH, TYP.

WATER SOURCE SHALL BE POTABLE WATER. CONTRACTOR TO PROVIDE A 1-1/2" TAP AND WATER METER INTO EXISTING 8" MAIN AND INSTALLATION OF CITY OF TAMPA WATER METER. COORDINATE WITH CITY OF TAMPA WATER DEPARTMENT. CONTRACTOR TO PROVIDE ALL EQUIPMENT DOWNSTREAM OF TAP INCLUDING 2" BALL VALVE SHUT OFF, BACKFLOW PREVENTOR AND MASTER IRRIGATION VALVE WITH FLOW SENSOR. INSTALL ALL VALVES IN CONCRETE VALVE BOXES WITH CAST IRON LIDS, TYP. METER SHALL BE CAPABLE OF PRODUCING A MIN OF 35GPM AT 50 PSI

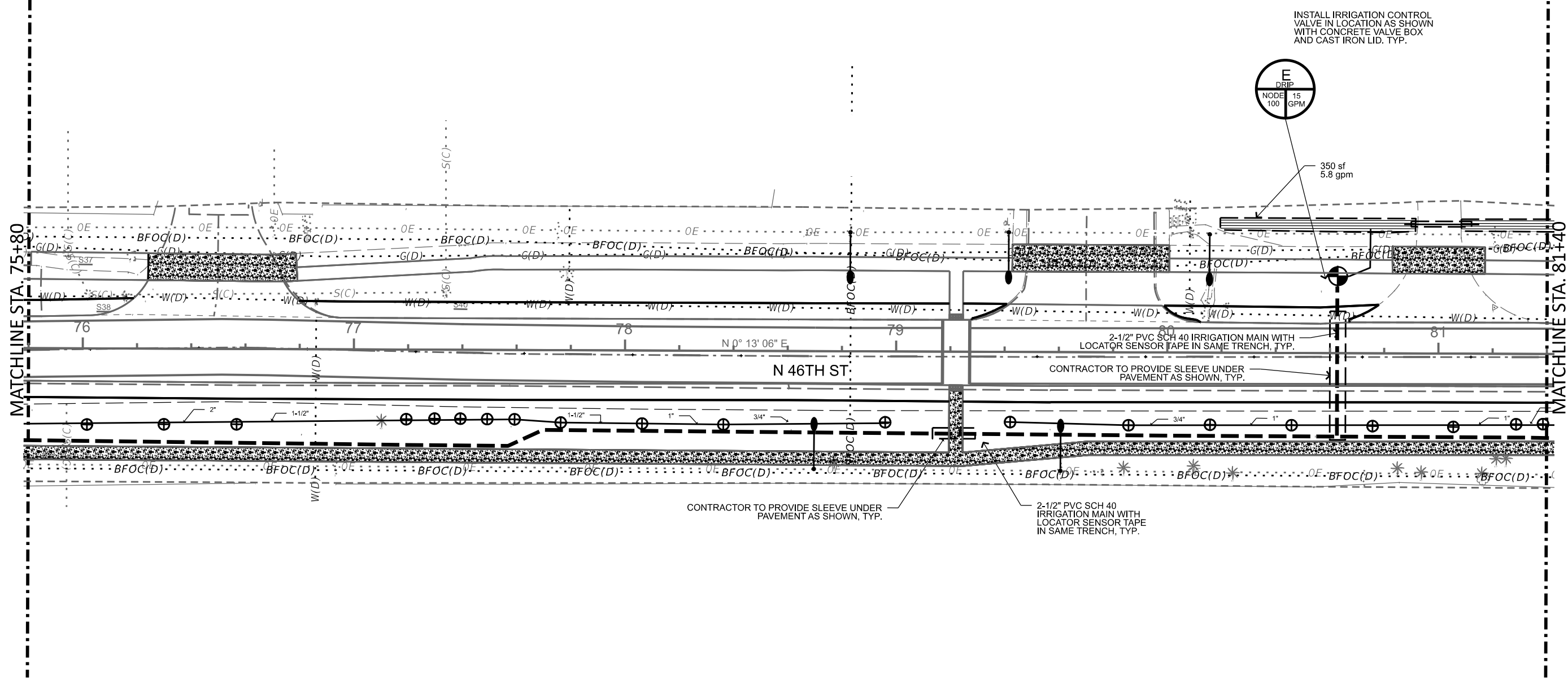
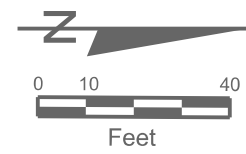


INSTALL IRRIGATION CONTROL VALVE IN LOCATION AS SHOWN WITH CONCRETE VALVE BOX AND CAST IRON LID. TYP.

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MATCHLINE STA. 75+80

MATCHLINE STA. 81+40

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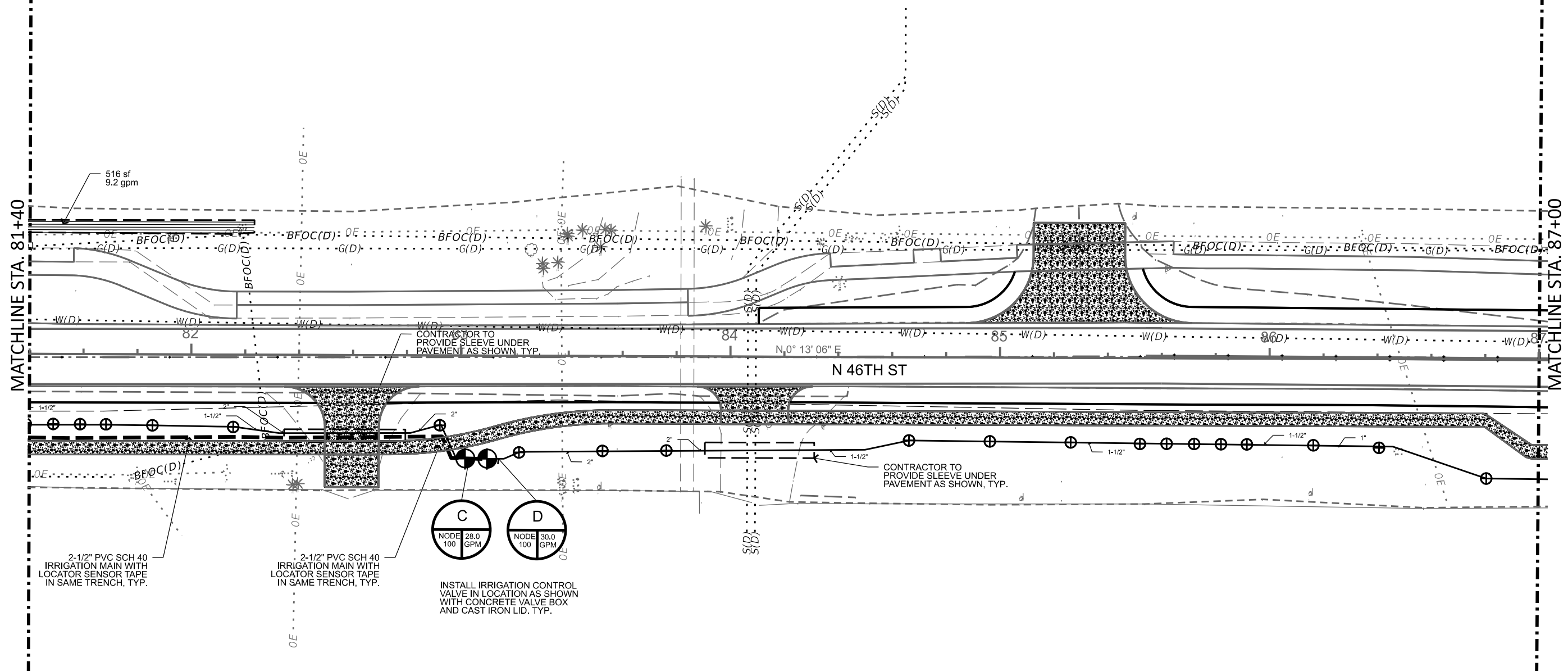
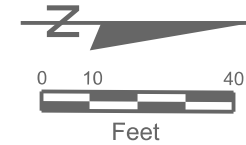
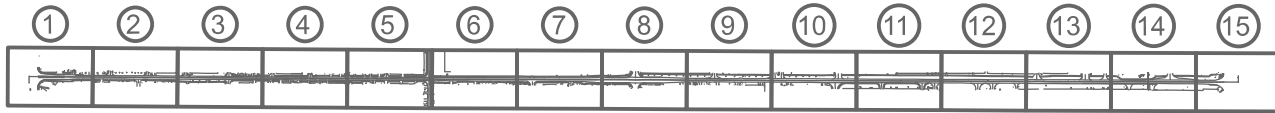
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IRRIGATION PLAN 13

SHEET NO.
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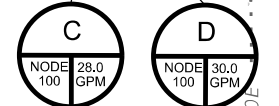


MATCHLINE STA. 81+40

MATCHLINE STA. 87+00

2-1/2" PVC SCH 40 IRRIGATION MAIN WITH LOCATOR SENSOR TAPE IN SAME TRENCH, TYP.

2-1/2" PVC SCH 40 IRRIGATION MAIN WITH LOCATOR SENSOR TAPE IN SAME TRENCH, TYP.



INSTALL IRRIGATION CONTROL VALVE IN LOCATION AS SHOWN WITH CONCRETE VALVE BOX AND CAST IRON LID, TYP.

CONTRACTOR TO PROVIDE SLEEVE UNDER PAVEMENT AS SHOWN, TYP.

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Jonathan H. Toner
Landscape Architect
Florida LIC #0001123

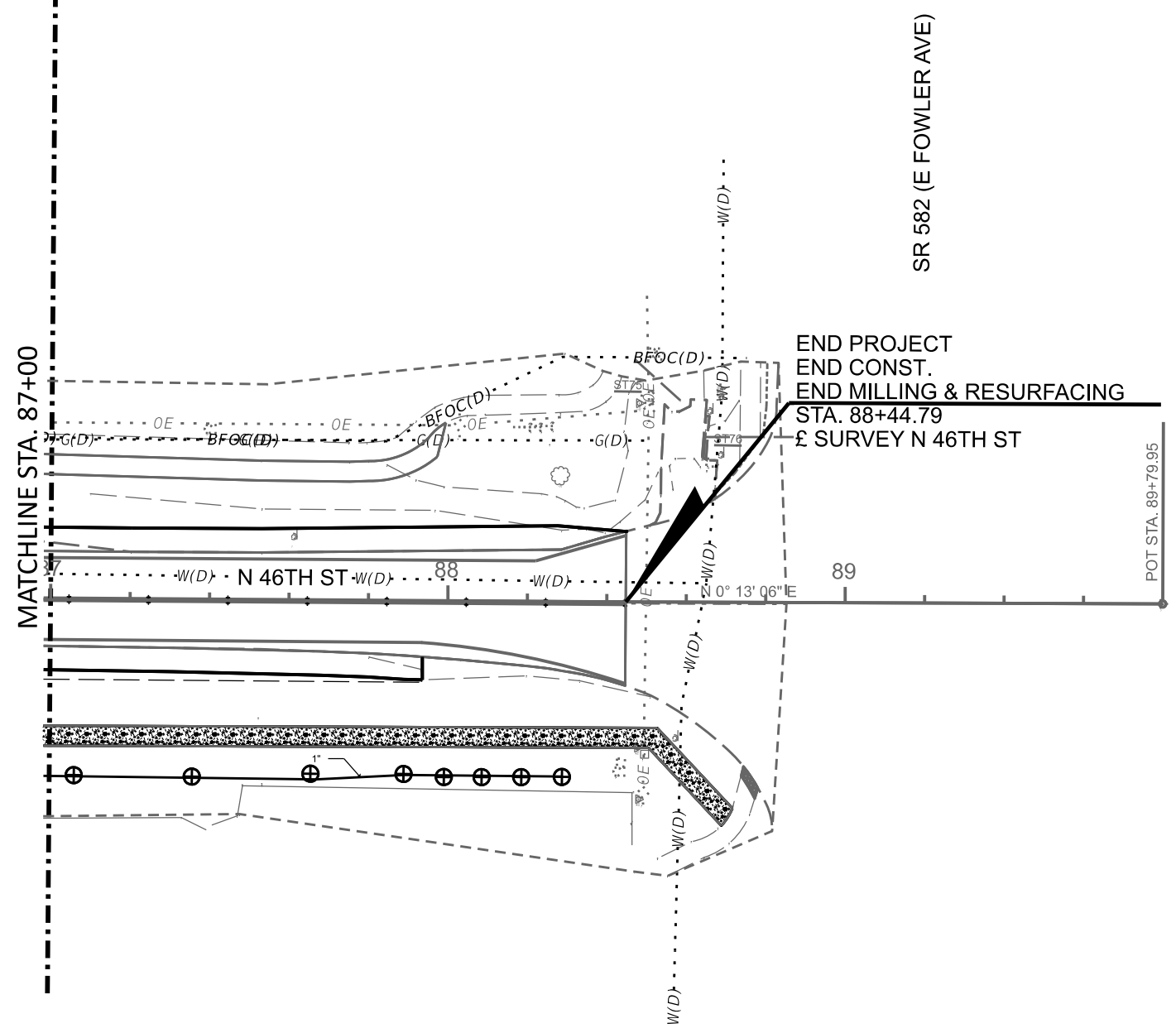
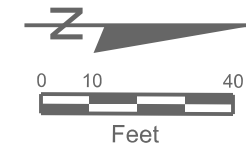
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| IRRIGATION PLAN 14 | |
| L12 | |

SHEET NO.
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IRRIGATION PLAN 15

SHEET NO.
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GENERAL NOTES:

1. Roadway Design Speed is **30 MPH**. Criteria for a **30 MPH** design speed for **46th Street WALK/BIKE STREETScape PROJECT** was the basis for the design setbacks criteria for this project. Which includes a 13' Clear Zone from edge of pavement face of tree or palm.
2. Project limits are from North of Busch Blvd to South of Fowler Ave., Station points as shown on plan. These have been used in order to establish Landscaping Clear Zones for the median plantings, for the roadway for the project.
3. Standard Indexes 613, 616 and 619 will be used for the Maintenance of Traffic for landscaping work as well as the FDOT 2019 Design Standards.
4. Criteria based on the FDOT 2019 Plans Preparation Manual and the 2007 AASHTO "Green Book".
5. In accordance with Rule 14.40.003(3)(b), Florida Administrative Code, no planting is allowed which screens, or when mature will screen an outdoor advertising sign permitted under Chapter 479 F.S. billboard noticed have been issued to billboard owners by certified letter.
6. No vegetation to be placed in a manner whereby official departmental traffic control signing would be discerned as being screened.
7. All applicable departmental Maintenance of Traffic standards to be utilized at all times while construction and maintenance activities are being performed as a result of this project.
8. A minimum vertical clearance of 12' between the grade of the travel lanes/ways and the bottom canopy of foliage to be maintained at all times.
9. A minimum vertical clearance of 8.5' between the grade of sidewalks and the bottom canopy of foliage to be maintained at all times.
10. Trees and palms will be planted no closer than 15' to any overhead powerlines.

PAY ITEM NOTES:

EXISTING LANDSCAPE

All existing landscape to remain in place unless specified on the plans. Patch existing sod in areas disturbed by construction with utilizing the existing sod type, after construction is completed.

CLEARING AND GRUBBING

Where plant beds, trees and palms are installed in sodded areas or areas with other plant growth, existing plants to be removed, and the plant bed prepared to meet the requirements below before planting. Existing sod to be treated with herbicide and follow manufacturer's directions for the appropriate waiting period to confirm the sod is dead, before continuing construction of the landscape. The plant beds to be marked, and the sod removed within the plant beds areas. Project site to be free of shrub/tree/palm paper, boards, chips, sticks, trash, or any other undesirable material. There to be no exotic or noxious weeds or weed seeds (i.e. Nut grass, Bermuda grass, Sedges and the like). In no case to there be more than 5% by volume of stones, limestone, asphalt waste to pay items ratio. Where plant beds, trees and palms are installed in sodded areas or areas with other plant growth, existing plants to be removed, and the plant bed prepared to meet the requirements below before planting. with the peanut. Plant beds to have Bahia sod removed in its entirety to a depth of 3" before planting any of the shrub and ground cover materials.

STRUCTURED SOILS

As shown on plans, backfill around the Tree Wells to be with Structured Soils. Contractor to submit sample and soil analysis, for approval by City of Tampa Construction Representative, before delivery to site.

PREPARED SOIL LAYER 3" DEPTH

All palm, tree and shrub planting pits to be supplemented with 6" of Prepared Planting Soils for each plant item during installation. See Specifications for Prepared Planting Soils. Maximum Soluble Salts: 200 ppm. Contractor to submit sample and soil analysis, for approval by City of Tampa Construction Representative, before delivery to site.

IRRIGATION

Provide a Lump Sum Unit Price for the drip irrigation system and all appurtenances for the irrigation system as shown on the Plans. This shall include the connection to the potable water tap into the 12" water main. Coordinate with City of Tampa Construction Representative.

The entire 12-month Warranty Period will require plant watering, as needed. Supplemental irrigation will be to keep the plant materials in no less than a Florida #1 condition. Any plant materials that suffer or perish due to over or under watering will need to be replaced.

Provide an alternative Unit Price for Truck watering as needed for watering the landscape shown on plans. Supplemental watering may be needed during the establishment, to be provided in the form of truck watering. MOT practices to be employed during truck watering practices. Inform City of Tampa Construction Representative before performing truck watering. Truck watering, if used, to comply with potable water standards and not be reclaimed water. Truck water costs to be the responsibility of the Contractor.

PRE-EMERGENT ON PREPARED SOIL LAYER

Prior to mulching, the proposed plant beds indicated on plans, to be treated with granular Pre-Emergent Herbicide containing 1% Benefin and 1% Oryzaly. Apply granular herbicide per manufacturer's directions. Use a properly calibrated granular applicator and do not apply chemical directly onto leaves of plants. Applicator to be licensed by State of Florida and trained for proper application.

LANDSCAPE COMPLETE - B+B Plant Materials

The B+B (Balled +Burlapped) plant materials to be field grown, hardened-off a minimum of 3-4 weeks before delivery to job site and to be balled and burlapped and of sizes according to the 2015 Florida Grade and Standards for Nursery Plants. All other material under this pay item number is to be container grown.

LANDSCAPE QUALITY STANDARD

All Plant materials to be delivered to the site in a 'Florida No.1' condition, according to the 2015 Florida Grades and Standards for Nursery Plants. Root ball, canopy spread, overall height as well as caliper inches, to comply with 'Florida No.1' requirements.

TREE PLACEMENT

Adjust trees and palms to be placed as far from utilities as possible with the 811 locator.

LANDSCAPE COMPLETE - STAKING AND GUYING


Staking and Guying to be included in the cost of the plant material. Staking and guying to be per the requirements of Index No. 580, FDOT Design Standards 2019. Staking and Guying to be maintained throughout the one-year warranty period, and to be removed at the end of that year at Contractors expense.

LANDSCAPE COMPLETE - MULCH - WOOD CHIPS

All new shrub beds to be mulched with 3" depth of either Pine Bark-Mini-Nuggets (1-1/2-3" pieces) or "Enviro-mulch" mulch material. Cypress mulch will not be allowed on the job site. Planting quantities do not include mulch in shrub beds or tree/palm beds and individual trees/palms. The mulch to be free of other vegetative yard waste, plastic, glass, metal, palm trees, sand and other foreign materials. The mulch to have the consistency of appearance. The mulch to be certified to be sterile and free from viable weed and grass seed. Submit samples in 1-gallon Ziplocs bags to Project Tampa Construction Representative, for approval before delivery to site.

LANDSCAPE COMPLETE - 12 MONTH MAINTENANCE & WARRANTY PERIOD


There will be a Landscape Establishment and Maintenance period of 12-Months after Final Acceptance, included in the contract pricing from Contractors during bidding, for the items shown in the project specifications. The date of Final Acceptance will be determined by City of Tampa Project Representative and will be based on the contract being fully and satisfactorily executed to the requirements of the plans and specifications. All plant materials to be maintained in a Florida #1 Condition. Any plant materials not found to be in this condition to be replaced, including materials and labor, at the end of every calendar quarter, from date of Final Acceptance until 12 months from the date of Final Acceptance.

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|-----------|-------------|------|-------------|--|--|--------------|----------------------|-----------------------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID | |
| | | | | | 1001220 | HILLSBOROUGH | 437246-1-58-01 | |

GENERAL LANDSCAPE NOTES

1. Prior to submission of bid, visit the site and become informed of the conditions under which the work is to be accomplished.
2. The work includes soil preparation, finish grading, supplying and planting of trees, shrubs, groundcovers and sod, of the species, sizes and quality as shown on the drawings and/or as specified herein.
3. Provided plant material to be graded Florida No.1 or better as outlined under the 2015 - Grades and Standards for Nursery Plants, Parts I and II, State of Florida, Department of Agriculture, and to conform to AAN Standards for Nursery Stock (ANSI 260.1-1980).
4. Provide any necessary truck watering to maintain the plant materials in a Florida No.1 condition, according to the 2015 Florida Nursery Grades and Standards.
5. Provide a Lump Sum Price for drip irrigation, spray irrigation and tree bubbler irrigation and required piping, trenching and equipment for the items shown on the unit item bid sheet. The cost to be inclusive of all fixtures, pipes and appurtenances for the installation and activation of an irrigation system for each and various properties shown as an approved easement, on these plans. Connection to tap into potable water line to be provided and coordinated with City of Tampa. The pricing for the irrigation system to be a Lump Sum price.
6. Provide an additional Lump Sum price for truck watering plant material from the date of installation to the date of Final Acceptance and duration of 12 Month Warranty Period. This option to be in lieu of installing an in-ground automatic irrigation system. Provide the truck and the watering to maintain the plant materials in a Florida No.1 condition as per the 2015 Florida Nursery Grades and Standards.
7. Provide any and all necessary specialty permits for the work, prior to commencement of their operations on-site. Copies of permits to be sent to the City of Tampa Construction representative.
8. Verify all utility locations (existing and proposed), related paving, elevations, water and electrical supply, etc. prior to start of work. Notify the City of Tampa Construction Representative in writing of unsatisfactory conditions prior to start of work. Start of work will indicate acceptance of conditions and full responsibility for completed work.
9. Verify all underground and above ground and overhead utility locations prior to any excavation. If underground construction, utilities or obstructions are encountered during the excavation of planting areas or pits, immediately inform the City of Tampa Construction Representative. Alternate locations for the plant material(s) will be selected by the City of Tampa Construction Representative. Such changes in location to be made by the Contractor without additional compensation.
10. Provide sole responsibility for any and all damages that result from activities due to improper verification of utilities and/or operator error during excavations. Coordinate on-site with the City of Tampa Construction representative before digging or commencement of any work.
11. Project Site to be clear of debris and weed growth before any plantings to commence. If weed growth is still present and viable, re-spray with herbicide and wait the required time period, according to manufacturer's instructions.
12. Required erosion control measures to remain intact throughout construction. Proposed storm water runoff for the street trees and palms to be directed to the Tree Well areas by way of the roadway inlets and any surface grading within the project. Do not place silt barriers or other blockage devices between the street run-off and the tree wells, after the trees are installed.
13. Notify the City of Tampa Construction Representative of site conditions which may require planting design adjustments. Submit proposed changes for written approval to City of Tampa & Landscape Architect, prior to the installation of plant materials.


14. Planting Limits refer to FDOT Standard Index 700 and are based on project design speed and median applications for this project, which is based on <30mph.
Outside roadways: Locate trees no less than 4 feet from face of curb in accordance with Design Standard Index 546
15. All trees to be single trunked and cleared to a height of a min of 8.5" above finished grade within the medians. See FDOT index 700 and FDOT Index 546.
16. If containers are used, then container size is to be as specified. A minimum of 80% of the container root ball must contain active and viable root system. Girdling or "ring" roots are prohibited and will be cause for rejection of plant material. See notes and details for root observations and corrective actions. Be responsible to demonstrate the root ball conditions of the plan materials while the plantings are either on the truck at time of delivery or in-field, to Landscape Architect to illustrate root conditions of the plant materials. Any root ball or container planted materials that cannot be corrected in field to be rejected and will need to be replaced at contractors' expense.
17. No substitutions will be made without the explicit written permission of the City of Tampa Construction Representative. Submit written verification of any plant material(s) that may be unavailable as specified during the bid process, to the City of Tampa Construction Representative.
18. Coordinate the installation of trees and plants so as to not screen the FDOT Standard Index 546 Clear Sight Limits at intersections or the City of Tampa site visibility triangle at intersections. Coordinate so as not to obstruct the visibility of directional, informational or traffic control signs as well as traffic signals. Field adjust tree and palm locations as required to avoid conflict with light poles, sign supports, utility poles, walls and fences, etc.
19. Landscape Architect of Record to review, before any delivery to the construction site, all proposed trees, shrubs and ground cover materials, by means of accurate and representative photographs taken from nursery of the grower of the materials, that will be delivered to job site. Submittal to be in an electronic e-mail format sent to City of Tampa Construction Representative. The project name and location to be labeled on the front of each e-mail, with the Contractor's name, address and phone number listed on the inside first page with the index of photographs.
20. The City of Tampa Construction Representative reserves the right to make minor adjustments, in the field, to the locations of trees, palms, shrubs and groundcovers. Do not remove vegetation by grubbing or place soil deposits, debris, solvents, concrete, paint, chemicals or other foreign substance in or on the soil. Required tree barricades and erosion control measures to remain intact during construction. No construction debris, construction materials, machinery or equipment of any kind placed within the dripline of a tree to remain on the site. All areas within the dripline of a protected tree to be maintained at their original grade with no trenching of cutting of any kind.
21. In the event of a variation between the plant list and the actual number of plants shown or noted on the plans, the plans to control. City of Tampa Construction Representative to be notified of any discrepancy during bid process in writing, with the plans taking precedent over tabulation list.
22. Plants and trees to be set plumb, at the same grade at which they have been grown, best side facing prime visibility and thoroughly watered-in at time of planting to eliminate air pockets. If site conditions are unfavorable to vigorous plant growth, the City of Tampa Construction Representative to be notified prior to submitting bid and commencing construction. The conditions are considered accepted, if written notification is not received by City of Tampa Construction Representative before commencement of installation of the materials.
23. Provide proper drainage for all trees and plant materials. Trees set too high or low may be rejected. Verify proposed finish grades and set trees accordingly. See details for planting, staking and guying.
24. Properly securing all trees, palms and large shrubs immediately after planting. Tree bracing to be performed by the detail shown on plans for bracing the rootball within the Tree Well. No external guy wires will be permitted.
25. Shrubs to be planted as shown on plans. Trees and palms to be backfilled with native excavated soils and prepared planting soils (see specifications). Remove container and all synthetic bindings from trees and palms,

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|-----------|-------------|------|-------------|---|--|----------------|----------------------|---|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID | | L15 |
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- vertically slice the rootball perimeter to a depth of 12" for optimum growth. Each slice to be the width of a shovel or 12" in width.
26. All trees within FDOT Standard Index 546 Clear Sight Limits to have 8.5' clear trunk above the nearest pavement elevation, to the lowest point on the tree canopy.
 27. Provide a 12-month Warranty, from date of Final Acceptance, for all plantings as part of this contract. Dead plantings to be replaced.
 28. Maintain the watering required for the establishment of plant materials from the date of installation to the date of the Final Acceptance. The cost of watering and its application to be borne by contractor until Final Acceptance by City of Tampa. Providing any additional hand watering as necessary for all plant materials on the project.
 29. Responsibility of watering and maintaining the City of Tampa properties and FDOT properties after Final Acceptance to be borne by City of Tampa.
 30. Replace all Plant Materials that are in a deteriorated and/or perished Condition or that have perished within the 12-month warranty period. Monthly inspections are required to be performed to determine deficiencies and perished items to be replaced on a monthly basis, as needed.
 31. Trees or shrubs shown in a line on the plan to have the trunks/canopies in proper alignment upon visual inspection after installation. Groundcover and shrub beds to be planted on triangular spacing with plants installed and faced for optimum growth into the bed.
 32. Any areas subject to erosion (e.g. grass swales, retention area embankments) must be stabilized by solid Bahia sod.
 33. The job site to be kept orderly and reasonably clean on a daily basis during construction operations. Upon daily completion of work, remove all debris and waste generated by operations on-site, including the cleaning of walks and paving.
 34. The maintenance period for plantings begins at time of installation and continues until final acceptance.
 35. Provide clearly delineated electronic prepared As-Built PDF drawings of landscape and irrigation, to the City of Tampa Construction representative at end of project. This consists of representations of quantities and locations all planted palms, trees, shrubs, groundcovers and turf areas prior to final acceptance. Upon completion, deliver to City of Tampa Construction representative. Hand marked plans will not be acceptable.
 36. An "As-Built" of the landscape plans to be provided by the contractor and signed and sealed by a Landscape Architect Registered in the State of Florida. The Landscape Architect to be obtained by the Contractor. Submit to the City of Tampa Construction Representative prior to the final walk-through and Final Acceptance. The "As-Built" to be up-dated daily and to be kept on-site at all times during the construction period.
 37. Any and all deviations from the original construction documents to be duly and accurately recorded. A PDF of the Final Construction Plans to be the basis for the As-Built mark-ups.
 38. At the time of Final Acceptance, provide the City of Tampa Construction Representative, with a maintenance manual containing instructions for the proper care of all materials specific to the job, and any pertinent manufacturer's literature.
 39. All landscape material to be installed and maintained at all times in a manner whereby traffic control signage and devices are visible to motorists and pedestrians.
 40. Contact the Florida Department of Transportation (FDOT) City of Tampa Operations Center and One Call 811, two full working days prior to the start of work. Contact the FDOT Hillsborough Operations Center two weeks prior to the beginning of installation in order to locate highway lighting conduit.
 41. Unless otherwise determined by the FDOT, any lane closures to be restricted as follows:
 - a. During daylight hours from 9:00 am to 3:00 pm on weekdays only (Monday through Friday)
 - b. During nighttime hours (if applicable) from 9:00 P.M. to 5:30 AM on weeknights only
 42. No work to be performed on State Holidays
 43. The FDOT Hillsborough Operation Center to be contacted a minimum of two (2) working days prior to anticipated lane closure to obtain permission.
 44. Provide the FDOT with the name, contact telephone number, e-mail address and Advanced Training Certificate of the Individual who will be in the work zone Maintenance of Traffic (MOT) Worksite Safety Supervisor.

45. All Landscape material to be maintained in accordance with FDOT Standard indices 546 and 700 and all other applicable Department standards and regulations. <http://www.dot.state.fl.us/rddesign/DS/15/STDs.shtm>
46. Application of herbicides to be performed by a person possessing a current Florida Restricted Use Pesticide License in the Core Curriculum, Right-of-way and Aquatic Categories.
47. Pursuant to section 2.10 of the departments "Roadway and Roadside Maintenance" Procedure (topic No. 850-000-015-I of 91/01/2014), all individuals who contract the application of fertilizer to ensure that they are licensed commercial applicators who have been trained through the Green Industry BMP Program, and have obtained a limited certification for Urban commercial fertilizer application under Section 482.1562, F.S. Furnish the FDOT current copies of licenses/certifications belonging to the personnel that will be involved in the application of fertilizer on the FDOT right of way prior to start of work.

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|-----------|-------------|------|-------------|---|--|--------------|----------------------|--------------------------|-----------------------------|
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46TH STREET WALK/BIKE PROJECT

LANDSCAPE TABULATIONS

100% SUBMITTAL

| PLANTINGS: | | | | | PLAN | PLAN | PLAN | PLAN | PLAN | PLAN | |
|--|-----------------------------|----------------------------------|------------------|---|------|------|------|------|------|------|-------|
| SYM | COMMON NAME | BOTANICAL NAME | Container size | SPECIFICATION | 10 | 11 | 12 | 13 | 14 | 15 | TOTAL |
| LARGE TREES AND PALMS: | | | | | | | | | | | |
| SPE | Sabal Palm - Enhanced Root' | SABAL palmetto 'enhanced root' | B+B | Staggered ht.s 16' ct to 24' ct. Keep frond bases intact. Min 16" caliper | 4 | 5 | 5 | 7 | 8 | 9 | 38 |
| LID | Crepe Myrtle 'Red Rocket' | LAGERSTROMEA indica 'Red Rocket' | 65 gallon or B+B | 12'-14' x 10' spread, 6' c.t 4" caliper standard | | 8 | 8 | 13 | 12 | 3 | 44 |
| Small shrubs and ground covers: | | | | | | | | | | | |
| SS | Simpson Stopper | MYCIANTHES fragrans | 7-gal | 36" ht x 24" spread | | | | 29 | 22 | | 51 |
| | Prepared Planting soils | | | | 0.7 | 2.2 | 2.2 | 3.3 | 3.3 | 2.0 | 13.0 |
| | Pine Bark mulch | | 3" depth | | 0.3 | 1.1 | 1.1 | 1.7 | 1.7 | 1.0 | 6.5 |

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| DATE | DESCRIPTION | DATE | DESCRIPTION | | CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID | | L17 |
| | | | | | 1001220 | HILLSBOROUGH | 437246-1-58-01 | | |

\$USERS\$

\$DATES\$

\$TIMES\$

\$MODELNAMES\$


\$FILES\$

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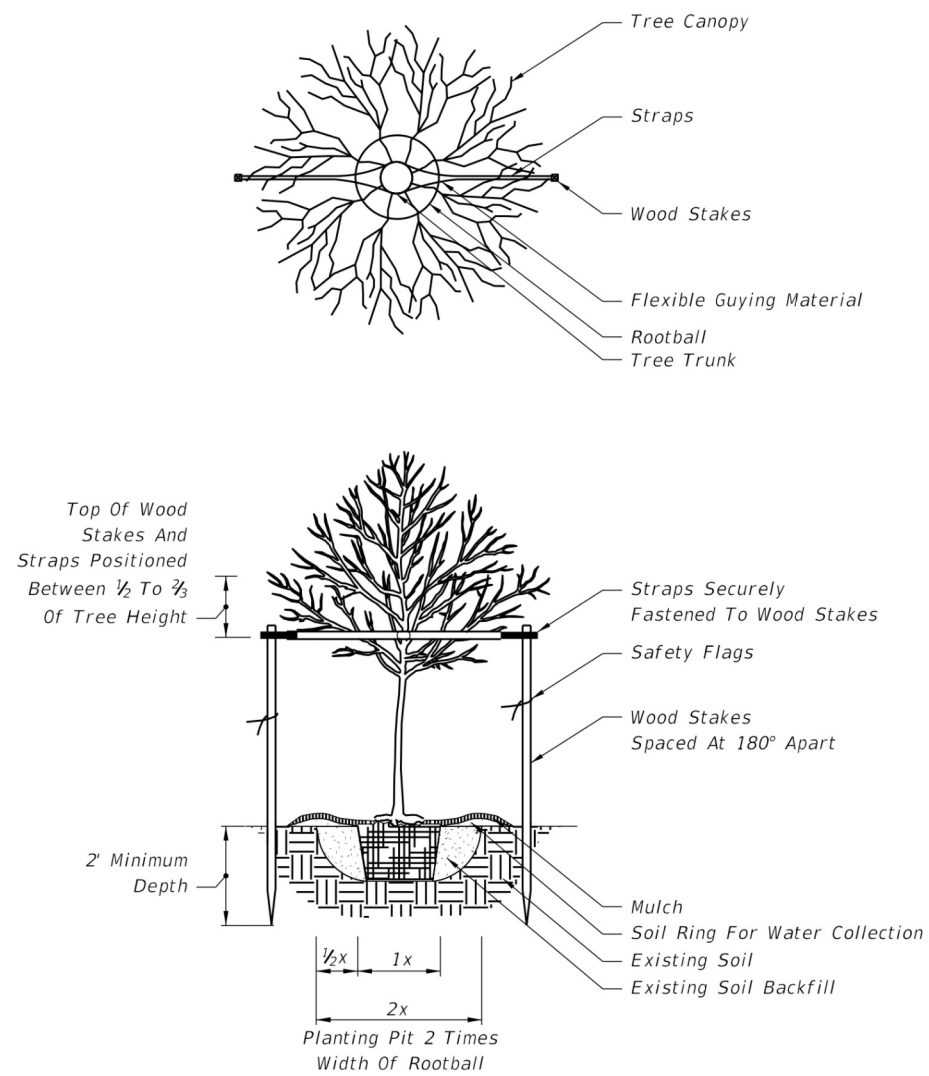
46TH STREET WALK/BIKE PROJECT

IRRIGATION TABULATIONS

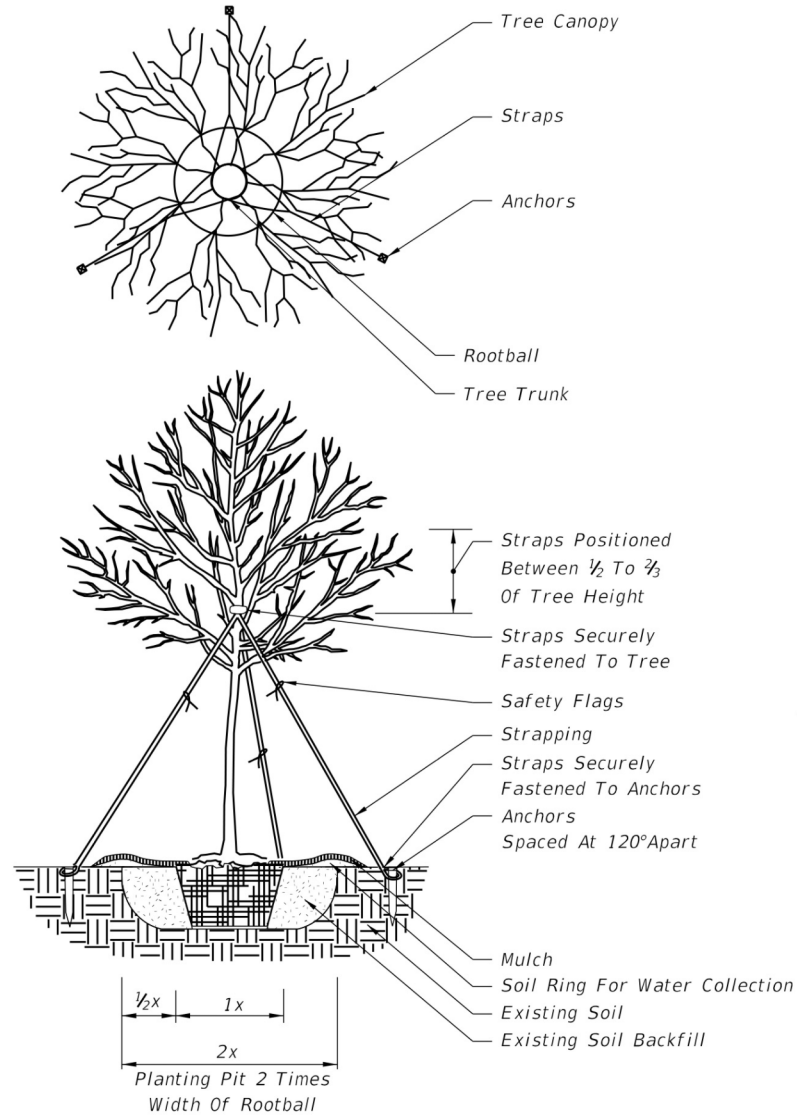
| IRRIGATION | | PLAN | PLAN | PLAN | PLAN | PLAN | PLAN | |
|-------------------------------------|------|------|------|------|------|------|------|-------|
| ITEM | UNIT | 10 | 11 | 12 | 13 | 14 | 15 | TOTAL |
| TREE BUBBLERS 1 GPM - HUNTER | EA | 4 | 12 | 13 | 19 | 20 | 9 | 77 |
| 3/4" PVC FLEX PIPE | LF | 20 | 20 | 50 | 100 | 75 | 25 | 290 |
| 3/4" PVC SCH 40 PIPE | LF | | 50 | 50 | 75 | 75 | 25 | 275 |
| 1" PVC SCH 40 PIPE | LF | | 50 | 50 | 75 | 75 | 25 | 275 |
| 1-1/2" PVC SCH 40 PIPE | LF | | 100 | 250 | 150 | 100 | 80 | 680 |
| 2" PVC SCH 40 PIPE | LF | | | 200 | 200 | 200 | | 600 |
| 2-1/2" PVC SCH 40 PIPE - MAIN | LF | | | 500 | 500 | 160 | | 1160 |
| LOCATOR TAPE ALONG MAIN | LF | | | 500 | 500 | 160 | | 1160 |
| DRIP IRRIGATION-NETAFIM | SF | | | | 350 | 516 | | 866 |
| NODE CONTROLLER - HUNTER | EA | | | 2 | 1 | 2 | | 5 |
| 2" BALL VALVE | EA | | | 1 | | | | 1 |
| 1 BACKFLOW PREVENTOR | EA | | | 1 | | | | 1 |
| 6" PVC SLEEVE WITH DIRECTIONAL BORE | L/F | | 150 | 120 | 70 | 70 | | 410 |

| | | | | | | | | | |
|-----------|-------------|------|-------------|--|--|----------------|----------------------|-----------------------------------|-----------|
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| DATE | DESCRIPTION | DATE | DESCRIPTION | | CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID | | L18 |
| | | | | 1001220 | HILLSBOROUGH | 437246-1-58-01 | | | |

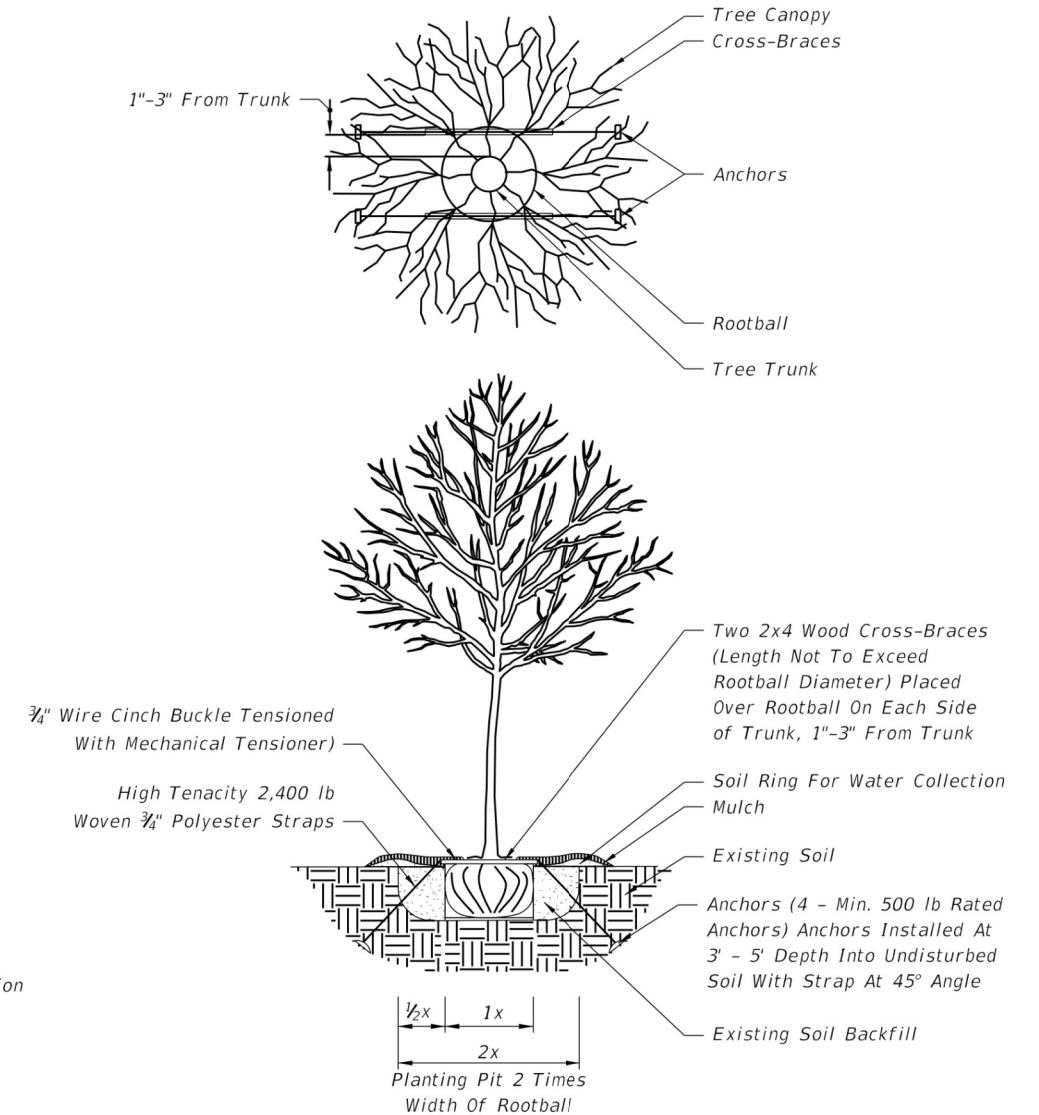
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1" - 3 1/2" CALIPER TREE PLANTING



4" AND LARGER CALIPER TREE PLANTING



1" - 3 1/2" CALIPER TREE PLANTING WITH UNDERGROUND BRACING

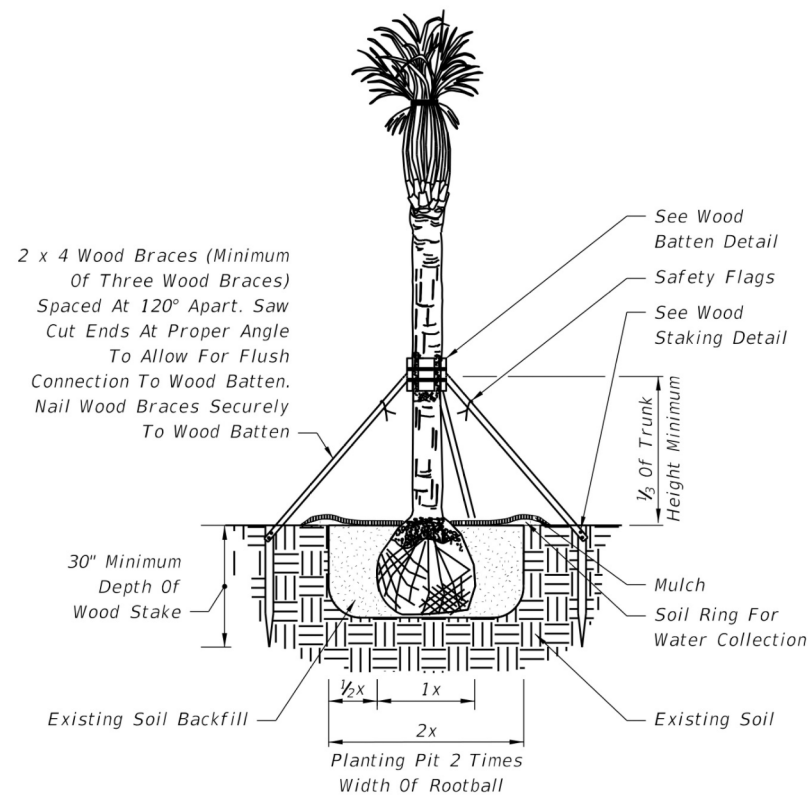
GENERAL NOTES:

- All dimensions 6" and less are exaggerated for illustrative purposes only.
- Plant containers shall be removed prior to planting. If plants are not container grown, remove a minimum of the top 1/3 of burlap, fabric, or wire mesh. Never lift or handle the tree by the trunk.
- The uppermost root on all trees shall be covered by less than 1" of soil. Use hand tools to carefully remove all excess soil. The top of root ball shall be set 1"-2" above finish grade and set plumb to the horizon. If planting pit is too deep, remove the tree and firmly pack additional soil in the bottom of the planting pit to raise the rootball. After positioning the tree in the planting pit, slice through rootballs with 3 or 4 vertical slices (top to bottom) equally distributed around the tree.
- Backfill shall be loosened existing soil. Remove rocks, sticks, or other deleterious material greater than 1" in any direction prior to backfilling. Water and tamp to remove air pockets. If existing soils contain excessive sand, clay, or other material not conducive to proper plant growth, contact Engineer prior to planting.
- Soil rings shall be constructed of existing soil at the outer edge of the planting pit, with a height of 3" and gently sloping sides. Do not pile soil on top of rootball.
- Mulch shall be a 3" deep layer placed to the edge of the trunk flare, around the base of shrub, or solidly around groundcover. Never pile mulch against the tree trunk.
- Straps shall be minimum 1" wide nylon or polypropylene. All wood stakes or anchors shall be located beyond the edge of soil ring and located below finished grade, unless otherwise specified.
- Sabal Palms may be hurricane cut. All other palms must have fronds tied with biodegradable twine. Palm trunks shall have no burn marks, scars, or sanding.
- All dimensions provided for wood materials are nominal.
- When a permanent, subsurface, or drip irrigation system is provided, a soil ring is not required. Mulch to edge of planting pit.
- Alternate tree bracing and guying systems approved by the Engineer may be used in lieu of the tree bracing and guying methods detailed on the Index. Alternate tree protection systems approved by the Engineer may be used in lieu of the tree protection barricade detailed on the index.
- Remove aboveground guying systems at the end of the establishment period.

| REVISIONS | | REVISIONS | | CITY OF TAMPA TRANSPORTATION DEPARTMENT | | | SHEET NO. |
|-----------|-------------|-----------|-------------|--|--------------|----------------------|-------------------------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID | |
| | | | | 1001220 | HILLSBOROUGH | 437246-1-58-01 | PLANTING DETAILS 1 L19 |
| | | | | | | | |

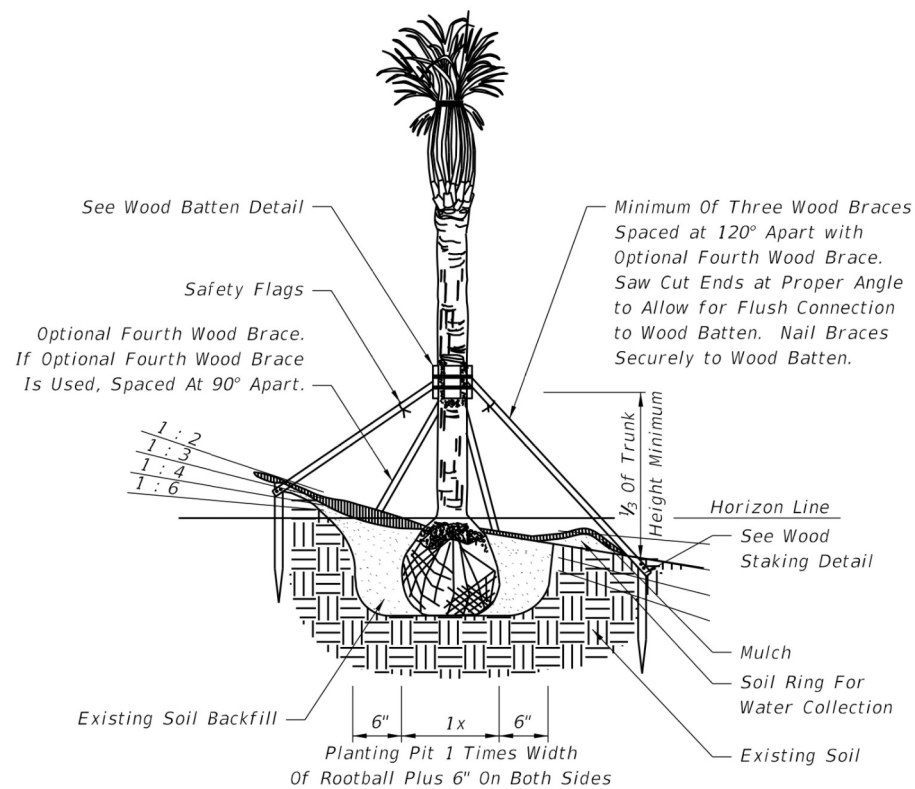
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LANDSCAPE ARCHITECTS
ISA CERTIFIED ARBORISTS
URBAN DESIGNERS
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
Corporate
Authorization # 254
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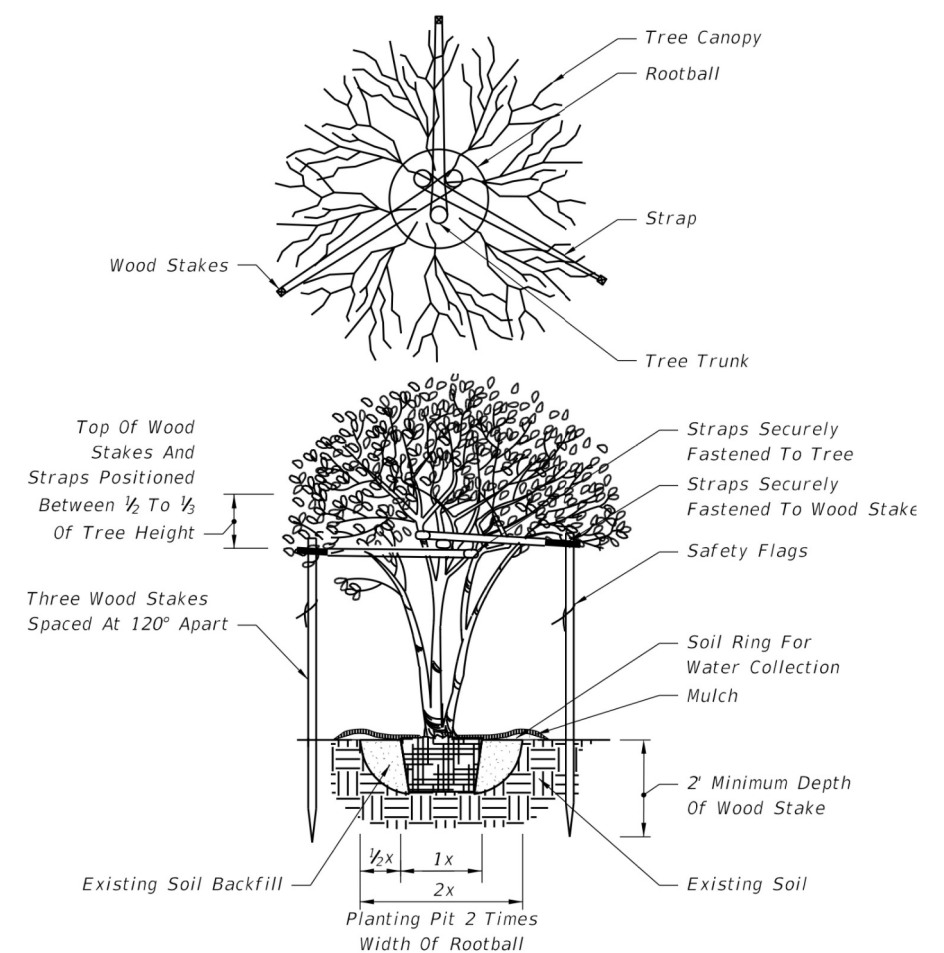
NOTE: For All Other Palms, Use Detail Provided By Landscape Architect In Contract Plans.

CABBAGE PALM PLANTING FOR UP TO 24' CLEAR TRUNK

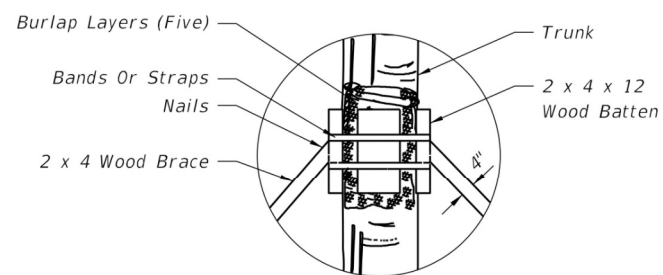


NOTES: Slope Provided As Rise:Run. For All Other Palms, Use Detail Provided By Landscape Architect In Contract Plans.

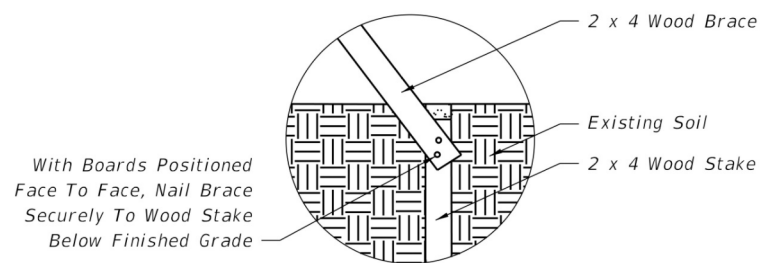
CABBAGE PALM PLANTING ON SLOPE FOR UP TO 24' CLEAR TRUNK



MULTI-TRUNK TREE PLANTING

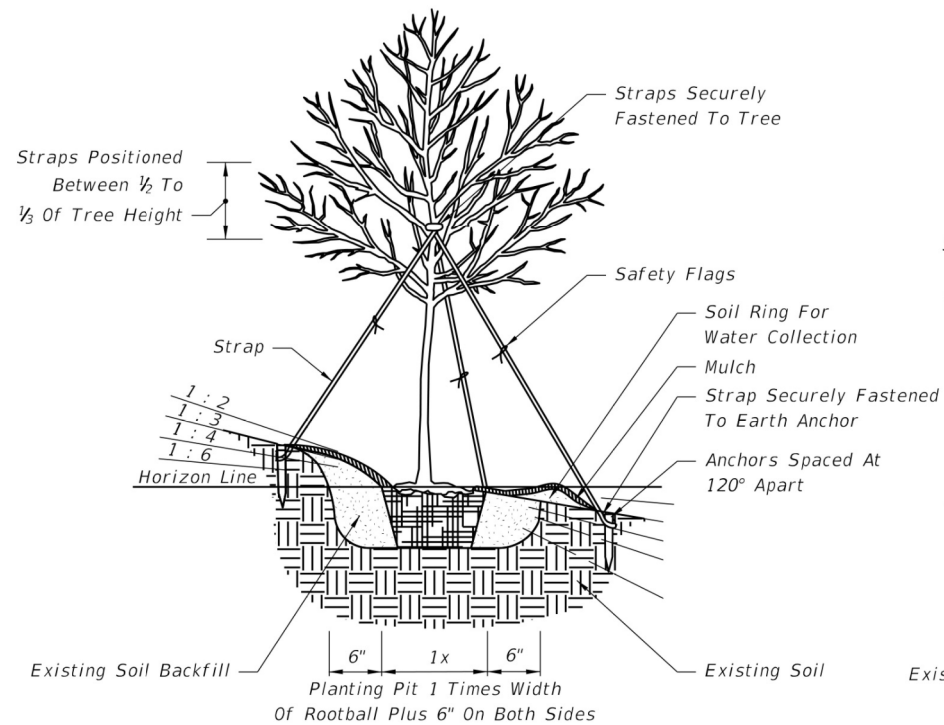


WOOD BATTEN DETAIL



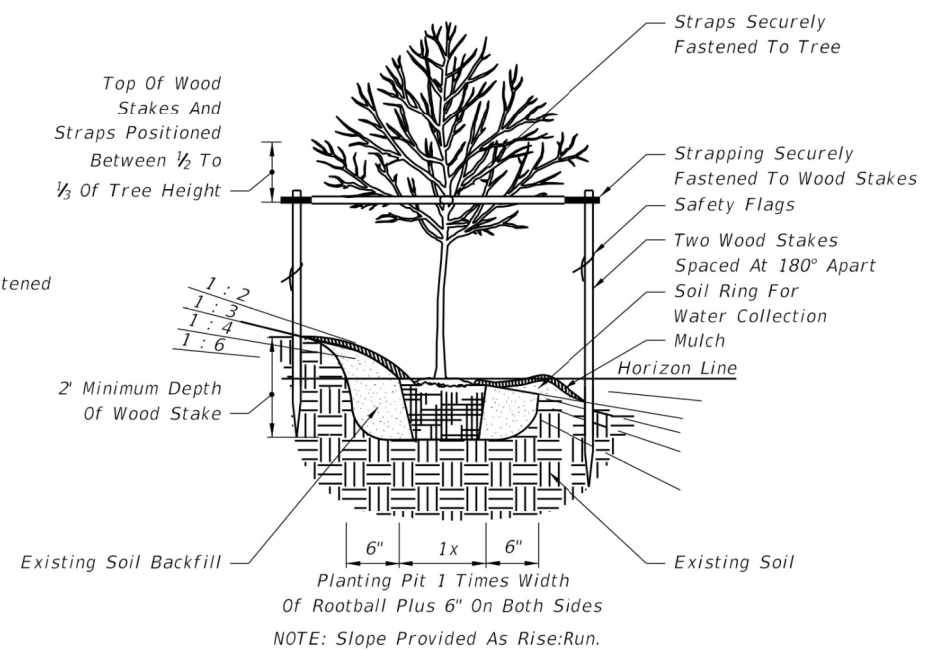
NOTE: Stake Into Firm, Existing Soil.

WOOD STAKING DETAIL



NOTE: Slope Provided As Rise:Run.

4" AND LARGER CALIPER TREE PLANTING ON SLOPE



NOTE: Slope Provided As Rise:Run.

1" - 3 1/2 " CALIPER TREE PLANTING ON SLOPE

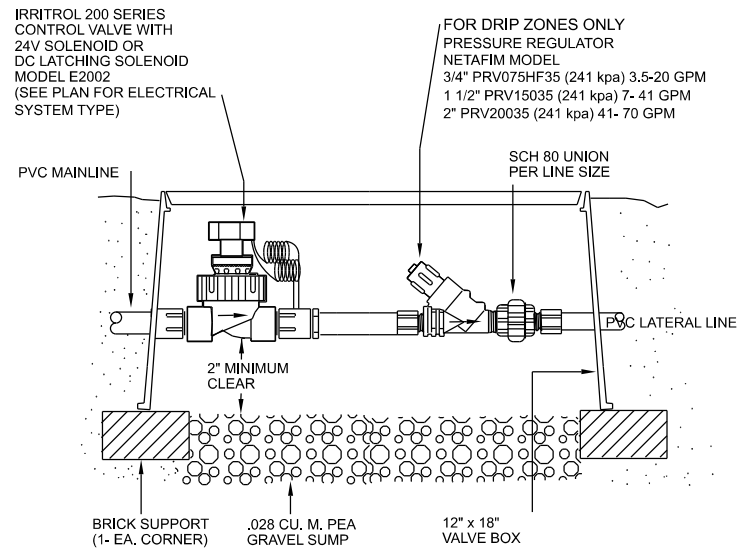
| REVISIONS | | | |
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| DATE | DESCRIPTION | DATE | DESCRIPTION |
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 LANDSCAPE ARCHITECTS
 ISA CERTIFIED ARBORISTS
 URBAN DESIGNERS
 Jonathan H. Toner
 Landscape Architect
 Florida LIC #0001123
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 Authorization # 254
 33765 | 727.441.4504
 1188 Kapp Drive | Clearwater, Florida

| | | |
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| CITY OF TAMPA TRANSPORTATION DEPARTMENT | | |
| CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID |
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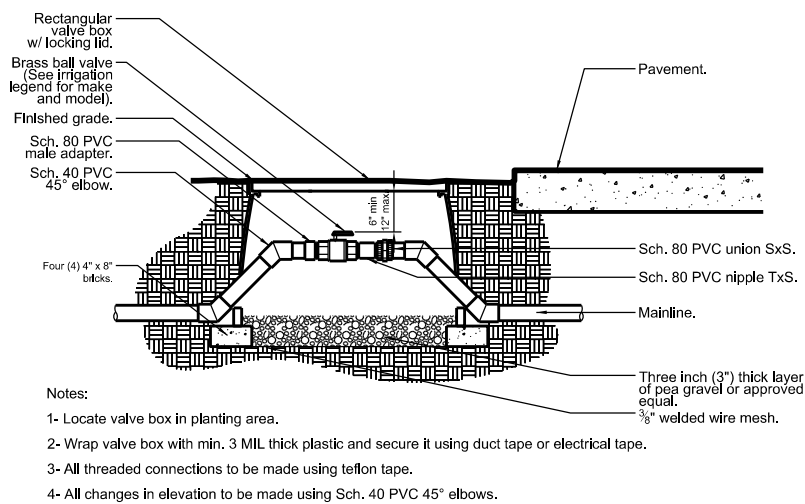
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| PLANTING DETAILS 2 | |
| SHEET NO. L20 | |

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E REMOTE CONTROL VALVE WITH PRESSURE REGULATOR

NTS



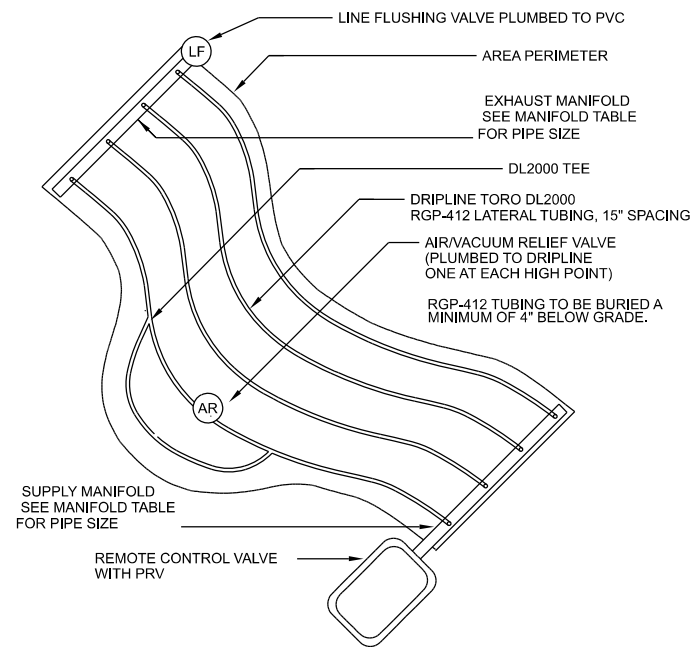
- Notes:
- 1- Locate valve box in planting area.
 - 2- Wrap valve box with min. 3 MIL thick plastic and secure it using duct tape or electrical tape.
 - 3- All threaded connections to be made using teflon tape.
 - 4- All changes in elevation to be made using Sch. 40 PVC 45° elbows.

A BALL VALVE 4" AND LARGER
1 1/2" = 1'-0"

| GALLONS PER MINUTE (GPM) | MANIFOLD PIPE SIZE, PVC SCH. 40 |
|--------------------------|---------------------------------|
| 0 - 6 | 3/4" |
| 7 - 10 | 1" |
| 11 - 17 | 1 1/4" |
| 18 - 24 | 1 1/2" |
| 25 - 42 | 2" |
| 43 - 75 | 2 1/2" |

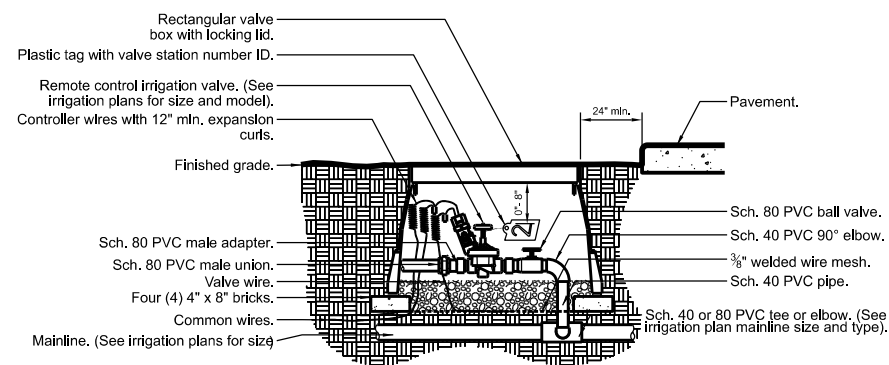
REFER TO EACH DRIPLINE IRRIGATION ZONE ON PLAN DRAWINGS FOR ZONE GPM.

F DRIPLINE SUPPLY AND EXHAUST MANIFOLD PIPE SIZE TABLE



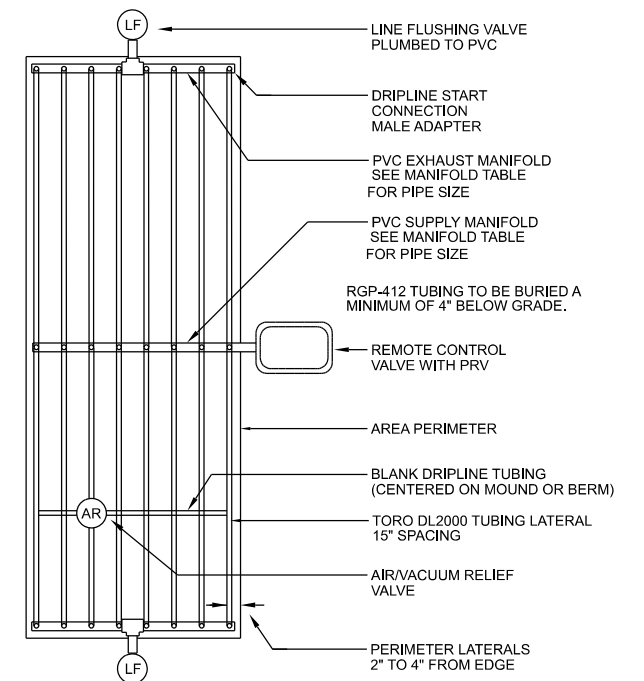
NTS

G IRREGULAR AREAS: ODD CURVES



- Note:
- 1- Locate valve box within 24" of pavement edge in planting area where easily accessible whenever possible.
 - 2- Common wire and controller wire shall be direct burial 14 AWG or larger. Color: Common (white), controller wire for turf (blue), and controller wire for shrubs (red). (See specifications for 2-wire controllers).
 - 3- All wire runs shall be continuous without any splices unless approved by the Owner's Representative. See splice box detail. Wire connections shall be made using DBR/Y-6 connectors or approved equal.
 - 4- Valve box shall be wrapped with min. 3 mil thick plastic and secure it using duct tape or electrical tape.
 - 5- Mainlines 4" or larger shall use saddles at the connections points to the irrigation valve. (See specifications for Irrigations saddles).
 - 6- All Sch. 80 PVC to Sch. 40 PVC threaded connections shall be made using teflon tape.
 - 7- Valve boxes shall be located in planting areas.

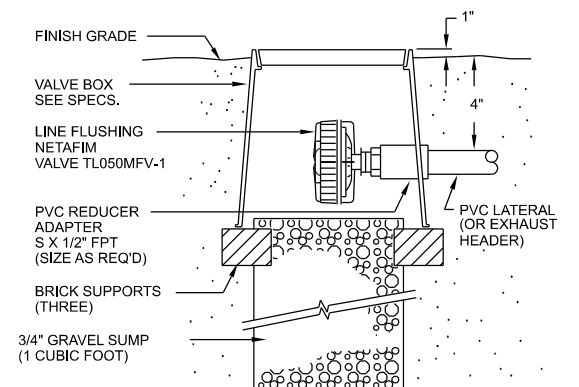
B REMOTE CONTROL IRRIGATION VALVE
1 1/2" = 1'-0"



NTS

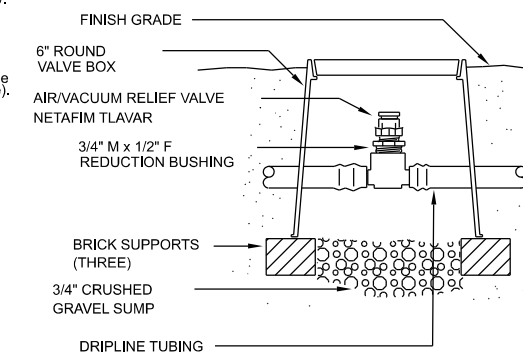
H CENTER FEED LAYOUT

NOTE: MAXIMUM VALVE FLOW RATE, 32 LPM. USE MULTIPLE FLUSH VALVES AS ZONE FLOW RATE REQUIRES. REFER TO PLANS FOR TOTAL ZONE FLOW RATE.



NTS

D LINE FLUSHING VALVE



NTS

C AIR/VACUUM RELIEF

| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

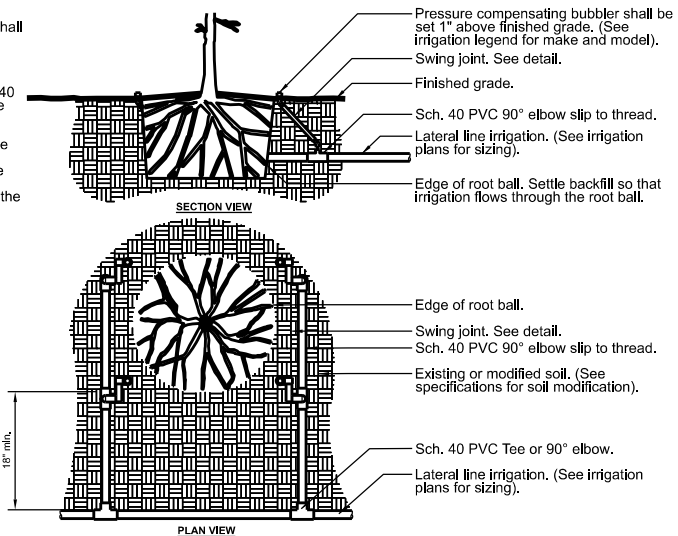
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| CITY OF TAMPA TRANSPORTATION DEPARTMENT | | |
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| CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID |
| 1001220 | HILLSBOROUGH | 437246-1-58-01 |

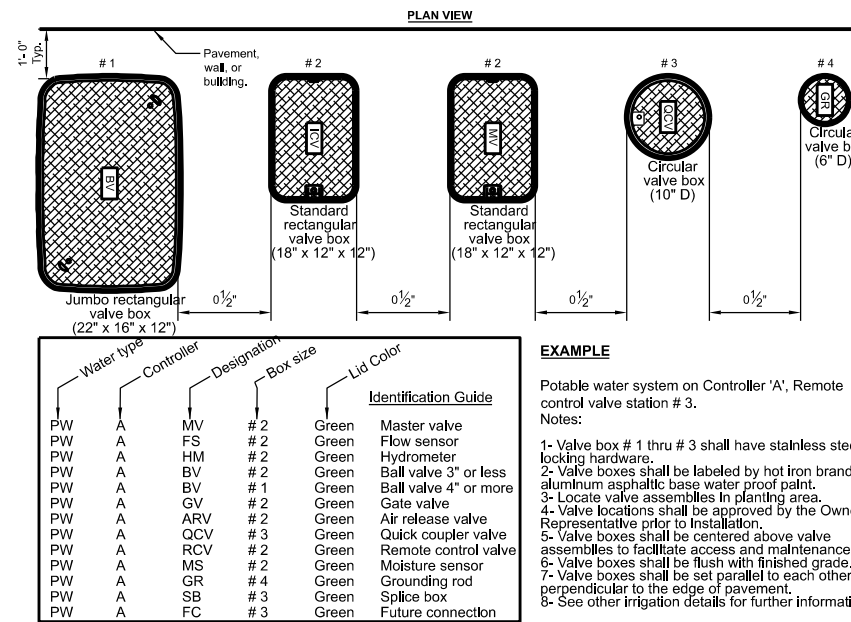
IRRIGATION DETAILS 1

SHEET NO.
L22

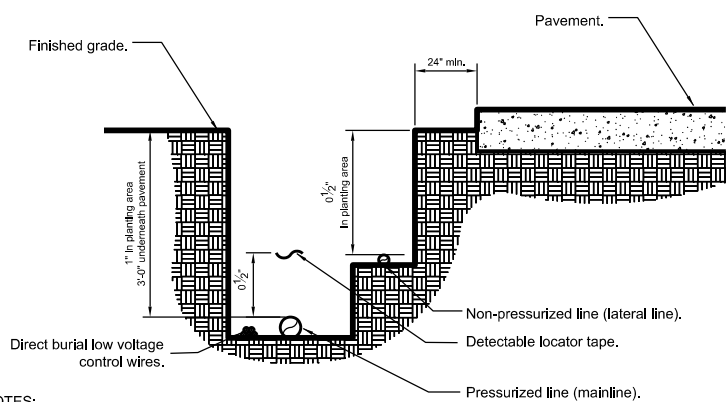
- Notes:
- 1- All irrigation fittings shall be Sch. 40 PVC unless specified otherwise.
 - 2- All threaded connections from Sch. 40 to Sch. 80 PVC shall be made using teflon tape.
 - 3- Contractor shall settle the area around the bubbler and edge of the root ball so that all irrigation flows through the root ball.



J IRRIGATION BUBBLER (4) W/ LAYOUT
3/4" = 1'-0"



K VALVE BOX LAYOUT
1" = 1'-0"
VALVE BOX SHALL BE CONCRETE WITH CAST IRON LIDS

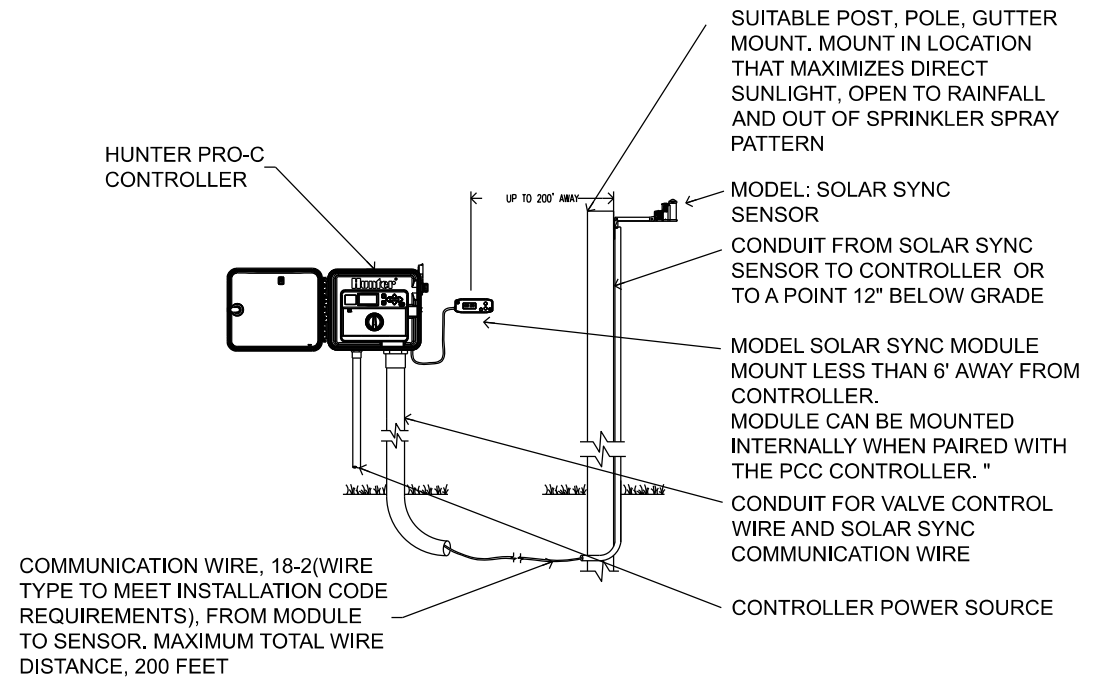


- NOTES:
- 1- See irrigation legend for mainline and lateral line pipe size and type.
 - 2- Direct burial control wires shall be installed in Sch. 40 PVC electrical conduit if required.
 - 3- 2-wire irrigation wire shall be installed in Sch. 40 PVC electrical conduit.
 - 4- Detectable locator tape shall be located six inches (6") above the entire mainline run.

L IRRIGATION TRENCHING
1 1/2" = 1'-0"

| NOZZLE SELECTION CHART FOR SPRINKLERS | | | | | |
|---------------------------------------|--------------|-----|------|----------|---------------------|
| SHRUB SPRAYS & BUBBLER HEADS | | | | | |
| SYMBOL | SPEC#/NOZZLE | PSI | GPM | RADIUS | PATTERN |
| ●●●● | 15F | 30 | 4 | 15' | FULL |
| | 15A | 30 | 3 | 15' | THREE QUARTER |
| | 15A | 30 | 2.6 | 15' | TWO THIRD |
| | 15H | 30 | 2 | 15' | HALF |
| | 15A | 30 | 1.4 | 15' | ONE THIRD |
| ●●● | 15Q | 30 | 1 | 15' | QUARTER |
| | 15EST | 30 | 0.6 | 4' x 15' | END STRIP |
| | 15CST | 30 | 1.2 | 4' x 30' | CENTER STRIP |
| | 9SST | 30 | 1.2 | 9' x 18' | SIDE STRIP |
| ●●●●● | 15SST | 30 | 1.45 | 4' x 30' | SIDE STRIP |
| | 12F | 30 | 2.1 | 12' | FULL |
| | 12A | 30 | 1.5 | 12' | THREE QUARTER |
| | 12A | 30 | 1.3 | 12' | TWO THIRD |
| | 12H | 30 | 1.1 | 12' | HALF |
| ●●●● | 12A | 30 | 0.9 | 12' | ONE THIRD |
| | 12Q | 30 | 0.8 | 12' | QUARTER |
| ●●●●● | MSBN10F | 30 | 1 | 1' | FULL STREAM BUBBLER |
| | MSBN50H | 30 | 0.5 | 1' | HALF STREAM BUBBLER |
| ●●●●● | MSBN25Q | 30 | 0.25 | 1' | QTR. STREAM BUBBLER |
| TURF ROTORS | | | | | |
| AA | PGP-ADJ-LA-7 | 40 | 3.1 | 32' | ADJ. FULL |
| BB | PGP-ADJ-LA-8 | 40 | 3.9 | 34' | ADJ. FULL |
| CC | PGP-ADJ-LA-9 | 40 | 5 | 37' | ADJ. FULL |
| DD | I-25-ADS-4 | 40 | 3.8 | 40' | ADJ. FULL |
| EE | I-25-ADS-7 | 40 | 6.6 | 45' | ADJ. FULL |
| FF | I-25-ADS-8 | 40 | 7.7 | 47' | ADJ. FULL |
| GG | I-40-ADS-40 | 50 | 8 | 46' | ADJ. FULL |
| HH | I-40-ADS-41 | 50 | 10.2 | 52' | ADJ. FULL |
| II | I-40-ADS-43 | 50 | 14.2 | 58' | ADJ. FULL |
| JJ | I-60-ADS-7 | 40 | 6.5 | 50' | ADJ. FULL |
| KK | I-60-ADS-13 | 40 | 10 | 56' | ADJ. FULL |
| LL | I-60-ADS-18 | 40 | 15 | 59' | ADJ. FULL |

- TREE BUBBLER NOTES:**
1. LARGER TREES REQUIRE MULTIPLE BUBBLERS. USE THE FOLLOWING CHART TO DETERMINE THE NUMBER OF BUBBLERS. BUBBLER SIZES INDICATED ON PLANS
- | CONTAINER SIZE | BUBBLERS |
|----------------|----------|
| 15 GAL | 1 |
| 30 GAL | 2 |
| 45 GAL | 3 |
| 60 GAL | 4 |
| B&B | 4 |
| PALM | 2 |
2. TREE BUBBLER WILL BE INSTALLED ON SEPARATE ZONES. DO NOT INCLUDE BUBBLERS ON ROTOR OR SPRAY ZONES. SYSTEM IS DESIGNED FOR BUBBLERS ON SEPARATE ZONES.
 3. BUBBLER PIPING NOT INDICATED IN ALL INSTANCES FOR GRAPHIC CLARITY



M SOLAR SYNC SYSTEM
SCALE: 1" = 1'-0" IRRIGATION DETAIL

| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

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| IRRIGATION DETAILS 2 | |
|----------------------|-----------|
| DATE | SHEET NO. |
| | L23 |

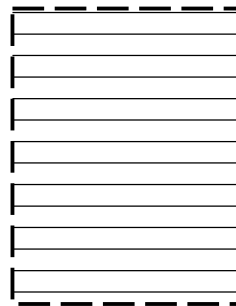
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IRRIGATION LEGEND



CONTROLLERS/VALVES: HUNTER NODE 1-STATION CONTROLLER
 PROVIDE A HUNTER NODE BATTERY POWERED VALVE CONTROLLER
 AT EACH LOCATION AS SHOWN ON PLANS
 INSTALL PER MANUFACTURER'S RECOMMENDATIONS. GENERAL
 COORDINATE WITH CITY OF TAMPA PARKS/IRRIGATION DIVISION
 SHOW ON AS-BUILTS WITH TRANGLE DIMENSIONS FROM FIXED OBJECT

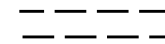
REMOTE CONTROL VALVES: HUNTER NODE-100 SINGLE STATION
 OR NODE 200 TWO STATION
 IN LOCATIONS AS SHOWN ON PLANS. INSTALL IN
 CONCRETE VALVE BOX WITH CAST IRON LID.



NETAFIM DRIP IRRIGATION TUBING. 12" ON CENTER
 SPACING OF TUBING WITH EMITTERS
 12" ON CENTER. INSTALL AS PER DIAGRAMS
 PROVIDED ON PLANS. USE FILTERS
 AND AIR RELIEF VALVES AS INDICATED.



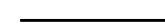
TREE BUBBLERS: HUNTER PRO-SPRAY WITH MSBN NOZZLE; 1 GPM
 INSTALL AT PERIMETER OF ROOTBALL. SEE NOTES FOR
 REQUIRED NUMBER OF BUBBLERS PER TREE



INDICATES PVC SCH 40 SLEEVE SIZED TWO PIPE SIZES LARGER
 (INSIDE DIAMETER) THAN LATERAL LINE "WET PIPE" INDICATED ON
 PLAN.



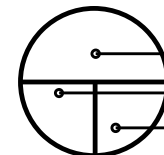
SCH 40 PVC MAINLINE-2" (LOCATE IN PLANTING AREAS NOT UNDER
 PAVEMENT EXCEPT IN SLEEVES, AS SHOWN ON PLAN)
 INSTALL IN TRENCH WITH LOCATOR TAPE.



INDICATES PVC LATERAL LINE:
 CLASS 200 = 3/4" LINE OR SMALLER CLASS 160 = 1"+ LINE



P.O.C.: LANDSCAPE CONTRACTOR TO COODINATE INSTALLATION OF 1-1/2" POTABLE WATER METER
 W/ BACKFLOW PREVENTER AS REQUIRED BY LOCAL
 ORDINANCE. IRRIGATION CONTRACTOR TO VERIFY THAT PSI AND GPM OF METER
 ARE ADEQUATE FOR SYSTEM. CONTACT LANDSCAPE ARCHITECT IF
 THERE IS A DISCREPANCY BETWEEN THE PLAN AND SYSTEM AS INSTALLED
 IRRIGATION CONTRACTOR TO PROVIDE
 ENTIRE SYSTEM DOWNSTREAM OF METER, INCLUDING A BALL VALVE SHUT-OFF.




ZONE #
 PSI REQUIRED AT NOZZLE
 GPM

NOTE: ALL MAINLINE AND LATERAL LINES SHALL BE INSTALLED IN
 PLANTING AREAS AND SLEEVED UNDER PAVING AREAS AND ARE ONLY
 DIAGRAMATICALLY LOCATED ON THIS PLAN.

NOTE:
 WHEN DIGGING NEAR EXISTING TREES, FIELD ADJUST HEADS, LINES AND
 TRENCHES TO AVOID CUTTING ROOTS 1/2" AND GREATER IN DIAMETER.

NOTE: IRRIGATION CONTRACTOR SHALL SIZE PIPE SIZES NOT TO EXCEED 5 FPS
 FEET-PER-SECOND OF FLOW RATE. PSI AND GPM AT ALL HEADS SHALL
 MATCH MANUFACTURERS DESIGN SPECIFICATIONS AS CALLED FOR ON PLANS
 DETERMINED BY HEAD TYPE ON CHART.

| REVISIONS | | | |  TERRA TECTONICS design group international, inc. LANDSCAPE ARCHITECTS ISA CERTIFIED ARBORISTS URBAN DESIGNERS 1188 Kapp Drive Clearwater, Florida 33765 727.441.4504 | CITY OF TAMPA TRANSPORTATION DEPARTMENT | | | SHEET NO. L21 |
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| DATE | DESCRIPTION | DATE | DESCRIPTION | | CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID | |
| | | | | | 1001220 | HILLSBOROUGH | 437246-1-58-01 | |

46th Street Walk/Bike Roadway Plan

Streetscape Maintenance Plan Narrative:

The project falls within the USADA Zone 9-9A, with minimum temps between 26-32 degrees F, but only every few years. This project is surrounded by mostly residential and some industrial areas. It can be expected that this landscape will be subjected to incoming winter fronts from the NW and then summer daily rain from June to September with a drastic increase during tropical storms and hurricanes. Summers are typically very hot humid and frequent rainfall in the afternoons. Temperatures in the roadway edges can be harsh as it is surrounded by roadway asphalt & development. The summer warm evening temps can have the tendency to create conditions conducive to fungus production when combined with the high daily rainfall. Supplemental truck watering if needed, and also use of the proposed supplemental irrigation system, will be the source of supplemental watering. Supplemental watering will be required to establish the plantings after installation.

MAINTENANCE PLAN:

Maintenance to be done on the same schedule as the current City of Tampa schedules. This to be on a bi-weekly basis from April through September and a month basis September through March. This includes litter pickup, mowing, edging weed removal and line trimming Pruning, fertilization and mulch replenishment to be done on an annual or semi-annual basis

Mowing:

The final project surface will be completed with Bahia sod in all areas not defined as plant bed. The mowing to be to a height of 3". This is to remove the seed heads from weeds and help control the invasive weeds. It can also be controlled by applications of specific herbicides, according to manufacturer's directions and frequency, to control initial weed growth after construction.

Edging:

Edging to be performed around the rootball perimeter of the street tree and palm root balls, with a diameter of 6' for each tree and palm. This to coincide with the mowing schedule.

Weeding:

Use of herbicides is encouraged to minimize hand pulling of weeds along the edge of the busy roadway. Care should be taken not to overspray onto the leaves of the desired landscape plantings. Correct applications of the proper herbicides have been proven to work effectively to reduce weeds, but not harm the trees and palms. Only Florida State licensed applicators will be permitted to apply herbicides.

Mulch:

Frequent observation and replacement of mini-pine bark mulch as required to maintain a 2-3" cover will help reduce invasive weeds. Spot mulch, semi-annually as needed for areas that need mulch cover. Contractor to replenish Mulch to a 3" depth at the end of the 12-month warranty period prior to turning the site over to the City Staff for, maintenance.

Pruning:


The plant selections are chosen for their habit of maintaining a small size and pruning should not be required other than an annual trimming of overgrown palm fronds and branches. Dead tree limbs need to be removed as soon as they are seen.

Fertilization:

The trees, shrubs and ground covers to be fertilized annually in March. Use a Time-release 2-8-10 Osmocote or equal, and according to manufacturer's recommendations for the particular plant material. Do not Fertilize in summer months, Check local ordinances for times of non-fertilization within City of Tampa.

Watering:

The watering to be by either Truck Watering or the proposed In-Ground Automatic Irrigation. Water source for the in-ground irrigation system to be a tap into the existing 12" potable water main and location is shown on plans. Water meter bills to be the responsibility of the Landscape Contractor up to Final Acceptance and then during the 12-month Warranty Period. After the 12-month Warranty Period, the City of Tampa to either abandon-in-place the irrigation system, and truck water if needed. After the 12-month Warranty Period, the City of Tampa will be responsible for watering.

| REVISIONS | | | |  TERRA TECTONICS design group international, inc. LANDSCAPE ARCHITECTS ISA CERTIFIED ARBORISTS URBAN DESIGNERS 1188 Kapp Drive Clearwater, Florida 33765 727.441.4504 | CITY OF TAMPA TRANSPORTATION DEPARTMENT | | | LANDSCAPE MAINTENANCE NOTES | SHEET NO. |
|-----------|-------------|------|-------------|--|--|--------------|----------------------|-----------------------------------|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID | | |
| | | | | | 1001220 | HILLSBOROUGH | 437246-1-58-01 | | L21 |

TECHNICAL MAINTENANCE PLAN – 180 DAYS

| OPERATION | 180 DAY CONTRACTED MAINTENANCE WEEKLY CYCLE | | | | CITY OF TAMPA COMMITMENT ON YEARLY CYCLE | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--|---|---|---|--|---|---|---|------|---|-----|-----|-----|---|-----|------|------|-----|------|-----|-----|-----|--|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9-12 | 13-26 | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC | | | |
| WATERING # DAYS | 7 | 7 | 7 | 7 | 4 | 4 | 4 | 4 | 2 | 1 | | | | | | | | | | | | | | | |
| | Watering by truck must be performed each week of the 180 day maintenance period at the frequency indicated (see chart for Water Application Rates). Saturate tree well completely. | | | | | | | | | City shall water once a week or as needed after the 180 day contracted maintenance period (during drought periods) using a City water truck. | | | | | | | | | | | | | | | |
| WEEDING/ LITTER PICKUP | X | | | | X | | | | X | X | X | X | X | Weeding every 14 days as indicated using an approved herbicide such as "Roundup"(Glyphosate) or equal applied at the rate of 1 1/2 oz. per gallon and applied by a licensed applicator or under the supervision of a licensed applicator. Litter pick up must be performed prior to application of herbicide. | | | | | | | | | | | |
| PRUNING | As needed to mechanically remove damaged branches. Contractor shall maintain State of Florida #1 form to attain final acceptance. | | | | | | | | | Pruning shall be accomplished using chain saws, hand saws, and/or lopping shears. Shrubs shall be pruned yearly to a height appropriate to species, use and location. | | | | | | | | | | | | | | | |
| FERTILIZING | Trees, palms, shrubs and groundcovers shall be fertilized when planted per detail & specifications. | | | | | | | | | Trees, palms, shrubs and groundcovers to be fertilized annually per manufacturer's specifications. | | | | | | | | | | | | | | | |
| MOWING | Every 14 days leaving 3" in height. | | | | | | | | | Every 14 days leaving 3" in height. | | | | | | | | | | | | | | | |
| EDGING | Every 14 days by mechanical means. | | | | | | | | | Every 14 days by mechanical means. | | | | | | | | | | | | | | | |
| MULCHING | Mulch shall be applied immediately after watering of each plant. See Plant List for mulch types/depth to be used. | | | | | | | | | Restore 3" layer of mulch once a year. See Plant List for mulch types to be used. | | | | | | | | | | | | | | | |

WATER APPLICATION RATES


(For non-irrigated areas if applicable)

| | |
|----------------------|--|
| Trees and Palms | Saturate to 3' depth. Flood tree well or Ooze Tube. |
| Shrubs | 2 gallons per plant, sprayed over entire planting bed. |
| Groundcovers/grasses | 1 gallon per plant, sprayed over entire planting bed. |
| Turf | Saturate turf area to 1" prepared soil depth. |

NOTE:

FERTILIZER APPLICATION RATES

| | |
|----------------------|---|
| Trees and Palms | Fertilizer per details and manf. specifications shall be applied at time of planting and once annually. |
| Shrubs | Fertilizer per details and manf. specifications shall be applied at time of planting and once annually. |
| Groundcovers/Grasses | Fertilizer per details and manf. specifications shall be applied at time of planting and once annually. |

| REVISIONS | | | |  TERRA TECTONICS <small>design group international, inc.</small> LANDSCAPE ARCHITECTS ISA CERTIFIED ARBORISTS URBAN DESIGNERS 1188 Kapp Drive Clearwater, Florida 33765 727.441.4504 | CITY OF TAMPA TRANSPORTATION DEPARTMENT | | | <h2 style="margin: 0;">TECHNICAL MAINTENANCE PLAN</h2> | SHEET NO. |
|-----------|-------------|------|-------------|---|--|----------------|----------------------|--|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | CITY PROJECT NO. | COUNTY | FINANCIAL PROJECT ID | | L24 |
| | | | | 1001220 | HILLSBOROUGH | 437246-1-58-01 | | | |