



#### Radio Road Beautification M.S.T.U.

Advisory Committee 8300 Radio Road Naples Florida 34104

#### NOVEMBER 14, 2022 3:00 PM

## AT BERKSHIRE LAKES MASTER ASSOCIATION CLUBHOUSE 495 BELVILLE BLVD.

Others are encouraged to attend via Zoom video conference

#### **AGENDA**

- I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE
- II. ATTENDANCE

Advisory Committee Dale Lewis, Chairman (3/3/24)

Maria Schoenfelder Vice Chairman (3/3/25)

Michael Cashman (3/3/26) Frank Cooper (3/3/24) Harry Wilson (3/3/25)

Staff Harry Sells- Project Manager,
Landscape Robert Kindelan - Superb Landscape

Transcriptionist Wendy Warren

- III. APPROVAL OF AGENDA
- IV. APPROVAL OF MINUTES: September 12, 2022
- V. LANDSCAPE MAINTENANCE REPORT ROBERT KINDELAN, Superb Landscape
- VI. PROJECT MANAGER REPORT HARRY SELLS
  - A. Review Current Budget Report 11/14/2022
  - B. Ian Discussion
  - C. Site line issues at Appleby, removal of plants
  - D. Status of Irrigation system
  - E. Rich King Refurbishment Status Report
- VII. OLD BUSINESS
  - A. Discussion of Budget Reserve Policy, Maintenance Plan
- VIII. NEW BUSINESS
  - IX. COMMITTEE MEMBER COMMENTS
  - X. PUBLIC COMMENTS
  - XI. ADJOURNMENT

NEXT MEETING: DECEMBER 12, 3:00 PM 495 BELVILLE BLVD.



#### Radio Road Beautification M.S.T.U. Advisory Committee 8300 Radio Road Naples Florida 34104

September 9, 2022

#### I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Chair Lewis called the meeting to order at 3:00 PM.

A quorum of three was present. The Pledge of Allegiance was recited.

#### II. ATTENDANCE

Advisory Committee: Dale Lewis, Chairman; Maria Schoenfelder, Vice-Chair.

Michael Cashman (Excused); Frank Cooper; Harry Wilson

County Staff: Harry Sells, Project Manager; Michelle Arnold, Director PTNE (Excused);

Rosio Garcia, Operations Coordinator (Excused)

Landscape: Robert Kindelan, Superb Landscape Services (Excused)
Others: Wendy Warren, Premier Staffing, Transcriptionist

#### III. APPROVAL OF AGENDA

Mr. Cooper moved to approve the Agenda of the Radio Road Beautification M.S.T.U. Second by Chair Lewis. Carried unanimously 3 - 0.

#### IV. APPROVAL OF MINUTES – August 8, 2022

Mr. Wilson moved to approve the minutes of the August 8, 2022, meeting as presented. Second by Mr. Cooper. Carried unanimously 3 - 0.

#### V. LANDSCAPE MAINTENANCE REPORT – Harry Sells

Mr. Sells reported:

- Overall median landscaping is in good condition.
- Gold Mound shrubs were planted to fill voids in the first two medians on Devonshire Blvd.

Ms. Schoenfelder joined the meeting. A quorum of four was present.

#### Landscape Maintenance Contract

- The contract is awarded to Superior Landscaping & Lawn Service, Inc., the lowest qualified bidder.
- The contract includes monthly maintenance of the Rich King Memorial Greenway landscaping.
- The three-year contract in the amount of \$72,837.27, with two (2) one-year renewal options, is subject to approval by the Board of County Commissioners (BCC).
- Effective contract date is December 12, 2022.

#### Median Landscaping

The Committee discussed removal of Juniper shrubs between the palm trees from the medians on Devonshire Boulevard. Modification to the irrigation system to one (1) zone will be considered.

Chair Lewis motioned to remove the Juniper bushes from the medians on Devonshire Boulevard. Second by Vice Chair Schoenfelder. Carried unanimously 4 - 0.

#### VI. PROJECT MANAGER REPORT – Harry Sells

#### A. Review Current Budget Report 9/12/2022

Radio Road MSTU Fund Budget 158 dated September 12, 2022

- The FY-22 millage rate of 0.0000, was approved by the Board of County Commissioners (BCC).
- The FY-22 budget will be funded by Carry Forward Funds.
- Transfers and Contributions, Line 11, are \$519,495.00; a carry-over of unexpended FY-21 funds.
- Total Revenue, Line 12, is \$522,895.00, including investment interest, transfers, contributions, and expenditures.
- Purchase Orders: (Contractors)
  - ➤ Hannula Landscaping Landscape & Irrigation for Rich King Entryway.
  - ➤ Hart's Electrical Electrical Maintenance & Irrigation Repairs.
  - ➤ Howard Fertilizer Fertilizer.
  - ➤ MAR Green Resource Fertilizer. *Closed*
  - ➤ McGee & Associates Landscape Architecture; Rick King Refurbishment Plan Review. Closed.
  - ➤ Naples Electric Motor Works Mixing Chamber Pump. *Closed*.
  - > Premier Staffing Transcription Services.
  - ➤ SiteOne Landscape Supply Irrigation Parts & Pumps.
  - Superb Landscape Services
    - o Incidentals is for landscape refurbishment and miscellaneous.
    - o Grounds Maintenance includes irrigation repairs.
- Red indicates a Purchase Order has been closed and the money expended.
- Operating Expense, Line 32, is budgeted at \$126,395.00; with current Commitments of \$17,344.64, Expenditures of \$82,475.11, and a Budget Remainder (unspent operating funds) of \$26,575.25.
- Capital Outlay, Line 34, budgeted at \$100,000.00, has a current Commitment of 54,772.66 to fund the *Rich King Memorial Greenway Entrance Project*, Expenditures for invoices paid to Hannula Landscaping in the amount of \$12,818.95 and a Budget remainder of \$32,408.39.
- Transfer to Fund 111, Line 35, in the amount of \$40,700.00, is for M.S.T.U. Staff salaries and accrued County overhead related to M.S.T.U. operations.
- Transfer to the Tax Collector, Line 36, in the amount of \$100.00, is for collection of M.S.T.U. millage as part of the tax bill, currently 0.0000 mills.
- Reserves, Line 39, budgeted at \$255,700.00, is designated for Insurance and Catastrophic damage repair.
- Total Budget, Line 40, lists FY-22 M.S.T.U. budgeted funds at \$522,895.00; with tabulated Commitments of \$72,117.30, Expenditures of \$135,995.43, and a Budget Remainder (total unspent funds) of \$314,782.27. The Budget amount of \$522,895.00 does not change during the fiscal year.

*Unexpended FY-22 funds will be carried-over to the FY-23 budget and recorded as a line item under Transfers & Contributions.* 

#### Reserve for Capital

- Funds from Reserves, Line 39, can be accessed for current year expenditures or to finance special projects consistent with the M.S.T.U. Ordinance, upon a recommendation by the Advisory Committee and approval by Board of County Commissioners (BCC).
- The *Capital Maintenance Plan*, which identifies community assets and defines financial requirements to maintain these assets, as well as reserves for catastrophic events, are reflected in the Budget as *Capital for Reserve*.

Establishing a Reserve Policy will be added to the November meeting Agenda as a topic for discussion.

#### **B.** Status of Irrigation System

Devonshire Blvd.

- Overall, the system is functioning properly.
- The three (3) solar panels are working well.
- Four (4) failed valves were replaced.

#### Proposed Radio Road at Devonshire Blvd. and Countryside Dr. Intersection Improvements.

- The Road Maintenance Division and Traffic Operations plan to modify the Radio Road left turn lanes at the intersection of Devonshire Blvd. and Countryside Dr. by twelve (12) feet.
- The main water line for Devonshire Blvd. runs under the roadway and must be relocated.
- The Road Maintenance Division will prepare the contract, perform the work, and install a new irrigation line parallel to the County's line.
- Funds for the irrigation line relocation will be expensed from the M.S.T.U. Capital Outlay budget after installation.

The Committee will be apprised of the timeline and cost for the irrigation line construction by Staff at a future meeting.

#### C. Rich King Refurbishment Status Report

The Board of County Commissioners awarded Contract No. 21-7941 in the amount of \$67,591.61, to Hannula Landscaping and Irrigation, Inc. for landscaping the south entry of the Rich King Memorial Greenway on Radio Road.

- Plant material was installed.
- Irrigation is functioning as intended.
- Gravel will be installed as indicated on the design drawings.
- Permission will be requested to close the roadway during sod installation.
- Paver installation for two (2) paver pads for benches and the area between the sidewalk and the street is estimated for November December 2022.
- A graphic of a custom-built bench style with an option to place a commemorative plaque, was presented for Committee consideration. The bench proposed is currently in use on Vanderbilt Drive, has proven to be durable and easy to maintain.

The Committee will review bench styles at the November meeting. Lead time for bench production and delivery is one (1) to two (2) months.

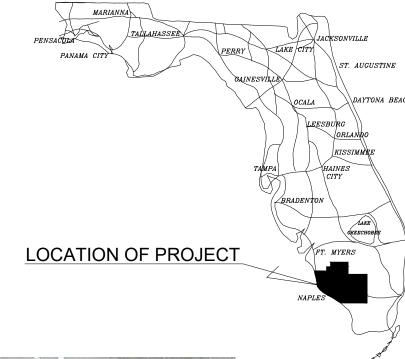
VII.	None None
VIII.	NEW BUSINESS
	Chair Lewis motioned to cancel the October 10, 2022, meeting of the Radio Road Beautification M.S.T.U. Advisory Committee reserving the right to schedule a special meeting if necessary. Second by Mr. Cooper. Carried unanimously 4 - 0.
IX.	COMMITTEE MEMBER COMMENTS
	None
Χ.	PUBLIC COMMENTS
	None
XI.	ADJOURNMENT
	There being no further business to come before the Committee, the meeting was adjourned by the Chair at 3:32 P.M.
	NEXT M.S.T.U. MEETING
	NOVEMBER 14, 2022 - 3:00 PM
	495 Belville Boulevard
	Naples, Florida 34104
	RADIO ROAD MSTU ADVISORY COMMITTEE

#### **INDEX OF PLANS**

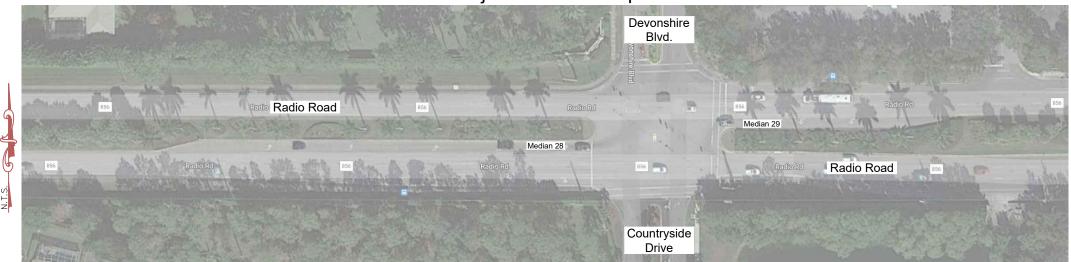
SHEET NO.	SHEET DESCRIPTION
0	Cover
1	Schedule of Quantities
2	Existing Landscape Plan
3	Proposed Landscape Plan
4	Landscape Details
5	Landscape Notes
6	Soil Specifications
7	Tree Relocations
8	Existing Irrigation
9	Proposed Irrigation - Median 28
10	Proposed Irrigation - Median 29
11	Irrigation Details
12	Irrigation Details
13	Irrigation Notes

## COLLIER COUNTY BOARD OF COUNTY COMMISSIONERS

LANDSCAPE & IRRIGATION INTERSECTION IMPROVEMENT PLANS ON RADIO ROAD @ DEVONSHIRE BOULEVARD



**Project Location Map** 



CALL BEFORE YOU DIG!



	REVISIONS			
No.	DATE	BY	DESCRIPTION	



This item has been digitally signed and sealed by Katherine A. Chachere, RLA on [DATE].

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Attention is directed to the fact that these plans may have been reduced in size by reproduction. This must be considered when obtaining scaled data.

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Landscape & Irrigation Intersection Improvement Plans

**Devonshire Boulevard** 

**(B)** 

Radio Road

	LANDSCAPE					
Pay Item #	Qty	иом	Common Name	Scientific Name	Specification	
1	13	EA	Remove Sabal Palms	NA	Remove & dispose of Sabal Palms, remove rootball and fill holes	
2	2	EA	Remove Royal Palms	NA	Remove & dispose of Royal Palms, , remove rootball and fill holes	
3	1	EA	Remove Shrubs	NA	Remove Misc. shrubs in work zone in Medians 28 & 29	
4	7	EA	Remove Magnolia Trees	NA	Remove and dispose of existing Magnolia trees on Goodlette-Frank for Royal relocation	
5	2	EA	Relocate Crape Myrtle*	NA	Prepare & relocate Crape Myrtle tree to a new location shown in plans	
6	16	EA	Relocate Royal Palms*	NA	Prepare & relocate Royal Palms to new locations shown in plans	
7	5	EA	Royal Palm	Roystonea elata	12-16' GW, 5 frond min, FG	
8	5	EA	Montgomery Palm	Veitchia montgomeryana	16-20' Ht., 4 frond min, FG	
9	10	EA	Sabal Palms	Sabal palmetto	16-20' oa ht, booted	
10	6	EA	Peregrina Tree	Jatropha integerrima	25 gallon, standard	
11	600	EA	Muhly Grass	Muhlenbergia capillaris	3 gallon, 36" oc	
12	335	EA	Yellow African Iris	Dietes bicolor	3 gallon, 36" oc	
13	315	EA	Perennial Peanut	Arachis glabrata 'Ecoturf'	1 gallon, 18" oc, full, weed-free	
14	123	CY	Mulch	NA	2" coverage for all new planting areas, Collier County Blend, provide sample for approval	
15	152	СУ	Topsoil	NA	Planting soil per specifications - blend in 4" to new planting areas, provide soil test results from IFAS and a sample for approval	

<sup>\*</sup> Contractor to tag all trees and palms in the field & verify with PM before relocating materials

	IRRIGATION				
Pay Item #	QTY	UOM	Specification		
16	2	EA	Remove (or cut, fill & abandon) existing main line, laterals, valves, & rotors in construction zone		
17	4	EA	Locate existing sleeves, pothole to verify ends, mark location with PVC pipe		
18	1,000	LF	Furnish & install (1) valve common wire, white 10 AWG, solid copper, insulated so it is suitable for direct burial with 2' sweeps		
19	5,700	LF	Furnish & install (6) valve common wires, red 12 AWG, solid copper, insulated so it is suitable for direct burial with 2' sweeps		
20	1,550	LF	Furnish & install (2) valve spare wires, blue 12 AWG, solid copper, insulated so it is suitable for direct burial with 2' sweeps		
21	1,100	LF	3" PVC Schedule 40 gasketed irrigation main line with Harco DIP fittings, purple		
22	120	LF	8" HDPE Class 150 SDR11 extra molecular weight HDPE irrigation sleeving under roadways for existing sleeve extension (from median 28 to median 29)		
23	80	LF	3" HDPE-Class 150 SDR11 Extra molecular weight HDPE Irrigation main line, installed using directional bore		
24	2	EA	8" HDPE to HDPE mechanical clamp		
25	7	EA	3" PVC to PVC mechanical clamp		
26	1	EA	3" PVC to HDPE mechanical clamp		
27	2,400	LF	Furnish & install 1" lateral line PVC pantone purple Schedule 40		
28	400	LF	Furnish & install 1.25" lateral line PVC pantone purple Schedule 40		
29	700	LF	Furnish & install 1.50" lateral line PVC pantone purple Schedule 40		
30	72	EA	Furnish & Install: Toro Pressure Compensating Bubblers (FB-200-ADJ-PC2.00). Includes PVC Pantone purple 522C 1120-1220 Sch 40 solvent. Includes funny pipe and fittings to connect to lateral line in bubbler zone. Use two bubblers for Royal Palms, and one for all other trees.		
31	4	EA	Toro 220-227-X-5, 1.25" 220 Series Brass Electric Solenoid Valve with Pressure Regulator, include a 1.25" Red-White 206 Series Isolation Valve. Install combination units within a Jumbo valve box.		
32	2	EA	Matco 3" Main line Isolation Gate Valve, flanged connection, non-rising stem, square nut		
33	1	EA	Irrigation Main line blow off points. 3" & 1-1/2" D.I.P. & SCH 80 Piping & Fittings, 3" & 1-1/2" manual gate valve, valve boxes & other elements as per detail.		
34	9	EA	Valve Boxes & Splice Box Highline jumbo valve box, Pantone purple with "irrigaiton" on the cover. 6 for valves, 1 for splice box (SPL)		
35	163	EA	Toro 570Z-PRX-12P, Toro 570 PRX Series 12" High Pop-Up Spray head body with inriser pressure regulator and X-Flow shut-off device. Refer to plan for patterns & nozzle ranges.		
36	10	EA	Green Reflective Paving Marker, attach to top of curb at valve & splice box locations (RPG)		
37	22	EA	Omniball, pantone purple, place at the ends of sleeves and at interconnecting pipes as needed		

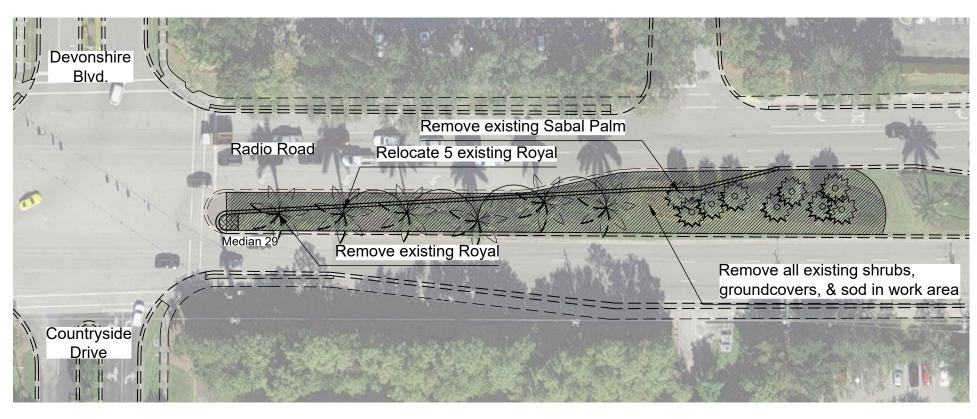
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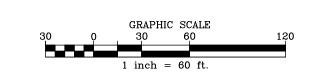
PROJECT

TITLE

DRAWN BY: KAC	DATE:
DESIGNED BY: KAC	DATE:
CHECKED BY: PJL	DATE:
HORIZONTAL SCALE: N	i.T.S.
VERTICAL SCALE: N	i.T.S
DATE:	
September 2022	

## Existing Landscape - Median 28





Existing Landscape - Median 29

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BOARD OF COUNTY COMMISSIONERS
COLLIER COUNTY, FLORIDA
ROAD MAINTENANCE DIVISION
2885 SOUTH HORSESHOE DRIVE

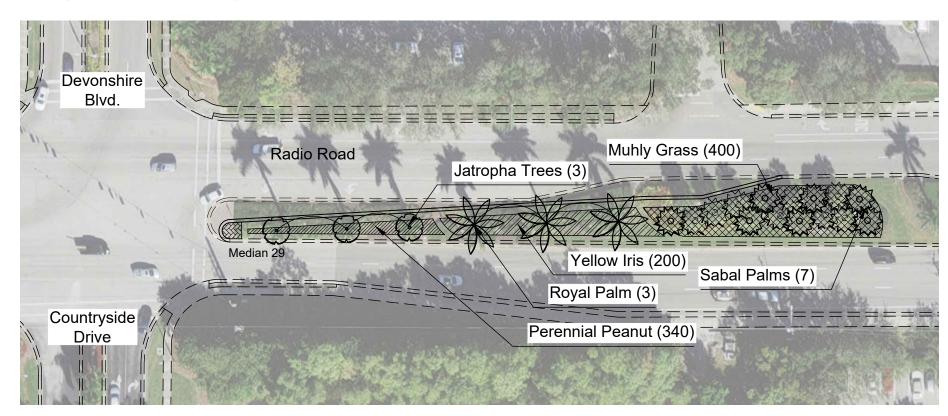
Radio Road @ Devonshire Boulevard Turn Lane Expansion

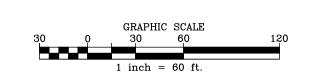
Existing Landscape

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Katherine Chachere FL RLA #6667146 DATE: 2

## Proposed Landscape - Median 28



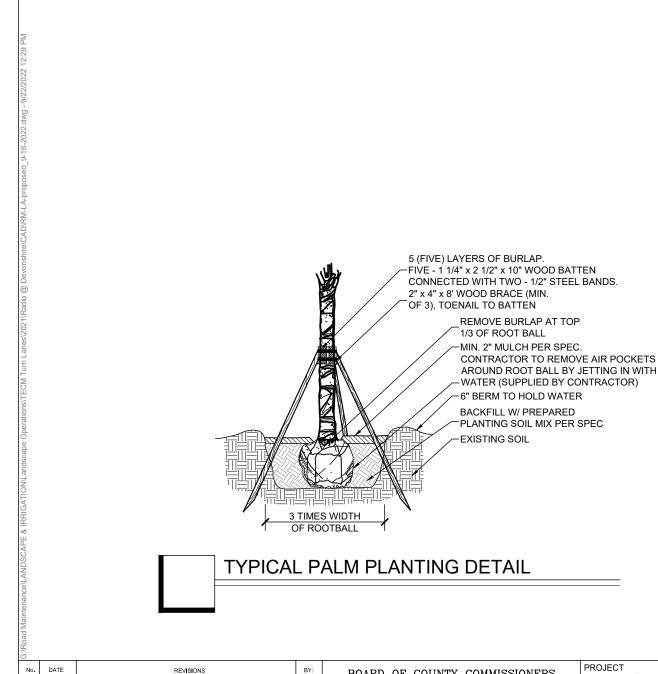


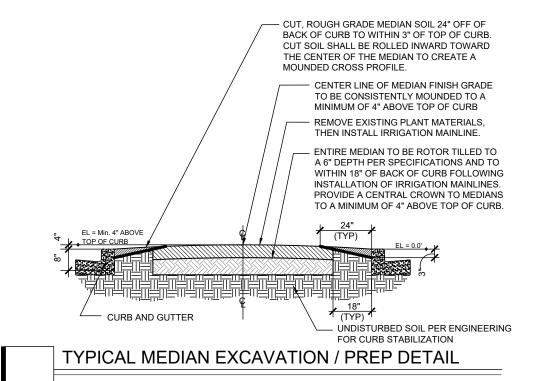
Proposed Landscape - Median 29

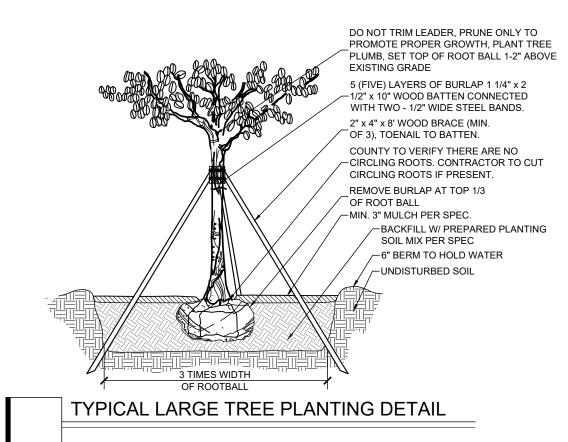
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September 2022		

Katherine Chachere FL RLA #6667146 DATE: 3







BOARD OF COUNTY COMMISSIONERS COLLIER COUNTY, FLORIDA ROAD MAINTENANCE DIVISION 2885 SOUTH HORSESHOE DRIVE NAPLES, FLORIDA 34104 (239) 252-9824

Radio Road @ Devonshire Boulevard Turn Lane Expansion

Landscape Notes & Details

DRAWN BY: KAC	DATE:	
DESIGNED BY: KAC	DATE:	
CHECKED BY: PJL	DATE:	
HORIZONTAL SCALE:	N.T.S.	
VERTICAL SCALE:	N.T.S	
DATE:		

Katherine Chachere FL RLA #6667146

SHEET

PROJECT

DATE: September 2022

#### **GENERAL NOTES**

- 1. All plant material shall be Florida No. 1 or better as specified by the Department of Agriculture's Grades & Standards for Nursery Plants Volume I & II Latest Edition
- All specified sizes for plant material shall be considered the minimum. Plants must meet or exceed these requirements.
- The contractor shall verify the location of all plant material on-site with the landscape architect before planting.
- Mulch, plants, seeding, soil, and sod quantities, as specified in the plant schedule shall be considered estimated only, subject to lump-sum bids, field counts, and measurements.
- Planting beds or areas containing lime rock or otherwise unsuitable growing material as determined by a landscape architect or project manager shall have the material removed to an 18-inch depth and then replaced with clean native topsoil or specified growing quality planting material before plant installation.
- The contractor shall verify the location and mark of all overhead and underground utilities on site and notify the landscape architect of any possible conflicts before starting any work.
- 7. The bidder shall provide unit and total prices for all items listed in the schedules or specified within the plans. Items noted by others or N.I.C. are not within the landscaping and irrigation contract.
- The contractor shall provide to the Landscape Architect As-built/Record Drawings in AutoCAD format. Plans to include highlights of any changes to the approved permitted plans.
- The landscape architect is not responsible for the means and method of installation and construction by the contractor.
- 10. All proposed and preserved existing landscaping shown on the plans requires continuous horticultural maintenance service. The owner or the owner's representatives shall provide for proper plant establishment and continued proper growth of the above-ground foliage and underground root system.
- 11. Construction and installation shall comply with these plans, contract documents, and the FDOT Design Standards, current edition.
- 12. Directional boring of conduit shall comply with the FDOT 2010 Utility Accommodation Manual (UAM), or other current
- The contractor shall submit samples of all products or materials supplied for the project to the project manager. All trees and shrubs shall be approved by the project manager before planting.
- 14. All large canopy trees and palms and shall be installed to maintain a 5-foot separation from underground utilities.
- 15. Installed bid cost for individual canopy trees, palms, or large shrubs planted in turf areas shall include planting soil mix per specifications in the Collier County ROW manual.
- 16. These drawings assume that MOT is covered by General Contractor. Funds may need to be added by the contractor to cover this cost if the GC is unable to provide this service.
- 17. The contractor must provide access to all manholes, valve boxes, etc., in the landscape areas for ongoing maintenance during construction.

#### **EROSION CONTROL NOTES**

- 1. The Contractor shall execute all measures necessary to limit the transport of sediment outside the project's limits to the volume and amount that exist before the commencement of construction. This condition will be satisfied throughout the total anticipated construction period. Provision must be made to preserve the integrity of and capacity of check weirs, sediment basins, slope drains, grading patterns, etc., required to meet this provision throughout construction. The Contractor shall provide hay bales, slit barriers, temporary grassing, etc., as needed to comply with this specification's full intent.
- Erosion control at all inlet drainage structures during construction shall be constructed following Standard Index no. 102.
- If the Prime Contractor has removed erosion control devices due to the completion of roadway work, the landscape contractor must install new erosion control devices.

#### MEDIAN GRADING AND SOIL PREPARATION

- The Contractor will install irrigation mainlines and wiring and stub up valve locations within eight inches of the existing surface grade, marking locations on the curb for reference.
- The Contractor will remove irrigation excavation debris, unsuitable excavated soils, and excess fill.
- The Contractor will cut existing soil to a width of 24" from the back of the curb and to a depth of 3" from the top of the curb and spread the cut fill towards the medians' center to establish a minimum 4" crown.
- 4. Before planting, the Contractor will fine grade medians to a proposed uniform profile per the Typical Median Detail (refer to the Collier County Landscape and Irrigation Specification Handbook for work within the right-of-way).
- The Contractor will remove all debris/rocks in the median larger than 1" in diameter from within the top 4" of the finished grade.
- The landscape architect will approve the final median grades before planting (katherine.chachere@colliercountyfl.gov).

**PROJECT** 

DRAWN BY: KAC	DATE:	
DESIGNED BY: KAC	DATE:	
CHECKED BY: PJL	DATE:	
HORIZONTAL SCALE: N	I.T.S.	
VERTICAL SCALE: N	I.T.S	
DATE:		
September 2022		

#### SOIL SPECIFICATIONS FOR MEDIAN BACKFILL / ACCEPTABLE TOPSOIL

#### PART 1- GENERAL

#### 1.01 SUMMARY

- 1. This section specifies requirements for the preparation, supplying and spreading of acceptable topsoil at a minimum eighteen-inch (18") depth within all roadway medians.
- 2. Beneath the (18" depth) topsoil is a Select (S) Soil which follows FDOT Standard index #505.

#### SEE MEDIAN BACKFILL DETAIL

#### 1.02 QUALITY ASSURANCE

#### A. Qualifications:

1. Testing Agency: Independent testing laboratory as approved by F.D.O.T. and Collier County.

#### B. Test Requirements:

- 1. Before delivery to the construction site, submit a representative one-pound sample of acceptable topsoil for analysis to an independent laboratory to ensure conformance to requirements specified in 2.01. Submit all test results to the Engineer for written approval before delivery.
- After delivery of acceptable topsoil to the construction site, submit a representative one-pound sample for analysis to an independent laboratory to ensure conformance to requirements specified in 2.01. Submit test results to the Engineer for approval. If the delivered sample is not consistent with the sample approved before delivery, the Engineer will reject the delivered topsoil.

#### C. Certification:

- Before the delivery of acceptable topsoil to the construction site, furnish the Engineer with a written statement from the topsoil supplier giving the certification of the soil analysis.
  - a) Manufacturer's certification and/or testing laboratory clarification that content of soil conditioners meet specification requirements.
  - b) Manufacturer's certificate of fertilizer's chemical composition including, but limited to, percentage and derivation of nitrogen, phosphorus, potassium, and micro-nutrients.
  - c) Submit all certifications to Engineer/Landscape Architect a minimum of one week before installation of any material.

#### D. Test Reports:

- 1. Reports shall be identified by project name, date, and soil mix type.
- 2. The following reports are required:
  - a) pH range
  - b) major and minor element analysis
  - c) soluble salt concentrations
  - d) sand fraction analysis
  - e) % Calcium
  - f) Testing laboratory recommendations as to the suitability of soil for planting and drainage.

#### 1.03 DELIVERY, STORAGE, AND HANDLING

 Do not deliver the acceptable topsoil to the construction site until the Engineer has approved in writing the test results for the representative sample.

#### 1.04 SUBMITTALS

- A. Test Reports: Submit laboratory analysis of acceptable topsoil to the Engineer per 1.02 Section D.
- B. Certification: Submit to the Engineer certification required by 1.02.

#### PART 2 - PRODUCTS

#### 2.01 MATERIALS

#### A. Topsoil:

- 1. Topsoil shall be fertile, friable blended, or native sandy soil.
  - Acceptable topsoil shall be of uniform quality, free from hard clods, stiff clay, hardpan, sods, partially disintegrated stone, lime, cement, ashes, slag, concrete, tar residues, tarred paper, boards, chips, sticks, or any other undesirable material.
- 2. There shall be no exotic or noxious weeds or weed seeds (i.e. Nutgrass, Bermuda grass, sedges, and the like).
- 3. In no case shall there be more than 5% by volume of stones, coarse sand, gravel, or clay lumps larger than one inch (1") in diameter.
- 4. Acceptable topsoil shall contain a minimum of 2.5% organic matter, not to exceed 4% as determined by loss on ignition of moisture-free samples and the ph range shall be 5.0 to 7.5 inclusive and shall contain no substance which will impede plant growth.
- 5. Maximum Soluble Salts: 300 ppm
- 6. Acceptable topsoil shall be graded as follows:

PASSING RETAINED ON PERCENTAGE

1" SCREEN 100%

1" SCREEN 2 mm (No. 10) Sieve not more than 5%

- 7. The components of blended topsoil are peat moss and sand (.05-.002 mm) or Florida peat, sand (.05-.002mm), wood chips, and compost.
- A. Test ph of topsoil and planting soil mixtures by the method acceptable to current industry standards. If pH is not between 5.0 and 7.5, add the approved soil conditioner/additive to bring ph within that range.
- B. Within the selected soil range, subsurface drainage is required.
  - 1) Good soil water infiltration and percolation. Water must be able to penetrate and move through the soil; one inch per hour is considered optimal.
  - 2) Good subsurface drainage should be present to a depth of 762 mm (30 inches) 1,219 mm (48 inches) which is the normal critical rooting zone. There should be no impervious layer/hardpan, or soil interfaces to disrupt the flow of water downward and away from the roots.
  - 3) Adequate aeration. Oxygen must be both able to diffuse in from the atmosphere and be able to move readily through the soil profile.
  - 4) Desirable soil should have adequate available water-holding capabilities. Soil should be able to retain 10 percent to 15 percent of the available water after gravitational water has drained away.
- C. Physical Soil Characteristics and Infiltration Rates (Reference: FDOT Soils and Foundation Handbook 2021)

#### PART 3 - EXECUTION

- A. PREPARATION: SEE MEDIAN BACKFILL DETAIL
- B. APPLICATION: SEE MEDIAN BACKFILL DETAIL
- C. CLEANUP

TITI F

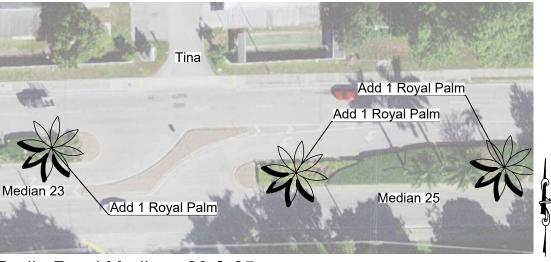
- 1. Immediately clean up spills, soil, and conditioners on paved and finished surface areas.
- 2. Remove debris and excess materials from the project site daily.

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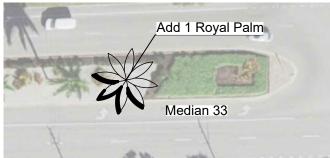
PROJECT

RAWN BY: KAC	DATE:
ESIGNED BY: KAC	DATE:
HECKED BY: PJL	DATE:
ORIZONTAL SCALE: N	.T.S.
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ATE:	
September 2022	





Radio Road Median 27 West Tip



Add 1 Royal Palm

Median 27

### Radio Road Median 33 East Tip

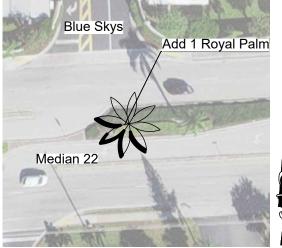
required to optimize the tree's ability to create a strong root system as well as a strong, well grown structured canopy.

B. OVERVIEW: Tree production includes many forms of containers, bags and also in-ground growing techniques. The final product may have potential problems that may not affect the plant in the nursery, but if not corrected could eventually be detrimental to the tree's ability to grow and can

GENERAL GUIDELINES: Trees must meet the Florida Department of Agriculture and Consumer Services Division of Plant Industry's Grades And Standards For Nursery Plants. The tree's root ball should be inspected to make sure that there are no circling roots that cannot be corrected, and that the root initiation zone is visible at the surface of the soil.

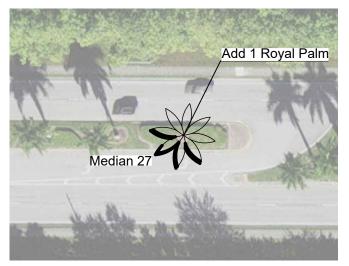
#### C PROCESS:

- 1. Inspect tree for defects both in the canopy and root ball, if not correctable reject the tree
- 2. If planting location not defined, determine location and make sure all utility locates have
- 3. If all utilities are located, and it is safe to dig, dig hole to slightly less than the depth of the tree root ball or container, so that the root initiation zone or top of root ball is visible and will be about 10% above the existing soil level. The hole should be wide enough to make sure that backfill soil can be easily packed around the tree's root ball, eliminating air pockets. Backfill from the hole should be piled as close to the side of the hole as possible, for easy
- 4. B & B material can be carefully placed in the planting hole and adjusted for straightness and position. Once set and stabilized, wire basket and any burlap or other material should be removed at least to a depth of 8 inches. Containerized trees can have the container carefully removed, the root ball checked for circling roots below the surface and make corrective cuts to these roots. This could involve making several up and down cuts around the outside of the root ball, or specifically targeting any offending roots. A third method involves shaving the outside diameter of the root ball ½ inch to several inches depending on container size.
- The tree should then be carefully placed in the planting hole and adjusted for straightness and position. The top of soil, or where the topmost root emerges from the trunk should be planted 5% to 10% higher than the landscape grade
- 6. Place the backfill soil around the root ball, making sure to leave no air space. Water can be used at this time to help wash soil into hidden or difficult to access areas. Fill the hole up equal to the surrounding soil level, the top of the root ball should be 5% to 10% above this
- 7. If needed a small 2 to 3-inch tree well can be developed around the outside of the planting hole, this must be knocked down in 2, but no more than 3 months. Preferably multiple bubbler heads can be placed around tree base to supply consistent water without the need for the planting of the planting that the proof of the planting that the planting for tree ring. Follow the guide for establishment watering times.
- 8. Trees that need staking should be staked at this time, see staking details
- 9. Mulch can be placed around the outside edge of the tree's root ball for a couple to several



Radio Road Median 22

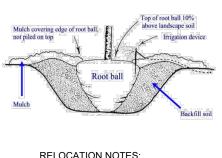
Radio Road Medians 23 & 25



Radio Road Median 27 East Tip

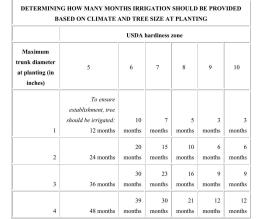


Davis Blvd Median 32



#### **RELOCATION NOTES:**

- Add (2) bubblers per relocated tree Trees to be watered in to remove air
- pockets (contractor to provide water) Watering schedules & zones to be coordinated with Collier County Road Maintenance 239-252-8924.



nded tree size at planting depends on climate and how long trees can be irrigated after planting. For example, if irrigation can be provided for six months after planting ir USDA hardiness zone 9, maximum trunk diameter at planting is two inches. With six months' irrigation, maximum trunk diameter for planting in zone 5 would be about one-half inch. Irrigation inch tree in USDA hardiness zone 5.



**PROJECT** 

Goodlette-Frank, Median 40

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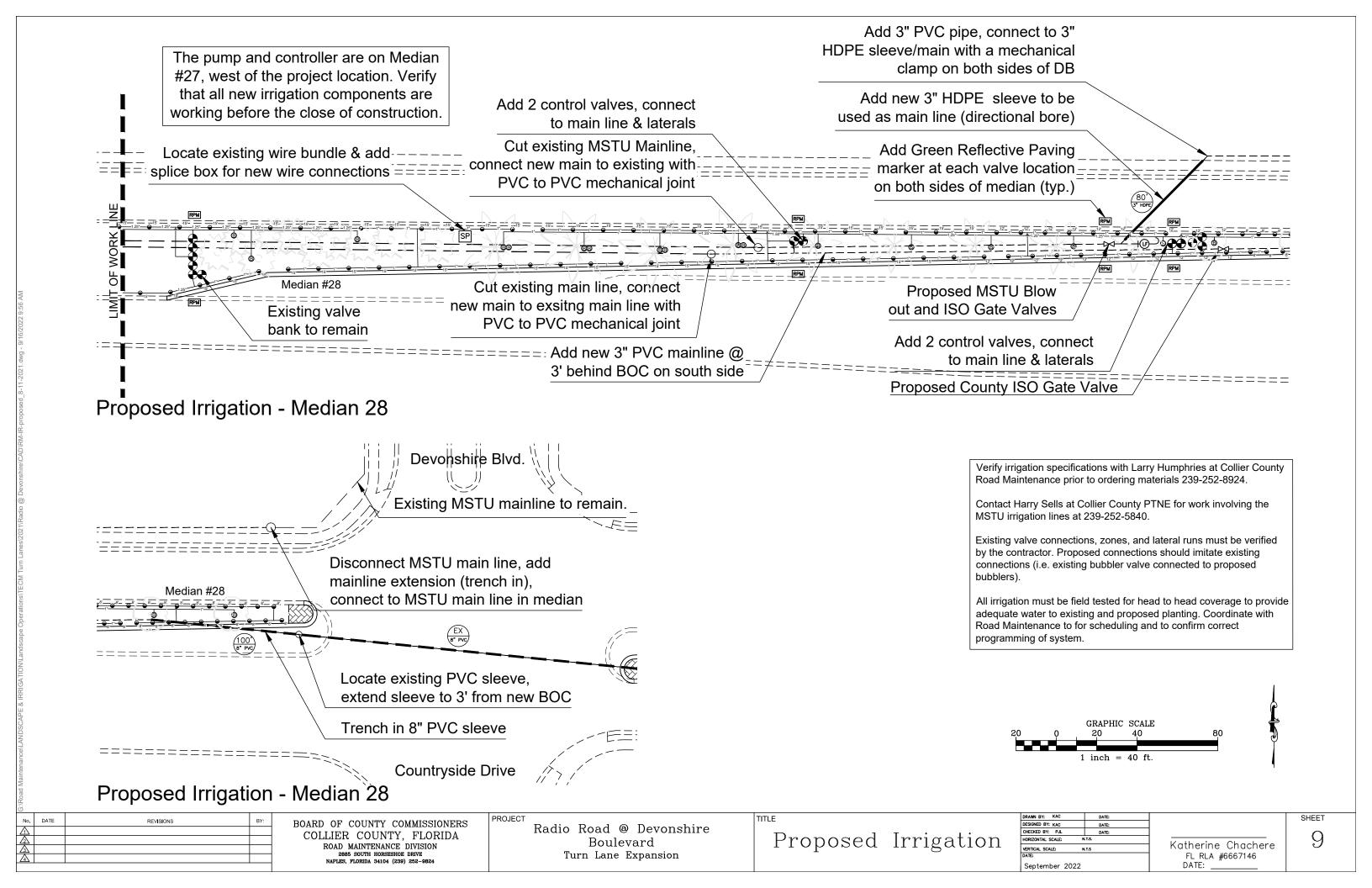
BOARD OF COUNTY COMMISSIONERS COLLIER COUNTY, FLORIDA ROAD MAINTENANCE DIVISION 2885 SOUTH HORSESHOE DRIVE

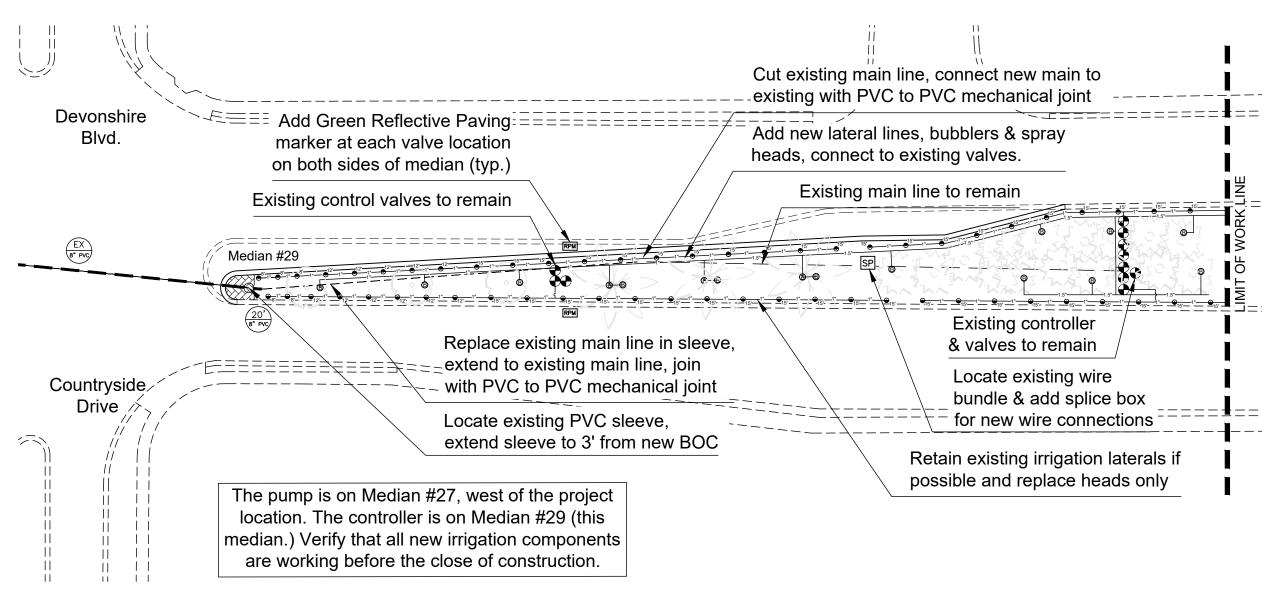
Radio Road @ Devonshire Boulevard Turn Lane Expansion

Relocation Plan

DRAWN BY: KAC	DATE:	
DESIGNED BY: KAC	DATE:	
CHECKED BY: PJL	DATE:	
HORIZONTAL SCALE:	N.T.S.	
VERTICAL SCALE:	N.T.S	
DATE:		
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Katherine Chachere FL RLA #6667146





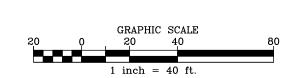
## Proposed Irrigation - Median 29

Verify irrigation specifications with Larry Humphries at Collier County Road Maintenance prior to ordering materials 239-252-8924.

Contact Harry Sells at Collier County PTNE for work involving the MSTU irrigation lines at 239-252-5840.

Existing valve connections and lateral runs must be verified by the contractor. Proposed connections should imitate existing connections (i.e. existing bubbler valve connected to proposed bubblers).

All irrigation must be field tested for head to head coverage to provide adequate water to existing and proposed planting. Coordinate with Road Maintenance to for scheduling and to confirm correct programming of system.



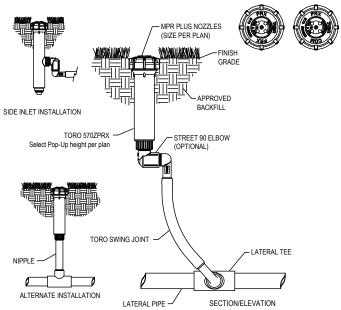
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BOARD OF COUNTY COMMISSIONERS
COLLIER COUNTY, FLORIDA
ROAD MAINTENANCE DIVISION
2885 SOUTH HORSESHOE DRIVE

Radio Road @ Devonshire Boulevard Turn Lane Expansion Proposed Irrigation
Median 29

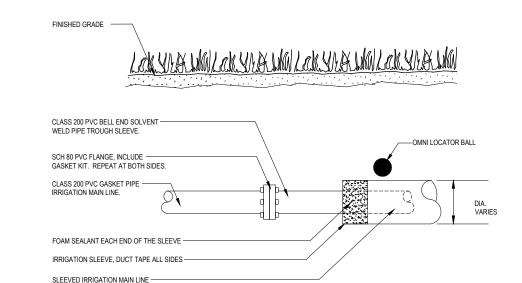
DRAWN BY: KAC	DATE:
DESIGNED BY: KAC	DATE:
CHECKED BY: PJL	DATE:
HORIZONTAL SCALE: N	I.T.S.
VERTICAL SCALE: N	I.T.S
DATE:	

Katherine Chachere



- NO SPRINKLER HEADS SHALL OCCUR WITHIN 18" FROM THE BACK OF CURB (BOC) AT PLANTING
- NO TRENCHING ALLOWED WITHIN 18" PARALLEL TO BOC.
- DO NOT OPERATE AT HIGH PRESSURE LEVELS. ADJUST THE ZONE CONTROL VALVE PRESSURE REGULATOR DIAL DOWN TO 50 PSI FOR ROTOR HEADS. AND 30 PSI FOR SPRAY HEADS.
- TOP OF POP-UP SPRINKLER SHALL BE INSTALLED ABOUT .25"± ABOVE FINISH GRADE (include a



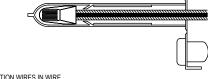


Irrigation Sleeve Sealing

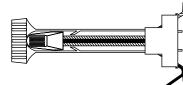
STEP NO. 1. STRIP WIRES AND APPLY SCOTCHLOK Y ELECTRICAL SPRING



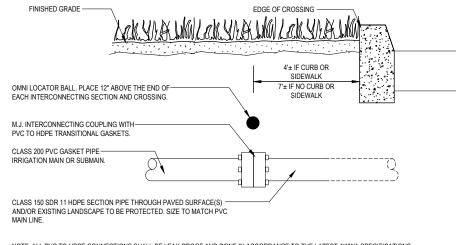
STEP NO. 2. INSERT SPLICE TO BOTTOM OF GEL-FILED TUBE. VISUALLY CHECK TO MAKE SURE SCOTCHLOK CONNECTOR HAS BEEN PUSHED PAST THE LOCKING FINGERS AND IS



STEP NO. 3. POSITION WIRES IN WIRE CHANNELS AND CLOSE INSULATOR TUBE

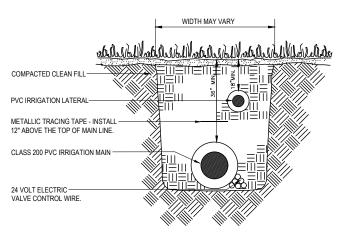


24 Volt Wire Connection Detail



NOTE: ALL PVC TO HDPE CONNECTIONS SHALL BE LEAK-PROOF AND DONE IN ACCORDANCE TO THE LATEST AWWA SPECIFICATIONS.

Irrigation Main Line PVC to HDPE Connection



1. METALLIC TRACING TAPE MUST BE INSTALLED 12" ABOVE THE MAIN LINE.

- 2. DEPTH MEASUREMENTS ARE TO BE DONE FROM FLUSH GRADE TO TOP OF PIPE.
- 3. PROVIDE A 6" MINIMUM VERTICAL SEPARATION BETWEEN MAIN LINE(S) AND LATERAL LINE(S).
- ALL TRENCHES SHALL BE BACKFILLED WITH CLEAN SOIL FREE OF DEBRIS & NOXIOUS WEEDS.
- 5. REMOVE AND DISPOSE OF ANY ROCKS LARGER THAN 1
- TRENCHES SHALL BE COMPACTED TO A 90% STANDARD PROCTOR DENSITY, ASTMD698-78.
- 7. PIPE PULLING THROUGH UN-TRENCHED SOIL IS NOT ALLOWED UNDER ANY CIRCUMSTANCE
- 8. PRIOR TO THE INSTALLATION, OFFSET AND/OR FIELD ADJUST PIPING LOCATIONS AS NEEDED.

Typical Trenching Detail

DATE REVISIONS

BOARD OF COUNTY COMMISSIONERS COLLIER COUNTY, FLORIDA ROAD MAINTENANCE DIVISION 2885 SOUTH HORSESHOE DRIVE

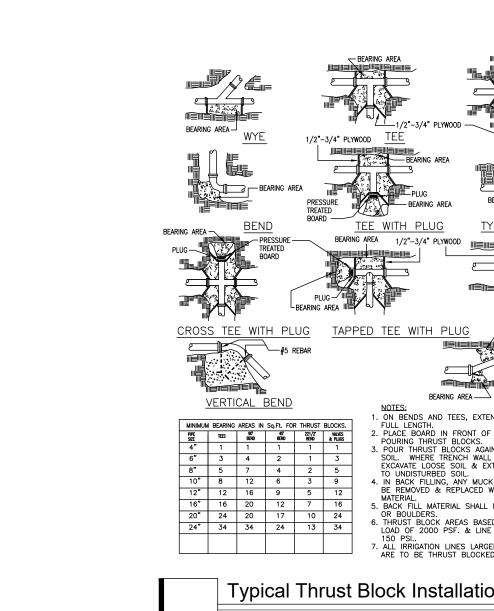
**PROJECT** 

Radio Road @ Devonshire Boulevard Turn Lane Expansion

Irrigation Details

DRAWN BY: KAC	DATE:	
DESIGNED BY: KAC	DATE:	
CHECKED BY: PJL	DATE:	
HORIZONTAL SCALE:	N.T.S.	
VERTICAL SCALE:	N.T.S	
DATE:		
September 2022		

Katherine Chachere FL RLA #6667146 DATE:





BOARD OF COUNTY COMMISSIONERS

COLLIER COUNTY, FLORIDA ROAD MAINTENANCE DIVISION 2885 SOUTH HORSESHOE DRIVE NAPLES, FLORIDA 34104 (239) 252-9824

Radio Road @ Devonshire Boulevard Turn Lane Expansion

DRAWN BY: KAC	DATE:	
DESIGNED BY: KAC	DATE:	
CHECKED BY: PJL	DATE:	
HORIZONTAL SCALE: N	I.T.S.	
VERTICAL SCALE: N	i.T.S	
DATE:		
September 2022		

Katherine Chachere FL RLA #6667146 DATE:

SHEET

		REALED BOARD		UG AREA	
TE	E WI	TH PL	<u>UG</u>	TAP	PED TEE WITH PLUG REDUCERS
		-\_#5 F -> 	REBAR		BEARING AREA
RTI	CAL	BEND			BEARING AREA —— OFFSET NOTES:
ARING		N Sq.Ft. FOI		BLOCKS.	ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH.
EES	90° BEND	45° BEND	221/2* BEND	WALVES & PLUGS	2. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE     POURING THRUST BLOCKS.
1	1	1	1	1	3. POUR THRUST BLOCKS AGAINST UNDISTURBED
3	4	2	1	3	SOIL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE SOIL & EXTEND THRUST BLOCK
5	7	4	2	5	TO UNDISTURBED SOIL.
æ	12	6	3	9	4. IN BACK FILLING, ANY MUCK ENCOUNTERED SHALL
12	16	9	5	12	BE REMOVED & REPLACED WITH ACCEPTABLE MATERIAL.
16	20	12	7	16	5. BACK FILL MATERIAL SHALL NOT INCLUDE ROCK
24	20	17	10	24	OR BOULDERS. 6. THRUST BLOCK AREAS BASED ON SOIL BEARING
34	34	24	13	34	LOAD OF 2000 PSF. & LINE PRESSURE OF
					150 PSI 7. ALL IRRIGATION LINES LARGER THAN 2" ARE TO BE THRUST BLOCKED AS 4" SIZE.
Т	ур	ical	Thr	ust	Block Installation Details

homens of the grant of the second TREE OR PALM TO BE IRRIGATED MULCH AS SPECIFIED. IRRITROL 533 FLOOD BUBBLER CONNECTED TO
FLEXIBLE PVC PIPE WITH
ADEQUATE BARBED FITTING. FLEXIBLE PVC PIPE TO (2) IRRITROL FLOOD BUBBLERS. INSTALL 6" BELOW GRADE.

NOTE :
1. REFER TO PLANS FOR BUBBLER FLOW VOLUME AND BUBBLER QUANTITIES PER TREE.

2. BUBBLER IS TO BE INSTALLED ADJACENT TO THE ROOT BALL PERIMETER.

3. DO NOT INSTALL BUBBLER ON TOP OF THE ROOT BALL, NEXT TO TRUNK.

## Irrigation Flood Bubbler Installation

DATE	REVISIONS	BY:	

PROJECT

Irrigation Details

#### **GENERAL NOTES**

- 1. The plans and drawings are diagrammatic of the work to be performed. The work shall be executed in a manner to avoid conflicts with utilities and other elements of construction, including landscape materials. All deviations shall be brought to the attention of the landscape architect. The contractor shall not willfully install any aspect of the irrigation system as shown on the plans and drawings when it is obvious in the field that obstructions, grade differences, or discrepancies exist that might not have been known during the design of the irrigation system. If notification of the conflict is not given to the representative, the contractor will assume full responsibility for all revisions.
- The irrigation system shall be installed following the plans and all contract documents. The contractor shall comply with all prevailing local codes, ordinances, and regulations.
- Check and verify all site conditions, including service utility locations before trenching or digging. Coordinate all irrigation system construction with existing and/or new plantings to avoid conflict or interference with the location of piping, sleeving, cables, and service utilities. The irrigation contractor is responsible for coordinating installation with all other construction on site, especially landscape installation. The irrigation system is to be relocated at no additional cost for any conflict with landscape installation or any other site construction or existing conditions. All components that are not contained within the specific areas shown on the drawings will not be accepted. All piping and other components are to remain as property of the Owner.
- Where existing or new trees, lights, signs, electronic controllers, and/or other objects are an obstruction to an irrigation sprinkler's pattern, the component and piping shall be relocated as necessary to obtain proper coverage without damaging the obstruction. Notify the landscape architect or representative to determine whether an obstruction occurs or not.
- 5. Component spacing is maximum. Do not exceed spacing shown or noted on the plans. Component spacing may be adjusted to accommodate changes in terrain and planting layout as long as the modified spacing does not exceed the spacing shown in the plans. Unless shown otherwise, the irrigation contractor shall verify that the system provides coverage for all plant materials.
- All materials and equipment shown shall be installed as detailed on the plans. If the drawings do not thoroughly describe the techniques to be used, the installer shall follow the installation methods/instructions recommended by their manufacturer.
- 7. The irrigation contractor shall adjust all sprinkler heads, controllers, and other devices to obtain specified operating characteristics, including coverage, operating pressure, flow rates, and operation times indicated on the drawings. Adjust all sprinklers to avoid overthrow of water onto buildings, roadways, sidewalks, or existing native vegetation.
- Contractor to provide installation shop drawings and manufacturer product information for all irrigation components. The contractor will be responsible for conducting a comprehensive take-off of materials to verify the quantities of material necessary to execute the work described on the plans and drawings.
- 9. All trenches shall be backfilled with clean, debris-free materials. Remove and dispose of any rocks greater than 1". Pulling pipe is prohibited.
- 10. All solvent welding shall be preceded by priming of the fittings and pipe as recommended by the manufacturer.
- 11. Contractor to label/number all zone valve covers with corresponding controller zone number and isolation valve box covers with record drawing numbers. Provide tags to all valves as shown per details.

#### **MAINLINE & PIPING**

- 1. All irrigation main(s) shall be 1120-1220 class 200 PVC gasketed pipe with gasketed fittings. All lateral pipes used downstream of each remote control valve shall be Schedule 40 for pipes less than 2" diameter and Class 200 for pipes greater than 2", unless shown otherwise.
- 2. The depth of all lines shall be as specified per plans and details. Measurements shall be from the top of the pipe(s) to finish grade. The contractor will be responsible for retrenching and relaying any pipe not meeting specified depth(s)
- 3. All mainlines will be installed with a tracing tape labeled "Non-potable Irrigation Main."

Verify irrigation specifications with Collier County Road Maintenance prior to ordering materials 239-252-8924.

Contact Collier County PTNE for work involving the MSTU irrigation lines at 239-252-5840.

All irrigation must be field tested for head to head coverage to provide adequate water to existing and proposed planting. Coordinate with Road Maintenance to for scheduling and to confirm correct programming of system.

#### **SLEEVING**

- 1. All crossings on existing surfaces not scheduled for renovation, whether shown or not shall be made using Class 150 SDR11 PE casings installed using directional boring technology. At crossings scheduled for construction or renovations, shall be made using SCH 40 PVC piping or as specified by the project's engineer. Main line sections going through paved surface crossings shall be Class 150 SDR 11 HDPE casing, entire sections for the crossing. All Class 150 SDR 11 HDPE to PVC connections shall be made using leak proof mechanical joint couplings with transitional gaskets.
- 2. Small main line (<2") sections, as well as PVC lateral lines, electric service and control wires having to cross paved surfaces shall be encased within a sleeve. The sleeve/casing material shall be directional bore installed Class 150 SDR 11 HDPE casing. The casing size shall be as specified or in a size that is suitable for accommodating the pipe within including interconnecting bell ends, and or couplings. All main line and lateral line piping going through a sleeve shall be solvent weld piping.
- 3. Irrigation contractor shall provide locating balls at each end of all main/sub-main/lateral lines and wire crossing casings/sleeves going accross vehicular crossings, or crossings in excess of ten feet.
- 4. All directional bore installed casing/sleeves shall extend seven feet from the edge of pavement at crossing with no curb, and four feet at crossings with curb or sidewlks.using with no curb, and four feet at crossings with curb and/or sidewalks.
- All open trench installed casings/sleeves shall extend: 36" for main/sub-main: 12" for laterals, beyond the edge of the payed edge.
- Irrigation contractor shall coordinate with general contractor for the location of sleeve crossings whether shown or not. At no time will irrigation control wiring share the same sleeve with main line or other piping. Wiring sleeves shall be dedicated to wiring only.
- 7. All open sleeves/casings shall be sealed with sealing foam.

#### REMOTE CONTROL VALVES

- 1. All control valves shall be installed as close as possible to the mainline(s) or sub-main(s) piping as possible. Control valves shall be type and size as specified herein and indicated on the drawings.
- Wire sizes for control valve connections to the controller will be insulated direct burial solid wire. See irrigation schedule for wiring specifications.
- 3. All electrical splices shall be made using 3M-DBY and 3M-3570 Scotchlock Seal Pack Connectors as detailed herein

#### **VALVE & SPLICE BOXES**

- 1. All valve boxes shall meet specifications, be sized & installed as shown and detailed herein. Top of valve boxes shall be level and 4"± above final grade (includes 2" of mulch) when installed. Contractor to reinstall and re-level boxes if soil settling occurs.
- 2. Where possible and feasible install valve boxes within planting bed lines. No valve boxes shall be installed within: 3' of a sidewalk or other pedestrian used surface, 5' from any vehicular roadways. Do NOT install at the bottom of swale(s) or any other low point.

#### POP-UP SPRAY HEADS & TREE BUBBLERS

- 1. All sprinkler heads will be installed and connected to lateral lines as per details. The smallest pipe size allowed to connect sprinkler sprinkler heads shall be 1" Schedule 40 PVC, or as specified per plan.
- 2. All sprinkler heads occurring within plant beds shall be 12" high pop-up sprinklers, unless otherwise shown on the drawings.
- 3. Spray head nozzle range shall be selected based on the spacing shown on the plan set.
- 4. All trees and palms designated to have supplemental irrigation shall have it in the form of adjestable flood type bubblers. Provide one or two bubblers per designated tree/palm (see plans). Provide flow discharge adjustments for adjustable bubblers. Do not install the bubbler on top of the rootball adjacent to the trunk. Install the bubbler adjacent to the rootball perimeter, away from the trunk.

DRAWN BY: KAC	DATE:			
DESIGNED BY: KAC	DATE:			
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HORIZONTAL SCALE: N.T.S.				
VERTICAL SCALE: N.T.S				
DATE:				
September 2022				

# HONORING CHARLES ARTHUR VANDERBILT BEACH MSTU COMMITTEE MEMBER/CHAIRMAN SPEARHEADED UTILITY BURIAL



#### **Radio Road MSTU Maintenance Plan**

**FY23** 

Category	Sub Category	Type / Location	(Current) OMS	Quantity	Units	Year (Install)	Year (Replace)	\$Cost (then YR)	Annual Maint
Irrigation	Mixing Chamber	5500 Radio Rd	1	1	EA	2007	2060	\$100,000	\$2,000
	Controller	Devonshire	3	3	EA	2018	2026	\$10,000	\$500
	Controller	Rich King	1	1	EA	2020	2028	\$1,000	\$100
Electric	Meter	Radio/Devonshire	2	2	EA	2007	NA	\$2,000	\$300
Water	Flowmeter	Radio/Devonshire	2	2	EA	2019	2040	\$6,000	\$300
	Valves	Devonshire	40	40	EA	2007	2027	\$26,000	\$1,500
	Valves	R. King	5	5	EA	2020	2041	\$2,000	\$200
Landscaping Areas	Mowing, Weeding, etc.	Devonshire	1980 Ft	1980	Ft	2007	As Needed	As needed	\$96,000
	<b>Ornamental Trees</b>	Devonshire	91	91	EA	2007	As Needed	As needed	\$3,000
	Rich King	Rich King	8800	8800	Sq Ft	2022	As Needed	\$68,000	\$3,000

Total	\$106,900
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The maintenance of Rich King will increase the annual maintenance estimate by \$3,000 so the total annual maintenance will be now \$106,900.