

ADDENDUM NUMBER 4
ITB 16-ES-002 - US HWY #1 AND SR #442 FDOT LANDSCAPE BEAUTIFICATION PROJECT
CITY OF EDGEWATER

To All Plan Holders:

The following changes, clarification and additions are hereby made part of the **ITB 16-ES-002** - for the above **US HWY #1 AND SR #442 FDOT LANDSCAPE BEAUTIFICATION PROJECT** as fully and completely as if the same were fully set forth therein.

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**CLARIFICATIONS/LANGUAGE CHANGES**

**Additional Questions prompted revised Landscape Plans and Bid Form which are included as a part of this addendum.**

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Q1. After driving the work site with the new drawings, we found the trees (Carnarvon Gorge Palm) on Sheet LA7 are located in an asphalt parking lot. Do you really want these trees planted in an asphalt parking lot?
A1. This area is to be cleared of asphalt in a minimum 10 foot strip to add trees and irrigation. This item should be included in the bid item "Clearing & Grubbing".

Q2. There are no details on the "Palm Up-Lighting". Are these to be installed by others?
A2. Lighting will be installed by others at a later date.

Q3. Are we to install a 4" main in a 4" bore as the plans indicate?
A3. Comments have been addressed, see revised plans.

Q4. Is the 4" bore HDPE pipe?
A4. Comments have been addressed, see revised plans.

Q5. Is the 4" bore a direct carrier pipe?
A5. Comments have been addressed, see revised plans.

Q6. Are there really 23 wet taps into reuse mains as indicated on sheet IR 8 of 9?
A6. Comments have been addressed, see revised plans.

Q7. What is the spec on the transmissions if needed?
A7. Comments have been addressed, see revised plans.

Q8. Why are there wet taps on a new line?
A8. Comments have been addressed, see revised plans.

Q9. Please eliminate the ambiguity to date by defining all bores in quantity in actual linear feet.
A9. Comments have been addressed, see revised plans.

Q10. Are all POC's in landscape areas versus pavement or concrete?
A10. Comments have been addressed, see revised plans.

Q11. Who is responsible for watering relocated trees through establishment?

A11. Please see item 3. Maintenance on page 6 of the original bid document.

Q12. Will impact fees be charged to the contractor on new 5/8ths inch water meter?

A12. No. City will provide the meter.

Q13. Other than reconnecting existing service to new pump and well is there any other electrical work? Please provide a detailed answer.

A13. Comments have been addressed, see revised plans.

Q14. Are MOT costs to be included in landscape line items only or on all line items? Without a separate line item, full credit cannot be given to a line item if the quantity is deleted or changed as it will also include bonds and insurance, general conditions, and MOT. We could put the costs on the third page of the revised total but the word "May" will need to be eliminated.

A14. Please see revised Bid Sheet

Q15. Please confirm that this is a line item contract.

A15. The line item quantities are based on the plans. The actual quantities will be paid by unit prices

Q16. Would you consider delaying the bid until a full and complete and non-ambiguous set of bidding prints can be provided by the provider?

A16. The bid due/opening has been extended until September 16, 2016 at 3:00 pm per Addendum #3.

Q17. Is the city aware that the estimated budget is grossly under estimated?

A17. Engineer's Opinion of Cost is estimated to be \$514,337

Q18. Please provide clarification regarding Bulbine. The Plans show 3 gal., bid form calls for 1 gal.

A18. See revised Bid Form

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**ATTACHMENTS**

- **Revised Landscape Plan (9/7/16)**
- **Revised Bid Sheet**

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Signature acknowledges receipt and understanding of this addendum.

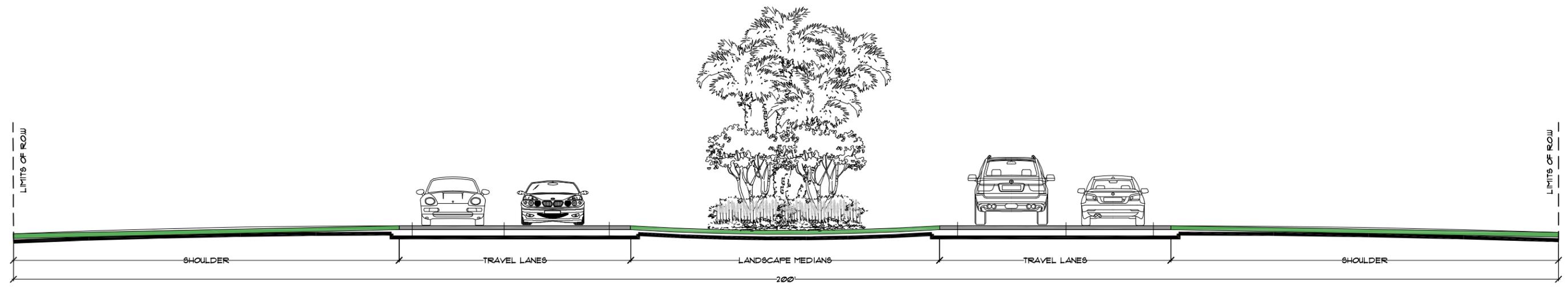
Name/Title

Date

US 1 AND SR442 FDOT LANDSCAPE BEAUTIFICATION

CITY OF EDGEWATER, VOLUSIA COUNTY, FLORIDA
LANDSCAPE PLANS
 (VOLCO RD. - BOSTON RD.) - 2 MILES
 (LAMONT ST. - 10th ST.) - 1 MILE
 (I-95 AND SR 442) - .5 MILES

FDOT FINANCIAL MANAGEMENT # 435465-1-58-01

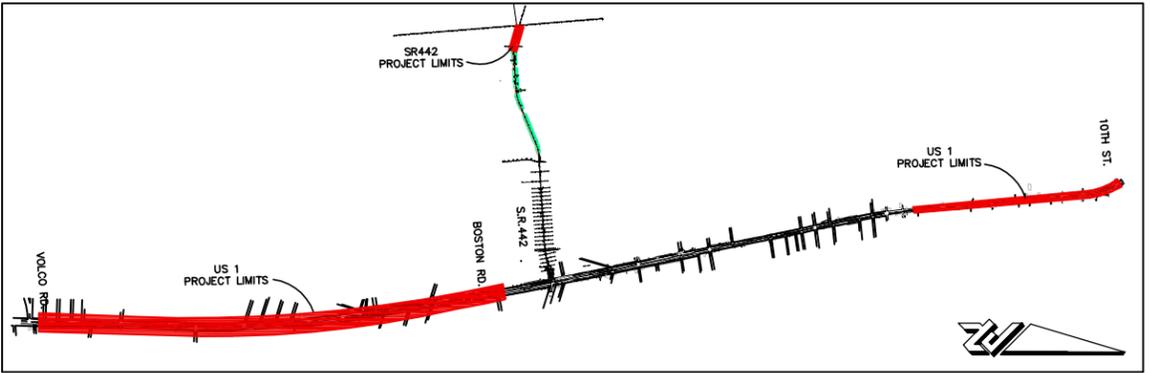


MAYOR MICHAEL IGNASIAK
CITY MANAGER TRACEY BARLOW
PUBLIC WORKS DIRECTOR BRENDA DEWEES

CITY COMMISSION:
DISTRICT 1 : CHRISTINE POWER
DISTRICT 2 : GIGI BENNINGTON
DISTRICT 3 : DAN BLAZI
DISTRICT 4 : GARY CONROY

APPLICANT: CITY OF EDGEWATER
 104 N. RIVERSIDE DR.
 EDGEWATER, FLORIDA 32132
 (386) 424-2472
 CONTACT: BRENDA DEWEES,
 DIRECTOR OF PUBLIC WORKS
 & UTILITIES

LANDSCAPE ARCHITECT: ZEV COHEN & ASSOCIATES, INC.
 300 INTERCHANGE BLVD.
 ORMOND BEACH, FL., 32174
 (386) 677-2482
 (386) 677-2505 (FAX)
 CONTACT: STEVEN R. BURNS, RLA



VICINITY MAP
 SCALE: 1" = 2000'

US 1 SHEET INDEX:

- CVR COVER SHEET
- D1 LANDSCAPE NOTES & DETAILS
- D2 MAINTENANCE OF TRAFFIC PLANS
- LAYOUT LAYOUT SHEET - LANDSCAPE
- DEM DEMOLITION PLAN
- LA1 LANDSCAPE PLAN (MEDIANS 1A - 3A)
- LA2 LANDSCAPE PLAN (MEDIANS 3B - 5A)
- LA3 LANDSCAPE PLAN (MEDIANS 5B - 6A)
- LA4 LANDSCAPE PLAN (MEDIANS 6B - 9A)
- LA5 LANDSCAPE PLAN (MEDIANS 9B - 9C)
- LA6 LANDSCAPE PLAN (MEDIANS 9B - 9C)
- LA7 LANDSCAPE PLAN (MEDIANS 9B - 9C)
- LAYOUT LAYOUT SHEET - IRRIGATION
- IR1-1 IRRIGATION PLANS
- IR1-2 IRRIGATION PLANS
- IR1-3 IRRIGATION PLANS
- IR1-4 IRRIGATION PLANS
- IR1-5 IRRIGATION PLANS
- IR1-6 IRRIGATION PLANS
- IR1-7 IRRIGATION PLANS
- IR1-8 IRRIGATION PLANS NOTES & DETAILS
- IR1-9 IRRIGATION PLANS NOTES & DETAILS

SR442 SHEET INDEX:

- D1-1 LANDSCAPE NOTES & DETAILS
- D2-1 MAINTENANCE OF TRAFFIC PLANS
- DEM-1 DEMOLITION PLAN
- LA1-1 LANDSCAPE PLAN
- LA2-1 LANDSCAPE PLAN
- IR1-1 IRRIGATION PLAN
- IR2-1 IRRIGATION PLAN NOTES & DETAILS
- IR3-1 IRRIGATION PLAN NOTES & DETAILS

GOVERNING STANDARDS AND SPECIFICATIONS:
 FLORIDA DEPARTMENT OF TRANSPORTATION, 2016
 DESIGN STANDARDS AND REVISED INDEX DRAWINGS
 AS APPENDED HEREIN, AND JANUARY 2016
 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE
 CONSTRUCTION, AS AMENDED BY CONTRACT
 DOCUMENTS.

FOR "DESIGN STANDARDS" FOLLOW LINK BELOW:
[HTTP://WWW.DOT.STATE.FL.US/RDDDESIGN/](http://www.dot.state.fl.us/rddesign/)

FOR "STANDARD SPECIFICATIONS FOR ROAD AND
 BRIDGE CONSTRUCTION FOLLOW LINK BELOW:
[HTTP://WWW.DOT.STATE.FL.US/SPECIFICATIONSOFFICE/](http://www.dot.state.fl.us/specificationsoffice/)



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 AMELIA ISLAND, FLORIDA 32034
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NO.	DATE	DESCRIPTION
1	12-21-15	REVISED PER FDOT COMMENTS, DATED 12-15-15
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9	1-21-16	REVISED PER CITY REQUEST
10	1-21-16	REVISED PER CITY REQUEST

**US 1 AND SR442 BEAUTIFICATION
 LANDSCAPE PLANS
 COVER SHEET**

ZEV COHEN & ASSOCIATES, INC.
 CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
 PLANNERS - TRANSPORTATION - ENVIRONMENTAL
 WWW.ZEVCOHEN.COM
 PROJECT NO: 14021
 DRAFTED BY: AKS
 CHECKED BY: SBK/PM
 ISSUE DATE: 7-14-14
 DRAWING FILE: 1421LA

GENERAL CONSTRUCTION NOTES

- THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE Vv, Vh, AND Vvh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.
- EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL CONTACT SUNSHINE ONE CALL OF FLORIDA, INC. AS REQUIRED BY CHAPTER 556 OF THE FLORIDA STATUTES.

UTILITY AGENCY OWNER - TELEPHONE NUMBER
ELECTRIC - FLORIDA POWER & LIGHT, BEVERLY HUITTO (386) 922-3499
GAS - TECO PEOPLES GAS, GEORGE SMITH (386) 671-2132
FIBER OPTIC CABLE - AT&T, MICHAEL MOORE (386) 254-8550
TELEPHONE - BRIGHT HOUSE, SEAN RIEN (386) 760-9341
TRAFFIC MONITORING SITES- FDOT, CHERYL BURKE (386) 943-5360
VOLUSIA COUNTY TRAFFIC ENGINEERING - (386) 796-5366
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH RULE CHAPTER 14-40, FLORIDA ADMINISTRATIVE CODE, THE FDOT 2016 DESIGN STANDARDS AND REVISED INDEX DRAWINGS AS APPENDED HEREIN, THE JANUARY 2016 FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION EDITION AND THE FDOT UAM 2010 EDITION. CONTRACTOR TO FOLLOW ALL REQUIREMENTS OF CITY/FDOT JPA AND FDOT APPROVAL.
- CONTRACTOR TO PROVIDE EROSION AND SILTATION CONTROL MEASURES AND COORDINATED /APPROVED BY FDOT AND INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE MEASURES ARE TO BE INSPECTED BY THE CONTRACTOR ON A REGULAR BASIS AND ARE TO BE MAINTAINED IN ACCORDANCE WITH SURVIVED, DEP NPDES, AND BEST MANAGEMENT PRACTICES (BMP'S) STANDARDS AND REPAIRED ON AN IMMEDIATE BASIS AS REQUIRED. CONTRACTOR TO OBTAIN DEP NPDES PERMIT, IF REQUIRED.
- ANY EXISTING STRIPING ON US1 DAMAGED BY THIS PROJECT MUST BE REPLACED.
- CONTRACTOR TO STAKE-OUT EACH MEDIAN FOR PLANT/TREE LOCATIONS FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO INSTALLATION.
- CONTRACTOR WILL BE RESPONSIBLE TO DO ANY GRADING WORK NECESSARY TO ASSURE PROPER DRAINAGE FLOW. CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERNS, SWALES CONVEYANCE, AND RUNOFF STORAGE CAPACITY DURING AND POST CONSTRUCTION ACTIVITIES. THE EXISTING DRAINAGE STRUCTURES SHALL NOT BE OBSTRUCTED OR MODIFIED ANYTIME.
- IT IS THE RESPONSIBILITY OF THE CITY TO MAINTAIN THE PROPOSED PROJECT LIMIT AREAS IN ACCORDANCE WITH THE FDOT MAINTENANCE RATING PROGRAM STANDARDS (MRP). REFER TO THEIR CRITERIA THROUGH THE LINK PROVIDED: <http://www.dot.state.fl.us/maintenance/office/MainRatingProgram.htm>. ALSO, REFER TO THE "A" GUIDE FOR TREE, PALM MAINTENANCE FOR URBAN ROADSIDES AND LANDSCAPE AREAS.

LANDSCAPE NOTES

- FLORIDA #:** ALL PLANT MATERIAL SHALL BE GRADE FLORIDA NO. 1 OR BETTER IN QUALITY AS DESIGNATED IN THE MOST RECENT PUBLICATION OF "GRADES AND STANDARDS FOR NURSERY PLANTS", PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
- SOD:** SOD SHALL BE ARGENTINE DAWA GRASS UNLESS OTHERWISE SPECIFIED ON THE PLANS AS FLORATAM ST. AUGUSTINE. ALL SOD SHALL BE ROLLED. CONTRACTOR TO SOD ALL AREAS THAT ARE WITHIN MEDIANS WORKED. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THE SOD IS FREE OF WEEDS UPON INSTALLATION AND FOR THE DURATION OF THE 90 DAY MAINTENANCE PERIOD. SOD QUANTITY TAKEOFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL TURF AREAS SHALL BE SMOOTH AND FREE OF ANY TRACK RUTS OR OTHER UNSIGHTLY IMPRINTS CAUSED BY CONTRACTOR MACHINERY DURING CONSTRUCTION/INSTALLATION. ALL REPLACEMENT SOD SHALL BE FLORATAM ST. AUGUSTINE. ALL TURF AREAS SHALL BE SMOOTH AND FREE OF ANY TRACK RUTS OR OTHER UNSIGHTLY IMPRINTS CAUSED BY CONTRACTOR MACHINERY DURING CONSTRUCTION/INSTALLATION. ALL REPLACEMENT SOD SHALL BE ARGENTINE DAWA.
- MULCH:** ALL PLANTING BEDS SHALL BE TOP DRESSED WITH 3" PINE BARK MULCH, GRADE "B" OR BETTER. ALL TREES NOT IN BEDS SHALL HAVE A 5' DIAMETER MULCH RING.
- QUANTITIES:** IN THE EVENT OF A VARIATION BETWEEN THE QUANTITIES SHOWN ON THE PLANT LISTS AND THE ACTUAL QUANTITY OF PLANTS SHOWN ON THE PLANS, THE PLANS SHALL CONTROL. SOD QUANTITY TAKEOFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- UNFORESEEN CONFLICTS:** CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY PORTION OF THE LANDSCAPE PLAN AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNFORESEEN OBSTRUCTIONS, GRADE DIFFERENCES, STANDING WATER, SOIL CONDITIONS OR OTHER CONFLICTS EXIST. SUCH UNFORESEEN CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE AND THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- SUBSTITUTIONS:** NO SUBSTITUTIONS OR VARIATIONS OF ANY PLANT MATERIAL OR ITS INSTALLED LOCATION WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT AND APPROVAL FROM THE LANDSCAPE ARCHITECT.
- CONTAINERS:** IF GALLONAGE FOR PLANTS OR TREES IS SHOWN THEY SHALL BE CONTAINER GROWN AND THE SIZE SHOWN SHALL REPRESENT THE MINIMUM ALLOWABLE GALLONAGE ACCEPTED. IN ALL CASES THE PLANT SPECIFIED SIZE SHALL GOVERN OVER THE GALLONAGE INDICATED.
- SOIL:** CONTRACTOR SHALL VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO THE PLANT SPECIES SPECIFIED. IF SOIL CONDITIONS ARE DEEMED UNSUITABLE FOR PROPER PLANT HEALTH, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT AND PROPER SUBSTITUTIONS SHALL BE SPECIFIED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ADDITIONALLY, IF PRESENT, THE CONTRACTOR SHALL REMOVE LIME ROCK, CONCRETE AND OTHER BELLETERIOUS DEBRIS FROM PLANTING BEDS. IF DEBRIS IS INTEGRATED IN THE SOIL, THE SOIL MUST BE EXCAVATED AND REPLACED WITH ACCEPTABLE SOIL. LASTLY, ALL FILL TO BE PLACED IN LANDSCAPE AREAS MUST HAVE A pH RANGE BETWEEN 5.8 AND 7.5, BE ORGANIC IN NATURE, AND BE FREE OF ROCKS AND DEBRIS.
- TOPSOIL:** TOPSOIL MATERIAL, IF REQUIRED, SHALL BE FREE FROM ALL HARD CLODS, WEEDS, STONES OVER 1" IN DIAMETER, CLAY, HARD PAN, NOXIOUS PLANTS, SOD, INSECTS, OR OTHER UNDESIRABLE PLANTS, SEEDS, OR MATERIAL WHICH MAY BE HARMFUL FOR GROWTH AND SHALL BE CERTIFIED AS STERILE.
- WEEDS:** IF PRESENT, THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ANY WEEDS FROM PLANTING AREAS PRIOR TO THE INSTALLATION OF PROPOSED PLANT MATERIAL AND MULCH COVER. CONTRACTOR SHALL BE RESPONSIBLE TO KEEP BEDS FREE OF WEEDS FOR THE DURATION OF THE 90 DAY MAINTENANCE PERIOD.
- GRADING:** UNLESS OTHERWISE STATED ON THESE PLANS, THE LANDSCAPE CONTRACTOR SHALL FINE GRADE ALL AREAS TO BE PLANTED AND SODDED IN ORDER TO ELIMINATE BUMPS AND DEPRESSIONS. FINE GRADING SHALL BE DEFINED AS THE FINAL 2" OF GRADE TO BE ACHIEVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND REGRADING WASHOUT AREAS CAUSED BY EROSION UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- STAKING:** ALL TREES, SHRUBS AND GROUND COVERS ARE TO BE PLANTED ACCORDING TO THE DETAILS IN THESE PLANS. IF THE CONTRACTOR PREFERENCES TO USE OTHER STAKING METHODS THAN SHOWN IN THE DETAILS, HE OR SHE MUST SUBMIT PROPOSED STAKING DETAILS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN, REPAIR, AND/OR REPLACE ANY PLANTS DAMAGED BY FAILURE TO PROPERLY STAKE OR GUY ANY TREES IN SITE, AT THEIR OWN EXPENSE.
- FERTILIZER:** OSMOCOTE SLOW RELEASE FERTILIZER OR EQUIVALENT SHALL BE APPLIED TO ALL TREE, SHRUB, AND GROUND COVER PLANTING AREAS AT THE RATE OF THREE (3) TABLESPOONS PER 2 SF OF PLANTING AREA.
- DRAINAGE:** THE LANDSCAPE CONTRACTOR SHALL ASSURE THAT THIS WORK DOES NOT INTERRUPT EXISTING OR PROPOSED DRAINAGE PATTERNS AND SHALL NOTIFY THE OWNERS REPRESENTATIVE IMMEDIATELY SHALL A CONFLICT ARISE.
- SPECIFICATIONS:** THE LANDSCAPE ARCHITECT SHALL BE PERMITTED THE RIGHT DURING INSTALLATION TO REJECT ANY AND ALL PLANT MATERIAL AND WORKMANSHIP WHICH IN HIS OR HER OPINION DOES NOT MEET THE REQUIREMENTS OF THESE SPECIFICATIONS.
- PERCOLATION:** PERCOLATION TESTS ARE REQUIRED FOR ALL PLANTING PITS FOR PHOENIX SPP, PALM TREES. AFTER THE PLANTING PIT IS DUG TO THE PROPER DEPTH, FILL PIT WITH WATER AND DOCUMENT THE AMOUNT OF TIME IT TAKES FOR THE WATER TO DRAIN FROM THE PIT COMPLETELY. NOTIFY THE OWNERS REPRESENTATIVE TO WITNESS THE TEST.
- TURNOVER:** CONTRACTOR SHALL CONTACT OWNERS REPRESENTATIVE FOR A TURNOVER DATE TO INCLUDE A WALK-THROUGH AND ACCEPTANCE OF WORK BY THE LANDSCAPE ARCHITECT. ANY WORK DEEMED UNACCEPTABLE SHALL BE CORRECTED IMMEDIATELY AND REINSPECTED AS SCHEDULED.
- MAINTENANCE:** CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE TO BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE 90 DAYS AFTER FINAL WRITTEN ACCEPTANCE BY THE OWNER. MAINTENANCE SHALL INCLUDE WATERING, PRUNING, WEEDING, MULCHING, MOWING, REPLACEMENT OF SICK OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY IN ORDER TO MAINTAIN PROPER PLANT HEALTH AND SOIL MOISTURE CONTENT.
- GUARANTEE:** CONTRACTOR SHALL GUARANTEE ALL INSTALLED PLANT MATERIAL FOR ONE (1) CALENDAR YEAR STARTING FROM THE TURNOVER DATE SHOULD WORK BE FOUND ACCEPTABLE. ANY CORRECTED WORK SHALL HAVE A PROPORTIONAL EXTENSION OF WARRANTY ONCE APPROVED. ANY SICK OR DEAD MATERIAL SHALL BE REPLACED IMMEDIATELY. THE LANDSCAPE CONTRACTOR SHALL NOT BE RESPONSIBLE TO HONOR ANY WARRANTY FOR THE LOSS OF ANY PLANT MATERIAL CAUSED BY FLOODING, FIRE, FREEZING TEMPERATURES, WINDS OVER 50 MPH, LIGHTNING, ANY OTHER NATURAL DISASTER, OR ANY LOSS/DAMAGE CAUSED BY VANDALISM OR NEGLIGENCE ON THE PART OF THE OWNER.

IRRIGATION NOTES

- AN AUTOMATIC TIME CONTROLLED IRRIGATION SYSTEM WITH A RAIN SENSOR SHALL BE INSTALLED TO PROVIDE 100% HEAD TO HEAD COVERAGE OF ALL NEW PLANTINGS. IRRIGATION PLAN SHALL BE PROVIDED UPON SUBSTANTIAL SITE PLAN APPROVAL.

QUALIFICATION OF CONTRACTORS

- THE CITY OF EDGEWATER BEACH RESERVES THE RIGHT TO REQUIRE ANY BIDDER TO SUBMIT SUCH EVIDENCE OF QUALIFICATIONS AS IT MAY DEEM NECESSARY AND MAY CONSIDER EVIDENCE AVAILABLE CONCERNING THE FINANCIAL AND OTHER QUALIFICATIONS AND ABILITIES OF A CONTRACTOR. FAILURE TO PROVIDE ALL REQUIRED INFORMATION MAY RESULT IN THE PROPOSAL BEING REJECTED AS NONRESPONSIVE. THE MINIMUM QUALIFICATIONS FOR THIS PROJECT ARE AS FOLLOWS:
1. THE CONTRACTOR MUST HAVE A MINIMUM TEN (10) YEARS EXPERIENCE INSTALLING (NOT MAINTAINING) LANDSCAPE AND IRRIGATION SYSTEMS ON PROJECTS OF A SIMILAR SCOPE IN NATURE WITH VERIFIABLE REFERENCES IN THE FOLLOWING AREAS:
MUNICIPAL LANDSCAPE AND IRRIGATION CONTRACTS, PROJECTS WITHIN FDOT RIGHTS OF WAY, PROJECTS EXCEEDING \$100K AS PRIME CONTRACTOR, TWENTY (20) OR MORE DATE PALMS ON A SINGLE SITE AND PROJECT FUNDED BY COUNTY, STATE OR FEDERAL FUNDS.

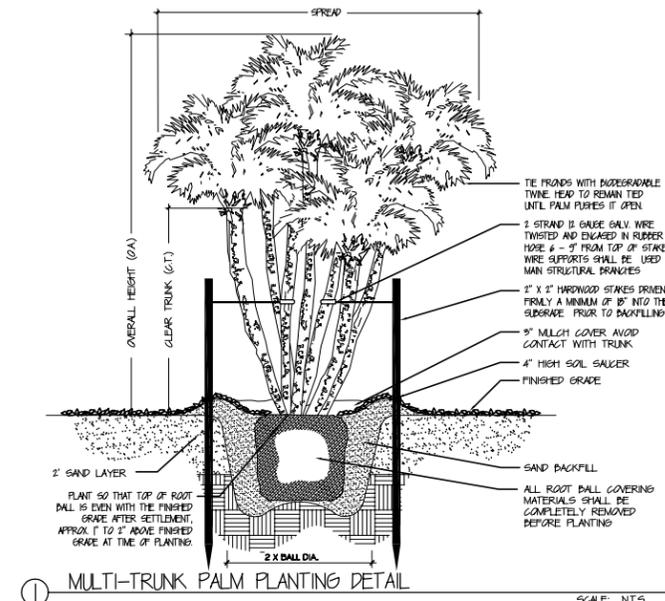
BASE INFORMATION

- BASE PLANS USED IN THE DEVELOPMENT OF THIS PROJECT DESIGN WERE PROVIDED BY FDOT. CONTRACTOR TO CONFIRM FINAL LAYOUT AND DIMENSIONS PRIOR TO COMMENCING WORK.
- MEDIAN LINES ARE DRAWN IN PER GOOGLE MAP IMAGES (FIELD VERIFY)

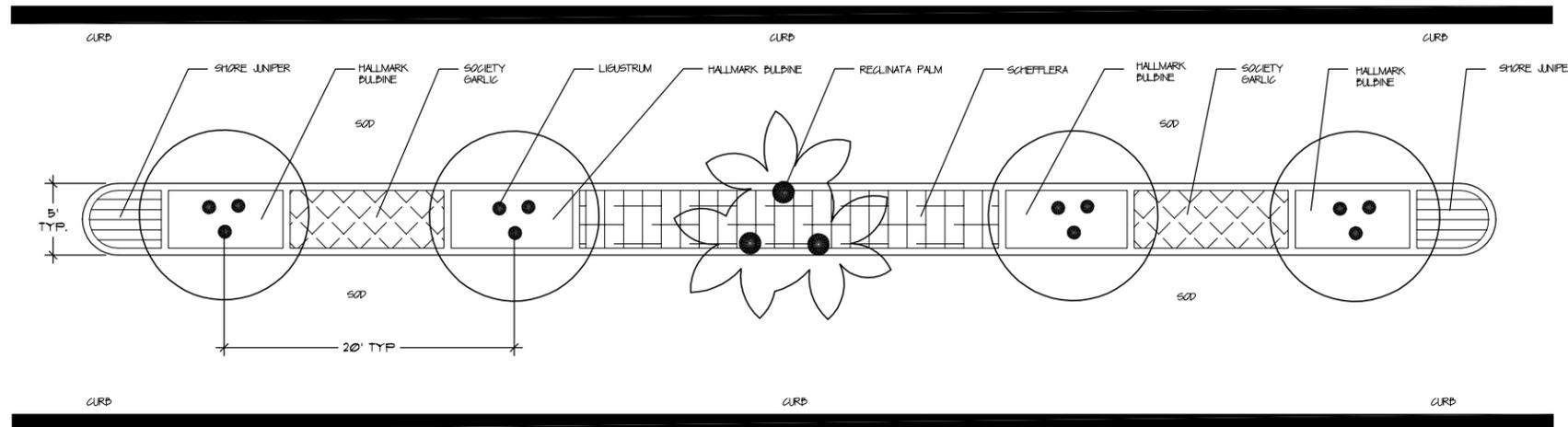
MASTER PLANT LIST

SYMB.	QUAN.	SPECIES	COMMON NAME	SPECIFICATIONS
LN	11	LIVISTONA NITIDA	CARNARVON GORSE PALM	14' CT. MATCHED, DIAMOND CUT
PR	9	PHOENIX RECLINATA	RECLINATA PALM	10' -12' CT. HT. MIN. 8-10 TRUNK, 4" MAX
TREES				
LJ	19	LAGERSTROEMIA INDICA 'MUSKOGEE'	LAVENDER GRAPE MYRTLE	65 GAL., 3 1/2" CAL., 12" HT., 8.5' CT.
LJ	35	LIGUSTRUM JAPONICUM TREE FORM	LIGUSTRUM TREE	12' X 12', M.T., 8.5' CT., PRUNED
SHRUBS & GROUND COVERS				
BF	464	BULBINE FRUTESCENS	YELLOW BULBINE	3 GAL., 12" HT. X 12" SPRD., FULL, 18" OC.
JK	44	JUNIPERUS CONFERTA	SHORE JUNIPER	3 GAL., 18" HT. X 18" SPRD., FULL, 30" OC.
SA	152	SCHEFFLERA ARBORICOLA 'TRINETTE'	VARIEGATED SCHEFFLERA	7 GAL., 18" SPD X 24" HT., FULL, 30" OC.
TV	304	TULBASHIA VIOLACEA	SOCIETY GARLIC	1 GAL., 12" SPRD., 18" OC.

NOTE: SEE LANDSCAPE PLAN, SHEETS LA1 THRU LA7, FOR INDIVIDUAL MEDIAN QUANTITIES.



① MULTI-TRUNK PALM PLANTING DETAIL SCALE: N.T.S.



⑤ MEDIAN PLANTING DETAIL SCALE: N.T.S.



ZEV COHEN & ASSOCIATES, INC.
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 84 ATLANTIC AVE. STE. 200 ORMOND BEACH, FL 32066
 (386) 967-9655 FAX (386) 967-1478

NO.	DATE	DESCRIPTION
1	12-14-15	REVISED PER FDOT COMMENTS DATED 12-14-15
2	1-4-16	REVISED PER FDOT COMMENTS DATED 1-4-16
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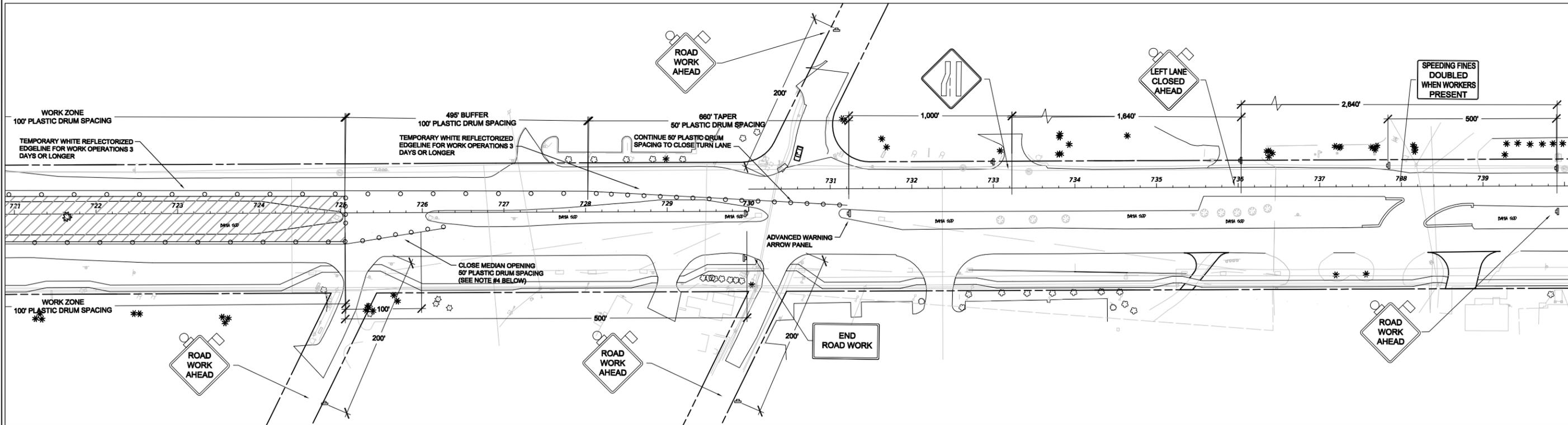
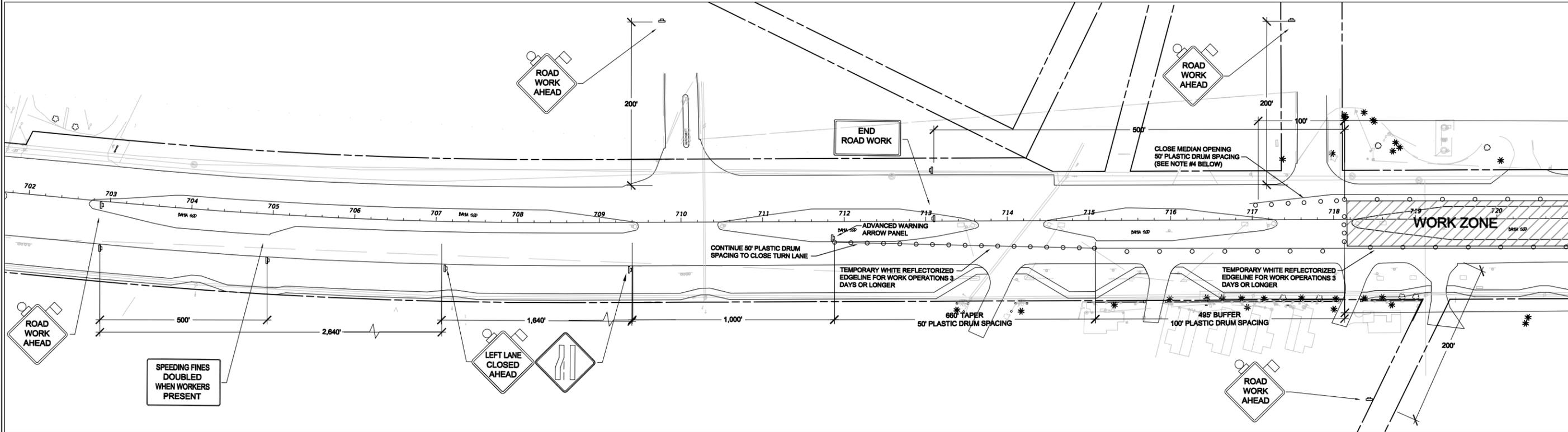
REVISIONS:

US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS
NOTES & DETAILS
 VOLUSIA COUNTY, FLORIDA
 CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
 CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
 PLANNERS - TRANSPORTATION - ENVIRONMENTAL
 WWW.ZEVCOHEN.COM
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 DRAWING FILE: HAZLEA



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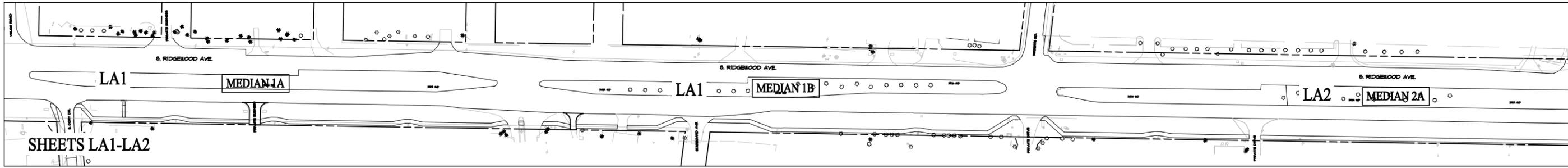
**US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS
MAINTENANCE OF TRAFFIC**

VOLUSIA COUNTY, FLORIDA
CITY OF EDGEWATER

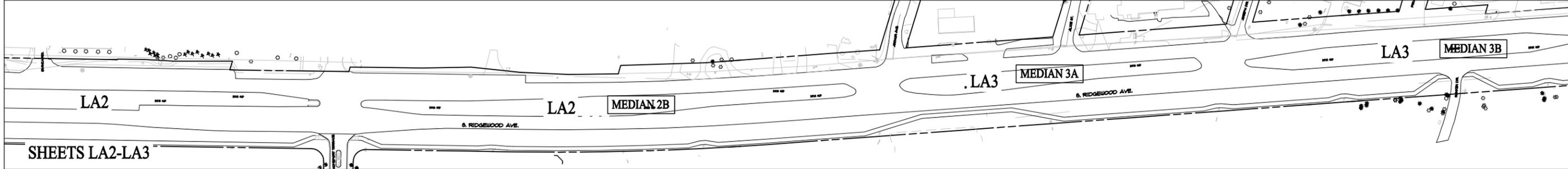
ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
WWW.ZEVCOHEN.COM

PROJECT NO: 14021
ISSUE DATE: 7-14-14
DRAFTED BY: AKS
CHECKED BY: SBK/PM
DRAWING FILE: 14021A

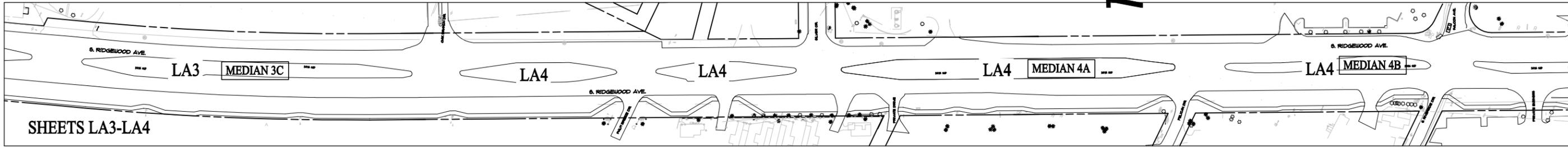
- NOTES**
- M.O.T. SHALL CONFORM TO THE FDOT INDICES, 2016 EDITION. M.O.T. SHOWN AS A GUIDE, CONTRACTOR REQUIRED TO COORDINATE WITH FDOT FOR FINAL M.O.T. DESIGN AND APPROVAL.
 - CONTRACTOR TO PROVIDE M.O.T SHOP DRAWINGS AND OBTAIN APPROVAL FROM F.D.O.T. CONSTRUCTION OFFICE PRIOR TO CONSTRUCTION ON EACH MEDIAN (AS FUNDING ALLOWS). M.O.T. PROVIDED HEREON IS TYPICAL AND WILL APPLY TO EACH MEDIAN CONSTRUCTION.
 - NO LANE CLOSURES DURING CITY SPECIAL EVENTS, HOLIDAYS, PEAK TRAVEL TIMES (6-8AM, 5-7PM). SIGNALIZED INTERSECTIONS SHALL BE FREE OF BARRIER DEVICES AT ALL TIMES.
 - THE WORK ZONE SPEED LIMITS THROUGHOUT THE DESIGNATED PROJECT LIMITS WILL REMAIN THE SAME AS THE POSTED 55, 45 & 40 MPH.
 - "SPECIAL EVENTS" INCLUDE, BUT ARE NOT LIMITED TO, DAYTONA SPEED WEEKS, DAYTONA BIKE WEEK, SPRING BREAK AND BIKETOBERFEST.



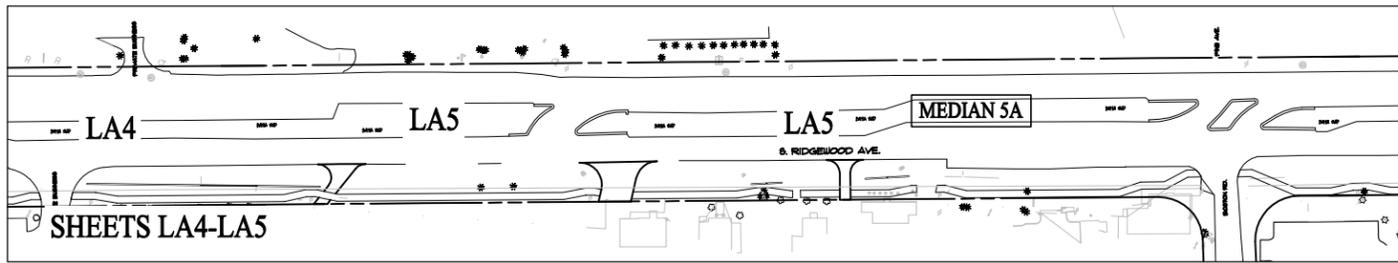
SHEETS LA1-LA2



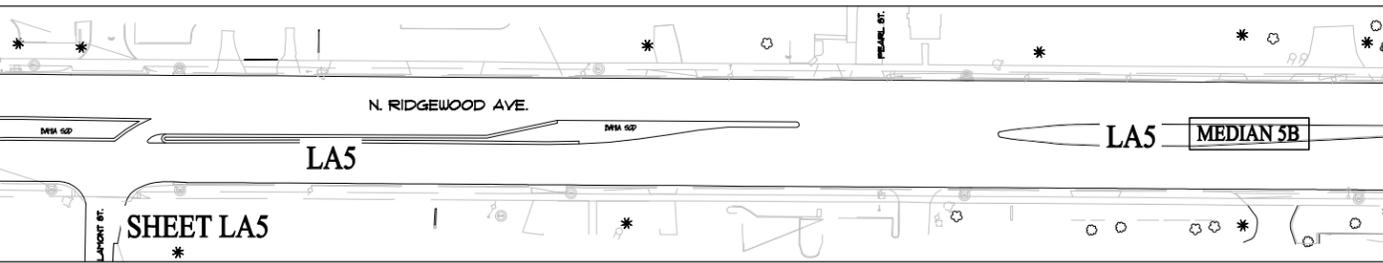
SHEETS LA2-LA3



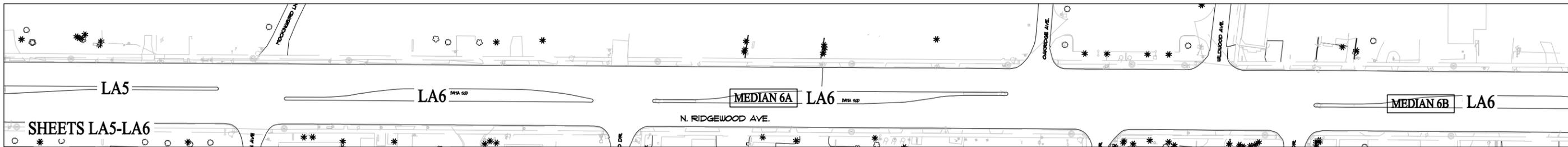
SHEETS LA3-LA4



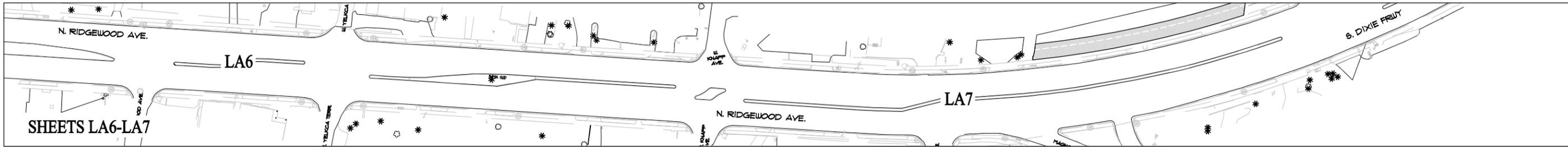
SHEETS LA4-LA5



SHEET LA5



SHEETS LA5-LA6



SHEETS LA6-LA7

ORMOND BEACH
 300 INTERCHANGE BLVD., ORMOND BEACH, FL 32174
 (386) 877-2482 FAX (386) 877-2505
 ST. AUGUSTINE
 4475 U.S. 1 S., ST. AUGUSTINE, FL 32086
 (888) 707-1810 FAX (888) 707-4159
 AMELIA ISLAND
 914 ATLANTIC AVE., STE. 200 ORMOND BEACH, FL 32064
 (386) 467-5656 FAX (386) 467-4159

NO.	DATE	DESCRIPTION
1	12-12-15	REVISED PER FOOT COMMENTS, DATED 12-13-15
2	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-16-16
3	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-16-16
4	1-21-16	REVISED PER CITY REQUEST
5	3-18-16	REVISED PER CITY REQUEST
6	3-18-16	REVISED PER CITY REQUEST
7	1-8-16	REVISED PER CITY REQUEST

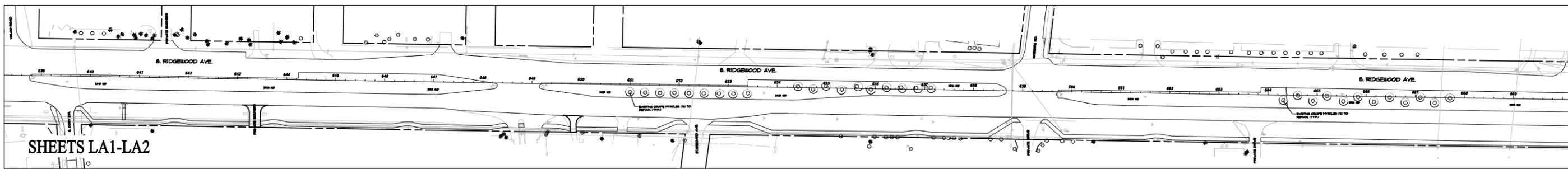
REVISIONS:

US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS
LAYOUT SHEET

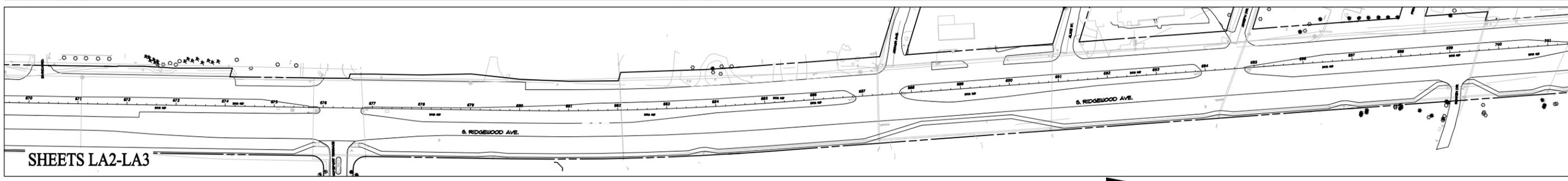
VOLUSIA COUNTY, FLORIDA
 CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
 CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
 PLANNERS - TRANSPORTATION - ENVIRONMENTAL
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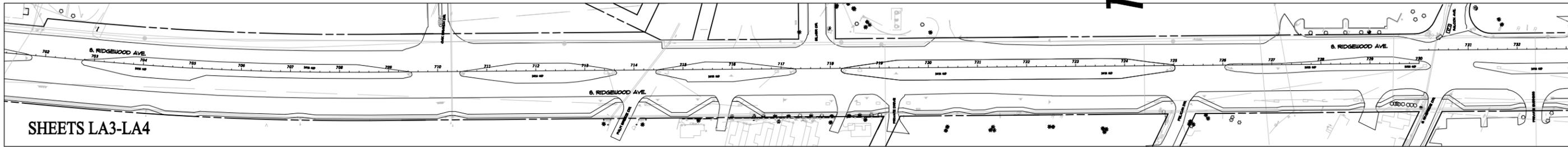
PROJECT NO: 14021
 DRAFTED BY: AKS
 ISSUE DATE: 7/14/14
 CHECKED BY: SBK/PM
 DRAWING FILE: 1421LA



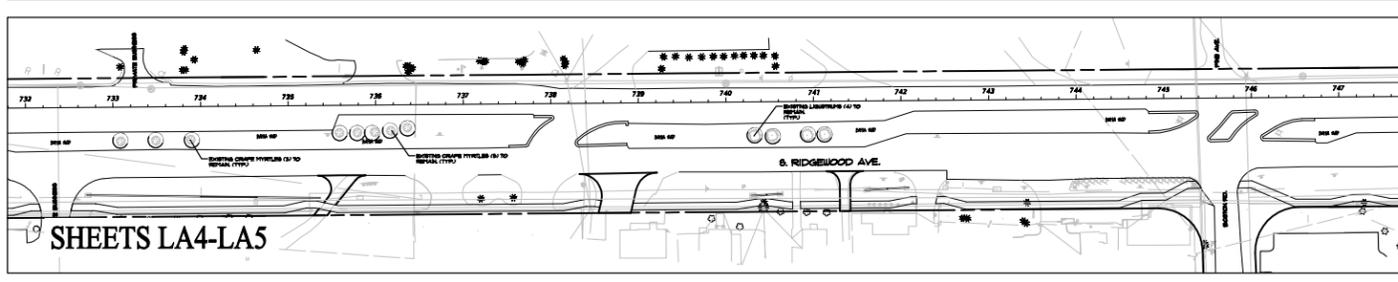
SHEETS LA1-LA2



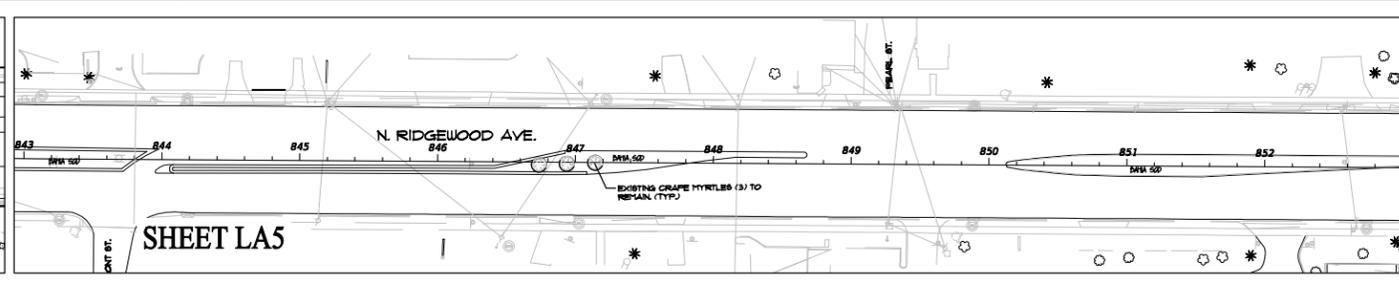
SHEETS LA2-LA3



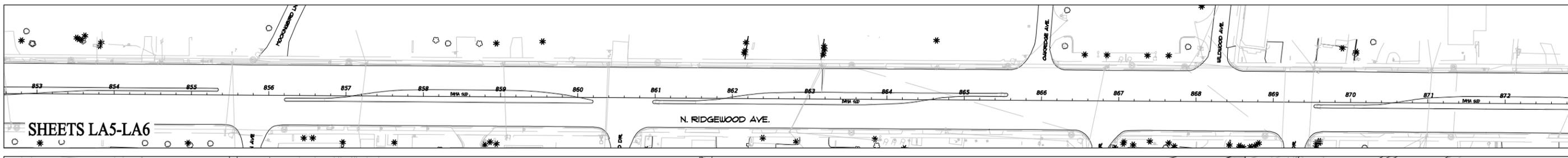
SHEETS LA3-LA4



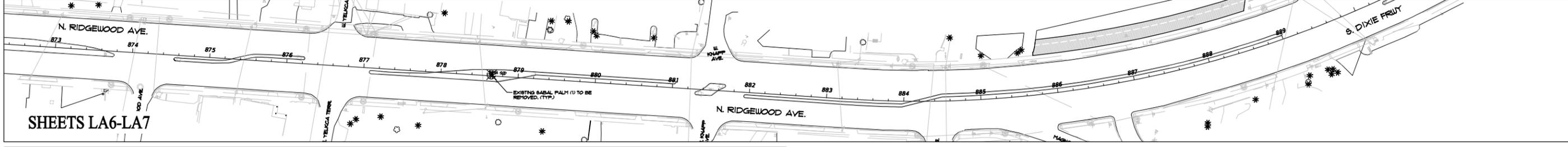
SHEETS LA4-LA5



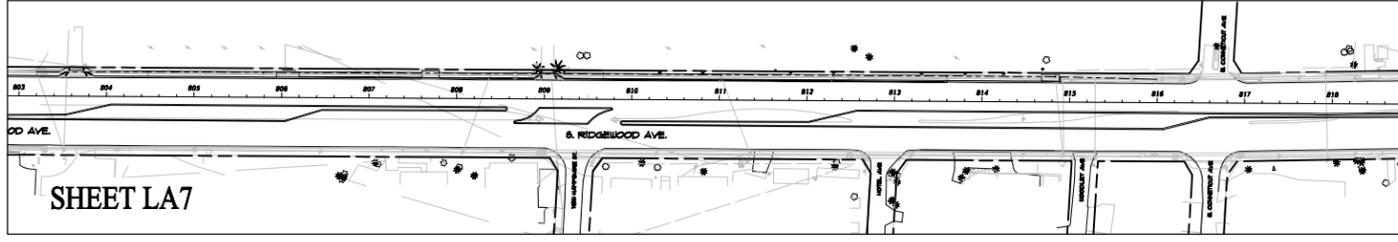
SHEET LA5



SHEETS LA5-LA6



SHEETS LA6-LA7



SHEET LA7

LEGEND

- EXISTING TREE/PALM TO REMAIN
- ⊗ EXISTING TREE/PALM TO BE REMOVED

NOTE: CUT OUT/REMOVE EXISTING SOD FROM PROPOSED NEW LANDSCAPE AREAS



ORMOND BEACH
300 INTERCHANGE BLVD., ORMOND BEACH, FL 32174
(386) 877-2482 FAX (386) 877-2505
4478 U.S. 1, ST. AUGUSTINE
FLORIDA 32086
(849) 797-1810 FAX (849) 797-4159
AMELIA ISLAND
814 ATLANTIC AVE., STE. 204, ORMOND BEACH, FL 32066
(386) 467-9505 FAX (386) 467-1159

NO.	DATE	DESCRIPTION
1	12-12-15	REVISED PER FOOT COMMENTS, DATED 12-15-15
2	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-16-16
3	1-2-16-15	REVISED PER CITY REQUEST
4	1-2-16-15	REVISED PER CITY REQUEST
5	1-2-16-15	REVISED PER CITY REQUEST
6	1-2-16-15	REVISED PER CITY REQUEST
7	1-2-16-15	REVISED PER CITY REQUEST
8	1-2-16-15	REVISED PER CITY REQUEST
9	1-2-16-15	REVISED PER CITY REQUEST
10	1-2-16-15	REVISED PER CITY REQUEST

**US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS
DEMOLITION PLAN**

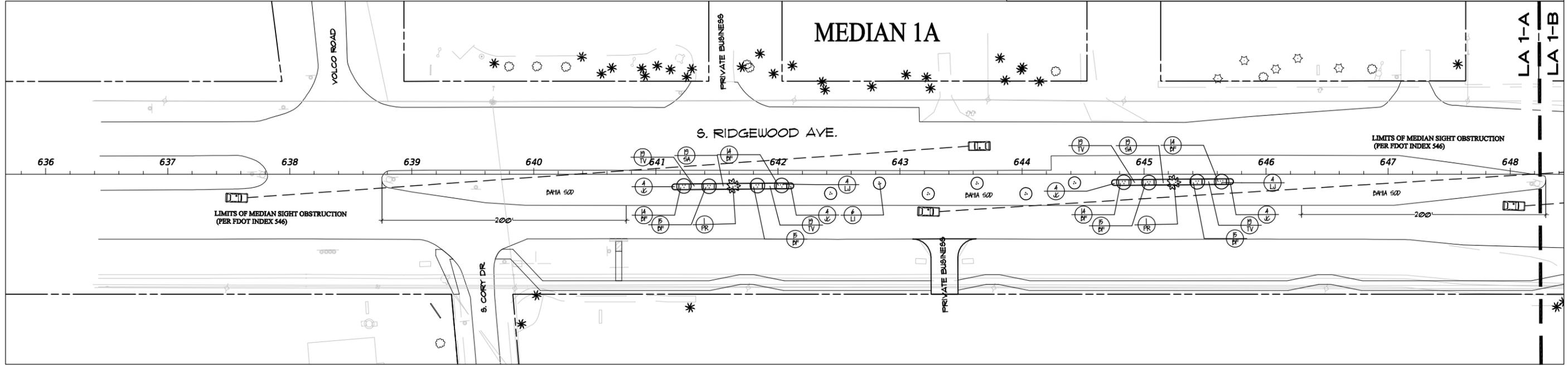
VOLUSIA COUNTY, FLORIDA
CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
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PROJECT NO: 14021
DRAFTED BY: AKS
ISSUE DATE: 7/14/14
CHECKED BY: SBK/PM
DRAWING FILE: 1421LA

LA 1-A

POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH



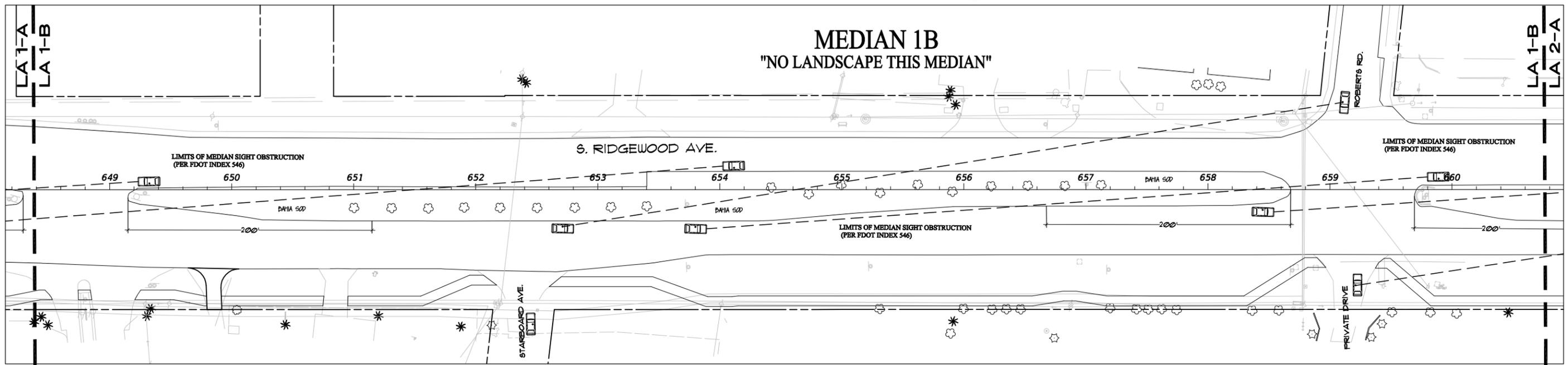
PLANT LIST: MEDIAN 1A

SPECIES	COMMON NAME	SPECIFICATIONS
PALMS		
PR 2	PHOENIX RECLINATA	RECLINATA PALM
TREES		
LI 6	LAGERSTROEMIA INDICA 'MUSKOGEE'	LAVENDER GRAPE MYRTLE
LW 8	LIGUSTRUM JAPONICUM 'TREE FORM'	LIGUSTRUM TREE
SHRUBS & GROUNDCOVERS		
BF 116	BULBINE FRUTESCENS	YELLOW BULBINE
JC 16	JUNIPERUS CONFERTA	SHORE JUNIPER
SA 38	SCHIEFFELERA ARBORICOLA 'TRINETTE'	VARIEGATED SCHIEFFELERA
TV 76	TULBAGHIA VIOLACEA	SOCIETY GARLIC
		3 GAL., 12" HT. X 12" SPRD., FULL, 18" OC.
		3 GAL., 18" HT. X 18" SPRD., FULL, 30" OC.
		7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
		1 GAL., 12" SPRD., 18" OC.

LA 1-B

POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH



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(386) 877-2482 FAX (386) 877-2505

4478 U.S. 1 S., ST. ALGER DRIVE, PALM BEACH, FL 33408
(848) 707-1810 FAX (848) 707-4159

AMELIA ISLAND
914 ATLANTIC AVE., STE. 200, ORMOND BEACH, FL 32066
(386) 949-5955 FAX (386) 949-4159

NO.	DATE	DESCRIPTION
1	12-12-15	REVISED PER FOOT COMMENTS, DATED 12-13-15
2	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-16-16
3	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-16-16
4	1-2-16-15	REVISED PER CITY REQUEST
5	1-18-16	REVISED PER CITY REQUEST
6	1-18-16	REVISED PER CITY REQUEST
7	1-18-16	REVISED PER CITY REQUEST
8	1-18-16	REVISED PER CITY REQUEST

REVISIONS:

US 1 AND SR442 BEAUTIFICATION LANDSCAPE PLANS

VOLUSIA COUNTY, FLORIDA

CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
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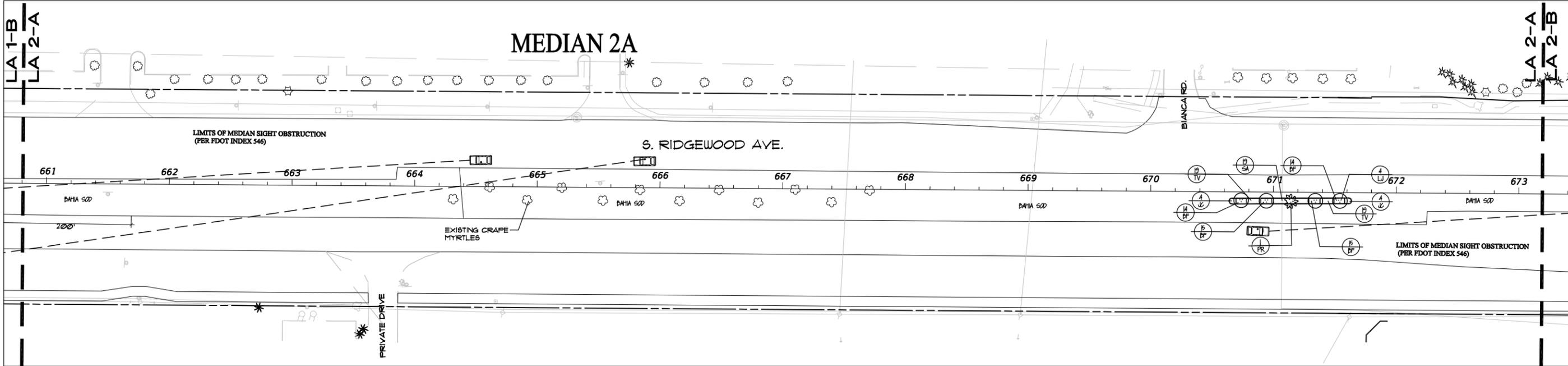
PROJECT NO: 14021 DRAFTED BY: AKS
ISSUE DATE: 7-14-14 CHECKED BY: SBK/PM
DRAWING FILE: 14021LA

SCALE:
SHEET LA1 OF 7

LA 2-A

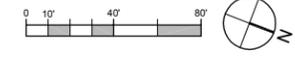
POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH



PLANT LIST: MEDIAN 2A

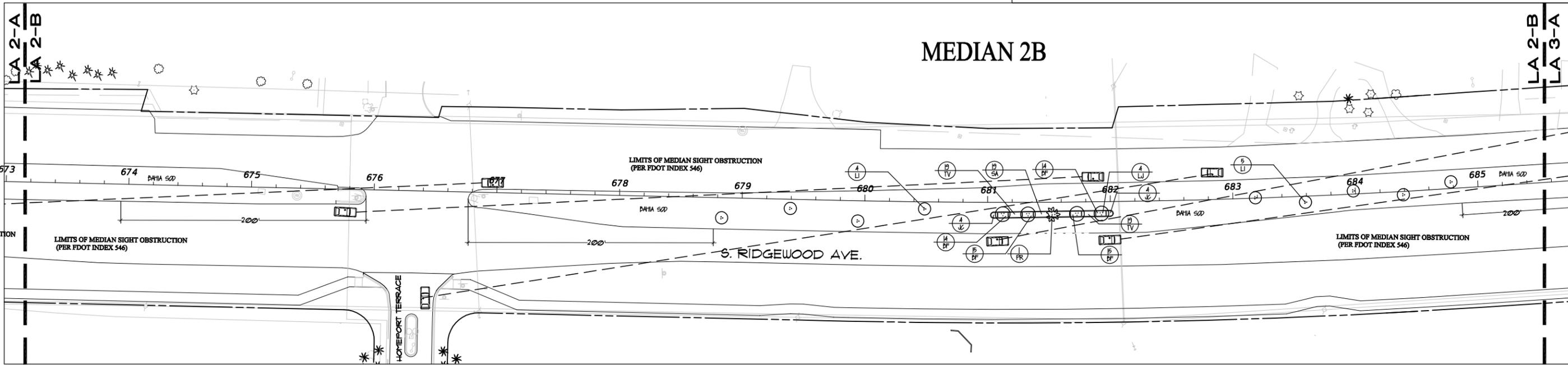
SPECIES	COMMON NAME	SPECIFICATIONS
PALMS		
PR 1	PHOENIX RECLINATA	RECLINATA PALM
TREES		
LJ 4	LIGUSTRUM JAPONICUM TREE FORM	LIGUSTRUM TREE
SHRUBS & GRANDCOVERS		
BF 50	BULPINE FRUTESCENS	YELLOW BULPINE
JC 5	JUNIPERUS CONFERTA	SHORE JUNIPER
SA 19	SHEFFLERA ARBORICOLA 'TRINETTE'	VARIEGATED SHEFFLERA
TV 30	TULBAGHIA VIOLACEA	SOCIETY GARLIC
		3 GAL., 12" HT. X 12" SPRD., FULL, 18" OC.
		3 GAL., 18" HT. X 18" SPRD., FULL, 30" OC.
		7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
		1 GAL., 12" SPRD., 18" OC.



LA 2-B

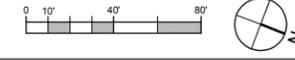
POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH



PLANT LIST: MEDIAN 2B

SPECIES	COMMON NAME	SPECIFICATIONS
PALMS		
PR 1	PHOENIX RECLINATA	RECLINATA PALM
TREES		
LI 9	LAGERSTROEMIA INDICA 'MUSKOGEE'	LAVENDER GRAPE MYRTLE
LJ 4	LIGUSTRUM JAPONICUM TREE FORM	LIGUSTRUM TREE
SHRUBS & GRANDCOVERS		
BF 50	BULPINE FRUTESCENS	YELLOW BULPINE
JC 5	JUNIPERUS CONFERTA	SHORE JUNIPER
SA 19	SHEFFLERA ARBORICOLA 'TRINETTE'	VARIEGATED SHEFFLERA
TV 30	TULBAGHIA VIOLACEA	SOCIETY GARLIC
		3 GAL., 12" HT. X 12" SPRD., FULL, 18" OC.
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		1 GAL., 12" SPRD., 18" OC.



ZEV COHEN & ASSOCIATES INC.
 300 INTERCHANGE BLVD., OCEAN BEACH, FL 32174
 (386) 877-2482 FAX (386) 877-2505
 4478 U.S. 1 S., ST. AUGUSTINE, FL 32086
 (888) 707-1810 FAX (888) 707-4159
 AMELIA ISLAND
 814 ATLANTIC AVE., STE. 200 OCEAN BEACH, FL 32064
 (386) 461-5455 FAX (386) 461-1458

NO. 1 DATE DESCRIPTION BY
 1. 12-15-15 REVISED PER FOOT COMMENTS, DATED 12-15-15 SMC
 2. 1-4-16 REVISED PER FOOT COMMENTS, DATED 1-4-16 SMC
 3. 4-4-16 REVISED PER FOOT COMMENTS, DATED 4-4-16 SMC
 4. 12-18-16 REVISED PER CITY REQUEST SMC
 5. 1-18-17 REVISED PER CITY REQUEST SMC
 6. 1-18-17 REVISED PER CITY REQUEST SMC
 7. 1-18-17 REVISED PER CITY REQUEST SMC
 8. 1-18-17 REVISED PER CITY REQUEST SMC
 9. 1-18-17 REVISED PER CITY REQUEST SMC
 10. 1-18-17 REVISED PER CITY REQUEST SMC

REVISIONS:

US 1 AND SR442 BEAUTIFICATION LANDSCAPE PLANS

VOLUSIA COUNTY, FLORIDA

CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
 CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
 PLANNERS - TRANSPORTATION - ENVIRONMENTAL
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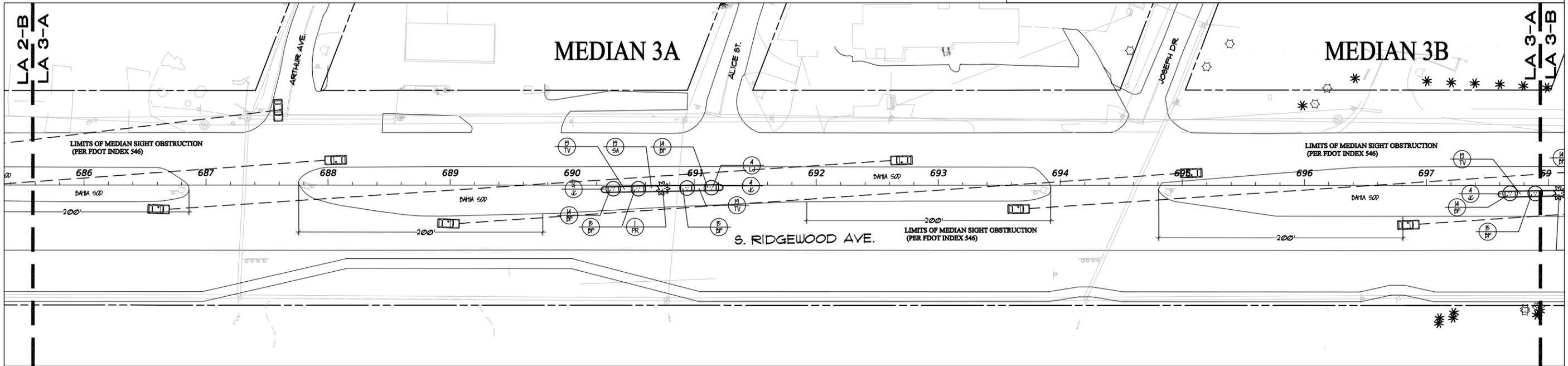
PROJECT NO: 14021 DRAFTED BY: AKS
 ISSUE DATE: 7-14-14 CHECKED BY: SBK/PM
 DRAWING FILE: 14021A

SCALE:
 SHEET LA2 OF 7

LA 3-A

POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH



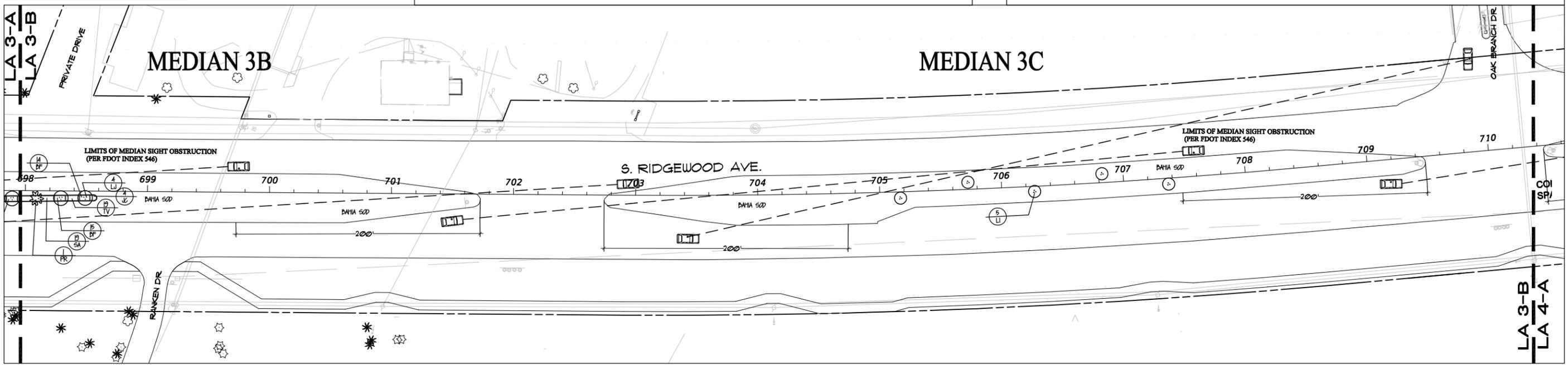
PLANT LIST: MEDIAN 3A

SPECIES	COMMON NAME	SPECIFICATIONS
PALMS		
PR 1	PHOENIX RECLINATA	RECLINATA PALM
TREES		
LJ 4	LIGUSTRUM JAPONICUM TREE FORM	LIGUSTRUM TREE
SHRUBS & GRANDCOVERS		
PF 5B	PULPINE FRUTESCENS	YELLOW PULPINE
JC 3	JUNIFERUS CONFERTA	SHORE JUNIPER
SA 19	SHEFFLERA ARBORICOLA 'TRINETTE'	VARIEGATED SCHEFFLERA
TV 3B	TULBAGHIA VIOLACEA	SOCIETY GARLIC
		3 GAL., 12" HT. X 12" SPRD., FULL, 18" OC.
		3 GAL., 18" HT. X 18" SPRD., FULL, 30" OC.
		7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
		1 GAL., 12" SPRD., 18" OC.

LA 3-B

POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH



PLANT LIST: MEDIAN 3B

SPECIES	COMMON NAME	SPECIFICATIONS
PALMS		
PR 1	PHOENIX RECLINATA	RECLINATA PALM
TREES		
LJ 4	LIGUSTRUM JAPONICUM TREE FORM	LIGUSTRUM TREE
SHRUBS & GRANDCOVERS		
PF 5B	PULPINE FRUTESCENS	YELLOW PULPINE
JC 3	JUNIFERUS CONFERTA	SHORE JUNIPER
SA 19	SHEFFLERA ARBORICOLA 'TRINETTE'	VARIEGATED SCHEFFLERA
TV 3B	TULBAGHIA VIOLACEA	SOCIETY GARLIC
		3 GAL., 12" HT. X 12" SPRD., FULL, 18" OC.
		3 GAL., 18" HT. X 18" SPRD., FULL, 30" OC.
		7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
		1 GAL., 12" SPRD., 18" OC.

PLANT LIST: MEDIAN 3C

SPECIES	COMMON NAME	SPECIFICATIONS
TREES		
LI 5	LAGERSTROEMIA INDICA MUSKOGEE'	LAVENDER GRAPE MYRTLE
		65 GAL., 3 1/2" GAL., 12" HT., 85" C.T.



300 INTERCHANGE BLVD., OCEAN BEACH, FL 32114
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 4478 U.S. 1 S., ST. AUGUSTINE, FL 32086
 (841) 707-1810 FAX (841) 707-4159
 AMELIA ISLAND
 914 ATLANTIC AVE., STE. 200 OCEAN BEACH, FL 32064
 (386) 467-9505 FAX (386) 467-1159

NO.	DATE	DESCRIPTION
1	12-12-15	REVISED PER FOOT COMMENTS, DATED 12-13-15
2	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-16-16
3	1-21-16	REVISED PER FOOT COMMENTS, DATED 1-20-16
4	1-21-16	REVISED PER CITY REQUEST
5	1-21-16	REVISED PER CITY REQUEST
6	1-21-16	REVISED PER CITY REQUEST
7	1-21-16	REVISED PER CITY REQUEST
8	1-21-16	REVISED PER CITY REQUEST

**US 1 AND SR442 BEAUTIFICATION
 LANDSCAPE PLANS**

VOLUSIA COUNTY, FLORIDA
 CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
 CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
 PLANNERS - TRANSPORTATION - ENVIRONMENTAL
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PROJECT NO: 14021
 DRAFTED BY: AKS
 CHECKED BY: SBK/PM
 ISSUE DATE: 7-14-14
 DRAWING FILE: HAZ/LA

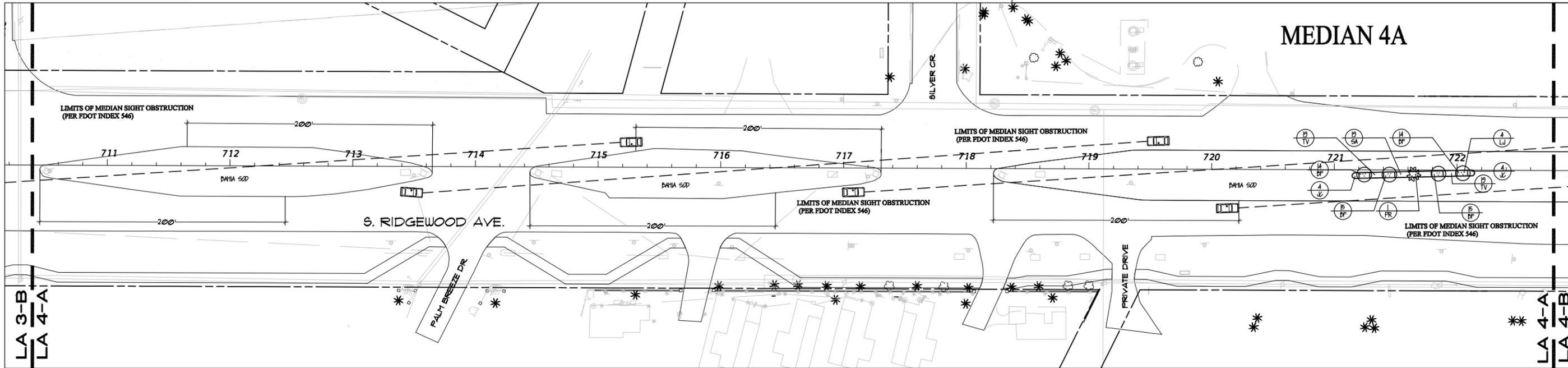
LA 4-A

POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH

PLANT LIST: MEDIAN 4A

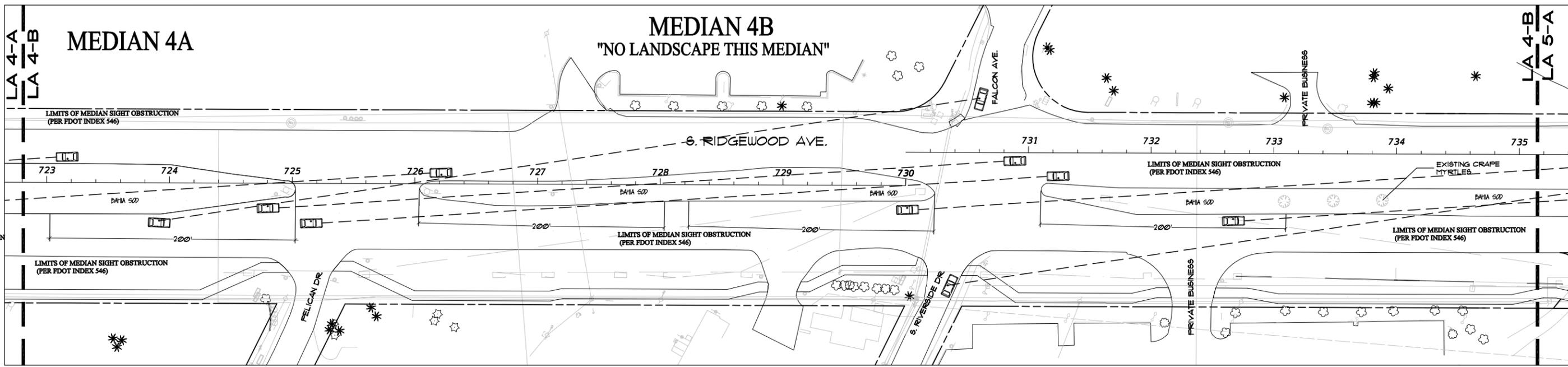
SPECIES	COMMON NAME	SPECIFICATIONS
PALMS		
PR 1	PHOENIX RECLINATA	RECLINATA PALM
TREES		
LJ 4	LIGUSTRUM JAPONICUM TREE FORM	LIGUSTRUM TREE
SHRUBS & GRASSCOVERS		
BF 5B	PULDINE FRUTESCENS	YELLOW PULDINE
JC 5	JUNIPERUS CONFERTA	SHORE JUNIPER
SA 19	SCHIEFFERA ARBORICOLA 'TRINETTE'	VARIEGATED SCHEFFLERA
TV 3B	TULBASHIA VIOLACEA	SOCIETY GARLIC
		3 GAL., 12" HT. X 12" SPRD., FULL, 18" OC.
		3 GAL., 18" HT. X 18" SPRD., FULL, 30" OC.
		7 GAL., 18" SPRD. X 24" HT., FULL, 30" OC.
		1 GAL., 12" SPRD., 18" OC.



LA 4-B

POSTED SPEED 45 MPH

DESIGN SPEED 50 MPH



ZEV COHEN & ASSOCIATES, INC. 2014

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(386) 877-2482 FAX (386) 877-2505

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AMIELIA ISLAND
814 ATLANTIC AVE., STE. 202 OCEAN BEACH, FL 32064
(386) 467-9505 FAX (386) 467-1159

REVISIONS:

NO.	DATE	DESCRIPTION
1	12-12-15	REVISED PER FOOT COMMENTS, DATED 12-13-15
2	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-16-16
3	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-20-16
4	1-21-16	REVISED PER CITY REQUEST
5	1-21-16	REVISED PER CITY REQUEST
6	1-21-16	REVISED PER CITY REQUEST
7	1-21-16	REVISED PER CITY REQUEST
8	1-21-16	REVISED PER CITY REQUEST

US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS

VOLUSIA COUNTY, FLORIDA

CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
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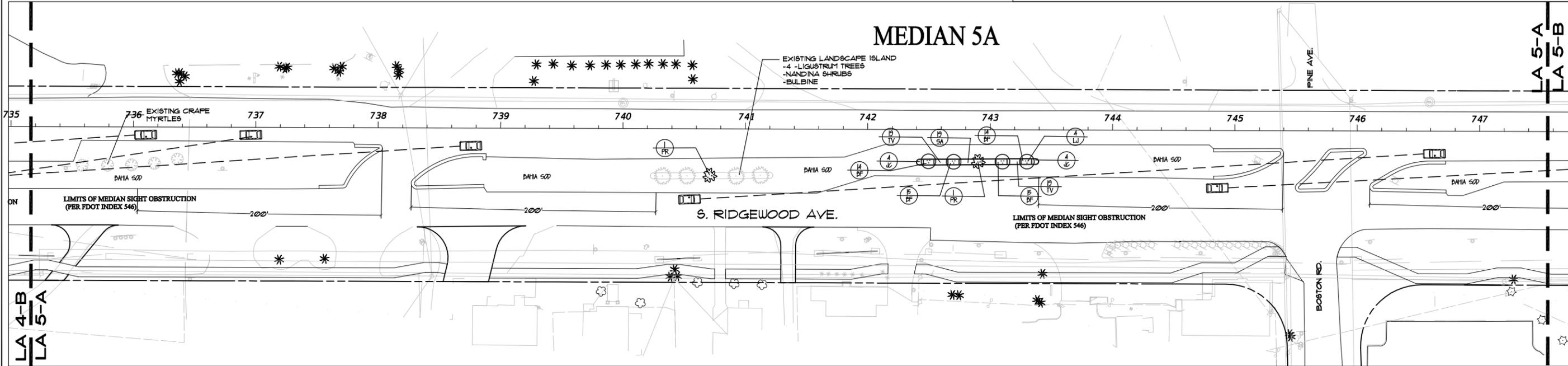
PROJECT NO: 14021 | DRAFTED BY: AKS
ISSUE DATE: 7-14-14 | CHECKED BY: SBK/PM
DRAWING FILE: 14021LA

SCALE: SHEET LA4 OF 7

LA 5-A

POSTED SPEED 45 MPH

DESIGN SPEED 50 MPH



PLANT LIST: MEDIAN 5A

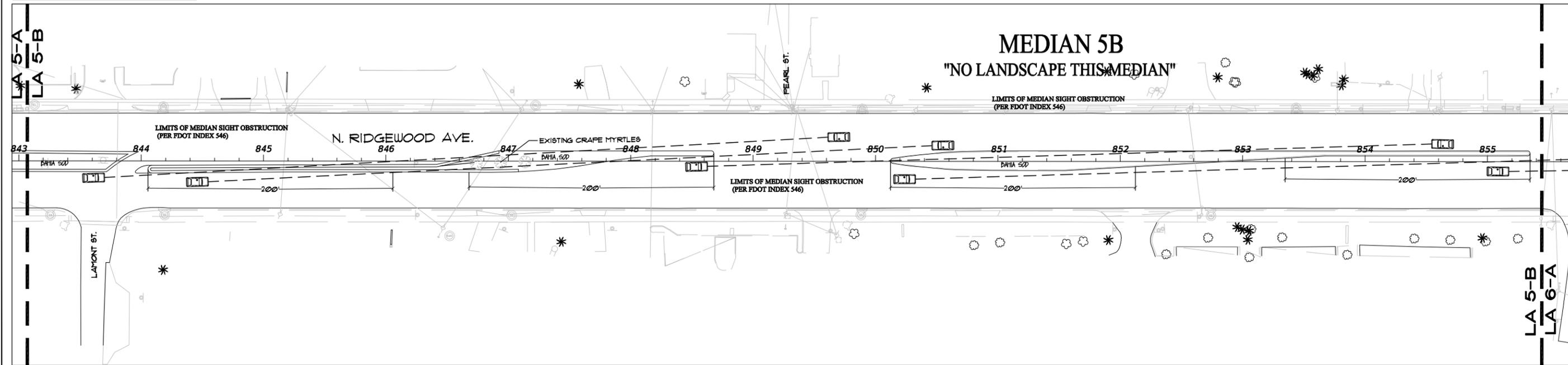
SPECIES	COMMON NAME	SPECIFICATIONS
PALMS		
PR 2	PHOENIX RECLINATA	RECLINATA PALM
TREES		
LJ 4	LIGUSTRUM JAPONICUM 'TREE FORM'	LIGUSTRUM TREE
SHRUBS & GRANDCOVERS		
BF 5B	BULBINE FRUTESCENS	YELLOW BULBINE
JK 8	JUNIPERUS CONFERTA	SHORE JUNIPER
SA 19	SCHEFFLERA ARBORICOLA 'TRINETTE'	VARIEGATED SCHEFFLERA
TV 3B	TULBAGHIA VIOLACEA	SOCIETY GARLIC
		3 GAL., 12" HT. X 12" SPRD., FULL, 18" OC.
		3 GAL., 18" HT. X 18" SPRD., FULL, 30" OC.
		7 GAL., 18" SPRD. X 24" HT., FULL, 30" OC.
		1 GAL., 12" SPRD., 18" OC.



LA 5-B

POSTED SPEED 45 MPH

DESIGN SPEED 50 MPH



ZEV COHEN & ASSOCIATES INC. 2014

ORLANDO BEACH, FL 32174
 300 INTERCHANGE BLVD., ORLANDO BEACH, FL 32174
 (386) 877-2482 FAX (386) 877-2505

ST. AUGUSTINE, FL 32086
 4478 U.S. 1 S. ST. AUGUSTINE, FL 32086
 (884) 707-1810 FAX (884) 707-1459

AMELIA ISLAND, FL 32004
 914 ATLANTIC AVE. STE. 200 ORLANDO BEACH, FL 32064
 (386) 467-9405 FAX (386) 467-1459

NO.	DATE	DESCRIPTION
1	12-12-15	REVISED PER FOOT COMMENTS, DATED 12-15-15
2	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-16-16
3	1-4-16	REVISED PER FOOT COMMENTS, DATED 1-16-16
4	1-21-16	REVISED PER CITY REQUEST
5	1-21-16	REVISED PER CITY REQUEST
6	1-21-16	REVISED PER CITY REQUEST
7	1-21-16	REVISED PER CITY REQUEST
8	1-21-16	REVISED PER CITY REQUEST
9	1-21-16	REVISED PER CITY REQUEST
10	1-21-16	REVISED PER CITY REQUEST

**US 1 AND SR442 BEAUTIFICATION
 LANDSCAPE PLANS**

CITY OF EDGEWATER
 VOLUSIA COUNTY, FLORIDA

ZEV COHEN & ASSOCIATES, INC.
 CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
 PLANNERS - TRANSPORTATION - ENVIRONMENTAL
 WWW.ZEVCOHEN.COM

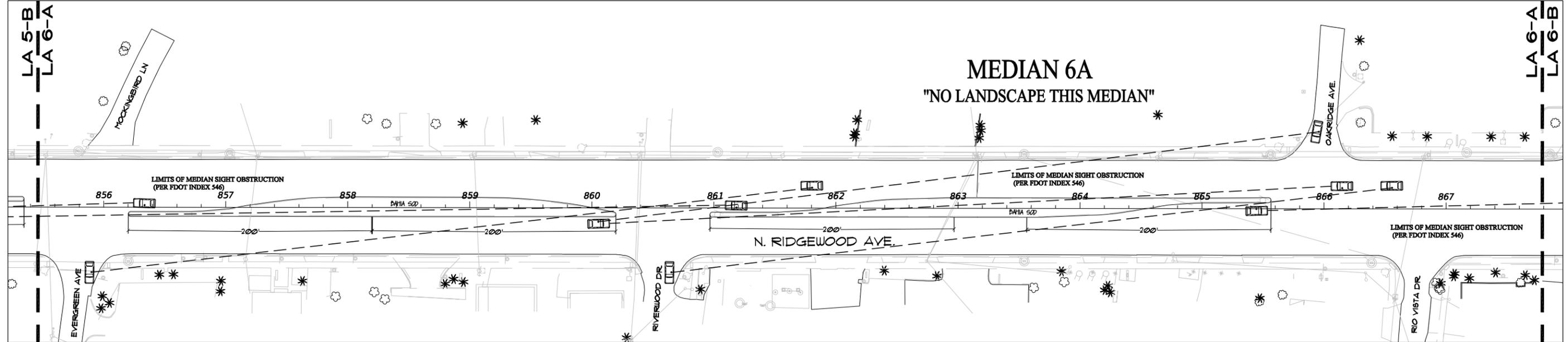
PROJECT NO: 14021
 DRAFTED BY: AKS
 CHECKED BY: SBK/PM
 ISSUE DATE: 7-14-14
 DRAWING FILE: 14021LA

SCALE:
 SHEET LA5 OF 7

LA 6-A

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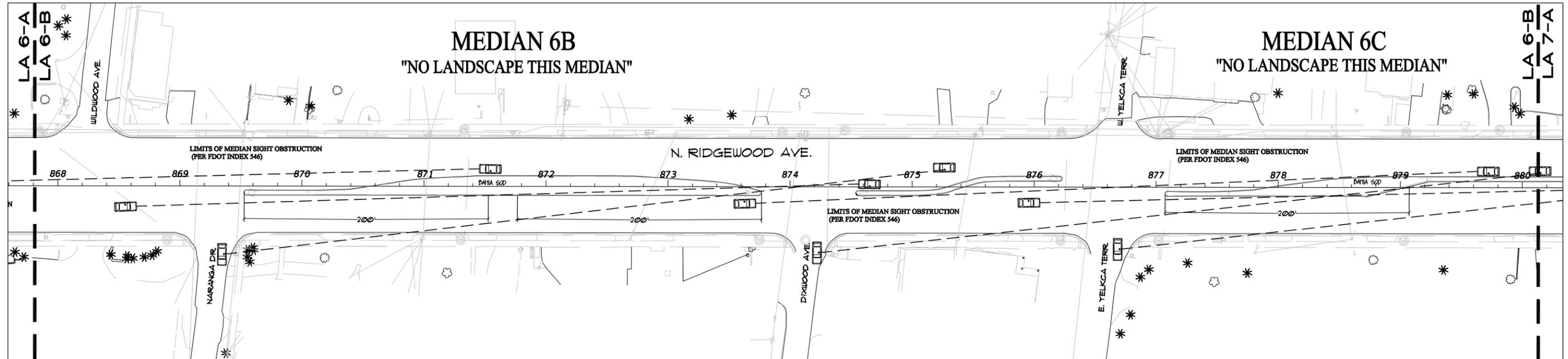
DESIGN SPEED 50 MPH



LA 6-B

POSTED SPEED 45 MPH

DESIGN SPEED 50 MPH



ORMOND BEACH
300 INTERCHANGE WY. ORMOND BEACH, FL 32174
(386) 877-2482 FAX (386) 877-2505
ST. AUGUSTINE
4478 U.S. 1 S. ST. AUGUSTINE, FL 32086
(888) 707-1810 FAX (888) 707-4159
AMELIA ISLAND
914 ATLANTIC AVE. STE. 240 ORMOND BEACH, FL 32064
(386) 467-5455 FAX (386) 467-4159

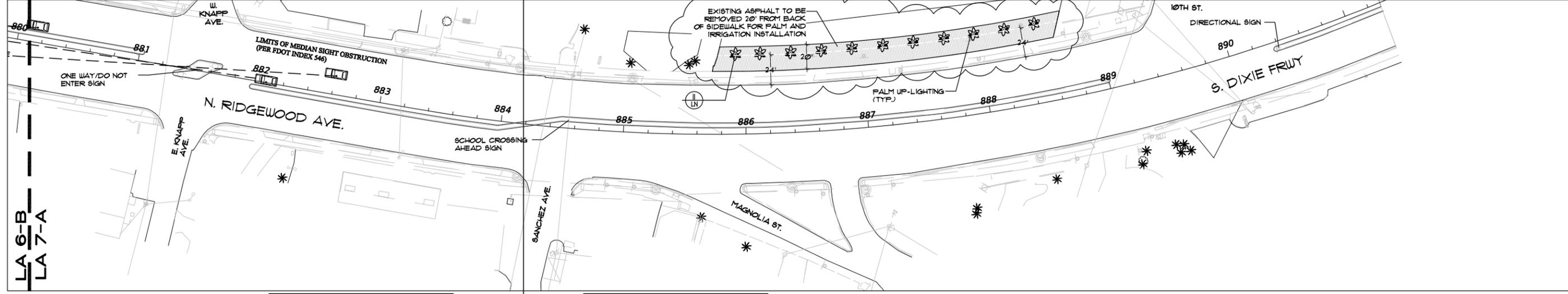
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US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS
VOLUSIA COUNTY, FLORIDA
CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
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ISSUE DATE: 7-14-14 CHECKED BY: SBK/PM
DRAWING FILE: LA2/LA

LA 7-A

LA 6-B
LA 7-A



PLANT LIST - 10TH ST PARK

SPECIES	COMMON NAME	SPECIFICATIONS
PALMS		
LN II	LIVISTONA NITIDA	CARNARVON GORGE PALM 14' CT. MATCHED

POSTED SPEED 45 MPH
DESIGN SPEED 50 MPH

POSTED SPEED 40 MPH
DESIGN SPEED 45 MPH

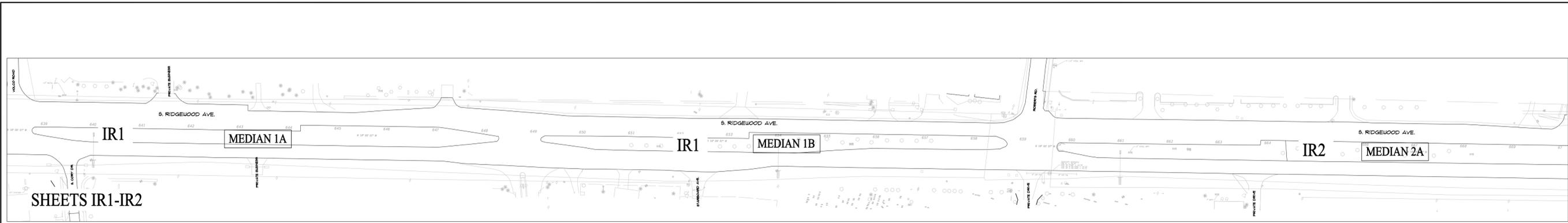


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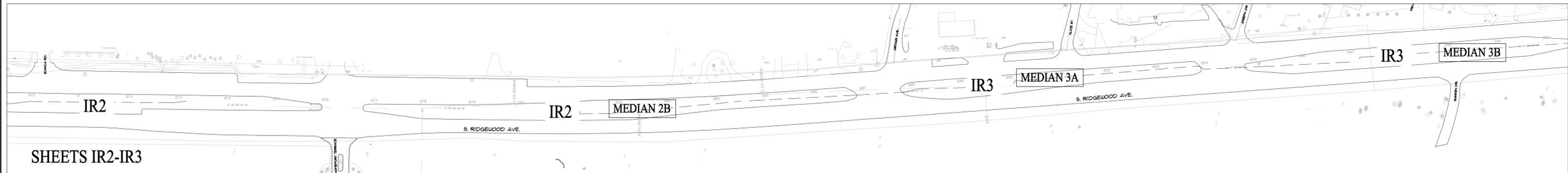
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10	1-18-16	REVISED PER CITY REQUEST

US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS
CITY OF EDGEWATER
VOLUSIA COUNTY, FLORIDA

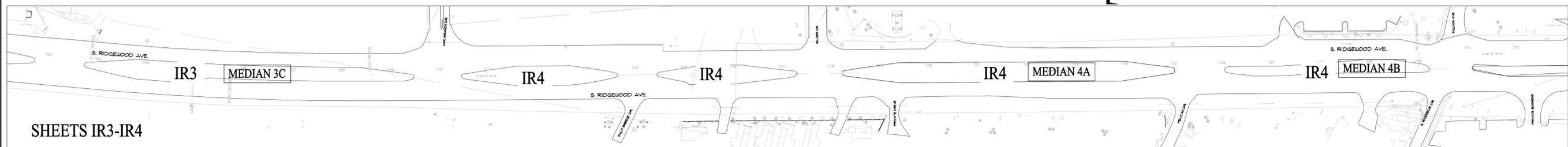
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DRAWING FILE: 14021LA



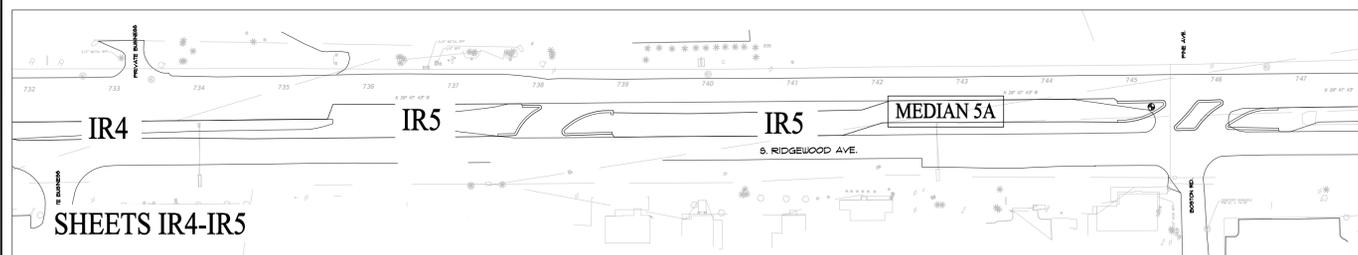
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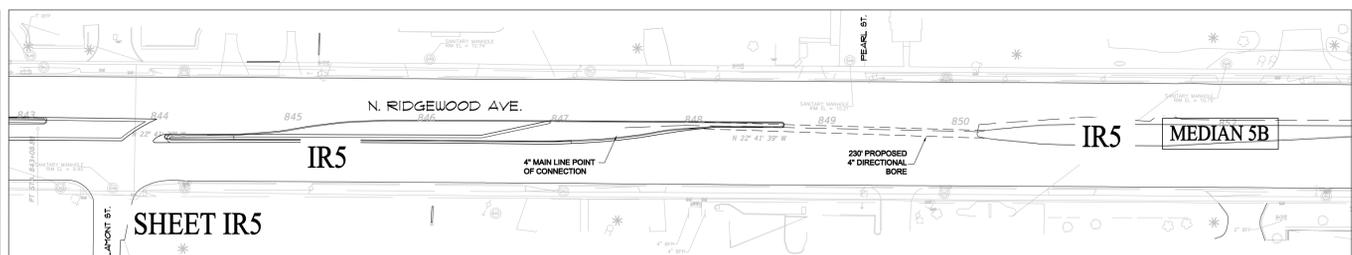
SHEETS IR2-IR3



SHEETS IR3-IR4



SHEETS IR4-IR5



SHEET IR5



SHEETS IR5-IR6



SHEETS IR6-IR7



ORLAND BEACH
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AMELIA ISLAND
814 ATLANTIC AVE. SEASIDE BEACH, FL 32084
(904) 481-5438 FAX (904) 481-4159

NO.	DATE	DESCRIPTION
1.	12-15-16	BASED PER CITY REQUEST
2.	1-24-18	REVISED PER BID REQUEST
3.	8-24-18	REVISED PER BID REQUEST
4.	9-6-18	REVISED PER BID REQUEST

US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
LAYOUT SHEET

PROJECT NO. 14021
ISSUE DATE: 4-8-15
DESIGNED BY: JC
DRAFTED BY: JC
CHECKED BY: SNG/PM
DRAWING FILE: 14021R_US1
XREFS: 14021RASE

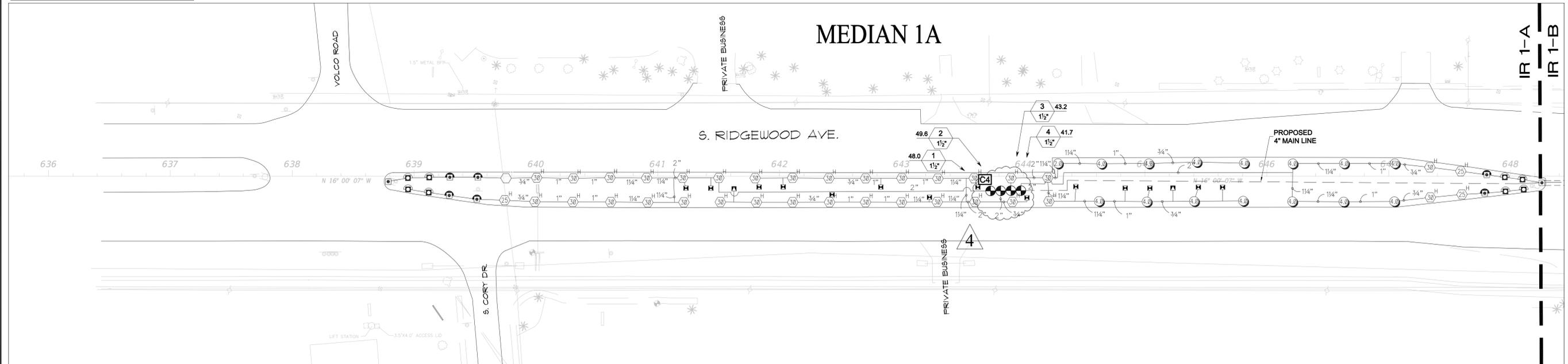
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SCALE:
SHEET LAYOUT OF 1

VOLUSIA COUNTY, FLORIDA
CITY OF EDGEWATER

IR 1-A

POSTED SPEED 55 MPH

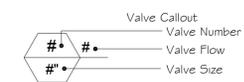
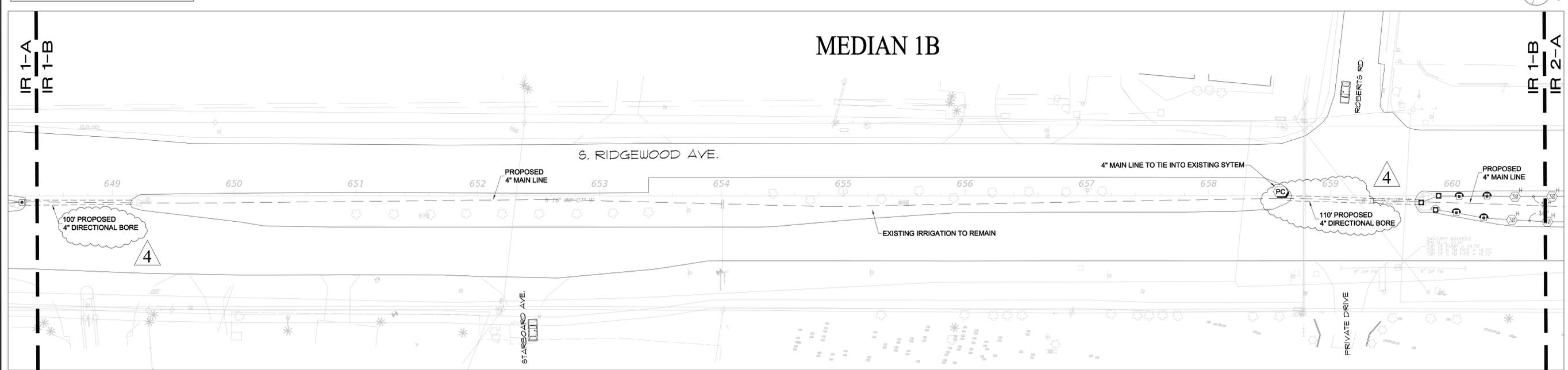
DESIGN SPEED 55 MPH



IR 1-B

POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH



ORLAND BEACH
300 INTERCHANGE
(386) 872-2482 FAX (386) 877-2505
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AMELIA ISLAND
894 ATLANTIC AVE.
(904) 481-5438 FAX (904) 481-4159

NO.	DATE	DESCRIPTION
1	12-15-16	BASED PER CITY REVIEW
2	12-15-16	REVISED PER CITY REQUEST
3	04-16	REVISED PER BID REQUEST
4	04-16	REVISED PER BID REQUEST

US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
VOLUSIA COUNTY, FLORIDA
CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
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PROJECT NO. 14021
ISSUE DATE: 4-8-15
DESIGNED BY: JC
DRAFTED BY: JC
CHECKED BY: SMGPM
DRAWING FILE: 14021R_US1
XREFS: 14021RASE

FILE LOCATION
SCALE:
SHEET IR1 OF 9

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IR 2-A

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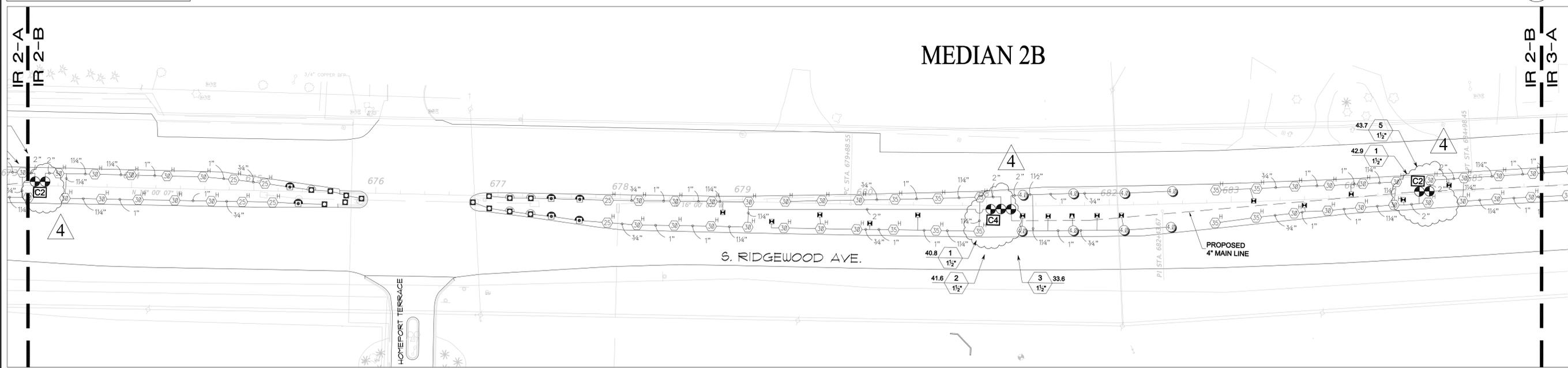
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IR 2-B

POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH



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US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
VOLUSIA COUNTY, FLORIDA
CITY OF EDGEWATER

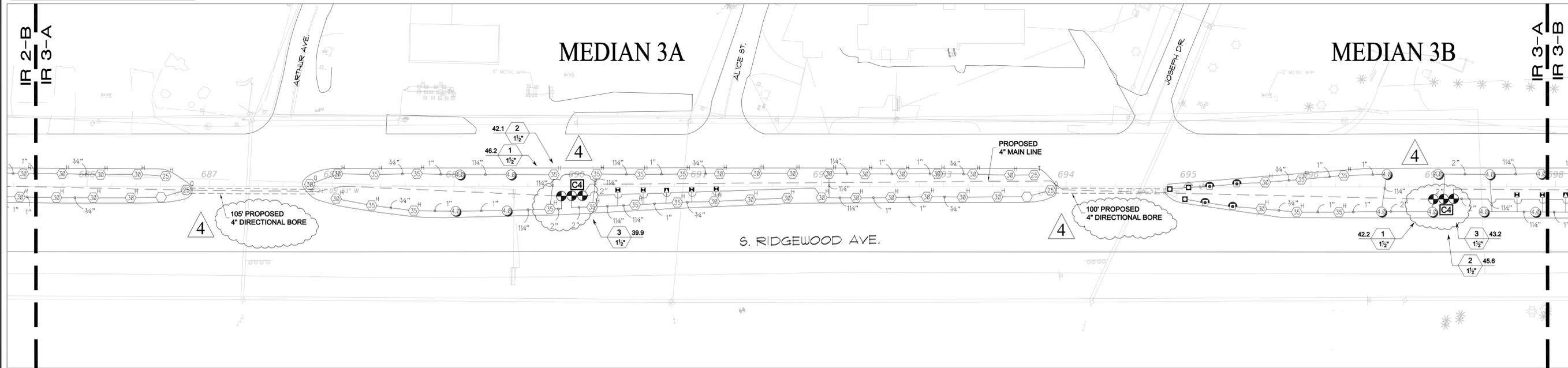
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XREFS: 14021RASE

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SCALE:
SHEET IR2 OF 9

IR 3-A

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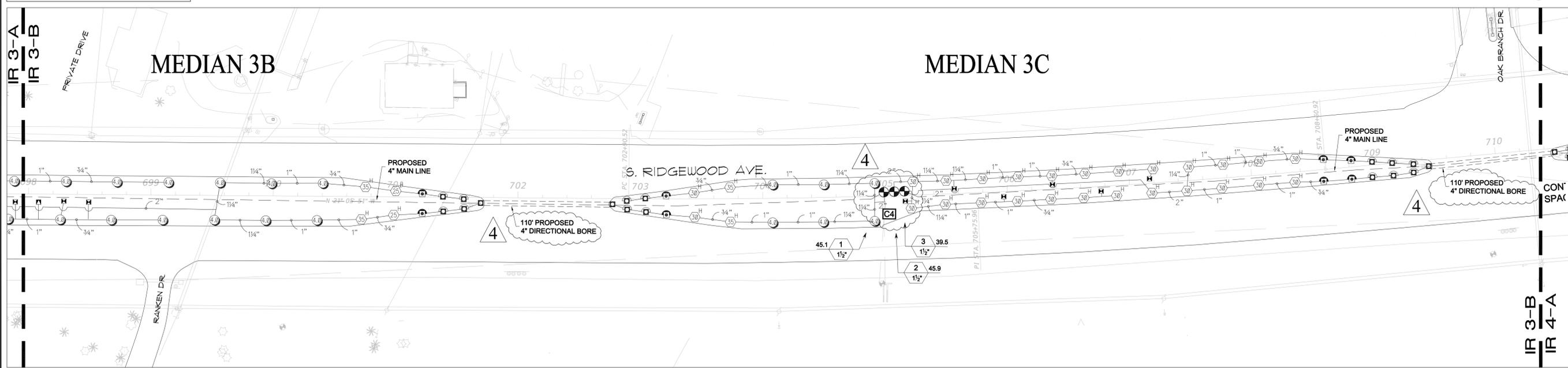
DESIGN SPEED 55 MPH



IR 3-B

POSTED SPEED 55 MPH

DESIGN SPEED 55 MPH



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US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS

CITY OF EDGEWATER
VOLUSIA COUNTY, FLORIDA

ZEV COHEN & ASSOCIATES, INC.
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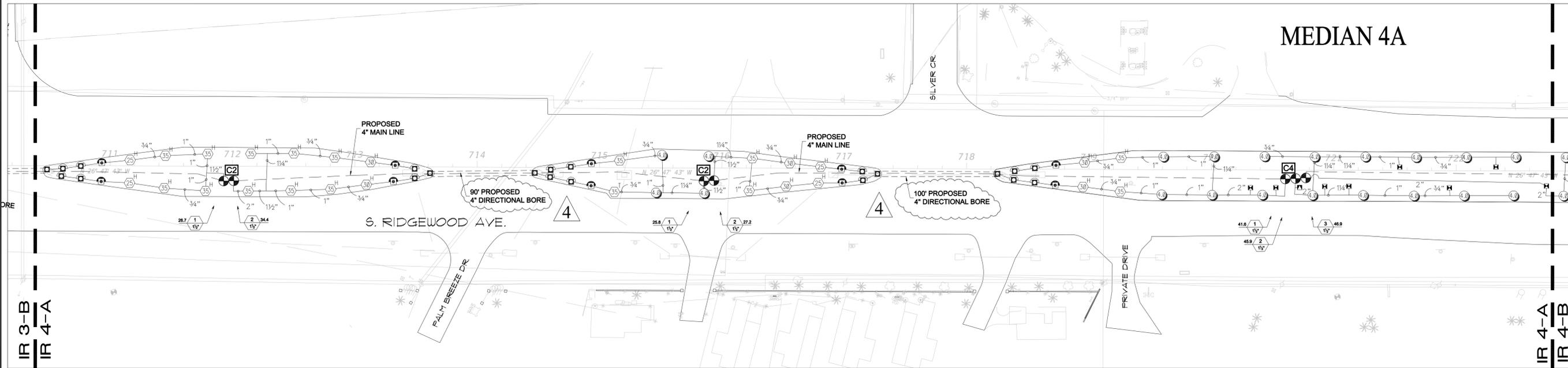
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SCALE:
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IR 4-A

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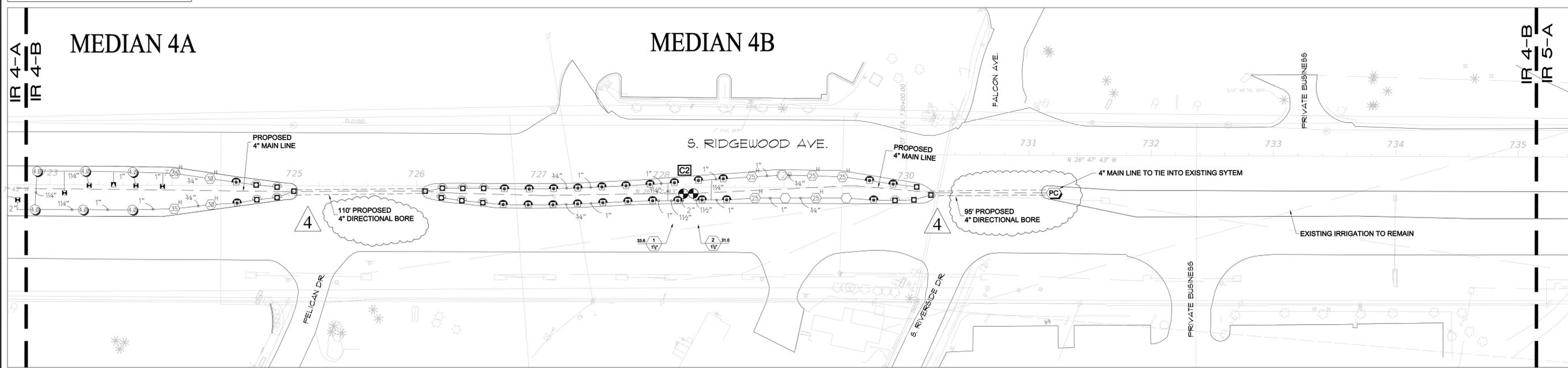
DESIGN SPEED 55 MPH



IR 4-B

POSTED SPEED 45 MPH

DESIGN SPEED 55 MPH



ORLAND BEACH
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NO.	DATE	DESCRIPTION
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3	8-6-18	REVISED PER BID REQUEST
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US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
VOLUSA COUNTY, FLORIDA
CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
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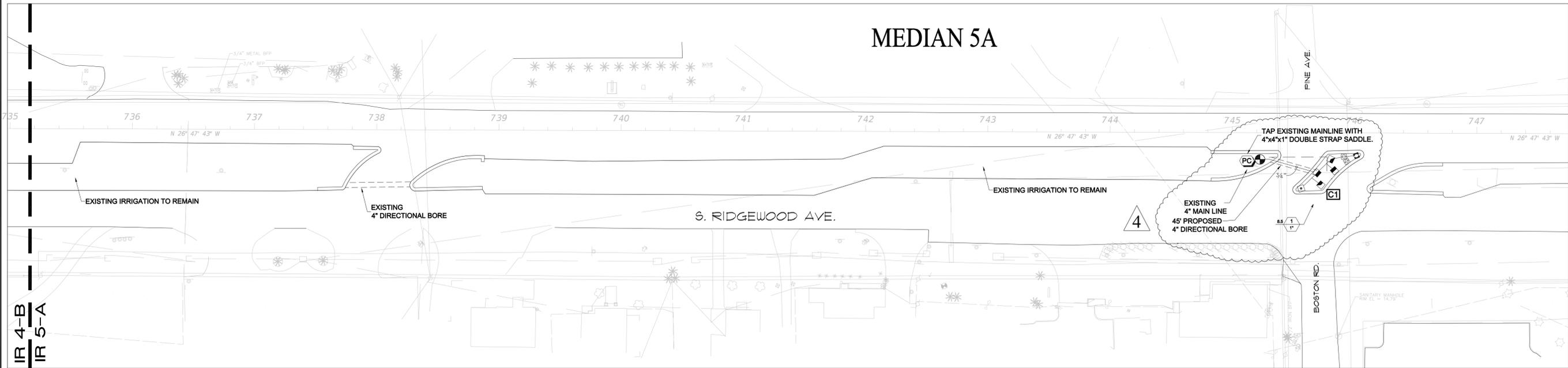
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NOT VALID WITHOUT EMBOSSED SEAL

IR 5-A

POSTED SPEED 45 MPH

DESIGN SPEED 55 MPH



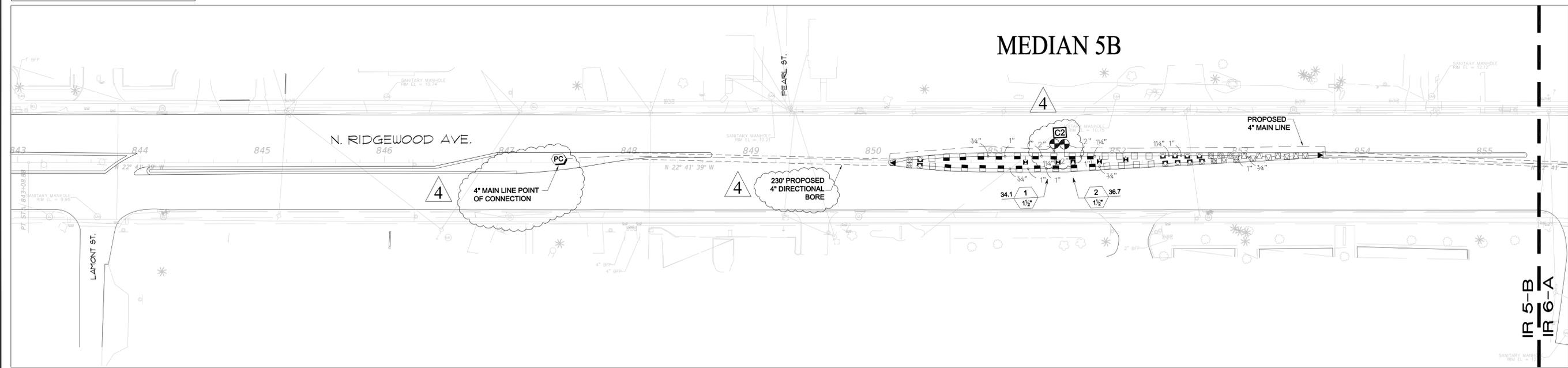
IR 4-B
IR 5-A



IR 5-B

POSTED SPEED 45 MPH

DESIGN SPEED 55 MPH



IR 5-B
IR 6-A



ORLAND BEACH
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US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
CITY OF EDGEWATER
VOLUSIA COUNTY, FLORIDA

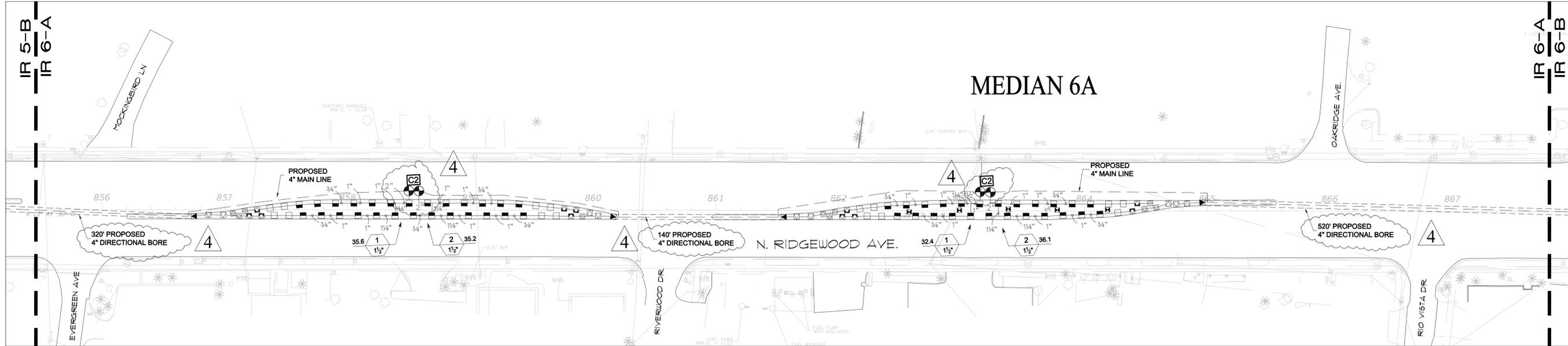
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FILE LOCATION
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SCALE:
SHEET IR5 OF 9

IR 6-A

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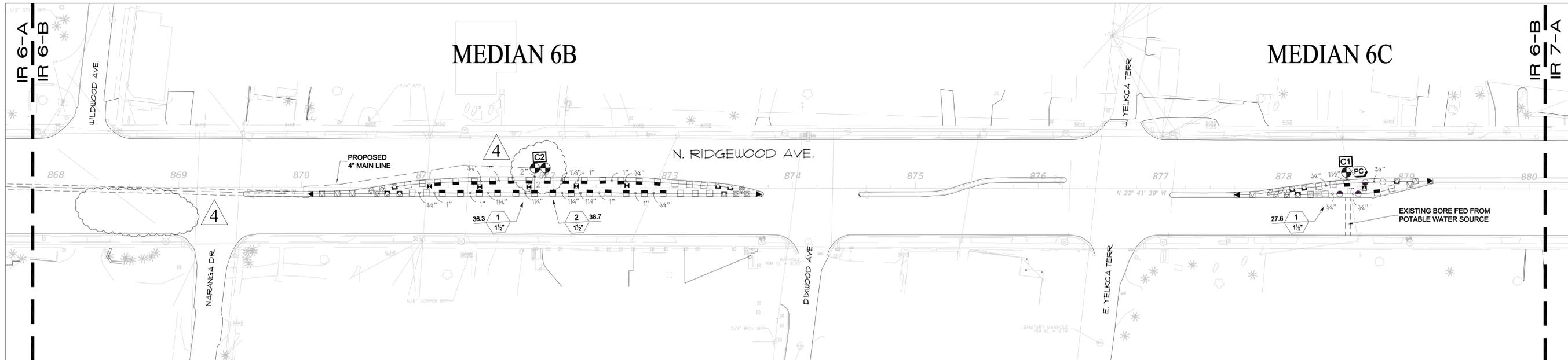
DESIGN SPEED 55 MPH



IR 6-B

POSTED SPEED 45 MPH

DESIGN SPEED 55 MPH



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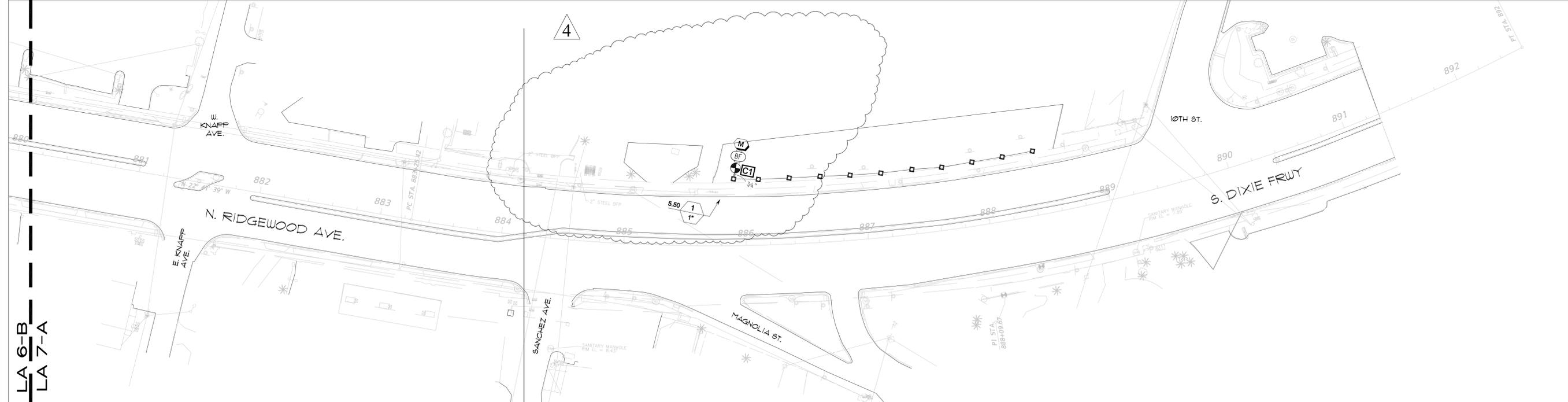
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US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
VOLUSA COUNTY, FLORIDA
CITY OF EDgewater

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FILE LOCATION
NOT VALID WITHOUT EMBOSSED SEAL
SCALE:
SHEET IR6 OF 9

IR 7-A



LA 6-B
LA 7-A

POSTED SPEED 45 MPH
DESIGN SPEED 55 MPH

POSTED SPEED 40 MPH
DESIGN SPEED 55 MPH



ORLAND BEACH
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US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
CITY OF EDGEWATER
VOLUSIA COUNTY, FLORIDA

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DRAWING FILE: 14021R_US1
XREFS: 14021RASE

FILE LOCATION
NOT VALID WITHOUT EMBOSSED SEAL
SCALE:
SHEET
IR7 OF 9

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS
	Hunter PRO5-0G-PR530-R or approved equal 1.5 Strip Series	10	EST	30	0.61	4x1.5'
	Hunter PRO5-0G-PR530-R or approved equal 1.5 Strip Series	23	SST	30	1.21	4x3.0'
	Hunter PRO5-0G-PR530-R or approved equal 8 Series MPR	30	1.80	30	0.52	8'
	Hunter PRO5-0G-PR530-R or approved equal 1.0 Series MPR	31	1.80	30	0.79	10'
	Hunter PRO5-0G-PR530-R or approved equal 1.2 Series MPR	40	1.80	30	1.30	12'
	Hunter PRO5-0G-PR530-R or approved equal 1.5 Series MPR	96	1.80	30	1.85	15'
	Hunter PRO5-0G-PR530-R or approved equal 1.5 Series MPR	2	1.20	30	1.23	15'
	Hunter PRO5-0G-PR530-R or approved equal 1.0 Series VAN	1	Adj	30		10'
	Hunter PRO5-0G-PR530-R or approved equal 1.5 Series VAN	1	Adj	30		15'
	Hunter PRO5-0G-PR530-R or approved equal 1.2 Series MPR	1	1.80	30	1.30	12'
	Hunter PRO5-0G-PR530-R or approved equal 1.5 Series MPR	3	1.80	30	1.85	15'
	Hunter PRO5-0G-PR540-R MP2000 or approved equal	30	C5T	40	0.01	17'
	Hunter PRO5-0G-PR540-R MP3000 or approved equal	5	C5T	40	0.01	23'
	Hunter PRO5-0G-PR540-R MP2000 or approved equal	78	1.80	40	0.92	17'
	Hunter PRO5-0G-PR540-R MP3000 or approved equal	105	1.80	40	1.73	23'
	Hunter PRO5-0G-PR540-R MP3000 or approved equal	2	90	40	0.87	23'
	Hunter PCB-25 Bubbler or approved equal	80	360	30	0.25	1'
	Two Hunter PCB-25 Bubbler or approved equal	13	360	30	2x.25	1'
	Hunter PRO5-0G-PR530-R w/Maxijet ARC/RHFR09H or approved equal	11	360	30	0.40	5'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
	Hunter PGP-04-CV-R 2.0LA or approved equal	58	45		25'
	Hunter PGP-04-CV-R 2.5LA or approved equal	231	45		30'
	Hunter PGP-04-CV-R 3.0LA or approved equal	60	45		35'
	Hunter PGP-04-CV-R 2.0 or approved equal	5	45	2.07	37'
	Hunter PGP-04-CV-R 4.0 or approved equal	125	45	4.01	42'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Area to Receive Dripline Hunter FLD-1.0-1.2 or approved equal On-Surface Pressure Compensating Landscape Dripline, 0.9GPH emitters at 1.2' O.C. Dripline laterals spaced at 1.6' O' apart, with emitters offset for triangular pattern. UV Resistant.	3,000 s.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Hunter ICV-F5 or approved equal in 1.0" Purple Valve Box with DC latching solenoid.	55
	Hunter ICZ or approved equal in Jumbo Purple Valve Box with DC latching solenoid.	2
	Hunter NODE-1.00 or approved equal install in valve box for zone 1.	3
	Hunter NODE-200 or approved equal install in valve box for zone 2.	11
	Hunter NODE-400 or approved equal install in valve box for zone 2.	10
	Water Meter 1" Potable by others	1
	Wilkins 975XL 1" Backflow Preventer or approved equal	1
	Point of Connection into 4" Reclaimed Water Main. Install 4" mechanical joint fitting with megalug for connection into existing mainline.	5
	Point of Connection- Install 4x4x1" saddle on existing 4" mainline.	1
	Future Point of Connection- Install 2" reclaim water main from median and cap for future connection.	1
	Irrigation Lateral Line: PVC Class 200 Purple	27,500 l.f.
	Irrigation Mainline: PVC 4" Class 200 Purple Gasket Bell	11,200 l.f.
	Directional Bore: HDPE 3608 IPS directional bore sized per plan. Extend bores a minimum of 30' past landscape. See note 28.	4

IRRIGATION NOTES:

- THE PLANS AND DRAWINGS ARE DIAGRAMMATIC OF THE WORK TO BE PERFORMED. SOME COMPONENTS MAY BE SHOWN OUTSIDE THE WORK AREA FOR CLARITY. THE WORK SHALL BE EXECUTED IN A MANNER TO AVOID CONFLICTS WITH UTILITIES AND OTHER ELEMENTS OF CONSTRUCTION, INCLUDING LANDSCAPE MATERIALS. ALL DEVIATIONS FROM THE PLANS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE BEING INSTALLED. 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. IN THE EVENT THAT NOTIFICATION OF THE CONFLICT IS NOT APPROVED BY THE OWNER'S REPRESENTATIVE, THE CONTRACTOR WILL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS.
- THE IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS, IRRIGATION SYSTEM SPECIFICATIONS AND ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL COMPLY WITH ALL PREVAILING LOCAL CODES, ORDINANCES, AND REGULATIONS.
- CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS, INCLUDING UTILITY LOCATIONS, BEFORE INSTALLATION OF THE IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THE PLANS - CONTRACTOR TO VERIFY. COORDINATE ALL IRRIGATION SYSTEM CONSTRUCTION WITH EXISTING AND NEW PLANTINGS TO AVOID CONFLICT OR INTERFERENCE WITH LOCATION OF PIPING, SLEEVING, CABLES, AND SERVICE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION WITH ALL OTHER CONSTRUCTION ON SITE, ESPECIALLY LANDSCAPE INSTALLATION. IRRIGATION SYSTEM SHALL 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 OR CALLED OUT ON THE DRAWINGS WILL NOT BE ACCEPTED. ALL PIPING AND OTHER COMPONENTS ARE TO REMAIN WITHIN THE PROPERTY OF THE OWNER.
- WHERE EXISTING OR NEW TREES, LIGHT STANDARDS, 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 THE PROPER COVERAGE WITHOUT DAMAGING THE OBSTRUCTION. OWNER'S REPRESENTATIVE SHALL DETERMINE WHETHER AN OBSTRUCTION OCCURS OR NOT.
- COMPONENT SPACINGS ARE MAXIMUM. DO NOT EXCEED SPACINGS SHOWN OR NOTED ON THE PLANS. COMPONENT SPACINGS MAY BE ADJUSTED TO ACCOMMODATE CHANGES IN TERRAIN AND PLANTING LAYOUT AS LONG AS THE MODIFIED SPACINGS DO NOT EXCEED THE SPACINGS SHOWN IN THE PLANS. UNLESS SHOWN OTHERWISE, CONTRACTOR SHALL PROVIDE 100% COVERAGE.
- ALL MATERIALS AND EQUIPMENT SHOWN SHALL BE NEW AND 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 AND INSTRUCTIONS RECOMMENDED BY THEIR MANUFACTURER.
- THE LOCATION OF THE IRRIGATION MAINLINE SHALL BE IDENTIFIED IN THE FIELD AND APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE INSTALLATION. MAINLINE TO BE INSTALLED A MINIMUM OF FIVE FEET OFF EDGE OF PAVEMENT IN MEDIANS. SHOWN OUTSIDE FOR CLARITY PURPOSES ONLY.
- IRRIGATION CONTRACTOR SHALL ADJUST ALL SPRINKLERS, CONTROLLER AND OTHER DEVICES TO OBTAIN SPECIFIED OPERATING PARAMETERS, INCLUDING COVERAGE, OPERATING PRESSURE, FLOW RATES AND OPERATION TIME, AS INDICATED ON THE DRAWINGS AND IN THE IRRIGATION SYSTEM SPECIFICATIONS.
- CONTRACTOR TO PROVIDE INSTALLATION SHOP DRAWINGS AND MANUFACTURER PRODUCT INFORMATION FOR ALL IRRIGATION COMPONENTS. ALL INSTALLATIONS SHALL BE AS RECOMMENDED BY MANUFACTURERS. THE QUANTITIES SHOWN IN THE LEGENDS AND SYMBOL SHEETS SHALL NOT BE USED FOR BIDDING PURPOSES. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONDUCTING A COMPREHENSIVE MATERIALS TAKEOFF TO DETERMINE THE ACTUAL QUANTITIES OF MATERIAL NECESSARY TO EXECUTE THE WORK DESCRIBED IN THE DOCUMENTS.
- ALL TRENCHES SHALL BE BACKFILLED WITH CLEAN, DEBRIS-FREE MATERIALS. CLEAN SAND SHALL BE USED FOR BEDDING MATERIAL IF PARENT SOIL CANNOT BE ADEQUATELY RID OF ROCK (5/8" AND LARGER) AND OTHER EXTRANEIOUS DEBRIS. PULLING PIPE SHALL BE PROHIBITED.
- ALL SOLVENT WELDING SHALL BE PRECEDED BY PRIMING OF THE FITTINGS AND PIPE AS RECOMMENDED BY THE MANUFACTURER.
- CONTRACTOR TO LABEL ALL VALVE BOX COVERS WITH THE CORRESPONDING CONTROLLER ZONE NUMBER. NUMBERING SIZE 1". ALL VALVE BOXES TO HAVE BOLT DOWN COVER WITH BOLT INSTALLED.
- CONTRACTOR TO PLACE TREE SPRAYS OR BUBBLERS AT OUTER EDGE OF ROOT BALL, NOT OUTER EDGE OF PLANTING HOLE.
- ALL WIRE SPLICES TO BE MADE WITH KINGBLACK WIRE CONNECTORS OR APPROVED EQUAL.
- IRRIGATION CONTRACTOR SHALL INSTALL A IRROMETER WATERMARK 200SS SOIL MOISTURE SENSOR COMPATIBLE WITH DC VOLTAGE FOR EACH CONTROLLER. INSTALL SOIL MOISTURE SENSOR THREE FEET OFF EDGE OF PAVEMENT. LOCATION SHALL BE DOCUMENTED ON AS BUILT PLANS WITH A MINIMUM OF TWO REFERENCE POINTS. INSTALL SOIL MOISTURE SENSOR PER MANUFACTURE SPECIFICATIONS.
- LOCATE ALL VALVES WITH A MINIMUM OFFSET OF 5'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT.
- THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR ALL DIRECTIONAL BORING.
- ALL UN-SIZED PIPE SHALL BE 3/4".
- IRRIGATION LATERAL LINES TO BE BURIED AT A DEPTH OF 16".
- IRRIGATION MAINLINES TO BE BURIED AT A DEPTH OF 20".
- ALL COMPONENTS INSTALLED BY THE IRRIGATION CONTRACTOR, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE EXACT LOCATION AND DEPTH BELOW FINISH GRADE OF ALL COMPONENTS SHALL BE NOTED ON THE "AS-BUILT" DRAWINGS.
- IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE LANDSCAPE SUPERVISOR. WORK IN THE RIGHT OF WAY SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE HIGHWAY JURISDICTION.
- INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY FLOW OF VEHICULAR TRAFFIC AND COMPLETION OF ALL WORK ON THE SITE.
- IRRIGATION CONTRACTOR SHALL CONTACT THE CITY OF EDGEWATER TO COORDINATE INSTALLATION OF POTABLE WATER METER AND BE RESPONSIBLE FOR ALL ASSOCIATED COST FOR THE INSTALLATION.
- THE CITY OF EDGEWATER SHALL BE RESPONSIBLE FOR ALL CONSUMPTION COST FOR WATER SERVICE TO IRRIGATION SYSTEM.
- DIRECTIONAL BORES SHALL BE INSTALLED IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 555 FOR PRESSURIZED PIPES. INSTALL HARCO 4" IPS STAINLESS STEEL TRANSITION FITTINGS ON 4" PIPE AND USE DIRECTIONAL BORE AS MAINLINE. INSTALL HDPE X SCHEDULE 40 FUSED ENDS FOR 2" CROSSING AT MEDIAN IN FRONT OF CEMETERY. INSTALL HDPE X SCHEDULE 40 FUSED END ON 1" DIRECTIONAL BORE IN MEDIAN ACROSS FROM BOSTON ROAD AND USE AS A LATERAL PIPE INTO ISLAND.
- INSTALL RECLAIM WATER ADVISORY SIGNS AT EACH GROUP OF CONTROL VALVES PER LOCAL CODE.
- INSTALL DUCTILE IRON 4"x4"x2" GASKET SERVICE TEE WITH LEEMCO RESTRAINT FITTINGS INTO NEW 4" MAINLINE AT EACH GROUP OF VALVES.
- ALL MAINLINE AND IRRIGATION EQUIPMENT TO BE INSTALLED WITHIN THE MEDIAN. SHOWN OUTSIDE FOR CLARITY PURPOSES ONLY.



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(386) 877-2482 FAX (386) 877-2505

ST. AUGUSTINE
4475 U.S. 1
(904) 797-1510 FAX (904) 797-1159

AMELIA ISLAND
84 ATLANTIC AVE.
(904) 481-5488 FAX (904) 481-4159

NO.	DATE	DESCRIPTION
1	12-15-16	BASED PER CITY REQUEST
2	1-24-18	REVISED PER BID REQUEST
3	8-24-18	REVISED PER BID REQUEST
4	8-6-18	REVISED PER BID REQUEST

US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
NOTES & DETAILS

VOLUSIA COUNTY, FLORIDA
CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
WWW.ZEVCOHEN.COM

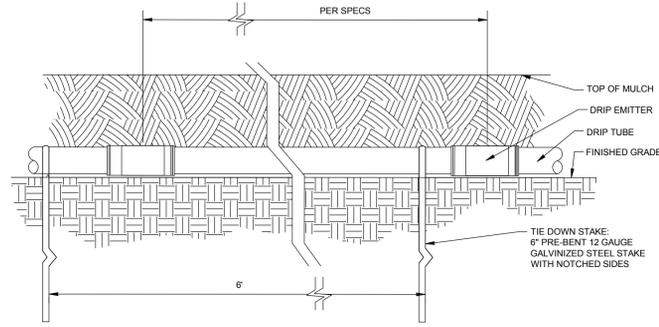
PROJECT NO: 14021
ISSUE DATE: 4-8-15
DESIGNED BY: JC

DRAFTED BY: JC
CHECKED BY: SNG/PM
DRAWING FILE: 14021P_US1
XREFS: 14021BASE

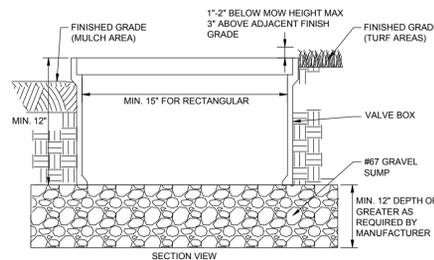
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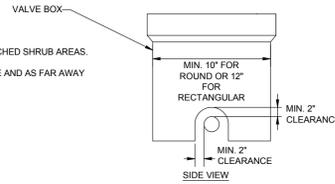
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SHEET IR8 OF 9



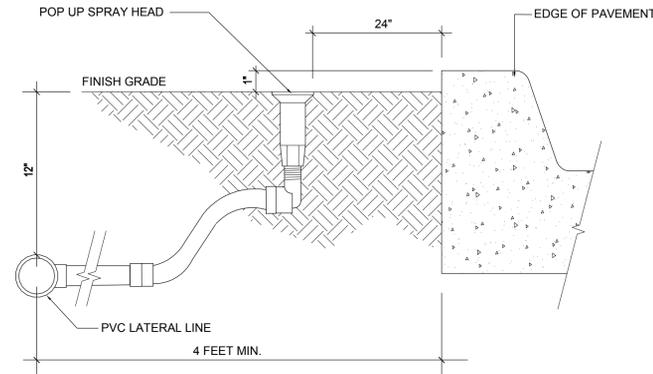
DRIP TUBE ON GRADE WITH MULCH COVER
SCALE: NTS



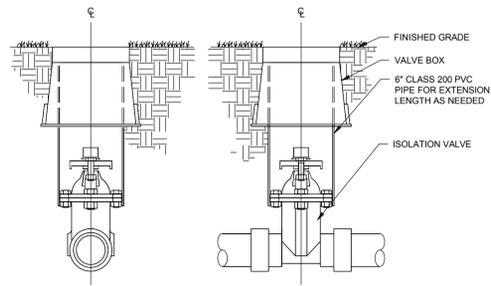
- NOTES:
1. INSTALL BOX TOP BETWEEN 1\"/>



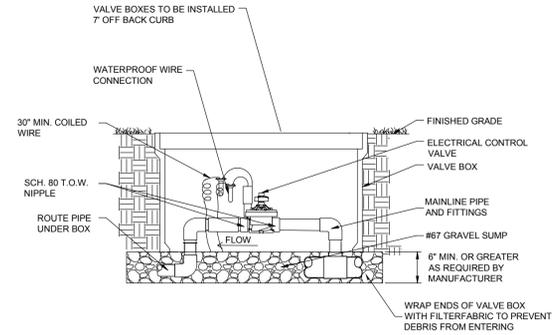
VALVE BOX DETAIL
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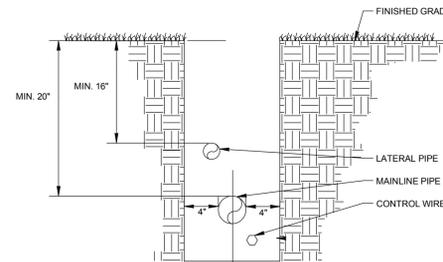
IRRIGATION HEAD INSTALLATION NEXT TO ROADWAY
SCALE: NTS



ISOLATION VALVE DETAIL
SCALE: NTS

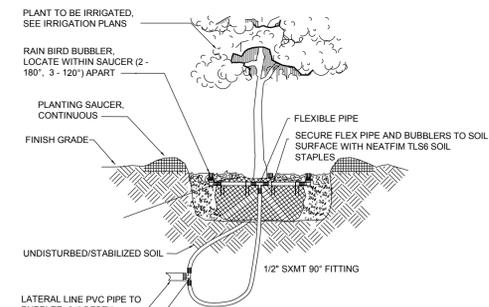


ELECTRIC CONTROL VALVE
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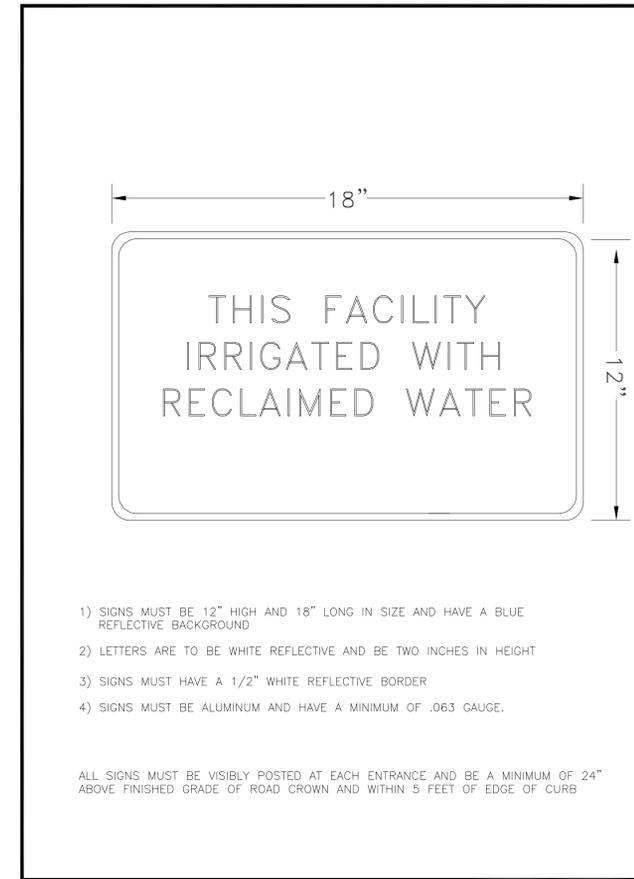


- NOTES:
1. ALL TRENCHING TO BE OUTSIDE OF EXISTING TREE DRIP LINE.
 2. NO ROCKS, BOULDERS, OR SHAPR OBJECTS TO BE IN TRENCH BACKFILL.
 3. ALL PIPE TO BE INSTALLED AS RECOMMENDED BY MANUFACTURER.
 4. AT EACH CHANGE IN MAINLINE DIRECTION INSTALL A 30\"/>

TRENCH, PIPE, AND WIRE DETAIL
SCALE: NTS



BUBBLER INSTALLATION
SCALE: NTS

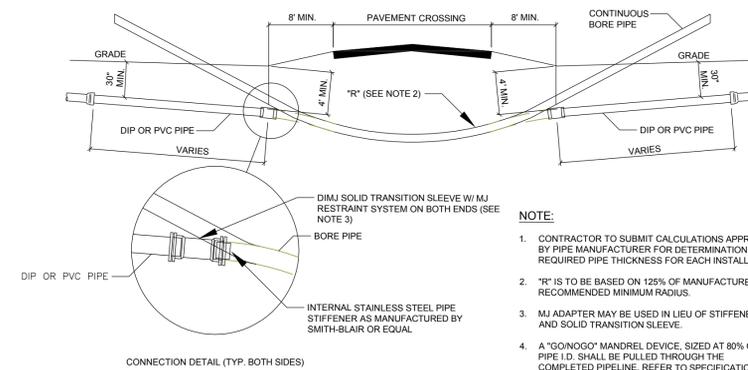


- 1) SIGNS MUST BE 12\"/>

ALL SIGNS MUST BE VISIBLY POSTED AT EACH ENTRANCE AND BE A MINIMUM OF 24\"/>

SC-21

RECLAIMED WATER ADVISORY SIGN
SCALE: NTS



DIRECTIONAL BORE DETAIL
SCALE: NTS

- NOTE:
1. CONTRACTOR TO SUBMIT CALCULATIONS APPROVED BY PIPE MANUFACTURER FOR DETERMINATION OF REQUIRED PIPE THICKNESS FOR EACH INSTALLATION.
 2. "R" IS TO BE BASED ON 125% OF MANUFACTURER'S RECOMMENDED MINIMUM RADIUS.
 3. MJ ADAPTER MAY BE USED IN LIEU OF STIFFENER AND SOLID TRANSITION SLEEVE.
 4. A "GONOGO" MANDREL DEVICE, SIZED AT 80% OF THE PIPE I.D. SHALL BE PULLED THROUGH THE COMPLETED PIPELINE. REFER TO SPECIFICATION SECTION 02446.



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US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
VOLUSIA COUNTY, FLORIDA
CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
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DRAWING FILE: 14021R_US1
XREFS: 14021RASE

FILE LOCATION
NOT VALID WITHOUT EMBOSSED SEAL
SCALE:
SHEET IR9 OF 9

GENERAL CONSTRUCTION NOTES

- THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE Vv, Vh, AND Vvh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE. ONLY THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.
- EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL CONTACT SUNSHINE ONE CALL OF FLORIDA, INC. AS REQUIRED BY CHAPTER 556 OF THE FLORIDA STATUTES.

UTILITY AGENCY OWNER - TELEPHONE NUMBER
ELECTRIC - FLORIDA POWER & LIGHT, BEVERLY HUTTO (386) 922-3499
GAS - TECO PEOPLES GAS, GEORGE SMITH (386) 671-2292
FIBER OPTIC CABLE - AT&T, MICHAEL MOORE (386) 254-8560
TELEPHONE - BRIGHTHOUSE, SEAN RIEN (386) 760-524
TRAFFIC MONITORING SITES- FDOT, CHERYL BURKE (386) 343-5280
VOLUSIA COUNTY TRAFFIC ENGINEERING - (386) 756-5268
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH RULE CHAPTER 14-42, FLORIDA ADMINISTRATIVE CODE, THE FDOT 20% DESIGN STANDARDS AND REVISED INDEX DRAWINGS AS APPENDED HEREIN, THE JANUARY 2006 FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION EDITION AND THE FDOT JAM 2010 EDITION. CONTRACTOR TO FOLLOW ALL REQUIREMENTS OF CITY/FDOT JPA AND FDOT APPROVAL.
- CONTRACTOR TO PROVIDE EROSION AND SILTATION CONTROL MEASURES AND COORDINATED /APPROVED BY FDOT AND INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE MEASURES ARE TO BE INSPECTED BY THE CONTRACTOR ON A REGULAR BASIS AND ARE TO BE MAINTAINED IN ACCORDANCE WITH SWAMP, DEP NPDES, AND BEST MANAGEMENT PRACTICES (BMPs) STANDARDS AND REPAIRED ON AN IMMEDIATE BASIS AS REQUIRED. CONTRACTOR TO OBTAIN DEP NPDES PERMIT, IF REQUIRED.
- ALL EXISTING UTILITY BOXES AND APPURTENANCES SHALL BE RAISED TO PROPOSED GRADE AS NECESSARY. INTERRUPTIONS TO PROPOSED RIBBON CURBS MAY BE REQUIRED. CONTRACTOR TO COORDINATE IN FIELD WITH CITY OF EDGEWATER AND LANDSCAPE ARCHITECT.
- ANY EXISTING STRIPING ON SR442 DAMAGED BY THIS PROJECT MUST BE REPLACED.
- CONTRACTOR TO STAKE-OUT EACH MEDIAN FOR PLANT/TREE LOCATIONS FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO INSTALLATION.
- CONTRACTOR WILL BE RESPONSIBLE TO DO ANY GRADING WORK NECESSARY TO ASSURE PROPER DRAINAGE FLOW. CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERNS, SWALES CONVEYANCE, AND RUNOFF STORAGE CAPACITY DURING AND POST CONSTRUCTION ACTIVITIES. THE EXISTING DRAINAGE STRUCTURES SHALL NOT BE OBSTRUCTED OR MODIFIED ANYTIME.
- IT IS THE RESPONSIBILITY OF THE CITY TO MAINTAIN THE PROPOSED PROJECT LIMIT AREAS IN ACCORDANCE WITH THE FDOT MAINTENANCE RATING PROGRAM STANDARDS (MRP). REFER TO THEIR CRITERIA THROUGH THE LINK PROVIDED: <http://www.dot.state.fl.us/statemaintenanceoffice/MaintRatingProgram.htm>

LANDSCAPE NOTES

- FLORIDA #1 ALL PLANT MATERIAL SHALL BE GRADE FLORIDA NO. 1 OR BETTER IN QUALITY AS DESIGNATED IN THE MOST RECENT PUBLICATION OF "GRADES AND STANDARDS FOR NURSERY PLANTS", PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
- SOD: SOD SHALL BE FLORATAM ST. AUGUSTINE GRASS UNLESS OTHERWISE SPECIFIED ON THE PLANS AS ARGENTINE BAHIA. ALL SOD SHALL BE ROLLED. CONTRACTOR TO SOD ALL AREAS THAT ARE WITHIN MEDIANS WORKED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE SOD IS FREE OF WEEDS UPON INSTALLATION AND FOR THE DURATION OF THE 90 DAY MAINTENANCE PERIOD. SOD QUANTITY TAKEOFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL TURF AREAS SHALL BE SMOOTH AND FREE OF ANY TRACK PRINTS OR OTHER UNSIGHTLY IMPURITIES CAUSED BY CONTRACTOR MACHINERY DURING CONSTRUCTION/INSTALLATION. ALL REPLACEMENT SOD SHALL BE FLORATAM ST. AUGUSTINE.
- MULCH: ALL PLANTING BEDS SHALL BE TOP DRESSED WITH 3" PINE BARK MULCH, GRADE "B" OR BETTER. ALL TREES NOT IN BEDS SHALL HAVE A 5' DIAMETER MULCH RING.
- QUANTITIES: IN THE EVENT OF A VARIATION BETWEEN THE QUANTITIES SHOWN ON THE PLANT LISTS AND THE ACTUAL QUANTITY OF PLANTS SHOWN ON THE PLANS, THE PLANS SHALL CONTROL. SOD QUANTITY TAKEOFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- UNFORESEEN CONFLICTS: CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY PORTION OF THE LANDSCAPE PLAN AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNFORESEEN OBSTRUCTIONS, GRADE DIFFERENCES, STANDING WATER, SOIL CONDITIONS OR OTHER CONFLICTS EXIST. SUCH UNFORESEEN CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- SUBSTITUTIONS: NO SUBSTITUTIONS OR VARIATIONS OF ANY PLANT MATERIAL OR ITS INSTALLED LOCATION WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT AND APPROVAL FROM THE LANDSCAPE ARCHITECT.
- CONTAINERS: IF GALLONAGE FOR PLANTS OR TREES IS SHOWN THEY SHALL BE CONTAINER GROWN AND THE SIZE SHOWN SHALL REPRESENT THE MINIMUM ALLOWABLE GALLONAGE ACCEPTED. IN ALL CASES THE PLANT SPECIFIED SIZE SHALL GOVERN OVER THE GALLONAGE INDICATED.
- SOIL: CONTRACTOR SHALL VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO THE PLANT SPECIES SPECIFIED. IF SOIL CONDITIONS ARE DEEMED UNSUITABLE FOR PROPER PLANT HEALTH, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT. IF PROPER SUBSTITUTIONS SHALL BE SPECIFIED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ADDITIONALLY, IF PRESENT, THE CONTRACTOR SHALL REMOVE LIME ROCK, CONCRETE AND OTHER DELETERIOUS DEBRIS FROM PLANTING BEDS. IF DEBRIS IS INTEGRATED IN THE SOIL, THE SOIL MUST BE EXCAVATED AND REPLACED WITH ACCEPTABLE SOIL. LASTLY, ALL FILL TO BE PLACED IN LANDSCAPE AREAS MUST HAVE A pH RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, AND BE FREE OF ROCKS AND DEBRIS.
- TOPSOIL: TOPSOIL MATERIAL, IF REQUIRED, SHALL BE FREE FROM ALL HARD CLODS, WEEDS, STONES OVER 1" IN DIAMETER, CLAY, HARD PAN, NOXIOUS PLANTS, SOD, INSECTS, OR OTHER UNDESIRABLE PLANTS, SEEDS, OR MATERIAL WHICH MAY BE HARMFUL FOR GROWTH AND SHALL BE CERTIFIED AS STERILE.
- WEEDS: IF PRESENT, THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ANY WEEDS FROM PLANTING AREAS PRIOR TO THE INSTALLATION OF PROPOSED PLANT MATERIAL AND MULCH COVER. CONTRACTOR SHALL BE RESPONSIBLE TO KEEP BEDS FREE OF WEEDS FOR THE DURATION OF THE 90 DAY MAINTENANCE PERIOD.
- GRADING: UNLESS OTHERWISE STATED ON THESE PLANS, THE LANDSCAPE CONTRACTOR SHALL FINE GRADE ALL AREAS TO BE PLANTED AND SODDED IN ORDER TO ELIMINATE BUMPS AND DEPRESSIONS. FINE GRADING SHALL BE DEFINED AS THE FINAL 1/2" OF GRADE TO BE ACHIEVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND REGRADING WASHOUT AREAS CAUSED BY EROSION UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- LAYOUT: CONTRACTOR SHALL FIELD LOCATE AND STAKE ALL PROPOSED LOCATIONS OF DATE PALMS WITHIN MEDIANS FOR FDOT INSPECTION AND APPROVAL PRIOR TO PLANTING. CONTRACTOR RESPONSIBLE FOR COORDINATION WITH FDOT ON INSPECTION TIME(S), DATE(S).
- STAKING: ALL TREES, SHRUBS AND GRASS COVERS ARE TO BE PLANTED ACCORDING TO THE DETAILS IN THESE PLANS. IF THE CONTRACTOR PREFERENCES TO USE OTHER STAKING METHODS THAN SHOWN IN THE DETAILS, HE OR SHE MUST SUBMIT PROPOSED STAKING DETAILS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN, REPAIR, AND/OR REPLACE ANY PLANTS DAMAGED BY FAILURE TO PROPERLY STAKE OR GUY ANY TREES IN SITE, AT THEIR OWN EXPENSE.
- FERTILIZER: OSMOCOTE SLOW RELEASE FERTILIZER OR EQUIVALENT SHALL BE APPLIED TO ALL TREE, SHRUB, AND GRASSCOVER PLANTING AREAS AT THE RATE OF THREE (3) TABLESPOONS PER 2 SF OF PLANTING AREA.
- DRAINAGE: THE LANDSCAPE CONTRACTOR SHALL ASSURE THAT THIS WORK DOES NOT INTERRUPT EXISTING OR PROPOSED DRAINAGE PATTERNS AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY SHALL A CONFLICT ARISE.
- SPECIFICATIONS: THE LANDSCAPE ARCHITECT SHALL BE PERMITTED THE RIGHT DURING INSTALLATION TO REJECT ANY AND ALL PLANT MATERIAL AND WORKMANSHIP WHICH IN HIS OR HER OPINION DOES NOT MEET THE REQUIREMENTS OF THESE SPECIFICATIONS.
- PERCOLATION: PERCOLATION TESTS ARE REQUIRED FOR ALL PLANTING PITS FOR PHOENIX SPP. PALM TREES AFTER THE PLANTING PIT IS DUG TO THE PROPER DEPTH, FILL PIT WITH WATER AND DOCUMENT THE AMOUNT OF TIME IT TAKES FOR THE WATER TO DRAIN FROM THE PIT COMPLETELY. NOTIFY THE OWNER'S REPRESENTATIVE TO WITNESS THE TEST.
- TURNOVER: CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE FOR A TURNOVER DATE TO INCLUDE A WALK-THROUGH AND ACCEPTANCE OF WORK BY THE LANDSCAPE ARCHITECT. ANY WORK DEEMED UNACCEPTABLE SHALL BE CORRECTED IMMEDIATELY AND REINSPECTED AS SCHEDULED.
- MAINTENANCE: CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE TO BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE 90 DAYS AFTER FINAL WRITTEN ACCEPTANCE BY THE OWNER. MAINTENANCE SHALL INCLUDE WATERING, PRUNING, WEEDING, MULCHING, MOWING, REPLACEMENT OF SICK OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY IN ORDER TO MAINTAIN PROPER PLANT HEALTH AND SOIL MOISTURE CONTENT.
- GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL INSTALLED PLANT MATERIAL FOR ONE (1) CALENDAR YEAR STARTING FROM THE TURNOVER DATE. SHOULD WORK BE FOUND UNACCEPTABLE ANY CORRECTED WORK SHALL HAVE A PROPORTIONAL EXTENSION OF WARRANTY ONCE APPROVED. ANY SICK OR DEAD MATERIAL SHALL BE REPLACED IMMEDIATELY. THE LANDSCAPE CONTRACTOR SHALL NOT BE RESPONSIBLE TO HONOR ANY WARRANTY FOR THE LOSS OF ANY PLANT MATERIAL CAUSED BY FLOODING, FIRE, FREEZING TEMPERATURES, WINDS OVER 50 MPH, LIGHTNING, ANY OTHER NATURAL DISASTER, OR ANY LOSS/DAMAGE CAUSED BY VANDALISM OR NEGLIGENCE ON THE PART OF THE OWNER.

IRRIGATION NOTES

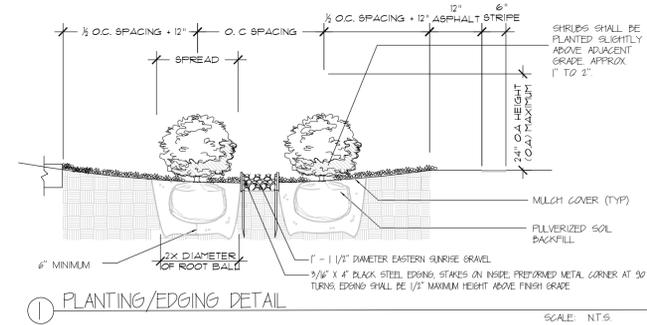
- AN AUTOMATIC TIME CONTROLLED IRRIGATION SYSTEM WITH A RAIN SENSOR SHALL BE INSTALLED TO PROVIDE 100% HEAD TO HEAD COVERAGE OF ALL NEW PLANTINGS. IRRIGATION PLAN SHALL BE PROVIDED UPON SUBSTANTIAL SITE PLAN APPROVAL.

QUALIFICATION OF CONTRACTORS

- THE CITY OF EDGEWATER BEACH RESERVES THE RIGHT TO REQUIRE ANY BIDDER TO SUBMIT SUCH EVIDENCE OF QUALIFICATIONS AS IT MAY DEEM NECESSARY AND MAY CONSIDER EVIDENCE AVAILABLE CONCERNING THE FINANCIAL AND OTHER QUALIFICATIONS AND ABILITIES OF A CONTRACTOR. FAILURE TO PROVIDE ALL REQUIRED INFORMATION MAY RESULT IN THE PROPOSAL BEING REJECTED AS UNRESPONSIVE. THE MINIMUM QUALIFICATIONS FOR THIS PROJECT ARE AS FOLLOWS:
1. THE CONTRACTOR MUST HAVE A MINIMUM TEN (10) YEARS EXPERIENCE INSTALLING (NOT MAINTAINING) LANDSCAPE AND IRRIGATION SYSTEMS ON PROJECTS OF A SIMILAR SCOPE IN NATURE WITH VERIFIABLE REFERENCES IN THE FOLLOWING AREAS:
MUNICIPAL LANDSCAPE AND IRRIGATION CONTRACTS, PROJECTS WITHIN FDOT RIGHTS OF WAY, PROJECTS EXCEEDING \$500K AS FRAME CONTRACTOR, TWENTY (20) OR MORE DATE PALMS ON A SINGLE SITE AND PROJECT FUNDED BY COUNTY, STATE OR FEDERAL FUNDS.

BASE INFORMATION

BASE PLANS USED IN THE DEVELOPMENT OF THIS PROJECT DESIGN WERE PROVIDED BY FDOT. CONTRACTOR TO CONFIRM FINAL LAYOUT AND DIMENSIONS PRIOR TO COMMENCING WORK.

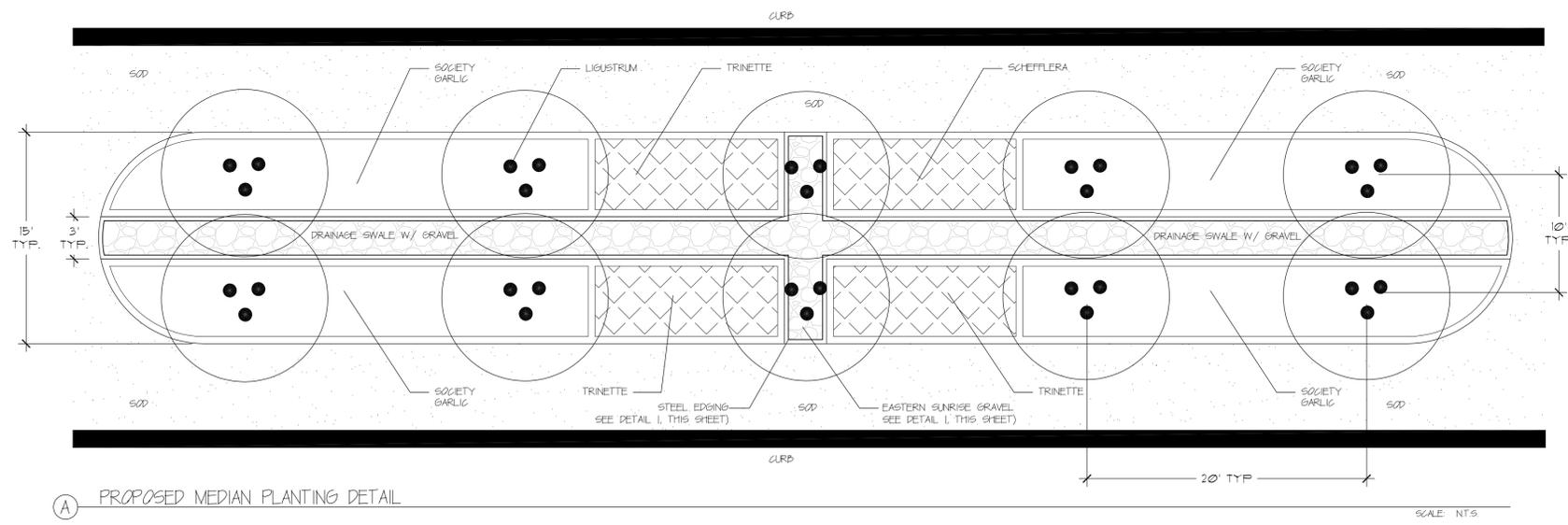


1 PLANTING/EDGING DETAIL SCALE: N.T.S.

MASTER PLANT LIST

SYMB	QUAN	SCIENTIFIC NAME	COMMON NAME	SIZE & SPACING
PALMS				
PC	15	PHOENIX CANARIENSIS	CANARY DATE PALM	12'-14' C.T., SPECIMEN
PC	5	PHOENIX CANARIENSIS	CANARY DATE PALM	10' C.T., SPECIMEN
TREES				
LI	10	LASERSTROEMIA INDICA 'MUSKOGEE'	LAVENDER GRAPE MYRTLE	45 GAL, 3 1/2" CAL., 12' HT., 85' C.T.
LJ	20	LIGUSTRUM JAPONICA TREE FORM	LIGUSTRUM TREE	12' X 12' MT., 85' C.T., PRUNED
N2	6	NERIUM OLEANDER	PINK OLEANDER	45 GAL., 12' HT., 8' C.T.
SHRUBS & GRASSCOVERS				
MD	54	MELANTHUS DEBILIS	BEACH SUNFLOWER	1 GAL, 10" HT. X 10" SPRD., FULL, 18" OC.
MUG	105	MULLENBERGIA CAPILLARIS	MULHY GRASS	7 GAL., 18" HT. X 18" SPRD., 30" OC.
NF	364	NANINA FIREPOWDER	FIREPOWDER NANINA	3 GAL., 24" HT., 18" SPRD., 3-4 PPP
PF	100	FENISTETUM SETACEUM	FOUNTAIN GRASS	7 GAL., 24" HT., FULL, 36" OC.
SA	180	SCHEFFLERA ARBORESCENS TRINETTE	VARIEGATED SCHEFFLERA	7 GAL., 18" SPRD. X 24" HT., FULL, 30" OC.
TV	568	TILLAGHIA VILLOSA	SOCIETY GARLIC	1 GAL., 12" SPRD., 18" OC.
ZP	210	ZANIA PUMILA	COONITE	3 GAL., 24" HT. X 18" SPRD., FULL, 36" OC.

NOTE: SEE LANDSCAPE PLAN, SHEETS LA1 & LA2, FOR INDIVIDUAL QUANTITIES.



A PROPOSED MEDIAN PLANTING DETAIL SCALE: N.T.S.



ORLINDO BEACH
300 INTERSTATE 95
(386) 872-2482 FAX: (386) 877-2555
ST. AUGUSTINE
4475 U.S. 1 S. # 100 FAX: (814) 797-4159
AMELIA ISLAND
84 ATLANTIC AVE. # 100 FAX: (904) 481-4159

NO.	DATE	DESCRIPTION
1	12-14-15	REVISED PER FDOT COMMENTS, DATED 12-14-15
2	12-14-15	REVISED PER FDOT COMMENTS, DATED 12-14-15
3	12-14-15	REVISED PER FDOT COMMENTS, DATED 12-14-15
4	12-18-15	REVISED PER CITY REQUEST
5	12-18-15	REVISED PER CITY REQUEST
6	12-18-15	REVISED PER FDOT DOCUMENTS CHANGE REQUEST

REVISIONS:

**US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS
NOTES & DETAILS**

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
WWW.ZEVCOHEN.COM
PROJECT NO. 14021
ISSUE DATE: 7-14-14
DESIGNED BY: PM
DRAFTED BY: AKS
CHECKED BY: SRK/PM
DRAWING FILE: US1/21A
XREFS: 4021/21A



ORLAND BEACH
300 INTERCHANGE
(386) 877-2482 FAX (386) 877-2505
ST. AUGUSTINE
4476 U.S. 1 S.
(904) 797-1610 FAX (904) 797-1159
AMELIA ISLAND
894 ATLANTIC AVE.
(904) 481-5438 FAX (904) 481-4159

NO.	DATE	DESCRIPTION
1	6-4-15	ISSUED PER FDOT COMMENTS, DATED 4-16-15
2	6-4-15	REVISED PER FDOT COMMENTS, DATED 4-16-15
3	6-4-15	REVISED PER FDOT COMMENTS, DATED 4-16-15
4	12-18-16	REVISED PER CITY REQUEST
5	3-15-16	REVISED PER CITY REQUEST
6	10-15-16	REVISED PER DOCUMENTS CHANGE REQUEST

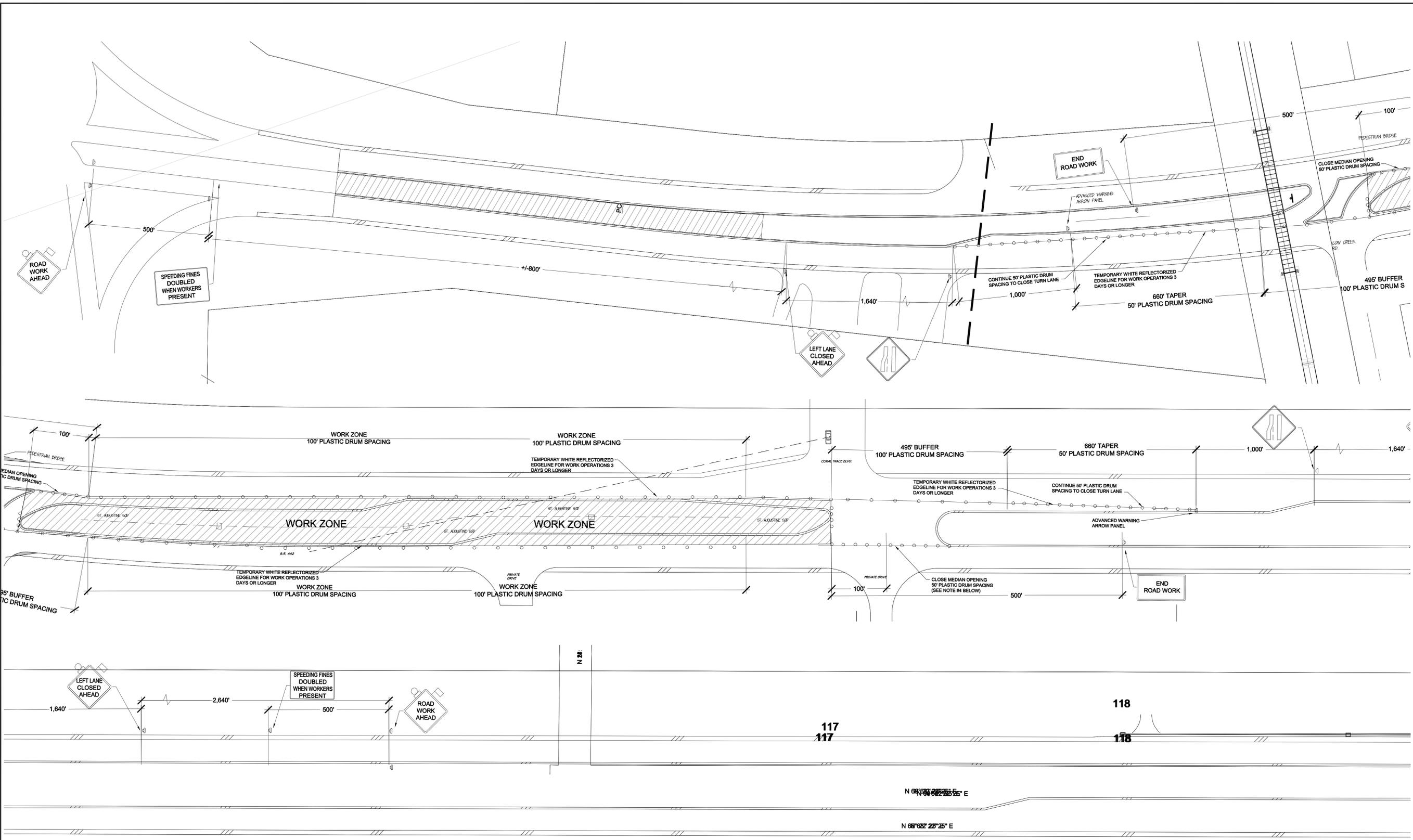
REVISIONS:

**US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS
MAINTENANCE OF TRAFFIC**

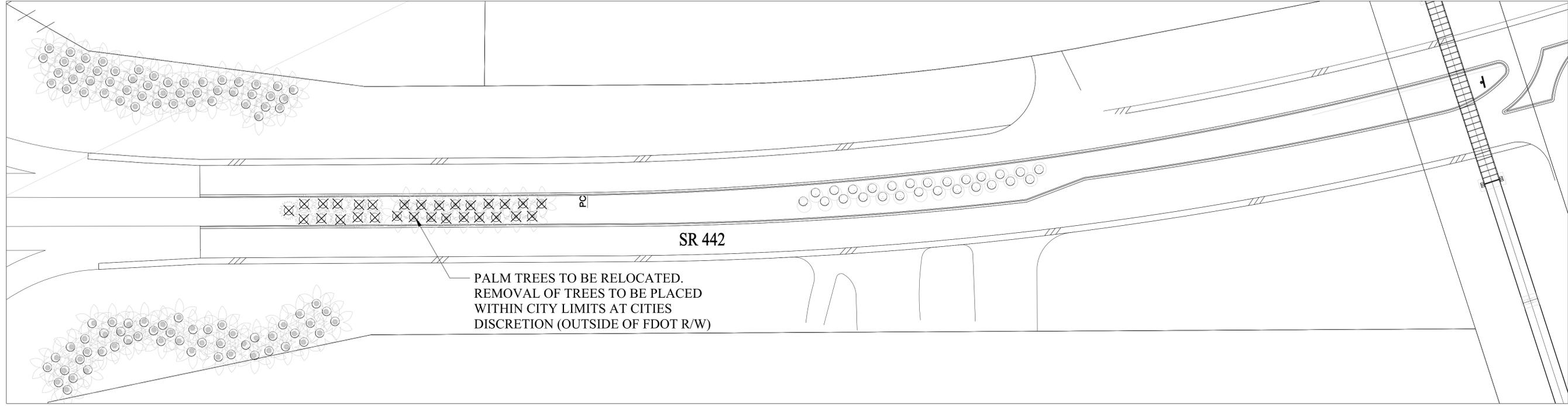
**ZEV COHEN
& ASSOCIATES, INC.**
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
WWW.ZEVCOHEN.COM

PROJECT NO. 14021
ISSUE DATE: 7-14-14
DESIGNED BY: PM
DRAFTED BY: AKS
CHECKED BY: SBK/PM
DRAWING FILE: 14021LA
XREFS: 14021LASE

SCALE:
SHEET **D2-1** OF **2**



- NOTES**
- M.O.T. SHALL CONFORM TO THE FDOT INDICES, 2016 EDITION.
 - M.O.T. SHOWN AS A GUIDE. CONTRACTOR REQUIRED TO COORDINATE WITH FDOT FOR FINAL M.O.T. DESIGN AND APPROVAL.
 - CONTRACTOR TO PROVIDE M.O.T. SHOP DRAWINGS AND OBTAIN APPROVAL FROM F.D.O.T. CONSTRUCTION OFFICE PRIOR TO CONSTRUCTION ON EACH MEDIAN (AS FUNDING ALLOWS). M.O.T. PROVIDED HEREON IS TYPICAL AND WILL APPLY TO EACH MEDIAN CONSTRUCTION.
 - NO LANE CLOSURES DURING CITY SPECIAL EVENTS, HOLIDAYS, PEAK TRAVEL TIMES (6-8AM, 5-7PM). SIGNALIZED INTERSECTIONS SHALL BE FREE OF BARRIER DEVICES AT ALL TIMES.
 - THE WORK ZONE SPEED LIMITS THROUGHOUT THE DESIGNATED PROJECT LIMITS WILL REMAIN THE SAME AS THE POSTED 55, 45 & 40 MPH.
 - "SPECIAL EVENTS" INCLUDE, BUT ARE NOT LIMITED TO, DAYTONA SPEED WEEKS, DAYTONA BIKE WEEK, SPRING BREAK AND BIKE TOBERFEST.

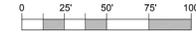


PALM TREES TO BE RELOCATED.
REMOVAL OF TREES TO BE PLACED
WITHIN CITY LIMITS AT CITIES
DISCRETION (OUTSIDE OF FDOT R/W)

SR 442

PC

SHEETS LA1



LEGEND	
○	EXISTING TREE/PALM TO BE REMAIN
⊗	EXISTING TREE/PALM TO BE REMOVED

NOTE: CUT OUT/REMOVE EXISTING SOD FROM PROPOSED NEW LANDSCAPE AREAS



ORLAND BEACH
300 INTERCHANGE
(386) 877-2482 FAX (386) 877-2505

ST. AUGUSTINE
4476 U.S. 1 S.
(904) 797-1610 FAX (904) 797-1159

AMELIA ISLAND
814 ATLANTIC AVE.
(904) 481-5438 FAX (904) 481-4159

NO.	DATE	DESCRIPTION
1.	1-14-14	ISSUED PER FDOT COMMENTS
2.	6-4-15	REVISED PER FDOT COMMENTS, DATED 4-16-15
3.	6-4-15	REVISED PER FDOT COMMENTS, DATED 4-16-15
4.	12-18-14	REVISED PER CITY REQUEST
5.	3-19-16	REVISED PER CITY REQUEST
2.	10-12-16	REVISED PER DOCUMENTS CHANGE REQUEST

US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS
DEMOLITION PLAN

CITY OF EDGEWATER
VOLUSIA COUNTY, FLORIDA

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
WWW.ZEVCOHEN.COM

PROJECT NO: 14021
ISSUE DATE: 7-14-14
DESIGNED BY: PM

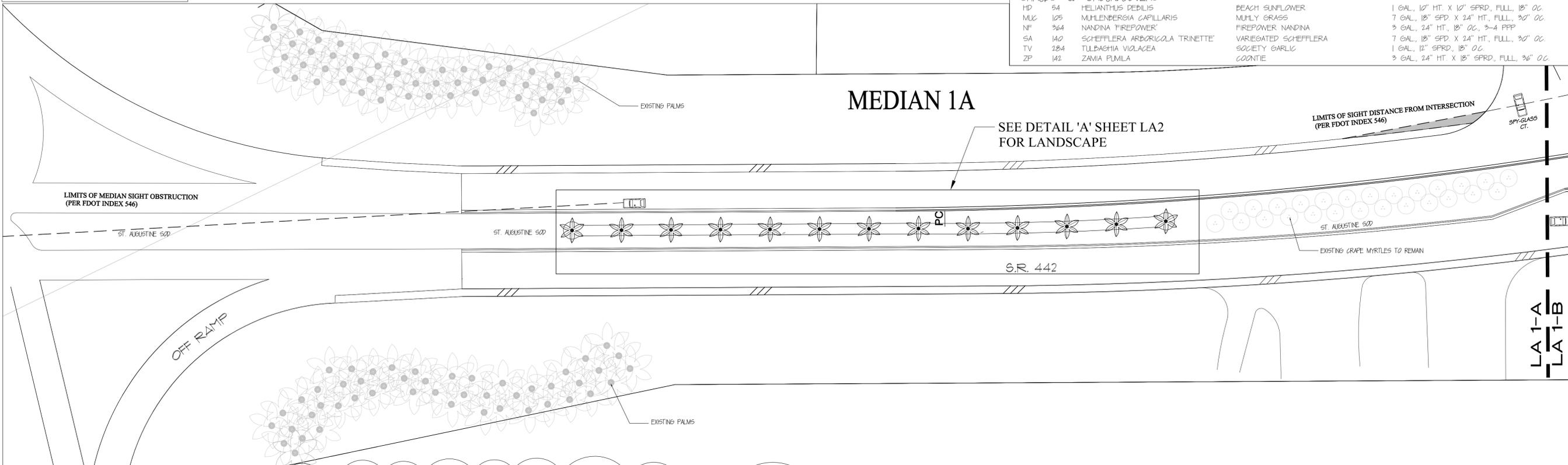
DRAFTED BY: ANS
CHECKED BY: SBK/PM
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XREFS: 14021BASE

SCALE:
SHEET DEM-1 OF 1

LA 1-A

POSTED SPEED 55 MPH

DESIGN SPEED 60 MPH



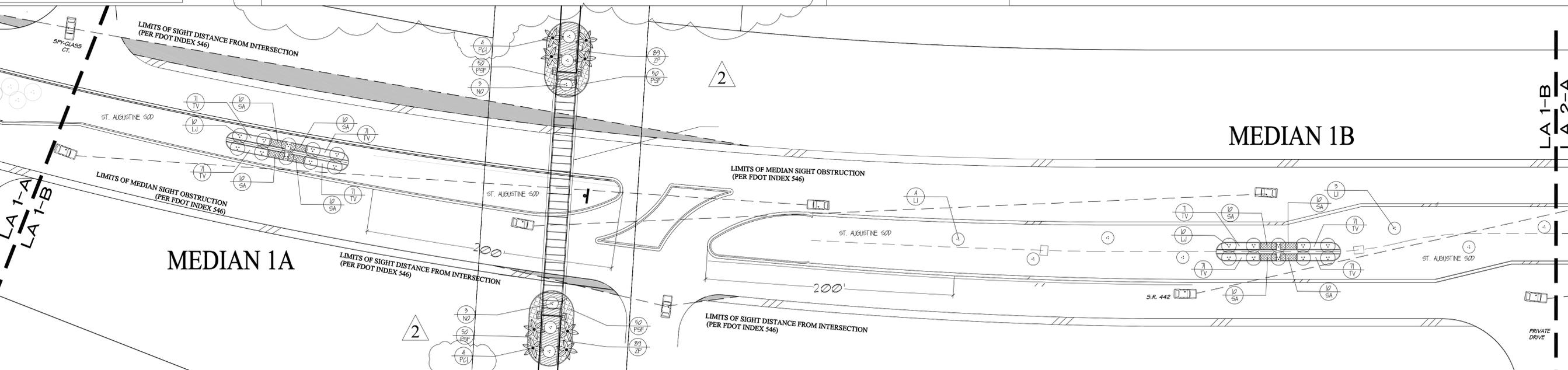
PLANT LIST: MEDIAN 1A

SYMB	QUAN	SCIENTIFIC NAME	COMMON NAME	SIZE & SPACING
PALMS				
PC	13	PHOENIX CANARIENSIS	CANARY DATE PALM	12'-14' C.T., SPECIMEN
TREES				
LJ	10	LIGUSTRUM JAPONICA TREE FORM	LIGUSTRUM TREE	12' x 12', M.T., 8.5' C.T., PRUNED
SHRUBS & GRASS				
HD	54	HELIANTHUS DEBILIS	BEACH SUNFLOWER	1 GAL., 10" HT. X 10" SPRD., FULL, 18" OC.
MK	105	MULLENBERGIA CAPILLARIS	MULY GRASS	7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
NF	364	NANDINA FIREPOWER	FIREPOWER NANDINA	3 GAL., 24" HT., 18" OC., 3-4 PPP
SA	140	SHEFFLERA ARBORICOLA TRINETTE	VARIEGATED SCHEFFLERA	7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
TV	284	TULBAGHIA VIOLACEA	SOCIETY GARLIC	1 GAL., 12" SPRD., 18" OC.
ZP	142	ZAMIA FUMILA	COONTIE	3 GAL., 24" HT. X 18" SPRD., FULL, 36" OC.

LA 1-B

POSTED SPEED 55 MPH

DESIGN SPEED 60 MPH



PLANT LIST: PEDESTRIAN BRIDGE

SYMB	QUAN	SCIENTIFIC NAME	COMMON NAME	SIZE & SPACING
PALMS				
PC	8	PHOENIX CANARIENSIS	CANARY DATE PALM	10' C.T., SPECIMEN
TREES				
NO	6	NERIUM OLEANDER	PINK OLEANDER	45 GAL., 12' HT., 8' C.T.
SHRUBS & GRASS				
PSF	200	PENNISETUM SETACEUM	FOUNTAIN GRASS	7 GAL., 24" HT., FULL, 36" OC.
ZP	178	ZAMIA FUMILA	COONTIE	3 GAL., 24" HT. X 18" SPRD., FULL, 36" OC.

PLANT LIST: MEDIAN 1B

SYMB	QUAN	SCIENTIFIC NAME	COMMON NAME	SIZE & SPACING
TREES				
LI	10	LAGERSTROEMIA INDICA MUSKOGEE'	LAVENDER GRAPE MYRTLE	65 GAL., 3 1/2" CAL., 12' HT., 8.5' C.T.
LJ	10	LIGUSTRUM JAPONICA TREE FORM	LIGUSTRUM TREE	12' x 12', M.T., 8.5' C.T., PRUNED
SHRUBS & GRASS				
SA	40	SHEFFLERA ARBORICOLA TRINETTE	VARIEGATED SCHEFFLERA	7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
TV	284	TULBAGHIA VIOLACEA	SOCIETY GARLIC	1 GAL., 12" SPRD., 18" OC.



ORLANDO BEACH
300 INTERCHANGING
(386) 877-2482 FAX (386) 877-2505
ST. AUGUSTINE
4475 U.S. 1 S.
(904) 797-1610 FAX (904) 797-4159
AMELIA ISLAND
894 ATLANTIC AVE.
(904) 481-5438 FAX (904) 481-4159

NO.	DATE	DESCRIPTION
1	12-18-16	ISSUED PER FDOT COMMENTS, DATED 4-16-15
2	6-4-15	REVISED PER FDOT COMMENTS, DATED 4-16-15
3	6-4-15	REVISED PER FDOT COMMENTS, DATED 4-16-15
4	12-18-16	REVISED PER CITY REQUEST
5	3-15-16	REVISED PER CITY REQUEST
6	10-12-16	REVISED PER DOCUMENTS CHANGE REQUEST

US 1 AND SR442 BEAUTIFICATION
LANDSCAPE PLANS

VOLUSIA COUNTY, FLORIDA

CITY OF EDGEWATER

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
WWW.ZEVCOHEN.COM

PROJECT NO. 14021
ISSUE DATE: 7-14-14
DESIGNED BY: PM

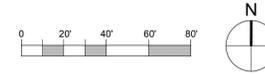
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CHECKED BY: SRK/PM
DRAWING FILE: LA101A
XREFS: 14021ASE

SCALE:
SHEET LA1-1 OF 2

LA 2-A

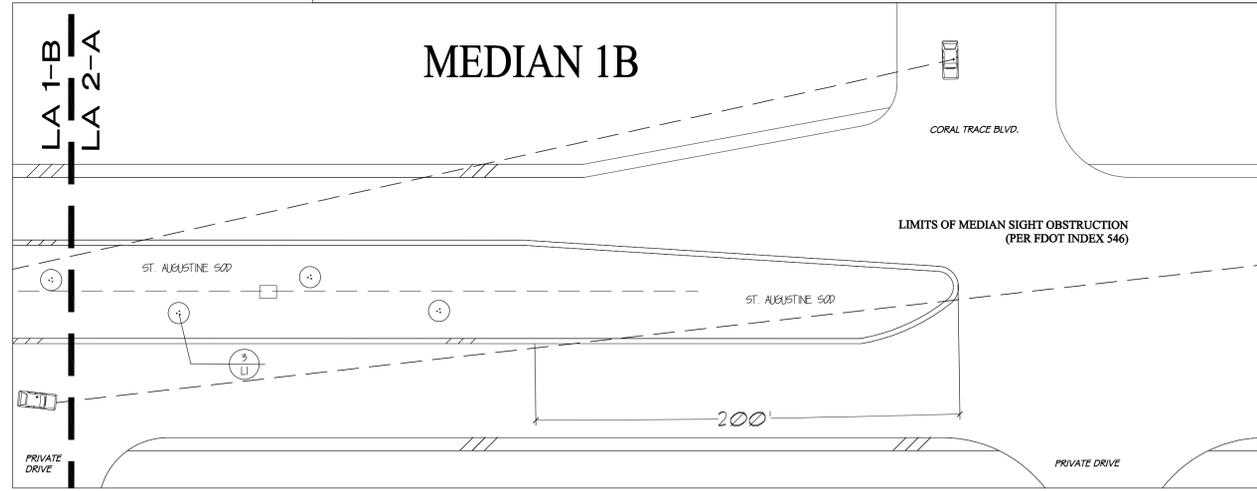
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DESIGN SPEED 60 MPH



PLANT LIST: MEDIAN 1B

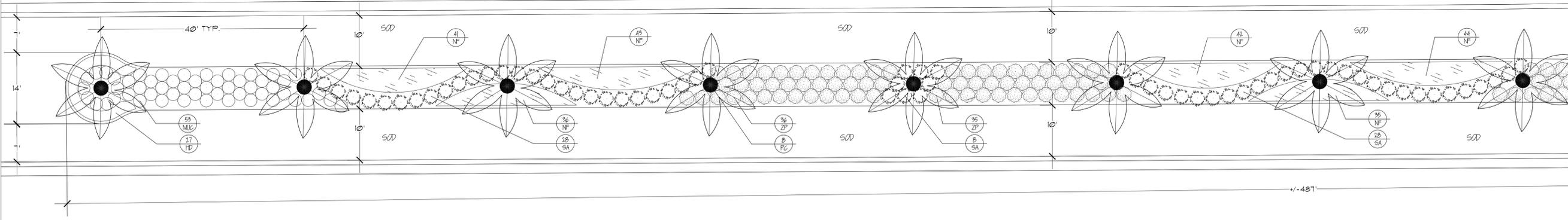
SYMB.	QUAN.	SCIENTIFIC NAME	COMMON NAME	SIZE & SPACING
TREES				
LI	10	LAGERSTRÆMIA INDICA 'MUSKOGEE'	LAVENDER GRAPE MYRTLE	65 GAL., 3 1/2" CAL., 12' HT., 8.5' C.T.
LJ	10	LIGUSTRUM JAPONICA 'TREE FORM'	LIGUSTRUM TREE	12' x 12', M.T., 8.5' C.T., PRUNED
SHRUBS & GROUNDCOVERS				
SA	40	SCHEFFLERA ARBORICOLA 'TRINETTE'	VARIEGATED SCHEFFLERA	7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
TV	254	TULBAGHIA VIOLACEA	SOCIETY GARLIC	1 GAL., 12" SPRD., 18" OC.



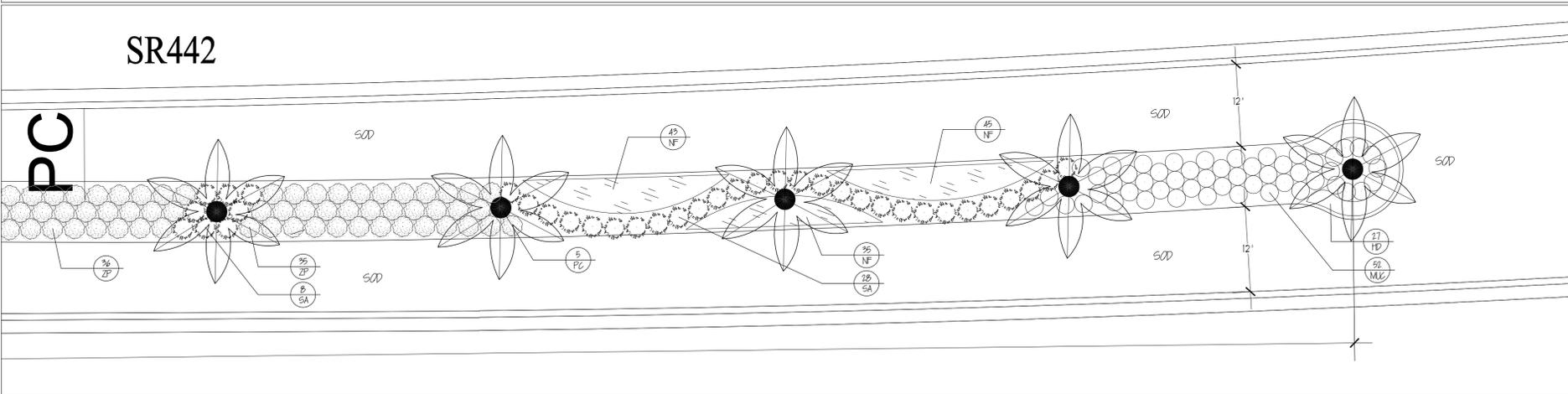
PLANT LIST: PRIMARY MEDIAN

SYMB.	QUAN.	SCIENTIFIC NAME	COMMON NAME	SIZE & SPACING
PALMS				
PC	13	PHOENIX CANARIENSIS	CANARY DATE PALM	12'-14' C.T., SPECIMEN
SHRUBS & GROUNDCOVERS				
HD	54	HELIANTHUS DEBILIS	BEACH SUNFLOWER	1 GAL., 10" HT. X 10" SPRD., FULL, 18" OC.
MLG	105	MUHLENBERGIA CAPILLARIS	MUHLI GRASS	7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
NF	364	NANDINA 'FIREPOWER'	FIREPOWER NANDINA	3 GAL., 24" HT., 18" OC., 3-4 PPP
SA	100	SCHEFFLERA ARBORICOLA 'TRINETTE'	VARIEGATED SCHEFFLERA	7 GAL., 18" SPD. X 24" HT., FULL, 30" OC.
ZP	142	ZAMIA PUMILA	COONTIE	3 GAL., 24" HT. X 18" SPRD., FULL, 36" OC.

SR442



SR442



(A) MEDIAN PLANTING BLOW-UP

SCALE: 1"=10'



ZEV COHEN & ASSOCIATES, INC.
 300 INTERCHANGE BLVD., SUITE 200
 ORLANDO, FL 32814
 (386) 877-2482 FAX (386) 877-2555
 4475 U.S. 1 S., SUITE 100
 ST. AUGUSTINE, FL 32086
 (904) 797-1610 FAX (904) 797-1159
 814 ATLANTIC AVE., SUITE 200
 AMELIA ISLAND, FL 32034
 (904) 481-5438 FAX (904) 481-1159

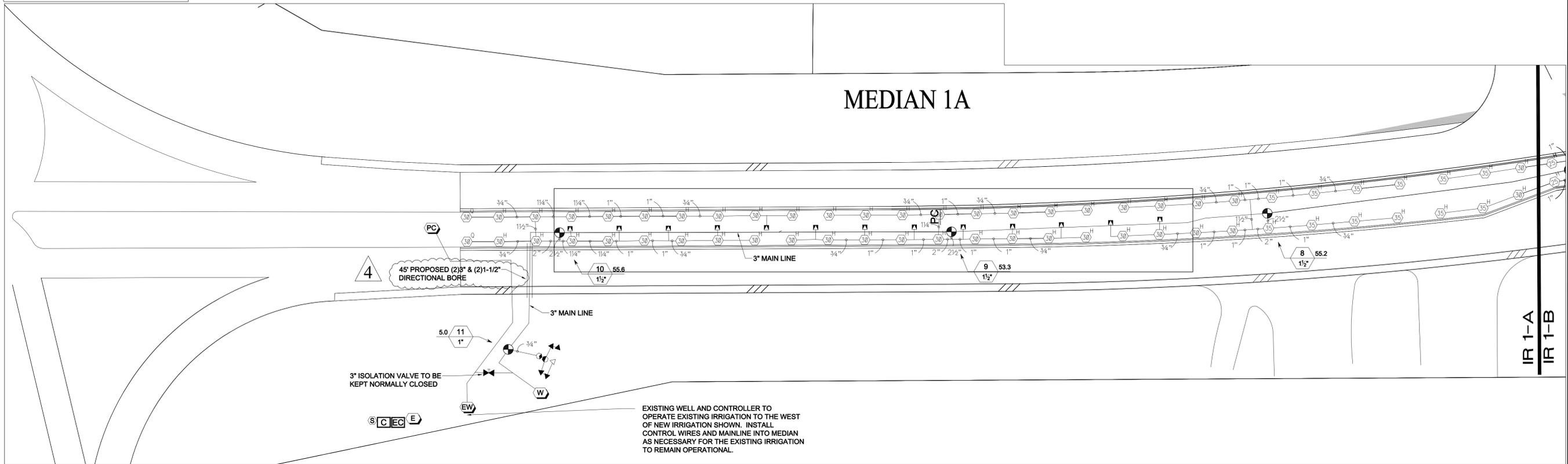
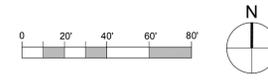
NO.	DATE	DESCRIPTION
1	11-14-13	ISSUED PER FDOT COMMENTS, DATED 11-14-13
2	6-4-15	REVISED PER FDOT COMMENTS, DATED 6-4-15
3	6-4-15	REVISED PER FDOT COMMENTS, DATED 6-20-15
4	12-18-16	REVISED PER CITY REQUEST
5	3-15-16	REVISED PER CITY REQUEST
6	10-12-16	REVISED PER FDOT DOCUMENTS CHANGE REQUEST

US 1 AND SR442 BEAUTIFICATION LANDSCAPE PLANS

ZEV COHEN & ASSOCIATES, INC.
 CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
 PLANNERS - TRANSPORTATION - ENVIRONMENTAL
 WWW.ZEVCOHEN.COM
 PROJECT NO. 14021
 DRAFTED BY: AKS
 CHECKED BY: SRK/PM
 ISSUE DATE: 7-14-14
 DRAWING FILE: LA21A
 XREFS: HQ21AISE
 DESIGNED BY: PM
 CITY OF EDGEWATER
 VOLUSIA COUNTY, FLORIDA

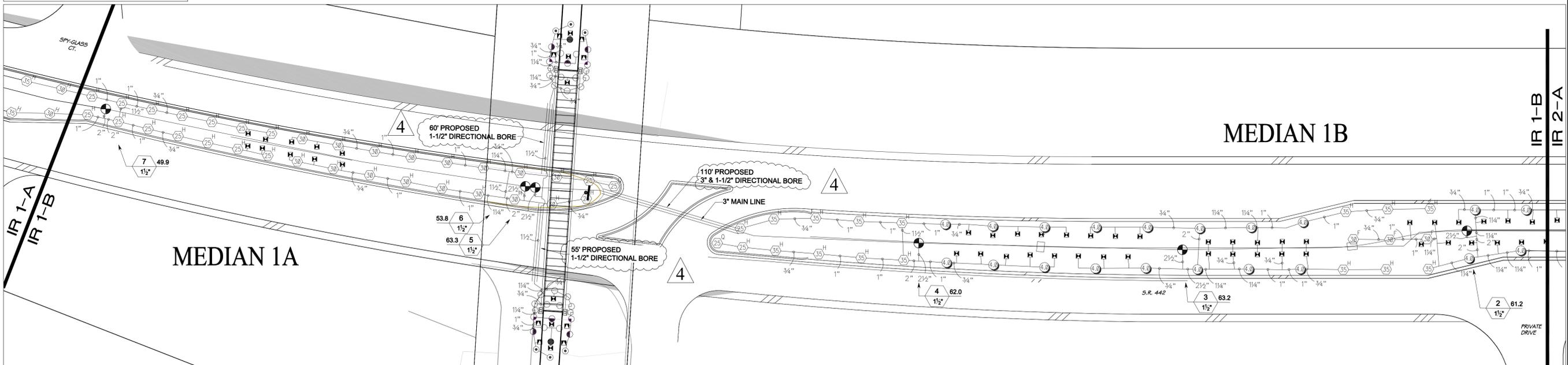
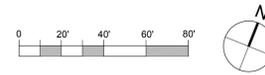
IR 1-A

POSTED SPEED 55 MPH
DESIGN SPEED 60 MPH



IR 1-B

POSTED SPEED 55 MPH
DESIGN SPEED 60 MPH



ORLANDO BEACH
300 INTERCHANGE
(386) 877-2482 FAX (386) 877-2555
ST. AUGUSTINE
4475 U.S. 1 S. #1510
(904) 797-1510 FAX (904) 797-4159
AMELIA ISLAND
894 ATLANTIC AVE.
(904) 481-5438 FAX (904) 481-4159

NO.	DATE	DESCRIPTION
1	10-15-16	REVISED PER CITY REQUEST
2	11-15-16	REVISED PER BID DOCUMENTS CHANGE REQUEST
3	12-15-16	REVISED PER BID REQUEST
4		

REVISIONS:

ZEV COHEN & ASSOCIATES, INC.
US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
WWW.ZEVCOHEN.COM
PROJECT NO. 14021
ISSUE DATE: 4-7-15
DESIGNED BY: JC
DRAFTED BY: JC
CHECKED BY: SNG/PM
DRAWING FILE: M321R_SRA42
XREFS: H421RASE
VOLUSA COUNTY, FLORIDA
CITY OF EDGEWATER

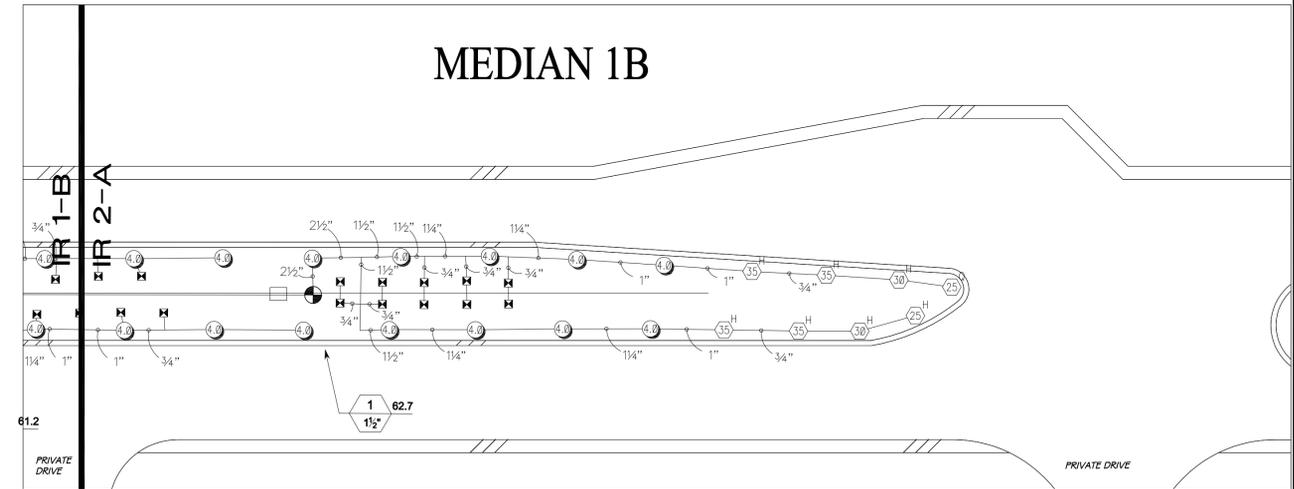
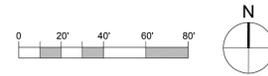
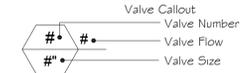
SCALE:
SHEET
IR1-1 OF 3

IRRIGATION NOTES:

- THE PLANS AND DRAWINGS ARE DIAGRAMMATIC OF THE WORK TO BE PERFORMED. SOME COMPONENTS MAY BE SHOWN OUTSIDE THE WORK AREA FOR CLARITY. THE WORK SHALL BE EXECUTED IN A MANNER TO AVOID CONFLICTS WITH UTILITIES AND OTHER ELEMENTS OF CONSTRUCTION, INCLUDING LANDSCAPE MATERIALS. ALL DEVIATIONS FROM THE PLANS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE BEING INSTALLED. 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. IN THE EVENT THAT NOTIFICATION OF THE CONFLICT IS NOT APPROVED BY THE OWNER'S REPRESENTATIVE, THE CONTRACTOR WILL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS.
- THE IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS, IRRIGATION SYSTEM SPECIFICATIONS AND ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL COMPLY WITH ALL PREVAILING LOCAL CODES, ORDINANCES, AND REGULATIONS.
- CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS, INCLUDING UTILITY LOCATIONS, BEFORE INSTALLATION OF THE IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THE PLANS - CONTRACTOR TO VERIFY. COORDINATE ALL IRRIGATION SYSTEM CONSTRUCTION WITH EXISTING AND NEW PLANTINGS TO AVOID CONFLICT OR INTERFERENCE WITH LOCATION OF PIPING, SLEEVING, CABLES, AND SERVICE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION WITH ALL OTHER CONSTRUCTION ON SITE, ESPECIALLY LANDSCAPE INSTALLATION. IRRIGATION SYSTEM SHALL 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 OR CALLED OUT ON THE DRAWINGS WILL NOT BE ACCEPTED. ALL PIPING AND OTHER COMPONENTS ARE TO REMAIN WITHIN THE PROPERTY OF THE OWNER.
- WHERE EXISTING OR NEW TREES, LIGHT STANDARDS, 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 OF AN IRRIGATION SPRINKLER'S PATTERN. THE COMPONENT AND PIPING SHALL BE RELOCATED AS NECESSARY TO OBTAIN THE PROPER COVERAGE WITHOUT DAMAGING THE OBSTRUCTION. OWNER'S REPRESENTATIVE SHALL DETERMINE WHETHER AN OBSTRUCTION OCCURS OR NOT.
- COMPONENT SPACINGS ARE MAXIMUM. DO NOT EXCEED SPACINGS SHOWN OR NOTED ON THE PLANS. COMPONENT SPACINGS MAY BE ADJUSTED TO ACCOMMODATE CHANGES IN TERRAIN AND PLANTING LAYOUT AS LONG AS THE MODIFIED SPACINGS DO NOT EXCEED THE SPACINGS SHOWN IN THE PLANS. UNLESS SHOWN OTHERWISE, CONTRACTOR SHALL PROVIDE 100% COVERAGE.
- ALL MATERIALS AND EQUIPMENT SHOWN SHALL BE NEW AND 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 AND INSTRUCTIONS RECOMMENDED BY THEIR MANUFACTURER.
- THE LOCATION OF THE IRRIGATION MAINLINE SHALL BE IDENTIFIED IN THE FIELD AND APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE INSTALLATION. MAINLINE TO BE INSTALLED A MINIMUM OF FIVE FEET OFF EDGE OF PAVEMENT IN MEDIANS. SHOWN OUTSIDE FOR CLARITY PURPOSES ONLY.
- IRRIGATION CONTRACTOR SHALL ADJUST ALL SPRINKLERS, CONTROLLER AND OTHER DEVICES TO OBTAIN SPECIFIED OPERATING PARAMETERS, INCLUDING COVERAGE, OPERATING PRESSURE, FLOW RATES AND OPERATION TIME, AS INDICATED ON THE DRAWINGS AND IN THE IRRIGATION SYSTEM SPECIFICATIONS.
- CONTRACTOR TO PROVIDE INSTALLATION SHOP DRAWINGS AND MANUFACTURER PRODUCT INFORMATION FOR ALL IRRIGATION COMPONENTS. ALL INSTALLATIONS SHALL BE AS RECOMMENDED BY MANUFACTURERS. THE QUANTITIES SHOWN IN THE LEGENDS AND SYMBOL SHEETS SHALL NOT BE USED FOR BIDDING PURPOSES. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONDUCTING A COMPREHENSIVE MATERIALS TAKEOFF TO DETERMINE THE ACTUAL QUANTITIES OF MATERIAL NECESSARY TO EXECUTE THE WORK DESCRIBED IN THE DOCUMENTS.
- ALL TRENCHES SHALL BE BACKFILLED WITH CLEAN, DEBRIS-FREE MATERIALS. CLEAN SAND SHALL BE USED FOR BEDDING MATERIAL IF PARENT SOIL CANNOT BE ADEQUATELY RID OF ROCK (3/8" AND LARGER) AND OTHER EXTRANEIOUS DEBRIS. PULLING PIPE SHALL BE PROHIBITED.
- ALL MAINLINE CHANGE OF DIRECTION FITTINGS TO BE DUCTILE IRON THRUST BLOCKED PER DETAIL. ALL SERVICE TEES TO CONTROL VALVES SHALL BE PVC GASKET.
- ALL SOLVENT WELDING SHALL BE PRECEDED BY PRIMING OF THE FITTINGS AND PIPE AS RECOMMENDED BY THE MANUFACTURER.
- CONTRACTOR TO LABEL ALL VALVE BOX COVERS WITH THE CORRESPONDING CONTROLLER ZONE NUMBER. NUMBERING SIZE 1". ALL VALVE BOXES TO HAVE BOLT DOWN COVER WITH BOLT INSTALLED.
- CONTRACTOR TO PLACE BUBBLERS AT OUTER EDGE OF ROOT BALL, NOT OUTER EDGE OF PLANTING HOLE.
- INSTALL HUNTER ID/WIRE1 CONTROL WIRE OR APPROVED EQUAL FROM CONTROLLER TO ALL NEW VALVES SHOWN. INSTALL HUNTER HUNTER DUAL-1 DECODERS OR APPROVED EQUAL AT ALL VALVE LOCATIONS. ALL WIRE SPLICES TO BE MADE INTO HUNTER IDWIRE1 SHALL BE MADE WITH 3M-DBR6 CONNECTORS OR APPROVED EQUAL. ALL WIRES SPLICES FROM DECODER TO CONTROL VALVE SHALL BE MADE WITH 3M-DBY CONNECTORS OR APPROVED EQUAL.
- LOCATE ALL VALVES WITH A MINIMUM OFFSET OF 5'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT.
- THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR ALL DIRECTIONAL BORING.
- ALL UN-SIZED PIPE SHALL BE 3/4".
- IRRIGATION LATERAL LINES TO BE BURIED AT A DEPTH OF 16".
- IRRIGATION MAINLINES TO BE BURIED AT A DEPTH OF 20".
- ALL COMPONENTS INSTALLED BY THE IRRIGATION CONTRACTOR, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE EXACT LOCATION AND DEPTH BELOW FINISH GRADE OF ALL COMPONENTS SHALL BE NOTED ON THE "AS-BUILT" DRAWINGS.
- IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE LANDSCAPE SUPERVISOR. WORK IN THE RIGHT OF WAY SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE HIGHWAY JURISDICTION.
- INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY FLOW OF VEHICULAR TRAFFIC AND COMPLETION OF ALL WORK ON THE SITE.
- DIRECTIONAL BORES SHALL BE INSTALLED IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 555 FOR PRESSURIZED PIPES. INSTALL HARCO IPS MJ BELL X PE BUTT FUSION ADAPTER ON 3" DIRECTIONAL BORES AND USE FOR MAINLINE PIPING. INSTALL WIRE THROUGH 1-1/2" DIRECTIONAL BORES RUNNING WITH MAINLINE. INSTALL HDPE X SCHEDULE 40 FUSED ENDS ON 1-1/2" DIRECTIONAL BORES AT WALKOVER BRIDGE AND USE FOR LATERAL PIPING.
- IRRIGATION CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING IRRIGATION SYSTEM THAT IS DUE TO THE INSTALLATION OF THE NEW IRRIGATION SYSTEM.
- IRRIGATION CONTRACTOR SHALL ADJUST EXISTING IRRIGATION HEAD AROUND WELCOME SIGN SO THEY DO NOT OVERLAP NEW IRRIGATION HEADS AND PROVIDE COMPLETE COVERAGE PER ORIGINAL DESIGN. ZONE 11 TO OPERATE SIMULTANEOUSLY WITH ZONE 5.
- CITY OF EDGEWATER WILL PROVIDE A 120 VOLT 20 AMP AND 240 VOLT 40 AMP BREAKER IN PANEL BOX. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR ELECTRICAL WORK FROM BREAKERS TO NEW PUMP AND IRRIGATION CONTROLLER.

IR 2-A

POSTED SPEED 55 MPH
DESIGN SPEED 60 MPH



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS
◀	Hunter PRO5-12-PRS-30 or approved equal 15 Strip Series	4	EST	30	0.61	4x15'
◁	Hunter PRO5-12-PRS-30 or approved equal 15 Strip Series	1	55T	30	1.21	4x30'
⊙	Hunter PRO5-12-PRS-30 or approved equal 8 Series MPR	4	90	30	0.26	8'
⊙	Hunter PRO5-12-PRS-30 or approved equal 10 Series MPR	1	180	30	0.79	10'
⊙	Hunter PRO5-12-PRS-30 or approved equal 10 Series MPR	1	120	30	0.53	10'
⊙	Hunter PRO5-12-PRS-30 or approved equal 12 Series MPR	4	360	30	2.60	12'
⊙	Hunter PRO5-12-PRS-30 or approved equal 12 Series MPR	10	180	30	1.30	12'
⊙	Hunter PRO5-12-PRS-30 or approved equal 12 Series MPR	4	90	30	0.65	12'
⊙	Hunter PRO5-12-PRS-30 or approved equal 15 Series MPR	2	360	30	3.70	15'
⊙	Hunter PRO5-12-PRS-30 or approved equal 15 Series MPR	6	180	30	1.85	15'
⊙	Hunter PRO5-12-PRS-30 or approved equal 15 Series MPR	4	90	30	0.92	15'
⊙	Hunter PRO5-12-PRS-30 or approved equal 15 Series	6	Adj	30	15'	
⊙	Hunter PCB-25 Bubbler or approved equal	68	360	30	0.25	1'
⊙	Two Hunter PCB-25 Bubbler or approved equal	21	360	30	2x.25	1'
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS	
⊙	Hunter GGP-04 2.0LA or approved equal	22	45		25'	
⊙	Hunter GGP-04 2.5LA or approved equal	67	45		30'	
⊙	Hunter GGP-04 3.0LA or approved equal	30	45		35'	
⊙	Hunter GGP-04 4.0 or approved equal	34	45	4.01	42'	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY				
⊙	Hunter ICV-F5 in 10" Valve Box	11				
EC	Existing Hunter ICC Controller see note	1				
C	New Hunter IC-600PI with DUAL48M Two Wire Module to be used for all new valves shown. Install DUAL decoders at all valves. Install Hunter PSR-52 pump start relay to control new pump.	1				
E	Existing Electrical Service	1				
EW	Existing 4" Well and 5hp Pump	1				
W	New 4" well with 5hp submersible pump to produce 65gpm @ 55 psi. Install 2" check valve, 2" pressure relief valve and 2" Vu-Flo filter with 100 mesh screen at discharge of well. Install pump discharge and equipment in a lock box fiberglass enclosure LB3000 on concrete pad.	1				
---	Irrigation Lateral Line: PVC Class 200 SDR 21	6,500 l.f.				
---	Irrigation Mainline: PVC 3" Class 200 SDR 21 Gasket	2,500 l.f.				
---	Directional Bore: HDPE 3608 IPS directional bore sized per plan. Extend bores a minimum of 30" past hardscape.					

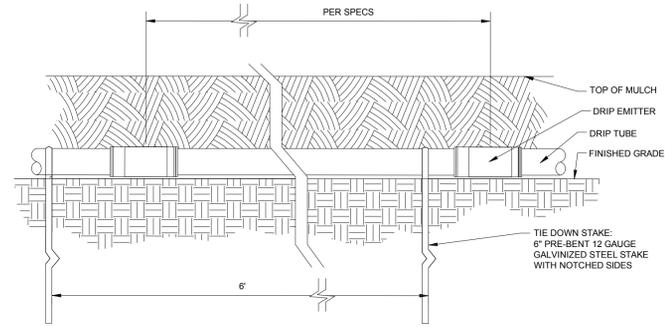


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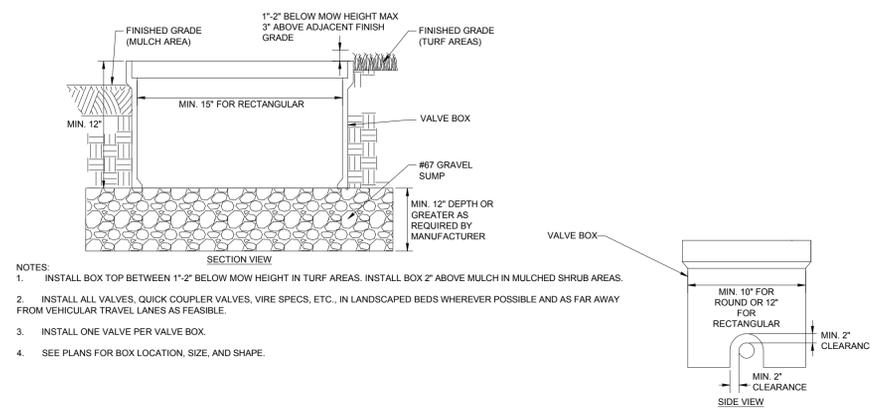
NO.	DATE	DESCRIPTION
1	12-15-16	REVISED PER CITY REQUEST
2	1-18-16	REVISED PER BID DOCUMENTS CHANGE REQUEST
3	9-6-16	REVISED PER BID REQUEST
4		

**US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
NOTES & DETAILS**

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
WWW.ZEVCOHEN.COM
PROJECT NO. 14021
ISSUE DATE: 4-7-15
DESIGNED BY: JC
DRAFTED BY: JC
CHECKED BY: SMGPM
DRAWING FILE: M321R_SRA42
XREFS: 14021BASE

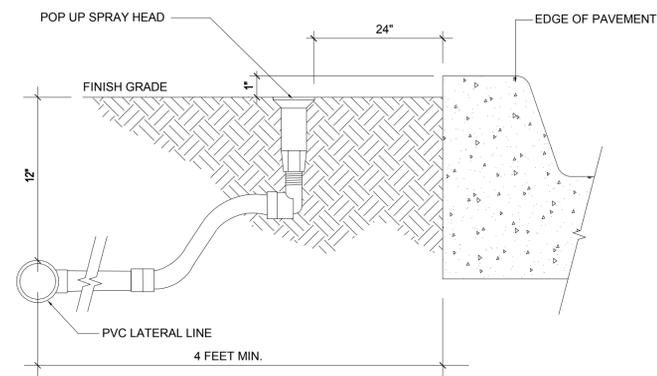


DRIP TUBE ON GRADE WITH MULCH COVER
SCALE: NTS

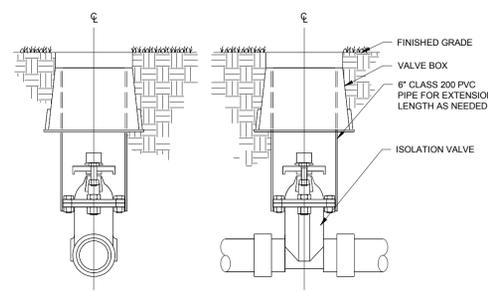


- NOTES:
1. INSTALL BOX TOP BETWEEN 1"-2" BELOW MOW HEIGHT IN TURF AREAS. INSTALL BOX 2" ABOVE MULCH IN MULCHED SHRUB AREAS.
 2. INSTALL ALL VALVES, QUICK COUPLER VALVES, VIRE SPECS, ETC., IN LANDSCAPED BEDS WHEREVER POSSIBLE AND AS FAR AWAY FROM VEHICULAR TRAVEL LANES AS FEASIBLE.
 3. INSTALL ONE VALVE PER VALVE BOX.
 4. SEE PLANS FOR BOX LOCATION, SIZE, AND SHAPE.

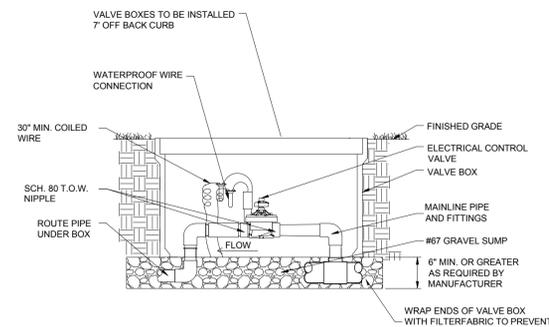
VALVE BOX DETAIL
SCALE: NTS



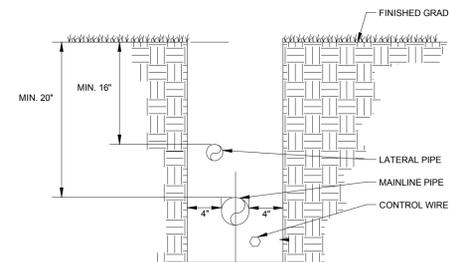
IRRIGATION HEAD INSTALLATION NEXT TO ROADWAY
SCALE: NTS



ISOLATION VALVE DETAIL
SCALE: NTS

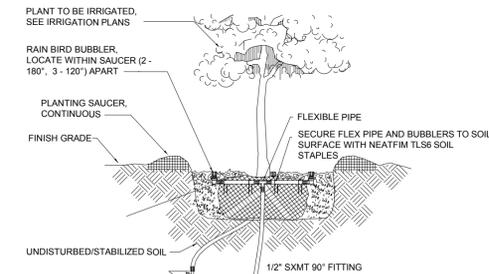


ELECTRIC CONTROL VALVE
SCALE: NTS



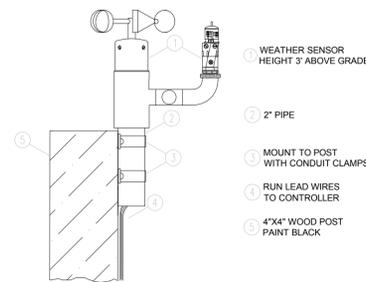
- NOTES:
1. ALL TRENCHING TO BE OUTSIDE OF EXISTING TREE DRIP LINE.
 2. NO ROCKS, BOULDERS, OR SHARP OBJECTS TO BE IN TRENCH BACKFILL.
 3. ALL PIPE TO BE INSTALLED AS RECOMMENDED BY MANUFACTURER.
 4. AT EACH CHANGE IN MAINLINE DIRECTION INSTALL A 30' LOOP OF EXTRA WIRE.
 5. BUNDLE WIRE WITH ELECTRICAL TAPE EVERY 10'.

TRENCH, PIPE, AND WIRE DETAIL
SCALE: NTS

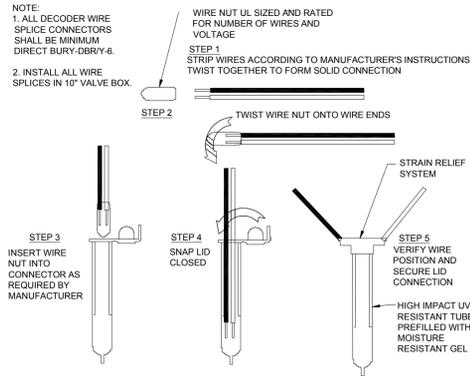


- NOTES:
1. BUBBLERS SHALL BE PLACED ON THE UPHILL SIDE OF ANY SLOPES & ON THE OPPOSING SIDES OF EACH ROOTBALL WITHIN THE SAUCER
 2. BUBBLERS TO BE INSTALLED ADJACENT TO ROOTBALL PERIMETER. DO NOT INSTALL BUBBLER ON TOP OF ROOTBALL OR NEXT TO TRUNK
 3. REFER TO LEGEND FOR BUBBLER FLOW VOLUME AND BUBBLER QUANTITIES.

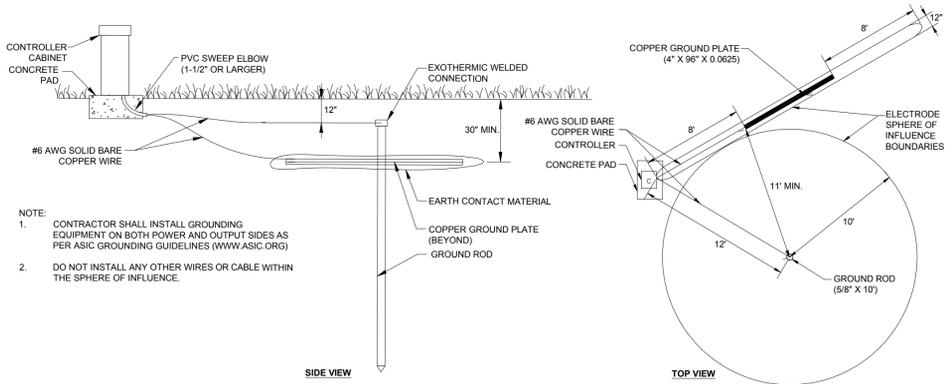
BUBBLER INSTALLATION
SCALE: NTS



WEATHER SENSOR
SCALE: NTS

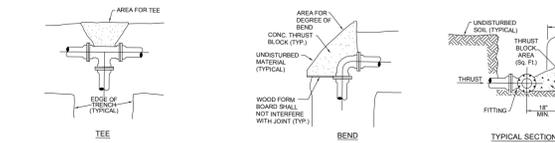


WATERPROOF WIRE CONNECTION
SCALE: NTS



- NOTE:
1. CONTRACTOR SHALL INSTALL GROUNDING EQUIPMENT ON BOTH POWER AND OUTPUT SIDES AS PER ASIC GROUNDING GUIDELINES (WWW.ASIC.ORG)
 2. DO NOT INSTALL ANY OTHER WIRES OR CABLE WITHIN THE SPHERE OF INFLUENCE.

CONTROLLER AND DECODER GROUNDING DETAIL
SCALE: NTS



- THRUST BLOCK NOTES:
1. THRUST BLOCK BEARING AREAS SHALL BE FLOURED AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED. EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL. EXTEND THRUST BLOCK FOR FULL LENGTH OF FITTINGS. NOT BEARD IN FRONT OF PLUG BEFORE POURING CONCRETE. JOINTS SHALL NOT BE COVERED BY THRUST BLOCK.
 2. ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS.
 3. THRUST BLOCKS SHALL BE USED IN COMBINATION AS REQUIRED, TO SUIT THE SPECIFIC FITTING ARRANGEMENT.
 4. ALTERNATE DESIGNED RESTRAINING SYSTEMS SHALL BE PROVIDED WHERE STANDARD THRUST BLOCKING IS NOT SUITABLE.
 5. ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE.

THRUST BLOCK DETAILS
SCALE: NTS



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4475 U.S. 1 S. ST. AUGUSTINE, FL 32086
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914 ATLANTIC AVE., SUITE 100
AMELIA ISLAND BEACH, FL 32024
(904) 481-5438 FAX (904) 481-4159

NO.	DATE	DESCRIPTION
1	10/15/16	REVISED PER CITY REQUEST
2	10/15/16	REVISED PER BID DOCUMENTS CHANGE REQUEST
3	10/15/16	REVISED PER BID REQUEST
4	10/15/16	REVISED PER BID REQUEST

REVISIONS:

**US 1 AND SR442 BEAUTIFICATION
IRRIGATION PLANS
NOTES & DETAILS**

ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS
PLANNERS - TRANSPORTATION - ENVIRONMENTAL
WWW.ZEVCOHEN.COM
PROJECT NO. 14021
ISSUE DATE: 4-7-15
DESIGNED BY: JC
DRAFTED BY: JC
CHECKED BY: SM/GPM
DRAWING FILE: 14021P_0842
XREFS: 14021P_0842

SCALE:
SHEET **IR3-1** OF **3**

TOTAL BID FORM

ITB # 16-ES-002

REVISED PER ADDENDUM #4

“US HWY #1 AND SR #442 FDOT Landscape Beautification Project”

The total Bid Amount is to include all costs associated with completion of this project including but not limited parts and labor, overhead, operating margin and profit and all direct and indirect expenses. Please complete the breakdown of costs for all items.

No substitutes will be permitted. All blanks must be completed.

LANDSCAPING

<u>ITEM (Common Name)</u>	<u>Specification</u>	<u>QTY.</u>	<u>Unit Price</u>	<u>TOTAL</u>
Trees				
Ligustrum	12'x12'	55		
Crape Myrtle - Lavender	65 Gal.	29		
Oleander - Pink	45 Gal.	6		
Palms				
Reclinata Palm	10-12' C.T.	10		
Carnarvon Gorge Palm	14' C.T.	11		
Canary Island Date Palm	12'-14' C.T.	13		
Canary Island Date Palm	10' C.T.	8		
Shrubs & Groundcovers				
Variegated Schefflera	7 Gal.	332		
Society Garlic	1 Gal.	872		
Shore Juniper	3 Gal.	64		
Bulbine	3 Gal.	464		
Beach Dune Sunflower	1 Gal.	54		
Muhly Grass	7 Gal.	105		
Nandina 'Firepower'	3 Gal.	364		
Fountain Grass	7 Gal.	200		
Coontie	3 Gal.	320		
Rock	CY	7		
Steel Edging	LF	700		
Pensacola Bahia Sod	SF	324,000		
St. Augustine Sod	SF	98,000		
Mulch - Pine Bark	CY	152		
Relocation of Palms	EA	18		
Total of Landscaping Materials				

*Sod calculation is an estimate, sod to be replaced are for areas that are disturbed by construction activities.

DEMOLITION/IRRIGATION ITEMS

Description	Units	Quantity	Unit Cost	Total Cost
Mobilization	LS	1		
MOT	LS	1		
Clearing & Grubbing	LS	1		
Asphalt Removal & Disposal	LS	1		
Plant Establishment	LS	1		
US #1 Medians				
Hunter PROS-06-PRS30-R 15 Strip Series	EA	10		
Hunter PROS-06-PRS30-R 15 Strip Series	EA	23		
Hunter PROS-06-PRS30-R 8 Series MPR	EA	30		
Hunter PROS-06-PRS30-R 10 Series MPR	EA	31		
Hunter PROS-06-PRS30-R 12 Series MPR	EA	40		
Hunter PROS-06-PRS30-R 15 Series MPR	EA	98		
Hunter PROS-06-PRS30-R 15 Series MPR	EA	2		
Hunter PROS-06-PRS30-R 10 Series VAN	EA	1		
Hunter PROS-06-PRS30-R 15 Series VAN	EA	1		
Hunter PROS-06-PRS30-R 12 Series MPR	EA	1		
Hunter PROS-06-PRS30-R 15 Series MPR	EA	3		
Hunter PROS-06-PRS40-R MP2000	EA	30		
Hunter PROS-06-PRS40-R MP3000	EA	5		
Hunter PROS-06-PRS40-R MP2000	EA	78		
Hunter PROS-06-PRS40-R MP3000	EA	105		
Hunter PROS-06-PRS40-R MP3000	EA	2		
Hunter PCB25 Bubblers	EA	80		
Two Hunter PCB-25 Bubblers	EA	13		
Hunter PROS-06-PRS30-R w/Maxijet ARCHFR09H	EA	11		
Hunter PGP-04-CV-R 2.0 LA	EA	58		
Hunter PGP-04-CV-R 2.5 LA	EA	231		
Hunter PGP-04-CV-R 3.0 LA	EA	60		
Hunter PGP-04-CV-R 2.0	EA	5		
Hunter PGP-04-CV-R 4.0	EA	125		
Area to Receive Dripline				
Hunter PLD-10-12	SF	3,000		
Hunter ICV-FS 10" Purple Valve Box w/DC latching solenoid	EA	55		
Hunter ICV Jumbo Purple Valve Box w/DC latching solenoid	EA	2		
Hunter NODE-100 Install in Valve Box	EA	3		
Hunter NODE-400 Install in Valve Box	EA	11		
Hunter NODE-200 Install in Valve Box	EA	10		
Wilkins 975XL 1" Backflow Preventer	EA	1		
Point of Connection into 4" reclaimed Water Main				
Install 4" x 2" wet tap & Nibco T113 2" isolation valve	EA	23		
Future Point of Connection				
Install 2" Reclaimed Water Main from Median & Cap	EA	1		
Point of Connection 6" Potable Water Line	EA	1		
Point of Connection 8" Potable Water Line	EA	1		

Description	Units	Quantity	Unit Cost	Total Cost
Irrigation Lateral Line PVC Class 200 Purple	LF	27,500		
Irrigation Lateral Line PVC 2" Class 200 Purple	LF	1,300		
Irrigation Mainline PVC 4" Class 200 Purple	LF	11,200		
4" Directional Bore	EA	14		
SR #442 MEDIANS				
Hunter PROS-12-PRS30 15 Strip Series	EA	4		
Hunter PROS-12-PRS30 15 Strip Series	EA	1		
Hunter PROS-12-PRS30 8 Series MPR	EA	4		
Hunter PROS-12-PRS30 10 Series MPR	EA	1		
Hunter PROS-12-PRS30 10 Series MPR	EA	1		
Hunter PROS-12-PRS30 12 Series MPR	EA	4		
Hunter PROS-12-PRS30 12 Series MPR	EA	10		
Hunter PROS-12-PRS30 12 Series MPR	EA	4		
Hunter PROS-12-PRS30 15 Series MPR	EA	2		
Hunter PROS-12-PRS30 15 Series MPR	EA	6		
Hunter PROS-12-PRS30 15 Series MPR	EA	4		
Hunter PROS-12-PRS30 15 Series	EA	6		
Hunter PCB25 Bubbler	EA	68		
Two Hunter PCB-25 Bubbler	EA	21		
Hunter PGP-04 2.0 LA	EA	22		
Hunter PGP-04 2.5 LA	EA	67		
Hunter PGP-04 3.0 LA	EA	30		
Hunter PGP-04 4.0	EA	34		
Hunter ICV-FS 10" Valve Box	EA	11		
Hunter ICC Controller wtr IC-600 PL	EA	1		
Connection from Existing Well to Point of Connection	EA	1		
New 4" Well and 5 hp Pump	EA	1		
1 1/2" Directional Bore	EA	2		
3" Directional Bore	EA	2		
3" Isolation Valve and Box with Connections	EA	1		
Irrigation Lateral Line PVC Class 200 SDR 21	LF	6,500		
Irrigation Mainline PVC 3" Class 200 SDR 21 Gasket	LF	2,400		
Total of Irrigation				
Grand Total of All Bid Items				

PLEASE INCLUDE BELOW ANY OTHER POTENTIAL ADDITIONAL SERVICES THAT MAY BE REQUIRED AND ASSOCIATED COSTS.

Total Bid Amount \$ _____
(Landscaping and Irrigation)

Total Bid Amount in Words: _____

Company Name: _____

Address: _____

Telephone Number: _____

Email Address: _____

Company Authorized Representative Name: _____

Signature/Date: _____

Bid prices must include all freight charges and delivery charges for any and all material delivered to the work sight.

THE ABOVE AMOUNTS INCLUDE SALARY COST, FRINGE BENEFITS, OVERHEAD, OPERATING MARGIN AND PROFIT, AND ALL DIRECT AND INDIRECT EXPENSES.

Authorized Signature

Address

Printed Name & Title

City, State, Zip Code

Company

Telephone No.

Date

Fax No.