

Meeting Date: 3/10/2015

Agenda Item 11

REQUESTED COMMISSION ACTION:

Consent Ordinance Resolution Consideration Workshop

SHORT TITLE OR MOTION: A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF POMPANO BEACH, FLORIDA, APPROVING AND AUTHORIZING THE PROPER CITY OFFICIALS TO EXECUTE A JOINT PARTICIPATION AGREEMENT BETWEEN THE CITY OF POMPANO AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FOR LANDSCAPE IMPROVEMENTS ON THE STATE ROAD 834 (SAMPLE ROAD) FROM MILITARY TRAIL TO STATE ROAD 5 (US 1); PROVIDING AN EFFECTIVE DATE. (COST \$206,011)

SUMMARY OF PURPOSE AND WHY:

The City earned a FY14/15 Florida Highway Beautification Council Grant to enhance landscaping roadway medians on Sample Road (SR 834) from Military Trail to Federal Highway. In order to implement the project, the attached Point Participation Agreement (JPA) between the City and Florida Department of Transportation (FDOT) is necessary. The Total Project Cost is \$306,011 and City's cost share is \$206,011.

QUESTIONS TO BE ANSWERED BY ORIGINATING DEPARTMENT:

- (1) Origin of request for this action: Staff
- (2) Primary staff contact: Robert A. McCaughan, Public Works Director Ext 4097
- (3) Expiration of contract, if applicable: _____
- (4) Fiscal impact and source of funding: Canopy Tree Trust Fund and CIP #14-222 (302-7500-530.65-12)

DEPARTMENTAL COORDINATION	DATE	DEPARTMENTAL RECOMMENDATION	DEPARTMENTAL HEAD SIGNATURE
Public Works	<u>2/27/15</u>	APPROVE	<u>Robert A. McCaughan</u>
Finance	<u>3/2/15</u>	APPROVE	<u>J. Schell</u>
City Attorney	<u>3/2/15</u>	APPROVE	<u>Stacy Brown</u>
Budget	<u>3-2-15</u>	APPROVE	<u>SW</u>

Advisory Board
 Development Services Director
 City Manager [Signature]

[Signature]
Commissioner

ACTION TAKEN BY COMMISSION:

Ordinance	Resolution	Consideration	Workshop
1st Reading _____	1st Reading _____	Results: _____	Results: _____
2nd Reading _____	_____	_____	_____
_____	_____	_____	_____



City Attorney's Communication #2015-632

February 23, 2015

TO: Robert A. McCaughan, Public Works Director

FROM: Jill R. Mesojedec, FRP, Paralegal

VIA: Gordon B. Linn, City Attorney 

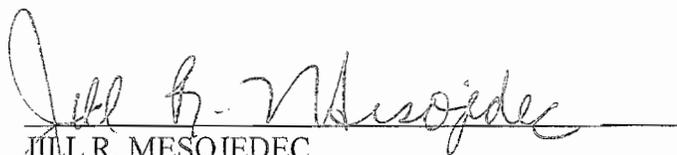
RE: Resolutions – 2013-2014 Highway Beautification Council Grant

As requested in your memorandum dated February 20, 2015, Public Works Department Memorandum No. 2015-027, I have prepared and attached the following captioned resolutions:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF POMPANO BEACH, FLORIDA, APPROVING AND AUTHORIZING THE PROPER CITY OFFICIALS TO EXECUTE A DISTRICT FOUR (4) AMENDMENT NUMBER NINE (9) TO LANDSCAPE INCLUSIVE MAINTENANCE MEMORANDUM OF AGREEMENT BETWEEN THE CITY OF POMPANO BEACH AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FOR ADDITIONAL LANDSCAPE IMPROVEMENTS ON STATE ROAD 834 (SAMPLE ROAD) FROM MILITARY TRAIL TO STATE ROAD 5 (US 1); PROVIDING AN EFFECTIVE DATE.

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF POMPANO BEACH, FLORIDA, APPROVING AND AUTHORIZING THE PROPER CITY OFFICIALS TO EXECUTE A JOINT PARTICIPATION AGREEMENT BETWEEN THE CITY OF POMPANO BEACH AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FOR LANDSCAPE IMPROVEMENTS ON STATE ROAD 834 (SAMPLE ROAD) FROM MILITARY TRAIL TO STATE ROAD 5 (US 1); PROVIDING AN EFFECTIVE DATE.

Please feel free to contact me if I may be of further assistance.


JILL R. MESOJEDEC

/jrm
l:cor/pw/2014-373

Attachments

RESOLUTION NO. 2015-_____

CITY OF POMPANO BEACH
Broward County, Florida

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF POMPANO BEACH, FLORIDA, APPROVING AND AUTHORIZING THE PROPER CITY OFFICIALS TO EXECUTE A JOINT PARTICIPATION AGREEMENT BETWEEN THE CITY OF POMPANO BEACH AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FOR LANDSCAPE IMPROVEMENTS ON STATE ROAD 834 (SAMPLE ROAD) FROM MILITARY TRAIL TO STATE ROAD 5 (US 1); PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF POMPANO BEACH, FLORIDA:

SECTION 1. That an Agreement between the City of Pompano Beach and the State of Florida Department of Transportation, a copy of which Agreement is attached hereto and incorporated by reference as if set forth in full, is hereby approved.

SECTION 2. That the proper City officials are hereby authorized to execute said Agreement between the City of Pompano Beach and the State of Florida Department of Transportation.

SECTION 3. This Resolution shall become effective upon passage.

PASSED AND ADOPTED this _____ day of _____, 2015.

LAMAR FISHER, MAYOR

ATTEST:

ASCELETA HAMMOND, CITY CLERK

**STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
JOINT PARTICIPATION AGREEMENT
CONTRACT NUMBER _____**

THIS AGREEMENT, entered into this _____ day of _____, 20____, by and between the State of Florida Department of Transportation, a component agency of the State of Florida, hereinafter called the DEPARTMENT, and the **City of Pompano Beach**, a municipal corporation of the State of Florida, located at **1215 N.E. 5th Avenue, Pompano Beach, Florida 33060**, hereinafter called the PARTICIPANT.

WITNESSETH

WHEREAS, the DEPARTMENT and the PARTICIPANT are desirous of having the PARTICIPANT make certain improvements in connection with **Financial Management (FM) Number 435709-1-78-01** for landscape improvements in the **City of Pompano Beach, Florida, State Road 834 (Sample Road) from Military Trail (M.P. 7.116) to State Road 5 (US 1) (M.P. 9.481) Pompano Beach, Florida**, herein after referred to as the Project. Refer to **Exhibit "A"** for a detailed Scope of Services and **Exhibit "B"** for a set of Project Plans attached hereto and made a part hereof; and,

WHEREAS, the improvements are in the interest of both the PARTICIPANT and the DEPARTMENT and it would be more practical, expeditious, and economical for the PARTICIPANT to perform such activities; and,

WHEREAS, the PARTICIPANT by Resolution No. _____ adopted on _____, 20____, a copy of which is attached hereto and made a part hereof, authorizes the proper officials to enter into this Agreement.

NOW, THEREFORE, in consideration of the mutual benefits to be derived from joint participation on the Project, the parties agree to the following:

- 1) The recitals set forth above are true and correct and are deemed incorporated herein.
- 2) The PARTICIPANT shall be responsible for assuring that the Project complies with all applicable Federal, State and Local laws, rules, regulations, guidelines and standards, and will not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the performance of work under the Agreement.
- 3) The DEPARTMENT agrees to make all previous studies, maps, drawings, surveys and other data and information pertaining to the Project available to the PARTICIPANT at no extra cost.
- 4) The PARTICIPANT shall have the sole responsibility for resolving claims and requests for additional work for the Project. The PARTICIPANT will make best efforts to obtain the DEPARTMENT'S input in its decisions.
- 5) The total cost of the Project is estimated at **Three Hundred Six Thousand Eleven Dollars and No Cents (\$306, 011.00)**. The DEPARTMENT agrees to pay **one hundred percent (100%)** of the total actual cost of the Project, up to a maximum amount of **One**

Hundred Thousand Dollars and No Cents (\$100,000.00) for actual costs incurred for the deliverables listed in **Exhibit "D"**. The PARTICIPANT shall submit progress billings to the DEPARTMENT on a quarterly basis. The balance of the Project cost shall be the sole responsibility of and paid by the PARTICIPANT. The PARTICIPANT acknowledges and agrees that the DEPARTMENT'S obligation to make payment under the AGREEMENT is contingent upon an annual appropriation by the Florida legislature.

- 6) This Agreement and **Exhibit "C"**, attached hereto and made a part hereof shall act to supersede the requirements of PARTICIPANT to secure a separate DEPARTMENT permit. The DEPARTMENT shall retain any rights in relation to the PARTICIPANT as if it has issued a permit.
- 7) The PARTICIPANT shall:
 - (a) Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Participant during the term of the contract; and
 - (b) Expressly require any subcontractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.
- 8) The PARTICIPANT must certify that the installation of the project is completed by a Contractor prequalified by the DEPARTMENT as required by Section 2 of the Standard Specifications for Road and Bridge Construction (2015), as amended unless otherwise approved by the DEPARTMENT in writing.

Construction Engineering Inspection (CEI) services will be provided at the PARTICIPANT'S cost by hiring a DEPARTMENT prequalified consultant firm including one individual that has completed the Advanced Maintenance of Traffic Level Training, unless otherwise approved by the DEPARTMENT in writing. The CEI staff shall be present on the Project at all times that the contractor is working. Administration of the CEI staff shall be under the responsible charge of a State of Florida licensed Professional Engineer. The DEPARTMENT shall approve all CEI personnel. The PARTICIPANT is hereby precluded from having the same consultant firm providing design services.

- 9) The PARTICIPANT is obligated to fulfill all of its obligations as set forth in this Agreement and to commence construction of the Project within six (6) months of the execution of this Agreement by all parties
- 10) This Agreement and any interest herein shall not be assigned, transferred or otherwise encumbered by the PARTICIPANT under any circumstances without the prior written consent of the DEPARTMENT. However, this Agreement shall run to the DEPARTMENT and its successors.
- 11) Except as otherwise set forth herein, this Agreement shall continue in effect and be binding to both the PARTICIPANT and the DEPARTMENT until the Project is accepted in writing by the DEPARTMENT'S Project Manager as complete, or December 31, 2016, whichever occurs first. The DEPARTMENT and PARTICIPANT may agree to extend this

Agreement in writing. The PARTICIPANT shall delegate signature authority for the PARTICIPANT to City Manager.

- 12) The PARTICIPANT shall provide the following quantifiable, measurable, and verifiable units of deliverables. Each deliverable must specify the required minimum level of service to be performed and the criteria for evaluating successful completion. The deliverables for the Project are shown in **Exhibit "D"** Deliverables, attached hereto and a made apart hereof. The PARTICIPANT will need DEPARTMENT approval if deviating from these deliverables and the Landscape Plans as shown in **Exhibit "B"** when approved by the DEPARTMENT.

The PARTICIPANT will be reimbursed for actual expenses incurred during the Agreement time period that are directly related to the installation of landscape and irrigation as set forth in this Agreement. The PARTICIPANT will submit a written progress report by the 15th day of the month following the installation attesting to the actual number of large and/or small plants installed, along with all irrigation parts received and installation at the Project site. Upon completion, the PARTICIPANT will notify the DEPARTMENT'S Landscape Architect who will be responsible for inspection and acceptance of the landscape improvements contemplated in this Agreement.

- 13) Upon completion and authorized by this Agreement, the PARTICIPANT shall notify the DEPARTMENT in writing of the completion; and for all design work that originally required certification by a Registered Landscape Architect, this notification shall contain a Landscape Architect's Certification of Compliance, signed and sealed by a Registered Landscape Architect. The certification shall state that work has been completed in compliance with the Project construction plans and specifications. If any deviations per paragraph number 12 are found from the approved plans, the certification shall include a list of all deviations along with an explanation that justifies the reason to accept each deviation."
- 14) The PARTICIPANT shall agree to maintain all landscape improvements at its sole cost and expense and in accordance with the terms of the Landscape Maintenance Memorandum of Agreement attached hereto and made a part hereof as **Exhibit "E"**.
- 15) Upon completion and certification of Project, the PARTICIPANT must submit the final invoice to the DEPARTMENT within 180 days after the final acceptance of the Project which follows the 365 day warranty period. Invoices submitted after the 180 day time period may not be paid.
- 16) Payment shall be made only after receipt and approval of goods and services unless advance payments are authorized by the Department of Financial Services under **Section 215.422(14), Florida Statutes**, or by the DEPARTMENT'S Comptroller under **Section 334.004(29), Florida Statutes**.
- 17) Invoices shall be submitted quarterly by the PARTICIPANT in detail sufficient for a proper pre-audit and post-audit thereof, based on the quantifiable, measurable and verifiable units of deliverables as established in 12) above and **Exhibit "D"**. Deliverables must be received and accepted in writing by the DEPARTMENT'S Project Manager prior to payments.

- 18) Supporting documentation must establish that the deliverables were received and accepted in writing by the PARTICIPANT and that the required minimum level of service to be performed based on the criteria for evaluating successful completion as specified in 12) has been met.
- 19) PARTICIPANT providing goods and services to the DEPARTMENT should be aware of the following time frames. The DEPARTMENT has (10) ten working days to inspect and approve the goods and services where working day is defined as any day of the week excluding Saturday, Sunday and any legal holiday as designated in **Section 110.117, Florida Statutes**. The DEPARTMENT has (20) twenty working days to deliver a request for payment (voucher) to the Department of Financial Services. The (20) twenty working days are measured from the latter of the date the invoice is received or the goods or services are received, inspected and approved.
- 20) If a payment is not available within (40) forty days, a separate interest penalty at a rate as established pursuant to **Section 55.03(1), Florida Statutes**, will be due and payable, in addition to the invoice amount, to the PARTICIPANT. Interest penalties of less than one (1) dollar will not be enforced unless the PARTICIPANT requests payment. Invoices that have to be returned to a PARTICIPANT because of PARTICIPANT preparation errors will result in a delay in the payment. The invoice payment requirements do not start until a properly completed invoice is provided to the DEPARTMENT.
- 21) A Vendor Ombudsman has been established within the Department of Financial Services. The duties of this individual include acting as an advocate for Participant's contractors who may be experiencing problems in obtaining timely payment(s) from a state agency. The Vendor Ombudsman may be contacted at (850) 413-5516 or by calling the Division of Consumer Services at 1-877-693-5236.
- 22) Records of costs incurred under the terms of this Agreement shall be maintained and made available upon request to the DEPARTMENT at all times during the period of this Agreement and for five years after final payment is made. Copies of these documents and records shall be furnished to the DEPARTMENT upon request. Records of costs incurred include the PARTICIPANT'S general accounting records and the Project records, together with supporting documents and records, of the contractor and all subcontractors performing work on the Project, and all other records of the Contractor and subcontractors considered necessary by the Department for a proper audit of costs.
- 23) In the event this contract is for services in excess of TWENTY-FIVE THOUSAND DOLLARS (\$25,000.00) and a term for a period of more than one year, the provisions of **Section 339.135(6)(a), Florida Statutes**, are hereby incorporated:

"The DEPARTMENT, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The Department shall require a statement from the Comptroller of the Department that such funds are available prior to entering into any such contract or other binding commitment of funds.

Nothing herein contained shall prevent the making of contracts for periods exceeding one year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the Department which are for an amount in excess of TWENTY FIVE THOUSAND DOLLARS (\$25,000.00) and which have a term for a period of more than one year."

- 24) The PARTICIPANT warrants that it has not employed or obtained any company or person, other than bona fide employees of the PARTICIPANT, to solicit or secure this Agreement, and it has not paid or agreed to pay any company, corporation, individual or firm, other than a bona fide employee employed by the PARTICIPANT. For breach or violation of this provision, the DEPARTMENT shall have the right to terminate the Agreement without liability.

- 25) In a contract executed between the PARTICIPANT and one or more contractors arising out of this Agreement, such contract shall state that:

To the fullest extent permitted by law the PARTICIPANT contractor shall indemnify and hold harmless the PARTICIPANT, the State of Florida, Department of Transportation, and its officers and employees, from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness or intentional wrongful misconduct of contractor and persons employed or utilized by contractor in the performance of this Contract.

This indemnification shall survive the termination of this Agreement. Nothing contained in this paragraph is intended to nor shall it constitute a waiver of the State of Florida and PARTICIPANT'S sovereign immunity.

In a contract executed between the PARTICIPANT and one or more consultants arising out of this Agreement, such contract shall state that:

To the fullest extent permitted by law, the PARTICIPANT'S consultant shall indemnify and hold harmless the PARTICIPANT, the State of Florida, Department of Transportation, and its officers and employees from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney fees to the extent caused, in whole or in part, by the professional negligence, error or omission, recklessness, or intentional wrongful conduct of the consultant or persons employed or utilized by the consultant in the performance of the Agreement.

This indemnification shall survive the termination of this Agreement. Nothing contained in this paragraph is intended to nor shall it constitute a waiver of the State of Florida and PARTICIPANT'S sovereign immunity.

- 26) This Agreement is governed by and construed in accordance with the laws of the State of Florida. In the event it becomes necessary for the DEPARTMENT or PARTICIPANT to institute suit for the enforcement of the provisions of this AGREEMENT, each party shall be responsible to pay their own attorney fees and court costs. Venue with respect to such litigation shall be in Broward County, Florida.

- 27) This document incorporates and includes all prior negotiations, correspondence, conversations, agreements, or understandings applicable to the matters contained herein,

and the parties agree that there are no commitments, agreements or understandings concerning the subject matter of this Agreement that are not contained in this document except the Landscape Maintenance Memorandum of Agreement between the DEPARTMENT and the PARTICIPANT which is included as **Exhibit "E"**. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior representation or agreements whether oral or written. It is further agreed that no modification, amendment, or alteration in the terms and conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.

- 28) Any or all notices (except invoices) given or required under this Agreement shall be in writing and either personally delivered with receipt acknowledged or sent by certified mail, return receipt requested. All notices delivered shall be sent to the following addresses:

If to the DEPARTMENT:

State of Florida Department of Transportation
3400 West Commercial Blvd.
Ft. Lauderdale, FL 33309-3421
Attention: Elisabeth A. Hassett, R.L.A.
FDOT District IV Landscape Architect
A second copy to: Office of the General Counsel

If to the PARTICIPANT:

City of Pompano Beach
1201 N.E. 5th Avenue
Pompano Beach, Florida 33060
City Manager

With a Copy to: City Attorney

- 29) LIST OF EXHIBITS

Exhibit A: Scope of Services
Exhibit B: Project Plans
Exhibit C: Permit Requirements
Exhibit D: Deliverables
Exhibit E: Landscape Maintenance Memorandum of Agreement

"CITY":

Witnesses:

CITY OF POMPANO BEACH

By: _____
LAMAR FISHER, MAYOR

By: _____
DENNIS W. BEACH, CITY MANAGER

Attest:

ASCELETA HAMMOND, CITY CLERK

(SEAL)

Approved As To Form:

GORDON B. LINN, CITY ATTORNEY

STATE OF FLORIDA
COUNTY OF BROWARD

The foregoing instrument was acknowledged before me this ____ day of _____, 2015 by **LAMAR FISHER**, as Mayor, **DENNIS W. BEACH** as City Manager and **ASCELETA HAMMOND**, as City Clerk of the City of Pompano Beach, Florida, a municipal corporation, on behalf of the municipal corporation, who are personally known to me.

NOTARY'S SEAL:

NOTARY PUBLIC, STATE OF FLORIDA

(Name of Acknowledger Typed, Printed or Stamped)

Commission Number

IN WITNESS WHEREOF, this Agreement is to be executed below for the purposes specified herein. Authorization has been given to enter into and execute this Agreement by Resolution _____, hereto attached.

CITY OF POMPANO BEACH

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

By: _____
Chairperson/Mayor/Manager

By: _____
Director of Transportation Development

Attest: _____ (SEAL)
Clerk

Attest: _____ (SEAL)
Executive Secretary

Legal Review Date

Attorney

Legal Review Date

Office of the General Counsel

EXHIBIT A

SCOPE OF SERVICES

The PARTICIPANT (**City of Pompano Beach**) agrees to make certain landscape improvements on **State Road 834 (Sample Road) from Military Trail (M.P. 7.116) to State Road 5 (US 1) (M.P. 9.481) Pompano Beach, Florida**, and will subsequently furnish, construct, and inspect the landscape as shown in the plans and specifications prepared by **Michael D. Conner, RLA, December 16, 2014**. Work shown on the plans, "to be done by others", or "not in this project" shall not be performed under this agreement and shall not be reimbursed, nor is permission to perform this work on State right of way granted. The following conditions shall apply:

- (a) The current Florida Department of Transportation Design Standard Index 546 must be adhered to.
- (b) Clear zone/horizontal clearance as specified in the Plans Preparation Manual – English Volume 1, Chapter 2 and Department Design Standard Index 700 must be adhered to.
- (c) Landscape materials shall not obstruct roadside signs or the 500 ft. view zone for permitted outdoor advertising signs per Florida Statutes 479.106.
- (d) Landscape materials shall be of a size, type and placement so as not to impede large machine mowing that the DEPARTMENT currently provides and will continue to provide at the same frequency.
- (e) Should the PARTICIPANT elect to design, furnish and construct irrigation, all costs associated with water source connection(s), continued maintenance of the distribution system and water, and electricity costs shall be born solely by the PARTICIPANT. All permits (including tree permits), fees, and any mitigation associated with the removal, relocation or adjustments of these improvements are the PARTICIPANT'S responsibility.
- (f) During the installation of the Project and future maintenance operations, maintenance of traffic shall be in accordance with the current edition of the MUTCD and the current Department Design Standards (series 600).
- (g) If there is a need to restrict the normal flow of traffic it shall be done in accordance with the Maintenance of Traffic Plan (see **Exhibit "B"**), and the party performing such work shall give 48 hour notice to the local law enforcement agency within whose jurisdiction such road is located prior to commencing work on the Project. The DEPARTMENT'S Public Information Office shall also be notified by phone at 954-777-4092 at least 48 hours in advance.
- (h) The PARTICIPANT shall be responsible to clear all utilities within the Project limits.

EXHIBIT B
PROJECT PLANS

Please see attached plans prepared by:

Michael D. Conner, RLA,
Calvin, Giordano and Associates Inc.

and

Dated: December 16, 2014

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

CONTRACT PLANS

FINANCIAL PROJECT ID: 435709-1-78-01

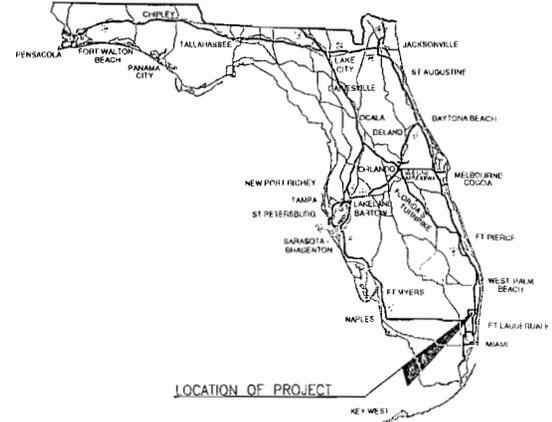
BROWARD COUNTY (33064)

STATE ROAD NO. S.R. 834

LANDSCAPE PLANS

S.R. 834 (SAMPLE ROAD)

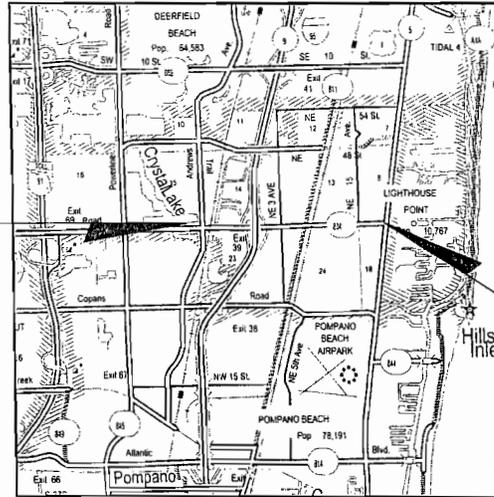
FROM MILITARY TRAIL (M.P. 7.116) TO
U.S.1 (S.R. 5 - M.P. 9.481)



INDEX OF LANDSCAPE PLANS

SHEET NO.	SHEET DESCRIPTION
0	COVER SHEET
1	OVERALL KEY PLAN AND LANDSCAPE NOTES
2 - 3	PLANTING SCHEDULES
4 - 18	LANDSCAPE PLAN
19 - 21	IRRIGATION NOTES
22	IRRIGATION SCHEDULES
23 - 46	IRRIGATION PLAN
47 - 49	IRRIGATION DETAILS
50	TRAFFIC CONTROL PLAN

BEGIN PROJECT
S.R. S.R. 834
M.P. 7.116



END PROJECT
S.R. S.R. 834
M.P. 9.481



PLANS PREPARED BY:



Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS
1870 New Clinic Way, 400, Fort Lauderdale, Florida 33316
Phone: 954-921-7311 • Fax: 954-921-8911
Contractor of Record License: LC20060319
VLA000110-NO-10-001-0001

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

GOVERNING STANDARDS AND SPECIFICATIONS

Florida Department of Transportation, 2015 Design Standards and revised Index Drawings as appended herein, and 2015 Standard Specifications for Road and Bridge Construction, as amended by Contract Documents.

For Design Standards click on the "Design Standards" link at the following web site:
<http://www.dot.state.fl.us/rddesign/>

For the Standard Specifications for Road and Bridge Construction click on the "Specifications" link at the following web site:
<http://www.dot.state.fl.us/specificationsoffice/>

S.R. S.R. 834 DESIGN SPEED: 45MPH

MAINTAINING AGENCY: CITY OF POMPANO BEACH

Contact: Robert McCaughan
Public Works Director

City of Pompano Beach
1201 NE 5th Ave
Pompano Beach, FL 33060
954-786-4097
Robert.McCaughan@copbfl.com

KEY SHEET REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments
9/28/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C.COMMENT
12/16/14	Revised For FDOT Agreements

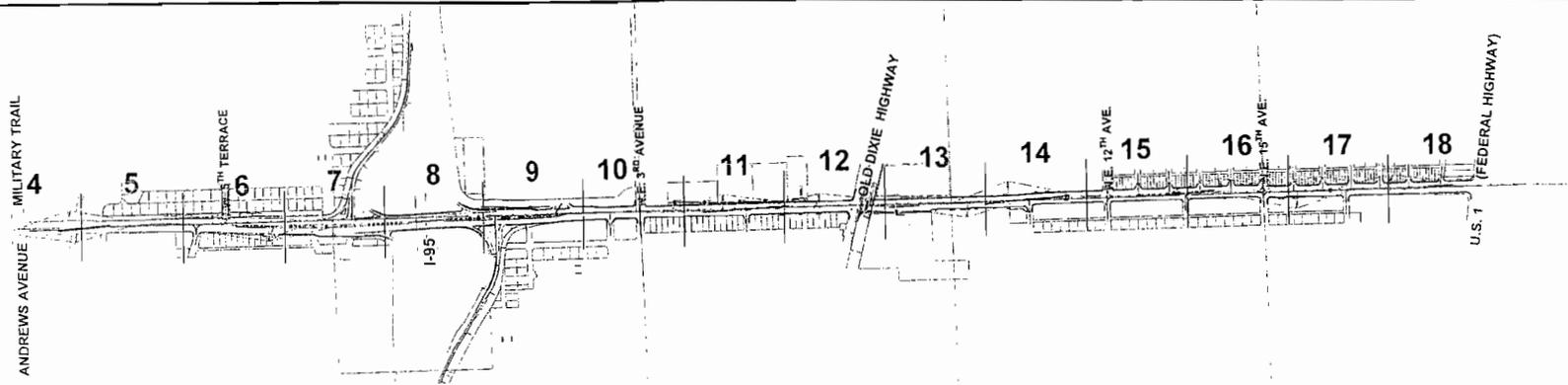
LANDSCAPE PLANS
ARCHITECT OF RECORD: MICHAEL CONNER, R.L.A.

RLA NO.: LICENSE No.1161
Michael Conner
12-16-14

FISCAL YEAR	SHEET NO
2014	0

FDOT PROJECT MANAGER: ELISABETH HASSETT, RLA (FDOT DISTRICT IV LANDSCAPE ARCHITECT)

DECEMBER 16, 2014



OVERALL KEY MAP

N.T.S.

GENERAL NOTES:

1. GOVERNING STANDARDS FOR CONSTRUCTION & INSTALLATION SHALL BE AS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARDS INDEX 544 AND REVISED INDEX DRAWINGS AS APPENDED HEREIN, AND 2015 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, PLEASE NOTE THAT GOVERNING SPECIFICATIONS FOR LANDSCAPE INSTALLATION SHALL BE BY MODIFIED SPECIAL PROVISION (MSP) AS PROVIDED IN TECHNICAL SPECIFICATION AND BID DOCUMENTS.
2. FDOT INDEX CAN BE FOUND AT THE FOLLOWING WEBPAGE: <http://www.dot.state.fl.us/rddesign/DesignStandards/Standards.shtm>
3. STATE LAW MANDATES CONTACTING "SUNSHINE STATE ONE-CALL OF FLORIDA, INC." AT 811 OR 1-800-432-4770. AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. CONTRACTOR SHALL VIDEO TAPE WORK AREAS BEFORE (WORK COMMENCES) TO IDENTIFY EXISTING CONDITIONS, IF CUI NOT PRESENT ON PROJECT. DAMAGES TO CURBS AND ASPHALT DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED BY CONTRACTOR TO THE SATISFACTION OF F.D.O.T., THESE REPAIRS OR REPLACEMENTS BY CONTRACTOR SHALL BE AT HIS SOLE EXPENSE.
5. CONTRACTOR(S) MUST OBTAIN FDOT PERMITS, AND SEPARATE LANDSCAPE, IRRIGATION & TREE RELOCATION/REMOVAL PERMITS FROM THE GOVERNING AGENCIES, AS REQUIRED.

6. LANDSCAPE CONTRACTOR MUST CALL THE LANDSCAPE INSPECTOR WITH THE GOVERNING AGENCY TO SCHEDULE A PRE CONSTRUCTION MEETING, ALONG WITH THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT PRIOR TO ANY SITE PREPARATION.
7. ALL CLEARING, GRUBBING, EXCAVATION, FILL AND DISPOSAL OF ALL CONSTRUCTION MATERIAL IS INCIDENTAL TO WORK, AND SHALL BE INCLUDED IN THE CONTRACT.
8. CONTRACTOR SHALL CONTACT F.D.O.T. 'OPERATIONS' FOR DIRECTION AS TO THE DISPOSAL OF EXCAVATED FILL. BROWARD OPERATIONS: CONTACT ADRIAN CROUCH MAINTENANCE PROGRAM MANAGER AT (954) 958-7643.
9. CONTRACTOR SHALL MAINTAIN CLEAR SIGHT AT MEDIAN OPENINGS FOR VEHICLES TURNING ACROSS ONCOMING TRAFFIC, AS DEFINED PER F.D.O.T. INDEX 546, EXCEPT WHERE SIGNALIZED INTERSECTIONS THAT DO NOT GO FLASHING.
10. CONTRACTOR SHALL MAINTAIN A HORIZONTAL CLEAR ZONE, AS DEFINED PER F.D.O.T. INDEX 700.
11. CONTRACTOR SHALL INSURE THAT NO SIGNS WILL BE BLOCKED DURING NEW MEDIAN PLANTING, AND THAT NO PLANT MATERIAL WILL BE BLOCKING ANY SIGN.

TREE PROTECTION NOTE:

12. CONTRACTOR SHOULD PROVIDE TREE PROTECTION FOR ANY EXISTING TREE AND PALMS TO REMAIN PER F.D.O.T. STANDARD INDEX 544, LANDSCAPE INSTALLATION CURRENT EDITION

PLANTING NOTES:

13. CONTRACTOR SHALL INSTALL PLANT MATERIAL AS DETAILED IN F.D.O.T. INDEX 544 LANDSCAPE INSTALLATION, LANDSCAPE INSTALLATION CURRENT EDITION
14. CYPRESS MULCH IS NOT PERMITTED ON FDOT RIGHT OF WAY. CONTRACTOR SHALL PROVIDE 3" RECYCLED MULCH CERTIFIED BY THE MULCH AND SOIL COUNCIL (MSC). SUBMIT PROOF OF CERTIFICATION TO THE FDOT DISTRICT OPERATIONS PERMIT LANDSCAPE INSPECTOR UPON INSPECTION.

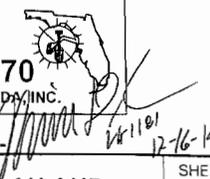
UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY

- BE ADVISED THAT UNDERGROUND UTILITIES SHOWN ON PLANS ARE APPROXIMATIONS, AND MAY NOT REFLECT ALL EXISTING UNDERGROUND UTILITIES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL 811 OR 1-800-432-4770 (SUNSHINE STATE ONE CALL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION, AS PER CHAPTER 556 OF THE FLORIDA STATUTES.

CALL 48 HOURS BEFORE YOU DIG IN FLORIDA, ITS THE LAW!

811 or 1-800-432-4770

SUNSHINE STATE ONE CALL OF FLORIDA, INC.



DECEMBER 16, 2014

REVISIONS		DESCRIPTION	DATE	DATE	DESCRIPTION
DATE	DESCRIPTION				
9/26/14	REVISIONS PER E.R.C. COMMENTS				
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT				

		SAMPLE ROAD BEAUTIFICATION GRANT		OVERALL KEY PLAN AND LANDSCAPE NOTES	SHEET NO. 1
LANDSCAPE ARCHITECT OF RECORD: MICHAEL CONNER, R.L.A. LICENSE #01181 Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1400 Old Dixie Hwy, Suite 603, Fort Lauderdale, Florida 33315 Phone: 954-831-7791 • Fax: 954-431-8667 Certificate of Authorization LC00790323 VENDOR ID: 400-88101-0895 USER: apareda 12/16/2014 5:16:15 PM P:\Projects\2013\136147 Florida Highway Beautification Grant Application\CADD Files\Drawings\136147-L106-OVERALL_KEY_PLAN.dwg	ROAD NO. S.R. 834	COUNTY BROWARD	FINANCIAL PROJECT ID 435709-1-78-01		

TABULATION OF QUANTITIES / PLANT SCHEDULE

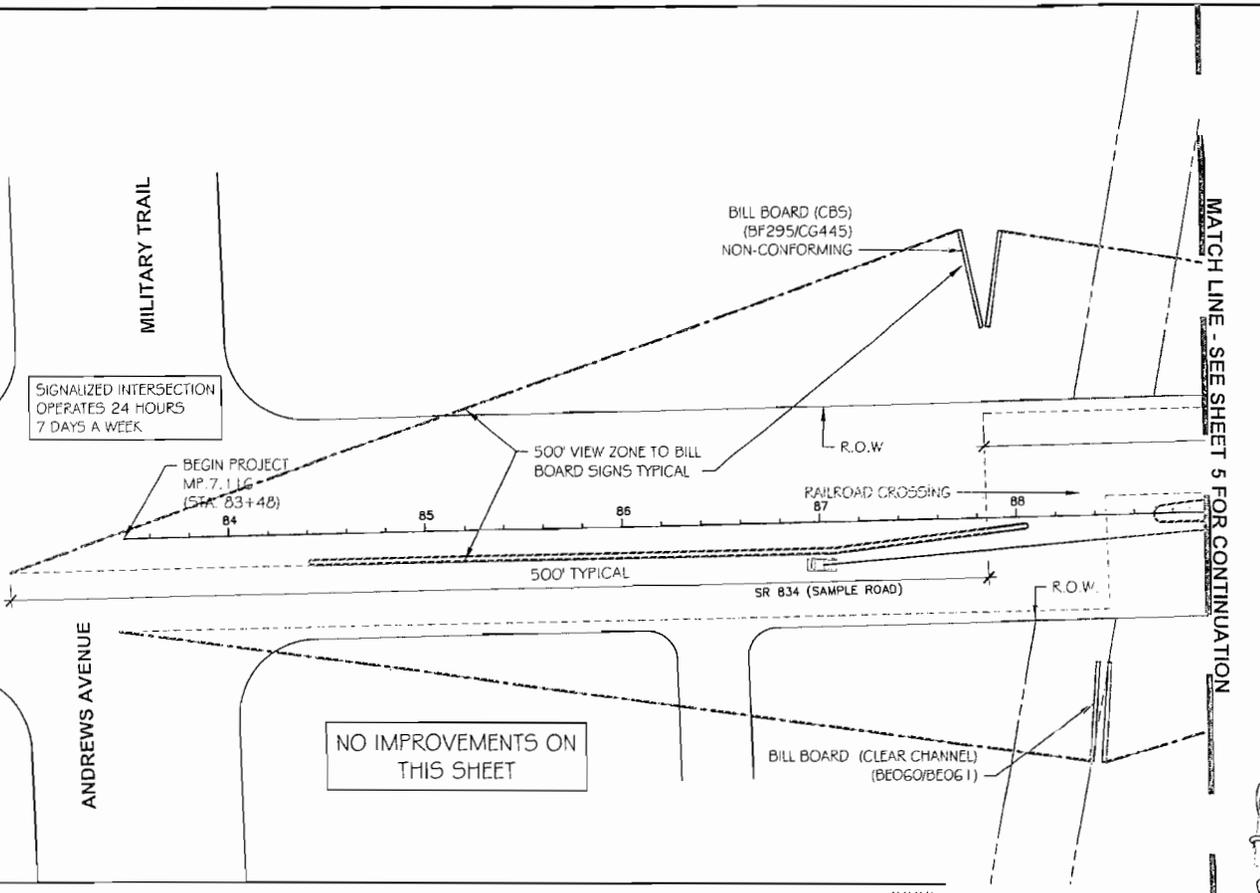
PAY ITEM NO	PAY SIZE	SYM	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MAXIMUM MAINTAINED SIZE	SPACING	NATIVE	DROUGHT TOLERANT	UNIT	SHEET NUMBERS								TOTAL FOR SHEETS 4 TO 7		GRAND TOTAL							
											4		5		6		7		PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL		
											PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL										
N/A	N/A	BIS	Bismarckia nobilis 'Silver'	Silver Bismarkia Palm	14' O.A., 4'C.T.	N/A	N/A			EA.									9						12			
N/A	N/A	BUL	Bulnesia arborea	Bulnesia Tree	14' HT X 6.2'DBH	N/A	N/A		Yes	EA.																4		
N/A	N/A	QVL	Quercus virginiana	Live Oak Tree	18' HT X 9.3'DBH	N/A	N/A	Yes	Yes	EA.																4		
N/A	N/A	PES	Ptychosperma elegans	Soitaire Palm - Single	12'-16' C.T.	N/A	N/A			EA.																6		
N/A	N/A	VMS	Veitchia montgomeryana	Veitchia Montgomeryana	12'-16' C.T.	N/A	N/A			EA.																8		
N/A	N/A	ALL	Allamanda cathartica	Allamanda Shrubs	3 Gal., 24"X18"	36"	30" O.C.			EA.					217												290	
N/A	N/A	BRO	Aechmia blanchetiana	Bromeliads	3 Gal., 15"X15"	30"	36" O.C.			EA.																	52	
N/A	N/A	CRI	Cnnum augustum 'Queen Emma'	Cnnum Lily	3 Gal., 24"X24"	36"	36" O.C.			EA.																	214	
N/A	N/A	DUR	Duranta erecta 'Gold Mound'	Gold Mound	3 Gal., 18"X18"	24"	24" O.C.			EA.																	329	
N/A	N/A	FAX	Tripsacum dactyloides	Fakahatchee Grass	3 Gal., 24"X24"	36"	36" O.C.	Yes		EA.																	327	
N/A	N/A	FMG	Ficus microcarpa	Green Island Ficus	3 Gal., 15"X15"	18"	24" O.C.		Yes	EA.					421												1743	
N/A	N/A	SPA	Spartina bakeri	Sand Cord Grass	3 Gal., 24"X24"	36"	24" O.C.	Yes	Yes	EA.																	1020	
N/A	N/A	SSF		St. Augustine Floratam Sod	G.C.	N/A	N/A			EA.																	38756	
N/A	N/A	PMF	Podocarpus macrophyllis 'Fringles'	Dwarf Podocarpus	3 Gal., 12"X12"	18"	18" O.C.		Yes	EA.																	402	
N/A	N/A	HDS	Helianthus debilis	Dune Sunflower	1 Gal., 12"X12"	18"	15" O.C.	Yes		S.F.																	1985	
N/A	N/A	CUP	Cuphea Hyssopifolia	False Mexican Heather	1 Gal., 8"X8"	15"	15" O.C.			EA.																	1487	
N/A	N/A	SET	Tradescantia Pallida 'Purpurea'	Purple Queen	1 Gal., 8"X8"	12"	15" O.C.		Yes	EA.																	405	

PAY ITEM NO	PAY SIZE	SYM	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MAXIMUM MAINTAINED SIZE	SPACING	NATIVE	DROUGHT TOLERANT	UNIT	SHEET NUMBERS								TOTAL FOR SHEETS 8 TO 11		GRAND TOTAL								
											8		9		10		11		PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL			
											PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL											
N/A	N/A	BIS	Bismarckia nobilis 'Silver'	Silver Bismarkia Palm	14' O.A., 4'C.T.	N/A	N/A			EA.																		12	
N/A	N/A	BUL	Bulnesia arborea	Bulnesia Tree	14' HT X 6.2'DBH	N/A	N/A		Yes	EA.																		4	
N/A	N/A	QVL	Quercus virginiana	Live Oak Tree	18' HT X 9.3'DBH	N/A	N/A	Yes	Yes	EA.																		4	
N/A	N/A	PES	Ptychosperma elegans	Soitaire Palm - Single	12'-16' C.T.	N/A	N/A			EA.																		6	
N/A	N/A	VMS	Veitchia montgomeryana	Veitchia Montgomeryana	12'-16' C.T.	N/A	N/A			EA.																		8	
N/A	N/A	ALL	Allamanda cathartica	Allamanda Shrubs	3 Gal., 24"X18"	36"	30" O.C.			EA.																		290	
N/A	N/A	BRO	Aechmia blanchetiana	Bromeliads	3 Gal., 15"X15"	30"	36" O.C.			EA.																		52	
N/A	N/A	CRI	Cnnum augustum 'Queen Emma'	Cnnum Lily	3 Gal., 24"X24"	36"	36" O.C.			EA.																		214	
N/A	N/A	DUR	Duranta erecta 'Gold Mound'	Gold Mound	3 Gal., 18"X18"	24"	24" O.C.			EA.																		329	
N/A	N/A	FAX	Tripsacum dactyloides	Fakahatchee Grass	3 Gal., 24"X24"	36"	36" O.C.	Yes		EA.																		327	
N/A	N/A	FMG	Ficus microcarpa	Green Island Ficus	3 Gal., 15"X15"	18"	24" O.C.		Yes	EA.																		1743	
N/A	N/A	SPA	Spartina bakeri	Sand Cord Grass	3 Gal., 24"X24"	36"	24" O.C.	Yes	Yes	EA.																		1020	
N/A	N/A	SSF		St. Augustine Floratam Sod	G.C.	N/A	N/A			EA.																		38756	
N/A	N/A	PMF	Podocarpus macrophyllis 'Fringles'	Dwarf Podocarpus	3 Gal., 12"X12"	18"	18" O.C.		Yes	EA.																		402	
N/A	N/A	HDS	Helianthus debilis	Dune Sunflower	1 Gal., 12"X12"	18"	15" O.C.	Yes		S.F.																		1985	
N/A	N/A	CUP	Cuphea Hyssopifolia	False Mexican Heather	1 Gal., 8"X8"	15"	15" O.C.			EA.																		1487	
N/A	N/A	SET	Tradescantia Pallida 'Purpurea'	Purple Queen	1 Gal., 8"X8"	12"	15" O.C.		Yes	EA.																		405	

Handwritten signature and date: 12-16-14

DECEMBER 16, 2014

REVISIONS DATE DESCRIPTION 07/11/14 Revised per FDOT Comments 9/26/14 REVISIONS PER E.R.C. COMMENTS 10/31/14 SECOND REVISIONS PER E.R.C. COMMENT		DESCRIPTION DATE		UNIFORMS AGENCY OF RECORDS CALVIN, GIORDANO & ASSOCIATES, INC. EXCEPTIONAL SOLUTIONS 1190 E. ONE STOP, SUITE 907, FORT LAUDERDALE, FLORIDA 33316 PHONE 954-212-7724 FAX 954-914-8209 CERTIFICATE OF AUTHORIZATION LC05000733 VENEZUELA ID: 110 65-961-2629	SAMPLE ROAD BEAUTIFICATION GRANT ROAD NO. COUNTY FINANCIAL PROJECT ID S.R. 834 BROWARD 435709-1-78-01	PLANTING SCHEDULES SHEET NO. 2
--	--	---------------------	--	--	---	-----------------------------------



1 LANDSCAPE PLAN

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- SIGHT DISTANCES (TYP.):
- SIGHT DISTANCE TRIANGLES ARE BASED ON PDOT INDEX 546.
 - 6 LANE DIVIDED HIGHWAY WITH MEDIANS LESS THAN 22', DESIGN SPEED OF 45MPH
 - CARS ENTERING ROAD FROM SIDE STREETS MUST HAVE A CLEAR LINE OF SIGHT FOR 625 FT.
 - CARS WAITING TO CROSS FROM A DIRECTIONAL MEDIAN MUST BE ABLE TO SEE 430 FT



Michael D. Giordano
 12-16-14
 12-16-14

DECEMBER 16, 2014

REVISIONS		LANDSCAPE ARCHITECT OF RECORD: MICHAEL GIORDANO P.L.L.C. LICENSE #101181	SAMPLE ROAD BEAUTIFICATION GRANT			SHEET NO.
DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
9/26/14	REVISIONS PER E.R.C. COMMENTS	Calvin Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1480 Blue Drive, Suite 603, Fort Lauderdale, Florida 33314 Phone: 954 921 7791 • Fax: 954 921 0287 Certificate of Authorization LC00090233 VENDOR ID: 900 453 050 3860	S.R. 834	BROWARD	435709-1-78-01	4
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT					

LANDSCAPE PLAN

MATCH LINE - SEE SHEET 4 FOR CONTINUATION

MATCH LINE - SEE SHEET 6 FOR CONTINUATION

NW 36TH STREET

SR 834 (SAMPLE ROAD)

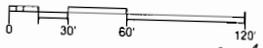
500' TYPICAL
CONCRETE SEPARATORS

EXISTING SIGNS

NO IMPROVEMENTS ON
THIS SHEET

2 LANDSCAPE PLAN

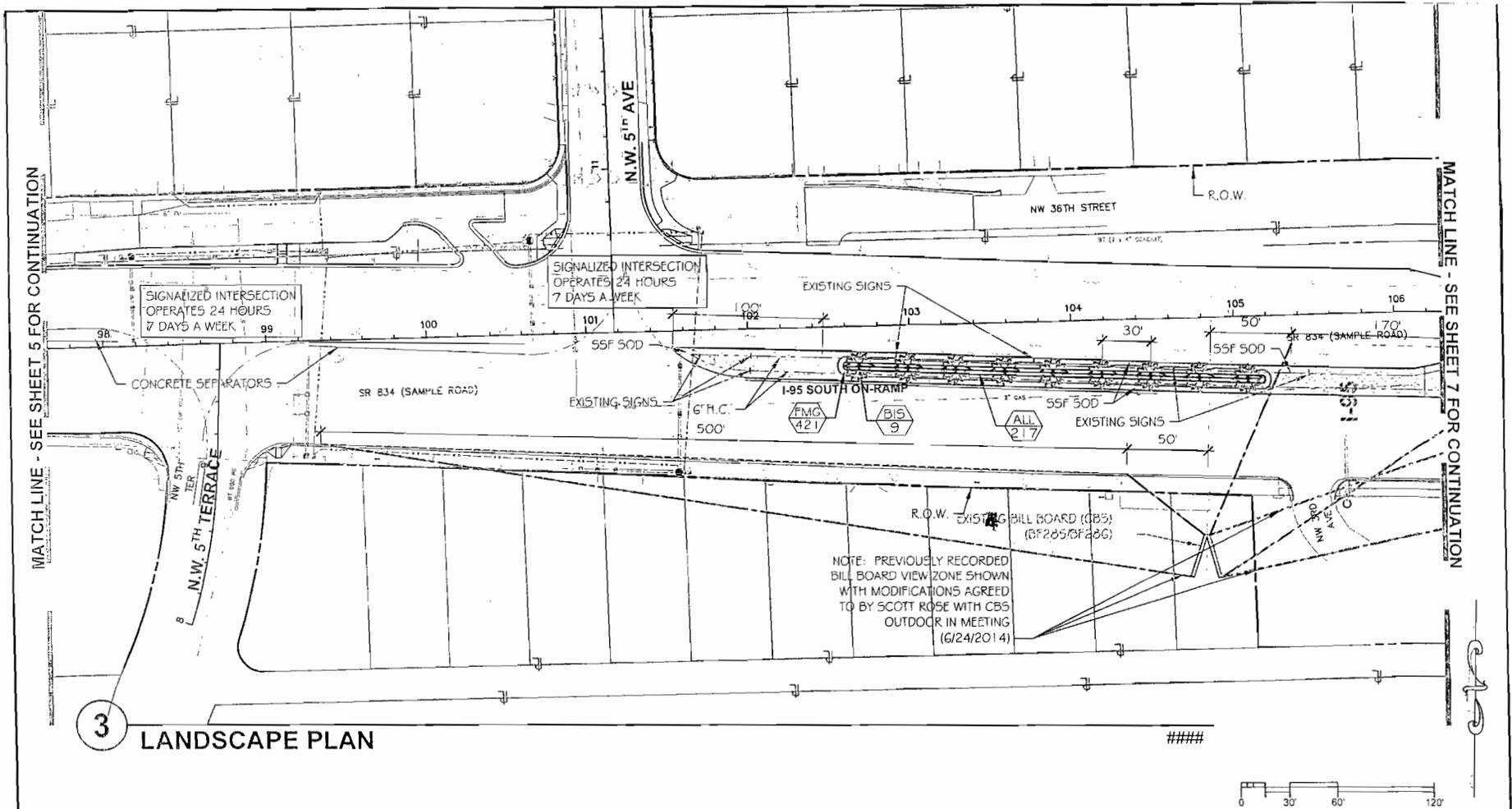
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LB 1181
12-16-14

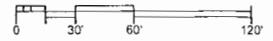
DECEMBER 16, 2014

REVISIONS		REVISIONS		LANDSCAPE ARCHITECT OF RECORD: MICHEL COMNER R.L.A. LICENSE No. 1191	SAMPLE ROAD BEAUTIFICATION GRANT			LANDSCAPE PLAN	SHEET NO. 5
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
9/26/14	REVISIONS PER E.R.C. COMMENTS			 Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1800 E. Dixie, Suite 800, Fort Lauderdale, Florida 33315 Phone: (954) 921-7781 • Fax: (954) 921-8800 Certificate of Authorization LC00000229 VENDOR ID: 103-45-021-2829 USER: operado	S.R. 834	BROWARD	435709-1-78-01		
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT								



MATCH LINE - SEE SHEET 5 FOR CONTINUATION

MATCH LINE - SEE SHEET 7 FOR CONTINUATION



REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments
3/26/14	REVISIONS PER E.R.C. COMMENTS
0/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD: MICHAEL GARDNER P.L.A., LICENSE No. 1181

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS
1800 Blue Circle, Suite 900, Fort Lauderdale, Florida 33316
Phone: (954) 578-1111 • Fax: (954) 921-8800
Certificate of Authorization LC00000339
VENDOR ID NO. EG-011-2010

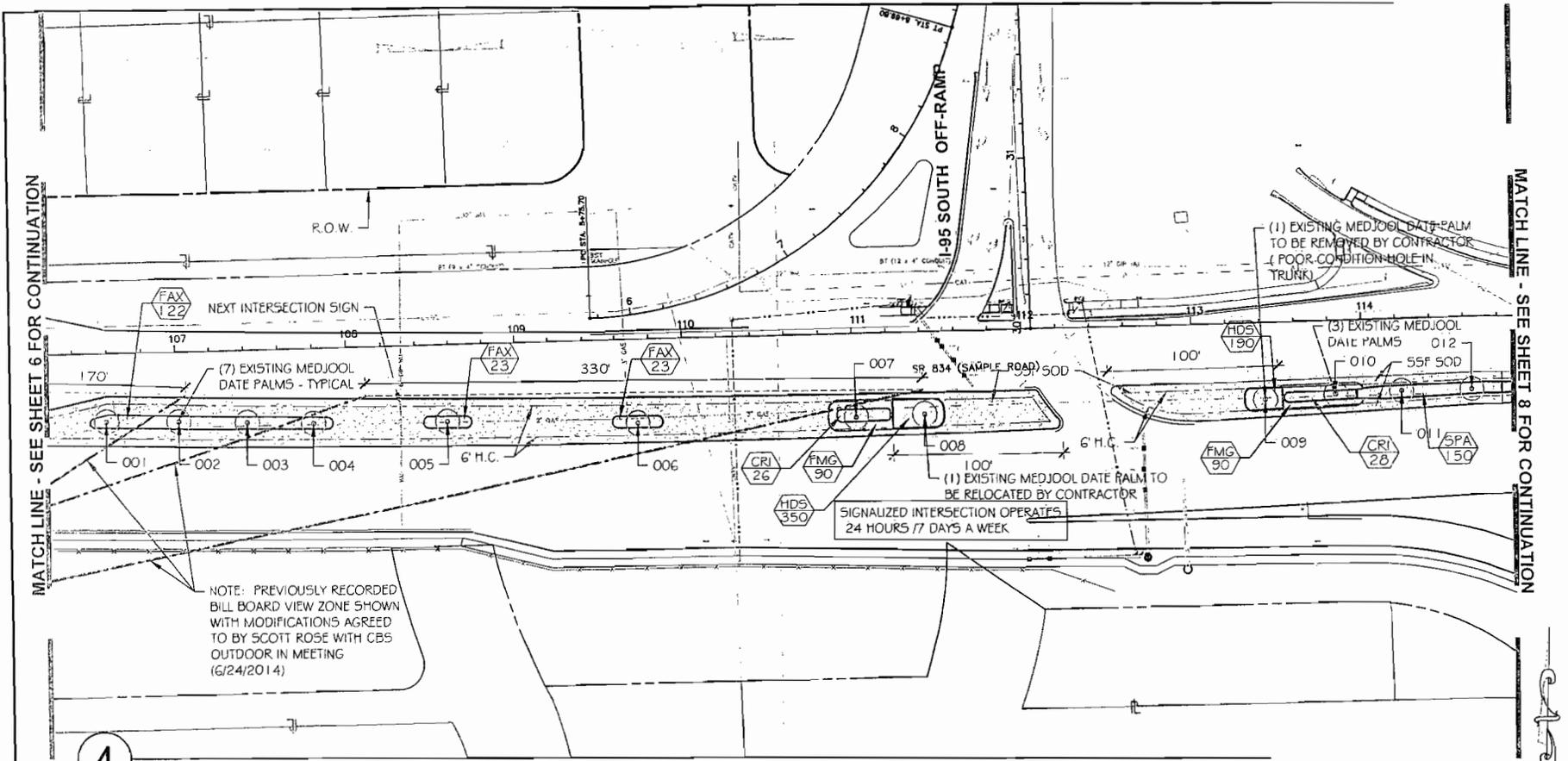
SAMPLE ROAD BEAUTIFICATION GRANT

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

LANDSCAPE PLAN

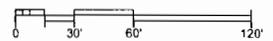
SHEET NO. 6

DECEMBER 16, 2014



4 LANDSCAPE PLAN

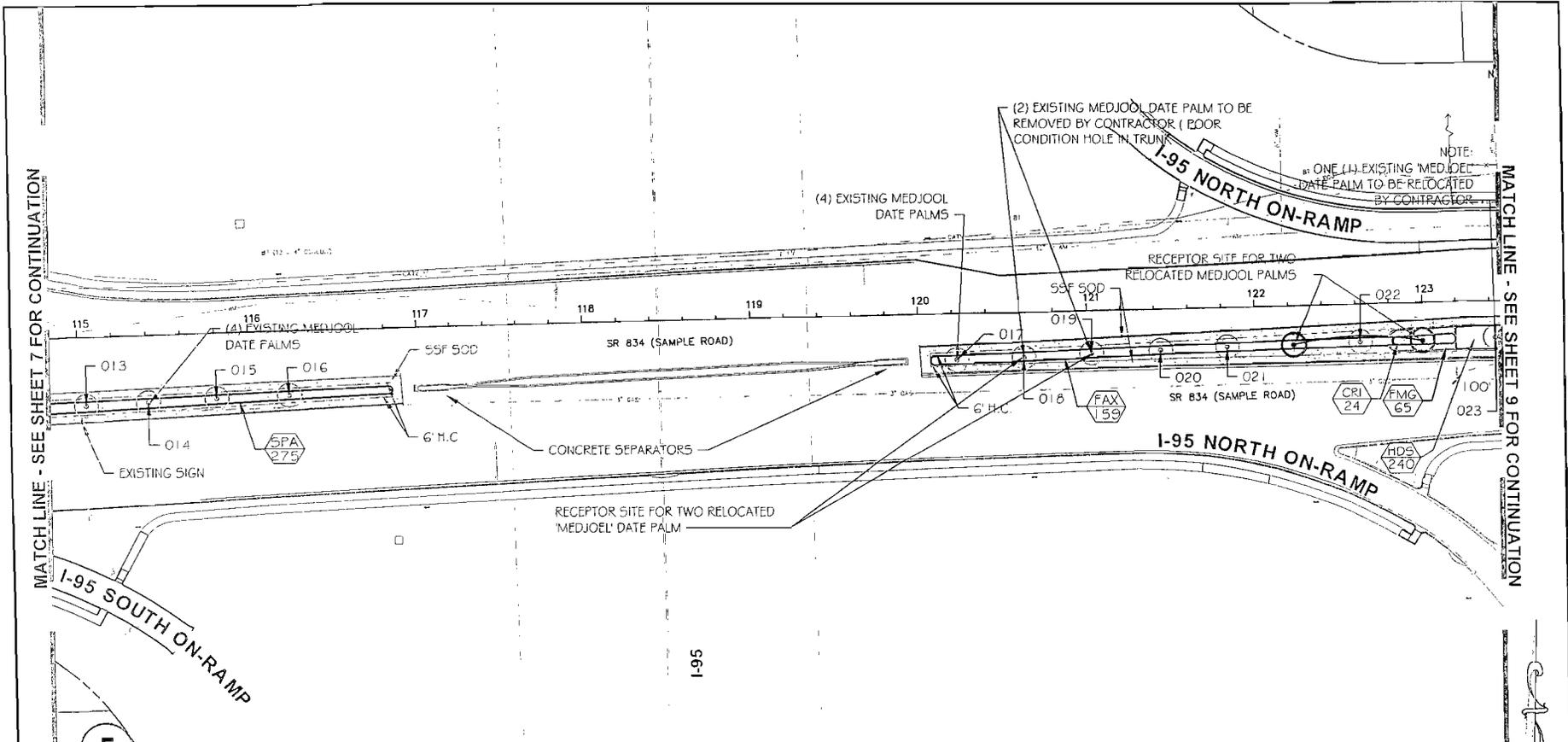
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Handwritten signature and date: 12/16/14

DECEMBER 16, 2014

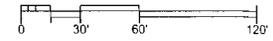
REVISIONS		REVISIONS		LANDSCAPE ARCHITECT OF RECORD: MICHAEL COOPER, R.L.A., LICENSE NO. 1181		SAMPLE ROAD BEAUTIFICATION GRANT		LANDSCAPE PLAN	SHEET NO. 7
DATE	DESCRIPTION	DATE	DESCRIPTION	Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1870 Hwy One, Suite 800, Ft. Lauderdale, Florida 33316 Phone: 954.931.7791 Fax: 954.931.8887 Certificate of Authorization: LC00050339 VPL0000110 954.649.9128/99		ROAD NO.	COUNTY		
07/11/14	Revised per FDD comments					S.R. 834	BROWARD	435709-1-78-01	
9/26/14	REVISIONS PER E.R.C. COMMENTS								
0/31/14	SECOND REVISIONS PER E.R.C. COMMENT								



MATCH LINE - SEE SHEET 7 FOR CONTINUATION

MATCH LINE - SEE SHEET 9 FOR CONTINUATION

5 LANDSCAPE PLAN



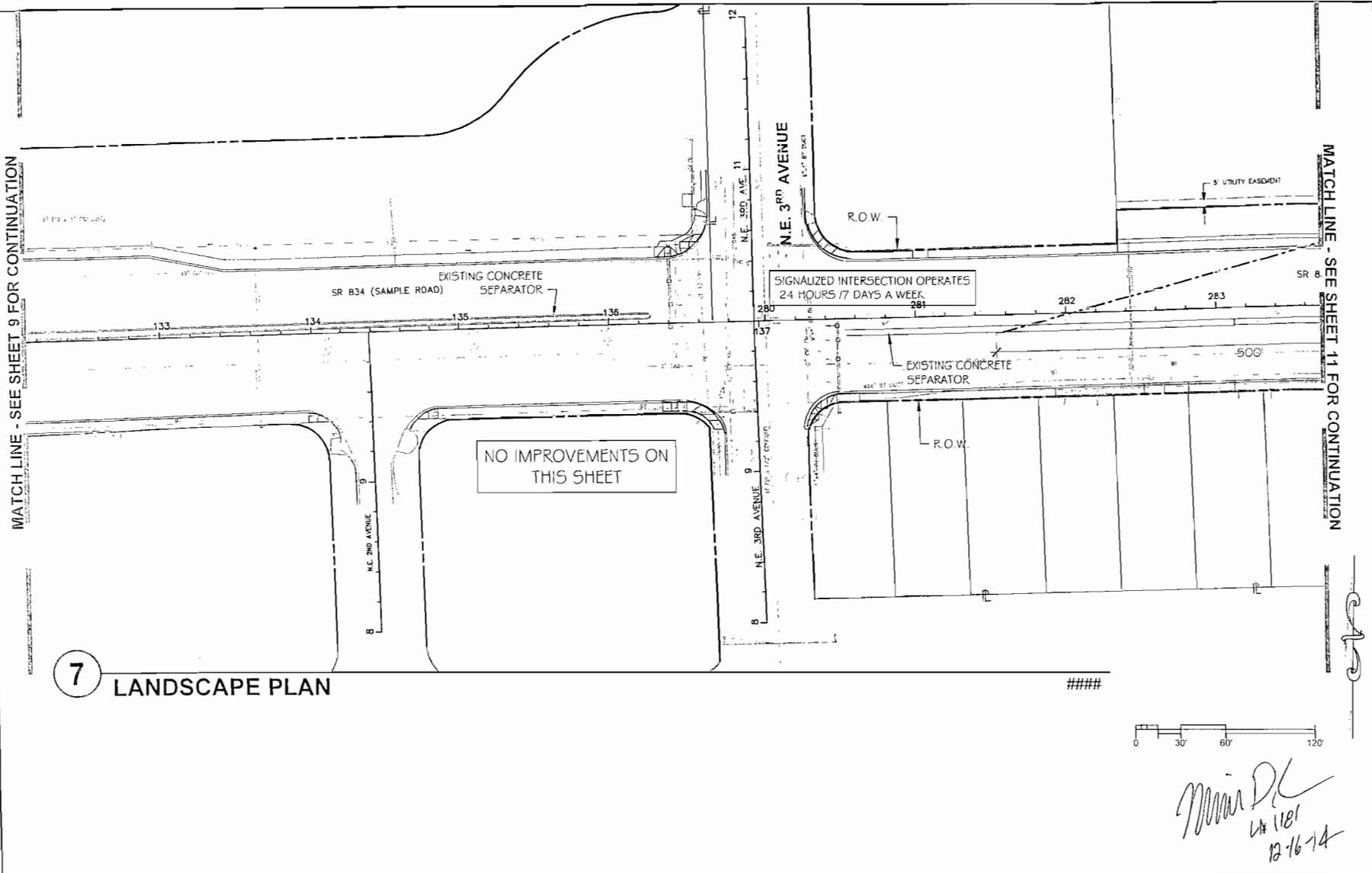
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 12-16-14

DECEMBER 16, 2014

REVISIONS		REVISIONS		LANDSCAPE ARCHITECT OF RECORD:  CALVIN, GIORDANO & ASSOCIATES, INC. EXCEPTIONAL SOLUTIONS 1875 E. Ocala, Suite 600, Fort Lauderdale, Florida 33316 Phone: 954-521-7781 • Fax: 954-521-8407 Certificate of Authorization: LC000000370 VENDOR ID: 102, 65-591-2483	SAMPLE ROAD BEAUTIFICATION GRANT		LANDSCAPE PLAN	SHEET NO. 8
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY		
9/26/14	REVISIONS PER E.R.C. COMMENTS				S.R. 834	BROWARD	435709-1-78-01	
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT							

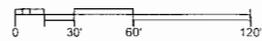
MATCH LINE - SEE SHEET 9 FOR CONTINUATION

MATCH LINE - SEE SHEET 11 FOR CONTINUATION



7 LANDSCAPE PLAN

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Handwritten signature and date:
 12/16/14
 12-16-14

DECEMBER 16, 2014

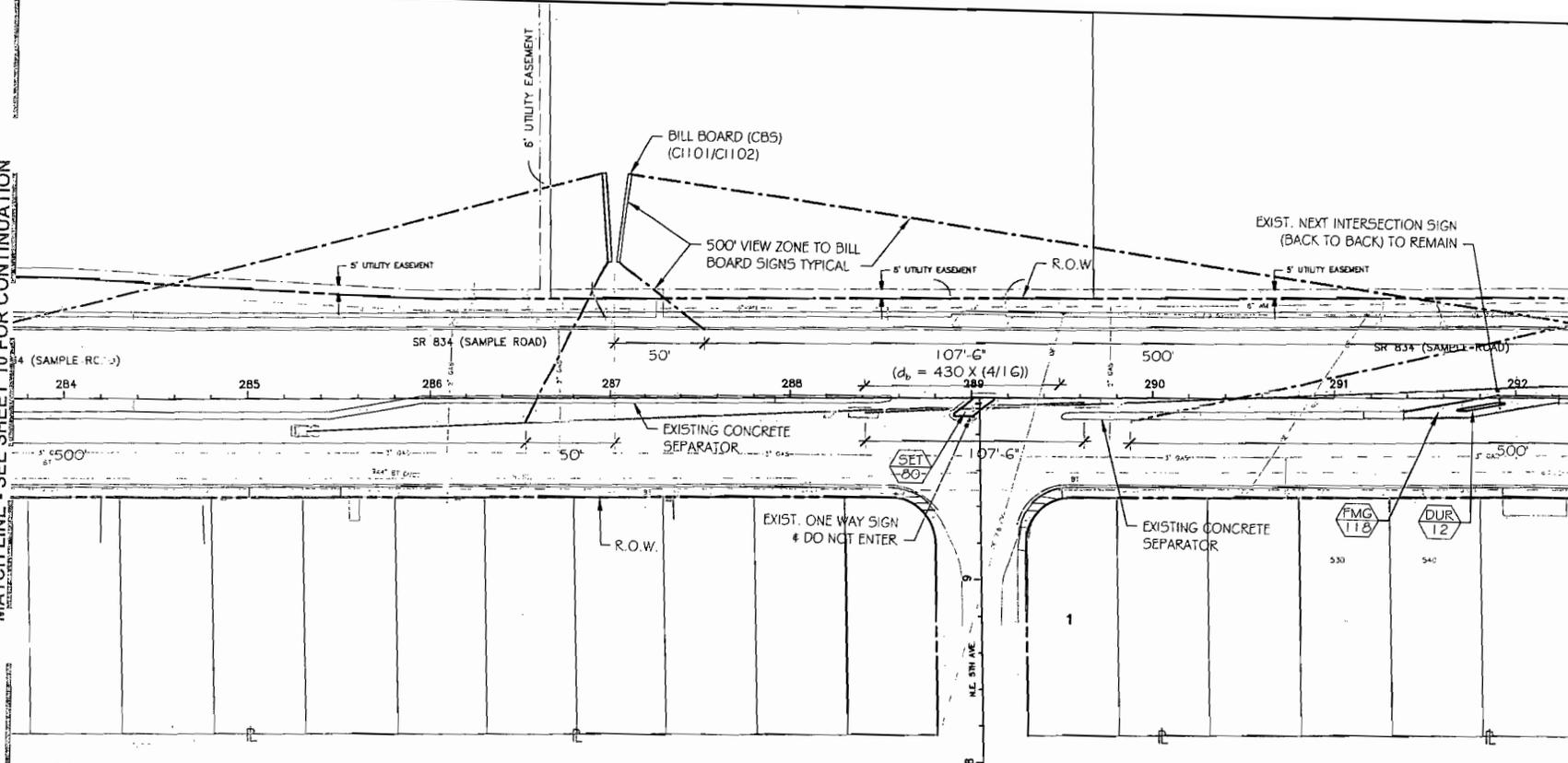
REVISIONS		LANDSCAPE ARCHITECT OF RECORD: MICHAEL COLLIER, P.L.A. LICENSE NO. 1181		SAMPLE ROAD BEAUTIFICATION GRANT			LANDSCAPE PLAN	SHEET NO. 10
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
9/28/14	REVISIONS PER E.R.C. COMMENTS			S.R. 834	BROWARD	435709-1-78-01		
0/31/14	SECOND REVISIONS PER E.R.C. COMMENT							



Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 18001 Blue Drive, Suite 902, Fort Lauderdale, Florida 33316
 Phone: 954-221-7721 • Fax: 954-421-8207
 Certificate of Authorization LC06060339
 VENDOR ID: NE 95-071-3009

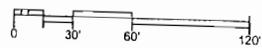
MATCH LINE - SEE SHEET 10 FOR CONTINUATION

MATCH LINE - SEE SHEET 12 FOR CONTINUATION



8 LANDSCAPE PLAN

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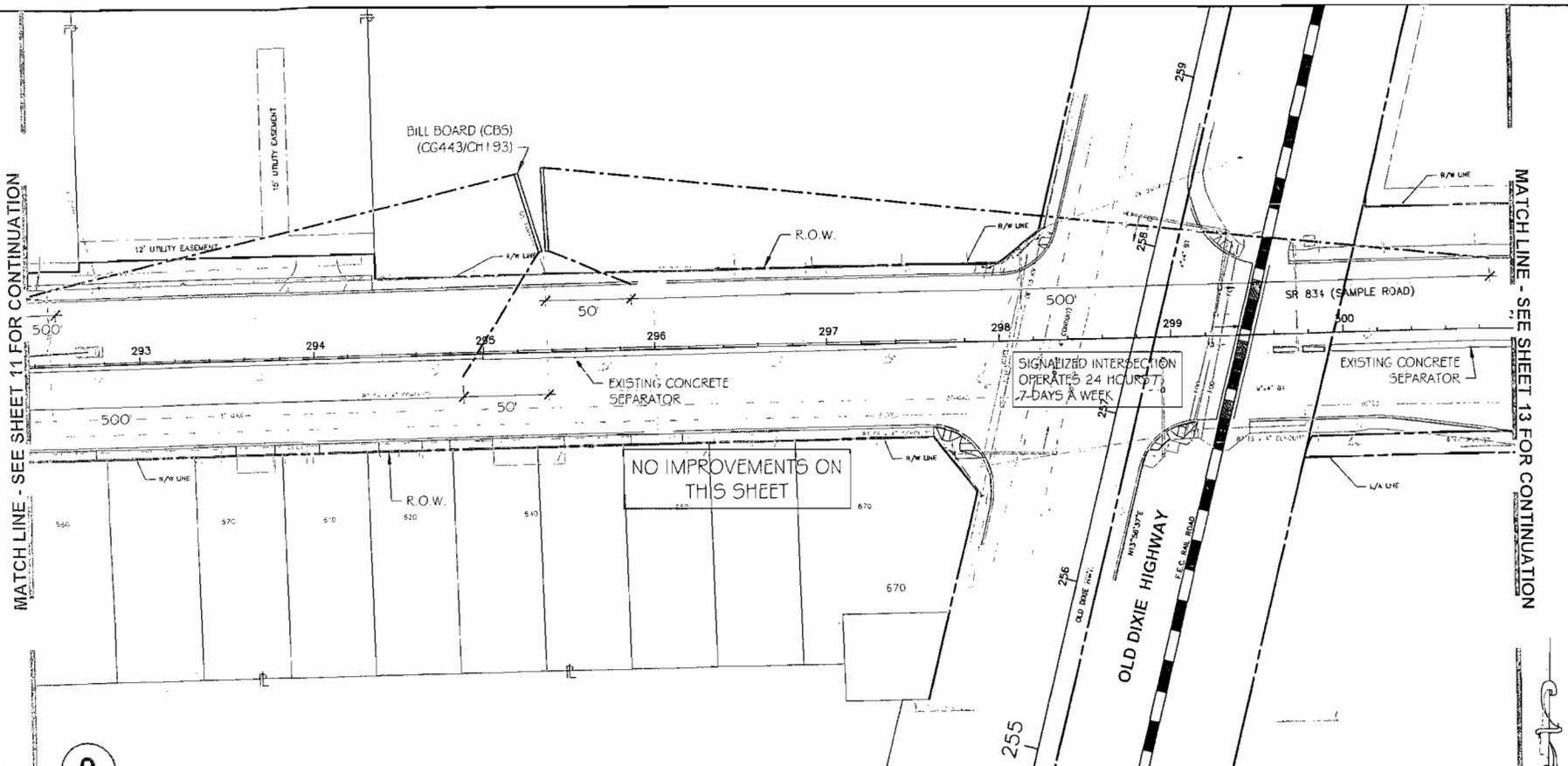
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 LT 1181
 12-16-14

DECEMBER 16, 2014

REVISIONS		DESCRIPTION		LANDSCAPE ARCHITECT OF RECORD		SAMPLE ROAD BEAUTIFICATION GRANT		LANDSCAPE PLAN		SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	ARCHITECT	PROJECT NO.	COUNTY	FINANCIAL PROJECT ID	LANDSCAPE PLAN		NO.
07/11/14	Revised per FDOT comments			Calvin, Giordano & Associates, Inc.	S.R. 834	BROWARD	435709-1-78-01	LANDSCAPE PLAN		11
09/26/14	REVISIONS PER E.R.C. COMMENTS			EXCEPTIONAL SOLUTIONS						
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT									

MATCH LINE - SEE SHEET 11 FOR CONTINUATION

MATCH LINE - SEE SHEET 13 FOR CONTINUATION



9

LANDSCAPE PLAN



Minneapolis
 12-11-14
 12-16-14

DECEMBER 16, 2014

REVISIONS		REVISIONS		LANDSCAPE ARCHITECT OF RECORD: MICHAEL CORNER, P.L.A. LICENSE #A1181	SAMPLE ROAD BEAUTIFICATION GRANT			LANDSCAPE PLAN	SHEET NO. 12
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
07/11/14	Revised per FDOT comments			<p>Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1400 Lake Drive, Suite 600, Fort Lauderdale, Florida 33316 Phone: 954.521.1781 • Fax: 954.424.9077 Certificate of Authorization LC00049325 VENDOR ID: NCS_057011862</p>	S.R. 834	BROWARD	435709-1-78-01		
9/26/14	REVISIONS PER E.R.C. COMMENTS								
0/31/14	SECOND REVISIONS PER E.R.C. COMMENT								

MATCH LINE - SEE SHEET 12 FOR CONTINUATION

MATCH LINE - SEE SHEET 14 FOR CONTINUATION

NOTE:
PROVIDE FOR MULCH
ACCESS PATH AND 3' CLEAR
ON 3 SIDE OF ALL UTILITIES

(2) EXISTING SABAL PALMS TO BE
RELOCATED OFF SITE BY CITY
NOT PART OF THE PROJECT

EXIST. UTILITY BOXES
EXIST. SIGN

FMG
273

DUR
67

SR 834 (SAMPLE ROAD)
1.07'-6" (d₁₅ = 430 X (4/116))

EXISTING CONCRETE
SEPARATOR

EXIST. SIGN
SET
195

EXISTING CONCRETE
SEPARATOR

500' TYPICAL

SR 834 (SAMPLE ROAD)
500'

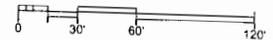
12' UTILITY & ROAD EASEMENT

750
STATION SQUARE

BILL BOARD
(LAMAR SOUTH FLORIDA)
(C108&C1087)

10 LANDSCAPE PLAN

1:60



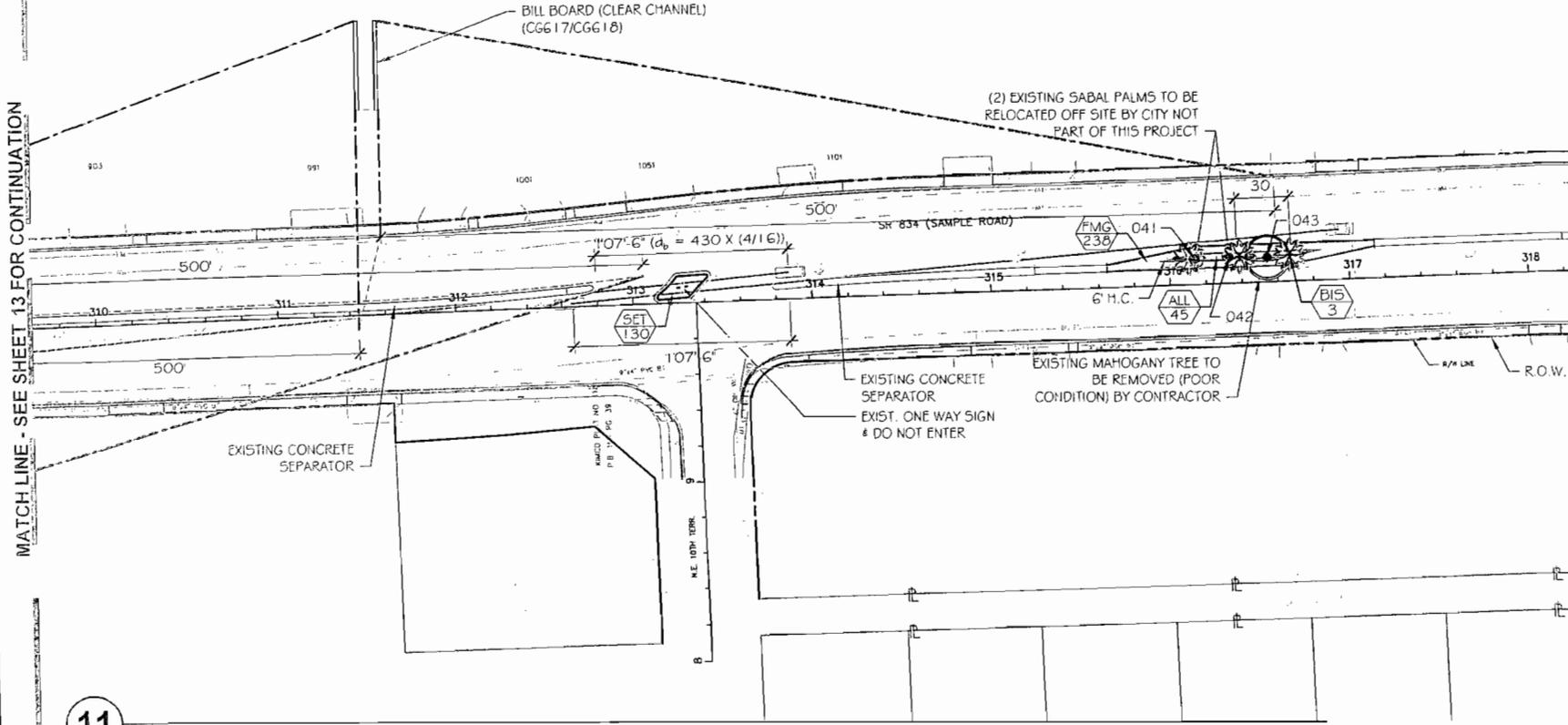
Michael P. C.
12-16-14

DECEMBER 16, 2014

REVISIONS		REVISIONS		LANDSCAPE ARCHITECT OF RECORD: MICHAEL COOPER, P.L.L.C. LICENSE NO. 11181		SAMPLE ROAD BEAUTIFICATION GRANT			LANDSCAPE PLAN	SHEET NO. 13
DATE	DESCRIPTION	DATE	DESCRIPTION	PROJECT NO.	COUNTY	FINANCIAL PROJECT ID				
07/11/14	Revised per FDOT comments			Calvin, Giordano & Associates, Inc.	S.R. 834	BROWARD	435709-1-78-01			
9/26/14	REVISIONS PER E.R.C. COMMENTS			EXCEPTIONAL SOLUTIONS						
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT			1800 E. Her Drive, Suite 603, Fort Lauderdale, Florida 33316 Phone: (954) 321-9781 • Fax: (954) 321-8220 Certificate of Accreditation: LSC09-000320 VENDOR ID: NO. ES-091-1609						

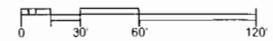
MATCH LINE - SEE SHEET 13 FOR CONTINUATION

MATCH LINE - SEE SHEET 15 FOR CONTINUATION



11 LANDSCAPE PLAN

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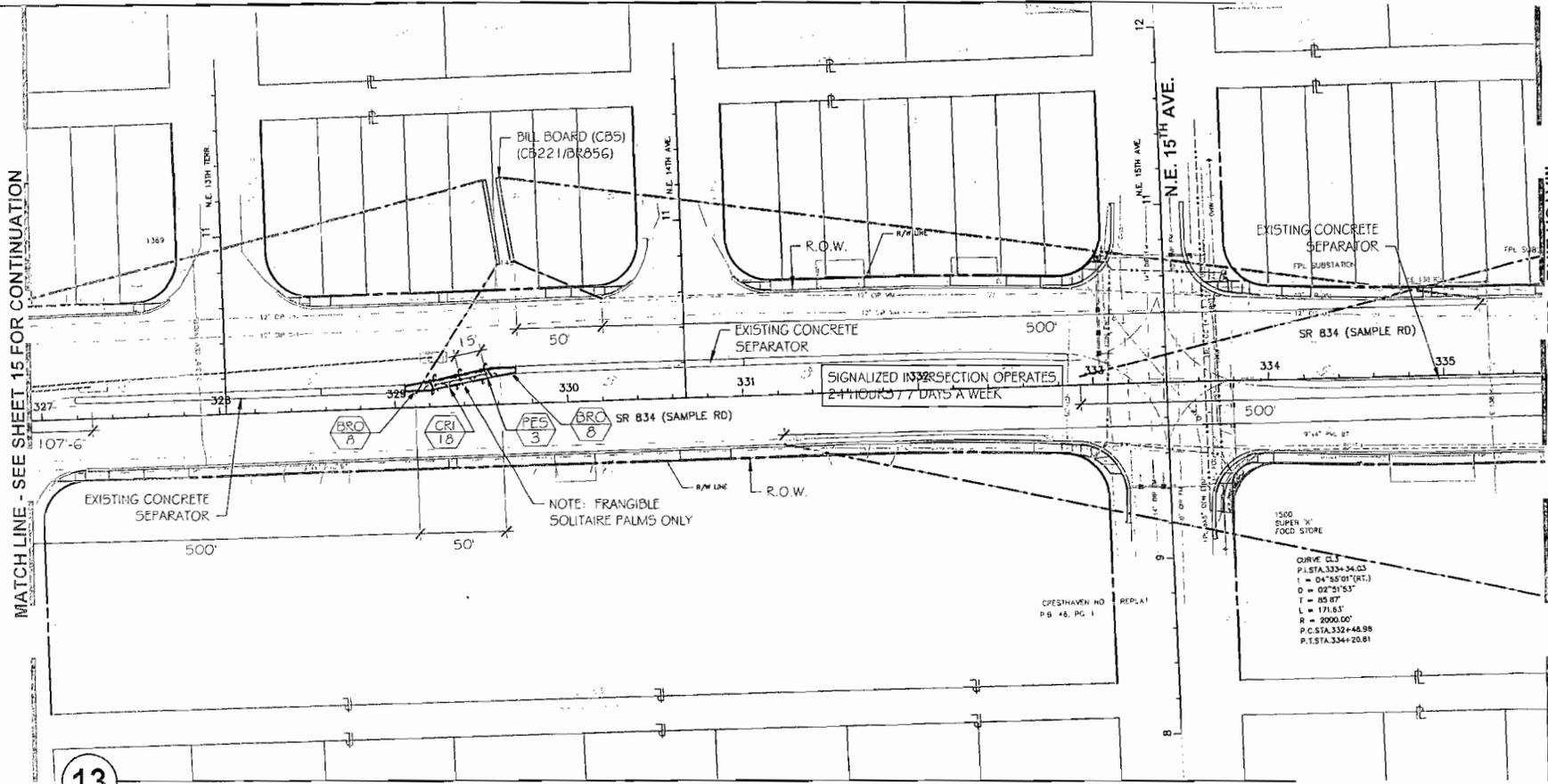
Min Pic
 12/16/14
 12-16-14

DECEMBER 16, 2014

REVISIONS		LANDSCAPE ARCHITECT OF RECORD: 1521 WELLS CORNER, R.L.A., LICENSE No. 1181  Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1970 Hill Drive, Suite 600, Fort Lauderdale, Florida 33316 Phone: 954.821.7791 • Fax: 954.321.8107 Certificate of American Landmarking: C00600326 VENDOR ID: 101-80-251-2860	SAMPLE ROAD BEAUTIFICATION GRANT		LANDSCAPE PLAN	SHEET NO. 14
DATE	DESCRIPTION		ROAD NO.	COUNTY		
07/11/14	Revised per FDOT comments	S.R. 834	BROWARD	435709-1-78-01		
09/26/14	REVISIONS PER E.R.C. COMMENTS					
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT					

MATCH LINE - SEE SHEET 15 FOR CONTINUATION

MATCH LINE - SEE SHEET 17 FOR CONTINUATION



13 LANDSCAPE PLAN

####

Mmm P.L.
LA 1181
12-16-14

DECEMBER 16, 2014

REVISIONS	
DATE	DESCRIPTION
9/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD: MICHAEL COOPER, P.L.A., LICENSE NO. 11811

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

1800 Flor Drive, Suite 600, Fort Lauderdale, Florida 33316
Phone: 954-917-7781 • Fax: 954-921-8800
Certificate of Authorization L1206000209
VENDOR ID: 901-65-290-3147

USER: oper@da

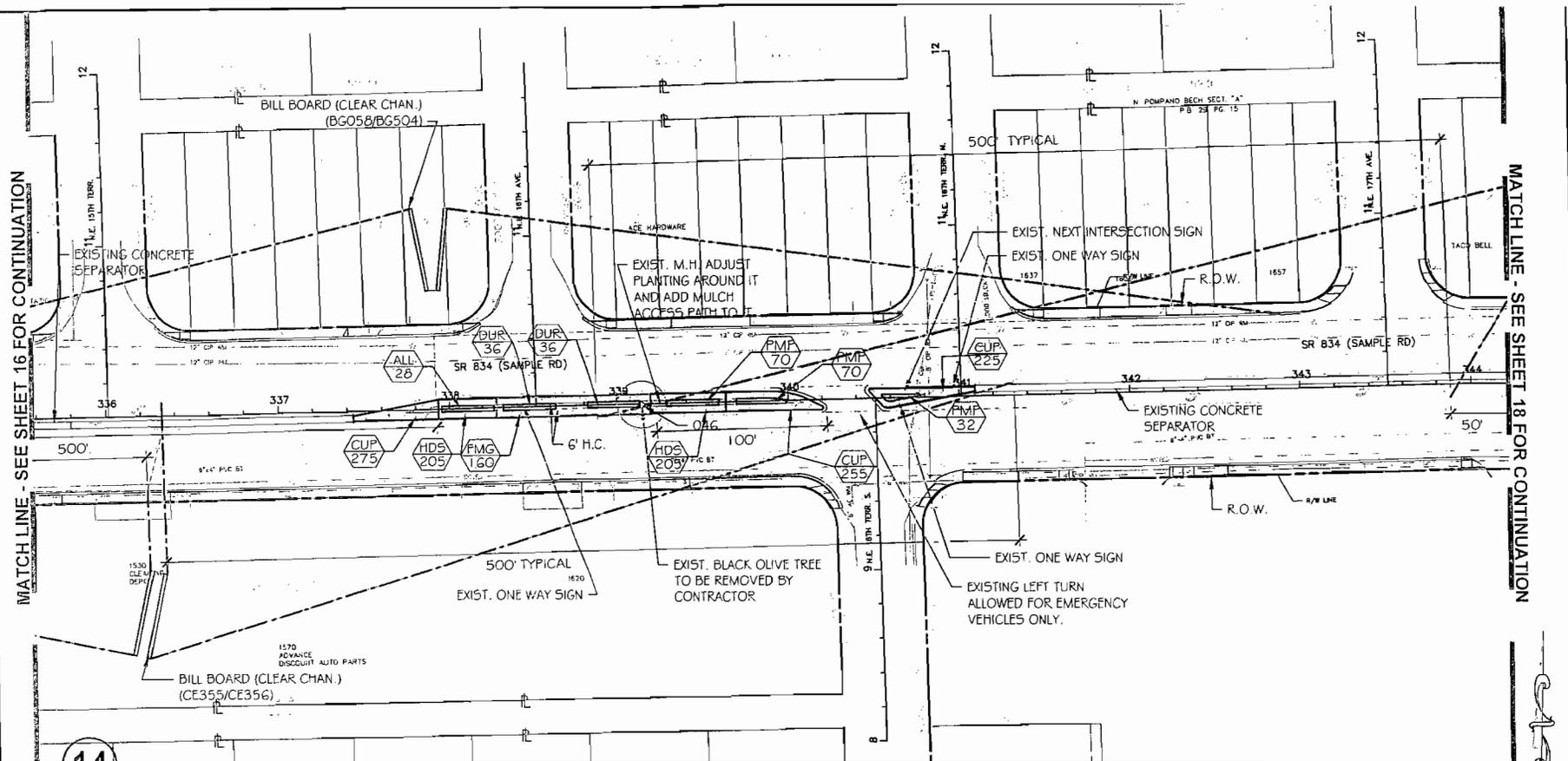
SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

LANDSCAPE PLAN

SHEET NO.
16

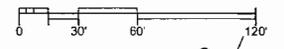
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MATCH LINE - SEE SHEET 18 FOR CONTINUATION



14 LANDSCAPE PLAN

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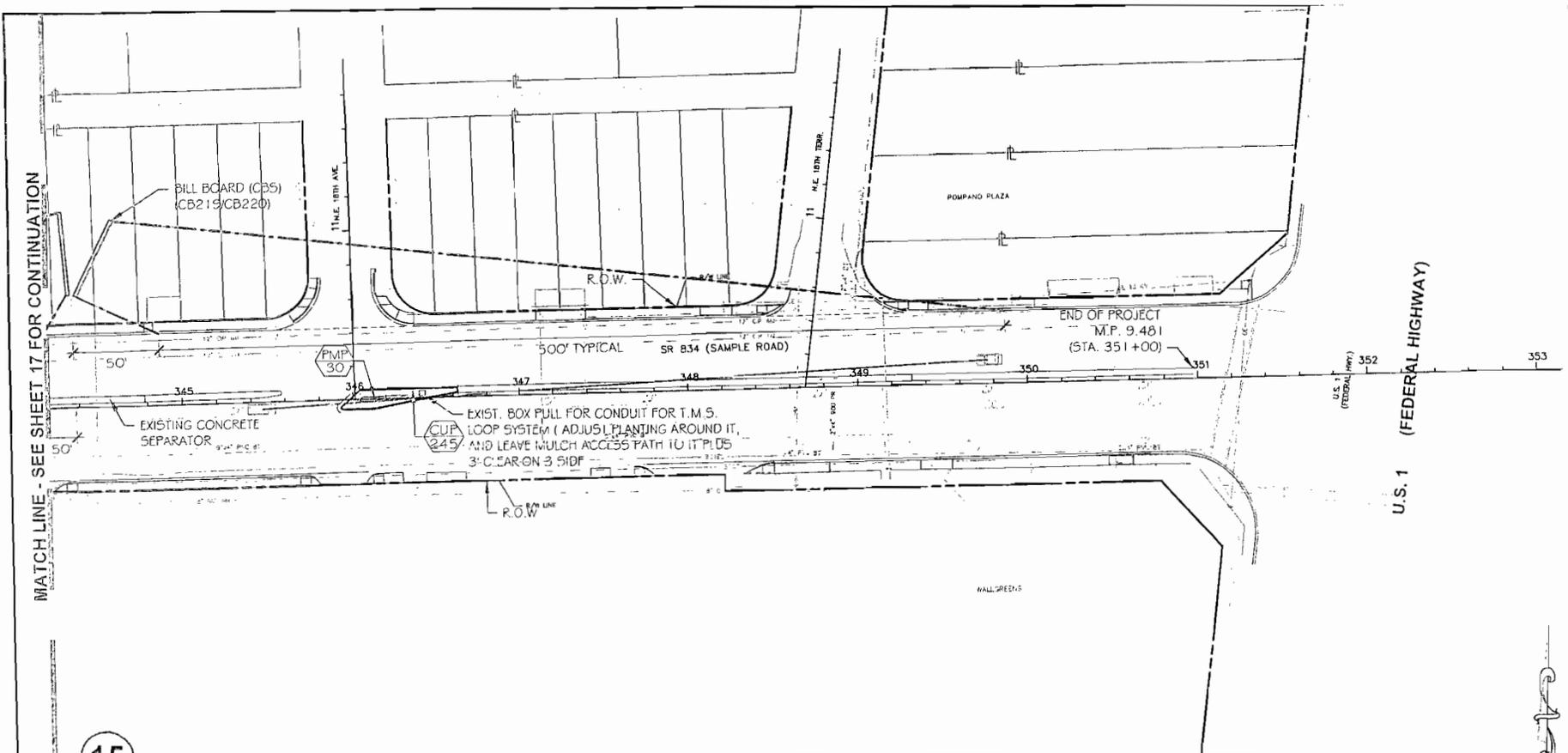
REVISIONS		LANDSCAPE ARCHITECT OF RECORD		SAMPLE ROAD BEAUTIFICATION GRANT			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID.	
07/11/14	Revised per FDOT comments			S.R. 834	BROWARD	435709-1-78-01	17
9/26/14	REVISIONS PER E.R.C. COMMENTS						
10/31/14	SECONDO REVISIONS PER E.R.C. COMMENT						



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 VENDOR I.D. NO. ES-201-2969
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LANDSCAPE PLAN

SHEET NO.
17



MATCH LINE - SEE SHEET 17 FOR CONTINUATION

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LANDSCAPE PLAN

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DECEMBER 16, 2014

REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments
9/26/14	REVISIONS PER E.R.C. COMMENTS
0/31/14	SECOND REVISIONS PER E.R.C. COMMENT

DATE	DESCRIPTION

LANDSCAPE ARCHITECT OF RECORD: CALVIN GIORDANO R.L.A. LICENSE NO. 1181

Calvin, Giordano & Associates, Inc.
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SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

LANDSCAPE PLAN

SHEET NO.
18

IRRIGATION NOTES & SPECIFICATIONS:

THE SYSTEM HAS BEEN DESIGNED TO CONFORM WITH THE REQUIREMENTS OF ALL APPLICABLE CODES. SHOULD ANY CONFLICT EXIST, THE REQUIREMENTS OF THE CODES SHALL PREVAIL. IT IS THE RESPONSIBILITY OF THE OWNER/INSTALLATION CONTRACTOR TO INSURE THE ENTIRE SYSTEM IS INSTALLED ACCORDING TO ALL APPLICABLE LAWS, RULES, REGULATIONS AND CONVENTIONS. IRRIGATION CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS ACCORDING TO FEDERAL, STATE AND LOCAL LAWS.

THE SCOPE OF WORK IS SHOWN ON THE PLANS, NOTES AND DETAILS. THE IRRIGATION CONTRACTOR SHALL BE CERTIFIED AS A CERTIFIED IRRIGATION CONTRACTOR BY THE IRRIGATION ASSOCIATION. THE CERTIFICATION SHALL BE CURRENT AND IN GOOD STANDING.

THE WORK:

THE WORK SPECIFIED IN THIS SECTION CONSISTS OF FURNISHING ALL COMPONENTS NECESSARY FOR THE INSTALLATION, TESTING, AND DELIVERY OF A COMPLETE, FULLY FUNCTIONAL AUTOMATIC LANDSCAPE IRRIGATION SYSTEM THAT COMPLETELY COMPLIES WITH THE IRRIGATION PLANS, SPECIFICATIONS, NOTES, DETAILS AND ALL APPLICABLE LAWS, REGULATIONS, CODES AND ORDINANCES. THIS WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, THE PROVIDING OF ALL REQUIRED MATERIAL (PIPE, VALVES, FITTINGS, CONTROLLERS, WIRE, PRIMER, GLUE, ETC.); LAYOUT, PROTECTION TO THE PUBLIC, EXCAVATION, ASSEMBLY, INSTALLATION, BACK FILLING, COMPACTING, REPAIR OF ROAD SURFACES, CONTROLLER AND LOW VOLTAGE FEEDS TO VALVES, CLEANUP, MAINTENANCE, GUARANTEE AND AS-BUILT PLANS.

ALL IRRIGATED AREAS SHALL PROVIDE 100% HEAD-TO-HEAD COVERAGE FROM A FULLY AUTOMATIC IRRIGATION SYSTEM WITH A RAIN SHUT-OFF DEVICE (SENSOR). THE RAIN SHUT-OFF DEVICE (SENSOR) SHALL BE INSTALLED TO PREVENT ACCIDENTAL ACTIVATION BY ADJACENT IRRIGATION HEADS. ALL WATERING PROCEDURES SHALL CONFORM TO LOCAL CODES, AS WELL AS THIS PROJECT'S REGIONAL WATER MANAGEMENT DISTRICT RESTRICTIONS AND REGULATIONS. THESE PLANS HAVE BEEN DESIGNED TO SATISFY/EXCEED THE FLORIDA BUILDING CODE (FBC) APPENDIX F & THE FLORIDA IRRIGATION SOCIETY STANDARDS AND SPECIFICATIONS FOR TURF AND LANDSCAPE IRRIGATION SYSTEMS, FOURTH EDITION.

CONTRACTOR SHALL VERIFY LOCATION AND CONDITION OF ALL UNDERGROUND UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF WORK.

IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE THEMSELVES WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, PAVED SURFACES, CURBS, STRUCTURES AND UTILITIES. CONTRACTOR SHALL NOT INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN

THE FIELD THAT UNKNOWN CONDITIONS, OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT DO NOT MATCH IRRIGATION PLANS OR HAVE NOT BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS, OR DIFFERENCES, SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY THEIR WORK. IRRIGATION CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE LANDSCAPE CONTRACTOR & OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS UNDER ROADWAYS AND PAVING, ETC.

THE CONTRACTOR SHALL TAKE IMMEDIATE STEPS TO REPAIR, REPLACE, OR RESTORE ALL SERVICES TO ANY UTILITIES WHICH ARE DISRUPTED DUE TO THEIR OPERATIONS. ALL COSTS INVOLVED IN DISRUPTION OF SERVICE AND REPAIRS DUE TO NEGLIGENCE ON THE PART OF THE CONTRACTOR SHALL BE THEIR RESPONSIBILITY.

POINT OF CONNECTION (P.O.C.):

THIS PROJECT CONSISTS OF SEVERAL P.O.C.(S). THERE ARE TWO NEW HOOVER PUMPING SYSTEMS (PUMP STATION MODEL: HCF-5FD-230/3-E-8-W-2 AND TWO NEW 4" WELLS. THIS P.O.C. MUST BE CAPABLE OF DELIVERING A MINIMUM OF 80 GPM AT 120 TDH) AND 6 NEW WATER METERS WITH PRESSURE VACUUM BREAKERS SIZE PER SCHEDULE # PLANS.

PRIOR TO PURCHASE OF PUMPING SYSTEM IRRIGATION CONTRACTOR SHALL CHECK/VERIFY:

1. CONTRACTOR SHALL HIRE A FLORIDA LICENSED WELL DRILLER FOR INSTALLATION OF NEW WELL. WELL DRILLER SHALL TEST WELL AND PROVIDE IRRIGATION CONTRACTOR WITH A CAPACITY-DRAW/DOWN CURVE OF NEW WELL.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 12'. IF THIS MAXIMUM IS EXCEEDED, DO NO PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NO PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
4. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF STAINING IS A CONCERN, A CHEMICAL FEED PUMP SYSTEM MAY NEED TO BE INSTALLED BY THE PUMP SYSTEM MANUFACTURER, CONTACT HOOVER PUMPING

SYSTEMS FOR A WRITTEN ESTIMATE TO BE PROVIDED FOR APPROVAL BY OWNER/OWNER'S REPRESENTATIVE.

CONTRACTOR TO VERIFY THESE MINIMUM CONDITIONS CAN BE MET PRIOR TO THE BEGINNING OF INSTALLATION. IF THE CONDITIONS CAN NOT BE MET, THE CONTRACTOR MUST NOTIFY THE DESIGNER PRIOR TO PROCEEDING WITH THE WORK. IF THE CONTRACTOR DOES NOT DO SO, THE CONTRACTOR PROCEEDS AT THEIR OWN RISK AND BECOMES RESPONSIBLE FOR ANY FUTURE WORK REQUIRED TO MAKE THE SYSTEM PERFORM AS REQUIRED.

THE PIPE:

PIPE LOCATIONS SHOWN ON THE PLAN ARE SCHEMATIC AND SHALL BE ADJUSTED IN THE FIELD. WHEN LAYING OUT MAINLINES PLACE A MAXIMUM OF 18" AWAY FROM EITHER THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR OTHER HARDSCAPE TO ALLOW FOR EASE IN LOCATING AND PROTECTION FROM PHYSICAL DAMAGE. INSTALL ALL LATERAL PIPE NEAR EDGES OF PAVEMENT OR AGAINST BUILDINGS WHENEVER POSSIBLE TO ALLOW SPACE FOR PLANT ROOT BALLS. ALWAYS INSTALL PIPING INSIDE PROJECT PROPERTIES BOUNDARY.

ALL PIPES ARE TO ALWAYS BE PLACED IN PLANTING BEDS. IF IT IS NECESSARY TO HAVE PIPING UNDER HARDSCAPES, SUCH AS ROADS, THE PIPES MUST BE SLEEVED USING DIRECTIONAL BORING PER THE DETAILS ON THE PLANS. NO OPEN TRENCHING SHALL BE ALLOWED.

PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE AT THE TIME OF SAID REJECTION.

MAINLINE SHALL BE SCHEDULE 40 SOLVENT-WELD PVC WITH SCHEDULE 40 PVC SOLVENT-WELD FITTINGS. SIZE AS SHOWN ON PLANS.

CONTRACTOR TO ENSURE ALL MAINLINE PIPING IS PROPERLY SET IN TRENCH. CONTRACTOR SHALL REFER TO PIPE MANUFACTURERS RECOMMENDED INSTALLATION PRACTICES FOR FURTHER DIRECTION.

PVC PIPE JOINT COMPOUND AND PRIMER: SLOW-DRYING, HEAVY DUTY CEMENT AND TINTED (PURPLE) PRIMER THAT IS COMPATIBLE WITH THE CEMENT. THE PVC CEMENT SHALL BE WELD-ON 2711 (GREY, SLOW-DRYING, HEAVY DUTY) AND THE PRIMER SHALL BE WELD-ON P70 (PURPLE TINTED, COMPATIBLE WITH CEMENT), OR APPROVED EQUALS.

ELECTRICAL POWER SUPPLY:

ELECTRICAL SUPPLY FOR PUMPING STATION IS TO BE PROVIDED BY CITY. CONTRACTOR TO COORDINATE WITH LOCAL UTILITIES FOR THE INSTALLATION OF, AND CONNECTION TO, SITE AVAILABLE POWER SUPPLYS FOR REQUIRED ELECTRICAL COMPONENTS AS SET FORTH IN THE IRRIGATION PLANS.

ALL ELECTRICAL TO COMPLY WITH THE NATIONAL ELECTRICAL CODE AND ANY, AND ALL, OTHER APPLICABLE ELECTRICAL CODES, LAWS AND REGULATIONS. A LICENSED ELECTRICIAN SHALL PERFORM ALL ELECTRICAL HOOK-UPS. POWER FOR PUMP(S) SHALL BE ACCORDING TO PUMP MANUFACTURERS SPECIFICATIONS AS SET FORTH IN THESE PLANS.

WIRING:

IRRIGATION CONTROL WIRE SHALL BE THERMOPLASTIC SOLID COPPER, SINGLE CONDUCTOR, LOW VOLTAGE IRRIGATION CONTROLLER WIRE; SUITABLE FOR DIRECT BURIAL AND CONTINUOUS OPERATION AT RATED VOLTAGES.

ALL WIRE SHALL BE RUN IN BURIED ELECTRICAL CONDUIT ALONGSIDE THE MAINLINE. AT ALL VALVE BOXES COIL WIRE AROUND A 3/4" PIECE OF PVC PIPE TO MAKE A COIL USING 30 LINEAR INCHES OF WIRE. MAKE ELECTRICAL CONNECTIONS WITH 3M-DBY-DBR CONNECTORS.

NUMBER ALL WIRES. USING AN ELECTRICAL BOOK OF NUMBERS, ACCORDING TO THE PLANS. NUMBER WIRES IN ALL VALVE BOXES. JUNCTION BOXES AND AT THE CONTROLLER.

WIRE SIZED, NUMBERED AND COLORED AS FOLLOWS:

- # 12 WHITE FOR COMMON
- # 12 SPARE BLACK COMMON
- # 14 RED FOR HOT WIRES
- # 14 SPARE YELLOW HOT WIRE

SPARE WIRES:

LEAVING EACH CONTROLLER, RUN FOUR SPARE WIRES IN BOTH DIRECTIONS (EIGHT SPARE WIRES TOTAL). INSTALL AS 1 COMMON SPARES (2 TOTAL) AND 3 HOT WIRES (6 TOTAL). LOOP THESE WIRES INTO EACH RCV ALONG THEIR PATH AND TERMINATE IN THE LAST VALVE BOX CONTROLLED BY THE WIRES RESPECTIVE CONTROLLER. THE LOOP INTO EACH VALVE BOX CONTROLLED BY THE WIRES RESPECTIVE CONTROLLER. THE LOOP INTO EACH VALVE BOX SHALL EXTEND UP INTO THE VALVE BOX A MINIMUM OF 8" AND BE READILY ACCESSIBLE BY OPENING THE VALVE BOX LID. THESE WIRES MUST BE ALL NUMBERED AND COLOR CODED AS REQUIRED IN THESE PLANS.

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DECEMBER 16, 2014

REVISIONS		REVISIONS		SAMPLE ROAD BEAUTIFICATION GRANT			IRRIGATION NOTES	SHEET NO. 19
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
07/11/14	Revised per FDOT Comments (Added sheet)			S.R. 834	BROWARD	435709-1-78-01		
9/26/14	REVISIONS PER E.R.C. COMMENTS							
0/31/14	SECOND REVISIONS PER E.R.C. COMMENT							

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 VENDOR ID: MD 854-021-3900
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CONTROLLER GROUNDING:

CONTRACTOR TO VERIFY THAT THE EARTH TO GROUND RESISTANCE DOES NOT EXCEED 10 OHMS AT THE PUMP STATION CONTROLLER. CONTRACTOR SHALL PROVIDE A WRITTEN CERTIFICATION, ON A LICENSED ELECTRICAL CONTRACTORS LETTER HEAD, SHOWING THE DATE OF THE TEST, CONTROLLER LOCATION, AND TEST RESULTS.

IF, GROUND RESISTANCE EXCEEDS 10 OHMS

CONTRACTOR SHALL UTILIZE 5/8"X1'0" COPPER CLAD GROUNDING ROD & PLATES AS DETAILED "GROUNDING PLATE DESIGN DETAIL", AND RE-TEST.

LAYOUT:

LAY OUT IRRIGATION SYSTEM MAINLINES AND LATERAL LINES. MAKE THE NECESSARY ADJUSTMENTS AS REQUIRED TO TAKE INTO ACCOUNT ALL SITE OBSTRUCTIONS AND LIMITATIONS PRIOR TO EXCAVATING TRENCHES.

STAKE ALL SPRINKLER HEAD LOCATIONS. ADJUST LOCATION AND MAKE THE NECESSARY MODIFICATIONS TO HOZZLE TYPES, ETC. REQUIRED TO INSURE 100% HEAD TO HEAD COVERAGE. REFER TO THE EDGE OF PAVEMENT DETAIL ON THE IRRIGATION DETAIL SHEET

SPRAY HEADS SHALL BE INSTALLED 4" FROM SIDEWALKS OR CURBED ROADWAYS AND 12" FROM UNCURBED ROADWAYS AND BUILDING FOUNDATIONS. ROTORS SHALL BE INSTALLED 4" FROM SIDEWALKS OR CURBED ROADWAYS, 12" FROM BUILDING FOUNDATIONS, AND 36" FROM UNCURBED ROADWAYS.

SHRUB HEADS SHALL BE SET AT A MINIMUM OF 18" OFF SIDEWALKS, ROADWAY CURBING, AND/OR ANY OTHER HARDSCAPED AREAS. SHRUB HEADS SHALL BE INSTALLED TO A STANDARD HEIGHT OF 4" BELOW MAINTAINED HEIGHT OF PLANTS AND SHALL BE INSTALLED A MINIMUM OF 6" WITHIN PLANTED MASSSES TO BE LESS VISIBLE AND OFFER PROTECTION. PAINT ALL SHRUB RISERS WITH FLAT BLACK OR FOREST GREEN PAINT.

LOCATE VALVES PRIOR TO EXCAVATION. INSURE THAT THEIR LOCATION PROVIDES FOR EASY ACCESS AND THAT THERE IS NO INTERFERENCE WITH PHYSICAL STRUCTURES, PLANTS, TREES, POLES, ETC. VALVE BOXES MUST BE PLACED A MINIMUM OF 12" AND A MAXIMUM OF 18" FROM THE EDGE OF PAVEMENT, CURBS, ETC. AND THE TOP OF THE BOX MUST BE 2" ABOVE FINISH GRADE.

VALVES:

SEQUENCE ALL VALVES SO THAT THE FARTHEST VALVE FROM THE P.O.C. OPERATES FIRST AND THE CLOSEST TO THE P.O.C. OPERATES LAST. ADJUST THE FLOW CONTROL ON EACH RCV TO ENSURE SHUT OFF IN 10 SECONDS AFTER DEACTIVATION BY THE IRRIGATION CONTROLLER.

EQUIPMENT:

ALL POP-UP HEADS AND SHRUB RISERS SHALL BE PRESSURE COMPENSATING. ALL POP-UP HEADS SHALL BE MOUNTED PER DETAILS ON THE PLANS. ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS, AND ACCURATELY TO LOCAL AND STATE LAWS.

TRENCHING:

EXCAVATE STRAIGHT AND VERTICAL TRENCHES WITH SMOOTH, FLAT OR SLOPING BOTTOMS. TRENCH WIDTH AND DEPTH SHOULD BE SUFFICIENT TO ALLOW FOR THE PROPER VERTICAL AND HORIZONTAL SEPARATION BETWEEN PIPING AS SHOWN IN THE PIPE INSTALLATION DETAIL ON THE DETAIL SHEET.

PROTECT EXISTING LANDSCAPED AREAS. REMOVE AND REPLANT ANY DAMAGED PLANT MATERIAL UPON JOB COMPLETION. THE REPLACEMENT MATERIAL SHALL BE OF THE SAME GENUS AND SPECIES, AND OF THE SIZE OF THE MATERIAL IT IS REPLACING. THE FINAL DETERMINATION AS TO WHAT NEEDS TO BE REPLACED AND THE ACCEPTABILITY OF THE REPLACEMENT MATERIAL SHALL BE SOLELY UP TO THE OWNER OR OWNER'S REPRESENTATIVE.

INSTALLATION:

SOLVENT WELD PIPE: CUT ALL PIPE SQUARE AND DEBURR. CLEAN PIPE AND FITTINGS OF FOREIGN MATERIAL; THEN APPLY A SMALL AMOUNT OF PRIMER WHILE ENSURING THAT ANY EXCESS IS WIPED OFF IMMEDIATELY. PRIMER SHOULD NOT PUDDLE OR DRIP FROM PIPE OR FITTINGS. NEXT APPLY A THIN COAT OF PVC CEMENT; FIRST APPLY A THIN LAYER TO THE PIPE, NEXT A THIN LAYER INSIDE THE FITTING, AND FINALLY ANOTHER VERY THIN LAYER ON THE PIPE. INSERT THE PIPE INTO THE FITTING. INSURE THAT THE PIPE IS INSERTED TO THE BOTTOM OF THE FITTING. THEN TURN THE PIPE A 1/4 TURN AND HOLD FOR 10 SECONDS. MAKE SURE THAT THE PIPE DOESN'T REcede FROM THE FITTING. IF THE PIPE ISN'T AT THE BOTTOM OF THE FITTING UPON COMPLETION, THE GLUE JOINT IS UNACCEPTABLE AND MUST BE DISCARDED.

PIPES MUST CURE A MINIMUM OF 30 MINUTES PRIOR TO HANDLING AND PLACING INTO TRENCHES. A LONGER CURING TIME MAY BE REQUIRED; REFER TO THE MANUFACTURER'S SPECIFICATIONS. THE PIPE MUST CURE A MINIMUM OF 24 HOURS PRIOR TO FILLING WITH WATER.

BACK FILL

THE BACKFILL 4" BELOW AND 4" ABOVE ALL PIPING SHALL BE OF CLEAN SAND AND ANYTHING BEYOND THAT IN THE TRENCH CAN BE OF NATIVE MATERIAL BUT NOTHING LARGER THAN 1" IN DIAMETER. MAIN LINE PIPE DEPTH MEASURED TO THE TOP OF PIPE SHALL BE 36" MINIMUM. WITH A 36" MINIMUM AT VEHICULAR CROSSINGS. LATERAL LINE DEPTHS MEASURED TO TOP OF PIPE SHALL BE: AS PER "TYPICAL IRRIGATION TRENCH WITHIN R.O.W DETAIL", ON SHEET 4.B.

CONTRACTOR SHALL BACKFILL ALL PIPING, BOTH MAINLINE AND LATERALS, PRIOR TO PERFORMING ANY PRESSURE TESTS. THE PIPE SHALL BE BACKFILLED WITH THE EXCEPTION OF 2' ON EACH SIDE OF EVERY JOINT (BELL FITTINGS, 90'S, TEES, 45'S, ETC.). THESE JOINTS SHALL NOT BE BACKFILLED UNTIL ALL PIPING HAS SATISFACTORILY PASSED ITS APPROPRIATE PRESSURE TEST AS OUTLINED BELOW

FLUSHING:

PRIOR TO THE PLACEMENT OF HEADS, FLUSH ALL LINES FOR A MINIMUM OF 10 MINUTES OR UNTIL LINES ARE COMPLETELY CLEAN OF DEBRIS, WHICHEVER IS LONGER. USE SCREENS IN HEADS AND ADJUST HEADS FOR PROPER COVERAGE AVOIDING EXCESS WATER ON WALLS, WALKS AND PAVING

TESTING:

REMOVE ALL REMOTE CONTROL VALVES AND CAP USING A THREADED CAP. FILL MAINLINE WITH WATER AND PRESSURIZE THE SYSTEM TO 125 PSI. MONITOR THE SYSTEM PRESSURE AT TWO GAUGE LOCATIONS; THE GAUGE LOCATIONS MUST BE AT OPPOSITE ENDS OF THE MAINLINE, WITH THE SAME RESPECTIVE PRESSURES. MONITOR THE GAUGES FOR TWO HOURS. THERE CAN BE NO LOSS IN PRESSURE AT EITHER GAUGE FOR SOLVENT-WELDED PIPE. THIS PROCEDURE MUST BE FOLLOWED UNTIL THE MAINLINE PASSES THE TEST.

THE LATERAL LINES MUST BE FILLED AND VISUALLY CHECKED FOR LEAKS. ANY LEAKS DETECTED MUST BE REPAIRED. NO PRESSURE TEST OF THE LATERAL LINES IS REQUIRED.

ONCE THE MAINLINE AND LATERAL LINES HAVE PASSED THEIR RESPECTIVE TESTS, AND THE SYSTEM IS COMPLETELY OPERATIONAL, A COVERAGE TEST AND DEMONSTRATION OF THE SYSTEM IS REQUIRED. THE IRRIGATION CONTRACTOR MUST DEMONSTRATE TO THE OWNER, OR HIS/HER REPRESENTATIVE THAT PROPER COVERAGE IS OBTAINED AND THAT THE SYSTEM WORKS AUTOMATICALLY FROM THE CONTROLLER. THIS DEMONSTRATION REQUIRES THAT EACH ZONE IS TURNED ON, IN THE PROPER SEQUENCE AS SHOWN ON THE PLANS, FROM THE CONTROLLER. EACH ZONE WILL BE INSPECTED FOR PROPER COVERAGE AND FUNCTION. THE DETERMINATION OF PROPER COVERAGE AND FUNCTION IS AT THE SOLE DISCRETION OF THE OWNER OR OWNER'S REPRESENTATIVE.

OPERATIONAL TESTING - UPON COMPLETION OF BACK FILLING, FINISH GRADING AND CONTOURING. TEST THE ENTIRE SYSTEM FOR PROPER OPERATION; INCLUDING ELECTRICALLY ACTUATING THE REMOTE CONTROL VALVES. RUN EACH ZONE UNTIL WATER BEGINS TO PUDDLE OR RUN OFF. THIS WILL ALLOW YOU TO DETERMINE THE NUMBER OF IRRIGATION START TIMES NECESSARY TO MEET THE WEEKLY EVAPOTRANSPIRATION REQUIREMENTS OF THE PLANTING MATERIAL IN EACH ZONE. IN SANDY SOILS NO PUDDLING WILL OCCUR. INSTEAD; CALCULATE THE REQUIRED RUN TIMES.

SUBMITTALS:

THE CONTRACTOR MUST SUBMIT FOR APPROVAL, PRIOR TO INSTALLATION, (5) COPIES OF THE MANUFACTURER'S CUT SHEETS/SPECIFICATIONS FOR ALL COMPONENTS TO BE USED IN THE IRRIGATION SYSTEM. AFTER PROJECT COMPLETION

- AS A CONDITION OF FINAL ACCEPTANCE, THE IRRIGATION CONTRACTOR SHALL PROVIDE THE OWNER WITH:
 - IRRIGATION AS-BUILTS: A HIGH QUALITY, ACCURATE, AND LEGIBLE SET OF AS-BUILT DRAWINGS UTILIZING A SUB-FOOT GLOBAL POSITIONING SYSTEM (GPS) TO ACCURATELY LOCATE ALL MAINLINES, SLEEVES,

REMOTE CONTROL VALVES, GATE VALVES, INDEPENDENT WIRE RUNS, SPLICE BOXES, CONTROLLERS, HIGH VOLTAGE SUPPLY SOURCES/CONDUIT PATH, CONTROL MECHANISMS, SENSORS, WELLS, AND WATER SOURCE CONNECTIONS IN FLORIDA EAST STATE PLANE COORDINATES (NAD 83) AND CORS 96 FORMAT. THE DATA COLLECTED SHALL BE IN POINT FORMAT AND INCLUDE AN ID FOR EACH DATA POINT WITH MANUFACTURER, TYPE, SIZE AND DEPTH. ALL MAINLINE AND INDEPENDENT RUNS OF WIRE SHALL BE LOCATED EVERY 30' FOR STRAIGHT RUNS AND AT EVERY CHANGE OF DIRECTION. SLEEVES WILL BE LOCATED AT END POINTS AND EVERY 20' OF LENGTH. ALL UNDERGROUND ITEMS SHALL INCLUDE DEPTH IN INCH FORMAT. THESE POINTS ONCE COLLECTED SHALL BE IMPORTED INTO AN AUTOCAD DWG GEO-REFERENCED BASE FILE TO BE LABELED ACCORDINGLY. THE COMPLETED AS-BUILT SHALL BE A GEO-REFERENCED DWF FILE AND DELIVERED TO THE OWNER ON A COMPACT DISK (CD).

- CONTROLLER CHARTS: UPON COMPLETION OF "AS-BUILT" PREPARE CONTROLLER CHARTS ONE PER CONTROLLER. INDICATE ON EACH CHART THE AREA CONTROLLED BY A REMOTE CONTROL VALVE (USING A DIFFERENT COLOR FOR EACH ZONE). THIS CHART SHALL BE HERMETICALLY SEALED INSIDE TWO 2-MIL PIECES OF CLEAR PLASTIC.
- GROUNDING CERTIFICATION: PROVIDE GROUND CERTIFICATION RESULTS FOR EACH CONTROLLER AND PUMP PANEL GROUNDING GRID INSTALLED. THIS MUST BE ON A LICENSED ELECTRICIAN LETTER HEAD INDICATING LOCATION TESTED (USING IR PLAN SYMBOLS), DATE, TIME, TEST METHOD, AND TESTING RESULTS

INSPECTIONS AND COORDINATION MEETINGS REQUIRED.

- PRE-CONSTRUCTION MEETING - DESIGNER AND CONTRACTOR TO REVIEW ENTIRE INSTALL PROCESS AND SCHEDULE WITH OWNER/GENERAL CONTRACTOR.
- MAINLINE PRESSURE TEST - ALL MAINLINE SHALL BE PRESSURE TESTED ACCORDING TO THIS DESIGN'S REQUIREMENTS
- COVERAGE AND OPERATIONAL TEST
- FINAL INSPECTION
- PUNCH LIST INSPECTION

FINAL ACCEPTANCE OF THE IRRIGATION SYSTEM WILL BE GIVEN AFTER THE FOLLOWING DOCUMENTS AND CONDITIONS HAVE BEEN COMPLETED AND APPROVED. FINAL PAYMENT WILL NOT BE RELEASED UNTIL THESE CONDITIONS ARE SATISFIED:

- ALL ABOVE INSPECTIONS ARE COMPLETED, DOCUMENTED, AND APPROVED BY OWNER.
- COMPLETION AND ACCEPTANCE OF "AS-BUILT" DRAWINGS.
- ACCEPTANCE OF REQUIRED CONTROLLER CHARTS AND PLACEMENT INSIDE OF CONTROLLERS.
- ALL OTHER SUBMITTALS HAVE BEEN MADE TO THE SATISFACTION OF THE OWNER.

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DECEMBER 16, 2014

REVISIONS		LANDSCAPE ARCHITECT OF RECORD: MICHAEL GIOVANNI R.L.L., LICENSE NO. 1191	
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 01/19/2012-01-01-01-31-2012

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION NOTES

SHEET NO.
20

SINGLE CENTRIFUGAL PUMP SYSTEM (PRESSURE DEMAND)

PURPOSE:

TO PROVIDE A COMPLETE PREFABRICATED SKID MOUNTED PRESSURE DEMAND CENTRIFUGAL PUMP SYSTEM FROM A SOLE SOURCE COMPANY, HEREIN AFTER REFERRED TO AS THE "MANUFACTURER", WHOSE PRIMARY BUSINESS IS THE MANUFACTURE OF PREFABRICATED PUMP SYSTEMS. THE MANUFACTURER WILL MANUFACTURE, FLOW TEST, INSTALL AND WARRANT THE SYSTEM TO MEET ALL SPECIFIED OPERATING REQUIREMENTS DESCRIBED BELOW AND IN THE SYSTEM DETAIL. FOR PURPOSES OF THE BID, THE SYSTEM SHALL BE A MODEL HCF-5PD-230/3-E-8,W,Z AS MANUFACTURED BY HOOVER PUMPING SYSTEMS OF POMPANO BEACH, FLORIDA USA 954-971-7350 SPECIFIED BELOW AND SHOWN ON THE PLAN DETAILS. THIS SPECIFICATION DESCRIBES THE GENERAL COMPONENTS AND MINIMAL OPERATING REQUIREMENTS AND SHALL NOT BE CONSTRUED AS A MANUFACTURING GUIDE OR COMPLETE LIST OF REQUIRED SYSTEM COMPONENTS AND APPURTENANCES.

AFTER AWARD OF BID, THE CONTRACTOR SHALL SUBMIT SEVEN (7) COMPLETE COPIES OF THE SHOP DRAWINGS TO THE DESIGNER FOR APPROVAL, PRIOR TO SYSTEM ORDER PLACEMENT. THE SUBMITTAL SHALL CONTAIN CUT SHEETS FOR ALL SYSTEM COMPONENTS, INCLUDING: MANUFACTURER BROCHURE SHOWING PREFABRICATED PUMP SYSTEMS MANUFACTURING IS THE PRIMARY BUSINESS OF THE MANUFACTURER OR DIVISION PROPOSED TO MANUFACTURE THE SYSTEM, WRITTEN SPECIFICATIONS, DIMENSIONED LAYOUT DETAIL, ELECTRICAL SCHEMATIC, PRODUCT SHEETS FOR ALL MAIN COMPONENTS, UNDERWRITERS LABORATORY ELECTRICAL CONTROL PANEL AND "PACKAGED PUMPING SYSTEM" MANUFACTURER'S FILE NUMBERS, LIST OF 6 PROJECTS WITH SIMILAR OPERATING SYSTEMS WITH CURRENT NAME AND PHONE NUMBER OF PERSON RESPONSIBLE FOR SYSTEM OPERATION, MANUFACTURER'S INSURANCE CERTIFICATE FOR GENERAL LIABILITY SHOWING MINIMUM COVERAGE OF \$1 MILLION, AND WRITTEN CERTIFICATION FROM THE MANUFACTURER STATING THE PROPOSED SYSTEM MEETS ALL REQUIREMENTS DESCRIBED IN THIS SPECIFICATION, THE DETAIL AND THE BID DOCUMENTS.

IF THE DATA SUBMITTED IS DETERMINED TO BE AN EQUAL BY THE DESIGNER THE CONTRACTOR WILL BE NOTIFIED PRIOR TO ORDERING.

FIBERGLASS ENCLOSURE:

THE PUMP STATION SHALL BE PROTECTED BY A FIBERGLASS ENCLOSURE WITH CHEMICAL AND ULTRAVIOLET RESISTANT OPEN MOLD RESIN WITH EXTERIOR FINISH THAT IS UNIFORM IN COLOR AND TEXTURE, REINFORCED WITH FIBERGLASS AND STIFFENERS FOR RIGIDITY. THE ENCLOSURE SHALL OPEN CLEAR OF THE EQUIPMENT FOR EASE OF SERVICE WITH THE AID OF GAS FILLED STRUTS, A STAINLESS STEEL HINGE AND LATCHING LOCKABLE HANDLE. THE ENCLOSURE SHALL BE OF DIMENSIONS ADEQUATE TO CONTAIN THE PUMP SYSTEM MOUNTED ON THE SKID AS SHOWN ON THE SYSTEM DETAIL.

MOUNTING ASSEMBLY:

THE PUMP STATION SHALL BE MOUNTED ON A PREFABRICATED ALUMINUM OR HOT DIPPED GALVANIZED SKID. PEDESTALS SHALL BE PROVIDED TO MOUNT THE PUMP MOTOR AND CONTROL PANEL ASSEMBLIES. THE ENTIRE STATION SHALL BE INSTALLED ON A REINFORCED CONCRETE SLAB SIZED AS NOTED ON THE SYSTEM DETAIL.

PUMP AND MOTOR:

THE PUMP SHALL BE A SINGLE-STAGE END-SUCTION CENTRIFUGAL TYPE, WITH THE LIQUID END MOUNTED DIRECTLY TO THE MOTOR ENCLOSURE TO ALLOW REAR PULL OUT OF THE ENTIRE MOTOR. A PRESSURE SENSOR FOR LOSS OF PRIME PROTECTION SHALL BE MOUNTED INTO THE PUMP VOLUTE.

THE SYSTEM WILL BE DESIGNED FOR OPERATION AT 3,450 RPM. THE PUMP DRIVING MOTOR SHALL BE OF THE SQUIRREL CAGE INDUCTION TYPE. THE MOTOR SHALL BE SUITABLE FOR FULL VOLTAGE STARTING AT 60 HZ. THE MOTOR ENCLOSURE SHALL BE TOTALLY ENCLOSED FAN COOLED.

THE MAIN MOTOR SHALL BE RATED AT 5 HP AT 60 HZ. MOTOR WILL NOT EXCEED 10HP WHEN ONLY SINGLE PHASE ELECTRIC SERVICE IS AVAILABLE

PUMP STATION PERFORMANCE:

THE REQUIRED PUMP PERFORMANCE WITH A MAXIMUM OF 12 FT. OF SUCTION LIFT IS AS FOLLOWS: A) DISCHARGE PRESSURE OF 51 PSI, B) MAXIMUM REQUIRED FLOW OF 80 GPM, AND C) MINIMUM REQUIRED FLOW OF 25 GPM.

IRRIGATION PUMP CONTROL PANEL:

THE CONTROL PANEL ASSEMBLY SHALL BE UNDERWRITERS LABORATORIES LISTED IN ACCORDANCE WITH SECTION 508A FOR "ENCLOSED INDUSTRIAL CONTROL PANELS." ALL CONTROL DEVICES AND ELECTRONIC AUTO-SENSORY CIRCUITRY SHALL BE HOUSED IN A SELF-CONTAINED WEATHER-RESISTANT NEMA 4 OR 4X-CONTROL CABINET. AN ELECTRICAL SCHEMATIC SHALL BE PERMANENTLY MOUNTED INSIDE THE CABINET. THE CONTROL CABINET SHALL CONTAIN THE FOLLOWING PROTECTION AND CONTROL EQUIPMENT:

OPERATION

THIS STATION OPERATES AS A PRESSURE DEMAND, NO-FLOW RETIREMENT SYSTEM. SYSTEM FEATURES INCLUDE LOSS OF PRIME PROTECTION, LOW-PRESSURE PROTECTION, AND PUMP THERMAL PROTECTION. THE SYSTEM IS EQUIPPED WITH A 'HAND-OFF-AUTO' (H-O-A) SELECTOR SWITCH, AND A 'RESET-NORMAL-OVERRIDE' SELECTOR SWITCH. THE SELF-DIAGNOSTIC CONTROL PANEL ASSEMBLY INCLUDES STATUS INDICATOR LIGHTS FOR LOSS OF PRIME, LOW PRESSURE, AND PUMP OVERHEAT. PUMP HOUR METER AND AUXILIARY CONTACTS ARE ALSO PROVIDED.

PRESSURE DEMAND

THE PUMP STARTS WHEN THE MAINLINE PRESSURE DROPS BELOW THE SETTING OF THE START PRESSURE SWITCH.

NO-FLOW RETIREMENT

THE PUMP SHUTS OFF IF WATER STOPS FLOWING FOR 15 SECONDS.

LOSS OF PRIME PROTECTION

IF THE SYSTEM PRESSURE REMAINS BELOW THE START PRESSURE, AND THERE IS NO FLOW OF WATER THROUGH THE SYSTEM DURING PUMP OPERATION FOR 45 SECONDS, THE PUMP WILL SHUT OFF AND THE 'LOSS OF PRIME' LIGHT WILL TURN ON. THE SYSTEM WILL REMAIN OFF UNTIL 'RESET'.

LOW PRESSURE PROTECTION

IF THE MAINLINE PRESSURE FALLS BELOW THE START PRESSURE FOR 12 MINUTES DURING PUMP OPERATION, THE PUMP WILL SHUT OFF, AND THE 'LOW PRESSURE' LIGHT WILL TURN ON. THE SYSTEM WILL REMAIN OFF UNTIL 'RESET'.

THERMAL PROTECTION

IF THE TEMPERATURE AT THE PUMP VOLUTE EXCEEDS 43C AFTER AT LEAST 3 MINUTES OF PUMP OPERATION, THE PUMP WILL SHUT OFF, AND THE 'PUMP OVERHEAT' LIGHT WILL TURN ON. THE SYSTEM WILL REMAIN OFF UNTIL 'RESET'.

HAND - OFF - AUTO SWITCH

THE PUMP IS EQUIPPED WITH AN H-O-A SELECTOR SWITCH THAT OPERATES AS FOLLOWS:

POSITION	FUNCTION
HAND -	MANUAL PUMP START. THIS POSITION OVERRIDES ALL PROTECTIVE FEATURES AND START CONTROLS
OFF -	PUMP WILL NOT RUN.
AUTO -	PUMP WILL START AUTOMATICALLY. IN THIS POSITION, ALL START CONTROLS AND PROTECTIVE FEATURES ARE ACTIVE.
RESET -	NORMAL - OVERRIDE SWITCH
	THE STATION IS EQUIPPED WITH AN OVERRIDE SELECTOR SWITCH THAT OPERATES AS FOLLOWS:
POSITION	FUNCTION
RESET	RESETS ALL SYSTEM FAILURES.
NORMAL	LOW-PRESSURE PROTECTION IS ACTIVE.
OVERRIDE	LOW-PRESSURE PROTECTION IS DISABLED.
ELAPSED RUN-TIME METER	
THE PUMP IS EQUIPPED WITH AN HOUR METER WHICH RECORDS TOTAL PUMP RUN TIME.	
PROTECTION EQUIPMENT	
- FRONT OPERATED MAIN POWER DISCONNECT	
- TIME DELAYED MOTOR STARTER FUSES FOR MOTOR SHORT CIRCUIT PROTECTION	
- FULL VOLTAGE CLASS 10 IEC MOTOR STARTER	
- METAL OXIDE VARISTORS (MOV) FOR TRANSIENT VOLTAGE SUPPRESSION PER PHASE	
- FUSED CONTROL CIRCUITRY WITH BLOWN FUSE	

LIGHTED INDICATOR FOR EACH CIRCUIT

PENETRATION STANDARD REQUIREMENTS:

ALL CONTROL PANEL PENETRATIONS SHALL BE PERFORMED BY A LICENSED ELECTRICIAN TO MINIMUM NEMA 4X REQUIREMENTS, AND COMPLIANT WITH INTERNATIONAL ELECTROTECHNICAL COMMISSIONS (IEC) IP56 RATING UNDER ITS IP CODE, TO PROTECT AGAINST DUST INGRESSION AND AGAINST ANY HARMFUL EFFECTS FROM WATER PROJECTED IN POWERFUL JETS FROM ANY DIRECTION AND PROTECTION AGAINST CORROSION.

DISCHARGE PIPE MANIFOLD:

THE PIPE DISCHARGE MANIFOLD SHALL BE CONSTRUCTED OF GALVANIZED STEEL PIPE WITH GALVANIZED ROLL GROOVE FITTINGS. A FLOW-SWITCH, PRESSURE GAUGE AND HOSE BIB WILL BE PROVIDED ON THE STATION DISCHARGE. A WAFER TYPE BUTTERFLY VALVE WILL BE PROVIDED AT PUMP STATION DISCHARGE. A HYDROPNEUMATIC TANK WITH AIR/WATER SEPARATION BLADDER WILL BE CONNECTED TO THE DISCHARGE HEADER AS SHOWN ON THE SYSTEM DETAIL TO SUPPLY REPLACEMENT WATER WHEN THE PUMP IS NOT OPERATING.

SUCTION LINE:

THE MINIMUM SIZE SUCTION LINE SHALL BE 3" DIAMETER OR LARGER AS REQUIRED FOR A MAXIMUM OF 5 FEET PER SECOND VELOCITY FLOW. IF A REDUCING FITTING IS REQUIRED AT THE PUMP SUCTION, AN ECCENTRIC REDUCER SHALL BE INSTALLED. ANY ABOVE GROUND PIPE AT THE PUMP SYSTEM EXPOSED TO SUNLIGHT SHALL BE SCHEDULE 40 GALVANIZED STEEL WITH GALVANIZED ROLL GROOVE FITTINGS. SUCTION PIPE AND FITTINGS SHALL BE HDPE HEAT FUSED

WELL SOURCE: THE PUMP SUCTION LINE SHALL RUN FROM THE PUMP TO THE CUSTOMER SUPPLIED WELL TEE WITH HOT DIPPED GALVANIZED OR HIGH DENSITY POLYETHYLENE HDPE PIPING. SWING CHECK VALVE PLACED AT THE WELL TEE.

IRRIGATION CONTROLLER:

A RAIN BIRD ESPLXME MODEL 8 STATION CONTROLLER AND RAIN SENSOR SHALL BE MOUNTED ON THE PUMP SYSTEM. THE CONTROLLER SHALL BE POWERED FROM A FUSE BLOCK IN THE PUMP SYSTEM CONTROL PANEL.

WARRANTIES:

PRIOR TO SHIPPING, THE MANUFACTURER SHALL FLOW TEST THE SYSTEM AND SUBMIT A CERTIFIED REPORT TO THE DESIGNER STATING THE SYSTEM IS WITHIN 1% + OR - OF THE SPECIFIED FLOW RATE AND PRESSURE, AND MEETS THE OPERATIONAL REQUIREMENTS.

THE MANUFACTURER OF THE PUMPING STATION SHALL WARRANT ALL COMPONENTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF MANUFACTURE.
PN1283G

Handwritten signature and date: Mike P... 12-16-14

REVISIONS		DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)		
9/26/14	REVISIONS PER E.R.C. COMMENTS		
10/31/14	SECOND REVISIONS PER E.R.C.COMMENT		

LANDSCAPE ARCHITECT OF RECORD: KNOWEL CORNER, P.L.L.C. LICENSE #11181

 Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1800 Hill Drive, Suite 600, Fort Lauderdale, Florida 33316
 Phone: 954-521-2781 • Fax: 954-521-8207
 Certificate of Accreditation # 000000020
 VERIFIED I.D. #01-85-581-3029

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION NOTES

SHEET NO.
21

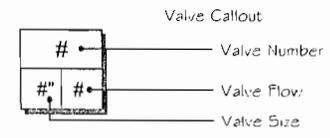
DECEMBER 16, 2014

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS
	Rain Bird 1812-SAM-PRS 15 Strip Series	11	E5T	30	0.61	4x15'
	Rain Bird 1812-SAM-PRS 15 Strip Series	8	LC5	30	0.49	4x15'
	Rain Bird 1812-SAM-PRS 15 Strip Series	23	S5T	30	1.21	4x30'
	Rain Bird 1812-SAM-PRS 5 Series MPR	16	180	30	0.20	5'
	Rain Bird 1812-SAM-PRS 5 Series MPR	4	90	30	0.10	5'
	Rain Bird 1812-SAM-PRS 8 Series MPR	55	180	30	0.52	8'
	Rain Bird 1812-SAM-PRS 8 Series MPR	4	90	30	0.26	8'
	Rain Bird 1812-SAM-PRS 8 Series MPR	3	120	30	0.35	8'
	Rain Bird 1812-SAM-PRS 10 Series MPR	23	180	30	0.79	10'
	Rain Bird 1812-SAM-PRS 10 Series MPR	1	120	30	0.53	10'
	Rain Bird 1812-SAM-PRS 12 Series MPR	92	180	30	1.30	12'
	Rain Bird 1812-SAM-PRS 12 Series MPR	3	120	30	0.87	12'
	Rain Bird 1812-SAM-PRS 15 Series MPR	2	120	30	1.23	15'
	Hunter MP1000 PRO5-06-CV	16	45-210	40		14'
	Hunter MP2000 PRO5-06-CV	145	45-210	40		19'
	Hunter MP3000 PRO5-06-CV	98	45-210	40		30'
	Hunter MP Corner PRO5-06-CV	3	Adj	40		13'
	Hunter MP Strip PRO5-06-CV	1	LC5	40	0.22	5x15'
	Hunter MP Strip PRO5-06-CV	1	RC5	40	0.22	5x15'
	Hunter MP1000 PRO5-12-CV	10	360	40	0.75	14'
Irrigation Lateral Line: PVC Class 200 SDR 21 PVC Class 200 irrigation pipe. Only lateral transition pipe sizes 1" and above are indicated on the plan, with all others being 3/4" in size.				8,915 l.f.		
Irrigation Mainline: PVC Schedule 40 PVC Schedule 40 irrigation pipe.				1,955 l.f.		
Directional Boring Sleeve: HDPE DR11 Typical Direction Boring sleeve for irrigation, as per FDOT INDEX 591				1,855 l.f.		

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird PESB 1", 1-1/2", 2" Traffic Rated Industrial Valves.	18
	Febco 765 1" Pressure Vacuum Breaker, brass with ball valve SOV. Install 12" (305MM) above highest downstream outlet and the highest point in the downstream piping.	3
	Febco 765 3/4" Pressure Vacuum Breaker, brass with ball valve SOV.	3
	Rain Bird TBOS2-CM1 and TBOS2-FTUS Battery-Operated Controller with one field transmitter.	4
	Rain Bird TBOS2-CM4 and TBOS2-FTUS Battery-Operated Controller.	1
	Rain Bird TBOS2-CM2 and TBOS2-FTUS Battery-Operated Controller.	2
	Rain Bird RSD-CEX Rain Sensing Device, conduit mount.	7
	Water Meter 3/4"	1
	Water Meter 3/4"	1
	Water Meter 1"	1
	Water Meter 1"	1
	Water Meter 1"	1
	Water Meter 3/4"	1
	New Irrigation Pump # Well #1	1
	New Irrigation Pump # Well #2	1



Mini P.C.
12-16-14
12-16-14

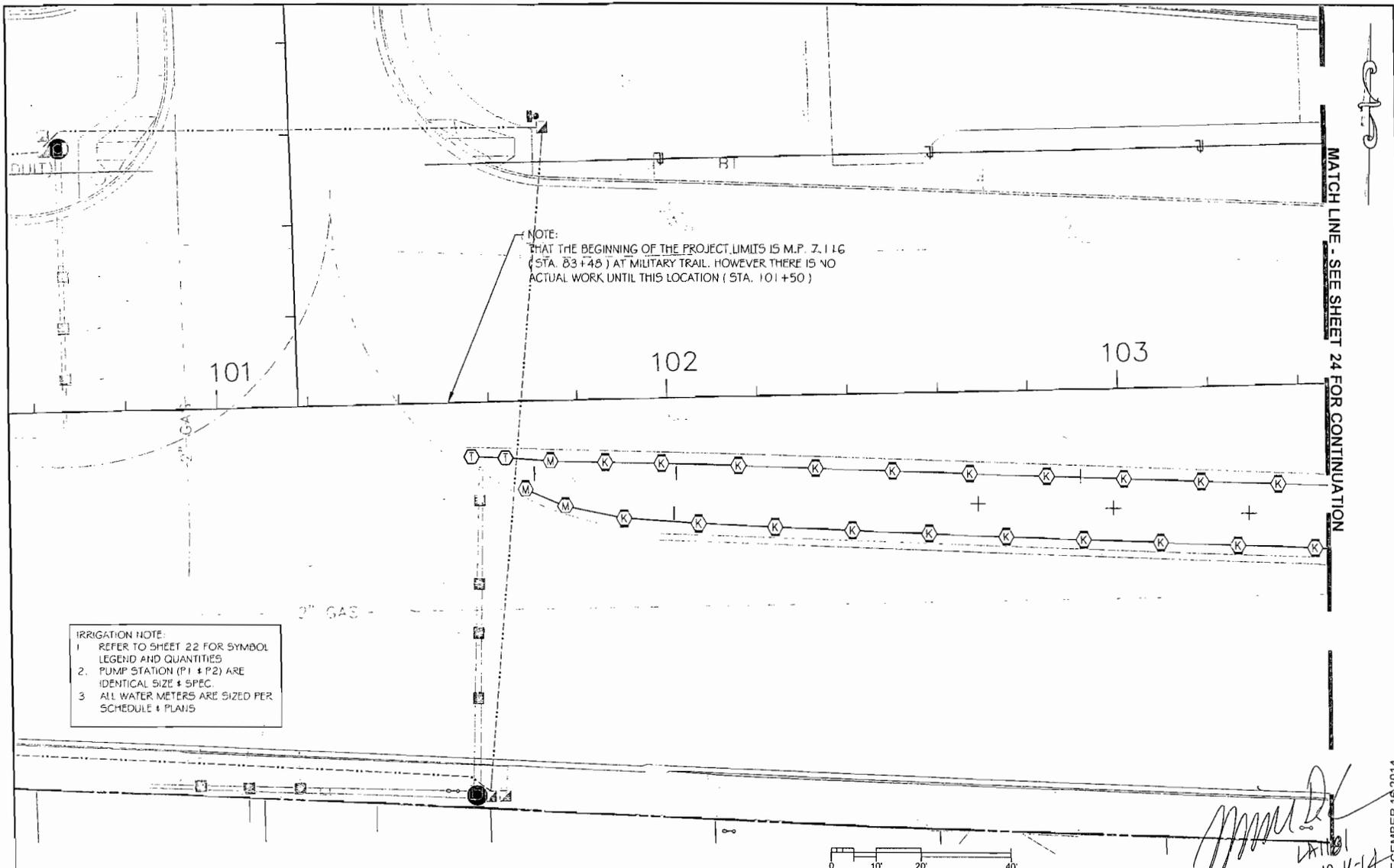
DECEMBER 16, 2014

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)			
9/26/14	REVISIONS PER E.R.C. COMMENTS			
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT			

LANDSCAPE ARCHITECT OF RECORD: MICHELLE CONNER R.L.A., LICENSE NO. 11181
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 Certificate of Accreditation LC000/00330
 VENDOR ID: 1173 05-011-3969

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION SCHEDULES	
SHEET NO.	
22	



DECEMBER 16, 2014

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 12-16-14

REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
09/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD MICHAEL CORNER P.L.L.C. LICENSE NO. 1181

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 CALIFORNIA REGISTRATION: C00660329
 VENDOR ID: NS 61-791-1919

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SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
23

NW 36TH STREET

BT (9 x 4" CONDUIT)

104

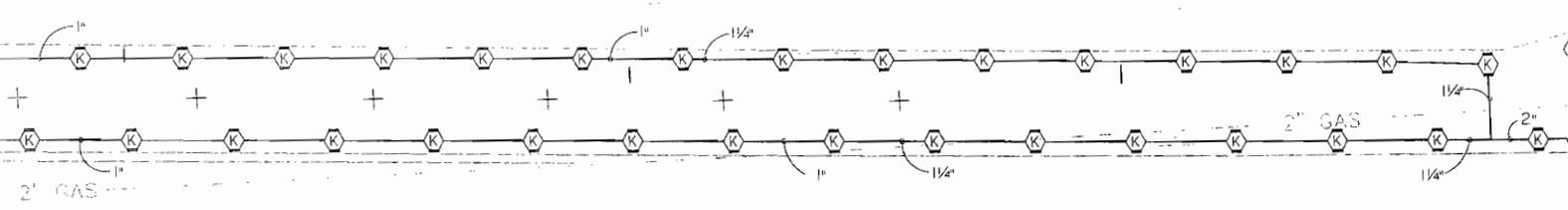
105

106

SR 834 (SAMPLE ROAD)

MATCH LINE - SEE SHEET 23 FOR CONTINUATION

MATCH LINE - SEE SHEET 25 FOR CONTINUATION



Signature
LA 110
12-16-14

DECEMBER 16, 2014

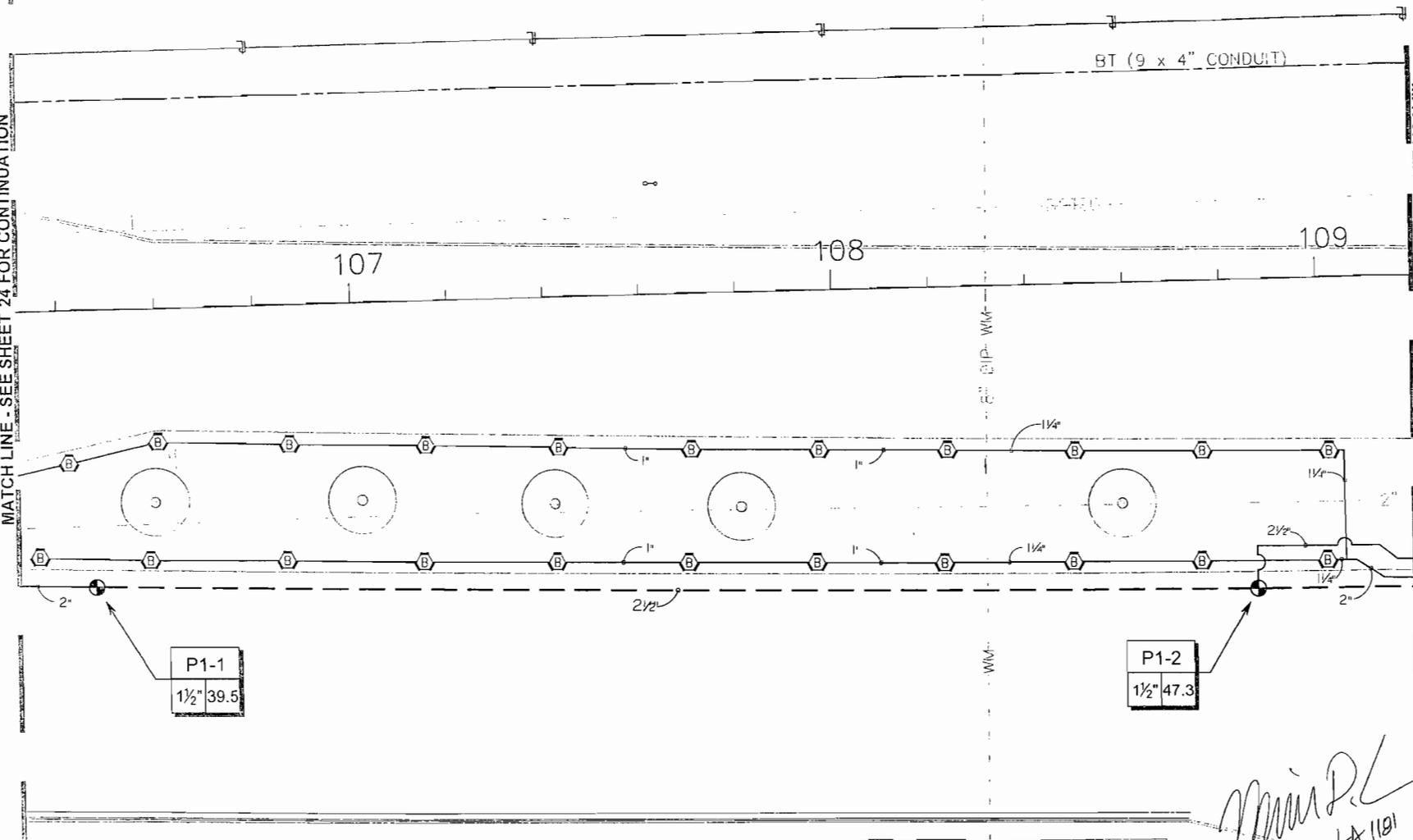
REVISIONS		DATE		DESCRIPTION	
07/11/14	Revised per FDOT comments (Added sheet)				
09/26/14	REVISIONS PER E.R.C. COMMENTS				
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT				

LANDSCAPE ARCHITECT OF RECORD: KROHSEL CONNER, R.L.A., LICENSE NO. 1481 Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS <small>1801 Flamingo Ave., Suite 600, Fort Lauderdale, Florida 33316 Phone: 954-521-7781 - Fax: 954-521-5627 Certificate of Registration: EC00000330 VENDOR ID: 209-05-001-12079</small>			SAMPLE ROAD BEAUTIFICATION GRANT		SHEET NO. 24
ROAD NO.	COUNTY	FINANCIAL PROJECT ID			
S.R. 834	BROWARD	435709-1-78-01			

IRRIGATION PLAN

MATCH LINE - SEE SHEET 24 FOR CONTINUATION

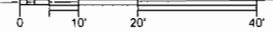
MATCH LINE - SEE SHEET 26 FOR CONTINUATION



P1-1
1 1/2" 39.5

P1-2
1 1/2" 47.3

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12-16-14



REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
09/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD: MICHAEL COVER, R.L.A., LICENSE NO. 1181

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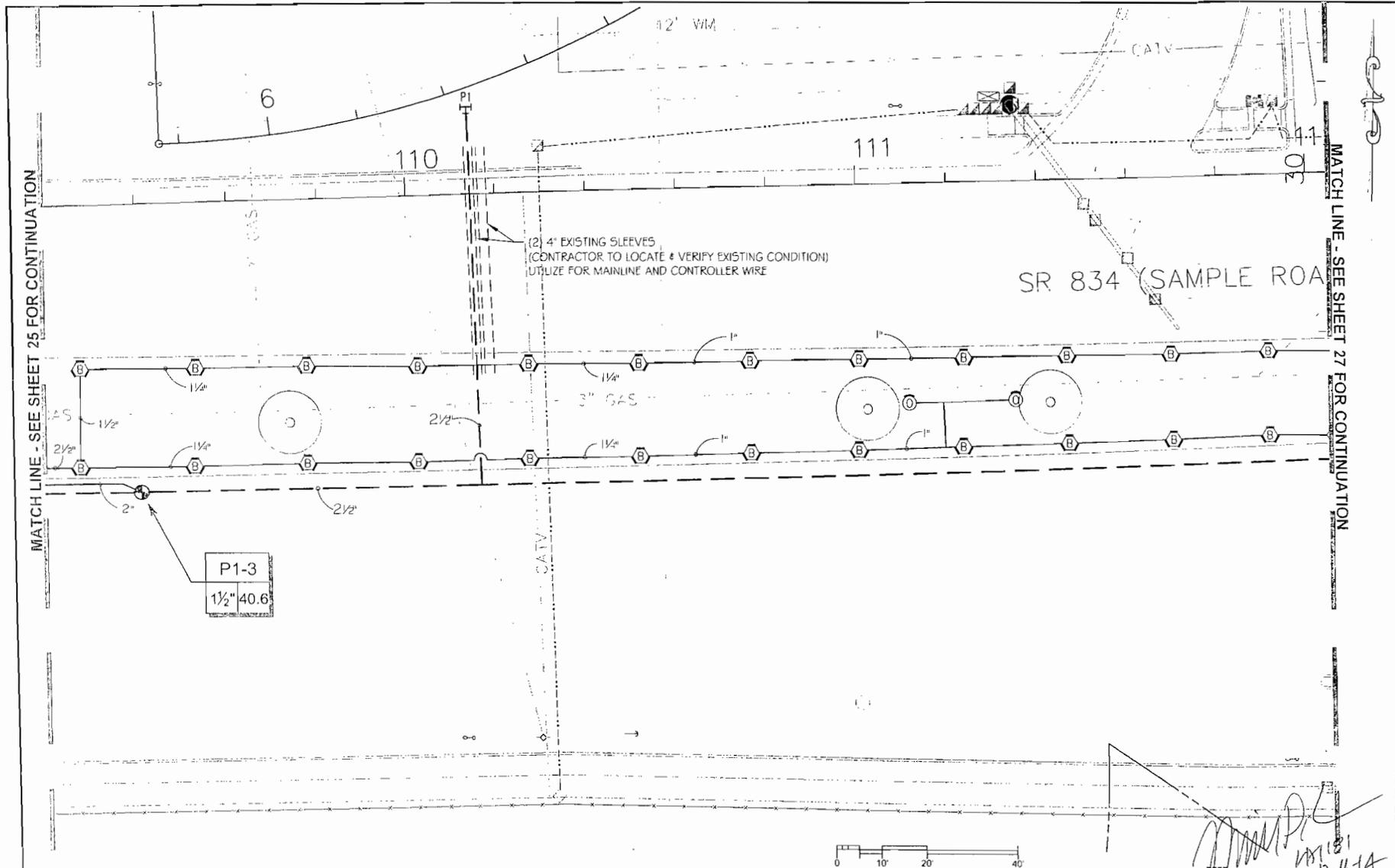
1800 U.S. Drive, Suite 600, Fort Lauderdale, Florida 33316
Phone: 954-321-2731 • Fax: 954-321-8827
Certificate of Authorization LC00009336
VENDOR ID: NO. BS-001-2009

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
25

DECEMBER 16, 2014



MATCH LINE - SEE SHEET 25 FOR CONTINUATION

MATCH LINE - SEE SHEET 27 FOR CONTINUATION

P1-3
1 1/2" 40.6

REVISIONS		DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)		
9/26/14	REVISIONS PER E.R.C. COMMENTS		
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT		

LANDSCAPE ARCHITECT OF RECORD: MICHAEL COOPER R.L.A., LICENSE NO. 1181

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Certificate of Authorization LC000140275
VENDOR ID: 313 05-501-3749

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
26

DECEMBER 16, 2014

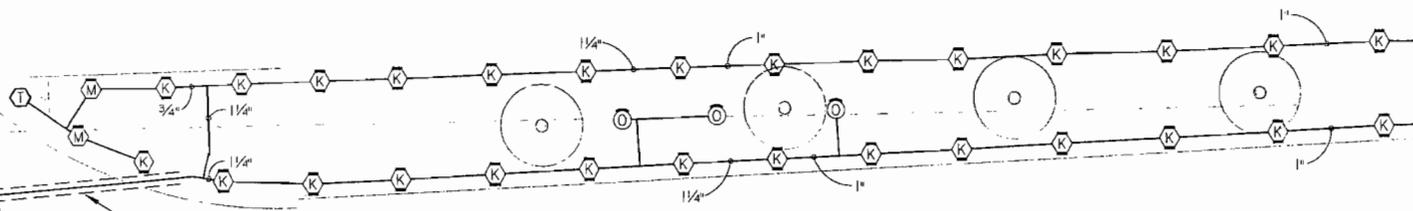
MATCH LINE - SEE SHEET 26 FOR CONTINUATION

MATCH LINE - SEE SHEET 28 FOR CONTINUATION

12" DIP W.M.

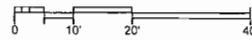
113

114



4" EXISTING SLEEVE
(CONTRACTOR TO LOCATE & VERIFY EXISTING CONDITION)
UTILIZE FOR MAINLINE LATERAL

P1-4
1 1/2" 40.6



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12-16-14

DECEMBER 16, 2014

REVISIONS		REVISIONS		LANDSCAPE ARCHITECT OF RECORD: MICHAEL CONNER, R.L.A., LICENSE NO. 1161			SAMPLE ROAD BEAUTIFICATION GRANT			IRRIGATION PLAN		SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1870 Edin Drive, Suite 400, Fort Lauderdale, Florida 33316 Phone 954.921.7781 • Fax 954.921.8467 Certificate of Authorization LC06010339 VENUES 02 002 85455-1 3052			ROAD NO.	COUNTY	FINANCIAL PROJECT ID			27
07/11/14	Revised per FDOT comments (Added sheet)						S.R. 834	BROWARD	435709-1-78-01			
9/28/14	REVISIONS PER E.R.C. COMMENTS											
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT											

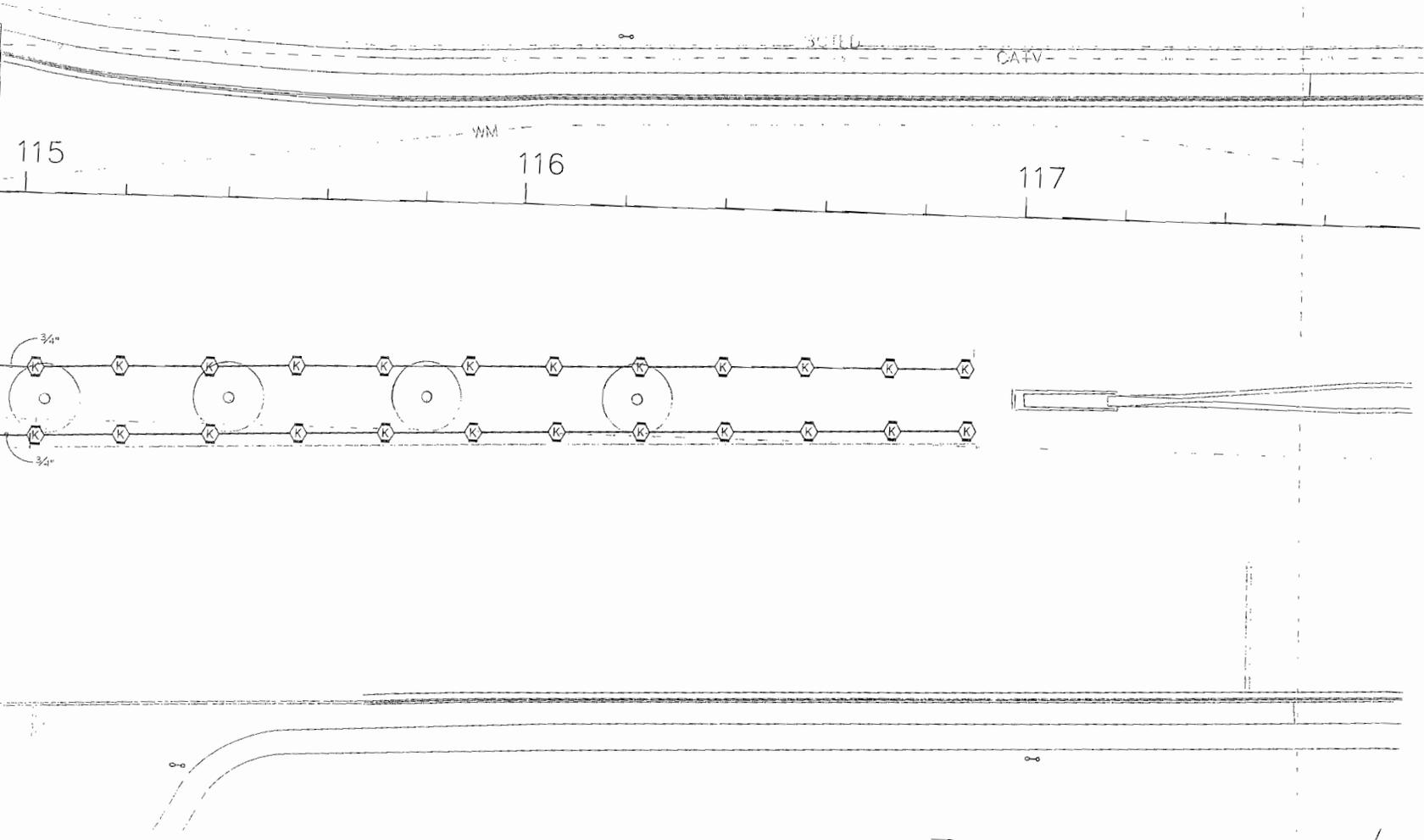
BT (12 x 4" CONDUIT)

MATCH LINE - SEE SHEET 27 FOR CONTINUATION

115

116

117



S

DATE	DESCRIPTION	REVISIONS
07/11/14	Revised per FDOT comments (Added sheet)	
09/26/14	REVISIONS PER E.R.C. COMMENTS	
03/31/14	SECOND REVISIONS PER E.R.C. COMMENT	

LANDSCAPE ARCHITECT OF RECORD: MICHEL COMBER R.L.P., LICENSE #681781

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

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Certificate of Registration: LDC00003370
VERICOR ID: 110-65-201-2659

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01



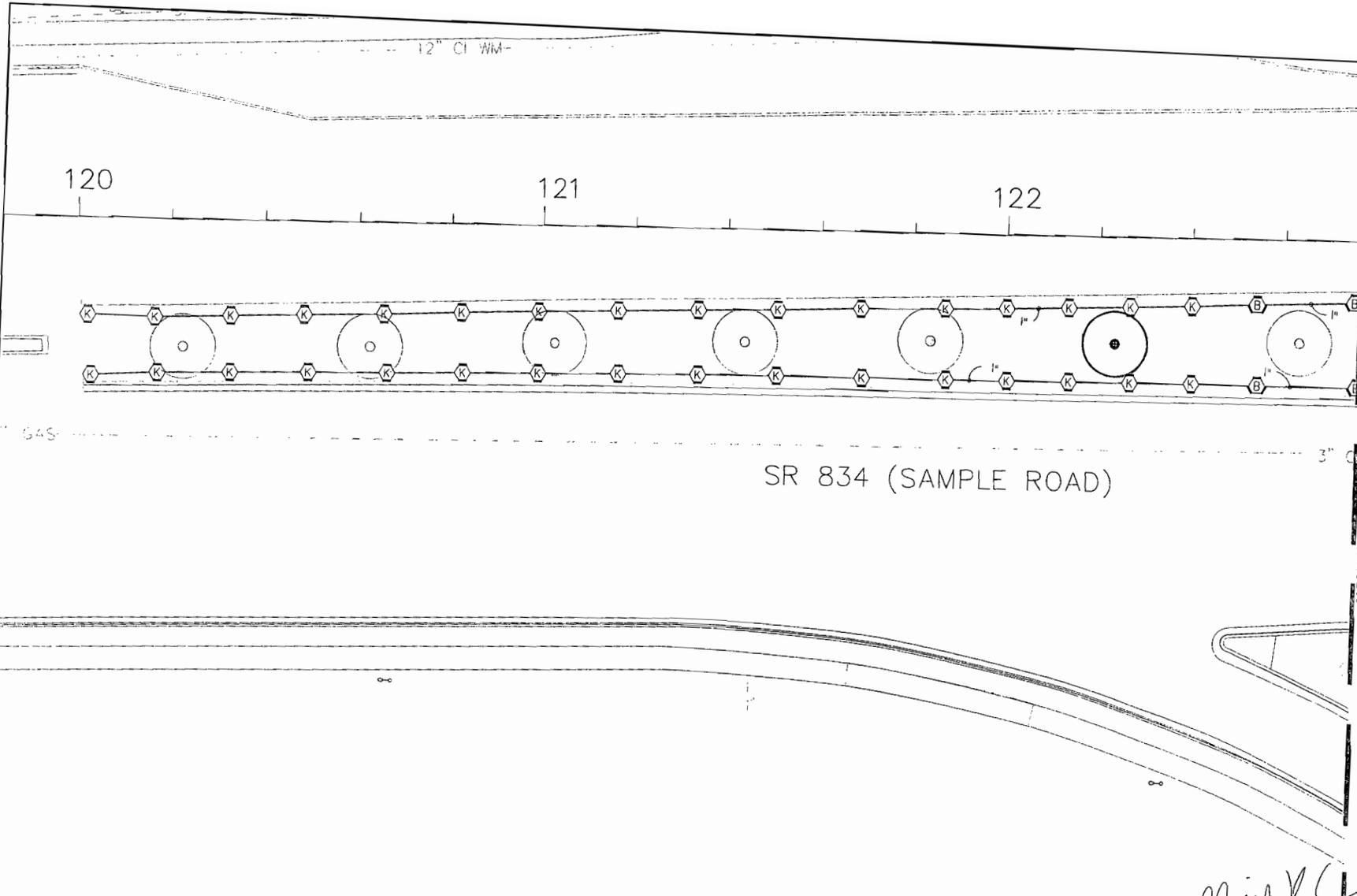
IRRIGATION PLAN

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LA 1181
12-16-14

SHEET NO.
28

DECEMBER 16, 2014

AS



MATCH LINE - SEE SHEET 30 FOR CONTINUATION

SR 834 (SAMPLE ROAD)

Handwritten signature and initials:
 Mike P. C.
 12/16/14
 1246-14

DECEMBER 16, 2014

DATE	DESCRIPTION	REVISIONS
07/11/14	Revised per FDOT comments (Added sheet)	
8/26/14	REVISIONS PER E.R.C. COMMENTS	
10/31/14	SECOND REVISIONS PER E.R.C.COMMENT	

DATE	DESCRIPTION

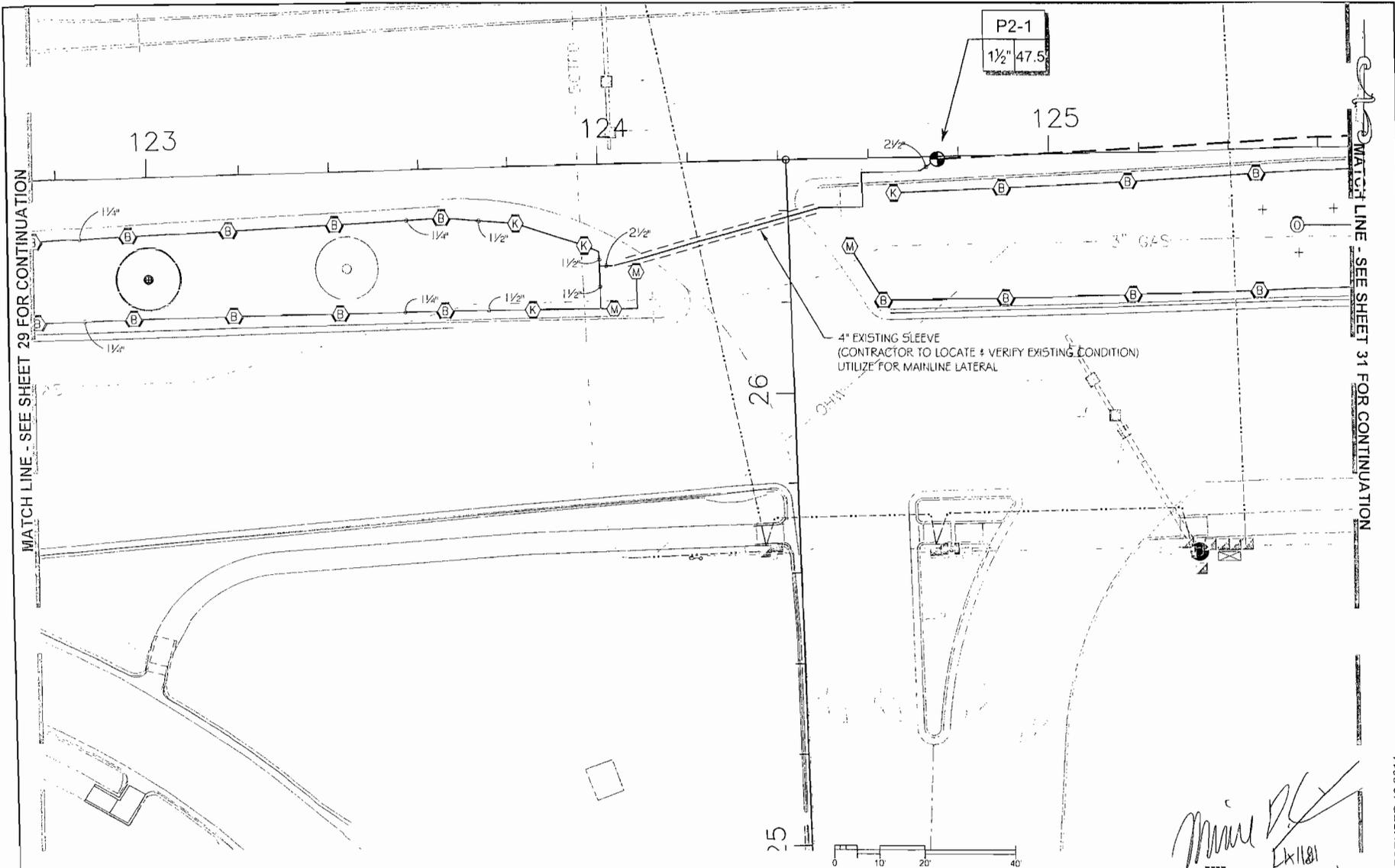


LANDSCAPE ARCHITECT OF RECORD 120461 CONVA R.L.A. LICENSE NO.1181
Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1100 18th Drive, Suite 300, Fort Lauderdale, Florida 33314
 Phone: (954) 778-1111 Fax: (954) 221-8807
 Certificate of Accreditation: C000000339
 VENDOR ID: NO. 65-601-3549

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
29

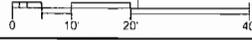


MATCH LINE - SEE SHEET 29 FOR CONTINUATION

MATCH LINE - SEE SHEET 31 FOR CONTINUATION

P2-1
1 1/2" 47.5'

4" EXISTING SLEEVE
(CONTRACTOR TO LOCATE & VERIFY EXISTING CONDITION)
UTILIZE FOR MAINLINE LATERAL



Mike P.C.
12-16-14

DECEMBER 16, 2014

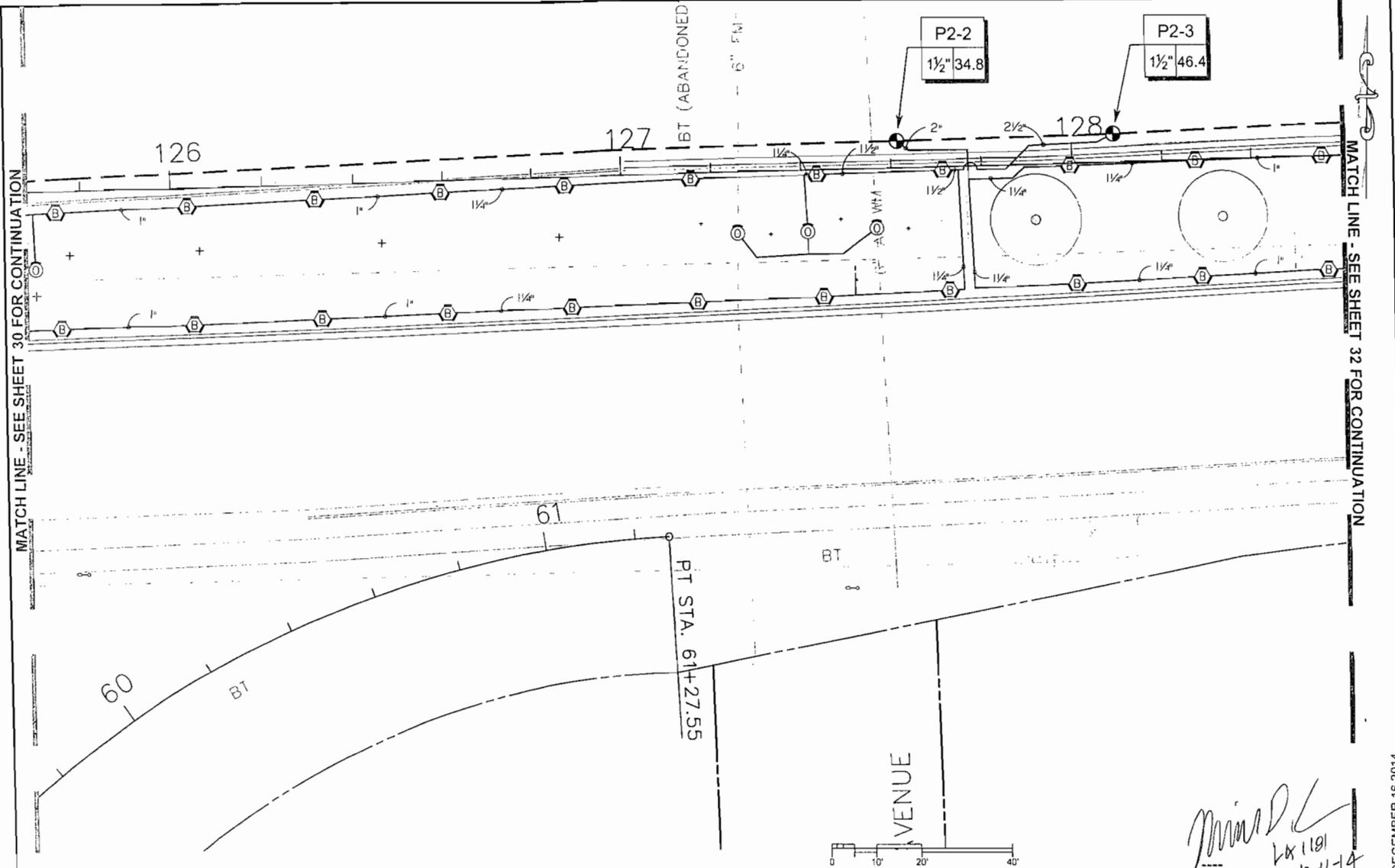
REVISIONS		DATE	DESCRIPTION
07/11/14	Revised per PSD comments (Added sheet)		
9/26/14	REVISIONS PER E.R.C. COMMENTS		
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT		

LANDSCAPE ARCHITECT OF RECORD: MICHAEL COHEN, R.L.A. LICENSE NO. 1181
Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1180 Elm Drive, Suite 600, Fort Lauderdale, Florida 33316
 Phone: 754-923-7231 • Fax: 754-923-8900
 Certificate of Authorization: EC00090230
 VERIFIED: ID #73 85-001-3452

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
30



MATCH LINE - SEE SHEET 30 FOR CONTINUATION

MATCH LINE - SEE SHEET 32 FOR CONTINUATION

DECEMBER 16, 2014

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 LX 1191
 12-16-14

REVISIONS		REVISIONS	
DATE	DESCRIPTION	DATE	DESCRIPTION
07/11/14	Revised per PDOT comments (Added sheet)		
09/26/14	REVISIONS PER E.R.C. COMMENTS		
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT		

LANDSCAPE ARCHITECT OF RECORD: MICHAEL CONNOR R.L.A. LICENSE NO. 1181
Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1800 S.W. 21st Street, Suite 600, Fort Lauderdale, Florida 33316
 Phone: 954-921-7279 • Fax: 954-921-8037
 Certificate of Authorization LC00020333
 VER1020810.007, 05/04/10-05/05

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
31

MATCH LINE - SEE SHEET 31 FOR CONTINUATION

SR 834 (SAMPLE ROAD)

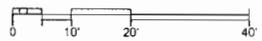
129

130

131

3" GAS

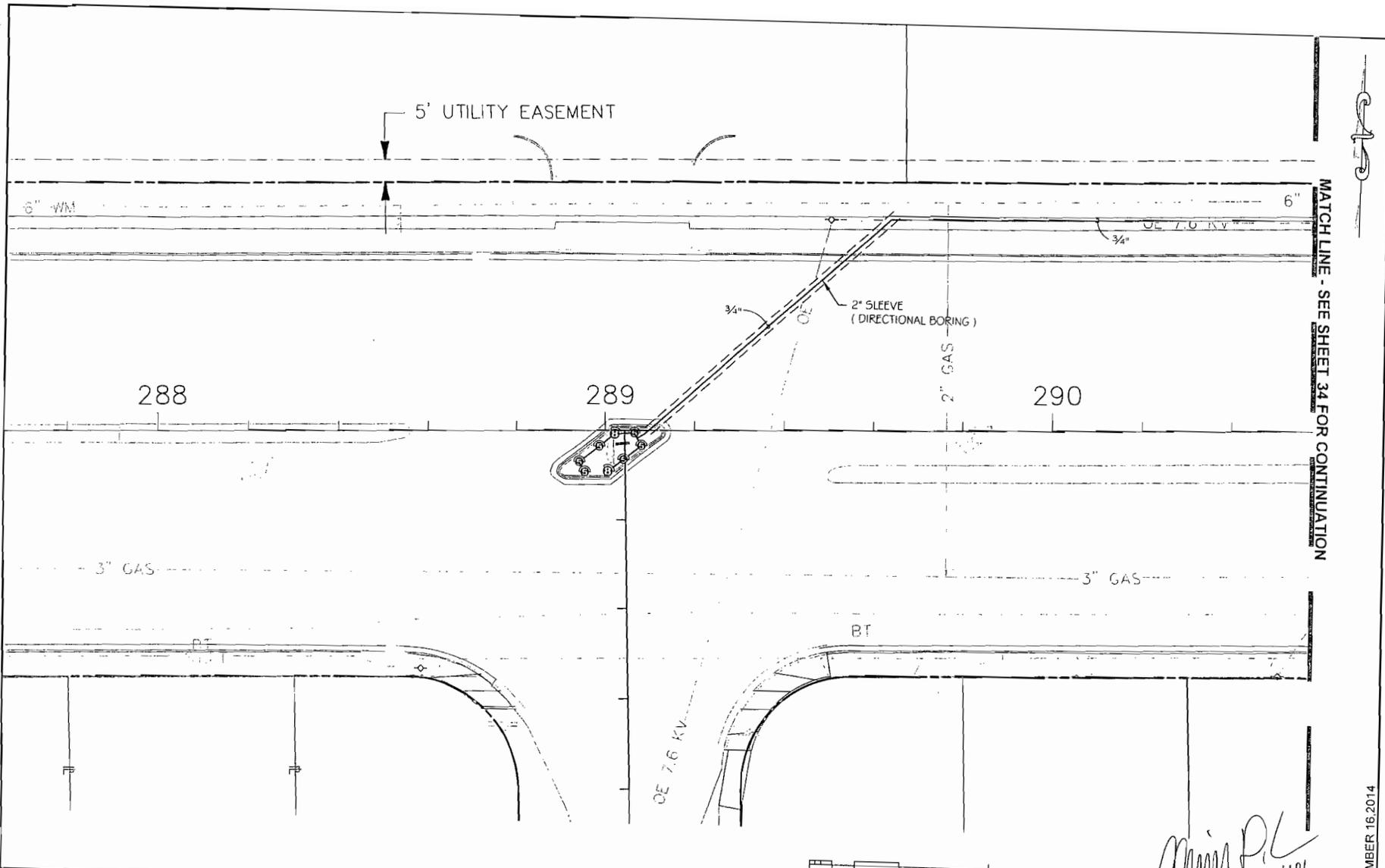
BT



Min PK
LKL181
12-16-18

DECEMBER 16, 2014

REVISIONS		DATE	DESCRIPTION		SAMPLE ROAD BEAUTIFICATION GRANT			SHEET NO.
DATE	DESCRIPTION				ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
07/11/14	Revised per FDOT comments (Added sheet)			<small>LANDSCAPE ARCHITECT OF RECORD: 8339 PELI COOPER P.L.L.C. LICENSE NO. 1181</small> Calvin, Giordano & Associates, Inc. <small>EXCEPTIONAL SOLUTIONS</small> <small>1897 E. Lake Drive, Suite 900, Fort Lauderdale, Florida 33316</small> <small>Phone: 954.527.7788 or 954.547.8887</small> <small>Certificate of Accreditation C095000235</small> <small>VERIFICATION NO. 25.001.3445</small>	S.R. 834	BROWARD	435709-1-78-01	32
09/26/14	REVISIONS PER E.R.C. COMMENTS							
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT							



MATCH LINE - SEE SHEET 34 FOR CONTINUATION

DECEMBER 16, 2014

REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
9/25/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD: MICHAEL COOPER R.L.A. LICENSE NO. 1181

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

1800 Eller Drive, Suite 402, Fort Lauderdale, Florida 33316
Phone: 954.921.7731 • Fax: 954.921.0807
Certificate of Accreditation: LC06000195
M.F. 0608113, P.O. 85-561-2803

USER: apereda 12/16/2014 5:22:14 PM P:\Projects\2013\136147 Florida Highway Beautification Grant Application\CADD Files\Drawings\136147-L1101-IRRIGATION_PLANS.dwg

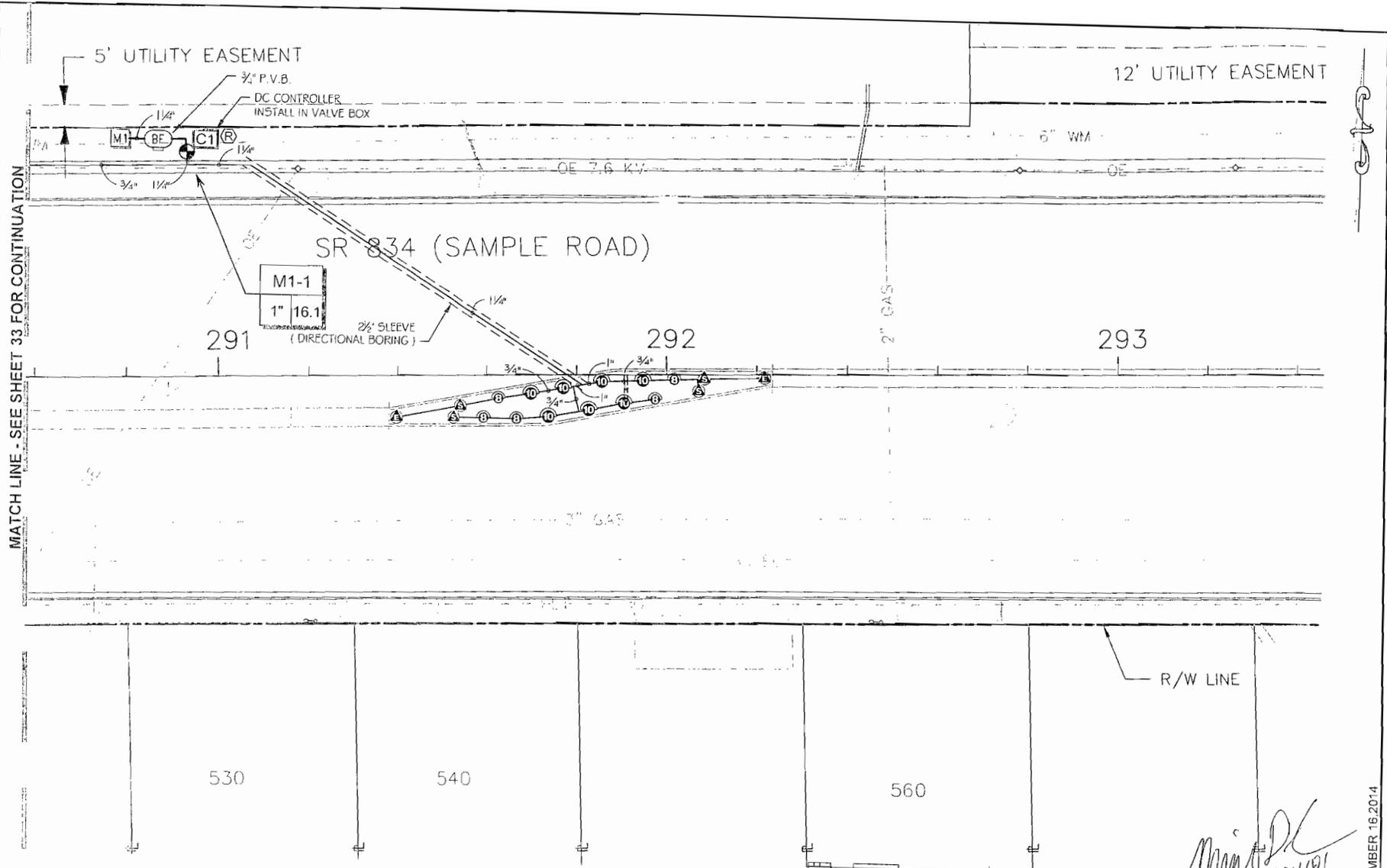
SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

Min P.C.
12/16/14

SHEET NO.
33

MATCH LINE - SEE SHEET 33 FOR CONTINUATION



REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
9/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD: MALVEL DONER, P.L.A., LICENSE NO. 11811

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

11000 N. Dixie, Suite 500, Fort Lauderdale, FL 33324
Phone: (954) 778-1100 • Fax: (954) 731-8827
City/State/Zip: Fort Lauderdale, FL 33309
VENDOR ID: NO. 11-0281350W

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO. 34

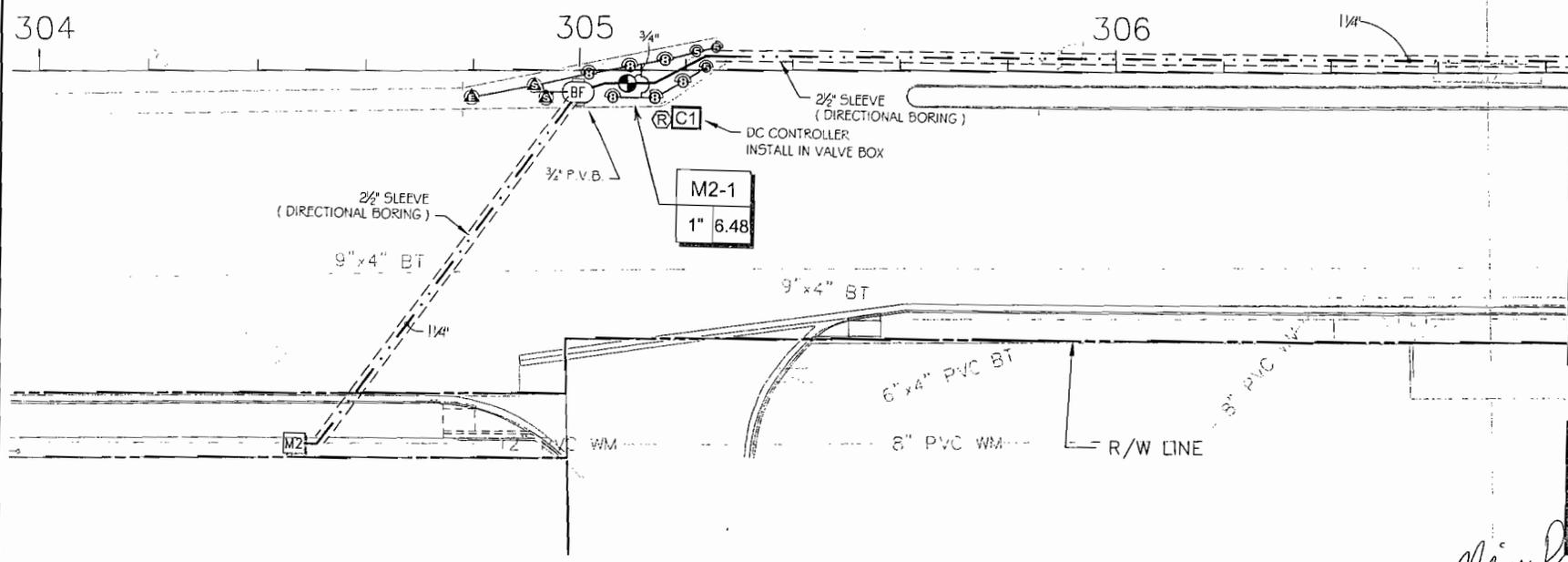
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12/16/14

DECEMBER 16, 2014



MATCH LINE - SEE SHEET 36 FOR CONTINUATION

SR 834 (SAMPLE ROAD)



REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
9/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD: MICHAEL COOPER, R.L.A., LICENSE NO. 11811

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

1800 E. Lake Drive, Suite 800, Fort Lauderdale, Florida 33314
Phone: (954) 521-7733 • Fax: (954) 521-0907
Certificate of Professional Registration: 0000090307
VENDOR ID: NO. 41-011-3066

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO. 35

DECEMBER 16, 2014

MATCH LINE - SEE SHEET 35 FOR CONTINUATION

MATCH LINE - SEE SHEET 37 FOR CONTINUATION

SR 834 (SAMPLE ROAD)

R/W LINE

R/W LINE

307

308

309

M2-2
1" 15.5

M2-3
1" 13.3

2" SLEEVE
(DIRECTIONAL BORING)

1/4" C2

DC CONTROLLER
INSTALL IN VALVE BOX

6" CIP WM

9" x 4" PVC BT



REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
09/28/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD (MICHAEL CONNER P.L.A. LICENSE #A011981)

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

1960 E. Old Dixie, Suite 603, Palm Lakeshore, Florida 33116
Phone: 954-921-7791 • Fax: 954-921-8287
Certificate of AutoCAD/GRAPHIC L.C.00000235
VENDOR ID: EIG-80-001-7029

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
36

DECEMBER 16, 2014

Handwritten signature and date: 12-16-14

NO WORK IN THIS AREA

1001

MATCH LINE - SEE SHEET 36 FOR CONTINUATION

MATCH LINE - SEE SHEET 38 FOR CONTINUATION

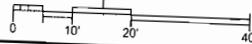
310

311

312

9" x 24" PVC BT

6" CIP WM



Min P.C.
LA 1131
12-16-14

DECEMBER 16 2014

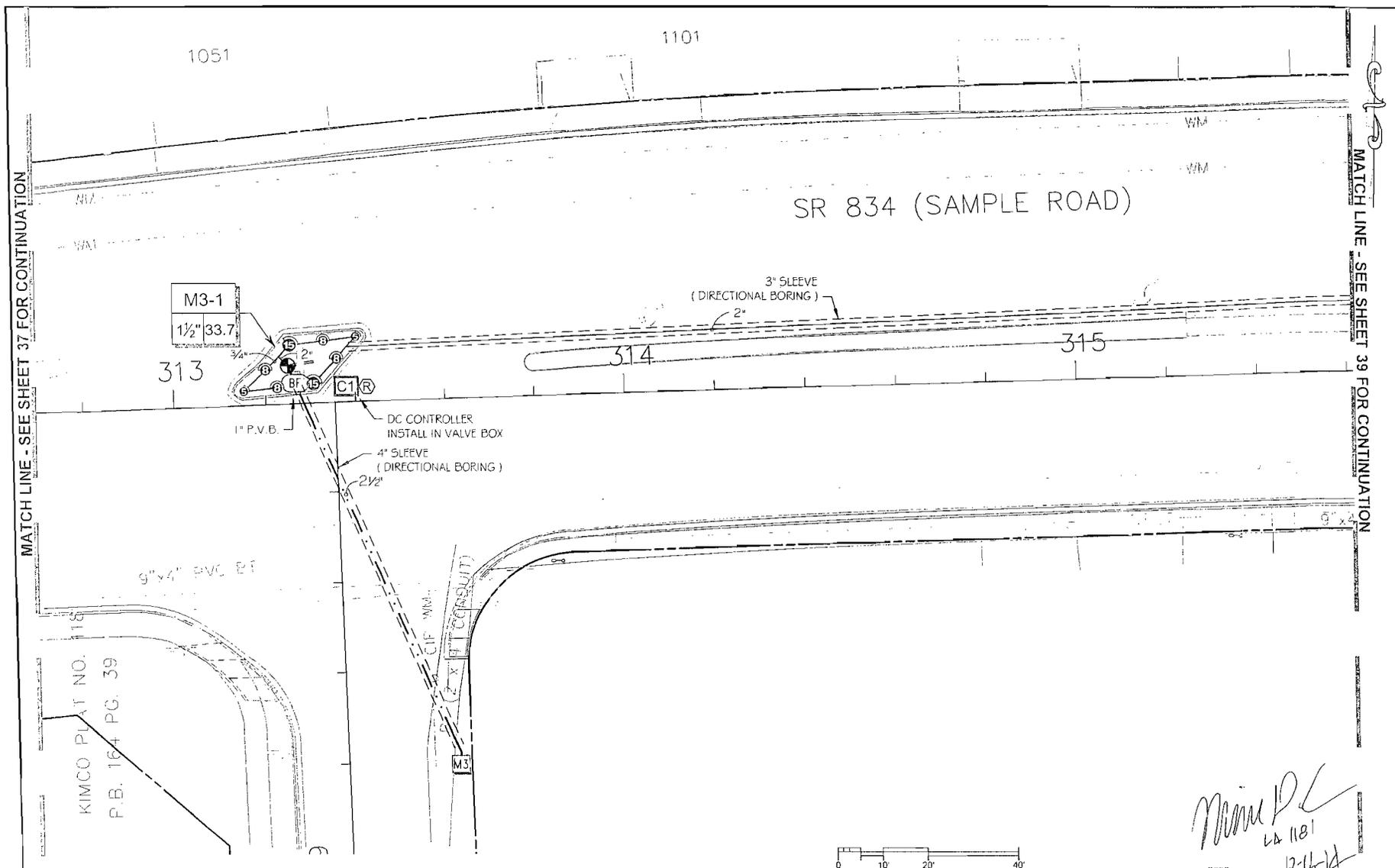
DATE	DESCRIPTION	REVISIONS
07/11/14	Revised per FDOT comments (Added sheet)	
9/25/14	REVISIONS PER E.R.C. COMMENTS	
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT	

LANDSCAPE ARCHITECT OF RECORD: MICHAEL CONNER R.L.A., LICENSE No. 1181
Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1800 Hill Drive, Suite 502, Fort Lauderdale, Florida 33316
 Phone: 754-921-3781 • Fax: 754-921-8807
 Certificate of Authorization LC05000337
 VENDOR ID: 900-85204-9005
 USER: opereda

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

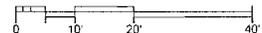
SHEET NO.
37



MATCH LINE - SEE SHEET 37 FOR CONTINUATION

MATCH LINE - SEE SHEET 39 FOR CONTINUATION

KIMCO PLAT NO. 118
P.B. 164 PG. 39



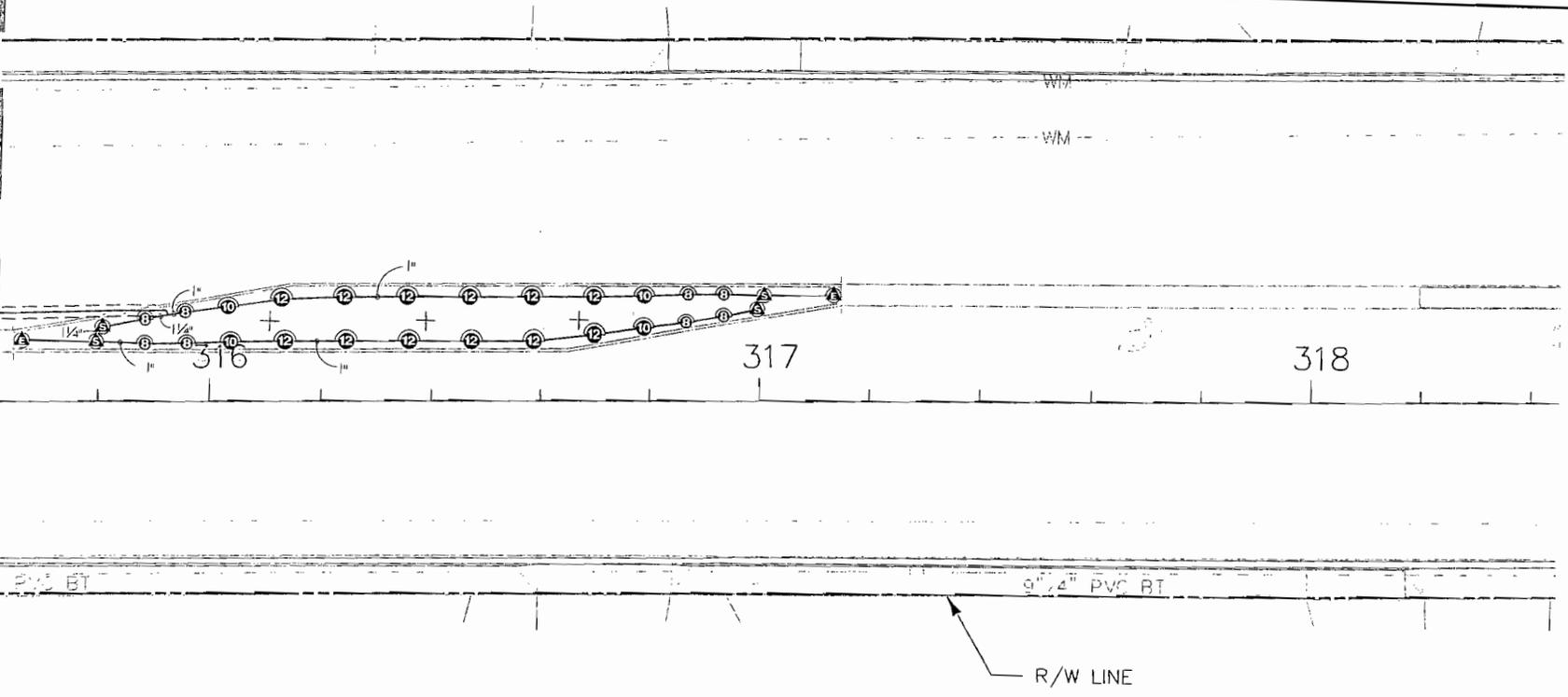
Mimi PC
12-16-14

DECEMBER 16 2014

REVISIONS		LANDSCAPE ARCHITECT OF RECORD: MICHAEL GARDNER, P.L.L.C. LICENSE #111781			SAMPLE ROAD BEAUTIFICATION GRANT			IRRIGATION PLAN	SHEET NO. 38
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID.			
07/11/14	Revised per FDOT comments (Added sheet)			S.R. 834	BROWARD	435709-1-78-01			
9/26/14	REVISIONS PER E.R.C. COMMENTS								
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT								


Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
1800 E. Silver Creek Road, Suite 2000, Fort Lauderdale, Florida 33316
 Phone: (954) 572-5700 • Fax: (954) 572-5047
 Certificate of Authorization LC000003291
 VENTURE ID NO. 00-2015-3702

MATCH LINE - SEE SHEET 38 FOR CONTINUATION



REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Agreed sheet)
9/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD MICHAEL GOMBER, P.L.A. LICENSE #41181

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

1890 Eller Drive, Suite 602, Fort Lauderdale, Florida 33316
Phone: (954) 921-3781 • Fax: (954) 921-8840
Certificate of Authorization LC066040337
VENDOR ID: #12 85/201-3818

USER: aperecdo

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
39

Michael P. K.
LA 1181
12-16-14

DECEMBER 16, 2014

1251



MATCH LINE - SEE SHEET 41 FOR CONTINUATION

12" CIP WM

12" CIP WM

2" SLEEVE
(DIRECTIONAL BORING)

323

324

322

9"x4" PVC BT



Mario R.C.
LX1181
12-16-14

DECEMBER 16, 2014

REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
9/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD: MICHAEL COOPER, R.L.A., LICENSE NO. 1181



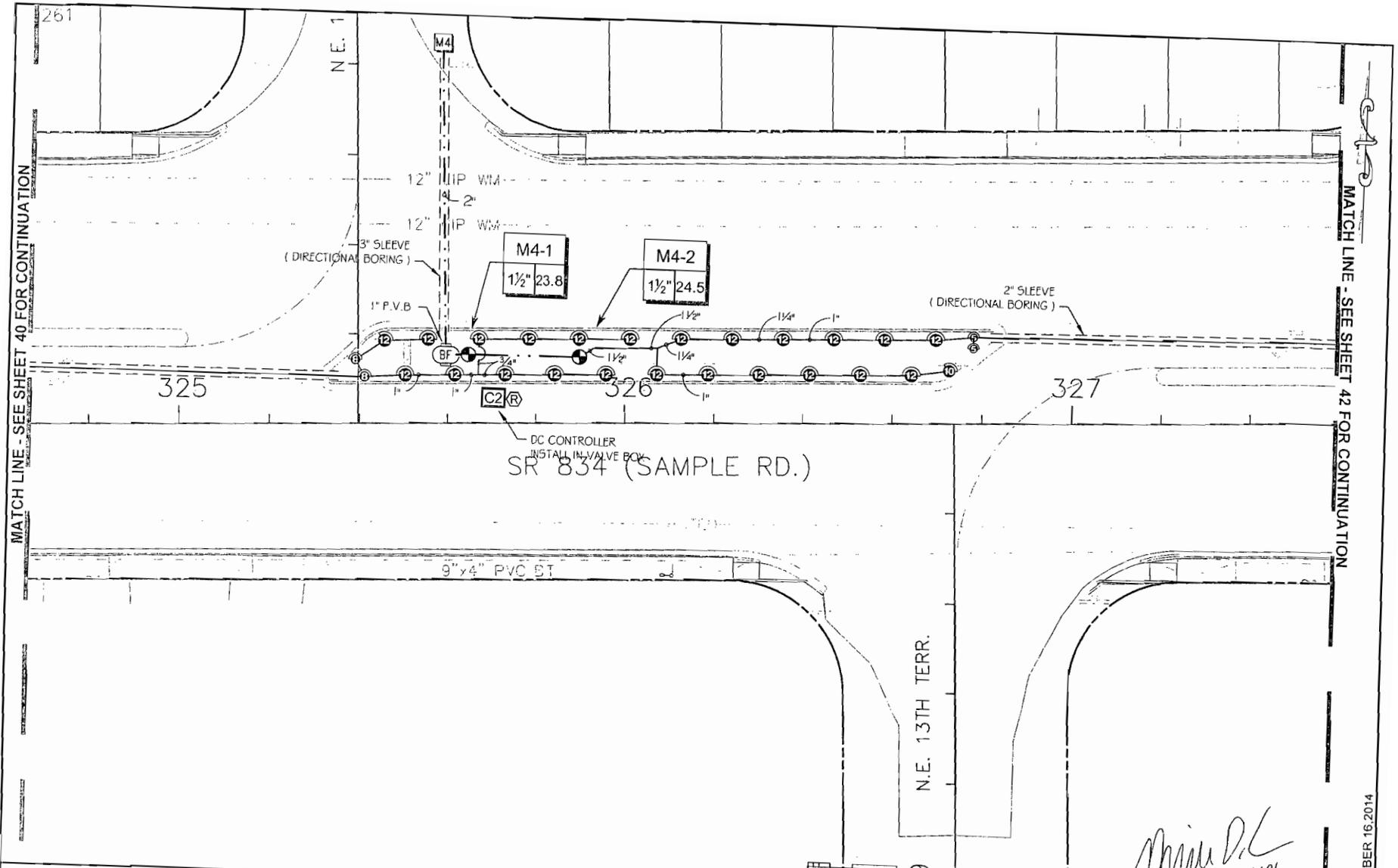
Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

1800 Ellar Drive, Suite 500, Fort Lauderdale, Florida 33316
Phone: 954-921-7781 • Fax: 954-921-8807
Certificate of Authorization: LC220200209
VENDOR ID: 907-18-501-2962

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
40



MATCH LINE - SEE SHEET 40 FOR CONTINUATION

MATCH LINE - SEE SHEET 42 FOR CONTINUATION

REVISIONS	
DATE	DESCRIPTION
3/7/11/14	Revised per PDD comments (Added sheet)
9/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD: LINCOLN GOODMAN R.L.A. LICENSE NO. 11181

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS™

1870 E. Dr. Drive, Suite 602, Fort Lauderdale, Florida 33316
Phone: 954.321.7781 • Fax: 954.921.4637
Certificate of Authorization LC060097332
4-12-2008 ID: 007 85-001-7400

USER: oparedo 12/16/2014 5:23:35 PM P:\Projects\2013\136147 Florida Highway Beautification Grant Application\CADD Files\Drawings\136147-L1101-IRRIGATION_PLANS.dwg

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
41

Mina P.C.
LX1191
12-16-14

DECEMBER 16, 2014

MATCH LINE - SEE SHEET 41 FOR CONTINUATION

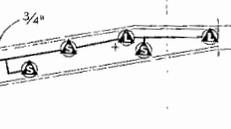
2 - 3.5" CEM DUCTS

12" CIP WM
12" CIP WM

328

2" SLEEVE
(DIRECTIONAL BORING)

329

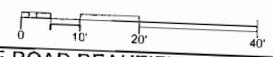


330

SR 834 (S)

8.4" PVC BT

Mini P.C.
LA 1181
12-16-14



DECEMBER 16, 2014

REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
09/28/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

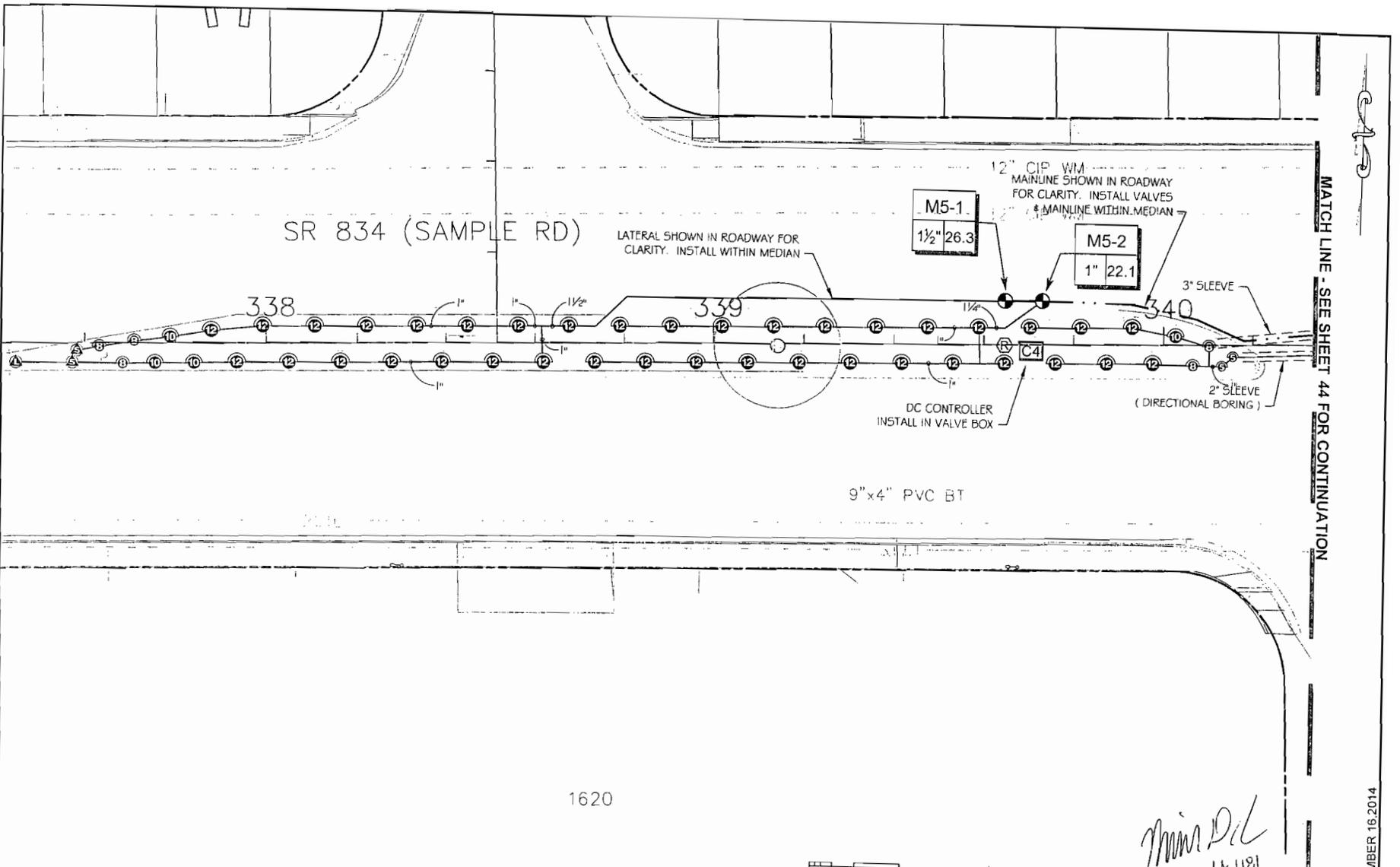


LANDSCAPE ARCHITECT OF RECORD: MICHAEL CONNER, R.L.A., LICENSE #611781
Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1800 Blue Emerald, Suite 801, Fort Lauderdale, Florida 33316
 Phone: 754-927-7781 • Fax: 754-927-8847
 Certificate of Authorization LC046009279
 VENDOR ID: NYS 8915631-7319
 USER: operado 12/16/2014 5:23:45 PM P:\Projects\2013\136147 Florida Highway Beautification Grant Application\CADD Files\Drawings\136147-LI01-IRRIGATION_PLANS.dwg

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO
42

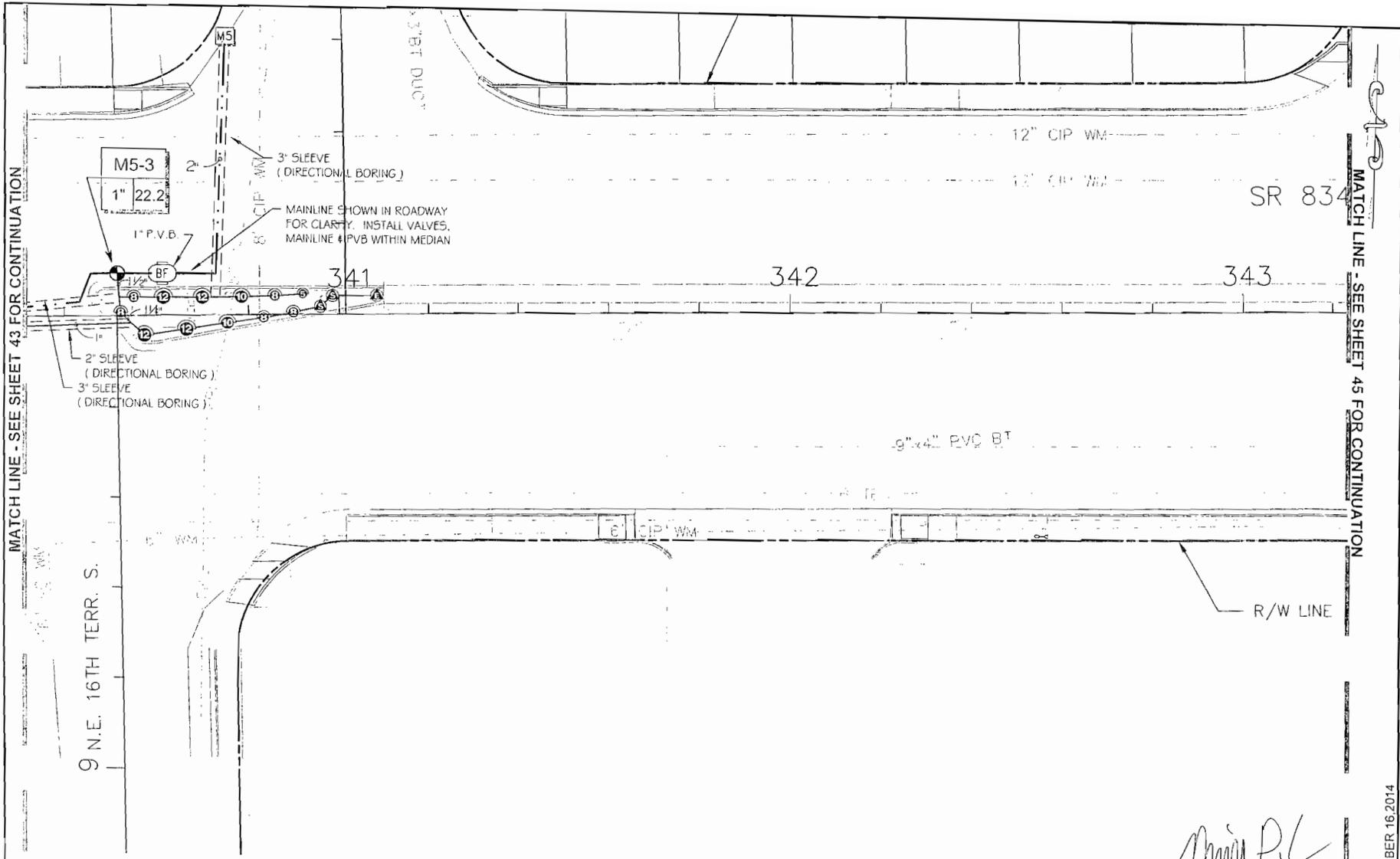


DECEMBER 16, 2014

REVISIONS		REVISIONS	
DATE	DESCRIPTION	DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)		
9/26/14	REVISIONS PER E.R.C. COMMENTS		
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT		

		LANDSCAPE ARCHITECT OF RECORD (LAWYER CORNER R.L.A. LICENSE #11181) Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1800 The Oaks, Suite 400, Fort Lauderdale, Florida 33316 Phone: 954 921 7291 • Fax: 954 921 8810 Certificate of Accreditation: LC00060203 VENDOR ID: 001 951001-0005 USER: cpareda 12/16/2014 5:23:55 PM P:\Projects\2013\136147 Florida Highway Beautification Grant Application\CADD Files\Drawings\136147-L1101-IRRIGATION_PLANS.dwg	
SAMPLE ROAD BEAUTIFICATION GRANT			
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
S.R. 834	BROWARD	435709-1-78-01	

IRRIGATION PLAN		SHEET NO.
		43



MATCH LINE - SEE SHEET 43 FOR CONTINUATION

MATCH LINE - SEE SHEET 45 FOR CONTINUATION

DECEMBER 16 2014

Handwritten signature: Maria P.L. written 12-16-14

REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
09/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

LANDSCAPE ARCHITECT OF RECORD: MICHAEL COVIER P.L.A. LICENSE NO. 1811

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

1800 NW Ocean Surf Blvd, Fort Lauderdale, Florida 33316
Phone: 954.951.7788 • Fax: 954.921.8855
CERTIFIED PROFESSIONAL ENGINEERING FIRM
REGISTERED NO. 283589-2005

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
44

TACO BELL

MATCH LINE - SEE SHEET 44 FOR CONTINUATION

MATCH LINE - SEE SHEET 46 FOR CONTINUATION

(SAMPLE RD) NO WORK IN THIS AREA

344

345

3" DIP



min DC
lt 11/1
12-16-14

DECEMBER 16, 2014

REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
9/26/14	REVISIONS PER E.R.C. COMMENTS
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT

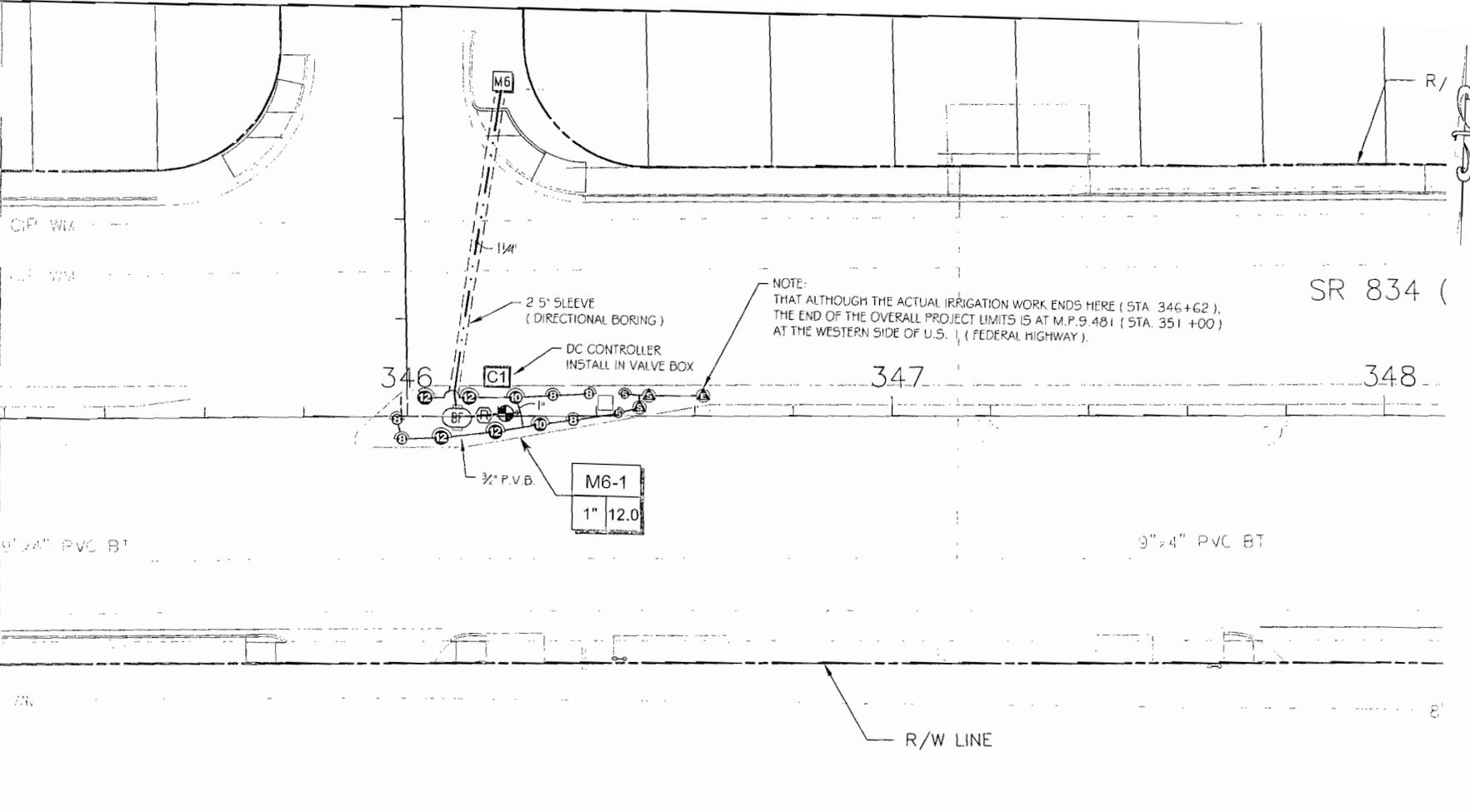
LANDSCAPE ARCHITECT OF RECORD: KIMMEL CORNER A.L.A. LICENSE #61181
Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1500 E. Bay Drive, Suite 600, Fort Lauderdale, Florida 33316
 Phone: (954) 921-7781 • Fax: (954) 921-8020
 Certificate of Authorization: EC000990370
 VENDOR ID: #03-68-001-21-09

SAMPLE ROAD BEAUTIFICATION GRANT		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

IRRIGATION PLAN

SHEET NO.
45

MATCH LINE - SEE SHEET 45 FOR CONTINUATION



REVISIONS	
DATE	DESCRIPTION
07/11/14	Revised per FDOT comments (Added sheet)
9/26/14	REVISIONS PER E.R.C. COMMENTS
0/31/14	SECOND REVISIONS PER E.R.C. COMMENT

UNDER THE ARCHITECT OF RECORD: VINCEY COOPER & L.A. LICENSE #AT1181

Calvin Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

14601 Ber Drive, Suite 100, Fort Lauderdale, Florida 33316
Phone: 954-921-1788 • Fax: 954-321-8857
Certificate of Authorization L006190330
VPE#001133 7/11/05 0211-3262

0 10' 20' 40'

SAMPLE ROAD BEAUTIFICATION GRANT

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
S.R. 834	BROWARD	435709-1-78-01

Min PC
LA 1181
12-16-14

IRRIGATION PLAN

SHEET NO. **46**

DECEMBER 16, 2014

KEYNOTE SCHEDULE

SYMBOL 32 EXTERIOR IMPROVEMENTS

3282-20

SLEEVE BELOW ALL HARDSCAPE ELEMENTS (PAVED SURFACES, PRIVATE ROADS, WALKS, CONCRETE PADS, PAVERS, ETC.) WITH HDPE DR 11. (THE SLEEVE DIAMETER SHALL BE A MINIMUM OF TWO PIPE SIZES LARGER THAN THE DIAMETER OF THE PIPE OR THE WIRE BUNDLE TRAVELING WITHIN IT. THE MINIMUM SLEEVE SIZE SHALL BE 2" INSIDE DIAMETER).

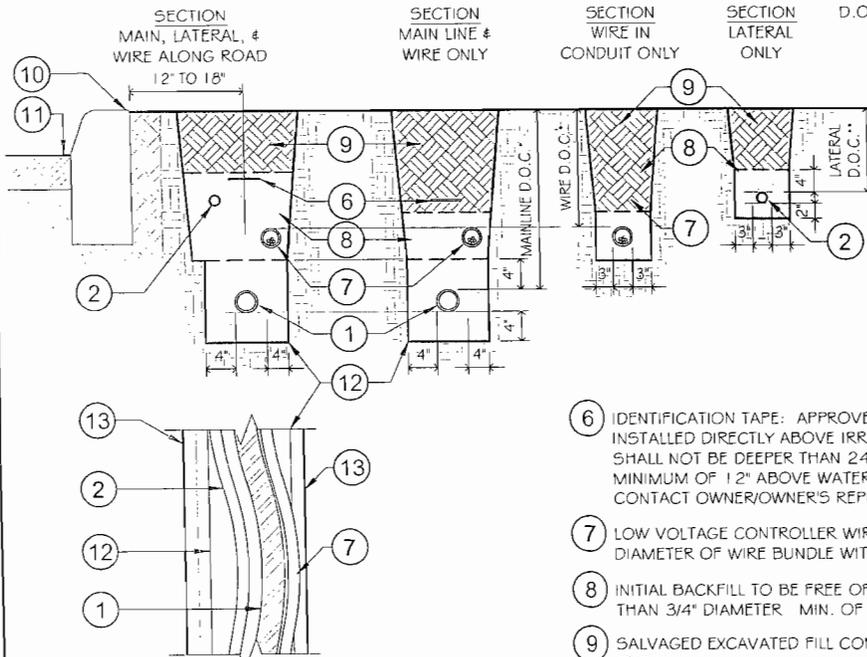
ALL ROADWAY CROSSINGS IN EXISTING PAVEMENT SHALL BE DIRECTIONAL BORING, UNLESS WRITTEN PERMISSION HAS BEEN GRANTED FOR ROADWAY CUTTING.

ALL SLEEVES SHALL BE CAPPED WITH A PVC SCH. 40 SLEEVE CAP, USE DUCT TAPE TO SECURE IN PLACE AND KEEP DEBRIS OUT. SPARE SLEEVES SHALL BE SEALED WITH PIPE JOINT CEMENT AND A PVC SCH. 40 SLEEVE CAP. IMMEDIATELY MARK SLEEVE LOCATION BY PLACING A 2" PVC SCH 40 PIPE (LENGTH EQUAL TO THE DEPTH OF COVER) VERTICALLY OVER SLEEVE END CAP WITH A YELLOW RAINBIRD 6300 PVC END CAP (FLUSH WITH FINISH GRADE & CEMENTED TO VERTICAL PVC PIPE).

3282-21

ALL IRRIGATION SLEEVES WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE INSTALLED AS PER FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS INDEX NO. 5911-LANDSCAPE IRRIGATION SLEEVES, AND INDEX NO. 17721-CONDUIT INSTALLATION DETAILS.

D.O.C. = DEPTH OF COVER, REFER TO TABLE BELOW.



- 1 IRRIGATION MAIN LINE
- 2 IRRIGATION LATERAL (SNAKE ALL SOLVENT WELD PLASTIC PIPE IN TRENCH, AS SHOWN)

- 6 IDENTIFICATION TAPE: APPROVED MAGNETIC TAPE SHALL BE INSTALLED DIRECTLY ABOVE IRRIGATION WATER MAIN. TAPE SHALL NOT BE DEEPER THAN 24" BELOW FINISHED GRADE WITH A MINIMUM OF 12" ABOVE WATER MAIN. CONTRACTOR SHALL CONTACT OWNER/OWNER'S REPRESENTATIVE FOR APPROVAL.
- 7 LOW VOLTAGE CONTROLLER WIRE IN CONDUIT (TWICE THE DIAMETER OF WIRE BUNDLE WITHIN)
- 8 INITIAL BACKFILL TO BE FREE OF ROCKS OR STONES LARGER THAN 3/4" DIAMETER. MIN. OF 4" COVER - TYPICAL
- 9 SALVAGED EXCAVATED FILL COMPACTED TO ORIGINAL DENSITY (TYP.)

- 10 BACK OF CURB (IN CASES WHERE NO CURB IS PRESENT CONTRACTOR SHALL KEEP MAIN LINE 12" - 18" FROM EDGE OF PAVEMENT)

- 11 PAVED VEHICULAR USE AREA
- 12 BOTTOM OF TRENCH
- 13 TOP OF TRENCH

PLAN VIEW
MAIN, LATERAL, & WIRE IN
SAME TRENCH ALONG ROAD

* MIN. DEPTH OF COVER FOR MAIN LINES

** MIN. DEPTH OF COVER FOR LATERAL LINES

PIPE SIZE (I.D.)	* MIN. DEPTH OF COVER FOR MAIN LINES		** MIN. DEPTH OF COVER FOR LATERAL LINES	
	MAIN LINES (ALL AREA)	WIRE & CONDUIT (ALL AREAS)	NON-TRAFFIC AREAS	VEHICULAR TRAFFIC AREAS
3/4" TO 1"			12"	36"
1 1/4" TO 2"			18"	36"
2 1/2" TO 3"	36"	30"	18"	36"
4" TO 5"			24"	36"
6" AND LARGER			30"	36"

NOTE: ALL PIPE BENEATH PAVED SURFACES MUST BE SLEEVED: 3282-20 3282-21

328020-04

2

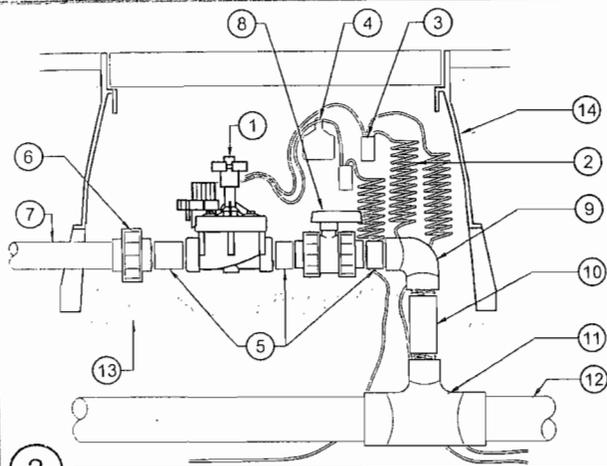
TYPICAL IRRIGATION TRENCH WITHIN R.O.W. DETAIL

N.T.S.

Handwritten signature: M.D.C. LA 1181

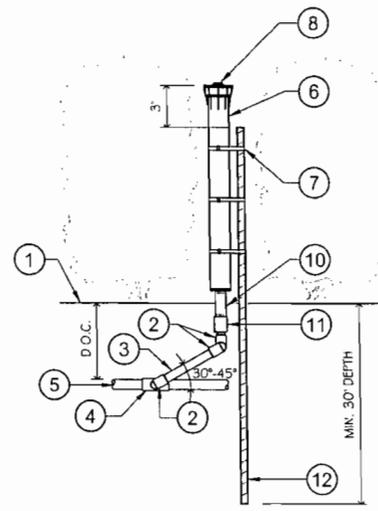
DECEMBER 16, 2014

REVISIONS		DATE	DESCRIPTION	LANDSCAPE ARCHITECT OF RECORD: UNLICENSED MEMBER, R.L.A. LICENSE NO. 1181 Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1800 Hill Drive, Suite 802E, Fort Lauderdale, Florida 33316 Phone: 954-551-7788 • Fax: 954-521-0027 Certificate of Authorization: LCA000003395 VENUEOR117 880 05-001-20-01	SAMPLE ROAD BEAUTIFICATION GRANT			SHEET NO
DATE	DESCRIPTION				ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
07/11/14	Revised per FDOT comments (Added sheet)				S.R. 834	BROWARD	435709-1-78-01	48
09/26/14	REVISIONS PER E.R.C. COMMENTS							
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT							



- 1 REMOTE CONTROL VALVE RAINBIRD PESB SERIES, SIZE PER PLAN & SCHEDULE
- 2 30-INCH LINEAR LENGTH OF CONTROL WIRE, COILED
- 3 WATERPROOF CONNECTION RAIN BIRD SPLICE-1 (1 OF 2)
- 4 ID TAG: RAIN BIRD VID SERIES
- 5 PVC SCHEDULE 80 NIPPLE (2" LENGTH) TYP.
- 6 PVC SCH 80 UNION (T&T)
- 7 LATERAL (SIZE PER PLAN)
- 8 TRUE UNION BALL VALVE (T&T)
- 9 PVC SCH 40 ELL
- 10 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- 11 PVC SCH 40 TEE OR ELL
- 12 PVC MAINLINE
- 13 DRAIN ROCK 12" MIN. DEPTH
- 14 IRRIGATION VALVE ENCLOSURE (MIN. 12X20 VEHICULAR RATED BOX & COVER)

3 GLOBE REMOTE CONTROL VALVE DETAIL



- CONTRACTOR SHALL USE THESE METHODS FOR INSTALLATION OF SPRAYS OR ROTARY SPRINKLERS WITHIN SHRUB BED AREAS.
- 1 FINISH GRADE
 - 2 1/2" HIGH DENSITY POLYETHYLENE (MARLEX) STREET ELL
 - 3 SCH 80 NIPPLE (LENGTH AS REQUIRED)
 - 4 SCH 40 LATERAL TEE (55T) OR ELL (5T), INSTALL THREAD OUTLET SIDEWAYS
 - 5 LATERAL PIPE
 - 6 POP-UP SPRAY BODY (SEE PLANS & SCHEDULE FOR TYPE)
 - 7 BLACK NYLON TIE STRAPS (TOTAL OF 3 PER RISER) EQUALLY SPACED
 - 8 SPRAY NOZZLE (PER PLAN & SCHEDULE)
 - 9 SHRUBS (REFER TO PLANTING PLAN & SCHEDULE FOR SHRUB MAINTAINED HEIGHT)
 - 10 PVC LVR ("BROWNLINER") SCH 80 NIPPLE (LENGTH AS REQUIRED)
 - 11 SCH 40 THREADED COUPLER
 - 12 3/4" PVC SCH 40 PIPE (PAINTED BLACK)

TYPICAL SWING JOINT (3-ELL OPTION)

NOTE: CONTRACTOR SHALL PROVIDE MANUFACTURER'S CUT SHEETS IF USING RE-MANUFACTURED SWING JOINTS, FOR APPROVAL PRIOR TO ORDERING.

4 328403.23-03 SHRUB 12" POP-UP ON RISER

N.1.5

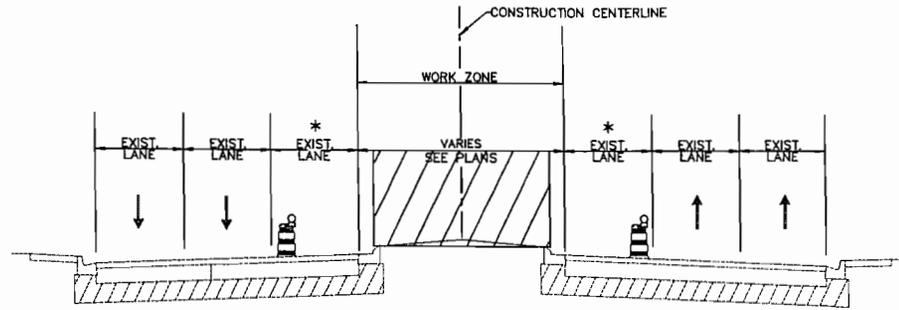
Mini P.C.
12-16-14
1181

DECEMBER 16, 2014

REVISIONS		REVISIONS		LANDSCAPE ARCHITECT OF RECORD: UNZEL COOPER, R.L.L.A. LICENSE NO. 13181	SAMPLE ROAD BEAUTIFICATION GRANT			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
07/11/14	Revised per FDOT comments (Added sheet)			 1870 E. Old Dixie, Suite 200, Fort Lauderdale, Florida 33316 Phone: 954-921-7791 • Fax: 954-921-8055 Certificate of Authorization LC20/66335 (RENEWED 12/30/2013)	S.R. 834	BROWARD	435709-1-78-01	IRRIGATION DETAILS 49
09/26/14	REVISIONS PER E.R.C. COMMENTS							
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT							

TRAFFIC CONTROL PLAN - GENERAL NOTES

- TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH LATEST FDOT DESIGN STANDARDS INDEX 600 SERIES, MUTCD 2009 AND PROJECT PLANS.
- THE REGULATORY SPEED LIMIT FOR S.R. 834/SAMPLE RD. DURING CONSTRUCTION SHALL BE MAINTAINED AT THE EXISTING POSTED SPEED LIMIT.
- EXISTING SIGNS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE PROJECT ADMINISTRATOR.
- THE CONTRACTOR SHALL PROVIDE A 24 HOUR EMERGENCY CONTACT NAME AND NUMBER.
- TRAFFIC AND TRAVEL WAYS SHALL NOT BE ALTERED BY THE CONTRACTOR TO CREATE A WORK ZONE UNTIL ALL LABOR AND MATERIALS ARE AVAILABLE FOR THE CONSTRUCTION OF THAT PARTICULAR AREA. ALL LANES OF TRAFFIC SHALL BE OPEN DURING INACTIVE WORK PERIODS. ALL WORK ZONE SIGNS SHALL BE COVERED PER INDEX 600 OR REMOVED DURING INACTIVE WORK PERIODS.
- FULL TIME FLORIDA CERTIFIED MOT SUPERVISOR SHALL BE ON SITE WHEN CONTRACTOR IS WORKING AND SHALL BE ON CALL FOR EMERGENCIES WHEN THE CONTRACTOR IS NOT WORKING. COPY OF HIS/HER CURRENT CERTIFICATION SHALL BECOME PART OF PROJECT FILE.
- ALL LANES ON S.R. 834/SAMPLE RD. MUST BE OPEN FOR TRAFFIC DURING AN EVACUATION NOTICE FOR A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT AS DIRECTED BY THE ENGINEER.
- WORK ZONE MAINLINE LANE CLOSURE TIME RESTRICTIONS:
 - NORMAL WORK HOURS WILL BE LIMITED TO MONDAY THROUGH FRIDAY FROM 9:00 AM TO 4:00 PM.
 - LANE CLOSURE WILL BE LIMITED TO EITHER THE LANE ADJACENT TO THE MEDIAN OR THE OUTSIDE BUT NOT BOTH AT ANY GIVEN TIME.
 - NO LANE CLOSURE ARE PERMITTED ON HOLIDAYS.
- AT THE DISCRETION OF THE ENGINEER, IF A LANE CLOSING CAUSES EXTENDED CONGESTION, THE CONTRACTOR SHALL BE DIRECTED TO REOPEN THE CLOSED LANE(S) UNTIL SUCH TIME AS TRAFFIC FLOW HAS RETURNED TO AN ACCEPTABLE LEVEL.
- THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT WITHIN THE CLEAR ZONE DURING CONSTRUCTION ACTIVITY PERIOD, THE CONTRACTOR SHALL LIMIT THE STORAGE OF MATERIAL AND EQUIPMENT TO THE WORK ZONE AREA.
- WHEN WORKING IN MEDIANS NEAR THE ENTRANCE OR EXIT TO I-95, STAGING AND CONSTRUCTION EQUIPMENT SHALL BE PLACED TO AVOID CLOSURE OF ANY LANES ON THE RAMPS FROM I-95.
- ARROWS IN TRAFFIC CONTROL PLAN DENOTE THE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS.



FOR WORK IN MEDIAN FOLLOW DESIGN STANDARD INDEXES 600, 613 AND 616.

WORK IN MEDIAN

* IF MEDIAN WORK OCCURS ADJACENT TO AN EXISTING LEFT TURN LANE, THE TAPER AND TURN LANE SHALL BE CLOSED AND THE INSIDE THROUGH LANE CAN REMAIN OPEN.

MAINTENANCE OF TRAFFIC SCHOOL/PEDESTRIAN NOTES

- ON DAYS THAT SCHOOL IS IN SESSION, THE CONTRACTOR'S WORK SCHEDULE WITHIN THE SCHOOL ZONE MAY BE REDUCED BASED ON ACTUAL WORK ACTIVITIES IN THE SCHOOL ZONE. ANY CHANGES IN THE MAINTENANCE OF TRAFFIC WORK SCHEDULES WITHIN SCHOOL ZONES SHOULD BE DISCUSSED DURING THE MANDATORY PRECONSTRUCTION SCHOOL SAFETY MEETING.
- ALL WORK REQUIRED AT DESIGNATED SCHOOL CROSSINGS AND PEDESTRIAN CROSSINGS SHALL BE RESTORED TO A SAFE WALKABLE PATH BETWEEN THE SCHOOL ZONE HOURS.
- THIRTY (30) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE SPECIAL PROJECTS COORDINATOR AT BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, (954) 847-2671, TO ARRANGE A PRE-CONSTRUCTION SCHOOL SAFETY MEETING.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE BROWARD COUNTY SCHOOL BOARD PUPIL TRANSPORTATION DEPARTMENT TO ARRANGE A PRE-CONSTRUCTION SCHOOL BUS ROUTE MEETING AT THE FOLLOWING:
 - RUTH MASTERS ROUTING (754) 321-4400 EXT. # 2309
ruthmasters@browardschools.com
 - VINCENT HARRELL STUDENT TRANSPORTATION & FLEET SERVICE (754) 321-4472
vincentharrell@browardschools.com
 - MARY TOCHTERMANN STUDENT TRANSPORTATION & FLEET SERVICE (754) 321-4400 EXT. # 2006
mary.tochtermann@browardschools.com

THIS MEETING IS TO DETERMINE ALL BUS ROUTES AND TO MAKE ANY NECESSARY ARRANGEMENTS OR REROUTING. THIS MEETING SHALL INCLUDE THE SPECIAL PROJECTS COORDINATOR FROM BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, (954) 847-2671.



DECEMBER 16, 2014

REVISIONS		ENGINEER OF RECORD	SAMPLE ROAD BEAUTIFICATION GRANT		TRAFFIC CONTROL PLAN	SHEET NO.
DATE	DESCRIPTION		DATE	DESCRIPTION		
07/11/14	Revised per FDOT comments (Added sheet)	<p>ENGINEER OF RECORD: JENNA REE MARTINETTI, P.E. LICENSE NO. 69035 Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1002 Eby Drive Suite 603 Ft. Lauderdale, Florida 33315 Phone: (954) 221-7241 • Fax: (954) 221-3657 Certificate of Registration: CCL000297 VERIFIED I.D. 11/05/2013-2014</p>	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	50
9/26/14	REVISIONS PER E.R.C. COMMENTS		S.R. 834	BROWARD	435709-1-78-01	
10/31/14	SECOND REVISIONS PER E.R.C. COMMENT					

EXHIBIT C

PERMIT REQUIREMENTS

1. The Project shall be designed and constructed in accordance with the latest edition of the DEPARTMENT'S Standard Specifications for Road and Bridge Construction and DEPARTMENT Design Standards and Manual of Uniform Traffic Control Devices ("MUTCD"). The following guidelines shall apply as deemed appropriate by the DEPARTMENT: the DEPARTMENT Structures Design Manual, AASHTO Guide Specifications for the Design of Pedestrian Bridges, AASHTO LRFD Bridge Design Specifications, the DEPARTMENT Plans Preparation Manual ("PPM") Manual for Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (the "Florida Green Book") and the DEPARTMENT Traffic Engineering Manual. The AGENCY will be required to submit any construction plans required by the DEPARTMENT for review and approval prior to any work being commenced. Should any changes to the plans be required during construction of the Project, the AGENCY shall be required to notify the DEPARTMENT of the changes and receive approval from the DEPARTMENT prior to the changes being constructed. The AGENCY shall maintain the area of the project at all times and coordinate any work needs of the DEPARTMENT during construction of the project.
2. The AGENCY shall notify the DEPARTMENT a minimum of 48 hours before beginning construction within DEPARTMENT right of way. The AGENCY shall notify the DEPARTMENT should construction be suspended for more than 5 working days. The DEPARTMENT contact person for construction is Vikrant Srivastava, located at 5548 N.W. 9th Avenue, Fort Lauderdale, Florida 33309, Telephone number (954)958-7657, Email address Vikrant.srivastava@dot.state.fl.us.
3. The AGENCY shall be responsible for monitoring construction operations and the maintenance of traffic ("MOT") throughout the course of the project in accordance with the latest edition of the DEPARTMENT Standard Specifications, section 102. The AGENCY is responsible for the development of a MOT plan and making any changes to that plan as necessary. The MOT plan shall be in accordance with the latest version of the DEPARTMENT Design Standards, Index 600 series. Any MOT plan developed by the AGENCY that deviates from the DEPARTMENT Design Standards must be signed and sealed by a professional engineer. MOT plans will require approval by the DEPARTMENT prior to implementation.
4. The AGENCY shall be responsible for locating all existing utilities, both aerial and underground, and for ensuring that all utility locations be accurately documented on the construction plans. All utility conflicts shall be fully resolved directly with the applicable utility.
5. The AGENCY will be responsible for obtaining all permits that may be required by other agencies or local governmental entities.

6. It is hereby agreed by the parties that this Agreement creates a permissive use only and all improvements resulting from this Agreement shall become the property of the DEPARTMENT. Neither the granting of the permission to use the DEPARTMENT right of way nor the placing of facilities upon the DEPARTMENT property shall operate to create or vest any property right to or in the AGENCY, except as may otherwise be provided in separate agreements. The AGENCY shall not acquire any right, title, interest or estate in DEPARTMENT right of way, of any nature or kind whatsoever, by virtue of the execution, operation, effect, or performance of this Agreement including, but not limited to, the AGENCY's use, occupancy or possession of DEPARTMENT right of way. The parties agree that this Agreement does not, and shall not be construed to, grant credit for any future transportation concurrency requirements pursuant to chapter 163, Florida Statutes.
7. The AGENCY shall perform all required testing associated with the design and construction of the project. Testing results shall be made available to the DEPARTMENT upon request. The DEPARTMENT shall have the right to perform its own independent testing during the course of the Project.
8. The AGENCY shall exercise the rights granted herein and shall otherwise perform this Agreement in a good and workmanlike manner, with reasonable care, in accordance with the terms and provisions of this Agreement and all applicable federal, state, local, administrative, regulatory, safety and environmental laws, codes, rules, regulations, policies, procedures, guidelines, standards and permits, as the same may be constituted and amended from time to time, including, but not limited to, those of the DEPARTMENT, applicable Water Management District, Florida Department of Environmental Protection, Environmental Protection Agency, the Army Corps of Engineers, the United States Coast Guard and local governmental entities.
9. If the DEPARTMENT determines a condition exists which threatens the public's safety, the DEPARTMENT may, at its discretion, cause construction operations to cease and immediately have any potential hazards removed from its right of way at the sole cost, expense, and effort of the AGENCY. The AGENCY shall bear all construction delay costs incurred by the DEPARTMENT.
10. The AGENCY shall be responsible to maintain and restore all features that might require relocation within the DEPARTMENT right of way.
11. The AGENCY will be solely responsible for clean up or restoration required to correct any environmental or health hazards that may result from construction operations.
12. The AGENCY will be required to maintain the Project until final acceptance by the DEPARTMENT. The acceptance procedure will include a final "walk-through" by AGENCY and DEPARTMENT personnel. Upon completion of construction, the AGENCY will be required to submit to the DEPARTMENT final as-built plans and an engineering certification that construction was completed in accordance to the plans. Submittal of the final as-built plans shall include one complete set of the signed and sealed plans on 11" X 17" plan sheets and an electronic copy prepared in Portable Document Format (PDF). Prior to the termination of this Agreement, the AGENCY shall remove its presence, including, but not limited to, all of the AGENCY's property, machinery, and equipment from DEPARTMENT right of way and shall restore those portions of DEPARTMENT right of way disturbed or

otherwise altered by the Project to substantially the same condition that existed immediately prior to the commencement of the Project.

13. If the DEPARTMENT determines that the Project is not completed in accordance with the provisions of this Agreement, the DEPARTMENT shall deliver written notification of such to the AGENCY. The AGENCY shall have thirty (30) days from the date of receipt of the DEPARTMENT'S written notice, or such other time as the AGENCY and the DEPARTMENT mutually agree to in writing, to complete the Project and provide the DEPARTMENT with written notice of the same (the "Notice of Completion"). If the AGENCY fails to timely deliver the Notice of Completion, or if it is determined that the Project is not properly completed after receipt of the Notice of Completion, the DEPARTMENT, within its discretion may: 1) provide the AGENCY with written authorization granting such additional time as the DEPARTMENT deems appropriate to correct the deficiency(ies); or 2) correct the deficiency(ies) at the AGENCY 's sole cost and expense, without DEPARTMENT liability to the AGENCY for any resulting loss or damage to property, including, but not limited to, machinery and equipment. If the DEPARTMENT elects to correct the deficiency(ies), the DEPARTMENT shall provide the AGENCY with an invoice for the costs incurred by the DEPARTMENT and the AGENCY shall pay the invoice within thirty (30) days of the date of the invoice.
14. The AGENCY shall implement best management practices for erosion and pollution control to prevent violation of state water quality standards. The PARTICIPANT shall be responsible for the correction of any erosion, shoaling, or water quality problems that result from the construction of the Project.
15. Portable Traffic Monitoring Site (PTMS) or a Telemetry Traffic Monitoring Site (TTMS) may exist within the vicinity of your proposed work. It is the responsibility of the AGENCY to locate and avoid damage to these sites. If a PTMS or TTMS is encountered during construction, the Planning and Environmental Management Office (PL&EM) must be contacted immediately at 954-777-4601.
16. During construction, highest priority must be given to pedestrian safety. If permission is granted to temporarily close a sidewalk, it should be done with the express condition that an alternate route will be provided, and shall continuously maintain pedestrian features to meet Americans Disability Act (ADA) standards.
17. Restricted hours of operation will be from 9:00am to 3:30 pm, (Monday-Friday), unless otherwise approved by the Operations Engineer, or designee.
18. Lane closures on the state road system must be coordinated with the Public Information Office at least two weeks prior to the closure. The contact information for the DEPARTMENT's Public Information Office is:

Barbara Kelleher
Florida Department of Transportation Public Information Office
3400 West Commercial Blvd.
Fort Lauderdale, Florida 33309
954-777-4090

EXHIBIT D
DELIVERABLES

***THE PARTICIPANT WILL NEED DEPARTMENT APPROVAL IF DEVIATING FROM THESE DELIVERIBLES AS SHOWN IN EXHIBIT B and D.**

PLEASE SEE ATTACHED

DELIVERABLES:

Sample Road - Florida Highway Beautification Council Grant

FPID # 435709-1-78-01

Date: 11/5/2014

<u>Item</u>	<u>Description</u>	<u>Estimated Qty.</u>	<u>Unit</u>
Mobilization / General Conditions	Mobilization / General Conditions	1	L.S.
M.O.T. / Traffic Control	Maintenance of Traffic	1	L.S.
Clearing & Bed Preparation	Removal of Existing Plants and Grass	1	L.S.
Soil Backfill	Furnish & Install Planting Soil	450	C.Y.
Landscape - Large Plants	Furnish & Install Trees and Palms	38	EACH
Bulnesia Tree	2"DBH 14' ht. x 6' spr.		
Silver Bismarkia Palm	14' o.a. ht.4'C.T.		
Solitaire Palm, Single	18' - 22' o.a ht., 12' - 16' c.t.		
Mongomery Palm, Single	18' - 22' o.a. ht., 12' -16' c.t.		
Live Oak Tree	3" DBH 18' ht. x 9' spr.		
Relocate 'Medjool' Date Palms	15' c.t.		
Landscape - Small Plants	Furnish & Install Shrubs / Gr. Covers	8254	EACH
'Green Island' Ficus	3 gal., 15" ht.x 15"spr, 24"o.c.		
Shrub Allamanda	3 gal., 24" ht.x 18" spr, 30"o.c.		
Sand Cordgrass	3 gal., 24" ht.x 24" spr, 24"o.c.		
'Queen Emma' Crinum Lily	3 gal., 24" ht.x 24" spr, 36"o.c.		
Bromeliads	3 gal., 15" ht.x 15"spr, 36"o.c.		
Gold Mound	3 gal., 18" ht.x 18"spr, 24"o.c.		
Fakahatchee Grass	3 gal., 24" ht.x 24" spr, 36"o.c.		
Dwarf Podocarpus 'Pringles'	3 gal., 12" ht. x 12" spr., 18" o.c.		
Dune Sunflower	1 gal., 12" ht. x 12" spr., 15" o.c.		
False/Mexican Heather	1 gal., 8" ht. x 10" spr., 15" o.c.		
Purple Queen	1 gal., 8" ht. x 8" spr., 15" o.c.		
Sod	Furnish & Install St. Augustine Sod	4,750	S.Y.
Irrigation	Install Irrigation System per Plans	1	L.S.

EXHIBIT D

LANDSCAPE MAINTENANCE MEMORANDUM OF AGREEMENT

PLEASE SEE ATTACHED

SECTION No.(s): 86028
S.R. No.(s): 834
FM No: 435709-1-78-01
COUNTY: BROWARD COUNTY

**DISTRICT FOUR (4) AMENDMENT NUMBER NINE (9) TO STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION LANDSCAPE INCLUSIVE
MEMORANDUM OF AGREEMENT**

THIS AMENDMENT Number Nine (9) to the Agreement dated December 5, 2007, made and entered into this _____ day of _____ 20____ by and between the State of Florida Department of Transportation hereinafter called the DEPARTMENT and the CITY OF POMPANO BEACH, a municipal subdivision of the State of Florida, hereinafter called the AGENCY.

W I T N E S S E T H

WHEREAS, the parties entered into the Landscape Inclusive Maintenance of Agreement dated, December 5, 2007 for the purpose of maintaining the landscape improvements by the AGENCY on various roads including State Road 834 (Sample Road); and,

WHEREAS, the DEPARTMENT and the AGENCY have agreed to add additional landscape to be installed on State Road 834 (Sample Road) in accordance with the above referenced Agreement; and,

WHEREAS, the AGENCY by Resolution No. _____ dated _____, attached hereto and by this reference made a part hereof, desires to enter into this Agreement and authorized its officers to do so; and,

NOW THEREFORE, for and in consideration of mutual benefits that flow each to the other, the parties covenant and agree as follows:

1. Pursuant to paragraph 12 of the Landscape Inclusive Maintenance Memorandum of Agreement for State Road 834 dated December 5, 2007, the DEPARTMENT will allow the AGENCY to construct additional landscape improvements or to modify an improvement located as indicated in **Exhibit "A"**, State Road 834 from Military Trail (M.P. 7.116) to State Road 5 (US 1) (M.P. 9.481). In accordance with the plans attached as **Exhibit "B"**.
2. The AGENCY shall agree to maintain the additional landscape improvements in the Agreement described above according the **Exhibit "C"** Maintenance Plan, attached to this Amendment.
3. The DEPARTMENT intends to enter into a separate contract with the AGENCY to have installed said landscape improvements for an approximate amount as indicated in **Exhibit "D"** not to exceed **\$306,011**.

Except as modified by this Amendment, all terms and conditions of the original Agreement and all Amendments thereto shall remain in full force and effect.

LIST OF EXHIBITS

- Exhibit A - Landscape Improvements Limits and Maintenance Boundaries and Location Map
- Exhibit B - Landscape Improvement Plans
- Exhibit C - Maintenance Plan Landscape Improvements
- Exhibit D - Approximate Cost For Landscape Improvements Under Separate Proposed JPA Agreement

In Witness whereof, the parties hereto have executed with this Amendment effective the ____ day _____ year written and approved.

POMPANO BEACH

By: _____
Chairperson/Mayor/Manager

Attest: _____(SEAL)
Clerk

Legal Review Date

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

By: _____
Transportation Development Director

Attest: _____(SEAL)
Executive Secretary

Legal Review Date

Office of the General Counsel

SECTION No.(s): 86028
S.R. No.(s): 834
FM No: 435709-1-78-01
COUNTY: BROWARD COUNTY

EXHIBIT A

**LANDSCAPE IMPROVEMENTS PROJECT LIMITS
MAINTENANCE BOUNDARIES LIMITS AND LOCATION MAP**

- I. **LANDSCAPE PROJECT LIMITS:**
State Road 834 (Sample Road) from Military Trail (M.P. 7.116) to State Road 5 (US 1) (M.P. 9.481)

- II. **INCLUSIVE LANDSCAPE MAINTENANCE AGREEMENT LIMITS:**
State Road 834 (Sample Road) from (M.P. 5.030) (Turripike) to State Road 5 (US 1) (M.P. 9.481)

- III. **MAINTENANCE BOUNDARY LIMITS MAP:**

*All limits of the original agreement and amendments shall apply

Please See Attached

SECTION No.(s): 86028
S.R. No.(s): 834
FM No: 435709-1-78-01
COUNTY: BROWARD COUNTY

EXHIBIT B
LANDSCAPE IMPROVEMENT PLANS

The AGENCY agrees to install the landscape improvements in accordance with the plans and specifications attached hereto and incorporated herein.

Please see attached plans prepared by: Michael D. Conner RLA
Calvin & Giordano
Date: December 16, 2014

Sheets 0-50

SECTION No.(s): 86028
S.R. No.(s): 834
FM No: 435709-1-78-01
COUNTY: BROWARD COUNTY

EXHIBIT C
LANDSCAPE IMPROVEMENT MAINTENANCE PLANS

MAINTENANCE PLAN

Landscape Improvements

Project State Road No(s): State Road 834 (Sample Road)
Project Limits: From Military Trail (M.P. 7.116) to State Road 5 (US 1) (M.P. 9.481)
FM No(s): 435709-1-78-01
Maintaining Agency: City of Pompano Beach
RLA of Record: Michael D. Conner (LA0001181)
Date: September 25, 2014

I. GENERAL MAINTENANCE REQUIREMENTS AND RECOMMENDATIONS:

The purpose of a plan for the landscape improvements maintenance practices is to allow the plant material on your project to thrive in a safe and vigorous manner while fulfilling their intended purpose and conserving our natural resources. Plantings and all other landscape improvements shall be maintained to avoid potential roadway hazards and to provide required clear visibility, accessibility, clearance, and setbacks as set forth by Florida Department of Transportation (FDOT) governing standards and specifications: *FDOT Design Standards, FDOT Plans Preparation Manual Vol. 1, Chapter 2.11* and *FDOT Standard Specifications for Road and Bridge Construction*, as amended by contract documents, and all other requirements set forth by the District 4 Operations Maintenance Engineer. The initial portion of the Maintenance Plan describes general maintenance requirements and recommendations. The concluding section provides recommendations prepared by the Registered Landscape Architect of Record specific to the attached approved plans.

WATERING REQUIREMENTS

Watering is a critical concern for not only the maintenance of healthy plant material but also for observing water conservation practices. The amount of water to apply at any one time varies with the weather, drainage conditions and water holding capacity of the soil. For plant materials that have been established, it is imperative that any mandated water restrictions be fully conformed to on FDOT roadways.

Proper watering techniques should provide even and thorough water dispersal to wet the entire root zone, but not saturate the soil or over-spray onto travel lanes.

IRRIGATION SYSTEM

The Agency shall ensure there are no roadway overspray or irrigation activities during daytime hours (most notably "rush hour" traffic periods). It is imperative the irrigation controller is properly set to run early enough that the watering process will be entirely completed before high traffic periods, while adhering to mandated water restrictions. To ensure water conservation, the Agency shall monitor the system for water leaks and the rain sensors to ensure they are functioning properly so that the system shuts down when there is sufficient rainfall.

INTEGRATED PLANT MANAGEMENT

An assessment of each planting area's soil is recommended to periodically determine the nutrient levels needed to sustain healthy, vigorous plant growth.

Palms, shrubs, trees and turf areas shall be fertilized in such a manner and frequency to ensure that the plant material remains healthy and vigorously growing. Establishment of an integrated pest management program is encouraged to ensure healthy plants, which are free of disease and pests.

MULCHING

Mulch planting beds in such a manner as to prevent weed growth, retain moisture to the plants, protect against soil erosion and nutrient loss, maintain a more uniform soil temperature, and improve the appearance of the planting beds. Avoid mulch mounded up on the trunks of trees, palms, and the base of shrubs to encourage air movement in this area which aids in lowering disease susceptibility. Cypress mulch is prohibited on state right of way.

PRUNING

All pruning, and the associated safety criteria, shall be performed according to American National Standard Institute (ANSI) A300 standards and shall be supervised by an International Society of Arboriculture (ISA) Certified Arborist. Pruning shall be carried out with the health and natural growth of plant materials in mind, to specific pruning heights maintaining clear visibility for motorists, and provide vertical clearance for pedestrian, bicyclist, and truck traffic where applicable. Visibility windows must be maintained free of view obstructions, and all trees and palms must be maintained to prevent potential roadway and pedestrian hazards, all palms are to be kept fruit free. The specific pruning heights are determined by understanding the designer's intent when selecting and placing the plants. The intended mature maintained height and spread of plants are noted on the plans (See Exhibit B.) and see Part II. Specific Requirements and Recommendations for guidelines. The understory plant materials selected for use within the restricted planting areas (Limits of Clear Sight) are to be maintained at a height in compliance with *FDOT Design Standards* Index 546; Page 6 of 6, Window Detail. Vertical tree heights must meet *FDOT Maintenance Rating Program* (MRP) standards.

STAKING AND GUYING

All staking materials, except for replacements, are to be removed by the completion of FDOT warranty period or at one year (whichever comes first). Any subsequent staking and guying activities by the Agency must adhere to *FDOT Design Standards* guidelines (See Index 544). The Agency shall closely monitor staking and guying attachment materials so that they are securely fastened to avoid potential roadway hazards.

TURF MOWING:

All grassed areas are to be mowed and trimmed with sufficient frequency to maintain a deep, healthy root system while providing a neat and clean appearance to the urban landscape. All turf efforts, mowing, curb/sidewalk edging and turf condition, must at a minimum, meet *FDOT Maintenance Rating Program* (MRP).

LITTER CONTROL:

The project site shall remain as litter free as practicable. It is recommended to recycle this litter to avoid unnecessary waste by its reuse. Litter removal efforts must meet *FDOT Maintenance Rating Program (MRP)* standards.

WEEDING/HERBICIDE

All planting areas shall be maintained as weed free as practicable by enlisting integrated pest management practices in areas specified on the plans and maintaining proper mulch levels. Extreme care is recommended if using a chemical herbicide to avoid overspray onto plant materials. It is the applicator's responsibility to restore any damage, resulting from overspray to the plantings, per the approved plans.

PLANT REPLACEMENT

Plant replacement shall be the same species and specification as the approved plan. Move and replace all plant materials that may conflict with utility relocations and service. Only plants graded Florida #1 or better, per the *Florida Department of Agriculture and Consumer Services, Grades and Standards for Nursery Plants* are permitted on FDOT roadways. Should it become necessary to change the species, a general use permit is required from FDOT for approval by the FDOT District Landscape Architect.

HARDSCAPE (SPECIALTY SURFACING)

All tree grates and specialty surfacing (if applicable) shall be maintained in such a manner as to prevent any potential tripping hazards and protect damage to the pavers and tree grates. Final surface tolerance from grade elevations shall, at a minimum, meet the most current *Interlocking Concrete Pavement Institute (ICPI), Guide Specifications for Pavers on an Aggregate Base, Section 23 14 13 Interlocking Concrete Pavers, Part 3.05*. If the specialty surfacing or tree grates become damaged, they shall be replaced with the same type and specification as the approved plan.

HARDSCAPE (NON-STANDARD) TRAVELWAY SURFACING

It shall be the responsibility of the AGENCY to restore an unacceptable ride condition of the roadway, including asphalt pavement (if applicable), caused or contributed by the installation or failure of non-standard surfacing, and/or the header curb, on the Department of Transportation right-of-way within the limits of this Agreement. Pavement restoration areas or "patches" will have a minimum length of 10-ft, measured from the edge of the header curb, and a width to cover full lanes for each lane affected by the restoration.

Pavement restoration will be performed in accordance with the most current edition of the *FDOT Standard Specifications for Road and Bridge Construction*, and the *FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System*.

It shall be the responsibility of the AGENCY to maintain all signs located within a non-standard surfacing area. Such maintenance to be provided by the AGENCY shall include repair and replacement of the sign panel, post, and base.

HARDSCAPE (LANDSCAPE ACCENT LIGHTING)

Landscape accent lighting shall be maintained in such a manner as to prolong the life of the lighting fixture and prevent potential safety hazards. If the lighting fixtures and their system

become damaged, they shall be replaced with the same type and specification as the approved plan. Landscape lighting shall meet requirements for the sea turtle nesting and hatching.

MAINTENANCE OF TRAFFIC CONTROL

Reference the FDOT website regarding the selection of the proper traffic control requirements to be provided during routine maintenance and / or new installations of this DOT roadway.

VEGETATION MANAGEMENT AT OUTDOOR ADVERTISING (ODA)

To avoid conflicts with permitted outdoor advertising, please reference the State of Florida website regarding the vegetation management of outdoor advertising. This website provides a portal to search the FDOT Outdoor Advertising Inventory Management System Database. The database contains an inventory of outdoor advertising structures, permits and other related information maintained by the Department.

Also, reference the *Florida Highway Beautification Program* website link for "Vegetation Management at ODA signs" "Florida Statutes" and "Florida Administrative Code" related to vegetation management at outdoor advertising sign, permit applications for vegetation management and determining mitigation value of roadside vegetation.

II. SPECIFIC PROJECT SITE MAINTENANCE REQUIREMENTS AND RECOMMENDATIONS

The only specific maintenance requirements for the planting design for this project, other than those outlined and specified in Part I, are as follows:

1. The Shrub Allamanda shall be maintained at maximum height of 36".
2. The Crinum Lilies, Fakahatchee Grass, and Sand Cordgrass do not need to be pruned or trimmed back. They are located in areas that do not have sight distance restrictions, and therefore can be left natural. They should be self-heading at about 36" height. However, the Fakahatchee Grass and Sand Cordgrass may be headed back once in the spring, if desired.
3. Likewise, the Bromeliads do not need to be trimmed back necessarily, in order to keep them at about 30" height. They are located in areas that do not have sight distance restrictions, and therefore can be left natural. If an individual plant does get too large, then it should be removed completely, not just trimmed back.
4. The Gold Mound and Green Island Ficus, while not located within any sight distance restricted area, shall be maintained at a maximum height of 24" and 18" respectively.
5. The plant materials that are located within sight distance restrictions are the Dwarf Podocarpus 'Pringles', Dune sunflower, False/Mexican Heather, and Purple Queen. They shall be kept at a maximum height of 15" to 18".

REFERENCES

This reference list is provided as a courtesy. The list may not contain the most current websites. The most current references must be accessed for up to date information.

Accessible Sidewalk (ADA)

<http://www.access-board.gov/guidelines-and-standards/streets-sidewalks>

Americans with Disabilities Act (ADA) (ADAAG)

http://www.ada.gov/2010ADAstandards_index.htm

American National Standard Institute, *ANSI A300, (Part 1) for Tree Care Operations – Trees, Shrub, and Other Woody Plant Maintenance – Standard Practices (Pruning)*, available for purchase

<http://webstore.ansi.org>

Florida Department of Agriculture and Consumer Services, Division of Plant Industry, *Florida Grades and Standards for Nursery Plants*

<http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Bureaus-and-Services/Bureau-of-Plant-and-Apiary-Inspection/Plant-Inspection#pubs>

Florida Department of Business & Professional Regulation (DBPR), Florida Building Commission, 2012 Florida Accessibility Code for Building and Construction

[http://www.floridabuilding.org/fbc/committees/accessibility/aac/Changes to Law/Florida Accessibility Code 2012 ICC FINAL.pdf](http://www.floridabuilding.org/fbc/committees/accessibility/aac/Changes%20to%20Law/Florida%20Accessibility%20Code%202012%20ICC%20FINAL.pdf)

Florida Department of Transportation, *FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 544 Landscape Installation*

<http://www.dot.state.fl.us/rddesign/DS/15/IDx/00544.pdf>

Florida Department of Transportation, *FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 546 Sight Distance at Intersections*

<http://www.dot.state.fl.us/rddesign/DS/15/IDx/00546.pdf>

Florida Department of Transportation, *FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 600 Traffic Control through Work Zones*

<http://www.dot.state.fl.us/rddesign/DS/15/IDx/00600.pdf>

Florida Department of Transportation, *FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 700 Roadside Offsets*

<http://www.dot.state.fl.us/rddesign/DS/15/IDx/00700.pdf>

Florida Department of Transportation, *FDOT Plans Preparation Manual (PPM) Vol. I Chapter 2.11 Horizontal Clearance*

Table 2.11.5 Horizontal Clearance to Trees

Table 2.11.11 Recoverable Terrain

<http://www.dot.state.fl.us/rddesign/PPMManual/2014PPM.shtm>

Florida Department of Transportation, *FDOT Standard Specifications for Road and Bridge Construction, Section 580 Landscape Installation*

<http://www.dot.state.fl.us/specificationsoffice/Maintenance/Jan15/Files/SS5800000.doc>

Florida Department of Transportation, Landscape Architecture Website

www.MyFloridaBeautiful.com

Florida Department of Transportation, *Maintenance Rating Program Handbook*

<http://www.dot.state.fl.us/statemaintenanceoffice/MaintRatingProgram.shtm>

Florida Department of Transportation Outdoor Advertising Database

<http://www2.dot.state.fl.us/rightofway/>

Florida Exotic Pest Plant Council Invasive Plant Lists

<http://www.fleppc.org/list/list.htm>

Florida Irrigation Society

<http://www.fisstate.org>

Florida Power and Light (FPL), *Plant the Right Tree in the Right Place*

http://www.fpl.com/residential/trees/right_tree_right_place.shtml

A Guide to Roadside Vegetation Management

[http://www.dot.state.fl.us/statemaintenanceoffice/DOT%20Final%20\(3\)Turf%20Management%20Guide%20UF.pdf](http://www.dot.state.fl.us/statemaintenanceoffice/DOT%20Final%20(3)Turf%20Management%20Guide%20UF.pdf)

Interlocking Concrete Pavement Institute (ICPI)

<http://www.icpi.org/>

International Society of Arboriculture (ISA)

www.isa-arbor.com

UF IFAS: *Selecting Tropical and Subtropical Tree Species for Wind Resistance*

<http://edis.ifas.ufl.edu/pdf/FR/FR17500.pdf>

U.S. Department of Transportation, Federal Highway Administration, *Manual on Uniform Traffic Control Devices*

<http://www.mutcd.fhwa.dot.gov>

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S.R. No.(s): 834
FM No: 435709-1-78-01
COUNTY: BROWARD COUNTY

EXHIBIT D

**APPROXIMATE COST FOR LANDSCAPE IMPROVEMENTS UNDER SEPARATE
PROPOSED JPA AGREEMENT**

This Exhibit forms an integral part of the DISTRICT FOUR (4) LANDSCAPE MAINTENANCE MEMORANDUM OF AGREEMENT between the State of Florida, Department of Transportation and the AGENCY.

\$306,011.00