Hacienda Lakes Community Development District

707 Orchid Drive, Naples, FL 34102
P. 239-269-1341

BOARD OF SUPERVISORS
HACIENDA LAKES COMMUNITY
DEVELOPMENT DISTRICT

Monday, January 11, 2021, 9:00 a.m.
4001 Tamiami Trail North, Suite 300
Naples, Florida 34103

I. Roll Call.

II. Public Comments on Agenda Items

III. Organizational Matters:

None to report at this time.

IV. Administrative Matters

A.	Consideration of Interlocal Landscape Agreement with Collier County	Exhibit 1
B.	Consideration of Interlocal Bridge and Landscape Improvements Turnover with Collier County	Exhibit 2
C.	Consideration of Sapphire Cove Lake Turnover to District	Exhibit 3
D.	Consideration of Sapphire Cove Lake Permit	Exhibit 4
E.	Consideration of Northeast Lake Deed from 2016	Exhibit 5
F.	Consideration of O&M Special Assessment Maintenance for Commercial Entry Road on South Side of Rattlesnake Hammock Road	Exhibit 6
G.	E-Verify Memorandum of Understanding	Exhibit 7
H.	Approval of Minutes from the November 16, 2020 Landowner Meeting	Exhibit 8
I.	Approval of Minutes from the November 16, 2020 General Meeting	Exhibit 9

V. Business Matters

None to report at this time.

VI. Financial Matters

A. Acceptance of the December 2020 Financial Statements Exhibit 10

VII. Staff Reports.

A. Manager.

B. Legal Counsel

C. Engineer

VIII. Public Comments

IX. Supervisors' Requests

X. Adjournment

EXHIBIT 1

EXECUTIVE SUMMARY

Recommendation that the Board approves and authorizes the Chairman to sign a Collier County Landscape Maintenance Agreement ("Agreement") between Collier County and Hacienda Lakes Community Development District, for landscape and irrigation improvements within the Rattlesnake Hammock Road between Collier Boulevard and Hacienda Boulevard public right-of-way.

OBJECTIVE: That the Board of County Commissioners (Board) approves and authorizes the Chairman to sign the attached Collier County Landscape Maintenance Agreement permitting landscaping and irrigation improvements within the County right-of-way and ensuring that Hacienda Lakes Community Development District, will maintain improvements accordingly.

CONSIDERATIONS: Collier County was approached by the Hacienda Lakes LLC on behalf of the Hacienda Lakes Community Development District to install landscaping and irrigation within the Rattlesnake Hammock Road between Collier Boulevard and Hacienda Boulevard public right-of-way in two separate phases. Pursuant to the attached Landscape Maintenance Agreement, the Hacienda Lakes Community Development District agrees to maintain the landscaping and irrigation improvements along Rattlesnake Hammock Road, as depicted in Schedule A and in accordance with the specifications in Schedule B. Rights to terminate the Agreement are spelled out in the attached Agreement.

FISCAL IMPACT: There is no cost to Collier County associated with this proposal. The Hacienda Lakes Community Development District is responsible for all recording fees.

GROWTH MANAGEMENT IMPACT: There is no growth management impact associated with this Executive Summary.

LEGAL CONSIDERATIONS: This item has been reviewed by the County Attorney, is approved as to form and legality, and requires majority vote for approval.

RECOMMENDATION: To sign a Collier County Landscape Maintenance Agreement between Collier County and Hacienda Lakes Community Development District, for landscaping and irrigation improvements within the Rattlesnake Hammock Road between Collier Boulevard and Hacienda Boulevard public right-of-way.

Prepared By: Pamela Lulich, PLA, Landscape Operations Manager, Growth Management Department, Road Maintenance Division

LANDSCAPE MAINTENANCE AGREEMENT

This Landscape Maintenance Agreement is entered into this _____ day of _____ , 2021, by and between Collier County, Florida, a political subdivision of the State of Florida whose mailing address is 3299 Tamiami Trail East, Naples, FL 34112 (hereinafter referred to as the "County"), and Hacienda Lakes Community Development District, whose mailing address is c/o District Manager, Real Estate Econometrics, Inc., 707 Orchid Drive, Suite 100, Naples, FL 34102 (hereinafter referred to as the "District").

RECITALS:

WHEREAS, County is the owner of that certain right-of-way located in Collier County, Florida and known as Rattlesnake Hammock Road between Collier Boulevard and Hacienda Boulevard (hereinafter referred to as "Road"); and

WHEREAS, Section I. Planning and Development, of the handbook titled "Collier County Landscape and Irrigation Specifications for Beautification Improvements Within the Public Right-of-Way, Collier County, Florida" (2009), provides as follows:

> *Entities desiring to make landscape improvements within public road right-of-way shall submit plans and documentation consistent with the requirements for a public right-of-way permit. This submission shall be in accordance with the "Construction Standards Handbook for Work within the Public Right-of-Way, Collier County, Florida" (the "Construction Handbook").*
>
> * * *
>
> *Landscaping Permit Within the public rights of way:*
>
> *Improvements to unimproved medians in the right of way: A private owner, Developer or civic or homeowners' association desiring to landscape within a public right-of-way shall submit landscape and irrigation construction documents prepared by a licensed landscape architect for County review. The Permit application shall include three (3) sets of detailed plans indicating the existing right-of-way facilities and the type and location of the proposed plantings, location of electrical and irrigation systems(s). After acceptance of the landscape and irrigation plans, a landscape agreement shall be prepared by the contracting parties and approved by the County attorney's office. (See Appendix for example) The purpose of the landscape agreement is to ensure that the Permittee, or his successors or assign, shall be responsible to maintain such material and irrigation system until removed or unless otherwise specified*; and

WHEREAS, in keeping with the above, SDPA PL20120001222 and PPLPL20130000589 include landscape and irrigation construction documents prepared by a licensed landscape architect for County review. A copy of these Permits and the plans are attached hereto as Schedule "A." The District shall follow the Collier County Maintenance specifications attached as Schedule "B."

NOW, THEREFORE, in consideration of the covenants contained herein, the parties agree as follows:

1. Subject to the issuance of all necessary Permits, County hereby grants to the District the right to use those portions of the Road depicted in Schedule "A," for the sole purpose set forth in Schedule "A." The Permits address, among other things, the timing of the work, maintenance of traffic flow during construction, and the permissible lane closures during the time that work is to be performed.

2. The District agrees to construct and maintain the improvements set forth in Schedule "A" (hereinafter referred to as "Improvements") at its sole cost and expense, until such time as the County executes a release from indemnification as discussed below.

3. Should the District fail to construct or maintain the Improvements in accordance with Schedule "A" or law, the County may provide notice to the District in writing, specifying the nature of the deficiency. Within five working days following receipt of such notice, the District at its sole cost shall cause the appropriate repairs or cure to be effected. In the event damage to, or failure to maintain the Improvements results in a situation where public safety is at risk, (1) the District shall effect repairs within twenty-four hours of receipt of the County's written notice, or (2) the County may, at its option, effect repairs to the Improvements, without the need for prior notice to the District, and will promptly bill the District for all actual costs incurred in effecting the repairs. The District shall reimburse the County for such costs within thirty days of receipt of the County's bill.

4. The District, as Indemnitor hereunder, shall indemnify and save harmless the County, as Indemnitee hereunder, including all employees of the County, from any loss or damages Indemnitee may suffer as a result of claims, suits, demands, damages, losses, fines, penalties, interest, expenses, costs, or judgments, including attorneys' fees and costs of litigation, against the County arising out of the District's use of the Road for the purposes set forth in this Agreement, including the construction and removal of the Improvements. The Indemnitee shall not undertake to settle any lawsuit or threatened lawsuit that could give rise to Indemnitor's obligation hereunder without the prior consent of Indemnitor, such consent to not be unreasonably withheld. It is acknowledged that the District's liability under the foregoing indemnity shall only be to the extent the County would be liable under statutory limited waiver of immunity or limits of liability that have been adopted by the Florida Legislature in Section 768.28, Florida Statutes, or other applicable statute. Notwithstanding the foregoing, nothing in this Agreement shall be deemed as a waiver of immunity or limits of liability of the District or the County beyond any statutory limited waiver of immunity or limits of liability that may have been adopted by the Florida Legislature in Section 768.28, Florida Statutes, or other statute, and nothing in this Agreement shall inure to the benefit of any third party for the purpose of allowing any claim that would otherwise be barred under the Doctrine of Sovereign Immunity or by operation of law.

5. The indemnity provided for by this Agreement will extend from the date of this Agreement until such time as the parties hereto acknowledge in writing that the District has ceased to use the Road for the purposes stated within this Agreement and the Road has been restored as

set forth below, at which time, following receipt of the District's written request, the County will execute a release from indemnification in favor of the District.

6. Indemnitee agrees to give Indemnitor written notice of any claims filed against the County in connection with this Agreement, within thirty days of the date that County is aware of such claim.

7. Unless terminated as set forth below, this Agreement shall remain in full force and effect in perpetuity from the date first set forth above, and shall be binding upon the parties and all their successors in interest. The Agreement may be freely terminated as of right by either party, with or without cause, upon written notice to the other. If the District exercises this right, or if the County exercises this right based upon the District's substantial breach of this Agreement, then upon written demand by County, the District, at its sole cost and expense, shall remove the Improvements and will restore the Road to the condition that existed immediately prior to the effective date of this Agreement. If the County exercises this right, or if the District exercises this right based upon the County's substantial breach of this Agreement, then the County will be responsible for any removal of the Improvements or restoration of the Road. Except for the above, neither party will be liable to the other for any damages or claims resulting from the termination of this Agreement.

8. In the event either party hereto shall institute legal proceedings in connection with, or for the enforcement of, this Agreement, the prevailing party shall be entitled to recover its costs of suit, including reasonable attorney's fees, at both trial and appellate levels.

9. This Agreement may be recorded by the County in the Official Records of Collier County, Florida. The District shall pay all costs of recording this Agreement prior to the execution of this Agreement. A copy of the Recorded Agreement will be provided to the District.

10. This Agreement is the entire agreement between the parties, and supersedes all previous oral and written representations, agreements and understandings between the parties. This Agreement shall be governed by the laws of the State of Florida, and may not be altered or amended in any way, save by written agreement signed by both parties.

11. The rights and obligations of this Agreement shall bind and benefit any successors or assigns of the parties.

{Remainder of page intentionally left blank. Signatures appear on next page.}

In Witness Whereof, the parties have caused these presents to be executed on the day and date first above written.

BOARD OF COUNTY COMMISSIONERS
COLLIER COUNTY, FLORIDA

ATTEST:
Crystal K. Kinzel, Clerk

_____
Deputy Clerk

By: _____
Penny Taylor, Chairman

HACIENDA LAKES COMMUNITY
DEVELOPMENT DISTRICT

WITNESSES:

_____
Printed Name:

By:_____
Robert Mulhere, Chairman

_____
Printed Name:

STATE OF FLORIDA
COUNTY OF COLLIER

Signed and acknowledged on this ____day of _____, 202__, before me, the undersigned notary public, by means of [ ] physical presence or [ ] online notarization, by Robert Mulhere, as Chairman of Hacienda Lakes Community Development District. He [ ] is personally known to me or [ ] produced _____ as identification.

_____
Notary Public
Printed Name:

My Commission Expires: _____

Approved as to form and legality:

_____
Derek D. Perry
Assistant County Attorney

SCHEDULE "A"

COLLIER COUNTY
Growth Management Division
Engineering Review Services

June 27, 2013

RWA, INC
MIKE PAPPAS
6610 WILLOW PARK DR STE 200
Naples, FL 34109

Re: Final Site Development Plans Approval (SDPA)
HACIENDA LAKES OF NAPLES PHASE 1
Project Number: PL20120001222

Dear: RWA, INC

THIS IS YOUR PERMIT AND MUST BE POSTED ONSITE!

Land Development Services Department has reviewed the Final Site Development Plan for the referenced project and has no objection to the construction of water, sewer, paving, and drainage aspects of the project subject to the following stipulations:

By receipt and acceptance of this approval, the petitioner acknowledges that a pre-construction meeting is required by code for this project. If the pre-construction meeting is not held prior to the beginning of construction, the project will be cited and shut down until the required meeting is held. Please call the Engineering Inspections Supervisor at 239-252-2391 to schedule a pre-construction meeting at a minimum of 48 hours prior to the start of construction. Even with an Early Work Authorization a pre-construction meeting is required.

General Conditions

- **CHANGES IN USE AND/OR DESIGN OF THESE SITE AND ACHITECTURAL PLANS ARE NOT AUTHORIZED WITHOUT WRITTEN APPROVAL BY THE COUNTY. CHANGES SHALL REQUIRE RE–REVIEW IN ACCORDANCE WITH ALL CURRENT COUNTY CODES INCLUDING PARKING FACILITIES, UTILITIES, TRANSPORTATION, ENVIRONMENTAL REQUIREMENTS AND THE LIKE.**

- A preliminary inspection and approval of the infrastructure for multi-family residential must be done by Engineer Inspections prior to any Certificate of Occupancy being granted.

- Permits from other agencies having jurisdiction over this project shall be obtained prior to start of construction.

- Please call Mr. Daryl Hughes at (239) 252-2391 to schedule a pre–construction meeting a minimum of 48 hours prior to start of construction.

- All construction activities permitted by this letter shall only occur during the following times:

  6:30 A.M. to 7:00 P.M., Monday through Saturday; no work is permitted on Sundays and the following holidays: New Year's Day, Memorial Day, 4th of July, Labor Day, Thanksgiving Day, Christmas Day.

- The review and approval of these improvement plans does not authorize the construction of required improvements, which are inconsistent with easement of record.

- Upon completion of the infrastructure improvements associated with a site development plan and prior to the issuance of a certificate of occupancy, the engineer shall provide a completion certificate as to the improvements, together with all applicable items referenced in Section 10.02.05 of this code including electronic disk. Upon a satisfactory inspection of the improvements, a certificate of occupancy may then be issued.

Zoning Conditions

- SIGNAGE RESTRICTIONS: Please be advised that any permanent sign (wall, ground, monument, directory, etc.) requires a separate building permit and must meet the provisions of the Collier County Land Development Code, Section 5.06, and/or the applicable provisions of the governing Planned Unit Development (PUD) document, regardless of any sign placement, dimensions or color depicted on the site and/or architectural plans approved by this letter.

- All PUD related stipulations shall apply to this project.

Utility Conditions

- See attached Exhibit "A"

- Written confirmation from that the water/sewer facilities have been accepted and placed in service must be provided prior to issuance of a Certificate of Occupancy.

- **“APPROVAL OF THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THE METER SIZE. SIZING OF THE METER SHALL BE DONE WITH THE APPROVAL OF PUBLIC UTILITIES ENGINEERING DIRECTOR OR HIS DESIGNEE, BASED ON DOCUMENTATION RECEIVED FROM THE ENGINEERING OF RECORD. THE METER DETAIL SHALL BE SUBMITTED TO ENGINEERING REVIEW SERVICE FOR APPROVAL PRIOR TO INSATLLATION”.**

- No water or sewer utility construction shall commence until proper DEP permits have been obtained.

Subdivision Conditions

All work shall be in accordance with applicable Collier County ordinances and rules and regulations of other entities having jurisdiction over the project.

Environmental Conditions

- Site clearing is conditioned to the stipulations contained on the approved plans.
- Required permits for listed species relocation must be provided to staff at the pre-construction meeting.
- Silt fencing must be installed prior to any mechanical clearing.
- Exotic vegetation must be removed prior to preliminary acceptance as required on the approved plans.

Water Management Conditions

- All work shall be in accordance with applicable State or Federal rules and regulations.
- Work area shall be properly barricaded with hay bales and/or silt screens during the entire time of construction, to prevent any siltation during construction.
- Separate excavation permit must be obtained.
- The engineer of record, prior to issuance of a Certificate of Occupancy, shall provide documentation from the stormwater maintenance entity that it has been provided information on how the stormwater system works and their responsibility to maintain the system.
- This project shall be permitted by SFWMD.
- Whether or not this project was permitted by SFWMD, dewatering shall not occur without a dewatering permit from the South Florida Water Management District"

Addressing Conditions

Pursuant to Ordinance No. 07-62, no proposed subdivision, street, building, condominium or development may utilize the same name or a similar sounding name as any existing subdivision, street, building, condominium or development, except that the major street within a subdivision may utilize the name of the subdivision. Any changes to the project name shall be reviewed and approved by Growth Management Division/Planning and Regulation Addressing Section.

Landscaping Conditions

At the time of Preliminary Acceptance the Landscape Architect shall certify that he landscaping has been installed in substantial accordance with the approved plans and specifications. The certification shall be in a form approved by the County Manager or his designee.

Fire Protection Conditions

- Please note that prior to the accumulation of combustible building materials on site, proposed fire hydrants must be operable with the minimum required fire flows and improved stabilized emergency apparatus access ways (min. 20' wide) must be available to within 100' of the structures.
- No fire appliances shall be obstructed, visually or functionally, by vegetation.

Additional Stipulations

- An on-site pre-construction meeting for water and/or sewer is required prior to construction. Contact Craig Callis (239) 252-2905.
- All preliminary and final inspections of water and/or sewer shall be coordinated through Jodi Hughes with a 48 hour written notification.
- Although the Utilities Master Planning Engineering Report that was provided with REV:3 has indicated that "…fire flow demands are uncertain at this time due to a lack of specificity in the final design of the building types proposed for the developments…" a design was provided assuming 'Fire Flow Demands' of 1000gpm at hydrants in residential areas and 750gpm at future cul-de-sacs. However, please note that pursuant to the 2010 edition of the FFPC 101: section 18.4.5.1.1, 1000gpm is required for homes with fire areas less than 5000s.f. And per section 18.4.5.1.2, homes that exceed 5000s.f. in fire area shall have fire flows that comply with Table 18.4.5.1.2 as shall all commercial

structures. These minimum fire flow requirements shall be provided as outlined above.

- Provide revised site plan sheet/s (three copies) at Pre-Construction Meeting addressing Public Utilities comments (Nathan Beals 6/17/13).
- Lighting: Provide revised roadway lighting plan sheet/s (three copies) at a time coordinated between Traffic Operations and Engineering Services that addresses Traffic Operations comments. The lighting design and installation must be resolved prior to County acceptance of the lighting system.
- Sheet 23 and 24 under the Pavement Section heading, change “Traffice D” to correct term.
- Sheet 22 of 34, the Note in the outlined box says See Sheet 25 of 31. It should be 23 & 24 of 34.

Six (6) sets of approved plans are being returned herewith for your use. Five copies of approved SDP shall be attached to each set of building plans submitted.

PURSUANT TO HB 503, PLEASE COMPLETE THE ATTACHED AFFIDAVIT OF COMPLIANCE AND PROVIDE TO CLIENT SERVICES STAFF (252-2400). INCLUDE THE BALANCE OF ANY OUTSTANDING INSPECTION FEES TOGETHER WITH ANY REQUIRED STATE OR FEDERAL PERMITS. UPON PROCESSING THE AFFIDAVIT OF COMPLIANCE, A PRE-CONSTRUCTION MEETING MAY BE SCHEDULED.

Be advised that this approval automatically expires in thirty-six (36) months pursuant to Collier County Land Development Code Section 10.02.03 B.4. The expiration date is 06/27/2016.

Please call me if you have any questions or need any additional information.

Sincerely,

Jack McKenna, P.E.
County Engineer
Engineering Review Services

cc: Property Appraiser (w/attach.)
Engineering Inspections Supervisor (w/attach.)
Mark Burtchin, Project Manager

Fred Reischl, Project Planner
Customer Services/Addressing (w/attach.)
Engineering Technician
Operations Analyst, Public Utilities Engineering (w/attach.)
Records- SDPA-PL20120001222, (w/attach.)

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

Hacienda Lakes of Naples

Landscape Construction Documents

Prepared For:

Hacienda Lakes of Naples, LLC
David Torres, Development Manager
3921 Prospect Avenue
Naples, Florida 34104

Phone: 239.263.9700

Landscape Architecture by:

Knaak Design Group, LLC
TX RLA #2591 FLA RLA #6666907

13650 Fiddlesticks Blvd, Suite #202-330
Fort Myers, Florida 33912

Phone: 239.603.6768

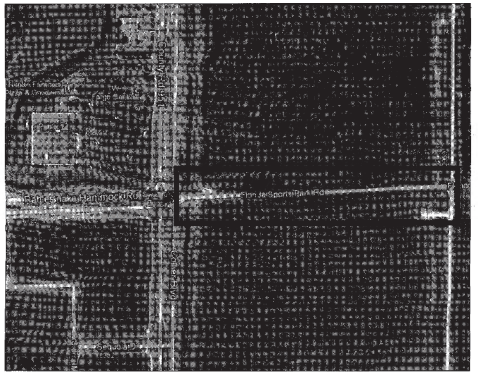
Civil Engineering by:

RWA Consulting, INC
6610 Willow Park Drive
Naples, Florida 34109

Phone: 239.597.0575

Planting Plan Subject to Change. Landscape Architect observes the right to make field changes including plant quantities and species changes to meet or exceed the county code.

VICINITY MAP



This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

CALL 48 HOURS BEFORE YOU DIG
It's the Law!
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

NAPLES, FLORIDA 34134
COLLIER COUNTY, FLORIDA

DRAWING SCHEDULE

SHEET No.	DESCRIPTION	SHEET COUNT	ISSUE DATE / REVISIONS: per county review 4-5-13
	GENERAL		
C0.1	COVER SHEET AND INDEX OF DRAWINGS	1 OF 16	
L1.0	PLANTING PLAN	3 OF 16	
L1.1	PLANTING PLAN AND LEGEND	3 OF 16	
L1.2	PLANTING PLAN	4 OF 16	
L1.3	PLANTING PLAN AND LEGEND	5 OF 16	
L1.4	PLANTING PLAN	6 OF 16	
L1.5	PLANTING PLAN	7 OF 16	
L2.01	PLANTING DETAILS AND SPECIFICATIONS	8 OF 16	
IR1.0	IRRIGATION PLAN	9 OF 16	
IR1.1	IRRIGATION PLAN	10 OF 16	
IR1.2	IRRIGATION PLAN	11 OF 16	
IR1.3	IRRIGATION PLAN	12 OF 16	
IR1.4	IRRIGATION PLAN	13 OF 16	
IR1.5	IRRIGATION PLAN	14 OF 16	
IR1.6	IRRIGATION PLAN	15 OF 16	
IR2.01	IRRIGATION DETAILS AND SPECIFICATIONS	16 OF 16	

1 INDEX OF DRAWINGS
N.T.S.

DESIGN SPEED LIMIT FOR ROADWAY IS 45 MPH
POSTED SPEED IS 40 MPH

SDP#: PL20120001222 REV: 3
HACIENDA LAKES OF NAPLES PHASE 1
DATE: 5/10/13
DUE: 6/10/13

knaak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #220-303
Fort Myers, Florida
33912
239.246.7898
www.knaakdesigngroup.com

REGISTRATION:
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA6666907 STATE OF FLORIDA

NORTH:

PROJECT NAME AND LOCATION:
HACIENDA LAKES OF NAPLES
Construction Documents
3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION

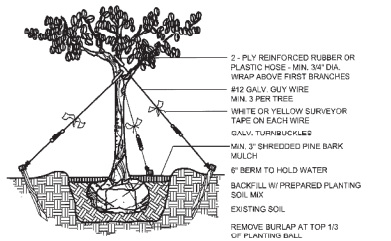
DRAWING TITLE:
COVER SHEET & DRAWING INDEX

PROJECT PHASE: -
ISSUE DATE: 12-7-2012
DRAWN BY: - APPROVED BY: -
WORK ORDER NUMBER: -
Sheet NO.
C0.1
SHEET OF

DEPARTMENT OF ZONING AND DEVELOPMENT REVIEW LANDSCAPE SYSTEM APPROVAL DOES NOT INCLUDE FASCIA. 7.2.13 DATE
ROBERT CORRIS LANDSCAPE PLANNER

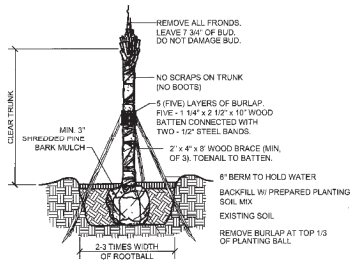
This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

© 2005 Knaak Design Group, LLC - KDG Landscape Architects - Online Studio Services.



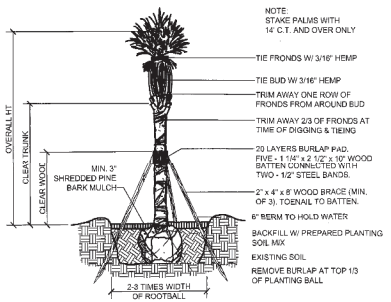
NOTE: PULL BACK MULCH BACK FROM BASE OF PLANTS

A LARGE TREE TYPICAL PLANTING DETAIL



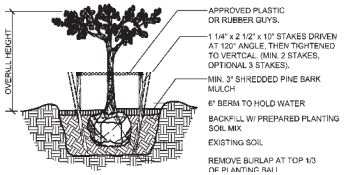
NOTE: PULL BACK MULCH BACK FROM BASE OF PLANTS

B SABAL PALM PLANTING DETAIL



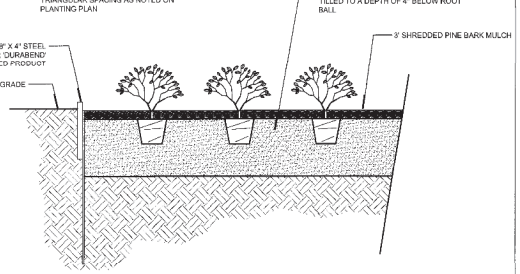
NOTE: PULL BACK MULCH BACK FROM BASE OF PLANTS

C PALM TYPICAL PLANTING DETAIL



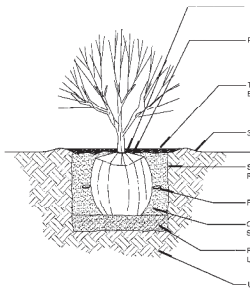
NOTE: PULL BACK MULCH BACK FROM BASE OF PLANTS

D SMALL TREE PLANTING DETAIL



NOTE: PULL BACK MULCH BACK FROM BASE OF PLANTS

E GROUNDCOVER PLANTING DETAIL



F SMALL TREE PLANTING DETAIL

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

PLANTING SPECIFICATIONS

GENERAL

The landscape contractor shall be responsible for all materials and work called for on the landscape plans and in these landscape specifications. In the event of variation between quantities shown on plant list and the plans, the plans shall control. The landscape contractor shall verify all quantities sizes, specifications, and report any discrepancies at the time of bidding.

The landscape contractor shall review architectural/ engineering plans and become thoroughly familiar with surface and subsurface utilities. Prior to the preparation of the planting areas, the contractor shall ascertain the location of all utilities, including but not limited to; water, sewer, telephone and electrical services. These utilities may not be indicated on the landscape plans. The contractor shall not disrupt or damage the above mentioned utilities, if damage occurs, the contractor shall be responsible in replacement or repairing the damaged utility promptly.

The work under these plans consist of supplying and installing the complete plant materials as shown on the landscape plans. This shall include all labor, equipment, and associated materials (planting soil, fertilizer, water, staking and mulch) in sufficient quantities to complete the plantings as shown on the plans. Also included is the maintaining of the plant material until final acceptance and fulfillment of all guarantee provisions as stated in these notes. The work shall include the water required for the establishment of plant material during the guarantee period if the irrigation system is not functioning at the time of installation.

Every possible safeguard shall be taken to protect building surfaces, equipment and furnishings. The landscape contractor shall be responsible for any damage or injury to person of property which may occur as a result of negligence in the execution of the work.

All planting shall be performed by personnel familiar with planting procedure and under the supervision of a qualified planting foreman.

The landscape architect or owner shall have the right, at any stage of the operations to reject any and all work and materials which, in his opinion, do not meet with the requirements of these specifications.

The contractor shall verify the location of existing plant material within the planting area. The contractor shall remove all extraneous materials, plant debris and unacceptable soils within the planting area that will be detrimental to the proper installation of the plant material.

All trees, palms and specimens shall be Florida Fancy grade. All shrubs and groundcovers shall be Florida #1 or better, as outlined under Grades and Standards for Nursery Plants, Division of Plant Industry, State of Florida, unless otherwise noted.

All trees, palms, shrubs and ground covers shall be at the sizes as indicated on the landscape plans. Plant material determined, by the Landscape Architect, not meeting the size and quality specified shall be removed from the site and replaced by appropriate material promptly. Contractor shall submit samples and/or photographs of plant materials for approval by the Landscape Architect prior to plant material being installed.

The minimum acceptable size of all plants, measured after pruning, with branches in normal positions, shall conform to the measurements specified on the plant list or as indicated on the landscape drawing. Height and spread dimensions refer to main body of the plant and not extreme branch tip to tip. The caliper of tree trunks is to be taken one foot above the ground level.

Plants shall be protected upon arrival at the site, by being thoroughly watered and properly maintained until planted.

All plant material shall be watered thoroughly twice during the first 24-hour period after planting.

The landscape contractor shall be responsible for proper watering of all plants. All plants shall be thoroughly watered at time of planting and kept adequately watered until time of acceptance. It shall be the landscape contractor's responsibility to assure that plants are not over watered.

All tree pits shall be excavated to size and depth in accordance with the USDA Standard for Nursery Stock 260.1, unless shown otherwise on the drawings, and backfilled with the specified planting soil. The landscape contractor shall test fill all tree pits with water before planting to assure proper drainage percolation is available.

The landscape contractor shall insure adequate vertical drainage in all plant beds, planters, and sod areas. Vertical drilling through any compacted fill to native soil shall be accomplished to insure drainage. If well drained fill is necessary to assure positive drainage, this issue shall be brought up by the landscape contractor at time of bidding.

All plants shall be balled and wrapped or container grown as specified. No container grown stock will be accepted if it is root bound. All root wrapping material made of synthetics or plastics shall be removed at time of planting.

All new palms and trees shall be plumb vertical at the time they are installed to within three(3) degrees from vertical unless otherwise noted on plans. All palms shall be staked unless stated otherwise by the Landscape Architect or noted on the plans.

Planting soil mixture shall consist of 2/3 existing soil on site, mixed with 1/3 pulverized peat and 2 lbs. of 6-8-6 100% organic fertilizer with trace elements per cubic yard.

It shall be the landscape contractor's responsibility to prevent plants from falling or being blown over, to restraighten and replant all plants which lean or fall and to replace all plants which are damaged due to lack of proper guying or staking. The landscape contractor shall be legally liable for any damage caused by instability of any plant material.

All trees 65 gallon (12'-14' in height) or larger, and all palms shall be guyed or staked or braced. The landscape contractor shall determine which small or multi-trunk trees need to be guyed and staked to maintain plumb. Staking of trees and shrubs, if required, shall be done as per staking and guying detail prepared by the landscape architect. It shall be the responsibility of the landscape contractor to remove guys and stakes from the trees and job site after a period of 90 days.

Plants blown over by high winds (up to 74 mph), within the guaranteed period, shall not be cause for additional expense to the owner, but shall be the responsibility of the landscape contractor. Damaged plants shall be replaced by the landscape contractor at no additional cost to the owner.

The landscape contractor shall insure that his work does not interrupt established or projected drainage patterns.

The landscape contractor shall prune, shape and remove dead foliage/limbs from existing plant material to remain. Confirm with the landscape architect or owner the extent of work required at time of bidding.

Mulch – All plant beds shall be top dressed with hardwood mulch (no cedar), (or approved equal) or as specified.

Beds adjacent to building foundations or any concrete work are to have an iron sulfate soil mixture worked into the soil as per manufacturer's specifications or appropriately to achieve a soil ph of 4.5 to 5.5.

Contractor to fertilizer all plant material upon installation and follow manufacturer's recommendations. Fertilizer shall be quick release, water soluble fertilizer and shall confirm to all applicable Regional, State and National fertilizer laws.

All sod shall be St. Augustine 'Floratam' unless otherwise indicated on the plans. The roots shall be visibly healthy and well matted with sufficient soil adhering to the roots for protection during handling. Sod shall be free of weeds and other grasses. Sod shall be planted with in 48 hours of harvesting or kept damp until planted. Sod not meeting these requirements will be rejected and removed from site and replaced promptly.

Substitution of any plant and/or construction material shall first be approved by the Landscape Architect as to type, size, quantity, and unit cost.

The Contractor shall clean up continuously during the course of the project, with excess debris removed promptly from the site.

MAINTENANCE PRIOR TO FINAL INSPECTION AND ACCEPTANCE

a. Maintenance shall commence after each plant is planted and the maintenance period shall continue until the job or specific phase of the job is accepted by the landscape architect of owner. Extreme care shall be taken to instruct the owner or his representatives in general maintenance procedures.

b. Plant maintenance shall include watering, pruning, weeding, cultivating, mulching, tightening, and repairing of guys, replacement of sick or dead plants, resetting plants to proper grades or upright positions and restoration of the planting saucer and all other care needed for proper growth of the plants.

c. During the maintenance period and up to the date of final acceptance, the landscape contractor shall do all seasonal spraying and/or dusting of trees and shrubs, upon completion of all planting, an inspection for acceptance of work will be held. The landscape contractor shall notify the landscape architect or owner for scheduling of the inspection 10 days prior to the anticipated date.

d. At the time of the inspection, if all of the materials are acceptable, a written notice will be give by the landscape architect of owner to the landscape contractor stating the date when the maintenance period ends.

Contractor shall be responsible for verifying all quantities shown on the final landscape plans prior to pricing the work.

All work shall be subject to construction observation procedures during the entire course of the project by the Owner or his representative(s). Any materials found not to meet the specifications set by these contract documents, shall be removed and replaced promptly. All work shall be completed in a professional manner. The Landscape Architect reserves the right to have any work or materials removed and replaced if, in his opinion, it does not represent a professional appearance. This is providing the work or materials can be installed properly using current methods. The contractor shall be responsible for all costs associated with the removal and replacement of items not found to meet the specifications of these contract documents.

GUARANTEE AND REPLACEMENT

All plant material shall be guaranteed for a period of ninety (90) days from date of final inspection and acceptance of such materials. Trees and palms shall be guaranteed for a period of one (1) year from said date. At the end of the guarantee period, any plant required under this contract that is dead or not in satisfactory condition, as determined by the owner or the landscape architect, shall be removed and replaced. Replacement plants shall have an extended guarantee, as noted above, from time of replacement.

All replacements shall be planted of the same kind and size as specified on the plant list. They shall be the responsibility of the landscape contractor.

IRRIGATION NOTES WHERE APPLICABLE

Contractor to incorporate irrigation specifications in contract and construction documents while bidding and performing work associated with this project.

The Contractor shall be familiar with both proposed and existing site conditions such as, utilities, plant materials and architectural elements in order to avoid conflicts during installation.

The Contractor shall avoid damage to existing trees and shrubs on site that may or may not be indicated on the landscape plans.

The Contractor shall install the irrigation system in conformance to all applicable state and regional regulations, codes and community landscape irrigation system specifications.

The mainline piping shall be buried to a minimum 18" depth, all lateral lines shall be buried to a minimum depth of 12" for 2" and 12" for rotor and pop-up laterals. The trench bottom and sides shall be free of any extraneous material or rubble so as to allow the piping to lay relatively flat within the trench. The backfill for the trench shall be free of any extraneous materials such as rocks, roots and rubbish. The backfill of the trench shall be compacted to match the surrounding soil conditions and shall match surrounding grade after such compaction.

Contractor is responsible for providing 100% head-to-head irrigation coverage. The contractor shall install the irrigation elements appropriately to avoid plant materials, utilities and architectural elements. Modifications to the irrigation system due to conflicts with field conditions shall be made after the approval of the Watermark Communities Field Manager.

The Contractor shall be responsible for final adjustment of the irrigation system, this would include the proper setting of the controller and the adjustment of the irrigation system to ensure specified coverage and limit over spray onto walls, buildings and pavement.

The contractor shall install the proper model controller for the irrigation system. The Contractor shall supply the controller, all necessary installation materials are be responsible for electrical hook-up of the controller.

All irrigation sprayheads, rotors and drip systems shall be of the proper pressure compensating models from the following manufactures: Rainbird, Toro and/or Hunter. Any substitutions shall be subject to approval of the owner's representative.

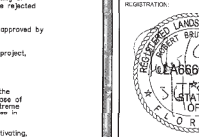
All wiring for the irrigation system shall be the appropriate direct burial cable. Wire splices shall be made within valve boxes, using waterproof connectors and sealant.

As pertinent irrigation elements, such as sprayheads, rotors, quick-couplers and valves, shall be marked as non-potable with irrigation industry established purple coloring.

G LANDSCAPE SPECIFICATIONS

knaak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #220-303
Fort Myers, Florida
33912
239.246.7898
www.knaakdesigngroup.com

REGISTRATION:



NORTH:

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO	DATE	REVISION:

DRAWING TITLE:

DETAILS AND SPECS

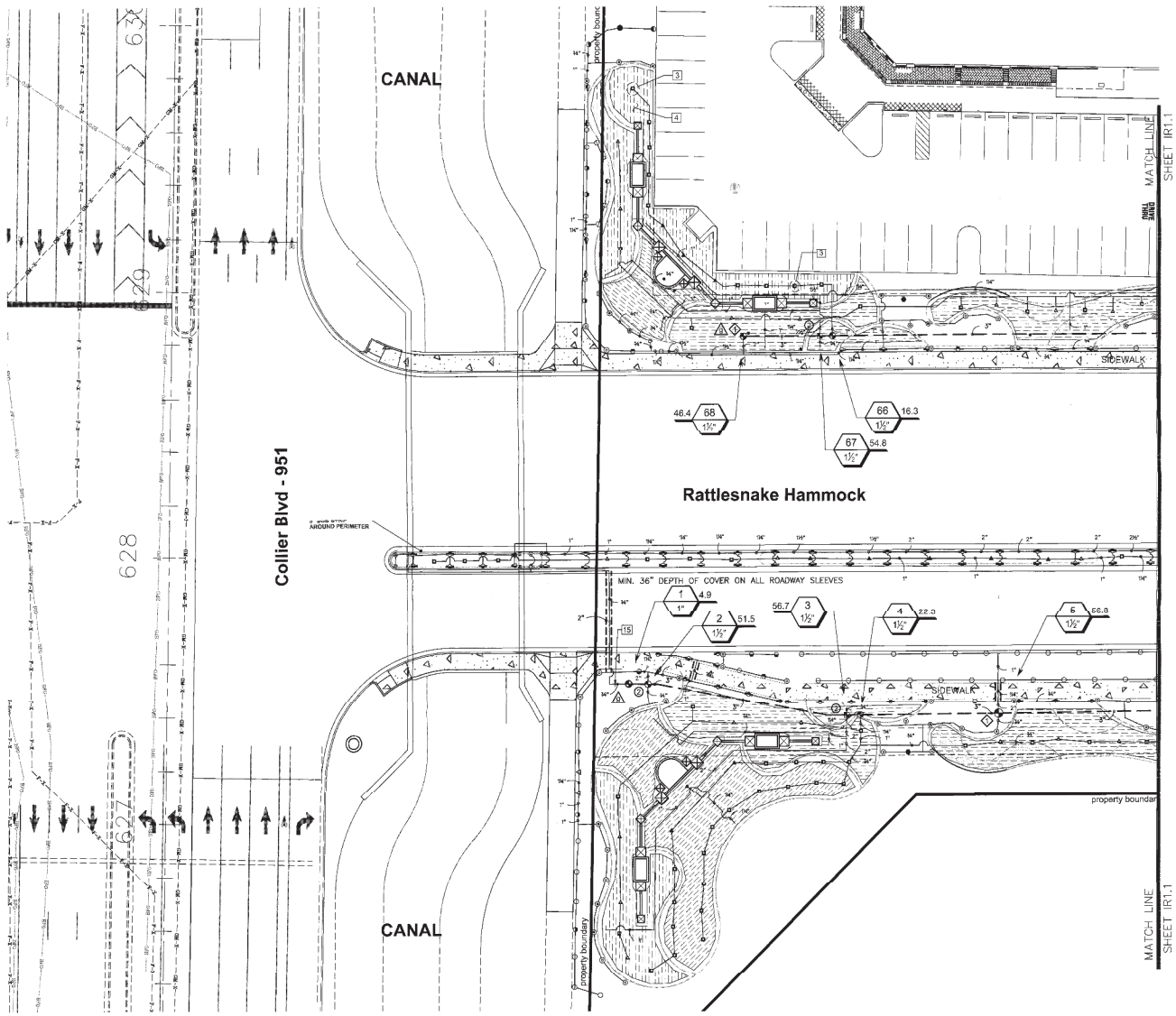
PROJECT PHASE: -
ISSUE DATE: -
DRAWN BY: - APPROVED BY: -
WORK ORDER NUMBER: -

SHEET NO.

L2.01

SHEET OF

© 2005 Knaak Design Group, LLC - EDC Landscape Architecture - Dallas Studio Division



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
EST LCS RCS CST SST	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H F	RAIN BIRD RD-06-P30-NP TURF SPRAY 8 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 10 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 12 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H TQ F	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 12 15 18	RAIN BIRD RD-06-P30-NP TURF SPRAY ADJ 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 12	RAIN BIRD RD-12-NP SHRUB SPRAY ADJ 12.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
1401 1402 1404 1406	RAIN BIRD 1800-1400 FLOOD FLOOD BUBBLER ON FIXED RISER

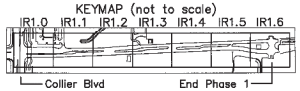
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICZ-151-40 DRIP CONTROL ZONE KIT
	HUNTER ICZ-101-40 DRIP CONTROL ZONE KIT
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 (18) XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.9GPH EMITTERS AT 12.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICV-G PLASTIC 24 VAC REMOTE CONTROL VALVES.
	NIBCO T-113-K BRONZE GATE SHUT OFF VALVE SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION.
	MATCO-NORCA 10RT CAST IRON GATE ISOLATION VALVE WITH FULL GASKET LINUS. RESILIENT WEDGE WITH EPOXY COATING AND OPTIONAL NUT. SAME SIZE AS MAINLINE PIPE WHERE LOCATED.
C	RAIN BIRD ESP-LXD-LXMMPED WITH (1) ESPLXD-SM75 TWO-WIRE DECODER COMMERCIAL CONTROLLER. 125 STATIONS. UV-RESISTANT, OUTDOOR-RATED, POWDER-COATED METAL PEDESTAL CASE. AVAILABLE IN THE US MARKET, INTERNATIONAL, EUROPEAN, OR AUSTRALIAN MARKETS.
RSD	RAIN BIRD RSD-CEX RAIN SENSING DEVICE, CONDUIT MOUNT. WITH THREADED ADAPTER, EXTENSION WIRE.
	RAIN BIRD FD-101TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES ONE VALVE/SOLENOID. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
	RAIN BIRD FD-202TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES TWO VALVE/SOLENOIDS OR TWO PAIRS OF VALVES. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
	RAIN BIRD LSP-1TURF LINE SURGE PROTECTION DECODER DIRECTLY TO THE GROUND ROD OR GROUND PLATE
	CAP FOR FUTURE USE CAP AT THE MAINLINE OR LATERAL LINE FOR FUTURE USE.
PDC	JOHN DEERE GT SERIES LAKE SUCTION PUMP STATION 180 GPM AT 70 PSI REQUIRED, VFD DRIVES, DUAL PUMPS, PRESSURE DEMAND START, ALUMINUM ENCLOSURE, SELF CLEANING SUCTION SCREEN AND DISCHARGE FILTER, PRESSURE TANK, FLOW METER. SUBMIT SHOP DRAWINGS FOR APPROVAL.
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26 ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 MAINLINE INSTALL GASKET JOINT PIPE WITH MECHANICALLY RESTRAINED DUCTILE IRON FITTINGS FOR ALL MAINLINE 4" AND ABOVE.
	PIPE SLEEVE: PVC SCHEDULE 40 SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.

Valve Callout
- Valve Number
- Valve Flow
- Valve Size

This ODCD Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

KEYMAP (not to scale)



GRAPHIC SCALE
SCALE: 1" = 20'-0"
0 20 40 80

CALL 48 HOURS BEFORE YOU DIG
It's the Law!
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

Not valid without embossed seal, signature, and date. ©
Copyright 2012. Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited.

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

© 2005 Knaak Design Group, LLC – KDG Landscape architects – Online Studio Division.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION:
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK JR. LA0666907 STATE OF FLORIDA

NORTH

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION

DRAWING TITLE:

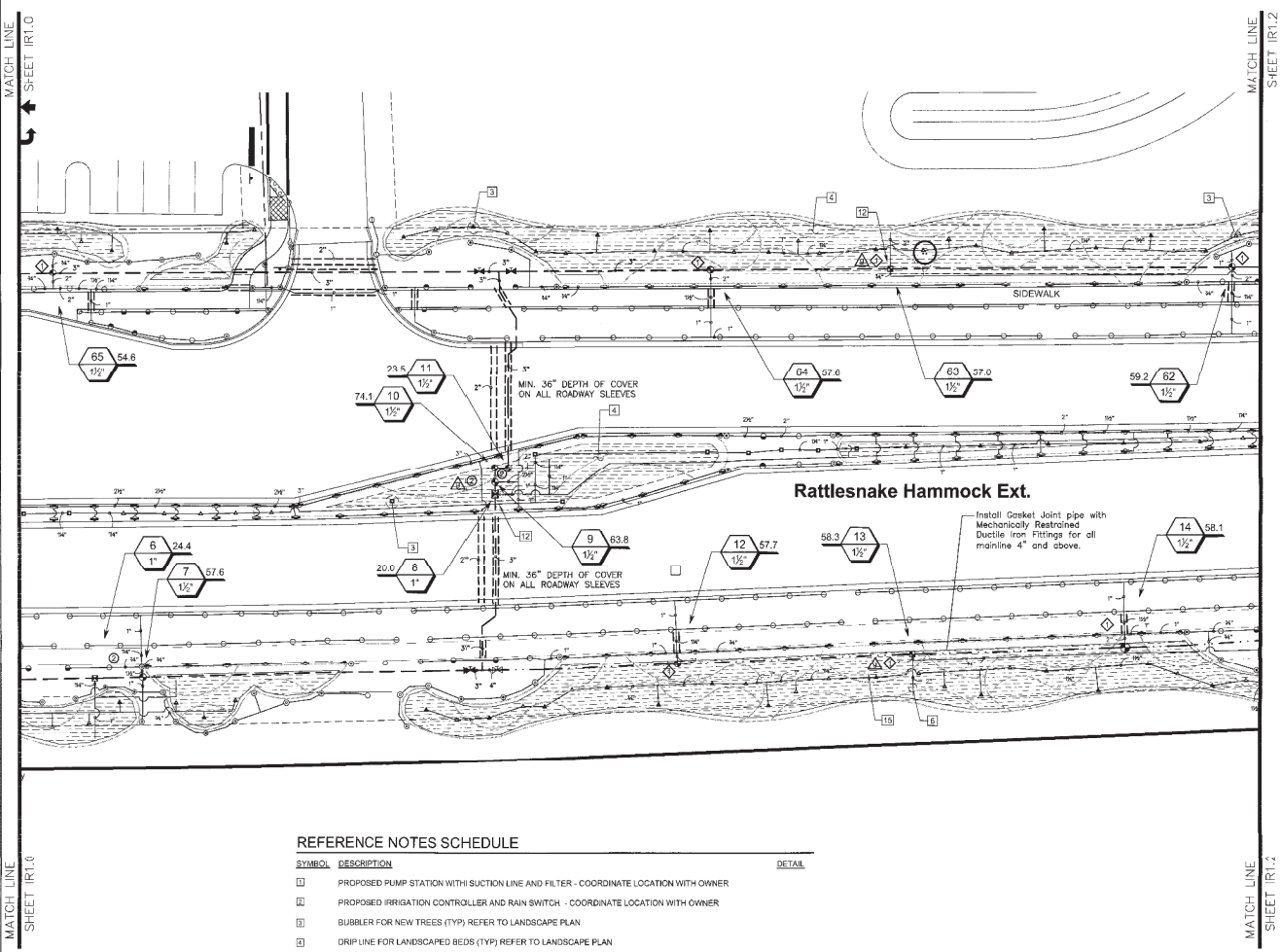
IRRIGATION PLAN

PROJECT PHASE:
ISSUE DATE:
DRAWN BY: – APPROVED BY:
WORK ORDER NUMBER:

SHEET NO.

IR1.0

SHEET 1 OF 8



REFERENCE NOTES SCHEDULE

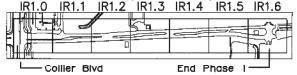
SYMBOL	DESCRIPTION	DETAIL
1	PROPOSED PUMP STATION WITH SUCTION LINE AND FILTER - COORDINATE LOCATION WITH OWNER	
2	PROPOSED IRRIGATION CONTROLLER AND RAIN SWITCH - COORDINATE LOCATION WITH OWNER	
3	BUBBLER FOR NEW TREES (TYP) REFER TO LANDSCAPE PLAN	
4	DRIP LINE FOR LANDSCAPED BEDS (TYP) REFER TO LANDSCAPE PLAN	
5	DRIP LINE FOR HEDGE ROW (TWO LINES 18" O.C. MIN.) - REFER TO LANDSCAPE PLAN	
6	INSTALL "HEADER" FOR DRIPLINE AS NEEDED.	
7	MAINTAIN AT LEAST 8" OF CLEARANCE BETWEEN THE BEDLINE AND ANY DRIPLINES OR SPRINKLER HEADS.	
8	MINIMUM CLEARANCE BETWEEN WALL AND ANY SPRINKLER HEAD OR DRIPLINE TO BE 12".	
9	SHOWN FOR GRAPHIC CLARITY - INSTALL PIPE WITHIN GREENSPACE	
10	SHOWN FOR GRAPHIC CLARITY - INSTALL MAINLINE AND VALVES WITHIN PROPERTY LINE	
11	SHOWN FOR GRAPHIC CLARITY - ROUTE PIPING AWAY FROM EXISTING TREE ROOTS. HAND DIG OR DIRECTIONAL BORE AS NEEDED TO PRESERVE EXISTING TREES.	
12	VALVE LOCATIONS ARE DIAGRAMMATIC. INSTALL VALVES IN "LOW TRAFFIC" AREAS WITH A MIN. CLEARANCE OF 12" BETWEEN THE VALVE BOX AND ANY FENCE, WALL, SIDEWALK, PAVEMENT OR SODLINE	
13	ISOLATION GATE VALVE - LINE SIZE	
14	EARTH GROUND ASSEMBLY AT CONTROLLER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.	
15	EARTH GROUND ASSEMBLY AT DECODER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.	

CALL 48 HOURS BEFORE YOU DIG
It's the Law!
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

Not valid without embossed seal, signature, and date. © Copyright 2012, Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited."

KDG assumes no liability for any structures built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

KEYMAP (not to scale)





GRAPHIC SCALE
SCALE: 1" = 20'-0"

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
EST LCS RCS CST SST	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H F	RAIN BIRD RD-06-P30-NP TURF SPRAY 8 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H F	RAIN BIRD RD-06-P30-NP TURF SPRAY 10 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H F	RAIN BIRD RD-06-P30-NP TURF SPRAY 12 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H F	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 12 15 18	RAIN BIRD RD-06-P30-NP TURF SPRAY ADJ 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 18	RAIN BIRD RD-12-NP SHRUB SPRAY ADJ 12.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
1402 1406 1401 1404	RAIN BIRD 1800-1400 FLOOD FLOOD BUBBLER ON FIXED RISER

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICZ-151-40 DRIP CONTROL ZONE KIT
	HUNTER ICZ-101-40 DRIP CONTROL ZONE KIT
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 (18) XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.9GPH EMITTERS AT 12.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICV-G PLASTIC 24 VAC REMOTE CONTROL VALVES.
	NIBCO T-113-K BRONZE GATE SHUT OFF VALVE SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION.
	MATCO-NORCA 10RT CAST IRON GATE ISOLATION VALVE RING-TITE GASKET ENDS. RESILIENT WEDGE WITH EPOXY COATING AND OPTIONAL NUT. SAME SIZE AS MAINLINE PIPE WHERE LOCATED.
C	RAIN BIRD ESP-LXD-LXMMPED WITH (1) ESPLXD-SM75 TWO-WIRE DECODER COMMERCIAL CONTROLLER. 125 STATIONS. UV-RESISTANT, OUTDOOR-RATED, POWDER-COATED METAL PEDESTAL CASE. AVAILABLE IN THE US MARKET, INTERNATIONAL, EUROPEAN, OR AUSTRALIAN MARKETS.
RS	RAIN BIRD RSD-CEX RAIN SENSING DEVICE, CONDUIT MOUNT. WITH THREADED ADAPTER, EXTENSION WIRE.
D	RAIN BIRD FD-101TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES ONE VALVE/SOLENOID. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
D	RAIN BIRD FD-202TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES TWO VALVE/SOLENOIDS OR TWO PAIRS OF VALVES. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
LSP	RAIN BIRD LSP-1TURF LINE SURGE PROTECTION DECODER DIRECTLY TO THE GROUND ROD OR GROUND PLATE
T XX	CAP FOR FUTURE USE CAP AT THE MAINLINE OR LATERAL LINE FOR FUTURE USE.
POC	JOHN DEERE GT SERIES LAKE SUCTION PUMP STATION 180 GPM AT 70 PSI REQUIRED. VFD DRIVES, DUAL PUMPS, PRESSURE DEMAND START, ALUMINUM ENCLOSURE, SELF CLEANING SUCTION SCREEN AND DISCHARGE FILTER, PRESSURE TANK, FLOW METER. SUBMIT SHOP DRAWINGS FOR APPROVAL.
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26 ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 MAINLINE INSTALL GASKET JOINT PIPE WITH MECHANICALLY RESTRAINED DUCTILE IRON FITTINGS FOR ALL MAINLINE 4" AND ABOVE.
	PIPE SLEEVE: PVC SCHEDULE 40 SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.

Valve Callout
#1 Valve Number
Valve Flow
#" Valve Size

This COES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION:
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA0066907 STATE OF FLORIDA

NORTH:

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION:

DRAWING TITLE:

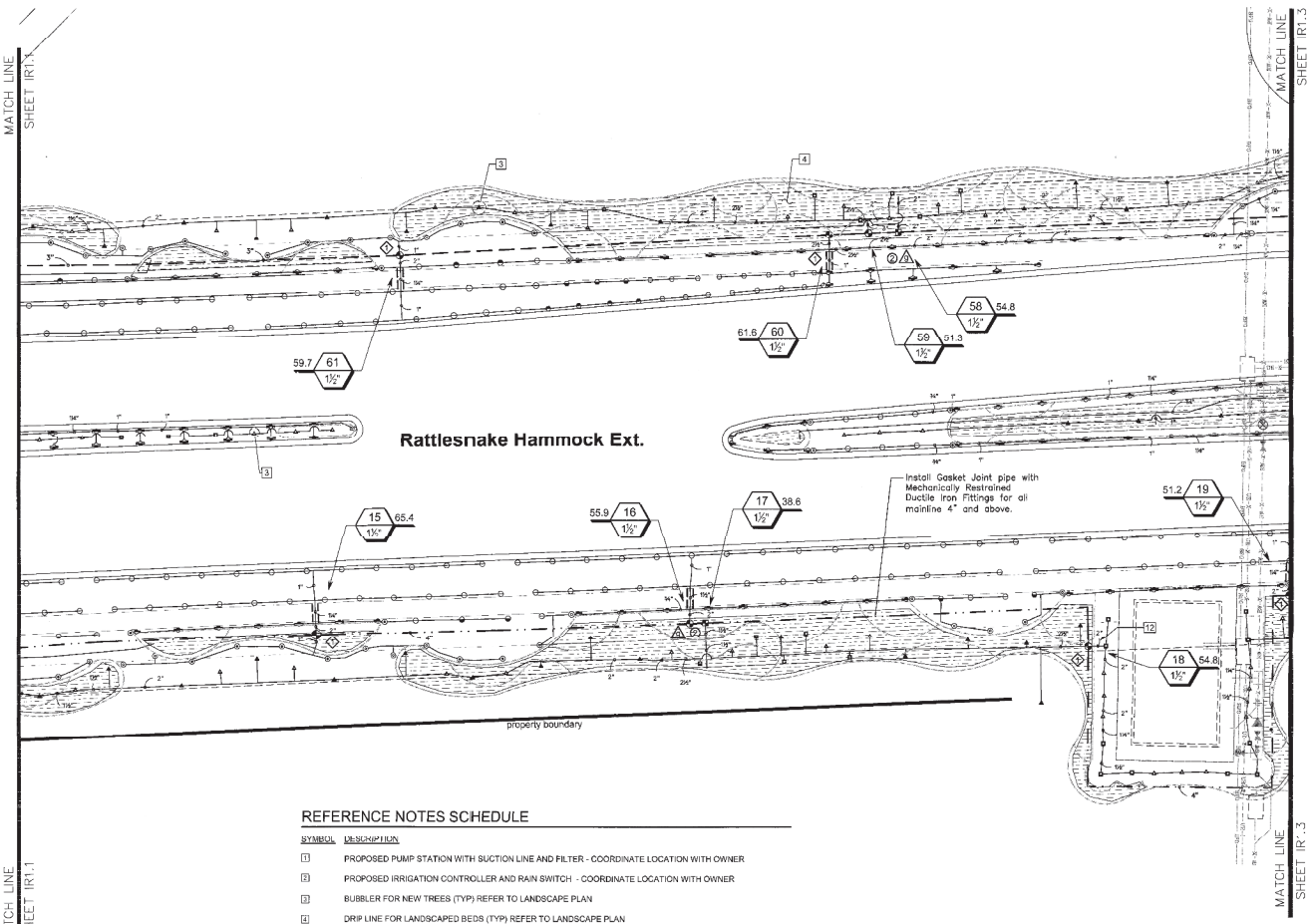
IRRIGATION PLAN

PROJECT PHASE:
ISSUE DATE:
DRAWN BY: - APPROVED BY:
WORK ORDER NUMBER:
SHEET NO.

IR1.1

SHEET 2 OF 8

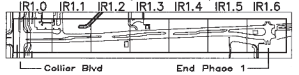
© 2005 Knaak Design Group, LLC - KDG Landscape Architects - Online Sheets Division.

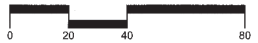


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	PROPOSED PUMP STATION WITH SUCTION LINE AND FILTER - COORDINATE LOCATION WITH OWNER
2	PROPOSED IRRIGATION CONTROLLER AND RAIN SWITCH - COORDINATE LOCATION WITH OWNER
3	BUBBLER FOR NEW TREES (TYP) REFER TO LANDSCAPE PLAN
4	DRIP LINE FOR LANDSCAPED BEDS (TYP) REFER TO LANDSCAPE PLAN
5	DRIP LINE FOR HEDGE ROW (TWO LINES 18" O.C. MIN.) - REFER TO LANDSCAPE PLAN
6	INSTALL "HEADER" FOR DRIPLINE AS NEEDED.
7	MAINTAIN AT LEAST 6" OF CLEARANCE BETWEEN THE BEDLINE AND ANY DRIPLINES OR SPRINKLER HEADS.
8	MINIMUM CLEARANCE BETWEEN WALL AND ANY SPRINKLER HEAD OR DRIPLINE TO BE 12".
9	SHOWN FOR GRAPHIC CLARITY - INSTALL PIPE WITHIN GREENSPACE
10	SHOWN FOR GRAPHIC CLARITY - INSTALL MAINLINE AND VALVES WITHIN PROPERTY LINE
11	SHOWN FOR GRAPHIC CLARITY - ROUTE PIPING AWAY FROM EXISTING TREE ROOTS. HAND DIG OR DIRECTIONAL BORE AS NEEDED TO PRESERVE EXISTING TREES.
12	VALVE LOCATIONS ARE DIAGRAMMATIC, INSTALL VALVES IN "LOW TRAFFIC" AREAS WITH A MIN. CLEARANCE OF 12" BETWEEN THE VALVE BOX AND ANY FENCE, WALL, SIDEWALK, PAVEMENT OR SODLINE
13	ISOLATION GATE VALVE - LINE SIZE
14	EARTH GROUND ASSEMBLY AT CONTROLLER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.
15	EARTH GROUND ASSEMBLY AT DECODER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.

KEYMAP (not to scale)





GRAPHIC SCALE

SCALE: 1" = 20'-0"

CALL 48 HOURS BEFORE YOU DIG
It's the Law!
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

Not valid without embossed seal, signature, and date. ©
Copyright 2012, Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited."

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
EST LCS RCS CST SST	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H TQ F	RAIN BIRD RD-06-P30-NP TURF SPRAY 8 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H TQ F	RAIN BIRD RD-06-P30-NP TURF SPRAY 10 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H TQ F	RAIN BIRD RD-06-P30-NP TURF SPRAY 12 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H TQ F	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 12 15 18	RAIN BIRD RD-06-P30-NP TURF SPRAY ADJ 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 15	RAIN BIRD RD-12-NP SHRUB SPRAY ADJ 12.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
1401 1402 1404 1408	RAIN BIRD 1800-1400 FLOOD FLOOD BUBBLER ON FIXED RISER

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICZ-151-40 DRIP CONTROL ZONE KIT
	HUNTER ICZ-101-40 DRIP CONTROL ZONE KIT
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 (16) XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.90PH EMITTERS AT 12.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICV-G PLASTIC 24 VAC REMOTE CONTROL VALVES.
	NIBCO T-113-K BRONZE GATE SHUT OFF VALVE SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION.
	MATCO-NORCA 10RT CAST IRON GATE ISOLATION VALVE RING-TITE GASKET ENDS. RESILIENT WEDGE WITH EPOXY COATING AND OPTIONAL NUT. SAME SIZE AS MAINLINE PIPE WHERE LOCATED.
C	RAIN BIRD ESP-LXD-LXMMPED WITH (1) ESPLXD-SM75 TWO-WIRE DECODER COMMERCIAL CONTROLLER. 125 STATIONS. UV-RESISTANT, OUTDOOR-RATED, POWDER-COATED METAL PEDESTAL CASE. AVAILABLE IN THE US MARKET, INTERNATIONAL, EUROPEAN, OR AUSTRALIAN MARKETS.
	RAIN BIRD RSD-CEX RAIN SENSING DEVICE, CONDUIT MOUNT. WITH THREADED ADAPTER, EXTENSION WIRE.
	RAIN BIRD FD-101TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES ONE VALVE/SOLENOID. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
	RAIN BIRD FD-202TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES TWO VALVE/SOLENOIDS OR TWO PAIRS OF VALVES. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
	RAIN BIRD LSP-1TURF LINE SURGE PROTECTION DECODER DIRECTLY TO THE GROUND ROD OR GROUND PLATE
	CAP FOR FUTURE USE CAP AT THE MAINLINE OR LATERAL LINE FOR FUTURE USE.
POC	JOHN DEERE GT SERIES LAKE SUCTION PUMP STATION. 180 GPM AT 70 PSI REQUIRED, VFD DRIVES, DUAL PUMPS, PRESSURE DEMAND START, ALUMINUM ENCLOSURE, SELF CLEANING SUCTION SCREEN AND DISCHARGE FILTER, PRESSURE TANK, FLOW METER. SUBMIT SHOP DRAWINGS FOR APPROVAL.
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26 ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 MAINLINE INSTALL GASKET JOINT PIPE WITH MECHANICALLY RESTRAINED DUCTILE IRON FITTINGS FOR ALL MAINLINE 4" AND ABOVE.
	PIPE SLEEVE: PVC SCHEDULE 40 SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.

Valve Callout
- Valve Number
- Valve Flow
- Valve Size

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION:



NORTH:

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION

DRAWING TITLE:

IRRIGATION PLAN

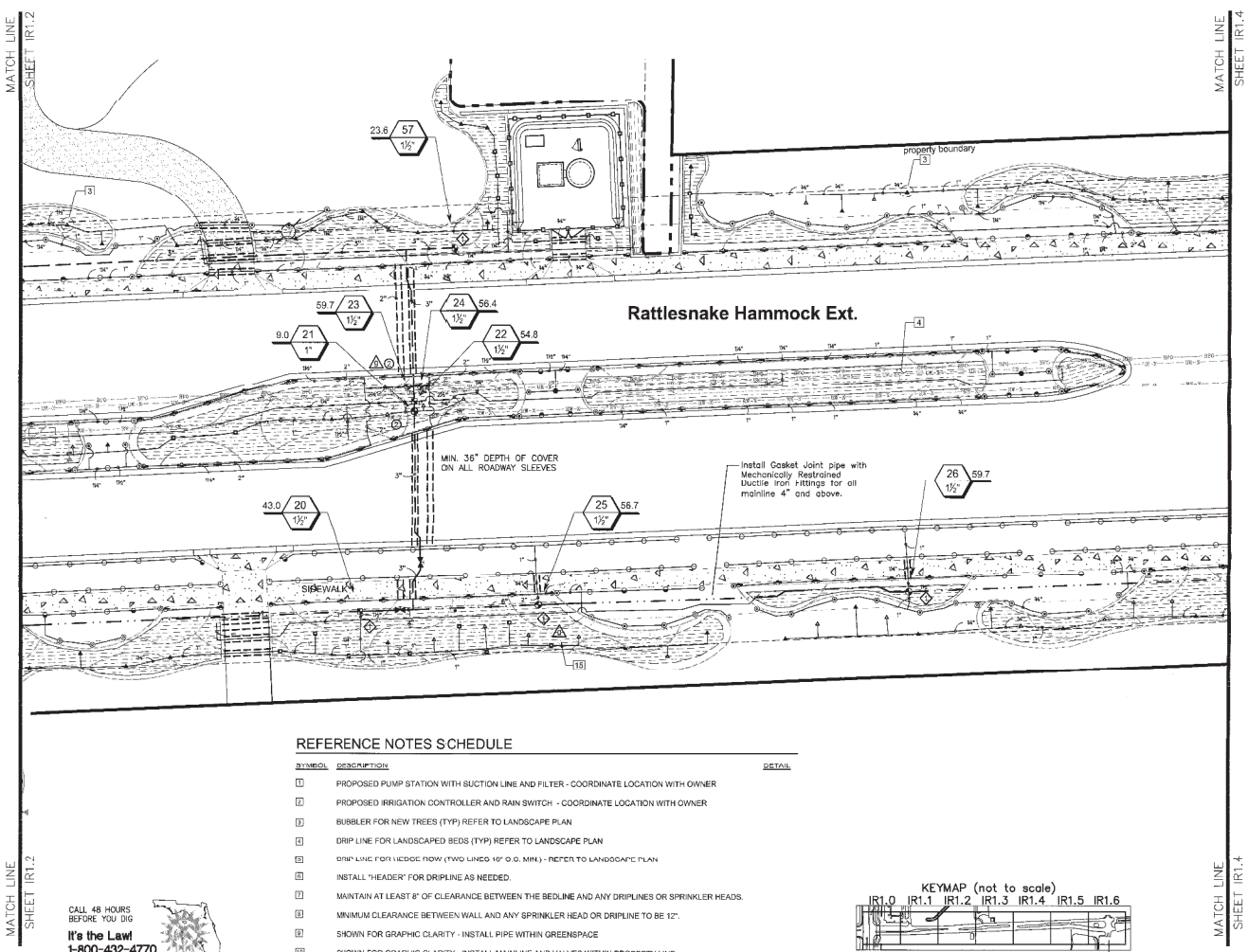
PROJECT PHASE:	-
ISSUE DATE:	-
DRAWN BY:	-
APPROVED BY:	-
WORK ORDER NUMBER:	-

SHEET NO.

IR1.2

SHEET 3 OF 8

© 2009 Knaak Design Group, LLC – KDG Landscape Architects – Online Studio Division.



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	DETAIL
1	PROPOSED PUMP STATION WITH SUCTION LINE AND FILTER - COORDINATE LOCATION WITH OWNER	
2	PROPOSED IRRIGATION CONTROLLER AND RAIN SWITCH - COORDINATE LOCATION WITH OWNER	
3	BUBBLER FOR NEW TREES (TYP) REFER TO LANDSCAPE PLAN	
4	DRIP LINE FOR LANDSCAPED BEDS (TYP) REFER TO LANDSCAPE PLAN	
5	DRIP LINE FOR HEDGE ROW (TWO LINES 16" O.C. MIN.) - REFER TO LANDSCAPE PLAN	
6	INSTALL "HEADER" FOR DRIPLINE AS NEEDED.	
7	MAINTAIN AT LEAST 8" OF CLEARANCE BETWEEN THE BEDLINE AND ANY DRIPLINES OR SPRINKLER HEADS.	
8	MINIMUM CLEARANCE BETWEEN WALL AND ANY SPRINKLER HEAD OR DRIPLINE TO BE 12".	
9	SHOWN FOR GRAPHIC CLARITY - INSTALL PIPE WITHIN GREENSPACE	
10	SHOWN FOR GRAPHIC CLARITY - INSTALL MAINLINE AND VALVES WITHIN PROPERTY LINE	
11	SHOWN FOR GRAPHIC CLARITY - ROUTE PIPING AWAY FROM EXISTING TREE ROOTS. HAND DIG OR DIRECTIONAL BORE AS NEEDED TO PRESERVE EXISTING TREES.	
12	VALVE LOCATIONS ARE DIAGRAMMATIC. INSTALL VALVES IN "LOW TRAFFIC" AREAS WITH A MIN. CLEARANCE OF 12" BETWEEN THE VALVE BOX AND ANY FENCE, WALL, SIDEWALK, PAVEMENT OR SODLINE	
13	ISOLATION GATE VALVE - LINE SIZE	
14	EARTH GROUND ASSEMBLY AT CONTROLLER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.	
15	EARTH GROUND ASSEMBLY AT DECODER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.	

CALL 48 HOURS BEFORE YOU DIG
It's the Law!
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

Not valid without embossed seal, signature, and date. © Copyright 2012, Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited."

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

KEYMAP (not to scale)
IR1.0 IR1.1 IR1.2 IR1.3 IR1.4 IR1.5 IR1.6
Collier Blvd
End Phase 1

0 20 40 80
GRAPHIC SCALE
SCALE: 1" = 20'-0"

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
EST LCS RCS CST SST	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 9 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 18 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 12 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY ADJ 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-12-NP SHRUB SPRAY ADJ 12.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
1401 1404	RAIN BIRD 1800-1400 FLOOD FLOOD BUBBLER ON FIXED RISER

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICZ-151-40 DRIP CONTROL ZONE KIT
	HUNTER ICZ-101-40 DRIP CONTROL ZONE KIT
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 (18) XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE, 0.9GPH EMITTERS AT 12.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICV-G PLASTIC 24 VAC REMOTE CONTROL VALVES.
	NIBCO T-113-K BRONZE GATE SHUT OFF VALVE SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION.
	MATCO-NORCA 10RT CAST IRON GATE ISOLATION VALVE RING-TITE GASKET ENDS. RESILIENT WEDGE WITH EPOXY COATING AND OPTIONAL NUT. SAME SIZE AS MAINLINE PIPE WHERE LOCATED.
C	RAIN BIRD ESP-LXD-LXMMPED WITH (1) ESPLXD-SM75 TWO-WIRE DECODER COMMERCIAL CONTROLLER. 125 STATIONS. UV-RESISTANT, OUTDOOR-RATED, POWDER-COATED METAL PEDESTAL CASE. AVAILABLE IN THE US MARKET, INTERNATIONAL, EUROPEAN, OR AUSTRALIAN MARKETS.
	RAIN BIRD RSD-CEX RAIN SENSING DEVICE, CONDUIT MOUNT. WITH THREADED ADAPTER, EXTENSION WIRE.
	RAIN BIRD FD-101TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES ONE VALVE/SOLENOID. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
2	RAIN BIRD FD-202TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES TWO VALVES/SOLENOIDS OR TWO PAIRS OF VALVES. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
	RAIN BIRD LSP-1TURF LINE SURGE PROTECTION DECODER DIRECTLY TO THE GROUND ROD OR GROUND PLATE
X X	CAP FOR FUTURE USE CAP AT THE MAINLINE OR LATERAL LINE FOR FUTURE USE.
PDC LT	JOHN DEERE GT SERIES LAKE SUCTION PUMP STATION 160 GPM AT 70 PSI REQUIRED, VFD DRIVES, DUAL PUMPS, PRESSURE DEMAND START, ALUMINUM ENCLOSURE, SELF CLEANING SUCTION SCREEN AND DISCHARGE FILTER, PRESSURE TANK, FLOW METER. SUBMIT SHOP DRAWINGS FOR APPROVAL.
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26 ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 MAINLINE INSTALL GASKET JOINT PIPE WITH MECHANICALLY RESTRAINED DUCTILE IRON FITTINGS FOR ALL MAINLINE 4" AND ABOVE.
	PIPE SLEEVE: PVC SCHEDULE 40 SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.

Valve Callout
Valve Number
Valve Flow
Valve Size

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA666690Z STATE OF FLORIDA

NORTH

PROJECT NAME AND LOCATION:
HACIENDA LAKES OF NAPLES
Construction Documents
3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

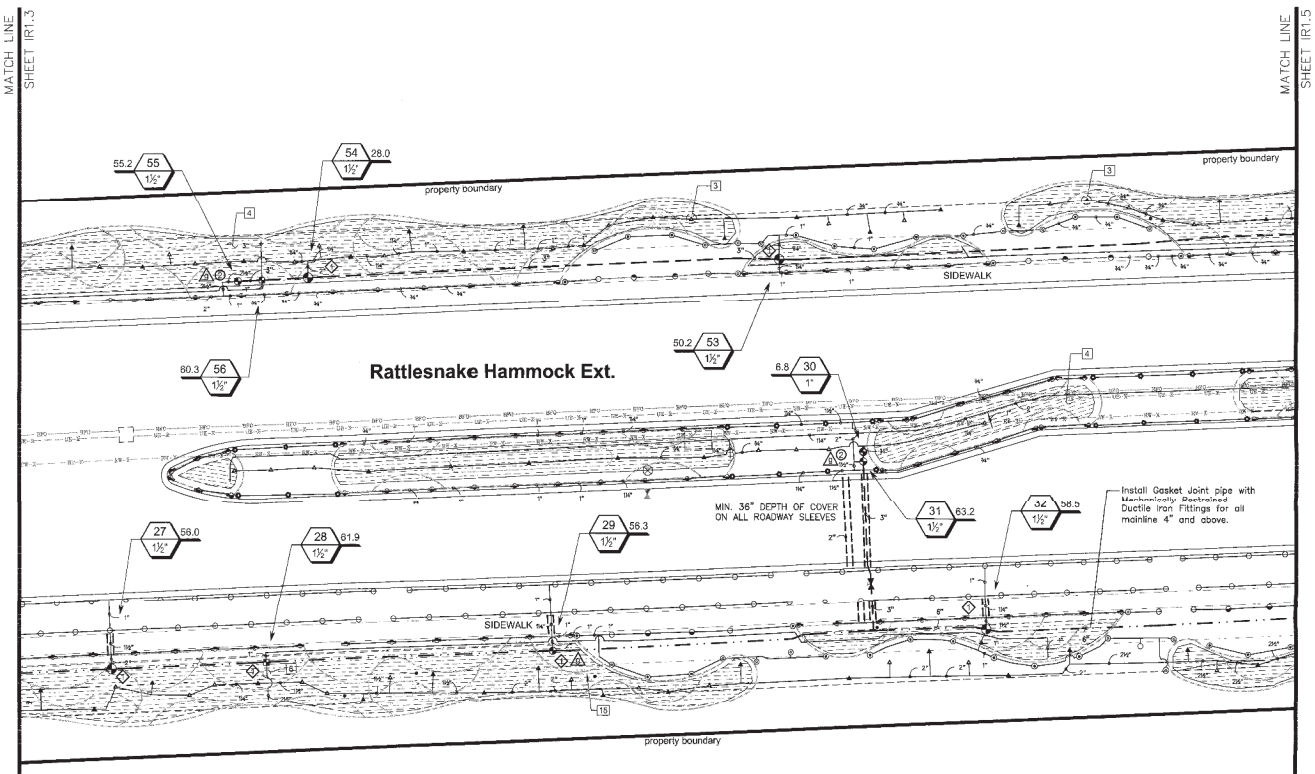
NO.	DATE	REVISION:

DRAWING TITLE:
IRRIGATION PLAN

PROJECT PHASE: -
ISSUE DATE: -
DRAWN BY: - APPROVED BY: -
WORK ORDER NUMBER: -

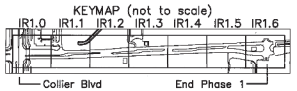
SHEET NO.
IR1.3
SHEET 4 OF 8

© 2005 Knaak Design Group, LLC - KDG Landscape Architects - Online Studio Division.



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	DETAIL
1	PROPOSED PUMP STATION WITH SUCTION LINE AND FILTER - COORDINATE LOCATION WITH OWNER	
2	PROPOSED IRRIGATION CONTROLLER AND RAIN SWITCH - COORDINATE LOCATION WITH OWNER	
3	BUBBLER FOR NEW TREES (TYP) REFER TO LANDSCAPE PLAN	
4	DRIP LINE FOR LANDSCAPED BEDS (TYP) REFER TO LANDSCAPE PLAN	
5	DRIP LINE FOR HEDGE ROW (TWO LINES 18" O.C. MIN.) - REFER TO LANDSCAPE PLAN	
6	INSTALL "HEADER" FOR DRIPLINE AS NEEDED.	
7	MAINTAIN AT LEAST 8" OF CLEARANCE BETWEEN THE BEDLINE AND ANY DRIPLINES OR SPRINKLER HEADS.	
8	MINIMUM CLEARANCE BETWEEN WALL AND ANY SPRINKLER HEAD OR DRIPLINE TO BE 12".	
[8]	SHOWN FOR GRAPHIC CLARITY - INSTALL PIPE WITHIN GREENSPACE	
[7]	SHOWN FOR GRAPHIC CLARITY - INSTALL MAINLINE AND VALVES WITHIN PROPERTY LINE	
[11]	SHOWN FOR GRAPHIC CLARITY - ROUTE PIPING AWAY FROM EXISTING TREE ROOTS. HAND DIG OR DIRECTIONAL BORE AS NEEDED TO PRESERVE EXISTING TREES.	
13	VALVE LOCATIONS ARE DIAGRAMMATIC, INSTALL VALVES IN "LOW TRAFFIC" AREAS WITH A MIN. CLEARANCE OF 12" BETWEEN THE VALVE BOX AND ANY FENCE, WALL, SIDEWALK, PAVEMENT OR SODLINE	
13	ISOLATION GATE VALVE - LINE SIZE	
14	EARTH GROUND ASSEMBLY AT CONTROLLER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.	
15	EARTH GROUND ASSEMBLY AT DECODER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.	





GRAPHIC SCALE
SCALE: 1" = 20'-0"

CALL 48 HOURS BEFORE YOU DIG
It's the Law!
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

Not valid without embossed seal, signature, and date. © Copyright 2012, Knaak Design Group, LLC.
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited."

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
EST LCS RCS CST SST	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H F	RAIN BIRD RD-06-P30-NP TURF SPRAY 8 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H TQ F	RAIN BIRD RD-06-P30-NP TURF SPRAY 10 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H TQ F	RAIN BIRD RD-06-P30-NP TURF SPRAY 12 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H TQ F	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 12 15 18	RAIN BIRD RD-06-P30-NP TURF SPRAY ADJ 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 18	RAIN BIRD RD-12-NP SHRUB SPRAY ADJ 12.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
1402 1408 1401 1404	RAIN BIRD 1800-1400 FLOOD FLOOD BUBBLER ON FIXED RISER

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICZ-151-40 DRIP CONTROL ZONE KIT
	HUNTER ICZ-101-40 DRIP CONTROL ZONE KIT
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 (18) XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.9GPH EMITTERS AT 12.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICV-G PLASTIC 24 VAC REMOTE CONTROL VALVES.
	NIBCO T-113-K BRONZE GATE SHUT OFF VALVE SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION.
	MATCO-NORCA 10RT CAST IRON GATE ISOLATION VALVE RING TITE GASKET ENDS, RESILIENT WEDGE WITH EPOXY COATING AND OPTIONAL NUT. SAME SIZE AS MAINLINE PIPE WHERE LOCATED.
C	RAIN BIRD ESP-LXD-LXMPED WITH (1) ESPLXD-SM75 TWO-WIRE DECODER COMMERCIAL CONTROLLER. 125 STATIONS. UV-RESISTANT, OUTDOOR-RATED, POWDER-COATED METAL PEDESTAL CASE. AVAILABLE IN THE US MARKET, INTERNATIONAL, EUROPEAN, OR AUSTRALIAN MARKETS.
M	RAIN BIRD RSD-CEX RAIN SENSING DEVICE, CONDUIT MOUNT, WITH THREADED ADAPTER, EXTENSION WIRE.
	RAIN BIRD FD-101TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES ONE VALVE/SOLENOID. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
2	RAIN BIRD FD-202TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES TWO VALVE/SOLENOIDS OR TWO PAIRS OF VALVES. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
4	RAIN BIRD LSP-1TURF LINE SURGE PROTECTION DECODER DIRECTLY TO THE GROUND ROD OR GROUND PLATE
XX	CAP FOR FUTURE USE CAP AT THE MAINLINE OR LATERAL LINE FOR FUTURE USE.
POC SIZE	JOHN DEERE GT SERIES LAKE SUCTION PUMP STATION 160 GPM AT 70 PSI REQUIRED, VFD DRIVES, DUAL PUMPS, PRESSURE DEMAND START, ALUMINUM ENCLOSURE, SELF CLEANING SUCTION SCREEN AND DISCHARGE FILTER, PRESSURE TANK, FLOW METER, SUBMIT SHOP DRAWINGS FOR APPROVAL.
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26 ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 MAINLINE INSTALL GASKET JOINT PIPE WITH MECHANICALLY RESTRAINED DUCTILE IRON FITTINGS FOR ALL MAINLINE 4" AND ABOVE.
	PIPE SLEEVE: PVC SCHEDULE 40 SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.



This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION:
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LIC. # LA0667907 STATE OF FLORIDA

NORTH:

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION:

DRAWING TITLE:

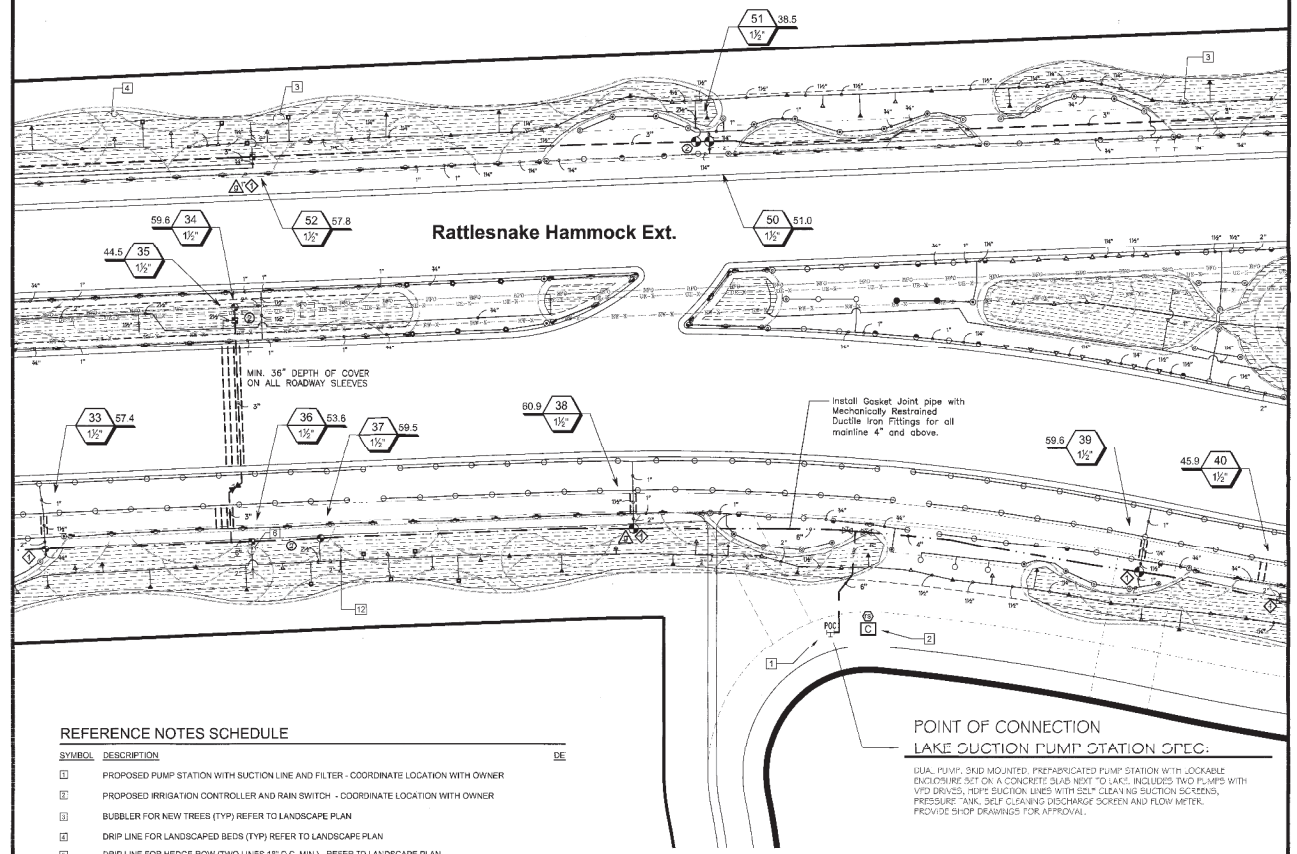
IRRIGATION PLAN

PROJECT PHASE:
ISSUE DATE:
DRAWN BY: | APPROVED BY:
SHEET NO.

IR1.4

SHEET 5 OF 8

© 2005 Knaak Design Group, LLC - KDG Landscape Architects - Outline Studio Division.



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	DE
1	PROPOSED PUMP STATION WITH SUCTION LINE AND FILTER - COORDINATE LOCATION WITH OWNER	
2	PROPOSED IRRIGATION CONTROLLER AND RAIN SWITCH - COORDINATE LOCATION WITH OWNER	
3	BUBBLER FOR NEW TREES (TYP) REFER TO LANDSCAPE PLAN	
4	DRIP LINE FOR LANDSCAPED BEDS (TYP) REFER TO LANDSCAPE PLAN	
5	DRIP LINE FOR HEDGE ROW (TWO LINES 18" O.C. MIN.) - REFER TO LANDSCAPE PLAN	
6	INSTALL "HEADER" FOR DRIPLINE AS NEEDED.	
7	MAINTAIN AT LEAST 8" OF CLEARANCE BETWEEN THE BEDLINE AND ANY DRIPLINES OR SPRINKLER HEADS.	
8	MINIMUM CLEARANCE BETWEEN WALL AND ANY SPRINKLER HEAD OR DRIPLINE TO BE 12".	
9	SHOWN FOR GRAPHIC CLARITY - INSTALL PIPE WITHIN GREENSPACE	
10	SHOWN FOR GRAPHIC CLARITY - INSTALL MAINLINE AND VALVES WITHIN PROPERTY LINE	
11	SHOWN FOR GRAPHIC CLARITY - ROUTE PIPING AWAY FROM EXISTING TREE ROOTS. HAND DIG OR DIRECTIONAL BORE AS NEEDED TO PRESERVE EXISTING TREES.	
12	VALVE LOCATIONS ARE DIAGRAMMATIC. INSTALL VALVES IN "LOW TRAFFIC" AREAS WITH A MIN. CLEARANCE OF 12" BETWEEN THE VALVE BOX AND ANY FENCE, WALL, SIDEWALK, PAVEMENT OR SODLINE	
13	ISOLATION GATE VALVE - LINE SIZE	
14	EARTH GROUND ASSEMBLY AT CONTROLLER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.	
15	EARTH GROUND ASSEMBLY AT DECODER - PER DETAIL AND/OR MANUFACTURER'S RECOMMENDATIONS.	

POINT OF CONNECTION
LAKE SUCTION PUMP STATION SPEC:

DUAL PUMP, SKID MOUNTED, PREFABRICATED PUMP STATION WITH LOCKABLE ENCLOSURE SET ON A CONCRETE SLAB NEXT TO LAKE. INCLUDES TWO PUMPS WITH VFD DRIVES, HDPE SUCTION LINES WITH SELF CLEANING SUCTION SCREENS, PRESSURE TANK, SELF CLEANING DISCHARGE SCREEN AND FLOW METER. PROVIDE SHOP DRAWINGS FOR APPROVAL.

CALL 48 HOURS BEFORE YOU DIG
It's the Law!
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

Not valid without embossed seal, signature, and date. © Copyright 2012, Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited."

KDG assumes no liability for any structures built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

KEYMAP (not to scale)
IR1.0 IR1.1 IR1.2 IR1.3 IR1.4 IR1.5 IR1.6
Collier Blvd
End Phase 1

0 20 40 80
GRAPHIC SCALE
SCALE: 1" = 20'-0"

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
EST LCS RCS CST SST	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H F	RAIN BIRD RD-06-P30-NP TURF SPRAY 8 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H F	RAIN BIRD RD-06-P30-NP TURF SPRAY 10 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H 10 F	RAIN BIRD RD-06-P30-NP TURF SPRAY 12 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H 10 F	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 12 15 18	RAIN BIRD RD-06-P30-NP TURF SPRAY ADJ 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
1 6 8 10 15	RAIN BIRD RD-12-NP SHRUB SPRAY ADJ 12.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
1401 1404	RAIN BIRD 1800-1400 FLOOD FLOOD BUBBLER ON FIXED RISER

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICZ-151-40 DRIP CONTROL ZONE KIT
	HUNTER ICZ-101-40 DRIP CONTROL ZONE KIT
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 (18) XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE, 0.9GPH EMITTERS AT 12.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICV-G PLASTIC 24 VAC REMOTE CONTROL VALVES,
	NIBCO T-113-K BRONZE GATE SHUT OFF VALVE SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION.
	MATCO-NORCA 10RT CAST IRON GATE ISOLATION VALVE RING-TITE GASKET ENDS. RESILIENT WEDGE WITH EPOXY COATING AND OPTIONAL NUT. SAME SIZE AS MAINLINE PIPE WHERE LOCATED.
C	RAIN BIRD ESP-LXD-LXM/PED WITH (1) ESPLXD-SM75 TWO-WIRE DECODER COMMERCIAL CONTROLLER. 126 STATIONS, UV-RESISTANT, OUTDOOR-RATED, POWDER-COATED METAL PEDESTAL CASE. AVAILABLE IN THE US MARKET, INTERNATIONAL, EUROPEAN, OR AUSTRALIAN MARKETS.
RSD	RAIN BIRD RSD-CEX RAIN SENSING DEVICE, CONDUIT MOUNT, WITH THREADED ADAPTER, EXTENSION WIRE.
	RAIN BIRD FD-101TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES ONE VALVE/SOLENOID. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
	RAIN BIRD FD-202TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES TWO VALVE/SOLENOIDS OR TWO PAIRS OF VALVES. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
	RAIN BIRD LSP-1TURF LINE SURGE PROTECTION DECODER DIRECTLY TO THE GROUND ROD OR GROUND PLATE
	CAP FOR FUTURE USE CAP AT THE MAINLINE OR LATERAL LINE FOR FUTURE USE.
POC	JOHN DEERE GT SERIES LAKE SUCTION PUMP STATION 160 GPM AT 70 PSI REQUIRED, VFD DRIVES, DUAL PUMPS, PRESSURE DEMAND START, ALUMINUM ENCLOSURE, SELF CLEANING SUCTION SCREEN AND DISCHARGE FILTER, PRESSURE TANK, FLOW METER. SUBMIT SHOP DRAWINGS FOR APPROVAL.
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26 ONLY. LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 MAINLINE INSTALL GASKET JOINT PIPE WITH MECHANICALLY RESTRAINED DUCTILE IRON FITTINGS FOR ALL MAINLINE 4" AND ABOVE.
	PIPE SLEEVE: PVC SCHEDULE 40 SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.

Valve Callout
Valve Number
Valve Flow
Valve Size

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION:
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA6666907 STATE OF FLORIDA

NORTH:

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION

DRAWING TITLE:

IRRIGATION PLAN

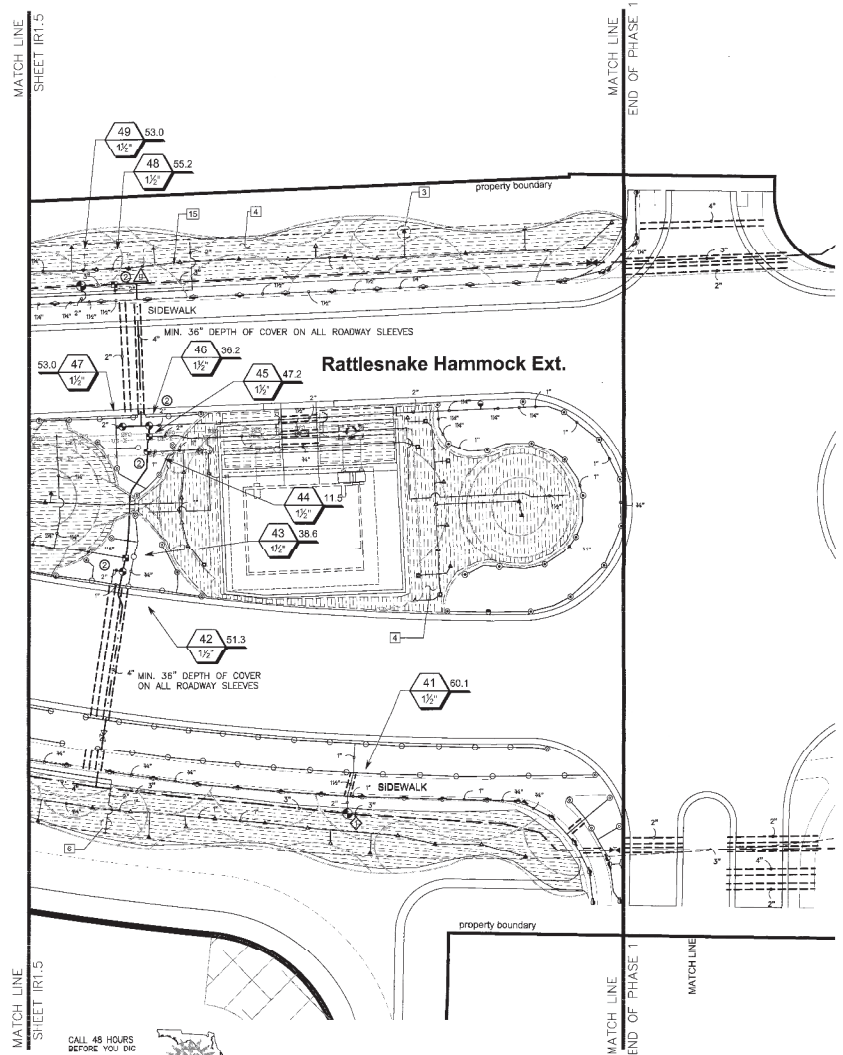
PROJECT PHASE:
ISSUE DATE:
DRAWN BY: | APPROVED BY:
WORK ORDER NUMBER:

SHEET NO.

IR1.5

SHEET 6 OF 8

© 2009 Knaak Design Group, LLC - KDG Landscape Architects - Online Studio Division.

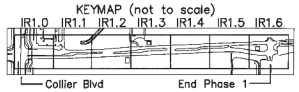


CALL 48 HOURS BEFORE YOU DIG
It's the Law!
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

Not valid without embossed seal, signature, and date. © Copyright 2012, Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited.

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

KEYMAP (not to scale)





GRAPHIC SCALE
SCALE: 1" = 20'-0"

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
EST LCS RCS CST SST	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H F	RAIN BIRD RD-06-P30-NP TURF SPRAY 8 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 STRIP SERIES 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H 10 F	RAIN BIRD RD-06-P30-NP TURF SPRAY 10 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H 10 F	RAIN BIRD RD-06-P30-NP TURF SPRAY 12 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
Q T H 10 F	RAIN BIRD RD-06-P30-NP TURF SPRAY 15 SERIES MPR 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 12 15 18	RAIN BIRD RD-06-P30-NP TURF SPRAY ADJ 6.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
4 6 8 10 15	RAIN BIRD RD-12-NP SHRUB SPRAY ADJ 12.0" POP-UP WITH NON-POTABLE COVER (PURPLE CAP).
1402 1405 1401 1404	RAIN BIRD 1800-1400 FLOOD FLOOD BUBBLER ON FIXED RISER

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICZ-151-40 DRIP CONTROL ZONE KIT
	HUNTER ICZ-101-40 DRIP CONTROL ZONE KIT
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 (18) XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.90GPH EMITTERS AT 12.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICV-G PLASTIC 24 VAC REMOTE CONTROL VALVES.
	NIBCO T-113-K BRONZE GATE SHUT OFF VALVE SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION.
	MATCO-NORCA 10RT CAST IRON GATE ISOLATION VALVE RING TYPE GASKET ENDS, RESILIENT WEDGE WITH EPOXY COATING AND OPTIONAL NUT. SAME SIZE AS MAINLINE PIPE WHERE LOCATED.
C	RAIN BIRD ESP-LXD-LXMMPED WITH (1) ESPLXD-SM75 TWO-WIRE DECODER COMMERCIAL CONTROLLER. 125 STATIONS. UV-RESISTANT, OUTDOOR-RATED, POWDER-COATED METAL PEDESTAL CASE. AVAILABLE IN THE US MARKET, INTERNATIONAL, EUROPEAN, OR AUSTRALIAN MARKETS.
	RAIN BIRD RSD-CEX RAIN SENSING DEVICE, CONDUIT MOUNT. WITH THREADED ADAPTER, EXTENSION WIRE.
	RAIN BIRD FD-101TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES ONE VALVE/SOLENOID. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
	RAIN BIRD FD-202TURF FIELD DECODER INSTALL IN VALVE BOX. OPERATES TWO VALVE/SOLENOIDS OR TWO PAIRS OF VALVES. USE LINE SURGE PROTECTION AS PER MANUFACTURER'S DIRECTIONS.
	RAIN BIRD LSP-1TURF LINE SURGE PROTECTION DECODER DIRECTLY TO THE GROUND ROD OR GROUND PLATE
	CAP FOR FUTURE USE CAP AT THE MAINLINE OR LATERAL LINE FOR FUTURE USE.
POC	JOHN DEERE GT SERIES LAKE SUCTION PUMP STATION 180 GPM AT 70 PSI REQUIRED, VFD DRIVES, DUAL PUMPS, PRESSURE DEMAND START, ALUMINUM ENCLOSURE, SELF CLEANING SUCTION SCREEN AND DISCHARGE FILTER, PRESSURE TANK, FLOW METER. SUBMIT SHOP DRAWINGS FOR APPROVAL.
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26 ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 MAINLINE INSTALL GASKET JOINT PIPE WITH MECHANICALLY RESTRAINED DUCTILE IRON FITTINGS FOR ALL MAINLINE 4" AND ABOVE.
	PIPE SLEEVE: PVC SCHEDULE 40 SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.

Valve Callout
Valve Number
Valve Flow
Valve Size

IRRIGATION NOTES:

1. Irrigation system design requirements: 180 GPM @ a minimum of 70 PSI at the point of connection. The Irrigation Contractor shall verify the available GPM and PSI prior to installation of the system.
2. Do not willfully install the irrigation system as shown on the drawings when it is obvious in the field that conditions exist that might not have been considered in the design process. For example: obstructions, grade differences, water levels, dimensions differences, etc. Refer to the Landscape Plan to avoid conflicts with proposed trees or shrubs.
3. Piping may sometimes be indicated as being located in unlikely areas: i.e., under buildings or pavement, outside of property lines, in lakes or ditches, etc. This is done for graphic clarity only. Whenever possible, piping is to be installed in open, green areas.
4. If required, the Irrigation Contractor shall provide the necessary "Right of Way" use permits.
5. Pipe sizes shall conform to those on the drawings. Substituting with smaller pipe sizes will not be permitted.
6. Mainline is to be installed with a minimum of 24" depth of cover. Lateral lines are to be installed with a minimum of 12" depth of cover.
7. Unless otherwise indicated, all sleeves are to be PVC Sch 40 and two (2) nominal sizes larger than the pipe to be sleeved. For example: The sleeve for a 2" pipe shall be 3". No irrigation sleeve shall be smaller than 2".
8. Where new pavement will cover an installed valve and/or flush valve box, the Contractor shall install a 12" square valve box extension. Valve boxes shall be installed flush with finished grade. All valves, flush valves and wire splices shall be installed in Rain Bird wide flanged, structural foam "plastic" valve boxes as follows:

Remote Control Valves	#VB-910, 12" std. rect. box
Isolation Gate Valves	#VB-1ORND, 10" round box
Wire Splices	#VB-1ORND, 10" round box
Dbl Zone Valve / Filter Assy	#VB-5PR, Super Jumbo Rect. box

9. Refer to Valve Designation Symbols for controller, station number and designed flow rate for each remote control valve.
10. The communication cable between the controller and the decoders shall be Hunter # D1BLU (14-2 AWG) jacketed, twisted cable. Use a different color jacket for each cable run. Maximum distance per cable run shall be 5,000'.
11. All decoder-to-solenoid wiring shall be 18-2 AWG twisted cable, with a maximum cable length of 80'.
12. All splices to the control wiring shall be made with 3M #DB 6 600 volt, UL listed direct bury splice kits. Use "yellow or "red" size as needed.
13. All pop-up sprinkler heads shall be installed level and flush to grade. Mount all sprinklers on flexible connections as follows:

1/2" inlet spray heads	18" of Heavy Wall PVC IPS Hose
3/4" inlet rotor heads	18" of Heavy Wall PVC IPS Hose

14. The tops of all shrub sprinklers shall be installed 2" above the height of the surrounding plant material. For plant heights of 12" or more, support the riser with a #5 rebar stake and nylon cable ties. All risers shall be placed a minimum of 12" from any sidewalk, edge of pavement or structure.
15. Location of all sprinkler heads shall be side adjusted to minimize water overthrow onto building surfaces and walkways. Throttle valves on spray zones as required to prevent fogging.
16. Install drip tubing at grade and cover with mulch. Typical spacing for drip tubing is 18" to 24" on center. Spacing to be determined by plant layout. Refer to Landscape Plan. Anchor tubing every 7' with 6" long wire staking stakes. Install flush valve assemblies at all tubing "dead ends".
17. Exact controller location(s) shall be coordinated with an Owner's Representative prior to installation. Unless otherwise stated, the General Contractor shall provide 110 volt power to the controller location(s). The Irrigation Contractor is responsible for the connection from the power source to the controller(s).
18. At each irrigation controller, install a "secondary surge arrester" to the incoming (120 volt) power supply (Intermatic #AG2401 or equal).
19. At each irrigation controller, install an "supplementary earth ground and" with a minimum of two (2) 4' x 3/4" grounding plates. Test the resistance to earth per NFPA Standard #780. A acceptable earth ground should have 12 ohms or less resistance. Use more plates or grounding rods as needed to achieve the desired resistance reading.
20. The rain shutoff device shall be installed to meet local codes and/or manufacturers recommendations. Obstructions, vandalism and ease of service shall be considered in locating the device.
21. Exact pump location(s) shall be coordinated with an Owner's Representative prior to installation. Unless otherwise staked, the General Contractor shall provide 230 volt, three phase power to the pump location(s). The Irrigation Contractor is responsible for the connection from the power source to the pump(s).
22. The IRRIGATION CONTRACTOR shall prepare an AS-BUILT drawing on reproducible paper detailing the actual installation of the irrigation system. The AS-BUILT drawings shall locate all main line piping, control valves, wire splices, sleeves and valves by showing exact measurements from permanent features (buildings, edge of pavement, power poles, fire hydrants, etc.). Include depth of cover on mainline and sleeves.
23. No product substitutions will be permitted without the written permission of the Owner's Representative. Irrigation Contractor to provide submittals to the Owner's Representative for approval prior to installation.
24. Any other equipment required that is not other wise detailed or specified shall be installed as per manufacturer's recommendations and local code.

CONTROLLER PROGRAMING:

THIS SYSTEM IS DESIGNED TO OPERATE UP TO THREE (3) 60 GPM ZONES AT A TIME.

TURF SPRAY ZONES TO OPERATE THREE (3) DAYS PER WEEK.

BUBBLER AND DRIPLINE ZONES TO OPERATE ON "TURF ZONE "OFF DAYS".

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

© 2006 Knaak Design Group, LLC - KDG Landscape Architects - Online Studio Division.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA6666907 STATE OF FLORIDA

NORTH

PROJECT NAME AND LOCATION
HACIENDA LAKES OF NAPLES
Construction Documents
3921 Prospect Avenue
Naples, Florida 34104

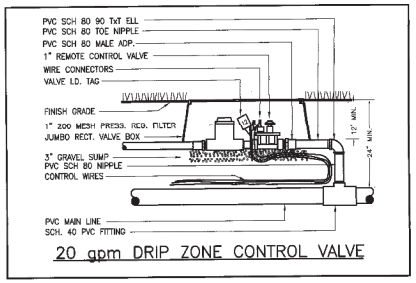
REVISIONS:

NO.	DATE	REVISION

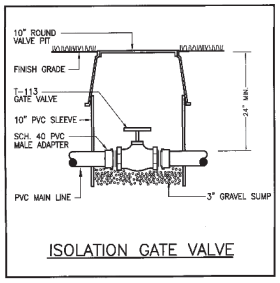
DRAWING TITLE:
IRRIGATION PLAN

PROJECT PHASE:	-
ISSUE DATE:	-
DRAWN BY: -	APPROVED BY: -
WORK ORDER NUMBER:	-

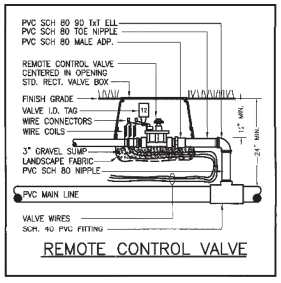
SHEET NO.
IR1.6
SHEET 7 OF 8



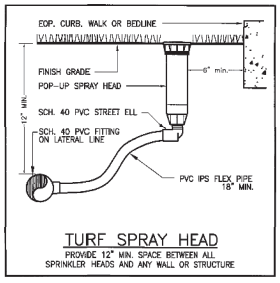
20 gpm DRIP ZONE CONTROL VALVE



ISOLATION GATE VALVE

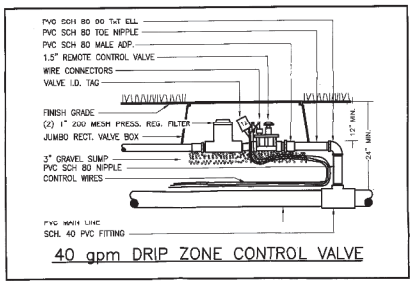


REMOTE CONTROL VALVE

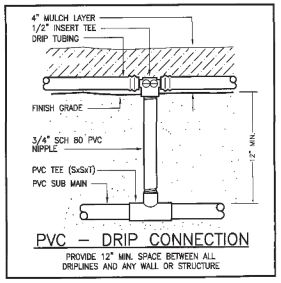


TURF SPRAY HEAD

PROVIDE 12" MIN. SPACE BETWEEN ALL SPRINKLER HEADS AND ANY WALL OR STRUCTURE

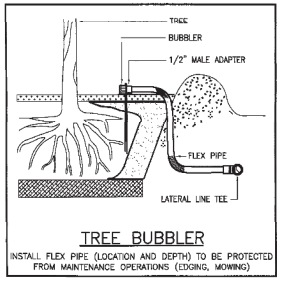


40 gpm DRIP ZONE CONTROL VALVE



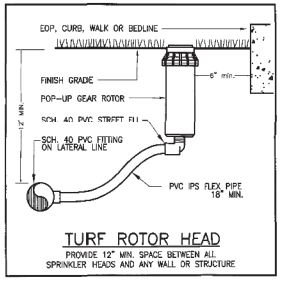
PVC – DRIP CONNECTION

PROVIDE 12" MIN. SPACE BETWEEN ALL DRIPLINES AND ANY WALL OR STRUCTURE



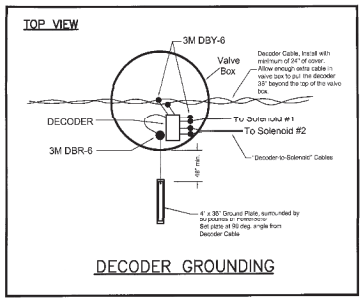
TREE BUBBLER

INSTALL FLEX PIPE (LOCATION AND DEPTH) TO BE PROTECTED FROM MAINTENANCE OPERATIONS (EDGING, MOWING)

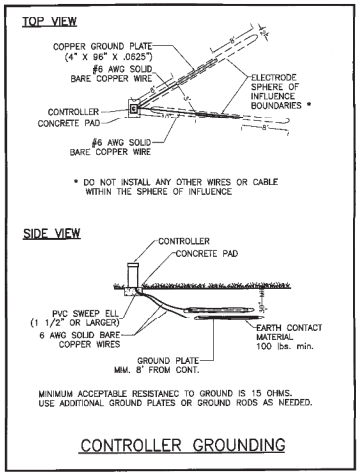


TURF ROTOR HEAD

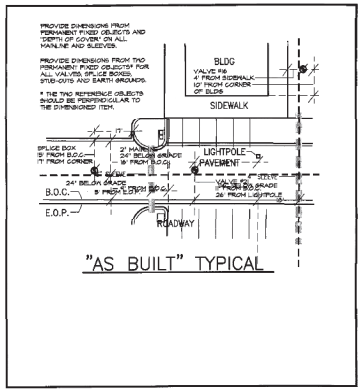
PROVIDE 12" MIN. SPACE BETWEEN ALL SPRINKLER HEADS AND ANY WALL OR STRUCTURE



DECODER GROUNDING



CONTROLLER GROUNDING



"AS BUILT" TYPICAL

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Permit from the Collier County Transportation Department.

© 2005 Knaak Design Group, LLC - KDG Landscape Architects - Online Studio Version.

knaak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #220-303
Fort Myers, Florida
33912
239.246.7898
www.knaakdesigngroup.com

REGISTRATION

REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA6666907 STATE OF FLORIDA

NORTH:

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

CONSTRUCTION DOCUMENTS

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION

DRAWING TITLE:

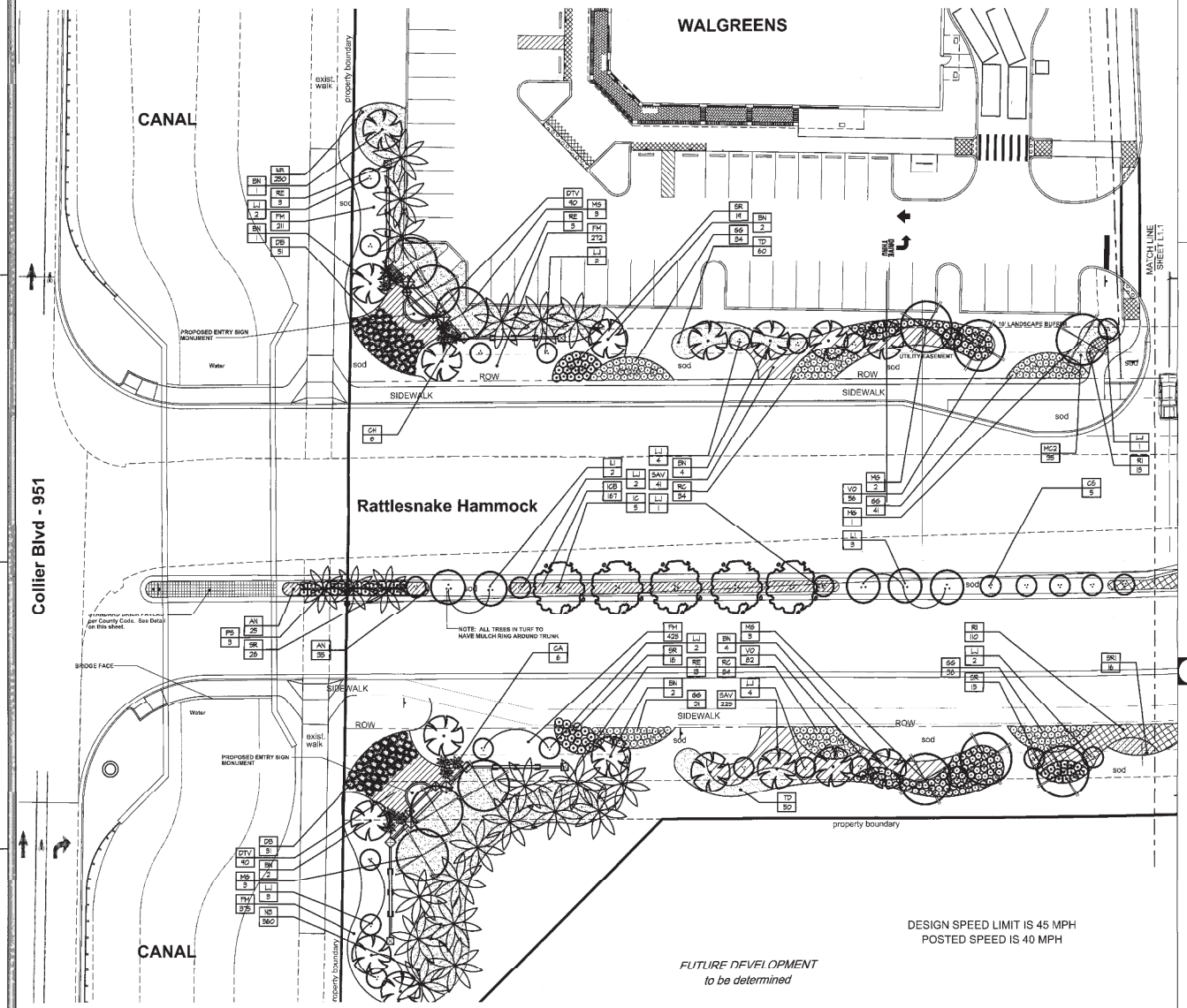
IRRIGATION DETAILS

PROJECT PHASE:	-
ISSUE DATE:	-
DRAWN BY: -	APPROVED BY: -
WORK ORDER NUMBER:	-

SHEET NO.

IR2.0

SHEET OF



DESIGN SPEED LIMIT IS 45 MPH
POSTED SPEED IS 40 MPH

FUTURE DEVELOPMENT
to be determined

TREES

Qty	Sym	Botanical Name	Common Name	Size	Native
14	LI	Lagerstroemia indica 'Tuscarora'	Crape Myrtle	65 - 10-14' Ht. x 6'-7' Spr., Full Head	
62	MG	Magnolia grandiflora 'DD Blanchard'	Southern Magnolia	15-16' Ht. x 6'-8' Spr., 200 gal.	Yes
132	LJ	Liquidambar formosana	Tree Liquidambar	8' X 8', Multi-trunk, Tree Form	
22	QB	Quercus virginiana	Live Oak	10-12' Ht, B & B	
30	QV	Quercus virginiana	Live Oak	10ft Gallon min, Florida Fancy	Yes
43	CS	Senna surattensis	Senna	65 Gallon min, Florida Fancy	Yes
9	CH	Chrysobalanus icaco	Pitch Apple	6'-10' minimum	
8	IC	Ilex cassine	Dahoon Holly	Field Grown 10'-12' Std	Yes

NOTE: Each tree is required to have an minimum a three (3") inch layer of SHREDDED PINE BARK mulch no less than 36" beyond its trunk in all directions.

PALMS

Qty	Sym	Botanical Name	Common Name	Size	Native
16	BN	Bismarckia nobilis	Bismark Palm	7' Clear Trunk, Thick Trunk, Must Show Photo	
13	PS	Phoenix sylvestris	Sylvestar Date Palm	Triple Hooted Specimen 22' Overall Height NOTE: Typical height on plan, thick trunk, Must show photo	
22	CH	Chamaerops humilis	Mediterranean Fan	15 gallon, multi-trunk	
58	RE	Roystonea elata	Royal Palm	15' Grey Wood, Large Base, Matching, Must Show Photo	Yes
5	SP	Sabal palmetto	Cabbage Palm	16'-18' Clear Trunk, Booted, Cut Head, Staggered	Yes

NOTE: Palm trees required to meet minimum requirements shall have a minimum size of 10 feet overall, unless located within ten feet of a walkway, in which case they shall have a minimum of ten feet of clear trunk at planting.

SHRUBS

Qty	Sym	Botanical Name	Common Name	Size	Native
48	PW	Podocarpus maki	Podocarpus	5-10' minimum, full to base	
1,196	RC	Ruellia caroliniana	Wild Petunia	3 gal., 16" Ht. x 14-16" Spr., 30" o.c.	Yes
1,084	MH	Galphimia gracca	Thryallis	3 gal., 18" x 24" min., 36" o.c.	
58	MC	Myrtus cerifera	Wax Myrtle	65 gal., 7' minimum height	Yes
363	SAV	Scheffera arboricola 'Variegata'	Dwf. Schefflera	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	
886	MS	Nephrolepis biserrata	Macho Fern	3 gal., 18" Ht. x 12-14" Spr., 30" o.c.	Yes
3967	SA	Schefflera actinophylla	Red Schefflera	3 gal., 18"-24" Ht., Full, 36" o.c.	
6	RS	Rhapis excelsa x humilis 'red cluster'	Redbrush	45 gal., 6' height minimum	
1644	VO	Viburnum odoratissimum	Sweet Viburnum	3 gal., 18" Ht., Full, 36" o.c.	Yes
746	FH	Ficus microcarpa	Green Island Ficus	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	
556	JM	Jasminum simplicifolium	Wax Jasmine	3 gal., 18" Ht. x 10-12"	
338	ICD	Ilex cornuta burfordii	Dwarf burfod Holly	3 gal., 18" Ht. x 10-12"	
4649	RI	Rhaphiolepis indica	Indian Hawthorn	3 gal., 18" Ht. x 10-12"	

GROUNDCOVER

Qty	Sym	Botanical Name	Common Name	Size	Native
88	JP	Juniperus chinensis 'parsons'	Parson's Juniper	3 gal., Full, 12" x 18" min., 24" o.c.	
10	AN	Annuals	Single Color	Landscape Architect/Owner to Select	
1,525	BG	Bougainvillea spp.	Dwarf Bougainvillea	3 gal., Full, 24" - 48" min., 24" o.c.	

NOTE: All groundcovers shall be planted no more than 24" apart for one (1) gallon pots or 12" apart for four (4) inch pots.
ALL GROUNDCOVER TO MAINTAINED AT A MAXIMUM HEIGHT OF 24"

ACCENTS

Qty	Sym	Botanical Name	Common Name	Size	Native
764	SR1	Serona repens	Silver Saw Palmetto	7 gal., Must Show Photo, 30" o.c.	Yes
674	SR	Strelitzia nicholai	Orange Bird of Paradise	7 gal., 18" Ht. x 14-16" Spr., Full, 30" o.c.	
12	CA	Crinum augustum 'Queen Emma'	Crinum Lily	3' Ht x 3' Spr., 7 gal	
212	DTV	Dianella tasmanica 'variegata'	Blueberry Flax Lily	3 gal., 12" Ht. x 10-12" Spr., 30" o.c.	
353	PL	Pentas lanceolata	White Pentas	1 gal., 18" Ht. x 10-12" Spr., 18" o.c.	
88	ZM	Zamia pumila	Cardboard Plant	7 gal., 18" Ht. x 14-16" Spr., Full, 36" o.c.	Yes

GRASSES

Qty	Sym	Botanical Name	Common Name	Size	Native
2126	TD	Tripsacum dactyloides	Fakahatchee Grass	3 gal., Full Pots 36" o.c.	Yes
1466	MC2	Muhlenbergia capillaris	Muhley Grass	3 gal., Full Pots 36" o.c.	Yes
405	TF	Tripsacum floridana	Dwarf Fakahatchee Grass	3 gal., Full Pots 36" o.c.	Yes
sf	SOD	Stenotaphrum secundatum	St. Augustine	Sod	

INSTALL STANDARDS

Plant installation standards. Final materials shall be installed to and conditions that are conducive to the proper growth of the plant material. Soil in planting areas shall be loose, permeable, friable, and free of limestone and other construction materials, parking lot base material, rocks, noxious weeds, grasses, hard pan, clay or other debris. It is recommended that such materials be removed to a depth of two and one-half feet for the well-being of plant materials. Required canopy trees, accent trees, palm trees, and shrubs shall be planted on grades not exceeding 3:1

MISCELLANEOUS

Mulch 3" depth. All mulch to consist of hardwoods and not CYPRESS MULCH. USE SHREDDED PINE BARK.
Contractor Must Verify Plant Counts. Any discrepancies contact landscape architect.
All field adjustments must be approved by landscape architect.
Plant designation is determined by stated tag, not symbol.
Photos must be submitted of specimens or subject to rejection by landscape architect.
No prime must be planted nearer than 10' to any utility pole or other obstacle unless approved.
Each tree is required to have at minimum a three (3") inch layer of organic hardwood mulch no less than 36" beyond its trunk in all directions.
**NOTE: Trees MUST be maintained at a 15'-6" clearance over travelled roadways and 10'-0" over sidewalks.

Not valid without embossed seal, signature, and date. ©Copyright 2012, Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited."

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

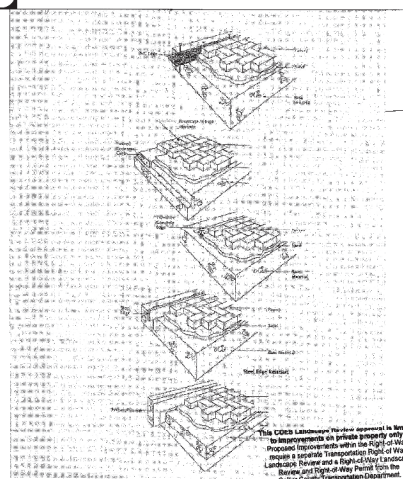
Planting Plan Subject to Change. Landscape Architect observes the right to make field changes including plant quantities and species changes to meet or exceed the county code.

As-built construction drawings shall be required and submitted to the Right-of-Way Department in both PDF and AutoCAD format upon completion of project.

0 20 40 80
GRAPHIC SCALE

A PLANTING PLAN — SCALE: 1" = 20'-0"

B PLANT LEGEND



This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

C COUNTY STANDARD PAVER DETAIL FOR MEDIAN

© 2005 Knaak Design Group, LLC - KDG Landscape Architects - Collier Studio Division.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA6666907 STATE OF FLORIDA

NORTH

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION

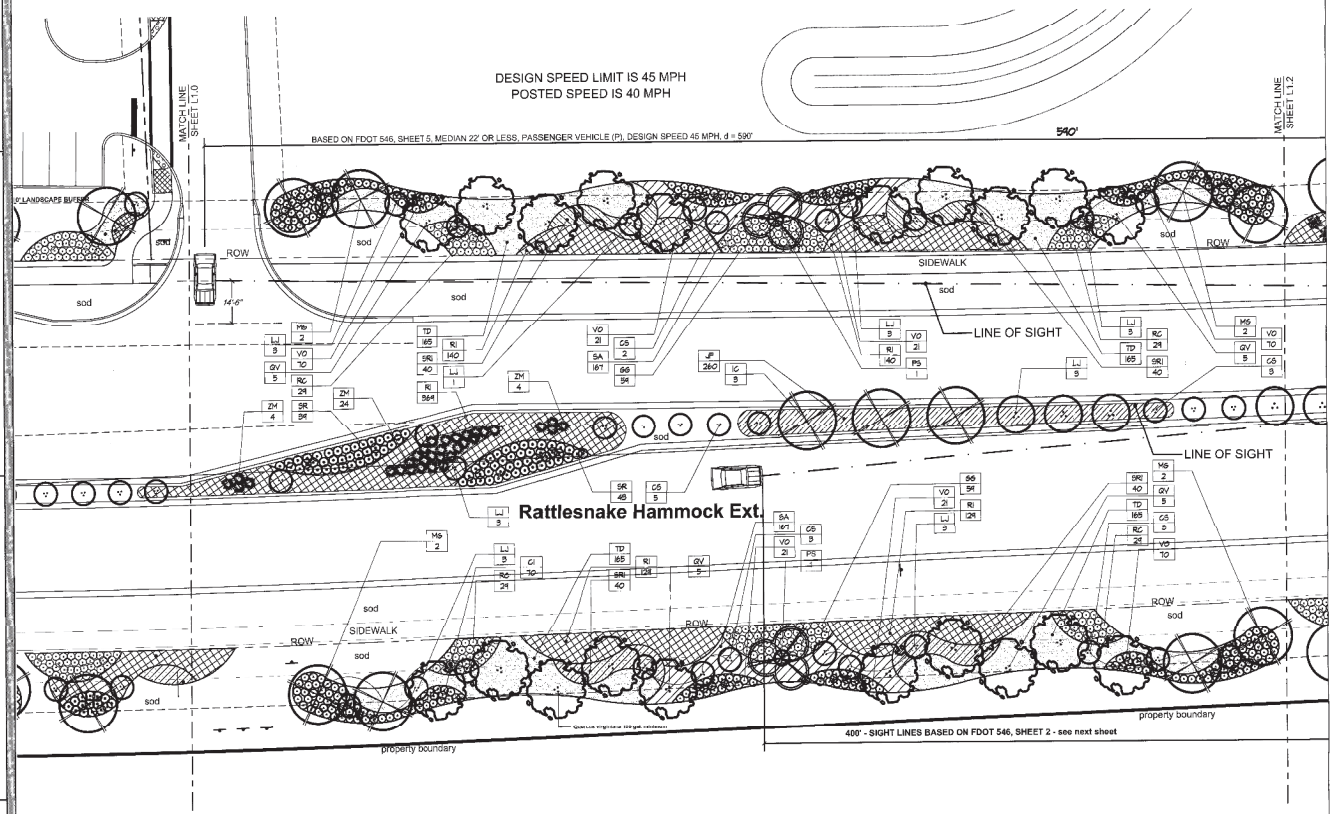
DRAWING TITLE:

PLANTING PLAN

PROJECT PHASE: -
ISSUE DATE: -
DRAWN BY: - APPROVED BY: -
WORK ORDER NUMBER: -
SHEET NO.

L1.0

SHEET
OF



TREES

Qty	Sym	Botanical Name	Common Name	Size	Native
14	LI	Lagerstroemia indica 'purpurea'	Crape Myrtle	65, 10-14' Ht. x 5'-7' Spr., Full Head	
62	MG	Magnolia grandiflora '120 Blanchard'	Southern Magnolia	15-16' Ht. x 8'-0' Spr., 200 gal.	Yes
133	LJ	Liquidambar lacciniflua	Tree Liquidambar	8' X 6', Multi-trunk, Tree Form	
22	DR	Delonix regia	Royal Poinciana	10-12' Ht. B & B	
99	QV	Quercus virginiana	Live Oak	105 Gallon min, Florida Fancy	Yes
49	CS	Swinglea glutinosa	Senna	65 Gallon min, Florida Fancy	Yes
9	CH	Clusia rosea	Pitch Apple	8-10' minimum	
8	IC	Ilex cassine	Dahoon Holly	Field Grown 10'-12' Std	Yes

NOTE: Each tree is required to have at minimum a three (3") inch layer of SHREDDED PINE BARK mulch no less than 36" beyond its trunk in all directions.

PALMS

Qty	Sym	Botanical Name	Common Name	Size	Native
16	BN	Bismarkia nobilis	Bismark Palm	7' Clear Trunk, Thick Trunk, Must Show Photo	
13	PS	Phoenix sylvestri	Sylvestor Date Palms	Triple Headed Specimen 22' Overall Height NOTE: Typical height on plan, thick trunk, Must show photo	
22	CH	Chamaerops humilis	Mediterranean Fan	15 gallon, multi-trunk	
55	RE	Roystonea elata	Royal Palm	13' Grey Wood, Large Base, Matching, Must Show Photo	Yes
5	SP	Sabal palmetto	Cabbage Palm	16'-14' Clear Trunk, Boxted, Cut Head, Staggered	Yes

NOTE: Palm trees required to meet minimum requirements shall have a minimum size of 16 feet overall, unless located within ten feet of a walkway, in which case they shall have a minimum of ten feet of clear trunk at planting

SHRUBS

Qty	Sym	Botanical Name	Common Name	Size	Native
48	PM	Podocarpus macl.	Podocarpus	6'-10' minimum, full to base	
786	RC	Ruellia carolinensis	Wild Petunia	3 gal., 18" Ht. x 14-16" Spr., 30" o.c.	Yes
1996	GG	Gaillardia glasca	Thryallis	3 gal., 18" x 24" min., 36" o.c.	
23	MC1	Myrica cerifera	Wax Myrtle	65 gal.,8' minimum height	Yes
363	SAV	Schefflera arboricola 'variegata'	Dwf. Schefflera	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	
555	NB	Nephrolepis biserrata	Macho Fern	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	Yes
1357	SA	Schefflera arboricola	Dwf. Schefflera	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	
8	SC	Calliandra slirmia 'red closter'	Powderpuff	45 gal., 5' Height minimum	
1644	VO	Viburnum odoratissimum	Sweet Viburnum	3 gal., 18" Ht., Full, 36" o.c.	Yes
746	FM	Ficus microcarpa	Green Island Ficus	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	
800	JM	Jasminum simplicifolium	Wax Jasmine	3 gal., 18" Ht. x 10-12"	
533	ICS	Ilex cornuta burfordii	Dwarf burfod Holly	3 gal., 18" Ht. x 10-12"	
4649	RI	Rhaphiolepis indica	Indian Hawthorn	3 gal., 18" Ht. x 10-12"	

GROUNDCOVER

Qty	Sym	Botanical Name	Common Name	Size	Native
98	JP	Juniperus chinensis 'parsoni'	Parson's Juniper	3 gal., Full, 12" x 18" min., 24" o.c.	
60	AN	Arrosits	Single Color	Landscape Architect/Owner to Select	
1965	DB	Bougainvillea spp.	Dwarf Bougainvillea	3 gal., Full, 12" x 18" min., 24" o.c.	

NOTE: All groundcovers shall be planted no more than 24" apart for one (1) gallon pots or 12" apart for four (4) inch pots. ALL GROUNDCOVER TO MAINTAINED AT A MAXIMUM HEIGHT OF 24"

ACCENTS

Qty	Sym	Botanical Name	Common Name	Size	Native
784	SR1	Serena repens	Silver Saw Palmetto	7 gal., Mast Show Photo, 36" o.c.	Yes
514	SR	Strelitzia reginae	Orange Bird of Paradise	7 gal., 18" Ht. x 16-18" Spr., Full, 36" o.c.	
12	CA	Crinum augustum 'Queen Emma'	Crinum Lily	3' Ht.x 3' Spr., 7 gal.	
212	DTV	Dianella tasmanica 'variegata'	Blueberry Flax Lily	3 gal., 18" Ht. x 10-12" Spr., 36" o.c.	
383	PL	Pentas lanceolata	White Pentas	1 gal., 16" Ht. x 10-12" Spr., 18" o.c.	
60	ZM	Zamia pumila	Coontail Plant	7 gal., 18" Ht. x 14-16" Spr., Full, 36" o.c.	Yes

GRASSES

Qty	Sym	Botanical Name	Common Name	Size	Native
2124	TD	Tripsacum dactyloides	Fakahatchee Grass	3 gal., Full Pots 36" o.c.	Yes
1464	MC2	Muhlenbergia capillaris	Muhley Grass	3 gal., Full Pots 36" o.c.	Yes
486	TF	Tripsacum floridana	Dwarf Fakahatchee Grass	3 gal., Full Pots 36" o.c.	Yes
sf	SOD	Stenotaphrum secundatum	St. Augustine	Sod	

INSTALL STANDARDS

Plant installation standards. Plant materials shall be installed in soil conditions that are conducive to the proper growth of the plant material. Soil in planting areas shall be loose, permeable, friable, and free of limestone and other construction materials, parking lot base material, rocks, rocky roads, gravel, sod, peat, clay or other debris. It is recommended that such materials be removed to a depth of two and one-half feet for the well-being of plant materials. Required canopy trees, accent trees, palm trees, and shrubs shall be planted on grades not exceeding 3:1

MISCELLANEOUS

Mulch 3" depth. All mulch to consist of hardwoods and not CYPRESS MULCH. USE SHREDDED PINE BARK.
Contractor Must Verify Plant Counts. Any discrepancies contact landscape architect.
All field adjustments must be approved by landscape architect.
Plant designation is determined by select tag, call symbol.
Photos must be submitted of specimens or subject to rejection by landscape architect.
All plants must be Florida Number 1 or better unless otherwise specified.
Each tree is required to have at minimum a three (3") inch layer of organic hardwood mulch no less than 36" beyond its trunk in all directions.
**NOTE: Trees MUST be maintained at a 15'-6" clearance over travelled roadways and 10'-0" over sidewalks.

Planting Plan Subject to Change.
Landscape Architect observes the right to make field changes including plant quantities and species changes to meet or exceed the county code.

As-built construction drawings shall be required and submitted to the Right-of-Way Department in both PDF and AutoCAD format upon completion of project.

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

0 20 40 80
GRAPHIC SCALE

SCALE: 1" = 20'-0"

A PLANTING PLAN

B PLANT LEGEND

Not valid without embossed seal, signature, and date. ©Copyright 2015, Knaak Design Group, LLC This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited."

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION:
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA6666997 STATE OF FLORIDA

NORTH:

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION

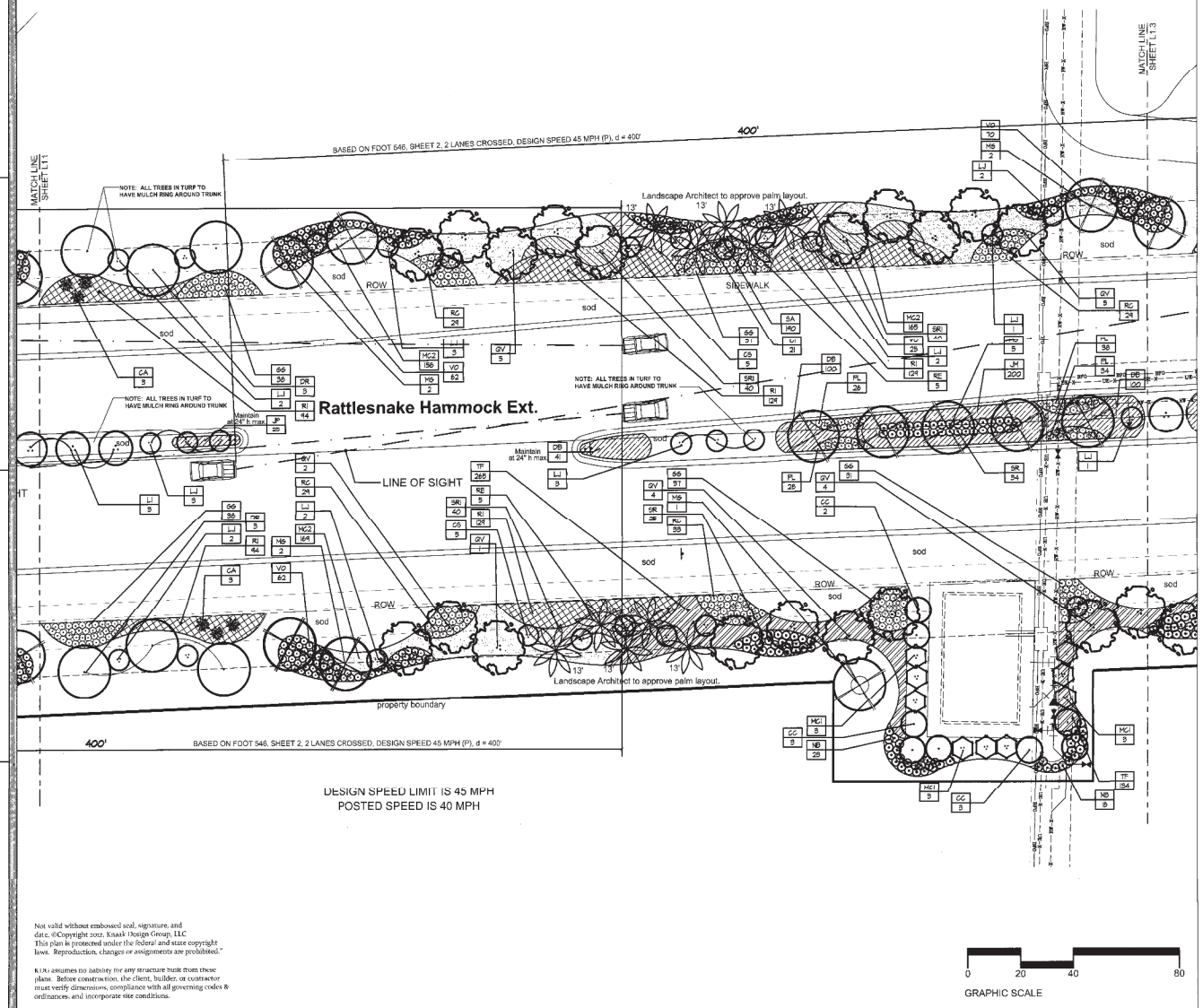
DRAWING TITLE:

PLANTING PLAN

PROJECT PHASE:
ISSUE DATE:
DRAWN BY: - APPROVED BY: -
WORK ORDER NUMBER:
SHEET NO.

L1.1

SHEET OF



Not valid without embossed seal, signature, and date. ©Copyright 2012, Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited."

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

0 20 40 80
GRAPHIC SCALE

A PLANTING PLAN — SCALE: 1" = 20'-0"

TREES

Qty	Sym	Botanical Name	Common Name	Size	Native
14	LI	Lagerstroemia indica 'Iarapurea'	Crape Myrtle	6'-10'-0" Ht. x 5'-7" Spr., Full Head.	
59	MG	Magnolia grandiflora 'DD Blanchard'	Southern Magnolia	15-16' Ht. x 6'-0" Spr., 3x6 ppl.	Yes
132	LJ	Ligustrum japonicum	Tree Ligustrum	8' X 5', Multi-trunk, Tree Form	
22	OR	Ostrichi regia	Royal Poinciana	10-12' Ht. B & B	
69	QV	Quercus virginiana	Live Oak	100 Gallon min, Florida Fancy	Yes
49	CS	Senna surattensis	Senna	65 Gallon min, Florida Fancy	Yes
9	CS	Chysis caesa	Pitch Apple	8'-10' minimum	
8	IC	Ilex cassine	Dahoon Holly	Field Grown 10'-12' Std	Yes

NOTE: Each tree is required to have at minimum a three (3") inch layer of SHREDDED PINE BARK mulch no less than 36" beyond its trunk in all directions.

PALMS

Qty	Sym	Botanical Name	Common Name	Size	Native
16	BN	Bismarkia nobilis	Bismark Palm	2 Clear Trunk, Thick Trunk, Must Show Photo	
13	PS	Phoenix sylvestri	Sylvester Date Palm	Triple Headed Specimen 22' Overall Height NOTE: Typical height on plan, thick trunk. Must show photo	
22	CH	Chamaerops humilis	Mediterranean Fan	15 pallors, multi-trunk	
56	RE	Roystonea elata	Royal Palm	13' Gray Wood, Large Base, Matching, Must Show Photo	Yes
5	SP	Sabal palmetto	Cabbage Palm	16'-18' Clear Trunk, Booted, Cut Head, Staggered	Yes

NOTE: Palm trees required to meet minimum requirements shall have a minimum size of 16 feet overall, unless located within ten feet of a walkway, in which case they shall have a minimum of ten feet of clear trunk at planting

SHRUBS

Qty	Sym	Botanical Name	Common Name	Size	Native
48	PM	Podocarpus maki	Podocarpus	6'-10' minimum, full to base	
758	RC	Ruellia caroliniana	Wild Petunia	3 gal., 18" Ht. x 14-16" Spr., 30" o.c.	Yes
1884	GS	Galphimia gracs	Thryallis	3 gal., 18" x 24" min., 30" o.c.	
23	MC1	Myrica cerifera	Wax Myrtle	65 gal., 6' minimum height	Yes
343	SAV	Schefflera arboricola 'variegata'	Dwf. Schefflera	3 gal., 18" Ht. x 16-12" Spr., 36" o.c.	
696	MR	Raphiolepis indica	Marlon Fern	3 gal. 18" Ht. x 16-12" Spr., 30" o.c.	Yes
1567	SA	Schefflera arboricola	Dwf. Schefflera	3 gal., 18" Ht. x 16-12" Spr., 36" o.c.	
8	CC	Callistemon citrinus 'red cluster'	Bottlebrush	45 gal., 5' height minimum	
1364	VO	Viburnum odoratissimum	Sweet Viburnum	3 gal., 18" Ht., Full, 36" o.c.	Yes
746	FM	Ficus microcarpa	Green Island Ficus	3 gal., 18" Ht. x 16-12" Spr., 36" o.c.	
809	JM	Jasminum simplicifolium	Wax Jasmine	3 gal., 18" Ht. x 16-12"	
332	ICR	Ilex cornuta burfordii	Dwarf burford Holly	3 gal., 18" Ht. x 16-12"	
4648	RI	Rhaphiolepis indica	Indian Hawthorn	3 gal., 18" Ht. x 16-12"	

GROUNDCOVER

Qty	Sym	Botanical Name	Common Name	Size	Native
56	LP	Juniperus chinensis 'parsonii'	Parson's Juniper	3 gal., Full, 12" x 18" min., 24" o.c.	
88	AN	Asystasia gangetica	Chinese Violet	Landscape Architect/Owner to Select	
1363	DB	Breynia nivosa spp.	Dwarf Snowbush	3 gal., Full, 12" x 18" min., 24" o.c.	

NOTE: All groundcovers shall be planted no more than 24" apart for one (1) gallon pots or 12" apart for four (4) inch pots.
ALL GROUNDCOVER TO MAINTAINED AT A MAXIMUM HEIGHT OF 24"

ACCENTS

Qty	Sym	Botanical Name	Common Name	Size	Native
764	SR1	Serenoa repens	Silver Saw Palmetto	7 gal., Must Show Photo, 36" o.c.	Yes
874	SR	Strelitzia reginae	Orange Bird of Paradise	7 gal., 18" Ht. x 16-12" Spr., Full, 36" o.c.	
12	CA	Crinum augustum 'Queen Emma'	Crinum Lily	3 gal., 18" Ht., Full	
212	DTV	Duranta lassoscitrus 'Variegata'	Blueberry Flex Lily	3 gal., 18" Ht. x 16-12" Spr., 36" o.c.	
393	PL	Pentas lanceolata	White Pentas	1 gal., 18" Ht. x 16-12" Spr., 18" o.c.	
38	PM	Penta morifo	Candleberry Plant	7 gal., 18" Ht. x 14-10" Spr., Full, 30" o.c.	Yes

GRASSES

Qty	Sym	Botanical Name	Common Name	Size	Native
2124	TD	Tripsacum dactyloides	Fakahatchee Grass	3 gal., Full Pots 30" o.c.	Yes
1466	MCI	Muhlenbergia capillaris	Muhley Grass	3 gal., Full Pots 30" o.c.	Yes
408	TF	Tripsacum floridana	Dwarf Fakahatchee Grass	3 gal., Full Pots 30" o.c.	Yes
sf	SOD	Stenotaphrum secundatum	St. Augustine	Sod	

INSTALL STANDARDS

Plant installation standards. Plant materials shall be installed in soil conditions that are conducive to the proper growth of the plant material. Soil in planting areas shall be loose, permeable, friable, and free of limestone and other construction materials, parking lot base material, rocks, noxious weeds, grasses, hard pan, clay or other debris. It is recommended that such materials be removed to a depth of two and one-half feet for the well-being of plant materials. Required canopy trees, accent trees, palm trees, and shrubs shall be planted on grades not exceeding 3:1

MISCELLANEOUS

Mulch 3" depth. All mulch to consist of hardwoods and not CYPRESS MULCH. USE SHREDDED PINE BARK.
Contractor Must Verify Plant Counts. Any discrepancies contact landscape architect.
All field adjustments must be approved by landscape architect.
Plant designation is determined by started tag, not symbol.
Photos must be specimens or specimens of subject to rejection by landscape architect.
All plants must be Florida Number 1 or better unless otherwise specified.
Each tree is required to have at minimum a three (3") inch layer of organic hardwood mulch no less than 36" beyond its trunk in all directions.
**NOTE: Trees MUST be maintained at a 15'-6" clearance over travelled roadways and 08'-0" over sidewalks.

Planting Plan Subject to Change.
Landscape Architect observes the right to make field changes including plant quantities and species changes to meet or exceed the county code.

As-built construction drawings shall be required and submitted to the Right-of-Way Department in both PDF and AutoCAD format upon completion of project.

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Permit from the Review and Right-of-Way Permit from the Collier County Transportation Department

B PLANT LEGEND

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION
REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA0666907 STATE OF FLORIDA

NORTH

PROJECT NAME AND LOCATION:
HACIENDA LAKES OF NAPLES
Construction Documents
3921 Prospect Avenue
Naples, Florida 34104

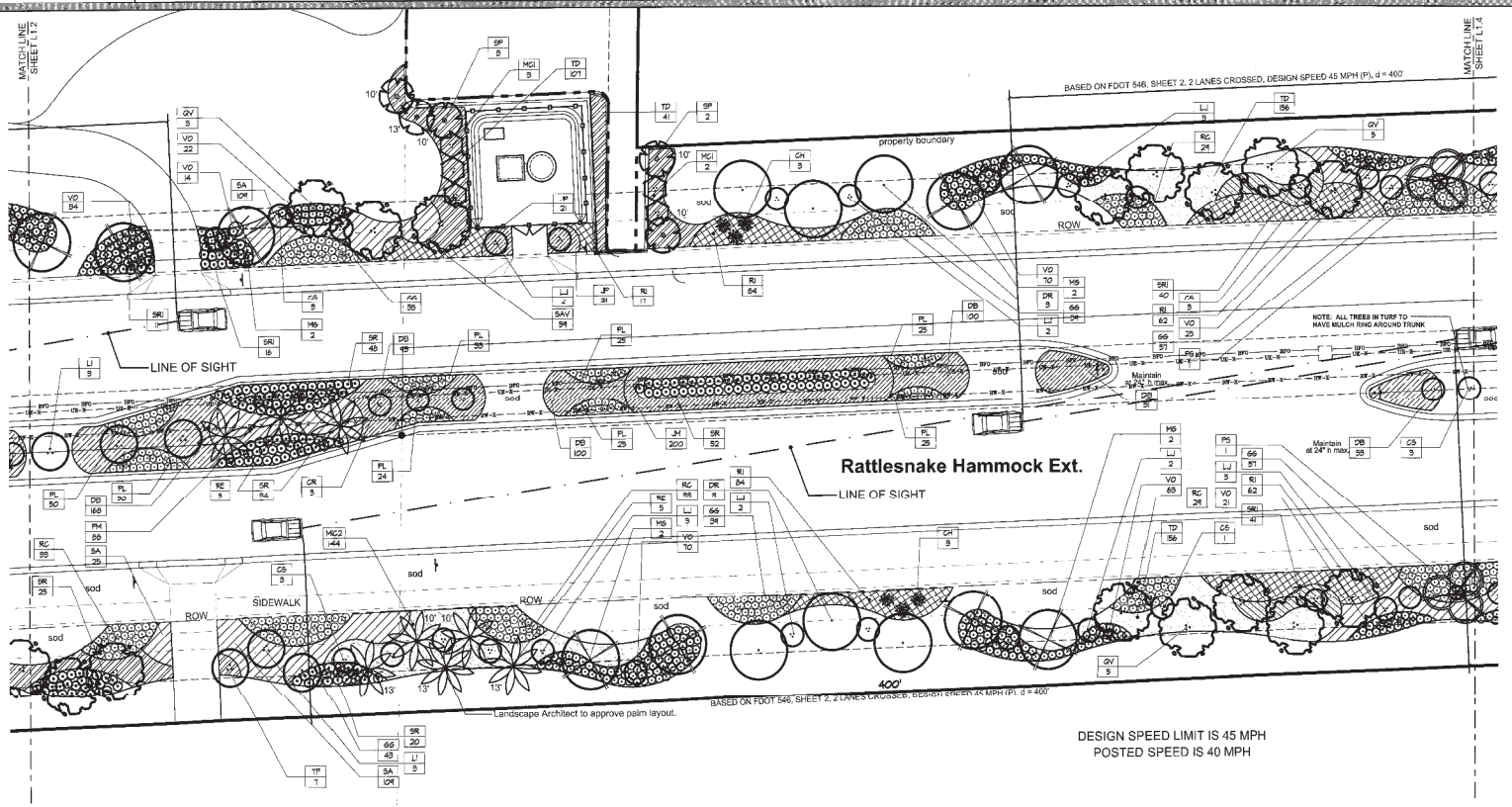
REVISIONS:

NO.	DATE	REVISION

DRAWING TITLE
PLANTING PLAN

PROJECT PHASE:
ISSUE DATE:
DRAWN BY: | APPROVED BY:
WORK ORDER NUMBER:
SHEET NO.
L1.2
SHEET OF

© 2005 Knaak Design Group, LLC - KDG Landscape Architects - Online Studio Division.



A PLANTING PLAN

SCALE: 1" = 20'-0"

Planting Plan Subject to Change.
Landscape Architect observes the right to make field changes including plant quantities and species changes to meet or exceed the county code.

As-built construction drawings shall be required and submitted to the Right-of-Way Department in both PDF and AutoCAD format upon completion of project.

Not valid without embossed seal, signature, and date. ©Copyright 2015, Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited.

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

B PLANTING LEGEND & NOTES

TREES

Qty	Sym	Botanical Name	Common Name	Size	Native
14	LI	Lagerstroemia indica 'panicerise'	Crape Myrtle	6ft., 10-14' Ht. x 6'-7' Spr., Full Head.	
62	MG	Magnolia grandiflora 'DD Blanchard'	Southern Magnolia	15-16' Ht. x 5'-6' Spr., 200 gal.	Yes
132	LJ	Ligustrum japonicum	Tree Ligustrum	8' X 9' Multi-trunk, Tree Form	
22	DR	Deiswith regia	Royal Poinciana	16-18' Ht. 6' & 8'	
39	QV	Quercus virginiana	Live Oak	100 Gallon min. Florida Fancy	Yes
49	CS	Senna surattensis	Senna	65 Gallon min. Florida Fancy	Yes
9	CR	Clusia rosea	Pitch Apple	8'-10' minimum	
5	IC	Ilex cassine	Dahoon Holly	Field Grown 10'-12' Std.	Yes

NOTE: Each tree is required to have at minimum a three (3") inch layer of SHREDDED PINE BARK mulch no less than 36" beyond its trunk in all directions.

PALMS

Qty	Sym	Botanical Name	Common Name	Size	Native
16	BN	Bismarckia nobilis	Bismarck Palm	7' Clear Trunk, Thick Trunk, Must Show Photo	
13	PS	Phoenix sylvestri	Sylvester Date Palm	Triple Headed Specimen, 22' Overall Height NOTE: Typical height on plan, thick trunk, Must show photo	
22	CH	Chamaerops humilis	Mediterranean Fan	13 gallon, multi-trunk	
55	RE	Roystonea elata	Royal Palm	15' Gray Wood, Large Base, Matching, Must Show Photo	Yes
5	SP	Sabal palmetto	Cabbage Palm	10'-14' Clear Trunk, Booted, Cut Head, Staggared	Yes

NOTE: Palm trees required to meet minimum requirements shall have a minimum size of 16 foot overall, unless located within ten feet of a walkway, in which case they shall have a minimum of ten feet of clear trunk at planting

SHRUBS

Qty	Sym	Botanical Name	Common Name	Size	Native
48	PM	Podocarpus	Podocarpus	8'-10' minimum, full to base	
756	RC	Ruellia caroliniensis	Wild Petunia	3 gal., 18" Ht. x 14-16" Spr., 36" o.c.	Yes
1584	GG	Gaylussacia glauca	Thryallis	3 gal., 18" x 24" min., 30" o.c.	
23	MC1	Myrica cerifera	Wax Myrtle	65 gal., 8' minimum height	Yes
363	SAV	Schefflera arboricola 'Variegata'	Dwrf. Schefflera	3 gal., 16" Ht. x 16-12" Spr., 30" o.c.	
696	NB	Nephrolepis biserrata	Macho Fern	3 gal., 16" Ht. x 16-12" Spr., 30" o.c.	Yes
1907	SA	Schefflera arboricola	Dwrf. Schefflera	3 gal., 16" Ht. x 16-12" Spr., 30" o.c.	
9	CC	Callistemon citrinus "cal cluster"	Bottlebrush	65 gal., 6' height minimum	
1944	VO	Viburnum odoratissimum	Sweet Viburnum	3 gal., 16" Ht., Full, 30" o.c.	Yes
746	FM	Ficus microcarpa	Green Island Ficus	3 gal., 16" Ht. x 16-12" Spr., 30" o.c.	
300	JH	Jasminum simplicifolium	Wax Jasmine	3 gal., 16" Ht. x 16-12"	
302	ICB	Ilex cornuta burfordii	Dwarf Burford Holly	3 gal., 16" Ht. x 16-12"	
4649	RI	Rhapidophyllum indica	Indian Hawthorn	3 gal., 16" Ht. x 16-12"	

GROUNDCOVER

Qty	Sym	Botanical Name	Common Name	Size	Native
98	JP	Juniperus chinensis 'parsonii'	Parson's Juniper	3 gal., Full, 12" x 18" min., 24" o.c.	
80	AM	Aromatic	Single Color	Landscape Architect/Owner to Select	
1355	BB	Bougainvillea spp.	Dwarf Bougainvillea	3 gal., Full, 12" x 18" min., 24" o.c.	

NOTE: All groundcovers shall be planted no more than 24" apart for one (1) gallon pots or 12" apart for four (4) inch pots.
ALL GROUNDCOVER TO MAINTAINED AT A MAXIMUM HEIGHT OF 24"

ACCENTS

Qty	Sym	Botanical Name	Common Name	Size	Native
764	SR1	Sansevieria trifasciata	silver sans/mother	1 gal., leaves above rimpot, 24" o.c.	Yes
574	SR	Sansevieria cylindrica	Dracena Bird of Paradise	7 gal., 55" Ht. x 14-16" Spr., Full, 36" o.c.	
11	CA	Crinum augustum 'Queen Emma'	Crinum Lily	3' Ht x 3' Spr., 7 gal.	
212	BTV	Stenotaphrum 'variegata'	Blackberry Flax Lily	3 gal., 16" Ht. x 10-12" Spr., 20" o.c.	
383	PL	Pentas lanceolata	White Pentas	1 gal., 16" Ht. x 10-12" Spr., 18" o.c.	
86	ZM	Zamia pumila	Cardboard Plant	1 gal., 16" Ht. x 14-16" Spr., Full, 36" o.c.	Yes

GRASSES

Qty	Sym	Botanical Name	Common Name	Size	Native
2124	TD	Tripsacum dactyloides	Fakahatchee Grass	3 gal., Full Pots 30" o.c.	Yes
1488	MC2	Muhlenbergia capillaris	Muhley Grass	3 gal., Full Pots 30" o.c.	Yes
465	TF	Tripsacum floridanum 'Dwarf'	Dwarf Fakahatchee Grass	3 gal., Full Pots 30" o.c.	Yes
sf	SOD	Stenotaphrum secundatum	St. Augustine	Sod	

INSTALL STANDARDS

Plant installation standards. Plant materials shall be installed in soil conditions that are conducive to the proper growth of the plant material. Soil in planting areas shall be loose, permeable, friable, and free of limestone and other construction materials, parking lot base material, rocks, noxious weeds, grasses, hard pan, clay or other debris. It is recommended that such materials be removed to a depth of two and one-half feet for the well-being of plant materials. Required canopy trees, accent trees, palm trees, and shrubs shall be planted on grades not exceeding 3:1

MISCELLANEOUS

Mulch 3" depth. All mulch to consist of hardwoods and not CYPRESS MULCH. USE SHREDDED PINE BARK.
Contractor Must Verify Plant Counts. Any discrepancies contact landscape architect.
All field adjustments must be approved by landscape architect.
Plant designation is determined by stated tag, not symbol.
Photos must be submitted of specimens or subject to rejection by landscape architect.
All plants must be Florida Number 1 or better unless otherwise specified.
Each tree is required to have at minimum a three (3") inch layer of organic hardwood mulch no less than 36" beyond its trunk in all directions.
**NOTE: Trees MUST be maintained at a 15'-6" clearance over traveled roadways and 13'-6" over sidewalks.

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

0 20 40 80
GRAPHIC SCALE

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION:
REGISTERED LANDSCAPE ARCHITECT BRUCE A. KNAAK LA6666907 STATE OF FLORIDA

NORTH:

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION:

DRAWING TITLE:

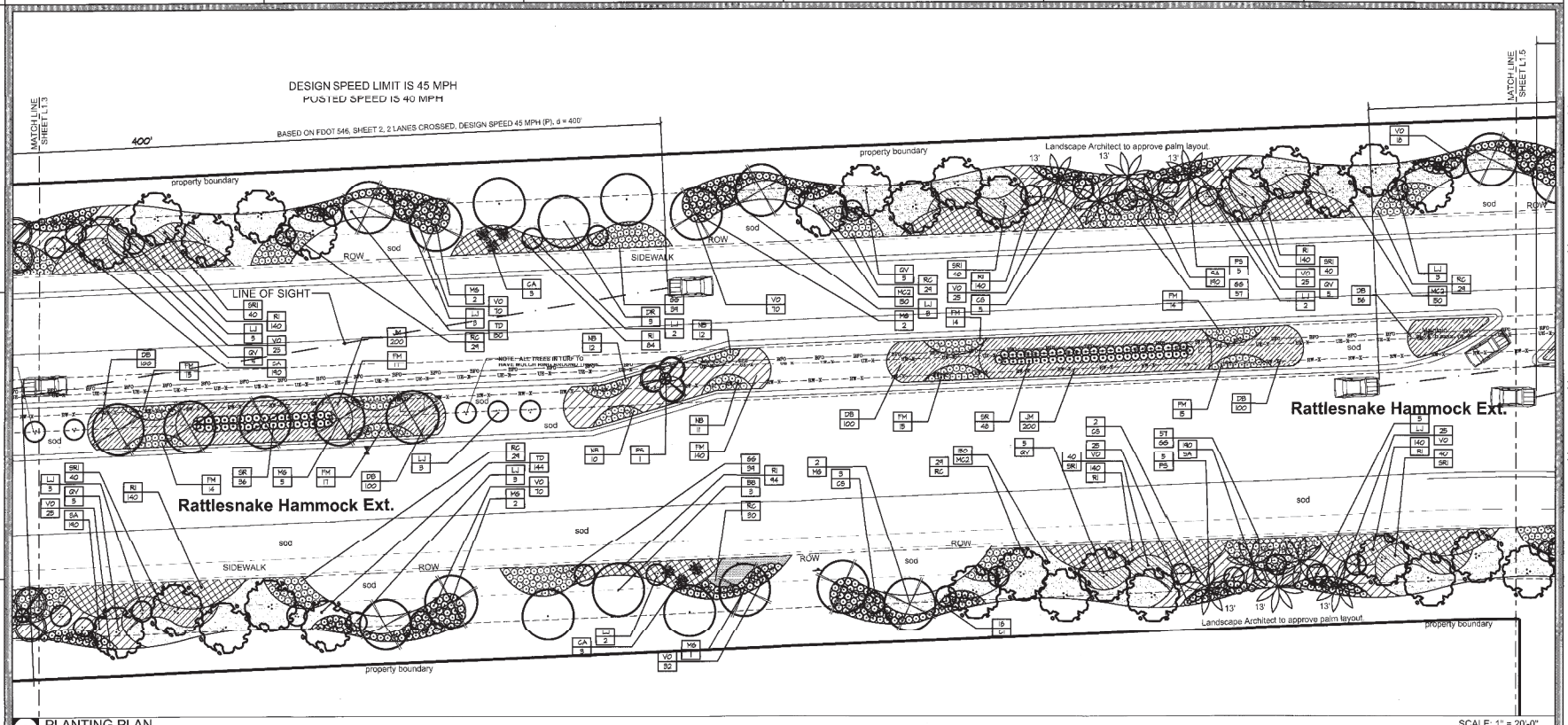
PLANTING PLAN

PROJECT PHASE:
ISSUE DATE:
DRAWN BY: | APPROVED BY:
WORK ORDER NUMBER:
SHEET NO.

L1.3

SHEET

© 2005 Knaak Design Group, LLC – KDG Landscape Architects – Online Studio Division.



A PLANTING PLAN

SCALE: 1" = 20'-0"

Planting Plan Subject to Change
Landscape Architect observes the right to make field changes including plant quantities and species changes to meet or exceed the county code.

As-built construction drawings shall be required and submitted to the Right-of-Way Department in both PDF and AutoCAD format upon completion of project.

Not valid without embossed seal, signature, and date. ©Copyright 2012, Knaak Design Group, LLC
This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited.*

KDG assumes no liability for any of anyone bulk from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

TREES

Qty	Sym	Botanical Name	Common Name	Size	Native
14	LI	Lagerstroemia indica 'pesqueve'	Crape Myrtle	6ft., 10-14' Ht., x 6'-7' Spr., Full Head,	
52	MG	Magnolia grandiflora 'DD Blanchard'	Southern Magnolia	10-14' Ht. x 2'-4' Spr., 300 gal.	Yes
126	LC	Liquidambar 'Jaywalker'	Tree Liquidambar	4" C.C., Multi-trunk, Tree Form	
22	RO	Roystonea regia	Royal Poinciana	10-12' Ht. B & B	
89	QV	Quercus virginiana	Live Oak	160 Gallon min. Florida Fancy	Yes
48	CS	Senna surattensis	Senna	65 Gallon min. Florida Fancy	Yes
9	CR	Chuka rosea	Pitch Apple	8'-10' minimum	
8	IC	Ilex cassine	Dahoon Holly	Field Grown, 10'-12' Std	Yes

NOTE: Each tree is required to have at minimum a three (3") inch layer of SHREDDED PINE BARK mulch no less than 36" beyond its trunk in all directions.

PALMS

Qty	Sym	Botanical Name	Common Name	Size	Native
16	BN	Bismarckia nobilis	Bismarck Palm	7' Clear Trunk, Thick Trunk, Must Show Photo	
13	PS	Phoenix sylvestri	Sylvester date Palm	Triple Hanaled Specimen 20' Overall Height NOTE: Typical height on plan, thick trunk, Must show photo	
22	CM	Chamaerops humilis	Mediterranean Fan	15 gallon, multi-trunk	
58	RE	Roystonea elata	Royal Palm	12' Grey Wood, Large Base, Matching, Must Show Photo	Yes
5	SP	Sabal palmetto	Cabbage Palm	16'-18' Clear Trunk, Booted, Cut Hurd, Staggered	Yes

NOTE: Palm trees required to meet minimum requirements shall have a minimum size of 10 feet overall, unless located within ten feet of a walkway, in which case they shall have a minimum of ten feet of clear trunk at planting

SHRUBS

Qty	Sym	Botanical Name	Common Name	Size	Native
66	PM	Podocarpus macki	Podocarpus	6'-7'H. minimum, full to base	
791	RC	Ruellia caroliniensis	Wild Petunia	3 gal., 18" Ht. x 14-16" Spr., 30" o.c.	Yes
1084	GG	Galphimia glauca	Thryallis	3 gal., 18" H. x 24" min., 30" o.c.	
23	MC1	Muhlenbergia capillaris	Muhly Grass	15 gal., 5' minimum height	Yes
363	SAV	Schefflera arboricola 'variegata'	Dwf. Schefflera	3 gal., 18" Ht. x 10-12" Spr., 26" o.c.	
696	NS	Nephrolepis biserrata	Macho Fern	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	Yes
1997	SA	Schefflera arboricola	Dwf. Schefflera	3 gal., 18" Ht. x 10-12" Spr., 26" o.c.	
9	CC	Calliandra c.#Nicaa 'red cluster'	Powderpuff	45 gal., 5' Ht&Sp minimum	
1844	VD	Viburnum odoratissimum	Sweet Viburnum	3 gal., 18" Ht. Full, 30" o.c.	Yes
745	FM	Ficus microcarpa	Green Island Ficus	3 gal., 18" Ht. x 10-12" Spr., 36" o.c.	
990	JM	Jasminum simplicifolium	Wax Jasmine	3 gal., 18" Ht. x 10-12"	
332	ICB	Ilex cornuta burfordii	Dwarf burfod Holly	3 gal., 18" Ht. x 10-12"	
4648	RI	Rhapidophyllum hystrix	Indian Hawthorn	3 gal., 18" Ht. x 10-12"	

GROUNDCOVER

Qty	Sym	Botanical Name	Common Name	Size	Native
38	JP	Justicia chlorotis 'pesqui'	Parson's Jumper	3 gal., Full, 12" x 18" min., 24" o.c.	
90	AN	Annuals	Single Color	Landscape Architect/Owner to Select	
1368	DB	Bougainvillea spp.	Dwarf Bougainvillea	3 gal., Full, 12" x 18" min., 24" o.c.	

NOTE: All groundcovers shall be planted no more than 24" apart for one (1) gallon pots or 12" apart for four (4) inch pots.
ALL GROUNDCOVER TO MAINTAINED AT A MAXIMUM HEIGHT OF 24"

ACCENTS

Qty	Sym	Botanical Name	Common Name	Size	Native
764	ABH	Aechmea rhomm.	Khaki Saw Palmetto	7 gal., Must Show Photo, 30" o.c.	Yes
574	SR	Strelitzia reginae	Orange Bird of Paradise	7 gal., 18" Ht. x 54-56" Spr., Full, 30" o.c.	
12	CA	Cirsium augustum 'Queen Emma'	Crirsium Lily	3 Ht.x 2' Spr., 2' gal.	
212	DTV	Dianella tasmanica 'variegata'	Blueberry Flax Lily	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	
365	PL	Pentas lanceolata	White Pentas	1 gal., 18" Ht. x 10-12" Spr., 18" o.c.	
88	ZM	Zamia pumila	Cardboard Plant	7 gal., 18" Ht. x 14-16" Spr., Full, 30" o.c.	Yes

GRASSES

Qty	Sym	Botanical Name	Common Name	Size	Native
2124	TD	Tripsacum dactyloides	Fakahatchee Grass	3 gal., Full Pots 30" o.c.	Yes
1466	MC2	Muhlenbergia capillaris	Muhley Grass	3 gal., Full Pots 30" o.c.	Yes
458	TF	Tripsacum floridanum	Dwarf Fakahatchee Grass	3 gal., Full Pots 30" o.c.	Yes
sf	SOD	Stenotaphrum secundatum	St. Augustine	Sod	

INSTALL STANDARDS

Plant installation standards. Plant materials shall be installed in soil conditions that are conducive to the proper growth of the plant material. Soil in planting areas shall be loose, permeable, friable, and free of limestone and other construction materials, parking lot base material, rocks, noxious weeds, grasses, hard pan, clay or other debris. It is recommended that such materials be removed to a depth of two and one-half feet for the well-being of plant materials. Required canopy trees, accent trees, palm trees, and shrubs shall be planted on grades not exceeding 3:1

MISCELLANEOUS

Mulch 3" depth. All mulch to consist of hardwoods and not CYPRESS MULCH. USE SHREDDED PINE BARK.
Contractor Must Verify Plant Counts. Any discrepancies contact landscape architect.
All field adjustments must be approved by landscape architect.
Plant designation is determined by stated tag, not symbol.
Photos must be submitted of specimens or subject to rejection by landscape architect.
All plants must be Florida Number 1 or better unless otherwise specified.
Each tree is required to have at minimum a three (3") inch layer of organic hardwood mulch no less than 36" beyond its trunk in all directions.
**NOTE: Trees MUST be maintained at a 15'-6' clearance over travelled roadways and 16'-0" over sidewalks.

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

0 20 40 80
GRAPHIC SCALE

B PLANTING LEGEND & NOTES

© 2006 Knaak Design Group, LLC - KDG Landscape Architects - Online Studio Division.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesigngroup.com

REGISTRATION: REGISTERED LANDSCAPE ARCHITECT ROBERT BRUCE KNAAK LA6666907 STATE OF FLORIDA

NORTH

PROJECT NAME AND LOCATION:

HACIENDA LAKES OF NAPLES

Construction Documents

3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION

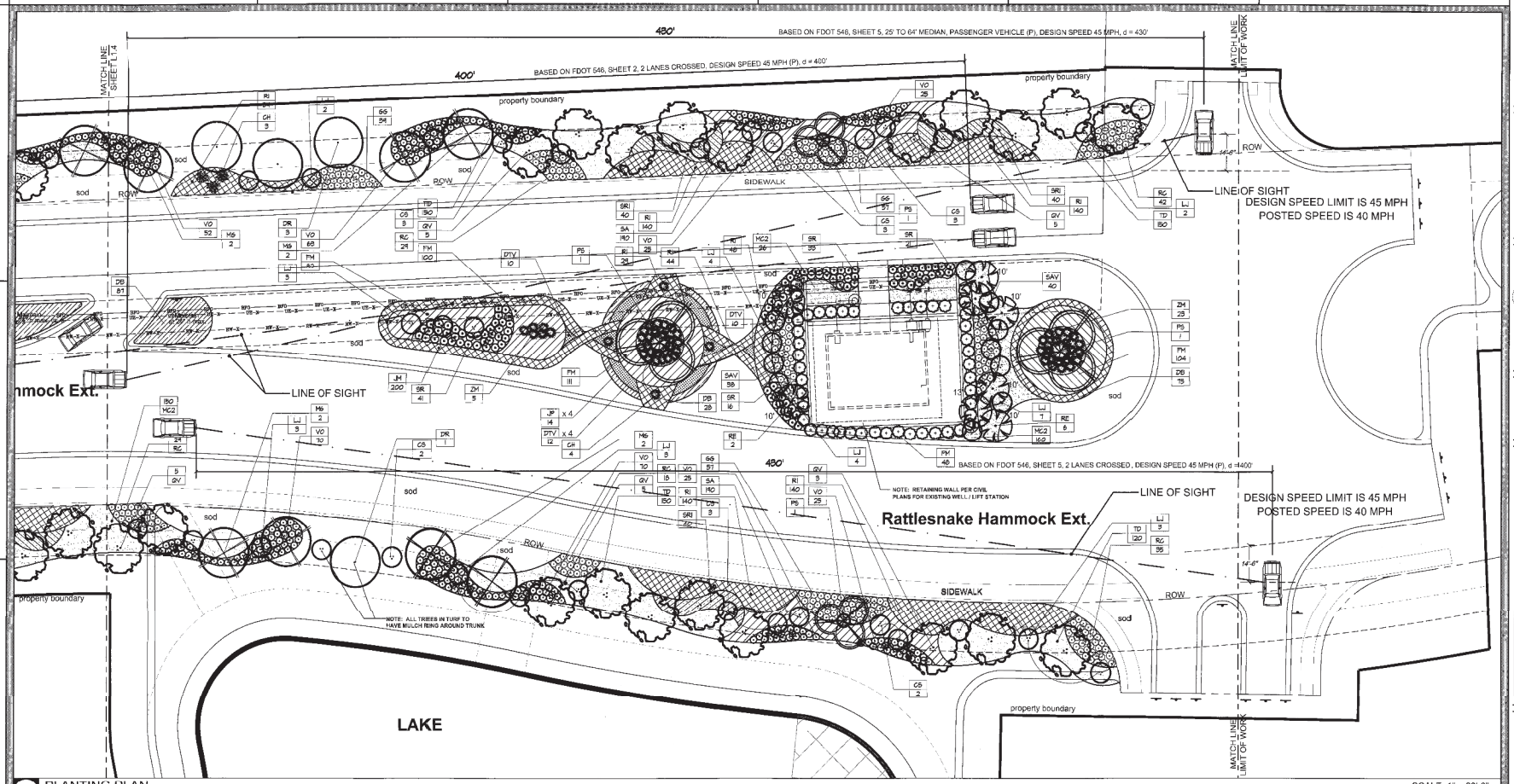
DRAWING TITLE:

PLANTING PLAN

PROJECT PHASE:
ISSUE DATE:
DRAWN BY: - APPROVED BY: -
WORK ORDER NUMBER:
SHEET NO.

L1.4

SHEET OF



A PLANTING PLAN

SCALE: 1" = 20'-0"

Planting Plan Subject to Change. Landscape Architect observes the right to make field changes including plant quantities and species changes to meet or exceed the county code.

As-built construction drawings shall be required and submitted to the Right-of-Way Department in both PDF and AutoCAD format upon completion of project.

Not valid without embossed seal, signature, and date. ©Copyright 2021. Knaak Design Group, LLC This plan is protected under the federal and state copyright laws. Reproduction, changes or assignments are prohibited."

KDG assumes no liability for any structure built from these plans. Before construction, the client, builder, or contractor must verify dimensions, compliance with all governing codes & ordinances, and incorporate site conditions.

TREES

Qty	Sym	Botanical Name	Common Name	Size	Native
14	LI	Lagerstroemia indica 'Iarnpurple'	Crape Myrtle	6ft.-10-14' Ht. x 4'-5' Spr., Full Head,	
62	MG	Magnolia grandiflora 'BD Blanchard'	Southern Magnolia	15-16' Ht. x 5'-6' Spr., 3ft0 ctr.	Yes
132	LJ	Ligustrum japonicum	Tree Ligustrum	6' X 5', Multi-trunk, Tree Form	
22	ON	Roystonea regia	Royal Purslane	16-12' Ht, 8 & 9	
89	QV	Quercus virginiana	Live Oak	100 Gallon min, Florida Fancy	Yes
49	CS	Senna surattensis	Senna	65 Gallon min, Florida Fancy	Yes
9	CS	Ouida rosea	Pitch Apple	8'-10' minimum	
4	IC	Ilex cassine	Dahoon Holly	Field Grown 10'-12' Std	Yes

NOTE: Each tree is required to have at minimum a three (3") inch layer of SHREDDED PINE BARK mulch no less than 36" beyond its trunk in all directions.

PALMS

Qty	Sym	Botanical Name	Common Name	Size	Native
16	BN	Bismarkia nobilis	Bismark Palm	7' Clear Trunk, Thick Trunk, Must Show Photo	
13	PS	Phoenix sylvestri	Sylvester Date Palm	Triple Headed Specimen 23' Overall Height NOTE: Typical height on plan, thick trunk, Must show photo	
22	VT	Veitchiarecrus montgomeryana	Montgomery Palm	10' Clear Trunk, Single Trunk	
55	RE	Roystonea elata	Royal Palm	13' Grey Wood, Single Trunk, Matching, Must Show Photo	Yes
5	SP	Sabal palmetto	Cabbage Palm	16'-14' Clear Trunk, Rooted, Cut Head, Staggered	Yes

NOTE: Palm trees required to meet minimum requirements shall have a minimum size of 15 feet overall, unless located within ten feet of a walkway, in which case they shall have a minimum of ten feet of clear trunk at planting

SHRUBS

Qty	Sym	Botanical Name	Common Name	Size	Native
46	PN	Podocarpus nuki	Podocarpus	6'-12' minimum , full to base	
796	RC	Ruellia caroliniensis	Wild Petunia	3 gal., 18" Ht. x 14-18" Spr., 30" o.c.	Yes
1184	GC	Galphimia glauca	Thryallis	3 gal., 18" x 24" min., 36" o.c.	
73	MC1	Myrtus cerifera	Wax Myrtle	65 gal., 6' minimum height	Yes
263	SAV	Schefflera arboricola 'variegata'	Dwf. Schefflera	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.,	
696	NB	Nephrolepis biserrata	Macho Fern	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	Yes
1907	SA	Schefflera arboricola	Dwf. Schefflera	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	
5	CC	Calliandra emirnea 'red cluster'	Bottlebrush	45 gal., 5' height minimum	
1844	VO	Viburnum odoratissimum	Sweet Viburnum	3 gal., 18" ht., Full, 30" o.c.	Yes
748	FM	Ficus microcarpa	Green Island Ficus	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	
850	JM	Jasminum simplicifolium	Wax Jasmine	3 gal., 18" Ht. x 10-12"	
332	ICB	Ilex cornuta burfordii	Dwarf Burford Holly	3 gal., 18" Ht. x 10-12"	
4649	RI	Rhaphiolepis indica	Indian Hawthorn	3 gal., 18" Ht. x 10-12"	

GROUNDCOVER

Qty	Sym	Botanical Name	Common Name	Size	Native
98	JP	Juniperus chinensis 'parsoni'	Parson's Juniper	3 gal., Full, 12" x 18" min., 24" o.c.	
80	AN	Annuals	Single Color	Landscape Architect/Owner to Select	
1355	DB	Bougainvillea spp.	Dwarf Bougainvillea	3 gal., Full, 12" x 18" min., 36" o.c.	

NOTE: All groundcovers shall be planted no more than 24" apart for one (1) gallon pots or 12" apart for four (4) inch pots.
ALL GROUNDCOVER TO MAINTAINED AT A MAXIMUM HEIGHT OF 24"

ACCENTS

Qty	Sym	Botanical Name	Common Name	Size	Native
764	SR1	Serenoa repens	Silver Saw Palmetto	7 gal., Must Show Photo, 36" o.c.	Yes
574	SR	Strelitzia reginae	Orange Bird of Paradise	7 gal., 18" Ht. x 14-18" Spr., Full, 30" o.c.	
19	CA	Crinum augustum 'Queen Emma'	Celebrity Lily	3.00 x 2' Spr., 7 gal.	
212	DTV	Dianella tasmanica 'variegata'	Blueberry Flax Lily	3 gal., 18" Ht. x 10-12" Spr., 30" o.c.	
383	PT	Pentas lanceolata	White Pentas	1 gal, 15" Ht. x 10-12" Spr., 18" o.c.	
88	ZM	Zamia pumila	Cardboard Plant	7 gal., 18" Ht. x 14-18" Spr., Full, 36" o.c.	Yes

GRASSES

Qty	Sym	Botanical Name	Common Name	Size	Native
2134	FD	Fimbristylis electrostera	Fakahatchee Grass	3 gal., Full Pots 36" o.c.	Yes
1466	MC2	Muhlenbergia capillaris	Muhley Grass	3 gal., Full Pots 36" o.c.	Yes
405	TF	Tripsacum floridana	Dwarf Fakahatchee Grass	3 gal., Full Pots 36" o.c.	Yes
sf	SOD	Stenotaphrum secundatum	St. Augustine	Sod	

INSTALL STANDARDS

Plant installation standards. Plant materials shall be installed in soil conditions that are conducive to the proper growth of the plant material. Soil in planting areas shall be loose, permeable, friable, and free of limestone and other construction materials, parking lot base material, rocks, noxious weeds, grasses, hard pan, clay or other debris. It is recommended that such materials be removed to a depth of two and one-half feet for the well-being of plant materials. Required canopy trees, accent trees, palm trees, and shrubs shall be planted on grades not exceeding 3:1

MISCELLANEOUS

Mulch 3" depth. All mulch to consist of hardwoods and not CYPRESS MULCH, USE SHREDDED PINE BARK.
Contractor Must Verify Plant Counts. Any discrepancies contact landscape architect.
All field adjustments must be approved by landscape architect.
Plant designation is determined by stated tag, not symbol.
Photos must be submitted of specimens or subject to rejection by landscape architect.
All plants must be Florida Number 1 or better unless otherwise specified.
Each tree is required to have at minimum a three (3") inch layer of organic hardwood mulch no less than 36" beyond its trunk in all directions.
**NOTE: Trees MUST be maintained at a 16'-0" clearance over travelled roadways and 10'-0" over sidewalks.

0 20 40 80
GRAPHIC SCALE

B PLANTING LEGEND & NOTES

This CDES Landscape Review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way require a separate Tree Transportation Right-of-Way Landscape Review and a Right-of-Way Landscape Review and Right-of-Way Permit from the Collier County Transportation Department.

knäak design group
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
13650 Fiddlesticks Blvd.
Suite #202-330
Fort Myers, Florida
33912
239.603.6768
www.knaakdesignroup.com

REGISTRATION:
REGISTERED LANDSCAPE ARCHITECT BRUCE KNAAK LA6668907 STATE OF FLORIDA

NORTH:

PROJECT NAME AND LOCATION:
HACIENDA LAKES OF NAPLES
Construction Documents
3921 Prospect Avenue
Naples, Florida 34104

REVISIONS:

NO.	DATE	REVISION

DRAWING TITLE:
PLANTING PLAN

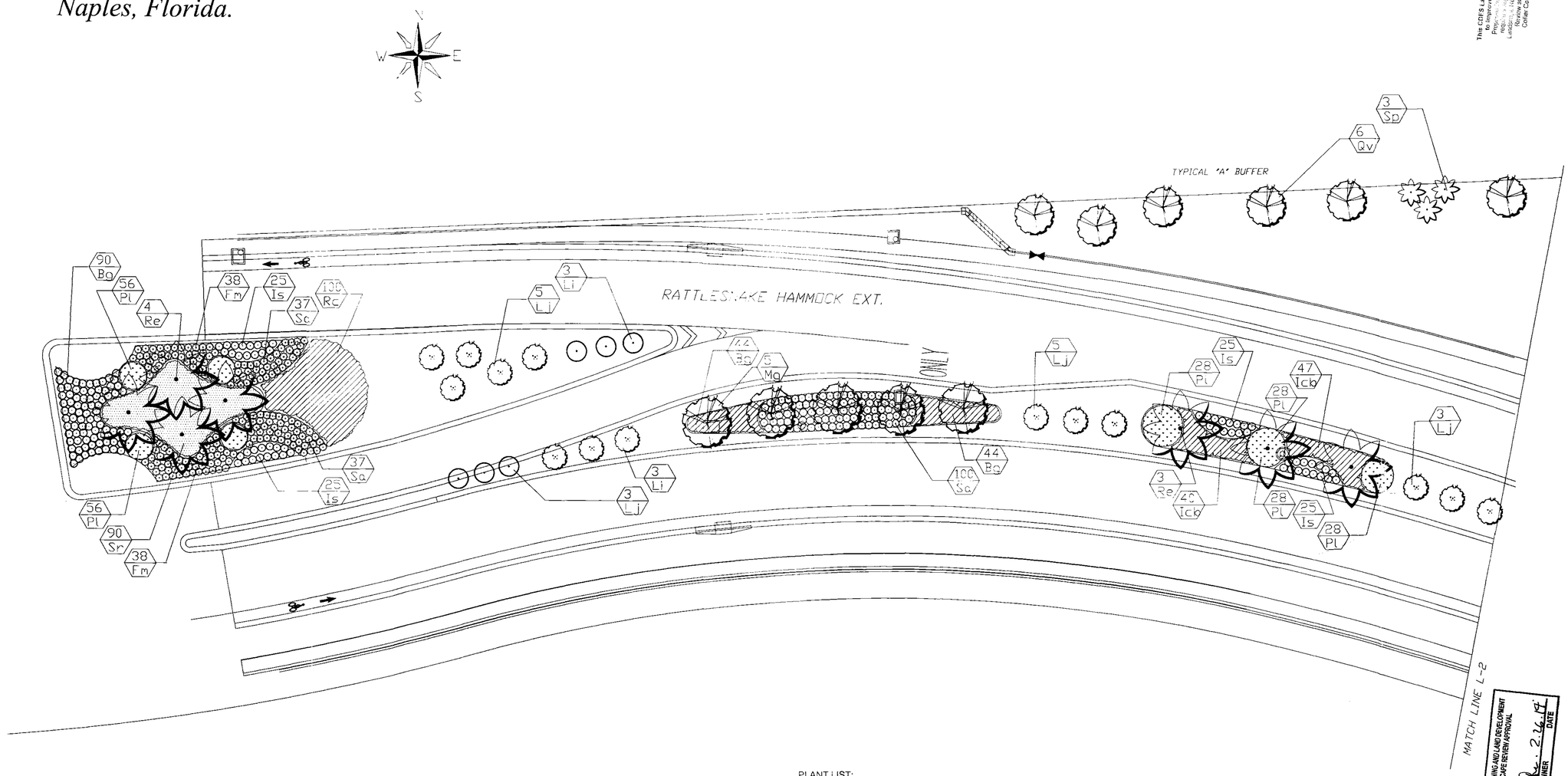
PROJECT PHASE:
ISSUE DATE:
DRAWN BY: - APPROVED BY: -
WORK ORDER NUMBER:
SHEET NO.
L1.5
SHEET OF

© 2005 Knaak Design Group, LLC – KDG Landscape Architects – Dallas Studio Division.

SCHEDULE "A"

Hacienda Lakes of Naples,

Naples, Florida.



PLANT LIST:

Abbr	Quant.	Common Name	Botanical Name	Nat.	Size/Spacing
Re	10	Royal Palm	Roystonea elata	Yes	10 GW; 28' oa
Sp	23	Cabbage Palm	Sabal palmetto	Yes	10-16' ct: part booted
Dr	4	Royal Poinciana	Delenix reginai	No	12'x7', 3" cal
Qv	24	Southern Live Oak	Quercus virginiana	Yes	12'x6', 45 gal
Ar	3	Red Maple	Acer rubrum	Yes	10-12'x5', 2" cal.
Mg	10	Southern Magnolia	Magnolia grandifolia DD Blanchard	Yes	14'x8'
Lj	30	Glossy Privet Tree	Ligustrum japonioca	No	6-8', 45 gal.
Li	8	Crepe myrtle	Laegerstromia indica	No	8-10', multi stem, "watermelon"
Sr	155	Bird of Paradise	Strelizia reginae	No	24-30", 7 gal.
Sa	274	Varigated Arbicola	Schef. act arb. "trinette"	No	18-24", 3 gal.
Fm	76	Green Island Ficus	Ficus microcarpa	No	20", 3 gal.
Bg	448	Dwf. Bougainvilla	Bougainvilla Helen Johnson	No	18", 3 gal.
Icb	174	Burford Holly	Iklex cornuta burfordii	Yes	18", 3 gal.
Rc	100	Wild Petunia	Ruhellia carolinenae.	No	18", 3 gal.
Is	250	Dwf. Ilex	ilex shillings	Yes	18". 3 gal.
Pl	280	Egyptian Star Flower	Penta lancelata	No	12", 1 gal. white
Bags	560	Shredded pine bark mulch, 2-3" depth, all planting areas			

All PLANT MATERIAL SHALL BE FLORIDA # 1 AS STATED IN FLA. DEPT. AG.

This CDES Landscape Review approval is limited to Environmental issues on private property only. Proposed improvements on public property require separate review and approval by the Transportation Division. Review and approval of Landscape Plans does not relieve the applicant of the responsibility to comply with all applicable codes and regulations. Collier County Transportation Department

DEPARTMENT OF ZONING AND LAND DEVELOPMENT REVIEW LANDSCAPE REVIEW APPROVAL
LANDSCAPE PLANNER
DATE 2.26.14

This CDES Landscape Review approval is limited to Environmental issues on private property only. Proposed improvements on public property require separate review and approval by the Transportation Division.

PPL-PL20130000589 REV: 1
HACIENDA LAKES PHASE 2
DATE: 9/4/13
DUE: 10/2/13

General Notes

LAO DALE A. SLABAUGH, ASLA
Landscape Architect LA0000626
Land Planning Planting & Irrigation Design Consulting
5070 Tamarind Ridge Dr. Naples, FL 34119
PH. (239) 353-8187 FX. (239) 353-0814

HACIENDA LAKES OF NAPLES,
NAPLES, FLORIDA

PREPARED FOR:
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA

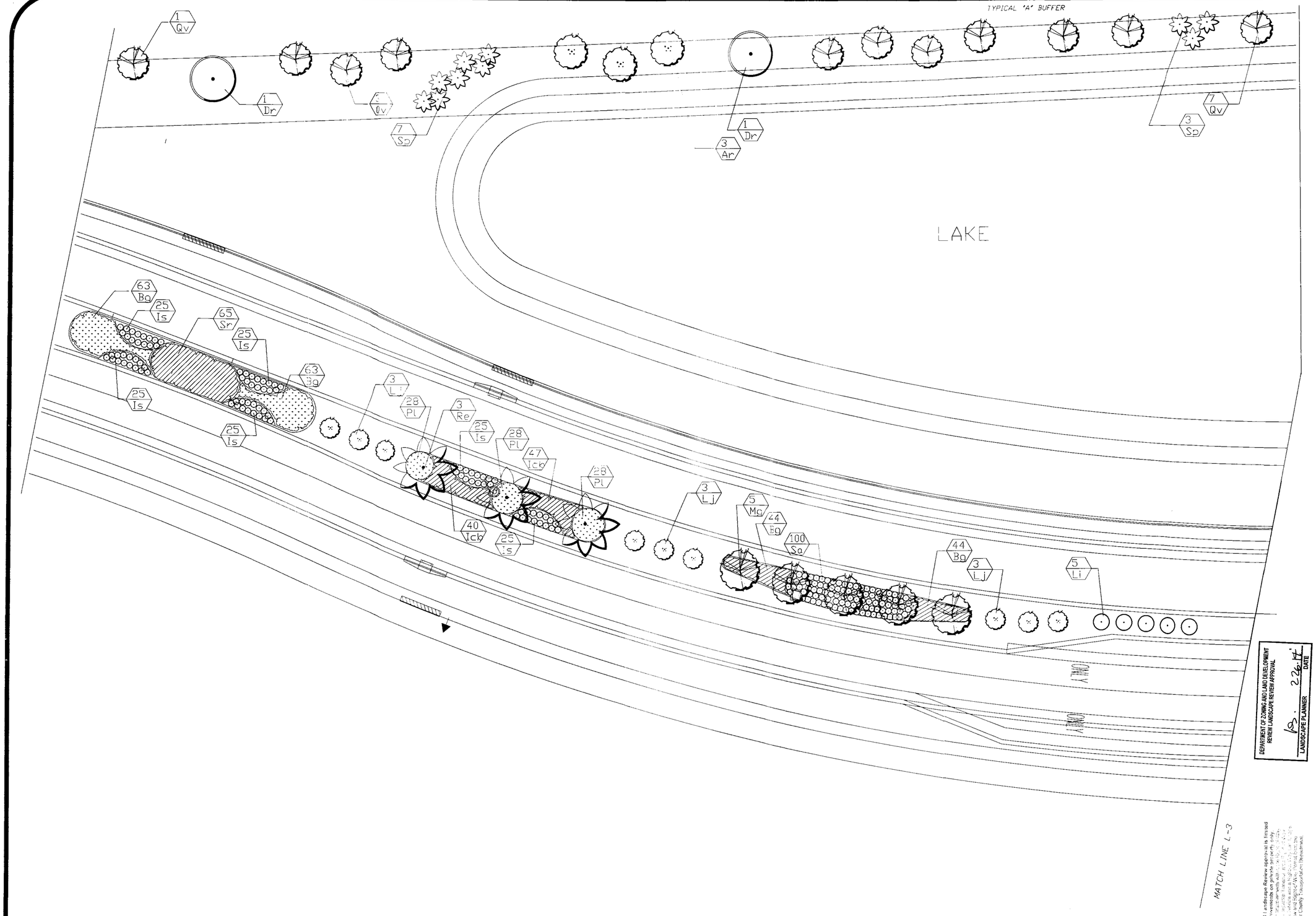
LANDSCAPE PLAN
SCALE: 1" = 20 - 0"

No.	Revision/Issue	Date

Firm Name and Address
DALE A. SLABAUGH & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
5070 TAMARIND RIDGE DRIVE
NAPLES, FLORIDA 34119
PH.941.353.8187 FX.941.353.0814

Project Name and Address
HACIENDA LAKES OF NAPLES,
3921 PROSPECT AVENUE
NAPLES, FL 34104

Project	Sheet
HACIENDALK.	L-1
Date 8.14.13	
Scale 1" = 20' - 0"	



DEPARTMENT OF ZONING AND LAND DEVELOPMENT REVIEW LANDSCAPE REVIEW APPROVAL
DATE 2.26.14
LANDSCAPE PLANNER

This CERTIFICATE is a Landscape Review approval is limited to landscape improvements on private property only. Approval of public right-of-way landscape improvements must be obtained from the Collier County Transportation Department.

General Notes

Dale A Slabaugh 8/29/13

DALE A. SLABAUGH, ASLA
Landscape Architect
LA0000626
Land Planning Planting & Irrigation Design Consulting
5070 Tamarind Ridge Dr. Naples, FL 34119
PH. (239) 353-8187
FX. (239) 353-0814

HACIENDA LAKES OF NAPLES,
NAPLES, FLORIDA

PREPARED FOR:
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA

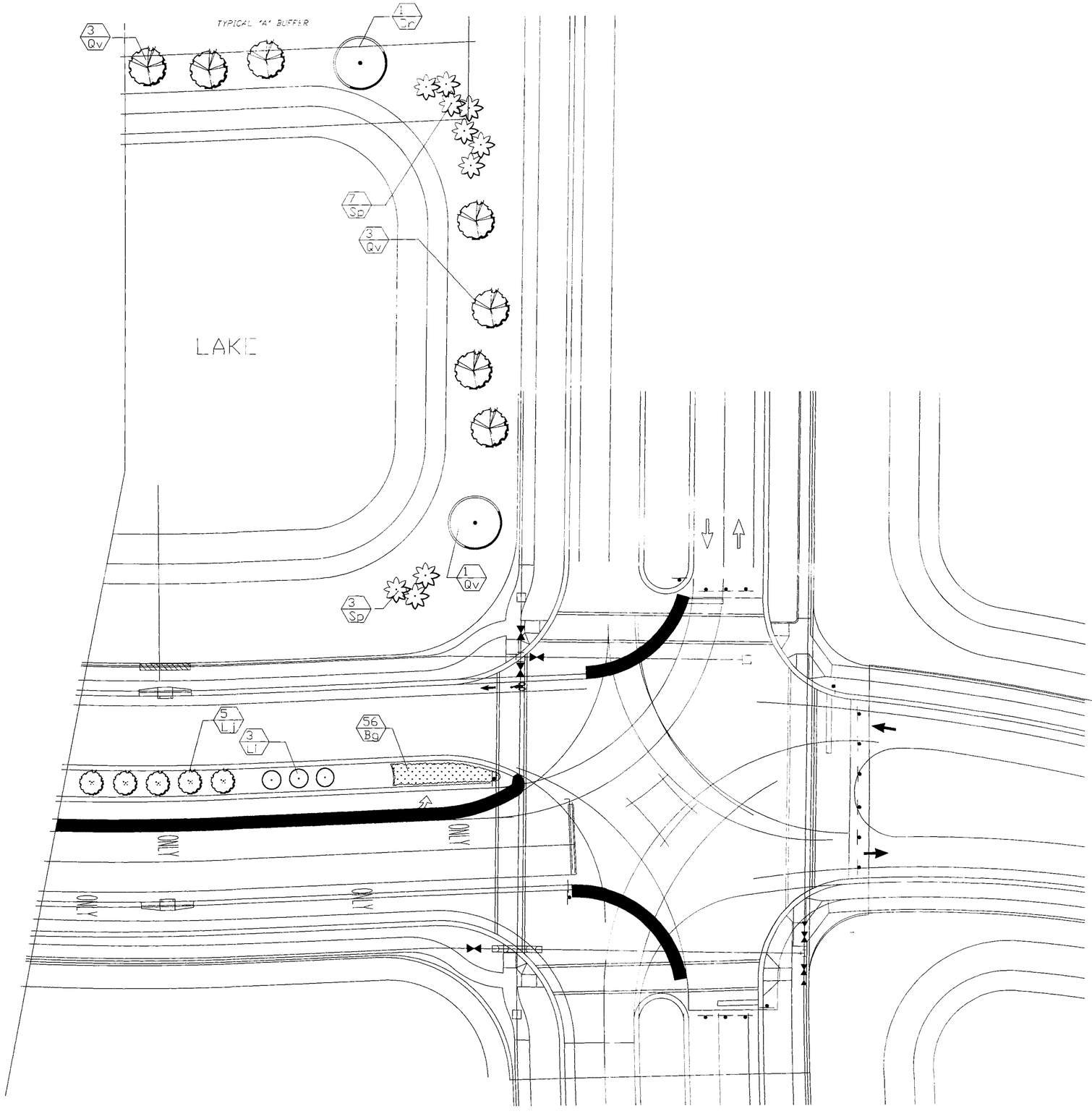
LANDSCAPE PLAN
SCALE: 1" = 20 - 0"

No.	Revision/Issue	Date

Firm Name and Address
DALE A. SLABAUGH & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
5070 TAMARIND RIDGE DRIVE
NAPLES, FLORIDA 34119
PH.941.353.8187 FX.941.353.0814

Project Name and Address
HACIENDA LAKES OF NAPLES,
3921 PROSPECT AVENUE
NAPLES, FL 34104

Project	Sheet
HACIENDALK.	L-2
Date 8.14.13	
Scale 1" = 20' - 0"	



DEPARTMENT OF ZONING AND LAND DEVELOPMENT REVIEW LANDSCAPE REVIEW APPROVAL
LANDSCAPE PLANNER
DATE 2.26.14

This CDES Landscape Review approval is limited to improvements on private property only. Improvements on public property, including Right-of-Way, require separate approval. Landscape design and installation on Right-of-Way must comply with Collier County Transportation Design Manual.

General Notes

Dale A. Slabaugh 8/14/13

LA DALE A. SLABAUGH, ASLA
Landscape Architect
Land Planning • Planting & Irrigation Design • Consulting
5070 Tamarind Ridge Dr. Naples, FL 34119
PH. (239) 353-8187 FX. (239) 353-0814

HACIENDA LAKES OF NAPLES,
NAPLES, FLORIDA

PREPARED FOR:
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA

LANDSCAPE PLAN
SCALE: 1" = 20 - 0"

No.	Revision/Issue	Date

Firm Name and Address
DALE A. SLABAUGH & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
5070 TAMARIND RIDGE DRIVE
NAPLES, FLORIDA 34119
PH.941.353.8187 FX.941.353.0814

Project Name and Address
HACIENDA LAKES OF NAPLES,
3921 PROSPECT AVENUE
NAPLES, FL 34104

Project	Sheet
HACIENDALK.	L-3
Date 8.14.13	
Scale 1" = 20' - 0"	

GENERAL LANDSCAPE & IRRIGATION NOTES AND DETAILS

LANDSCAPE INSTALLATION NOTES

The work includes furnishing all plants, materials, equipment and labor necessary for installation of plant material as indicated on the drawings and described in these notes. A schedule of plant materials and plant locations are provided on the plans.

All quantities indicated on the plant schedule are the amounts to be bid upon. The plant schedule is to be used as a guide and does not releive the bidder from it's responsibilities to do a comprehensive plant and/or materials take off. Should a descrepancy occur between the bidder's take off and the plant schedule quantity, the Landscape Architeck/Owner's Representative is to be notified prior to bid acceptance.

All plants furnished by the contractor, unless otherwise specified, shall be Florida #1 or better in accordance with and to the most current or updated edition of The State of Florida, Department of Agriculture's "Grades and Standards for Nursery Plants", Volume I & II. Plants shall have a habit of growth that is normal to the species, be sound, vigorous, healthy, and free from insects, pests, disease and injury. There will be no substitutions unless written approval is issued by the Landscape Architect or the Owner's Representative.

Teo fertilizers shall be used in all plantings. Granular fertilizer shall be uniform in composition, dry and free flowing, delivered to the site in original unopened bags, each bearing the manufacturer's statement of analysis and shall meet the following requirements: (17) percent nitrogen, (5) perdent phosphorous, (11) percent potassium, plus micro-nutrients. Tablet fertilizer shall be Agriform, or equal, in 21 gram size with the following anaylsis: (20) percent nitrogen, (10) percent phosphorous, (5) percent potassium.

FERTILIZER SCHEDULES:

Agriform, 21 gram tablets

Trees and Palms	2 per 1" caliper
B & B Shrubs	6 per plant
#7 or #10 container	4 per plant
#3 or #5 container	2 per plant
#1 shrub or ground cover	1 per plant

Annuals shall be fertilized with 4 to 6 months Osmocote ay (1) tablespoon per plant.

Granular 17-5-11 fertilizer shall be applied at the following rates:

Trees and Palms:	1 lb. (16oz) per 1" caliper
#7 to #10 container shrub	1 lb. (16oz) per 3 ft. ht./spr. of plant
#3 to #5 container shrub	½ lb.(8oz) per plant
#1 cont. shrub or ground cover	¼ lb. (4oz) per plant

PLANTING MIX, TOP SOIL & ANNUAL MIXTURES:

Planting mix shall be used with all trees, shrubs and ground covers. Planting soil shall be 80 percent #1 ground screened peat, 20 percent wood product, (50 percent wood chips- 50 percent wood sawdust), 10 percent sharp builder's sand, Compost material: (10 lbs. of 6-6-6 fertilizer, 100 percent organic; calcium level elevated to a minimum 120 700 parts per million; Magnesium level elevated to a minimum 120 parts per million. Soil shall be delivered in a loose, friable condition and applied in accordance with the planting specifications. PH range to be 5.5 to 6.5.
Palm trees shall be planted in existing site soils with a PH range of 5.5 to 7.0, unless specified otherwise in the plan specifications or notes.

The finish grade or sub-grade of planting areas shall be established to within one (1) inch prior to beginning any planting operations. Should any objectional materials such as stones, roots, limestone or construction debris be encounter during the planting operation they will be remove from the site by the landscape contractor. Base material shall be removed from sod and planting areas.

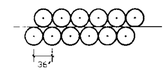
Trees, palms and major shrubs shall be located by flagging prior to planting and subject to approval by the landscape architect or the owner's representative if requested. Planting bed lines shall be sprayed out on the ground with industry approved spray paint prior to final layout and m ulching.

Plants shall be thououghly watered in at time of planting to remove any air pockets that may occur during the planting operation. Staking and guying shall be done according to the details shown on the plans.

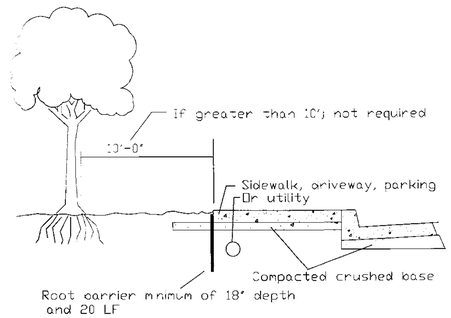
All areas shown on the plans within the limits of the work that are not to be planted with plant materials and/or mulched shall be sodded in accordance with the owner's instructions or as indicated on the plans. Quantities shall be verified by field measurement prioe to ordering and installation

Any excess soil or debris resulting from landscape operations onto any paved areas shall be removed promptly, keeping these areas clean as the work progresses. Upon completion of the planting, all excess soil, stones and other debris which has not been previously cleaned up, shall be removed from the site, or disposed of as directed by LA or owner's rep.

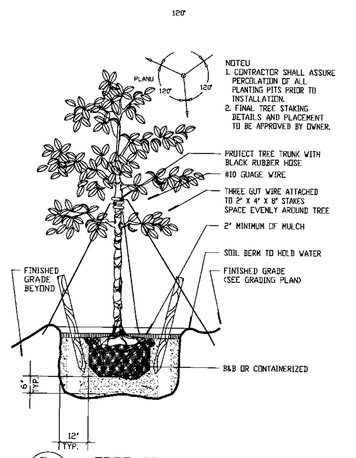
Final inspection, acceptance and turn over shall be scheduled by the LA and/or the owner's representative as work is completed. Landscape contractor is responsible for the naintenance of all planted and sodded areas until such time as the project is accepted by the owner.



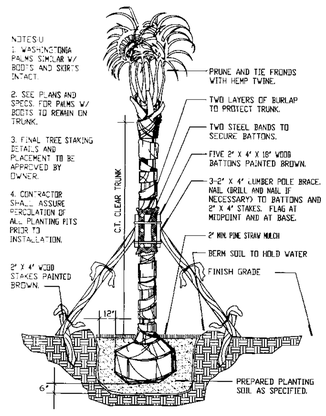
TYPICAL DOUBLE HEDGE PLANTING LAYOUT
FOR TYPICAL "B" TYPE BUFFER



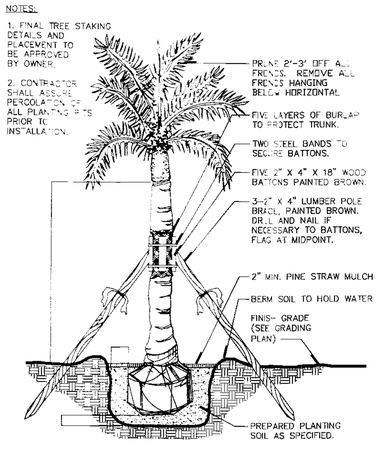
D/6 ROOT BARRIER DETAIL
SECTION NOT TO SCALE



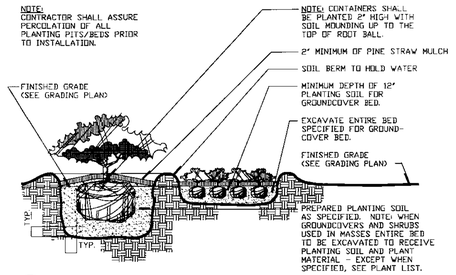
D/1 TREE STAKING DETAIL
SECTION NOT TO SCALE



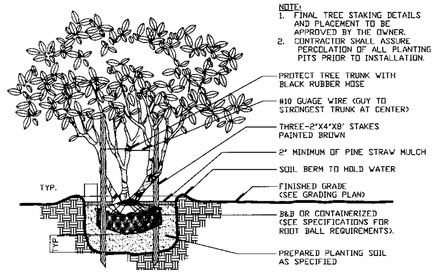
D/2 PALM STAKING DETAIL
NOT TO SCALE



D/3 ROYAL PALM TREE DETAIL
SECTION NOT TO SCALE



D/5 CONTAINER AND GROUNDCOVER DETAIL
SECTION NOT TO SCALE



D/4 MULTI-TRUNK TREE DETAIL
SECTION NOT TO SCALE

DEPARTMENT OF ZONING AND LAND DEVELOPMENT REVIEW
LANDSCAPE REVIEW APPROVAL
DATE 2.26.14
LANDSCAPE PLANNER

This DRI Landscape Review approval is limited to improvements on private property only. No improvements on or over public property are approved.

General Notes

DALE A. SLABAUGH, ASLA
Landscape Architect
Land Planning Planting & Irrigation Design Consulting
5070 Tamarind Ridge Dr. Naples, FL 34119
Phone (239) 353-8187
Facim. (239) 353-0814

HACIENDA LAKES OF NAPLES,
NAPLES, FLORIDA

PREPARED FOR:
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA

NOTES & DETAILS

No.	Revision/Issue	Date

Firm Name and Address
DALE A. SLABAUGH & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
5070 TAMARIND RIDGE DRIVE
NAPLES, FLORIDA 34119
PH.239.353.8187 FX.239.353.0814

Project Name and Address
HACIENDA LAKES OF NAPLES,
3921 PROSPECT AVENUE
NAPLES, FL 34104

Project HACIENDALK.	Sheet L-4
Date 8.14.13	
Scale GIVEN ABOVE	

NOTE: RAIN BIRD ESP-LXD CONTROLLER WITH (1) ESPLXD-SM75 MODULE INSTALLED DURING PHASE 1 CONSTRUCTION.

TERMINATION POINT OF 3" IRRIGATION MAINLINE AND COMMUNICATION CABLE INSTALLED DURING PHASE 1 CONSTRUCTION. CONTRACTOR TO VERIFY PER AS-BUILT PLANS AND IN THE FIELD

3" MAINLINE (EXISTING)

3" MAINLINE

DRIPLINE 448 LF., TYPICAL 8 PLACES

1 | 1 | 15.3
2 | 2 | 53.8
3 | 2 | 68.2
4 | 2 | 69.5
5 | 1 1/2 | 28.8
6 | 2 | 69.9
7 | 2 | 67.6
8 | 2 | 67.6
17 | 2 | 68.4
18 | 2 | 76.8
19 | 2 | 65.0
20 | 2 | 73.4
21 | 1 1/2 | 43.0
22 | 1 1/2 | 42.6

2 1/2" MAINLINE

6" & 2" SLEEVES

DRIPLINE 471 LF., TYPICAL 2 PLACES

DRIPLINE 491 LF., TYPICAL 2 PLACES

4" MAINLINE

DRIPLINE 404 LF., TYPICAL 4 PLACES

DRIPLINE 337 LF., TYPICAL 3 PLACES

4" MAINLINE (EXISTING)

4" MAINLINE

TERMINATION POINT OF 4" IRRIGATION MAINLINE AND COMMUNICATION CABLE INSTALLED DURING PHASE 1 CONSTRUCTION. CONTRACTOR TO VERIFY PER AS-BUILT PLANS AND IN THE FIELD.

MATCH LINE 13-2

0 30 60 90

SCALE IN FEET

SCALE : 1" = 30'

This CDES Landscape Review approval is limited to improvements within the Right-of-Way. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Florida Department of Transportation Review and Right-of-Way Permit from the Collier County Transportation Department

Converted to Electronic Record

PPL-PL20130000589 REV: 1
HACIENDA LAKES PHASE 2
DATE: 9/4/13
DUE: 10/2/13

REVISIONS:

DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# ---
SCALE 1" = 30'

HACIENDA LAKES OF NAPLES
RATTLESNAKE HAMMOCK EXT.
IRRIGATION PLAN

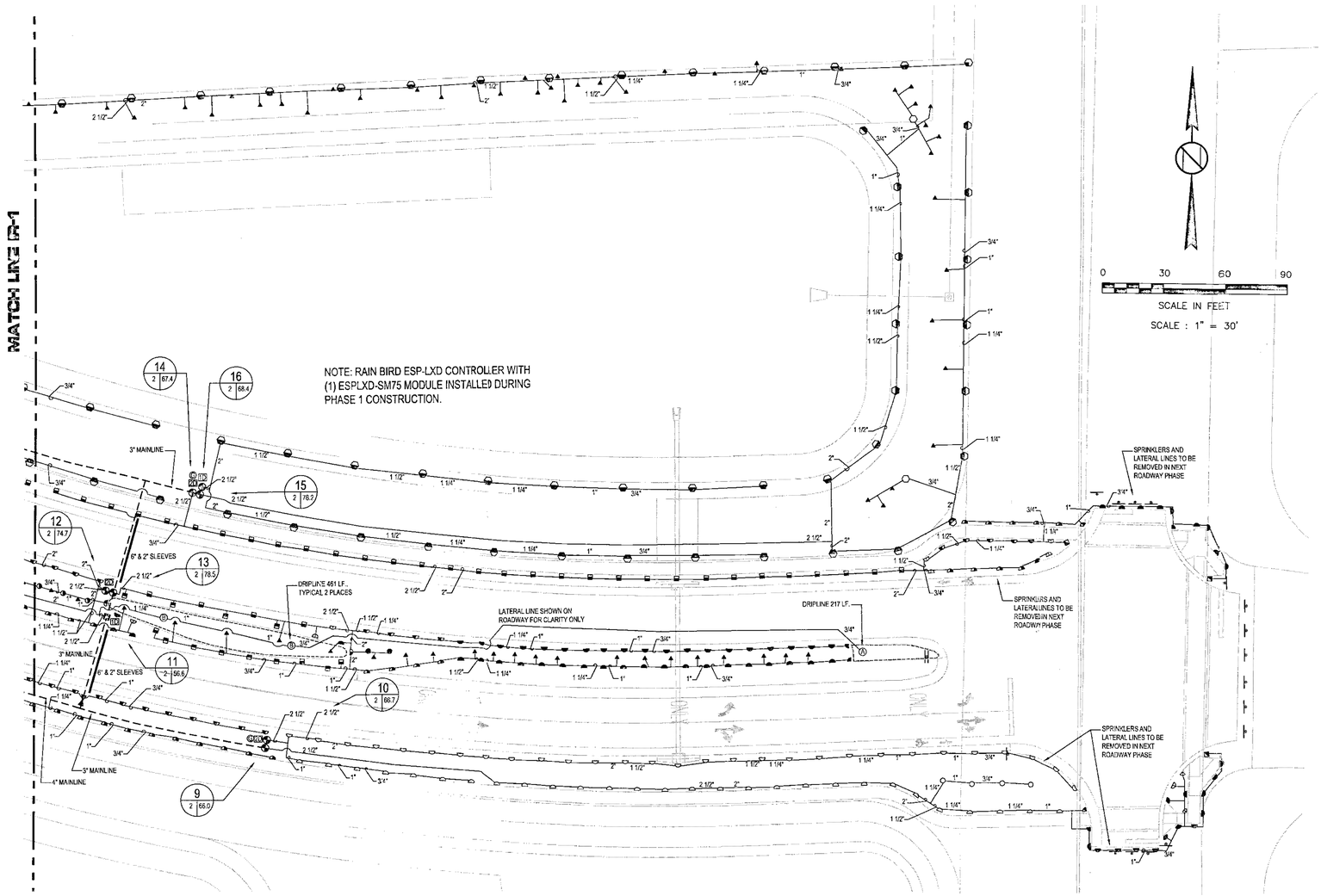
NAPLES, FLORIDA

EUGENE W. COLBORN, JR.
FLA. LIC. # LA0001494

COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT

P.O. Box 147283
Bradenton, Florida 34280
Phone (941) 795-7468

IR-1



IRRIGATION LEGEND

RAIN BIRD MPR SPRAY NOZZLES UNLESS NOTED OTHERWISE

	15-Q	30° TRAJECTORY
	15-T	30° TRAJECTORY
	15-H	30° TRAJECTORY
	15-TQ	30° TRAJECTORY
	15-F	30° TRAJECTORY
	12-Q	30° TRAJECTORY
	12-T	30° TRAJECTORY
	12-H	30° TRAJECTORY
	12-TQ	30° TRAJECTORY
	12-F	30° TRAJECTORY
	10-Q	15° TRAJECTORY
	10-T	15° TRAJECTORY
	10-H	15° TRAJECTORY
	10-F	15° TRAJECTORY
	8-Q	10° TRAJECTORY
	8-H	10° TRAJECTORY
	15EST	
	15SST	
	15CST	
	RAINBIRD 1401 PC BUBBLER, (ROTOR ZONES)	
	RAINBIRD 1402 PC BUBBLER, (SPRAY ZONES)	
	RAIN BIRD 5006-PC-PL-MPR 25/30 NOZZLE, 90° ADJUSTABLE	
	RAIN BIRD 5006-PC-PL-MPR 25/30 NOZZLE, 180° ADJUSTABLE	
	RAIN BIRD 5006-PC-FC-MPR 25/30 NOZZLE, 360° FULL CIRCLE	
	RAIN BIRD 5006-PC-PL-MPR 35 NOZZLE, 90° ADJUSTABLE	
	RAIN BIRD 5006-PC-PL-MPR 35 NOZZLE, 180° ADJUSTABLE	
	RAIN BIRD 5006-PC-FC-MPR 35 NOZZLE, 360° FULL CIRCLE	
1D	RAIN BIRD FD-101TURF ONE STATION DECODER	
2D	RAIN BIRD FD-202TURF TWO STATION DECODER	
G	GROUND ROD AT DECODER LOCATIONS WHERE SHOWN	
GP	COPPER GROUNDING PLATE AT CONTROLLER AND COMMUNICATION WIRE TERMINATION POINTS.	
	RAIN BIRD PESB SERIES ELECTRIC CONTROL VALVE,	
	HUNTER ICZ-150 DRIP ZONE CONTROL VALVE KIT	
A	RAIN BIRD XFD DRIPLINE SUPPLY POINT OF CONNECTION 'A'	
B	RAIN BIRD XFD DRIPLINE SUPPLY POINT OF CONNECTION 'B'	
	RAIN BIRD XFD DRIPLINE, MODEL XFD-09-12	
	RED AND WHITE SERIES #206 GATE VALVE, INSTALLED PER LINE SIZE AND IN 12" VALVE BOX	
	CLASS 200 PVC GASKETTED MAINLINE WITH DUCTILE IRON FITTINGS	
	CLASS 200 PVC LATERAL LINE SOLVENT WELD	
	SCHEDULE 40 PVC SLEEVE (SEE PLAN FOR SLEEVE SIZE)	
NOT SHOWN	RAIN BIRD MAXI-CABLE 14-2UF COMMUNICATION CABLE	

Converted to Electronic Record

REVISIONS:

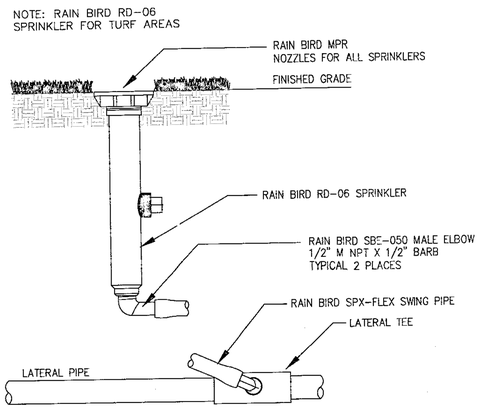
DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# ____
SCALE 1" = 30'

HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA
RATTLESNAKE HAMMOCK EXT.
IRRIGATION PLAN

EUGENE W. COLBORN, JR.
FLA. LIC.# LA0001484

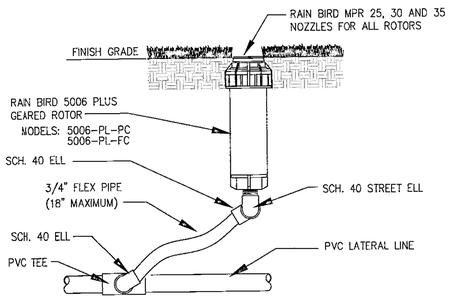
COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT
P.O. Box 14783
Bradenton, Florida 34280
Phone (941) 795-7458

R-2



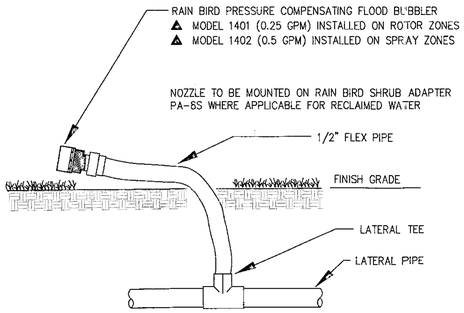
RAIN BIRD RD-06 SPRINKLER

NTS



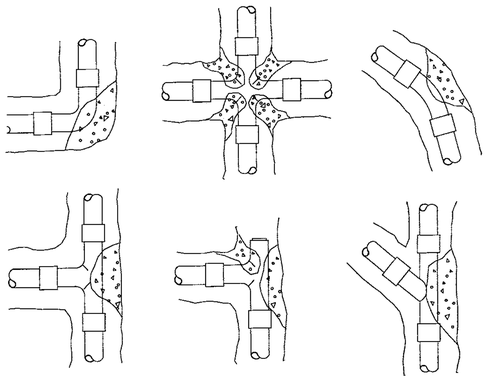
RAIN BIRD 5000 PLUS SERIES ROTOR

NTS



RAIN BIRD 1400 SERIES BUBBLER

NTS



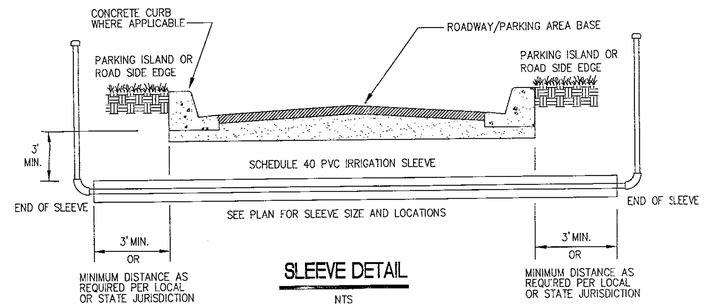
INSTALLATION NOTES

1. 3000 PSI CONCRETE OR BETTER IS TO BE USED FOR THRUST BLOCKS.
2. FOR 45°/90° FITTINGS, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.
3. FOR 22 1/2° FITTINGS, MINIMUM OF 0.5 CUBIC FEET OF CONCRETE TO BE USED.
4. FOR TEES, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.

THRUST BLOCKS REQUIRED FOR IRRIGATION MAINLINE 2 1/2" AND LARGER.

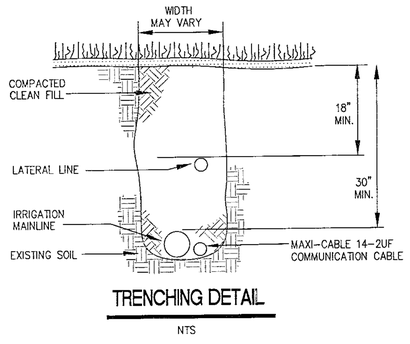
THRUST BLOCK REINFORCEMENT

NTS



SLEEVE DETAIL

NTS

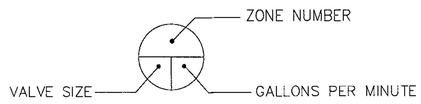


TRENCHING DETAIL

NTS

CONTROLLER SCHEDULE

ZONE	GPM	VALVE SIZE	TYPE
1	15.3	1"	ROTOR
2	53.8	2"	DRIP
3	68.2	2"	SPRAY
4	69.5	2"	SPRAY
5	28.8	1 1/2"	DRIP
6	69.9	2"	SPRAY
7	67.6	2"	SPRAY
8	67.6	2"	SPRAY
9	66.0	2"	SPRAY
10	66.7	2"	SPRAY
11	56.6	2"	DRIP
12	74.7	2"	SPRAY
13	78.5	2"	SPRAY
14	67.4	2"	SPRAY
15	76.2	2"	ROTOR
16	68.4	2"	ROTOR
17	68.4	2"	ROTOR
18	76.8	2"	ROTOR
19	65.0	2"	ROTOR
20	73.4	2"	ROTOR
21	43.0	1 1/2"	SPRAY
22	42.6	1 1/2"	SPRAY



IRRIGATION NOTES

1) THE HEAD LAYOUT HAS BEEN DESIGNED TO PROVIDE 100% COVERAGE. ANY CHANGES MADE IN THE HEAD LAYOUT DUE TO FIELD CONDITIONS SHALL BE IN ACCORDANCE WITH THESE STANDARDS.

2) SET SPRAY HEADS 3" AND ROTORS 6" IN FROM BACK OF CURB OR 12" IF PAVEMENT HAS NO CURB.

3) WHERE SHRUB HEADS ARE UTILIZED WITHIN PLANT ARES RISERS SHALL BE SET 4" ABOVE HEIGHT OF PLANT MATERIAL AND PAINTED FOREST GREEN WITH A PAINT WHICH ADHERES WELL TO PVC.

4) VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE PROJECT MANAGER AND THE LANDSCAPE ARCHITECT. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL VERIFY.

5) ALL PRESSURE MAINLINES UNDER ASPHALT PAVEMENT SHALL BE WITHIN SLEEVES AS NOTED. IRRIGATION COMMUNICATION CABLE SHALL HAVE ITS OWN SEPARATE SLEEVE. LATERAL LINES SHALL BE CONTAINED WITHIN THEIR OWN SLEEVE WHERE SHOWN ON THE PLAN.

6) ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR, WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF EACH SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS.

7) MAINLINE AND VALVES ARE SHOWN IN SCHEMATIC FORM. LOCATE AS NOTED ON PLANS.

8) LOCATE ALL VALVES A MINIMUM OF 24" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS NOTED OTHERWISE.

9) ALL UNSIZED PIPE SHALL BE 3/4" UNLESS OTHERWISE NOTED.

10) ALL VALVES SHALL BE INSTALLED IN A CARSON PLASTIC VALVE BOX WITH LOCKING LID.

11) IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE HIGHWAY JURISDICTION.

12) VERIFY MAINLINE POINT OF CONNECTIONS AND IRRIGATION CONTROLLER LOCATION AT PROJECT SITE WITH OWNER.

13) RAIN BIRD MAXI-CABLE 14-2UF COMMUNICATION CABLE TO BE LAID ALONG SIDE MAINLINE.

14) ALL CONNECTIONS TO THE FIELD DECODERS ALONG THE 2-WIRE PATH SHALL BE ACCOMPLISHED VIA THE USE OF THE 3M DBR/DBY WIRE CONNECTORS. THIS ALSO INCLUDES ALL GROUND RODS AND THE CONNECTION TO THE CONTROLLER. CONTRACTOR SHALL FOLLOW MANUFACTURE'S INSTALLATION SPECIFICATIONS.

15) DURING INSTALLATION AND UPON COMPLETION OF THE IRRIGATION SYSTEM, VALVES SHALL BE WIRED TO THE CONTROLLER STATION AS PER THE IRRIGATION ZONE NUMBERS.

16) WHERE ADDITIONAL WIRING IS REQUIRED FROM THE DECODER TO THE CONTROL VALVE SOLENOID THE WIRE SHALL BE DIRECT BURIAL STANDARD PAIR 14 AWG.

17) INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON THE SITE.

18) PRODUCTS SHALL BE AS SPECIFIED OR APPROVED EQUAL.

Converted to
Electronic Record

REVISIONS:

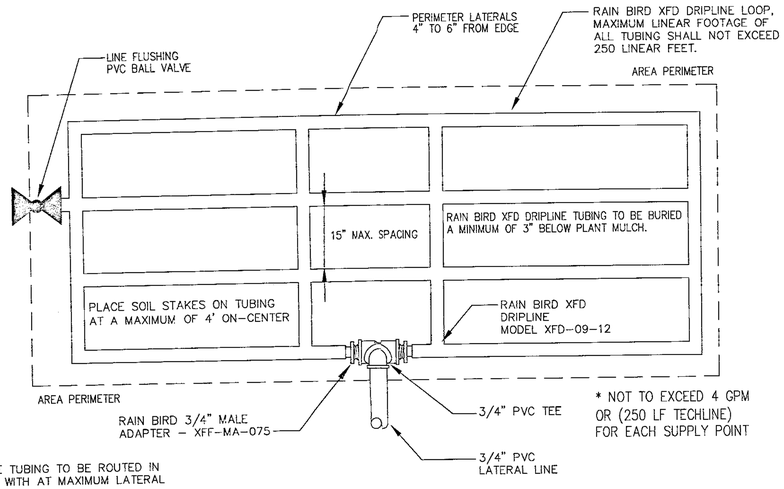
DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# ---
SCALE NONE

HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA
RATTLESNAKE HAMMOCK EXT.
IRRIGATION DETAILS

EUGENE W. COLBORN, JR.
FLA. LIC.# LA0001484

COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT
P.O. Box 14783
Bradenton, Florida 34280
Phone (941) 795-7456

IR-3



NOTE:

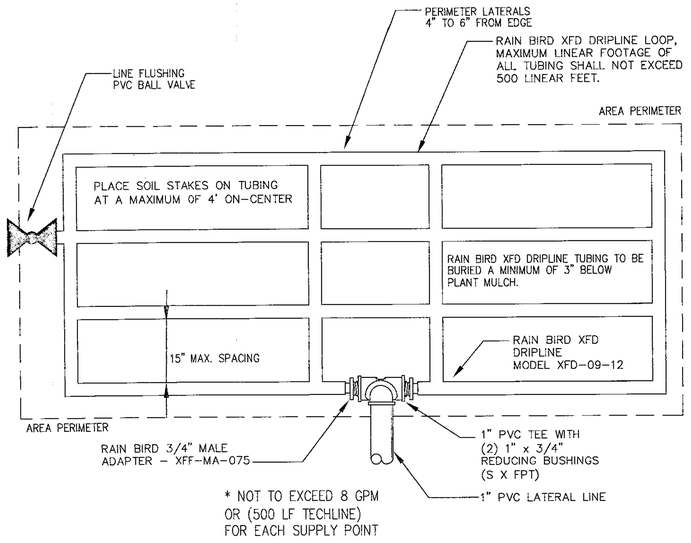
1. RAIN BIRD XFD DRIPLINE TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 15 INCHES.

2. RAIN BIRD XFD DRIPLINE TUBING TO BE INSTALLED IN A GRID PATTERN. RAIN BIRD XFD DRIPLINE TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.

3. ALL RAIN BIRD XFD DRIPLINE TUBING AND FITTING CONNECTIONS SHALL BE CLAMPLED WITH A CRIMP STEEL BAND OR HOSE CLAMP

RAIN BIRD XFD DRIPLINE CONNECTION POINT "A"

NTS



NOTE:

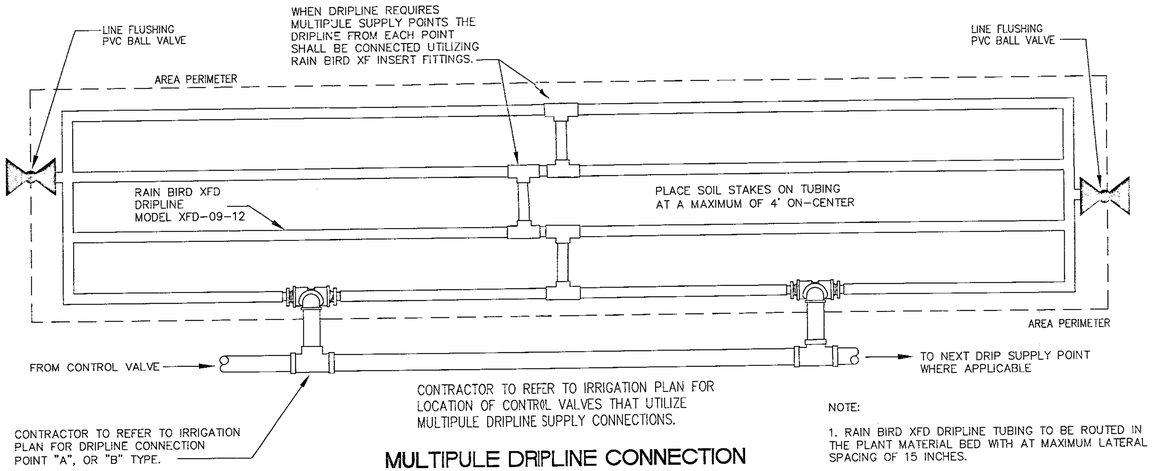
1. RAIN BIRD XFD DRIPLINE TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 15 INCHES.

2. RAIN BIRD XFD DRIPLINE TUBING TO BE INSTALLED IN A GRID PATTERN. RAIN BIRD XFD DRIPLINE TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.

3. ALL RAIN BIRD XFD DRIPLINE TUBING AND FITTING CONNECTIONS SHALL BE CLAMPLED WITH A CRIMP STEEL BAND OR HOSE CLAMP

RAIN BIRD XFD DRIPLINE CONNECTION POINT "B"

NTS



MULTIPULE DRIPLINE CONNECTION SUPPLIES FROM SINGLE CONTROL VALVE

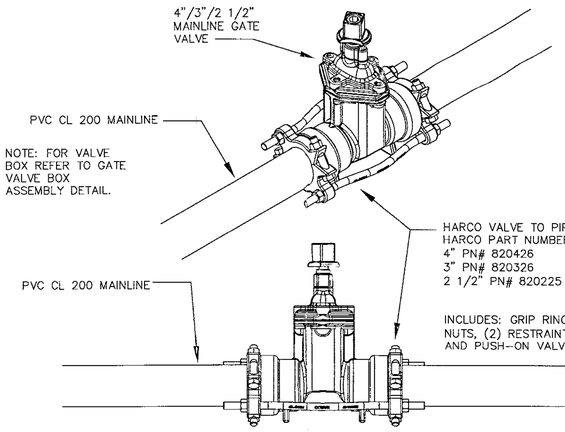
N'S

NOTE:

1. RAIN BIRD XFD DRIPLINE TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 15 INCHES.

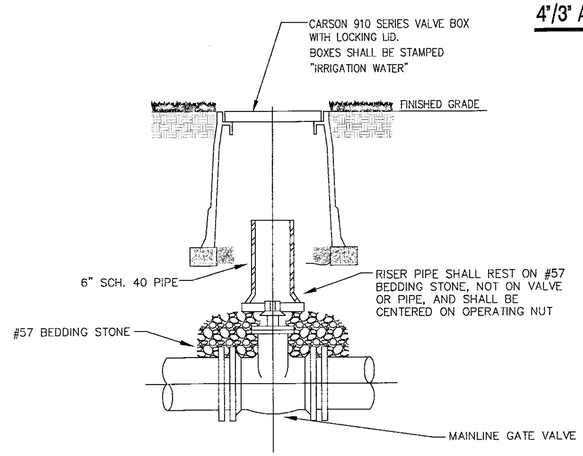
2. RAIN BIRD XFD DRIPLINE TUBING TO BE INSTALLED IN A GRID PATTERN. RAIN BIRD XFD DRIPLINE TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.

3. ALL RAIN BIRD XFD DRIPLINE TUBING AND FITTING CONNECTIONS SHALL BE CLAMPLED WITH A CRIMP STEEL BAND OR HOSE CLAMP



4"/3" AND 2 1/2" MAINLINE GATE ASSEMBLY

NTS



GATE VALVE BOX ASSEMBLY

NTS

Converted to Electronic Record

REVISIONS:

DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# NONE
SCALE NONE

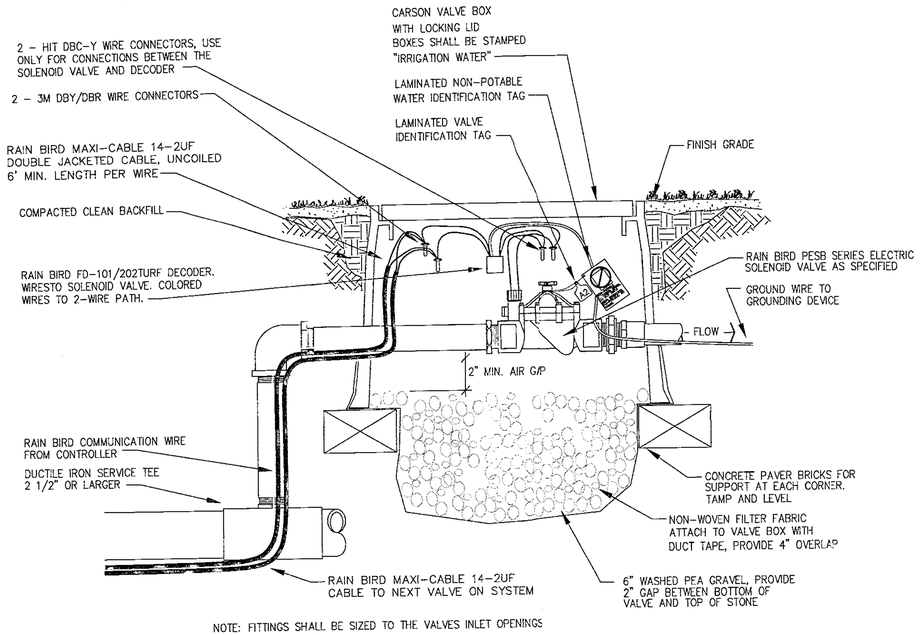
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA
RATTLESNAKE HAMMOCK EXT.
IRRIGATION DETAILS

EUGENE W. COLBORN JR.
RLA, LIC # LA0001484

COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT
P.O. Box 14760
Bradenton, Florida 34280
Phone (941) 795-7458

R-4

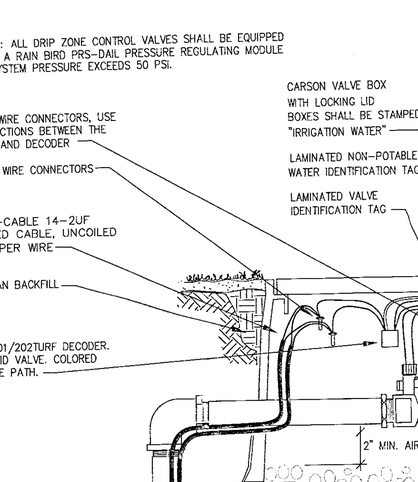
NOTE: ALL DRIP ZONE CONTROL VALVES SHALL BE EQUIPPED WITH A RAIN BIRD PRS-DAIL PRESSURE REGULATING MODULE IF SYSTEM PRESSURE EXCEEDS 50 PSI.



NOTE: FITTINGS SHALL BE SIZED TO THE VALVES INLET OPENINGS

RAIN BIRD PESB SERIES CONTROL VALVE ASSEMBLY

NTS

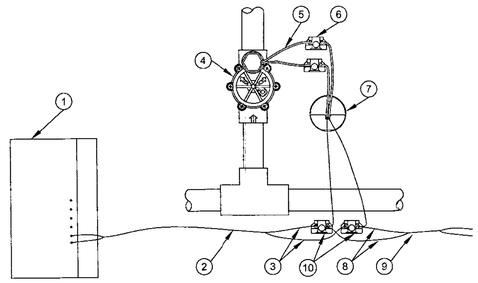


1. FINISH GRADE OR TOP OF MULCH
2. 10–INCH VALVE BOX WITH LOCKING COVER
3. GROUNDING ROD: 10 OHMS OR LESS
4. GREEN/YELLOW WIRE FROM LSP–1 TO GROUNDING ROD BRASS CLAMPS (1 OF 2)
5. DB SERIES WIRE CONNECTOR:
6. LINE SURGE PROTECTOR: RAIN BIRD LSP–1
7. TWO–WIRE CABLE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, LINE SURGE PROTECTOR OR ESP–LXD CONTROLLER)
8. COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, LINE SURGE PROTECTOR OR ESP–LXD CONTROLLER)
9. 3–INCH MINIMUM DEPTH OF 3/4–INCH WASHED GRAVEL
10. BRICK (1 OF 2)
11. BLUE WIRE FROM LSP–1 TO DB SERIES WIRE CONNECTOR

NOTES:
1. LSP–1 SHOULD BE INSTALLED EVERY 500–FEET OR FOR EVERY EIGHT DECODERS ON TWO–WIRE PATH.
2. LSP–1 TO BE INSTALLED AT END OF WIRE RUN THAT TERMINATES IN THE FIELD (STAR CONFIGURATION).

RAIN BIRD LSP-1 LINE SURGE PROTECTOR

NTS

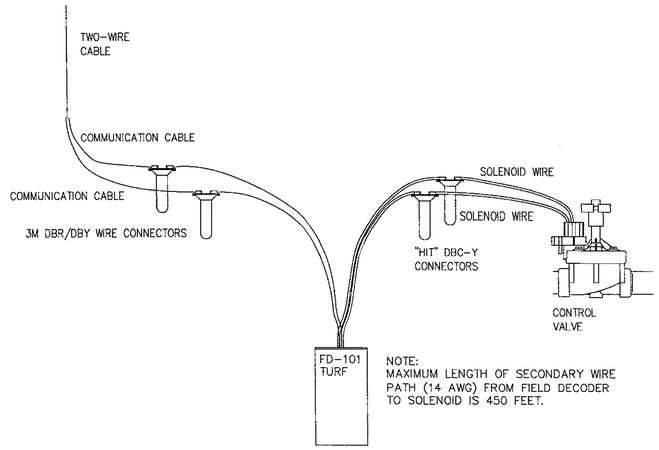


1. RAIN BIRD ESP–LXD CONTROLLER
2. TWO–WIRE TO CONTROLLER
3. COMMUNICATION WIRE TO CONTROLLER
4. REMOTE CONTROL VALVE
5. 5' MIN. LENGTH OF 14–2 GAUGE SOLENOID WIRE
6. "HIT" DBC–Y CONNECTORS (1 OF 2)
7. RAIN BIRD FD–101TURF SINGLE DECODER
8. COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, CONTROLLER)
9. TWO WIRE CABLE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, OR CONTROLLER)
10. 3M DBR/DBY WIRE CONNECTORS

NOTE:
MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM FIELD DECODER TO SOLENOID IS 450 FEET.

RAIN BIRD FD-101TURF DECODER WIRING TO VALVE AND CONTROLLER

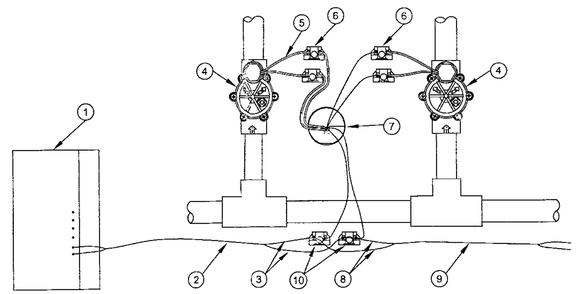
NTS



NOTE:
MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM FIELD DECODER TO SOLENOID IS 450 FEET.

RAIN BIRD FD-101TURF DECODER WIRING DIAGRAM

NTS

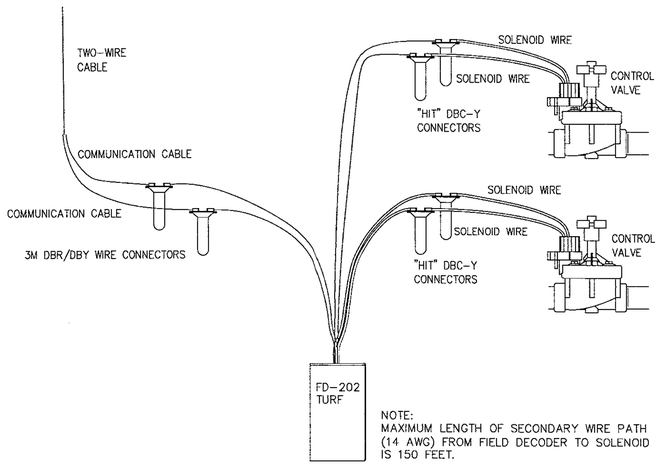


1. RAIN BIRD ESP–LXD CONTROLLER
2. TWO–WIRE CABLE TO CONTROLLER
3. COMMUNICATION WIRE TO CONTROLLER
4. REMOTE CONTROL VALVE
5. 5' MIN. LENGTH OF 14–2 GAUGE SOLENOID WIRE
6. "HIT" DBC–Y CONNECTORS (1 OF 4)
7. RAIN BIRD FD–202TURF DECODER
8. COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, ACC CONTROLLER)
9. TWO WIRE CABLE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, OR ACC CONTROLLER)
10. 3M DBR/DBY WIRE CONNECTORS

NOTE:
MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM DECODER TO SOLENOID IS 450 FEET.

RAIN BIRD FD-202TURF DECODER WIRING TO VALVES AND CONTROLLER

NTS



NOTE:
MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM FIELD DECODER TO SOLENOID IS 150 FEET.

RAIN BIRD FD-202TURF DECODER WIRING DIAGRAM

NTS

Converted to Electronic Record

REVISIONS:

DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# —
SCALE NONE

HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA
RATTLESNAKE HAMMOCK EXT.
IRRIGATION DETAILS

EUGENE W. COLBORN, JR.
FLA. LIC.# LA0001494

COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT
P.O. Box 14753
Bradenton, Florida 34280
Phone (941) 795-7458

R-5

COLLIER COUNTY
Growth Management Division
Land Development Services Department

March 25, 2014

Hole Montes
Terry Cole, P.E.
950 Encore WayNaples, FL 34110

RE: Construction Plan Approval - PL20130000589
Hacienda Lakes Phase 2

Dear Applicant:

THIS IS YOUR PERMIT AND MUST BE POSTED ON THE JOB SITE

Please be advised that the Collier County Board of County Commissioners, at its regularly scheduled meeting of March 25, 2014 has approved the plat for the referenced project with certain stipulations (see attached Exhibit "A").

Please call Engineering Inspections Supervisor at 239-877-8146 to schedule a pre-construction meeting a minimum of 48 hours prior to the start of construction.

Engineering Review has reviewed the construction plans for the referenced project and has no objection to the construction of water, sewer, paving and drainage aspects of the project subject to the following stipulations:

1. **General**

   a) **CHANGES IN USE AND/OR DESIGN OF THIS PLAN ARE NOT AUTHORIZED WITHOUT WRITTEN APPROVAL BY THE COUNTY. CHANGES SHALL REQUIRE RE-REVIEW IN ACCORDANCE WITH ALL CURRENT COUNTY CODES INCLUDING PARKING FACILITIES, UTILITIES, TRANSPORTATION AND THE LIKE.**

   b) **The Completion Certificate for preliminary acceptance shall be based on information provided by the project Surveyor, and the Engineer's own observations, and NOT based on information provided by the contractor (10.02.05 B.3).**

   c) All PUD related stipulations shall apply to this project.

   d) Permits from other agencies having jurisdiction over this project shall be obtained prior to start of construction.

   e) This construction plan and plat is approved pursuant to the Certificate of Adequate Public Facilities which has been issued for this project.

   f) All construction activities permitted by this letter shall only occur during the following times:

6:30 A.M. to 7:00 P.M., Monday through Saturday; no work is permitted on Sundays and the following holidays: New Year's Day, Memorial Day, 4th of July, Labor Day, Thanksgiving Day, Christmas Day

g) SIGNAGE RESTRICTIONS: Please be advised that any permanent sign (wall, ground, monument, directory, etc.) requires a separate building permit and must meet the provisions of the Collier County Land Development Code, Section 5.06, and/or the applicable provisions of the governing Planned Unit Development (PUD) document, regardless of any sign placement, dimensions or color depicted on the site and/or architectural plans approved by this letter.

2. **Utility**
Please see attached Utilities check;list

3. **Subdivision**
All work shall be in accordance with applicable Collier County ordinances and rules and regulations of other entities having jurisdiction over the project.

Pursuant to Sections 10.02.04 3.b and 10.02.05 B.11, the plat must be recoded within 18 months of the BCC approval and the required subdivision improvements must receive final acceptance within 36 months of the BCC approval.

4. **Environmental**
Site clearing is conditioned to the stipulations contained on the approved site plan.

5. **Water Management**
a) All work shall be in accordance with applicable State or Federal rules and regulations.

b) Work area shall be properly barricaded with hay bales and/or silt screens during the entire time of construction, to prevent any siltation during construction.

c) Separate excavation permit must be obtained.

d) The engineer of record, prior to final acceptance of the subdivision shall provide documentation from the stormwater maintenance entity that it has been provided information on how the stormwater system operates and their responsibility to maintain the system.

6. **Addressing**
Pursuant to Ordinance No. 07-62, no proposed subdivision, street, building, condominium or development may utilize the same name or a similar sounding name as any existing subdivision, street, building, condominium or development, except that the major street within a subdivision may utilize the name of the subdivision. Any changes to the project name shall be reviewed and approved by Growth Management Division/Planning and Regulation Addressing Section.

7. **Fire**
Please note that prior to the accumulation of combustible building materials on site, proposed fire hydrants must be operable and be able to provide the minimum required fire flows, and improved stabilized emergency apparatus access ways (min. 20-feet wide) must be available to within 100-feet of structures.

All fire hydrants, fire department connections (FDC) and post-indicating valves (PIV) shall be visible and accessible; they shall not be obstructed visually or functionally by trees or landscaping."

8. At the time of Preliminary Acceptance, the Landscape Architect shall certify that the landscaping has been installed in substantial accordance with the approved plans and specifications. The certification shall be in a form approved by the County Manager or his designee.

Engineering Services Stipulations: An on-site pre-construction meeting for water and/or sewer is required prior to construction. Contact Craig Callis (239) 252-2905.

Engineering Services Stipulations: All preliminary and final inspections of water and/or sewer shall be coordinated through Jodi Hughes (239) 252-5744 with a 48 hour written notification.

Engineering Services Informational Comments: Prepaid Excavation Inspection Fee Required prior to final approval/release of excavation permit. Refer to Excavation application for fee schedule.

Transportation-Pathways Stipulations: 10/02/2013 Approved with Stipulation-6 ft. concrete sidewalks are required by LDC to have a thickness of 6". Sheet 9 and note (5) on page 10 show a thickness of 4" which is incorrect, this needs to be changed to 6"

Landscape Stipulations: This landscape review approval is limited to improvements on private property only. Proposed improvements within the Right-of-Way (including the proposed future public Right of Way) requires a separate Transportation Right-of-Way landscape review and a Right of Way permit from the Collier County Transportation Department.

Engineering Services Stipulations: Additional Fees due prior to pre-construction meeting - jh

Based on the revised OPC of $1,103,639.50, Inspection fees due are $24,831.89 LESS overage from Review fee of $846.84. Therefore total due prior to pre-construction meeting is $23,985.05. This may have to be reconciled in the fee schedule since the OPC was reduced and the incpection fees are less than what is shown on the fee schedule associated with this application.

Fire Department Informational Comments: Terry Cole (Hole Montes engineer) provided report from RWA which was submitted under PPL-PL2012-2539 which shows the required 1000gpm is exceeded at all nodes in the Phase 1 and Built-Out scenarios.

Planning Informational Comments: The segment of Rattlesnake Hammock Road within this plat will become a County ROW. Since ROWs do not fall within a zoning district, it has been determined that this segment of Rattlesnake Hammock Road is not required to be "Dark Skies" compliant.

Transportation Planning Stipulations: 2/24/14 Stipulations for approval:
Please respond to the comments below through a follow-up ICP to this project.

"1. Summary of Quantities Sheets. It is noted that there is a 4" and 6" plug on sheet 7 at approximate station 52+50+ that is not reflected on the Summary of Quantities sheets. Does it need to be shown on Summary of Quantities?

2. RCP shall be Class III. Class I is not acceptable.

3. Site Grading & Earthwork: Is the design consultant saying that there will be no excavation needed for muck?

4. Sheet 5 of 13. How will this 42" RCP be maintained and by whom?

5. Shouldn't there be blue RPM's for Fire Hydrant location at approximate Stations 41+66, 4+35 & 50+15?

Sheet 1 of 13 – Cover Sheet. Legal Descriptions:

6. First paragraph - Typo "Colliery"

7. Second paragraph - Typo "Colliery"
8. Once Plat is recorded please add Plat Book Number (XX) and Page Numbers (XX) to paragraph No. 1 and No. 2

Sheet 2 of 13 – Index-Abbr-Legend-General Notes

9. General Note 8 – Should read: "Irrigation line sizes, locations & casing locations are shown on the project Landscape and Irrigation Plans.

Sheet 3 of 13 – Aerial Photograph Drainage Map and Clearing Plan

10. Fix text for drainage basin numbers – Font Issue
11. Fix leaders in bottom right of sheet that point to nowhere for "Install Single Row Silt Fence…."

Sheet 4 of 13 – Site Utilities Plan

12. Fix text in border lower left – Font issue
13. Plan and Profile Sheet Reference Numbers missing - Font Issue
14. Reference to lake number missing in 3 locations – Font issue
15. Clean-up overlapping graphics/text by stat. 47+00 "Provide 20 LF …
16. Please confirm with PUED that utilizing a Fire Hydrant Assembly for a Temporary Sample Point is acceptable. That method is typically not acceptable by PUED.

Sheet 5 of 13 – Paving, Grading and Drainage Plan

17. The Pavement cross slopes from east of approximately Sta. 50+25+/- to end are too flat and may cause ponding issues – please modify as appropriate

Sheet 6 of 13 – Plan and Profile (38+50 – 46+00)

18. Remove sign symbols (3) on the plan sheet in the vicinity of Station 38+80
19. Label "6 ft Sidewalk" for westbound direction on plan sheet
Sheet 10 of 13 – Roadway Cross Sections and Lake Details

20. Notes No. 2 – Please change All elevations….1.29 to 1.30 similar to other sheets

Sheet 11 of 13 – Signage and Pavement Marking Plan

21. Bike Lane Message Standard has changed. Use "Bike Lane & arrow" per MUTCD Figure 9C-3, Word Legends on page 809. Use paint not thermoplastic for this marking.
22. Westbound Sta. 45+00 +/-. Should signage be provided for left turn 'ramp" to avoid confusing drivers? The yellow edge of pavement line may cause drivers to head onto ramp without meaning to. Maybe white skip to delineate difference should be used (like a turn lane)?

Sheet 12 of 13 – Erosion Control Details

23. Details not utilized should be removed (Ex. Tree Well Protection, Tree Fencing Detail, Tree Well Detail, Gravel Construction Entrance)
Sheet 13 of 13 – Construction Pollution Prevention Plan

24. Please update to eliminate use of straw bales (Bottom Row – Middle Form)"

Engineering Services Stipulations: This plat can not be recorded until after the Hacienda Lakes of Naples (Phase One) plat has been recorded. JH

STIPULATION:

PURSUANT TO HB 503, PLEASE COMPLETE THE ATTACHED AFFIDAVIT OF COMPLIANCE AND PROVIDE TO CLIENT SERVICES STAFF (252-2400). INCLUDE THE BALANCE OF ANY OUTSTANDING INSPECTION FEES TOGETHER WITH ANY REQUIRED STATE OR FEDERAL PERMITS. UPON PROCESSING THE AFFIDAVIT OF COMPLIANCE, A PRE-CONSTRUCTION MEETING MAY BE SCHEDULED.

See attached preliminary acceptance checklist for the subdivision improvements.

Two sets of approved plans and one set of landscape plans are being returned herewith for your use.

Be advised that this approval automatically expires in thirty-six (36) months pursuant to Collier County Land Development Code Section 10.02.05 B.11. The expiration date is March 25, 2017..

Please call me if you have any questions or need any additional information.

Sincerely,

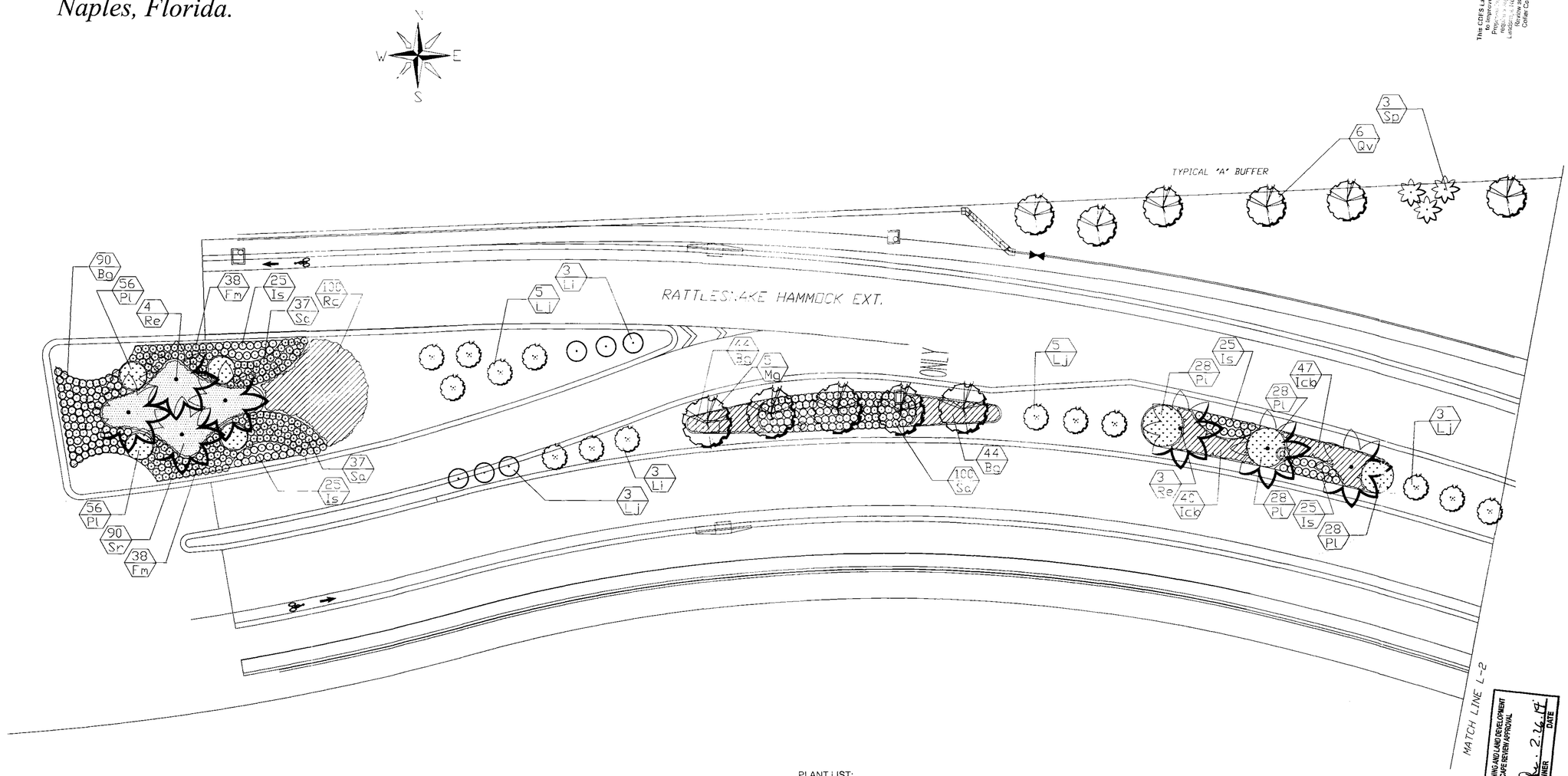
John Houldsworth
Senior Site Plan Reviewer
johnhouldsworth@colliergov.net

cc: Daryl Hughes, Engineering Inspector Supervisor (w/attach.)
Customer Services/Addressing (w/attach.)
Jodi Hughes, Engineering Technician
Transportation Engineering & Construction Management, P.E.
Zamira Deltoro, Utilities Adm. Assistant (w/attach.)

SCHEDULE "A"

Hacienda Lakes of Naples,

Naples, Florida.



PLANT LIST:

Abbr	Quant.	Common Name	Botanical Name	Nat.	Size/Spacing
Re	10	Royal Palm	Roystonea elata	Yes	10 GW; 28' oa
Sp	23	Cabbage Palm	Sabal palmetto	Yes	10-16' ct: part booted
Dr	4	Royal Poinciana	Delenix reginai	No	12'x7', 3" cal
Qv	24	Southern Live Oak	Quercus virginiana	Yes	12'x6', 45 gal
Ar	3	Red Maple	Acer rubrum	Yes	10-12'x5', 2" cal.
Mg	10	Southern Magnolia	Magnolia grandifolia DD Blanchard	Yes	14'x8'
Lj	30	Glossy Privet Tree	Ligustrum japonioca	No	6-8', 45 gal.
Li	8	Crepe myrtle	Laegerstromia indica	No	8-10', multi stem, "watermelon"
Sr	155	Bird of Paradise	Strelizia reginae	No	24-30", 7 gal.
Sa	274	Varigated Arbicola	Schef. act arb. "trinette"	No	18-24", 3 gal.
Fm	76	Green Island Ficus	Ficus microcarpa	No	20", 3 gal.
Bg	448	Dwf. Bougainvilla	Bougainvilla Helen Johnson	No	18", 3 gal.
Icb	174	Burford Holly	Iklex cornuta burfordii	Yes	18", 3 gal.
Rc	100	Wild Petunia	Ruhellia carolinenae.	No	18", 3 gal.
Is	250	Dwf. Ilex	ilex shillings	Yes	18". 3 gal.
Pl	280	Egyptian Star Flower	Penta lancelata	No	12", 1 gal. white
Bags	560	Shredded pine bark mulch, 2-3" depth, all planting areas			

All PLANT MATERIAL SHALL BE FLORIDA # 1 AS STATED IN FLA. DEPT. AG.

This CDES Landscape Review approval is limited to Environmental issues on private property only. Proposed improvements on public property require separate review and approval by the Transportation Division. Review and approval of Landscape Plans does not relieve the applicant of the responsibility to comply with all applicable codes and regulations. Collier County Transportation Department

DEPARTMENT OF ZONING AND LAND DEVELOPMENT REVIEW LANDSCAPE REVIEW APPROVAL
LANDSCAPE PLANNER
DATE 2.26.14

This CDES Landscape Review approval is limited to Environmental issues on private property only. Proposed improvements on public property require separate review and approval by the Transportation Division.

PPL-PL20130000589 REV: 1
HACIENDA LAKES PHASE 2
DATE: 9/4/13
DUE: 10/2/13

General Notes

LAO DALE A. SLABAUGH, ASLA
Landscape Architect LA0000626
Land Planning Planting & Irrigation Design Consulting
5070 Tamarind Ridge Dr. Naples, FL 34119
PH. (239) 353-8187 FX. (239) 353-0814

HACIENDA LAKES OF NAPLES,
NAPLES, FLORIDA

PREPARED FOR:
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA

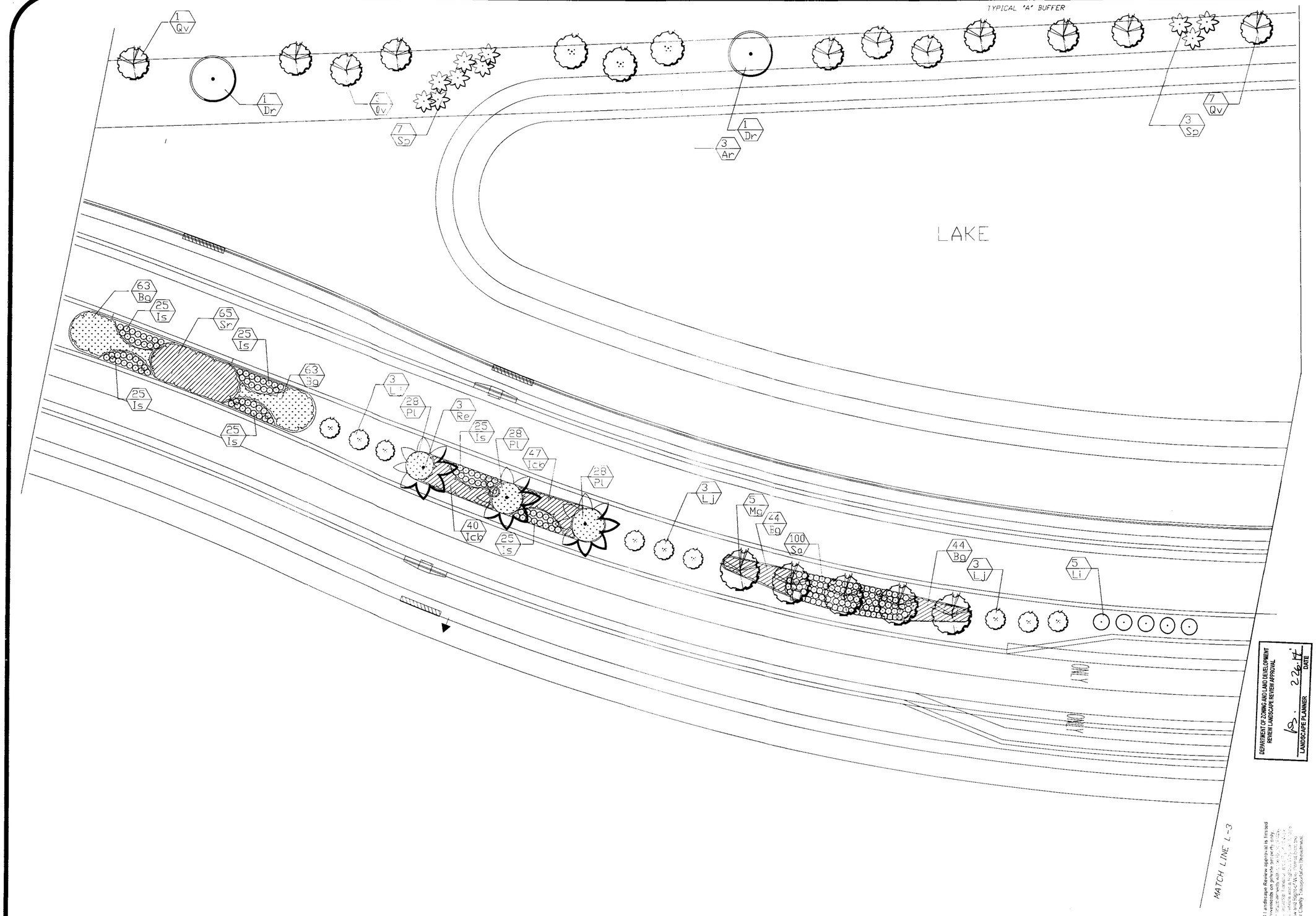
LANDSCAPE PLAN
SCALE: 1" = 20 - 0"

No.	Revision/Issue	Date

Firm Name and Address
DALE A. SLABAUGH & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
5070 TAMARIND RIDGE DRIVE
NAPLES, FLORIDA 34119
PH.941.353.8187 FX.941.353.0814

Project Name and Address
HACIENDA LAKES OF NAPLES,
3921 PROSPECT AVENUE
NAPLES, FL 34104

Project	Sheet
HACIENDALK.	L-1
Date 8.14.13	
Scale 1" = 20' - 0"	



DEPARTMENT OF ZONING AND LAND DEVELOPMENT REVIEW LANDSCAPE REVIEW APPROVAL
DATE 2.26.14
LANDSCAPE PLANNER

This CERTIFICATE is a Landscape Review approval is limited to landscape improvements on private property only. Approval of public right-of-way landscape improvements must be obtained from the Collier County Transportation Department.

General Notes

Dale A Slabaugh 8/29/13

DALE A. SLABAUGH, ASLA
Landscape Architect
LA0000626
Land Planning Planting & Irrigation Design Consulting
5070 Tamarind Ridge Dr. Naples, FL 34119
PH. (239) 353-8187
FX. (239) 353-0814

HACIENDA LAKES OF NAPLES,
NAPLES, FLORIDA

PREPARED FOR:
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA

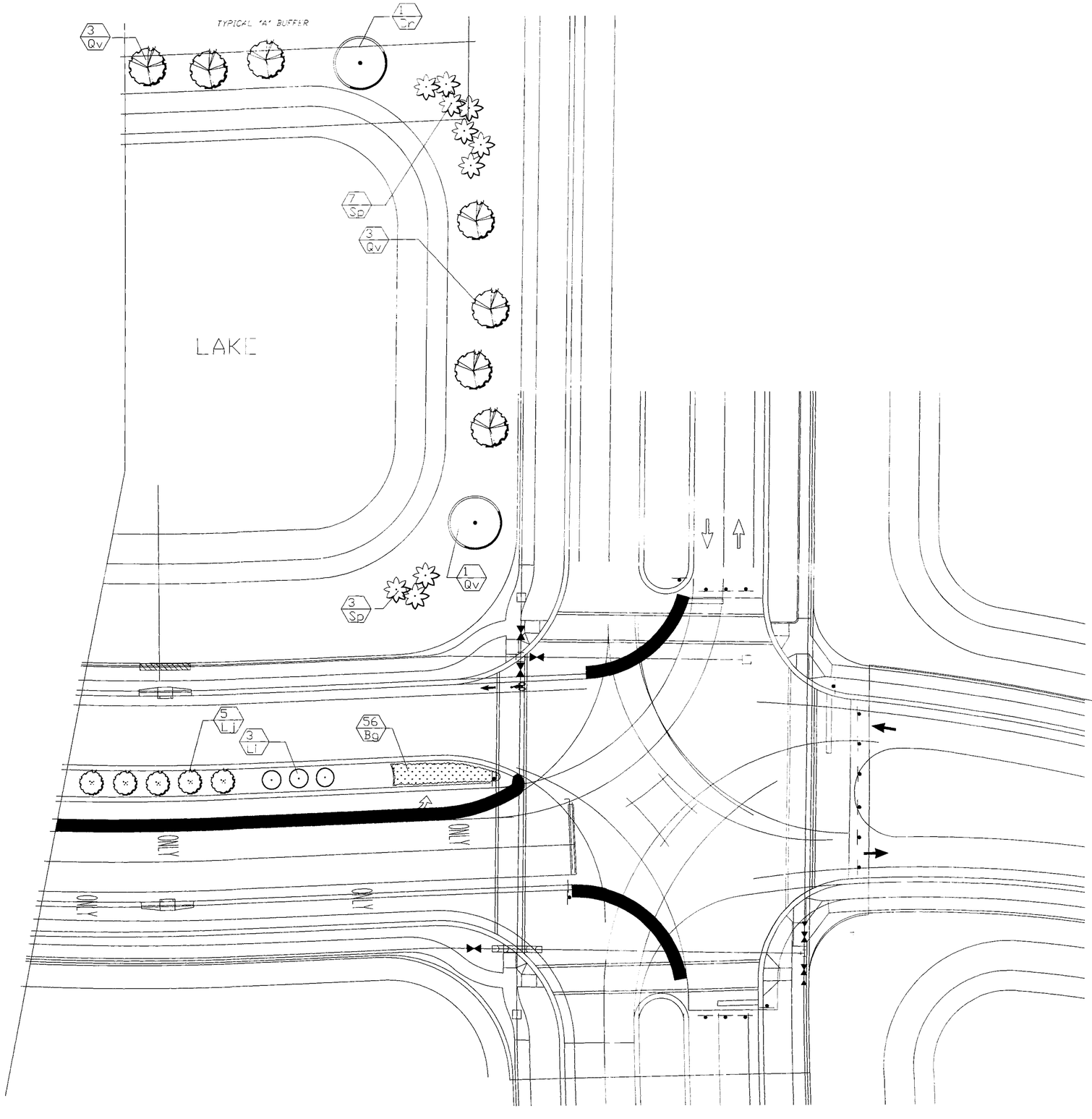
LANDSCAPE PLAN
SCALE: 1" = 20 - 0"

No.	Revision/Issue	Date

Firm Name and Address
DALE A. SLABAUGH & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
5070 TAMARIND RIDGE DRIVE
NAPLES, FLORIDA 34119
PH.941.353.8187 FX.941.353.0814

Project Name and Address
HACIENDA LAKES OF NAPLES,
3921 PROSPECT AVENUE
NAPLES, FL 34104

Project	Sheet
HACIENDALK.	L-2
Date 8.14.13	
Scale 1" = 20' - 0"	



DEPARTMENT OF ZONING AND LAND DEVELOPMENT REVIEW LANDSCAPE REVIEW APPROVAL
LANDSCAPE PLANNER
DATE 2.26.14

This CDES Landscape Review approval is limited to improvements on private property only. Improvements on public property, including Right-of-Way, require separate approval. Landscape design and installation on Right-of-Way must comply with Collier County Transportation Design Manual.

General Notes

Dale A. Slabaugh 8/14/13

LA DALE A. SLABAUGH, ASLA
Landscape Architect
Land Planning • Planting & Irrigation Design • Consulting
5070 Tamarind Ridge Dr. Naples, FL 34119
PH. (239) 353-8187 FX. (239) 353-0814

HACIENDA LAKES OF NAPLES,
NAPLES, FLORIDA

PREPARED FOR:
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA

LANDSCAPE PLAN
SCALE: 1" = 20 - 0"

No.	Revision/Issue	Date

Firm Name and Address
DALE A. SLABAUGH & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
5070 TAMARIND RIDGE DRIVE
NAPLES, FLORIDA 34119
PH.941.353.8187 FX.941.353.0814

Project Name and Address
HACIENDA LAKES OF NAPLES,
3921 PROSPECT AVENUE
NAPLES, FL 34104

Project	Sheet
HACIENDALK.	L-3
Date 8.14.13	
Scale 1" = 20' - 0"	

GENERAL LANDSCAPE & IRRIGATION NOTES AND DETAILS

LANDSCAPE INSTALLATION NOTES

The work includes furnishing all plants, materials, equipment and labor necessary for installation of plant material as indicated on the drawings and described in these notes. A schedule of plant materials and plant locations are provided on the plans.

All quantities indicated on the plant schedule are the amounts to be bid upon. The plant schedule is to be used as a guide and does not releive the bidder from it's responsibilities to do a comprehensive plant and/or materials take off. Should a descrepancy occur between the bidder's take off and the plant schedule quantity, the Landscape Architeck/Owner's Representative is to be notified prior to bid acceptance.

All plants furnished by the contractor, unless otherwise specified, shall be Florida #1 or better in accordance with and to the most current or updated edition of The State of Florida, Department of Agriculture's "Grades and Standards for Nursery Plants", Volume I & II. Plants shall have a habit of growth that is normal to the species, be sound, vigorous, healthy, and free from insects, pests, disease and injury. There will be no substitutions unless written approval is issued by the Landscape Architect or the Owner's Representative.

Teo fertilizers shall be used in all plantings. Granular fertilizer shall be uniform in composition, dry and free flowing, delivered to the site in original unopened bags, each bearing the manufacturer's statement of analysis and shall meet the following requirements: (17) percent nitrogen, (5) perdent phosphorous, (11) percent potassium, plus micro-nutrients. Tablet fertilizer shall be Agriform, or equal, in 21 gram size with the following anaylsis: (20) percent nitrogen, (10) percent phosphorous, (5) percent potassium.

FERTILIZER SCHEDULES:

Agriform, 21 gram tablets

Trees and Palms	2 per 1" caliper
B & B Shrubs	6 per plant
#7 or #10 container	4 per plant
#3 or #5 container	2 per plant
#1 shrub or ground cover	1 per plant

Annuals shall be fertilized with 4 to 6 months Osmocote ay (1) tablespoon per plant.

Granular 17-5-11 fertilizer shall be applied at the following rates:

Trees and Palms:	1 lb. (16oz) per 1" caliper
#7 to #10 container shrub	1 lb. (16oz) per 3 ft. ht./spr. of plant
#3 to #5 container shrub	½ lb.(8oz) per plant
#1 cont. shrub or ground cover	¼ lb. (4oz) per plant

PLANTING MIX, TOP SOIL & ANNUAL MIXTURES:

Planting mix shall be used with all trees, shrubs and ground covers. Planting soil shall be 80 percent #1 ground screened peat, 20 percent wood product, (50 percent wood chips- 50 percent wood sawdust), 10 percent sharp builder's sand, Compost material: (10 lbs. of 6-6-6 fertilizer, 100 percent organic; calcium level elevated to a minimum 120 700 parts per million; Magnesium level elevated to a minimum 120 parts per million. Soil shall be delivered in a loose, friable condition and applied in accordance with the planting specifications. PH range to be 5.5 to 6.5.
Palm trees shall be planted in existing site soils with a PH range of 5.5 to 7.0, unless specified otherwise in the plan specifications or notes.

The finish grade or sub-grade of planting areas shall be established to within one (1) inch prior to beginning any planting operations. Should any objectional materials such as stones, roots, limestone or construction debris be encounter during the planting operation they will be remove from the site by the landscape contractor. Base material shall be removed from sod and planting areas.

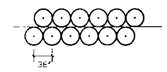
Trees, palms and major shrubs shall be located by flagging prior to planting and subject to approval by the landscape architect or the owner's representative if requested. Planting bed lines shall be sprayed out on the ground with industry approved spray paint prior to final layout and m ulching.

Plants shall be thououghly watered in at time of planting to remove any air pockets that may occur during the planting operation. Staking and guying shall be done according to the details shown on the plans.

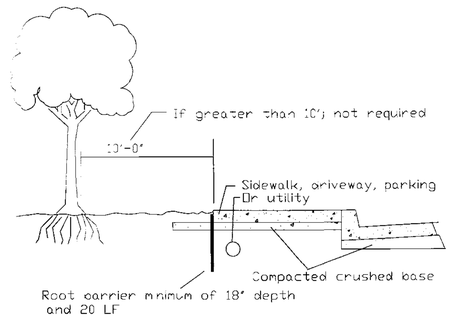
All areas shown on the plans within the limits of the work that are not to be planted with plant materials and/or mulched shall be sodded in accordance with the owner's instructions or as indicated on the plans. Quantities shall be verified by field measurement prioe to ordering and installation

Any excess soil or debris resulting from landscape operations onto any paved areas shall be removed promptly, keeping these areas clean as the work progresses. Upon completion of the planting, all excess soil, stones and other debris which has not been previously cleaned up, shall be removed from the site, or disposed of as directed by LA or owner's rep.

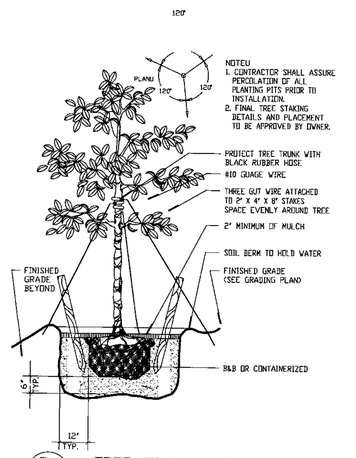
Final inspection, acceptance and turn over shall be scheduled by the LA and/or the owner's representative as work is completed. Landscape contractor is responsible for the naintenance of all planted and sodded areas until such time as the project is accepted by the owner.



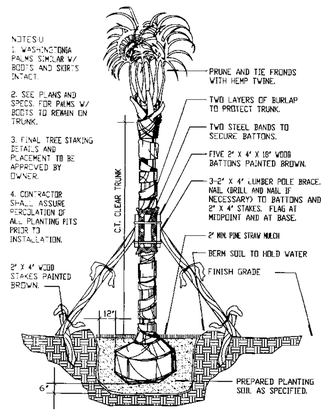
TYPICAL DOUBLE HEDGE PLANTING LAYOUT
FOR TYPICAL "B" TYPE BUFFER



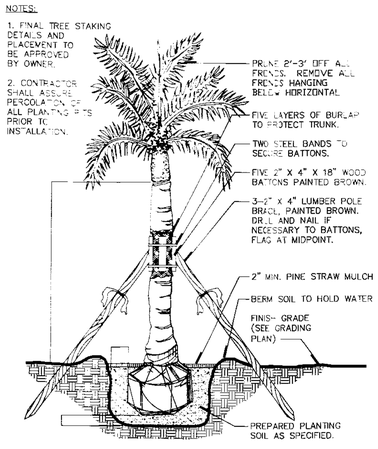
D/6 ROOT BARRIER DETAIL
SECTION NOT TO SCALE



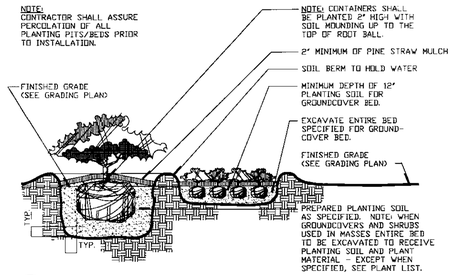
D/1 TREE STAKING DETAIL
SECTION NOT TO SCALE



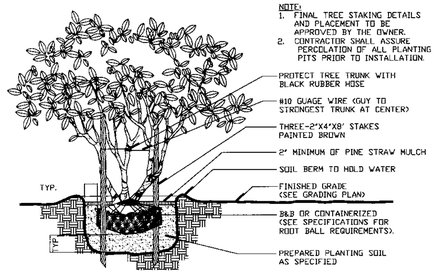
D/2 PALM STAKING DETAIL
NOT TO SCALE



D/3 ROYAL PALM TREE DETAIL
SECTION NOT TO SCALE



D/5 CONTAINER AND GROUNDCOVER DETAIL
SECTION NOT TO SCALE



D/4 MULTI-TRUNK TREE DETAIL
SECTION NOT TO SCALE

DEPARTMENT OF ZONING AND LAND DEVELOPMENT REVIEW
LANDSCAPE REVIEW APPROVAL
DATE 2.26.14
LANDSCAPE PLANNER

This DRI Landscape Review approval is limited to improvements on private property only. No improvements on or over public property are approved.

General Notes

DALE A. SLABAUGH, ASLA
Landscape Architect
Land Planning Planting & Irrigation Design Consulting
5070 Tamarind Ridge Dr. Naples, FL 34119
Phone (239) 353-8187
Facim. (239) 353-0814

HACIENDA LAKES OF NAPLES,
NAPLES, FLORIDA

PREPARED FOR:
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA

NOTES & DETAILS

No.	Revision/Issue	Date

Firm Name and Address
DALE A. SLABAUGH & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
5070 TAMARIND RIDGE DRIVE
NAPLES, FLORIDA 34119
PH.239.353.8187 FX.239.353.0814

Project Name and Address
HACIENDA LAKES OF NAPLES,
3921 PROSPECT AVENUE
NAPLES, FL 34104

Project HACIENDALK.	Sheet L-4
Date 8.14.13	
Scale GIVEN ABOVE	

NOTE: RAIN BIRD ESP-LXD CONTROLLER WITH (1) ESPLXD-SM75 MODULE INSTALLED DURING PHASE 1 CONSTRUCTION.

TERMINATION POINT OF 3" IRRIGATION MAINLINE AND COMMUNICATION CABLE INSTALLED DURING PHASE 1 CONSTRUCTION. CONTRACTOR TO VERIFY PER AS-BUILT PLANS AND IN THE FIELD

3" MAINLINE (EXISTING)

3" MAINLINE

DRIPLINE 448 LF., TYPICAL 8 PLACES

1 | 1 | 15.3
2 | 2 | 53.8
3 | 2 | 68.2
4 | 2 | 69.5
5 | 1 1/2 | 28.8
6 | 2 | 69.9
7 | 2 | 67.6
8 | 2 | 67.6
17 | 2 | 68.4
18 | 2 | 76.8
19 | 2 | 65.0
20 | 2 | 73.4
21 | 1 1/2 | 43.0
22 | 1 1/2 | 42.6

2 1/2" MAINLINE

6" & 2" SLEEVES

DRIPLINE 471 LF., TYPICAL 2 PLACES

DRIPLINE 491 LF., TYPICAL 2 PLACES

4" MAINLINE

DRIPLINE 404 LF., TYPICAL 4 PLACES

DRIPLINE 337 LF., TYPICAL 3 PLACES

4" MAINLINE (EXISTING)

4" MAINLINE

TERMINATION POINT OF 4" IRRIGATION MAINLINE AND COMMUNICATION CABLE INSTALLED DURING PHASE 1 CONSTRUCTION. CONTRACTOR TO VERIFY PER AS-BUILT PLANS AND IN THE FIELD.

MATCH LINE 13-2

0 30 60 90

SCALE IN FEET

SCALE : 1" = 30'

This CDES Landscape Review approval is limited to improvements within the Right-of-Way. Proposed improvements within the Right-of-Way require a separate Transportation Right-of-Way Landscape Review and a Florida Department of Transportation Review and Right-of-Way Permit from the Collier County Transportation Department

Converted to Electronic Record

PPL-PL20130000589 REV: 1
HACIENDA LAKES PHASE 2
DATE: 9/4/13
DUE: 10/2/13

REVISIONS:

DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# ---
SCALE 1" = 30'

HACIENDA LAKES OF NAPLES
RATTLESNAKE HAMMOCK EXT.
IRRIGATION PLAN

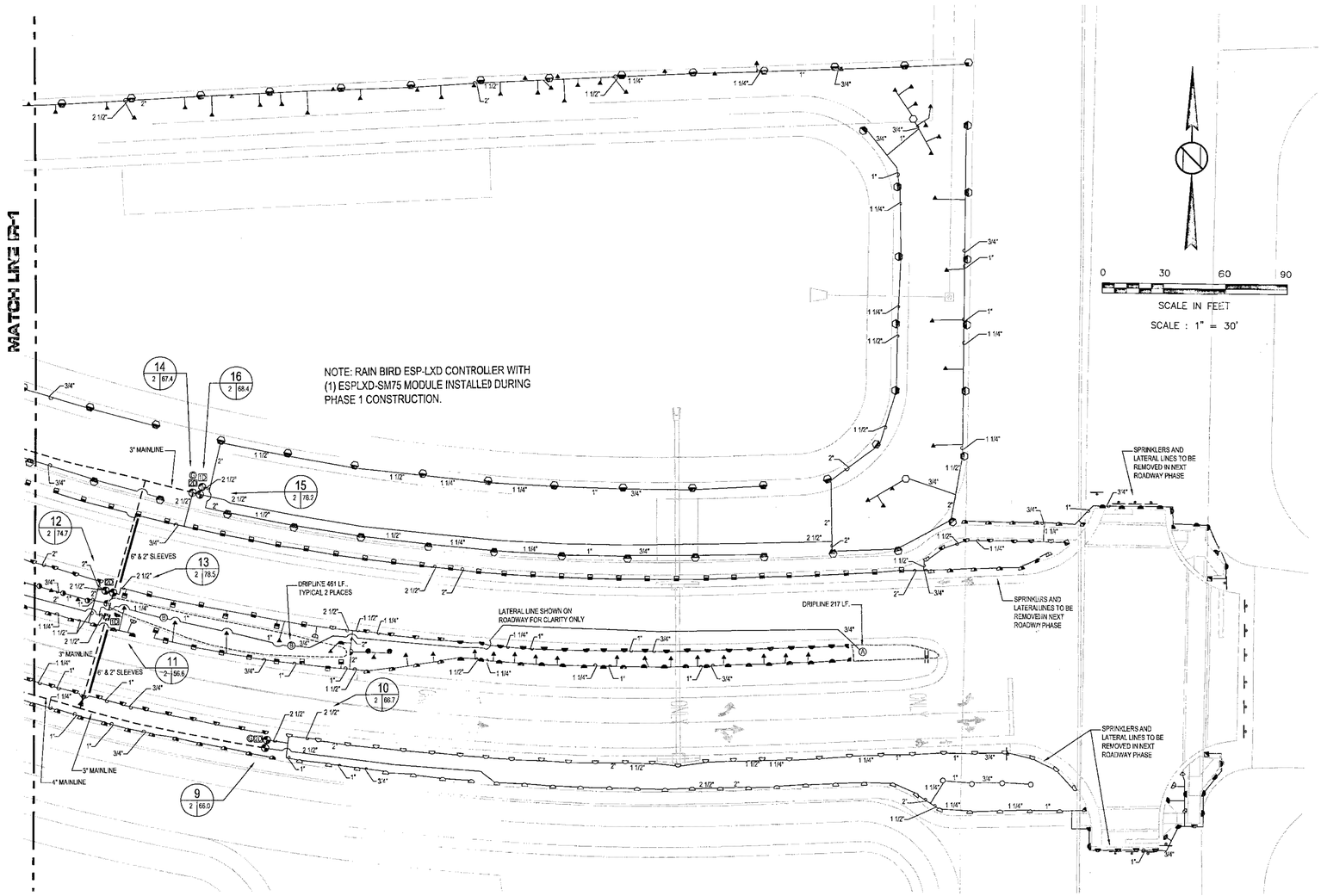
NAPLES, FLORIDA

EUGENE W. COLBORN, JR.
FLA. LIC. # LA0001494

COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT

P.O. Box 147283
Bradenton, Florida 34280
Phone (941) 795-7468

IR-1



IRRIGATION LEGEND

RAIN BIRD MPR SPRAY NOZZLES UNLESS NOTED OTHERWISE

	15-Q	30° TRAJECTORY
	15-T	30° TRAJECTORY
	15-H	30° TRAJECTORY
	15-TQ	30° TRAJECTORY
	15-F	30° TRAJECTORY
	12-Q	30° TRAJECTORY
	12-T	30° TRAJECTORY
	12-H	30° TRAJECTORY
	12-TQ	30° TRAJECTORY
	12-F	30° TRAJECTORY
	10-Q	15° TRAJECTORY
	10-T	15° TRAJECTORY
	10-H	15° TRAJECTORY
	10-F	15° TRAJECTORY
	8-Q	10° TRAJECTORY
	8-H	10° TRAJECTORY
	15EST	
	15SST	
	15CST	
	RAINBIRD 1401 PC BUBBLER, (ROTOR ZONES)	
	RAINBIRD 1402 PC BUBBLER, (SPRAY ZONES)	
	RAIN BIRD 5006-PC-PL-MPR 25/30 NOZZLE, 90° ADJUSTABLE	
	RAIN BIRD 5006-PC-PL-MPR 25/30 NOZZLE, 180° ADJUSTABLE	
	RAIN BIRD 5006-PC-FC-MPR 25/30 NOZZLE, 360° FULL CIRCLE	
	RAIN BIRD 5006-PC-PL-MPR 35 NOZZLE, 90° ADJUSTABLE	
	RAIN BIRD 5006-PC-PL-MPR 35 NOZZLE, 180° ADJUSTABLE	
	RAIN BIRD 5006-PC-FC-MPR 35 NOZZLE, 360° FULL CIRCLE	
1D	RAIN BIRD FD-101TURF ONE STATION DECODER	
2D	RAIN BIRD FD-202TURF TWO STATION DECODER	
G	GROUND ROD AT DECODER LOCATIONS WHERE SHOWN	
GP	COPPER GROUNDING PLATE AT CONTROLLER AND COMMUNICATION WIRE TERMINATION POINTS.	
	RAIN BIRD PESB SERIES ELECTRIC CONTROL VALVE,	
	HUNTER ICZ-150 DRIP ZONE CONTROL VALVE KIT	
A	RAIN BIRD XFD DRIPLINE SUPPLY POINT OF CONNECTION 'A'	
B	RAIN BIRD XFD DRIPLINE SUPPLY POINT OF CONNECTION 'B'	
	RAIN BIRD XFD DRIPLINE, MODEL XFD-09-12	
	RED AND WHITE SERIES #206 GATE VALVE, INSTALLED PER LINE SIZE AND IN 12" VALVE BOX	
	CLASS 200 PVC GASKETTED MAINLINE WITH DUCTILE IRON FITTINGS	
	CLASS 200 PVC LATERAL LINE SOLVENT WELD	
	SCHEDULE 40 PVC SLEEVE (SEE PLAN FOR SLEEVE SIZE)	
NOT SHOWN	RAIN BIRD MAXI-CABLE 14-2UF COMMUNICATION CABLE	

Converted to Electronic Record

REVISIONS:

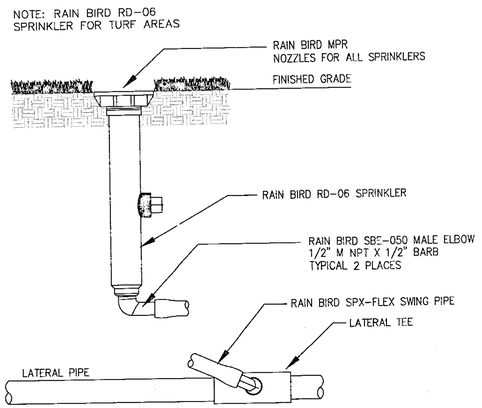
DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# ____
SCALE 1" = 30'

HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA
RATTLESNAKE HAMMOCK EXT.
IRRIGATION PLAN

EUGENE W. COLBORN, JR.
FLA. LIC.# LA0001484

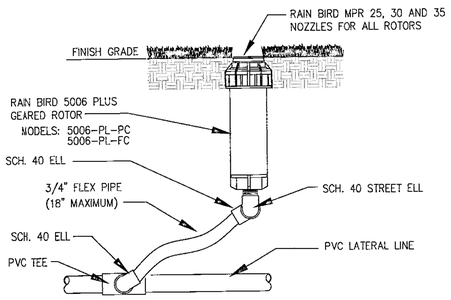
COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT
P.O. Box 14783
Bradenton, Florida 34280
Phone (941) 795-7458

R-2



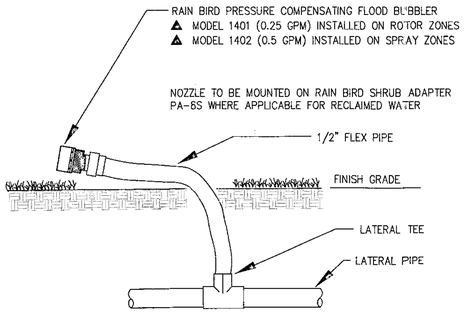
RAIN BIRD RD-06 SPRINKLER

NTS



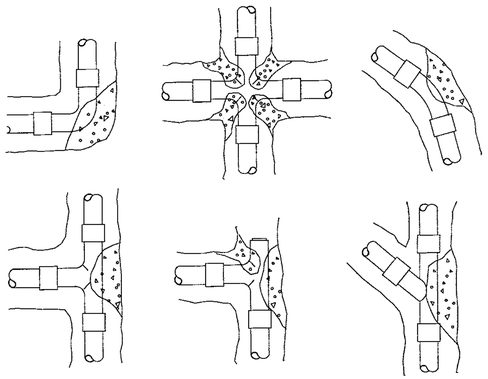
RAIN BIRD 5000 PLUS SERIES ROTOR

NTS



RAIN BIRD 1400 SERIES BUBBLER

NTS



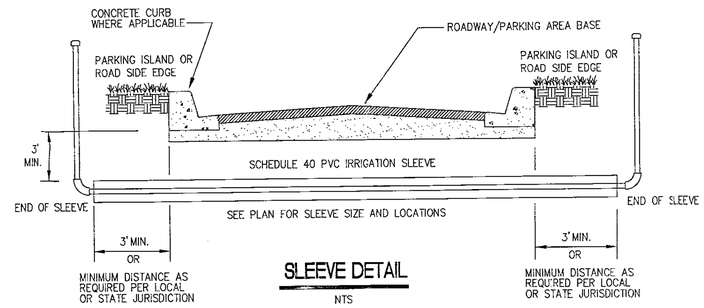
INSTALLATION NOTES

1. 3000 PSI CONCRETE OR BETTER IS TO BE USED FOR THRUST BLOCKS.
2. FOR 45°/90° FITTINGS, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.
3. FOR 22 1/2° FITTINGS, MINIMUM OF 0.5 CUBIC FEET OF CONCRETE TO BE USED.
4. FOR TEES, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.

THRUST BLOCKS REQUIRED FOR IRRIGATION MAINLINE 2 1/2" AND LARGER.

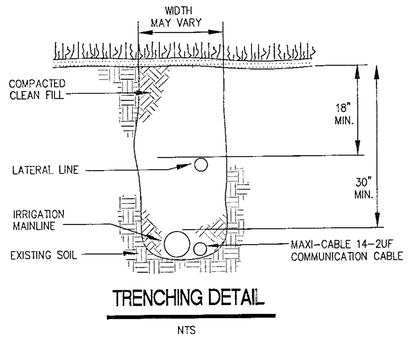
THRUST BLOCK REINFORCEMENT

NTS



SLEEVE DETAIL

NTS

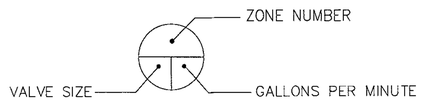


TRENCHING DETAIL

NTS

CONTROLLER SCHEDULE

ZONE	GPM	VALVE SIZE	TYPE
1	15.3	1"	ROTOR
2	53.8	2"	DRIP
3	68.2	2"	SPRAY
4	69.5	2"	SPRAY
5	28.8	1 1/2"	DRIP
6	69.9	2"	SPRAY
7	67.6	2"	SPRAY
8	67.6	2"	SPRAY
9	66.0	2"	SPRAY
10	66.7	2"	SPRAY
11	56.6	2"	DRIP
12	74.7	2"	SPRAY
13	78.5	2"	SPRAY
14	67.4	2"	SPRAY
15	76.2	2"	ROTOR
16	68.4	2"	ROTOR
17	68.4	2"	ROTOR
18	76.8	2"	ROTOR
19	65.0	2"	ROTOR
20	73.4	2"	ROTOR
21	43.0	1 1/2"	SPRAY
22	42.6	1 1/2"	SPRAY



IRRIGATION NOTES

1) THE HEAD LAYOUT HAS BEEN DESIGNED TO PROVIDE 100% COVERAGE. ANY CHANGES MADE IN THE HEAD LAYOUT DUE TO FIELD CONDITIONS SHALL BE IN ACCORDANCE WITH THESE STANDARDS.

2) SET SPRAY HEADS 3" AND ROTORS 6" IN FROM BACK OF CURB OR 12" IF PAVEMENT HAS NO CURB.

3) WHERE SHRUB HEADS ARE UTILIZED WITHIN PLANT ARES RISERS SHALL BE SET 4" ABOVE HEIGHT OF PLANT MATERIAL AND PAINTED FOREST GREEN WITH A PAINT WHICH ADHERES WELL TO PVC.

4) VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE PROJECT MANAGER AND THE LANDSCAPE ARCHITECT. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL VERIFY.

5) ALL PRESSURE MAINLINES UNDER ASPHALT PAVEMENT SHALL BE WITHIN SLEEVES AS NOTED. IRRIGATION COMMUNICATION CABLE SHALL HAVE ITS OWN SEPARATE SLEEVE. LATERAL LINES SHALL BE CONTAINED WITHIN THEIR OWN SLEEVE WHERE SHOWN ON THE PLAN.

6) ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR, WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF EACH SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS.

7) MAINLINE AND VALVES ARE SHOWN IN SCHEMATIC FORM. LOCATE AS NOTED ON PLANS.

8) LOCATE ALL VALVES A MINIMUM OF 24" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS NOTED OTHERWISE.

9) ALL UNSIZED PIPE SHALL BE 3/4" UNLESS OTHERWISE NOTED.

10) ALL VALVES SHALL BE INSTALLED IN A CARSON PLASTIC VALVE BOX WITH LOCKING LID.

11) IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE HIGHWAY JURISDICTION.

12) VERIFY MAINLINE POINT OF CONNECTIONS AND IRRIGATION CONTROLLER LOCATION AT PROJECT SITE WITH OWNER.

13) RAIN BIRD MAXI-CABLE 14-2UF COMMUNICATION CABLE TO BE LAID ALONG SIDE MAINLINE.

14) ALL CONNECTIONS TO THE FIELD DECODERS ALONG THE 2-WIRE PATH SHALL BE ACCOMPLISHED VIA THE USE OF THE 3M DBR/DBY WIRE CONNECTORS. THIS ALSO INCLUDES ALL GROUND RODS AND THE CONNECTION TO THE CONTROLLER. CONTRACTOR SHALL FOLLOW MANUFACTURE'S INSTALLATION SPECIFICATIONS.

15) DURING INSTALLATION AND UPON COMPLETION OF THE IRRIGATION SYSTEM, VALVES SHALL BE WIRED TO THE CONTROLLER STATION AS PER THE IRRIGATION ZONE NUMBERS.

16) WHERE ADDITIONAL WIRING IS REQUIRED FROM THE DECODER TO THE CONTROL VALVE SOLENOID THE WIRE SHALL BE DIRECT BURIAL STANDARD PAIR 14 AWG.

17) INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON THE SITE.

18) PRODUCTS SHALL BE AS SPECIFIED OR APPROVED EQUAL.

Converted to
Electronic Record

REVISIONS:

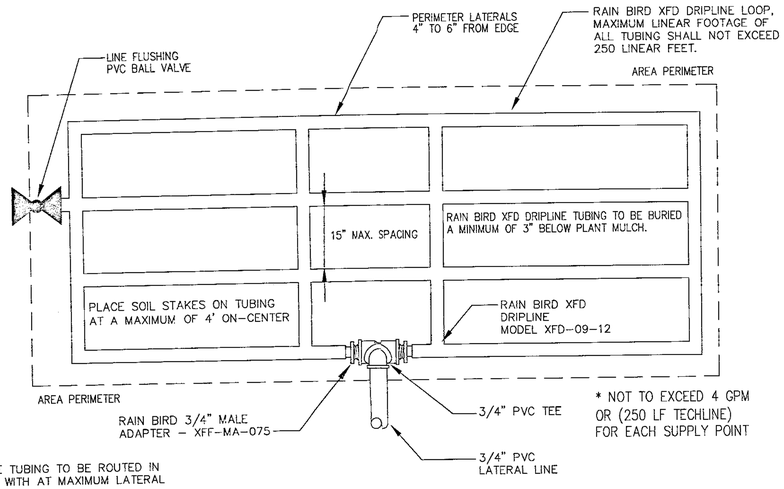
DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# ---
SCALE NONE

HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA
RATTLESNAKE HAMMOCK EXT.
IRRIGATION DETAILS

EUGENE W. COLBORN, JR.
FLA. LIC.# LA0001484

COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT
P.O. Box 14783
Bradenton, Florida 34280
Phone (941) 795-7456

IR-3



NOTE:

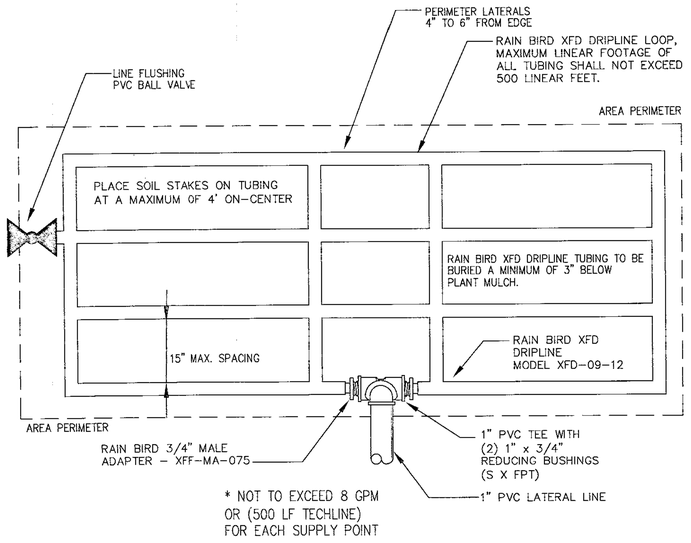
1. RAIN BIRD XFD DRIPLINE TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 15 INCHES.

2. RAIN BIRD XFD DRIPLINE TUBING TO BE INSTALLED IN A GRID PATTERN. RAIN BIRD XFD DRIPLINE TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.

3. ALL RAIN BIRD XFD DRIPLINE TUBING AND FITTING CONNECTIONS SHALL BE CLAMPLED WITH A CRIMP STEEL BAND OR HOSE CLAMP

RAIN BIRD XFD DRIPLINE CONNECTION POINT "A"

NTS



NOTE:

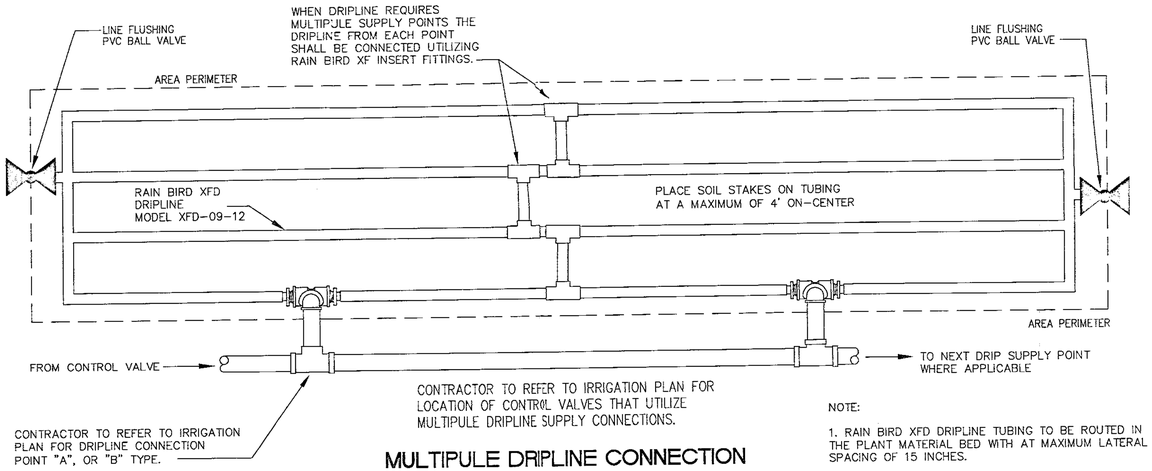
1. RAIN BIRD XFD DRIPLINE TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 15 INCHES.

2. RAIN BIRD XFD DRIPLINE TUBING TO BE INSTALLED IN A GRID PATTERN. RAIN BIRD XFD DRIPLINE TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.

3. ALL RAIN BIRD XFD DRIPLINE TUBING AND FITTING CONNECTIONS SHALL BE CLAMPLED WITH A CRIMP STEEL BAND OR HOSE CLAMP

RAIN BIRD XFD DRIPLINE CONNECTION POINT "B"

NTS



MULTIPULE DRIPLINE CONNECTION SUPPLIES FROM SINGLE CONTROL VALVE

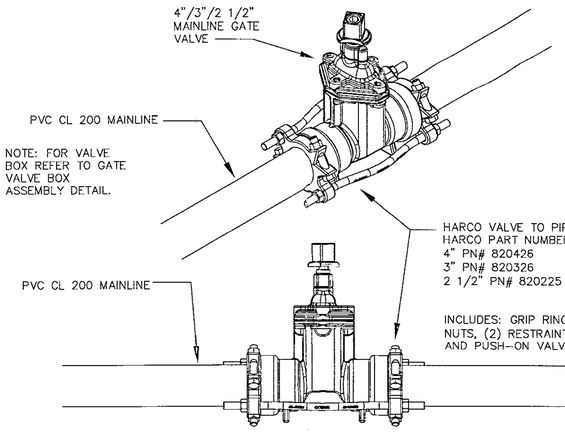
N'S

NOTE:

1. RAIN BIRD XFD DRIPLINE TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 15 INCHES.

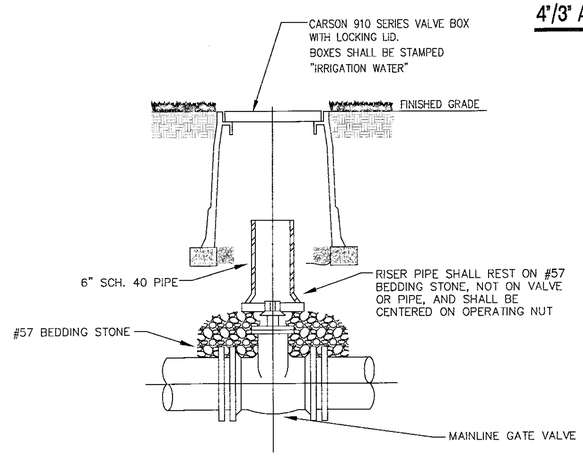
2. RAIN BIRD XFD DRIPLINE TUBING TO BE INSTALLED IN A GRID PATTERN. RAIN BIRD XFD DRIPLINE TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.

3. ALL RAIN BIRD XFD DRIPLINE TUBING AND FITTING CONNECTIONS SHALL BE CLAMPLED WITH A CRIMP STEEL BAND OR HOSE CLAMP



4"/3" AND 2 1/2" MAINLINE GATE ASSEMBLY

NTS



GATE VALVE BOX ASSEMBLY

NTS

Converted to Electronic Record

REVISIONS:

DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# NONE
SCALE NONE

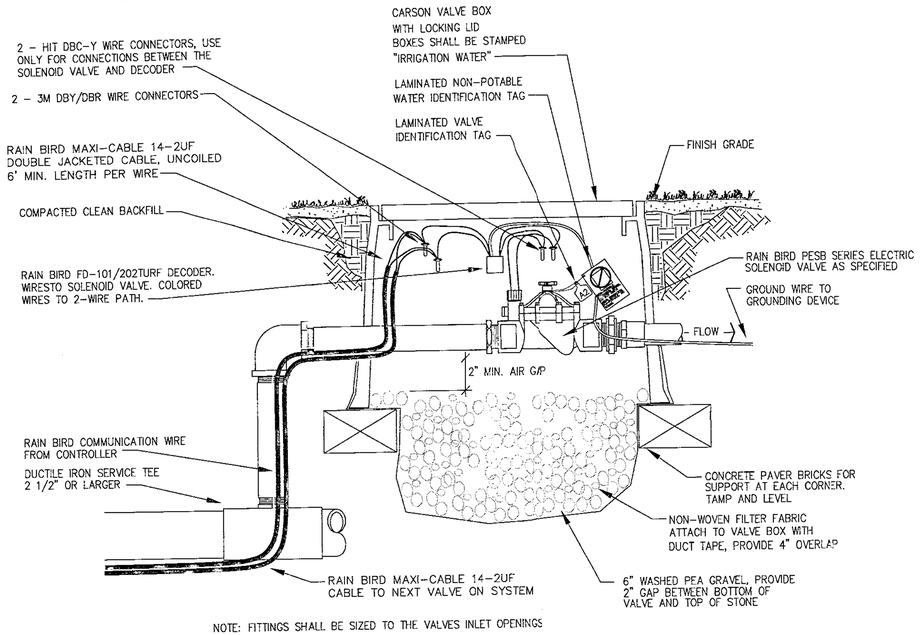
HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA
RATTLESNAKE HAMMOCK EXT.
IRRIGATION DETAILS

EUGENE W. COLBORN JR.
RLA, LIC # LA0001484

COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT
P.O. Box 14760
Bradenton, Florida 34280
Phone (941) 795-7458

R-4

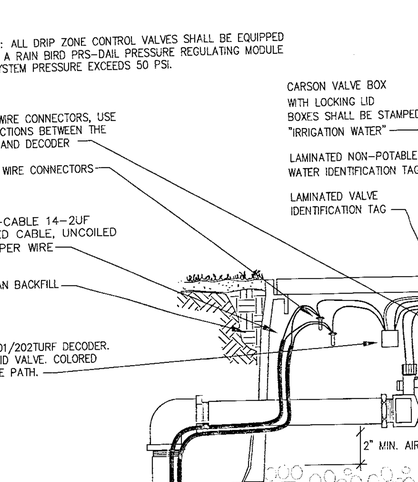
NOTE: ALL DRIP ZONE CONTROL VALVES SHALL BE EQUIPPED WITH A RAIN BIRD PRS-DAIL PRESSURE REGULATING MODULE IF SYSTEM PRESSURE EXCEEDS 50 PSI.



NOTE: FITTINGS SHALL BE SIZED TO THE VALVES INLET OPENINGS

RAIN BIRD PESB SERIES CONTROL VALVE ASSEMBLY

NTS

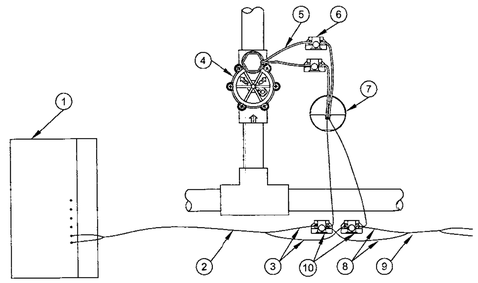


1. FINISH GRADE OR TOP OF MULCH
2. 10–INCH VALVE BOX WITH LOCKING COVER
3. GROUNDING ROD: 10 OHMS OR LESS
4. GREEN/YELLOW WIRE FROM LSP–1 TO GROUNDING ROD BRASS CLAMPS (1 OF 2)
5. DB SERIES WIRE CONNECTOR:
6. LINE SURGE PROTECTOR: RAIN BIRD LSP–1
7. TWO–WIRE CABLE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, LINE SURGE PROTECTOR OR ESP–LXD CONTROLLER)
8. COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, LINE SURGE PROTECTOR OR ESP–LXD CONTROLLER)
9. 3–INCH MINIMUM DEPTH OF 3/4–INCH WASHED GRAVEL
10. BRICK (1 OF 2)
11. BLUE WIRE FROM LSP–1 TO DB SERIES WIRE CONNECTOR

NOTES:
1. LSP–1 SHOULD BE INSTALLED EVERY 500–FEET OR FOR EVERY EIGHT DECODERS ON TWO–WIRE PATH.
2. LSP–1 TO BE INSTALLED AT END OF WIRE RUN THAT TERMINATES IN THE FIELD (STAR CONFIGURATION).

RAIN BIRD LSP-1 LINE SURGE PROTECTOR

NTS

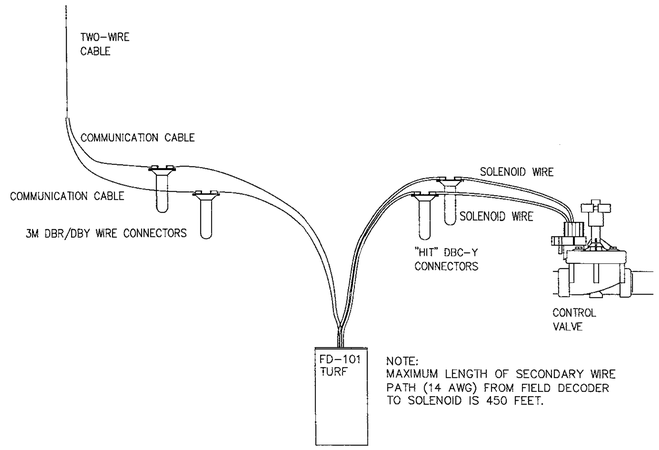


1. RAIN BIRD ESP–LXD CONTROLLER
2. TWO–WIRE TO CONTROLLER
3. COMMUNICATION WIRE TO CONTROLLER
4. REMOTE CONTROL VALVE
5. 5' MIN. LENGTH OF 14–2 GAUGE SOLENOID WIRE
6. "HIT" DBC–Y CONNECTORS (1 OF 2)
7. RAIN BIRD FD–101TURF SINGLE DECODER
8. COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, CONTROLLER)
9. TWO WIRE CABLE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, OR CONTROLLER)
10. 3M DBR/DBY WIRE CONNECTORS

NOTE:
MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM FIELD DECODER TO SOLENOID IS 450 FEET.

RAIN BIRD FD-101TURF DECODER WIRING TO VALVE AND CONTROLLER

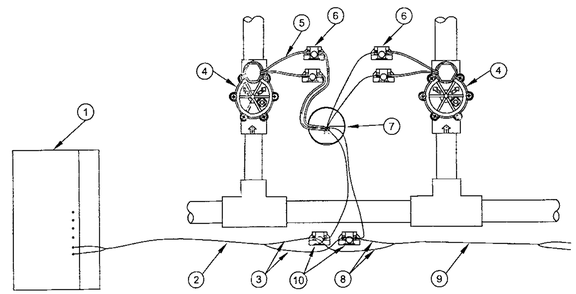
NTS



NOTE:
MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM FIELD DECODER TO SOLENOID IS 450 FEET.

RAIN BIRD FD-101TURF DECODER WIRING DIAGRAM

NTS

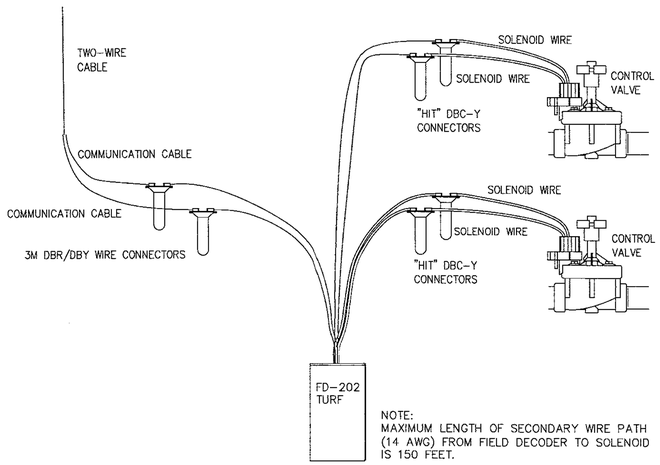


1. RAIN BIRD ESP–LXD CONTROLLER
2. TWO–WIRE CABLE TO CONTROLLER
3. COMMUNICATION WIRE TO CONTROLLER
4. REMOTE CONTROL VALVE
5. 5' MIN. LENGTH OF 14–2 GAUGE SOLENOID WIRE
6. "HIT" DBC–Y CONNECTORS (1 OF 4)
7. RAIN BIRD FD–202TURF DECODER
8. COMMUNICATION WIRE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, ACC CONTROLLER)
9. TWO WIRE CABLE TO NEXT DEVICE (FIELD DECODER, SENSOR DECODER, OR ACC CONTROLLER)
10. 3M DBR/DBY WIRE CONNECTORS

NOTE:
MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM DECODER TO SOLENOID IS 450 FEET.

RAIN BIRD FD-202TURF DECODER WIRING TO VALVES AND CONTROLLER

NTS



NOTE:
MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM FIELD DECODER TO SOLENOID IS 150 FEET.

RAIN BIRD FD-202TURF DECODER WIRING DIAGRAM

NTS

Converted to Electronic Record

REVISIONS:

DESG SC
DRWN SC
CHKD SC
DATE 08/28/13
CAD# —
SCALE NONE

HACIENDA LAKES OF NAPLES
NAPLES, FLORIDA
RATTLESNAKE HAMMOCK EXT.
IRRIGATION DETAILS

EUGENE W. COLBORN, JR.
FLA. LIC.# LA0001494

COLBORN DESIGN GROUP, INC
IRRIGATION DESIGN & WATER MANAGEMENT
P.O. Box 14753
Bradenton, Florida 34280
Phone (941) 795-7458

R-5

SCHEDULE "B"

RIGHT OF WAY LANDSCAPE MAINTENANCE SPECIFICATIONS

These specifications are intended to provide the information by which private entities may understand the minimum requirements of Collier County relative to maintaining County rights of ways. Records of all specification requirements shall be kept and made available to the County's representative upon request.

A. **MOWING AND EDGING:** Mowing and edging shall include medians as well as those areas, if existing, along the outside edge of the sidewalks of adjacent properties. All turf shall be mowed with mulching type mower equipment to eliminate the need to bag and transport grass clippings. Should bagging be necessary, the bagged clippings shall be collected and removed at no additional cost. Grass shall be cut at a height of three and one half inches (3 ½"). The frequency of cutting will be weekly or fifty-two (52) times.

Mechanical edging of the turf shall be done with each mowing along all sidewalk edges, back of concrete curbs, around all planting beds, utility service boxes, street light bases, sign posts, headwalls, guardrails, timer pedestals, posts, and trees. Metal blade edging is not permitted along back of curbing. Grass root runners extending into the mulched areas shall be cut and removed when the edging is performed. Edging will also be required in all turf areas around isolated trees, sprinkler heads, valve boxes, shrubs, sign posts, manholes, etc. where they exist. All debris on streets, sidewalks or other areas resulting from edging shall be removed. No herbicide shall be used for edging.

All sidewalks, curbing and/or gutters shall be cleaned after each service. All sidewalks shall be blown clean, but no clippings or other debris shall be blown or allowed to be deposited on other adjacent property or accumulate on right-of-way areas.

B. **WEEDING:** Weeding of plant beds, sidewalks (asphalt, concrete or pavers), guardrail bases, and curb joints as well as other mulched areas by chemical and/or hand removal will be performed weekly or as necessary to provide a weed free and well maintained area.

C. **GENERAL SITE PRUNING:** General site pruning shall be defined as the pruning of any plant's foliage below ten-foot (10') foot.

All groundcovers, shrubs, canopy trees and palms up to ten foot (10') level, shall be inspected and pruned on a weekly or an as needed basis, so to maintain the proper or required heights for visibility, vehicular movement purposes and desired shape or form as determined by County's representative. Pruning shall also include removal of water sprouts, suckers and any dead or diseased foliage or branches.

During the first week of October and April, ornamental grasses, such as Fountain grass, Florida Gamma or Fakahatchee grass shall be pruned in a pyramid shape to a twelve inch (12") or twenty-four (24") height based upon the type of plant. Ornamental type grasses such as Liriope muscari 'Evergreen Giant', shall only be pruned at the direction and approval of the County's representative.

Plant material with a canopy over pedestrian sidewalks shall be maintained at a minimum height of one hundred twenty inches (120"). Shrubs and groundcovers adjacent to pathways or sidewalks shall be pruned to maintain one foot (1') of clearance from the edge of the pathway. IT is recommended that adjacent shrubs and groundcovers be maintained so that they angle or are rounded away from the pathway.

D. **TRASH REMOVAL:** With each service, all sites shall be cleaned by removing all trash or debris to include, but not limited to; paper, bottles, cans, other trash, and horticultural debris. All debris or trash pick-ups shall be performed "prior" to mowing in all turf areas. The disposal of all trash and debris must be at a proper landfill or disposal site.

E. **STREET CLEANING/SWEEPING:** Street Cleaning: A four foot (4') wide area measured from the face of the curb and gutters including turn lanes shall be cleaned with each site service to remove any accumulation of debris or objectionable growth so to maintain a neat and safe condition.

F. **TRAFFIC CONTROL:** The Association shall comply with the requirements of Collier County Maintenance of Traffic (MOT) Policy, copies of which are available through Risk Management or the Purchasing Department. The Association shall obtain and review the County MOT policy requirements prior to submitting a bid.

The Association will be responsible for obtaining copies of all required manuals, MUTCD, FDOT Roadway & Traffic Design Standard Indexes, or other related documents, so to become familiar with the requirements. Strict adherence to the requirements of the MOT policy will be enforced under this Contract.

To assist in employee visibility, employees servicing the area shall wear high visibility safety apparel in compliance with the most current editions of the FDOT Design Standards and the Collier County Maintenance of Traffic (MOT) policy.

G. **CANOPY TREE AND PALM PRUNING:** For this site, canopy trees shall be defined as any large shrub, tree, or palm with foliage above a ten-foot (10') level.

All canopy trees and palms shall be pruned on a continuous basis to create and maintain a seventeen-foot (17') canopy clearance over the roadways and a ten-foot (10') canopy clearance over all pathways. Canopy trees shall be selectively pruned twice per year in April and September so to thin the interior canopy of cross branching and to shape the canopy of the trees. The County's representative shall approve a professional licensed to prune tress under the direction of a Licensed Landscape Architect, Arborist, Tree Surgeon, or other approved professional shall do the pruning and sharpening. The work shall be performed per ANSI AS300 "Standard Practices for Trees, Shrubs, and other Woody Plant Maintenance" and done in a professional manner in accordance with "Pruning Standards" of the national Arborist Association or accepted local trade standards and practices.

Palms shall be pruned annually during June of each year. The palms shall be pruned to a "Tropical Cut" or to a nine (9) o'clock- three (3) o'clock angle from the horizontal at the base of the palm's bud or lowest fronds. Approximately seven (7) to (10) ten green fronds shall be left at the head after pruning. The pruning shall include removal of all nuts, seed stalks, brown or dead and lower fronds.

The work shall be done in a professional manner in accordance with acceptable trade standards and practices. The palms shall not be climbed with tree spikes to remove the fronds. The pruning shall be accomplished by the use of a ladder, boom truck or lift. All debris from the pruning shall be removed and the site shall be left on a clean and neat manner.

When the annual or bi-annual heavy pruning work is being performed with the use of a lift or boom truck, it is required that the adjacent traffic or turn lane to the work area, be closed using traffic control devices and signage per the current FDOT traffic control standards and indexes.

H. **FERTILIZATION:** Granular fertilization of shrubs and groundcovers shall be applied by hand in a twelve-inch (12") wide radius ring around the base of the plants. Granular fertilization of the trees and palms shall be determined by the caliper (diameter) of the trunk and broadcast by hand in a band around the plant's base from a distance of 12" to the drip line of the palm, whenever possible.

An 8 oz. cup equals one (1) pound. Trees and palms shall receive one (1) cup per one-inch (1") caliper. Shrubs and groundcovers shall receive one (1) cup per three foot (3') of height or spread. Shrubs and groundcovers shall receive one-half (1/2) cup per eighteen inches (18") of height or spread. All fertilizer shall be swept off all sidewalks, concrete curbing and paving.

The fertilizer shall be applied as set forth in the following schedule.

Turf Areas and Plant beds containing Shrubs, Groundcovers, and Trees.

The (13-3-13) fertilizer shall be applied at a rate of ten (10) pounds per one thousand (1000) sq ft. for all areas. Four applications of (13-3-13) fertilizer will be applied yearly during the months of February, May, July, and October.
Palms: Association shall apply approved by County's representative palm fertilizer during February, May, July, and October as specified below.
Should yellowing occur on the top of the fronds, manganese sulfate will be required and if on the lower fronds, Sul-Po-Mag or equivalent will be required to be applied with the palm fertilizer at the rates specified.

I. **MULCHING:** Organic Mulch Areas with no mulch or new planting areas shall have mulch placed to provide for a four inch (4") non-compacted or unsettled depth measured from the existing soil grade. The area to receive the mulch shall be raked level to establish the proper finished grade and have all weeds removed prior to the placement of the mulch. Two inches must be applied to replenish this mulch twice a year, November and during May.

J. **LANE CLOSURE:** Lane closure for median maintenance shall comply with the most current editions of the FDOT Design Standards and the Collier County Maintenance of Traffic (MOT) policy.

K. **IRRIGATION SYSTEMS:** The irrigation systems shall be checked and repaired as necessary. Each zone shall be manually turned on at the valve once a week and a thorough inspection conducted to ascertain proper operations of the system. Quick coupling valves, if existing shall be reviewed weekly and operated quarterly to insure proper operation. Maintenance responsibilities will include cleaning and adjustment of heads, nozzles, installation or replacement of risers, repair of minor PVC piping breaks or subsurface piping or restricted sprinkler lines, replacement of damaged valve boxes/lids and adjustment of controller and rain shut off switches for settings and operations. Where required, the Association shall maintain on site reclaimed water irrigation signage.

SUBSURFACE IRRIGATION SYSTEMS:
No excavation or mechanical metal edging around plant beds shall be done within the Right-of-way. Mechanical metal blade edging is permitted along the back of curbing.

Weekly Service Requirements:

1. A visual inspection of the subsurface irrigation systems shall be performed weekly to determine if the systems are functioning normally and if cuts, leaks, piping damage, flooded areas exist, and repair as necessary. This shall also include review and re-setting of the controller and in-ground moisture sensor adjustments or other rain sensing devices as needed.

2. System Computer/Controller
   a. Operate, adjust, and set controller to provide proper operation of the systems.
   b. Diagnose and repair electrical and mechanical malfunctions.
   c. Monitor and adjust the system zones moisture levels based upon moisture sensor readings.
   d. Operate controller on automatic, manual and single trip operation.
   e. Monitor controller standby battery backup and replace as required.

3. Automatic Control Assemblies and Quick Coupling Valves
   a. Review control valve assembly and by-pass system for proper settings.
   b. Open zone control valve assemblies and quick coupling valve boxes to review valves for leaks; pressure gauge operation; proper settings and are clean of debris or mulch.

4. Pump Sites
   a. Inspect for proper operations.
   b. The Association shall record and provide to the County's representative the well water flow meter readings for the two well locations on the General Maintenance Report Sheets.

5. Review system water source connections to include water meters, backflow preventers, gate valve points of connection and main lines for proper operation.

Monthly Service Requirements:

1. Automatic Control Valve Assembly
   Manually operate valves, and clean valve assembly filters

2. Backflow Assembly
   Review assembly for proper operation and clean filter as needed

3. Quick Coupling Valves
   Review boxes and operate valve

4. Pump Sites
   a. Once a month, the Association will trouble shoot each pump station, checking amperage draw and document the results for future reference.
   b. Manually run the system to ensure proper coverage and that no sprinkler head and nozzle are spraying onto the roadway. Clean and adjust sprinkler heads and nozzles and irrigation shields to ensure proper coverage.
   c. The Association will check all zone wiring and solenoid conditions through the use of an OHM meter and document the results for future reference.
   d. The Association will clean the strainers filters and inspect them for wear at the Pump Station.

5. Manually run the system with open flush caps and review sprinkler head indicators located at the end of zones.

6. Review pressure gauge readings at control valve assemblies for each zone, as well as gauges located at the end of zones where present to determine the system and porous piping is functioning properly.
7. Check, analyze and adjust flow control devices as required.

Quarterly Service Requirements:
1. Review all subsurface system piping, valve assemblies, wiring, moisture sensors and controllers for overall operation and provide adjustments as required to assure proper operation and irrigation application.

Conventional Pop-up Irrigation Systems:
Weekly Service Requirements:
1. Each median zone shall be manually turned on at the valve to ascertain proper operation of the system.
2. Repair system for any blown-off heads, broken lines or leaks around heads or valves.
3. Check the controller and rain sensing devices for proper operation and settings.
4. The Association shall further adjust all sprinkler heads to ensure that all landscaped areas receive one hundred percent (100%) irrigation coverage.
5. Within all work areas the Association shall review the plant material and turf for dry conditions and if found correct the problem.

Monthly Service Requirements:
1. Manually run the system, clean and adjust sprinkler heads/nozzles and concrete donuts as necessary to ensure proper coverage and that there are no sprinkler heads/nozzles spraying directly onto the roadway.
   a. Each median and side right-of-way zone shall be manually turned on at the valve to ascertain proper operation of the system.
   b. Repair system for any blown-off head, broken lines or leaks around heads or valves.
   c. Check the controllers and rain sensors for proper operation and settings.
   d. The Association shall further adjust all sprinkler heads to ensure that all landscaped areas receive one hundred percent (100%) irrigation coverage.
   e. Within all work areas the Association shall review the plant material and turf for dry conditions and if found correct the problem.

General Service Requirements for Irrigation Systems:
1. Should South Florida Water Management District or other governing agency establish water restrictions, the irrigation systems shall be inspected and all other controllers set to the mandated hours

of operation set by the District or Agency. Subsurface systems are exempt from water restrictions.

2. Replace defective heads or nozzles, install or replace defective risers and repair minor breaks or restricted sprinkler lines.
3. Replace damaged valve boxes/lids if caused by the Maintenance Association.
4. Inspect, clean, and replace, if necessary, screen/filters within the sprinkler heads.
5. Keep all grass and mulch out of all valve boxes. All valve boxes in sod areas are to be kept at sod level. All valve boxes in plant beds are to be kept two inches (2") above finished mulch.
6. One hundred percent (100%) irrigation coverage shall be maintained within all irrigated landscaped areas while this Contract is in effect.

7. Notification to the County's representative is required when acts of vandalism or accidents have occurred to the irrigation system. Photos shall be taken and provided to the County's representative at no added cost.

Miscellaneous Irrigation Maintenance Responsibilities:

1. Should the temperature be forecast to be below thirty-four (34) degrees, the Association shall be responsible for turning the irrigation system off in order to protect plants from possible freeze damage.
2. It shall be the Association's responsibility to notify the County's representative of any irrigation problems or additional irrigation maintenance needs.
3. The irrigation service personnel must trouble shoot time clocks, i.e. power-in 110 volt and 24-volt fuses, 24 volts output when necessary.
4. The irrigation services personnel must trouble shoot any pump start relay, main fuses and capacitors when necessary.

L. **BRICK PAVERS:** All median brick paving shall be pressure cleaned twice per year, in April and November, to remove marks, gum and other dirt that may be deposited on the surface areas. Upon finding damaged areas, the Associations shall clean-up debris if present, and or flag off the areas with protective barriers and/or high visibility hazard tape. Damaged areas must be repaired as quickly as possible.

M. **PEST CONTROL:** Trees, Palms, Shrubs, Groundcovers, and Sod must be closely monitored for pests and diseases and must be treated appropriately by a licensed Pest Control Operator approved by the County's representative.

EXHIBIT 2

After recording, return to:

Gregory L. Urbancic, Esq.
Coleman, Yovanovich & Koester, P.A.
4001 Tamiami Trail North, Suite 300
Naples, Florida 34103
(239) 435-3535

INTERLOCAL AGREEMENT BETWEEN COLLIER COUNTY, FLORIDA AND HACIENDA LAKES COMMUNITY DEVELOPMENT DISTRICT REGARDING BRIDGE AND LANDSCAPE IMPROVEMENTS

THIS INTERLOCAL AGREEMENT (this "**Agreement**") is made and entered into this _____ _____ day of _____, 2021, by and between **COLLIER COUNTY**, a political subdivision of the State of Florida (the "**County**") and **HACIENDA LAKES COMMUNITY DEVELOPMENT DISTRICT**, a community development district established and existing pursuant to Chapter 190, Florida Statutes (the "**District**"), pursuant to the authority set forth in Section 163.01, et seq. Florida Statutes, which is known as the Florida Interlocal Cooperation Act of 1969.

WITNESSETH:

WHEREAS, Chapter 163, Florida Statutes includes the "Florida Interlocal Cooperation Act of 1969," which permits local governmental units to make the most efficient use of their powers by enabling them to cooperate with other localities on a basis of mutual advantage and thereby to provide services and facilities in a manner and pursuant to forms of governmental organization that will accord best with geographic, economic, population, and other factors influencing the needs and development of local communities; and

WHEREAS, the District is a local unit of special-purpose government organized and existing under and pursuant to the "Uniform Community Development District Act of 1980," as amended, Chapter 190, Florida Statutes (the "**Act**") and is a special district according to Chapter 189, Florida Statutes; and

WHEREAS, the County established the District by enactment of Ordinance No. 2012-36, effective September 19, 2012; and

WHEREAS, the District was created for the purpose of financing, funding, planning, establishing, acquiring, constructing, enlarging, extending, equipping, operating and maintaining certain community development services, facilities, systems, infrastructure, projects and improvements, including without limitation the design and construction bridge and culverts, roadway systems, street lighting, landscaping and related improvements; and

WHEREAS, the District funded the construction of that certain bridge on Rattlesnake Hammock Road near the intersection of Rattlesnake Hammock Road and Collier Boulevard (the "**Bridge**") and the extension of Rattlesnake Hammock Road east of Collier Boulevard to the proposed Hacienda Boulevard (fka. Benfield Rd) ("**Road Extension**"); and

WHEREAS, the County has issued preliminary acceptance of these improvements and the required one year maintenance period following preliminary acceptance has expired; and

WHEREAS, the District will convey ownership of the Bridge and the Road Extension to the County concurrent with the approval of this Agreement and subject to the terms hereof; and

WHEREAS, the Bridge included various non-standard decorative finishes specific to the Bridge for which the District is willing to accept the responsibility to maintain in perpetuity; and

WHEREAS, the Road Extension included irrigation and landscaping improvements within the right-of-way (the "**Road Extension Landscaping**") for which the District is willing to accept the responsibility to maintain in perpetuity; and

WHEREAS, the County agrees that said non-standard decorative finishes specific to the Bridge and the Road Extension Landscaping may be maintained as proposed by the District pursuant to the terms and conditions contained herein.

NOW, THEREFORE, in consideration of the mutual promises and other considerations contained herein, the parties hereto agree as follows:

1. Recitals and Authority. The foregoing recitals are true and correct and by this reference are incorporated as a material part of this Agreement. This Agreement is entered into pursuant to the provision of Florida law, including, but not limited to, Chapters 120, 163, 189 and 190, Florida Statutes, and the Florida Constitution.

2. **Bridge**. The Bridge was originally constructed to include the following non-standard decorative finishes (collectively, the "**Decorative Finishes**") all as shown and located on the plans attached hereto and made a part hereof as Exhibit "A" (the "**Plans**"):

a. Non-standard paint color;
b. Tile and veneer items including decorative stone;
c. Traffic railing finishes and coping finishes;
d. Pipe chase railing finishes and coping finishes;

The District, at its sole cost and expense, agrees to maintain the Decorative Finishes, to keep the same in good condition and repair in accordance with the Plans. The District shall be responsible for obtaining any and all necessary permits from the County for any such maintenance work. The District shall not materially modify any portion of the Decorative Finishes without the prior written approval of the County. The District shall maintain the Decorative Finishes until the termination of this Agreement.

Except as to the Decorative Finishes, the County shall be responsible, at its sole cost and expense, for all other necessary or required repair and maintenance of the Bridge including, without limitation, any and all underlying structural components of the Bridge.

3. **Road Extension Landscaping.** The District, at its sole cost and expense, agrees to maintain the Road Extension Landscaping to keep the same in good condition and repair in accordance with the approved landscaping plans. The District shall be responsible for obtaining any and all necessary permits from the County for any such maintenance work.

Except as to the Road Extension Landscaping , the County shall be responsible, at its sole cost and expense, for any and all other necessary or required repair and maintenance of the Road Extension.

4. Failure to Maintain. Should the District fail to maintain the Decorative Finishes or the Road Extension Landscaping in accordance with Sections 2 and 3 above, the County may provide notice

to the District in writing, specifying the nature of the deficiency. Within thirty (30) days following receipt of such notice, the District, at its sole cost and expense, shall cause the appropriate repairs or cure to be effected. In the event damage to, or failure to maintain by the District results in a situation where public safety is at risk, (1) the District shall effect repairs within twenty-four hours of receipt of the County's written notice, or (2) the County may, at its option, effect repairs to the Decorative Finishes, without the need for prior notice to the District, and will promptly bill the District for all actual costs incurred in effecting the repairs. The District shall reimburse the County for such costs within thirty days after receipt of the County's bill.

5. **Term**. Unless terminated as set forth below, this Agreement shall commence on the Effective Date (as hereinafter defined) and shall remain in full force and effect in perpetuity from the Effective Date, and shall be binding upon the parties and all their successors in interest. This Agreement may be freely terminated as of right by the District, with or without cause, upon thirty (30) days' written notice to the County. If the District exercises this right, or if the County exercises this right based upon the District's failure to timely cure a default after thirty (30) days' written notice from the County, then upon written demand by County, the District, at its sole cost and expense, shall remove the Decorative Finishes from the Bridge such that the specified components of the Plan are made standard for similar bridges in Collier County. Except for the above, neither party will be liable to the other for any damages or claims resulting from the termination of this Agreement.

6. **Indemnification**. To the extent permitted by Florida law, the District ("**Indemnitor**") shall indemnify and save harmless the County ("**Indemnitee**"), including all employees of the County, from any loss or damages Indemnitee may suffer as a result of claims, suits, demands, damages, losses, fines, penalties, interest, expenses, costs, or judgments, including attorneys' fees and costs of litigation, against the County arising out of Indemnitor's negligent, intentional or willful acts of the District in carrying out the responsibilities under this Agreement, including the maintenance of the Decorative Finishes. The Indemnitee shall not undertake to settle any lawsuit or threatened lawsuit that could give rise to Indemnitor's obligation hereunder without the prior consent of Indemnitor, such consent to not be unreasonably withheld. It is acknowledged that the District's liability under the foregoing indemnity shall only be to the extent the County would be liable under statutory limited waiver of immunity or limits of liability that have been adopted by the Florida Legislature in Section 768.28, Florida Statutes, or other applicable statute. Notwithstanding the foregoing, nothing in this Agreement shall be deemed as a waiver of immunity or limits of liability of the District beyond any statutory limited waiver of immunity or limits of liability that may have been adopted by the Florida Legislature in Section 768.28, Florida Statutes, or other statute, and nothing in this Agreement shall inure to the benefit of any third party for the purpose of allowing any claim that would otherwise be barred under the Doctrine of Sovereign Immunity or by operation of law.

7. **Notices**. Any notice, request, demand, instruction or other communication to be given to any party hereunder shall be in writing and either hand delivered, delivered by overnight courier, or sent by first class mail, postage prepaid, addressed as follows:

To the County: Board of County Commissioners
Attn: County Manager
3301 Tamiami Trail E.
Naples, Florida 34112

With a copy to: Collier County Attorney's Office
Attn: County Attorney
3299 Tamiami Trail E., #800
Naples, FL 34112

To District:	Hacienda Lakes Community Development District Attn: District Manager Real Estate Econometrics, Inc. 707 Orchid Drive, Suite 100 Naples, FL 34102
With a copy to:	Coleman, Yovanovich & Koester, P.A. Attn: Gregory L. Urbancic, Esq. 4001 Tamiami Trail N., Suite 300 Naples, FL 34103

Any notice demand, request or other communication shall be deemed to be given upon actual receipt in the case of hand delivery or delivery by overnight courier, or three (3) business days after depositing the same in a letter box or by other means placed within the possession of the United States Postal Service, properly addressed to the party in accordance with the foregoing and with the proper amount of postage affixed thereto.

The addressees and addresses for the purpose of this Section may be changed by any party by giving written notice of such change to the other party in the manner provided in this Agreement. For the purpose of changing such addresses or addressees only, unless and until such written notice is received, the last addressee and respective address stated in this Agreement shall be deemed to continue in effect for all purposes.

8. Default. A default by either party under this Agreement shall entitle the other party to all remedies available at law or in equity, which may include, but not be limited to, damages, injunctive relief and specific performance. Each of the parties shall give the other party written notice of default hereunder and shall allow the defaulting party not less than thirty (30) days from the date of receipt of such notice to cure the default.

9. Disputes/Enforcement. All disputes under this Agreement shall be governed in accordance with the requirements of Chapter 164, Florida Statutes. In the event that either party seeks to enforce this Agreement by court proceedings or otherwise, then the prevailing party shall be entitled to recover all fees and costs incurred, including reasonable attorneys' fees and costs for trial, alternative dispute resolution or appellate proceedings.

10. Controlling Law/Venue. This Agreement shall be construed and governed in accordance with the laws of the State of Florida. Venue for any action arising hereunder shall lie exclusively in Collier County, Florida.

11. Severability. In the event any term or provision of this Agreement is determined by appropriate judicial authority to be illegal or otherwise invalid, such provision shall be construed or deleted as such authority determines, and the remainder of this Agreement shall be construed to be in full force and effect.

12. Integration. This Agreement embodies the entire understanding of the parties with respect to the subject matter herein, and the terms hereof control over and supersede all prior understandings and agreements.

13. Binding Effect. This Agreement shall be binding upon the parties, their successors and assigns, and the properties encumbered hereby and their successors and assigns.

14. **Assignment**. This Agreement may not be assigned, whether in whole or in part, to any party without the express written consent of the parties, which consent may be withheld in their sole and absolute discretion. Any purported assignment in contravention of this Section shall, at the sole option of the non-assigning party or parties, be deemed null and void and of no force or effect.

15. **Modifications**. This Agreement may not be modified in any respect whatsoever or rescinded, in whole or in part, except by written instrument duly executed, acknowledged by all of the Parties and recorded in the Public Records of Collier County, Florida.

16. **Interpretation**. This Agreement has been negotiated fully between the parties as an arm's length transaction. Both parties participated fully in the preparation of this Agreement. In the case of a dispute concerning the interpretation of any provision of this Agreement, both parties are deemed to have drafted, chosen and selected the language, and the doubtful language will not be interpreted or construed against any party.

17. **Cooperation**. Each party shall cause its employees and agents to perform such tasks and take such other lawful and appropriate actions as may be necessary or desirable in order to accomplish the purposes and meet the obligations of this Agreement, except as expressly provided for otherwise in this Agreement.

18. **Counterparts**. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original as against any Party whose signature appears thereon and all of which shall together constitute one and the same instrument.

19. **No Third Party Beneficiary**. The provisions of this Agreement are for the exclusive benefit of the Parties, their heirs, successors, grantees, and assigns, except as otherwise provided herein, and not for the benefit of any third person, nor shall this Agreement be deemed to have conferred any rights, express or implied, upon any third person.

20. **Effective Date**. Pursuant to Chapter 163, Florida Statutes, within 14 days after the County and the District have approved and executed this Agreement, the County shall record same in the public records of Collier County. This Agreement and the rights conferred in this Agreement shall become effective upon filing with the Clerk of the Circuit Court of Collier County, Florida, in accordance with the requirements of Chapter 163.01(11), Florida Statutes, which date shall be set forth in the first paragraph of this Agreement at the time of recording (the "**Effective Date**"). The County shall pay the costs of recording this Agreement. If this Agreement is amended, canceled, modified, extended, or revoked, the County shall also record notice of such action in the public records of Collier County.

(Remainder of Page Intentionally Left Blank- Signatures Begin on Next Page)

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

COUNTY:

BOARD OF COUNTY COMMISSIONERS OF COLLIER COUNTY, FLORIDA

Attest:

By:_____
Penny Taylor, Chairman

_____
Crystal K. Kinzel, Clerk

Approved as to Form:

_____
County Attorney

DISTRICT:

HACIENDA LAKES COMMUNITY DEVELOPMENT District

Attest:

By:_____
Robert Mulhere, Chairman

_____
Secretary/Assistant Secretary

STATE OF FLORIDA)
) ss.
County OF COLLIER)

The foregoing instrument was acknowledged before me, this _____of _____, 2015, by Robert Mulhere, as Chairman of Hacienda Lakes Community Development District, on behalf of the district, who is ( ) personally known to me or ( ) has produced _____ as evidence of identification.

(SEAL)

_____
NOTARY PUBLIC
Name:_____
(Type or Print)
My Commission Expires:

Exhibit A- Decorative Finishes

Exhibit A – Decorative Finishes



a. Non-standard paint colors
b. Tile and veneer items including decorative stone
c. Traffic railing finishes
d. Pipe chase (see exhibit A pg 2)

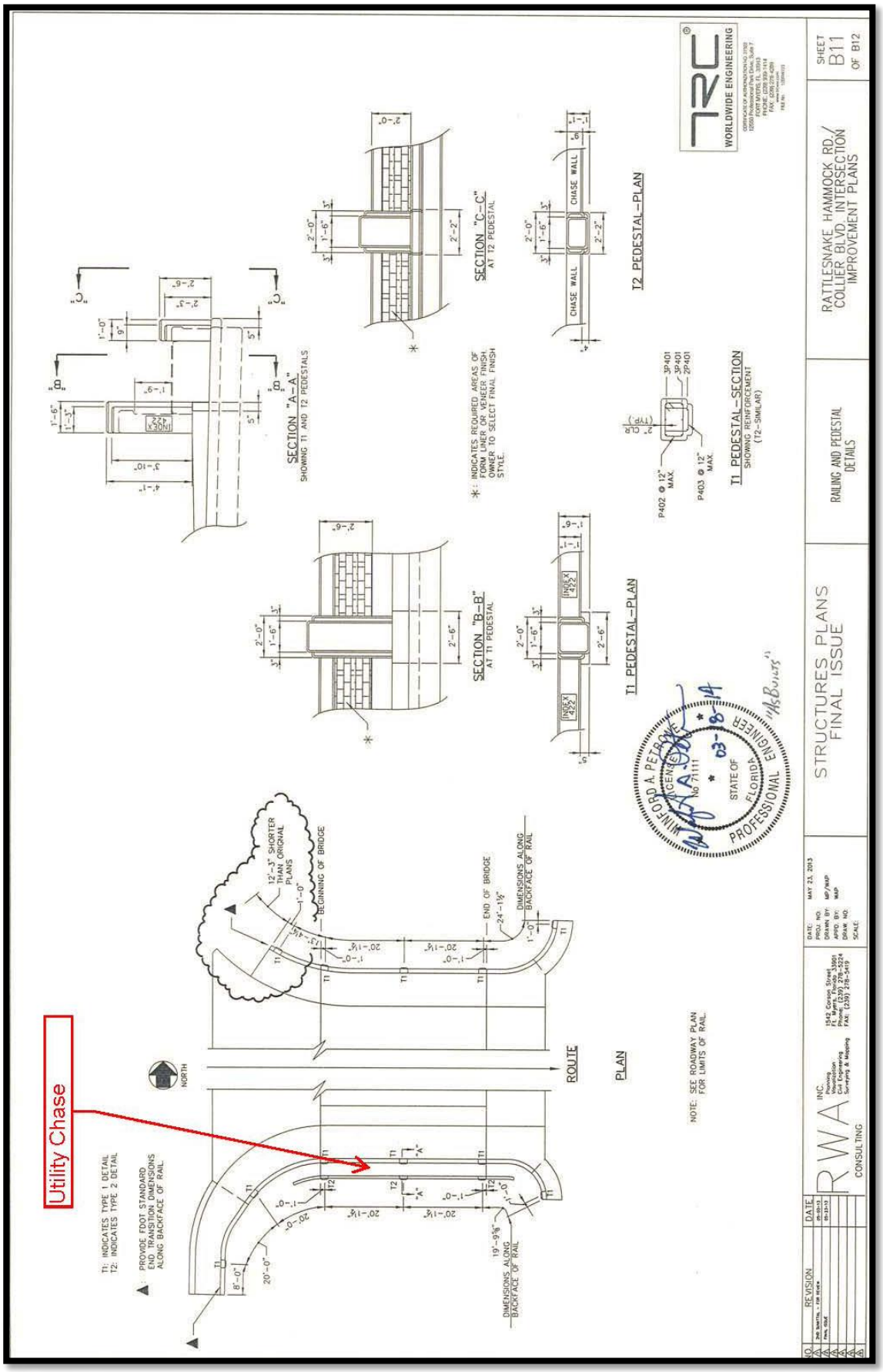

Utility Chase
T1: INDICATES TYPE 1 DETAIL
T2: INDICATES TYPE 2 DETAIL
▲: PROVIDE FDOT STANDARD END TRANSITION DIMENSIONS ALONG BACKFACE OF RAIL
NORTH
ROUTE
PLAN
NOTE: SEE ROADWAY PLAN FOR LIMITS OF RAIL.
BEGINNING OF BRIDGE
END OF BRIDGE
12'-3" SHORTER THAN ORIGINAL PLANS
DIMENSIONS ALONG BACKFACE OF RAIL
SECTION "A-A"
SHOWING T1 AND T2 PEDESTALS
SECTION "B-B"
AT T1 PEDESTAL
SECTION "C-C"
AT T2 PEDESTAL
*: INDICATES REQUIRED AREAS OF FORM LINER OR VENEER FINISH OWNER TO SELECT FINAL FINISH STYLE.
T1 PEDESTAL-PLAN
T2 PEDESTAL-PLAN
T1 PEDESTAL-SECTION
SHOWING REINFORCEMENT
(T2-SIMILAR)
P402 @ 12" MAX
P403 @ 12" MAX
3P401
3P401
2P401
INDEX 422
CHASE WALL
WORLDWIDE ENGINEERING
RWA INC.
CONSULTING
REVISION
DATE
MAY 23, 2013
STRUCTURES PLANS
FINAL ISSUE
RAILING AND PEDESTAL DETAILS
RATTLESNAKE HAMMOCK RD./
COLLIER BLVD. INTERSECTION
IMPROVEMENT PLANS
SHEET
B11
OF B12

EXHIBIT 3

November 20, 2020

Hacienda Lakes Community Development District
c/o Russ Weyer, CDD Manager
President, Real Estate Econometrics, Inc
Via Email

Dear Russ,

Please accept this correspondence and attached information as our request on behalf of Lord's Way 30, LLC to start the conveyance process of the lake located within the Sapphire Cove development located within the boundaries of the Hacienda Lakes Community Development District.

As required, below is the information required and the status of the subject documents.

1. Site Plan. The Developer shall provide a copy of the approved PPL construction plans or site development plan showing the lake(s) (and any lake interconnects) to be turned over to the District.
Enclosed.

2. Lake Cross Sections. The Developer shall provide the Collier County approved lake cross sections.
Enclosed.

3. Collier County Approval. The Developer shall provide a copy of the SAF (Site Acceptance Final) lake inspection acceptance letter from Collier County
Enclosed.

4. Littoral Planting Plan. For each lake, the Developer shall provide a lake littoral planting plan that has been approved by the applicable regulatory agency and a copy of the invoice or other acceptable evidence showing that the littoral plantings have been installed or replaced within the last six (6) months.
Invoice Enclosed and approved planting plan is located within the PPL plan set provided under item 1.

5. Legal Description. The Developer shall provide a legal description for all lakes to be conveyed. For any lake described by a metes and bounds legal description (i.e. other than platted tract), the District may require the Developer to provide a survey of the lake property.
Legal description as follows:
Tract "L-1" of Estilo Acres, Plat Recorded in the Public Records of Collier County, FL PB65 PG69-71

6. Evidence of Title. The Developer shall provide an attorney's opinion of title, title search report or other evidence of title acceptable to the District that reflects fee title to the applicable lake(s) are in the name of the Developer and free and clear of all liens, mortgages, and all other encumbrances that render title unmarketable.
Enclosed for review

7. Conveyance Documents. The Developer shall provide an appropriate special warranty deeds and/or other instruments of conveyance acceptable to the District to transfer the lake(s). The Developer shall also provide easements or assignments of easements to the District as necessary for access and maintenance to the lake(s).
Enclosed for review.

8. Permit Transfers. The Developer shall provide for the transfer of applicable South Florida Water Management District permits relating to the lake(s) to the District.
Letter modification in process.

9. Developer's Cost Basis. If required by the District, the Developer shall provide the District Manager with the Developer's cost basis in the lake(s) to be transferred to the District for the District's audit purposes.
N/A

10. Lake Inspection. The District Engineer shall perform an inspection of the lake(s) to review items including, without limitation, lake bank slopes, erosion conditions, and presence of required littoral plants. The Developer shall make such corrections to the lake(s) as are identified by the District Engineer's inspection prior to acceptance by the District of the lake(s).
Please advise as to available dates.

11. Administrative Fee. The Developer shall pay the District an administrative fee of $500 per lake to partially reimburse the District for its administrative costs in the turnover procedure.
Check will be sent to your office separately.

Thank you for your attention to this matter.

Sincerely,

David E. Torres

ICP

Sub-Division Plans - PL# 2013.2583

for

ESTILO ACRES

PHASE I & PHASE II

SECTION 14, TOWNSHIP 50 SOUTH, RANGE 26 EAST

COLLIER COUNTY, FLORIDA

Index of Plans

SHEET NO.	DESCRIPTION
C-1	COVER SHEET
C-2	ABBREVIATIONS & GENERAL NOTES
C-3	AERIAL
C-4	EXISTING DRAINAGE MAP
C-5	MASTER SITE PLAN
C-6	PAVING, GRADING, AND DRAINAGE PLANS - NORTH
C-7	PAVING, GRADING, AND DRAINAGE PLANS - SOUTH
C-8	MASTER UTILITY PLAN
C-9 TO C-16	PLAN AND PROFILES
C-17 TO C-18	PLAN AND PROFILE
C-19	TYPICAL SECTIONS
C-20 TO C-22	DRAINAGE DETAILS
C-23 TO C-26	UTILITY DETAILS
C-27	MASTER PUMP STATION DETAILS
C-28	EROSION CONTROL PLAN

Attachments

SHEET NO.	DESCRIPTION
R-01 to R-03	FDOT DETAILS
ENVIRONMENTAL -	PRESERVE AREA MANAGEMENT PLAN

Legal Description

PARCEL 1
W 1/2, E 1/2,
NE 1/4, SE 1/4
SECTION 14,
T-50-S, R-26-E

PARCEL 2
E 1/2, E 1/2,
NE 1/4, SE 1/4
SECTION 14,
T-50-S, R-26-E

PARCEL 3
E 1/2, W 1/2,
NE 1/4, SE 1/4
SECTION 14,
T-50-S, R-26-E

OFF-SITE PARCEL
20 50 27 E1/2 OF NE1/4 LESS
S 330 FT LESS N 461.12FT OF E
2609.05FT OF E1/2 OF NE1/4

Utility Services

WATER SERVICE:
COLLIER COUNTY WATER DEPARTMENT
3301 E. TAMIAMI TRAIL
NAPLES, FLORIDA 34112
PHONE (239) 252-6245

SEWER SERVICE:
COLLIER COUNTY WASTEWATER
DEPARTMENT
3301 EAST TAMIAMI TRAIL
NAPLES, FLORIDA 32112
PHONE (239) 597-5355

ELECTRIC SERVICE:
FLORIDA POWER & LIGHT
P.O. BOX 025576
MIAMI, FLORIDA 33102
PHONE (239) 262-1322

PHONE SERVICE:
CENTURY LINK
6438 NAPLES BLVD #100
NAPLES, FLORIDA 34109
PHONE (239) 596-6220

CABLE TELEVISION:
COMCAST
301 TOWER ROAD
NAPLES, FLORIDA 34113
PHONE (239) 793-3577

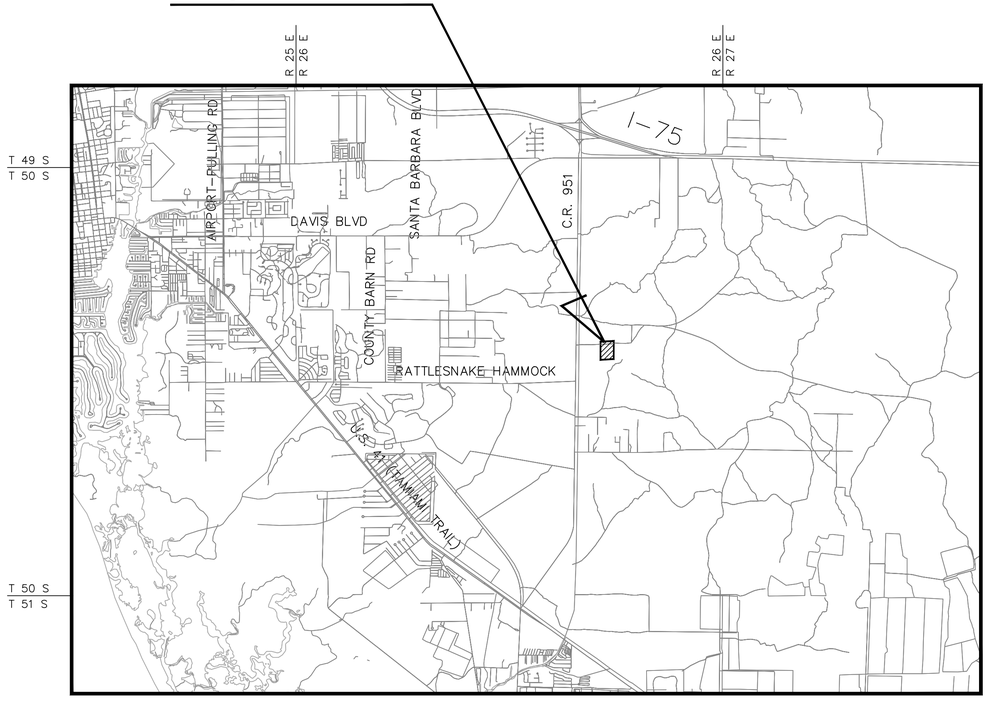
WASTE DISPOSAL:
COLLIER COUNTY
SOLID WASTE DEPARTMENT
3301 E. TAMIAMI TRAIL
NAPLES, FLORIDA 34112
PHONE (239) 252-2508

FIRE CONTROL DISTRICT:
GOLDEN GATE FIRE CONTROL DISTRICT
4798 DAVIS BLVD.
NAPLES, FLORIDA 34104
PHONE (239) 774-7111

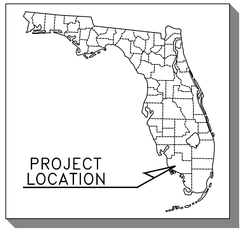
REVISION	DESCRIPTION	DATE
1	PER COUNTY COMMENTS	6-25-14
2	PER COUNTY COMMENTS	7-10-14
3	PER COUNTY IC COMMENTS	11-30-15
4	PER COUNTY IC COMMENTS	3-21-16

2013-072 PPL COVER.dwg, Apr 04, 2016, 11:59am

Project Location



Location Map



HAGAN ENGINEERING

1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

AUGUST 2014

FIRE CODE INFORMATION

PER 2010 FLORIDA FIRE CODE

75 SINGLE FAMILY HOMES	TYPE IV CONSTRUCTION	MAXIMUM SIZE 5000 SF	NOT SPRINKLED

CLUBHOUSE PERMITTED SEPARATELY (LATER SDP)

FIRE FLOW TESTED TO BE 12,534 GPM WITH 20 PSI RESIDUAL PRESSURE

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

Owner

LORD'S WAY 30, LLC
3921 PROSPECT AVENUE
NAPLES, FL 34104

Collier County Folio Nos.

00416960006, 00418360002, 00418320000
OFF SITE MITIGATION: 00459320001

Size of Parcel

30.82 ACRES

Collier Commissioners

DISTRICT 1 - DONNA FIALA
DISTRICT 2 - GEORGIA A. HILLER, ESQ., CHAIRWOMAN
DISTRICT 3 - TOM HENNING
DISTRICT 4 - FRED COYLE
DISTRICT 5 - TIM NANCE

PROJECT CONSULTANTS

ENGINEERING:
HAGAN ENGINEERING
909 10TH STREET SOUTH #105
NAPLES, FLORIDA 34102
PHONE: (239) 687-3811

SURVEYING:
MARCO SURVEYING AND MAPPING
3825 BECK BLVD., SUITE 725
NAPLES, FL 34114
PHONE: (239) 389-0026

LANDSCAPING:
ENSITE, INC.
2401 FIRST STREET., SUITE 201
FORT MYERS, FL 33901
PHONE: (239) 226-0024

TRAFFIC ENGINEERING:
NORMAN J. TREBILCOCK, AICP, PE
TREBILCOCK CONSULTING SOLUTIONS, PA
1205 PIPER BOULEVARD, SUITE 202
NAPLES, FL 34110
PHONE: (239) 566-9551

ENVIRONMENTAL:
PASSARELLA & ASSOCIATES, INC.
13620 METROPOLIS AVE # 200
FORT MYERS, FL 33912
PHONE: (239) 274-0067

SHEET
C-1

TS ARE APPROXIMATE

ORNER MONUMENT IS IN
SHOULD NOTIFY THE

PRIOR TO COMMENCING

SPORTATION, ROADWAY
S AND SPECIFICATIONS

ETATION.

S NECESSARY TO MATCH

OF 72 HOURS PRIOR

S TO EFFECT THE
UCTION ACTIVITIES.
HAVE BEEN STABILIZED

ESS NOTED OTHERWISE.

NSTRUCTION.

ALL BE DETERMINED IN

PRIOR TO PLACEMENT
ROM FILL AREAS SHALL

WNER OR ENGINEER TO

RY OF MATERIALS.

TAKEN FROM RECORD
EIR EXACT LOCATION

ILTER FABRIC (MIRAFI

TS INSTALLED ON A

R ANY DEVIATIONS

STREETS ADJACENT TO
RIDA MANUAL OF
NCE, AND UTILITY

N OF REQUIRED

RECORDED ARE

ON, THE CONTRACTOR
ONS.

APPROVAL PRIOR TO

E DURING ALL PHASES

INATED THROUGH JODI

CONSTRUCTION.
REMOVED FROM THE
TY OF THE PROPERTY

GENERAL UTILITY NOTES

1. ALL WORK TO BE DONE IN ACCORDANCE W/ THE COLLIER COUNTY LAND DEVELOPMENT CODE, ORD. 93–82, AS AMENDED AND THE UTILITY STANDARDS AND PROCEDURES, ORD. 2004–31 AND 2007–60, AS AMENDED AND COLLIER COUNTY UTILITY STANDARDS, AS AMENDED.
2. THE CONTRACTOR SCLOHALL NOTIFY THE APPROPRIATE AGENCY PRIOR TO COMMENCING WORK WITHIN SUCH AGENCY'S JURISDICTION.
3. PRIOR TO COMPACTION OF SUBGRADE AND ROADWAY CONSTRUCTION ALL SUBSURFACE CONSTRUCTION SUCH AS WATER LINES, SEWER LINES, PUBLIC UTILITIES, AND STORM DRAINAGE MUST BE COMPLETED.
4. ALL WATER MAINS AND FORCE MEANS SHALL HAVE A MINIMUM OF 30" OF COVER AT ALL TIMES.
5. WATER LINES AND FORCE MAIN SHALL HAVE A MAXIMUM OF 48" OF COVER.
6. ALL CONFLICTS OF WATER LINES OVER OR GRAVITY SEWER LINES UNDER RCP DRAINAGE LINES SHALL BE C900 CL200 OR EQUAL FOR 10' EACH WAY OF CONFLICT.
7. ALL PRESSURE LINES (WATER & SEWER) SHALL BE DEFLECTED AROUND CATCH BASINS TO MAINTAIN 5' MINIMUM SEPARATION. 45DEG. BENDS SHELL BE UTILIZED IF NECESSARY.
8. ALL PVC WATER MAIN SHALL BE AWWA C–900, CLASS 200, DR14, UNLESS OTHERWISE NOTED.
9. ALL TEMPORARY BLOWOFFS ARE TO BE REMOVED AFTER SATISFACTORY BACTERIAL TESTING IS COMPLETED AND THE CONNECTION IS MADE TO THE EXISTING WATER MAIN.
10. ALL WATER MAINS MUST BE FLUSHED AND DETERMINED TO BE BACTERIOLOGICAL CLEARED BEFORE CONNECTIONS ARE MADE TO THE PROPOSED WATER DISTRIBUTION SYSTEM.
11. ALL WATER SERVICES UNDER PAVEMENT SHALL BE INSTALLED IN A 4" PVC CONDUIT AND EXTEND 5' EACH SIDE OF PAVEMENT. WATER SERVICE CONDUITS SHALL BE PLUGGED, MARKED AT GRADE, AND "3M" MARKERS AT EACH END. CONTRACTOR SHALL INSTALL WATER SERVICE FROM MAIN TO WITHIN 5' OF BUILDING. A 3M WALKER SHALL BE PLACED AT CONNECTIONS TO WATER MAIN.
12. BACTERIOLOGICAL SAMPLING POINTS SHALL BE POSITIONED AT THE BEGINNING OF EACH NEW SYSTEM, AT 1000 FOOT INTERVALS AND ALL DEAD ENDS UNLESS OTHERWISE DIRECTED. THE SAMPLING POINTS WILL BE UTILIZED BY UTILITIES PERSONNEL FOR WATER MAIN AND BACTERIAL CLEARANCE PROCEDURES. AT THE COMPLETION OF THE PROJECT, WHEN AUTHORIZATION IS GIVEN BY THE COUNTY, PERMANENT SAMPLING POINTS SHALL REMAIN EVERY 3000 FEET OR ONE AT 2/3 OF THE LENGTH FROM THE POINT OF CONNECTION TO THE COUNTY SYSTEM IF THE LINE IS LESS THAN 3000 FEET LONG. ALL OTHERS SHALL BE REMOVED DOWN TO THE MAIN AND PROPERLY CAPPED BY THE CONTRACTOR. THE PERMANENT SAMPLING POINT STILL BE CONSTRUCTED AS SHOWN IN THE UTILITY DETAIL DRAWINGS. COLLIER COUNTY STAFF WILL REVIEW THE PERMANENT SAMPLING POINT LOCATIONS DURING FINAL PLANS REVIEW.
13. ALL WATER OR FORCE MAIN DIPS SHALL USE C900 DR14 PVC WITH RESTRAINING JOINTS. PIPE CONFLICT FITTINGS ARE SHOWN IN PIPE CONFLICT THE DETAIL.
14. ALL SEWER LATERALS SHALL EXTEND TO WITHIN 5' OF BUILDING AND THE CUTOFF 12" BELOW FINISHED GRADE. EACH SEWER LATERAL SHALL BE MARKED WITH A 3M MAGNETIC MARKER FOR FEATURE LOCATION.
15. ALL 8" ASTM D3034, DR26 PVC SANITARY SEWER (S.S.) SHALL HAVE A 0.40% MIN. SLOPE UNLESS OTHERWISE NOTED. (SLOPE CALCULATED FROM WALL TO WALL). PIPE LENGTHS ARE APPROXIMATE AND MEASURED FROM CENTER OF STRUCTURE OR FITTINGS.
16. THE 6" ASTM D3034, DR26 PVC SEWER SERVICES SHALL BE CONSTRUCTED AT 1.00% SLOPE MINIMUM PER PLUMBING CODE.
17. ALL INSPECTIONS REQUIRE 48 HOUR NOTICE. CONSTRUCTION–RELATED INSPECTIONS, WHERE APPLICABLE, SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
    a) HOT TAPS TO POTABLE WATER LINES LARGER THAN 6" AND WASTEWATER SYSTEMS LINES GREATER THAN 4". *
    b) MASTER METER AND BYPASS PIPING.
    c) JACK & BORE CASINGS.*
    d) PRESSURE TESTS.*
    e) INFILTRATION/EXFILTRATION TESTS.*
    f) LIFT STATION INSTALLATION, PRIOR TO COVER–UP AND START–UP.*
    g) LIFT STATIONS START–UP.*
    h) LAMPING OF SEWER LINES.*
    i) PIGGING AND FLUSHING OF WASTEWATER LINES, FORCE MAINS, POTABLE WATER MAINS AND NON–POTABLE IRRIGATION LINES.* NOTE: ALL BORE FLUSHING AND PIGGING OF POTABLE WATER LINES NEED ONLY WATER DEPARTMENT INSPECTION.
    j) TELEVISION VIDEO TAPING OF WASTEWATER LINES AT END OF CONSTRUCTION AND THE WARRANTY PERIOD ("IN–OFFICE REVIEW").
    k) CONFLICT CONSTRUCTION.*
    l) CONNECTIONS TO EXISTING POTABLE WATER, NON–POTABLE IRRIGATION WATER AND WASTEWATER SYSTEMS.*
    m) 8" DIAMETER OR LARGER CHASING INSTALLATIONS.*
    n) OTHER SPECIAL REQUIREMENTS AS SPECIFIED BY THE COUNTY STAFF AT THE TIME OF CONSTRUCTION DOCUMENT APPROVAL.
    o) CHLORINATION OF WATER LINES AND REFLUSHING OF LINE AFTER CHLORINATION (NEEDS WATER DEPARTMENT INSPECTION ONLY).*
    p) INSTALLATION OF TEMPORARY METERS/BACKFLOWS.*
    q) BACTERIOLOGICAL SAMPLING (NEEDS WATER DEPARTMENT INSPECTION ONLY).*
    r) HOT TAPS TO ANY WATER CONCRETE MAINS, PRESSURE TEST ON HUGE LINES 20" AND GREATER, AND CONNECTIONS TO EXISTING PORTABLE SYSTEMS GREATER THAN 12" NEED TO BE INSPECTED BY THE WATER DEPARTMENT AND CDES.*
    s) FIRE FLOW TESTING.

    • AN INSPECTOR ON BEHALF OF THE COUNTY OR OTHER QUALIFIED EMPLOYEE OF THE COUNTY MUST BE PRESENT DURING INSPECTIONS MARKED WITH AN *
18. ALL PVC PIPE 4" TO 12" INSTALLED BELOW PAVED STREETS SHALL BE C900, DR14.
19. CONTRACTOR SHALL INSTALL SERVICE LEADS AND BOX. METERS SHALL SIZED AND INSTALLED BY PUBLIC UTILITIES.
20. ALL COLD–WATER METERS–DISPLACEMENT TYPE, BRONZE MAIN CASE, SIZE ½" THROUGH 2" SHALL MEET THE REQUIREMENTS OF AWWA C700.
21. ALL WATER METER COMPONENTS THAT COME IN CONTACT WITH DRINKING WATER SHALL CONFORM WITH NSF STANDARD 61.
22. CONTRACTOR TO VERIFY CONDUIT SIZE AND LOCATIONS WITH UTILITY PROVIDERS PRIOR TO INSTALLATION.
23. POLYVINYL CHLORIDE PIPE (PVC) FOR PIPE SIZES 4'–12" SHALL MEET THE REQUIREMENTS OF AWWA C–900 (DR 14 OR DR 18).
24. BACKFLOW PREVENTER ASSEMBLIES SHALL CONFORM TO AWWA M–14 STANDARDS.
25. METERS SHALL BE SIZED AND INSTALLED BY PUBLIC UTILITIES.
26. FIRE HYDRANTS SHALL BE IN ACCORDANCE WITH L.D.C. OF COLLIER COUNTY OR NFPA REGULATIONS, LATEST REVISIONS, WHICHEVER IS MORE RESTRICTIVE, AND MEET THE APPROVAL OF THE LOCAL FIRE CONTROL DISTRICT. PAVEMENT REFLECTORS SHALL BE LOCATED AT THE CENTERLINE OF FINISHED PAVEMENT OPPOSITE EACH HYDRANT.
27. ALL FIRE HYDRANTS CAN BE USED FOR TEMPORARY BACTERIAL SAMPLE POINTS.
28. ALL WATER AND SEWER FACILITIES SHALL BE CONVEYED TO COLLIER COUNTY PUBLIC UTILITIES FOR OWNERSHIP AND MAINTENANCE.
29. HYDRANTS TO BE BAGGED UNTIL BACTERIOLOGICAL SAMPLING IS CLEARED AND OPERATIONAL.
30. ALL STORM SEWER, NON–POTABLE IRRIGATION MAINS AND WASTEWATER TRANSMISSION SYSTEM CONFLICTS WITH WATER SYSTEMS OR PORTIONS(S) THEREOF THAT MUST BE CROSSED SHALL BE PERFORMED USING AWWA C900 CLASS 200 OR C905 CLASS 235 PVC WITH DUCTILE IRON FITTINGS. ALL FITTINGS SHALL BE ADEQUATELY RESTRAINED USING RETAINER GLANDS, STAINLESS STEEL RODS, EBAA IRON SALES "MEGALUG", "UNI–FLANCE", ROMAC INDUSTRIES "GRIP RING", OR STAR RESTRAINT, TRANSITIONAL FITTINGS, WHEN APPROVE BY THE COUNTY MANAGER OR DESIGNEE, SHALL BE LOCATED AS CLOSE TO THE POINT OF CONFLICT AS POSSIBLE. AIR RELEASE ASSEMBLIES SHALL BE PROVIDED AS SPECIFIED IN SUBSECTION 1.7 HEREIN, BELOW. GRADUAL DEFLECTION OF THE WATERLINE IN LIEU OF USING FITTINGS TO CLEAR THE CONFLICT SHALL NOT BE PERMITTED IF COVER EXCEEDS FIVE FEET (5'–0"), A MINIMUM VERTICAL CLEARANCE OF EIGHTEEN INCHES (18") SHALL BE PROVIDED BETWEEN THE WATER MAIN AND THE BOTTOM OF CONFLICT. WHEREVER THE EIGHTEEN INCH (18") MINIMUM VERTICAL CLEARANCE CANNOT BE PROVIDED, A COUNTY APPROVED DEVIATION FORM WILL BE REQUIRED. (A DEVIATION FORM WILL NOT BE REQUIRED FOR SEPARATION OF SEWER LATERALS AND POTABLE WATER PIPELINE.)
31. WATER MAINS SHALL BE BLUE IN COLOR. BOTH SANITARY SEWER AND FORCE MAINS SHALL BE GREEN IN COLOR. IRRIGATION MAINS SHALL BE PANTONE PURPLE IN COLOR.
32. LORD'S WAY 30 SHALL NOT TIE–IN WATER AND/OR SEWER UNTIL LORD'S WAY ROAD UTILITIES HAVE BEEN ACCEPTED BY PUBLIC UTILITIES.
33. CONTRACTOR SHALL INSTALL 4" 3M ELECTRONIC BALL MARKERS OR EQUAL, EVERY 200 LF AND AT EACH PIPE ELBOW LOCATION.
34. ALL DIPS SHALL USE 45 DEG. MECHANICAL JOINT FITTINGS WITH RETAINER GLANDS AND CLASS 200 PVC PIPE.

PAVING, GRADING, AND DRAINAGE NOTES

1. LENGTH OF STORM DRAIN PIPES ARE APPROXIMATE AND ARE MEASURED FROM CENTER OF STRUCTURE.
2. PLACE 200 S.F. OF SOD AROUND ALL INLETS, HEADWALLS, AND CONTROL STRUCTURES. USE ARGENTINE BAHIA AND CONFORM TO FDOT SECTION 575.
3. PLACE 18" OF SOD CONTINUOUS ALONG EDGES OF PAVEMENT OF ALL ROADS AND/OR CURB, LAYING PARALLEL WITH THE ROAD MAINTAINING 1" BELOW FINISHED PAVEMENT GRADE.
4. CONTRACTOR TO PROVIDE SILT FENCE, STAKED HAY BALES AND OTHER APPROPRIATE MEASURES TO EFFECT THE FILTRATION OF SURFACE WATER FLOWS AND TO PROVIDE EROSION PROTECTION DURING CONSTRUCTION ACTIVITIES. PROTECTION IS TO BE MAINTAINED DURING THE CONSTRUCTION PERIOD UNTIL DISTURBED SOILS HAVE BEEN STABILIZED WITH GRASS OR SUITABLE EROSION PROTECTION TREATMENT.
5. THE PROPOSED STABILIZED SUBGRADE SHALL HAVE L.BR OF 40 AND SHALL BE COMPACTED TO 98% MINIMUM DENSITY AS DETERMINED BY AASHTO T–180.
6. THE PROPOSED LIMEROCK BASE SHALL HAVE L.B.R. OF 100 AND SHALL BE PLACED IN TWO (2) LIFTS, WITH EACH LIFT COMPACTED TO 98% MINIMUM DENSITY AS DETERMINED BY AASHTO T–180.
7. LIMEROCK BASE SHALL BE PRIMED IN ACCORDANCE WITH SECTION 200–8 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION (CURRENT EDITION.)
8. ONE (1) FIELD DENSITY TEST SHALL BE REQUIRED EVERY 300 LF. OR PART THEREOF ON THE FINISHED SUBGRADE MATERIAL AND ON EACH LIFT OF LIMEROCK BASE MATERIAL.
9. TWO (2) COPIES OF THE L.B.R. MODIFIED (AASHTO T–180) PROCTOR AND COMPACTION TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR SUBMITTAL TWO C.C.P.R.S.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT WATER DISCHARGED FROM THE SITE DURING CONSTRUCTION SHALL MEET OR EXCEED STATE WATER QUALITY STANDARDS. SPECIFICALLY, THE TURBIDITY OF DISCHARGED WATER SHALL NOT EXCEED 29 NTU ABOVE THE BACKGROUND LEVEL. WATER QUALITY AND SILTATION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL EROSION OF CONTROL MEASURES ARE INSTALLED, ESTABLISHED AND ACCEPTED.
11. WE'RE INDICATED, OR AS NECESSARY, SILT FENCES AND/OR HAY BALES SHALL BE PLACED ALONG THE PROJECT PERIMETER TO PREVENT SEDIMENT IN RUNOFF AND TURBID WATER FROM LEAVING THE SITE.
12. ALL PAVING, GRADING AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE COLLIER COUNTY LAND DEVELOPMENT CODE.
13. ALL FRAME AND GRATE INLETS TO BE HEAVY DUTY TRAFFIC RATED.
14. THE LORD'S WAY 30 HOMEOWNERS ASSOCIATION WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE WATER MANAGEMENT FACILITY.

SYMBOLS

- GATE VALVE / PLUG VALVE
- TEE ASSEMBLY
- REDUCER
- BLOW OFF
- FIRE HYDRANT
- FIRE HYDRANT ASSEMBLY W/ GATE VALVE
- FIRE DEPARTMENT CONNECTION
- MITERED END SECTION
- MANHOLE W/ NUMBER (MH-1)
- PLUG VALVE
- IRRIGATION SERVICE (DOUBLE)
- IRRIGATION SERVICE (SINGLE)
- SEWER SERVICE (DOUBLE)
- SEWER SERVICE (SINGLE)
- WATER SERVICE (DOUBLE)
- WATER SERVICE (SINGLE)
- HEADWALL
- DRAINAGE INLET (SEE PLAN FOR TYPES)
- THROAT INLET
- FLARED END SECTION
- FLOW ARROW

LINETYPES

	EXISTING	PROPOSED
BASIN		
RIGHT–OF–WAY LINE		
LAKE MAINTENANCE EASEMENT		
PUBLIC UTILITY EASEMENT		
DRAINAGE EASEMENT		
CENTER LINE		
WETLAND BOUNDARY		
FORCE MAIN	FM	FM
SANITARY SEWER	SS	SS
WATER MAIN	WM	WM
PERIMETER BERM		
DITCH / SWALE		
FENCE LINE	X	X
SILT FENCE		
BULKHEAD		
STRUCTURAL BUFFER		

ABBREVIATIONS

AC	ACRE
ALT	ALTERNATE
APPROX	APPROXIMATE
ASB	ASBESTOS
BM	BENCH MARK
BLDG.	BUILDING
BOT	BOTTOM
CB	CATCH BASIN
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CV	CHECK VALVE
CF	CUBIC FOOT
CY	CUBIC YARD
℄	CENTER LINE
CLKG	CAULKING
CLF	CHAIN LINK FENCE
COL	COLUMN, COLOR
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CTRS	CENTERS
CU	COPPER
CU IN	CUBIC INCH
DIA, ø	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIST	DISTANCE
DIP	DUCTILE IRON PIPE
DE	DRAINAGE EASEMENT
DWG	DRAWING
E	EAST
EA	EACH
EL/ELEV	ELEVATION
EQUIP	EQUIPMENT
ERCP	ELLIPTICAL CONCRETE PIPE
EX. EXIST	EXISTING
FF	FINISHED FLOOR
FFE	FINISHED FLOOR ELEVATION
FM	FORCE MAIN
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FIN	FINISH
FRP	FIBERGLASS REINFORCED PLASTIC
FT	FEET
G	NATURAL GAS
GC	GENERAL CONTRACTOR
GI	GALVANIZED IRON
GPM	GALLONS PER MINUTE
GV	GATE VALVE
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GR	GRADE
HDPE	HIGH DENSITY POLYETHYLENE
HOR	HORIZONTAL
HYD	HYDRANT
ID	INSIDE DIAMETER
IDD	IONA DRAINAGE DISTRICT
INV	INVERT
LAE	LAKE ACCESS EASEMENT
LF	LINEAL FEET
LME	LAKE MAINTENANCE EASEMENT
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MJ	MECHANICAL JOINT
MAX	MAXIMUM
MECH	MECHANICAL
MES	MITERED END SECTION
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
N	NORTH
NE	NORTHEAST
NW	NORTHWEST
NPW	NON POTABLE WATER
NTS	NOT TO SCALE
NUM/#	NUMBER
NOM	NOMINAL
NG	NATURAL GAS
OC	ON CENTERS
OCEW	ON CENTER EACH WAY
OD	OUTSIDE DIAMETER
⚠ PBSP	PERMANENT BACTERIAL SAMPLE POINT
PCF	POUNDS PER CUBIC FOOT
PSF	POUNDS PER SQUARE FOOT
PV	PLUG VALVE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
POLY, PE	POLYETHYLENE
PAVT	PAVEMENT
PC	POINT OF CURVATURE
℗	PROPERTY LINE
PLBG	PLUMBING
PLWD	PLYWOOD
PW	POTABLE WATER
PT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
PVI	POINT OF VERTICAL INTERSECTION
QUAN	QUANTITY
R	RADIUS
RD	ROAD
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
ROW	RIGHT OF WAY
R/W	RIGHT OF WAY
S	SOUTH
SE	SOUTHEAST
SW	SOUTHWEST
SS	STAINLESS STEEL
SAN	SANITARY
SCH	SCHEDULE
SECT	SECTION
SEW	SEWER
SH	SHEET
SPEC	SPECIFICATION
SQ	SQUARE
ST	STREET
STA	STATION
STL	STEEL
STD	STANDARD
SUR	SURFACE
SYM	SYMMETRICAL
⚠ TBSP	TEMPORARY BACTERIAL SAMPLE POINT
TOE	TOE OF SLOPE
TOB	TOP OF BANK
THK	THICK
TEL	TELEPHONE
TEMP	TEMPERATURE
TRANS	TRANSFORMER
TYP	TYPICAL
UE	UTILITY EASEMENT
VERT	VERTICAL
W	WATER
WM	WATER MAIN
W/	WITH
W/O	WITHOUT
WD	WOOD
WT	WEIGHT
WV	WATER VALVE
WH	WALL HYDRANT

ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

ABBREVIATIONS & GENERAL NOTES

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013–072	As Shown	C–2



ESTILO
COLLIER COUNTY, FLORIDA

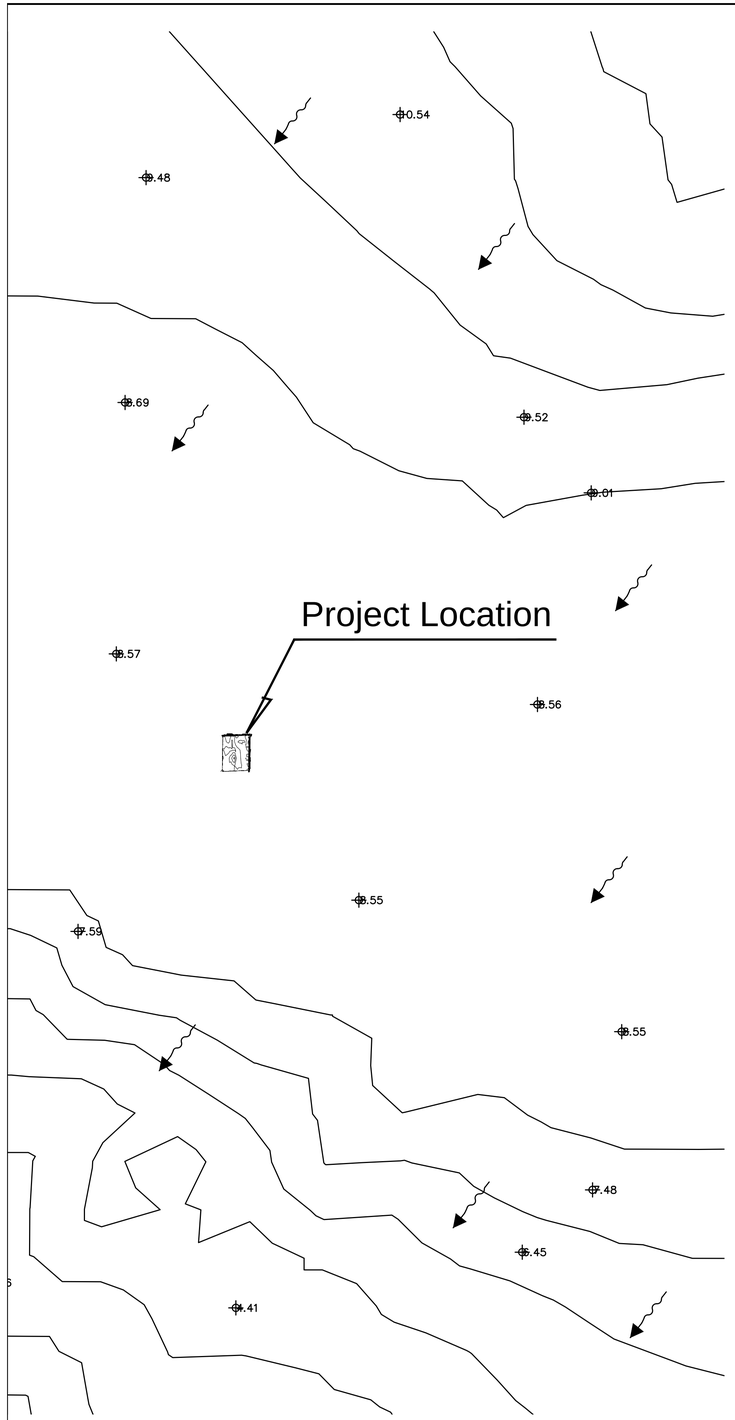
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

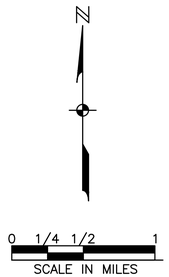
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

AERIAL

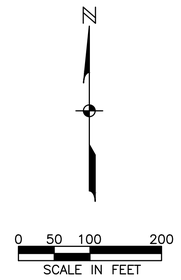
DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-3



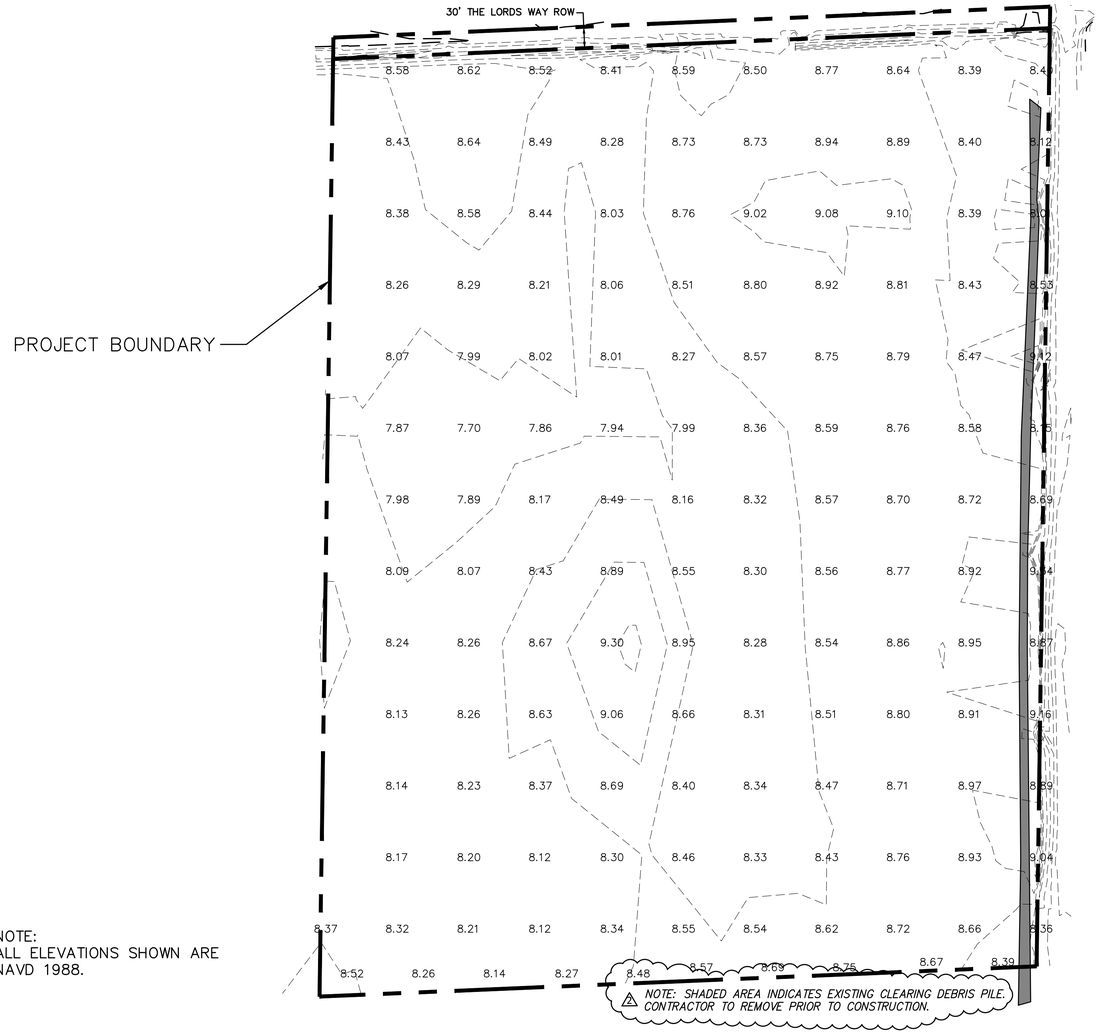
USGS 7.5–Minute SDTS DEM 10–Meter file dated 10–13–2006 CONVERTED TO NAVD 1988.



NOTE:
ALL ELEVATIONS SHOWN ARE NAVD 1988.



ELEVATIONS FROM RHODES AND RHODES LAND SURVEY DATED 15 MARCH, 2012 AND ADJUSTED –1.29' TO CONVERT TO NAVD 1988.



ESTILO
COLLIER COUNTY, FLORIDA

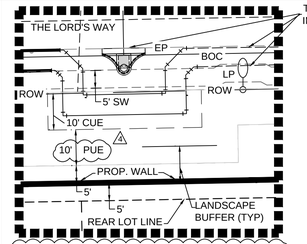
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

EXISTING DRAINAGE MAP

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013–072	As Shown	C–4



THE LORD'S WAY ROADWAY \ UTILITY IMPROVEMENTS BY OTHERS

EASEMENT DETAIL

SCALE: 1" = 20'

PHASING NOTE:
PERIMETER BERM, LAKE & OUTFALL STRUCTURE SHALL BE BUILT WITHIN PHASE I CONSTRUCTION. SEE SHEETS C-6 & C-7 FOR ADDITIONAL INFORMATION

PHASE I CONSTRUCTION NOTES:

1. CONTRACTOR SHALL INSTALL ALL INFRASTRUCTURE WITHIN THE PHASE I LIMITS AS SHOWN HEREIN.
2. CONTRACTOR SHALL EXCAVATE & CONSTRUCT ENTIRE LAKE IN PHASE I.
3. CONTRACTOR SHALL INSTALL PERIMETER AROUND ENTIRE PROJECT AS SHOWN ON SHEETS C-6 & C-7.
4. CONTRACTOR SHALL INSTALL ALL DRAINAGE STRUCTURES & PIPES WITHIN THE PHASE I LIMITS TO INCLUDE STRUCTURES CS-1, 24" RCP PIPE & S-38 (OUTFALL STRUCTURES LOCATED IN SOUTHWEST CORNER OF LAKE TO PRESERVE AREA). SEE SHEET C-7 FOR LOCATION & INFORMATION.
5. CONTRACTOR SHALL INSTALL 2 - 50' RADIUS TEMPORARY CUL-DE-SAC(S) AT THE OF PHASE I PAVEMENT CONSTRUCTION AS SHOWN HEREIN. SEE SHEET C-20 FOR TEMPORARY CUL-DE-SAC DETAIL.
6. CONTRACTOR SHALL INSTALL 8" WATERMAIN THROUGH TEMPORARY CUL-DE-SACS & TERMINATE 5' BEYOND WITH TEMPORARY AUTOMATIC FLUSHING DEVICE AS APPROVED BY COLLIER COUNTY UTILITIES STANDARDS MANUAL.
7. CONTRACTOR SHALL INSTALL 8" GRAVITY SEWER MAINS & SEWER LATERALS THROUGH TEMPORARY CUL-DE-SACS & TEMINATE 5' BEYOND & PLUG FOR FUTURE CONNECTION.

PHASE II ◄► PHASE I

TYPE A BUFFER IN COMMON AREA (TYP) SEE LANDSCAPE PLANS FOR INFORMATION

67.86'

25' PRESERVE SETBACK (TYP.)

RIP-RAP @ 1:1 TO EL. = 12.54

146'

1002.99'

PRESERVE

42' ROW (TYP)

20' ROADWAY (TYP)

9' BOC TO ROW (TYP)

8' SW

8' CROSSWALK 12" WHITE

5' - 8' SW TRANSITION STA.=116+92

ESTILO CIR

42' ROW

20' L.M.E./COMMON AREA

LITTORAL AREA

LAKE

272.96'

570.07'

20' L.M.E./COMMON AREA

6' SIDEYARD SETBACK - TYPICAL ALL LOTS

PRESERVE CONSERVATION AREA SIGNS (3) (TYP)

PRESERVE

5' STRUCTURAL BUFFER (HEDGE) (TYP)

164'

25' PRESERVE SETBACK (TYP.)

20' TYPE C BUFFER IN COMMON AREA

270.11'

SIDEWALK (BY OTHERS)

PERIMETER BERM "NO WALL OPTIONAL" 6' CHAIN LINK FENCE

SEE PUE\CUE DETAIL 1 THIS SHEET

10' PUE

5' C.U.E. TYP.

5' CUE

PERIMETER BERM @ 8' WALL

143.13'

5' TYP

FUTURE AMENITY

8' CROSSWALK 24" WHITE

34.99'

10' PUE

15' CUE

ESTILO DRIVE

20'

28'

12'

8' CROSSWALK

25' D.E.

PERIMETER BERM @ 6' WALL

143.68'

5' TYP

PHASE I

PERIMETER BERM AND BEGIN 8' WALL ALONG EAST PROP. LINE

PERIMETER BERM @ 6' WALL ALONG NORTH PROPERTY LINE TYPICAL

PERIMETER BERM 8' WALL

SIDEWALK (BY OTHERS)

ROADWAY (BY OTHERS) W/ 2' TYPE "F" CURB

OFFSITE ROADWAY IMPROVEMENT PLANS BY OTHERS. PLANS PREPARED BY: ROBAU & ASSOCIATES - REFER TO HACIENDA LAKES BUSINESS PARK PLANS REFER TO PLANS FOR ALL WORK WITHIN THE LORDS WAY RIGHT OF WAY. ROADWAY IMPROVEMENT PLANS INCLUDE TURN LANE AND PARTIAL ENTRY MEDIAN AS SHOWN.

EXISTING 30' INGRESS\EGRESS ROADWAY & PUE
30' PUBLIC ACCESS & UE

BEGIN PAVEMENT & SIDEWALK CONSTRUCTION INDICATED BY SHADED SOLID HATCH. MATCH EXISTING PAVEMENT & SIDEWALK LOCATION PER ABOVE NOTE\REFERENCED PLAN SET BY OTHERS

CROSSWALK, STOP SIGN & ROAD STRIPING BY OTHERS

FUTURE PROJECT ENTRY MONUMENT

PERIMETER BERM @ 6' WALL

12' WIDE SODDED, STABILIZED ACCESS DRIVE
PUMP STATION 40'x48' C.U.E.

SIDEWALK (BY OTHERS)

HIDDEN LINETYPE INDICATES SIDEWALK, PAVEMENT & CURB BY OTHERS. SEE NOTE ABOVE.

EXIST. COUNTY WELL EASEMENT

0 30 60 120
SCALE IN FEET

LAKE
PAVEMENT
PRESERVE
CONCRETE SIDEWALK

LAND USE TABLE

LAND USE	ACREAGE
LOT AREA	16.92
LAKE AREA	3.54
RIGHT OF WAY	3.28
– PAVEMENT/CONC. AREA	2.03
– PERVIOUS AREA	1.25
FUTURE DEVELOPMENT AREA	0.65
OPEN SPACE/COMMON AREA	2.88
EASEMENT	0.04
PRESERVE AREA	3.51
TOTAL:	30.82

UNIT SUMMARY

LOT TYPE	NO. OF LOTS
SINGLE-FAMILY DETATCHED	75

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
3	REVISED PER COUNTY IC COMMENTS	11-30-2015
4	REVISED PER COUNTY IC COMMENTS	3-21-2016

ESTILO ACRES
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

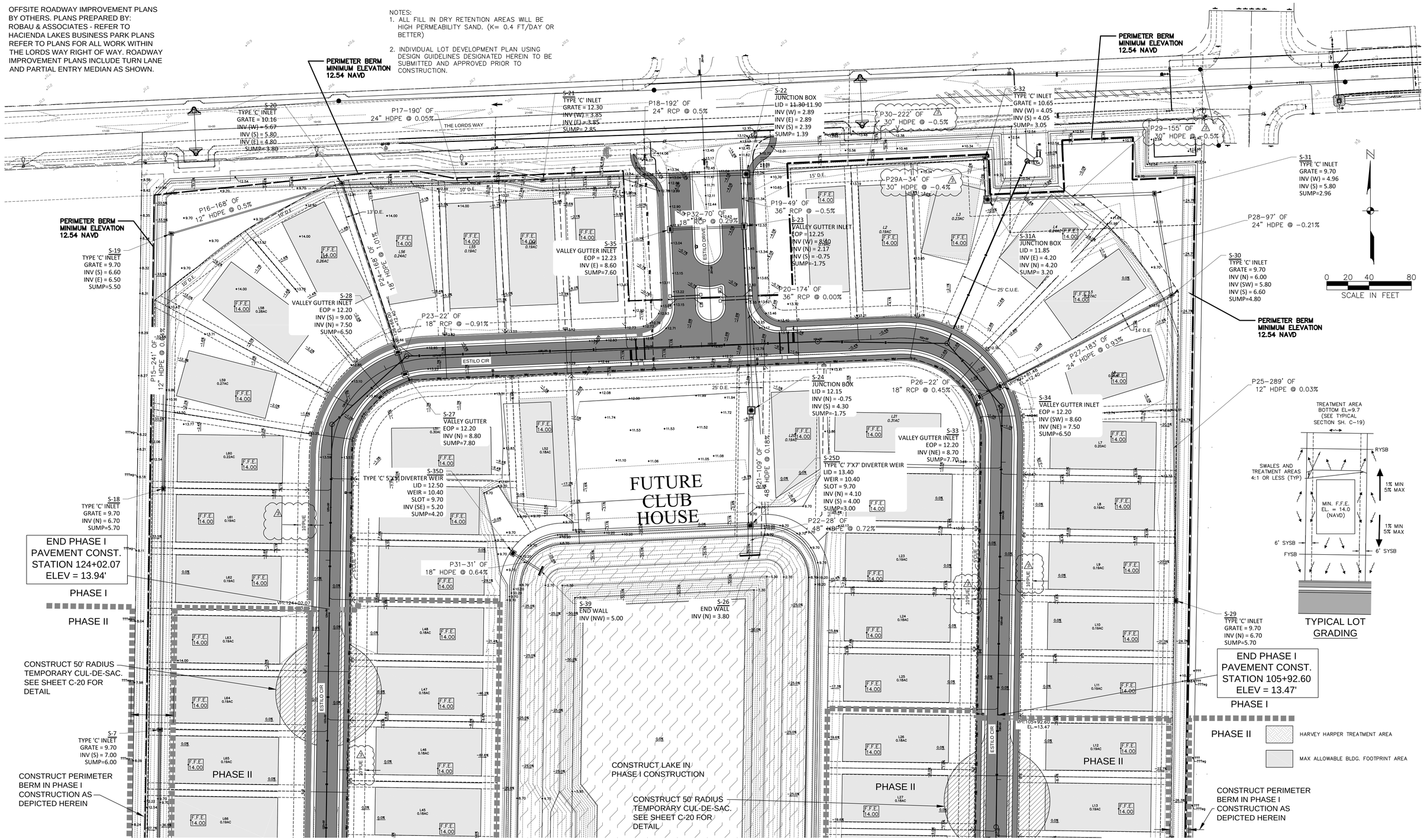
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

MASTER SITE PLAN

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-5

OFFSITE ROADWAY IMPROVEMENT PLANS BY OTHERS. PLANS PREPARED BY: ROBAU & ASSOCIATES - REFER TO HACIENDA LAKES BUSINESS PARK PLANS REFER TO PLANS FOR ALL WORK WITHIN THE LORDS WAY RIGHT OF WAY. ROADWAY IMPROVEMENT PLANS INCLUDE TURN LANE AND PARTIAL ENTRY MEDIAN AS SHOWN.

NOTES:
1. ALL FILL IN DRY RETENTION AREAS WILL BE HIGH PERMEABILITY SAND. (K= 0.4 FT/DAY OR BETTER)
2. INDIVIDUAL LOT DEVELOPMENT PLAN USING DESIGN GUIDELINES DESIGNATED HEREIN TO BE SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION.



REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
3	REVISED PER COUNTY IC COMMENTS	11-30-2015

ESTILO ACRES
COLLIER COUNTY, FLORIDA

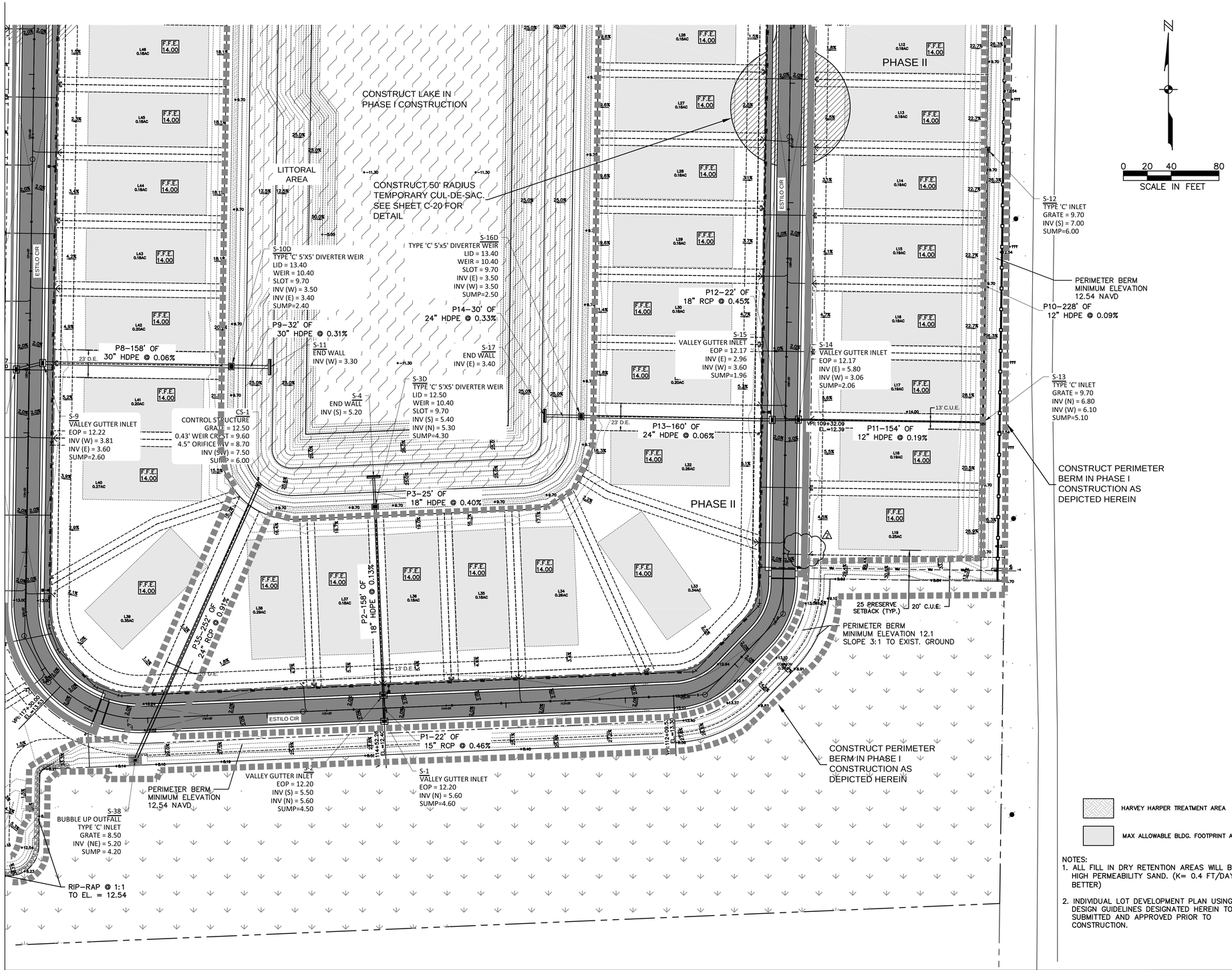
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

PAVING, GRADING, AND DRAINAGE PLANS - NORTH

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013–072	As Shown	C–6



NOTES:
1. ALL FILL IN DRY RETENTION AREAS WILL BE HIGH PERMEABILITY SAND. (K= 0.4 FT/DAY OR BETTER)
2. INDIVIDUAL LOT DEVELOPMENT PLAN USING DESIGN GUIDELINES DESIGNATED HEREIN TO BE SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION.

ESTILO
COLLIER COUNTY, FLORIDA

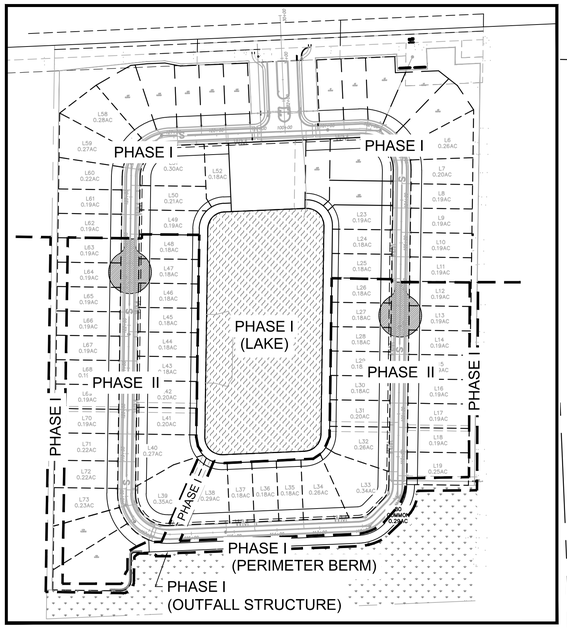
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

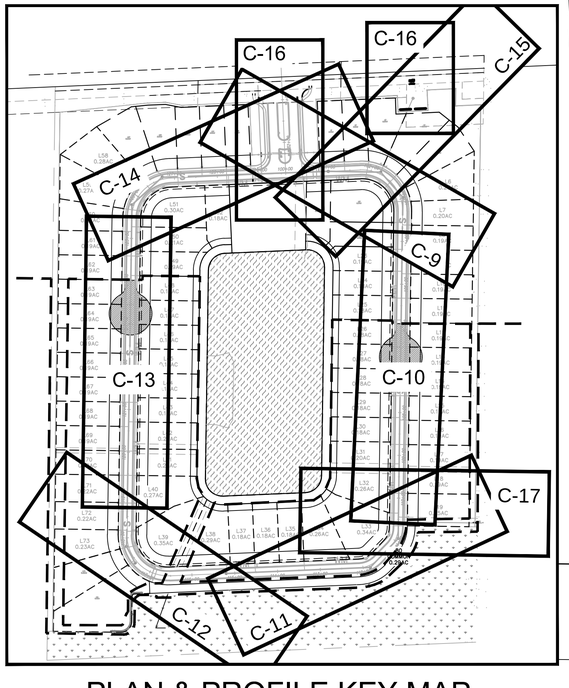
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

PAVING, GRADING, AND DRAINAGE PLANS - SOUTH

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-7



MASTER PHASING PLAN



PLAN & PROFILE KEY MAP

0 30 60 120
SCALE IN FEET

PHASE II
PHASE I
PROPOSED BERM "NO WALL" OPTIONAL \ 6' CHAIN LINK FENCE
OFFSITE ROADWAY IMPROVEMENT PLANS BY OTHERS. PLANS PREPARED BY: ROBAU & ASSOCIATES - REFER TO HACIENDA LAKES BUSINESS PARK PLANS REFER TO PLANS FOR ALL WORK WITHIN THE LORDS WAY RIGHT OF WAY. ROADWAY IMPROVEMENT PLANS INCLUDE TURN LANE AND PARTIAL ENTRY MEDIAN AS SHOWN.
END PROPOSED GRAVITY SEWER STATION 122+73.92 PHASE I CONSTRUCTION. PLUG FOR FUTURE PHASE II CONNECTION
PROPOSED 8" GRAVITY SEWER MAIN
END PROPOSED 8" WATERMAIN 5' BEYOND TEMP. CUL DE SAC WITH TEMPORARY AUTOMATIC FLUSHING DEVICE.
PROPOSED 6' HIGH WALL ALONG NORTHERN PROPERTY LINE
10' PUE ALONG NORTHERN BOUNDARY TYPICAL
THE LORDS WAY
PHASE II
12' D.E.
10' PUE
8" GATE VALVE
ESTILO CIR
PHASE I
10' D.E.
PROPOSED FIRE HYDRANT
7.5'
10' PUE
PROPOSED FIRE HYDRANT
5' CUE
PROPOSED PERMANENT BACTERIAL SAMPLE POINT (TBSP)
PROPOSED FIRE HYDRANT
13' D.E.
EXISTING COUNTY 10" PVC WATER MAIN
EXISTING COUNTY 8" WATER MAIN
EXISTING COUNTY 10" PVC WATER MAIN
PRESERVE
20' D.E.
LITTORAL AREA
PROPOSED 8" WATER MAIN (C-900, CLASS 200, DR 14)
PROPOSED TEMPORARY BACTERIAL SAMPLE POINT (TBSP)
PROPOSED FIRE HYDRANT
PHASE I
LAKE
END PROPOSED 8" WATERMAIN 5' BEYOND TEMP. CUL DE SAC WITH TEMPORARY AUTOMATIC FLUSHING DEVICE.
8" GATE VALVE (3)
20" UTILITY CASING
10' PUE
15' CUE
ESTILO DRIVE
PROPOSED TEMPORARY BACTERIAL SAMPLE POINT (TBSP)
25' D.E.
PROPOSED FIRE HYDRANT
PROPOSED TEMPORARY BACTERIAL SAMPLE POINT (TBSP)
6" FORCE MAIN (BY OTHERS)
PROPOSED 8" WATER MAIN (C-900, CLASS 200, DR 14)
PROPOSED FIRE HYDRANT
EXISTING 30' INGRESS\ EGRESS ROADWAY & PUE
30' PUBLIC ACCESS & UE
23' D.E.
8" GATE VALVE (3)
PROPOSED FIRE HYDRANT
5' CUE
8" GATE VALVE
7.5'
10' PUE
6" FORCE MAIN CROSSING W/ PLUG VALVE (BY OTHERS)
25' C.U.E.
ESTILO CIR
PROPOSED 8" GRAVITY SEWER MAIN
40'X48' C.U.E.
CONNECT TO 6" FORCE MAIN STUB-OUT
PUMP STATION 40'x48' C.U.E.
12' WIDE SODDED, STABILIZED ACCESS DRIVE
13' D.E.
PROPOSED 8" GRAVITY SEWER MAIN
PROPOSED PERMANENT BACTERIAL SAMPLE POINT (PBSP)
20' C.U.E.
10' PUE
PHASE I
14' D.E.
20" UTILITY CASING
PHASE II
END PHASE I GRAVITY SEWER AT PROPOSED MANHOLE 04 STATION 106+94.83. PLUG SOUTH SIDE FOR FUTURE PHASE II CONNECTION
SANITARY SEWER NOTE: UPON COMPLETION & APPROVAL, ALL POTABLE WATER & SANITARY SEWER SHALL BE TURNED OVER TO THE COLLIER COUNTY WATER-SEWER DISTRICT.
EXIST. COUNTY WELL EASEMENT
PROPERTY LINE TYPICAL
8" BLOW-OFF ASSEMBLY - AUTO FLUSHING DEVICE
8" PLUG VALVE
PROPOSED 8" WATER MAIN FUTURE CONNECTION
PHASE II
PHASE I
PROPOSED 8' WALL
WATER MAIN LOCATED 7.5' BEHIND BOC PER LDC

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
3	REVISED PER COUNTY IC COMMENTS	11-30-2015
4	REVISED PER COUNTY IC COMMENTS	3-21-2016

ESTILO ACRES
COLLIER COUNTY, FLORIDA

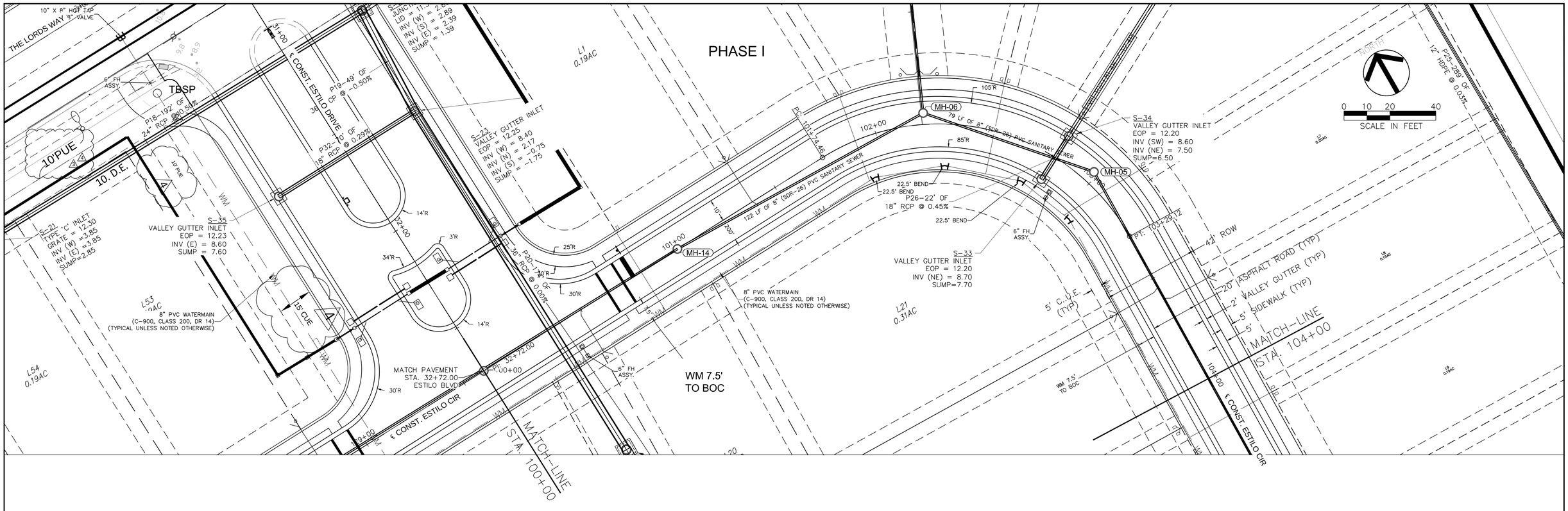
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

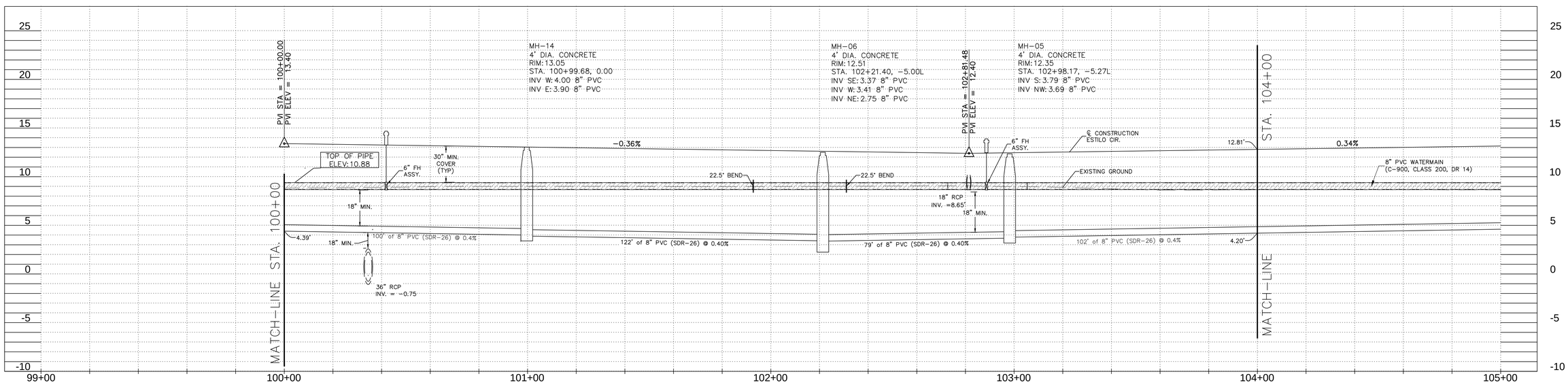
PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

MASTER UTILITY PLAN

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-8





ALL ELEVATIONS NAVD

2013-072 PPL pnp.dwg, Apr 04, 2016, 12:09pm

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
⚠3	REVISED PER COUNTY IC COMMENTS	11-30-2015
4	REVISED PER COUNTY IC COMMENTS	3-21-2016

ESTILO ACRES ⚠3
COLLIER COUNTY, FLORIDA

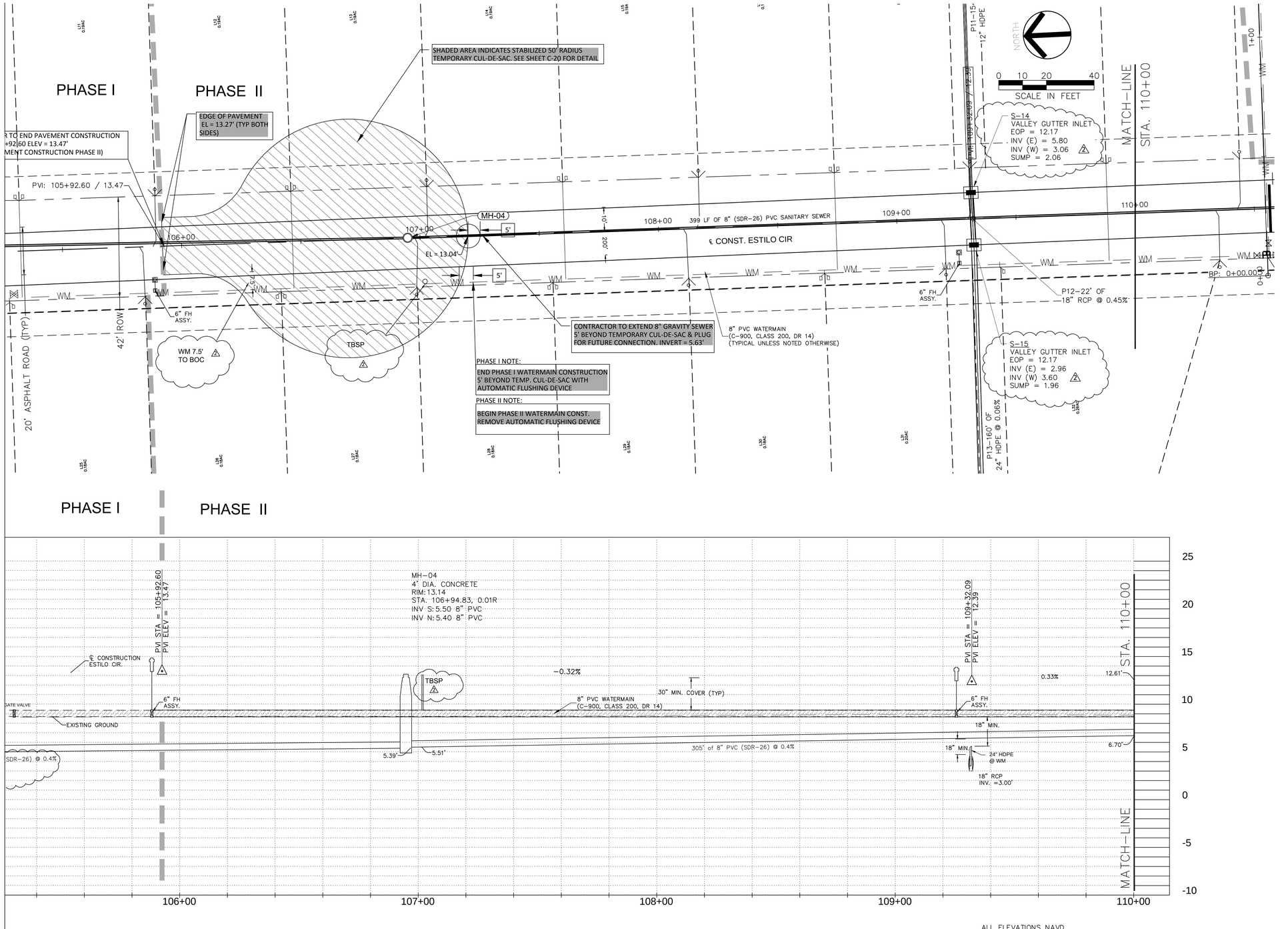
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

PLAN AND PROFILE

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	1" = 20' HORZ. 1" = 5' VERT	C-9



ESTILO
COLLIER COUNTY, FLORIDA

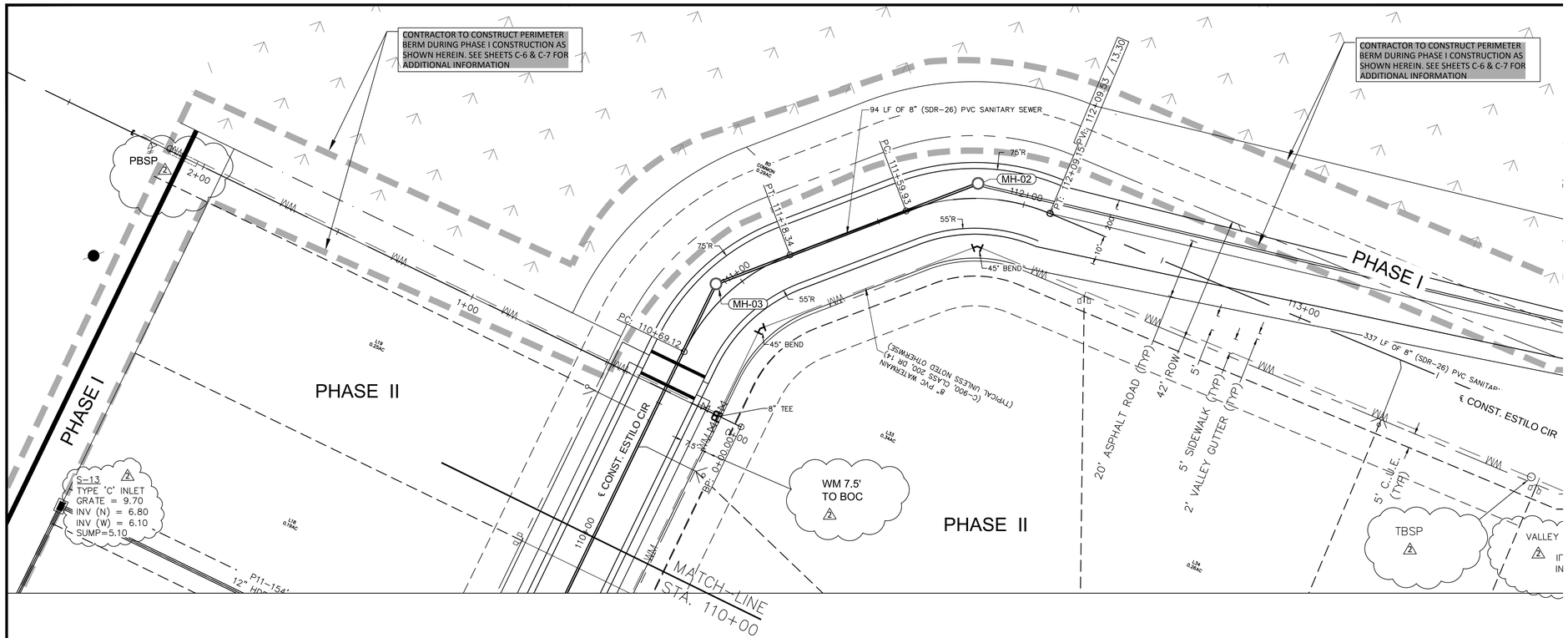
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

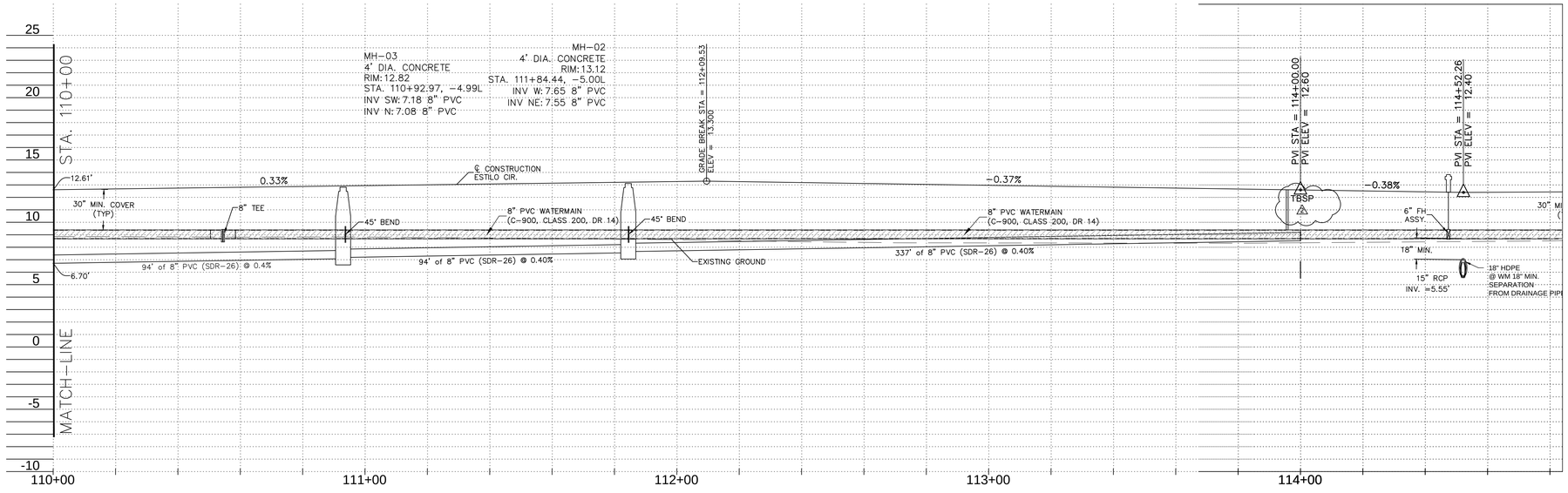
PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

PLAN AND PROFILE

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	1" = 20' HORZ. 1" = 5' VERT	C-10





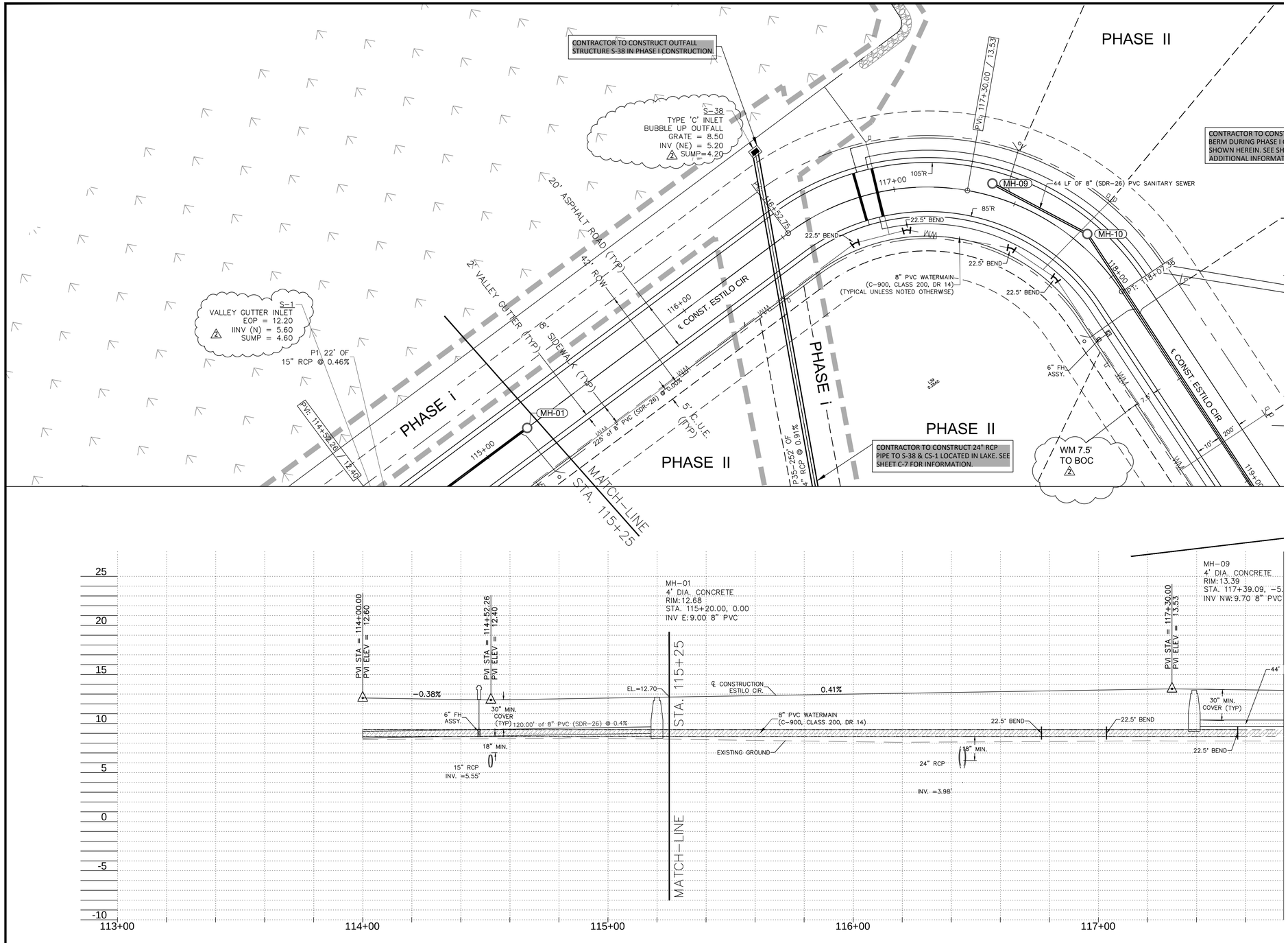
2013-072 PPL pnp.dwg, Jun 11, 2015, 11:14am

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014

ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJEC



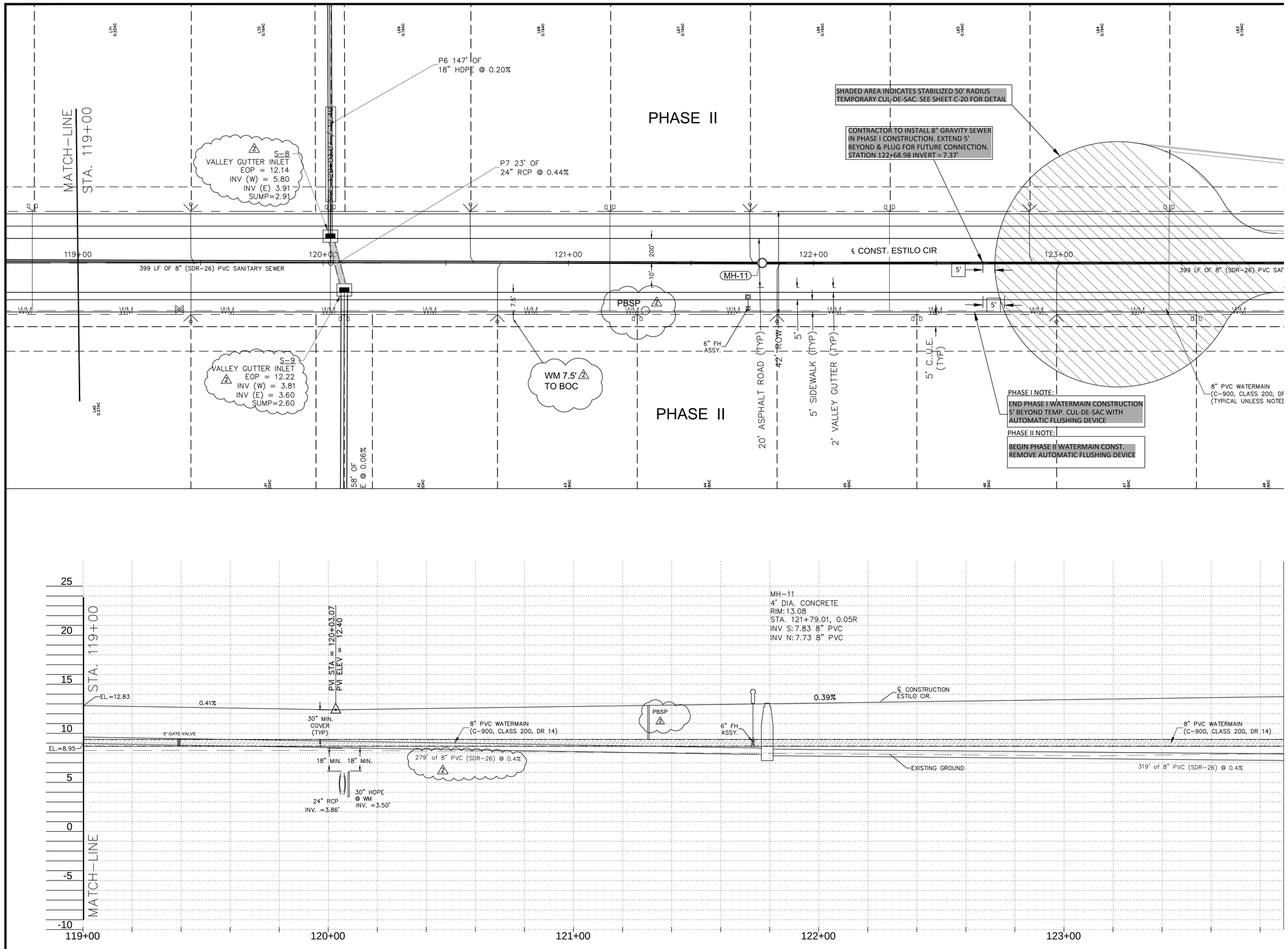
2013-072 PPL pnp.dwg, Jun 11, 2015, 11:14am

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014

ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJEC



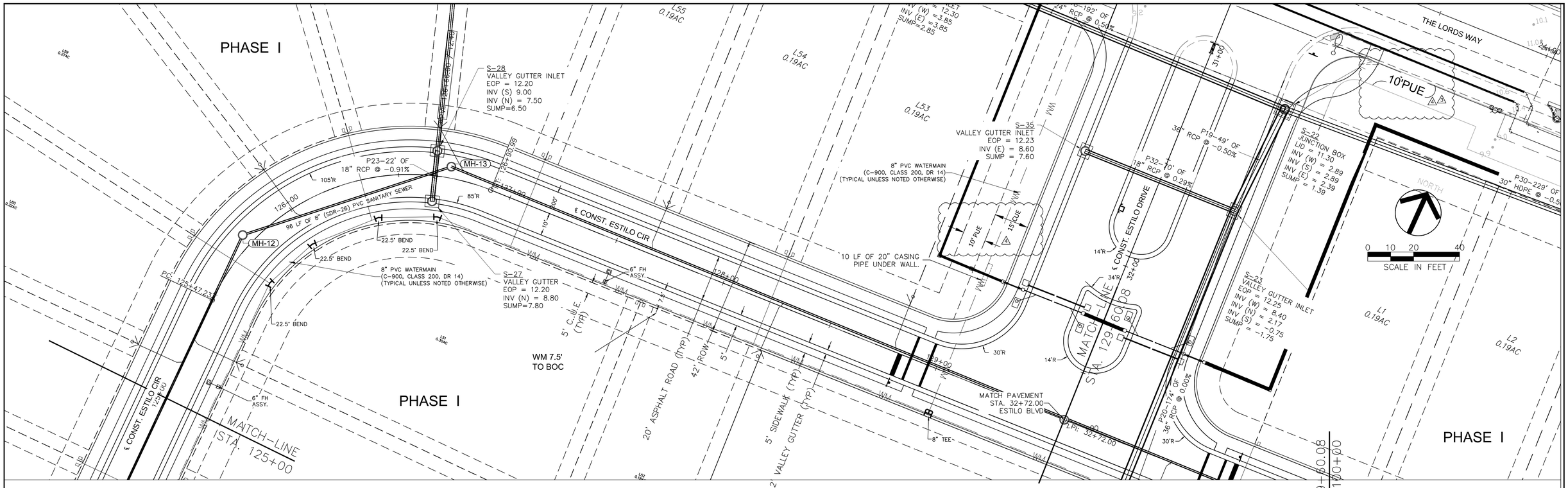
2013-072 PPL pnp.dwg, Jun 11, 2015, 11:14am

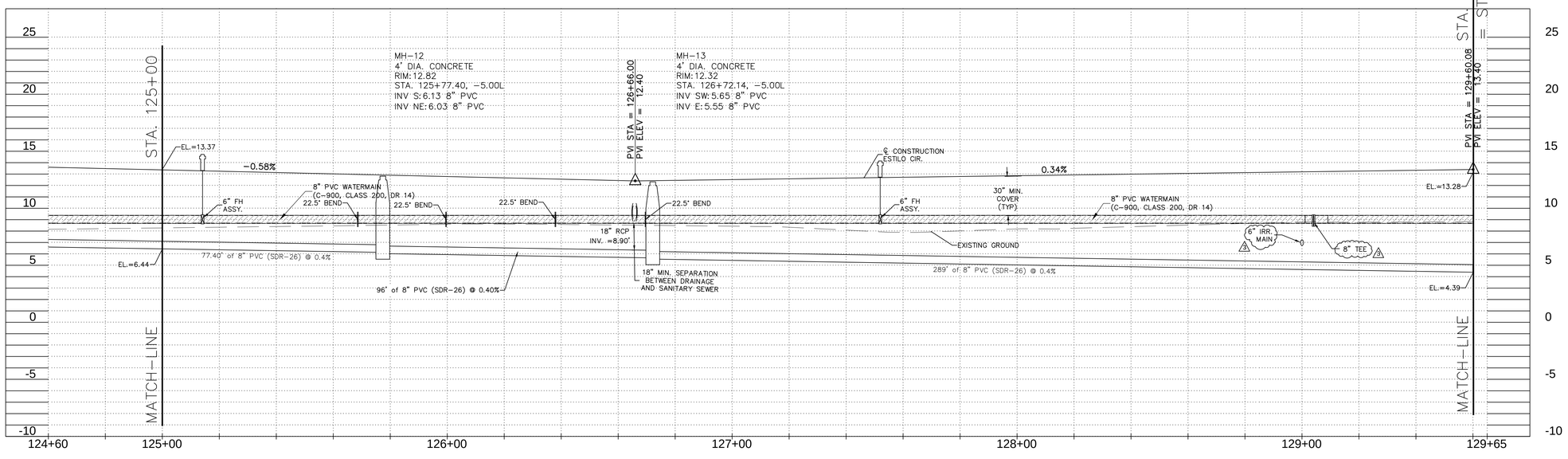
REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014

ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJEC





ALL ELEVATIONS NAVD

2013-072 PPL pnp.dwg, Apr 04, 2016, 12:12pm

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
⚠3	REVISED PER COUNTY IC COMMENTS	11-30-2015
4	REVISED PER COUNTY IC COMMENTS	3-21-2016

ESTILO ACRES ⚠3
COLLIER COUNTY, FLORIDA

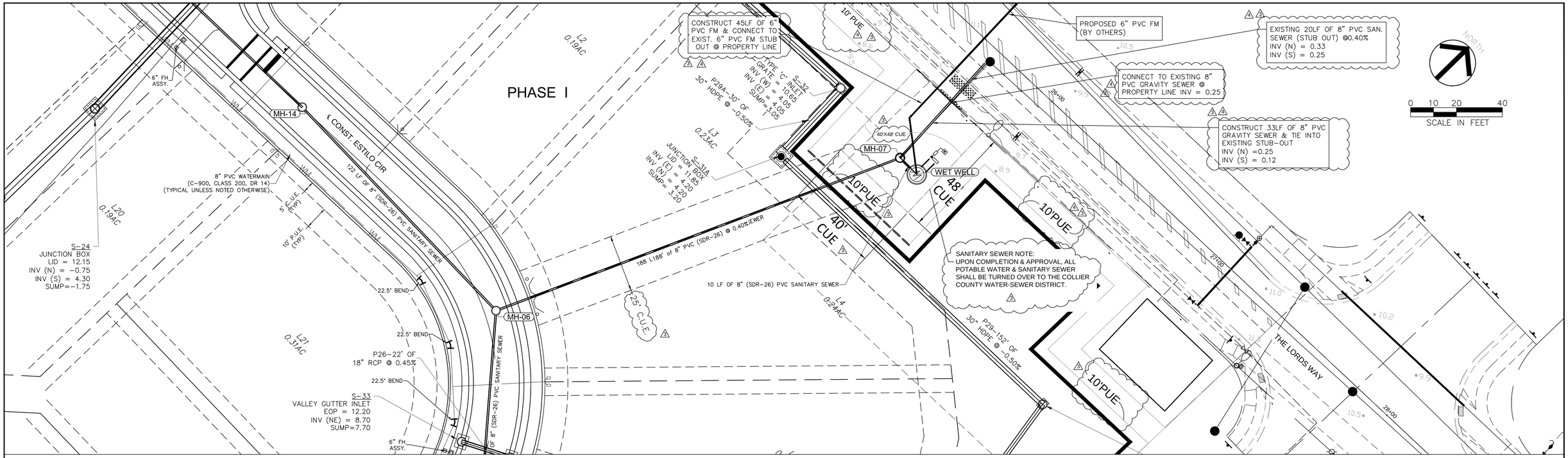
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

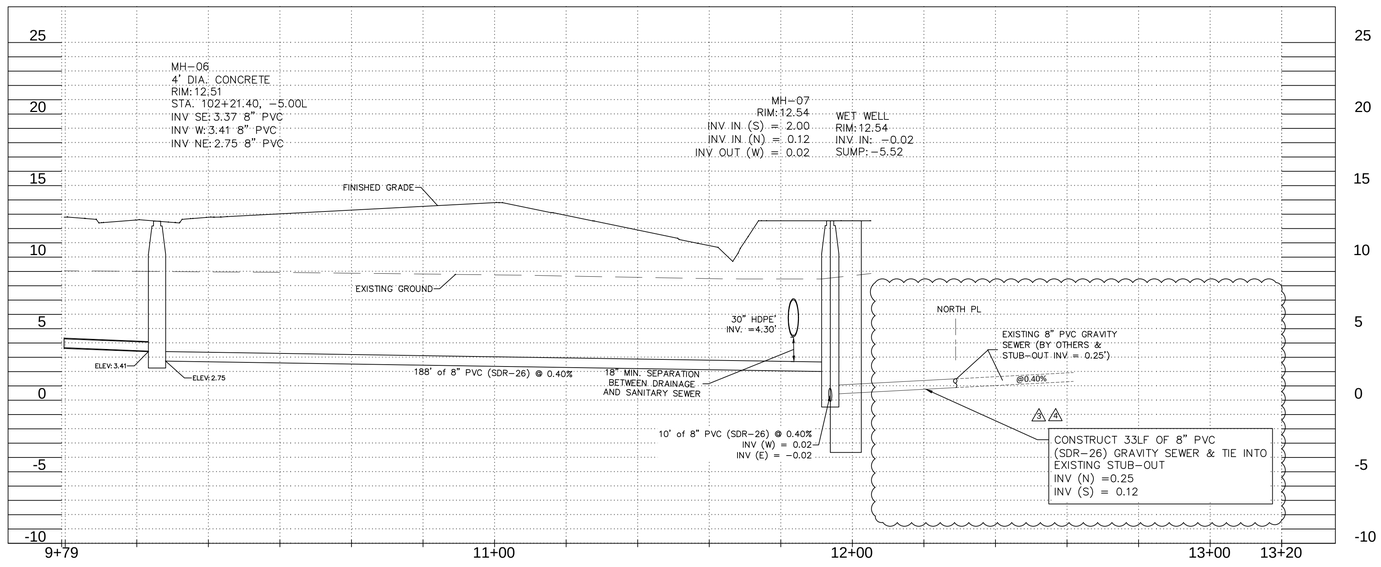
PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

PLAN AND PROFILE

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	1" = 20' HORZ. 1" = 5' VERT	C-14





ALL ELEVATIONS NAVD

2013-072 PPL pnp.dwg, Apr 04, 2016, 12:13pm

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
3	REVISED PER COUNTY IC COMMENTS	11-30-2015
4	REVISED PER COUNTY IC COMMENTS	3-21-2016

ESTILO ACRES
COLLIER COUNTY, FLORIDA

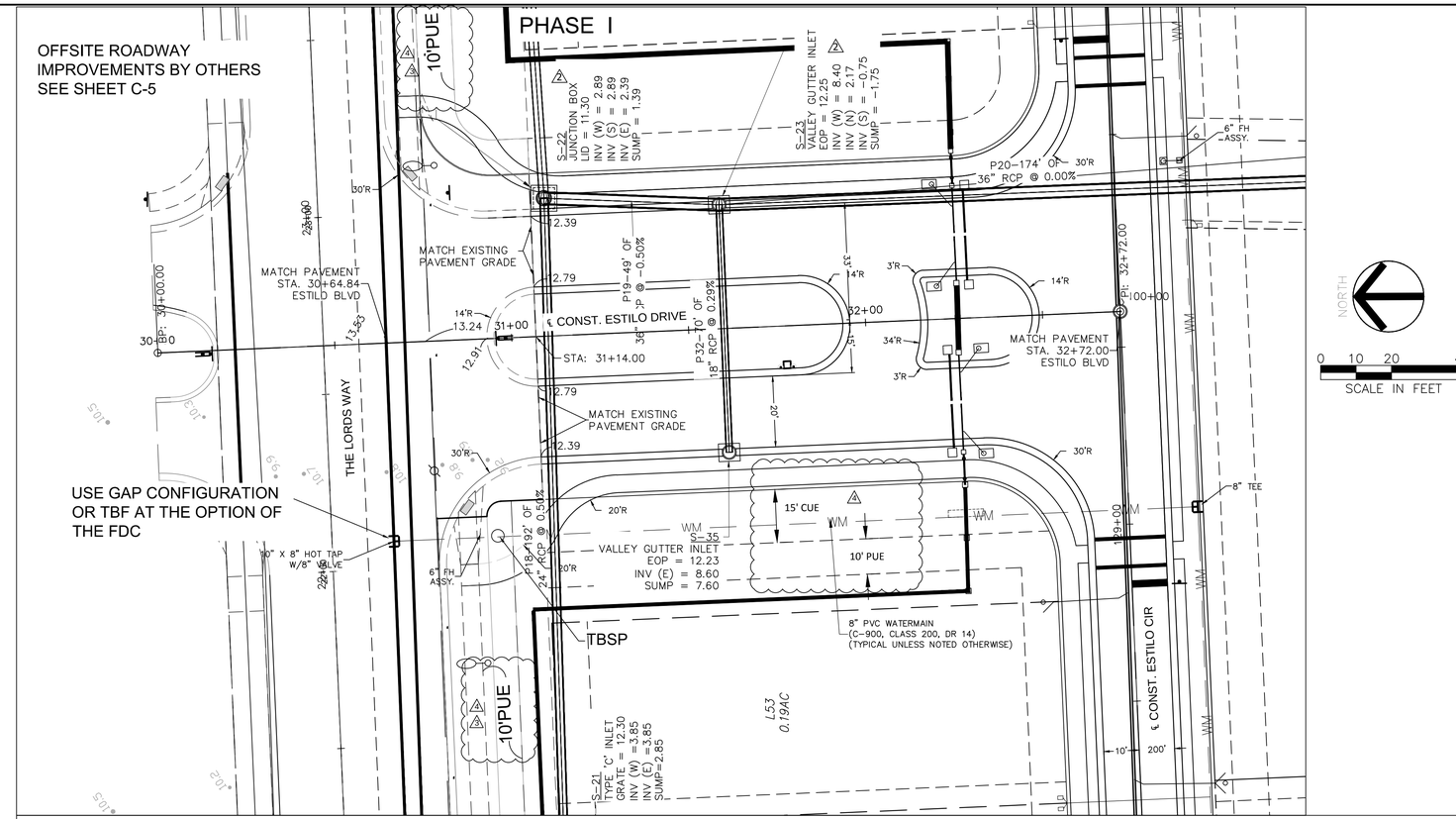
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

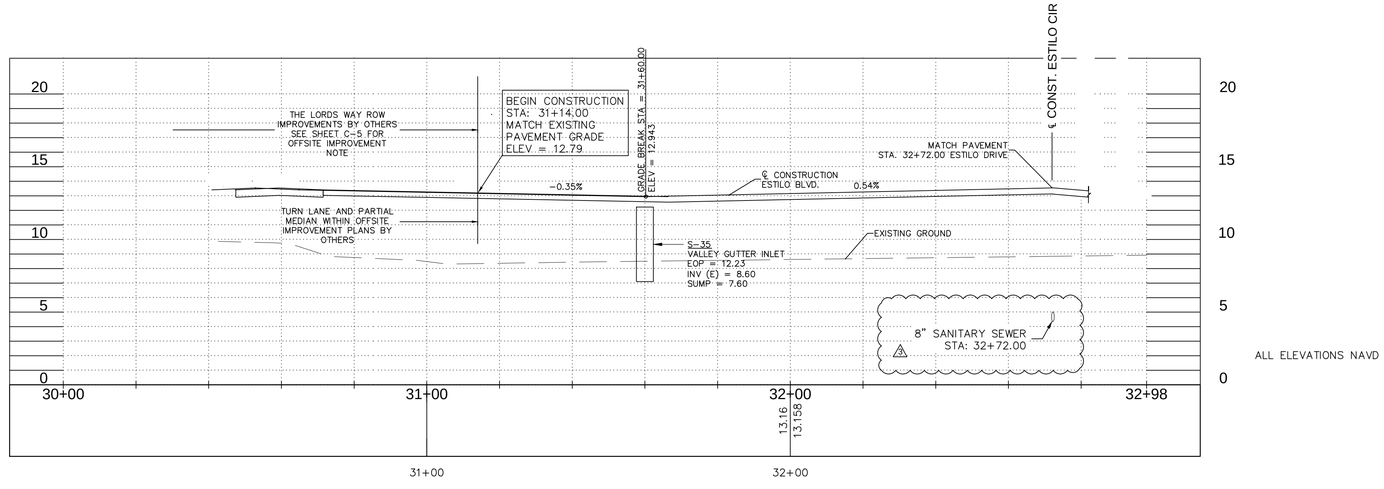
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

PLAN AND PROFILE

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	1" = 20' HORZ. 1" = 5' VERT	C-15



WATERMAIN PROFILE ON SHEET C-18



2013-072 PPL pnp.dwg, Apr 04, 2016, 12:23pm

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
3	REVISED PER COUNTY IC COMMENTS	11-30-2015
4	REVISED PER COUNTY IC COMMENTS	3-21-2016

ESTILO ACRES
COLLIER COUNTY, FLORIDA

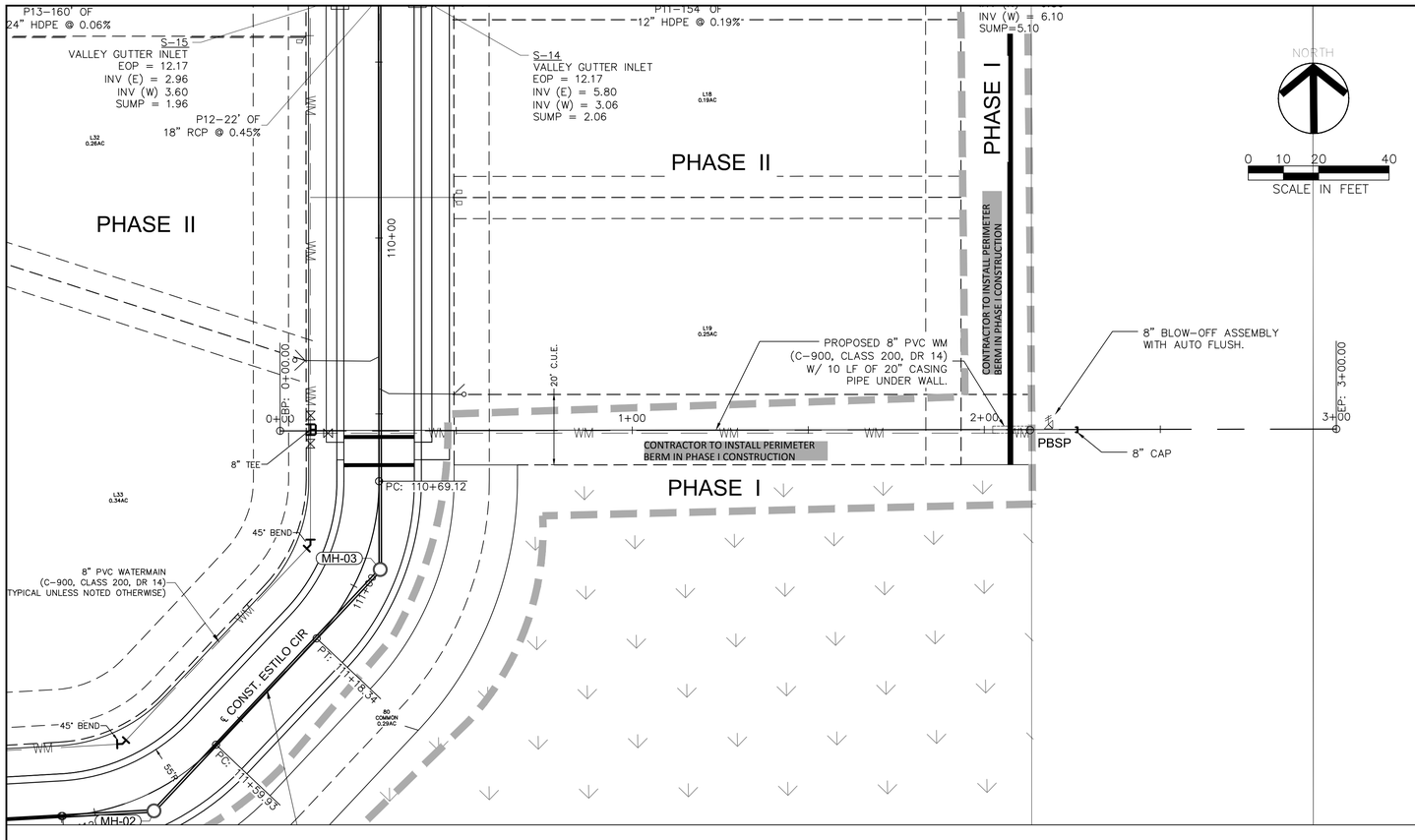
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

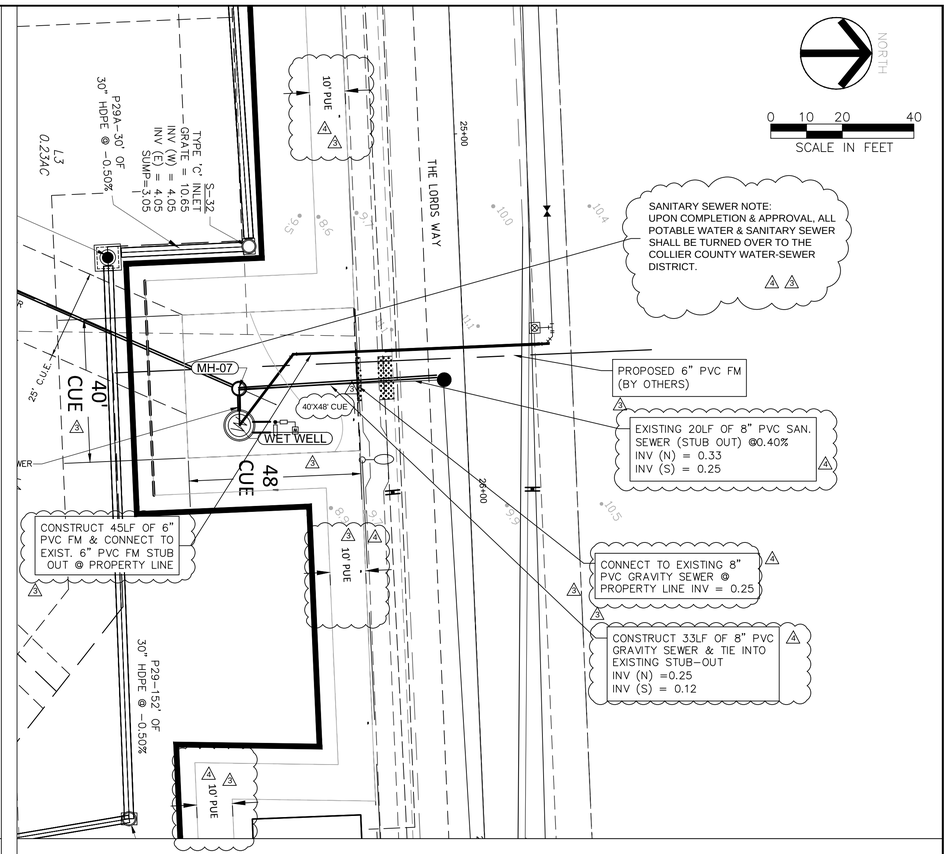
PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

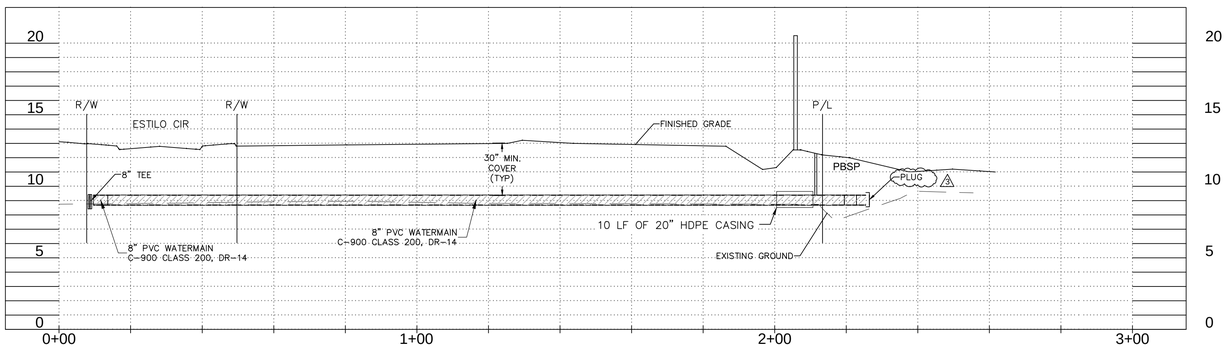
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

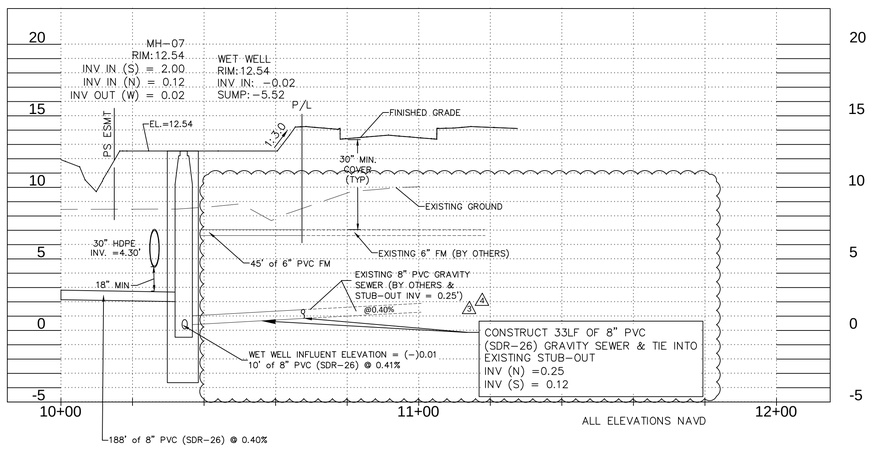
PLAN AND PROFILE

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	1" = 20' HORZ. 1" = 5' VERT	C-16









2013-072 PPL pnp.dwg, Apr 04, 2016, 12:25pm

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
3	REVISED PER COUNTY IC COMMENTS	11-30-2015
4	REVISED PER COUNTY IC COMMENTS	3-21-2016

ESTILO ACRES 3
COLLIER COUNTY, FLORIDA

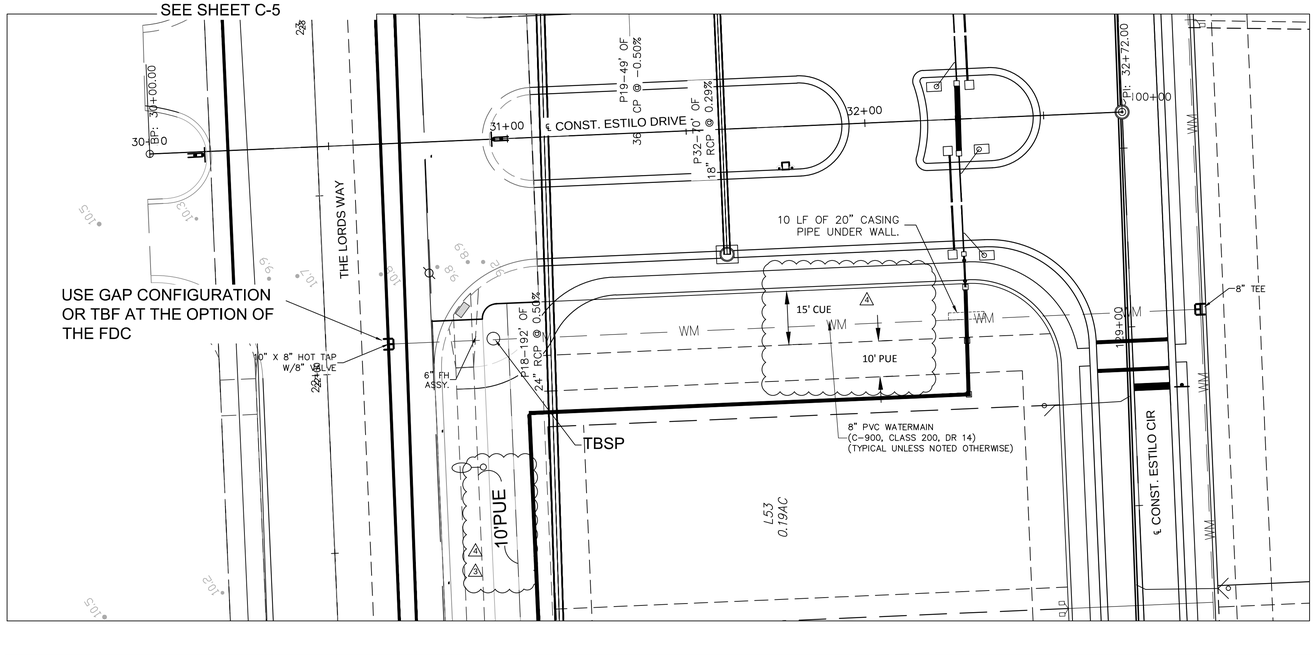
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

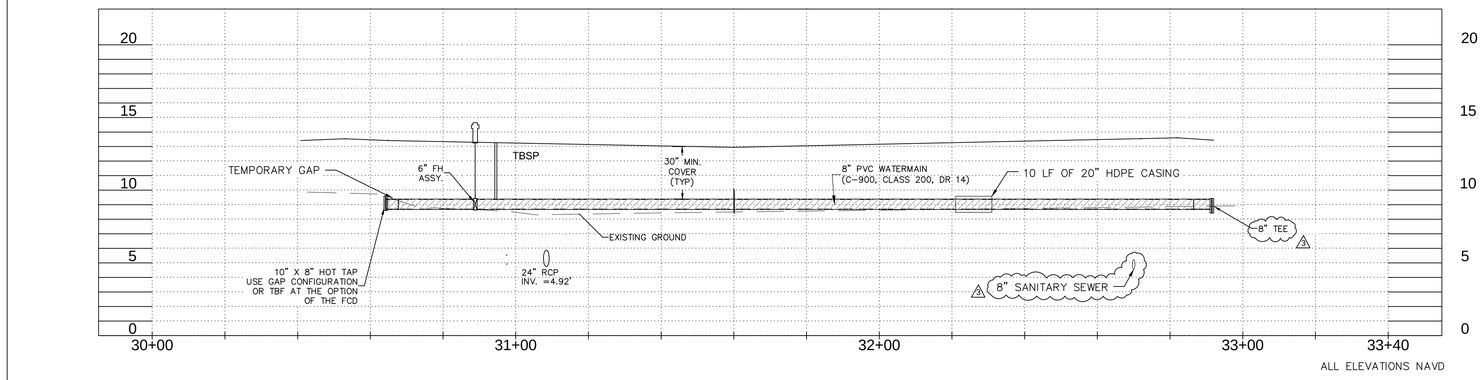
PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

PLAN AND PROFILE

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	1" = 20' HORZ. 1" = 5' VERT	C-17





2013-072 PPL pnp.dwg, Apr 04, 2016, 12:27pm

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
3	REVISED PER COUNTY IC COMMENTS	11-30-2015
4	REVISED PER COUNTY IC COMMENTS	3-21-2016

ESTILO ACRES ⚠3
COLLIER COUNTY, FLORIDA

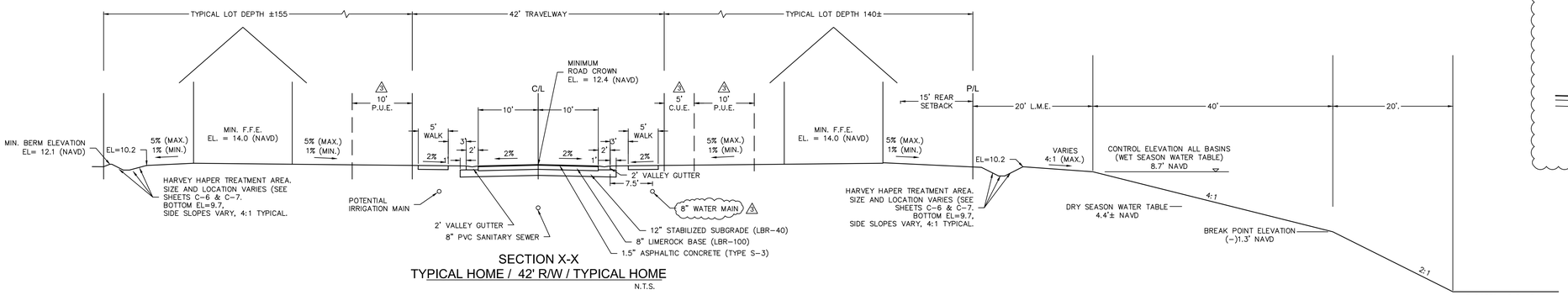
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

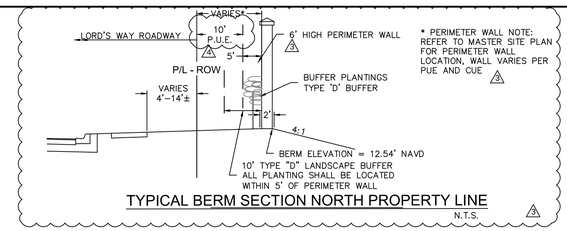
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

PLAN AND PROFILE

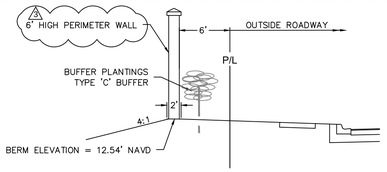
DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	1" = 20' HORZ. 1" = 5' VERT	C-18



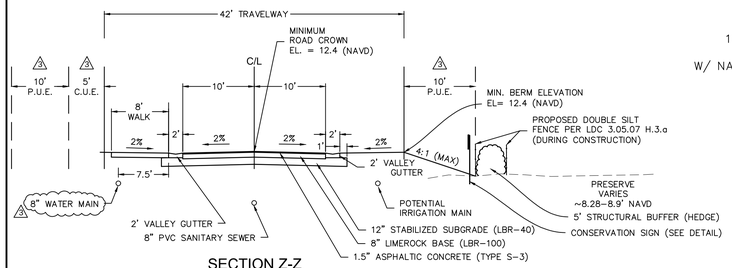
SECTION X-X
TYPICAL HOME / 42' R/W / TYPICAL HOME
N.T.S.



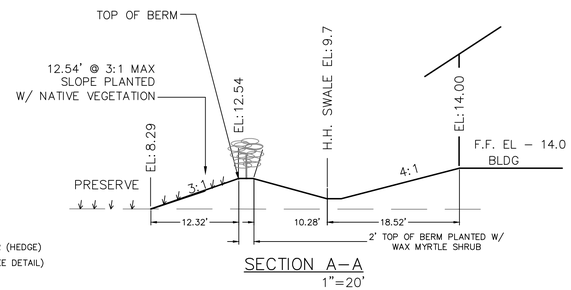
TYPICAL BERM SECTION NORTH PROPERTY LINE
N.T.S.



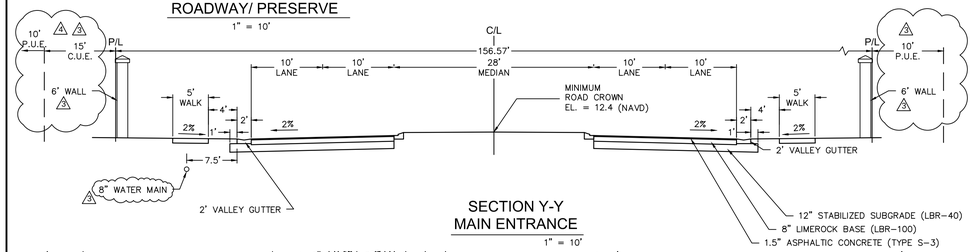
TYPICAL BERM SECTION EAST PROPERTY LINE
N.T.S.



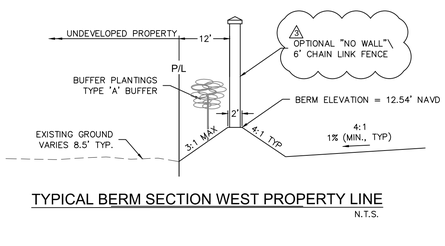
SECTION Z-Z
ROADWAY/ PRESERVE
1" = 10'



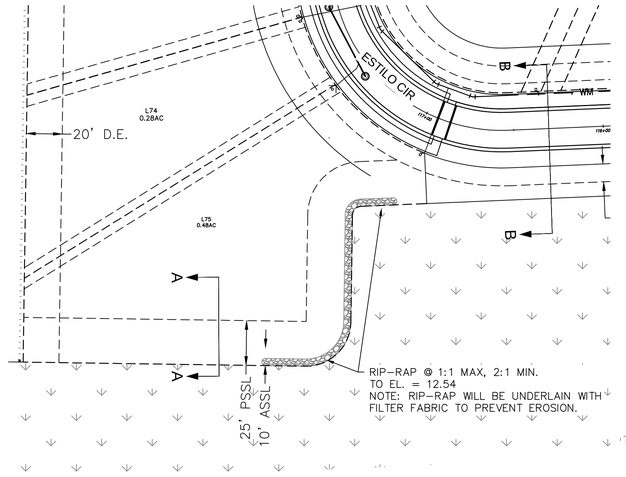
SECTION A-A
1"=20'



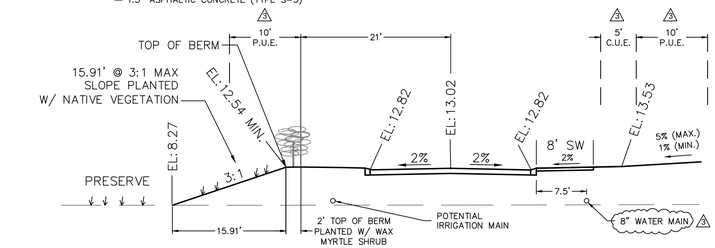
SECTION Y-Y
MAIN ENTRANCE
1" = 10'



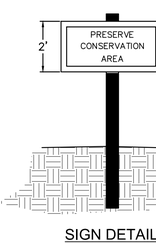
TYPICAL BERM SECTION WEST PROPERTY LINE
N.T.S.



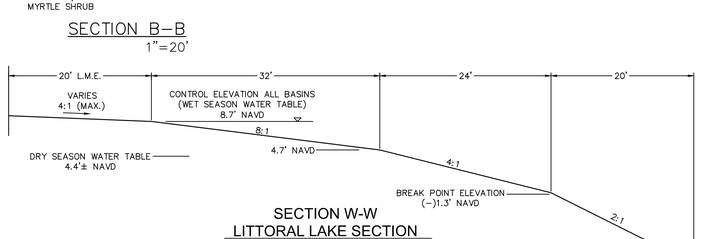
PRESERVE TYPICAL SECTION KEY
N.T.S.



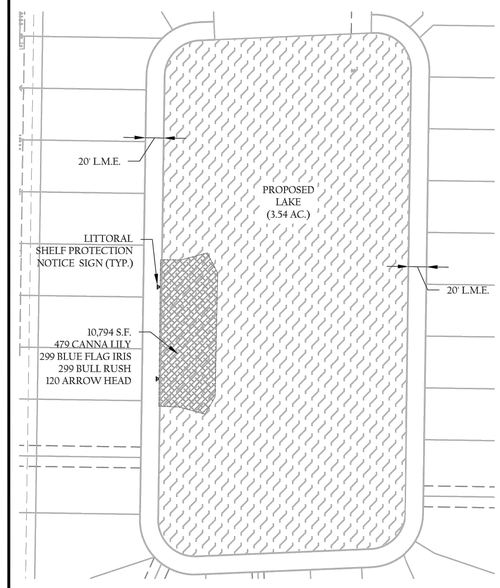
SECTION B-B
1"=20'



SIGN DETAIL
N.T.S.

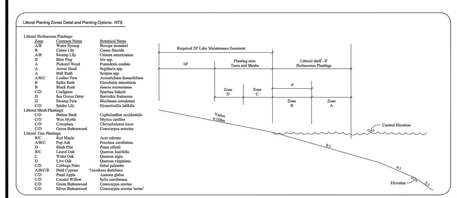


SECTION W-W
LITTORAL LAKE SECTION
1" = 10'



D. LITTORAL PLANTING REQUIREMENT:
Per LDC Section 3.05.10A.1
7% of total lake area to be planted
3.54 Ac. Lake x 7% = 10,794 s.f. of Littorals Provided:
10,794 s.f. Littoral Provided

LITTORAL SHELF PLANTINGS



MASTER PLANT SCHEDULE

	SYM	QTY	NATIVE	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS
LITTORALS	N/A	479	Y	CANNA FLACCIDA RUBRUM	CANNA LILY	4" LINER, 36" O.C.
	N/A	599	Y	IRIS VIRGINICA	BLUE FLAG IRIS	4" LINER, 36" O.C.
	N/A	599	Y	TYPHA LATIFOLIA	BULRUSH	4" LINER, 36" O.C.
	N/A	120	Y	SYNGONIUM PODOPHYLLUM	ARROWHEAD	4" LINER, 36" O.C.

ensite
345 FIRST STREET, SUITE 301 • FORT MYERS, FLORIDA 33901
PH: (239) 226-1054 FX: (239) 226-1056
TF: 30544 • Cа.C2000019
WWW.ENSITE.COM

PROJECT:
ESTILO ACRES

TITLE:
LITTORAL EXHIBIT

Exhibit
EX-01

Project Number: 1159-04
Cad File: LIT EXH
Date: 6-25-15
P:\Projects\1159 Hogan Engineering\1159-04 Leslie Way SDCA\Landscape\Dwl_subMittal

REVISIONS		
1	REVISED PER COUNTY COMMENTS	6-25-2014
2	REVISED PER COUNTY COMMENTS	7-10-2014
3	REVISED PER COUNTY IC COMMENTS	11-30-2015
4	REVISED PER COUNTY IC COMMENTS	3-21-2016

ESTILO ACRES
COLLIER COUNTY, FLORIDA

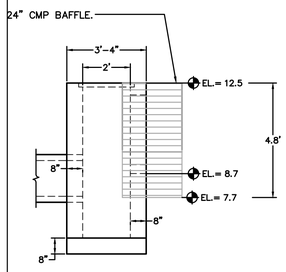
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

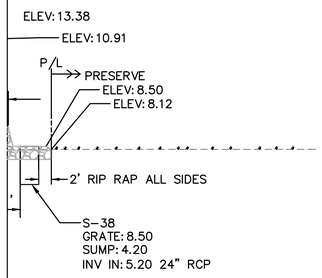
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

TYPICAL SECTIONS

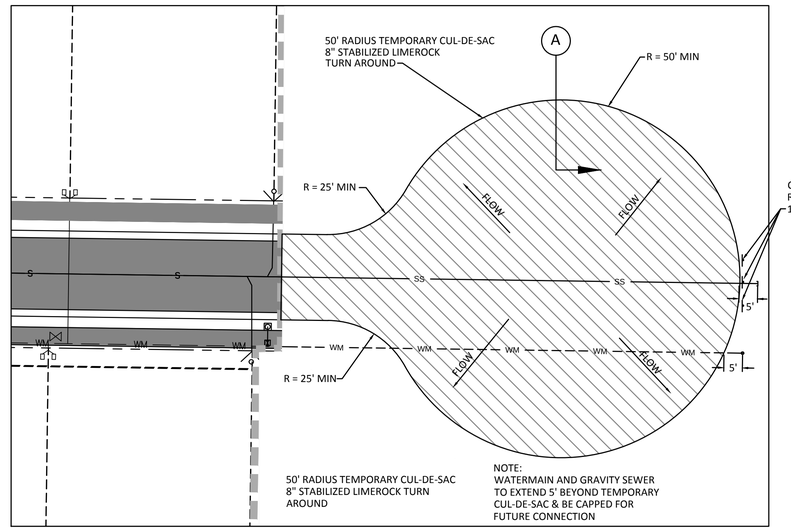
DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-19



ype C Inlet
S-1
" = 3'

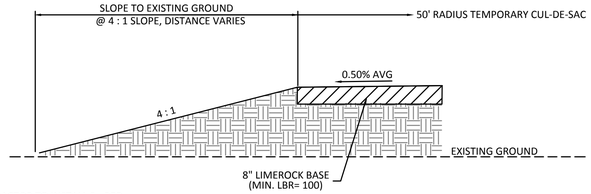


Bubble Up
38
SCALE

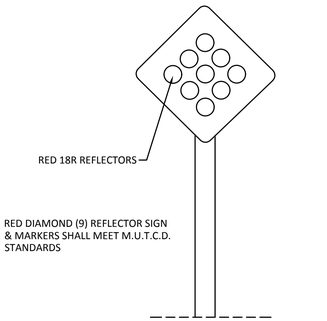


PLAN VIEW
SCALE: 1" = 20'

CONTRACTOR TO INSTALL 3 - RED REFLECTOR WARNING SIGNS - 18X18, 5' O.C. AS SHOWN

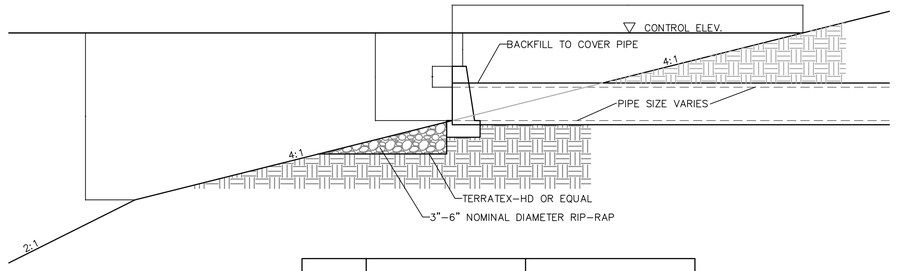


SECTION A
NTS



RED REFLECTOR WARNING SIGN
NTS

TEMPORARY CUL-DE-SAC DETAIL
SCALE AS NOTED



PIPE SIZE	DEPTH BELOW CONTROL (D)	DISTANCE FROM CONTROL (L)
15"	4.5'	18.0'
18"	4.8'	19.2'
24"	5.3'	21.2'
30"	5.8'	23.2'
36"	6.3'	25.2'
42"	6.8'	27.2'
48"	7.3'	29.2'
54"	7.8'	31.2'
60"	8.8'	35.2'
72"	10.3'	40.6'

HEADWALL LOCATION DETAIL
NOT TO SCALE

ESTILO
COLLIER COUNTY, FLORIDA

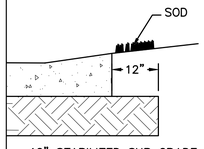
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

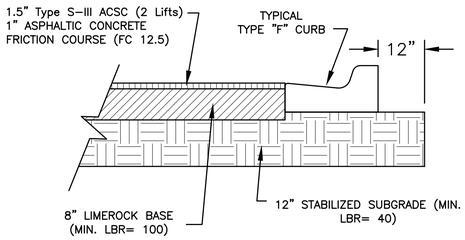
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

DRAINAGE DETAILS

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-20

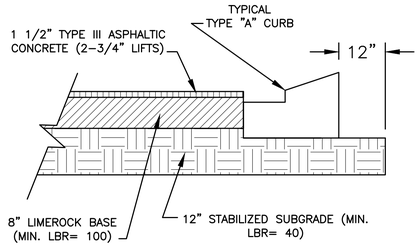


T SECTION
CURBING



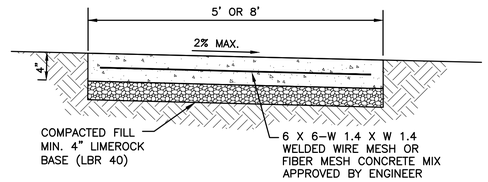
TURN LANE TYPICAL
PAVEMENT SECTION
W/ TYPE F CURBING

NOT TO SCALE



TYPICAL PAVEMENT SECTION
W/ TYPE A CURBING

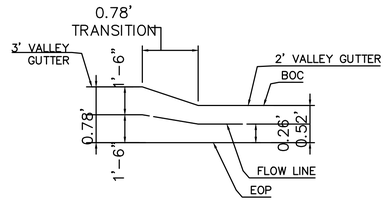
NOT TO SCALE



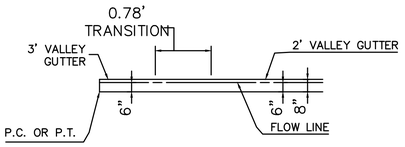
TYPICAL CONCRETE SIDEWALK DETAIL

NOT TO SCALE

NOTE: CONCRETE IN SIDEWALK TO BE 3,000 P.S.I.
SIDEWALK CONTRACTION JOINTS TO BE
AT 5' INTERVALS.



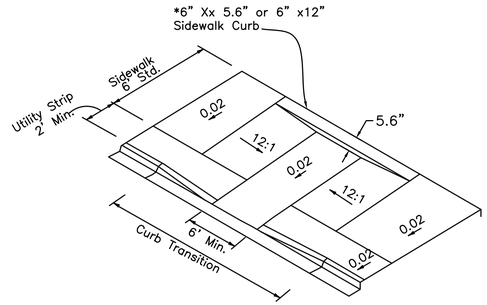
PLAN



ELEVATION
(2' VALLEY GUTTER TO 3' VALLEY GUTTER)

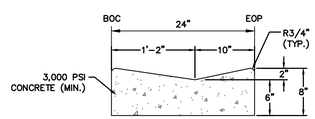
CURB TRANSITION DETAILS

NOT TO SCALE



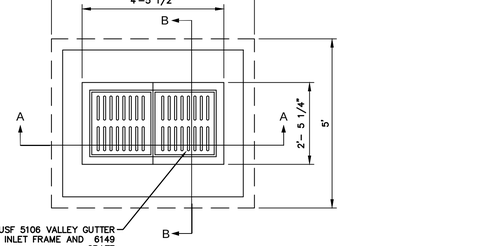
ALTERNATIVE SIDEWALK CURB RAMP

NOT TO SCALE



VALLEY GUTTER

NOT TO SCALE



VALLEY GUTTER INLET DETAIL

NOT TO SCALE

ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

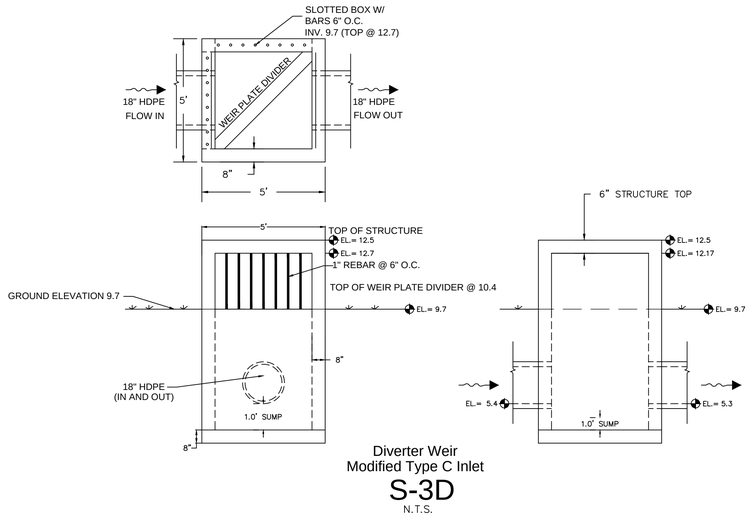
PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474

DATE:

DRAINAGE DETAILS

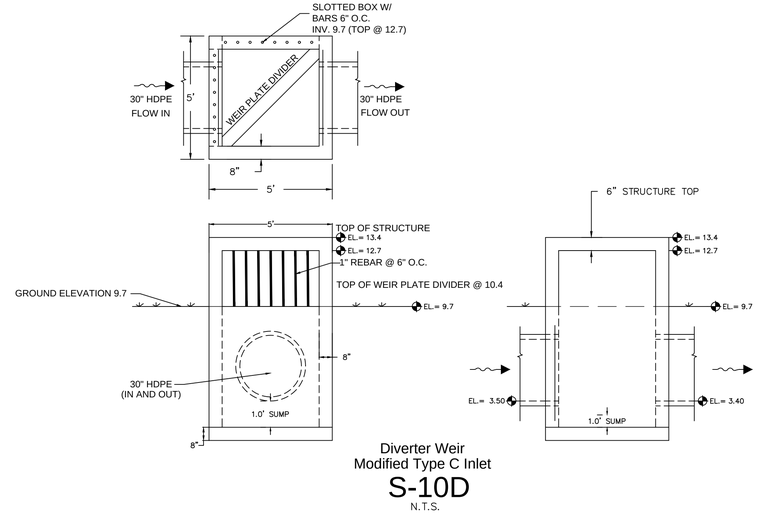
DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-21



Diverter Weir
Modified Type C Inlet

S-3D

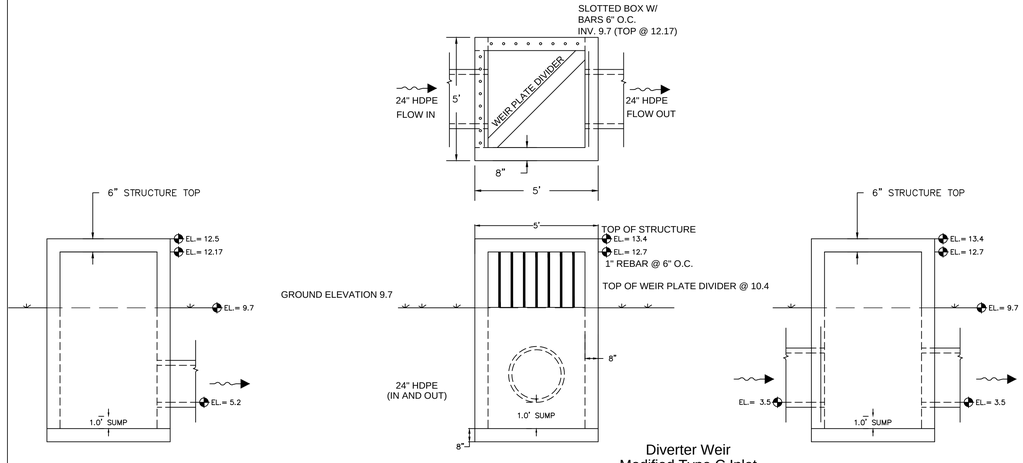
N.T.S.



Diverter Weir
Modified Type C Inlet

S-10D

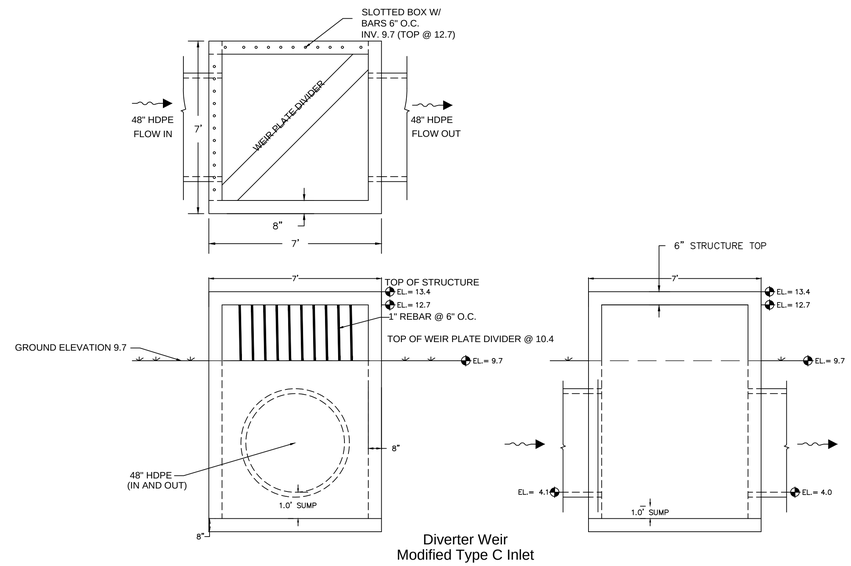
N.T.S.



Diverter Weir
Modified Type C Inlet

S-16D

N.T.S.



Diverter Weir
Modified Type C Inlet

S-25D

N.T.S.

ESTILO
COLLIER COUNTY, FLORIDA

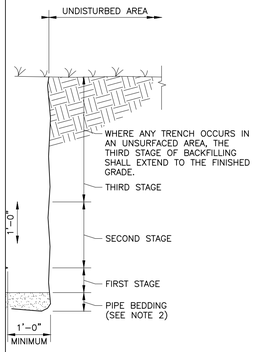
HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

DRAINAGE DETAILS

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2011-025	As Shown	C-22

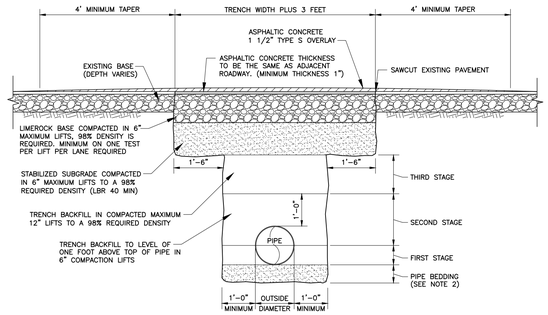


LE MATERIAL REMOVED
RE OTHER MATERIAL IS
ALL CONSIST OF EARTH,
SHED LIMESTONE, OR
ER TO TECHNICAL
IREMENTS.

ROCK, THEN A MINIMUM
BE USED.

A TRENCH DETAIL
NTS

G-1
REVISED: APRIL 2006

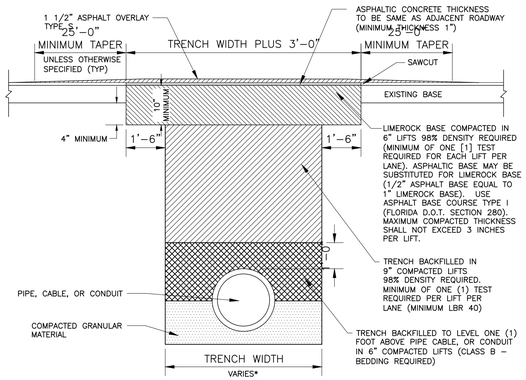


NOTES:

1. BACKFILL SHALL BE OF SUITABLE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. BACKFILL MATERIAL SHALL CONSIST OF EARTH, LOAM, SANDY CLAY, GRAVEL, CRUSHED LIMESTONE, OR OTHER APPROVED MATERIAL. REFER TO TECHNICAL SPECIFICATIONS FOR DETAIL REQUIREMENTS.
2. IF TRENCH BOTTOM CONTAINS ROCK, THEN A MINIMUM OF A 6" PIPE BEDDING SHALL BE USED.
3. R.O.W. PERMIT STIPULATIONS OVERRIDE THIS DETAIL WHERE TRENCH IS LOCATED WITHIN A COUNTY R.O.W.

PAVED AREA TRENCH RESTORATION DETAIL FOR PRIVATE ROADS
NTS

G-2
REVISED: APRIL 2006



*TRENCH WIDTH = PIPE OUTSIDE DIAMETER PLUS 2 FEET

NOTES:

1. ALL MODIFIED PROCTOR AND DENSITY TESTS SHALL BE TAKEN BY A CERTIFIED LABORATORY.
2. ALL TESTS SHALL BE COMPLETED AND SHALL MEET MINIMUM DENSITY REQUIREMENTS PRIOR TO ADDITIONAL BACKFILLING.
3. RIGHT-OF-WAY PERMIT STIPULATIONS OVERRIDE THIS DETAIL WHERE TRENCH IS LOCATED WITHIN A COUNTY RIGHT-OF-WAY.

ROAD AND TRENCH RESTORATION FOR LOCAL ROADS
NTS

G-2B
REVISED: DECEMBER 2007

V



ITARY SEWER, STORM SEWER,
IGATION MAIN AND FORCE
N

POTABLE
F 18 INCHES
WER PIPE. THE
-TIONS OF SEWER
S SHALL BE
T AND FROM
ES.

E SUBMISSION AND
UM STIPULATIONS
DR14, PVC (CLASS
CTILE IRON,
E OF THE
EN APPROVAL OF

OSSES UNDER

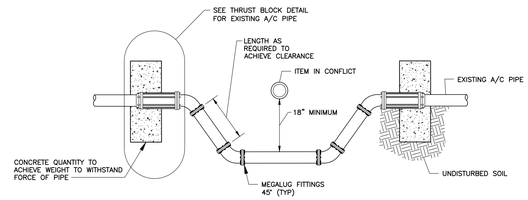
AINS SHALL BE

OR STORM SEWER
IE OTHER
OTHER PIPELINE.
WATER MAIN JOINTS
TORM SEWERS,
UNDER PART III
OR
ED WATER NOT

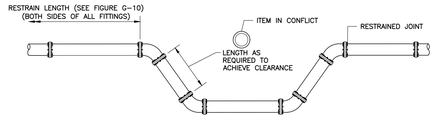
R LINES AND

REQUIREMENTS.

G-3
REVISED: APRIL 2006



EXISTING A/C PIPE - HEADWALL



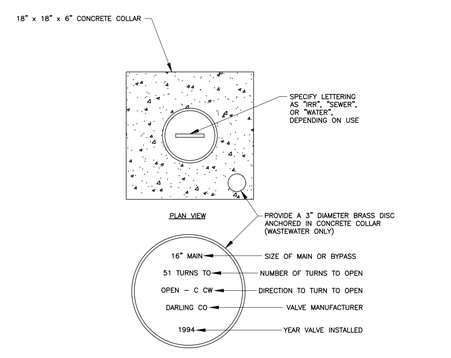
NEW & EXISTING PIPE - RESTRAINED JOINT

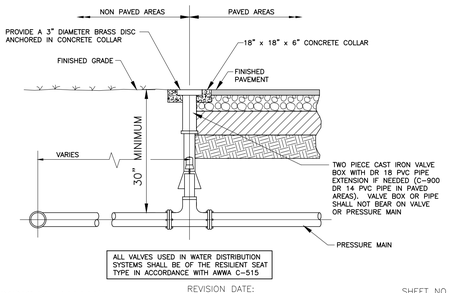
NOTES

1. SEE SECTION 1 - DESIGN CRITERIA FOR AIR RELEASE VALVE REQUIREMENTS.

PIPE CONFLICT DETAILS
NTS

G-4
REVISED: APRIL 2006





TYPICAL VALVE SETTING DETAIL
NTS

REVISION DATE: JUNE 2013

SHEET NO. G-7

PIPE SIZE IN INCHES	RESTRAINED PIPE LENGTH IN FEET (1)						
	HORIZONTAL BENDS				DEAD ENDS (2)	45° VERTICAL BENDS	
	90°	45°	22-1/2°	11-1/4°		UPPER	LOWER
4	23	9	5	2	55	23	8
6	32	13	6	3	77	32	11
8	40	17	8	4	100	41	14
10	48	20	10	5	120	50	17
12	56	23	11	6	141	58	20
16	71	29	14	7	181	75	25
18	77	32	15	8	200	83	28
20	84	35	17	8	218	90	30
24	96	40	19	10	253	105	35
30	112	47	22	11	303	125	41
36	127	53	25	13	350	145	47

PIPE SIZE IN INCHES	RESTRAINED PIPE LENGTH IN FEET (1)	
	TEE (3)	REDUCER (4)
6 x 4	0	40
6 x 6	34	
8 x 4	0	72
8 x 8	55	
10 x 6	3	74
10 x 10	75	
12 x 4	0	122
12 x 8	31	75
12 x 12	95	
16 x 6	0	153
16 x 10	44	107
16 x 16	134	
18 x 8	0	157
18 x 12	68	108
18 x 18	152	
20 x 10	20	161
20 x 16	120	77
20 x 20	170	
24 x 12	37	187
24 x 18	132	109
24 x 24	204	
30 x 16	78	213
30 x 20	138	165
30 x 30	252	
36 x 18	84	259
36 x 24	170	191
36 x 36	298	

NOTES:

1. RESTRAIN ALL PIPE JOINTS WITHIN THE DISTANCE SHOWN ON THE TABLES MEASURED FROM THE POINT OF CONNECTION.
2. ISOLATION VALVES SHALL BE TREATED AS DEAD ENDS. WITH RESTRAINT ON BOTH SIDES OF THE VALVE.
3. RESTRAINT IS FOR BRANCH OF TEE. IF BRANCH SIZE IS NOT ON TABLE, USE NEXT LARGEST BRANCH.
4. RESTRAINT IS FOR LARGE DIAMETER SIDE OF REDUCER. IF REDUCER SIZE IS NOT ON TABLE, USE NEXT SMALLER REDUCER (SMALL END).
5. THIS SCHEDULE IS TO BE USED FOR DUCTILE IRON AND PVC PIPE .

PIPE RESTRAINT SCHEDULE
NTS

G-10
REVISED: APRIL 2006

ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

UTILITY DETAILS

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-23

TAPPED CAP
I HOSE BIBB

DESTAL HOUSING (SEE COUNTY
PROVED PRODUCT LIST,
PENDIX F)

STAINLESS STEEL POST WITH
STAINLESS STEEL HARDWARE
AND STAINLESS STEEL LOCKING
HASP WITH BRASS LOCK (KEYED
FOR COLLIER COUNTY)

COMBINATION AIR RELEASE VALVE
SEE COUNTY APPROVED
RODUCT LIST, APPENDIX F)

IEDULE 80 NIPPLE

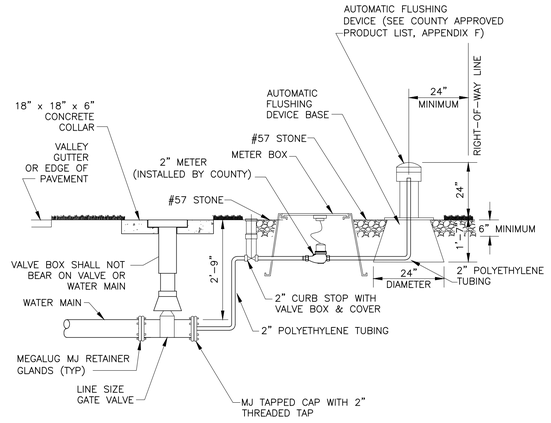
BRASS CORPORATION STOP
EE COUNTY APPROVED PRODUCT
ST, APPENDIX F) WITH COUPLING
NECESSARY

MINIMUM

(TYP)

AIL
NTS

W-5
REVISED: AUGUST 2008



NOTES:

1. PIPING SHALL BE INSTALLED UP TO 2" CURB STOP WITH VALVE BOX AND COVER AT TIME OF MAIN INSTALLATION.
2. AUTOMATIC FLUSHING DEVICE SHALL BE SHUT OFF UNTIL MAIN LINE HAS BEEN BACTERIOLOGICALLY TESTED.
3. SEE TECHNICAL SPECIFICATIONS SECTION 331200 FOR GATE VALVE AND VALVE BOX REQUIREMENTS.
4. AT TIME OF ACCEPTANCE, WATER DEPARTMENT WILL INSTALL 2" METER.
5. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

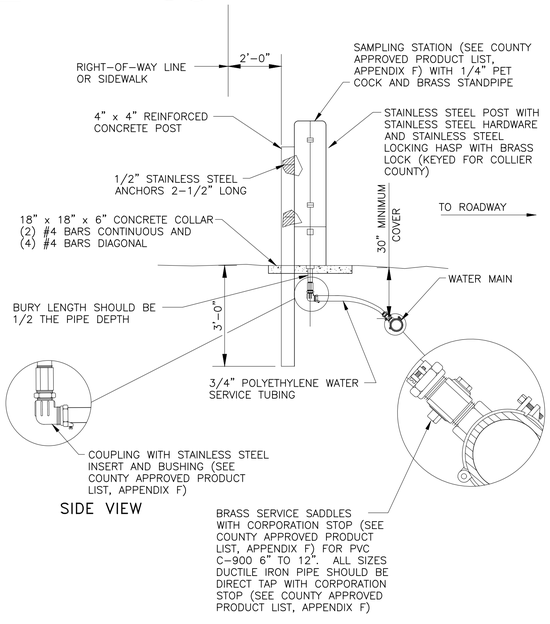
		Issued	Revised
WZ	WZ	W-2 Automatic Watermain Flushing Device Detail	08|2008 01|2014

DETAIL FROM COLLIER COUNTY (http://www.colliergov.net/index.aspx?page=390. REVISED JANUARY 2014

AUTOMATIC WATER MAIN FLUSHING DEVICE DETAIL
NTS

SHEET NO.
W-1

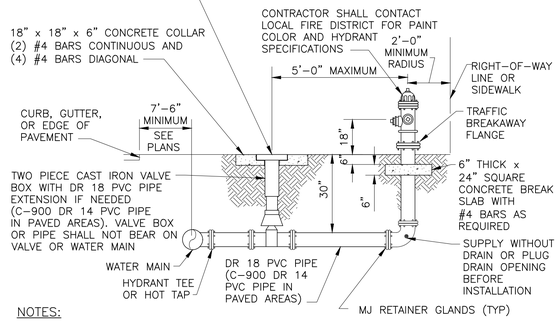
SHEET NO.
W-2



PERMANENT BACTERIAL SAMPLE POINT DETAIL
NTS

W-6
REVISED: AUGUST 2008

PROVIDE A 3" DIAMETER BRASS DISC ANCHORED IN CONCRETE COLLAR. DISC SHOULD PROVIDE THE FOLLOWING INFORMATION: SIZE OF MAIN; NUMBER OF TURNS TO OPEN; DIRECTION TO TURN TO OPEN; VALVE MANUFACTURER AND YEAR VALVE INSTALLED



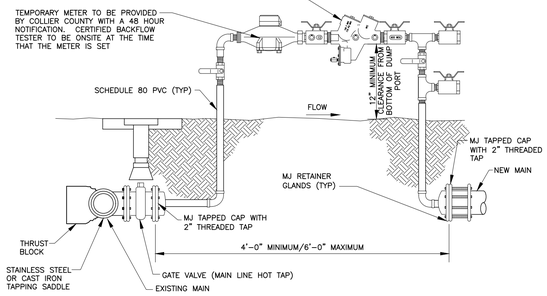
NOTES:

1. HYDRANT MUST BE CURRENT YEAR MANUFACTURE AND YEAR OF MANUFACTURE MUST BE CAST ON BARREL.
2. ALL EXISTING MAINS WHERE FIRE HYDRANTS ARE TO BE INSTALLED SHALL BE HOT TAPPED.
3. TAPPING SADDLES MAY BE EITHER STAINLESS STEEL OR DUCTILE IRON. ALL TAPPING SADDLES FOR ASBESTOS CEMENT PIPE SHALL BE STAINLESS STEEL.
4. ALL FIRE HYDRANT BARRELS SHALL BE A MINIMUM 5-1/4" IN DIAMETER.
5. ALL FIRE HYDRANTS INSTALLED SHALL BE OF THE BREAK AWAY FLANGE TYPE AND SHALL MEET THE REQUIREMENTS OF THE LOCAL FIRE CONTROL DISTRICT.
6. HYDRANT SHALL CONFORM WITH AWWA C-502.
7. THRUST RESTRAINT SHALL BE BY MJ RETAINER GLANDS.
8. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

FIRE HYDRANT DETAIL
NTS

W-3
REVISED: JANUARY 2009

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER ASSEMBLY (PROVIDED BY CONTRACTOR) SUPPLIED WITH AMMONIA AND CHLORINE RESISTANT SEATS AND SILICONE RUBBER SEALS. INSTALLATION AS REQUIRED BY COUNTY ORDINANCE AND AWWA M-14 STANDARDS (SEE APPROVED BACKFLOW DEVICES, APPENDIX G)

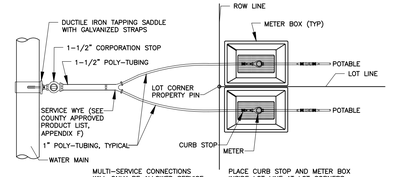


NOTES:

1. FINAL CONNECTION TO BE WITNESSED BY COLLIER COUNTY WATER DISTRIBUTION.
2. MJ TAPPED CAPS TO BE PROPERLY RESTRAINED.
3. INSTALL JUMPER TAP SYSTEM FOR TEMPORARY METER DOWNSTREAM OF BLIND FLANGE FOR CONSTRUCTION WATER.
4. TAPPING SADDLES MAY BE EITHER STAINLESS STEEL OR DUCTILE IRON. ALL TAPPING SADDLES FOR ASBESTOS CEMENT PIPE SHALL BE STAINLESS STEEL.
5. JUMPER ASSEMBLY MUST BE MINIMUM OF 18" ABOVE FINISHED GRADE.
6. BACKFLOW ASSEMBLY REQUIRES INITIAL CERTIFICATION BY CERTIFIED BACKFLOW TESTER.
7. THIS ASSEMBLY SHALL ONLY BE USED IF NO COMBUSTIBLES WILL BE ON SITE. IF COMBUSTIBLES ARE BROUGHT ON SITE, THEN THE TEMPORARY BACKFLOW PREVENTERS AND FIRE PROTECTION METER TIE-IN ASSEMBLY SHALL BE USED.
8. THIS ASSEMBLY IS NOT APPROVED TO PROVIDE FIRE PROTECTION WATER TO THE SITE DURING CONSTRUCTION. ASSEMBLY NOT TO BE REMOVED AND SPOOL PIECE INSTALLED FOR FINAL CONNECTION UNTIL AFTER TESTING, BACTERIAL CLEARANCE, FINAL INSPECTION AND COUNTY ACCEPTANCE.
9. GAP CONFIGURATION TO BE INSTALLED WITHIN 24 HOURS OR LESS AT THE DISCRETION OF THE WATER DISTRIBUTION DEPARTMENT.
10. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

CONNECTION TO EXISTING WATER MAIN DETAIL (GAP CONFIGURATION)
NTS

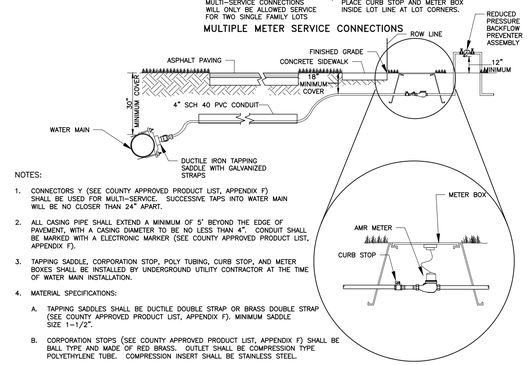
W-4
REVISED: JANUARY 2009



MULTI-SERVICE CONNECTIONS WILL ONLY BE ALLOWED SERVICE FOR TWO SINGLE FAMILY LOTS

PLACE CURB STOP AND METER BOX INSIDE LOT LINE AT LOT CORNERS.

MULTIPLE METER SERVICE CONNECTIONS



NOTES:

1. CONNECTORS Y (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) SHALL BE USED FOR MULTI-SERVICE. SUCCESSIVE TAPS INTO WATER MAIN WILL BE NO CLOSER THAN 24" APART.
2. ALL CASING PIPE SHALL EXTEND A MINIMUM OF 5' BEYOND THE EDGE OF PAVEMENT, WITH A CASING DIAMETER TO BE NO LESS THAN 4". CONDUIT SHALL BE MARKED WITH A ELECTRONIC MARKER (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F).
3. TAPPING SADDLE, CORPORATION STOP, POLY TUBING, CURB STOP, AND METER BOXES SHALL BE INSTALLED BY UNDERGROUND UTILITY CONTRACTOR AT THE TIME OF WATER MAIN INSTALLATION.
4. MATERIAL SPECIFICATIONS:
   A. TAPPING SADDLES SHALL BE DUCTILE DOUBLE STRAP OR BRASS DOUBLE STRAP (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F). MINIMUM SADDLE SIZE 1-1/2".
   B. CORPORATION STOPS (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) SHALL BE BALL TYPE AND MADE OF RED BRASS. OUTLET SHALL BE COMPRESSION TYPE POLYETHYLENE TUBE. COMPRESSION INSERT SHALL BE STAINLESS STEEL.
   C. CURB STOPS (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) SHALL BE BALL TYPE AND MADE OF RED BRASS. INLET SHALL BE COMPRESSION JOINT. OUTLET SHALL BE SWIVEL NUT FOR METER CONNECTION.
   D. TUBING SHALL BE POLYETHYLENE, PE3408, (AWWA C-901, SDS 9-200) AND BLUE IN COLOR; SIZES SHALL BE 1-1/2" UP TO WYE AND 1" AFTER WYE FOR LONG AND SHORT SIDE SERVICES.
   E. AUTOMATIC METER READER (AMR) METER BOXES (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) SHALL HAVE CAST IRON READ LID.
   F. POLYETHYLENE PIPE (PE) SHALL MEET THE REQUIREMENTS OF AWWA C-901.
5. ALL PLANTINGS SHALL BE A MINIMUM 1.5' FROM METER BOX, AND SHALL PROVIDE A 3' ACCESS OPENING.
6. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

TYPICAL SHORT AND LONG SIDE WATER SERVICE METER SETTING DETAIL FOR CONNECTION TO WATER MAIN
NTS

W-12
REVISED: MAY 2009

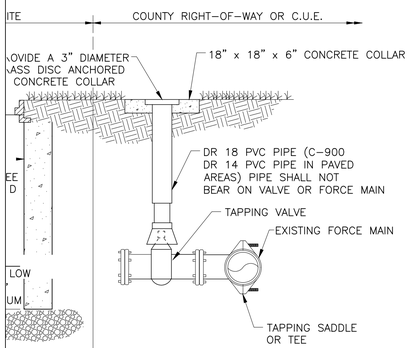
ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

UTILITY DETAILS

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-24

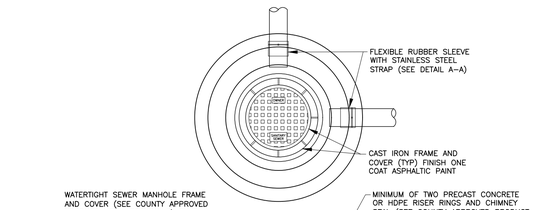


	Issued	Revised
WW2 WW2 WW-2 Private Force Main Connection to County Force Main Detail	08/2008	01/2014

DETAIL FROM COLLIER COUNTY (http://www.colliergov.net/index.aspx?page=390. REVISED JANUARY 2014

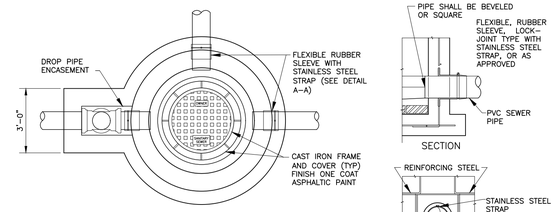
CONNECTION
AIN DETAIL

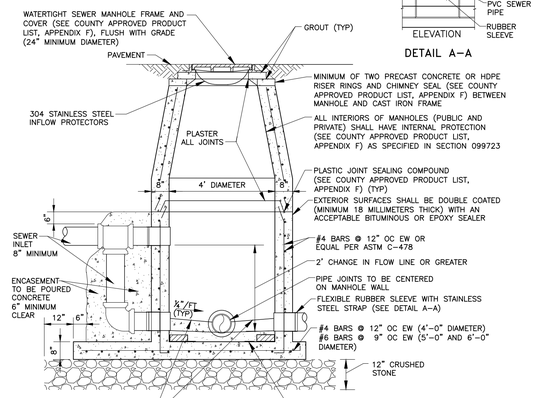
SHEET NO.
WW-2



SHALLOW MANHOLE DETAIL
NTS

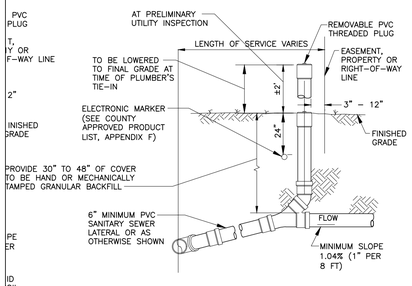
WW-4
REVISED: AUGUST 2008





DROP MANHOLE DETAIL
NTS

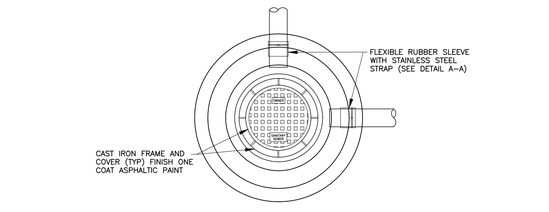
WW-5
REVISED: AUGUST 2008



E:
TIME OF PLUMBER'S TIE-IN,
CONCRETE COLLAR AS PER
AIL WW-12.

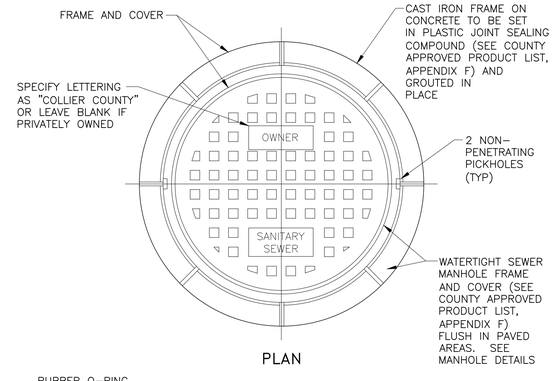
R CONNECTION DETAILS
GHT-OF-WAY OR EASEMENT LINE
NTS

WW-10
REVISED: MAY 2009



PRECAST REINFORCED CONCRETE MANHOLE DETAIL
NTS

WW-3
REVISED: AUGUST 2008



MANHOLE RING AND COVER DETAIL
NTS

WW-6
REVISED: AUGUST 2008

ESTILO
COLLIER COUNTY, FLORIDA

HAGAN
ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

UTILITY DETAILS

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-25

R FORCE MAINS 24" DIAMETER
D LARGER, USE 48" SQUARE
ECAST STRUCTURE

A

LLS AND BASE ARE SADDLE
ONFIGURATION OVER PIPE
OG HOUSE")

" TYPICAL BASE EXTENSION,
TERIOR AND EXTERIOR

CAST LID

FINISH GRADE

#4 BARS @ 8" OC EW
OR EQUAL PER ASTM C-478

1/8"x 2" SS FLAT BAR ON TOP
AND SIDES OF OPENING.

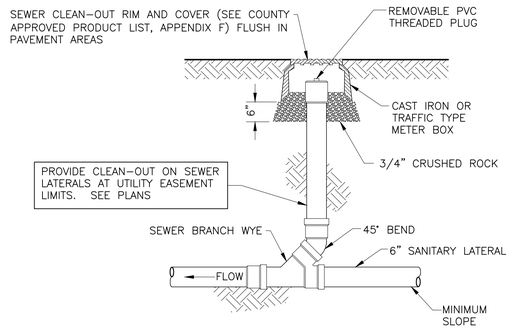
8 MIL POLY TUBING
PIPE ENCASEMENT,
OVERSIZE AS
REQUIRED. SLIT
BOTTOM. SECURE
POLY TO STRUCTURE
AT TOP AND SIDES
OF OPENING WITH
1/8"x 2" SS FLAT
BAR AND 3/16" SS
FASTENERS @ 4" OC.

SS CLAMP (TYP)

S @ 8" OC EW
AL PER ASTM C-478

SLAB OPENING WITH
/57 STONE

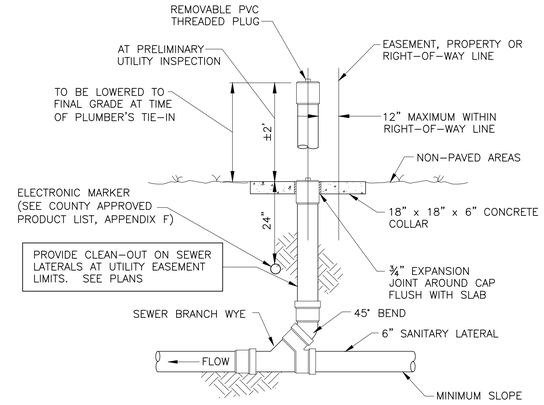
WW-13
REVISED: AUGUST 2008



ELEVATION

SEWER CLEAN-OUT DETAIL
PAVED AREAS
NTS

WW-11
REVISED: APRIL 2006

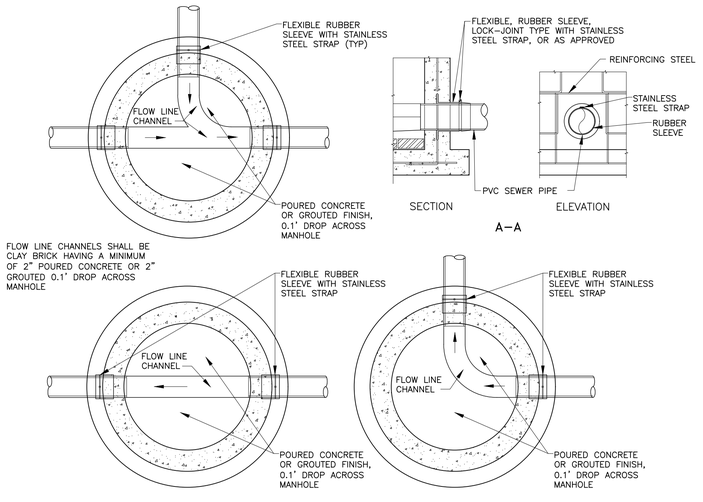


ELEVATION

SEWER CLEAN-OUT DETAIL
NON PAVED AREAS
NTS

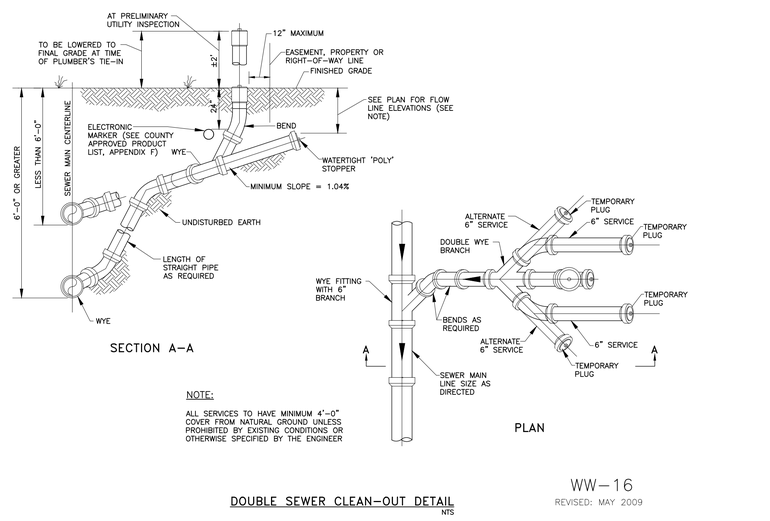
REVISION DATE:
JUNE 2013

SHEET NO.
WW-12



TYPICAL FLOW LINE CHANNELS DETAIL
NTS

WW-15
REVISED: APRIL 2006



NOTE:

ALL SERVICES TO HAVE MINIMUM 4'-0" COVER FROM NATURAL GROUND UNLESS PROHIBITED BY EXISTING CONDITIONS OR OTHERWISE SPECIFIED BY THE ENGINEER

DOUBLE SEWER CLEAN-OUT DETAIL
NTS

WW-16
REVISED: MAY 2009

ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

UTILITY DETAILS

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-26

ject Summary

aster pump station required modification to accommodate offsite inflows. Previous ssions addressed the potable water pressure, flow, and chloramines issues. Previous ission also addressed onsite gravity sewer design, slopes, and pipes. The change nced in this supplement is a change in the offsite inflow and therefore the pump station n. The following is the revised pump station information.

stewater System

astewater generated by this project is based upon the County's level of service rements and the expected unit count for the project. The onsite demands are calculated % of the water demands as previously accepted. Offsite 30 acres of commerce park lopment. 30 acres at 12,000sf/acre = 360,000sf. Sewage generation at 0.1 ns/sf/day as measured at Collier Park of Commerce. 0.1 gallons/sf/day x 360,000sf = 00 gallons/day.:

ing Type and (gpm)	Units	Avg Daily Demand (GPD)	Peak Hour
e Family	75	21,000	58.3
house	1	280	0.8
te Commercial	360,00sf	36,000	100.0
	Totals	**57,280**	**159.1**

p Station Design

harge is via 1,130 LF of 6" force main. It manifolds to an existing pump and force main st Assembly of God. The existing pump at First Assembly is a FLYGT Model 27-101hp-481 impeller. It is designed to accommodate an average daily flow of 60,602 with a peak flow of 165 gpm. The operating point for the First Assembly of God pump 5 gpm results in a peak head of 88 feet at receiving point. That is the design pressure ill design to pump against.

pressure report from Collier County for the tie in location has been recorded at a lower ving pressure. As the pump station at the First Assembly of God has not been activated o the site being undeveloped, we believe it is prudent to design the pump station at o to accommodate this pump being activated. Based on this we are utilizing the higher ving pressure of 88' of head.

ump will be set at Elevation -5.51 NAVD. The force main high point will be at ation +7.5 NAVD. The static head result is 13.01 feet.

eak flow of 159.1gpm yields a friction head loss of 2.17 feet. Need to get to 180 gpm x 2 fps in the 6" force main, which raises the friction head loss to 2.73 feet.

head is static + friction + pressure = 13.01 + 2.73 + 88 = 103.7 feet of head.

operating point for the pump station needs to provide 159 gpm at a total head of 104

p Type	NP3153	FLYGT
ller	463	
Horsepower	15	HP
Voltage	200	Volts
Phase	3	Phase

Curve (attached)
on Pumping
(Qdp) 162 gpm at 108 TDH

Pump Run and Cycle Times

1. Minimum Pump Run Time (min. 2.5 minutes)

   Tmin = Volume of Wet Well / Design Pumping Rate

   Tmin = 4.64 minutes

2. Pumping Station Cycle Time At Average Flow Conditions

   The time for one pump cycle under average flow conditions (in minutes).

   (minimum 2 cycles / hour or 30 minutes / cycle)

   Tavg = [Vavg / (Qdp - Qavg)] + [Vavg / Qavg]

   Tavg = 25.0 minutes/cycle or 2.4 cycles/hour

3. Pumping Station Cycle Time At Intermittent Peak Flow Conditions

   Time for one pump cycle under peak hour flow (in minutes)

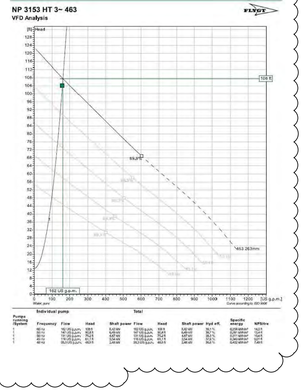
   (maximum 10 cycles/hour of 6 minutes/cycle)

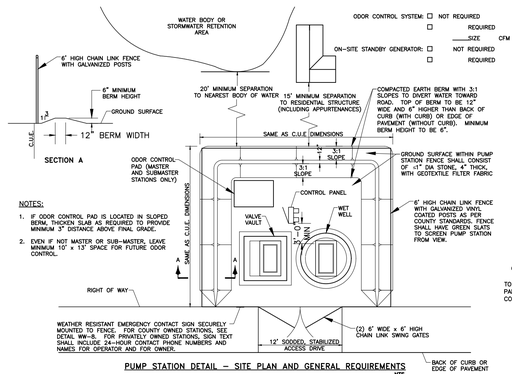
   Tpeak = [Vavg/Qdp] + [Vavg/Qpeak]

   Tpeak = 9.4 minutes/cycle or 6.4 cycles/hour

Wet Well Design

Inside Wet Well Diameter	8 feet
Wall Thickness	8 inches
Slab Diameter	10.7 feet
Slab Thickness (1 ft typical)	2.5 foot
Finished Grade (use actual slab elevation)	+12.54 NAVD
Influent Elevation	-0.02 NAVD
Wet Well Interior Cross-Sectional Area	50.3 square ft
Storage Depth (2 ft min)	2.0 feet
Actual Storage Provided	752 gallons
High Water Alarm*	-0.52 NAVD
Lag On*	-1.02 NAVD
Lead On*	-1.52 NAVD
Pump Off*	-3.52 NAVD
Bottom Elevation*	-5.52 NAVD



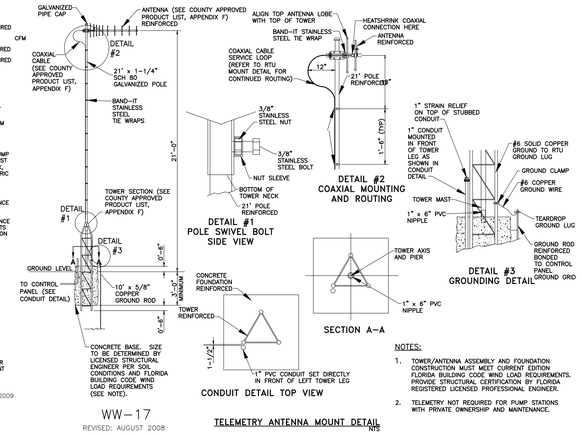


NOTES:

1. IF ODOR CONTROL PAD IS LOCATED IN SLOPED BERM, THICKEN SLAB AS REQUIRED TO PROVIDE MINIMUM 3" DISTANCE ABOVE FINAL GRADE.
2. EVEN IF NOT MASTER OR SUB-MASTER, LEAVE MINIMUM 10' x 13' SPACE FOR FUTURE ODOR CONTROL.

PUMP STATION DETAIL – SITE PLAN AND GENERAL REQUIREMENTS
NTS

WW-7A
REVISED: AUGUST 2009



NOTES:

1. TOWER/ANTENNA ASSEMBLY AND FOUNDATION CONSTRUCTION MUST MEET CURRENT EDITION FLORIDA BUILDING CODE WIND LOAD REQUIREMENTS. PROVIDE STRUCTURAL CERTIFICATION BY FLORIDA REGISTERED LICENSED PROFESSIONAL ENGINEER.
2. TELEMETRY NOT REQUIRED FOR PUMP STATIONS WITH PRIVATE OWNERSHIP AND MAINTENANCE.

TELEMETRY ANTENNA MOUNT DETAIL
NTS

WW-17
REVISED: AUGUST 2008

DIMENSION TABLE	
(A)	8'-0"
(B)	13.75"
(C)	12.54 NAVD
(D)	-0.02 NAVD
(E)	-0.52 NAVD
(F)	-1.02 NAVD
(G)	-1.52 NAVD
(H)	-3.52 NAVD
(I)	-5.52 NAVD
(J)	N/A
(K)	4"
(L)	6"
(M)	3'-0"
(N)	4'-0"
(O)	4'-0"
(P)	15"
(Q)	20"
(R)	18"
(S)	10"
(T)	30"

EQUIPMENT SPECIFICATIONS

MARK	QTY	
1	2	DUPLEX 4" INCH DISCHARGE SUBMERSIBLE SEWAGE PUMPS EQUIPPED WITH 230/460 VOLT MOTORS. EACH PUMP SHALL HAVE THE CAPACITY AND RANGE SET FORTH ON THIS SHEET AS THE "REQUIRED PUMP PERFORMANCE CURVE" OR COUNTY APPROVED EQUAL. PUMP PERFORMANCE DATA WILL BE REQUIRED AS SET FORTH IN THE SPECIFICATIONS. CONTRACTOR SHALL VERIFY LOCAL VOLTAGE PRIOR TO PLACEMENT OF PUMP ORDER.
2	4	LIQUID LEVEL REGULATORS (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F), EACH PROVIDED WITH A MINIMUM OF 40 FEET OF ELECTRICAL CABLE.
3	1	ACCESS FRAME (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) WITH HINGED AND HASP EQUIPPED COVER, TWO UPPER GUIDE HOLDERS, CHAIN HOLDERS AND CABLE HOLDERS. ACCESS FRAMES SHALL BE ALUMINUM, H-20 LOADING WITH OPTIONS, COLLIER COUNTY STANDARD.
4	1	ACCESS FRAME (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) WITH HINGED AND HASP EQUIPPED COVER. ACCESS FRAME SHALL BE ALUMINUM, H-20 LOADING WITH OPTIONS, COLLIER COUNTY STANDARD.
5	1	PUMP CONTROL PANEL: SEE TECHNICAL SPECIFICATIONS SECTION 13510, 2.1.H.
6	1	4" PVC VENT PIPE WITH 90° ELBOWS & END CAP WITH 3/8" DIAMETER DRILLED HOLES FOR VENTILATION
7	1	WETWELL: REINFORCED CONCRETE PIPE CONFORMING TO TABLE II, WALL B OF ASTM C-76. O-RING JOINTS SHALL CONFORM TO ASTM C-443 OR COUNTY APPROVED EQUAL. WETWELL CONSTRUCTION: APPLY TWO COATS OF APPROVED BITUMINOUS OR EPOXY SEALER ON EXTERIOR SURFACES OF THE WELL.
8	2	CHECK VALVE, (K") IRON BODY, FLANGED, BRONZE MOUNTED WITH BRONZE FACED DISC. WEIGHT AND LEVER TYPE HORIZONTAL SWING CHECK VALVE (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F).
9	1	PLUG VALVE (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F), (K") NON-LUBRICATED NICKEL IRON, NEOPRENE COATED PLUG, 100% OPENING VALVE AND SHALL BE COMPLETE WITH WRENCH.
10	1	3-WAY PLUG VALVE (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F), (K") – 3 PORT, FLANGED, LEVEL ACTIVATED. VALVE SHALL BE MOUNTED SO THAT THE THIRD PORT IS ON TOP.
11	1	3" QUICK-COUPLING UNIT COMPLETE. CONNECT TO THIRD PORT OF 3-WAY VALVE WITH A BRONZE MALE THREAD ADAPTOR AND 2-HANDLE BRONZE LOCKING CAP.
12	3	ALL PUMP STATION INTERIORS SHALL HAVE INTERNAL PROTECTION (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX 5) IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS SECTION 099723.
13	1	IN CASES WHERE A PUMP STATION REQUIRES AN ODOR CONTROL UNIT AND IS ON THE OPPOSITE SIDE OF THE STREET FROM A WATER MAIN, A 4" PVC CONDUIT SHALL BE INSTALLED FROM THE NEAREST LOT CORNER ON OPPOSITE OF STREET TO A POINT 5 FOOT BEYOND BACK OF SIDEWALK ON SAME SIDE OF STREET AS PUMP STATION
14	1	CHAIN LINK FENCE SHALL BE NEW, HOT DIP GALVANIZED AFTER FABRICATION WITH MINIMUM 1.2 OUNCES PER SQUARE FOOT OF ZINC COATING. FENCE FABRIC SHALL BE WOVEN #9 GAUGE WIRE WITH 2 INCH DIAMOND MESH AND KNUCKLED SELVAGES. FENCE SHALL HAVE TOP RAIL AND BOTTOM TENSION WIRE WITH TIE CLIPS AT MAX 24 INCH SPACING. FENCE SHALL HAVE WEATHER-TIGHT POST CAPS ON EACH POST. GATE FRAMES SHALL BE CONSTRUCTED OF TUBULAR MEMBERS WELDED AT ALL CORNERS. GATE POSTS SHALL BE EMBEDDED IN CONCRETE (30" MINIMUM EMBEDMENT). INSTALLATION SHALL MEET ASTM F567.
15	1	ALL FPL TRANSFORMERS SHALL BE INSTALLED OUTSIDE OF PUMP STATION FENCE LINE

ODOR CONTROL UNITS – U.S. FILTER ZABOCS

UNIT	CFM SIZE	INTAKE LINE	PAD SIZE
ZB-8000	1500	12"	10'x13'
ZB-7000	1150	12"	9'x12'
ZB-6000	850	10"	8'x11'
ZB-5000	500	8"	7'x9.5'
ZB-4000	350	6"	6'x8.5'
ZB-42	140	4"	5'x5'
ZB-30	70	4"	4'x4'

(A)	8'-0"	(K)	4"
(B)	13.75"	(L)	6"
(C)	12.54 NAVD	(M)	3'-0"
(D)	-0.02 NAVD	(N)	4'-0"
(E)	-0.52 NAVD	(O)	4'-0"
(F)	-1.02 NAVD	(P)	15"
(G)	-1.52 NAVD	(Q)	20"
(H)	-3.52 NAVD	(R)	18"
(I)	-5.52 NAVD	(S)	10"
(J)	N/A	(T)	30"

EQUIPMENT SPECIFICATIONS

MARK	QTY	
1	2	DUPLEX 4" INCH DISCHARGE SUBMERSIBLE SEWAGE PUMPS EQUIPPED WITH 230/460 VOL MOTORS. EACH PUMP SHALL HAVE THE CAPACITY AND RANGE SET FORTH ON THIS SHEET AS THE "REQUIRED PUMP PERFORMANCE CURVE" OR COUNTY APPROVED EQUAL. PUMP PERFORMANCE DATA WILL BE REQUIRED AS SET FORTH IN THE SPECIFICATIONS. CONTRACTOR SHALL VERIFY LOCAL VOLTAGE PRIOR TO PLACEMENT OF PUMP ORDER.
2	4	LIQUID LEVEL REGULATORS (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F), EACH PROVIDED WITH 40 FEET OF ELECTRICAL CABLE.
3	1	ACCESS FRAME (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) WITH HINGED AND HASP EQUIPPED COVER, TWO UPPER GUIDE HOLDERS, CHAIN HOLDERS AND CABLE HOLDERS. ACCESS FRAMES SHALL BE ALUMINUM, H-20 LOADING WITH OPTIONS, COLLIER COUNTY STANDARD.
4	1	ACCESS FRAME (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) WITH HINGED AND HASP EQUIPPED COVER. ACCESS FRAME SHALL BE ALUMINUM, H-20 LOADING WITH OPTIONS, COLLIER COUNTY STANDARD.
5	1	PUMP CONTROL PANEL (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) WITH ALL COMPONENTS FOR OPERATING TWO PUMPS AND LIQUID LEVEL REGULATORS; GENERATOR RECEPTACLE AND ANGLE ADAPTOR (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F), AND NEMA 3R STAINLESS STEEL ENCLOSURE.
6	1	4" PVC VENT PIPE WITH 90° ELBOWS AND END CAP WITH 3/8" DIAMETER DRILLED HOLES FOR VENTILATION.
7	1	WETWELL, REINFORCED CONCRETE PIPE CONFORMING TO TABLE II, WALL B OF ASTM C-76, O-RING JOINTS SHALL CONFORM TO ASTM C-443 OR COUNTY APPROVED EQUAL WETWELL CONSTRUCTION. APPLY TWO COATS OF APPROVED BITUMINOUS OR EPOXY SEALER ON EXTERIOR SURFACES OF THE WETWELL.
8	2	CHECK VALVE, (K") IRON BODY, FLANGED, BRONZE MOUNTED WITH BRONZE FACED DISC. WEIGHT AND LEVER TYPE HORIZONTAL SWING CHECK VALVE (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F).
9	1	PLUG VALVE (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F), (K") NON-LUBRICATED NICKEL IRON, NEOPRENE COATED PLUG, 100% OPENING VALVE AND SHALL BE COMPLETE WITH WRENCH.
10	1	3-WAY PLUG VALVE (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F), (K") – 3 PORT, FLANGED, LEVEL ACTIVATED. VALVE SHALL BE MOUNTED SO THAT THE THIRD PORT IS ON TOP.
11	1	3" QUICK-COUPLING UNIT COMPLETE. CONNECT TO THIRD PORT OF 3-WAY VALVE WITH A BRONZE MALE THREAD ADAPTOR AND 2-HANDLE BRONZE LOCKING CAP.
12	3	ALL PUMP STATION INTERIORS SHALL HAVE INTERNAL PROTECTION (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F), IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTION 099723.
13	1	THE IMPELLER SHALL BE A SINGLE VANE, NON-CLOG DESIGN, CAPABLE OF PASSING 3 INCH SOLIDS, FIBROUS MATERIAL, AND HEAVY SLUDGE, AND CONSTRUCTED WITH A LONG THROUGHWAY WITH NO ACUTE TURNS AS SET FORTH IN THE SPECIFICATIONS.

SECTION A-A

PUMP STATION DETAIL – PROFILE
NTS

WW-7
REVISED: AUGUST 2008

PUMP STATION LOCATION
LONGITUDE: 81° 40' 45" W
LATITUDE: 26° 07' 02" N

ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

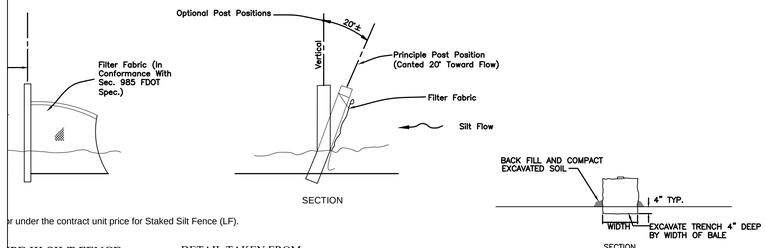
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

MASTER PUMP STATION DETAILS

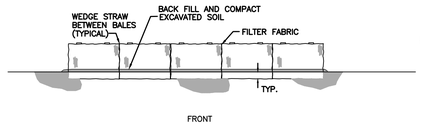
DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-27

r under the contract unit price for Staked Silt Fence (LF).

'PE III SILT FENCE
N.T.S.

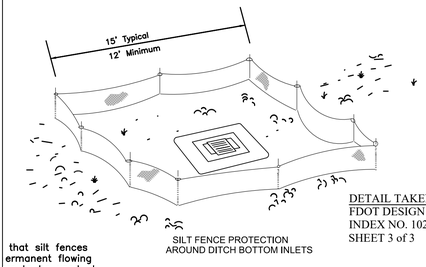


DETAIL TAKEN FROM:
FDOT DESIGN STANDARDS
INDEX NO. 102
SHEET 3 of 3



STRAW BALE BARRIER
N.T.S.

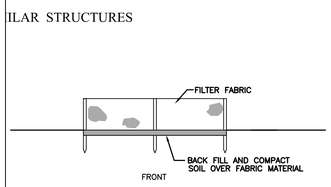
that silt fences
ermanent flowing
ire to be used at
ty barriers used
ler.

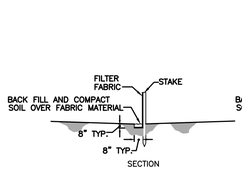


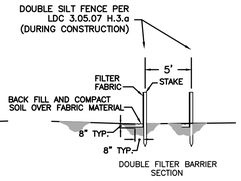
SILT FENCE PROTECTION
AROUND DITCH BOTTOM INLETS

DETAIL TAKEN FROM:
FDOT DESIGN STANDARDS
INDEX NO. 102
SHEET 3 of 3

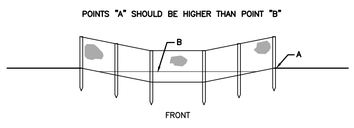
ILAR STRUCTURES

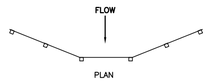




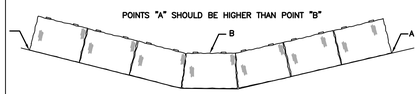


FILTER BARRIER
N.T.S.

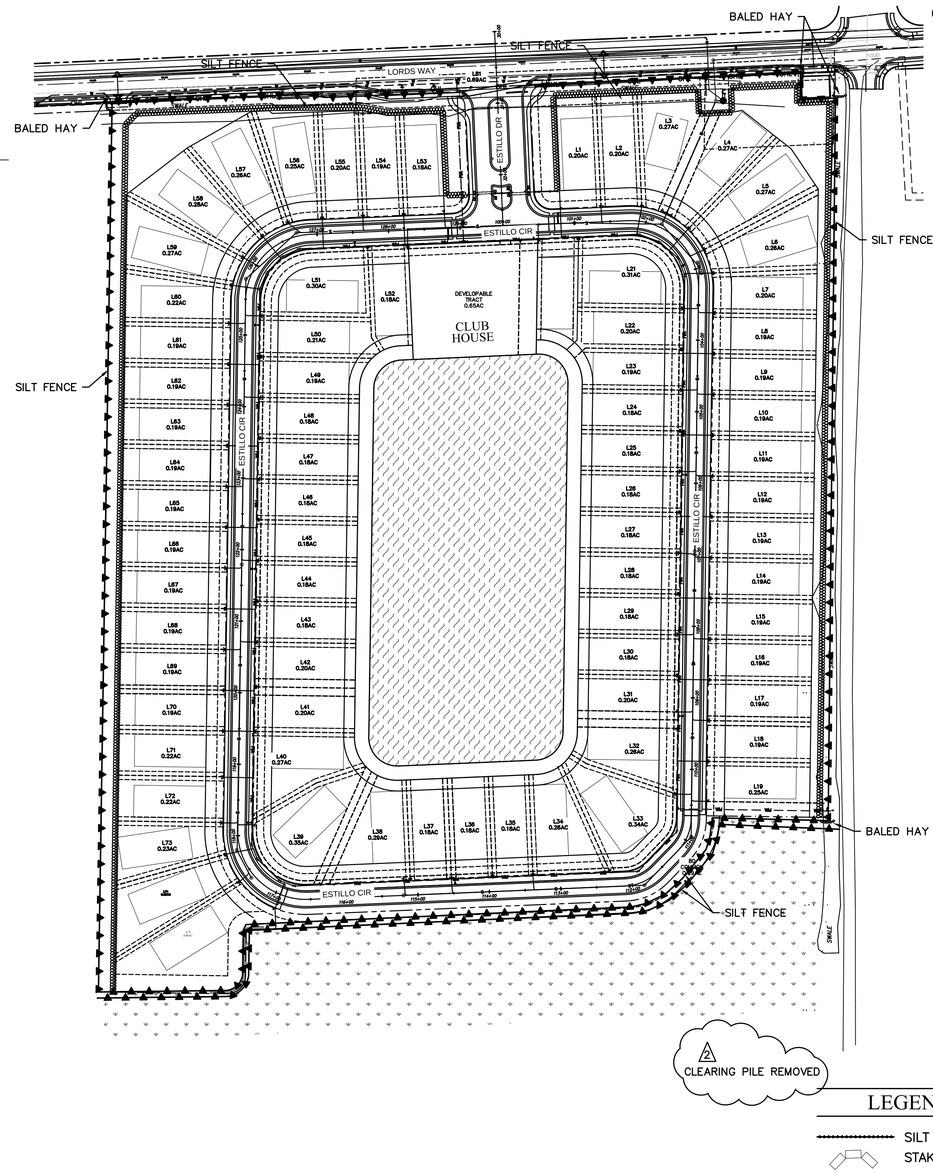




PROPER PLACEMENT OF FILTER BARRIER
IN DRAINAGE WAY
N.T.S.



PROPER PLACEMENT OF STRAW BALE BARRIER
IN DRAINAGE WAY
N.T.S.



ESTILO
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
1250 TAMIAMI TRAIL N., STE. 203B
Naples, Florida 34102
Phone (239) 851-8239

PERMITTING PLANS
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

EROSION CONTROL PLAN

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	C-28

GENERAL NOTES

1. Public sidewalk curb ramps shall be constructed in the public right of way at locations that will provide continuous unobstructed pedestrian circulation paths to pedestrian areas, elements and facilities in the public right of way and to accessible pedestrian routes on adjacent sites. Curbed facilities with sidewalks and those without sidewalks are to have curb ramps constructed at all street intersections and at turnouts that have curbed returns. Partial curb returns shall extend to the limit prescribed by Index No. 515 to accommodate curb ramps. Ramps constructed at locations without sidewalks shall have a landing constructed at the top of each ramp, see Sheet 5.
2. The location and orientation of curb ramps shall be as shown in the plans.
3. Curb ramp running slopes at unrestrained sites shall not be steeper than 1:12 and cross slope shall be 0.02 or flatter. Transition slopes shall not be steeper than 1:12.

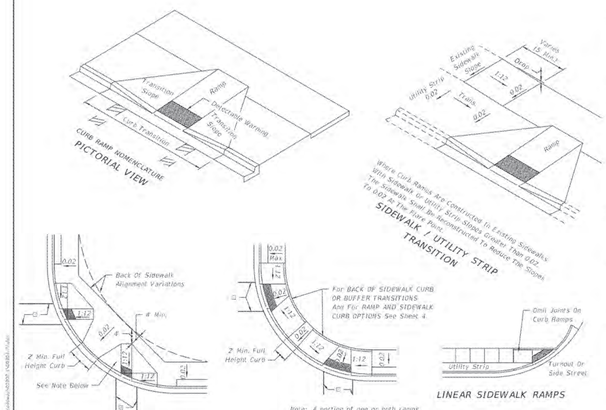
   When altering existing pedestrian facilities where existing site development precludes the accomodation of a ramp slope of 1:12, a running slope between 1:12 and 1:10 is permitted for a rise of 6" maximum and a running slope of between 1:10 and 1:8 is permitted for a rise of 3" maximum. Where compliance with the requirements for cross slope cannot be fully met, the minimum feasible cross slope shall be provided.

   Ramp running slope is not required to exceed 8' in length, except at sites where the plans specify a greater length.
4. If a curb ramp is located where pedestrians must walk across the ramp, then the walk shall have transition slopes to the ramp; the maximum slope of the transitions shall be 1:12. Ramps with cheek returns may be used at locations where other improvements provide guidance away from that portion of curb perpendicular to the sidewalk; improvements for guidance are not required at curb ramps for linear pedestrian traffic.
5. Curb ramp detectable warning surfaces shall extend the full width of the ramp and 24" deep. Detectable warning surfaces shall be constructed in accordance with Specification 527. See Sheet 6 for detectable warning layouts. Transition slopes are not to have detectable warnings. Detectable warnings are required on sidewalks at intersecting roads, streets and railroads. For requirements for detectable warnings on sidewalks at intersecting driveways, see Index 310.
6. Where a curb ramp is constructed within existing curb, curb and gutter and/or sidewalk, the existing curb or curb and gutter shall be removed to the nearest joint beyond the curb transitions or to the extent that no remaining section of curb or curb and gutter is less than 5' long. The existing sidewalk shall be removed to the nearest joint beyond the transition slope or walk around or to the extent that no remaining section of sidewalk is less than 5' long. For details of Concrete Sidewalk See Index 310.
7. Alpha-numeric identifications are for reference (plans, permits, etc.).
8. Public sidewalk curb ramps are to be paid for as follows:

   Ramps, reconstructed sidewalks, walk around sidewalks, sidewalk landings and sidewalk curbs are to be paid for under the contract unit price for Sidewalk, Concrete, (__" thick), SY. Curb transitions and reconstructed curbs are to be paid for under the contract unit price for the parent curb, i.e., Concrete Curb (Type __), LF. or Concrete Curb and Gutter (Type __), LF.

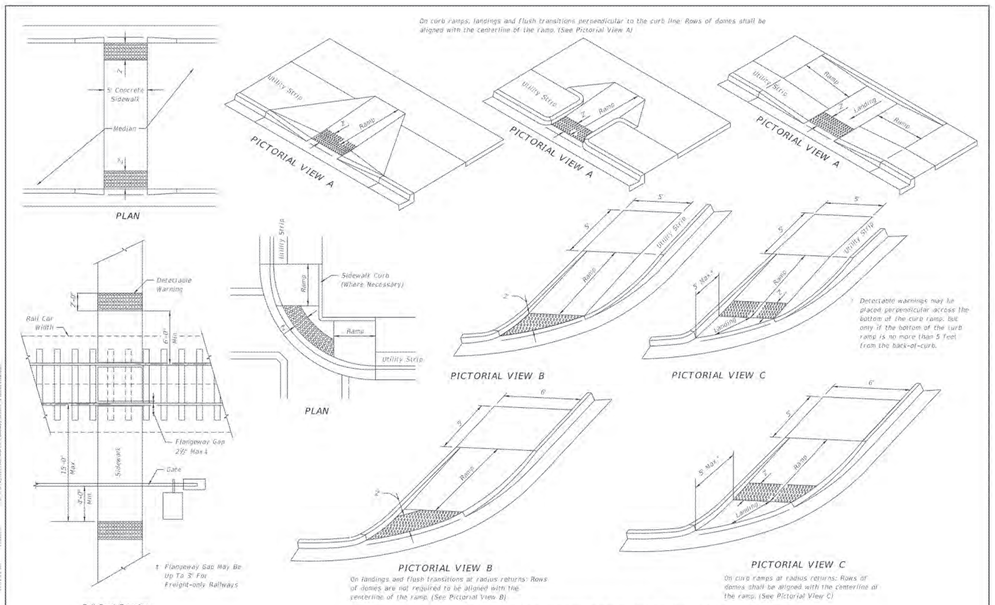
   Within a separate pay item for the removal and disposal of existing curb, curb and gutter, and/or sidewalk is not provided in the plans, the cost of removal and disposal of these features shall be included in the contract unit price for new curb, curb and gutter and/or sidewalk respectively.
9. Acceptance Criteria for Detectable Warnings:

   a. The ramp detectable warning surface shall be complete and uniform in color and texture.
   b. 90% of the individual truncated domes must comply with the design criteria.
   c. There may be no more than 4 non-complying domes in any one square foot of surface.
   d. No two adjacent domes may be non-compliant.
   e. Surface may not deviate more than 0.10" from a true plane.
10. All sidewalk surfaces, ramp surfaces, and landings with a cross slope shown in this Index to be 0.02 shall be 0.02 maximum. All ramp surfaces and ramp transition slopes with a slope shown in this Index to be 1:12 shall be 1:12 maximum.



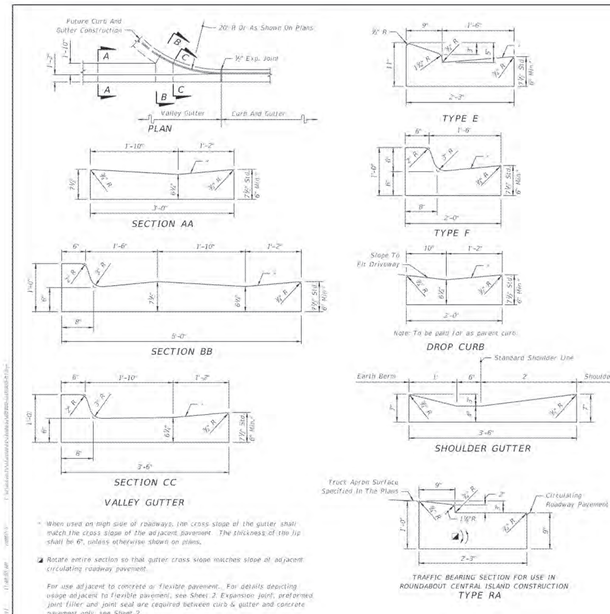
TYPICAL PLACEMENT OF PUBLIC SIDEWALK CURB RAMPS AT CURBED RETURNS

LAST REVISION	DESCRIPTION:	FDOT DESIGN STANDARDS FY 2012/2013	PUBLIC SIDEWALK CURB RAMPS	INDEX NO.	SHEET NO.
01/01/11				304	1



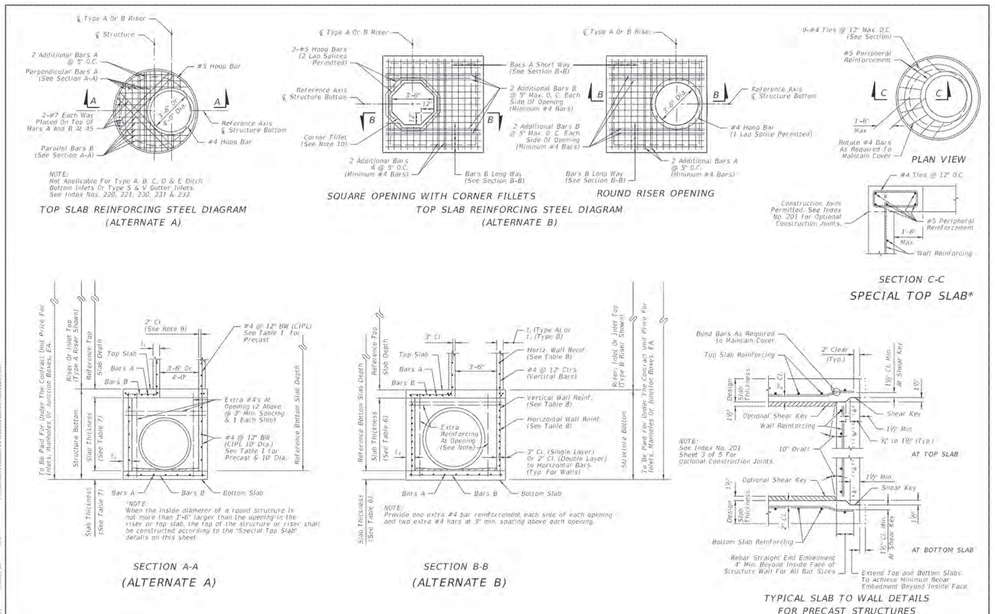
TYPICAL PLACEMENT OF DETECTABLE WARNING AT CURB RAMPS

LAST REVISION	DESCRIPTION:	FDOT DESIGN STANDARDS FY 2012/2013	PUBLIC SIDEWALK CURB RAMPS	INDEX NO.	SHEET NO.
01/01/11				304	6



CONCRETE CURB AND GUTTER

LAST REVISION	DESCRIPTION:	FDOT DESIGN STANDARDS FY 2012/2013	CURB & CURB AND GUTTER	INDEX NO.	SHEET NO.
00				300	1



LAST REVISION	DESCRIPTION:	FDOT DESIGN STANDARDS FY 2012/2013	STRUCTURE BOTTOMS TYPE J AND P	INDEX NO.	SHEET NO.
01/01/10				200	1

REVISIONS		

LORD'S WAY 30, LLC

SFWMD PERMIT PLANS
COLLIER COUNTY, FLORIDA

HAGAN ENGINEERING
909 10th Street South #105
Naples, Florida 34102
Phone (239) 851-8239

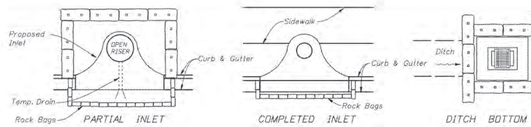
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474

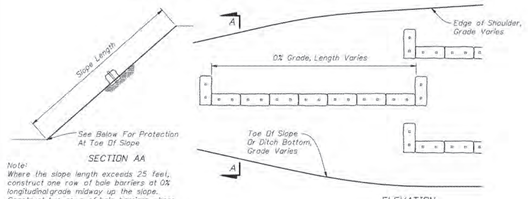
DATE:

FDOT CONSTRUCTION DETAILS

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013-072	As Shown	R-01

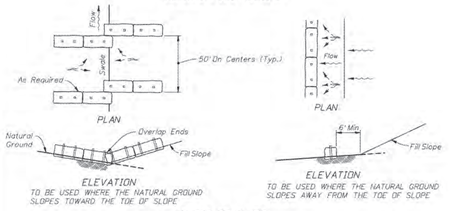


PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

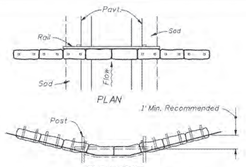


Note:
Where the slope length exceeds 25 feet, construct one row of bale barriers at 0% longitudinal grade midway up the slope. Construct two rows of bale barriers where the slope length exceeds 50 feet.

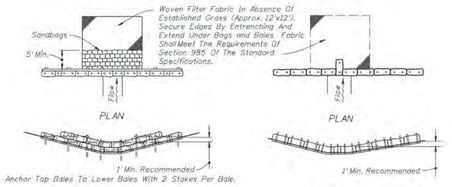
ALONG FILL SLOPE



AT TOE OF SLOPE
BARRIERS FOR FILL SLOPES



SYNTHETIC BALES OR BALE TYPE BARRIERS FOR PAVED DITCHES

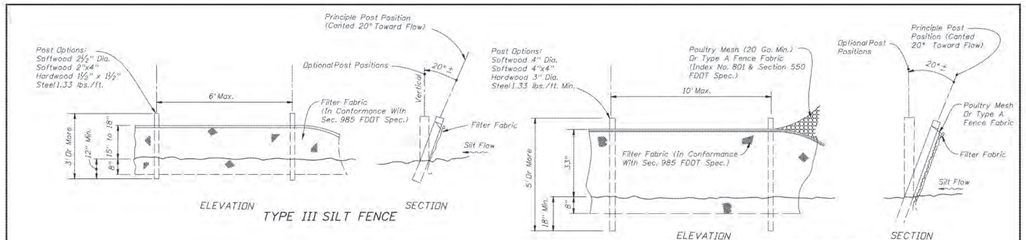


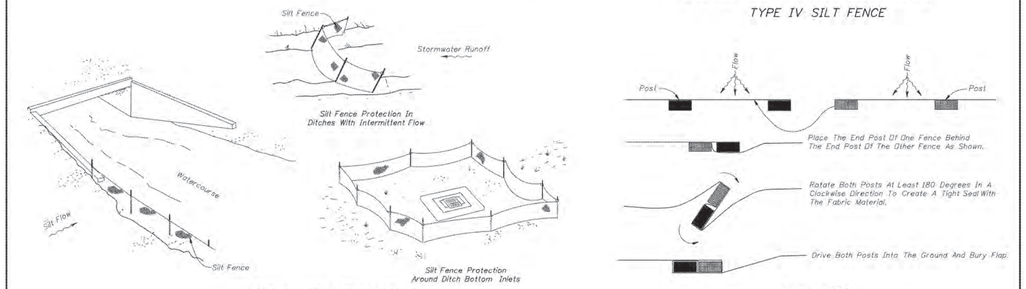
SYNTHETIC BALES OR BALE TYPE BARRIERS FOR UNPAVED DITCHES

NOTES FOR SYNTHETIC BALES OR BALE TYPE BARRIERS

1. Type I and II Synthetic Barrier should be spaced in accordance with Chart 1, Sheet 1.
2. Bales shall be anchored with 2-1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the Engineer. Stakes other than wood shall be removed upon completion of the project.
3. Rails and posts shall be 2" x 4" wood. Other materials providing equivalent strength may be used if approved by the Engineer.
4. Adjacent bales shall be butted firmly together.
5. Where used in conjunction with silt fence, bales shall be placed on the upstream side of the fence.
6. Bales to be paid for under the contract unit price for Synthetic Bales, LF. The unit price shall include the cost of filter fabric for Type I and II Barriers. Sandbags shall be paid for under the unit price for Sandbagging, CY. Rock bags to be paid for under the contract unit price for Rock Bags, EA.

2010 FDOT Design Standards	Last Revision 07/01/09	Sheet No. 2 of 3
TEMPORARY EROSION AND SEDIMENT CONTROL		Index No. 102

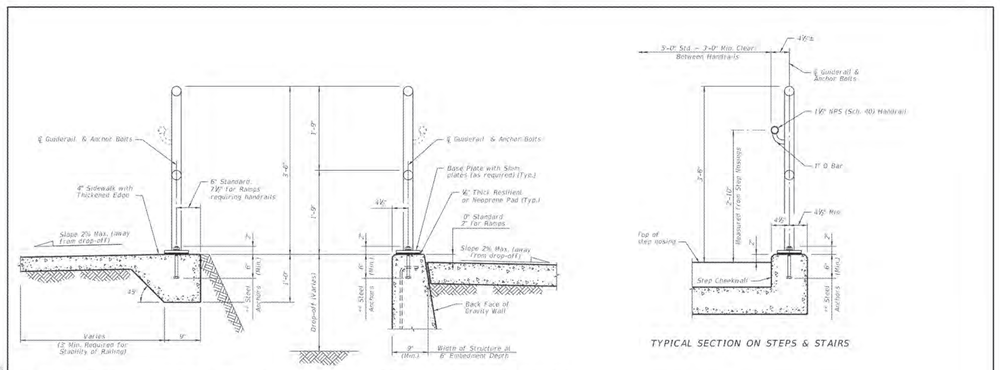




NOTES FOR SILT FENCES

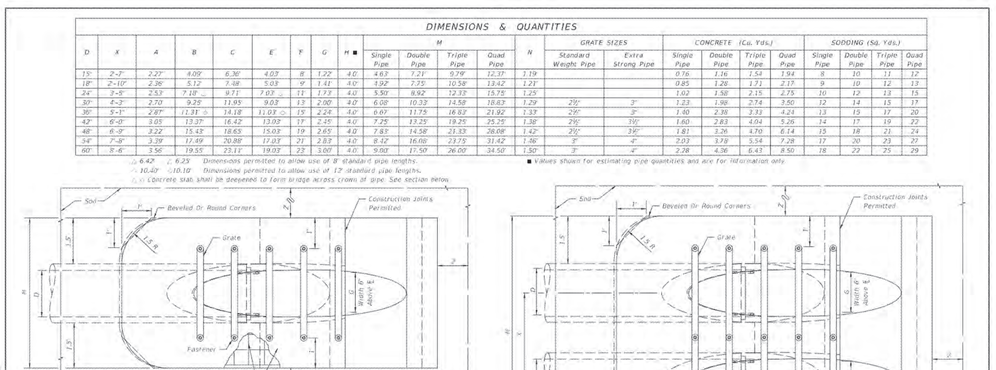
1. Type III Silt Fence to be used at most locations. Where used in ditches, the spacing for Type III Silt fence shall be in accordance with Chart 1, Sheet 1.
2. Type IV Silt Fence to be used where large sediment loads are anticipated. Suggested use is where fill slope is 1:2 or steeper and length of slope exceeds 25 feet. Avoid use where the detained water may back into travelanes or off the right of way.
3. Do not construct silt fences across permanent flowing watercourses. Silt fences are to be at upland locations and turbidity barriers used at permanent bodies of water.
4. Where used as slope protection, Silt Fence is to be constructed on 0% longitudinal grade to avoid channelizing runoff along the length of the fence.
5. Silt Fence to be paid for under the contract unit price for Staked Silt Fence, (LF).

2010 FDOT Design Standards	Last Revision 07/01/05	Sheet No. 3 of 3
TEMPORARY EROSION AND SEDIMENT CONTROL		Index No. 102



NOTES
1. 2 – ½" Ø x 8" Steel Anchors; Galvanized Steel Bolts (As Shown) (C-1-P): Galvanized U-Bolts Permitted (C-1-P), Galvanized Adhesive Anchors Permitted (C-1). Expansion Anchors Not Permitted.
2. Adhesive anchors shall be fully encapsulated headless anchor bolts set in a hole (1/32" larger than the nominal diameter) with an Adhesive Bonding Material System in accordance with Specification Section 937 and installed in accordance with Specification Section 416. The minimum embedment is 6".

LAST REVISION	DESCRIPTION:	FDOT DESIGN STANDARDS 2013	ALUMINUM PIPE GUIDERAIL	INDEX NO. 870	SHEET NO. 5
01/01/11					



LAST REVISION	DESCRIPTION	FDOT DESIGN STANDARDS FY 2012/2013	SIDE DRAIN MITERED END SECTION	INDEX NO. 273	SHEET NO. 1
02					

REVISIONS

LORD'S WAY 30, LLC

SFWMD PERMIT PLANS
COLLIER COUNTY, FLORIDA

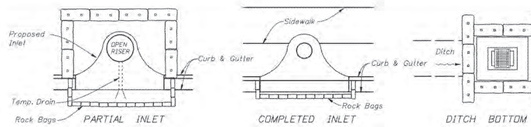
HAGAN ENGINEERING
909 10th Street South #105
Naples, Florida 34102
Phone (239) 851-8239

30 ACRE SINGLE-FAMILY PROJECT

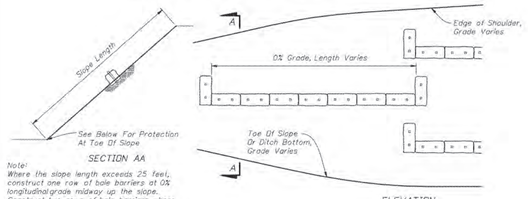
C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

FDOT CONSTRUCTION DETAILS

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013–072	As Shown	R–03

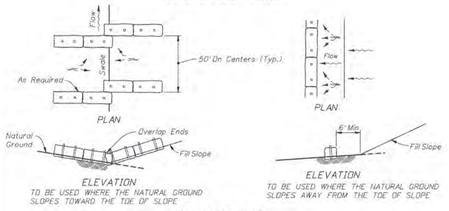


PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

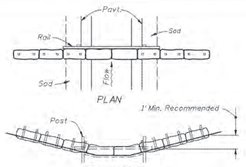


Note:
Where the slope length exceeds 25 feet, construct one row of bale barriers at 0% longitudinal grade midway up the slope. Construct two rows of bale barriers where the slope length exceeds 50 feet.

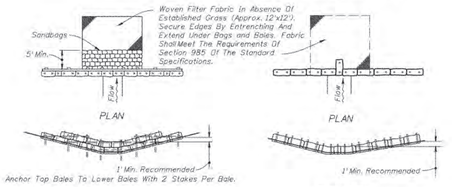
ALONG FILL SLOPE



AT TOE OF SLOPE
BARRIERS FOR FILL SLOPES



SYNTHETIC BALES OR BALE TYPE BARRIERS FOR PAVED DITCHES

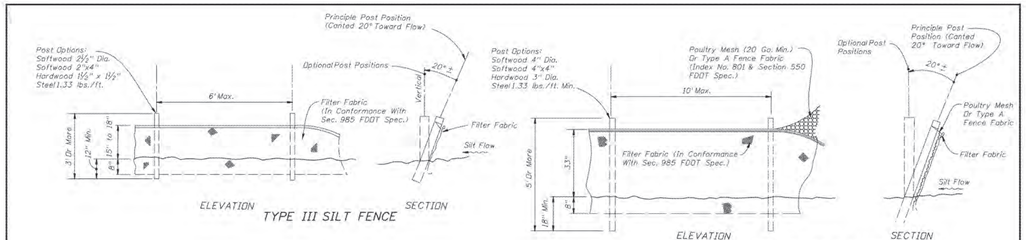


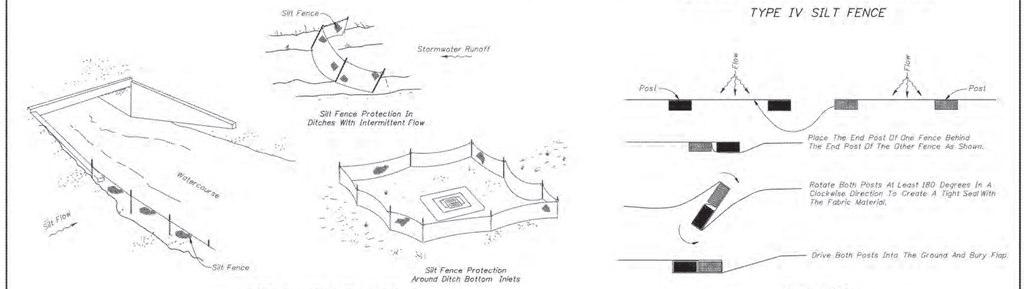
SYNTHETIC BALES OR BALE TYPE BARRIERS FOR UNPAVED DITCHES

NOTES FOR SYNTHETIC BALES OR BALE TYPE BARRIERS

1. Type I and II Synthetic Barrier should be spaced in accordance with Chart 1, Sheet 1.
2. Bales shall be anchored with 2-1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the Engineer. Stakes other than wood shall be removed upon completion of the project.
3. Rails and posts shall be 2" x 4" wood. Other materials providing equivalent strength may be used if approved by the Engineer.
4. Adjacent bales shall be butted firmly together.
5. Where used in conjunction with silt fence, bales shall be placed on the upstream side of the fence.
6. Bales to be paid for under the contract unit price for Synthetic Bales, LF. The unit price shall include the cost of filter fabric for Type I and II Barriers. Sandbags shall be paid for under the unit price for Sandbagging, CY. Rock bags to be paid for under the contract unit price for Rock Bags, EA.

2010 FDOT Design Standards	Last Revision 07/01/09	Sheet No. 2 of 3
TEMPORARY EROSION AND SEDIMENT CONTROL		Index No. 102

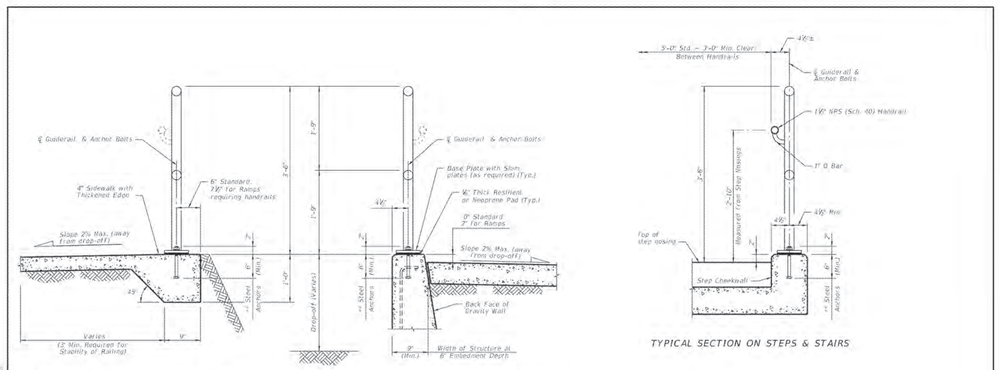




NOTES FOR SILT FENCES

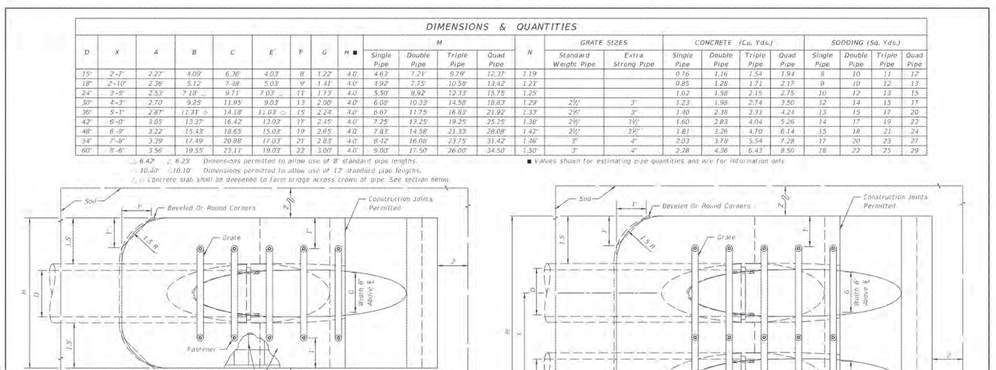
1. Type III Silt Fence to be used at most locations. Where used in ditches, the spacing for Type III Silt fence shall be in accordance with Chart 1, Sheet 1.
2. Type IV Silt Fence to be used where large sediment loads are anticipated. Suggested use is where fill slope is 1:2 or steeper and length of slope exceeds 25 feet. Avoid use where the detained water may back into travelanes or off the right of way.
3. Do not construct silt fences across permanent flowing watercourses. Silt fences are to be at upland locations and turbidity barriers used at permanent bodies of water.
4. Where used as slope protection, Silt Fence is to be constructed on 0% longitudinal grade to avoid channelizing runoff along the length of the fence.
5. Silt Fence to be paid for under the contract unit price for Staked Silt Fence, (LF).

2010 FDOT Design Standards	Last Revision 07/01/05	Sheet No. 3 of 3
TEMPORARY EROSION AND SEDIMENT CONTROL		Index No. 102



NOTES
1. 2 – ½" Ø x 8" Steel Anchors; Galvanized Steel Bolts (As Shown) (C-1-P): Galvanized U-Bolts Permitted (C-1-P), Galvanized Adhesive Anchors Permitted (C-1). Expansion Anchors Not Permitted.
2. Adhesive anchors shall be fully encapsulated headless anchor bolts set in a hole (1/32" larger than the nominal diameter) with an Adhesive Bonding Material System in accordance with Specification Section 937 and installed in accordance with Specification Section 416. The minimum embedment is 6".

LAST REVISION	DESCRIPTION:	FDOT DESIGN STANDARDS 2013	ALUMINUM PIPE GUIDERAIL	INDEX NO. 870	SHEET NO. 5
01/01/11					



LAST REVISION	DESCRIPTION	FDOT DESIGN STANDARDS FY 2012/2013	SIDE DRAIN MITERED END SECTION	INDEX NO. 273	SHEET NO. 1
02					

REVISIONS

LORD'S WAY 30, LLC

SFWMD PERMIT PLANS
COLLIER COUNTY, FLORIDA

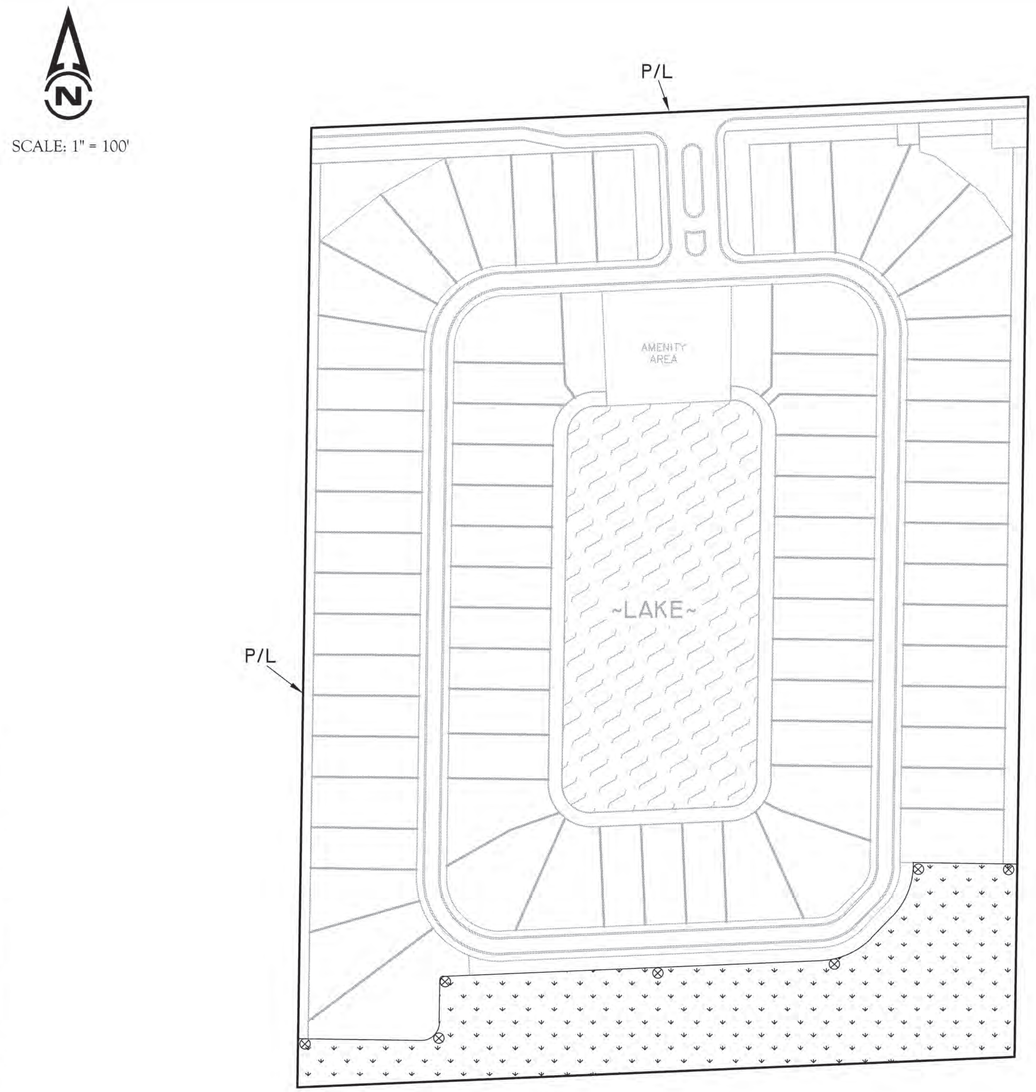
HAGAN ENGINEERING
909 10th Street South #105
Naples, Florida 34102
Phone (239) 851-8239

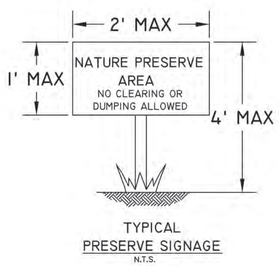
30 ACRE SINGLE-FAMILY PROJECT

C. D. HAGAN, P.E.
FL REGT. #38649
EB #29474
DATE:

FDOT CONSTRUCTION DETAILS

DATE	PROJECT NO.	SCALE	SHEET
06/20/12	2013–072	As Shown	R–03





TYPICAL
PRESERVE SIGNAGE
N.T.S.

LEGEND:

PRESERVE AREA (3.51 Ac.±)

NATURE PRESERVE SIGN

NOTES:

PROPERTY BOUNDARY PER HAGAN ENGINEERING
DRAWING NO. ACAD-2013-072-BASE.DWG
DATED JANUARY 9, 2014.

SITE PLAN PER HAGEN ENGINEERING
DRAWING NO. LORDS WAY BASE 021214.DWG
DATED FEBRUARY 12, 2014.

LORD'S WAY 30
PRESERVE AND LISTED SPECIES MANAGEMENT PLAN

INTRODUCTION

The following details the preserve and listed species management plan for the Lord's Way 30 (Project), a residential project located in Section 14, Township 50 South, Range 26 East, Collier County. The Project's preserve area consists of 3.51± acres of wetlands located along the south property boundary. Enhancement activities include exotic removal, supplemental plantings, and long-term maintenance of exotic vegetation. The preserve area will be placed under a conservation easement, which will ensure that the preserve remains in a natural state in perpetuity.

EXOTIC REMOVAL AND PLANTING PLAN

Enhancement activities consist of the removal of exotic and nuisance species and supplemental planting of native wetland vegetation. Exotic vegetation species are identified as Category I and II invasive exotic plant species, pursuant to the most current list established by the Florida Exotic Pest Plant Council (EPPC). The exotic species to be eradicated include, but are not limited to, melaleuca (*Melaleuca quinquenervia*), Brazilian pepper (*Schinus terebinthifolius*), earleaf acacia (*Acacia auriculiformis*), and downy rose-myrtle (*Rhodomyrtus tomentosus*). The on-site exotic removal work within the preserve area will be done concurrently with initial site clearing and stormwater management construction activities for the Project.

Due to the dense exotic vegetation present within the on-site preserve area, exotic vegetation will be removed using mechanical equipment in order to allow for successful supplemental plantings and natural recruitment of native vegetation. Efforts will be made to preserve native trees when conducting the selective mechanical removal activities. Exotic and nuisance vegetation will be cut within 12 inches of ground elevation and the remaining stump will be treated with approved herbicide. The cut exotic and nuisance vegetation will be removed from the preserve area. To minimize adverse impacts to the ground surface, the staging of mechanical equipment used for the exotic removal activities will occur within the development footprint.

Following the removal of exotics, supplemental wetland plantings will be installed throughout the 3.51± acre on-site preserve. The target community type is pine/cypress. As such, the majority of the trees planted will be slash pine and cypress with the inclusion of two of the other four tree species listed in Table 1. Shrub plantings will include a minimum of two of the three species listed in Table 1, and ground cover plantings will include a minimum of five of the eight ground cover species listed in Table 1. The species selected for planting will depend on market availability at the time the plantings are to occur.

Table 1. Supplemental Wetland Planting List

Common Name	Scientific Name	Minimum Height	Minimum Container Size	Planting Density (On Center)
Tree Plantings				
Slash Pine	*Pinus elliottii*	5 ft.	3 gal.	15 ft.
Cypress	*Taxodium* spp.	5 ft.	3 gal.	15 ft.
Dahoon Holly	*Ilex cassine*	5 ft.	3 gal.	15 ft.
Red Maple	*Acer rubrum*	5 ft.	3 gal.	15 ft.
Sweetbay	*Magnolia virginiana*	5 ft.	3 gal.	15 ft.
Swamp Bay	*Persea palustris*	5 ft.	3 gal.	15 ft.
Shrub Plantings				
Wax Myrtle	*Myrica cerifera*	3 ft.	1 gal.	10 ft.
Myrsine	*Myrsine cubana*	3 ft.	1 gal.	10 ft.
Gallberry	*Ilex glabra*	3 ft.	1 gal.	10 ft.
Ground Cover Plantings				
Gulfdune Paspalum	*Paspalum monostachyum*	12 in.	2 in.	3 ft.
Sawgrass	*Cladium jamaicense*	12 in.	2 in.	3 ft.
Swamp Fern	*Blechnum serrulatum*	12 in.	2 in.	3 ft.
Blue Maidencane	*Amphicarpum muhlenbergianum*	12 in.	2 in.	3 ft.
Maidencane	*Panicum hemitomon*	12 in.	2 in.	3 ft.
Spikerush	*Eleocharis interstincta*	12 in.	2 in.	3 ft.
Cordgrass	*Spartina bakeri*	12 in.	2 in.	3 ft.
Lovegrass	*Eragrostis* spp.	12 in.	2 in.	3 ft.

MONITORING

Vegetation and hydrologic monitoring of the on-site preserve will be conducted. Vegetation will be monitored prior to and following enhancement activities. Sampling will involve canopy, sub-canopy, and ground cover stratum along one monitoring transect. Permanent fixed-point photograph stations will be established in the preserve area providing physical documentation of the condition and appearance of the preserve, as well as any changes taking place within it. Hydrologic monitoring will include the installation of one continuous recording monitoring well which will be set to record on a daily basis. Monitoring well data will be downloaded once every three months and will be summarized in the annual monitoring reports. The permittee will submit baseline, time-zero, and annual monitoring reports to the South Florida Water Management District. Annual monitoring reports will be prepared for a period of five years or until success criteria are met.

MAINTENANCE

The preserve area will remain in a natural state in perpetuity and not be disturbed by dredging, filling, land clearing, or construction related activities. Maintenance will be conducted in perpetuity to ensure that the preserves are free of exotic vegetation and nuisance vegetation. The preserve area shall be kept free of refuse and debris.

If sod is being used to stabilize the berm slopes adjacent to the preserve area, native sod grass (i.e., St. Augustine grass (*Stenotaphrum secundatum*)) will be used and maintenance and monitoring of the preserve and development line boundaries will be conducted to control the spread of the sod grass into the preserve. Maintenance of the sod will include regular edging and either hand pulling or herbicide treatment of sod grass which has encroached into the preserve. Monitoring will be performed, on an annual basis at minimum, to identify areas which may have been missed by landscape crews, and which are in need of treatment.

PRESERVE SIGNAGE

Permanent physical markers identifying the boundary of the preserve will be installed along the limits of the on-site preserve area. Signage will be placed around preserve areas to identify and protect the preserve during and after construction. In accordance with LDC 3.05.04, the signs will be no closer than ten feet from residential property lines; will be limited to a maximum height of four feet and a maximum size of two square feet; and spaced no further than 300 feet apart.

PERMITTED USES

Allowable uses within the preserves include those activities required to maintain the preserve area per the Project's county, state, and federal requirements. Prohibited uses include but are not limited to: construction or placing of buildings on or above the ground; dumping or placing soil or other substances such as trash; removal or destruction of trees, shrubs, or other vegetation – with the exception of exotic/nuisance vegetation removal; excavation, dredging, or removal of soil material; diking or fencing; and any other activities detrimental to drainage, flood control, water conservation, erosion control, or fish and wildlife habitat conservation or preservation.

FLORIDA BLACK BEAR MANAGEMENT PLAN

The Project will utilize bear-proof dumpsters and garbage containers to discourage Florida black bears (*Ursus americanus floridanus*) from foraging in trash receptacles.

PRESERVE MANAGER AND DEVELOPER INFORMATION

The contact information for the preserve manager and the developer are as follows:

Preserve Manager
Kenneth Passarella
Passarella & Associates, Inc.
13620 Metropolis Avenue, Suite 200
Fort Myers, Florida 33912
(239) 274-0067
kenp@passarella.net

Developer
Lord's Way 30, LLC
c/o David Torres
3921 Prospect Avenue
Naples, Florida 34104
(239) 263-9700
david@flstardevelopment.com

The preserve manager is responsible for overseeing the implementation of the preserve management plan until the homeowners association takes over from the developer.

REVISIONS	DATE	DRAWN BY	DATE
		D.B.	1/10/14
Revised Per Updated Site Plan	2/12/14	DESIGNED BY	DATE
		C.G.R.	1/10/14
		REVIEWED BY	DATE
		K.C.P.	1/10/14

13620 Metropolis Avenue
Suite 200
Fort Myers, Florida 33912
Phone (239) 274-0067
Fax (239) 274-0069

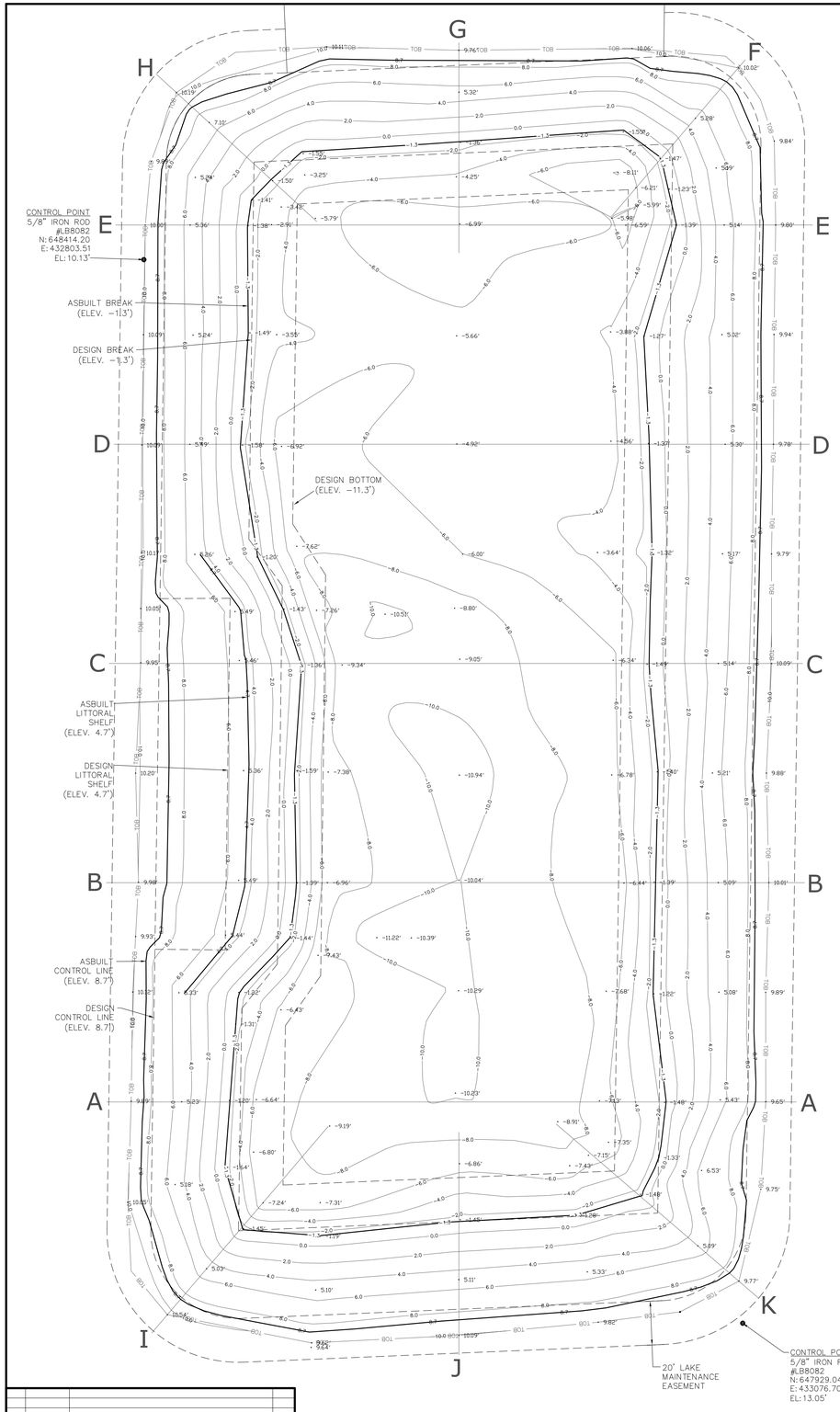
PASSARELLA & ASSOCIATES INC
Consulting Ecologists

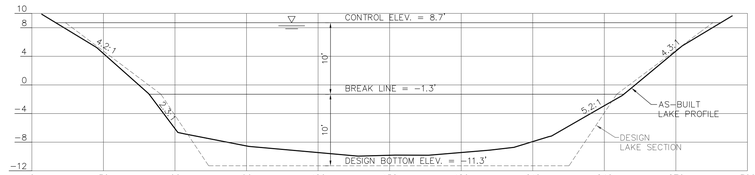
LORD'S WAY 30
PRESERVE AND LISTED SPECIES MANAGEMENT PLAN

DRAWING No.
11MIG2072

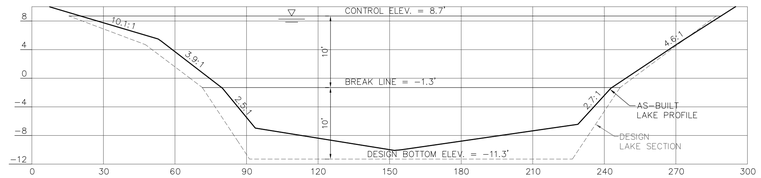
SHEET No.

J:\2011\11mig2072\30A\PPL Application\Preserve Area and Listed Species Management Plan 2-12-14.dwg Tab: 36x24-M Feb 25, 2014 - 2:50pm Plotted by: Holden Harding

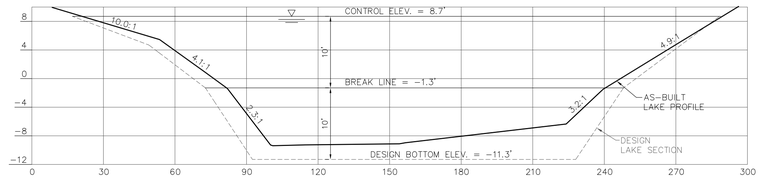




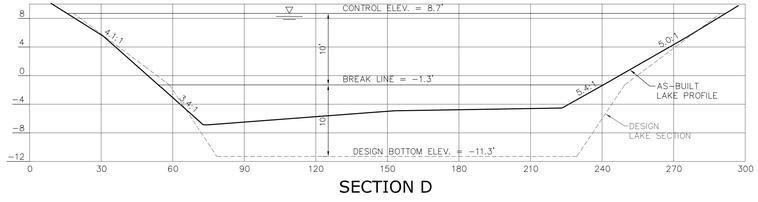
SECTION A



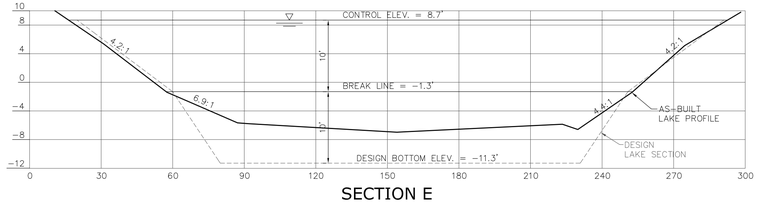
SECTION B



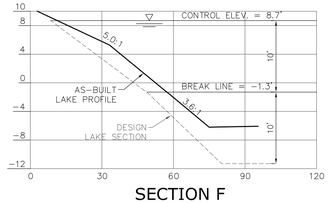
SECTION C



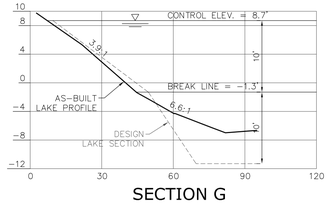
SECTION D



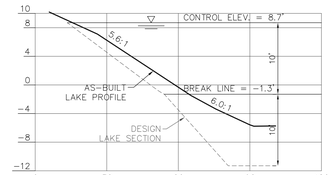
SECTION E



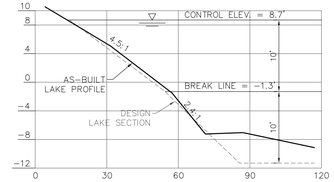
SECTION F



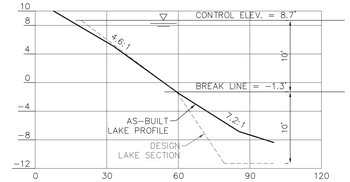
SECTION G



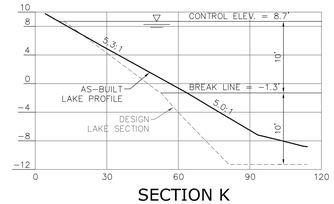
SECTION H



SECTION I



SECTION J



SECTION K

ASBUILT SURVEY

ESTILO ACRES
SECTION 14, TOWNSHIP 50 S., RANGE 26 E.
COLLIER COUNTY, FLORIDA.



SCALE: HORZ. 1"=30'
VERT. 1"=10'

NOTES:

THIS PLAT PREPARED AS AN ASBUILT SURVEY.

ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 FROM NATIONAL GEODETIC SURVEY BENCHMARK X526, ELEVATION 11.68 FEET.

COORDINATES AS SHOWN ARE PLANE COORDINATE FLORIDA EAST ZONE, NORTH AMERICAN DATUM OF 1983.

UNDERGROUND IMPROVEMENTS, OTHER THAN THOSE SHOWN, IF ANY, WERE NOT LOCATED.

THIS SURVEY WAS NOT INTENDED TO DELINEATE OR DEFINE ANY WETLANDS, ENVIRONMENTALLY SENSITIVE AREAS, WILDLIFE HABITATS, OR JURISDICTIONAL LINE OF ANY FEDERAL, STATE, REGIONAL OR LOCAL AGENCY, BOARD, COMMISSION OR OTHER ENTITY.

LEGEND:

I.R.	IRON ROD
LB	LICENSED BUSINESS
LS	LAND SURVEYOR
ELEV	ELEVATION
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
NGVD29	NATIONAL GEODETIC VERTICAL DATUM OF 1929
TOB	TOP OF BANK
+5.00'	ASBUILT ELEVATIONS

VOLUME AND AREA TABULATION

DESIGN AREA (8.7' CONTOUR): 152,618.6 SQUARE FEET OR 3.50 ACRES
ASBUILT AREA (8.7' CONTOUR): 154,100.2 SQUARE FEET OR 3.54 ACRES

DESIGN VOLUME (BELOW 8.7' CONTOUR): 72,843.13 CUBIC YARDS
ASBUILT VOLUME (BELOW 8.7' CONTOUR): 60,306.25 CUBIC YARDS

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, THAT THIS PLAT OF THE HEREON DESCRIBED PROPERTY IS A TRUE REPRESENTATION OF A FIELD SURVEY MADE UNDER MY DIRECTION AND CONFORMS TO THE STANDARDS OF PRACTICE FOR PROFESSIONAL SURVEYORS AND MAPPERS AS OUTLINED IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE.

KENNETH E. TRASK — DATE
PROFESSIONAL LAND SURVEYOR
FLORIDA LICENSE NO. LS4684

NOTICE:

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.

THIS CERTIFICATION IS ONLY FOR THE LANDS DESCRIBED HEREON. IT IS NOT A CERTIFICATION OF TITLE, ZONING, SETBACKS, OR FREEDOM OF ENCUMBRANCES.

NO.	DATE	REVISION DESCRIPTION	BY

Trask Surveying, P.A.
Land Surveyors
Florida Licensed Business No. LB8082
12345 Blasingim Road
Fort Myers, Florida 33966
(239) 980-1495

date	dwg	scale	job#	sheet
1-9-19	15-715R	1"=30'	15-71	1 of 1

Collier County
Growth Management Department
Development Review Division

September 8, 2020

Chris Hagan
1250 Tamiami Trail North, Suite 203B
Naples, FL 34102

Re: Final Excavation Acceptance Letter
Project Number: PL20130002583
Project Name: Sapphire Cove (fka Estilo Acres, fka Lords Way 30 (EX)

Dear Applicant:

Please be advised that the Board of County Commissioners of Collier County Florida as the beneficiary has inspected all of the required improvements associated with the subject Performance Bond and has found that the improvements meet County standards.

On September 8, 2020 the Board granted final acceptance of this excavation project and authorized the Clerk to the Board to release the performance security to the applicant.

Please be advised that Cash Bond may now be released and that Collier County has no claims against or further interest in the Cash Bond. A refund check in the amount of $32,200 will be sent to Lords Way 30, LLC via regular mail.

If you should have any questions or if we may be of assistance, please advise us at 239-252-2417.

Sincerely,

Development Review Division

Growth Management Department
2800 N. Horseshoe Dr.
Naples, Florida 34104
239-252-2400

WOODS & WETLANDS INC
Ecosystem Restoration

18731 Durrance Road
North Fort Myers, FL 33917
www.woodsandwetlands.com

Invoice

Date	Invoice #
8/27/2019	4944

LW30 QB
LW30 Class

Bill To

Lord's Way 30, LLC
7742 Alico Rd
Fort Myers, FL 33912

POSTED

Terms
Due on receipt

Description	Amount
PROJECT: Estilo	
Furnished & Installed	
192 - 3 GAL (127 Pine and 65 Cypress) @ $9.00 EA	1,728.00
330 - 1 GAL (70 Wax Myrtle, 170 Buttonbush, 90 Gallberry) @ $5.00 EA	1,650.00
1,500 - 2" (300 Cordgrass, 350 Maidencane, 200 Muhly, 350 Sawgrass, 300 Gulfdune paspalum) @ $1.10 EA	1,650.00
Total	$5,028.00

T 239 567 1857 info@woodsandwetlands.com F 239 567 0932

Chicago Title Insurance Company

TITLE SEARCH REPORT

Order No.: 8974148

Customer Reference: 3488.012
(use for AgentTRAX documents)

To: Coleman, Yovanovich & Koester, P.A.
4001 Tamiami Trail North, Suite 300
Naples, FL 34103
Phone: 239-435-3535
Fax: 239-435-1218

The attached Title Search Report is issued for the use of the agent to whom it is addressed. This Report is to be used only by the agent to determine the insurability of title to the property described herein in conjunction with issuance of commitments, policies and endorsements by Chicago Title Insurance Company, Fidelity National Title Insurance Company or Commonwealth Land Title Insurance Company ("the Company").

The agent reviewing this Title Search Report must follow all underwriting guidelines set forth in the underwriting Manual and Bulletins issued by the Company. This is a report of matters appearing in the official land records of the county or city wherein the property is located. No search has been made for any matters recorded in the Federal District Courts. Not included in this Report are matters, such as mortgages, judgments and other liens, for which the Company has found recorded satisfactions or releases, and possible other matters which, according to custom and practice, would not appear in a title search. At the time of this Report, the Company may have had and relied upon title evidence in the form of a title policy, master file, title report or abstract which predates the period searched.

The amount shown in this Report for any deeds of trust, judgments and/or taxes is for informational purposes only. The recipient is responsible for confirming amounts for payoff and/or proration purposes.

Use of this Title Search Report for any reason other than the issuance of a Company commitment, policy or endorsement is not authorized. This Report may not be relied upon by any other party nor may it be relied upon for any other purpose. No liability is assumed by the Company for unauthorized use or reliance. The liability under this Title Search Report is limited to the liability under the policy or policies issued pursuant to this Title Search Report. This Title Search Report is not an opinion, warranty or guarantee of title. The liability under this Title Search Report shall cease and terminate six months after the ending date set forth in the Period of the Search, unless extended in writing by the Company.

Dated: November 19, 2020

Chicago Title Insurance Company
TITLE SEARCH REPORT
Schedule A

1. PERIOD SEARCHED:

   The period covered in the search commenced with the Base Title as determined by Company and ends on: November 05, 2020 at 8:00 AM

2. Policy or Policies to be issued:

   A. ALTA Owners 2006 with Florida Modifications
      Proposed Insured: Hacienda Lakes Community Development District
      Proposed Amount of Insurance: $1,000.00

3. The estate or interest in the land described or referred to in this report is:

   Fee Simple

4. Last grantee of record for the period searched:

   Lord's Way 30, LLC, a Florida limited liability company

5. The land is described as follows:

   See attached Exhibit "A"

TITLE SEARCH REPORT
Schedule B Section 1
Requirements

The following are the requirements to be complied with:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

   A. Duly executed Special Warranty Deed from Lord's Way 30, LLC, a Florida limited liability company, Grantor, to Hacienda Lakes Community Development District, Grantee, conveying the land described on Exhibit A hereof.

5. Proof of payment of any outstanding assessments in favor of Collier County, Florida, any special taxing district and any municipality. NOTE: If this requirement is not satisfied the following exception will appear on Schedule B:

   Any outstanding assessments in favor of Collier County, Florida, any special taxing district and any municipality.

6. Proof of payment of service charges for water, sewer, waste and gas, if any, through the date of closing. NOTE: If this requirement is not met the following exception will appear on Schedule B:

   Any lien provided for by Florida Statutes in favor of any city, town, village or port authority for unpaid service charges for service by any water, sewer, waste or gas system supplying the insured land or service facilities.

7. Partial Release of the subject property from the Mortgage and Security Agreement given by Lord's Way 30, LLC, a Florida limited liability company, to Iberia Bank, N.A., a Louisiana state-chartered bank dated June 30, 2016, recorded July 1, 2016 in Official Records Book 5289, Page 2172, in the principal sum of $3,900,000.00 and as modified by Mortgage Modification Agreement, Amendment to the Assignment of Leases Rents and Profits and Notice of Receipt of Future Advance recorded June 17, 2019, in Official Records Book 5642, Page 1099, together with the following collateral documents;

   a) Assignment of Leases, Rents and Profits recorded July 1, 2016 in Official Records Book 5289, Page 2188

   b) UCC-1 Financing Statement recorded July 1, 2016 in Official Records Book 5289, Page 2193

8. Partial Release of the subject property from the Mortgage, Assignment of Rents and Security Agreement given by Lord's Way 30, LLC, a Florida limited liability company, to Marco Island Group, LLC, a Florida limited liability company dated June 30, 2016, recorded July 1, 2016 in Official Records Book 5289, Page 2197, in the principal sum of $900,000.00 and as assigned to George P. Bauer, as Trustee of the George P. Bauer Revocable Trust Dated July 20, 1990, as to an undivided ninety-nine percent (99%) interest, and Carol B. Bauer, as Trustee of the Carol B. Bauer Revocable Trust Dated July 20, 1990, as to an undivided one percent (1%) interest in Official Records Book 5321, Page 3171.

NOTE: 2020 Real Property Taxes in the gross amount of $1.13 are paid. Homestead Exemption: No. Tax I.D. 31374000129.

TITLE SEARCH REPORT
Schedule B Section 2
Exceptions

1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed insured acquires for value of record the estate or interest or mortgage thereon covered by this form.

2. Taxes and assessments for the year 2021 and subsequent years, which are not yet due and payable.

3. Standard Exceptions:

   A. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land.

   B. Rights or claims of parties in possession not shown by the public records.

   C. Any lien, or right to a lien, for services, labor, or materials heretofore or hereafter furnished, imposed by law and not shown by the public records.

   D. Taxes or assessments which are not shown as existing liens in the public records.

4. Any claim that any portion of the insured land is sovereign lands of the State of Florida, including submerged, filled or artificially exposed lands accreted to such land.

5. Any lien provided by County Ordinance or by Chapter 159, Florida Statutes, in favor of any city, town, village or port authority for unpaid service charges for service by any water, sewer or gas system supplying the insured land.

NOTE: Exception 1 above shall be deemed deleted as of the time the settlement funds or proceeds of the loan to be secured by the insured mortgage, as applicable, are disbursed by the Company or its authorized agent. Neither the Company nor its agent shall, however, be under any duty to disburse any sum except upon a determination that no such adverse intervening matters have appeared of record or occurred.

NOTES ON STANDARD EXCEPTIONS:

Item 3A will be deleted from the policy(ies) upon receipt of an accurate survey of the Land acceptable to the Company. Exception will be made for any encroachment, setback line violation, overlap, boundary line dispute or other adverse matter disclosed by the survey.

Items 3B, 3C, and 3D will be deleted from the policy(ies) upon receipt of an affidavit acceptable to the Company, affirming that, except as disclosed therein (i) no parties in possession of the Land exist other than the record owner(s); (ii) no improvements have been made to the Land within 90 days prior to closing which have not have been paid for in full; and (iii) no unpaid taxes or assessments are against the Land which are not shown as existing liens in the public records. Exception will be made for matters disclosed in the affidavit.

6. Restrictions, reservations, dedications and easements contained on the plat of Estilo Acres, as recorded in Plat Book 65, page 69, of the Public Records of Collier County, Florida.

7. Oil, gas and mineral lease recorded in Deed Book 9, Page 560, and reservations as contained in partial release of Oil, Gas and Mineral Lease recorded in Official Records Book 221, Page 31, all of the Public Records of Collier County, Florida

8. Notice of Establishment of Hacienda Lakes Community Development District recorded in Official Records Book 4852, Page 1137 and as Amended and Restated in Official Records Book 5500, Page 3229, of the Public Records of Collier County, Florida.

TITLE SEARCH REPORT
EXCEPTIONS continued

9. Declaration of Consent to Jurisdiction of Hacienda Lakes Community Development District and to Imposition of Special Assessments recorded in Official Records Book 4928, Page 3894, of the Public Records of Collier County, Florida.

10. Final Judgment of Validation of Hacienda Lakes Community Development District recorded in Official Records Book 5010, Page 2673, of the Public Records of Collier County, Florida.

11. True-Up Agreement between Hacienda Lakes Community Development District and Lord's Way 30, LLC, a Florida limited liability company recorded in Official Records Book 5305, page 1273, of the Public Records of Collier County, Florida.

12. Declaration of Consent to Jurisdiction of Hacienda Lakes Community Development District and to Imposition of Special Assessments recorded in Official Records Book 5305, page 1254, and Notice of Lien of Record of Hacienda Lakes Community Development District recorded in Official Records Book 5305, page 1259, together with Mortgagee Special Assessment Acknowledgement recorded in Official records Book 5305, page 1263 and in Official Records Book 5305, page 1268, of the Public Records of Collier County, Florida.

13. Notice of Environmental Resource or Surface Water Management Permit recorded in Official Records Book 4947, Page 2608, of the Public Records of Collier County, Florida.

14. Temporary Access, Drainage and Utility Easement given by Lord's Way 30, LLC, a Florida limited liability company in favor of Hacienda Lakes Community Development District as recorded in Official Records Book 5325, page 2524, of the Public Records of Collier County, Florida.

15. Collateral Assignment and Assumption of Development and Contract rights relating to Hacienda Lakes recorded in Official Records Book 5305, page 1284, as re-recorded in Official Records Book 5305, page 2357, of the Public Records of Collier County, Florida.

16. Terms, conditions, covenants, easements and restrictions set forth in Declaration of Covenants, Conditions and Restrictions of Sapphire Cove recorded in Official Records Book 5599, page 775, and First Amendment recorded in Official Records Book 5630, page 112, of the Public Records of Collier County, Florida. Such Declaration, as may be amended from time to time, establishes and provides for easements, liens, charges, assessments and an option to repurchase.

17. Collateral Assignment and Assumption of Development and Contract Rights Relating to Hacienda Lakes recorded in Official Records Book 4928, Page 3907, and being amended and restated in Official Records Book 5028, Page 1974, all of the Public Records of Collier County, Florida.

18. Recorded Notice regarding noise recorded in Official Records Book 5047, Page 2789, of the Public Records of Collier County, Florida.

19. Deed of Conservation Easement given by Marco Island Group, LLC to South Florida Water Management District recorded in Official Records Book 5175, Page 2388, of the Public Records of Collier County, Florida.

NOTE: In accordance with Florida Statutes Section 627.4131, please be advised that the insured hereunder may present inquiries, obtain information about coverage, or receive assistance in resolving complaints, by contacting Chicago Title Insurance Company, 12800 University Dr., Suite 260, Ft. Myers, FL 33907; Telephone 239-275-8212.

Searched by: Dale Hunt

TITLE SEARCH REPORT
EXHIBIT “A”
LEGAL DESCRIPTION

Tract "L-1", of Estilo Acres, according to the plat thereof, as recorded in Plat Book 65, Page 69, of the Public Records of Collier County, Florida.

Prepared by:
Harold J. Webre, Esquire
Coleman, Yovanovich & Koester, P.A.
4001 Tamiami Trail North, Suite 300
Naples, FL 34103

Consideration: $10.00

Parcel Identification No. 31374000129

_____[Space Above This Line For Recording Data]_____

Special Warranty Deed

THIS SPECIAL WARRANTY DEED is made this _____ day of _____, 2020 between **LORD'S WAY 30, LLC**, a Florida limited liability company, whose post office address is 7742 Alico Rd., Ft. Myers, FL 33192, as Grantor*, and **HACIENDA LAKES COMMUNITY DEVELOPMENT DISTRICT**, an independent special district established pursuant to Chapter 190, Florida Statutes, whose post office address is c/o Real Estate Econometrics, Inc., 707 Orchid Drive, Suite 100, Naples, FL 34102, as Grantee*,

WITNESSETH that said Grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said Grantor in hand paid by said Grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said Grantee, and Grantee's successors and assigns forever, the following described land, situate, lying and being in **Collier County**, **Florida**, to-wit:

Tract "L-1", of Estilo Acres, according to the plat thereof, as recorded in Plat Book 65, Page 69, of the Public Records of Collier County, Florida.

Subject to: (a) real property ad valorem taxes accruing subsequent to December 31, 2020; (b) zoning, building code and other use restrictions imposed by governmental authority; (c) outstanding oil, gas and mineral interests of record, if any; and (d) restrictions, reservations and easements of record.

Together with all the tenements, hereditaments and appurtenances thereto.

To Have and to Hold, the same in fee simple forever.

And Grantor hereby covenants with said Grantee that Grantor is lawfully seized of said land in fee simple; that Grantor has good right and lawful authority to sell and convey said land; and that Grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under Grantor.

* "Grantor" and "Grantee" are used for singular or plural, as context requires.

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's hand and seal the day and year first above written.

Signed, sealed and delivered
In our presence:

_____
Print Name: _____

_____
Print Name: _____

LORD'S WAY, 30, LLC, a
Florida limited liability company

By: _____
David E. Torres, its Manager

STATE OF FLORIDA

COUNTY OF LEE

The foregoing instrument was acknowledged before me by means of [__] physical presence or [__] online notarization, on this _____ day of _____, 2020 by David E. Torres, as Manager of LORD'S WAY 30, LLC, a Florida limited liability company, who [__] is personally known to me or [__] has produced _____as identification.

[Notary Seal]

_____
Notary Public

Printed Name: _____

My Commission Expires: _____

November 10, 2020

South Florida Water Management Division
Permit Review

Re: ERP permit No. 11-03462-P; Estilo

Dear Permit Reviewer,

Please accept this correspondence on behalf of Lord's Way 30, LLC as a request for a permit modification to the Estilo ERP permit No. 11-03462-P. The permit currently states that the homeowner's association will be the responsible entity. We request that the operating entity be adjusted to Hacienda Lakes Community Development District c/o Russ Weyer, CDD Manager, 707 Orchid Dr, Suite 100, Naples, FL 34102. This change is requested as the Developer is in the process of conveying the water management system to the noted CDD and who will remain as the operating entity in the future.

I can be reached via cell phone at 904-762-4454 or via email at david@torrescompanies.com if you have any questions with regards to this request.

Sincerely,

David E. Torres, Manager
Lord's Way 30, LLC
7742 Alico Rd
Ft. Myers, FL 33912

cc. Russ Weyer, Hacienda Lakes CDD

Russ Weyer

From: Mike Roddis <MikeRoddis@hmeng.com>
Sent: Wednesday, December 9, 2020 12:02 PM
To: Russ Weyer; Terry Cole
Subject: RE: Request to Turn Over Lake - Sapphire Cove
Attachments: IMG_7239.JPG; IMG_7235.JPG; IMG_7236.JPG; IMG_7237.JPG; IMG_7238.JPG

Russ we really don't even need to meet ?? I walked it and took some pictures , weed eat around the W.C.S .in the southwest corner and have a laborer walk the lake and pick up trash -lake looks very well maintained .
Biggest thing is get rid of that RED barrel of kryptonite ?? (I don't know what's in it but could cause you some head ach if the right agency sees it). One more thing , fix your littoral signs
Text me back if you still want to meet 825-5381

From: Russ Weyer <Rweyer@ree-i.com>
Sent: Wednesday, December 09, 2020 11:09 AM
To: Mike Roddis <MikeRoddis@hmeng.com>
Cc: Terry Cole <TerryCole@hmeng.com>; David Torres <david@torrescompanies.com>; Gary Hains <gary@fl-star.com>
Subject: Re: Request to Turn Over Lake - Sapphire Cove

I can be there at that time as long as we're done no later than 9:30. Tomorrow correct?

Russ Weyer
President
Real Estate Econometrics, Inc.
(239) 269-1341

> On Dec 9, 2020, at 11:02 AM, Mike Roddis <MikeRoddis@hmeng.com> wrote:
>
> I would like to walk this lake on Thursday say 8:30? Does that work for who ever want to tag along ?
>
> ---
>
> **From:** Terry Cole <TerryCole@hmeng.com>
> **Sent:** Tuesday, December 08, 2020 10:14 AM
> **To:** Mike Roddis <MikeRoddis@hmeng.com>; Russ Weyer <Rweyer@ree-i.com>
> **Cc:** David Torres <david@torrescompanies.com>; Gary Hains <gary@fl-star.com>
> **Subject:** RE: Request to Turn Over Lake - Sapphire Cove
>
> Mike,
>
> Please let Russ and I know when you could inspect the completed lake (attached are the cross sections).
> It is located South of Lord's Way, east of the old First Assembly of God church.
>
> thanks,
>
> <image001.jpg>
> W. Terry Cole, P.E.
> Vice President/Principal


12/09/2020 12:30


12/09/2020 12:31


LAMBERT
12/09/2020 12:32


12/09/2020 12:28


12/09/2020 12:31

CASH ONLY IF ALL *CheckLock*™ SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

Lords Way 30, LLC 06/12
7742 Alico Rd
Fort Myers, FL 33912
(239) 208-4079

IBERIABANK
84-7041/2652

1633

11/20/2020

PAY TO THE ORDER OF Hacienda Lakes Community Development Dist $ **500.00

Five Hundred and 00/100********** DOLLARS

PROTECTED AGAINST FRAUD

Hacienda Lakes Community Development Dist
c/o Real Estate Econometrics, Inc.
707 Orchid Dr. Suite 100
Naples, FL 34102

MEMO

⑈001633⑈ ⑆265270413⑆ 20000780707⑈

© 2014 INTUIT INC. 1-800-333-8610
Intuit® CheckLock™ Secure Check Details on Back

Lords Way 30, LLC 1633

Hacienda Lakes Community Development Dist 11/20/2020

500.00

Ross, This is
for Sapphire
Lake
David T.

IberiaBank-Checking 500.00

EXHIBIT 4

HACIENDA LAKES

COMMUNITY DEVELOPMENT DISTRICT

C/O Real Estate Econometrics, Inc. •707 Orchid Drive, Suite 100 • Naples, FL 34102
(239) 269-1341 • rweyer@ree-i.com

December 28, 2020

Ms. Elizabeth Veguilla
Regulatory Support Supervisor
South Florida Water Management District
3301 Gun Club Road – MSC9610
West Palm Beach, FL 33406

RE: SFWMD permit number 11-03462-P

Dear Ms. Veguilla,

This letter confirms that the Hacienda Lakes Community Development District ("District") is in agreement that the District is to be included as an operating entity of the water management system at Sapphire Cove neighborhood in Hacienda Lakes. The District currently manages the water management system within District boundaries and the Sapphire Cove lake is a part of the District's water management system.

The District is currently maintaining the lake and its connecting systems and has the lake maintenance included in the current year fiscal budget. The District however, has no maintenance obligation pertaining to any preserves related to Sapphire Cove. Any preserves related to Sapphire Cove are the responsibility of the Sapphire Cove Homeowners Association, Inc.

Please feel free to contact me with any District questions you may have related to this issue.

Kindest regards,

G. Russell Weyer
District Manager

South Florida Water Management District
Individual Environmental Resource Permit No. 11-03462-P
Date Issued: June 5, 2015
Modified On: December 30, 2020

Permittee:	Lord's Way 30, LLC 7742 Alico Rd Ft Myers, FL 33912
Project:	Estilo
Application No.	201110-4667
Location:	Collier County, See Exhibit 1

Your application for an Individual Environmental Resource Permit is approved. This action is taken based on Chapter 373, Part IV, of Florida Statutes (F.S.) and the rules in Chapter 62-330, Florida Administrative Code (F.A.C.). Unless otherwise stated, this permit constitutes certification of compliance with state water quality standards under section 401 of the Clean Water Act, 33 U.S.C. 1341, and a finding of consistency with the Florida Coastal Management Program. Please read this entire agency action thoroughly and understand its contents.

This permit is subject to:

- Not receiving a filed request for a Chapter 120, F.S., administrative hearing.
- The attached General Conditions for Environmental Resource Permits.
- The attached Special Conditions.
- All referenced Exhibits.

All documents are available online through the District's ePermitting site at www.sfwmd.gov/ePermitting.

If you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

The District does not publish notices of action. If you wish to limit the time within which a person may request an administrative hearing regarding this action, you are encouraged to publish, at your own expense, a notice of agency action in the legal advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Legal requirements and instructions for publishing a notice of agency action, as well as a noticing format that can be used, are available upon request. If you publish a notice of agency action, please send a copy of the affidavit of publication provided by the newspaper to the District's West Palm Beach office for retention in this file.

If you have any questions regarding your permit or need any other information, please call us at 1-800-432-2045 or email epermits@sfwmd.gov.

Angelica S. Hoffert, P.E.
Section Leader, Environmental Resource Bureau

South Florida Water Management District
Individual Environmental Resource Permit No. 11-03462-P

Date Issued: June 5, 2015 **Expiration Date:** June 5, 2020

Modified On: December 30, 2020

Project Name: Estilo

Permittee: Lord's Way 30, LLC
7742 Alico Rd
Ft Myers, FL 33912

Operating Entity: Hacienda Lakes Community Development District
707 Orchid Dr, Naples
Naples, FL 34102

Sapphire Cove Homeowners Association, Inc.
7742 Alico Rd
Ft. Myers, FL 33912

Location: Collier County

Permit Acres: 127.28 acres

Project Land Use: Residential

Special Drainage District: N/A

Water Body Classification: CLASS III

FDEP Water Body ID: 3278V

Wetland and Surface Water Impacts: 22.37 acres

Conservation Easement to District: No

Sovereign Submerged Lands: No

Project Summary
This Environmental Resource Permit authorizes Construction and Operation of a stormwater management (SWM) system serving 27.31 acres of residential development for a project known as Estilo (fka Lords Way 30) with discharge into on-site wetlands. The authorization also includes 60.71 acres of offsite wetland mitigation on applicant-owned land in the vicinity of the proposed development area.

The project includes construction of a single family residential development and wet detention SWM system. See Exhibit No. 2.0 for construction plans.

Issuance of this permit constitutes certification of compliance with state water quality standards in accordance with Rule 62-330.062 Florida Administrative Code (F.A.C.).

Site Description
The 27.31-acre development site is located on the southern side of The Lord's Way, east of the

intersection with Collier Boulevard, north of Rattlesnake Hammock Road (County Highway 864), and adjacent to the Florida Sports Park/Naples Motor Speedway, in Naples, Collier County, Florida. The proposed off-site mitigation parcel is located approximately 0.80 miles to the east of the development site. A location map is attached as Exhibit No. 1.0.

Current Authorization (Application No. 201110-4667)
This application authorized a change to the perpetual operation and maintenance of the stormwater management system. The operating entity for this will be is Hacienda Lakes Community Development District and Sapphire Cove Homeowners Association, Inc.

Permit Modification History
Please see Exhibit No. 5.0 for a complete list of authorizations, special conditions and post permit compliance actions that constitute this permit.

Ownership, Operation and Maintenance
Perpetual operation and maintenance of the SWM Master system is the responsibility of Hacienda Lakes Community Development District. Perpetual operation and maintenance of the SWM system onsite and offsite preserves is the responsibility of Sapphire Cove Homeowners Association, Inc., as indicated in the submitted governing documents. Please refer to Exhibit No. 4.0, 4.1 and 4.2. Upon completion of construction and in conjunction with submittal of the construction completion certification, a request for transfer to the operating entity and recorded copies of its governing documents must be submitted in accordance with General Condition No. 7.

Engineering Evaluation:

Land Use
Land coverages for the 27.31-acre residential land use project are provided in the table below. The Open Space includes 1.80 acres outside of the 25.51-acre controlled SWM basin.

Water Quality
Water quality treatment will be provided in a 3.54-acre wet detention lake. The project provides the required 2.13 acre-feet of water quality treatment volume based on one inch over the basin area.

Pursuant to Appendix E of Volume II, the water quality treatment volume provided includes an additional 50% treatment volume above the requirements in Section 4.2 of Volume II to provide reasonable assurance that the project will not have an adverse impact on the quality of the downstream receiving body. The project is located within the watershed of FDEP WBID No. 3278V; the Rookery Bay (Inland East Segment) has not been identified as impaired for any constituent.

In addition to the required water quality treatment volume, the applicant provided site specific pollutant loading calculations to demonstrate that the storm water management system reduces the post development loading of pollutants, specifically nutrients, to levels less than the loadings generated under the pre-development condition. The pollutant loading calculations are based upon the removal characteristics associated with the system.

Water Quantity

Discharge
As found in the Water Quantity Data Table, the proposed discharge is below the allowable limit of 0.15 cfs/acre as established by Collier County.

Road Design
As found in the Water Quantity Data Table, minimum road center line elevations have been set at or above the calculated design storm flood elevation.

Perimeter Berm
As found in the Water Quantity Data Table, minimum perimeter berm elevations have been set at

or above the calculated design storm flood elevation.

Finished Floors
As found in the Water Quantity Data Table, minimum finished floor elevations have been set at or above the calculated design storm flood elevation.

For additional engineering details, please refer to Exhibit No. 5.0 for a comprehensive list of applications that constitute this permit.

Certification, Operation, and Maintenance
Pursuant to Chapter 62-330.310, F.A.C., Individual Permits will not be converted from the construction phase to the operation phase until construction completion certification of the project is submitted to and accepted by the District. This includes compliance with all permit conditions, except for any long term maintenance and monitoring requirements. It is suggested that the permittee retain the services of an appropriate professional registered in the State of Florida for periodic observation of construction of the project.

For projects permitted with an operating entity that is different from the permittee, it should be noted that until the construction completion certification is accepted by the District and the permit is transferred to an acceptable operating entity pursuant to Sections 12.1-12.3 of the Applicant's Handbook Volume I and Section 62-330.310, F.A.C., the permittee is liable for operation and maintenance in compliance with the terms and conditions of this permit.

In accordance with Section 373.416(2), F.S., unless revoked or abandoned, all SWM systems and works permitted under Part IV of Chapter 373, F.S., must be operated and maintained in perpetuity.

The efficiency of SWM systems, dams, impoundments, and most other project components will decrease over time without periodic maintenance. The operation and maintenance entity must perform periodic inspections to identify if there are any deficiencies in structural integrity, degradation due to insufficient maintenance, or improper operation of projects that may endanger public health, safety, or welfare, or the water resources. If deficiencies are found, the operation and maintenance entity is responsible for correcting the deficiencies in a timely manner to prevent compromises to flood protection and water quality. See Section 12.4 of the Applicant's Handbook Volume I for Minimum Operation and Maintenance Standards.

Engineering Evaluation Tables:
Land Use

Basin	Land Type	Area (ac)	% of Total Basin
Estilo	PAVEMENT	1.61	5.90
	ROADWAY	2.03	7.43
	LAKE	3.54	12.96
	BUILDING COVERAGE	4.22	15.45
	OPEN SPACE	15.91	58.26
	Total:	27.31	100%

Water Quality

Basin	Treatment Type	Treatment System	Volume Required (ac-ft)	Volume Provided (ac-ft)
Estilo	Treatment	WET DETENTION	2.13	3.19

Water Quantity

Basin	Elevation Type	Storm Event (Yr/Day)	Precipitation Depth (in)	Peak Stage (ft NAVD88)	Min. EL (ft NAVD88)	Peak Discharge Rate (cfs)	Allowable Discharge Rate (cfs)
Estilo	Finished Floor	100Y3D	15.08	12.54	14.00	N/A	N/A
	Perimeter Berm/ Discharge	25YR3D	11.55	11.33	12.54	3.77	3.83
	Road Crown	25YR3D	11.55	11.33	12.40	N/A	N/A

Bleeder

Basin	Control EL (ft NAVD88)	Structure #	Structure Type	Count	Type	Dia.(in)	Invert EL (ft NAVD88)	Receiving Body
Estilo	8.70	CS-1	Water Quality	1	Circular Orifice	4.50	8.70	On-site Preserve

Inlets

Basin	Control EL (ft NAVD88)	Structure #	Structure Type	Count	Type	Length (in)	Width (in)	Crest EL (ft NAVD88)	Receiving Body
Estilo	8.70	CS-1	SWM	1	Mod FDOT Type C Drop Inlet	24.0	444.0	12.50	On-site Preserve

Weir

Basin	Control EL (ft NAVD88)	Structure #	Structure Type	Count	Type	Width (in)	Height (in)	Crest EL (ft NAVD88)	Receiving Body
Estilo	8.70	CS-1	Discharge	1	Rectangular Notch	5.16	34.80	9.60	On-site Preserve

Environmental Evaluation:

Wetlands and Other Surface Waters

The project area contains a total of 25.88 acres of wetlands. Please see Exhibit 3.0 for wetland locations. The wetlands can be generally described as hydric melaleuca (formerly cypress, pine, and cabbage palm habitat), hydric pine, and hydric disturbed land. Additional wetland descriptions are located in the e-permitting file.

A total of 22.37 acres of direct wetland impacts were previously authorized under Application No. 120814-14. The permittee is not proposing any additional direct or secondary wetland impacts under the current application. Please see the Wetland Impact Map attached as Exhibit 3.1.

To mitigate for the wetland impacts, the applicant will conduct both on-site and off-site mitigation. A total of 3.51 acres of wetlands will be enhanced and preserved on-site. The off-site wetland mitigation plan within the new offsite mitigation parcel includes the enhancement and preservation of 91.73 acres of wetlands and 2.67 acres of uplands. The off-site wetlands can be generally described as cypress, hydric pine, and pine/cypress with varying levels of exotic coverage. Mitigation will consist of exotic vegetation removal and replanting of native species. The off-site mitigation area is part of a 96.46-acre parcel. However, 2.06 acres consist of an access easement that bisects the parcel. The 2.06 acres of access easement are not used for mitigation. Please see the Mitigation/Monitoring/Maintenance Plan attached as Exhibit 3.2. The amount of mitigation was determined by using the Unified Mitigation Assessment Method in Chapter 62-345, F.A.C. The final scores can be found in the permit file. Environmental data tables can be found in Application No. 150107-11.

The proposed mitigation is located within the same basin as the impacts, therefore pursuant to Section 10.2.8 of Volume I, the project will not result in unacceptable cumulative impacts to the West Collier Basin.

A total of 3.51 acres on-site and 94.40 acres off-site will be preserved on site under a conservation easement dedicated to the District.

Fish and Wildlife Issues

The wetlands or surface waters to be impacted provide habitat for wetland-dependent species. The proposed on-site and off-site mitigation willl provide or improve habitat for wetland-dependent/ aquatic species, including wading birds, Florida panther, and Flroida black bear. No aquatic or wetland- dependent listed species or species having special protection were observed to be using the uplands within the project for nesting or denning.

This permit does not relieve the applicant from complying with all applicable rules and any other agencies' requirements if, in the future, endangered/threatened species or species of special concern are discovered on the site.

Legal Issues

A conservation easement has been recorded over the on-site and off-site wetlands and upland buffers. Pursuant to Special Condition 23 of Application No. 120814-14, the permittee has provided an original bond in the amount of $251,480.00 to ensure the permittee's financial ability and commitment to complete the proposed mitigaiton, monitoring, and maintenance plan. Since the updated cost estimate totals $224,877.50 ($247,365.25 at 110%), it was determined that the original bond would suffice since it exceeds the updated cost estimate amount.

Related Concerns:

Water Use Permit Status
The applicant has indicated that public water supply will be used as a source for irrigation water for the project.

The applicant has indicated that dewatering is not required for construction of this project.

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation.

Water and Wastewater Service
Collier County Utilities

Historical/ Archeological Resources
The District has received correspondence from the Florida Department of State, Division of Historical Resources on November 13, 2012 indicating that no significant archaeological or historical resources are recorded on the project site; therefore, the project is unlikely to have an effect upon any such resources. This permit does not release the permittee from complying with any other agencies requirements in the event that historical and/or archaeological resources are found on the site.

General Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, Florida Administrative Code (F.A.C.). Any deviations that are not so authorized shall subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.

2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.

3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the "State of Florida Erosion and Sediment Control Designer and Reviewer Manual" (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the "Florida Stormwater Erosion and Sedimentation Control Inspector's Manual" (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice" indicating the expected start and completion dates. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.

5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.

6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
   a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex- "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit"[Form 62-330.310(3)]; or
   b. For all other activities- "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
   c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

7. If the final operation and maintenance entity is a third party:
   a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as- built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Applicant's Handbook Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
   b. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form

62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:
   a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
   b. Convey to the permittee or create in the permittee any interest in real property;
   c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
   d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the Agency in writing:
    a. Immediately if any previously submitted information is discovered to be inaccurate; and
    b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule

62-330.201, F.A.C., provides otherwise.

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

Special Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

1. The construction authorization for this permit shall expire on the date shown on page 2.

2. Operation and maintenance of the SWM Master system shall be the responsibility of Hacienda Lakes Community Development District. Operation and maintenance of the SWM system onsite and offsite preserves shall be the responsibility of Sapphire Cove Homeowner's Association, Inc. Upon completion of construction and in conjunction with submittal of the as-built certification, a request for transfer to the operating entity with supporting documentation must be submitted in accordance with General Condition No. 7.

3. Discharge Facilities: CS-1:
   1-.43' W X 2.9' H RECTANGULAR NOTCH weir with crest at elev. 9.6' NAVD 88.
   1-4.5" dia. CIRCULAR ORIFICE with invert at elev. 8.7' NAVD 88.
   1-37' W X 24" L drop inlet with crest at elev. 12.5' NAVD 88.
   Receiving body : On-site Preserve
   Control elev : 8.7 feet NAVD 88.

4. Lake side slopes shall be no steeper than 4:1 (horizontal:vertical) to a depth of two feet below the control elevation. Side slopes shall be nurtured or planted from 2 feet below to 1 foot above control elevation to insure vegetative growth, unless shown on the plans.

5. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on or with the certification report.

6. Minimum building floor elevation: BASIN: Estilo - 14.00 feet NAVD 88.

7. Minimum road crown elevation: Basin: Estilo - 12.40 feet NAVD 88.

8. The exhibits and special conditions in this permit apply only to this application. They do not supersede or delete any requirements for other applications covered in Permit No. 11-03462-P unless otherwise specified herein.

9. Prior to initiating construction activities associated with this Environmental Resource Permit (ERP), the permittee is required to hold a pre-construction meeting with field representatives, consultants, contractors, District Environmental Resource Compliance (ERC) staff, and any other local government entities as necessary. The purpose of the pre-construction meeting is to discuss construction methods, sequencing, best management practices, identify work areas, staking and roping of preserves where applicable, and to facilitate coordination and assistance amongst relevant parties. To schedule a pre-construction meeting, please contact ERC staff from the Lower West Coast Service Center Service Center at (239) 338-2929 or via e-mail at: pre-con@sfwmd.gov. When sending a request for a pre-construction meeting, please include the application number, permit number, and contact name and phone number.

10. The District reserves the right to require remedial measures to be taken by the permittee if monitoring or other information demonstrates that adverse impacts to onsite or offsite wetlands, upland conservation areas or buffers, or other surface waters have occurred due to project related activities.

11. A mitigation program for Estilo shall be implemented in accordance with Exhibit No. 3.2. The permittee shall enhance and preserve 3.51 acres of on-site wetlands, 91.73 acres of off-site wetlands, and 2.67 acres of off-site uplands.

12. A maintenance program shall be implemented in accordance with Exhibit No. 3.2 for the preserved and enhanced on-site wetlands and off-site wetlands and uplands on a regular basis to ensure the integrity and viability of those areas as permitted. Maintenance shall be conducted in perpetuity to ensure that the conservation areas are maintained free from Category 1 and Category 2 exotic vegetation (as defined by the Florida Exotic Pest Plant Council) immediately following a maintenance activity. Maintenance in perpetuity shall also ensure that conservation areas, including buffers, maintain the species and coverage of native, desirable vegetation specified in the permit. Coverage of exotic and nuisance plant species shall not exceed 5% of total cover between maintenance activities. Girdled trees within the offsite mitigation area will be limited to scattered trees in the landscape. In addition, the permittee shall manage the conservation areas such that exotic/nuisance plant species do not dominate any one section of those areas. The exotic and nuisance vegetation removal and maintenance activities for the mitigation areas shall be implemented to maintain consistency and compliance with the proposed mitigation plan and mitigation credit received, the proposed success criteria, and the proposed target habitat types

13. Prior to the commencement of construction, the perimeter of protected on-site wetland preservation areas shall be staked/roped/fenced to prevent encroachment into the protected areas. Using Global Positioning System (GPS) technology, the perimeter of the preserve area(s) shall be identified for future reference. The data shall be differentially corrected and accurate to less than a meter (+/- one meter or better). Electronic copies of the GPS data shall be provided to the District's Environmental Resource Compliance staff in accordance with Exhibit 3.6. The permittee shall notify the District's Environmental Resource Compliance staff in writing upon completion of staking/roping/fencing and schedule an inspection of this work. The staking/roping/fencing shall be subject to District staff approval. The permittee shall modify the staking/roping/fencing if District staff determines that it is insufficient or is not in conformance with the intent of this permit. The staking/roping/fencing shall remain in place until all adjacent construction activities are complete.

14. Endangered species, threatened species and/or species of special concern have been observed onsite and/or the project contains suitable habitat for these species. It shall be the permittee's responsibility to coordinate with the Florida Fish and Wildlife Conservation Commission and/or the U.S. Fish and Wildlife Service for appropriate guidance, recommendations and/or necessary permits to avoid impacts to listed species.

15. Activities associated with the implementation of the mitigation, monitoring and maintenance plan(s) shall be completed in accordance with the work schedule provided herein. Any deviation from these time frames must be coordinated with the District's Environmental Resource Compliance staff, and may require a minor modification to this permit. Such requests must be made in writing and shall include (1) reason for the change, (2) proposed start/finish and/or completion dates; and (3) progress report on the status of the project development or mitigation

effort.

16. A monitoring program shall be implemented in accordance with Exhibit No. 3.2. The monitoring program shall extend for a period of 5 years with annual reports submitted to District staff. At the end of the first monitoring period the mitigation area shall contain an 80% survival of planted vegetation. The 80% survival rate shall be maintained throughout the remainder of the monitoring program, with replanting as necessary. If native wetland, transitional, and upland species do not achieve an 80% coverage within the initial two years of the monitoring program, native species shall be planted in accordance with the maintenance program. At the end of the 5 year monitoring program the entire mitigation area shall contain an 80% survival of planted vegetation and an 80% coverage of desirable obligate and facultative wetland species.

17. Prior to July 15, 2015 and prior to the commencement of construction, whichever occurs first, the permittee shall submit the following via ePermitting or to the Environmental Compliance staff at the local District office:
    -One certified copy of the recorded conservation easement document including exhibits.
    -A CD or DVD containing the easement data in a digital ESRI Geodatabase (mdb), ESRI Shapefile (shp) or AutoCAD Drawing Interchange (dxf) file format using Florida State Plane coordinate system, East Zone (3601), Datum NAD83, HARN with the map units in feet.
    -A map depicting the Conservation Easement over the best available satellite or aerial imagery.
    -Form 1001 ERP REG: Title, Possession, and Lien Affidavit, fully executed by the owner and notarized. The recorded easement shall utilize the form attached as Exhibit No. 3.4. This Exhibit may not be modified. The easement must be free of mortgages, liens, easements or other encumbrances or interests in the easement which District staff states are contrary to the intent of the easement. In the event it is later determined that there are encumbrances or interests in the easement which the District determines are contrary to the intent of the easement, the permittee shall be required to provide release or subordination of such encumbrances or interests.

18. Permanent physical markers designating the preserve status of the wetland preservation areas and buffer zones shall be placed at the intersection of the buffer and each lot line. These markers shall be maintained in perpetuity.

19. Prior to the commencement of construction and pursuant to Rule 62-330.060 (3) F.A.C., the permittee shall demonstrate ownership of the project area to the District's Environmental Resource Compliance staff.

Please see Exhibit No. 5.0 for a complete list of authorizations, special conditions and post permit compliance actions that constitute this permit.

Project Work Schedule for Permit No. 11-03462-P

The following activities are requirements of this Permit and shall be completed in accordance with the Project Work Schedule below. Please refer to both General and Special Conditions for more information. Any deviation from these time frames will require prior approval from the District's Environmental Resources Bureau and may require a minor modification to this permit. Such requests must be made in writing and shall include: (1) reason for the change, (2) proposed start/finish and/or completion dates, and (3) progress report on the status of the project.

Condition No.	Date Added	Description (Application Number)	Due Date	Date Satisfied
GC 4	07/01/2013	Construction Commencement Notice (120814-14)	07/31/2013	01/21/2016
GC 6	07/01/2013	Certification (120814-14)	09/19/2016	08/20/2019
GC 7	07/01/2013	Conversion/Transfer (120814-14)	07/01/2014	
SC 17	06/05/2015	Estilo Submit Recorded Conservation Easement (150107-11)	07/15/2015	11/21/2016
SC 17	06/05/2015	Estilo Submit Baseline Monitoring Report (150107-11)	12/01/2015	11/28/2016
SC 17	06/05/2015	Estilo Submit Time Zero Monitoring Report (150107-11)	07/01/2017	08/08/2017
SC 17	06/05/2015	Estilo Submit First Monitoring Report (150107-11)	07/01/2018	08/16/2018
SC 17	06/05/2015	Estilo Submit Second Monitoring Report (150107-11)	07/01/2019	07/08/2019
SC 17	06/05/2015	Estilo Submit Third Monitoring Report (150107-11)	07/01/2020	07/06/2020
SC 17	06/05/2015	Estilo Submit Fourth Monitoring Report (150107-11)	07/01/2021	
SC 17	06/05/2015	Estilo Submit Fifth Monitoring Report (150107-11)	07/01/2022	
SC 23	07/01/2013	Credit/Bond Letter (120814-14)	09/01/2013	11/28/2016

GC = General Condition

SC = Special Condition

Distribution List

Audubon of Florida - Charles Lee

Div of Recreation and Park - District 4

US Army Corps of Engineers - Permit Section

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website at http://my.sfwmd.gov/ePermitting and searching under this application number 201110-4667 .

Exhibit No. 1.0 Location Map

Exhibit No. 2.0 Plans

Exhibit No. 2.2 Urban Stormwater Management Plan

Exhibit No. 3.0 FLUCCS Map

Exhibit No. 3.1 Wetland Impact Map

Exhibit No. 3.2 Mitigation Plan and Maps

Exhibit No. 3.3 Work Schedule

Exhibit No. 3.4 Conservation Easement

Exhibit No. 4.0 Declaration of Covenants

Exhibit No. 4.1 Declaration of Covenants Amendment

Exhibit No. 4.2 CDD Ordinance

Exhibit No. 5.0 Permit History

NOTICE OF RIGHTS

As required by Chapter 120, Florida Statutes, the following provides notice of the opportunities which may be available for administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes, or judicial review pursuant to Section 120.68, Florida Statutes, when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Some of the legal proceedings detailed below may not be applicable or appropriate for your situation. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Florida Statutes. Persons seeking a hearing on a District decision which affects or may affect their substantial interests shall file a petition for hearing in accordance with the filing instructions set forth herein within 21 days of receipt of written notice of the decision unless one of the following shorter time periods apply: (1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Florida Statutes; or (2) within 14 days of service of an Administrative Order pursuant to Section 373.119(1), Florida Statutes. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, posting, or publication that the District has taken or intends to take final agency action. Any person who receives written notice of a District decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

If the District takes final agency action that materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional point of entry pursuant to Rule 28-106.111, Florida Administrative Code.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Florida Statutes, shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

A person may file a request for an extension of time for filing a petition. The District may grant the request for good cause. Requests for extension of time must be filed with the District prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and whether the District and any other parties agree to or oppose the extension. A timely request for an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

FILING INSTRUCTIONS

A petition for administrative hearing must be filed with the Office of the District Clerk. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at the District's headquarters in West Palm Beach, Florida. The District's normal business hours are 8:00 a.m. – 5:00 p.m., excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed filed as of 8:00 a.m. on the next regular business day.

Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, 3301 Gun Club Road, West Palm Beach, Florida 33406.
- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the District's security desk does not constitute filing. It will be necessary to request that the District's security officer contact the Office of the District Clerk. An employee of the District's Clerk's office will receive and process the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document.

INITIATION OF ADMINISTRATIVE HEARING

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes, and Rules 28-106.201 and 28-106.301, Florida Administrative Code, initiation of an administrative hearing shall be made by written petition to the District in legible form and on 8 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, District file number or any other District identification number, if known.
2. The name, address, any email address, any facsimile number, and telephone number of the petitioner, petitioner's attorney or qualified representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the District's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the District's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the District's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the District to take with respect to the District's proposed action.

MEDIATION

The procedures for pursuing mediation are set forth in Section 120.573, Florida Statutes, and Rules 28-106.111 and 28-106.401–.405, Florida Administrative Code. The District is not proposing mediation for this agency action under Section 120.573, Florida Statutes, at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Section 120.68, Florida Statutes, and in accordance with Florida Rule of Appellate Procedure 9.110, a party who is adversely affected by final District action may seek judicial review of the District's final decision by filing a notice of appeal with the Office of the District Clerk in accordance with the filing instructions set forth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the appropriate district court of appeals via the Florida Courts E-Filing Portal.

EXHIBIT 5

INSTR 5325264 OR 5325 PG 2546 RECORDED 10/20/2016 4:22 PM PAGES 2
DWIGHT E. BROCK, CLERK OF THE CIRCUIT COURT, COLLIER COUNTY FLORIDA
DOC@.70 $0.70 REC $18.50

This instrument was prepared
without opinion of title by:
Gregory L. Urbancic, Esq.
Coleman, Yovanovich & Koester, P.A.
4001 Tamiami Trail North, Suite 300
Naples, Florida 34103

WARRANTY DEED

THIS WARRANTY DEED is made on this 18th day of October, 2016, by **HACIENDA LAKES OF NAPLES, LLC,** a Florida limited liability company, whose address is 7742 Alico Rd. Ft. Myers, FL 33912 ("**Grantor**"), to **HACIENDA LAKES COMMUNITY DEVELOPMENT DISTRICT**, a community development district established and existing pursuant to Chapter 190, Florida Statutes, whose post office address is c/o Real Estate Econometrics, Inc., 707 Orchid Drive, Suite 100, Naples, FL 34102 ("**Grantee**").

(Wherever used herein, the terms "Grantor" and "Grantee" include all the parties to this instrument and their respective heirs, legal representatives, successors and assigns.)

Grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the Grantee, all that certain land situate in Collier County, Florida, to wit:

COLLIER COUNTY COPY CLERK OF THE CIRCUIT COURT

Tract R, Hacienda Lakes of Naples – Phase II, according to the plat thereof recorded in Plat Book 61, Pages 16-17, of the Public Records of Collier County, Florida.

Folio No.: 48586005086

and

Tract L-1, Hacienda Lakes of Naples – Phase II, according to the plat thereof recorded in Plat Book 61, Pages 16-17, of the Public Records of Collier County, Florida.

Folio No.: 48586005060

SUBJECT TO: real estate taxes for the year 2016 and subsequent years; zoning, building code and other use restrictions imposed by governmental authority; outstanding oil, gas and mineral rights of record, if any; and restrictions, reservations and easements of record.

TOGETHER with all tenements, hereditaments and appurtenances thereto belonging or in otherwise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND, Grantor hereby covenants with Grantee that Grantor is lawfully seized of said land in fee simple; that Grantor has good right and lawful authority to sell and convey this land; that Grantor hereby fully warrants the title to the land and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the undersigned Grantor has duly executed and delivered this instrument the day and year first above written.

Signed, sealed and delivered
in the presence of:

Print Name: Lizbeth Hernandez

Print Name: Maritza Aguiar

HACIENDA LAKES OF NAPLES, LLC,
a Florida limited liability company

By: _____
David E. Torres, its Manager

STATE OF FLORIDA

COUNTY OF COLLIER

The foregoing instrument was acknowledged before me on this 18th day of October, 2016, by David E. Torres, as Manager of HACIENDA LAKES OF NAPLES, LLC, a Florida limited liability company, on behalf of said company, who (___) is personally known to me or (___) has produced _____ _____ as identification.

COLLIER COUNTY
COPY
CLERK OF THE CIRCUIT COURT

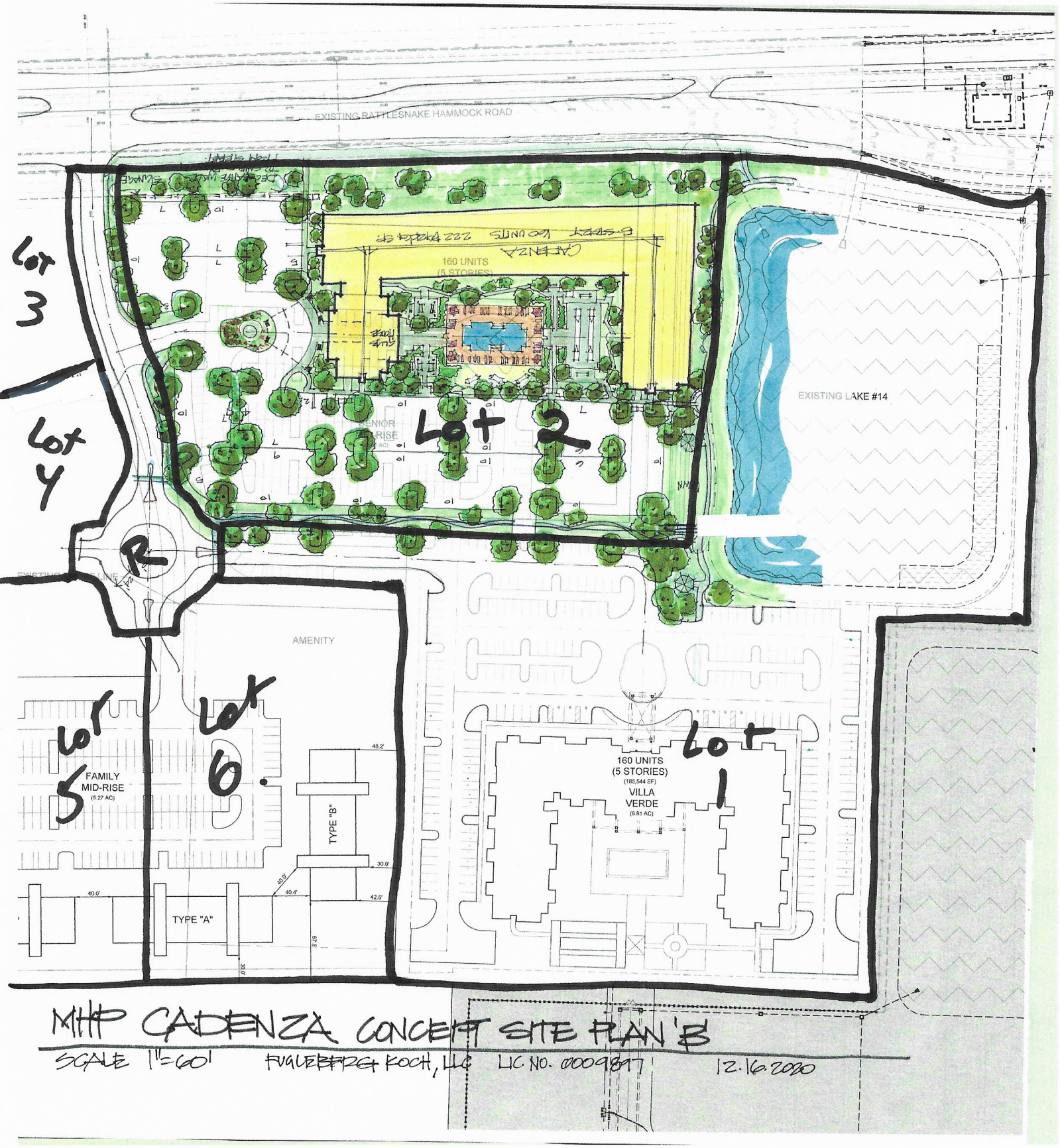
Notary Public
Print Name: Maritza Aguiar

My Commission Expires: 12/08/17

(Notary Seal)

Notary Public State of Florida
Maritza Aguiar
My Commission FF 075151
Expires 12/08/2017

EXHIBIT 6



MHP CADENZA CONCEPT SITE PLAN 'B'

SCALE 1"=60' FUGLEBERG KOCH, LLC LIC NO. 0009817 12.16.2020

EXHIBIT 7

Company ID Number: 46-1454613

THE E-VERIFY MEMORANDUM OF UNDERSTANDING FOR EMPLOYERS

ARTICLE I
PURPOSE AND AUTHORITY

The parties to this agreement are the Department of Homeland Security (DHS) and the Hacienda Lakes Community Development District (Employer). The purpose of this agreement is to set forth terms and conditions which the Employer will follow while participating in E-Verify.

E-Verify is a program that electronically confirms an employee's eligibility to work in the United States after completion of Form I-9, Employment Eligibility Verification (Form I-9). This Memorandum of Understanding (MOU) explains certain features of the E-Verify program and describes specific responsibilities of the Employer, the Social Security Administration (SSA), and DHS.

Authority for the E-Verify program is found in Title IV, Subtitle A, of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), Pub. L. 104-208, 110 Stat. 3009, as amended (8 U.S.C. § 1324a note). The Federal Acquisition Regulation (FAR) Subpart 22.18, "Employment Eligibility Verification" and Executive Order 12989, as amended, provide authority for Federal contractors and subcontractors (Federal contractor) to use E-Verify to verify the employment eligibility of certain employees working on Federal contracts.

ARTICLE II
RESPONSIBILITIES

A. RESPONSIBILITIES OF THE EMPLOYER

1. The Employer agrees to display the following notices supplied by DHS in a prominent place that is clearly visible to prospective employees and all employees who are to be verified through the system**:**
    a. Notice of E-Verify Participation
    b. Notice of Right to Work
2. The Employer agrees to provide to the SSA and DHS the names, titles, addresses, and telephone numbers of the Employer representatives to be contacted about E-Verify. The Employer also agrees to keep such information current by providing updated information to SSA and DHS whenever the representatives' contact information changes.
3. The Employer agrees to grant E-Verify access only to current employees who need E-Verify access. Employers must promptly terminate an employee's E-Verify access if the

employee is separated from the company or no longer needs access to E-Verify.
4. The Employer agrees to become familiar with and comply with the most recent version of the E-Verify User Manual.
5. The Employer agrees that any Employer Representative who will create E-Verify cases will complete the E-Verify Tutorial before that individual creates any cases.

a. The Employer agrees that all Employer representatives will take the refresher tutorials when prompted by E-Verify in order to continue using E-Verify**.** Failure to complete a refresher tutorial will prevent the Employer Representative from continued use of E-Verify.

6. The Employer agrees to comply with current Form I-9 procedures, with two exceptions:

a. If an employee presents a "List B" identity document, the Employer agrees to only accept "List B" documents that contain a photo. (List B documents identified in 8 C.F.R. § 274a.2(b)(1)(B)) can be presented during the Form I-9 process to establish identity.) If an employee objects to the photo requirement for religious reasons, the Employer should contact E-Verify at 888-464-4218.

b. If an employee presents a DHS Form I-551 (Permanent Resident Card), Form I-766 (Employment Authorization Document), or U.S. Passport or Passport Card to complete Form I-9, the Employer agrees to make a photocopy of the document and to retain the photocopy with the employee's Form I-9. The Employer will use the photocopy to verify the photo and to assist DHS with its review of photo mismatches that employees contest. DHS may in the future designate other documents that activate the photo screening tool.

Note: Subject only to the exceptions noted previously in this paragraph, employees still retain the right to present any List A, or List B and List C, document(s) to complete the Form I-9.

7. The Employer agrees to record the case verification number on the employee's Form I-9 or to print the screen containing the case verification number and attach it to the employee's Form I-9.
8. The Employer agrees that, although it participates in E-Verify, the Employer has a responsibility to complete, retain, and make available for inspection Forms I-9 that relate to its employees, or from other requirements of applicable regulations or laws, including the obligation to comply with the antidiscrimination requirements of section 274B of the INA with respect to Form I-9 procedures.

a. The following modified requirements are the only exceptions to an Employer's obligation to not employ unauthorized workers and comply with the anti-discrimination provision of the INA: (1) List B identity documents must have photos, as described in paragraph 6 above; (2) When an Employer confirms the identity and employment eligibility of newly hired employee using E-Verify procedures, the Employer establishes a rebuttable presumption that it has not violated section 274A(a)(1)(A) of the Immigration and Nationality Act (INA) with respect to the hiring of that employee; (3) If the Employer receives a final nonconfirmation for an employee, but continues to employ that person, the Employer must notify DHS and the Employer is subject to a civil money penalty between $550 and $1,100 for each failure to notify DHS of continued employment

following a final nonconfirmation; (4) If the Employer continues to employ an employee after receiving a final nonconfirmation, then the Employer is subject to a rebuttable presumption that it has knowingly employed an unauthorized alien in violation of section 274A(a)(1)(A); and (5) no E-Verify participant is civilly or criminally liable under any law for any action taken in good faith based on information provided through the E-Verify.

b. DHS reserves the right to conduct Form I-9 compliance inspections, as well as any other enforcement or compliance activity authorized by law, including site visits, to ensure proper use of E-Verify.

9. The Employer is strictly prohibited from creating an E-Verify case before the employee has been hired, meaning that a firm offer of employment was extended and accepted and Form I-9 was completed. The Employer agrees to create an E-Verify case for new employees within three Employer business days after each employee has been hired (after both Sections 1 and 2 of Form I-9 have been completed), and to complete as many steps of the E-Verify process as are necessary according to the E-Verify User Manual. If E-Verify is temporarily unavailable, the three-day time period will be extended until it is again operational in order to accommodate the Employer's attempting, in good faith, to make inquiries during the period of unavailability.

10. The Employer agrees not to use E-Verify for pre-employment screening of job applicants, in support of any unlawful employment practice, or for any other use that this MOU or the E-Verify User Manual does not authorize.

11. The Employer must use E-Verify for all new employees. The Employer will not verify selectively and will not verify employees hired before the effective date of this MOU. Employers who are Federal contractors may qualify for exceptions to this requirement as described in Article II.B of this MOU.

12. The Employer agrees to follow appropriate procedures (see Article III below) regarding tentative nonconfirmations. The Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee’s E-Verify case. The Employer agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer agrees to provide written referral instructions to employees and instruct affected employees to bring the English copy of the letter to the SSA. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending. Further, when employees contest a tentative nonconfirmation based upon a photo mismatch, the Employer must take additional steps (see Article III.B. below) to contact DHS with information necessary to resolve the challenge.

13. The Employer agrees not to take any adverse action against an employee based upon the employee's perceived employment eligibility status while SSA or DHS is processing the verification request unless the Employer obtains knowledge (as defined in 8 C.F.R. § 274a.1(l)) that the employee is not work authorized. The Employer understands that an initial inability of the SSA or DHS automated verification system to verify work authorization, a tentative nonconfirmation, a case in continuance (indicating the need for additional time for the government to resolve a case), or the finding of a photo mismatch, does not establish, and should not be interpreted as, evidence that the employee is not work authorized. In any of such cases, the employee must be provided a full and fair opportunity to contest the finding, and if he or she does so, the employee

may not be terminated or suffer any adverse employment consequences based upon the employee's perceived employment eligibility status (including denying, reducing, or extending work hours, delaying or preventing training, requiring an employee to work in poorer conditions, withholding pay, refusing to assign the employee to a Federal contract or other assignment, or otherwise assuming that he or she is unauthorized to work) until and unless secondary verification by SSA or DHS has been completed and a final nonconfirmation has been issued. If the employee does not choose to contest a tentative nonconfirmation or a photo mismatch or if a secondary verification is completed and a final nonconfirmation is issued, then the Employer can find the employee is not work authorized and terminate the employee's employment. Employers or employees with questions about a final nonconfirmation may call E-Verify at 1-888-464-4218 (customer service) or 1-888-897-7781 (worker hotline).

14. The Employer agrees to comply with Title VII of the Civil Rights Act of 1964 and section 274B of the INA as applicable by not discriminating unlawfully against any individual in hiring, firing, employment eligibility verification, or recruitment or referral practices because of his or her national origin or citizenship status, or by committing discriminatory documentary practices. The Employer understands that such illegal practices can include selective verification or use of E-Verify except as provided in part D below, or discharging or refusing to hire employees because they appear or sound "foreign" or have received tentative nonconfirmations. The Employer further understands that any violation of the immigration-related unfair employment practices provisions in section 274B of the INA could subject the Employer to civil penalties, back pay awards, and other sanctions, and violations of Title VII could subject the Employer to back pay awards, compensatory and punitive damages. Violations of either section 274B of the INA or Title VII may also lead to the termination of its participation in E-Verify. If the Employer has any questions relating to the anti-discrimination provision, it should contact the Immigrant and Employee Rights Section, Civil Rights Division, U.S. Department of Justice at 1-800-255-8155 or 1-800-237-2515 (TTY) or go to https://www.justice.gov/ier.

15. The Employer agrees that it will use the information it receives from E-Verify only to confirm the employment eligibility of employees as authorized by this MOU. The Employer agrees that it will safeguard this information, and means of access to it (such as PINS and passwords), to ensure that it is not used for any other purpose and as necessary to protect its confidentiality, including ensuring that it is not disseminated to any person other than employees of the Employer who are authorized to perform the Employer's responsibilities under this MOU**,** except for such dissemination as may be authorized in advance by SSA or DHS for legitimate purposes.

16. The Employer agrees to notify DHS immediately in the event of a breach of personal information. Breaches are defined as loss of control or unauthorized access to E-Verify personal data. All suspected or confirmed breaches should be reported by calling 1-888-464-4218 or via email at E-Verify@dhs.gov. Please use "Privacy Incident – Password" in the subject line of your email when sending a breach report to E-Verify.

17. The Employer acknowledges that the information it receives from SSA is governed by the Privacy Act (5 U.S.C. § 552a(i)(1) and (3)) and the Social Security Act (42 U.S.C. 1306(a)). Any person who obtains this information under false pretenses or uses it for any purpose other than as provided for in this MOU may be subject to criminal penalties.

18. The Employer agrees to cooperate with DHS and SSA in their compliance monitoring and evaluation of E-Verify, which includes permitting DHS, SSA, their contractors and

other agents, upon reasonable notice, to review Forms I-9 and other employment records and to interview it and its employees regarding the Employer's use of E-Verify, and to respond in a prompt and accurate manner to DHS requests for information relating to their participation in E-Verify.
19. The Employer shall not make any false or unauthorized claims or references about its participation in E-Verify on its website, in advertising materials, or other media. The Employer shall not describe its services as federally-approved, federally-certified, or federally-recognized, or use language with a similar intent on its website or other materials provided to the public. Entering into this MOU does not mean that E-Verify endorses or authorizes your E-Verify services and any claim to that effect is false.
20. The Employer shall not state in its website or other public documents that any language used therein has been provided or approved by DHS, USCIS or the Verification Division, without first obtaining the prior written consent of DHS.
21. The Employer agrees that E-Verify trademarks and logos may be used only under license by DHS/USCIS (see M-795 (Web)) and, other than pursuant to the specific terms of such license, may not be used in any manner that might imply that the Employer's services, products, websites, or publications are sponsored by, endorsed by, licensed by, or affiliated with DHS, USCIS, or E-Verify.
22. The Employer understands that if it uses E-Verify procedures for any purpose other than as authorized by this MOU, the Employer may be subject to appropriate legal action and termination of its participation in E-Verify according to this MOU.

B. RESPONSIBILITIES OF FEDERAL CONTRACTORS

1. If the Employer is a Federal contractor with the FAR E-Verify clause subject to the employment verification terms in Subpart 22.18 of the FAR, it will become familiar with and comply with the most current version of the E-Verify User Manual for Federal Contractors as well as the E-Verify Supplemental Guide for Federal Contractors.
2. In addition to the responsibilities of every employer outlined in this MOU, the Employer understands that if it is a Federal contractor subject to the employment verification terms in Subpart 22.18 of the FAR it must verify the employment eligibility of any "employee assigned to the contract" (as defined in FAR 22.1801). Once an employee has been verified through E-Verify by the Employer, the Employer may not create a second case for the employee through E-Verify.

a. An Employer that is not enrolled in E-Verify as a Federal contractor at the time of a contract award must enroll as a Federal contractor in the E-Verify program within 30 calendar days of contract award and, within 90 days of enrollment, begin to verify employment eligibility of new hires using E-Verify. The Employer must verify those employees who are working in the United States, whether or not they are assigned to the contract. Once the Employer begins verifying new hires, such verification of new hires must be initiated within three business days after the hire date. Once enrolled in E-Verify as a Federal contractor, the Employer must begin verification of employees assigned to the contract within 90 calendar days after the date of enrollment or within 30 days of an employee's assignment to the contract, whichever date is later.

b. Employers enrolled in E-Verify as a Federal contractor for 90 days or more at the time of a contract award must use E-Verify to begin verification of employment

eligibility for new hires of the Employer who are working in the United States, whether or not assigned to the contract, within three business days after the date of hire. If the Employer is enrolled in E-Verify as a Federal contractor for 90 calendar days or less at the time of contract award, the Employer must, within 90 days of enrollment, begin to use E-Verify to initiate verification of new hires of the contractor who are working in the United States, whether or not assigned to the contract. Such verification of new hires must be initiated within three business days after the date of hire. An Employer enrolled as a Federal contractor in E-Verify must begin verification of each employee assigned to the contract within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever is later.

c. Federal contractors that are institutions of higher education (as defined at 20 U.S.C. 1001(a)), state or local governments, governments of Federally recognized Indian tribes, or sureties performing under a takeover agreement entered into with a Federal agency under a performance bond may choose to only verify new and existing employees assigned to the Federal contract. Such Federal contractors may, however, elect to verify all new hires, and/or all existing employees hired after November 6, 1986. Employers in this category must begin verification of employees assigned to the contract within 90 calendar days after the date of enrollment or within 30 days of an employee's assignment to the contract, whichever date is later.

d. Upon enrollment, Employers who are Federal contractors may elect to verify employment eligibility of all existing employees working in the United States who were hired after November 6, 1986, instead of verifying only those employees assigned to a covered Federal contract. After enrollment, Employers must elect to verify existing staff following DHS procedures and begin E-Verify verification of all existing employees within 180 days after the election.

e. The Employer may use a previously completed Form I-9 as the basis for creating an E-Verify case for an employee assigned to a contract as long as:

i. That Form I-9 is complete (including the SSN) and complies with Article II.A.6,
ii. The employee's work authorization has not expired, and
iii. The Employer has reviewed the Form I-9 information either in person or in communications with the employee to ensure that the employee's Section 1, Form I-9 attestation has not changed (including, but not limited to, a lawful permanent resident alien having become a naturalized U.S. citizen).

f. The Employer shall complete a new Form I-9 consistent with Article II.A.6 or update the previous Form I-9 to provide the necessary information if:

i. The Employer cannot determine that Form I-9 complies with Article II.A.6,
ii. The employee's basis for work authorization as attested in Section 1 has expired or changed, or
iii. The Form I-9 contains no SSN or is otherwise incomplete.

Note: If Section 1 of Form I-9 is otherwise valid and up-to-date and the form otherwise complies with Article II.C.5, but reflects documentation (such as a U.S. passport or Form I-551) that expired after completing Form I-9, the Employer shall

not require the production of additional documentation, or use the photo screening tool described in Article II.A.5, subject to any additional or superseding instructions that may be provided on this subject in the E-Verify User Manual.

g. The Employer agrees not to require a second verification using E-Verify of any assigned employee who has previously been verified as a newly hired employee under this MOU or to authorize verification of any existing employee by any Employer that is not a Federal contractor based on this Article.

3. The Employer understands that if it is a Federal contractor, its compliance with this MOU is a performance requirement under the terms of the Federal contract or subcontract, and the Employer consents to the release of information relating to compliance with its verification responsibilities under this MOU to contracting officers or other officials authorized to review the Employer's compliance with Federal contracting requirements.

C. RESPONSIBILITIES OF SSA

1. SSA agrees to allow DHS to compare data provided by the Employer against SSA's database. SSA sends DHS confirmation that the data sent either matches or does not match the information in SSA's database.
2. SSA agrees to safeguard the information the Employer provides through E-Verify procedures. SSA also agrees to limit access to such information, as is appropriate by law, to individuals responsible for the verification of Social Security numbers or responsible for evaluation of E-Verify or such other persons or entities who may be authorized by SSA as governed by the Privacy Act (5 U.S.C. § 552a), the Social Security Act (42 U.S.C. 1306(a)), and SSA regulations (20 CFR Part 401).
3. SSA agrees to provide case results from its database within three Federal Government work days of the initial inquiry. E-Verify provides the information to the Employer.
4. SSA agrees to update SSA records as necessary if the employee who contests the SSA tentative nonconfirmation visits an SSA field office and provides the required evidence. If the employee visits an SSA field office within the eight Federal Government work days from the date of referral to SSA, SSA agrees to update SSA records, if appropriate, within the eight-day period unless SSA determines that more than eight days may be necessary. In such cases, SSA will provide additional instructions to the employee. If the employee does not visit SSA in the time allowed, E-Verify may provide a final nonconfirmation to the employer.

Note: If an Employer experiences technical problems, or has a policy question, the employer should contact E-Verify at 1-888-464-4218.

D. RESPONSIBILITIES OF DHS

1. DHS agrees to provide the Employer with selected data from DHS databases to enable the Employer to conduct, to the extent authorized by this MOU:
   a. Automated verification checks on alien employees by electronic means, and
   b. Photo verification checks (when available) on employees.

2. DHS agrees to assist the Employer with operational problems associated with the Employer's participation in E-Verify. DHS agrees to provide the Employer names, titles, addresses, and telephone numbers of DHS representatives to be contacted during the E-Verify process.
3. DHS agrees to provide to the Employer with access to E-Verify training materials as well as an E-Verify User Manual that contain instructions on E-Verify policies, procedures, and requirements for both SSA and DHS, including restrictions on the use of E-Verify.
4. DHS agrees to train Employers on all important changes made to E-Verify through the use of mandatory refresher tutorials and updates to the E-Verify User Manual. Even without changes to E-Verify, DHS reserves the right to require employers to take mandatory refresher tutorials.
5. DHS agrees to provide to the Employer a notice, which indicates the Employer's participation in E-Verify. DHS also agrees to provide to the Employer anti-discrimination notices issued by the Immigrant and Employee Rights Section, Civil Rights Division, U.S. Department of Justice.
6. DHS agrees to issue each of the Employer's E-Verify users a unique user identification number and password that permits them to log in to E-Verify.
7. DHS agrees to safeguard the information the Employer provides, and to limit access to such information to individuals responsible for the verification process, for evaluation of E-Verify, or to such other persons or entities as may be authorized by applicable law. Information will be used only to verify the accuracy of Social Security numbers and employment eligibility, to enforce the INA and Federal criminal laws, and to administer Federal contracting requirements.
8. DHS agrees to provide a means of automated verification that provides (in conjunction with SSA verification procedures) confirmation or tentative nonconfirmation of employees' employment eligibility within three Federal Government work days of the initial inquiry.
9. DHS agrees to provide a means of secondary verification (including updating DHS records) for employees who contest DHS tentative nonconfirmations and photo mismatch tentative nonconfirmations. This provides final confirmation or nonconfirmation of the employees' employment eligibility within 10 Federal Government work days of the date of referral to DHS, unless DHS determines that more than 10 days may be necessary. In such cases, DHS will provide additional verification instructions.

ARTICLE III
REFERRAL OF INDIVIDUALS TO SSA AND DHS

A. REFERRAL TO SSA

1. If the Employer receives a tentative nonconfirmation issued by SSA, the Employer must print the notice as directed by E-Verify. The Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify case. The Employer also agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer agrees to provide written referral instructions to employees and instruct affected employees to bring the English copy of

the letter to the SSA. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending.
2. The Employer agrees to obtain the employee's response about whether he or she will contest the tentative nonconfirmation as soon as possible after the Employer receives the tentative nonconfirmation. Only the employee may determine whether he or she will contest the tentative nonconfirmation.
3. After a tentative nonconfirmation, the Employer will refer employees to SSA field offices only as directed by E-Verify. The Employer must record the case verification number, review the employee information submitted to E-Verify to identify any errors, and find out whether the employee contests the tentative nonconfirmation. The Employer will transmit the Social Security number, or any other corrected employee information that SSA requests, to SSA for verification again if this review indicates a need to do so.
4. The Employer will instruct the employee to visit an SSA office within eight Federal Government work days. SSA will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.
5. While waiting for case results, the Employer agrees to check the E-Verify system regularly for case updates.
6. The Employer agrees not to ask the employee to obtain a printout from the Social Security Administration number database (the Numident) or other written verification of the SSN from the SSA.

B. REFERRAL TO DHS

1. If the Employer receives a tentative nonconfirmation issued by DHS, the Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify case. The Employer also agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending.
2. The Employer agrees to obtain the employee's response about whether he or she will contest the tentative nonconfirmation as soon as possible after the Employer receives the tentative nonconfirmation. Only the employee may determine whether he or she will contest the tentative nonconfirmation.
3. The Employer agrees to refer individuals to DHS only when the employee chooses to contest a tentative nonconfirmation.
4. If the employee contests a tentative nonconfirmation issued by DHS, the Employer will instruct the employee to contact DHS through its toll-free hotline (as found on the referral letter) within eight Federal Government work days.
5. If the Employer finds a photo mismatch, the Employer must provide the photo mismatch tentative nonconfirmation notice and follow the instructions outlined in paragraph 1 of this section for tentative nonconfirmations, generally.
6. The Employer agrees that if an employee contests a tentative nonconfirmation based upon a photo mismatch, the Employer will send a copy of the employee's Form I-551, Form I-766, U.S. Passport, or passport card to DHS for review by:

a. Scanning and uploading the document, or
b. Sending a photocopy of the document by express mail (furnished and paid for by the employer).

7. The Employer understands that if it cannot determine whether there is a photo match/mismatch, the Employer must forward the employee's documentation to DHS as described in the preceding paragraph. The Employer agrees to resolve the case as specified by the DHS representative who will determine the photo match or mismatch.
8. DHS will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.
9. While waiting for case results, the Employer agrees to check the E-Verify system regularly for case updates.

ARTICLE IV
SERVICE PROVISIONS

A. NO SERVICE FEES

1. SSA and DHS will not charge the Employer for verification services performed under this MOU. The Employer is responsible for providing equipment needed to make inquiries. To access E-Verify, an Employer will need a personal computer with Internet access.

ARTICLE V
MODIFICATION AND TERMINATION

A. MODIFICATION

1. This MOU is effective upon the signature of all parties and shall continue in effect for as long as the SSA and DHS operates the E-Verify program unless modified in writing by the mutual consent of all parties.
2. Any and all E-Verify system enhancements by DHS or SSA, including but not limited to E-Verify checking against additional data sources and instituting new verification policies or procedures, will be covered under this MOU and will not cause the need for a supplemental MOU that outlines these changes.

B. TERMINATION

1. The Employer may terminate this MOU and its participation in E-Verify at any time upon 30 days prior written notice to the other parties.
2. Notwithstanding Article V, part A of this MOU, DHS may terminate this MOU, and thereby the Employer's participation in E-Verify, with or without notice at any time if deemed necessary because of the requirements of law or policy, or upon a determination by SSA or DHS that there has been a breach of system integrity or security by the Employer, or a failure on the part of the Employer to comply with established E-Verify procedures and/or legal requirements. The Employer understands that if it is a Federal contractor, termination of this MOU by any party for any reason may negatively affect the

performance of its contractual responsibilities. Similarly, the Employer understands that if it is in a state where E-Verify is mandatory, termination of this by any party MOU may negatively affect the Employer's business.
3. An Employer that is a Federal contractor may terminate this MOU when the Federal contract that requires its participation in E-Verify is terminated or completed. In such cases, the Federal contractor must provide written notice to DHS. If an Employer that is a Federal contractor fails to provide such notice, then that Employer will remain an E-Verify participant, will remain bound by the terms of this MOU that apply to non-Federal contractor participants, and will be required to use the E-Verify procedures to verify the employment eligibility of all newly hired employees.
4. The Employer agrees that E-Verify is not liable for any losses, financial or otherwise, if the Employer is terminated from E-Verify.

ARTICLE VI
PARTIES

A. Some or all SSA and DHS responsibilities under this MOU may be performed by contractor(s), and SSA and DHS may adjust verification responsibilities between each other as necessary. By separate agreement with DHS, SSA has agreed to perform its responsibilities as described in this MOU.
B. Nothing in this MOU is intended, or should be construed, to create any right or benefit, substantive or procedural, enforceable at law by any third party against the United States, its agencies, officers, or employees, or against the Employer, its agents, officers, or employees.
C. The Employer may not assign, directly or indirectly, whether by operation of law, change of control or merger, all or any part of its rights or obligations under this MOU without the prior written consent of DHS, which consent shall not be unreasonably withheld or delayed. Any attempt to sublicense, assign, or transfer any of the rights, duties, or obligations herein is void.
D. Each party shall be solely responsible for defending any claim or action against it arising out of or related to E-Verify or this MOU, whether civil or criminal, and for any liability wherefrom, including (but not limited to) any dispute between the Employer and any other person or entity regarding the applicability of Section 403(d) of IIRIRA to any action taken or allegedly taken by the Employer.
E. The Employer understands that its participation in E-Verify is not confidential information and may be disclosed as authorized or required by law and DHS or SSA policy, including but not limited to, Congressional oversight, E-Verify publicity and media inquiries, determinations of compliance with Federal contractual requirements, and responses to inquiries under the Freedom of Information Act (FOIA).
F. The individuals whose signatures appear below represent that they are authorized to enter into this MOU on behalf of the Employer and DHS respectively. The Employer understands that any inaccurate statement, representation, data or other information provided to DHS may subject the Employer, its subcontractors, its employees, or its representatives to: (1) prosecution for false statements pursuant to 18 U.S.C. 1001 and/or; (2) immediate termination of its MOU and/or; (3) possible debarment or suspension.
G. The foregoing constitutes the full agreement on this subject between DHS and the

Employer.

To be accepted as an E-Verify participant, you should only sign the Employer's Section of the signature page. If you have any questions, contact E-Verify at 1-888-464-4218.

Approved by:

E-Verify Employer	
Name (Please Type or Print) G. Russell Weyer	Title District Manager
Signature	Date
Department of Homeland Security – Verification Division	
Name (Please Type or Print)	Title
Signature	Date

Information Required for E-Verify Information relating to your Company:	
Company Name:	Hacienda Lakes Community Development District
Company Facility Address:	707 Orchid Drive, Suite 100, Naples, FL 34102
Company Alternate Address:	
County or Parish:	Collier

Employer Identification Number:	46-1454613
North American Industry Classification Systems Code:	925120
Parent Company:	NA
Number of Employees:	0
Number of Sites Verified for:	1

Are you verifying for more than one site? No
If yes, please provide the number of sites verified for in each State:

State	Number of sites	Site(s)

Information relating to the Program Administrator(s) for your Company on policy questions or operational problems:	
Name:	G. Russell Weyer
Telephone Number:	(239) 269-1341
Fax Number:	NA
E-mail Address:	rweyer@ree-i.com

Name:	
Telephone Number:	
Fax Number:	
E-mail Address:	

EXHIBIT 8

HACIENDA LAKES COMMUNITY DEVELOPMENT DISTRICT
Suite 100, 707 Orchid Drive
Naples, FL 34102

MINUTES OF MEETING

Landowner Meeting
Monday, November 16, 2020, 9:08 a.m.
Esplanade Clubhouse
8490 Viale Circle
Naples, Florida 34114

Present and constituting a quorum were:

Maritza Aguiar	Board Member
Dwight Nadeau	Board Member
Clifford "Chip" Olson	Board Member
Bob Mulhere	Board Member

Absent was:

Tom Bothe	Board Member

Also present were:

Russ Weyer	District Manager, Real Estate Econometrics, Inc.
Greg Urbancic	District Counsel, Coleman, Yovanovich & Koester, P.A.
Terry Cole	District Engineer, Hole Montes
David Torres	Torres Companies
Chris Adams	Toll Brothers

FIRST ORDER OF BUSINESS **Call to Order and Roll Call**

Mr. Weyer called the meeting to order and proceeded with the roll call. The members in attendance are as outlined above. There were no residents or members of the public in attendance.

SECOND ORDER OF BUSINESS **Notice of Publication**

Mr. Weyer pointed out that the meeting was properly advertised in the Naples Daily News as shown in the agenda package.

THIRD ORDER OF BUSINESS **Election of Supervisors**

A. Election of Supervisors

1. Determine the Number of Voting Units Represented

Mr. Weyer noted that there is a total of votes to be cast by the Landowners.

2. Nominations of the Position of Supervisors and Terms of Office.

Mr. Weyer pointed out that the following Board of Supervisors candidates are being considered for re-election to the Hacienda Lakes Community Development District Board of Supervisors:

Ms. Maritza Aguiar	Seat #1
Mr. Tom Bothe	Seat #2
Mr. Clifford Olson	Seat #5

Mr. Weyer said that two of the seats are being elected for 4-year terms and one of the seats is being elected for a 2-year term. The terms are determined by the numbers of votes as the two candidates with the most votes will be elected for the 4-year terms and the candidate with the lowest number of votes will be elected for a 2-year term.

3. Casting of Ballot.

Mr. Torres was indicated as the proxy holder for Hacienda Lakes of Naples, and Lord's Way 30 and Mr. Adams as the proxy holder for Toll Brothers. There were no residents in attendance so no resident votes were cast

4. Ballot Tabulations and Results.

The tabulations were as follows:

Ms. Maritza Aguiar	341 Votes	4-Year Term
Mr. Chip Olson	341 Votes	4-Year Term
Mr. Tom Bothe	338 Votes	2-Year Term

FOURTH ORDER OF BUSINESS **Landowner Questions/Comments**

There were no questions or comments from the Landowners.

FIFTH ORDER OF BUSINESS **Adjournment**

On MOTION by Mr. Olson and seconded by Ms. Aguiar, with all in favor, the Landowner Meeting of the Hacienda Lakes Community Development District was adjourned.

_____	_____
Secretary/Assistant Secretary	Chairperson/Vice-Chairperson
_____	_____
Print Name	Print Name

EXHIBIT 9

HACIENDA LAKES COMMUNITY DEVELOPMENT DISTRICT
Suite 100, 707 Orchid Drive
Naples, FL 34102

MINUTES OF MEETING

Board of Supervisors Meeting
Monday, November 16, 2020, 9:16 a.m.
Esplanade Clubhouse
8490 Viale Circle
Naples, Florida 34114

Present and constituting a quorum were:

Maritza Aguiar	Board Member
Dwight Nadeau	Board Member
Bob Mulhere	Board Member
Clifford "Chip" Olson	Board Member

Absent was:

Tom Bothe	Board Member

Also present were:

Russ Weyer	District Manager, Real Estate Econometrics, Inc.
Greg Urbancic	District Counsel, Coleman, Yovanovich & Koester, P.A.
Terry Cole	District Engineer, Hole Montes
Chris Adams	Toll Brothers

FIRST ORDER OF BUSINESS **Call to Order and Roll Call**

Mr. Weyer called the meeting to order and proceeded with the roll call. The members in attendance are as outlined above and a quorum was established.

SECOND ORDER OF BUSINESS **Public Comments**

Mr. Weyer noted that the Florida Statutes require that there be an opportunity for Public Comment. No comments were forthcoming from the public in attendance.

THIRD ORDER OF BUSINESS **Organizational Matters**

The newly appointed Supervisors each gave their oaths of office by Mr. Urbancic.

A. Consideration of Resolution 2020-7: Canvassing the Landowner Election results from the November 20th Landowner Election meeting.

Mr. Weyer presented Resolution 2020-7 which canvasses the votes, declares and certifies the election. He pointed out that Ms. Aguiar and Mr. Olson received 341 votes each and were elected to 4-year terms and Mr. Bothe received 338 votes and was elected to a two-year term.

There was no further discussion

On MOTION by Ms. Aguiar and seconded by Mr. Mulhere, with all in favor, the Board of Supervisors of the Hacienda Lakes Community Development District approved Resolution 2020-7 canvassing the Landowner Election results from the November 20th Landowner Election meeting.

B. Consideration of Resolution 2020-8: Relating to the designation of officers for the District and providing for an effective date.

Mr. Weyer kept the slate of officers the same as voted on in August so this resolution is a formality.

There was no further discussion.

On MOTION by Mr. Nadeau and seconded by Mr. Olson, with all in favor, the Board of Supervisors of the Hacienda Lakes Community Development District approved Resolution 2020-8 relating to the designation of officers for the District and providing for an effective date.

FOURTH ORDER OF BUSINESS **Administrative Matters**

A. Ratification of Chairman's signature for Vacation of Easement from Grady Minor.

Mr. Torres explained that the original Hacienda Lakes plat gave up blanket easements including the EMS station to the north. It is located within the original District boundaries but is now located outside of the District boundary that has been retracted. However the easement remains and the County is cleaning up the title and would like for the easement to be removed. Mr. Urbancic said that the form was fine and it accomplishes its intent.

On MOTION by Mr. Olson and seconded by Ms, Aguiar, with all in favor, the Board of Supervisors of the Hacienda Lakes Community Development District ratified the Chairman's signature to vacate the easement.

B. Termination of Easement and Chairman's Signature Authorization

The prior signed document was initially going to be submitted by Grady Minor but Collier County's Attorney's office sent this final termination of easement document to be signed. Mr. Urbancic recommended that the Board approve the termination of the easement and authorize the Chairman to sign on behalf of the District.

On MOTION by Ms. Aguiar and seconded by Mr. Nadeau, with all in favor, the Board of Supervisors of the Hacienda Lakes Community Development District approved the termination of easement and authorized the Chairman to sign.

C. Approval of Minutes of the August 17, 2020 Meeting

Mr. Weyer let the Board know that he had sent the minutes of this meeting in draft form out to the residents since they were unable to join the meeting via Zoom. There were no comments from the residents. Mr. Cole noted that on page 12 of his report to the Board that the word "resume" needed to be added between the words probably and in in the last sentence. There were no further comments or changes.

On MOTION by Mr. Olson with Mr. Cole's change and seconded by Mr. Mulhere, with all in favor, the Board of Supervisors of the Hacienda Lakes Community Development District approved the August 17, 2020 Board Meeting Minutes.

D. Approval of Grau & Associates FY 2019-2020 Audit Engagement Letter

Mr. Weyer presented the Grau & Associates audit engagement letter for the just ended 2019-2020 fiscal year. They will be going through this process one more time with them and then we will most likely need to go out with a request for proposals for this fiscal year.

Mr. Olson asked if the District does a two year contract with the auditing firm. Mr. Urbancic said that we usually have the contract for three to five years with annual renewals at the discretion of the Board.

.

On MOTION by Mr. Olson and seconded by Ms. Aguiar, with all in favor, the Board of Supervisors of the Hacienda Lakes Community Development District approved the Grau & Associates FY 2019-2020 Audit Engagement Letter.

FIFTH ORDER OF BUSINESS **Business Matters**

None to be considered at this time.

SIXTH ORDER OF BUSINESS **Financial Matters**

A. Acceptance of October 2020 Financial Statements

Mr. Weyer presented the District's financial statements through October 31, 2020. There was only the cash flow statement available since we are still finalizing year end documents which will ultimately affect the balance sheet and budget to actual has yet to be created.

The trial balances are done for FY 2019-2020 and will be transmitted to Grau & Associates

There were no further questions or comments.

On MOTION by Mr. Nadeau and seconded by Mr. Olson, with all in favor, the Board of Supervisors of the Hacienda Lakes Community Development District accepted the District's Financial Statements through October 31, 2020.

SEVENTH ORDER OF BUSINESS **Staff Reports**

Manager's Report –

1. Mr. Weyer noted that the holiday decorations are half installed on the trees and the wreaths and garland will be installed in the next week or so. The landscaping is looking good as well and there have been no complaints since we switched landscape companies. Mr. Adams commended the District for making the change in landscape companies and the look has improved drastically.

Attorney's Report –

Mr. Urbancic had nothing further to report.

Engineer's Report –

Mr. Cole noted that he and Mr. Torres have been communicating recently and it looks like Phase 1 of Rattlesnake Hammock Road along with the bridge will be turned over to the County. There will be documents to the turnover that the Board will need to approve since the District now owns those assets.

Mr. Torres also indicated that the County has expressed an interest in taking over the Sable Palm culverts that is currently maintained by the District. Mr. Weyer also reported that we are still waiting for the water to go down so we can get back in there to clean them out. Mr. Cole noted that they will need to go back in and take a look at the culverts to see which ones need cleaning again since they have gone through another wet season since the last check.

EIGHTH ORDER OF BUSINESS **Public Comments**

There was no public comment.

EIGHTH ORDER OF BUSINESS **Supervisors' Requests**

There were no Supervisor requests.

EIGHTH ORDER OF BUSINESS **Adjournment**

On MOTION by Ms, Aguiar and seconded by Mr. Mulhere, with all in favor, the meeting of the Board of Supervisors of the Hacienda Lakes Community Development District was adjourned.

_____ _____

Secretary/Assistant Secretary Chairperson/Vice-Chairperson

_____ _____

Print Name Print Name

EXHIBIT 10

Hacienda Lakes Community Development District
FY 2020-2021 Cash Flow

Through November 30, 2020

REVENUES

		TOTAL
ASSESSMENT CARRY OVER FROM 2019-2020	$	47,230
REMAINING CARRY OVER FROM FY 2019-2020		45,498
EXCESS COMMISSION REFUND		7,121
NET ON-ROLL ASSESSMENTS		145,961
OFF ROLL DEVELOPER ASSESSMENTS		51,109
INTEREST REVENUE		-
SERVICE/FEE INCOME		500
MISCELLANEIOUS REVENUE		-
TOTAL REVENUES	$	297,420

EXPENDITURES

ADMINISTRATIVE		
BOARD OF SUPERVISORS PAYROLL	$	1,193
PAYROLL TAXES		386
PAYROLL SERVICE FEE		103
MANAGEMENT CONSULTING SERVICES		10,500
ASSESSMENT ADMINISTRATION		16,031
ASSESSMENT ROLL PREPARATION		-
MISCELLANEOUS		250
STORAGE		-
BANK CHARGES		-
OFFICE EXPENSE		168
AUDITING		-
ACCOUNTING FIRM		1,000
INSURANCE (Liability, Property & Casuality)		5,920
NEW ASSESSMENT METHODOLOGY		-
WEBSITE HOSTING & ADMINISTRATION		-
LEGAL ADVERTISING		1,134
REGULATORY AND PERMIT FEES		175
LEGAL SERVICES		2,275
ENGINEERING SERVICES - General		278
TOTAL ADMINISTRATIVE EXPENDITURES	$	39,413
FIELD OPERATIONS		
LANDSCAPING & FIELD MAINTENANCE	$	21,446
LANDSCAPE REPLACEMENT		3,048
LANDSCAPE MULCHING		-
IRRIGATION REPAIRS		2,352
SOD REPLACEMENT		-
TREE PRUNING		-
MASTER PUMP MAINTENANCE		1,392
MASTER PUMP REPLACEMENT RESERVE		25,000
ELECTRICITY		3,069
FOUNTAINS		-
WATER USE MONITORING		800
ENTRY MONUMENTS MAINTENANCE		-
HOLIDAY DECORATIONS		6,590
WETLAND MONITORING		-
STREET SWEEPING		-
SFWMD ERP ANNUAL REPORT		-
LAKE TESTING		-
SABLE PALM CULVERTS CLEANING		-
LAKE MAINTENANCE		6,932
TOTAL FIELD OPERATIONS EXPENDITURES	$	70,630
TOTAL EXPENDITURES	$	110,043
NET CASH FLOW	$	187,377

Hacienda Lakes Community Development District
FY 2020-2021 Budget to Actual

Through December 31, 2020

REVENUES	**Fiscal Year Budget**	**Fiscal Actual 12/31/20**	**Over/**(Under)
ASSESSMENT CARRY OVER FROM 2019-2020	$ 47,230	$ 47,230	$ -
REMAINING CARRY OVER FROM FY 2019-2020	45,498	45,498	-
EXCESS COMMISSION REFUND	-	7,121	7,121
NET ON-ROLL ASSESSMENTS	214,051	145,961	(68,091)
OFF ROLL DEVELOPER ASSESSMENTS	101,364	51,109	(50,255)
SERVICE/FEE INCOME	-	500	500
MISCELLANEOUS REVENUE	-	-	-
TOTAL REVENUES	$ 408,143	$ 297,420	$ (110,724)
EXPENDITURES			(Over)**/Under**
ADMINISTRATIVE			
BOARD OF SUPERVISORS PAYROLL	$ 6,000	$ 1,193	$ 4,807
PAYROLL TAXES	1,072	386	685
PAYROLL SERVICE FEE	673	103	569
MANAGEMENT CONSULTING SERVICES	42,000	10,500	31,500
ASSESSMENT ADMINISTRATION	15,000	16,031	(1,031)
ASSESSMENT ROLL PREPARATION	5,000	-	5,000
MISCELLANEOUS	750	417	333
STORAGE	900	-	900
BANK CHARGES	-	-	-
AUDITING	6,500	-	6,500
ACCOUNTING FIRM	6,000	1,000	5,000
INSURANCE (Liability, Property & Casuality)	5,500	5,920	(420)
LEGAL ADVERTISING	1,800	1,134	666
REGULATORY AND PERMIT FEES	175	175	-
LEGAL SERVICES	8,000	2,275	5,725
ENGINEERING SERVICES - General	8,000	278	7,722
NEW ASSESSMENT METHODOLOGY	-	-	-
WEBSITE HOSTING & ADMINISTRATION	1,800	-	1,800
TOTAL ADMINISTRATIVE EXPENDITURES	$ 109,169	$ 39,412	$ 69,757
FIELD OPERATIONS			
LANDSCAPING & FIELD MAINTENANCE	$ 85,920	$ 21,446	$ 64,474
LANDSCAPE REPLACEMENT	15,000	3,048	11,952
LANDSCAPE MULCHING	15,000	-	15,000
IRRIGATION REPAIRS	20,000	2,352	17,648
SOD REPLACEMENT	10,000	-	10,000
TREE PRUNING	7,600	-	7,600
MASTER PUMP MAINTENANCE	3,000	1,392	1,608
MASTER PUMP REPLACEMENT RESERVE	25,000	25,000	-
ELECTRICITY	15,000	3,069	11,931
FOUNTAINS	1,500	-	1,500
WATER USE MONITORING	2,400	800	1,600
ENTRY MONUMENTS MAINTENANCE	1,500	-	1,500
SIGNAGE	-	1,090	(1,090)
HOLIDAY DECORATIONS	6,000	5,500	500
WETLAND MONITORING	1,500	-	1,500
STREET SWEEPING	600	-	600
SFWMD ERP ANNUAL REPORT	1,500	-	1,500
LAKE TESTING	3,600	-	3,600
SABLE PALM CULVERTS CLEANING	7,500	-	7,500
LAKE MAINTENANCE	30,856	6,932	23,924
TOTAL FIELD OPERATIONS EXPENDITURES	$ 253,476	$ 70,630	$ 182,846
TOTAL EXPENDITURES	$ 362,645	$ 110,042	$ 252,603
Net Cash Flow	$ 45,498	$ 187,377	

Hacienda Lakes Community Development District
Balance Sheet Summary
As of December 31, 2020

		Total
ASSETS		
Current Assets		
Bank Accounts		2,910,265.14
Accounts Receivable		4,379.00
Other Current Assets		9,301.00
Total Current Assets	$	2,923,945.14
Fixed Assets		0.00
TOTAL ASSETS	$	2,923,945.14
LIABILITIES AND EQUITY		
Liabilities		
Current Liabilities		
Accounts Payable		59.48
Other Current Liabilities		189,961.11
Total Current Liabilities	$	190,020.59
Total Liabilities	$	190,020.59
Equity		2,733,924.55
TOTAL LIABILITIES AND EQUITY	$	2,923,945.14