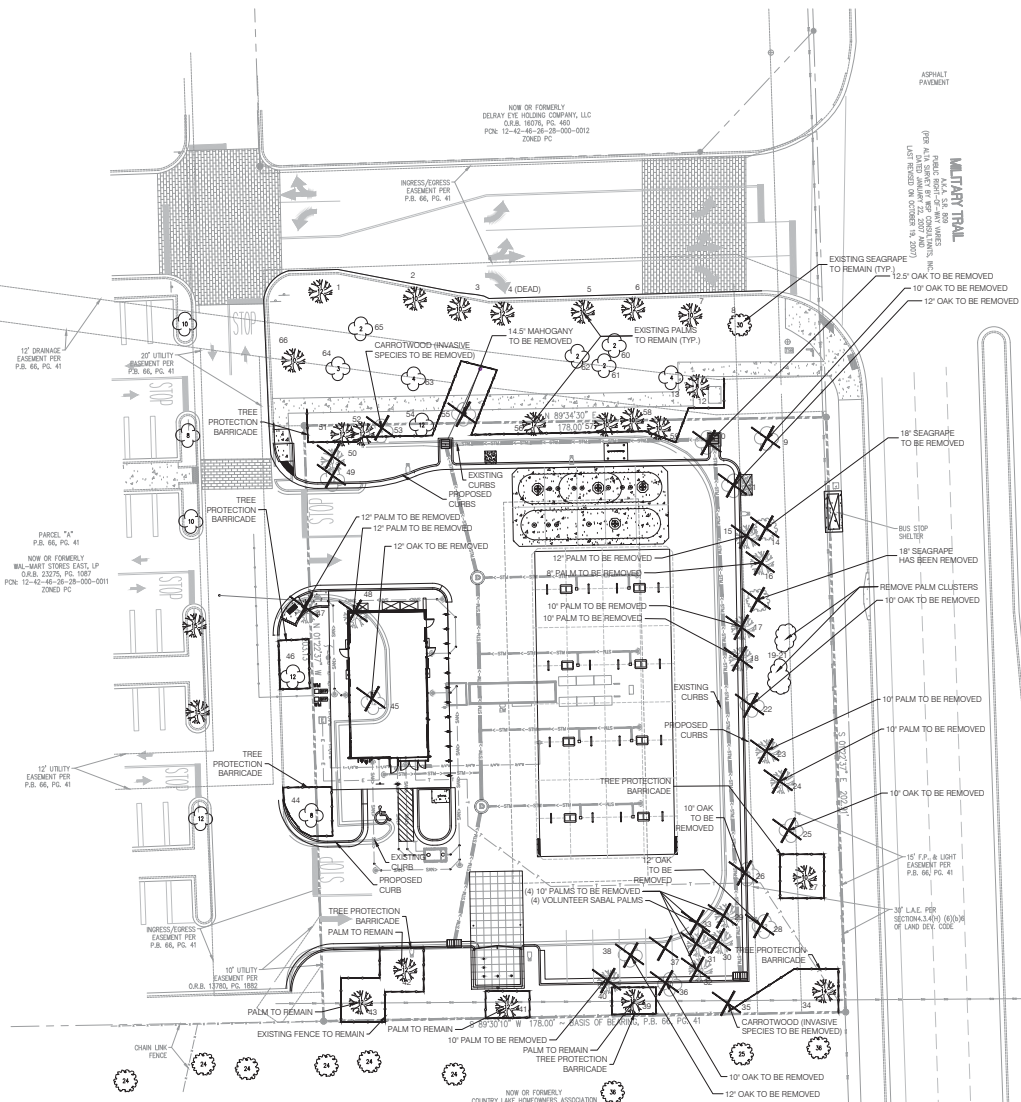


NOT TO SCALE

Tree Mitigation Fee Subtotal:	\$117,220.00
26 PROPOSED TREES @ 4" = 104"x \$450	-\$46,800.00
Tree Mitigation Fee Total:	\$70,420.00

Species Codes	Scientific Name
WARO	<i>Washingtonia robusta</i>
ROEL	<i>Roystonea elata</i>
COUV	<i>Coccolobis uvifera</i>
QUVI	<i>Quercus virginiana</i>
SAPA	Sabal palm
CHLU	<i>Chrysaliidocarpis lutescens</i>
CUAN	<i>Cupaniopsis anacardioides</i>
SWMA	<i>Sweetenia mahoganii</i>
TADI	<i>Taxodium distichum</i>



SCALE:
1" = 20'

0 10' 20' 40' 80'


NORTH

811 Know what's below.
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JACOB ZIMMERMAN, RLA
REG. NO. FL LA 0001653
LANDSCAPE ARCHITECT

HEARTWOOD
— and —
BARK INC.



MURPHY OIL USA, INC.
16211 S. MILITARY TRAIL
DELRAY BEACH, FLORIDA

5. 11/114/18
SITE PLAN REVISION

REVISIONS:

1. 4/16/18

CLIENT COMMENT:
EXIST. TREE DATA

2. 5/16/18

OFF SITE TRUCK
TURNING RADIUS

3. 06/25/18

SITE PLAN MODIFICATION

4. 10/29/18

CITY REVIEW
COMMENTS

DRAWN BY: J

DATE: 11/20/

17061

1/002

TREE PRESERV

PLAN

19

§1

ES

80¹

SCALE:
1" = 20'

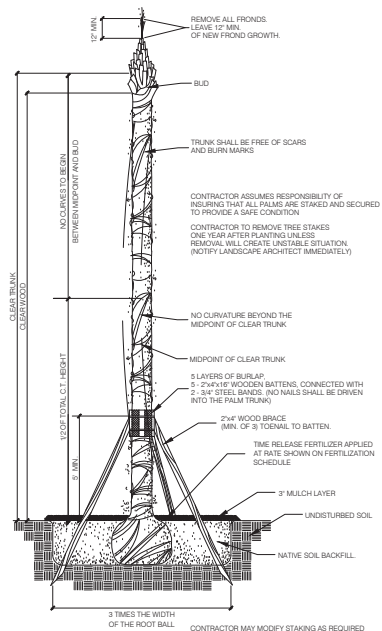
MURPHY OIL USA, INC.

MURPHY OIL USA, INC.

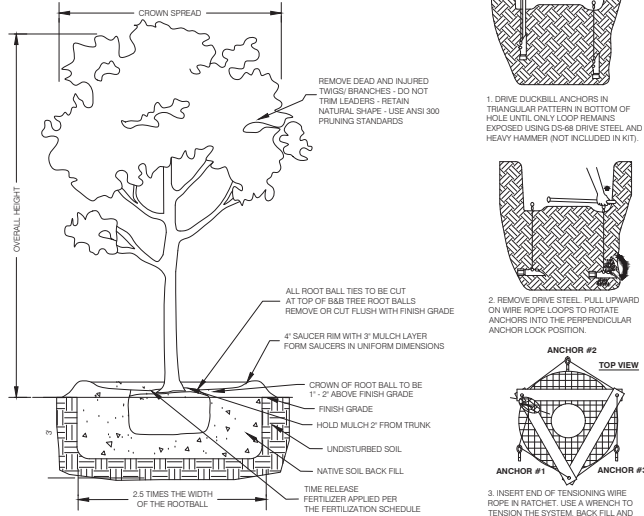
01/23/19	AHEL HEDGE
5. 11/114/18	SITE PLAN REVISION
REVISIONS:	
4/16/18	CLIENT COMMENTS
5/16/18	OFFSITE TRUCK TURNING RADIUS
06/25/18	SITE PLAN MODIFICATION
10/29/18	CITY REVIEW COMMENTS

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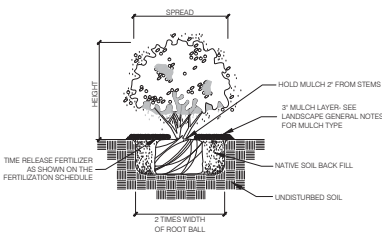
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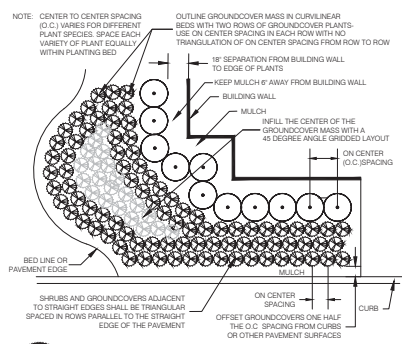
1 SABAL PALM PLANTING DETAIL
NOT TO SCALE



2 LARGE TREE PLANTING DETAIL (3' OR GREATER CALIPER)
NOT TO SCALE

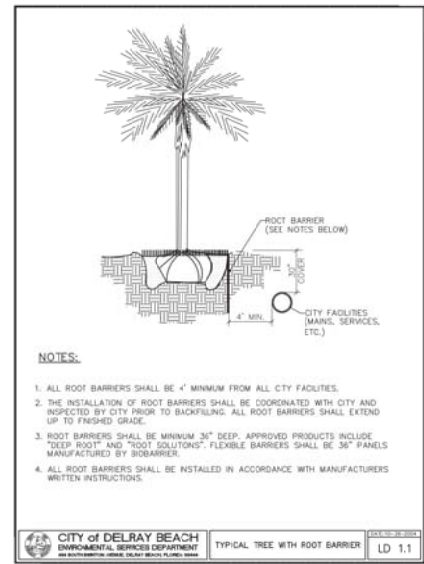
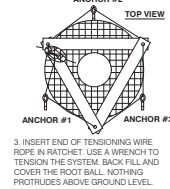
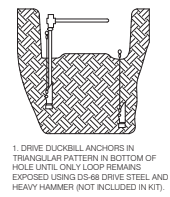


3 SHRUB & GROUNDCOVER PLANTING DETAIL
NOT TO SCALE

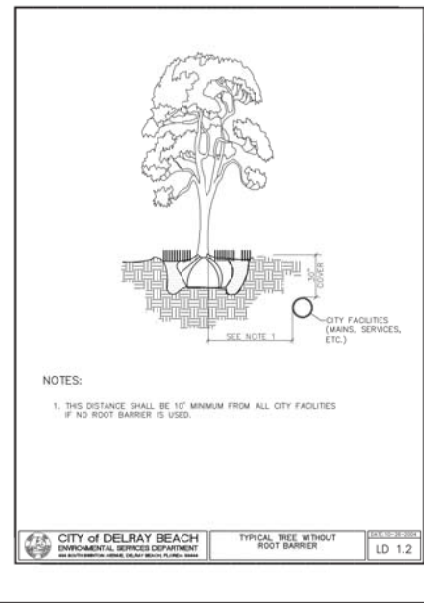


4 SHRUB AND GROUNDCOVER LAYOUT DETAIL
NOT TO SCALE

- STAKING NOTES:**
1. STAKING DETAIL ONLY FOR TREES WITH 3 INCH OR GREATER THAN 3" CALIPER MEASUREMENTS. SEE ALTERNATE STAKING DETAIL FOR TREES LESS THAN 3 INCH CALIPER (SMALL TREE PLANTING/STAKING).
 2. DUCKBILL ROOT BALL STRAP ANCHORS MODEL # 68 REB BY FORESIGHT PRODUCTS, LLC (800) 325-5860 www.earthfirst.com. OTHER TREE STAKING SYSTEMS MAY BE ACCEPTABLE IF APPROVED BY THE LANDSCAPE ARCHITECT.
 3. LANDSCAPE CONTRACTOR SHALL REMOVE STAKING AND GUYING MATERIALS AFTER ONE GROWING SEASON.
 4. STAKING TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



TYPICAL TREE WITH ROOT BARRIER
LD 1.1



TYPICAL TREE WITHOUT ROOT BARRIER
LD 1.2



5. 11/14/18 SITE PLAN REVISION
REVISIONS:
1. 4/16/18 CLIENT COMMENTS
2. 5/16/18 OFF SITE TRUCK TURNING RADIUS
3. 06/25/18 SITE PLAN MODIFICATION
4. 10/29/18 CITY REVIEW COMMENTS



JACOB ZIMMERMAN, RLA
REG. NO. FL LA 0001653
LANDSCAPE ARCHITECT



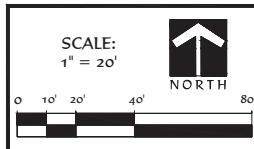
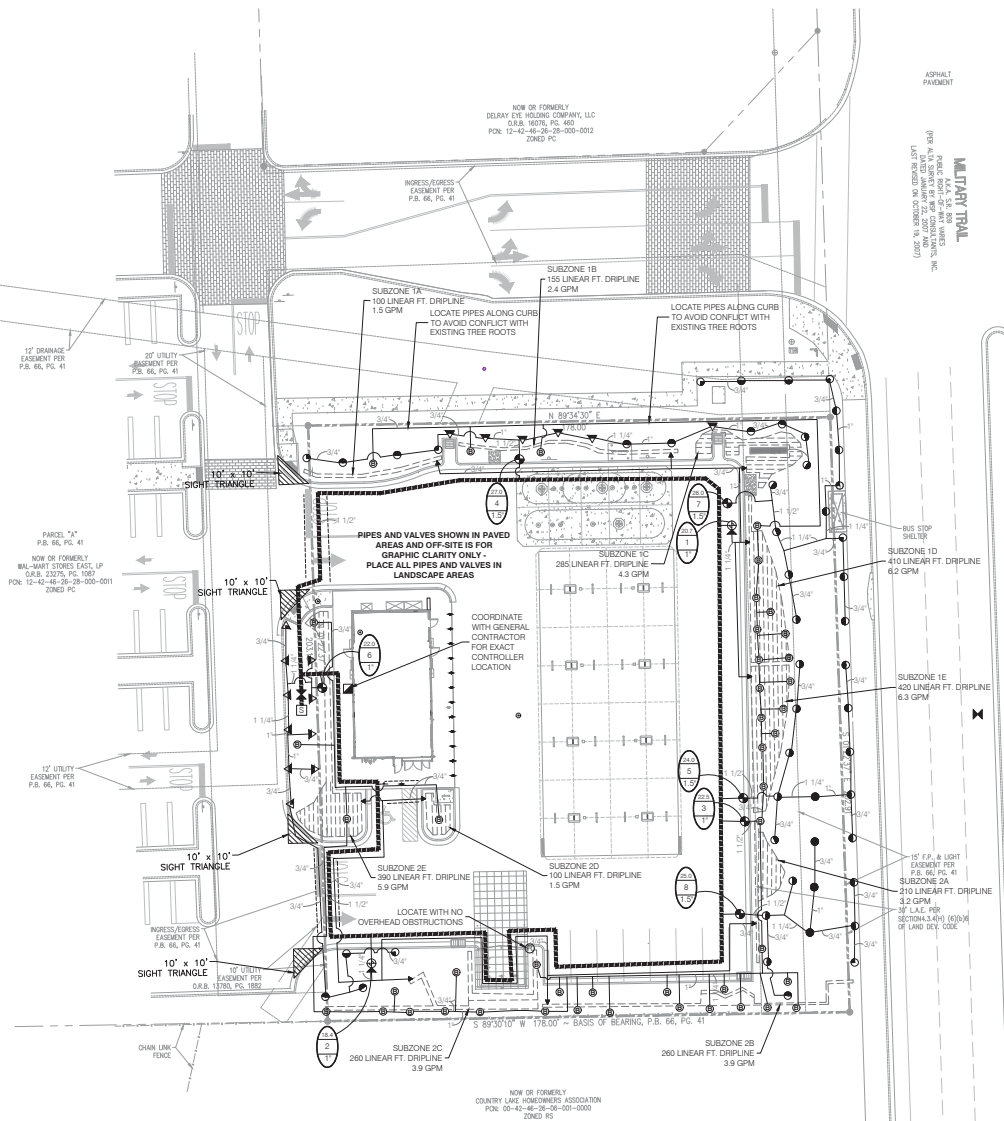
DRAWN BY: JAZ
DATE: 11/20/17
17062
LANDSCAPE DETAILS
LS3

IRRIGATION LEGEND			
SYMBOL	SPECIFICATION		
	HUNTER ICC2 IRRIGATION CONTROLLER 12C-800-PL (SEE GENERAL IRRIGATION NOTES FOR INSTRUCTIONS)		
	HUNTER RAIN-CLK - RAIN SENSOR		
	WATER SOURCE: PROPOSED 1" POTABLE WATER METER		
	ISOLATION GATE VALVE - LINE SIZE		
	HUNTER ICV 24 VOLT REMOTE CONTROL VALVE FILTER SENTRY ON WELL WATER SYSTEMS (SEE IRRIGATION ZONE TAG FOR VALVE SIZE)		
	1" RAINBIRD XCD-101-COM PESH-PRS-D VALVE WITH RAINBIRD 150 MESH BASKET FILTER (QXCHK-150M)		
	POINT OF CONNECTION - PVC TO DRIP TUBING		
	MAINLINE: 1 1/2" SCHEDULE 40 PVC		
	LATERAL LINE: MINIMUM 160 PSI PVC (MINIMUM PIPE SIZE TO BE 3/4")		
	RAIN BIRD WFTD-09-12 IN-LINE PRESSURE COMPENSATING DRIP TUBING (1.5 GPM/100 TUBING)		
	SLEEVING: SCHEDULE 40 PVC (TWO NOMINAL SIZES LARGER THAN PIPE TO BE SLEEVED)		
	STATION NUMBER		
	VALVE SIZE		
	IRRIGATION ZONE TAG		
SYMBOL	MODEL #	SYMBOL	MODEL #
	Hunter PROS-06 8F - 0.97 GPM		Hunter PROS-06 15F - 3.75 GPM
	Hunter PROS-06 8H - 0.47 GPM		Hunter PROS-06 15H - 1.86 GPM
	Hunter PROS-06 8Q - 0.24 GPM		Hunter PROS-06 15Q - 0.97 GPM
	Hunter PROS-06 10F - 1.59 GPM		Hunter PROS-06 ES-515 - .65 GPM
	Hunter PROS-06 10H - 0.88 GPM		Hunter PROS-06 SS-530 - 1.30 GPM
	Hunter PROS-06 10Q - 0.42 GPM		Hunter PROS-06 SS-918 - 1.72 GPM
	Hunter PROS-06 12F - 2.70 GPM		Hunter PCB-50 Bubbler - 0.5 GPM
	Hunter PROS-06 12H - 1.30 GPM		
	Hunter PROS-06 12Q - 0.67 GPM		

SPRAY ZONES TO BE OPERATED AT 30 PSI

GENERAL IRRIGATION NOTES

- The Contractor shall provide a fully functional irrigation system as shown on the Plans. Irrigation heads shall provide 100% coverage of the area to be irrigated.
- The source of water for the irrigation system shall be: Proposed 1" potable water meter.
- The Contractor shall field verify the capability of the water source to deliver a minimum pressure (40 PSI) and volume (37 GPM) to operate the irrigation systems as designed. In the event of discrepancies contact the Landscape Architect prior to installation.
- All questions concerning the Plans, Details or Specifications shall be directed to the Landscape Architect (727) 343-1809.
- All necessary permits (including Right of Way Use Permit) are to be provided by the installing contractor for work shown on the Plans.
- All components of the proposed irrigation system shall meet the federal, state and local codes, regulations and ordinances concerning irrigation construction.
- In an effort to create graphic clarity, irrigation mainline, lateral line, valves and other components of the irrigation system may be shown in paved areas or inside buildings on the Plans. These components are to be installed in appropriate landscape areas to carry out the intent of the Plans.
- The Contractor shall be responsible for verification and protection of all underground and overhead utilities.
- The Contractor shall review the Landscape Plans prior to installing the irrigation system. Coordinate installation locations of pipes, valves and other equipment with the installation locations of trees and shrubs.
- As-Built drawings are to be provided by the Contractor. Drawings shall be on Owner furnished base plans in hard copy or electronic versions. Contractor shall note all deviations from the Irrigation Plans as noted in Section 32 8423 of the Specifications.
- Mainline is to be installed with a minimum of 18" depth of cover, and lateral lines are to be installed with a minimum of 12" depth of cover.
- Sleeving is to be provided by the Contractor (unless otherwise specifically stated in the Specifications or Bid Documents).
- The Contractor shall provide operating maintenance instructions and operation manuals to the Owner prior to acceptance of the project.
- Owner shall provide 110 Volt power to the controller location. Electrical connection from power source to control clock is to be provided by the Contractor (unless otherwise specifically stated in the Specifications or Bid Documents). Contractor shall coordinate installation location of control clock with Owner or Owner's Representative.
- When the irrigation system Source is a proposed well, the well and pump locations shall be coordinated with the Owner or Owner's Representative prior to installation. The Owner shall provide power to the pump location. Contractor shall coordinate voltage and phases of available power with the local electrical utility and the Owner prior to ordering of the pump. Contractor shall coordinate pump ordering tag time with the irrigation and landscape work schedules to ensure timely supply of water to the project site.
- Contractor shall install an inline 120VAC-15A lightning surge protector between the power source and the controller. Ground each controller to a 5/8" x 8 copper clad ground rod with AWG #8 bare solid copper wire. A proper ground shall have 10 ohms or less resistance to earth. Use of multiple ground rods may be necessary to achieve the desired resistance reading.
- Contractor shall label location and head type for each zone in the irrigation system on the inside of the controller door. Suggested zone run time shall be indicated. All zone valves shall have permanent (plastic or metal) tags attached to the valve corresponding to the number of the zone on the controller.
- Control Clock shall be programmed to include a watering schedule that provides 1" of water every two weeks during the months April to November and provides 1" of water every two weeks during the months December to March. The zone run time shall be sequenced for the local watering restrictions as Program A. Program B shall be set as the water establishment period watering schedule in cooperation with the Landscape Contractor.
- The rain shut-off device shall be installed to meet local codes. Contractor shall locate device so that obstructions do not alter the accurate monitoring of rainfall at the project site. All wiring to the device shall be enclosed in 1/2" PVC electrical conduit.
- 12" pop-up spray (or rotor) heads shall be installed in all groundcover beds and masses of shrubs not exceeding 22 inches height.
- 6" pop-up spray heads shall be installed in all turf areas. Rotor heads in turf areas to be 6" pop-ups with the exception of Hunter PGP Series (4").
- All Hunter PGP and PGP Rotor and Spray heads shall have heavy walled PVC IPS flex pipe for the connection between lateral line and each head. Provide adequate slack for minor head adjustment. All Hunter 120 Rotor heads shall have rigid PVC swing joints. See Details for Shrub Riser and 12" pop-up head applications.
- The Contractor shall adjust all heads to provide optimum coverage and minimize overflow onto paved surfaces. Adjustable nozzles shall be used in areas where fixed spray patterns will result in overflow onto paved surfaces. Adjust pressure regulating valves to prevent misting from heads.
- Valve boxes shall be sized to accommodate installation and maintenance of zone valves. The valve box shall have a 3" deep layer of 1/2" diameter gravel as a sump installed 2" below the bottom of the valve. Valve boxes shall be installed so that the top of the box is no more than 1.5 inch above finish grade and set parallel to the surrounding grade.
- All 24 Volt control wiring shall be UL Listed, single strand, Type UF 600 Volt control cable. Common wires to be white AWG #12 or larger wire. Hot wires to be red, AWG #14 or larger wire. Spare wires to be any color wire except green, red or white, AWG #14 or larger wire.
- All splices to the 24 Volt control wiring shall be made with King Technology (King 6) silicone filled safety connectors.
- Shrub risers shall only be installed in hedges or mass plantings abutting vertical walls or objects and not extend more than 6" above the height of the shrubs. In no case shall risers be installed directly adjacent to curbs, sidewalks or other vehicular access ways. If risers are to be used in hedges abutting parking areas without concrete wheel stops, they must be placed a minimum of 30 inches away from the edge of pavement to protect the riser from damage by vehicular overhang. All risers are to be painted black.
- Mainline piping shall have thrust blocks sized and placed in accordance with the pipe manufacturer's recommendations. Thrust blocks shall be installed at all changes in direction, reduction in pipe size, and end caps on the Mainline.
- Irrigation Systems designed with Reclaimed Water as the Source shall include purple marking caps for all valve boxes, valves, quick couplers, hose bibs and spray or rotor heads. Rainbird PESR-PRS-D zone valves with self cleaning scrubber shall be used on all systems connected to Reclaimed Water.



811
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5/11/14/18 SITE PLAN REVISION	
REVISIONS:	
1. 4/16/18	CLIENT COMMENTS
2. 5/16/18	OFFSITE TRUCK TURNING RADIUS
3. 06/25/18	SITE PLAN MODIFICATION
4. 10/29/18	CITY REVIEW COMMENTS
DRAWN BY: JAZ	
DATE: 11/26/17	
17062	
IRRIGATION PLAN	
LS4	

MURPHY OIL USA, INC.
16211 S. MILITARY TRAIL
DELRAY BEACH, FLORIDA

HEARTWOOD
AND
BARK
LLC
LANDSCAPE ARCHITECTURE & DESIGN
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(727) 543-1809
www.heartwoodandbark.com
Landscape Architect License #12049289