

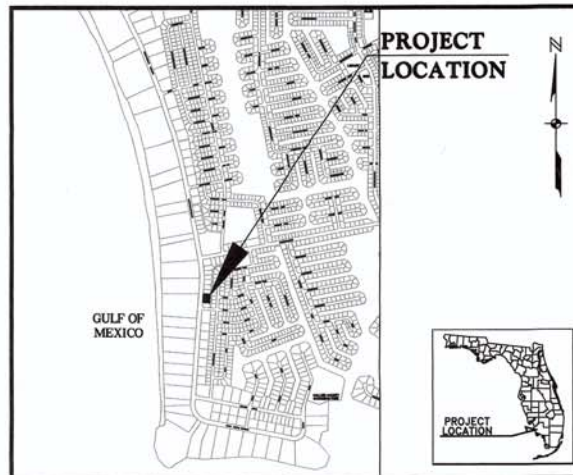
SITE DEVELOPMENT PLANS FOR Marco Moose Parking Lot Currently Zoned (Per CU-05-05) C-3

Plans part of the Planning
Board Packet

Folio No. 5787172009 / 57871680000
Located in Part of Section 17, Township 51 South, Range 26 East,
Marco Island, Florida.
Prepared for:
Marco Lodge, LLC
5800 Merle Hay Rd. #14
Johnston, IA. 50131
(239) 732-6669

INDEX OF PLANS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
3	DETAIL SHEET



LOCATION MAP



JUNE 2013
REVISED AUGUST 2013

Legal Description

Lots 2 and 3, Block 348, Marco Beach Unit Ten, According to the Plat
Thereof Recorded in Plat Book 6 at Pages 74-79 of the Public Records of
Collier County, Florida.

CITY OF MARCO ISLAND
COMMUNITY DEVELOPMENT

This project has been reviewed and approved for sufficiency with
the applicable land development regulations. The entity/engineer
of record signing and sealing these plans will be accountable for
adequacy of design of all infrastructure facilities as exhibited by
these drawings.

SDP No. 13-01
Approved by: [Signature]
Date: 8/15/13



Blair A. Foley, P.E., LLC
Civil Engineer / Development Consultant
120 Edgemere Way South - Naples, FL 34105

Phone (239) 263-1222 - Cell (239) 289-4900 - Fax (239) 263-0472 - E-mail bfoley@aol.com

Certificate Of Authorization No. 9469
Florida Registered Professional Engineer No. 53756
Name: [Signature] Date: 8/15/13



Site Row 13-4636

BUILDING DEPT.
COPY

BUILDING DEPT.
COPY
13-4636
111 & 121 S. Collier Blvd
The Planning Group
SEP 11 2013

THE PROPERTY IS CURRENTLY ZONED G-C-5.
A PRE-CONSTRUCTION MEETING IS TO BE HELD WITH THE CITY OF
HAWAII (PLANS AND PUBLIC WORKS DEPT., ENGINEER OF RECORD
AND INSPECTOR OF RECORD) AND THE HAWAIIAN LAND RECLAMATION
COMMISSION ON THE CHAIRS REPRESENTATIVE SHALL BE INVITED TO
ATTEND THE PRE-CONSTRUCTION MEETING.
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PERMITS AND
EQUIPMENT SHALL BE IN ACCORDANCE WITH THE PLANS AND
SPECIFICATIONS PREPARED BY THE ENGINEER OF RECORD.
REVISIONS AND ADDITIONS TO THE CONTRACT SHALL BE MADE ONLY
UPON WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
BID DRAWINGS OF ALL MATERIALS BEING USED SHALL BE
SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO
INSTALLATION.
CONSTRUCTION PROTECTION MAY BE PROVIDED BY THE ENGINEER,
CONSULTED AT HIS DISCRETION.
AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION AND AT

INFORMATION AVAILABLE TO THE ENGINEER, THE INFORMATION IS NOT GUARANTEED, THEREFORE THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL UTILITY LINES AND SERVICES DAMAGED DURING CONSTRUCTION, INCLUDING INTERRUPTION LINES AND SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ALL DAMAGED UTILITIES PRIOR TO REPAIR. ALL NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY UPON DAMAGED OR LOST. THE UNDERGROUND CONTRACTOR SHALL MINIMIZE THE WORK AREA AND DEPTH OF EXCAVATION. ALL EXCAVATIONS SHALL BE PROTECTED BY SAFETY BARRIERS. ALL UTILITIES SHALL BE PLACED OFF OR PREVIOUSLY CLEARED AREAS OR AS DIRECTED BY THE ENGINEER OR HAZARDOUS UTILITIES. THE CONTRACTOR SHALL NOT REMOVE OR DISTURB ANY TREES OR PLANTS WITHIN THE PROJECT AREA. ALL UTILITIES SHALL BE PROTECTED. ALL UTILITIES, ALL LICENSES REQUIRED FOR UTILITY INSTALLATIONS SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

ALL UTILITIES SHALL BE PROVIDED, AS REQUIRED.

CB 51 TYPE "C" GRATE = 4.80 INV. 5. = 2.50	CB 55 TYPE "C" GRATE = 4.80 INV. N. = 2.50	CB 59 TYPE "C" GRATE = 3.20 CAN BE FIELD ADJUSTED INV. E. = 0.80
CB 52 TYPE "C" GRATE = 3.20 INV. N. = 0.45	CB 56 TYPE "C" GRATE = 3.20 INV. 5. = 0.45	CB 51Q TYPE "C" GRATE = 3.20 INV. N. = 0.45
CB 53 TYPE "C" GRATE = 4.80 INV. 5. = 2.50	CB 57 TYPE "C" GRATE = 4.80 INV. N. = 2.50	CB 51I TYPE "C" GRATE = 3.20 INV. 5. = 0.45
CB 54 TYPE "C" GRATE = 3.20 INV. N. = 0.45	CB 58 TYPE "C" GRATE = 3.20 INV. 5. = 0.45	CB 51S GRATE = 4.70 INV. 5. = 2.90

RETAIN THE FIRST ONE INCH OF RUNOFF

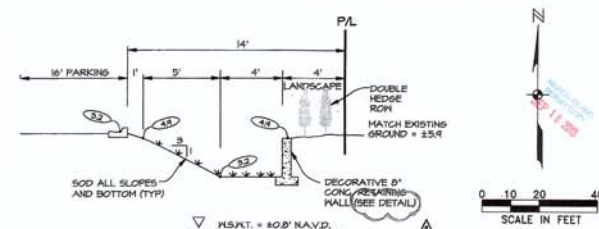
$V_r = 1" (17' / 12 \text{ IN}) \times 0.781 \times 43,560 \text{ SF/AC}$

$V_r = 2,836 \text{ CF REQUIRED}$

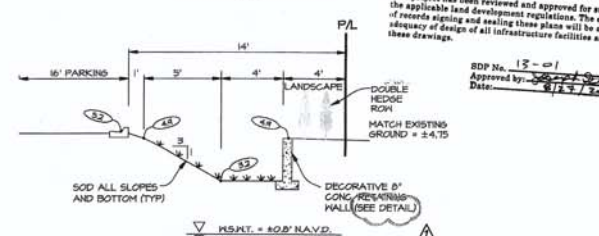
Swale Volume = $2,840 \text{ CF}$ ~~PROVIDED~~

$V_p = \text{Volume PROVIDED} = 2,840 \text{ CF}$

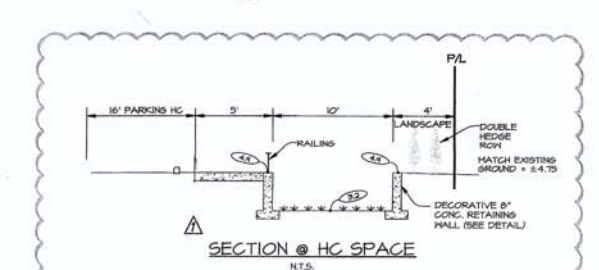
$\therefore V_p > V_r$



NTS.



NTS.



EXISTING GRADE
PROPOSED GRADE
8" CONC. BOLLARDS
CATCH BASIN
PROPOSED PAVEMENT
FLOW DIRECTION

NOTE:
THE SITE LIGHTING
SHALL BE INSTALLED
USING AN 18 FOOT
TALL POLE.

TOTAL SITE (AC) = 40.781
 *TOTAL IMPERVIOUS (AC) = .584 (75%)
 *TOTAL OPEN SPACE (AC) = .197 (23%)

REGULAR SPACES = 80
COMPACT SPACES = 16
H.C. REQUIRED = 4
PROVIDED = 4
TOTAL SPACES = 80

SOUTH COLLIER B
(100' R.O.W.)

EXTEND RETAINING WALL
AND ADD RAILING ON TOP
OF WALL THIS AREA
(TYP. NORTH & SOUTH HC
SPACES)

WORKING PROVIDED

RAW SPACES	=	60
FACT SPACES	=	16
REQUIRED	=	4
PROVIDED	=	4
AL SPACES	=	60

NOT VALID FOR CONSTRUCTION
UNLESS SIGNED IN THIS BLOCK

Phone

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Civil Engineer / Development Consultant
120 Edgemoore Way South - Naples, FL 34105
(9) 263-1222 Cell (239) 289-4500 Fax (239) 263-0472 E-mail foia000@aol.com

CLIENT: **Marco Lodge, LLC**

Marco Moose Parking Lot
Marco Island, Florida

Marco Moose Parking Lot
Site Development Plan

PRICE NO. 00.000
SCALE: As Noted
DATE: 06/26/1
SHEET: 2 of 3

LANDSCAPE CALCULATIONS

- I. INTERIOR LANDSCAPING
4 trees are provided as pre-approved by City staff
- II. RIGHT OF WAY LANDSCAPING
Type D Buffer
100 lf / 30 lf/tree = 23 trees
frontage req'd planting
100 lf / 3 lf/shrub x 2 = 450 shrubs
frontage req'd planting
- III. TREES & SHRUBS TOTALS
TREES 21 10' ht, 4" spd, 2" cal, 75% native
21 req'd trees x 75% = 20 native trees
SHRUBS 450 20" ht, 3" oc, 3 gal, 50% native (225 native)
- IV. MULCH
All required planting areas will be mulched with Florimulch.

PLANT LIST

Code	Quan	Botanical/Common Name	Native	Drought	Specifications
<u>Trees/Palms</u>					
BS	11	Bursera simaruba/Simbo limbo	*	••	12' ht/6" spd/3" cal/6' cl/65 gal
CE	16	Conocarpus erectus/sericeus/Silver Buttonwood	*	••	12' ht/6" spd/3" cal/6' cl/65 gal
<u>Shrubs/Ground Covers</u>					
O	450	Chrysobalanus icaco/Coco plum	*	••	2' ht/18" spd/3" oc./111/3 gal
JP	135	Juripensis oh parsoni/Parson Juniper		••	1' ht/1' spd/3" oc./111/3 gal

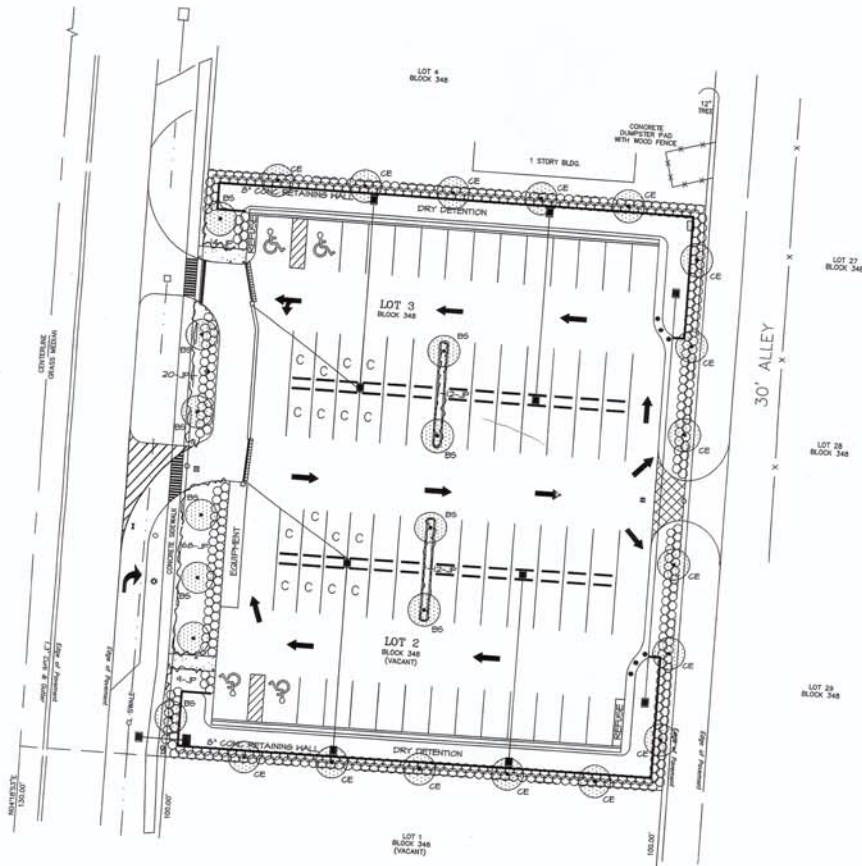
LANDSCAPE NOTES:

- Landscape Contractor is responsible to know existing site conditions and the location of all underground utilities prior to starting work.
- Landscape Contractor shall repair any site utilities damaged during landscape installation at his own expense.
- Landscape Contractor shall install all plants within 48 hours of delivery to the site.
- All plants shown on Landscape Plans shall be nursery grown container (except for field grown trees/palms noted in Plant List) stock of Grade # One or better as defined in Grades and Standards for Nursery Plants, Fla Dept. of Agriculture and Consumer Services.
- All sizes noted on Plant List are to be considered to be minimum. All plants shall meet or exceed these minimum requirement for height, trunk caliber and spread. Any other requirements for specific shape or effect as noted on Landscape Plan shall be required for acceptance. All trees are to be single trunked, unless otherwise noted on the landscape plans.
- The Landscape Contractor shall verify the location of all trees and palms on site with Landscape Architect prior to installation.
- Landscape Contractor shall remove all weeds, grass, debris, rocks and finish grade planting areas prior to installation and remove all collected debris to an approved disposal area. Any building construction material discovered when digging plant holes shall be removed and replaced with acceptable backfill.
- Landscape Contractor shall install trees and palms in holes that are twice the width of root ball and equal in depth of root ball. Backfill until ground is firm and voids or air pockets are filled with soil.
- Landscape Contractor shall install all ground cover plants 12" and shrubs 24" away from edges of all walks, driveways and walls.
- Landscape Contractor shall guarantee in writing trees and palms for 1 year and shrubs for 90 days after landscape installation is completed and accepted by the Owner.
- Irrigation system shall be operational before starting any landscape installation.
- No substitutions of plants without Landscape Architect's review and written approval.
- Mulch planting areas and 3' circles around trees in sod with Florimulch at 2" thickness.
- Sod detention basins with Bahia sod.

MAINTENANCE SPECIFICATIONS

- Maintain hedge in D Buffer at 3' overall height and B Buffer at 4' overall height.
- Remove only dead or damaged tree limbs or branches.
- Remove tree guys/stakes and palm bracing 12 months after installation.
- Remove only dead palm fronds from Sabal palms.
- Property owner shall maintain landscape areas free of prohibited exotic vegetation.
- Property owner shall replace any and all dead plants in code req'd planting.

SOUTH COLLIER BLVD.
(100' R.O.W.)



CITY OF MARCO ISLAND
COMMUNITY DEVELOPMENT

This project has been reviewed and approved for sufficiency with the applicable land development regulations. The entry/engineer of records signing and sealing these plans will be accountable for adequacy of design of all infrastructure facilities as exhibited by these drawings.

SDP No. 13-001
Approved by: [Signature]
Date: 8/10/13

North

JEFF MOORE
Landscape Architect

Naples, Florida
239 512 0226

WATER PLANT
FERTILIZER
SEP 18 2013

CODE REQUIRED
LANDSCAPE PLAN

Marco Moose Parking Lot
Marco Lodge
South Collier Blvd
City of Marco Island

SCALE: 1" = 20'

DATE: 7/13

REVISIONS:

[Signature]

7/10/13

SHEET #
L-1

IRRIGATION LEGEND

Symbol	Model Number
---	Class 200 PVC piping
---	2" Schedule 40 PVC mainline pipe
---	4" Schedule 40 PVC sleeve set 1' below paving sub base
●	Rainbird 1806 Pop-up/fixed head sprinkler on 2' risers by shrubs
□	Rainbird 100-PSA-BSP electric valve
□	Rainbird ESP-BLX Plus Controller
□	Rainbird Wireless Rain Sensor secured to building rooftop
□	Existing Water Meter (approximate location)
□	Irrigation Backflow Preventer

IRRIGATION NOTES:

Material Requirements

- All irrigation equipment shall be manufactured by RAINBIRD or approved equal.
- Main lines, sleeves and lateral shall be Schedule 40 PVC.
- Wire shall be UF 16 AHS, provided with waterproof + weatherproof connections.
- Valves shall be plastic, electric, remote control type with pressure regulation.
- Valve boxes shall be thermoplastic, 12" square with lid, green in color.
- Controller shall be dual program computer type with battery back-up.
- Irrigation system connected to lake irrigation pump station.
- Spray heads shall be plastic, pop-up type with matched precipitation nozzles.
- Rotor heads shall be plastic pop-up type with pressure compensating nozzles.
- Heads located in turf areas shall be 6" pop-ups.
- Heads located in ground cover areas shall be 12" pop-ups.
- Heads located next to shrubs shall be installed on Schedule 40 risers.

Selecting Sprinkler, Sizing Pipe + Valves

- Sprinkler heads and nozzles shall be selected to minimize overspray onto pavement, buildings and walks.
- Pipe shall be sized so that water flow never exceeds a velocity of 5 feet per second.
- Valve size shall be 2".
- Valves shall be installed in valve box arranged for easy adjustment and removal.

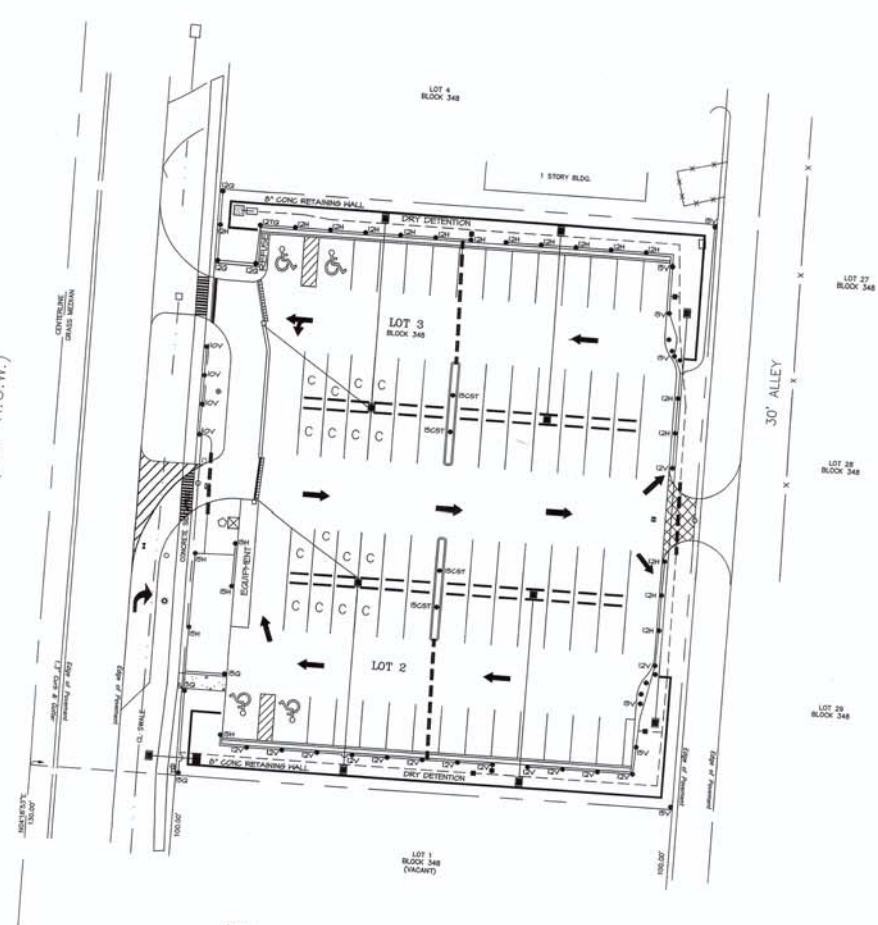
Sprinkler Head Spacing Criteria

- Triangular spacing of heads shall be used if possible.
- Heads shall be spaced no further apart than 60% of the spray diameter.

Installation Guidelines

- Sprinklers shall be installed on flex pipe with min. 12" slack, or swing joints.
- Risers shall be 4" above adjacent shrubs to allow for plant growth.
- All pipe that will be installed under paving or walks shall be installed inside sleeves sized two sizes larger than pipe size.
- Main lines depth shall be a minimum of 16", lateral lines depth shall be a minimum of 12" below finish grade.
- Test main lines and valves for leaks before backfilling trenches to a hydrostatic pressure of 100 psi for one hour.
- Perform operational testing after sprinkler heads have been adjusted to final position and site landscape installation is completed.
- Adjust spray patterns, correct radius and clean nozzles before final inspection.
- Note on Irrigation Plan all changes of pipe layout and sprinkler placement to create a record "as-built" irrigation plan and give plan to owner at project completion.
- Connect irrigation system to existing irrigation meter in northeast corner of the property.
- This a code required plan. Irrigation contractor can make changes in piping and valve locations to find a way to add new sprinklers to existing irrigation system.
- Landscape Architect does not have an "as built" of existing irrigation system.

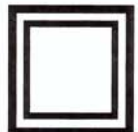
SOUTH COLLIER BLVD.
(100' R.O.W.)



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COMMUNITY DEVELOPMENT

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SDP No. 13-01
Approved by: [Signature]
Date: 7/10/13



JEFF MOORE
Landscape Architect
Naples, Florida
239 512 0226

CODE REQUIRED
IRRIGATION PLAN

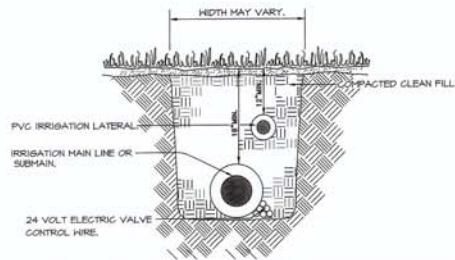
Marco Moose Parking Lot
Marco Lodge
South Collier Blvd
City of Marco Island

SCALE: 1" = 20'

DATE: 7/13

REVISIONS:

SHEET #
L-2



ALL TRENCHING DEPTHS SHOWN ARE MINIMUM. IN THE EVENT THAT MINIMUM TRENCHING DEPTHS ARE NOT MET, THE TRENCHES SHALL BE RE-EXCAVATED.

DEPTH MEASUREMENTS ARE TO BE DONE FROM FLUSH GRADE TO TOP OF PIPE.

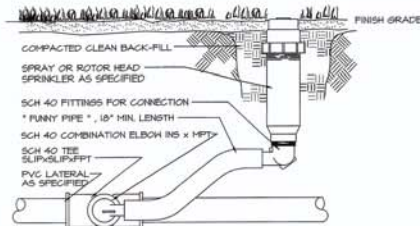
PROVIDE A 6" MINIMUM VERTICAL SEPARATION BETWEEN MAIN LINES AND LATERAL LINES.

ALL TRENCHES SHALL BE BACKFILLED WITH CLEAN SOIL FREE OF DEBRIS & NOXIOUS WEEDS. TRENCHES SHALL BE COMPACTED TO A 90% STANDARD PROCTOR DENSITY, ASTM D648-70.

PIPE PULLING THROUGH UN-TRENCHED SOIL IS NOT ALLOWED UNDER ANY CIRCUMSTANCE.

TYPICAL TRENCHING DETAIL

N.T.S.

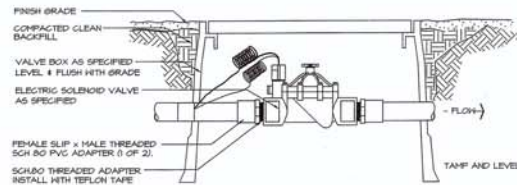


NOTES:

- NO SPRINKLER HEADS SHALL OCCUR WITHIN 6" OF SIDEWALKS, PAVED AREAS, BEDLINES, AND 5' FROM BUILDINGS, OR OTHER STRUCTURES.
- IN THE EVENT OF OPERATION AT HIGH PRESSURE (65 PSI OR MORE) THE IRRIGATION CONTRACTOR SHALL CONNECT THE "FUNNY PIPE" TO THE BARBED FITTINGS WITH STAINLESS STEEL SCREEN CLAMPS.

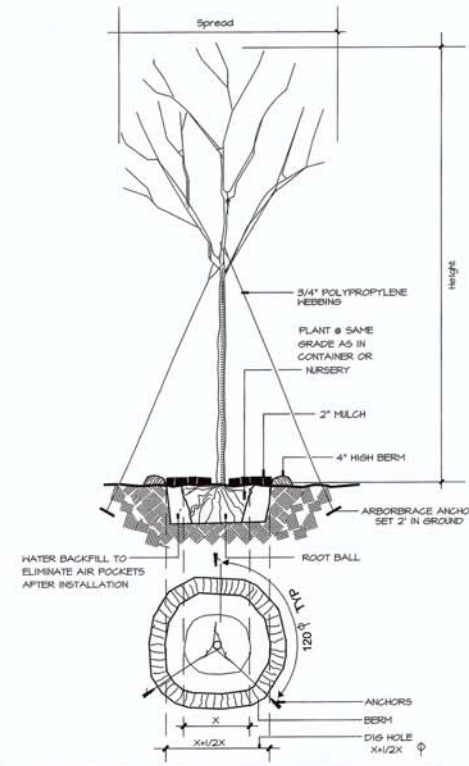
POP-UP SPRINKLER INSTALLATION DETAIL

N.T.S.



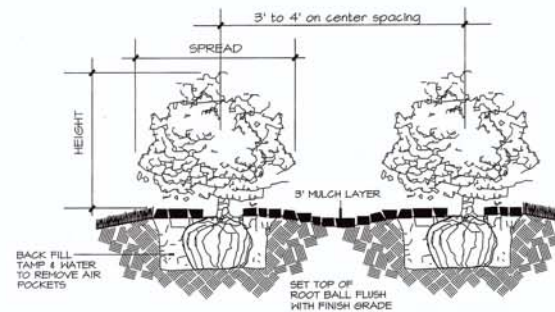
ELECTRIC SOLENOID VALVE INSTALLATION DETAIL

N.T.S.



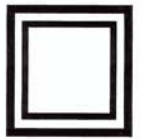
1 TREES W/ TIES

N.T.S.



2 SHRUBS

N.T.S.



JEFF MOORE
Landscape Architect
Naples, Florida
239 572 0226

MARCO ISLAND
PLANTING
SEP 13 2013

PLANTING + IRRIGATION DETAILS

Marco Moose Parking Lot
Marco Lodge
South Collier Blvd
City of Marco Island

CITY OF MARCO ISLAND
COMMUNITY DEVELOPMENT

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SDP No. 13-01
Approved By: [Signature]
Date: 9/13/2013

DATE: 7/13

REVISIONS

SHEET #

L-3

