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 THESE PLANS MAY HAVE BEEN REDUCED OR INCREASED IN  
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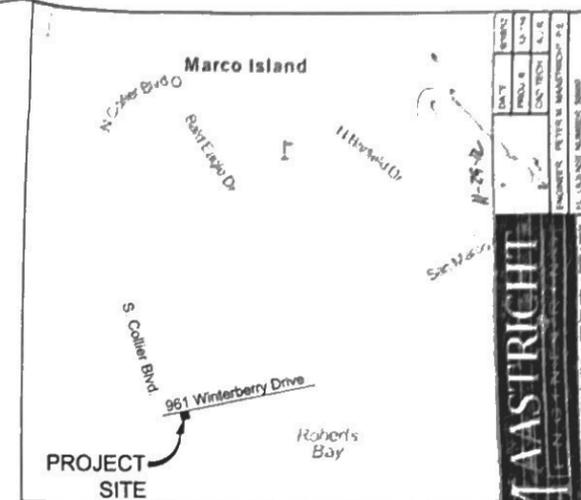
# SITE CONSTRUCTION PLANS FOR MARCO GOLF AND GARDEN MARCO ISLAND - COLLIER COUNTY, FLORIDA

*Approved Set  
 Joseph D. L.  
 12/10/2012*

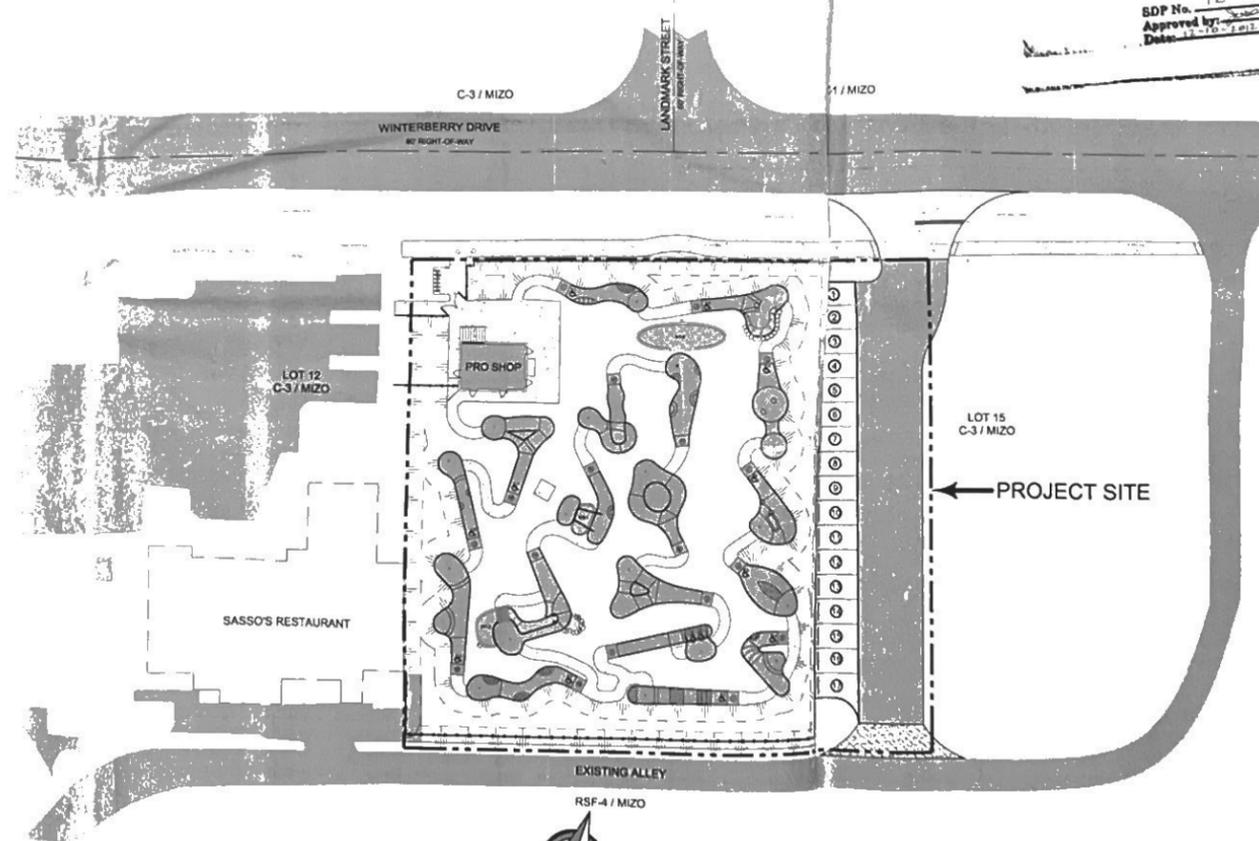
CITY OF MARCO ISLAND  
 COMMUNITY DEVELOPMENT

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

BDP No. 12-02  
 Approved by: Joseph D. L.  
 Date: 12-10-2012



LOCATION MAP  
 N.T.S.



VICINITY MAP  
 SCALE: 1"=30'

**LOCATION:**  
 961 WINTERBERRY DRIVE  
 SECTION 17, TOWNSHIP 52 SOUTH, RANGE 26 EAST,  
 MARCO ISLAND, COLLIER COUNTY, FLORIDA  
 PARCEL NOS.: 57872120005 & 57872120008

**BUILDING INFORMATION:**  
 1. CONSTRUCTION TYPE: CBS  
 2. TOTAL SQUARE FOOTAGE UNDER ROOF:  
    CONDITIONED: 450 SF NON-CONDITIONED: N/A  
 3. NON-SPRINKLED BUILDING  
 4. FINISHED FLOOR ELEV: 75' (NAVD 88)  
 BUILDING TO BE EQUIPPED WITH FLOOD PANELS  
 TO ELEVATION 10'00" NAVD (FEMA FIRM ELEV 9'00" NAVD))

**SITE DATA:**  
 ZONING: AMUSEMENT, GAMBLING AND RECREATION INDUSTRIES  
 USE: VACANT  
 LAND USE: MZO  
 OVERLAY: AE-EL # (NAVD 88)  
 FLOOD ZONE: S-RSF4  
 SURROUNDING ZONING: E: WINTERBERRY DRIVE ROW / C-3 & C-1  
                                   S: RSF4  
                                   W: C-3 (COMMERCIAL)  
                                   E: C-3 (COMMERCIAL)

SETBACKS:	REQUIRED	PROVIDED
FRONT (NORTH)	25'	31.5'
SIDE (EAST & WEST)	15'	18.0'
REAR (SOUTH)	15'	15.0'

BLDG. HGT	<50'	13.5'-4"
MIN. FLOOR AREA	700 SQ FT	450 SQ FT
MIN. LOT AREA	10,000 SQ FT	36,032.8 SQ FT
MIN. LOT WIDTH	100 FT	200 FT
PARKING SPACES	23 SPACES	17 SPACES

(PLUS SHARED PARKING WITH ADJACENT SASSO'S RESTAURANT)  
 PROJECT TO UTILIZE DUMPSTERS AT ADJACENT SASSO'S RESTAURANT

	ON SITE			OFF SITE	
	S.F.	AC.	%	S.F.	AC.
TOTALS	36,033	0.87	100		
BUILDING	450	0.01	1.2		
ASPHALT	4,106	0.11	11.4		
CONC. DRIVE APRON				1,147	0.03
CONC. WALKS	3,072	0.09	8.5	1,563	0.03
GOLF HOLES	5,535	0.13	15.4		
IMPERVIOUS	13,163	0.35	36.5	2,710	0.06
PERVIOUS	22,870	0.53	63.5		

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DEVELOPER MR. FREDERICK C. KRAMER 880 NORTH COLLIER BLVD SUITE 101 MARCO ISLAND, FL 34145	REVISION DESCRIPTION BY DATE	MARCO GOLF AND GARDEN 961 WINTERBERRY DRIVE MARCO ISLAND, COLLIER COUNTY, FLORIDA	COVER SHEET	SHEET 1 of 11
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### GENERAL CONSTRUCTION NOTES:

- REFER TO CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION. CONTRACTORS RESPONSIBILITIES AND DETAILS.
- THE CONTRACTOR SHALL BE REQUIRED TO MEET ALL "MAINTENANCE OF TRAFFIC" REQUIREMENTS AS PRESCRIBED IN THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, F.H.W.A. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WITH CURRENT EDITION, AND ALL APPLICABLE SECTIONS OF THE AASHTO AND TRAFFIC DESIGN STANDARDS, FLORIDA DEPARTMENT OF TRANSPORTATION, CURRENT EDITION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITIES IN THE AREA OF CONSTRUCTION PRIOR TO BEGINNING CONSTRUCTION. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ANY UTILITY RELOCATION WITH THE UTILITY COMPANY SUCH THAT ALL CONFLICTS ARE RESOLVED. NO COMPENSATION OR TIME EXTENSION WILL BE GRANTED TO THE CONTRACTOR FOR DELAYS CAUSED BY UTILITIES.
- THE CONTRACTOR SHALL COMPLY WITH CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) SPECIFICATIONS, SPECIFICALLY IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE "SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND THE "ROAD AND TRAFFIC DESIGN STANDARDS" UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL ALSO COMPLY WITH MARCO ISLAND DEPARTMENT STANDARDS.
- CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. ANY DISCREPANCY NOT CALLED TO THE ENGINEER'S ATTENTION PRIOR TO THE COMMENCEMENT OF THE WORK SHALL BE CORRECTED BY AND AT THE CONTRACTOR'S EXPENSE.
- THERE ARE NOT KNOWN WELLS LOCATED ON THIS JOB SITE. IF ANY WELLS ARE LOCATED DURING CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ENGINEER.
- ALL PRACTICABLE AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS, SWALES AND OUTFALLS (REFER TO EROSION CONTROL PLAN).
- WHERE THE NEW PAVEMENT IS DISCONTINUED IT SHALL BE RUBB WITH OR HAVE A SMOOTH TRANSITION WITH ADJACENT PAVEMENT.
- ALL INVERT ELEVATIONS NOTED FOR DRAINAGE STRUCTURES ARE FLOW LINE ELEVATIONS.
- ALL EXISTING AND PROPOSED GRADES SHOWN REFER TO A.S.D. 1988.
- AT THE CONTRACTOR'S EXPENSE, ALL FRAMES, COVERS, VALVE BOXES, METER BOXES AND MANHOLES SHALL BE ADJUSTED TO FINISHED GRADE UPON COMPLETION OF PAVING OR RELATED CONSTRUCTION.
- ANY SURPLUS MATERIAL WILL REMAIN THE PROPERTY OF THE OWNER, AND THE CONTRACTOR, AT HIS EXPENSE SHALL STOCKPILE THE SURPLUS MATERIAL AS DIRECTED BY OWNER.
- THE LIMITS OF CONSTRUCTION SHALL MATCH THE LIMITS OF CLEARING & GRUBBING UNLESS OTHERWISE NOTED ON PLANS.
- ALL UTILITY WORKMANSHIP AND MATERIALS FOR THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND STANDARDS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP), THE STATE OF FLORIDA DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES (DHRS), THE MARCO ISLAND UTILITIES TECHNICAL STANDARDS MANUAL, UNLESS OTHERWISE NOTED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND VERIFY THE SIZE, DEPTH AND LOCATION OF ALL UTILITIES IN THE FIELD WITHIN THE PROJECT LIMITS PRIOR TO CONSTRUCTION. ANY UTILITIES THAT ARE DISTURBED OR DAMAGED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED OR REPLACED AT HIS EXPENSE. ANY DISCREPANCY NOT CALLED TO THE ENGINEER'S ATTENTION PRIOR TO THE ACCOMPLISHMENT OF THE WORK SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. THE ENGINEER AND/OR OWNER WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS OR THOSE OMITTED FROM THE SHEET.
- ALL DISTURBED AREAS WITHIN PROJECT SITE AND CITY RIGHTS-OF-WAY ALLEYS SHALL BE REGRADED AS REQUIRED AND STABILIZED WITH SOIL VACANT LOT AREAS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE SEED & MULCHED.
- CONCRETE SIDEWALK USE CLASS 1, 3000 PSI (MINIMUM) CONCRETE. APPLY A BROOM FINISH AND MAKE VERTICAL SAW CUTS AT 5' ON CENTER AT DEPTH OF 1/4 OF THE SLAB THICKNESS. PROVIDE PRE-FORMED EXPANSION JOINTS @ 100' ON CENTER.
- ALL HANDICAP SPACES, RAMPS, AND ACCESS AREAS SHALL COMPLY IN STRICT ACCORDANCE WITH THE "AMERICAN DISABILITY ACT" (ADA) (28 CFR PART 36) AND "ACCESSIBILITY BY HANDICAPPED PERSONS" CHAPTER 98.09 PART V, FLORIDA STATUTES. ANY DISCREPANCY SHALL BE CALLED TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION.
- CONCRETE CURB & GUTTER AND STRAIGHT CURB: USE CLASS 1, 3000 PSI (MINIMUM) CONCRETE. MAKE VERTICAL SAW CUTS EVERY 10' ON CENTER WITH PRE-MOLDED EXPANSION JOINTS EVERY 100' ON CENTER.
- PAVEMENT MARKINGS AND SIGNS SHALL BE IN STRICT ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)" FOR STREETS AND HIGHWAYS" AND FDOT STANDARD INDEX #17346.
- STORM DRAIN (SD) SHALL BE REINFORCED CONCRETE PIPE, 12" ALUMINUM, PVC SDR-35, A-2000 PVC, OR AS SHOWN ON PLANS. NO STEEL PIPE, NON REINFORCED CONCRETE PIPE, OR FIBER REINFORCED PIPE.
- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER SHOP DRAWINGS OF ANY AND ALL MATERIALS, STRUCTURES, PIPING, VALVES, VALVE BOXES ETC. TO BE USED ON SITE PRIOR TO ORDERING OR INSTALLING, INCLUDING MFG. OF SAME.
- ALL PIPE CONNECTIONS SHALL BE IN ACCORDANCE WITH THE MARCO ISLAND UTILITIES TECHNICAL STANDARDS MANUAL, FDOT INDEX 38 AND FDOT SPEC. 430-7.

### MISC. NOTES

- FINAL ALIGNMENTS, MATERIALS, COLORS FINISHES FOR PEDESTRIAN HARDSCAPE AREAS MAY BE ADJUSTED ON SITE BY OWNER OR OWNER REPRESENTATIVE.
- THE SIZES AND LOCATIONS OF THE UNDERGROUND PRESSURE MAINS, STORM DRAINS, GRAVITY MAINS, ELECTRIC CONDUITS, SLEEVES, TRANSFORMERS, ENCLOSURES, LIGHT POLES AND OTHER APPURTENANCES ARE BASED UPON THE BEST INFORMATION OBTAINED BY THE ENGINEER AT THE TIME OF DESIGN. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATION, SIZE AND DEPTH OF ALL UTILITIES DESCRIBED ABOVE PRIOR TO INSTALLATION OF THEIR FACILITIES.

### RIGHT-OF-WAY CONSTRUCTION NOTES:

- CONSTRUCTION OF NEW DRIVEWAYS SHALL BE IN STRICT ACCORDANCE WITH THE CURRENT CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE CITY OF MARCO ISLAND, FLORIDA AND OTHER STANDARDS REFERENCED HEREIN (REFER TO GENERAL CONSTRUCTION NOTES).
- PRIOR TO COMMENCING ANY WORK WITHIN THE CITY RIGHT-OF-WAYS, THE CONTRACTOR SHALL SET UP A PRE-CONSTRUCTION MEETING WITH THE CITY INSPECTORS. CITY REQUIREMENTS FOR MATERIAL TEST REPORTS AND PROCEDURES SHALL BE VERIFIED BY THE CONTRACTOR AND THE REPORTS SHALL BE AVAILABLE TO THE INSPECTORS AT THE TIME OF INSPECTION. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE INSPECTIONS AND OBTAIN APPROVAL PRIOR TO PLACEMENT OF CONCRETE AND/OR ASPHALT WITHIN THE RIGHT-OF-WAYS. PRIOR TO THE ENGINEERING RIGHT-OF-WAY FINAL INSPECTION, THE CONTRACTOR SHALL PROVIDE IN-PLACE PAVEMENT SECTION CORE SAMPLES FOR ALL PAVEMENT WITHIN THE CITY RIGHT-OF-WAYS.
- PRIOR TO WORKING WITHIN THE RIGHT-OF-WAYS, THE CONTRACTOR IS REQUIRED TO OBTAIN ALL THE NECESSARY RIGHT-OF-WAY PERMITS AND PROVIDE THE NECESSARY WORK ZONE CONTROLS AND SAFETY REQUIREMENTS. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO PREPARE A TRAFFIC MAINTENANCE PLAN AND OBTAIN APPROVAL BY THE CITY OF MARCO ISLAND TRANSPORTATION DEPARTMENT.
- THE CONTRACTOR SHALL NOTE THAT THE DESIGN ELEVATIONS SHOWN ON THE PLANS WITHIN THE RIGHT-OF-WAY SHOWN MAY DIFFER FROM THE CITY'S MASTER DESIGN PLAN. ALL PROPOSED GRADES IN THE ALLEYS, DRIVEWAYS AND STREET RIGHTS-OF-WAY SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- PRIOR TO CONSTRUCTION NEAR OR ADJACENT TO TRAFFIC SIGNALS, THE CONTRACTOR SHALL NOTIFY THE COLLIER COUNTY DEPARTMENT OF TRANSPORTATION (C.C.D.O.T.) TRAFFIC SIGNAL MAINTENANCE DIVISION TO ENSURE THE PROPER OPERATION OF THE SIGNAL AND OTHER APPURTENANCES. THE CONTRACTOR SHALL COORDINATE THE RELOCATION OF SIGNAL BOXES AND LOOPS (IF ANY) WITH C.C.D.O.T. AND THE CITY OF MARCO ISLAND TRAFFIC DEPARTMENT.
- ALL BROKEN OR VERTICALLY MISALIGNED CURBS/SIDEWALK DIRECTLY ADJACENT TO THE SITE THAT DO NOT MEET A MINIMUM REQUIREMENTS SHALL BE REPLACED. CONCRETE FORMS ARE REQUIRED ON BOTH SIDES OF REPLACEMENT CURBS.
- ANY WORK OR MATERIALS THAT DO NOT CONFORM TO THE SPECIFICATIONS CONTAINED HEREIN OR ANY WORK PERFORMED IN THE CITY R.O.W. WITHOUT A CITY INSPECTION IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL RESTORATION IN THE CITY RIGHT-OF-WAYS DISTURBED OR DAMAGED DURING CONSTRUCTION INCLUDING SWALE RE-GRADING (REFER TO EROSION CONTROL PLAN AND GENERAL CONSTRUCTION NOTES).
- ALL CITY TRAFFIC SIGNS AND MAILBOXES IN OR ADJACENT TO THE RIGHT-OF-WAY THAT MUST BE RELOCATED SHALL BE COORDINATED WITH THE CITY TRAFFIC DEPARTMENT. TEMPORARY MAILBOXES SHALL BE MADE AVAILABLE TO THE OWNER(S) AND POSTAL DELIVERY SERVICE DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE TEMPORARY AND FINAL LOCATIONS WITH THE LOCAL POST OFFICE.
- THE CONTRACTOR SHALL COORDINATE WITH THE CITY SITE DEVELOPMENT AND REVIEW DIVISION FOR THE INSTALLATION, INSPECTIONS AND SHALL PROVIDE SURVEY LAYOUT FOR THE RE-ROUTING OF CITY DRAINAGE PIPES AND STRUCTURES (IF ANY).

### LEGEND

- MANHOLE I.D.
- PROPOSED FORCE MAIN
- PROPOSED FIRE HYDRANT ASSEMBLY (WIPE BOLLARDS (TYP))
- PROPOSED WATER MAIN & G.V. (DI) C-900 DR. 14 UNDER PAVEMENT)
- PROPOSED SANITARY SEWER MAIN (SDR 26 PVC) W/MANHOLE
- PROPOSED SEWER LATERAL W/CLEAN-OUT
- TRANSFORMER PAD (BY OTHERS)
- LIGHT POLE (BY OTHERS)
- EXIST. STORM DRAIN & INLET
- INLET STRUCTURE I.D.
- PROP. STORM DRAIN & INLET
- PROPOSED CONTOUR ELEVATION
- PROPOSED ELEVATION (NAVD)
- DESIGN ELEVATIONS (NAVD)
- EXISTING ELEVATION (NAVD)
- DRAINAGE FLOW ARROW

\*\* ALL DESIGN ELEVATIONS WITHIN CITY R/W INCLUDING PAVEMENT, WALKS, DRIVES & ALLEYS ARE TO BE COORDINATED WITH CITY PUBLIC WORKS DEPT. PRIOR TO CONSTRUCTION.

### GENERAL LANDSCAPING NOTES:

- ALL PLANTS, TREES & SHRUBS SHALL BE FLORIDA NO 1 OR BETTER AS DESCRIBED IN THE CODES AND STANDARDS FOR NURSERY PLANTS" 1975, FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TREES AND SOO FOR A PERIOD OF 90 DAYS AFTER THE LANDSCAPING IS COMPLETED AND ACCEPTED. ANY PLANTINGS THAT PERISH WITHIN THIS 90 DAY PERIOD SHALL BE REPLACED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- ALL PREVIOUS AREAS WITHIN THE PROJECT SITE SHALL BE SOLID FLORATAM SOO. CONTRACTOR SHALL RESTORE ALL EXISTING SOO AND LANDSCAPING DISTURBED DURING OR AS A RESULT OF CONSTRUCTION. ALL UNPAVED PORTIONS OF THE RIGHT-OF-WAY SHALL BE SOLID FLORATAM IN ACCORDANCE WITH THE CITY OF MARCO ISLAND DEPARTMENT STANDARDS.
- ALL IRRIGATION LINES, HEADS AND CONTROLS REMOVED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
  - A. IRRIGATION PIPING SHALL BE ASTM D1785, SCHEDULE 40 OR 80 WITH 1/2" MINIMUM COVER.
  - B. PIPING UNDER PAVEMENT SHALL BE IN A PVC SLEEVE (ASTM D1785, SCHEDULE 40 PVC).
  - C. THE LANDSCAPE CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS AND OPERATION MANUALS.
- EXISTING SOO DISTURBED IN ANY CITY DRAINAGE SWALES, SHALL BE REPLACED.
- ALL ELECTRICAL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AND N.F.P.A. 70.

### DEMOLITION NOTES:

- ALL ELEVATIONS, PROPOSED AND EXISTING, REFERENCE THE NORTH AMERICAN VERTICAL DATUM (N.A.V.D.) 1988.
- CONTRACTOR SHALL LOCATE AND VERIFY THE SIZE, LOCATION, AND DEPTH OF ALL EXISTING UTILITIES IN THE FIELD AND SHALL NOTIFY THE UTILITY COMPANIES IN THE AREA BEFORE BEGINNING CONSTRUCTION. ANY UTILITIES THAT ARE DISTURBED OR DAMAGED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ANY DISCREPANCY NOT CALLED TO THE ENGINEER'S ATTENTION PRIOR TO ACCOMPLISHMENT OF THE WORK SHALL BE CORRECTED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DEMOLITION OF ANY EXISTING STRUCTURES WITHIN THE PROJECT LIMITS. ALL DEBRIS GENERATED SHALL BE REMOVED FROM THE SITE AND HAULED TO A COUNTY APPROVED OFF-SITE DUMP. THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS FOR THESE OPERATIONS.
- RELOCATION OR REMOVAL OF EXISTING LANDSCAPE MATERIAL SHALL BE COORDINATED WITH THE OWNER AND/OR LANDSCAPE ARCHITECT.
- THE CONTRACTOR, AT HIS OWN EXPENSE AND IN CONFORMANCE WITH ANY APPLICABLE GOVERNMENTAL REGULATION, SHALL DURING THE COURSE OF AND AFTER COMPLETION OF CONSTRUCTION, REMOVE FROM THE JOB SITE AND DISPOSE OF, IN AN AUTHORIZED GARBAGE OR RUBBISH DISPOSAL SITE, ALL RUBBISH, SCRAP, AND DEBRIS ACCUMULATED IN CONNECTION WITH HIS WORK AND SHALL DELIVER THE WORK IN A NEAT AND WORKMANLIKE MANNER.
- DURING USE OF STREETS AND HIGHWAYS FOR WORK TO BE DONE UNDER THIS CONTRACT, DETERMINE AND CONFORM TO ALL STATE, COUNTY, AND LOCAL LAWS AND REGULATIONS. THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN EFFECTIVE BARRICADES, WARNING SIGNALS AND SIGNS ON ALL AFFECTED STREETS OR HIGHWAYS FOR PROTECTION OF COMPLETED WORK AND TO ENSURE THE SAFETY OF THE PUBLIC. ALL BARRICADES OR OBSTRUCTIONS WHICH ENCRUSH ON, OR ARE ADJACENT TO, PUBLIC RIGHTS-OF-WAYS SHALL BE PROVIDED WITH LIGHTS WHICH SHALL BE KEPT ILLUMINATED AT ALL TIMES BETWEEN SUNSET AND SUNRISE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM ANY NEGLIGENCE OR FAILURE TO MEET THESE REQUIREMENTS.
- THE CONTRACTOR SHALL ARRANGE WORK TO MINIMIZE AMOUNT OF DISTURBANCE TO NORMAL PEDESTRIAN AND VEHICULAR TRAFFIC AND PROVIDE ADEQUATE MEANS OF ACCESS TO ALL PUBLIC AND PRIVATE PROPERTIES DURING CONSTRUCTION. IF CONSTRUCTION WORK SHOULD REQUIRE REPAIRS, CHANGES, OR MODIFICATIONS OF OTHER UTILITIES, THE CONTRACTOR SHALL PROVIDE FOR MAINTENANCE OF CONTINUOUS WATER, ELEC., TELEPHONE, GAS, SEWAGE, AND OTHER UTILITY SERVICES TO ALL CONNECTED CUSTOMERS OF SUCH UTILITIES UNLESS APPROVAL IN WRITING IS OBTAINED FROM UTILITY COMPANY OR OWNER FOR INTERRUPTION OF SUCH SERVICES.
- CONTRACTOR SHALL CLEAN OR REPAIR ANY EXISTING INLETS & S.D. PIPES WITHIN SITE THAT WHERE DAMAGED OR DISTURBED DURING CONSTRUCTION.
- EXISTING AREA LIGHTING REMOVAL AND/OR RELOCATION SHALL BE COORDINATED WITH OWNER AND APPROVED SITE LIGHTING PLAN. UNDERGROUND ELECTRIC AND TRANSFORMER RELOCATION SHALL BE COORDINATED WITH OWNER AND L.C.E.C. OR FPL.
- SURROUNDING FACILITIES SHALL STAY OPERATIONAL AT ALL TIMES OF CONSTRUCTION.

### UTILITY COMPANIES

ELECTRICAL POWER	WATER & WASTEWATER
LEE COUNTY ELECTRIC COOPERATIVE, INC. 4900 BAYLINE DR., N. FT. MYERS, FL 33917 (239) 688-2296 ATTN: JERRY MARKS	CITY OF MARCO ISLAND UTILITIES DEPARTMENT 50 BALD EAGLE DRIVE MARCO ISLAND, FL 34145 (239) 389-5183
TELEPHONE	CABLE
CENTURYLINK TELEPHONE 3940 PROSPECT AVENUE, UNIT 101 (800) 786-3800	COMCAST CABLE 13040 LIVINGSTON ROAD, NAPLES, FL 34105 (239) 432-9277
REFUSE WASTE MANAGEMENT	MARCO ISLAND CABLE
3757 CORAL TREE CIRCLE COCONUT CREEK, FL 33073 (854) 878-7500	P.O. BOX 368 MARCO ISLAND FL 34145 (239) 642-4545
GAS	
TECO PEOPLES GAS 6901 ENTERPRISE PKWY PORT MYERS, FL 33905 (239) 680-5656	

### GENERAL UTILITY NOTE

- ALL WATER, SEWER AND IRRIGATION CONSTRUCTION SHALL CONFORM TO THE MARCO ISLAND UTILITIES TECHNICAL STANDARDS MANUAL, AND THE SOUTH FLORIDA CODE.
- WATER AND IRRIGATION PIPE SMALLER THAN 2" SHALL BE POLYETHYLENE CONFORM TO ASTM D1785, CLASS 1120 OR 1220, SCHEDULE 80 PVC. 2" BUT LESS THAN 4" IN DIAMETER SHALL BE PVC CLASS 200 DR 21 WITH RING-TYPE JOINTS. WATER AND IRRIGATION PIPE 4" INCHES IN DIAMETER SHALL BE AWWA C-900 CLASS 150, DR-18. 18" INCHES IN DIAMETER AND IRRIGATION PIPE UNDER PAVEMENT SHALL BE AWWA C-900 CLASS 150, DR-18. ALL MAINS SHALL HAVE 30" MINIMUM COVER FROM FINISHED GROUND.
- THE CONTRACTOR SHALL UTILIZE RESTRAINED JOINTS FOR THE MAIN AND IRRIGATION PIPING.
- GRAVITY SEWER PIPE 6" IN DIAMETER AND GREATER SHALL BE PVC (ASTM D-3034) SOH OR 36 INCH MINIMUM COVER, UNLESS OTHERWISE NOTED.
- INSTALLATION OF SERVICE METERS AND CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED BY AND COORDINATED WITH THE UTILITY COMPANIES AT THE CONTRACTOR'S EXPENSE. THE LOCATION OF SERVICE METERS SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
- WHERE WATER, IRRIGATION AND SEWER MAINS CROSS, THE MINIMUM COVER SHALL BE 12 INCHES. WHERE THIS IS NOT POSSIBLE, THE WATER MAIN SHALL BE 12 INCHES ABOVE THE SEWER MAIN. THE SEWER MAIN SHALL BE 12 INCHES ABOVE THE WATER MAIN. THE WATER MAIN SHALL CROSSING THE SEWER MAIN. THE CONTRACTOR SHALL COMPLY WITH RULE 62-555.34 F.S. THE COSTS FOR DEFLECTING PIPE, ROLL-DOWNS OR ENCASEMENT SHALL BE PAID BY THE OWNER.
- TESTING AND COMPACTION OF TRENCH BACKFILL, SUBGRADE, AND ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- ALL UTILITY PIPING, INCLUDING SERVICES, SHALL BE COLOR CODED: POTABLE WATER - BLUE; SEWER - GREEN; IRRIGATION - PANTONE PURPLE. FOR BACKFLOW ASSEMBLIES (ABOVE GROUND PIPING), DOMESTIC ASSEMBLIES ABOVE 2" MUST BE BLUE. FIRE ASSEMBLIES MUST BE RED.
- ALL WATER, SEWER, IRRIGATION, FORCE MAINS, SERVICES AND LAUNCHERS SHALL BE INSTALLED OVER THE PIPE WITH 12" MINIMUM COVER PROPOSED GRADE.
- WATER, FIRE AND IRRIGATION MAINS, INCLUDING SERVICES, SHALL BE TESTED IN ACCORDANCE WITH AWWA C-600. THE UTILITY COMPANIES SHALL BE PRESENT DURING THE TESTING.
- WATER MAINS AND SERVICES SHALL BE DISINFECTED AND TESTED AND RULE 62-555.345 FAC. INCLUDING PROVIDING SAMPLE POINTS TO THE UTILITY DEPARTMENT.
- ALL FRAMES, COVERS, VALVE BOXES, METER BOXES AND MANHOLES SHALL BE ADJUSTED TO FINISHED GRADE UPON COMPLETION OF PAVING OR RELATED CONSTRUCTION.
- ANY WORK OR MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS OF THE MARCO ISLAND UTILITIES TECHNICAL STANDARDS MANUAL, UNLESS OTHERWISE NOTED, SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL AFFECTED UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH ALL UTILITY COMPANIES AND RESOLVE CONFLICTS WITH EXISTING UTILITIES IN A TIMELY MANNER, COMPLETING THE PROJECT.
- ACCEPTANCE OF THE COMPLETED UTILITY SYSTEMS WILL NOT BE GRANTED UNTIL ALL UTILITY SYSTEMS HAVE BEEN SUBMITTED AND ACCEPTED BY THE ENGINEER.
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH UNDERGROUND PHONE AND ELECTRIC SERVICE TO BUILDING(S).
- THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE MARCO ISLAND UTILITIES DEPARTMENT PRIOR TO ANY SHUTDOWN, TIE-IN OR PRESSURE TESTING OF WATER OR SEWER MAIN. THE CITY OF MARCO ISLAND WILL DISTRIBUTE SERVICE NOTICES TO ALL AFFECTED PARTIES AND THE CITY WILL WATER NOTICES AND RESCUSSION NOTICES.
- THE CONTRACTOR IS PROHIBITED FROM TURNING OFF ANY EXISTING UTILITY SYSTEMS. ANY TURNING OFF BY A REPRESENTATIVE OF THE CITY UTILITY DEPARTMENT WILL BE TURNED OFF BY A REPRESENTATIVE OF THE CITY UTILITY DEPARTMENT. CONTRACTORS ARRANGED TIME AND DATE.
- BACKFLOW PREVENTION DEVICES SHALL BE TESTED BY A CERTIFIED CONTROL TECHNICIAN IN THE PRESENCE OF A MARCO ISLAND UTILITY REPRESENTATIVE.
- THE CONTRACTOR OR OWNERS REPRESENTATIVES WILL BE RESPONSIBLE FOR PROVIDING APPROPRIATE SIZED TEMPORARY JUMPER ASSEMBLY WITH METER FOR ISLANDS UTILITY COLLECTION AND DISTRIBUTION DEPARTMENT. PROVIDE APPROPRIATE SIZED TEMPORARY JUMPER ASSEMBLY WITH METER FOR WATER FOR CONSTRUCTION AND/OR TYPING INTO ANY EXISTING POTABLE WATER SYSTEM. ALL JUMPER ASSEMBLIES MUST BE SUBMITTED TO THE SITE DEVELOPMENT INSPECTOR AT THE TIME OF METER INSTALLATION. AFTER CONSTRUCTION, THE TEMPORARY JUMPER AND METER IS REMOVED. ALL POTABLE WATER SHALL BE FLUSHED AND PRESSURE TESTED PER AWWA SECTION C600 AND C601.
- ALL BURIED DUCTILE IRON JOINTS, FITTINGS AND VALVES TO BE POLYETHYLENE IN ACCORDANCE WITH MARCO ISLAND UTILITIES STANDARD SPECIFICATIONS.
- POTABLE WATER AND WASTEWATER SERVICES ARE SUPPLIED BY THE CITY OF MARCO ISLAND.
- CONTRACTORS WORKING WITHIN THE PUBLIC RIGHT-OF-WAY AND WORKING UNDER EXISTING UTILITY MAINS MUST BE CERTIFIED IN ASBESTOS HANDLING AND PROVIDE DOCUMENTATION TO THE MARCO ISLAND PUBLIC WORKS - COLLECTIONS AND DISTRIBUTIONS DEPT. BEFORE BEGINNING WORK.
- ANY LOCATION WHERE A CITY OWNED A.C. MAIN IS EXCAVATED OR UNDER EXISTING UTILITY MAINS SHALL BE REPLACED WITH C-900 DR-18 COMPLETE JOINT OF A.C. MAIN SHALL BE REPLACED WITH C-900 DR-18 COMPLETE JOINT OF A.C. MAIN PIPE PRIOR TO ORDERING PARTS AS OBTAINED FROM UTILITY COMPANY OR OWNER FOR INTERRUPTION OF SUCH SERVICES.
- CONTRACTOR MUST FILL OUT AND SUBMIT SERVICE INTERRUPTION RECORD IN ADVANCE ANYTIME SERVICE IS TO BE INTERRUPTED.
- ONLY MARCO ISLAND UTILITY EMPLOYEES MAY OPERATE CITY OWNED UTILITY SYSTEMS.

CITY OF MARCO ISLAND  
COMMUNITY DEVELOPMENT

This project has been reviewed and approved by the applicable land development regulatory authority. The accuracy of design of all infrastructure shown on these drawings.

SDP No. 12-01  
Approved by: [Signature]  
Date: 11/16/2010









**DRAINAGE STRUCTURE DATA**

ES 1 EXIST INLET TOP OF GRATE I.E. (E) = 11.17 I.E. (W) = 11.15 I.E. (S) = 0.00 (PROP.)	ES 8 12" YD G.E. = 4.25 I.E. = 2.80
ES 1 PROP. OUTFALL CONTROL STRUCTURE (MODIFIED TYPE 'C' INLET) G.E. = 5.50 3" BLEEDER (S) I.E. = 2.50 I.E. (E) = 0.70 I.E. (W) = 0.00	ES 9 12" YD G.E. = 3.50 I.E. = 2.20
ES 2 12" YD G.E. = 4.60 I.E. = 3.70	ES 10 12" YD G.E. = 6.50 I.E. = 5.25
ES 3 12" YD G.E. = 4.60 I.E. = 3.50	ES 11 12" YD G.E. = 6.60 I.E. = 5.30
ES 4 12" YD G.E. = 3.70 I.E. = 2.70	ES 12 TYPE 'X' INLET G.E. = 3.50 I.E. = 1.50 SUMP = 0.00
ES 5 12" YD G.E. = 3.50 I.E. = 2.20	ES 13 TYPE 'X' INLET G.E. = 3.50 I.E. = 1.20 SUMP = (-)0.30
ES 6 12" YD G.E. = 4.25 I.E. = 2.90	ES 14 PROP. 12" YD G.E. = 4.75 I.E. = 3.00
ES 7 12" YD G.E. = 3.50 I.E. = 2.20	ES 15 12" YD G.E. = 4.00 I.E. = 3.00

**DRAINAGE CULVERT DATA**

P1	18 LF 15" ADS N-12
P2	22 LF 4" ADS N-12
P3	22 LF 4" ADS N-12
P4	17 LF 4" ADS N-12
P5	18 LF 4" ADS N-12
P6	19 LF 4" ADS N-12
P7	25 LF 4" ADS N-12
P8	26 LF 4" ADS N-12
P9	33 LF 12" ADS N-12
P10	17 LF 4" ADS N-12
P11	57 LF 12" x 18" ERCOP W/M E.S. (REFER TO FDOT INDEX 272) I.E. (E) = 2.80 I.E. (W) = 2.50

NOTE:  
DECK AND WALKS AROUND  
BUILDING TO BE CONCRETE  
OR BRICK PAVERS.

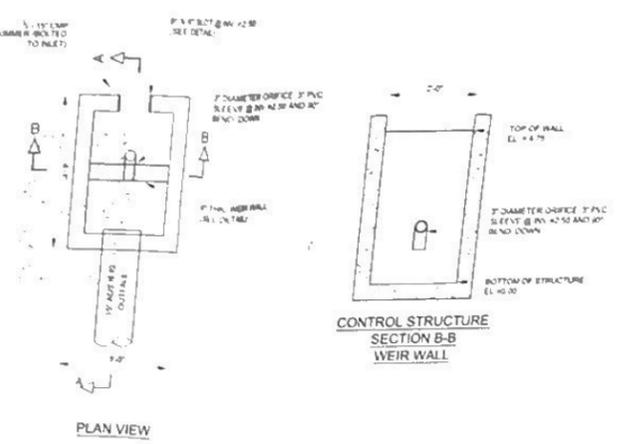
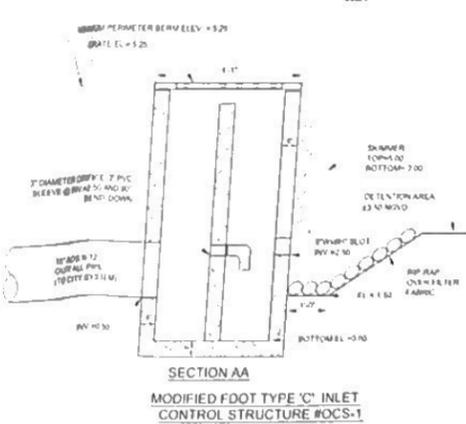
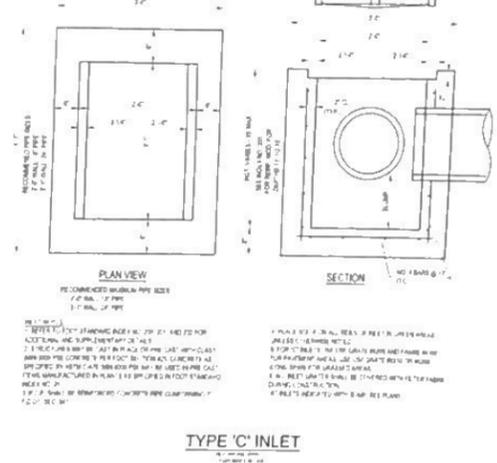
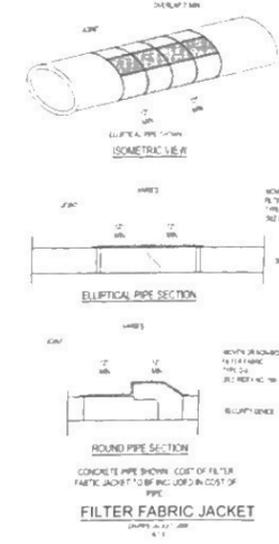
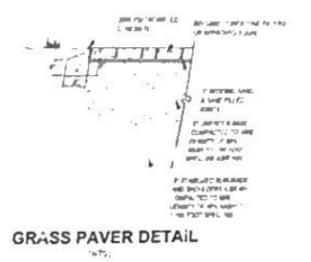
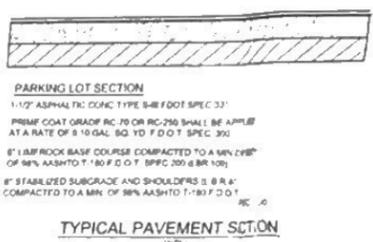
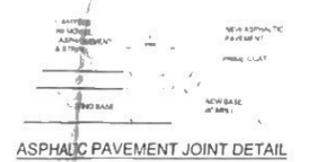
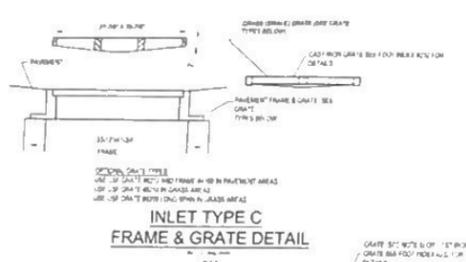
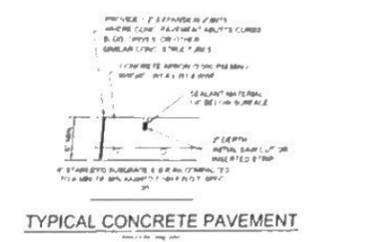
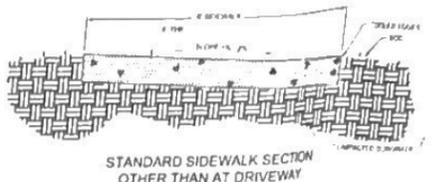
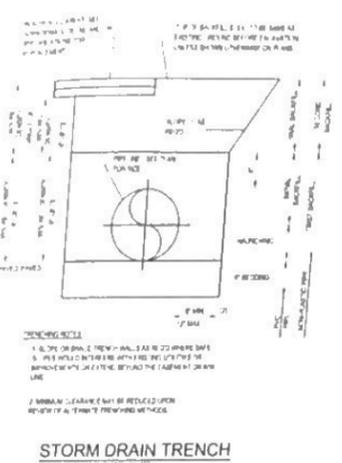
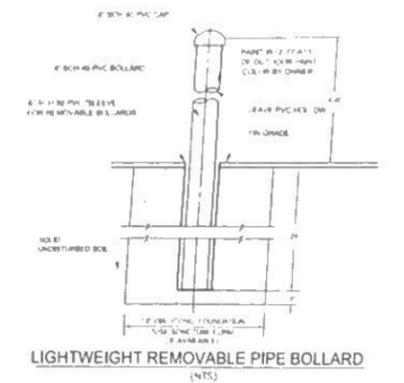
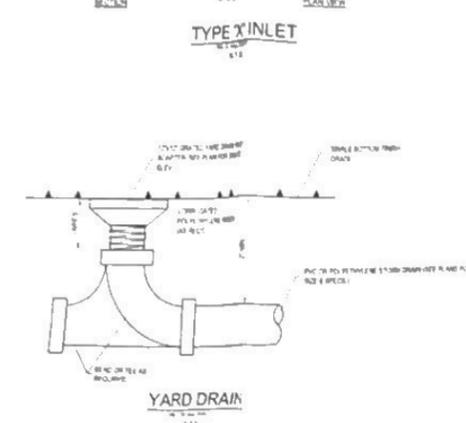
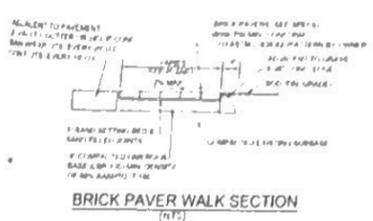
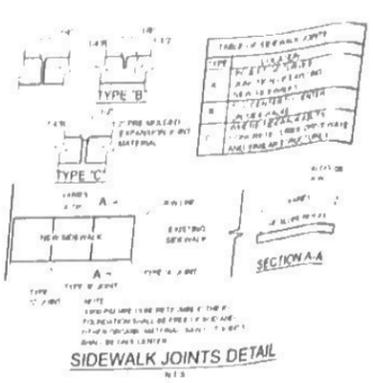
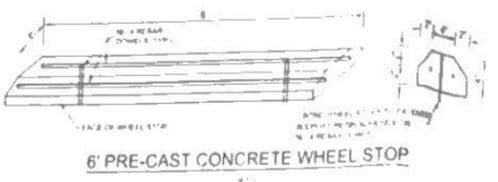
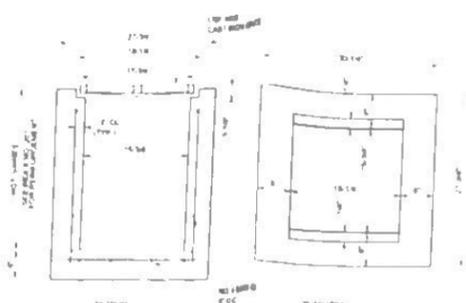
	DEVELOPER: MR. FRANCIS C. ROBERTS 1801 W. PALM BEACH BLVD. SUITE 101 MARCO ISLAND, FL 33488
REVISION DESCRIPTION: BY: DATE:	MARCO GOLF AND GARDEN 851 WINTERBERRY DRIVE MARCO ISLAND, COLLETT COUNTY, FLORIDA
CITY OF MARCO ISLAND COMMUNITY DEVELOPMENT	<b>GRADING, PAVING, AND DRAINAGE PLAN</b>
<b>SHEET 6 OF 11</b>	

See comment  
on sheet 5 of 11.  
Joseph R. [Signature]  
12/10/12









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

SDP No. 12-02  
Approved by: [Signature]  
Date: 12-10-02

**MAASTRICHT ENGINEERING**

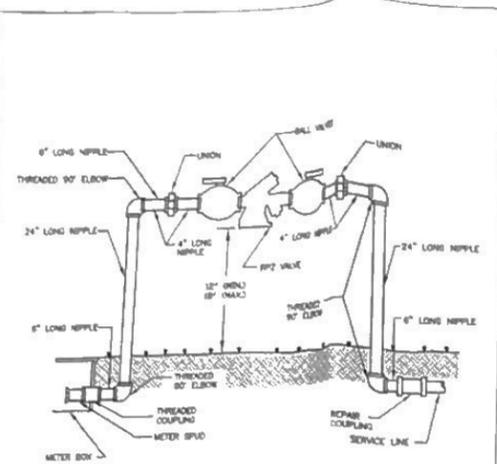
DEVELOPER: [Name]  
DESIGNER: [Name]  
CHECKER: [Name]  
DATE: [Date]

**MARCO ISLAND COMMUNITY DEVELOPMENT**

**MARCO ISLAND GOLF AND GARDEN**

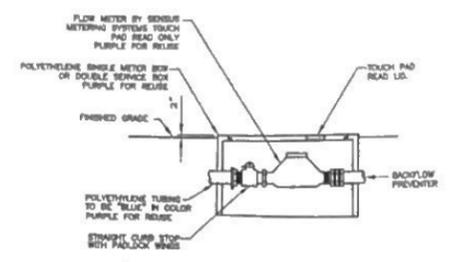
**MISCELLANEOUS DETAILS**

**SHEET 10 OF 11**



**BF-3 3/4\"/>**

MARCO ISLAND UTILITIES  
 880 North Collier Blvd.  
 MARCO ISLAND, FL 34145  
 SCALE: NOT TO SCALE  
 DATE: APRIL 2007  
 DWG # BF-3.DWG



**V-13 METER BOX ASSEMBLY**  
 NOT TO SCALE

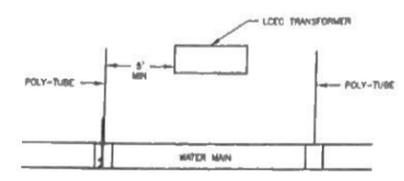
METER LIDS & BOXES FOR 1\"/>

MARCO ISLAND UTILITIES  
 880 North Collier Blvd.  
 MARCO ISLAND, FL 34145  
 SCALE: NOT TO SCALE  
 DATE: APRIL 2007  
 DWG # V-13.DWG

**CITY OF MARCO ISLAND  
 COMMUNITY DEVELOPMENT**

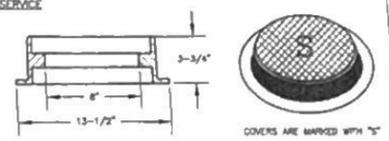
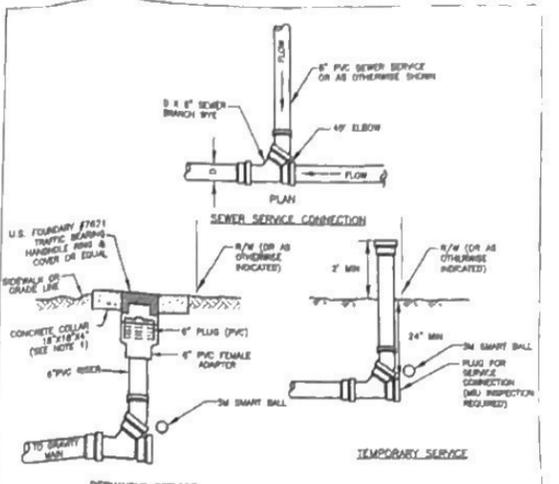
This project has been reviewed and approved for sufficiency with the applicable land development regulations. The entity/engineer of records signing and sealing these plans will be accountable for adequacy of design of all infrastructure facilities as exhibited by these drawings.

BDP No. 17-02  
 Approved by: [Signature]  
 Date: 12-10-2012



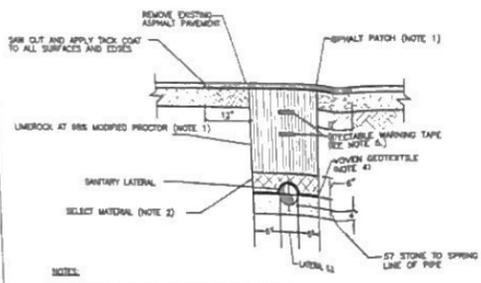
**V-14 MINIMUM LCEC TRANSFORMER SEPARATION FOR WATER SYSTEM CONNECTION**  
 NOT TO SCALE

MARCO ISLAND UTILITIES  
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 MARCO ISLAND, FL 34145  
 SCALE: NOT TO SCALE  
 DATE: APRIL 2007  
 DWG # V-14.DWG



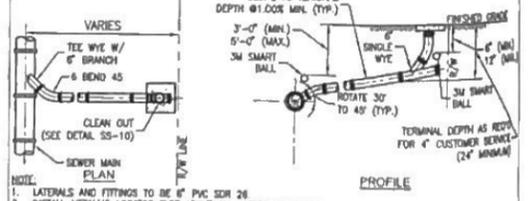
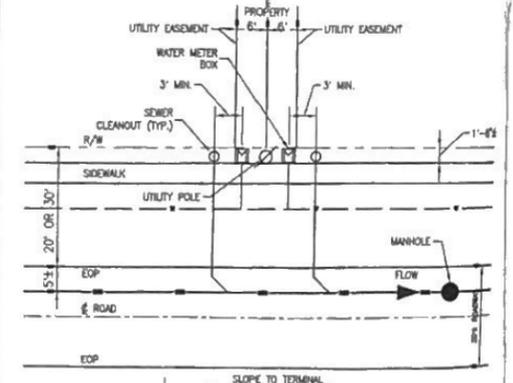
**SS-10 CLEANOUT ASSEMBLY**  
 NOT TO SCALE

MARCO ISLAND UTILITIES  
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 MARCO ISLAND, FL 34145  
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 DATE: APRIL 2007  
 DWG # SS-10.DWG



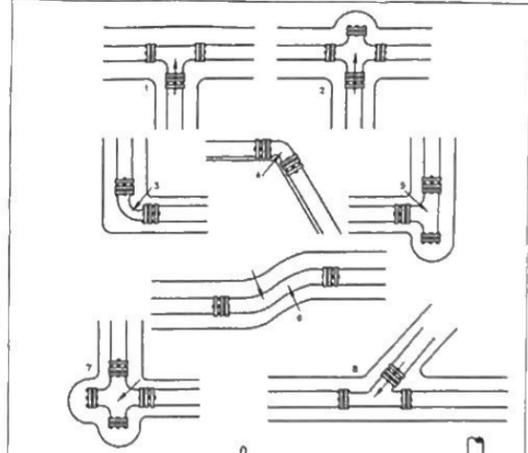
**SS-12 CUSTOMER SANITARY LATERAL TRENCH RESTORATION**  
 NOT TO SCALE

MARCO ISLAND UTILITIES  
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 MARCO ISLAND, FL 34145  
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 DWG # SS-12.DWG



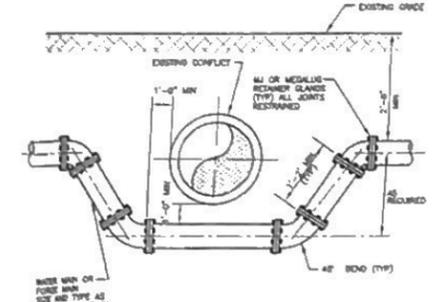
**SS-20 SINGLE SEWER SERVICE CONNECTION**  
 NOT TO SCALE

MARCO ISLAND UTILITIES  
 880 North Collier Blvd.  
 MARCO ISLAND, FL 34145  
 SCALE: NOT TO SCALE  
 DATE: APRIL 2007  
 DWG # SS-20.DWG



**CB-2 THRUST RESTRAINING**  
 NOT TO SCALE

MARCO ISLAND UTILITIES  
 880 North Collier Blvd.  
 MARCO ISLAND, FL 34145  
 SCALE: NOT TO SCALE  
 DATE: APRIL 2007  
 DWG # CB-2.DWG



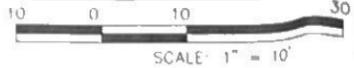
**CB-8 CONFLICT ADJUSTMENT MJ**  
 NOT TO SCALE

MARCO ISLAND UTILITIES  
 880 North Collier Blvd.  
 MARCO ISLAND, FL 34145  
 SCALE: NOT TO SCALE  
 DATE: APRIL 2007  
 DWG # CB-8.DWG

**MAASTRICHT**  
 DEVELOPER  
 MR. FREDRICK C. HANMER  
 801 NORTH COLIER BLVD. #100  
 MARCO ISLAND, FL 34145

**MARCO ISLAND UTILITIES**  
 880 North Collier Blvd.  
 MARCO ISLAND, FL 34145

**MARCO ISLAND UTILITIES**  
 880 North Collier Blvd.  
 MARCO ISLAND, FL 34145



**GENERAL NOTES**

1. ALL FENCES SHALL BE CONSTRUCTED AS CLOSE AS POSSIBLE AND PARALLELLING THE PROPERTY LINE. ALL FENCES AND MATERIAL SHALL BE WITHIN THE SUBJECT PROPERTY.

2. LANDSCAPE FRIENDLY PRACTICES: Florida-friendly landscape practices are encouraged in all zoning districts. Landscaping areas utilizing Florida-friendly designs are those that comply with the standards of Florida-friendly landscape consistent with the standards provided in the following publications. It may be amended from time to time.

3. EXISTING PLANT COMMUNITIES AND ECOSYSTEMS shall be maintained in a natural state and shall not be required to be irrigated. Native plant areas that are supplements to an existing plant community or newly installed by the applicant shall be irrigated on a temporary basis only during the period of establishment from a temporary irrigation system, water truck, or by hand watering with a hose. CITY OF MARCO LANDSCAPE CODE.

4. ALL LANDSCAPED AREAS OTHER THAN LAWN SHALL HAVE A 3" LAYER OF BARK MULCH. CONTRACTOR SHALL SUBMIT A SAMPLE FOR APPROVAL.

5. THIS TABLE IS NOT INCLUDED have not been included as part of the code requirement trees.

6. ALL PLANT COVER AREAS LYING WITHIN THE MINIATURE GOLF COURSE ITSELF ARE NOT LISTED AS BEING APPLICABLE TO THIS PROJECT OTHER THAN MAINTAINED LAWN AREA AND. Therefore maintained lawn areas may be substituted for these areas (e.g. Bahia seed or sod or other adapted non-invasive species) and a DRAINAGE AND BACK FLOW PREVENTION DEVICE TO BE SIZED AT 1-INCH EACH.

**INTERNAL LANDSCAPE TREE REQUIREMENTS**

INTERNAL LANDSCAPE TREE REQUIREMENTS  
 TOTAL VEHICULAR USE AREA = 6,913 SF  
 10% X 6,913 SF = 692 SF REQUIRED, 1193 SF PROVIDED  
 1 TREE / 250 SF = 435 / 250 = 27  
 ~ 3 TREES REQUIRED  
 3 INTERNAL TREES PROVIDED

**INTERNAL LANDSCAPE REQUIREMENTS**

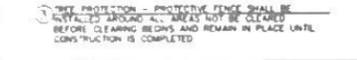
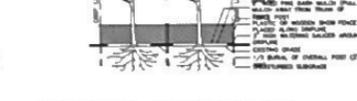
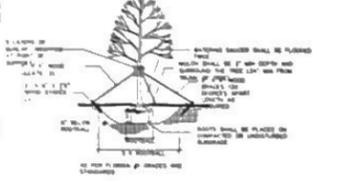
INTERNAL LANDSCAPE REQUIREMENTS  
 TOTAL VEHICULAR USE AREA = 6,913 SF  
 10% X 6,913 SF = 692 SF REQUIRED, 1193 SF PROVIDED  
 1 TREE / 250 SF = 435 / 250 = 27  
 ~ 3 TREES REQUIRED  
 3 INTERNAL TREES PROVIDED

**BUILDING PERIMETER PLANTINGS**

BUILDING PERIMETER PLANTINGS  
 REQUIRED OPEN SPACE FOR SMALL PROJECTS = 100 SF / 1000 SF = 10% REQUIRED  
 10% X 425.5 SF = 42.55 SF REQUIRED  
 461 SF PROVIDED

**SITE AREA CALCULATIONS**

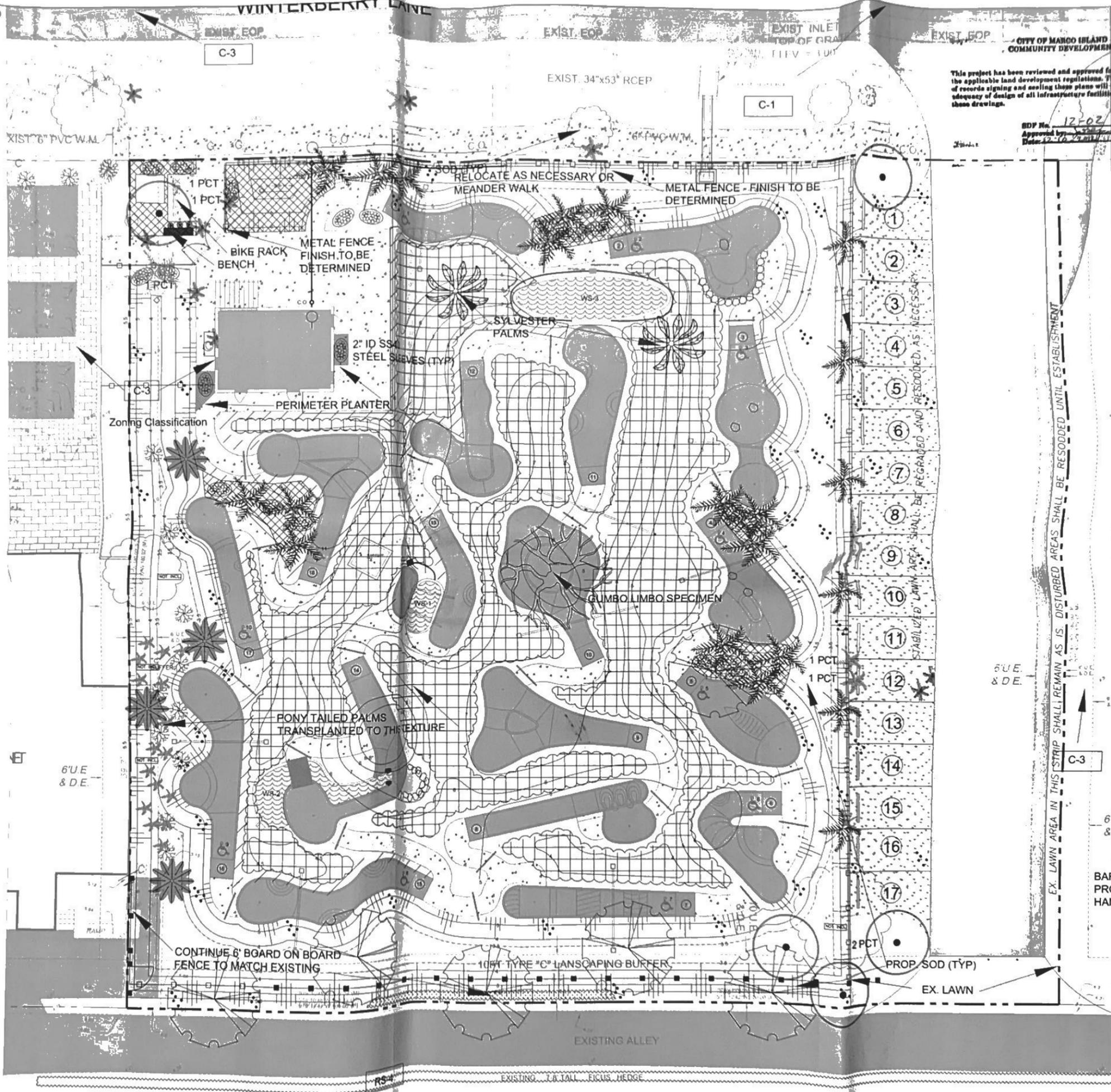
SITE AREA CALCULATIONS  
 Lot Area = 36,032.82  
 Game Area = 7,621.68  
 Pavement, Walks = 1,352.13  
 Pavement, Onsite Road = 4,079.62  
 Pavement, Offsite Road = 871.67  
 Vehicular Use Area = 6,913 SF  
 Building = 424.72  
 Pervious = Remainder (22,554.67)



**PLANT LIST**

THE PROJECT SITE IS LOCATED WITHIN THE COASTAL ZONE

NATIVE SYMBOL	QTY	SPECIES	SIZE & SPEC	LANDSCAPE CODE CATEGORY	DROUGHT TOLERANT
YES	5	LIVE OAK <i>Quercus Virginiana</i>	16-18' HT. 4" CAL. @ 12" ABOVE GROUND MIN. 20' SPR. MIN.	INTERNAL BUFFER	YES
	15	CABBAGE PALM <i>Sabal Palmello</i>	10'-16' HTS OF CLEAR WOOD	GENERAL CANOPY	YES
	8	FLORIDA ROYAL PALM <i>Sabalopsis Royal</i>	10'-18' HTS OF CLEAR WOOD	GENERAL CANOPY	-
	1	SPECIMEN GUMBO LIMBO <i>Bumelia americana</i>	10' HT. 2" CAL. @ 12" ABOVE GROUND MIN. 4" SPR. MIN.	-	YES
	4	MANOYANI <i>Scaevola Tamaritensis</i>	10' HT. 3" CAL. @ 12" ABOVE GROUND MIN. 4" SPR. MIN.	INTERNAL	YES
		WALTER'S SILVER PALM <i>Silver Palm</i>	24" HT - 3 GAL. CONTAINER	NONE	YES
		PORTULAC PALM <i>Portulaca Palm</i>	(Transplanted from play area on site)	NONE	YES
		QUEEN PALM <i>Queen Palm</i>		NONE	YES
		SILVER PALM <i>Silver Palm</i>		NONE	YES
		RAJAHAD VINE <i>Rajahad Vine</i>	FLATS - 18" OC	NONE	YES
		CONFEDERATE LASHING <i>Confederate Lashing</i>		NONE	YES
		WINDY STOPPER <i>Windy Stopper</i>		NONE	YES
		SILVER BURNINGWOOD <i>Silver Burningwood</i>	24" HT - 3 GAL. CONTAINER	NONE	YES
YES		ANNUALS (E. AMPERED)	6-8 HT - CONTAINERS	NONE	YES
YES		FLORIDA COONING <i>Florida Cooning</i>	CLUMPS OF 10	NONE	YES
YES		GOLDEN GREENER <i>Golden Greener</i>	FLATS - 18" OC	"C" BUFFER	-
	75	FLORIDA SEEDED LAWN ON 4" TOPSOIL	SUPPLY REUSABLE TOPSOIL ON SITE TO RETAIN SUFFICIENT TOPSOIL AT REQUIRED SPECIFICATION	N/A	-
		STABILIZED BARE FOR GRASS PAVING			
		BUILDING PERIMETER PLANTING			
		BICYCLE RACK PLANTING ONE MANOYANI TREE THREE STOPPER STOPPERS			



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

BDP No. 12-02  
 Approved by: [Signature]  
 Date: 12-10-2012

**CITY OF MARCO ISLAND COMMUNITY DEVELOPMENT**

**NATIVE LANDSCAPES**

LANDSCAPE ARCHITECTURE & ENVIRONMENTAL SCIENCE & PLANNING  
 4100 EVANS AVENUE, SUITE 3 FT. WORTH, TX 76101  
 TEL (817) 332-1503 FAX (817) 332-0444

STATUS: 12-02-2012 Revised per regulatory committee

DESIGNED BY: R.E.N. DATE: SEPTEMBER 30, 2012

CHECKED BY: R.E.N.

DRAWN BY: H.L.P. SCALE: 1"=10'

PROJECT: MARCO GOLF & GARDEN

LOTS 13 & 14 WINTERBERRY LANE MARCO ISLAND, FL

PREPARED FOR: FREDERICK C. KRAMER 990 NORTH COLLIER BLVD. SUITE 101 MARCO ISLAND, FL 34155

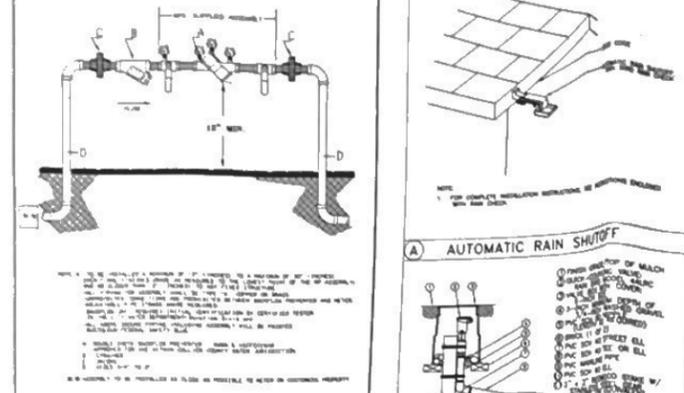
DATE: 12/14/12

ROBERT E. MARINI, L.A. FLORIDA REG. # 1104

SHEET L-1

EX. LAWN AREA IN THIS STRIP SHALL REMAIN AS IS. DISTURBED AREAS SHALL BE RESEEDD UNTIL ESTABLISHMENT

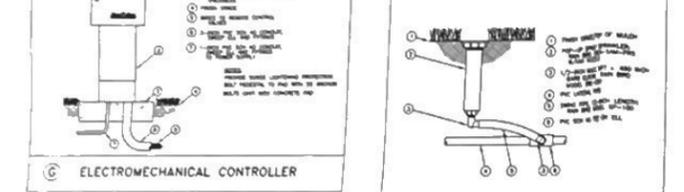
WINTERBERRY LANE



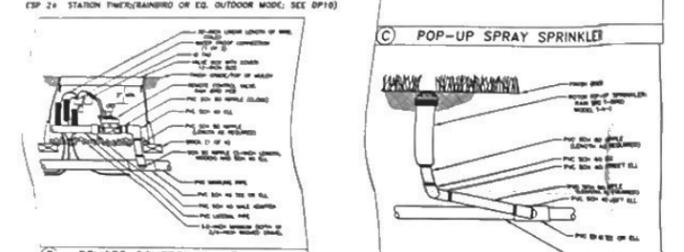
A AUTOMATIC RAIN SHUTOFF



B QUICK-COUPLING VALVE



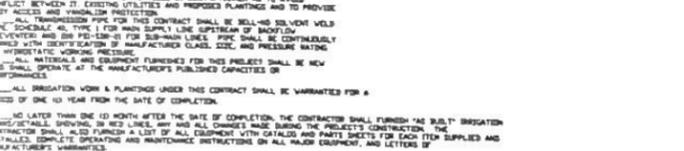
C ELECTROMECHANICAL CONTROLLER



D ROTOR POP-UP SPRINKLER



E POP-UP SPRAY SPRINKLER



F REMOTE CONTROL VALVE

**IRRIGATION NOTES:**

1. THE IRRIGATION WORK UNDER THIS CONTRACT SHALL INCLUDE THE FURNISHING OF ALL LABOR, SUPERVISION, TESTING SERVICES, TOGETHER WITH ALL MATERIALS, EQUIPMENT AND ACCESSORIES NECESSARY FOR A COMPLETE INSTALLATION.
2. THE CONTRACTOR SHALL FULLY COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS GOVERNING THE INSTALLATION OF IRRIGATION SYSTEMS AND CROSS CONNECTION CONTROL REQUIREMENTS.
3. IRRIGATION COMPONENT SUBSTITUTIONS OF EQUAL QUALITY WILL BE PERMITTED UPON REVIEW AND ACCEPTANCE PRIOR TO INSTALLATION.
4. THE CONTRACTOR SHALL FURNISH MANUFACTURER'S SPECIFICATION SHEETS FOR ALL IRRIGATION SYSTEM COMPONENTS AND ESSENTIAL ACCESSORIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF COMPONENTS AT THE TIME OF INSTALLATION. THE IRRIGATION SYSTEM SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICT BETWEEN IT EXISTING UTILITIES AND PROPOSED PLANTINGS AND TO PROVIDE EASY ACCESS AND MAINTENANCE ACCESS.
5. ALL TRANSMISSION PIPE FOR THIS CONTRACT SHALL BE SCHEDULE 40 SOLVENT WELD PIPE, GENERALLY 40 TYPE 1 HIGH DENSITY POLYETHYLENE (HDPE) PIPE. ALL MAIN LINE PIPE SHALL BE 1/2" OR 3/4" POLYETHYLENE GLASS FIBER REINFORCED PLASTIC (FRP) PIPE. ALL MAIN LINE PIPE SHALL BE CONTINUOUSLY MARKED WITH IDENTIFICATION OF MANUFACTURER, SIZE, AND PRESSURE RATING AT HYDROSTATIC WORKING PRESSURE.
6. ALL MATERIALS AND EQUIPMENT FURNISHED FOR THIS PROJECT SHALL BE NEW AND SHALL OPERATE AT THE MANUFACTURER'S PUBLISHED CAPACITIES OR PERFORMANCE.
7. ALL IRRIGATION WORK & PLANTINGS UNDER THIS CONTRACT SHALL BE WARRANTED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF COMPLETION.
8. NO LATER THAN ONE (1) MONTH AFTER THE DATE OF COMPLETION, THE CONTRACTOR SHALL FURNISH "AS BUILT" IRRIGATION PLANS, SHOWING THE LOCATION OF ALL EQUIPMENT AND PARTS. THE CONTRACTOR SHALL ALSO FURNISH A LIST OF ALL EQUIPMENT WITH CATALOG AND PART SHEETS FOR EACH ITEM SUPPLIED AND INSTALLED, COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL MAJOR EQUIPMENT, AND LETTERS OF MANUFACTURER'S WARRANTIES.
9. IRRIGATION METER AND BACKFLOW PREVENTION DEVICE TO BE SIZED AT 1-INCH EACH BASED ON MAXIMUM FLOW FOR 1/2 INCH METER AT 40 GPM USE ZONE COVERAGE.

**IRRIGATION ZONE WATER DEMANDS:**

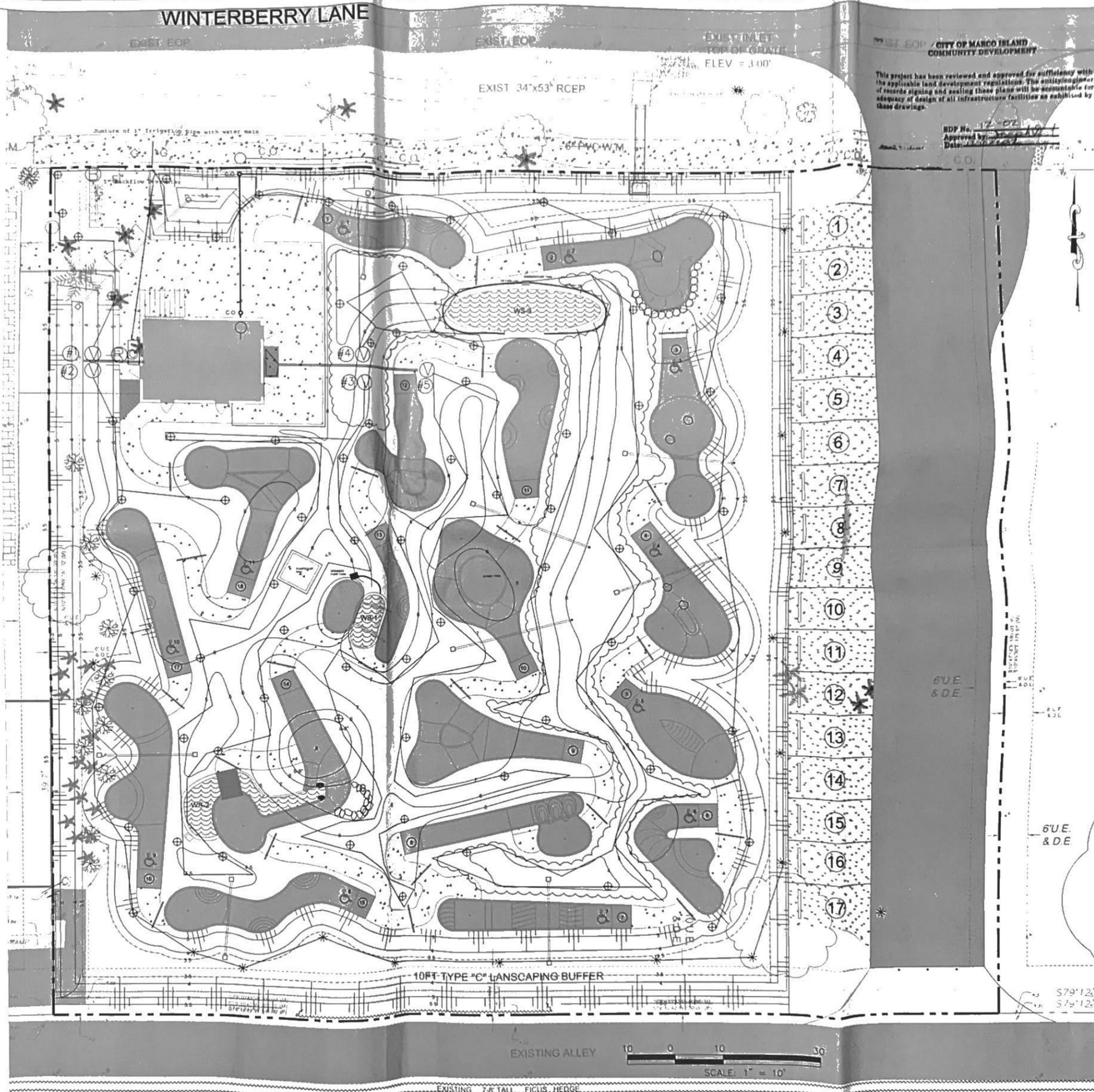
ZONE 1: SPRAY HEADS (SEM): 20 x 1.5 gpm = 30 gpm  
 ZONE 2: SPRAY HEADS (SEM): 7 x 1.5 gpm = 10 gpm  
 ROTARY HEADS (FULL): 10 x 1.85 gpm = 18 gpm  
 ZONE 3: SPRAY HEADS (SEM): 14 x 1.5 gpm = 21 gpm  
 ZONE 4: SPRAY HEADS (SEM): 16 x 1.5 gpm = 24 gpm  
 ZONE 5: SPRAY HEADS (SEM): 13 x 1.5 gpm = 20 gpm  
 ROTARY HEADS (FULL): 4 x 1.85 gpm = 7 gpm

**TOTAL ZONE DEMANDS (INCLUDING 15% FOR PIPING AND FITTINGS)**

ZONE 1: 35 gpm  
 ZONE 2: 40 gpm  
 ZONE 3: 25 gpm  
 ZONE 4: 28 gpm  
 ZONE 5: 30 gpm

IRRIGATION LEGEND

SYMBOL	ARC	DESCRIPTION
⊕		CITY OF MARCO & COLLIER COUNTY APPROVED BACKFLOW PREVENTER
⊕	0-360°	RAINBIRD (OR EQUAL) SPRAYHEAD PRESSURE REGULATING SEAL-MATIC POP-UP SPRAY SPRINKLER VARIABLE ARC NOZZLES - RANGE 5 FT - 30 FT DES FOR HEAD TO HEAD COVERAGE
*	0-360°	RAINBIRD (OR EQUAL) ROTOR HEAD PERFORMANCE NOZZLES - RANGE 16 FT - 50 FT DESIGNED FOR HEAD TO HEAD COVERAGE
⊕	0-360°	3/4" PE PIPE RAINBIRD (OR EQ.) FOR SPRAY HEADS FOR GROUNDER TREES AND SHRUBS
⊕		RAINBIRD (OR EQUAL) ELECTROMECHANICAL CONTROLLER UP TO 20 STATIONS 3-60 MINUTES IN 1-2 MINUTE INCREMENTS - WALL MOUNTED
⊕		RAINBIRD (OR EQUAL) ELECTRIC-REMOTE CONTROL VALVE PER SERIES 1" PIPE INDUSTRIAL STRENGTH GLASS FILLED NYLON GLOBE VALVE #1 ZONE INDICATION
⊕		RAINBIRD (OR EQUAL) RAIN SENSOR FOR AUTOMATIC SHUTOFF
—		2" ID SS40 STEEL SLEEVES - GALVANIZED OR ALUMINUM
—		RAINBIRD (OR EQUAL) MAIN LINE - 1" PVC



CITY OF MARCO ISLAND  
 COMMUNITY DEVELOPMENT

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

RDP No. 17-02-1011  
 Approved by: [Signature]  
 Date: 12/02/2012

**NATIVE LANDSCAPES**  
 LANDSCAPE ARCHITECTURE & ENVIRONMENTAL SCIENCE & PLANNING  
 4100 EASY AVENUE, SUITE 311, MYRTLE BEACH, FL 39501  
 TEL (252) 332-1505 FAX (252) 236-0444

**MARCO GOLF & GARDEN**

LOTS 13 & 14 WINTERBERRY LANE  
 MARCO ISLAND, FL

DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]  
 DATE: SEPTEMBER 30, 2012

STATUS: 12-02-2012 Revised per regulatory comments

PREPARED FOR: [Signature]  
 DATE: 12/4/12

FLORIDA REG. # 1104

SHEET L-2

FIXTURE MOUNTING HEIGHT -  
750W POLE MOUNTED 18' AFG  
150W POLE MOUNTED 17' AFG  
SOLINES AT 1 FC  
POLES BY OTHERS

ADDITIONAL REQUIRED EQUIPMENT  
(2) - SRL-AV20CBZ (BACK LIGHT SHIELDS)  
(8) - SRL-AV25CBZ (BACKLIGHT SHIELDS - 750W)

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Luminaire/Lamp	LLF	Description	Lum. Watts
2	2	B-BLS	SINGLE	14000	0.750	AV20CBZ-M (750W PSMH TYPE IV W/ BLS)	185
8	8	A-BLS	SINGLE	82000	0.750	AV25CBZ-M (750W PSMH TYPE IV W/ BLS)	815
2	2	C-2	BACK-BACK	82000	0.750	AV25CBZ-M (750W PSMH TYPE B)	815

Calculation Summary	avg	Max	Min	Avg/Min	Max/Min
Label	1.75	24.7	0.0	N/A	N/A
SITE	1.50	3.9	0.6	2.50	6.50
LOT	0.04	24.7	2.0	4.00	6.52

MINI GOLF  
Illuminance (Fc)  
Average = 13.04  
Maximum = 24.7  
Minimum = 2.9  
Avg/Min Ratio = 4.50  
Max/Min Ratio = 8.52

**RUUD LIGHTING DIRECT**

6201 Washington Ave  
Racine, WI 53406  
PH: (800) 236-7000  
FX: (800) 236-7500  
www.ruudlightingdirect.com

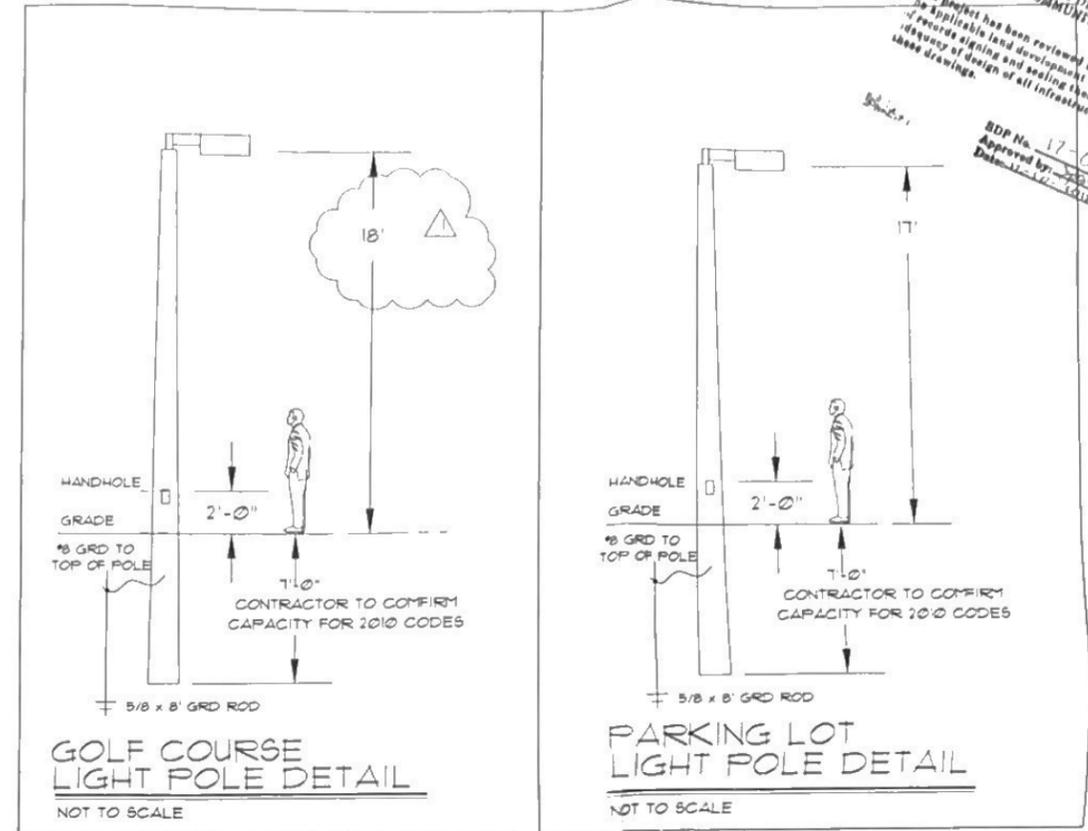
Date: 12/5/2012 Scale: 1"=16' Layout by: WJK JANAKY  
Project Name: MARCO MINI GOLF - R1 Customer No: #39223  
Filename: V:\Common\Appl\rg\OUT\120518SM\MOJRI.AGI

Footcandles calculated at grade using mean luminaire values

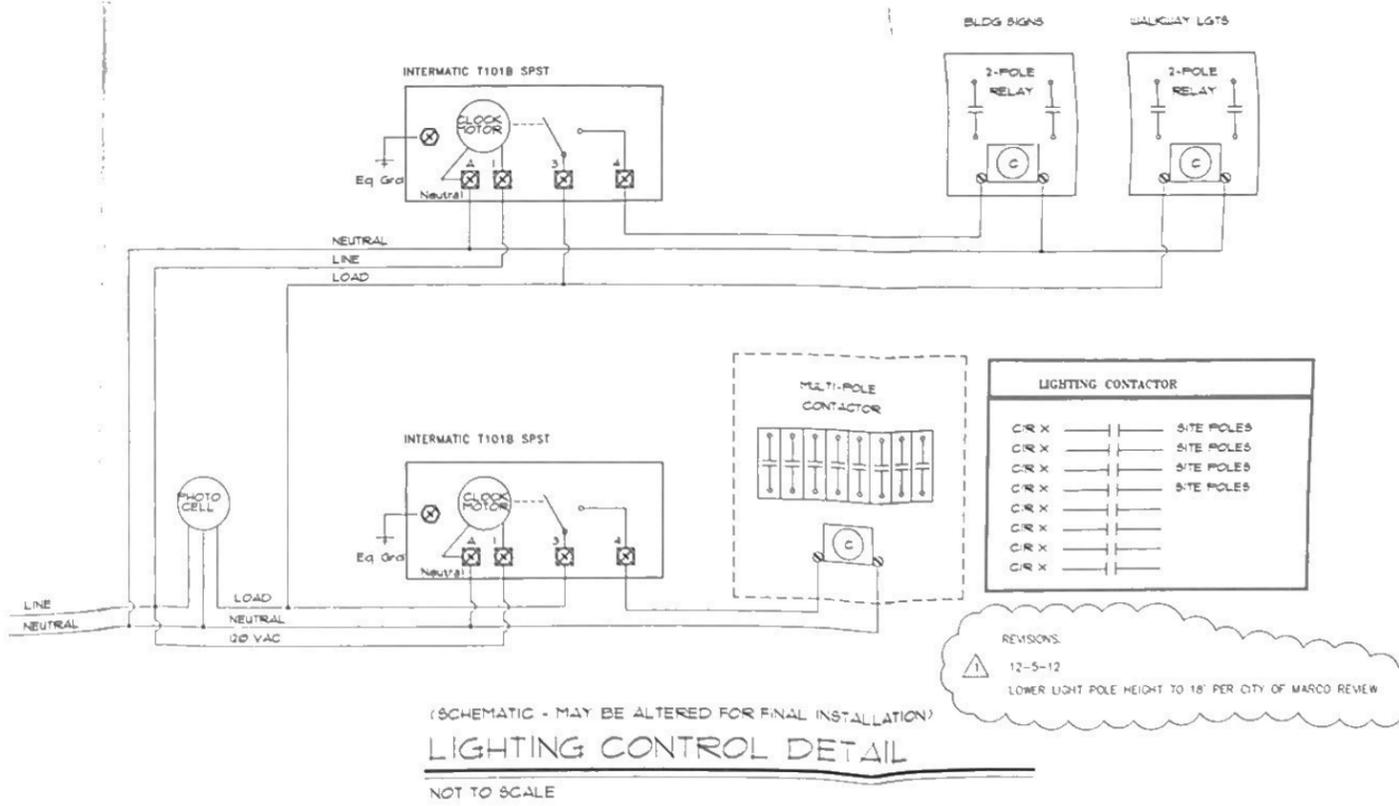
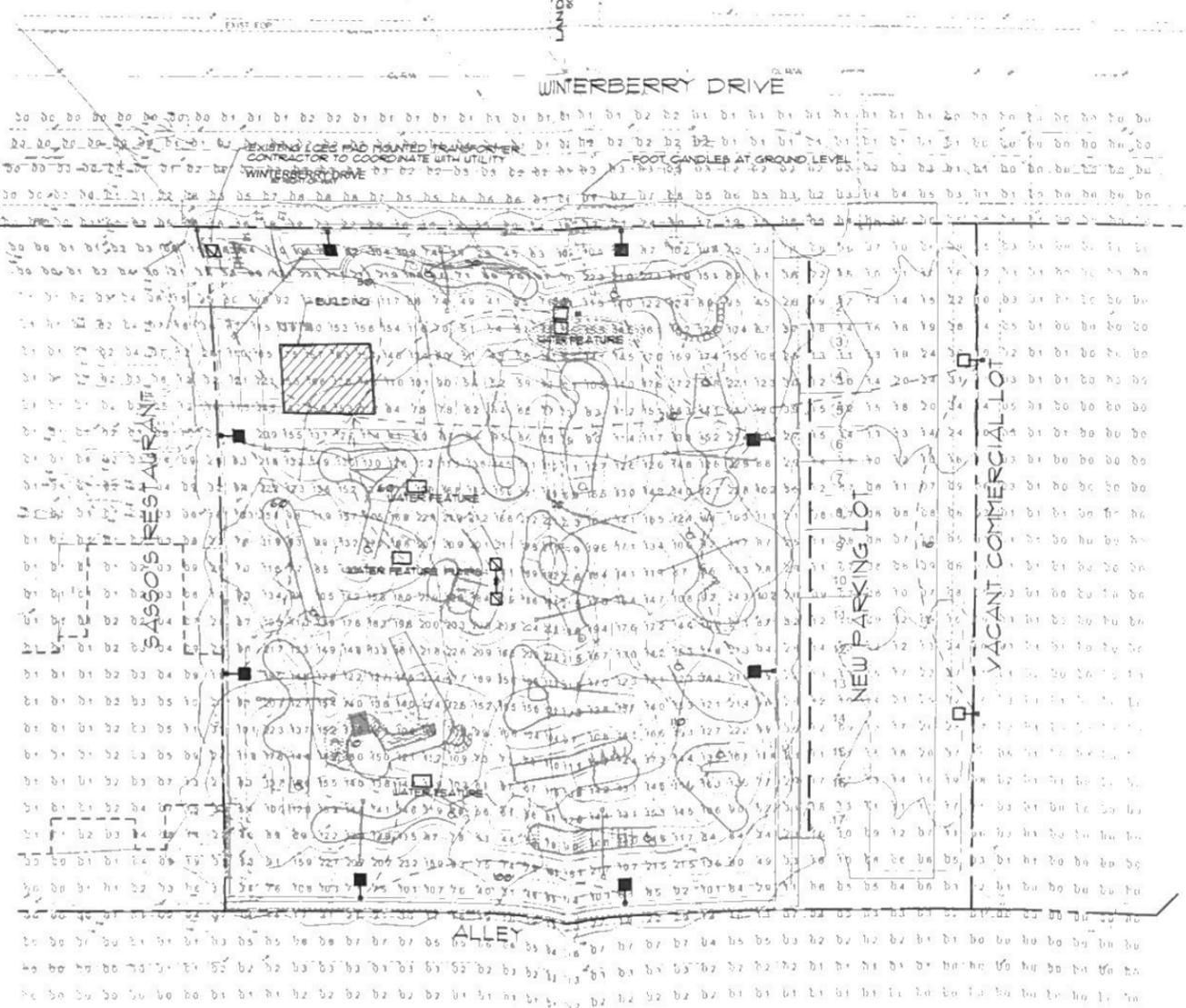
Simulation results shown on this lighting design are based on project parameters provided to Ruud Lighting used in conjunction with luminaires test procedures conducted under standard conditions. Actual project conditions differing from these design parameters may affect final results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting, or energy code.

LOT

Illuminance (Fc)  
Average = 1.50  
Maximum = 3.9  
Minimum = 0.6  
Avg/Min Ratio = 2.50  
Max/Min Ratio = 6.50



This project has been reviewed and approved for sufficiency with applicable land development regulations. The utility/engineer's liability of design and sealing these plans will be acceptable for these drawings.  
CITY OF MARCO ISLAND COMMUNITY DEVELOPMENT  
BDP No. 17-07  
Approved by: [Signature]  
Date: 12-12-12



REVISIONS  
12-5-12  
LOWER LIGHT POLE HEIGHT TO 18' PER CITY OF MARCO REVIEW

HERBERT ROSSER SAVAGE, AIA, ARCHITECT 851 50 COLLIER BLVD MARCO ISLAND, 34145 - PH (239) 394-1580		DATE: SEPT 12, 2012 SCALE: NOTED
PROJECT: MARCO GOLF AND GARDEN 961 Winterberry Drive Marco Island, FL 34145	SHEET TITLE: ELECTRICAL SITE LIGHTING	SHEET NO: ES-1 OF ES-1