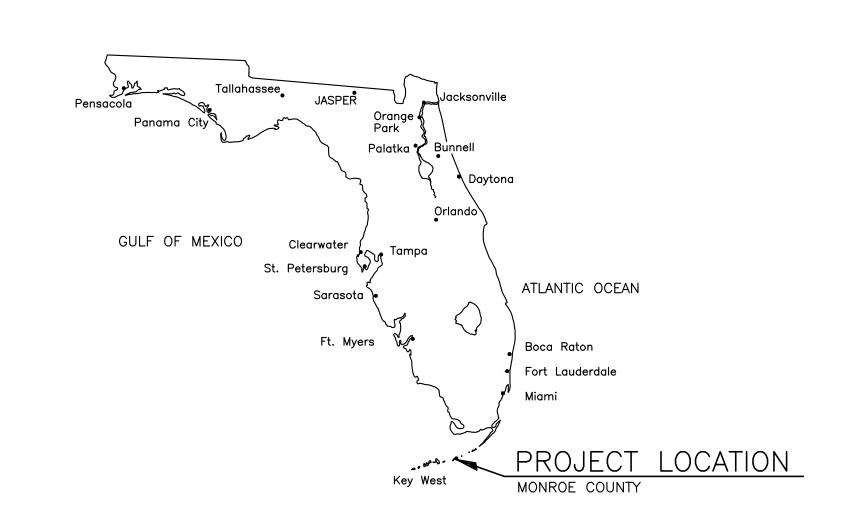
# 7TH AND SHELTER BAY DRIVE DRAINAGE IMPROVEMENTS, PHASE 1 WET DETENTION SYSTEM LANDSCAPING

FOR

# CITY OF KEY COLONY BEACH, FLORIDA

Project No. M060420.000 Client No. 0604-20-1





FREDDIE FOSTER
MAYOR

JOEY RASPE
VICE-MAYOR

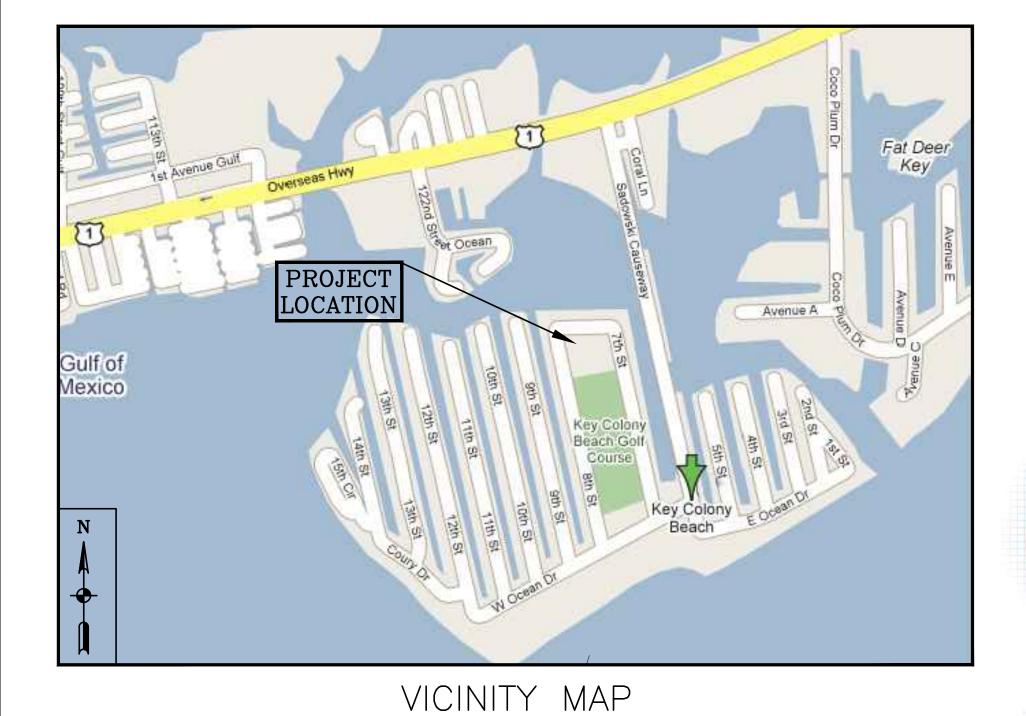
THOMAS HARDING
COMMISSIONER/SECRETARY/TREASURER

TOM DIFRANSICO
COMMISSIONER

DOUG COLONELL COMMISSIONER

SILVIA GRANSEE
CITY CLERK

JOHN BARTUS
CITY ADMINISTRATOR



ASSOCIATES, INC.
CONSULTING ENGINEERS &
PROJECT FUNDING SPECIALISTS

NOW A PART OF GPA

Florida License
No. 3215

**BID SET** 

06/11/25

<u>DRAWING INDEX</u>

WET DETENTION POND - PLANTING PLAN

N.I.C. -22 ELECTRICAL DETAILS

WET DETENTION POND - PLANTING BLOW UP

THE SAME GREAT TEAM. NOW WITH EVEN MORE RESOURCES.

# GENERAL NOTES

# . GENERAL CONSTRUCTION NOTES

- proper Utility Representative prior to commencing excavation near the utility. The Contractor is responsible for locating all utilities in the path of construction. Contractor shall field determine the location, size, and depth of all existing piping. The Contractor shall call the Sunshine State One center (1-800-432-4770).
- It shall be the sole responsibility of the Contractor to locate and avoid all utilities, structures, and obstructions both above and below the ground surface. All damages resulting from the Contractor's failure to comply with this requirement shall be repaired at the Contractor's expense
- Contractor is responsible for supporting/protecting & maintaining all existing improvements (i.e., utilities, utility poles, structures, pavement, sidewalks, monitoring wells, foundations, etc.) which may be damaged/undermined or interrupted as a result of his operations. The Contractor shall immediately notify the Engineer of any such occurrences. The Contractor may be required to shore, sheet, brace, or support work to protect existing improvements. The Contractor shall maintain a minimum of 5 feet of undisturbed soil around all power poles Where edge of utility trench would be closer than 5 feet from poles. Contractor shall be required to sheet around pole to maintain 5 feet of undisturbed soil. Where 5 feet of undisturbed soil cannot be maintained Contractor shall make arrangements with power company to have poles held/braced. All costs associated with supporting/protecting existing improvements shall be borne by the Contractor.
- All existing facilities (e.g., pipes, roadways, sidewalks, landscaping, structure, etc.) not indicated to be disturbed/restored which are disturbed/damaged as a result of the Contractor's operations shall be restored to a condition equal to or better than that which existed prior to construction, at Contractor's expense.
- Horizontal and vertical controls are subject to adjustments in the field if necessary to avoid utility conflicts upon approval of the Engineer or his representative. Contractor shall not adjust location of pipe or other facilities (either vertically or horizontally) without approval of the Engineer or his representative.
- Contractor shall provide constant slope between indicated pipe invert elevations, unless otherwise directed by Engineer.
- Contractor shall not remove any trees of 4-inch diameter or larger without Engineer's approval. Adjustment of pipe location to avoid trees shall be subject to approval of the Engineer. The Engineer makes no claim that any tree will survive construction of the proposed project.
- The Contractor shall at all times conduct his operations so as to interfere as little as possible with the existing facilities. The Contractor shall develop a program in cooperation with the Owner's operating staff which shall provide for the construction of an putting into service the proposed work in the most orderly manner possible. All work of connection with, cutting into and reconstruction of existing facilities shall be planned so as not to interfere with the existing facility.
- The Contractor shall provide all traffic control measures necessary to perform the work at his expense. Traffic control shall be in accordance with governing local, state, and federal agencies, including the MUTCD latest
- 10. Contractor shall provide all fill required to achieve proposed grades at his expense.
- 11. All aboveground piping shall be properly supported and/or secured to tanks, buildings, or other structures using 316 SS straps and fasteners.
- 12. All pipe shall have the following minimum cover, unless otherwise directed by Engineer: Water Service Pipe 30-inches cover at edge of curb
  - PVC (<3-inch)30-inches (>3-inch)36-inches PVC
  - (all sizes) 36-inches 36-inches Steel (all sizes)
  - RCP (all sizes) 12-inches Corrugated Plastic 24-inches
- 13. Warning tape and tracer wire shall be installed along all water mains, laterals, and force mains, in accordance with the specifications.
- Contractor shall apply for and obtain FDEP Generic Permit for Large and Small Construction Activities (CGP). The Contractor shall act as the Operator of all temporary construction phase pollution prevention improvements and be responsible for their design, selection, and implementation. Schematic erosion control measures are provided in these documents and shall be the basis of the Contractor's design.
- 15. During any construction activity, including stabilization and revegetation of disturbed surfaces, the Contractor is responsible for the design, selection, permitting, implementation, and operation of all temporary construction phase erosion and sediment control measures required to retain on-site sediment and prevent violations of the State of Florida water quality standards. The Contractor shall use appropriate best management practices described in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, July 2013, with revisions. All turbidity/silt barriers must be in place downgradient from the construction zone prior to the start of any construction activity in general accordance with the plans and details provided in these documents. The barriers shall remain in place until all the disturbed areas have been properly stabilized.
- 16. Maintenance and Operation of the Surface Water Management System: Upon completion of construction of the project, the Contractor shall remove accumulated sediment from the stormwater system including the bottom of the retention basin. The Owner shall mow the grass on the slopes and bottom of the retention basin on a biweekly basis as a minimum and remove thatch, leaves, trash and other debris on an as—needed basis.
- 17. Relocate existing garbage/trash pads & walls as required to construct project. The Contractor shall coordinate the new location with the City, Engineer and the Property Owner.
- 18. Improvements made within right-of-way by private citizens such as fence lines, landscaping, pavers, landscaping features, etc. that impede the proposed construction shall be removed to construct project and then restored as near as possible to its original location and shall be equal to or better than its original condition.
- 19. Remove & replace and/or relocate existing irrigation systems as required to facilitate construction and to continue to irrigate the existing irrigated areas.
- 20. All traffic signs within the proposed construction shall be removed and then restored to original location upon completion of the work. signs damaged during removal shall be replaced with new signs of the same size and
- 21. The Contractor shall employ the services of a Florida licensed surveyor who shall be responsible for laying out the work and for establishing the following: project temporary benchmarks; elevation lines and grades; and right—of—way and easement limits for construction. Contractor shall also employ the services of a Florida licensed surveyor to obtain the required record drawing information.
- 22. The Contractor shall employ a land surveyor, registered in the State of Florida, to reference property and restore property corners and land markers which may be disturbed as a result of Contractor's operations.
- 23. Horizontal control for features on the plans are relative to the NSRS 2011 Florida State Planes, East Zone, US <u>Foot</u> coordinate system.
- 24. Topographic information based on a survey by Reese & Associates, Inc., Project 24071807, dated 09/06/2024.
- 25. Contractor shall contact Florida Keys Electric Co-op, (423-693-4829) related to any overhead power and/or power pole hold requirements during construction.

# B. **GENERAL WATER SYSTEM NOTES**

- Existing underground utilities have been shown from the best available information. The Contractor shall be in accordance with FAC 62-555, Permitting and Construction of Public Water Systems and the Florida Keys Aquaduct Authority (FKAA). All materials that come in contact with drinking water shall be in conformance with ANSI/NSF International Standard 61 and shall be installed in accordance with applicable AWWA Standards and/or the manufacturer's recommendations.
  - 2. All water main work shall be performed by the Florida Keys Aquaduct Authority (FKAA).
  - 3. Maintain minimum separation requirements between potable water mains and other utilities.
  - 4. The location of water services, if shown on the plans, are approximate. Actual location of services shall be determined in the field by location of existing water lines, meters, valves and as directed by the Engineer, FKAA and
  - 5. All existing water meters, meter boxes, valve boxes, cleanouts, manhole lids, junction boxes or other utility access ports within the proposed construction shall be adjusted, as necessary, to match the new finish grade.
  - C. GENERAL SEWER SYSTEM NOTES
  - 1. All sewer line work shall be in accordance with FAC 62-600, Domestic Wastewater Facilities and FAC 62-604,
  - 2. All workmanship, material, testing and as—built drawings shall conform to the latest standards and specifications of the City of Key Colony Beach.
  - 3. The location of sewer services, if shown, on the plans, are approximate. Actual location of services shall be determined in the field by test holing and as directed by the Engineer and the Owner.

### D. PAVEMENT STRIPING AND SIGNAGE NOTES

Collection Systems and Transmission Facilities.

- 1. Unless otherwise noted on the drawings, all existing signs removed by the construction activity, shall be restored to their original position prior to completion of the project. Any signs damaged during construction shall be replaced at the Contractors expense.
- 2. All signs and pavement markings shall conform to the Manual on Uniform Traffic Control Devices (MUTCD) and the Florida Department of Transportation Roadway and Traffic Design Standards, latest editions.
- 3. Sign assembly locations, shown on the plans, which are in conflict with lighting, utilities etc. may be adjusted slightly as directed by the Engineer.
- 4. Existing signs to be permanently removed shall become the property of the Contractor and disposed of at his expense unless claimed by Owner or governing authority.
- 5. All pavement striping within Right—of—Way or easements, as well as all stop bars, crosswalks, messages and directional arrows (regardless of location) shall be lead free, thermoplastic paint (FDOT spec. section 711). All other striping shall be reflective paint (FDOT spec. section 710) unless noted otherwise on the drawings.
- 6. The aluminum column (post) & connection design shall adhere to FDOT index 11860 and the following criteria:
  - a. mounting height = 14' maximum
- b. sign(s) area = 25 sq. ft. maximum c. sign(s) width: single = 36" maximum
- dual = 48" maximum d. driven post only
- e. minimum post diameter = 3"
- 7. All posts shall be installed plumb.
- 8. All hardware shall be 316 stainless steel (ASTM F593, ASTM F594, Alloy Group 2, Condition A, CW2 or SH4).

# E. ROADWAY NOTES

- 1. All work performed within the City Right-of-Way shall conform to the most current edition of the following
  - Standard Specifications for Road and Bridge Construction.
- FDOT Design Standards. • FDOT Plans Prep Manual.
- FDOT Flexible Pavement Design Manual for new construction and pavement rehabilitation.
- Should a conflict arise between the details shown in the plans and the Department of Transportation Standards, the Contractor shall immediately confer with the Engineer in order to resolve the discrepancy.
- 2. Removal of existing striping shall be accomplished using the "hydro-blast" method. If this process damages or scars pavement, the pavement shall be milled and resurfaced per FDOT standards.
- 3. Burning of any material or debris is prohibited.
- 4. All lanes must be opened for traffic during an evacuation notice of a hurricane or other catastrophic event and shall remain open for the duration for the evacuation or event.

# ABBREVIATIONS

, CND

CONDUIT

CAPACITY

CAST IRON

CLEAN OUT

CONTINUOUS

COVERED

COLIPLING

CULVERT

CHECK VALVE

DEMOLITION

DIAMFTER

DIMENSION

DRIVEWAY

ECCENTRIC

ELEVATION

EMERGENCY

FQUIPMEN<sup>3</sup> EASEMENT

ESTIMATE(D

**EXISTING** 

FXTFRIOR

FLOOR DRAIN

FIRE HYDRANT

FINISHED WATER

GALVANIZED STEEL PIPE

HIGH-DENSITY POLYETHYLENE

HEATING, VENTILATION, AND AIR CONDITIONING

INTERNATIONAL PIPE STANDARD; IRON PIPE SIZE

HAND-OFF-AUTO SWITCH

HORIZONTAL

HIGH WATER LEVE

INSIDE DIAMETER

INSIDE FACE

INTERSECTION

JUNCTION BOX

KIP(1,000 LB)

LABORATORY

LINEAR FEET

LIGHT POLE

LOW WATER LEVEL

I AVATORY

POUND

KILÖVOLT-AMPERE

IRON PIPE

FINISH(ED)

FOUNDATION

LECTRIC(AL

EDGE OF PAVEMENT

ETHYLENE PROPYLENE DIENE MONOMER

ELLIPTICAL REINFORCED CONCRETE PIPE

FLORIDA DEPARTMENT OF TRANSPORTATION

L, ELEV

X, EXIST

DRAWING

DUCTILE IRON

CENTER TO CENTER

CABLE TELEVISION

CHAIN LINK FENCE

CLEAR OR CLEARANC

CONCRETE MONUMENT

CORRUGATED METAL PIPE

CONCRETE MASONRY UNIT

CUBIC FEET PER MINUTE

CUBIC FEET PER SECONI

CAST IRON PIPE, CAST-IN-PLACE

CORRUGATED POLYETHYLENE PIPE

CHI ORINATED POLYVINYI CHI ORIDI

TRANSPORTATION

### LEGEND PROPOSED EXISTING ABBREVIATION DESCRIPTION ACRYLONITRILE BUTADIENE STYRENE MAINTAIN OR MAINTENANCE MANUAL(LY) --8"-- SANITARY SEWER ASRESTOS CEMENT PIPE MAXIMUM MOTOR CONTROL CENTER ABOVE FINISH FLOOR (REF. ELEV. ABOVE FINISH GRADE (REF. ELEV.) --4"FM-- SANITARY FORCE MAIN MITERED FND SECTION ALUMINUM MECHANICAL ALTERNATE MANUFACTURE SANITARY MANHOLE APPROXIMATE(LY MILLION GALLON(S) ARCHITECT(URAL) MILLION GALLONS PER DAY ---- STORM PIPE AIR RELEASE VALVE MEAN HIGH WATER =====(PERF PVC) ASSEMBLY MINIMUM: MINUTE(S) BURIED ELECTRIC MISCELL ANEOUS $\circ$ STORM MANHOLE OR INLET BASIN BOTTOM FACE MECHANICAL JOINT BURIED FIBER OPTIC MONUMENT ------BUTTERFLY VALVE MILES PER HOUR STORM INLET BITUMINOUS OR BITUMASTIC MOUNTED BUILDING MANWAY: MONITORING WELL \_\_\_\_ STORM SWALE BLOCK BENCH MARK NORTHFAST DRAINAGE INLET OR MES WITH FIBER ROLL NOT IN CONTRACT: NOT INCLUDED BACK OF CURB OR TURBIDITY BARRIER PROTECTION воттом NOMINAL BURIED TELEPHONE-CABLE NUMBER NATIONAL PIPE THREAD STAKED TURBIDITY BARRIER <del>-</del>0----0-

NON-POTABLE WATER

NOT TO SCALE FIBER ROLL WITH SILT FENCE NORTHWEST TURBIDITY BARRIER PROTECTION NOT APPLICABLE OVERALL DIMENSION ON CENTER TRENCH WIDTH PAVEMENT/PAVER OUTSIDE DIAMETER DEMOLITION AND RESTORATION OUTSIDE FACE OVER HEAD OVER HEAD ELECTRIC DEMOLISH PAVEMENT OPTIONAL OPERATION AND MAINTENANCE PAVFMFNT  $- \bowtie -$  VALVE POINT OF CURVE PLAIN END WATER MAIN POINT OF INTERSECTION --6"W--

POUNDS PER LINEAR FOOT WATER SERVICE (SIZE VARIES) OINT OF BEGINNING POWER POLE ——63 — GRADE CONTOURS POLINDS PER DAY PARTS PER MILLION *∕*−63.0 PRESSURE SPOT ELEVATIONS PRESSURE REDUCING VALVE PUMP STATION POUNDS PER SQUARE FOOT POWER POLE / W/ANCHOR POUNDS PER SQUARE INCH POUNDS PER SQUARE INCH ABSOLUTI ——BT — BURIED TELEPHONE POUNDS PER SQUARE INCH GAGE POINT OF TANGENCY PLUG VALVE -- FC -- FIBER CABLE POLYVINYL CHLORIDE -- ctv-- CABLE TELEVISION POWER -- OHE-- OVER HEAD ELEC RADIUS REINFORCED CONCRETE PIPE ---swale---- SWALE

REDUCER REINFORCING STEEL BARS RIGHT-OF-WAY REINFORCE(D)(ING)(MENT) --x----x- FENCING RESTRAINED ROADWAY OR DRIVEWAY REVOLUTIONS PER MINUTE RAILROAD

` LIMITS OF WOODS RAW WATER RAW WATER MAIN TREE \*\*\* RIGHT-OF-WAY SEWER: SOUTH SANITARY SEWER

SERVICE POLE, DROP POLE FINISH GRADE FLANGED JOINT SPECIFICATION FLANGE(D) FORCE MÁIN SANITARY SEWER. STAINLESS STEEL FEET PER MINUTE FEMALE PIPE THREAD FIBERGLASS REINFORCED PLASTIC STANDARD STEEL STRUCTURAL STL STRUCT

SCHEDULE

SOUTHEAS1

TELEPHONE

TEMPORARY

THICK(NESS)

TOP OF BANK

ELEVISON

VOLT(S)

VACUUM

VOLUME

WATER, WEST

WATER METER

WATER LINE

UNDERGROUND UNDERGROUND ELECTRIC

VARIABLE FREQUENCY DRIVE

WATER TREATMENT PLANT

WASTEWATER TREATMENT PLANT

WELDED WIRE FABRIC

WELDED WIRE MESH

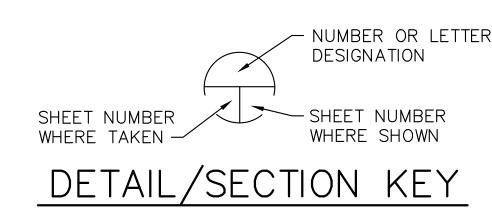
HREADED JOINT

SECTION

FACE TO FACE SOUTHWES' SIDEWATER DEPTH GAS MAIN GALLON(S) SYMMETRICAL GALVANIŻÉD GALVANIZED IRON PIPE GALLONS PER DAY TEMPORARY BENCH MARK

GALLONS PER HOUR GALLONS PER MINUTE GALLONS PER SECOND GALVANIZED STEEL

(RELOCATED) SQUARE FOOT OR FEET TOTAL DYNAMIC HEAD TOE OF SLOPE TOE OF SLOPE; TOP OF STEEL ELEPHONE POLE, TOP OF PAVEMENT TOP AND BOTTOM

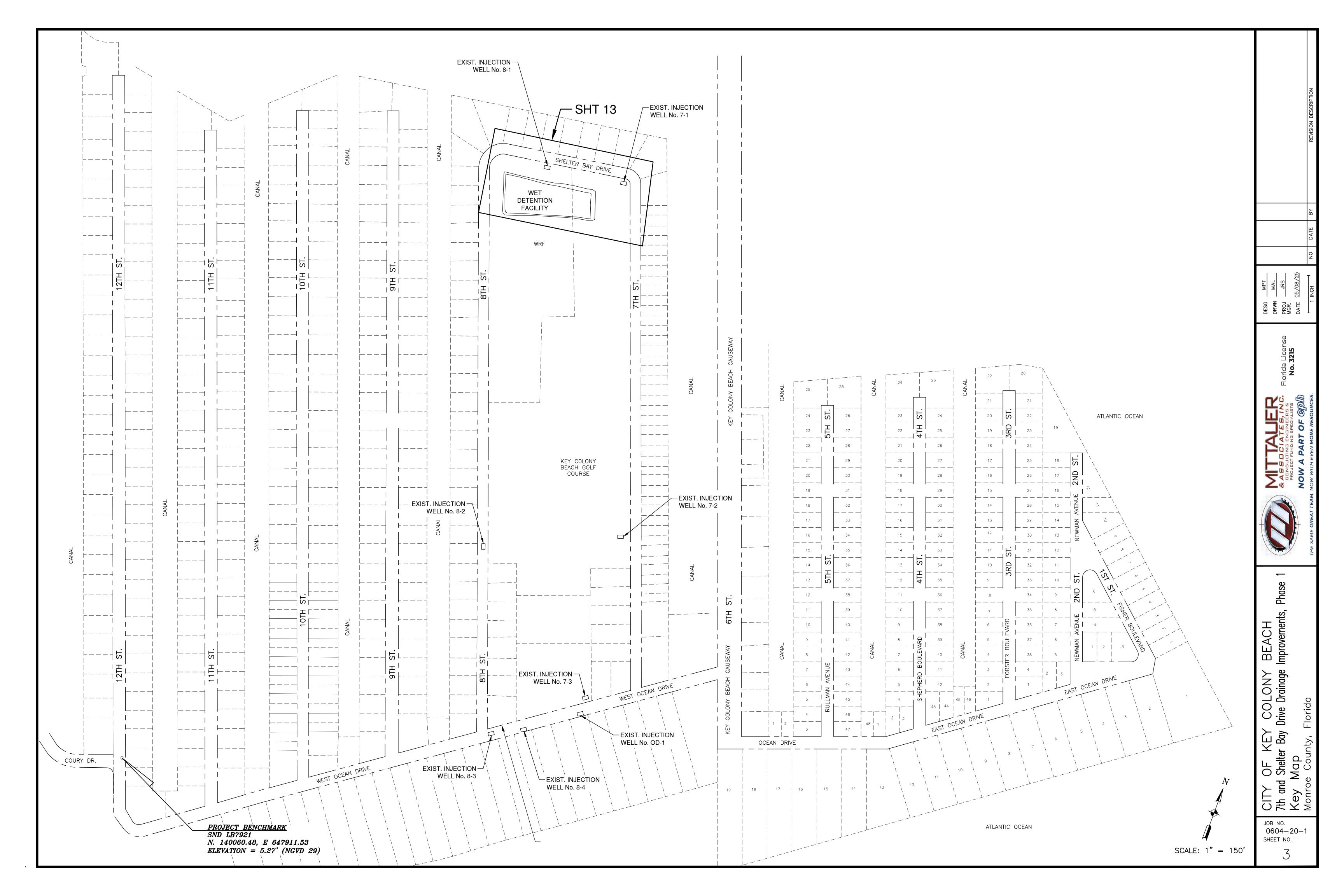


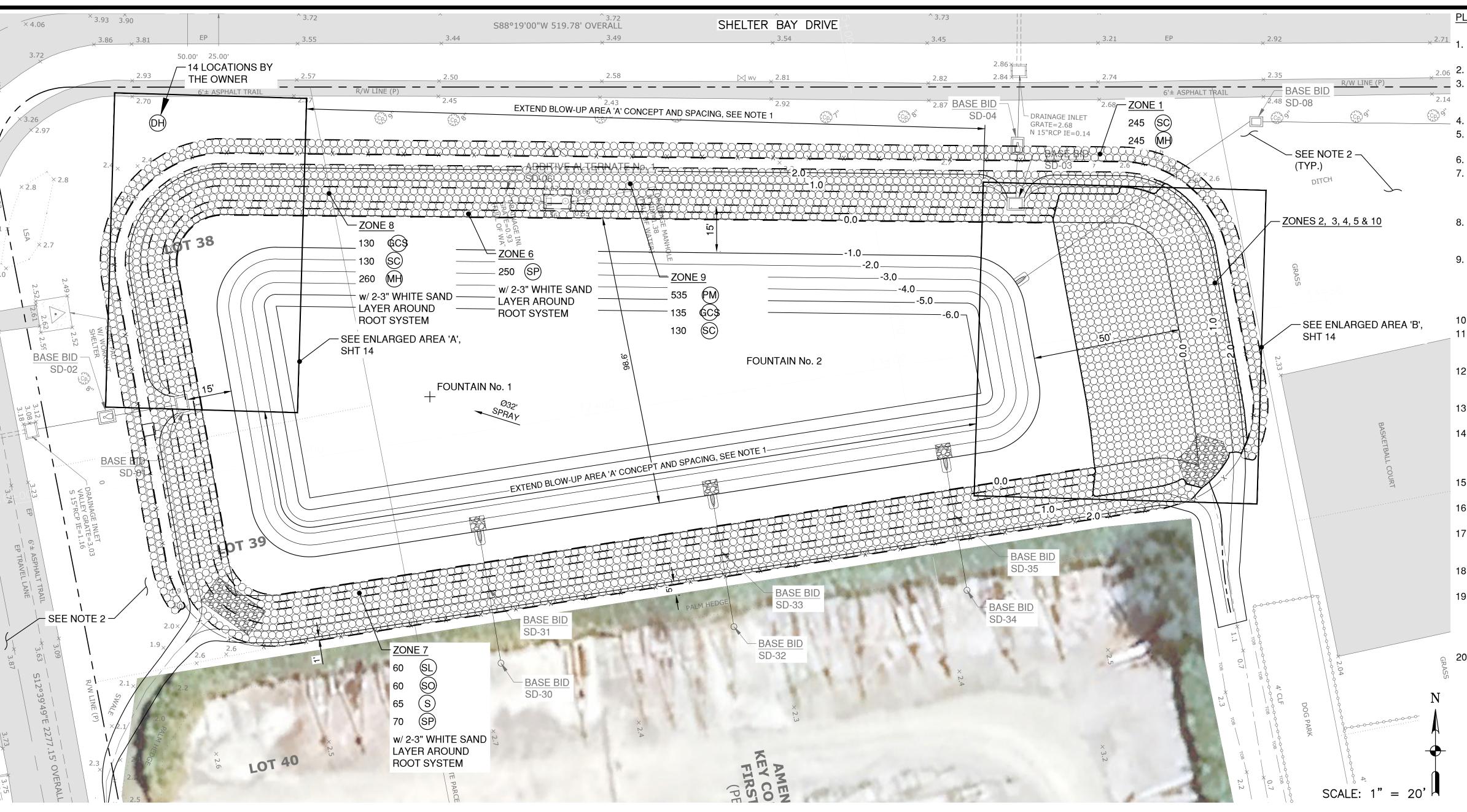
PROJECT CONTACTS									
TYPE	COMPANY	ADDRESS	PHONE	CONTACT PERSON					
ELECTRIC	FLORIDA KEYS ELECTRIC COOPERATIVE	P.O. BOX 377 TAVERNIER, FL 33070	(305) 852-2431 EXT. 125	BRYAN HESS					
TELEPHONE	AT&T	1120 S. ROGERS CIR. BOCA RATON, FL 33487	(561) 997-0240	DINU FARRUGARDU					
CABLE	COMCAST	2601 SW 145TH AVE MIRAMAR, FL 33027	(754) 221-1254	LEONARD MAXWELL-NEWBOLD					
WATER	FLORIDA KEYS AQUADUCT AUTHORITY	1100 KENNEDY DRIVE KEY WEST, FL 33040	(305) 295-2154	MARNIE WALTERSON					
SEWER	CITY OF KEY COLONY BEACH, FLORIDA	600 WEST OCEAN DR. KEY COLONY BEACH, FL 33051	(305) 289-1212 FREDDIE FOSTER MAYOR						
OWNER	CITY OF KEY COLONY BEACH, FLORIDA	600 WEST OCEAN DR. KEY COLONY BEACH, FL 33051	(305) 289-1212	FREDDIE FOSTER MAYOR					
DESIGN ENGINEER	MITTAUER & ASSOCIATES, INC.	580-1 WELLS ROAD ORANGE PARK, FL 32073	(904) 278-0030	MICHAEL P. TIBBLE, P.E.					

0 RT **□** □ en Pha ege Ď impro tions  $\Box$ 

ONY rainage 9 OL, e Dr 0 OF Shelter <u>a</u> pu e

JOB NO. 0604-20-1 SHEET NO.





				T				
QTY	ABV	BOTANICAL NAME	COMMON NAME	CAL IN/ CONT	HT/SPD	SPACING /OC	CANOPY	ORIGIN
	,		TREE	S				
16	DH	llex cassine	Dahoon Holly	7	20-30' / 8-12'	40' OC	Yes	Native
								TOTALS
			SHRUBS AND	GRASS	SES			
480	GCS	Eleocharis cellulosa	Gulf Coast Spikerush	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
60	DF	Tripsacum floridanum	Dwarf Fakahatchee Grass	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
740	SC	Sporobolus bakeri	Sand Cord Grass	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
700	PM	Muhlenbergia capillaris	Pink Muhly Grass	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
660	МН	Sporobolus pumilus	Marsh Hay Cord Grass	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
130	SL	Crinum asiaticum	Swamp Lily	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
490	SO	Borrichia frutescens	Sea Ox-Eye Daisy	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
-	SB	Fourwing saltbush	Salt Bush	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
570	SP	Sesuvium portulacastrum	Sea Purselane	1 gal	2-3' / 2-3'	2.5' OC	NO	Native
-	DI	Iris hexagona	Dixie Iris	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
100	S	Salicornia europaea	Samphire	3 gal	2-3' / 2-3'	2.5' OC	NO	Native
			SOD	)				

# NOTES:

- 1. CONTRACTOR SHALL COORDINATE WITH THE CITY REPRESENTATIVE(S) TO CONFIRM PLANTING SELECTIONS, LOCATIONS & SPACING BEFORE ORDERING AND INSTALLING PLANT VEGETATION.
- 2. THE CITY IS CONSTRUCTING THE WET DETENTION SYSTEM VIA A SEPARATE CONTRACT. THE LANDSCAPING CONTRACTOR, AS PART OF THIS CONTRACT, SHALL SOD ALL DISTURBED AREAS. THE BID FORM INCLUDES A SQUARE YARD TOTAL OF ESTIMATED LIMITS OF SODDING. SODDING SHALL EXTEND FROM THE UPLAND SIDE OF THE LANDSCAPE AREAS THRU ALL DISTURBED AREAS. THE CONTRACTOR WILL BE PAID AT THE CONTRACT'S UNIT PRICE BASED ON THE ORDERED AND PLACED QUANTITY OF SODDING. THE LANDSCAPING CONTRACTOR SHALL FURNISH AND INSTALL THE SODDING IMMEDIATELY FOLLOWING THE CITY'S WET DETENTION POND CONTRACTOR'S PARTIAL COMPLETION (OR FINAL COMPLETION) OF EARTHWORK ACTIVITIES.
- SEE LANDSCAPE NOTES ON THIS SHEET AND TECHNICAL SPECIFICATIONS.

# GENERAL INSTALLATION INSTRUCTIONS

- 1. Contractor shall furnish all labor, materials, and insurance to complete the work as shown in the plan.
- 2. Contractor is responsible for acquiring all required permits and associated fees to complete the work.
- Contractor shall locate and visibly mark all buried utilities prior to construction and notify the owner of any conflicts.
- 4. Contractor shall demolish and remove from the premises all pavement, sod and other materials required to implement the plan.
- 5. All work shall be completed in a timely manner and in accordance with standard industry practices.
- 6. Contractor shall coordinate a work plan with the owner prior to starting work and shall comply with all state and federal requirements for work safety.
- Contractor shall coordinate an approved staging area with the owner prior to starting the work and shall maintain a clean and orderly site throughout the construction period and shall properly dispose of all trash and removed materials.
- 8. Contractor shall proceed with approved work in an orderly and timely fashion.
- 9. Contractor shall prevent offsite erosion, both by wind and rain, during construction using adequate means such as silt fencing, hay bales, and drain socks.
- 10. Contractor shall provide all new materials in first quality condition.
- 11. Substitutions shall be rejected unless approved by the owner prior to installation.
- 12. Contractor shall repair and/or replace at contractor's cost and in an expedient manner any utilities, pipes, conduit, cables, fences, pavement, plant material, or any other existing property within or abutting the project site damaged by contractor during the course of the project.
- 13. Contractor shall notify the owner at least one week in advance for a substantial completion inspection. The owner shall provide a punch list to the contractor outlining items to be completed by the contractor. Contractor shall complete punch list items in timely manner before calling for a final inspection by the owner.
- 14. Final payment for the work shall not be issued until a final inspection is completed and approved by the owner.
- 15. All work shall be warranted against defects and failure for at least 1 year following the final acceptance.
- 16. Contractor shall clean site of all construction debris, materials, and trash. Disturbed areas shall be fine-graded and landscaped according to the plans, or sodded with specified sod. Site must be clean and neat before a final acceptance and payment will be issued.

## PLANT INSTALLATION

- 1. Install all plants according to Florida Department of Transportation Index Number 544 Landscape Installation (http://www.fdot.gov).
- 2.06 2. Do not install groundcovers or shrubs on top of or into the rootball of new trees.
  - Contractor shall verify project site conditinos and final quantities based on the plans prior to bidding and pricing. In the occurrence of a discrepancy between the plans and the plant list, the plans shall take precedence.
- 4. All plants shall conform to the specifications on the plant list or plant schedule.
- 5. All plants shall be Florida No. 1 Grade or better according to the Florida Grades and Standards
- 6. All plants shall be nursery-grown containerized or b&b stock.
- 7. All plants shall be in good health, vigorous, evenly branched, and thickly foliated when in leaf. All plants shall be free of disease, insects, including eggs and larvae, as well as have a healthy, developed root system. They should also be free of physical damage or adverse conditions that would prevent thriving growth.
- 8. Plant material, tree locations, and bed outlines shall be staked or flagged on site by the contractor and shall be adjusted as required to fit actual as-built conditions on site and approved by the owner or owner's representative prior to installation.
- On Unless otherwise specified, all existing plant material within the areas of new construction as shown on the plans shall be removed and properly disposed of off of the project site. Plant material outside of these areas shall remain and shall be replaced with like kind if killed or damaged via landscape installation activities (see general installation instructions and tree and existing vegetation protection).
- 10. Planting beds shall be shovel-cut to form a uniform, clean line between beds and lawn areas.11. Remove all synthetic material surrounding the rootball, including strapping, and remove all
- material including burlap and wire basket from top third of root ball prior to backfilling. Failure to take these measures will result in rejection of the installed tree.

  12. Shade trees shall be planted a minimum of 4 feet from any edge of payament and 15 feet from
- 12. Shade trees shall be planted a minimum of 4 feet from any edge of pavement and 15 feet from overhead electric lines as measured from the at-grade centerline (refer to local provider to verify specific requirements).
- 13. All plant material shall be warranted for a period of one year from the date of Final Acceptance of the work and not the date on which it was installed.
- 14. Contractor shall provide all fine surface grading preparation for planting and shall maintain all finished grade requirements according to the plans, and ensure positive drainage. Report any drainage problems associated with finished grade or finished soil characteristics to the owner and the landscape architect.
- 15. Coordinate construction of planting areas with installation of irrigation system or hose bibs as specified.
- 16. Contractor shall provide white sand for all newly installed landscape areas. Provide a minimum 5' diameter mulch ring for all installed trees. Provide uniform coverage for all landscape beds.
- 17. Install sod as specified in the plans, according to the Florida Department of Transportation Standard Specification Section 570 Performance Turf (http://www.fdot.gov) unless otherwise stated herein.
- 18. Contractor shall provide certified, healthy sod, free of weeds, disease, fungus, insects, or nematodes
- 19. Contractor is responsible for maintaining all stockpiled and installed landscape material during the construction period through Final Acceptance, including required weeding, pest control, fertilization, pruning, and any other measure necessary to ensure healthy and vigorous plants are provided at Final Acceptance. The owner shall provide maintenance during the warranty period following Final Acceptance, unless otherwise specified in the contract documents.
- 20. Contractor shall maintain all staking and guying materials and correct tree leaning or tilting during the warranty period. Contractor shall ensure that tree trunks and branches are not damaged or growth restricted by strapping or guying materials. Contractor shall be responsible for removal of all above-ground staking and guying material at the end of the warranty period.

# <u>SOILS</u>

- 1. Contractor shall minimize soil compaction to all new planting areas by limiting access to those areas designated for planting purposes only. Contractor shall not store, clean, or empty equipment or materials within any area specified for preservation or new plant installation.
- 2. Prior to plant installation, contractor shall conduct a soil test in at least three locations on the site that best represent the plant distribution and conditions shown on the planting plan. The soil test shall be conducted by an independent laboratory qualified to test soils. The test shall be
- conducted to determine:

  2.1. Soil type
- 2.2. Soil pH
- 2.3. Nutrient content
- 2.4. Recommended amendments
- . Contractor shall furnish a copy of the soil report(s) along with the contractor's recommended amendments to the landscape architect and the owner prior to initiating plant installation. Contractor shall not initiate plant installation without a written or verbal response from the landscape architect or owner indicating receipt of the report and agreement with the amendment approach.
- At a minimum, contractor shall provide 5-8 percent organic pine bark compost uniformly throughout the planting soils prior to plant installation. Do not apply synthetic fertilizer to any planting area without the approval of the landscape architect or owner.

CITY OF KEY COLONY BEACH 7th and Shelter Bay Drive Drainage Improvements, Phase Wet Detention Pond — Planting Pla

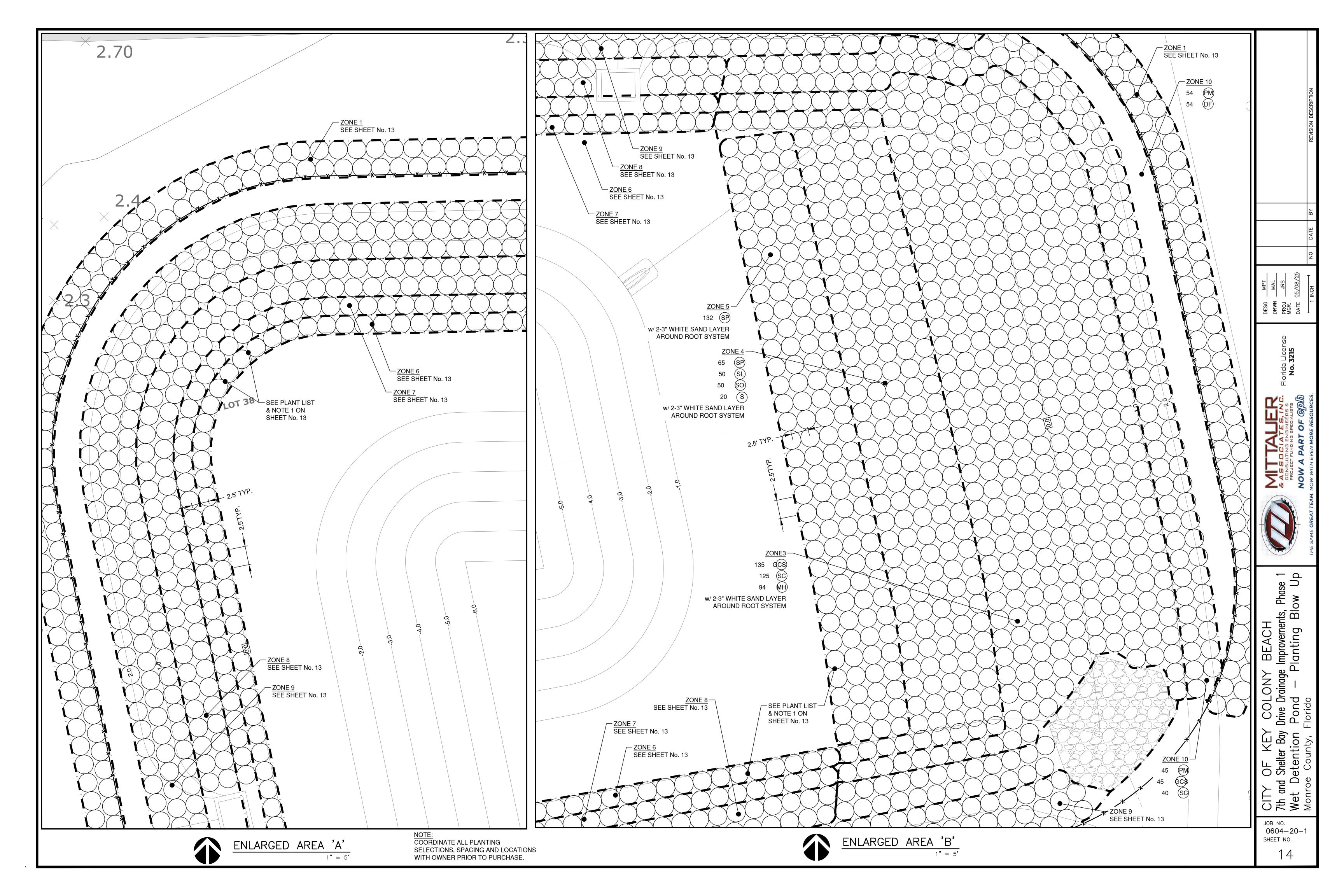
DESG DRWN PROJ MGR. DATE

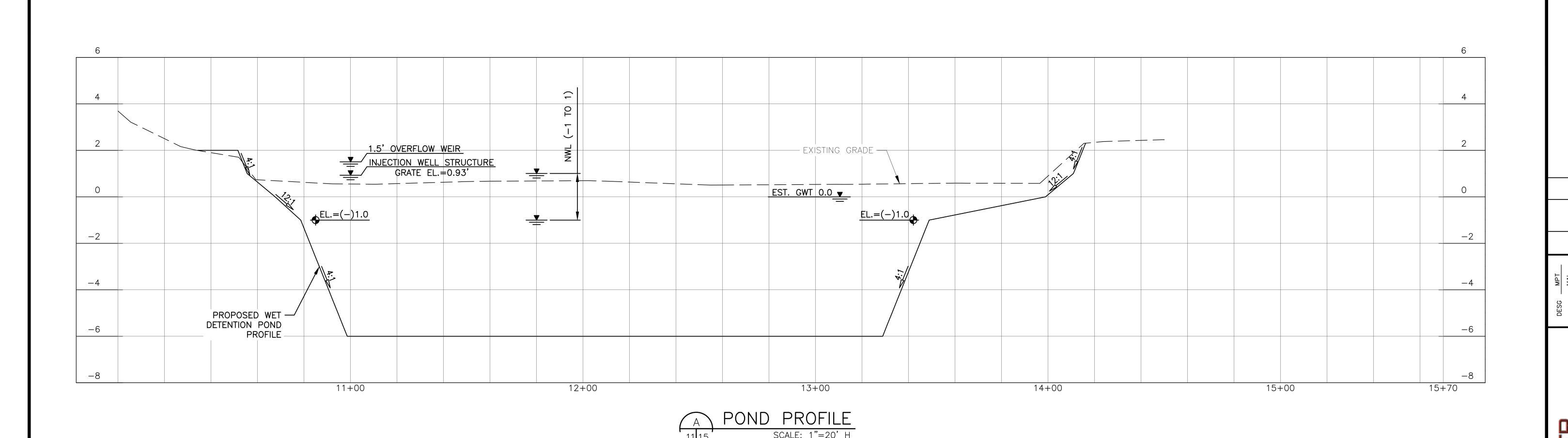
JOB NO.

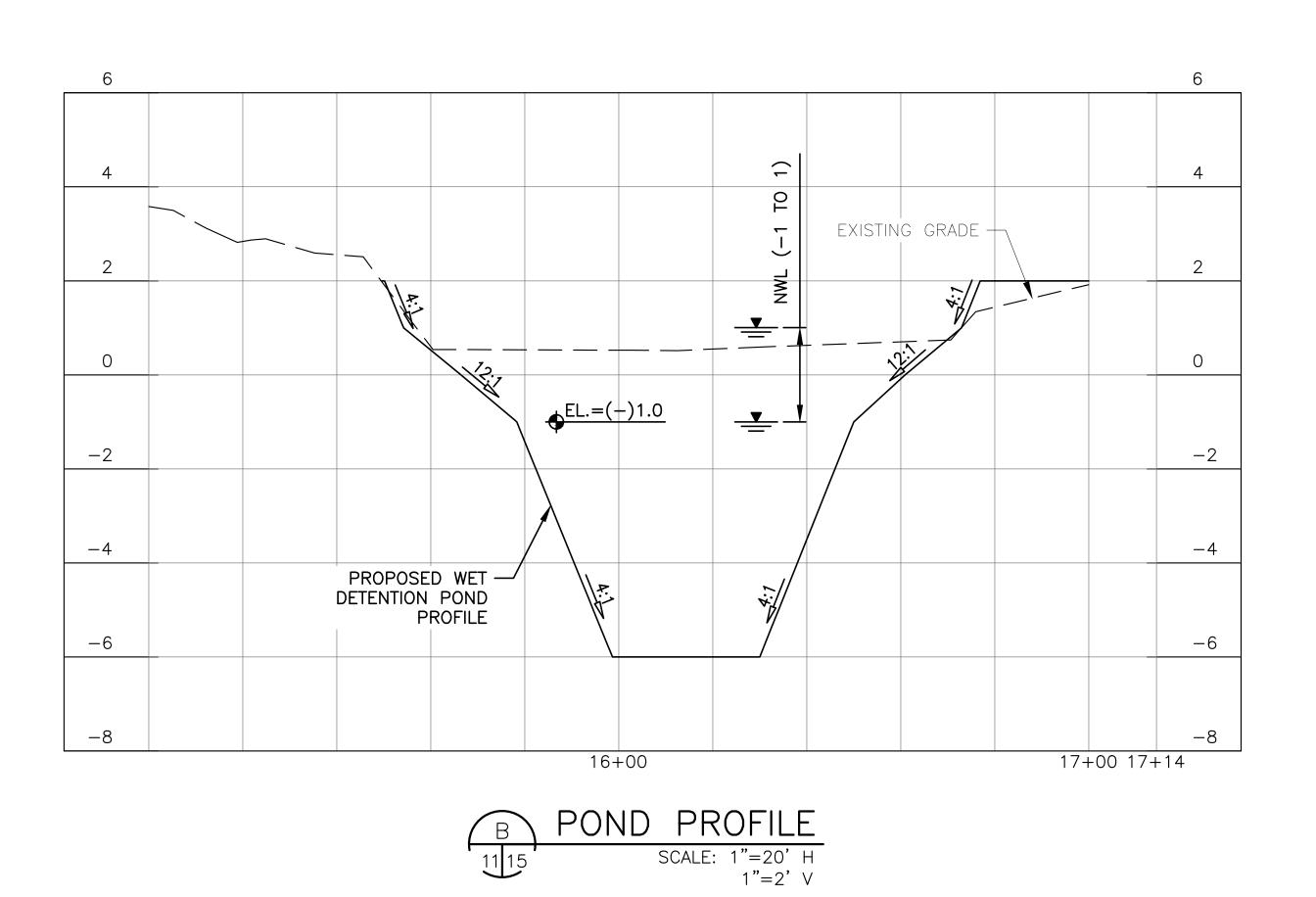
0604-20-1

SHEET NO.

13









CITY OF KEY COLONY BEACH
7th and Shelter Bay Drive Drainage Improvements,
Sections
Monroe County, Florida

JOB NO. 0604-20-1 SHEET NO.