

# LONGBOAT KEY HOTEL-4711 GULF OF MEXICO DRIVE

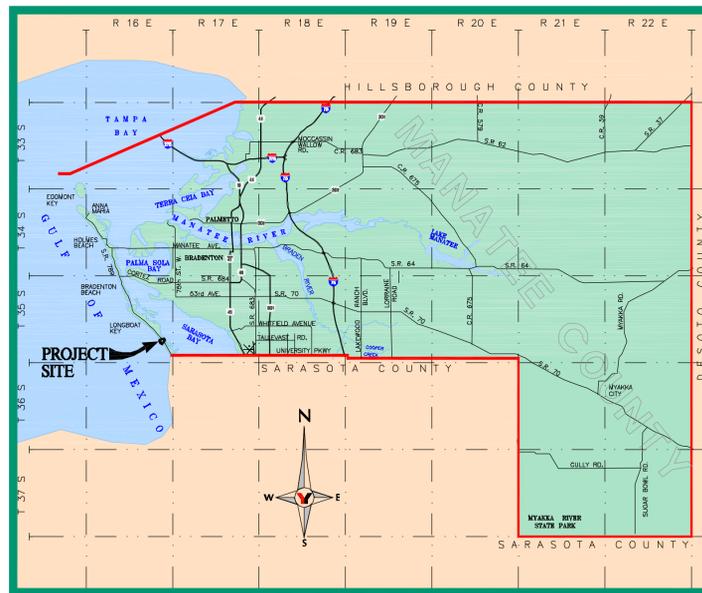
MANATEE COUNTY S.R. 789, SECTION 13080, MILE POST 0.785

OPROCK LONGBOAT FEE, LLC  
 1000 MARKET STREET, BUILDING 1, SUITE 300  
 PORTSMOUTH, NEW HAMPSHIRE 03801

## SITE DEVELOPMENT PLANS

ISSUE FOR TOWN OF LBK  
 PLANNING AND ZONING REVIEW  
 10/18/2013

SECTION 36, TOWNSHIP 35 SOUTH, RANGE 16 EAST



LOCATION MAP

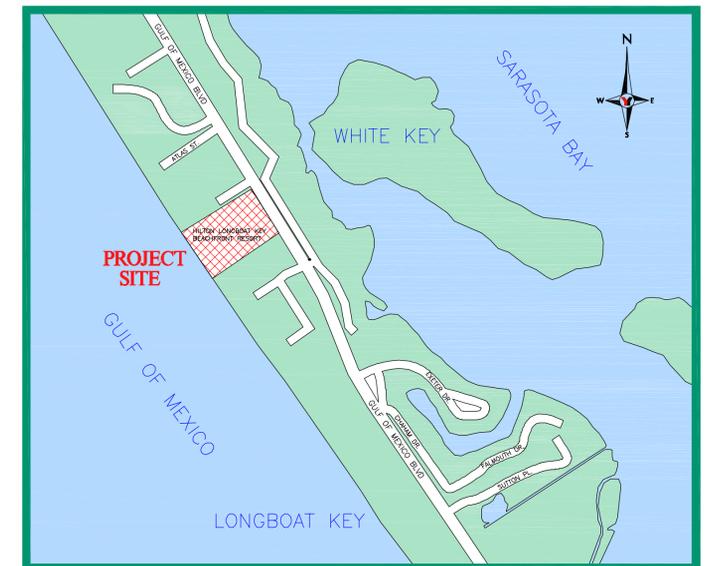


### George F. Young, Inc.

10540 PORTAL CROSSING, SUITE 105 BRADENTON, FLORIDA 34211  
 PHONE (941) 747-2981 • FAX (941) 747-7234  
 ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 21  
 ARCHITECTURE • ENGINEERING • ENVIRONMENTAL • LANDSCAPE • PLANNING • SURVEYING • UTILITIES  
 GAINESVILLE • LAKEWOOD RANCH • ORLANDO • PALM BEACH GARDENS • ST. PETERSBURG • TAMPA

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*	*	*	*	C2	DEMOLITION PLAN
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VICINITY MAP

#### F.D.O.T. NOTES

AT LEAST 72 HOURS IN ADVANCE OF BEGINNING CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL CONTACT THE LOCAL MAINTENANCE FOOT ENGINEER'S OFFICE TO SECURE GENERAL USE PERMITS AND/OR OTHER PERMITS AS REQUIRED FOR WORKING WITHIN THE DEPARTMENTS RIGHT-OF-WAY.

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (DATED 2013) AND DESIGN STANDARDS BOOKLET (DATED 2013). FOR DESIGN STANDARDS REVISIONS, CLICK ON "DESIGN STANDARDS" AT THE FOLLOWING WEBSITE:  
<http://www.dot.state.fl.us/rdbdesign/>

#### GENERAL NOTES

##### RESPONSIBILITY REGARDING EXISTING UTILITIES & STRUCTURES

THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT GUARANTEED AND SHALL BE INVESTIGATED AND VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE STARTING WORK. EXCAVATION IN THE VICINITY OF EXISTING STRUCTURES AND UTILITIES SHALL BE CAREFULLY DONE, BY HAND IF NECESSARY. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO AND FOR MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE POINT OF CONNECTION OF ALL BUILDING SERVICE LINES AT THE BUILDING PRIOR TO INSTALLATION.

##### EROSION CONTROL DURING CONSTRUCTION

THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT THE RUNOFF OF ERODED SOIL MATERIAL FROM LEAVING THE CONSTRUCTION SITE AND BEING DEPOSITED ON THE PROPERTY OF OTHERS OR ON PORTIONS OF THE SITE OUTSIDE THE CONSTRUCTION LIMITS.

THE CONTRACTOR SHALL INSURE THAT ALL NECESSARY PERMITS ARE OBTAINED PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY.

##### LAWS TO BE OBSERVED

THE CONTRACTOR IS ASSUMED TO BE FAMILIAR WITH AND AT ALL TIMES SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, BYLAWS, SAFETY LAWS, BUILDING AND CONSTRUCTION CODES, AND ORDINANCES AND REGULATIONS IN ANY MANNER AFFECTING THE CONDUCT OF THE WORK.

##### ELEVATION MEASUREMENTS

ALL ELEVATIONS ARE BASED ON NGVD.

THESE PLANS COMPLY WITH APPLICABLE STANDARDS, INCLUDING THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS. THESE PLANS ARE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (A.D.A.) MANUAL, AT CURBS, GUTTERS, SIDEWALKS, INTERSECTIONS, ETC. THESE PLANS ARE IN COMPLIANCE WITH THE FLORIDA ACCESSIBILITY CODE AT CURBS, GUTTERS, SIDEWALKS, INTERSECTIONS, ETC.



Know what's below.  
 Call before you dig.  
[callsunshine.com](http://callsunshine.com)

APPROVED \_\_\_\_\_  
 TIMOTHY A. DOVE, P.E. NO. 43268  
 DATE \_\_\_\_\_

#### PROJECT CONTACT LIST:

SITE OWNER/DEVELOPER:	OPROCK LONGBOAT FEE, LLC 1000 MARKET STREET, BUILDING 1 SUITE 300 PORTSMOUTH, NEW HAMPSHIRE 03801 PHONE: (603) 559-2187	BARRY KIMBALL Executive Project Manager EMAIL: <a href="mailto:barry.kimball@oceanprop.com">barry.kimball@oceanprop.com</a>
ARCHITECT:	NICHOLS, BROSCHE, WURST & WOLFE, INC. 161 ALMENIA AVENUE CORAL GABLES, FLORIDA 33134 PHONE: (305) 443-5206	JAMES P. WURST, A.I.A. EMAIL: <a href="mailto:jwurst@nbw.com">jwurst@nbw.com</a>
CIVIL ENGINEERING:	GEORGE F. YOUNG, INC. 10540 PORTAL CROSSING, SUITE 105 BRADENTON, FLORIDA 34211 PHONE: (941) 747-2981	MARK A. ADLER, P.E. EMAIL: <a href="mailto:adler@georgefyoung.com">adler@georgefyoung.com</a>
SURVEYOR:	GEORGE F. YOUNG, INC. 10540 PORTAL CROSSING, SUITE 105 BRADENTON, FLORIDA 34211 PHONE: (941) 747-2981	MARK E. BASSETT, PSM EMAIL: <a href="mailto:mbassett@georgefyoung.com">mbassett@georgefyoung.com</a>
LANDSCAPE ARCHITECT:	STEWART-WASHMUTH & COMPANY, INC. 1916 RAIN FOREST TRAIL SARASOTA, FLORIDA 34240 PHONE: (941) 377-4704	LARRY R. WASHMUTH, ASLA RLA LANDSCAPE ARCHITECT EMAIL: <a href="mailto:larry@swco-la.net">larry@swco-la.net</a>
GENERAL CONTRACTOR:	TO BE DETERMINED	

LONGBOAT KEY HOTEL  
 4711 GULF OF MEXICO DRIVE  
 OPROCK LONGBOAT FEE, LLC  
 SITE DEVELOPMENT PLANS

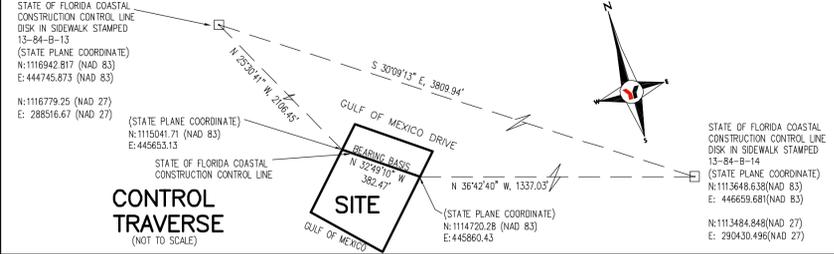
PROJECT NO. 0971-0044-01

"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"

LEGAL DESCRIPTION

COMMENCE AT A CONCRETE MONUMENT MARKING THE POINT OF INTERSECTION OF THE NORTH LINE OF SECTION 36, TOWNSHIP 35 SOUTH, RANGE 16 EAST, MANATEE COUNTY, FLORIDA, AND THE WESTERLY RIGHT-OF-WAY LINE OF GULF OF MEXICO DRIVE; THENCE S. 31°39'50" E., ALONG SAID WESTERLY RIGHT-OF-WAY LINE 1941.22 FEET TO A CONCRETE MONUMENT FOR A POINT OF BEGINNING; RUN THENCE S. 58°15'40" W., 582.4 FEET MORE OR LESS TO INTERSECT THE WATERS OF THE GULF OF MEXICO, WHICH POINT OF INTERSECTION IS HEREBY DESIGNATED POINT "X"; COMMENCING AGAIN AT THE POINT OF BEGINNING; RUN THENCE S. 31°39'50" E., ALONG SAID WESTERLY RIGHT-OF-WAY LINE OF THE GULF OF MEXICO DRIVE, 392.42 FEET TO A CONCRETE MONUMENT; RUN THENCE S. 58°15'40" W., 553.69 FEET MORE OR LESS TO INTERSECT THE WATERS OF THE GULF OF MEXICO, MEANDER THENCE NORTHWESTERLY ALONG THE WATERS OF THE GULF OF MEXICO, A DISTANCE OF 392.4 FEET MORE OR LESS TO ABOVE DESIGNATED POINT "X".

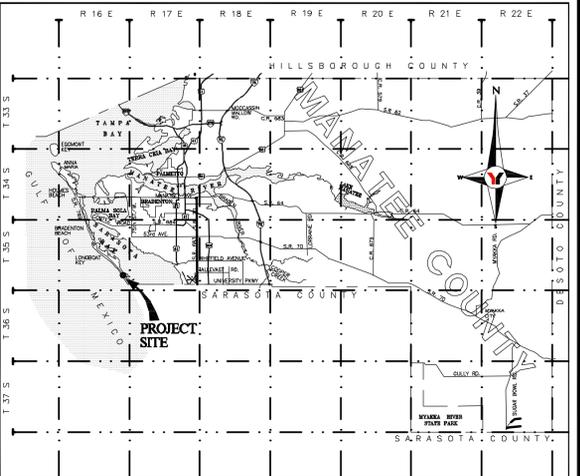
LESS AND EXCEPT: A 10 FOOT WIDE STRIP OF LAND ALONG THE SOUTHEASTERLY BOUNDARY OF THE ABOVE DESCRIBED PROPERTY BEING ALL THAT PORTION OF SAID PROPERTY LYING BETWEEN THE SOUTHEASTERLY BOUNDARY LINE OF SAID PROPERTY AND A LINE PARALLEL THEREOF LYING 10 FEET NORTHWESTERLY OF THE SOUTHEASTERLY BOUNDARY.



POINT OF COMMENCEMENT

INTERSECTION OF THE NORTH LINE OF SECTION 36-355-15E WITH THE WESTERLY R/W LINE OF GULF OF MEXICO DRIVE. (CONCRETE MONUMENT FOUND-BROKEN)

POINT OF BEGINNING



VICINITY MAP (NOT TO SCALE)

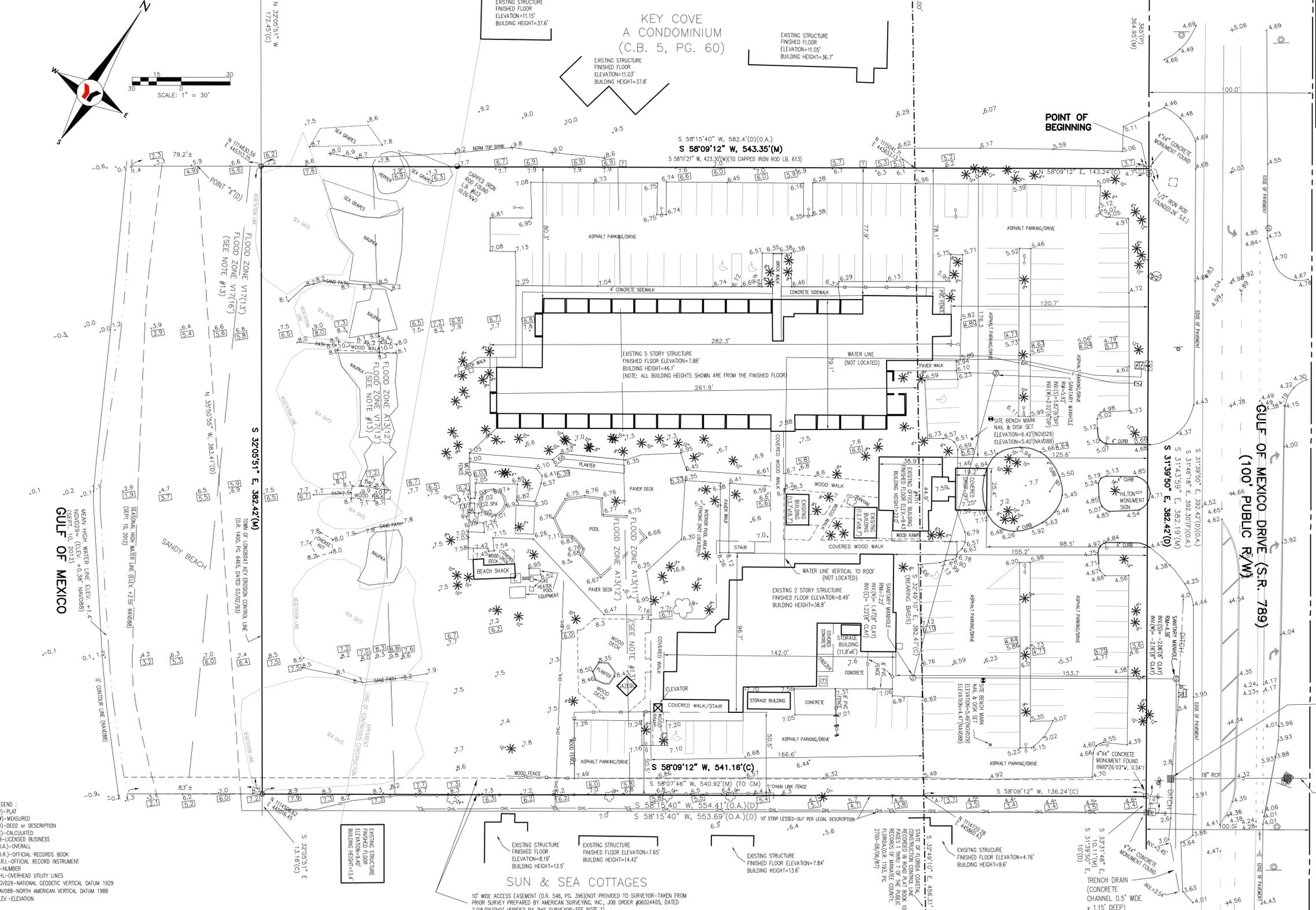
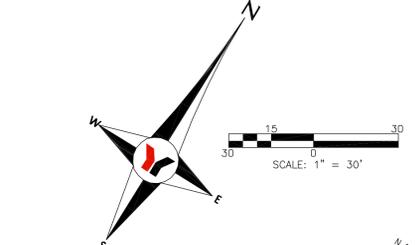
SURVEYOR'S REPORT

- THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF A CURRENT TITLE REPORT AND THEREFORE MAY NOT NECESSARILY INDICATE ALL ENCUMBRANCES AFFECTING SUBJECT PROPERTY.
- THERE ARE NO VISIBLE ENCROACHMENTS EXCEPT AS SHOWN. FOUNDATIONS BENEATH THE SURFACE OF THE GROUND THAT MAY ENCRUCH HAVE NOT BEEN LOCATED.
- THE LOCATION AND EXISTENCE OF UNDERGROUND UTILITIES AND UNDERGROUND FOUNDATIONS OR ANY OTHER PERTINENT ATTRIBUTES TO SUBJECT PROPERTY (IF ANY) NOT ABSTRACTED AS PART OF THIS SURVEY, EXCEPT AS SHOWN.
- BEARINGS BASED ON COASTAL CONSTRUCTION CONTROL LINE, AS SHOWN.
- SUBJECT TO ALL RESTRICTIONS, RIGHTS OF WAY AND EASEMENTS OF RECORD, IF ANY.
- PROPERTY CONTAINS 4.76 ACRES, MORE OR LESS, AS MEASURED TO THE EROSION CONTROL LINE.
- REUSE OF DOCUMENTS: THIS DOCUMENT IS AN INSTRUMENT OF SERVICE IN RESPECT OF THE PROJECT TO WHICH IT APPLIES AND ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY GEORGE F. YOUNG, INC. (GYI) FOR THE SPECIFIC PURPOSES INTENDED WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO GYI AND USER SHALL INDEMNIFY AND HOLD HARMLESS GYI FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM. ANY SUCH VERIFICATION OR ADAPTATION WILL ENTITILE GYI TO FURTHER COMPENSATION AT RATES TO BE AGREED UPON BY USER AND GYI.
- THE EXPECTED USE OF THE LAND, AS CLASSIFIED IN THE FLORIDA MINIMUM TECHNICAL STANDARDS (5J-17-F.A.C.), IS SUBURBAN. THE MINIMUM RELATIVE DISTANCE ACCURACY FOR THIS TYPE OF BOUNDARY SURVEY IS 1 FOOT IN 7,500 FEET. THE ACCURACY OBTAINED BY MEASUREMENT AND CALCULATION OF A CLOSED GEOMETRIC FIGURE FOR THIS SURVEY WAS FOUND TO EXCEED THIS REQUIREMENT.
- THE EXISTING ELEVATIONS SHOWN WERE BASED ON NOS STATION A6 9191 (GIS 086) WITH A PUBLISHED ELEVATION OF 15.024 NAVD 1988. ELEVATIONS SHOWN ARE ALSO REFERENCED TO COASTAL CONSTRUCTION CONTROL LINE MONUMENT 13-84-B-14 WITH A PUBLISHED ELEVATION OF +5.58', NAVD 1929.
- COORDINATES SHOWN ARE BASED ON THE STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, NATIONAL GEODETIC SURVEY CONTROL POINT G15-086 WAS OBSERVED WITH A STATE PLANE COORDINATE OF N: 111541.23, E: 448059.66 NAD 83(1999 ADJUSTMENT).
- THIS BOUNDARY & TOPOGRAPHIC SURVEY MEETS THE MINIMUM TECHNICAL STANDARDS FOR SURVEYING IN THE STATE OF FLORIDA AS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO CHAPTER 472 OF THE FLORIDA STATUTES AND CHAPTER 5J-17 AND 62B-33 OF THE FLORIDA ADMINISTRATIVE CODE AND IS TO SUPPORT AN APPLICATION FOR CONSTRUCTION SEAWARD OF THE STATE OF FLORIDA COASTAL CONSTRUCTION CONTROL LINE.
- ADDITIONAL SANITARY MANHOLES AND CLEAN-OUTS WITHIN THE PROPERTY WERE NOT VISIBLE, POSSIBLY UNDER ASPHALT?
- THE FLOOD ZONE LINES SHOWN ARE APPROXIMATE AND WERE SCALED FROM A 1"=900' TOWN OF LONGBOAT KEY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 123126-0008-0, MAP REVISED DATE MAY 18, 1992. THE FLOOD ZONE AND BASE FLOOD ELEVATION SHOULD BE VERIFIED BY THE LOCAL BUILDING DEPARTMENT AND F.E.M.A. AGENT.
- THE SITE ADDRESS IS 4711 GULF OF MEXICO DRIVE, LONGBOAT KEY, FL., MANATEE COUNTY TAX PARCEL IDENTIFICATION NUMBER 8011300004.

SYMBOL LEGEND

□ CONCRETE MONUMENT FOUND	⊗ GAS METER
● IRON PIPE FOUND	⊕ SANITARY MANHOLE
● CAPPED IRON ROD FOUND	⊕ METAL LIGHT POLE
○ CAPPED IRON ROD SET L.B. 021	⊕ WATER METER
⊗ IRON ROD FOUND	⊕ TELEPHONE PAD
⊕ NAIL & DISK SET L.B. 021	⊕ TRANSFORMER
⊕ STORM INLET	⊕ WATER VALVE
⊕ EXISTING SPOT ELEVATION NVD29	⊕ WOOD POWER POLE
⊕ EXISTING SPOT ELEVATION NAVD88	⊕ GAS WITNESS POST
⊕ BENCH	⊕ WIRE PULL BOX
⊕ FLAG POLE	⊕ TREE
⊕ HANDICAP PARKING	⊕ BACKFLOW PREVENTER
⊕ POST	⊕ ELECTRIC SERVICE
⊕ SIGN	⊕ FIRE HYDRANT
⊕ SITE BENCH MARK	⊕ GUY ANCHOR

\*NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER\*



LEGEND:  
 (P)-PLAT  
 (M)-MEASURED  
 (D)-DEED OR DESCRIPTION  
 (C)-CALCULATED  
 (L)-LICENSED BUSINESS  
 (O.A.)-ORIGINAL  
 (O.R.)-OFFICIAL RECORDS BOOK  
 O.R.I.-OFFICIAL RECORD INSTRUMENT  
 # -NUMBER  
 O.H.L.-OVERHEAD UTILITY LINES  
 N.O.D.S.-NATIONAL GEODETIC VERTICAL DATUM 1929  
 NAVD88-NORTH AMERICAN VERTICAL DATUM 1988  
 ELEV.-ELEVATION

NO.	BY	DATE	DESCRIPTION
1	P.L.	9/20/12	REVISE SYMBOL LEGEND (WPP & GAS WITNESS)
2	P.L.	10/29/12	ADDITIONAL SAN. MANHOLE/WATERLINE & ROAD STRIPING (PN PLOT)
3	P.L.	10/30/12	REV. STORM PIPE SIZES OFFSITE PER FOOT RECORD DATA
4	P.L.	11/14/12	SCALE IN FLOOD ZONE

NO.	BY	DATE	DESCRIPTION
6	JFE	9/10/12	CREW CHIEF
7	P.L.	9/10/12	DRAWN
8	MEB	9/12/12	CHECKED
9	349/7		FIELD BOOK
10	9/10/12		FIELD DATE

INITIALS	DATE	PREPARED FOR:
JFE	9/10/12	OPROCK LONGBOAT FEE, LLC
P.L.	9/10/12	1000 MARKET STREET, BUILDING 1, SUITE 300
MEB	9/12/12	PORTSMOUTH, NEW HAMPSHIRE 03801
		PHONE: (603)-559-2187

**George F. Young, Inc.**  
 10540 PORTAL CROSSING, SUITE 105, BRADENTON, FLORIDA 34211  
 PHONE (941) 747-2981 FAX (941) 747-7234  
 BUSINESS ENTITY L821

ARCHITECTURE-ENGINEERING-ENVIRONMENTAL-LANDSCAPE-PLANNING-SURVEYING-UTILITIES  
 GAINESVILLE-LAKEWOOD RANCH-ORLANDO-PALM BEACH GARDENS-ST. PETERSBURG-TAMPA-VENICE

**LONGBOAT KEY HOTEL**  
 4711 GULF OF MEXICO DRIVE  
 BOUNDARY & TOPOGRAPHIC SURVEY

SECTION 36, TOWNSHIP 35 S., RANGE 16 E.

JOB NO. 0971004401  
 SHEET NO. S1 OF S1



GULF OF MEXICO DRIVE

T-6  
HIGH DENSITY  
TOURIST RESORT

R-4MX  
MULTI-FAMILY  
MIXED RESIDENTIAL

T-6  
HIGH DENSITY  
TOURIST RESORT



**SITE DEVELOPMENT PLANS**

LONGBOAT KEY HOTEL  
4711 GULF OF MEXICO DRIVE  
AERIAL SITE PLAN

NO.	BY	DATE	DESCRIPTION
1	PSN	5/6/13	REVISED PER FDEP REVIEW COMMENTS
2	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE
3	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS
4	PSN	10/14/13	ISSUE FOR GMP
5	PSN	10/18/13	ISSUE FOR TOWN OF LBK PLANNING AND ZONING REVIEW

NO.	BY	DATE	DESCRIPTION
6			
7			
8			
9			
10			

INITIALS	DATE
DESIGN NICKOLS	10/23/12
DRAWN NICKOLS	10/23/12
CHECKED ADLER	10/25/12
QUALITY CHK	
SCALE	1"=50'

PREPARED FOR:  
**OPROCK LONGBOAT FEE, LLC**  
1000 MARKET STREET, BUILDING 1, SUITE 300  
PORTSMOUTH, NEW HAMPSHIRE 03801  
PHONE: (603)-559-2187

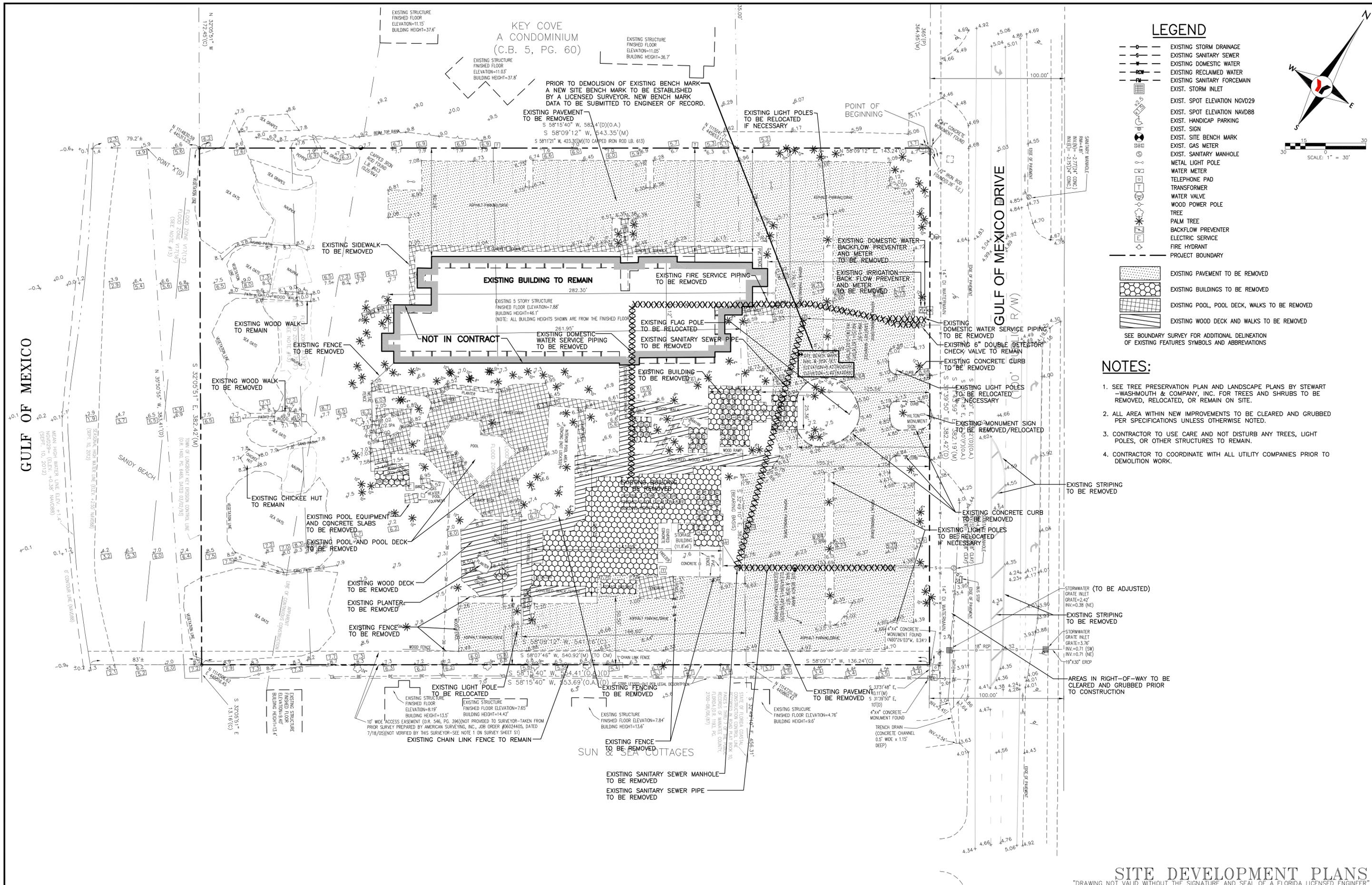
**George F. Young, Inc.**  
10540 PORTAL CROSSING, SUITE 105 BRADENTON, FLORIDA 34211  
PHONE (941) 747-2961 FAX (941) 747-7234  
ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 21  
ARCHITECTURE-ENGINEERING-ENVIRONMENTAL-LANDSCAPE-PLANNING-SURVEYING-UTILITIES  
GAINESVILLE-LAKEWOOD RANCH-ORLANDO-PALM BEACH GARDENS-ST. PETERSBURG-TAMPA-VENICE

TIMOTHY A. DOVE, P.E. No. 43268  
DATE

SECTION 36, TOWNSHIP 35 S., RANGE 16 E.

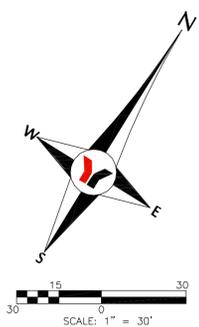
JOB NO. 0971004401  
SHEET NO. C1

FILE: \\PROJECTS\0971004401\0971004401\0971004401.dwg  
 USER: PHOENIX  
 PLOT: 10/22/13 13:36:00



**LEGEND**

- EXISTING STORM DRAINAGE
  - EXISTING SANITARY SEWER
  - EXISTING DOMESTIC WATER
  - EXISTING RECLAIMED WATER
  - EXISTING SANITARY FORCEMAIN
  - EXIST. STORM INLET
  - EXIST. SPOT ELEVATION NGVD29
  - EXIST. SPOT ELEVATION NAVD88
  - EXIST. HANDICAP PARKING
  - EXIST. SIGN
  - EXIST. SITE BENCH MARK
  - EXIST. GAS METER
  - EXIST. SANITARY MANHOLE
  - METAL LIGHT POLE
  - WATER METER
  - TELEPHONE PAD
  - TRANSFORMER
  - WATER VALVE
  - WOOD POWER POLE
  - TREE
  - PALM TREE
  - BACKFLOW PREVENTER
  - ELECTRIC SERVICE
  - FIRE HYDRANT
  - PROJECT BOUNDARY
- 
- [Pattern] EXISTING PAVEMENT TO BE REMOVED
  - [Pattern] EXISTING BUILDINGS TO BE REMOVED
  - [Pattern] EXISTING POOL, POOL DECK, WALKS TO BE REMOVED
  - [Pattern] EXISTING WOOD DECK AND WALKS TO BE REMOVED
- SEE BOUNDARY SURVEY FOR ADDITIONAL DELINEATION OF EXISTING FEATURES SYMBOLS AND ABBREVIATIONS



**NOTES:**

1. SEE TREE PRESERVATION PLAN AND LANDSCAPE PLANS BY STEWART-WASHMOUTH & COMPANY, INC. FOR TREES AND SHRUBS TO BE REMOVED, RELOCATED, OR REMAIN ON SITE.
2. ALL AREA WITHIN NEW IMPROVEMENTS TO BE CLEARED AND GRUBBED PER SPECIFICATIONS UNLESS OTHERWISE NOTED.
3. CONTRACTOR TO USE CARE AND NOT DISTURB ANY TREES, LIGHT POLES, OR OTHER STRUCTURES TO REMAIN.
4. CONTRACTOR TO COORDINATE WITH ALL UTILITY COMPANIES PRIOR TO DEMOLITION WORK.

GULF OF MEXICO

GULF OF MEXICO DRIVE

KEY COVE  
A CONDOMINIUM  
(C.B. 5, PG. 60)

SUN & SEA COTTAGES

NO.	BY	DATE	DESCRIPTION
1	PSN	5/6/13	REVISED PER FDEP REVIEW COMMENTS
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3	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS
4	PSN	10/14/13	ISSUE FOR GMP
5	PSN	10/18/13	ISSUE FOR TOWN OF LKZ PLANNING AND ZONING REVIEW

NO.	BY	DATE	DESCRIPTION
6	PSN	10/23/12	DESIGN
7	NICKOLS	10/23/12	DRAWN
8	JORDAN	10/25/12	CHECKED
9	ADLER		QUALITY CHK
10			SCALE

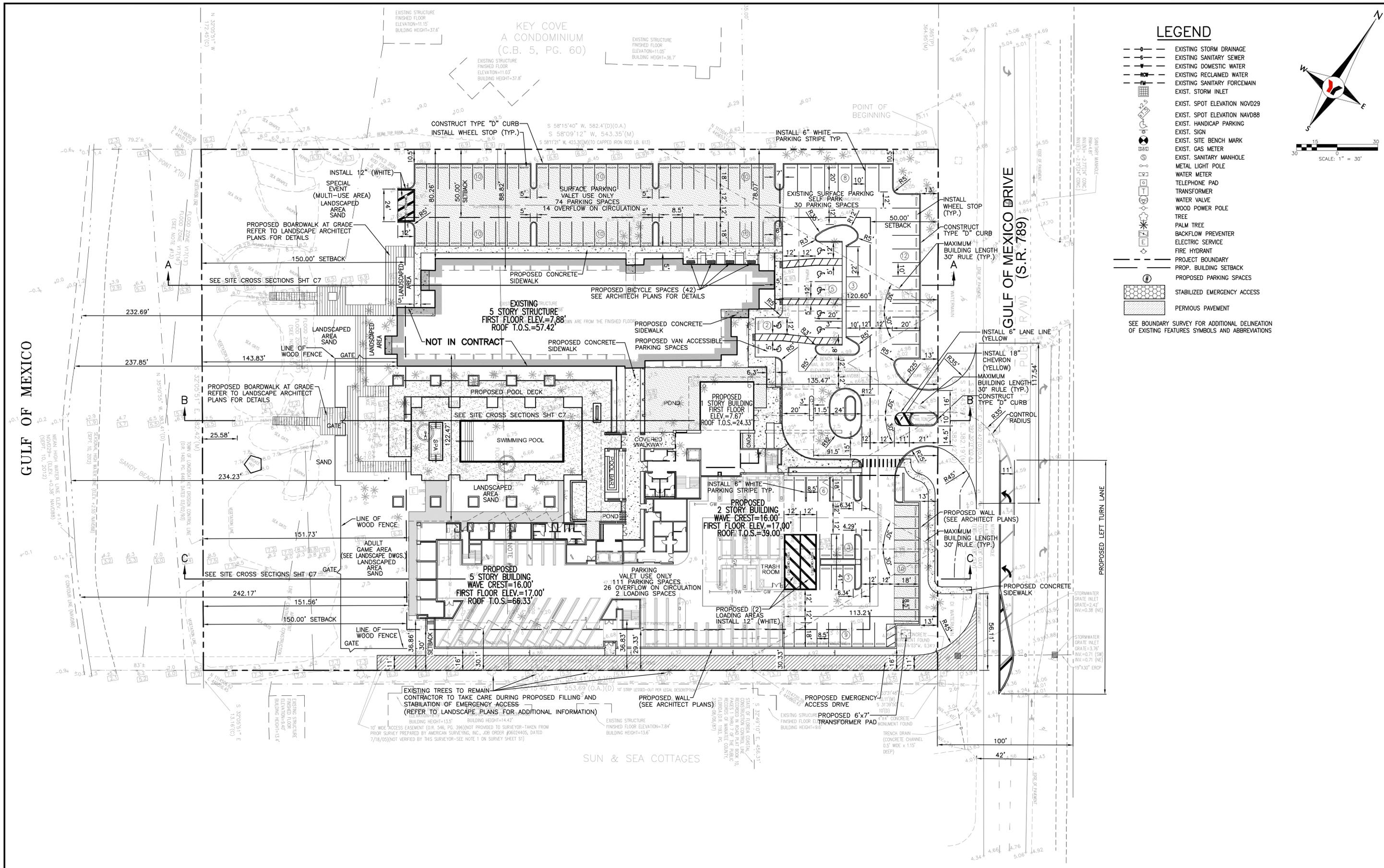
PREPARED FOR:  
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PHONE: (603)-559-2187

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ARCHITECTURE-ENGINEERING-ENVIRONMENTAL-LANDSCAPE-PLANNING-SURVEYING-UTILITIES  
SINCE 1919

DATE: \_\_\_\_\_  
THOMAS A. DOVE, P.E. No. 43268

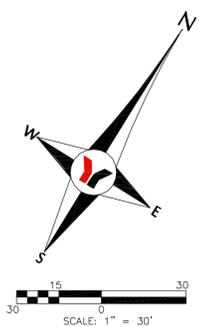
**SITE DEVELOPMENT PLANS**  
"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"  
**LONGBOAT KEY HOTEL**  
4711 GULF OF MEXICO DRIVE  
**DEMOLITION PLAN**

JOB NO. 0971004401  
SHEET NO. C2  
SECTION 36, TOWNSHIP 35 S., RANGE 16 E.



**LEGEND**

- EXISTING STORM DRAINAGE
  - S— EXISTING SANITARY SEWER
  - W— EXISTING DOMESTIC WATER
  - R— EXISTING RECLAIMED WATER
  - F— EXISTING SANITARY FORCEMAIN
  - EXIST. STORM INLET
  - EXIST. SPOT ELEVATION NGVD29
  - EXIST. SPOT ELEVATION NAVD88
  - EXIST. HANDICAP PARKING
  - EXIST. SIGN
  - EXIST. SITE BENCH MARK
  - EXIST. GAS METER
  - EXIST. SANITARY MANHOLE
  - METAL LIGHT POLE
  - WATER METER
  - TELEPHONE PAD
  - TRANSFORMER
  - WATER VALVE
  - WOOD POWER POLE
  - TREE
  - PALM TREE
  - BACKFLOW PREVENTER
  - ELECTRIC SERVICE
  - FIRE HYDRANT
  - PROJECT BOUNDARY
  - PROP. BUILDING SETBACK
  - PROPOSED PARKING SPACES
  - STABILIZED EMERGENCY ACCESS
  - PERVIOUS PAVEMENT
- SEE BOUNDARY SURVEY FOR ADDITIONAL DELINEATION OF EXISTING FEATURES SYMBOLS AND ABBREVIATIONS



GULF OF MEXICO

GULF OF MEXICO DRIVE (S.R. 789)

PROPOSED LEFT TURN LANE

NO.	BY	DATE	DESCRIPTION
1	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE
2	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS
3	PSN	10/14/13	ISSUE FOR GMP
4	PSN	10/18/13	ISSUE FOR TOWN OF LKB PLANNING AND ZONING REVIEW

NO.	BY	DATE	DESCRIPTION
6			
7			
8			
9			
10			

INITIALS	DATE	PREPARED FOR:
DESIGN	NICKOLS 10/23/12	OPROCK LONGBOAT FEE, LLC 1000 MARKET STREET, BUILDING 1, SUITE 300 PORTSMOUTH, NEW HAMPSHIRE 03801 PHONE: (603)-539-2187
DRAWN	NICKOLS 10/23/12	
CHECKED	JORDAN 10/25/12	
QUALITY CHK	ADLER	
SCALE		

**George F. Young, Inc.**  
 10540 PORTAL CROSSING, SUITE 105 BRADENTON, FLORIDA 34211  
 PHONE (941) 747-2981 FAX (941) 747-7234  
 ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 21  
 ARCHITECTURE-ENGINEERING-ENVIRONMENTAL-LANDSCAPE-PLANNING-SURVEYING-UTILITIES  
 GAINESVILLE-LAKEWOOD RANCH-ORLANDO-PALM BEACH GARDENS-ST. PETERSBURG-TAMPA-VENICE

WIDHAY A. DOVE, P.E. No. 43268  
 DATE

**SITE DEVELOPMENT PLANS**  
 "DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"  
**LONGBOAT KEY HOTEL**  
 4711 GULF OF MEXICO DRIVE  
**CIVIL SITE PLAN**

SECTION 36, TOWNSHIP 35 S., RANGE 16 E.

JOB NO. 0971004401  
 SHEET NO. C3

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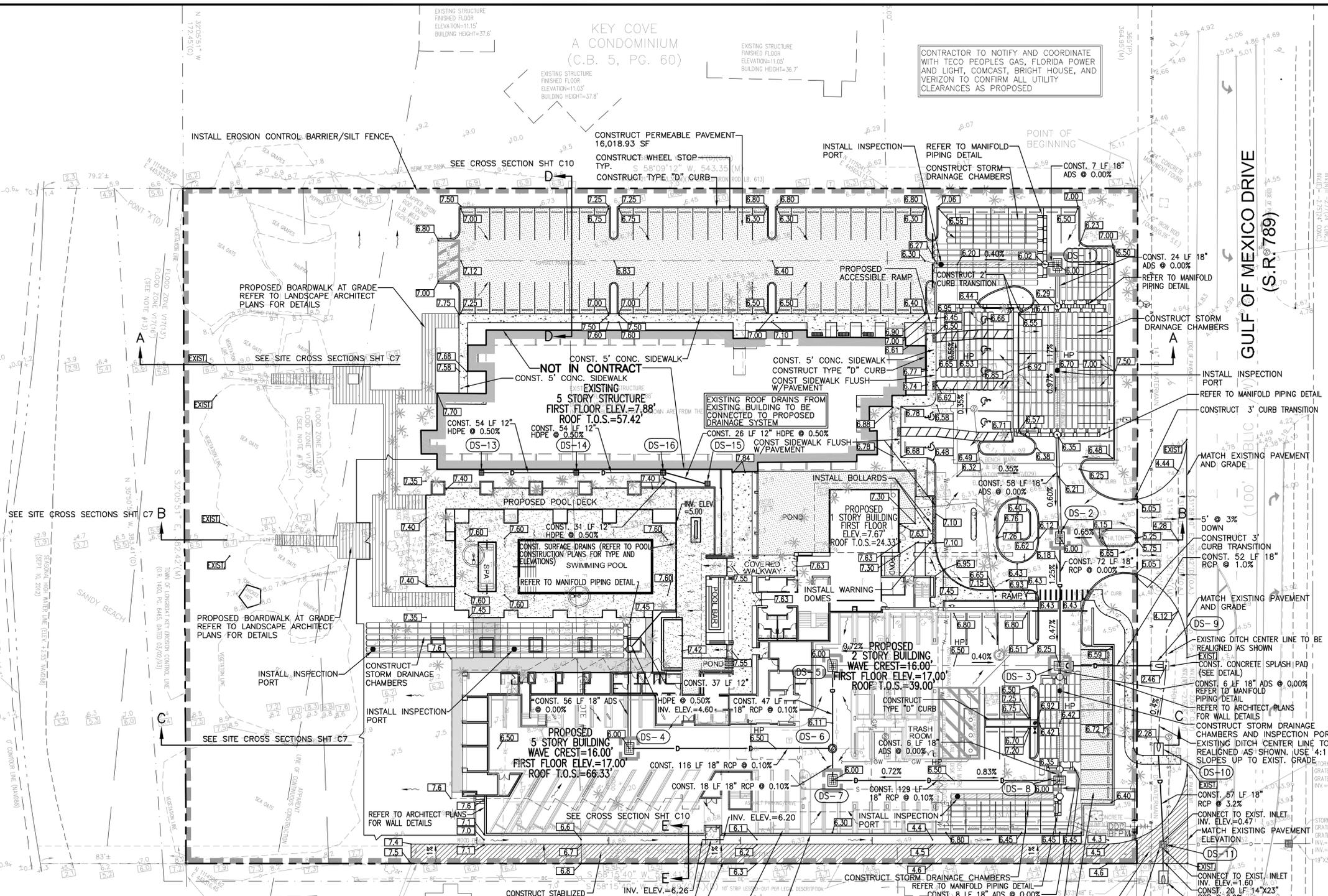
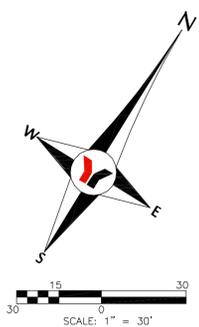


GULF OF MEXICO

GULF OF MEXICO DRIVE (S.R. 789)

LEGEND

- EXISTING STORM DRAINAGE
- EXISTING SANITARY SEWER
- EXISTING DOMESTIC WATER
- EXISTING RECLAIMED WATER
- EXISTING SANITARY FORCEMAIN
- EXIST. STORM INLET
- EXIST. SPOT ELEVATION NGVD29
- EXIST. SPOT ELEVATION NAVD88
- EXIST. HANDICAP PARKING
- EXIST. SIGN
- EXIST. SITE BENCH MARK
- EXIST. GAS METER
- EXIST. SANITARY MANHOLE
- METAL LIGHT POLE
- WATER METER
- TELEPHONE PAD
- TRANSFORMER
- WATER VALVE
- WOOD POWER POLE
- TREE
- PALM TREE
- BACKFLOW PREVENTER
- ELECTRIC SERVICE
- FIRE HYDRANT
- PROJECT BOUNDARY
- PROPOSED STORM DRAINAGE
- PROPOSED STORM INLET
- PROPOSED STORM MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED FIRE LINE
- PROPOSED DOMESTIC WATER
- PROPOSED FIRE HYDRANT
- PROPOSED BLOWOFF
- PROPOSED GATE VALVE
- PROPOSED METER
- PROPOSED HIGH POINT
- PROPOSED LOW POINT
- PROPOSED GRADE BREAK
- PROPOSED SPOT ELEVATION
- PROPOSED DRAINAGE STRUCTURE ID
- PROPOSED DRAINAGE PIPE ID
- PROPOSED SHEET FLOW
- PROPOSED SWALE FLOW
- EROSION CONTROL BARRIER/SILT FENCE
- STABILIZED EMERGENCY ACCESS
- PERVIOUS PAVEMENT



NOTES:

- SILT BARRIERS, HAY BALES OR SIMILAR EFFECTIVE EROSION CONTROL BARRIERS WILL BE REQUIRED IN ANY AREA WHERE EROSION OR SILTATION MAY CAUSE DAMAGE TO TREES.
- SILT FENCE BARRIER TO BE INSTALLED ALONG PERIMETER OF SITE PER THIS PLAN PRIOR TO ANY DEMOLITION OR CONSTRUCTION ON THIS SITE.
- ALL STORMWATER RUNOFF FROM DEVELOPMENT SITE SHALL MEET APPLICABLE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFMD) AND/OR FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP).
- ALL ELEVATIONS AREA BASED ON NGVD.
- ROOF DRAINS FROM THE PROPOSED 5 STORY BUILDING WILL BE CONNECTED BELOW GRADE TO THE PROPOSED STORM DRAINAGE CHAMBERS.

- DS-1 CONST. TYPE "C" INLET W/TRAFFIC BEARING STEEL GRATE FDOT INDEX NO. 232 GRATE ELEV.=6.00 INV. ELEV.=3.33 (SE) INV. ELEV.=3.33 (SW)
- DS-2 CONST. TYPE "C" INLET W/TRAFFIC BEARING STEEL GRATE FDOT INDEX NO. 232 GRATE ELEV.=6.00 INV. ELEV.=3.33 (NW) INV. ELEV.=3.33 (SE)
- DS-3 CONST. CONTROL STRUCTURE (SEE DETAIL) W/TRAFFIC BEARING STEEL GRATE GRATE ELEV.=6.25 INV. ELEV.=3.33 (NW) INV. ELEV.=3.00 (SW) INV. ELEV.=3.33 (SE)

- DS-4 CONST. TYPE "C" INLET W/TRAFFIC BEARING STEEL GRATE FDOT INDEX NO. 232 GRATE ELEV.=6.00 INV. ELEV.=3.60 (NW) INV. ELEV.=3.60 (NE)
- DS-5 CONST. TYPE "C" INLET W/TRAFFIC BEARING STEEL GRATE FDOT INDEX NO. 232 GRATE ELEV.=6.00 INV. ELEV.=3.63 (SE)
- DS-6 CONST. STANDARD JUNCTION BOX RIM ELEV.=6.06 INV. ELEV.=3.48 (NW) INV. ELEV.=3.48 (SW) INV. ELEV.=3.48 (SE)

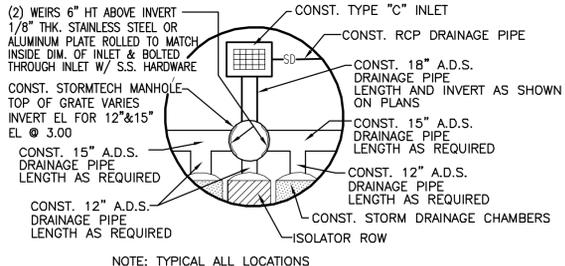
- DS-7 CONST. TYPE "C" INLET W/TRAFFIC BEARING STEEL GRATE FDOT INDEX NO. 232 GRATE ELEV.=6.00 INV. ELEV.=3.46 (NW) INV. ELEV.=3.46 (NE)
- DS-8 CONST. TYPE "C" INLET W/TRAFFIC BEARING STEEL GRATE FDOT INDEX NO. 232 GRATE ELEV.=6.00 INV. ELEV.=3.33 (NW) INV. ELEV.=3.33 (SE) INV. ELEV.=3.33 (NE)
- DS-9 CONST. MITERED END SECTION (4:1) INV. ELEV.= 2.46

- DS-10 CONST. MITERED END SECTION (4:1) INV. ELEV.= 2.28
- DS-11 EXISTING STORM INLET REPLACE GRATE WITH TRAFFIC BEARING STEEL GRATE GRATE ELEV.= 4.12 (ADJUSTED) INV. ELEV.=0.38 (NE)(EXIST.) INV. ELEV.=1.60 (SE) INV. ELEV.=0.47 (NW)
- NOTE: STORM INLET DS-11 WILL BE EVALUATED FOR TRAFFIC BEARING LOAD STATUS AND REPLACED IF NECESSARY, AS SHOWN ON THE FINAL CONSTRUCTION PLANS.

- DS-14 CONST. IN-LINE YARD DRAIN NYLOPLAST OR APPROVED EQUAL GRATE ELEV.=7.60 INV. ELEV.= 5.42 (SW) INV. ELEV.= 5.42 (NE)
- DS-12 CONST. MITERED END SECTION (4:1) INV. ELEV.=2.00
- DS-13 CONST. IN-LINE YARD DRAIN NYLOPLAST OR APPROVED EQUAL GRATE ELEV.=7.60 INV. ELEV.= 5.69 (NE)

- DS-15 CONST. IN-LINE YARD DRAIN NYLOPLAST OR APPROVED EQUAL GRATE ELEV.=7.15 INV. ELEV.= 5.50 (W)
- DS-16 CONST. IN-LINE YARD DRAIN NYLOPLAST OR APPROVED EQUAL GRATE ELEV.=7.60 INV. ELEV.= 5.15 (E) INV. ELEV.= 5.15 (SW) INV. ELEV.= 5.15 (SE)

NOTE: SEE CIVIL SITE PLAN SHEET C3 FOR PAVEMENT MARKING PLAN



MANIFOLD PIPING DETAIL

NTS

SITE DEVELOPMENT PLANS

"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"

LONGBOAT KEY HOTEL  
4711 GULF OF MEXICO DRIVE  
PAVING, GRADING, DRAINAGE/SOIL EROSION SEDIMENTATION PLAN

JOB NO. 0971004401  
SHEET NO. C5

SECTION 36, TOWNSHIP 35S., RANGE 16E.

NO.	BY	DATE	REVISION	DESCRIPTION
1	PSN	5/6/13	REVISED PER FDEP REVIEW COMMENTS	
2	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE	
3	PSN	7/15/13	REVISED PER FDOT REVIEW COMMENTS	
4	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS	
5	PSN	9/27/13	ADD ACCESSIBLE CROSSWALKS AND SIDEWALK	

NO.	BY	DATE	REVISION	DESCRIPTION
6	PSN	10/14/13	ISSUE FOR GMP	
7	PSN	10/18/13	ISSUE FOR TOWN OF LK PLANNING AND ZONING REVIEW	
8				
9				
10				

DESIGN	INITIALS	DATE
DESIGN	JORDAN	10/23/12
DRAWN	NICKOLS	10/23/12
CHECKED	JORDAN	10/25/12
QUALITY CHK	ADLER	
SCALE		

PREPARED FOR:  
**OPROCK LONGBOAT FEE, LLC**  
1000 MARKET STREET, BUILDING 1, SUITE 300  
PORTSMOUTH, NEW HAMPSHIRE 03801  
PHONE: (603)-559-2187

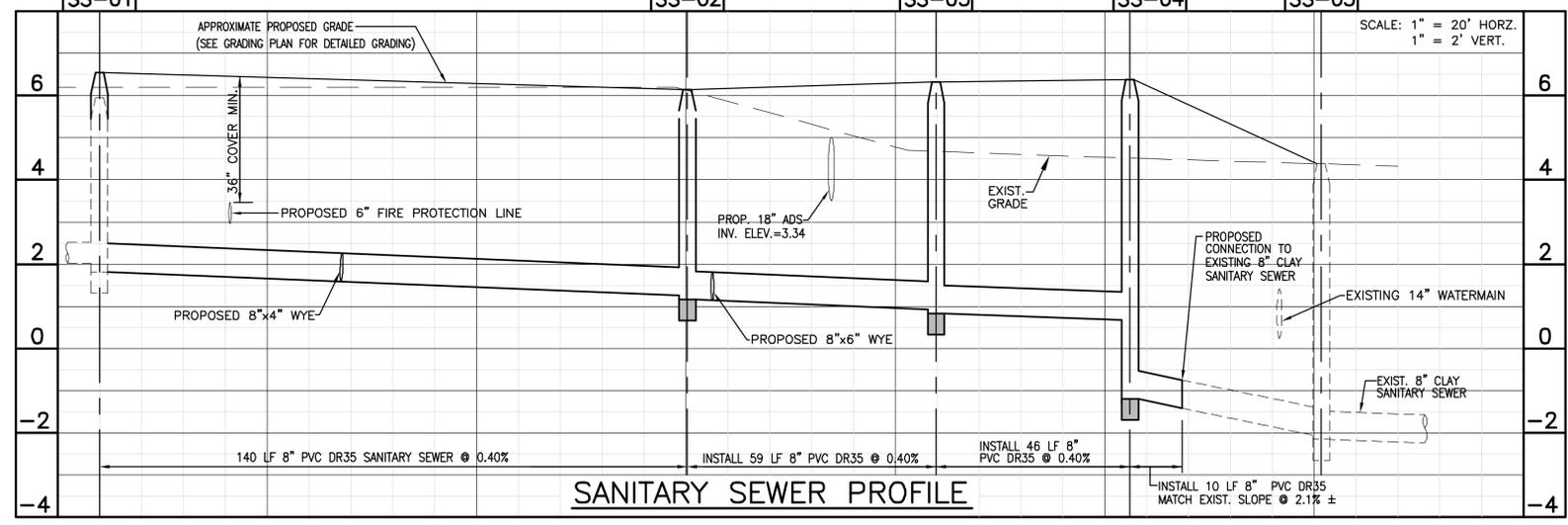
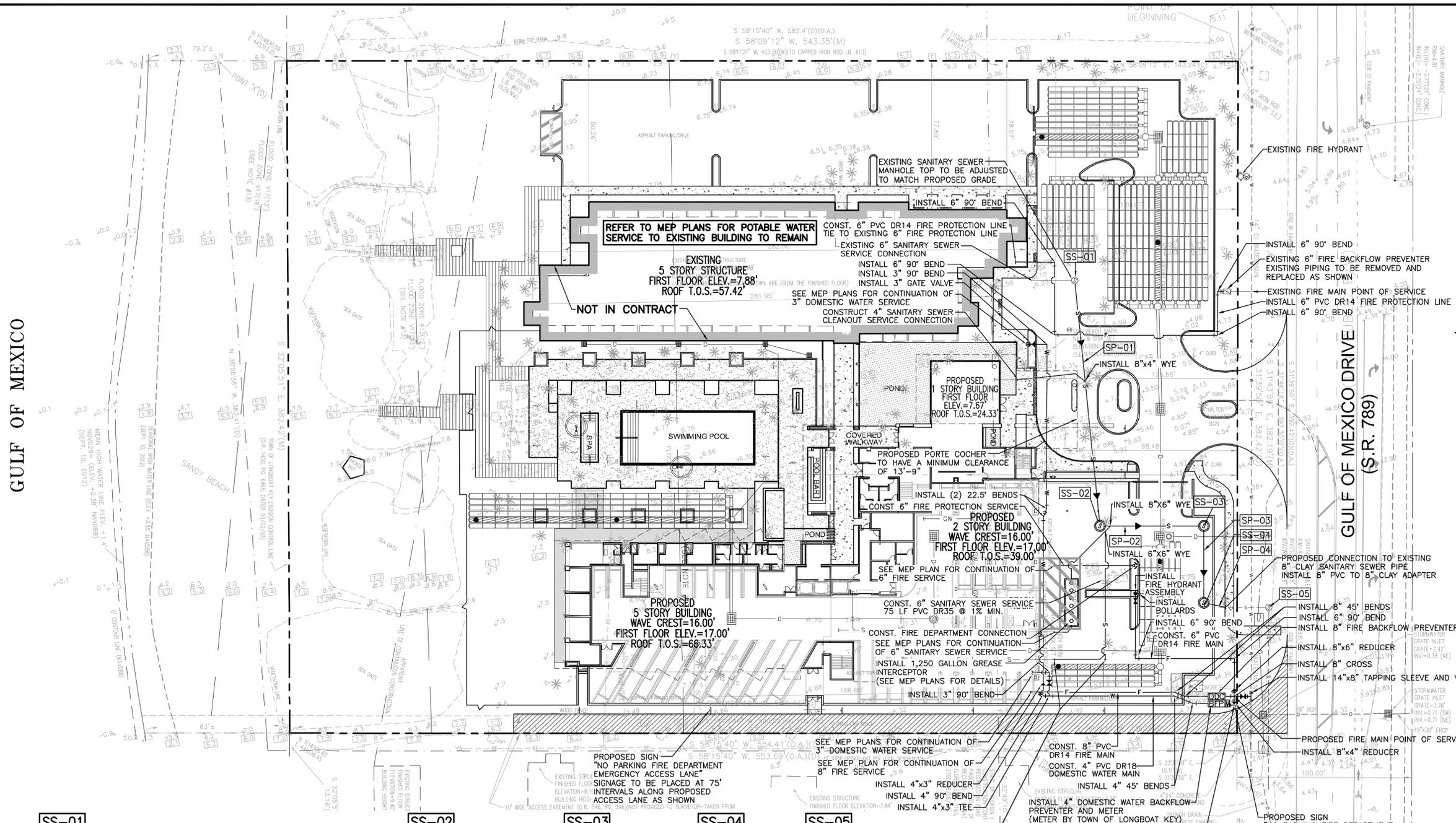
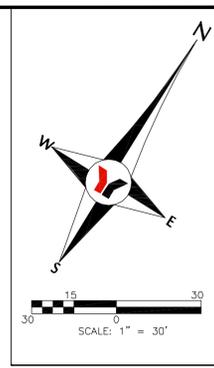
**George F. Young, Inc.**  
10540 PORTAL CROSSING, SUITE 105, BRADENTON, FLORIDA 34211  
PHONE (941) 747-2981 FAX (941) 747-7234  
ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 21  
ARCHITECTURE-ENGINEERING-ENVIRONMENTAL-LANDSCAPE-PLANNING-SURVEYING-UTILITIES  
GAINESVILLE-LAKEWOOD RANCH-ORLANDO-PALM BEACH GARDENS-S.T. PETERSBURG-TAMPA-VENICE

DATE: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

GULF OF MEXICO

**LEGEND**

- EXISTING STORM DRAINAGE
- EXISTING SANITARY SEWER
- EXISTING DOMESTIC WATER
- EXISTING RECLAIMED WATER
- EXISTING SANITARY FORCEMAIN
- EXIST. STORM INLET
- EXIST. SPOT ELEVATION NGVD29
- EXIST. SPOT ELEVATION NAVD88
- EXIST. HANDICAP PARKING
- EXIST. SIGN
- EXIST. SITE BENCH MARK
- EXIST. GAS METER
- EXIST. SANITARY MANHOLE
- METAL LIGHT POLE
- WATER METER
- TELEPHONE PAD
- TRANSFORMER
- WATER VALVE
- WOOD POWER POLE
- TREE
- PALM TREE
- BACKFLOW PREVENTER
- ELECTRIC SERVICE
- FIRE HYDRANT
- PROJECT BOUNDARY
- PROPOSED STORM DRAINAGE
- PROPOSED STORM INLET
- PROPOSED STORM MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED SIAMSE CONNECTION
- PROPOSED FIRE LINE
- PROPOSED DOMESTIC WATER
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED BLOWOFF ASSEMBLY
- PROPOSED GATE VALVE
- PROPOSED DOMESTIC WATER METER
- PROPOSED SANITARY STRUCTURE ID
- PROPOSED SANITARY PIPE ID
- STABILIZED EMERGENCY ACCESS



**NOTES:**

- 1) 2" HDPE DOMESTIC WATERMAIN SHALL BE SDR 11, PRESSURE RATING 160 P.S.I.
- 2) 6" AND 8" WATERMAIN SHALL CONFORM TO THE REQUIREMENTS OF AWWA STANDARD C-900, DR-18 WITH WORKING PRESSURE OF 150 P.S.I.G.
- 3) ALL WATERMAIN SHALL BE COLOR CODE BLUE.
- 4) GRAVITY SANITARY SEWER PIPE SHALL BE P.V.C. SDR-35, ASTM D-3034, COLOR CODE GREEN.
- 5) ALL ELEVATIONS ARE BASED ON NGVD.
- 6) ALL NEW MANHOLE COVERS SHALL BE RUBBER "O" RING TYPE AND PLUMBERS TAPE SHALL BE INSTALLED ON ALL CLEAN-OUT CAPS.
- 7) FOR ALL 6" FIRE PROTECTION SERVICES REFER TO FIRE PROTECTION PLAN PROVIDED BY WADSWORTH O'NEAL ENGINEERING.
- 8) STANDPIPES SHALL BE INSTALLED AS STRUCTURES ARE BUILT AND FIRE DEPARTMENT ACCESS TO CONNECTIONS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION PER NFPA 1, CHAPTER 16.
- 9) SEE MEP PLANS FOR GAS SERVICE.

NO.	BY	DATE	DESCRIPTION
1	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE
2	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS
3	PSN	10/14/13	ISSUE FOR GMP
4	PSN	10/14/13	REVISE FIRE SERVICE TO 8" PER MEP
5	PSN	10/18/13	ISSUE FOR TOWN OF LBK PLANNING AND ZONING REVIEW

NO.	BY	DATE	DESCRIPTION
6			
7			
8			
9			
10			

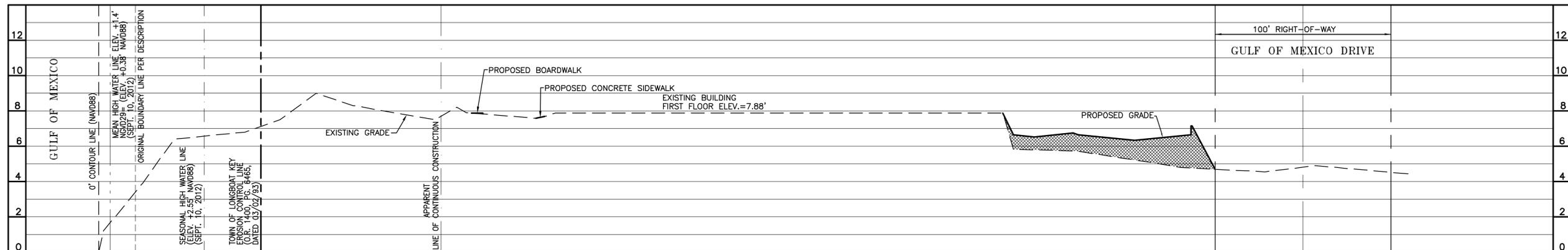
INITIALS	DATE
NICKOLS	10/23/12
NICKOLS	10/23/12
JORDAN	10/25/12
ADLER	10/25/12

PREPARED FOR:  
**OPROCK LONGBOAT FEE, LLC**  
 1000 MARKET STREET, BUILDING 1, SUITE 300  
 PORTSMOUTH, NEW HAMPSHIRE 03801  
 PHONE: (603)-539-2187

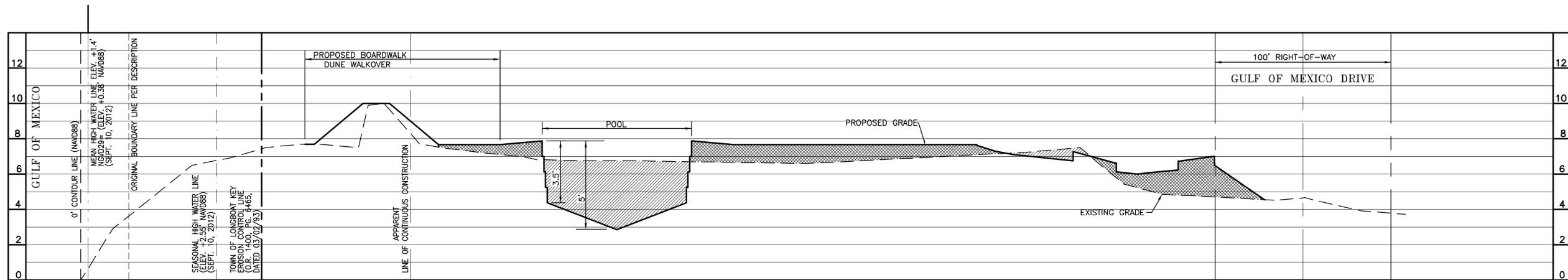
**George F. Young, Inc.**  
 10540 PORTAL CROSSING, SUITE 105 BRADENTON, FLORIDA 34211  
 PHONE (941) 747-2981 FAX (941) 747-7234  
 ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 21  
 ARCHITECTURE-ENGINEERING-ENVIRONMENTAL-LANDSCAPE-PLANNING-SURVEYING-UTILITIES  
 GAINESVILLE-LAKEWOOD RANCH-ORLANDO-PALM BEACH GARDENS-ST. PETERSBURG-TAMPA-VENICE

THOMAS A. DOVE, P.E. No. 43268  
 DATE

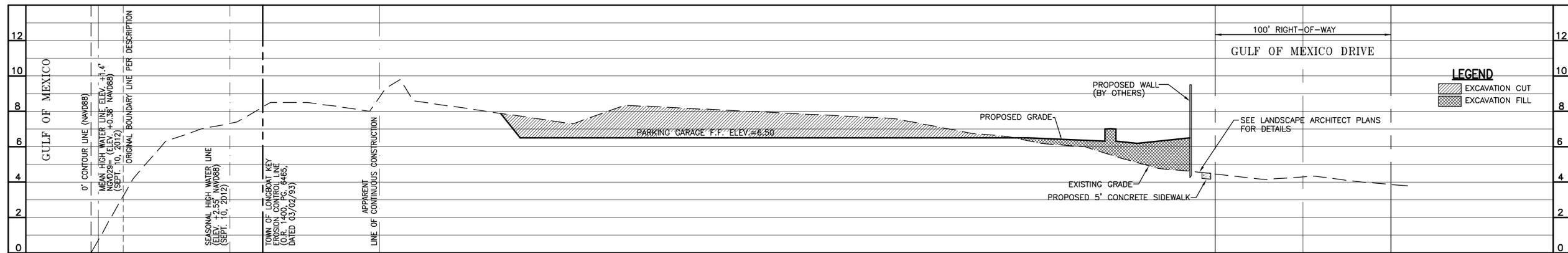
**SITE DEVELOPMENT PLANS**  
 "DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"  
**LONGBOAT KEY HOTEL**  
 4711 GULF OF MEXICO DRIVE  
**WATER AND SANITARY SEWER PLAN**  
 SECTION 36, TOWNSHIP 35 S., RANGE 16 E.  
 JOB NO. 0971004401  
 SHEET NO. C6



**SECTION A-A**  
SCALE: 1"=30' HORIZONTAL  
1"=3' VERTICAL



**SECTION B-B**  
SCALE: 1"=30' HORIZONTAL  
1"=3' VERTICAL



**SECTION C-C**  
SCALE: 1"=30' HORIZONTAL  
1"=3' VERTICAL

NOTE: ALL ELEVATIONS AREA BASED ON NGVD.

NO.	BY	DATE	DESCRIPTION
1	PSN	5/6/13	REVISED PER FDEP REVIEW COMMENTS
2	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE
3	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS
4	PSN	10/14/13	ISSUE FOR GMP
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NO.	BY	DATE	DESCRIPTION
6			
7			
8			
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10			

INITIALS	DATE
DESIGN	NICKOLS 10/23/12
DRAWN	NICKOLS 10/23/12
CHECKED	JORDAN 10/25/12
QUALITY CHK	ADLER
SCALE	

PREPARED FOR:  
**OPROCK LONGBOAT FEE, LLC**  
1000 MARKET STREET, BUILDING 1, SUITE 300  
PORTSMOUTH, NEW HAMPSHIRE 03801  
PHONE: (603)-539-2187

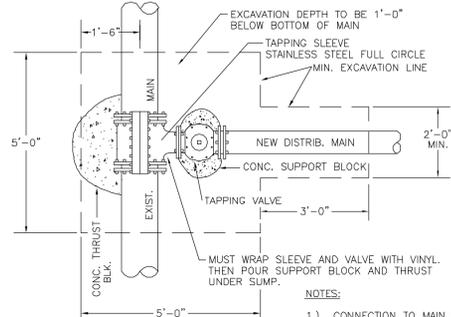
**George F. Young, Inc.**  
10540 PORTAL CROSSING, SUITE 105 BRADENTON, FLORIDA 34211  
PHONE (941) 747-2961 FAX (941) 747-7234  
ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 21  
ARCHITECTURE-ENGINEERING-ENVIRONMENTAL-LANDSCAPE-PLANNING-SURVEYING-UTILITIES  
GAINESVILLE-LAKEWOOD RANCH-ORLANDO-PALM BEACH GARDENS-ST. PETERSBURG-TAMPA-VENICE

TIMOTHY A. DOVE, P.E. No. 43268  
DATE

**SITE DEVELOPMENT PLANS**  
"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"  
**LONGBOAT KEY HOTEL**  
4711 GULF OF MEXICO DRIVE  
**SITE CROSS SECTIONS**  
SECTION 36, TOWNSHIP 35 S., RANGE 16 E.

JOB NO. 0971004401  
SHEET NO. C7

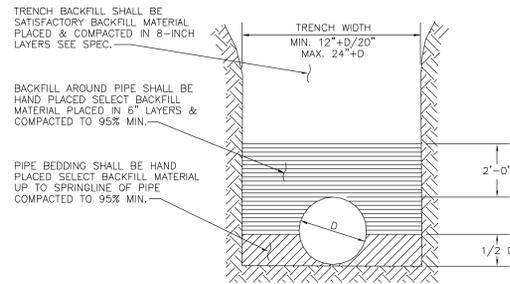
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- NOTES:**
- 1.) CONNECTION TO MAIN SHALL BE MADE AFTER ENGINEER AND TOWN OF LONGBOAT KEY HAVE APPROVED ALL NEW WATER MAIN CONSTRUCTION. CONTRACTOR IS TO NOTIFY THE ENGINEER 48 HOURS PRIOR TO TAPPING.
  - 2.) SEE SPECS. FOR TAPPING SLEEVE AND VALVE. ANY SUBSTITUTIONS SHALL BE APPROVED BY THE ENGINEER AND TOWN OF LONGBOAT KEY PRIOR TO CONSTRUCTION.

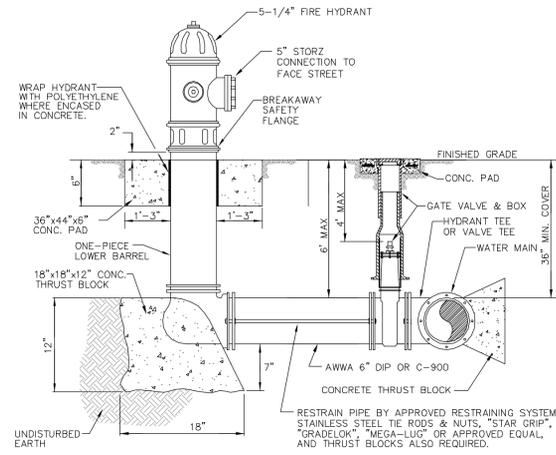
**MAIN CONNECTION DETAIL (TAPPED)**

N.T.S.



**TYPE 2  
PIPE BEDDING DETAIL  
FOR DUCTILE IRON & P.V.C. PIPE**

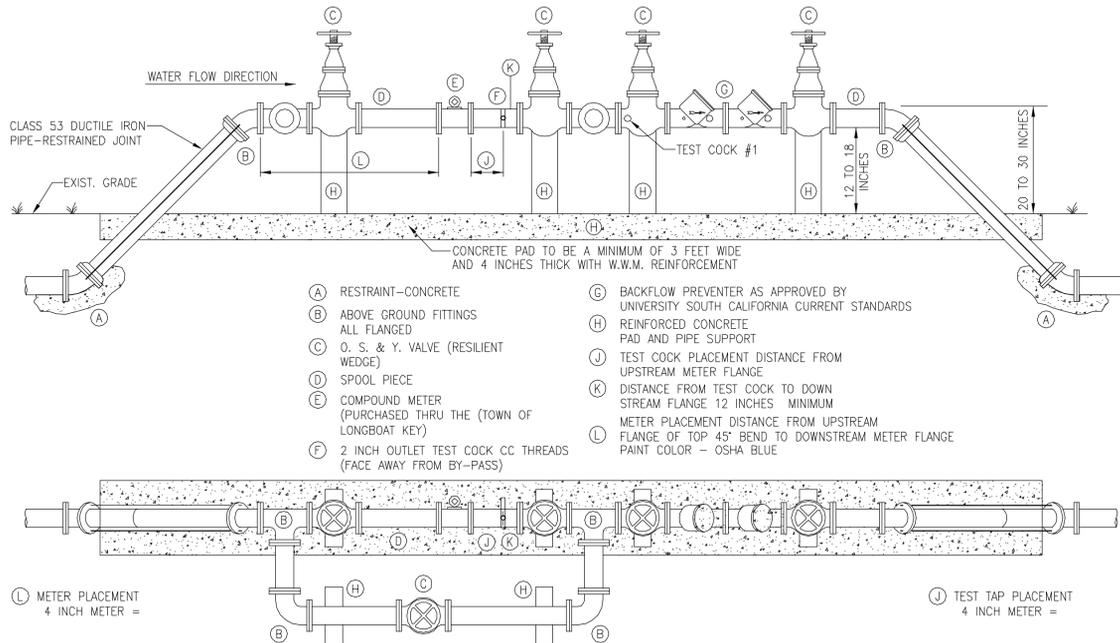
N.T.S.



- NOTES:**
1. WEEPHOLES SHALL BE EXCLUDED FROM THE FIRE HYDRANT.
  2. HYDRANTS SHALL BE FUSION BONDED EPOXY COATED SAFETY YELLOW.
  3. HYDRANTS SHALL BE DUCTILE IRON CONSTRUCTION.
  4. FIRE HYDRANTS SHALL BE PLACED SO THAT STORM WATER FLOWS AWAY FROM THE HYDRANT.
  5. FIRE HYDRANTS SHALL BE CONSTRUCTED WITH "GROUND LINE" SET TO FINISHED GRADES AS ESTABLISHED IN THE FIELD. NORMAL BURY IS 3 FEET OF COVER FOR ALL WATER LINES.
  6. FIRE HYDRANTS MAY BE CONSTRUCTED WITH "GRADELOCK" OFFSET FITTING.
  7. RAISED REFLECTIVE PAVEMENT MARKER (BLUE) FOR POTABLE WATER SHALL BE INSTALLED AT CENTERLINE OF PAVEMENT ADJACENT TO EACH HYDRANT.
  8. PRECAST CONCRETE THRUST BLOCKS & PADS SHALL NOT BE USED.
  9. FIRE HYDRANT VALVE SHALL BE FASTENED DIRECTLY TO TEE.
  10. IN-LINE VALVES SHOULD BE LOCATED AT HYDRANT TEES.
  11. FIRE HYDRANTS NEAR ROADWAYS AND PARKING AREAS ARE TO BE PROTECTED WITH TWO OR MORE, CONC. FILLED, 6" DIA. STEEL PIPES, PAINTED O.S.H.A. YELLOW, EXTENDING FROM 6'-0" BELOW GRADE TO APPROX. 6' ABOVE TOP OF HYDRANTS.

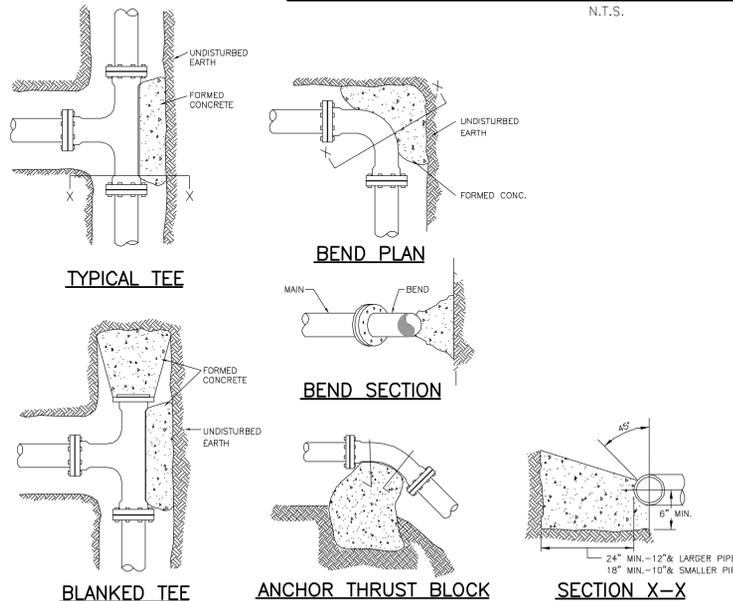
**FIRE HYDRANT WITH TYPICAL GATE VALVE**

N.T.S.



**4" WATER SUPPLY BACKFLOW PREVENTER DETAIL**

N.T.S.



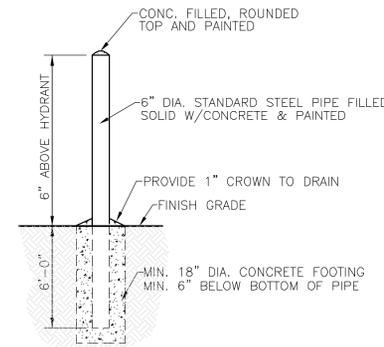
**THRUST BLOCK BEARING AREA TABLE (SQ. FT.)**

SIZE OF PIPE	TEE & PLUGS	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
4"	2.5	2.5	1.5	1.0	1.0
6"	5.0	5.0	3.0	1.5	1.0
8"	9.0	9.0	5.0	2.5	1.5
10"	14.0	14.0	7.5	4.0	2.0
12"	20.0	20.0	11.0	5.5	3.0
14"	27.0	27.0	15.0	7.5	4.0
16"	35.0	35.0	19.0	10.0	5.0

- NOTE:**
- 1.) WRAP ALL FITTINGS WITH PLASTIC BEFORE POURING THRUST BLOCKS. ALL THRUST BLOCKS MUST BE LEFT OPEN FOR INSPECTION BY THE ENGINEER & TOWN OF LONGBOAT KEY.
  - 2.) ALL BEARING SURFACE TO BE CARRIED TO UNDISTURBED SOIL.
  - 3.) THESE TABLES SHOW MINIMUM SIZE THRUST BLOCKS FOR GOOD SOIL WITH A 2,000 P.S.F. SOIL BEARING (A-1 THRU A-3 CLEAN SAND AND GRAVELS).
  - 4.) POOR SOIL (A-1 THRU A-8, SILTY SOILS, CLAYS, MUCK & PEAT) WILL REQUIRE LARGER THRUST BLOCKS.
  - 5.) THRUST BLOCK SIZES BASED ON 150 P.S.I. HYDROSTATIC TEST PRESSURE.

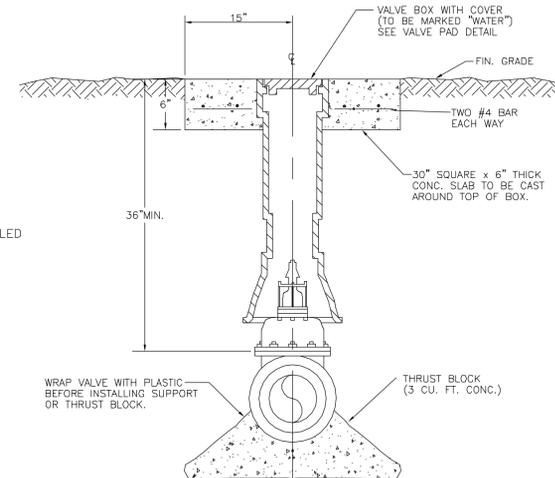
**TYPICAL THRUST BLOCKING DETAIL FOR WATERMAIN**

N.T.S.



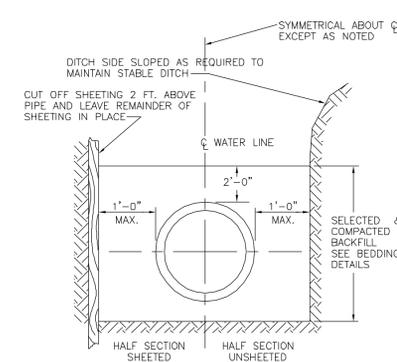
**BOLLARD DETAIL**

N.T.S.



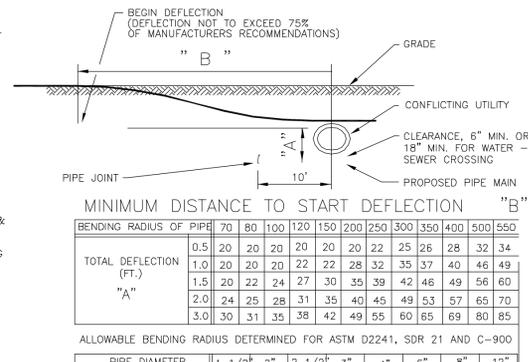
**GATE VALVE INSTALLATION DETAIL**

N.T.S.



**WATER LINE PIPE TRENCH DETAIL**

N.T.S.



**MINIMUM DISTANCE TO START DEFLECTION "B"**

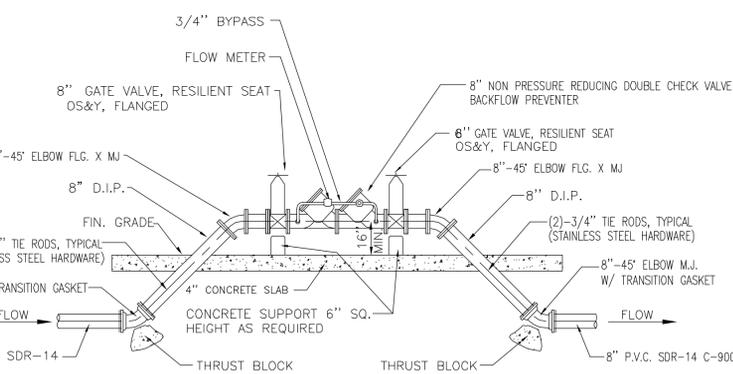
BENDING RADIUS OF PIPE (FT.)	70	80	100	120	150	200	250	300	350	400	500	550
TOTAL DEFLECTION (FT.)	0.5	20	20	20	20	20	22	25	26	28	32	34
"A"	1.0	20	20	22	22	28	32	35	37	40	46	49
	1.5	20	24	24	27	30	39	42	46	49	56	60
	2.0	24	25	28	31	35	40	45	49	53	57	65
	3.0	30	31	35	38	42	49	55	60	65	69	80

ALLOWABLE BENDING RADIUS DETERMINED FOR ASTM D2241, SDR 21 AND C-900

PIPE DIAMETER (IN.)	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	12"
ALLOWABLE BENDING RADIUS (FT.)	70	80	100	120	150	220	290	430
	C-900					200	300	400

**UTILITY CROSSING DETAIL**

N.T.S.



**FIRE LINE/BACKFLOW PREVENTER DETAIL**

N.T.S.

NO.	BY	DATE	DESCRIPTION
1	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE
2	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS
3	PSN	10/14/13	ISSUE FOR GMP
4	PSN	10/14/13	REVISE FIRE BFP TO 8" PER MEP
5	PSN	10/18/13	ISSUE FOR TOWN OF LBK PLANNING AND ZONING REVIEW

NO.	BY	DATE	DESCRIPTION
6			
7			
8			
9			
10			

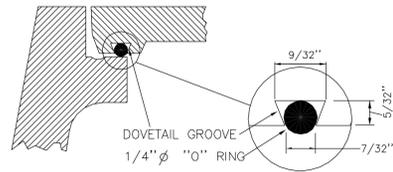
INITIALS	DATE
DESIGN	NICKOLS 10/23/12
DRAWN	NICKOLS 10/23/12
CHECKED	JORDAN 10/25/12
QUALITY CHK	ADLER
SCALE	

PREPARED FOR:  
**OPROCK LONGBOAT FEE, LLC**  
1000 MARKET STREET, BUILDING 1, SUITE 300  
PORTSMOUTH, NEW HAMPSHIRE 03801  
PHONE: (603)-539-2187

**George F. Young, Inc.**  
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ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 21  
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GAINESVILLE-LAKEWUCH RANCH-ORLANDO-PALM BEACH GARDENS-ST. PETERSBURG-TAMPA-VENICE  
Since 1919

THOMAS A. DOVE, P.E. No. 43268  
DATE

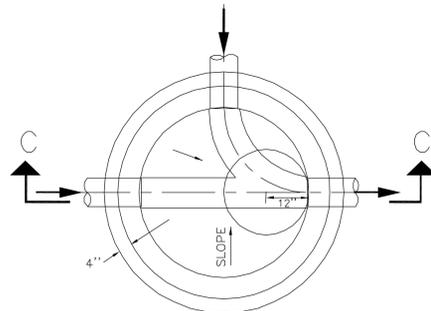
**SITE DEVELOPMENT PLANS**  
"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"  
**LONGBOAT KEY HOTEL**  
4711 GULF OF MEXICO DRIVE  
**WATER SYSTEM DETAILS**  
SECTION 36, TOWNSHIP 35 S., RANGE 16 E.  
JOB NO. 0971004401  
SHEET NO. C8



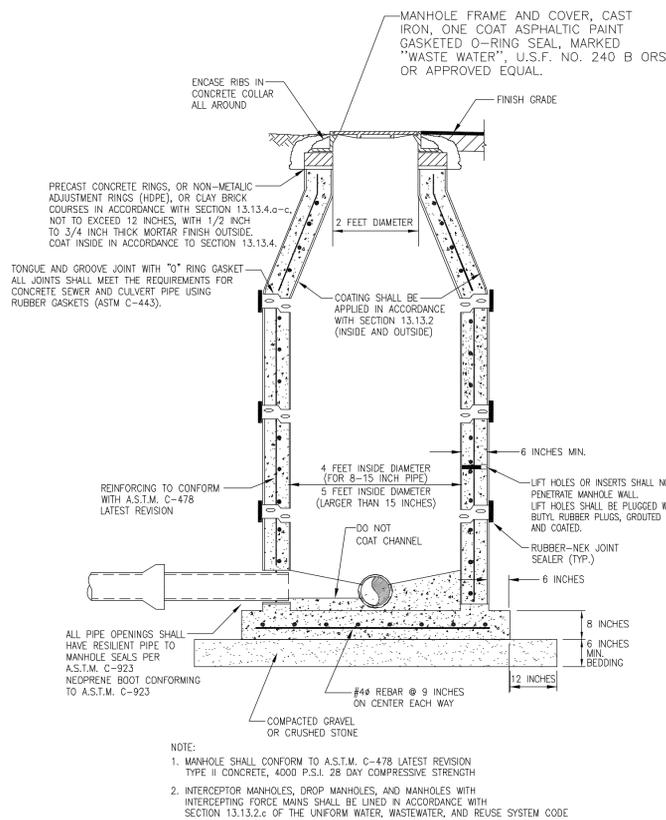
TYPICAL MANHOLE RING & COVER SECTION

DOVETAIL GROOVE DETAIL

N.T.S.



FLOW CHANNEL PLAN



SECTION C-C

STANDARD WASTE WATER PRE-CAST MANHOLE

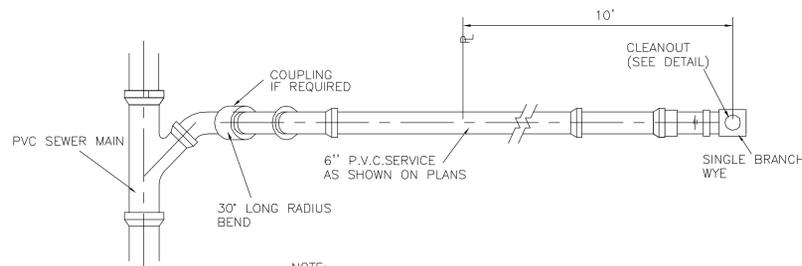
N.T.S.

MANHOLE SPECIFICATIONS:

1. MANHOLES SHALL COMPLY WITH A.S.T.M. SPECS. C-478, LATEST REVISION, "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS," EXCEPT WALL THICKNESS SHALL BE MIN. 6".
2. CONCRETE SHALL BE 4000 P.S.I./28 DAY MIN. STRENGTH, WITH TYPE II CEMENT.
3. HEAVY DUTY MANHOLE RING (6" HIGH) AND COVER SHALL BE TYPE B (DWG. NO. 240, OLD NO. 24) WITH FRAME & DOVETAIL GROOVED COVER (325 LB) TO ACCOMMODATE 1 1/4" DIA. O-RING AS MANUFACTURED BY U.S. FOUNDRY CORP., MIAMI, FLORIDA, OR APPROVED EQUAL, WITH THE WORDS "WASTEWATER" CAST INTO THE COVER.
4. REINFORCING PER A.S.T.M. SPEC. C-478, LATEST REVISION.
5. LEVELING BRICKS TO BE CLAY; MORTAR TO BE 2 PARTS CLEAN SAND AND 1 PART CEMENT WITH NO MORE 1/4 HYDRATED LIME, WITH JOINTS FULL & STRUCK FLUSH.
6. NO STEPS SHALL BE USED.
7. COMPLETELY FILL SPACE BETWEEN PIPES AND MANHOLE WALL WITH CEMENT MORTAR AFTER PIPE IS SET WITH 15 LB. EMBECCO PER 100 LB. CEMENT.

GENERAL NOTES:

1. WHERE WATER & WASTEWATER MAINS CROSS WITH LESS THAN 18" VERTICAL CLEARANCE, THE WASTEWATER PIPE SHALL BE OF EITHER DUCTILE IRON OR CONCRETE ENCASED PVC, (20' MIN.) CENTERED ON THE POINT OF CROSSING.
2. PARALLEL WATER & WASTEWATER MAINS SHALL MAINTAIN A HORIZONTAL SEPARATION OF AT LEAST 10'.
3. WHERE STORMWATER SEWERS CROSS OVER WASTEWATER SEWERS WITH LESS THAN 12" VERTICAL CLEARANCE, THE WASTEWATER PIPE SHALL BE EITHER DUCTILE IRON OR CONCRETE ENCASED PVC, 10' MIN. EITHER SIDE OF CROSSING.

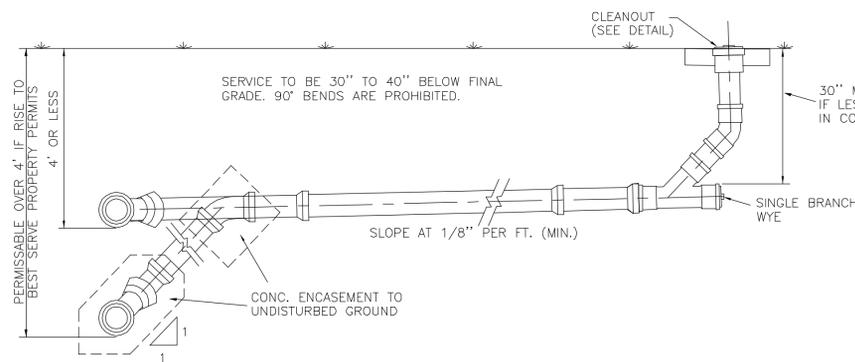


NOTE:

1. WHERE SERVICE CONNECTIONS EXCEED 8' IN DEPTH THE SERVICE WYE SHALL BE ENCASED IN CONCRETE.
2. SEWER SERVICE TO BE STAKED IN THE FIELD BY OR UNDER THE DIRECTION OF A REGISTERED ENGINEER AND/OR LAND SURVEYOR.

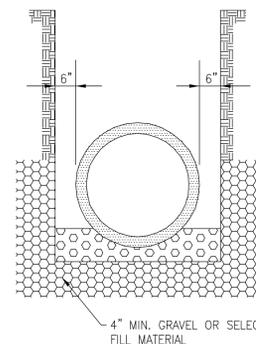
PLAN VIEW SINGLE SERVICE

N.T.S.



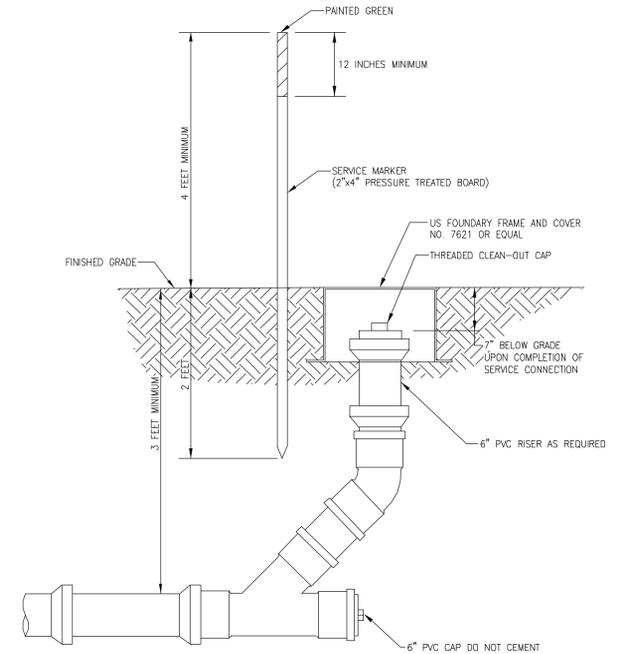
TYPICAL SERVICE CONNECTION

N.T.S.



TRENCH IN ROCK

N.T.S.

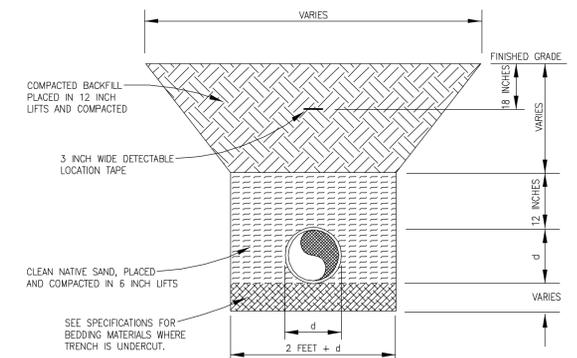


CLEAN OUT DETAIL

N.T.S.

NOTES:

1. TRENCH WIDTH SHALL BE APPROX. EQUAL TO THE PIPE DIA. + 2 FEET OR AS PER AWWA AND THE MANUFACTURER'S RECOMMENDATIONS.
2. PROVIDE SHEETING AND SHORING AS NECESSARY FOR SAFETY.
3. BACKFILL MATERIALS SHALL BE APPROVED BY THE ENGINEER WHERE THE PIPE IS UNDERCUT.
4. WATER, SEWER, AND REUSE MAINS TO BE INSTALLED WITH A MINIMUM 36 INCHES OF COVER.
5. REFER TO LAND DEVELOPMENT REGULATIONS FOR DENSITY REQUIREMENTS.



TRENCH DETAIL

N.T.S.

SITE DEVELOPMENT PLANS

"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"

LONGBOAT KEY HOTEL  
4711 GULF OF MEXICO DRIVE  
SANITARY SEWER DETAILS  
SECTION 36, TOWNSHIP 35 S., RANGE 16 E.

JOB NO. 0971004401

SHEET NO. C9

NO.	BY	DATE	DESCRIPTION
1	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE
2	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS
3	PSN	10/14/13	ISSUE FOR GMP
4	PSN	10/18/13	ISSUE FOR TOWN OF LKZ PLANNING AND ZONING REVIEW

NO.	BY	DATE	DESCRIPTION
6			
7			
8			
9			
10			

INITIALS	DATE
DESIGN	NICKOLS 10/23/12
DRAWN	NICKOLS 10/23/12
CHECKED	JORDAN 10/25/12
QUALITY CHK	ADLER
SCALE	

PREPARED FOR:  
**OPROCK LONGBOAT FEE, LLC**  
1000 MARKET STREET, BUILDING 1, SUITE 300  
PORTSMOUTH, NEW HAMPSHIRE 03801  
PHONE: (603)-559-2187

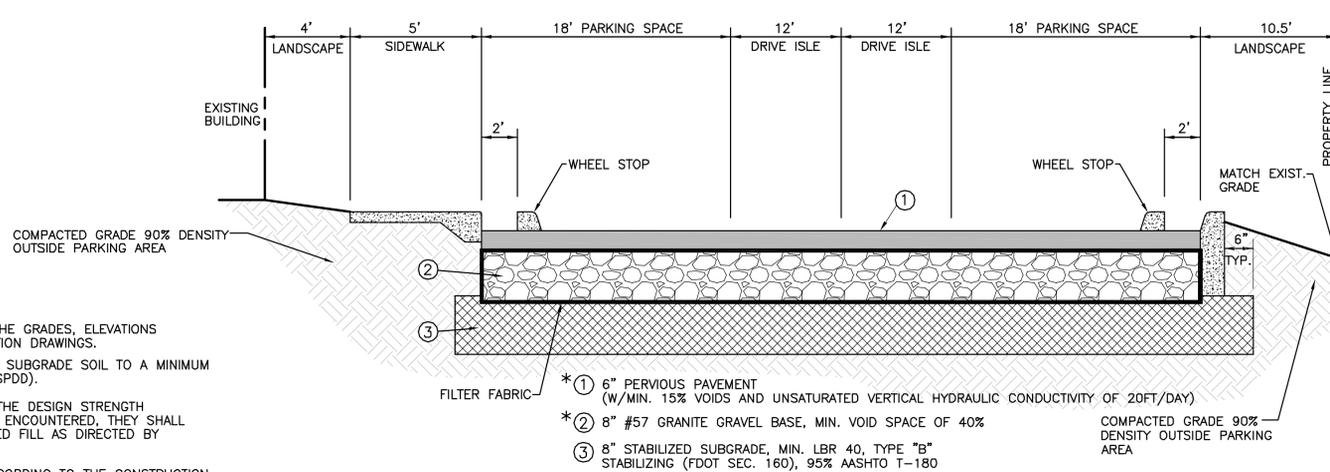


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WIDHAY A. DOVE, P.E. No. 43268  
DATE

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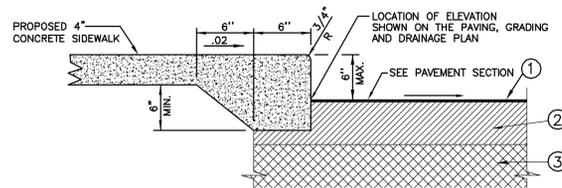


**NOTES:**

- EXCAVATE OR FILL THE SUBGRADE SOIL TO THE GRADES, ELEVATIONS AND DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS.
- COMPACT THE TOP 300 mm (12 in) OF THE SUBGRADE SOIL TO A MINIMUM 98% OF STANDARD PROCTOR DRY DENSITY (SPDD).
- VERIFY THAT THE SUBGRADE SOIL SATISFIES THE DESIGN STRENGTH REQUIREMENTS. IF UNACCEPTABLE SOILS ARE ENCOUNTERED, THEY SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL AS DIRECTED BY THE PROJECT ENGINEER.
- EXPAND GEOWEB<sup>®</sup> SECTIONS, DIMENSIONED ACCORDING TO THE CONSTRUCTION DRAWINGS, INTO POSITION USING STRETCHER FRAMES, TEMPORARY STAKES, OR OTHER SUITABLE METHOD TO TEMPORARILY HOLD IN PLACE. INTERLEAF OR OVERLAP ADJACENT SECTIONS ACCORDING TO WHICH SIDE WALL PROFILES ABUT. ENSURE THAT ALL ADJOINING CELLS ARE FULLY STAPLED.
- PLACE THE SPECIFIED INFILL MATERIAL TO APPROXIMATELY 50 mm (2 in) ABOVE THE CELL WALLS. COMPACT THE INFILL MATERIAL TO A MINIMUM OF 95% SPDD (NOT REQUIRED FOR GEOWEB GRASS PAVING SYSTEMS).

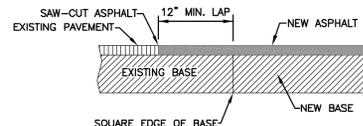
**PERVIOUS PAVEMENT SECTION (SECTION D-D)**

N.T.S.



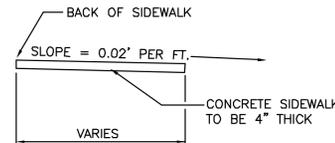
**SIDEWALK/CURB DETAIL**

N.T.S.



**TO PROPOSED NEW PAVEMENT CONNECTION OF EXISTING PAVEMENT**

N.T.S.



**NOTES:**

- ALL ORGANIC MATERIAL & DEBRIS SHALL BE REMOVED & AREA GRADED & COMPACTED PRIOR TO CONCRETE PLACEMENT.
- THE MINIMUM COMPRESSION STRENGTH OF THE CONCRETE SHALL BE 3000 p.s.i. @ 28 DAYS.
- TYPE "A" & "B" JOINTS MAY BE SAW CUT.

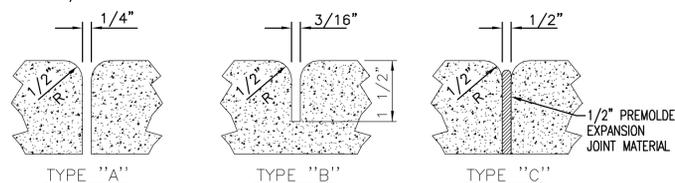
**STANDARD SIDEWALK**

N.T.S.

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
"A"	P.C. AND P.T. OF CURVES, JUNCTION OF EXIST. AND NEW SIDEWALKS
"B"	5'-0" CENTER TO CENTER ON SIDEWALKS
"C"	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES AT INTERVALS NOT TO EXCEED 80 FEET.

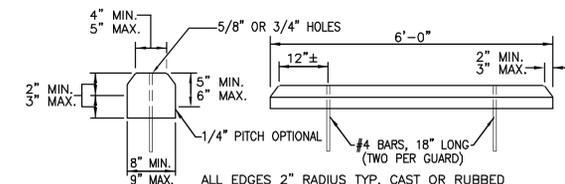
**NOTES:**

- ALL ORGANIC MATERIAL AND DEBRIS SHALL BE REMOVED AND AREA GRADED AND COMPACTED PRIOR TO CONCRETE PLACEMENT.
- THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 3,000 P.S.I. @ 28 DAYS.
- TYPE "A" AND "B" JOINTS MATERIAL MAY BE SAW CUT.



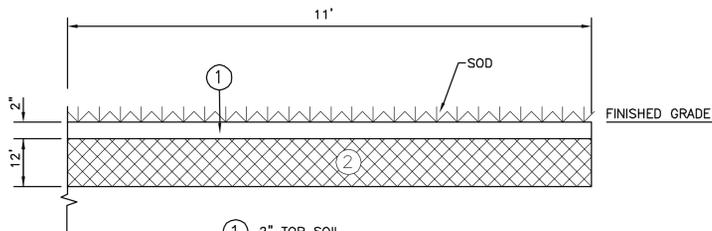
**SIDEWALK JOINTS**

N.T.S.



**CONCRETE BUMPER GUARD**

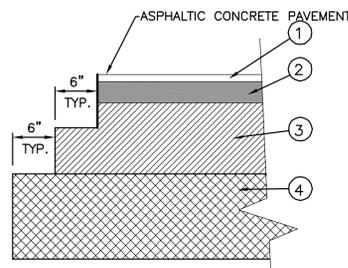
N.T.S.



- 2" TOP SOIL
- 12" THICK STABILIZED SUBGRADE TYPE "B" STABILIZATION LBR 40 MINIMUM, 98% T-180

**SECTION E-E TYPICAL EMERGENCY ACCESS**

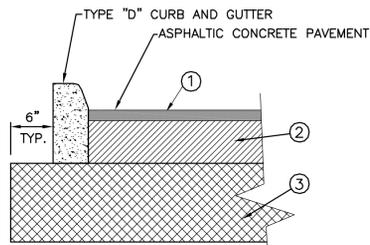
N.T.S.



- 1" THICK, FC-5 SUPERPAVE FRICTION COURSE IN ACCORDANCE WITH F.D.O.T. SECTION 337 (MATCHING EXISTING CONDITIONS)
- 3" SP 12.5 STRUCTURE COURSE IN ACCORDANCE WITH F.D.O.T. SECTION 331
- 10" SHELL BASE OR LIMEROCK BASE COMPACTED TO 98% MAX. DENSITY, LBR 100 OR 6" ASPHALT BASE TYPE B 12.5 IN ACCORDANCE WITH F.D.O.T. SECTIONS, 285, 234
- 12" STABILIZED SUB-GRADE COMPACTED TO 98% MAX. DENSITY LBR 40. IN ACCORDANCE WITH F.D.O.T. SECTION 160

**ASPHALT PAVEMENT DETAIL WITHIN FDOT RIGHT-OF-WAY**

N.T.S.

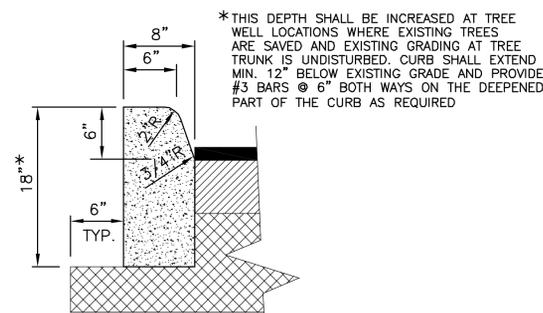


MINIMUM STRUCTURAL NUMBER 3.28 (REFER TO UNIVERSAL ENGINEERING SCIENCES, INC. REPORT # 7978, project # B0392-001-01)

- 1 1/2" ASPHALTIC CONCRETE WEARING SURFACE TYPE S-III, MARSHALL STABILITY 1500
- 6" SHELL BASE OR LIMEROCK BASE COMPACTED TO 98% MAX. DENSITY, LBR 100 OR 6" ASPHALT BASE TYPE B 12.5 IN ACCORDANCE WITH F.D.O.T. SECTIONS, 285, 234
- 8" STABILIZED SUBGRADE, MIN. LBR 40, TYPE "B" STABILIZING (FDOT SEC. 160), 95% AASHTO T-180

**ASPHALT PAVEMENT DETAIL WITHIN PROJECT LIMITS**

N.T.S.



**TYPE "D" CURB DETAIL**

N.T.S.

**GENERAL NOTES:**

- ALL TRAFFIC CONTROL PAVEMENT MARKINGS SHALL BE ALKYD THERMOPLASTIC 90 MILS IN THICKNESS.
- A TWO FOOT WIDE STRIP OF SOD IS TO BE PROVIDED BEHIND ALL CURBS AND PAVEMENT EDGES. SOD OR GRASS/MULCHING SHALL BE PROVIDED FOR ALL OTHER OPEN AREAS UNLESS NOTED OTHERWISE ON LANDSCAPE PLANS.
- ALL CONCRETE TO BE A MINIMUM 3000 P.S.I., UNLESS NOTED OTHERWISE ON THE PLANS.
- ALL CULVERT PIPE JOINTS ARE TO BE WRAPPED WITH A FILTER FABRIC JACKET PER F.D.O.T. INDEX NO. 280.
- ALL TRAFFIC SIGN POSTS SHALL BE 2"x2" SQUARE BREAK-AWAY 14 GAUGE GALVANIZED STEEL WITH PUNCHED HOLES.

**OPERATION AND MAINTENANCE FOR THE PROPOSED STORMWATER STORAGE AND DISCHARGE SYSTEM:**

- ALL STORMWATER PIPES, INLETS, CATCH BASINS, MANHOLES, SUMP STRUCTURES, INFLOW AND OUTFALL STRUCTURES, AND DISCHARGE PIPES SHOULD BE INSPECTED ON A REGULAR BASIS (MONTHLY OR QUARTERLY) AND AFTER MAJOR RAINFALLS. THEY SHOULD BE MAINTAINED BY REMOVING BUILT-UP DEBRIS AND VEGETATION AND REPAIRING DETERIORATING STRUCTURES.
- OPEN AND INSPECT SUMP MANHOLES AND ACCESS POINTS IN VAULTS WITHIN THREE DAYS OF A STORM EVENT TO OBSERVE THE SYSTEM HAS DRAINED. STORMWATER ACCUMULATION MAY INDICATE A FAILURE OF THE PERCOLATION BED. EACH VAULT WILL REQUIRE PERIODIC FLUSHING TO REMOVE ACCUMULATED SEDIMENT.
- REFER TO THE MANUFACTURER'S RECOMMENDED MAINTENANCE INSTRUCTIONS FOR MAINTENANCE SPECIFIC TO THE UNDERGROUND VAULTS.
- CHEMICALS, OILS, GREASES OR SIMILAR WASTES ARE NOT TO BE DISPOSED OF DIRECTLY TO THE STORMWATER FACILITY OR THROUGH STORM SEWERS. TREATMENT VAULTS ARE DESIGNED TO TREAT NORMAL ROAD, PARKING LOT, ROOF, AND YARD RUNOFF ONLY. SOME CHEMICALS MAY INTERFERE WITH A TREATMENT VAULT'S FUNCTIONS. DISPOSE OF ANY POTENTIALLY DANGEROUS MATERIALS PROPERLY BY TAKING THEM TO RECYCLING FACILITIES OR TO COLLECTION LOCATIONS SPONSORED BY MANY LOCAL GOVERNMENTS.
- ACCUMULATED SEDIMENTS MAY CONTAIN HEAVY METALS SUCH AS LEAD, CADMIUM AND MERCURY, AS WELL AS OTHER POTENTIALLY HAZARDOUS MATERIALS. THEREFORE, SEDIMENTS REMOVED FROM STORM SEWERS, INLETS, PIPES AND VAULTS SHOULD BE DISPOSED OF AT AN APPROVED FACILITY (CHECK WITH YOUR COUNTY SOLID WASTE DEPARTMENT OR THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR DISPOSAL FACILITIES APPROVED TO ACCEPT TREATMENT SEDIMENT).
- DURING ANY REPAIR OR MAINTENANCE ACTIVITY, USE CARE TO AVOID CAUSING EROSION OR SILTATION TO ADJACENT OR OFF-SITE AREAS.
- REMEMBER, ALTERATIONS (FILLING, ENLARGING, ETC.) OF ANY PART OF THE STORMWATER FACILITY ARE NOT PERMITTED WITHOUT PRIOR APPROVAL FROM ALL APPLICABLE GOVERNING AGENCIES.
- THE APPROVED OPERATION AND MAINTENANCE PERMIT AND RECORD DRAWINGS WILL BE AVAILABLE AT THE DISTRICT SERVICE OFFICE IN TAMPA. REFER TO THOSE PLANS AND PERMITS OR ADDITIONAL RESTRICTIONS, INSTRUCTIONS AND CONDITIONS.
- IT IS USUALLY MORE COST-EFFECTIVE TO MONITOR AND PERFORM ROUTINE MAINTENANCE ON A SWMS, RATHER THAN LET IT FAIL AND HAVE TO RECONSTRUCT THE ENTIRE SYSTEM.

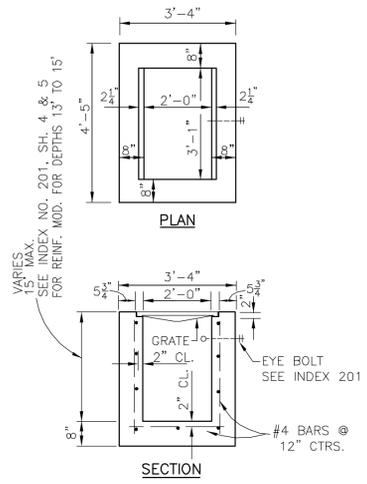
**SITE DEVELOPMENT PLANS**  
 "DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"  
**LONGBOAT KEY HOTEL**  
 4711 GULF OF MEXICO DRIVE  
 PAVING, GRADING, AND DRAINAGE DETAILS  
 SECTION 36, TOWNSHIP 35 S., RANGE 16 E.  
 JOB NO. 0971004401  
 SHEET NO. C10

NO.	BY	DATE	DESCRIPTION	NO.	BY	DATE	DESCRIPTION
1	PSN	5/6/13	REVISED PER FDEP REVIEW COMMENTS	6			
2	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE	7			
3	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS	8			
4	PSN	10/14/13	ISSUE FOR GMP	9			
5	PSN	10/18/13	ISSUE FOR TOWN OF LBK PLANNING AND ZONING REVIEW	10			

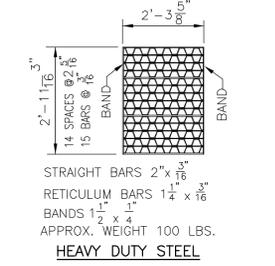
**George F. Young, Inc.**  
 10540 PORTAL CROSSING, SUITE 105 BRADENTON, FLORIDA 34211  
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 Since 1919

REVISED

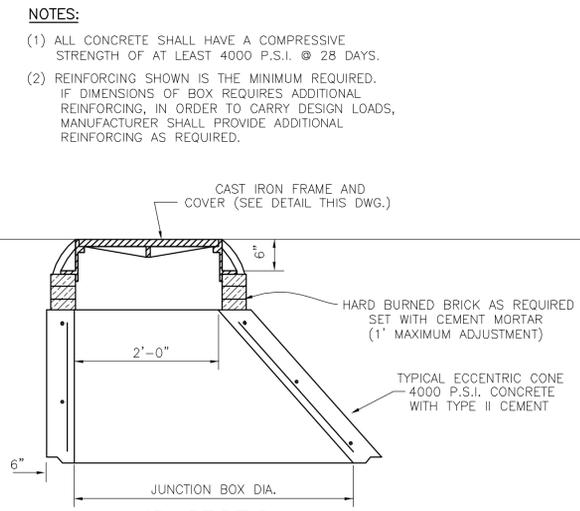
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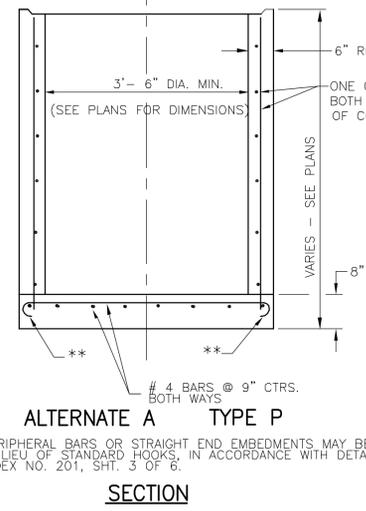
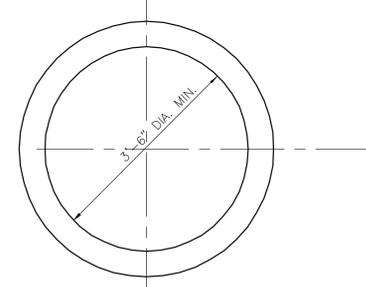
**TYPE "C" INLET DETAIL**  
N.T.S.  
RECOMMENDED MAXIMUM PIPE SIZE:  
2'-0" WALL-18" PIPE  
3'-1" WALL-24" PIPE



**TYPE "C" GRATE**  
N.T.S.

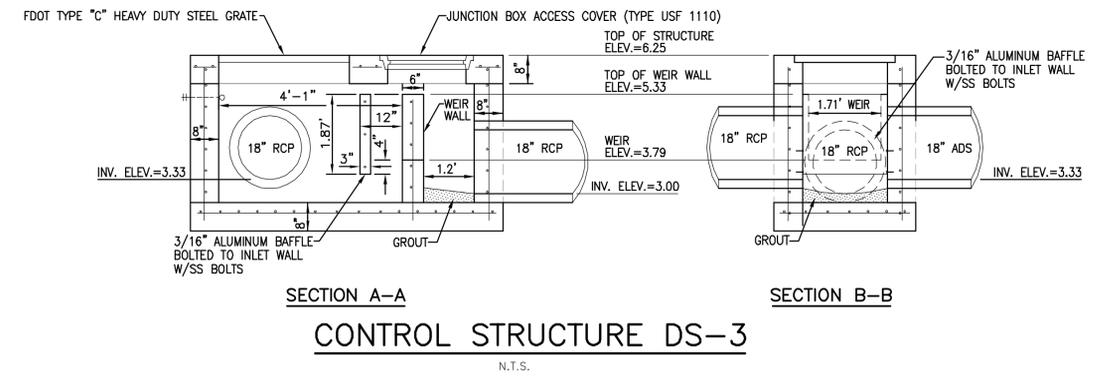
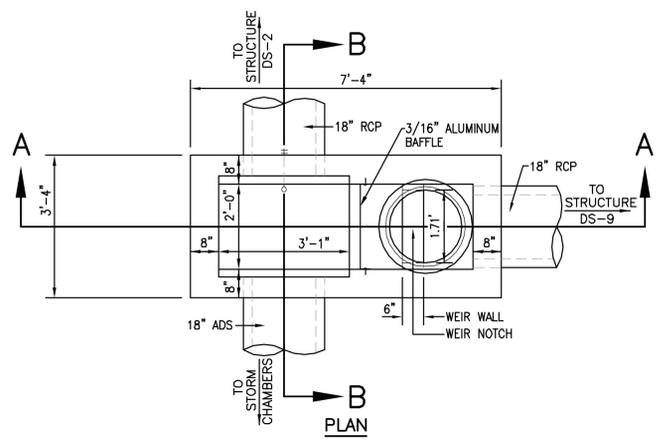


**LID SECTION TYPE 8 (TRAFFIC) (H-20)**

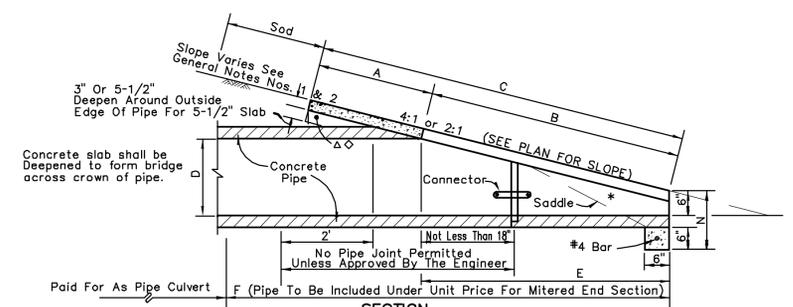


**ALTERNATE A TYPE P SECTION**  
PERIPHERAL BARS OR STRAIGHT END EMBEDMENTS MAY BE USED IN LIEU OF STANDARD HOOKS, IN ACCORDANCE WITH DETAILS  
\*\*INDEX NO. 201, SHT. 3 OF 6

**STANDARD JUNCTION BOX**  
N.T.S.

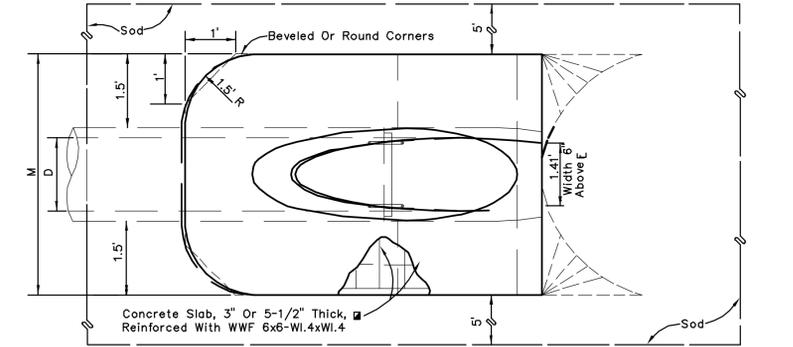


**CONTROL STRUCTURE DS-3**  
N.T.S.

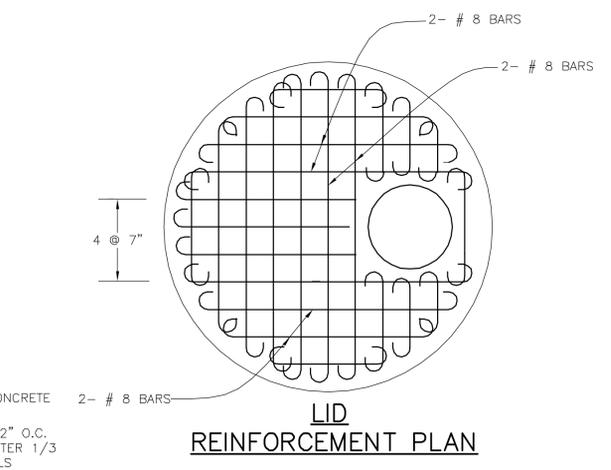


	DIMENSIONS AND QUANTITIES								M	N	5-1/2" CONC. SLAB (CY)		SODDING	
	D	X	A	B	C	E	F	G			H	Single Pipe	Single Pipe	Single Pipe
4# Slope	15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.0'	4.63'	1.19'	0.57	2.3	
	18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.0'	4.92'	1.21'	0.66	2.5	
2# Slope	15"	2'-7"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	2.9'	4.63'	1.19'	0.38	2.1	
	18"	2'-10"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	3.4'	4.92'	1.21'	0.44	2.2	
Slope	15"	2'-7"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	3.4'	5.50'	1.25'	0.54	2.4	
	18"	2'-10"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	3.4'	5.50'	1.25'	0.54	2.4	

\*Slope: 4:1 Miter: To C Pipe For Pipes 18" And Smaller.

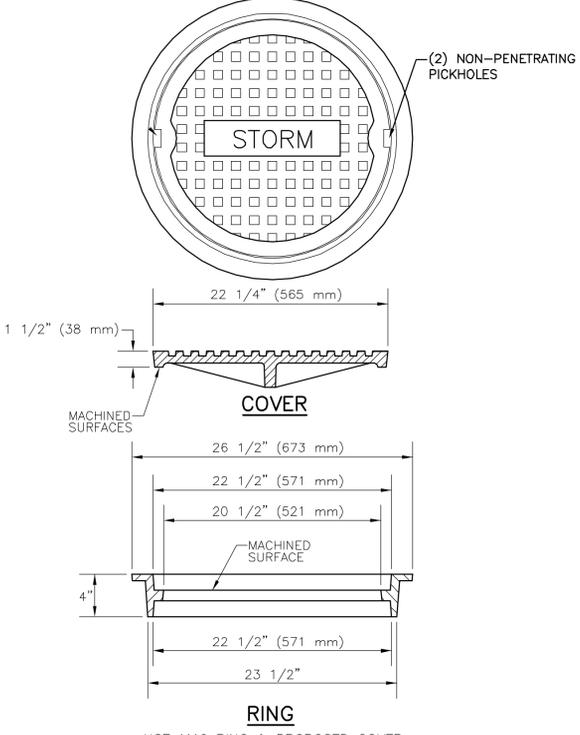


**MITERED END SECTION**  
FOR ADDITIONAL INFORMATION REFER TO FOOT INDEX 272  
N.T.S.



**LID SECTION TYPE 7-T (TRAFFIC) (H-20)**

ALL REINFORCEMENT NO. 6 BARS EXCEPT 6- # 8 BARS SHOWN. BARS SPACED @ 6" CENTERS BOTH WAYS EXCEPT MIDDLE BARS @ 7" CENTERS. ALL BARS WITH ACI STANDARD HOOKS CANTED APPROX. 45°, OR EMBEDDED IN ACCORDANCE WITH THE SLAB REINFORCEMENT DETAIL SHOWN UNDER OPTIONAL CONSTRUCTION JOINTS. SHT.3 OF 6. EXCEPT ALL # 8 BARS AND # 6 BARS AROUND MANHOLE OPENING SHALL BE HOOKED.



**NOTE:**  
1 - MATERIAL: ASTM-A48 CLASS 30B GRAY IRON.  
2 - COVER WEIGHT: 105 LBS. APPROX.  
3 - RING WEIGHT: 90 LBS. APPROX.

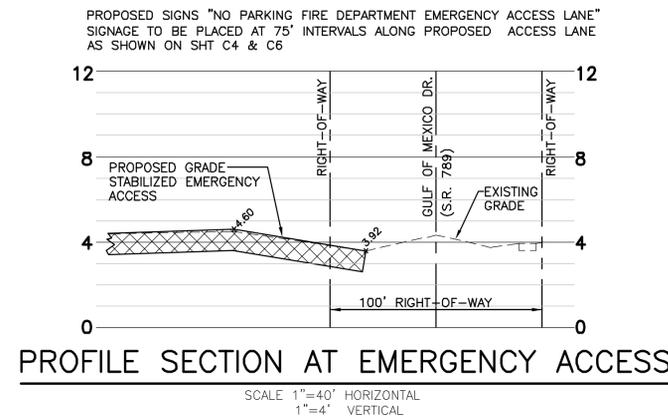
**ACCESS COVER FOR STORMWATER JUNCTION BOX**  
N.T.S.

# STORMTECH GENERAL NOTES

- STORMTECH LLC ("STORMTECH") REQUIRES INSTALLING CONTRACTORS TO USE AND UNDERSTAND STORMTECH'S LATEST INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION.
- OUR TECHNICAL SERVICES DEPARTMENT OFFERS INSTALLATION CONSULTATIONS TO INSTALLING CONTRACTORS. CONTACT OUR TECHNICAL SERVICES REPRESENTATIVE AT LEAST 30 DAYS PRIOR TO SYSTEM INSTALLATION TO ARRANGE A PRE-INSTALLATION CONSULTATION. OUR REPRESENTATIVES CAN THEN ANSWER QUESTIONS OR ADDRESS COMMENTS ON THE STORMTECH CHAMBER SYSTEM AND INFORM THE INSTALLING CONTRACTOR OF THE MINIMUM INSTALLATION REQUIREMENTS BEFORE BEGINNING THE SYSTEM'S CONSTRUCTION. CALL 888-892-2694 TO SPEAK TO A TECHNICAL SERVICE REPRESENTATIVE OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF OUR INSTALLATION INSTRUCTIONS.
- STORMTECH'S REQUIREMENTS FOR SYSTEMS WITH PAVEMENT DESIGN (ASPHALT, CONCRETE PAVERS, ETC.): MINIMUM COVER IS 18 INCHES NOT INCLUDING PAVEMENT; MAXIMUM COVER IS 96 INCHES INCLUDING PAVEMENT. FOR INSTALLATIONS THAT DO NOT INCLUDE PAVEMENT, WHERE RUTTING FROM VEHICLES MAY OCCUR, MINIMUM REQUIRED COVER IS 24 INCHES, MAXIMUM COVER IS 96 INCHES.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE DESIGN ENGINEER.
- ASHTO M288 CLASS 2 NON-WOVEN GEOTEXTILE (FILTER FABRIC) MUST BE USED AS INDICATED IN THE PROJECT PLANS.
- STONE PLACEMENT BETWEEN CHAMBERS ROWS AND AROUND PERIMETER MUST FOLLOW INSTRUCTIONS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
- BACKFILLING OVER THE CHAMBERS MUST FOLLOW REQUIREMENTS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
- THE CONTRACTOR MUST REFER TO STORMTECH'S INSTALLATION INSTRUCTIONS FOR A TABLE OF ACCEPTABLE VEHICLE LOADS AT VARIOUS DEPTHS OF COVER. THIS INFORMATION IS ALSO AVAILABLE AT STORMTECH'S WEBSITE: WWW.STORMTECH.COM. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING VEHICLES THAT EXCEED STORMTECH'S REQUIREMENTS FROM TRAVELING ACROSS OR PARKING OVER THE STORMTECH SYSTEM. TEMPORARY FENCING, WARNING TAPE AND APPROPRIATELY LOCATED SIGNS ARE COMMONLY USED TO PREVENT UNAUTHORIZED VEHICLES FROM ENTERING SENSITIVE CONSTRUCTION AREAS.
- THE CONTRACTOR MUST APPLY EROSION AND SEDIMENT CONTROL MEASURES TO PROTECT THE STORMTECH SYSTEM DURING ALL PHASES OF SITE CONSTRUCTION PER LOCAL CODES AND DESIGN ENGINEER'S SPECIFICATIONS.
- STORMTECH PRODUCT WARRANTY IS LIMITED. SEE CURRENT PRODUCT WARRANTY FOR DETAILS. TO ACQUIRE A COPY CALL STORMTECH AT 1-888-892-2694 OR VISIT WWW.STORMTECH.COM.
- STORMTECH SHALL PROVIDE A REPRESENTATIVE TO SUPERVISE THE INSTALLATION OF STORMTECH CHAMBER SYSTEM.

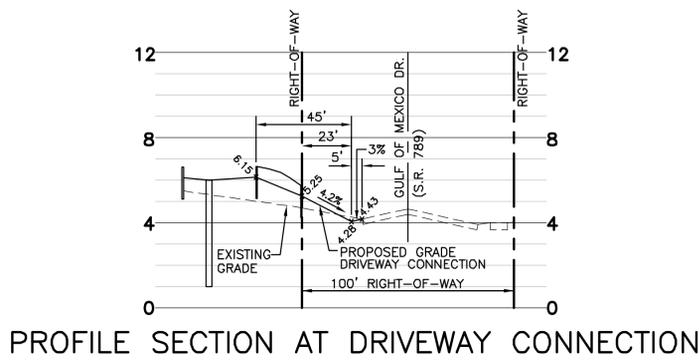
NOTES:

- TRENCH WIDTH SHALL BE APPROX. EQUAL TO THE PIPE DIA. + 2 FEET OR AS PER ANWA AND THE MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE SHEETING AND SHORING AS NECESSARY FOR SAFETY.
- BACKFILL MATERIALS SHALL BE APPROVED BY THE ENGINEER WHERE THE PIPE IS UNDERCUT.
- WATER, SEWER, AND REUSE MAINS TO BE INSTALLED WITH A MINIMUM 36 INCHES OF COVER.
- REFER TO LAND DEVELOPMENT REGULATIONS FOR DENSITY REQUIREMENTS.



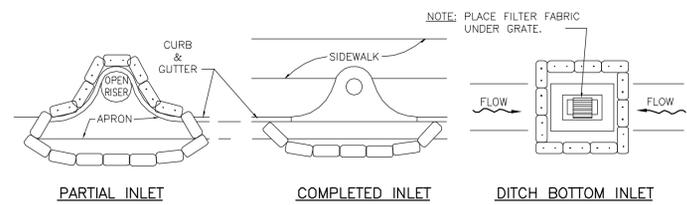
PROFILE SECTION AT EMERGENCY ACCESS

SCALE 1"=40' HORIZONTAL  
1"=4' VERTICAL



PROFILE SECTION AT DRIVEWAY CONNECTION

SCALE 1"=40' HORIZONTAL  
1"=4' VERTICAL

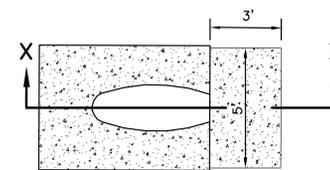


PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

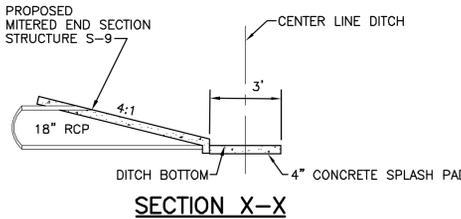
N.T.S.

# STORMTECH PRODUCT SPECIFICATIONS

- GENERAL
- STORMTECH CHAMBERS ARE DESIGNED TO CONTROL STORMWATER RUNOFF. AS A SUBSURFACE RETENTION SYSTEM, STORMTECH CHAMBERS RETAIN AND ALLOW EFFECTIVE INFILTRATION OF WATER INTO THE SOIL. AS A SUBSURFACE DETENTION SYSTEM, STORMTECH CHAMBERS DETAIN AND ALLOW FOR THE METERED FLOW OF WATER TO AN OUTFALL.
- CHAMBER PARAMETERS
- THE CHAMBER SHALL BE INJECTION MOLDED OF POLYPROPYLENE RESIN TO BE INHERENTLY RESISTANT TO ENVIRONMENTAL STRESS CRACKING (ESCR), AND TO MAINTAIN ADEQUATE STIFFNESS THROUGH HIGHER TEMPERATURES EXPERIENCED DURING INSTALLATION AND SERVICE.
- THE NOMINAL CHAMBER DIMENSIONS OF THE STORMTECH SC-310 SHALL BE 16.0 INCHES TALL, 34.0 INCHES WIDE AND 90.7 INCHES LONG. THE INSTALLED LENGTH OF A JOINED CHAMBER SHALL BE 85.4 INCHES.
- THE CHAMBER SHALL HAVE A CONTINUOUSLY CURVED SECTION PROFILE.
- THE CHAMBER SHALL BE OPEN-BOTTOMED.
- THE CHAMBER SHALL INCORPORATE AN OVERLAPPING CORRUGATION JOINT SYSTEM TO ALLOW CHAMBER ROWS OF ALMOST ANY LENGTH TO BE CREATED. THE OVERLAPPING CORRUGATION JOINT SYSTEM SHALL BE EFFECTIVE WHILE ALLOWING A CHAMBER TO BE TRIMMED TO SHORTEN ITS OVERALL LENGTH.
- THE NOMINAL STORAGE VOLUME OF AN INSTALLED STORMTECH SC-310 CHAMBER SHALL BE 31.0 CUBIC FEET PER CHAMBER WHEN INSTALLED PER STORMTECH'S TYPICAL DETAILS (INCLUDES THE VOLUME OF CRUSHED ANGULAR STONE WITH AN ASSUMED 40% POROSITY). THIS EQUALS TO 1.3 CUBIC FEET OF STORAGE/SQUARE FOOT OF BED.
- THE CHAMBER SHALL HAVE FORTY-EIGHT ORIFICES PENETRATING THE SIDEWALLS TO ALLOW FOR LATERAL CONVEYANCE OF WATER.
- THE CHAMBER SHALL HAVE TWO ORIFICES NEAR ITS TOP TO ALLOW FOR EQUALIZATION OF AIR PRESSURE BETWEEN ITS INTERIOR AND EXTERIOR.
- THE CHAMBER SHALL HAVE BOTH OF ITS ENDS OPEN TO ALLOW FOR UNIMPEDED HYDRAULIC FLOWS AND VISUAL INSPECTIONS DOWN A ROW'S ENTIRE LENGTH.
- THE CHAMBER SHALL HAVE 14 CORRUGATIONS.
- THE CHAMBER SHALL HAVE A CIRCULAR, INDENTED, FLAT SURFACE ON THE TOP OF THE CHAMBER FOR AN OPTIONAL 4-INCH INSPECTION PORT OR CLEAN-OUT.
- THE CHAMBER SHALL BE ANALYZED AND DESIGNED USING AASHTO METHODS FOR THERMOPLASTIC CULVERTS CONTAINED IN THE LRD BRIDGE DESIGN SPECIFICATIONS, 2ND EDITION, INCLUDING INTERIM SPECIFICATIONS THROUGH 2001. DESIGN LIVE LOAD SHALL BE THE AASHTO HS20 TRUCK. DESIGN SHALL CONSIDER EARTH AND LIVE LOADS AS APPROPRIATE FOR THE MINIMUM TO MAXIMUM SPECIFIED DEPTH OF FILL.
- THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2000 CERTIFIED FACILITY.
- END CAP PARAMETERS
- THE END CAP SHALL BE INJECTION MOLDED OF POLYPROPYLENE RESIN TO BE INHERENTLY RESISTANT TO ENVIRONMENTAL STRESS CRACKING, AND TO MAINTAIN ADEQUATE STIFFNESS THROUGH HIGHER TEMPERATURES EXPERIENCED DURING INSTALLATION AND SERVICE.
- THE END CAP SHALL BE DESIGNED TO FIT INTO ANY CORRUGATION OF A CHAMBER, WHICH ALLOWS: CAPPING A CHAMBER THAT HAS ITS LENGTH TRIMMED; SEGMENTING ROWS INTO STORAGE BASINS OF VARIOUS LENGTHS.
- THE END CAP SHALL HAVE SAW GUIDES TO ALLOW EASY CUTTING FOR VARIOUS DIAMETERS OF PIPE THAT MAY BE USED TO INLET THE SYSTEM.
- THE END CAP SHALL HAVE EXCESS STRUCTURAL ADEQUACIES TO ALLOW CUTTING AN ORIFICE OF ANY SIZE AT ANY INVERT ELEVATION.
- THE PRIMARY FACE OF AN END CAP SHALL BE CURVED OUTWARD TO RESIST HORIZONTAL LOADS GENERATED NEAR THE EDGES OF BEDS.
- THE END CAP SHALL BE MANUFACTURED IN AN ISO 9001:2000 CERTIFIED FACILITY.

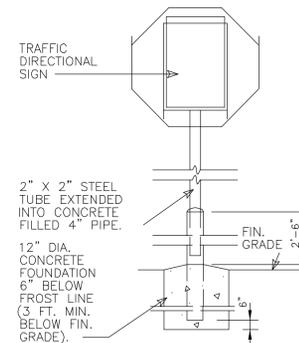


PLAN



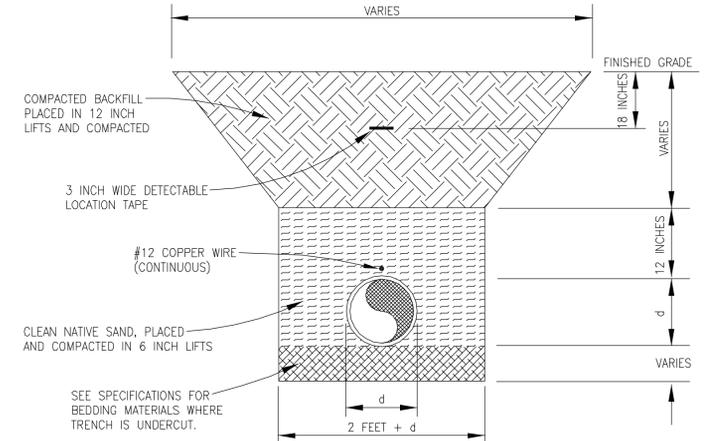
CONCRETE SPLASH PAD

N.T.S.



TRAFFIC DIRECTIONAL SIGN (FREESTANDING)

N.T.S.



TRENCH DETAIL

N.T.S.

## GENERAL NOTES:

- ALL TRAFFIC CONTROL PAVEMENT MARKINGS SHALL BE ALKYD THERMOPLASTIC 90 MILS IN THICKNESS.
- A TWO FOOT WIDE STRIP OF SOD IS TO BE PROVIDED BEHIND ALL CURBS AND PAVEMENT EDGES. SOD OR GRASSING/MULCHING SHALL BE PROVIDED FOR ALL OTHER OPEN AREAS UNLESS NOTED OTHERWISE ON LANDSCAPE PLANS.
- ALL CONCRETE TO BE A MINIMUM 3000 P.S.I., UNLESS NOTED OTHERWISE ON THE PLANS.

## COLOR CODES

LEGEND (and/or) SYMBOL/BACKGROUND

- B.....Black.....(Non-ReflectORIZED)
- W.....White.....(ReflectORIZED)
- R.....Red.....(ReflectORIZED)



R5.1  
WR/W



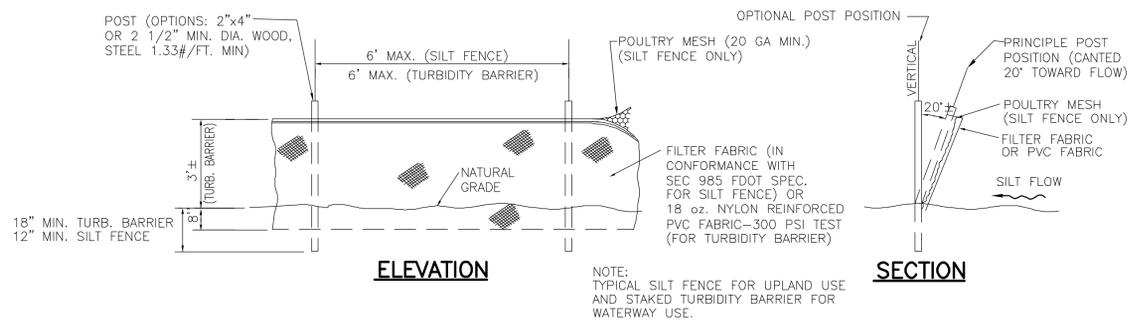
FTP 25

SIGNAGE DETAILS

N.T.S.

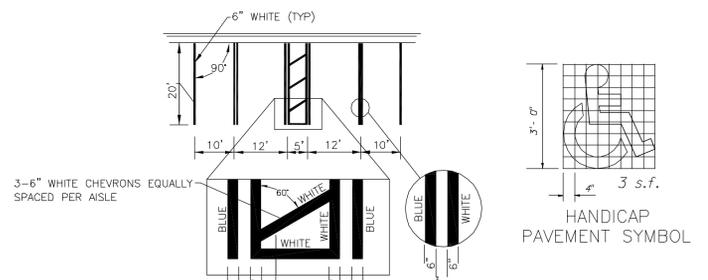
## FTP 25 SIGN NOTES

- Top portion of FTP 25 Sign shall have a reflective blue background with white reflective symbol and border.
- Bottom portion shall have a reflective white background with black opaque legend and border.
- Signs are to be mounted at standard height. (7' from pavement to bottom of sign).



TYPICAL SILT FENCE AND STAKED TURBIDITY BARRIER

N.T.S.



TYPICAL HANDICAP PARKING/STRIPING DETAIL

N.T.S.

# SITE DEVELOPMENT PLANS

"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"

NO.	BY	DATE	DESCRIPTION
1	PSN	5/6/13	REVISED PER FDEP REVIEW COMMENTS
2	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE
3	PSN	7/15/13	REVISED PER FDEP REVIEW COMMENTS
4	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS
5	PSN	10/14/13	ISSUE FOR GMP

NO.	BY	DATE	DESCRIPTION
6	PSN	10/18/13	ISSUE FOR TOWN OF LKB PLANNING AND ZONING REVIEW
7			
8			
9			
10			

INITIALS	DATE
DESIGN	JORDAN 10/23/12
DRAWN	NICKOLS 10/23/12
CHECKED	JORDAN 10/25/12
QUALITY CHK	ADLER
SCALE	

PREPARED FOR:  
**OPROCK LONGBOAT FEE, LLC**  
1000 MARKET STREET, BUILDING 1, SUITE 300  
PORTSMOUTH, NEW HAMPSHIRE 03801  
PHONE: (603)-559-2187

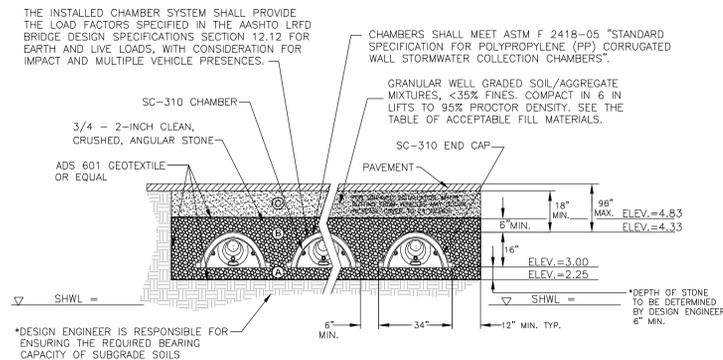


**George F. Young, Inc.**  
10540 PORTAL CROSSING, SUITE 105, BRADENTON, FLORIDA 34211  
PHONE: (941) 747-2881 FAX: (941) 747-7234  
ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 21  
ARCHITECTURE-ENGINEERING-ENVIRONMENTAL-LANDSCAPE-PLANNING-SURVEYING-UTILITIES  
GAINESVILLE-LAKEWOOD RANCH-ORLANDO-PALM BEACH GARDENS-ST. PETERSBURG-TAMPA-VENICE

DATE: \_\_\_\_\_  
DRAWN BY: TUDOR A. DOVE, P.E. No. 43268

**LONGBOAT KEY HOTEL**  
4711 GULF OF MEXICO DRIVE  
**PAVING, GRADING AND DRAINAGE DETAILS**  
SECTION 36, TOWNSHIP 35 S., RANGE 16 E.

JOB NO.: 0971004401  
SHEET NO.: C12



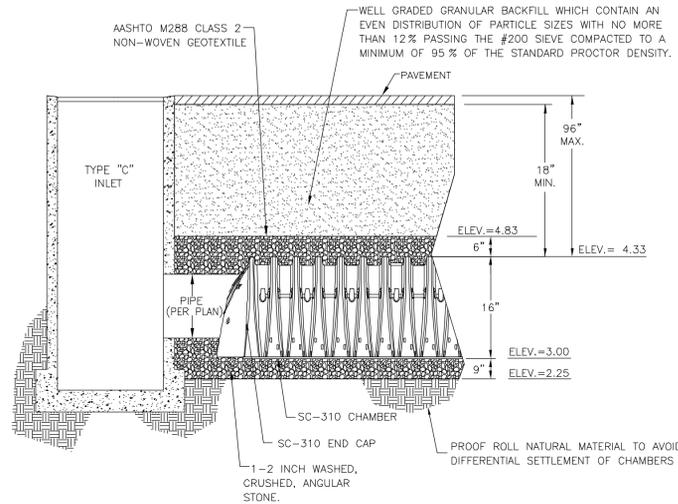
THIS CROSS SECTION DETAILS THE REQUIREMENTS NECESSARY TO SATISFY THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS USING STORMTECH CHAMBERS

FOR STORMTECH INFORMATION CALL 1-888-892-2694

\*SEE STORMTECH DESIGN MANUAL

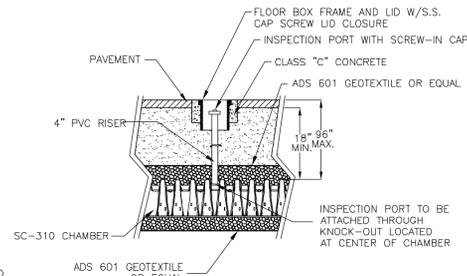
### STORMTECH SC-310 CROSS SECTION

N.T.S.



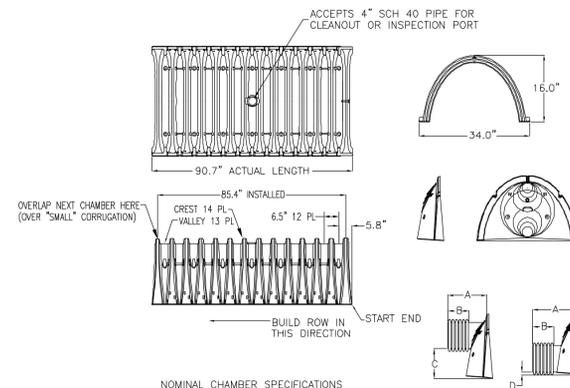
### STORMTECH SC-310 CHAMBER SYSTEM CATCH BASIN DETAIL

N.T.S.



### SC-310 INSPECTION PORT DETAIL

N.T.S.



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W x H x INSTALLED LENGTH)	34.0" x 16.0" x 85.4"
CHAMBER STORAGE	14.7 CUBIC FEET
MINIMUM INSTALLED STORAGE	31.0 CUBIC FEET
WEIGHT	37 LBS.

STUBS AT TOP OF END CAP FOR PARTS NUMBERS ENDING WITH "T"

STUBS AT BOTTOM OF END CAP FOR PARTS NUMBERS ENDING WITH "B"

PART #	CHAMBER	PIPE SIZE	A	B	C
SC310EP06T	SC-310	6 in (150 mm)	9.60 in (244 mm)	5.80 in (147 mm)	N/A
SC310EP06B	SC-310	6 in (150 mm)	9.60 in (244 mm)	N/A	0.50 in (13 mm)
SC310EP08T	SC-310	8 in (200 mm)	11.90 in (302 mm)	8.50 in (89 mm)	N/A
SC310EP08B	SC-310	8 in (200 mm)	11.90 in (302 mm)	N/A	0.60 in (15 mm)
SC310EP10T	SC-310	10 in (250 mm)	12.70 in (323 mm)	1.48 in (36 mm)	N/A
SC310EP10B	SC-310	10 in (250 mm)	12.70 in (323 mm)	N/A	0.80 in (20 mm)
SC310EP12B	SC-310	12 in (300 mm)	13.50 in (343 mm)	N/A	0.90 in (23 mm)

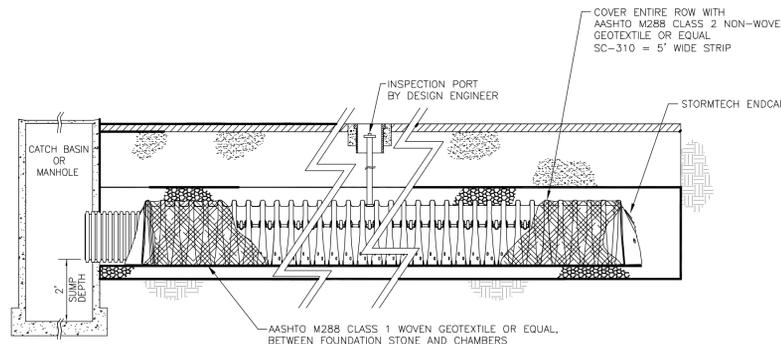
NOTE: ALL DIMENSIONS ARE NOMINAL

ALL STUBS, EXCEPT FOR THE SC310EP12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

FOR THE SC310EP12B THE 12" STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25". BACKFILL MATERIAL SHOULD BE REMOVED FROM BETWEEN FOUNDATION STONE AND CHAMBERS SC-310 = 5" WIDE STRIP

### SC-310 TECHNICAL SPECIFICATIONS

N.T.S.

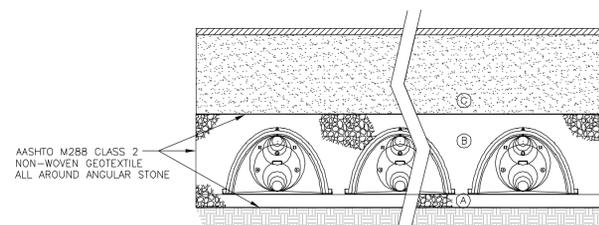


### ISOLATOR ROW PROFILE VIEW

N.T.S.

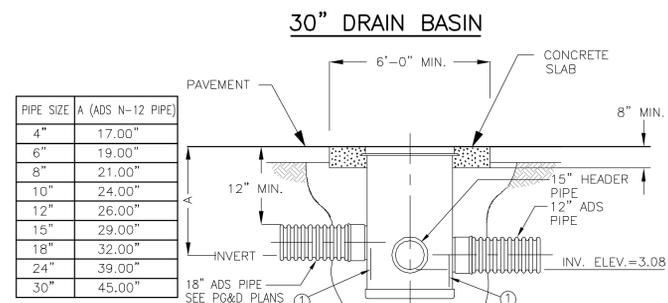
MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
FILL MATERIAL FROM 18" TO GRADE ABOVE CHAMBERS	ANY SOIL/ROCK MATERIALS, NATIVE SOILS OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
FILL MATERIAL FOR 6" TO 18" ELEVATION ABOVE CHAMBERS (24" FOR UNPAVED INSTALLATIONS)	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES.	3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9	A-1 A-2 A-3	COMPACT IN 6" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LBS. DYNAMIC FORCE NOT TO EXCEED 20,000 LBS.
EMBEDMENT STONE SURROUNDING AND TO A 6" ELEVATION ABOVE CHAMBERS	CLEAN ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 1/4" - 2 INCH	89, 357, 4, 467, 5, 56, 57	N/A	NO COMPACTION REQUIRED
FOUNDATION STONE BELOW CHAMBERS	CLEAN ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 1/4" - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY

PLEASE NOTE: THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN CRUSHED ANGULAR. FOR EXAMPLE, THE STONE MUST BE SPECIFIED AS CLEAN, CRUSHED, ANGULAR NO. 4 STONE.



### ACCEPTABLE FILL MATERIALS STORMTECH SC-310 CHAMBER SYSTEMS

N.T.S.



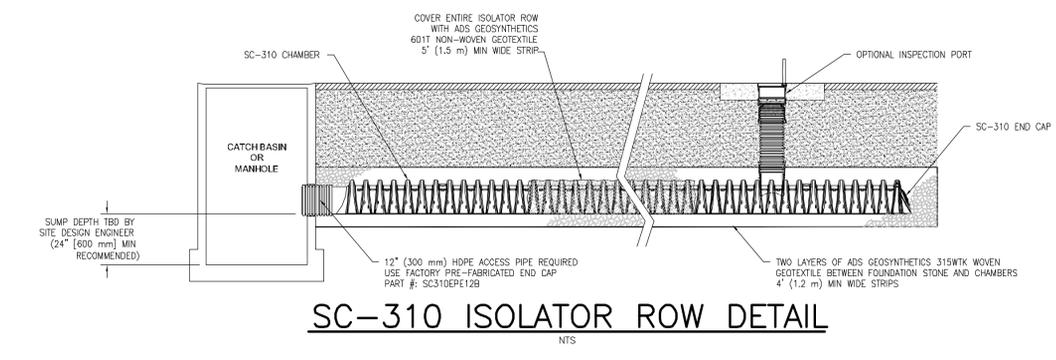
PIPE SIZE	A (ADS N-12 PIPE)
4"	17.00"
6"	19.00"
8"	21.00"
10"	24.00"
12"	26.00"
15"	29.00"
18"	32.00"
24"	39.00"
30"	45.00"

BACKFILL MATERIAL SHALL BE CRUSHED STONE OR GRAVEL MATERIAL MEETING CLASS 1 OR 2 AS SPECIFIED IN ASTM D2321. BACKFILL MATERIAL SHALL BE PLACED UNIFORMLY IN 12" LIFTS AND COMPACTED

① 1/8" THK. STAINLESS STEEL OR ALUMINUM PLATE ROLLED TO MEET INSIDE DIAMETER OF INLET

### NYLOPLAST-ADS DRAIN BASIN WITH H-25 RATED COVER

N.T.S.



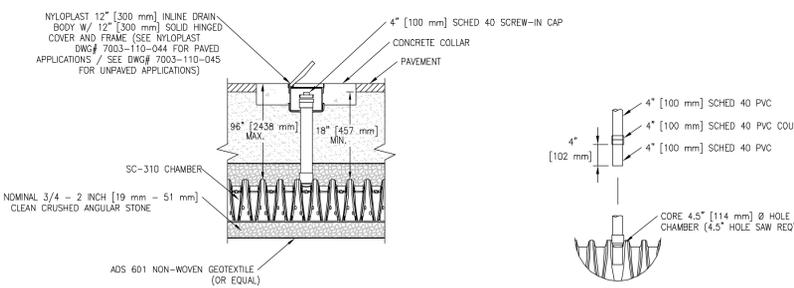
### INSPECTION & MAINTENANCE

- INSPECT ISOLATOR ROW FOR SEDIMENT
  - INSPECTION PORTS (IF PRESENT)
    - REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
    - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
    - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
    - LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
    - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
  - ALL ISOLATOR ROWS
    - REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
    - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
      - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
      - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
    - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
  - A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
  - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
  - VACUUM STRUCTURE SUMP AS REQUIRED
- REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

### NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

- NOTES:
- INSPECTION PORT MUST BE CONNECTED THROUGH KNOCK-OUT LOCATED AT CENTER OF CHAMBER.
  - ALL SCHEDULE 40 FITTINGS TO BE SOLVENT CEMENTED.



### INSPECTION PORT DETAIL CONNECTION DETAIL

N.T.S.

### STORMWATER CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-310 OR APPROVED EQUAL.
- CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418-05, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
  - CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS.
  - THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE SAFETY FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12 ARE MET. THE 50-YEAR CREEP MODULUS DATA SPECIFIED IN ASTM 2418-05 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
  - ONLY CHAMBERS THAT ARE APPROVED BY THE ENGINEER WILL BE ALLOWED. THE CONTRACTOR SHALL SUBMIT (3 SETS) OF THE FOLLOWING TO THE ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
    - A STRUCTURAL EVALUATION BY A REGISTERED STRUCTURAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12 ARE MET.
    - A CERTIFICATION BY THE MANUFACTURER THAT THE CHAMBERS ARE IN ACCORDANCE WITH ASTM F2418-05.
  - CHAMBERS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
  - ALL DESIGN SPECIFICATIONS FOR CHAMBERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S LATEST DESIGN MANUAL.
  - THE INSTALLATION OF CHAMBERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S LATEST INSTALLATION INSTRUCTIONS.
  - MANUFACTURER'S REPRESENTATIVE SHALL SUPERVISE INSTALLATION.

\*NOTE: CHAMBER SYSTEM DESIGN MUST BE IN ACCORDANCE WITH STORMTECH DESIGN MANUAL

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Subsurface Stormwater Management

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### SEE SHEET C12 FOR ADDITIONAL NOTES AND SPECIFICATIONS

### SITE DEVELOPMENT PLANS

"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"

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5	PSN	10/18/13	ISSUE FOR TOWN OF LKZ PLANNING AND ZONING REVIEW	10			

DESIGN: NICKOLS 10/23/12  
DRAWN: NICKOLS 10/23/12  
CHECKED: JORDAN 10/25/12  
QUALITY CHK: ADLER  
SCALE:

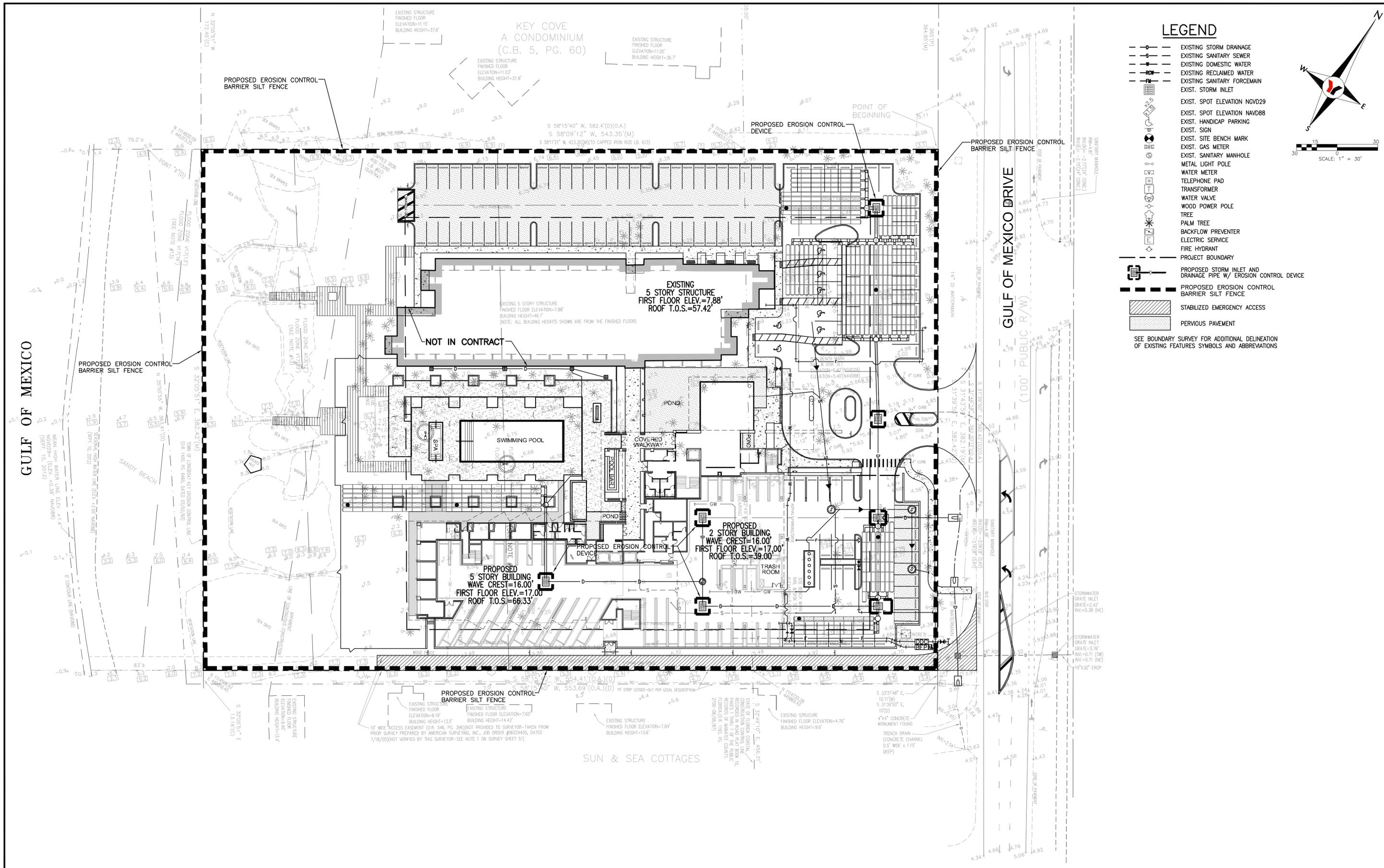
PREPARED FOR:  
**OPROCK LONGBOAT FEE, LLC**  
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GAINESVILLE-LAKEWUCH RANCH-ORLANDO-PALM BEACH GARDENS-ST. PETERSBURG-TAMPA-VENICE

THIRDY A. DOVE, P.E. No. 43268  
DATE

**LONGBOAT KEY HOTEL**  
4711 GULF OF MEXICO DRIVE  
**STORMTECH DRAINAGE CHAMBER DETAILS**

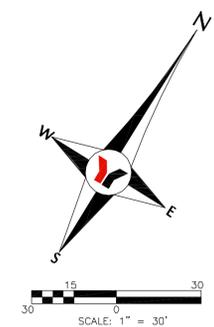
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SHEET NO. C13  
SECTION 36, TOWNSHIP 35 S., RANGE 16 E.



### LEGEND

- EXISTING STORM DRAINAGE
- EXISTING SANITARY SEWER
- EXISTING DOMESTIC WATER
- EXISTING RECLAIMED WATER
- EXISTING SANITARY FORCEMAIN
- EXIST. STORM INLET
- EXIST. SPOT ELEVATION NGVD29
- EXIST. SPOT ELEVATION NAVD88
- EXIST. HANDICAP PARKING
- EXIST. SIGN
- EXIST. SITE BENCH MARK
- EXIST. GAS METER
- EXIST. SANITARY MANHOLE
- METAL LIGHT POLE
- WATER METER
- TELEPHONE PAD
- TRANSFORMER
- WATER VALVE
- WOOD POWER POLE
- TREE
- PALM TREE
- BACKFLOW PREVENTER
- ELECTRIC SERVICE
- FIRE HYDRANT
- PROJECT BOUNDARY
- PROPOSED STORM INLET AND DRAINAGE PIPE W/ EROSION CONTROL DEVICE
- PROPOSED EROSION CONTROL BARRIER SILT FENCE
- STABILIZED EMERGENCY ACCESS
- PERVIOUS PAVEMENT

SEE BOUNDARY SURVEY FOR ADDITIONAL DELINEATION OF EXISTING FEATURES SYMBOLS AND ABBREVIATIONS



GULF OF MEXICO

GULF OF MEXICO DRIVE  
(100' PUBLIC R/W)

KEY COVE  
A CONDOMINIUM  
(C.B. 5, PG. 60)

EXISTING 5 STORY STRUCTURE  
FIRST FLOOR ELEV.=7.88'  
ROOF T.O.S.=57.42'

PROPOSED 5 STORY BUILDING  
WAVE CREST=16.00'  
FIRST FLOOR ELEV.=17.00'  
ROOF T.O.S.=66.33'

PROPOSED 2 STORY BUILDING  
WAVE CREST=16.00'  
FIRST FLOOR ELEV.=17.00'  
ROOF T.O.S.=39.00'

SUN & SEA COTTAGES

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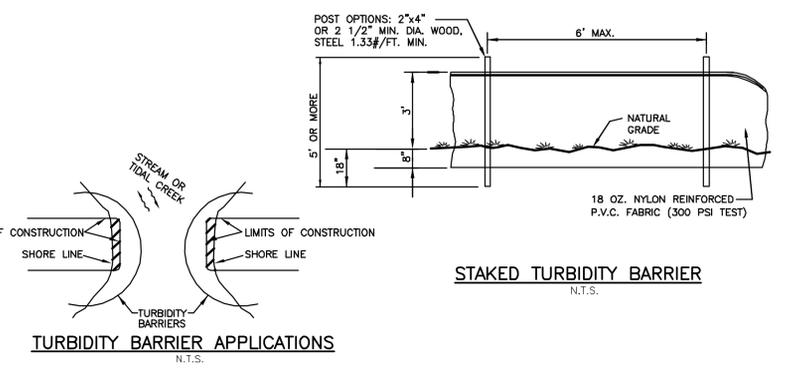
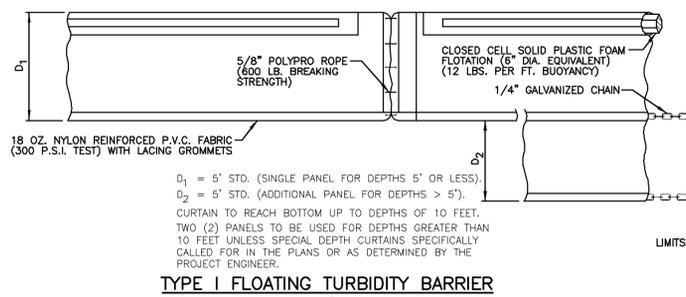
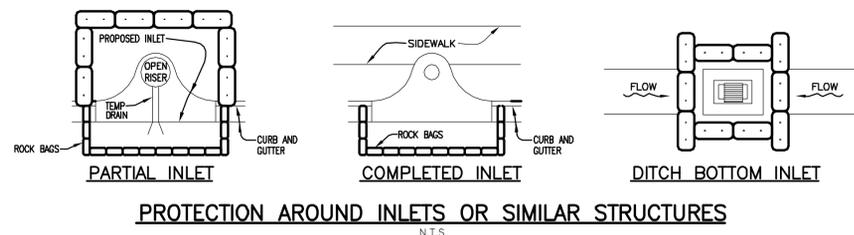
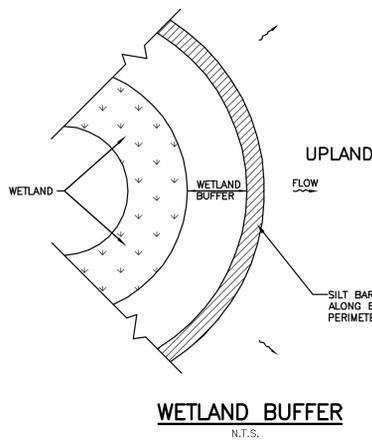
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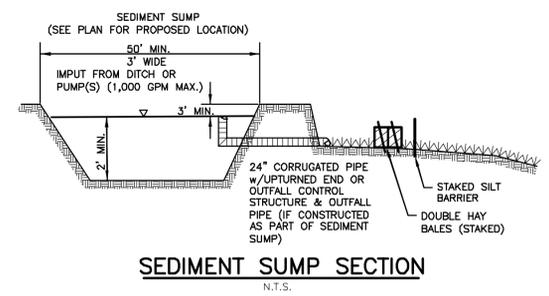
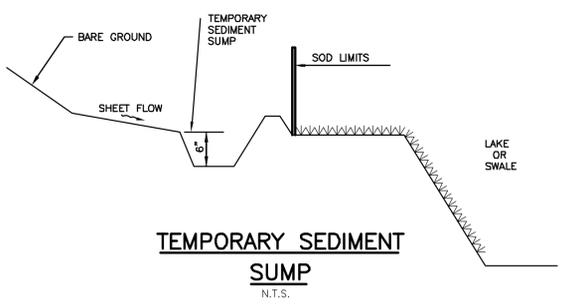
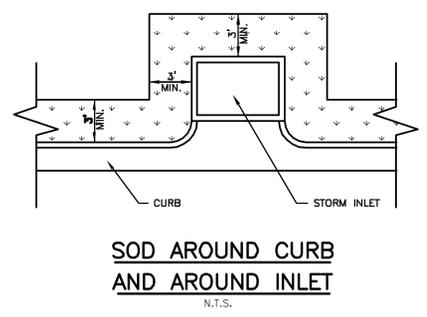
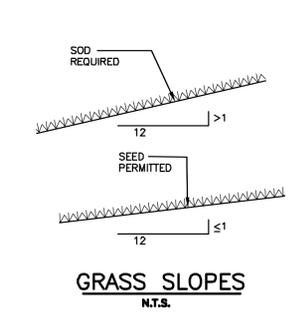
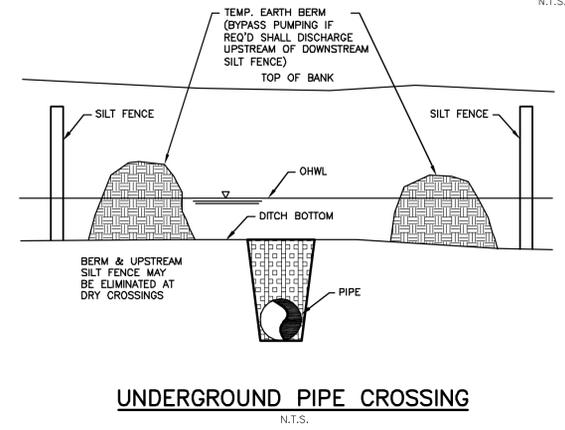
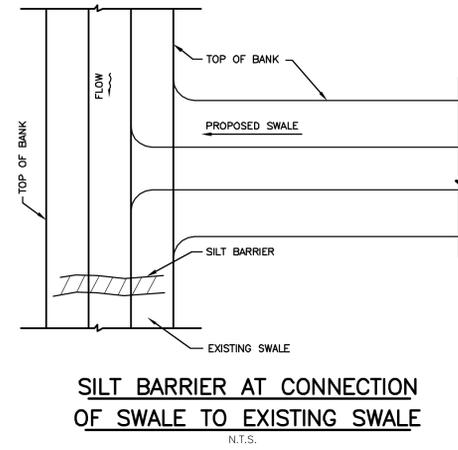
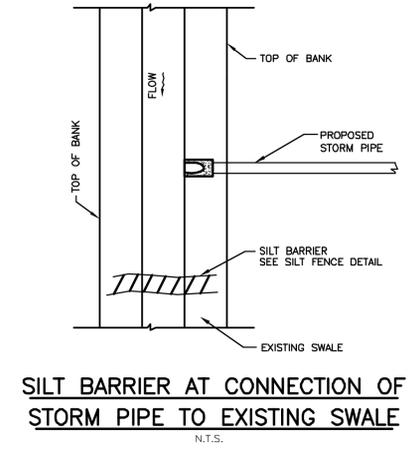
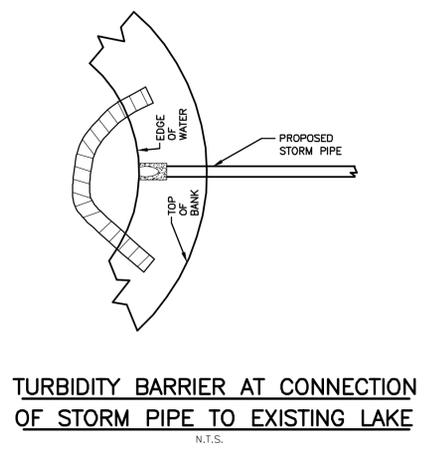
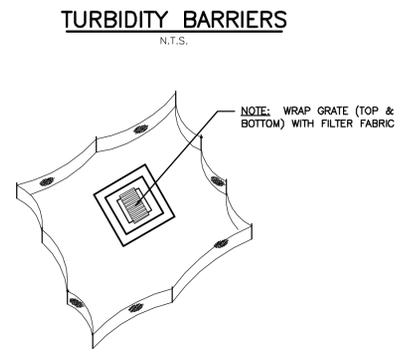
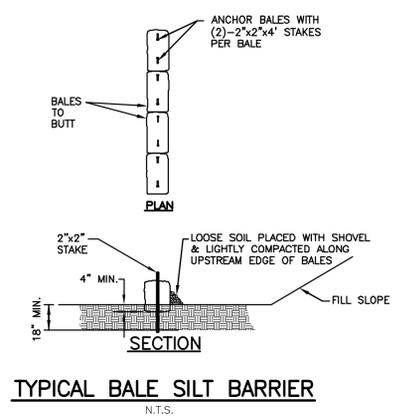
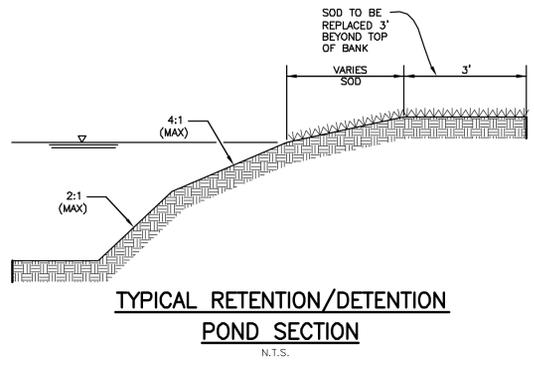
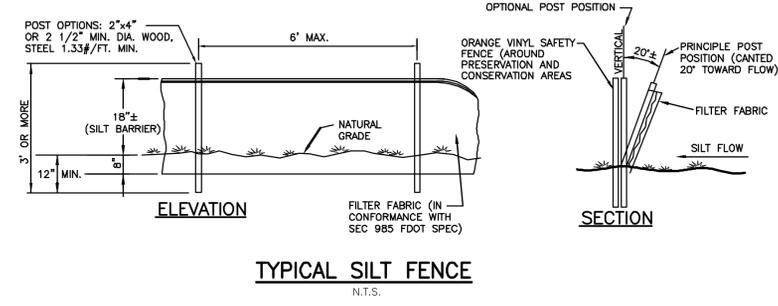
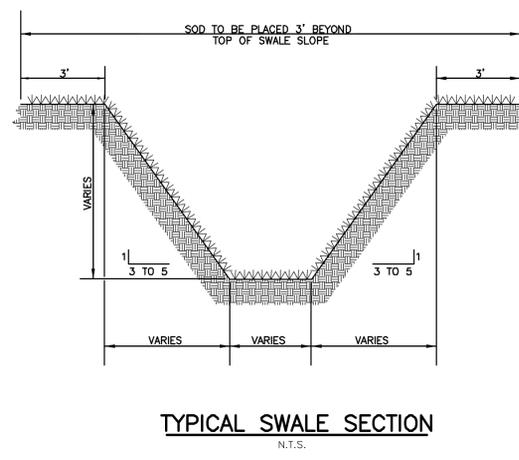
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THOMAS A. DOVE, P.E. No. 43268  
DATE

**SITE DEVELOPMENT PLANS**  
"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"  
**LONGBOAT KEY HOTEL**  
4711 GULF OF MEXICO DRIVE  
**EROSION CONTROL PLAN**  
SECTION 36, TOWNSHIP 35 S., RANGE 16 E.  
JOB NO. 0971004401  
SHEET NO. C14



- NOTES:**
- 1) TURBIDITY OF TYPE I MAY BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
  - 2) NUMBER AND SPACING OF ANCHORS DEPENDENT ON WATER VELOCITIES.
  - 3) DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMMODATE CONSTRUCTION OPERATIONS.
  - 4) NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION OPERATIONS.
  - 5) TURBIDITY BARRIERS FOR FLOWING STREAMS, AND TIDAL CREEKS MAY BE EITHER FLOATING OR STAKED TYPES THAT WILL SUIT SITE CONDITIONS AND MEET EROSION CONTROL AND WATER QUALITY REQUIREMENTS.
  - 6) THE BARRIER TYPE(S) WILL BE AT THE CONTRACTOR'S OPTION UNLESS OTHERWISE SPECIFIED IN THE PLANS, HOWEVER PAYMENT WILL BE UNDER THE PAY ITEM(S) ESTABLISHED IN THE PLANS FOR FLOATING TURBIDITY BARRIERS AND/OR STAKED TURBIDITY BARRIERS.
  - 7) POSTS IN STAKED TURBIDITY BARRIERS TO BE INSTALLED IN VERTICAL POSITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
  - 8) SUBSTITUTIONS FOR TYPE I SHALL BE AS APPROVED BY ENGINEER.
  - 9) COMPONENTS OF TYPE I MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER.



- EROSION AND SEDIMENT CONTROL PLAN (ESCP)**
1. EROSION/SEDIMENT CONTROL BMP IN ADDITION TO THOSE PRESENTED ON THE PLANS SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTY OR ROADWAYS. CONTROLS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED AS REQUIRED BY THE ENGINEER AND/OR CONTRACTOR TO ENSURE SURFACE WATER QUALITY CONDITIONS ARE IN COMPLIANCE WITH STATE WATER QUALITY STANDARDS, AND MANATEE COUNTY LDC SECTION 508.3.4.7.J
  2. THE CONTRACTOR SHALL REPORT ALL OFFSITE SURFACE WATER DISCHARGES WITH TURBIDITY IN EXCESS OF 29 NTU'S (NEPHELOMETRIC TURBIDITY UNITS) ABOVE BACKGROUND LEVEL TO WATER RESOURCES WITHIN 24 HOURS AFTER OCCURRENCE (941-861-6220 OR FAX 941-861-6270). NOTIFICATION SHALL INCLUDE CAUSE OF THE PROBLEM, CORRECTIVE ACTIONS TAKEN, AND INSTALLATION OF ADDITIONAL EROSION/SEDIMENT CONTROLS NOT SHOWN ON THE APPROVED CONSTRUCTION PLAN DRAWINGS.
  3. THE CONTRACTOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-296.320(4) (C)1., FLORIDA ADMINISTRATIVE CODE, FROM THE CONSTRUCTION SITE BY TAKING ADEQUATE MEASURES TO STABILIZE AFFECTED AREAS.
  4. FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORM WATER DRAINAGES OR WATER BODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP AND REPORTED IMMEDIATELY TO WATER RESOURCE: (941-861-6220). SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.
  5. CONSTRUCTION IS ANTICIPATED TO BEGIN IN 2013 AND END 2014.
  6. EXCAVATED MATERIAL WILL BE PLACED ON SITE. UNSUITABLE MATERIAL WILL BE TRUCKED AWAY.
  7. STOCKPILE AREAS WILL BE ON SITE.
  8. EROSION AND SEDIMENT CONTROL DEVICES WILL BE INSTALLED PRIOR TO CONSTRUCTION AND WILL BE INSPECTED WEEKLY AND REPAIRED AS NECESSARY BY THE GENERAL CONTRACTOR.
  9. WETLAND BUFFERS IF ANY WILL BE STAKED PRIOR TO CONSTRUCTION.
  10. IT IS ANTICIPATED THAT THE CONSTRUCTION WILL BE ONGOING EXCEPT FOR WEATHER DELAYS. ONCE GRADING IS COMPLETED AREAS WILL BE STABILIZED BY SEEDING.

THE UNDERSIGNED, AS AN AUTHORIZED REPRESENTATIVE OF OPROCK LONGBOAT FEE, LLC ACKNOWLEDGES RESPONSIBILITY FOR BEST MANAGEMENT PRACTICES AS THEY RELATE TO THE EROSION CONTROL AND SURFACE WATER MANAGEMENT SYSTEMS.

AUTHORIZED REPRESENTATIVE SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

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TIMOTHY A. DOVE, P.E. No. 43268  
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**SITE DEVELOPMENT PLANS**  
"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"

**LONGBOAT KEY HOTEL**  
4711 GULF OF MEXICO DRIVE  
BEST MANAGEMENT PRACTICES DETAILS

SECTION 36, TOWNSHIP 35 S., RANGE 16 E.

JOB NO. 0971004401  
SHEET NO. C15

**LEGEND**

- - - - - EXISTING STORM DRAINAGE
- - - - - EXISTING SANITARY SEWER
- - - - - EXISTING DOMESTIC WATER
- - - - - EXISTING RECLAIMED WATER
- - - - - EXISTING SANITARY FORCEMAIN
- - - - - EXIST. STORM INLET
- - - - - EXIST. SPOT ELEVATION NGVD29
- - - - - EXIST. SPOT ELEVATION NAVD88
- - - - - EXIST. HANDICAP PARKING
- - - - - EXIST. SIGN
- - - - - EXIST. SITE BENCH MARK
- - - - - EXIST. GAS METER
- - - - - EXIST. SANITARY MANHOLE
- - - - - METAL LIGHT POLE
- - - - - WATER METER
- - - - - TELEPHONE PAD
- - - - - TRANSFORMER
- - - - - WATER VALVE
- - - - - WOOD POWER POLE
- - - - - BACKFLOW PREVENTER
- - - - - ELECTRIC SERVICE
- - - - - FIRE HYDRANT
- - - - - PROJECT BOUNDARY

SEE BOUNDARY SURVEY FOR ADDITIONAL DELINEATION OF EXISTING FEATURES SYMBOLS AND ABBREVIATIONS



**TREE LEGEND**

- ☼ TREE
- \* PALM TREE
- TREES TO BE REMOVED
- TREES/PALMS TO BE REMOVED/RELOCATED OR REPLACED (WITH APPROVED SPECIES PER TOWN OF LONGBOAT KEY ZONING CODE, CHAPTER 98.06)
- TREES TO REMAIN IN PLACE
- △ PALM TREES TO BE RELOCATED ON-SITE OR REPLACED (WITH APPROVED SPECIES PER TOWN OF LONGBOAT KEY ZONING CODE, CHAPTER 98.06)

**NOTES:**

- 1). AUSTRALIAN PINES AND ALL OTHER NUISANCE PLANTS WITHIN GULF OF MEXICO DRIVE RIGHT-OF-WAY AND WITHIN PROPOSED DEVELOPMENT SITE ARE TO BE REMOVED.
- 2). SEE LANDSCAPE PLANS BY STEWART-WASHMUTH & COMPANY, INC. FOR ALL LANDSCAPE AND HARDSCAPE REQUIREMENTS, INCLUDING TREE REMOVAL AND PRESERVATION DETAILS.

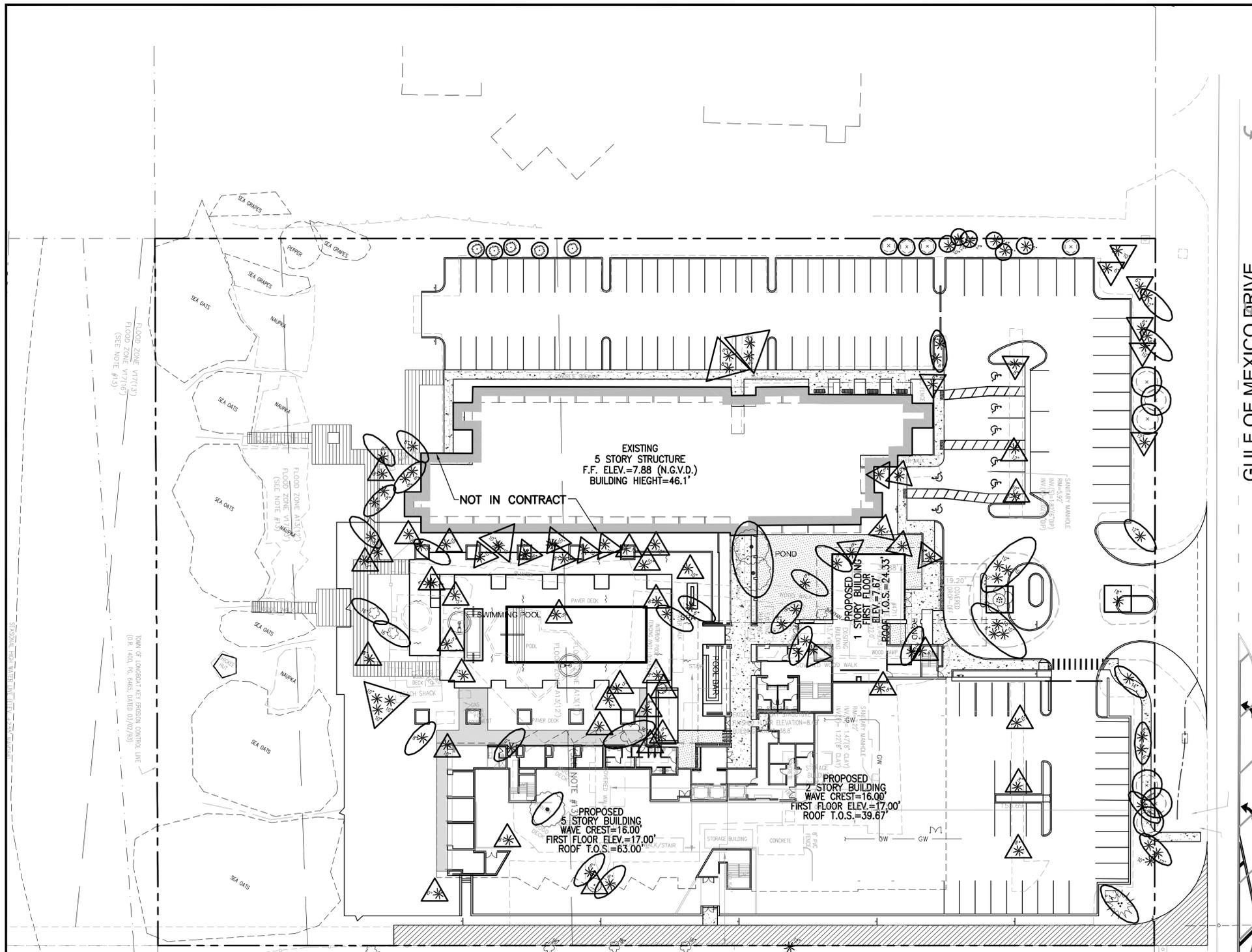
**TREE PROTECTION REQUIREMENTS**

TOWN OF LONGBOAT KEY CODE, CHAPTER 98, TREES

- 1). EXISTING TREES ARE TO BE REMOVED, RELOCATED OR REPLACED DUE TO PROPOSED GRADE/ELEVATION CHANGES, PROXIMITY TO PROPOSED STRUCTURES, CONFLICT WITH ACCESS/PARKING AREAS AND PROPOSED UTILITIES. THOSE TREES THAT CAN NOT BE RELOCATED OR REPLACED ON-SITE SHALL BE INCLUDED IN THE TOWN FUND REPLACEMENT PROGRAM IN ACCORDANCE WITH CHAPTER 98.
- 2). ALL NECESSARY TREE REMOVAL PERMITS WILL BE OBTAINED BY THE CONTRACTOR BEFORE LAND CLEARING COMMENCES. ALL TREE REPLACEMENT WILL BE CONDUCTED IN ACCORDANCE WITH CHAPTER 98. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPLANTING AND INTERIM CARE OF THE TREES DURING CONSTRUCTION AND UP TO FINAL APPROVAL. SEE THE LANDSCAPE PLAN.
- 3). PRIOR TO LAND CLEARING, THE CONTRACTOR SHALL CLEARLY MARK (WITH RED FLAGGING) ALL TREES TO BE REMOVED AND SHALL ERECT BARRICADES NO CLOSER THAN 10' AROUND ALL TREES TO BE PROTECTED. BARRICADES SHALL CONSIST OF THREE ROWS OF SURVEY RIBBON ON 1"x2"x4" STAKES.
- 4). THE BARRICADES MUST REMAIN IN PLACE AND BE IN GOOD CONDITION THROUGHOUT CONSTRUCTION. BARRICADES CAN BE REMOVED FOR FINAL GRADING. REMOVAL OF OTHER VEGETATION WITHIN THE PROTECTED ZONES MAY BE REMOVED BY MOWING OR BY HAND. IF IMPROVEMENTS ARE TO BE LOCATED WITHIN THE PROTECTED ZONES, CLEARING BY MACHINERY WILL BE ALLOWED BUT ONLY IN THE AREA AND TO THE EXTENT NECESSARY TO INSTALL THE IMPROVEMENTS. NO MACHINERY, MATERIAL OR DEBRIS SHALL BE PLACED OR STORED WITHIN THE PROTECTED ZONES.
- 5). THE CONTRACTOR SHALL NOT CAUSE OR PERMIT THE CLEANING OF EQUIPMENT OR MATERIALS OR THE STORAGE OR DISPOSAL OF WASTE MATERIALS WITHIN THE DRIP LINE OF ANY TREE OR GROUPING OF TREES.
- 6). SILT BARRIERS, HAY BALES OR SIMILAR EFFECTIVE EROSION CONTROL BARRIERS WILL BE REQUIRED IN ANY AREA WHERE EROSION OR SILTATION MAY CAUSE DAMAGE TO TREES.
- 7). THE RELOCATED TREES WILL BE PROTECTED DURING CONSTRUCTION BY PLACEMENT OF THE TREES IN A TEMPORARY ON-SITE HOLDING AREA DESIGNATED BY THE LANDSCAPE ARCHITECT. THE TREES WILL BE TRIMMED, HEELED IN A PLANTING MEDIUM AND KEPT MOIST ON REGULAR BASIS TO MAINTAIN VEGETATION VITALITY AND ROOT STRUCTURE INTEGRITY. ONCE SITE CONSTRUCTION IS COMPLETE, THE TREES WILL BE RELOCATED TO AREAS AS ILLUSTRATED ON THE LANDSCAPE PLAN. THEREAFTER, THE TREES WILL BE WATERED BY AN AUTOMATIC, FULL COVERAGE IRRIGATION SYSTEM AS ILLUSTRATED PER THE IRRIGATION PLAN. SEE ABOVE FOR TREE REPLACEMENT REQUIREMENTS AND CALCULATIONS.

REMOVED TREES ARE TO BE REPLACED PER THE TOWN OF LONGBOAT KEY CHAPTER 98.06:

- 2:1 BASIS IF REPLACEMENT TREES ARE SMALLER THAN REMOVED TREES.
- 1:1 BASIS IF REPLACEMENT TREES ARE APPROXIMATELY THE SAME SIZE AS REMOVED TREES.



**TREES TO BE RELOCATED OR REMOVED**

PALMS TO TRANSPLANT TO HOLDING AREA			TREES TO BE REMOVE FROM SITE		
QTY	COMMON NAME		QTY	COMMON NAME	
1	PAUROTIS PALM	☼	4	SEA GRAPE	☼
1	BISMARCK PALM	☼	3	FICUS SPECIES	☼
1	OLD MAN PALM	☼	1	SCREW PINE	☼
10	COCONUT PALM	☼	20	SABAL PALM **	☼
22	WINDMILL PALM	☼	19	QUEEN PALM	☼
47	SABAL PALM	☼			

\*\*SABAL PALMS DESIGNATED TO BE REMOVED HAVE INTERIOR TRUNKS &/OR SHOW DECAY. REMOVAL SHALL BE APPROVED BY THE TOWN OF LBK

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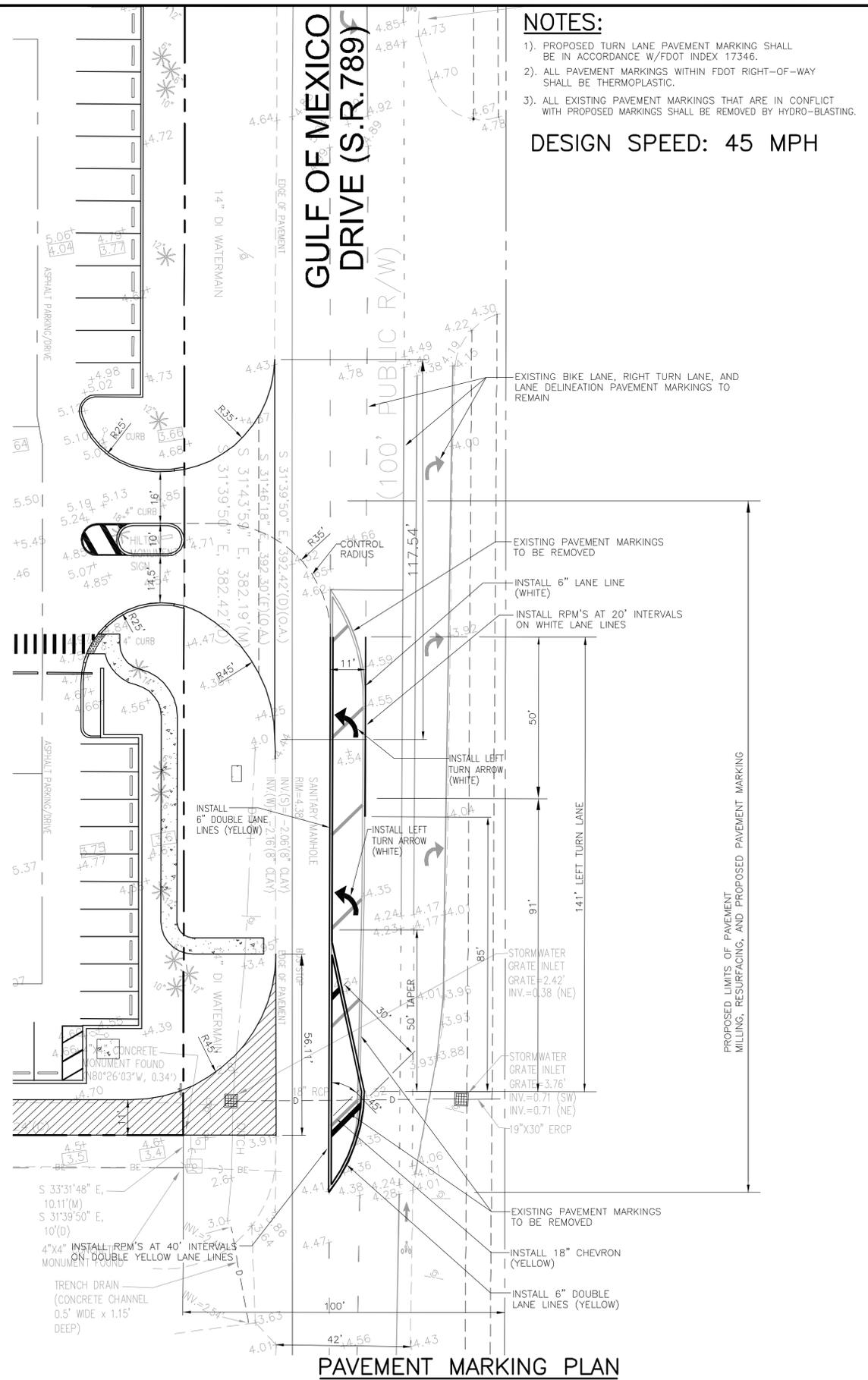
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PHONE (941) 747-2981 FAX (941) 747-7234  
ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 21  
ARCHITECTURE-ENGINEERING-ENVIRONMENTAL-LANDSCAPE-PLANNING-SURVEYING-UTILITIES  
GAINESVILLE-LAKEWUCH RANCH-ORLANDO-PALM BEACH GARDENS-ST. PETERSBURG-TAMPA-VENICE  
Since 1919

TIMOTHY A. DOVE, P.E. No. 43268  
DATE

**SITE DEVELOPMENT PLANS**  
"DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"  
**LONGBOAT KEY HOTEL**  
4711 GULF OF MEXICO DRIVE  
**TREE PRESERVATION PLAN**  
SECTION 36, TOWNSHIP 35 S., RANGE 16 E.  
JOB NO. 0971004401  
SHEET NO. C16

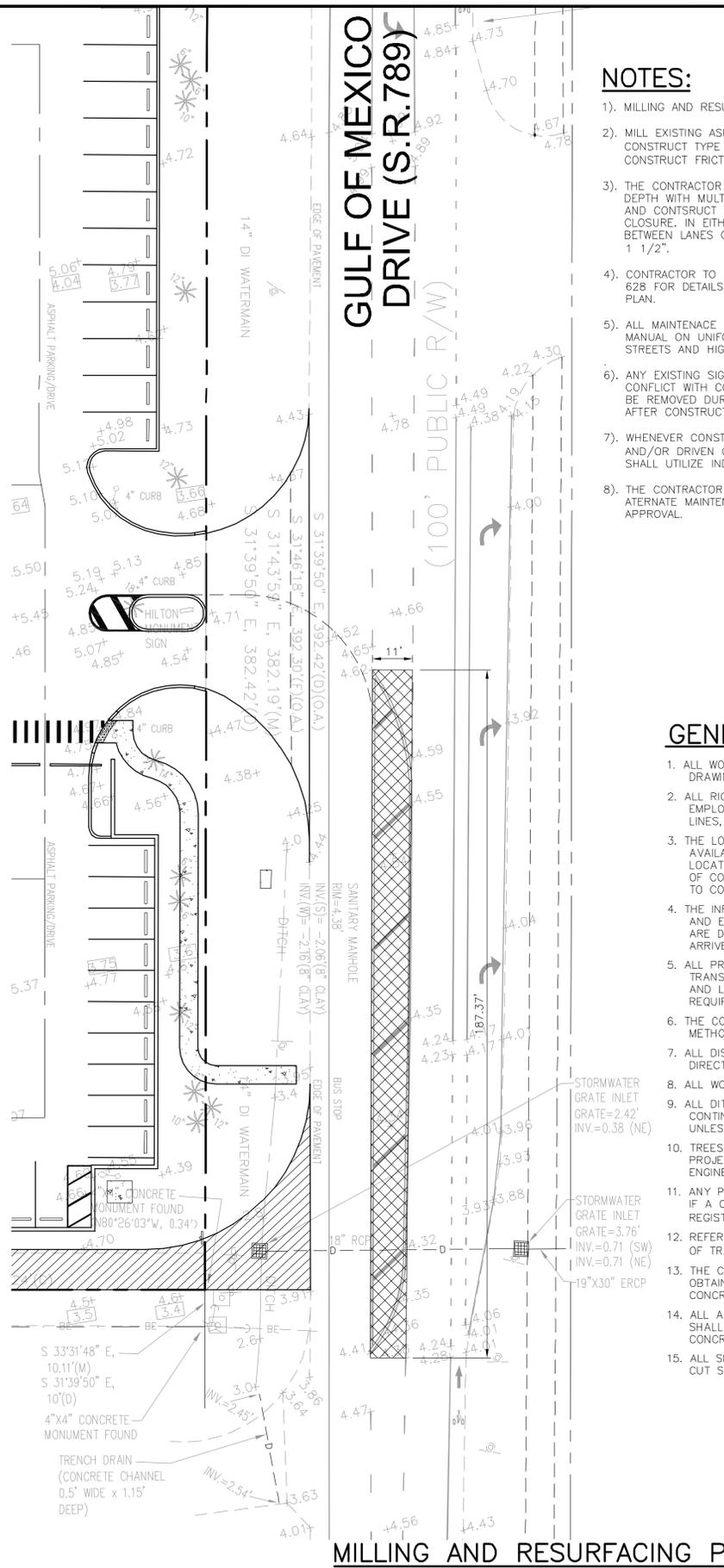


**PAVEMENT MARKING PLAN**

**NOTES:**

- 1). PROPOSED TURN LANE PAVEMENT MARKING SHALL BE IN ACCORDANCE W/FDOT INDEX 17346.
- 2). ALL PAVEMENT MARKINGS WITHIN FDOT RIGHT-OF-WAY SHALL BE THERMOPLASTIC.
- 3). ALL EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH PROPOSED MARKINGS SHALL BE REMOVED BY HYDRO-BLASTING.

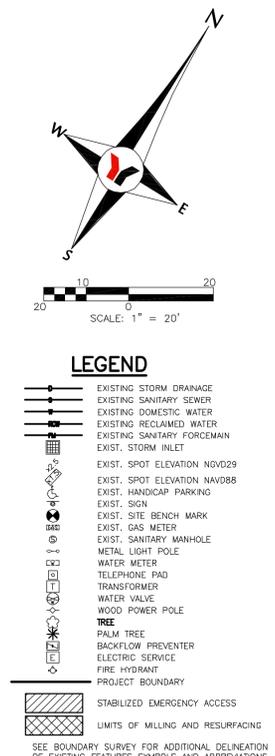
**DESIGN SPEED: 45 MPH**



**MILLING AND RESURFACING PLAN**

**NOTES:**

- 1). MILLING AND RESURFACING AREA = 2,061 SF.
- 2). MILL EXISTING ASPHALT PAVEMENT 1 1/2\"/>



**GENERAL NOTES:**

1. ALL WORK INCLUDED IN THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE CONSTRUCTION DRAWINGS AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
2. ALL RIGHT-OF-WAY AND PROPERTY LINES SHOWN ON THE DRAWINGS ARE APPARENT. THE CONTRACTOR SHALL EMPLOY THE SERVICES OF A SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO ESTABLISH RIGHT-OF-WAY LINES, BASE LINES, BENCH MARKS LINES AND STATIONING AS REQUIRED TO CONSTRUCT THIS PROJECT.
3. THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE DRAWINGS HAVE BEEN ESTABLISHED BASED ON BEST AVAILABLE INFORMATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT SIZE, LOCATION, DEPTH AND HEIGHT OF ALL UNDERGROUND AND OVERHEAD UTILITIES WHICH MAY BE WITHIN THE LIMITS OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR OF UTILITIES DAMAGED BY FAILURE TO COMPLY WITH THIS REQUIREMENT WITH NO ADDITIONAL COST TO THE OWNER.
4. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO CONSTRUCTION, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED.
5. ALL PRACTICABLE EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIALS TO STORMWATER INLETS, SURFACE DRAINS, DRAINAGE DITCHES, WETLANDS AND LAKE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.
6. THE CONTRACTOR SHALL CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED, OR REPRESENTATIVE.
7. ALL DISTURBED GRASS AREAS SHALL BE RESTORED WITH SOLID ST. AUGUSTINE SOD UNLESS OTHERWISE NOTED OR DIRECTED BY THE OWNER.
8. ALL WORK SHALL BE IN ACCORDANCE WITH FDOT AND PROJECT SPECIFICATIONS. ELEV. TO INVERT ELEV.
9. ALL DITCHES AND SIDE SLOPES THAT ARE DISTURBED ARE TO BE RESHAPED TO ORIGINAL DESIGN. ORIGINAL IS A CONTINUOUS GRADE FROM INVERT PLANTINGS SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR UNLESS IDENTIFIED AS REMOVE OR REPLACE.
10. TREES, SHRUBS AND OTHER LANDSCAPING SHALL BE PROTECTED DURING CONSTRUCTION AS IDENTIFIED ON THE PROJECT DOCUMENTS. ALL DAMAGED IN DANGER OF BEING DESTROYED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. ANY CORNER MONUMENT DESTROYED OR DISTURBED
11. ANY PUBLIC LAND CORNER, PROPERTY OR BENCHMARK WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A CORNER MONUMENT IS SHALL BE RESET AND CERTIFIED BY A PROFESSIONAL SURVEYOR AND MAPPER REGISTERED IN THE STATE OF FLORIDA AT THE CONTRACTOR'S EXPENSE. ROAD AND BRIDGE CONSTRUCTION".
12. REFERENCE TO FDOT STANDARD SPECIFICATIONS SHALL MEAN THE CURRENT EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "FOR
13. THE CONTRACTOR SHALL ADHERE TO ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS WHICH HAVE BEEN OBTAINED. SUCH THAT THE REPAIRED AREAS ARE PARALLEL OR PERPENDICULAR TO EXISTING PAVEMENT OR CONCRETE.
14. ALL ASPHALT DRIVEWAY REPAIR SHALL MEET OR EXCEED THE ORIGINAL CONDITION AND THICKNESS. THE ASPHALT SHALL BE SAW CUT STRAIGHT REPAIRED AREAS ARE PARALLEL OR PERPENDICULAR TO EXISTING PAVEMENT OR CONCRETE OR TO THE NEAREST JOINT.
15. ALL SIDEWALK REPAIR SHALL BE PER FDOT DESIGN STANDARDS. THE DAMAGED SIDEWALK AREAS SHALL BE SAW CUT STRAIGHT SUCH THAT THE

NO.	BY	DATE	DESCRIPTION
1	PSN	6/17/13	DESIGN DEVELOPMENT ISSUE
2	PSN	7/15/13	REVISED PER FDOT REVIEW COMMENTS
3	PSN	9/13/13	REVISED PER TOWN OF LONGBOAT KEY REVIEW COMMENTS
4	PSN	10/14/13	ISSUE FOR GMP
5	PSN	10/18/13	ISSUE FOR TOWN OF LBK PLANNING AND ZONING REVIEW

NO.	BY	DATE	DESCRIPTION
6			
7			
8			
9			
10			

INITIALS	DATE
NICKOLS	10/23/12
NICKOLS	10/23/12
JORDAN	10/25/12
ADLER	

PREPARED FOR:  
**OPROCK LONGBOAT FEE, LLC**  
 1000 MARKET STREET, BUILDING 1, SUITE 300  
 PORTSMOUTH, NEW HAMPSHIRE 03801  
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 "DRAWING NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED ENGINEER"  
**LONGBOAT KEY HOTEL**  
 4711 GULF OF MEXICO DRIVE  
**GULF OF MEXICO DR. (S.R. 789) IMPROVEMENT PLAN**  
 SECTION 36, TOWNSHIP 35 S., RANGE 16 E.  
 JOB NO. 0971004401  
 SHEET NO. C17