## DATUM CONVERSION +0.298' NGVD

3277A Fruitville Road, Suite 2 Sarasota, FL 34237 State of Florida License Architect, No. AA260009

A Full Service A & E Firm

# WARNER'S BAYOU BOAT RAMP SOUTH PARKING LOT IMPROVEMENTS

5800 RIVERVIEW BLVD. MANATEE COUNTY, FLORIDA **SECTION 20 - TOWNSHIP 34 SOUTH - RANGE 17 EAST** PARCEL ID: 3047600006

# **CONSULTANTS OWNER / DEVELOPER MANATEE COUNTY** 5502 33rd AVE. DRIVE WEST **BRADENTON, FLORIDA 34209** (941) 792-8784 **ATTN: ALAN MERONEK ENGINEER** CPH. INC. **3277A FRUITVILLE ROAD SARASOTA. FLORIDA 34237** ATTN: DANIEL P. MOYER, P.E. (941) 365-4771 **SURVEYOR GEORGE F. YOUNG, INC.** 10540 PORTAL CROSSING, SUITE 105

**BRADENTON, FLORIDA 34211** (941) 747-2981 ATTN: F. PETER LUTZ, JR.

## **LANDSCAPE ARCHITECT**

CPH, INC. **500 WEST FULTON STREET** SANFORD, FLORIDA 32771 ATTN: MAXWELL D. SPANN, R.L.A. (407) 322-6841

## **ENVIRONMENTAL SCIENTIST**

CPH, INC. **500 WEST FULTON STREET** SANFORD, FLORIDA 32771 **ATTN: DAVID A. LANDERS** (407) 322-6841

# NO WELLS EXIST CURRENTLY ON THIS SITE.



WHEN SCALING ANY REPRODUCED PLANS FOR THE PURPOSE OF

COLLECTING DATA.

# **ELECTRIC**

FLORIDA POWER & LIGHT **303 HASTINGS ROAD** ST. AUGUSTINE, FLORIDA 32084 (800) 868-9554 **ATTN: TRACY STERN** 

**UTILITY PROVIDERS** 

## **TELEPHONE**

VERIZON FLORIDA INC. 1909 US HWY. 301 N. TAMPA, FLORIDA 33619 (813) 627-8343 **ATTN: DAVID WYNNS** 

## **WATER / SEWER**

**MANATEE COUNTY UTILITY OPERATIONS** 4422 - C 66TH STREET WEST **BRADENTON, FLORIDA 34210** (941) 792-8811, EXT. 5002 ATTN: KATHY MCMAHON

# **CABLE**

BRIGHT HOUSE NETWORKS TAMPA BAY 5413 SR 64 E. **BRADENTON, FLORIDA 34208** (941) 345-1348 EXT. 21348 **ATTN: TOM WRIGHT** 

## **MANATEE COUNTY**

**MANATEE COUNTY** 5502 33rd AVE. DRIVE WEST **BRADENTON, FLORIDA 34209** (941) 792-8784 ATTN: ALAN MERONEK

## FLORIDA DEPARTMENT **OF ENVIRONMENTAL PROTECTION**

**APPROVAL AGENCIES** 

SOUTHWEST DISTRICT 13051 N. TELECOM PARKWAY **TEMPLE TERRACE, FLORIDA 33637** PHONE: (813) 470-5700

# **COVER SHEET**

**SUMMARY OF PAY ITEMS** C0.1A **BOUNDARY AND TOPOGRAPHIC SURVEY S1** 

**INDEX OF SHEETS** 

GENERAL NOTES, LEGENDS AND SYMBOLS SHEET C1.1 STORMWATER POLLUTION PREVENTION PLAN

C1.2 STORMWATER POLLUTION PREVENTION PLAN

C1.3 SITE DIMENSION PLAN

C1.4 GRADING AND STORM DRAINAGE PLAN

**CONSTRUCTION DETAILS SHEET** 

C5.2 **CONSTRUCTION DETAILS SHEET** 

**CONSTRUCTION DETAILS SHEET** C5.3

C5.4 MANATEE COUNTY DETAILS SHEET

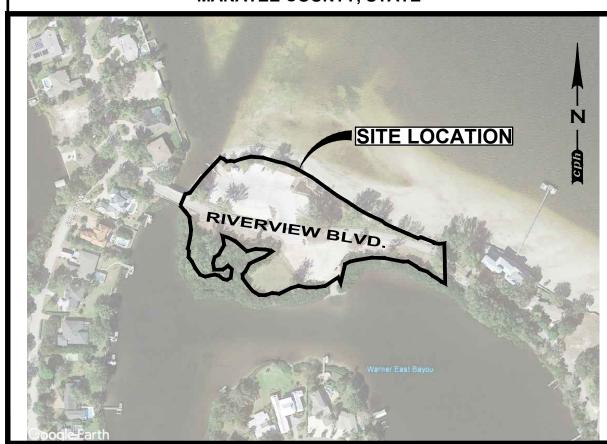
BID ALTERNATE SHEET L1.1 LANDSCAPE PLAN

L5.1 LANDSCAPE NOTES AND DETAILS

# **SITE LOCATION** Bradenton Designed: K. Upp Drawn: K. Upp **VICINITY MAP** Checked: D. Moyer

**MAPS** 

SCALE: 1" = 3,000' MANATEE COUNTY, STATE



**LOCATION MAP** SCALE: 1" = 300' MANATEE COUNTY, STATE

Approval Type: OFF-STREET PARKING PLAN Project Name: WARNER'S BAYOU BOAT RAME

	-		
Approved:	PLN1804-0064		
Date	File Number		
PROJECT PLANNER (PD)			
PROJECT ENGINEER (PW)			
CONCURRENCY (PD)			
ENVIRONMENTAL PLANNING (PD)			
ENVIRONMENTAL HEALTH			
FIRE DISTRICT			
OWNER / AGENT			
Attention: The combination of this signed plan and acc approval document. Both documents should any building permit application.	companying approval letter constitutes the complete I be provided to interested parties and submitted with		

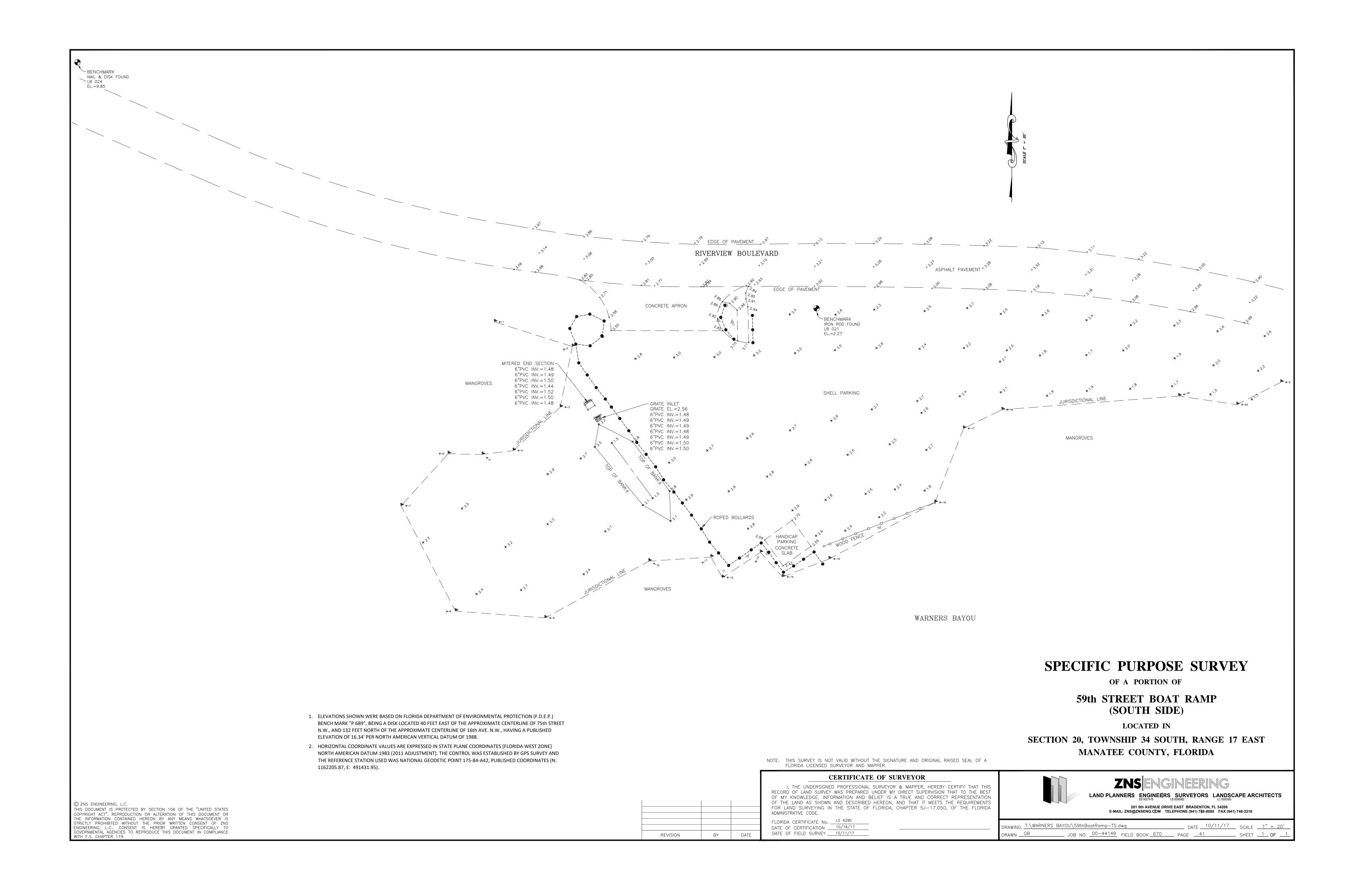
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Job No.: M13104.2

Date: 09/25/17

THIS SHEET NOT VALID FOR COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.



Summary of Pay Items - Warner's Bayou South Improvements					
Manatee County			QUANTITY		
PAY ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT	PLAN	FINAL	
2.01	Mobilization	LS	1	1 11 11 11	
2.02	Maintenance of Traffic	LS	1		
2.03	Survey and Control Layout by Contractor	LS	1		
2.04	As-Built Survey	LS	1		
2.04	Prevention, Control, and Abatement of Erosion and Water Pollution	LS	1		
2.06	Remove and Dispose of Exist. Site Items	LS	1		
2.07	Remove and Dispose of Exist. Trees (8-Inch and Greater)	EA	2		
2.08	Clearing and Grubbing	LS	1		
2.09	Grading and Fill	LS	1		
2.10	Stormwater Pond Outall	LS	1		
2.10	Pavement Cement Concrete and Base (5-Inch Thick Min., 3000 PSI),	LO	1		
2.11	including WWR and 12" Base	SY	2400		
2.12	<del>                                     </del>	31	2400		
2.12	Pavement Cement Concrete and Base (6-Inch Thick Min., 3000 PSI),	SY	175		
0.40	including WWR and 12" Base		175		
2.13	Concrete Sidewalk offsite (FDOT index 310)	SY	56		
2.14	FDOT Type C Inlet	EA	2		
2.15	12" Storm Pipe	<u>LF</u>	87		
2.16	Concrete Flume	EA	1		
2.17	Type F Curb and Gutter	LF	120		
2.18	Type D Vertical Curb	LF	385		
2.19	Wooden Post	EA	32		
2.20	Post / Rope	LF	225		
2.21	Wheel Stops	EA	24		
2.22	Bollard (Galvanized Steel, Painted)	EA	1		
2.23	Bollard (Removable)	EA	1		
2.24	Signage	LS	1		
2.25	Detectable Warning Mats	SF	30		
2.26	Traffic Stripes and Markings	LS	1		
2.27	Bike Rack	EA	1		
2.28	Conduit for future water service	LF	120		
2.29	Conduit to future light pole	LF	150		
2.30	Irrigation	LS	1		
2.31	Tree Protection	EA	1		
2.32	Trees, Green Buttonwood	EA	18		
2.33	Trees, Cabbage Palm	EA	6		
2.34	Shrubs, Silver Buttonwood	EA	161		
2.35	Shrubs, Indian Hawhthorn	EA	48		
2.36	Groundcover, Sea Oxeye Daisy	EA	427		
2.37	Groundcover, Sand Cordgrass	EA	239		
2.38	Groundcover, Muhly Grass	EA	452		
2.39	Sod, Seashore Paspalum	SY	1000		
3.01	Discretionary Funds (Testing)	LS	1		
3.02	Discretionary Funds (10% Contingency)	LS	1		
4.00	Bid As Alternative				
4.01	Kayak Launch (flexipave and ribbon curb)	LS	1		
4.02	New Light Pole, Fixture, Service	EA	1		
4.03	New Fixture	EA	1		
4.04	Broadcast Shell	SY	2631		



A Full Service

A & E Firm 3277A Fruitville Road, Suite 2 Sarasota, FL 34237 Ph: 941.365.4771

Plans Prepared By: CPH, Inc.
State of Florida Licenses:
Engineer No. 3215
Surveyor No. LB7143
Architect. No. AA26000926
Landscape No. LC000298

					12/04/18 ADDENDUM NO. 1	10/26/18 OUT TO BID	Revision
					12/04/18	10/26/18	No. Date
$\forall$	$\lozenge$	\$	₹	$\bigvee$	$\overline{\mathbb{V}}$	$\nabla \!$	No.
Designed: K. Upp							
Drawn: K. Upp							
Checked: D. Moyer							

Date: 09/25/17 © 2018

FOR SUMMARY OF PAY ITEMS

LOT IMPROVEMENT PLANS
WARNER'S BAYOU
MANATEE COUNTY / FLORIDA

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

Sheet No.

CO.1A

#### GENERAL PROVISIONS

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL MAKE A PRE-CONSTRUCTION VIDEO (DVD FORMAT) ALONG THE PROPOSED ROUTE IN ACCORDANCE WITH THE SPECIFICATIONS. IN PARTICULAR, THE VIDEO SHALL DOCUMENT THE CONDITION OF EXISTING DRIVEWAYS, BUILDINGS, STRUCTURES, MAILBOXES, SIGNS, FENCES, AND LANDSCAPING ALONG PROPOSED CONSTRUCTION AREAS.

2. THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT (FS 553.60-553.64). ANY MATERIAL, CONSTRUCTION METHODS, OR MATERIAL COST TO COMPLY WITH THESE LAWS SHALL BE INCIDENTAL TO THE CONTRACT.

3. THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF ALL AVAILABLE REGULATORY AGENCY PERMITS AND LOCAL AGENCY PERMITS.

4. ALL CONSTRUCTION PROJECTS 1 OR MORE ACRES IN SIZE THAT DISCHARGE TO OFFSITE AREAS ARE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORMWATER DISCHARGE FROM SMALL AND LARGE CONSTRUCTION ACTIVITIES. IN ORDER TO MEET NPDES REQUIREMENTS, THE CONTRACTOR IS RESPONSIBLE FOR PREPARING A STORMWATER POLLUTION PREVENTION PLAN (SWPPP), IMPLEMENTING, INSPECTING, MAINTAINING, AND REPORTING ON ALL ELEMENTS OF THE SWPPP, COMPLETING AND SUBMITTING THE REQUIRED NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT) FORMS AS THE OPERATOR, AND PAYING ALL ASSOCIATED FEES.

5. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS REPRESENT A MINIMUM REQUIREMENT. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NEEDED IN ORDER TO PREVENT THE TRANSFER OF SEDIMENT FROM THE PROJECT AREA AND PREVENT THE EROSION OF SURFACES DURING CONSTRUCTION, AS NEEDED TO PROTECT ADJACENT PROPERTIES AND WATER BODIES.

6. IN THE EVENT THAT WATER IS ENCOUNTERED DURING CONSTRUCTION, DEWATERING SHALL BE CONDUCTED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION, AND SUBSEQUENT REMOVAL OF DEWATERING SYSTEMS AND THEIR SAFETY AND CONFORMITY WITH LOCAL CODES AND REGULATIONS. IF DEWATERING EQUIPMENT NEEDED EXCEEDS ANY OF THE FOLLOWING: 1) 6" PUMP VOLUTE; 2) 100,000 GPD TOTAL 24 HOUR (1 DAY) DEWATERING, AND; 3) 1,000,000 GPD PUMP CAPACITY, THE CONTRACTOR SHALL BE REQUIRED TO PERMIT THE DEWATERING SYSTEM WITH THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD). THE ENGINEER AND/OR OWNER SHALL BE NOTIFIED IMMEDIATELY IF ANY OF THE ABOVE THRESHOLDS ARE EXCEEDED.

7. DEWATERING DISCHARGE FROM THE SITE SHALL COMPLY WITH ALL NPDES GENERAL PERMIT REQUIREMENTS AND STATE WATER QUALITY STANDARDS. PROVIDE ALL TESTING AND PERMITTING REQUIRED AND COMPLY WITH ALL TREATMENT OR DISPOSAL METHODS REQUIRED TO MEET ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.

8. UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER, THE CONTRACTOR IS EXPECTED TO CONTAIN ALL CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY BOUNDARY, RIGHT-OF-WAY AND EASEMENTS, AND OTHER AREAS SPECIFICALLY DESIGNATED FOR CONSTRUCTION. AT NO TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. ANY REPAIR OR RECONSTRUCTION OF DAMAGED AREAS IN SURROUNDING PROPERTIES SHALL BE REPAIRED BY THE CONTRACTOR ON AN IMMEDIATE BASIS. ALL COSTS FOR REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED.

9. UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL USE THE GEOMETRY PROVIDED ON THE CONSTRUCTION PLANS. BENCHMARK INFORMATION SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER OR OWNER'S SURVEYOR. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND CONSTRUCTION PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

10. BASE SURVEY INFORMATION INCLUDING BUT NOT LIMITED TO ELEVATIONS, EASEMENTS, RIGHTS OF WAY, AND OTHER TOPOGRAPHIC INFORMATION HAS BEEN PREPARED BY OTHER PROFESSIONALS. CPH, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.

11. THIS SET OF PLANS MAY CONTAIN DRAWINGS PREPARED BY OTHER PROFESSIONALS, WHICH CONTAIN THE NAME, ADDRESS, AND LOGO OF THE PROFESSIONAL. CPH, INC. IS NOT RESPONSIBLE FOR DRAWINGS PREPARED BY OTHER PROFESSIONALS.

12. THE ENTIRE PROJECT SITE SHALL BE THOROUGHLY CLEANED AT THE COMPLETION OF THE WORK. CLEAN ALL INSTALLED PIPELINES, STRUCTURES, SIDEWALKS, PAVED AREAS, ACCUMULATED SILT IN PONDS, PLUS ALL ADJACENT AREAS AFFECTED BY CONSTRUCTION, AS DIRECTED BY THE OWNER OR JURISDICTIONAL AGENCY. EQUIPMENT TO CLEAN THESE SURFACES SHALL BE SUBJECT TO APPROVAL BY THE OWNER.

### UTILITY GENERAL NOTES

1. THE UTILITY DATA SHOWN ON THESE PLANS WAS LOCATED BY THE RESPECTIVE UTILITY, OR IS BASED ON UTILITY DRAWINGS, MAPS, OR FIELD RECONNAISSANCE.

2. THE LOCATION, MATERIAL TYPE, AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ANY UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT, THAT INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE CLOSELY COORDINATED WITH THE ENGINEER AND THE RESPECTIVE UTILITY COMPANY FOR RELOCATION OR PROPER INSTRUCTION

3. A SINGLE POINT UTILITY IDENTIFICATION SERVICE HAS BEEN SET UP FOR EXISTING UTILITIES. THE CONTRACTOR IS TO CONTACT THE SUNSHINE STATE ONE CALL CENTER BY DIALING "811" AT LEAST TWO (2) AND NO MORE THAN FIVE (5) WORKING DAYS PRIOR TO THE SPECIFIC CONSTRUCTION ACTIVITY FOR FIELD LOCATION. NOTE THAT NOT ALL UTILITIES PARTICIPATE IN THIS PROGRAM. THE CONTRACTOR SHOULD CONTACT ALL NON-PARTICIPATING UTILITIES SEPARATELY FOR FIELD LOCATION OF THEIR FACILITIES AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

4. REFER TO THE COVER SHEET FOR UTILITIES THAT HAVE PREVIOUSLY INDICATED THAT THEY MAY HAVE FACILITIES IN THE VICINITY OF THE CONSTRUCTION AREA:

5. THE CONTRACTOR SHALL KEEP LOCATE TICKETS UP TO DATE AT ALL TIMES.

6. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH EACH UTILITY AND ALL COSTS ASSOCIATED WITH THE PROTECTION OF EXISTING FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL ALSO COORDINATE NECESSARY RELOCATIONS OR OTHER CONSTRUCTION RELATED MATTERS WITH EACH UTILITY.

7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN IN SERVICE ALL EXISTING PIPING ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE DRAWINGS. ANY PIPING WHICH CAN BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION OF SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR WITH THE PERMISSION OF THE OWNER AND THE ENGINEER.

8. THE CONTRACTOR SHALL FIELD LOCATE ALL WATER AND SEWER SERVICES AND LATERALS WITHIN THE PROPOSED CONSTRUCTION AREA PRIOR TO CONSTRUCTION AND ADJUST THE PROPOSED CONSTRUCTION AS NEEDED TO ACCOMMODATE THESE EXISTING LINES

9. TYPICAL DETAILS AND PROPOSED CONSTRUCTION AS SHOWN ILLUSTRATE THE ENGINEER'S INTENT AND ARE NOT PRESENTED AS A SOLUTION TO ALL CONSTRUCTION PROBLEMS ENCOUNTERED IN THE FIELD. THE CONTRACTOR MAY ALTER THE PROPOSED CONSTRUCTION TO SUIT FIELD CONDITIONS, PROVIDED IT COMPLIES WITH THE PROJECT SPECIFICATIONS AND APPROVAL IS RECEIVED FROM THE ENGINEER. WHERE SUCH PROPOSED REVISIONS DEVIATE FROM THE FDEP CONSTRUCTION PERMIT, THEN SUCH REVISIONS WILL ALSO REQUIRE APPROVAL FROM FDEP.

10. FOR EACH RESPECTIVE PIPELINE CONSTRUCTION REQUIRED, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, DEPTH, SIZE, MATERIAL TYPE, AND ALIGNMENT OF ALL EXISTING PIPES, CABLES, ETC. TO BE CROSSED OR CONNECTED TO. IF THE CONTRACTOR DEEMS NECESSARY (A) A CHANGE IN ALIGNMENT OR DEPTH, OR THE NEED FOR ADDITIONAL FITTINGS, BENDS, OR COUPLINGS, WHICH REPRESENT A DEPARTURE FROM THE CONTRACT DRAWING, OR (B) A NEED FOR RELOCATION OF EXISTING UTILITIES, THEN DETAILS OF SUCH DEPARTURES, RELOCATIONS, OR ADDITIONAL FITTINGS, INCLUDING CHANGES IN RELATED PORTIONS OF THE PROJECT AND THE REASONS THEREFORE, SHALL BE SUBMITTED WITH SHOP DRAWINGS. APPROVED DEPARTURES FOR THE CONTRACTOR'S CONVENIENCE SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.

11. THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TEST PUMPING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES, AND OTHER EQUIPMENT, MATERIAL AND FACILITIES REQUIRED FOR ALL HYDROSTATIC, LEAKAGE, AND PRESSURE TESTING. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND THE OWNER IN WRITTEN FORM, FORTY-EIGHT (48) HOURS IN ADVANCE OF PROPOSED TESTING. THE CONTRACTOR SHALL PERFORM SATISFACTORY PRETESTING PRIOR TO NOTIFICATION.

## TRAFFIC CONTROL

1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A MAINTENANCE OF TRAFFIC (M.O.T.) PLAN PRIOR TO CONSTRUCTION. THE M.O.T. PLAN SHALL SHOW ALL PROPOSED TRAFFIC CONTROL SIGNS, PAVEMENT MARKINGS, AND BARRICADES, AND SHALL DETAIL ALL PROPOSED CONSTRUCTION SEQUENCING. THE M.O.T. PLAN AND INSTALLED TRAFFIC CONTROL MEASURES SHALL BE APPROVED BY THE ENGINEER, OWNER, AND ROADWAY JURISDICTIONAL AGENCY PRIOR TO CONSTRUCTION. IN GENERAL, ROADWAY AND DRIVEWAY LANE CLOSURES ARE PROHIBITED DURING CONSTRUCTION UNLESS SPECIFICALLY DETAILED ON THESE PLANS. IN THE EVENT IT IS DETERMINED THAT ROADWAY AND DRIVEWAY LANE CLOSURES WILL BE ALLOWED, THE CLOSURES SHALL BE RESTRICTED TO THE HOURS BETWEEN 9:00 A.M. AND 4:00 P.M. UNLESS OTHERWISE AUTHORIZED IN THE

2. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX NO. 102-600 AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED DURING CONSTRUCTION.

3. INSPECT TRAFFIC CONTROL DEVICES ON A DAILY BASIS TO ENSURE PLACEMENT OF BARRICADES AND FUNCTION OF LIGHTS IS MAINTAINED THROUGHOUT CONSTRUCTION.

4. CONTACT PROPERTY OWNERS AFFECTED BY CONSTRUCTION. COORDINATE TEMPORARY DRIVEWAY CLOSURES AND SEQUENCING. MAINTAIN ACCESS FOR ALL PROPERTY OWNERS DURING CONSTRUCTION.

5. WET UNSTABILIZED AREAS AS NECESSARY TO CONTROL DUST.

6. ADJUST TRAFFIC CONTROL DEVICES AS REQUIRED UNDER EMERGENCY CONDITIONS.

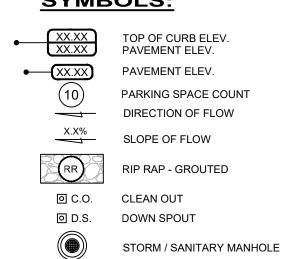
7. THE CONTRACTOR IS EXPECTED TO COORDINATE ITS ACTIVITIES WITH OTHER CONTRACTORS WHO MAY BE WORKING IN THE IMMEDIATE VICINITY.

8. WHEN WORK OCCURS WITHIN 15-FT OF ACTIVE ROAD TRAVEL WAY BUT NO CLOSER THAN 2-FT FROM THE TRAVEL WAY, SIGNAGE AND WARNING DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH FDOT INDEX NO. 102-600 AND 102-602. WHEN WORK OCCURS BETWEEN THE ROAD CENTERLINE AND A LINE 2-FT OUTSIDE THE EDGE OF THE TRAVEL WAY, SIGNAGE AND WARNING DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH FDOT INDEX NO. 102-600 AND 102-603.

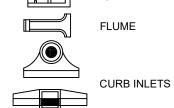
9. TYPE I OR TYPE II BARRICADES AT 20-FT CENTERS SHALL BE PLACED AND MAINTAINED ALONG THE EDGE OF THE ROAD WHEREVER HAZARDS EXIST AND TO BLOCK ENTRANCE INTO COMPLETED OR PARTIALLY COMPLETED PAVEMENTS UNTIL SUCH PAVEMENTS ARE OPEN TO PUBLIC USE.

10. WHERE A DROP-OFF CONDITION IN THE WORK ZONE OCCURS, IT SHALL BE MITIGATED IN ACCORDANCE WITH FDOT INDEX 102-600. REFER TO FDOT INDEX NO. 102-600 FOR THE DEFINITION OF A DROP-OFF.

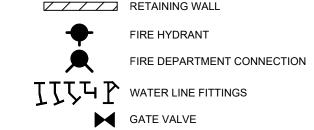
## SYMBOLS:

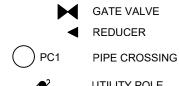














FLAG POLE

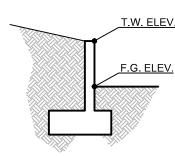
TRANSFORMER





SWSL - SINGLE WHITE SOLID LINE
SYSL - SINGLE YELLOW SOLID LINE
DYSL - DOUBLE YELLOW SOLID LINE
SWDL - SINGLE WHITE DASHED LINE
SBYL - SINGLE BROKEN YELLOW LINE

──◆──◆──◆──◆── GUIDE RAIL



**ABBREVIATIONS:** 

- AIR CONDITIONER

- BACK FLOW PREVENTER

- CONSTRUCTION ENTRANCE

- CORRUGATED METAL PIPE

APPROX - APPROXIMATE

- ASPHALT

- BLOCK

- BUILDING

- BACK OF CURB

- BACK OF WALL

- CENTERLINE

- CLEAN OUT

- CONCRETE

- DEPARTMENT

- DOWN SPOUT

- ELECTRICAL METER

- EDGE OF PAVEMENT

- FIRE DEPARTMENT CONNECTION

- FLORIDA POWER AND LIGHT

- MATCH EXISTING ELEVATION

- POLYVINYL CHLORIDE PIPE

- REINFORCED CONCRETE PIPE

- UNDERGROUND TELEPHONE LINES

- MITERED END SECTION

- HIGH DENSITY POLYETHYLENE PIPE

- FLORIDA DEPARTMENT OF TRANSPORTATION

- ELECTRIC

- ELEVATION

- FINISH FLOOR

- FINISH GRADE

- FIRE HYDRANT

- FACE OF CURB

- GOVERNMENT

- ADA ACCESSIBLE

- HOSE BIB

- IRRIGATION

- MANHOLE

- PAVEMENT

- RADIUS

- REVISION

- RIGHT-OF-WAY

- SQUARE FEET - SIDEWALK

- TOP OF BANK

- TOP OF WALL

- WATER VALVE

- TYPICAL

- WITH

- UNKNOWN

- TOE OF SLOPE

- INVFRT

- FORCE MAIN

CURB & GUTTER

- AVERAGE

A/C

ASPH

AVG

BFP

BLK

BLDG

BOC

BOW

C & G

CE

C/L

CMP

CO

CONC

DEPT

ELEC

DS

EM ELEV

EOP

FDOT

FF

FH

FM

FOC

FP&L GOV'T

HB

HC

HDPE

INV

IRR

ME

MES

PVC

RCP

REV

R/W

TOB

TOE

UNK

UTL

W/

PVMT

V LINE RETAINING WALL ELEVATION

## LINE TYPES:

	GOIDE IVAIL
	BASIN LINE
	BUILDING SETBACK LINE
x x	FENCE (AS NOTED ON PLAN
CATV	CABLE TELEVISION
——— EC ———	CONDUIT ELECTRIC
TC	CONDUIT TELEPHONE
DC	CONDUIT DATA
CN-F	CONSTRUCTION FENCE (AS NOTED ON PLAN)
XX	
	EASEMENT
——— Е ———	ELECTRIC LINE
FO	FIBER OPTIC
——— FW ———	FIRE WATER
FM	FORCE MAIN
———— G ————	GAS LINE
H.P	HIGH POINT
IC	IRRIGATION LINE
	LANDSCAPE BUFFER
	LIMITS OF DISTURBANCE

OHE OVERHEAD ELECTRIC

SANITARY SEWER

TEMPORARY SILT FENCE

— UB ———— UTILITY BOLLARD CONDUIT

TAMPER SWITCH

TELEPHONE LINE

----- W ----- WATER MAIN

WALL (AS NOTED ON PLAN)

PROPERTY LINE

STORM PIPE

## SIGNS:

0.0.10	<u> </u>
(B) -	BUS STOP (R7-7)
(DNE)	DO NOT ENTER (R5-1)
(FL)	NO PARKING - FIRE LANE (R7-94)
(HC)	HANDICAP (FTP-25)
(KR)	KEEP RIGHT (R4-7A)
(KL)	KEEP LEFT (R4-8A)
(LTO)	LEFT TURN ONLY (R3-5L)
(ME) —	MEDIAN (R4-7) (R4-8)
(ND)	NO DUMPING
(NL)	NO LEFT TURN (R3-2)
(NLI)	NO LITTERING
(NOR)	NO RIGHT TURN (R3-1)
(NOT)	NO TRUCKS (R5-2A)
(NP)	NO PARKING (R7-1)
(NPLZ)	NO PARKING LOADING ZONE (R7-6)
(1W) <del>•</del>	ONE WAY (R6-1L) (R6-1R)
(PE)	PEDESTRIAN CROSSING (W11-2)
(RTO)	RIGHT TURN ONLY (R3-5R)

(R1) ROW NUMBER

(ST) STOP (R1-1)

(SL) SPEED LIMIT (R2-X)

(TE) TRUCK ENTRANCE

(TZ) TOW AWAY ZONE (R7-201)

(WL) WEIGHT LIMIT (R12-5)

(WW) WRONG WAY (R5-1A)

(Y) WIELD (R1-2)

(DT) RESERVED DRIVE-THRU PARKING

NOTE:
ITEMS SHOWN DASHED /
SCREENED REPRESENT EXISTING
CONDITIONS. ITEMS SHOWN SOLID
/ BOLD REPRESENT PROPOSED
CONDITIONS.



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3277A Fruitville Road, Suite 2

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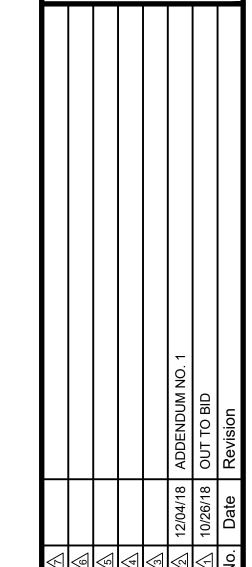
277A Fruitville Road, Suite
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Plans Prepared By:
CPH, Inc.

State of Florida Licenses

Engineer No. 3215
Surveyor No. LB7143
Architect. No. AA26000926
Landscape No. LC000298

STATE OF The Control of



Drawn: K. Upp

Checked: D. Moyer

Job No.: M13104.2

Date: 09/25/17

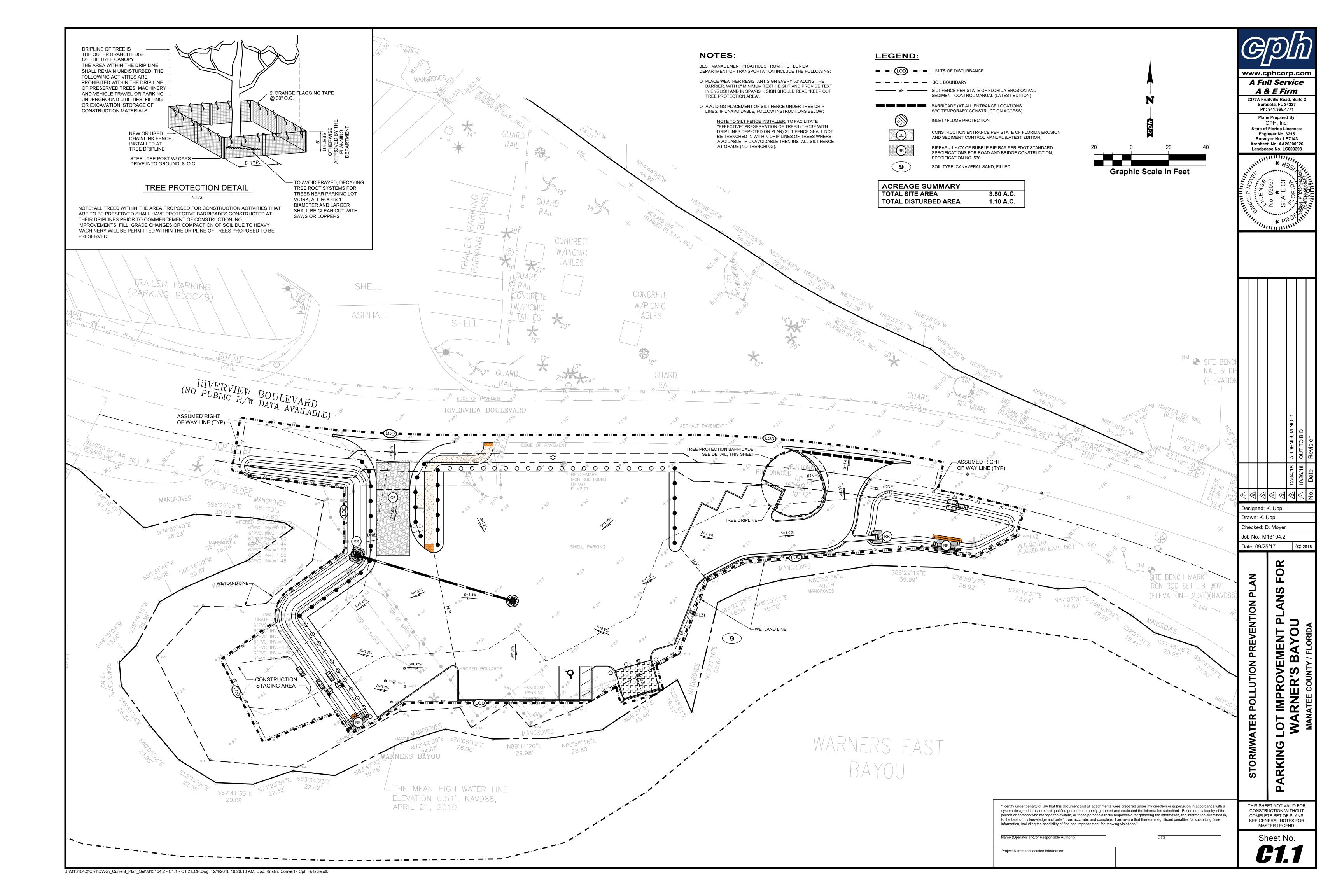
© 2018

Designed: K. Upp

ES, LEGENDS
LS SHEET
VEMENT PLANS FOR
S BAYOU

AND SYMBOLS
(ING LOT IMPROVER
WARNER'S E

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS.
SEE GENERAL NOTES FOR MASTER LEGEND.



## STORMWATER POLLUTION PREVENTION NOTES

THESE PLANS HAVE BEEN PREPARED TO ASSIST THE CONTRACTOR IN OBTAINING COVERAGE UNDER THE FDEP GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE PERMIT REQUIREMENTS AND MODIFY THESE PLANS AS NEEDED TO BE IN COMPLIANCE WITH THE PERMIT REQUIREMENTS.

THE SITE IS LOCATED AT 5800 RIVERVIEW BLVD., MANATEE COUNTY, FLORIDA SECTION 20, TOWNSHIP 34 SOUTH, RANGE 17 EAST

B. SITE CONDITIONS & ACTIVITIES NARRATIVE:

THE EXISTING CONDITION OF THE SITE IS DEVELOPED. DURING CONSTRUCTION THE SITE WILL BE CLEARED AND GRUBBED. THIS PROJECT WILL HAVE NO MAJOR EFFECT ON ANY THE ABUTTING PROPERTIES.

## WETLANDS/BUFFERS WETLANDS EXIST ON SITE, HOWEVER, THIS PROJECT WILL NOT IMPACT THEM.

LATITUDE: 27°30'33.06"N LONGITUDE: 82°37'3.40"W

#### THE INTENT OF THIS SWPPP IS TO COMPLY WITH THE INTENT OF THE GENERIC PERMIT AND TO PREVENT THE RELEASE OF SOILS, TRASH, CHEMICALS, TOXINS AND OTHER POLLUTANTS, BY WATER, AIR, VEHICLE TRANSPORT OR OTHER MEANS THAT CAN IMPACT STORM WATER QUALITY. THE CONTRACTOR SHALL OBTAIN A COPY OF THE GENERIC PERMIT AND RETAIN ON-SITE FOR FUTURE REFERENCE. THE CONTRACTOR SHALL READ AND LINDERSTAND THE PERMIT, AND ENSURE THAT THE BMP'S ARE INSTALLED AND THE EXECUTION OF THE WORK IS PERFORMED TO MEET THE INTENT OF THE GENERIC PERMIT AND THE SWPPP.

POTENTIAL SOURCES OF POLLUTION
THE POTENTIAL SOURCES OF POLLUTION THAT MAY REASONABLY BE EXPECTED TO AFFECT THE QUALITY OF STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY INCLUDE: SEDIMENT, PESTICIDES, FERTILIZER, PLASTER, CLEANING SOLVENTS, ASPHALT, CONCRETE, GLUE, ADHESIVES, PAINTS, CURING COMPOUNDS, WOOD PRESERVATIVES, HYDRAULIC OIL FLUIDS, GASOLINE, DIESEL FUEL AND KEROSENE

#### SEQUENCE OF CONSTRUCTION

THE SEQUENCE OF CONSTRUCTION HAS BEEN DEVELOPED AS A GUIDE FOR THE CONTRACTOR. THE CONTRACTOR SHALL SEQUENCE THE CONSTRUCTION AS NEEDED BASED ON BEST MEANS AND METHODS IN ORDER TO BE IN COMPLIANCE WITH STATE AND LOCAL REQUIREMENTS. THE INSTALLATION OR REMOVAL OF BMPS FARTH DISTURBANCE GRADING TEMPORARY STABILIZATION AND PERMANENT STABILIZATION SHALL BE IMMEDIATELY NOTED IN THE SWPPP IMPLEMENTATION LOG. ALL TEMPORARY BMPS SHALL BE REPAIRED AND MAINTAINED UNTIL STABILIZATION HAS OCCURRED AND THERE IS NO RISK OF DISCHARGE TEMPORARILY SEED, IMMEDIATELY AND THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.

- 1. POST A COPY OF THE NOLOR LETTER FROM FDEP CONFIRMING COVERAGE UNDER THE GENERIC PERMIT, AND THE NAME AND PHONE NUMBER OF THE CONTRACTOR'S REPRESENTATIVE RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL INSTALLATION AND MAINTENANCE ON A 24 HOUR BASIS.
- INSTALL PERIMETER CONTROLS IMMEDIATELY DOWNSTREAM OF THE PLANNED LOCATION OF THE CONSTRUCTION EXIT INSTALL STABILIZED CONSTRUCTION EXIT.
- INSTALL PERMITER CONTROLS. THE CONTRACTOR SHALL INSTALL THE REMAINING BMPS AS SHOWN AND AS REQUIRED TO MEET PERMIT REQUIREMENTS. SOME BMP INSTALLATIONS MAY NOT BE POSSIBLE AT THE BEGINNING OF THE PROJECT BUT MUST BE INSTALLED AS SOON AS POSSIBLE TO ENSURE COMPLIANCE.
- INSTALL TEMPORARY STAGING AND STORAGE AREAS. CONSTRUCT AND STABILIZE THE SEDIMENT BASINS AND SEDIMENT TRAPS WITH APPROPRIATE OUTFALL STRUCTURES, IF REQUIRED.
- CONSTRUCT AND STABILIZE HYDRAULIC CONTROLS (DITCHES, SWALES, DIKES, CHECK DAMS, ETC.), IF REQUIRED. BEGIN DEMOLITION, CLEARING AND GRUBBING OPERATIONS AS APPLICABLE. BEGIN CONSTRUCTION OF SITE IMPROVEMENTS.
- PAVE SITE AND STABILIZE PER PLAN. 11. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER SITE HAS ACHIEVED FINAL STABILIZATION. 12. SUBMIT NOTICE OF TERMINATION (NOT) ONCE ALL CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED PER PLAN.

A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FILE "NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES" (DEP FORM 62-621.300(4)(B) OR LATEST VERSION) TO FDEP TO THE FOLLOWING ADDRESS OR THROUGH THE FDEP ON-LINE SYSTEM AT LEAST TWO (2) DAYS BEFORE COMMENCEMENT OF CONSTRUCTION:

NPDES STORMWATER NOTICES CENTER, MS #2510 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2600 BLAIR STONE ROAD, TALLAHASSEE, FLORIDA

THE CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (NOT) WITHIN 14 CALENDAR DAYS AFTER THE SITE HAS ACHIEVED FINAL STABILIZATION (I.E. ALL DISTURBED SOILS AT THE SITE HAVE BEEN FINAL STABILIZED). TEMPORARY BMPS HAVE BEEN REMOVED. AND STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE SITE AUTHORIZED BY THE PERMIT HAVE BEEN ELIMINATED

AN ENVIRONMENTAL RESOURCE PERMIT IS REQUIRED FOR THE PROJECT. CONTRACTOR SHALL PROVIDE THE PERMIT INFORMATION ON THE NOI APPLICATION.

THE CONTRACTOR SHALL PROVIDE A COPY OF THE NOI AND SUBSEQUENT NOT OR THE ACKNOWLEDGEMENT LETTERS FOR THE NOI OR NOT TO THE MS4 WITHIN 7 DAYS OF RECEIPT. THE CONTRACTOR SHALL ALSO COORDINATE WITH THE MS4 TO ENSURE THAT ALL SPECIFIC REQUIREMENTS ARE MET.

B. WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES. SWALES SHALL BE CONSTRUCTED AS SHOWN ON PLANS.

C. EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY, WHILE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING:

. IN GENERAL, EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION. II. NEW AND EXISTING STORMWATER INLETS AND OUTFALL STRUCTURES SHALL BE PROTECTED DURING CONSTRUCTION. PROTECTION MEASURES SHALL BE EMPLOYED IMMEDIATELY AS REQUIRED DURING THE VARIOUS STAGES OF CONSTRUCTION. III. PERIMETER EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL FINAL SITE STABILIZATION HAS BEEN ESTABLISHED

D. CLEARING AND GRUBBING OPERATIONS SHALL BE CONTROLLED SO AS TO MINIMIZE LINPROTECTED ERODIRLE AREAS EXPOSED TO WEATHER. GENERAL FROSION CONTROL BMP'S SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND OFF-SITE SEDIMENTATION. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED PRIOR TO ANY CONSTRUCTION ACTIVITY.

E. THE CONTRACTOR SHALL FURNISH, INSTALL PER THE SEQUENCE OF CONSTRUCTION, MAINTAIN AND SUBSEQUENTLY REMOVE, ALL NECESSARY TEMPORARY

THE CONTRACTOR SHALL ADJUST, ADD OR MODIEY BMPS AS NECESSARY TO COMPLY WITH THE INTENT OF THE GENERIC NPDES PERMIT AND THE SWPPP FOR NO ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER PRIOR TO ADJUSTING, ADDING OR MODIFYING BMPS THAT AFFECT

THE CONTRACTOR IS ADVISED THAT THE CONTRACT DRAWINGS ONLY INDICATE EROSION. SEDIMENT, AND TURBIDITY CONTROLS AT LOCATIONS DETERMINED I THE DESIGN PROCESS. HOWEVER, THE CONTRACTOR IS REQUIRED TO PROVIDE ANY ADDITIONAL CONTROLS NECESSARY TO PREVENT THE POSSIBILITY OF SILTING ANY ADJACENT LOWLAND PARCEL OR RECEIVING WATER.

H. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. THE EROSION CONTROL SYSTEM DESCRIBED WITHIN THE CONSTRUCTION DOCUMENTS SHOULD BE CONSIDERED TO REPRESENT THE MINIMUM ACCEPTABLE STANDARDS FOR THIS PROJECT. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDENT UPON THE STAGE OF CONSTRUCTION, THE SEVERITY OF THE RAINFALL EVENT AND/OR AS DEEMED NECESSARY AS A RESULT OF ON-SITE INSPECTIONS BY THE OWNER. THEIR REPRESENTATIVES. OR THE APPLICABLE JURISDICTIONAL AUTHORITIES. THESE ADDITIONAL MEASURES (IF NEEDED) SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER. IT SHOULD BE NOTED THAT THE MEASURES IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED BEST MANAGEMENT PRACTICES (BMPS). THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES AS

SPECIFIED IN FDOT INDEXES #100 THROUGH #102 AND AS NECESSARY FOR EACH SPECIFIC APPLICATION. IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO ASSURE THAT THE STORMWATER DISCHARGE FROM THE SITE DOES NOT EXCEED THE TOLERANCES ESTABLISHED BY ANY OF THE APPLICABLE JURISDICTIONAL AUTHORITIES. THE CONTRACTOR SHALL KEEP THE SWPPP CURRENT AT ALL TIMES. THE CONTRACTOR SHALL SIGN AND DATE ANY CHANGES TO THE SWPPP AND KEEP THEM

AS ATTACHMENTS TO THE ORIGINAL PLAN. WHENEVER ANY OF THE FOLLOWING EVENTS OCCUR, THE CONTRACTOR SHALL UPDATE THE SWPPP WITHIN 7 DAYS: I THERE IS A CHANGE IN DESIGN. CONSTRUCTION OPERATION OR MAINTENANCE THAT HAS A SIGNIFICANT EFFECT ON THE DISCHARGE FROM THE PROJECT. II. THERE IS A NEW DISCHARGE POINT OUR OUTFALL III. THERE IS A CHANGE IN THE LOCATION OF A DISCHARGE POINT OF OUTFALL

IV. AN INSPECTION REVEALS THAT BMPS ARE INEFFECTIVE AT ELIMINATING OR MINIMIZING POLLUTANTS IN THE STORMWATER DISCHARGED FROM THE SITE. V THERE IS A NEW SUBCONTRACTOR IMPLEMENTING ANY PORTION OF THE SWPPP VI. A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR GREATER THAN A REPORTABLE QUANTITY OCCURS DURING A 24-HOUR

J. THE CONTRACTOR SHALL ENSURE THAT THE CONTRACTOR AND ALL SUBCONTRACTORS RESPONSIBLE FOR IMPLEMENTING SWPPP CONTROL MEASURES FILL OUT THE CONTRACTOR / SUBCONTRACTOR CERTIFICATION TABLE INCLUDED IN THIS SWPPP.

K. THE CONTRACTOR SHALL COMPLETE THE CONSTRUCTION SEQUENCE TABLE INCLUDING IN THIS SWPPP PRIOR TO PROCEEDING WITH THE INSTALLATION OF BMPS AND PRIOR TO GROUND DISTURBING ACTIVITIES. THE CONTRACTOR SHALL COMPLETE THE TABLE WITH ANTICIPATED DATES IN WHICH THE BMP WILL BE

**GRADE** 

2"X2"X3/4"

RESTRAINT

BLOCK (TYP)

COLORED NYLON

ROPE EXPANSION

SECTION VIEW

INSTALLED FILTER SACK

**GEOTEXTILE BAG INLET PROTECTION DETAIL** 

PROFILE VIEW OF

CAN NO LONGER BE SEEN

4. INSPECT PER REGULATORY EQUIREMENTS.

ARE A CONCERN.

GRATED INLET BOX.

GRATED INLET BOX.

PARENT OPENING SIZE

A. TURBIDITY REDUCTION TO NO MORE THAN 29 NTUs ABOVE BACKGROUND LEVEL PRIOR TO DISCHARGE OFF SITE.

BMPS. THE CONTRACTOR WILL FURNISH AND INSTALL ALL NECESSARY PERMANENT BMPS.

THE HYDRAULICS OF THE SITE OR BEFORE ADDING BMPS NOT DETAILED IN THE SWPPP.

B. CONTRACTOR TO FILE FOR A FDEP NOTICE OF INTENT (NOI) WITHIN 14 DAYS OF CONSTRUCTION COMPLETION.

I. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT

2. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR

3. PLACE AN OIL ADSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS

5. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE

6. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36

7. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE

EXTRA CARE SHALL BE TAKEN TO ENSURE REGULAR MAINTENANCE OF FILTER

SACKS USED IN RIGHT OF WAY TO ENSURE ADEQUATE DRAINAGE CAPACITY.

EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.

ASTM D-4632

## STABILIZATION

A. STABILIZATION MEASURES SHALL BE INITIATED IMMEDIATELY IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED AND WILL REMAIN UNDISTURBED FOR 7 DAYS OR MORE. STABILIZE BY COVERING WITH ADEQUATE AMOUNTS OF MULCH OVER SEED AND PERIODICALLY WATER TO PROMOTE AND MAINTAIN GROWTH OF THE TEMPORARY GROUNDCOVER, OR BY THE USE OF AN APPROPRIATE ALTERNATIVE BMP.

B. PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES OR ANY DISTURBED LAND AREAS SHALL BE COMPLETED IMMEDIATELY AFTER FINAL GRADING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY PROTECT A DISTURBED AREA IMMEDIATELY AFTER GRADING OPERATIONS, TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED. ALL TEMPORARY PROTECTION SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED.

C. ALL GRASS SLOPES CONSTRUCTED STEEPER THAN 4H:1V SHALL BE SODDED IMMEDIATELY AFTER FINAL GRADE IS ESTABLISHED.

## **DUST CONTROL**

A. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IN NO CASE SHALL FUGITIVE DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.

B. AS REQUIRED AFTER COMPLETION OF CONSTRUCTION, BARE EARTH AREAS SHALL BE VEGETATED.

AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, OTHER METHODS AS ARE NECESSARY FOR SUCH CONTROL SHALL BE EMPLOYED. THESE METHODS MAY INCLUDE ERECTION OF DUST CONTROL FENCES.

A. THE CONTRACTOR SHALL ENSURE THAT ALL WASTE AND DEBRIS ARE MANAGED DAILY SUCH THAT THEY WILL NOT IMPACT STORMWATER OR LEAVE THE PERMITTED AREA, AND DISPOSED OF PROPERLY IN ACCORDANCE WITH APPLICABLE STATE, LOCAL AND

B. THE CONTRACTOR SHALL ENSURE THAT ALL CHEMICALS, OILS, FUELS, HAZARDOUS WASTE, UNIVERSAL WASTE AND TOXIC SUBSTANCES ARE PROPERLY MANAGED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE STATE, LOCAL AND FEDERAL REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT WASTE IS NOT DISCHARGED FROM THE SITE, AND DOES NOT IMPACT

C. THE CONTRACTOR SHALL PROVIDE APPROPRIATE AND ADEQUATE WASHOUT FACILITIES TO ENSURE THAT CHEMICALS AND WASTE IS NOT DISCHARGED FROM THE SITE, AND DO NOT IMPACT STORMWATER OR GROUNDWATER. (E.G. CONCRETE/MASONRY WASHOUT, PAINT WASHOUT, EIFS, ETC.) THE CONTRACTOR SHALL CLEAN UP SPILLS PROMPTLY AND ENSURE THAT WASHOUT AREAS ARE PROPERLY MAINTAINED TO PROVIDE ADEQUATE VOLUME TO PREVENT OVERFLOW

D. THE CONTRACTOR SHALL PROVIDE ADEQUATE SANITARY FACILITIES FOR SITE PERSONNEL, MAINTAIN THROUGHOUT CONSTRUCTION. AND PROVIDE FOR PROPER DISPOSAL IN ACCORDANCE WITH APPLICABLE STATE, LOCAL AND FEDERAL REGULATIONS. SANITARY FACILITIES SHALL BE PROPERLY SECURED TO PREVENT TIPPING.

E A SPILL CONTROL AND CONTAINMENT KIT (CONTAINING FOR EXAMPLE ARSORRENT MATERIAL SLICH AS KITTY LITTER OR SAWDLIST ACID BASE NEUTRALIZING AGENT BROOMS DUST PANS MOPS RAGS GLOVES GOGGLES PLASTIC AND METAL TRASH CONTAINERS ETC.) SHALL BE PROVIDED AT THE CONSTRUCTION SITE AND IT'S LOCATION(S) SHALL BE IDENTIFIED WITH LEGIBLE SIGNAGEAND SHOWN ON THE SITE MAPS A. THE SPILL CONTROL AND CONTAINMENT KIT SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS

F. WHEN A SPILL OF REPORTABLE QUANTITIES IS DISCOVERED ON THE SITE. THE CONTRACTOR SHALL CLEAN UP ALL SPILLED MATERIALS. AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AUTHORITIES IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS, THE OWNER AND PROJECT ENGINEER. THE CONTRACTOR SHALL RETAIN CLEANUP INFORMATION AS WELL AS DISPOSAL MANIFESTS WITH THEIR SWPPP

#### EXCAVATED MATERIAL SHALL NOT BE DEPOSITED IN LOCATIONS WHERE IT COULD BE WASHED AWAY BY HIGH WATER OR STORM WATER RUNOFF. STOCKPILED MATERIAL SHALL BE COVERED OR ENCIRCLED WITH SEDIMENT CONTAINMENT DEVICES.

B. HEAVY CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM ENTERING SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CONTRACTORS SHALL PROVIDE BROAD DIKES OR SILT SCREENS AROUND, AND SEDIMENT SUMPS WITHIN, SUCH AREAS AS REQUIRED TO CONTAIN SPILLS OR OIL. GREASE, LUBRICANTS, OR OTHER CONTAMINANTS. CONTRACTOR SHALL HAVE AVAILABLE, AND SHALL USE, ABSORBENT FILTER PADS TO CLEAN UP SPILLS IMMEDIATELY AFTER ANY OCCURRENCE

C. THE CONTRACTOR SHALL ENSURE THAT ALL TOXIC / HAZARDOUS SUBSTANCES AND CHEMICALS ARE PROPERLY STORED, OUT OF THE WEATHER, AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL ENSURE THAT THESE PRODUCTS ARE STORED AND USED IN SUCH A MANNER THAT WILL NOT NEGATIVELY IMPACT STORMWATER, GROUNDWATER OR

D. THE CONTRACTOR SHALL ENSURE THAT ALL MATERIALS, EQUIPMENT, DEBRIS, WASTE, TRAILERS, AND OTHER SUPPORT RELATED ITEMS ARE CONTAINED WITHIN THE PERMITTED LIMITS OF DISTURBANCE. THE CONTRACTOR SHALL ENSURE THAT THE STORAGE AND USE OF SUCH ITEMS DOES NOT NEGATIVELY IMPACT STORMWATER OR GROUNDWATER.

A. THE CONTRACTOR SHALL ENSURE THAT THE CONSTRUCTION EXIT IS USED BY ALL VEHICLES AND EQUIPMENT ENTERING OR LEAVING THE JOBSITE. THE CONTRACTOR SHALL MONITOR AND MAINTAIN THE CONSTRUCTION EXIT TO ENSURE THAT NO SOILS ARE TRACKED OFFSITE BY TIRES OR TRACKS, AND THAT NO SOILS ARE SPILLED BY TRUCKS OR EQUIPMENT LEAVING THE SITE. ALL TRACKED OR SPILLED SOILS SHALL BE SHOVELED OR SWEPT FROM THE ROADWAY AND RETURNED TO THE SITE. WATER SHALL NOT BE USED TO CLEAN THE SOILS FROM THE ROADWAY UNLESS THE WATER AND SOILS ARE RECOVERED BY THE USE OF A VACUUM TRUCK OR SIMILAR DEVICE

## FERTILIZERS, HERBICIDES AND PESTICIDES

A. THE CONTRACTOR SHALL ENSURE THAT ALL FERTILIZERS, HERBICIDES, PESTICIDES AND SIMILAR PRODUCTS ARE PROPERLY STORED, OUT OF THE WEATHER, AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL ENSURE THAT THESE PRODUCTS ARE USED IN SUCH A MANNER THAT WILL NOT NEGATIVELY IMPACT STORMWATER, GROUNDWATER OR PROTECTED SPECIES.

B. NUTRIENTS SHALL BE APPLIED ONLY AT RATES NECESSARY TO ESTABLISH AND MAINTAIN VEGETATION.

A. THE CONTRACTOR SHALL INSPECT BMPS (I.E. DISCHARGE LOCATIONS, CONSTRUCTION EXIT, PERIMETER CONTROLS, INLET PROTECTION, STABILIZATION, EROSION CONTROL, DOCUMENTATION, WASTE DISPOSAL AREAS, MATERIAL STORAGE AREAS, ETC.) TO ENSURE THAT RMPS ARE NOT CAUSING OR CONTRIBUTION TO VIOLATIONS OF WATER OLIALITY STANDARDS OR RESULTING IN DESITE SEDIMENTATION: ENSURE THAT BMPS ARE INSTALLED. MAINTAINED AND OPERATING CORRECTLY AND EFFECTIVELY: ENSURE THAT BMPS ASSOCIATED WITH STORAGE AND WASTE DISPOSAL AREAS ARE BEING USED AND MAINTAINED PROPERLY: ENSURE THAT THE CONSTRUCTION EXIT IS FUNCTION PROPERLY TO PREVENT OFFSITE TRACKING OF SEDIMENT; ENSURE THAT EROSION PREVENTION MEASURES ARE MAINTAINED TO PREVENT VISIBLE EROSION OF DISTURBED AREAS AND SEDIMENTATION AT THE DISCHARGE POINTS AND DETERMINE IF CONSTRUCTION ACTIVITIES HAVE ALTERED THE EFFECTIVENESS OF BMPS. INSPECTIONS MUST BE COMPLETED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS, AND WITHIN 24 HOURS AFTER A RAINSTORM OF 0.50 INCHES OR GREATER EVEN IF IT RAINS ON THE WEEKEND OR A HOLIDAY

USING THE STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT FORM PROVIDED BY FDEP OR AN EQUIVALENT FORM. INSPECTION REPORTS SHALL BE SIGNED BY THE INSPECTOR AND A RESPONSIBLE AUTHORITY AS DEFINED BY THE PERMIT. INSPECTION REPORTS SHALL BE MAINTAINED WITH THE SWPPP. THE INSPECTOR MUST BE A QUALIFIED EROSION AND SEDIMENT CONTROL INSPECTOR AS DEFINED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

B. THE CONTRACTOR SHALL REPORT ALL INSPECTION FINDINGS AND CORRECTIVE ACTIONS TAKEN AS A RESULT OF THE INSPECTION

C. ANY MAINTENANCE, REPAIR AND NECESSARY REVISIONS TO BMP ITEMS SHALL BE ADDRESSED IN A TIMELY MANNER, BUT IN NO CASE LATER THAN 7 CALENDAR DAYS FOLLOWING THE INSPECTION OR IDENTIFICATION OF THE ISSUE. UNLESS OTHERWISE SPECIFIED, ACCUMULATED SEDIMENTS SHOULD BE REMOVED BEFORE THEY REACH ONE-HALF OF THE CAPACITY OF THE CONTROL DEVICE.

## THE GENERIC PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES PROHIBIT MOST

- SECURE RECTANGULAR BAR TO OR

**CAUTION: BAGGED INLET PROTECTION** 

REQUIRES ADDITIONAL MAINTENANCE

TO ENSURE THAT THE BMP FUNCTIONS

PROPERLY AND DOES NOT CAUSE

UNDER SURROUNDING SURFACE

NON-STORMWATER DISCHARGES DURING THE CONSTRUCTION PHASE. CERTAIN DISCHARGES ARE ALLOWED BY THE PERMIT PROVIDED APPROPRIATE BMP'S ARE UTILIZED AND THE DISCHARGE DOES NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS. ALLOWABLE NON-STORMWATER DISCHARGES THAT OCCUR DURING CONSTRUCTION ON THIS PROJECT PER PART 3.2 OF THE GENERIC PERMIT ARE:

DISCHARGES FROM FIRE FIGHTING ACTIVITIES. FIRE HYDRANT FLUSHINGS.

WATERS WITHOUT DETERGENTS USED TO SPRAY OFF LOOSE SOLIDS FROM VEHICLES.

WATERS USED TO CONTROL DUST POTABLE WATER SOURCES SUCH AS WATERLINE FLUSHINGS.

LANDSCAPE IRRIGATION AND DRAINAGE

ROUTINE EXTERNAL BUILDING WASHDOWN PROVIDED NO DETERGENTS ARE USED. PAVEMENT WASHWATERS THAT DO NOT CONTAIN DETERGENTS, LEAKS, SPILLS OF TOXIC OR HAZARDOUS MATERIALS. AIR CONDITIONING CONDENSATE.

LOOPS SIZED FOR 2"X1/4"

RECTANGULAR BAR. LIFT

RECTANGULAR BAR FOR

OVERFLOW HOLES ~

GEOTEXTILE BAG •

1/4" BRIGHTI Y COLORED -

LOOPS SIZED FOR 1" REBAR -

USE REBAR FOR A HANDLE TO EMPTY FILTER SACK AT A SEDIMENT COLLECTION

NYLON ROPE EXPANSION

HANDLES

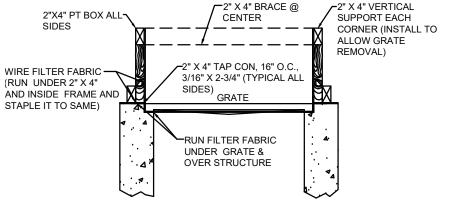
RESTRAINT

LOCATION.

FILTER BAG FROM INLET USII

FOUNDATION OR FOOTING DRAIN FLOWS THAT ARE NOT CONTAMINATED WITH PROCESS MATERIAL SUCH AS SOLVENTS. NONCONTAMINATED GROUND WATER ASSOCIATED WITH DEWATERING ACTIVITIES AS DESCRIBED IN PART 3.4 OF THE GENERIC

# \_\_\_\_2" X 4" BRACE @ ~2" X 4" VERTICAL CENTER SUPPORT FACH \_ \_ \_ \_ -CORNER (INSTALL TO



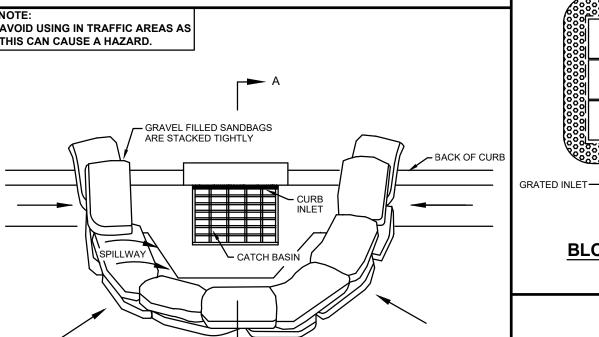
## **SECTION A - A**

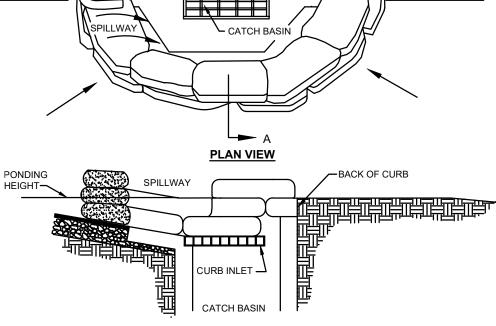
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY EVEL DRAINAGE AREAS. (LESS THAN 5%) 2. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE

GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM SYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

3. FASTEN FRAMING TO STRUCTURE TO ALLOW GRATE REMOVAL 4. LEAVE EXPOSED EDGE TO ALLOW FOR PAVING TO GRADE

## FILTER FABRIC INLET PROTECTION DETAIL



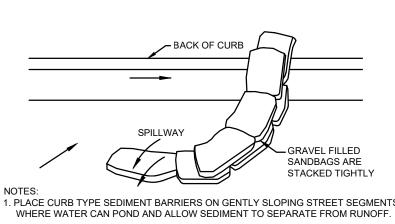


1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF 2. SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.

3. LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW 4. INSPECT BARRIERS AND REMOVE SEDIMENT AS NECESSARY. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY

# **CURB INLET PROTECTION DETAIL**

## **AVOID USING IN TRAFFIC AREAS AS** THIS CAN CAUSE A HAZARD.



2. SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.

3. TAPER TO ONE SANDBAG TO PROVIDE A SPILLWAY FOR OVERFLOW. 4. INSPECT BARRIERS AND REMOVE SEDIMENT AS NECESSARY, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

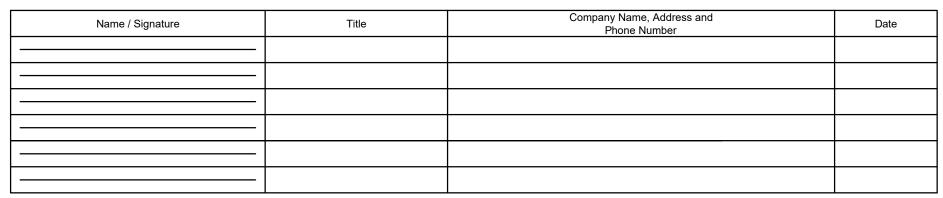
**CURB LINE PROTECTION DETAIL** 



THIS SWPPP MUST CLEARLY IDENTIFY, FOR EACH MEASURE IDENTIFIED WITHIN THE SWPPP, THE CONTRACTOR(S) OR SUBCONTRACTOR(S) WHO WILL IMPLEMENT EACH MEASURE. ALL CONTRACTOR(S) AND SUBCONTRACTOR(S) IDENTIFIED IN THE SWPPP MUST SIGN THE FOLLOWING CERTIFICATION:

'I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH. THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR

STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN.



NOTE: CONTRACTOR TO ADD SHEETS TO CERTIFICATION TABLE AS NECESSARY

## SWPPP IMPLEMENTATION LOG

A RECORD OF DATES WHEN BMPs ARE INSTALLED OR REMOVED. STABILIZATION MEASURES ARE INITIATED. MAJOR GRADING ACTIVITIES OCCUR. AND CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON PORTIONS OF THE SITE. THIS FORM MUST BE UPDATED CONTINUOUSLY THROUGHOUT THE PROJECT UNTIL THE

DESCRIPTION OF ACTIVITY	LOCATION	CONTRACTOR	BEGIN DATE	END DATE		
NOTE CONTRACTOR TO ARROUGHTS TO THE CHIRDREN HE ENTER THE CONTRACTOR HE						

NOTE: CONTRACTOR TO ADD SHEETS TO THE SWPPP IMPLEMENTATION LOG AS NECESSARY.

SECTION

. PLACE CONCRETE BLOCKS IN A SINGLE ROW

HEIGHT OF BARRIER VARIES LISE STACKS OF

3. HEIGHT OF BARRIER 12" AND MAX. HEIGHT OF

NON-ERODIBLE MATERIAL SUCH AS LOOSE

ROCK, BROKEN CONCRETE THAT WILL SLOW

THE FLOW OF THE WATER AND ALLOW IT TO

—WIRE MESH W/ FILTER FABRIC

FILTER THROUGH AND OVER THE MATERIAL

24" PLACE FILTER FABRIC OVER VERTICAL FACE

4-INCH 8-INCH OR 12" BLOCKS MIN

4. THE SEDIMENT FILTER SHALL BE ANY

SEFORE ENTERING THE INLET.

OF CONCRETE BLOCKS.

GRAVEL (12" MIN. DEPTH)

BLOCK AND AGGREGATE INLET SEDIMENT FILTER

SPECIFIC APPLICATION

INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED ACRES.

\* GRAVEL SHALL BE 2"-3" CLEAN STONE

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED. BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE

**GRAVEL & WIRE MESH INLET SEDIMENT FILTER** 

TREE PROTECTION DETAIL

THIS IS ONLY A GUIDE, CONTRACTOR IS TO USE HIS JUDGMENT TO MODIFY AS NEEDED.

WITH ENDS OF ADJACENT BLOCKS ABUTTING

AROUND PERIMETER OF INLET ON THEIR SIDES,

**AVOID USING IN TRAFFIC AREAS AS** 

CONCRETE BLOCKS-

► SEDIMENT FILTER

THIS CAN CAUSE A HAZARD.

FILTER FABRIC-

SEDIMENT-

DRIPLINE OF TREE IS THE EXTENT OF ITS

ORANGE FLAGGING TAPE

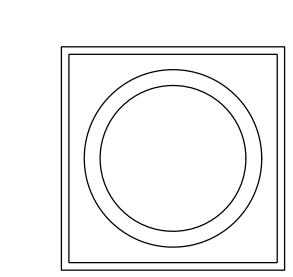
4.5 GAUGE WIRE MESH FENCE,

INTO GROUND, 8' O.C. (ATTACH WIRE

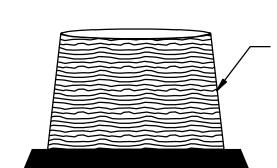
MESH W/ TWISTED WIRE

2" X 2", INSTALLED AT @ TREE

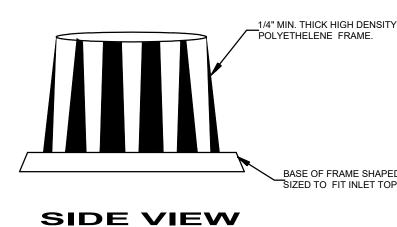
DRIPLINE



# TOP VIEW



NON-WOVEN COVER



# 1. EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.

2. PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.

#### 3. SLIDE THE COVER OVER THE FRAME. 4. FILL THE COVER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE COVER

POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE. 5. BACK FILL AROUND THE FRAME AND COVER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER, BACKFILLING MAY BE NECESSARY TO

COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.

## DOMED INLET PROTECTION (PREFABRICATED)

Stormwater Team Company IContractor: Contractor's Responsible CONSTRUCTION SEQUENCING TABLE Qualified Inspector(s): ANTICIPATED CONSTRUCTION SEQUENCE\* CONSTRUCTION ENTRANCE TEMPORARY CONTROL MEASURES STORM FACILITIES ROUGH GRADE / SEDIMENT CONTROL FOUNDATION / BUILDING CONSTRUCTION SITE CONSTRUCTION The contractor shall complete this table identifying the individuals of the stormwater team and their responsibilities.

A Full Service

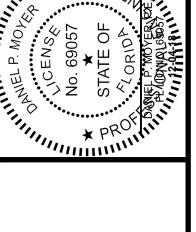
A & E Firm

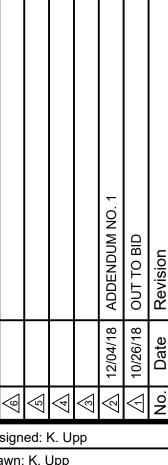
3277A Fruitville Road, Suite 2

Sarasota, FL 34237 Ph: 941.365.4771

Plans Prepared By CPH, Inc. State of Florida Licenses Engineer No. 3215 Surveyor No. LB7143 Architect, No. AA26000926

Landscape No. LC000298

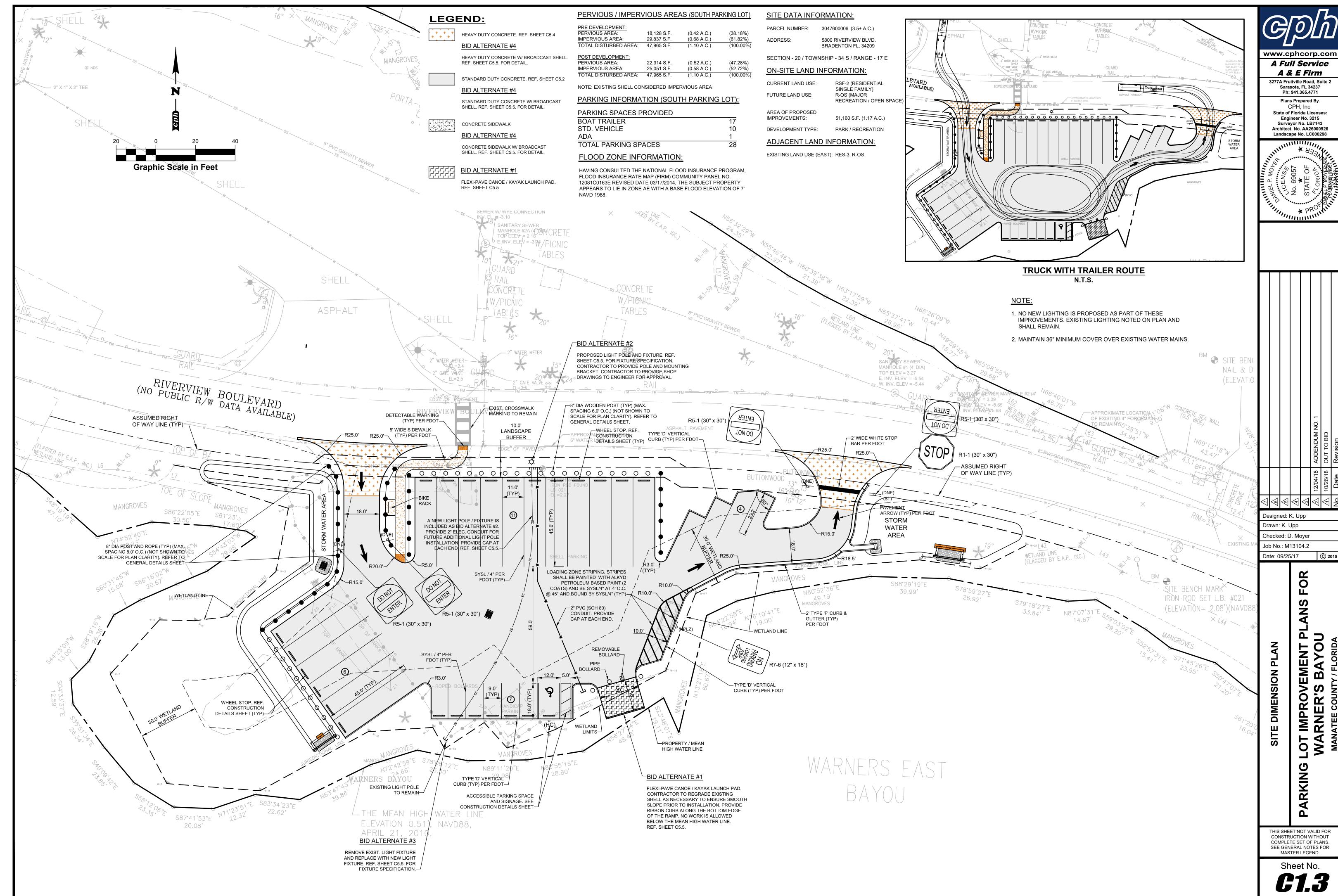




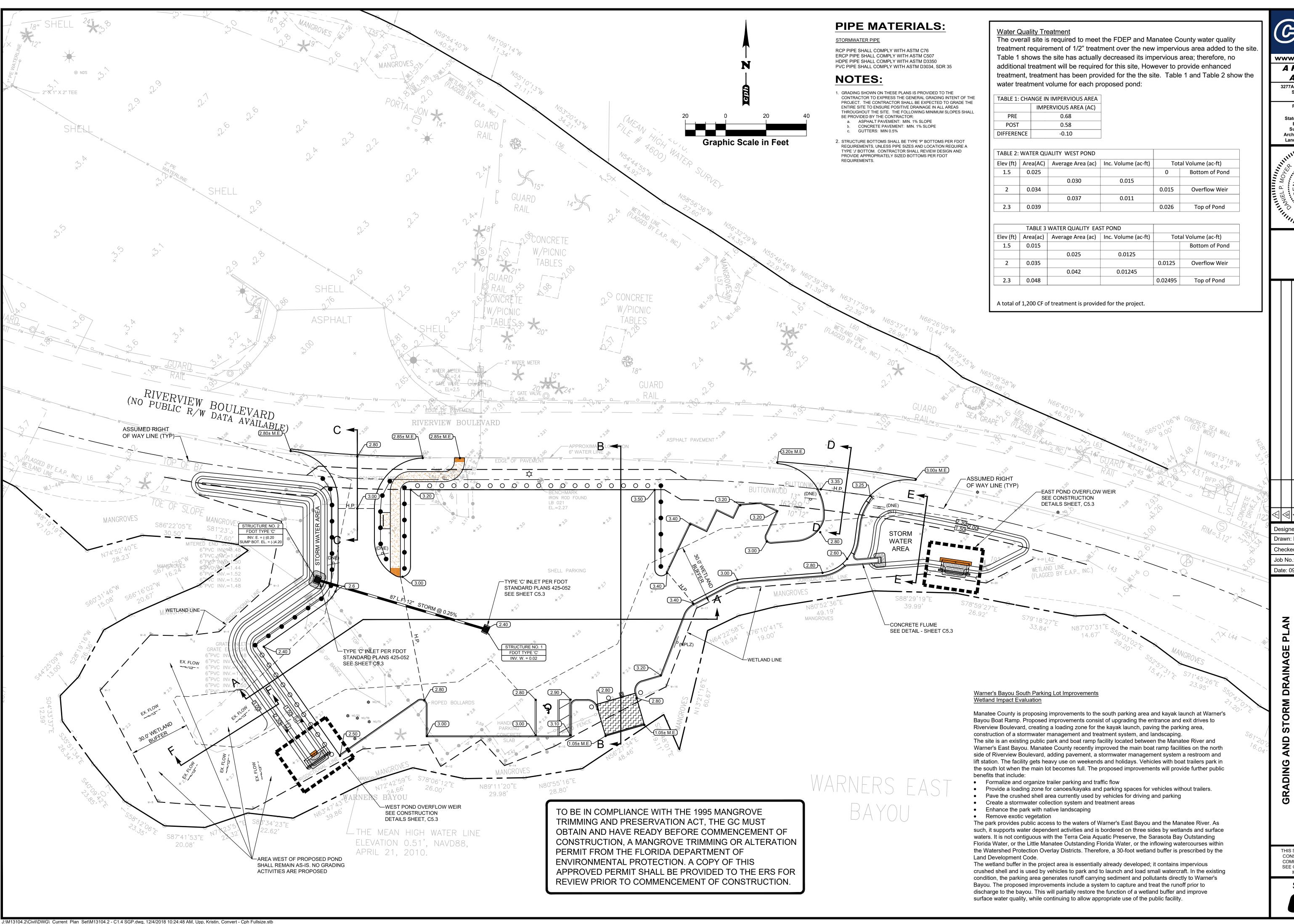
Designed: K. Upp Drawn: K. Upp Checked: D. Moyer Job No.: M13104.2 Date: 09/25/17 © 2018

Ω.

**CONSTRUCTION WITHOUT** COMPLETE SET OF PLANS SEE GENERAL NOTES FOR MASTER LEGEND.



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www.cphcorp.com

A Full Service

A & E Firm

3277A Fruitville Road, Suite 2 Sarasota, FL 34237 Ph: 941.365.4771 Plans Prepared By:

CPH, Inc.
State of Florida Licenses:
Engineer No. 3215
Surveyor No. LB7143
Architect. No. AA26000926
Landscape No. LC000298

NO. 69057

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Drawn: K. Upp

Checked: D. Moyer

Job No.: M13104.2

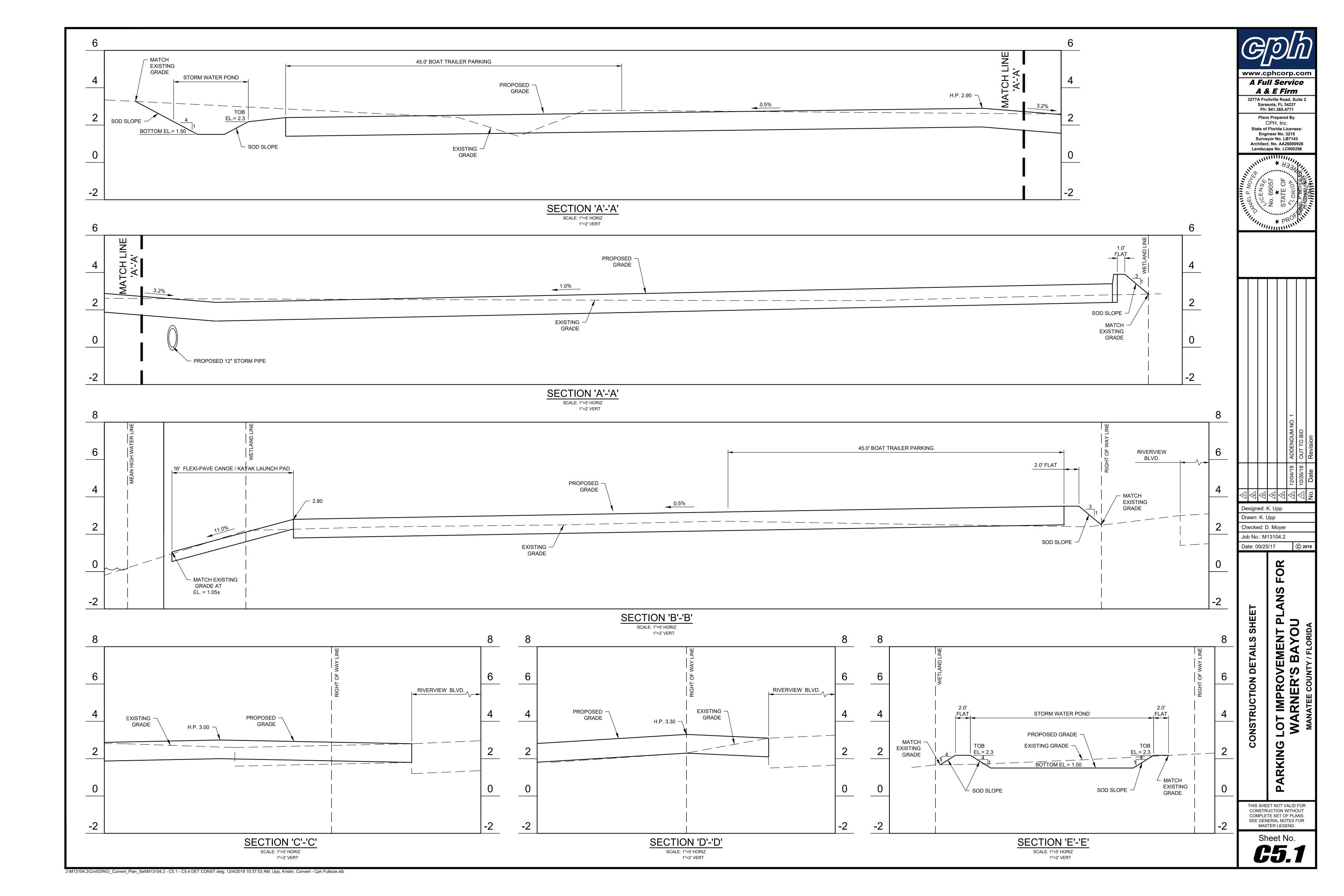
Date: 09/25/17 © 2018

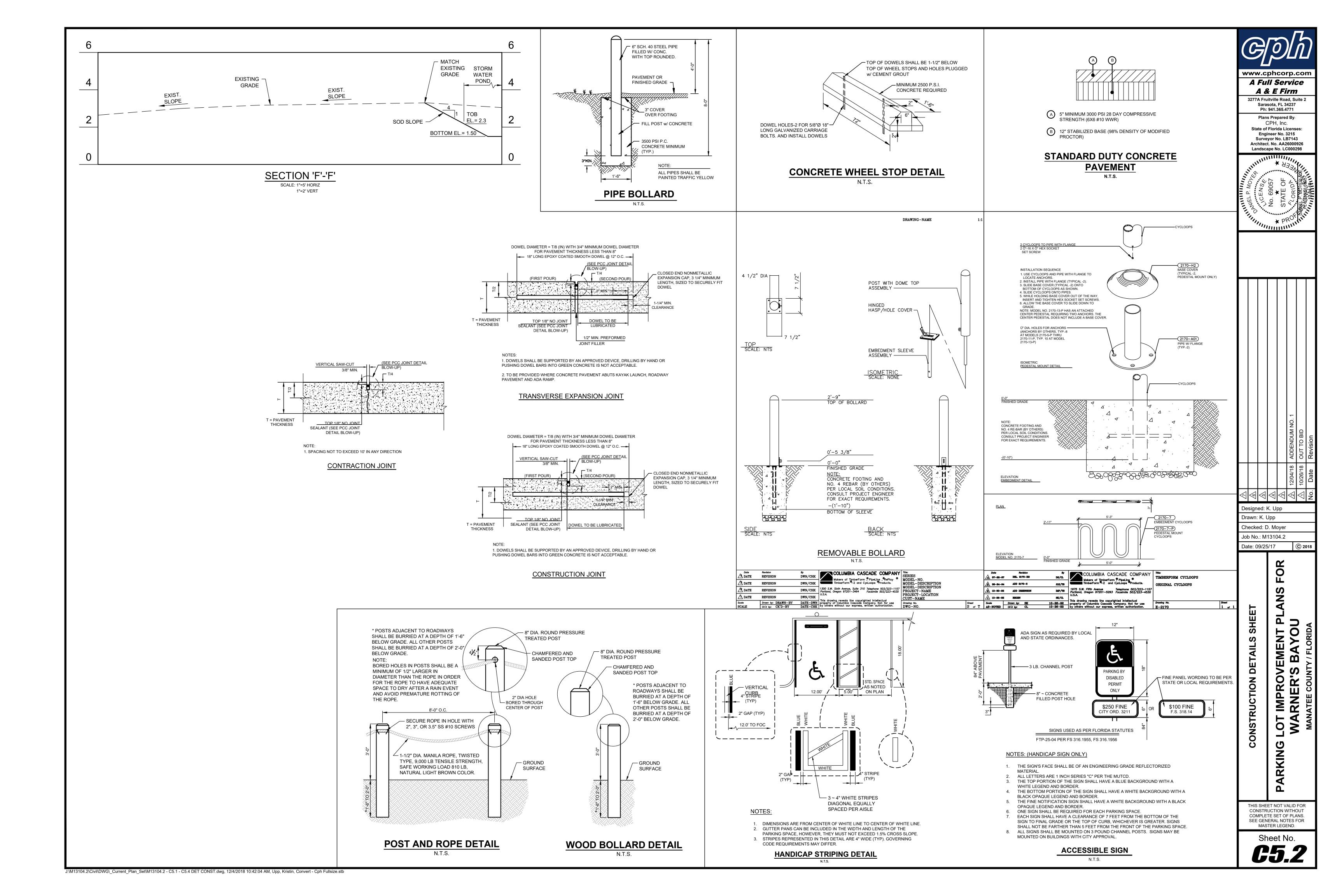
GE PLAN
PLANS FOR
U

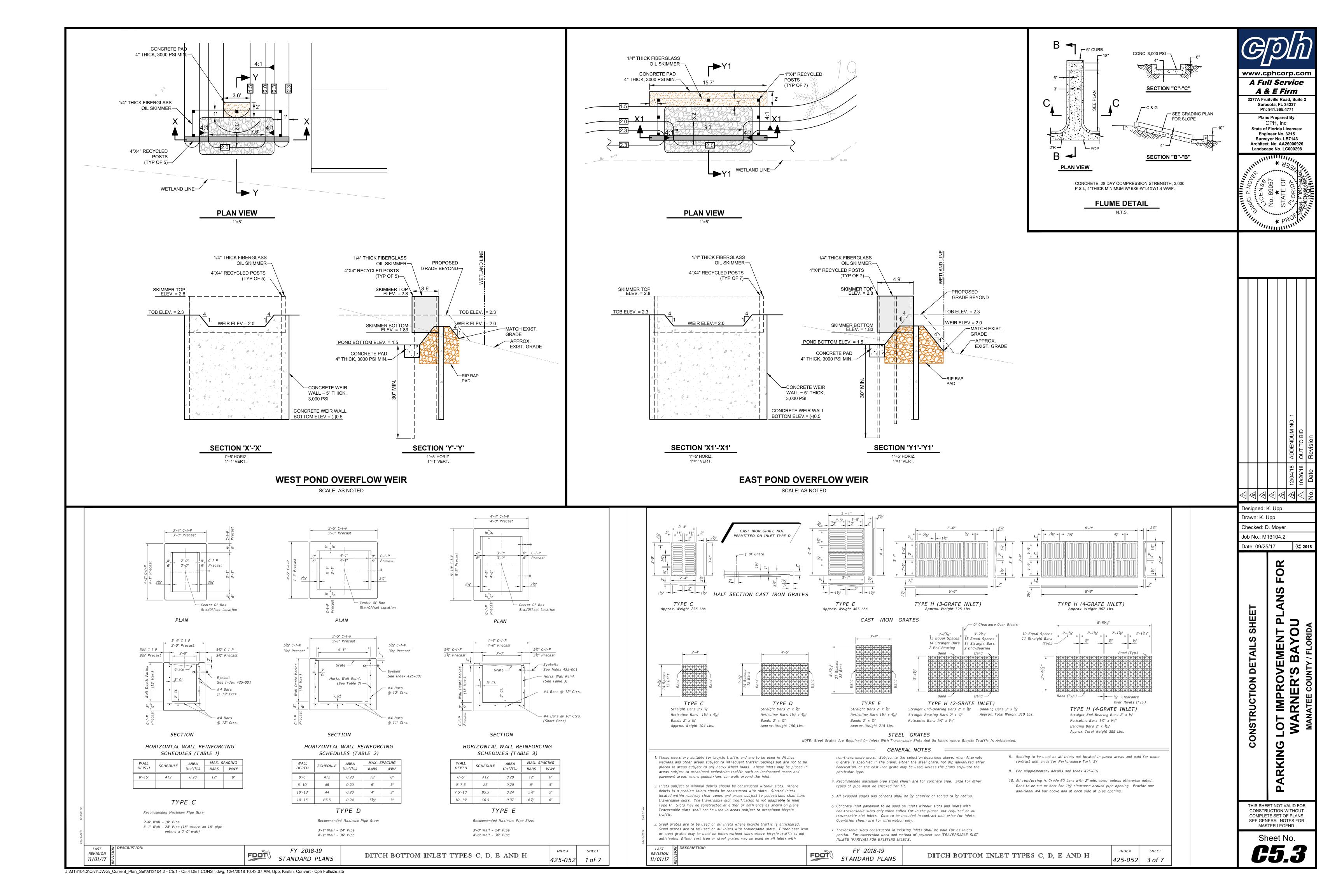
FROVEIMENT PLIER'S BAYOU

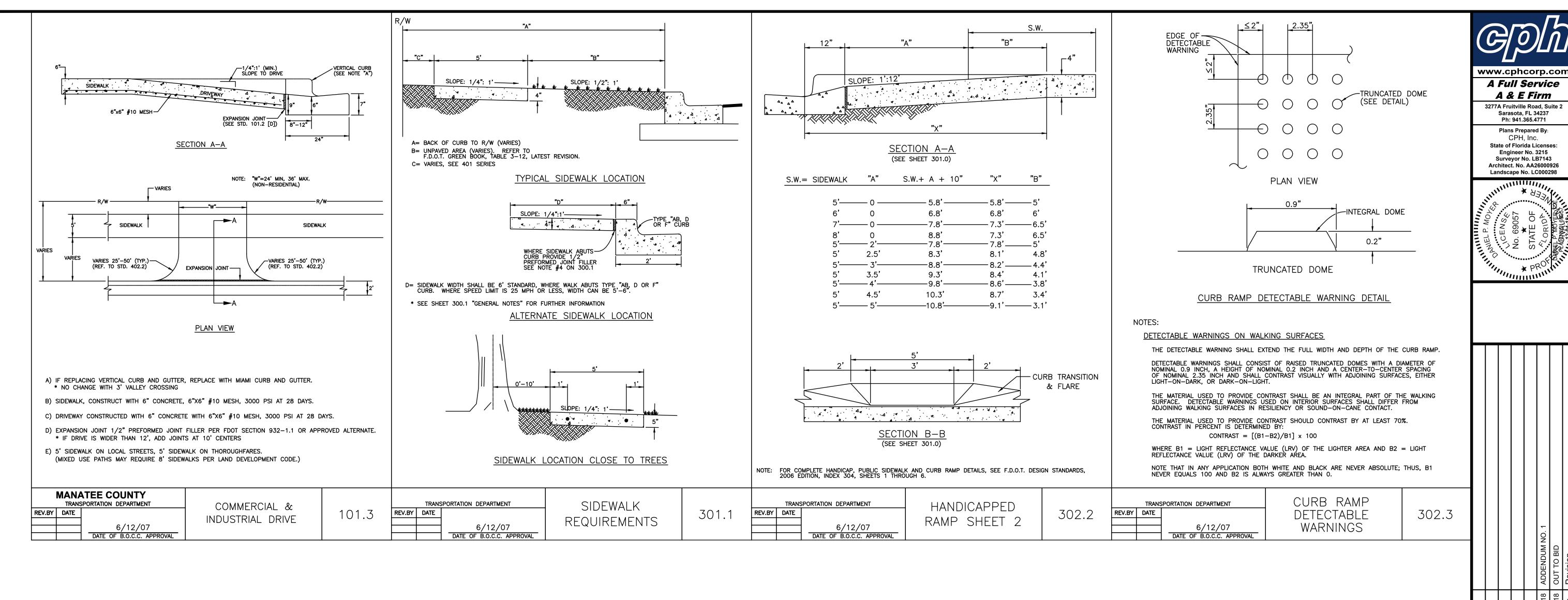
ING LOT IMPRO
WARNER

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.









Designed: K. Upp

Drawn: K. Upp Checked: D. Moyer

Date: 09/25/17

**DETAILS SHEET** 

LOT IMPROVEMENT PL. WARNER'S BAYOU

CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

MANATEE COUNTY

\_Flexible Porous Paving

1.2. All components, materials and compounds shall be 100% sourced and manufactured in the USA. 1.3. The Flexible Porous Paving shall be supplied by a manufacturer with at least 10 years experience that can supply references for similar applications and installations in the USA.

### 2. SUBMITTALS

- 2.1. The Flexible Porous Paving manufacturer shall submit;
- 2.1.1. Certificates stating that materials meet or exceed the specified contract requirements.
- 2.1.2. Site handling and storage instructions. 2.1.3. Mixing and installation instructions.
- 2.1.4.A sample that reflects the characteristics of the material to be installed. The sample, upon approval, shall be maintained as the standard of minimum quality for all the proposed surfacing and paving work required for the project.

## 3. CONTRACTOR

- 3.1. The Contractor's craftsmen or crew chief, installing the Flexible Porous Paving shall attend a training webinar and an on-site installation training session prior to installing KBI Flexi-Pave
- 3.2. Contractors bidding on the installation of KBI Flexi-Pave HD2000 may start the training process by contacting KBI and attending a training webinar prior to contract award. On-site installation training may occur after the contract is awarded.
- 3.3. The Contractor shall;
- 3.3.1.Furnish all labor, materials, tools, equipment, and incidentals required to install KBI Flexi-Pave HD2000.
- 3.3.2. Provide an adequate number of skilled workers who are trained and experienced with installing KBI Flexi-Pave HD2000 and are familiar with the specified contract requirements and the methods needed for its installation.
- 3.3.3.Install the crushed stone sub-base as described in the specifications and shown on the contract drawing unless the sub-base is installed/provided.
- 3.3.4.Install the KBI Flexi-Pave HD2000 to depth and width as described in the specifications and shown in the contract drawings.
- 3.3.5.Reduce the risk of damage to the Flexible Porous Paving surface by not allowing track vehicles (metal or rubber), forklifts (warehouse-variable reach), main lifts (booms or scissors), and/or dumpsters or roll-off containers on the KBI Flexi-Pave HD 2000 either during or following installation. Any explicit or implied warranty is voided through failure to comply with this section.

### 4. PRODUCTS

- 4.1. Recommended sub-base shall be either; crushed stone or for KBI Flexi-Pave HD2000 Titan Series use UltraBaseSystems Pro interlocking panels. KBI will provide advice on appropriate sub base for each installation and the materials based on the application and project location. 4.2. Crushed Stone;
- 4.2.1.For load bearing applications KBI Flexi-Pave HD2000 shall be installed over a minimum of 4" (100mm) of compacted crushed concrete or crushed stone aggregate to a density of
- 4.2.2.The sizing of the stone and base soil will directly represent the desired "Curve Number" (percolation rate) required.

KBI FLEXI®-PAVE HD2000

6.1.5.Restore and repair areas, at no additional cost to the owner, that have been damaged as a

project and climate expectations during installation. KBI will provide the appropriate binder for each

the installation site is above 95° F or below 32° F. Temperatures below 50° F can extend the

7.1. KBI Flexi-Pave HD2000 urethane binder is engineered based on the geographical location of the

7.2. KBI Flexi-Pave HD2000 shall not be installed when the ambient air temperature in the shade near

7.3. The urethane binder shall be stored on site at between 40°- 77° F and used within 12 months of

7.4. The Contractor shall not pave on days when rain or snow is forecast, unless a change in the

7.5. In the event of rain on days prior to installation, the sub base must be dry and not contain any

8.1. When construction work will interfere with existing, traffic and sidewalks the Contractor shall notify

9.1. KBI Flexi-Pave HD 2000 installations are designed to operate and function trouble free with only

9.2. The frequency and scope of the routine maintenance required will largely be dependent on the

9.3. Prior to undertaking routine maintenance of KBI Flexi- Pave it is recommended that an annual

application and project location. The key objective will be to keep the surface clean and clear of

debris to maintain the hydraulic conveyance capacity of KBI Flexi- Pave over time as well as

inspection be completed to evaluate the condition of the surface. The following are suggested

9.3.1.Inspect the surface of the KBI Flexi- Pave for evidence of sediment deposition, organic debris, staining or ponding. If any signs of clogging are noted, schedule a vacuum sweeper

9.3.2. Inspect the structural integrity of the KBI Flexi- Pave surface, looking for signs of damage

10.1. The KBI Flexi- Pave HD2000 shall have a material warranty of 1 year from the date of installation

10.2. The Manufacturers' warranty shall be issued on completion of the installation and final

10.3. The Manufactures' warranty is based on the installation completed by an on-site installation

trained and qualified team of tradesmen. Faulty workmanship by tradesmen will be cause to

9.3.3. Check for potential need to overspray/roll with urethane binder after 4-6 years. 9.4. If in doubt or should any unexpected situations or observations occur during the maintenance

(extended warranties are available with the addition of a maintenance program)

(no brooms or water spray) to remove deposited material. Cleaned sections may then be

tested by pouring water from a five-gallon bucket to ensure full hydraulic conveyance

or surface deterioration, such as raveling, slumping, cracking, etc. Replace or repair

minimal routine maintenance over the lifetime of the product.

maintaining the aesthetic appeal of the surface.

annual maintenance inspection points:

capacity has been restored.

affected areas, as necessary.

and cooperate with local authorities, and other jurisdictional organizations, and provide temporary

barriers, signs, warning lights, flaggers, and other protections as required by the authorities to

assure the safety of pedestrians and vehicles around the construction area and to organize the

weather results in favorable paving conditions as determined by the Owner's Representative.

installation and the materials delivered will be based on project location and seasonality.

curing time and would fall outside of normal "use ready in 24 hours" guidelines.

result of construction work, including existing paving on or adjacent to the site, to their

original condition or repair as directed to the satisfaction of the Owner's Representative.

January 2018

4.3. UltraBaseSystems Pro interlocking panels shall;

- 4.3.1.Measure 28" x 28" by 11/4 "deep manufactured from recycled post industrial polymeric
- 4.3.2. Have a vertical drainage rating of 341" per hour and a horizontal flow rate of 96.4" per hour and each panel shall store up to 3.58 gallons of water.
- 4.3.3. Have a static load capacity of 1664 psi.
- 4.3.4.Be suitable for installation over properly prepared earth sub base without the need for compacted rock, concrete or asphalt.

#### 4.4. KBI Flexi-Pave HD2000.

- 4.4.1.The KBI Flexi-Pave HD2000 shall be installed in accordance with the manufacturers written instructions to an average depth of 1.5 inches over the prepared sub-base.
- 4.4.2.The KBI Flexi-Pave HD2000 shall be Natural colors; Black / Cypress / Redwood / Bark Brown / Green / Granite or ZX vibrant colors Brick Red / Concrete / Emerald / Mahogany /
- Olive Brown / Pitch Black / Sand Stone / Sky Blue / Slate in color. 4.4.3.The KBI Flexi-Pave HD2000 shall be mixed with a urethane binding agent based on MDI Polyether Polyols and shall be free of extender oils to prevent leaching over time. Binders that use extender oils will not be acceptable.
- 4.4.4.The KBI Flexi-Pave HD2000 shall be cured and fit for use within 24 hours of installation. 4.4.5.The KBI Flexi-Pave HD2000 shall have a composition of 50% stone aggregate and 50% chipped rubber tires by weight for trails, carts paths, sidewalks and tree surrounds. For vehicular applications, such as driveways and parking lots, the composition shall be 50% stone aggregate and 50% chipped rubber tires by volume.

Z

ATIO

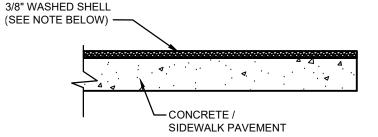
- 5.1. The Contractor is responsible for supplying and installing a warranted material that meets, or exceeds, the manufacturer's specifications and testing:
- 5.1.1.ASTM C 666/C/666M- Freeze-Thaw testing with no cracks or breaks through 300 cycles
- 5.1.2.Designated as "Highly Permeable" under FL DOT FM 5-565 permeability testing. 5.1.3. Independent testing showing a perk rate of 2400 gph (40 gpm) per sq. ft. or higher.
- 5.1.4. Scuff/Power Steering Resistance in accordance with ISSA TB 100 / ISSA TB 139.
- 5.1.5. Accelerated Weathering using ASTM 4798. 5.1.6. Hamburg Loaded Wheel Testing TX DOT 242-F, must be equivalent or better than 2.3 rut
- depth at 8,000 cycles and full recovery within 24 hours. 5.1.7. Static Creep Testing TX DOT 231-F, shall be equivalent to or better than total strain
- +2,703% and permanent strain equal to 0.514%.
- 5.1.8.Resilient Modulus Testing in accordance with ASTM D 4123 shall be equivalent or better than 68,495 pounds.
- 5.1.9. Slip resistant and ADA compliant, in accordance with ASTM D 2047 testing.
- 5.1.10. Heat resilient to 400 degrees in accordance with ASTM D 4123 testing. 5.1.11. Sound absorbent, in accordance with ASTN C423-09a / E795-05 testing.
- 5.1.12. Compression tested and be able to withstand 250 psi without permanent deformation or
- 5.1.13. Has a leachate less than 6 parts per billion and containing no organic compounds or
- 5.1.14. The material shall be resistant to the following elements: transmission, hydraulic, and brake fluids, gasoline, diesel, saltwater, oil, chlorine, ozone, bromine, and muriatic acid.

### PROJECT CONDITIONS

- 6.1. The Contractor shall provide appropriate and adequate protection to adjacent areas including but not limited to:
  - 6.1.1.Protection of adjacent work space from splashing of Flexible Porous Paving materials.
  - 6.1.2.Remove all stains from exposed surfaces of paving, structures, and grounds.
  - 6.1.3. Remove all waste and spillage. 6.1.4. Provide suitable protection to assure no damage or disturbance to existing improvements
  - or vegetation before starting work and maintain protection throughout the course of the

KBI FLEXI®-PAVE HD2000

Revised January 2018



3/8" WASHED SHELL CONCRETE NOTE:

THE SURFACE AGGREGATE SHALL BE COMMON 3/8" WASHED SHELL. CONTRACTOR TO SEED THE APPROVED SHELL AGGREGATE ONTO THE SLAB SURFACE IMMEDIATELY AFTER THE CONCRETE HAS BEEN PLACED AND BUILL FLOATED, AGGREGATE TO BE PLACED UNIFORMLY ONTO THE SURFACE AND EMBEDDING WITH A BULL FLOAT UNTIL COMPLETELY COVERED BY A THIN LAYER OF CONCRETE. CONTRACTOR TO HOSE DOWN THE CONCRETE UNTIL THE TOP OF THE DECORATIVE SHELL IS REVEALED. SURFACE SHALL BE CLEANED AND SEALED. THE CONTRACTOR SHALL CONSTRUCT A 2'X2' TEST POUR USING THE

PRESCRIBED METHOD FOR APPROVAL BY THE ENGINEER PRIOR TO INSTALLATION. SEVERAL OF THESE TEST POURS MAY BE NECESSARY TO ACHIEVE THE DESIRED RESULTS. THE COST OF THE TEST POURS AND CEMENT FINISHING SHALL BE INCLUDED IN THE BASE BID. CONTRACTOR TO ENSURE THAT THE CONCRETE IS WITHIN THE ALLOWABLE TOLERANCES OF THE FLORIDA BUILDING CODE FOR AN ADA ACCESSIBLE ROUTE.

## **CONCRETE SIDEWALK / PAVEMENT W/ BROADCAST SHELL FINISH DETAIL**

# ALED3T78

Specification Grade Area lights available in IES Type II, III and IV distributions. For use in parking lots, roadways, pathways and general area lighting. Mounts to 4' square steel poles at 15-25'. Designed to replace 250W Metal Halide Area Lights. Patent Pending thermal management system, 5 Year Warranty.

LED Info Driver Info 78W Watts: Type: Constant Current 5100K (Cool) Color Temp: 120V: 0.78A 0.50A 208V: Color Accuracy: 68 L70 Lifespan: 100000 240V: 0.44A LM79 Lumens: 4,959 277V: 0.38A 55 LPW Input Watts: 91W Efficacy: Efficiency: 86%

### Technical Specifications

Lumen Maintenance: 100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

#### IES Classification:

The Type III distribution is ideal for roadway, general parking and other area lighting applications where a larger pool of lighting is required. It is intended to be located near the side of the area, allowing the light to project outward and fill the area.

## Ingress Protection rating of IP66 for dust and water.

# Six (6) multi-chip, 13W, high-output, long-life LEDs.

Three drivers, constant current, Class 2, 100 - 277V, 50 - 60 Hz, 100 - 277VAC .04 Amps.

13.1% at 120V

Fixture Efficacy: 55 Lumens per Watt

Ambient Temperature:

Suitable for use in 40°C ambient temperatures. Surge Protection:

Cold Weather Starting: The minimum starting temperature is -40°F/-40°C.

Thermal Management:

Superior heat sinking with external Air-Flow fins.

Created: 10/25/2013

www.cphcorp.com

A Full Service

A & E Firm

3277A Fruitville Road, Suite 2

Sarasota, FL 34237

Ph: 941.365.4771

Plans Prepared By:

CPH, Inc.

State of Florida Licenses:

Engineer No. 3215

Surveyor No. LB7143

Architect, No. AA26000926

Landscape No. LC000298

Weight: 30.4 lbs

## Effective Projected Area: EPA = 0.75

Color: Bronze

# Die cast aluminum housing, lens frame and mounting

## Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

## Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

## Color Accuracy:

68 CRI Color Temperature (Nominal CCT):

## 5100K Color Uniformity:

RAB's range of CCT (Correlated color temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2008.

## Reflector:

Specular aluminum.

## High temperature silicone gaskets.

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color,

and contains no VOC or toxic heavy metals.

Tech Help Line: 888 RAB-1000

Email: sales@rabweb.com On the web at: www.rabweb.com Note: Specifications are subject to change without notice

Page 1 of 2 Created: 10/25/2013

## ALED3T78 - continued

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Surge Protector: ALED78 is available with a 6kV surge protector (SP6). SP6 available.

## Green Technology: Mercury and UV free.

## IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

## Replacement:

The ALED78 replaces 250W Metal Halide Area Lights.

#### California Title 24: ALED78 complies with California Title 24 building and electrical codes.

Warranty: RAB warrants that our LED products will be free from defects in materials and workmanship for a period of

five (5) years from the date of delivery to the end user,

#### including coverage of light output, color stability, driver performance and fixture finish. See our full warranty

The ALED design is protected by patents in the U.S. Pat. 668,370, Canada Pat. 144956, China ZL201230100154.X, and Mexico Pat. 38423. Pending patents in Taiwan.

## For use on LEED Buildings:

IDA Dark Sky Approval means that this fixture can be used to achieve LEED Credits for Light Pollution Reduction.

The International Dark Sky Association has approved

this product as a full cutoff, fully shielded luminaire.

## **UL Listing:**

Dark Sky Approved:

Suitable for wet locations as a downlight

**ALL FIXTURES ARE 20'** MOUNTING HEIGHT, **USING EITHER EXISTING** OR NEW POLES

Designed: K. Upp

Page 2 of 2

Drawn: K. Upp Checked: D. Moyer Job No.: M13104.2

> Date: 09/25/17 © 2018

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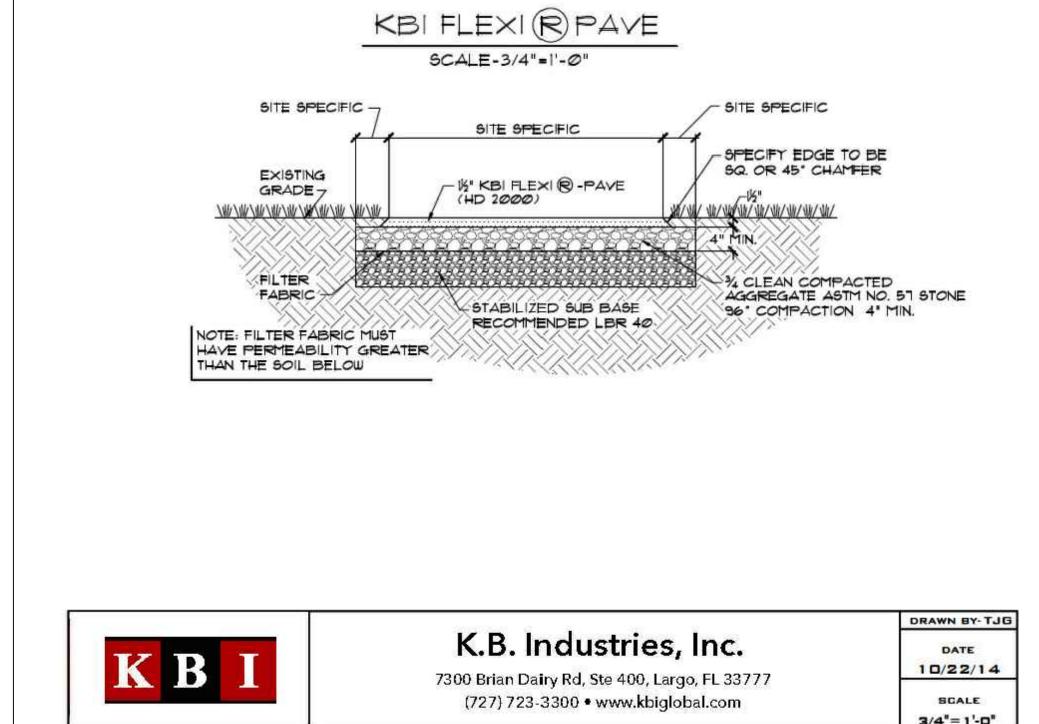
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THIS SHEET NOT VALID FOR **CONSTRUCTION WITHOUT** COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

Sheet No.



3/4"=1'-0"

Tech Help Line: 888 RAB-1000 Copyright ©2013 RAB Lighting, Inc. All Rights Reserved

Email: sales@rabweb.com On the web at: www.rabweb.com

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KBI FLEXI®-PAVE HD2000

inspection, please contact KBI for consultation and advice.

10. WARRANTY

Revised

standing or moving water.

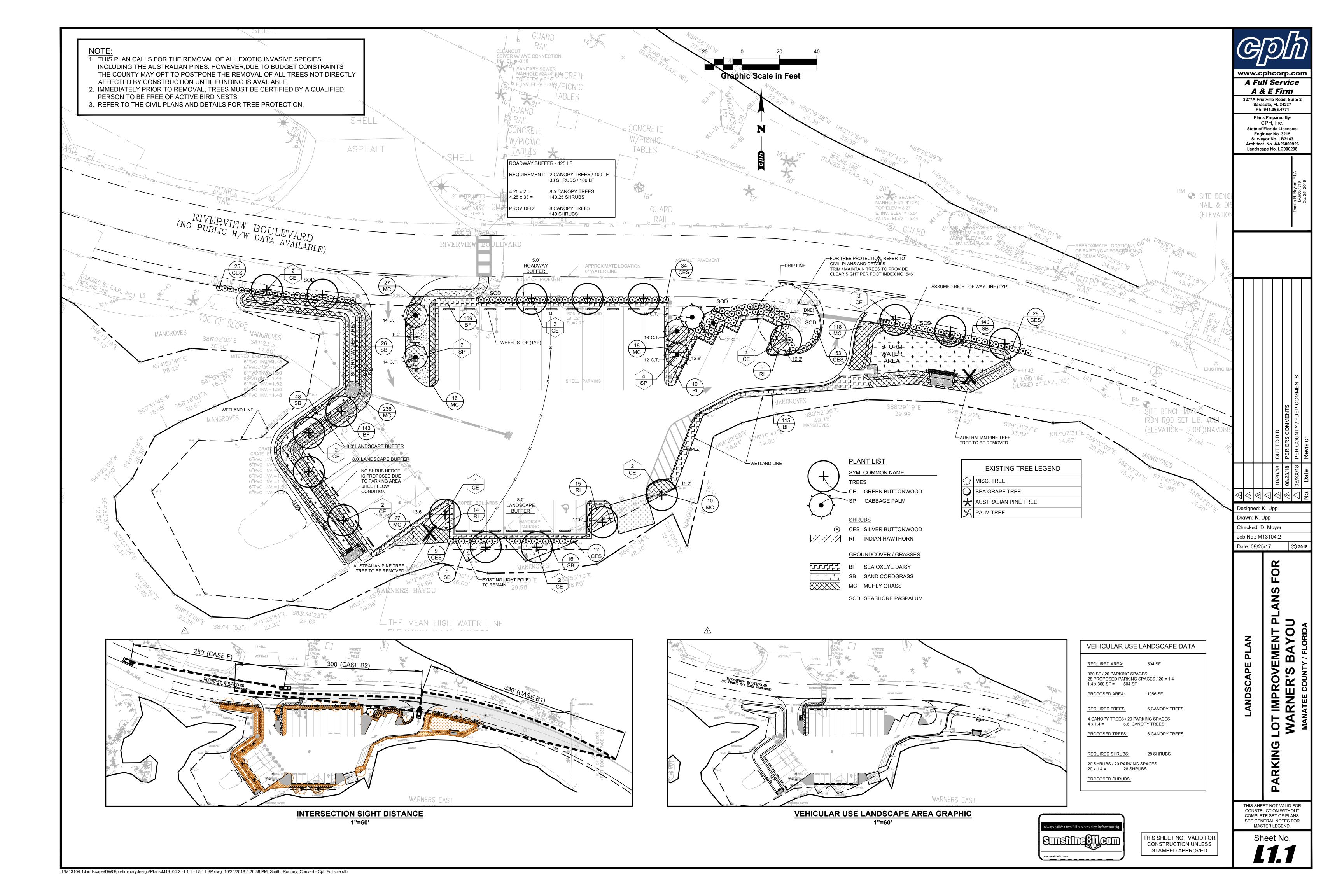
8. SAFETY AND TRAFFIC CONTROL

smooth flow of traffic.

9. MAINTENANCE

January 2018

void the warranty.



## LANDSCAPE NOTES:

- 1. The landscape Contractor shall be responsible for all materials and all work as called for on the Landscape Plans and in the Landscape Specifications. In the event of variation between quantities shown on plant list and the plans, the plans shall control. The Landscape Contractor shall verify all quantities and report any discrepancies at the time of bidding.
- 2. The Landscape Contractor shall review architectural/engineering plans and become thoroughly familiar with surface and subsurface
- Prior to construction, the contractor shall be responsible for locating all underground utilities and shall avoid damage to all utilities during the course of the work. Locations of existing buried utility lines shown on the plans are based upon best available information and are considered to be approximate. It shall be the responsibility of the contractor 1) to verify the locations of utility lines within and adjacent to the work area 2) to protect all utility lines during the construction period 3) to repair any and all damage to utilities, structures, site appurtenances, etc. which occurs as a result of the construction 4) To field adjust the location of proposed trees and palms 10' off the center of the utility lines. Notify the Landscape Architect if a 10' offset does not function.
- The work shall be coordinated with other trades to prevent conflicts. Coordinate the planting with the irrigation work to assure availability and proper location of irrigation items and plants
- Contractor shall ensure that there are no visual obstructions to vehicle lines of sight and traffic controls. Contractor shall field adjust tree and/or large shrub locations to avoid any such obstructions.
- 6. Trees shall be maintained by the owner to avoid future such obstructions by pruning trees and/or shrubs as necessary utilizing horticulturally sound techniques
- All planting shall be performed by personnel familiar with planting procedure and under the supervision of a qualified planting
- 8. All plant material shall be graded Florida No. 1 or better as outlined under Grades and Standards for Nursery Stock, Part I and II, published by the Florida Department of Agriculture and Consumer Services.
- The Landscape Architect or Owner shall have the right, at any stage of the operations, to reject any and all work and materials
- 10. Except as otherwise specified, the Landscape Contractor's work shall conform to accepted horticultural practices as used in the
- 11. The minimum acceptable size of all plants, measured after pruning, with branches in normal positions, shall conform to the measurements specified on the plant list or as indicated on the landscape drawing. Height and spread dimensions refer to main body of the plant and not extreme branch tip to tip. Trunk caliper (trunk diameter) is measured 6 inches from the ground on trees up to and including 4 inches in caliper, and 12 inches from the ground for larger trees. Since trunks are seldom round, the average of the largest diameter and that perpendicular to it is referred to as caliper.
- 12. Plants shall be protected upon arrival at the site, by being thoroughly watered and properly maintained until planted.

which, in his opinion, do not meet with the requirements of these specifications.

- 13. All tree pits shall be excavated to size and depth in accordance with the Florida Grades & Standards for Nursery Stock, unless shown otherwise on the drawings, and backfilled with the specified planting soil. The Landscape Contractor shall test fill all tree pits with water before planting to assure proper drainage percolation is available.
- 14. The Landscape Contractor shall be responsible for proper watering of all plants. All plants shall be thoroughly watered at time of planting and kept adequately watered until time of acceptance. It shall be the Landscape Contractor's responsibility to assure that
- 15. It shall be the Landscape Contractor's responsibility to prevent plants from falling or being blown over, to re-straighten and replant all plants which lean or fall and to replace all plants which are damaged due to lack of proper guying or staking. The Landscape Contractor shall be legally liable for any damage caused by instability of any plant material.
- 16. All Palms to be staked as indicated per Palm staking details. All other trees to be stabilized utilizing 8' lodge poles per tree planting
- 17. Plants blown over by high winds, within the guaranteed period, shall not be cause for additional expense to the Owner, but shall be the responsibility of the Landscape Contractor. Damaged plants shall be replaced by the Landscape Contractor at no additional cost to the Owner.
- 18. Sod shall be of a species specified on the drawings and originate from a commercial turf grower. It shall be a dense stand of live turf, reasonably free of weeds, well matted with grass roots in rectangles 12 inch by 24 inch or in 12 inch wide rolls in a length consistent with the equipment and methods used to handle the rolls and place the sod. Any netting contained within the sod shall be certified by the manufacturer to be bio-degradable. The soil and root mat shall be a minimum of 1-1/2 inch thick and must hold together during placement. Sod shall be place adjacent to one another to avoid gaps and overlaps. Joints shall be staggered between the rows. Sod placed on slopes exceeding 3:1 shall be pinned with turf staples. Sod turf, shall have been mowed a minimum of one week prior to cutting and delivery, so that the length of the turf is no longer than 4 inches at time of delivery. Place sod within 48 hours of cutting the sod. The sod shall be kept moist throughout the 48 hour period to maintain the health and viability of the sod. Submit a letter of certification to the Owner's CEI Representative, at time of delivery, as to the source of the sod, the time it was cut, the species and cultivars provided, last mowing date, and that the sod is free of fire ants. Sod which has been cut for longer than 48 hours after being cut shall not be used unless specifically authorized by Owner's CEI Representative.
- 19. It shall be the Contractor's responsibility to measure and determine the exact quantity of sod required for a complete job at the time of bidding or providing a price quote. The Owner shall not be responsible for additional cost due to the Contractor's under estimating of the quantity of sod for the original bid area.
- 20. The Landscape Contractor shall insure adequate vertical drainage in all plant beds, planters, and sod areas. Vertical drilling through any compacted fill to native soil shall be accomplished to insure drainage. If well drained fill is necessary to assure positive drainage, this issue shall be brought up by the Landscape Contractor at time of bidding.
- The Landscape Contractor shall insure that his work does not interrupt established or projected drainage patterns
- 22. The Landscape Contractor shall prune, shape and remove dead foliage/limbs from existing plant material to remain. Confirm with the Landscape Architect or Owner the extent of work required at time of Bidding.
- 23. Mulch All plant beds shall be top dressed with 4" shredded hardwood mulch (or approved equal).
- 24. Transplanted Material The Landscape Contractor shall be responsible for determining and evaluating which plant materials are suitable for transplanting and shall verify this with the Landscape Architect or Owner. The Landscape Contractor shall take all reasonable, horticulturally acceptable measures to assure the successful transplanting of determined plant materials. The Landscape Contractor shall be responsible for replacing any relocated plant materials which die if such measures are not taken, as determined by the Landscape Architect or Owner. Replacement plants shall be of identical species and size if required.
- 25. MAINTENANCE PRIOR TO FINAL INSPECTION AND ACCEPTANCE:

Maintenance shall commence after each plant is planted and the maintenance period shall continue until the job or specific phase of the job is accepted by the Landscape Architect or Owner. Extreme care shall be taken to instruct the Owner or his representatives in general maintenance procedures.

Plant maintenance shall include watering, pruning, weeding, cultivating, mulching, tightening, and repairing of guys, replacement of sick or dead plants, resetting plants to proper grades or upright positions and restoration of the planting saucer and all other care needed for proper growth of the plants.

During the maintenance period and up to the date of final acceptance, the Landscape Contractor shall do all seasonal spraying and/or dusting of trees and shrubs. Upon completion of all planting, an inspection for acceptance of work will be held. The Landscape Contractor shall notify the Landscape Architect or Owner for scheduling of the inspection 10 days prior to the anticipated

At the time of the inspection, if all of the materials are acceptable, a written notice will be given by the Landscape Architect or Owner to the Landscape Contractor Stating the date when the Maintenance Period ends.

## GUARANTEE AND REPLACEMENT:

All plant materials shall be guaranteed for one (1) year from the time of final inspection and interim acceptance shall be alive and in satisfactory growth for each specific kind of plant at the end of the guaranteed period.

At the end of the guarantee period, any plant required under this contract that is dead or not in satisfactory growth, as determined by the Owner or the Landscape Architect, shall be removed and replaced. Replacement plants shall have an extended guarantee, as noted above, from time of replacement.

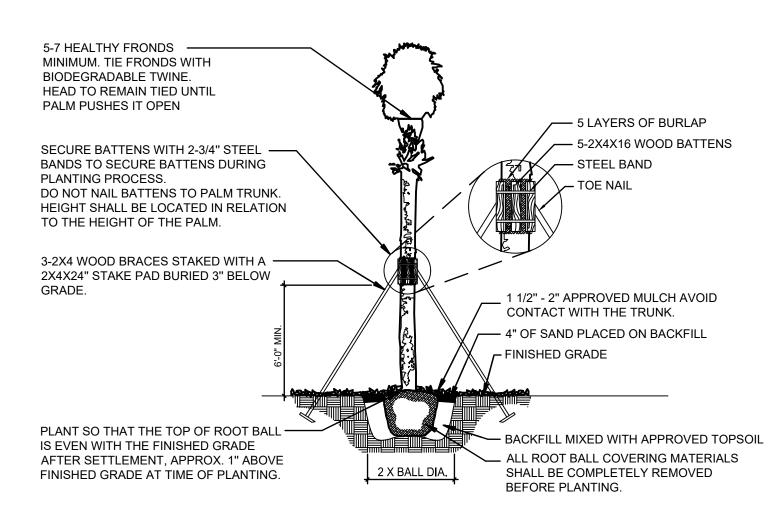
All replacements shall be planted of the same kind and size as specified on the plant list. They shall be the responsibility of the Landscape Contractor.

## 26. TOPSOIL

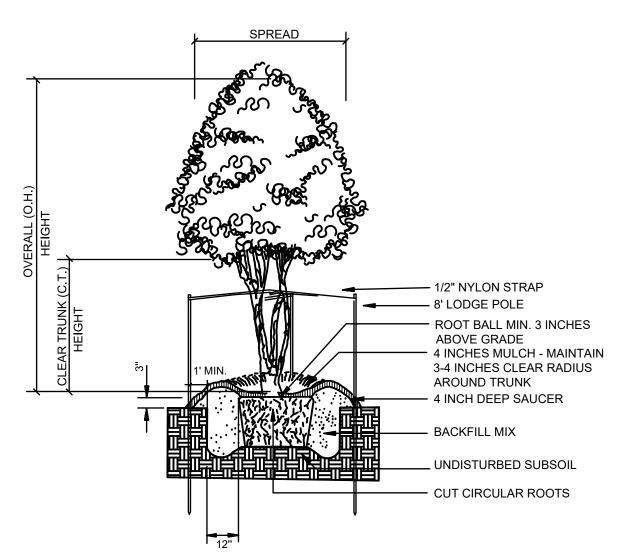
Topsoil shall be natural, friable, fertile, fine loamy soil possessing characteristics of representative topsoil in the vicinity that produces heavy growth. Topsoil shall have a pH range of 5.5 to 7.4, free from subsoil, objectionable weeds, litter, sods, stiff clay, stones larger than 1-inch in diameter, stumps, roots, trash, toxic substances, or any other material which may be harmful to plant growth or hinder planting operations. Top soil shall contain a minimum of three percent organic material.

#### 27. UNSUITABLE SUBSOILS Locations containing unsuitable subsoil shall be treated by one or more of the following:

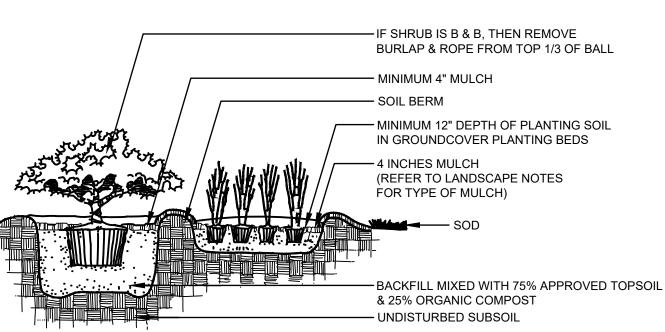
- A. Where unsuitability is deemed by Owner or Owner's Representative to be due to excessive compaction caused by heavy equipment and where natural subsoil is other than AASHTO classification of A6 or A7, loosen such areas with spikes, discing, or other means to loosen soil to condition acceptable to Owner. Loosen soil to minimum depth of 12 inches with additional loosening as required to obtain adequate drainage. Contractor may introduce peat moss, sand, or organic matter into the subsoil to obtain adequate measures shall be considered as incidental, without additional cost to Owner.
- B. Where unsuitability is deemed by Owner or Owner's Representative to be due to presence of boards, mortar, concrete, graded aggregate base, or other construction materials in sub grade and where natural subsoil is other than AASHTO classification of A6 or A7, remove debris and objectionable material. Such remedial measures shall be considered as incidental, without additional cost to Owner.
- C. Where unsuitability is deemed by Owner to be because natural subsoil falls into AASHTO classification of A6 or A7 and contains moisture in excess of 30 percent, then installation of sub drainage system or other means described elsewhere in Specifications shall be used. Where such conditions have not been known or revealed prior to planting time and they have not been recognized in preparation of The Drawings and Specifications, then Owner shall issue pricing order to install proper remedial measures.
- D. Planting beds where existing subsoil is determined by Owner to be unsuitable for plant growth in accordance paragraph Unsuitable Subsoil herein shall be excavated to a depth of 12 inches or as needed to provide adequate drainage. Replace excavated soil with planting soil.



## PALM STAKING DETAIL



MULTI-TRUNK CONTAINER TREE PLANTING DETAIL



-PROVIDE MINIMUM PIT CLEARANCE AROUND ROOT BALL OF 6" SIDES AND BOTTOM. -MAINTAIN 3"-4" MULCH FREE ZONE AROUND BASE OF PLANT.

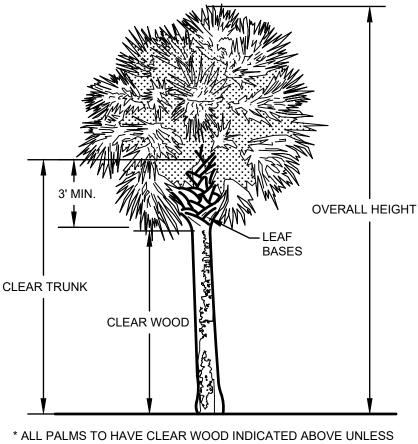
## SHRUB AND GROUNDCOVER PLANTING DETAIL N.T.S.

## WATERING:

EACH PLANT & TREE SHALL BE THOROUGHLY HAND WATERED IN AFTER PLANTING TO FILL EACH PLANTING WELL FULL. DAILY WATERING OF ALL NEWLY INSTALLED PLANT MATERIALS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR UNTIL FINAL ACCEPTANCE.

ALL TREES AND SHRUBS SHALL BE DEEP WATERED FOR A PERIOD OF 90 DAYS AFTER PLANTING. TREES AND SHRUBS SHALL BE DEEP WATERED FIVE TIMES PER WEEK DURING THE INITIAL 30 DAYS, THREE TIMES PER WEEK DURING THE FOLLOWING 30 DAYS, AND TWICE PER WEEK DURING THE LAST THIRTY DAYS. IF THE PLANTS EVIDENCE ANY STRESS DUE TO HEAT OR OTHER ACTS OF GOD, THE CONTRACTOR SHALL TAKE ANY AND ALL STEPS TO REMEDY THE SITUATION INCLUDING BUT NOT LIMITED TO REMEDIAL WATERING TWICE PER DAY UNTIL PLANT REVITALIZATION.

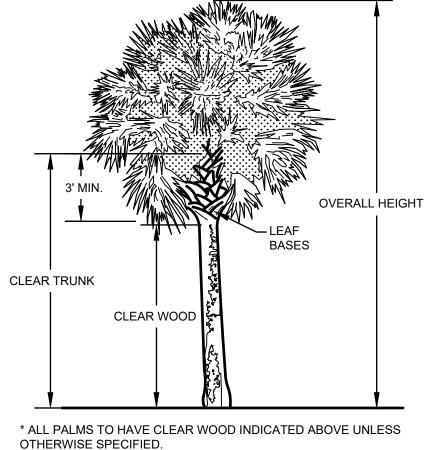
NOTE: REFER TO CIVIL PLANS AND DETAILS FOR THE TREE PROTECTION BARRICADES, SILT FENCE PLACEMENT, REQUIRED SIGNAGE, AND EXISTING TREE DRIP LINES.



SABAL PALM

## **PALM MATRIX B**

(NO CROWN SHAFT)



CLEAR WOOD(CW):
A MEASUREMENT FROM THE SOIL LINE TO THE HIGHEST POINT OF THE TRUNK FREE OF PERSISTEN LEAF BASES. ON PALMS WITH A CROWN SHAFT. THE

OVERALL HEIGHT.

MEASURE WILL BE FROM THE SOIL LINE TO THE BASE OF THE CROWN SHAFT. IT SHOULD BE NOTED THAT PAI MS WITH VERY PERSISTENT LEAF BASES MAY NOT HAVE CLEAR WOOD.

PALM HEIGHT/TRUNK SPECIFICATIONS

<u>OVERALL HEIGHT(OA)</u>: HIGHEST POINT IN THE CANOPY MEASURED FRON

THE SOIL LINE TO THE NATURAL POSITION OF THE

LAST FULLY EXPANDED LEAF. UNLESS SPECIFIED

MEASUREMENTS SPECIFIED, WILL BE CONSIDERED

CLEAR TRUNK(CT):
A MEASUREMENT FROM THE SOIL LINE TO A POINT IN

THE CANOPY WHERE THE TRUNK CALIPER BEGINS TO

TAPER ABRUPTLY. ON MANY PALMS, THIS POINT WILL

LIE AT THE BASE OF THE PETIOLE OF THE THIRD OR

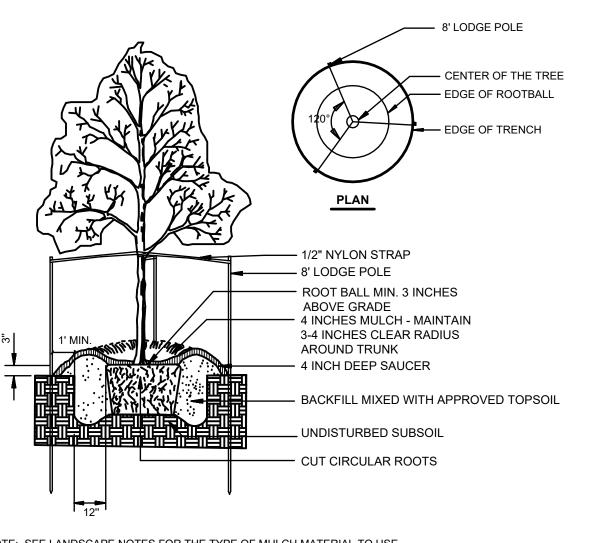
FOURTH YOUNGEST BUT FULLY EXPANDED LEAF.

DIFFERENTLY, THE TERM HEIGHT, OR HEIGHT

### DPI INSPECTION NOTES(REQUIRED)

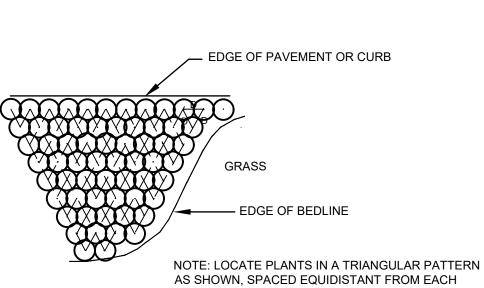
OF FLORIDA, DIVISION OF PLANT INDUSTRY (DPI) SPECTION CERTIFICATION PRIOR TO BEING

TRANSPORTED TO THE CONSTRUCTION SITE. THE DPI CERTIFICATION MUST BE SUBMITTED TO CPH AND A COPY OF THIS CERTIFICATION MUST BE PROVIDED TO THE GENERAL CONTRACTOR AND MAINTAINED WITH THE CONSTRUCTION RECORDS



NOTE: SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

**CONTAINER TREE PLANTING DETAIL** 



OTHER (AT SPACING SPECIFIED IN THE PLANT LIST). SHRUB/GROUNDCOVER SPACING PLAN

QTY. NATIVE

# PLANT LIST SYM COMMON NAME - CE GREEN BUTTONWOOD

CONOCARPUS ERECTUS 2.5" CAL., 10' MIN. HT. 18 YE3 CABBAGE PALM SABAL PALMETTO C.T. SHOWN ON PLAN. YES HURRICANE CUT. CLEAN TRUNK CONOCARPUS ERECTUS 'SERICEUS' 3 GAL., 24" MIN. HT., 16" SPRD., 36" O.C. 161 • CES SILVER BUTTONWOOD YES 3 GAL., 24" MIN. HT., 10" SPRD., 30" O.C. 48 INDIAN HAWTHORN NO RHAPHEOLEPIS INDICA GROUNDCOVER / GRASSES SEA OXEYE DAISY **BORRICHIA FRUTESCENS** 1 GAL., FULL, 24" O.C. 427 YES SAND CORDGRASS SPARTINA BAKERI YES 3 GAL., 15" HT., 10" SPRD., 36" O.C. 239 MC MUHLY GRASS MUHLENBERGIA CAPILLARIS 3 GAL., 15" HT., 10" SPRD., 36" O.C. 452 YES

**BOTANICAL NAME** 

- PLANT DESCRIPTIONS ARE FOR MINIMUM ACCEPTABLE SPECIFICATIONS. ALL CRITERIA LISTED FOR CONTAINER SIZE, CALIPER, HEIGHT, SPREAD, ETC. MUST BE MET FOR PLANT MATERIAL ACCEPTANCE. FOR EXAMPLE, IF A THREE GALLON SHRUB DONE NOT MEET THE HEIGHT OR SPREAD SPECIFICATION, IT WILL NOT BE ACCEPTED.

PASPALUM VAGINATUM 'SEASHORE' SOLID SOD, CONTRACTOR TO VERIFY QTY.

DESCRIPTION

- IF SPECIFIED PLANTS ARE UNAVAILABLE AT TIME OF CONSTRUCTION, CONTRACTOR MAY REEPLACE SPECIFIED PLANTS WITH PLANTS APPROVED BY LANDSCAPE ARCHITECT AND CITY STAFF.
- ALL OPEN SPACE AREAS WITHIN THE PROPERTY SHALL BE SODDED UNLESS PAVED, SEEDED AND MULCHED OR PLANTED WITH SHRUBS AND GROUND COVER.
- CONTRACTOR SHALL REPLACE ANY EXISTING SOD OR OTHER PLANT MATERIALS DAMAGED DURING CONSTRUCTION IN AREAS THAT ARE
- OUTSIDE PROPOSED LANDSCAPE AS SHOWN ON THE PLAN. - CONTRACTOR SHALL PROVIDE TEMPORARY WATER AS NEEDED TO ESTABLISH PLANTINGS AND PROVIDE WARRANTY COVERAGE.
- THERE SHALL BE 3' MINIMUM CLEARANCE FROM LANDSCAPE PLANTS TO THE EDGE OF THE METERS LESS THAN 3" AND 10' FOR METERS 3" AND LARGER.
- THERE SHALL BE 7.5' MINIMUM CLEARANCE FROM THE FRONT AND BOTH SIDES AND 4' FROM THE BACK FOR ALL FIRE HYDRANTS.
- NO TREES SHALL BE PLANTED WITHIN 10' OF ANY COUNTY MAINTAINED WATER OR SEWER MAIN. - TOTAL PLANTS :
- TOTAL NATIVE PLANTS: 1230 (96%)

SOD SEASHORE PASPALUM

A Full Service A & E Firm 3277A Fruitville Road, Suite 2 Sarasota, FL 34237 Ph: 941.365.4771 Plans Prepared By: CPH, Inc. State of Florida Licenses Engineer No. 3215 Surveyor No. LB7143 Architect, No. AA26000926

Landscape No. LC000298

Designed: K. Upp Drawn: K. Upp Checked: D. Moyer Job No.: M13104.2 Date: 09/25/17 © 2018 DET AND

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THIS SHEET NOT VALID FOR **CONSTRUCTION WITHOUT** COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.