FORT STREET PARKING LOT

PEREZ ENGINEERING
& DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION NO. 8579

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 400
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

TAMPA OFFICE
CONCOURSE CENTER
3507 EAST FRONTAGE ROAD, SUITE 140
TAMPA, FLORIDA 33607
TEL: (813) 579-1616 FAX: (813) 288-0710

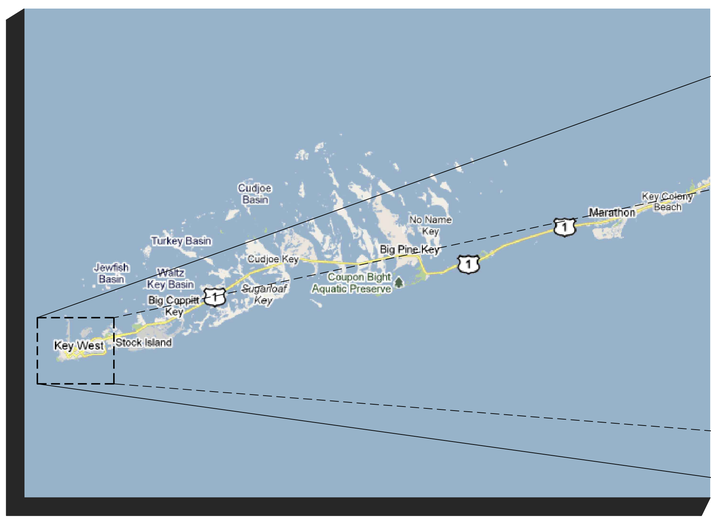
DATE: JULY 17, 2012
PROJECT NUMBER: 111002
PROJECT NAME: FORT STREET PARKING LOT
PREPARED BY: PEREZ ENGINEERING & DEVELOPMENT
PREPARED FOR: CITY OF KEY WEST, ENGINEERING SERVICES

PLANS DESCRIPTION: CONSTRUCTION DRAWINGS

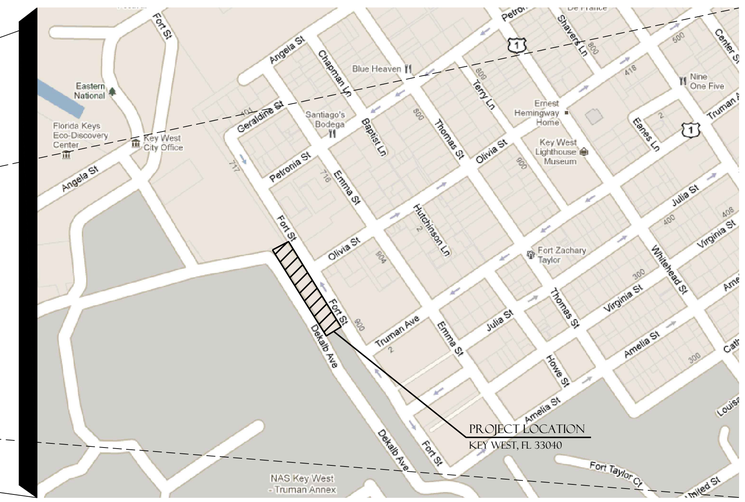
CONSTRUCTION DRAWINGS

SECTION 6, TOWNSHIP 68S, RANGE 25E
KEY WEST, FLORIDA 33040

811 Know what's below. Call before you dig.



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
	CIVIL
-	COVER
C-1	GENERAL NOTES
C-2	DEMOLITION & EROSION CONTROL PLAN
C-3	SITE PLAN
C-4	GEOMETRY PLAN
C-5	DRAINAGE & GRADING PLAN
C-6	CIVIL DETAILS
C-7	NPDES DETAILS
	LANDSCAPE
L-1	PLANTING PLAN
L-2	PLANTING SPECIFICATIONS
	LIGHTING
E-1	ELECTRICAL SITE PLAN

LANDSCAPE DESIGN

LANDWISE DESIGN
LADD ROBERTS, RLA
9822 TAPESTRY PARK CIRCL, STE. #201
JACKSONVILLE, FL 32246
TEL. (904) 343-4194

LIGHTING DESIGN

INNOVATIVE ENGINEERING GROUP INC.
SUDHIR GUPTA, PE, LEEP AP
5532 N.W. 72ND AVE.
MIAMI, FL 33166
TEL. (305) 888-9626

PREPARED FOR:

CITY OF KEY WEST

P.O. BOX 1409
KEY WEST, FL 33041

REVISIONS: DATE
1. ____
2. ____
3. ____
4. ____
5. ____
6. ____

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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& DEVELOPMENT, INC
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PERMITS

PERMIT AGENCY	TYPE	NUMBER	STATUS

ALLEN E. PEREZ, P.E. NO. 51468
(SEAL)
DATE

GENERAL NOTES

1. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS AND ADVISE THE ENGINEER OF ANY CONFLICTS OF REPRESENTATION BETWEEN DRAWINGS AND/OR SPECIFICATIONS PRIOR TO COMMENCING WITH CONSTRUCTION.

2. THE CONTRACTOR SHALL FIELD-VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING ANY WORK UNDER THIS CONTRACT AND NOTIFY THE ENGINEER IN WRITING OF ANY DIFFERENCES BEFORE COMMENCING WITH ANY CONSTRUCTION.

3. HORIZONTAL COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM. VERTICAL ELEVATIONS ARE BASED ON NGVD 1929 DATUM.

4. THE LOCATIONS, SIZES, AND ELEVATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO OBTAIN ANY AVAILABLE RECORD DRAWINGS AND SHALL DETERMINE THE EXACT LOCATION AND ELEVATION IN THE FIELD. THE CONTRACTOR SHALL ANTICIPATE THAT SCANNING AND EXCAVATION USING LIGHT EQUIPMENT AND HAND METHODS WILL BE NECESSARY IN AREAS NEAR EXISTING UTILITIES AND STRUCTURES TO AVOID DAMAGING THESE FACILITIES. THE CONTRACTOR SHALL CONTACT BELLSOUTH, THE LOCAL TELEPHONE COMPANY AND COMCAST, THE LOCAL CABLE TV PROVIDER TO VERIFY THE LOCATION OF BURIED TELEPHONE AND CABLE TV UTILITIES. NONE HAVE BEEN INDICATED ON THE DRAWINGS. CALL 1-800-432-4770 BEFORE DIGGING OR TRENCHING OPERATIONS BEGIN. CONTRACTOR SHALL ALSO CONTACT KEYS ENERGY TO LOCATE SECONDARY ELECTRIC LINES.

5. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND ELEVATION IN THE FIELD PRIOR TO INSTALLING ANY NEW WORK THAT CROSSES OR CONNECTS TO EXISTING UTILITY SYSTEMS. LOCATIONS OF NEW UTILITIES SHALL BE ADJUSTED IN A MANNER APPROVED BY THE ENGINEER TO AVOID CONFLICTS. DAMAGES TO UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE CLIENT.

6. ALL EXCAVATION, TRENCHING, SHEETING, SHORING AND BRACING SHALL BE INSTALLED AS REQUIRED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS, INCLUDING OSHA (29 CFR 1926).

7. ALL ITEMS INDICATED TO BE REMOVED OR DEMOLISHED SHALL BE REVIEWED WITH THE DEVELOPER TO DETERMINE IF THE ITEM IS TO BE PROPERTY OF THE CONTRACTOR. ALL ITMES SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS, UNLESS OTHERWISE NOTED. NO SALVAGE VALUE IS EXPRESSED OR IMPLIED BY THESE CONTRACT DOCUMENTS FOR ANY ITEMS TO BE REMOVED OR DEMOLISHED.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF THE CONTRACTOR'S EQUIPMENT, MATERIALS, AND PERSONNEL, AND SHALL PROVIDE ADEQUATE BARRIERS TO PREVENT RISK TO OTHERS FROM THE CONTRACTOR'S ACTIVITIES.

9. WHERE ACTUAL DIMENSIONS AND SIZES ARE PROVIDED IN THE DRAWINGS, THEY SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. LARGE SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS.

10. THE CONTRACTOR SHALL SEQUENCE HIS OPERATIONS SUCH THAT ORANGE MESH SAFETY FENCING IS PROVIDED ALONG ALL AREAS BEING TRENCHED AND NO TRENCH IS LEFT OPEN AT THE END OF THE WORK DAY.

11. NO CONNECTIONS FOR THE PURPOSE OF OBTAINING WATER SUPPLY DURING CONSTRUCTION SHALL BE MADE TO ANY FIRE HYDRANT OR BLOW-OFF STRUCTURE WITH OUT FIRST OBTAINING A CONSTRUCTION METER FROM THE FLORIDA KEYS AQUEDUCT AUTHORITY.

12. IF UNSATISFACTORY MATERIAL FOR ADEQUATE BEARING IS ENCOUNTERED AT THE NORMAL SUBGRADE, THE UNSATISFACTORY MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE FOUNDATION STABILIZATION MATERIAL AS SPECIFIED.

13. IN GENERAL, EXISTING STRUCTURES AND UTILITIES ARE NOTED AS EXISTING AND/OR SHOWN IN LIGHT LINE WEIGHT. NEW CONSTRUCTION IS SHOWN IN HEAVY LINE WEIGHT.

14. ALL FIELD LAYOUT AND SURVEYING FOR CONSTRUCTION OF THIS PROJECT SHALL BE PROVIDED BY THE CONTRACTOR AT HIS EXPENSE, UNDER THE DIRECTION OF A FLORIDA LICENSED PROFESSIONAL LAND SURVEYOR.

NEW CONSTRUCTION NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY DURING CONSTRUCTION OF NEW UTILITIES TO ANTICIPATE AND PLAN FOR CROSSINGS OF NEW AND EXISTING UTILITIES AND SUBSURFACE FEATURES. UTILITY LINES SHALL HAVE PRIORITIES AS FOLLOWS:
   A. GRAVITY SANITARY SEWER LINES SHALL BE CONSTRUCTED TO GRADES AS INDICATED.
   B. ANY GRAVITY UTILITY DISCOVERED TO CONFLICT WITH GRADES FOR NEW SANITARY SEWER LINES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER WITH POSSIBLE SOLUTIONS FOR HORIZONTAL AND VERTICAL ADJUSTMENT.
   C. POTABLE WATER LINES, ELECTRICAL, COMMUNICATION, AND CABLE TV DISTRIBUTIONS WILL REQUIRE RELOCATION AS NECESSARY TO ACCOMMODATE NEW SANITARY SEWER LINES. THE CONTRACTOR SHALL DETERMINE, PRIOR TO INSTALLATION, THE METHOD BY WHICH THESE LINES SHALL BE REROUTED ABOVE OR BELOW NEW SANITARY SEWER LINES. THE CONTRACTOR SHALL REFER TO THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS FOR SEPARATION REQUIREMENTS BETWEEN INDIVIDUAL UTILITY LINES, BOTH HORIZONTALLY AND THE CONTRACTOR SHALL INCLUDE IN THE VERTICALLY, AND SPECIAL TREATMENT REQUIREMENTS. BID PRICE ANY SPECIAL TREATMENT REQUIRED FOR UTILITY INSTALLATION, INCLUDING ADJUSTMENTS OF EXISTING UTILITIES.

2. NEW SLABS SHALL BE GRADED TO POSITIVELY DRAIN WITHOUT ANY STORMWATER PONDING.

3. PROVIDE CONTRACTION JOINTS AT 12' O,C. MAX. JOINT PATTERNS IN PAVEMENTS AND SIDEWALKS SHALL BE GENERALLY SQUARE. AT CURBS PROVIDE FULL DEPTH EXPANSION JOINTS AT 100 FT. O.C. MAX, AND AT LOCATIONS WHERE STRAIGHT CURB RUNS CHAGE DIRECTIONS. AT SIDEWALKS PROVIDE WEAKENED PLANE CONTRACTION JOINTS NOT MORE THAN 5'=0" MAX. AND EXPANSION JOINTS AT 20-FT. O.C. MAX (TOOL ALL EDGES). INSTALL SELF-LEVELING SEALENT AT ALL ISOLATION/ EXPANSION JOINTS.

EROSION CONTROL NOTES

1. EROSION, SEDIMENT, AND TURBIDITY CONTROL MEASURES SHALL BE PROVIDED THROUGHOUT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL SLOPES AND SURFACES THROUGHOUT CONSTRUCTION AND UNTIL A STABLE SURFACE CONDITION EXISTS. THE CONTRACTOR SHALL MINIMIZE THE EXPOSED AREA AT ANY POINT DURING CONSTRUCTION AS MUCH AS PRACTICAL.

2. FILTER FABRIC SILT FENCE SHALL BE IN CONFORMANCE WITH SECTION 985, FDOT SPECIFICATION.

3. CONTRACTOR SHALL INSTALL EROSION CONTROLS NOTED ON DRAWINGS AND APPLICABLE PERMITS, EROSION CONTROLS SHALL BE MAINTAINED UNTIL A PERMANENT STAND OF GRASS IS PLANTED ONSITE.

4. BALED HAY OR STRAW BARRIERS SHALL BE CONSTRUCTED AND MAINTAINED IN CONFORMANCE WITH FDOT INDEX NO. 103.

5. SILT FENCE LOCATIONS SHOWN HEREON ARE FOR CLARITY ONLY AND SHOULD BE CONSTRUCTED WITHIN PROPERTY LINES.

6. PROVIDE EROSION CONTROL MEASURES CONSISTING OF STAKED SILT FENCES AND HAY BALES ALONG THE PROPOSED LIMITS OF CONSTRUCTION AS INDICATED ON THE DRAWINGS. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO AVOID ADVERSE IMPACTS TO JURISDICTIONAL AREAS (WETLANDS OR WATER BODIES) AND OFF-SITE LANDS AND WATERBODIES. MAINTAIN THESE MEASURED DAILY UNTIL CONSTRUCTION ACCEPTANCE BY THE OWNER AND THEN REMOVE AND LEGALLY DISPOSE OF SAID MEASURES.

7. EROSION CONTROL SHALL MAINTAINED WITHIN CONSTRUCTION AREA BY QUICKLY STABILIZING DISTURBED AREA TO PREVENT THE RELEASE OF SEDIMENT. THIS SHALL BE ACCOMPLISHED USING GRASS COVER, HAY BALES AND OTHER MEANS ACCEPTABLE TO OWNER, ENGINEER AND REGULATORY AGENCIES.

8. DURING CONSTRUCTION, THE CONTRACTOR SHALL, AT THE REQUEST OF THE OWNER OR AS NECESSARY MODIFY, RELOCATE THE ENVIRO-FENCE AND/OR SILT FENCE TO ALLOW FOR ACCESS AND TO COMPLETE CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ADEQUATE EROSION CONTROL AT ALL TIMES.

9. DURING CONSTRUCTION, THE CONTRACTOR WILL PROVIDE TEMPORARY SEEDING AND MULCHING FOR AREA THAT HAVE BEEN CLEARED AND NOT REWORKED WITHIN 7 CALENDAR DAYS DURING THE WET SEASON (APRIL THROUGH SEPTEMBER AND 14 CALENDAR DAYS DURING THE DRY SEASON (OCTOBER THROUGH MARCH). ALSO, ALL SIDE SLOPES SHALL BE SODDED OR SEEDED AND MULCHED WITHIN 7 DAYS DURING WET SEASON AND 14 DAYS DURING THE DRY SEASON.

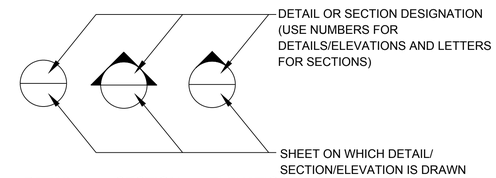
10. ALL SURFACE WATER DISCHARGE FROM SITE, INCLUDING DEWATERING DISCHARGE SHALL MEET STATE WATER QUALITY STANDARDS (LESS THAN 29 NTU ABOVE BACKGROUND) PRIOR TO REACHING ANY WATERS OF THE STATE INCLUDING WETLAND.

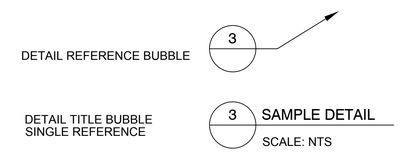
11. IN THE EVENT THAT THE EROSION PREVENTION AND CONTROL DEVICES SHOWN IN THESE PLANS PROVE NOT TO BE EFFECTIVE. ALTERNATE METHODS FOR MAINTAINING STATE WATER QUALITY STANDARDS FOR DISCHARGE FROM THE CONSTRUCTION SITE WILL BE REQUIRED. ANY ALTERNATE EROSION PREVENTION AND CONTROL DEVICES MUST BE APPROVED BY MONROE COUNTY AND SFWMD COMPLIANCE PERSONNEL PRIOR TO PLACEMENT.

LEGEND

GENERAL

—— - - - ——	RIGHT-OF-WAY AND/ OR PROPERTY LINE
TL 1500	TAX LOT NUMBER
▲	CONTRACTOR'S SURVEY REFERENCE
(5)	KEY NOTE MARKER
(9)	(ON SITE PLAN) # OF PARKING SPACES





BUBBLE SYMBOLS

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 400
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CERTIFICATE OF AUTHORIZATION NO. 8579

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
July 18, 2012

ORIGINAL: APRIL 2011

REVISIONS:
1
2
3
4
5
6

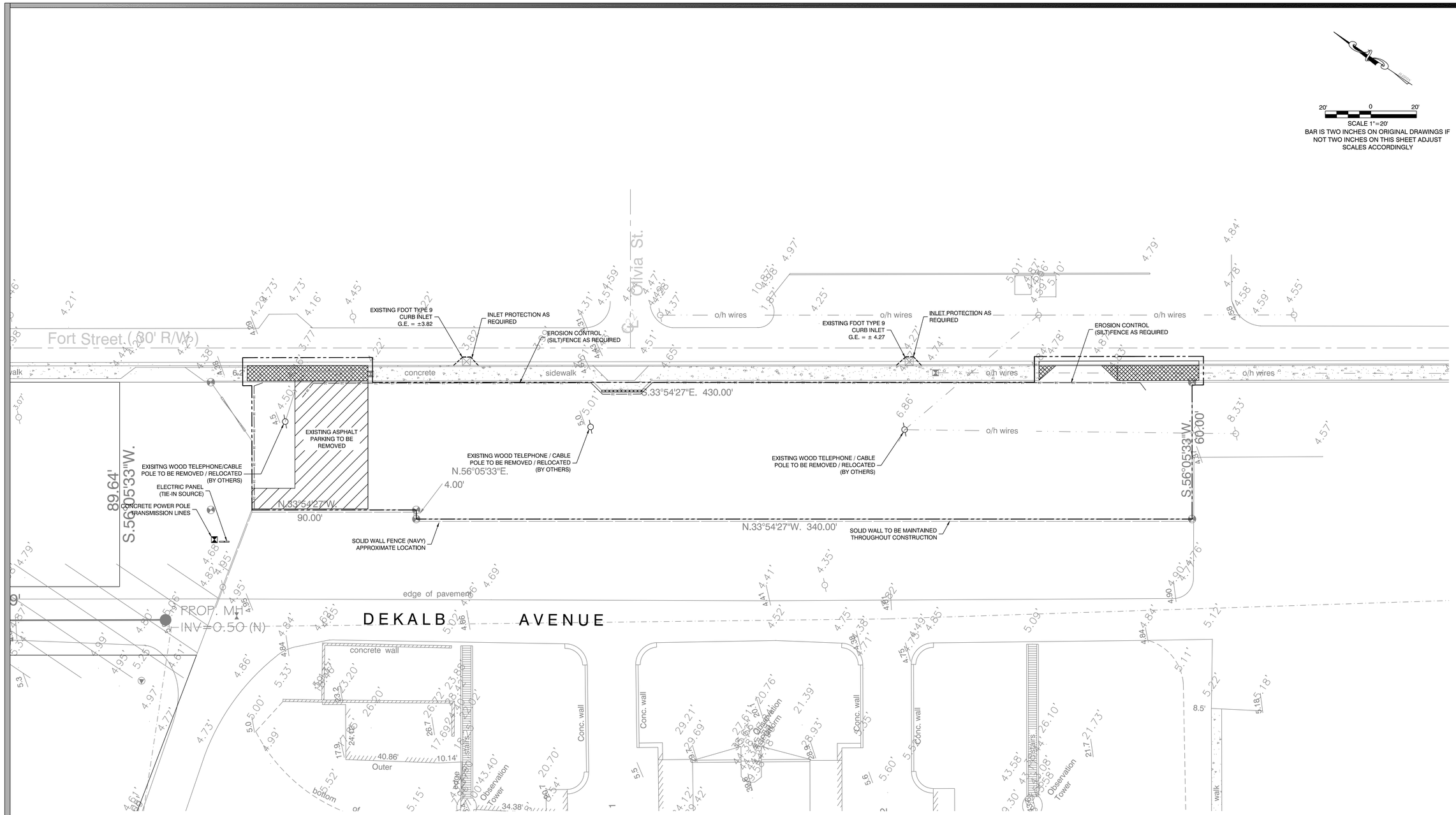
FORT STREET PARKING LOT

KEY WEST, FL 33040

GENERAL NOTES

CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, FL 33041

JOB NO. 111002
DRAWN RTM
DESIGNED AEP
CHECKED AEP
QC
SHEET C-1



DEMOLITION & EROSION CONTROL NOTES:

1. CONTRACTOR TO MAINTAIN TRAFFIC & PEDESTRIAN ACCESS ON FORT STREET THROUGHOUT CONSTRUCTION.
2. EXISTING PAVEMENT, SIDEWALK, CURBING, ETC DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION.
3. CONTRACTOR SHALL ENSURE EROSION CONTROL METHODS ARE ESTABLISHED AND MAINTAINED IN ACCORDANCE WITH FDEP NPDES GENERAL PERMIT.
4. NPDES GENERAL PERMIT TO BE PROCURRED BY CONTRACTOR PRIOR TO CONSTRUCTION.

LEGEND

- PROJECT LIMITS
- ASPHALT TO BE REMOVED
- CONCRETE TO BE REMOVED
- EC — EROSION CONTROL (SILT) FENCE
- 5.00 EXISTING GRADE

NOTE:SYMBOLS IN LEGEND ARE NOT TO SCALE

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REVISIONS: ORIGINAL: APRIL 2011
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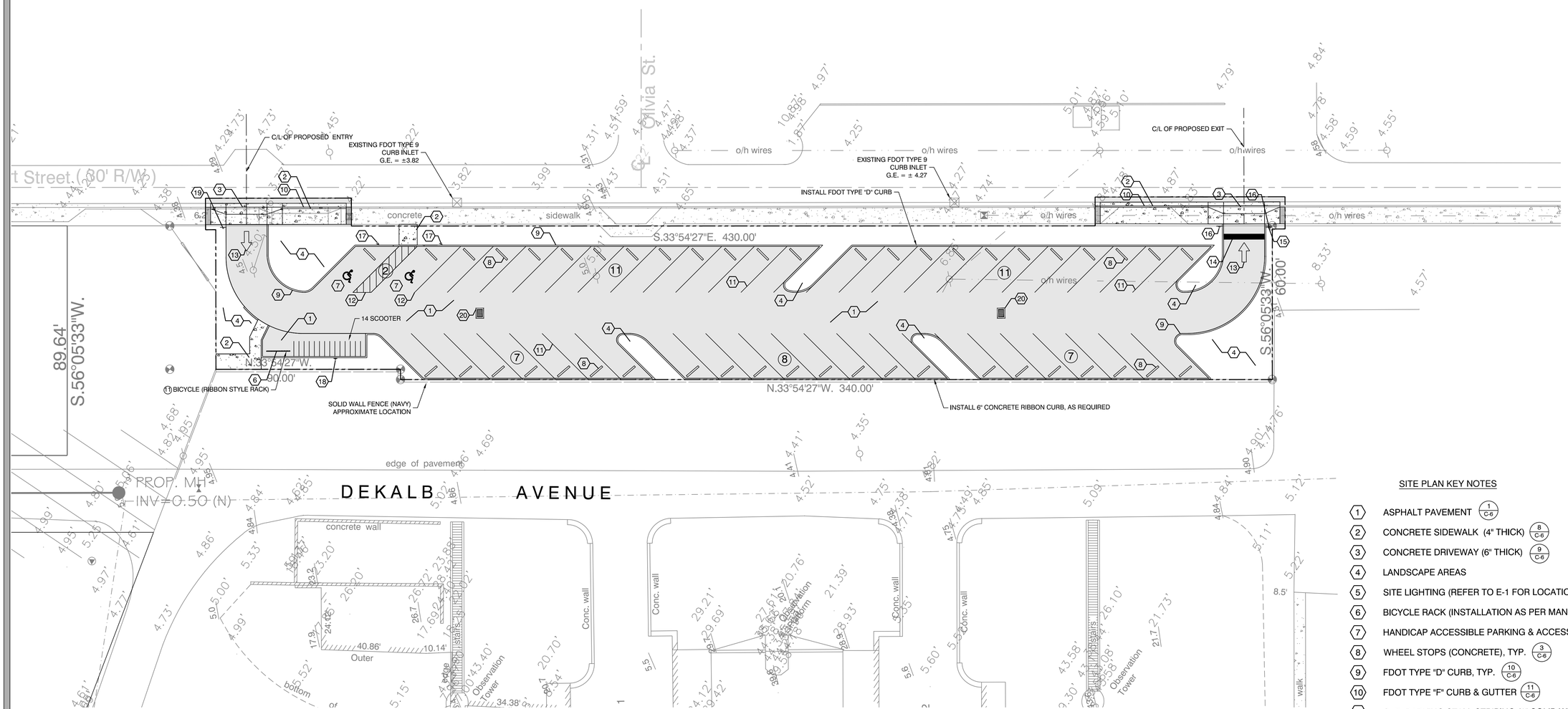
FORT STREET PARKING LOT
KEY WEST, FL 33040
DEMOLITION & EROSION CONTROL PLAN

CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, FL 33041

JOB NO. 111002
DRAWN RTM
DESIGNED AEP
CHECKED AEP
QC
SHEET C-2



SCALE 1"=20'
BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY

SITE PLAN KEY NOTES

1. ASPHALT PAVEMENT (1/C-6)
2. CONCRETE SIDEWALK (4" THICK) (8/C-6)
3. CONCRETE DRIVEWAY (6" THICK) (9/C-6)
4. LANDSCAPE AREAS
5. SITE LIGHTING (REFER TO E-1 FOR LOCATION & DETAIL)
6. BICYCLE RACK (INSTALLATION AS PER MANF. SPEC)
7. HANDICAP ACCESSIBLE PARKING & ACCESS (5-7/C-6)
8. WHEEL STOPS (CONCRETE), TYP. (3/C-6)
9. FDOT TYPE "D" CURB, TYP. (10/C-6)
10. FDOT TYPE "F" CURB & GUTTER (11/C-6)
11. STD. PARKING STALL STRIPING (6" SOLID WHITE), TYP.
12. HANDICAP PARKING STALL STRIPING (5,7/C-6)
13. PAVEMENT MARKINGS
14. STOP BAR (24" SOLID WHITE)
15. R1-1 "STOP SIGN" (24")
16. R5-1 "DO NOT ENTER" SIGNAGE (30")
17. HANDICAP ACCESSIBLE SIGNAGE (6/C-6)
18. "SCOOTER PARKING ONLY" SIGNAGE
19. ENTRY / EXIT SIGNAGE
20. STORMWATER INLET (FDOT TYPE "C" DITCH BOTTOM INLET) (4/C-6)

LEGEND

- PROJECT LIMITS
- KEY NOTE MARKER
- PARKING SPACE COUNT
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT

NOTE:SYMBOLS IN LEGEND ARE NOT TO SCALE

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FORT STREET PARKING LOT

KEY WEST, FL 33040

SITE PLAN

CITY OF KEY WEST
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KEY WEST, FL 33041

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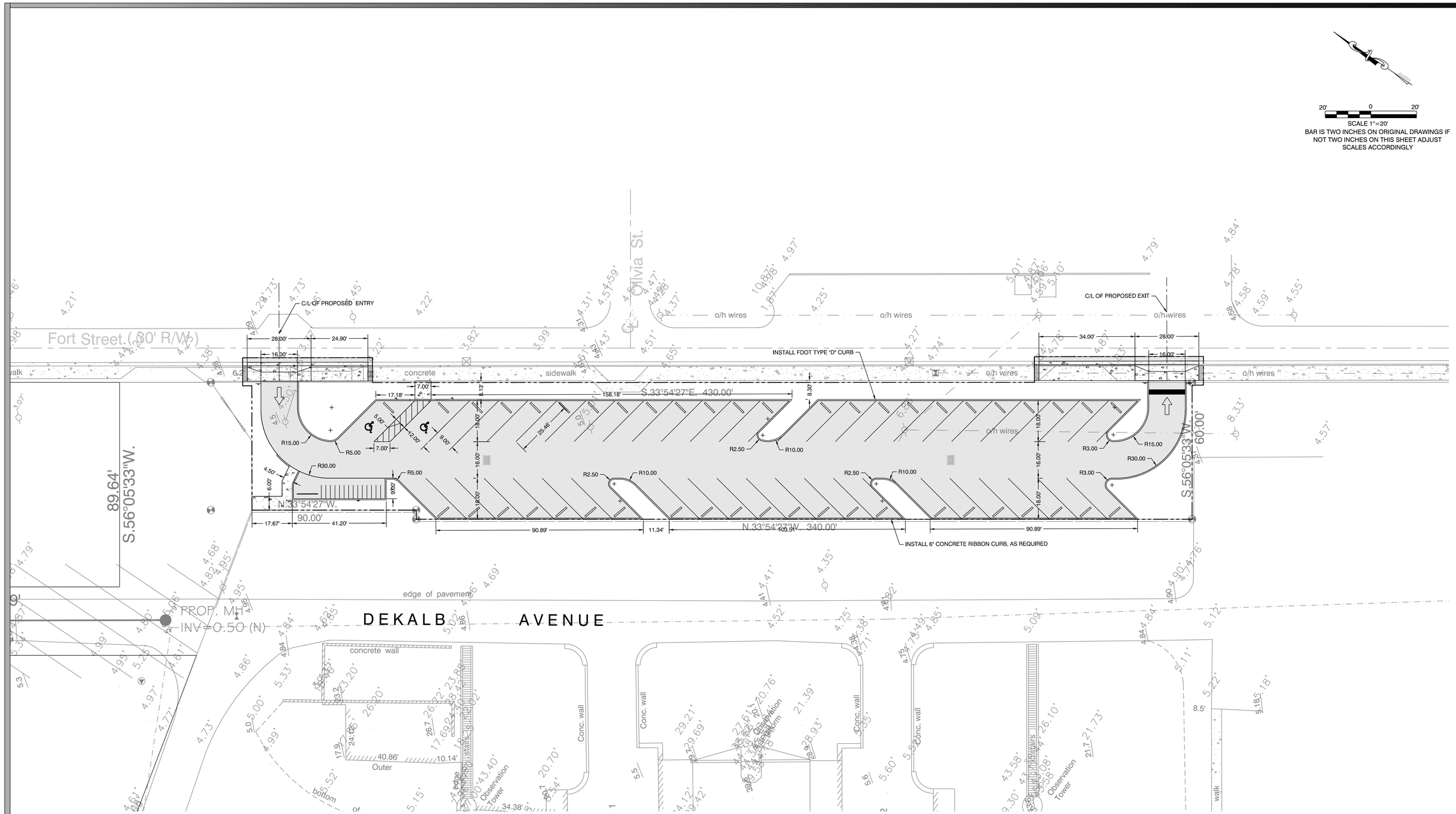
QC
SHEET C-3



LEGEND

- PROJECT LIMITS
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 5.00 EXISTING GRADE

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GEOMETRY PLAN

CITY OF KEY WEST
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KEY WEST, FL 33041

JOB NO. 111002
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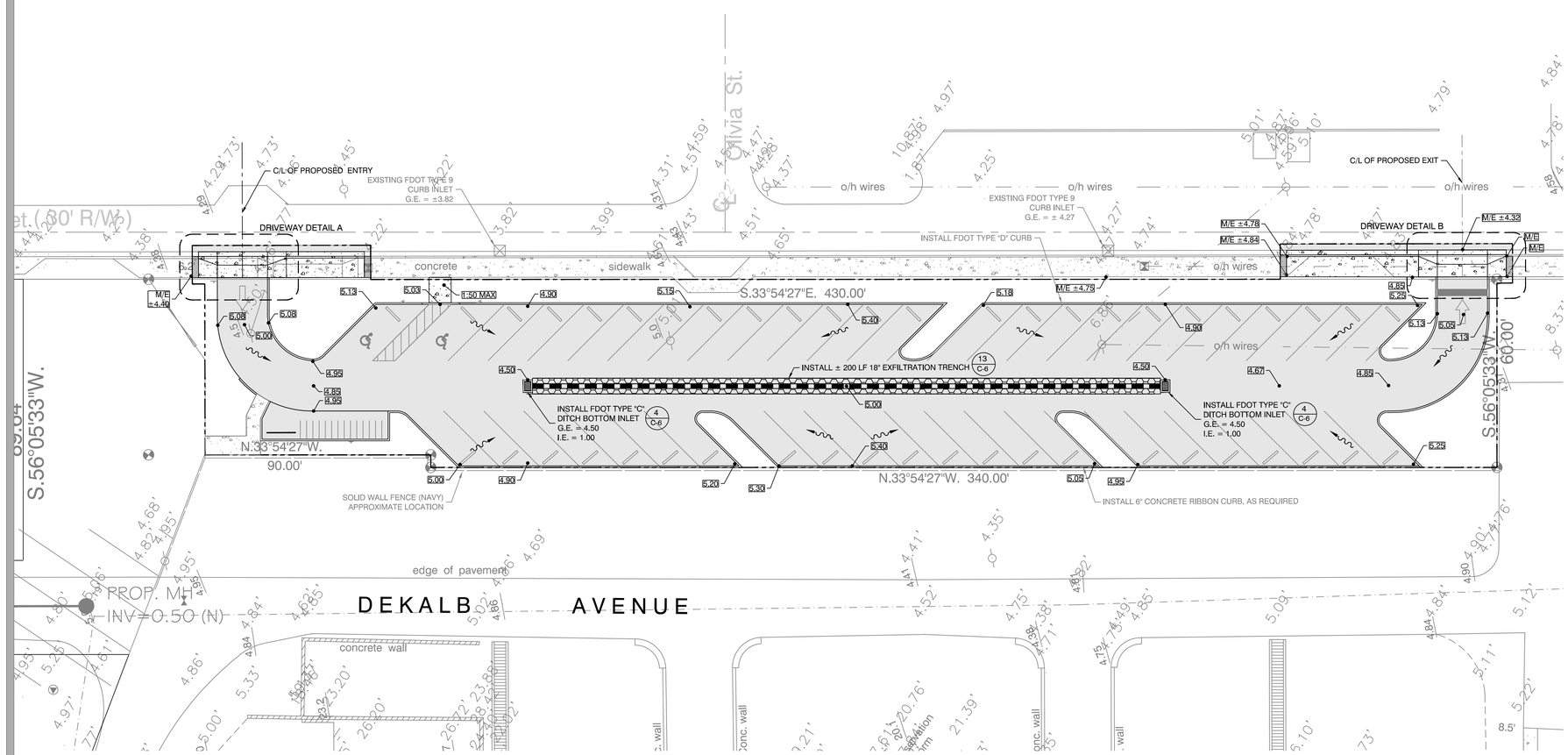
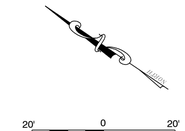
CHECKED AEP
QC
SHEET C-4





SCALE 1"=20'
BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY

Water Quantity and Water Quality Calculations

Water Quantity - Predevelopment

Project Area	A =	0.594	ac	25,886	sf
Pervious Area		0.523	ac	22,761	sf
Impervious Area		0.072	ac	3,125	sf
% Impervious		12.07%			
Rainfall for 25yr/24hr event	P_{24} =	9	in		
Rainfall for 25yr/3day event	P_{72} =	12.23	in		
Depth to Water Table		3	ft		
Predeveloped Available Storage		4.95	in		
Soil Storage	S =	4.35	in		
$Q_{pre} = \frac{(P_{24} - 0.2S)^2}{(P_{24} + 0.8S)}$	Q_{pre} =	8.21	in		
Runoff Volume from 25 year/ 3 day storm	$V_{25yr/24h}$ =	4.88	ac-in		

Water Quantity - Postdevelopment

Project Area	A =	0.594	ac	25,886	sf
Pervious Area		0.134	ac	5,836	sf
Impervious Area		0.460	ac	20,051	sf
% Impervious		77.5%			
Rainfall for 25yr/24hr event	P_{24} =	9	in		
Rainfall for 25yr/3day event	P_{72} =	12.23	in		
Depth to Water Table		3	ft		
Developed Available Storage		4.95	in		
Soil Storage	S =	1.12	in		
$Q_{post} = \frac{(P_{24} - 0.2S)^2}{(P_{24} + 0.8S)}$	Q_{post} =	10.99	in		
Runoff Volume from 25 year/ 3 day storm	$V_{25yr/24h}$ =	6.53	ac-in		

Postdevelopment - Predevelopment

$Q_{pre\text{-}post} = Q_{post} - Q_{pre}$	$Q_{pre\text{-}post}$ =	2.77	in
Pre/Post Volume = $Q_{pre\text{-}post} \times A$	$V_{pre\text{-}post}$ =	1.65	ac-in

Water Quality

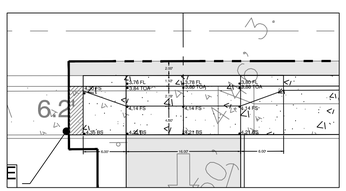
Project Area		0.594	ac	25,886	sf
Surface Water		0.000	ac	0	sf
Roof Area		0.000	ac	0	sf
Pavement/Walkways		0.460	ac	20,051	sf
Pervious area		0.134	ac	5,836	sf
Site area for Water Quality (Total area- (water surface + roof area))		0.594	ac	25,886	sf
Impervious area for water Quality (Site area for Water Quality - Pervious area)		0.460	ac	20,051	sf
% Impervious		77%			
One inch of runoff from project area		0.594	ac-in		
		0.594 ac-in			
Pretreatment Volume Required	0.594	ac-in		2,157	cf
Pretreament Volume Provided	0.621	ac-in		2,254	cf

Exfiltration Trench Design

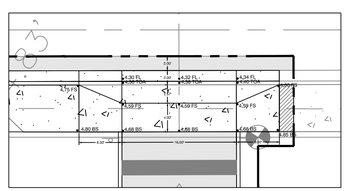
Required trench length (L) =

$$\frac{V}{K\,(H^2W + 2H^2Du - Du^2 + 2H^2Ds) + 1.39\times10^{-4}(W)(Du)}$$

Hydraulic Conductivity, K=	0.0001	
H =	2.5	ft
W =	4	ft
Du =	1.5	ft
Ds =	1.5	ft
Volume of Trench , V =	0.594	ac-in
Trench Length Required =	191	FT
Trench Length Provided =	200	FT



DRIVEWAY DETAIL A
1" = 10'



DRIVEWAY DETAIL B
1" = 10'

LEGEND

- PROJECT LIMITS
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 5.00 EXISTING GRADE
- 6.00 PROPOSED GRADE
- EXFILTRATION TRENCH
- STORMWATER INLET (FDOT DITCH BOTTOM)
- STORMWATER FLOW

NOTE:SYMBOLS IN LEGEND ARE NOT TO SCALE

DRAINAGE & GRADING NOTES:

1. STORMWATER DRAINAGE SYSTEM DESIGNED FOR 25 YR/72 HR STORM EVENT.
2. STORMWATER DRAINGE SYSTEM DESIGNED TO PROVIDE PRETREATMENT FOR 1" OF STORMWATER RUNOFF FROM THE PROJECT AREA.
3. CONTRACTOR TO VERIFY EXISTING ELEVATIONS PRIOR TO CONSTRUCTION.

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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TAMPA OFFICE
CONCOURSE CENTER
3507 E FRANKLIN ROAD, SUITE 140
TAMPA, FLORIDA 33607
TEL: (813) 579-1616 FAX: (813) 288-0710

PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8579

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
July 18, 2012

REVISIONS: 1 2 3 4 5 6

ORIGINAL: APRIL 2011

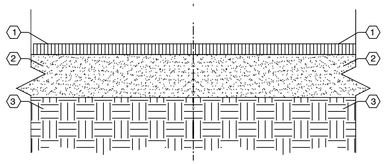
FORT STREET PARKING LOT

KEY WEST, FL 33040

DRAINAGE & GRADING PLAN

CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, FL 33041

JOB NO. 111002
DRAWN RTM
DESIGNED AEP
CHECKED AEP
QC
SHEET C-5

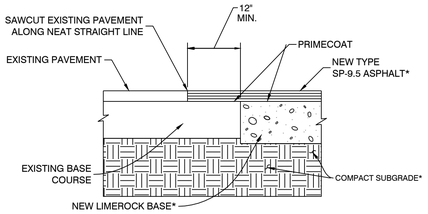


KEYED NOTES

1. 2" SP-9.5 STRUCTURAL COURSE OVER PRIME COAT
2. 6" MIN LIMEROCK BASECOURSE COMPACTED TO 98% ASTM D-1557
3. 8" SUBGRADE COMPACTED TO 95% OF ASTM D-1557.

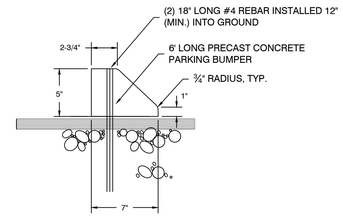
NOTE:
PAVEMENT TO BE BUILT IN COMPLIANCE WITH FDOT STANDARDS AND SPECIFICATIONS.

1 / C-6 Asphalt Pavement Detail
NTS

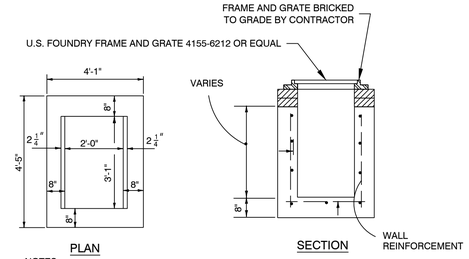


*NOTE:
FOR MATERIAL DEPTHS AND TESTING REQUIREMENTS OF NEW ASPHALT CONSTRUCTION, PLEASE REFER TO CIVIL DETAIL # 1, SHEET C-7

2 / C-6 Pavement Connection to Existing Surface
NTS



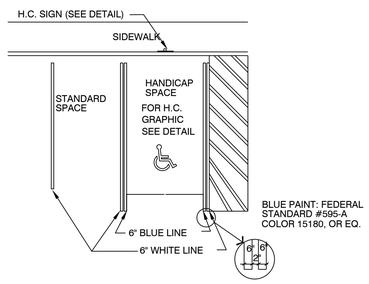
3 / C-6 Concrete Parking Bumper Detail
NTS



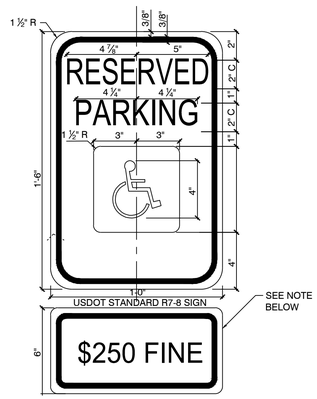
NOTES:

1. CONCRETE SHALL BE 4000 PSI AT 28 DAYS, TYPE II CEMENT
2. ALL REINFORCEMENT MAY BE WELDED WIRE AS PER ASTM C-478, #4 @ 12" O.C.E.W.
3. FRAME AND GRATE BRICKED TO GRADE BY CONTRACTOR.
4. BOTTOM INLETS SHALL BE USP PRODUCT NO. 3-3 OR EQUAL.
5. STRUCTURES TO BE SET ON COARSE AGGREGATE BEDDING

4 / C-6 Type "C" Ditch Bottom Inlet
NTS

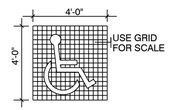


5 / C-6 Handicap Parking Details
NTS



NOTE (R7-8 SIGN): THIS IS A STANDARD SIGN AND MAY BE ORDERED FROM TRAFFIC SIGN SUPPLIER BY NUMBER. THE SIGN MUST BE SUPPLEMENTED WITH A "VAN ACCESSIBLE" SIGN AS APPLICABLE AND/OR AMOUNT OF THE FINE FOR ILLEGALLY PARKING IN THE RESERVED SPACE(S) A MUNICIPALITY MAY IMPOSE, CONFIRM WITH LOCAL REGULATIONS.

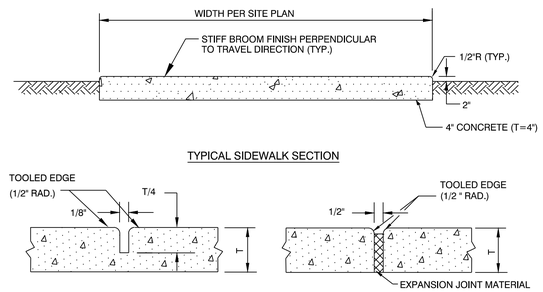
6 / C-6 Accessibility Signage
NTS



NOTES:
ALL LETTERS ARE 1" SERIES "C".
TOP PORTION OF SIGN SHALL HAVE A REFLECTORIZED BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND & BORDER.

BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED WHITE BACKGROUND WITH BLACK OPAQUE LEGEND & BORDER.

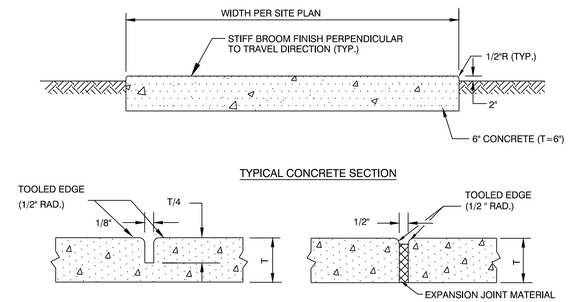
7 / C-6 Handicap Graphic Details
NTS



NOTES:

1. PROVIDE EXPANSION JOINTS WHERE NEW SIDEWALKS ABUT STRUCTURES AND CONTRACTION JOINTS AT INTERVALS EQUAL TO SIDEWALK WIDTH.
2. REPLACE CONCRETE SIDEWALKS AT SCORED JOINTS TO AVOID A PATCHED APPEARANCE. PROVIDE A 2" LEVELING COURSE BENEATH NEW SIDEWALK.
3. SIDEWALK SLOPES NOT TO EXCEED THE FOLLOWING: 5% RUNNING SLOPE , 2% CROSS SLOPE.

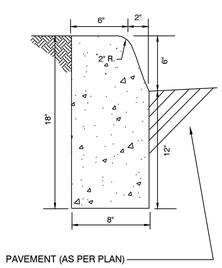
8 / C-6 Typical Sidewalk Detail
NTS



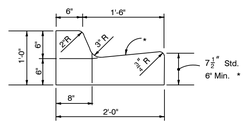
NOTES:

- MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 350 OF FDOT SPECIFICATIONS.
- BASE MATERIAL: 8" CRUSHED LIMEROCK WITH A MIN. LBR OF 100 COMPACTED TO 98% OF THE MODIFIED PROCTOR MAX. DRY DENSITY.
- SUB-BASE: 12" STABILIZED WITH A MIN. LBR 40 COMPACTED TO 95% OF THE MODIFIED PROCTOR MAX. DRY DENSITY.

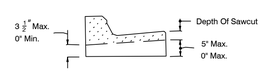
9 / C-6 6" Concrete Pavement Detail
NTS



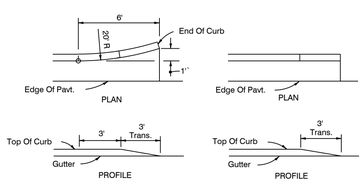
10 / C-6 FDOT Type "D" Curb
NTS



TYPE F
CONCRETE CURB AND GUTTER



TYPE F
CONTRACTION JOINT IN CURB AND GUTTER

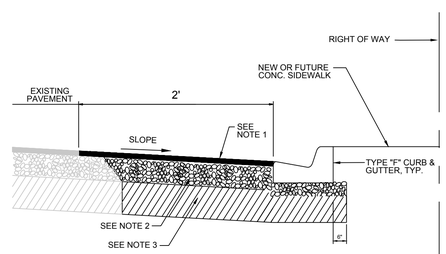


CURB AND GUTTER TYPES E & F
CURB AND GUTTER ENDINGS

GENERAL NOTES

1. For curb,gutter,and curb and gutter provide $\frac{1}{8}$" - $\frac{1}{4}$" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers. Curb,gutter and curb & gutter expansion joints shall be located in accordance with FDOT Section 520 of the standard specifications.

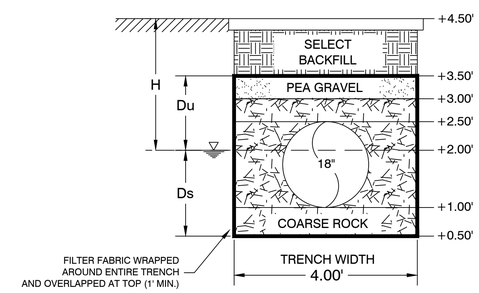
11 / C-6 FDOT Type "F" Curb & Gutter
NTS



NOTES:

1. 2.5" TYPE SP-12.5 ASPHALTIC COURSE
2. 8" COMPACTED LIMEROCK BASE COURSE, 95% ASTM D-1557.
3. EXISTING SUBGRADE COMPACTED AND STABILIZED TO 98% MODIFIED PROCTOR VALUE.

12 / C-6 Asphalt Repair for Curb Construction
NTS



13 / C-6 Exfiltration Trench Detail
NTS

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

KEY WEST OFFICE
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CONCOURSE CENTER
3507 E. FRANKLIN ROAD, SUITE 140
TAMPA, FLORIDA 33607
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PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8579

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
July 18, 2012

REVISIONS:
1 ST.ORM STRUCTURES REVISED 12-29-11
2
3
4
5
6

ORIGINAL: FEBRUARY 2010

IRVING EYSTER MUSEUM AND CONFERENCE CENTER AT THE ISLANDER RESORT
ISLAMORADA, FL 33036

CIVIL DETAILS

H & C ISLANDER RESORT, LLC
P.O. BOX 126
FORT SMITH, AR 72906

JOB NO.	111001
DRAWN	BM
DESIGNED	AEP
CHECKED	AEP
QC	
SHEET	C-6

EROSION AND SEDIMENT CONTROL NOTES

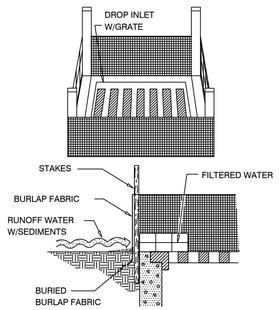
1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDITIONAL PROTECTION - ON-SITE PROTECTION MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNFORSEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC., ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. IF THE HAYBALES/ ROCK BAGS BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUETELY PERFORMS ITS FUNCTION, THE MATERIALS MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
6. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
7. BALES SHALL BE PLACED LENGTHWISE IN SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
8. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACK FILLED. A TRENCH SHALL BE EXCAVATED AROUND THE INLET AND WIDTH OF A BALE TO A MINIMUM DEPTH OF FOUR INCHES. AFTER THE BALES ARE STACKED, THE EXCAVATED SOIL SHALL BE BACK FILLED AND COMPACTED AGAINST THE FILTER BARRIER.
9. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBAR'S DRIVEN THROUGH THE BALE A MINIMUM OF 2 FEET INTO THE GROUND.
10. LOOSE STRAW SHALL BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
11. HAY BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH 1/2 INCH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
12. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
13. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
14. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES 1 FOOT OR APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
15. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE HAY BALE BARRIER IS NO LONGER REQUIRED SHALL BE REMOVED. THE AREA SHALL BE DRESSED TO CONFORM TO THE FINISH GRADE, PREPARED AND SEEDED.
16. ALL FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
17. SHOULD THE FABRIC ON A FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE PROJECT THE SILT FENCE OR FILTER BARRIER SHALL BE REPLACED PROMPTLY.
18. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
19. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE INCH IN ADDITION TO THE REQUIREMENTS SHOWN HERE.
20. THE CONTRACTOR IS RESPONSIBLE FOR THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND THE ENVIRONMENTAL MANAGEMENT PLAN (E.M.P.) IN THE ENVIRONMENTAL IMPACT ANALYSIS (E.I.A.) FOR THIS PROJECT.
21. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WATER BODIES AND WETLAND AREAS, WITHIN 200 FT. OF THE CONSTRUCTION LIMITS AND FARTHER WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION.
22. ALL DISTURBED AREAS THAT WILL REMAIN UNPAVED SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL COMPLETION OF THE PROJECT (UNTIL FURTHER VEGETATIVE COVER IS ESTABLISHED FOR AREAS TO RECEIVE FURTHER LANDSCAPING).
23. ALL DISCHARGE FROM DE WATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE SEWER SYSTEM IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
24. ALL GRASSED FILL SLOPES 4:1 OR STEEPER TO RECEIVE OVERLAPPED (SHINGLE STYLE) SOLID SOD WITH EACH PIECE INDIVIDUALLY STAKED OR PINNED. OVERLAPPING SHALL BE A MINIMUM OF 5".
25. ALL TEMPORARY, EROSION, AND SEDIMENT CONTROL TO REMAIN IN PLACE UNTIL COMPLETION OF CONSTRUCTION.
26. IN ADDITION TO THE MINIMUM EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND SHALL UTILIZE ALL ADDITIONAL CONTROLS NECESSARY FOR COMPLIANCE.
27. ALL EXCAVATIONS AND EARTHWORK SHALL BE DONE IN A MANNER TO MINIMIZE WATER TURBIDITY AND POLLUTION. DISCHARGE SHALL BE CONTROLLED AND REROUTED THROUGH HAY FILTERS, SILTATION DIAPERS, SUMPS AND POLISHING PONDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION, CORRECTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE BAHAMAS AND THE ENVIRONMENTAL MANAGEMENT PLAN AND ENVIRONMENTAL IMPACTS ASSESSMENT FOR THIS PROJECT.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY SEDIMENT THAT LEAVES THE SITE AND CHANGES ANY DOWNSTREAM CONDITIONS BY RAISING CHANNEL BOTTOMS AND/OR CLOGGING OUTFALL CULVERTS.
29. THE CONTRACTOR SHALL PAY FOR ANY WATER QUALITY CONTROL VIOLATIONS FROM ANY AGENCY THAT RESULTS IN FINES BEING ASSESSED TO THE OWNER BECAUSE OF THE CONTRACTOR'S FAILURE TO ELIMINATE TURBID RUNOFF FROM LEAVING THE SITE AND RAISING TURBIDITY LEVELS ABOVE EXISTING BACKGROUND LEVEL.

EROSION AND SEDIMENT CONTROL GENERAL NOTE:

THE ATTACHED BEST MANAGEMENT PRACTICES (BMP'S) DETAILS AND SPECIFICATIONS ARE ONLY A SUGGESTED APPROACH DEVELOPED FOR USE BY THE OWNER/CONTRACTOR TO ASSIST THEM IN IMPLEMENTING APPROPRIATE POLLUTION PREVENTION TECHNIQUES.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND IMPLEMENT THE BEST MANAGEMENT PRACTICES THAT ARE APPROPRIATE FOR THE PROJECT'S SITE SPECIFIC CONDITIONS DURING THE LIFE OF THE CONSTRUCTION ACTIVITIES.

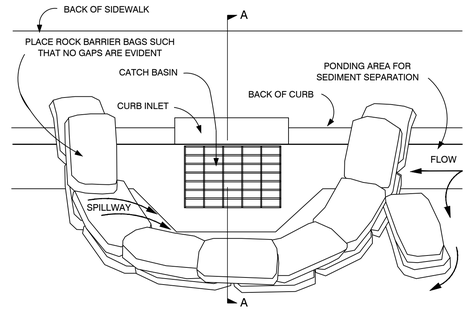
CONTRACTOR SHALL SUBMIT A EROSION AND SEDIMENT CONTROL PLAN FOR APPROVAL BY CITY OF KEY WEST PRIOR TO BEGINNING CONSTRUCTION



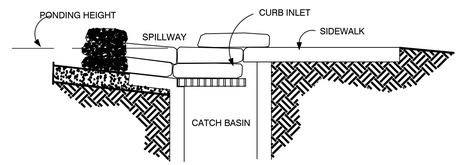
SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT NON PAVED AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS ALONG ROADWAYS.

1 C-7 **Drop Inlet Sediment Filter**
NTS



PLAN VIEW

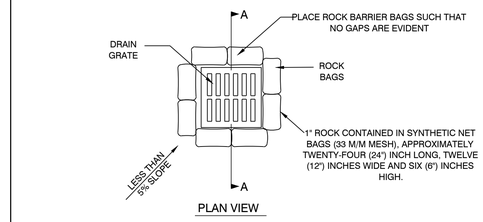


SECTION A-A

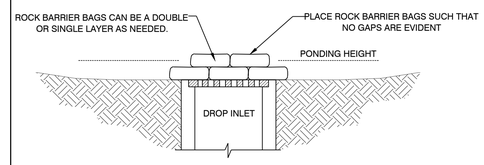
NOTES:

1. ALL ROCK BAG BARRIERS MUST AGREE WITH THE NOTES ON PREVIOUS PAGE.
2. PLACE CURB TYPE ROCK BAG BARRIER ON GENTLY SLOPING STREET, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNNOFF.
3. BAGS OF WOVEN GEOTEXTILE FABRIC, FILLED WITH GRAVEL MUST BE LAYERED SUCH THAT NO GAPS ARE EVIDENT.
4. LEAVE ONE SANDBAG GAP IN THE TOP ROW ON THE SIDE AWAY FROM FLOW, TO PROVIDE A SPILLWAY; OR IN THE CENTER IF PONDING IS NEEDED ON BOTH SIDES.
5. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY

2 C-7 **Silt Rock Bag Curb Inlet Filter**
NTS



PLAN VIEW

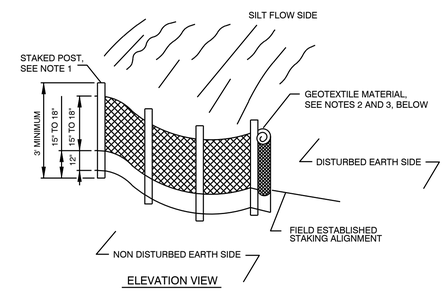


SECTION A-A

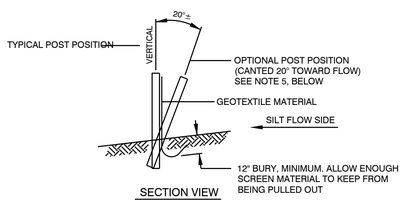
NOTES:

1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%.)
2. A "REASONABLE" DESIGN SIZE PARTICLE TO CAPTURE MUST BE SELECTED.
3. SIZE DISTRIBUTION OF UPSTREAM SOIL PARTICLES MUST BE EVALUATED.
4. INFLOW AND OUTFLOW FROM THE SYSTEM FOR A SPECIFIC FREQUENCY STORM MUST BE KNOWN.
5. POND VOLUME IS DIRECTLY PROPORTIONAL TO THE DISCHARGE RATE OF WATER FROM THE SYSTEM.
6. POND VOLUME IS INVERSELY PROPORTIONAL TO THE MASS OF THE DESIGN SIZE SUSPENDED PARTICLE.
7. A SYSTEM MUST PROVIDE SUFFICIENT FLOW TO ALLOW FOR DEPOSITION OF DESIGN SIZE PARTICLES.
8. THE PONDING HEIGHT MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

3 C-7 **Silt Rock Bag Drop Inlet Filter**
NTS



ELEVATION VIEW

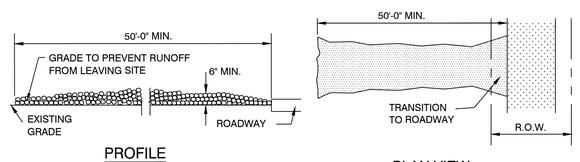


SECTION VIEW

NOTES:

1. POST; 2"X2" WOOD, P.T. OR 2-1/2"Ø STEEL AT 6' CENTERS, MAXIMUM.
2. GEOTEXTILE: GRAB TENSILE AT 90 LBS, TRAPEZOIDAL TEAR AT 35 LBS., MULLEN BURST AT 180 PSI.
3. GEOTEXTILE MATERIAL SHALL BE BURIED IN THE GROUND A MINIMUM OF 12" AND BACK FILLED.
4. ALSO SEE FDOT INDEX 199, "GEOTEXTILE CRITERIA", EROSION CLASS.
5. OPTIONAL POST POSITION REQUIRED WHEN SLOPE IS GREATER THAN 1:2.

4 C-7 **Staked Silt Barrier Detail**
NTS

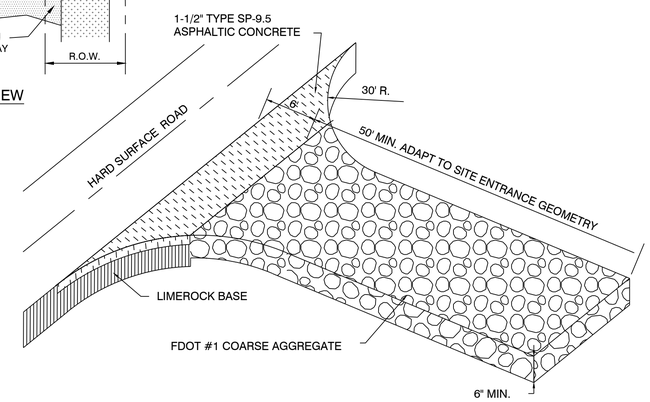


PROFILE

PLAN VIEW

GENERAL NOTES:

1. STONE SIZE- 3 TO 5 INCH OPEN GRADED ROCK.
2. LENGTH- AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
3. THICKNESS- NOT LESS THAN 8 INCHES.
4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WASHING- WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED STRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE- ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.



5 C-7 **Gravel Construction Entrance**
NTS

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 400
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

TAMPA OFFICE
CORPORATE OFFICE
3507 EAST FRONTAGE ROAD, SUITE 140
TAMPA, FLORIDA 33607
TEL: (813) 579-1616 FAX: (813) 288-0710

PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8579

ALLEN E. PEREZ P.E.
Florida P.E. NO. 51468
July 18, 2012

ORIGINAL: APRIL 2011

REVISIONS:
1
2
3
4
5
6

FORT STREET PARKING LOT

KEY WEST, FL 33040

NPDES DETAILS

CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, FL 33041

JOB NO. 111002
DRAWN RTM
DESIGNED AEP
CHECKED AEP
QC
SHEET C-7

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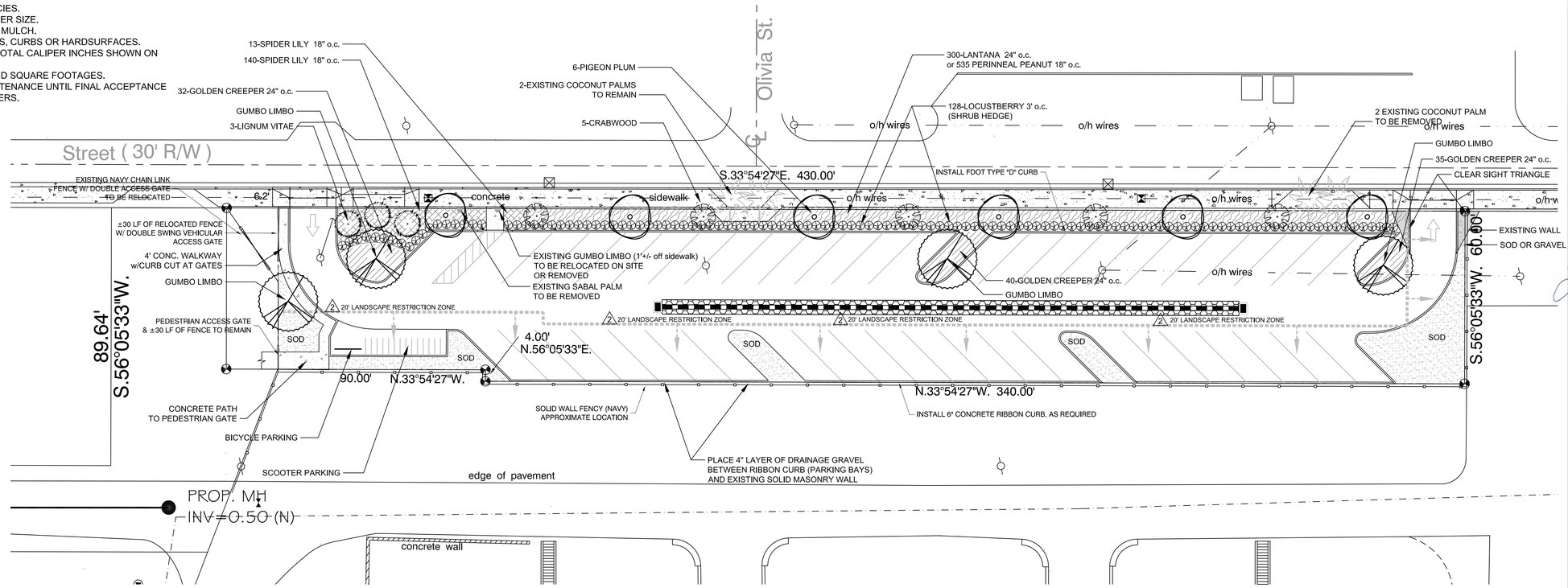
GENERAL LANDSCAPE NOTES:
70% OF ALL PLANT GROUPS ARE TO BE NATIVE SPECIES.
PLANT SIZE TO TAKE PRECENDENCE OVER CONTAINER SIZE.
ALL PLANTING AREAS TO RECIEVE 3" MIN. LAYER OF MULCH.
ALL SHADE TREES TO BE 4' MIN. FROM ALL SIDWALKS, CURBS OR HARDSURFACES.
CONTRACTOR RESPONSIBLE TO PROVIDE ON SITE TOTAL CALIPER INCHES SHOWN ON PLANTING SCHEDULE.
CONTRACTOR TO VERIFY ALL PLANT QUANTITIES AND SQUARE FOOTAGES.
CONTRACTOR RESPONSIBLE FOR LANDSCAPE MAINTENANCE UNTIL FINAL ACCEPTANCE APPROVAL LETTER RELEASES LANDSCAPE TO OWNERS.



GENERAL INFORMATION-(City Owned Project)

DISTRICT: HPS-1
GROSS ACRES: 24,434 S.F. or .56 ACRES (project area)
MAXIMUM BUILDING COVERAGE: 30% or 7,330 s.f.
BUILDING COVERAGE PROVIDED: 0% or 0 s.f.
PARKING PROVIDED: 46
SCOOTER PARKING PROVIDED: 14
MAXIMUM IMPERVIOUS AREA: 50%
PROPOSED IMPERVIOUS AREA: not applicable
REQUIRED OPEN SPACE: not applicable
OPEN SPACE PROVIDED: not applicable

SETBACKS REQ.	SETBACKS PROVIDED
FRONT: 20' (Fort St.)	FRONT: 8' (ROW to Parking Area)
REAR: 20' or 15' on alley	REAR: n/a
SIDEYARD: 5' or 10% of lot width	SIDEYARD: 3'+ plus
STREET SIDE: 10'	STREET SIDE: n/a

LANDSCAPE DATA/CALCULATIONS

MINIMUM LANDSCAPE AREA -(Building Site Area)
MINIMUM REQUIRED 20% OF BLDG. SITE AREA: 0 s.f. or .0 acres
LANDSCAPE AREA PROVIDED: n/a

1 MINIMUM LANDSCAPE AREA - (Parking Area)
MINIMUM REQUIRED 10% OF TOTAL PARKING AREA: 2,442 s.f. or .056 acres
LANDSCAPE AREA PROVIDED: 5,838 s.f.

STREET FRONTAGE REQUIREMENT
NOTE: .56 ACRES REQUIRES 20 l.f. WIDE STRIP WHICH CANNOT BE MET DUE TO PARKING AREA.
REQUIRED MATERIAL FOR 20' WIDE STRIP TO BE MET IN SPACE AND QUANTITIES DEFINED BELOW.

FORT STREET FRONTAGE: 8' STRIP PROVIDED (80 Plant Units per 100')
412 l.f. = 412 PLANT UNITS REQUIRED

312 Shrubs	=	312 p.u.	581 Shrubs Provided
8 Trees	=	40 p.u.	8 Trees Provided
6 Shade Tree	=	60 p.u.	6 Shade Trees Provided
Total	=	412 p.u.	681 p.u. provided

INTERIOR PARKING REQUIREMENT

TOTAL PARKING AREA: 16,200 s.f.
20% VUA INTERIOR LS AREA: 3,240 s.f.
AREA PROVIDED: 5,838 s.f. (Total L.S. Area)

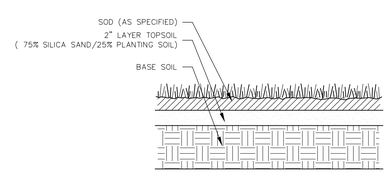
(I) TREE PER 100 s.f. OF REQ. 20% = 32 TREES
TREES PROVIDED: = 32 TREES (Total)

PERIMETER PARKING REQUIREMENT 1
REQUIRED PERIMETER WIDTH = 5' CANNOT BE MET.
WIDTH PROVIDED = 3'+(North & South) and 1'+/- West (SEE PLAN)
SOUTH AND WEST PERIMETERS ARE BORDERED BY MASONRY WALL
(There is no Landscape Space between the West Parking Spaces and the West Masonry Wall)
REQUIRED 1 TREE & 10 SHRUBS PER 35 L.F.
120 l.f. (side perimeteres only) / 35 l.f. = 3 TREES & 34 SHRUBS
TREES PROVIDED = 6
SHRUBS PROVIDED = 131

NON-VEHICULAR USE AREA (NOS)
0% OF BUILDING SITE IS NON-VEHICULAR OPEN SPACE (NOS)
(Claculation is not applicable to this project)

PLANT SCHEDULE

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	NOTE	NATIVE
TREES					
CANOPY					
6	PIDGEON PLUM	Coccoloba diversifolia	3" cal., 12-14 ' o.h	FL #1	NATIVE
2 4	GUMBO LIMBO	Bursera simaruba	4" cal., 14-16' o.h.	FL #1	NATIVE
2 0	GREEN BUTTONWOOD	Conocarpus erectus	4" cal., 12-14' o.h.	FL #1	NATIVE
UNDERSTORY					
2 0	SILVER BUTTONWOOD	Silver buttonwood	2" cal. 10'-12' o.h.	FL #1	NATIVE
2 3	LIGNUM VITAE	Guaiacum sanctum	1.5" cal. 6'-8' o.h.	FL #1	NATIVE
5	CRABWOOD	Gymnanthes lucida	1" cal. 5'-7' o.h.	FL #1	NATIVE
SHRUBS					
2 0	SPANISH STOPPER	Eugenia foetida	7 gal., 36"-40" hgt./sprd.	FL #1	NATIVE
128	LOCUSTBERRY	Byrsonima lucida	3 gal., 24" -36" hgt./sprd.	FL #1	NATIVE
300	LANTANA	Lantana camara	1 gal., 15" -18" hgt./sprd.	FL #1	NATIVE
GROUNDCOVER					
2 107	GOLDEN CREEPER	Ernodea littoralis	1 gal., full	FL #1	NATIVE
153	SPIDER LILY	Hymenocallis latifolia	1 gal., full	FL #1	NATIVE
1,700 s.f.	ARGENTINE BAHIA				



SODDING DETAIL

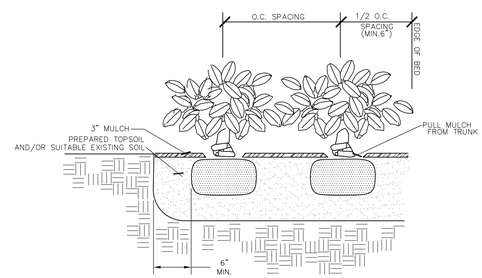
ALL AREAS TO BE SODDED TO RECEIVE 2" TOP LAYER OF SILICA SAND/PLANTING SOIL AS INDICATED.

IRRIGATION NOTES

100% IRRIGATION COVERAGE SHALL BE PROVIDED TO ALL PROPOSED PLANTING AREAS.

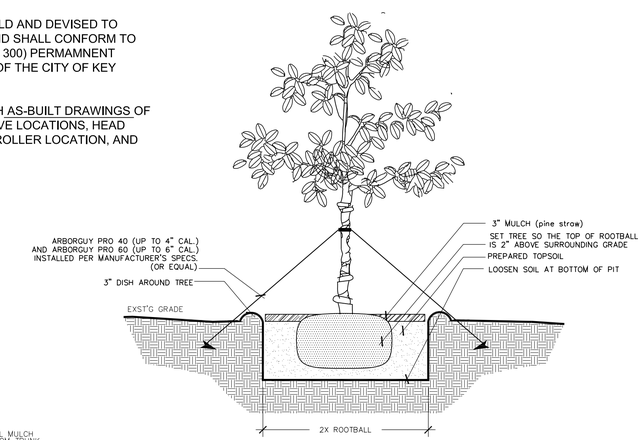
SAID SYSTEM SHALL BE DESIGN / BUILD AND DEVISED TO MAXIMIZE WATER CONSERVATION AND SHALL CONFORM TO SUBDIVISION II: SECTION 74 - (295 TO 300) PERMAMNENT WATER CONSERVATION MEASURES OF THE CITY OF KEY WEST CODE.

CONTRACTOR TO PROVIDE CITY WITH AS-BUILT DRAWINGS OF INSTALLED SYSTEM INCLUDING: VALVE LOCATIONS, HEAD LOCATIONS, PIPE LOCATIONS, CONTROLLER LOCATION, AND BFP LOCATION, ETC...



SHRUB PLANTING DETAIL

ALL SHRUBS ARE TO BE POSITIONED VERTICALLY REGARDLESS OF THE SLOPE OF THE GROUND IN WHICH THEY ARE PLANTED. WATER RINGS ARE TO BE CONSTRUCTED AT RIGHT ANGLES TO THE TREE OR SHRUB OR IN A MANNER IN WHICH THEY WILL MOST EFFECTIVELY SERVE THE PURPOSE OF RETAINING WATER AT THE BASE OF THE PLANT.



TREE PLANTING DETAIL

ALL TREES ARE TO BE POSITIONED VERTICALLY REGARDLESS OF THE SLOPE OF THE GROUND IN WHICH THEY ARE PLANTED. WATER RINGS ARE TO BE CONSTRUCTED AT RIGHT ANGLES TO THE TREE OR SHRUB OR IN A MANNER IN WHICH THEY WILL MOST EFFECTIVELY SERVE THE PURPOSE OF RETAINING WATER AT THE BASE OF THE PLANT.

THE ROOTBALL OF THE TREE SHOULD BE POSITIONED IN THE HOLE SO THAT THE FINISH GRADE OF THE BACKFILL SOIL AND LANDSCAPE SOIL IS 2" LOWER THAN THE TOP OF THE ROOTBALL. MULCH SHOULD COVER THE EDGE OF THE ROOTBALL, DO NOT MULCH ON TOP OF ROOTBALL.

PLANTING PLAN

0 10 20 40

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LANDWISE DESIGN
9822 TAPESTRY PARK CIRCLE, SUITE 201 - JACKSONVILLE, FL 32210
P. 904.343.4194

2.22.13

PLANTING PLAN

CITY OF KEY WEST
FORT STREET PARKING AREA
KEY WEST, FLORIDA

REVISIONS:
1 - 7.19.12-Staff Comment
2 - 2.22.13-Navy Comment

NORTH

JOB NUMBER: 11007
DATE: 11.9.11
DRAWN BY: LBR
CHECKED BY: LADD B. ROBERTS

SHEET NUMBER: L-1

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SECTION 01533
TREE AND PLANT PROTECTION

PART 1 GENERAL

1.01 SECTION INCLUDES
A. The work consists of furnishing temporary tree protection barriers, tree guards and general plant protection as indicated on the drawings.

1.02 RELATED SECTIONS
PART 2 PRODUCTS

2.03 TREE PRUNING COMPOUND
A. Waterproof, antiseptic, elastic and free of kerosene, coal tar, creosote, and other substances harmful to plants.

2.04 TOPSOIL
A. In accordance with Trees, Plants, and Ground Cover - Section 02950.

2.05 FARM-FIELD FENCE
A. This fencing shall meet the requirements of ASTM A116 Zinc-Coated (galvanized) iron or steel Farm-Field and Railroad Right-of-Way Wire Fencing, Design No. 1047-6-9, Zinc coating Class

2.04 WOODEN POSTS AND BRACES
A. May be either round or square shaped. When square posts are used, line post shall be 3 inches square minimum. Corner, end, pull, approach and intermediate post shall be 6 inches minimum.

2.05 PLYWOOD
A. Construction grade 3/8 inch.

2.06 WOODEN BRACING
A. Brace to be 2-by 4-inch. No. 3 Grade SPIB.
PART 3 EXECUTION

3.06 LAYOUT
A. Trees and vegetation which are to remain and must be protected against damage during construction are indicated on drawings as within a tree preservation area or a protected tree to remain.
B. Provide temporary tree protection barriers and tree guards around all protected trees indicated to remain.
C. Stake the limits of all new buildings and paving prior to any other construction activities. Notify the owner's representative upon completion of staking. All trees to remain within the selected clearing of understory area shall be tagged with surveyor's ribbon and any understory to remain will be indicated.
D. No trees or vegetation of any type shall be disturbed outside the limits of clearing and grubbing and selected clearing areas unless otherwise indicated.
E. All trees and vegetation designated to remain shall retain natural form and orientation to existing grade. Where existing trees and vegetation are to remain within selected clearing areas, proper techniques of tree protection as prescribed herein shall be followed.

3.07 TREE REMOVAL AND CLEARING
A. All trees to be removed shall be done so in a manner that will not damage the remaining trees. Trees that are to remain that have been damaged during construction operations shall be repaired in an appropriate manner as prescribed by the Landscape Architect as soon as final clearing has been completed.
B. The owner's representative shall be contacted in the event it becomes necessary to disturb any trees or vegetation designated to remain. No trees or vegetation in any area shall be removed without prior written approval.
C. Clearing consists of the felling and cutting of trees into sections and the satisfactory disposal of the trees and other vegetation including down timber, snags, brush, and rubbish occurring within the areas to be cleared. Trees, stumps, roots, brush, and other vegetation in areas to be cleared shall be cut off flush with or to 6" below the original ground surface except such trees and vegetation as may be directed to be left standing. Trim branches of trees left standing within the cleared areas to such heights and in such manner as directed by the landscape Architect. Limbs and branches to be trimmed shall be neatly cut close to the bole of the tree or main branches. Cuts more than 1-1/2 inches in diameter thus made shall be painted with an approved tree wound paint as well as repairing any damage to existing tree crowns or root systems.

3.08 TREE PROTECTION BARRIER
A. Tree protection fencing shall be placed before any excavation or grading is begun and shall be maintained in repair for the duration of the construction work unless otherwise directed. Tree protection fencing shall remain until the planting work is started and then removed. No materials shall be stored within ten feet of the tree protection fencing. Fencing shall conform to the fencing detail shown on the drawings.
B. Perform such minimal clearing and grubbing as may be necessary to construct the fence to the required grade and alignment. When necessary in areas of irregular ground or where trees and understory are encountered, modification of the fence alignment shall be made. In general, the bottom of the fence shall follow the contour of the ground in accordance with usual practice in constructing the fence of the type specified without trenching or disturbing the existing grade.
C. Spacing and setting of posts shall be in accordance with the drawings and details.
D. The fence shall be erected to the lines and grades shown on the plans or established by the Landscape Architect.
E. Adjust the fence where understory and trees are in the line of the fence.
F. The tension of stretching the fence shall be applied by use of mechanical fence stretchers and single wire stretchers designed and manufactured for that purpose and in accordance with the fence manufacturer's recommendations. The finished fence shall be true to line, taut, and solid at all points.

3.09 TREE GUARD
A. General: Protect trees to be left standing in the selected clearing areas from damage incident to clearing, grubbing, and construction operations, by the erection of tree guards. Such barriers must be placed and be approved by the owner's representative before construction operations proceed.
B. Installation: Install tree guards around protected trees to remain. Make the necessary adjustments around the tree in order to minimize damage that may occur during installation.

3.05 EXCAVATION AROUND TREES
A. Excavate within drip line of trees only where indicated.
B. Where trenching for utilities is required within drip line with the approval of the Landscape Architect, tunnel under or around roots by hand digging. Do not cut main lateral roots or tap roots 2 inches in diameter or greater. Cut smaller roots which interfere with installation of new work. Cut roots with sharp pruning instruments; do not break or chop.

3.06 GRADING AND FILLING AROUND TREES
A. Maintain existing grade within drip line of trees, unless otherwise indicated.
B. Lowering Grades: Where existing grade is above new finish grade shown around trees, carefully hand excavate within drip line to new finish grade. Cut roots exposed by excavation and provide permanent protections as recommended by the Landscape Architect.
C. Raising Grades: Minor Fills: Where existing grade is 6 inches or less below elevation of finish grade shown, use a topsoil fill material. Place in single layer and do not compact; hand grade to required finish elevations.
D. Protect root systems. Do not store construction materials, debris or excavated material within drip line (outer perimeter of branches). Do not permit vehicles within drip line. Restrict foot traffic to prevent excessive compaction of soil over root systems.

3.07 REPAIR AND REPLACEMENT OF TREES
A. Repair trees damaged by construction operation, in a manner acceptable to the Landscape Architect. Make repairs promptly after damage occurs to prevent progressive deterioration of damaged trees.
B. Remove dead and damaged trees which are determined by the Landscape Architect to be incapable of restoration to normal growth pattern.
C. Replacement: If any trees to be saved are severely injured by equipment, replace each injured tree up to 3-inch caliper with a tree of equal size and species and replace each injured tree above three inches with a sufficient number and calipersized trees of the same species as directed by the Landscape Architect. Install and maintain trees in accordance with Trees, Plants and Ground Cover - Section 02950.
3.08 REMOVAL FROM PROPERTY
A. Remove excess excavation, displaced trees, and trimmings and dispose of legally off the property.

END OF SECTION

SECTION 02950

TREES, PLANTS AND GROUND COVERS

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Extent of landscape development work is shown on drawings and in schedules.
B. Sodding of areas disturbed during construction exclusive of paved areas.
C. Transplanting of existing trees, palms and plant material.
D. Prior to construction activities, all trees, palms and plant material to be relocated will be tagged by Architect. Specific relocations are shown on drawings.

1.02 RELATED SECTIONS
A. Section 02810 - Irrigation Systems
C. Section 02935 - Sodding

1.03 SUBMITTALS
A. Comply with provisions of General Conditions
B. Certificates of inspection as required by governmental authorities and manufacturer's or vendor's certified analysis for soil amendments and fertilizer materials. Submit other data substantiating that materials comply with specified requirements.
C. Soil test reports.
D. Maintenance Instructions: Typewritten instructions recommending procedures to be established by Owner for maintenance of landscape work for one full year. Submit prior to expiration of required maintenance periods.
E. Provide reproducable "As-Built" drawing after final acceptance by owner.

1.04 QUALITY ASSURANCE
A. Landscape work shall be performed by a single firm specializing in landscape work.
B. Obtain agronomic soils tests for all planting areas. Tests shall be performed by an approved agronomic soils testing laboratory and shall include fertility and suitability analysis with written recommendations for soil amendments, fertilizer, and chemical conditioner application rates for soil preparation, planting backfill mix, and post maintenance fertilization program. Submit a copy of soils test to Architect.
C. Obtain soil test from existing stockpiled topsoil, if any, to determine type and amount of amendments needed for areas that are to receive stockpiled topsoil.
D. Ship landscape materials with certificates of inspection as required by governmental authorities. Comply with governing regulations applicable to landscape materials.
E. Substitutions: Do not make substitutions. If specified landscape material is not obtainable, submit proof of nonavailability and proposal for use of equivalent material to Architect. When authorized, adjustment of contract amount will be made.
F. Analysis and Standards: Package standard products with manufacturer's certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agricultural Chemists, wherever applicable or as further specified.
G. Topsoil: Before delivery of topsoil, furnish Landscape Architect with written statement giving location of properties from which topsoil is to be obtained, names and addresses of owners, depth to be stripped and crops grown during past two years.
H. Trees and Shrubs: Plant names indicated are to comply with "Standard Plant Names" as adopted by latest edition of American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged. Provide healthy, vigorous stock grown under climactic conditions similar to conditions in locality of project; free of disease, insects, eggs, larvae and defects such as knots, sun-scald, injuries, abrasions or disfigurement. ALL PLANTS TO BE FLORIDA #1 OR BETTER.
I. Sizes: Comply with sizing and grading standards of latest edition of American Standard for Nursery Stock. A plant shall be dimensional as it stands in its natural position. Stock furnished shall be at least minimum size indicated. Larger stock is acceptable at no additional cost unless a written change order is issued.
J. Inspection: Landscape Architect reserves the right to inspect trees and shrubs either at place of growth or at site before planting for compliance with requirements for name, variety, size and quality.
1. Such approval shall not impair the right of inspection and rejection upon delivery at the site during the progress of work.

1.05 DELIVERY, STORAGE AND HANDLING
A. Packaged Materials: Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored at site.
B. Trees and Shrubs: Provide container grown or balled and burlapped trees and shrubs. Do not use trees or shrubs which have been in cold storage or heeled-in. Do not prune prior to delivery. Do not bend or bind-tie trees or shrubs in such manner as to damage bark, break branches or destroy natural shape. Provide protective covering during delivery.
C. Deliver trees and shrubs after preparations for planting have been completed and plant immediately. Cover plants transported on open vehicles with a protective covering to prevent wind burn. If planting is delayed more than six hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist.
D. Do not remove container grown stock from containers until planting time.
E. Label at least one tree and one shrub of each variety with a securely attached waterproof tag bearing legible designation of botanical and common name.

1.06 PROJECT REQUIREMENTS
A. Proceed with and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.
B. Utilities: Determine location of underground and above ground utilities and perform work in manner which will avoid possible damage. Hand excavate, as required, to minimize possibility of damage to underground utilities. Maintain grade stakes set by others until removal is mutually agreed upon by all parties concerned.
C. Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions or obstructions, notify Architect before planting.
D. Planting Schedule: Prepare a proposed planting schedule. Schedule dates for each type of landscape work during normal seasons for such work in area of site. Correlate with specified maintenance periods to provide maintenance until final completion of work under contract.
E. Coordination with Lawns: Plant trees and shrubs after final grades are established and prior to planting of lawns, unless otherwise acceptable to Landscape Architect. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

1.07 WARRANTY
A. Warranty trees and shrubs, for a period of one year after date of acceptance, against defects including death and unsatisfactory growth except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents which are beyond Contractor's control.
B. Warranty shall not include damage or loss of trees, plants or ground covers caused by fires, floods, severe freezes not typical to the region, winds over 75 mph or acts of vandalism.
C. Remove and replace trees, shrubs, or other plants found to be dead or in unhealthy condition during warranty period. Plant missing trees, shrubs and plants. Make replacements during growth season following end of warranty period. Furnish and plant replacements which comply with requirements shown and specified. Also, replace trees and shrubs which are in doubtful condition at end of warranty period. Only one replacement shall be required at end of warranty period, except for losses or replacements due to failure to comply with specified requirements.

PART 2 PRODUCTS

2.08 TOPSOIL/SILICA SAND
A. 75% silica sand (NOT BUILDER'S SAND)/25% planting soil.
A. Topsoil for landscape work is not available at site and shall be furnished as specified.
B. Provide new topsoil which is fertile, friable, natural loam, surface soil, reasonably free of subsoil, clay lumps, brush, weeds and other litter and free of roots, stumps, stones larger than 2 inches in any dimension, and other extraneous or toxic matter harmful to plant growth.
1. Obtain topsoil from local sources or from areas having similar soil characteristics to that found at project site.
2. Obtain topsoil only from naturally well-drained sites where topsoil occurs in a depth of not less than four inches; do not obtain from bogs or marshes.

2.09 SOIL AMENDMENTS
A. Lime: Natural limestone containing not less than 85 percent of total carbonates, ground so that not less than 90 percent passes a 10 mesh sieve and not less than 50 percent passes a 100 mesh sieve.
B. Peat Humus: FS Q-P-166 and with texture and pH range suitable for intended use, or Florida muck.
C. Bone Meal: Commercial, raw, finely ground; 4 percent nitrogen and 20 percent phosphoric acid.
D. Superphosphate: Soluble mixture of treated minerals; 20 percent available phosphoric acid.
E. Commercial Fertilizer: Complete fertilizer of neutral character with some elements derived from organic sources and containing following percentages of available plant nutrients:
1. Trees and Shrubs: Minimum 10 percent available phosphoric acid, from 3 percent to 5 percent total nitrogen, and from 3 percent to 5 percent soluble potash.
2. Lawns: Minimum 4 percent phosphoric acid, minimum 2 percent potassium, and percentage of nitrogen required to provide not less than one pound of actual nitrogen per 1,000 sq.ft. of lawn area. Provide nitrogen in a form that will be available to lawn during initial period of growth.
3. Palm Fertilizer - Slow release "Palm Special" granular fertilizer which includes trace elements of iron, magnesium and manganese.
F. Sand: Clean, silica sand (NOT BUILDER'S SAND) free of salt, weeds, sticks and other debris.
G. Organic Soil Amendment: Pinebark chunks smaller in size but not greater than 3/4 inches in diameter.

2.010 PLANT MATERIALS - GENERAL
A. Name and Variety: Provide plant materials true to name and variety established by American Joint Committee on Horticultural Nomenclature "Standardized Plant Names".
B. Quality: Provide trees, shrubs and other plants complying with recommendations and requirements of ANSI Z60.1 "Standard for Nursery Stock" and as further specified.
C. Provide plants typical of their species or variety with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sunscald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers and all other forms of infestation. Plants shall have a fully developed form without voids and open spaces.
D. Dig balled and burlapped plants with firm, natural balls of earth sufficient in diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of plant. Provide ball sizes complying with latest edition of American Standard for Nursery Stock. Cracked or loose balls are not acceptable.
E. Provide tree species true to normal species, character and habit. Single trunk trees will not be acceptable with "Y" shape trunk in the main leader. Culls will not be acceptable.
F. Plants planted in rows shall be matched in form.
G. Plants larger than those specified in the plant list may be used and are acceptable in most instances, but should be verified by Owner.
H. The height of trees, measured from the crown of the ball to the top of the top branch, shall not be less than the minimum size designated in the plant list prior to topping and pruning.
I. Coniferous trees shall be branched to the ground.

2.011 CONTAINER GROWN STOCK
A. Stock shall be grown in container for sufficient length of time for root system to have developed to hold its soil together, firm and whole.
B. No plants shall be loose in the container.
C. Container stock shall not be pot bound.

2.012 SHRUBS AND SMALL PLANTS
A. Requirements for spread and height are indicated in plant list.
B. Measurements for height shall be taken from ground level to the average height of top of plant and not the longest branch.
C. Single stemmed or thin plants will not be acceptable.
D. Side branches shall be generous, well-twigged and, the plant as a whole, well-bushed to ground.
E. Plants shall be in moist, vigorous condition, free from dead wood, bruises or other root or branch injuries.
F. Provide plants established and well-rooted in removable containers or integral peat pots and with less than minimum number and length of runners required by ANSI Z60.1 for post size shown or listed.

2.013 FERTILIZER
A. Plant fertilizer Type A, commercial type, containing at least 12 percent nitrogen, 12 percent phosphoric acid, and 12 percent potash and whose composition is at least 50 percent organic so as to provide a continuous time released character.
1. Preferred Type: Pelletized or briquette form, such as Agriform tablets for use in planting shrubs and trees on an individual basis.
2. Granular Type A to be incorporated into topsoil of planting beds, annual beds and ground cover beds.

2.014 MULCH
A. For Use in Backfill Mixtures: Well-shredded pine bark or native hardwood not larger than 1/2 inch in width.

B. Bed and Tree Dressing Mulch:
1. Premium pine straw; furnish in bales free of sticks and rubbish.

2.015 ACCESSORIES
A. Topsoil: Fertile, friable, natural, of loamy character, without a mixture of subsoil material, shall be obtained from a well-drained arable site, or from on-site stockpile, being reasonably free from clay, lumps, coarse sands, stones, roots, sticks and other foreign materials, with a acidity range of between Ph 6.0 and 6.8.
B. Peat Moss: Brown to black in color, weed and seed free, granulated, raw peat or baled peat, containing not more than 9 percent mineral on a dry basis.
C. Water: Free of substances harmful to plant growth.
D. Stakes for Tree Staking: Common and acceptable in region of project.
E. Guying Wire: 10 or 12 gage galvanized wire.
F. Turnbuckles: Galvanized steel or aluminum of size and gage required to provide tensile strength equal to that of guying wire. Turnbuckles opening shall be at least 3 inches to allow for periodic adjustments.
G. Staking and Guying Hose: Two-ply reinforced garden hose not less than 1/2 inch inside diameter.
H. Erosion Control Fabric: Supergro or equal.
I. Twine: Two-ply jute material.
J. Soil Separator: Heat resistant filter fabric, water permeable and unaffected by freezing and thawing.
K. Drainage Fill: AASHTO M43#6; 3/8 inch to 3/4 inch clean, uniformly graded stone.
L. Erosion Control Fabric: Dewit Weed Barrier or equal.

2.016 ANTI-DESICCANT
A. Emulsion type, film-forming agent designed to permit transpiration but retard excessive loss of moisture from plants.
B. Deliver in manufacturer's fully identified containers and mix in accordance with manufacturer's instructions.
C. Acceptable Manufacturers:
1. Dow Chemical Company; Dowax.
2. Nursery Specialty Products, Inc.; Wilt-Proof.

2.17 PLANTING SOIL MIXTURE
A. Mix: 1/3 parts organic soil amendment to 1/3 parts "Florida Muck" or equivalent to 1/3 parts silica sand (NOT BUILDER'S SAND) or existing suitable soil.
B. Add soil amendments as recommended by soil test in quantities necessary to bring soil mixture to pH rating of between 5.5 and 6.0. Minerals used for pH correction shall be commercially produced for this purpose.
C. For pit and trench type backfill, mix planting soil prior to backfilling and stockpile at site.
D. For ground cover and other planting beds, mix planting soil mixture either prior to planting or apply on surface of topsoil and mix thoroughly before planting.
1. Mix lime with dry soil prior to mixing of fertilizer.
2. Prevent lime from contacting roots of acid-loving plants.
3. Apply phosphoric acid fertilizer, other than that constituting a portion of complete fertilizers, directly to subgrade before applying planting soil and tilling.
E. For palms, plant in existing suitable soil or a mixture of 75% sand and 25% perlite.

PART 3 EXECUTION

3.018 EXAMINATION
A. Examine subgrade, verify elevations, observe conditions under which work is to be performed, and correct unsatisfactory conditions before proceeding with the work or notify Landscape Architect if adverse conditions are discovered which will inhibit plant growth.

3.019 PREPARATION
A. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations and outline areas and secure Landscape Architect's acceptance before start of planting work. Make minor adjustments as may be requested.
B. In planting beds, where plants are spaced 3 feet on center or less, work soil amendments as required by soils test. Remove stones over 1-1/2 inches in any dimension, stick, rubbish and other extraneous matter. Use a cutimulcher or other similar equipment to work amendments into soil.

3.020 PLANTERS
A. Place minimum 4 inch layer of gravel in bottom of planters and fill with planting soil mixture. Place soil in lightly compacted layers to an elevation 1-1/2 inches below top of planter allowing for natural settlement. For interior planters, soil mixture shall be a sterile mixture used for interior plantings such as Metromix or equal.

3.021 EXCAVATION - TREES AND SHRUBS
A. Excavate pits, beds, and trenches with vertical sides and with bottom of excavation slightly raised at center to provide proper drainage. Loosen hard subsoil in bottom of excavation.
B. Bare Root Trees and Shrubs: Make excavations minimum 1'-0" wider than root spread and deep enough to allow for setting of roots on a layer of compacted planting soil mixture and with collar set at same grade as in nursery but 2 inches below finished grade at site. Allow for 9 inch setting layer of planting soil mixture.
C. Balled and Burlapped (B&B) Trees and Shrubs: Make excavations minimum twice as wide as ball diameter and equal to ball depth.
D. Container Grown Stock: Excavate as specified for balled and burlapped stock, adjusted to size of container width and depth.
E. Ground Cover Beds: Provide a minimum 10 inches depth, 2 inches of which will be higher than surrounding grade.
F. Annual Beds: Provide minimum of 8 inches in depth, 2 to 5 inches of which shall be higher than surrounding grade.
G. Dispose of subsoil removed from landscape excavations. Do not mix with planting soil or use as backfill.
H. Fill excavations for trees and shrubs with water and allow to percolate out before planting.

3.022 PLANTING TREES AND SHRUBS
A. Set balled and burlapped (B&B) stock on layer of compacted planting soil mixture, plumb and in center of pit or trench with top of ball 1" higher than the adjacent finished landscape grades. When set, place additional planting soil mixture around sides and base and eliminate voids and air pockets. Lay back burlap to expose top of root ball to soil mixture. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill. Remove burlap from sides of balls; retain on bottoms.
B. Set bare root stock on cushion of planting soil mixture. Spread roots, carefully work backfill around roots by hand, and puddle with water until backfill layers are completely saturated. Plumb before backfilling and maintain plumb while working backfill around roots and placing layers above roots. Set collar one inch to two inches below adjacent finish landscape grades. Spread cut roots without tangling or turning up to surface. Cut injured roots clean, do not break.
C. Set container grown stock as specified for balled and burlapped stock, except cut cans on two sides with an approved can cutter. Remove sides of wooden boxes after partial backfilling so as not to damage root balls.
D. Dish top of planting soil mixture to allow for mulching.
1. For spring planting, provide additional backfill berm around edge of excavations to form shallow saucer to collect water.
E. Mulch pits, trenches and planted areas. Provide not less than the following thickness of mulch and work into top of planting soil mixture and finish level with adjacent.
1. Provide 3 inch thickness of mulch.
F. Apply anti-desiccant using power spray to provide an adequate film overtrunks, branches, stems, twigs and foliage.
1. If deciduous trees or shrubs are moved in full-leaf, spray with anti-desiccant at nursery before moving and again two weeks after planting.
G. Do not prune except to remove damaged branches or as directed by landscape architect.
H. Remove and replace excessively pruned or misformed stock resulting from improper pruning.
I. Paint cuts over 1/2 inch in size with standard tree paint or compound covering exposed, living tissue. Use paint which is waterproof, antiseptic, adhesive, elastic and free of kerosene, coal tar, creosote, and other substances harmful to plants. Do not use shellac.
J. Guy and stake trees immediately after planting, as indicated.

3.023 PLANTING PALMS
A. Set stock as indicated in bed. Stake palms as necessary to maintain plumb or at angle shown. Brace with three 2" x 4" wood braces toenailed to three 2" x 4" x 24" battens which are securely banded at two points to palm at a point 2/3 trunk height. Pad trunk with 20 layers of burlap under battens. Place braces 120 degrees apart and secure underground by 2" x 4" x 24" stakes.
B. Water palm thoroughly immediately after planting.

3.024 PLANTING GROUND COVER
A. Space plants as shown or scheduled.
B. Work planting soil mixture around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water. Water thoroughly after planting, taking care not to cover crowns of plants with wet soil.
C. Mulch areas between ground cover plants; place not less than 2 inches thick.

3.025 TRANSPLANTING EXISTING TREES, PALMS AND SHRUBS
A. Refer to Article entitled, Planting Trees and Shrubs.
B. Pruning: Prior to transplanting operations, prune existing branches back 1/3 on trees and shrubs. On existing palms, prune back existing fronds and tie a minimum of four fronds around central growth heart area.
C. Handle plants so that roots are adequately protected at all times.
D. Plant shall not be bound with rope or wire, at any time, that would damage bark, break branches, or destroy its natural shape.
E. Plant transplanted plants immediately after digging.
F. Plants shall be moved with firm, natural balls of soil with minimum ball size conforming to requirements of ANSI Z60.1 Standard for Nursery Stock.
G. Underground Obstruction: If underground construction, utilities or obstructions are encountered in excavation of planting areas or pits, other locations for plant material will be selected by Architect. Changes in locations shall be made without additional cost to Owner.

3.026 MAINTENANCE
A. Begin maintenance immediately after planting. Maintain trees, shrubs and other plants until final acceptance but in no case less than 30 days after planting.
B. Maintain trees, shrubs and other plants by pruning, cultivating and weeding as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease.
C. Verify watering of trees, plants and ground cover beds within the first 24 hours of initial planting and not less than twice per week until final acceptance.
D. For Date Palms, drench the root zone 2-4 times for the first 4 months after planting with a fungicide labeled for landscape use on soil borne root fungal pathogens. Apply a light surface application of a slow-release "palm special" granular fertilizer at the margins of the root ball 3 months after planting. Apply a foliar spray of soluable micronutients. When new leaves are evident from the crown, begin a maintenance program for fertilization 3 times a year.

3.27 CLEANING AND PROTECTION
A. During landscape work, store materials and equipment where directed.
B. Keep pavements clean and work area in an orderly condition.
C. Protect landscape work and materials from damage due to landscape operations, operations by other contractors, trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work.

3.28 INSPECTION AND ACCEPTANCE
A. When landscape work is completed, including maintenance, upon request Architect will make an inspection to determine acceptability.
B. Landscape work may be inspected for acceptance in parts agreeable to Architect, provided work offered for inspection is complete including maintenance and area comprises one complete unit or area of substantial size.
C. Where inspected landscape work does not comply with requirements, replace rejected work and continue specified maintenance until reinspected by Architect and found to be acceptable. Remove rejected plants and materials promptly from project site.

END OF SECTION

SECTION 02935

SODDING

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Sodding and fertilizing in areas distrubed during construction exclusive of paved areas.

1.02 RELATED SECTIONS
A. Section 02810 - Irrigation Systems
C. Section 02950 - Trees, Plants and Ground Covers

1.03 SUBMITTALS
A. Comply with provisions of Section 01300.
B. Sod grower's certification of grass species. Identify source locations.
C. Sod sample if requested by Owner.
D. Test reports and fertilizer(s) analysis.

1.04 QUALITY ASSURANCE
A. Supply written analysis stating N, P, and K requirements, organic matter content, and pH value of soil.
B. Recommendations on type of additives and quantities required to establish proper pH and supply of nutrients for satisfactory planting.

1.05 DELIVERY, STORAGE, AND HANDLING
A. Cut, deliver, and install sod within a 24 HOUR PERIOD MAXIMUM.
B. Do not harvest or transport sod when moisture content may adversely affect sod survival.
C. Protect sod from sun, wind, and dehydration prior to installation.
D. Do not tear, stretch, or drop sod during handling and installation.

1.06 PROJECT REQUIREMENTS
A. Perform sodding work after planting and work affecting ground surfaces have been completed.

1.07 SEQUENCE OF OPERATIONS
A. Notify General Contractor prior to starting of sodding operation so as not to conflict with other project operations.
B. Ensure a 2" top layer 75% silica sand/25% planting soil exists on all areas to be sodded. Amend soil as per soils test as described in Section 02950.
C. Apply fertilizer.
D. Dampen soil.
E. Lay sod.
F. Rolling.

1.08 WARRANTY
A. Provide a uniform stand of grass by watering, mowing, and maintaining sodded areas until acceptance by Owner. Re-sod areas, with specified materials, which fail to provide a uniform stand of grass until accepted by Owner.

PART 2 PRODUCT

2.09 SOD
A. Nursery grown, pasture sod as specified on plant list.
B. Provide well-rooted, healthy sod free of diseases, nematodes, and soil-borne insects. Provide sod uniform in color, leaf texture, and density; free from weeds, undesirable grasses, stones, roots, thatch, and other extraneous matter, viable and capable of growth and development when planted.
C. Furnish machine stripped sod of supplier's standard width, length, and thickness; uniformly one inch to 1-1/2 inches thick with clean cut edges. Mow sod before stripping.

2.010 FERTILIZER
A. Granular, nonburning product, composed of not less than 50 percent organic, slow acting, guaranteed analysis, professional fertilizer.
B. Type A: Starter fertilizer containing 20 percent nitrogen, 26 percent phosphoric acid, and 5 percent potash by weight or similar approved composition.
C. Type B: Top dressing fertilizer containing 31 percent nitrogen, 3 percent phosphoric acid, and 10 percent potash by weight or similar approved composition.

2.011 GROUND LIMESTONE
A. Containing not less than 85 percent of total carbonates and aground to such fineness that 50 percent will pass through a 100 mesh sieve and 90 percent will pass through a 20 mesh sieve.

2.012 STAKES
A. Use on slopes greater than 3:1 or in drainage swales.
B. Steel, tee shaped pins with approximately 4 inch heads and 8 inch legs.

PART 3 EXECUTION

3.013 EXAMINATION
A. Examine finish surfaces, grades, topsoil quality and depth. Do not start sodding work until unsatisfactory conditions are corrected.

3.014 PREPARATION
A. Verify operability of irrigation system or provide interim watering devices.
B. Limit preparation to areas which will be immediately sodded.
C. Scarify topsoil and remove stones, sticks, roots, rubbish, and other extraneous matter.
D. Fine grade lawn area to remove ridges and depressions prior to and during sodding operations.
E. In acidic regions, apply limestone at a rate determined by soil test results, in order to adjust pH to not less than 6.0 nor more than 6.8. Distribute thoroughly and evenly into topsoil.
F. Apply Type A fertilizer at the rate of one pound of actual nitrogen per 1000 square feet or 220 pounds per area. Apply fertilizer by mechanical rotary or drop type distributor, and incorporate into soil.
G. Dampen soil prior to sodding.

3.015 SODDING
A. Lay sod to form a solid mass with tightly fitted joints. Do not overlay edges. Stagger rows to offset joints in adjacent stripes. Provide sod pad top flush with adjacent curbs, sidewalks, drains, seeded areas or existing lawns.
B. Install sod in straight rows, except when lining adjacent planting beds.
C. Peg sod when slopes are greater than 3:1 or in areas of swales of drainage ditches which are prone to run off.
D. Water sod thoroughly with a fine spray immediately after laying.
E. Roll with light lawn roller to ensure contact with subgrade and to eliminate minor irregularities.

3.016 PROTECTION
A. Restrict traffic from sodded areas until grass is established. Erect sign and barriers as necessary.

3.017 MAINTENANCE
A. Maintain sodded areas including watering, spot weeding, mowing, application of herbicides, fungicides and re-sodding until a uniform stand of grass, free of weeds, undesirable grass species, diseases and insects is achieved and until completion and acceptance by Landscape Architect.
B. Water sod thoroughly every two to three days to establish proper rooting.
C. Repair, rework, and re-sod areas that have washed out or are eroded.
D. Mow lawn as soon as top growth reaches 3 inches. Maintain as appropriate for sod type.
E. Apply Type B fertilizer to lawns approximately 30 days after installation at rate of one pound actual nitrogen per 1000 square feet or 140 pounds per acre. Apply with mechanical rotary or drop type distributor. Water thoroughly into soil.
F. Apply herbicides, fungicides, and insecticides as necessary to control damage.

3.018 ACCEPTANCE
A. Sodded areas will be inspected at completion and accepted subject to compliance with specified materials and installation requirements.
B. Sodded areas will be acceptable provided requirements including maintenance have been complied with and a healthy, even colored, viable lawn is established, free of weeds, undesirable grass species, diseases and insects.
C. Upon acceptance Owner will assume lawn maintenance.

3.019 CLEANING
A. Perform cleaning during installation of work and upon completion of work. Remove from site excess materials, empty pallets, debris, and equipment. Repair any damage resulting from sodding operations.
B. Burning or burying trash is not permitted on site.

END OF SECTION

SPECIFICATIONS

0 10 20 40

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LANDWISE DESIGN
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P. 904.343.4194

7.19.12

PLANTING SPECIFICATIONS

CITY OF KEY WEST
FORT STREET PARKING AREA
KEY WEST, FLORIDA

REVISIONS:
1 - 7.19.12-Staff Comment

NORTH

JOB NUMBER: 11007
DATE: 11.10.11
DRAWN BY: LBR
CHECKED BY: LADD B. ROBERTS

SHEET NUMBER:
L-2

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LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	Lumens	LLF	Watts
●	A	19	Heritage #HCI F126-L-(6 side)-CTG-D-55LED-EMEBAT-BL5-CHY-BLK fixture, mounted on 12 ft Whatley #XF45-D9M-12-AB-BLK-40-40-R1MOD	HCI HERITAGE CASTING & IRONWORKS LUMINAIRE CAR. NO. SL20A WITH INDIVIDUAL LED LENS OPTICS AND CLEAR BOX LENS, frosted chimney to enclose the 26 wt CFL EM lamp NAED #78630 D6 Post Top Retrofit Type 3	55 WT LED /5000k	Absolute	0.85	58.8

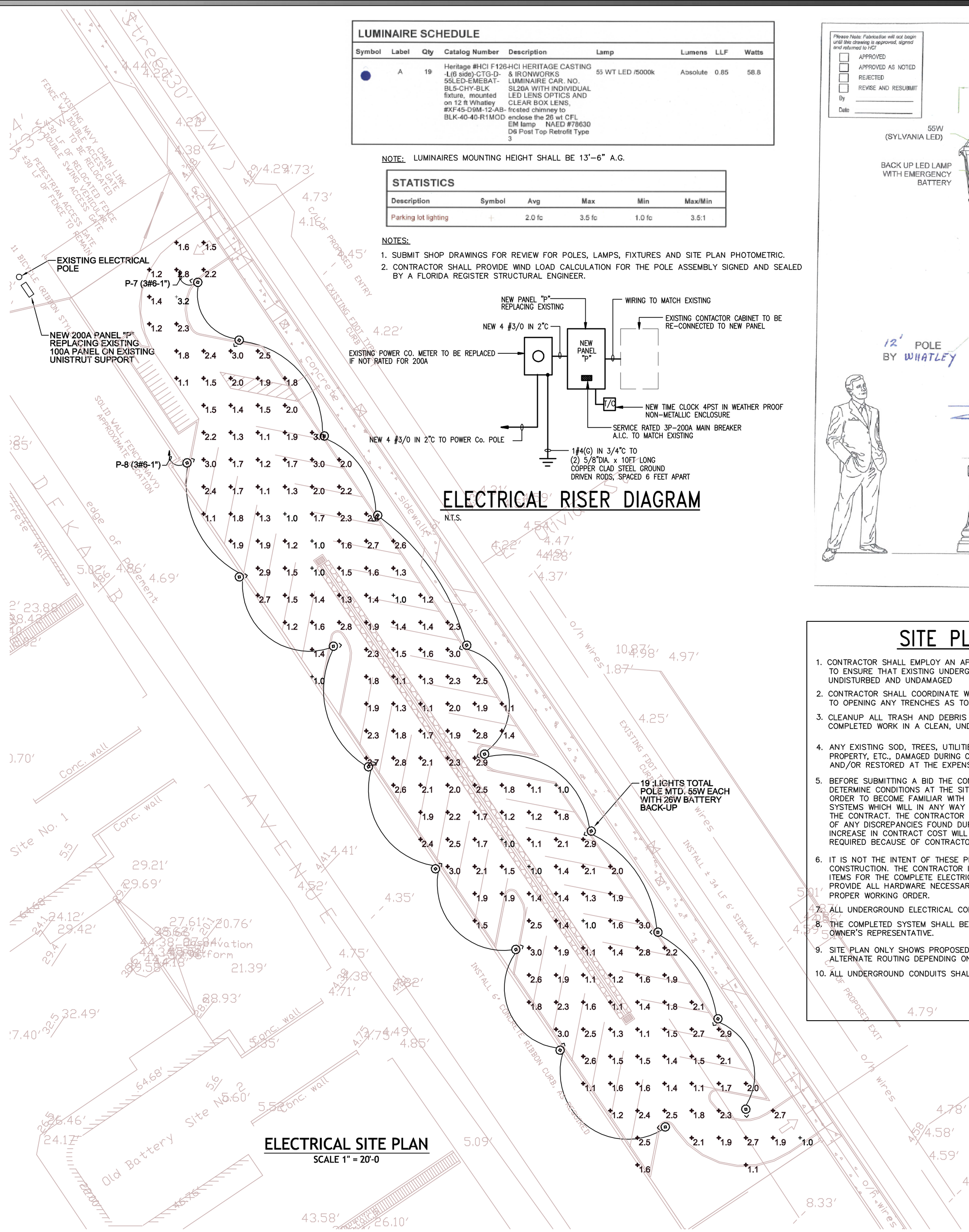
NOTE: LUMINAIRES MOUNTING HEIGHT SHALL BE 13'–6" A.G.

STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min
Parking lot lighting	+	2.0 fc	3.5 fc	1.0 fc	3.5:1

NOTES:

1. SUBMIT SHOP DRAWINGS FOR REVIEW FOR POLES, LAMPS, FIXTURES AND SITE PLAN PHOTOMETRIC.
2. CONTRACTOR SHALL PROVIDE WIND LOAD CALCULATION FOR THE POLE ASSEMBLY SIGNED AND SEALED BY A FLORIDA REGISTER STRUCTURAL ENGINEER.

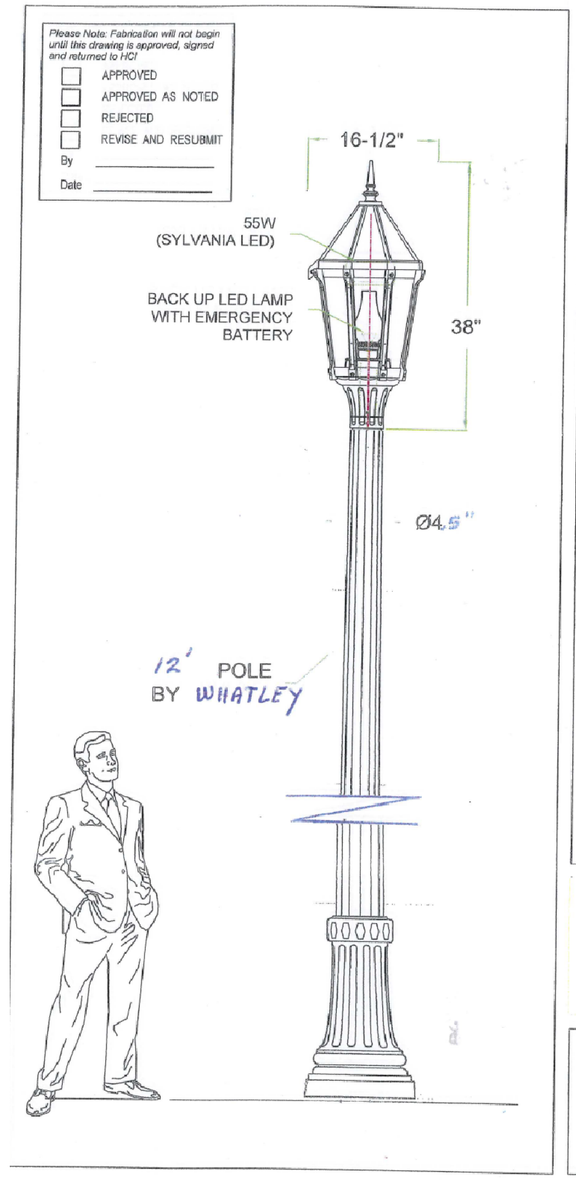


ELECTRICAL SITE PLAN

SCALE 1" = 20'-0

ELECTRICAL RISER DIAGRAM

N.T.S.



Approval Drawing

Light Std: F126-L

Diffuser Type: Ornamental
Diffuser Material: Tempered clear glass (CTG).
Optical System: Bare lamp

Light Distribution: IES Type V.
Luminaire Housing: The whole luminaire is made of cast aluminum. Top is fully hinged for easy access to lamp and driver.

LED DRIVER: SYLVANIA LED high power factor mounted on removable plate. A quick disconnect wiring system allows for fast easy driver maintenance.

Wattage - 55W
Voltage - 120V-277V.

Option: Emergency battery for LED lamp.

Emergency LED Lamp: MR16
Wattage - Specify.
Voltage - 12 V (DC)
Socket - GX5.3 base

Photocontrol: None

Colour: Specify.

Sale: Rick Designer:Webb
Date: JAN.28.2011 Drawing No: 11613(V2.1)
Model: F126-L-(6SIDE)-CTG-D4-55LED-EMEBAT-BL5-CHY-COLOR
Project: KEY WEST
REP:POWER LIGHTING SYSTEMS
Please Note: Fabrication will not begin until this drawing is approved, signed and returned to HCI

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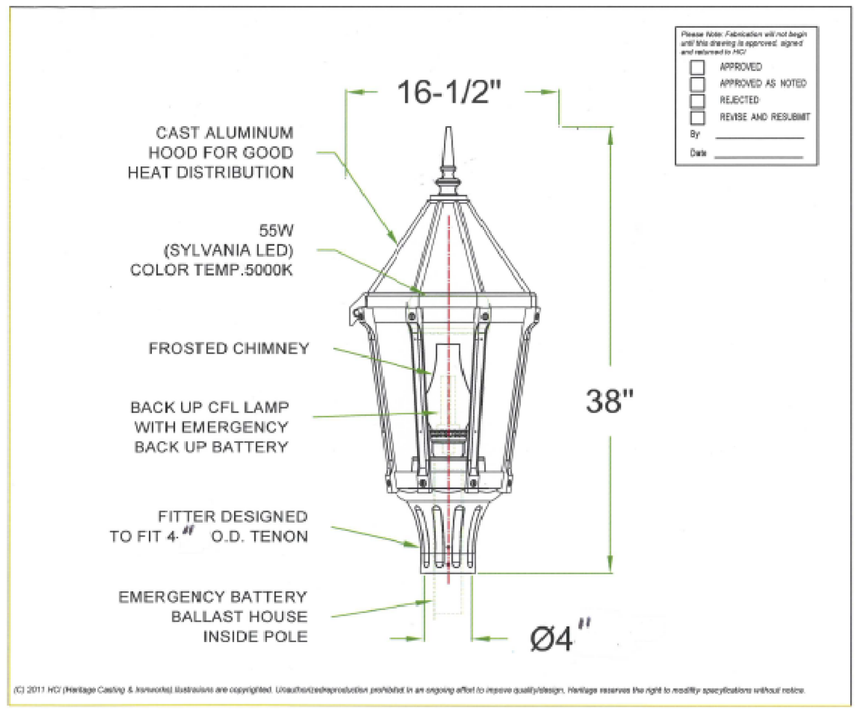

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Diffuser Type: Ornamental
Diffuser Material: Tempered clear glass (CTG).

Luminaire Housing: The whole luminaire is made of cast aluminum. Top is fully hinged for easy access to lamp and driver.

LED DRIVER: SYLVANIA LED high power factor mounted on removable plate. A quick disconnect wiring system allows for fast easy driver maintenance.

Wattage - 55W
Voltage - 120V-277V.

Emergency CFL Lamp:
Wattage - 26W.
Voltage - 120V-277V
Socket - GX24q-3

Optical System: Bare lamp

Light Distribution: IES Type III/V.

Option: Emergency battery and ballast for CFL back up lamp.

Tenon info: 4-1/2" O.D. by 3" H

Photocontrol: None

Colour: Specify.

Approval Drawing

Luminaire : F126-L

Sale: Rick Designer:Webb
Date: FEB.03.2011 Drawing No: 11613(V3.0)
Model: F126-L-(6SIDE)-CTG-D-55LED-EMEBAT-BL5-CHY-COLOR
Project: KEY WEST
REP:POWER LIGHTING SYSTEMS
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SITE PLAN NOTES

1. CONTRACTOR SHALL EMPLOY AN APPROVED SERVICE LOCATOR TO ENSURE THAT EXISTING UNDERGROUND UTILITIES REMAIN UNDISTURBED AND UNDAMAGED
2. CONTRACTOR SHALL COORDINATE WITH THE OWNERS REPRESENTATIVE PRIOR TO OPENING ANY TRENCHES AS TO PRECAUTION FOR PUBLIC SAFETY.
3. CLEANUP ALL TRASH AND DEBRIS GENERATED BY THE WORK AND LEAVE COMPLETED WORK IN A CLEAN, UNDAMAGED AND RESTORED CONDITION.
4. ANY EXISTING SOD, TREES, UTILITIES, IRRIGATION LINES, PUBLIC OR PRIVATE PROPERTY, ETC., DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED, REPLACED AND/OR RESTORED AT THE EXPENSE OF THE CONTRACTOR.
5. BEFORE SUBMITTING A BID THE CONTRACTOR SHALL VISIT THE SITE AND DETERMINE CONDITIONS AT THE SITE AND ALL EXISTING STRUCTURES IN ORDER TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND ELECTRICAL SYSTEMS WHICH WILL IN ANY WAY AFFECT THE WORK REQUIRED UNDER THE CONTRACT. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DISCREPANCIES FOUND DURING SAID SITE VISIT. NO SUBSEQUENT INCREASE IN CONTRACT COST WILL BE ALLOWED FOR ADDITIONAL WORK REQUIRED BECAUSE OF CONTRACTOR'S FAILURE TO FULFILL THIS REQUIREMENT.
6. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR THE COMPLETE ELECTRICAL AND LOW VOLTAGE SYSTEMS AND PROVIDE ALL HARDWARE NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
7. ALL UNDERGROUND ELECTRICAL CONDUITS TO BE P.V.C. SCHEDULE 40.
8. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY OWNER'S REPRESENTATIVE.
9. SITE PLAN ONLY SHOWS PROPOSED ROUTING. CONTRACTOR MAY USE ALTERNATE ROUTING DEPENDING ON EXISTING FIELD CONDITIONS.
10. ALL UNDERGROUND CONDUITS SHALL BE 24" MINIMUM BELOW GRADE.

TYPE: SQ'D NQOD
MTG: SURFACE
3P–200A M.C.B.

NEW PANEL "P" (NEMA 4X OR 3R, OWNER TO SELECT)
(A.I.C. TO MATCH EXISTING)
(CU BUS/ GND. BUS)

VOLTS: 120/208V,3Ø,4W
BUS: 225 A
LOAD: 39.9KVA/360V = 110.9A

VA	COND	WIRE	TRIP	POLE	DESCRIPTION	CKT.No.	CKT.No.	DESCRIPTION	POLE	TRIP	WIRE	COND	VA
800	1/2"	12	20	1	EXISTING LOAD	1	2	STADIUM LIGHTS	3	125	1	2"	36,000
800	1/2"	12	20	1	EXISTING LOAD	3	4						
800	1/2"	12	20	1	EXISTING LOAD	5	6						
810	1"	6	20	1	NEW POLE LIGHTS (*)	7	8	NEW POLE LIGHTS (*)	1	20	6	1"	730
–	–	–	20	1	SPARE	9	10	SPACE	–	–	–	–	–
–	–	–	20	1	SPARE	11	12	SPACE	–	–	–	–	–
–	–	–	20	1	SPARE	13	14	SPACE	–	–	–	–	–
–	–	–	20	1	SPARE	15	16	SPACE	–	–	–	–	–
–	–	–	20	1	SPARE	17	18	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	19	20	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	21	22	SPACE	–	–	–	–	–
–	–	–	–	–	SPACE	23	24	SPACE	–	–	–	–	–

(*) ON TIME CLOCK

GENERAL ELECTRICAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, FLORIDA BUILDING CODE AND OTHER APPLICABLE CODES AND STANDARDS.
2. THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING FIELD CONDITIONS BY VISITING THE SITE PRIOR TO COMMENCING/BIDDING WORK.
3. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS DIRECTED BY OWNER.
4. ALL CONDUCTORS SHALL BE COPPER.
5. ALL CONDUCTORS SHALL BE RUN IN CONDUIT (METALLIC TYPE). IF PVC SCHEDULE 40 IS USED FOR UNDERGROUND FEEDERS ONLY, AN EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH N.E.C. 250–122 MUST BE INSTALLED AND CONDUIT SIZE INCREASED AS REQUIRED.
6. ALL MATERIALS SHALL BE U.L. APPROVED.
7. ALL BRANCH CIRCUITS SHALL BE PROPERLY PHASE BALANCED.
8. ALL EMPTY CONDUITS TO BE PROVIDED WITH NYLON PULL STRINGS.
9. RISER ARE DIAGRAMMATIC ONLY. THEY DO NOT SHOW EVERY BEND REQUIRED FOR THE INSTALLATION.
10. THIS DRAWING IS A GUIDE FOR THE INSTALLATION OF ELECTRICAL SERVICE. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE A FUNCTIONING SYSTEM.
11. ALL CABLES SHALL BE RUN WITHOUT SPLICES EXCEPT OTHERWISE INDICATED.
12. ALL PULL AND JUNCTION BOXES SHALL BE ACCESSIBLE AT ALL TIMES.
13. EXACT POINT AND METHODS OF CONNECTION SHALL BE DETERMINED IN FIELD.
14. ALL WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER.

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305–888–9626
Sudhir K. Gupta, P.E.
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PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8979

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
November 29, 2011

ORIGINAL: NOV. 29th, 2011

REVISIONS:
1
2
3
4
5
6

FORT STREET PARKING LOT

KEY WEST, FL 33040

CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, FL 33041

JOB NO.	111002
DRAWN	JV
DESIGNED	JCP
CHECKED	SG
QC	
SHEET	E-1