CAROLINE STREET IMPROVEMENTS

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

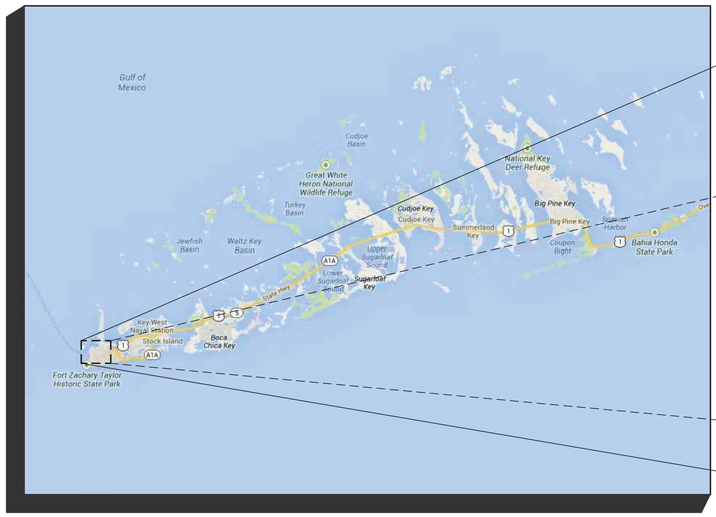
KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

DATE: DECEMBER 2014
PROJECT NUMBER: 111013
PROJECT NAME: CAROLINE ST. IMPROVEMENTS
PREPARED BY: PEREZ ENGINEERING & DEVELOPMENT
PREPARED FOR: CITY OF KEY WEST, ENGINEERING SERVICES
NOT FOR CONSTRUCTION
PLANS DESCRIPTION: 100% SUBMITTAL

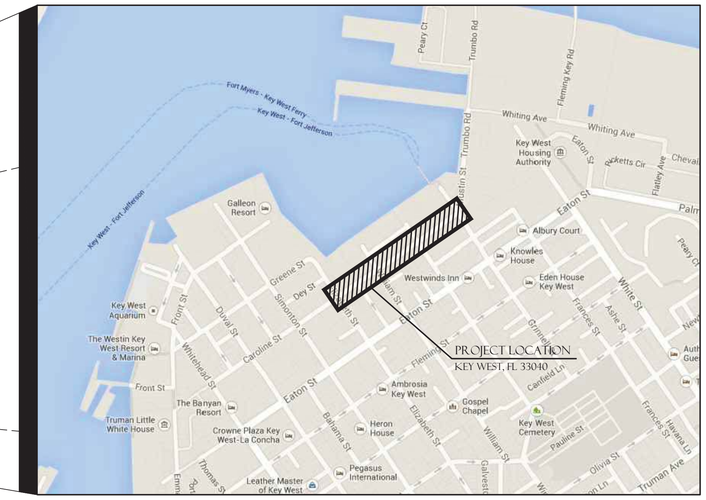
BID DOCUMENTS

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

CAROLINE STREET, FROM ELIZABETH TO GRINNELL STREETS
KEY WEST, FLORIDA 33040



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	DRAINAGE MAP
C-3	TYPICAL SECTIONS
C-4	ROADWAY PLAN
C-5	ROADWAY PLAN
C-6	ROADWAY PLAN
C-7	DRAINAGE PLAN
C-8	DRAINAGE PLAN
C-9	DRAINAGE PLAN
C-10	SIGNAGE AND PAVEMENT MARKING PLAN
C-11	SIGNAGE AND PAVEMENT MARKING PLAN
C-12	SIGNAGE AND PAVEMENT MARKING PLAN
C-13	INTERSECTION DETAILS - ELIZABETH STREET
C-14	INTERSECTION DETAILS - WILLIAM STREET
C-15	INTERSECTION DETAILS - MARGARET STREET
C-16	INTERSECTION DETAILS - GRINNELL STREET
C-17	OUTFALL - MARGARET STREET
C-18	OUTFALL - GRINNELL STREET
C-19	PARKING LOT PLAN
C-20	UTILITY RELOCATION PLAN
C-21	DETAILS
C-22	DETAILS
C-23	DETAILS
C-24	DETAILS
C-25	TYPICAL INTERSECTION DETAIL
L-1.0	EXISTING TREES & PALM DISPOSITION PLAN
L-1.1	LANDSCAPE PLAN
L-2.0	PLANTING NOTES & DETAILS
L-2.1	PLANTING DETAILS
E-1	ELECTRICAL NOTES
E-2	SITE LIGHTING PLAN

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

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

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

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 AT&T, THE LOCAL TELEPHONE COMPANY AND COMCAST, THE LOCAL CABLE TV PROVIDER TO VERIFY THE LOCATION OF BURIED TELEPHONE AND CABLE TV UTILITIES. CALL 1-800-432-4770 BEFORE DIGGING OR TRENCHING OPERATIONS BEGIN. CONTRACTOR SHALL ALSO CONTACT KEYS ENERGY TO LOCATE 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 OWNER TO DETERMINE IF THE ITEM IS TO BE PROPERTY OF THE CONTRACTOR. ALL ITEMS 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.

15. EXISTING FUEL LINE SHOWN HEREON FROM DATA FROM THIRD PARTIES. CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION. IN THE EVENT OF DISTURBANCE OR DAMAGE, CUT & CAP FUEL LINE.

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 SEWER LINES SHALL BE CONSTRUCTED TO GRADES AS INDICATED.
   B. ANY GRAVITY UTILITY DISCOVERED TO CONFLICT WITH GRADES FOR NEW 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 SEWER LINES. THE CONTRACTOR SHALL DETERMINE, PRIOR TO INSTALLATION, THE METHOD BY WHICH THESE LINES SHALL BE REROUTED ABOVE OR BELOW NEW SEWER LINES. THE CONTRACTOR SHALL REFER TO THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS FOR SEPARATION REQUIREMENTS BETWEEN INDIVIDUAL UTILITY LINES, BOTH HORIZONTALLY AND VERTICALLY, AND SPECIAL TREATMENT REQUIREMENTS. THE CONTRACTOR SHALL INCLUDE IN THE BID PRICE ANY SPECIAL TREATMENT REQUIRED FOR UTILITY INSTALLATION, INCLUDING ADJUSTMENTS OF EXISTING UTILITIES.

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. PROVIDE EROSION CONTROL MEASURES AS NECESSARY TO AVOID ADVERSE IMPACTS TO JURISDICTIONAL AREAS (WETLANDS OR WATER BODIES) AND OFF-SITE LANDS AND WATERBODIES. MAINTAIN THESE MEASURES DAILY UNTIL CONSTRUCTION ACCEPTANCE BY THE OWNER AND THEN REMOVE AND LEGALLY DISPOSE OF SAID MEASURES.

6. EROSION CONTROL SHALL BE 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 EROSION CONTROL MEASURES 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.

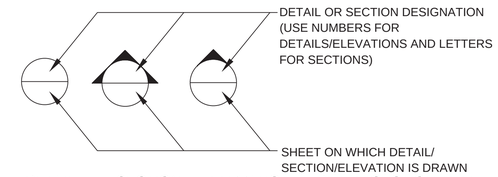
10. ALL SURFACE WATER DISCHARGE FROM SITE, INCLUDING DEWATERING DISCHARGE SHALL MEET STATE WATER QUALITY STANDARDS (LESS THAN 29 NTU ABOVE BACKGROUND) PRIOR TO REACHING ANY WATERS OF THE STATE INCLUDING WETLAND.

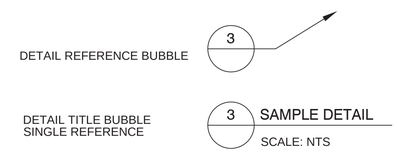
11. IN THE EVENT THAT THE EROSION PREVENTION AND CONTROL DEVICES SHOWN IN THESE PLANS PROVE NOT TO BE EFFECTIVE. ALTERNATE METHODS FOR MAINTAINING STATE WATER QUALITY STANDARDS FOR DISCHARGE FROM THE CONSTRUCTION SITE WILL BE REQUIRED. ANY ALTERNATE EROSION PREVENTION AND CONTROL DEVICES MUST BE APPROVED BY THE CITY OF KEY WEST.

LEGEND

GENERAL

— - - —	RIGHT-OF-WAY AND/ OR PROPERTY LINE
RPM	REFLECTIVE PAVEMENT MARKER
▲	CONTRACTOR'S SURVEY REFERENCE
5	KEY NOTE MARKER
9	(ON SITE PLAN) # OF PARKING SPACES
S-14	STORMWATER STRUCTURE
WM	WATER METER





BUBBLE SYMBOLS

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT
PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8579
KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243
ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

GENERAL NOTES

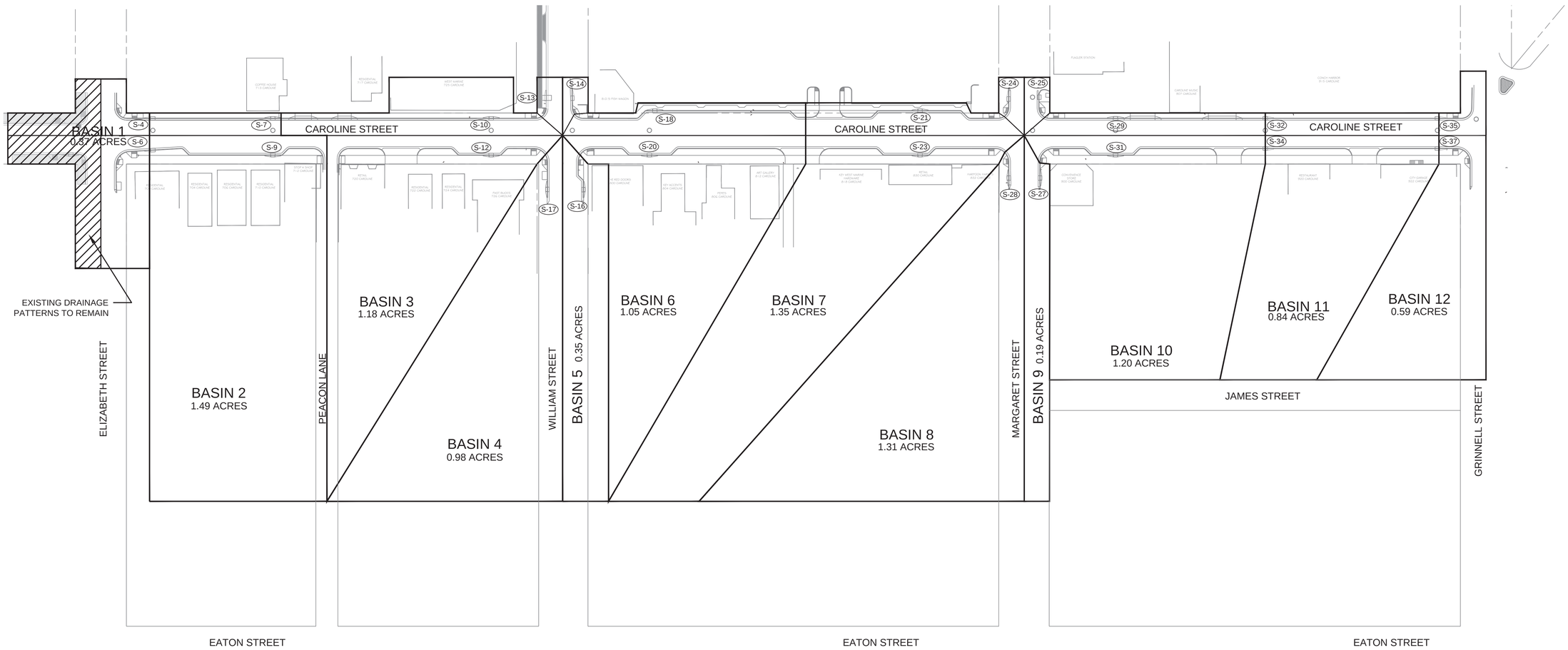
CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, 33041

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-1

50' 0 50'

SCALE 1"=50'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY



CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

KEY WEST OFFICE
1010 EAST OVERSEAS HWY, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

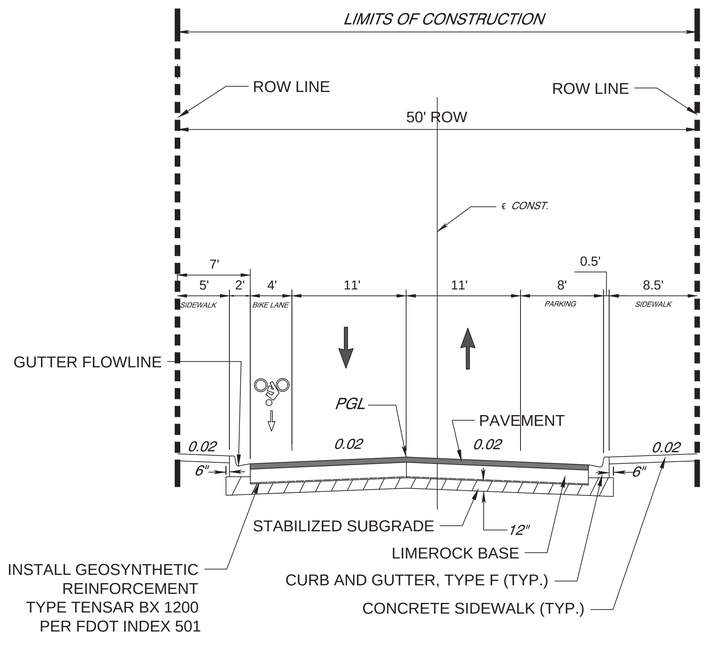
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

DRAINAGE MAP

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

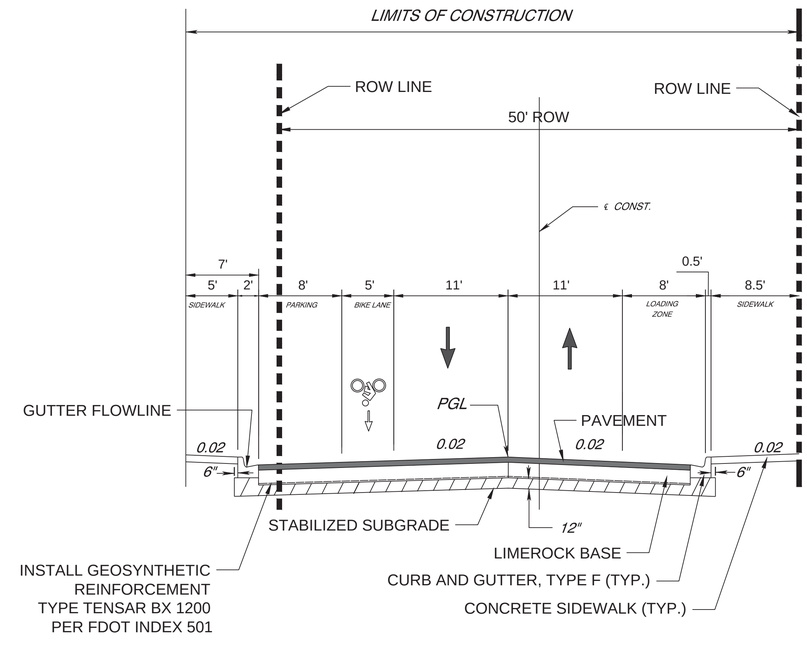
JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-2



TYPICAL SECTION

700 & 900 BLOCK OF CAROLINE ST.

STA 1+30 TO STA 6+24
STA 9+51 TO STA 14+30



TYPICAL SECTION

800 BLOCK OF CAROLINE ST.

STA 6+24 TO STA 9+51

PAVEMENT DESIGN *(DETAIL 1, SHEET C-21)*

- *(1.5" ASPHALT) TYPE SP-9.5 ASPHALTIC PAVEMENT*
- *(12" BASE) LIMEROCK BASE COURSE (LBR 100)*
- *(STABILIZED SUBGRADE) SOILS BELOW THE BASE COURSE COMPACTED (95% MOFIFIED PROCTOR) TO A DEPTH OF 12 INCHES*

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FL - FLORIDA 33040
TEL: (305) 292-9440 FAX (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL - DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

TYPICAL SECTIONS

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

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-3

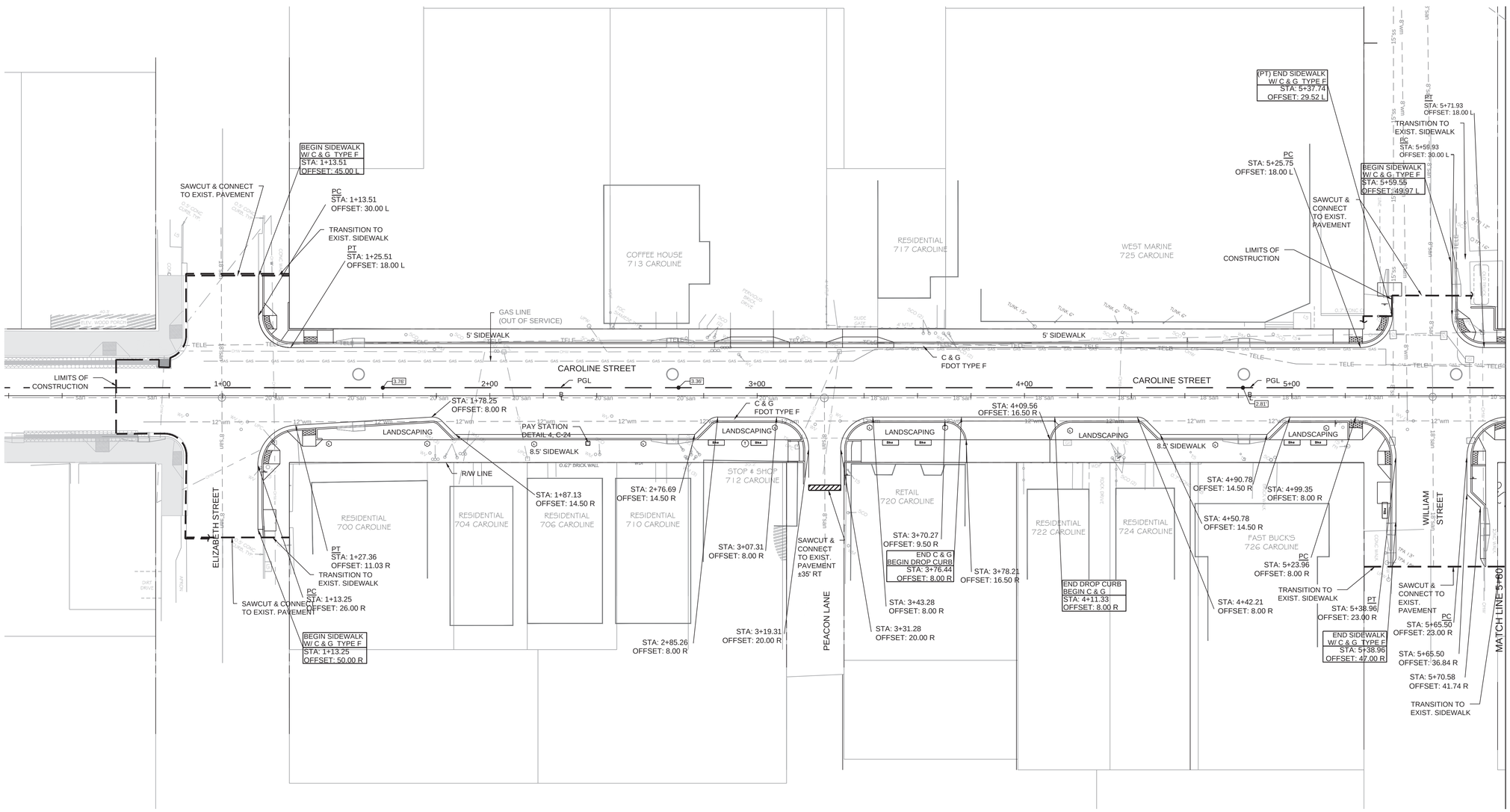
20' 0 20'

SCALE 1"=20'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY

LEGEND

- LIGHTING
- TRASH RECEPTACLE
- NEWSPAPER
- BIKE RACKS



CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING & DEVELOPMENT, INC

CERTIFICATE OF AUTHORIZATION No. 8579

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

ROADWAY PLAN

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

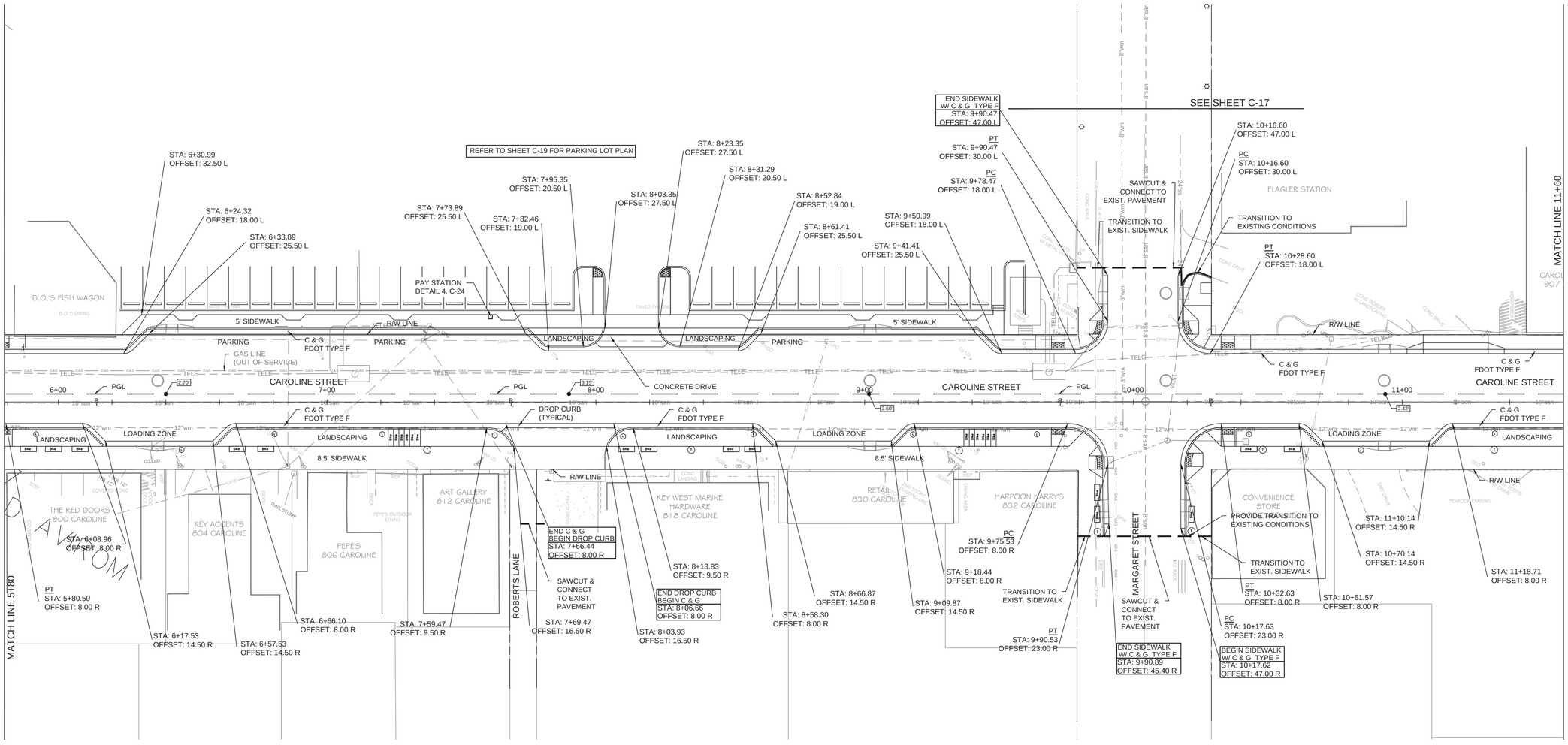
JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-4

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

20' 0 20'

LEGEND

- LIGHTING
- TRASH RECEPTACLE
- NEWSPAPER
- BIKE RACKS



CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

Key West Office
1010 East Kennedy Drive, Suite 201
Key West, Florida 33040
Tel: (305) 293-9440 Fax: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS: 1 2 3 4 5 6

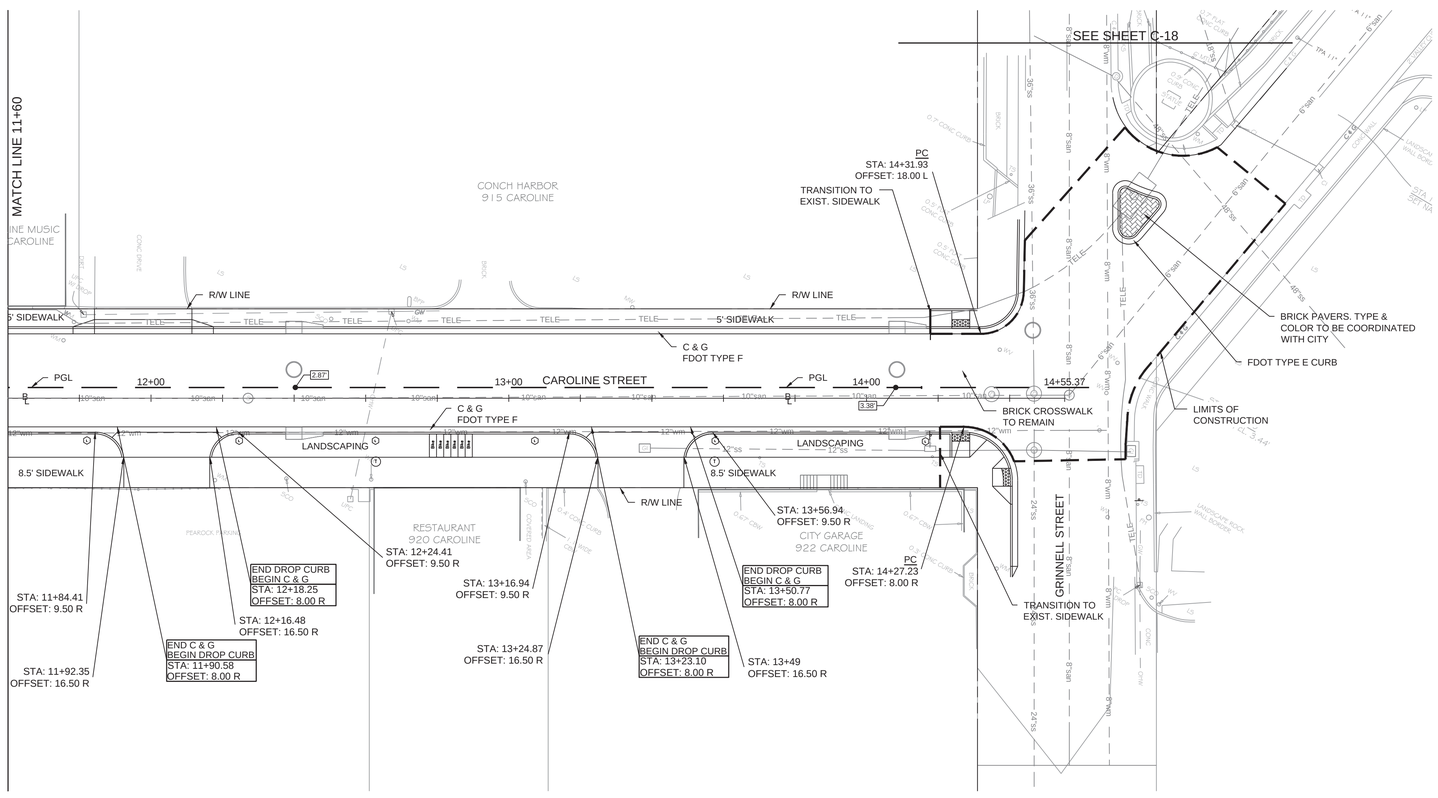
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

ROADWAY PLAN

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

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-5



NORTH

20' 0 20'

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

LEGEND

- LIGHTING
- TRASH RECEPTACLE
- NEWSPAPER
- BIKE RACKS

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

REVISIONS: 1 2 3 4 5 6

ORIGINAL: DECEMBER 2014

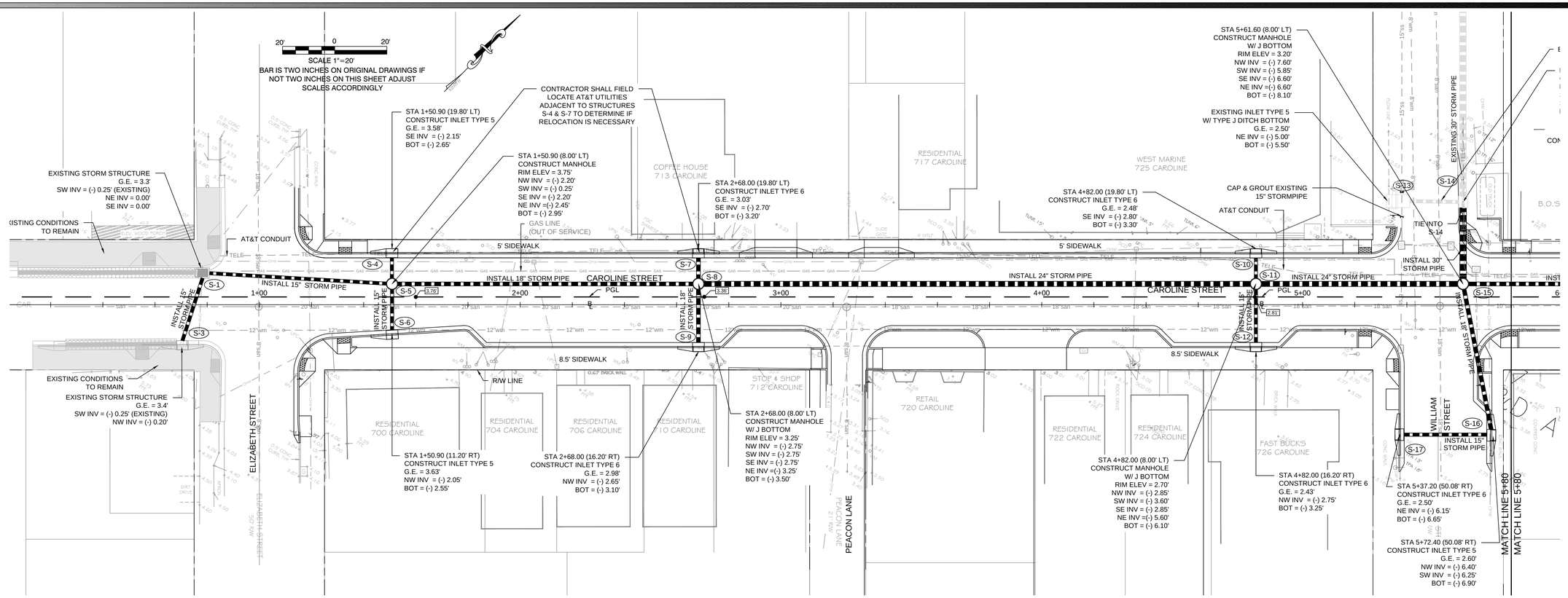
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

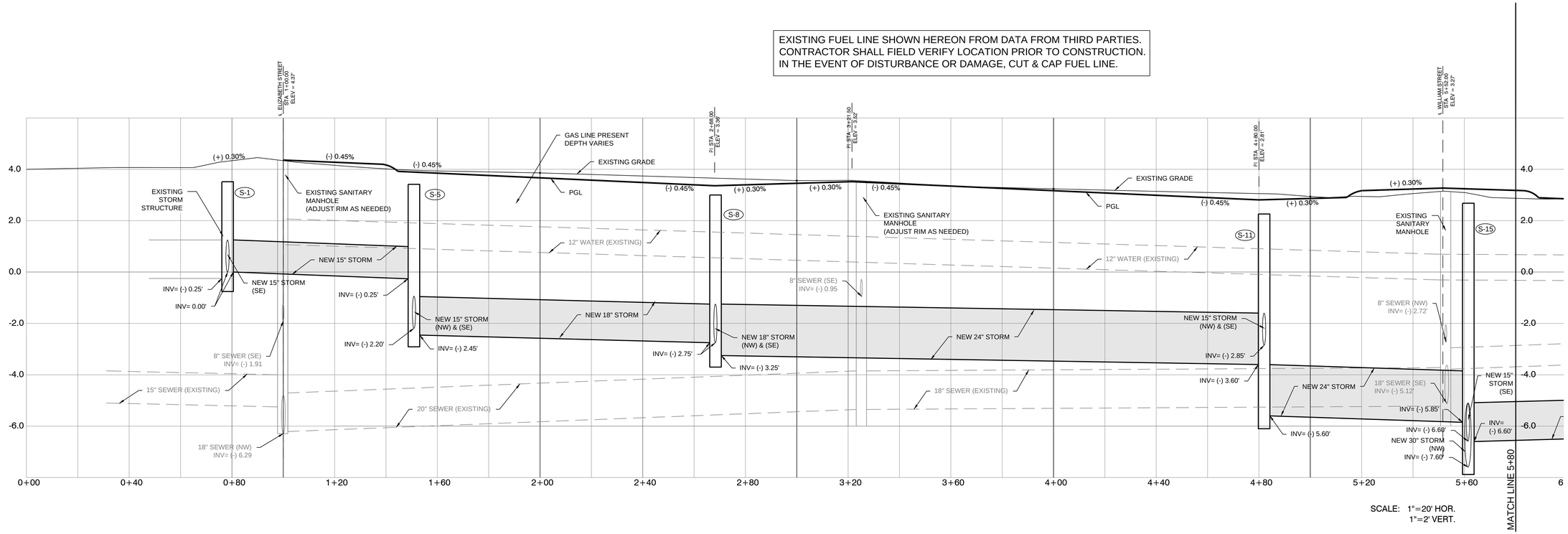
ROADWAY PLAN

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

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-6



EXISTING FUEL LINE SHOWN HEREON FROM DATA FROM THIRD PARTIES. CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION. IN THE EVENT OF DISTURBANCE OR DAMAGE, CUT & CAP FUEL LINE.



CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

Key West Office
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
May 15, 2015

ORIGINAL: DECEMBER 2014

REVISIONS: 1 2 3 4 5 6

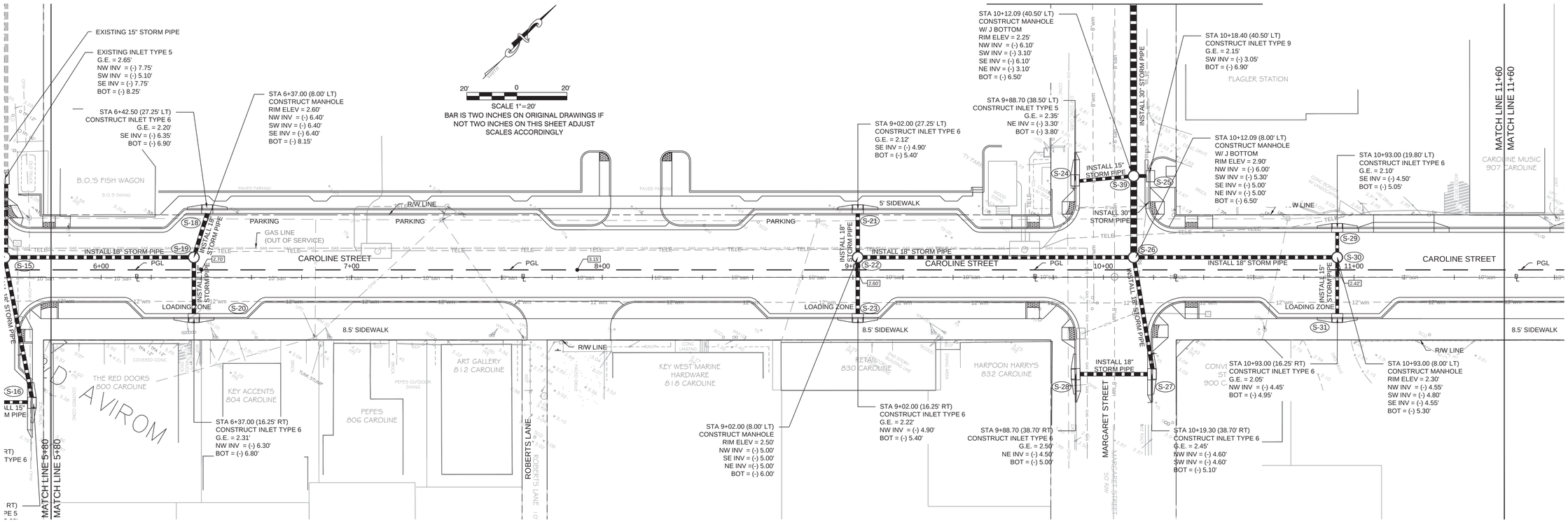
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

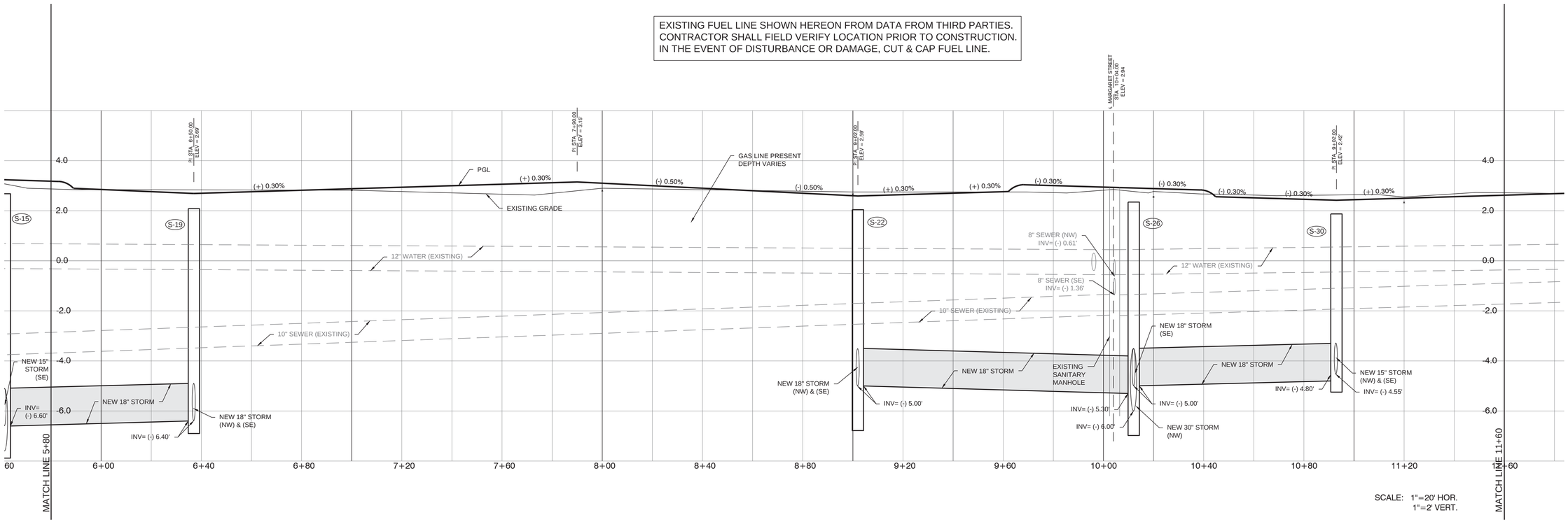
DRAINAGE PLAN & PROFILE

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

JOB NO.	111008
DRAWN	BGO
DESIGNED	AEP
CHECKED	AEP
QC	
SHEET	C-7



EXISTING FUEL LINE SHOWN HEREON FROM DATA FROM THIRD PARTIES. CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION. IN THE EVENT OF DISTURBANCE OR DAMAGE, CUT & CAP FUEL LINE.



CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING & DEVELOPMENT, INC

CERTIFICATE OF AUTHORIZATION No. 8579

Key West Office
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

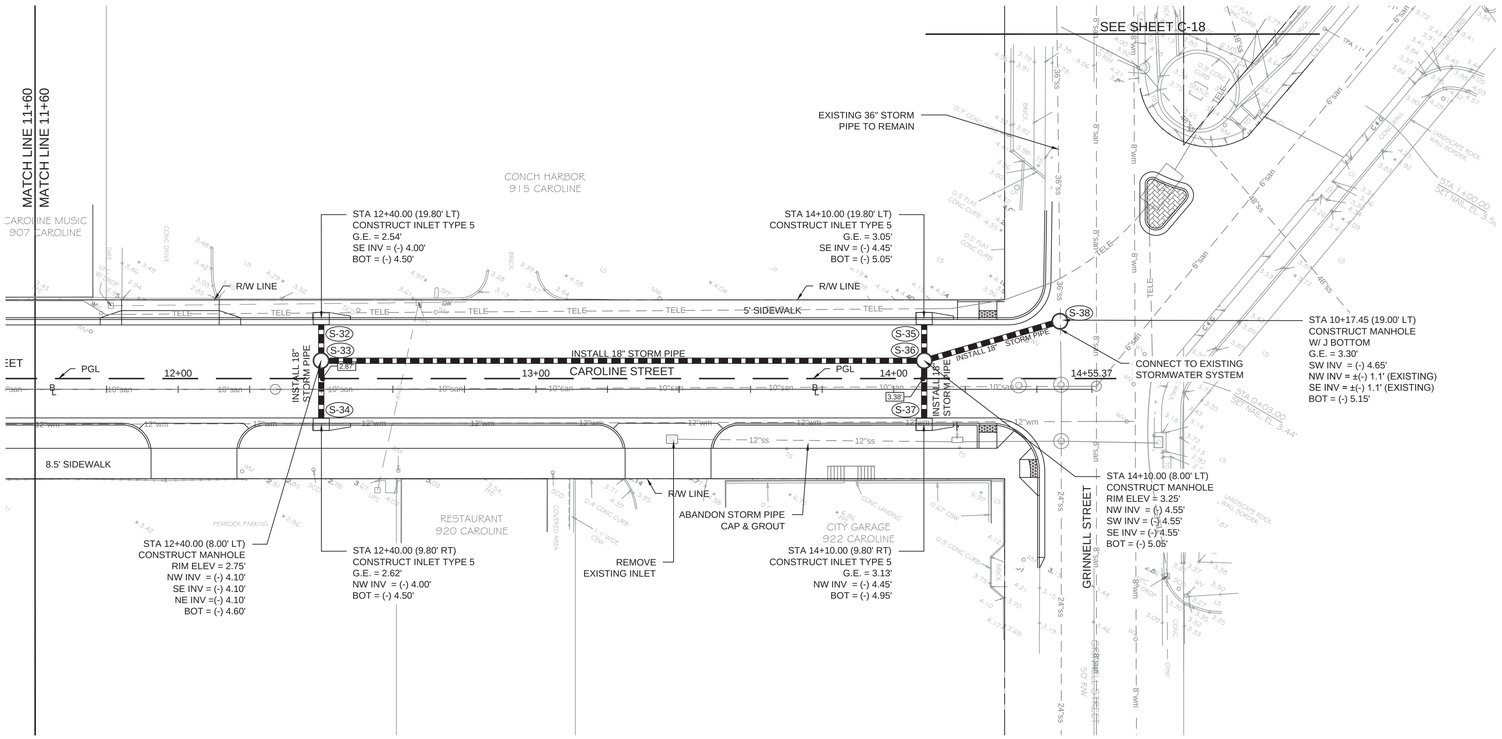
CAROLINE STREET IMPROVEMENTS

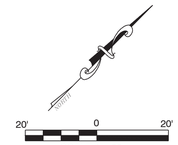
KEY WEST, FL 33040

DRAINAGE PLAN & PROFILE

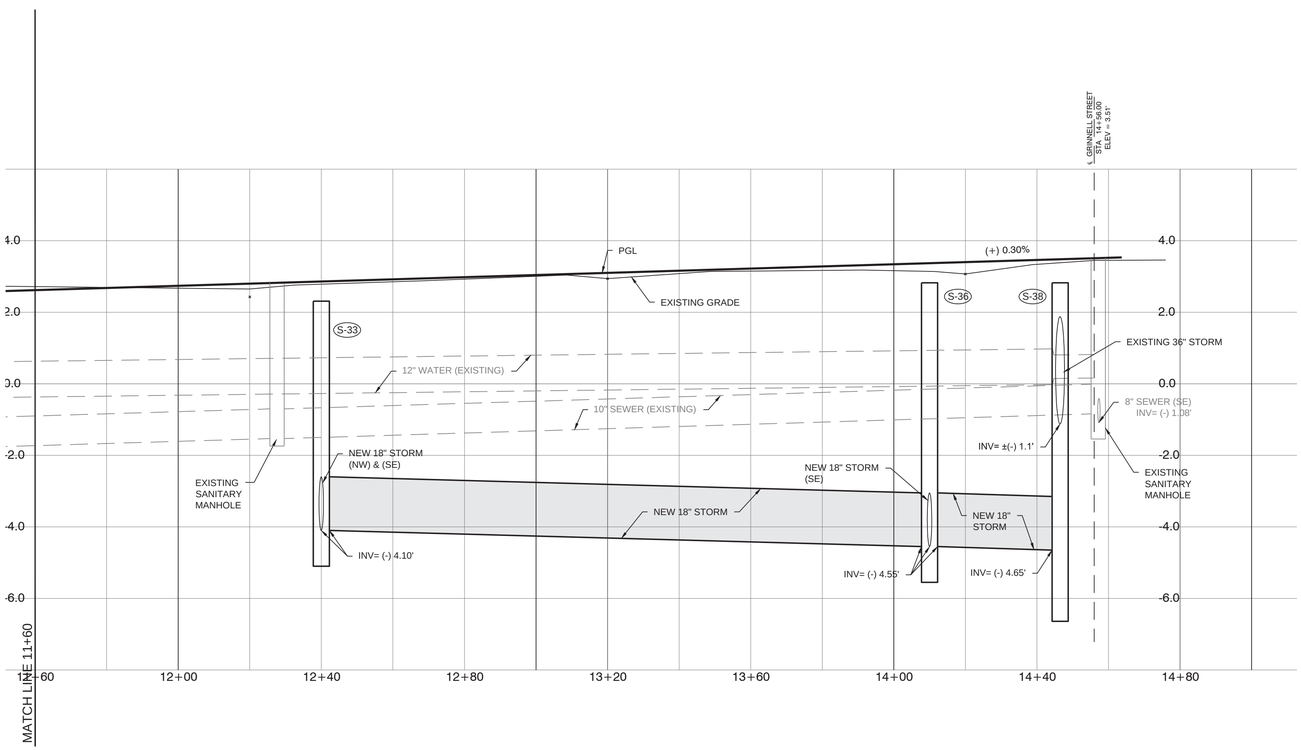
CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, 33041

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-8





BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY



SCALE: 1"=20' HOR.
1"=2' VERT.

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8579
Key West Office
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243
ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

REVISIONS:
1
2
3
4
5
6

ORIGINAL: DECEMBER 2014

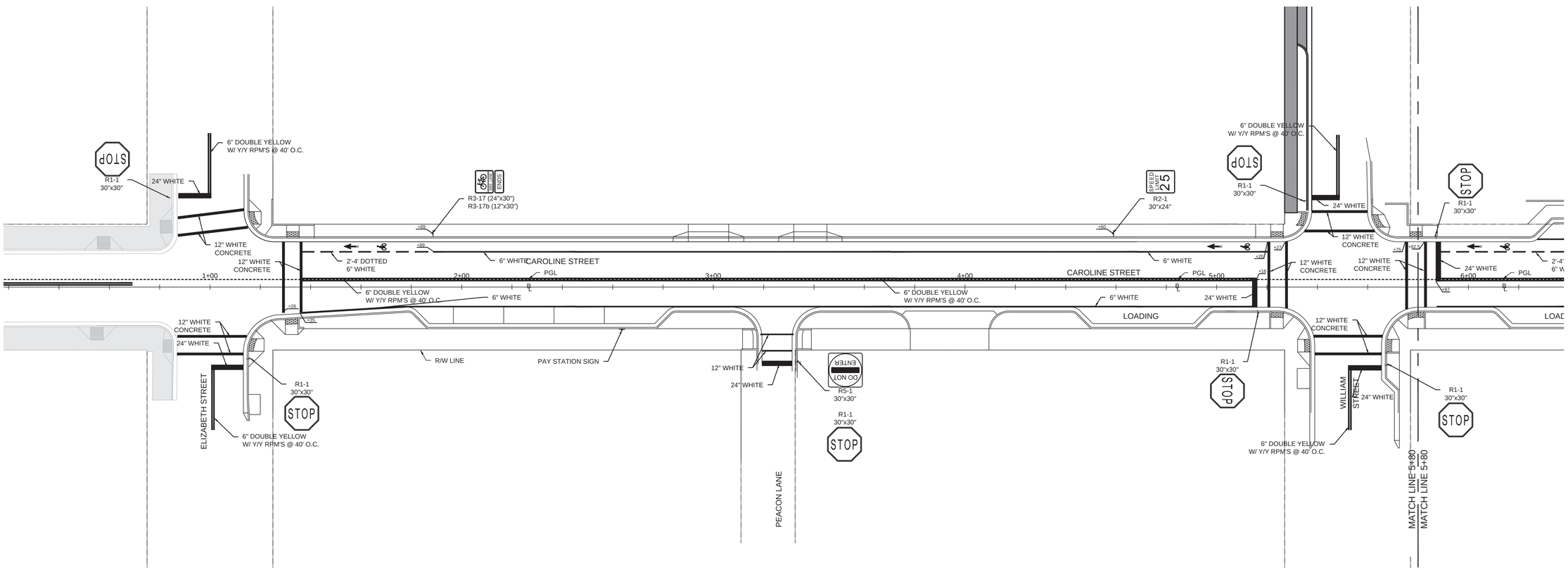
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

DRAINAGE PLAN & PROFILE

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

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-9



NOTE:
SIGN DESIGNATIONS REFER TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD)

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT
PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8579
Key West Office
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243
ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014
REVISIONS: 1 2 3 4 5 6

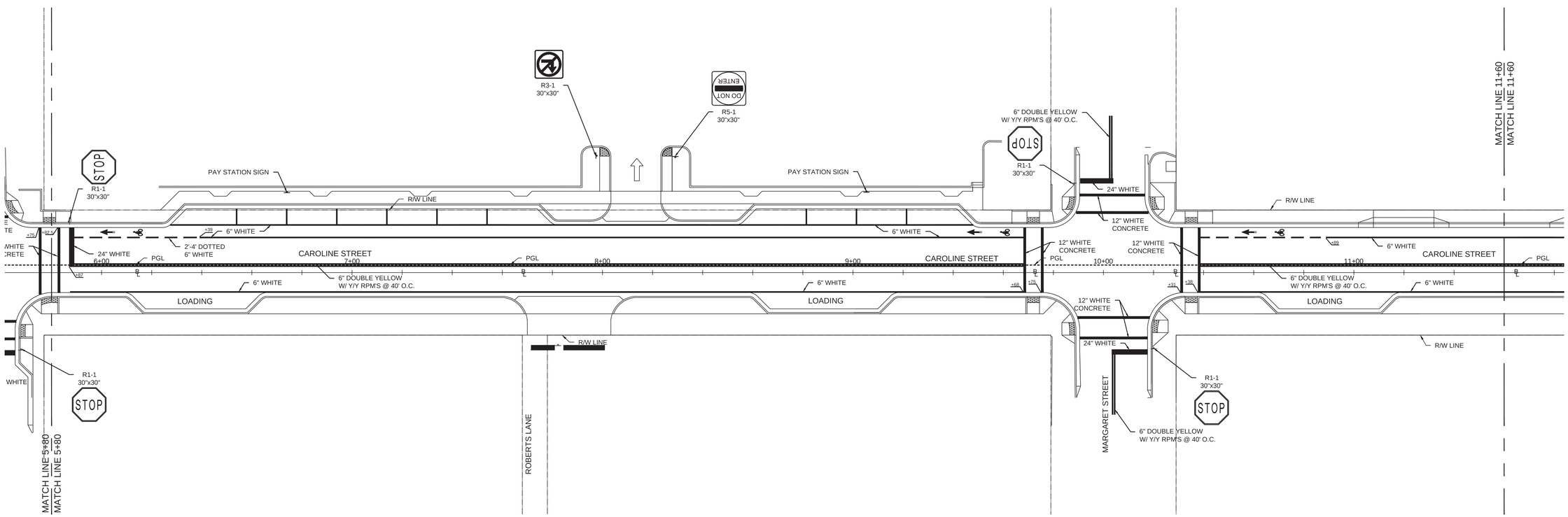
CAROLINE STREET IMPROVEMENTS
KEY WEST, FL 33040
SIGNING AND PAVEMENT MARKING PLANS

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

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-10

20' 0 20'

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



NOTE:
SIGN DESIGNATIONS REFER TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD)

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8579
KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: *DECEMBER 2014*

REVISIONS: 1 2 3 4 5 6

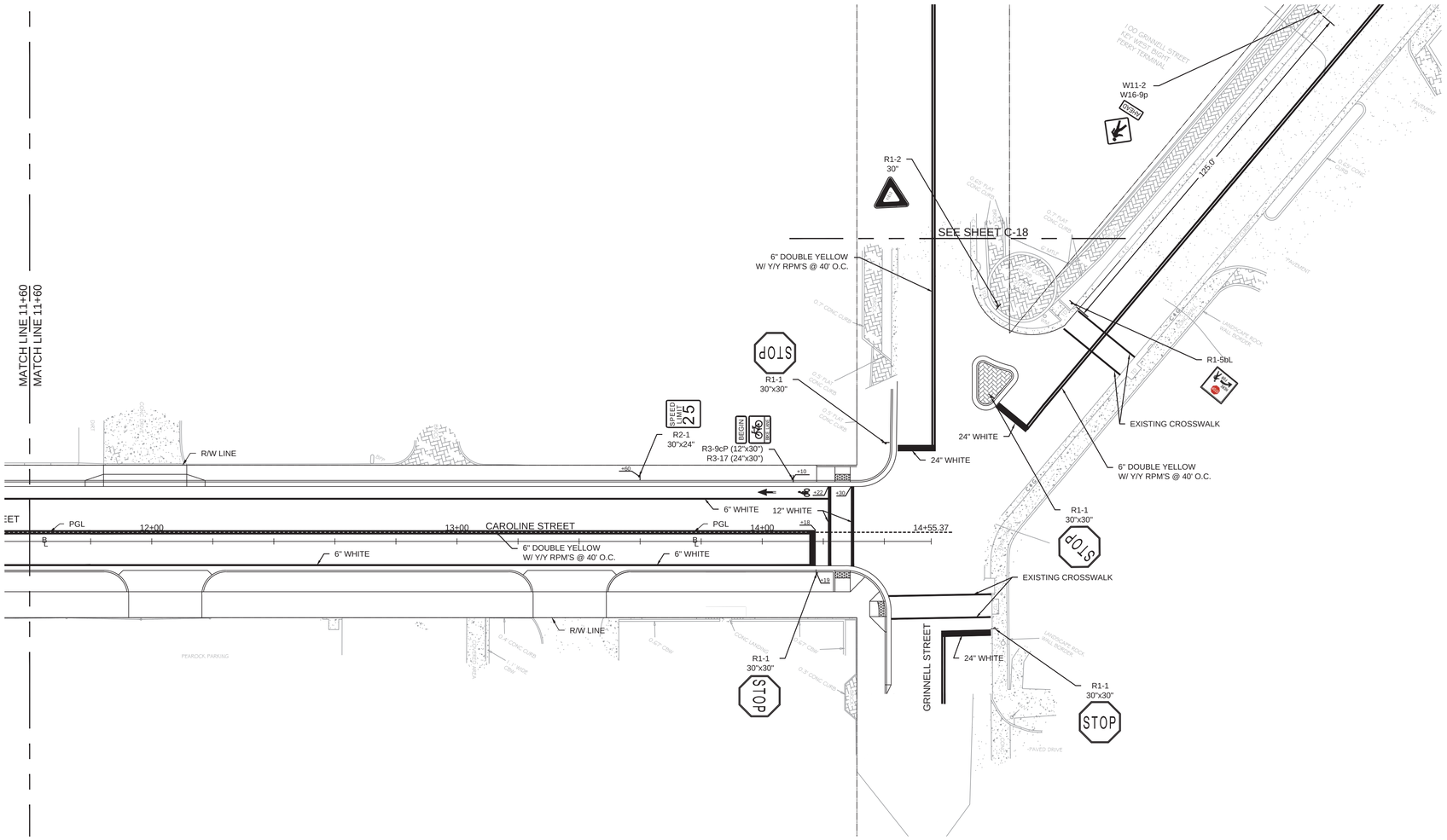
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

SIGNING AND PAVEMENT MARKING PLANS

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

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-11



20' 0 20'

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

NOTE:
SIGN DESIGNATIONS REFER TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD)

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

Key West Office
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

SIGNING AND PAVEMENT MARKING PLANS

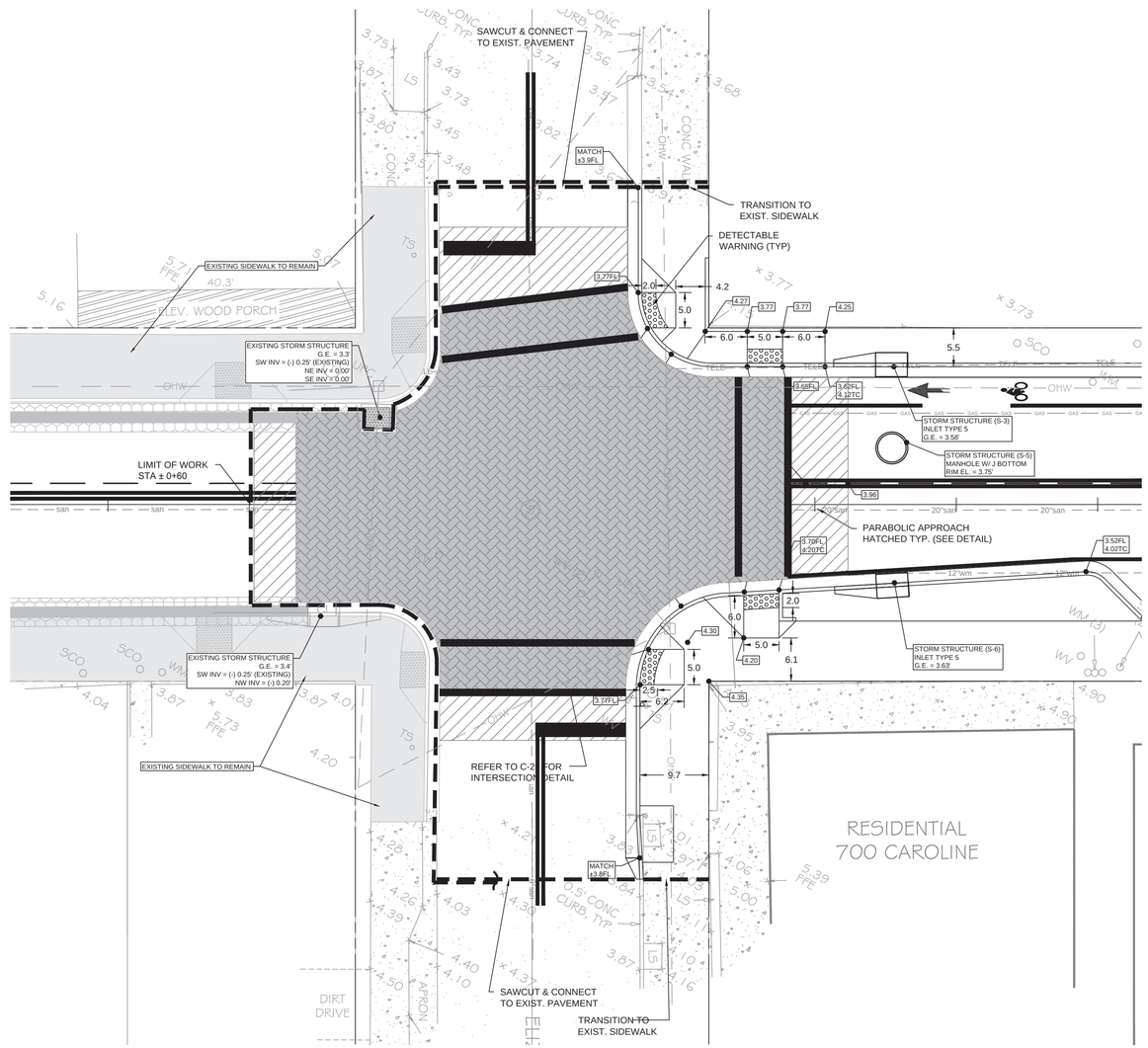
CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, 33041

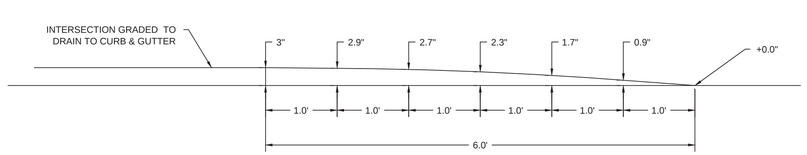
JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-12

10' 0 10'

SCALE 1"=10'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY





TYPICAL PARABOLIC APPROACH DETAIL

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

CAROLINE & ELIZABETH STREET

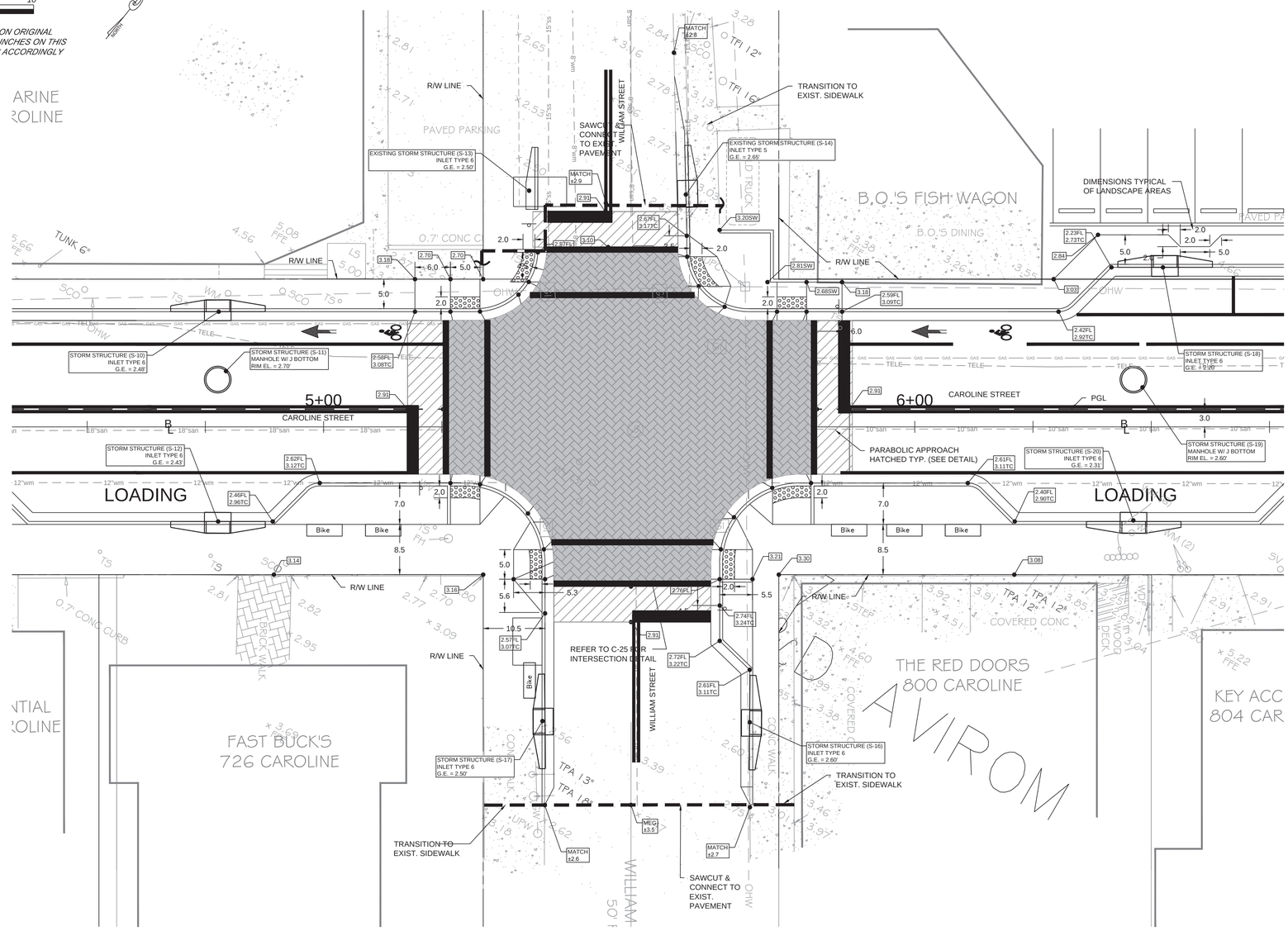
CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, 33041

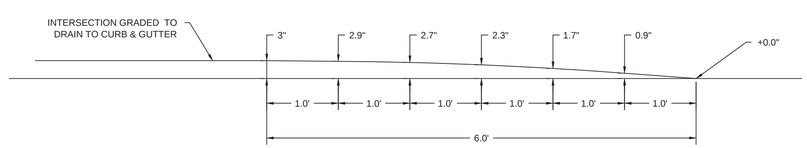
JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C- 13

10' 0 10'

SCALE 1"=10'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY





TYPICAL PARABOLIC APPROACH DETAIL

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS: 1 2 3 4 5 6

CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

CAROLINE & WILLIAM STREET

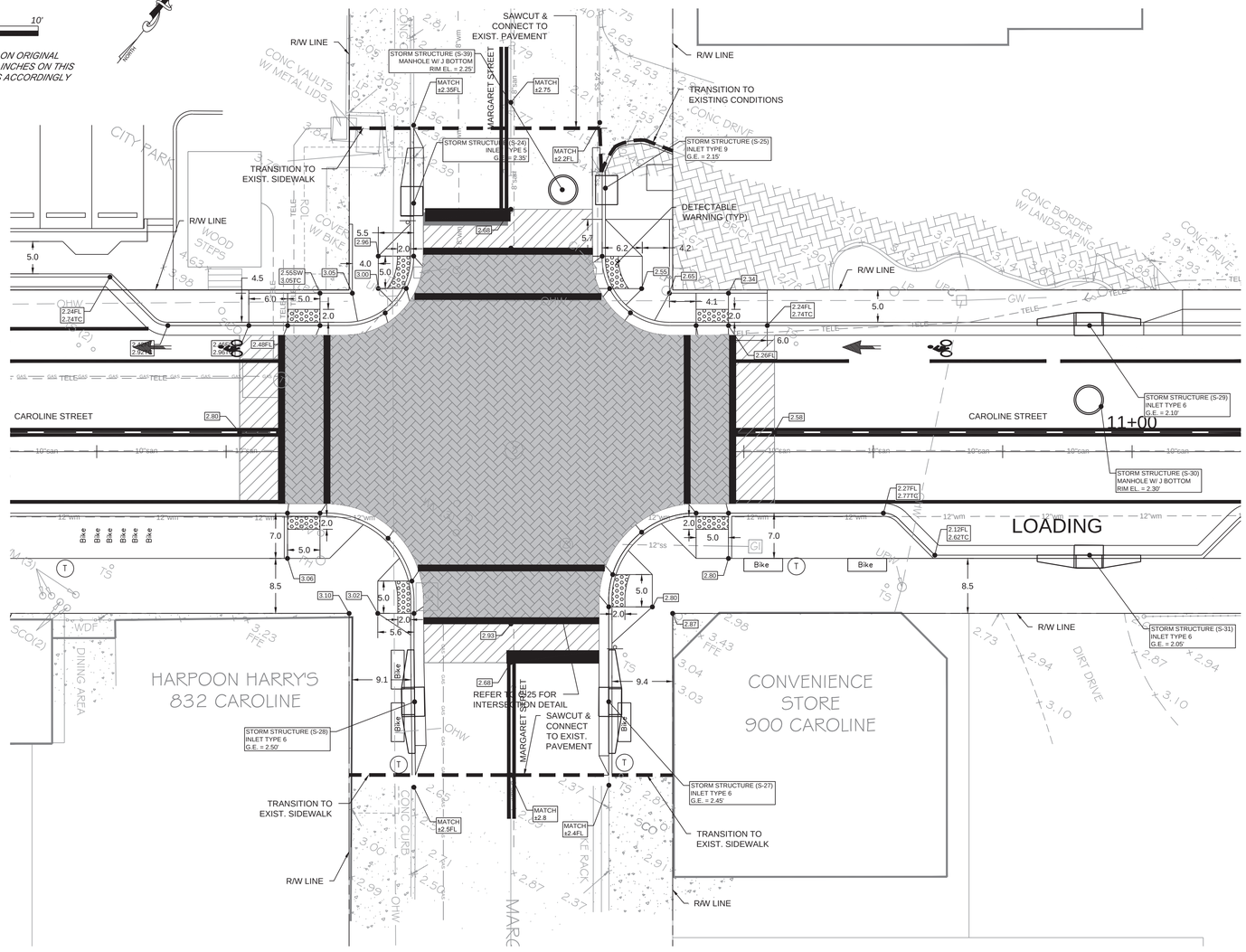
CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, 33041

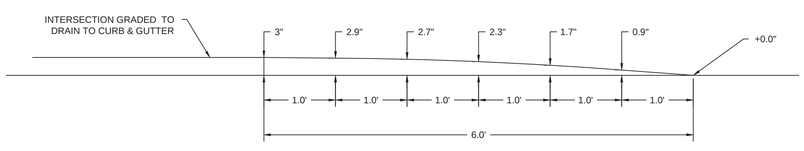
JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C- 14

10' 0 10'

SCALE 1"=10'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY





TYPICAL PARABOLIC APPROACH DETAIL

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8579
KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS: 1 2 3 4 5 6

CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

CAROLINE & MARGARET STREET

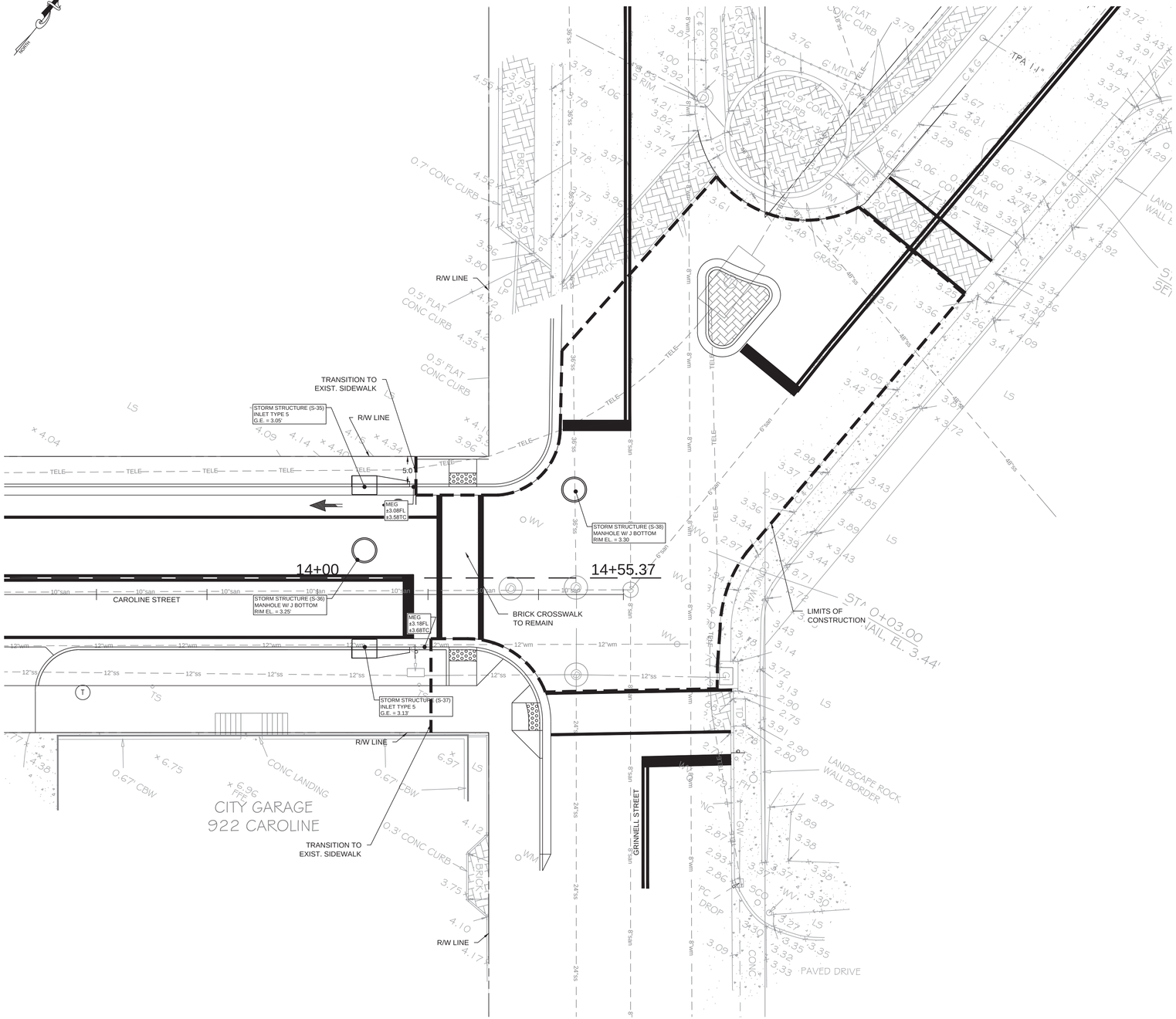
CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, 33041

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C- 15

10' 0 10'

SCALE 1"=10'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY



CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

REVISIONS:
1
2
3
4
5
6

ORIGINAL: *DECEMBER 2014*

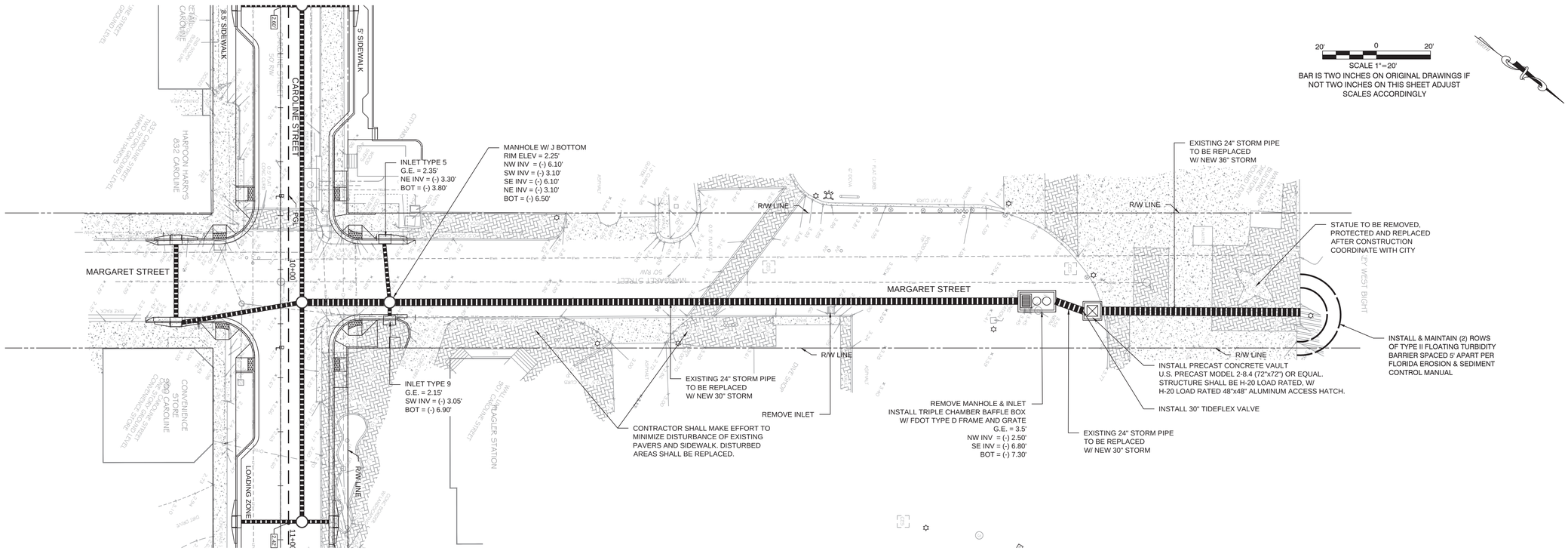
CAROLINE STREET IMPROVEMENTS

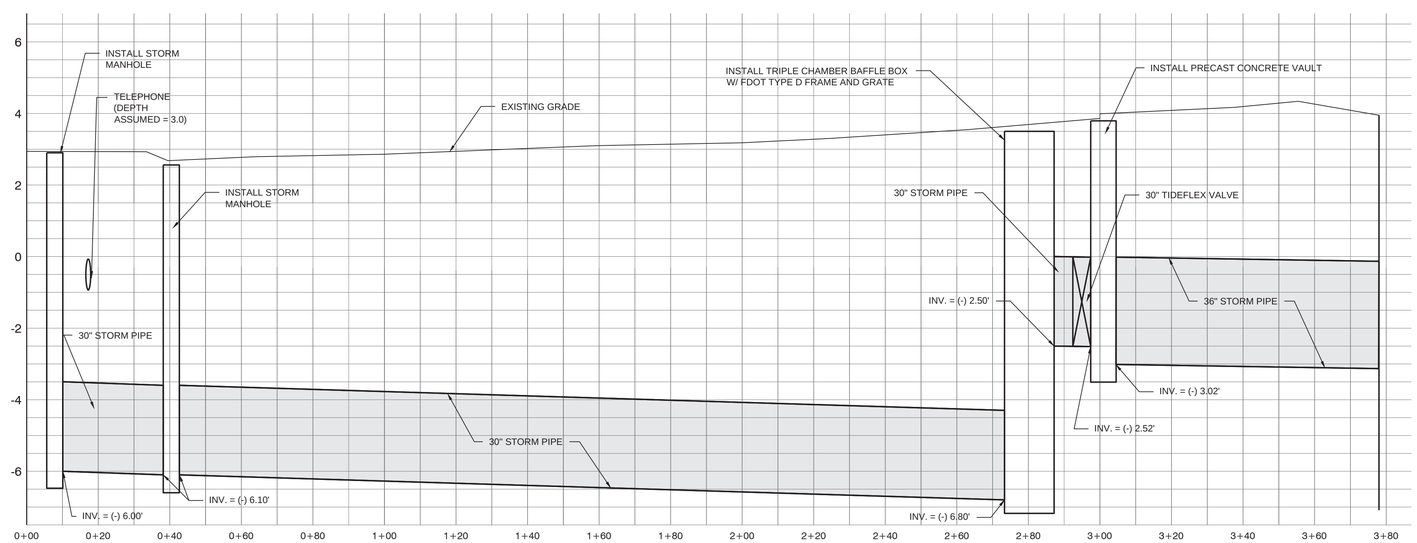
KEY WEST, FL 33040

CAROLINE & GRINNELL STREET

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

JOB NO. *111008*
DRAWN *BGO*
DESIGNED *AEP*
CHECKED *AEP*
QC
SHEET C- 16





SCALE: 1"=20' HOR.
1"=2' VERT.

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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

Key West Office
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

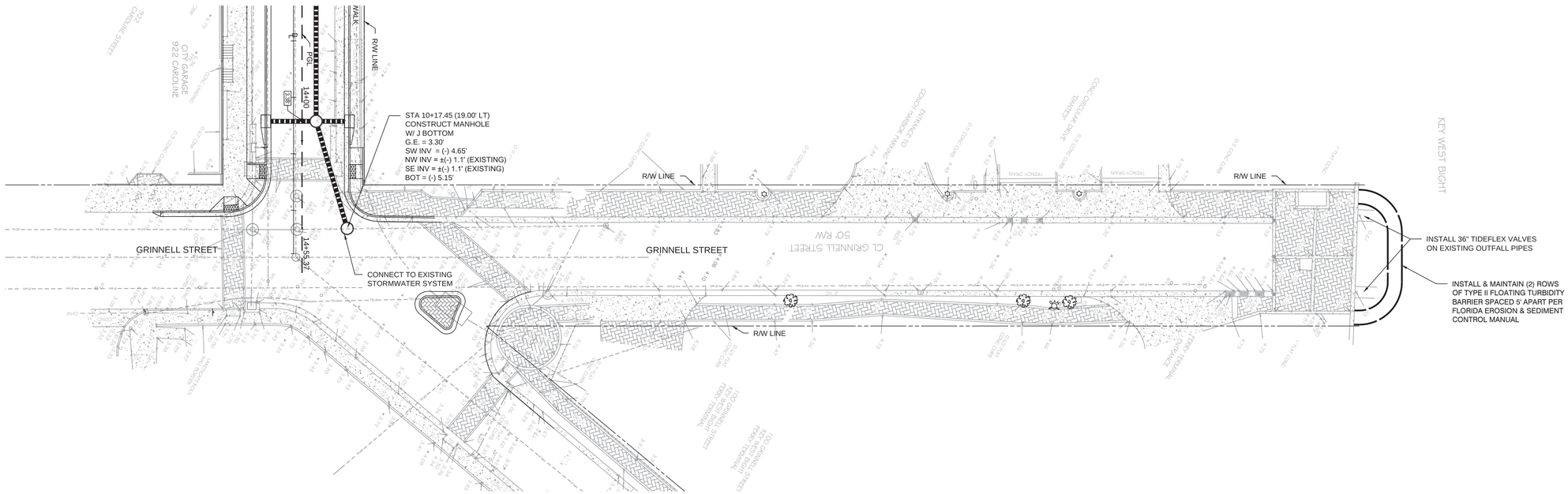
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

MARGARET STREET OUTFALL
DRAINAGE PLAN & PROFILE

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

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-17



20' 0 20'

SCALE 1"=20'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING & DEVELOPMENT, INC

CERTIFICATE OF AUTHORIZATION No. 8579

Key West Office
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

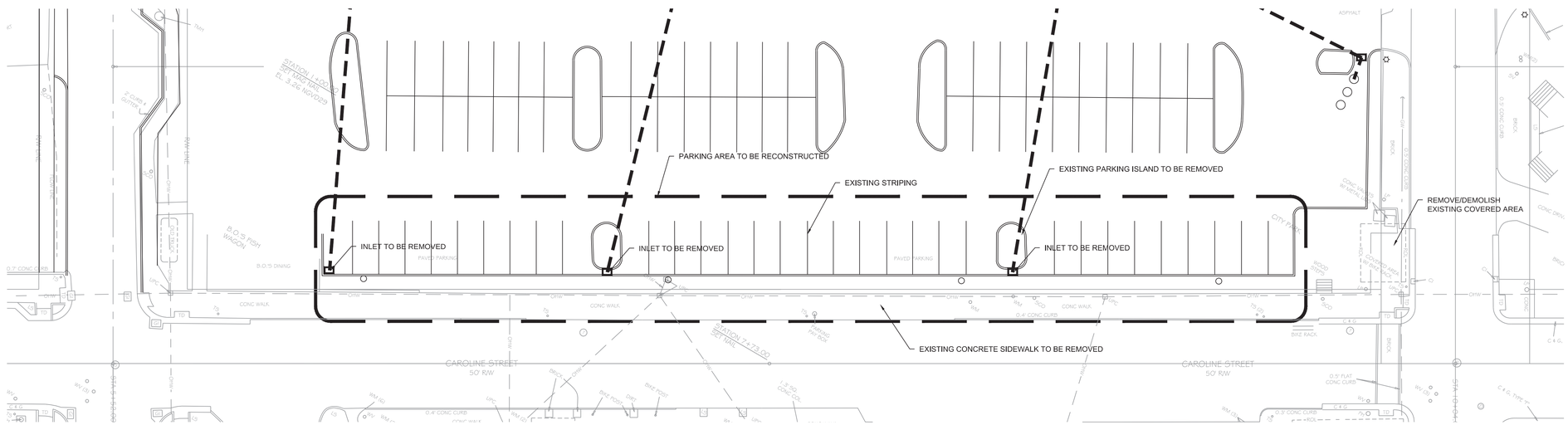
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

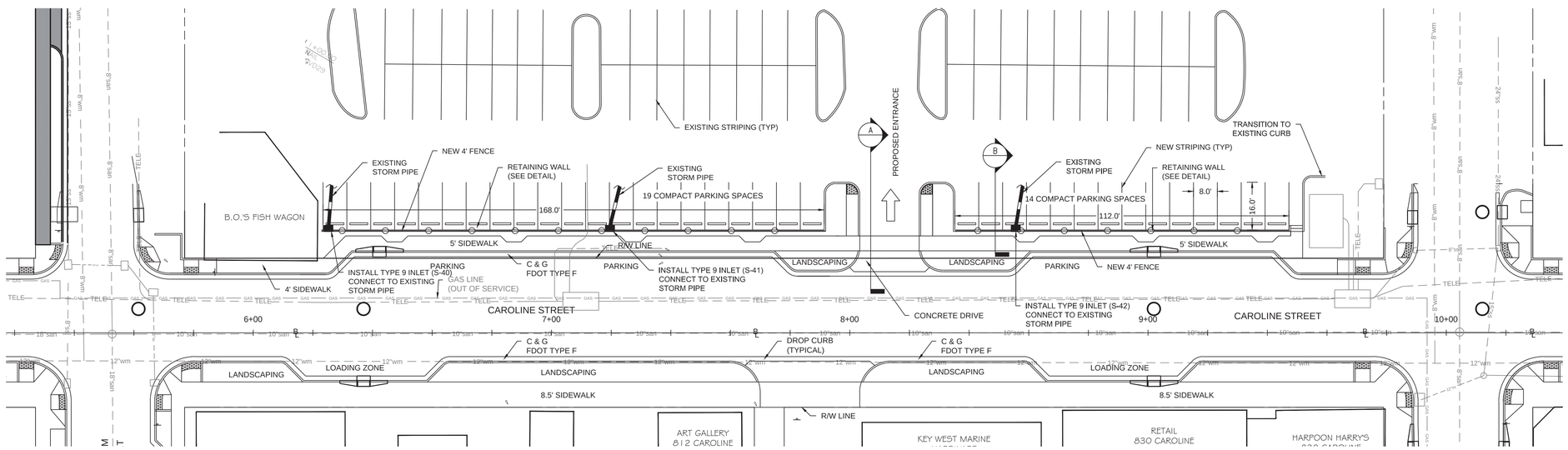
GRINNELL STREET OUTFALL
DRAINAGE PLAN & PROFILE

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

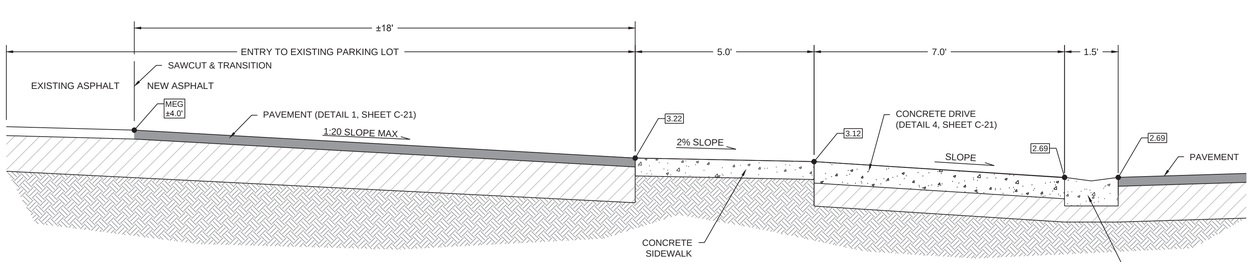
JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-18



EXISTING PARKING LOT PLAN

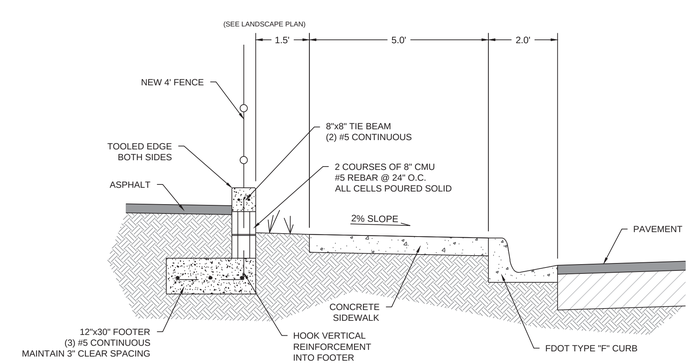


PROPOSED PARKING LOT PLAN



A ENTRANCE CROSS SECTION

NOT TO SCALE



B CROSS SECTION

NOT TO SCALE

20' 0 20'

SCALE 1"=20'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING & DEVELOPMENT, INC

CERTIFICATE OF AUTHORIZATION No. 8579

Key West Office
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

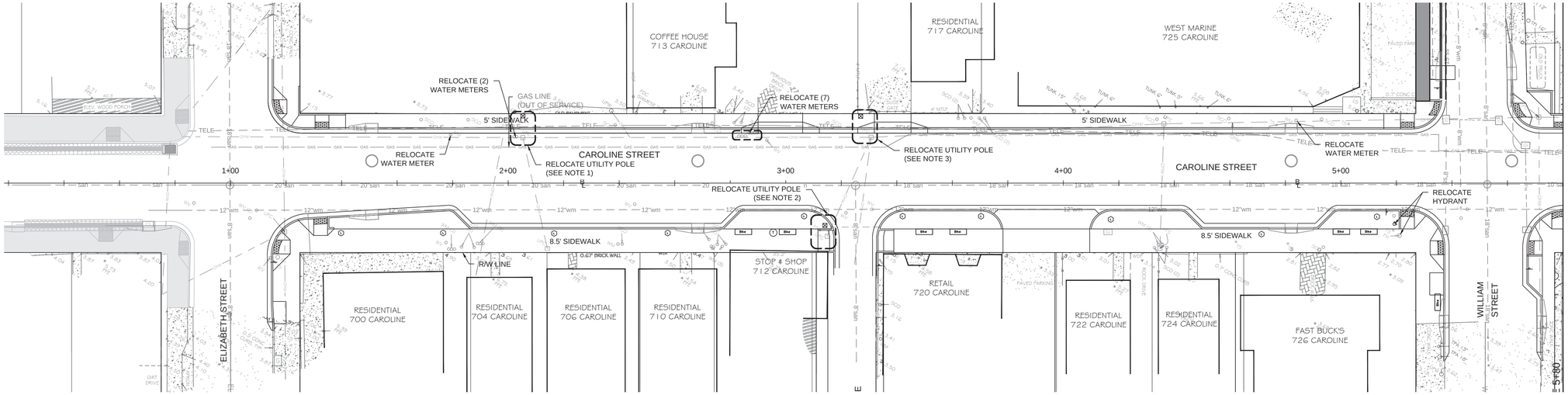
CAROLINE STREET IMPROVEMENTS

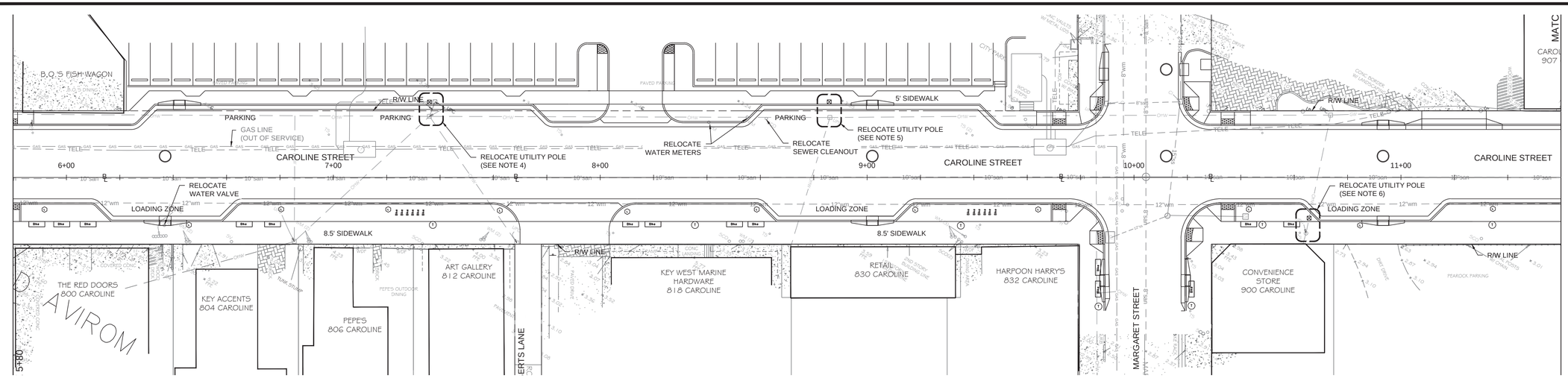
KEY WEST, FL 33040

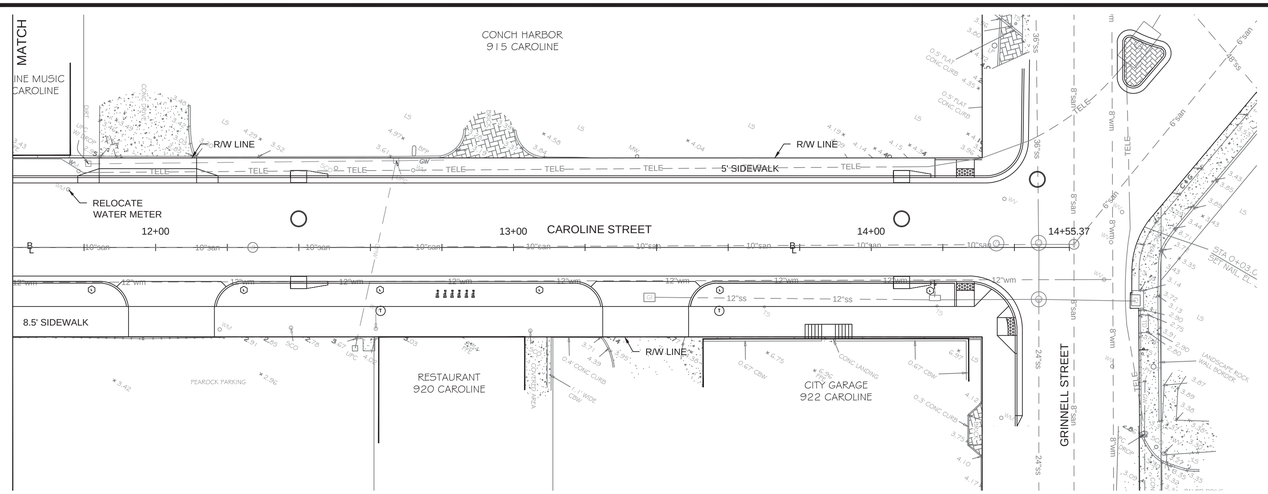
PARKING LOT PLAN

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

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-19







KEYS ENERGY POLE RELOCATION NOTES:

1. Pole A24-8 - Primary

Relocate pole 7' to back of sidewalk. Install 3 phase side arm.

2. Pole A33-3 - Service

Relocate pole 4' towards street into new landscape area.

3. Pole A24-7 - Primary

Relocate pole 8' back in line with underground conduits to back of sidewalk. NOTE: Moving of this pole will require extensive coordination between utilities and the City's contractor. It will also create a hardship to the customers residing at 713-715 Caroline Street. The City will have to notify everyone serviced by the 10 meters about the lengthy outage necessary while the electrical contractor reworks the two underground polyphase services.

4. Pole A25-7 - Primary

Relocate pole 6' to back of new curb/front of new sidewalk. Install 3 phase side arm.

5. Pole A25-8 - Primary

Relocate pole 6' to back of new curb/front of new sidewalk. Install 3 phase side arm.

6. Pole A36-1 - Service

Relocate pole 6' away from building into new landscape area. Moving the pole onto private property and setting the new pole near the property line will create a hazard for Waste Management every time they empty the customer's dumpster.

SCALE 1"=20'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING & DEVELOPMENT, INC

CERTIFICATE OF AUTHORIZATION No. 8579

Key West Office
1010 East Kennedy Drive, Suite 201
Key West, Florida 33040
Tel: (305) 293-9440 Fax: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS: 1 2 3 4 5 6

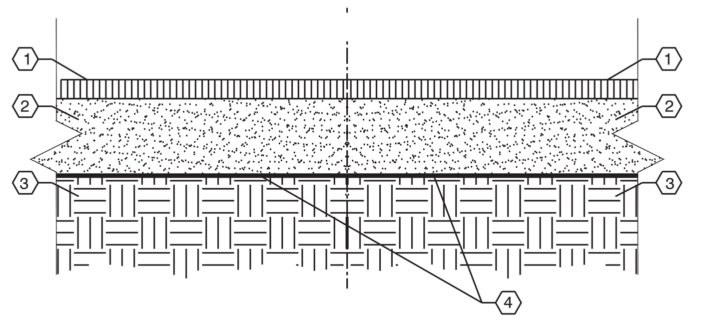
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

UTILITY RELOCATION PLAN

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

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-20

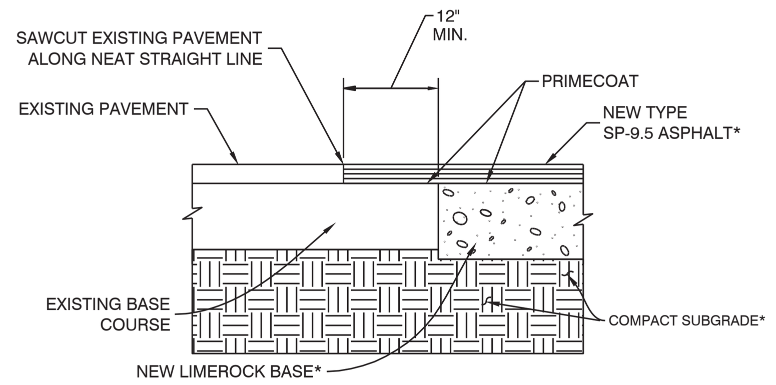


KEYED NOTES

1. 1.5" SP-9.5 STRUCTURAL COURSE OVER PRIME COAT
2. 12" MIN LIMEROCK BASECOURSE COMPACTED TO LBR 100
3. 12" SUBGRADE COMPACTED TO 95% OF ASTM D-1557.
4. INSTALL GEOSYNTHETIC REINFORCEMENT TYPE TENSAR BX 1200 PER FDOT INDEX 501

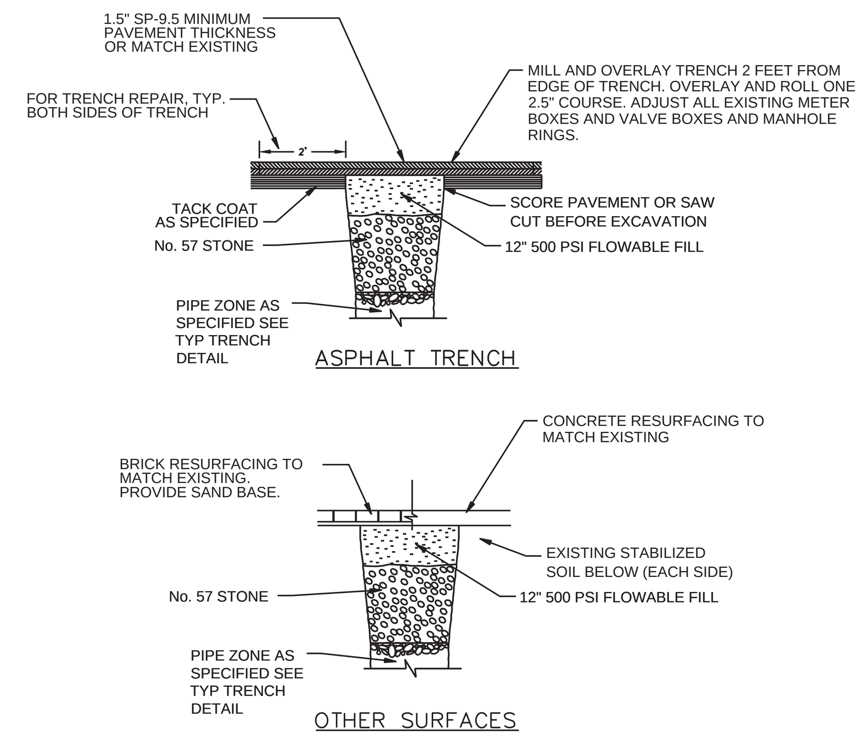
NOTE:
PAVEMENT TO BE BUILT IN COMPLIANCE WITH FDOT STANDARDS AND SPECIFICATIONS.

1 Asphalt Pavement Detail
NTS

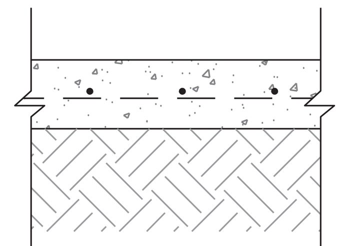


*NOTE:
FOR MATERIAL DEPTHS AND TESTING REQUIREMENTS OF NEW ASPHALT CONSTRUCTION, PLEASE REFER TO CIVIL DETAIL # 1

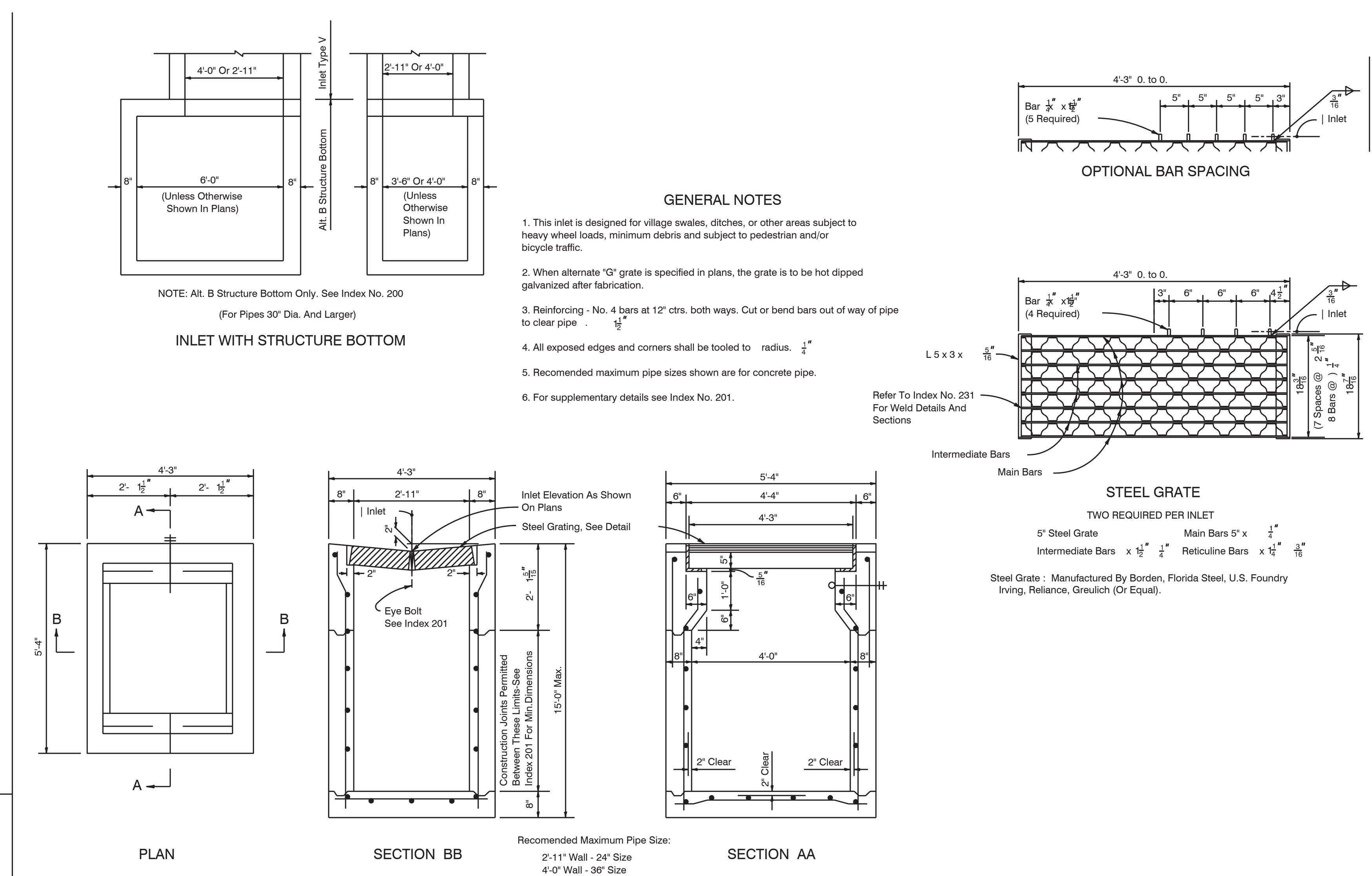
2 Pavement Connection to Existing Surface
NTS



3 Surface Repair for Trench
NTS



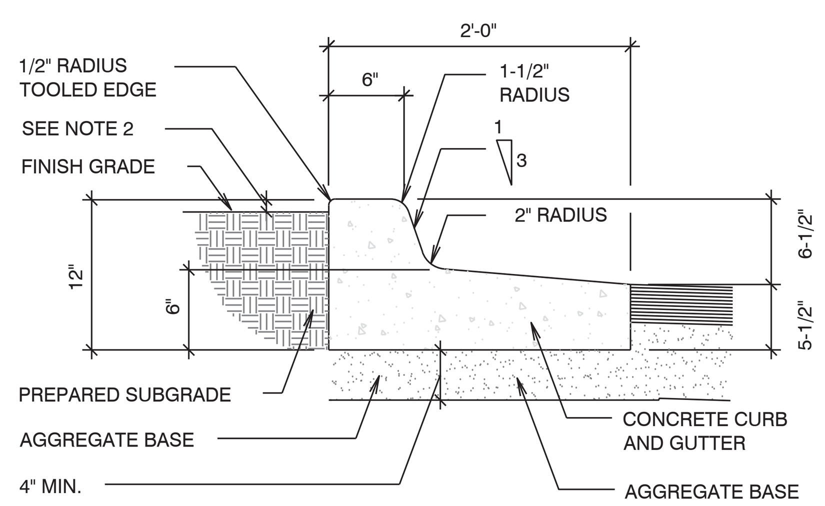
4 Concrete Detail
NTS



GENERAL NOTES

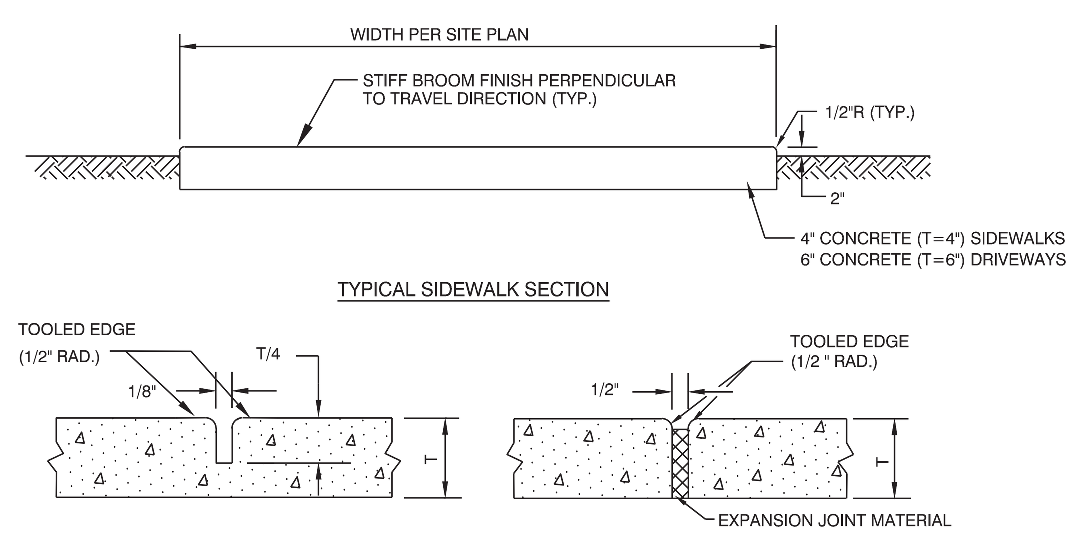
1. This inlet is designed for village swales, ditches, or other areas subject to heavy wheel loads, minimum debris and subject to pedestrian and/or bicycle traffic.
2. When alternate "G" grate is specified in plans, the grate is to be hot dipped galvanized after fabrication.
3. Reinforcing - No. 4 bars at 12" ctrs. both ways. Cut or bend bars out of way of pipe to clear pipe.
4. All exposed edges and corners shall be tooled to radius.
5. Recomended maximum pipe sizes shown are for concrete pipe.
6. For supplementary details see Index No. 201.

5 Type "V" Gutter Inlet
NTS



FOR USE WHERE WATER DRAINS AWAY FROM CURB

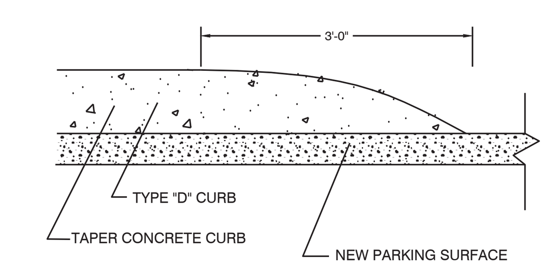
6 Modified Curb & Gutter Detail
NTS



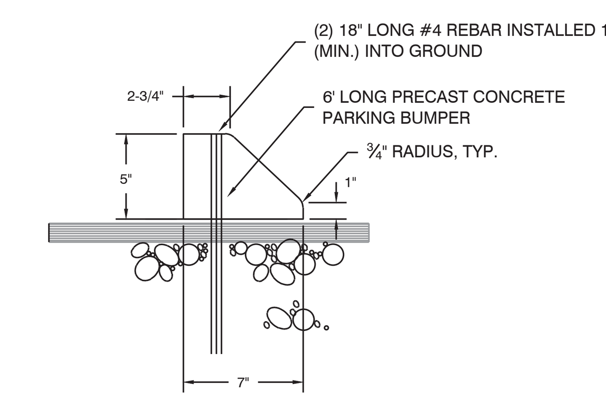
NOTES:

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. NEW SLABS SHALL BE GRADED TO POSITIVELY DRAIN WITHOUT ANY STORMWATER PONDING.
4. 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 CHANGE 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 SEALANT AT ALL ISOLATION/ EXPANSION JOINTS.

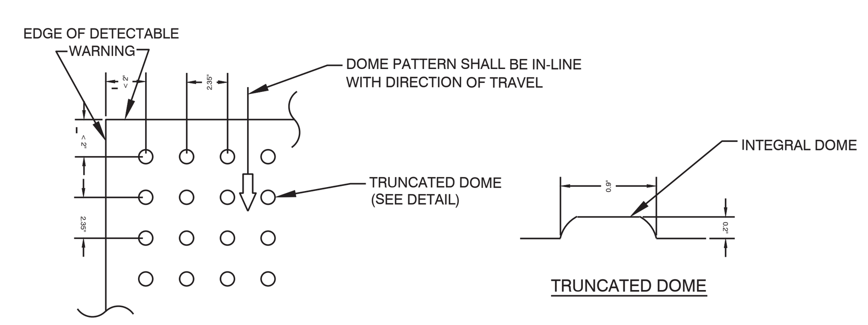
7 Typical Sidewalk Detail
NTS



8 Tapered Curb Detail
NTS

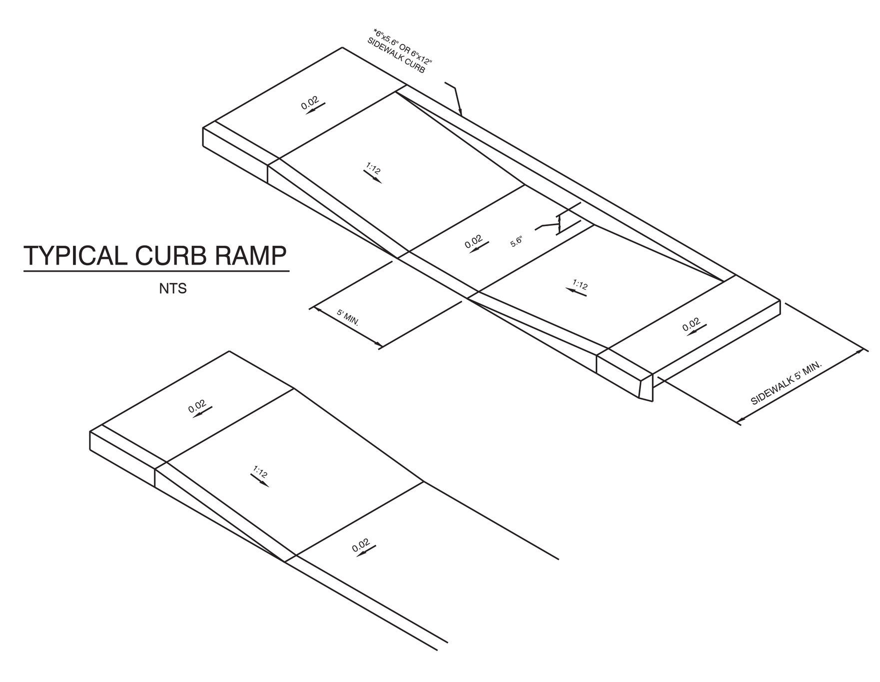


9 Concrete Parking Bumper Detail
NTS



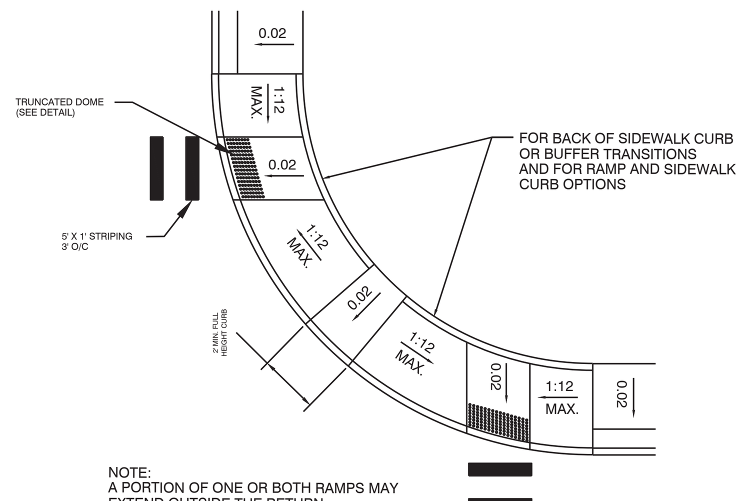
ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 mm) FROM THE BACK OF CURB.

CURB RAMP DETECTABLE WARNING
NTS



TYPICAL CURB RAMP
NTS

TYPICAL S/W TO DRIVEWAY TRANSITION
NTS



NOTE:
A PORTION OF ONE OR BOTH RAMPS MAY EXTEND OUTSIDE THE RETURN.

TYPICAL PLACEMENT OF SIDEWALK CURB RAMPS AT CURBED RETURNS
NTS

GENERAL NOTE:

1. CURB RAMP RUNNING SLOPES AT UNRESTRAINED SITES SHALL NOT BE STEEPER THAN 1:12 AND CROSS SLOPE SHALL BE 0.02 OR FLATTER. TRANSITION SLOPES SHALL NOT BE STEEPER THAN 1:12.

2. CURB RAMP DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24" FROM THE BACK OF CURB. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED BY TEXTURING A TRUNCATED DOME PATTERN IN CONFORMANCE WITH U.S. DEPARTMENT OF JUSTICE A.D.A. STANDARDS FOR ACCESSIBLE DESIGN, A.D.A. ACCESSIBILITY GUIDELINES, SECTION 4.29.2, TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS.

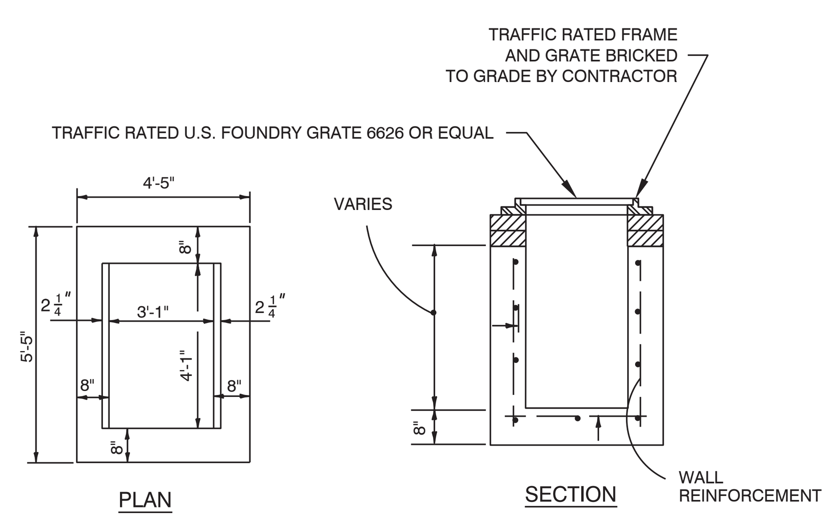
3. UNLESS OTHERWISE CALLED OUT IN THE PLANS, THE RAMP DETECTABLE WARNING SURFACE SHALL BE COLORED IN ACCORDANCE WITH FDOT SECTION 351 OF THE STANDARD SPECIFICATIONS.

4. WHERE A CURB RAMP IS CONSTRUCTED WITHIN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE OR WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5' LONG.

DESIGN NOTE:

1. THE COLOR REQUIREMENT IN GENERAL NOTE 3 IS TO PROVIDE A DARK-ON-LIGHT VISUAL CONTRAST BETWEEN THE DETECTABLE WARNING SURFACE AND THE ADJACENT WALKING SURFACE. WHERE ADJACENT WALKING SURFACES ARE COLORED OR ARE CONSTRUCTED WITH MATERIALS OTHER THAN STANDARD CLASS I PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH SECTION 522 OF THE STANDARD SPECIFICATIONS, THE PLANS MUST PROVIDE FOR DETECTABLE WARNING SURFACE COLOR OR MATERIALS THAT PROVIDE THE NECESSARY CONTRAST, EITHER DARK-ON-LIGHT OR LIGHT-ON-DARK.

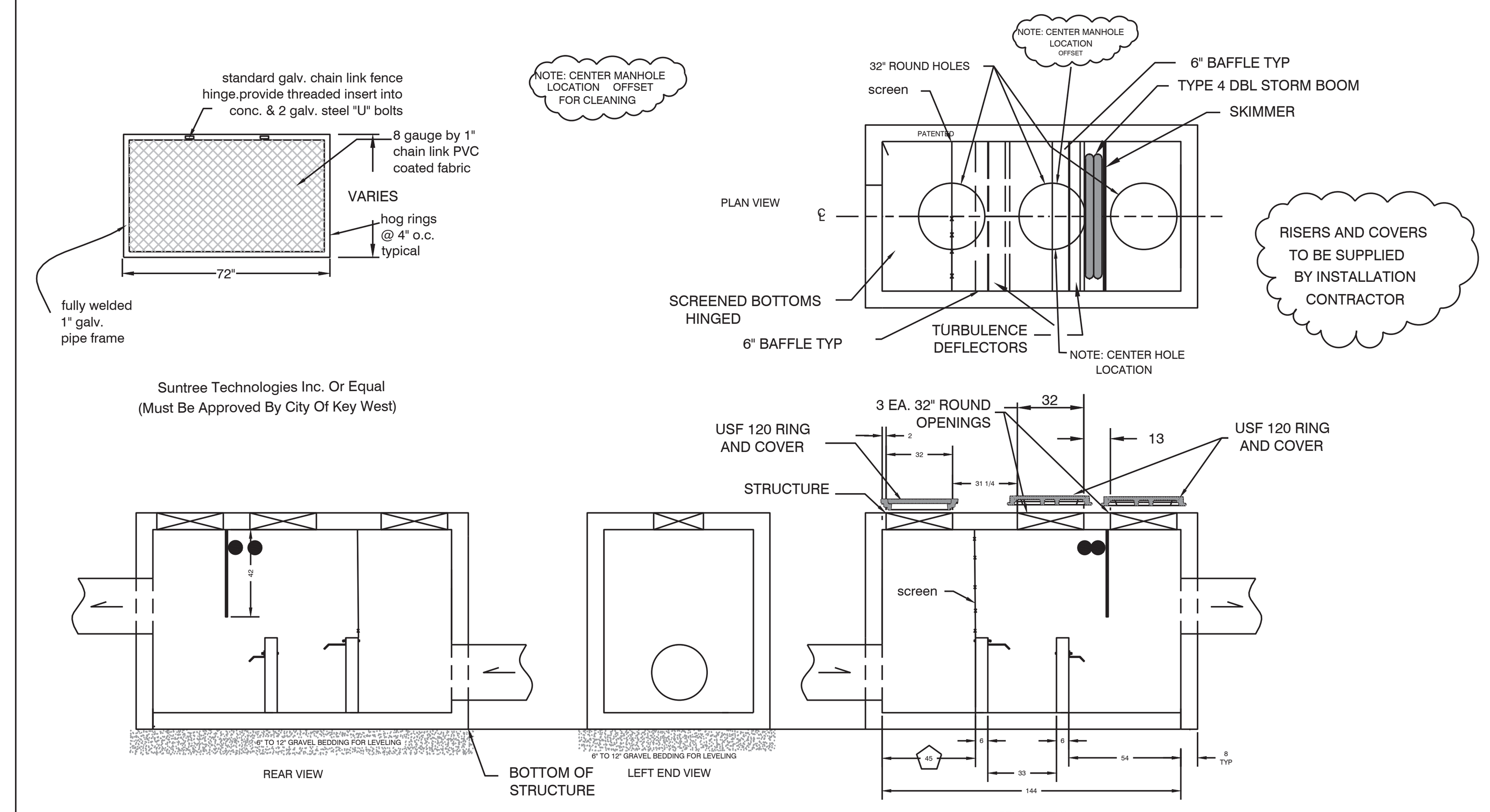
10 Sidewalk Transition Detail
NTS



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. STRUCTURES TO BE SET ON COARSE AGGREGTE BEDDING

11 Type "D" Ditch Bottom Inlet
NTS



NOTES:

1. CONCRETE 28 DAY COMPRESSIVE STRENGTH fc=5,000 PSI.
2. REINFORCING: ASTM A-615, GRADE 60.
3. SUPPORTS AN H20 LOADING AS INDICATED BY AASHTO.
4. JOINT SEALANT: BUTYL RUBBER SS-S-00210
5. ALL WALLS, TOP + BOTTOM ARE 8" THICK.
6. STEEL EMBEDDED IN CONCRETE 3" MINIMUM FROM EDGE
7. GROUTING RING TO BE SUPPLIED BY INSTALL CONTRACTOR.
8. DIMENSIONS PENTAGON BLOCK ARE CRITICAL DIMENSIONS.
9. FRAMES & GRATE WHEN REQUIRED SHALL BE USF 4160-6611-GALVANIZED COATED

12 Typical Triple Chamber Baffle Box
NTS

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT
PEREZ ENGINEERING & DEVELOPMENT, INC
KEY WEST OFFICE
1010 KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243
CERTIFICATE OF AUTHORIZATION No. 8579
ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

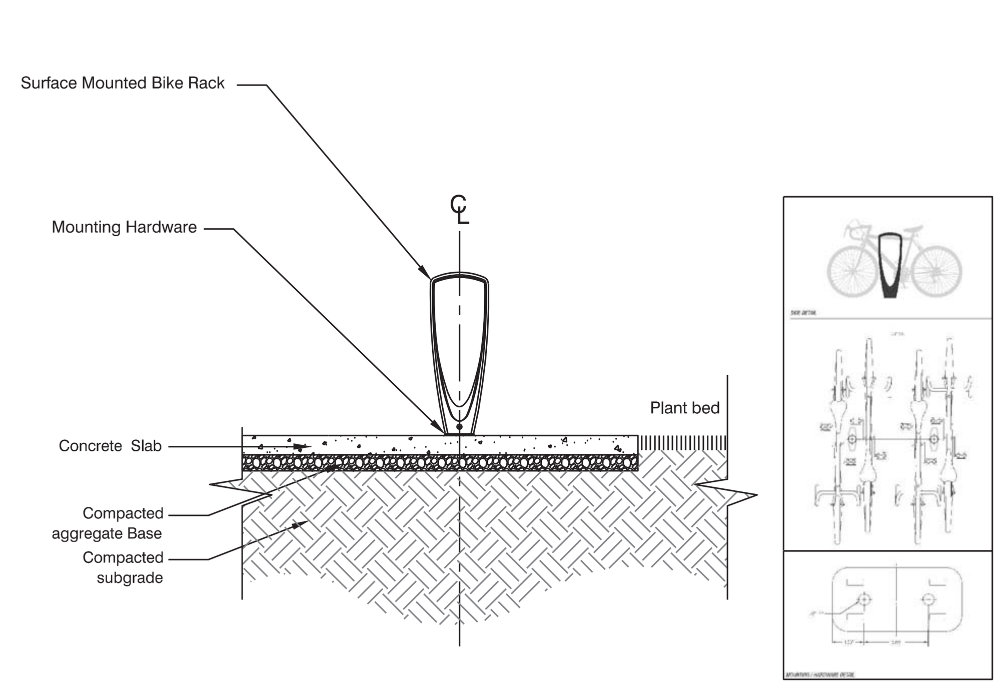
ORIGINAL: DECEMBER 2014

REVISIONS: 1 2 3 4 5 6

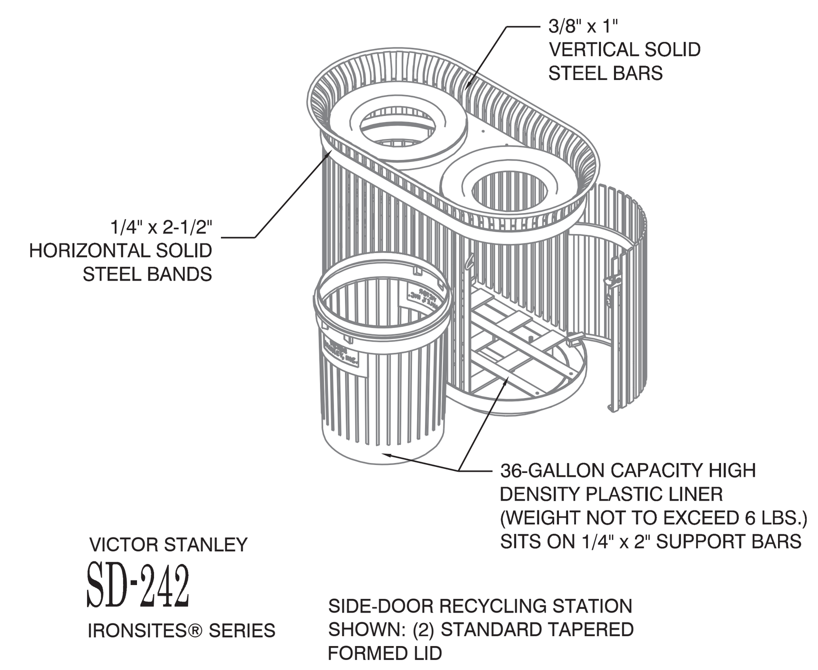
CAROLINE STREET IMPROVEMENTS
KEY WEST, FL 33040
CIVIL DETAILS

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

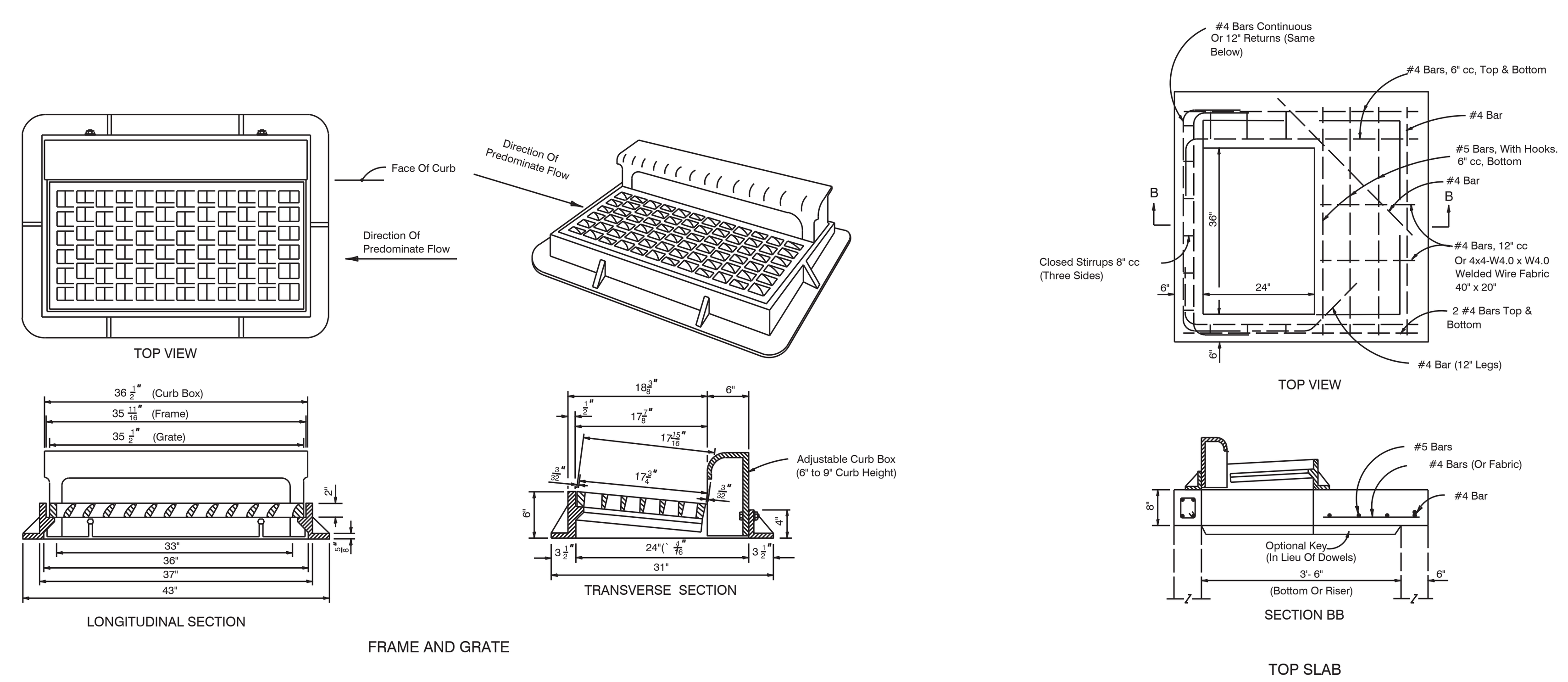
JOB NO.	111008
DRAWN	BGO
DESIGNED	AEP
CHECKED	AEP
QC	
SHEET	C- 21



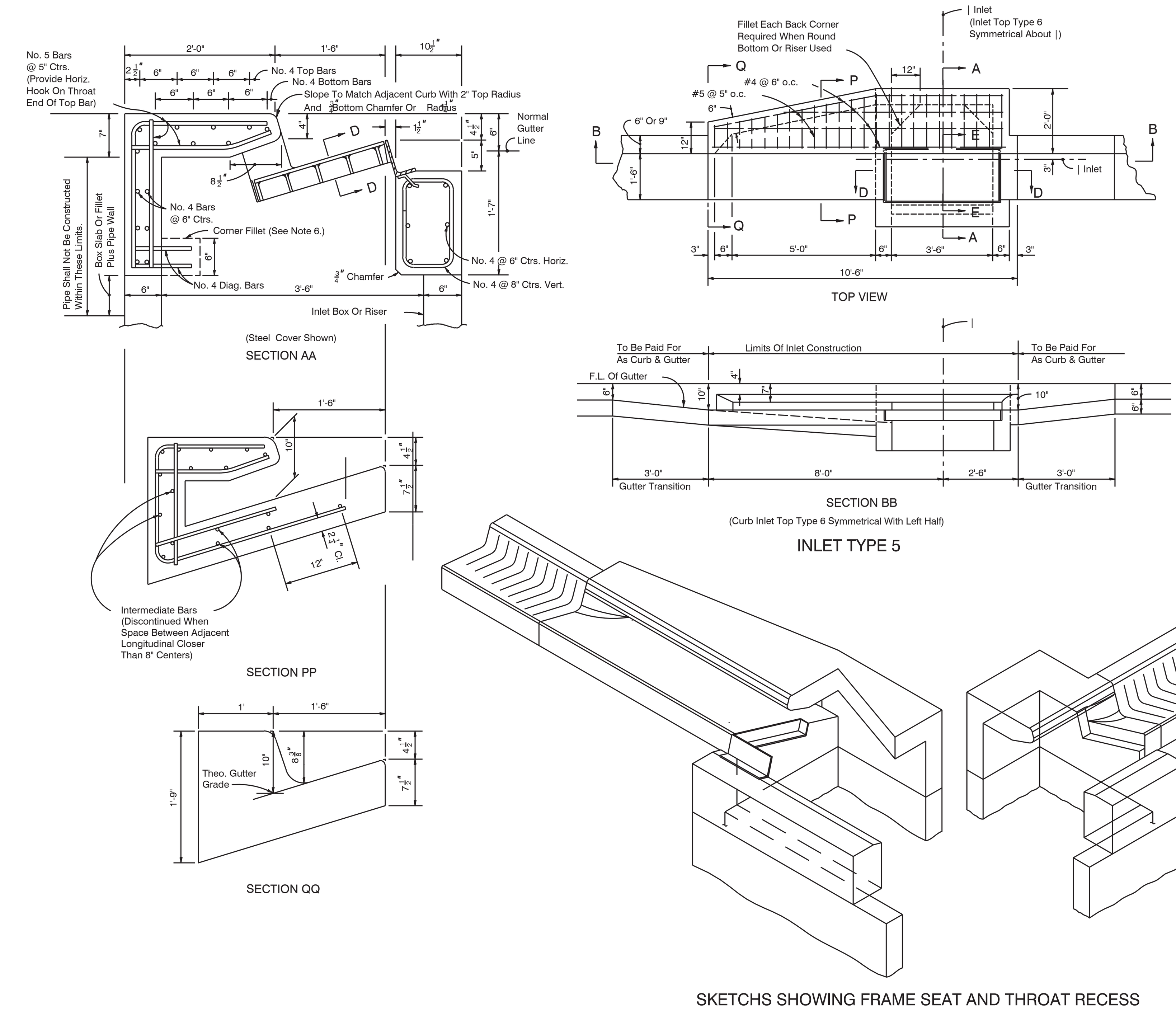
1 Bike Rack Typical Detail
NTS



2 Trash Receptacle Detail
NTS

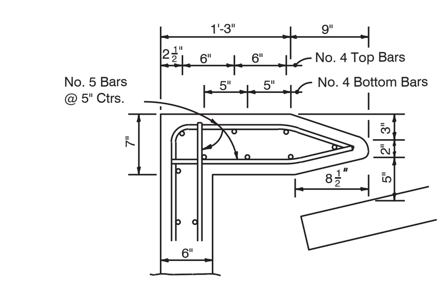


3 FDOT Curb Inlet Type "9"
NTS



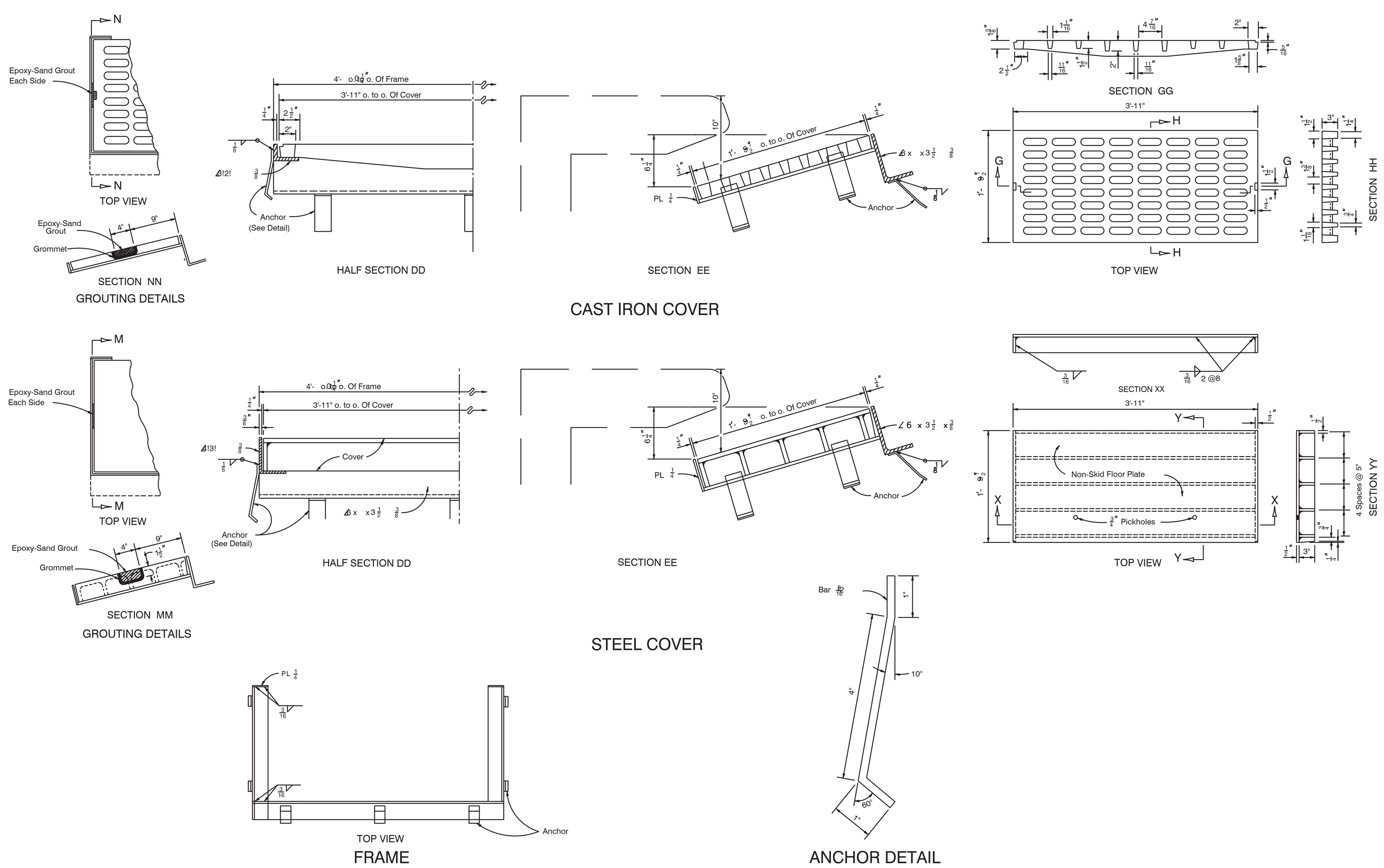
GENERAL NOTES

1. The finished grade and slope of the inlet tops are to conform with the finished cross slope and grade of the proposed sidewalk and/or parkway.
2. When inlets are to be constructed on a curve, refer to the plans to determine the radius and, where necessary, modify the inlet details accordingly. Bend steel when necessary.
3. All reinforcing steel shall have minimum $1\frac{1}{4}$" cover unless otherwise shown. Inlet tops shall be either cast-in-place or precast concrete.
4. Precasting of this inlet top will be permitted. Precast units shall conform to the dimensions shown or in accordance with approved shop drawings. Request for shop drawing approval shall be directed to the State Drainage Engineer.
5. Concrete meeting the requirements of A.S.T.M. C 478 (4,000 P.S.I.) may be used in lieu of Class ~ concrete for precast units, manufactured in plants which are under the Standard Operating Procedures for the inspection of precast drainage products.
6. The corner fillets shown for rectangular throats are necessary only when throats are to be used in conjunction with circular inlet bottoms or when used on skew with rectangular inlet boxes.
7. For inlet bottoms see Index No. 200.
8. These inlet tops are designed for use with standard curb and gutter Type E and Type F. Locate outside of pedestrian crosswalk where practical.
9. See Index 201 for supplemental details.
10. All steel used for frame and cover shall meet the requirements of ASTM A-36.
11. Either cast iron covers or steel covers may be used. Iron covers shall be Class No. 30 castings in accordance with ASTM A-48.
12. When Alternate "G" Cover is specified in plans either the cast iron cover and galvanized steel frame or the the galvanized steel cover and frame must be used. Covers are to be grouted in accordance with the grouting detail shown on sheet 2 of 2, in lieu of tack welding.
13. Inlet to be paid for under the contract unit price for Inlets (Curb) (Type), Each.

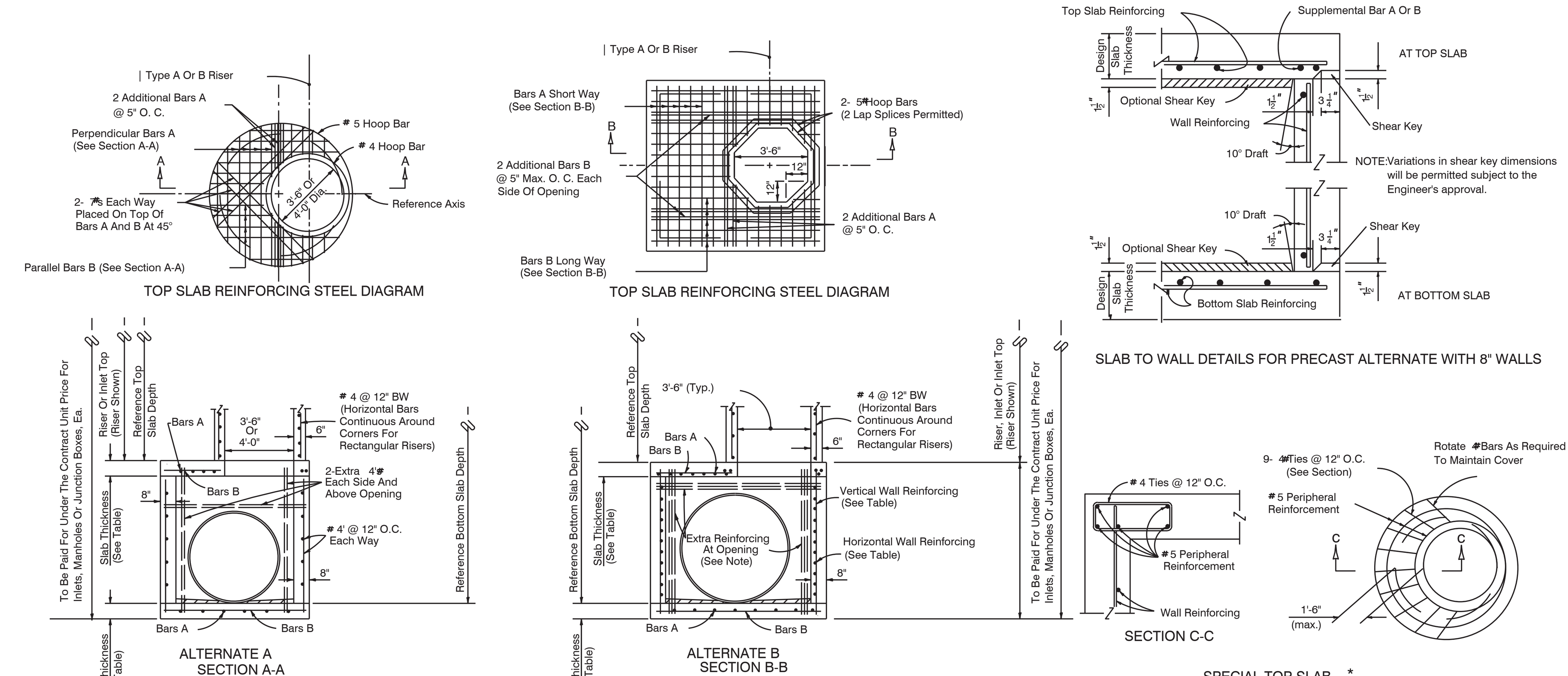


TOP MODIFICATION FOR TYPE E CURB

4 FDOT Curb Inlet Type "5 & 6"
NTS



5 FDOT Curb Inlet Type "5 & 6"
NTS



ALTERNATE A
SECTION A-A

* NOTE: When the inside diameter of a round structure is not more than 1'-6" larger than the opening in the riser or top slab, the top of the structure or riser shall be constructed according to the "Special Top Slab" details on this sheet.

ALTERNATE B
SECTION B-B

NOTE: Provide extra reinforcing each side of each opening at 3" maximum spacing equal to half the area of vertical reinforcment removed by the opening and provide the same area of reinforcment above each opening at 3" maximum spacing as removed by the opening.

SPECIAL TOP SLAB *

GENERAL NOTES

1. Standard structure bottoms 4'-0" diameter and smaller (Alt. A) and 3'-6" square (Alt. B) are designated Type P. Larger standard structure bottoms are designated Type J. Risers are permitted for all structures.
2. Walls of circular structures (Alternate A) constructed in place may be of non-reinforced concrete or brick or reinforced concrete. Precast and rectangular structures (Alternate B) shall be constructed of reinforced concrete only.
3. Wall thickness and reinforcement are for either reinforced cast-in-place or precast concrete units except that precast circular units may be furnished with walls in accordance with either A.S.T.M. C-478 (up to 96" diameter) or A.S.T.M. C-76, Class ~~~, B Wall, modified where the elliptical steel cage area is placed in the center one-third of the wall.
4. Top and floor slab thickness and reinforcement are for precast and cast in place construction. Top and floor slabs shall be of Class ~~ concrete. Concrete as specified in A.S.T.M. C-478 (4000 psi) may be used in lieu of Class ~ and Class ~~ concrete in precast items manufactured in plants which are under the 'Standard Operating Procedures' for the inspection of precast drainage products.
5. All reinforcement shall be A.S.T.M. A615, Grade 60 or 65 KSI welded wire fabric, either smooth or deformed.
6. Structure bottoms may be used in conjunction with curb inlet tops Types 1, 2, 3, 4, 5, 6, 9, and 10, and any manhole or junction box unless otherwise shown in the plans or other standard drawings. Alt. B structure bottoms may be used in conjunction with curb inlet Types 7 & 8, or any ditch bottom inlet unless otherwise shown in the plans or other standard drawings.
7. Rectangular structures may be rotated as directed by the Engineer in order to facilitate connections between the structure walls and storm sewer pipes.
8. Except when ACI hooks are specifically required, reinforcement top and slab shall be straight embedment.
9. All steel bars shall have $1\frac{1}{2}$" minimum cover unless otherwise shown except for precast circular units manufactured under ASTM C-76 or ASTM C-478, Horizontal steel in rectangular structures shall be lapped a minimum of 24 bar diameters at corners.
10. The corner fillets shown are necessary for rectangular structures used with circular risers and inlet throats and used on skew with rectangular risers, inlet and inlet throats. Fillets will be required in lieu of the bottom slab of the Alt. B riser when used with the Alt. A box. Each fillet shall be reinforced with 2-#5 bars.
11. Inlet throats, riser or manhole tops shall be secured to structures as shown on Index No. 201.
12. Structures with depths over 14' are to be checked for floatation by designer of project drainage.
13. Units larger than specified standard may be substituted at the contractor's option when these units will not cause or increase the severity of utility conflicts. Such larger units shall be furnished at no additional cost to the Department. Larger Alternate A units cannot replace Alternate B units without approval of the Engineer. This note applies to this Index only.
14. For manhole and junction box tops, for frames and covers, and, for supplementary details see Index No. 201.

6 FDOT Structure Bottoms Type "J" & "P"
NTS

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT
PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION NO. 8579
KEY WEST OFFICE
1010 KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243
ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

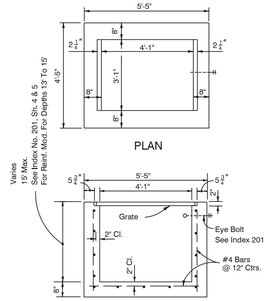
ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

CAROLINE STREET IMPROVEMENTS
KEY WEST, FL 33040
CIVIL DETAILS

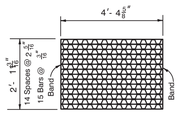
CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, 33041

JOB NO.	111008
DRAWN	BGO
DESIGNED	AEP
CHECKED	AEP
QC	
SHEET	C-22



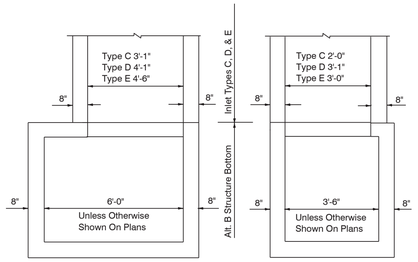
TYPE D

Recommended Maximum Pipe Size:
3'-1" Wall-24" Pipe
4'-1" Wall-36" Pipe



TYPE D

Straight Bars 2"x
Reticuline Bars
Bands
Approx. Weight 180 Lbs.



NOTE: Alt. B Structure Bottom Only. See Index No. 200

STRUCTURE BOTTOM FOR INLETS TYPE C, D & E

GENERAL NOTES

1. These inlets are suitable for bicycle and pedestrian areas and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads.

2. Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and in areas accessible to pedestrians shall have traversable slots. The traversable slot modification is not adaptable to inlet Type H. Slots may be constructed at either or both ends as shown on plans.

3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dipped galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.

4. Recommended maximum pipe sizes shown are for concrete pipe. Pipe sizes larger than those recommended must be checked for fit.

5. All exposed corners and edges of concrete are to be chamfered 3/4".

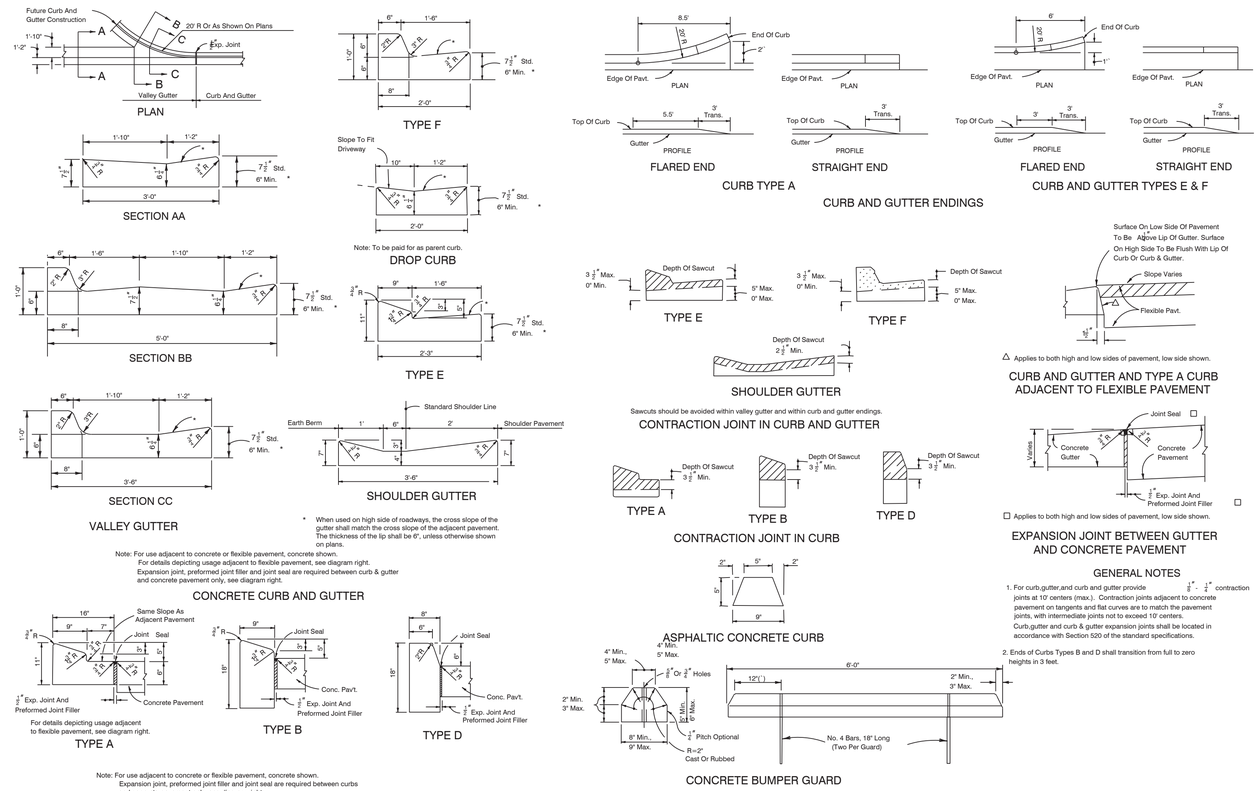
6. Pavement to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.

7. Traversable slots constructed in existing inlets shall be paid for as inlets partial, and shall include the cost for slot openings, paving and any required replacement grates.

8. Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Sodding SY.

9. For supplementary details see Index No. 201.

1 FDOT Ditch Bottom Inlet Type "D"
NTS

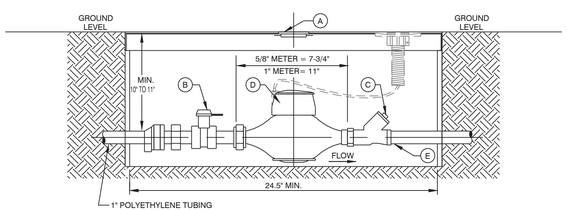


GENERAL NOTES

1. For curb,gutter,and curb and gutter provide 3/8" - 1/2" 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 Section 520 of the standard specifications.

2. Ends of Curbs Types B and D shall transition from full to zero heights in 3 feet.

2 Curb & Curb and Gutter Detail
NTS



A= METER BOX AND LID
BOX-OLDCASTLE PRECAST #02001032-FL12T FIBRELYTE GRAY COMPOSITE BOX (W/MOUSE HOLES)
LID-OLDCASTLE PRECAST #02001381-FL12 LID(1118)FIBRELYTE GRAY COMPOSITE NEPTUNE OFFSET-PROBE PROVISION FKAA WATER

NOTE: METER BOXES MUST HAVE LIDS IN PLACE PRIOR TO POURING THE CONCRETE.

B= FORD LOCKABLE CURB STOP OR APPROVED EQUAL

METER DIAMETER	CURB STOP	
3/4" x 5/8"	No. B43-342 W	*
1"	No. B43-344 W	*

* "W" ON CATALOG NUMBER IS FOR PADLOCK WINGS & SHOULD OPEN TO THE LEFT.

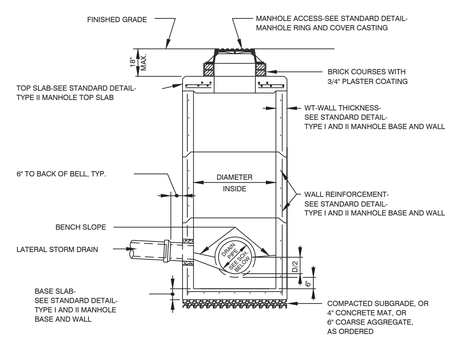
C= FKAA APPROVED DUAL CHECK VALVE: MUELLER No. H-14242 OR FORD HHS 31-323, HHS 31-344, OR APPROVED EQUAL
IF DOWNSTREAM BACKFLOW PREVENTOR (RPZ OR DCVA) IS REQUIRED, CURB STOP SHOULD BE INSTALLED IN LIEU OF DUAL CHECK.

D= SEALED REGISTER WATER METER

E= CUSTOMER TIE-IN POINT

NOTE:
1. MINIMUM DISTANCES BETWEEN METER INLETS/OUTLETS AND THE CLOSEST FITTINGS SHALL BE MAINTAINED PER METER MANUFACTURER'S REQUIREMENTS.

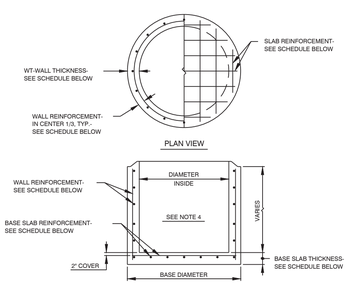
3 5/8 & 1 INCH METER DETAIL
NTS



SCHEDULE		
RECOMMENDED MIMINUM DIAMETER MANHOLE DIMENSION		
RCP	ERCP	DIA.
24"	N/A	4'
30"	19"x30"	5'
42"	24"x38"	6'
48"	32"x49"	7'
66"	38"x60"	8'

NOTE:
FOR GENERAL NOTES, SEE STANDARD DETAIL-STORM STRUCTURE NOTES.

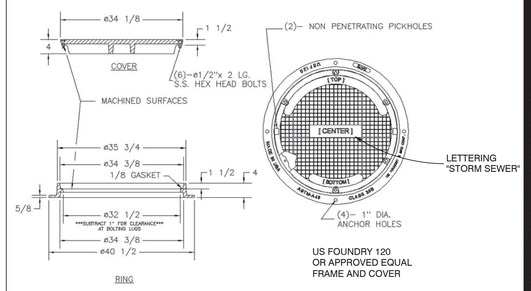
4 Precast Storm Manhole Detail
NTS



SCHEDULE					
DIAMETER INSIDE	BASE DIAMETER	WT WALL THICKNESS	WALL REINFORCMENT	BASE SLAB THICKNESS	BASE SLAB REINFORCEMENT
4'	5'-0"	6"	#4 @ 12" EW	8"	#6 @ 12" EW
5' (3)	6'-4"	8"	#4 @ 12" EW	8"	#6 @ 12" EW
6'	7'-4"	8"	#4 @ 12" EW	8"	#6 @ 12" EW
7'	8'-4"	8"	#4 @ 12" EW	8"	#6 @ 10" EW
8'	9'-4"	8"	#4 @ 12" EW	10"	#6 @ 10" EW

NOTES:
1. FOR GENERAL NOTES, SEE STANDARD DETAIL-STORM STRUCTURE NOTES.
2. WALL REINFORCEMENT MAY BE WELDED WIRE AS PER ASTM C-478.
3. MAXIMUM SIZE ALLOWED FOR TYPE I MANHOLE.
4. ADD 2 #4 REINFORCING BARS AT 3' CENTERS AT THE TOP AND SIDES OF ALL WALL OPENINGS.

5 Manhole Base & Wall Detail
NTS



6 Manhole Ring & Cover Detail
NTS

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243
PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8979
CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT
ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468

April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS: 1 2 3 4 5 6

CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

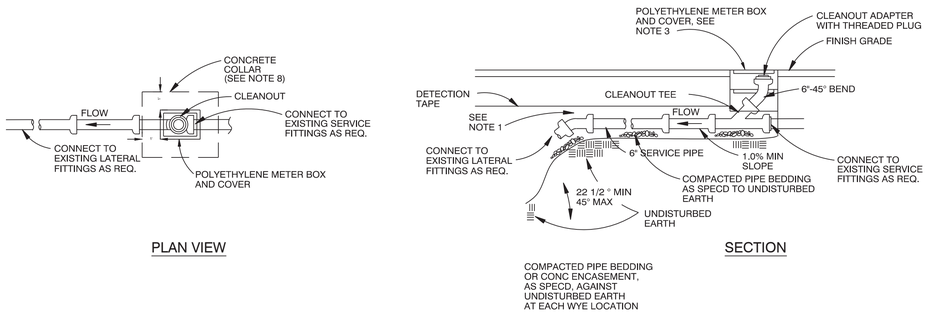
CIVIL DETAILS

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

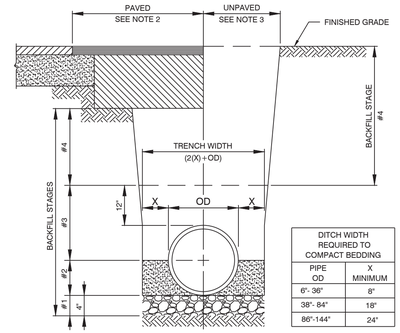
JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C-23

NOTES:

1. CONTRACTOR SHALL PROVIDE AN ADEQUATE SUPPLY OF 22 1/2°, 45° AND 6" WYES BENDS TO MEET VARYING FIELD CONDITIONS.
2. LENGTH OF SERVICE PIPE VARIES AT EACH SERVICE CONNECTION AND SHALL BE PROVIDED AS REQUIRED TERMINATE SERVICE AT LOCATION DIRECTED BY THE ENGINEER.
3. INSTALL MULTIPLE METER BOXES AS REQUIRED TO BRING TO GRADE.
4. IF SERVICE PIPE MATERIAL IS NOT THE SAME AS SEWER MAIN, CONNECTION SHALL BE APPROVED PRIOR TO CONSTRUCTION.
5. CONNECT AT TRENCH WALL OR AT SERVICE CONNECTION AT SEWER MAIN, AS DIRECTED BY THE ENGINEER.
6. WHERE ADEQUATE SEPARATION BETWEEN WATER MAIN AND SEWER LATERAL CANNOT BE PROVIDED INSTALL 8" SDR 35 SLEEVE AS DIRECTED BY THE ENGINEER.
7. FOR SERVICE CONNECTION REPAIRS: CONTRACTOR SHALL REPLACE A MINIMUM OF 6 LF OF OF 6 " PVC AND/OR FITTINGS AS REQUIRED.
8. ALL NEW CLEAN OUTS INSTALLED THAT ARE NOT IN CITY CONCRETE SIDEWALKS SHALL HAVE A 4" THICK CONCRETE COLLAR.



1 Typical Service Connection
NTS



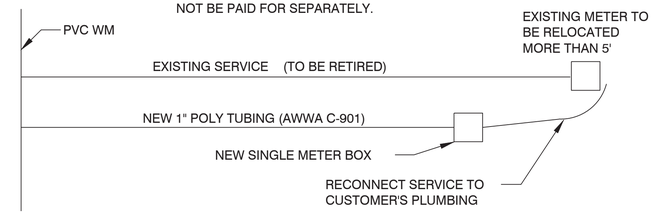
DITCH WIDTH REQUIRED TO COMPACT BEDDING	
PIPE OD	X MINIMUM
6"- 36"	8"
38"- 84"	18"
86"-144"	24"

SCHEDULE	
STAGE	MATERIAL
#1	BEDDING: WHERE DIRECTED GRANULAR MATERIAL (SAND, GRAVEL, OR RECLAIMED CONCRETE), W/WATERSTOP AT 100' INTERVALS.
#2	PIPE BEDDING: LOCAL SAND
#3	PIPE BACKFILL: LOCAL SAND TO 12" ABOVE TOP OF PIPE
#4	TRENCH BACKFILL: PAVED ROADWAYS-IN 6" LIFTS UNPAVED ROADWAYS-IN 6" LIFTS GRASS SURFACE-IN 12" LIFTS

NOTES:
1. ALL BACKFILL SHALL BE PLACED IN LIFTS AND COMPACTED AS PER SPECIFICATION.

2 Pipe Bedding Detail
NTS

ANY RELOCATION OF METER WITHIN A 5' RADIUS OF EXISTING LOCATION WILL BE CONSIDERED INCIDENTAL AND WILL NOT BE PAID FOR SEPARATELY.



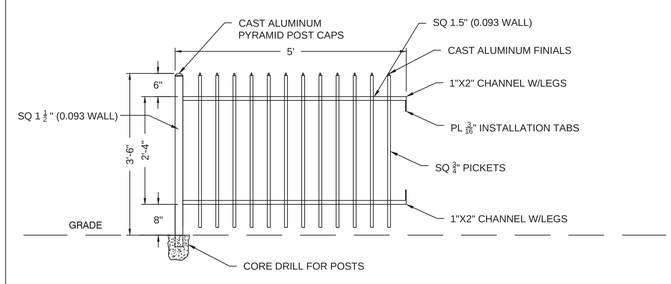
NOTE:
ALL WORK TO BE DONE IN PER LATEST FKAA STANDARDS

3 Water Meter Relocation
NTS

- The base anchor is designed for use in new concrete. The minimum concrete slab should be 28"w x 24" (front to back) by 10" deep.
- The anchor should be installed so that the metal top is completely level. The concrete must not be higher than the top surface of the anchor at any point within 4" of the edges of the anchor.
- If the surrounding area is not level, the concrete must be brought up to level,
- If an AC line or network connection will be made, it should be routed up through the center cutout on the anchor using a conduit.

Base anchor 0403-B0120

4 Pay Station Base/Anchor Detail
NTS



5 Fence Detail
NTS

Structure Table		
	Structure	Type
S-1	N/A	N/A
S-2	N/A	N/A
S-3	N/A	N/A
S-4	Inlet	5
S-5	Manhole	--
S-6	Inlet	5
S-7	Inlet	6
S-8	Manhole	J Bottom
S-9	Inlet	6
S-10	Inlet	6
S-11	Manhole	J Bottom
S-12	Inlet	6
S-13	Inlet	5
S-14	Inlet	5
S-15	Manhole	J Bottom
S-16	Inlet	6
S-17	Inlet	6
S-18	Inlet	F
S-19	Manhole	--
S-20	Inlet	6
S-21	Inlet	6
S-22	Manhole	--
S-23	Inlet	6
S-24	Inlet	5
S-25	Inlet	9
S-26	Manhole	J Bottom
S-27	Inlet	6
S-28	Inlet	6
S-29	Inlet	6
S-30	Manhole	--
S-31	Inlet	6
S-32	Inlet	5
S-33	Manhole	--
S-34	Inlet	5
S-35	Inlet	5
S-36	Manhole	--
S-37	Inlet	5
S-38	Manhole	J Bottom
S-39	Manhole	J Bottom

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT
PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION NO. 8979
KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FL FLORIDA 33040
TEL.: (305) 293-9440 FAX: (305) 296-0243
ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

ORIGINAL: DECEMBER 2014

REVISIONS:
1
2
3
4
5
6

CAROLINE STREET IMPROVEMENTS
KEY WEST, FL 33040
CIVIL DETAILS

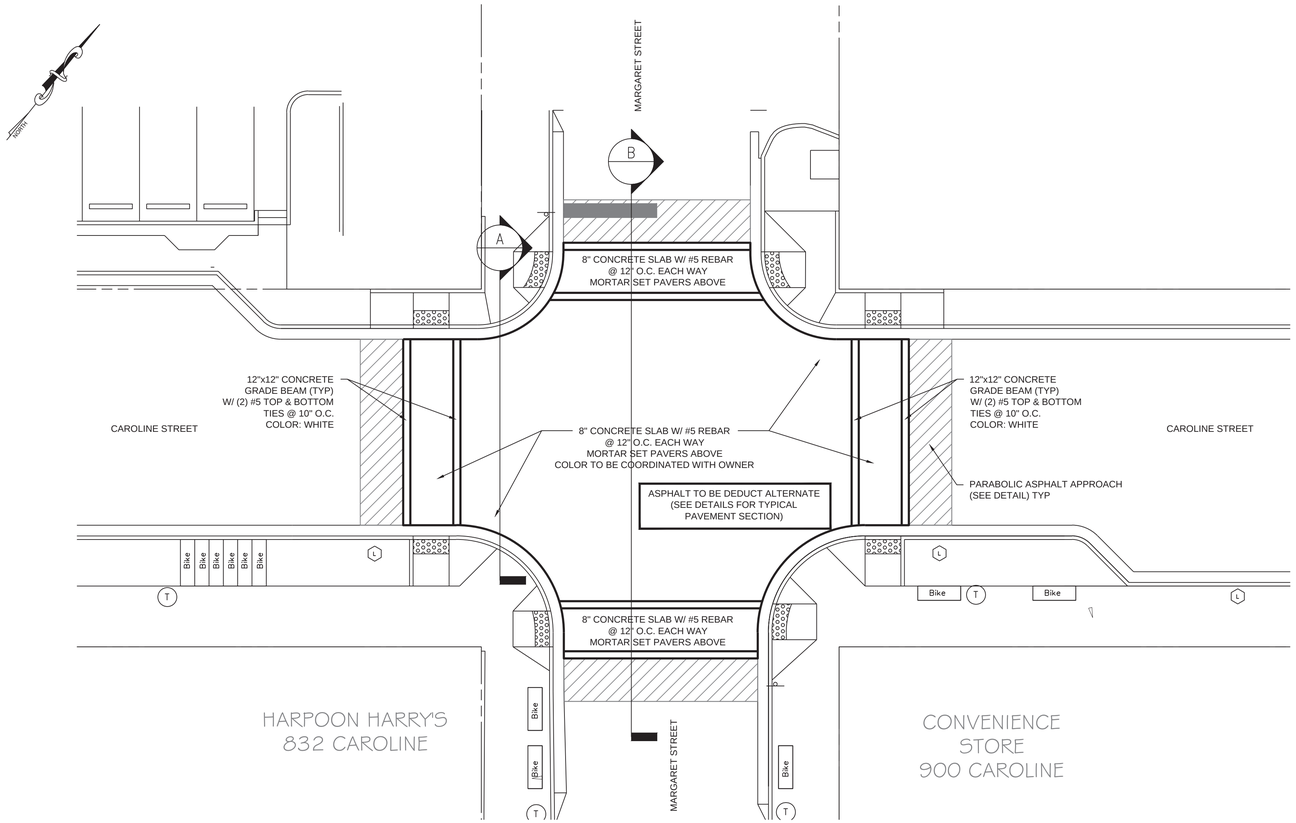
CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, 33041

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET
C-24

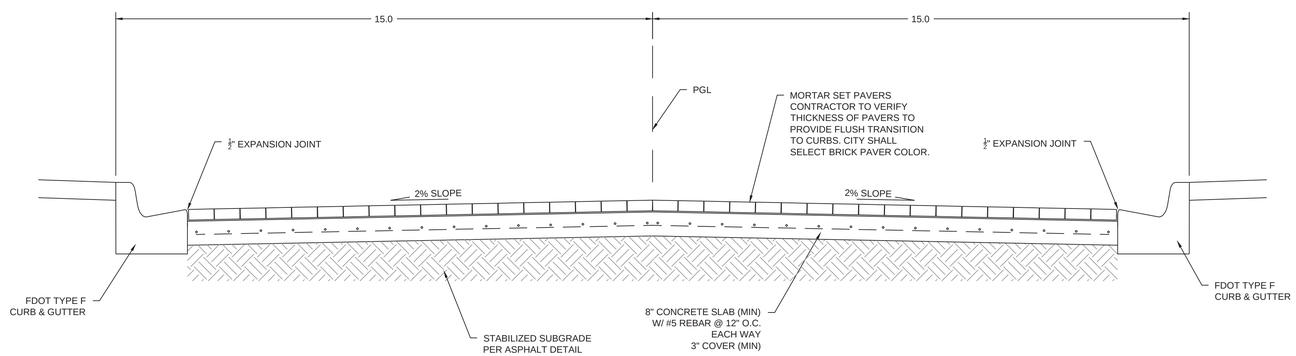
10' 0 10'

SCALE 1"=10'

BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF NOT TWO INCHES ON THIS SHEET ADJUST SCALES ACCORDINGLY

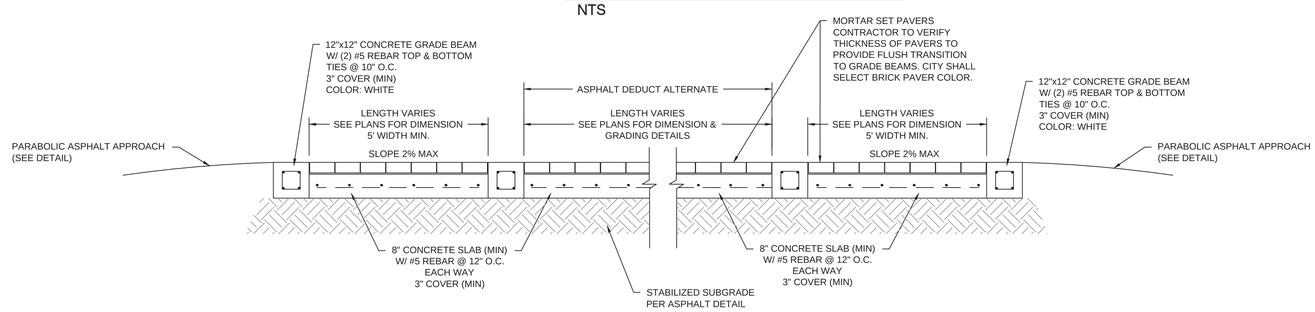


TYPICAL INTERSECTION PLAN VIEW



TYPICAL INTERSECTION DETAIL A

NTS



TYPICAL INTERSECTION DETAIL B

NTS

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING & DEVELOPMENT, INC
CERTIFICATE OF AUTHORIZATION No. 8579
KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 293-9440 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
April 9, 2015

REVISIONS: ORIGINAL: DECEMBER 2014
1
2
3
4
5
6

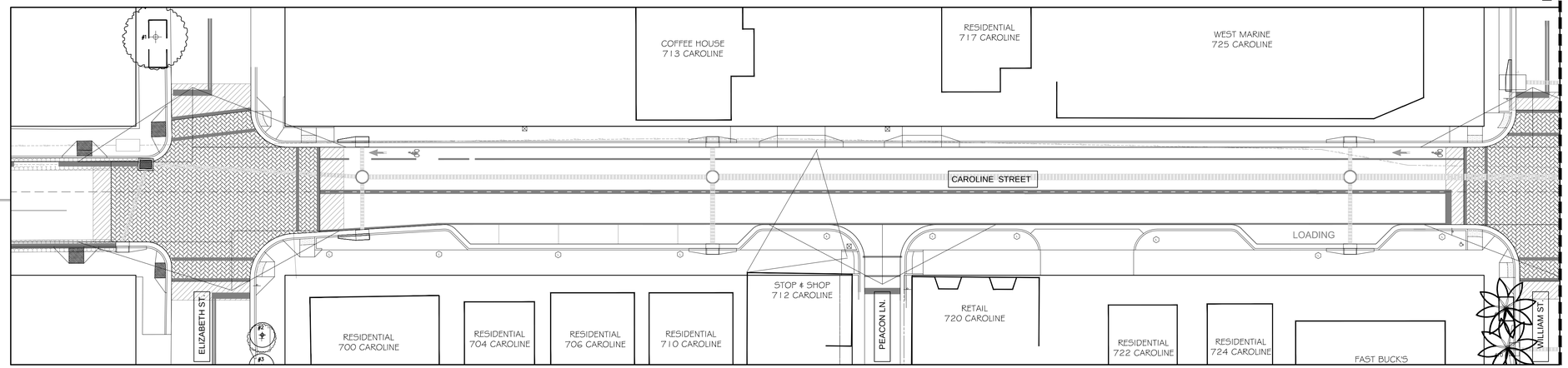
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

TYPICAL INTERSECTION DETAIL

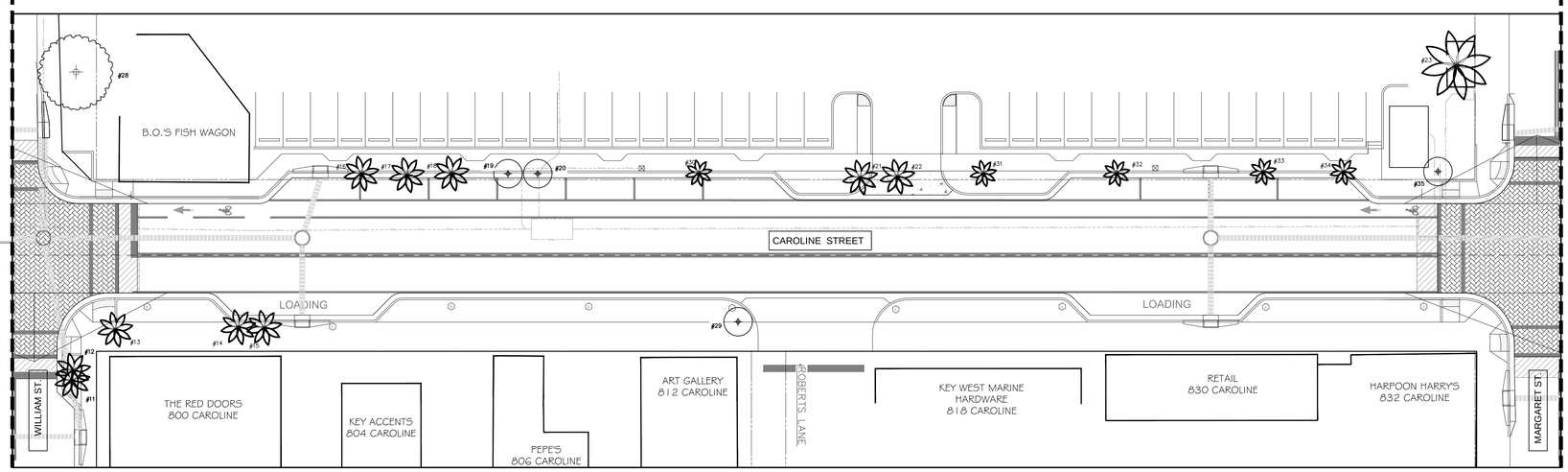
CITY OF KEY WEST
P.O. BOX 1409
KEY WEST, 33041

JOB NO. 111008
DRAWN BGO
DESIGNED AEP
CHECKED AEP
QC
SHEET C- 25



1 L-1.0 TREE DISPOSITION PLAN

SCALE: 1" = 20'-0"



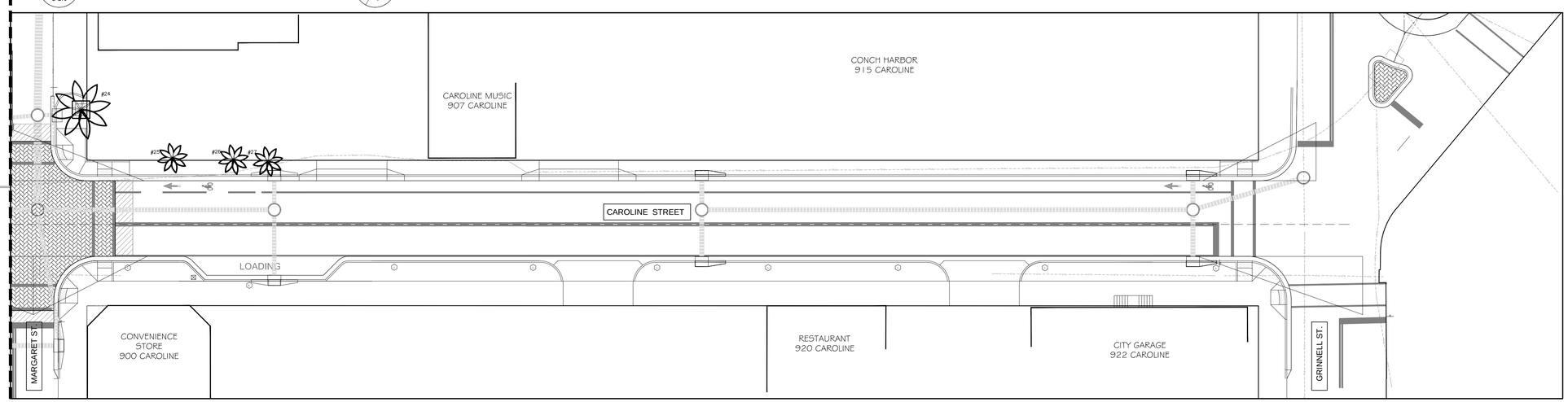
2 L-1.0 TREE DISPOSITION PLAN

SCALE: 1" = 20'-0"

NUMBER	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	CALIPER	CONDITION	STATUS	NOTES
1	Pongam pinnata	Pongam Tree	30'-35'	20'-25'	18"	Fair	Remain / Provide Protection	City Property/Outside Project Limits
2	Conocarpus erectus	Green Buttonwood	10'-15'	5'-10	5"	Fair	Remove	Adjacent to Excavation/Under OH Wires
3	Conocarpus erectus sericeus	Silver Buttonwood	10'-15'	5'-10	5"	Fair	Remove	Adjacent to Excavation/Under OH Wires
4	Not Used							
5	Not Used							
6	Not Used							
7	Not Used							
8	Not Used							
9	Cocos nucifera	Coconut Palm	25'-30'	20'	12"	Good	Remain / Provide Protection	Plant Bed Provided in Proposed Paving Plan
10	Cocos nucifera	Coconut Palm	25'-30'	20'	12"	Good	Transplant to City Property	Located in Proposed Paving/Drainage Area
11	Ravenala madagascariensis	Travellers Palm	15'-20'	15'-20'	8"	Fair	Remove	Located in Proposed Sewer Line
12	Ravenala madagascariensis	Travellers Palm	15'-20'	15'-20'	8"	Fair	Remove	Located in Proposed Sewer Line
13	Syagrus romanzoffiana	Queen Palm	10'-15'	5'-10'	7"	Poor	Remove	Located in Proposed Paving Area
14	Sabal palmetto	Sabal Palm	20'-25'	10'	12"	Good	Transplant to City Property	Located in Proposed Paving Area
15	Sabal palmetto	Sabal Palm	20'-25'	10'	12"	Good	Transplant to City Property	Located in Proposed Paving Area
16	Sabal palmetto	Sabal Palm	20'-25'	10'	12"	Good	Transplant to City Property	Located in Proposed Paving Area
17	Sabal palmetto	Sabal Palm	20'-25'	10'	12"	Good	Transplant to City Property	Located in Proposed Paving Area
18	Sabal palmetto	Sabal Palm	20'-25'	10'	12"	Good	Transplant to City Property	Located in Proposed Paving Area
19	Conocarpus erectus sericeus	Silver Buttonwood	5'-10'	5'-10'	7"	Poor	Remove	Located in Proposed Paving Area
20	Conocarpus erectus sericeus	Silver Buttonwood	5'-10'	5'-10'	7"	Poor	Remove	Located in Proposed Paving Area
21	Sabal palmetto	Sabal Palm	20'-25'	10'	12"	Fair	Transplant to City Property	Located in Proposed Paving Area
22	Sabal palmetto	Sabal Palm	20'-25'	10'	12"	Fair	Transplant to City Property	Located in Proposed Paving Area
23	Cocos nucifera	Coconut Palm	25'-30'	20'-22'	12"	Fair	Remain / Provide Protection	Outside Project Limits
24	Cocos nucifera	Coconut Palm	25'-30'	20'-22'	12"	Fair	Remain / Provide Protection	Plant Bed Provided in Proposed Paving Area
25	Thrinax radiata	Thatch Palm	10'-15'	5'-10'	5"	Good	Transplant to City Property	Located in Proposed Paving Area
26	Thrinax radiata	Thatch Palm	10'-15'	5'-10'	5"	Good	Transplant to City Property	Located in Proposed Paving Area
27	Thrinax radiata	Thatch Palm	10'-15'	5'-10'	5"	Good	Transplant to City Property	Located in Proposed Paving Area
28	Ficus sp.	Ficus	25'-30'	20'-25'	24"	Fair	Remain	Outside Project Limits
29	Conocarpus erectus sericeus	Silver Buttonwood	10'-15'	10'-15'	3"/3"	Poor	Remove	Located in Proposed Paving Area
30	Thrinax radiata	Thatch Palm	3'-5'	3'-5'	4"	Fair	Transplant to City Property	Located in Proposed Paving Area
31	Thrinax radiata	Thatch Palm	3'-5'	3'-5'	4"	Fair	Transplant to City Property	Located in Proposed Paving Area
32	Thrinax radiata	Thatch Palm	3'-5'	3'-5'	4"	Fair	Transplant to City Property	Located in Proposed Paving Area
33	Thrinax radiata	Thatch Palm	5'-8'	3'-5'	4"	Fair	Transplant to City Property	Located in Proposed Paving Area
34	Thrinax radiata	Thatch Palm	3'-5'	3'-5'	4"	Fair	Transplant to City Property	Located in Proposed Paving Area
35	Bursera simarouba	Gumbo Limbo	5'-10'	6'-8'	3 3/4"	Fair	Transplant to City Property	Located in Proposed Paving Area

4 L-1.0 EXISTING TREE DISPOSITION LIST

SCALE: N.T.S.



3 L-1.0 TREE DISPOSITION PLAN

SCALE: 1" = 20'-0"

Notes:

1. City of Key West Urban Forestry Manager to designate final transplant location for palms scheduled to be transplanted to City of Key West property outside project limits.
2. Location, height, spread and caliper of trees/palms is approximate and must be field verified by Surveyor prior to construction commencing.
3. Civil Engineering, Site Triangles and Survey provided by Perez Engineering and Development, Inc.
4. See Civil Engineering Plans for all hardscape, site lighting and site furniture details and dimensioning.
5. Tree Removal and Transplanting Permit have not been issued for this project. Contractor shall contact City of Key West Forester for permit processing.

LIMITS OF EXISTING TREE & PALM PROTECTION ZONE

BID DOCUMENTS

ELIZABETH NEWLAND

LANDSCAPE ARCHITECTURE, LLC

2525 Ponce de Leon Blvd.,
Suite 300
Coral Gables, Florida 33134
305.481.6301
liznewland@bellsouth.net

Seal:

ELIZABETH NEWLAND
Registered Landscape Architect
LA0001288
State of Florida

Consultants:

Revisions:

Notes: 05-14-15

CAROLINE ST. IMPROVEMENTS

KEY WEST, FLORIDA

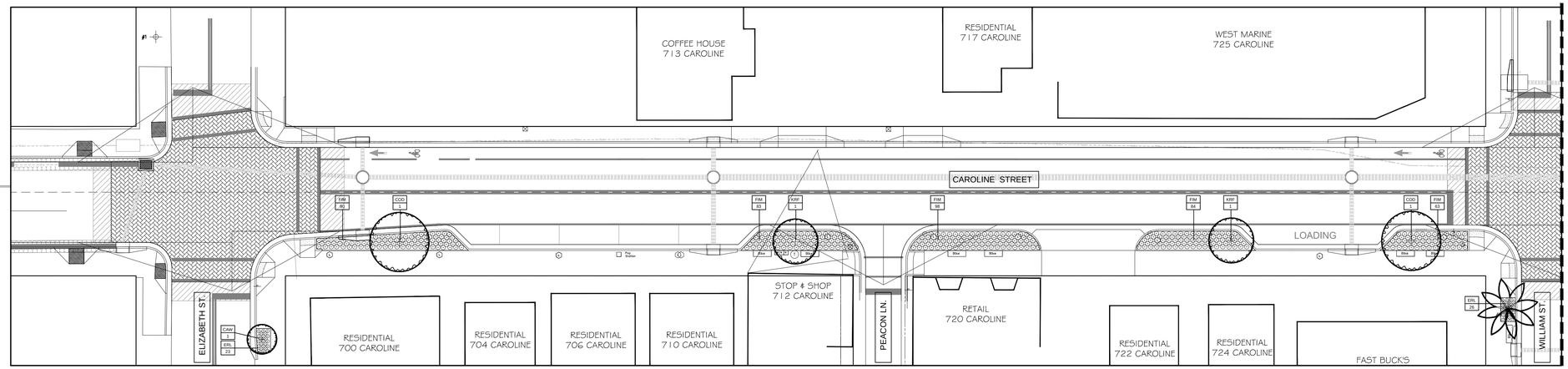
Drawing Size	Project #:
24x36	
Drawn By: EN	Checked By: EN

Title: EXISTING TREES & PALMS DISPOSITION PLAN

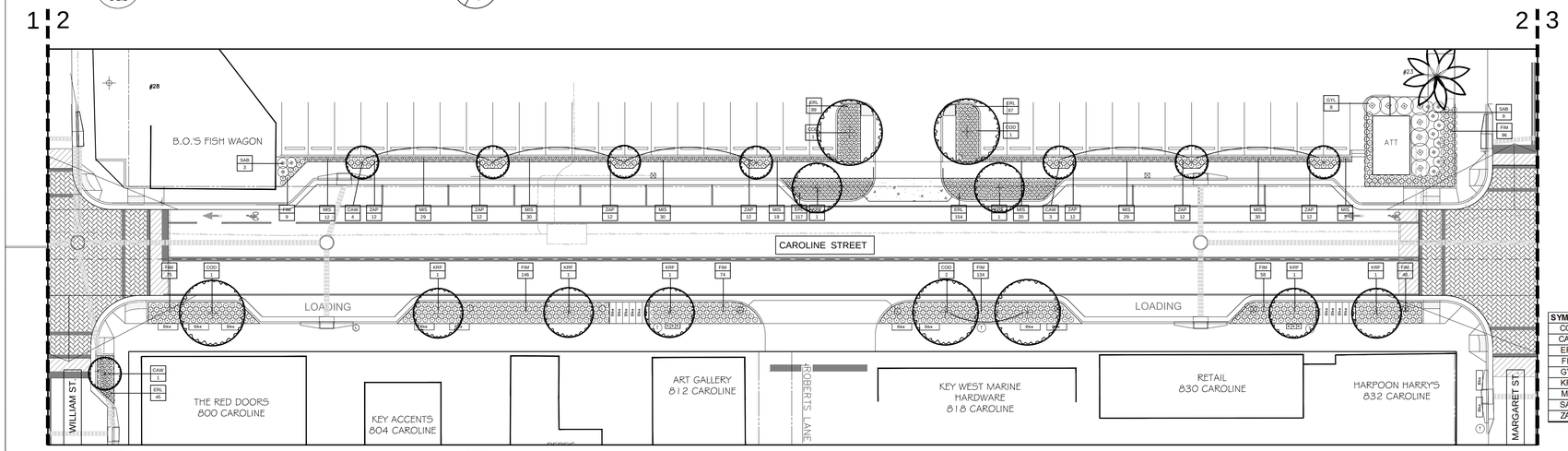
Sheet Number:

L-1.0

Date: - February 10, 2015



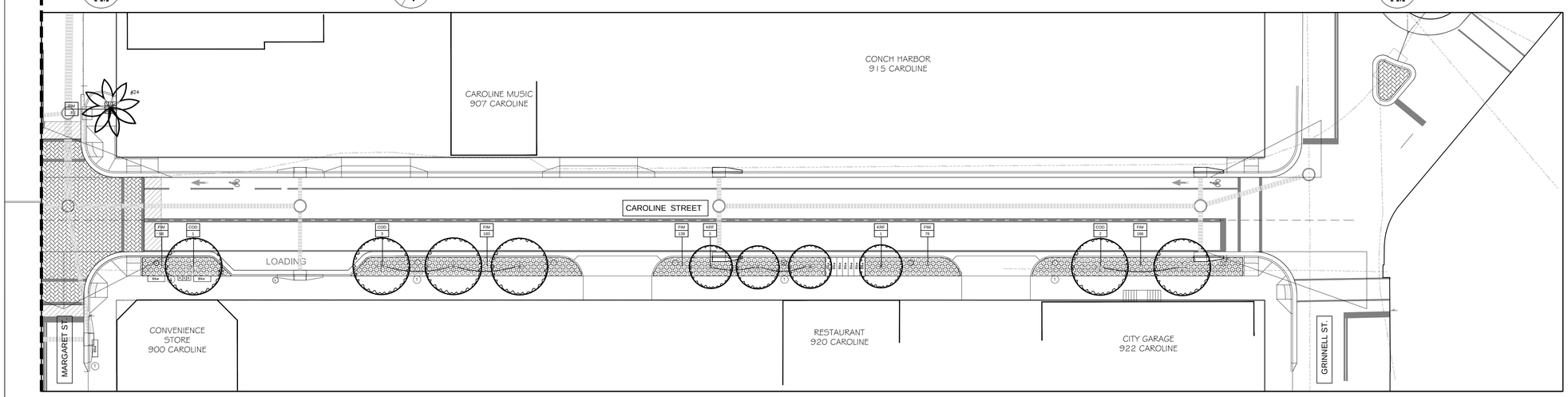
1 L-1.1 LANDSCAPE PLAN
SCALE: 1" = 20'-0"



2 L-1.1 LANDSCAPE PLAN
SCALE: 1" = 20'-0"

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	NATIVE	CALIPER	HEIGHT	CANOPY	CONTAINER	SPACING	CONDITION
COD	13	Coccoloba diversifolia	Pigeon Plum	Yes	3"-4"	14'-16'	8'-10'	100 Gal	As Shown	5' CT/Standard
CAW	9	Canella winterana	Cinnamon Bark	Yes	2"-3"	12'-14'	5'-6'	65 Gal	As Shown	5' CT/Standard
ERL	541	Ernodea littoralis	Beach Creeper	Yes	NA	12"-18"	12"-18"	1 Gal	12" O.C.	
FIM	1700	Ficus microcarpa 'Green Island'	Green Island Ficus	No	NA	12"-18"	12"-18"	3 Gal	18" O.C.	
GYL	8	Gymnanthes lucida	Crabwood	Yes	2"-3"	5'-6'	2'-3'	25 Gal	As Shown	Shrub Type
KRF	13	Krugiodendron ferreum	Black Ironwood	Yes	3"-4"	14'-16'	8'-10'	100 Gal	As Shown	5' CT/Standard
MIS	202	Microsorum scolopendrium	Wart Fern	No	NA	12"-16"	12"-16'	3 Gal	As Shown	
SAB	12	Savia bahamensis	Maidenbush	Yes	NA	24"-36"	24"-36"	7 Gal	As Shown	
ZAP	84	Zamia pumila	Coontie	Yes	NA	18"-24"	18"-24"	7 Gal	As Shown	

4 L-1.1 PLANT LIST
SCALE: N.T.S.



3 L-1.1 LANDSCAPE PLAN
SCALE: 1" = 20'-0"

BID DOCUMENTS

Notes:
1.Civil Engineering, Site Triangles and Survey provided by Perez Engineering and Development, Inc.
2. See Civil Engineering plans for all hardscape, site lighting and site furniture construction details and dimensioning.

ELIZABETH NEWLAND
LANDSCAPE ARCHITECTURE, LLC

2525 Ponce de Leon Blvd.,
Suite 300
Coral Gables, Florida 33134
305.481.6301
liznewland@bellsouth.net

Seal:

ELIZABETH NEWLAND
Registered Landscape Architect
LA0001288
State of Florida

Consultants:

Revisions:

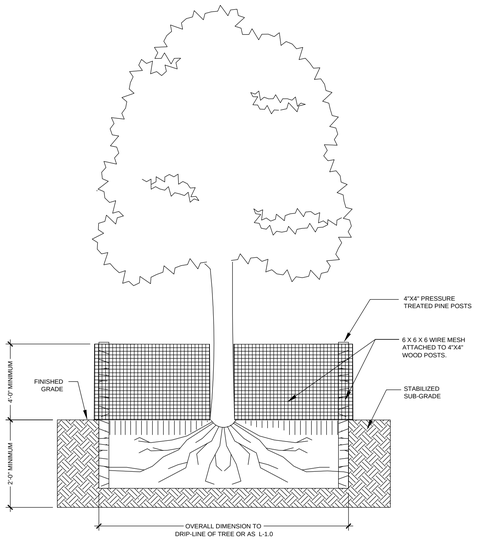
CAROLINE ST. IMPROVEMENTS
KEY WEST, FLORIDA

Drawing Size	Project #:
24x36	
Drawn By: EN	Checked By: EN

Title:
LANDSCAPE PLAN

Sheet Number:
L-1.1

Date: - February 10, 2015



01
L-2.0

TREE & PALM PROTECTION DETAIL

SCALE: N.T.S.

1. Before beginning work, the General Contractor is required to meet at the site with the City of Key West Urban Forestry Manager, Landscape Architect and Landscape Contractor to review all work procedures, access routes, storage areas and tree protection measures.
2. The General Contractor shall consult with an ISA Certified Arborist regarding the condition of the existing trees and palms and shall hire an ISA Certified Arborist to perform tree care that may be needed to mitigate risks prior to construction commencing. General Contractor is responsible for coordinating a meeting with ISA Certified Arborist, Landscape Architect, City of Key West Urban Forester and Landscape Contractor prior to tree care and construction commencing.
3. All tree pruning necessary shall be in accordance with ANSI A-300 Standards.
4. The General Contractor shall erect fences to protect all trees and palms scheduled to remain as per Tree Disposition Plan L-1.0, Existing Tree Disposition List Detail 04/L-1.0, and as per Tree Protection Detail 01/L-2.0 prior to construction commencing. Fences define a specific protection zone for each tree or group of trees to be protected. Fences are to remain until all site work has been completed.
5. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.
6. All underground utilities and drain or irrigation lines shall be routed outside the tree protection zone. If lines must traverse the protection area, they shall be tunneled or bored under the tree.
7. No construction materials, equipment, spoil, or waste or washout water may be deposited, stored, or parked within the tree protection zone (fenced area).
8. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use. Any pesticides used on site must be safe for use around trees and not easily transported by water.
9. If injury should occur to any tree during construction, the General Contractor is responsible for notifying the City of Key West Urban Forester, ISA Certified Arborist, Landscape Architect and Landscape Contractor as soon as possible so that appropriate treatments can be applied.
10. The General Contractor shall notify the City of Key West Urban Forester, ISA Certified Arborist, Landscape Architect and Landscape Contractor of any grading, construction, demolition, or other work that is expected to encounter tree roots.
11. Additional tree pruning that may be required for clearance during construction shall be approved by City of Key West Urban Forestry Manager and performed by an ISA Certified Arborist as per ANSI A-300 Standards.
12. All trees remaining on site shall be irrigated three times a week for the duration of construction. At each irrigation procedure shall apply to the soil area within the tree protection zone 2-3 gallons of water per inch of trunk caliper.
13. Erosion control devices such as silt fencing, debris basins, and water diversion structures shall be installed to prevent siltation and/or erosion within the tree protection zone.
14. Before grading, pad preparation, or excavation for foundations, footings, walls, sidewalks, curbs or trenching near trees the trees shall be root pruned 12 inches outside the tree protection zone by cutting all roots cleanly to a depth of 36 inches. Roots shall be cut manually by digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root-pruning equipment.
15. Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.
16. If temporary haul or access roads must pass over the root area of trees to be retained, a road bed of 6 inches of mulch or gravel shall be created to protect the soil. The road bed material shall be replenished as necessary to maintain a 6-inch depth.
17. Spoil from trenches, basements, or other excavations shall not be placed within the tree protection zone, either temporarily or permanently.
18. No burn piles of debris pits shall be placed within the tree protection zone. No ashes, debris, or garbage may be dumped or buried within the tree protection zone.
19. Maintain fire-safe areas around fenced tree protection areas. No heat sources, flames, ignition sources or smoking are allowed near mulch or trees.

02
L-2.0

TREE & PALM PROTECTION NOTES

SCALE: N.T.S.

1. Landscape Contractor shall maintain transplanted materials during transplanting procedure by watering, weeding, mowing, spraying, fertilizing, pruning and other horticultural practices.
2. Landscape Contractor is responsible for verifying locations of all underground and overhead utilities and easements prior to commencing work. All Utility companies and/or the General Contractor shall be notified to verify utility locations prior to digging. Utility trenching is to be coordinated by the General Contractor prior to beginning of project. The Owner or Landscape Architect shall not be responsible for damage to utility or irrigation lines.
3. The Landscape Contractor shall comply with all local and State codes and shall be responsible for obtaining all applicable permits.
4. Landscape Architect may inspect the relocated materials to ensure compliance with horticultural practices as noted. Landscape Architect will submit a written report to Landscape Contractor of any deficiencies found during the maintenance period.
5. The Landscape Contractor shall be responsible for guaranteeing the transplanted palms for a period of one year. At the time of final inspection all transplanted palms that are not in a healthy growing condition shall be replaced by the Landscape Contractor.
6. Transplanting Operations: The Landscape Contractor shall take all precautions to minimize shock of transplanting in accordance with standard arboriculture procedures that include:

   A. The diameter of the root ball shall be a minimum of 36" diameter for Sabal palmetto and Thrinax radiata palms. The diameter of the root ball shall be a minimum of 48" for Cocos nucifera palms.
   B. All roots small shall be cleanly cut with a sharp spade, a clean-saw or chainsaw depending on the size of the root.
   C. For all palms except Sabal palmetto, the lower fronds shall be pruned leaving 7-11 fronds that can be tied without creating an extensive amount of weight that may damage the heart of the palm. The Sabal palmetto shall have all fronds cut to 12" without damaging the bud.
   D. The root ball shall be watered prior to relocating to keep the root ball intact and to protect the roots from drying out during the transplanting process.
   E. Transplanting must occur within 24 hours after being dug for relocation. Plants should be kept in shade and the heart of the palm must be kept moist.
   F. Digging and preparation of the new hole for the transplant shall be done prior to removing the palm from the existing location.
   G. The depth of the new hole shall be equal to the depth of the root ball and the width shall be equal to twice the width of the root ball.
   H. Palms shall be lifted from the ground with heavy equipment designed specifically for palm relocation so that the trunk and fronds are not impacted and damaged by the equipment.
   I. The slings used to lift the heavy weight palms shall be non-binding nylon type slings that are wrapped under the root ball to support the weight of the palm.
   J. The slings used to lift the lighter weight palms shall be non-binding nylon type slings that are wrapped around the trunk to support the weight of the palm. Padding on the sling may be necessary so that the trunk or boots are not damaged.
   K. The palm shall be planted at its original planting level prior to relocation. The palm shall be centrally positioned in the hole and set straight, plumb or normal to the growth pattern of the palm prior to transplanting.
   L. The palm shall be backfilled according to Planting Detail 01/L2.1, Detail 02 /L-2.1 and Detail 03/L-2.1 with a soil mix consisting of 30% inland muck and 70% freshwater sand.
   M. The Landscape Contractor is responsible for providing water to deep root water palms at installation to eliminate air pockets in the backfill mix prior to mulching.
   N. A 4" saucer shall be created around the edge of the plant pit to help hold water.
   O. Provide a minimum of 3" layer of mulch over the saucer and backfill area to conserve moisture and prevent evaporation. Do not mulch on top of root ball.
   P. Install palm bracing as per Planting Detail 01/L2.1, Detail 02/L-2.1 and Detail 03/L-2.1 to ensure stability of palm during time period after transplanting.
   Q. During the guarantee period the Landscape Contractor is responsible for resetting any palms that are not vertical when caused by winds less than 75 MPH.
   R. After the transplanted trees are in their final location the Landscape Contractor will be responsible for obtaining water and watering to maintain soil moisture during the guarantee period until an automatic irrigation system has been installed providing 100% coverage. Watering shall be provided at a minimum of:

   First Month- Daily; Second Month- 3 Times Per Week; Third and Fourth Month 2 Times Per Week; Last Eight Months-1 Time Per Week. At each irrigation procedure apply 2-3 gallons of water per inch of trunk caliper to the top of the root ball.

03
L-2.0

PALM TRANSPLANTING NOTES

SCALE: N.T.S.

GENERAL NOTES

1. Landscape Contractor is responsible for verifying locations of all underground and overhead utilities and easements prior to commencing work. All Utility companies and/or the General Contractor and Irrigation Contractor shall be notified to verify existing and proposed utility locations prior to Landscape Contractor digging. The Owner or Landscape Architect shall not be responsible for damage to utility or irrigation lines.
2. Landscape Contractor shall examine the site and become familiar with conditions affecting the installation prior to submitting bids. Failure to do so shall not be considered cause for future extras or complaints.
3. Landscape Contractor is responsible for verifying all plant quantities prior to bidding and within (7) seven calendar days of receipt of these plans shall notify the Landscape Architect in writing of any and all discrepancies. In case of discrepancies planting plan quantities shall take precedence over plant list quantities.
4. No substitutions or alternate plant material shall be used without prior consent of the Landscape Architect. Alternate plant material shall meet same specifications as original selection. Plant material supply is the responsibility of the Landscape Contractor, and he/she shall take steps to insure availability at time of planting.
5. All plant material shall meet the size on the plant list. Plant material shall not exceed the specifications without prior consent of the Landscape Architect. In all cases meeting the height and the spread specifications shall take precedence over container size.
6. The Landscape Contractor is to remove and discard from site existing unwanted trees, palms, shrubs, groundcovers, sod and weeds within landscape areas.
7. Landscape Contractor to provide finish grade in plant beds and planters 3" lower than finish elevation of hardscape elements to accommodate 3" layer of mulch. Hardscape elements include roads, driveways, curbs, sidewalks and planters.

PLANTING NOTES

1. Landscape Contractor shall furnish and install all trees, palms, shrubs, groundcover, planting soil, fertilizer, soil amendments, herbicide, pre-emergence herbicide, gravel and mulch.
2. Landscape Contractor shall guarantee all plant material for a period of one year from the day of final acceptance by the Landscape Architect and Owner.
3. All plant material shall be Florida #1 or better, as defined in the Grades and Standards for Nursery Plants, Part I and II by the State of Florida Department of Agriculture.
4. Landscape Contractor is responsible for scheduling a nursery visit for Landscape Architect to approve all trees, palms and shrubs prior to delivery to the project site.
5. Landscape Contractor is responsible for scheduling a site stake out approval by Landscape Architect to approve the stake out of all trees and palms prior to installation.
6. Landscape Contractor is responsible for scheduling a site stake out approval by Landscape Architect to approve stake out of all shrubs and groundcover prior to installation.
7. Landscape Contractor shall coordinate work with that of the Irrigation Contractor.
8. After existing weeds and grass have been removed from site the Landscape Contractor shall determine if a pre-emergence herbicide is necessary. A Florida Licensed Pesticide Applicator shall treat new plant areas with pre-emergence herbicide in accordance with manufacturer's recommendations if needed. Landscape Contractor shall not install new vegetation until manufacturer's recommended duration for no planting after installation of pre-emergence herbicide has been met.
9. The Landscape Contractor shall maintain all finish grades for existing berms and swales established by General Contractor. Any impacts to elevations of berms or swales as a result of plant material installation shall be repaired to correct finish grade prior to installing mulch, sod or gravel.
10. Planting soil shall be a mix of 50% inland muck and 50% freshwater sand for shrubs and trees and 30% inland muck and 70% sand for palms. Planting soil mix/backfill shall be clean and free of construction debris, weeds, rock and noxious pests and disease.
11. All soil mix in plant beds for groundcovers, shrubs, palms and trees shall be as per details.
12. All planting areas and planting pits shall be tested for sufficient percolation prior to final planting and irrigation installation to ensure proper drainage. Plant beds in parking lots and in areas compacted by heavy equipment shall be de-compacted so that drainage is not impeded.
13. All synthetic burlap, string, cords or wire baskets shall be removed before trees are planted. All synthetic tape shall be removed from branches and trunks prior to final acceptance. The top 1/3 of the burlap shall be removed or tucked into the plant pit before the trees are backfilled.
14. Landscape Contractor is responsible for mulching all plant beds with a minimum 3" layer of natural color Eucalyptus or Enviromulch immediately after planting. In no case shall Cypress mulch or red color mulch be used.
15. Landscape Contractor shall guy and stake all trees and palms as per specifications and details. No paint shall be applied to any surface of trees or palms. No nails, screws or wiring shall penetrate the outer surface of trees and palms. All guying and staking shall be removed twelve months after planting.
16. All palm and tree guy wires and bracing are to be flagged for visibility for their duration. All unattended and unplanted tree pits shall be properly barricaded and flagged during construction.
17. Landscape Contractor is responsible for obtaining approval of Landscape Architect prior to pruning any new or existing plant material. Broken branches are to be pruned by and ISA Certified Arborist according to ANSI A-300 Guidelines for Tree Pruning.
18. Landscape Contractor to provide all plants with watering as indicated below or until such time that an automatic electric irrigation system has been installed that provides 100% coverage of landscape:
    First Month-Daily Watering, Second Month-3 Times Per Week, Third and Fourth Month-2 Times Per Week, Last Eight Months-1 Time Per Week. At each watering procedure apply to the top of the root ball 2-3 gallons of water per inch of trunk caliper.
19. Landscape Contractor is responsible for obtaining an existing soil test, planting mix soil test and plant analysis to determine if fertilizer or other soil amendments are necessary. Landscape Contractor is responsible for selecting the appropriate fertilizers or other soil amendments for each plant. Fertilizer shall comply with State of Florida fertilizer laws and shall be installed according to manufacturer's recommendations.
20. Irrigation Contractor to provide complete, fully functional automatic electric irrigation system, see specifications.

04
L-2.0

PLANTING NOTES

SCALE: N.T.S.

BID DOCUMENTS

Notes:
1.Civil Engineering, Site Triangles and Survey provided by Perez Engineering and Development, Inc.
2. See Civil Engineering plans for all hardscape, site lighting and site furniture construction details and dimensioning.

ELIZABETH NEWLAND
L A N D S C A P E
ARCHITECTURE, LLC

2525 Ponce de Leon Blvd.,
Suite 300
Coral Gables, Florida 33134
305.481.6301
liznewland@bellsouth.net

Seal:

ELIZABETH NEWLAND
Registered Landscape Architect
LA0001288
State of Florida

Consultants:

Revisions:

CAROLINE ST. IMPROVEMENTS

KEY WEST, FLORIDA

Drawing Size	Project #:
24x36	
Drawn By: EN	Checked By: EN

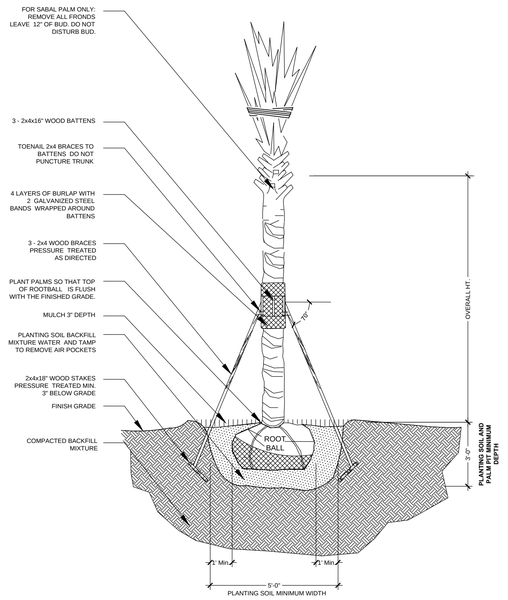
Title:

PLANTING NOTES & DETAILS

Sheet Number:

L-2.0

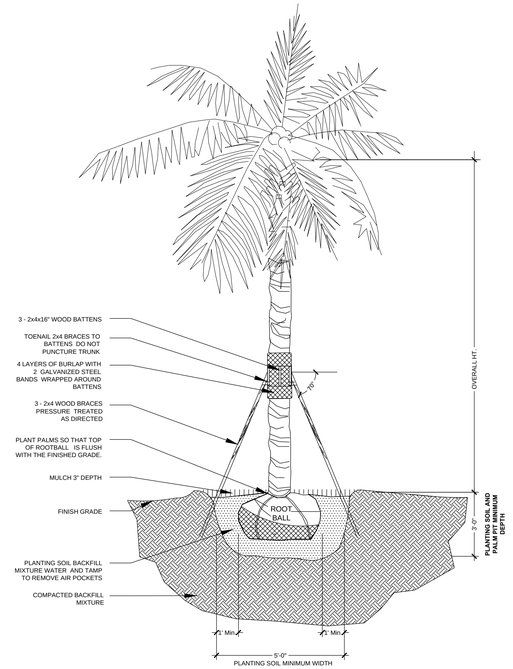
Date: - February 10, 2015



01 L-2.1

SABAL PALM PLANTING DETAIL

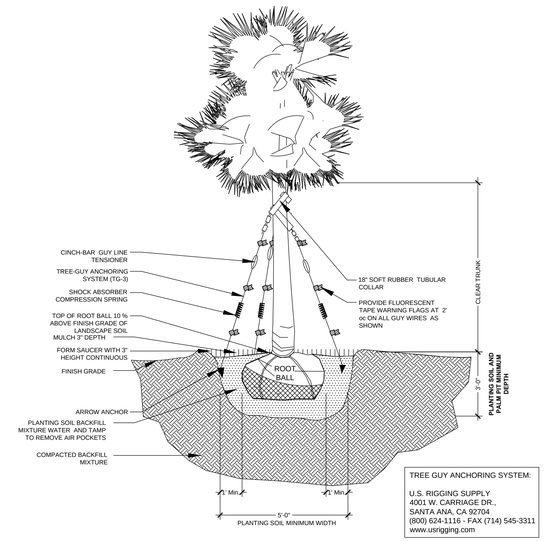
SCALE: N.T.S.



02 L-2.1

PALM PLANTING DETAIL

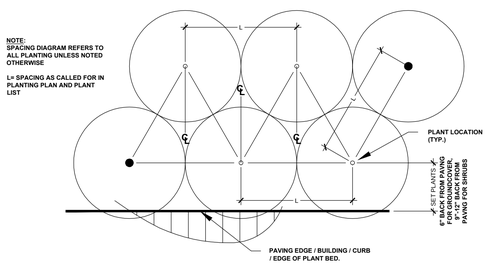
SCALE: N.T.S.



03 L-2.1

THRINAX PALM PLANTING DETAIL

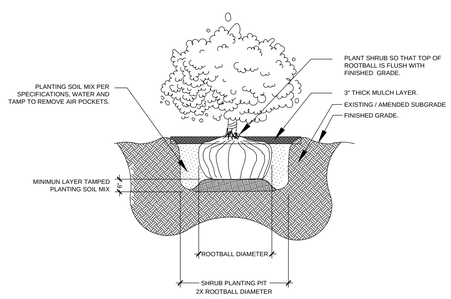
SCALE: N.T.S.



04 L-2.1

SHRUB PLANTING DETAIL

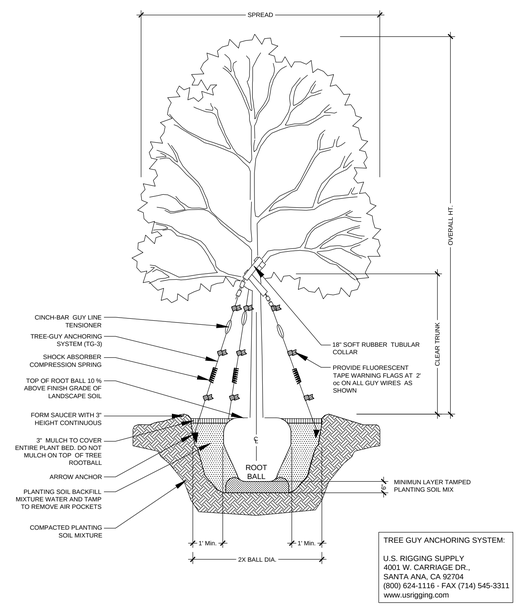
SCALE: N.T.S.



05 L-2.1

SHRUB PLANTING DETAIL

SCALE: N.T.S.



06 L-2.1

TREE PLANTING DETAIL

SCALE: N.T.S.

BID DOCUMENTS

Notes:
1.Civil Engineering, Site Triangles and Survey provided by Perez Engineering and Development, Inc.
2. See Civil Engineering plans for all hardscape, site lighting and site furniture construction details and dimensioning.

ELIZABETH NEWLAND
L A N D S C A P E
ARCHITECTURE, LLC

2525 Ponce de Leon Blvd.,
Suite 300
Coral Gables, Florida 33134
305.481.6301
liznewland@bellsouth.net

Seal:

ELIZABETH NEWLAND
Registered Landscape Architect
LA0001288
State of Florida

Consultants:

Revisions:

CAROLINE ST. IMPROVEMENTS

KEY WEST, FLORIDA

Drawing Size	Project #:
24x36	
Drawn By: EN	Checked By: EN

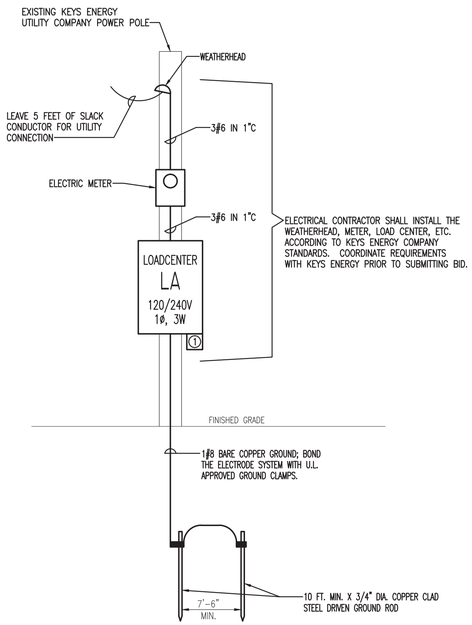
Title:

PLANTING DETAILS

Sheet Number:

L-2.1

Date: - February 10, 2015



POWER RISER DIAGRAM TYPICAL FOR PANELS LA,LB & LC (TOTAL OF 3 SEPARATE LOCATIONS)

NOT TO SCALE

KEYNOTES:

1. SURGE SUPPRESSOR EQUAL TO SURGE SUPPRESSION MODEL SRES1S1 – INSTALL PER MANUFACTURER'S RECOMMENDATIONS

CIRCUIT BREAKER PANEL SCHEDULE PANEL LA

120/240 VOLT 1ø 3W
60 AMP MAIN BREAKER

SURFACE MOUNTED
NEMA 3R ENCLOSURE
FURNISH WITH LOCKABLE COVER

CKT	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	LOAD KVA		BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT
1	DECORATIVE STREET LIGHTS	2	20	1.1		20	1	SPARE	2
3	↑	↑	↑			30	2	SURGE SUPPRESSOR	4
5	SPARE	1	20			↑	↑	↑	6

TOTAL CONNECTED LOAD: 1.10 KVA
MINIMUM INTERRUPTING CAPACITY: 10,000 AMPS SYMMETRICAL

CIRCUIT BREAKER PANEL SCHEDULE PANEL LB

120/240 VOLT 1ø 3W
60 AMP MAIN BREAKER

SURFACE MOUNTED
NEMA 3R ENCLOSURE
FURNISH WITH LOCKABLE COVER

CKT	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	LOAD KVA		BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT
1	DECORATIVE STREET LIGHTS	1	20	.99		20	1	SPARE	2
3	↑	↑	↑			30	2	SURGE SUPPRESSOR	4
5	SPARE	1	20			↑	↑	↑	6

TOTAL CONNECTED LOAD: 0.99 KVA
MINIMUM INTERRUPTING CAPACITY: 10,000 AMPS SYMMETRICAL

CIRCUIT BREAKER PANEL SCHEDULE PANEL LC

120/240 VOLT 1ø 3W
60 AMP MAIN BREAKER

SURFACE MOUNTED
NEMA 3R ENCLOSURE
FURNISH WITH LOCKABLE COVER

CKT	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	LOAD KVA		BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT
1	DECORATIVE STREET LIGHTS	1	20	.99		20	1	SPARE	2
3	↑	↑	↑			30	2	SURGE SUPPRESSOR	4
5	SPARE	1	20			↑	↑	↑	6

TOTAL CONNECTED LOAD: 0.99 KVA
MINIMUM INTERRUPTING CAPACITY: 10,000 AMPS SYMMETRICAL

ELECTRICAL GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION. REFER TO CIVIL DRAWINGS FOR EXACT SIZE AND LOCATION OF EQUIPMENT WHICH IS FURNISHED BY OTHERS AND CONNECTED BY ELECTRICAL.
2. FINAL CONNECTION TO ALL MOTORS SHALL BE WITH FLEXIBLE CONDUIT CONNECTION.
3. ALL PANELBOARDS, BACKBOARDS, TERMINAL CABINETS, ETC SHALL HAVE CUSTOM ENGRAVED MICARTA NAMEPLATE AFFIXED IDENTIFYING SYSTEM.
4. GENERAL CONTRACTOR SHALL FIELD–VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING ANY WORK, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES. FAILURE TO DO SO INDICATES THAT THE CONTRACTOR ACCEPTS THE CONDITIONS AS THEY EXIST, AND SHALL PERFORM THE WORK REQUIRED AS SHOWN AND SPECIFIED.
5. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AND REVIEW THE SPECIAL EQUIPMENT SUBMITTALS PRIOR TO SUBMITTING THE ELECTRICAL SUBMITTALS. ANY ELECTRICAL EQUIPMENT, CONDUIT, AND WIRE SIZE CHANGES RESULTING FROM THIS REVIEW SHALL ALSO BE SUBMITTED FOR APPROVAL.
6. COMPLY WITH ALL LOCAL CODE, LAWS, AND ORDINANCES APPLICABLE TO ELECTRICAL WORK, THE STATE BUILDING CODE AND THE NATIONAL ELECTRIC CODE. OBTAIN ALL PERMITS REQUIRED BY LOCAL ORDINANCES.
7. OBTAIN OWNERS/ENGINEERS APPROVAL OF ALL RECEPTACLES, FACEPLATES, PANELBOARDS, ETC. PRIOR TO PURCHASING.
8. FURNISH ALL EQUIPMENT AND LABOR, PERFORM ALL LABOR WITH SUPERVISION, BEAR ALL EXPENSES, AS NECESSARY FOR THE SATISFACTORY COMPLETION OF ALL WORK READY FOR OPERATION.
9. THE ELECTRICAL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. ALL NOT SO INSTALLED SHALL BE REMOVED AND REPLACED AT NO COST TO THE OWNER.
10. ALL CONDUCTORS SHALL BE COPPER. #12 & #10 SOLID, #8 AND LARGER STRANDED, #6 AND SMALLER TO BE TYPE THHN, 600 VOLT INSULATION
11. PROVIDE GROUNDING PER NATIONAL ELECTRIC CODE. A SEPERATE GROUND CONDUCTOR SHALL BE INSTALLED FOR ALL CIRCUITS. THE CONDUIT CANNOT SERVE AS THE CIRCUIT GROUND.
12. THE CONTRACTOR SHALL LEAVE THE ENTIRE ELECTRICAL SYSTEM INSTALLED IN PROPER WORKING ORDER, AND SHALL REPLACE WITHOUT ADDITIONAL COST, ALL WORK OR MATERIAL WHICH MAY DEVELOP DEFECTS, (ORDINARY WEAR AND TEAR OR DAMAGE RESULTING FROM IMPROPER HANDLING EXCEPTED) WITHIN A PERIOD OF ONE(1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.
13. EQUIPMENT GROUNDING CONDUCTOR SHALL BE PULLED IN ALL BRANCH CIRCUIT WIRING. CONDUIT GROUND SHALL NOT BE ACCEPTABLE.
14. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS FOR INSTALLING ALL UTILITY SERVICE REQUIREMENTS.
15. INSTALL ALL NEW CONDUCTORS CONTINUOUS IN THE GROUND, DO NOT MAKE UNDERGROUND SPLICES IN NEW CIRCUITS. SPLICES SHALL BE MADE ABOVE GRADE IN HANDHOLES OF NEW LIGHT POLES.
16. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES AND DETERMINE IF OTHER UTILITIES WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK AND TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
18. INSTALL ALL NEW CONDUCTORS CONTINUOUS IN THE GROUND, DO NOT MAKE UNDERGROUND SPLICES. SPLICES SHALL BE MADE ABOVE GRADE IN ACCESS POINTS IN LIGHT POLES.

ELECTRICAL LEGEND

LIGHT FIXTURES

PL — POLE LIGHT FIXTURE MARK 'PL'

BRANCH CIRCUITING

RUN CONCEALED IN GRADE

LA–1 — HOMERUN TO PANEL. ANY CIRCUIT WITHOUT FURTHER IDENTIFICATION INDICATES 2 #12, 1 #12 GROUND – 1/2" C; 3 #12, 1 #12 GROUND – 1/2" C; 4 #12, 1 #12 GROUND – 1/2" C; ETC. AS PER NEC. LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER.

PANELS AND POWER

120/240 VOLT PANELBOARD

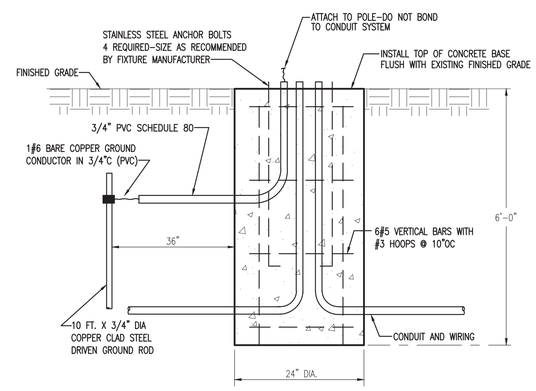
MISCELLANEOUS

A.F.F. ABOVE FINISH FLOOR
WP WEATHERPROOF
U.N.O. UNLESS NOTED OTHERWISE

LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER AND CATALOG No.	LAMPS No.	LAMPS TYPE	MOUNTING	REMARKS
PL	LUMINAIRE: BEACON WAT40/AF/36NB–110/5K/UNV/DIR5/BPC/PEC/BBT POLE: BEACON MADM/F/12/6Q/TN/BBT	–	110 WATT LED ARRAY	CONCRETE BASE SEE DETAIL	POLE TOP MOUNTED, DECORATIVE LED AREA LIGHTING FIXTURE, CLEAR TEXTURED ACRYLIC LENSE, PROVIDE EACH FIXTURE WITH PHOTOCELL ELECTRONIC BUTTON AND EMERGENCY UNIT BATTERY PACK, 12'–0" DECORATIVE POLE, FINISHES SELECTED BY OWNER

NOTE: OWNER SHALL APPROVE THE SELECTION OF DECORATIVE LUMINAIRE AND POLE TYPES AND FINISHES. DO NOT PURCHASE OR ORDER LUMINAIRES OR POLES WITHOUT APPROVAL FROM OWNER.



NOTES:

– INSTALL CONCRETE POLE BASE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS

– VERIFY BOLT PATTERN WITH MANUFACTURER

CONCRETE POLE BASE DETAIL FOR FIXTURE 'PL'

NOT TO SCALE

YATES ENGINEERING SOLUTIONS
7159 Blue Jack Dr.
Navarre, FL 32566
FBPE Authorization No. 30242
Phone: (850)512-9579
Email: quinn@yateseng.com
FL PE No: 60826

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT
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

REVISIONS:
1
2
3
4
5
6

ORIGINAL:

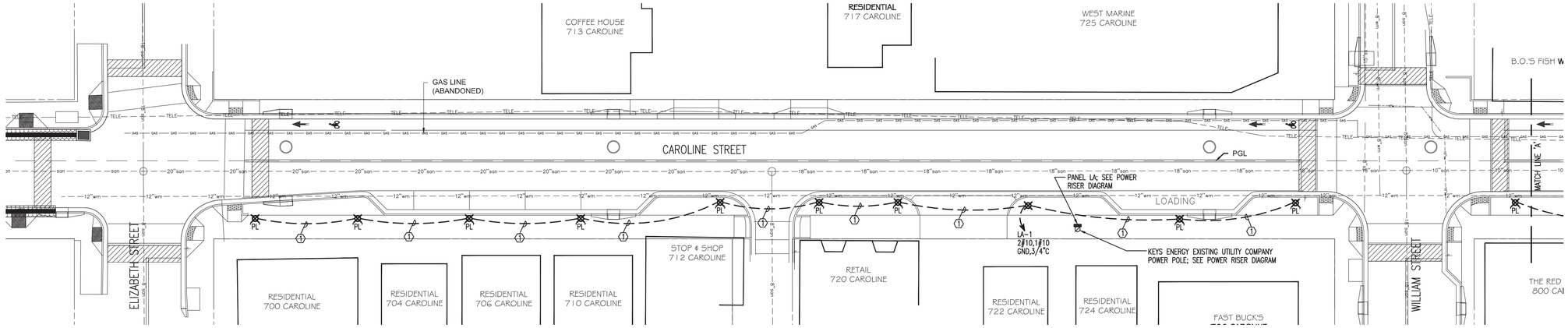
CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

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

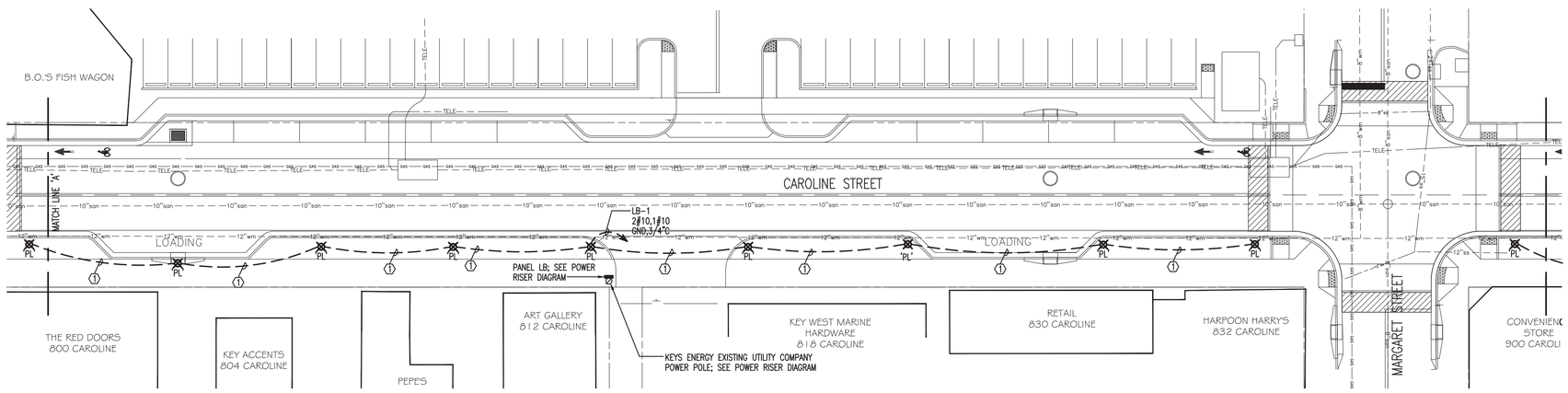
JOB NO. 111008
DRAWN BDH
DESIGNED RQY
CHECKED RQY
QC
SHEET E–1

S:\2014 Jobs\26 Caroline Street Lighting Project\E-1 Legend, LFS & Notes.dwg (Model) Plotted on: Feb 03, 2015 - 3:10pm by quinn



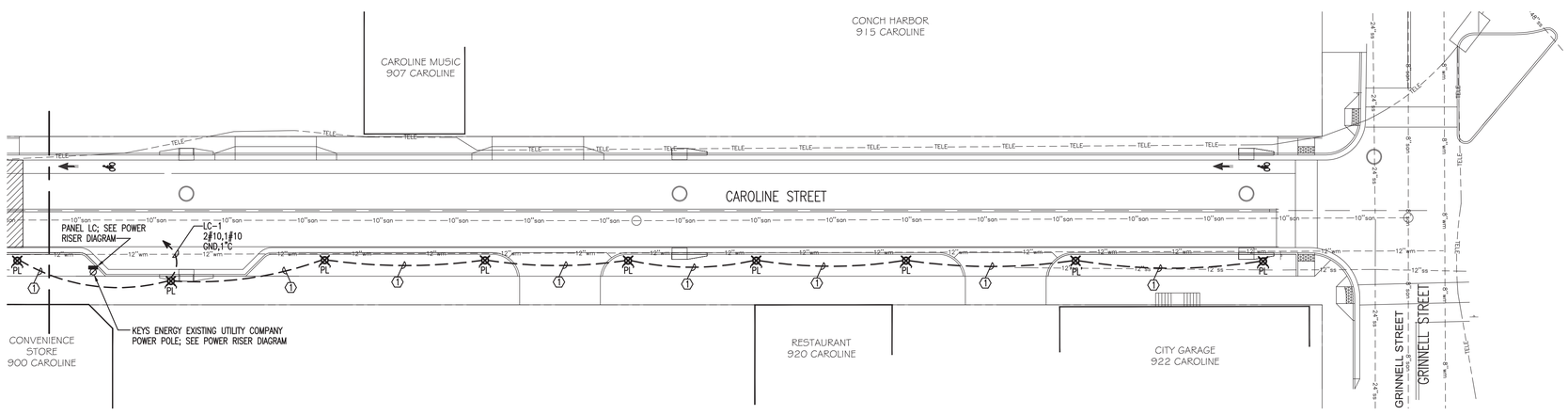
PARTIAL SITE LIGHTING PLAN

SCALE: 1"=20'



PARTIAL SITE LIGHTING PLAN

SCALE: 1"=20'



PARTIAL SITE LIGHTING PLAN

SCALE: 1"=20'

ELECTRICAL GENERAL NOTES

1. CONDUITS TO BE INSTALLED UNDER EXISTING PAVED AREAS WHICH ARE NOT TO BE DISTURBED, AND UNDER ROADS, MUST BE ZINC-COATED, RIGID STEEL, JACKED INTO PLACE. WHERE DUCTS ARE JACKED UNDER EXISTING PAVEMENT, RIGID STEEL CONDUIT MUST BE INSTALLED BECAUSE OF ITS STRENGTH. TO PROTECT THE CORROSION-RESISTANT CONDUIT COATING, PREDRILLING OR INSTALLING CONDUIT INSIDE A LARGER IRON PIPE SLEEVE (JACK-AND-SLEEVE) IS REQUIRED.
2. INSTALL ALL NEW CONDUCTORS CONTINUOUS IN THE GROUND. DO NOT MAKE UNDERGROUND SPLICES FOR ANY NEW LIGHTING CIRCUITS. SPLICES SHALL BE MADE ABOVE GRADE IN ACCESS POINTS IN LIGHT POLES.

KEY NOTES:

1. 2#10,1#10 GND, 3/4"C

YATES ENGINEERING SOLUTIONS

7159 Blue Jack Dr.
Navarre, FL 32566
FBPE Authorization No. 30242

Phone: (850)612-9579
Email: quinn@yatesesg.com
FL PE No: 60826

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
CONCOURSE CENTER
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

ORIGINAL: _____

REVISIONS: 1 2 3 4 5 6

CAROLINE STREET IMPROVEMENTS

KEY WEST, FL 33040

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

JOB NO.	111008
DRAWN	BDH
DESIGNED	RQY
CHECKED	RQY
QC	
SHEET	E-2

S:\2014 Jobs\26 Caroline Street Lighting Project\E-2 Lighting Plan.dwg (Model) Plotted on: Feb 03, 2015 - 3:10pm by quinn