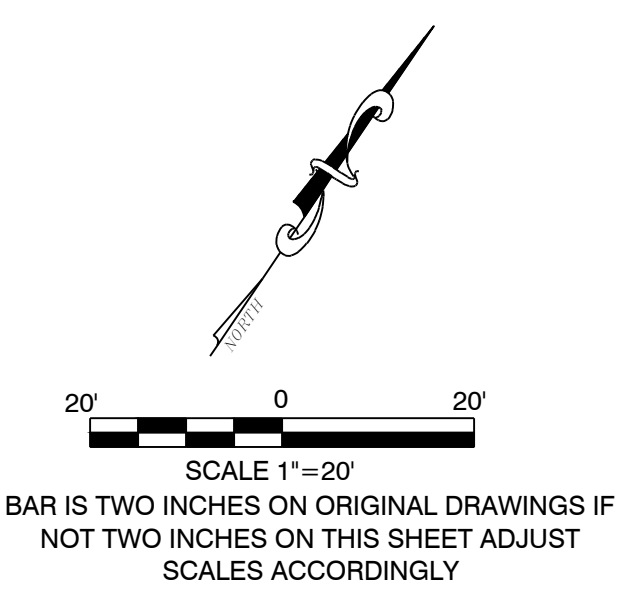
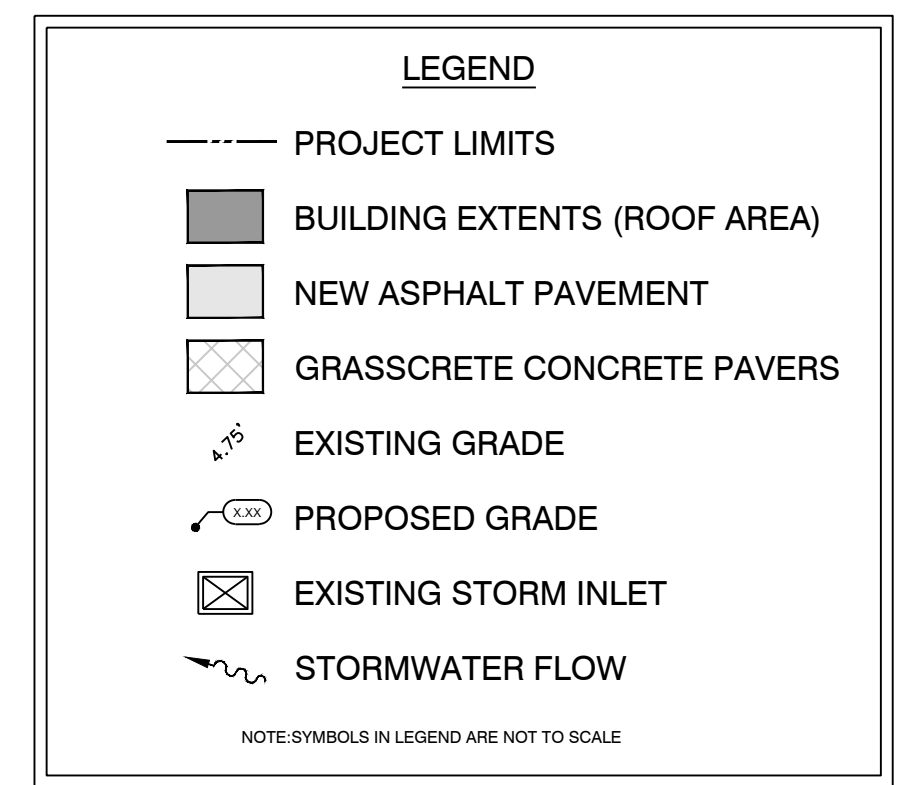


NORTH ROOSEVELT BOULEVARD
(50' R/W)
road and sidewalks under construction



Water Quantity and Water Quality Calculations			
<i>Water Quantity - Predevelopment</i>			
Project Area	A =	1.276	ac 55,589 sf
PerVIOUS Area		0.088	ac 3,853 sf
Impervious Area		1.188	ac 51,736 sf
% Impervious		93.07%	
Rainfall for 25yr/24hr event	P ₂₄ =	9	in
Rainfall for 25yr/3day event	P ₇₂ =	12.23	in
Depth to Water Table		3	ft
Predeveloped Available Storage		4.95	in
Soil Storage	S =	0.34	in
$Q_{pre} = \frac{(P_{24} - 0.25)^2}{(P_{24} + 0.85)}$	Q _{pre} =	11.83	in
Runoff Volume from 25 year/ 3 day storm	V _{25yr/24hr} =	15.10	ac-in
<i>Water Quantity - Postdevelopment</i>			
Project Area	A =	1.276	ac 55,589 sf
PerVIOUS Area		0.206	ac 8,978 sf
Impervious Area		1.070	ac 46,611 sf
% Impervious		83.8%	
Rainfall for 25yr/24hr event	P ₂₄ =	9	in
Rainfall for 25yr/3day event	P ₇₂ =	12.23	in
Depth to Water Table		3	ft
Developed Available Storage		4.95	in
Soil Storage	S =	0.80	in
$Q_{post} = \frac{(P_{24} - 0.25)^2}{(P_{24} + 0.85)}$	Q _{post} =	11.32	in
Runoff Volume from 25 year/ 3 day storm	V _{25yr/24hr} =	14.45	ac-in
<i>Postdevelopment - Predevelopment</i>			
$Q_{pre-post} = Q_{post} - Q_{pre}$	Q _{pre-post} =	-0.51	in
Pre/Post Volume = Q _{pre-post} × A	V _{pre-post} =	-0.65	ac-in

- CONCEPTUAL DRAINAGE NOTES:**
1. THE EXISTING STORMWATER MANAGEMENT SYSTEM SHALL REMAIN UNALTERED, EXCEPT FOR MODIFICATIONS TO ACCOUNT FOR CONSTRUCTION OF THE BUILDING.
 2. CONTRACTOR SHALL VERIFY THAT EXACT LOCATION OF SOURCE DISCHARGE AND SERVICE THE ENTIRE EXISTING STORMWATER SYSTEM PRIOR TO PLACING THE BUILDING INTO OPERATION.
 3. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING / RETURNING TO EXISTING CONDITION ANY PORTION OF STORMWATER SYSTEM THAT IS DAMAGED DURING CONSTRUCTION.



CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

KEY WEST OFFICE
1010 EAST KENNEDY DRIVE, SUITE 400
KEY WEST, FLORIDA 33040
TEL: (305) 295-9440 FAX: (305) 296-0243

TAMPA OFFICE
3507 EAST FRUIT AVE., SUITE 140
TAMPA, FLORIDA 33607
TEL: (813) 579-1616 FAX: (813) 288-0710

PEREZ ENGINEERING & DEVELOPMENT, INC.
CERTIFICATE OF AUTHORIZATION No. 6879

ALLEN PEREZ P.E.
Florida P.E. NO. 51468
February 28, 2013

REVISIONS:

1	ORIGINAL: MARCH 2013
2	
3	
4	
5	
6	

KEY WEST DOCKMASTER / BATHHOUSE BLDG.
GARRISON BIGHT MARINA

CITY OF KEY WEST
3121 FLAGLER AVE.
KEY WEST, FL 33040

JOB NO. 121001
DRAWN RTM
DESIGNED AEP
CHECKED AEP
QC SHEET