

# BAL HARBOUR SHOPS

## PAVING AND DRAINAGE PLANS

Bal Harbour Village, Miami-Dade County, Florida.



### LOCATION SKETCH

SECT. 26, TWP. 52s., RNG. 42e.  
SCALE: 1"=300'



### SHEET INDEX

SHEET No.	TITLE
CP1	COVER SHEET
CP2	NOTES AND SPECIFICATIONS
CP3 & CP4	PAVING AND DRAINAGE PLAN
CP5	PAVING DETAILS
CP6	DRAINAGE DETAILS

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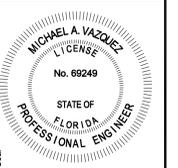
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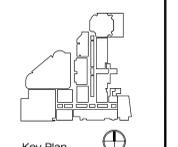
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 Project No. 1120BHSE

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Revised:


**COVER SHEET**

150330CP 04/27/16

**CP1**



**FLOOD LEGEND**  
Commercial, Industrial

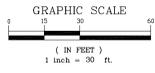
FOID: 12-2226-006-0860 ADDRESS: 9700 COLLINS AVENUE  
LOT: \_\_\_\_\_ BLOCK: \_\_\_\_\_ SUBDIVISION: ALL IN THE BUSINESS SECTION OF BAL HARBOUR  
PLAT BOOK: 89 PAGE: 39 MEETS & BOUNDS: \_\_\_\_\_

CROWN OF ROAD ELEV.: (+)36.63 FT NGVD. CROWN OF ROAD ELEVATION WAS TAKEN FROM A CERTIFIED SURVEY PREPARED BY: DANIEL G. FORTIN, SURVEYOR'S TITLE: PLS LIC.# 152853.  
DRAINAGE PLANS SHALL BE ATTACHED (IF 3 ACRES IMPERVIOUS PLANS SHALL BE STAMPED WITH THE DEM/ WATER CONTROL SECTION APPROVAL)  
DEM/ WC - SURFACE WATER MANAGEMENT STORMWATER PERMIT (COPY ATTACHED)  
SF/MD - ENVIRONMENTAL RESOURCES PERMIT (COPY ATTACHED)  
TOTAL IMPERVIOUS AREA: \_\_\_\_\_ UNDERGROUND PARKING: YES (NO) (CIRCLE ONE) IF YES, FLOODPROOFING PLANS AND CONIGRATE SHALL BE ATTACHED BASEMENT: YES/ NO (CIRCLE ONE)

HAVE THIS SITE OR OTHER PORTIONS OF THIS PROPERTY BEEN GRANTED A CLEAR OR FINAL LOWEST FLOOR ELEVATION? YES/ NO/MP# (CIRCLE ONE)

	Lowest Floor Elevation (Including Basement/Foundation) (ft) for the rest of the structure	Adjacent Grade Elevation (ft)	Clear Base Elevation (ft)
PROPOSED	(+39.00 NGVD)	(+38.50 NGVD)	(+34.55 NGVD)

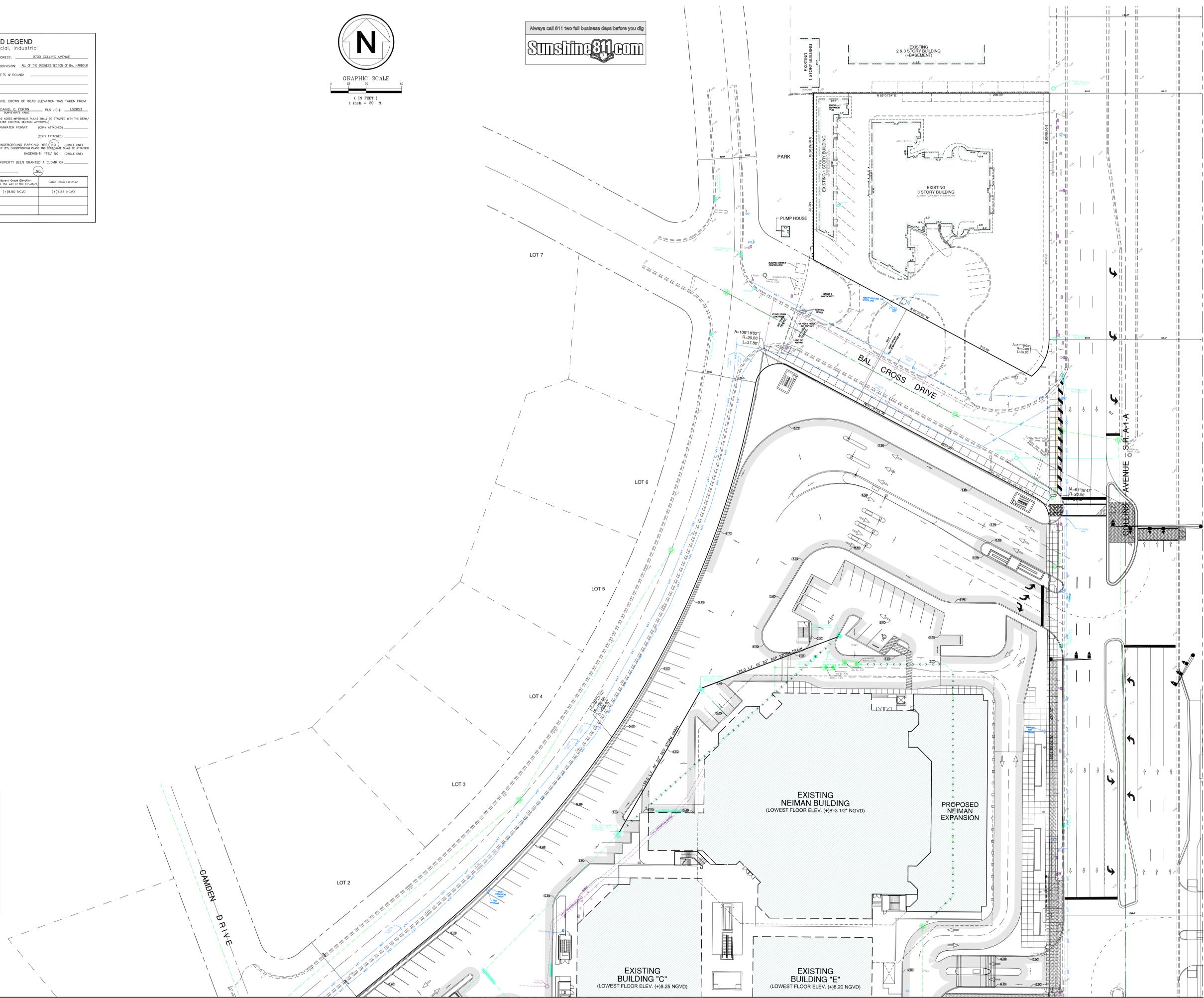
0'-0" = NGVD



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**UTILITY LEGEND:**

- CATCH BASIN
- UTILITY MANHOLES
- FIRE HYDRANT
- UTILITY VALVES
- WATER METER
- TELE. ELEC. FULL BOX
- WOOD POWER POLE
- PONDING POLE ALUMINUM
- CONC. POWER POLE
- SANITARY SEWER MAIN
- WATER MAIN
- STORM DRAIN LINES
- BURIED BELLSOUTH
- GAS MAINS
- OVERHEAD ELECTRIC (PPL)
- BURIED ELECTRIC (PPL)
- SANITARY FORCE MAIN
- TRAFFIC SIGN



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**Key Plan**

**Revised:**

**PAVING AND DRAINAGE PLAN**

150330CP 04/27/16

**CP3**

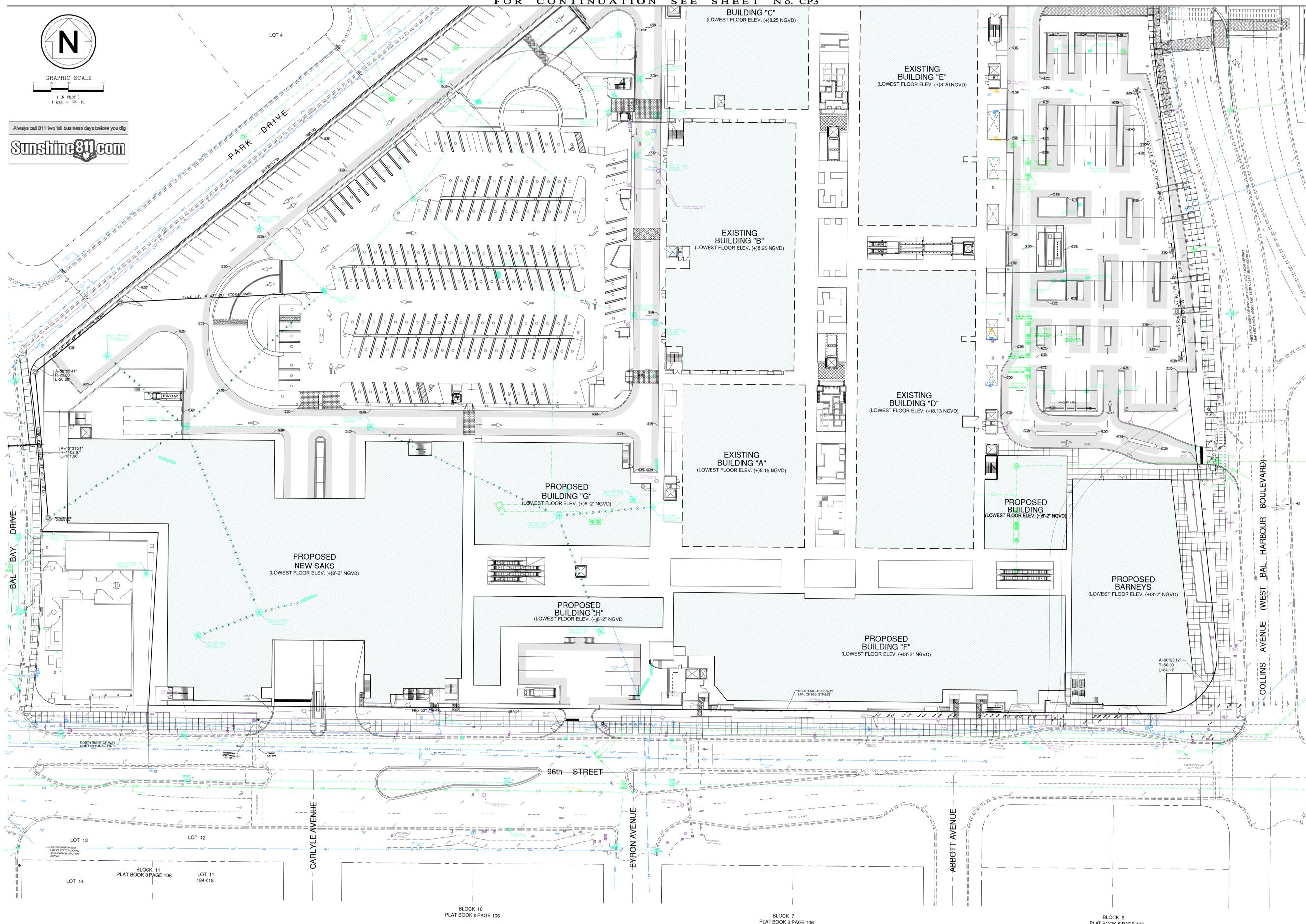
3015-005 CP3

FOR CONTINUATION SEE SHEET No CP4



GRAPHIC SCALE  
1 inch = 50 ft.

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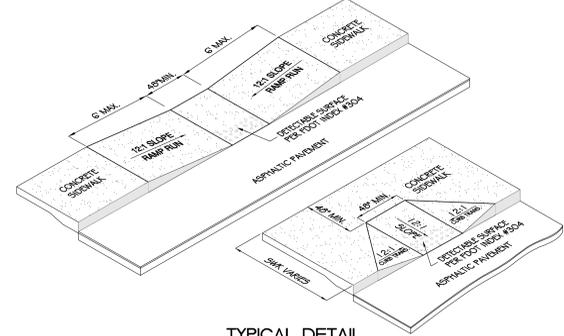
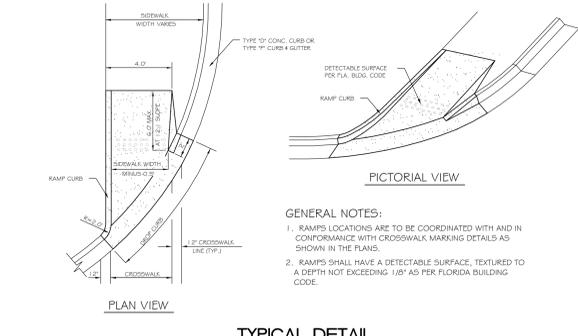
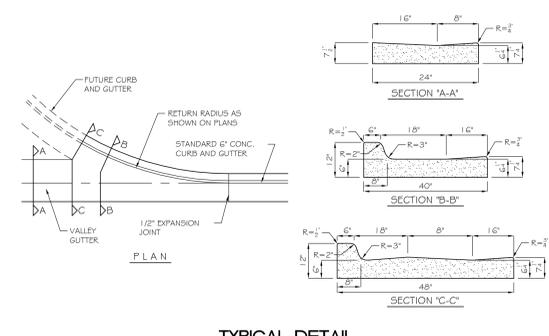
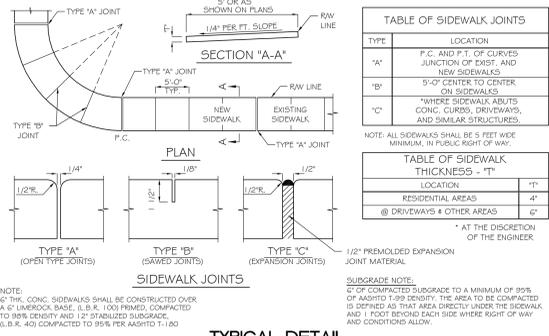
**Key Plan**  
[Diagram showing the location of this sheet within the overall project site]

**Revised:**

**PAVING AND DRAINAGE PLAN**

150330CP 04/27/16

**CP4**

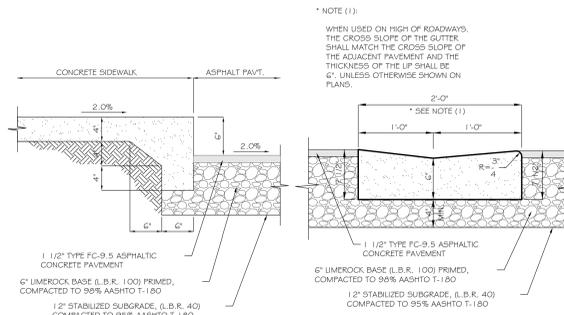
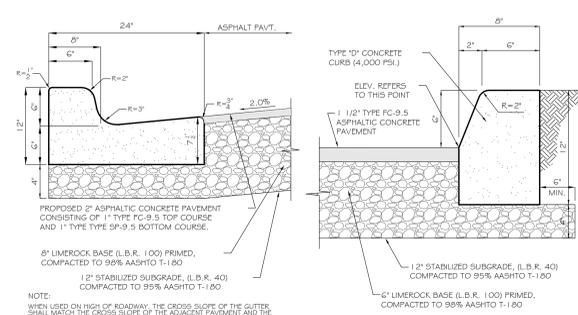
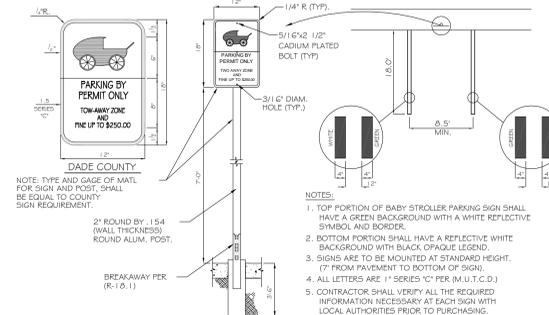
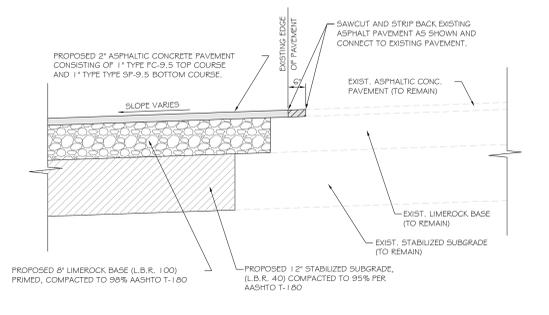


**TYPICAL DETAIL SIDEWALK CONSTRUCTION**  
N.T.S.

**TYPICAL DETAIL CONCRETE VALLEY GUTTER**  
N.T.S.

**TYPICAL DETAIL HANDICAP CURB CUT RAMP**  
N.T.S.

**TYPICAL DETAIL HANDICAP CURB CUT RAMP**  
N.T.S.

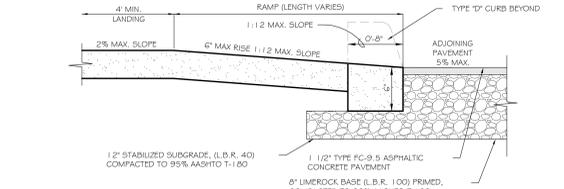
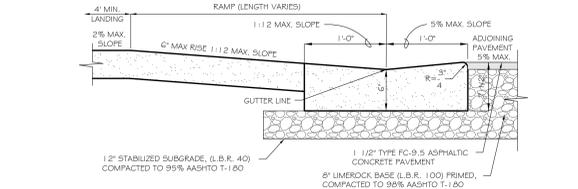
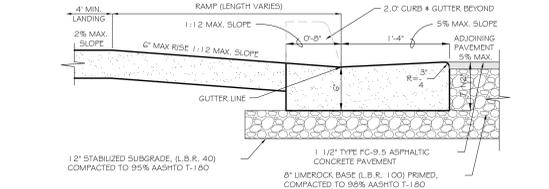
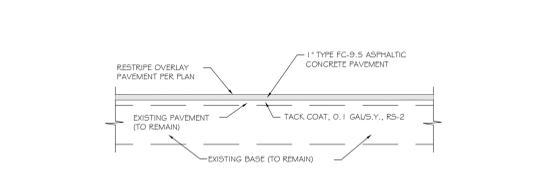


**TYPICAL DETAIL PAVEMENT CONNECTION**  
N.T.S.

**TYPICAL DETAIL BABY STROLLER PARKING SIGN**  
N.T.S.

**TYPICAL DETAIL TYPE 'F' CURB and GUTTER**  
N.T.S.

**TYPICAL DETAIL TYPE 'D' CONC. CURB**  
N.T.S.

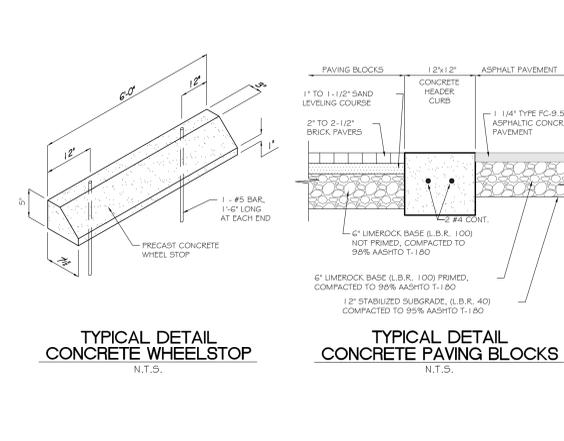
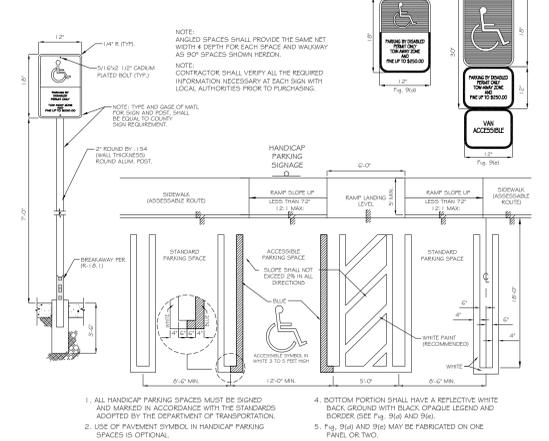
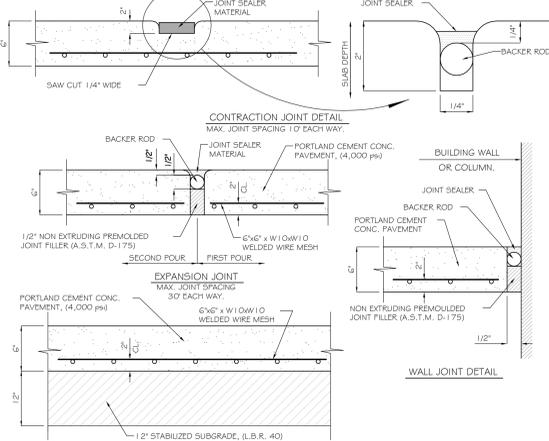


**TYPICAL DETAIL PAVEMENT OVERLAY**  
N.T.S.

**TYPICAL DETAIL 2' CURB and GUTTER AT CURB RAMPS**  
N.T.S.

**TYPICAL DETAIL 2' VALLEY GUTTER AT CURB RAMPS**  
N.T.S.

**TYPICAL DETAIL CURB AT CURB RAMPS**  
N.T.S.



**TYPICAL DETAIL CONCRETE PAVEMENT SECTION**  
N.T.S.

**TYPICAL DETAIL HANDICAP and STANDARD PARKING SPACES**  
N.T.S.

**TYPICAL DETAIL CONCRETE WHEELSTOP**  
N.T.S.

**TYPICAL DETAIL CONCRETE PAVING BLOCKS**  
N.T.S.

NOTE: ALL SIDEWALKS SHALL BE 5 FEET WIDE MINIMUM, IN PUBLIC RIGHT OF WAY AND CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.

NOTE: ALL SIDEWALKS SHALL BE CONSTRUCTED OVER A 6" THICK CONCRETE SLAB ON GRADE, 100% PRIMED, COMPACTED TO 98% AASHTO T-100. THE AREA TO BE COMPACTED IS DEFINED AS THAT AREA DIRECTLY UNDER THE SIDEWALK AND 1 FOOT BEYOND EACH SIDE WHERE RIGHT OF WAY IS NOT SPECIFIED OTHERWISE.

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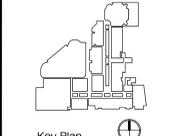
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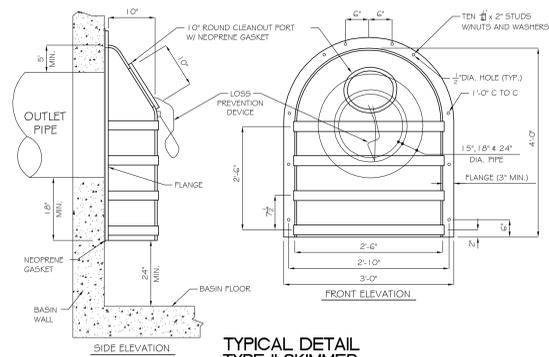
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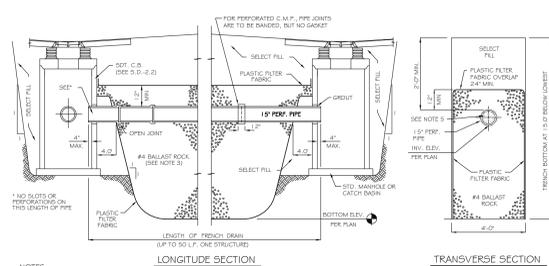
Revised:

**PAVING DETAILS**  
150330CP 04/27/16  
**CP5**  
3015-005 CP5



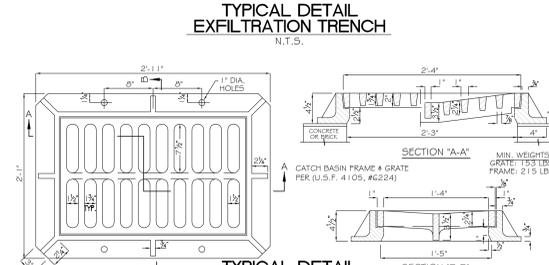
**TYPICAL DETAIL  
TYPE II SKIMMER**  
N.T.S.

- GENERAL NOTES**
1. THE CLEANOUT PORT FOR THE TYPE II SKIMMER SHALL BE GASKETED, WITH EITHER A THREADED SCREW-IN LID OR A LID SECURED BY FOUR STAINLESS STEEL QUICK-RELEASE LATCHES.
  2. PLACE NEOPRENE GASKET MATERIAL BETWEEN THE SKIMMER AND THE CATCH BASIN AT ALL POINTS OF CONTACT. TRIM THE GASKET NEATLY TO EXTEND 1/2 INCH BEYOND THE JOINT ON ALL SIDES.
  3. SKIMMER BAFFLE, CLEANOUT PIPE AND ANGLES SHALL BE PRIMARILY CONSTRUCTED OF EITHER GALVANIZED STEEL, ALUMINUM, POLYVINYL CHLORIDE, POLYETHYLENE, FIBERGLASS OR ACRYLONITRILE BUTADIENE STYRENE. ALL STEEL COMPONENTS, OTHER THAN STAINLESS, SHALL BE HOT-DIP GALVANIZED.
  4. MOUNTING HARDWARE, NUTS AND LATCHES SHALL ALL BE STAINLESS STEEL. LOSS PREVENTION DEVICE SHALL BE EITHER STAINLESS STEEL CHAIN OR RIVETED NYLON STRAP.
  5. MATERIAL USED IN CONSTRUCTION OF SKIMMER SIDES (BAFFLES) AND CLEANOUT PIPE SHALL COMPLY WITH FOOT STANDARD SPECIFICATION 943 FOR STEEL, 945 FOR ALUMINUM OR 946 FOR PLASTICS.
  6. PLASTIC SKIMMERS SHALL CONTAIN A MINIMUM OF 1.5% BY WEIGHT OF CARBON BLACK FOR UV PROTECTION.
  7. THE CONTRACTOR MAY SUBMIT AN ALTERNATIVE DESIGN PREFABRICATED FRENCH DRAIN SKIMMER FOR APPROVAL BY THE ENGINEER OF RECORD.
  8. TYPE I SKIMMER DIMENSIONS SHALL BE BASED ON THE OUTLET PIPE DIAMETER AS SHOWN IN THE DIMENSION TABLE.

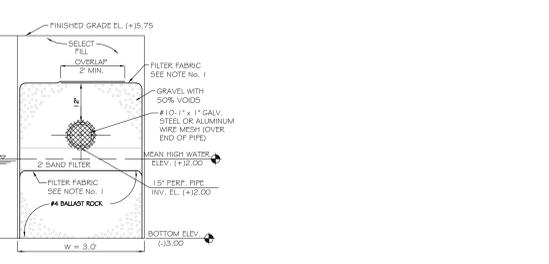


**TYPICAL DETAIL  
TYPE I SKIMMER**  
N.T.S.

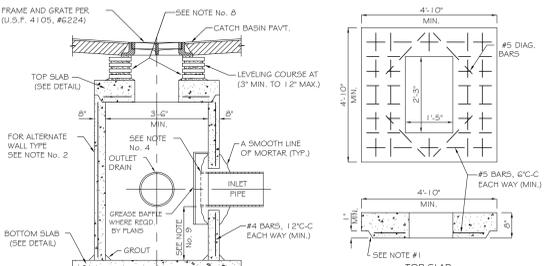
- NOTES**
1. NON-WOVEN PLASTIC FILTER FABRIC PER F.D.O.T. STANDARD INDEX #199 (TYPE D-3 FOR FRENCH DRAIN) SHALL BE USED AT EACH SIDE AND ON TOP, AND AT EACH END OF FRENCH DRAIN TRENCH. SHOP SPECS. AND A SAMPLE OF THE MATERIAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING AND INSTALLING THE FABRIC.
  2. THE BOTTOM OF THE INFILTRATION TRENCH SHALL BE AT ELEV. (+13.00) N.G.V.D. UNLESS OTHERWISE SHOWN.
  3. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WETTED OR COMPACTED IN ORDER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF IT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE BALLAST ROCK TO THE PROPER ELEVATION SO THAT THE INFILTRATION TRENCH CAN BE COMPLETED IN ACCORDANCE WITH THE DETAIL.
  4. INVERT ELEVATION TO BE AS SHOWN IN W.C.-2.2 (AVERAGE OUTSIDE GROUND WATER LEVEL) ELEVATION PER PLAN.
  5. DEAD END INFILTRATION TRENCH SHALL HAVE #10-1/4" GALV. STEEL OR ALUMINUM WIRE MESH (OVER END OF PIPE).
- NOTE:**  
IF THIS DETAIL IS TO BE USED FOR PRETREATMENT OF STORMWATER RUN-OFF, THE INVERT OF PIPE TO BE AS SHOWN IN W.C. 2.2. IF PRETREATMENT WAS NOT PROVIDED THIS OTHER MEANS THE INVERT OF PIPE CAN BE LOWER THAN SHOWN IN W.C. 2.2.



**TYPICAL DETAIL  
FRAME AND GRATE**  
N.T.S.

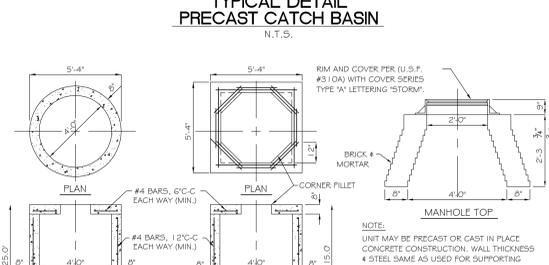


**TYPICAL DETAIL  
FRAME AND GRATE**  
N.T.S.

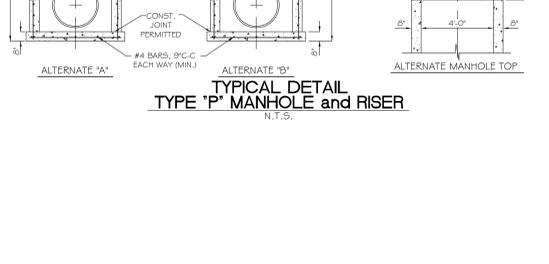


**TYPICAL DETAIL  
PRECAST CATCH BASIN**  
N.T.S.

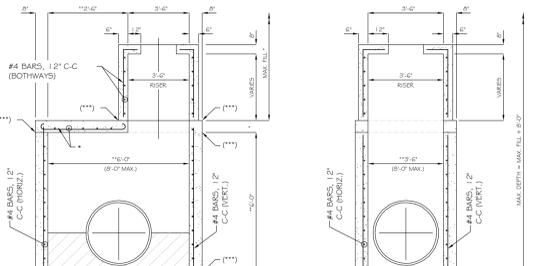
- NOTES**
1. CAST TOP SLAB TO 11" MIN. THICK.
  2. TONGUE AND GROOVE REINFORCED CONCRETE PIPE A.S.T.M. DESIGNATION C-76 CLASS II.
  3. BOTTOM SLAB MAY BE PRECAST OR FORMED IN PLACE REINFORCING MUST BE USED WHEN FORMED. REINFORCING TO BE 4" DIA. #4 BARS @ 12" C.C. (REF.).
  4. PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 3".
  5. USE 4,000 P.S.I. CONCRETE @ 28 DAYS (PER PLAN).
  6. MAXIMUM CONCRETE PER SIDE 24".
  7. MORTAR SHALL BE AS SPECIFIED BY APPROVED APPROVAL.
  8. A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.
  9. 3/8" SLUMP REQUIRED WHEN GRADE BAFFLE IS USED. 3/4" SLUMP REQUIRED WITH OUT BAFFLE.
  10. SLUMP TO BE 2" BELOW BOTTOM OF BAFFLE AND BOTTOM OF BAFFLE TO BE 1/8" BELOW INVERT OF PIPE.



**TYPICAL DETAIL  
TYPE 'P' MANHOLE and RISER**  
N.T.S.

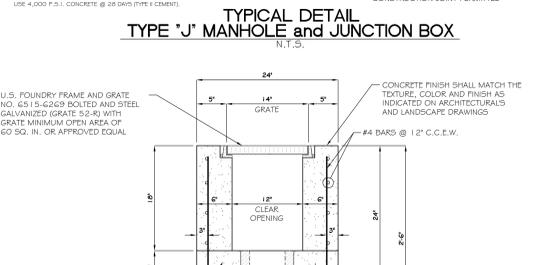


**TYPICAL DETAIL  
TYPE 'P' MANHOLE and RISER**  
N.T.S.

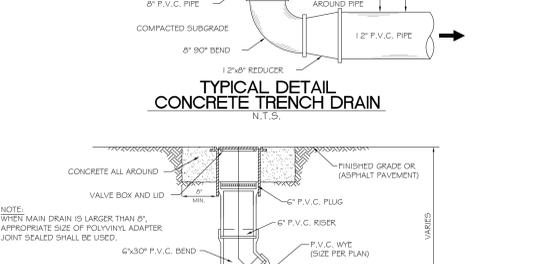


**TYPICAL DETAIL  
TYPE 'J' MANHOLE and JUNCTION BOX**  
N.T.S.

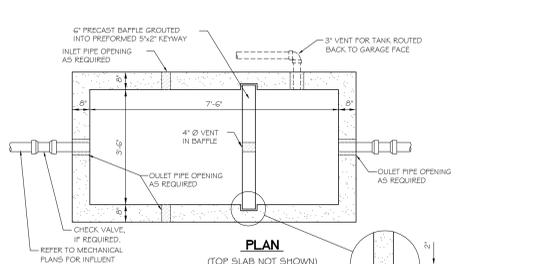
TOP AND BOTTOM SLAB TABLE TYPE 'J'	
TYPE 'J', ALT. '10' (N.S. CONC.)	TYPE 'J', ALT. '10' 4000 PSI CONC.
3'-0" x 3'-0"	3'-0" x 3'-0"
3'-0" x 4'-0"	3'-0" x 4'-0"
3'-0" x 5'-0"	3'-0" x 5'-0"
3'-0" x 6'-0"	3'-0" x 6'-0"
3'-0" x 7'-0"	3'-0" x 7'-0"
3'-0" x 8'-0"	3'-0" x 8'-0"
3'-0" x 9'-0"	3'-0" x 9'-0"
3'-0" x 10'-0"	3'-0" x 10'-0"



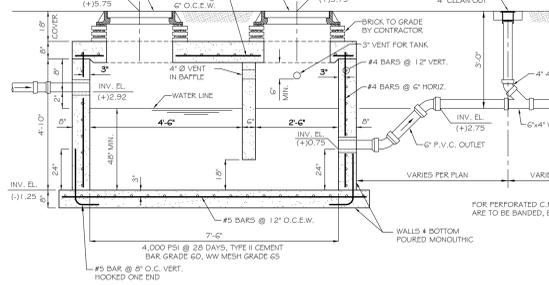
**TYPICAL DETAIL  
CONCRETE TRENCH DRAIN**  
N.T.S.



**TYPICAL DETAIL  
STORM DRAIN and CLEAN-OUT**  
N.T.S.



**TYPICAL DETAIL  
OIL INTERCEPTOR and EXFILTRATION TRENCH DETAIL**  
N.T.S.



**TYPICAL SECTION  
OIL INTERCEPTOR and EXFILTRATION TRENCH DETAIL**  
N.T.S.

- NOTES:**
1. NON-WOVEN PLASTIC FILTER FABRIC PER F.D.O.T. STANDARD INDEX #199 (TYPE D-3 FOR FRENCH DRAIN) SHALL BE USED AT EACH SIDE AND ON TOP, AND AT EACH END OF FRENCH DRAIN TRENCH. SHOP SPECS. AND A SAMPLE OF THE MATERIAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING AND INSTALLING THE FABRIC.
  2. THE BOTTOM OF THE INFILTRATION TRENCH SHALL BE AT ELEV. (+13.00) N.G.V.D. UNLESS OTHERWISE SHOWN.
  3. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WETTED OR COMPACTED IN ORDER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF IT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE BALLAST ROCK TO THE PROPER ELEVATION SO THAT THE INFILTRATION TRENCH CAN BE COMPLETED IN ACCORDANCE WITH THE DETAIL.

**TYPICAL SECTION  
OIL INTERCEPTOR and EXFILTRATION TRENCH DETAIL**  
N.T.S.

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**Key Plan**

**DRAINAGE DETAILS**

150330CP 04/27/16

**CP6**

# BAL HARBOUR SHOPS

## WATER AND SEWER PLANS

Bal Harbour Village, Miami-Dade County, Florida.



### LOCATION SKETCH

SECT. 26, TWP. 52s., RNG. 42e.  
SCALE: 1"=300'



### SHEET INDEX

SHEET No.	TITLE
CP7	COVER SHEET
CP8	NOTES AND SPECIFICATIONS
CP9 & CP10	WATER AND SEWER PLAN
CP11	WATER AND SEWER DETAILS

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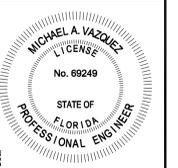
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Revised:


**COVER SHEET**

150330CP 04/27/16

**CP7**

I. REGULATORY AND ECONOMIC RESOURCES RER NOTES ON WATER-SEWER INSTALLATION

- 1. A PREFERRED HORIZONTAL DISTANCE (OUTSIDE TO OUTSIDE) OF 10 FEET OR MINIMUM OF 6 FEET SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE SEWER PIPES AND WATER MAINS. THE HORIZONTAL SEPARATION CAN BE REDUCED TO A MINIMUM OF 3 FEET ONLY FOR GRAVITY SEWER PIPES WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER. WHEN THE ABOVE SPECIFIED HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, SMALLER SEPARATIONS ARE ALLOWED IF:
a. THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI.
b. THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
c. THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER PIPE.
2. A VERTICAL DISTANCE OF AT LEAST 12 INCHES (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN ANY WATER AND SEWER MAINS WITH SEWER PIPES PREFERABLY CROSSING UNDER WATER MAINS. THE MINIMUM VERTICAL SEPARATION CAN BE REDUCED TO 6 INCHES FOR GRAVITY SEWERS WHERE THE SEWER PIPE IS CROSSING BELOW THE WATER MAIN. THE CROSSING SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 6 FEET FROM ALL JOINTS IN GRAVITY AND PRESSURE SEWER PIPES. WHEN THE ABOVE SPECIFIED VERTICAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, SMALLER SEPARATIONS ARE ALLOWED IF:
a. THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI.
b. THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
3. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, AND CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
4. ALL OTHER PUBLIC OR PRIVATE UTILITY FACILITIES SHALL BE CONSTRUCTED AT LEAST 5 FEET FROM ANY WATER AND SEWER MAIN AS MEASURED FROM THE OUTSIDE BELL OF THE WATER OF THE UTILITY PIPE.
5. WHEN THE 5 FEET SEPARATION BETWEEN PROPOSED AND EXISTING LINE IS NOT POSSIBLE, THE CONTRACTOR SHALL HAND DIG OR EXPOSE THE WATER AND SEWER PIPES BEFORE PROCEEDING WITH POWER EQUIPMENT EXCAVATION.
6. IN NO CASE SHALL A CONTRACTOR INSTALL UTILITY PIPES, CONDUITS, CABLES, ETC. IN THE SAME TRENCH PARALLEL AND ABOVE AN EXISTING WATER OR SEWER PIPE EXCEPT WHERE THEY CROSS. ANY DEVIATION FROM NOTES 3, 4 AND 5 SHALL BE APPROVED IN WRITING BY THE RESPONSIBLE WATER AND SEWER UTILITY.
7. IN HIGHLY CONGESTED AREAS, WHERE EITHER WATER OR SEWER FACILITIES ARE EXISTING OR THE SEPARATION REQUIREMENTS CANNOT BE MET, SPECIAL CONSIDERATION MAY BE GIVEN SUBJECT TO SUBMITTAL OF DOCUMENTATION SHOWING THAT THE PROPOSED ALTERNATIVE WILL RESULT IN AN EQUIVALENT LEVEL OF RELIABILITY AND PUBLIC HEALTH PROTECTION.
8. GRAVITY SANITARY SEWERS CONSTRUCTED WITHIN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE PVC-900 OR DUCTILE IRON PIPE THE MAXIMUM ALLOWABLE INFILTRATION, INFILTRATION, OR LEAKAGE FOR GRAVITY SANITARY SEWERS CONSTRUCTED WITHIN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE FIFTY (50) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY FOR RESIDENTIAL LAND USE AND TWENTY (20) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY FOR NON RESIDENTIAL LAND USE WITH NO ALLOWANCES FOR MANHOLES OR LATERALS. THE MAXIMUM ALLOWABLE INFILTRATION, INFILTRATION, OR LEAKAGE IN GRAVITY SANITARY SEWERS CONSTRUCTED OUTSIDE A PUBLIC WELLFIELD PROTECTION AREA SHALL BE ONE HUNDRED (100) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY. THE DURATION OF ALL TESTS SHALL BE A MINIMUM OF TWO (2) HOURS. ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL BE REPLACED EVEN WHEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED.
9. FORCE MAIN SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE EITHER DUCTILE IRON OR REINFORCED CONCRETE PRESSURE SEWER PIPES.
a. FOR DUCTILE IRON PIPE INFILTRATION RATE SHALL NOT BE GREATER THAN THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AMERICAN WATER WORKS ASSOCIATION STANDARD (AWWA) C600-82 AT A TEST PRESSURE OF 100 PSI.
b. FOR REINFORCED CONCRETE PRESSURE SANITARY SEWER INFILTRATION RATE SHALL NOT BE GREATER THAN HALF (1/2) THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AWWA C600-82 AT A TEST PRESSURE OF 100 PSI.
10. A NON-RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AT EACH PUMP TO RECORD THE TOTAL NUMBER OF OPERATING HOURS OF THE STATION.

II. ENGINEER'S NOTES:

- 1. THE WATER AND/OR SEWER SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE PUBLISHED AND CURRENT STANDARDS OF THE BAL HARBOUR VILLAGE WATER AND SEWER DEPARTMENT AND UNDER THE INSPECTION OF THEIR PERSONNEL.
2. THE APPROXIMATE LOCATION OF ALL UTILITIES SHOWN HEREON WERE DETERMINED FROM 'AS-BUILT' PLANS AND/OR FIELD LOCATION AND MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO ANY EXCAVATION.
3. CONTRACTOR TO VERIFY LOCATION, ELEVATION, MATERIAL AND CONDITION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION. AFTER OBTAINING LOCATION FROM SUNSHINE AND OTHER UTILITY COMPANIES, AND PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL UNCOVER ALL KNOWN UNDER- GROUND UTILITIES IN THE PATH OF THE WORK, WHETHER OR NOT THE UTILITIES ARE SHOWN ON THE PLANS AND SHALL TAKE VERTICAL AND HORIZONTAL ARE SHOWN ON THE PLANS AND SHALL TAKE VERTICAL AND HORIZONTAL MEASUREMENTS OF THE LOCATIONS OF THESE UTILITIES, AND IF ANY CONFLICTS ARE APPARENT, REPORT THE MEASUREMENTS TO THE ENGINEER-OF-RECORD.
4. CONTRACTOR TO CONTACT ENGINEER-OF-RECORD IF EXISTING UTILITIES ARE NOT SHOWN ON THE PLANS.
5. ALL LANDSCAPING AND IRRIGATION DISTURBED SHALL BE REPLACED WITH LIKE KIND.
6. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE ' FRENCH SAFETY ACT', AND ALL REQUIREMENTS OF O.S.H.A.
7. ALL BRANCH VALVES ARE TO BE TIED TO TEES.
8. ALL REQUIRED BACTERIOLOGICAL SAMPLING POINTS SHALL BE INSTALLED BY THE CONTRACTOR AND ALL BACTERIOLOGICAL TESTS PERFORMED BY HIM PER THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF H.R.S.
9. ALL REQUIRED FLUSHING, CLEANING PRESSURE TESTING AND BACTERIOLOGICAL TESTING SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF SAME SHALL BE INCLUDED IN THE CONTRACTORS BID FOR THE WORK.
10. SHOP DRAWINGS SHALL BE CHECKED AND APPROVED BY THE CONTRACTOR AND THEN ONE COPY SUBMITTED TO THE ENGINEER-OF-RECORD FOR REVIEW PRIOR TO THE PURCHASE OR INSTALLATION OF ANY SYSTEM COMPONENTS. SHOP DRAWINGS NEED TO BE REVIEWED AND APPROVED BY THE BAL HARBOUR VILLAGE PLANS REV. UNIT BEFORE PRE-CONSTRUCTION MEETING CAN BE SCHEDULED (TYP).
11. THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER IF ANY ADDITIONAL DIMENSIONS OR SPECIFICATION ARE NEEDED TO LAYOUT OR CONSTRUCT THE PROJECT. AN ELECTRONIC FILE OR GEOMETRIC CONTROL SHEET WILL BE PROVIDED TO THE CONTRACTOR BY THE ENGINEER.
12. ALL PAVEMENT RESTORATION SHALL COMPLY WITH THE REQUIREMENTS OF MIAMI-DADE COUNTY PUBLIC WORKS MANUAL, F.D.O.T. FLORIDA BUILDING CODE, AND/OR THE SPECIFIC MUNICIPALITY STANDARDS.
13. LOCATION OF THE PUBLIC WATER SYSTEM MAINS SHALL COMPLY WITH THE LATEST FLORIDA ADMINSTRATIVE CODE (F.A.C.) RULE G2-555.314.

III. ENGINEER'S CERTIFICATION REQUIREMENTS:

- 1. THE WATER AND/OR SEWER STAKEOUTS, PIPE COVER AND/OR INVERT ELEVATIONS AND DETERMINATION OF EASEMENT GEOMETRY SHALL BE PERFORMED BY A STATE OF FLORIDA LICENSED LAND SURVEYOR AT THE TIME OF INSTALLATION.
2. THE ENGINEER-OF-RECORD SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE BEFORE INSTALLATION, TESTING AND BACKFILLING OF ANY LINES.
3. IMMEDIATELY UPON COMPLETION OF THE TESTS, THE ENGINEER-OF-RECORD SHALL BE PROVIDED WITH COPIES OF THE REPORTS SHOWING SATISFACTORY RESULTS OF THE FOLLOWING:
1. BACTERIOLOGICAL TESTING (WATER).
2. PRESSURE TESTING (WATER & FORCE MAINS).
3. BACKFLOW PREVENTOR TESTS (WATER).
4. INFILTRATION TESTS (SEWER).
5. DENSITY TESTS (WATER & SEWER).
6. LAMPING REPORT (SEWER).
4. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER-OF-RECORD FOR REVIEW PRIOR TO THE PURCHASE OR INSTALLATION OF ANY SYSTEM COMPONENTS.
5. CONTRACTOR SHALL PROVIDE THE ENGINEER-OF-RECORD WITH A SET OF FINAL 'AS-BUILT' DRAWINGS, SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED LAND SURVEYOR, FOR ENGINEER'S REVIEW AND FILE.
6. CERTIFICATION OF COMPLETION IN ACCORDANCE WITH PLANS AND SPECIFICATIONS WILL "NOT" BE ISSUED BY THE ENGINEER-OF-RECORD TO THE APPROPRIATE PERMITTING AGENCIES UNTIL ALL THE REQUIREMENTS DESCRIBED HEREIN HAVE BEEN MET.

IV. DEPARTMENT OF HEALTH NOTES: WATER MAIN CROSSING

WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY, VACUUM OR STORM SEWER SHALL BE 6' AND PREFERABLY 12" ABOVE THE SEWER. WATER MAINS BELOW SEWER AT CROSSING SHALL HAVE AT LEAST 12" SEPARATION.
PRESSURE TYPE SANITARY SEWER, WASTE WATER OR STORM WATER FORCE MAIN, OR RECLAIMED WATER LINES SHALL BE AT LEAST 12" ABOVE OR BELOW WATER MAIN.
\*NOTE: CENTER 1 FULL LENGTH OF WATER MAIN PIPE AT CROSSINGS; ALTERNATIVELY ARRANGE PIPES SO JOINTS ARE AT LEAST 3 FEET FROM JOINTS IN VACUUM, STORM OR STORM FORCE MAINS, AT LEAST 6 FEET FROM JOINTS IN GRAVITY OR PRESSURE SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER.
ALL WATER MAIN TEES, PLUGS, AND HYDRANTS INSTALLED UNDER THIS PROJECT SHALL BE PROVIDED WITH THRUST BLOCKS OR RESTRAINED JOINTS TO PREVENT MOVEMENT AS PER FAC G2-555-320(2.1)(b) AND RSNW 8.5-4.

V. BACKFLOW PREVENTER NOTES:

- 1. PRIOR TO THE INSTALLATION OF THE BACK FLOW PREVENTER DEVISE, APPROVAL FROM THE APPLICABLE BUILDING AND ZONING DEPARTMENT AND FIRE DEPARTMENT SHALL BE REQUIRED.
2. PRIOR TO THE INSTALLATION OF ANY WATER METER THE BACK FLOW PREVENTER DEVICE MUST BE INSPECTED AND RELEASED BY THE APPLICABLE BUILDING AND ZONING DEPARTMENT.
3. INSTALLATION OF THE BACK FLOW PREVENTER DEVISE SHALL BE PERFORMED BY A CERTIFIED PLUMBING CONTRACTOR.
4. UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL UTILIZE THE FOLLOWING BACKFLOW PREVENTION ASSEMBLIES:
A. FBECO MODEL 876V STANDARD (N-SHAPE) ORIENTATION D.C.V.A. (O.A.E.)
B. FBECO MODEL 825-Y-B R.Z.P. (O.A.E.)
C. FBECO MODEL 765-BV P.V.B.A. (O.A.E.)

VI. LEGAL DESCRIPTION:

PARCEL 1 - THE BAL HARBOUR SHOPS PARCEL:
ALL OF THE BUSINESS SECTION OF BAL HARBOUR, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 60, AT PAGE 39, AMONG THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA, EXCEPTING AREA NOS. 3 AND 4 THEREOF.
AND
PARCEL 2 - THE VILLAGE OF BAL HARBOUR PARCEL:
AREA NO. 3 OF THE BUSINESS SECTION OF BAL HARBOUR, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 60, AT PAGE 39, AMONG THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.
AND
PARCEL 3 - THE COMMUNITY CHURCH PARCEL:
ORIGINAL COMMUNITY CHURCH TRACT
THAT PORTION OF TRACT 'D' AS SHOWN ON THE PLAT OF THE RESIDENTIAL SECTION OF BAL HARBOUR RECORDED IN PLAT BOOK 44, AT PAGE 98 OF PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA, OF WHICH THE FOLLOWING IS THE METES AND BOUNDS DESCRIPTION: COMMENCING AT THE SOUTHEAST CORNER OF BLOCK 2 AS SHOWN ON A PLAT ENTITLED RESIDENTIAL SECTION OF BAL HARBOUR RECORDED IN PLAT BOOK 44, AT PAGE 98 OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY FLORIDA, RUN SOUTHEASTERLY ACROSS PARK DRIVE, ALONG THE WESTERLY LINE OF CAMDEN DRIVE EXTENDED SOUTHERLY A DISTANCE OF 63.64 FEET TO A POINT ON THE NORTHWESTERLY BOUNDARY OF TRACT 'D' AS SHOWN ON THE ABOVE MENTIONED RECORDED PLAT; THENCE CONTINUE SOUTHEASTERLY ALONG THE WESTERLY LINE OF SAID CAMDEN DRIVE EXTENDED, A DISTANCE OF 370 FEET TO THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED;
FROM SAID POINT OF BEGINNING RUN SOUTHWESTERLY ALONG A LINE NORMAL TO THE SAID WESTERLY LINE OF CAMDEN DRIVE EXTENDED, A DISTANCE OF 130 FEET TO A POINT; THENCE RUN SOUTHEASTERLY ALONG A LINE PARALLEL TO THE WESTERLY LINE OF CAMDEN DRIVE EXTENDED, A DISTANCE OF 150.25 FEET TO A POINT ON A LINE WHICH IS PARALLEL TO AND 20 FEET DISTANT NORTHERLY FROM THE NORTHERLY LINE OF 96TH STREET AS SHOWN ON THE ABOVE MENTIONED RECORDED PLAT; THENCE RAN EASTERLY ALONG A LINE PARALLEL TO AND 20 FEET NORTHERLY OF THE NORTH LINE OF SAID 96TH STREET A DISTANCE OF 109.99 FEET BE THE POINT OF CURVATURE OF A CIRCULAR CURVE DEFLECTING TO THE LEFT; THENCE RUN ALONG THE ARC OF SAID CIRCULAR CURVE DEFLECTING TO THE LEFT HAVING FOR ITS ELEMENTS A CENTRAL ANGLE OF 110°35'25" A RADIUS OF 20 FEET A TANGENT DISTANCE OF 28.88 FEET, AN ARC DISTANCE OF 38.60 FEET TO A POINT; THENCE RUN NORTHWESTERLY ALONG A LINE TANGENT TO THE ABOVE MENTIONED CIRCULAR CURVE ALONG THE WESTERLY LINE OF SAID CAMDEN DRIVE EXTENDED, A DISTANCE OF 170.22 FEET TO THE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED.
ADDITIONAL COMMUNITY CHURCH TRACT
COMMENCING AT THE SOUTHEAST CORNER OF BLOCK 2, AS SHOWN ON A PLAT ENTITLED 'RESIDENTIAL SECTION OF BAL HARBOUR' RECORDED IN PLAT BOOK 44, AT PAGE 98 OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA, RUN SOUTHEASTERLY ACROSS PARK DRIVE, ALONG THE WESTERLY LINE OF CAMDEN DRIVE EXTENDED SOUTHERLY, A DISTANCE OF 63.64 FEET TO A POINT ON THE NORTHWESTERLY BOUNDARY OF TRACT 'D' AS SHOWN ON THE ABOVE MENTIONED RECORDED PLAT;
THENCE CONTINUE SOUTHEASTERLY ALONG THE WESTERLY LINE OF SAID CAMDEN DRIVE EXTENDED, A DISTANCE OF 370 FEET TO A POINT;
THENCE RUN SOUTHWESTERLY ALONG A LINE DEFLECTING 90° TO THE RIGHT NORMAL TO THE SAID WESTERLY LINE OF CAMDEN DRIVE EXTENDED, A DISTANCE OF 130 FEET TO THE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED, SAID POINT BEING THE NORTHWESTERLY CORNER OF THE ORIGINAL COMMUNITY CHURCH PROPERTY;
THENCE CONTINUE SOUTHWESTERLY ALONG THE LAST MENTIONED COURSE EXTENDED 26 FEET TO A POINT;
THENCE RUN SOUTHEASTERLY ALONG A LINE DEFLECTING 90° TO THE LEFT PARALLEL TO AND 26 FEET DISTANT SOUTHWESTERLY FROM THE ORIGINAL COMMUNITY CHURCH PROPERTY TO A POINT ON A LINE WHICH IS 20 FEET DISTANT NORTHERLY FROM THE NORTHERLY LINE OF 96TH STREET AS SHOWN ON THE ABOVE MENTIONED RECORDED PLAT;
THENCE RUN EASTERLY ALONG A LINE DEFLECTING 69°24'35" TO THE LEFT, SAID LINE BEING PARALLEL TO AND 20 FEET NORTHERLY FROM THE NORTH LINE OF SAID 96TH STREET, A DISTANCE OF 27.774 FEET TO A POINT, SAID POINT BEING THE SOUTHWESTERLY CORNER OF THE ORIGINAL COMMUNITY CHURCH PROPERTY; THENCE RUN NORTHWESTERLY ALONG A LINE DEFLECTING 110°35'25" TO THE LEFT, SAID LINE BEING THE SOUTHWESTERLY LINE OF THE ORIGINAL COMMUNITY CHURCH PROPERTY, A DISTANCE OF 150.25 FEET TO THE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED.

VII. SURVEYOR'S NOTE:

- ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929, BASED ON MIAMI-DADE COUNTY BENCHMARK NO. 2-315, ELEVATION +9.59, LOCATED ON OCTOBER 8, 2010 NEAR THE INTERSECTION OF 96TH STREET AND COLLINS AVENUE.
- LANDS SHOWN HEREON ARE LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION AE (EL 8) BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO.S 12066C0144L AND 12066C0163L FOR COMMUNITY NO. 120636, DATED SEPTEMBER 11, 2009, AND INDEX MAP REVISED SEPTEMBER 11, 2009, AND IS RELATIVE TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
- UNDERGROUND IMPROVEMENTS AND/OR UNDERGROUND ENCROACHMENTS NOT SHOWN UNLESS OTHERWISE INDICATED.
- THE APPROXIMATE LOCATION OF ALL UTILITIES SHOWN HEREON WERE DETERMINED FROM AS-BUILT PLANS AND/OR ON-SITE LOCATIONS AND SHOULD BE VERIFIED BEFORE CONSTRUCTION.

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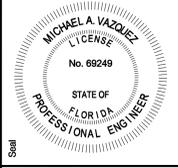
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Project
Bal Harbour
Bal Harbour Shops
9700 Collins Avenue
Bal Harbour, FL 33154
Project No. 1120B5E

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ZYSCOVICH
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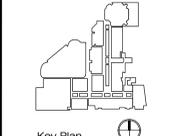


Table with 2 columns: Date, Description. Header: Revised:

NOTES AND SPECIFICATION SHEET

150330CP 04/27/16

CP8

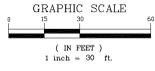
**FLOOD LEGEND**  
Commercial, Industrial

FOID: 12-2226-006-0060 ADDRESS: 9700 COLLINS AVENUE  
LOT: \_\_\_\_\_ BLOCK: \_\_\_\_\_ SUBDIVISION: ALL IN THE BUSINESS SECTION OF BAL HARBOUR  
PLAT BOOK: 89 PAGE: 39 MEETS & BOUNDS: \_\_\_\_\_

CROWN OF ROAD ELEV.: (+)36.63 FT. NVD. CROWN OF ROAD ELEVATION WAS TAKEN FROM A CERTIFIED SURVEY PREPARED BY: DANIEL G. FORTIN, SURVEYOR'S TIME: \_\_\_\_\_ PLS. LIC.#: 152853  
DRAINAGE PLANS SHALL BE ATTACHED (IF 3 ACRES IMPERVIOUS PLANS SHALL BE STAMPED WITH THE DEM/ WATER CONTROL SECTION APPROVAL)  
DEM/ WC - SURFACE WATER MANAGEMENT STORMWATER PERMIT (COPY ATTACHED)  
SF/MD - ENVIRONMENTAL RESOURCES PERMIT (COPY ATTACHED)  
TOTAL IMPERVIOUS AREA: \_\_\_\_\_ UNDERGROUND PARKING: YES (NO) (CIRCLE ONE) IF YES, FLOODPROOFING PLANS AND CONGRUATE SHALL BE ATTACHED BASEMENT: YES/ NO (CIRCLE ONE)  
HAVE THIS SITE OR OTHER PORTIONS OF THIS PROPERTY BEEN GRANTED A CLEAR OR FINAL LOWEST FLOOR ELEVATION? YES/ NO/MP# (CIRCLE ONE)

PROPOSED	(+39.00 NGVD)	(+38.50 NGVD)	(+34.55 NGVD)

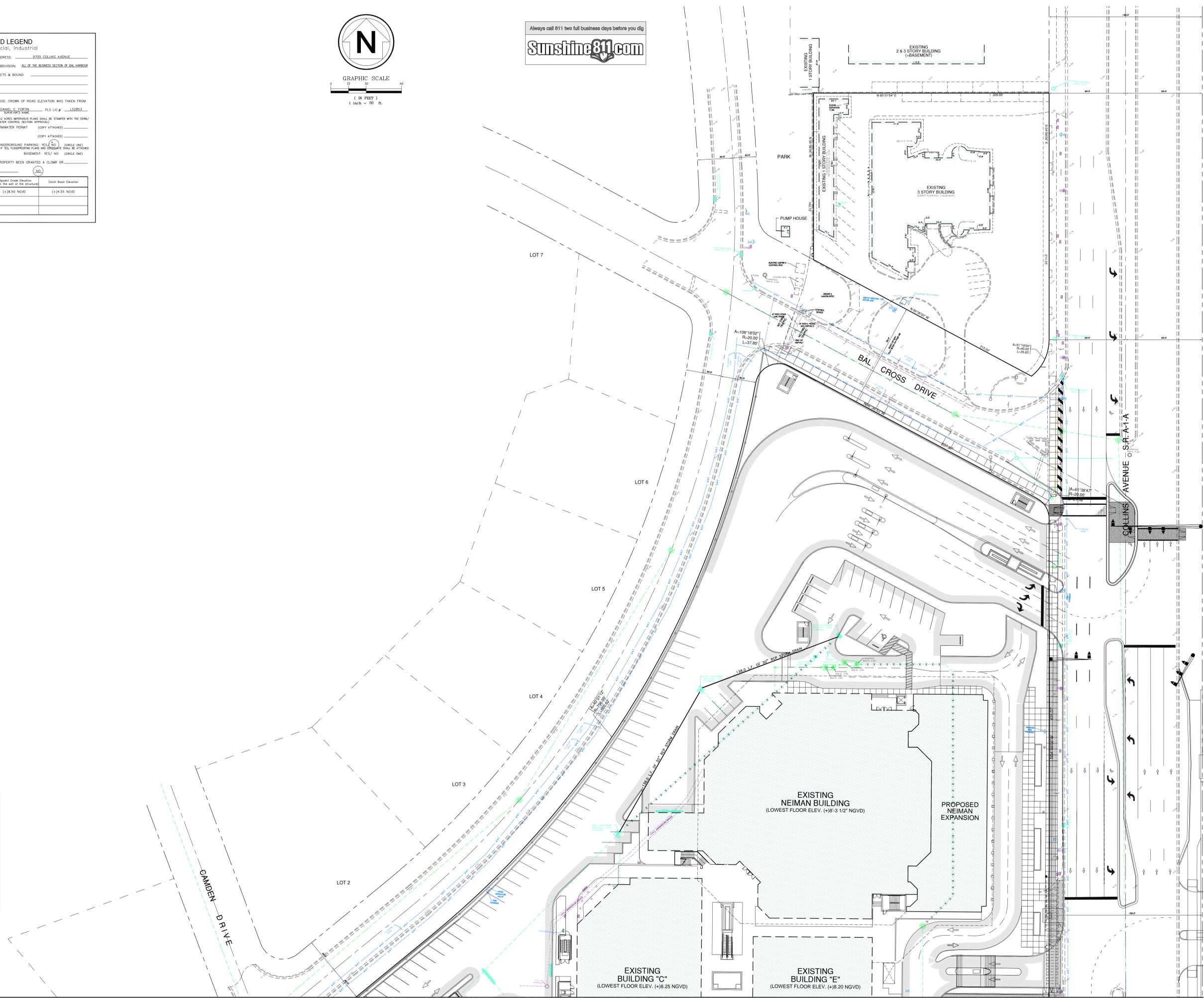
0'-0" = NGVD



Always call 811 two full business days before you dig  
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**UTILITY LEGEND:**

- CATCH BASIN
- UTILITY MANHOLES
- FIRE HYDRANT
- UTILITY VALVES
- WATER METER
- TELE. ELEC. FULL BOX
- WOOD POWER POLE
- CONC. POWER POLE
- SANITARY SEWER MAIN
- WATER MAIN
- STORM DRAIN LINES
- BURIED BELLSOUTH
- GAS MAINS
- OVERHEAD ELECTRIC (PPL)
- BURIED ELECTRIC (PPL)
- SANITARY FORCE MAIN
- TRAFFIC SIGN



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HILBISH MCCREE LIGHTING DESIGN  
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Sunshine Palms, FL 33153  
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Fax: 305.377.2421  
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**Professional Engineer License**  
MICHEL A. VAZQUEZ  
No. 69249  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER

**Key Plan**  
[Diagram showing the location of this sheet within a larger project area]

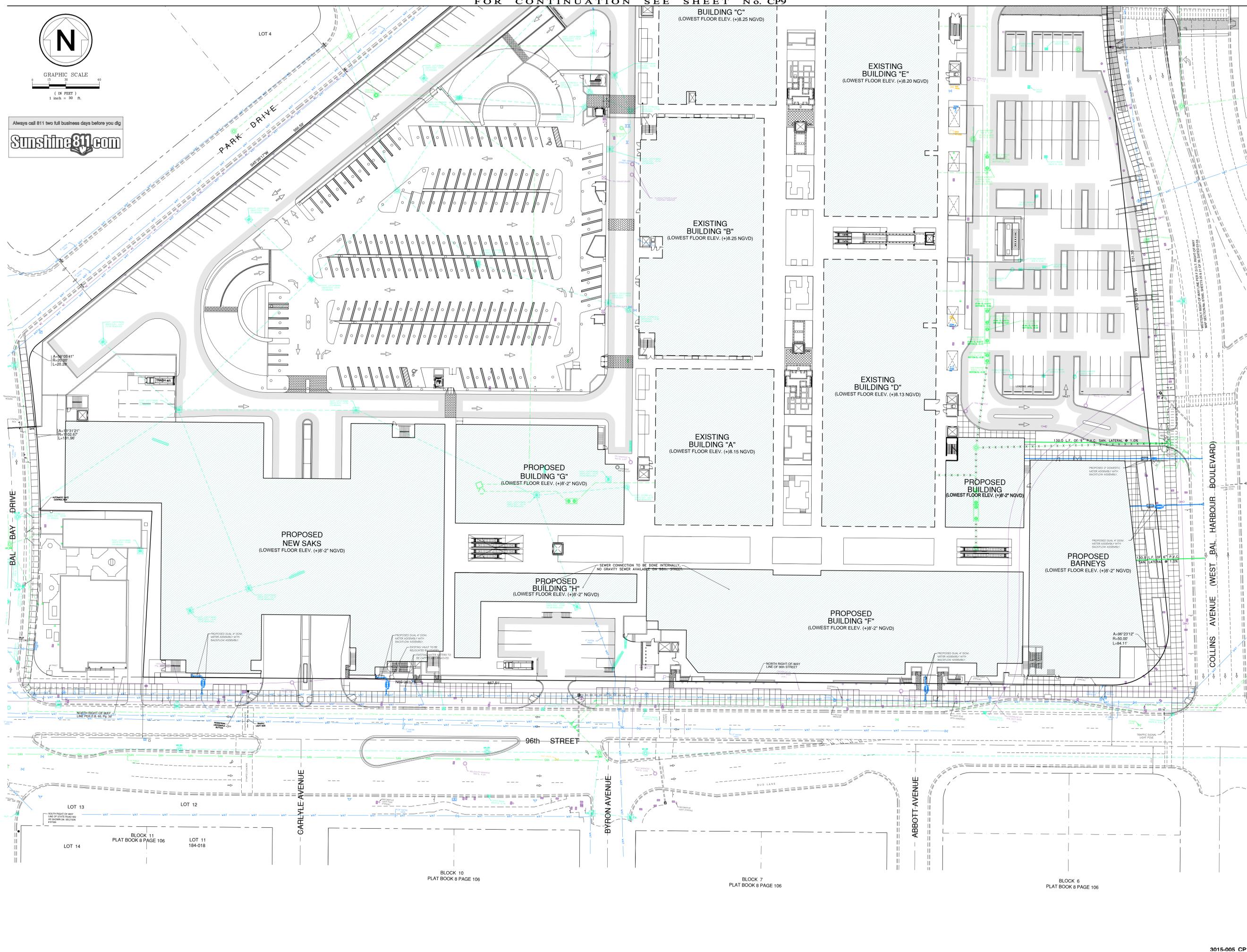
**Water and Sewer Plan**  
150330CP 04/27/16  
**CP9**

3015-005 CP9



GRAPHIC SCALE  
1 IN FEET  
1 inch = 50 ft.

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HNS ENGINEERS  
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**Stamp**  
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LICENSE  
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STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER

**Key Plan**  
[Diagram showing the location of this sheet within the overall project site]

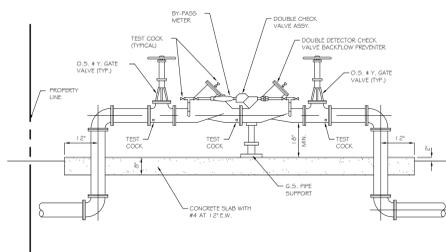
**Revised:**

**WATER AND SEWER PLAN**

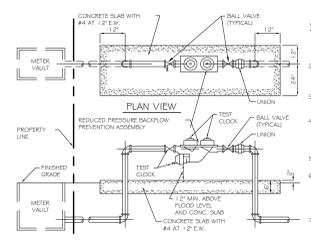
150330CP 04/27/16

**CP10**

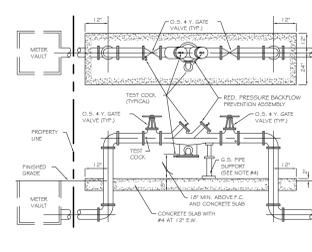
3015-005 CP10



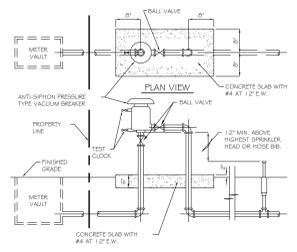
**TYPICAL DETAIL (WS 4.20)  
DOUBLE DETECTOR CHECK  
VALVE ASSEMBLY (PRIVATE)**  
N.T.S.



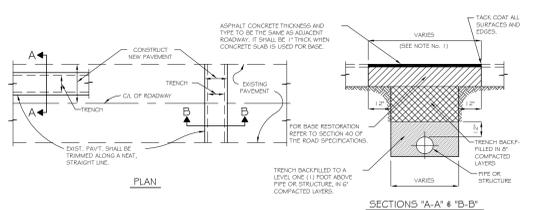
**TYPICAL DETAIL (WS 4.18)  
REDUCED PRESSURE BACKFLOW ASSY.  
FOR 3/4\"/>**



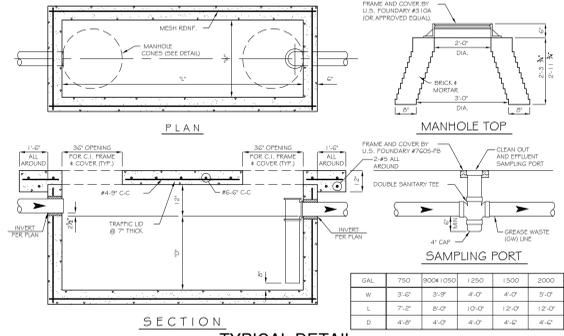
**TYPICAL DETAIL (WS 4.18)  
REDUCED PRESSURE BACKFLOW ASSY.  
FOR 2 1/2\"/>**



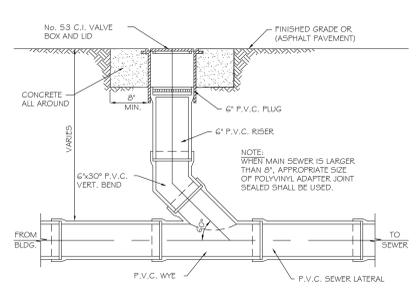
**TYPICAL DETAIL (WS 4.19)  
PRESSURE VACUUM BREAKER  
IRRIGATION SYSTEM ONLY (PRIVATE)**  
N.T.S.



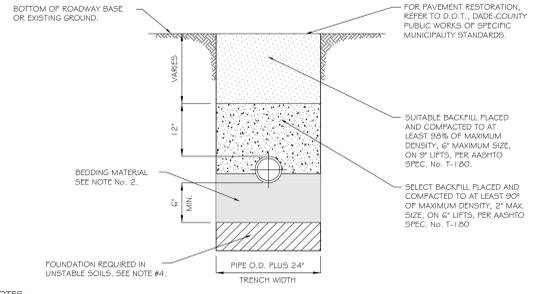
**TYPICAL DETAIL  
PAVEMENT RESTORATION**  
N.T.S.



**TYPICAL DETAIL  
SANITARY SEWER STANDARD MANHOLE**  
N.T.S.



**TYPICAL DETAIL  
CLEAN-OUT**  
N.T.S.



**TYPICAL DETAIL  
TRENCH BACKFILL**  
N.T.S.

- NOTES:**
- FOR EXCAVATION AND BACKFILL AROUND MANHOLES, APPURTENANCES, OR IN WATER, REFER TO PROVISIONS WITHIN THE SPECIFICATION.
  - UNLESS OTHERWISE SPECIFIED, BEDDING MATERIAL SHALL CONSIST OF SELECT BACKFILL MATERIAL 2" MAX. SIZE, OR WASHED AND GRADED LIMESTONE (305-778), COMPACTED TO AT LEAST 90% OF MAX. DENSITY, 6" LIFTS, PER AASHTO SPEC. NO. T-100.
  - WHERE REQUIRED, SHEETING AND SHORING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS.
  - WHERE UNSTABLE SOILS ARE ENCOUNTERED, INCLUDING PEAT, MUCK, OR OTHER ORGANIC SOILS, ELASTIC SILT AND CLAYS BELOW THE WATER TABLE, A FOUNDATION IS REQUIRED, COMPACTED TO AT LEAST 90% OF MAX. DENSITY, 6" LIFTS, PER AASHTO SPEC. NO. T-100. FOUNDATION MATERIAL SHALL BE SELECT BACKFILL MATERIAL, 2" MAXIMUM SIZE 6" LIFTS EXTEND EXCAVATION AT LEAST 2' DEEPER FOR FOUNDATION UNLESS SUITABLE MATERIAL IS FOUND AT A LESSER DEPTH, GREATER DEPTHS MAY BE REQUIRED FOR EXTREMELY POOR CONDITIONS.
  - UNLESS OTHERWISE APPROVED BY W.A.S.D. INSPECTOR, POLYETHYLENE ENCASEMENT IS REQUIRED FOR D, PER ANSI/AWWA C105/A21.5, METHOD A OR B, FOR TYPE I CLASS C TUBE, MINIMUM 6 MILS THICK.

**GENERAL NOTE:**

- THE ASSEMBLY SHALL BE INSTALLED WITH MINIMUM HORIZ. CLEARANCES OF 30 INCHES FREE FROM OBSTRUCTION IN ALL DIRECTIONS.
- GUARD FROTS SHALL BE INSTALLED IF THE ASSEMBLY IS EXPOSED TO POSSIBLE DAMAGE FROM VEHICULAR TRAFFIC AS DETERMINED BY THE VILLAGE UTILITY DEPARTMENT.
- THE ASSEMBLY SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION, APPROVED BY THE VILLAGE UTILITY DEPARTMENT.
- ADJUSTABLE PIPE SADDLE SUPPORT (SPRINCL PIG 264 OR EQUAL) SHALL BE FIT OVER THE TOP OF DOUBLE DETECTOR CHECK VALVE ASSEMBLY, WITH GALVANIZED STEEL PIPE AND FLOOR FLANGE. SETBACK FLOOR FLANGE TO CONCRETE SLAB WITH GALVANIZED EXPANSION BOLTS.
- THE DEPARTMENT SHALL HAVE UNRESTRICTED AND CONT. HANGUP ACCESS TO THE BACKFLOW PREVENTION ASSEMBLY.
- PIPING 2" AND SMALLER SHALL BE SCHEDULE 40 GALV. STEEL PIPE WITH GALVANIZED MALE/MALE IRON THREADED FITTINGS. PIPING 2" AND LARGER SHALL BE DUCTILE IRON PIPE WITH FLANGED FITTINGS. ALL PIPING SHALL BE IN ACCORDANCE WITH THE VILLAGE CONSTRUCTION SPECIFICATION FOR CONDITION OF WATER MAINS.
- ALL EXPOSED METALLIC THREADS SHALL BE PAINTED WITH BITUMASTIC PAINT.

**GENERAL NOTE:**

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- THE DEPARTMENT SHALL HAVE UNRESTRICTED AND CONT. HANGUP ACCESS TO THE VACUUM BREAKER ASSEMBLY.

- NOTES:**
- PAVEMENT RESTORATION FOR LONGITUDINAL CUTS SHALL INCLUDE FULL LANE WIDTH REPAIRS FOR EACH LANE WITHIN THE CUT EXTENSIVE.
  - IN SOME CASES IT WILL BE NECESSARY TO OVERLAY MORE THAN ONE (1) LANE WITH ASPHALTIC CONCRETE TO SMOOTH PAVEMENT SLOPE.
  - CONTRACTOR MAY elect TO BACKFILL WITH 1.5\"/>

**NOTES:**

- BRICK MANSIONARY CONSTRUCTION TO BE STUCCOED WITH 3/4" MORTAR INSIDE AND OUTSIDE.
- CONCRETE TO BE SEAL COATED WITH 1 G MIL THICKNESS APPROVED COATING.
- LIFT HOLES THROUGH PRECAST STRUCTURE ARE NOT PERMITTED.
- ALL OPENINGS SHALL BE SEALED WITH GROUT (TYPE 2 CEMENT).
- A FLOW CHANNEL SHALL BE CONST. INSIDE MANHOLE TO DIRECT INFILTRANT INTO FLOW STREAM.

**TYPICAL DETAIL  
SANITARY SEWER STANDARD MANHOLE**  
N.T.S.

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WALKER PARKING CONSULTANTS  
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PROFESSIONAL ENGINEER

**Key Plan**

**Revised:**

**150330CP 04/27/16**

**CP11**

**3015-005 CP11**