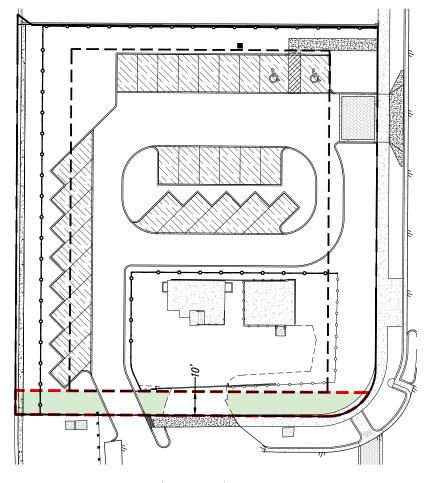


FRONT OPEN SPACE

TOTAL YARD AREA: 3,164 SF

20' SETBACK REQUIRED:

REQUIREMENT: 1,582 SF (50% MINIMUM) AREA PROVIDED: 2,165 SF (68.4%)



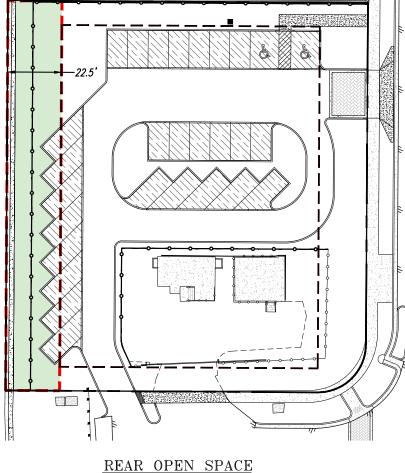
SIDE (STREET) OPEN SPACE

TOTAL YARD AREA:

SETBACK REQUIRED:

RE

AREA PROVIDED: 935 SF (65.7%)



TOTAL YARD AREA:

LEGEND

--- REQUIRED SETBACK LINE

SCALE: 1" = 20"

Open Area Diagram.dwg ISSUE DATE: 08/03/18

Dwg. No:

BIS

DRB FINAL

MIAMIBEAC

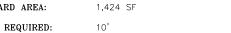
ITY MANAGER: JIMMY L. MORALES
W DIRECTOR: ROY COLEY, P.E.
CIP DIRECTOR: DAVID MARTINEZ, P.I.
CITY ENGINEER: LUIS SOTO, P.E.

Schwebke Shiskin &

Associates, Inc LAND SURVEYORS
CIVIL ENGINEERS
LAND PLANNERS
LB#87 CA#87

3240 CORPORATE WAY MIRAMAR, FL 33025 TEL: (305)652-7010 FAX: (305)652-8284

C-8 **OF**: 31



EQUIREMENT:	712	SF	(50%	MINIMUM)
nn. nnaumnn	0.75	<u>с</u> -	(65.7	or/

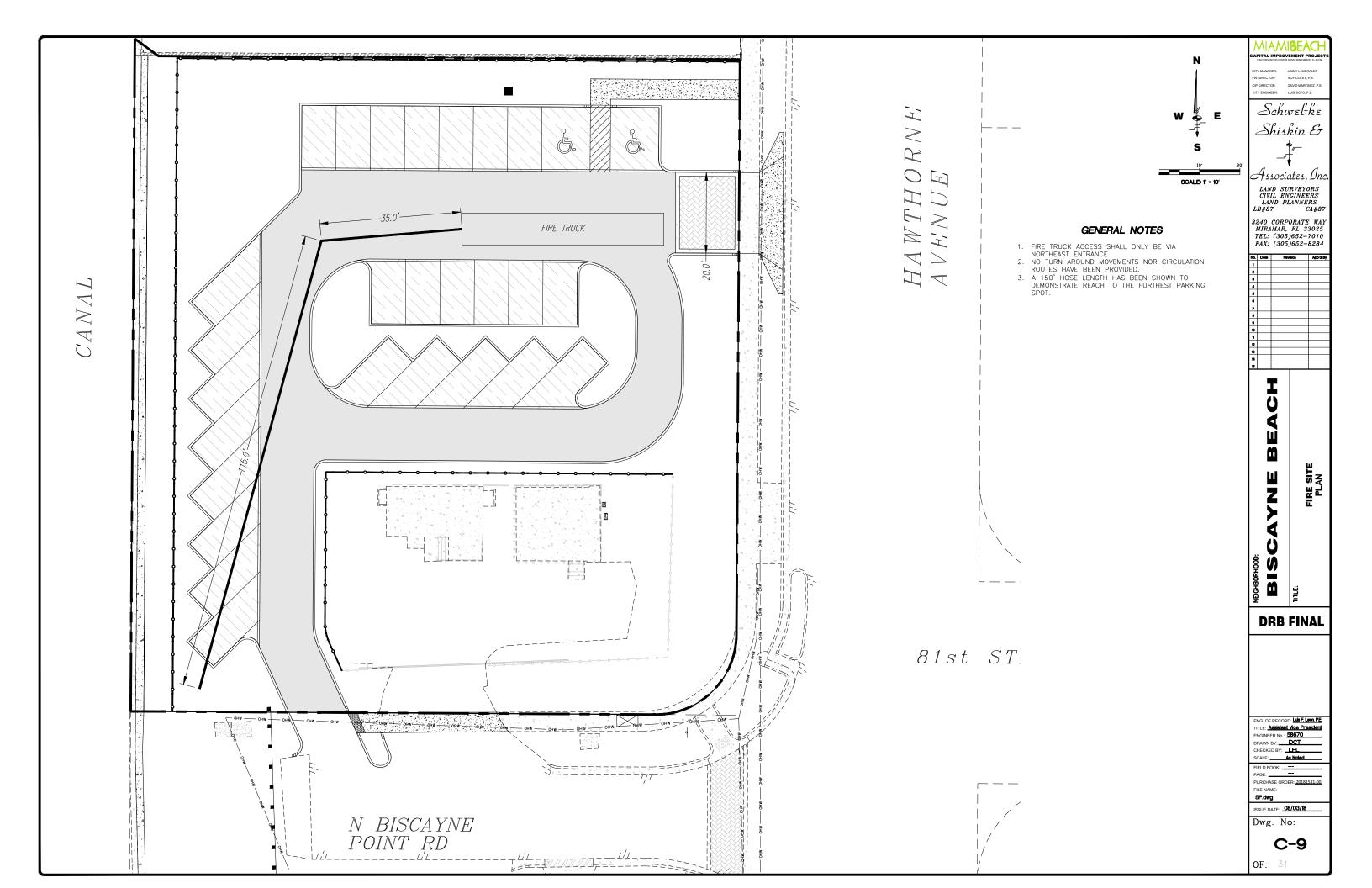
3,654 SF

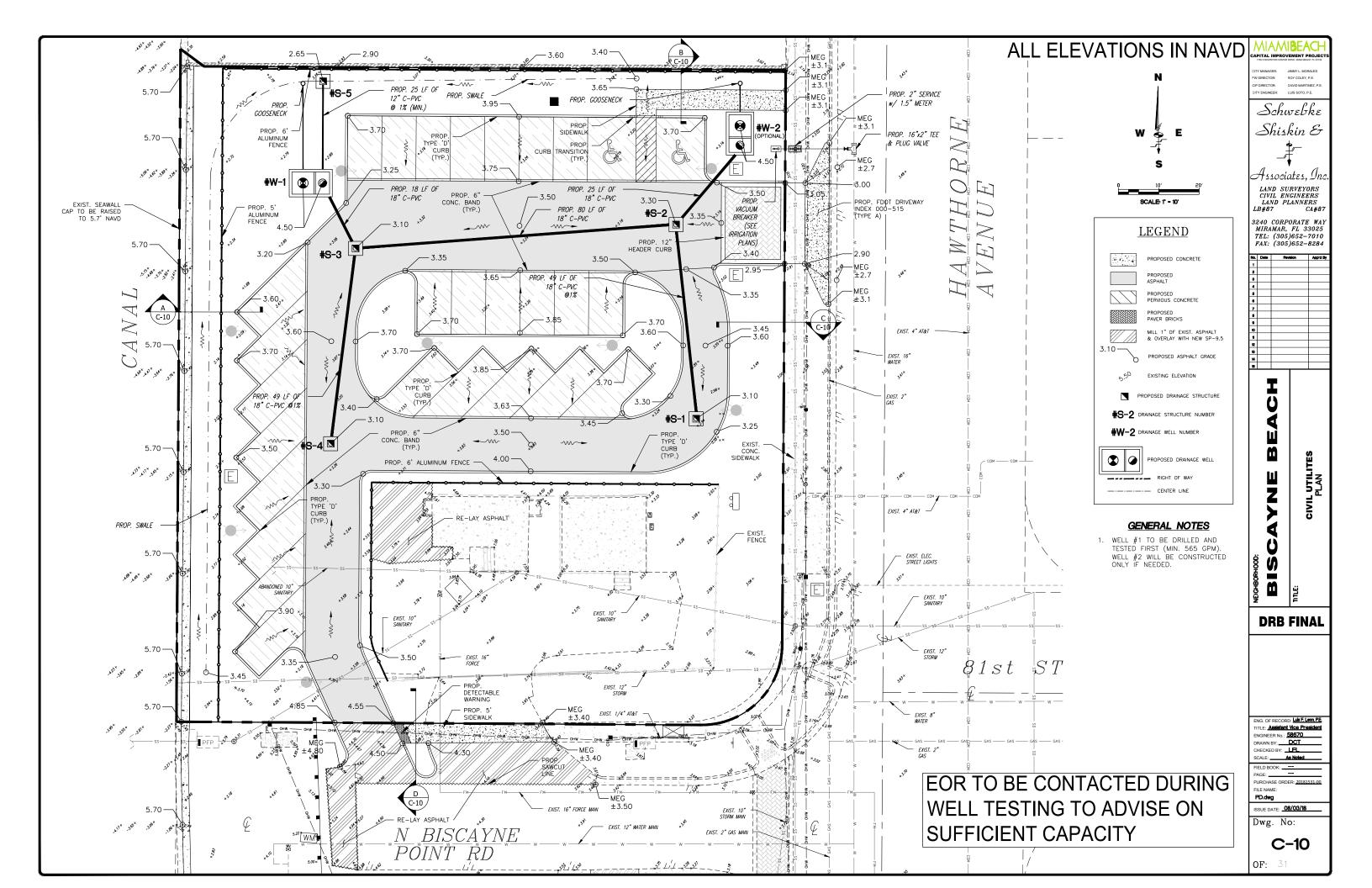
22.5 SETBACK REQUIRED:

REQUIREMENT: 2,558 SF (70% MINIMUM)

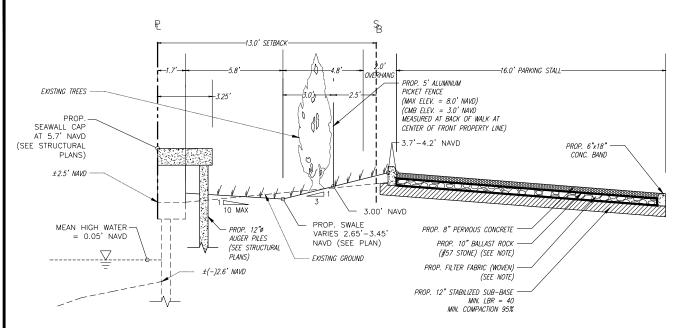
AREA PROVIDED: 2,568 SF (70.3%)

OPEN SPACE PERVIOUS AREA





ALL ELEVATIONS IN NAVD

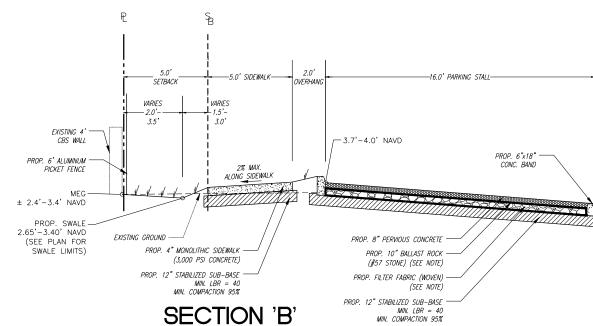


SECTION NOTES:

SECTION 'A' N.T.S.

- AFTER BALLAST ROCK HAS BEEN PLACED, IT SHALL BE CAREFULLY COMPACTED IN ORDER TO ALLOW FOR INITIAL SETTLEMENT. ADDITIONAL BALLAST ROCK SHALL BE ADDED, AS NEEDED, TO ADDITIONAL BULLAST ROCK TO THE PROPER ELEVATION. REPEAT UNTIL SETTLEMENT NO LONGER OCCURS.

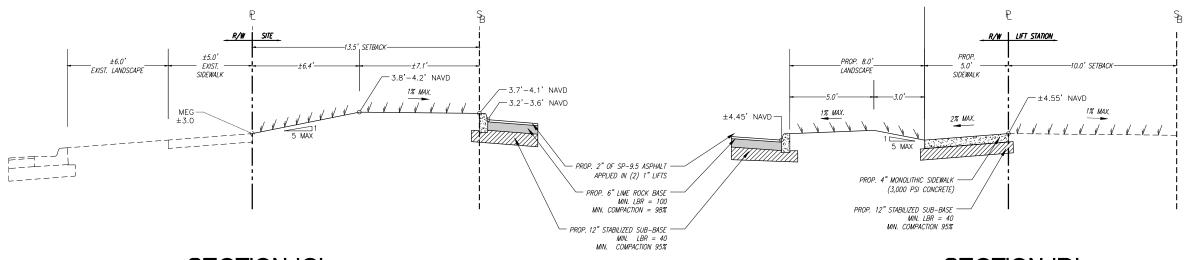
 2. FILER FABRIC SHALL BE PLACED ALONG THE FULL LENGTH OF THE BOTTOM, SIDES, AND ENDS OF THE INFILTRATION TRENCH.



AFTER BALLAST ROCK HAS BEEN PLACED, IT SHALL BE CAREFULLY COMPACTED IN ORDER TO ALLOW FOR INITIAL SETTLEMENT. ADDITIONAL BALLAST ROCK SHALL BE ADDED, AS NEEDED, TO RESTORE THE BALLAST ROCK TO THE PROPER ELEVATION. REPEAT UNTIL SETTLEMENT NO LONGER OCCURS.

SECTION NOTES:

2. FILTER FABRIC SHALL BE PLACED ALONG THE FULL LENGTH OF THE BOTTOM, SIDES, AND ENDS OF THE INFILTRATION TRENCH.



SECTION 'C' N.T.S.

SECTION 'D' N.T.S.

N.T.S.

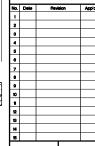
JIMMY L. MORALES ROY COLEY, P.E. LUIS SOTO, P.E.

Schwebke Shiskin &

Associates, Inc LAND SURVEYORS
CIVIL ENGINEERS
LAND PLANNERS

3240 CORPORATE WAY MIRAMAR, FL 33025





DRAINAGE GRADING, AND SECTIONS **NANE** PAVING,

DRB FINAL

ENG. OF RECORD: Luis F. Leon, P.E. TITLE: Assistant Vice President
ENGINEER No.: 58670 CHECKED BY: LFL

FIELD BOOK: ____ Sections.dwg

ISSUE DATE: 08/03/18 Dwg. No:

C-11

GENERAL NOTES:

- ALL APPLICABLE PERMITS MUST BE OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION
- ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF MIAMI BEACH, PUBLIC WORKS DEPARTMENT.
- THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THE APPROVED PLANS ARE TO BE VERRIED IN THE FIELD BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER OF ANY DISCREPANCY OR VARIATION FROM THE APPROVED DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES AND IMPROVEMENTS FROM DAMAGE, DISRUPTION OF SERVICE, OR DESTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING NECESSARY MEASURES TO PROTECT THE HEALTH, SAFETY, AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
- THE CONTRACTOR SHALL MAINTAIN A CURRENT APPROVED SET OF CONSTRUCTION PLANS ON SITE. THE PLANS ARE TO BE MADE AVAILABLE TO THE ENGINEERING INSPECTOR OF THE CITY OF MIAMI BEACH OI HIS DESIGNEE UPON REQUEST.
- THE CONTRACTOR SHALL PROVIDE ACCESS AND ASSISTANCE TO THE CITY ENGINEER OR HIS DESIGNEE MAKE INSPECTIONS, AS NECESSARY, DURING CONSTRUCTION.
- NO DEVIATION FROM APPROVED PLANS SHALL BE PERMITTED WITHOUT THE WRITTEN CONSENT OF THE CITY ENGINEER OR HIS DESIGNEE.
- ENGINEERING PERSONNEL WILL INSPECT ALL FACILITIES APPROVED BY THEIR OFFICE. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCIES SHALL BE IN ACCORDANCE WITH THEIR STANDARDS.
- TRENCH EXCAVATIONS IN EXCESS OF 5 FEET DEEP SHALL COMPLY WITH THE TRENCH SAFETY ACT AS PER O.S.H.A. STANDARD 29 OFR 5.926.650 SUBPART P IN STATUTES. THE TRENCHES AND DITCHES SHALL BE PROTECTED IN ACCORDANCE WITH RULE 366 4.302 FAC AND 6.4-1,095(2).
- PLANS AND SPECIFICATIONS REQUIRE THAT COMPACTED BACKFILL BE PLACED ALONGSIDE OF AND OVER ALL UTILITIES. THE CITY ENGINEER REQUIRES THAT COMPACTION TESTS BE TAKEN TO VERIFY BACKFILL COMPACTION. THE COST OF SUCH COMPACTION TESTS WILL BE BORNE BY THE CITY. THE RETESTING COST, DUE TO FAILURE OF THE COMPACTION TEST, WILL BE PAID BY THE CONTRACTOR.
- WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED COMPLETE UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED BY THE CITY OF MIAMI BEACH, PUBLIC WORKS DEPARTMENT.
 A. CONTRACTOR'S, SUBCONTRACTOR'S AND SUPPLIER'S WAYER AND RELEASE OF LIEN.
 B. CONTRACTOR'S LETTER OF WARRANITY (I.E. LETTER OF AGREEMENT).
 C. "AS BUILT" FOUR (4) ORIGINALS 22"/34" & 11"X"?" SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR SHOWNG SPECIFIC LOCATION, DEPTH, ETC. OF ALL CITY FACILITIES TOGETHER WITH A DIGITAL COPY IN AUTOCAD LAST VERSION 2011 OF THE "AS—BUILT" DRAWINGS USING STATE PLANE FLORIDA EAST FIPS 0901 FEET MAP 1983 (FEET).
- THESE PLANS ARE PREPARED FROM UTILITY INFORMATION OF PREVIOUS AND RECENT AVAILABLE RECORDS. THE DESIGNER IS NOT LUBBLE FOR ANY UTILITY CONFLICTS AND UNKNOWNS THAT ARE DISCOVERED DIRING CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITIES. IN CASE THAT A CONFLICT ARISES, THE ENGINEER OF RECORDS OR HIS DESIGNEE SHALL BE INFORMED TO MAKE THE APPROPRIATE DESIGN CHANGES.

A HORIZONTAL DISTANCE OF AT LEAST 6 FEET, AND PREFERABLY 10 FEET (QUTSIDE TO QUTSIDE), SHALL BE MAINTAINED BETWEEN GRANTY OR PRESSURE SEWER PIPES AND WATER PIPES. THE MINIMUM HORIZONTAL SEPARATION CAN BE REDUCED TO 3 FEET FOR VACUUM—TYPE SEWERS OR FOR GRANTY SEWERS WHERE THE BOTTOM OF THE SEWER PIPE IS AT LEAST 6 INCHES BELOW THE BOTTOM OF THE WATER PIPE. WHEN THE ABOVE SPECHED HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONTROLLED SAULER SEPARATIONS ARE ALLOWED IF:

WENT SET OF THE WATER PIPE AND PRESSURE TESTED AT 150 PINED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PINED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND CHIEF SEWER IS ENCASED IN A WATERTICHT CARRIER PIPE OR CONCRETE.

C—THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER PIPE.

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 HE WINDOWN METICAL SEP WATER IN CASE OF COMMENT OF THE REPORT OF THE WATER WATER OF THE PROPERTY OF THE WATER OF THE WA

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 WATERTIIGHT CARRIER PIPE OR CONCRETE.

IN HIGHLY CONGESTED AREAS, WHERE EITHER WATER OR SEWER FACILITIES ARE EXISTING AND TH SEPARATION REQUIREMENTS CANNOT BE MET, SPECIAL CONSIDERATION MAY BE GIVEN SUBJECT T SUBMITTAL OF DOCUMENTATION SHOWING THAT THE PROPOSED ALTERNATIVE WILL RESULT IN AN EQUIVALENT LEVEL OF RELIABILITY AND PUBLIC HEALTH PROTECTION.

THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, AND CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.

DERM NOTES ON WATER-SEWER INSTALLATION:



GENERAL NOTES

GN1a

- ADJUSTMENT AND CLEANING: CLEAN DEBRIS FROM AREAS OF DEMOLITION LEAVING AREA SUITABLE FOR WORK.
- 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 COLIPMENT EXCAVATION.

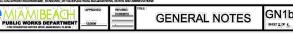
 IN NO CASE SHALL A CONTRACTOR INSTALL UTILITY PIPES, CONDUITS, CABLES, ETC. IN THE SAME TRENCH PARALLEL AND ABOVE AN EXISTING WATER OR SEWER PIPE EXCEPT WHERE THEY CROSS. ANY DEVALUTION FROM NOTES 6, 7 AND 8 SHALL BE APPROVED IN WRITING BY THE RESPONSIBLE WATER AND SEWER UTILITY.
- A NON-RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AT EACH PUMP TO RECORD THE TOTAL NUMBER OF OPERATING HOURS OF THE STATION.

GN1e DERM NOTES

GENERAL NOTES:

- 5. FOR SPECIFICATIONS, PLEASE REFER TO THE CITY OF MIAMILIBEACH PUBLIC WORKS MANUAL
- 16. DUE TO SOIL CONDITIONS, HIGH WATER TABLE AND PROTECTION OF ROADWAY, UTILITIES AND EXISTING LANDSCAPING, SHORING WILL BE REQUIRED FOR TRENCH AND STRUCTURE CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT THE PROPOSED METHOD OF CONSTRUCTION TO THE ENGINEER FOR APPROVAL AT THE PRECONSTRUCTION MEETING. THE COST OF SHORING WILL BE INCLUDED IN THE COSTS OF STRUCTURE AND PIPES. DEWATERING MAY BE REQUIRED AND SHALL BE INCLUDED IN THE COSTS OF STRUCTURES AND PIPES.
- CONTRACTOR SHALL, BE RESPONSIBLE FOR INSTALLING TURBIDITY BARRIER AT ALL OUTFALLS SUBJECT TO POTENTIAL DISCHARGE DURING CONSTRUCTION, SEE FOOT INDEX NO 104, CONTRACTOR SHALL BE RESPONSIBLE FOR FULL KNOWLEDGE OF ALL APPLICABLE REGULATORY REQUIREMENTS AND CORRECT ANY SILTATION OR OTHER DAMAGE TO THE DRAINAGE SYSTEM.
- WHEN POWER POLES ARE ADJACENT TO ANY PROPOSED UTILITY, THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR OTHER SUITABLE SUPPORT DURING CONSTRUCTION. THE SHORING AND SUPPORT METHODS SHALL BE APPROVED BY THE UTILITY COMPANY ENGINEERING DEPARTMENT.
- ALL DEFECTIVE WORK NOT ACCEPTED BY THE CITY ENGINEER OR HIS DESIGNEE, OR BY ANY GOVERNMENT PERMITTING AGENCY SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- 21: CONTRACTOR SHALL CONTACT PWD TO INSPECT METERS AND BOXES AHEAD OF CONSTRUCTION TO DETERMINE WHETHER REPLACEMENT IS NECESSARY.
- 22. ELEVATIONS ARE REFERRED TO NAVO 88, BASED ON A BENCH M.

 NO. ELEVATION: (NGV DATUM) = (NAVD 88) LOCATOR: (NAVD 88) LOCATOR: (LOCATED AT LOCATED AT LOC
- PROVIDE RESTRAINING BY THE USE OF FIELD LOCK GASKET ON TYTON JOINT PIPE AND AS MANUFACTURED BY U.S. PIPE OR EQUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UNINTERRUPTED WATER SERVICE DURING THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UNINTERRUPTED WATER SERVICE DURING THE CONSTRUCTION OF THE THE-IN CONNECTION OF TALL PROPOSED WATER SYSTEMS TO ANY EXISTING WATER SERVICE LINES, ABANDONMENT SHALL NOT OCCUR UNTIL THE PROPOSED WORK HAS BEEN APPROVED, AND ACCEPTED FOR OPERATION BY THE LENGUEER OF RECORD AND THE CITY OF MIAMIL BEACH FURDED FOR WATER MAIN SHALL DRIVEN CONTRACTOR SHALL REQUEST FROM CMB 48 HOURS PROPE FOR WATER MAIN SHALLDOWN.
- 25. ALL WATER METER BOXES DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH CITY ISSUED WATER METER BOXES AND PAID FOR BY CONTRACTOR:
- 26. ALL PROPOSED WATER METERS SHOULD BE A MINIMUM OF A 2-INCH SERVICE.
- 27. CONTRACTOR SHALL BE RESPONSIBLE TO VERIEW THE ACTUAL NUMBER OF EXISTING WATER SERVICES TO BE CONNECTED TO THE PROPOSED WATER MAIN.
- ALL DUCTILE IRON PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C 600 LATEST REVISIONS WITH A DETECTOR TAPE, DETECTOR TAPE SHALL BE 3"WIDE BLUE TAPE FOR WATER MAIN WITH A METALLIC FOIL CORE LEMAINATED BETWEN TWO LAYERS OF FLASTIC FILM, THE WORKS CAUTION WATER LINE BURIED BELOW ON THE UPPER SIDE OF THE IPPE SHALL BE PRINTED AT 30"NTERVALS ALONG THE TAPE. TAPE SHALL BE PLACED IN BEGINN OR ADDE ANOVER AND SERVICES OR AS RECOMMENDED BY MANUFACTURER NON-METALLIC TAPE, SHALL BE USED ABOVE JUCTILE IRON DIDECTION.



ENGINEER'S NOTES:

- EXISTING UNDERGROUND UTILITIES: INFORMATION SHOWN ON THE DRAWINGS AS TO THEIR LOCATIO AND CHARACTER HAS BEEN PREPARED FROM THE MOST RELIABLE DATA AVAILABLE TO THE ENGINEER: THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED. THE CONTRACTOR SHALL ENGINEER, THE ACQURACY OF THIS INFORMATION IS NOT GUARANTEED. THE CONTRACTOR SHALL CONTACT SURSHINE STATE ONE CALL OF FORIDA, INC.(1-800-432-4770) TWO (2) BUSINESS DAYS PRIOR TO ANY EXCAVATION TO DETERMINE SAID LOCATIONS AND THE LOCATIONS OF RECENT ADDITIONS TO THE SYSTEMS NOT SHOWN, EXTREME CAUTION SHALL BE EXERCISED BY THE CONTRACTOR TO ELIMINATE ANY POSSIBILITY OF DAMAGE TO UTILITIES DURING CONSTRUCTION. THE LOCATION AND CHARACTER OF ALL UTILITIES SHALL BE VERIFIED AND THE OWNER'S REPRESENTATIVE NOTIFIED OF ANY CONFLICT THAT MIGHT OCCUR.
- ALL EXISTING GRASSED AREAS DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE SODDED COMPLETELY AS DIRECTED BY THE CONSTRUCTION MANAGER AT NO ADDITIONAL COST 1 THE OWNER.
- PROTECT MATERIALS AND EQUIPMENT ON SITE FROM WEATHER, DUST, AND DEBRIS AT ALL TIMES, AND AVOID THE CREATION OF NUISANCE OR HAZARD IN THE SURROUNDING AREA.
- UNSCHEDULED ITEMS SHALL BE RESTORED TO THEIR ORIGINAL DESIGN AND FUNCTION AT CONTRACTOR'S EXPENSE.
- WHERE PAVEMENT DEMOLITION IS REQUIRED, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO PROTECT AND PREVENT DAMAGE TO ADJACENT STRUCTURES AND PAVEMENTS TO REMAIN. LIMITS OF PAVEMENT DEMOLITION SHALL BE PERFORMED IN A NEAT, STRAIGHT LINE BY SAW CUTTING.
- EXISTING BENCHMARKS LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED. IN THE EVENT THAT THE BENCHMARKS ARE DISTURBED OR DESTROYED, THEY SHALL BE REPLACED UPON COMPLETION OF THE PROJECT.
- FALL MATERIALS RESULTING FROM DEMOLITION WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR. REMOVE FROM SITE AND DISPOSE OF THESE MATERIALS IN A MANNER AND LOCATION APPROVED BY MAMM-DADE COUNTY REGULATIONS.

GN1f **ENGINEER'S NOTES**

ENERAL NOTES:

- CONTRACTOR WILL BE RESPONSIBLE TO COORDINATE WITH HRS (DEPT. OF HEALTH) THE WATER SAMPLING AND BACTERIOLOGICAL TESTS AND FINAL CERTIFICATION FROM HRS.
- TAPPING SLEEVE VALVE TO BE PRESSURE TESTED AT 125 PSI FOR TWO (2) HOURS BEFORE TAPPING THRUST BLOCK NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY ENGINEER. USE MEGALUGS OR CLASS 316 STAINLESS STEEL RESTRAINING RODS.
- CONTRACTOR SHALL EXERCISE CARE WHEN WORKING NEAR EXISTING CLAY PIPING
- EXISTING FIRE HYDRANTS SHALL REMAIN IN SERVICE UNTIL THE NEW MAIN IS PLACED IN SERVICE. ONCE THE NEW MAIN IS IN SERVICE, THE OLD HYDRANT SHALL BE COVERED AND TAGGED WITH A SIGN INDICATING OUT OF SERVICE" UNTIL IT IS REMOVED BY THE CONTRACTOR.
- NPDES BMP FOR SEDIMENTATION AND EROSION WORK MUST BE STRICTLY FOLLOWED DURING AND AFTER CONSTRUCTION.
- ALL D.I. PIPE SHALL BE THICKNESS CLASS 52 AND SHALL BE POLYWRAPPED AS PER WS7.
- A CONCRETE SLAB SHALL BE INSTALLED OVER ANY PIPE INSTALLED WITH LESS THAN 30" OF COVER AS PER STANDARD DETAIL SES1.
- ELEVATIONS ON PLANS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE CONTRACTOR SHALL BE GOVERNID BY THE LATEST APPLICABLE PORTIONS OF THE F.D.O.T. DESIGN STANDARDS, AND THE F.D.O.T. STANDARD SPECIFICATIONS FOR RODA AND BRIDGE CONSTRUCTOR AND SUPPLEMENTS THERE TO IF NOTED IN THE SPECIAL PROVISIONS FOR THIS PROJECT.
- THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES IN THE PROJECT AREA BEFORE THE START OF CONSTRUCTION. SEE THE UTILITY CONTACT INFORMATION TABLE FOR CONTACT NUMBERS.
- ANY DAMAGED PUBLIC OR PRIVATE PROPERTY BY THE CONTRACTOR SHALL BE RESTORED TO PREEXISTING CONDITIONS OR BETTER AT NO EXPENSE TO THE OWNER.
- ALL CONSTRUCTION DEBRIS SHALL BE PROPERLY DISPOSED OF OFFSITE AT THE CONTRACTOR'S EXPENSE.
- ERECTION OR INSTALLATION OF APPROPRIATE SAFETY AND WARNING DEVICES SHALL BE REQUIRED DURING THE COURSE OF CONSTRUCTION, SAID DEVICES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S "MANUAL OF TRAFFIC CONTROL AND SAFETY PRACTICES" AND THE MIAMI-DADE COUNTY PUBLIC WORKS MANUAL
- ALL EXISTING UTILITIES, MAN HOLE COVERS, ELECTRICAL BOXES, VALVE BOXES, METER BOXES, DRAINAGE STRUCTURES, ETC. WITHIN PROPOSED AREAS OF IMPROVEMENTS SHALL BE ADJUSTED TO GRADE ELEVATION, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL USE A STREET SWEEPER (USING WATER) OR OTHER EQUIPMENT CAPABLE OF CONTROLLING AND REMOVING DUST. APPROVAL OF THE USE OF SUCH EQUIPMENT IS CONTINGENT UPON ITS DEMONSTRATED ABILITY TO DO THE WORK.



□ WATER □

1-1/2" WATER METER WITH AMR

SECTION N.T.S.

MIAMIBEACI

1-1/2" WATER METER DETAIL
N.T.S.

-1-1/2" CUSTOMER

SLAB (SIDEWALK)

74

GN1c

- VAULT COVER POLY

___2" CURB STOP

←FLOW

/-1-1/2" WATER METER WITH AUTOMATED METER READER TECHNOLOGY (AMR)

2" POLY TUBING WATER MAIN FLOW 4" THICK #57 PEA ROCK COMPACTED TO 90% DENSITY _2" CURB STOP MIP

NOTE:

1. METER BOX AND COVER IN TRAFFIC ARE TO BE HS-20 RAITED.

2. ALL BRASS FITTINGS TO BE LEAD-FREE MATERIA B. STAINLESS STEEL. NUTS TO BE BRASS.

WATER DETAILS NO. 2

WS13

1-1/2" BRASS 5'x5' CONCRETE METER TAIL SLAB(SIDEWALK)

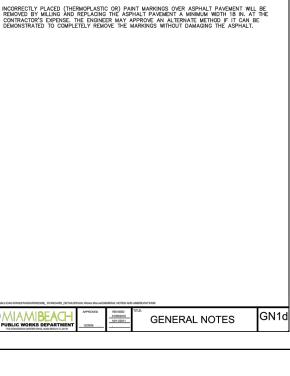
___2"ø POLY TUBING

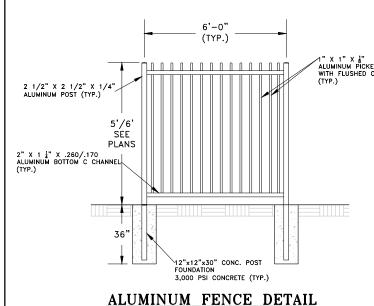
COVER & METER BOX MATERIALS:

FIBERGLASS REINFORCED POLYMER

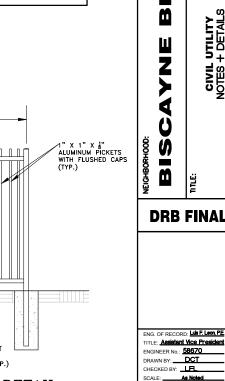
GENERAL NOTES:

- THE COLOR OF THE DETECTABLE WARNINGS ON CONCRETE OF COLORS OTHER THAN MIAMI BEACH RED, COORDINATE WITH THE PUBLIC WORKS DEPARTMENT FOR APPROPRIATE COLOR AND CONTRAST.
- ALL SIGNING AND PAVEMENT MARKINGS INSTALLED AS PART OF THESE PLANS SHALL CONFORM TO THE LATEST EDITION OF THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL OF UNIFORM TRACFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS. ALL SION PANELS SHALL BE FABRICATED TO COMPLY WITH THE LATEST EDITION OF THE FEDERAL HIGHWAY AND ANMINISTRATION STANDARD HIGHWAY SIGNS.
- MATCH EXISTING PAVEMENT MARKINGS AT THE BEGINNING AND THE END OF THE PROJECT WITHOUT JOSS OR OFFSETS.





COLOR: BLACK



ENG. OF RECORD: Luis F. Leon, P.E. ITLE: Assistant Vice President ENGINEER No.: 58670 CHECKED BY: _LFL_ FIELD BOOK: ____

MIAMI**B**E**A**C

DIRECTOR-

ROY COLEY, P.E.

LUIS SOTO, P.E.

Schwebke

Shiskin &

Hssociatεs, Inc

LAND SURVEYORS CIVIL ENGINEERS

LAND PLANNERS

3240 CORPORATE WA

MIRAMAR, FL 33025

TEL: (305)652-7010 FAX: (305)652-8284

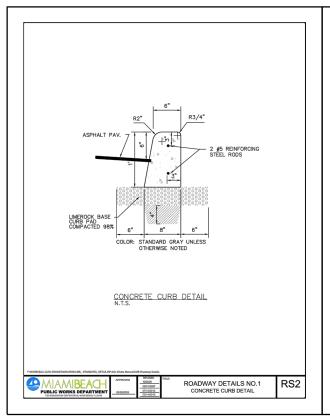
I.R#87

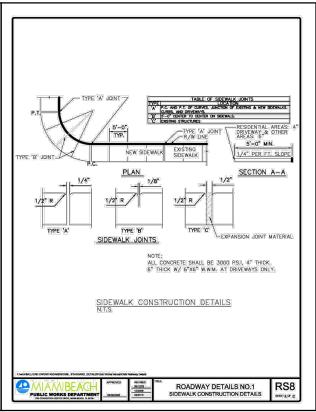
DAVID MARTINEZ D

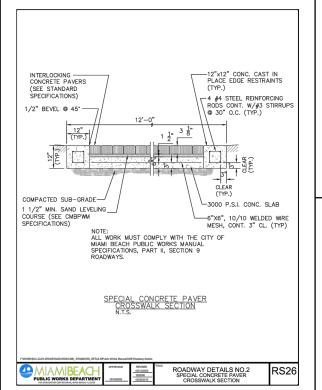
PURCHASE ORDER: 20181531-0 DETAILS.dwg ISSUE DATE: 08/03/18

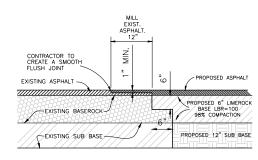
Dwg. No:

C-12

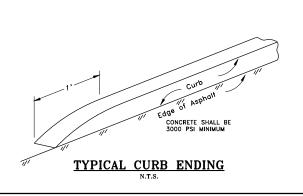


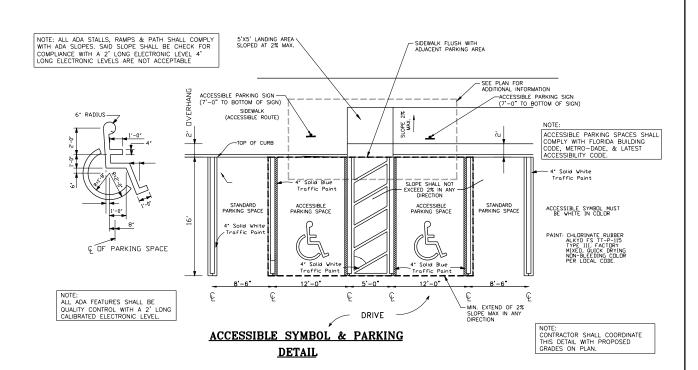


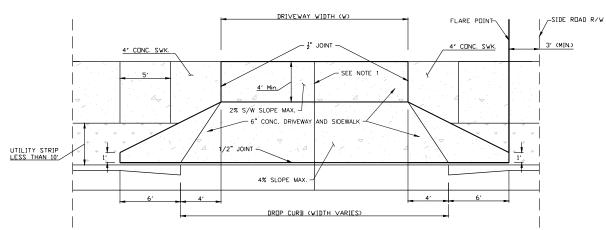




DETAIL FOR MATCHING EXISTING PAVEMENT



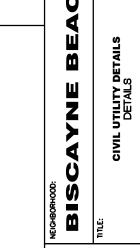




FDOT INDEX 000-515
PLAN A
TURNOUT WITH SIDEWALK AND UTILITY
STRIP (LESS THAN 10')

NOTES:

I. 1/8" OPEN JOINTS PLACE AT EQUAL (20" MAX.) INTERVALS FOR DRIVEWAYS OVER 20" WIDE: JOINTS IN CURB AND GUTTER TO MATCH JOINTS IN DRIVEWAYS.



MIAMI**B**EAC

D DIDECTOR-

LB#87

JIMMY L. MORALES ROY COLEY, P.E.

Schwebke Shiskin &

Associates, Inc.

LAND SURVEYORS
CIVIL ENGINEERS
LAND PLANNERS

3240 CORPORATE WAY MIRAMAR, FL 33025

TEL: (305)652-7010 FAX: (305)652-8284

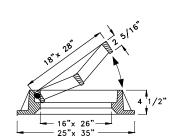
DRB FINAL

ENG. OF RECORD: Life F. Leon PE
TITLE: Assistant Vice President
ENGINEER No.: 58670
DRAWN BY: DCT
CHECKED BY: LIFL
SCALE: As Noted

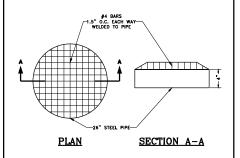
FIELD BOOK: _____
PAGE: ____
PURCHASE ORDER: 20181
FILE NAME:
DETAILS.dwg

Dwg. No:

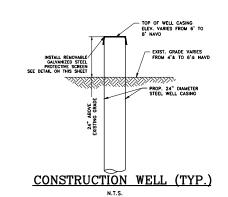
C-13



USF #4700 & 6223 GRATE HINGED FRAME



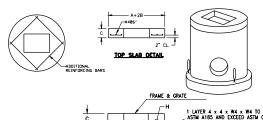
REMOVABLE GALVANIZED STEEL PROTECTIVE SCREEN DETAIL



CONSTRUCTION NOTES:

- CONTRACTOR SHALL USE NON-SHIRNK GROUT BETWEEN 4" CONC. BAFFLE
 AND LID OF STRUCTURE TO ENSURE WATER PROOF SEAL.
 CONTRACTOR SHALL MORTAL HIS TONNICHM FROM HIS STRUCTURE'S TON
- 2. CONTRACTOR SHALL MORTAR THE TRANSITION FROM THE STRUCTURE'S TOP SLAB THROUGH THE BRICKING TO THE FRAME AND GRATE INSIDE AND OUT TO ENSURE WATER TICHT (WATER PROOF) SEAL NON-SHRINK GROUT MUST BE USED AT ALL EDGES & JOINTS TO PREVENT LEAKAGE.

ALL ELEVATIONS IN NAVD



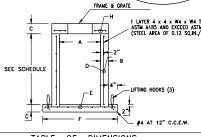
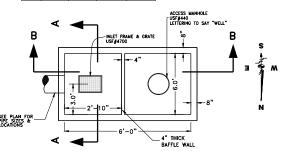


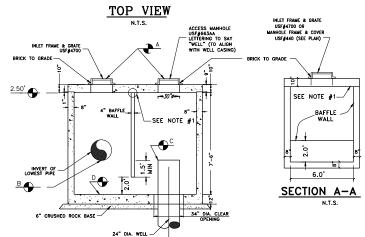
TABLE OF DIMENSIONS								
Αø	В	O	D	E* C.C.E.W.	Fø	Gø	H* C.C.E.W.	HOLDING CAPACITY (gains/kJL)
3'-6"	4"	8"	ASTM C-478	#4 AT 12"	4'-8"	4'-2"	#4 AT 6"	72
3'-6"	6"	8"	ASTM C-478	#4 AT 12"	5'-0"	4'-6"	#4 AT 6"	72
4'-0"	6"	8"	ASTM C-478	#4 AT 12"	6'-0"	5'-0"	#4 AT 6"	94
4'-0"	8"	8"	ASTM C-478	#4 AT 12"	6'-4"	5-4"	#4 AT 6"	94
5'-0"	8"	8"	ASTM C-478	#5 AT 12"	7'-4"	6-4"	#5 AT 6"	147
6'-0"	6"	8"	ASTM C-478	#5 AT 6"	8'-0"	7'-0"	#5 AT 6"	211
6'-0"	8"	8"	ASTM C-478	#5 AT 6"	8'-4"	7'-4"	#5 AT 6"	211
7'-0"	8	8"	ASTM C-478	#5 AT 6"	9'-4"	8'-4"	#5 AT 6"	288
8'-0"	10"	10"	ASTM C-478	#5 AT 6"	10'-8"	9'-8"	#6 AT 6"	376
10'-0"	12"	12"	ASTM C-478	#5 AT 6"	12'-0"位	12-0"	#6 AT 6"	587
*GRADE	40, C	R FOR	EQUIVALENT	STEEL DESIG	GNS.			

TYPE "C" CATCH BASIN 42"-120" ROUND STRUCTURE

DRAINAGE WELL #1 & INLET



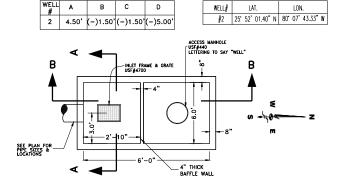


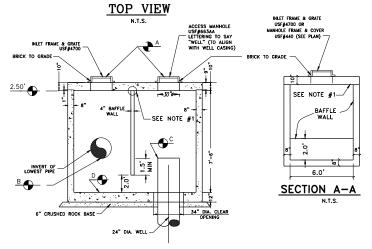


SECTION B-B

NOTE #1:
CONTRACTOR SHALL GROUT BETWEEN 4" CONC. BAFFLE
AND LID OF STRUCTURE TO INSURE WATER PROOF SEAL

DRAINAGE WELL #2 & INLET

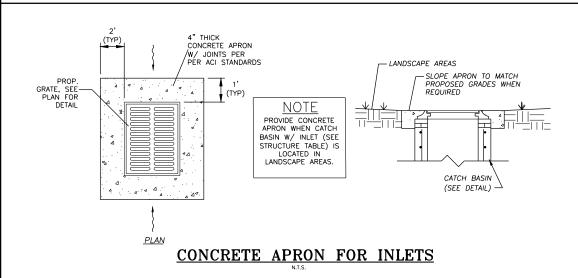




SECTION B-B

NOTE #1:
CONTRACTOR SHALL GROUT BETWEEN 4" CONC. BAFFLE
AND LID OF STRUCTURE TO INSURE WATER PROOF SEAL

STRUCTURE TABLE								
STRUCTURE	STRUCTURE RIM INVERTS FLOOR STRUCTURE FRAME &							FRAME &
NUMBER	ELEVATION	NORTH	SOUTH	EAST	WEST	ELEVATION	TYPE	GRATE
#S-1	3.10	-0.40		-	-	-2.40	TYPE 'C' - 42" ø	USF 4700-6223
#S-2	3.30	-0.40	-0.40		-0.40	-2.40	TYPE 'C' - 42" ø	USF 4700-6223
#S-3	3.10	-0.40	-0.40	-0.40	-	-2.40	TYPE 'C' - 42" ø	USF 4700-6223
#S-4	3.10	-0.40		-	-	-2.40	TYPE 'C' - 42" Ø	USF 4700-6223
#S-5	2.65		-0.35			-2.35	12" NYLOPLAST	ADS GRATE



MIAMIBEACH

CITY MANAGER: JIMMY L. MORALES
PW DIRECTOR: ROY COLEY, P.E.
CIP DIRECTOR: DAVID MARTINEZ, P.
CITY ENGINEER: LUIS SOTO, P.E.

Schwebke Shiskin & \$-

Associates, Inc

LAND SURVEYORS
CIVIL ENGINEERS
LAND PLANNERS

3240 CORPORATE WAY MIRAMAR, FL 33025 TEL: (305)652-7010 FAX: (305)652-8284

No.	Date	Revision	App'd B
T			
2			
3			
4			
5			
6			
7			
2			
1			
12			
13			
14			
15			

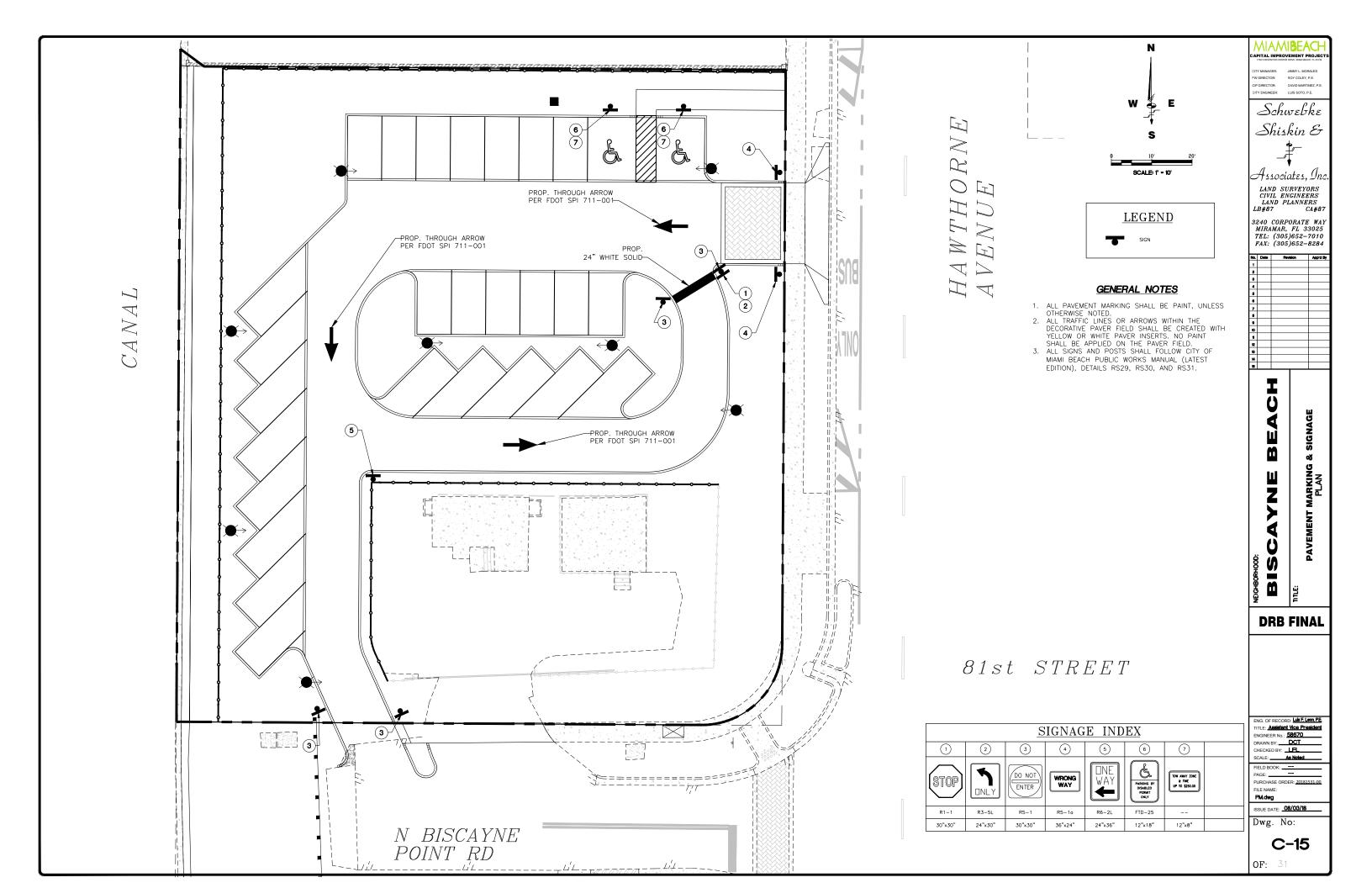
BISCAYNE BEACH
LE: CIVIL UTILITY DETAILS
DETAILS

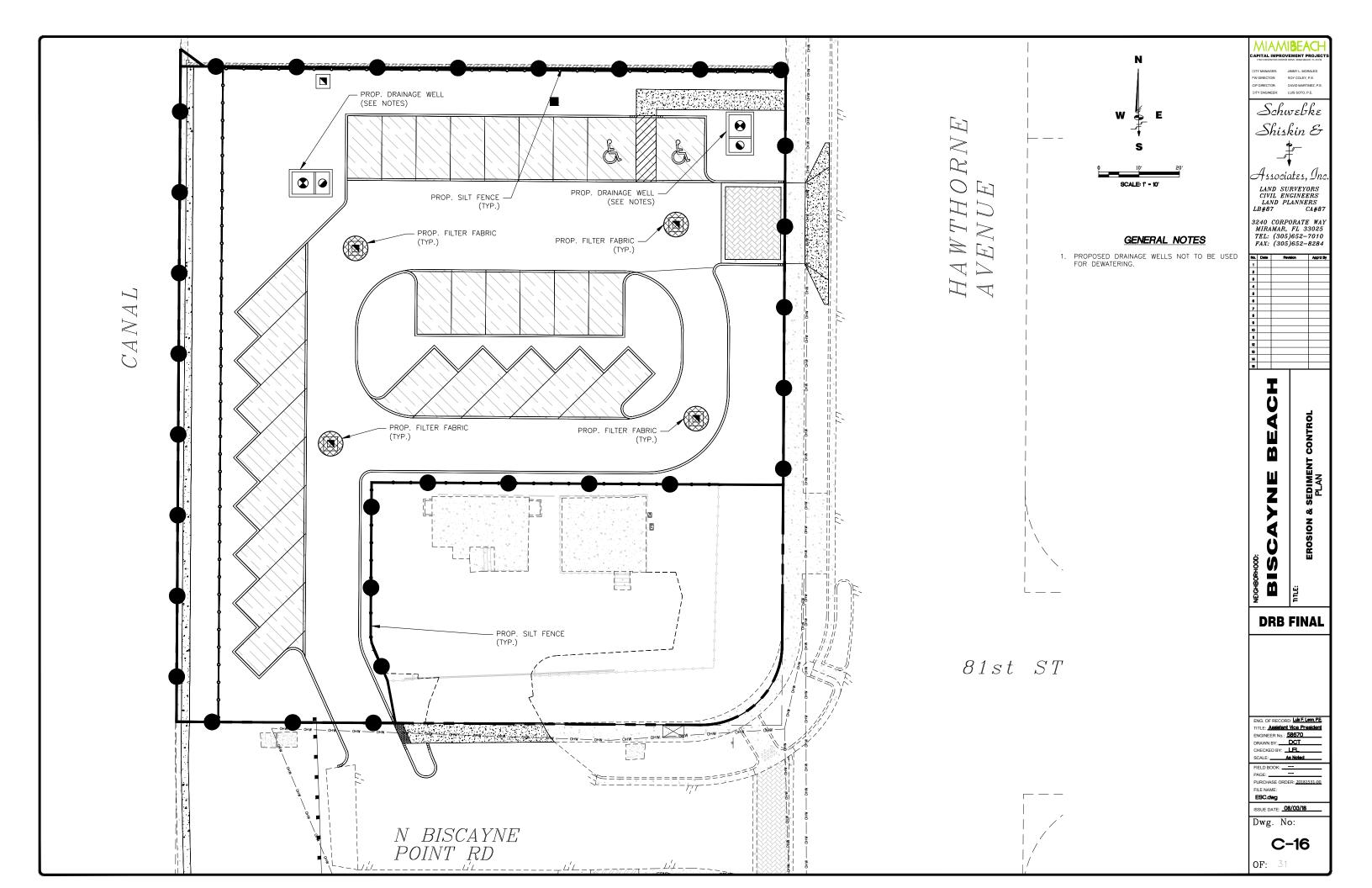
DRB FINAL

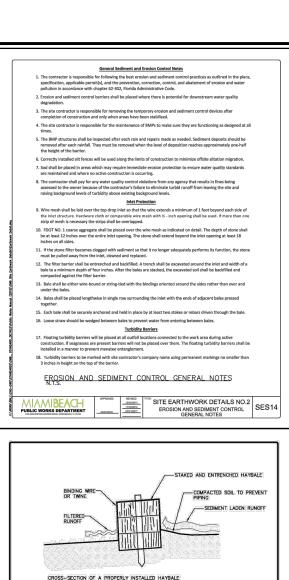
ENG. OF RECORD: Life FLeon PE
TITLE: Assistant Vice President
ENGINEER No.: 58670
DRAWN BY: DCT
CHECKED BY: LFL
SCALE: As Noted
FIELD BOOK: --PAGE:
PURCHASE ORDER: 20181531-00
FILE NAME:
DETAIL S.dwg

Dwg. No:

C-14



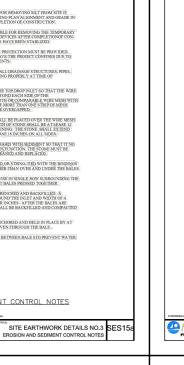




PROPER PLACEMENT OF HAYBALE BARRIER IN DRAINAGE WAY

HAYBALE BARRIER

NOTES:



CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.

5. WIRE MESH SHALL BE LAID OVER THE TOP DROP INLET SO THAT THE WIRE EXTENDED A MINIMUM OF 1 EXCHANGE BACK SIDE OF THE

BALE SHALL BE EITHER WIRE BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER-THAN OVER AND UNDER THE BALES.

[10] THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. AT TRENCH SHALL BE EXCAVATED AROUND THE DILET AND WIDTH OF A BALE TO A MINIMAN DEPIT OF FOUR THEMS. A FIFER THE BALE SHE ARE STACKED. THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.

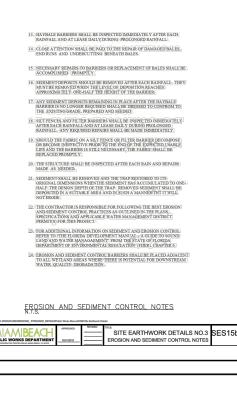
 111° Each bale shall be securely anchored and held in place by at least two stakes or rebars driven through the bale. 12 LOOSE STRAW SHOULD BE WEIGED BETWEEN BALE STO PREVENT WATER FROM ENTERING BETWEEN BALES.

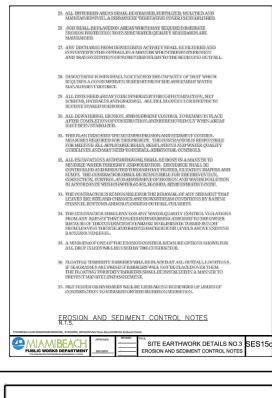
EROSION AND SEDIMENT CONTROL NOTES

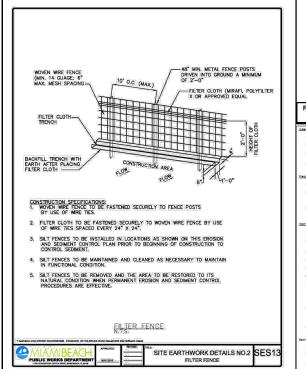
FILTERED WATER

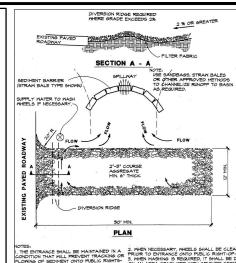
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 55) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEDING 0.50 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO METS RECEIVENCE CONCENTRATED (FLOWS, SUC), AS IN STREET

BURLAP DROP INLET SEDIMENT FILTER.









NOTES:

IT HE ENTRANCE SHALL BE MAINTAINED IN A

2. WHEN NECESSARY, PARELS SHALL BE CLEANED IN A

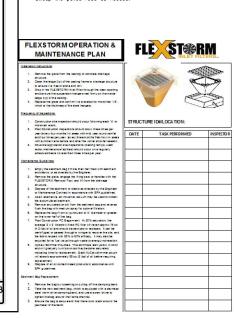
CONDITION THAT HILL REVENT TRACKING OF PRIOR TO ENTRANCE ONTO PRIOR REMOVED FROM THE PROVINCE OF SERVING OF SERVING PRIOR SHAPE OF THE PRIOR SH

Washing II conditions on the site are such that most of the mud is not removed by II conditions on the site are such that most of the whicle tires must be washed before entering a public road. Wash water must be carried away from the entrance to a settling area to remove sediment (see Figure 4.3b of the Florida Starmwater Erasion and Sedimentation Control Inspector's Manual). A wash rock may also be used to make washing more convenient and effective (see Figure 4.3c of the Florida Starmwater Erasion and Sedimentation Control Inspector's Manual).

<u>Location</u>
The entrance should be located to provide for maximum utility by all construction vehicles.

<u>Construction Specifications</u>
The entrance area should be cleared of all vegetation, roots, and other objectionable material. A geotextile should be laid down to improve stability and simplify maintenance when grovel is used. The gravel shall then be placed over the geotextile to the specified dimensions.

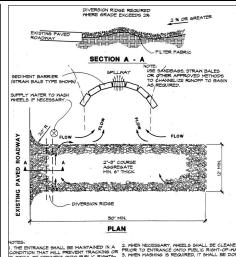
Maintenance
The stabilized construction exit shall be maintained in a condition that will prevent the tracking or flow of mud onto public rights of way. This may require periodic maintenance as conditions demand, and the repair and/or cleanout of any structures used to trap sediments. All moterials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately. Look for signs of trucks and trailered equipment "cutting corners" where the construction exit meets the roadway. Sweep the power road as needed.



(FLEXSTORM INLET PROTECTION OR **APPROVED EQUAL)**

NOTE:

CONTRACTOR SHALL COMPLY WITH THIS PLAN AND THE FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL BY F-DEP.



TEL: (305)652-7010 FAX: (305)652-8284

MIAMI**BEA**CI

DIRECTOR-

ROY COLEY, P.E.

LUIS SOTO, P.E.

Schwebke

Shiskin &

Associates, Inc

LAND SURVEYORS CIVIL ENGINEERS LAND PLANNERS

3240 CORPORATE WAY

MIRAMAR, FL 33025

8 Z

DRB FINAL

ENG. OF RECORD: Luis F. Leon, P.E. ITLE: Assistant Vice President ENGINEER No.: 58670 CHECKED BY: _LFL_

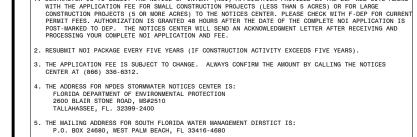
FIELD BOOK: ____

ESC.dwg ISSUE DATE: 08/03/18

Dwg. No:

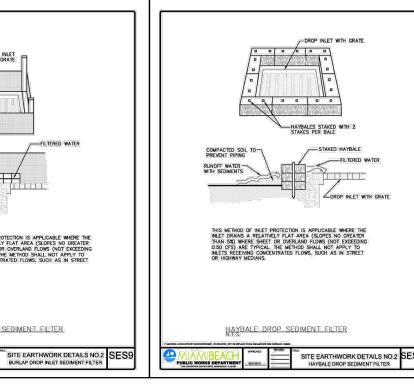
OF:

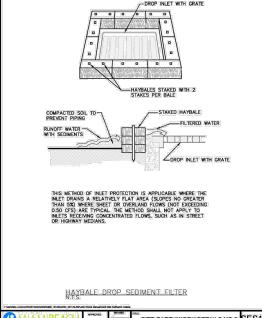
C-17

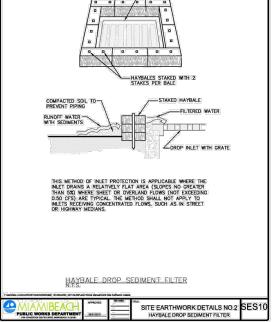


SES8

CONTRACTOR IS TO SUBMIT THE NOTICE OF INTENT (NOI) APPLICATION PROVIDED ON THE DEP WEB SITE ALONG







ELECTRICAL GENERAL NOTES

- 1. THE SCOPE OF WORK SHALL CONSIST PRIMARILY OF BUT NOT LIMITED TO THE FOLLOWING:
 - A. PROVIDE AND INSTALL NEW PARKING LOT LIGHTING SYSTEM AS SHOWN ON PLANS, FOR A COMPLETE WORKING SYSTEM IN PLACE.
- 2. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR TO INSTALL THE ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS. ITEMS NOT SHOWN BUT OBVIOUSLY NECESSARY FOR COMPLETION OF THE WORK SHALL BE INCLUDED.
- 3. THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, NATIONAL ELECTRICAL SAFETY CODE, LOCAL CODES, FLORIDA BUILDING CODE AND MIAMI BEACH CODES.
- 4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS AND APPROVALS AND TO INCLUDE ALL FEES AS PART OF THEIR BID IF NOT OTHERWISE NOTED.
- 5. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE ENGINEER AND OWNER.
- 6. THE CONTRACTOR SHALL, BEFORE SUBMITTING THEIR BID, VISIT THE SITE OF THE PROJECT AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS. NO ALLOWANCE WILL BE MADE FOR EXISTING CONDITIONS OR FAILURE OF THE CONTRACTOR TO OBSERVE THEM.
- 7. CONTRACTOR SHALL NOTIFY OWNER 48 HOURS IN ADVANCE OF ANY WORK THAT REQUIRES A POWER SHUTDOWN. CONTRACTOR SHALL PROVIDE A WORKING SCHEDULE IN WRITING TO OWNER SHOWING THE PROPOSED SCHEDULE OF WORK WITH THE ANTICIPATED TIME DURATIONS.
- 8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH ALL LOCAL UTILITIES, INCLUDING THE POWER AND TELEPHONE UTILITIES TO MEET ALL OF THEIR INSTALLATION REQUIREMENTS. ALL FEES, LABOR, EQUIPMENT OR MATERIALS NECESSARY TO MEET THESE REQUIREMENTS IS TO BE INCLUDED IN THE BID. THE CONTRACTOR SHALL OBTAIN, DELIVER AND INSTALL ALL CONDUITS, PULL—BOXES AND EQUIPMENT AS REQUIRED BY THE UTILITIES TO MEET THEIR SPECIFICATIONS.
- 9. ALL EQUIPMENT AND MATERIAL SHALL BE UNUSED AND U.L. LISTED. ALL REFERENCES TO A PARTICULAR MANUFACTURER ARE GIVEN ON AN "APPROVED ALTERNATE" BASIS.
- 10. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL SYSTEMS INSTALLED OR MODIFIED UNDER THIS PROJECT AND REPAIR OR REPLACE ALL DEFECTIVE WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER.
- 11. ALL EQUIPMENT FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF OWNER ACCEPTANCE.
- 12. ALL CONDUCTORS SHALL BE COPPER WITH XHHW INSULATION. NO ALUMINUM ALLOWED UNLESS SPECIFICALLY INDICATED ON DRAWINGS
- 13. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL ELECTRICAL SPECIAL SYSTEMS EQUIPMENT AND MATERIAL AND SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING CIRCUIT BREAKERS, CONDUITS, CONDUCTORS, ENCLOSURES, POLES, BASES, PULLBOXES, MANHOLES, WINDLOAD CALCULATIONS, LIGHTING CONTACTORS, LIGHTING ASSEMBLIES, GROUND ROD, GROUNDING, JUNCTION BOX, CHANNEI AND FTC..
- 14. ALL CONTROL PANELS SHALL BE CONSTRUCTED BY A UL 508A APPROVED PANEL VENDOR AND SHALL BARE A UL 508A LABEL ON THE PANEL.
- 15. THE DRAWINGS ARE NOT INTENDED TO SHOW THE EXACT LOCATION OF CONDUIT RUNS. THESE ARE TO BE COORDINATED WITH THE OTHER TRADES SO THAT CONFLICTS ARE AVOIDED PRIOR TO INSTALLATIONS.
- 16. ALL LOCATIONS OF EQUIPMENT, PANELS ETC. ARE SHOWN FOR ILLUSTRATION PURPOSES. CONTRACTOR SHALL VERIFY AND COORDINATE EXACT LOCATION AND SIZE WITH ALL SUBCONTRACTORS AND EQUIPMENT SUPPLIERS PRIOR TO ANY INSTALLATION AND THEN INSTALL AS SUCH WITH CORRESPONDING CONDUIT STUB—UPS.
- 17. SEE OTHER DISCIPLINE DRAWINGS FOR COORDINATION OF ALL DRAWINGS. ANY CONFLICTS SHALL BE BROUGHT TO THE ENGINEER'S/OWNER'S ATTENTION AND MOVEMENT OF CONDUITS OR OTHER ELECTRICAL EQUIPMENT SHALL BE ACCOMPLISHED WITHOUT ANY ADDITIONAL COST FOR THE OWNER.
- 18. LOCATIONS OF MANHOLES, HANDHOLES AND PULL BOXES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH EXISTING AND NEW PIPING OR CONDUIT AND ADJUST ACCORDINGLY.
- 19. NOT ALL CONDUITS SHOWN ON RISER AND ONE-LINE DIAGRAMS ARE SHOWN ON BUILDING LAYOUTS. CONTRACTOR SHALL SUPPLY ALL CONDUITS AND CABLES AS SHOWN ON RISER AND ONE-LINE DIAGRAMS.
- 20. ALL CIRCUITS SHALL BE IDENTIFIED IN JUNCTION BOXES, PULL BOXES, CONTROL PANELS, MINI—POWER ZONES, SWITCHBOARDS, PANELBOARDS, LIGHTING POLES, CONTROLLERS AND SERVICE POINTS. IDENTIFICATION SHALL MATCH PANELBOARD SCHEDULES.
- 21. EXPOSED RUNS OF CONDUITS SHALL BE INSTALLED WITH RUNS PARALLEL OR PERPENDICULAR TO WALLS, STRUCTURAL MEMBERS OR INTERSECTIONS OF VERTICAL PLANES AND CEILINGS, WITH RIGHT ANGLE TURNS CONSISTING OF SYMMETRICAL BENDS OR PULL BOXES AS INDICATED ON THE DRAWINGS. BENDS AND OFFSETS SHALL BE AVOIDED WHERE POSSIBLE.
- 22. CONDUCTOR PULLING TENSIONS SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATION. CONTRACTOR SHALL INSTALL PULL BOXES TO MEET MANUFACTURER'S REQUIREMENTS.
- 23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUIT AND WIRING INSTALLATION FOR ALL VENDOR PROVIDED EQUIPMENT (PACKAGE SYSTEMS). IF THE SHOP DRAWINGS DIFFER FROM THE DESIGNED FACILITIES, THE CONTRACTOR SHALL REDESIGN THE FACILITIES AND SUBMIT THE REVISED DESIGN FOR THE ENGINEER'S/OWNER'S APPROVAL ALONG WITH THE SHOP DRAWINGS. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER FOR THE REDESIGN NOR FOR ANY ADDITIONAL CONDUITS AND WIRING. DURING SUBMITTAL THE CONTRACTOR SHALL VERIFY ALL SUPPLIED BREAKER SIZES FOR ALL PACKAGED SYSTEMS AND MODIFY ALL BREAKERS IN PANELBOARDS ACCORDINGLY WITHOUT ANY ADDITIONAL COST TO THE OWNER.
- 24. ALL EXCAVATIONS FOR CONDUITS, HANDHOLES, MANHOLES AND PULLBOXES NEAR EXISTING PIPING, CONDUIT AND EQUIPMENT SHALL BE HAND EXCAVATED AND COORDINATED WITH ENGINEER AND OWNER.
- 25. MINIMUM DEPTH FROM TOP OF DUCTBANKS OR CONDUITS TO FINISHED GRADE SHALL BE 24" UNLESS OTHERWISE NOTED.

- 26. COLORED WARNING TAPE 6" WIDE SHALL BE INSTALLED 8" BELOW FINISHED GRADE DIRECTLY ABOVE ALL UNDERGROUND YARD CONDUITS ACCORDING TO THE FOLLOWING SCHEDULE: POWER: RED ALL OTHER CONDUITS: GREEN
- 27. CONTRACTOR SHALL RESTORE SIDEWALKS, PARKING LOTS, ROADWAYS, SOD AND SPRINKLER SYSTEM TO MATCH EXISTING, AFTER THE COMPLETION OF THE CONDUIT AND PULLBOX INSTALLATION.
- 28. GROUNDING SHALL BE INSTALLED IN ACCORDANCE WITH NEC, ARTICLE 250. THE GROUNDING SYSTEM TEST SHALL NOT EXCEED A 48 HOUR SPAN DRY RESISTANCE OF 25 OHMS. ADDITIONAL GROUNDING TO MEET THIS REQUIREMENT SHALL BE INSTALLED AT NO EXTRA COST. GROUNDING AND BONDING CONNECTIONS SHALL NOT BE PAINTED. ALL GROUNDING CONNECTIONS SHALL BE EXOTHERMIC UNLESS SPECIFICALLY INDICATED OTHERWISE.
- 29. AN EQUIPMENT GROUND WIRE SIZED PER NEC SHALL BE PULLED IN ALL ELECTRICAL CONDUITS, POWER AND CONTROL, WHETHER OR NOT INDICATED ON THE PLANS.
- 30. ALL ENCLOSURES, TJB, WIREWAY, PULL BOXES ETC. SHALL CONTAIN A GROUNDING BUS. CONNECT ALL RACEWAY BONDS TO THIS BUS VIA GROUNDING BUSHING AND EXTEND BONDING JUMPER FROM THIS BUS TO THE ENCLOSURE.
- 31. ALL CONDUITS PENETRATING RATED FIRE WALLS OR RATED FIRE FLOORS SHALL BE INSTALLED WITH U.L. APPROVED DEVICES TO MAINTAIN THE FIRE RATING OF THE WALL OR FLOOR PENETRATED.
- 32. PROVIDE CONDUIT DUCT SEAL AT ALL CONDUIT ENDS.
- 33. ALL SPARE CONDUITS SHALL BE SEALED WITH A CAP AT BOTH ENDS AND A PULL STRING INSTALLED WITH IDENTIFICATION ON BOTH ENDS.
- 34. TYPEWRITTEN PANEL SCHEDULES SHALL BE INSTALLED IN EACH PANELBOARD, AND TYPEWRITTEN TERMINAL BLOCK SCHEDULES IN EACH CONTROL CABINET.
- 35. AS PART OF THE ELECTRICAL SUBMITTAL, CONTRACTOR SHALL PROVIDE A LAYOUT OF THE ELECTRICAL ROOM SHOWING SIZES OF ALL EQUIPMENT AND THIER SPATIAL RELATIONSHIPS.
- 36. CONTRACTOR SHALL BALANCE PANELBOARD LOADS AT THE END OF THE PROJECT.
- 37. SCHEDULE 40 PVC SHALL BE USED UNDERGROUND. ALL ABOVE GROUND CONDUITS SHALL BE EMT IN AIR CONDITIONED AREAS AND RIGID GALVANIZED STEEL(RGS) IN NON—AIR CONDITIONED AREAS. MINIMUM CONDUIT SIZE SHALL BE 3/4".
- 38. COMBINING OF NEUTRAL CONDUCTORS SHALL NOT BE ALLOWED.
- 9. THE CONTRACTOR MAY COMBINE CONDUCTORS TO LIMIT THE NUMBER OF CONDUITS LEAVING THE PANELBOARD. CONTRACTOR SHALL DERATE THE WIRES AS PER NEC AND INCREASE THE SIZE OF THE WIRES ACCORDINGLY.
- HO. BRANCH AND FEEDER CONDUCTORS ARE SIZED FOR MAXIMUM VOLTAGE DROP OF 5 PERCENT COMBINED AT DESIGN LOAD PER THE 2017 FLORIDA BUILDING CODE —ENERGY CONSERVATION—C405.6.3.
- 1. THE OWNER SHALL HAVE THE RIGHT TO SALVAGE MATERIALS THAT ARE TO BE REMOVED IN THE DEMOLITION PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO DEMOLITION AND DELIVER SALVAGE MATERIAL TO THE OWNER/MAINTENANCE GROUP.
- THE CONTRACTOR SHALL INITIATE COORDINATION WITH FPL 30 DAYS PRIOR TO NTP FOR THE REQUISITION AND PICKUP OF ALL REQUIRED FPL PROVIDED MATERIALS IN ANTICIPATION OF INSTALLATION OF ALL CONDUITS, TRANSFORMER PADS, AND OTHER ASSOCIATED MATERIALS REQUIRED FOR SCHEDULING FPL CABLE INSTALLATION. PROVIDE AS—BUILT SURVEYS BY A LICENSED PROFESSIONAL SURVEYOR OF ALL FPL CONDUITS, FPL SPLICE BOXES, TRANSFORMER LOCATIONS, FOR A COMPLETE SYSTEM. THE AS—BUILTS SHALL INCLUDE LEGAL DESCRIPTIONS FOR THE DEVELOPMENT OF NEW EASEMENTS/LEASE AGREEMENTS AS REQUIRED BY FPL. SCHEDULE DIRECTLY WITH FPL FOR CABLE AND TRANSFORMER INSTALLATION UPON COMPLETION OF THE FPL PRIMARY SERVICE SYSTEM AND EASEMENT/LEASE AGREEMENTS SURVEY FOR THE PRIMARY SYSTEM. CONTRACTOR SHALL SCHEDULE MILESTONES DATES IN THE PROJECT SCHEDULE FOR START OF THE FPL SCOPE OF WORK AND COMPLETION.
- 43. FOR CABLE COLOR CODE PLEASE REFER TO SPECIFICATION 16120.
- 4. CONTRACTOR SHALL PROVIDE TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE RECORD DRAWINGS DEPICTING THE COMPLETED INSTALLATION AS INSTALLED INCLUDING A SINGLE LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION AND FLOOR PLANS INDICATING THE LOCATION AND AREA SERVED BY ALL INSTALLED DISTRIBUTIONS PER THE 2014 2017 FLORIDA BUILDING CODE—ENERGY CONSERVATION—C405.6.4.1.
- 5. CONTRACTOR SHALL PROVIDE TO THE OWNER OPERATING AND MAINTENANCE MANUALS (O&M MANUALS) FOR ALL EQUIPMENT PER THE 2017 FLORIDA BUILDING CODE, DIVISION C405.6.4.2. THE MANUALS SHALL INCLUDE:
 - 1. SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
 - 2. O&M MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
- 3. NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY
- 46. ALL REFERENCES TO SS OR STAINLESS STEEL SHALL MEAN 316 STAINLESS STEEL.
- 47. ALL ELECTRICAL EQUIPMENT SHALL BE PERMANENTLY IDENTIFIED AND SIGNED PER THE REQUIREMENTS OF THE NEC AND THE FLORIDA BUILDING CODE.
- 48. MINIMUM DISTANCE ALLOWED BETWEEN POWER CONDUITS AND INSTRUMENTATION/COMMUNICATION CONDUITS SHALL BE: VOLTAGE DISTANCE

480V 2 F 120V 1 FT

49. THE CONTRACTOR SHALL FURNISH AN ARC FLASH HAZARD ANALYSIS STUDY PER 2017 NFPA 70E - STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE, REFERENCE ARTICLE 130.5 (C)(1) AND ANNEX D, SEE SPECIFICATION 16015.

HILLERS ELECTRICAL ENGINEERING, INC. 23257 STATE ROAD 7, SUITE 100 BOCA RATON, FLORIDA 33428 (581) 451-9185 FAX LICENEE NO: E8 00008577

APITAL IMPROVEMENT PROJECTS
TO COMMONTO CONTROL SHOW LAW BEACH, ALS JOB
SITY MANAGER: JIMMY L MORALES
NO DRECTOR: ROY COLEY, P.E.
CIP DIRECTOR: DAVID MARTINEZ, P.E.
CITY ENGINEER: LUIS SOTO, P.E.

Schwebke Shiskin & Hassociates, Inc LAND SURVEYORS

CIVIL BUGINEERS
LAND PLANNERS
LB#87 CA#87

3240 CORPORATE WAY MIRAMAR, FL 33025 TEL: (305)852-7010 FAX: (305)652-8284

£	Dele	Redition	App'd B				
1							
2							
4							
۰							
7							
•							
9							
9							
		, and the second					
2							
*							
	_						

SISCA YNE BEACH

DRB FINAL

ENG. OF RECORD: ANY LIGHTANDSTITLE: ENGINEER
ENGINEER No.: 73735
DRAWN BY: LPD
CHECKED BY: DEU
SCALE: As Noted

PAGE: _____
PURCHASE ORDER: 20181531-00
FILE NAME:

ISSUE DATE: 08/03/2018

Dwg. No:

E-1.dwa

E-1

	LEGEND
•—	SCHEDULE 40 P.V.C. DIRECT BURIED CONDUIT HAND EXCAVATE AND INSTALLED IN ROCK/EARTH. SEE SITE PLAN AND RISERS FOR SIZE AND QUANTITY OF CONDUIT AND CONDUCTORS.
-••-	HDPE/SCHEDULE 40 P.V.C. CONDUIT DIRECTIONAL BORED UNDER EXISTING ROADWAY AND SIDEWALKS, COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE EXISTING SIDEWALK SECTIONS AS NECESSARY. SEE SITE PLAN AND RISERS FOR SIZE AND QUANTITY OF CONDUIT AND CONDUCTORS.
*	NEW SINGLE ROADWAY STREET LIGHT AND POLE WITH A 1-100 WATT LED FIXTURE TYPE III WITH A 10' MOUNTING HEIGHT, PULL BOX, AND A CONCRETE BASE. NOTE: ARROW DENOTES AIMING OF FIXTURE. FIXTURE IS HOLOPHANE GRANVILLE II FIXTURE, MODEL NO. GVD2-P50-40K.
P-# CKT. X STA. Y	POLE IDENTIFICATION P-# = POLE NUMBER CKT. X = CIRCUIT IDENTIFICATION STA. Y = POLE LOCATION
	NEW SERVICE POINT
F	NEW FPL PROVIDED SPLICE BOX

MIAMIBEACH

CAPITAL IMPROVEMENT PROJEC

1700 CONNENTION CENTER DRIVE, MANN BEACH, IL 31150

CITY MANAGER: JIMMY L. MORALES
PW DIRECTOR: ROY COLEY, P.E.
CIP DIRECTOR: DAVID MARTINEZ, P.E.
CITY ENGINEER: LUIS SOTO, P.E.

Schwebke Shiskin &

Associates, Inc. LAND SURVEYORS
CIVIL ENGINEERS
LAND PLANNERS
LB#87 CA#87

3240 CORPORATE WAY MIRAMAR, FL 33025 TEL: (305)852-7010 FAX: (305)652-8284

2	B	Resistan	App'd
1			
2			
•			
4			
8			
•			
7			
7			
٠			
10			
1			
2			
14			
15			

Bea Ch TITE:
ELECTRICAL LEGEND AND INSTALLATION NOTES BISCA YNE

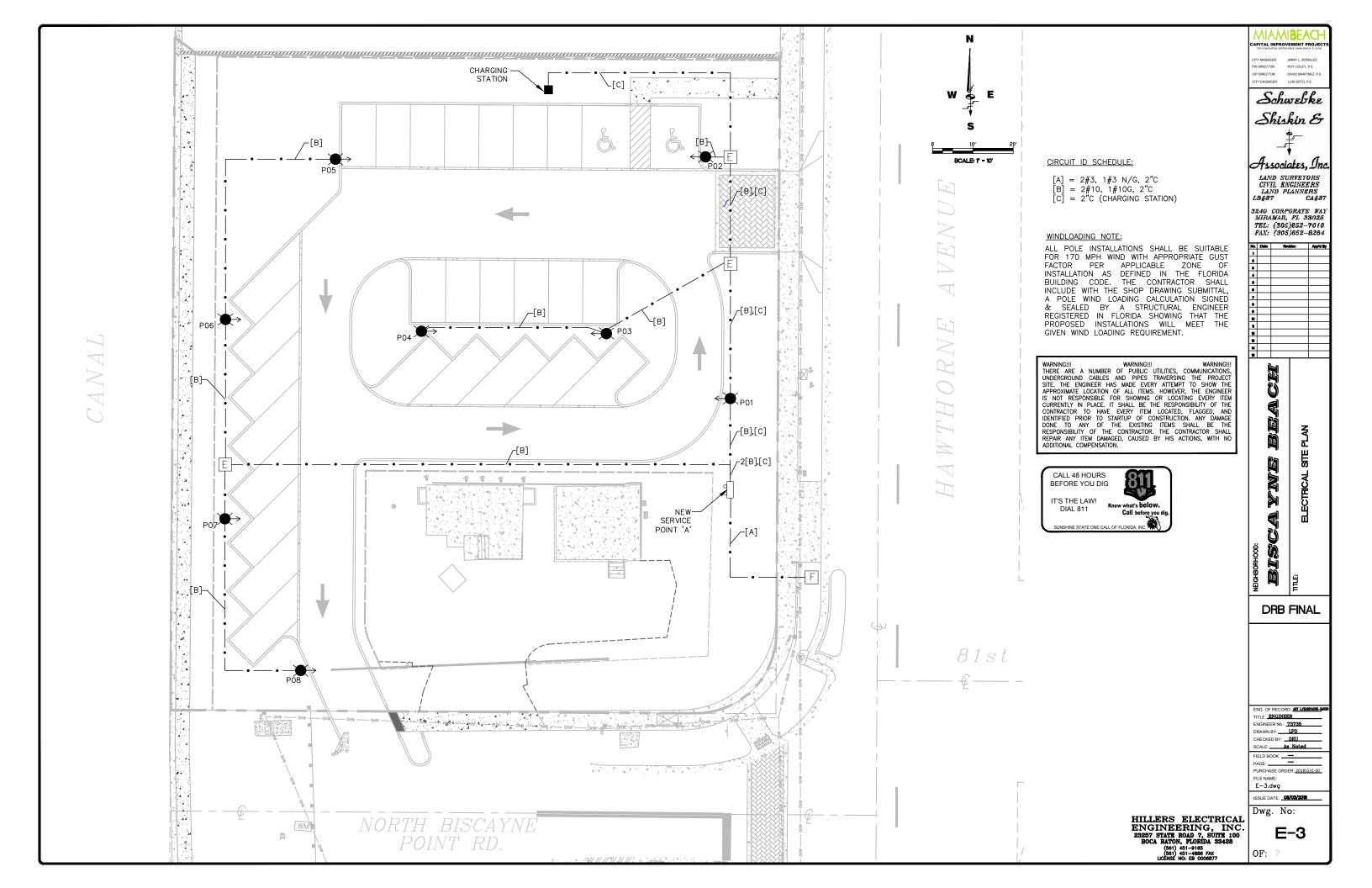
DRB FINAL

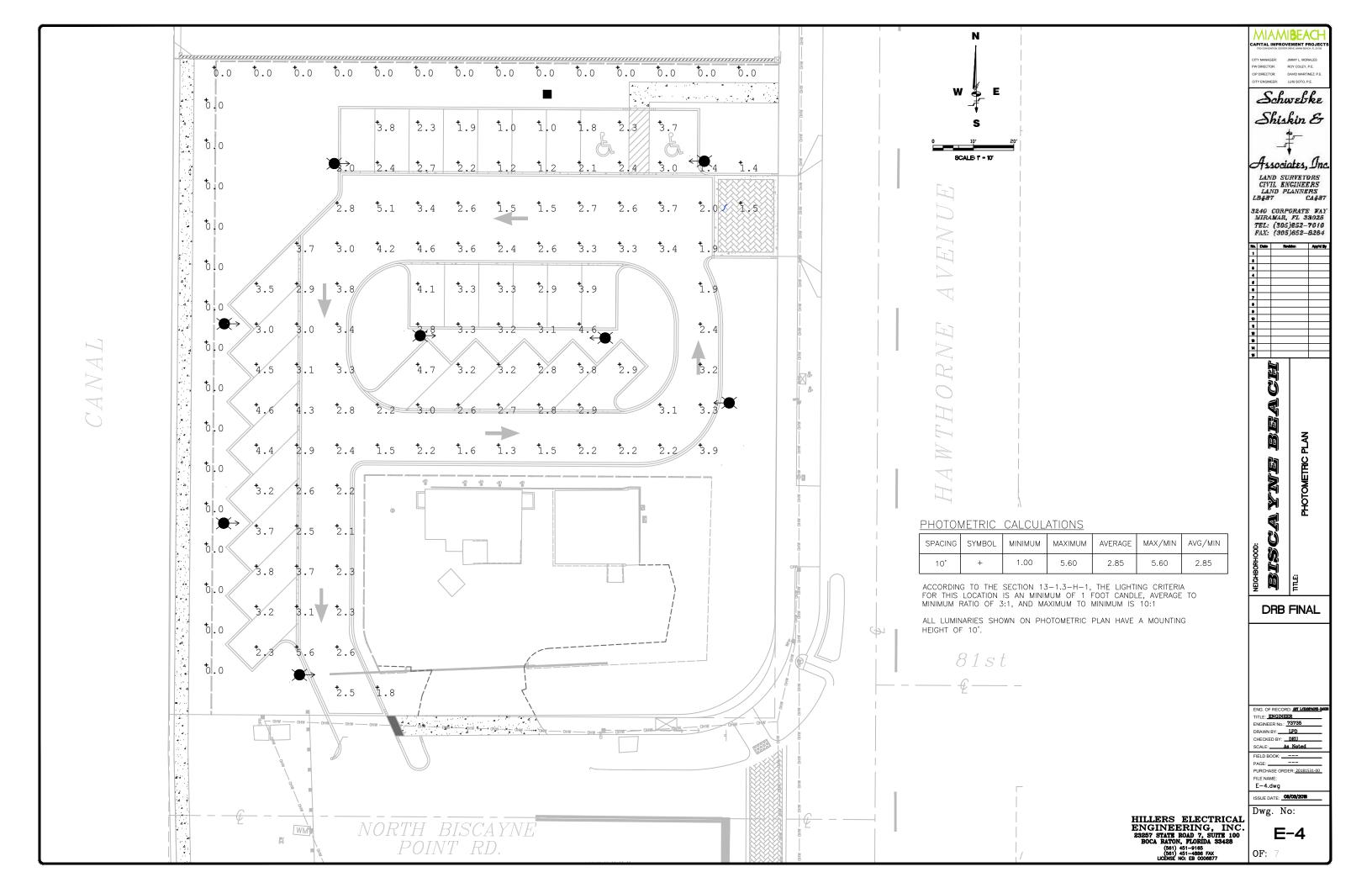
ENG. OF RECORD: MY LOUVE - NOT THE: ENGINEER No.: 73735
DRAWN BY: LPD
CHECKED BY: DRU
SCALE: As Noted
FIELD BOOK: —
PAGE: —
PURCHASE ORDER: 20181531-00
FILE NAME: E - 2.dwg

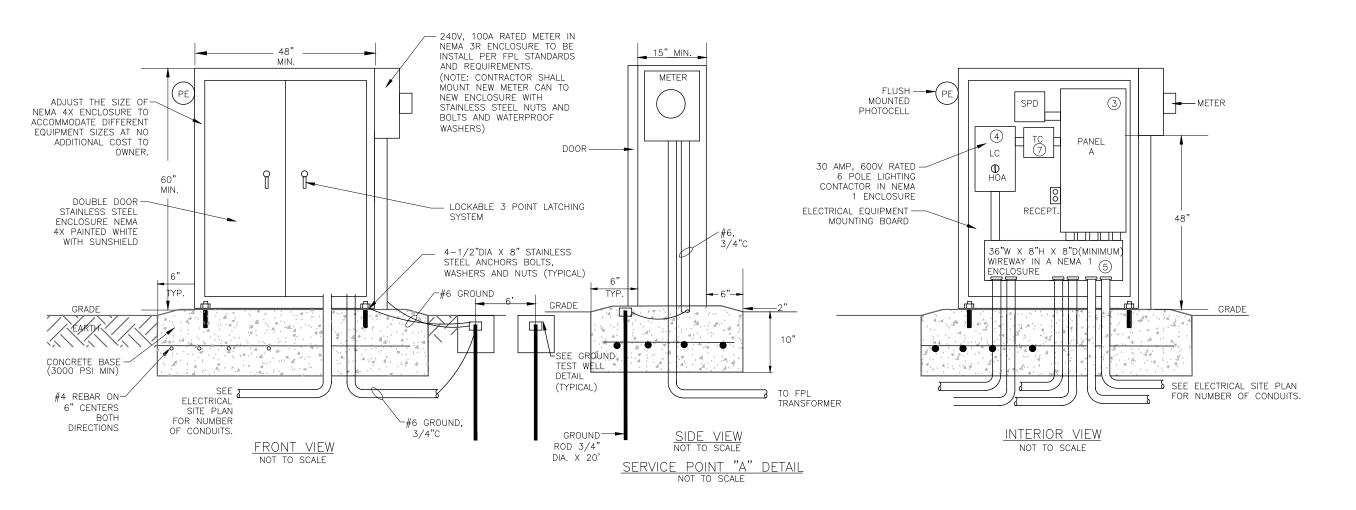
ISSUE DATE: 08/03/2018

Dwg. No: HILLERS ELECTRICAL
ENGINEERING, INC.
23257 STATE ROAD 7, SUITE 100
BOCA RATON, FLORIDA 33428
(S01) 451-4985 FAX
LICENDE NO. EB 0006877

E-2







MIAMI**BEAC**H ROY COLEY, P.E. W DIRECTOR: 'ENGINEER: LUIS SOTO, P.E. Schwebke Shiskin & Associates, Inc. LAND SURVEYORS CIVIL ENGINEERS LAND PLANNERS
LB#87 CA#87 3240 CORPORATE WAY MIRAMAR, FL 33025 TEL: (305)852-7010 FAX: (305)852-8284 AND ECTRICAL RISER DIAGRAMS
PANEL SCHEDULES BISC4

DRB FINAL

ENG. OF RECORD: MT LEMPANT-B
TITLE: ENGINEER
ENGINEER No.: 73735
DRAWN BY: LPD
CHECKED BY: DRU
SCALE: AS NOTED

FIELD BOOK: ____
PAGE: ___
PURCHASE ORDER: 20181531-00

PURCHASE ORDER: 2018153: FILE NAME: E-5.dwg

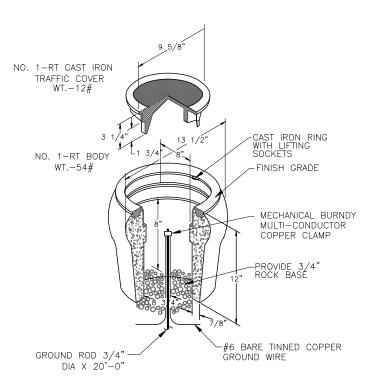
ISSUE DATE: 08/03/2018

Dwg. No:

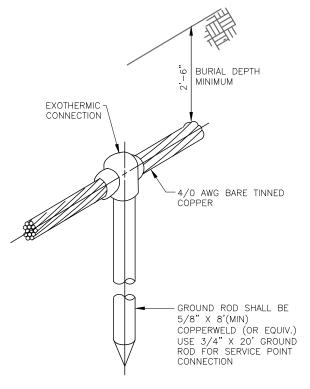
E-5

OF: 7

HILLERS ELECTRICAL
ENGINEERING, INC.
23287 STATE ROAD 7, SUITE 100
BOCA RATON, FLORIDA 33428
(561) 451-4886 FAX
UCENSE NO: EB 0006877



GROUND TESTED WELL DETAIL NOT TO SCALE



GROUND ROD DETAIL NOT TO SCALE

MIAMIBEACH CITY MANAGER: JIMMY L. MORALES PW DIRECTOR: ROY COLEY, P.E. P DIRECTOR: DAVID MARTINEZ, P.E.
TY ENGINEER: LUIS SOTO, P.E. Schwebke Shiskin & Associates, Inc. LAND SURVEYORS
CIVIL ENGINEERS
LAND PLANNERS
LB#87 CA#87 3240 CORPORATE WAY MIRAMAR, FL 33025 TEL: (305)852-7010 FAX: (305)652-8284 **BEA CH** BISCA YNE DRB FINAL

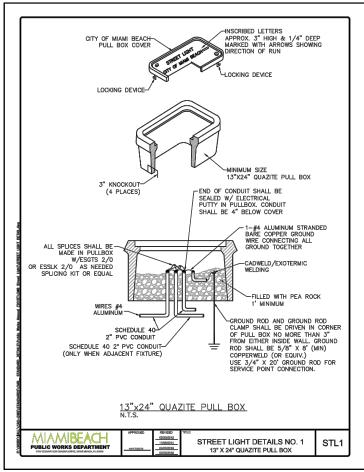
DETAILS

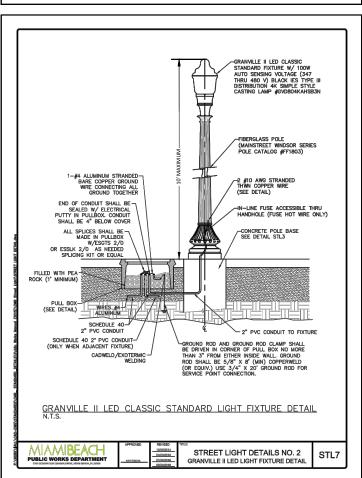
HILLERS ELECTRICAL
ENGINEERING, INC.
23287 STATE ROAD 7, SUITE 100
BOCA RATON, PLORIDA 33428
(581) 451-4985 FAX
LICENSE NO: EB 0006877

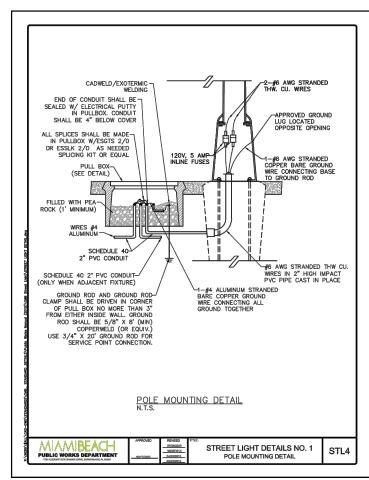
Dwg. No: E-6

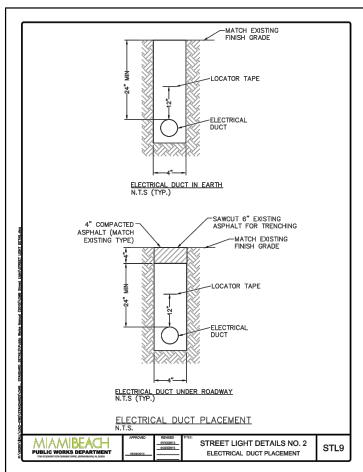
FILE NAME: E-6.dwg ISSUE DATE: 08/03/2018

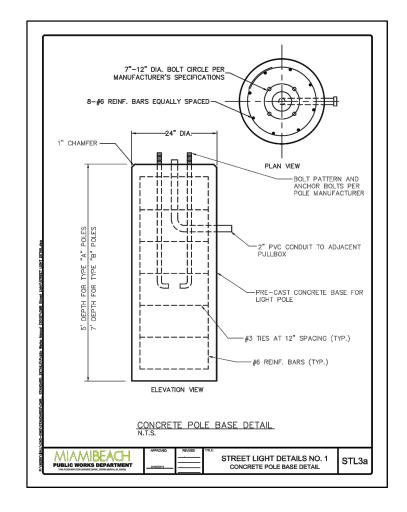
ENG. OF RECORD: MY LCHAMPAGHE-B TITLE: ENGINEER
ENGINEER No.: 73735 DRAWN BY: LPD FIELD BOOK: ____ PAGE: ______PURCHASE ORDER: 20181531-00











V DIRECTOR: ROY COLEY, P.E. ENGINEER: LUIS SOTO, P.E. Schwebke Shiskin & Associates, Inc LAND SURVEYORS CIVIL ENGINEERS LAND PLANNERS
LB#87 CA#87 3240 CORPORATE WAY MIRAMAR, FL 33025 TEL: (305)852-7010 FAX: (305)652-8284 DETAILS ELECTRICAL DRB FINAL ENG OF RECORD: ANY LORANDAGER-BA TITLE: ENGINEER ENGINEER No.: 73735 DRAWN BY: LPD CHECKED BY: __DEU SCALE: As Noted FIELD BOOK: ____ PURCHASE ORDER: 20181531-00 E-7.dwg ISSUE DATE: 08/03/2018 Dwg. No: E-7 OF:

HILLERS ELECTRICAL ENGINEERING, INC. 23257 STATE ROAD 7, SUITE 100 BOCA RATON, FLORIDA 33428 (561) 451-4985 FAX LICENSE NO. EB CO06877