

45TH TO 52ND AVENUE DRAINAGE IMPROVEMENTS

LOCATED IN
THE CITY OF ISLE OF PALMS, SOUTH CAROLINA

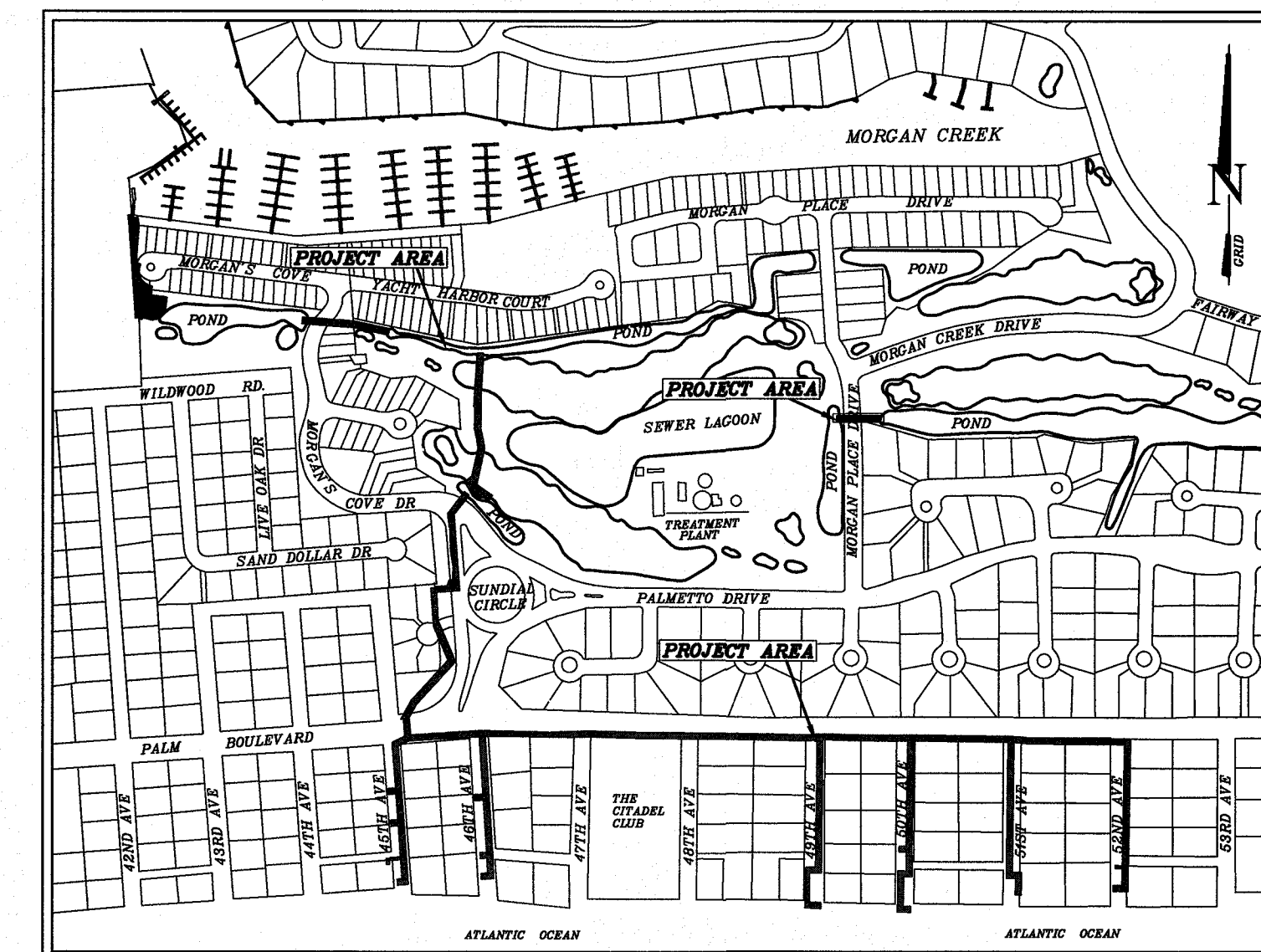
PREPARED FOR
CITY OF ISLE OF PALMS

PO BOX 508
ISLE OF PALMS, SC 29451
864-886-6428

PROJECT NOTES:

- PROJECT OPERATOR:**
CITY OF ISLE OF PALMS
P.O. BOX 508
ISLE OF PALMS, SC 29451
(864) 886-6428
- ENGINEER:**
CIVIL SITE ENVIRONMENTAL (C.S.E.)
668 MARINA DRIVE, SUITE B-1
CHARLESTON, SC 29492
PHONE: (843) 849-8945
FAX: (843) 849-8974
- SURVEYOR:**
SW&A SURVEYING
2093 EXECUTIVE HALL RD
CHARLESTON, SC 29407
PHONE: (843) 795-9330
FAX: (843) 975-2007
- PROJECT AREA OF DISTURBANCE:**
SCDOT RIGHT OF WAY AREAS 2.71 AC
CHARLESTON COUNTY MSA AREAS 1.23 AC
TOTAL 3.94 AC
- WATER & SEWER CONTACT:**
ISLE OF PALMS WATER AND SEWER COMMISSION
PO BOX 528
ISLE OF PALMS, SC 29451
PHONE: 843-886-6148
- POWER: SCE&G**
P.O. BOX 760
CHARLESTON, SC 29402
PHONE 843-576-8000
- PHONE: AT&T**
2600 MEETING STREET
CHARLESTON, SC 29423
PHONE: 843-745-6623
- CABLE: COMCAST**
4400 BELLE OAKS DRIVE
CHARLESTON, SC 29405
- WILD DUNES RESORT:**
5757 PALM BLVD.
ISLE OF PALMS, SC 29451
PHONE: 843-886-2314
CONTACT: SCOTT FERGUSON
DIRECTOR OF GOLF COURSE MAINTENANCE
- WILD DUNES COMMUNITY ASSOCIATION:**
6200 PALMETTO DR
ISLE OF PALMS, SC 29451
843-886-8847
CONTACT: DAVE KYNOSKI
- PROJECT IS SITUATED IN FLOOD ZONES VE(16), AE (16), AE(15) AND AE(14)
COMMUNITY-PANEL #45019C 0561J & 45019C 0542J. EFFECTIVE DATE NOV. 17,2004
- ALL ELEVATIONS REFER TO ABOVE MEAN SEA LEVEL (MSL) NGVD 29.
- LATITUDE 32°48'08"
LONGITUDE 79°44'26"
- PER ARMY CORPS OF ENGINEERS DETERMINATION LETTER DATED JANUARY 28, 2013
(SAC# 2012-01136-24Y) EXISTING LAKES/STORMWATER PONDS SHOWN ON PLANS ARE
WATERS OF THE UNITED STATES PERMITTED UNDER SECTION 402 OF THE CLEAN WATER ACT
AND "...DEPARTMENT OF THE ARMY AUTHORIZATION WILL NOT BE REQUIRED FOR
MECHANIZED LAND CLEARING, EXCAVATION, OR THE PLACEMENT OF DREDGED OR FILL
MATERIAL ON THIS SITE."

SHEET	TITLE	REVISED
SWP	GENERAL PROJECT NOTES & SWPPP	5/31/17
C100-100A	LIMITS OF DISTURBANCE	5/31/17
C101-107	EXISTING CONDITIONS	5/31/17
C200	PIPE & STRUCTURE CHARTS & DRAINAGE NOTES	5/31/17
C201-C207	DRAINAGE & EROSION CONTROL PLAN SHEETS	5/31/17
C300-C302	PIPE PROFILES	5/31/17
C400	SUNDIAL CIRCLE EASEMENT TREE REMOVAL	5/31/17
C401	SUMMARY SHEET OF EXISTING POND IMPACTS	5/31/17
CD-1	CONSTRUCTION DETAILS	5/31/17
CD-2	CONSTRUCTION DETAILS	5/31/17
CD-3	CONSTRUCTION DETAILS-WATER & SEWER DETAILS	5/31/17
L101	PLANTING PLAN	5/25/17
L102	PLANT SCHEDULE, NOTES, AND DETAILS	5/25/17



LOCATION MAP
NOT TO SCALE



CIVIL - SITE - ENVIRONMENTAL

668 MARINA DRIVE SUITE B-1
CHARLESTON, SOUTH CAROLINA 29492
843-849-8945

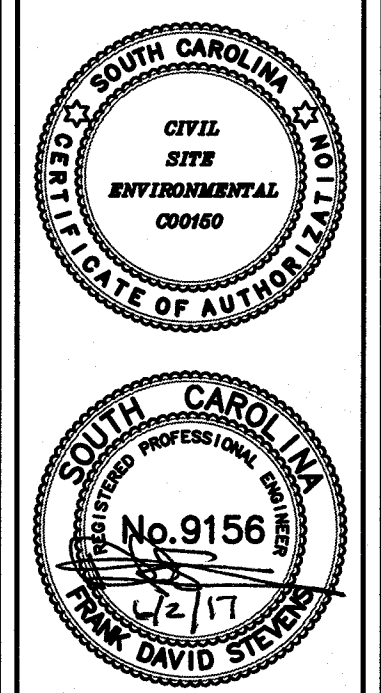


Know what's below.
Call before you dig.

REVISIONS:
1) 7/3/13 ADDED USAGE REFERENCE AND NOTATIONS FOR PONDS;
ADDED SHEETS 400 & 401
2) 9/23/13 PER COME WLD DUNES, SCOTT, IOPWSC COMMENTS/INFO
3) 10/1/13 PER COME WLD DUNES, SCOTT, IOPWSC COMMENTS/INFO
4) 8/17/14 PER SCORREC/ARCM COMMENTS
5) 5/31/17 CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: COVER SHEET
FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
FILE: 920-C000
SCALE: NONE
DATE: 6-28-13



668 MARINA DRIVE
SUITE B-1
CHARLESTON, S.C. 29492
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EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
SHEET NUMBER
C000

REQUIREMENT OF INSPECTION REPORTS:

A. SCOPE. CONSTRUCTION SITE INSPECTIONS ARE TO BE CONDUCTED ON A ROUTINE BASIS, AS OUTLINED IN SECTION 4.2.2. THE INSPECTOR MUST INCLUDE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY, INCLUDING PERIMETER BAYS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION...

I. ALL AREAS OF THE SITE DISTURBED BY CONSTRUCTION ACTIVITY AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION MUST BE INSPECTED FOR EVIDENCE OF POLLUTANTS ENTERING THESE SYSTEMS...

IF INSPECTION RESPONSIBILITIES ARE NOT SHARED BETWEEN THE PRIMARY AND SECONDARY PERMITTEES, EACH SECONDARY PERMITTEE MUST PROVIDE THEIR OWN INSPECTIONS FOR THE PORTIONS OF THE SITE FOR WHICH THEIR COVERAGE INCLUDES.

B. FREQUENCY. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE...

INSPECTION FREQUENCIES FOR PORTIONS OF THE CONSTRUCTION SITE THAT HAVE REACHED TEMPORARY OR FINAL STABILIZATION SHALL BE REDUCED TO AT LEAST ONCE EVERY MONTH, AS LONG AS THE STABILIZATION IS MAINTAINED AND THERE IS NO ADDITIONAL DISTURBANCE IN THESE AREAS...

C. RAIN GAUGE. PERMITTEES SHALL EITHER MAINTAIN AN ON-SITE RAIN GAUGE OR USE DATA FROM A CERTIFIED WEATHER RECORD (SUCH AS A PERSONAL WEATHER STATION OR AN AIRPORT) LOCATED WITHIN A REASONABLE PROXIMITY OF THE CONSTRUCTION SITE...

D. INSPECTOR QUALIFICATIONS. INSPECTIONS MUST BE CONDUCTED BY QUALIFIED PERSONNEL (PROVIDED BY THE PERMITTEE) AS OUTLINED BY THE FOLLOWING:

- I. FOR PROJECTS THAT DISTURB MORE THAN 2 ACRES, "QUALIFIED PERSONNEL" MEANS A PERSON WHO POSSESSES THE SKILLS TO ASSESS CONDITIONS AT THE CONSTRUCTION SITE THAT COULD IMPACT STORMWATER QUALITY AND TO ASSESS THE EFFECTIVENESS OF ANY BMPs SELECTED TO CONTROL THE QUALITY OF STORMWATER DISCHARGES FROM THE CONSTRUCTION SITE...

E. INSPECTION REPORTS. FOR EACH INSPECTION REQUIRED ABOVE, YOU MUST COMPLETE AN INSPECTION REPORT. AT A MINIMUM, THE INSPECTION REPORT MUST INCLUDE: I. THE INSPECTION DATE; II. NAMES, TITLES, AND IF NOT PREVIOUSLY GIVEN IN AN INSPECTION REPORT, THE QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION...

F. MONTHLY REPORTS. DHEC MAY REQUIRE ON A CASE-BY-CASE BASIS THAT THE PERMITTEE SUBMIT A MONTHLY REPORT SUMMARIZING THE INSPECTIONS AT THE SITE AND ANY ASSOCIATED MAINTENANCE ACTIVITY.

G. INSPECTION RECORDS. A RECORD OF EACH INSPECTION AND OF ANY ACTIONS TAKEN IN ACCORDANCE WITH THIS SECTION MUST BE RETAINED AS PART OF THE ON-SITE SWPPP FOR AT LEAST THREE YEARS FROM THE DATE THAT PERMIT COVERAGE EXPIRES OR IS TERMINATED...

H. PRIMARY PERMITTEES. INSPECTORS EMPLOYED BY THE PRIMARY PERMITTEE RETAIN THE AUTHORITY TO INSPECT, REPORT, AND DOCUMENT AREAS OF THE CONSTRUCTION SITE THAT ARE UNDER DIRECT CONTROL OF THE PRIMARY PERMITTEE, BUT ONLY WHEN A LACK OF COMPLIANCE BY THE SECONDARY PERMITTEE INHIBITS THE PRIMARY PERMITTEE'S ABILITY TO MAINTAIN COMPLIANCE WITH THE OVERALL OS-SWPPP OR THIS PERMIT.

CONSTRUCTION MAINTENANCE PROCEDURES
ALL BMPs AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THE OS-SWPPP MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. SITE INSPECTIONS REQUIRED BY SECTION 4.2 IDENTIFY BMPs THAT ARE NOT OPERATING EFFECTIVELY, MAINTENANCE MUST BE PERFORMED WITHIN SEVEN (7) CALENDAR DAYS, BEFORE THE NEXT INSPECTION, OR AS REASONABLY POSSIBLE, AND BEFORE THE NEXT STORM EVENT.

REVISIONS TO SWPPP AS RESULT OF INSPECTIONS
REVISIONS TO THE SWPPP AS A RESULT OF INSPECTIONS SHALL BE DOCUMENTED WITH REQUIRED CHANGES, REASON FOR THE CHANGES, AND SIGNATURES OF THE INSPECTOR AND OPERATOR RECOMMENDING/INITIATING REVISIONS.

RECORDING OF MAJOR ACTIVITIES
RECORDS OF MAJOR CONSTRUCTION EVENTS SHOULD BE KEPT. THESE RECORDS SHOULD INCLUDE: 1) DATES OF INSTALLATION OF SEDIMENT AND EROSION CONTROLS...

PRE CONSTRUCTION CERTIFICATION
PROJECTS THAT DISTURB 10 ACRES OR MORE A PRE-CONSTRUCTION CONFERENCE MUST BE CONDUCTED WITH EACH CO-PERMITTEE, AND CONTRACTOR WHO IS NOT A CO-PERMITTEE, IN PERSON AT THE SITE PRIOR TO PERFORMING CONSTRUCTION RELATED WORK...

STANDARD NOTES:

- 1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED...

- 11. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS. FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED...

POTENTIAL POLLUTANTS AND SOURCES OF CONTAMINATION

- 1) SIGNIFICANT MATERIAL INVENTORY
POLLUTANTS FROM CLEARING, GRADING, EXCAVATION, FILL ACTIVITIES, BUILDING CONSTRUCTION, AND PAVING ACTIVITIES HAVE THE POTENTIAL TO BE PRESENT IN STORMWATER RUNOFF FROM THE CONSTRUCTION SITE. TABLE 1 INCLUDES INFORMATION ON MATERIAL TYPES, CHEMICAL AND PHYSICAL DESCRIPTIONS.
2) POTENTIAL AREAS FOR STORMWATER CONTAMINATION
THE FOLLOWING POTENTIAL SOURCES OF STORM WATER CONTAMINATION WERE IDENTIFIED:

TABLE 2 LISTS POTENTIAL STORM WATER POLLUTANTS FROM CONSTRUCTION ACTIVITIES ON THIS SITE.

- 3) SUMMARY OF AVAILABLE STORM WATER SAMPLING DATA
NO STORM WATER SAMPLING DATA IS AVAILABLE FOR THE SITE.
4) LITTER, CONSTRUCTION DEBRIS, CONCRETE WASHOUT, OILS, FUELS AND BUILDING PRODUCTS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORMWATER DISCHARGES.

ALLOWABLE NON-STORM WATER DISCHARGES

- THE FOLLOWING ARE ALLOWABLE NON-STORM WATER DISCHARGES:
1) DISCHARGES FROM FIRE FIGHTING ACTIVITIES
2) FIRE HYDRANT FLUSHINGS
3) WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED
4) WATER USED TO CONTROL DUST IN ACCORDANCE WITH SCRI00000 SUBPART 3.4.J
5) POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHINGS
6) ROUTINE EXTERNAL BUILDING WAS DOWNS THAT DOES NOT USE DETERGENTS
7) PAVEMENT WASH WATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED) AND WHERE DETERGENTS ARE NOT USED
8) UNCONTAMINATED AIR CONDITIONS OR COMPRESSOR CONDENSATE
9) UNCONTAMINATED GROUND WATER OR SPRING WATER
10) FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS
11) UNCONTAMINATED EXCAVATION DETAHERING
12) LANDSCAPE IRRIGATION

THE NON-STORM WATER DISCHARGES LISTED ABOVE SHALL BE ROUTED SUCH THAT THEY DO NOT CAUSE UNNECESSARY EROSION OR SEDIMENT DISCHARGE FROM THE SITE. IF THESE DISCHARGE HAVE THE POTENTIAL TO CARRY SEDIMENT, THE DISCHARGE SHALL BE ROUTED THROUGH AN APPROPRIATE BMP TO ALLOW THE SEDIMENT TO SETTLE OUT BEFORE LEAVING THE SITE.

PRE CONSTRUCTION CERTIFICATION
PROJECTS THAT DISTURB 10 ACRES OR MORE A PRE-CONSTRUCTION CONFERENCE MUST BE CONDUCTED WITH EACH CO-PERMITTEE, AND CONTRACTOR WHO IS NOT A CO-PERMITTEE, IN PERSON AT THE SITE PRIOR TO PERFORMING CONSTRUCTION RELATED WORK...

CONTRACTOR CERTIFICATIONS AND CO-PERMITTEE STATUS

PER NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (SCR100000, EFFECTIVE JAN 1, 2013) :

"I, THE OWNER OF A PROJECT, AS THE APPLICANT FOR THE NPDES PERMIT, IS RESPONSIBLE FOR COMPLIANCE WITH ALL THE TERMS AND CONDITIONS OF THIS PERMIT AND THE SWPPP. THE OWNER MAY RELY ON OTHER PERSONS TO ASSIST IN COMPLIANCE WITH THIS PERMIT AND THE SWPPP. AS SUCH, THE PROJECT OWNER AND CONTRACTORS WHO WILL CONDUCT CONSTRUCTION ACTIVITIES INTENDED TO DISTURB SOILS MAY ELECT TO BE CO-PERMITTEES. FURTHER, ALL CONTRACTORS WHO WILL CONDUCT CONSTRUCTION RELATED WORK INTENDED TO DISTURB SOILS AT THE SITE THAT MAY AFFECT IMPLEMENTATION OF THE SWPPP, REGARDLESS OF WHETHER OR NOT THEY ARE CO-PERMITTEES, MUST BE LISTED IN THE SWPPP AND ATTEND A PRE-CONSTRUCTION CONFERENCE BEFORE THEY CAN CONDUCT CONSTRUCTION ACTIVITY AT THE SITE.

"I CERTIFY BY MY SIGNATURE BELOW THAT: A) FOR SITES THAT DISTURB 10 OR MORE ACRES, I PARTICIPATED IN A PRE-CONSTRUCTION CONFERENCE ON-SITE OR, WHEN ALLOWED, OFFSITE WITH THE INDIVIDUAL WHO IS RESPONSIBLE FOR THE OPERATIONAL CONTROL OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP); AND B) I ACCEPT THE TERMS AND CONDITIONS OF SWPPP AS REQUIRED BY THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES PERMIT NUMBER SCR100000) ISSUED TO THE OWNER/OPERATOR OF THE CONSTRUCTION ACTIVITY FOR WHICH I HAVE BEEN CONTRACTED TO PERFORM CONSTRUCTION RELATED PROFESSIONAL SERVICES. FURTHER, BY MY SIGNATURE BELOW, I UNDERSTAND THAT I AM BECOMING A CO-PERMITTEE WITH THE OWNER/OPERATOR AND OTHER CONTRACTORS THAT HAVE BECOME CO-PERMITTEES TO THE GENERAL NPDES PERMIT ISSUED TO THE OWNER/OPERATOR OF THE FACILITY FOR WHICH I HAVE BEEN CONTRACTED TO PERFORM PROFESSIONAL CONSTRUCTION SERVICES. AS A CO-PERMITTEE, I UNDERSTAND THAT I, AND MY COMPANY, AS THE CASE MAY BE, AM LEGALLY ACCOUNTABLE TO THE SC DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (DHEC), UNDER THE AUTHORITIES OF THE CWA AND THE SC POLLUTION CONTROL ACT, TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE SWPPP. I ALSO UNDERSTAND THAT DHEC ENFORCEMENT ACTIONS MAY BE TAKEN AGAINST ANY SPECIFIC CO-PERMITTEE OR COMBINATION OF CO-PERMITTEES IF THE TERMS AND CONDITIONS OF THE SWPPP ARE NOT MET. THEREFORE, I HAVE UNDERSTOOD THE ABOVE INFORMATION, I AM SIGNING THIS CERTIFICATION AND AM RECEIVING CO-PERMITTEE STATUS TO THE AFORESAID GENERAL NPDES PERMIT."

"I CERTIFY BY MY SIGNATURE BELOW THAT: A) FOR SITES THAT DISTURB 10 OR MORE ACRES, I PARTICIPATED IN A PRE-CONSTRUCTION CONFERENCE ON-SITE OR, WHEN ALLOWED, OFFSITE WITH THE INDIVIDUAL WHO IS RESPONSIBLE FOR THE OPERATIONAL CONTROL OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP); AND B) I UNDERSTAND THE TERMS AND CONDITIONS OF SWPPP AS REQUIRED BY THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT (NPDES PERMIT NUMBER SCR100000) ISSUED TO THE OWNER/OPERATOR OF THE CONSTRUCTION ACTIVITY FOR WHICH I HAVE BEEN CONTRACTED TO PERFORM CONSTRUCTION RELATED PROFESSIONAL SERVICES. FURTHER, BY MY SIGNATURE BELOW, I UNDERSTAND THAT I, AND MY COMPANY, AS THE CASE MAY BE, MAY BE LEGALLY ACCOUNTABLE TO THE SC DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (DHEC), UNDER THE AUTHORITIES OF THE CWA AND THE SC POLLUTION CONTROL ACT, TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE SWPPP."

4. THE DATE OF THE SIGNATURE, THE TITLE OF THE PERSON PROVIDING THE SIGNATURE, AND THE NAME, ADDRESS, AND TELEPHONE NUMBER OF THE CONTRACTED FIRM, SHALL ALSO BE PROVIDED. IN THE EVENT THE OWNER AMENDS THE SWPPP, SUCH AMENDMENTS SHOULD BE INCORPORATED TO THE PLAN AND THE CONTRACTORS AND SUBCONTRACTORS SHOULD BE ADVISED BY SIGNATURE. CO-PERMITTEES WHO HAVE COMPLETED THEIR WORK PRIOR TO THE AMENDMENTS DO NOT HAVE TO SIGN THE AMENDMENTS.

5. THE SIGNATORY REQUIREMENTS OF §122.22 OF SOUTH CAROLINA REGULATION 61-9 (SEE APPENDIX C OF THIS PERMIT) ARE APPLICABLE TO EACH CONTRACTED ENTITY THAT MUST SIGN ONE OF THE CONTRACTOR'S CERTIFICATION STATEMENTS. UPON SIGNING THE CO-PERMITTEE CERTIFICATION, THE CONTRACTOR IS A CO-PERMITTEE AND ACCOUNTABLE TO DHEC TO ENSURE THE TERMS AND CONDITIONS OF THIS PERMIT ARE IMPLEMENTED. ALL CO-PERMITTEES ARE SUBJECT TO DHEC ENFORCEMENT ACTIONS IF PERMIT CONDITIONS ARE NOT MET. ENFORCEMENT ACTIONS MAY BE TAKEN AGAINST ANY SPECIFIC CO-PERMITTEE OR COMBINATION OF CO-PERMITTEES, WITH CONSIDERATION GIVEN TO THE PARTY RESPONSIBLE FOR THE VIOLATION. THE OWNER/OPERATOR SUBMITTING THE NOI SHALL RETAIN ALL CONTRACTOR CERTIFICATIONS FOR AT LEAST THREE YEARS AFTER A CONTRACTOR HAS COMPLETED HIS CONTRACT. CONTRACTORS WHO SIGN THE CERTIFICATION FOR BEING A CO-PERMITTEE MAY BE LIABLE TO DHEC ENFORCEMENT ACTIONS RELATED TO PREVENTION PLAN.

6. COPIES OF ALL CONTRACTOR CERTIFICATIONS AND A COPY OF THIS PERMIT SHALL BE KEPT WITH THE SWPPP. FOR CONSTRUCTION SITES THAT DISTURB 10 ACRES OR MORE, THE FIRST MONTHLY REPORT OR COPIES OF THE FIRST MONTH'S INSPECTION FORMS (REFER TO PART 2) OF THE SWPPP SUBMITTED TO THE DEPARTMENT AFTER CONSTRUCTION BEGINS ON THE FACILITY MUST INCLUDE THE ORIGINAL AND ONE COPY OF ALL CO-PERMITTEE AND OTHER CONTRACTOR CERTIFICATIONS. IF ADDITIONAL CO-PERMITTEES OR OTHER CONTRACTORS ARE ADDED TO THE PROJECT, ADDITIONAL CO-PERMITTEE OR OTHER CONTRACTOR CERTIFICATIONS MUST BE SUBMITTED ALONG WITH THE MONTHLY REPORTS OR COPIES OF THE INSPECTION FORMS SUBMITTED AFTER THE SIGNING OF THE CERTIFICATION. FOR CONSTRUCTION SITES THAT DISTURB LESS THAN 10 ACRES, THE OWNER/OPERATOR OF THE FACILITY COVERED BY THIS PERMIT SHALL MAKE ALL CONTRACTOR CERTIFICATIONS AVAILABLE TO DHEC. THE DEPARTMENT MAY ON A CASE-BY-CASE BASIS REQUIRE THE SUBMITTAL OF THE CO-PERMITTEE AND OTHER CONTRACTOR CERTIFICATIONS."

CONTRACTOR SHALL BE REQUIRED TO HAVE PROPOSED ROUTE STAKED, ALL UTILITY CROSSINGS VERTICALLY LOCATED, AND A WALK THROUGH CONDUCTED WITH ENGINEER PRIOR TO INITIATION OF CONSTRUCTION.

ADDITIONAL PRACTICES TO MINIMIZE STORM WATER CONTAMINATION

THE FOLLOWING ADDITIONAL MEASURES WILL BE FOLLOWED TO MINIMIZE POTENTIAL CONTAMINATION OF STORM WATER DISCHARGES:

- 1) ALL VEHICLES ON SITE WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE OF LEAKAGE.
2) PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED AND SHALL BE STORED IN APPROPRIATE LOCATIONS TO PREVENT UNAUTHORIZED ACCESS.
3) SPILL KITS WILL BE INCLUDED WITH ALL FUELING SOURCES AND MAINTENANCE ACTIVITIES. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY.
4) ANY PETROLEUM OR ASPHALT SUBSTANCES USED ON-SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.
5) SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS REGULARLY TO AVOID OVERTIPPING.
6) COVERED DUMPSTERS WILL BE USED FOR TRASH DISPOSAL. HAZARDOUS WASTE MATERIALS SHOULD BE DISPOSED OF PROPERLY AND SHOULD NOT BE DISPOSED OF WITH TRASH AND OTHER CONSTRUCTION DEBRIS. SITE SHOULD BE POLICED WEEKLY TO CLEAN UP TRASH AND DEBRIS THAT MAY HAVE BEEN BLOWN ACROSS THE SITE. IF FORCE-MAJORE EVENTS OCCUR THAT DISTURB THE HIGH WINDS, THE APPROPRIATE MEASURES SHOULD BE TAKEN TO SECURE DUMPSTERS AND CONSTRUCTION DEBRIS TO PREVENT MATERIALS FROM BEING BLOWN FROM SITE.
7) STORED WHEN NOT REQUIRED FOR USE, EXCESS PAINT WILL NOT BE RETURNED TO THE STORM SYSTEM, BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
8) MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN A CENTRAL, ACCESSIBLE LOCATION. EQUIPMENT WILL INCLUDE, BUT NOT BE LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAW DUST, AND PLASTIC AND METAL TRASH CONTAINERS.
9) WHEN TESTING/CLEANING OF WATER SUPPLY LINES, THE DISCHARGE FROM THE TESTED PIPE WILL BE COLLECTED AND CONVEYED TO A COMPLETED STORM WATER SYSTEM FOR CONVEYANCE TO THE MAIN STORM WATER RETENTION POND OR TREATMENT SYSTEM ON-SITE.
10) THE PAVED STREETS ADJACENT TO THE SITE ENTRANCE WILL BE SWEEP WEEKLY (OR MORE FREQUENTLY) TO REMOVE EXCESS MUD, DIRT, OR ROCK TRACKED FROM THE SITE.
11) DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARP/PAULIN.
12) CONSTRUCTION ENTRANCE SHALL BE PERIODICALLY REFRESHED WITH FRESH STONE TO ENSURE PROPER FUNCTIONING OF CONSTRUCTION ENTRANCE.
13) LITTER, CONSTRUCTION DEBRIS, CONCRETE WASHOUT, OILS, FUELS AND BUILDING PRODUCTS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORMWATER DISCHARGES.

CONSTRUCTION STAGING AREAS (INCLUDING BUILDING CONSTRUCTION)

THE MEASURES LISTED APPLY FOR ALL CONSTRUCTION STAGING AREAS. ADDITIONALLY, STAGING AREAS SHOULD BE APPROPRIATELY SECURED TO PREVENT UNAUTHORIZED ACCESS TO STORED HAZARDOUS MATERIALS AND CONSTRUCTION WASTE AND DEBRIS. IF BUILDING CONSTRUCTION TAKES PLACE AFTER BASE COURSE HAS BEEN PLACED (OR AFTER ASPHALT COURSE HAS BEEN PLACED) INLET PROTECTION SHOULD BE PLACED AROUND ANY PILES TO WHICH STORM WATER FROM STAGING AREA WILL DRAIN. INLET PROTECTION SHOULD BE PROTECTED FROM TRAFFIC WHICH MAY RUN OVER OR DISTURB PROTECTION MEASURES.

TABLE 1. SEEDING SCHEDULE

Table with columns: SPECIES, LBS/AC, and months from JAN to DEC. Rows include BROWNTOP MILLET, RYE, GRAIN, RYEGRASS, WELL DRAINED, CLAYEY/LOAMEY SITES, BROWNTOP MILLET OR JAPANESE MILLET, RYE, GRAIN OR OATS, and RYEGRASS.

Table with columns: SPECIES, LBS/AC, and months from JAN to DEC. Rows include BROWNTOP MILLET, BAHAGRASS, BROWNTOP MILLET, BAHAGRASS, SERICEA LESPEDEZA, BROWNTOP MILLET, ATLANTIC COASTAL PANICGRASS, BROWNTOP MILLET, SWITCHGRASS (ALAMO), LITTLE BLUESTEM, SERICEA LESPEDEZA, BROWNTOP MILLET, and KEEPING LOVEGRASS.

Table with columns: SPECIES, LBS/AC, and months from JAN to DEC. Rows include BROWNTOP MILLET, BAHAGRASS, RYE, GRAIN, BAHAGRASS, CLOVER, GRIMSON (ANNUAL), BROWNTOP MILLET, BAHAGRASS, SERICEA LESPEDEZA, BROWNTOP MILLET, BERMUDA, COMMON, SERICEA LESPEDEZA, BROWNTOP MILLET, BERMUDA, COMMON, KOBE LESPEDEZA (ANNUAL), BROWNTOP MILLET, BAHAGRASS, BERMUDA, COMMON, SERICEA LESPEDEZA, BROWNTOP MILLET, SWITCHGRASS, LITTLE BLUESTEM, and INDIANGRASS.

Table with columns: SPECIES, LBS/AC, and months from JAN to DEC. Rows include BROWNTOP MILLET, BAHAGRASS, RYE, GRAIN, BAHAGRASS, CLOVER, GRIMSON (ANNUAL), BROWNTOP MILLET, BAHAGRASS, SERICEA LESPEDEZA, BROWNTOP MILLET, BERMUDA, COMMON, SERICEA LESPEDEZA, BROWNTOP MILLET, BERMUDA, COMMON, KOBE LESPEDEZA (ANNUAL), BROWNTOP MILLET, BAHAGRASS, BERMUDA, COMMON, SERICEA LESPEDEZA, BROWNTOP MILLET, SWITCHGRASS, LITTLE BLUESTEM, and INDIANGRASS.

NOTE: SEEDING CHART APPLIES ONLY TO AREAS INDICATED ON PLANS WHERE SOO OR OTHER LANDSCAPE RESTORATION IS NOT REQUIRED. GOLF COURSE REPAIRS SHALL BE PER WILD DUNES GOLF COURSE SPECIFICATIONS.

TABLE 2. POTENTIAL STORMWATER CONTAMINANTS

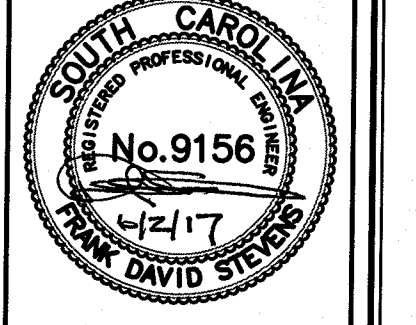
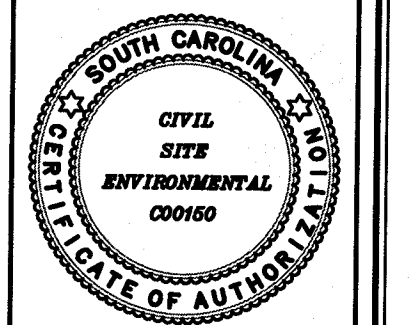
Table with columns: MATERIAL, CHEMICAL/PHYSICAL DESCRIPTION, and POTENTIAL STORMWATER POLLUTANT. Rows include PESTICIDES (INSECTICIDES, FUNGICIDES, HERBICIDES, RODENTICIDES), FERTILIZER, PLASTER, CLEANING SOLVENTS, ASPHALT, CONCRETE, GLUE, ADHESIVES, PAINTS, COATING COMPOUNDS, WASTEWATER FROM CONSTRUCTION, EQUIPMENT WASHING, WOOD PRESERVATIVES, HYDRAULIC OIL/FLUIDS, GASOLINE, DIESEL FUEL, KEROSENE, ANTIFREEZE/COOLANT, and EROSION.

NOTE: THIS LIST CONTAINS POSSIBLE CONTAMINANTS TO STORMWATER RUNOFF DURING CONSTRUCTION. OTHER CONTAMINANTS AND IS BY NO MEANS COMPLETE. ALL SPILLS OF POSSIBLE CONTAMINANTS SHOULD BE CLEANED UP IMMEDIATELY AFTER SPILL AND CONTAMINANT AND MATERIALS USED TO CLEAN UP SPILLS SHOULD BE DISPOSED OF IN AN APPROPRIATE MANNER.

REVISIONS: 1) REV 5/21/17 ADJUSTED SCHEDULE OF EVENTS TO INCLUDE PRECON CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: GENERAL PROJECT NOTES & SWPPP
FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
FILE: C100
SCALE: NONE
DATE: 6-28-13



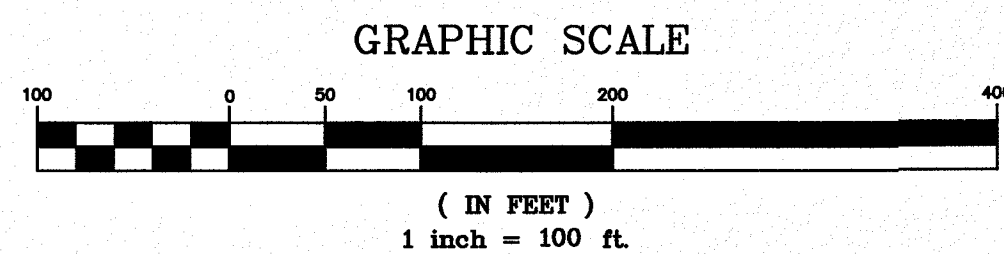
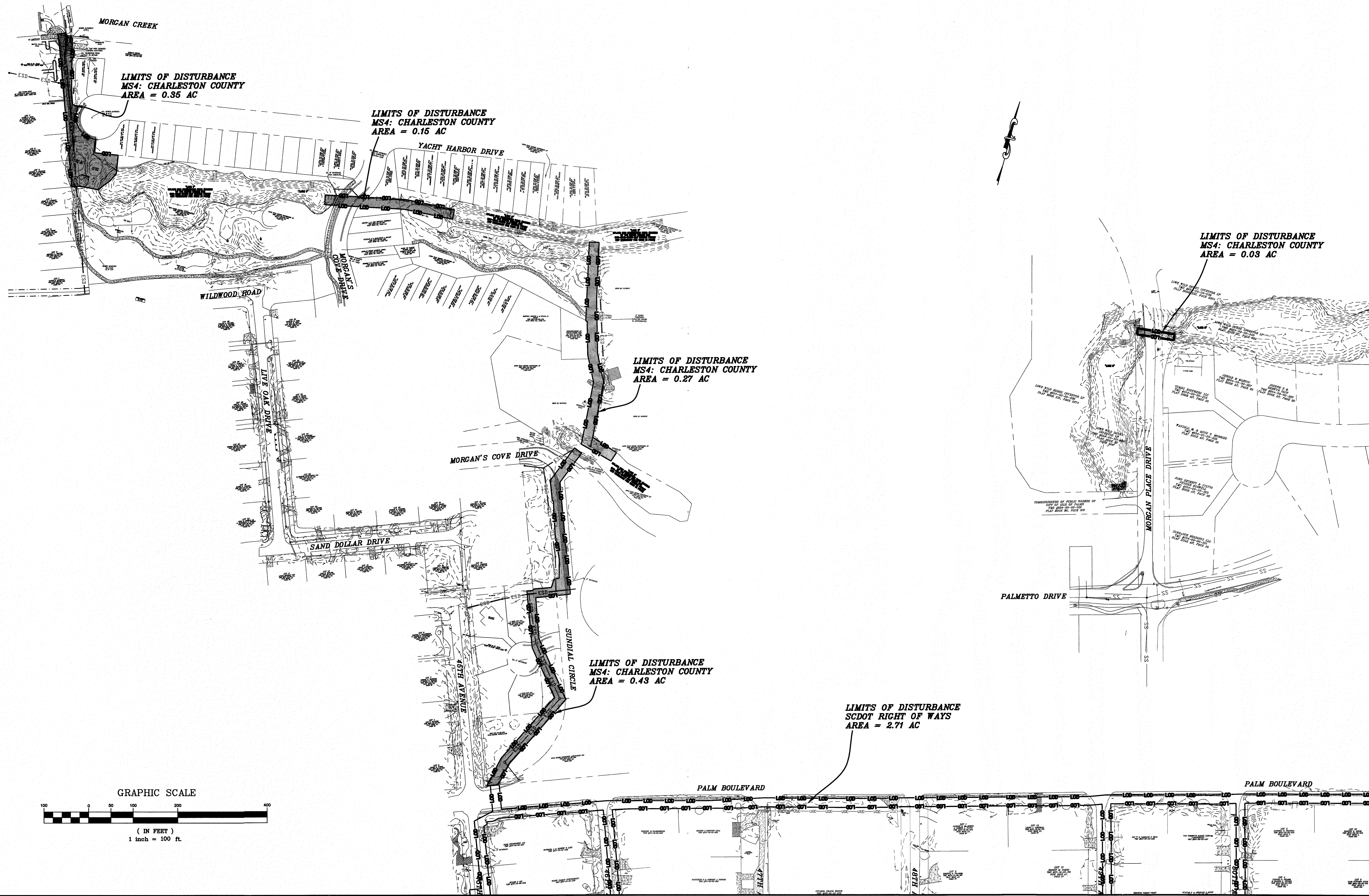
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PHONE: (843) 849-8945
FAX: (843) 849-8974
EMAIL: CSB@CIVILSTEEL.COM

CSE JOB NUMBER
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SHEET NUMBER
SWP



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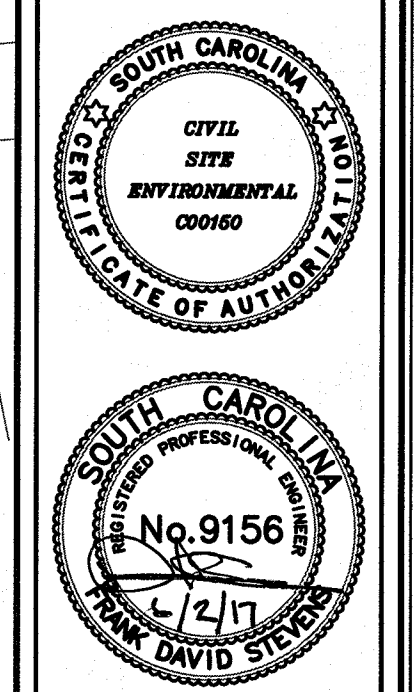
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REVISIONS:
1) REV 8/23/13 PER LOWE WILD DUNES, SCDOT, DPWSC COMMENTS/INFO
2) REV 5/5/17 CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: LIMITS OF DISTURBANCE
FOR: CITY OF ISLE OF PALMS

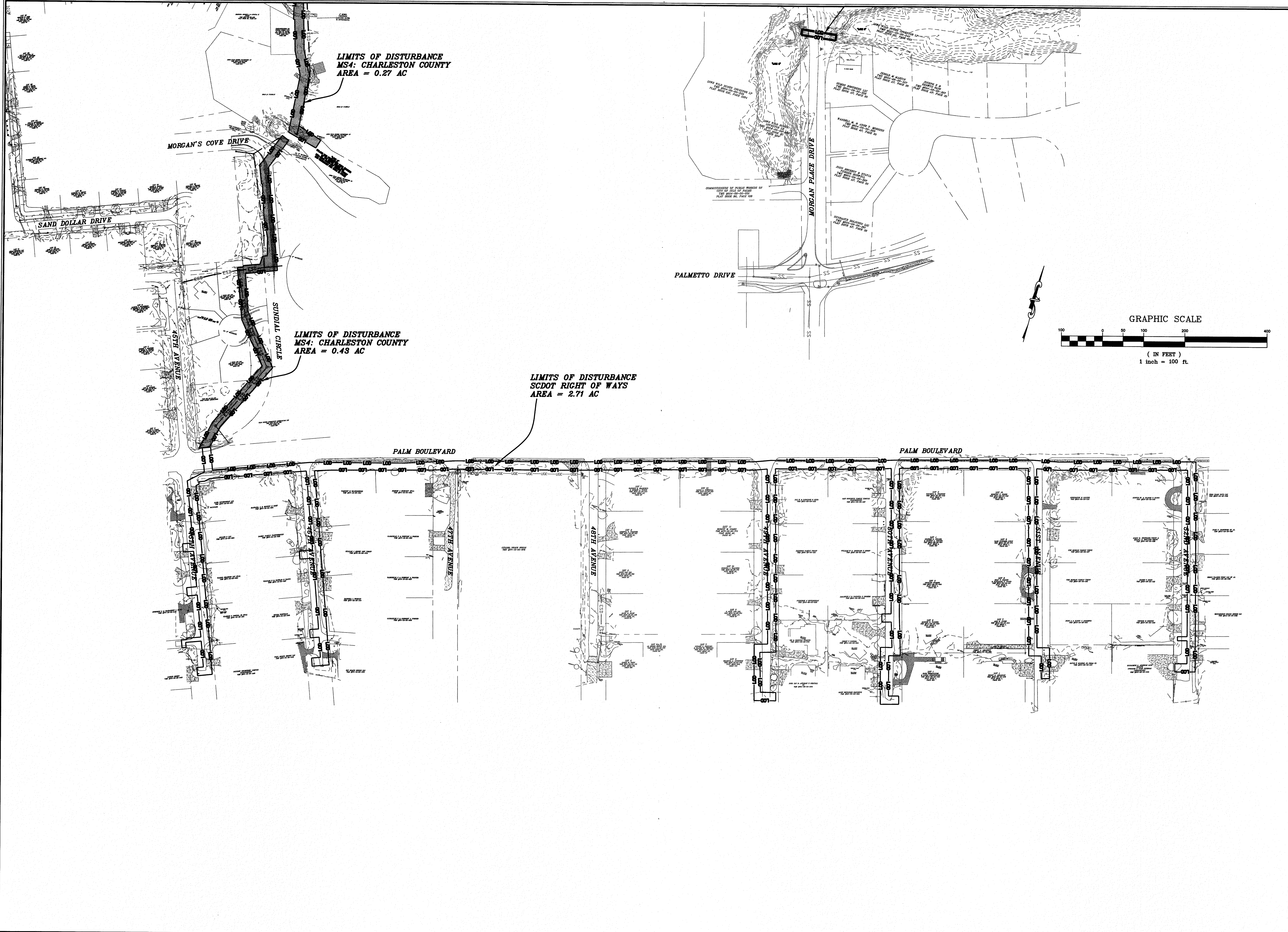
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DATE: 7-3-13



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FAX: (843) 849-8974
EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
SHEET NUMBER
C100

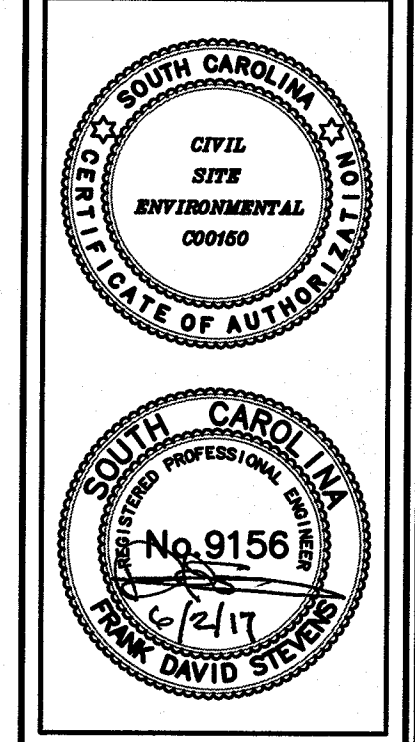
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REVISIONS:
 1) REV 8/23/13 PER LOWE WLD DUNES, SCDOT, IOPWSC COMMENTS/INFORMATIONS
 2) REV 5/25/17, RENUMBERED PAGE FROM C101 TO C100A; CONSTRUCTION 866 SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
 TITLE: LIMITS OF DISTURBANCE
 FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
 FILE: 920-PH2-C100
 SCALE: 1"=100'
 DATE: 7-3-13



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CSE JOB NUMBER
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 SHEET NUMBER
C100A

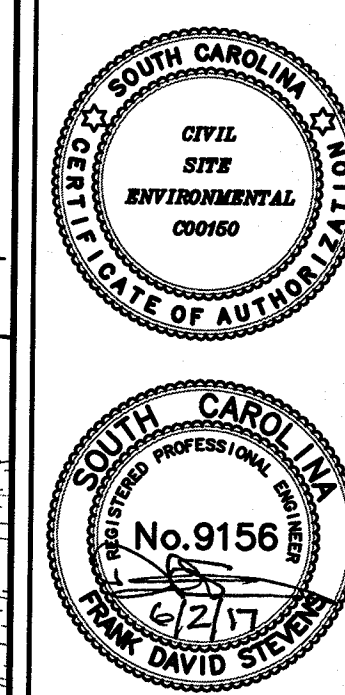


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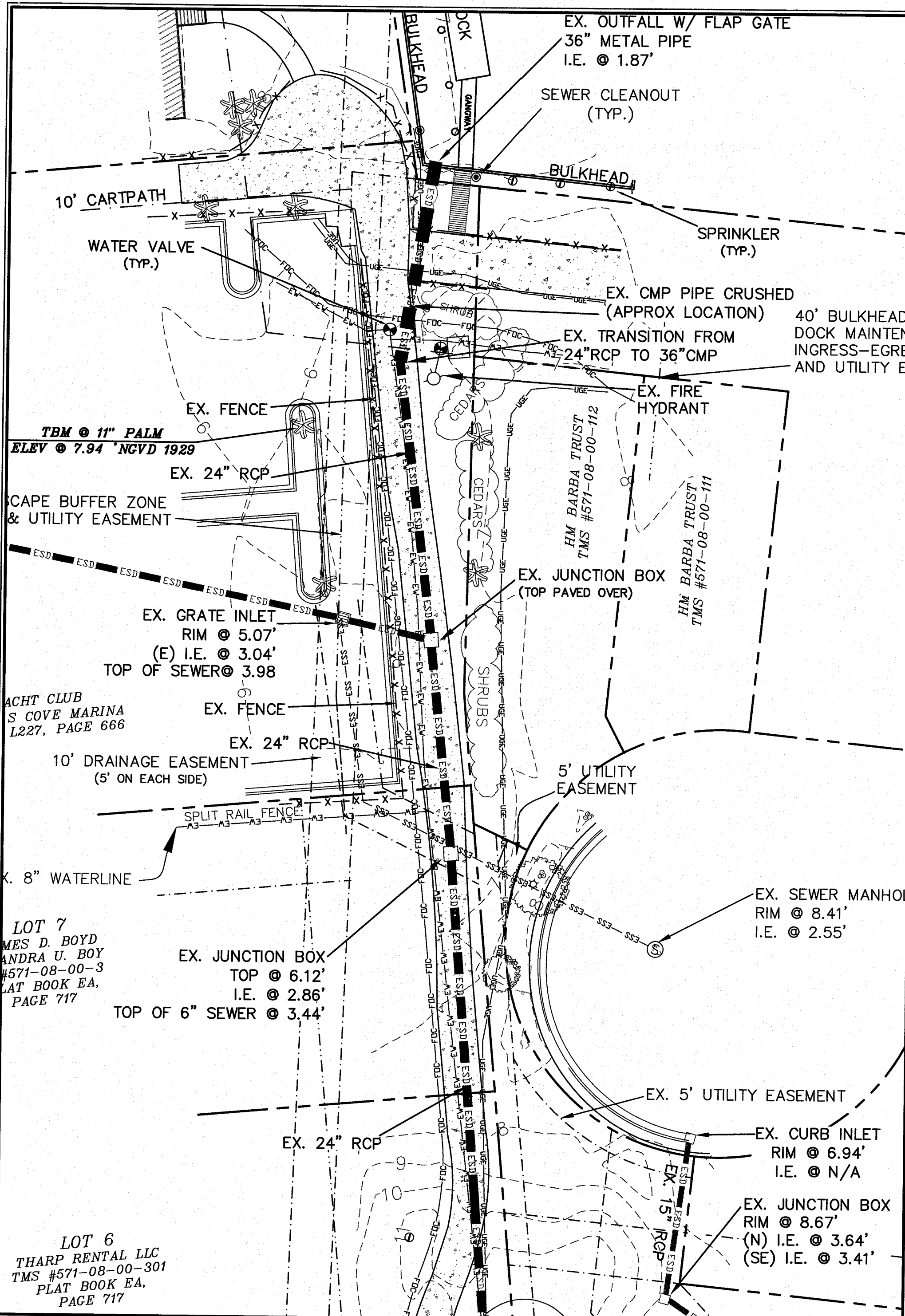
PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: EXISTING CONDITIONS
FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
FILE: 920-PH2-C101
SCALE: 1" = 30'
DATE: 5-25-17

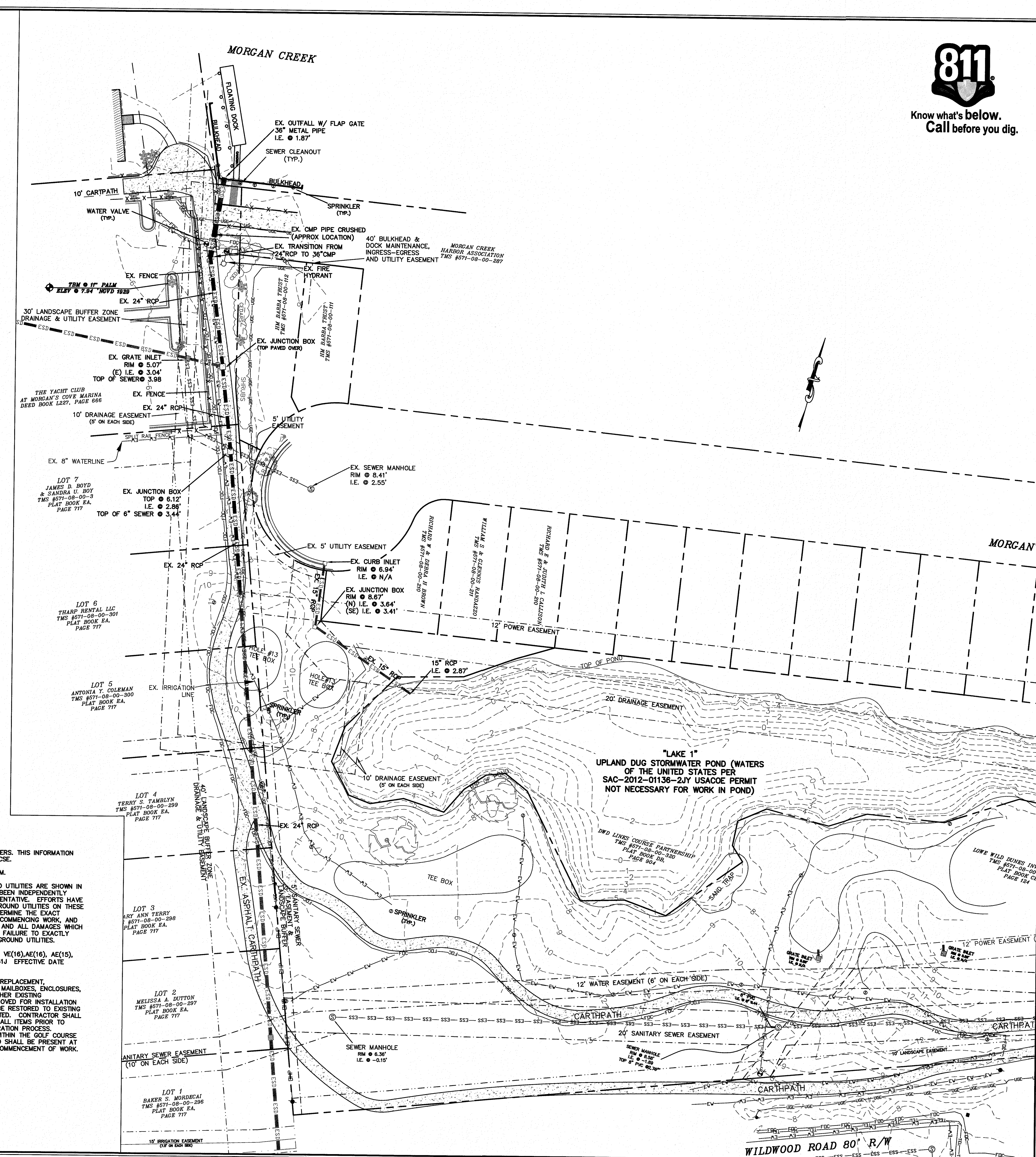


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CSE JOB NUMBER
920-PH2
SHEET NUMBER
C101



INSET A (SCALE 1"=20')



LEGEND

	—ESS—ESS—ESS—	EXISTING SANITARY SEWER
	—EW—EW—EW—EW—	EXISTING WATER LINE
	—EFM—EFM—EFM—	EXISTING FORCEMAIN
	—OP—OP—OP—OP—	EXISTING OVERHEAD POWER
	—ESD—ESD—ESD—	EXISTING STORM DRAIN
	—TEL—TEL—TEL—TEL—	EXISTING PROPERTY LINE
	—FOC—FOC—FOC—FOC—	EXISTING EASEMENT
	—UGE—UGE—UGE—UGE—	EXISTING TELEPHONE
	—CTV—CTV—CTV—CTV—	EXISTING FIBEROPTIC
	—B—B—B—B—B—	EXISTING UNDERGROUND ELECTRICAL
		EXISTING CABLE TV
		EXISTING CONTOUR

NOTES

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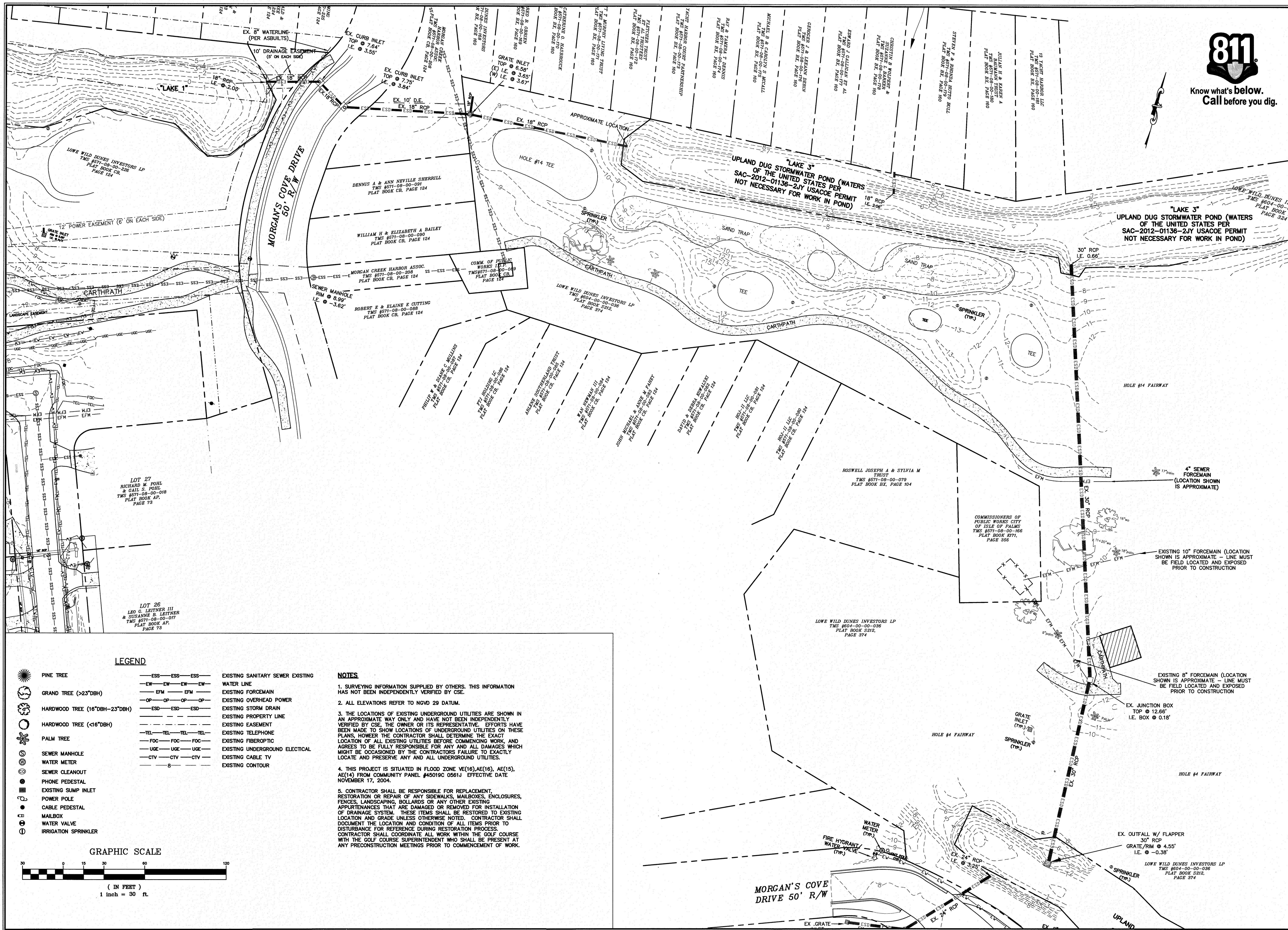
GRAPHIC SCALE
1 inch = 30 ft

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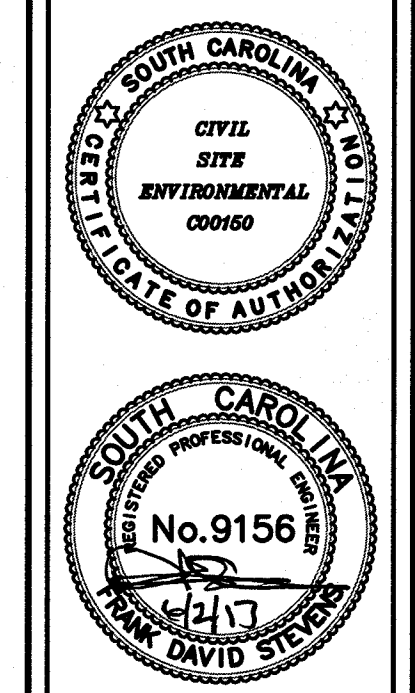


REVISIONS:
1) REV 5/31/17 CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE:
FOR: CITY OF ISLE OF PALMS

EXISTING CONDITIONS

DRAWN BY: JCM
FILE: 920-PH2-C101
SCALE: 1" = 30'
DATE: 5-25-17



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EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
SHEET NUMBER
C102

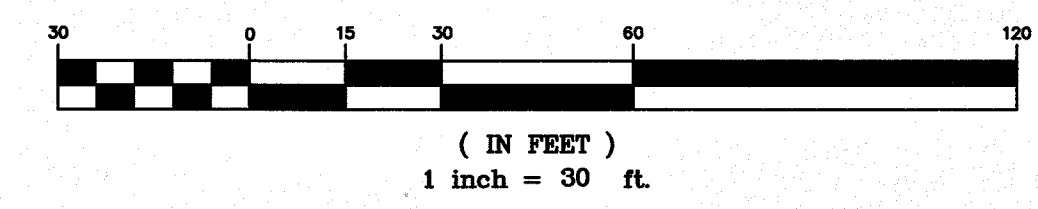
LEGEND

	—ESS—ESS—ESS—	EXISTING SANITARY SEWER EXISTING
	—EW—EW—EW—EW—	WATER LINE
	—EFM—EFM—EFM—EFM—	EXISTING FORCEMAIN
	—OP—OP—OP—OP—	EXISTING OVERHEAD POWER
	—ESD—ESD—ESD—	EXISTING STORM DRAIN
	—TEL—TEL—TEL—TEL—	EXISTING TELEPHONE
	—FOC—FOC—FOC—	EXISTING FIBEROPTIC
	—UGE—UGE—UGE—	EXISTING UNDERGROUND ELECTRICAL
	—CTV—CTV—CTV—	EXISTING CABLE TV
	—	EXISTING CONTOUR

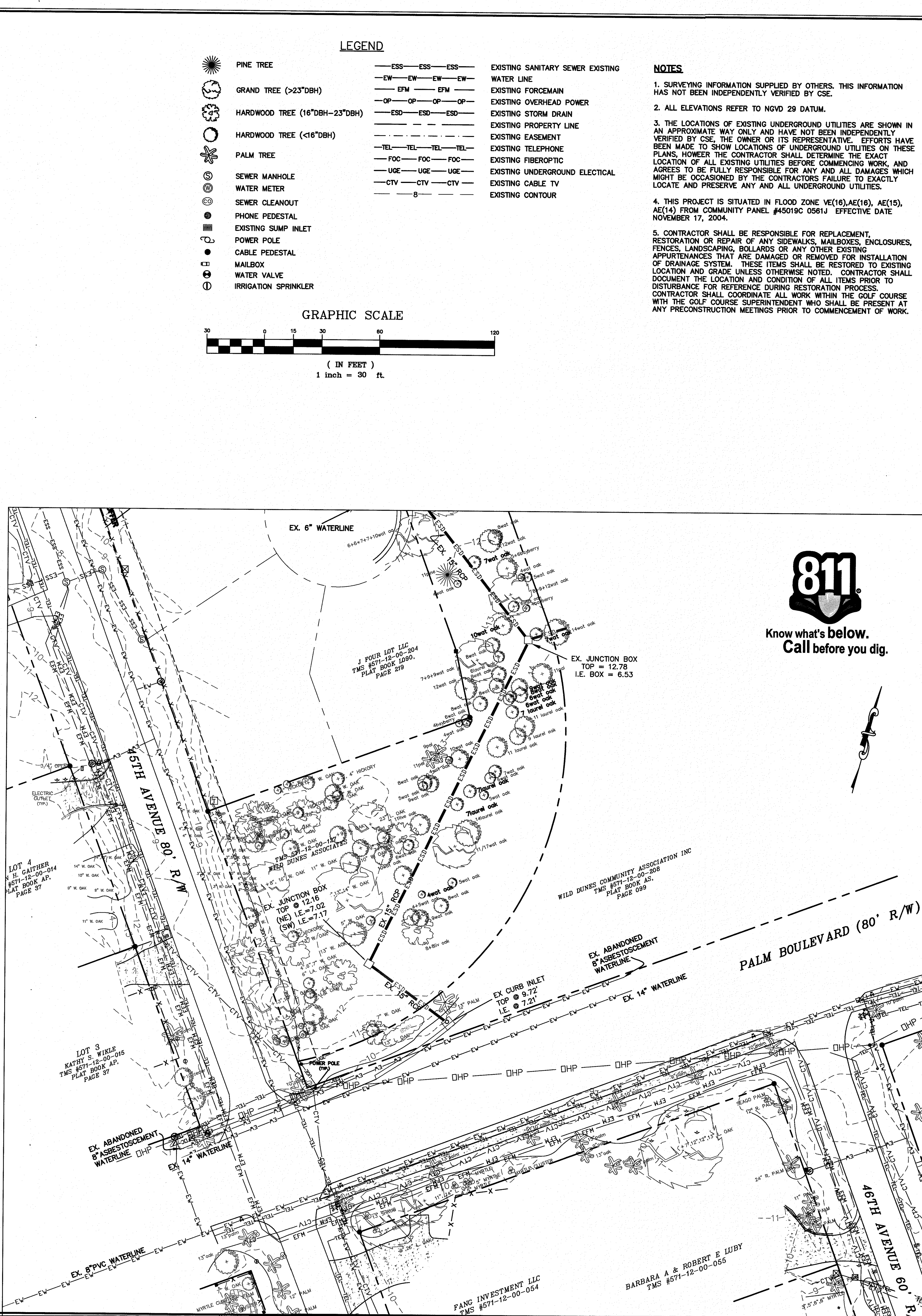
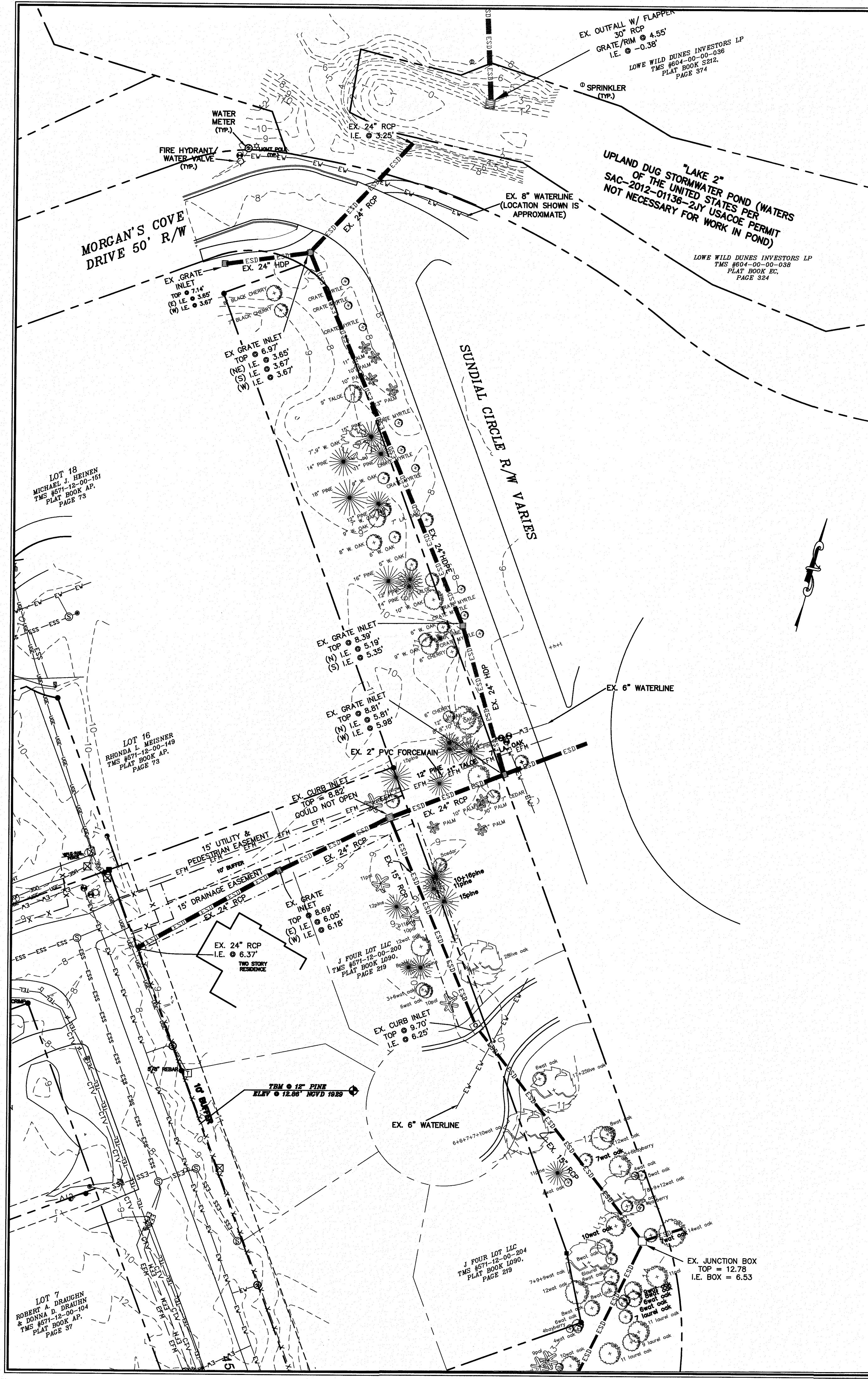
NOTES

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GRAPHIC SCALE

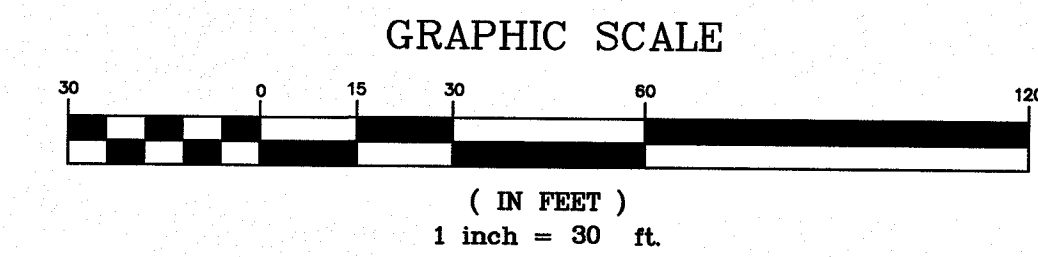


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LEGEND

	PINE TREE	—ESS—ESS—ESS—	EXISTING SANITARY SEWER EXISTING WATER LINE
	GRAND TREE (>23"DBH)	—EW—EW—EW—EW—	EXISTING FORCEMAIN
	HARDWOOD TREE (16"DBH-23"DBH)	—OP—OP—OP—OP—	EXISTING OVERHEAD POWER
	HARDWOOD TREE (<16"DBH)	—ESD—ESD—ESD—	EXISTING STORM DRAIN
	PALM TREE	—TEL—TEL—TEL—TEL—	EXISTING PROPERTY LINE
	SEWER MANHOLE	—FOC—FOC—FOC—	EXISTING EASEMENT
	WATER METER	—TEL—TEL—TEL—TEL—	EXISTING TELEPHONE
	SEWER CLEANOUT	—FOC—FOC—FOC—	EXISTING FIBEROPTIC
	PHONE PEDESTAL	—UGE—UGE—UGE—	EXISTING UNDERGROUND ELECTRICAL
	EXISTING SUMP INLET	—CTV—CTV—CTV—	EXISTING CABLE TV
	POWER POLE	—B—B—B—B—B—	EXISTING CONTOUR
	CABLE PEDESTAL		
	MAILBOX		
	WATER VALVE		
	IRRIGATION SPRINKLER		



- NOTES**
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REVIEWS:
1) REV 5/21/17 CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: EXISTING CONDITIONS
FOR: CITY OF ISLE OF PALMS

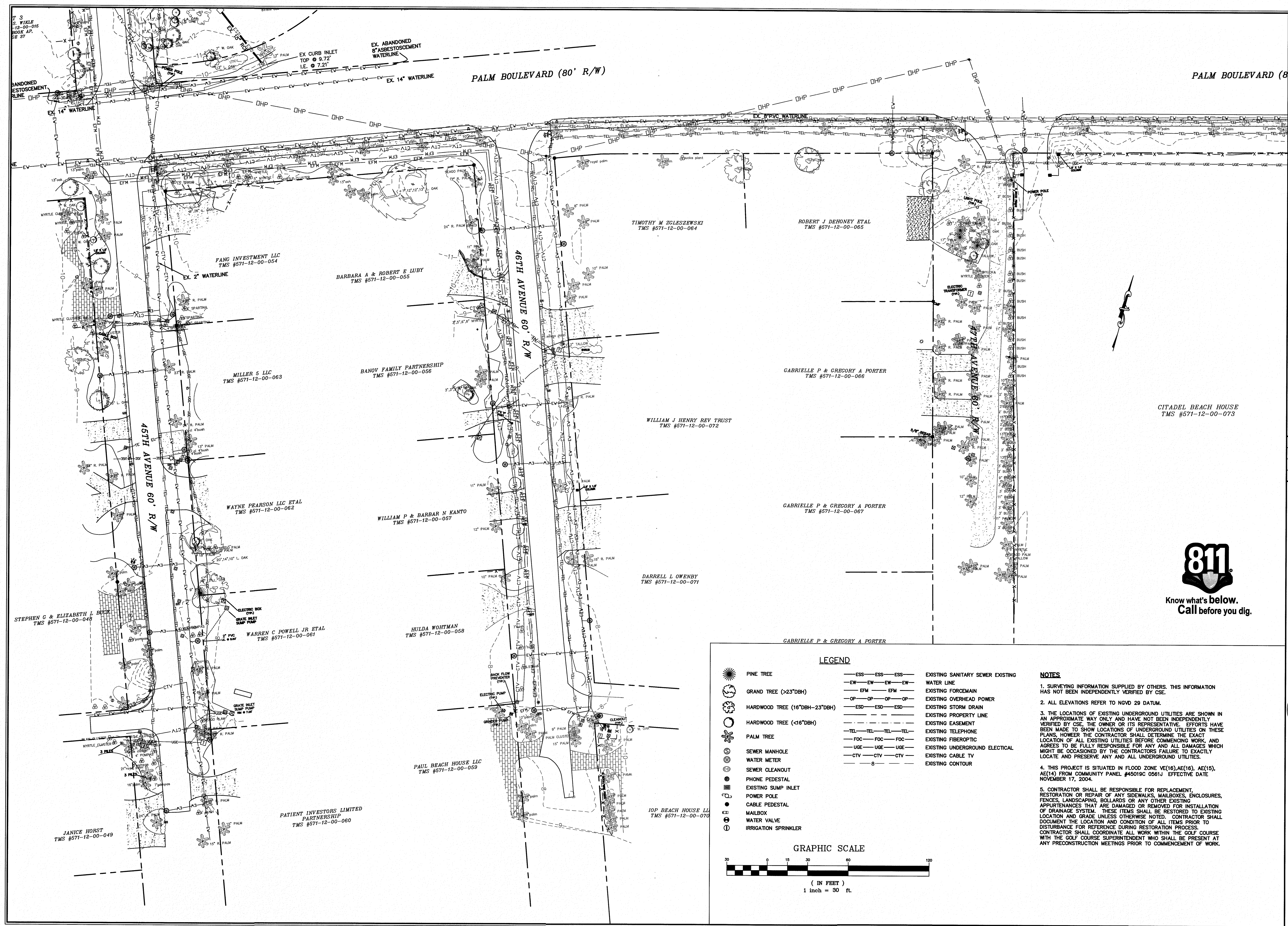
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FILE: 920-PH2-C101
SCALE: 1" = 30'
DATE: 5-25-17

668 MARINA DRIVE
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CHARLESTON, S.C. 29402

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FAX: (843) 849-8974
EMAIL: CSE@CIVILSITEENV.COM

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SHEET NUMBER
C103

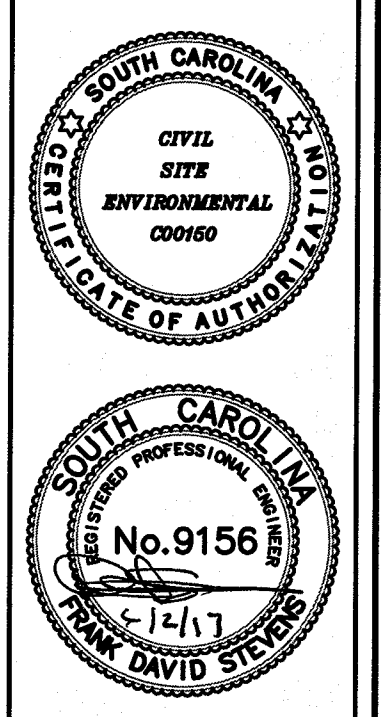
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REVISIONS:
1) REV 5/31/17 CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: EXISTING CONDITIONS
FOR: CITY OF ISLE OF PALMS

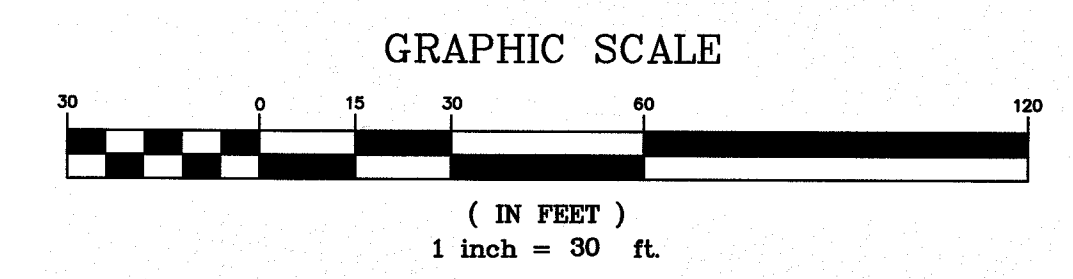
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LEGEND

	PINE TREE	—ESS—ESS—ESS—	EXISTING SANITARY SEWER
	GRAND TREE (>23" DBH)	—EW—EW—EW—EW—	EXISTING WATER LINE
	HARDWOOD TREE (16" DBH - 23" DBH)	—EFM—EFM—EFM—	EXISTING FORCEMAIN
	HARDWOOD TREE (<16" DBH)	—OP—OP—OP—OP—	EXISTING OVERHEAD POWER
	PALM TREE	—ESD—ESD—ESD—	EXISTING STORM DRAIN
	SEWER MANHOLE	—TEL—TEL—TEL—TEL—	EXISTING PROPERTY LINE
	WATER METER	—FOC—FOC—FOC—	EXISTING EASEMENT
	SEWER CLEANOUT	—UGE—UGE—UGE—	EXISTING TELEPHONE
	PHONE PEDESTAL	—CTV—CTV—CTV—	EXISTING FIBEROPTIC
	EXISTING SUMP INLET	—B—	EXISTING UNDERGROUND ELECTRICAL
	POWER POLE		EXISTING CABLE TV
	CABLE PEDESTAL		EXISTING CONTOUR
	MAILBOX		
	WATER VALVE		
	IRRIGATION SPRINKLER		

- NOTES**
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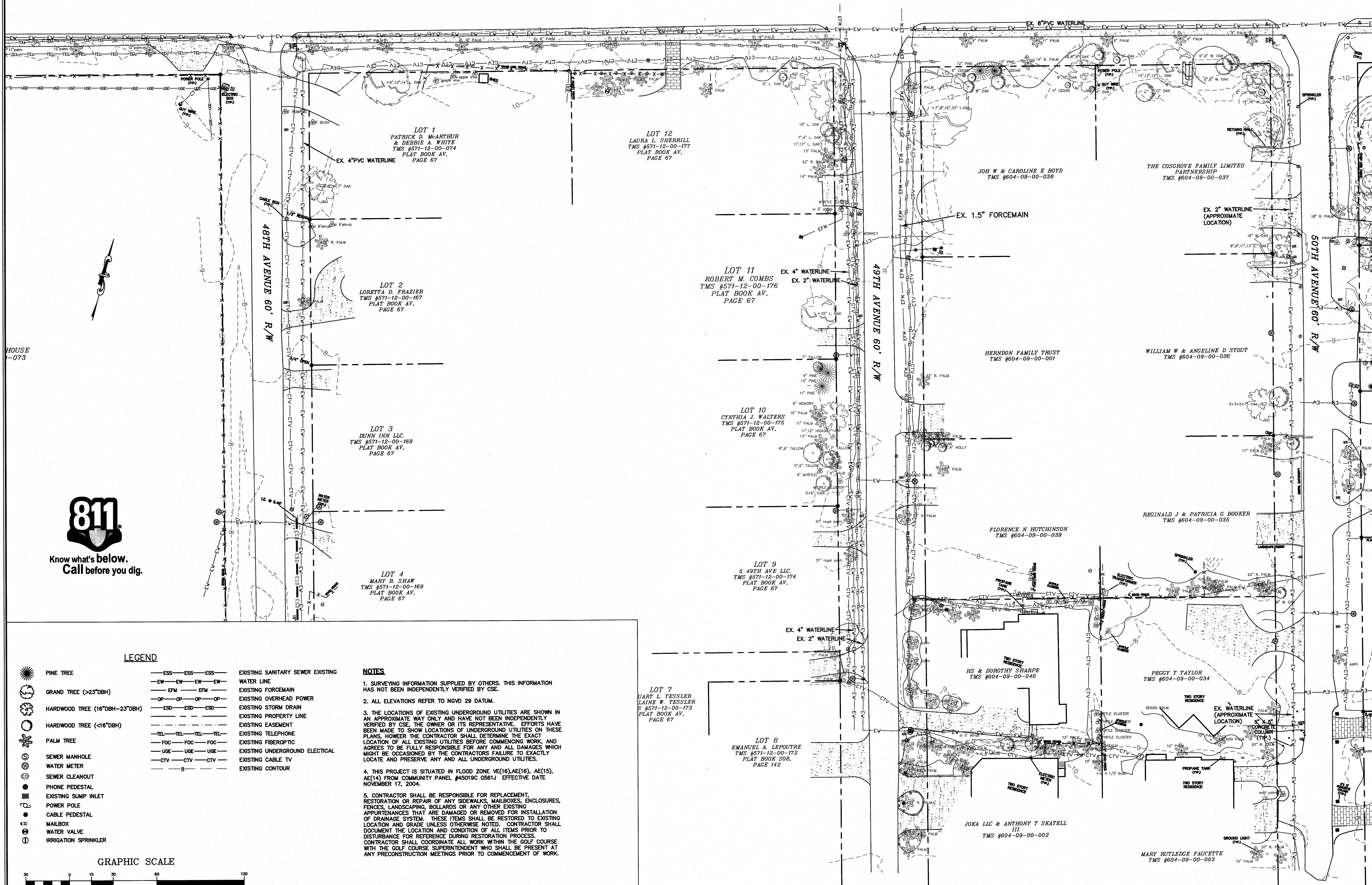
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SHEET NUMBER
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FAX: (843) 849-8974
EMAIL: CSE@CIVILSITEENVY.COM



BOULEVARD (80' R/W)

PALM BOULEVARD (80' R/W)



HOUSE -073



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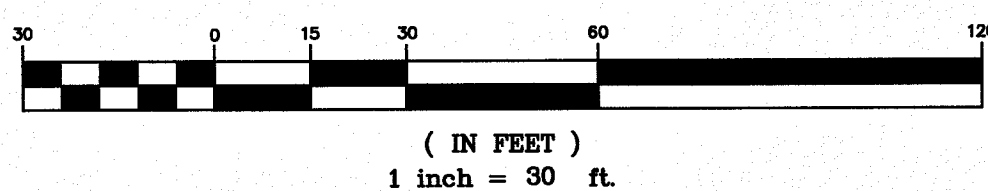
LEGEND

	—ESS—ESS—ESS—	EXISTING SANITARY SEWER EXISTING
	—EW—EW—EW—EW—	WATER LINE

NOTES

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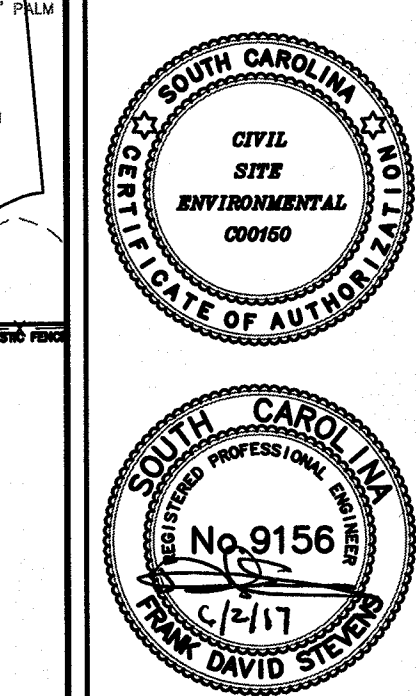
GRAPHIC SCALE



REVISIONS:
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PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
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FOR: CITY OF ISLE OF PALMS

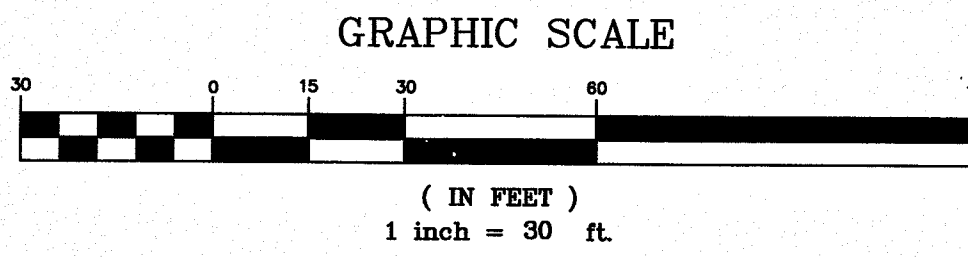
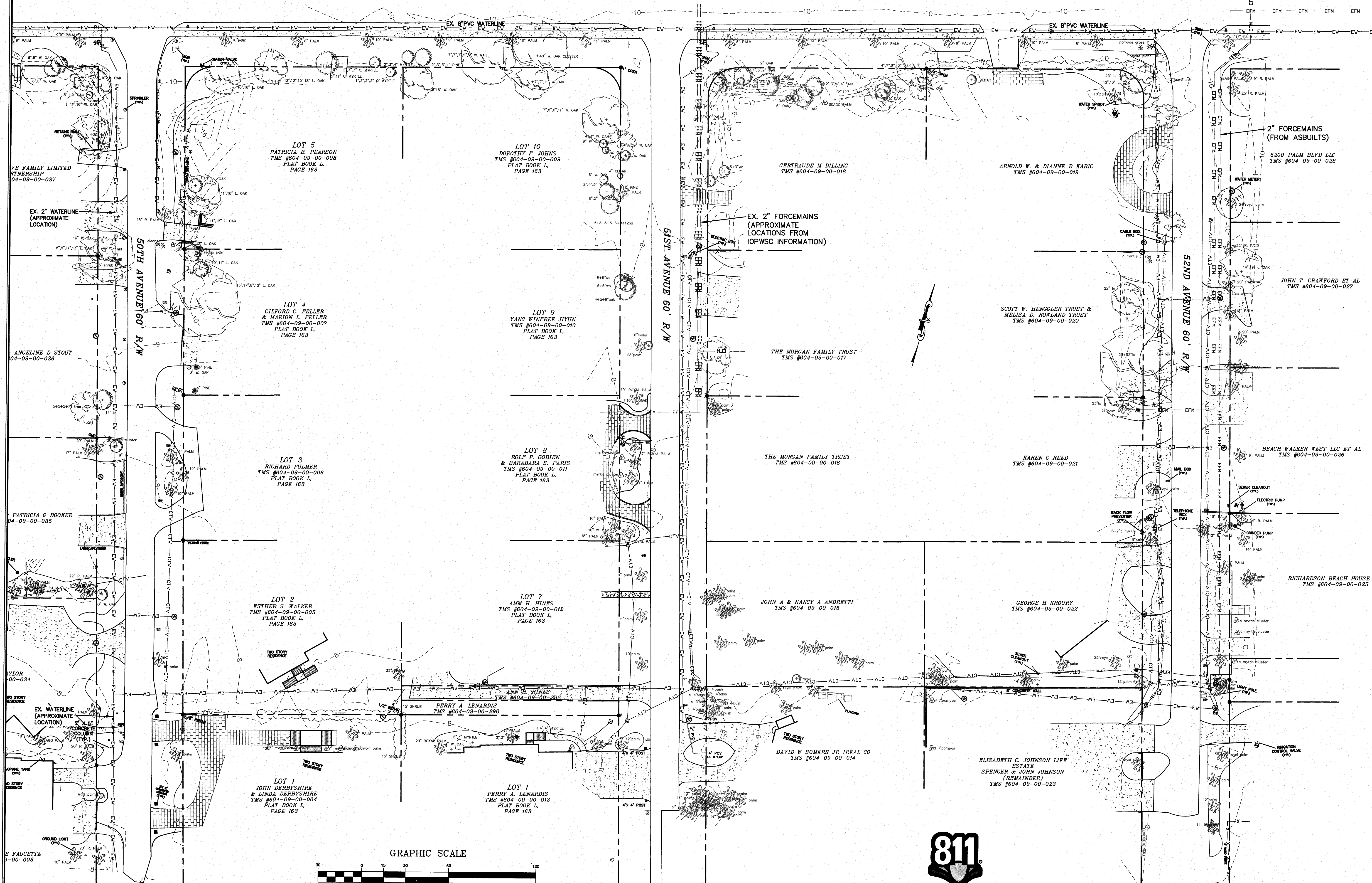
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C105

PALM BOULEVARD (80' R/W)

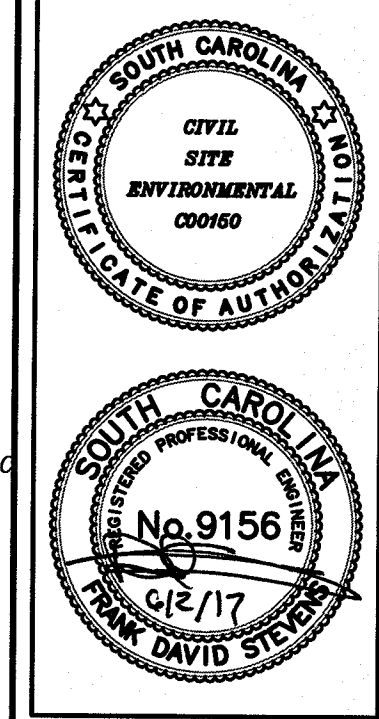


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1) REV 5/31/17 CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: EXISTING CONDITIONS
FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
FILE: 920-PH2-C101
SCALE: 1" = 30'
DATE: 5-25-17



688 MARINA DRIVE
SUITE B-1
CHARLESTON, S.C. 29492
PHONE: (843) 849-8945
FAX: (843) 849-8974
EMAIL: CSE@CIVILSITERNV.COM

CSE JOB NUMBER
920-PH2
SHEET NUMBER
C106

S:\920-Ph2\920-Ph2-Dwg\Construction Drawings\920-Ph2-C101.dwg, 6/12/2017 2:26:44 PM

COMMISSIONERS OF PUBLIC WORKS OF
CITY OF ISLE OF PALMS
TMS #604-00-00-031
PLAT BOOK B0, PAGE 109



LOWE WILD DUNES INVESTOR LP
TMS #604-00-00-036
PLAT BOOK S21, PAGE 2374

LOWE WILD DUNES INVESTOR LP
TMS #604-00-00-039
PLAT BOOK EC, PAGE 324

LOWE WILD DUNES INVESTOR LP
TMS #604-00-00-036
PLAT BOOK S21, PAGE 2374

LOWE WILD DUNES INVESTOR LP
TMS #604-00-00-040
PLAT BOOK EC, PAGE 322

GUMBS BROTHERS LLC
TMS #604-09-00-258
PLAT BOOK AP, PAGE 20

JEROLD M. MARTIN
TMS #604-09-00-257
PLAT BOOK AP, PAGE 20

JOSEPH E & KENWYN OLIN
TMS #604-09-00-257
PLAT BOOK AP, PAGE 20

WANDELL M. & ANNE T. MORRIS
TMS #604-09-00-259
PLAT BOOK AP, PAGE 20

EDGEWATER ALLEY

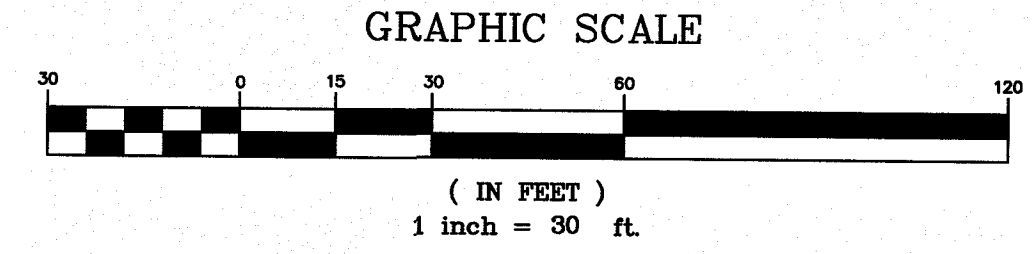
MORGAN PLACE DRIVE (60' R/W)

JOHN BECKETT & SYLVIA
FENDER BURWELL
TMS #604-09-00-260
PLAT BOOK AP, PAGE 20

SUNDANCE HOLDINGS LLC
TMS #604-09-00-261
PLAT BOOK AP, PAGE 20

LEGEND

	PINE TREE	—ESS—ESS—ESS—	EXISTING SANITARY SEWER EXISTING
	GRAND TREE (>23"DBH)	—EW—EW—EW—EW—	WATER LINE
	HARDWOOD TREE (16"DBH-23"DBH)	—EFM—EFM—	EXISTING FORCEMAIN
	HARDWOOD TREE (<16"DBH)	—OP—OP—OP—OP—	EXISTING OVERHEAD POWER
	PALM TREE	—ESD—ESD—ESD—	EXISTING STORM DRAIN
	SEWER MANHOLE	—TEL—TEL—TEL—TEL—	EXISTING PROPERTY LINE
	WATER METER	—FOC—FOC—FOC—	EXISTING EASEMENT
	SEWER CLEANOUT	—UGE—UGE—UGE—	EXISTING TELEPHONE
	PHONE PEDESTAL	—CTV—CTV—CTV—	EXISTING FIBEROPTIC
	EXISTING SUMP INLET	—	EXISTING UNDERGROUND ELECTRICAL
	POWER POLE	—	EXISTING CABLE TV
	CABLE PEDESTAL	—	EXISTING CONTOUR
	MAILBOX		
	WATER VALVE		
	IRRIGATION SPRINKLER		



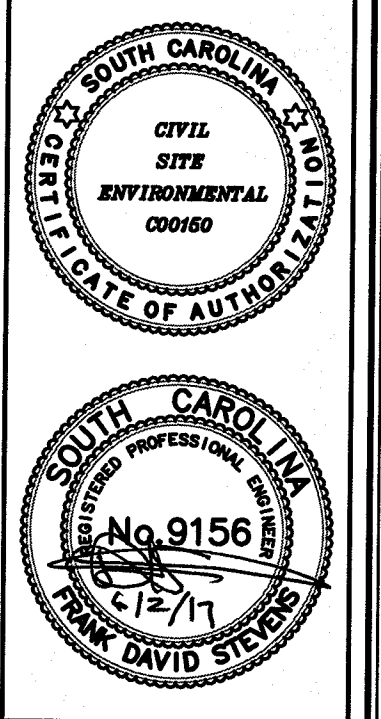
NOTES

1. SURVEYING INFORMATION SUPPLIED BY OTHERS. THIS INFORMATION HAS NOT BEEN INDEPENDENTLY VERIFIED BY CSE.
2. ALL ELEVATIONS REFER TO NGVD 29 DATUM.
3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY CSE. THE OWNER OR ITS REPRESENTATIVE, EFFORTS HAVE BEEN MADE TO SHOW LOCATIONS OF UNDERGROUND UTILITIES ON THESE PLANS. HOWEVER THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
4. THIS PROJECT IS SITUATED IN FLOOD ZONE VE(16), AE(16), AE(15), AE(14) FROM COMMUNITY PANEL #45019C 0561J EFFECTIVE DATE NOVEMBER 17, 2004.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT, RESTORATION OR REPAIR OF ANY SIDEWALKS, MAILBOXES, ENCLOSURES, FENCES, LANDSCAPING, BOLLARDS OR ANY OTHER EXISTING APPURTENANCES THAT ARE DAMAGED OR REMOVED FOR INSTALLATION OF DRAINAGE SYSTEM. THESE ITEMS SHALL BE RESTORED TO EXISTING LOCATION AND GRADE UNLESS OTHERWISE NOTED. CONTRACTOR SHALL DOCUMENT THE LOCATION AND CONDITION OF ALL ITEMS PRIOR TO DISTURBANCE FOR REFERENCE DURING RESTORATION PROCESS. CONTRACTOR SHALL COORDINATE ALL WORK WITHIN THE GOLF COURSE WITH THE GOLF COURSE SUPERINTENDENT WHO SHALL BE PRESENT AT ANY PRECONSTRUCTION MEETINGS PRIOR TO COMMENCEMENT OF WORK.

REVISIONS:
1) REV 5/31/17 CONSTRUCTION BID SET

PROJECT:
45TH TO 52ND AVE DRAINAGE IMPROVEMENTS

DRAWN BY: JCM
FILE: 920-PH2-C101
SCALE: 1" = 30'
DATE: 5-25-17



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CSE@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
SHEET NUMBER
C107

EXISTING CONDITIONS
FOR: CITY OF ISLE OF PALMS

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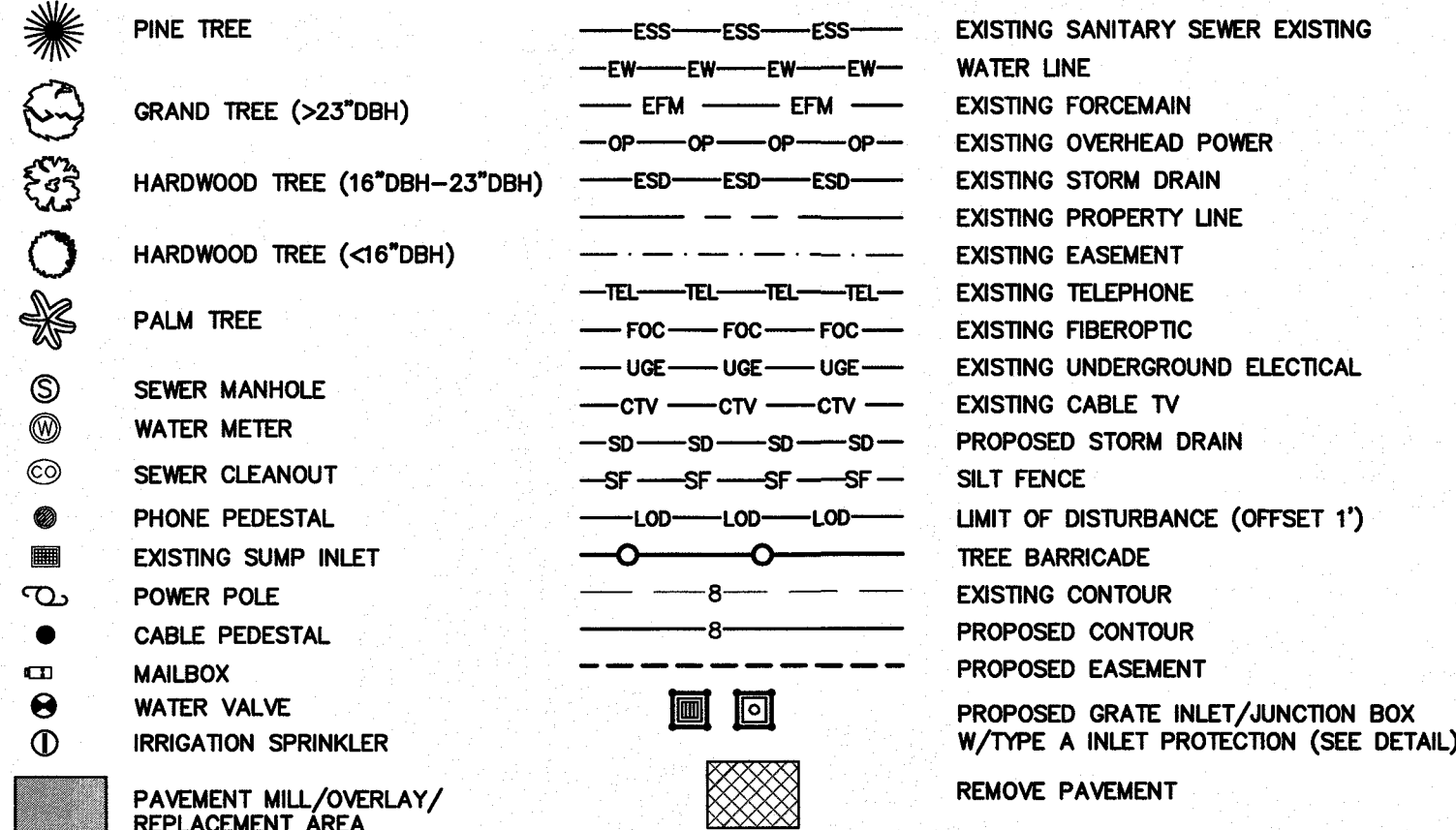
PIPE CHART

Table with columns: FROM, TO, LENGTH (FT), DIAMETER (IN), TYPE, SLOPE (%), I.E. (FROM), I.E. (TO), 10 YR VEL. Rows include pipe segments for JBB1-JB77, LAKE3-JB75, LAKE2-JB73, LAKE3-JB74, LAKE5-LAKE6, LAKE2-GI1, GI1-JB2, JB2-GI3, GI3-GI4, GI4-CI5, CI5-JB6, JB6-JB7, JB7-JB13, JB13-JB14, JB14-JB20, JB20-GI41, GI41-JB42, JB42-GI43, GI43-GI44, GI44-GI45, GI45-GI46, GI46-JB51, JB51-GI52, GI52-JB53, JB53-JB61A, JB61A-GI61, GI61-JB62, 45TH AVE (JB14-GI16, GI16-GI18, GI18-GI20, GI20-GI22, GI22-GI24, GI24-GI25, GI25-GI26, GI26-GI27), 46TH AVE (JB28-GI32, GI32-GI33, GI33-GI34, GI34-GI35, GI35-GI36, GI36-GI37, GI37-GI38, GI38-GI39, GI39-GI40), 49TH AVE (JB51-GI47, GI47-GI47A, GI47A-GI48, GI48-GI49, GI49-GI50), 50TH AVE (JB53-GI54, GI54-GI55, GI55-GI56, GI56-GI57, GI57-GI58, GI58-GI59, GI59-GI60), 51ST AVE (JB61-GI63, GI63-GI65, GI65-GI64, GI64-GI66), 52ND AVE (JB62-GI68, GI68-GI68A, GI68A-GI69, GI69-GI70, GI70-GI71, GI71-GI72).

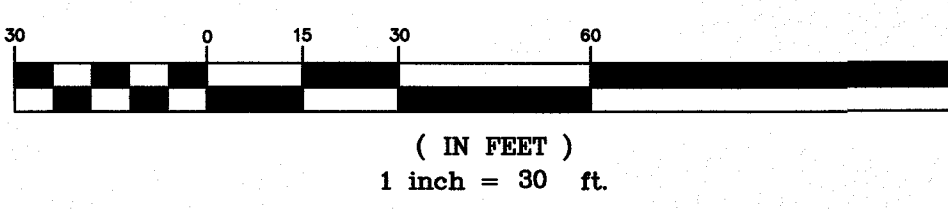
STRUCTURE CHART

Table with columns: NUMBER, RIM, I.E., TYPE. Lists structures GI1 through JB81, including grate inlets, junction boxes, manholes, and cleanouts.

LEGEND



GRAPHIC SCALE



SEQUENCE OF EVENTS

- 1) PRECONSTRUCTION MEETING
2) INSTALL EROSION CONTROL & TREE PROTECTION
3) INSTALL STORM DRAINAGE LINES
4) LANDSCAPE/STABILIZE ALL DISTURBED AREAS AS LINEAR WORK IS COMPLETED
5) REMOVE EROSION CONTROLS ONCE STABILIZED
6) SUBMIT NOTICE OF TERMINATION (NOT)

NOTES

- 1) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE CSE, THE OWNER OR ITS REPRESENTATIVE...
2) CONTRACTOR SHALL BE REQUIRED TO HAVE PROPOSED ROUTE STAKED, ALL UTILITIES MARKED, UTILITY CROSSINGS VERTICALLY LOCATED, AND A WALK THROUGH CONDUCTED WITH ENGINEER PRIOR TO INITIATION OF CONSTRUCTION OF ANY PORTION OF THE WORK.
3) SEE SHEET C200 FOR PIPE AND STRUCTURE CHART AND DRAINAGE NOTES.
4) CONTRACTOR TO COORDINATE ALL ACTIVITIES INVOLVING DISTURBANCE OF GOLF COURSE AREAS WITH WILD DUNES RESORT GOLF COURSE SUPERVISOR...
5) PER USACE LETTER OF JANUARY 28, 2013 (SAC 2012-01136-2JY) DEPARTMENT OF THE ARMY AUTHORIZATION WILL NOT BE REQUIRED FOR MECHANIZED LAND CLEARING, EXCAVATION, OR THE PLACEMENT OF DREDGED OR FILL MATERIAL ON THIS SITE.
6) ANY FIELD CHANGES THAT WOULD IMPACT SCDOT R/W WILL REQUIRE WRITTEN SCDOT APPROVAL PRIOR TO CHANGES BEING IMPLEMENTED IN THE FIELD.
7) WORK WITHIN SCDOT RIGHT-OF-WAYS SHALL COMPLY WITH CURRENT SCDOT STANDARD DRAWINGS AND SPECIFICATIONS. WORK IN OTHER AREAS SHALL COMPLY WITH SCDOT STANDARDS UNLESS OTHERWISE NOTED.

GENERAL PROJECT NOTES

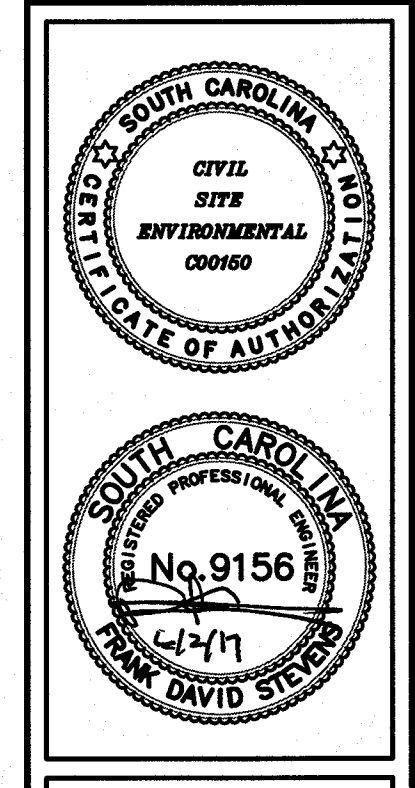
- 1. SURVEYING INFORMATION SUPPLIED BY OTHERS. THIS INFORMATION HAS NOT BEEN INDEPENDENTLY VERIFIED BY CSE.
2. ALL ELEVATIONS REFER TO NGVD 29 DATUM.
3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY CSE, THE OWNER OR ITS REPRESENTATIVE...
4. THE CONTRACTOR WILL NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS DISCOVERED PRIOR TO BEGINNING ANY REMOVAL.
5. ALL PAVING, GRADING AND DRAINAGE MATERIALS SHALL BE IN ACCORDANCE WITH SCDOT CURRENT STANDARDS. ALL WORK PERTAINING TO WATER AND SEWER FACILITIES SHALL BE IN ACCORDANCE WITH ISLE OF PALMS WATER AND SEWER COMMISSION CURRENT STANDARDS AND SPECIFICATIONS.
6. NO CONSTRUCTION SHALL TAKE PLACE WITHIN WETLANDS UNLESS A PERMIT HAS BEEN PREVIOUSLY OBTAINED.
7. ALL STORM PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CONFORMING TO ASTM C-76 CLASS III. JOINTS SHALL BE WATER TIGHT FLEXIBLE RUBBER GASKET AND SHALL MEET ASTM C-443 AND AASHTO M-198. PIPE JOINTS SHALL BE WRAPPED WITH NON-WOVEN GEOTEXTILE FABRIC.
8. RIP-RAP WILL BE PLACED AS INDICATED ON PLANS IMMEDIATELY AFTER INSTALLATION OF STORM PIPE TO REDUCE SEDIMENTATION AND EROSION DOWNSTREAM.
9. CONTRACTOR IS TO INSTALL SILT FENCE ALONG WETLANDS, WHERE INDICATED ON THE PLANS, SPECIFIED BY THE ENGINEER AND WHERE DISTURBED AREAS MAY CAUSE SILTATION OF THE WETLAND AND/OR ADJACENT PROPERTY...
10. THIS PROJECT IS SITUATED IN FLOOD ZONE VE(16), AE(16), AE(15), AE(14) FROM COMMUNITY PANEL #45019C 0561J EFFECTIVE DATE NOVEMBER 17, 2004.
11. OVERLAY AREAS FOR INTERSECTIONS WILL CONTINUE TO TANGENT POINTS ON INTERSECTION RADII UNLESS OTHERWISE NOTED. OVERLAY SHALL MEET CURRENT SCDOT STANDARDS.
12. TRIMMING/LIMBING OF TREES MAY BE REQUIRED. REMOVAL OF TREES GREATER THAN 7\"/>



REVISIONS:
1) 7/2/13 ADDED USACE REFERENCE AND NOTATIONS FOR PONDS AND WETLANDS.
2) REV 9/16/13 PER SCDOT COMMENTS.
3) REV 9/17/13 PER SCDOT COMMENTS.
4) REV 9/17/14 PER SCDOT COMMENTS.
5) REV 5/31/17 CONSTRUCTION BID SET - ADDED/REVISED NOTES

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: PIPE & STRUCTURE CHARTS & DRAINAGE NOTES
FOR: CITY OF ISLE OF PALMS
DRAWN BY: JCM
FILE: 920-PH2-C200
SCALE: NONE
DATE: 6-28-13

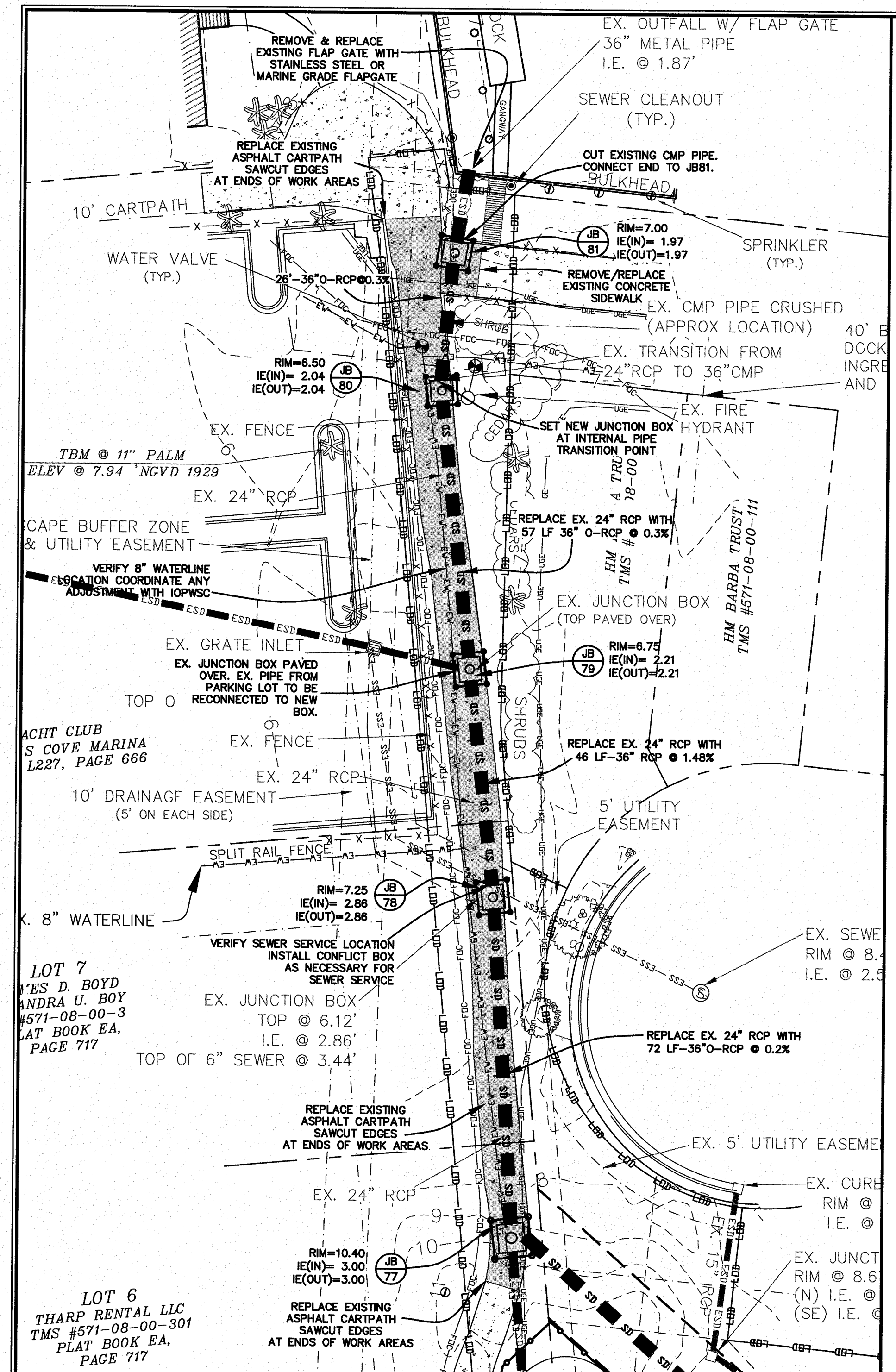
DATE: 6-28-13



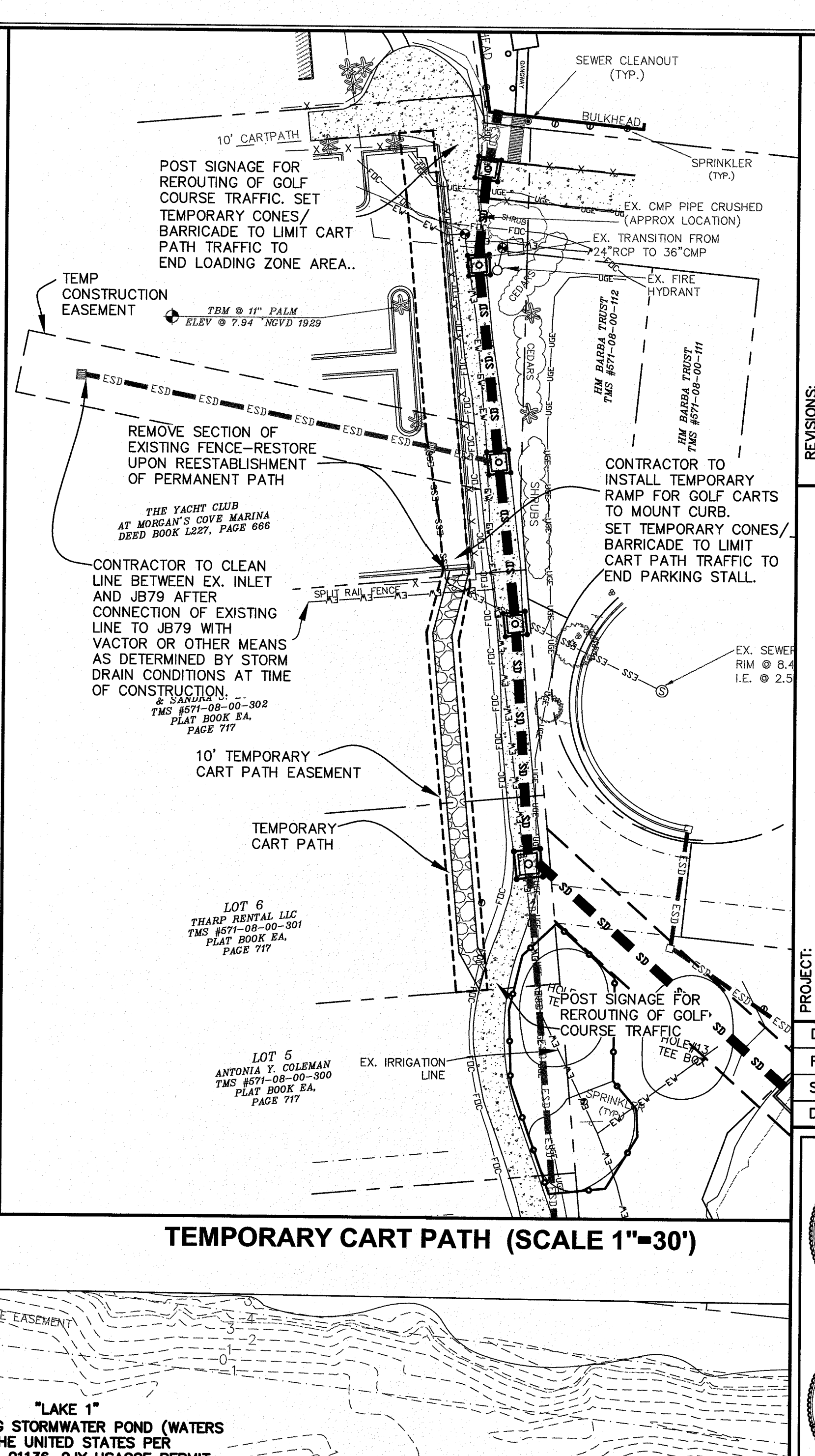
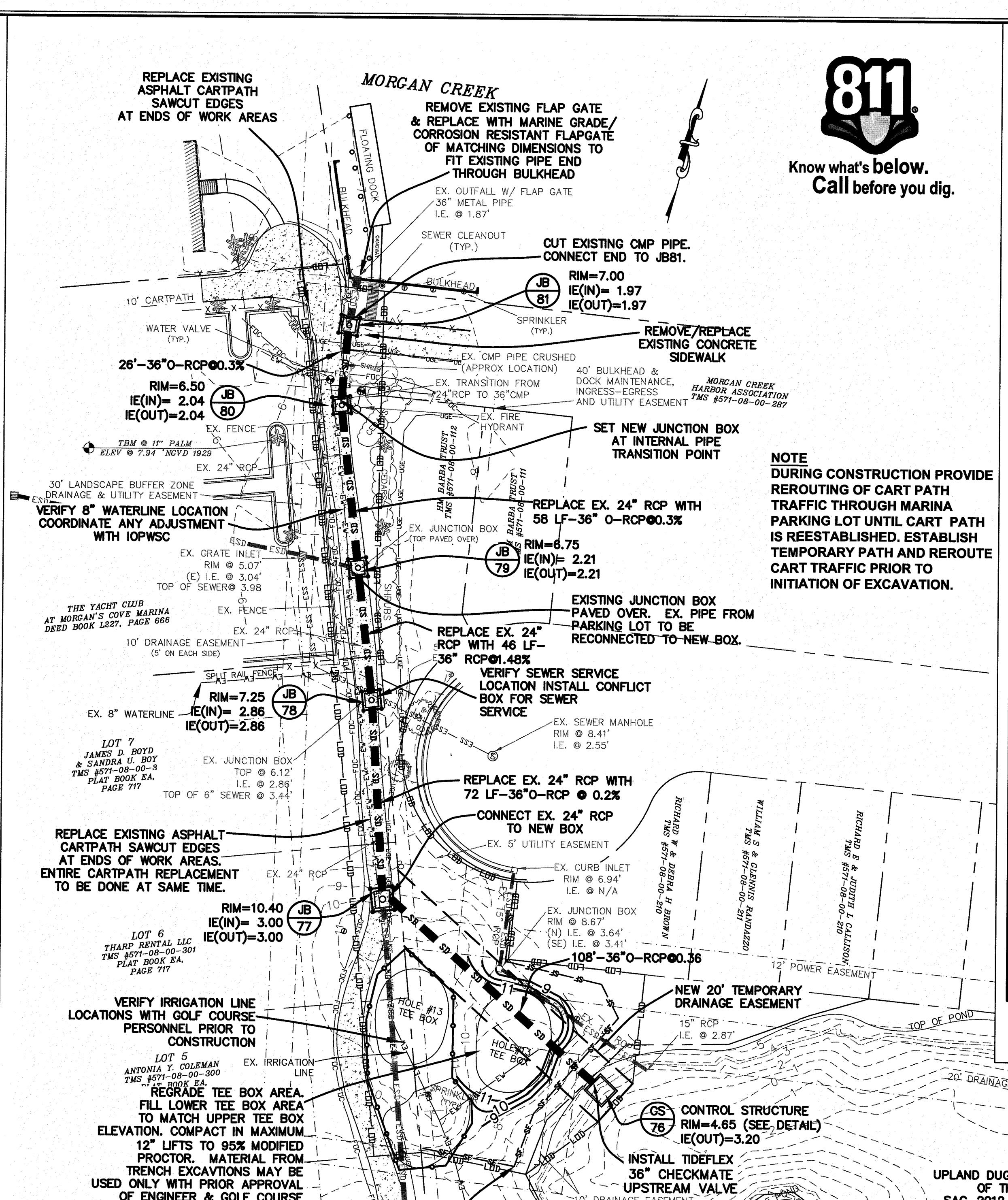
CIVIL SITE ENVIRONMENTAL
668 MARINA DRIVE SUITE B-1 CHARLESTON, S.C. 29492
PHONE: (843) 849-8946 FAX: (843) 849-8974
EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER 920-PH2 SHEET NUMBER C200

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INSET A (SCALE 1"=20')



TEMPORARY CART PATH (SCALE 1"=30')

LEGEND

	—ESS—ESS—ESS—	EXISTING SANITARY SEWER EXISTING
	—EW—EW—EW—EW—	WATER LINE
	—EPM—EPM—EPM—	EXISTING FORCEMAIN
	—OP—OP—OP—OP—	EXISTING OVERHEAD POWER
	—ESD—ESD—ESD—	EXISTING STORM DRAIN
	—TEL—TEL—TEL—TEL—	EXISTING PROPERTY LINE
	—FOC—FOC—FOC—	EXISTING EASEMENT
	—UGE—UGE—UGE—	EXISTING TELEPHONE
	—CTV—CTV—CTV—	EXISTING FIBEROPTIC
	—SF—SF—SF—SF—	EXISTING UNDERGROUND ELECTRICAL
	—LOD—LOD—LOD—	EXISTING CABLE TV
	—8—8—8—8—	PROPOSED STORM DRAIN
	—LOD—LOD—LOD—	SILT FENCE
	—8—8—8—8—	LIMIT OF DISTURBANCE (OFFSET 1')
	—8—8—8—8—	TREE BARRICADE
	—8—8—8—8—	EXISTING CONTOUR
	—8—8—8—8—	PROPOSED CONTOUR
	—8—8—8—8—	PROPOSED EASEMENT
		PROPOSED GRATE INLET/JUNCTION BOX W/TYPE A INLET PROTECTION (SEE DETAIL)
		REMOVE PAVEMENT

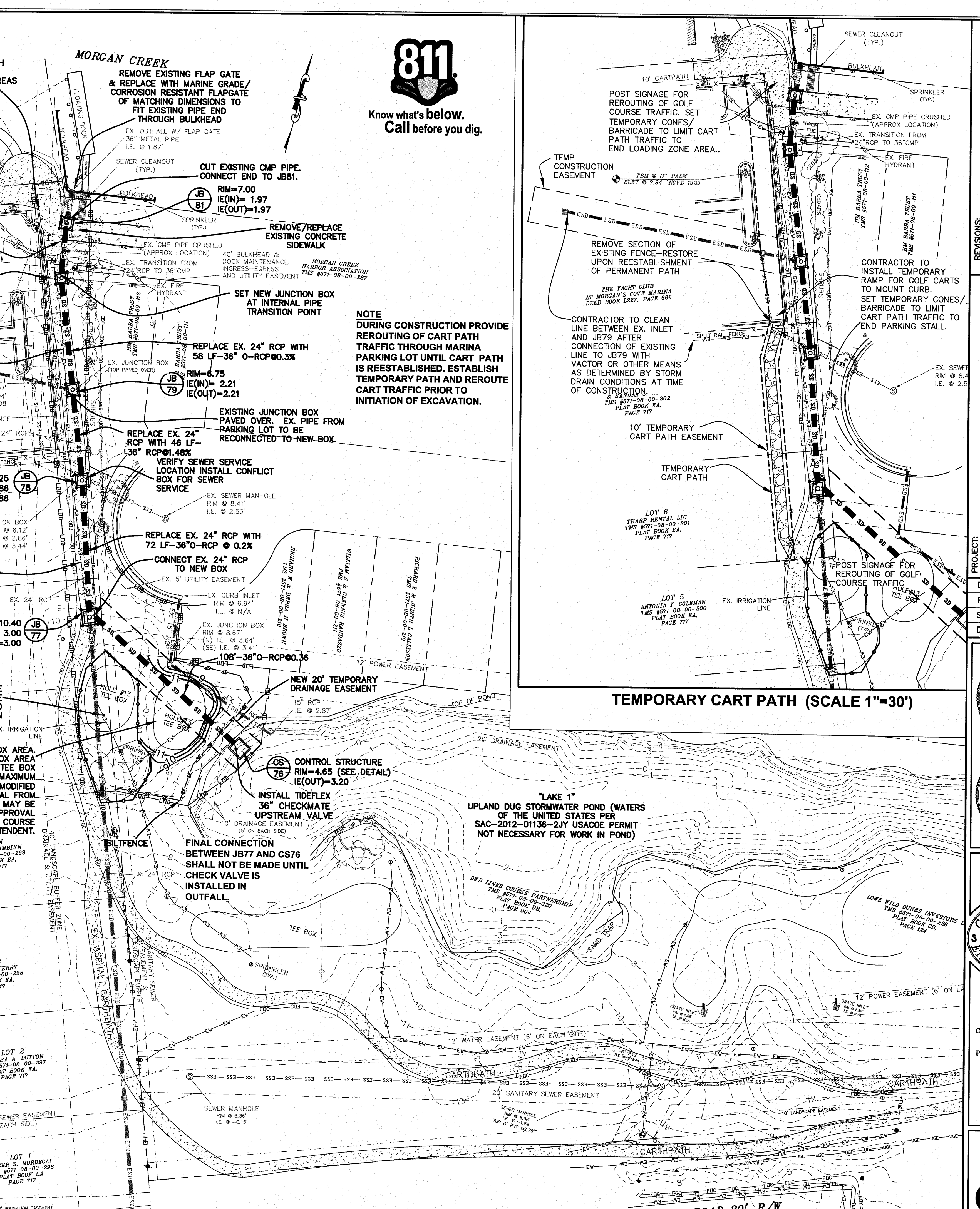
SEQUENCE OF EVENTS

- 1) PRECONSTRUCTION MEETING
- 2) INSTALL EROSION CONTROL & TREE PROTECTION
- 3) INSTALL STORM DRAINAGE LINES
- 4) LANDSCAPE/STABILIZE ALL DISTURBED AREAS AS LINEAR WORK IS COMPLETED
- 5) REMOVE EROSION CONTROLS ONCE STABILIZED
- 6) SUBMIT NOTICE OF TERMINATION (NOT)

GRAPHIC SCALE
1 inch = 30 ft.

NOTES

- 1) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE CSE. THE OWNER OR ITS REPRESENTATIVE, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- 2) CONTRACTOR SHALL BE REQUIRED TO HAVE PROPOSED ROUTE STAKED, ALL UTILITIES MARKED, UTILITY CROSSINGS VERTICALLY LOCATED, AND A WALK THROUGH CONDUCTED WITH ENGINEER PRIOR TO INITIATION OF CONSTRUCTION OF ANY PORTION OF THE WORK.
- 3) SEE SHEET C200 FOR PIPE AND STRUCTURE CHART AND DRAINAGE NOTES.
- 4) CONTRACTOR TO COORDINATE ALL ACTIVITIES INVOLVING DISTURBANCE OF GOLF COURSE AREAS WITH WILD DUNES RESORT GOLF COURSE SUPERVISOR. FINAL REESTABLISHMENT OF DISTURBED AREAS TO BE PERFORMED BY CONTRACTOR FROM APPROVED LIST OF GOLF COURSE RESTORATION CONTRACTORS.
- 5) PER USACOE LETTER OF JANUARY 28, 2013 (SAC 2012-01136-2JY) DEPARTMENT OF THE ARMY AUTHORIZATION WILL NOT BE REQUIRED FOR MECHANIZED LAND CLEARING, EXCAVATION, OR THE PLACEMENT OF DREDGED OR FILL MATERIAL ON THIS SITE.
- 6) ANY FIELD CHANGES THAT WOULD IMPACT SCDDT R/W WILL REQUIRE WRITTEN SCDDT APPROVAL PRIOR TO CHANGES BEING IMPLEMENTED IN THE FIELD.
- 7) WORK WITHIN SCDDT RIGHT-OF-WAYS SHALL COMPLY WITH CURRENT SCDDT STANDARD DRAWINGS AND SPECIFICATIONS. WORK IN OTHER AREAS SHALL COMPLY WITH SCDDT STANDARDS UNLESS OTHERWISE NOTED.



NOTE
DURING CONSTRUCTION PROVIDE REROUTING OF CART PATH TRAFFIC THROUGH MARINA PARKING LOT UNTIL CART PATH IS REESTABLISHED. ESTABLISH TEMPORARY PATH AND REROUTE CART TRAFFIC PRIOR TO INITIATION OF EXCAVATION.

REVISIONS:

- 1) 7/7/13 ADDED USACOE REFERENCE AND NOTATIONS FOR PONDS
- 2) REV 8/23/13 PER LOWE WILD DUNES, SCOT. IOPWSC COMMENTS/INFORMATIONS
- 3) REV 9/17/13 PER SCDDT COMMENTS
- 4) REV 9/17/13 PER SCDDT COMMENTS
- 5) REV 5/31/17 CONSTRUCTION BID SET - ADDED/REVISED NOTES

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: DRAINAGE & EROSION CONTROL PLAN
FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
FILE: 920-PH2-C200
SCALE: 1" = 30'
DATE: 6-28-13

CIVIL SITE ENVIRONMENTAL
688 MARINA DRIVE SUITE B-1 CHARLESTON, S.C. 29492
PHONE: (843) 849-8945 FAX: (843) 849-8974 EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
SHEET NUMBER
C201



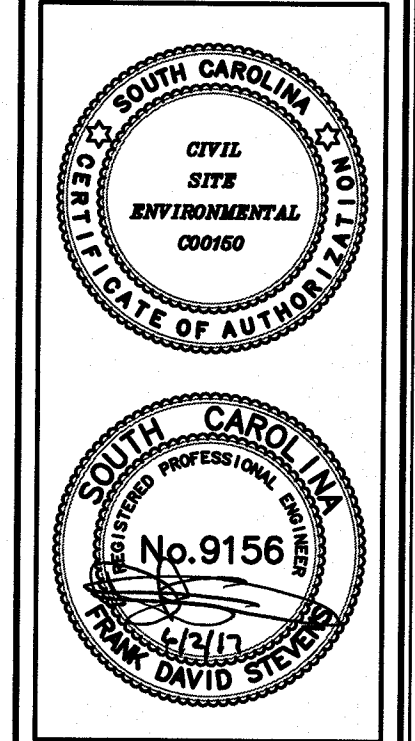
Know what's below. Call before you dig.

REVISIONS:

- 1) 7/2/13 ADDED USACE REFERENCE AND NOTATIONS FOR PONDS
- 2) REV 8/23/13 PER LOWE WILD DUNES, SCOOT, IOPWSC COMMENTS/INFO
- 3) REV 8/23/13 PER SCOT COMMENTS
- 4) REV 8/23/13 PER SCOT COMMENTS
- 5) REV 5/31/17 CONSTRUCTION BID SET - ADDED/REVISED NOTES

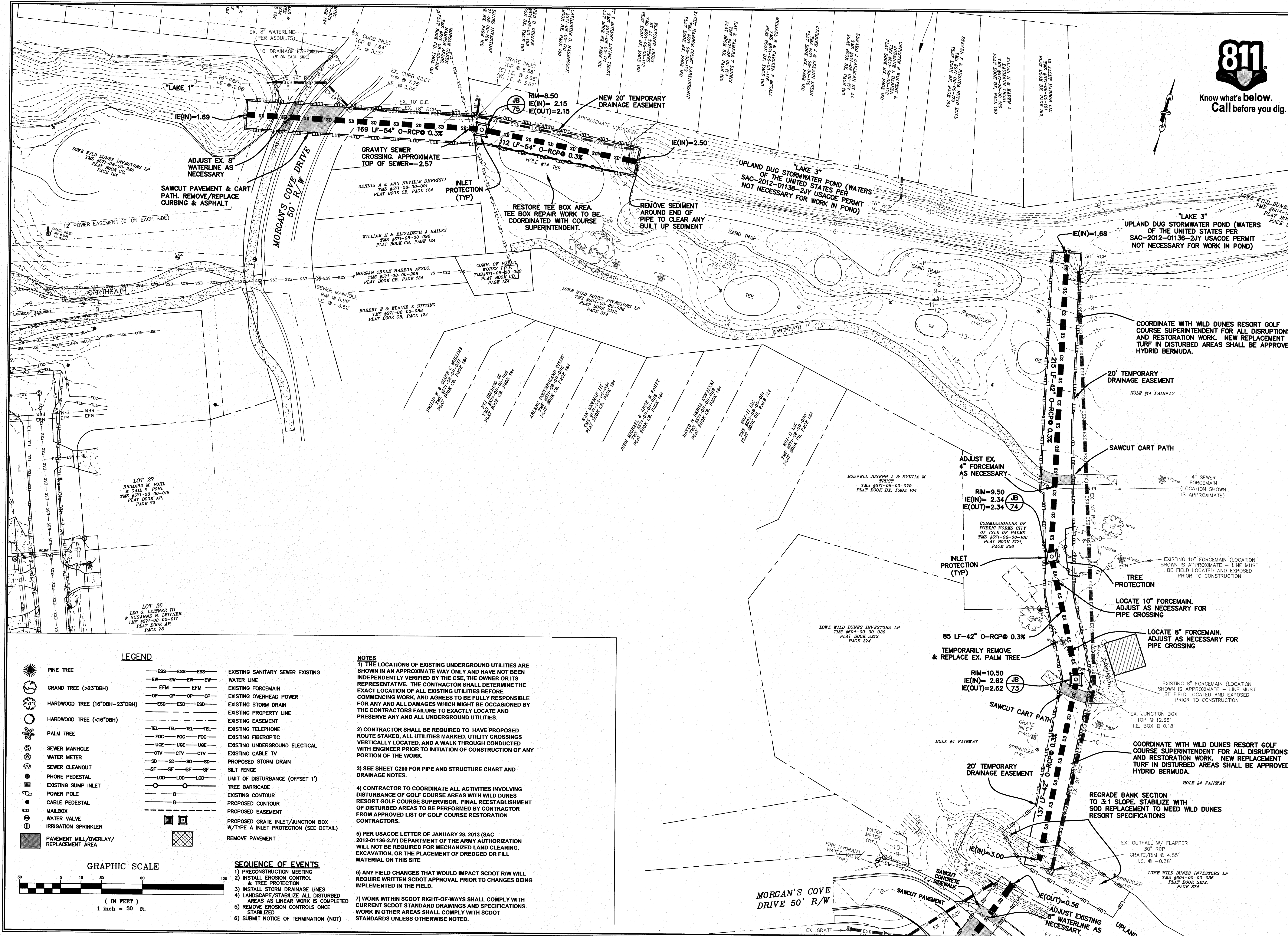
PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
 TITLE: DRAINAGE & EROSION CONTROL PLAN
 FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
 FILE: 920-PH2-C200
 SCALE: 1" = 30'
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 CHARLESTON, S.C. 29492
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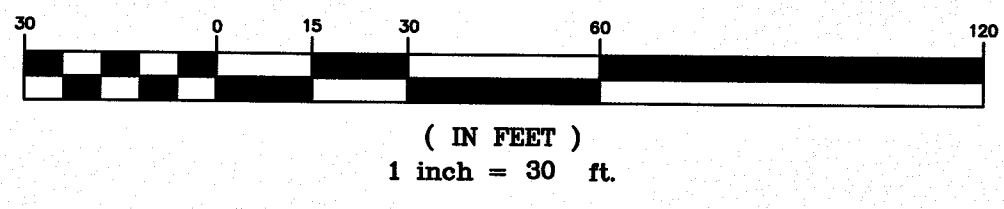
CSE JOB NUMBER
920-PH2
 SHEET NUMBER
C202



LEGEND

	ESS-ESS-ESS	EXISTING SANITARY SEWER
	EW-EW-EW-EW	EXISTING WATER LINE
	EPM-EPM	EXISTING FORCEMAIN
	OP-OP-OP-OP	EXISTING OVERHEAD POWER
	ESD-ESD-ESD	EXISTING STORM DRAIN
	TEL-TEL-TEL-TEL	EXISTING TELEPHONE
	FOC-FOC-FOC	EXISTING FIBEROPTIC
	UGE-UGE-UGE	EXISTING UNDERGROUND ELECTRICAL
	CIV-CIV-CIV	EXISTING CABLE TV
	SD-SD-SD-SD	PROPOSED STORM DRAIN
	SF-SF-SF-SF	SILT FENCE
	LOD-LOD-LOD	LIMIT OF DISTURBANCE (OFFSET 1')
		TREE BARRICADE
		EXISTING CONTOUR
		PROPOSED CONTOUR
		PROPOSED EASEMENT
		PROPOSED GRATE INLET/JUNCTION BOX
		W/TYPE A INLET PROTECTION (SEE DETAIL)
		REMOVE PAVEMENT

GRAPHIC SCALE



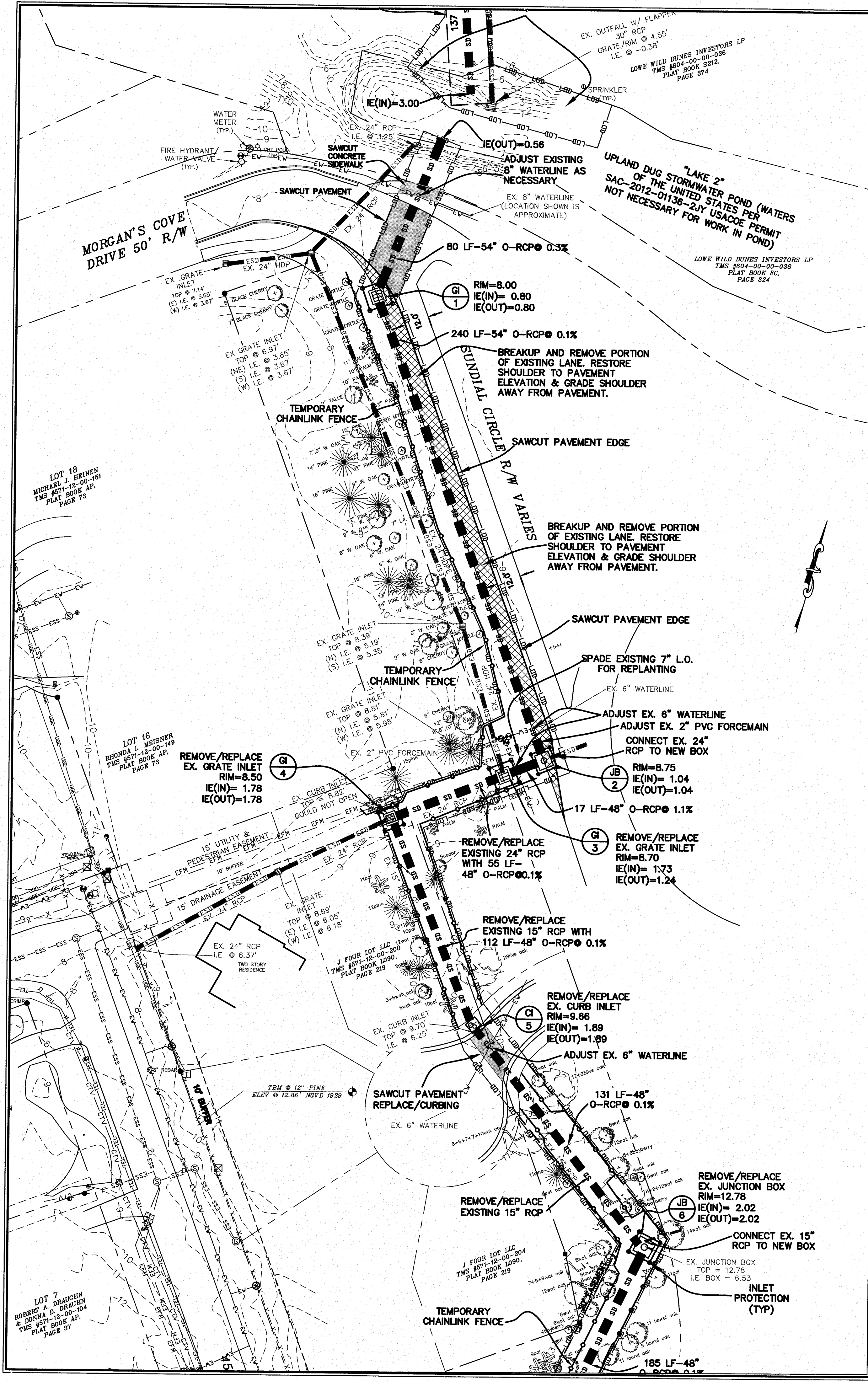
NOTES

- 1) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE CSE, THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- 2) CONTRACTOR SHALL BE REQUIRED TO HAVE PROPOSED ROUTE STAKED, ALL UTILITIES MARKED, UTILITY CROSSINGS VERTICALLY LOCATED, AND A WALK THROUGH CONDUCTED WITH ENGINEER PRIOR TO INITIATION OF CONSTRUCTION OF ANY PORTION OF THE WORK.
- 3) SEE SHEET C200 FOR PIPE AND STRUCTURE CHART AND DRAINAGE NOTES.
- 4) CONTRACTOR TO COORDINATE ALL ACTIVITIES INVOLVING DISTURBANCE OF GOLF COURSE AREAS WITH WILD DUNES RESORT GOLF COURSE SUPERVISOR. FINAL REESTABLISHMENT OF DISTURBED AREAS TO BE PERFORMED BY CONTRACTOR FROM APPROVED LIST OF GOLF COURSE RESTORATION CONTRACTORS.
- 5) PER USACE LETTER OF JANUARY 28, 2013 (SAC 2012-01136-2JY) DEPARTMENT OF THE ARMY AUTHORIZATION WILL NOT BE REQUIRED FOR MECHANIZED LAND CLEARING, EXCAVATION, OR THE PLACEMENT OF DREDGED OR FILL MATERIAL ON THIS SITE.
- 6) ANY FIELD CHANGES THAT WOULD IMPACT SCOTD R/W WILL REQUIRE WRITTEN SCOTD APPROVAL PRIOR TO CHANGES BEING IMPLEMENTED IN THE FIELD.
- 7) WORK WITHIN SCOTD RIGHT-OF-WAYS SHALL COMPLY WITH CURRENT SCOTD STANDARD DRAWINGS AND SPECIFICATIONS. WORK IN OTHER AREAS SHALL COMPLY WITH SCOTD STANDARDS UNLESS OTHERWISE NOTED.

SEQUENCE OF EVENTS

- 1) PRECONSTRUCTION MEETING
- 2) INSTALL EROSION CONTROL & TREE PROTECTION
- 3) INSTALL STORM DRAINAGE LINES
- 4) LANDSCAPE/STABILIZE ALL DISTURBED AREAS AS LINEAR WORK IS COMPLETED
- 5) REMOVE EROSION CONTROLS ONCE STABILIZED
- 6) SUBMIT NOTICE OF TERMINATION (NOT)

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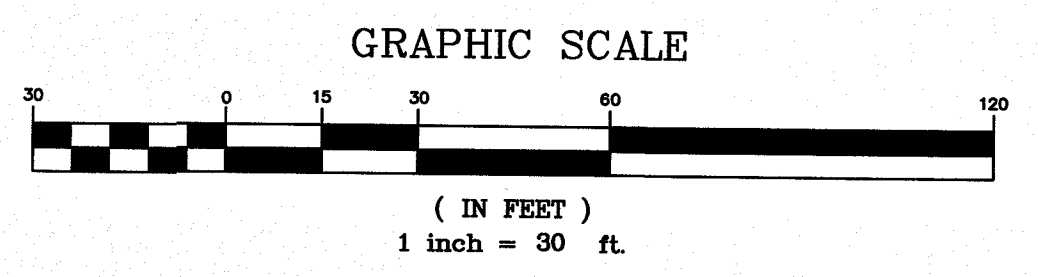
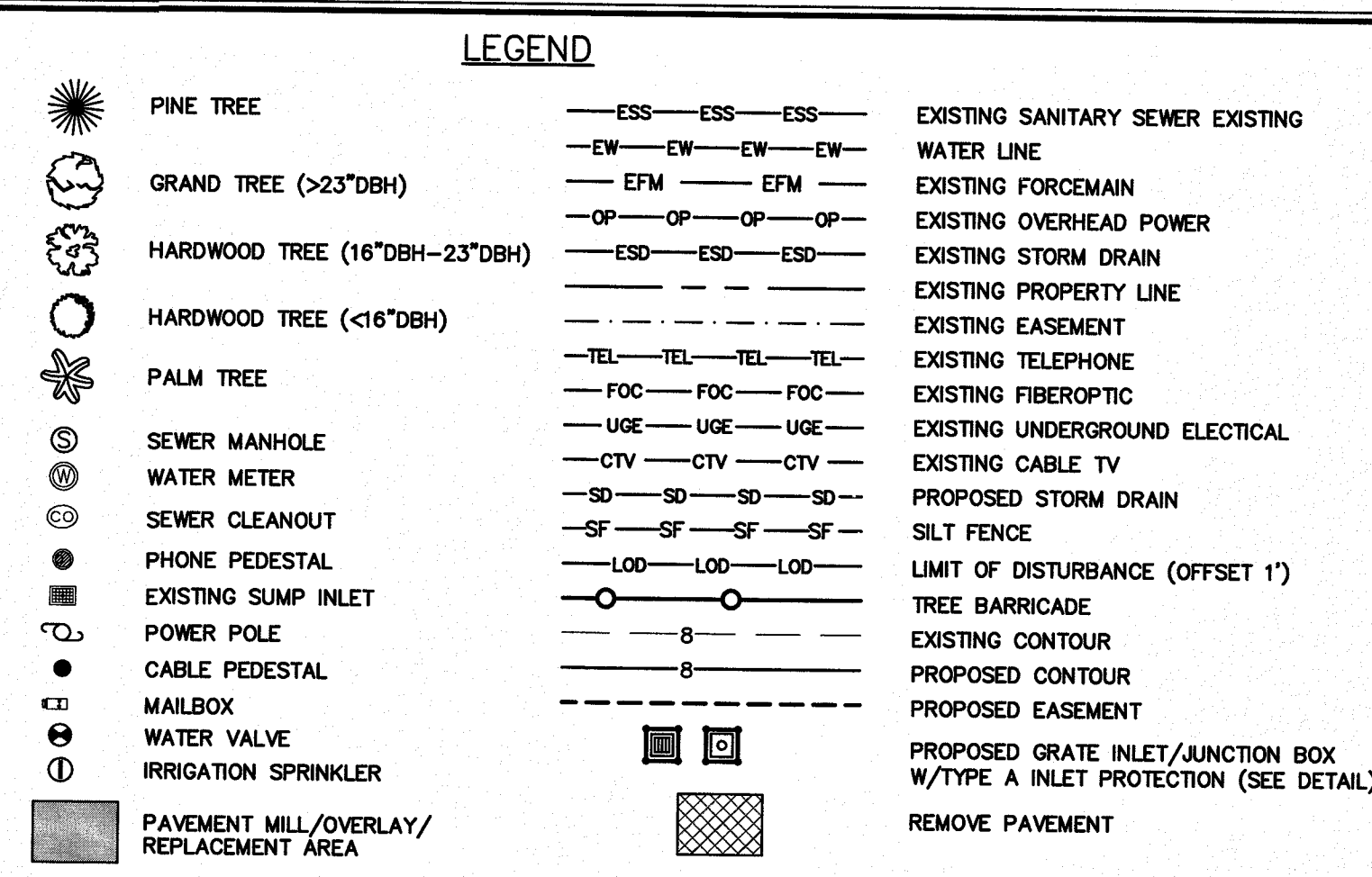
NOTE TO CONTRACTORS FOR WORK WITH ASBESTOS CEMENT PIPE

CONTRACTOR SHALL BE TRAINED AND APPROVED TO PERFORM WORK ON ASBESTOS CEMENT PIPE AND SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, LOCAL, EPA, OSHA REGULATIONS PERTAINING TO EXPOSURE TO AND HANDLING, CONTAINMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS MATERIAL.

CONTRACTOR SHALL HAVE A CURRENT GROUP LICENSE ISSUED BY SCDHEC TO COMPLETE WORK ON ASBESTOS CEMENT PIPE. A COPY OF THE LICENSE SHALL BE MAINTAINED ON SITE. FOR ALL INDIVIDUALS WHO WILL BE PERFORMING WORK ON ASBESTOS CEMENT PIPE, EACH INDIVIDUAL MUST BE CERTIFIED AND MUST CARRY ON THEM A CURRENT CLASS III O&M PIPE CARD. IF REQUESTED BY ENGINEER OR OWNER, LICENSE(S) AND CARD(S) MUST BE PRESENTED IMMEDIATELY FOR INSPECTION.

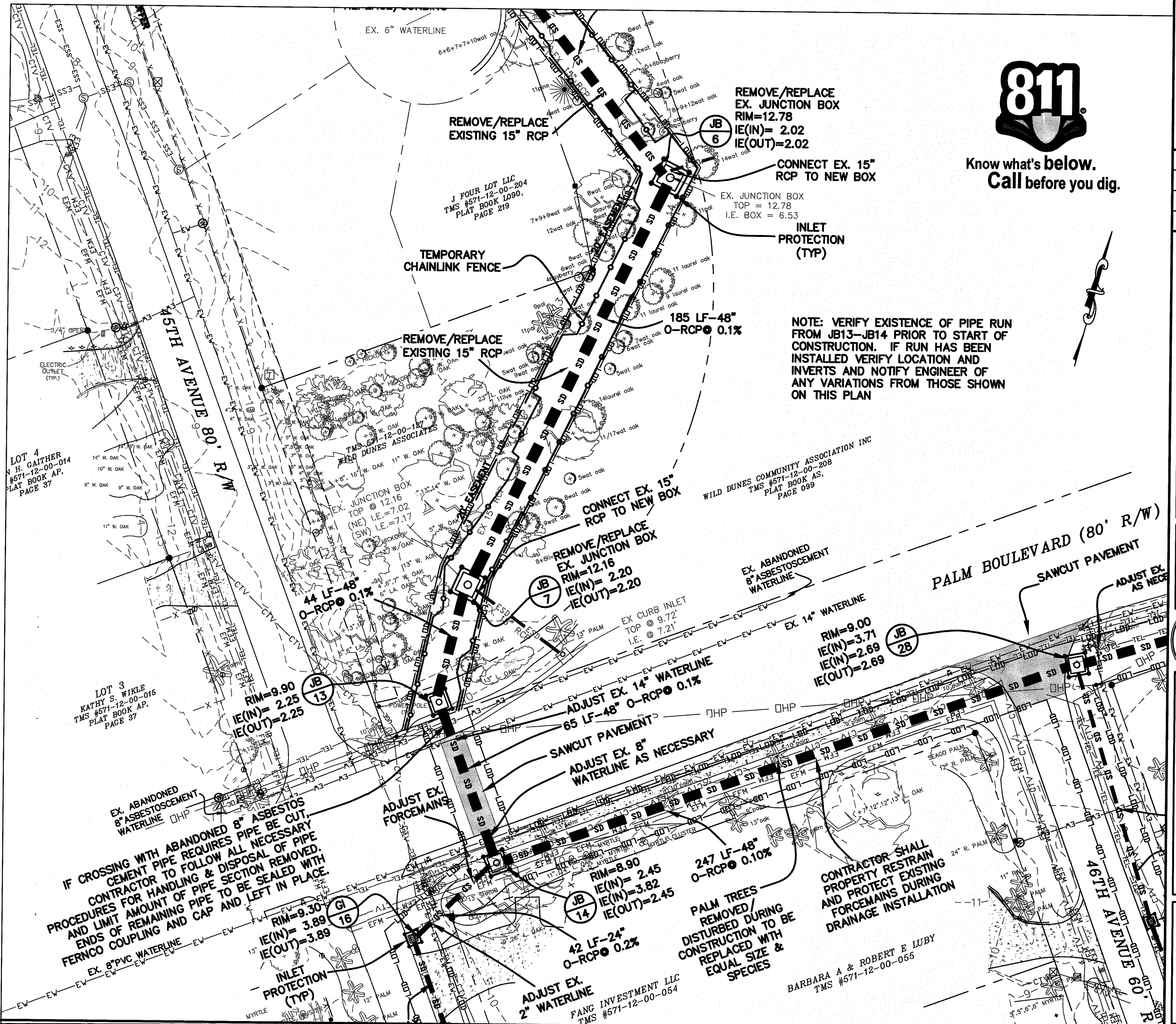
IF CONTRACTOR CHOOSES TO SUBCONTRACT THE REMOVAL WORK ASSOCIATED WITH THE ASBESTOS CEMENT PIPE, THE SUBCONTRACTOR SHALL BE HELD TO THE SAME REQUIREMENTS AND SHALL BE AVAILABLE DURING EXCAVATION OF PIPE FOR DISCONNECTION AND/OR TO REMOVE PIPE THAT MAY BE IN CONFLICT WITH STORM DRAINAGE. FOR NO REASON SHALL EXISTING PIPE BE EXPOSED PRIOR TO THE ARRIVAL ON SITE.

CONTRACTOR SHALL PROVIDE A LIST TO THE OWNER AND ENGINEER OF TRAINED PERSONNEL WHO WILL BE COMPLETING THE CROSSING WORK ON THE ASBESTOS PIPE A MINIMUM OF SEVEN DAYS PRIOR TO COMPLETING THE WORK.



- SEQUENCE OF EVENTS**
- 1) PRECONSTRUCTION MEETING
 - 2) INSTALL EROSION CONTROL & TREE PROTECTION
 - 3) INSTALL STORM DRAINAGE LINES
 - 4) LANDSCAPE STABILIZE ALL DISTURBED AREAS AS LINEAR WORK IS COMPLETED
 - 5) REMOVE EROSION CONTROLS ONCE STABILIZED
 - 6) SUBMIT NOTICE OF TERMINATION (NOT)

- NOTES**
- 1) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE CSE, THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
 - 2) CONTRACTOR SHALL BE REQUIRED TO HAVE PROPOSED ROUTE STAKED, ALL UTILITIES MARKED, UTILITY CROSSINGS VERTICALLY LOCATED, AND A WALK THROUGH CONDUCTED WITH ENGINEER PRIOR TO INITIATION OF CONSTRUCTION OF ANY PORTION OF THE WORK.
 - 3) SEE SHEET C200 FOR PIPE AND STRUCTURE CHART AND DRAINAGE NOTES.
 - 4) CONTRACTOR TO COORDINATE ALL ACTIVITIES INVOLVING DISTURBANCE OF GOLF COURSE AREAS WITH WILD DUNES RESORT GOLF COURSE SUPERVISOR. FINAL REESTABLISHMENT OF DISTURBED AREAS TO BE PERFORMED BY CONTRACTOR FROM APPROVED LIST OF GOLF COURSE RESTORATION CONTRACTORS.
 - 5) PER USACOE LETTER OF JANUARY 28, 2013 (SAC 2012-01136-2JY) DEPARTMENT OF THE ARMY AUTHORIZATION WILL NOT BE REQUIRED FOR MECHANIZED LAND CLEARING, EXCAVATION, OR THE PLACEMENT OF DREDGED OR FILL MATERIAL ON THIS SITE
 - 6) ANY FIELD CHANGES THAT WOULD IMPACT SCDOT R/W WILL REQUIRE WRITTEN SCDOT APPROVAL PRIOR TO CHANGES BEING IMPLEMENTED IN THE FIELD.
 - 7) WORK WITHIN SCDOT RIGHT-OF-WAYS SHALL COMPLY WITH CURRENT SCDOT STANDARD DRAWINGS AND SPECIFICATIONS. WORK IN OTHER AREAS SHALL COMPLY WITH SCDOT STANDARDS UNLESS OTHERWISE NOTED.



Know what's below. Call before you dig.

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
 TITLE: DRAINAGE & EROSION CONTROL PLAN
 FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
 FILE: 920-PH2-C200
 SCALE: 1" = 30'
 DATE: 6-28-13

811 logo

NOTE: VERIFY EXISTENCE OF PIPE RUN FROM JB13-JB14 PRIOR TO START OF CONSTRUCTION. IF RUN HAS BEEN INSTALLED VERIFY LOCATION AND INVERTS AND NOTIFY ENGINEER OF ANY VARIATIONS FROM THOSE SHOWN ON THIS PLAN

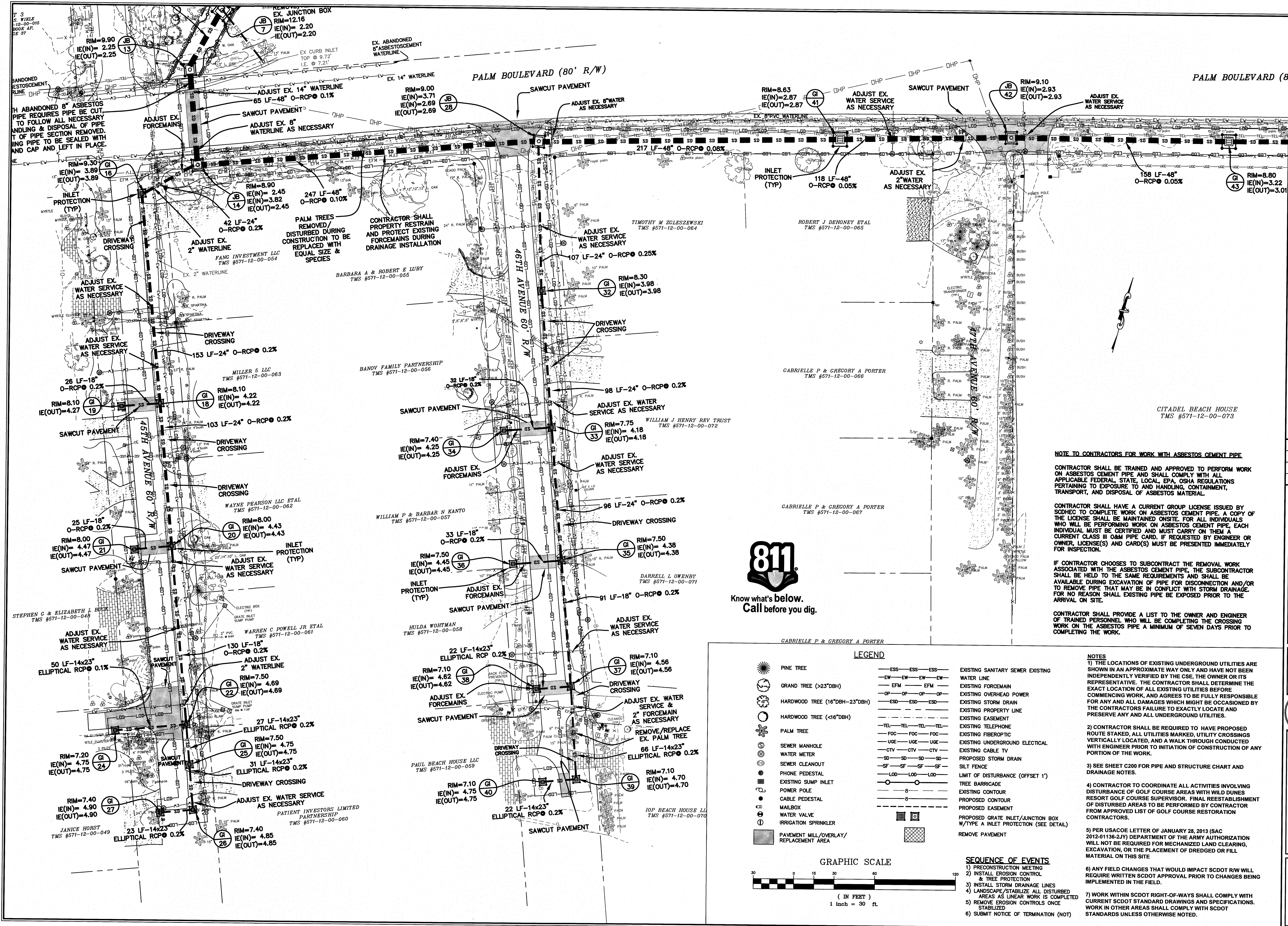
CONTRACTOR SHALL RESTRAIN PROPERTY EXISTING AND PROTECT EXISTING FORCEMAINS DURING DRAINAGE INSTALLATION

SEALS: CIVIL SITE ENVIRONMENTAL (Professional Engineer No. 9156), CIVIL SITE ENVIRONMENTAL (Professional Engineer No. 1217), CIVIL SITE ENVIRONMENTAL (Professional Engineer No. 00660)

688 MARINA DRIVE SUITE B-1 CHARLESTON, S.C. 29492
 PHONE: (843) 848-8945
 FAX: (843) 848-8974
 EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER 920-PH2
 SHEET NUMBER C203

S:\920-PH2\920-PH2-Drainage\920-PH2-C200.dwg, 6/1/2017 2:28:42 PM

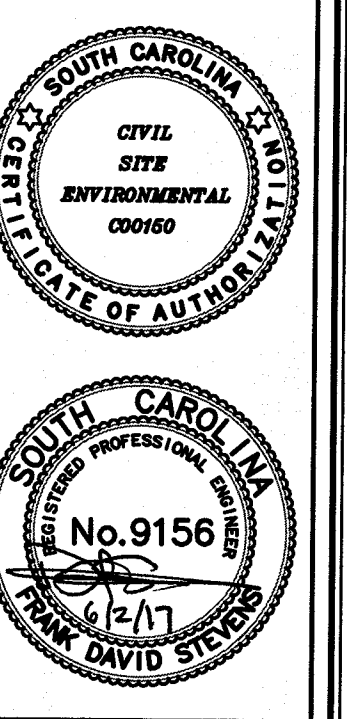


REVISIONS:

- 1) 7/13/13 ADDED USACE REFERENCE AND NOTATIONS FOR PONDS
- 2) REV 8/23/13 PER LOWE WILD DUNES, SCDOT, IOWSC COMMENTS/INFO
- 3) REV 9/17/13 PER IOWSC COMMENTS FOR 45TH AVE CROSSING
- 4) REV 9/17/13 PER IOWSC COMMENTS FOR 46TH AVE CROSSING
- 5) REV 9/17/13 PER IOWSC COMMENTS FOR 47TH AVE CROSSING
- 6) REV 5/31/17 CONSTRUCTION BID SET - ADDED/REVISED NOTES

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
 TITLE: DRAINAGE & EROSION CONTROL PLAN
 FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
 FILE: 920-PH2-C200
 SCALE: 1" = 30'
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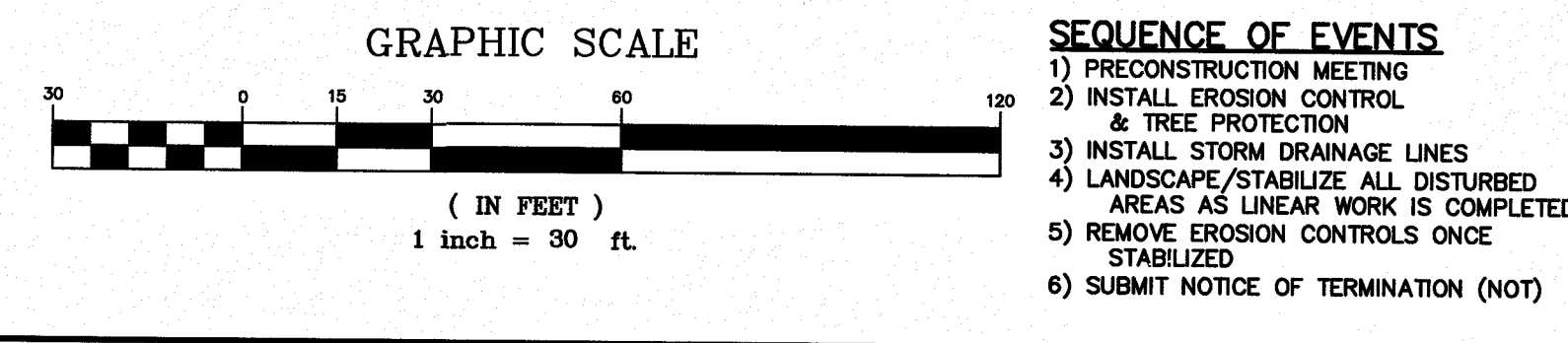
CONTRACTOR SHALL PROVIDE A LIST TO THE OWNER AND ENGINEER OF TRAINED PERSONNEL WHO WILL BE COMPLETING THE CROSSING WORK ON THE ASBESTOS PIPE A MINIMUM OF SEVEN DAYS PRIOR TO COMPLETING THE WORK.



Know what's below.
Call before you dig.

LEGEND

	ESS-ESS-ESS	EXISTING SANITARY SEWER EXISTING WATER LINE
	EW-EW-EW-EW	EXISTING FORCEMAIN
	OP-OP-OP-OP	EXISTING OVERHEAD POWER
	ESD-ESD-ESD	EXISTING STORM DRAIN
	TEL-TEL-TEL-TEL	EXISTING PROPERTY LINE
	FOC-FOC-FOC	EXISTING EASEMENT
	UGE-UGE-UGE	EXISTING TELEPHONE
	CTV-CTV-CTV	EXISTING FIBEROPTIC
	SD-SD-SD-SD	EXISTING UNDERGROUND ELECTRICAL
	SF-SF-SF-SF	EXISTING CABLE TV
	LOD-LOD-LOD	PROPOSED STORM DRAIN
	—	SILT FENCE
	—	LIMIT OF DISTURBANCE (OFFSET 1')
	—	TREE BARRICADE
	—	EXISTING CONTOUR
	—	PROPOSED CONTOUR
	—	PROPOSED EASEMENT
	—	PROPOSED GRATE INLET/JUNCTION BOX W/TYPE A INLET PROTECTION (SEE DETAIL)
	—	REMOVE PAVEMENT



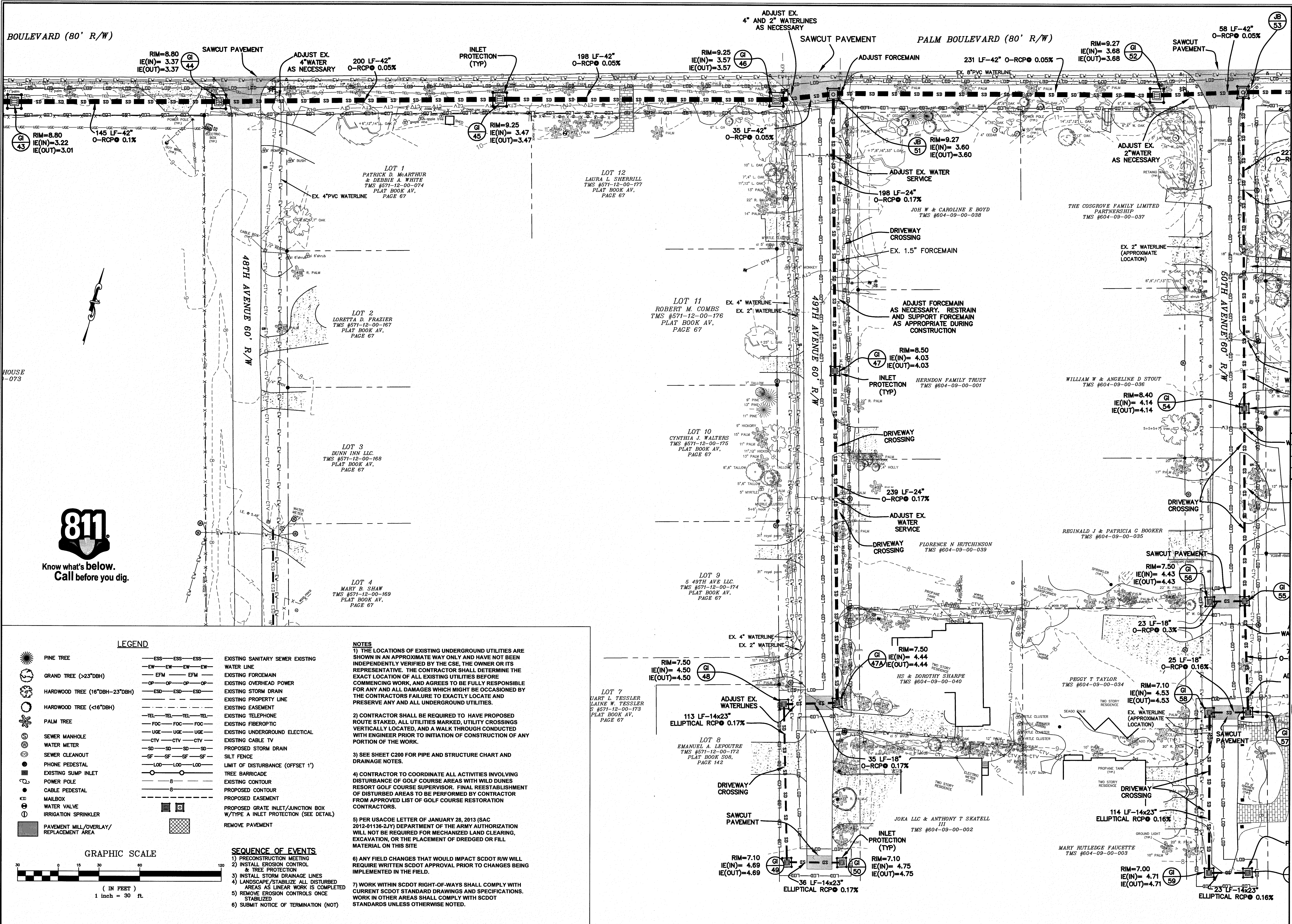
CSE
 CIVIL SITE ENVIRONMENTAL

688 MARINA DRIVE
 SUITE B-1
 CHARLESTON, S.C. 29492

PHONE: (843) 848-8945
 FAX: (843) 848-8974
 EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
 SHEET NUMBER
C204

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BOULEVARD (80' R/W)

PALM BOULEVARD (80' R/W)

48TH AVENUE 60' R/W

50TH AVENUE 60' R/W

HOUSE -073



Know what's below. Call before you dig.

LEGEND

	—ESS—ESS—ESS—	EXISTING SANITARY SEWER
	—EW—EW—EW—EW—	EXISTING WATER LINE
	—EFM—EFM—EFM—EFM—	EXISTING FORCEMAIN
	—OP—OP—OP—OP—OP—	EXISTING OVERHEAD POWER
	—ESD—ESD—ESD—ESD—	EXISTING STORM DRAIN
	—TEL—TEL—TEL—TEL—TEL—	EXISTING EASEMENT
	—FOC—FOC—FOC—FOC—FOC—	EXISTING TELEPHONE
	—UG—UG—UG—UG—UG—	EXISTING FIBROPTIC
	—CTV—CTV—CTV—CTV—CTV—	EXISTING UNDERGROUND ELECTRICAL
	—SD—SD—SD—SD—SD—SD—	EXISTING CABLE TV
	—SF—SF—SF—SF—SF—SF—	PROPOSED STORM DRAIN
	—LOD—LOD—LOD—LOD—LOD—	SILT FENCE
	—8—8—8—8—8—8—	LIMIT OF DISTURBANCE (OFFSET 1')
	—8—8—8—8—8—8—	TREE BARRICADE
	—8—8—8—8—8—8—	EXISTING CONTOUR
	—8—8—8—8—8—8—	PROPOSED CONTOUR
	—8—8—8—8—8—8—	PROPOSED EASEMENT
	—8—8—8—8—8—8—	PROPOSED GATE/INLET/JUNCTION BOX
	—8—8—8—8—8—8—	W/TYPE A INLET PROTECTION (SEE DETAIL)
	—8—8—8—8—8—8—	REMOVE PAVEMENT

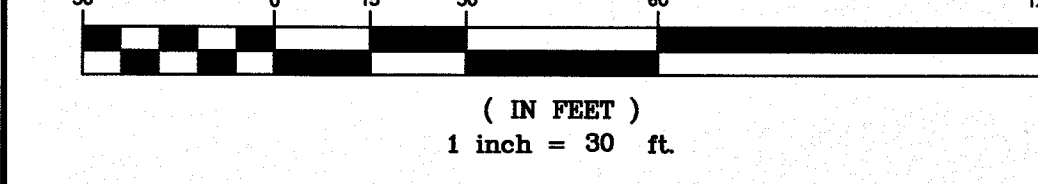
SEQUENCE OF EVENTS

- 1) PRECONSTRUCTION MEETING
- 2) INSTALL EROSION CONTROL & TREE PROTECTION
- 3) INSTALL STORM DRAINAGE LINES
- 4) LANDSCAPE/STABILIZE ALL DISTURBED AREAS AS LINEAR WORK IS COMPLETED
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- 6) SUBMIT NOTICE OF TERMINATION (NOT)

NOTES

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GRAPHIC SCALE



REVISIONS:
 1) 7/3/13 ADDED USACE REFERENCE AND NOTATIONS FOR PONDS
 2) REV 8/23/13 PER LONE WILD DUNES, SCDDOT, DPMSC COMMENTS/INFO
 3) REV 9/17/14 PER SCDDOT CORN COMMENTS
 4) REV 9/17/14 PER SCDDOT CORN COMMENTS
 5) REV 5/31/17 CONSTRUCTION BID SET - ADDED/REVISED NOTES

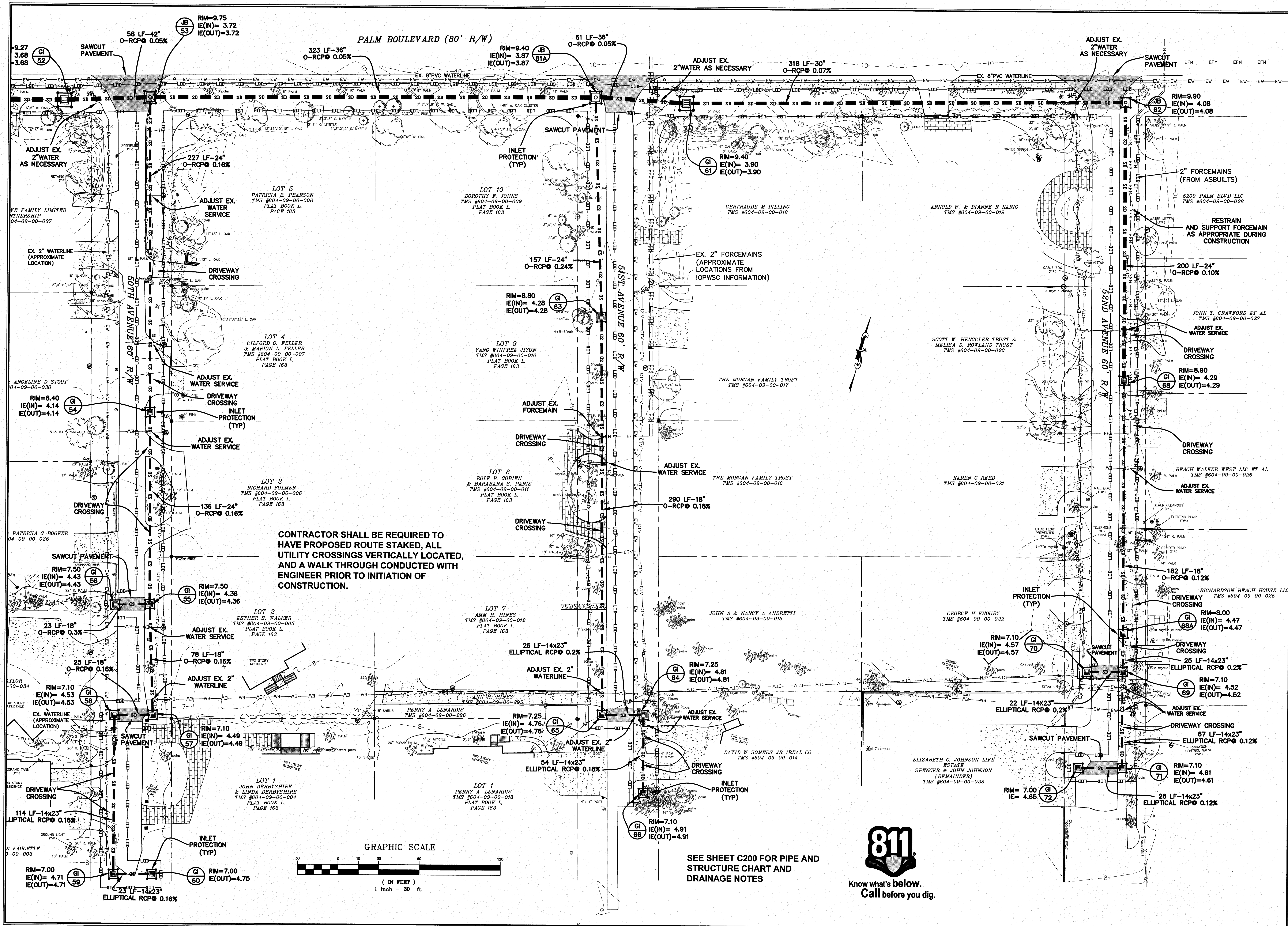
PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
 TITLE: DRAINAGE & EROSION CONTROL PLAN
 FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
 FILE: 920-PH2-C200
 SCALE: 1" = 30'
 DATE: 6-28-13

868 MARINA DRIVE
 SUITE B-1
 CHARLESTON, S.C. 29492
 PHONE: (843) 849-8945
 FAX: (843) 849-8974
 EMAIL: CSE@CIVILSITEENVY.COM

CSE JOB NUMBER
920-PH2
 SHEET NUMBER
C205

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CONTRACTOR SHALL BE REQUIRED TO HAVE PROPOSED ROUTE STAKED, ALL UTILITY CROSSINGS VERTICALLY LOCATED, AND A WALK THROUGH CONDUCTED WITH ENGINEER PRIOR TO INITIATION OF CONSTRUCTION.

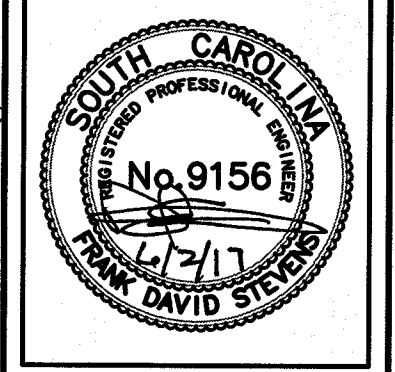
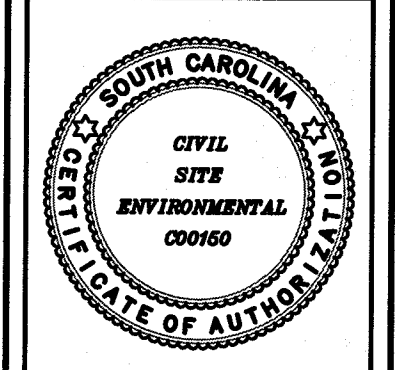
SEE SHEET C200 FOR PIPE AND STRUCTURE CHART AND DRAINAGE NOTES



REVISIONS:
 1) 7/13/13 ADDED REFERENCE AND NOTATION FOR PONDS
 2) REV 8/23/13 PER LOWE WLD DUNES, SCOTT, IOPWSC COMMENTS/INFO
 3) REV 7/15/14 PER SCOTT COMMENTS
 4) REV 5/31/17 PER IOPWSC COMMENTS
 5) REV 5/31/17 CONSTRUCTION BID SET - ADDED /REVISED NOTES

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
 TITLE: DRAINAGE & EROSION CONTROL PLAN
 FOR: CITY OF ISLE OF PALMS

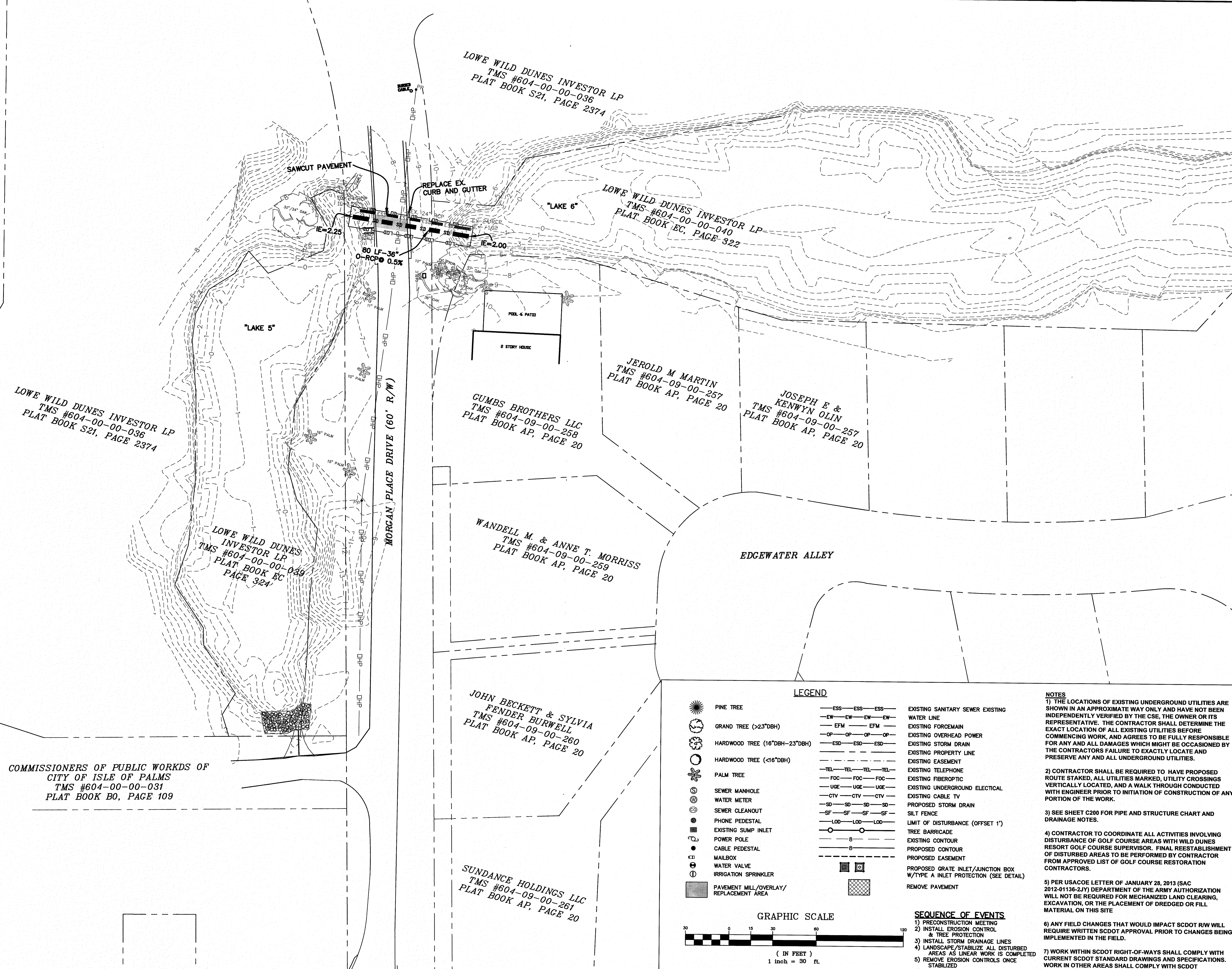
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 EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
 SHEET NUMBER
C206

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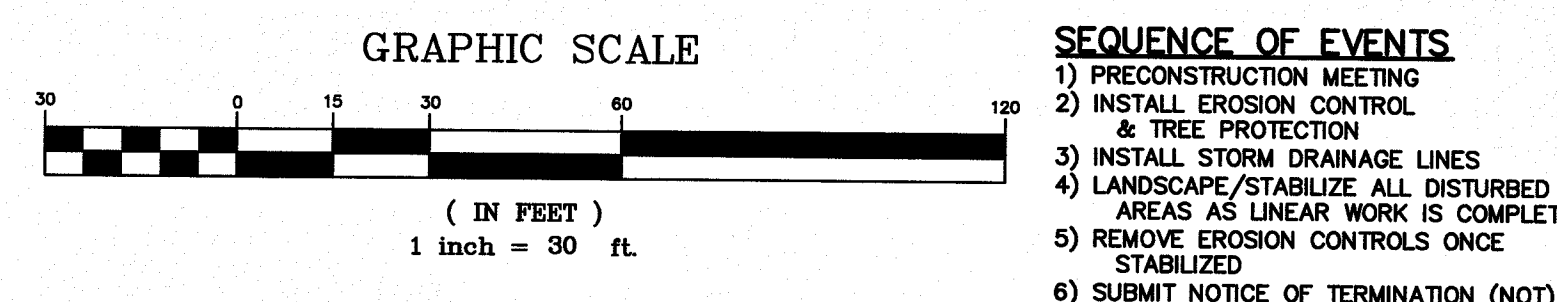


COMMISSIONERS OF PUBLIC WORKS OF
CITY OF ISLE OF PALMS
TMS #604-00-00-031
PLAT BOOK B0, PAGE 109



LEGEND

	PINE TREE	—ESS—ESS—ESS—	EXISTING SANITARY SEWER
	GRAND TREE (>23"DBH)	—EW—EW—EW—EW—	EXISTING WATER LINE
	HARDWOOD TREE (16"DBH-23"DBH)	—EFM—EFM—EFM—	EXISTING FORCEMAIN
	HARDWOOD TREE (<16"DBH)	—OP—OP—OP—OP—	EXISTING OVERHEAD POWER
	PALM TREE	—ESD—ESD—ESD—	EXISTING STORM DRAIN
	SEWER MANHOLE	—TEL—TEL—TEL—TEL—	EXISTING PROPERTY LINE
	WATER METER	—FOC—FOC—FOC—FOC—	EXISTING EASEMENT
	SEWER CLEANOUT	—UGE—UGE—UGE—UGE—	EXISTING TELEPHONE
	PHONE PEDESTAL	—CTV—CTV—CTV—CTV—	EXISTING FIBEROPTIC
	EXISTING SUMP INLET	—SD—SD—SD—SD—	EXISTING UNDERGROUND ELECTRICAL
	POWER POLE	—SF—SF—SF—SF—	EXISTING CABLE TV
	CABLE PEDESTAL	—LOD—LOD—LOD—LOD—	PROPOSED STORM DRAIN
	MAILBOX	—○—○—○—○—	SILT FENCE
	WATER VALVE	—○—○—○—○—	LIMIT OF DISTURBANCE (OFFSET 1')
	IRRIGATION SPRINKLER	—○—○—○—○—	TREE BARRICADE
	PAVEMENT MILL/OVERLAY/REPLACEMENT AREA	—○—○—○—○—	EXISTING CONTOUR
		—○—○—○—○—	PROPOSED CONTOUR
		—○—○—○—○—	PROPOSED EASEMENT
		—○—○—○—○—	PROPOSED GRATE INLET/JUNCTION BOX
		—○—○—○—○—	W/TYPE A INLET PROTECTION (SEE DETAIL)
		—○—○—○—○—	REMOVE PAVEMENT



- SEQUENCE OF EVENTS**
- 1) PRECONSTRUCTION MEETING
 - 2) INSTALL EROSION CONTROL & TREE PROTECTION
 - 3) INSTALL STORM DRAINAGE LINES
 - 4) LANDSCAPE/STABILIZE ALL DISTURBED AREAS AS LINEAR WORK IS COMPLETED
 - 5) REMOVE EROSION CONTROLS ONCE STABILIZED
 - 6) SUBMIT NOTICE OF TERMINATION (NOT)

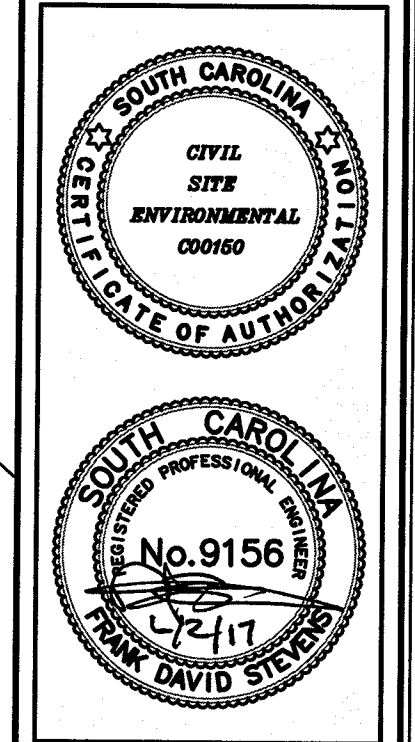
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REVISIONS:

- 1) 7/3/13 ADDED USACOE REFERENCE AND NOTATIONS FOR PONDS
- 2) REV 8/23/13 PER LOWE WILD DUNES, SCDOT, IOPWSC COMMENTS/INFO
- 3) REV 9/19/14 PER SCDOT COMMENTS
- 4) REV 9/19/14 PER SCDOT COMMENTS
- 5) REV 5/31/17 CONSTRUCTION BID SET - ADDED/REVISED NOTES

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: DRAINAGE & EROSION CONTROL PLAN
FOR: CITY OF ISLE OF PALMS

DRAWN BY: JCM
FILE: 920-PH2-C200
SCALE: 1" = 30'
DATE: 6-28-13



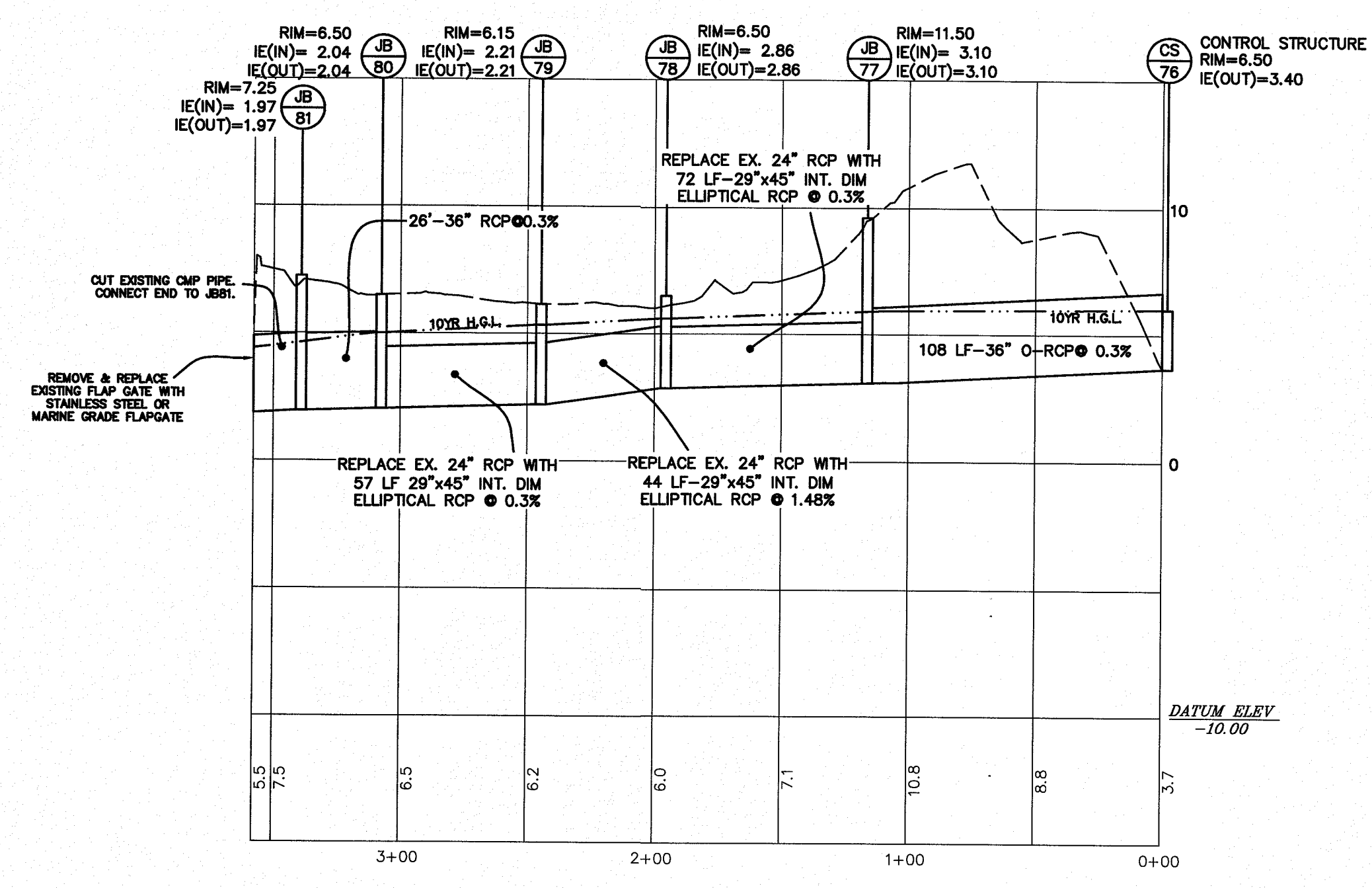
CSE SITE ENVIRONMENTAL

688 MARINA DRIVE
SUITE B-1
CHARLESTON, S.C. 29492

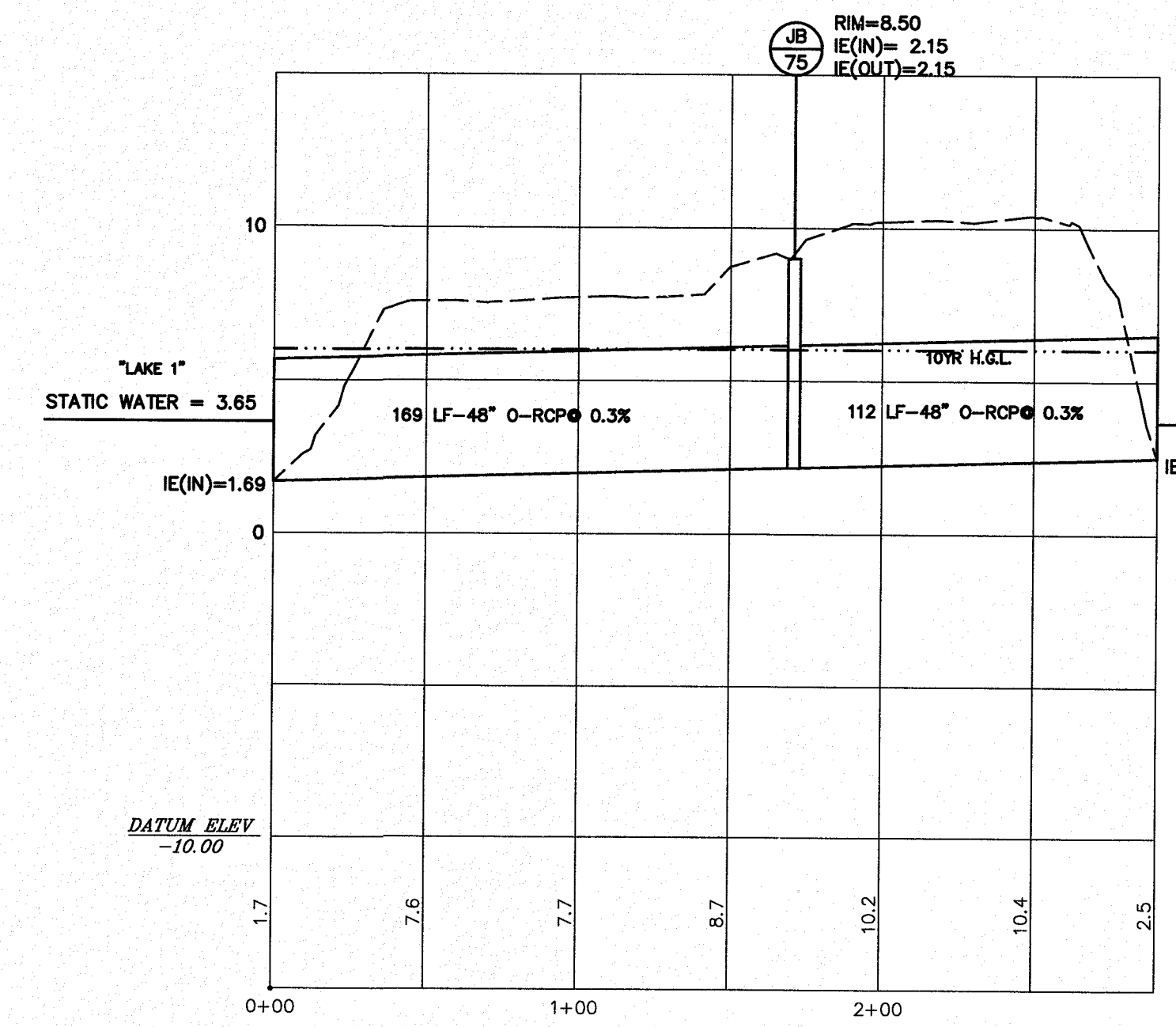
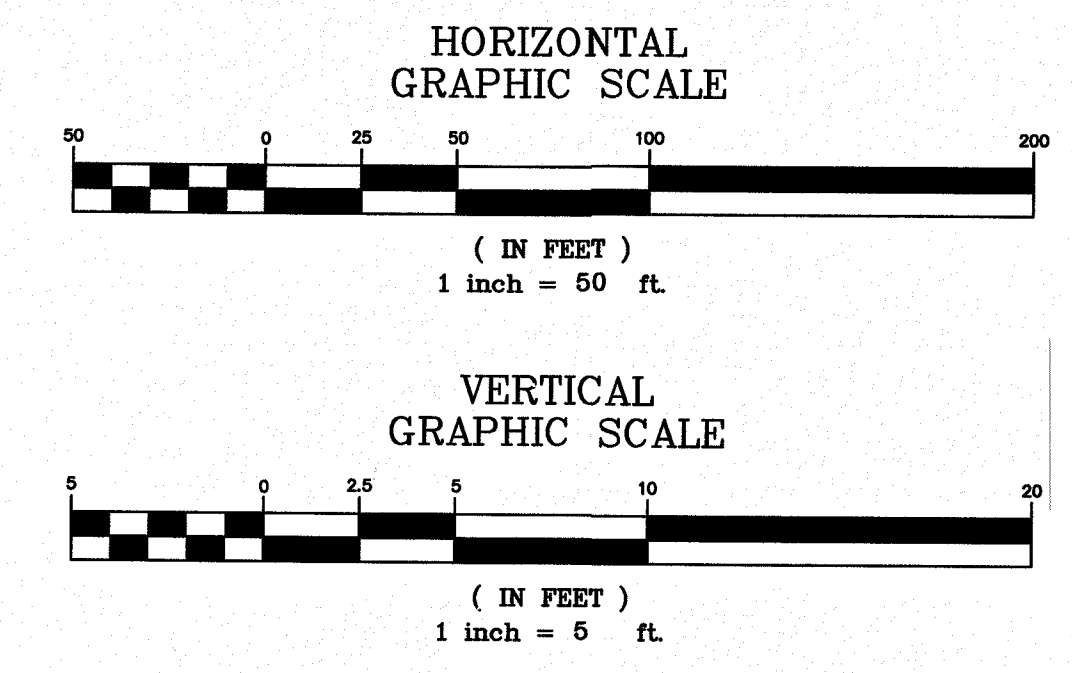
PHONE: (843) 849-8945
FAX: (843) 849-8974
EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
SHEET NUMBER
C207

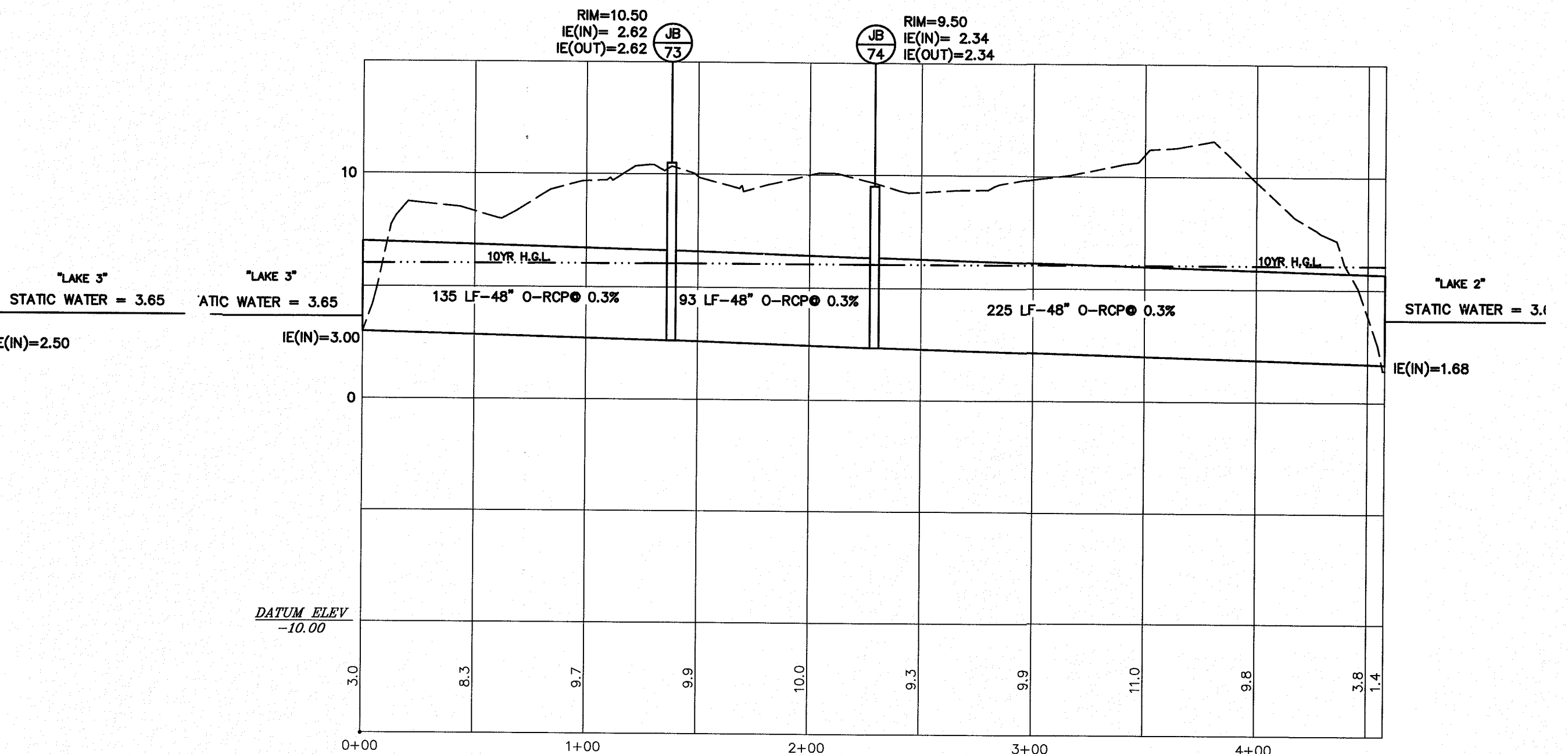
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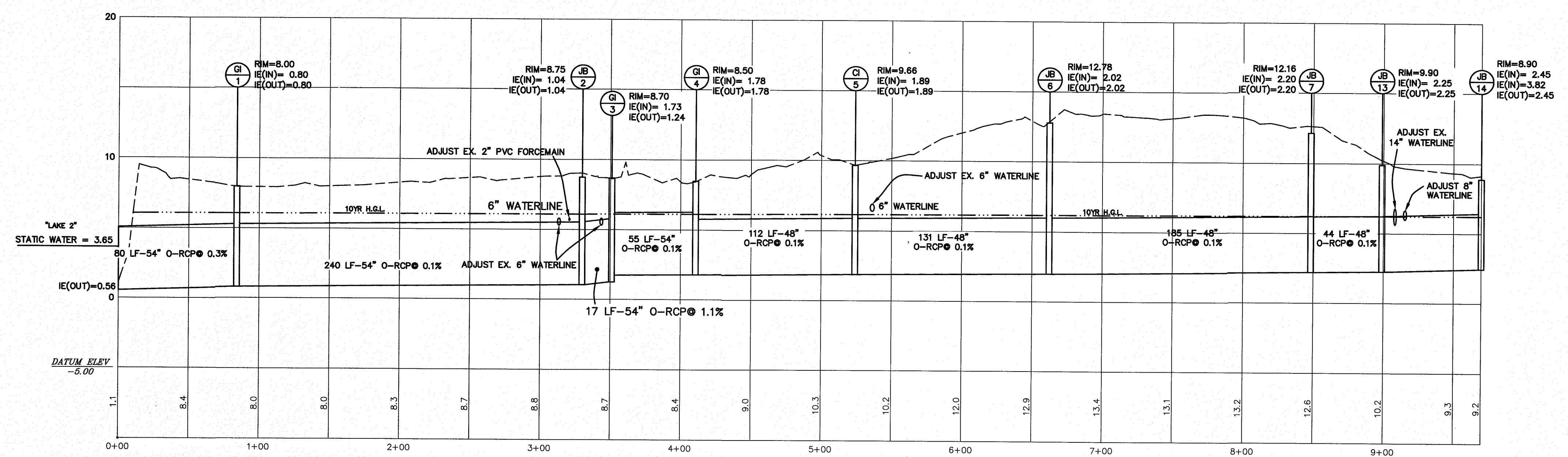
LAKE 1 TO BULKHEAD



LAKE 3 TO LAKE 1



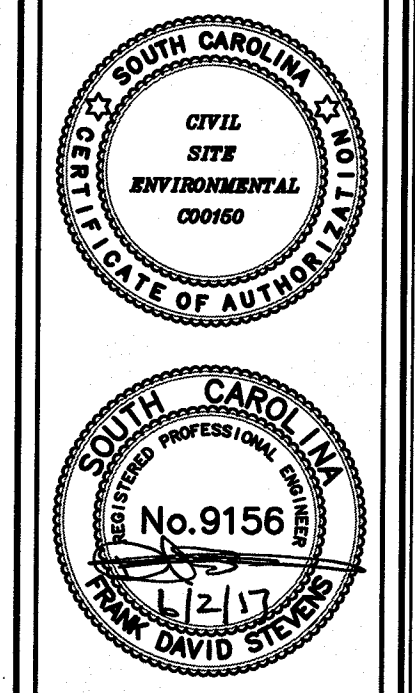
LAKE 2 TO LAKE 3



JB14 TO LAKE 2

REVISIONS:
 1) REV 8/23/13 PER LOWE WILD DUNES, SCOOT, IOPWSC COMMENTS/INFO
 2) REV 7/16/14 PER SCOOT COMMENTS
 3) REV 5/31/17 CONSTRUCTION BID SET

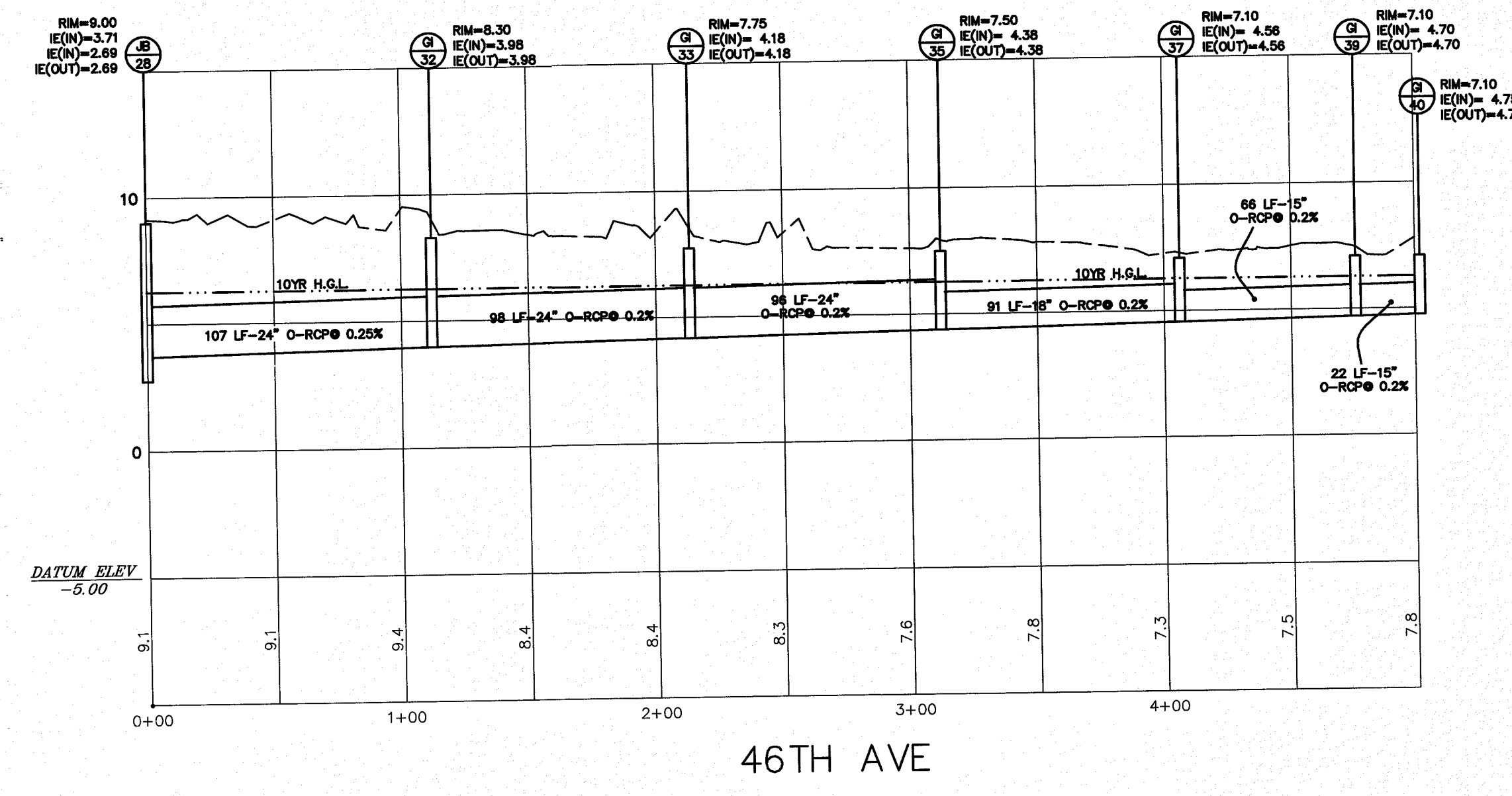
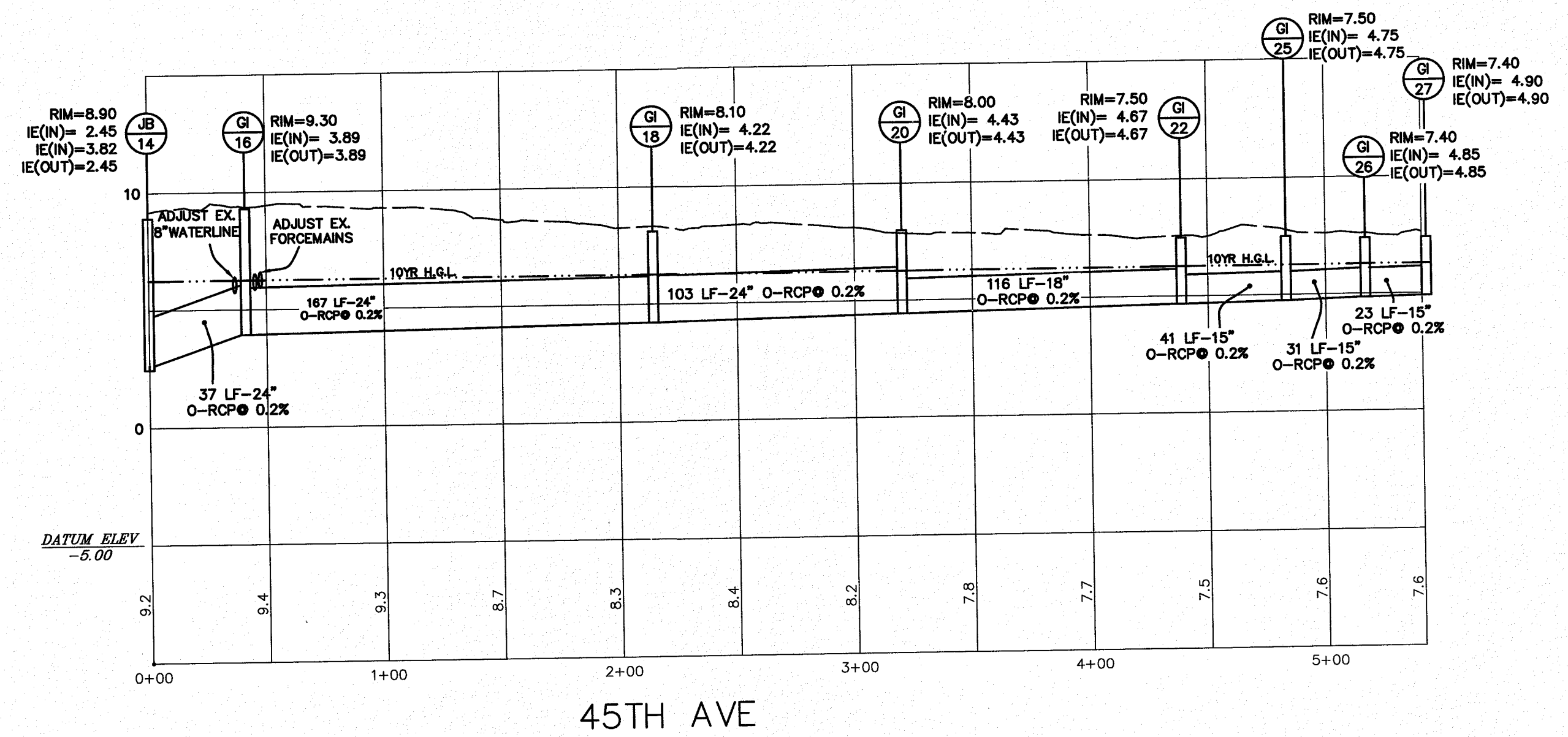
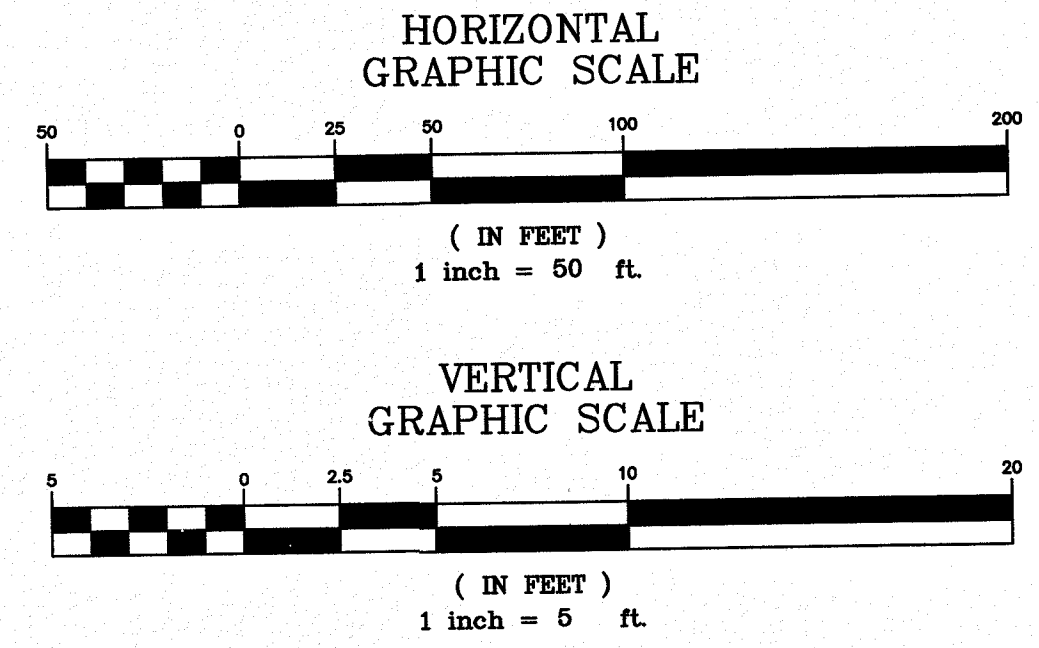
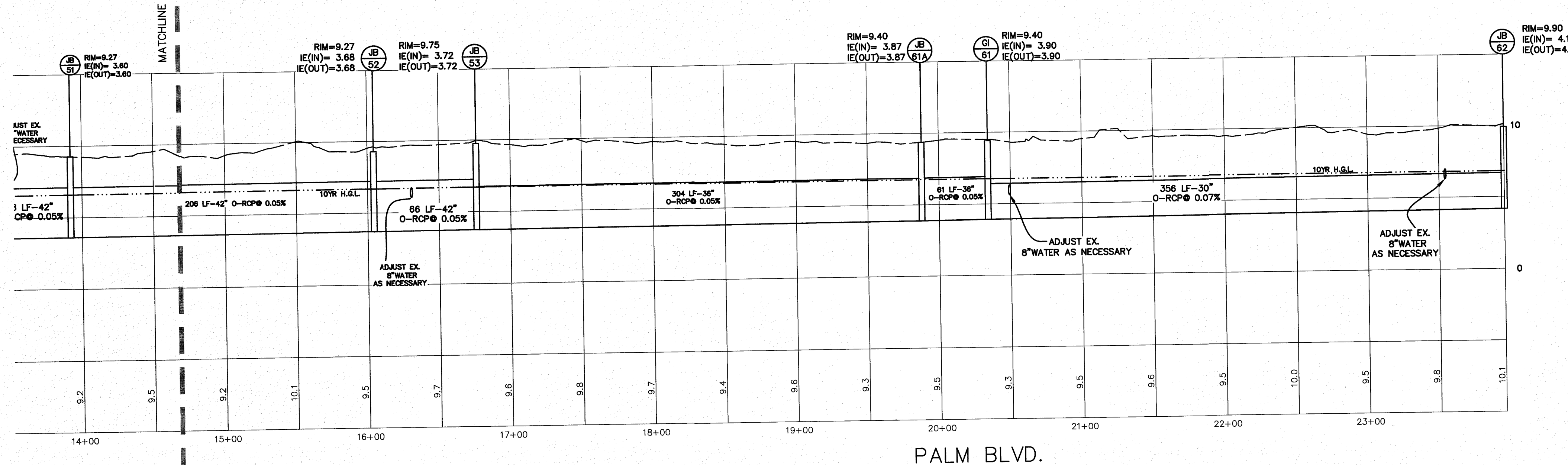
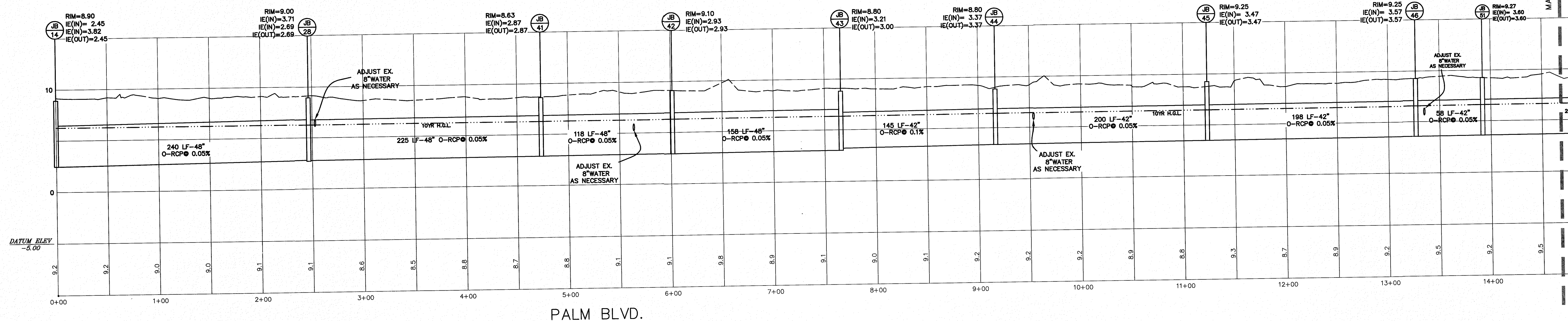
PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
 TITLE: PIPE PROFILES
 FOR: CITY OF ISLE OF PALMS
 DRAWN BY: JCM
 FILE: 920-PH2-C300
 SCALE: AS NOTED
 DATE: 6-28-13



CIVIL SITE ENVIRONMENTAL
 668 MARINA DRIVE
 SUITE B-1
 CHARLESTON, S.C. 29492
 PHONE: (843) 849-8945
 FAX: (843) 849-8974
 EMAIL: CSB@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
 SHEET NUMBER
C300

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REVISIONS:
 1) REV 9/23/13 PER LOWE WILD DUNES SCOTT, UPWISC COMMENTS/WFO
 2) REV 7/15/14 PER WILD DUNES SCOTT, UPWISC COMMENTS/WFO
 3) REV 5/5/17 CONSTRUCTION BID SET

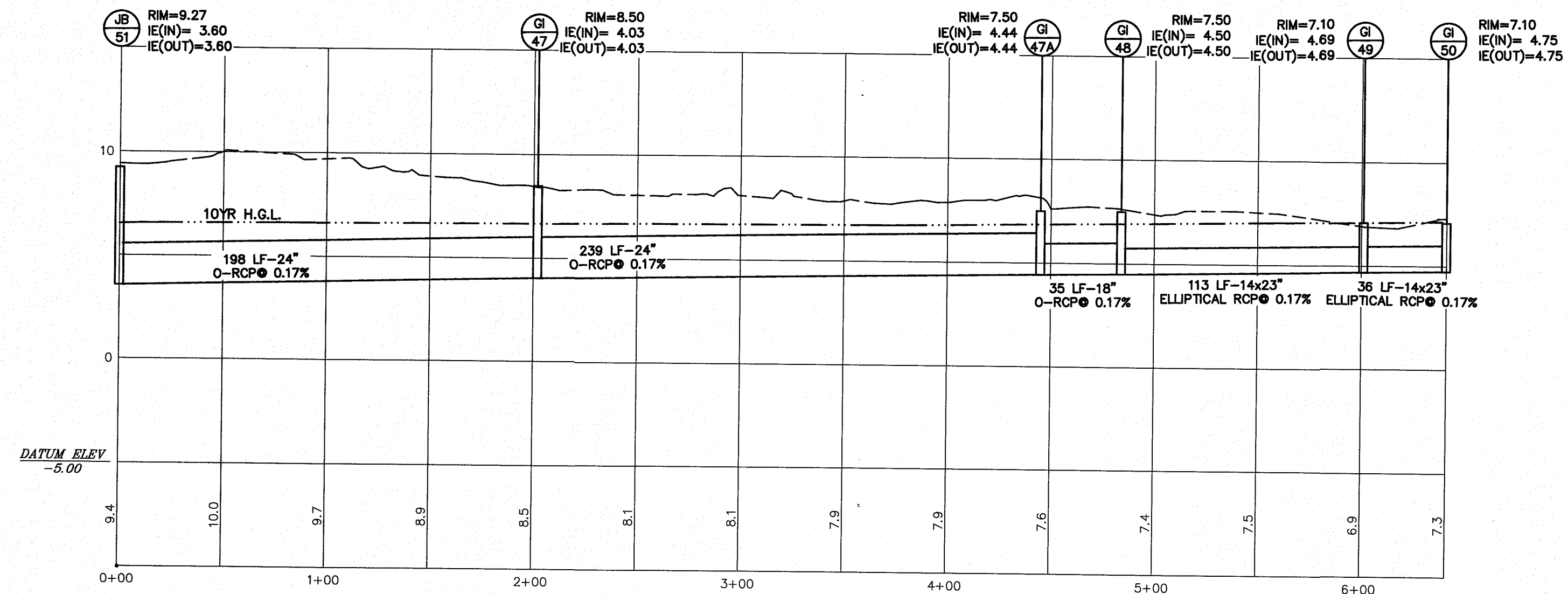
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 TITLE: PIPE PROFILES
 FOR: CITY OF ISLE OF PALMS

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 DATE: 6-28-13

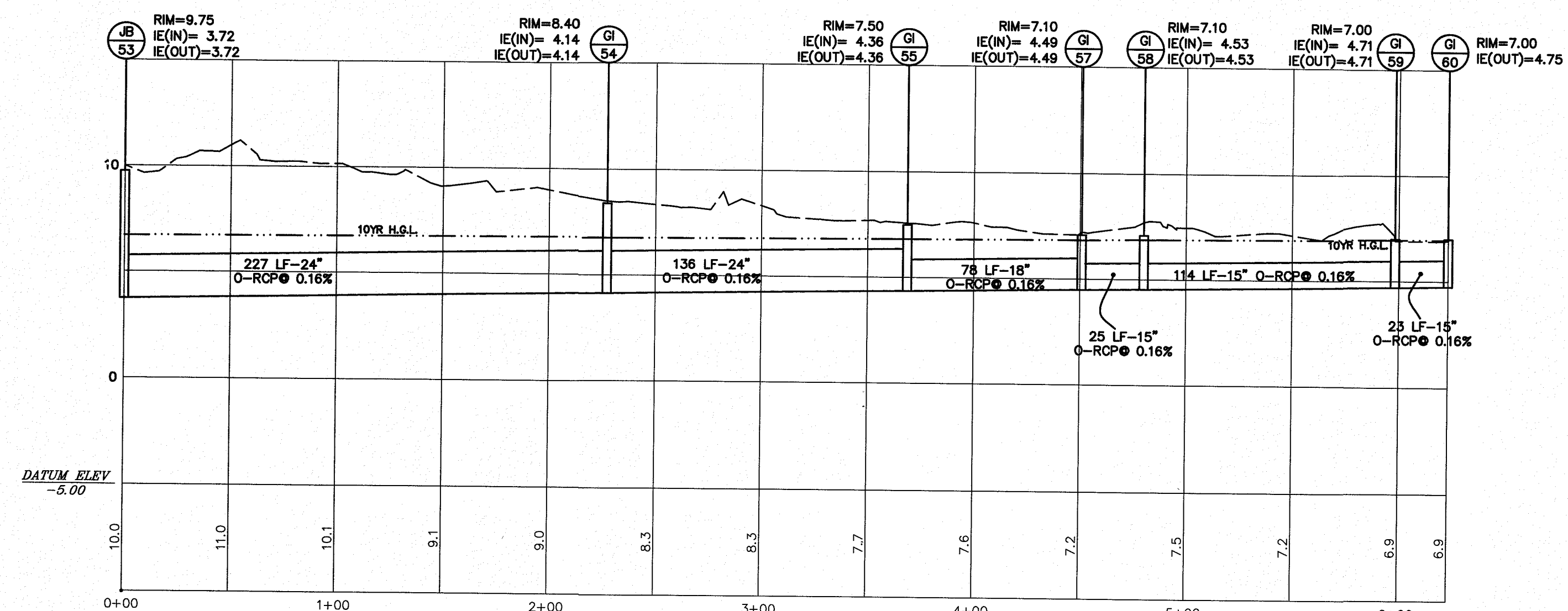
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 LICENSE STATE OF SOUTH CAROLINA
 LICENSE NO. 9156
 EXPIRES 12/17
 FRANK DAVID STEVENSON

CSE CIVIL SITE ENVIRONMENTAL
 688 MARINA DRIVE
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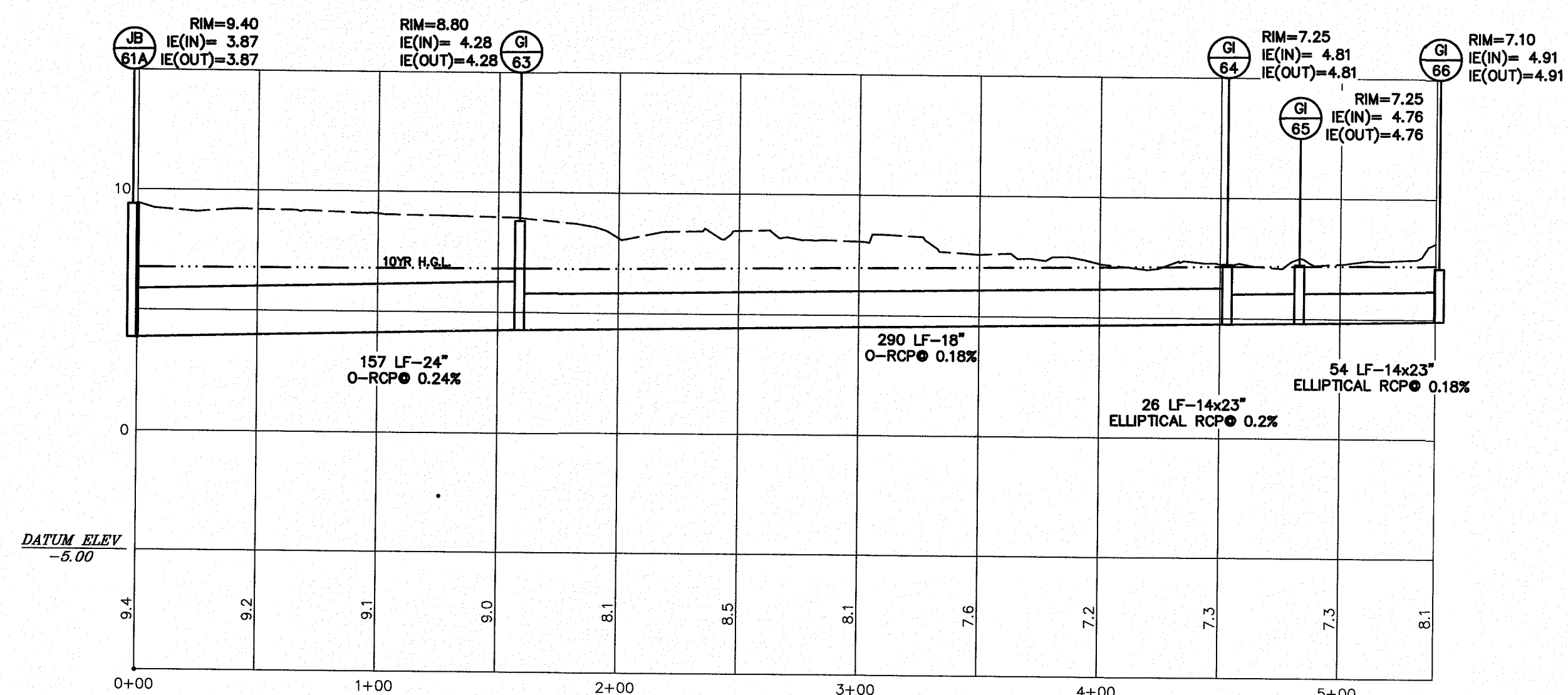
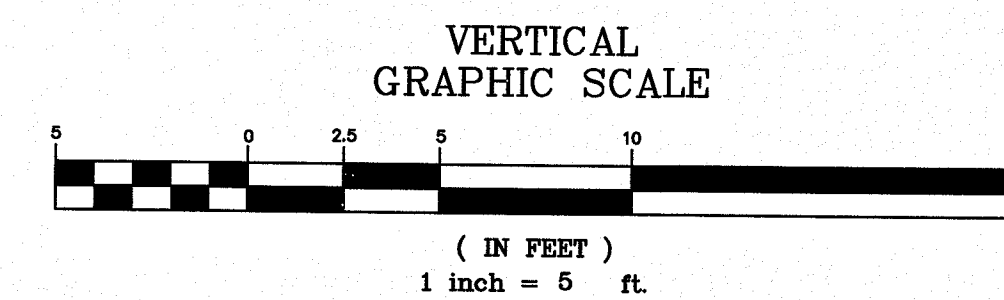
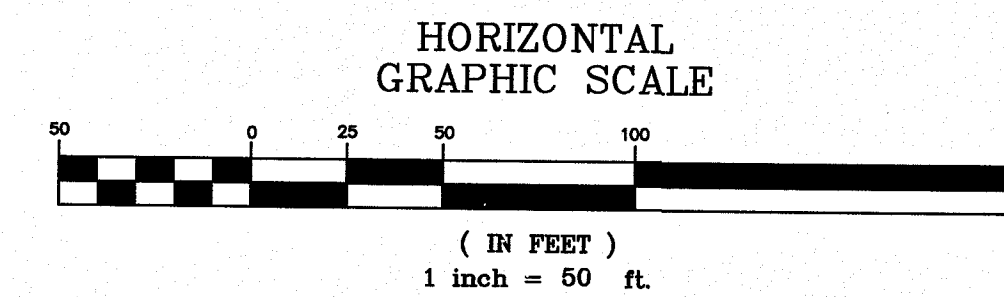
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 SHEET NUMBER
C301



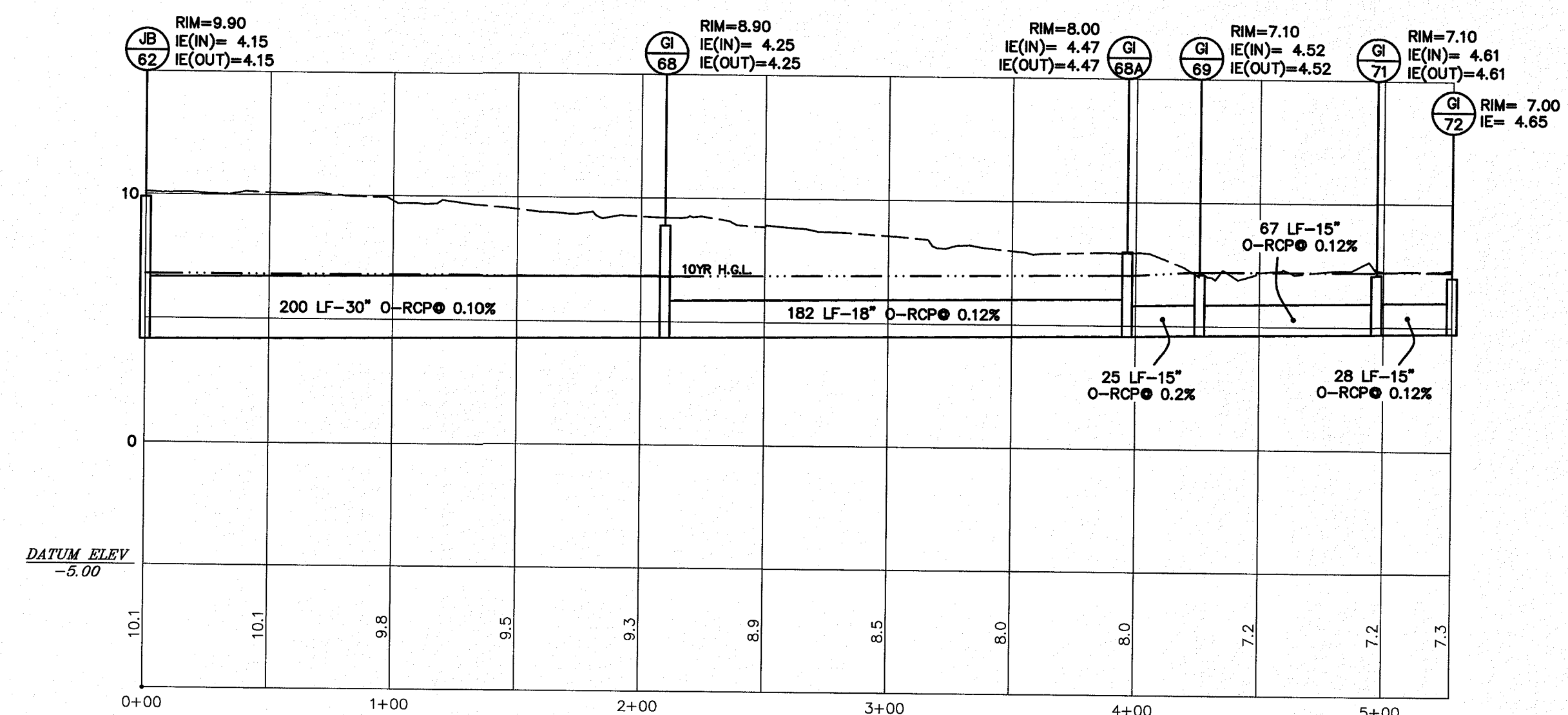
49TH AVE



50TH AVE



51ST AVE



52ND AVE

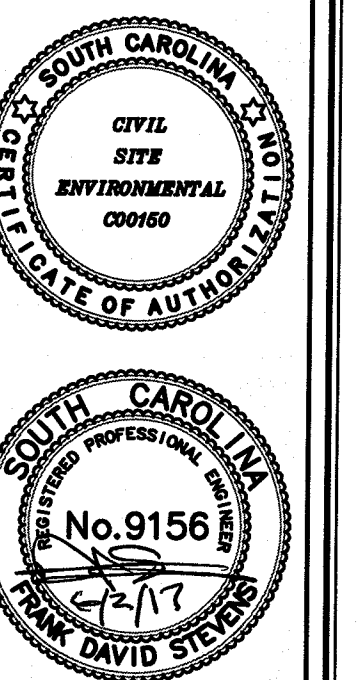
REVISIONS:
 1) REV 8/23/13 PER LOWE WILD DUNES SCOOT, IOPWSC COMMENTS/INPO
 2) REV 7/16/14 PER SCOOT COMMENTS
 3) REV 5/31/17 CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS

PIPE PROFILES

FOR: CITY OF ISLE OF PALMS

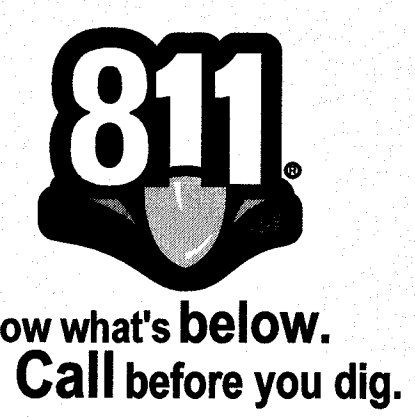
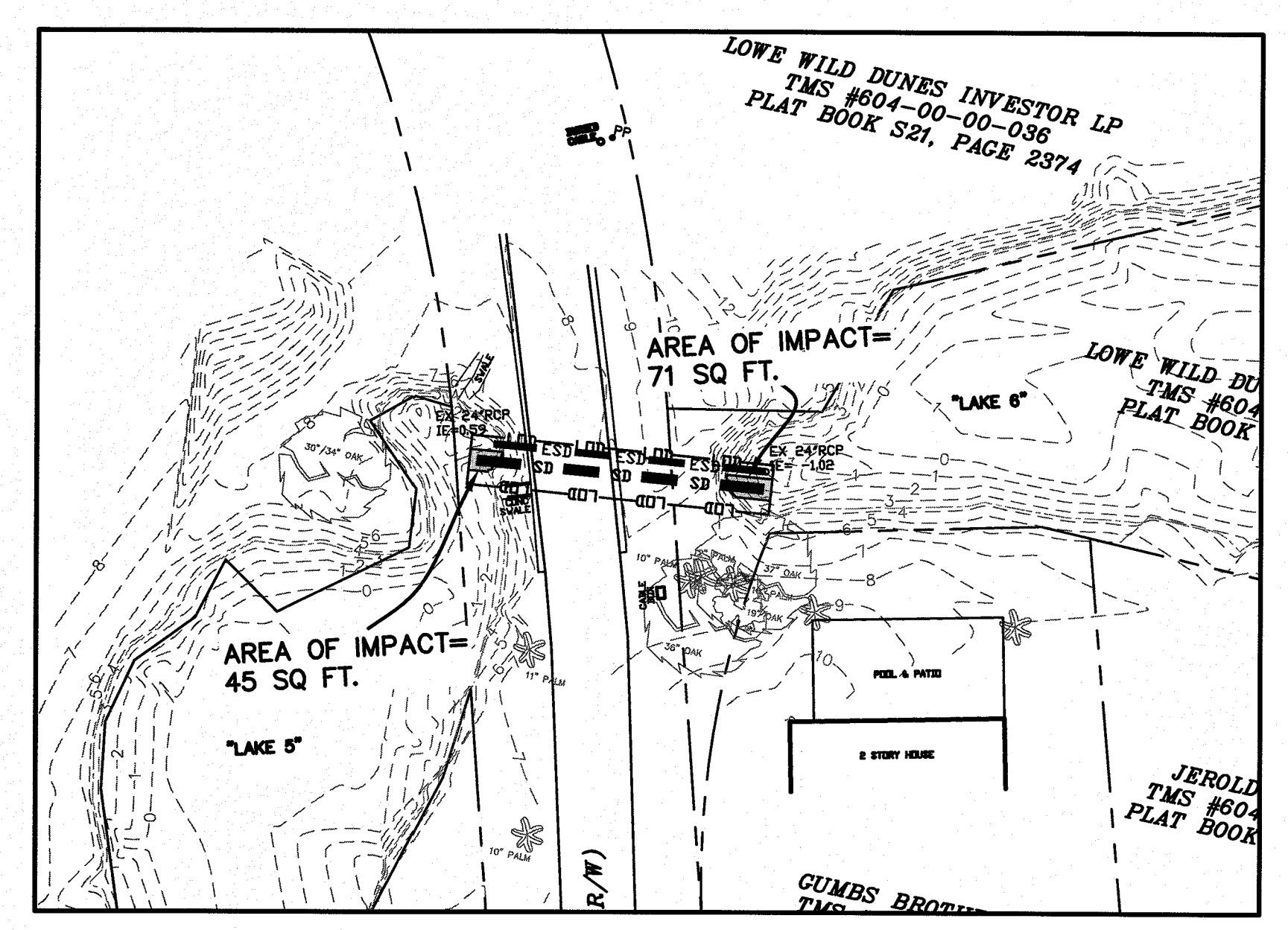
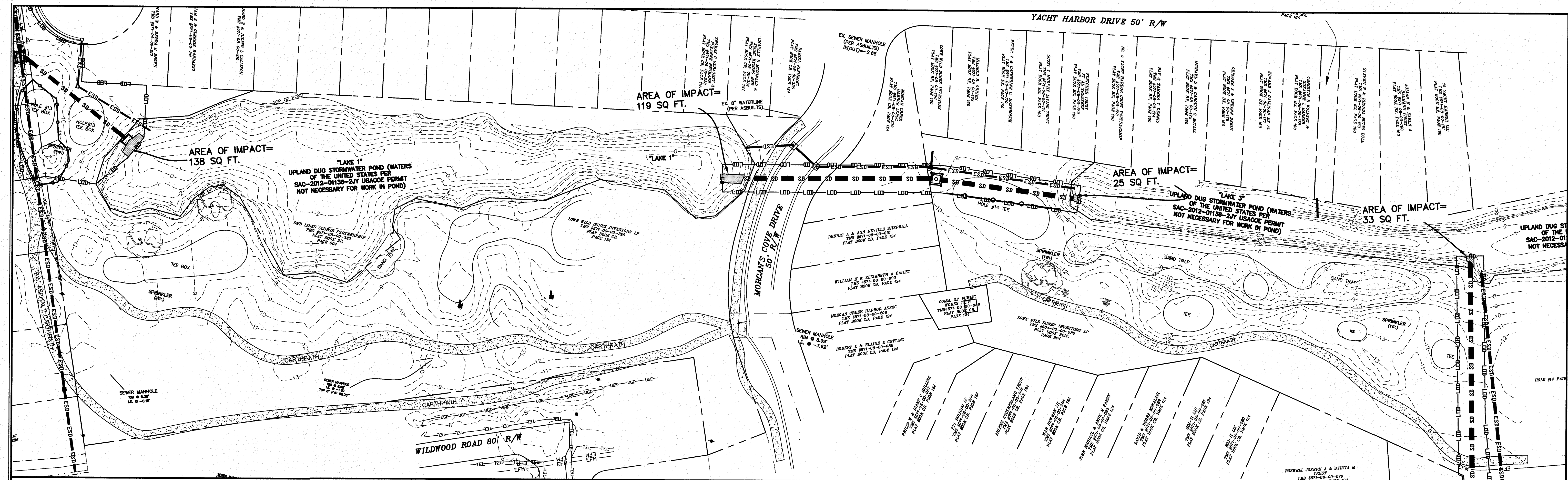
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 SCALE: AS NOTED
 DATE: 6-28-13



688 MARINA DRIVE
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CSE JOB NUMBER
920-PH2
 SHEET NUMBER
C302

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TOTAL IMPACTS TO EXISTING STORMWATER LAGOONS:

LAKE 1 = 257 SQ FT
 LAKE 2 = 73 SQ FT
 LAKE 3 = 58 SQ FT
 LAKE 5 = 45 SQ FT
 LAKE 6 = 71 SQ FT

TOTAL IMPACT = 504 SQ FT. (0.012 AC)

NOTE: IMPACTS ARE MEASURED BASED ON EXISTING STATIC WATER ELEVATIONS

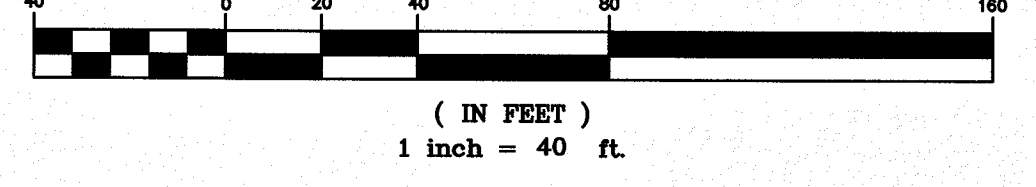
- NOTES:**
- 1) CONTRACTOR SHALL BE REQUIRED TO HAVE PROPOSED ROUTE STAKED, ALL UTILITY CROSSINGS VERTICALLY LOCATED, AND A WALK THROUGH CONDUCTED WITH ENGINEER PRIOR TO INITIATION OF CONSTRUCTION.
 - 2) SEE SHEET C200 FOR PIPE AND STRUCTURE CHART AND DRAINAGE NOTES.
 - 3) SEE SHEET C400 FOR TREE REMOVAL INFORMATION.
 - 4) CONTRACTOR TO COORDINATE ALL ACTIVITIES INVOLVING DISTURBANCE OF GOLF COURSE AREAS WITH WILD DUNES RESORT GOLF COURSE SUPERVISOR.

LEGEND

- | | | |
|--|-------------|---|
| | ESS-ESS-ESS | EXISTING SANITARY SEWER EXISTING WATER LINE |
| | EW-EW-EW | EXISTING FORCEMAIN |
| | EPM-EPM | EXISTING OVERHEAD POWER |
| | OP-OP-OP | EXISTING STORM DRAIN |
| | ESD-ESD-ESD | EXISTING PROPERTY LINE |
| | SD-SD-SD | EXISTING EASEMENT |
| | X-X-X | PROPOSED STORM DRAIN |
| | LOD-LOD-LOD | SILT FENCE |
| | LOD-LOD-LOD | LIMIT OF DISTURBANCE (OFFSET 1') |
| | 8-8-8 | TREE BARRICADE |
| | 8-8-8 | EXISTING CONTOUR |
| | 8-8-8 | PROPOSED CONTOUR |
| | 8-8-8 | PROPOSED EASEMENT |
| | 8-8-8 | PROPOSED GRATE INLET |
| | 8-8-8 | PROPOSED JUNCTION BOX |
| | 8-8-8 | PROPOSED GRATE INLET W/TYPE A SILTFENCE |
| | 8-8-8 | REMOVE PAVEMENT |

- SEQUENCE OF EVENTS**
- 1) INSTALL EROSION CONTROL & TREE PROTECTION
 - 2) EXCAVATE POND AND STABILIZE BANKS
 - 3) INSTALL/UPGRADE OUTFALL CONTROLS
 - 4) INSTALL POND CONNECTIONS
 - 5) INSTALL STORM DRAIN LINES
 - 6) LANDSCAPE/STABILIZE ALL DISTURBED AREAS
 - 7) REMOVE EROSION CONTROL

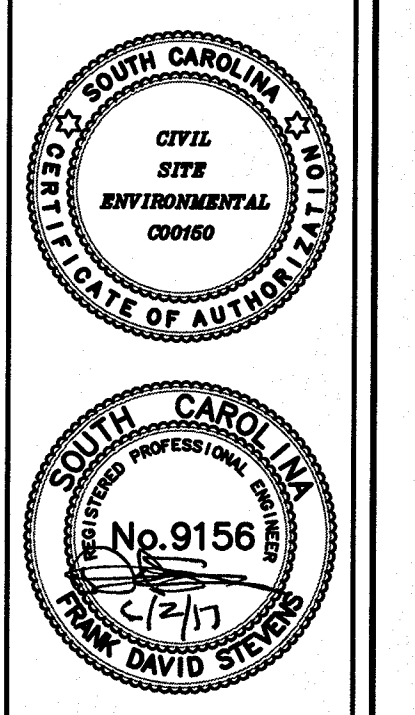
GRAPHIC SCALE



REVISIONS:
 1) REV 8/23/13 PER LOWE WILD DUNES, SCOTT, DPWSC COMMENTS/INFO
 2) REV 5/21/17 CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
 TITLE: SUMMARY SHEET OF EXISTING POND IMPACTS
 FOR: CITY OF ISLE OF PALMS

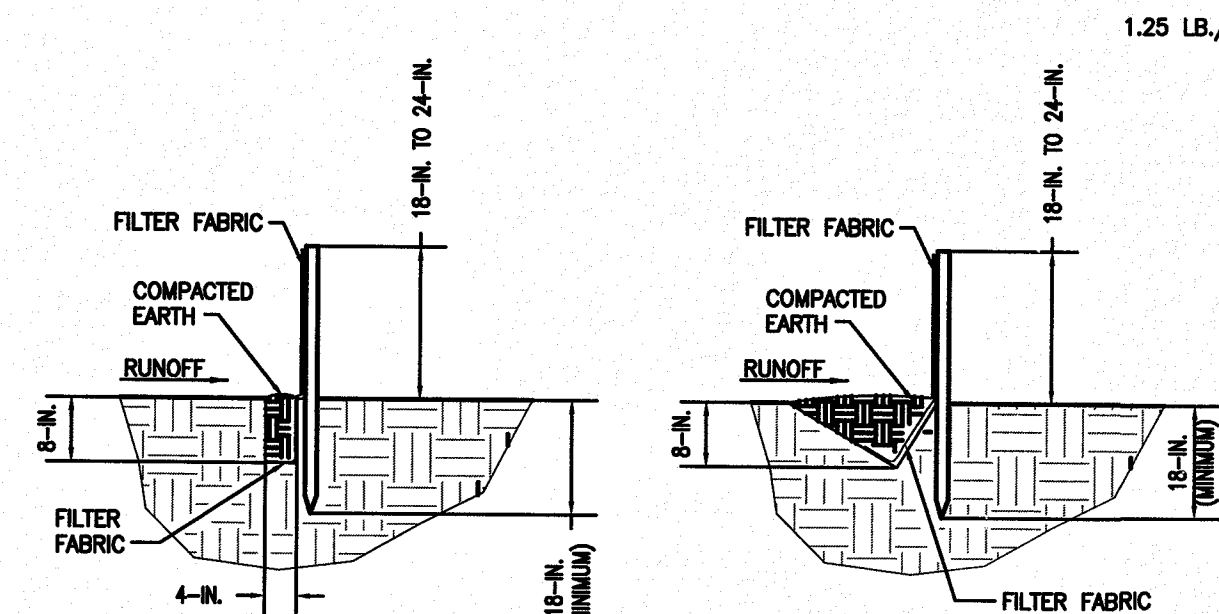
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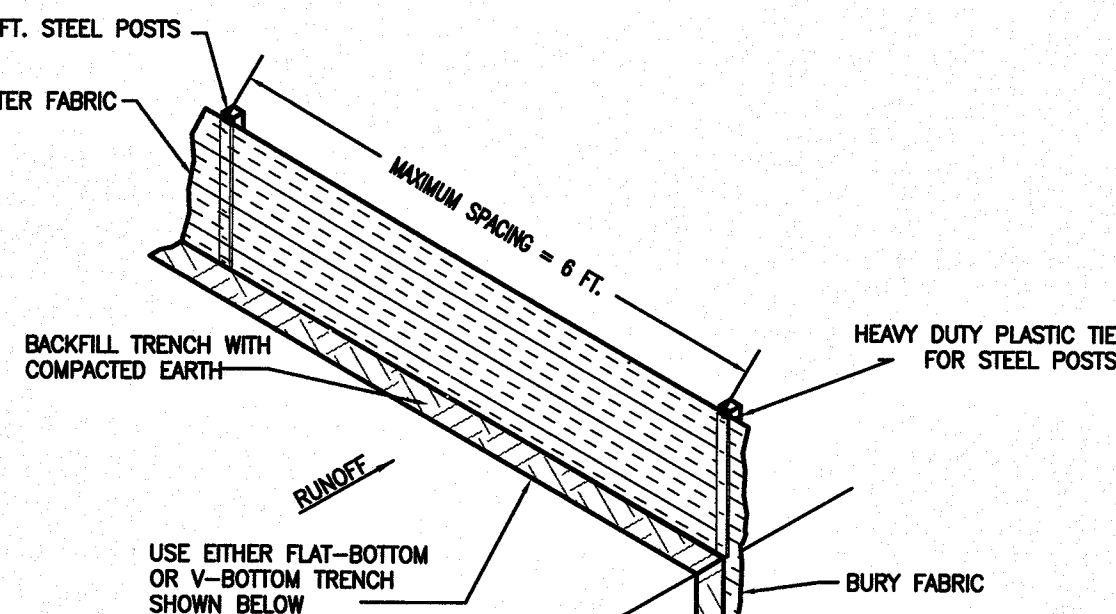
688 MARINA DRIVE
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 FAX: (843) 849-8974
 EMAIL: CSE@CIVILSITEENV.COM

CSE JOB NUMBER
920-PH2
 SHEET NUMBER
C401

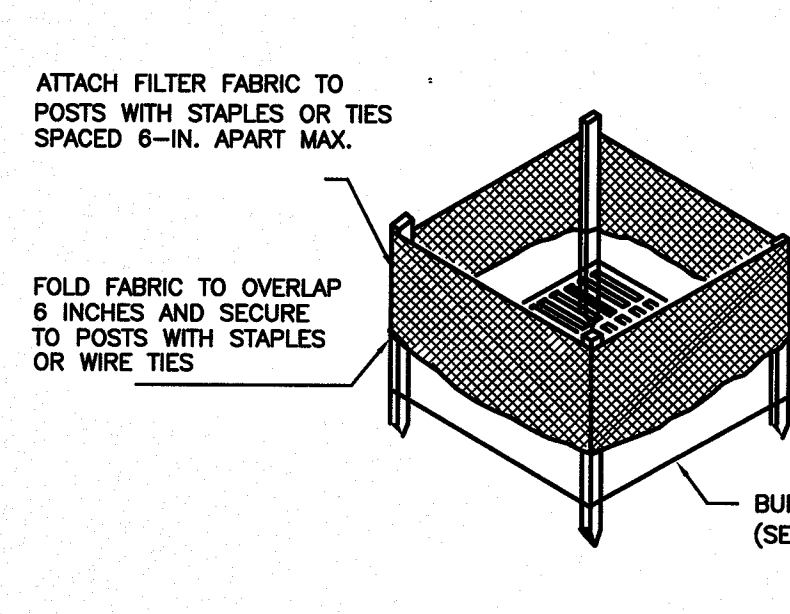
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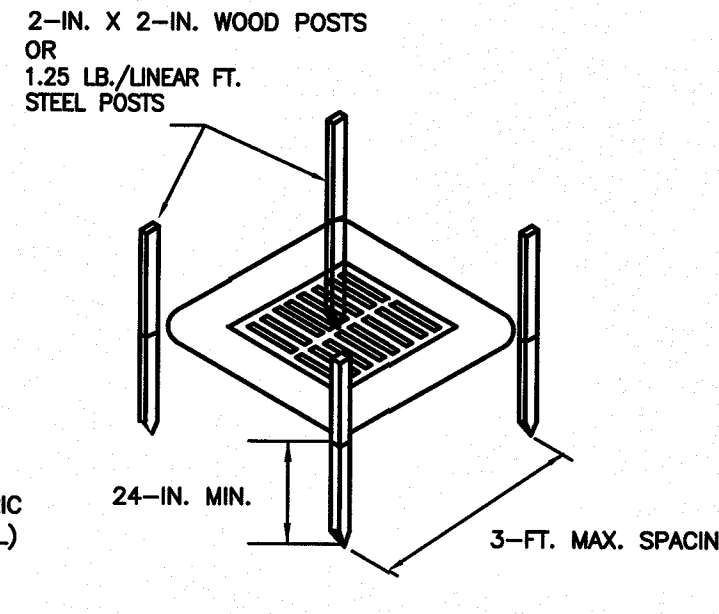
FLAT-BOTTOM TRENCH DETAIL V-SHAPED TRENCH DETAIL



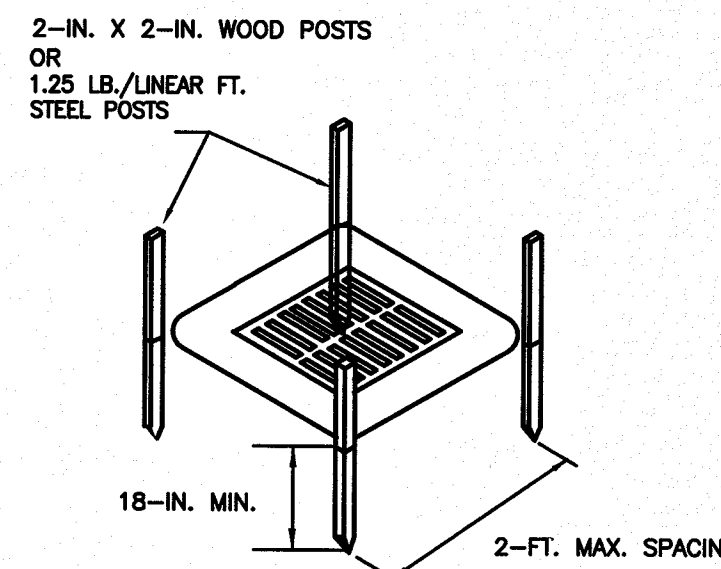
SILT FENCE INSTALLATION



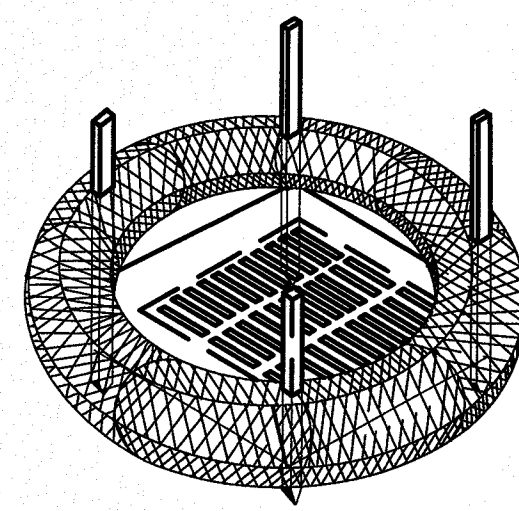
FILTER FABRIC INSTALLATION DETAIL



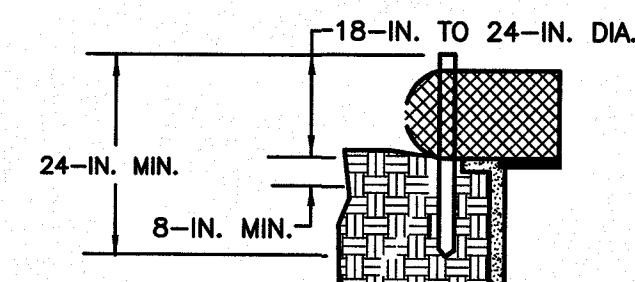
POST INSTALLATION DETAIL



POST INSTALLATION DETAIL



SEDIMENT TUBE INSTALLATION DETAIL



SEDIMENT TUBE BURIAL DETAIL

SILT FENCE DETAIL

N.T.S.

MATERIALS

STEEL POSTS
USE 48-INCH LONG STEEL POSTS THAT MEET THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS:
COMPOSED OF HIGH STRENGTH STEEL WITH MINIMUM YIELD STRENGTH OF 50,000 PSI.
HAVE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND NOMINAL "T" LENGTH OF 1.48-INCHES.
WEIGH 1.25 POUNDS PER FOOT (±8%).
HAVE A SOIL STABILIZATION PLATE WITH A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES ATTACHED TO THE STEEL POSTS.
PAINTED WITH A WATER BASED BAKED ENAMEL PAINT.

USE STEEL POSTS WITH A MINIMUM LENGTH OF 4- FEET, WEIGHING 1.25 POUNDS PER LINEAR FOOT (± 8
AID IN FASTENING THE FABRIC. EXCEPT WHEN HEAVY CLAY SOILS ARE PRESENT ON SITE, STEEL POSTS WILL HAVE A METAL SOIL
STABILIZATION PLATE WELDED NEAR THE BOTTOM SUCH THAT WHEN THE POST IS DRIVEN TO THE PROPER DEPTH, THE PLATE WILL BE
BELOW THE GROUND LEVEL FOR ADDED STABILITY.
THE SOIL PLATES SHOULD HAVE THE FOLLOWING CHARACTERISTICS:
BE COMPOSED OF MINIMUM 15 GAUGE STEEL.
HAVE A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES.

GEOTEXTILE FILTER FABRIC

FILTER FABRIC IS:
COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS COMPOSED OF AT LEAST 85 POLYOLEFINS, POLYESTERS, OR POLYAMIDES. FORMED INTO A NETWORK SUCH THAT THE
FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER. FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER
INSTALLATION. FREE OF DEFECTS OR FLOTS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES. CUT TO A MINIMUM WIDTH OF 36 INCHES.

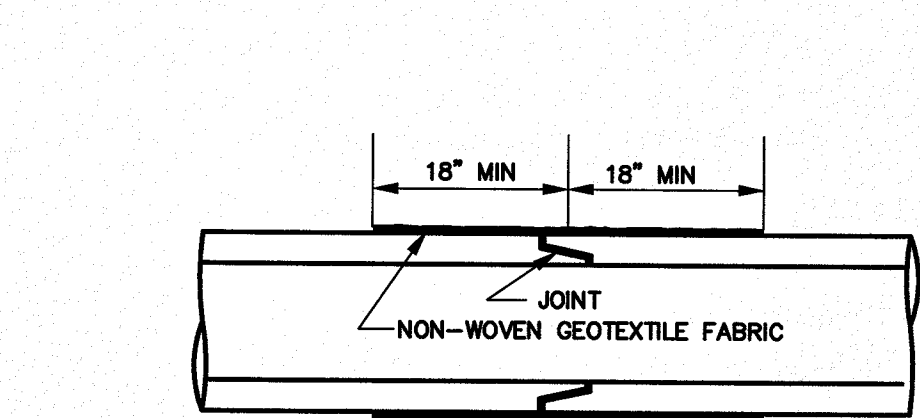
USE ONLY FABRIC APPEARING ON SCDOT APPROVAL SHEET #34 MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

INSTALLATION

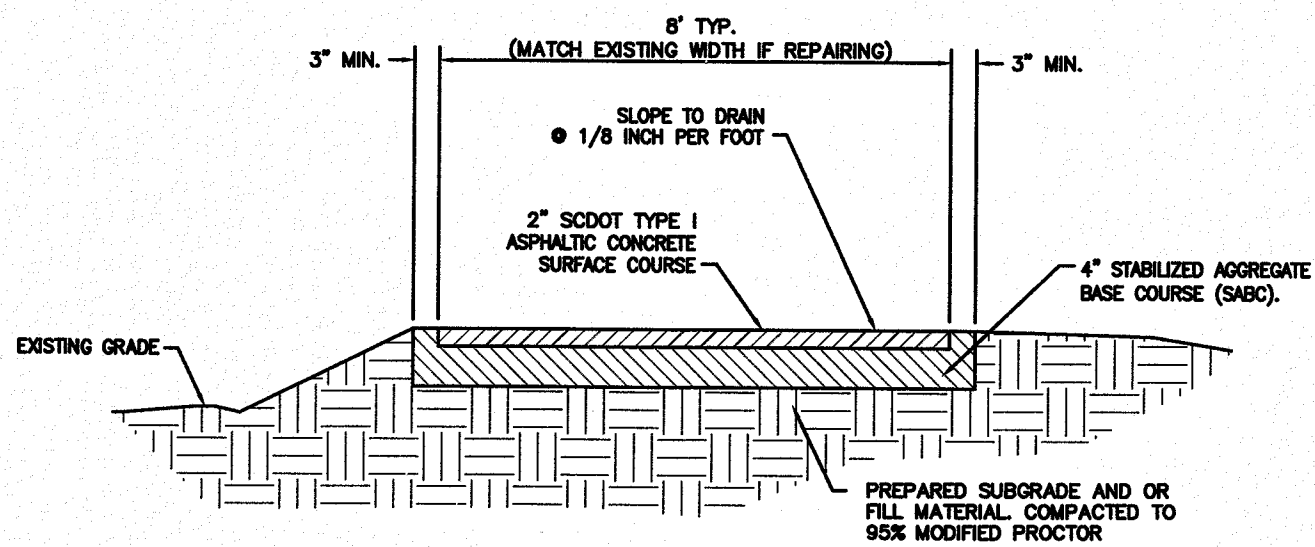
EXCAVATE A TRENCH APPROXIMATELY 6-INCHES WIDE AND 6-INCHES DEEP WHEN PLACING FABRIC BY HAND. PLACE 12-INCHES OF GEOTEXTILE FABRIC INTO THE 6-INCH DEEP TRENCH, EXTENDING THE
REMAINING 6-INCHES TOWARDS THE UPSLOPE SIDE OF THE TRENCH. BACKFILL THE TRENCH WITH SOIL OR GRAVEL AND COMPACT/BURY 12-INCHES OF FABRIC INTO THE GROUND WHEN PNEUMATICALLY
INSTALLING SILT FENCE WITH A SLICING METHOD. PURCHASE FABRIC IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, WRAPPED THE
FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 6-INCH MINIMUM OVERLAP. INSTALL POSTS TO A MINIMUM DEPTH OF 24-INCHES. INSTALL POSTS A MINIMUM
OF 1- TO 2- INCHES ABOVE THE FABRIC, WITH NO MORE THAN 3- FEET OF THE POST ABOVE THE GROUND. SPACE POSTS TO MAXIMUM 6- FEET CENTERS. ATTACH FABRIC TO WOOD POSTS USING
STAPLES MADE OF HEAVY-DUTY WIRE AT LEAST 1 1/2-INCH LONG, SPACED A MAXIMUM OF 6-INCHES APART. STAPLE A 2-INCH WIDE LATHE OVER THE FILTER FABRIC TO SECURELY FASTEN IT TO THE
UPSLOPE SIDE OF WOODEN POSTS. ATTACH FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED AND PLACED IN A MANNER TO PREVENT SAGGING OR TEARING
OF THE FABRIC. IN ALL CASES, TIES SHOULD BE AFFIXED IN NO LESS THAN 4 PLACES. INSTALL THE FABRIC A MINIMUM OF 24-INCHES ABOVE THE GROUND. WHEN NECESSARY, THE HEIGHT OF THE
FENCE ABOVE GROUND MAY BE GREATER THAN 24-INCHES. IN TIDAL AREAS, EXTRA SILT FENCE HEIGHT MAY BE REQUIRED. THE POST HEIGHT WILL BE TWICE THE EXPOSED POST HEIGHT. POST
SPACING WILL REMAIN THE SAME AND EXTRA HEIGHT FABRIC WILL BE 4-, 5-, OR 6- FEET TALL. LOCATE SILT FENCE CHECKS EVERY 100 FEET MAXIMUM AND AT LOW POINTS. INSTALL THE FENCE
PERPENDICULAR TO THE DIRECTION OF FLOW AND PLACE THE FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND
CLEANOUT.

INSPECTION AND MAINTENANCE

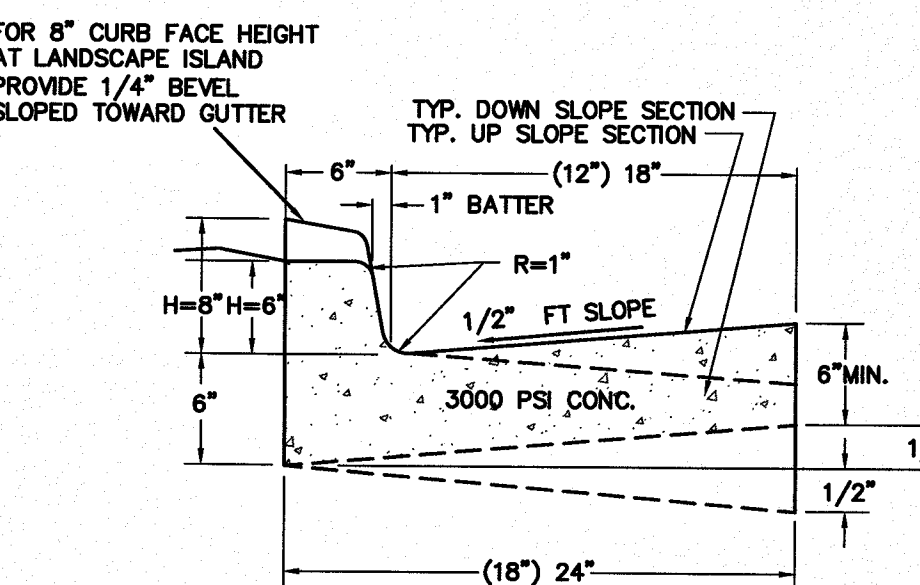
INSPECT EVERY SEVEN CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/4-INCHES OR MORE OF PRECIPITATION. CHECK FOR SEDIMENT BUILDUP AND FENCE
INTEGRITY. CHECK WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED BY FENCE OVERTOPPING. IF THE FENCE FABRIC TEARS, BEGINS TO
DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION OF FENCE IMMEDIATELY. REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE
FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE. REMOVE SILT FENCE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED
OR AFTER TEMPORARY BEST MANAGEMENT PRACTICES (BMPs) ARE NO LONGER NEEDED. PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM FENCE REMOVAL.



PIPE JOINT DETAIL



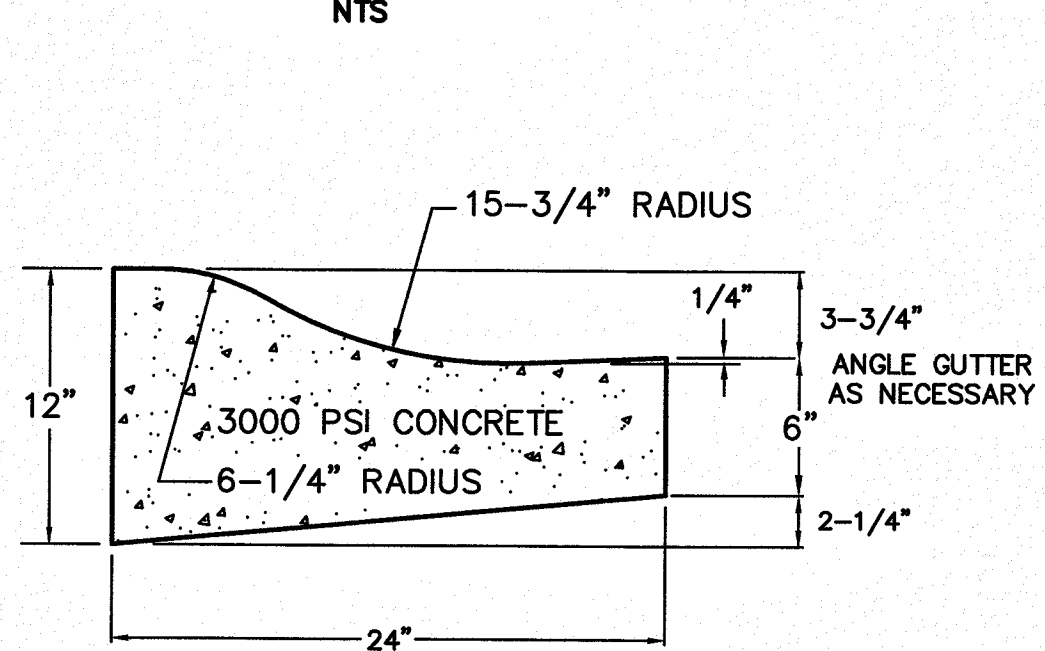
ASPHALT CURB PATH



NOTES:
ALTERNATE DOWN SLOPE SECTION TO BE
USED ONLY WHEN DRAINING AWAY FROM CURB.

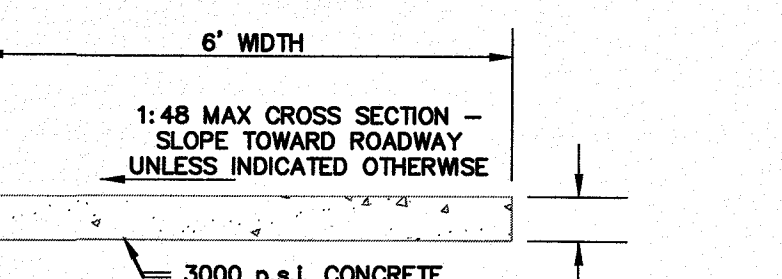
18" & 24" CURB & GUTTER DETAIL

N.T.S.



ROLL CURB & GUTTER DETAIL

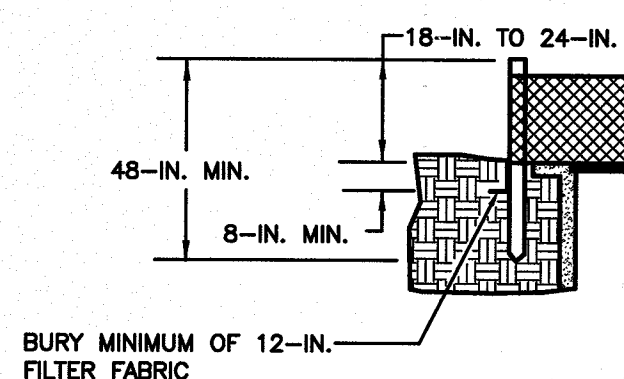
N.T.S.



NOTE:
CONCRETE SCORING AT 5'-0" O.C. AND
EXPANSION JOINTS AT 30'-0" O.C.

CONCRETE SIDEWALK DETAIL

N.T.S.



FILTER FABRIC BURIAL DETAIL

TYPE A - FILTER FABRIC INLET PROTECTION

N.T.S.

FILTER FABRIC INLET PROTECTION

MATERIALS:
USE FILTER FABRIC THAT CONFORMS TO SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
REFER TO THE SILT FENCE GEOTEXTILE FABRICS APPROVAL SHEET #34.

USE STEEL POSTS THAT MEET THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS:
BE COMPOSED OF HIGH STRENGTH STEEL WITH MINIMUM YIELD STRENGTH OF 50,000 PSI.
HAVE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND
NOMINAL "T" LENGTH OF 1.48-INCHES. WEIGH 1.25 POUNDS PER FOOT (±8%).
BE PAINTED WITH A WATER BASED BAKED ENAMEL PAINT.

ATTACH FABRIC TO METAL POSTS WITH HEAVY-DUTY PLASTIC TIES.

INSTALLATION:
EXCAVATE A TRENCH 6-INCHES WIDE AND 6-INCHES DEEP AROUND THE OUTSIDE PERIMETER OF THE INLET
UNLESS THE FABRIC IS PNEUMATICALLY INSTALLED.

EXTEND THE FILTER FABRIC A MINIMUM OF 12-INCHES INTO THE TRENCH.
BACKFILL THE TRENCH WITH SOIL OR CRUSHED STONE AND COMPACT OVER THE FILTER FABRIC UNLESS THE FABRIC IS
PNEUMATICALLY INSTALLED.

USE STEEL POSTS WITH A MINIMUM POST LENGTH OF 60-INCHES CONSISTING OF STANDARD "T" SECTIONS
WITH A WEIGHT OF 1.25 POUNDS PER FOOT. INSTALL THE FILTER FABRIC TO A MINIMUM HEIGHT OF
24-INCHES ABOVE GRADE. SPACE THE STEEL POSTS AROUND THE PERIMETER OF THE INLET A MAXIMUM OF
3- FEET APART AND DRIVE THEM INTO THE GROUND A MINIMUM OF 24-INCHES. CUT THE FILTER FABRIC FROM
A CONTINUOUS ROLL TO THE LENGTH OF THE PROTECTED AREA TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE
NECESSARY, WRAP FILTER FABRIC TOGETHER ONLY AT A SUPPORT POST WITH BOTH ENDS SECURELY FASTENED TO
THE POST, WITH A MINIMUM 6-INCH OVERLAP.

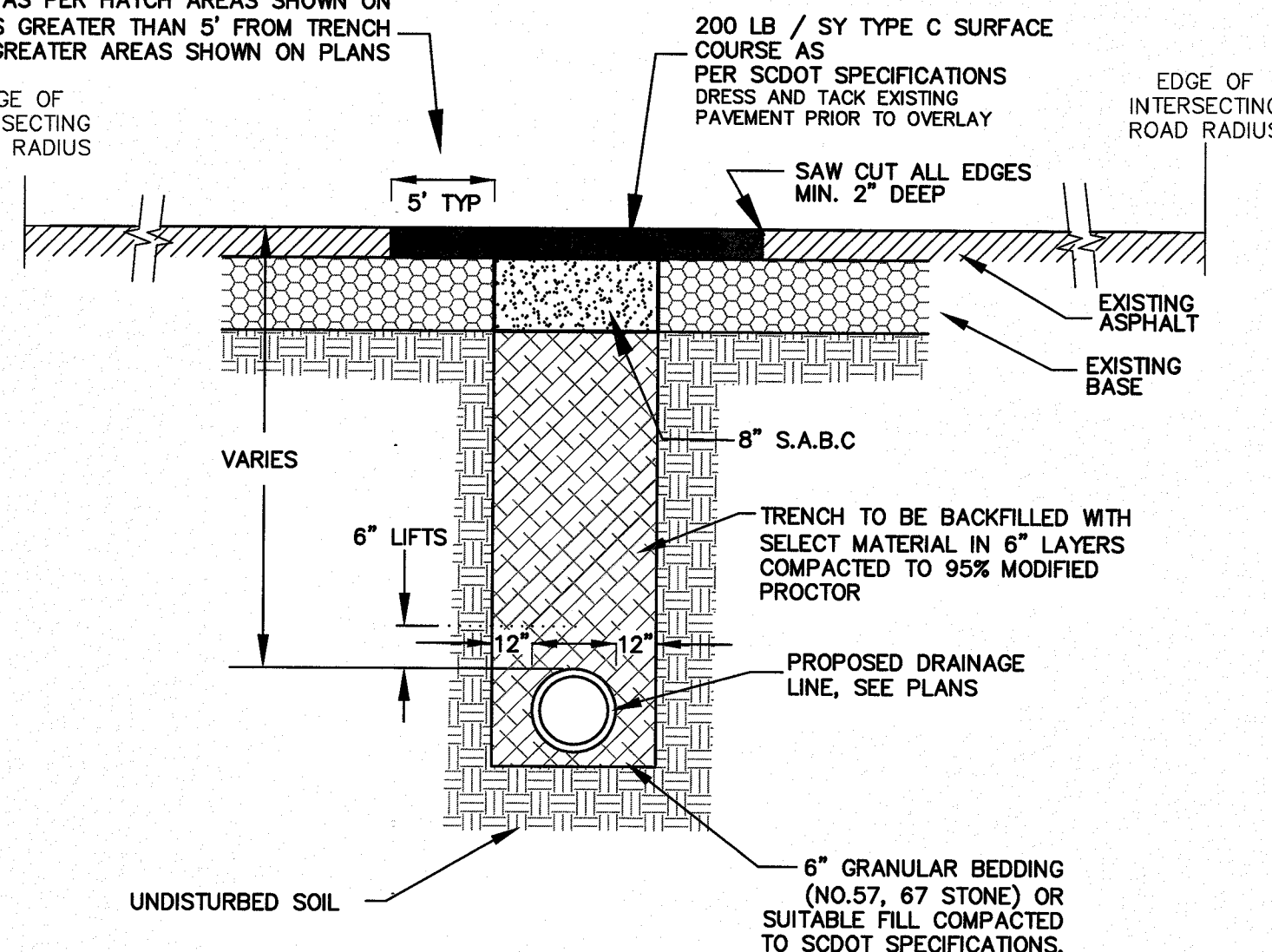
ATTACH FABRIC TO STEEL POSTS WITH HEAVY-DUTY PLASTIC TIES.

ATTACH AT LEAST FOUR (4) EVENLY SPACED TIES IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC.
IN ALL CASES, AFFIX TIES IN NO LESS THAN FOUR (4) PLACES.

INSPECTION AND MAINTENANCE:
INSPECTIONS SHOULD BE MADE EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH STORM THAT
PRODUCES 1/4-INCHES OR MORE OF RAIN. IF THE FABRIC BECOMES CLOGGED, IT SHOULD BE REPLACED.
SEDIMENT SHOULD BE REMOVED WHEN IT REACHES APPROXIMATELY 1/3 THE HEIGHT OF THE FENCE. TAKE CARE NOT TO
DAMAGE OR UNDERCUT FABRIC WHEN REMOVING SEDIMENT. IF A SUMP IS USED, SEDIMENT SHOULD BE REMOVED WHEN IT
FILLS APPROXIMATELY 1/3 THE DEPTH OF THE HOLE. MAINTAIN THE POOL AREA, ALWAYS PROVIDING ADEQUATE SEDIMENT
STORAGE VOLUME FOR THE NEXT STORM.

STORM DRAIN INLET PROTECTION STRUCTURES SHOULD BE REMOVED ONLY AFTER THE DISTURBED AREAS ARE PERMANENTLY
STABILIZED. REMOVE ALL CONSTRUCTION MATERIAL AND SEDIMENT, AND DISPOSE OF THEM PROPERLY.
GRADE THE DISTURBED AREA TO THE ELEVATION OF THE DROP INLET STRUCTURE CREST. USE APPROPRIATE PERMANENT
STABILIZATION METHODS TO STABILIZE BARE AREAS AROUND THE INLET.

FOR SCDOT ROADWAYS IF MILL & OVERLAY
LIMITS AS PER HATCH AREAS SHOWN ON
PLANS IS GREATER THAN 5' FROM TRENCH
USE GREATER AREAS SHOWN ON PLANS



TYPICAL PAVEMENT CUT & OVERLAY DETAIL

N.T.S.

TYPE A - SEDIMENT TUBE INLET PROTECTION

N.T.S.

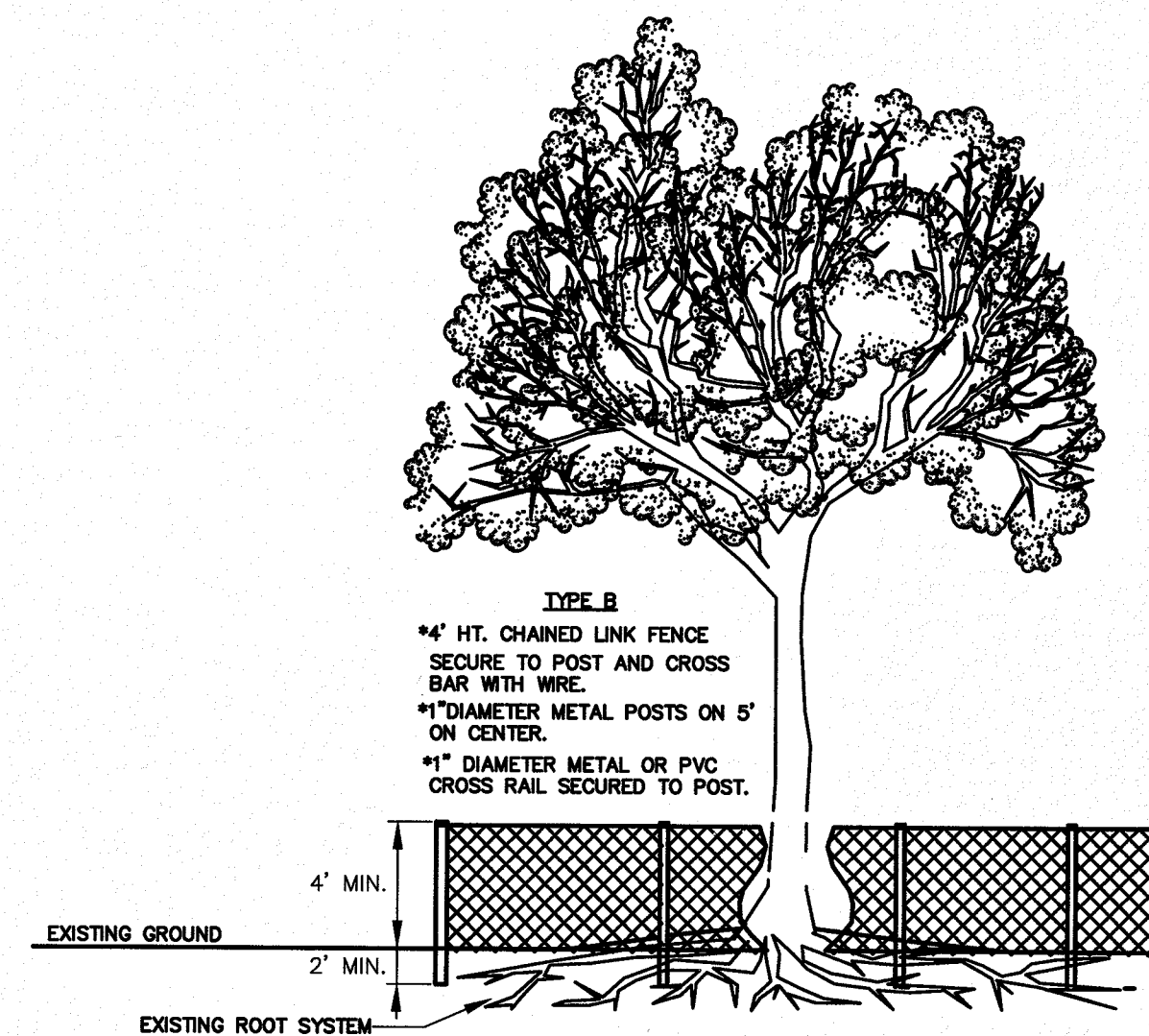
MATERIALS:
SEDIMENT TUBES FOR TYPE A INLET STRUCTURE FILTERS EXHIBIT THE FOLLOWING PROPERTIES: PRODUCED BY
A MANUFACTURER EXPERIENCED IN SEDIMENT TUBE MANUFACTURING, COMPOSED OF COMPACTED GEOTEXTILES,
CURLED EXCELISOR WOOD, NATURAL COCONUT FIBERS, HARDWOOD MULCH OR A MIX OF THESE MATERIALS
ENCLOSED BY A FLEXIBLE NETTING MATERIAL. STRAW, STRAW FIBER, STRAW BALETS, PINE NEEDLES, AND LEAF
MULCH ARE NOT ALLOWED UNDER THIS SPECIFICATION. UTILIZES OUTER NETTING THAT CONSISTS OF
SEAMLESS, HIGH-DENSITY POLYETHYLENE PHOTODEGRADABLE MATERIALS TREATED WITH ULTRAVIOLET
STABILIZERS OR A SEAMLESS, HIGH-DENSITY POLYETHYLENE NON-DEGRADABLE MATERIALS. DIAMETER
RANGING FROM 18-INCHES TO 24-INCHES.

CURLED EXCELISOR WOOD, OR NATURAL COCONUT ROLLED EROSION CONTROL PRODUCTS (RECPs) THAT ARE
ROLLED UP TO CREATE A SEDIMENT TUBE ARE NOT ALLOWED UNDER THIS SPECIFICATION. SELECT
APPLICABLE SEDIMENT TUBES FROM THE SCDOT APPROVED PRODUCTS LIST.
USE 48-INCH LONG WOOD POSTS THAT MEET THE FOLLOWING REQUIREMENTS:
2-INCH BY 2-INCH SIZE.
HEAVY-DUTY WIRE STAPLES AT LEAST 1 1/2-INCH LONG, SPACED A MAXIMUM OF 6-INCHES APART TO
ATTACH THE FILTER FABRIC TO WOODEN STAKES.

USE 48-INCH LONG STEEL POSTS THAT MEET THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS: BE
COMPOSED OF HIGH STRENGTH STEEL WITH MINIMUM YIELD STRENGTH OF 50,000 PSI. HAVE A STANDARD
"T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND NOMINAL "T" LENGTH OF 1.48-INCHES.
WEIGH 1.25 POUNDS PER FOOT (± 8) BE PAINTED WITH A WATER BASED BAKED ENAMEL PAINT.

REMOVE ALL ROCKS, CLODS, VEGETATION OR OTHER OBSTRUCTIONS SO INSTALLED SEDIMENT TUBES HAVE
DIRECT CONTACT WITH THE UNDERLYING SOIL OR SURFACE. INSTALL SEDIMENT TUBES BY LAYING THEM
FLAT ON THE GROUND. CONSTRUCT A SMALL TRENCH TO A DEPTH THAT IS 20 % OF THE SEDIMENT TUBE
DIAMETER. LAY THE SEDIMENT TUBE IN THE TRENCH AND COMPACT THE UPSTREAM SEDIMENT TUBE SOIL
INTERFACE. DO NOT COMPLETELY BURY SEDIMENT TUBES DURING INSTALLATION. LAP THE ENDS OF
ADJACENT SEDIMENT TUBES A MINIMUM OF 6-INCHES TO PREVENT FLOW AND SEDIMENT FROM PASSING
THROUGH THE FIELD JOINT. NEVER STACK SEDIMENT TUBES ON TOP OF ONE ANOTHER. INSTALL SEDIMENT
TUBES USING WOODEN STAKES (2-INCH X 2-INCH) OR STEEL POSTS (STANDARD "U" OR "T" SECTIONS
WITH A MINIMUM WEIGHT OF 1.25 POUNDS PER FOOT) A MINIMUM OF 48-INCHES IN LENGTH PLACED ON
2- FOOT CENTERS. INTERTIE THE STAKES WITH THE OUTER MESH ON THE DOWNSTREAM SIDE, AND
DRIVE THE STAKES IN THE GROUND TO A MINIMUM DEPTH OF 24-INCHES LEAVING LESS THAN 12-INCHES
OF STAKE ABOVE THE EXPOSED SEDIMENT TUBE.

INSPECTION AND MAINTENANCE:
INSPECT EVERY SEVEN CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT
PRODUCES 1/4-INCHES OR MORE OF PRECIPITATION. INSPECT SEDIMENT TUBES AFTER INSTALLATION FOR
GAPS UNDER THE TUBES AND FOR GAPS BETWEEN JOINTS OF ADJACENT ENDS OF SEDIMENT TUBES.
REPAIR RILLS, GULLIES, AND ALL UNDERCUTTING NEAR SEDIMENT TUBES. REMOVE AND/OR REPLACE
INSTALLED SEDIMENT TUBES AS REQUIRED TO ADAPT TO CHANGING CONSTRUCTION SITE CONDITIONS.
REMOVE ALL SEDIMENT TUBES FROM THE SITE WHEN THE FUNCTIONAL LONGEVITY IS EXCEEDED AS
DETERMINED BY THE ENGINEER, INSPECTOR OR MANUFACTURER'S REPRESENTATIVE. DISPOSE OF SEDIMENT
TUBES IN REGULAR MEANS AS NON-HAZARDOUS, INERT MATERIAL.



**TREE PROTECTION BARRICADE
DETAIL (CHAIN LINK FENCING)**

N.T.S.

NOTES:

1. ALL TREE PROTECTION BARRICADES MUST HAVE:

A. A TOP HORIZONTAL RAIL WITH THE CHAIN LINKED
FENCING WELDED TO THE POST AND TOP RAIL.
2. TREE BARRICADES SHALL BE ERRECTED AT A
MINIMUM DISTANCE FROM THE BASE OF A PROTECTED
TREE AND/OR GRAND TREE AS SHOWN ON PLANS OR
AS ACCORDING TO THE FOLLOWING STANDARDS;

A. FOR PROTECTED TREES TWENTY-THREE
INCHES (23") D.B.H. OR LESS, BARRICADES
SHALL BE PLACED A MINIMUM DISTANCE OF TEN
FEET (10') FROM THE BASE OF THE PROTECTED
TREE.

B. FOR PROTECTED TREES GREATER THAN
TWENTY-THREE INCHES (23") D.B.H. AND GRAND
TREES, BARRICADES SHALL PROVIDE A DIAMETER
OF PROTECTION AROUND THE TREE EQUAL IN
FEET TO THE DIAMETER BREAK HEIGHT OF THE
TREE (I.E. A 24" DIAMETER TREE REQUIRES A
24-FOOT DIAMETER PROTECTIVE BARRICADE.

TREE NOTE A CERTIFIED
ARBORIST SHALL PRUNE AND
TREAT ALL GRAND TREES
ACCORDING TO THEIR
EXPERTISE TO FURTHER
PRESERVE THEM.

REVISIONS:
1) REVISED 7/16/14 PER SCOT COMMENTS
2) REVISED 5/31/17 REVISED PATH WIDTH; CONSTRUCTION BID SET

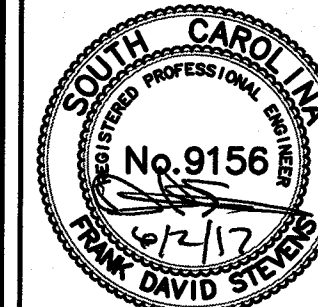
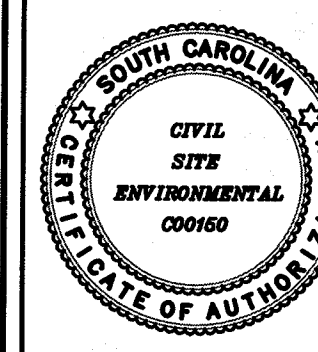
PROJECT:
45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE:
CONSTRUCTION DETAILS
FOR:
CITY OF ISLE OF PALMS

DRAWN BY: JCM

FILE: 920-PH2-C400

SCALE: NONE

DATE: 6-28-13



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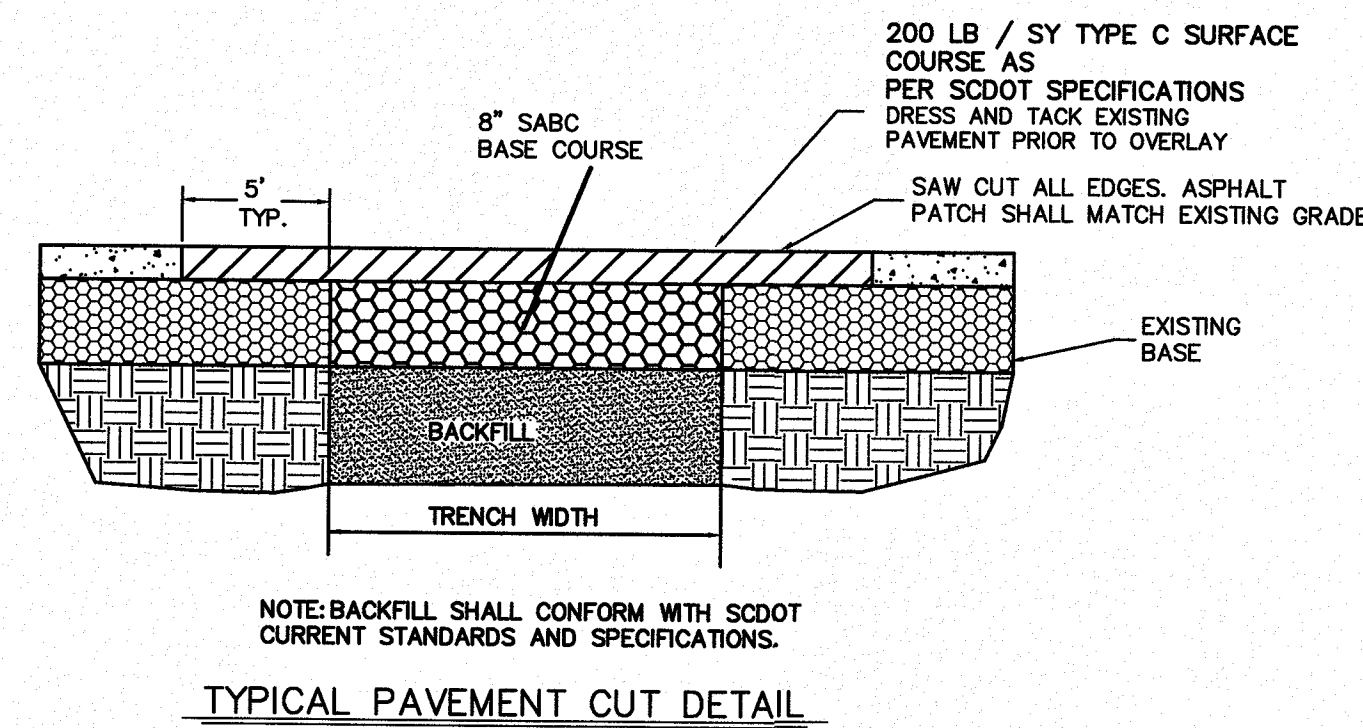
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920-PH2

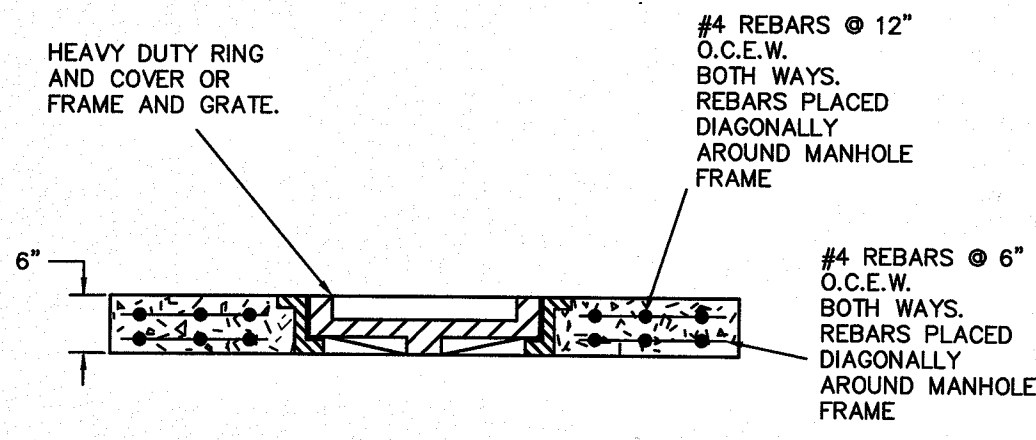
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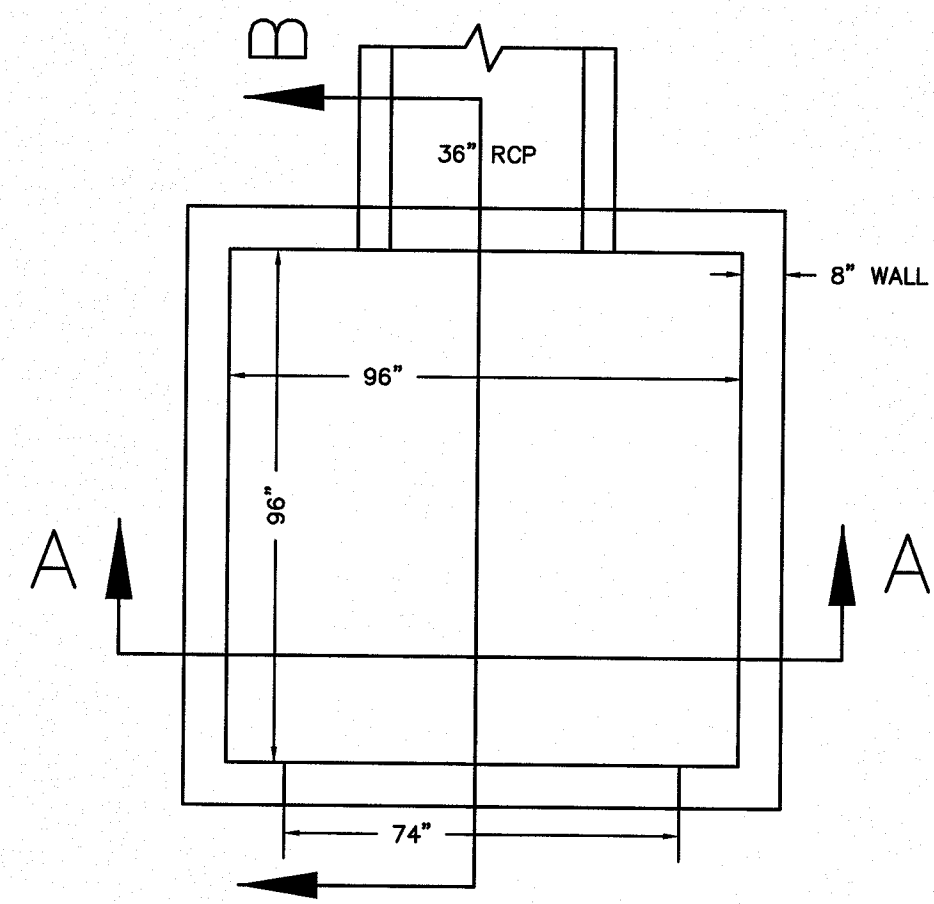
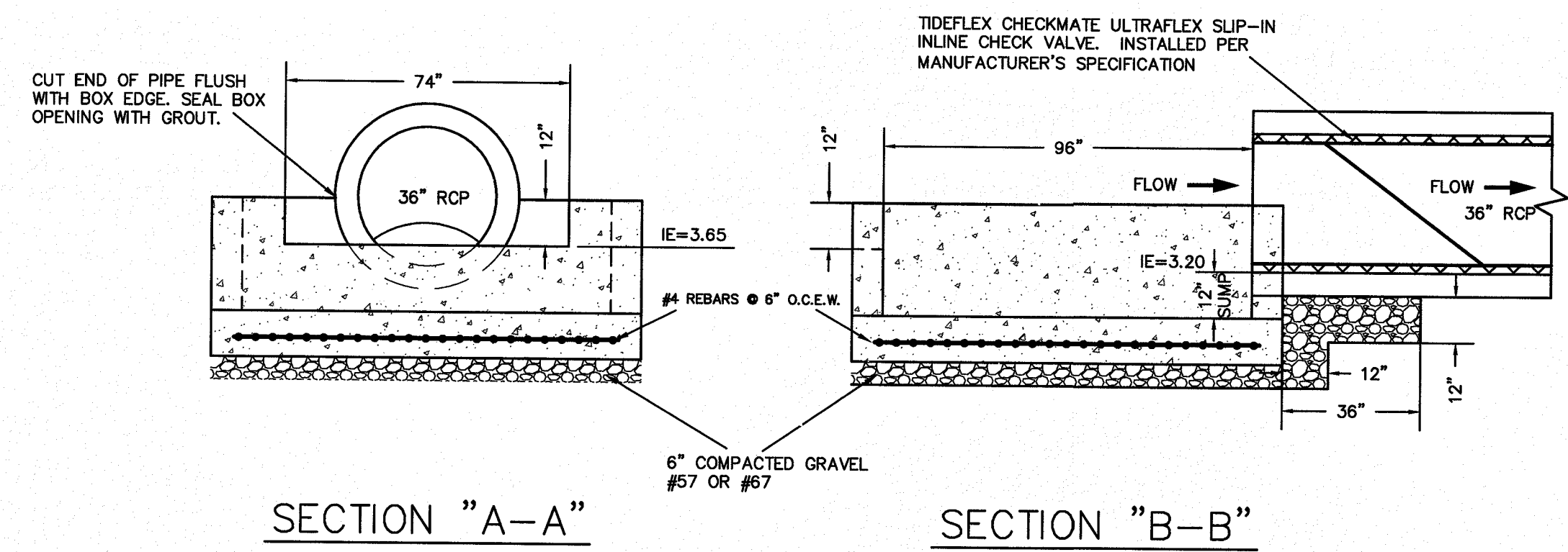


TYPICAL PAVEMENT CUT DETAIL
NTS

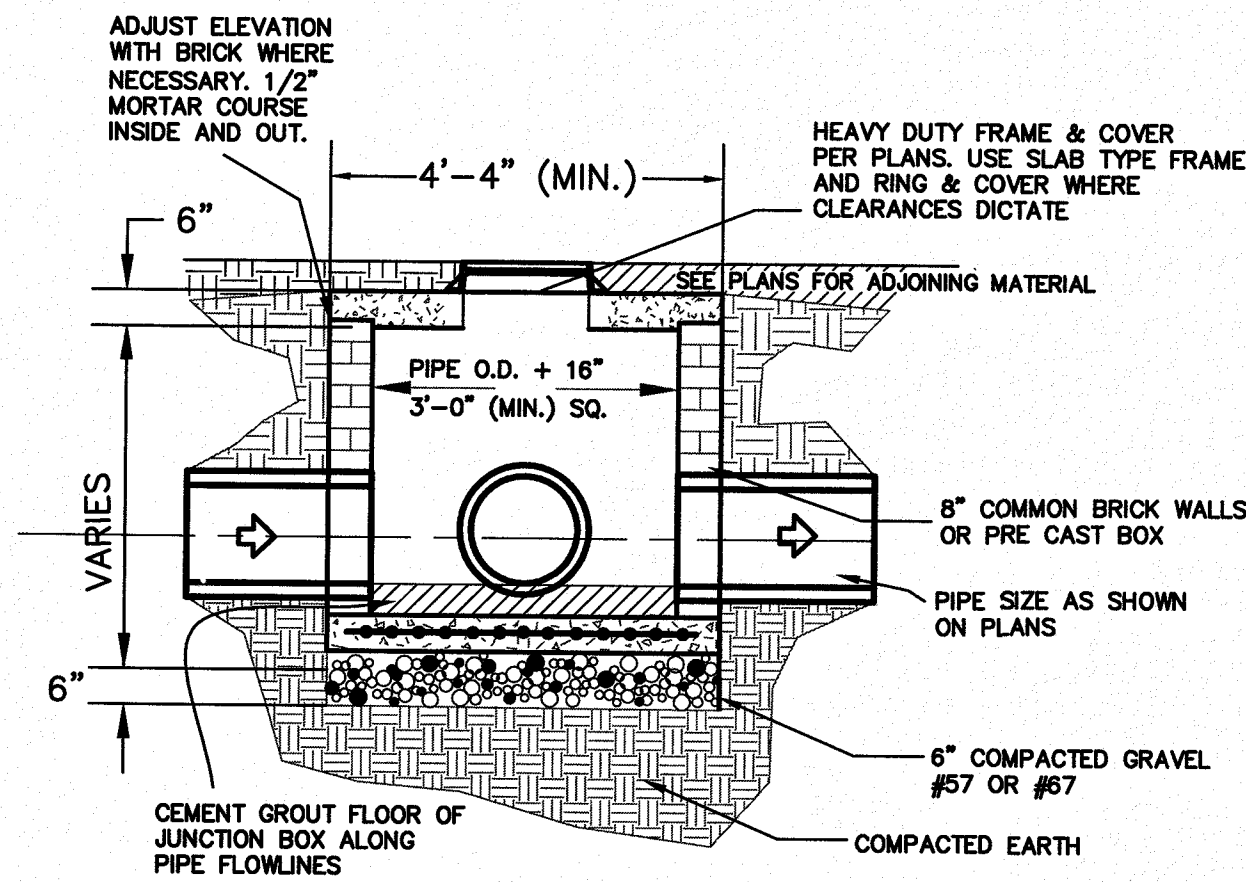


SLAB TYPE INLET/BOX INSTALLATION ALTERNATIVE

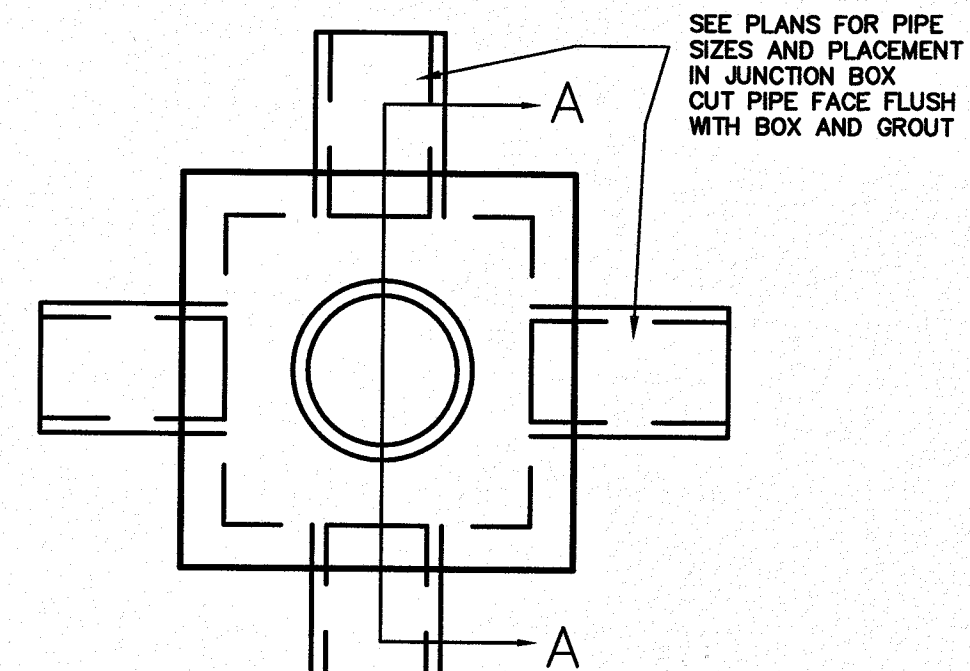
NOTE: WORK WITHIN SCDOT RIGHT-OF-WAYS SHALL COMPLY WITH CURRENT SCDOT STANDARD DRAWINGS AND SPECIFICATIONS.



WEIR OUTFALL STRUCTURE
N.T.S.



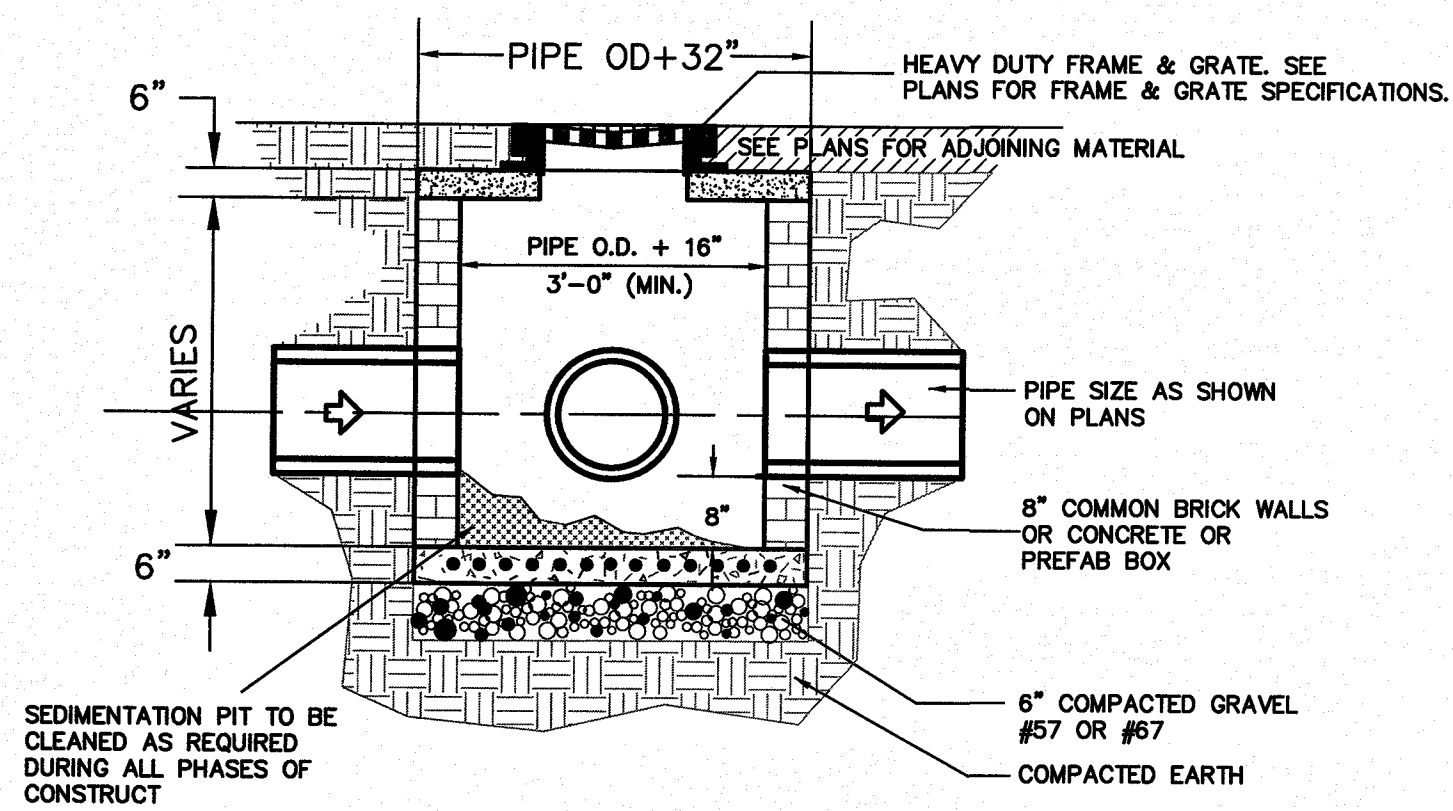
SECTION "A-A"



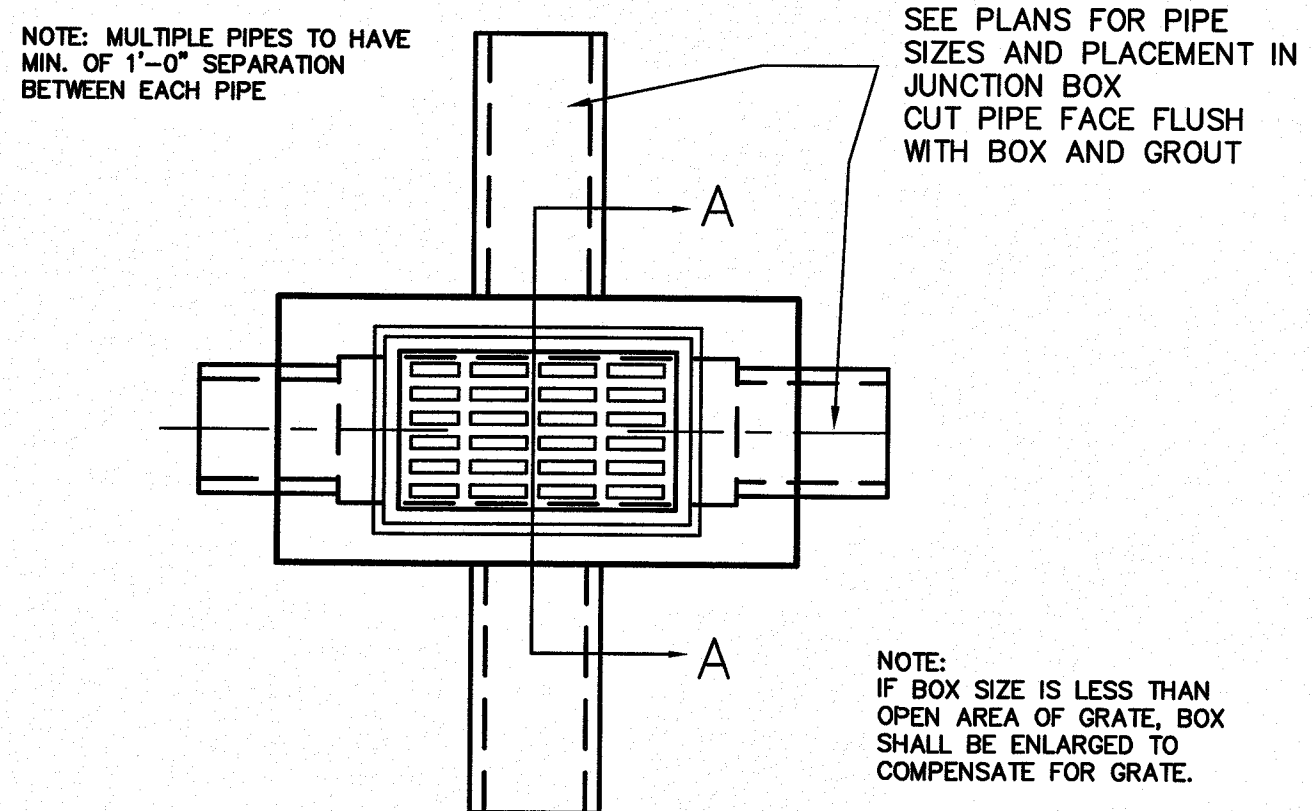
PLAN

NOTE:
1) RIM ELEVATIONS ON PLANS ARE APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT. IF PRECAST CONCRETE BOXES ARE USED, BOX HEIGHT SHALL BE 6" LOWER WITH FINAL RIM ELEVATION ACHIEVED THROUGH THE USE OF LEVELING BRICKS AND MORTAR.
2) REINFORCEMENT, CONSTRUCTION & MATERIALS TO COMPLY WITH SCDOT STANDARD DRAWINGS 719-305-00, 719-505-02 THRU 719-505-04 AND 719-550-00

JUNCTION BOX DETAIL
N.T.S.



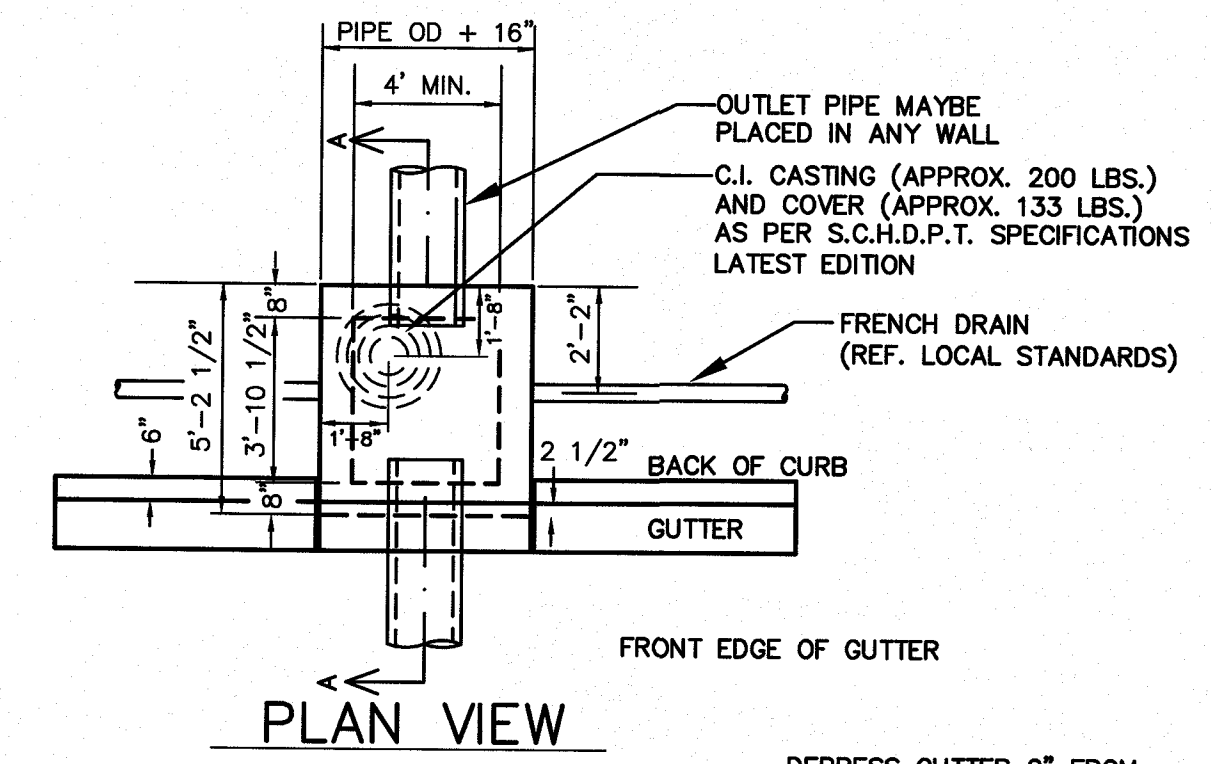
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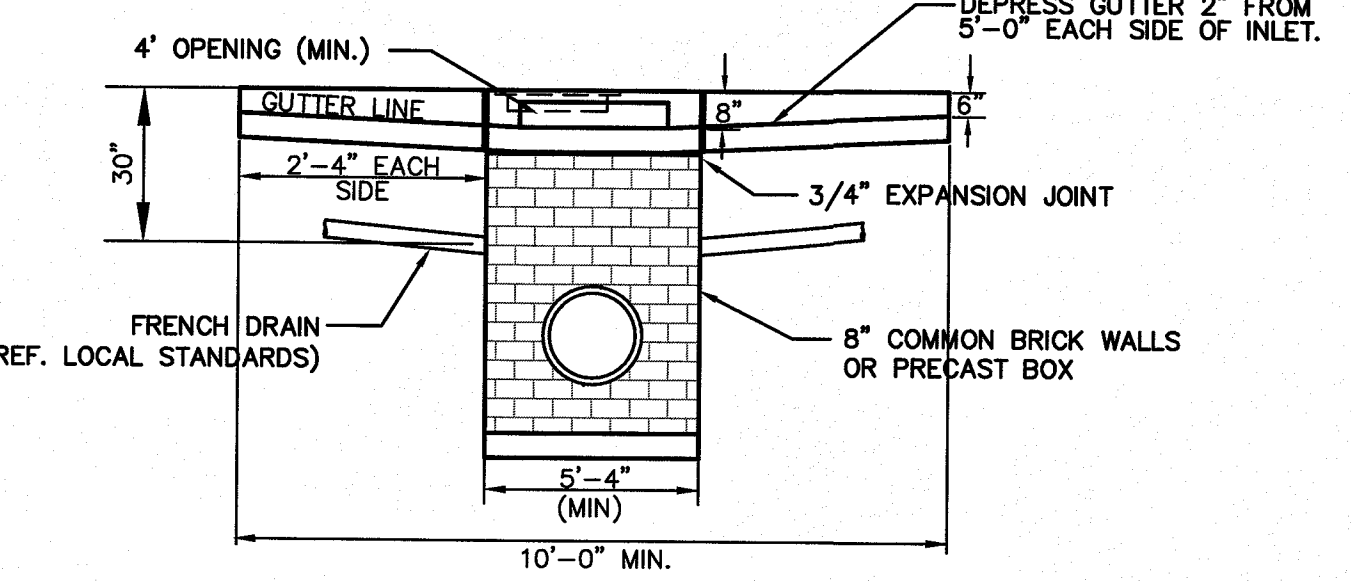
PLAN

NOTE:
1) RIM ELEVATIONS ON PLANS ARE APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT. IF PRECAST CONCRETE BOXES ARE USED, BOX HEIGHT SHALL BE 6" LOWER WITH FINAL RIM ELEVATION ACHIEVED THROUGH THE USE OF LEVELING BRICKS AND MORTAR.
2) REINFORCEMENT, CONSTRUCTION & MATERIALS TO COMPLY WITH SCDOT STANDARD DRAWINGS 719-110-01 & 719-305-00

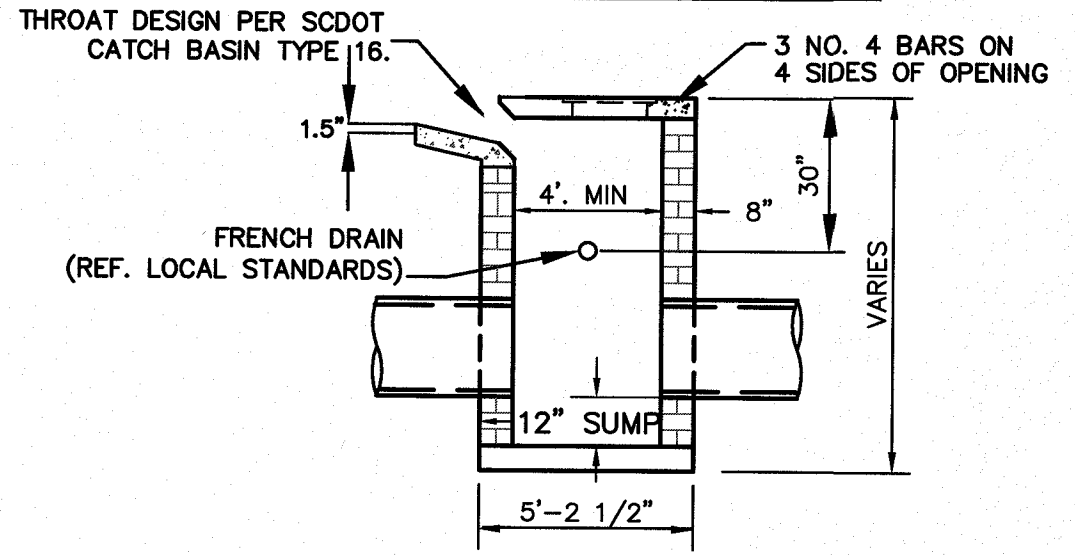
TYPICAL GRATE INLET WITH SUMP DETAIL
N.T.S.



PLAN VIEW



FRONT ELEVATION



SECTION "A-A"

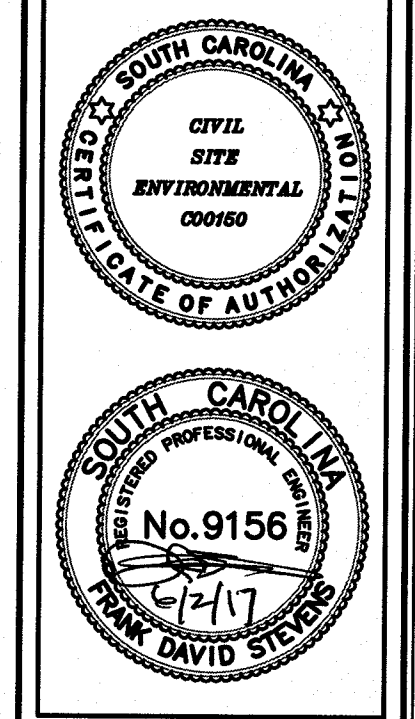
NOTE:
CURB INLET THROAT DIMENSIONS AND REINFORCEMENT SHALL CONFORM TO S.C.D.O.T. CATCH BASIN TYPE 16 AS SHOWN ON S.C.D.O.T. STANDARD DWG NO 719-016-01 & 719-016-02

TYPE 16 CURB INLET DETAIL
NTS

REVISIONS:
1) REVISED 7/16/14 PER SCDOT COMMENTS
2) REVISED 5/23/17 ADDED CHECK VALVE NOTE, CONSTRUCTION BID SET

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: CONSTRUCTION DETAILS
FOR: CITY OF ISLE OF PALMS

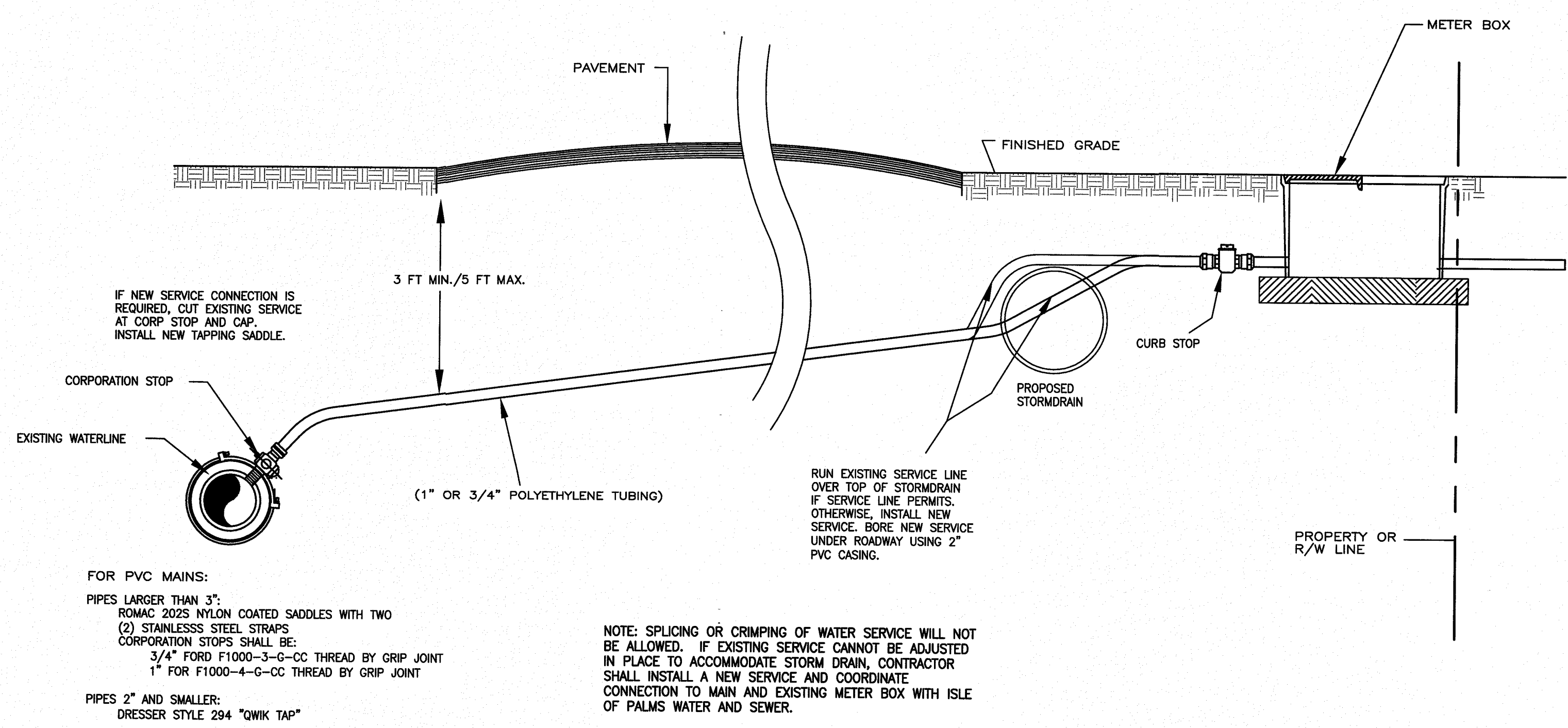
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FILE: 920-C400
SCALE: NONE
DATE: 6-28-13



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EMAIL: CSE@CIVILSTERNV.COM

CSE JOB NUMBER
920-PH2
SHEET NUMBER
CD-2

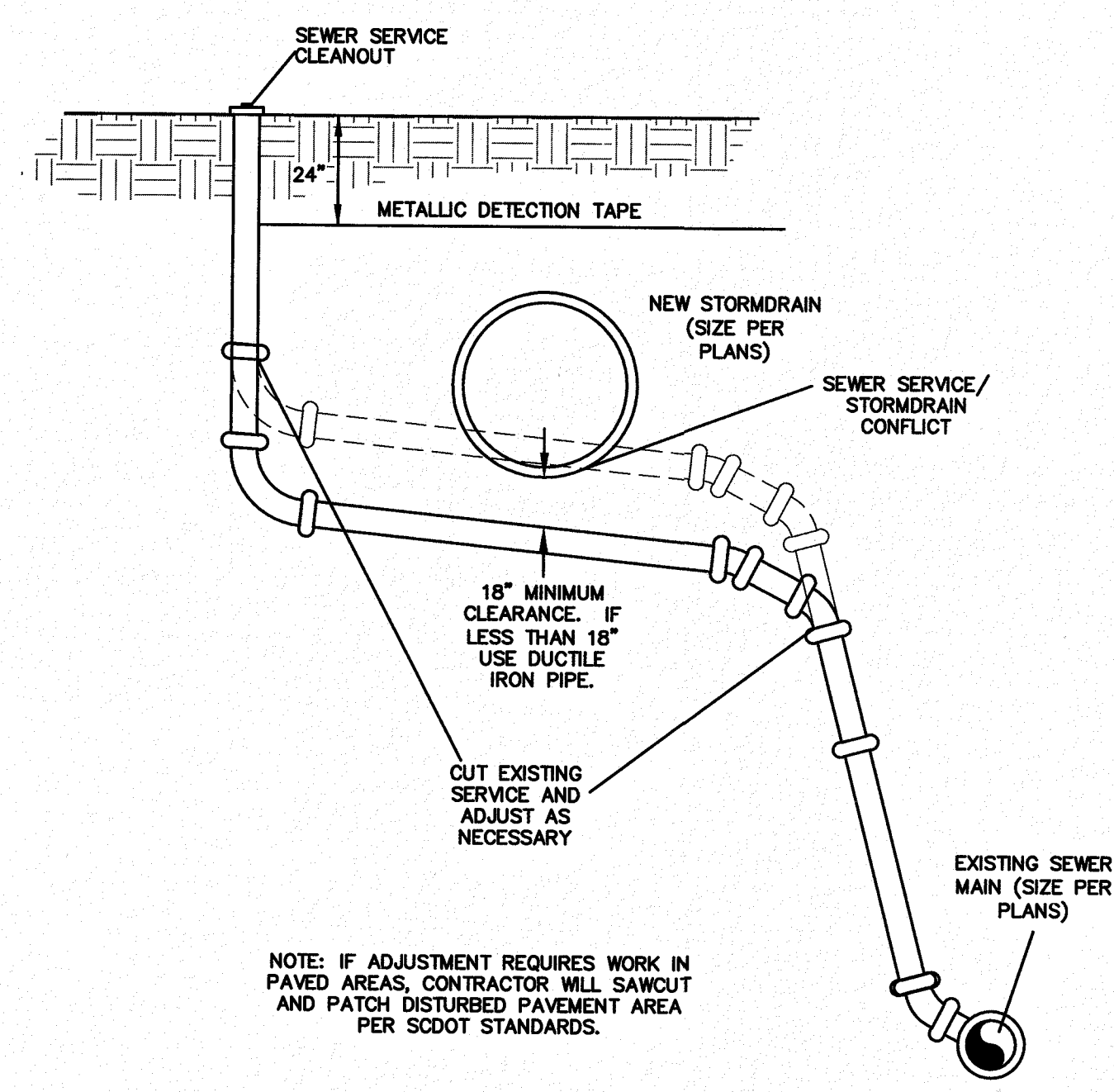
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FOR PVC MAINS:
 PIPES LARGER THAN 3\"/>

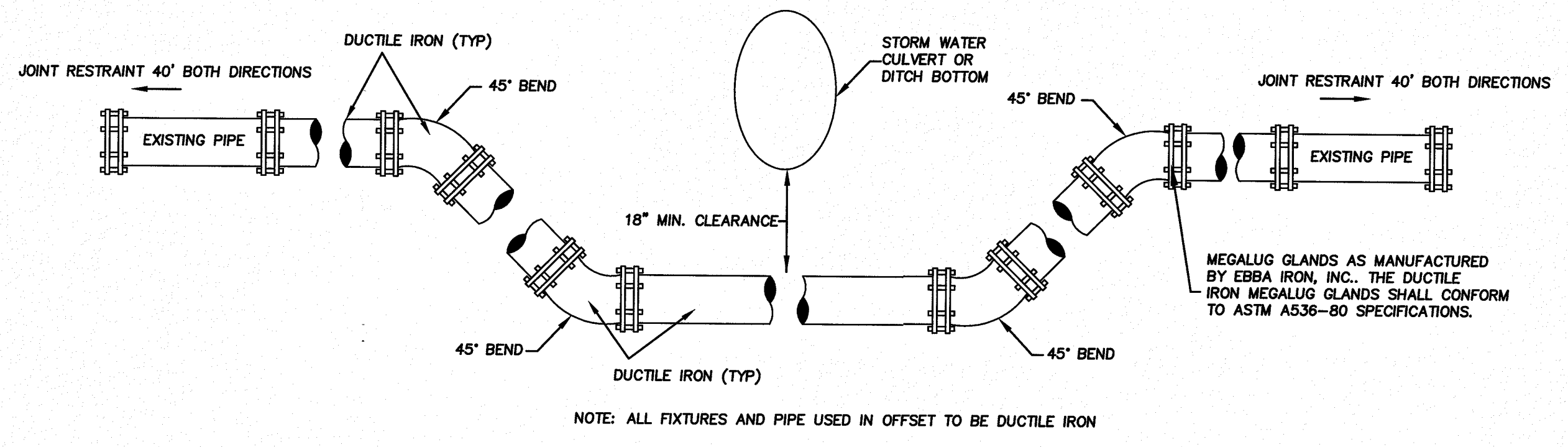
NOTE: SPLICING OR CRIMPING OF WATER SERVICE WILL NOT BE ALLOWED. IF EXISTING SERVICE CANNOT BE ADJUSTED IN PLACE TO ACCOMMODATE STORM DRAIN, CONTRACTOR SHALL INSTALL A NEW SERVICE AND COORDINATE CONNECTION TO MAIN AND EXISTING METER BOX WITH ISLE OF PALMS WATER AND SEWER.

STORMDRAIN & WATER SERVICE CONFLICT DETAIL
 N.T.S.



NOTE: IF ADJUSTMENT REQUIRES WORK IN PAVED AREAS, CONTRACTOR WILL SAWCUT AND PATCH DISTURBED PAVEMENT AREA PER SCDOT STANDARDS.

SEWER SERVICE & STORMDRAIN CONFLICT DETAIL
 N.T.S.



NOTE: ALL FIXTURES AND PIPE USED IN OFFSET TO BE DUCTILE IRON

VERTICAL OFFSET DETAIL
 N.T.S.

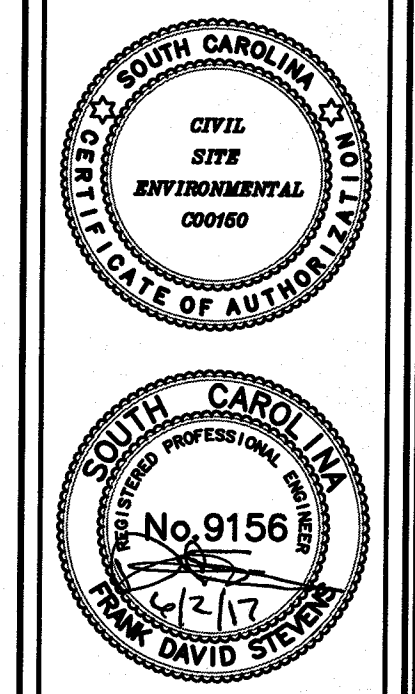
REVISIONS:
 2) REVISED 9/31/17 CONSTRUCTION BID SET

PROJECT:
 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS

TITLE:
CONSTRUCTION DETAILS
WATER & SEWER DETAILS

FOR:
 CITY OF ISLE OF PALMS

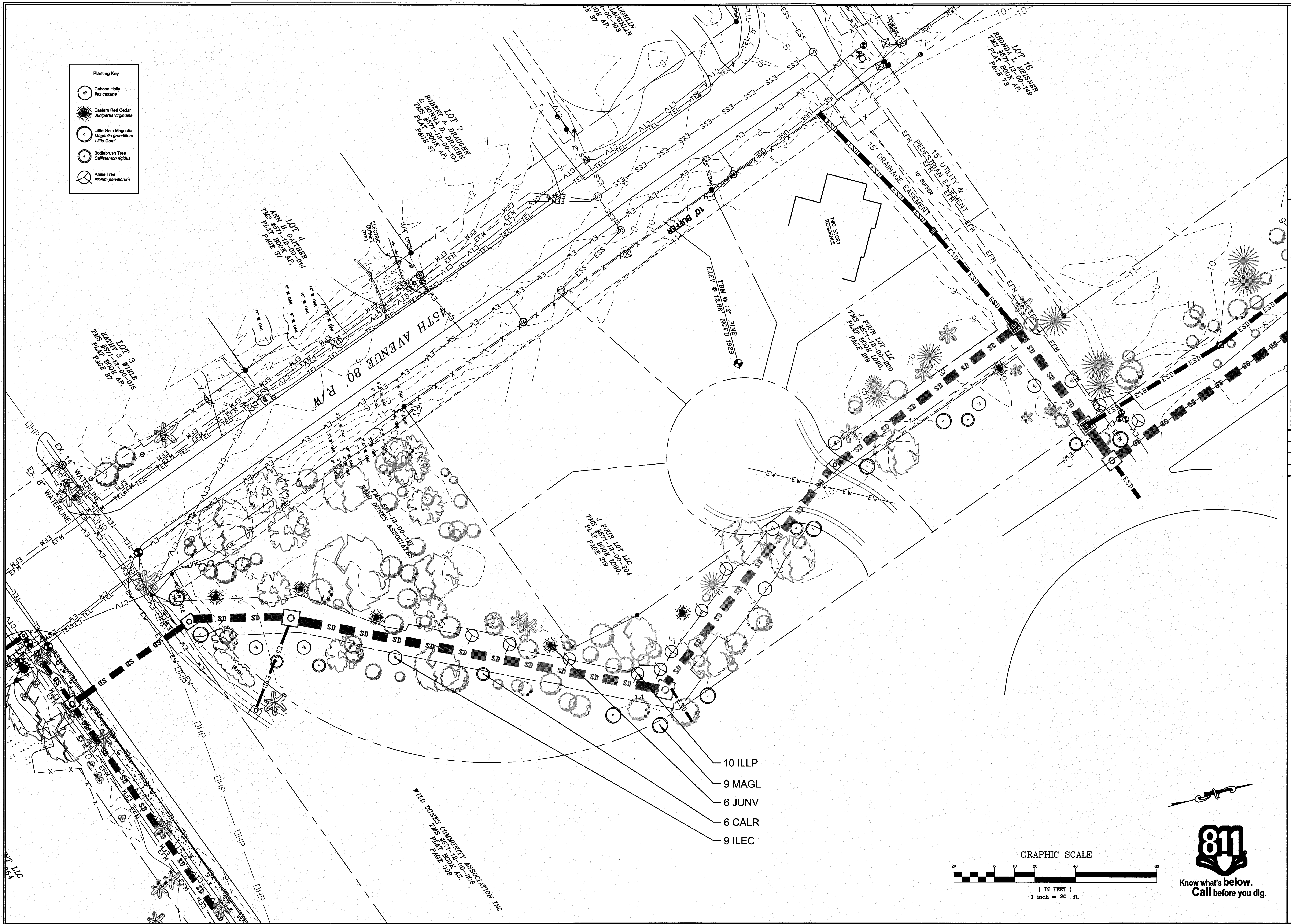
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 DATE: 6-28-13



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CSE JOB NUMBER
920-PH2
 SHEET NUMBER
CD-3

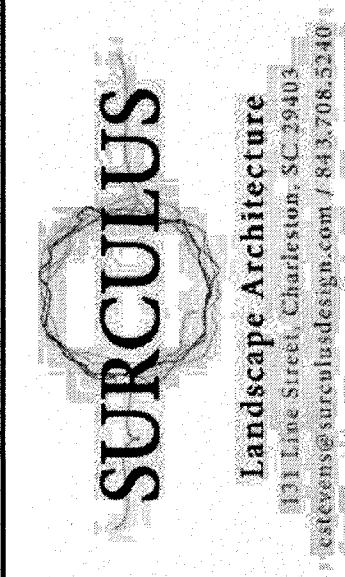
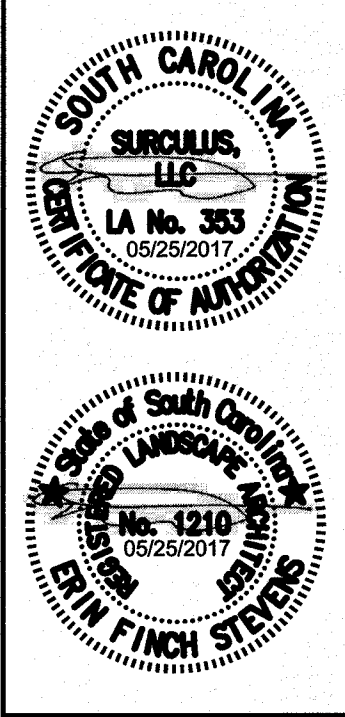
Planting Key	
	Dahoon Holly <i>Ilex cassine</i>
	Eastern Red Cedar <i>Juniperus virginiana</i>
	Little Gem Magnolia <i>Magnolia grandiflora</i> Tulsa Gem
	Bottlebrush Tree <i>Callistemon rigidus</i>
	Arisee Tree <i>Wikstrum parviflorum</i>



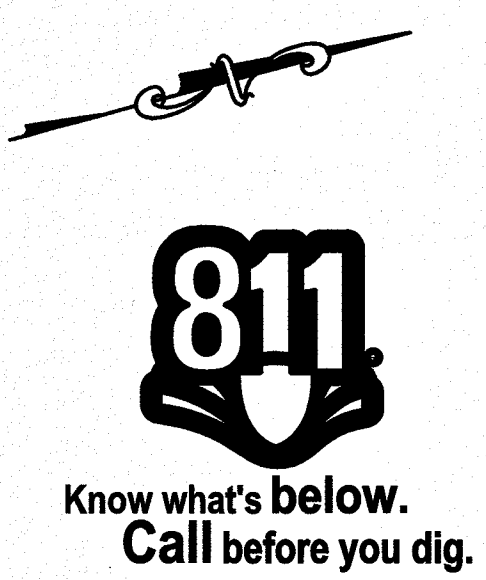
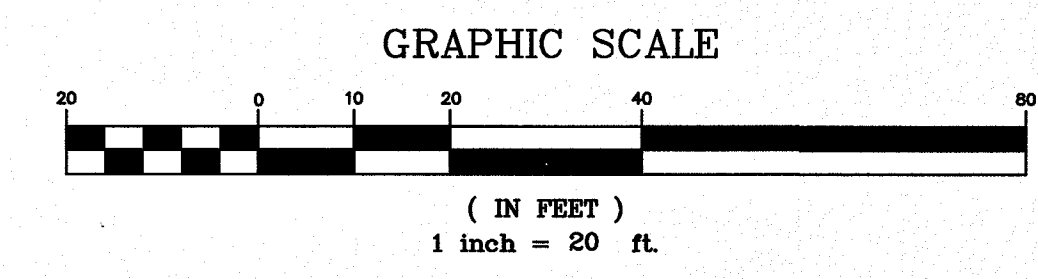
REVISIONS:

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
 TITLE: PLANTING PLAN
 FOR: CITY OF ISLE OF PALMS

DRAWN BY: EFS
 FILE: 920-PH2-C200
 SCALE: 1" = 20"
 DATE: 05-25-17

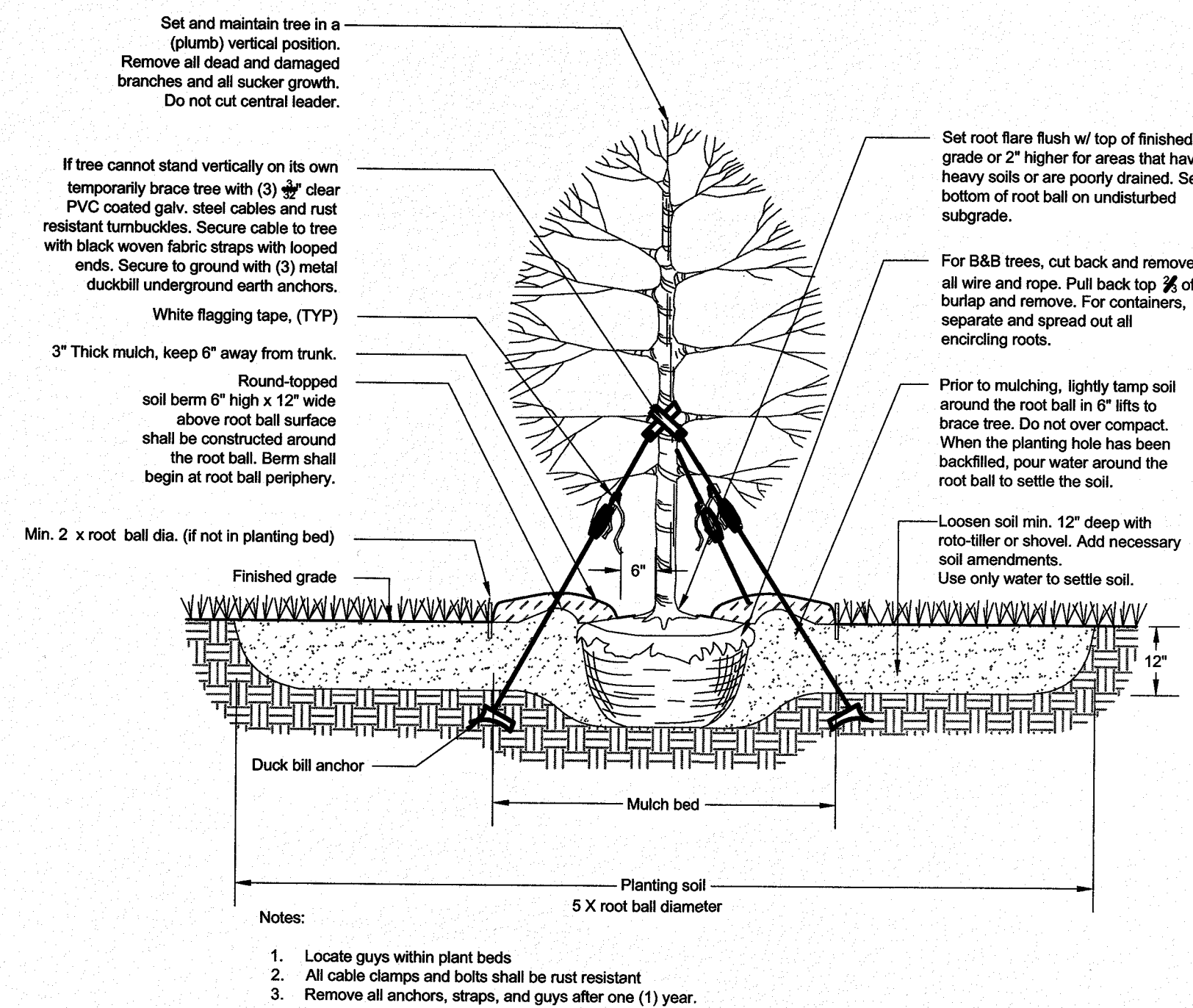


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920-PH2
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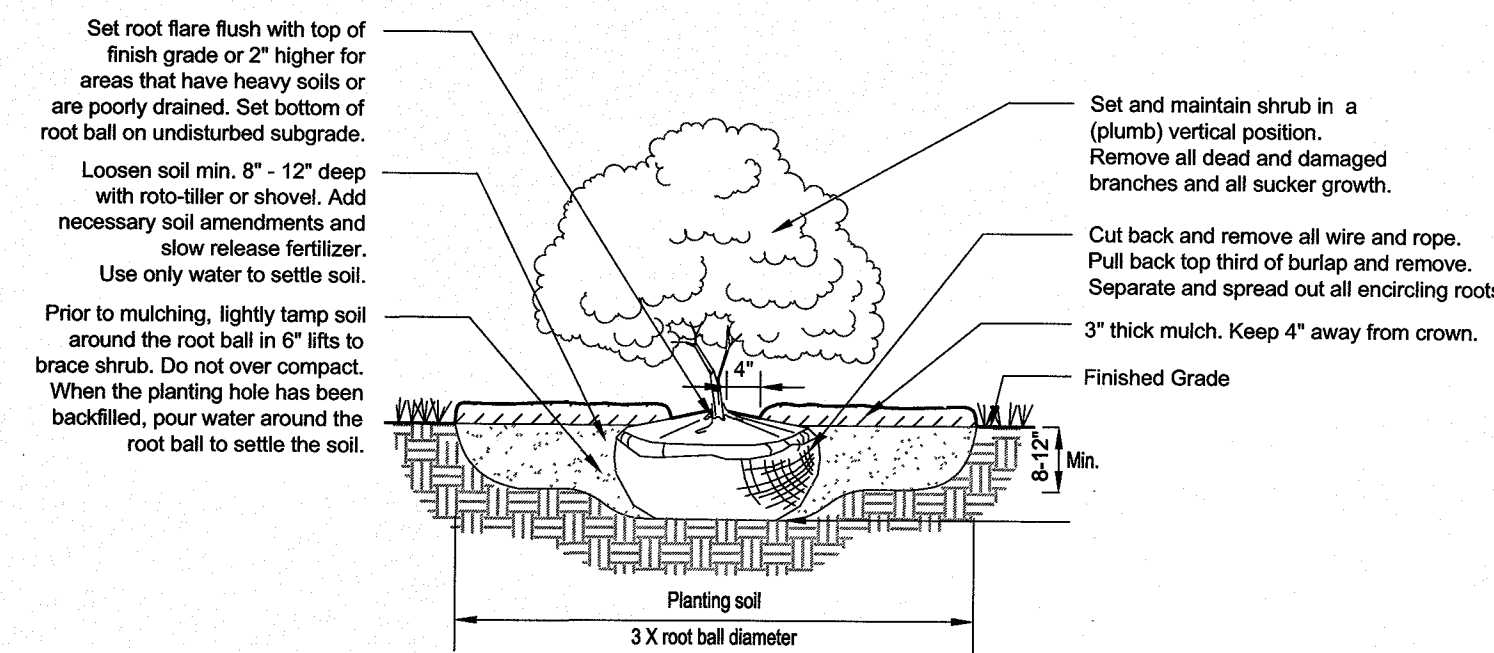


- 10 ILLP
- 9 MAGL
- 6 JUNV
- 6 CALR
- 9 ILEC

WILD DUNES COMMUNITY ASSOCIATION INC
 1515 12TH PINE BLVD #101
 ISLE OF PALMS, SC 29928



1 TREE PLANTING DETAIL
NTS



2 SHRUB PLANTING DETAIL
NTS

GENERAL NOTES:

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BOTH HORIZONTALLY & VERTICALLY OF ALL EXISTING & PROPOSED UTILITIES BEFORE COMMENCING WORK, AND HE SHALL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES THAT ARE DISTURBED AS A RESULT OF THE WORK.
2. ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION INSIDE OR OUTSIDE OF THE LIMIT OF WORK SHALL BE REPAIRED, GRADED AND GRASSED.
3. ALL TREES AND SHRUBS SHALL RECEIVE PINESTRAW MULCH AT A MINIMUM DEPTH OF 3".
4. PROVIDE EROSION CONTROL WHERE SLOPES ARE GREATER THAN 3:1 AND WHERE EROSION KEEPS RE-OCCURRING.
5. ALL TREE, SHRUB, AND GROUND COVER MATERIAL SHALL BE PLANTED WITHIN 24 HOURS OF DELIVERY.
6. ANY PLANTS LOCATED IN DIRECT SUN SHALL BE NURSERY SUN GROWN.
7. ALL PLANT MATERIAL TO MEET OR EXCEED AAN STANDARDS.
8. ALL TREES TO BE PLANTED FOLLOWING ACCEPTED HORTICULTURAL PRACTICES. PLANTING HOLES TO BE BACKFILLED WITH 1/3 COMPOST. DO NOT APPLY FERTILIZER AT PLANTING.
9. ALL SHRUBS TO BE SURFACE FERTILIZED WITH OSMOCOTE SLOW-RELEASE FERTILIZER ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
10. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY LICENSES AND INSURANCE TO COMPLETE WORK.
11. FINAL CLEANUP OF SITE AS A RESULT OF LANDSCAPE OPERATIONS AND ALL FINE GRADING SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
12. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE.
13. ALL PLANT MATERIAL, WATERING BAGS, AND WORKMANSHIP TO BE GUARANTEED FOR ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER OR OWNER'S REPRESENTATIVE.
14. CONTRACTOR TO MAINTAIN ALL PLANTBEDS AND PLANT LIFE UNTIL FINAL ACCEPTANCE OF LANDSCAPE. WARRANTY PERIOD OF ONE YEAR FOR PLANT MATERIALS BEGINS WHEN COMPLETION OF ALL PUNCH LIST ITEMS AND FINAL ACCEPTANCE OF LANDSCAPE HAVE BEEN APPROVED.
15. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
16. STAKING ONLY REQUIRED AS DEEMED NECESSARY BY THE LANDSCAPE CONTRACTOR.
17. THERE SHALL BE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS WITHOUT WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
18. ALL CONSTRUCTION SHALL CONFORM TO COUNTY, STATE, AND FEDERAL REQUIREMENTS.

PLANT SCHEDULE					
ABBRV.	QUAN.	BOTANICAL/COMMON	HEIGHT	CAL./CONT.	NOTES
Evergreen Trees:					
ILEC	9	Ilex cassine / Dahoon Holly	6'-8'	B&B	Full natural Form; Strong central leader; Foliage to extend to ground
JUNV	6	Juniperus virginiana / Eastern Red Cedar	8'-10'	B&B	Full natural Form; Strong central leader; Foliage to extend to ground
MAGL	9	Magnolia grandiflora 'Little Gem' / Little Gem Magnolia	8'-10'	B&B	Full natural Form; Strong central leader; White flowers
Understory Trees / Large Shrubs:					
CALR	6	Callistemon rigidus / Bottlebrush Tree	5'-6'	30 gal.	Full natural Form; Containerized Material; Red flowers
ILLP	10	Illicium parviflorum / Anise	3'-4'	7 gal.	Full natural Form; Containerized Material

ABBREVIATION NOTE:

WHERE AN ABBREVIATION IS SHOWN, THE FOLLOWING NOTES APPLY:

ABBRV - BOTANICAL ABBREVIATION.

QUAN - QUANTITY OF PLANT MATERIAL REQUIRED FOR THE PROJECT. (NOTE: CONTRACTOR RESPONSIBLE TO VERIFY QUANTITIES INDICATED. PLAN SHALL TAKE PRECEDENCE OVER SCHEDULE.)

BOTANICAL/COMMON - PLANT MATERIAL TO BE INSTALLED.

CAL - CALIPER/DIAMETER OF TRUNK. (CALIPER SHALL TAKE PRECEDENCE OVER HEIGHT AND SPREAD.)

CONT - CONTAINER TYPE WHICH PLANT MATERIAL IS ENCASED UPON SITE DELIVERY. (HEIGHT AND CALIPER SHALL TAKE PRECEDENCE OVER CONTAINER.)

NOTES - SPECIFIC NOTES FURTHER SPECIFYING OR DESCRIBING PLANT MATERIAL.

QUANTITIES NOTES:

PLANT MATERIAL LIST WAS PREPARED FOR ESTIMATING PURPOSES ONLY. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. CONTRACTORS SHALL MAKE THEIR OWN QUANTITY TAKE-OFFS USING DRAWINGS TO DETERMINE QUANTITIES TO THEIR SATISFACTION, REPORTING PROMPTLY TO THE LANDSCAPE ARCHITECT ANY DISCREPANCIES WHICH MAY AFFECT BIDDING AND/OR INSTALLATION. NO EXTRA COMPENSATION SHALL BE ALLOWED FOR EXTRA QUANTITIES NECESSARY TO COMPLETE THE WORK.

TREEGATOR BAG NOTE:

FOR ALL TREES AND SHRUBS, CONTRACTOR SHALL PROVIDE TREEGATOR BAGS OR COMPARABLE WATERING SYSTEM AT THE QUANTITIES BELOW TO BE ADEQUATELY MAINTAINED FOR THE DURATION OF THE ONE YEAR ESTABLISHMENT PERIOD. ALL TREES SHALL BE WATERED ACCORDING TO THE FOLLOWING SCHEDULE:

FLOW RATE: ROUGHLY 2.5 GPH DEPENDING ON SOIL TYPE AND TEMP.
RECOMMENDED 10 GALLON CAPACITY PER CALIPER INCH.

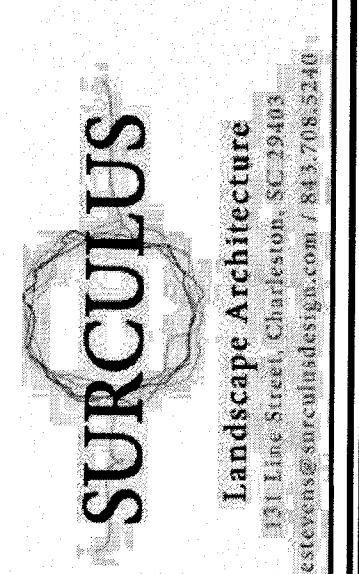
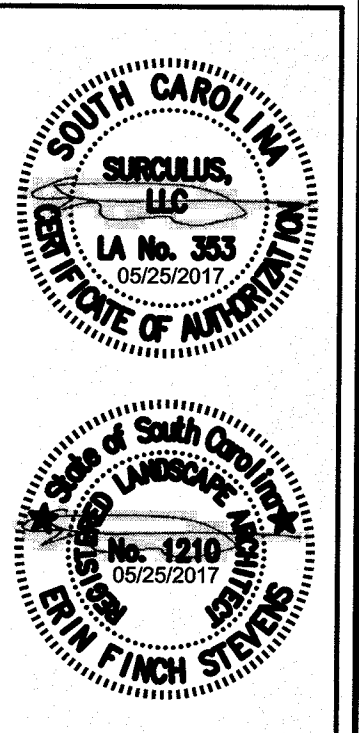
RECOMMENDED FILL RATE BY CALIPER INCHES FOR STANDARD 20 GALLON CAPACITY BAGS:

- 1-2 INCH: 1 FILL/WEEK
- 3-4 INCH: 2 FILLS/WEEK
- 4-5 INCH (DOUBLE BAG): 1 FILL / WEEK
- 5-8 INCH (DOUBLE BAG): 2 FILLS / WEEK

REVISIONS:

PROJECT: 45TH TO 52ND AVE DRAINAGE IMPROVEMENTS
TITLE: PLANT SCHEDULE, NOTES, AND DETAILS
FOR: CITY OF ISLE OF PALMS

DRAWN BY: EFS
FILE: 920-PH2-C200
SCALE: N/A
DATE: 05-25-17



CSE JOB NUMBER
920-PH2
SHEET NUMBER
L102