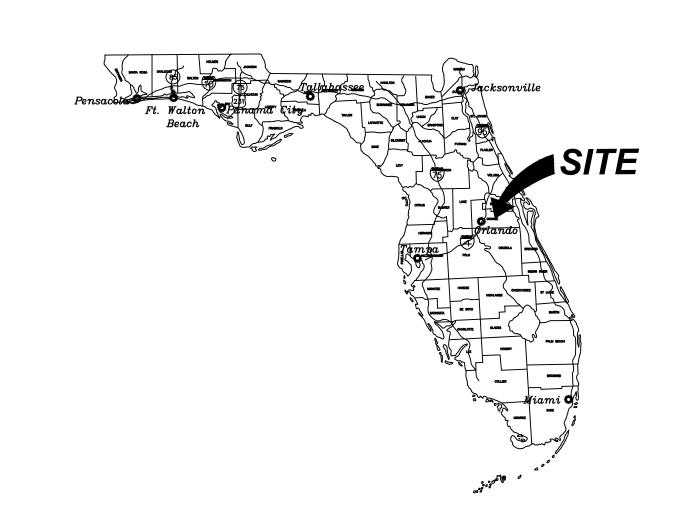
## SITE IMPROVEMENT PLANS 5050 S CONWAY ROAD MEDICAL PLAZA BELLE ISLE, FLORIDA 32812



SEPTEMBER 2020

PARCEL ID: 17-23-30-0000-00-008

### PROJECT TEAM:

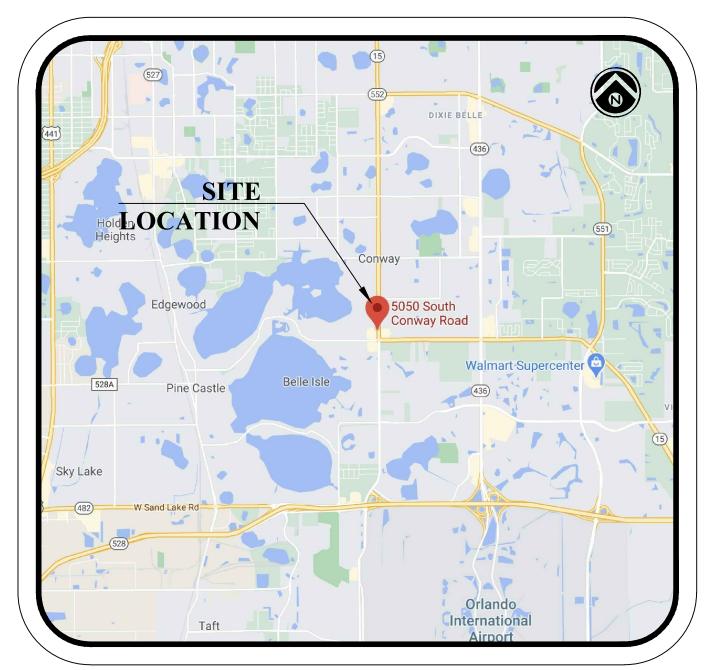
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CIVIL ENGINEER: LAURENCE POLINER RCE CONSULTANTS, LLC 617 ARVERN DRIVE ALTAMONTE SPRINGS, FL 32701 407-452-8633

SURVEYOR: STEVEN E. BLANKENSHIP, P.S.M. ATLANTIC SURVEYING 308 S. DILLARD ST

### **UTILITY SERVICE PROVIDERS**

POTABLE WATER WASTEWATER POWER CITY OF DEBARY CITY OF DEBARY DUKE ENERGY



 $\frac{\text{VICINITY MAP}}{\text{N.T.S.}}$ 

### LEGAL DESCRIPTION:

FROM THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 17, TOWNSHIP 23 SOUTH, RANGE 30 EAST, ORANGE COUNTY, FLORIDA, RUN SOUTH 00 DEGREES 06 MINUTES 21 SECONDS WEST, ALONG THE EAST LINE OF SAID NORTHWEST 1/4 OF THE SOUTHEAST 1/4, A DISTANCE OF 1338.57 FEET TO THE SOUTHEAST CORNER OF THE SAID NORTHWEST 1/4 OF THE SOUTHEAST 1/4; THENCE SOUTH 89 DEGREES 50 MINUTES 25 SECONDS WEST, ALONG THE SOUTH LINE OF THE SAID NORTHWEST 1/4 OF THE SOUTHEAST 1/4, A DISTANCE OF 53.0 FEET; THENCE RUN SOUTH 00 DEGREES 06 MINUTES 21 SECONDS WEST, A DISTANCE OF 156.0 FEET TO THE POINT OF BEGINNING; FROM SAID POINT OF BEGINNING, CONTINUE SOUTH 00 DEGREES 06 MINUTES 21 SECONDS WEST, A DISTANCE OF 120.0 FEET; THENCE SOUTH 89 DEGREES 50 MINUTES 19 SECONDS EAST, A DISTANCE OF 120.0 FEET; THENCE NORTH 00 DEGREES 06 MINUTES 21 SECONDS EAST, A DISTANCE OF 130.0 FEET; THENCE NORTH 89 DEGREES 50 MINUTES 25 SECONDS EAST, A DISTANCE OF 130.0 FEET TO THE POINT OF BEGINNING.

CONTAINING 15,600 SQUARE FEET (0.36 ACRES), MORE OR LESS.

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RCE
**Consultants
Engineering Real Solutions

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	DRAWN: LMP
050 S CONWAY RD	<u>DESIGNED:</u> DM
	CHECKED LMP
COVER SHEET	PROJECT #

Laurence Poliner #56974 RCE CONSULTANTS, LLC Certificate of Authorization 29307

### I. GENERAL NOTES

- A. THESE GENERAL NOTES APPLY TO ALL WORK IN THIS SET OF DRAWINGS.
- B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL PERMIT CONDITIONS.
- C. CONTRACTOR IS ADVISED THAT THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THAT ALL OPERATORS FILE A NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES GENERAL PERMIT PRIOR TO BEGINNING WORK. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN THE SAME. IF NOT PROVIDED BY THE ENGINEER AND TO PROVIDE ALL REQUIRED MONITORING REPORTS. A COPY SHALL BE SENT TO THE ENGINEER OF RECORD, ARCHITECT OF RECORD AND THE OWNER.
- D. FLORIDA LAW (F.S. 553.851) PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF PROPOSED EXCAVATION." THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATION EXCLUDING HOLIDAYS, SATURDAYS OR SUNDAYS.
- E. CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS, INCLUDING BUT NOT LIMITED TO, WATER, SANITARY SEWER, POWER, NATURAL GAS, TELEPHONE AND
- F. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
- G. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE APPROPRIATE UTILITY COMPANY AND / OR THE APPROPRIATE POWER CORPORATION ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDER-GROUND POWER LINES.
- H. CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE
- I. ALL INSPECTIONS WILL BE MADE BY THE RESPECTIVE GOVERNING AGENCY. THE ENGINEER OF RECORD WILL PROVIDE CONSTRUCTION OBSERVATION SERVICE.
- J. ALL RECOMMENDATIONS AND REQUIREMENTS OF THE INSPECTION PERSONNEL OTHER THAN THE OWNER'S SHALL BE REPORTED TO THE ENGINEER PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK WHICH IS NOT AUTHORIZED BY THE
- K. ALL WORK SHALL BE OPEN AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE COUNTY, OWNER, INVOLVED UTILITY COMPANIES, PROJECT ENGINEER, AND REGULATORY AGENCIES. L. ANY DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND THE OWNER IN WRITING. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED IF THE CONTRACTOR FAILS TO
- PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS FOR REVIEW BY THE ENGINEER AND THE OWNER. M. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND THE
- FIELD CONDITIONS PRIOR TO CONSTRUCTION IN THE AREA OF CONFLICT. N. NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL
- O. WORK SHALL BE PERFORMED IN ACCORDANCE WITH BOTH THE ORANGE COUNTY STANDARDS & THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AND FDOT ROADWAY TRAFFIC DESIGN STANDARDS, LATEST EDITION. ALL FDOT INDEXES USED ARE REFERENCED HEREIN. CONTRACTOR IS RESPONSIBLE
- FOR OBTAINING COMPLETE COPIES OF THE LATEST EDITION OF FDOT STANDARD INDEXES AND SPECIFICATIONS. P. CONTRACTOR SHALL PROTECT ADJACENT WATER BODIES, WETLANDS AND PROPERTIES FROM DAMAGE BY SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.
- Q. CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN ON THE PLAN OR DESIGNATED IN THE FIELD. R. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING PROPER TRAFFIC MAINTENANCE AND CONTROLS IN ACCORDANCE WITH
- REGULATORY STANDARDS. WHERE A TRAFFIC MAINTENANCE PLAN IS REQUIRED, THE CONTRACTOR SHALL PREPARE AND SUBMIT THE PLAN FOR APPROVAL TO ALL APPLICABLE REGULATORY AGENCIES.
- S. CONTRACTOR SHALL VERIFY THE ACCURACY OF THE BUILDING GEOMETRY SHOWN IN THE FINAL ARCHITECTURAL DRAWINGS PRIOR TO STAKE-OUT, AND SHALL NOTIFY THE OWNER AND ENGINEER IMMEDIATELY OF ANY DIFFERENCES. T. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY TESTING TO ASSURE THAT THE PROPER COMPACTION HAS BEEN ACHIEVED ON THE SUBGRADE, BASE MATERIAL, PIPE BASE MATERIAL AND ALL OTHER PERTINENT AREAS THAT HAVE BEEN COMPLETED. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH TESTING AND RETESTING THE AREAS AND SHALL
- PROVIDE THE OWNER AND THE ENGINEER COPIES OF ALL TEST RESULTS. ALL REPORTS ARE TO BE SIGNED AND SEALED BY A REGISTERED GEOTECHNICAL ENGINEER IN THE STATE OF FLORIDA. U. SSOCOF- CHAPTER 556, FLORIDA STATUTES, REQUIRES EXCAVATORS TO NOTIFY SUNSHINE STATE ON E CALL OF FLORIDA (SSOCOF) BEFORE BEGINNING ANY EXCAVATION IN THE STATE OF FLORIDA UNLESS A SPECIFIC EXEMPTION LISTED IN F.S. 556.108 APPLIES. AN EXCAVATOR MUST NOTIFY SSOCOF TWO FULL BUSINESS DAYS BEFORE EXCAVATING. EXCAVATORS MAY CALL 1-800 432-7770 DURING
- BUSINESS HOURS OR USE THE INTERNET TO PROVIDE NOTIFICATION INFORMATION. V. TRENCH SAFETY- CONTRACTOR SHALL COMPLY WITH OSHA TRENCH SAFETY STANDARDS 29 C.F.R., S. 926.650, SUBPART P, AND ALL SUBSEQUS=ESNT REVISIONS OR UPDATES ADOPTED BY THE DEPARTMENT OF LABOR AND EMPLOYMENT SECURITY AND WITH SECTION 553.62, FLORIDA

### II. PRE-CONSTRUCTION RESPONSIBILITIES

- A. UPON RECEIPT OF NOTICE OF AWARD, THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, ALL AFFECTED UTILITY OWNERS, THE OWNER, THE ENGINEER AND ITSELF.
- B. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A CONSTRUCTION SCHEDULE DEPICTING EACH PHASE
- C. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, ELEVATION, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
- D. EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
- E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH IT FAILS TO REQUEST LOCATIONS FROM THE UTILITY OWNER. THE CONTRACTOR IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE
- F. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS; THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- G. THE LOCATIONS OF EXISTING UTILITIES AND STORM DRAINAGE SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. ENGINEER ASSUMES NO RESPONSIBILITY FOR INACCURACY, PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAKE ARRANGEMENTS FOR THE FIELD LOCATIONS AND FOR ANY RELOCATION'S OF THE VARIOUS EXISTING UTILITIES WITH THE UTILITY OWNERS, WHICH SHALL BE DONE IN A TIMELY MANNER TO MINIMIZE IMPACT ON CONSTRUCTION SCHEDULE. ANY DELAY CAUSED BY THE CONTRACTOR BY THE RELOCATION OF UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED
- H. SUNSHINE STATE ONE CALL OF FLORIDA, INC.: CALL TWO FULL BUSINESS DAYS (BUT NOT MORE THAN FIVE) BEFORE TO FIND OUT WHERE BURIED FACILITIES (ELECTRICAL, GAS, TELEPHONE, CABLE, WATER) ARE LOCATED.

### III. PROJECT CLOSEOUT

- A. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER. UPON FINAL CLEAN UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE
- B. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER, THE COUNTY OR THE GOVERNING AGENCY, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY ITS WORK, EQUIPMENT, EMPLOYEES OR THOSE OF ITS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THIS END, THE CONTRACTOR SHALL DO ALL NECESSARY HIGHWAY OR DRIVEWAY, WALK AND LANDSCAPING WORK. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
- C. WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH
- BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION. D. THE CONTRACTOR SHALL MAINTAIN ACCURATE AND COMPLETE RÉCORDS OF WORK ITEMS COMPLETED.
- ALL REQUIRED TESTING RESULTS PROVIDED TO THE ENGINEER. F. ALL REQUIRED AS-BUILT INFORMATION PROVIDED TO THE ENGINEER.

### IV. REQUIRED AS-BUILT INFORMATION

C. STORM DRAINAGE:

- CONTRACTOR SHALL PROVIDE ENGINEER WITH AS-BUILT DRAWING DOCUMENTATION CERTIFIED BY A REGISTERED FLORIDA LAND SURVEYOR DEPICTING THE FOLLOWING INFORMATION AT A MINIMUM:
- A. UTILITY CROSSING SEPARATION INFORMATION FOR THAT PROVIDED ON THE PLANS VERIFYING:
- SIZE AND MATERIAL OF CROSSING PIPES 2. TOP ELEVATION OF BOTTOM PIPE
- 3. BOTTOM ELEVATION OF TOP PIPE 4. FINISH SURFACE ELEVATION OVER UTILITY CROSSING
- B. SANITARY SEWER:
  - 1. TOP ELEVATION OF EACH MANHOLE FRAME AND COVER.
  - INVERT OF EACH LINE ENTERING AND LEAVING EACH MANHOLE / STRUCTURE LENGTH OF EACH RUN OF MAIN BETWEEN MANHOLES (INVERT TO INVERT)
  - 4. ACTUAL GRADE OF PIPE BETWEEN MANHOLES.
  - 5. LOCATE ALL SERVICE WYES FROM DOWNSTREAM MANHOLE WITH DEPTH AT LOT LINE AND DISTANCE FROM THE MAIN LINE. 6. LOCATE WITH MEASUREMENTS FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS / ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINT TIES).
  - 1. TOP ELEVATION OF EACH MANHOLE FRAME AND COVER / GRATE AS WELL ALL OTHER STRUCTURES (HEADWALLS, CONTROL
  - 2. INVERT ELEVATION OF EACH LINE ENTERING AND LEAVING EACH STRUCTURE, INCLUDING UNDERDRAIN PIPES.
  - INVERTS OF ALL MITERED END SECTIONS. 4. ACTUAL GRADE OF PIPE BETWEEN THE STRUCTURES. (INVERT TO INVERT)
  - 5. INVERT ELEVATION AND TWO HORIZONTAL TIES FROM PERMANENT VISIBLE OBJECTS TO ALL STORM STUB-OUTS. 6. CONTRACTOR SHALL PROVIDE ACCURATE AS-BUILT DIMENSIONS AND ELEVATIONS OF THE STORMWATER MANAGEMENT AREAS IMMEDIATELY AFTER FINAL GRADING AND PRIOR TO SEEDING OR SODDING OF THE SLOPES. AT A MINIMUM, THE CONTRACTOR SHALL PROVIDE CROSS SECTIONS ON ALL SIDES OF THE WATER MANAGEMENT AREAS AT 100-FOOT INTERVALS. THE CROSS SECTIONS SHALL BE PROVIDED FROM TOP OF BANK TO THE SLOPE BREAK BELOW CONTROL ELEVATION. THE

ENGINEER'S APPROVAL IS REQUIRED PRIOR TO GRASSING OF THE BANKS. IF ANY MODIFICATIONS ARE SPECIFIED,

- ADDITIONAL AS-BUILTS MAY BE REQUIRED. D. PRESSURE SYSTEMS (WATER, RECLAIMED, AND FORCE MAINS):
  - ACTUAL LENGTHS BETWEEN BRANCHES AND VALVES ALONG THE MAIN RUN. 2. LOCATE WITH MEASUREMENTS FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS / ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINT TIES)
- 3. AS-BUILT INFORMATION ON THE FORCE MAIN, RECLAIMED AND WATER SYSTEMS SHALL INCLUDE LOCATIONS OF ALL FIRE HYDRANTS, WATER SERVICES AND TOP OF PIPE ELEVATIONS AT ALL FITTINGS AND AT A MINIMUM OF 100 FEET SPACING ALONG THE LENGTH OF MAINS.
- 4. ALL "AS-BUILT" INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR AND LEGIBLE TO SATISFY THE ENGINEER THAT THE INFORMATION PROVIDES A TRUE REPRESENTATION OF THE IMPROVEMENTS
- 5. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD COMPLETE SETS OF "AS-BUILT" CONSTRUCTION DRAWINGS AS REQUIRED FOR SUBMITTAL AND APPROVAL. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONED LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS AND SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR.

### V. SHOP DRAWINGS AND SUBMITTALS

- A. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, 7 SETS OF SHOP DRAWINGS AND CATALOGUE LITERATURE SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD FOR SANITARY SEWER, POTABLE WATER AND STORM SEWER FACILITIES.
- B. INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

- C. PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL REVIEW AND APPROVE THE DRAWINGS. AND SHALL NOTE IN RED ANY DEVIATIONS FROM THE ENGINEER'S PLANS OR SPECIFICATIONS. SIX (6) SETS OF APPROVED SHOP DRAWINGS SHALL BE RETURNED TO THE CONTRACTOR FOR DISSEMINATION TO OWNER, UTILITY, LOCAL JURISDICTIONAL AGENCIES,
- D. THE CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF THE PROJECT AND ADVISE THE ENGINEER OF ANY DISCREPANCIES.

A. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE STRICTLY OBSERVED.

- A. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE STATE OF FLORIDA TRENCH SAFETY ACT.
- B. WHERE EXCAVATIONS TO A DEPTH IN EXCESS OF FIVE FEET (5 FEET) ARE REQUIRED, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION IN THE BID: 1. A REFERENCE TO THE TRENCH SAFETY STANDARDS THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF
  - WRITTEN ASSURANCES BY THE CONTRACTOR PERFORMING THE TRENCH EXCAVATION THAT SUCH CONTRACTOR WILL COMPLY WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
- 3. A SEPARATE ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY STANDARDS . WHEN A BID IS NOT SUBMITTED, THE CONTRACTOR SHALL SUBMIT THE INFORMATION LISTED IN ITEM 'B' TO THE ENGINEER PRIOR TO

- A. ALL ELEVATIONS ON THE PLANS OR REFERENCED IN THE SPECIFICATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF
- B. THE CONTRACTOR SHALL PROTECT ALL PERMANENT REFERENCE MONUMENTS AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO SURVEY MARKERS DURING CONSTRUCTION. ANY SURVEY MARKERS DAMAGED DURING CONSTRUCTION WILL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- C. THE PROPOSED PLAT WAS PROVIDED BY A FLORIDA REGISTERED SURVEYOR. ). BENCHMARK LOCATION AND ELEVATION ARE AS REPRESENTED BY SURVEYOR AT THE TIME OF SURVEY. CONTRACTOR SHALL VERIFY

### IX. TEMPORARY FACILITIES

- A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY TO ITS EMPLOYEES AND SUBCONTRACTORS FOR THEIR USE DURING CONSTRUCTION.
- B. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MUTCD AND FDOT. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
- NO TRENCHES OR HOLES NEAR WALKWAYS OR IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESS PERMISSION OF THE COUNTY OR RESPECTIVE GOVERNING AGENCY.

### X. INTERRUPTION OF EXISTING UTILITIES

ITS CORRECTNESS AT TIME OF CONSTRUCTION.

A. ANY CONSTRUCTION WORK THAT REQUIRES INTERRUPTION OF SERVICE TO ANY CUSTOMER SHALL BE DONE SO WITH A MINIMUM OF SEVENTY-TWO (72) HOUR NOTICE TO, AND WRITTEN APPROVAL BY, THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL ARRANGE A MEETING WITH THE LOCAL JURISDICTIONAL AGENCIES AND OTHER GOVERNING AGENCIES, AND OTHER AFFECTED UTILITIES PRIOR TO SCHEDULING THE SHUT DOWN TO ASSESS THE SCOPE OF WORK. ALL SYSTEM SHUT DOWNS SHALL BE SCHEDULED BY THE CONTRACTOR AT SUCH TIME THAT SYSTEM DEMAND IS LOW. THIS GENERALLY REQUIRES NIGHT TIME WORK BY THE CONTRACTOR AND REQUIRES FULL TIME INSPECTION BY A REPRESENTATIVE OF THE UTILITY. ALL COST FOR OVERTIME WORK BY THE REPRESENTATIVE OF THE UTILITY SHALL BE BORNE BY THE CONTRACTOR. EACH CUSTOMER AFFECTED BY THE SHUT DOWN SHALL BE PROVIDED, MINIMUM, FORTY-EIGHT (48) HOURS WRITTEN NOTIFICATION BY THE CONTRACTOR.

### XI. EROSION CONTROL PLAN NOTES

FOR EROSION CONTROL NOTES PLEASE REFERENCE SHEET 3

- A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXISTING SITE CONDITIONS OF SOIL DURING THE BID PREPARATION TO DETERMINE IF ANY OFF-SITE MATERIALS WILL NEED TO BE IMPORTED TO ACHIEVE THE GRADES SPECIFIED ON THE PLANS.
- B. PRIOR TO BID PREPARATION, THE CONTRACTOR MUST BECOME FAMILIAR WITH THE OVERALL SITE, THE LIMIT AND DEPTH OF EXPECTED ORGANIC MATERIAL, ADEQUACY OF EXISTING MATERIALS AS FILL, DEWATERING REQUIREMENTS, CLEAN FILL REQUIRED FROM OFF SITE AND MATERIALS TO BE DISPOSED OF OFF SITE. ANY DELAY, INCONVENIENCE OR EXPENSE CAUSED TO THE CONTRACTOR DUE TO INADEQUATE INVESTIGATION OF EXISTING CONDITIONS SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. THE MATERIALS ANTICIPATED TO BE ENCOUNTERED DURING CONSTRUCTION MAY REQUIRE DRYING PRIOR TO USE AS BACKFILL AND THE CONTRACTOR MAY HAVE TO IMPORT MATERIALS, AT NO EXTRA COST, FROM OFF SITE TO MEET THE REQUIREMENTS FOR COMPACTION AND PROPER FILL
- CLEAR AREAS INDICATED SHALL BE COMPLETELY CLEAR OF ALL TIMBER, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER DEBRIS AND OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE GROUND. THIS DEBRIS SHALL BE DISPOSED OF IN A LEGAL MANNER. BURNING OF THIS MATERIAL IS NOT PERMITTED UNLESS THE CONTRACTOR OBTAINS SPECIFIC PERMITS ALLOWING SUCH ACTIVITY
- D.  $\,$  ALL EXCESS FILL FROM THE SITE SHALL BE STOCKPILED BY THE CONTRACTOR, IN A LOCATION DETERMINED BY THE OWNER OR THE OWNER'S REPRESENTATIVE AND THE ENGINEER.

### ALL ORGANIC AND OTHER UNSUITABLE MATERIAL IN BUILDING OR PAVEMENT AREAS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS AND SOUND CONSTRUCTION PRACTICES.

- A. ALL PAVEMENT MARKINGS WITHIN FDOT, OR COUNTY RIGHT-OF-WAY SHALL BE THERMOPLASTIC. IL – ALL STOP BARS SHALL BE THERMOPLASTIC. ALL OTHER STRIPING SHALL BE PAINTED UNLESS OTHERWISE SPECIFIED C. ALL PAINT USED FOR PAVEMENT MARKINGS SHALL CONFORM TO SECTION 971-13 OF THE FDOT STANDARD SPECIFICATIONS FOR
- SECTION 710 OF THE FDOT SSRBC AND THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). PAINT MAY ONLY BE USED FOR PRIVATE DEVELOPMENT IMPROVEMENTS OR AS TEMPORARY MARKINGS. D. THERMOPLASTIC TRAFFIC MARKINGS SHALL CONFORM TO SECTION 711-2 OF THE FDOT SSRBC. ONLY ALKYD BASED MATERIALS SHALL BE USED. THERMOPLASTIC TRAFFIC MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH SECTION 711 OF THE FDOT SSRBC

ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION (SSRBC), ALL PAINTED MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH

- ALL REFLECTIVE PAVEMENT MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 706 OF THE FDOT SSRBC. . ALL TRAFFIC SIGNS SHALL BE CONSTRUCTED OF HIGHLY REFLECTIVE MATERIAL AND BE "STANDARD" SIZE AS ESTABLISHED IN THE
- G. STOP BARS TO BE A MINIMUM OF 4 FEET CLEAR BEHIND CROSSWALKS. H. HANDICAP PARKING SPACES SHALL BE DESIGNATED BY APPROPRIATE PAVEMENT MARKINGS AND SIGNS.

### XIV. PAVING, GRADING AND DRAINAGE NOTES

XIII. SIGNING AND PAVEMENT MARKING NOTES

- A. CONTRACTOR ACCEPTS SITE AS IS. ANY REPAIRS TO EXISTING SITE ELEMENTS INCLUDING PAVEMENT, SIDEWALKS, CURBING,
- DRAINAGE, SANITARY SEWER, WATER, SIGNAGE AND STRIPING SHALL BE INCLUDED IN THE BID PRICE. . ALL CURB RADII AND DIMENSIONING ARE TO EDGE OF PAVEMENT.
- C. PRIOR TO BACKFILLING THE DRAINAGE SYSTEM, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND LOCAL JURISDICTIONAL AGENCIES FOR INSPECTION. D. ALL EXISTING AND PROPOSED UTILITIES SHALL BE ADJUSTED TO NEW FINISH GRADES AND PROPERLY SET TO PAVEMENT CROSS
- SLOPE AS REQUIRED ALL UTILITIES SHALL BE COMPLETED OR SLEEVING PROVIDED BEFORE ANY PAVEMENT CONSTRUCTION BEGINS.
- GRADING FROM PROPOSED TO EXISTING CONDITIONS SHALL NOT BE STEEPER THAN 3H:1V NOR FLATTER THAN 20H:1V. ALL SWALES AND SLOPES SHALL BE SODDED AFTER GRADING (SEE NOTE IV.C.6). G.  $\,$  IF THE PLANS INDICATE A STABILIZED SUBGRADE IS TO BE USED, IT SHALL HAVE A MINIMUM LBR VALUE OF 40 OR A FBV OF 75 AND SHALL BE IN ACCORDANCE WITH F.D.O.T. SPECIFICATIONS, SECTION 160. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT TO
- THE ENGINEER FOR APPROVAL, THE MATERIAL TO BE USED FOR THE SUBGRADE, AND THEIR PROPORTIONS AND LABORATORY LBR, BEFORE DELIVERY TO THE SITE. QUALITY CONTROL LBR'S MAY BE REQUIRED BY THE ENGINEER TO PROVE THE IN-PLACE CONDITION. H. MATERIAL HAVING A PLASTICITY INDEX AT MORE THAN 10 OR A LIQUID LIMIT GREATER THAN 40 SHALL NOT BE USED. ALL MATERIAL USED FOR STABILIZING THE ROADBED SHALL PASS A 3-1/2 INCH SIEVE.
- ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR SUBGRADE SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PLACING BASE COURSE MATERIAL J. IF THE PLANS INDICATE A LIMEROCK BASE, THE CONSTRUCTION AND THE MATERIAL FOR THE LIMEROCK BASE SHALL CONFORM TO
- THE REQUIREMENTS OF THE F.D.O.T. SPECIFICATIONS, SECTION 200. THE LIMEROCK BASE SHALL BE COMPACTED TO A 98% MAXIMUM DENSITY AT OPTIMUM MOISTURE, AASHTO T-180, METHOD "D". THE GEOTECHNICAL ENGINEER SHALL SPECIFY THE LOCATION AND NUMBER OF DENSITY TESTS REQUIRED. THE TESTS RESULTS SHALL BE ACCEPTED BY THE ENGINEER PRIOR TO THE APPLICATION OF THE PRIME AND TACK COATS
- K. IF THE PLANS INDICATE A SOIL CEMENT BASE, THE CONSTRUCTION AND THE MATERIAL FOR THE SOIL CEMENT BASE SHALL CONFORM TO THE REQUIREMENTS OF THE F.D.O.T. SPECIFICATIONS, SECTION 270. THE SOIL CEMENT BASE SHALL BE COMPACTED TO A 98% MAXIMUM DENSITY AT OPTIMUM MOISTURE, AASHTO T-134, METHOD "D". THE GEOTECHNICAL ENGINEER SHALL SPECIFY THE LOCATION AND NUMBER OF DENSITY TESTS REQUIRED. THE TESTS RESULTS SHALL BE ACCEPTED BY THE ENGINEER PRIOR TO THE APPLICATION OF THE PRIME AND TACK COATS.
- THE BASE SHALL BE TRANSPORTED TO THE POINT WHERE IT IS TO BE USED, OVER BASE PREVIOUSLY PLACED IF PRACTICABLE, AND DUMPED ON THE END OF THE PRECEDING SPREAD. HAULING OVER THE SUBGRADE AND DUMPING ON THE SUBGRADE WILL BE PERMITTED ONLY WHEN, IN THE ENGINEERS OPINION, THESE OPERATIONS WILL NOT BE DETRIMENTAL TO THE SUBGRADE. M. ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR BASE COURSE SHALL BE PROVIDED TO THE ENGINEER & THE ORANGE
- COUNTY'S ENGINEERING INSPECTOR PRIOR TO PLACING ASPHALT N.  $\,\,$  THE PRIME COAT BITUMINOUS MATERIAL SHALL BE APPLIED BY MEANS OF PRESSURE DISTRIBUTOR. THE AMOUNT OF BITUMINOUS MATERIAL APPLIED SHALL BE AT A RATE NOT LESS THAN 0.15 GALS / SY FOR LIMEROCK BASES AND NOT LESS THAN 0.25 GALS / SY FOR SOIL-CEMENT BASES. THE RATE OF APPLICATION SHALL COAT THE SURFACE THOROUGHLY AND UNIFORMLY WITHOUT HAVING ANY EXCESS TO FORM POOLS OR FLOW OFF THE BASE. THE PRIME SHALL BE ALLOWED TO STAND WITHOUT COVER MATERIAL FOR A PERIOD OF 48 HOURS UNLESS OTHERWISE ORDERED BY THE ENGINEER.
- O. NO BITUMINOUS MATERIAL SHALL BE APPLIED WHEN THE TEMPERATURE OF THE AIR IS LESS THAN 40 DEGREES FAHRENHEIT IN THE SHADE AND FALLING, OR WHEN IN THE OPINION OF THE ENGINEER, THE WEATHER CONDITIONS OR THE CONDITION OF THE EXISTING SURFACE IS UNSUITABLE
- . THE SURFACE TO BE PRIMED SHALL BE CLEAN AND DRY, FOR LIMEROCK BASES, THE GLAZED FINISH SHALL BE REMOVED BEFORE THE APPLICATION OF PRIME COAT. THE TEMPERATURE OF THE PRIME MATERIAL SHALL BE BETWEEN 100 DEGREES FAHRENHEIT AND 150 DEGREES FAHRENHEIT Q. ALL EXPOSED ENDS OF CURB SHALL TRANSITION TO FINISHED GRADE
- SMOOTH DRIVING SURFACE WHILE MAINTAINING POSITIVE DRAINAGE. SHOULD AREAS OF POOR DRAINAGE BE OBSERVED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF CURBS OR PAVEMENT COURSES, SO THAT RECOMMENDATIONS FOR CORRECTION CAN BE MADE. PAVEMENT GRADES AT HANDICAP PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION.

PROPOSED AND EXISTING SIDEWALKS SHALL BE RAMPED FLUSH WITH PAVEMENT. RAMPS SHALL NOT EXCEED A 12 HORIZONTAL TO 1

E. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL PAVEMENT TO DRAIN POSITIVELY. INTERSECTIONS SHALL TRANSITION TO PROVIDE

V. SIDEWALK RAMPS SHALL BE TEXTURED IN CONFORMANCE WITH FDOT STANDARDS EXCEPT WHERE LOCAL CODES DICTATE OTHERWISE OR IF INDICATED OTHERWISE ON THE PLANS, CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND THE MUNICIPAL AUTHORITY FOR FORM BOARD AND PRE POUR INSPECTIONS PRIOR TO ANY SIDEWALK AND / OR CONCRETE RAMP

R. ALL CONCRETE CURBS, SIDEWALKS, INLET TOPS, ETC., SHALL BE 3000 PSI CONCRETE, UNLESS OTHERWISE SPECIFIED.

- C. INSTALLATION. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT ALL RAMP TEXTURED SURFACES AND SIDEWALK
- LONGITUDINAL AND CROSS SLOPES ARE IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL ADA STANDARDS. D. ALL OFF-SITE DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION OR BETTER.

THAT WILL NOT PROVIDE A SUITABLE STABLE, CLEAN SUBGRADE.

- ALL LANDSCAPE ISLANDS SHALL CONTAIN SUITABLE LANDSCAPE MATERIAL FOR LANDSCAPE INSTALLATION. ELEVATIONS OF GRASSED AREAS ARE GIVEN AT FINISHED SOD / SEED GRADE.
- G. ELEVATIONS GIVEN ADJACENT TO CURB OR FRONT OF SIDEWALK ARE CONSIDERED EDGE OF PAVEMENT GRADES. H. SUBGRADE SHALL BE FREE OF MUCK, STUMPS, ROOTS, UNDERBRUSH, VEGETATIVE MATTER, GARBAGE, TRASH OR ANY MATERIAL
- I. ALL SUBGRADE, BASE COURSE, PRIME COAT, TACK COAT AND ASPHALT MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS (LATEST EDITION). J. BEFORE CONSTRUCTION OF ASPHALT SURFACE, A JOB MIX FORMULA SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER.
- K. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF DEBRIS AND SILT WHERE TIE-INS TO EXISTING DRAINAGE STRUCTURES OR
- L. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN CENTERLINES OF DRAINAGE STRUCTURES AND FROM INVERTS OF ENDWALLS AND / OR MITERED END SECTIONS.
- M. JOINTS FOR REINFORCED CONCRETE STORM DRAINS AND CULVERTS SHALL BE FOR ROUND PIPE. RUBBER GASKETS MEETING THE
- REQUIREMENTS OF SECTION 430-7.2, 941-1.5 AND 942-1, FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, SHALL BE USED N. REINFORCED CONCRETE PIPE SHALL BE PER ASTM C-76 CLASS III, UNLESS OTHERWISE SPECIFIED. INSTALLATION OF REINFORCED
- CONCRETE PIPE SHALL BE IN ACCORDANCE WITH FDOT SSRBC (LATEST EDITION). O. ALL STORM STRUCTURES SHALL BE CONSTRUCTED AND INSTALLED PER FDOT SSRBC. GRATES SHALL BE CAST IRON. GRATES IN
- PAVEMENT SHALL BE FRAME AND GRATE CONSTRUCTION UNLESS OTHERWISE SPECIFIED OR APPROVED. P. ALL TYPE 'P' STRUCTURE BOTTOMS SHALL BE ROUND UNLESS OTHERWISE SPECIFIED AND SHALL HAVE A 4-FOOT MINIMUM DIAMETER Q. REINFORCED CONCRETE PIPE SHALL MEET THE REQUIREMENTS OF F.D.O.T. STANDARD SPECIFICATIONS SECTION 941. CONCRETE PIPE SHALL BE CLASS III OR AS SHOWN ON THE PLANS. PIPE GASKETS SHALL MEET F.D.O.T. STANDARD SPECIFICATIONS SECTION 942.
- R. ALL PIPE JOINTS SHALL BE WRAPPED PER FDOT STANDARD INDEX NUMBER 280. S. ALL PIPE SHALL BE CAREFULLY LAID, TRUE TO THE LINES AND GRADES GIVEN, WITH HUB UPGRADE AND TONGUE END FULLY ENTERED INTO THE HUB. WHEN PIPE WITH QUADRANT REINFORCEMENT OR CIRCULAR PIPE WITH ELLIPTICAL REINFORCEMENT IS USED, THE PIPE SHALL BE INSTALLED IN A POSITION SUCH THAT THE MANUFACTURER'S MARKS DESIGNATING TOP AND BOTTOM OF THE PIPE SHALL NOT BE MORE THAN FIVE DEGREES FROM THE VERTICAL PLANE THROUGH THE LONGITUDINAL AXIS OF THE PIPE. ANY PIPE THAT IS NOT TRUE IN ALIGNMENT OR WHICH SHOWS ANY SETTLEMENT AFTER LAYING SHALL BE TAKEN UP AND RELAID WITHOUT ADDITIONAL COMPENSATION.
- PVC PIPE SHALL CONFORM TO ASTM D3034 SDR 35 WITH ELASTOMERIC JOINTS, NON-PERFORATED. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION'S "RECOMMENDED PRACTICE FOR INSTALLATION OF PVC SEWER PIPE".
- U. SDR 35 PVC DRAINAGE PIPE SHALL BE CONNECTED TO THE CATCH BASIN WALLS WITH A COATED PVC ADAPTER, CEMENT COLLAR, RUBBER BOOT, OR AS APPROVED BY THE ENGINEER. V. POLYETHYLENE PIPE SHALL BE HDPE CONFORMING TO AASHTO M252 AND AASHTO M294 (WHERE APPLICABLE) EQUAL TO ADS WITH
- PIPE AND FITTINGS BY THE SAME MANUFACTURER. YARD INLETS SHALL BE ADS NYLOPLAST WITH 12-INCH DIAMETER CAST IRON GRATES (UNLESS OTHERWISE SPECIFIED). W. ROOF DRAIN CONNECTIONS SHALL TERMINATE 5 FEET OUTSIDE THE BUILDING ENVELOPE.
- X. ALL CONNECTIONS WITH FDOT, CITY OR COUNTY RIGHTS-OF-WAY SHALL BE COORDINATED WITH THE APPROPRIATE JURISDICTION.
- Y. ALL STORM STRUCTURES ARE TO BE PLACED ON A 12 INCH BED OF CRUSHED STONE OR EQUAL A APPROVED BY THE COUNTY ENGINEER AND FULLY ENVELOPED WITH FILTER FABRIC.

### XV. WATER AND SEWER DISTRIBUTION & COLLECTION SYSTEM NOTES

- A. ALL WATER DISTRIBUTION SYSTEM, SANITARY SEWER AND RECLAIMED WATER MATERIALS (INCLUDING SERVICES) AND INSTALLATION SHALL CONFORM TO THE SPECIFICATIONS OF THE APPROPRIATE UTILITY COMPANY AS PROVIDED IN THEIR STANDARD
- B. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE MOST RECENT MATERIAL AND INSTALLATION SPECIFICATIONS FROM THE APPLICABLE MUNICIPALITY. ALL WATER AND SEWER MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE MOST UPDATE SPECIFICATIONS FROM THE MUNICIPALITY UNLESS OTHERWISE SPECIFIED BY THE MUNICIPALITY. CONTRACTOR SHALL BID THE PROJECT AS SUCH. WHENEVER LOCAL SPECIFICATIONS DIFFER FROM THESE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER
- . WATER, SEWER AND REUSE PIPES SHALL HAVE A MINIMUM OF 3 FEET OF COVER UNLESS OTHERWISE SPECIFIED. D. WATER SERVICES SHALL BE POLYETHYLENE TUBING COMPLYING WITH APPLICABLE REQUIREMENTS OF PE-3034. MATERIAL SHALL BE AS DESCRIBED IN ASTM D-2737 AND HAVE A STANDARD DIMENSION RATIO (SDR) OF 9.0 AND SHALL CONFORM TO ANSI / AWWA
- E. CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY FOR CONNECTION OF WATER SYSTEM AND FOR
- CONNECTION OF SANITARY SEWER AND RECLAIMED SYSTEM. F. JOINTS FOR THE POLYETHYLENE TUBING SHALL BE OF THE COMPRESSION TYPE, UTILIZING A TOTALLY CONFINED GRIP SEAL AND COUPLING NUT. STAINLESS STEEL TUBE STIFFENER INSERTS SHALL ALSO BE USED FOR P.E. TUBING SERVICES. G. CONTRACTOR SHALL PROVIDE DISINFECTION, HYDROSTATIC PRESSURE AND LEAKAGE TESTING IN ACCORDANCE WITH AWWA C600,
- C605 AND C651 AS APPLICABLE AND BACTERIOLOGICAL TEST REPORTS, ALL IN ACCORDANCE WITH GOVERNING SPECIFICATIONS, FDEP PERMIT CONDITIONS AND AWWA STANDARDS H. CONTRACTOR SHALL NOT ACTIVATE WATER SERVICE UNTIL THE FDEP HAS CLEARED THE SYSTEM FOR USE AND THE CLEARANCE
- LETTER HAS BEEN RECEIVED BY THE OWNER. I. SITE CONTRACTOR SHALL COORDINATE AND VERIFY ALL UTILITY SERVICES WITH FINAL ARCHITECTURAL DRAWINGS AND BUILDING J. WATER MAIN TAPS SHALL BE WITNESSED BY THE GOVERNING MUNICIPALITY; WATER METER VALVES SHALL BE INSTALLED BY THE
- GOVERNING MUNICIPALITY; WATER METERS SHALL BE INSTALLED BY THE GOVERNING MUNICIPALITY UNLESS OTHERWISE SPECIFIED; BACKFLOW PREVENTERS SHALL BE INSTALLED BY THE CONTRACTOR. K. EXISTING WATER MAINS SHALL BE PROTECTED FROM CONTAMINATION DURING FILLING, FLUSHING AND TESTING OF NEW LINES IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF AWWA C651-92, SEE JUMPER DETAIL.
- L. ALL FITTINGS 3 INCHES AND OVER SHALL BE PROPERLY ANCHORED W/RESTRAINED JOINT FITTINGS, CONFORMING WITH THE DETAILS M. ALL PIPE SHALL BE LAID TO LINE AND GRADE WITH VALVES AND HYDRANT STEMS PLUMB. ALL PIPE MAINS SHALL BE INSTALLED N. THE WATER SYSTEM SHALL BE TESTED FOR A PERIOD OF NOT LESS THAN 2 HOURS AT 150 PSI IN ACCORDANCE WITH ANSI / AWWA STANDARD C600-99 AND PER AWWA MANUAL M23 WITH AN ALLOWABLE LEAKAGE AS DETERMINED BY THE FOLLOWING FORMULA FOR

- L=SD\*p0.5 /133,200 WHERE L = ALLOWABLE LEAKAGE IN GALLONS PER HOUR
- S = PIPE LENGTH IN FEET D = NOMINAL DIAMETER OF PIPE IN INCHES

RUBBER GASKET TYPE JOINT SEALS CONFORMING TO ASTM D-1869.

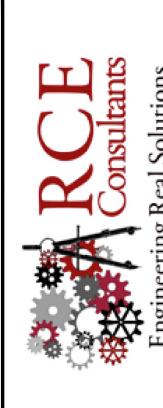
- O. SITE UTILITY WORK SHALL TERMINATE 5 FEET OUTSIDE THE BUILDING ENVELOPE UNLESS OTHERWISE SPECIFIED.
- P. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN CENTERLINES OF MANHOLE STRUCTURES. Q. UNLESS OTHERWISE NOTED OR APPROVED, ALL GRAVITY MAINS AND SERVICES SHALL BE UNPLASTICIZED POLYVINYL CHLORIDE (PVC) NON-PRESSURE PIPE CONFORMING TO ASTM D-3034 AND SDR 35 WITH INTEGRAL BELL AND SPIGOT JOINTS FOR PUSH-ON
- R. ALL GRAVITY MAINS ARE 8 INCHES PVC PIPE AT 0.40% MINIMUM SLOPE AND ALL LATERALS ARE 6 INCHES PVC AT 1/8 INCHES PER FOOT MINIMUM SLOPE, UNLESS OTHERWISE SHOWN ON THE PLANS.
- S. MINIMUM COVER ON SANITARY SEWER MAIN SHALL BE 60 INCHES TO INVERT; MINIMUM COVER ON LATERALS SHALL BE 18 INCHES AT HIGH END OR AS SHOWN ON PLANS.
- T. ALL MANHOLES SHALL HAVE THE WORDS "SANITARY SEWER" CAST IN THE LIDS. CASTINGS SHALL BE CLEAN AND COATED WITH A COAL TAR PITCH VARNISH WHICH IS TOUGH WHEN COLD BUT NOT TACKY OR BRITTLE. PICK TYPE LIFTING HOLES WILL BE CAST INTO LIDS BUT SHALL NOT GO CLEAR THROUGH THE LID
- U. CONTRACTOR SHALL INSTALL ONE LENGTH OF DR14 PVC FOR ALL SANITARY SEWER MAINS OR LATERALS HAVING LESS THAN 18 INCHES SEPARATION FROM WATER MAIN. (SEE STANDARD SEWER SEPARATION STATEMENT AND DETAILS ON INSTALLATION). V. THERE SHALL BE NO DETECTABLE LEVEL OF INFILTRATION OR EXFILTRATION WITHIN THE SANITARY SEWER SYSTEM AT THE TIME OF INSPECTION, ANY EVIDENCE OF LEAKAGE MUST BE CORRECTED PRIOR TO ACCEPTANCE. W. ALL VISIBLE LEAKS, REGARDLESS OF RESULTS OF INFILTRATION OR EXFILTRATION TESTS, SHALL BE REPAIRED. ALL REPAIRS SHOWN
- NECESSARY BY THE TESTS ARE TO BE MADE; BROKEN OR CRACKED PIPE REPLACED, ALL DEPOSITS REMOVED, THE SEWER LEFT TRUE TO LINE AND GRADE AND ENTIRELY CLEAN, FREE FROM LUMPS OF CEMENT, PROTRUDING GASKETS, BULKHEADS, ETC., AND READY FOR USE BEFORE FINAL ACCEPTANCE IS MADE. X. REPAIR OF ANY DEFECTS FOUND IN THE SYSTEM ARE TO BE COMPLETED AT THE EXPENSE OF THE CONTRACTOR. Y. BEDDING OF THE PIPE SHALL BE F.D.O.T. CLASS "C" OR BETTER, REQUIRING THE BOTTOM OF THE TRENCH TO BE SHAPED TO FIT THE
- BOTTOM OF THE PIPE FOR A DISTANCE EQUAL TO ONE-HALF OF THE OUTSIDE DIAMETER OF THE PIPE. BELL HOLES SHALL BE DEEP ENOUGH TO INSURE PROPER BEARING OF THE PIPE BARREL ON THE BEDDING Z. CONTRACTOR SHALL IDENTIFY AND PAINT ALL FIRE HYDRANTS IN ACCORDANCE WITH THE UTILITY PROVIDING SERVICE AND NFPA SPECIFICATIONS.
- AA. FIRE LINES TO BE TESTED AT 200 PSI. AB. FLOW AND COLOR WILL BE BASED ON ACTUAL FLOW TEST CONDUCTED BY THE FIRE INSPECTOR. THIS ACTIVITY SHALL BE COORDINATED BY THE CONTRACTOR. THE OWNER AND ENGINEER SHALL BE GIVEN PRIOR NOTICE OF TESTING AND PROVIDED COPIES OF ALL TEST REPORTS AC. FIRE LINE MATERIAL TO BE C900 CLASS 200 PIPING.
- AD. FIRE HYDRANTS WILL BE FURNISHED WITH A BREAKABLE FEATURE THAT WILL BREAK CLEANLY UPON IMPACT. THIS SHALL CONSIST OF A TWO PART BREAKABLE SAFETY FLANGE WITH A BREAKABLE STEM COUPLING. THE UPPER AND LOWER BARRELS SHALL BE FLUTED AND RIBBED ABOVE AND BELOW THE SAFETY FLANGE OR HAVE AN EXTRA STRENGTH LOWER BARREL.
- AE. ALL FIRE HYDRANTS SHALL MEET THE LOCAL JURISDICTIONAL AGENCIES AND APPROVED MANUFACTURERS LIST AS STATED IN THE AF. BLUE REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED OPPOSITE FIRE HYDRANTS IN THE CENTER OF THE NEAREST TRAVELED

### LANE TO MARK THEIR LOCATIONS. AG. ALL FIRE HYDRANTS SHALL COMPLY WITH ANSI / AWWA STANDARD C502-94.

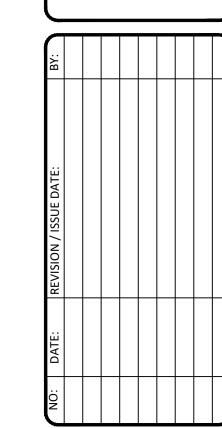
- XVI. <u>UTILITY SEPARATION NOTES</u> A. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE: ([FAC 62-555.314(1)&(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)])
- 1. A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.: 2. A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER (OR A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN
- THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER IF THE BOTTOM OF THE WATER MAIN WILL BE LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER; 3. A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING
- RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND 4. A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM." B. NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT:
- LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE; AND 2. THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12

. THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE

- INCHES ABOVE OR BELOW THE OTHER PIPELINE. C. AT THE UTILITY CROSSINGS DESCRIBED IN PART A. ABOVE: 1. ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE OR THE PIPES WILL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610,
  - 2. AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER <u>NOT</u> REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.



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**Engineer of Record** 

Laurence Poliner

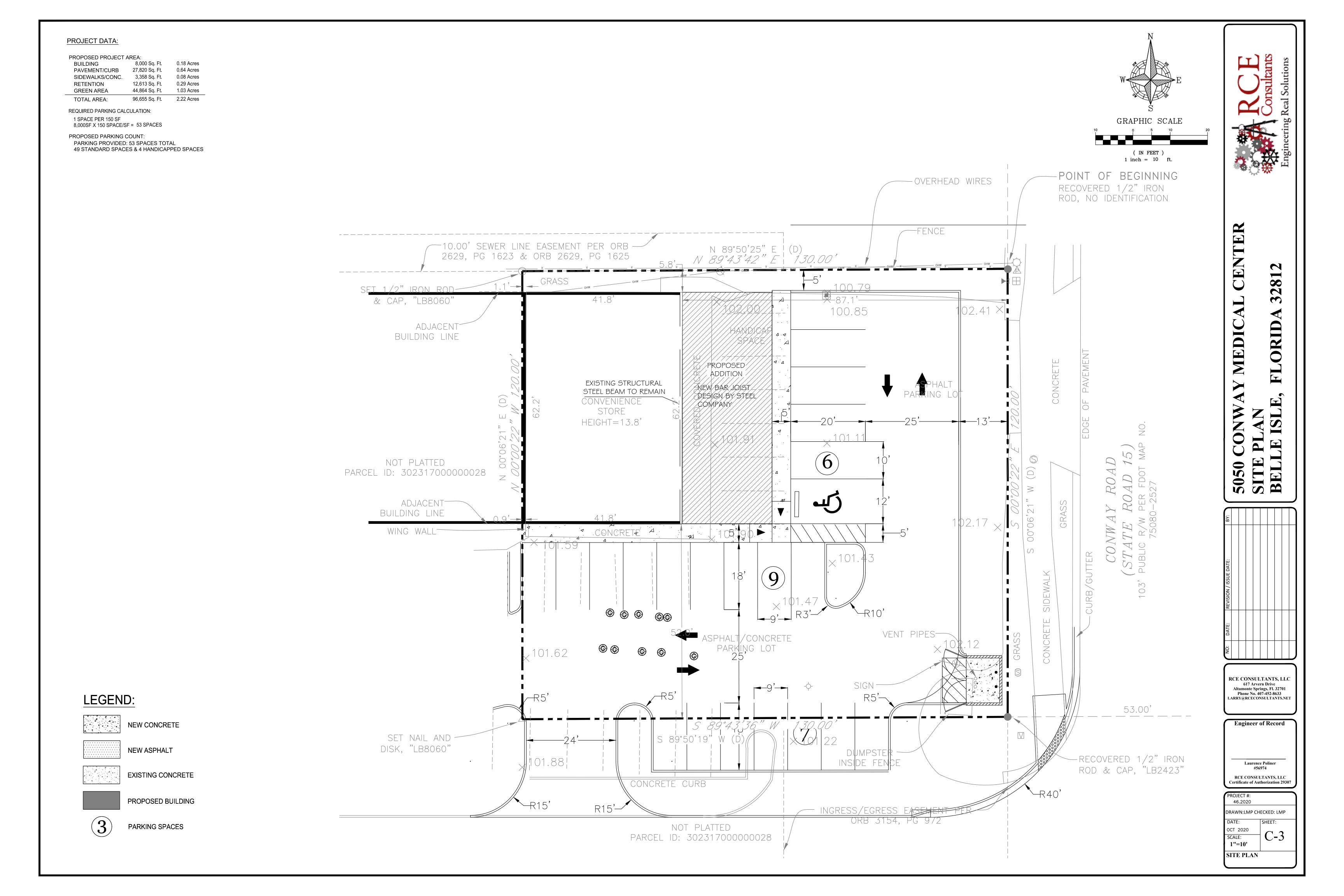
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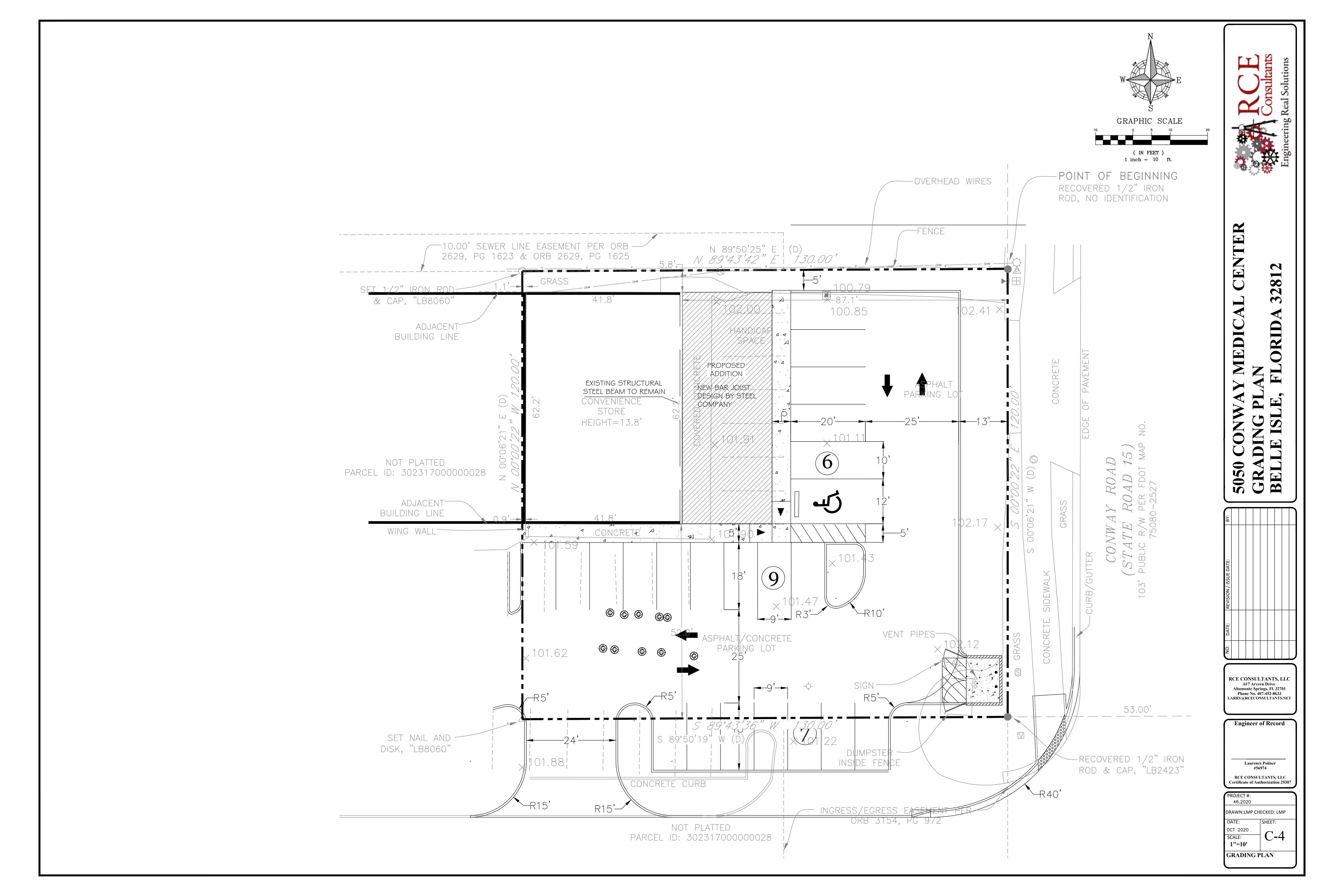
Certificate of Authorization 29307

DRAWN:LMP CHECKED: LMP OCT 2020 SCALE: N/A

**SPECIFICATION** 

46.2020





### GENERAL EROSION SITES AND THE OWNER. POLLUTION PREVENTION PLAN AND BECOME FAMILIAR WITH THEIR CONTENTS. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS INDICATED BY CONDITIONS AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION. APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER. FACILITIES. CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS. INITIATED AS SOON AS PRACTICABLE. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 30 DAYS, SHALL BE TEMPORARILY SEEDED. THESE DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS AND/OR LANDSCAPE PLAN. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE. GENERAL PERMIT REQUIREMENTS. CONTROL MEASURES (SILT FENCES, ROCK BAGS, ETC.) TO PREVENT EROSION. AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION. CONTRACTOR SHALL PROVIDE TREE PROTECTION MEASURES AS NEEDED. DEWATERING IS NOT ANTICIPATED FOR THE INSTALLATION OF UTILITIES. ALL WORK SHALL BE IN COMPLIANCE WITH NPDES. **MAINTENANCE** ONE-HALF THE HEIGHT OF THE SILT FENCE.

### CONTRACTOR IS ADVISED THAT THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THAT ALL OPERATORS FILE A NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES GENERAL PERMIT PRIOR TO BEGINNING WORK. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN THE SAME. IF NOT PROVIDED BY THE ENGINEER AND TO PROVIDE ALL REQUIRED MONITORING REPORTS. A COPY SHALL BE SENT TO THE ENGINEER OF RECORD, ARCHITECT OF RECORD THE STORMWATER POLLUTION PREVENTION PLAN IS COMPOSED OF THIS DRAWING (SITE MAP), THE STANDARD DETAILS AND THE PLAN NARRATIVE

INCLUDED IN SPECIFICATIONS PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH THE STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER

BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE AS

CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.

GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET

ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BUOYS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND

DUST ON THE SITE SHALL BE CONTROLLED BY WATERING. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TONIC LIQUIDS FOR DUST

RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN AND IN THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE

AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.

SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS, REFER TO THE GRADING PLAN

THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE ALL MATERIAL SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE

ON-SITE AND OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH

SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION

ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND

SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED SEDIMENT SHALL BE REMOVED FROM THE FENCES WHEN IT REACHES

THE CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.

THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING ON THE TEMPORARY PARKING AS CONDITIONS DEMAND.

OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%

1. INSTALL STABILIZED CONSTRUCTION ENTRANCES.

2. PREPARE TEMPORARY PARKING AND STORAGE AREA. 3. CONSTRUCT THE SILT FENCES ON THE SITE.

4. CONSTRUCT THE SEDIMENTATION AND SEDIMENT TRAP BASINS. 5. CLEAR AND GRUB THE SITE.

6. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.

### 7. BEGIN GRADING THE SITE.

PHASE II 1. TEMPORARY SEED DEMUCKED AREAS.

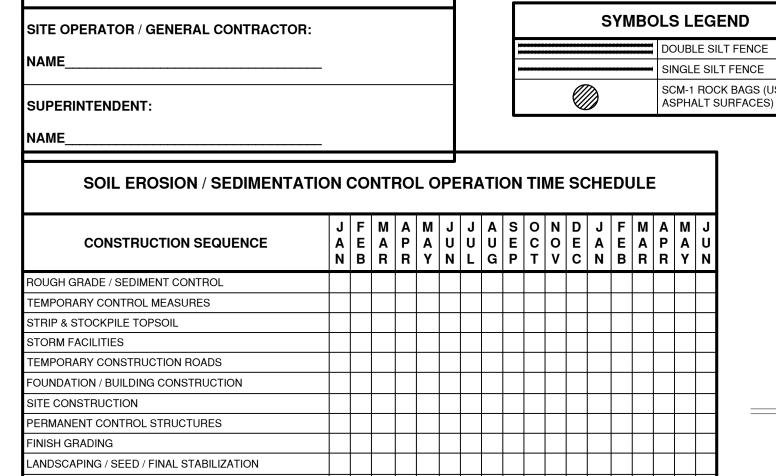
2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS. 3. INSTALL RIP RAP AROUND OUTLET STRUCTURES.

4. INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES. 5. PREPARE SITE FOR PAVING.

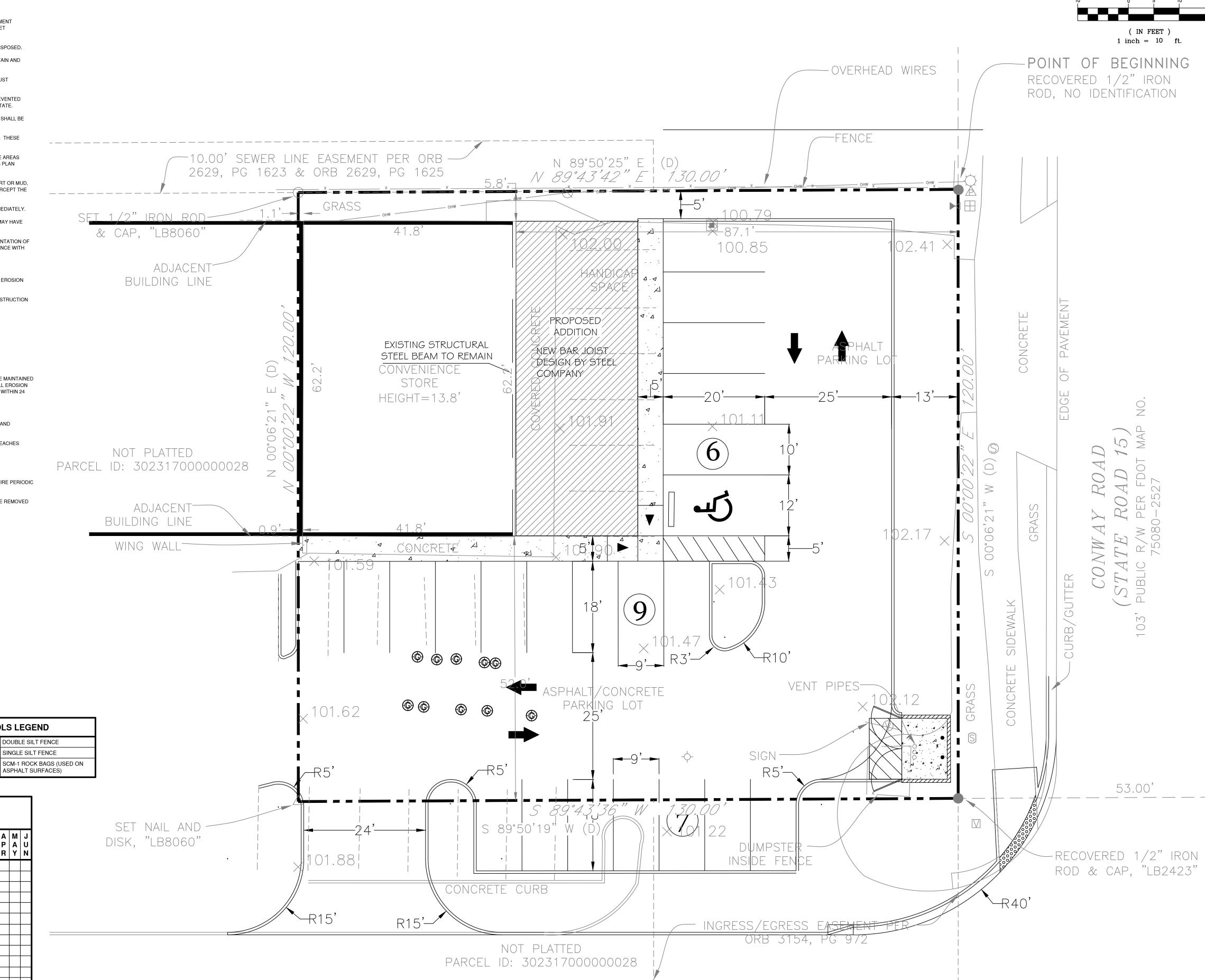
PAVE SITE. 7. INSTALL INLET PROTECTION DEVICES.

DEVELOPER / OWNER

8. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING. 9. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED.)



NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE



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505 STO

RCE CONSULTANTS, LLC

617 Arvern Drive Altamonte Springs, Fl. 32701

Phone No. 407-452-8633

Engineer of Record

Laurence Poliner

RCE CONSULTANTS, LLC

Certificate of Authorization 29307

DRAWN:LMP CHECKED: LMP

46.2020

OCT 2020

1"=10'

**SWPPP** 

SCALE:

ARRY@RCECONSULTANTS.NET

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### **EROSION CONTROL NOTES**

DURING ALL PHASES OF CONSTRUCTION THE SITE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL EXERCISE MEASURES TO PREVENT THE EROSION OF SOILS DUE TO THE ACTION OF THE WATER AND WIND. THE CONTRACTS SHALL USE THE FOLLOWING MEASURES TO ACCOMPLISH THIS

A. SURFACE PROTECTION 1. CLEARING SHALL BE LIMITED SO AS TO EXPOSE THE SMALLEST POSSIBLE AREA OF LAND FOR THE SHORTEST POSSIBLE TIME.

2. EXPOSED AREAS SHALL BE IMMEDIATELY GRADED AND PROTECTED WITH TEMPORARY OR PERMANENT COVER, SUCH AS SOD, SEED AND MULCH, CROWVETCH, LESPEDEZA OR CREEPER. NEWLY GRADED CHANNELS OR STEEP SLOPES WILL REQUIRE THE USE OF FIBROUS MATTING, NETTING OF SEEDED AND MULCHED AREAS, OR THE STAKING OR SHINGLING OF SOD WHILE VEGETATION IS BECOMING ESTABLISHED.

VEGETATION IS BECOMING ESTABLISHED.

B. RUN-OFF CONTROL

1. LONG AND/OR STEEP SLOPES WILL REQUIRE CONTOUR BENCHING AND FURROWING, OR BERMS TO REDUCE RUN-OFF VELOCITIES.

C. SEDIMENT TRAPPING

1. THE TRAPPING OF ERODED PARTICLES WILL BE ACCOMPLISHED BY THE DIVERSION OF RUN-OFF TO SEDIMENT BASINS, EXCAVATION TRAPS, BERMS, STAKED SYNTHETIC HAY BALES, OR

FLOATING SILT CURTAINS.

2. THE PROPOSED RETENTION AND/OR DETENTION POND(S) ALONG WITH ANY ENVIRONMENTAL BERM(S)/REAR YARD SWALE(S) SHALL BE CONSTRUCTED FIRST. THE POND(S) AND OUTFALL STRUCT-URE(S) MUST BE COMPLETE AND OPERATIONAL PRIOR TO THE PLACEMENT OF ANY IMPERVIOUS SURFACE.

3. TRAPPING DEVICES SHALL BE PERIODICALLY INSPECTED DURING DRY PERIODS AND AFTER EACH RAINFALL EVENT BY THE SITE CONTRACTOR. TRAPPING DEVICES SHALL BE REPLACED IF DETERMINED TO BE INCAPABLE OF PERFORMING INTENDED FUNCTION OF SEDIMENT TRAPPING.

4. TRAPPING DEVICES SHALL REMAIN IN PLACE UNTIL A VEGETA-TIVE COVER HAS ESTABLISHED SUFFICIENTLY TO STABILIZE THE SOILS AND PREVENT EROSION.

D. SOIL MOISTURE

1. THE CONTRACTOR SHALL HAVE AVAILABLE ON THE CONSTRUCTION SITE A WATER SOURCE CAPABLE OF APPLYING WATER TO DRY EXPOSED SOIL IN ORDER TO PREVENT WIND EROSION. THE APPLICATION RATE AND MANNER SHALL BE SUCH THAT SOIL

MOISTURE IS ATTAINED AND NO SURFACE RUN-OFF IS CREATED.

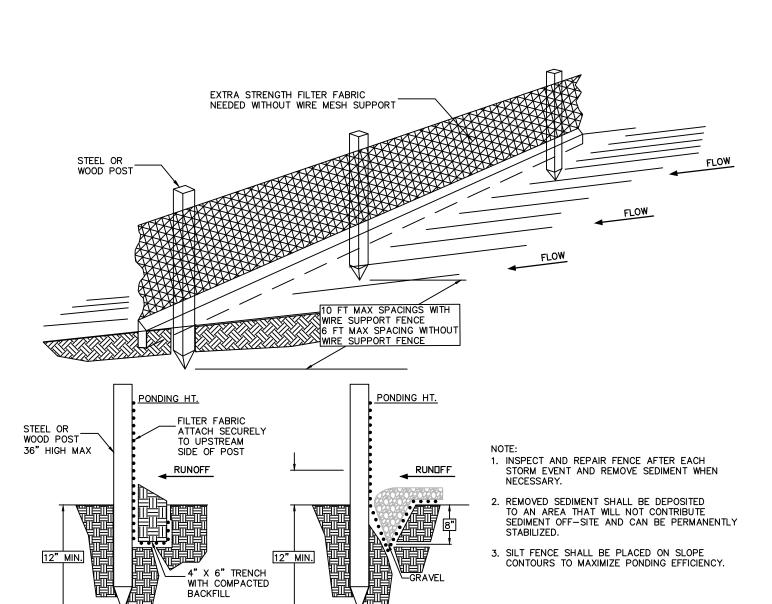
E. RESPONSIBILITY

1. THE CONTRACTOR SHALL BE HELD RESPONSIBLE UNTIL THE CERTIFICATE OF COMPLETION IS ISSUED. AFTER THAT, THE OWNER WILL BE RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER COLLECTION AND RETENTION SYSTEM.

### **CONSTRUCTION SEQUENCE**

4. STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.

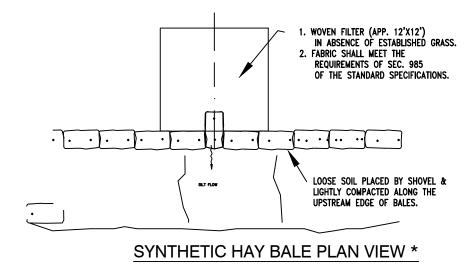
- 1. SET UP ON-SITE PRE-CONSTRUCTION CONFERENCE WITH CITY/COUNTY & ENGINEER
- 2. INSTALL SILT FENCE, INLET PROTECTION, SEDIMENT TRAPS, DIVERSION DITCHES, TREE PROTECTION, AND OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
- 3. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES. CONTACT CYCORP ENGINEERING IF ADDITIONAL MEASURES ARE REQUIRED DUE TO SITE SPECIFIC CONDITIONS.
- 5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY/COUNTY AND THE WATER MANAGEMENT DISTRICT, AND NPDES CRITERIA.



SILT FENCE INSTALLATION

ALTERNATE DETAIL

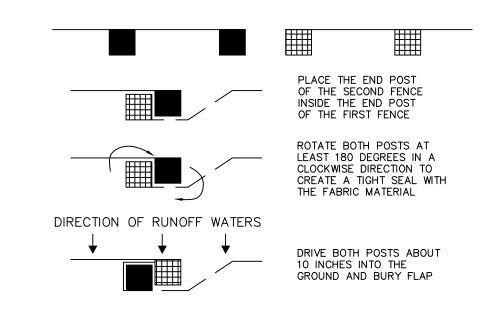
STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL



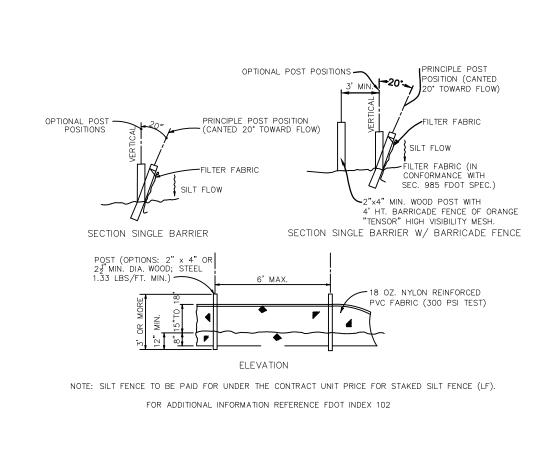
GENERAL NOTES:

- SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
   REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- THE STRUCTURE SHALL BE INSPECTED AFTER EACH STORM EVENT BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT AND REPAIRS MADE AS NECESSARY.
   CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT
- EROSION AND WATER POLLUTION ARE MINIMIZED.

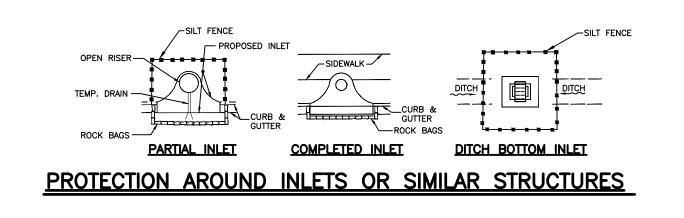
  5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE BASIN HAS BEEN PROPERLY STABILIZED.

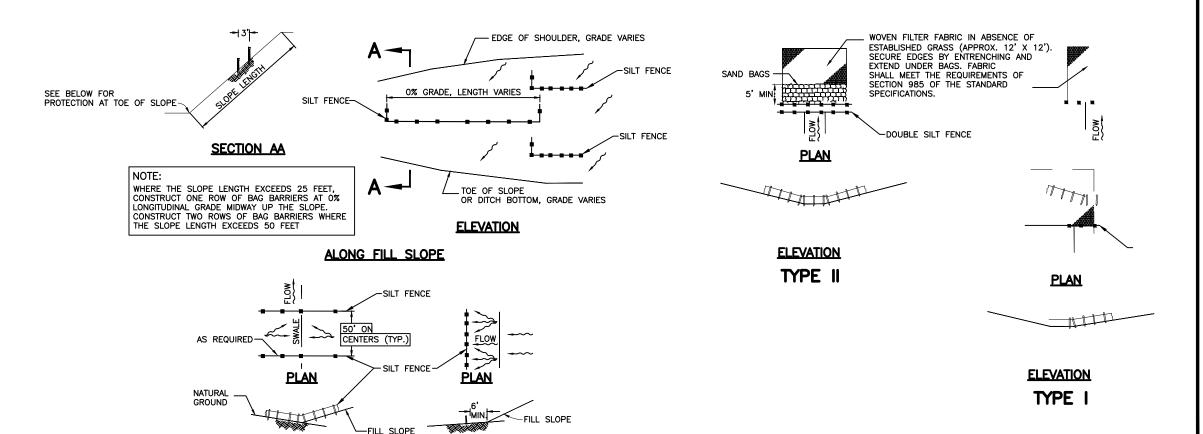


### SILT FENCE ATTACHMENT DETAIL



STAKED TURBIDITY BARRIER





BARRIERS FOR FILL SLOPES

TO BE USED WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE

TO BE USED WHERE THE NATURAL GROUND SLOPES AWAY FROM THE TOE OF SLOPE

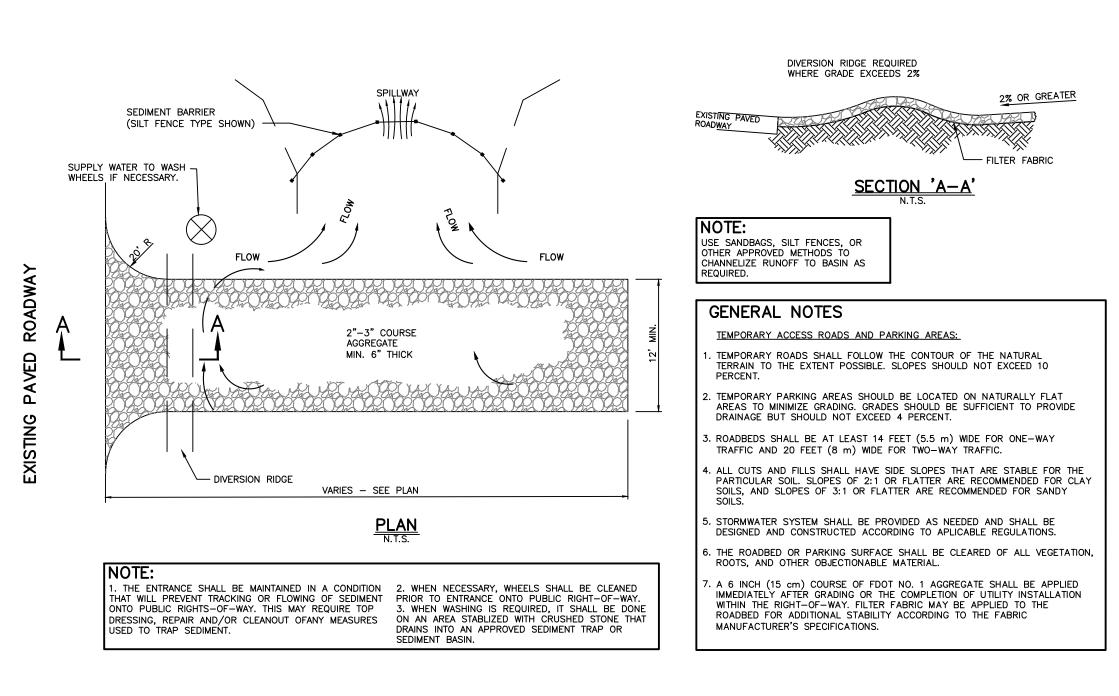
AT TOE OF SLOPE

**ELEVATION** 

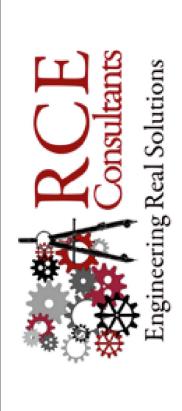
**ELEVATION** 

BARRIERS FOR UNPAVED DITCHES

### BARRIERS LAYOUT DETAIL NOT TO SCALE



TEMPORARY GRAVEL CONSTRUCTION EXIT



### = | 5050 CONWAY MEDICAL CENTE = | EROSION CONTROL DETAILS = | BELLE ISLE, FLORIDA 32812

NO: DATE: REVISION / ISSUE DATE: BY:

RCE CONSULTANTS, LLC 617 Arvern Drive Altamonte Springs, Fl. 32701 Phone No. 407-452-8633 LARRY@RCECONSULTANTS.NET

Engineer of Record

Laurence Poliner #56974 RCE CONSULTANTS, LLC Certificate of Authorization 29307

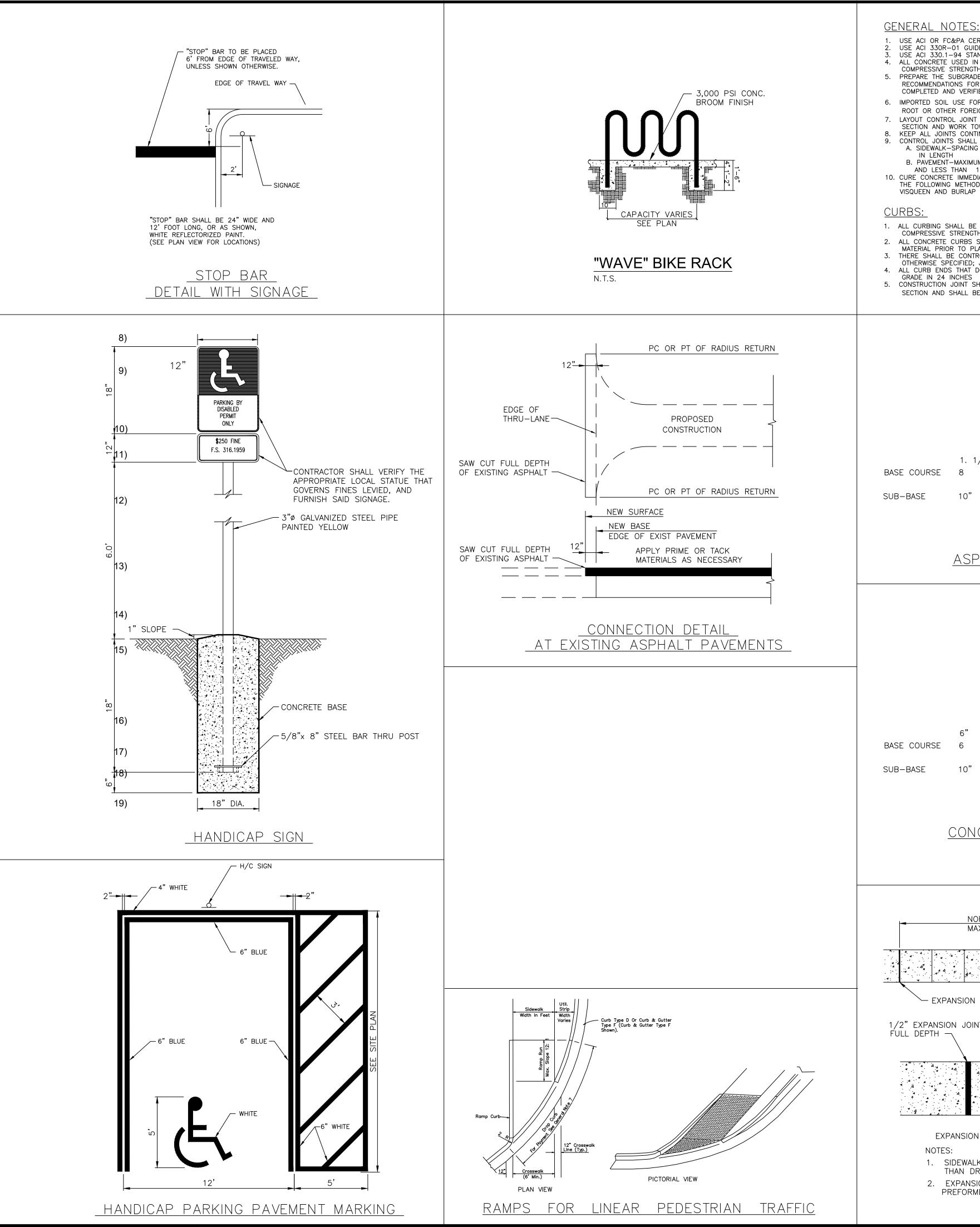
PROJECT #:
46.2020

DRAWN:LMP CHECKED: LMP

DATE:
OCT 2020
SCALE:

C-6

EROSION CONTROL
DETAILS



### **GENERAL NOTES:**

- 1. USE ACI OR FC&PA CERTIFIED FLATWORK FINISHER
- 2. USE ACI 330R-01 GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS USE ACI 330.1-94 STANDARD SPECIFICATION FOR PLAIN CONCRETE PARKING LOTS
- 4. ALL CONCRETE USED IN PARKING LOT, UNLESS OTHERWISE INDICATED, SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. 5. PREPARE THE SUBGRADE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS FOR RIGID PAVEMENTS. SUBGRADE SOIL DENSITY TESTING MUST BE
- COMPLETED AND VERIFIED BY THE GEOTECHNICAL ENGINEER PRIOR TO CONCRETE PLACEMENT. IMPORTED SOIL USE FOR BACK FILL SHOULD BE FREE OF HEAVY CLAY, SILTS, STONES, PLANT
- ROOT OR OTHER FOREIGN MATERIAL GREATER THAN 1" IN DIA LAYOUT CONTROL JOINT BY STARTING WITH ANY DRAINAGE INLET WITHIN THE PAVEMENT
- SECTION AND WORK TOWARD EDGE OF PAVEMENT KEEP ALL JOINTS CONTINUOUS
- CONTROL JOINTS SHALL BE FORMED OR SAWED WITHIN 12 HOURS FROM TIME OF PLACEMENT; A. SIDEWALK-SPACING SHALL BE SAME AS WIDTH OF PAVEMENT AND LESS THAN 5 FEET IN LENGTH
- B. PAVEMENT-MAXIMUM SPACING SHALL BE 2.5 TIMES THICKNESS IN UNIT OF FEET AND LESS THAN 15 FEET IN LENGTH (E.G. T=4 INCH SPACING AT 10'x10') 10. CURE CONCRETE IMMEDIATELY AFTER FINISHING OPERATION IS COMPLETED BY USING ONE OF THE FOLLOWING METHODS: WATER, PIGMENTED WATER-BASED CURING COMPOUND OR

- 1. ALL CURBING SHALL BE CONSTRUCTED OF CONCRETE THAT WILL OBTAIN A MINIMUM
- COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS
- 2. ALL CONCRETE CURBS SHALL BE SPACED WITH A FULL-DEPTH, ½" WIDTH ISOLATION JOINT MATERIAL PRIOR TO PLACEMENT OF ADJACENT CONCRETE PAVEMENT
- THERE SHALL BE CONTROL JOINTS, EITHER TOOL OR SAW—CUT, MATCH PAVEMENT JOINTS, UNLESS OTHERWISE SPECIFIED; JOINTS SHALL BE FORMED WITHIN 12 HOURS OF PLACEMENT ALL CURB ENDS THAT DO NOT TIE INTO OTHER FACILITIES SHALL TRANSITION DOWN TO PAVEMENT

SUB-BASE

98% DENSITY STANDARD PROCTOR PER ASTM D-558

98% DENSITY STANDARD PROCTOR PER ASTM D-558

STABILIZED SUBBASE WITH MIN. (FBV) OF 75 PSI

STABILIZED SUBBASE WITH MIN. (FBV) OF 75 PSI

- PAVEMENT

- PAVEMENT

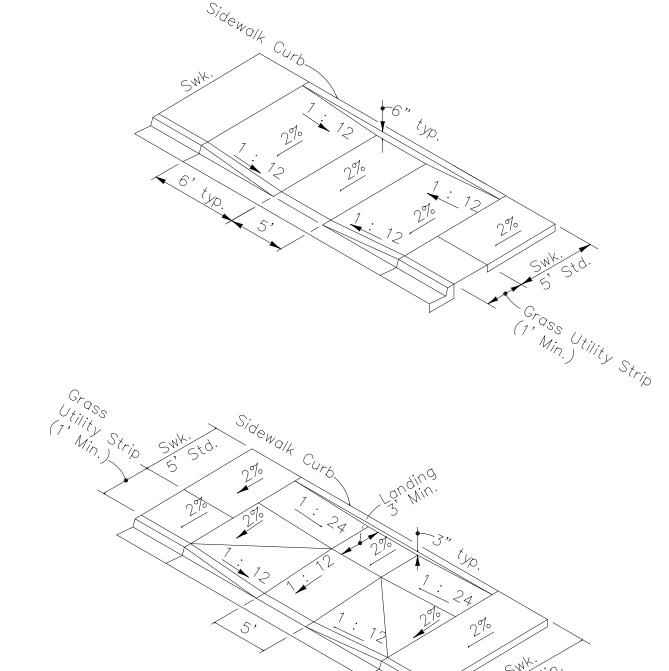
CONSTRUCTION JOINT SHALL BE TIED WITH A No.4 TIE BAR EXTENDED 6 INCHES INTO EACH CURB SECTION AND SHALL BE SPACED WITH A FULL-DEPTH 1 WIDTH ISOLATION JOINT MATERIAL

1. 1/2" TYPE S-9.5 ASPHALTIC CONCRETE

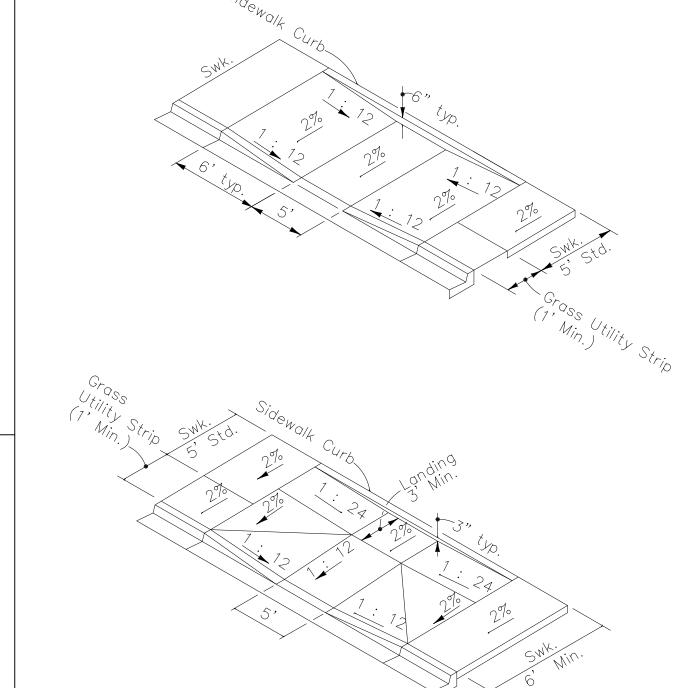
ASPHALT PAVEMENT DETAIL

CRUSHED CONCRETE

### LOCATION OF PUBLIC WATER SYSTEM MAIN IN ACCORDANCE WITH F.A.C. RULE 62-555.314 OTHER PIPE CROSSINGS (1) HORIZONTAL SEPARATION LTERNATE 3 FT MINIMUM WATER MAIN WATER MAIN STORM SEWER STORMWATER FORCE MAIN RECLAIMED WATER (2) WATER MAIN 3 FT. MIN ALTERNATE 3 FT MINIMUN WATER MAIN WATER MAIN WATER MAIN VACUUM SANITARY SEWER WATER MAIN WATER MAIN GRAVITY OR PRESSURE SANITARY SEWER SANITARY SEWER FORCE MAIN RECLAIMED WATER (4) WATER MAIN 10 FT PREFERRED 6 FT MIN (3) ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches. Reclaimed water regulated under Part III of Chapter 62-610. F.A.C. 3 5 t. for gravity sonitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer. Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C. Disclaimer- This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.



SIDEWALK RAMP DETAIL



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**Engineer of Record** 

Laurence Poliner

RCE CONSULTANTS, LLC

Certificate of Authorization 29307 DRAWN:LMP CHECKED: LMP

OCT 2020

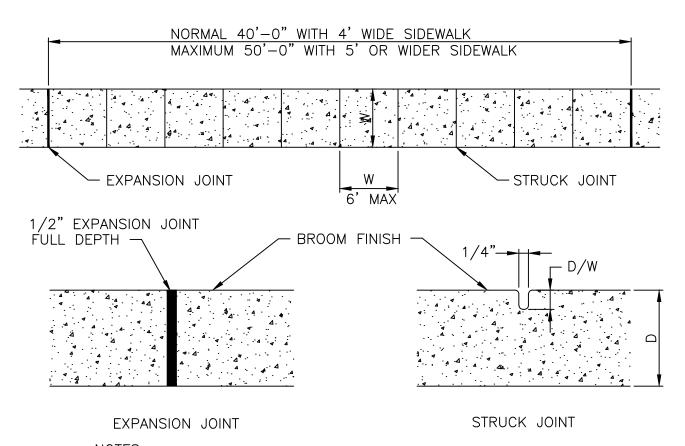
**GENERAL** 

**DETAILS** 

CONCRETE PAVEMENT DETAIL

4.000 PSI CONCRETE

CRUSHED CONCRETE



- 1. SIDEWALK EXPANSION JOINTS TO BE AT ALL TIES TO CONCRETE OTHER
- 2. EXPANSION JOINT MATERIAL SHALL BE ASPHALT FIBER IMPREGNATED PREFORMED JOINT FILLER, TO FILL DEPTH OF CONCRETE. TYPICAL SIDEWALK

THAN DRIVEWAYS. MAXIMUM SPACING SHALL BE 60'.