SITE IMPROVEMENTS

FOR

VINEYARD TRANSITIONAL CENTER

518 PINE AVE. N., GREEN COVE SPRINGS, FL 32043

CLAY COUNTY

PROJECT OWNER AND CONSULTANTS

OWNER: Vinevard Transitional Center

John Sanders

518 Pine Avenue North Green Cove Springs, FL 32043

TEL: 904-305-4641

SURVEYOR: Eiland and Associates, Inc

Harold Eiland

615 Blanding Boulevard Orange Park, FL 32073 TEL: (904) 272-1000

ENGINEER: Tocoi Engineering, LLC

Charles Sohm, P.E. 714 North Orange Avenue Green Cove Springs, FL 32043

TEL: 904-215-1388

TE JOB NO: 20-367









714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043 E.B. NUMBER: 26383 PH: 904-215-1388 "TURNING YOUR IDEAS INTO REALITY" www.tocoi.com

October 18, 2023

SPECIAL EXCEPTIONS GRANTED ON 09/28/2021 BY PLANNING ZONING COMMISSION.

CONDITIONS:

- A. APPROVAL OF SPECIAL EXCEPTION IS LIMITED TO THE APPLICANT / OWNER: JOHN SANDERS/THE VINEYARD. ANY TRANSFER OF OWNERSHIP WILL REQUIRE A NEW SPECIAL EXCEPTION APPLICATION
- THE MAXIMUM NUMBER TRANSITIONAL HOUSING UNITS SHALL BE LIMITED TO 8 UNITS.
- ALL OUTDOOR ACTIVITIES SHALL BE LIMITED TO NO LATER THAN 8:00 PM
- APPROVAL OF THE SPECIAL EXCEPTION IS THE CONTINGENT UPON THE APPROVAL OF THE FUTURE LAND USE AND ZONING AMENDMENTS BY CITY COUNCIL.

INDEX OF DRAWINGS

- **COVER SHEET**
- **GENERAL NOTES**
- **EXISTING GROUND**
- **EXISTING DRAINAGE MAP**
- PROPOSED DRAINAGE MAP
- **DEMOLITION PLAN**
- **GEOMETRY PLAN**
- **GRADING & DRAINAGE PLAN**
- DRAINAGE DETAILS
- 10 **EROSION CONTROL DETAILS**
- UTILITY PLAN 11
- **UTILITY DETAILS**
- SIGNAGE & PAVEMENT MARKING PLAN
- FIRE SUPPRESSION DETAILS
- MISCELLANEOUS DETAILS
- SWPP CONTRACTOR REQUIREMENTS
- SWPP CONTRACTOR CERTIFICATION
- PHOTOMETRIC PLAN
- LANDSCAPE PLAN



Digitally signed by Charles Sohm, PE

CHARLES SOHM, P.E. FLA. REGISTERED ENGINEER, #79289

GENERAL NOTES:

- 1. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE SECTIONS OF THE CITY OF GREEN COVE SPRINGS (G.C.S.) & GREEN COVE SPRINGS PUBLIC WORKS (G.C.S.P.W.) STANDARDS, (LATEST REVISION) AND ALL CURRENT CITY & G.C.S.P.W. DETAILS AS WELL AS ALL APPLICABLE STATE AND LOCAL REGULATIONS. THE WORK SHALL ALSO BE PERFORMED AND TESTED IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL INVESTIGATION REPORT PROVIDED BY JACKSON GEOTECHNICAL ENGINEERING, LLC PROJECT No. 23-414.1. IF MORE STRINGENT THAN CITY OF G.C.S. REQUIREMENTS.
- 2. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF O.S.H.A. SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES, AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLYING WITH O.S.H.A. REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTORS BID.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUBSURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THIS CONTRACT. THE CONTRACTOR IS ALSO URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF THE PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO AID IN RESOLVING POSSIBLE FUTURE COMPLAINTS THAT MAY OCCUR DUE TO THE CONSTRUCTION OF THE PROJECT.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EITHER CONDUCT ANY FIELD EXPLORATION OR ACQUIRE ANY GEOTECHNICAL ASSISTANCE REQUIRED TO ESTIMATE THE AMOUNT OF UNSUITABLE MATERIAL THAT WILL REQUIRE REMOVAL AND/OR TO ESTIMATE THE AMOUNT OF OFF SITE BORROW THAT WILL BE REQUIRED.
- 5. ALL IMPROVEMENTS SHOWN ARE TO BE WARRANTED BY THE CONTRACTOR TO THE DEVELOPER AND CITY OF G.C.S. FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY THE OWNER AND CITY OF G.C.S.
- 6. ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (N.G.V.D.) UNITED STATES COASTAL AND GEODETIC SURVEY (U.S.C. & G.S.), AS DETERMINED BY EILAND AND ASSOCIATES, INC.
- 7. FOR BOUNDARY, ROADWAY AND LOT GEOMETRY INFORMATION SEE PLAT.
- 8. THE CONTRACTOR WILL CONTRACT WITH AN INDEPENDENT TESTING LABORATORY TO PERFORM MATERIAL TESTING AND SOIL TESTING IN ACCORDANCE WITH CITY OF G.C.S. AND/OR G.C.S.P.W. REQUIREMENTS. THIS SHALL INCLUDE DENSITY TESTS IN ALL PAVEMENT AREAS AND IN ALL UTILITY TRENCHES LOCATED IN PAVEMENT AREAS CONCRETE TESTING AND ALL OTHER MATERIAL TESTING. PRIOR TO LIMEROCK PLACEMENT, THE PROJECT GEOTECHNICAL ENGINEER SHALL MAKE RECOMMENDATION FOR UNDER DRAIN PLACEMENT.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE PROJECT INCLUDING CITY RIGHT-OF-WAY PERMITS FOR WORK IN CITY OF G.C.S. RIGHT-OF-WAY OR EASEMENT.
- 10. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN CITY OF G.C.S. OR STATE RIGHT-OF-WAY WITH THE PROPER AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION AND REPAIR.
- 11. ALL PUBLIC DRAINAGE EASEMENTS SHALL BE "UNOBSTRUCTED" EASEMENTS. ALL "UNOBSTRUCTED" EASEMENTS TO BE CLEAR AND DRIVEABLE.
- 12. "AS-BUILT" DRAWINGS AS-BUILTS TO CITY OF G.C.S. AND THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR THEREFORE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION AND SUBMITTAL OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH CURRENT CITY OF G.C.S. & G.C.S.P.W. STANDARDS AND SPECIFICATIONS AND SJRWMD REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROCESS THE "AS-BUILT" DRAWINGS FOR APPROVAL BY CITY OF G.C.S.
- 13. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 14. ALL CLEARING AND GRUBBING REQUIRED FOR ALL ROADWAY, UTILITIES, DITCHES, AND BERMS INCLUDED IN THIS PROJECT AND THE CLEARING AND GRUBBING OF ALL RIGHT-OF-WAY OR EASEMENTS SHALL BE CONSIDERED AS PART OF THE PROJECT.
- 15. ALL AREAS SHOWN TO BE FILLED SHALL BE CLEARED AND GRUBBED IN ACCORDANCE WITH CITY OF G.C.S. STANDARDS AND SHALL BE FILLED WITH CLEAN STRUCTURAL FILL COMPACTED AND TESTED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.
- 16. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT.
- 17. ALL DEBRIS RESULTING FROM ALL ACTIVITIES SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR.
- 18. ALL EXCESS SUITABLE AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE BY ENGINEER OR OWNER.
- 19. ALL EXISTING TREES TO REMAIN SHALL BE PRESERVED AND PROTECTED.
- 20. BURNING OF TREES, BRUSH AND OTHER MATERIAL SHALL BE APPROVED, PERMITTED AND COORDINATED WITH CITY OF G.C.S. FIRE MARSHAL.

- 21. ROADWAY UNDER DRAINS SHALL BE AS REQUIRED ON THE PLANS OR AS MAY BE DETERMINED NECESSARY BY THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF HIGH GROUND WATER CONDITIONS ARE PRESENT DURING THE PREPARATION OF THE ROADWAY SUB-BASE. CITY OF G.C.S. WILL RESERVE THE RIGHT TO REQUEST ADDITIONAL UNDER DRAIN AS DEEMED NECESSARY.
- 22. CONTRACTOR SHALL PROVIDE CONTRACTION JOINTS AT 10' INTERVALS AND EXPANSION JOINTS SHALL BE CONSTRUCTED AT 50' INTERVALS AND AT ALL RADIUS POINTS ON ALL CURBING.
- 23. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS AT 18' INTERVALS AND CONTRACTION JOINTS SHALL BE SPACED AT 6' INTERVALS BETWEEN EXPANSION JOINTS.
- 24. MAINTENANCE OF TRAFFIC SHALL CONFORM TO F.D.O.T. STANDARD INDEX 600, LATEST EDITION.
- 25. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARD INDEXES 11860, 17346, AND 17352.
- 26. WHERE RCP IS CALLED OUT IN THE PLANS CONTRACTOR MAY SPECIFY RCP, OR HDPE FOR APPROVAL BY ENGINEER OF RECORD.
- 27. ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED ROADWAY/SITE DEVELOPMENT SHALL BE REMOVED BY THE CONTRACTOR UTILIZING THE HYDRO-BLASTING METHOD.

UTILITY NOTES:

- 1. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND IMPROVEMENTS SHOWN ON THE DRAWINGS IS BASED ON LIMITED INFORMATION AND MAY NOT HAVE BEEN VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRACT TO THE ACTUAL LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF THE DISCREPANCY. THIS DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITIES AND IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR AND SHALL REPAIR OR PAY FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH HE SHALL CONNECT.
- 2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL MATERIALS, IF REQUIRED, TO THE ENGINEER FOR REVIEW AND APPROVAL, PRIOR TO SUBMITTAL TO CITY OF G.C.S. & G.C.S.P.W., AND PRIOR TO PURCHASE OR CONSTRUCTION OF ANY UTILITY PIPE OR STRUCTURE.
- 3. ALL PIPE LENGTHS ARE SCALED DIMENSIONS. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH CITY OF G.C.S. REQUIREMENTS AND SHALL BE CONSTRUCTED TO CONFORM WITH CURBING, PROPERTY LINES AND LOW POINTS AS SHOWN ON THE PLANS.
- 4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEAN AND FUNCTIONING PROPERLY AT TIME OF ACCEPTANCE.
- 5. ALL DRAINAGE STRUCTURES TO HAVE TRAFFIC BEARING GRATES.
- 6. ALL DRAINAGE PIPE JOINTS IN CITY OF G.C.S. DRAINAGE EASEMENTS, DRAINAGE EASEMENTS BETWEEN PRIVATE LOTS, DRAINAGE RIGHT-OF-WAYS AND UNDER PAVED ROADS ARE TO BE FILTER-WRAPPED.
- 7. ALL INVERTS IN DRAINAGE STRUCTURES TO BE PRE CAST OR BRICK WITH LAYER OF MORTAR BETWEEN EACH LAYER OF BRICK, OR REDDI-MIX CONCRETE WITH #57 STONE.
- 8. UNSUITABLE MATERIALS UNDER WATER, SEWER PIPE, STORM PIPE OR STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED.
- ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUB GRADE FOR PAVEMENT.
- 10. ALL WATER AND SEWER CONSTRUCTION WITHIN CITY OF G.C.S. SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OF CHAPTER 489 FLORIDA STATUTES.
- 11. CONTRACTOR SHALL PROVIDE, TO THE ENGINEER, A SCHEDULE OF INVERT ELEVATIONS OF ALL SANITARY MANHOLES & DRAINAGE STRUCTURES PRIOR TO THE PLACEMENT OF THE LIME ROCK BASE COURSE. THIS SCHEDULE TO BE PROVIDED BY THE REGISTERED LAND SURVEYOR SUBMITTING THE "AS BUILT" DRAWINGS FOR THIS PROJECT.
- 12. WATER AND SEWER LINES ARE DESIGNATED TO FINISHED GRADES AND SHALL BE PROTECTED UNTIL FINISHED WORK IS COMPLETE. HORIZONTAL SEPARATION BETWEEN WATER MAINS, VALVES, FITTINGS AND SANITARY OR STORM SEWER SHALL BE A MINIMUM OF 10 FEET OR IN ACCORDANCE WITH THE F.D.E.P. REGULATIONS AND G.C.S.P.W. STANDARD DETAILS.
- 14. ALL WATER LINE CROSSINGS SHALL HAVE A FULL LENGTH OF PIPE CENTERED OVER THE EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING AT CROSSINGS. WATER MAINS CROSSING SANITARY AND STORM SEWER LINES, AS WELL AS VALVES AND FITTINGS, MUST HAVE A MINIMUM 18" VERTICAL SEPARATION. IF THIS SEPARATION CANNOT BE OBTAINED, THE WATER MAIN MUST BE CONSTRUCTED OF DUCTILE IRON PIPE FOR A DISTANCE OF 10' EITHER SIDE OF THE SANITARY OR STORM SEWER MAIN, OR INSTALL WATER MAIN IN D.I. SLEEVE MIN. LENGTH 20' CENTERED, ENDS OF SLEEVE TO BE GROUT FILLED, IN EITHER CASE, MINIMUM OF 6" OF VERTICAL SEPARATION SHALL BE MAINTAINED.
- 15. MECHANICAL RESTRAINING DEVICES ARE REQUIRED IN ACCORDANCE WITH UTILITY COMPANY STANDARDS WHERE WATER MAINS ARE TERMINATED AND AT ALL BENDS AND TEES.
- 16. ALL ELECTRIC CONDUIT WORK SHALL BE COMPLETED PRIOR TO THE PRESSURE TESTING OF WATER AND SEWAGE FORCE MAINS.

- 17. TELEVISION INSPECTION SHALL BE REQUIRED ON ALL GRAVITY SEWER MAINS. THIS SERVICE SHALL BE PROVIDED BY THE CONTRACTOR AS PART OF THE SANITARY SEWER CONTRACT. A FULL WRITTEN REPORT AS TO THE CONDITION OF THE PIPE WITH PERTINENT DATA SUCH AS DISTANCE BETWEEN MANHOLES, LOCATION OF SERVICES, ETC. SHALL BE SUBMITTED TO THE OWNER AND ENGINEER PRIOR TO ACCEPTANCE, AND ONE COPY OF THE VIDEO TAPE SHALL BE SUBMITTED TO CITY OF G.C.S.. ALL DEFECTIVE AREAS AND ITEMS SHALL BE REPLACED OR REPAIRED PRIOR TO FINAL ACCEPTANCE. ALL REPAIRED SECTIONS MUST BE REINSPECTED PRIOR TO ACCEPTANCE.
- 18. ALL NEW AND/OR RELOCATED WATER MAIN PIPES AND FITTINGS SHALL NOT CONTAIN MORE THAN EIGHT PERCENT LEAD AND ALL PACKING AND JOINT MATERIALS USED IN THE JOINTS SHALL CONFORM WITH ALL APPLICABLE AWWA STANDARDS. ALL NEW AND/OR RELOCATED WATER SERVICES AND PLUMBING SHALL CONTAIN NO MORE THAN EIGHT PERCENT LEAD AND ALL SOLDERS AND FLUX SHALL CONTAIN NO MORE THAN 0.2 PERCENT LEAD.
- 19. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE PERMITTING AGENCY, DUCTILE FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED.

Engineering, Le, GREN COVE SPRINGS, FL 32043 SITE IMPROVEMENTS FOR VINEYARD TRANSITIONAL CENTER REVISIONS

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

CITY GENERAL REQUIREMENTS:

- CITY OF G.C.S. DEPARTMENT OF ENGINEERING REQUIRES TWENTY-FOUR (24) HOUR NOTICE ON ALL MEETINGS AND OR TESTING MEASURES RELATED TO SAID PROJECT.
- 2. CONSTRUCTION WARNING SIGNS ARE TO BE POST MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE AND ALL TRAFFIC CONTROL DEVICES SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS WELL AS THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEXES.
- 3. ALL SUB BASE SHALL BE FIRM AND UNYIELDING.
- 4. ALL JOINTS OF PIPE, REGARDLESS OF MATERIAL TYPE, SHALL BE WRAPPED WITH FABRIC FILTER CLOTH PER FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEX 280.
- 5. ALL DISTURBED CITY OF G.C.S. RIGHTS-OF-WAY SHALL BE SODDED TO THE DISCRETION AND APPROVAL OF THE CITY OF G.C.S. ENGINEERING DEPARTMENT.
- 6. THE CURB SHALL BE CHECKED FOR FLOW DESIGN AT ANY STAGE OF THE PROJECT. A WATER TRUCK IS TO BE PROVIDED AT THE FINAL INSPECTION IN ORDER TO CHECK FLOW DESIGN.
- 7. ALL UNDER DRAIN LINES SHALL HAVE A FORTY-FIVE DEGREE CLEAN OUT AT TWO HUNDRED FOOT (200') INTERVALS AND AT THE END OF THE RUN. THE CURB SHALL BE MARKED WITH TEAL OR HUNTER GREEN PAINT AS TO THE LOCATION OF THE CLEAN OUT.
- 8. HANDICAP RAMPS SHALL BE INSTALLED WHEREVER THE SIDEWALK MEETS THE CURB.
- 9. ALL INFORMATION REQUESTED BY THE CITY SHALL BE IN HAND AT THE TIME OF THE FINAL INSPECTION. NO CONDITIONAL CERTIFICATES OF OCCUPANCY SHALL BE GIVEN.
- 10. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE UTILITY COMPANY, THE ENGINEER, AND THE CITY.
- 11. ALL SWALE SECTIONS ARE TO BE SODDED.
- 12. ALL DEVELOPER OR CONTRACTOR INSTALLED SIDEWALKS SHALL BE INSTALLED PRIOR TO THE FINAL INSPECTION.
- 13. A COPY OF THE CONTRACTORS' GENERAL LICENSE AND OR UNDER GROUND UTILITY LICENSE SHALL BE PROVIDED AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.
- 14. ANY APPLICABLE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) OR FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) PERMITS SHALL BE PROVIDED TO THE CITY BY THE PRE-CONSTRUCTION CONFERENCE. NO WORK SHALL BEGIN WITHOUT ALL APPLICABLE PERMITS ON
- 15. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) BEFORE THE CITY WILL ACCEPT THE PROJECT.
- 16. THERE SHALL BE A MINIMUM THREE (3) DAYS NOTICE GIVEN FOR SCHEDULING THE FINAL INSPECTION.
- 17. AT THE FINAL INSPECTION, A LETTER OF COMPLIANCE, PROVIDED BY THE CITY, WILL NEED TO BE FILLED OUT AND SIGNED THE STATE OF FLORIDA REGISTERED PROFESSIONAL ENGINEER OF RECORD.
- 18. FIVE (5) DAYS PRIOR TO THE FINAL INSPECTION TWO (2) SETS OF BLUE LINE AS-BUILTS AND ONE (1) COPY ON DISK IN AUTOCAD FORMAT SHOWING THE FOLLOWING SHALL BE SUBMITTED:

CITY EROSION CONTROL NOTES:

- 19. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, THE USE OF ONE OR MORE EROSION CONTROL MEASURES, AS REQUESTED BY THE CITY OF G.C.S. ENGINEERING DEPARTMENT, SHALL BE USED DURING CONSTRUCTION. THESE WILL BE, BUT NOT LIMITED TO, ITEMS SUCH AS TEMPORARY GRASS COVER, SEDIMENT BASINS OR PONDS, MULCHING, TEMPORARY FENCES, DIVERSION CHANNELS AND HAY BALES.
- 20. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, SCHEDULING OF CONSTRUCTION SHALL BE GIVEN SPECIAL CONSIDERATION TO MINIMIZE EXPOSURE OF BARE SOIL. THE CONTRACTOR WILL FORMULATE A CONSTRUCTION SCHEDULE TO BE GIVEN TO THE CITY REPRESENTATIVE.
- 21. THE CONTRACTOR SHALL CHECK EACH DAY TO INSURE THAT ALL EROSION CONTROL DEVICES ARE IN PLACE AND WORKING PROPERLY.
- 22. ALL EROSION CONTROL MEASURES SHALL BE IN COMPLIANCE WITH THE RULES, REGULATION AND STANDARDS OF THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD), THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND THE UNITED STATES ARMY CORP OF
- 23. THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PREVENT THE EROSION OF SOIL AND DEPOSITION OF SEDIMENT ON ADJACENT AND DOWNSTREAM PROPERTIES.
- 24. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.

CITY PUBLIC SAFETY NOTES:

25. BLUE, ALL-DIRECTIONAL HIGHWAY-STYLE REFLECTIVE MARKERS SHALL BE PROVIDED ON ALL ROADWAYS, ALLEYS, ACCESS ROADS AND ALL PAVED AREA IN FRONT OF EACH HYDRANT. SAID MARKERS SHALL BE LOCATED IN THE LANE OF TRAVEL ON THE SAME SIDE AS THE HYDRANT. THESE MARKERS SHALL BE IN PLACE AT THE TIME OF FINAL INSPECTION OR APPROVAL.

- 26. A DISK SHALL BE PROVIDED, IN AUTOCAD FORMAT, SHOWING THE LOCATION OF ALL FIRE HYDRANTS BEFORE FINAL APPROVAL. PAVING, DRAINAGE AND CONSTRUCTION NOTES:
- 27. ALL UNSUITABLE MATERIAL SHALL BE REMOVED TWO FEET (2') BEYOND THE BACK OF CURB AND TWO FEET (2') BELOW FINISHED GRADE.
- 28. COMPACTION DENSITIES FOR ALL ROADWAY CROSSINGS ARE TO BE TAKEN IN ONE-FOOT (1') LIFTS. STORM SEWER PIPE DENSITIES WILL START AT THE HAUNCHES OF THE PIPE AND BE TAKEN EVERY 6" UNTIL IT HAS REACHED 1' ABOVE THE PIPE.
- 29. IF UNSUITABLE MATERIAL IS FOUND WITHIN THE LIMITS OF THE ROAD OR IF MATERIAL IS HAULED IN FOR ROADWAY FILL AT A DEPTH GREATER THAN ONE-FOOT (1') THEN THE ENTIRE ROADWAY SHALL BE UNDER DRAINED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND INSTALLED PER THE APPROVED CITY OF G.C.S. DETAIL.
- 30. ALL STORM SEWER PIPES SHALL BE CUT FLUSH WITH THE INTERIOR WALL OF ANY TYPE MANHOLE OR CURB AND DITCH BOTTOM INLETS.
- 31. COMPACTION DENSITY TESTS FOR ALL WATER AND SEWER CROSSINGS WILL START THREE FEET (3') ABOVE THE PIPE.
- 32. COMPACTION DENSITY TESTS FOR ALL WATER AND SEWER CROSSINGS WILL START AT THE SPRING LINE OF THE PIPE.
- 33. IF THE APPROVED DESIGN REQUIRED THE INLET OR STORM RUN TO BE SURCHARGED, ALL INLETS SHALL BE INSPECTED BEFORE BEING EXPOSED TO THE SYSTEM.
- 34. TEST CYLINDERS SHALL RUN FOR ALL CONCRETE STRUCTURES. THERE WILL BE THREE (3) TESTS PER EACH DAY POUR WITH ONE (1) AT SEVEN (7) DAY BREAK, AND TWO (2) TWENTY-EIGHT (28) DAY BREAKS
- 35. THE ASPHALT SHALL BE CORED FOR THICKNESS AND WILL BE GIVEN A ONE-QUARTER INCH (1/4") Tolerance. If however the city's representative is present at pour and feels comfortable with the requirements then he or she may wave this policy.
- 36. LBR'S FOR SUBGRADE AT FORTY (40) AND LIME ROCK OR ALTERNATIVE BASE COURSE AT ONE HUNDRED (100). THERE WILL BE NO UNDER TOLERANCE.
- 37. ALL MATERIAL USED FOR BACK FILL SHALL BE SAND (A3) FREE DRAINING.
- 38. THERE ARE TO BE NO OPENED TRENCHES AT DAY'S END.
- 39. ALL DIRT AND DEBRIS TRACKED OUT OF THE PROJECT SHALL BE CLEANED DAILY AND TO THE DISCRETION OF THE CITY OF G.C.S. ENGINEERING DEPARTMENT.

SIGNING AND PAVEMENT MARKING NOTES:

- 40. ALL SIGNS MUST MEET THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS FOR ENGINEERING GRADE SIGN FACES IN REFLECTIVITY.
- 41. ALL FINAL PAVEMENT MARKINGS WITHIN THE RIGHTS-OF-WAY SHALL BE THERMOPLASTIC.
- 42. ALL SIGNS SHALL BE ON A TEN-FOOT (10') POLE A MINIMUM OF SEVEN FEET (7') FROM THE GROUND
- 43. STREET SIGNS SHALL BE MOUNTED WITH TEE CAPS.
- 44. STREET SIGNS SHALL BE SIX INCHES (6") WIDE WITH GREEN BACKINGS AND WHITE LETTERS AND
- 45. STOP SIGNS SHALL BE A MINIMUM TWENTY-FOUR INCH BY TWENTY-FOUR INCH (24" X 24").
- 46. STOP SIGNS ARE TO BE PLACED FOUR FEET (4') FROM BACK OF CURB, FOR FEET (4') BEHIND CROSS WALKS AND ON THE RIGHT HAND SIDE OF THE ROAD.
- 47. STREET SIGNS ARE TO BE LOCATED ON THE LEFT HAND CORNER OF THE INTERSECTION FOUR FEET (4') FROM THE BACK OF CURB.
- 48. STREET / STOP SIGN COMBINATIONS ARE NOT ALLOWED.
- 49. ALL REGULATORY SIGNS SHALL BE BLACK AND WHITE. ALL CONSTRUCTION WARNING SIGNS SHALL BE ORANGE AND BLACK. ALL WARNING SIGNS SHALL BE YELLOW AND BLACK. ALL NO PARKING AND STOP SIGNS SHALL BE RED AND WHITE.
- 50. STOP BARS SHALL BE TWENTY-FOUR INCHES (24") WIDE AND LANE WIDTH. ALL STOP BARS SHALL BE THERMOPLASTIC.
- 51. ALL SIGNS SHALL BE SIDED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
- 52. ALL DETECTABLE WARNING PADS FOR ADA RAMPS ARE TO BE WET-SET MATS.

CITY MAINTENANCE OF TRAFFIC:

- 53. AFTER ISSUANCE OF THE PERMIT. THE PERMITTEE SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT A MINIMUM OF TWO BUSINESS DAYS PRIOR TO COMMENCING CONSTRUCTION. THIS NOTIFICATION WILL ALLOW FOR SCHEDULING OF INSPECTIONS.
- 54. IF A ROAD CLOSURE IS REQUIRED. THE PERMITTEE SHALL SUBMIT WITH THE PERMIT APPLICATION A MAINTENANCE OF TRAFFIC (MOT) PLAN TO INCLUDE ALL PROPOSED ROAD CLOSURES AND AN EXPECTED TIME DURATION FOR EACH CLOSING.

- 55. ROAD CLOSURES SHALL REQUIRE SEPARATE APPROVAL BY THE PUBLIC WORKS DEPARTMENT AND A MINIMUM OF THREE BUSINESS DAYS PRIOR NOTIFICATION BEFORE THE COMMENCEMENT OR
- 56. ROAD CLOSURES SHALL REQUIRE SEPARATE APPROVAL OF CLAY COUNTY FIRE AND RESCUE.
- 57. ROAD CLOSURES OF FEWER THAN 15 MINUTES SHALL NOT REQUIRE NOTIFICATION.

CITY AS-BUILT REQUIREMENTS:

58. AS-BUILTS MUST BE SUBMITTED ON THE APPROVED GRADING.

CITY EMERGENCY SHELTER NOTES PER SEC 117-192-B-3

AN EMERGENCY SHELTER SHALL BE PERMITTED IN THE INSTITUTIONAL ZONING DISTRICT AS A SPECIAL EXCEPTION, SUBJECT TO THE FOLLOWING PROVISIONS:

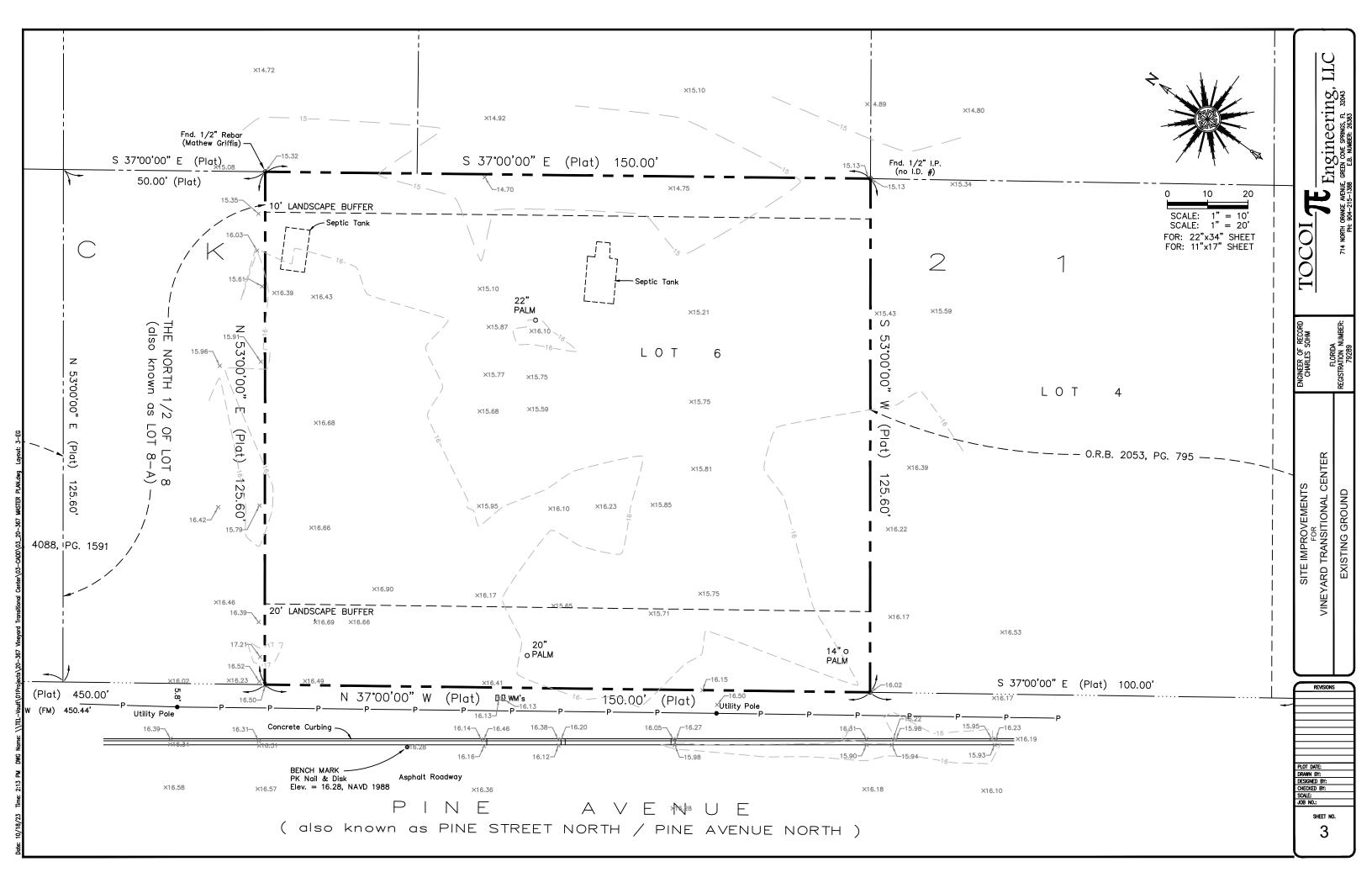
- (1) A MINIMUM OF 300 SQUARE FEET OF PRIVATE INDOOR LIVING SPACE SHALL BE PROVIDED FOR EACH OCCUPANT OF A STRUCTURE.
- (2) MINIMUM PARKING REQUIREMENTS SHALL BE AS FOLLOWS:
- A. ONE PARKING SPACE FOR EACH THREE BEDS; AND
- B. ONE PARKING SPACE FOR EACH EMPLOYEE.

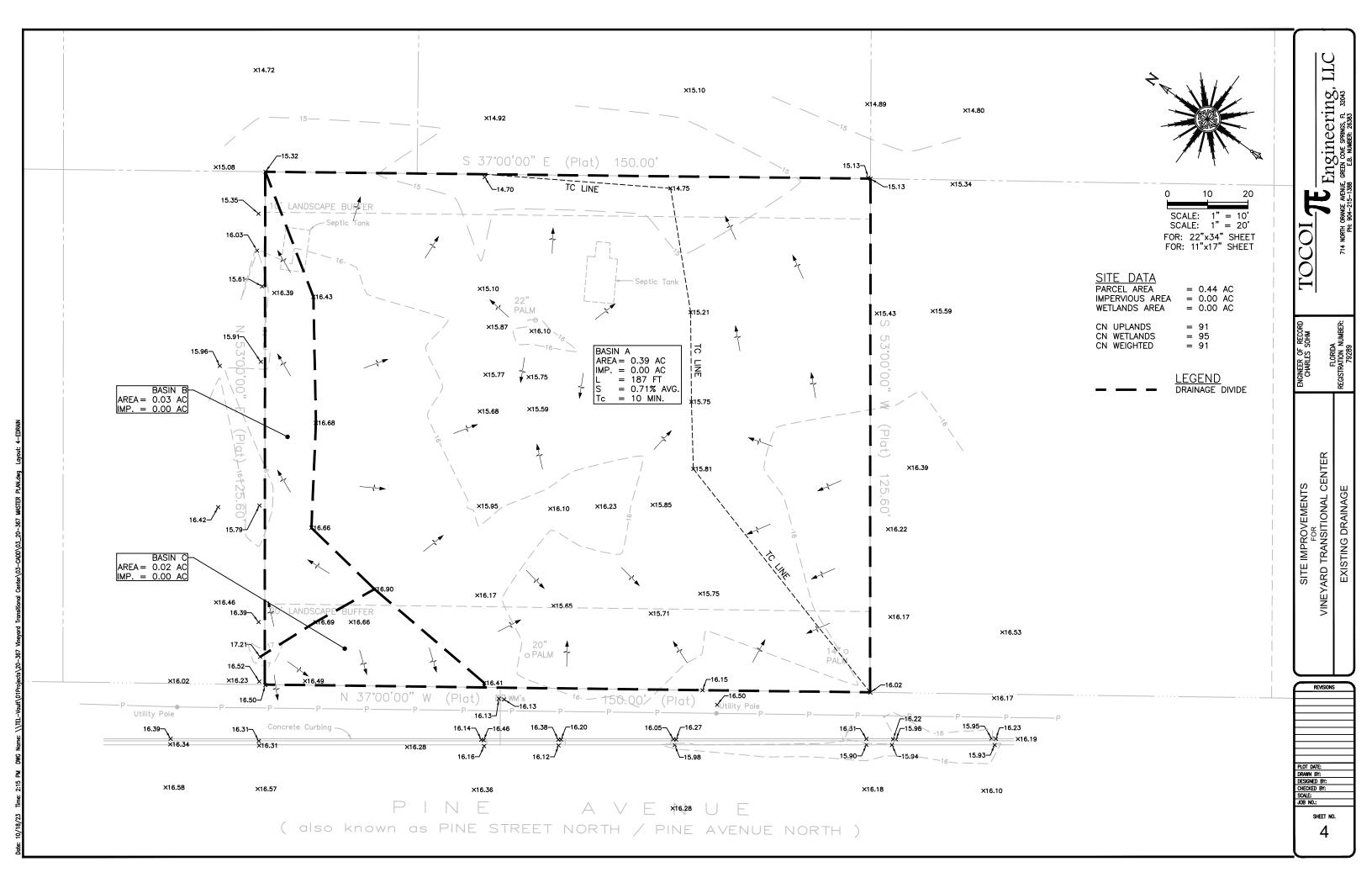
Engineering,

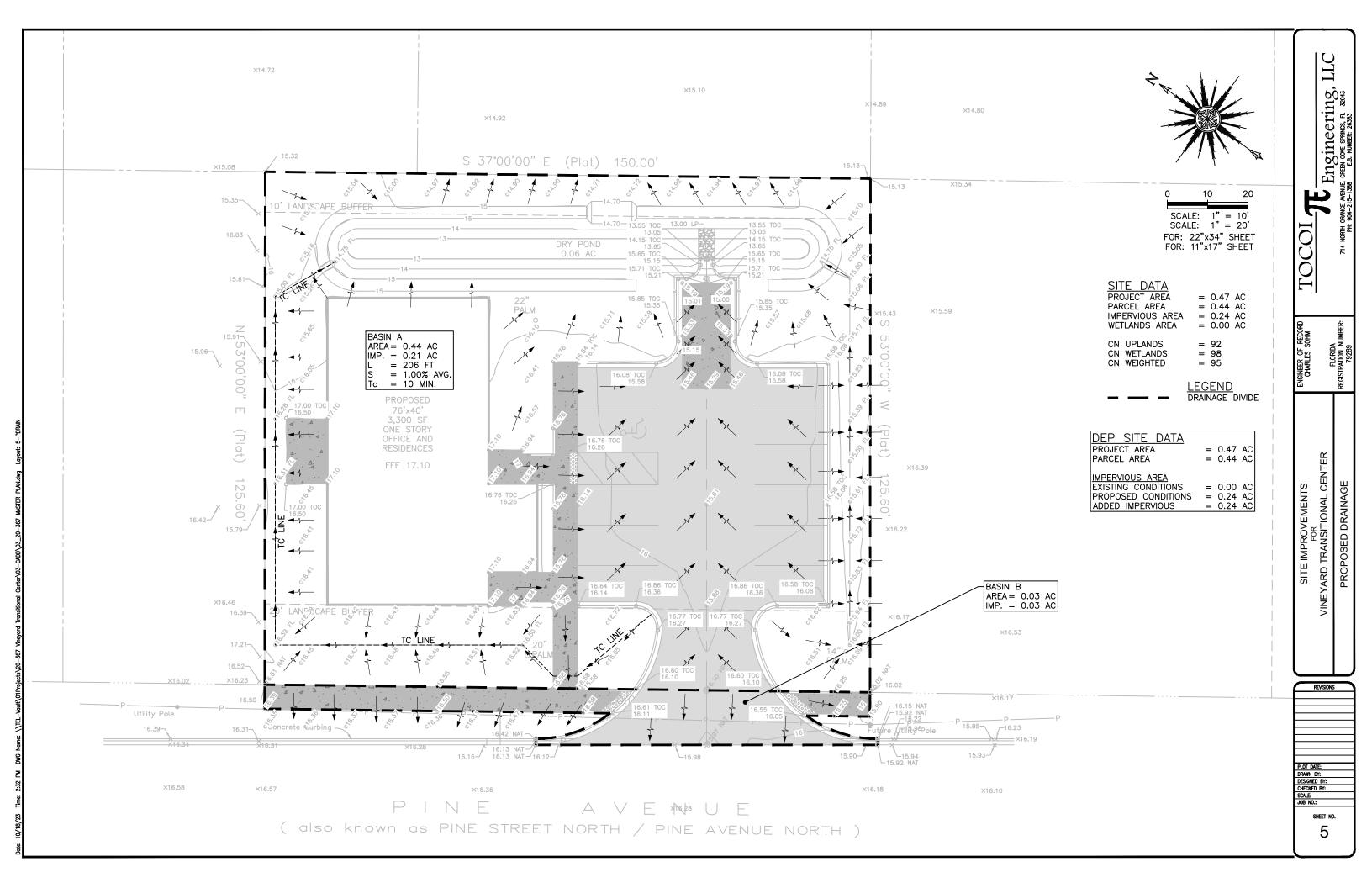
SITE IMPROVEMENTS
FOR
VINEYARD TRANSITIONAL CENTER

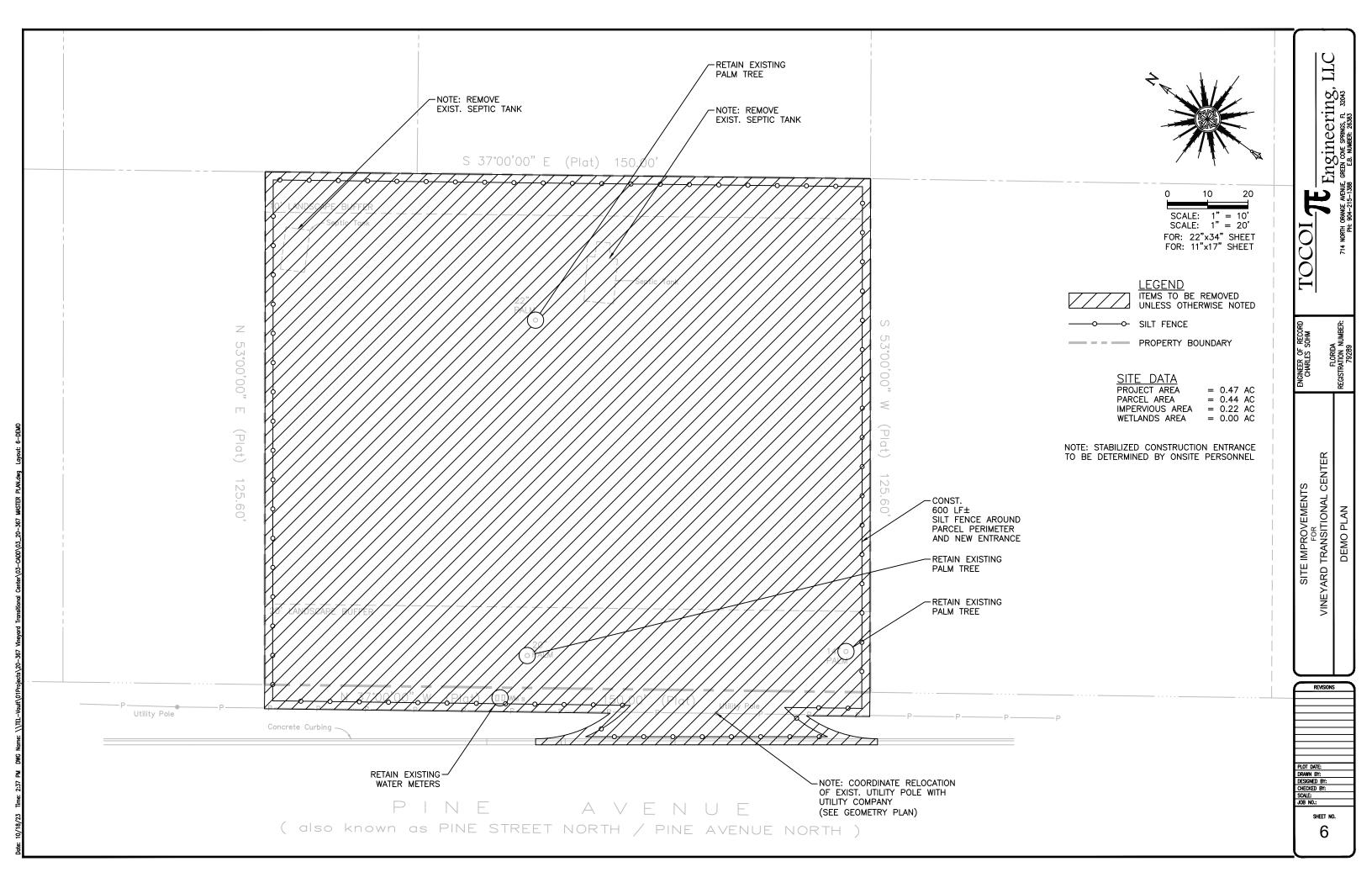
REVISIONS

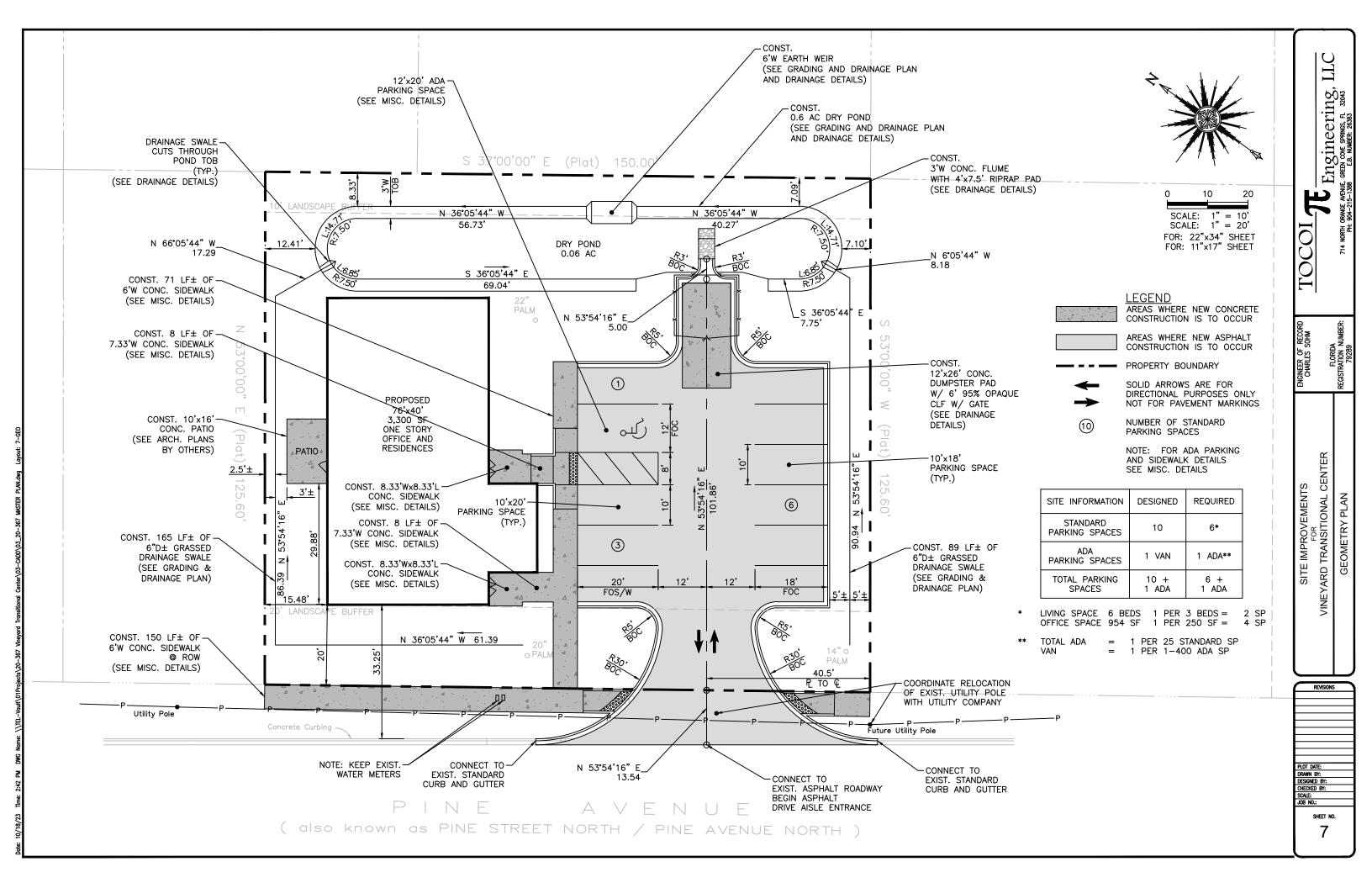
ESIGNED BY: HECKED BY:

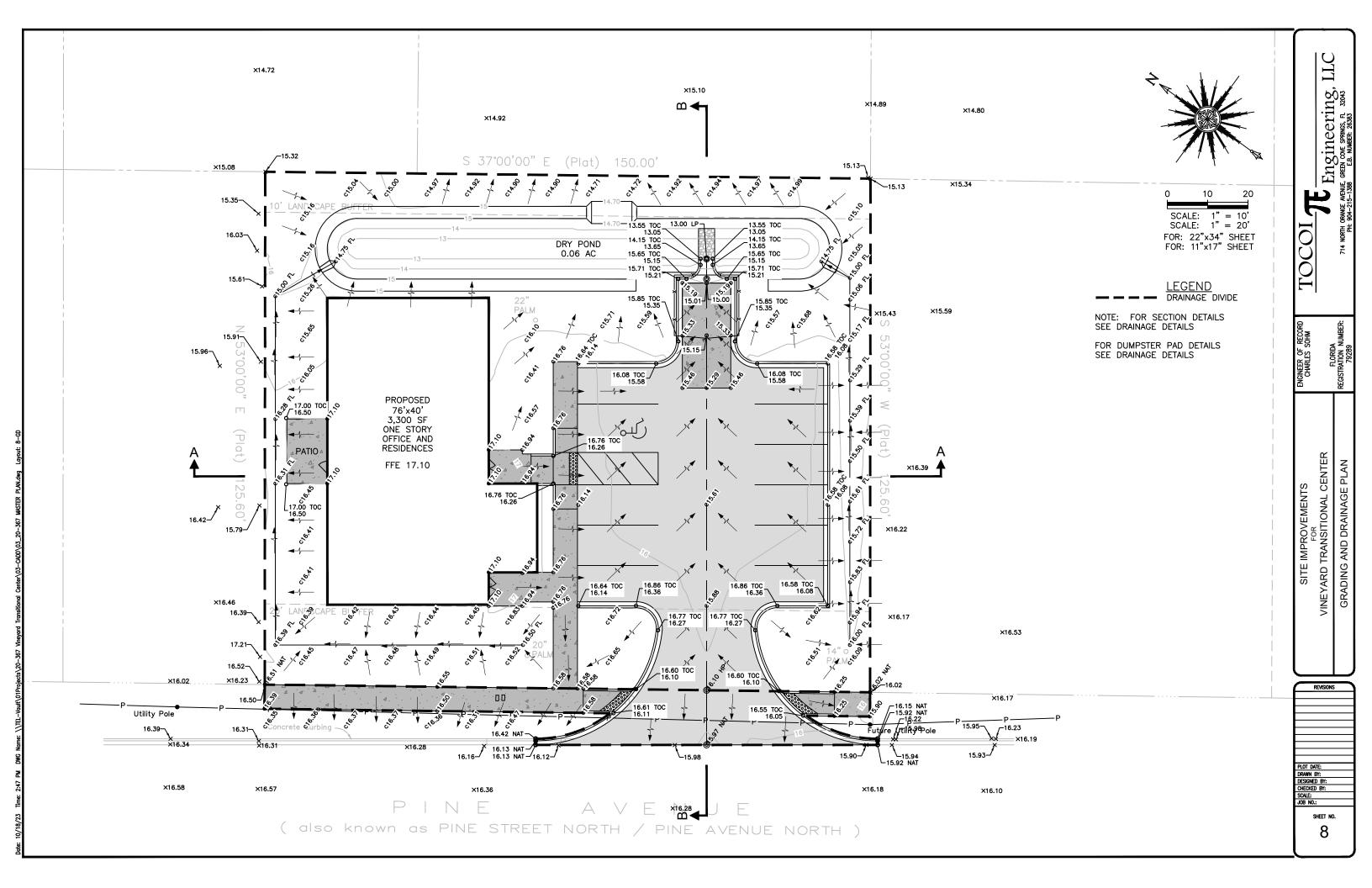


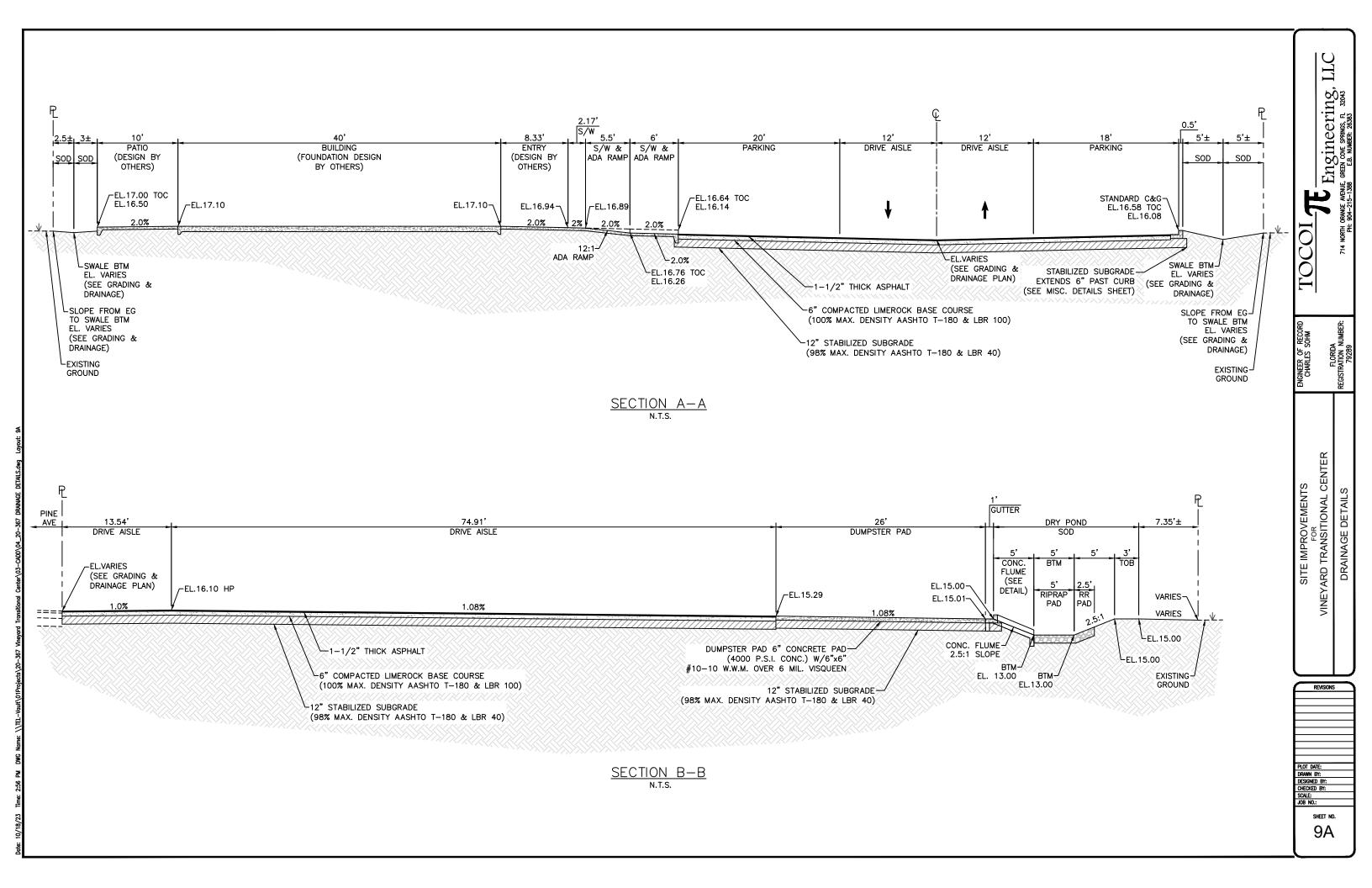


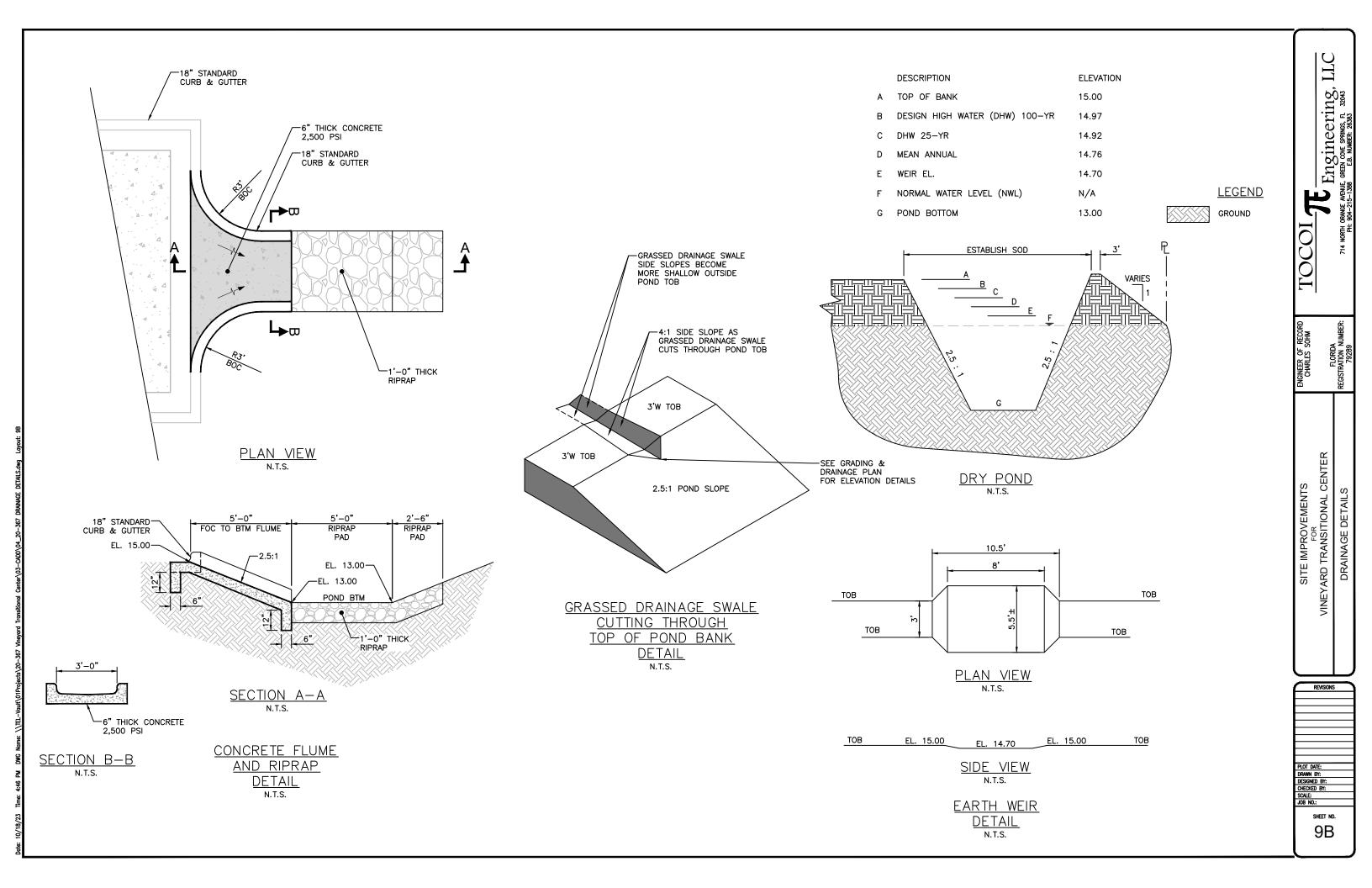


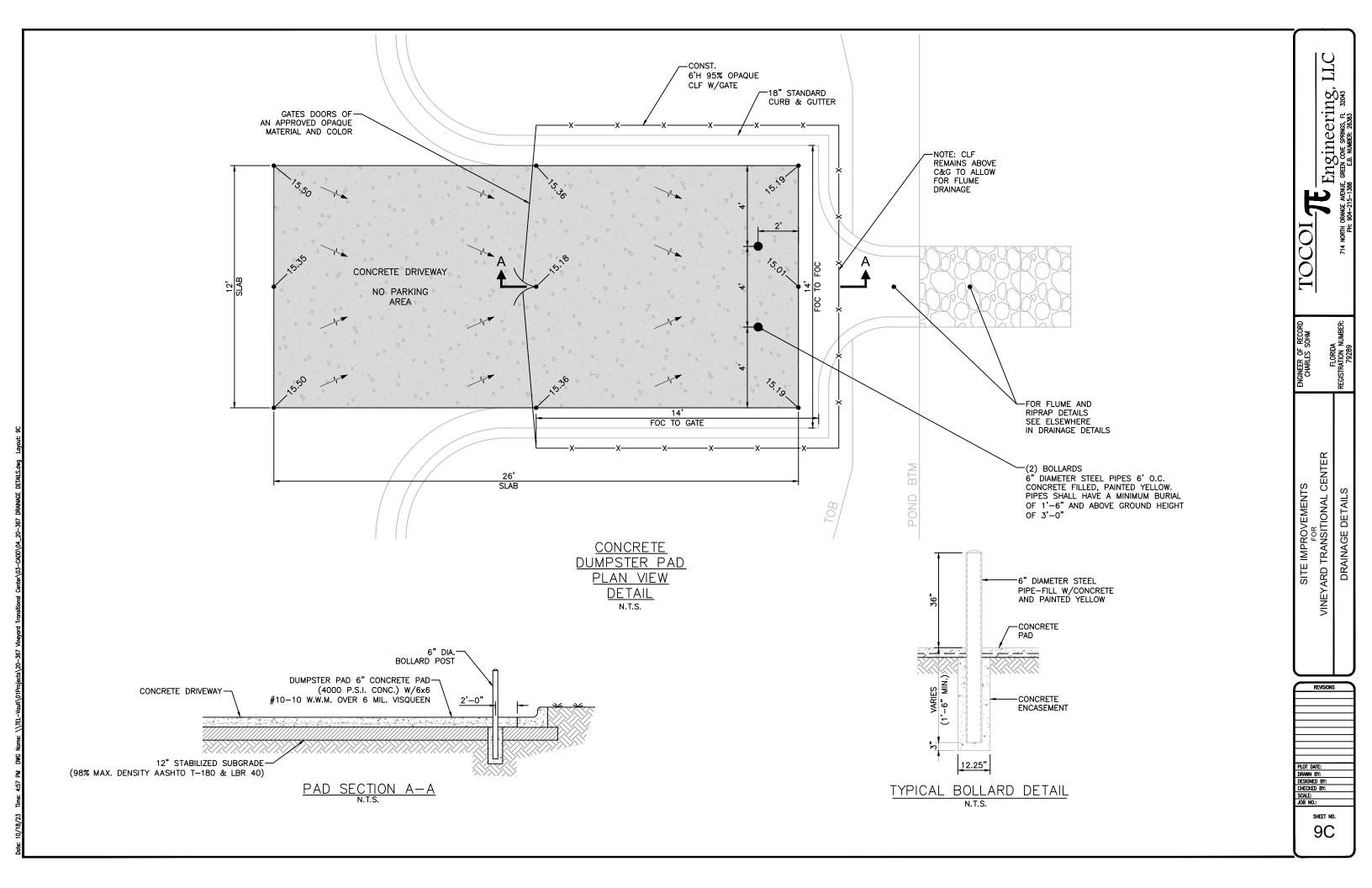


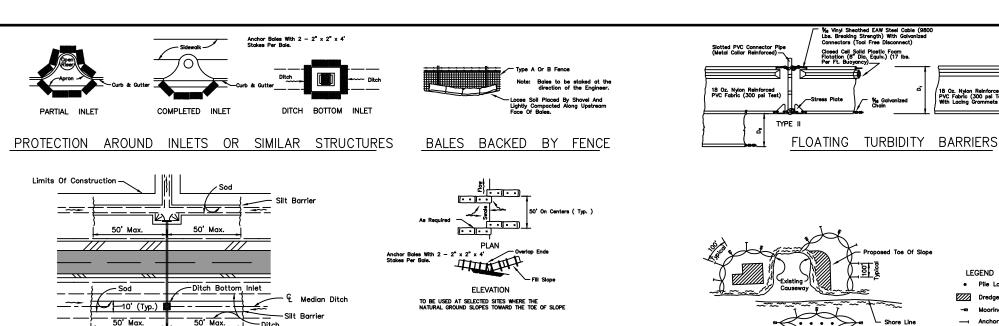


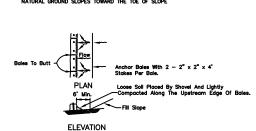






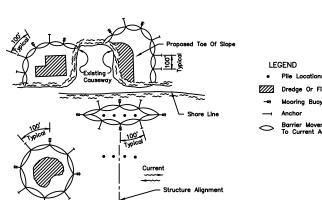






TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES AWAY FROM THE TOE OF SLOPE

BARRIERS FOR FILL SLOPES



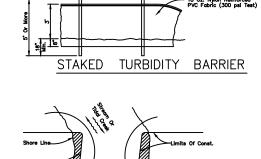
SECTION

- 1. Turbidity barriers are to be used in all permanent bodies of water regardless of
- 2. Number and spacing of anchors dependent on current velocities.
- 3. Deployment of barrier around pile locations may vary to accommodate construction operations
- 4. Navigation may require segmenting barrier during construction operations.
- 5. For additional information see Section 104 of the FDOT Standard Specifications

TURBIDITY BARRIER APPLICATIONS

TURBIDITY BARRIERS

(D-907) N.T.S.



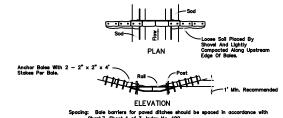
NOTICE:

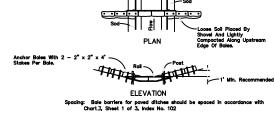
THE ENGINEER.

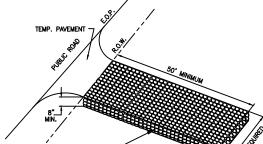
COMPONENTS OF TYPES I & TYPE II MAY

I AND II SHALL BE AS APPROVED BY

BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES

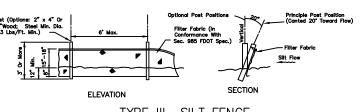






N.T.S. (per FDOT Index 106)

WHERE FDOT SPECS AND INDEX ARE REFERENCED, PLEASE REFER TO FDOT ROADWAY & TRAFFIC DESIGN STANDARDS
AND FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.



50' Max.

DITCH INSTALLATIONS AT

DRAINAGE STRUCTURES

TYPE III SILT FENCE



HAY BALE LOCATION

ELEVATION

TYPE IV SILT FENCE

SILT FENCE APPLICATIONS

SILT FENCE TYPE III & IV

(D-908)

HAY BALE BARRIERS TYPE I & II

BARRIER FOR UNPAVED DITCHES

TYPE II

(D-912) N.T.S.

tion and Spacing: The use of Types I & II bale barriers should be limited to the conditions outlined in Chart I, Sheet 1 of 3, Index No. 102

SITE IMPROVEMENTS
FOR
VINEYARD TRANSITIONAL CENTER

REVISIONS

Engineering,

RAWN BY: ESIGNED BY: HECKED BY:

SHEET NO. 10

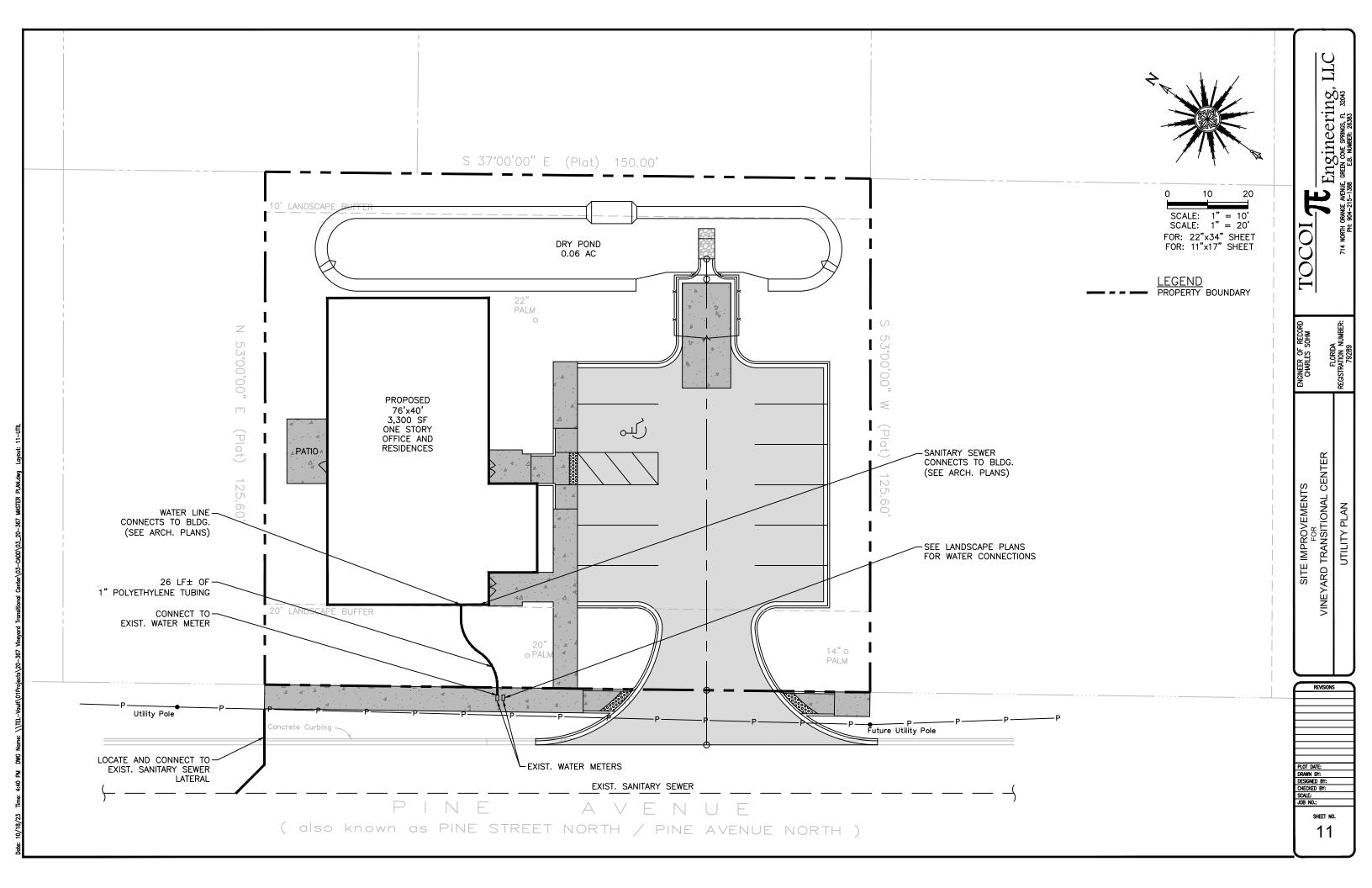
BARRIER FOR PAVED DITCH

FDOT #1 COARSE AGGREGATE OR EQUIVALENT

STABILIZED CONSTRUCTION ENTRANCE

Loose Soil Placed By Shovel And Lightly
Compacted Along The Upstream Edge Of Bales

ELEVATION



GREEN COVE SPRINGS GENERAL NOTES

- 1. AS-BUILT DRAWINGS. During the daily progress of the work, the Contractor's job superintendent shall record on his field set of drawings all work installed. All manholes, sewer mains, laterals, valves, fittings, fire hydrants, etc. shall be located in two directions. One location shall be referenced perpendicular to the right-of-way lines and/or property lines (preferably both) or existing permanent utility structures are acceptable (i.e manholes, catch basins, fire hydrants, head/endwalls, etc.). No power / utility poles may be used for reference. Elevations of manhole inverts and center of cover shall be shown to the nearest hundredth of a foot. Size, type, class and slope of sewer main shall be shown (i.e. 8" PVC, SDR-35). Size, type and class of water mains, valves, fittings, fire hydrants, etc. shall be shown (i.e. 8" D.I.P., 6" Gate Valve). All locations where the top of the water main is less than 36" deep or more than 50" deep shall be noted on the as-builts. R The As-Builts shall be at the Contractor's expense, provided in AutoCad R10, or later, in accordance with the City of Green Cove Springs required format. R A copy of the AutoCAD data shall be furnished on a compact disk (CD) and the contractor shall provide two double matte mylars and six prints of the as-builts on 18"x 24" sheets. Title Block format, as-built page numbers, fire hydrant numbers, and continuation sheet numbers shall be obtained from the City of Green Cove Springs staff before preparation of the as-builts and shall be incorporated into the as-built drawings prior to submittal. Scale shall be 1"=100', however, in congested areas where dimensions and data are not legible an insert shall be drawn to a scale which will provide adequate space for the as—built data. The lettering and numerals shall be legible and a minimum height of 0.06 inches. The mylars shall be signed by the General Contractor and Florida Registered Surveyor for the job. The signature shall certify that the "As-Built Drawings" do in fact, reflect the true as—built conditions. Upon completion of the job and the preparation of the as-builts, a "proof" set of the as-builts will be delivered to the Utility and the Design Engineer for their review and comment, prior to the final as-builts being submitted to the Design Engineer for his use in final certification to the Florida Department of Environmental Protection. As-built corrections based on the Utility's and the Design Engineer's comments shall be incorporated into the as-builts that the engineer uses for final certification, and the appropriate number of R copies of such as-builts along with the mylar and AutoCAD disk shall be delivered to the Utility with the request for execution of the final certification or prior. Water as-builts and sewer as-builts shall be on separate
- 2. CONSTRUCTION WARRANTY AND WARRANTY SECURITY PERIOD. Developer shall warranty Utility against defects in material and workmanship for the portion of the on-site system to be owned by the Utility. Developer shall secure from its Contractor a written and fully assignable warranty that the system installed will be and remain free from all defects, latent or otherwise with respect to workmanship, materials, installation, and accuracy of his as-built drawings in accordance with the Utility approved plans and specifications for a period of one year from the date of the system acceptance by the Utility, and immediately assign the same and the right to enforce the same to Utility on or before the date of the Utility's acceptance of the system for ownership and maintenance.
- 3. CLEAN-UP. All surplus materials of construction shall be removed from the site and disposed of by the Contractor as part of his contract with the owner.
- 4. RESTORATION. New Sanitary Sewer and Water Main Construction in earthen areas shall be seeded and mulched in accordance with Section 570 of the Standard Specifications of the Florida Department of Transportation (latest edition). In locations where existing grassed (sodded) areas are disturbed, sod shall be replaced to preconstruction condition and to limits of construction or where directed by the engineer.
- 5. PERMITS. The Contractor shall be responsible for obtaining all permits required for performing work under this contract, except that the F.D.E.P. permits and wetlands permits, if required, will be secured by the owner or developer.
- 6. PIPE BEDDING. In the event unsuitable or unstable bedding material is encountered at or below the limits of the excavation required for installation, such material shall be removed and replaced with suitable compacted backfill material specified by the design engineer and approved by the City of Green Cove Springs so as to provide a stable trench bedding surface suitable for proper pipe installation.
- 7. DEWATERING. The contractor shall at all time during construction provide ample means and equipment with which to promptly remove and dispose of all water entering the trench and structure excavations and shall keep said excavations acceptably dry, until the piping and/or structures to be built therein are completed. All water pumped or drained from the work area shall be disposed of in a manner as to not damage sewer, water, electrical or any other piping, structures or property. No pipe shall be laid in water and no water shall be allowed to rise above the bottom of any pipe while it is being jointed, except as may be approved in writing by the City of Green Cove Springs.

- 8. HYDROSTATIC TESTING. After all pressure pipes (water mains, services, and force mains) are laid, the joints completed, and the trench backfilled, the newly laid pipe and appurtenences shall be subjected to a hydrostatic test of 150 P.S.I. for a period of at least 2 hours. The Engineer and the City of Green Cove Springs must be notified 24 hours before a test is to be performed. Test shall be as set forth in AWWA standard C600. Any leaks detected shall be corrected and the section of pipeline retested. The 2 hour test period shall begin when all joints have been determined to be water tight. Leakage shall be limited to that allowance set forth in Section 4 of AWWA Standard C600-87. Hydrostatic and leakage test and blow-down (zeroing of gage) must occur before sampling for bacteriological test. The maximum allowable pressure loss is 5 P.S.I. regardless of the length of pipe.
- 9. REPORTS. Reports of hydrostatic and leakage tests and sterilization of the newly completed systems shall be submitted to the City of Green Cove Springs prior to requesting acceptance of the system.
- 10. DENSITY TESTING. In-place density tests are required at intervals not to exceed 150' along pipelines for every other lift. A minimum of one test between manholes is required for every other lift regardless of the distance between sanitary sewer manholes.
- 11. CONCRETE. All Portland Cement concrete shall be of Type II Portland Cement, 2,500 P.S.I. minimum, ready mixed. All concrete shall be placed before the initial set has taken place. Stale or retempered concrete shall not be used.
- 12. GATE VALVES AND BOXES. Gate valves shall have a 2" operating nut and open left. Gate valves shall have joints suitable for the type main on which installed. Valves 2" and 3" shall be iron body, bronze fitted. Valves 4" and larger shall be iron body, bronze fitted with resilient seat. The word "WATER" on water boxes and "SEWER" on force main boxes shall be cast in the covers.
- 13. SEPARATION OF WATER AND SEWER MAINS. A horizontal separation of a minimum of 10 feet shall be maintained between parallel water mains and sanitary sewers (including force mains) where practical. Where water mains and sanitary sewers cross with less than 18 inches vertical clearance, all PVC pipe shall be encased in concrete for a distance of 20 feet centered on the point of crossing; or a 20 foot section of ductile iron sewer pipe or DR-18 water pipe centered on the point of crossing may be substituted. This situation may or may not be noted on the design drawings. The City of Green Cove Springs must specifically approve use of ductile iron pipe for this situation.
- 14. NEW CONNECTION TO EXISTING MAIN. New connection to existing main in service shall be accomplished by the "wet tap" method utilizing full circle stainless steel tapping sleeve and mechanical joint tapping valve. Tapping sleeve shall be rated at 200 P.S.I., non—shock working pressure conforming to AWWA Standard C110, latest revision. Romac SST or JCM 432 stainless steel tapping sleeve with ductile iron flange is preferred. Tapping valve shall be mechanical joint one end and standard flanged joint on other end. Valve shall conform to Section 12. of these
- 15. JOBSITE SAFETY. While on the jobsite, the contractor shall at all times observe all Federal, State and local safety rules, regulations and laws. This applies to all aspects of the project including all rules, regulations, laws and requirements governing "confined spaces" for which a specific permit from the City of Green Cove Springs will be required.
- 16. CLOSE OUT / COMPLETION. Minimum items required for Close Out / Completion for submittal to the City of Green Cove Springs will include: 16.a. Construction Warranty from Developer in the form of a Bond, Letter of Credit or Cashier's Check for a two-year period.
- 16.b. Warranty Certificate for a two-year warranty from the contractor to the Developer and assignment of same to the City of Green Cove Springs.
- 16.c. Developer's Affidavit certifying there is no outstanding debt against utility assets to be deeded to City of Green Cove Springs.
- 16.d. Value of Acceptance Report showing value of assets to be deeded to the City of Green Cove Springs.
- 16.e. Bill of Sale to City of Green Cove Springs.
- 16.f. Bacteriological Test(s)
- 16.g. Pressure Test(s)
- 16.h. Television Reports and Tapes
- 16.i. Density Reports
- 16.i. Final As-Built Drawings and disks

- 17. AS-BUILT PLANS AND COST RECORDS. All cost records pertaining to the cost of water and sewer facilities donated to the Utility shall be provided to the Utility by Applicant. Prior to acceptance of any extension to the Utility's system that is completed by a licensed underground utility contractor, the Utility will require that the Applicant's contractor provide the Utility to retain for its permanent records, with:
- 17.a. Neat, legible, handwritten field copy as-built drawings showing all dimensions elevations required by the Utility: and and
- 17.b. A written report, in a format acceptable to the Utility, certified to by a Florida registered surveyor or mapper which:
- 17.b.1. Identifies each manhole by reference number;
- 17.b.2. Provides the top elevation of each manhole:
- 17.b.3. Identifies the inverts of all pipes coming into each manhole;
- 17.b.4. Provides the elevation of each invert and;
- 17.b.5. Provides the distance and grade on each pipe between manholes.
- 17.b.6. Applicant's Contractor shall be responsible for paying in advance the Utility's cost for preparation and completion of the Utility's final CADD as-built plans for each such extension of the Utility's system, based on the Utility's initial estimate of the cost to complete the Utility's final CADD as-built plans. Extra time required for revisions to the Utility's CADD as-built plans, caused either by inadequate as-built field copies provided by the Applicant's contractor, inaccurate or incomplete dimensions provided by the Applicant's surveyor, or other incomplete or inadequate information required of Applicant, Applicant's contractor or surveyor to complete the Utilities CADD as-built plans, or by any combination of such factors, shall be charged to and paid by the Applicant as an additional cost of completing th Utility's final CADD as-built plans, based on an hourly rate of \$30.00 per hour, plus plotting and printing costs for any extra proof sets. Once the Utility has completed its proposed final CADD as-built plans for such extension, a proof set of the proposed plans will be provided to the Applicant's contractor for proofreading and verification of the accuracy of the Utility's proposed final CADD as-built plans, based on the information provided to the Utility by the Applicant, Applicant's contractor or surveyor. When the Utility's proposed final CADD as-built plans have been verified as accurate by the Applicant's contractor, then a final set of "official" as-built plans will be plotted by the Utility and mylars will be prepared and submitted for the signature of the Applicant's contractor.
- 18. Location wire and warning tape is to installed on all water, sewer and forcemain to be dedicated to Green Cove Springs per Green Cove Springs standards and specifications.

Engineering, g. oren cove springs, g. 32043 TOCOI

LLC

GINEER OF CHARLES !

SITE IMPROVEMENTS FOR VINEYARD TRANSITIONAL CENTER SPRINGS (

REVISIONS

SHEET NO. 12A

- 2. GENERAL. All materials shall be new and unused. Materials shall be warranted by the Contractor as to materials, workmanship and accuracy of As—Built drawings for a period of two years from the date of completion of the work or beneficial use of the facilities. Workmanship shall be of good quality; i.e., mains shall be laid in a uniform alignment, fittings shall be properly restrained, trenches shall be properly excavated and backfilled, fire hydrants and valve boxes shall be adjusted to finished grade.
- 3. SURVEYS. The Utility Contractor shall provide all surveys necessary for the layout and construction of the work of his contract.
- 4. EARTHWORK. Earthwork shall include all excavation, fill and backfill (hand/machine), compaction and rough grading of materials encountered. No unsuitable materials clay, muck, or peat removed from pipe trenches are to be used for backfill. All fill or backfill shall be either sand or sandy clay, free of roots, trash or other debris. All backfill alongside of and to a height twenty—four inches above all pipe shall be free of clay or organic material, compacted by either hand or machine operation carefully to 98%. All other backfill shall be compacted by either hand or machine operation carefully to 95% (outside of paving), 98% (under paving) of its optimum moisture content as determined by ASTM D698, latest.
- 5. JOINT RESTRAINT. All fittings shall be properly and adequately restrained against lateral movement at all water main tees, crosses, valves bends and fire hydrants. Restrainers shall be Mega—lug or Uni—Flange Series 1300, 1350, 1390 or approved equal installed per manufacturer's recommendations and the City of Green Cove Springs Details and Specifications.
- 6. DUCTILE IRON PIPE. Ductile iron pipe shall conform to ANSI Specification A21.50 (AWWA C150) latest, "Thickness Design of Ductile Iron Pipe", Table 50.5, laying condition Type 2, internal operating pressure 250 p.s.i. for an 8-foot depth of cover, Class 51 minimum and shall be ANSI A21.51 (AWWA C151), latest centrifugally cast pipe. Laying lengths shall be 20 feet or less, each length clearly marked with pressure rating, thickness class, height of pipe without lining, length, and manufacturer. Ductile iron pipe for water service shall be furnished with cement lining per AWWA C110, C115 and C151. The pipe shall have design values of 60,000 P.S.I. minimum tensile strength, and 42,000 P.S.I. minimum yield strength. Ductile iron pipe for water service shall be used only between lots with close houses or with prior approval of the City of Green Cove Springs.
- 7. DUCTILE IRON FITTINGS shall be C153 cement lined and suitable for the type and class of pipe to which connected. Gaskets shall be suitable for potable, domestic water service. Minimum working pressure shall be 150 P.S.I.
- 8. STEEL CASING PIPE. Steel casing pipe shall be of size indicated on the Drawings and shall conform to ASTM A139, with a minimum yield strength of 35,000 p.s.i.
- 9. POLYVINYL CHLORIDE PIPE. Polyvinyl chloride pipe for water mains 4 inch in diameter and larger, shall be P.V.C. C900, DR18 orDR25.
- 10. POLYVINYL CHLORIDE PRESSURE PIPE. Pipe shall be virgin polyvinyl chloride (PVC) pipe for potable water and shall have a bell type coupling with a thickened wall section integral with the pipe barrel in accordance with ASTM D3139. Elastomeric seals shall meet ASTM F477. The pipe material shall be clean, virgin, National Sanitation Foundation NO.14 approved, Class 12454-A or 1254-8 PVC compound conforming to ASTM resin specification D1784. Each length shall be clearly marked with the manufacturer, location of plant, pressure rating, nonimal pipe diameter and lenght. Storage and handling of PVC pipe shall be in accordance with chapter 6 of AWWA manual M23. All PVC water pipe shall be blue. PVC 1120, CLASS 100, DR 25 PIPE Pipe shall conform to AWWA standard C900 for 4 inch through 12 inch pipe, and AWWA stanard C905 for 14 inch through 36 inch pipe. All pipe shall be hydrostatically proof tested at the factory in conformance with UNI-8-11 stangeds. In case of conflict between standards specified herein, the requirements of AWWA Standard C900 and C905 shall prevail. Pipe is to be manufactured to ductile iron pipe equivalent outside diameters. The pipe shall be designed to pass without failure a sustained presssure test of 350 psi in conformance with ASTM D1598 and a quick burst test of 535 psi in conformance with ASTM D1599. PVC 1120, CLASS 150. DR 18 PIPE Pipe shall conform to AWWA standard C900 for 4 inch through 12 inch pipe, and AWWA standard C905 for 14 inch through 36 inch pipe. All pipe shall be hydrostatically proof tested at the factory in conformance with UNI-8-11 standards. In case of conflict between standards specified herein, the requirements of AWWA Stanard C900 and C905 shall prevail. Pipe is to be

OUTLINE SPECIFICATIONS FOR CONSTRUCTION OF WATER DISTRIBUTION SYSTEM

manufactured to ductile iron pipe equivalent outside diameters. The pipe shall be designed to pass without failure a sustained presssure test of 500 psi in conformance with ASTM D1598 and a quick burst test of 755 psi in conformance with ASTM D1599. PVC 1120, CLASS 200, DR 14 PIPE Pipe shall conform to AWWA standard C900 for 4 inch through 12 inch pipe, and AWWA standard C905 for 14 inch through 36 inch pipe. All pipe shall be hydrostatically proof tested at the factory in conformance with UNI-8-11 standards. In case of conflict between standards specified herein, the requirements of AWWA Standard C900 and C905 shall prevail. Pipe is to be manufactured to ductile iron pipe equivalent outside diameters. The pipe shall be designed to pass without failure a sustained presssure test of 650 psi in conformance with ASTM D1598 and a quick burst test of 985 psi in conformance with ASTM D1599. PVC 1120, CLASS 200, SDR 21 PIPE Pipe shall conform to ASTM D2241 and shall be used only for construction of 2 inch water mains. Pipe is to be manufactured to I.P.S. (Steel) Standard Pipe equilvalent outside diameters. The pipe shall be designed for a hydrostatic working pressure of 200 psi at 73.4 degrees F. and to pass without failure a sustained pressure of 420 psi minimum when tested in accordance with ASTM D1598, and a quick burst test test of 630 psi minimum when tested in accordance with ASTM D1599. Pipe shall be marked NSF-pw approved. PVC 1120, SCHEDULE 40 AND 80 PIPE Pipe shall conform to ASTM D1784 and D1785 shall be used only for construction of 2 inch water mains. Pipe is to be manufactured to I.P.S. (Steel) Standard Pipe equilvalent outside diameters. The sustained pressure test shall be conducted in accordance with ASTM D1598 at test pressures given in ASTM D1785. The burst pressure test shall be conducted in accordance with ASTM D1599 at test pressures given in ASTM D1785. Pipe shall be marked NSF-PW approved.

- 11. POLYVINYL CHLORIDE (PVC 1120, SCHEDULE 80) PIPE shall conform to the requirements of ASTM D 1785. Fittings shall be suitable for type of installation required. All piping smaller than 4" shall be Schedule 80 PVC.
- 12. GATE VALVES AND BOXES. Gate valves shall be non-rising stem type and shall be suitable for a 200 p.s.i. non-shock working pressure Gate valves shall be mechanical joint, flanged or screwed. Gate valves shall have a 2" operating nut and open left. Gate valves shall have joints suitable for the type of main on which installed. Valves 2" & 3" shall be iron body, bronze fitted (distribution mains only). Valves 4" and larger shall be iron body, bronze fitted with resilient seat. Valves shall be of domestic (American) manufacture and shall be A.F.C., M&H, Mueller or approved equal. Valves 16" and larger shall be AWWA C-509, M&H Valve Co. Valve boxes with screw extensions shall be provided for all gate valves. Boxes shall be of cast iron construction, 7/32" minimum wall thickness and shall be nontacky tar enamel coated. The word "WATER" shall be cast in the cover. Other valves 2" and smaller shall be heavy—duty bronze, key operated ball valves.
- 13. WATER METER BOXES. Water meter boxes for residential services shall be DFW #D-1200. Meter boxes for flushing hydrants shall be Russco meter #D-112. Developer shall be responsible for installation of meter boxes on all water services as part of the water main installation. All curb stops shall be adjusted to the proper elevation and shall be accessible for the installation of the water meter. The contractor shall be required to open all boxes for the Authority's inspector at the final inspection. A treated 6'-6" long treated fence post marker shall be installed at the side of and centered on the meter box and painted blue for identification. DFW #D-1200 lid shall be C282 and Russell #112 shall be C283 for Touch Read meters.
- 14. CURB STOPS. Curb stops shall be cast bronze, inverted key stop, roundway, with check, lock wing type, for locking in the closed position. Curb stops shall be Ford Ball Valve, with F.I.P.T.
- 15. FIRE HYDRANTS. Fire hydrants shall be traffic type, 150 pound working pressure, AWWA Standard C502, latest revisions, with two 2 1/2" nozzles, one 4 1/2" nozzle and 5 1/4" main valve. Fire hydrant shall be be compression type with breakable coupling and bolts. Pipe connection shall be mechanical joint. Mueller A-423 or M&H 5 1/4 129T are the only acceptable fire hydrants. Fire hydrants shall be painted red with a white top and 1 1/2" penta nuts, opening left.
- 16. INSTALLATION. The minimum cover over top of potable water main shall be 36" minimum. All water lines and appurtenances shall be thoroughly cleaned of all foreign matter before being lowered into the trench and shall be kept clean during laying operations by means of plugs or other approved methods. All pipe shall be checked for defects before being lowered into the trench. Defective pipe shall not be used. Pipe found to be defective, after installation, shall be removed and replaced with sound pipe at no additional expense to the Owner. The full length of each section of pipe shall rest solidly upon the pipe bed, with recesses excavated to accommodate the bells and joints. All pipe that

has the grade or joint disturbed after laying shall be taken up and reinstalled. The pipe shall not be laid in water, or, when trench or weather conditions are unsuitable for the work. All joints shall be cleaned of all foreign matter before making the joint. Fittings at bends in the pipe shall be properly restrained with joint restrainers adequately sized to prevent movement and dislocating or blowing off when the line is under pressure. Service laterals shall terminate at the point noted in the details.

- 17. TESTS. After the pipe is laid, the joints completed, and the trench backfilled, the newly laid pipe and appurtenances shall be subjected to a Hydrostatic and Leakage test of 150 pounds per square inch for a period of at least two hours. During this period, all joints shall be inspected to determine water tightness of the system. Any leaks detected shall be corrected. Tests shall be in accordance with the City of Green Cove Springs requirements and specifications. Curb and limerock may be installed after construction of the water mains, however, limerock priming and paving operations may not proceed until such time as the C.O.G.C.S. inspector approves the water distribution system pressure test. This will be strictly enforced. If the water main is damaged during any of the operations prior to paving, a follow—up test may be required by the City of Green Cove Springs.
- 18. STERILIZATION. After completion of construction and testing, the water system shall be sterilized with chlorine in accordance with AWWA Standard C601 latest, and State of Florida Department of Environmental Protection requirements before acceptance for domestic operation. The amount of chlorine applied shall be sufficient to provide a dosage of 50 parts per million or more. The chlorine solution shall remain in the system for a period of at least 8 hours, during which time every valve in the system shall remain opened and closed several times to assure contact with every surface of the system. After completion of sterilization procedures, the system shall be flushed using chlorinated water from a domestic water source having a chlorine residual of at least 1 part per million. The contractor shall obtain all bacteriological clearances as required by the Florida Department of Environmental Protection. After bacteriological clearances, the pressure in the main shall not drop below 20 P.S.I. Clearance report to be submitted to the Engineer. The contractor should be aware that there is a timing maximum related to bacteriological clearance of the main, completion of as-built drawings and Engineer / The City of Green Cove Springs completion of Certificate of Completion. In any project where the bacteriological clearances are greater than 30 days old at the time of submittal of Certificate of Completion to F.D.E.P., the contractor may be required to pull more samples and obtain more bacteriological clearances. Prior to introducing the chlorine solution, the lines shall be thoroughly flushed with clean water utilizing full pipe diameter flushing for pipe up to and including 8" diameter. Contractor shall be responsible for dechlorination of the disinfectant water prior to any discharge to any ditch or surface waters.
- 19. BACTERIOLOGICAL SAMPLING. Contractor shall assure the project construction is completely finished prior to any bacteriological sampling and testing.

FINAL INSPECTION PROCEDURES

PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:

- The sewer line T.V. report and tape
- The pressure test and bacteriological clearance analysis report.
- 5. The engineer of record certification to D.E.P. This can be done with preliminary as—builts.
- 4. Preliminary as—builts showing at least the following: a.) Location of valves, mains, services and manholes.
 b.) Elevation of sewer lines in the manhole.
 5. All services and valves to be plainly marked with a treated fence post.
- 6. Pump station start—up report with draw down data for each pump and with both pumps in operation. All electrical components to be completely installed and in proper working condition.
- 7. Tracer wire test required prior to final inspection.

ITEMS THAT DO NOT HAVE TO BE TOTALLY COMPLETED AT THE FINAL INSPECTION ARE AS FOLLOWS:

- The water services do not have to be lowered if the area between the back of curb and the right-of-way line has not been dressed up.
- 2. The meter boxes do not have to be set.
- 3. The manhole rings and covers do not have to be adjusted to final finish grade.

PRIOR TO FINAL ACCEPTANCE FOR OWNERSHIP, THE FOLLOWING MUST BE COMPLETED:

- 1. All manhole rings and covers have to be adjusted to finish grade.
- 2. Water services must be lowered and meter boxes installed, valve boxes must be set on all gate valves.
- 3. As—built drawings shall have been updated to accommodate the City of Green Cove Springs comments and the final elevation of the manhole tops must be included.
- 4. As-builts must be accepted by the City of Green Cove Springs.

TOCOI E Engineering, 714 NORTH DRAWGE AVENUE, GREIN COME SPRINGS, FL. 32043

LLC

ENGINEER OF RECORD CHARLES SOHM FLORIDA REGISTRATION NUMBER:

SITE IMPROVEMENTS
FOR
VINEYARD TRANSITIONAL CENTER
EEN COVE SPRINGS UTILITY DETAILS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SPAIE:

SHEET NO. 12B

- 2. GENERAL. All materials shall be new and unused. The installation shall be warranted by the Contractor as to materials, workmanship and accuracy of As-Built drawings for a period of two years from the date of completion of the work or beneficial use of the facilities. Workmanship shall be of good quality; i.e., sewers shall be laid true to line and grade, fittings shall be properly installed and restrained, trenches shall be properly excavated and backfilled, manholes shall be installed at locations and to elevations shown on the plans.
- 3. SURVEYS. The Utility Contractor shall provide all sur-veys necessary for the layout and construction of the work of his contract.
- 4. EARTHWORK. Earthwork shall include all excavation, fill and backfill (hand/machine), compaction and rough grading of materials encountered. No unsuitable materials clay, muck, or peat removed from pipe trenches are to be used for backfill. All fill or backfill shall be either sand or sandy clay, free of roots, trash or other debris. All backfill alongside of and to a height twenty-four inches above all pipe shall be free of clay or organic material, compacted by either hand or machine operation carefully to 98%. All other backfill shall be compacted by either hand or machine operation carefully to 95% (outside of paving), 98% (under paving) of its optimum moisture content as determined by ASTM D698, latest.
- 5. MANHOLES. Manhole bases, sections and cones shall conform to the requirements of ASTM C478, Specifications for Precast Reinforced Concrete Manhole Sections. Cement shall meet the requirements of ASTM C150, Specifications for Portland Cement, Type II. Concrete shall meet the minimum requirements for Class "A" Concrete Work. Minimum wall thickness shall be 1/12 the inside diameter in inches plus one (1) inch. Bases for manholes shall be cast integrally with the bottom manhole section. Joint contact surfaces shall be formed with machined castings; they shall be exactly parallel with a 2 degree slope and nominal 1/16 inch clearance with the tongue equipped with a proper recess for the installation of an O-ring rubber gasket, conforming to ASTM C443, Joints for circular Concrete sewer and Culvert pipe using Rubber gasket, or RAM-NEK premolded Plastic Joint Sealer with joints Manhole adjustment materials shall be sound, hard, and pre-primed. uniformly burned brick, regular and uniform in shape and size, of compact texture and satisfactory to the Engineer. Precast concrete adjustment rings as manufactured by Taylor Precast Co. (or equal) may be utilized in lieu of brick adjustment. Brick shall comply with the ASTM Standard Specifications for Sewer Brick, Designation C-32, latest, Grade MM. Field mixed mortar for brick shall be composed of portland cement Type II, sand and clean water. Mortar shall be one part cement Type II and two parts sand; lime shall not be used. The outside faces of brick masonry shall be plastered with mortar from 1/4" to 3/8" thick. Precast manhole walls shall not be coated, unless otherwise noted. Cement grout for manhole bottoms shall be a stiff rich mix of Type II Portland Cement and sharp plaster sand. Calcium chloride may be added (maximum of 2%) to aid in obtaining a faster set. At pump station locations, the first upstream manhole from the station shall be lined with a polyethylene liner as manufactured and installed by Taylor Precast Co. or approved equal.
- 5.1. CAST IRON MANHOLE FRAMES AND COVERS. Cast iron manhole frames and covers shall be as detailed on drawings. Castings shall meet the requirements of ASTM A48, Specifications for Gray Iron Castings, Class No. 30, or Grade 65-45-12, Ductile Iron meeting the requirements of ASTM A536. Standard Specification for Ductile Iron Castings. In either case, manhole frame and cover shall be designed to withstand an HS20-44 loading defined in the ASSHTO Specifications. Frames and covers shall be machined or ground at touching surfaces so as to seat firmly and prevent
- 5.2. FLEXIBLE MANHOLE CONNECTOR. All connections between sewer pipe and pre-cast concrete manholes shall be accomplished by a Flexible Connector, "Kor—N—Seal", as manufactured by National Pollution Control Systems, Inc. or approved equal.
- 5.3. FLOW CHANNELS. Flow channels in manhole base shall be formed of D.O.T. Class I, Type II cement arout with brick or rubble and trowel to a smooth surface finish. Grout surface shall be 1" min. thickness over brick or rubble. While the manholes are under construction, cut off pipes at inside face of the manhole and construct the invert to the shape and sizes of pipe indicated. All inverts shall provide a constant gradient from influent pipe to effluent pipe through manhole. Changes in direction of the sewer and entering branch or branches shall be laid out in smooth curves of the longest possible radius which is tangent to the center lines of adjoining pipelines.

OUTLINE SPECIFICATIONS FOR CONSTRUCTION OF SEWAGE COLLECTION SYSTEM

- 5.4. DROP INLETS. Where shown on the drawings, drop inlets to the manholes shall be constructed as shown on the drawings and specified herein.
- 6. POLYVINYL CHLORIDE PIPE. Polyvinyl Chloride Sewer Pipe shall conform to the requirements of ASTM D-3034, SDR 26. The PVC compound conforming to ASTM D-1784. Pipe shall be clearly marked in 5 Ft. intervals or less, indicating manufacturers name, nominal size, cell classification and legend. Joints shall be push—on rubber gasketed, conforming to ASTM D—3034. Pipe and fittings shall be installed in accordance with recommended practice ASTM D-2321. Maximum depth of gravity sewer without prior approval shall be 15 feet.
- 7. PIPE BETWEEN MANHOLES. All piping installed between manholes shall be the same material and class. No dissimilar pipe material will be allowed anywhere within a single run of pipe.
- 8. SANITARY SERVICE LATERALS. Sanitary service laterals shall be Polyvinyl Chloride Pipe conforming to the requirements of ASTM D-3034, DR 35 where cover over top of pipe is 36 inches or greater. Where cover over top of pipe is less than 36 inches, sanitary service lateral shall be Ductile Iron Pipe, Polylined or Epoxy lined conforming to ANSI A 21.50, latest (unless specific construction conditions are agreed to by the City of Green Cove Springs). All sanitary service laterals shall be 6-inch diameter from the main to the right-of-way line with a minimum slope of 0.60% (0.6 feet per hundred feet). In single family residential developments, services shall reduce to 4" in size at the property line utilizing the proper fittings for the type of pipe specified. Mark end of all sewer laterals with 6'-6" treated post painted green.
- 9. FORCE MAINS. Force mains shall be C900 DR-18 PVC and conform to the requirements of ASTM D-1784, D-2241, D-3139 and F-477. Pipe shall be color coded and marked "FORCE MAIN" on at least two sides and at every 12" along the barrel of the pipe. Ductile iron pipe for force main service shall be asphaltic lined. Ductile iron pipe is not to be used without prior approval of the City of Green Cove Springs. Fittings shall be C110 gray iron and shall be asphaltic lined. Epoxy shall be 40 mil minimum thickness when approved with ductile iron pipe.
- 9.1. LIFT STATION VALVES. Plug valves shall be Dezurik or approved equal with full port opening. Check valves shall be M&H, Mueller or American Darling.
- 9.2. FORCE MAIN VALVE. Gate valve, resilient seated, same as specified in Water Distribution System Specifications Section 12 below. Valve box shall have the word "SEWER" cast into the cover.
- 9.3. FORCE MAIN JOINT RESTRAINT. All fittings shall be properly and adequately restrained against lateral movement at all force main tees, crosses, valves and bends. Restrainers shall be Mega-lug or Uni-Flange Series 1300, 1350, 1390 or approved equal installed per manufacturer's recommendations and City of Green Cove Springs details and specifications.
- 9.4. FORCE MAIN PIPE FLUSHING. All force main piping shall be flushed clean with water utilizing full pipe diameter flushing for all piping up to and includina 8" diameter.
- 10. INSTALLATION. All sewer lines, manholes, and appur-tenancies shall be constructed to the dimensions and elevations indicated on the drawings. Trenches shall be excavated to a width approximately twelve inches greater than the outside diameter of the pipe. Machine excavation shall be to a depth one-fourth pipe diameter above proposed pipe grade; the remaining depth shall be hand excavated and shaped to give full support to the lower one-fourth of each pipe. Each section of pipe shall be inspected for defects prior to being lowered into the trench. The inside of each bell and the outside of each spigot shall be thoroughly cleaned of all foreign matter, prior to making the joint. All sewer lines shall be constructed with the spigot ends pointing in the direction of the flow. Both the bell and the spigot of each joint shall be lubricated with the lubricant recommended by the pipe manufacturer. All sewer lines shall be cleaned of foreign matter as construction progresses, and shall be in a clean condition upon completion of construction operations. Pipe materials shall remain the same on runs between manholes and / or other structures.
- 11. INSPECTIONS. Each section of the completed sewer system shall be inspected for proper alignment. Inspection shall consist of "lamping" from manhole to manhole. Any section of the sewer system which does not display true, concentric alignment shall be reinstalled at no additional expense to the Owner. A written log of inspection shall be kept indicating location of test, potential problems in sewer, dips and depth of water, service locations, and other irregularities in the pipe lines. A video tape in DVD format shall be made of the television inspection and submitted to the Engineer and the City of Green Cove

- 11.1. Television inspection will be required on all new gravity sewers constructed. This service shall be provided by the Contractor as a part of this Contract. The newly constructed sewers shall be televised in the presence of the Inspector of the City of Green Cove Springs. A full report as to the condition of pipe, type, depth, location of services, length, type, joint and distance between manholes, etc. shall be furnished to the City of G.C.S. inspector prior to the final acceptance of the system. Any pipe found to be cracked, leaking or otherwise defective shall be removed and replaced with new pipe at no additional costs to the Owner. Deflection testing with 5% mandrel also required. Any section not passing the mandrel test shall be corrected. Curb and limerock may be installed after construction of the sewer lines, however, limerock priming and paving operations may not proceed until such time as the City of Green Cove Springs inspector reviews and approves the television tape of the gravity sewer system and/or approval of force main pressure tests. This will be strictly enforced. All gravity sewers must be flushed no sooner than 4 hours prior to any television inspection.
- 11.2. TEST, INFILTRATION: After completion, the sewers or sections thereof, shall be tested and gauged for infiltration. To check the amount of infiltration, the Contractor, at no added compensation over the contract price for the sewers, shall furnish, and install and maintain a V-notch sharp crested weir in a wood frame on the main sewers as directed by the Engineer. Maximum allowable infiltration shall be 50 gallons per mile, per inch of dia. of sewer per 24 hour day at any time.
- 11.3. TEST, EXFILTRATION: In areas where ground water is not encountered in sewer construction, or it is desired to run exfiltration tests, the Contractor shall furnish and install all necessary materials, equipments, shall supply water, etc., and shall run exfiltration tests to determine acceptance of the sewer. The maximum allowable exfiltration shall be 50 gallons per mile per inch of diameter of sewer per 24 hour day at any time based on two foot minimum internal head.

TOCO

INEER OF SITE IMPROVEMENTS FOR VINEYARD TRANSITIONAL CENTER SPRINGS (

LLC

Engineering, ue, GREN COME SPRINGS, FL. 32043

REVISIONS

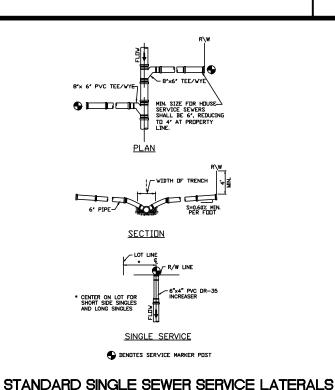
SHEET NO. 12C

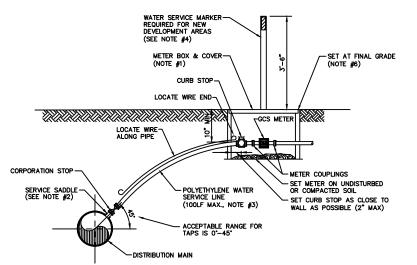
- 1. THE SKETCHES ABOVE INDICATE TYPICAL WATER SERVICE AND METER BOX LOCATIONS, ACTUAL LOCATIONS OF BOXES MAY VARY SLIGHTLY ACCORDING TO FIELD CONDITIONS ENCOUNTERED. TYPICALLY, THE METER BOX SHALL BE LOCATED 1.0' OFF OF THE R/W LINE.
- 2. UNLESS SPECIFIED OTHERWISE BY THE CITY OF GREEN COVE SPRINGS, THE METER BOX SHALL BE LOCATED 1.0' OFF OF THE R/W LINE, AND 1.0' FOOT INSIDE OF THE PROLONGATION OF ONE OF THE SIDE PROPERTY LINES. IF A CONFLICT EXISTS WITH OTHER UTILITIES, THE METER BOX MAY BE ADJUSTED TO FOUR FEET (MAX.) INSIDE PROPERTY LINES (IN LIEU OF 1.0' FEET). UNLESS APPROVED OTHERWISE BY THE THE METER BOX SHALL BE LOCATED IN NON-TRAFFIC AREAS (NOT IN SIDEWALKS OR DRIVEWAYS). IF AN UNAPPROVED METER BOX IS IDENTIFIED BY THE CITY, THEN THE CONTRACTOR OR CUSTOMER SHALL BE RESPONSIBLE FOR THE COST OF RELOCATING ANY METER BOX WHICH IS LOCATED IN THE SIDEWALK OR DRIVEWAY OR THE COST TO PROVIDE THE CORRECT METER BOX. THE CITY SHALL APPROVE ALL DEVIATIONS TO THE ABOVE PRIOR TO CONSTRUCTION.
- 3. IF DRAINAGE OR OTHER EASEMENT IS LOCATED BETWEEN LOTS, METER BOXES SHALL BE LOCATED AT THE EASEMENT LINE BUT OUTSIDE THE EASEMENT AREA.
- FOR SINGLE SERVICES, THE HORIZONTAL DISTANCE (PERPENDICULAR TO THE MAIN) BETWEEN THE SERVICE'S SADDLE AND THE METER BOX SHALL BE 2 FEET MAXIMUM. FOR DOUBLE 3/4 SERVICES, THE 2 POLY MAIN SHALL BE LOCATED CENTERED BETWEEN THE TWO METER BOXES. LOCATE WIRE IS REQUIRED ON ALL SERVICES. THE WIRE SHALL RUN FROM THE METER BOX TO THE MAIN (WITH NO CONNECTION TO MAIN WIRE WITH THE LAST 24 INCHES STRIPPED OF INSULATION/BARE WIRE AS GROUND), ALL EXCEPTIONS TO THIS REQUIREMENT MUST BE APPROVED BY THE CITY OF GREEN COVE SPRINGS. THIS WILL ASSIST IN LOCATING EXISTING SERVICE LINES IN THE FUTURE.

5. GANG WATER SERVICES: FOR 3 OR 4 SERVICES IN ONE AREA, A DUCTICLE IRON PIPE (D.I.P.) WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT—SIDE OR LONG—SIDE SERVICES WHERE SHOWN ON THE DRAWINGS. LOCATE WIRE SHALL EXTEND FROM ONE METER BOX TO CURB STOP AT WATER MAIN. FOR 5 OR MORE SERVICES IN ONE AREA, A WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT—SIDE OR LONG—SIDE SERVICES WHERE SHOWN ON THE DRAWINGS (TAPS STAGGERED AND AT 2 FEET ON CENTER (MINI). FOR WATER SUPPLY HEADERS WHERE 5 OR MORE TAPS ARE CONSTRUCTED, THE HEADER PIPE SHALL BE 4" AT A MINIMUM. EXAMPLE: CONSTRUCT A 4" MAIN D.I. CROSSING THE STREET FOR 5 RESIDENTIAL CUSTOMERS, UTILIZING 4" G.V., 4" PIPE, 4"X1" SADDLES AND 1 CURB STOPS (NO GLUED TEE FITTINGS). THE 4 OR LARGER D.I.P. WATER MAIN MUST BE SIZED AND DESIGNED BY THE ENGINEER.

6. ALL COMMERCIAL WATER SERVICES SHALL BE 2" POLYETHYLENE PIPING CONNECTED TO 2" CURB STOP IN METER BOX, UNLESS OTHERWISE APPROVED BY THE CITY.

WATER SERVICE INSTALLATIONS 2" AND SMALLER METER

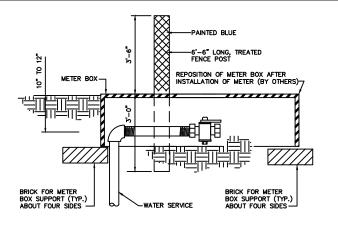




NOTES

- 1. SEE CITY OF GREEN COVE SPRINGS APPROVED MATERIALS MANUAL AND SYSTEM DETAILS FOR REQUIREMENTS.
- SINGLE BAND SADDLES MAYBE UTILIZED ON NEW 1" WATER SERVICES WHICH ARE INSTALLED ON A DRY 10" SIZE OR SMALLER WATER MAIN (NEW WATER MAIN CONSTRUCTION). FOR WET TAPS OR WATER MAINS 12" SIZE AND LARGER, A DOUBLE BAND SADDLE IS REQUIRED.
- 3. NO OPEN CUT UNDER ROADWAY PAVING ALLOWED UNLESS THE ROADWAY IS BEING RECONSTRUCTED OR IF DIRECTED OTHERWISE BY CITY OF GREEN COVE SPRINGS. CONSTRUCT POLY LINE WITH 36" (MIN.) COVER UNDER ROADWAYS. THE POLY WATER SERVICE LINE SHALL BE SAME SIZE AS THE METER (3/4" MINIMUM) AND BE INSTALLED PERPONICULAR TO THE MAIN AND NOT EXCEED 100LF UNLESS OTHERWISE APPROVED BY CITY OF GREEN COVE SPRINGS.
- 4. INSTALL PVC PLUG IN ALL CURB STOPS IF WATER SERVICE IS "NOT IN USE" (LE.: IF NO METER IS INSTALLED). IN ADDITION, INSTALL A 6", 6" P.T. FENCE POST (TOP PAINTED BLUE) 12" OFF SIDE OF METER BOX. THE REMOVAL OR TRANSFER OF A WATER SERVICE SHALL INCLUDE BRASS METER COUPLINGS (HEX ON
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE BOXES, METERS OR ELECTRONIC DEVICES IF DAMAGED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD.
- 6. METER BOX AND TOP SHALL BE CLEAR OF ALL DEBRIS TO ALLOW FULL ACCESS TO BOX (I.E., NO DIRT,
- 7. LOCATE WIRING REQUIRED ON ALL LONG AND SHORT SERVICES.

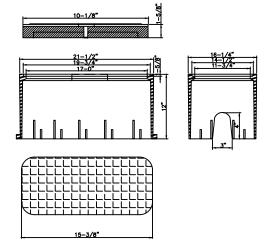
WATER SERVICE DETAIL- 2" AND SMALLER METER



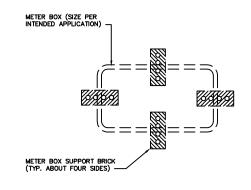
WATER SERVICE MARKER POST

NOTE:
ALL SERVICES ARE TO BE CLEARLY MARKED BY A TREATED 6'-6" LONG MARKER POST PAINTED BLUE. ALL SERVICES ARE TO BE EXTENDED ABOVE GRADE UNTIL COMPLETION OF ALL GRADING ACTIVITIES. ONCE FINAL ROAD GRADING IS COMPLETE, LOWER SERVICES BY CUTTING OFF RISER 10" TO 12" BELOW FINAL GRADE AND INSTALL 90" BEND, NIPPLE AND LW BALL VALVE AT THAT ELEVATION. SET METER BOX OVER ENTIRE HORIZONTAL SECTION OF SERVICE I LINE FROM LAST 90" BEND TO THE FIND METER BOX OVER ENTIRE HORIZONTAL SECTION CENTER SERVICE LINE FROM LAST 90° BEND TO THE END OF THE CURB STOP. BOX TO BE REPOSITIONED WHEN THE METER IS INSTALLED. MARKER POST TO BE INSTALLED ADJACENT TO AND LOCATED

NOTE:
MIN. WALL THIKNESS: .25"
DOUBLE WALL BODY W/STRUCTURAL SUPPORT RIBS
W/MIN. THINCKNESS: 3/6"
1 BOTOM PLANGE
BOX IS INJURIED BOX STRUCTURAL FOAM REC'
2011 VERSIFICATION. TED MOLDED STRUCTURAL FOAM RECYCLED



METER BOX & SOLID BLUE LID



METER BOX SUPPORT DETAIL

REVISIONS RAWN BY: ESIGNED BY: HECKED BY: SHEET NO.

SITE IMPROVEMENTS
FOR
VINEYARD TRANSITIONAL CENTER

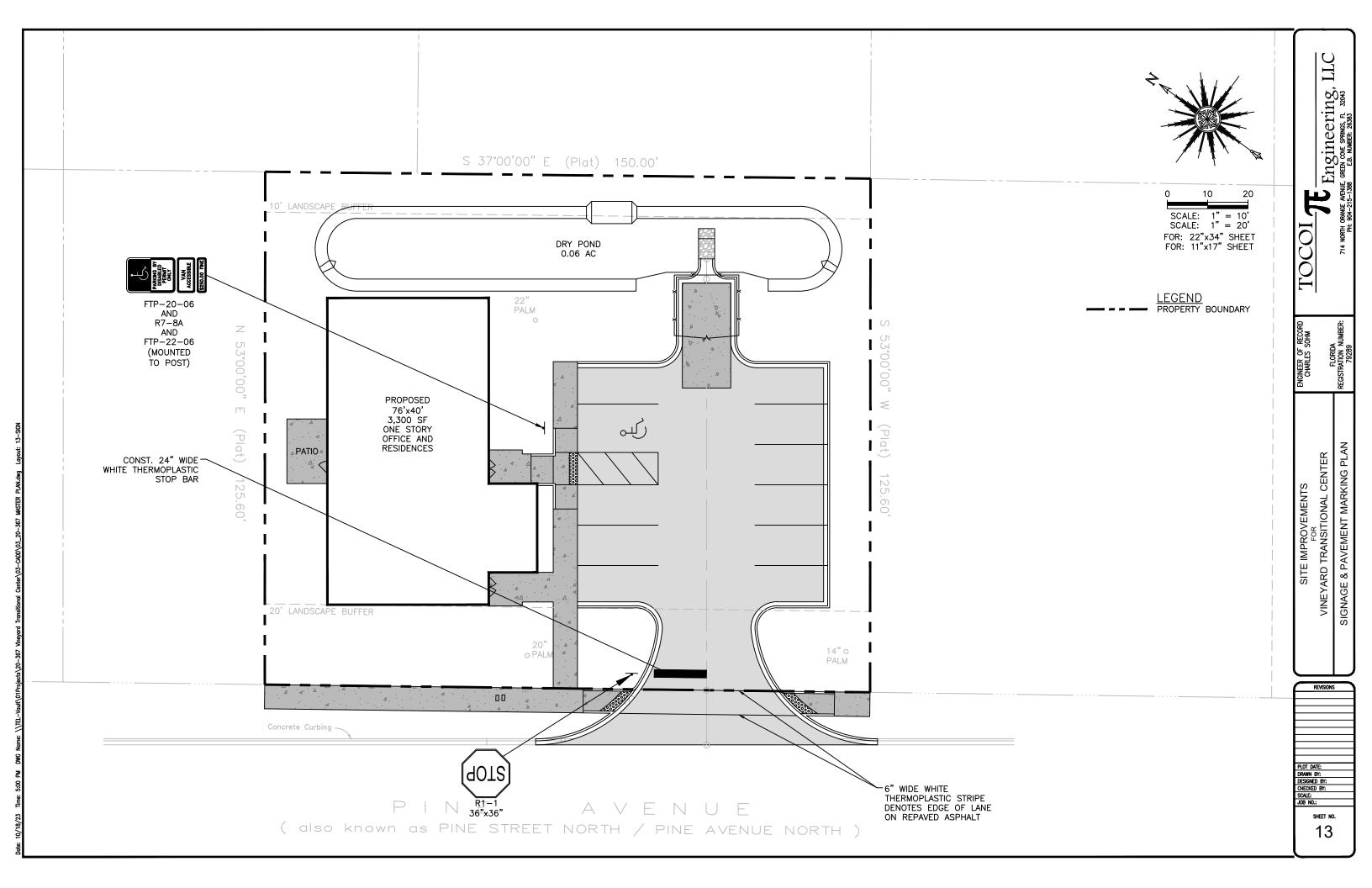
Engineering

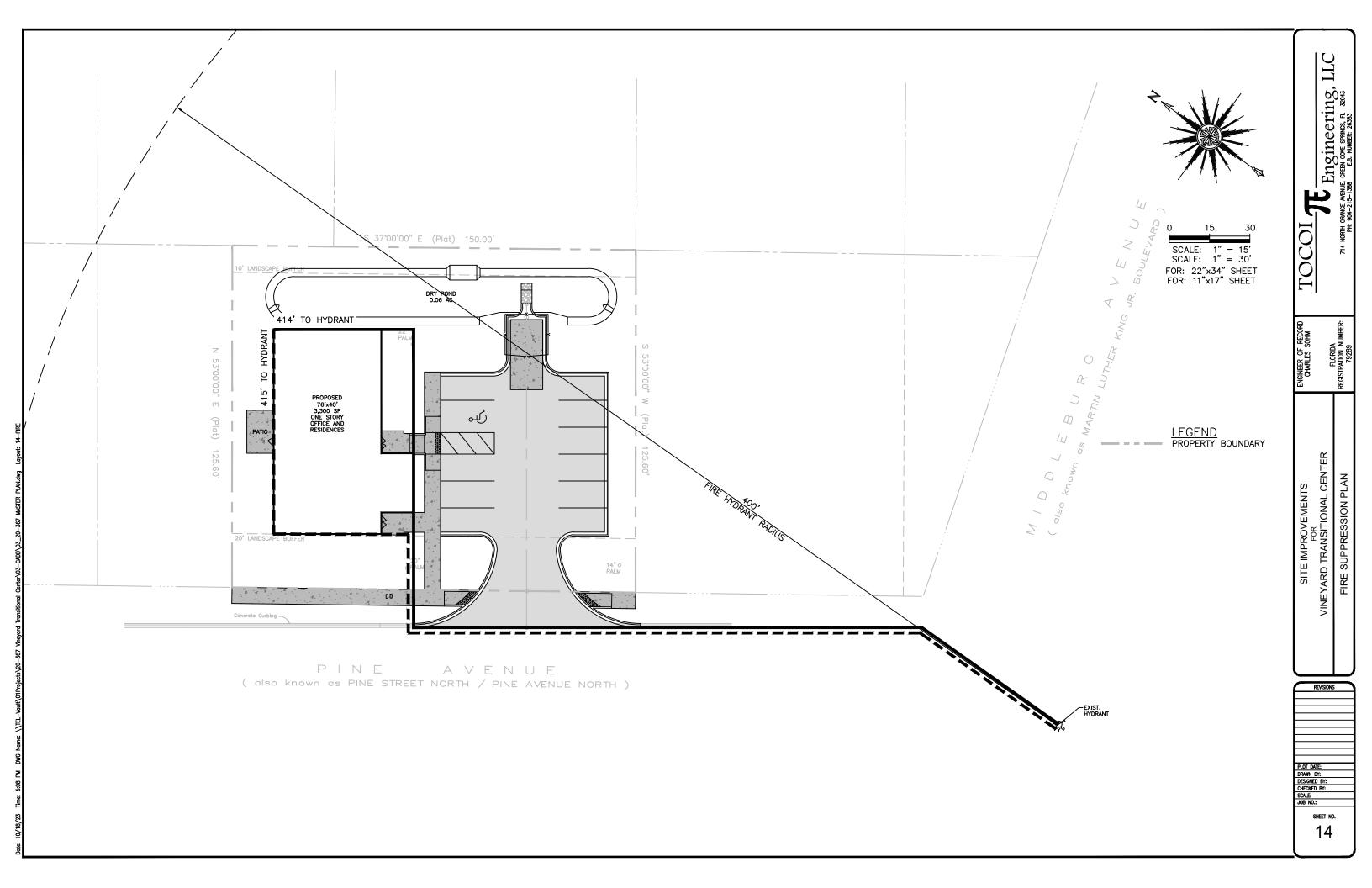
USF 170E MANHOLE FRAME & COVE FINISHED GRADE WHEN MANHOLE IS WITHIN LIMITS OF PAVEMENT CUT-DUT TOP 1/2
OF PVC END CAP-

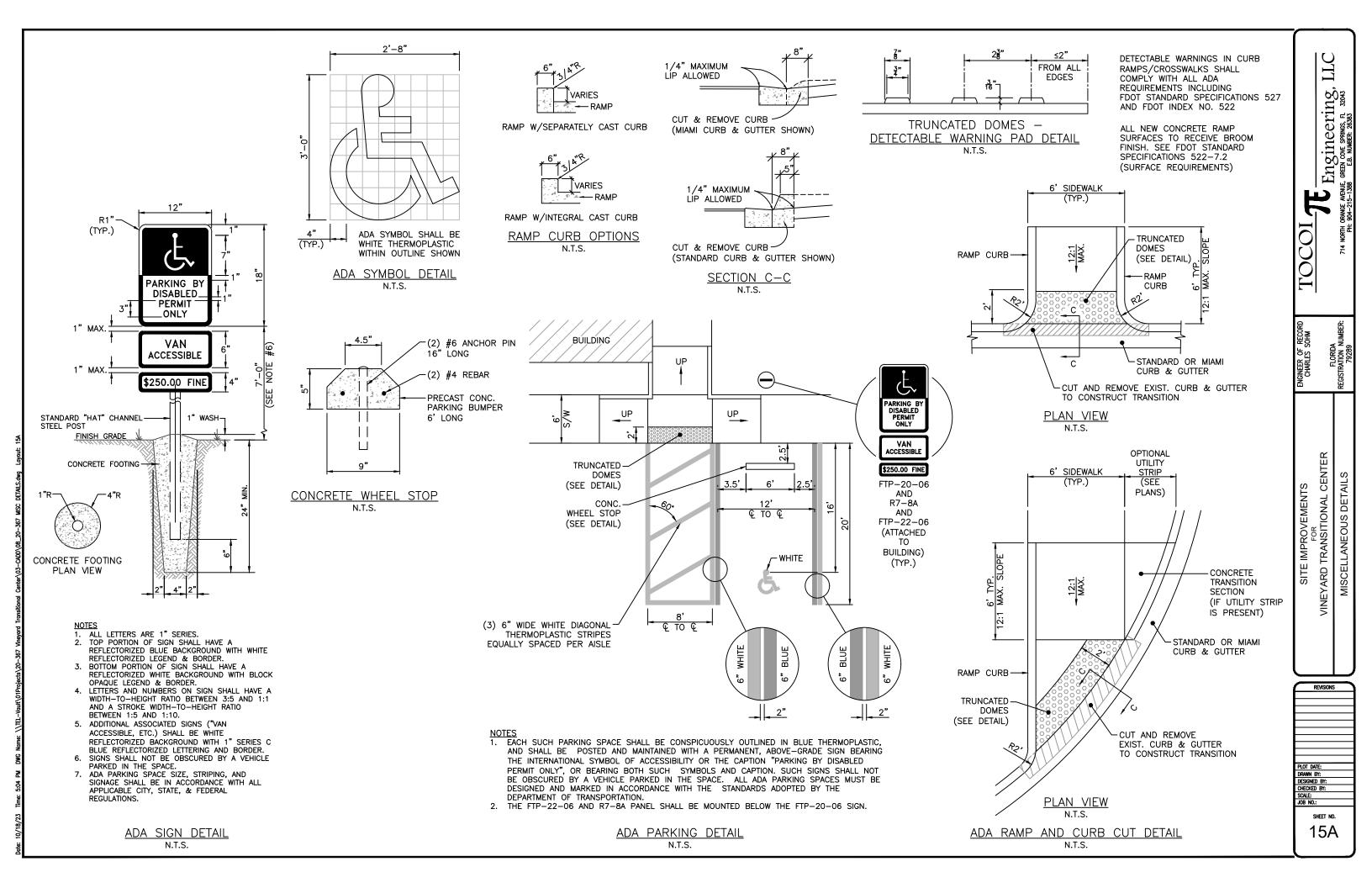
NOTE: FOR ADDITIONAL MANHOLE SPECIFICATIONS, SEE 'SANITARY SEVER MANHOLE' DETAIL THIS SHEET.
MAXIMUM ALLOVABLE DIFFERENCE IN INVERT ELEVATION VITHOUT INTERNAL DROP CONNECTION IS 24' TYPICAL GRAVITY SEWER DROP PIPE CONNECTION TO MANHOLE

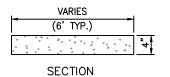
UNDISTURBED SOIL MIN. BEARING CAPACITY: 2000 P.S.F.

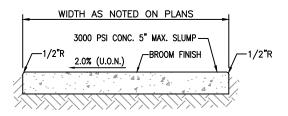
12D



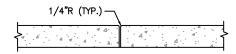








SECTION DETAILS



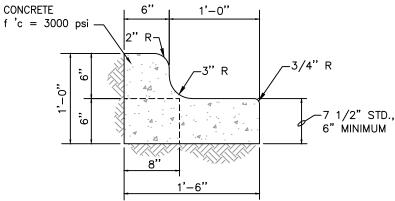
PROVIDE AT INTERVALS SHOWN IN PLAN VIEW CONTROL JOINT (1-1/2" DEEP)



PROVIDE AT INTERVALS SHOWN IN PLAN VIEW SAWCUT

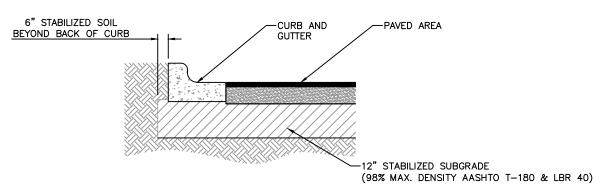
SIDEWALKS SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE, CLASS NON-STRESS (NS), AND ALL METHODS OF CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDING TO THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

CONCRETE SIDEWALK DETAILS

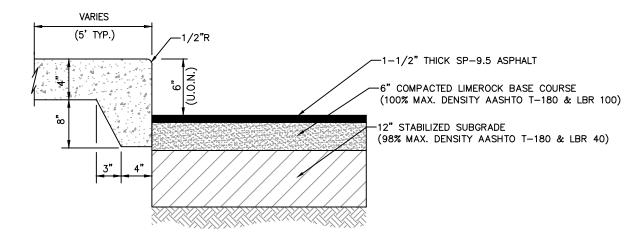


NOTE: WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

STANDARD TYPE CURB & GUTTER



SOIL STABILIZATION DETAIL N.T.S.



NOTE: UNDERCUT ALL UNSUITABLE MATERIAL AND BACKFILL WITH CLEAN FREE—DRAINING SAND (BOTTOM OF CUT SHALL BE 24" MIN. BELOW FINISH GRADE)

SIDEWALK DETAIL AT PAVEMENT AND NEW ASPHALT PAVEMENT SECTION N.T.S.

SITE IMPROVEMENTS
FOR
VINEYARD TRANSITIONAL CENTER
MISCELLA ANFOLIS DETAILS

NOTE:

shoulder.

2. L = Taper Length

B = Buffer Length

See Index 102-600 for "L", "X", "B", and channelizing device spacing values.

1. This Index applies to Two-Lane, Two-Way

of divided roadways, with work on the

X = Work Zone Sign Spacing

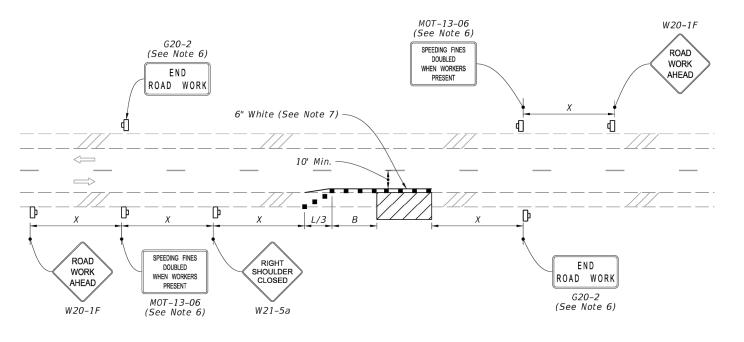
and Multilane Roadways, including Medians

- 4. When four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and
- 5. For work less than 2' from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.
- 6. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" Signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the work operation is in place for 24 hours or less.
- 7. Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.
- 8. Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.
- 9. When there is no paved shoulder, the "Worker" sign (W21-1) may be used instead of the "Shoulder Closed" sign (W21-5a).

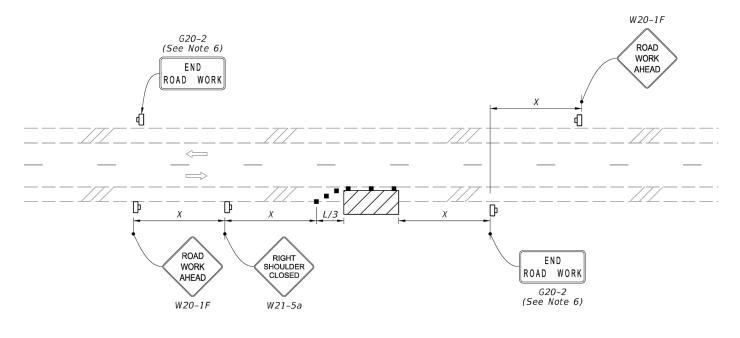
SYMBOLS:

Work Area

- Channelizing Device (See Index 102-600)
- ₩ork Zone Sign
- Lane Identification and Direction of Traffic



TWO-LANE ROADWAY = SHOULDER WORK LESS THAN 2' FROM THE TRAVELED WAY WITH WORK ZONE SPEED OF 45 MPH OR LESS



= TWO-LANE ROADWAY === SHOULDER WORK BETWEEN 2' AND 15' FROM THE TRAVELED WAY

REVISION 11/01/21 ≥ DESCRIPTION:

FDOT

FY 2023-24 STANDARD PLANS

TWO-LANE AND MULTILANE, WORK ON SHOULDER

INDEX 102-602 SHEET

1 of 2

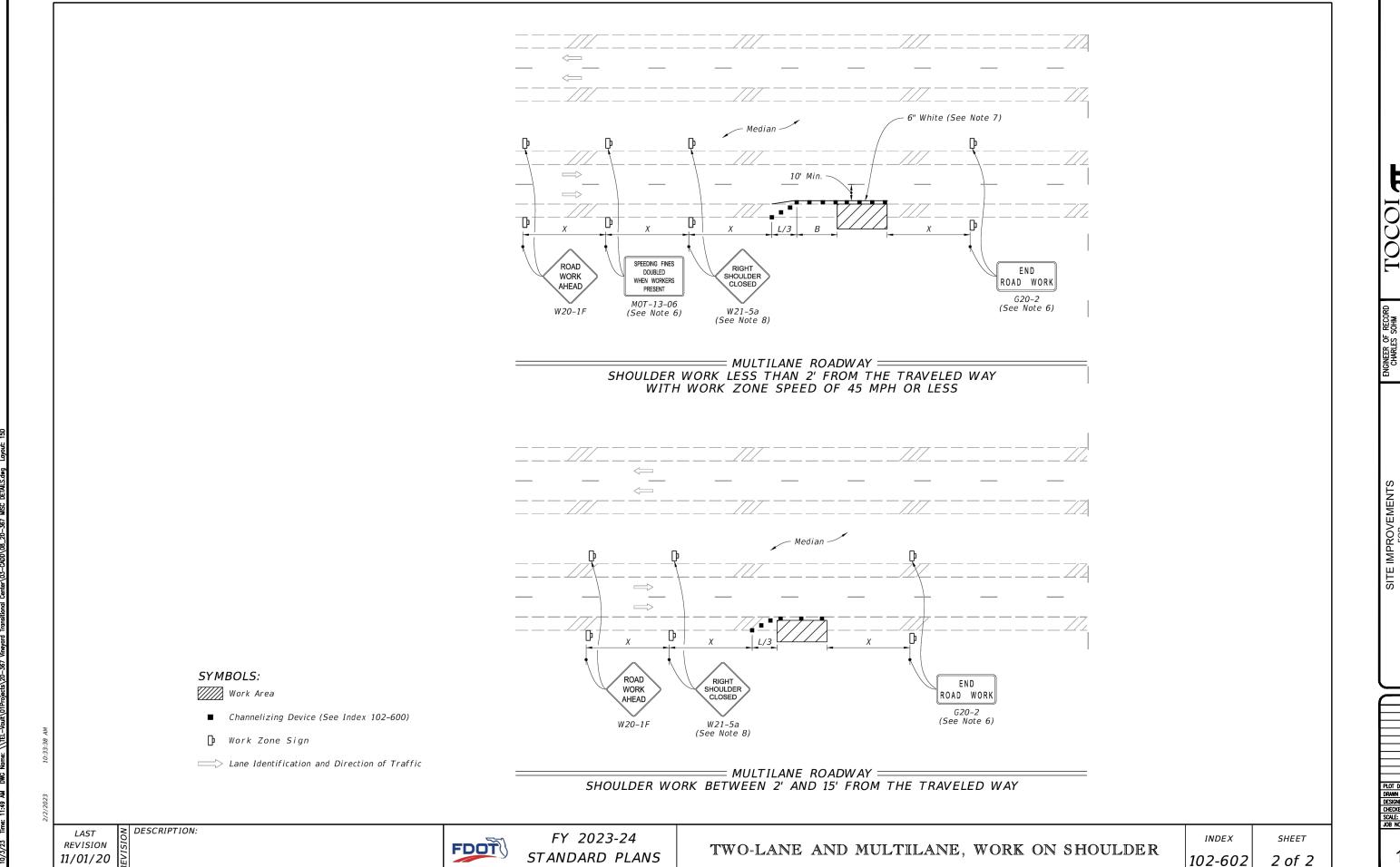
SHEET NO. 15C

REVISIONS

FOR VINEYARD TRANSITIONAL CENTER

SITE IMPROVEMENTS

Engineering,



Engineering,

SITE IMPROVEMENTS FOR VINEYARD TRANSITIONAL CENTER

SHEET NO.

15D

CITY'S REQUIREMENTS SITE DESCRIPTION

PROJECT NAME AND LOCATION: VINEYARD TRANSITIONAL CEN 518 PINE AVENUE NORTH GREEN COVE SPRINGS, FL 32043

OWNER NAME AND ADDRESS: VINEYARD TRANSITIONAL CENTER VINEYARD TRANS 518 PINE AVENUE NORTH GREEN COVE SPRINGS, FL 32043

LOT 6 BLK 21 N.S. GCS AS REC OR 4159 PG 1719

SOIL DISTURBING ACTIVITIES WILL INCLUDE: CLEARING AND GRUBBING; EARTHWORK, PAVEMENT AND GRADING; STORM SEWER, UTILITIES, AND PREPARATION FOR FINAL PLANTING

RUNOFF CURVE NUMBERS: PRE-CONSTRUCTION =

DURING CONSTRUCTION =

SOILS: SEE SOIL BORING REPORT FOR SOILS DATA

SITE MAPS:

* SEE ATTACHED GRADING PLAN FOR PRE & POST DEVELOPMENT GRADES,
AREAS OF SOILS, DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS,
PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS
AND STORM WATER DISCHARGE POINTS.

* SEE ATTACHED EROSION & TURBIDITY CONTROL PLAN FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS

* SEE GENERAL NOTES FOR REQUIRMENTS FOR TEMPORARY AND

TOTAL AREA TO BE DISTURBED =

CONTROLS

TOTAL AREA OF SITE =

NAME OF RECEIVING WATERS:

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN OFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL STATE AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

STORM WATER MANAGEMENT

STORM WATER DRAINAGE WILL BE PROVIDED BY (DESRIPTION:) ___

FOR THE PROJECT, AREAS WHICH ARE NOT TO BE CONSTRUCTED ON, BUT WILL BE REGRADED SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE, WHEN CONSTRUCTION IS COMPLETE, A TOTAL OF ____ ACRES WILL HAVE BEEN REGRADED. ____ ACRES LEFT UNDISTURBED. THE SITE DISCHARGES TO A WET DETENTION SYSTEM, WHERE PRACTICAL, TEMPORARY SEDIMENT BAS WILL BE USED TO INTERCEPT SEDIMENT BEFORE ENTERING THE PERMANENT DETENTION BASIN. THE WET DETENTION SYSTEM IS DESIGNED WITH A DAY MINIMUM RESIDENCE VOLUME. THIS IS IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT FOR THIS TYPE OF DEVELOPMENT AT THE TIME OF PERMITTING.

TIMING OF CONTROLS/MEASURES

REFER TO " CONTRACTORS RESPONSIBILITY" FOR THE TIMING OF CONTROL /MEASURES.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

IN ACCORDANCE WITH FEDERAL STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

D.E.R. DREDGE/FILL PERMIT S.J.R.W.M.D. M.S.S.W. PFRMIT#

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR

CITY ENGINEER

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S requirements outlined below and those measures shown on the erosion AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING

SEQUENCE OF MAJOR ACTIVITIES:

GENERAL

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

- INSTALL STABILIZED CONSTRUCTION ENTRANCE
- INSTALL SILT FENCES AND HAY CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT

PERFORM PRELIMINARY GRADING

- CONSTRUCT SEDIMENTATION
- CONTINUE CLEARING AND STOCK PILE TOP SOIL IF REQUIRED
- ON SITE AS REQUIRED STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS
- 9. INSTALL UTILITIES, STORM SEWER, CURBS & GUTTER
- APPLY BASE TO PROJECT 11. COMPLETE GRADING AND INSTALL PERMANENT
- SEEDING/SOD AND PLANTING COMPLETE FINAL PAVING 13. REMOVE ACCUMULATED SEDIMENT FROM BASINS
- ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY SWALES/DIKES AND RESEED/SOD

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN WITH THE PLANS, AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL
PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE
CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTIONING PROPI TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOW N THE EROSON AND TURRIDITY CONTROL PLAN AND ADD ADDITIONAL CONTE MEASURES, AS REQUIRED, TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

FROSION AND SEDIMENT CONTROLS

HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE

A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT. B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM

CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS. D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE

AGAINST WASHOUT. REFER TO CITY STANDARD DETAIL D-913 FOR CONSTRUCTING THE HAY

FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW

PILIER PABRIC BARRIER: FILIER PABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:

A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT. B. IM MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES. REFER TO CITY STANDARD DETAIL D-910 FOR PROPER CONSTRUCTION OF THE FILTER FABRIC BARRIER.

BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.

LEVEL SPREADER: A LEVEL SPREADER MAY BE LISED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE

CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE. LEVEL SPREADER SHALL BE CONSTRUCTED N ACCORDANCE TO CITY STANDARD DETAIL D-914.

STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.

EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT

INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS

TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.

FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.

TEMPORARY CRASSING: THE SEEDED OR SEEDED AND MILLOHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED

TEMPORARY REGRASSING: IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED

12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE

PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED

TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY. AND IT SHALL BE CONSTRUCTED IN ACCORDANCE TO D-914.

TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL RE INSTALLED IN IN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF ISCHARGE FROM A DISTURBED AREA. THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER NDEPENDANTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION

A. BLOCK & GRAVEL SEDIMENT FILTER - THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE REFER TO D-902 FOR CONSTRUCTION OF A CURB INLET SEDIMENT FILTER, AND D-904 FOR CONSTRUCTION OF A

B. GRAVEL SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED AREAS. REFER TO D—903 FOR CONSTRUCTION OF CURB INLET & DROP

C. DROP INLET SEDIMENT TRAP — THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH SHALL NOT APPLY TO INLE'IS NECEIVING CONCERNING.
AS IN STREET OR HIGHWAY MEDIANS. REFER TO D-905 FOR CONSTRUCTION OF HAY BALE & FABRIC SEDIMENT FILTER.

3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL

SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF

THE 3.600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE MATERIALS

CONTRACTOR'S REQUIREMENTS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMEN REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL, ALL PROCEDURE FOR WASTE DISPOSAL, NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES
THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT. THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING
MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

| J U U | Concrete Asphalt Tar Detergents | ☐ Fertilizers ☐ Petroleum Based Products ☐ Cleaning Solvents ☐ Paints ☐ | ☐ Wood ☐ Masonry Blocks ☐ Roofing Materials ☐ Metal Studs ☐ |
|-------|---------------------------------|---|---|
|-------|---------------------------------|---|---|

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO

ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE

SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS WHENEVER POSSIBLE. ALL OF A PRODUCT WILL BE USED UP BEFORE

MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT

ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY

* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDI TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL MILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND FOLIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS. GLOVES, GOGGLES, LIQUID ABSORBENT (I.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL FACH RECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE. IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE—THIRD THE HEIGHT OF THE FENCE.

* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.

ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.

* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTION. A CUPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTION IS ATTACHED.

THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND ERGSION PLANS, OR STORM WATER MANAGEMENT PLANS.

THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF ERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE.
 SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSTE IN GOOD WORKING POEDER.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING

* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR

* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

| responsible for/duties | GENERAL CONTRACTOR | SUB-CONTRACTOR | SOLOWILLNOO-BINS | SUB-CONTRACTOR | SUB-CONTRACTOR |
|---|--------------------|----------------|------------------|----------------|----------------|
| BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS | | | | | |
| SIGNATURE | | | | | |

REVISIONS

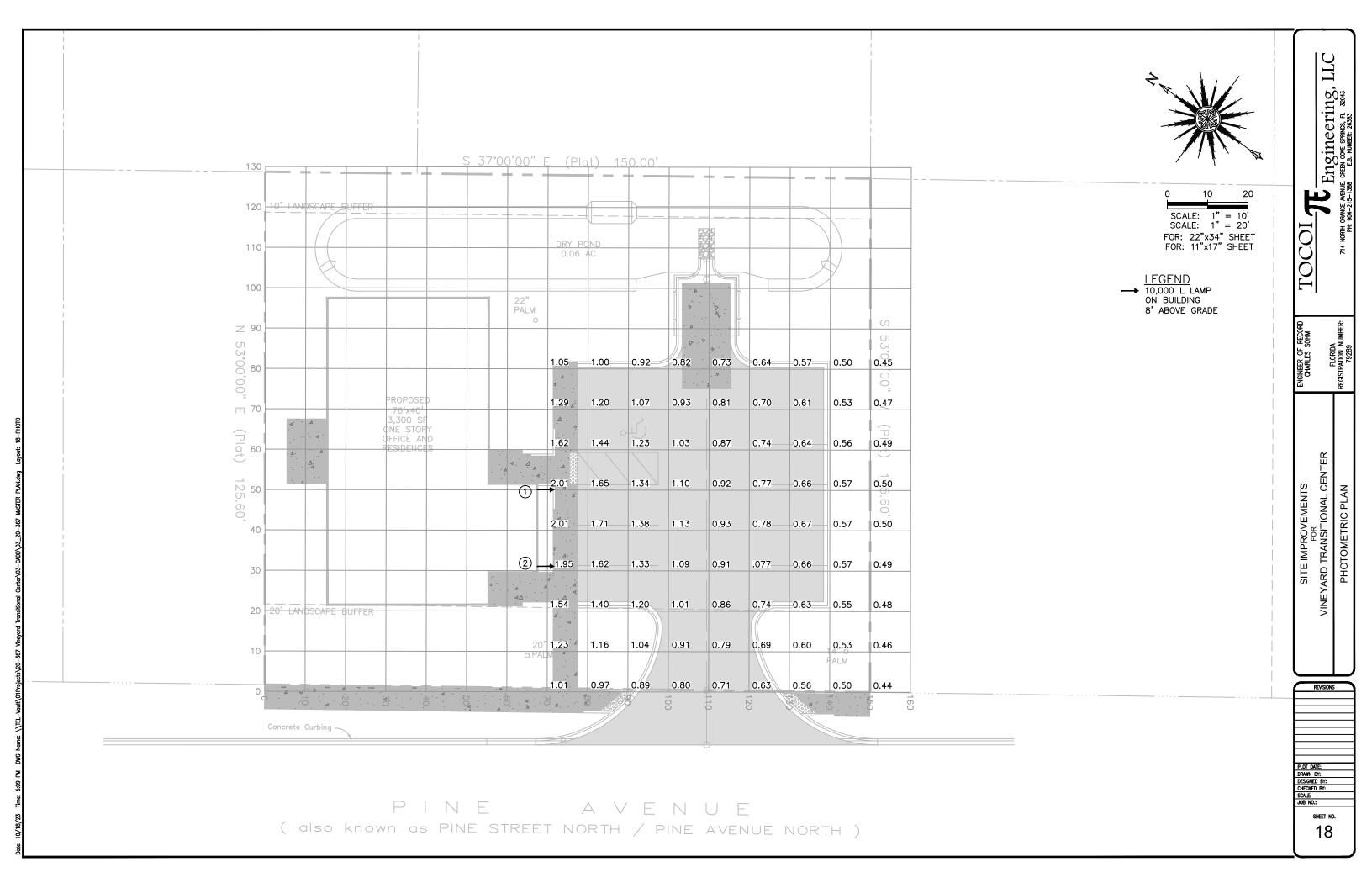
| STORM WATER POLLUTION PREVENTION PLAN INSPECTION AND MAINTENANCE REPORT FORM STRUCTURAL CONTROLS DATE. | DIKE OR SWALE IS THERE ENDENCE OF STABILIZED ? OVERTOPPING OVERTOP | TO BE PERFORMED BY: CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS STRUCTURE/ CONTROLS IN ARE TURBIDITY OF CLOCKING/WASHOUT OUTFALL MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/OUTFALLS TURBIDITY CONTROLS: TO BE PERFORMED BY: ON OR BEFORE. | FRASONS FOR CHANGES. FRASONS FRASONS FOR CHANGES. FRASONS FRASONS FOR CHANGES. FRASONS FRASONS FOR CHANGES. FRASONS FRANCES FRANCES FRANCES FRANCES FRANCES FRANCE FRANCES FRANCES FRANCES FRANCES FRANCES FRANCES FRANCES FRANCES |
|--|--|---|--|
| STORM WATER POLLUTION PREVENTION PLAN INSPECTION AND MAINTENANCE REPORT FORM TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.25 INCHES OR MORE | SPECTOR'S QUALFICATIONS: NYS SINCE LAST RANKALL | | STORM WATER POLLUTION PREVENTION PLAN INSPECTION AND MAINTENANCE REPORT FORM SEDMENT BASIN SEDMENT BASIN OFFER COMMINISH FORM SEDMENT BASIN OFFER COMMINISH FORM SEDMENT BASIN OFFER COMMINISH OFFER COMMINISH STANDARD BY. ONES MACH SEDMENT BY STANDARD BY ONES MACH SEDMENT BY STANDARD BY ONES COMMINISH STANDARD BY ONES MACH SEDMENT BY STANDARD STANDARD ONES MACH SEDMENT BY STANDARD ONES MACH STANDARD ONES MACH SEDMENT BY STANDARD ONES MACH STANDARD ONES MA |

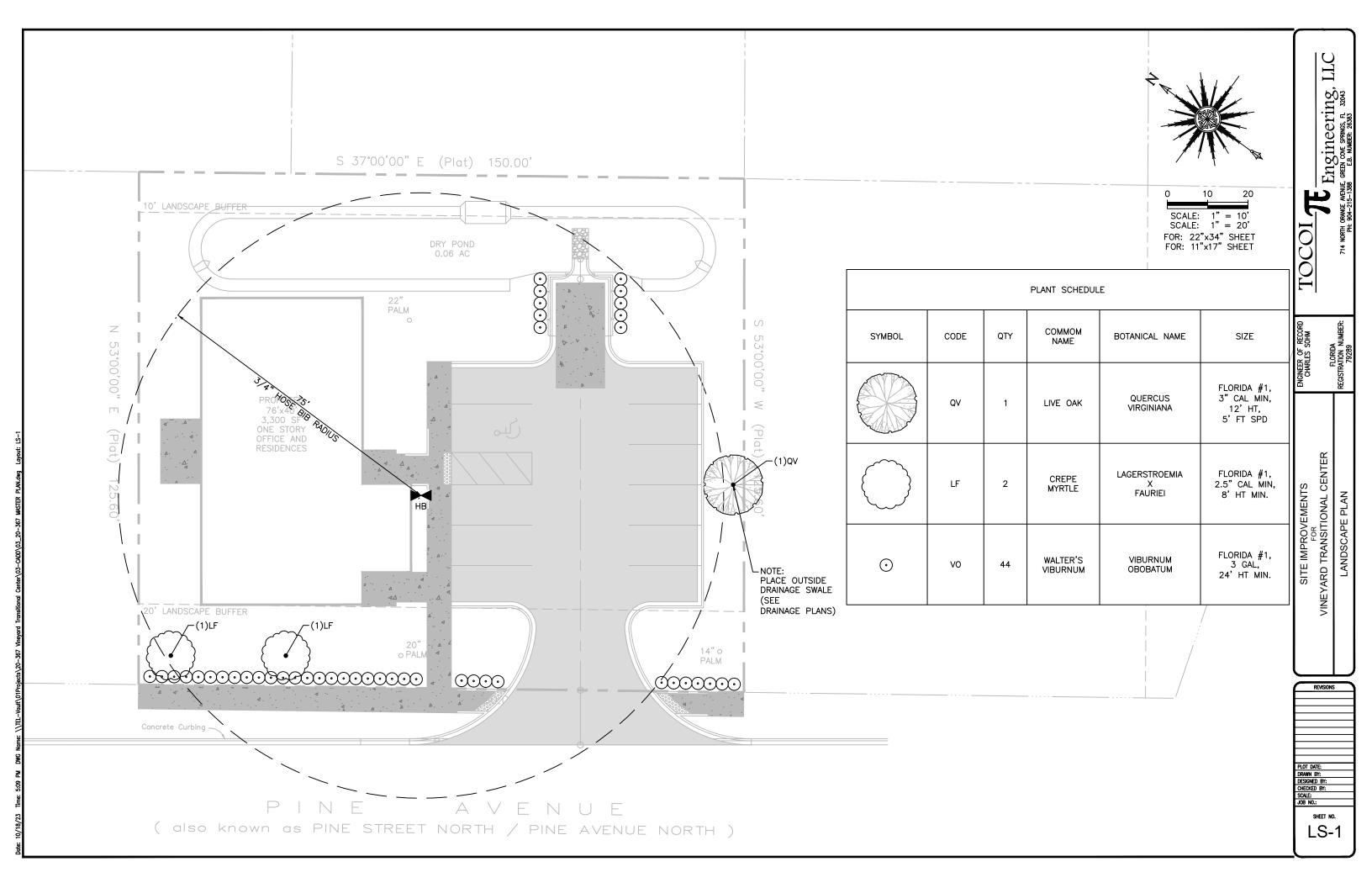
REVISIONS

ENGINEER OF RECORD CHARLES SOHM

NOTE TO CONTRACTOR:
THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION
SYSTEM (NPDES), STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 5 ACRES. THIS
CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.25 INCHES. IT IS
SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR.

LLC Engineering, 174 NORTH ORANGE AREN CONE SPRINGS, FL. 32043 PH; 904–215–1388 E.B. NUMBER: 26:383 TOCOI





CITY OF GREEN COVE SPRINGS LANDSCAPE NOTES

- THESE PLANS ARE FOR LANDSCAPE PERMITTING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL APPROPRIATE RULES AND REGULATIONS.
- 2. TREE PROTECTION BARRIERS ARE TO REMAIN IN PLACE UNTIL ALL SITE DEVELOPMENT IS COMPLETED.
- 3. EXISTING TREES SHOWN ON THIS PLAN ARE THOSE LOCATED BY SURVEYOR. ENGINEER TAKES NO RESPONSIBILITY FOR THEIR LOCATION AND SIZE.
- ENGINEER CAN NOT GUARANTEE EXISTING TREE SURVIVAL FROM CONSTRUCTION IMPACT.
- 5. PLANT SIZE TAKES PRECEDENCE OVER CONTAINER SIZE.
- 6. PLANT QUANTITIES AND SQUARE FOOTAGE TABULATIONS ARE FOR THE CONTRACTORS CONVENIENCE ONLY. THE CONTRACTOR IS TO VERIFY ALL PLANT QUANTITIES AND SQUARE FOOTAGES.
- 7. ALL TREES LOCATED IN LAWN AREAS ARE TO HAVE A 2' RADIUS MULCHED CIRCLE AROUND BASE OF TREE.
- 8. ALL PLANT MATERIAL TO BE FLORIDA GRADE #1 OR BETTER.
- ALL PLANTING AREAS AND MULCHED RADII AROUND TREES ARE TO BE A MIN.
 OF ORGANIC MULCH.
- 10. ALL SHADE TREES TO BE 15 FT MIN. FROM ALL OVER HEAD POWER LINES.
- 11. ALL SHADE TREES TO BE 5 FT MIN. AND UNDERSTORY TREES ARE TO BE A 2 1/2' FT MIN. FROM ALL SIDEWALKS, CURBS AND HARDSURFACES.
- 12. CONTRACTOR RESPONSIBLE TO PROVIDE ON SITE, TOTAL CALIPER INCHES SHOWN ON PLANTING SCHEDULE.
- 13. FINAL ACCEPTANCE OF LANDSCAPE IS NOT TO BE ASSUMED UNTIL: 13.1. CITY FINAL LANDSCAPE INSPECTION IS COMPLETE AND APPROVED.
- 13.2. A FORMAL LETTER FROM GENERAL CONTRACTOR TO ENGINEER STATING FINAL APPROVAL IS DELIVERED TO ENGINEER.
- 14. CONTRACTOR RESPONSIBLE FOR LANDSCAPE MAINTENANCE UNTIL FINAL APPROVAL LETTER RELEASES LANDSCAPE TO OWNER.
- 15. ALL DISTURBED AREAS ON THE SITE AND THE RIGHT-OF-WAY SHALL BE SODDED WITH TURF GRASS (ST. AUGUSTINE OR EQUIVALENT).
- 16. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL REQUIRED PERMITS AND ASSOCIATED FEES TO COMPLETE THE WORK.
- 17. CONTRACTOR SHALL LOCATE AND VISIBLY MARK ALL BURIED UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY CONFLICTS.
- SUBSTITUTIONS WILL REQUIRE CITY OF GREEN COVE SPRINGS APPROVAL AND AMENDED PLANS.

CODE REQUIREMENT CALCULATIONS (FROM ARTICLE VI)

| TOTAL SITE AREA (SF) | 19,074.30 |
|----------------------------------|-----------|
| ZONING AREA | C2 |
| PCT LANDSCAPED AREA (MIN 15%) | 2,861.15 |

| PERIMETER LANDSCAPING | | | | | | |
|--------------------------|---|------|-------|--|---------|--|
| | FRONT | SIDE | TOTAL | | CALIPER | |
| PERIMETER LENGTH (FT) | 150 1056 0756 | | | | | |
| NUMBER OF TREES @ 50' | 3 | 2 | 5 | | 12.5" | |
| | TOTAL MIN CALIPER REQUIRED | | | | | |
| TOTAL CALIF | TOTAL CALIPER PROVIDED (SEE LANDSCAPE PLAN) | | | | 24.50 | |

| INTERIOR LANDSCAPING | | | | | |
|---|-----------|-----------------------------------|---|--|--|
| SITE AREA (SF) | SQ. FEET/ | | | | |
| 10,500.00 | 1500 | SQ FT/ TREE (FIRST 10,500 SF)= | 7 | | |
| 8,574.30 | 4000 | REMAINING SF | 3 | | |
| REQUIRED TREES | | | | | |
| MIN CALIPER PER TREE (IN) | | | | | |
| TOTAL MIN CALIPER REQUIRED | | | | | |
| TOTAL CALIPER PROVIDED (SEE LANDSCAPE PLAN) | | | | | |

| OVERALL LANDSCAPE POINTS | | | | | |
|---|-------|--|--|-------|--|
| SIZE RETAINED REMOVED INSTALLED TOTAL POINTS POINTS | | | | | |
| UNDERSTORY 0 0 5.00 | | | | 5.00 | |
| CANOPY | 30.50 | | | | |
| TOTAL POINTS | | | | 35.50 | |

IRRIGATION

- 1. HOSE BIBS ARE TO BE PROVIDED EVERY 75' WITHIN ALL LANDSCAPED AREAS WITHIN THE PROJECT AREA.
- 2. UPON COMPLETION, CONTRACTOR SHALL SUBMIT AN AS-BUILT PLAN OF THE INSTALLED IRRIGATION SYSTEM, LOCATION OF ALL COMPONENTS AND SLEEVES TO THE OWNER (AND MUNICIPAL AUTHORITY IF REQUIRED).
- 3. ALL PIPE AND WIRE UNDER PAVING SHALL BE PLACED IN SCHEDULE 40 PVC SLEEVES FOR THE FULL PAVEMENT COVERAGE LENGTH AND SHALL BE AT LEAST 24" BELOW FINISHED GRADE.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPLICABLE PERMITS AND FFFS

WATERING SCHEDULE

ALL REQUIRED LANDSCAPING SHOWN ON THESE PLANS WILL BE WATERED MANUALLY USING HOSE BIBS DISPERSED THROUGHOUT THE DEVELOPMENT SO THAT EVERY REQUIRED LANDSCAPE AREA IS WITHIN 75' OF A HOSE BIB. TREES SHALL BE WATERED AS NEEDED TO PREVENT DECLINE, AND AT MINIMUM, THREE TIMES WEEKLY DURING NO—RAIN PERIODS FOR THE FIRST 60 DAYS. WATER THEREAFTER ACCORDING TO THE FOLLOWING 180—DAY SCHEDULE:

LARGE TREES/PALMS: 30GAL/APPLICATION SMALL TREES: 20GAL/APPLICATION

SHRUBS AND SOD: AS NEEDED TO PREVENT WILTING

1ST 8 WEEKS: 3 WATERINGS PER WEEK (24 TOTAL)
2ND 8 WEEKS: 2 WATERINGS PER WEEK (16 TOTAL)
FINAL 10 WEEKS: 1 WATERING PER WEEK (10 TOTAL)

ALL WATERING MUST COMPLY WITH ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT LAWN AND IRRIGATION RULES AND REGULATIONS.

Engineering, Per 32043

FLORIDA REGISTRATION NUMBER: 79289

SITE IMPROVEMENTS
FOR
VINEYARD TRANSITIONAL CENTER

REVISIONS

PLOT DATE:
DEANIN BY:

SITE IMPROVEMENTS FOR VINEYARD TRANSITIONAL CENTER



SHEET NO. LS-3

Prevailing wind. Remove nursery stake. If central leader needs to be straightened or held attach a ½" x 8' bamboo pole to the central leader and trunk. -32" long non-abrasive rubber ties. PLAN VIEW Three (3") two inch lodge pole stakes. Install approximately 2" away from the edge of the root ball. Stake location shall not interfere with permanent branches. TREE STAKING - LODGE POLES (3)

TEMPORARY TREE PROTECTION BARRIER SHALL BE LOCATED AS INDICATED ON PLAN BUT SHALL ALWAYS BE AT 1'-0" OF RADIUS FOR EVERY 1" OF D.B.H. IF NO CONSTRUCTION ACTIVITIES ARE TO TAKE PLACE WITHIN THE DRIP LINE. IN NO CASE SHALL THE PROTECTED AREA BE LESS THEN ONE-HALF THE AVERAGE RADIUS OF THE DRIP LINE OR LESS THAN 10 FEET.

> THE BARRIER SHALL BE CONSTRUCTED OF: 4'-0" SAFETY DRAINAGE COPOLYMER BARRIER FENCING RETAINED TAUGHT BY WIRE TIES TO POSTS. POSTS SHALL BE #3 REBAR 6'-0" LONG DRIVEN 2'-0" INTO GROUND NO MORE THEN 6'-0" APART. REBAR POST SHALL HAVE A SAFETY CAP ON EACH POST'S EXPOSED END.

- PROTECTED TREE.
- -PRIOR TO ANY LAND CLEARING OPERATIONS, TREE LIMBS WHICH INTERFERE WITH CONSTRUCTION SHALL BE REMOVED IN

TREE PROTECTION BARRIER DETAIL N.T.S.

.4'−0" min.∏

-NO MATERIALS OR EQUIPMENT SHALL BE STORED, OPERATED, DUMPED, OR BURNED WITHIN THE PROTECTED AREA.

-NO ATTACHMENT (WIRES, SIGNS, ETC.), SHALL BE ATTACHED TO A

ACCORDANCE WITH NAT. ARBORIST ASSOC. PRUNING STANDARDS.

