ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH

# Turtle Creek

### **GENERAL NOTES:**

2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO WIPE OUT OR ADJUST THE CROWN WHERE SO NOTED BY THE ENGINEER AND/OR REQUIRED FOR POSITIVE DRAINAGE PROPERTY OBSTRUCTIONS WHICH ARE TO REMAIN IN PLACE, SUCH AS BUILDINGS, SEWERS, DRAINS, WATER, OR GAS PIPES, CONDUITS, RAILROAD TRACK, POLES, WALLS, POSTS,

BRIDGES, ETC., ARE TO BE CAREFULLY PROTECTED AND ARE NOT TO BE DISPLACED, UNLESS NOTED. 4. THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENTS OF THE WATER, GAS, SEWER, TELEPHONE, AND POWER COMPANIES 10 DAYS IN ADVANCE, THAT HE INTENDS TO START WORK IN A SPECIFIC AREA. THE OWNER DISCLAIMS ANY RESPONSIBILITY FOR THE SUPPORT AND PROTECTION OF SEWERS, DRAINS, WATER PIPES, GAS PIPES, CONDUITS OF ANY KIND, UTILITIES OR OTHER STRUCTURES OWNED BY THE CITY, COUNTY, STATE OR BY PRIVATE OR PUBLIC UTILITIES LEGALLY OCCUPYING ANY STREET, ALLEY, PUBLIC PLACE, OR RIGHT-OF-WAY.

LOCATION OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION BEFORE CONSTRUCTION. FAILURE OF THE PLANS TO SHOW THE EXISTENCE OF ANY UNDERGROUND UTILITIES, STRUCTURES, ETC., SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PRESERVING AND PROTECTING SAID UTILITY OR STRUCTURES.

6. CONTRACTOR SHALL DISPOSE OF BY HAULING AWAY ALL EXCESS MATERIAL.

1. CONTRACTOR SHALL NOTIFY ESCAMBIA COUNTY ENGINEER 48 HOURS PRIOR TO COMMENCEMENT OF THIS PROJECT.

THE DEVELOPER/ CONTRACTOR SHALL INSTALL PRIOR TO THE START OF CONSTRUCTION AND MAINTAIN DURING CONSTRUCTION ALL SEDIMENT CONTROL MEASURES AS REQUIRED TO RETAIN ALL SEDIMENTS ON THE SITE. IMPROPER SEDIMENT CONTROL MEASURES MAY RESULT IN CODE ENFORCEMENT VIOLATION. CONTROL OF SEDIMENTATION AND EROSION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. AREAS OF CONTROL AND TYPICAL SECTION OF BARRIER ARE SUGGESTIONS ONLY AND DOES NOT RELIEVE THE CONTRACTOR OF ANY OF HIS

8. WHERE UNSUITABLE MATERIALS ARE ENCOUNTERED IN THE PAVED AREAS, THE UNSUITABLE MATERIAL SHALL BE EXCAVATED AND THE AREA BACK FILLED WITH GOOD SAND AND SAND/CLAY MATERIALS. THE SAME SHALL APPLY WHERE THE SUB-BASE IS SUBJECT TO RISING WATER TABLE.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILIZATION OF STREET AND ROAD SHOULDERS IN ACCORDANCE WITH REQUIREMENTS OF ESCAMBIA COUNTY L.D.C. AND F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. 10. WATER SUPPLY FACILITIES, INCLUDING MAINS, SHALL BE INSTALLED, CLEANED, DISINFECTED, AND BACTERIOLOGIC ALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST

APPLICABLE AWWA STANDARDS AND COORDINATED WITH LOCAL UTILITY ENGINEER/INSPECTOR IN ACCORDANCE WITH COTTAGE HILL WATER'S STANDARDS. 11. CONTRACTOR SHALL BE RESPONSIBLE FOR AND COMPLY WITH ANY TESTING REQUIRED BY THE LOCAL GOVERNING AGENCY IN ADDITION TO THE TESTING REQUIREMENTS OUTLINED IN

12. GRADING AROUND TREES WHICH ARE TO REMAIN SHALL BE AWAY FROM THE TREE IN A MANNER TO CAUSE NO DAMAGE TO THE TREE

13. SOD SHALL BE PLACE IN ACCORDANCE WITH SEC. 570 F.D.O.T. STANDARD SPECIFICATIONS.

14. PIPELINE CONTRACTOR SHALL BE RESPONSIBLE FOR INLET TOPS AND THROATS.

15. RETENTION/DETENTION AREAS SHALL BE SUBSTANTIALLY COMPLETE PRIOR TO ANY CONSTRUCTION ACTIVITIES THAT MAY INCREASE STORMWATER RUNOFF RATES. THE CONTRACTOR SHALL CONTROL STORMWATER DURING ALL PHASES OF CONSTRUCTION AND TAKE ADEQUATE MEASURES TO PREVENT THE EXCAVATED POND FROM BLINDING DUE TO SEDIMENTS.

16. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS DURING CONSTRUCTION WHICH SHOW ASBUILT CONDITIONS OF ALL WORK INCLUDING PIPING, DRAINAGE STRUCTURES, OUTLET STRUCTURES, DIMENSIONS, ELEVATIONS, GRADING ETC. RECORD DRAWINGS SHALL BE PROVIDED TO THE ENGINEER OF RECORD PRIOR TO REQUESTING FINAL INSPECTION.

17. ALL PROPOSED UNDERGROUND UTILITIES WITHIN THE RIGHT-OF-WAY SHALL BE INSTALLED PRIOR TO PAVING. NO STREETS UNDER THE TWO YEAR WARRANTY WILL BE ALLOWED TO BE OPEN-CUT OR JACK AND BORED. TO ACCOMPLISH THIS REQUIREMENT, COMMON TRENCHING IS REQUIRED. COMMON TRENCHING SHALL NOT TAKE PLACE UNTIL ALL ROW ROUGH GRADES HAVE BEEN ESTABLISHED TO ENSURE PROPER UTILITY DEPTHS. IF COMMON TRENCHING IS NOT A FEASIBLE OPTION, THE DEVELOPER SHALL INSTALL CONDUIT FOR THE UTILITY NOT PARTICIPATING IN THE COMMON TRENCHING FOR ALL ROAD CROSSINGS AND THE UTILITY COMPANY WILL BE REQUIRED TO USE THE CONDUIT. THIS SHALL REQUIRE PLANNING

18. ROUGH GRADING OF RIGHT OF WAY MUST BE ESTABLISHED PRIOR TO COMMON TRENCH UTILITY INSTALLATION TO ENSURE UTILITIES ARE INSTALLED AT PROPER DEPTHS. A MINIMUM OF 30" OF COVER IS REQUIRED OVER ALL UTILITIES. THIS DIMENSION SHALL BE MEASURED FROM PROPOSED GRADE IF ROAD IS IN FILL AND MEASURED FROM TOP OF CURB IF ROAD IS

19. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD AT LEAST 2 WEEKS PRIOR TO PLACEMENT OF BASE MATERIAL TO ASSIST IN COORDINATION OF ALL OTHER UNDERGROUND UTILITIES. 20. ON SITES >1 ACRE, IF >1 CONTIGUOUS ACRE IS CLEARED, A GROUND COVER SUFFICIENT TO PREVENT EROSION SHOULD BE PLANTED OR OTHERWISE STABILIZED WITHIN 10 WORKING DAYS ON THAT PORTION OF THE SITE UPON WHICH FURTHER ACTIVE CONSTRUCTION WILL NOT BE UNDERTAKEN WITHIN 90 DAYS.

21. THE PROJECT ENGINEER (ENGINEER OF RECORD) SHALL PROVIDE TO ESCAMBIA COUNTY "ASBUILT" RECORD DRAWINGS FOR VERIFICATION AND APPROVAL BY ESCAMBIA COUNTY ONE WEEK PRIOR TO REQUEST A FINAL INSPECTION, OR PROVIDE ASBUILT CERTIFICATION THAT THE PROJECT CONSTRUCTION ADHERES TO THE PERMITTED PLANS AND SPECIFICATIONS. THE ASBUILT CERTIFICATION OR THE ASBUILT RECORD DRAWINGS MUST BE SIGNED AND SEALED AND DATED BY A REGISTERED FLORIDA PROFESSIONAL ENGINEER.

22. ALL DISTURBED AREAS WHICH ARE NOT PAVED SHALL BE STABILIZED WITH SEEDING, FERTILIZER AND MULCH, HYDROSEED AND/ OR SOD. SEEDED AREAS SHALL INCLUDE A BAHIA MIX TO ENSURE CONTINUED GROWTH AFTER WINTER MONTHS IN ACCORDANCE WITH THE LATEST EDITIONS OF FDOT SECTION 570 AND FDOT STANDARD PLAN INDEXES 570-001 AND 570-010.

23. THE OWNER OR HIS AGENT SHALL ARRANGE/ SCHEDULE WITH HE COUNTY A FINAL INSPECTION OF THE DEVELOPMENT UPON COMPLETION AND ANY INTERMEDIATE INSPECTIONS AT (850) 595-3472. ASBUILT CERTIFICATION IS REQUIRED PRIOR TO REQUEST FOR FINAL INSPECTION/ APPROVAL.

24. ALL ASPECTS OF THE STORMWATER/ DRAINAGE COMPONENTS AND OR TRANSPORTATION COMPONENTS SHALL BE COMPLETED PRIOR TO REQUESTING A FINAL INSPECTION.

25. NO DEVIATION OR REVISIONS FROM THESE PLANS BY THE CONTRACTOR SHALL BE ALLOWED WITHOUT PRIOR APPROVAL FROM BOTH THE DESIGN ENGINEER, ESCAMBIA COUNTY, AND ECUA. ANY DEVIATIONS MAY RESULT IN DELAYS IN COUNTY ACCEPTANCE OF IMPROVEMENTS.

26. DENSITY TESTS AND CORE SAMPLES WILL BE REQUIRED TO DEMONSTRATE COMPLIANCE WITH COUNTY STANDARDS PRIOR TO FINAL ACCEPTANCE OF ROADWAY IMPROVEMENTS.

27. TO COMPLY WITH NPDES REQUIREMENTS, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH 1/2" RAINFALL EVENT OR AT LEAST WEEKLY. THE CONTRACTOR SHALL DOCUMENT SUCH INSPECTIONS AND EROSION CONTROL MAINTENANCE EFFORTS; INSPECTION RECORDS SHALL BE PROVIDED TO THE NPDES PERMIT APPLICANT FOR PROPER REPORTING TO 28. NOTIFY SUNSHINE UTILITIES 48 HOURS IN ADVANCE PRIOR TO DIGGING WITHIN R/W. 1-800-432-4770

29. ECUA INSPECTOR OR AUTHORIZED REPRESENTATIVE MUST OBSERVE ALL CONNECTIONS TO ECUA'S EXISTING WATER AND SANITARY SEWER SYSTEMS.

30. TYPE 1 CURB CUT DRIVEWAYS ARE TO BE USED FOR ALL UTILITY ACCESS POINTS.

31. ELECTRIC/PHONE/CABLE/GAS STRUCTURES INSTALLED WITHIN DRAINAGE ACCESS EASEMENTS SHALL BE LOCATED ALONG THE BOUNDARY OF THE EASEMENT TO MAXIMIZE CLEAR ACCESS FOR MAINTENANCE EQUIPMENT.

32. THE SUBGRADE IS TO BE TESTED FOR COMPACTION AT A FREQUENCY OF NOT LESS THAN ONE TEST PER 300 LINEAR FEET IN THE PROPOSED ROADWAY AREAS. COMPLIANCE TESTS WITHIN THE FILL/BACKFILL AREAS ARE TO BE PERFORMED AT A FREQUENCY OF NOT LESS THAN ONE TEST PER 300 LINEAR FEET.

33. ALL CONCRETE PIPE JOINTS SHALL BE WRAPPED WITH FABRIC/SOCK.

34. A HEALTHY GROWTH OF GRASS WITHIN DISTURBED RIGHT-OF-WAY AREAS IS REQUIRED PRIOR TO COUNTY APPROVAL /ACCEPTANCE. IF TIME CONTRAINTS EXIST DURING THE FINAL PLAT APPROVAL AND ACCEPTANCE PROCESS, A MINIMUM OF TWO STRIPS OF SOD (MINIMUM 2' WIDE) BEHIND THE BACK OF CURB WITH ALL OTHER DISTURBED AREAS SEEDED /MULCHED/FERTILIZED WILL BE ACCEPTABLE.

35. SAG FILTERS IN CURB THROATS ARE NOT AN ALLOWABLE SEDIMENT CONTROL METHOD.

36. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST TWO WEEKS PRIOR TO PLACEMENT OF BASE MATERIAL TO ASSIST IN THE COORDINATION OF ALL OTHER UNDERGROUND UTILITIES.

37. A MINIMUM ONE (1) FOOT GROUND COVER IS REQUIRED FOR ALL UNDERGROUND PIPES.

38. PROPOSED RESIDENTIAL LOTS SHALL REMAIN IN THEIR NATURAL STATE (TREES INCLUDED) UNTIL SUCH TIME AS A BUILDING PERMIT FOR THE DWELLING IS ISSUED. FURTHERMORE, PER CODE, NO LAND DISTURBANCE ACTIVITIES SHALL OCCUR ONSITE, INCLUDING LAND CLEARING, PLACING OF FILL MATERIALS, GRADING ACTIVITIES, ETC. OR THE REMOVAL OF TREES, UNTIL SUCH TIME AS CONSTRUCTION PLANS ARE APPROVED AND APPROPRIATE PERMIT(S) ARE ISSUED FOR THE DEVELOPMENT WORK OR OTHERWISE. INFRASTRUCTURE AREAS ONLY CAN BE DEVELOPED ONCE CONSTRUCTION PLANS APPROVAL & CO HAVE BEEN OBTAINED.

39. NO HERITAGE OR CHAMPION TREES EXIST ONSITE.

40. WORK PERFORMED NEXT TO THE R/W WITH EXISTING SWALES SYSTEMS MAY REQUIRED ADDITIONAL PROVISIONS TO REPAIR/RESTORE EXISTING DRAINAGE SWALES AS NEEDED TO ENSURE ADEQUATE DRAINAGE. R/W SHOULDER STABILIZATION SHOULD BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION.

41. THE CONTRACTOR SHALL NOTIFY FDOT 48 HOURS IN ADVANCE PRIOR TO INITIATING ANY WORK IN THE STATE RIGHT-OF-WAYS. 42. DEVELOPER/CONTRACTOR/HOMEOWNERS ASSOCIATION SHALL RESHAPE PER PLAN SPECIFICATIONS, CLEAN OUT ACCUMULATED SILT, AND STABILIZE RETENTION/DETENTION POND(S) AT THE END OF CONSTRUCTION WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED AND AT THE END OF THE 2-YEAR WARRANTY PERIOD.

#### OWNER AND DEVELOPER

ESPLANADE COMMUNITIES OF FLORIDA LLC 3000 GULF BREEZE PARKWAY GULF BREEZE, FL 32563 PHONE: (850) 934-0470

#### SURVEYOR

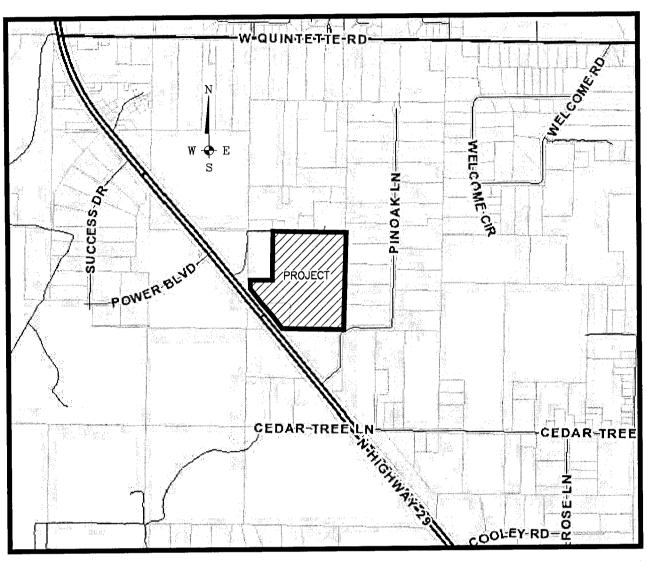
SAM SURVEYING & MAPPING, LLC

600 UNIVERSITY OFFICE BLVD., SUITE #17-B PENSACOLA, FL 32504

LB#7908 P: (850)857-7725 F: (850)857-7726 **ENGINEER OF RECORD** 

DAVID W. FITZPATRICK, P.E, P.A PROFESSIONAL ENGINEER 10250 NORTH PALAFOX STREET PENSACOLA, FLORIDA 32534 (850) 476-8677

A PROPOSED 134 LOT RESIDENTIAL SUBDIVISION OF A PORTION OF SECTION 34, TOWNSHIP 2 NORTH, RANGE 31 WEST ESCAMBIA COUNTY, FLORIDA MARCH 2021



VICINITY MAP (NOT TO SCALE)

INDEX OF DRAWINGS

	INDER OF BRITINGS
SHEET	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS
3	DIMENSION PLAN
4	SITE/UTILITY PLAN
5	SITE/UTILITY PLAN (NORTH)
6	SITE/UTILITY PLAN (SOUTH)
7	SITE/UTILITY PLAN (OFFSITE)
8	DRAINAGE PLAN
9	DRAINAGE PLAN (NORTH)
10	DRAINAGE PLAN (SOUTH)
11	PLAN/PROFILE - KINGSBRIDGE
12	PLAN/PROFILE - CRESCENT RIDGE
13	PLAN/PROFILE - BRIMWOOD
14	PLAN/PROFILE - BRIMWOOD
15	PLAN/PROFILE - BRIMWOOD
16	PLAN/PROFILE - KETCH CREEK
17	PLAN/PROFILE - CONVEYANCE SWALE (POND #1)
18	PLAN/PROFILE - CONVEYANCE SWALE (EAST)
19	PLAN/PROFILE - MISC. STORMWATER
20	PLAN/PROFILE - MISC. STORMWATER
21	PLAN/PROFILE - MISC. SANITARY SEWER
22	DETAILS - DRAINAGE
23	DETAILS - POND #1
24	DETAILS - POND #2
25	DETAILS - ROADWAY
26	DETAILS - POTABLE WATER
27	LIFTSTATION DETAILS - SITE / GRADING
28	LIFTSTATION DETAILS - UTILITIES
29	LIFTSTATION DETAILS - DS-3
30	LIFTSTATION DETAILS - DS-4
31	LIFTSTATION DETAILS - DS-5
32	LIFTSTATION DETAILS - DS-6
33	LIFTSTATION DETAILS - DS-7
34	LIFTSTATION DETAILS - DS-8
35	FDOT - EXISTING CONDITIONS
36	FDOT - EXISTING CONDITIONS
37	FDOT - RIGHT TURN LANE
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39	FDOT - CROSS-SECTIONS
40	FDOT - ECUA DRIVEWAY

#### ECUA Engineering Manual Reference Note\*

\*note shall be inserted in the upper right corner of title sheet \* applicable only to ECUA infrastructure to be constructed in public ROW or in utility easement; not to be applied to private water/sewer facilities on private property (see Building Code)

#### A. ECUA Engineering Manual Incorporated by Reference

The ECUA Engineering Manual, dated December 18, 2014, along with Update # 1 dated September 1, 2016 (hereinafter "Manual"), located at www.ecua.fl.gov, is hereby incorporated by reference into this Project's official contract documents as if fully set forth therein. It is the Contractor's responsibility to be knowledgeable of the Manual's contents and to construct the Project in accordance with the Manual. The Contractor shall provide its employees access to the Manual at all times, via Project site or office, via digital or paper format. In the event of a conflict between the Manual and Plans, Contractor shall consult Engineer of Record for proper resolution.

#### B. Additional Documents (to be completed by the Engineer of Record)

Does this Project have additional technical specifications or construction details that supplement and/or supersede the Manual listed above? XYES NO□. If yes, Contractor shall construct Project in accordance with said documents as listed and located below:

	Docume	nt Type	Location	
Document Name	Specifi- cation	Detail	Plans	Project Manual*
LPFM DETAILS		×	×	
A CONTRACT OF THE CONTRACT OF				

\*Project Manuals used only with ECUA CIP Projects C. Engineer of Record Responsibilities

The Engineers of Record (EORs) that have affixed their seals and signatures on these plans warrant their portions of the plans have been designed in accordance with the Manual (unless otherwise directed by the ECUA Project Engineer). The EORs shall be knowledgeable of the Manual's contents and shall assume responsibility for its use

#### LEGAL DESCRIPTION:

COMMENCE AT THE SOUTHWEST CORNER OF SECTION 34, TOWNSHIP 2 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA; THENCE NORTH 1 DEGREES 20 MINUTES 19 SECONDS EAST ALONG THE WEST LINE OF SAID SECTION FOR A DISTANCE OF 1904.42 FEET TO THE EAST RIGHT OF WAY OF U.S. HIGHWAY #29 (215.00 FEET RIGHT OF WAY) AND THE POINT OF BEGINNING; THENCE CONTINUE NORTH 1 DEGREES 20 MINUTES 19 SECONDS EAST ALONG SAID WEST LINE OF SECTION 34 FOR A DISTANCE OF 724.32 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION; THENCE SOUTH 88 DEGREES 22 MINUTES 21 SECONDS EAST FOR A DISTANCE OF 1324.44 FEET: THENCE SOUTH 1 DEGREES 19 MINUTES 26 SECONDS WEST FOR A DISTANCE OF 1314.58 FEET; THENCE NORTH 88 DEGREES 21 MINUTES 46 SECONDS WEST FOR A DISTANCE OF 726.11 FEET; THENCE NORTH 1 DEGREES 20 MINUTES 19 SECONDS EAST FOR A DISTANCE OF 344.00 FEET; THENCE NORTH 88 DEGREES 21 MINUTES 46 SECONDS WEST FOR A DISTANCE OF 406.38 FEET TO THE EAST RIGHT OF WAY OF U.S. HIGHWAY #29 (200.00 FEET RIGHT OF WAY); THENCE NORTH 39 DEGREES 16 MINUTES 56 SECONDS WEST ALONG SAID RIGHT OF WAY FOR A DISTANCE OF 25.70 FEET; THENCE NORTH 50 DEGREES 43 MINUTES 04 SECONDS EAST FOR A DISTANCE OF 15.00 FEET; THENCE 39 DEGREES 16 MINUTES 56 SECONDS WEST FOR A DISTANCE OF 287.38 FEET TO THE POINT OF BEGINNING; LYING AND BEING IN SECTION 34, TOWNSHIP 2 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA.

COMMENCE AT THE SOUTHWEST CORNER OF SECTION 34, TOWNSHIP 2 NORTH, RANGE 31 WEST. ESCAMBIA COUNTY, FLORIDA; THENCE NORTH 1 DEGREES 20 MINUTES 19 SECONDS EAST ALONG THE WEST LINE OF SAID SECTION FOR A DISTANCE OF 1904.42 FEET TO THE EAST RIGHT OF WAY OF U.S. HIGHWAY #29 (215 FEET RIGHT OF WAY) AND THE POINT OF BEGINNING; THENCE CONTINUE NORTH 1 DEGREES 20 MINUTES 19 SECONDS EAST FOR À DISTANCE OF 724.32 FEÉT; THENCE SOUTH 88 DEGREES 22 MINUTES 21 SECONDS EAST FOR A DISTANCE OF 330.00 FEET; THENCE SOUTH 1 DEGREES 20 MINUTES 19 SECONDS WEST FOR A DISTANCE OF 660.00 FEET; THENCE NORTH 88 DEGREES 22 MINUTES 21 SECONDS WEST FOR A DISTANCE OF 297.44 FEET; THENCE SOUTH 1 DEGREES 20 MINUTES 19 SECONDS WEST FOR A DISTANCE OF 102.10 FEET; THENCE NORTH 39 DEGREES 16 MINUTES 56 SECONDS WEST FOR A DISTANCE OF 50.00 FEET TO THE POINT OF BEGINNING, ALL LYING AND BEING IN SECTION 34, TOWNSHIP 2 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY,

#### PARCEL 2:

PARCEL 3:

BEGIN AT THE INTERSECTION OF THE EAST LINE OF THE RIGHT OF WAY OF NEW PALAFOX (HIGHWAY NO. 29) AND THE SOUTH LINE OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 2 NORTH RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA, THENCE IN AN EASTERLY DIRECTION ALONG SAID SOUTH LINE A DISTANCE OF 110 FEET; THENCE IN A NORTHERLY DIRECTION PARALLEL TO THE WEST LINE OF SAID SECTION 34, A DISTANCE OF 100 FEET TO THE POINT OF BEGINNING, THENCE CONTINUE ALONG THE SAME LINE FOR A DISTANCE OF 244 FEET; THENCE IN A WESTERLY DIRECTION PARALLEL TO SAID SOUTH LINE OF SAID NORTHWEST QUARTER OF SOUTHWEST QUARTER OF SECTION 34 A DISTANCE OF 406.4 FEET TO THE EAST RIGHT OF WAY LINE OF SAID NEW PALAFOX HIGHWAY; THENCE IN A SOUTHEASTERLY DIRECTION ALONG SAID EAST RIGHT OF WAY LINE A DISTANCE OF 322.8 FEET; THENCE EASTERLY AND PARALLEL TO THE SAID SOUTH LINE OF SAID NORTHWEST QUARTER OF SOUTHWEST QUARTER OF SECTION 34 A DISTANCE OF 196.2 FEET TO THE POINT OF BEGINNING, ALL LYING AND BEING IN SECTION 34, TOWNSHIP 2 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY,

BEGIN AT THE INTERSECTION OF THE EAST LINE OF THE RIGHT OF WAY OF NEW PALAFOX HIGHWAY (HIGHWAY NO. 29) AND THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 2 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA, THENCE IN AN EASTERLY DIRECTION ALONG THE SOUTH LINE A DISTANCE OF 110 FEET; THENCE IN A NORTHERLY DIRECTION PARALLEL TO THE WEST LINE OF SAID SECTION 34 A DISTANCE OF 100 FEET; THENCE IN A WESTERLY DIRECTION PARALLEL TO THE SOUTH LINE OF SAID NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 34 A DISTANCE OF 196.2 FEET TO THE EAST RIGHT OF WAY LINE OF SAID NEW PALAFOX HIGHWAY; THENCE IN A SOUTHEASTERLY DIRECTION ALONG SAID EAST RIGHT OF WAY LINE A DISTANCE OF 132.3 FEET TO THE POINT OF BEGINNING, ALL LYING AND BEING IN SECTION 34, TOWNSHIP 2 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY,

> CONTRACTOR SHALL NOTIFY SUNSHINE 1 48 HOURS PRIOR TO COMMENCING CONSTRUCTION 1-800-432-4770

GULF POWER CO.  $\sim 429-2603$ 

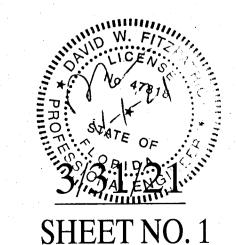
 $AT&T \sim 436-1489$ 

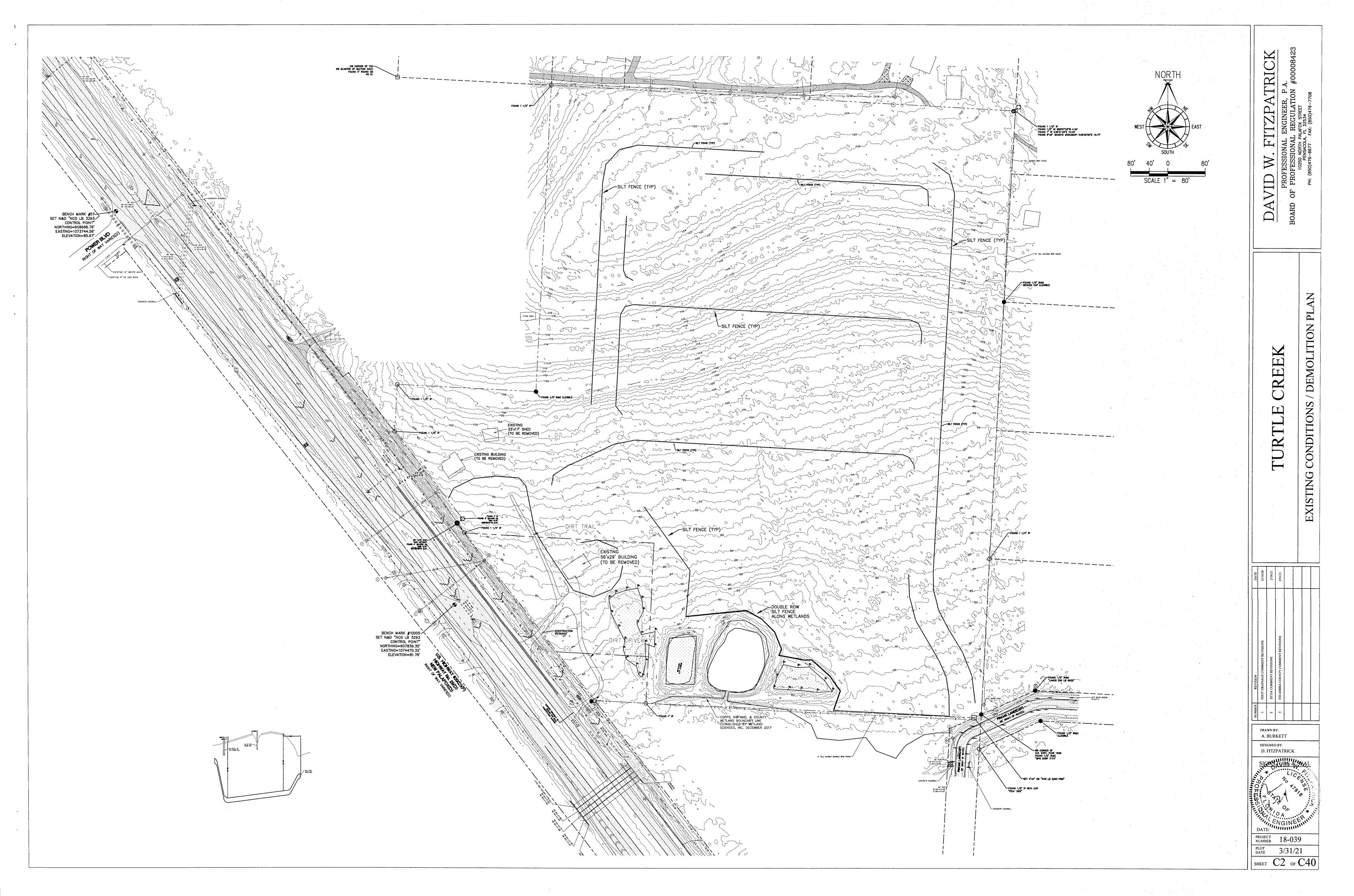
ECUA ~ 969-5823

PENSACOLA ENERGY ~ 474-5309

#### FLOOD ZONING NOTE:

THE SUBJECT PROPERTY AS SHOWN HEREON IS LOCATED IN FLOOD ZONE X, (MINIMAL RISK AREAS OUTSIDE THE 1-PERCENT AND .2-PERCENT-ANNUAL-CHANCE FLOODPLAINS. NO BFES OR BASE FLOOD DEPTHS ARE SHOWN WITHIN THESE ZONES), AS DETERMINED FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP OF ESCAMBIA COUNTY, FLORIDA, COMMUNITY 120080, FIRM MAP PANEL NUMBERS 12033C0240G, MAP REVISION DATED SEPTEMBER 29, 2006





ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH

FITZPATRICK

ONAL ENGINEER, P.A.

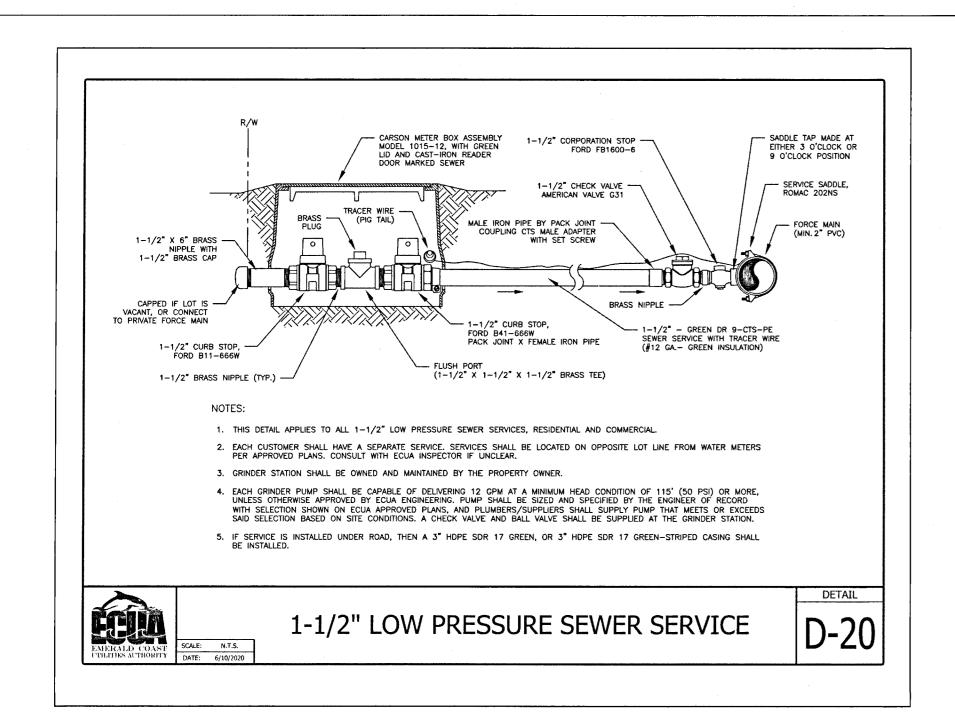
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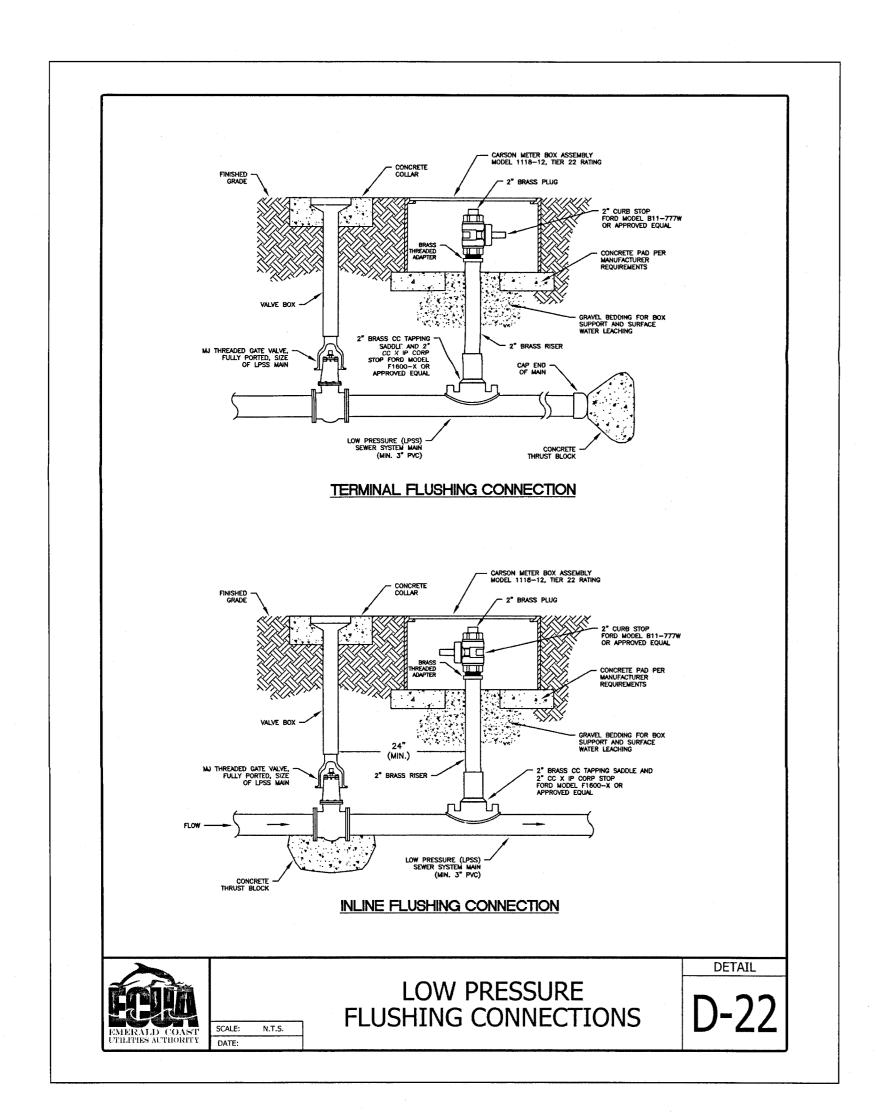
DIMENSION PLAN

A. BURKETT DESIGNED BY:

D, FITZPATRICK SIGNATURE & SEAL

PLOT DATE 3/31/21 SHEET C3 OF C40



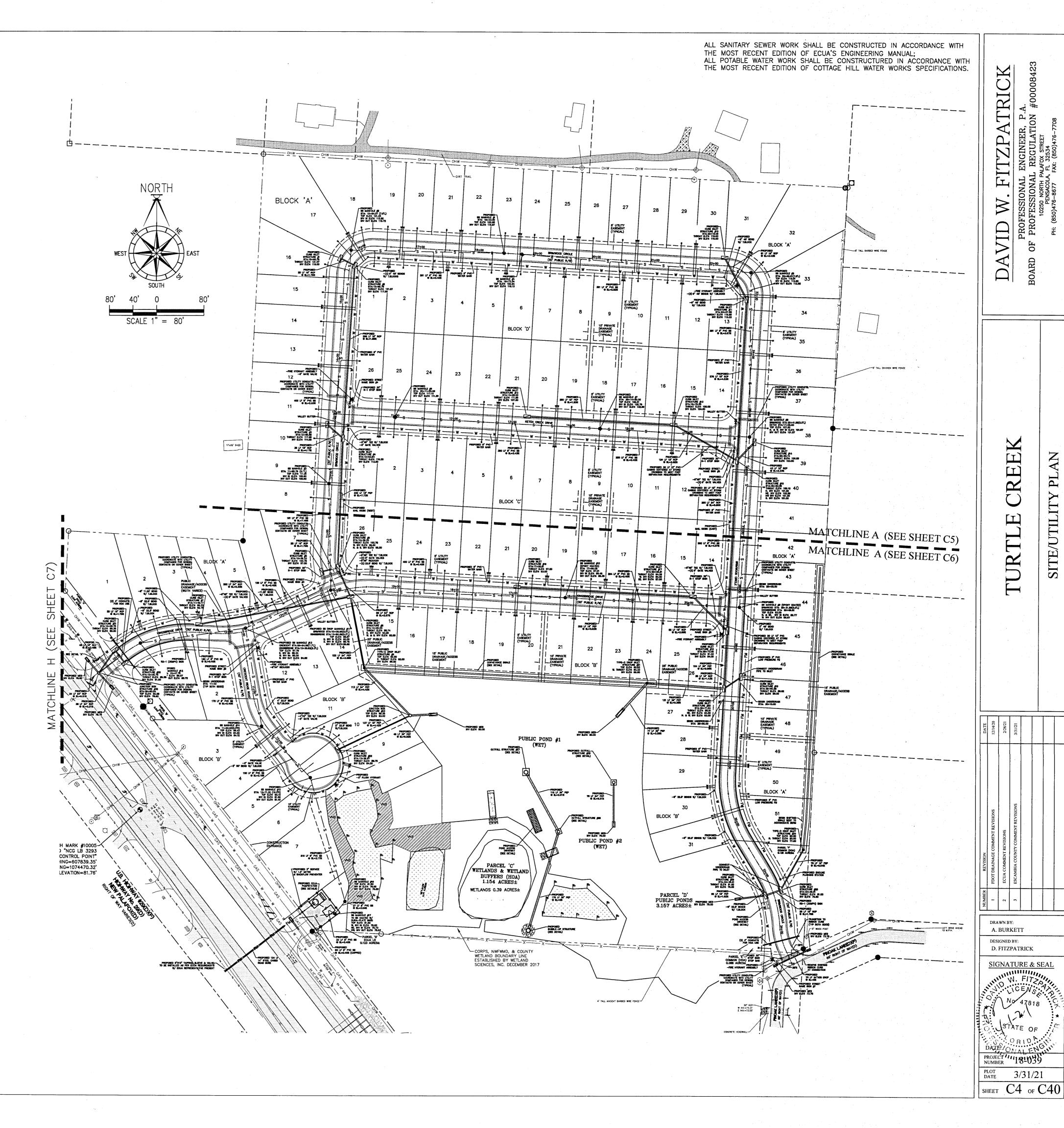


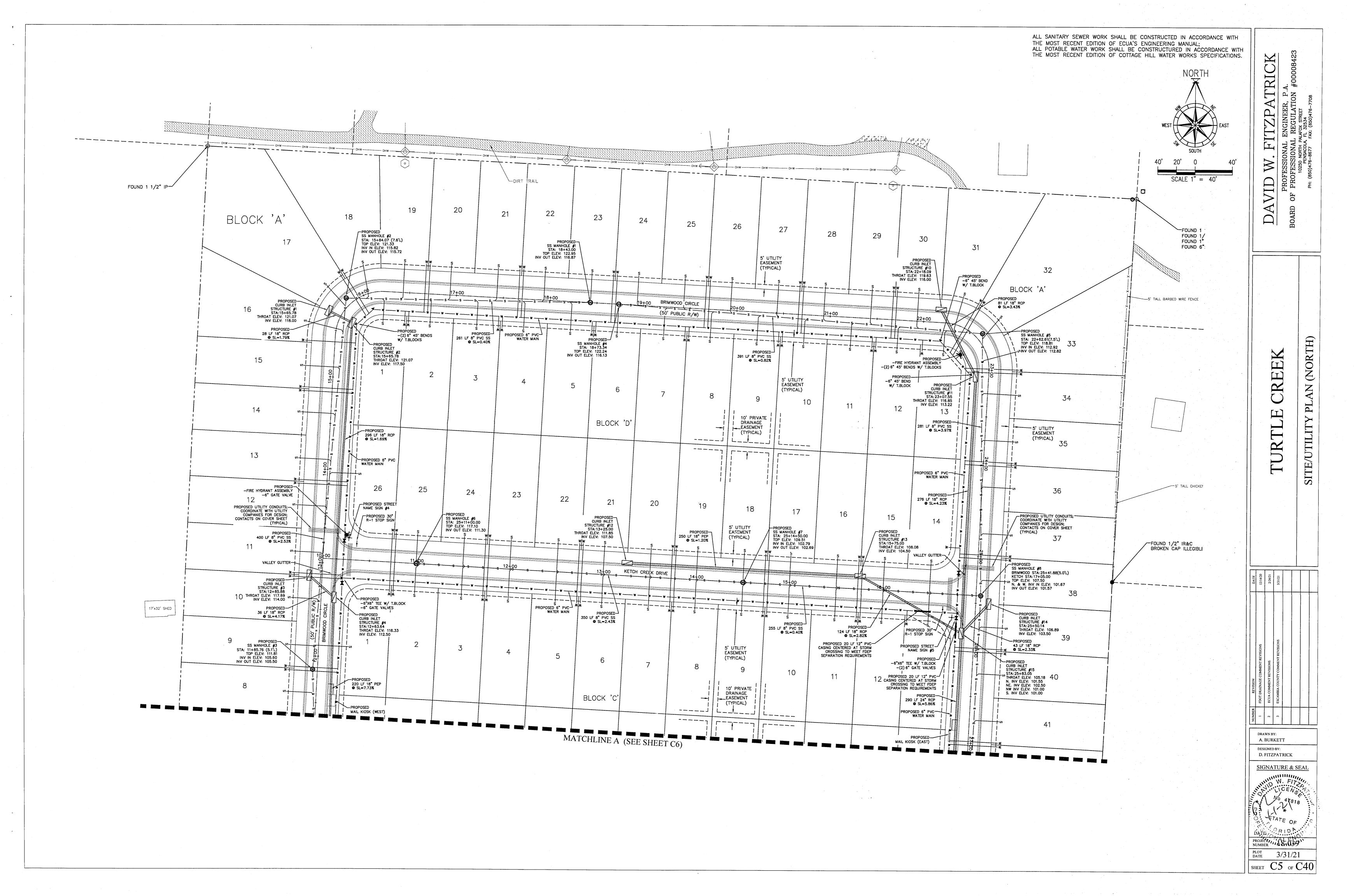
WETLAND CHART		
TOTAL LAND AREA	1,369,812 SF	31.45 AC
FDEP, NWFWMD, & ESCAMBIA COUNTY WETLANDS	39,250 SF	2.9%
UPLANDS	1,330,562 SF	97.1%
PROPOSED IMPACTS TO WETLANDS	0 SF	0%
WETLAND BUFFER	28,367 SF	2.1%
CONSERVATION EASEMENT	0 SF	0%

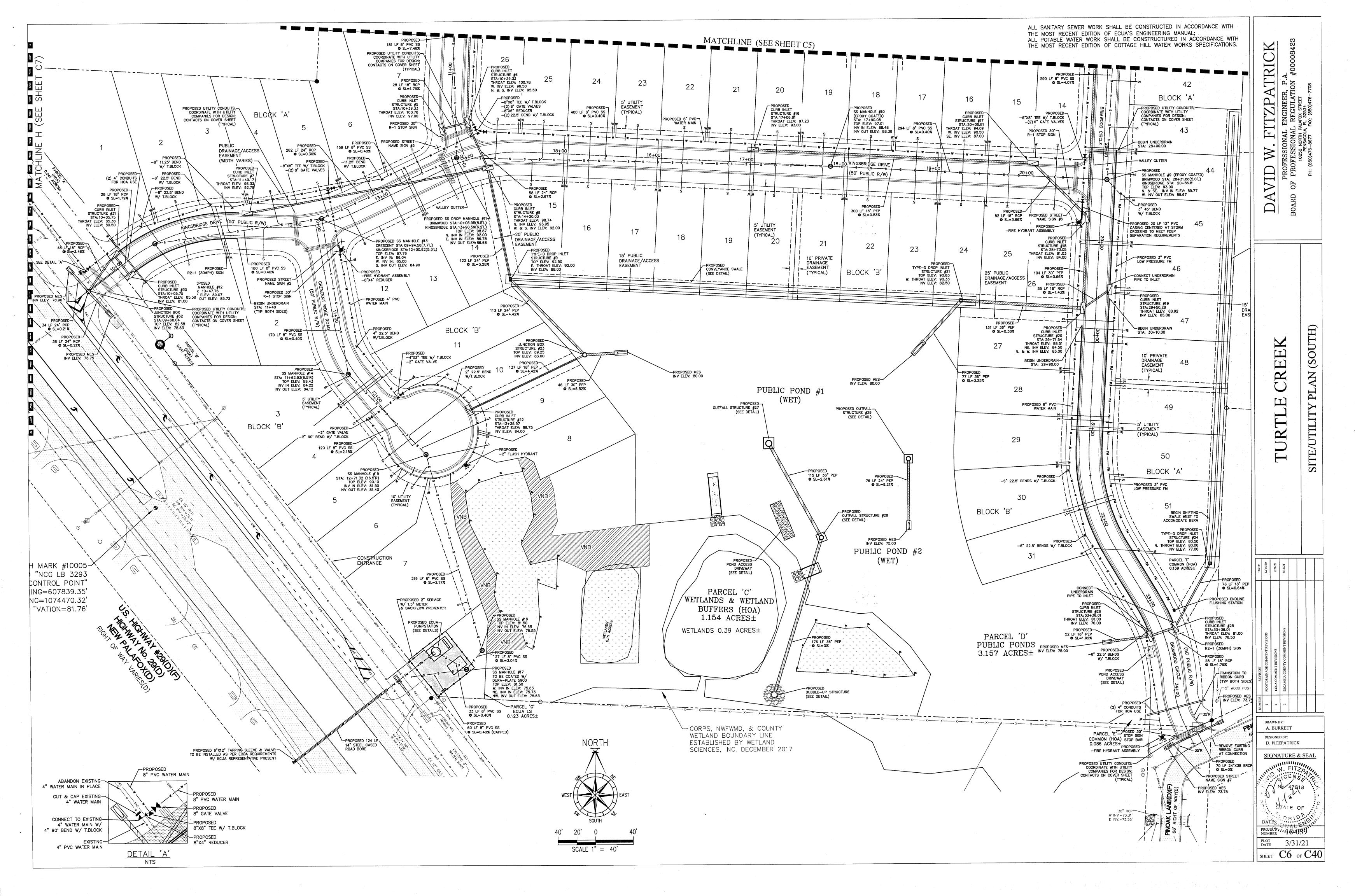
**BUFFER AVERAGE WIDTH:** 28,367 SF / 987 FT = 28.7' AVERAGE BUFFER WIDTH

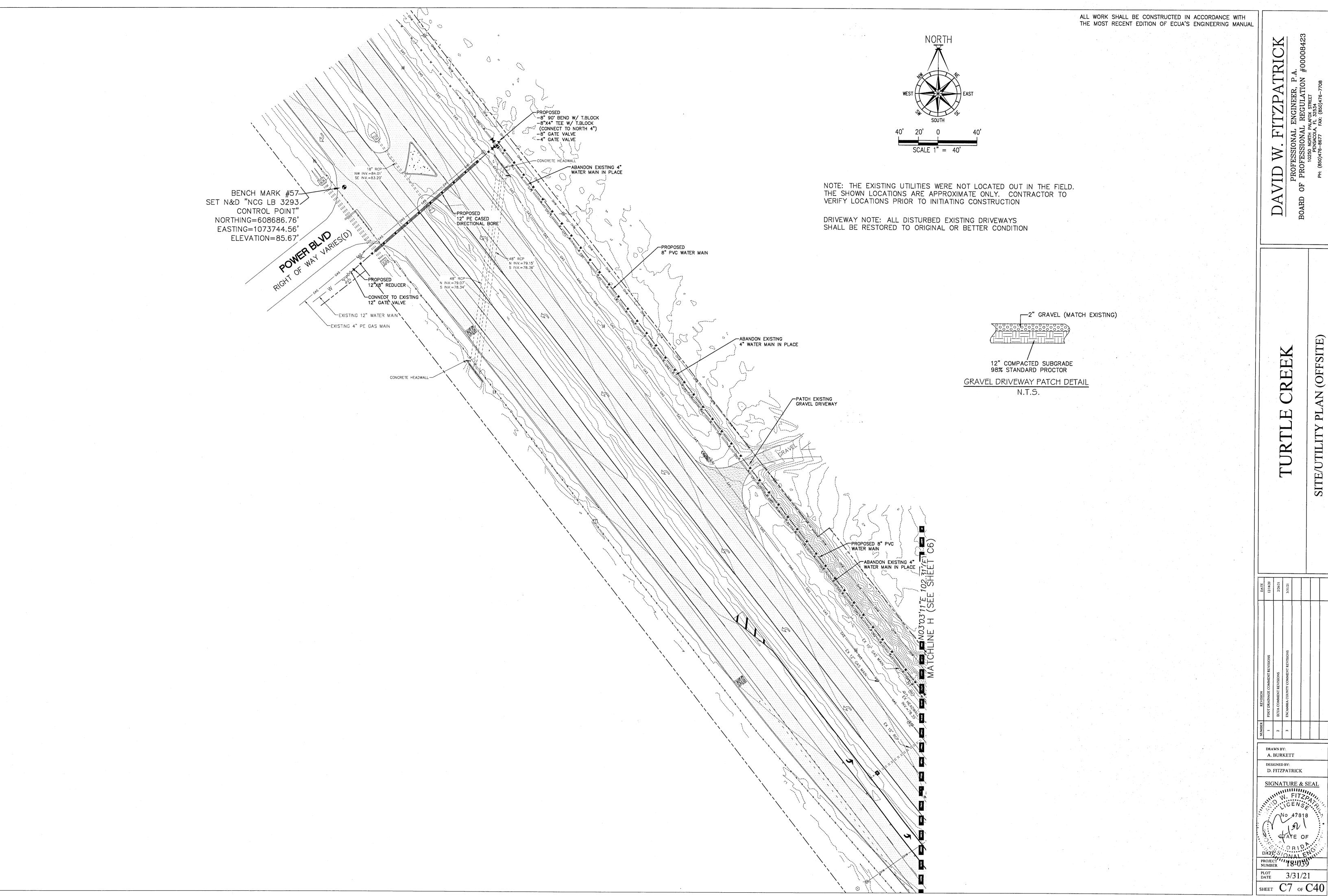
WETLAND & BUFFER NOTES

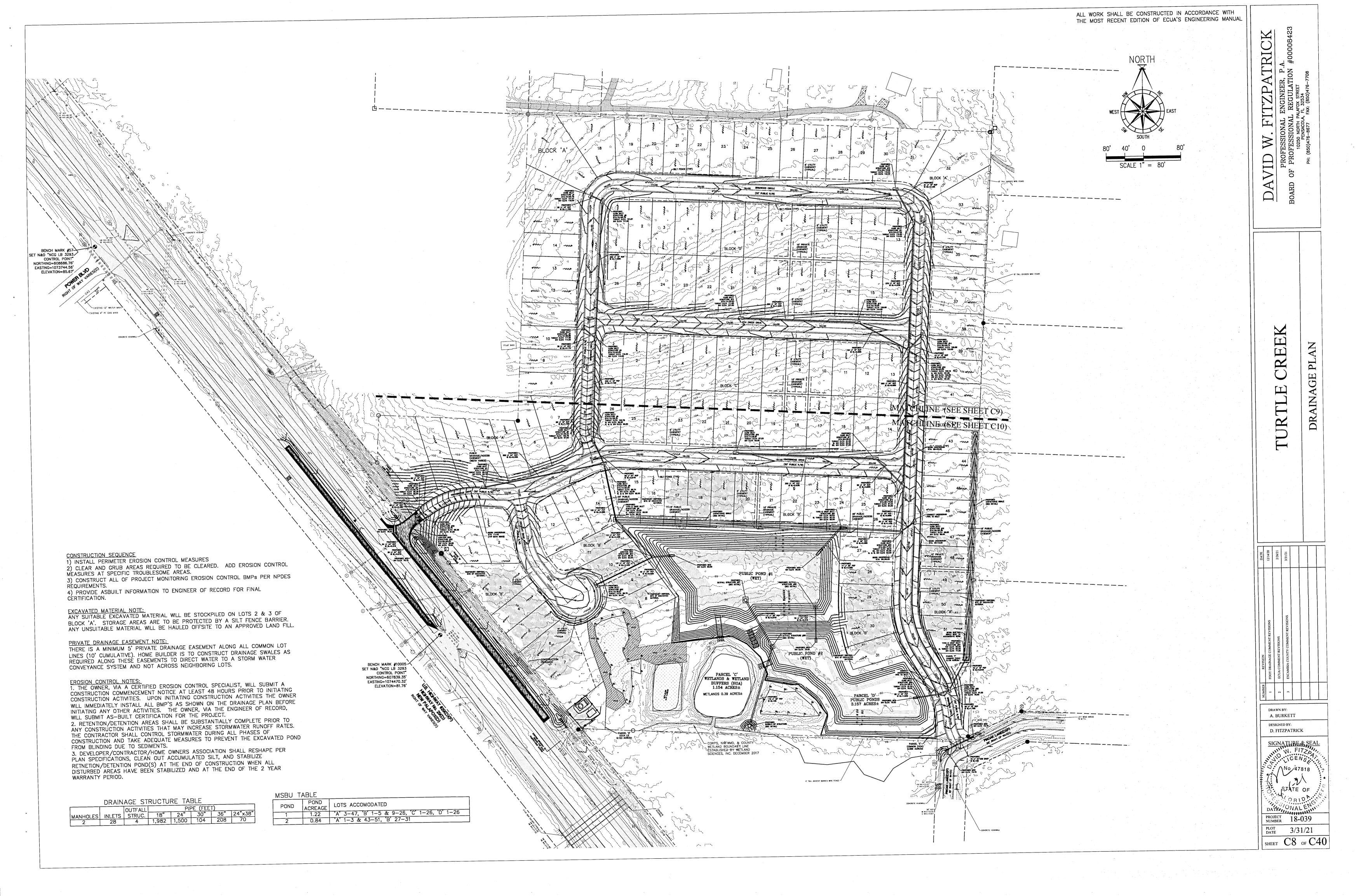
1. NO LAND DISTURBANCE SHALL OCCUR IN AREAS DEFINED AS WETLANDS OR WETLAND BUFFERS UNLESS OTHERWISE PERMITTED BY THE JURISDICTIONAL AGENCIES. 2. WETLANDS & WETLAND/UPLAND BUFFERS SHALL REMAIN IN THEIR NATURAL STATE.

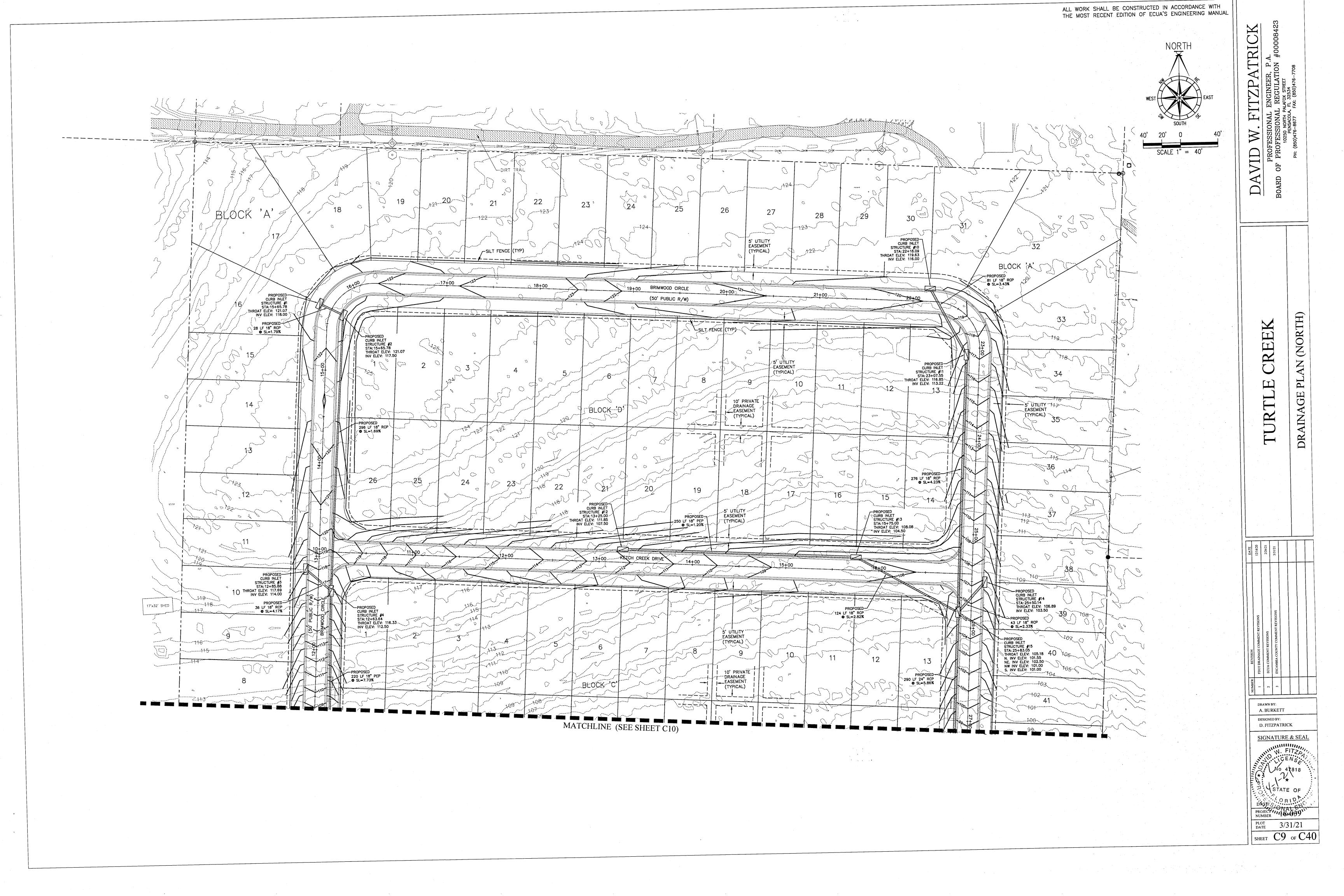


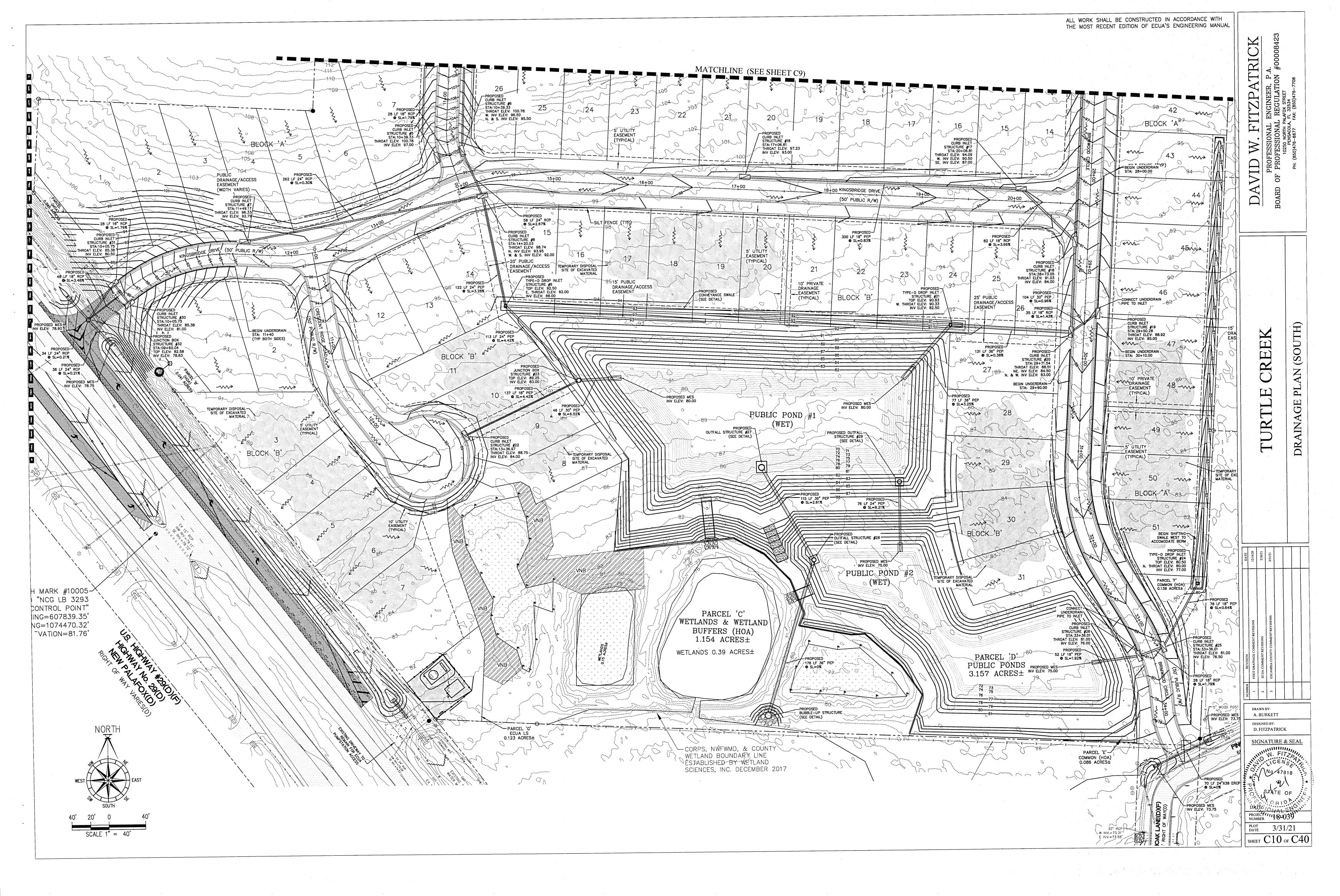


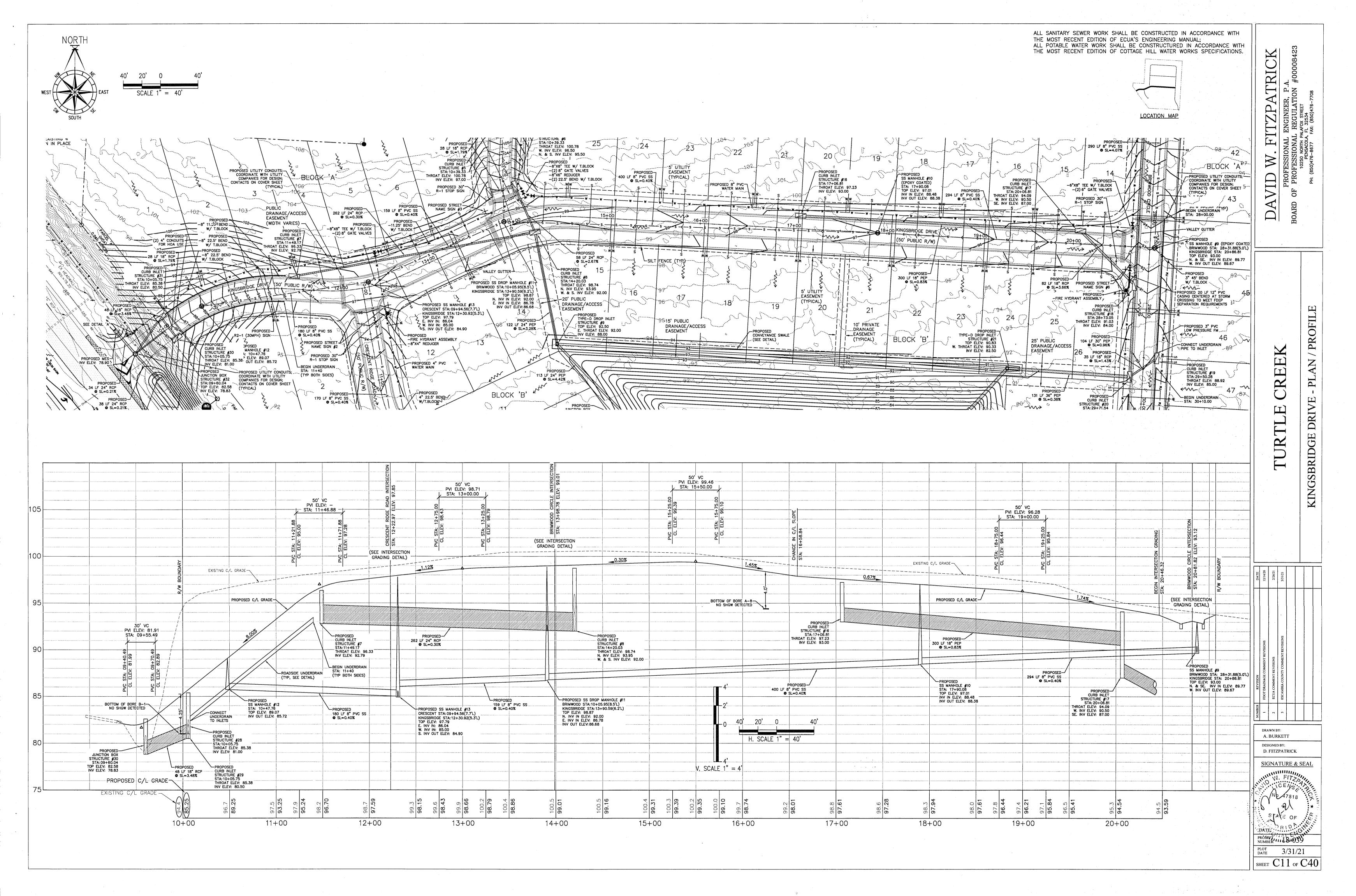


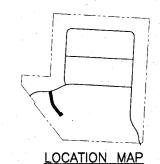


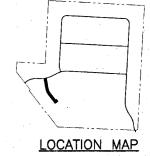


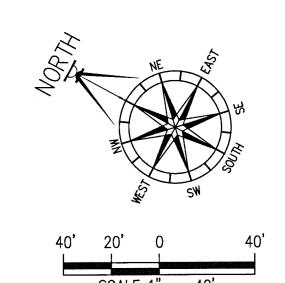


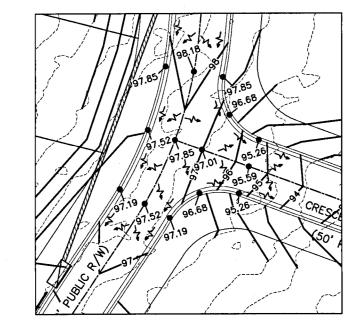




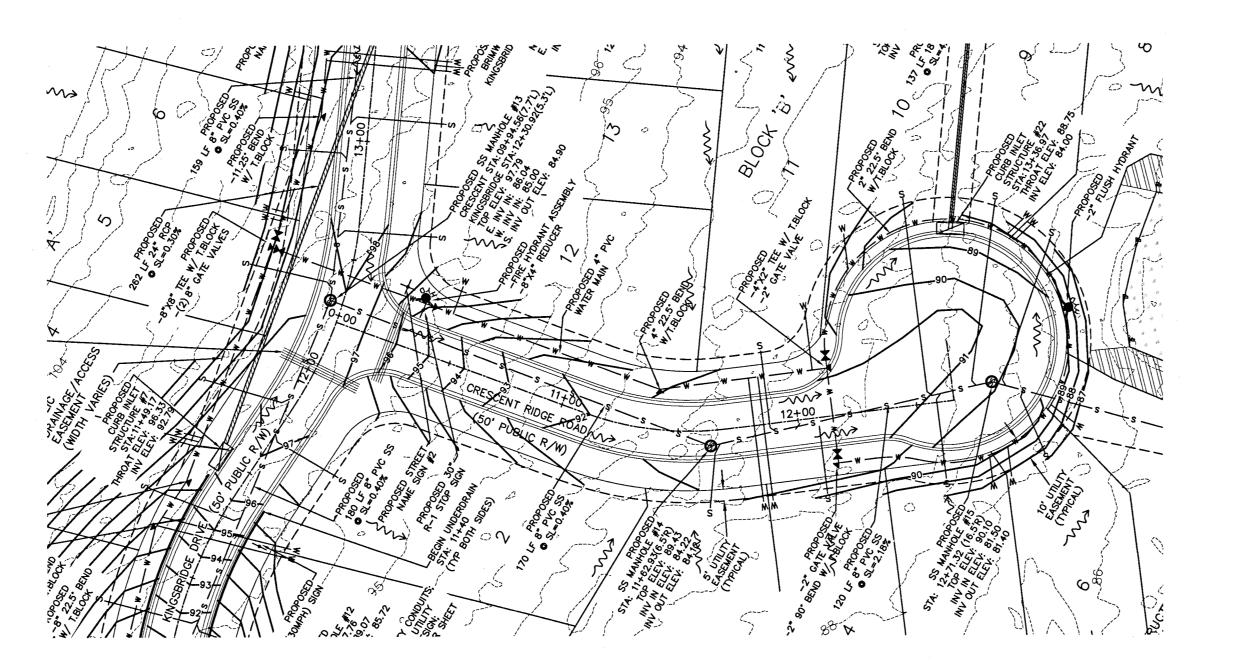




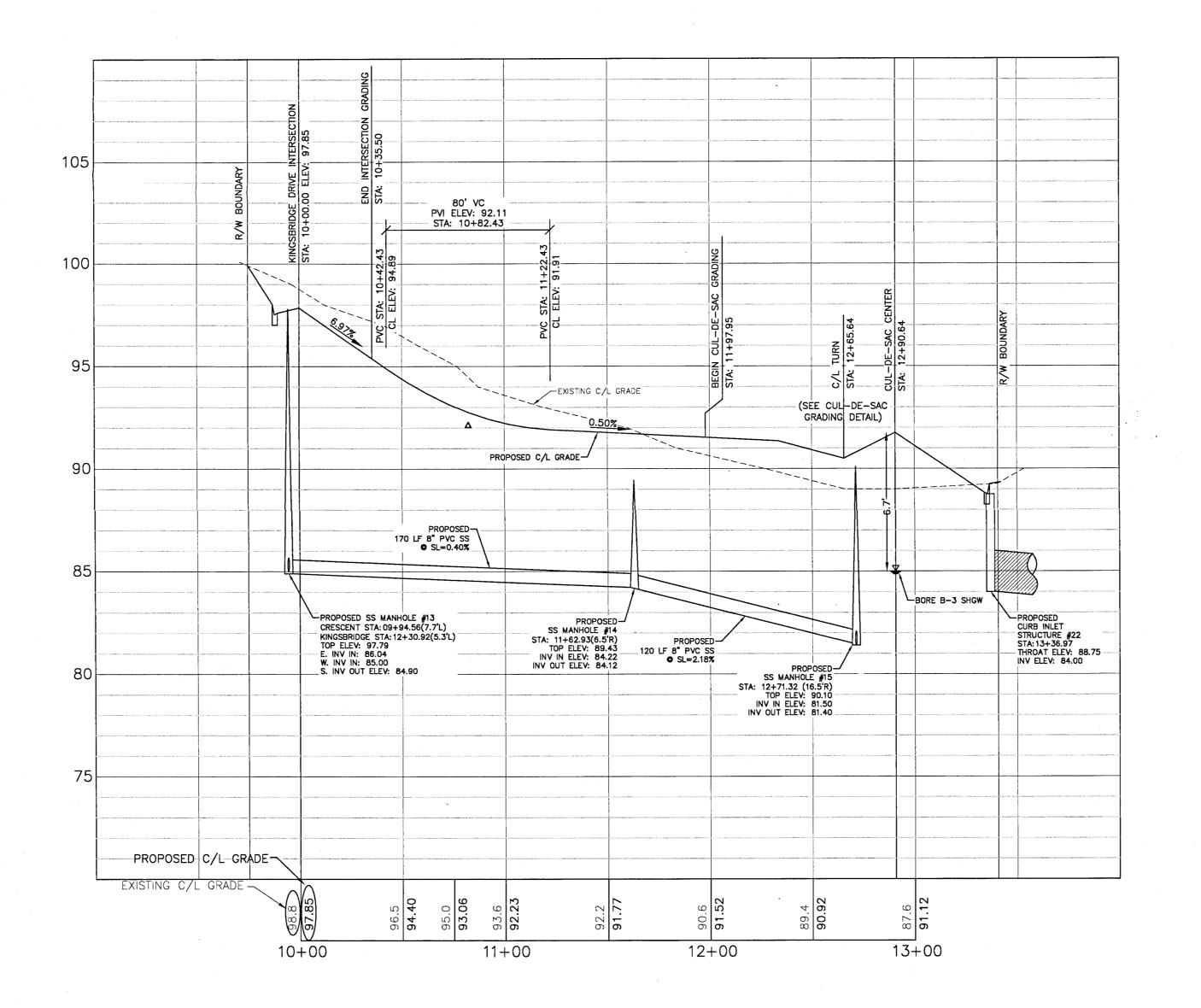


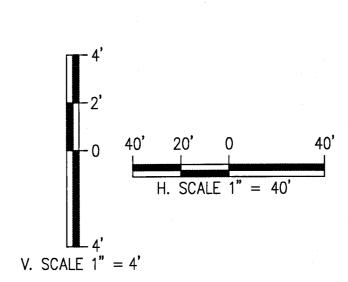


INTERSECTION GRADING DETAIL



CUL-DE-SAC GRADING DETAIL

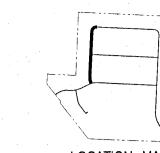




CRESCENT RIDGE

DAVID

DRAWN BY: A. BURKETT DESIGNED BY: D. FITZPATRICK PROJECT 18-039 PLOT 3/31/21
SHEET C12 OF C40

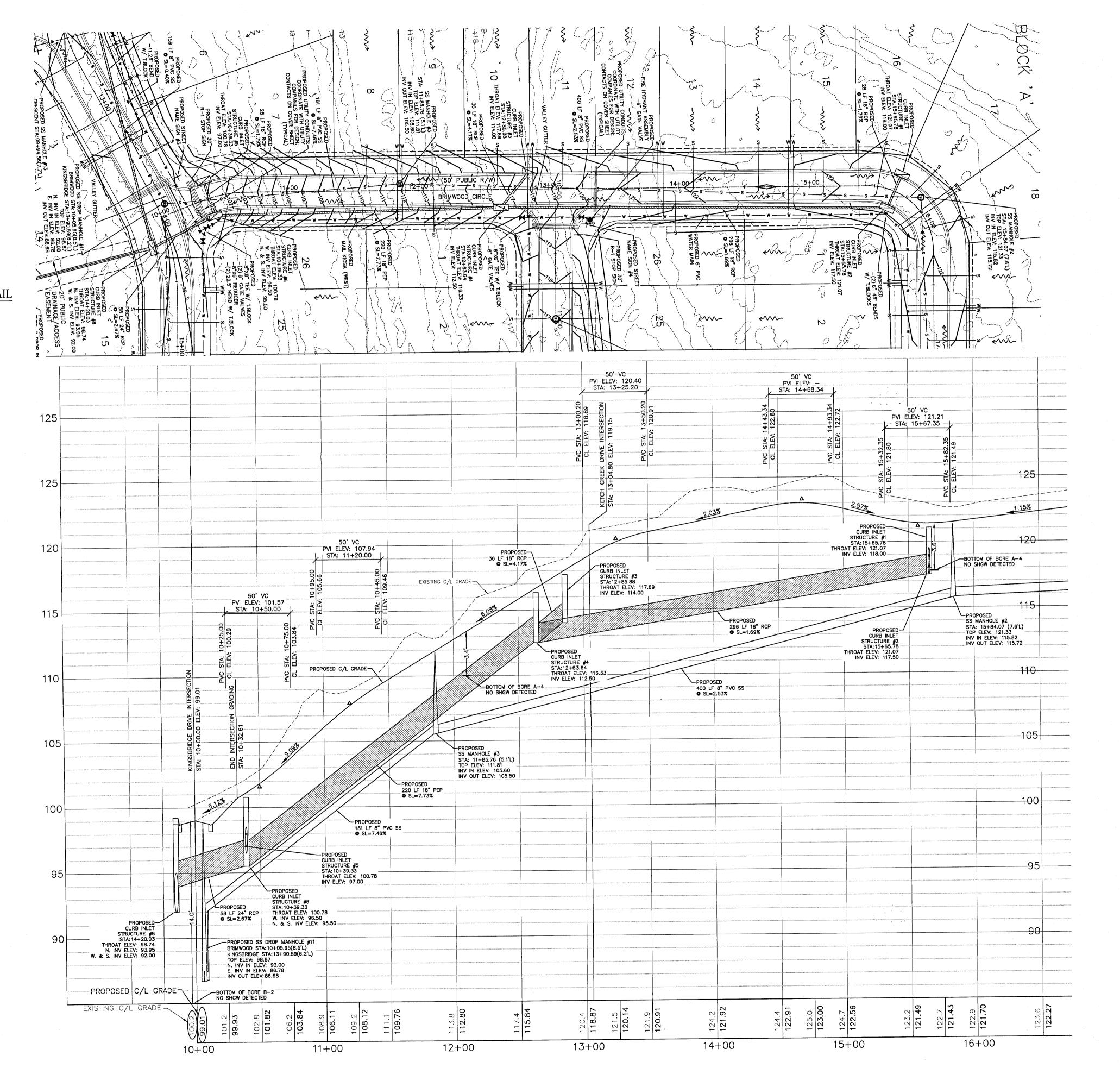


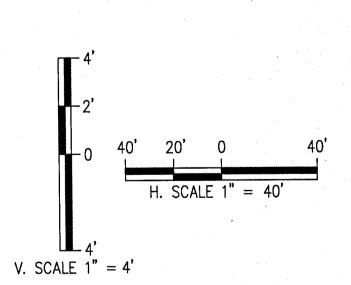
LOCATION MAP

FITZPATRICK

DAVID

INTERSECTION GRADING DETAIL





WOOD BRIM

PLAN / PROFIL

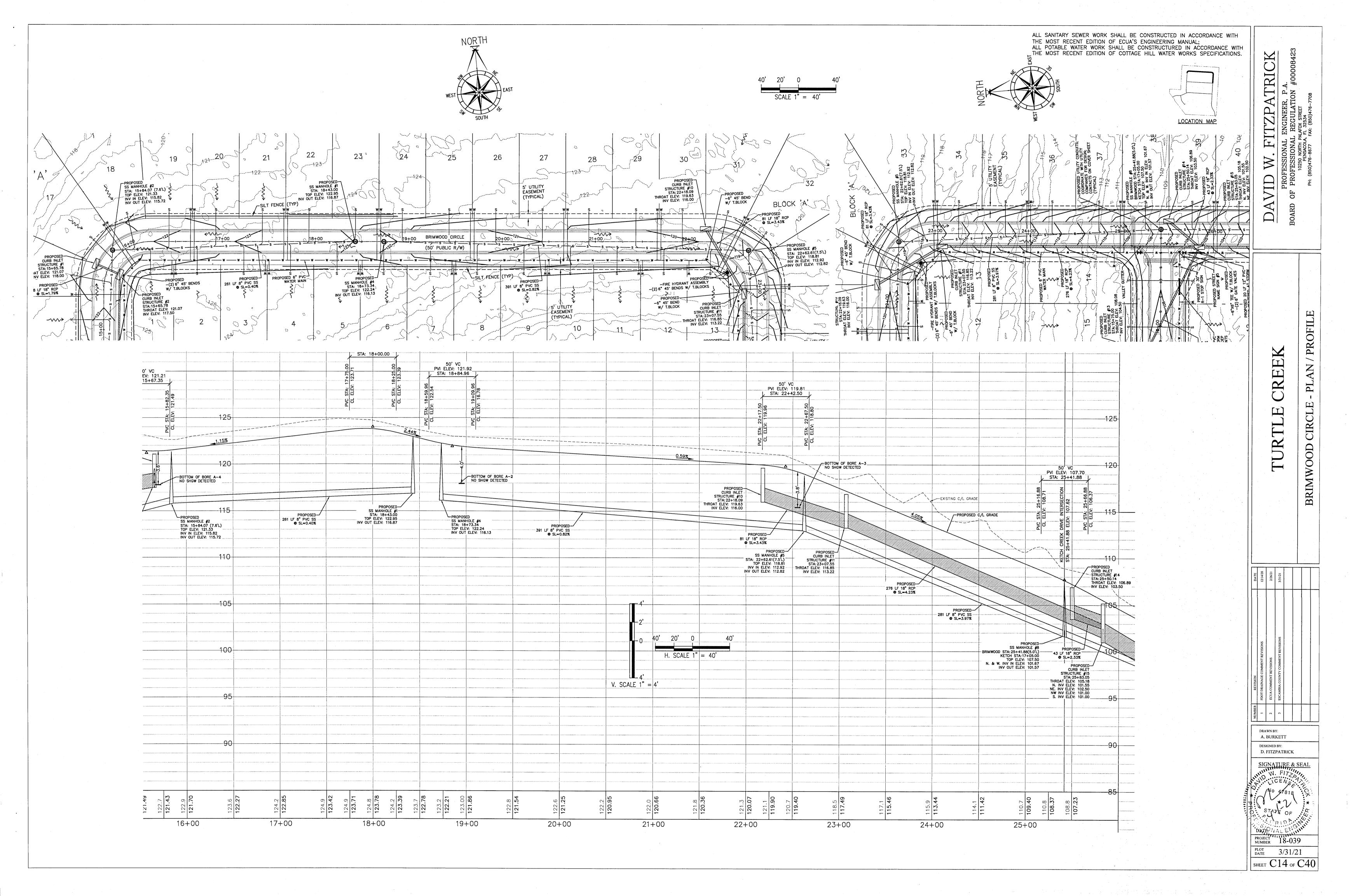
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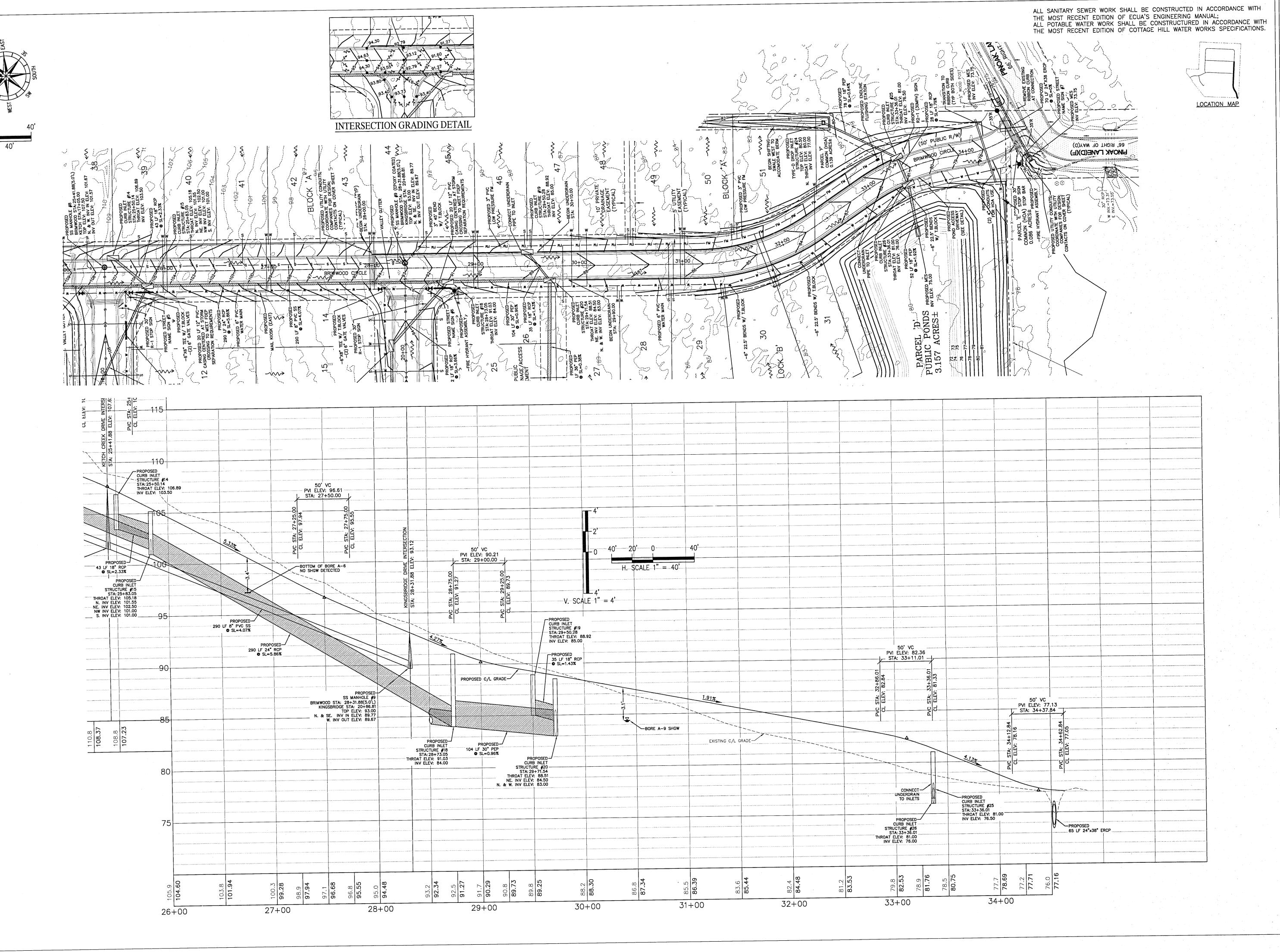
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PROJECT 18-039

PLOT 3/31/21 SHEET C13 OF C40





FITZPATRICK

 $\bowtie$ DAVID

CREEK

PLAN / PROFILE

CIRCLE

MWOOD

BRII

DRAWN BY: A. BURKETT DESIGNED BY: D. FITZPATRICK

PROJECT 18-039

PLOT 3/31/21 sheet C15 оf C40

114.5

13+00

PROPOSED C/L GRADE

118.2

11+00

118.2

12+00

108.7

16+00

17+00

110.5

14+00

15+00

FITZPATRI

REE

PLAN / PROFILE

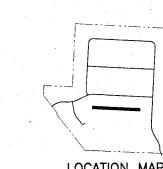
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KETCH

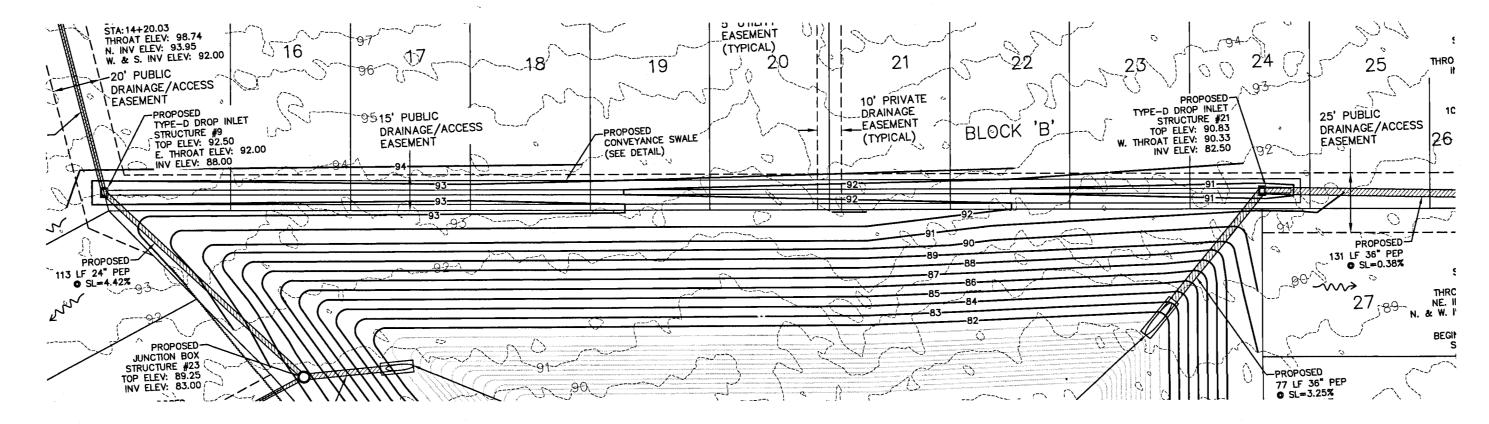
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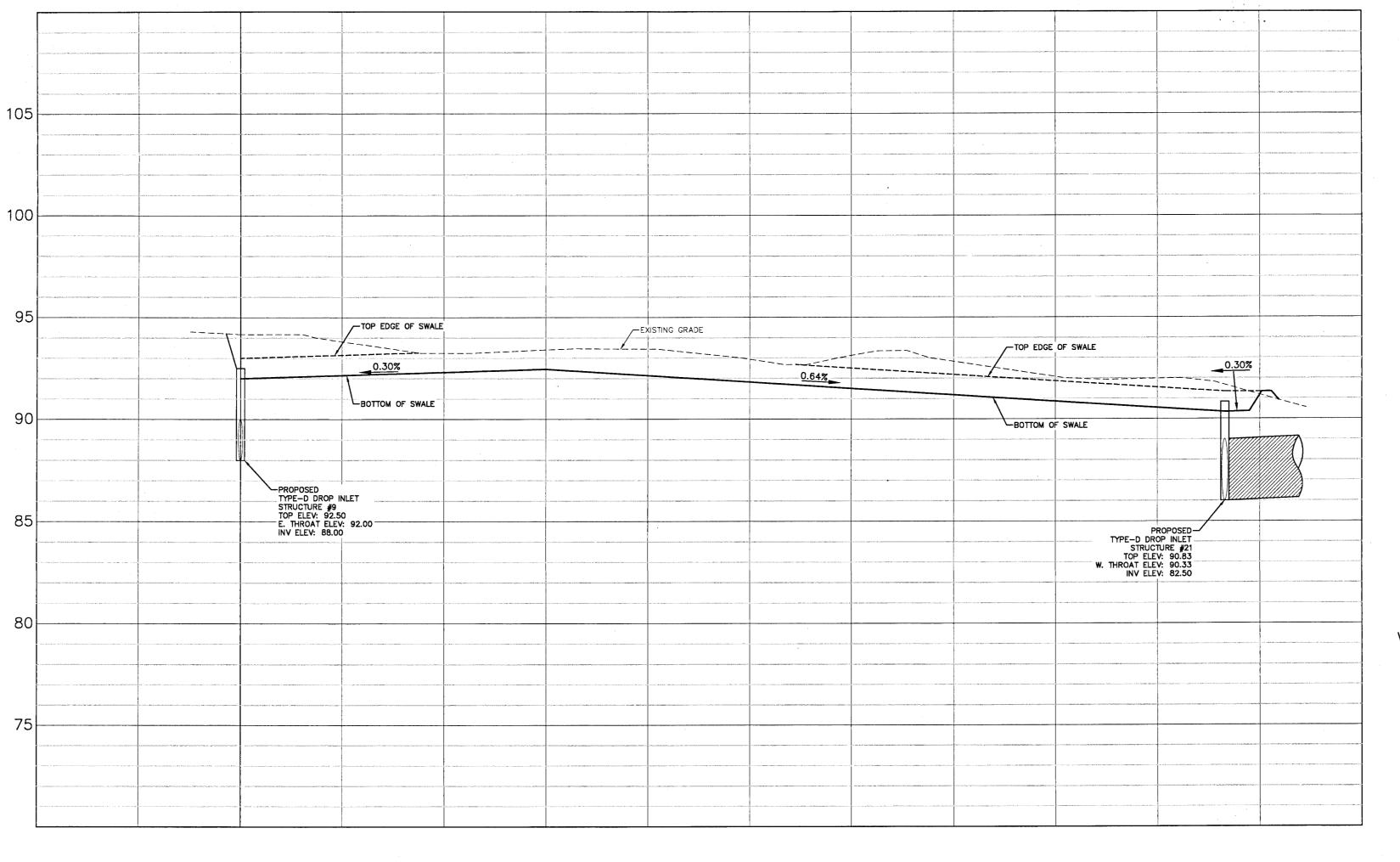
A. BURKETT DESIGNED BY: D. FITZPATRICK SIGNATURE & SEAL

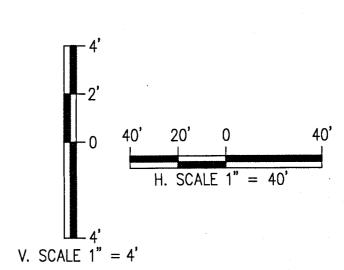
PLOT 3/31/21 SHEET C16 OF C40



LOCATION MAP



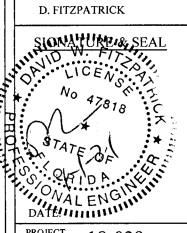




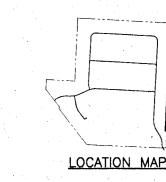
#1)

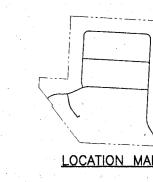
PROFESSIONAL ENGINEER, P.A.
F PROFESSIONAL REGULATION #00008423
10250 NORTH PALAFOX STRET
PENSACOLA, PL. 32534
PH: (850)476-8677 FAX: (850)476-7708

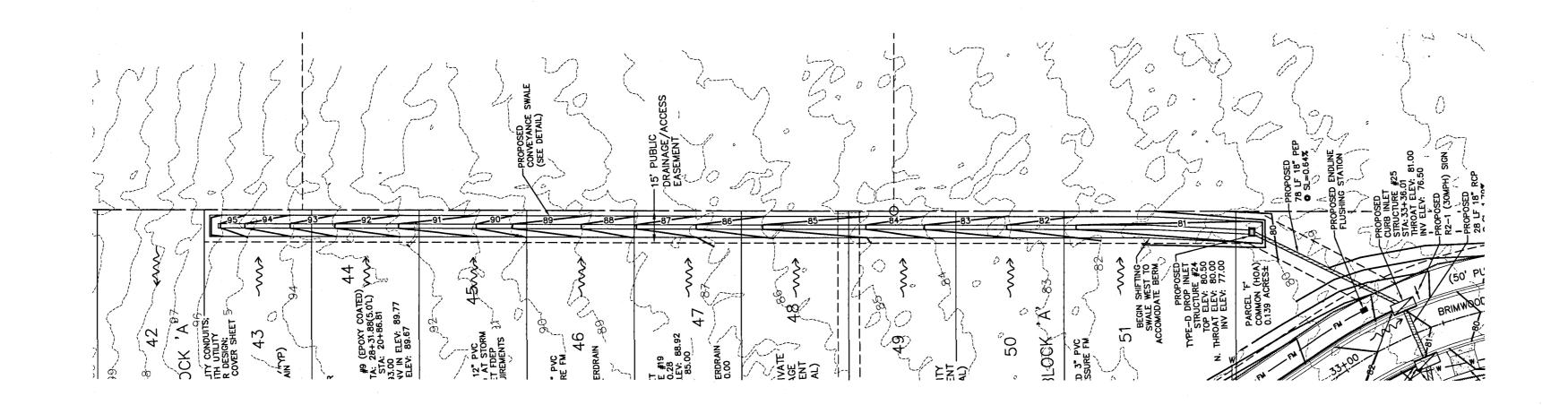
DRAWN BY:
A. BURKETT

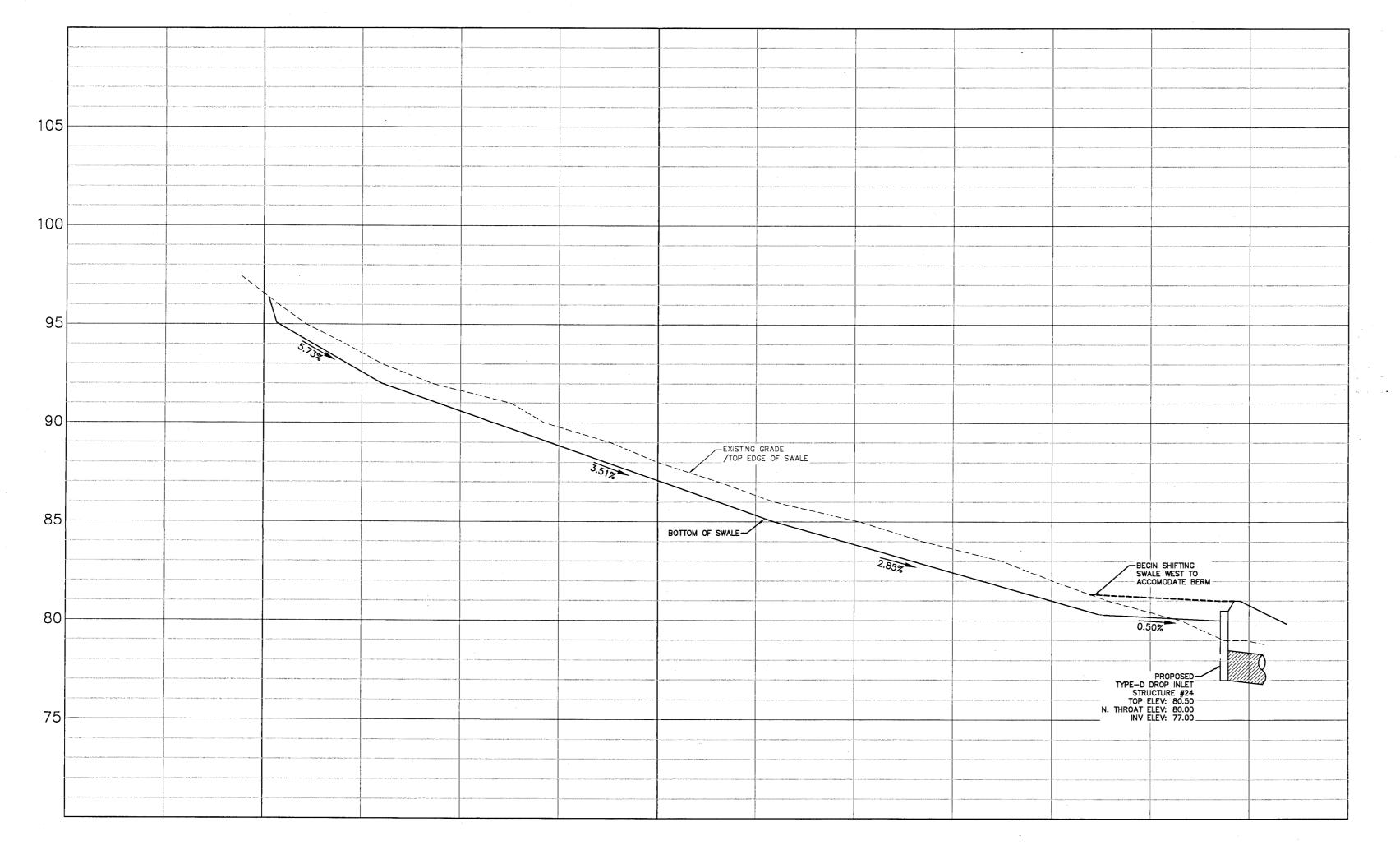


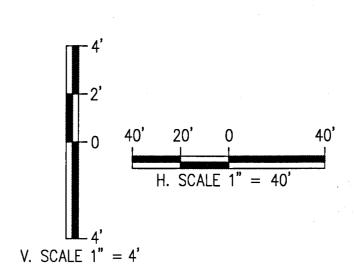
PROJECT 18-039
PLOT 3/31/21
SHEET C17 OF C40











				DI AN / PROFIT F - CONVEVNACE SWALF (FAST)	۱ .	
12/14/20	2/26/21	3/31/21		-		

BOARD

REVISION
FDOT DRAINAGE COMMENT REVISIONS
ECUA COMMENT REVISIONS
ESCAMBIA COUNTY COMMENT REVISIONS

DRAWN BY: A. BURKETT DESIGNED BY:

PROJECT 18-039
PLOT 3/31/21

SHEET C18 OF C40

ZPATRICK

PLAN / PROFILE

CREEK

ORMWATER

MISC ST

DRAWN BY:
A. BURKETT

D. FITZPATRICK

SIGNATURE & SEAL

PROJECT 18-05

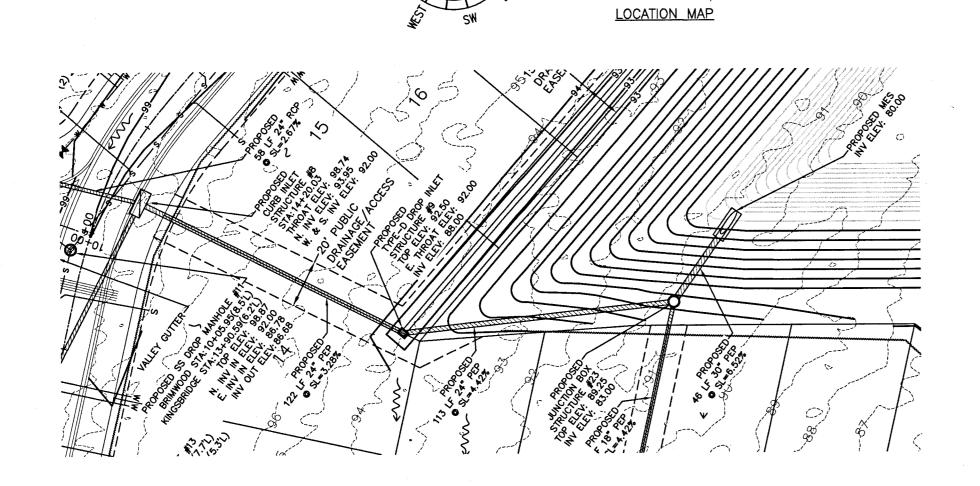
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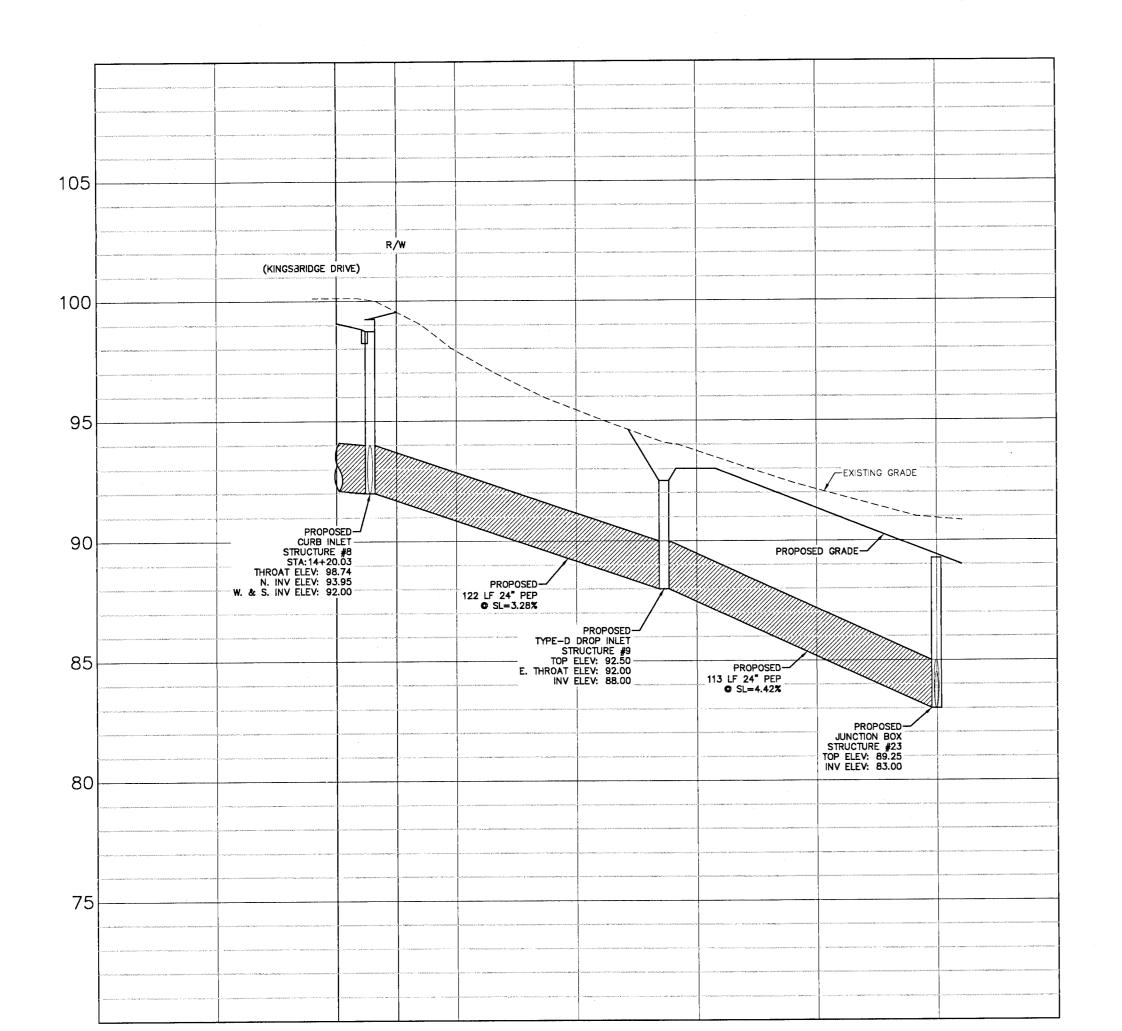
PROJECT 18-05

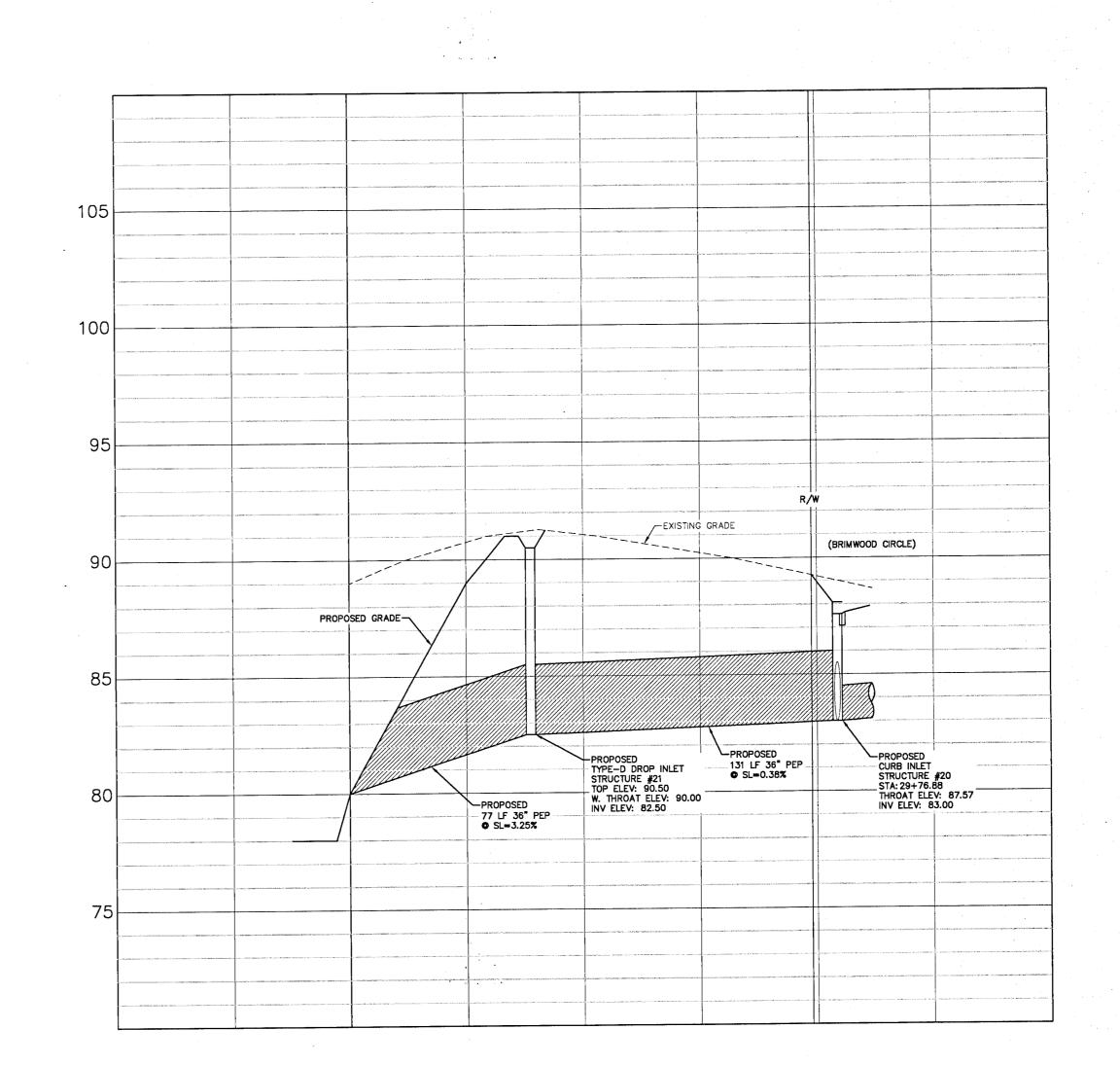
PLOT DATE 3/31/21

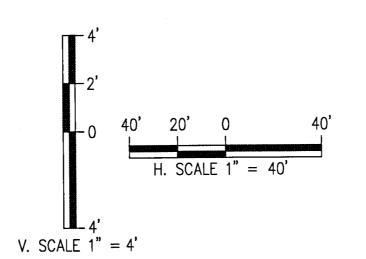
SHEET C19 of C40

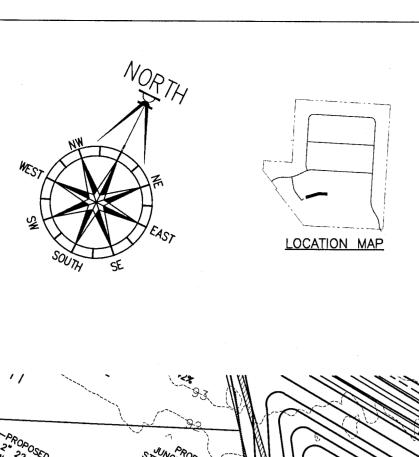
LOCATION MAP

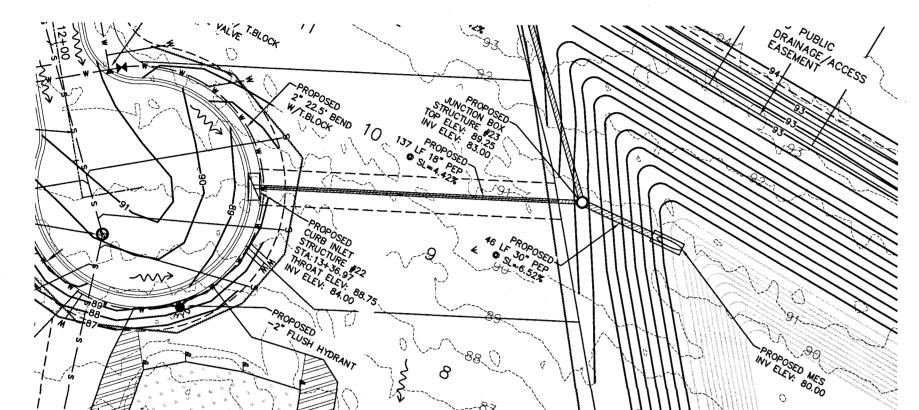


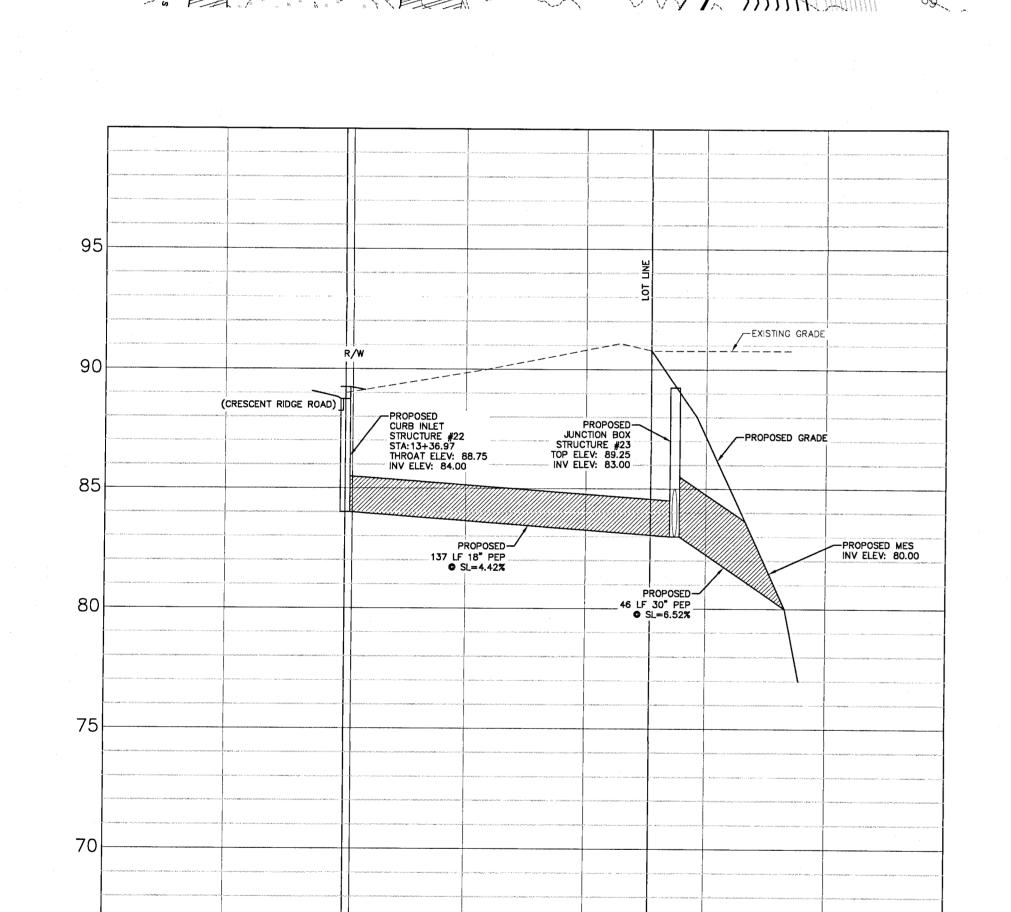


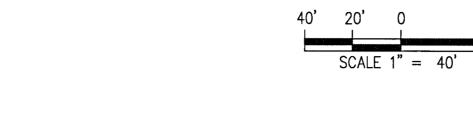


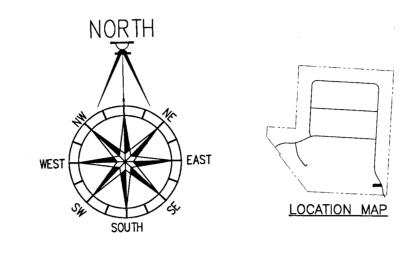


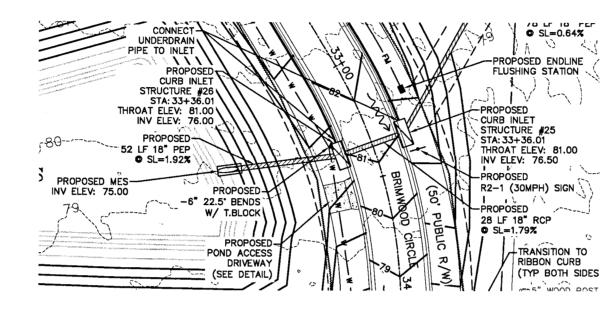


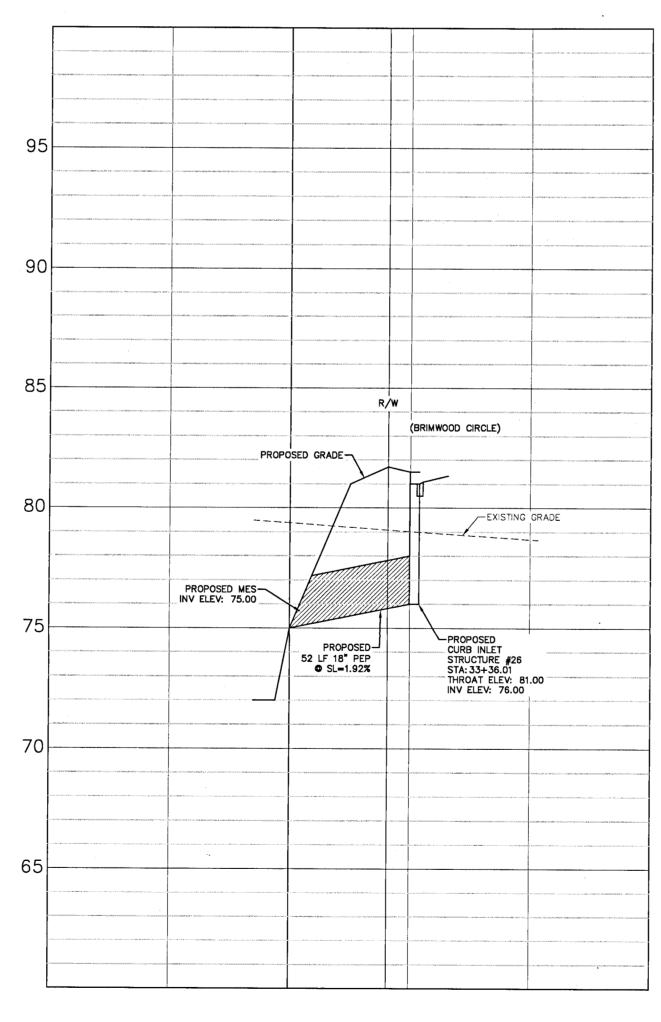


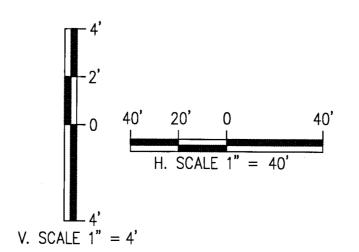


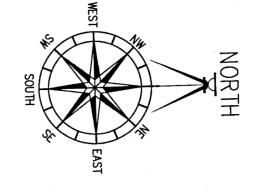




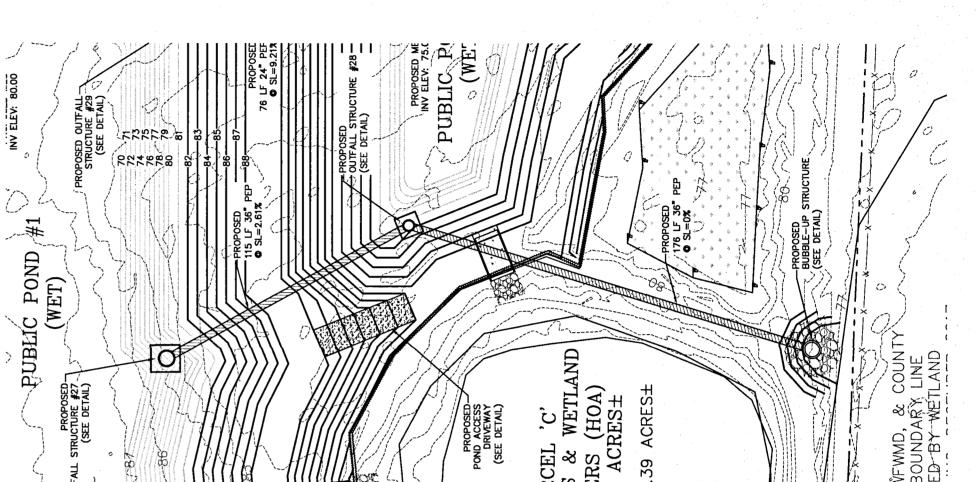


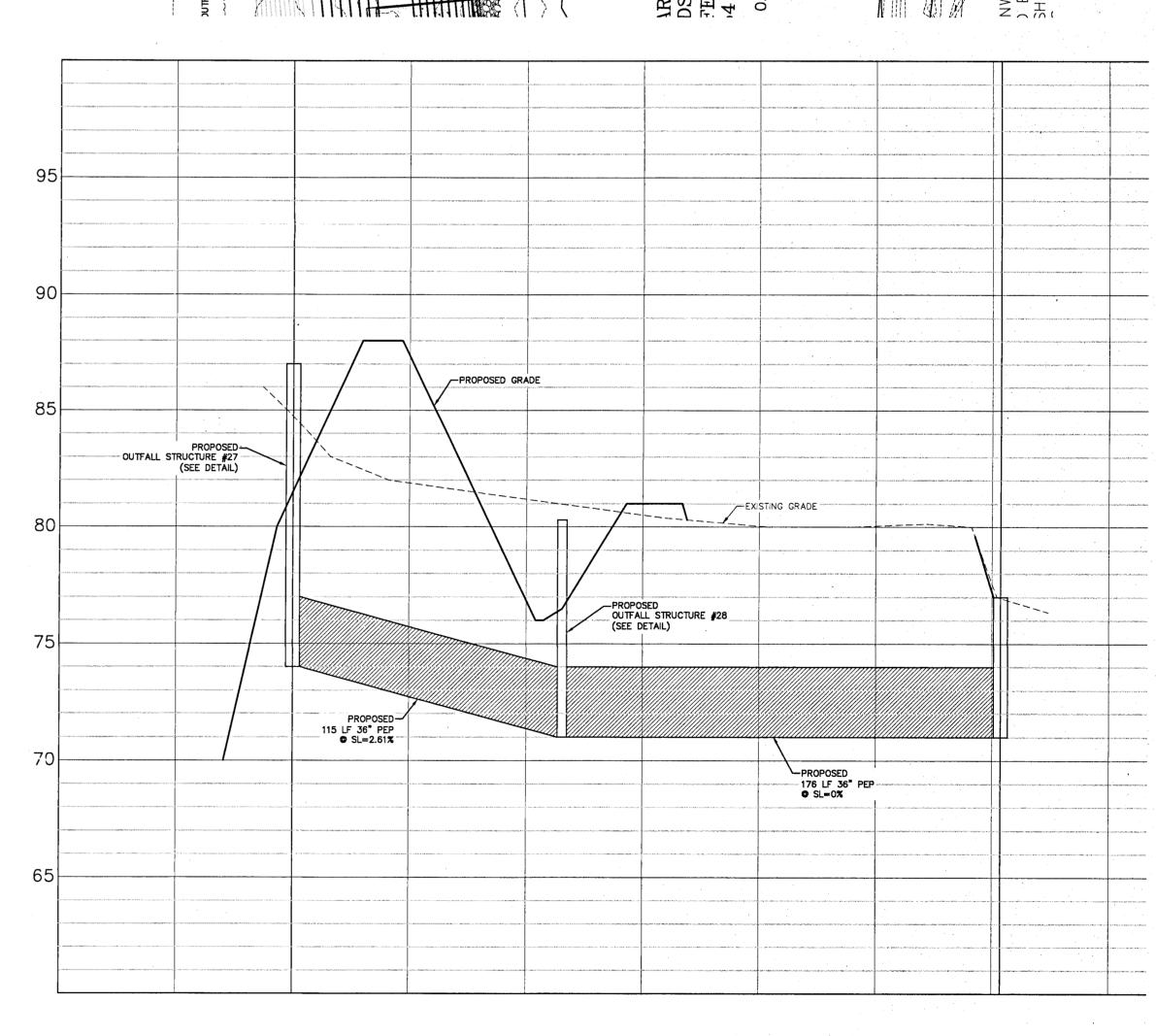








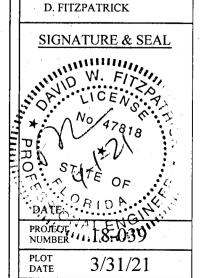






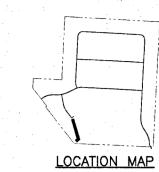
- PLAN / PROFILE FORMWATER S MISC.

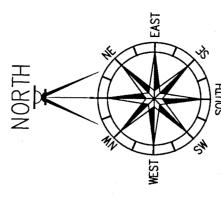
DRAWN BY: A. BURKETT DESIGNED BY: D. FITZPATRICK

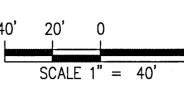


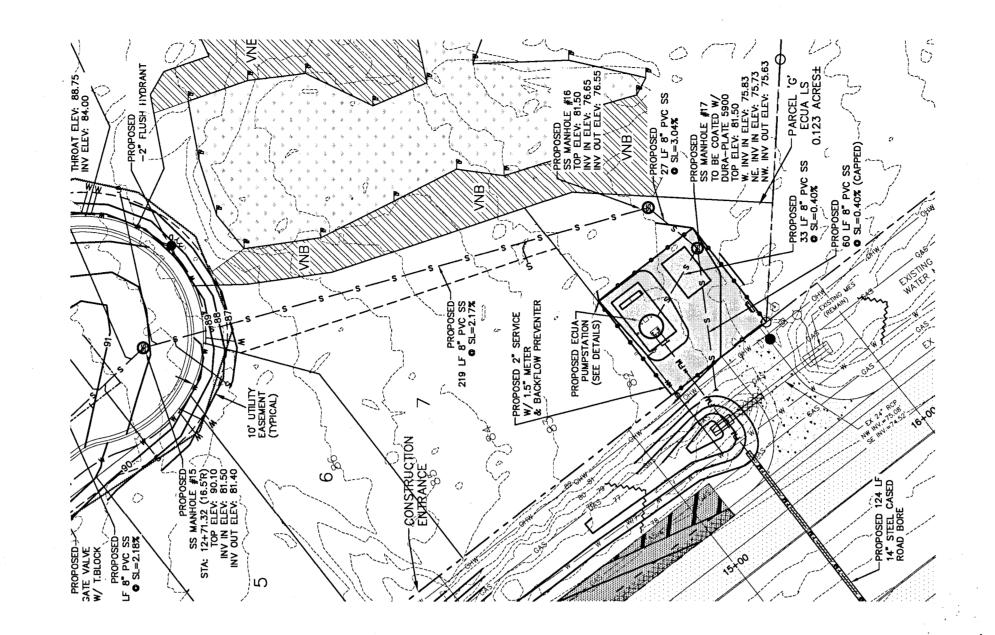
SHEET C20 OF C40

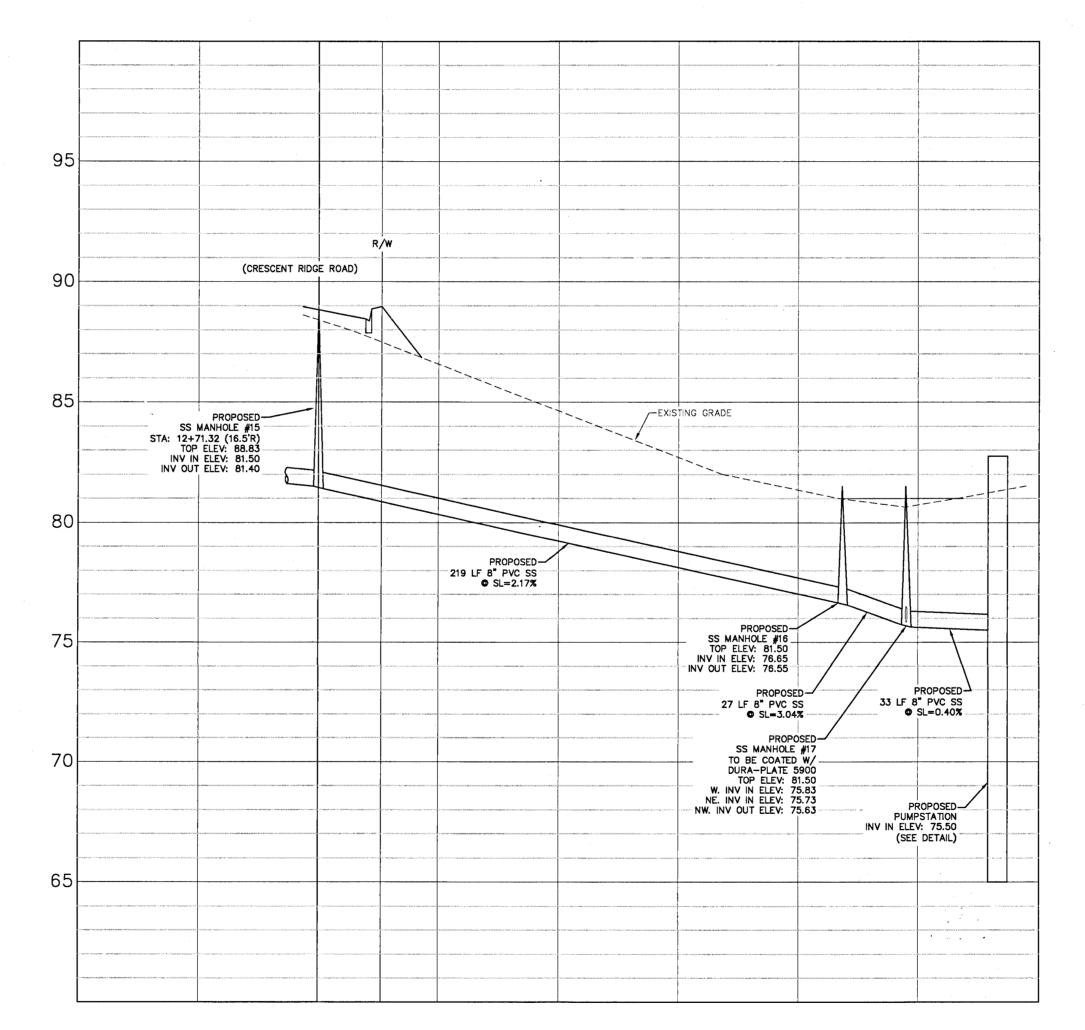
ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT EDITION OF ECUA'S ENGINEERING MANUAL; ALL POTABLE WATER WORK SHALL BE CONSTRUCTURED IN ACCORDANCE WITH THE MOST RECENT EDITION OF COTTAGE HILL WATER WORKS SPECIFICATIONS.

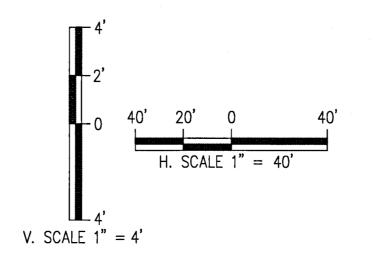












CREEK

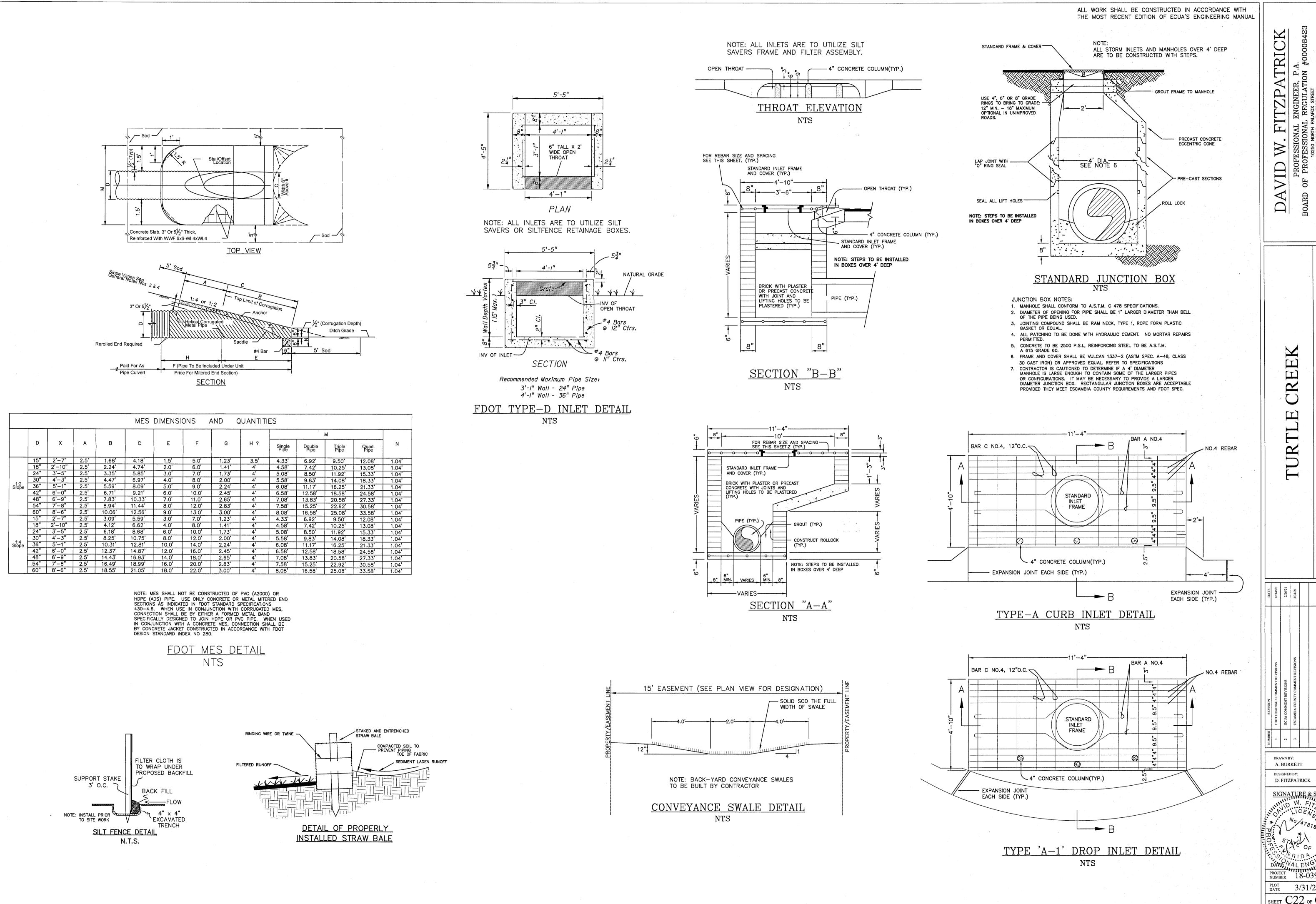
SEWER SANITARY MISC.

DRAWN BY: A. BURKETT D. FITZPATRICK

SIGNATURE & SEAL PROJECT 18-039

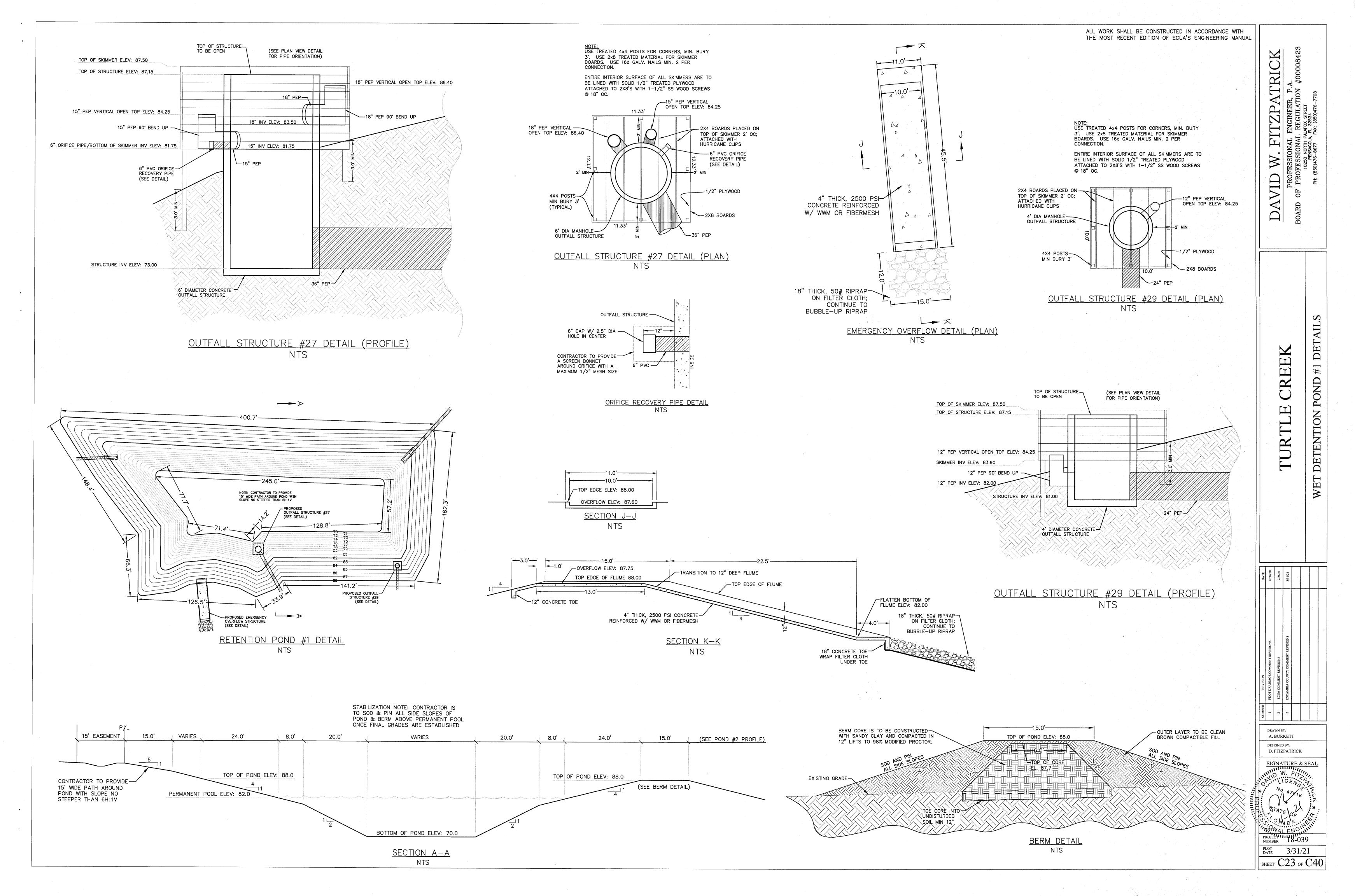
PLOT 3/31/21

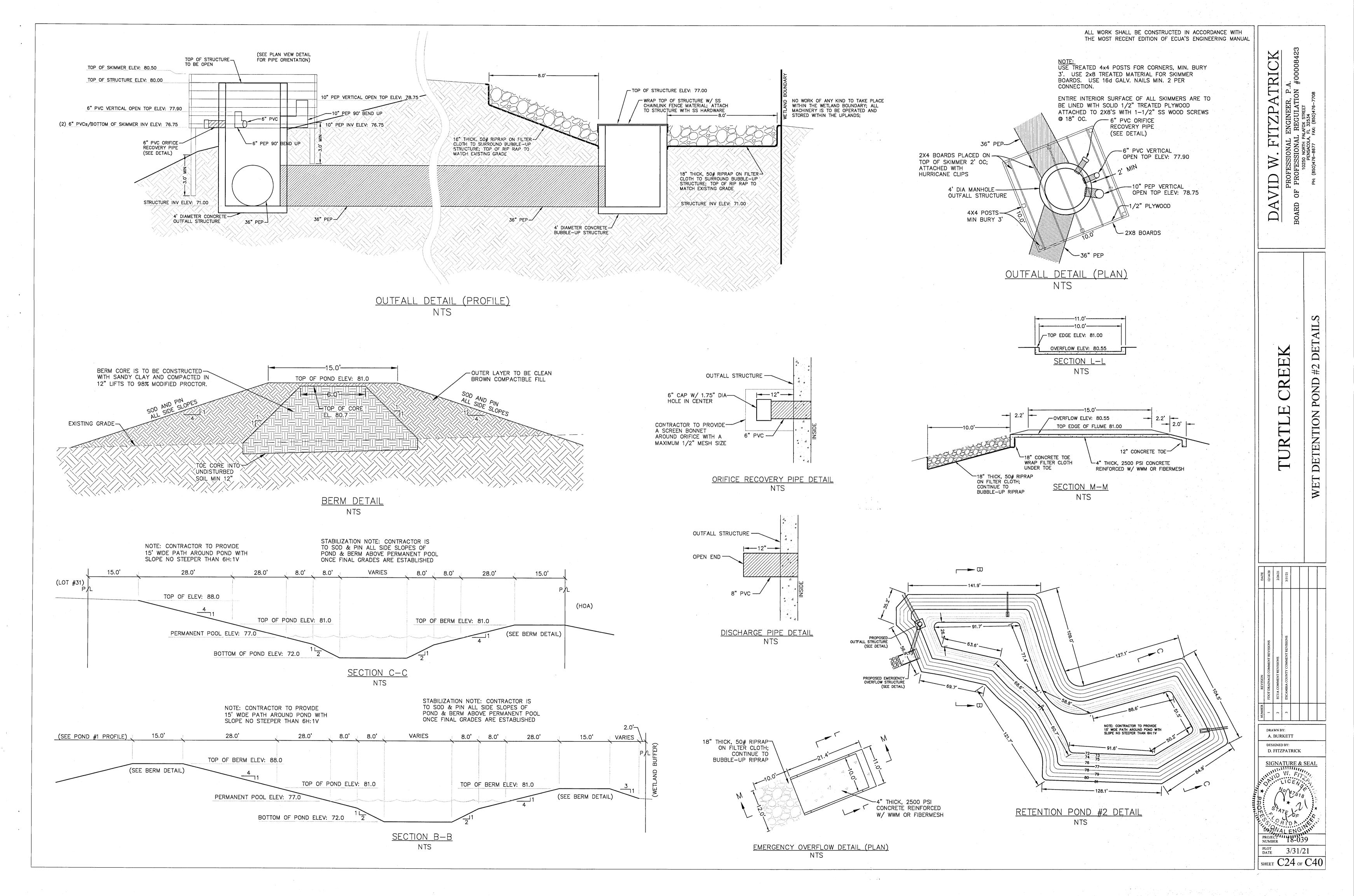
SHEET C21 OF C40

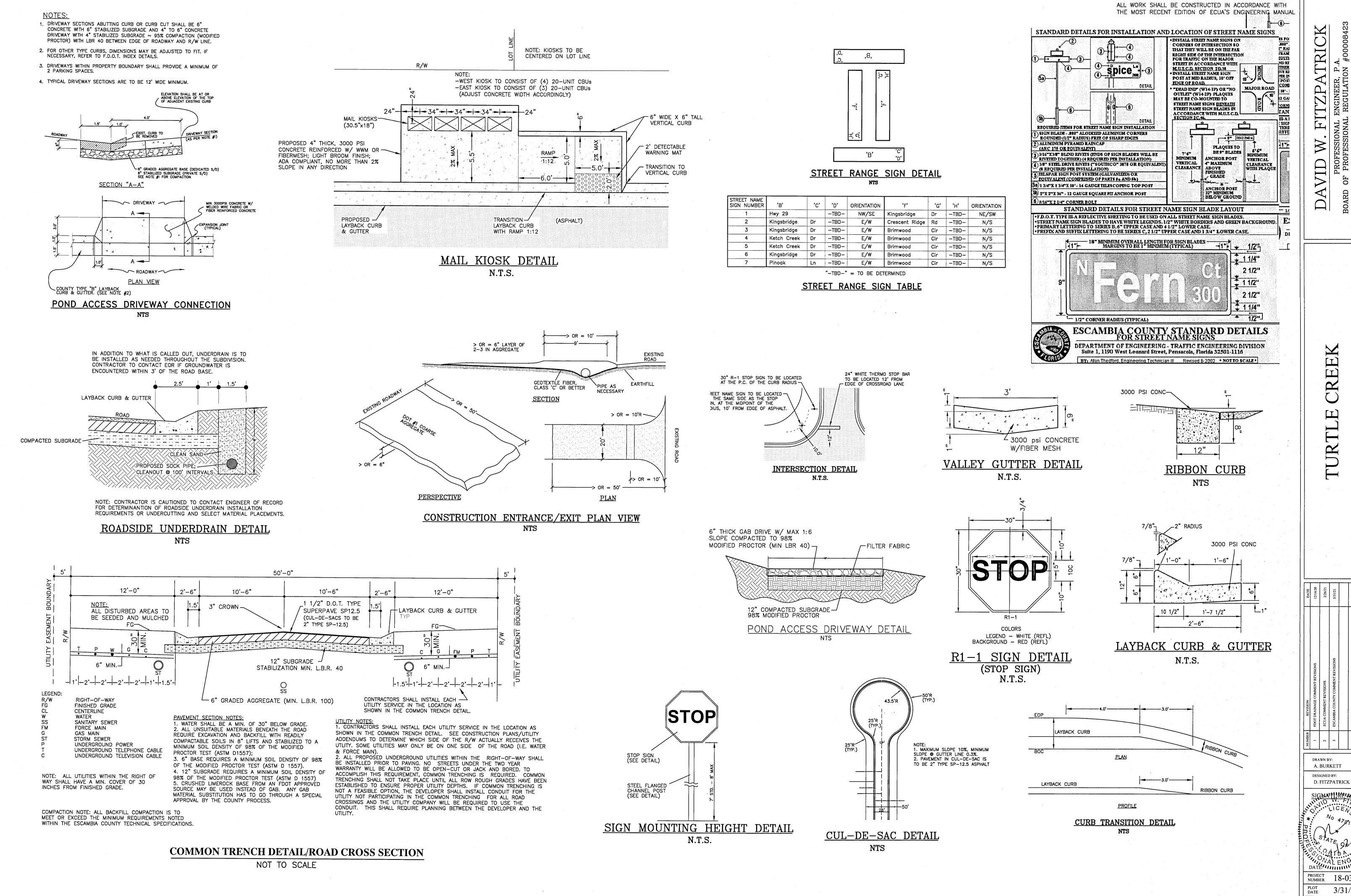


PROJECT 18-039

3/31/21 SHEET C22 of C40







PROJECT 18-039 3/31/21

SHEET C25 of C40

PIPE SIZE	SPECIFICATION	I.D. INCHES	GALLS/100'	CHLORINE REQUIRED PER 100' FOR 25ppm	CHLORINE REQUIRED PER 100' FOR 50ppm
2'	D2241 DR26	2.193	20	0.10 oz.	0.20 oz.
3"	D2241 DR26	3.230	43	0.22 oz.	0.44 oz.
4"	C-900 DR18	4.230	73	0.37 oz.	0.75 oz.
	C-900 DR25	4.390	79	0.40 oz.	0.81 oz.
6 <b>"</b>	C-900 DR18	6.090	151	0.78 oz.	1.55 oz.
	C-900 DR25	6.300	162	0.83 oz.	1.66 oz.
8"	C-900 DR18	7.980	260	1.33 oz.	2.67 oz.
	C-900 DR25	8.280	280	1.44 oz.	2.87 oz.
12"	C-900 DR18	11.650	554	2.84 oz.	5.69 oz.
	C-900 DR25	12.080	595	3.06 oz.	6.12 oz.
16 <b>"</b>	C-905 DR18	15.470	977	5.01 oz.	10.03 oz.
	C-905 DR25	16.010	1,046	5.37 oz.	10.74 oz.
20"	C-905 DR18	19.200	1,504	7.72 oz.	15.45 oz.
	C-905 DR25	19.870	1,611	8.27 oz.	16.55 oz.
24"	C-905 DR18	N/A	N/A	N/A	N/A
	C-905 DR25	23.742	2,300	11.81 oz.	23.62 oz.

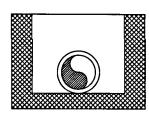
NOTE: - 16", 20" AND 24" PIPE SIZES ARE C.I.O.D.

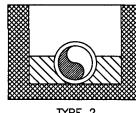
- FOR HTH WITH 65% AVAILABLE CHLORINE - 1 US GALLON WEIGHS 8.345 #

- APPROX. 1 oz./100 gal FOR 50 ppm APPROX. 0.5 oz./100 gal FOR 25 ppm

CHLORINE REQUIRED FOR STERILIZATION

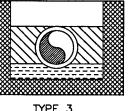
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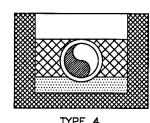




TYPE 1

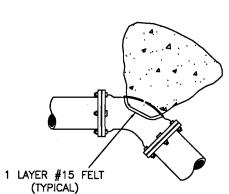
FLAT-BOTTOM\*TRENCH, LOOSE EMBEDMENT
E = 50 psi (340 kPa). K = 0.110





NOTE: REQUIRED EMBEDMENT TYPE WILL DEPEND ON THE PIPE'S DIMENSION RATIO, INTERNAL OPERATING PRESSURE, AND EXTERNAL LOAD, AND SHALL BE SPECIFIED BY THE PURCHASER.(SEE SEC. 5.3)

PIPE ENVELOPE REQUIREMENTS



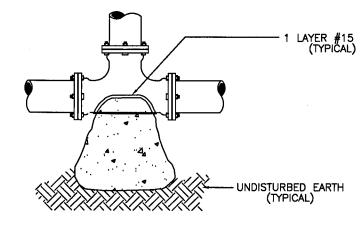
MINIMUM THRUST BLOCK DIMENSIONS:

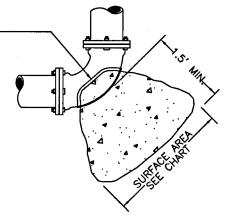
SURFACE AREA AGAINST UNDISTURBED SOIL					
DEAD END OR TEE	90° BEND	45° BEND	22.5° BEND		
1' X 2'	1.5' X 1.5'	1' X 1.5'	1' X 1'		
2' X 2'	2.5' X 2.5'	2' X 1.5'	1' X 1.5'		
2.25' X 3'	3' X 3'	2' X 2.5'	1.5' X 1.5'		
3.5' X 3'	4' X 3.75'	2.75' X 3'	2' X 2'		
4' X 4'	4' X 5'	3' X 4'	2' X 3'		
5' X 5.5'	6' X 6.5'	4' X 5'	3' X 3.5'		
	DEAD END OR TEE 1' X 2' 2' X 2' 2.25' X 3' 3.5' X 3' 4' X 4'	DEAD END 90° BEND  1' X 2' 1.5' X 1.5'  2' X 2' 2.5' X 2.5'  2.25' X 3' 3' X 3'  3.5' X 3' 4' X 3.75'  4' X 4' 4' X 5'	DEAD END OR TEE         90° BEND         45° BEND           1' X 2'         1.5' X 1.5'         1' X 1.5'           2' X 2'         2.5' X 2.5'         2' X 1.5'           2.25' X 3'         3' X 3'         2' X 2.5'           3.5' X 3'         4' X 3.75'         2.75' X 3'           4' X 4'         4' X 5'         3' X 4'		

45° BEND - M.J.

1. ONE LAYER OF #15 FELT TO BE USED TO PREVENT ADHESION OF CONCRETE TO FITTING. 2. ALL THRUST BLOCKS TO BE BACKED BY UNDISTURBED SOIL
3. THRUST BLOCK DIMENSIONS BASED ON SM SOIL CLASSIFICATION

4. CONCRETE MIN. 2,500 PSI. 5. JOINT RESTRAINTS ARE TO BE USED ON ALL FITTINGS. TRUST BLOCKS REQUIRED ON 90° BENDS, 45° BENDS, TEES, TAPPING SLEEVES, AND DEAD ENDS.

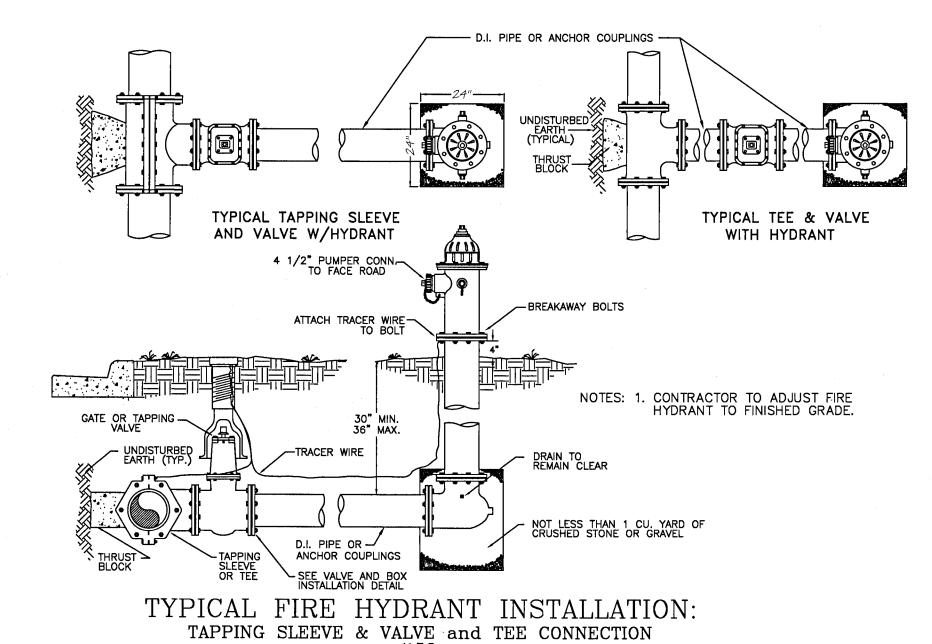




TEE - M.J.

90° BEND - M.J.

TYPICAL THRUST BLOCK INSTALLATIONS



NOTES:	NOTES:
1. NEW PIPE SHALL BE CAPPED OR PLUGGED FOR PRESSURE TEST. ONCE TEST IS SATISFACTORILY COMPLETED NEW MAIN IS TO BE CONNECTED TO EXISTING MAIN IN A MANNER ACCEPTABLE TO SSRU	NEW PIPE SHALL BE CAPPED OR PLUGGED FOR PRESSURE TEST.     ONCE TEST IS SATISFACTORILY COMPLETED NEW MAIN IS TO BE CONNECTED TO TAPPING VALVE.
2. THE CONTRACTOR SHALL FLUSH LINE PRIOR TO STARTING THE CHLORINATION PROCEDURE. ALL FLUSHING SHALL BE DONE THROUGH THE EXISTING VALVE WITH ALL HYDRANTS AND SERVICE LINES OPEN.  SSRU INSPECTOR SHALL BE THE ONLY PERSON ALLOWED TO OPERATE THE VALVE AND SHALL BE PRESENT DURING FLUSHING OPERATION.  ONCE FLUSHING IS COMPLETE THE INSPECTOR SHALL CLOSE THE VALVE.  3. ONCE SATISFACTORY BACTERIOLOGICAL SAMPLES ARE OBTAINED THE CONTRACTOR SHALL CLOSE BOTH CORPORATION STOPS AND REMOVE SERVICE TUBING, PUMP AND BACKFLOW PREVENTER; CAP CORPORATION STOPS WITH BRASS CAPS.  4. CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR FILLING, CHLORINATING AND TESTING PROCEDURES.  CONTRACTOR SHALL PROVIDE SAMPLING TAPS AT THOSE LOCATIONS APPROVED BY THE SSRU INSPECTOR.	TAPPING VALVE IS TO REMAIN CLOSED.  2. THE CONTRACTOR SHALL FLUSH LINE PRIOR TO STARTING THE CHLORINATION PROCEDURE. ALL FLUSHING SHALL BE DONE THROUGH THE TAPPING VALVE WITH ALL HYDRANTS AND SERVICE LINES OPEN.  SSRU INSPECTOR SHALL BE THE ONLY PERSON ALLOWED TO OPERATE THE VALVE AND SHALL BE PRESENT DURING FLUSHING OPERATION.  ONCE FLUSHING IS COMPLETE THE INSPECTOR SHALL CLOSE THE VALVE.  3. ONCE SATISFACTORY BACTERIOLOGICAL SAMPLES ARE OBTAINED THE CONTRACTOR SHALL CLOSE BOTH CORPORATION STOPS AND REMOVE SERVICE TUBING, PUMP AND BACKFLOW PREVENTER; CAP CORPORATION STOPS WITH BRASS CAPS.  4. CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR FILLING, CHLORINATING AND TESTING PROCEDURES.  CONTRACTOR SHALL PROVIDE SAMPLING TAPS AT
SSRU SHALL COLLECT TEST SAMPLES.  5. IF 20' STUBOUT IS NOT PRESENT SPECIAL ARRANGEMENTS WILL HAVE TO BE MADE TO DEPRESSURIZE THE EXISTING MAIN TO MAKE CONNECTION TO THE EXISTING VALVE.	THOSE LOCATIONS APPROVED BY THE SSRU INSPECTOR. SSRU SHALL COLLECT TEST SAMPLES.  SERVICE SADDLE WITH 1° CORPORATION STOP (TYP. 2 PLACES)
PUMP	PUMP SEE NOTE 1
REDUCED PRESSURE ZONE  SERVICE SADDLE WITH 1" CORPORATION STOP (TYP. 2 PLACES)	BFP REDUCED PRESSURE ZONE TAPPING VALVE CLOSE AFTER MAKING TAP.
PRESSURE NEW PIPE	
EXISTING MAIN VALVE — EXISTING PIPE (20' STUBOUT) SEE NOTE 5	NEW TAPPING SLEEVE AND VALVE EXISTING PIPE UNDER PRESSURE

TYPICAL DISINFECTION & CHLORINATION

TYPICAL CONNECTION FOR NEW LINE FILLING, PRESSURE TESTING FLUSHING AND CHLORINATION. (TAPPING SLEEVE AND VALVE)

TYPICAL CONNECTION FOR NEW LINE FILLING, PRESSURE TESTING,

FLUSHING AND CHLORINATION. (EXISTING STUBOUT)

#### PIPE JOINT RESTRAINT TABULATION SHOWING DISTANCES IN FEET FROM THE FITTING TO BE RESTRAINED TO THE LAST RESTRAINING GLAND REQUIRED

PIPE SIZE		HORIZONT		TEES (LENGTH ALON		
AND TYPE	90 Deg.	45 Deg.	22.5 Deg.	11.25 Deg.	DEAD ENDS	BRANCH)
3" DI	18	8	4	2	33	20
4" DI	22	9	4	2	39	25
6" DI	31	13	6	3	55	37
8" DI	40	17	8	4	72	49
10" DI	48	20	9	5	86	60
12" DI	56	23	11	5	101	71
16" DI	70	29	14	7	129	92
20" DI	84	35	17	8	156	112
24" DI	96	40	19	9	181	131
4" PVC	28	12	6	3	62	39
6" PVC	39	16	8	4	87	58
8" PVC	50	21	10	5	114	78
10" PVC	60	25	12	6	136	94
12" PVC	70	29	14	7	160	112
16" PVC	88	36	17	9	205	146
20" PVC	105	43	21	10	247	177
24" PVC	120	50	24	12	287	207

NOTES 1. VALVES ARE BASED ON TEST PRESSURE =150 PSI, SOIL =SM, TRENCH TYPE =3, DEPTH =2.5', SAFETY FACTOR =2.0 (1.5 FOR TEES WITH LR =2').

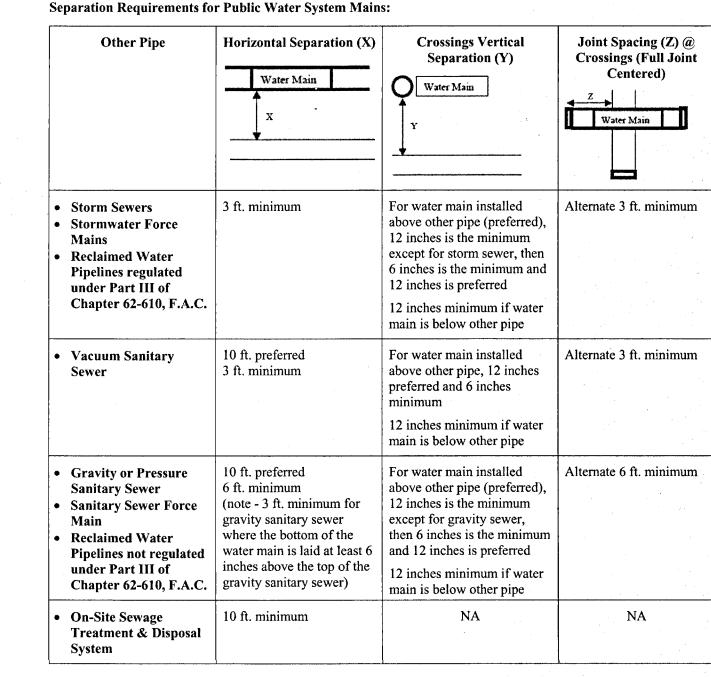
2. AS A MINIMUM ALL FITTINGS SHALL BE RESTRAINED TO THE NEXT JOINT.

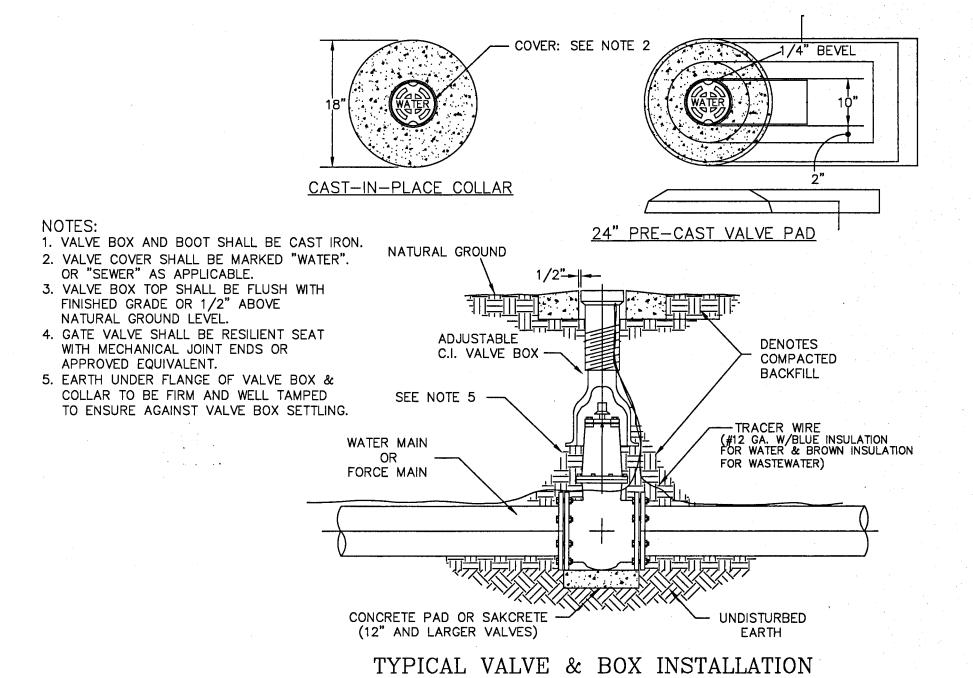
3. FOR OVERLAPPING JOINT RESTRAINTS, THE MOST RESTRICTIVE WILL APPLY. THE FARM HILL UTILITIES ENGINEER OR INSPECTOR MAY MAKE AN EXCEPTION IF THE DISTANCE TO BE RESTRAINED REQUIRES TEARING UP

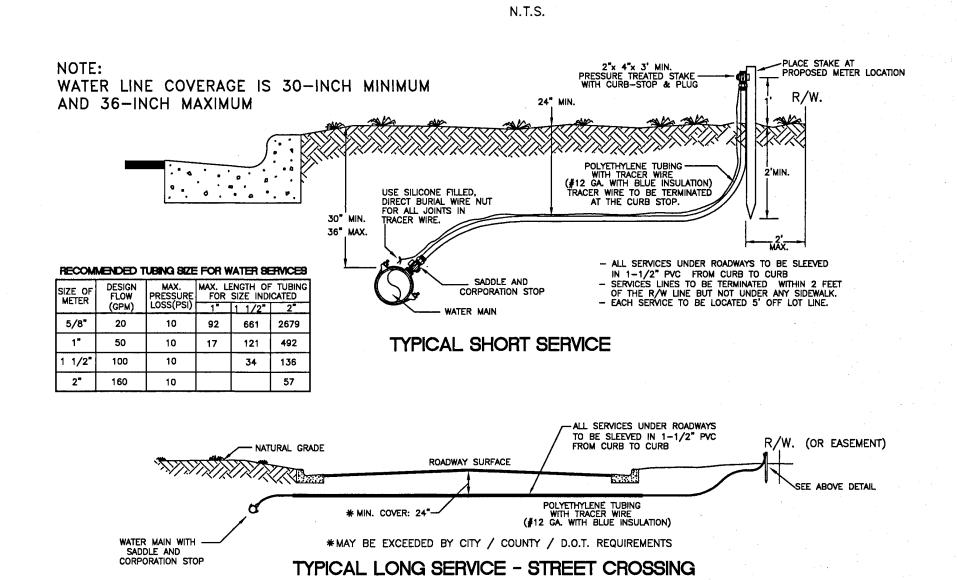
4. AN UNEQUAL TEE IS A TEE WHERE ONE OF THE DIAMETERS IS UNEQUAL (I.E. 6X6X4). RESTRAINED LENGTH FOR AN UNEQUAL TEE IS BASED ON DISTANCES FOR THE LARGER DIAMETER SHOWN IN THE TABLE. THE DESIGN ENGINEER MAY PROVIDE CALCULATIONS TO JUSTIFY A REVISED RESTRAINT DISTANCE.

5. IF A DEAD—END IS WITHIN A FEW FEET OF A REDUCER, THEN RESTRAIN THE REDUCER AS A DEAD—END BASED ON THE LARGER DIAMETER PIPE. OTHERWISE RESTRAIN THE REDUCER AT THE NEAREST JOINT OR A

MINIMUM OF 20 FEET (WHICHEVER IS GREATER). 6. RESTRAINED LENGTHS FOR A VERTICAL OFFSETS MUST BE INDIVIDUALLY CALCULATED. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT EDITION OF ECUA'S ENGINEERING MANUAL





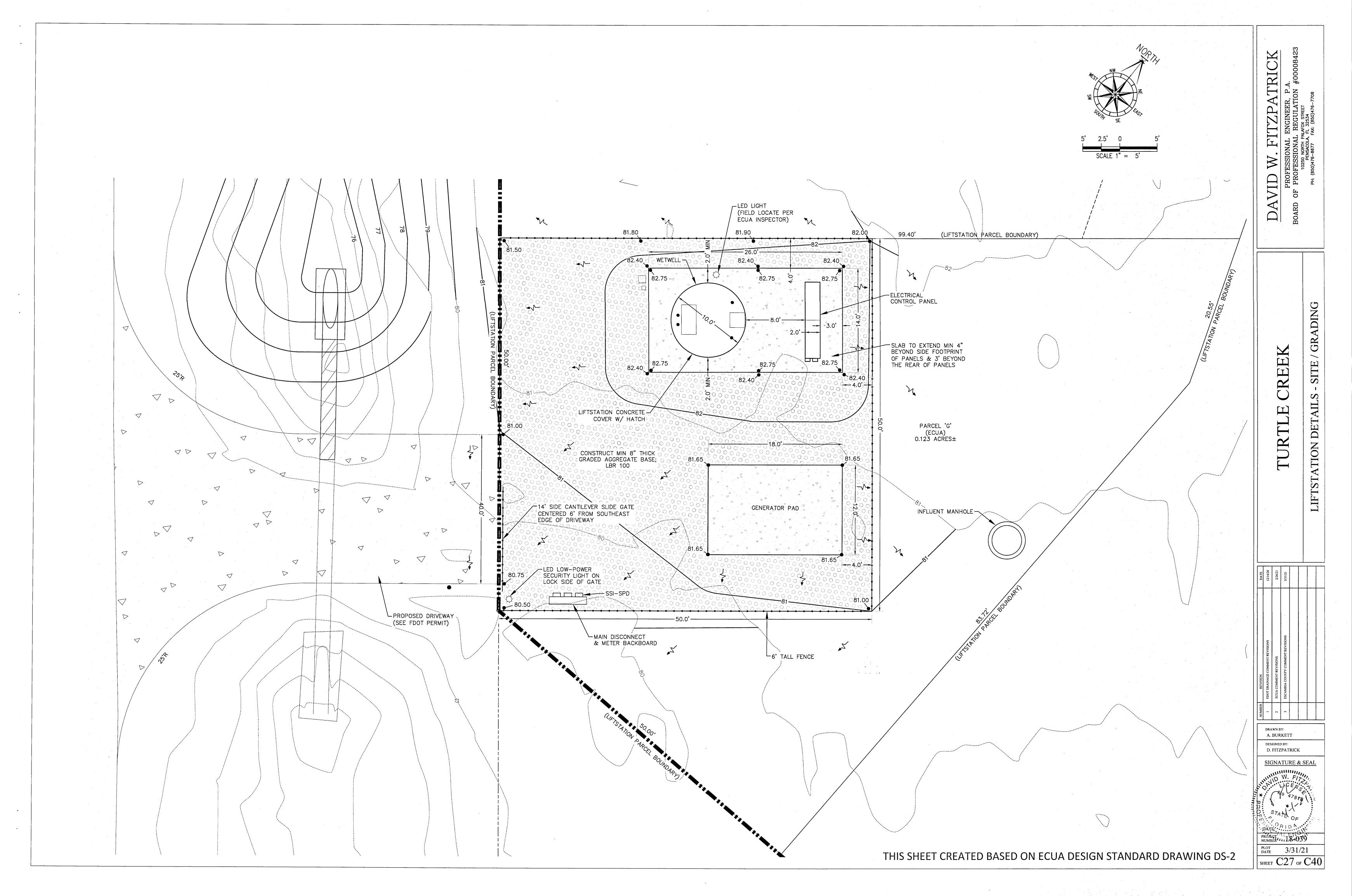


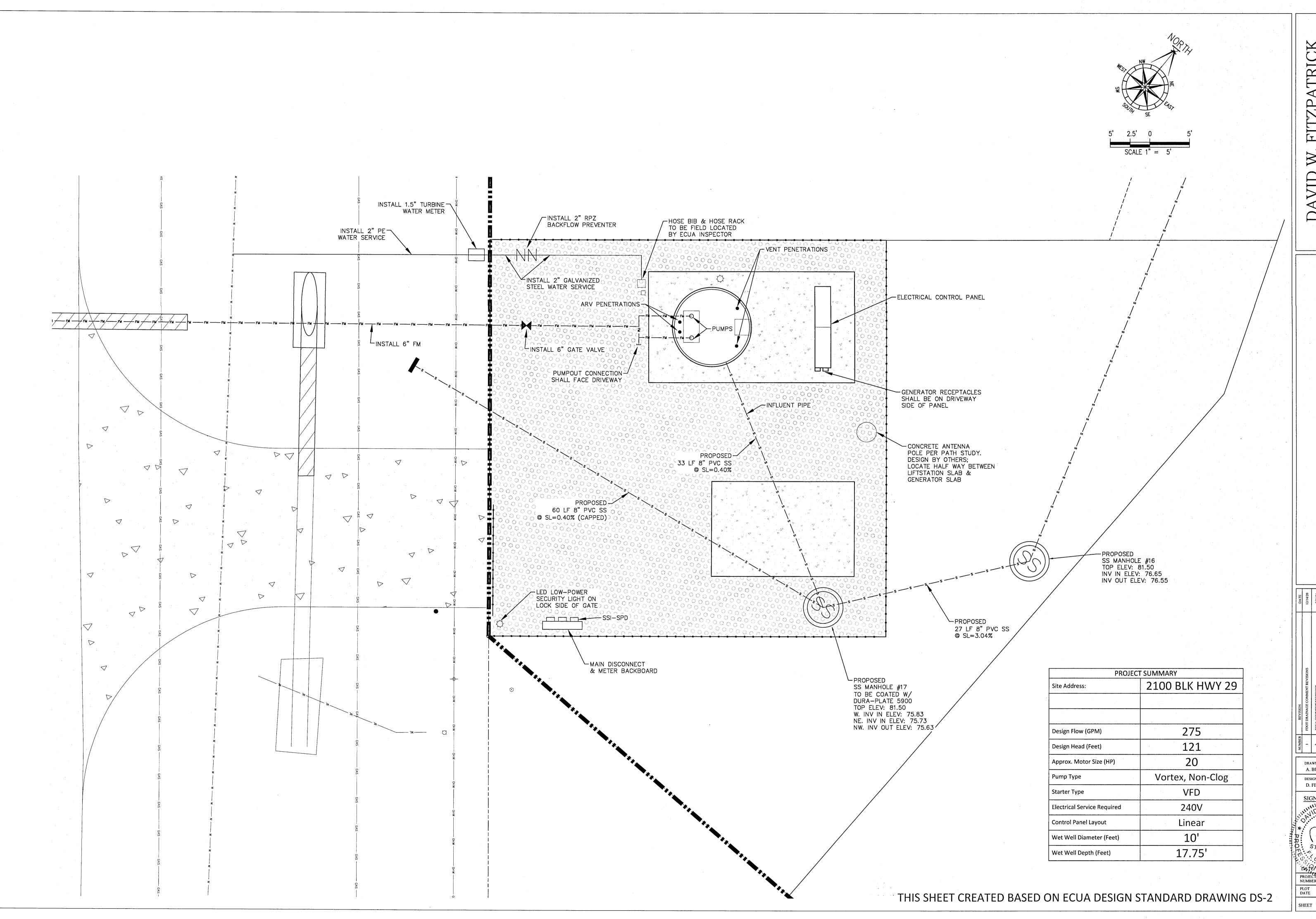
TYPICAL WATER SERVICE INSTALLATION

DRAWN BY: A. BURKETT DESIGNED BY: D. FITZPATRICK

RE

PROJECT 18-039 PLOT 3/31/21 SHEET C26 of C40





REE [UR

A. BURKETT D. FITZPATRICK

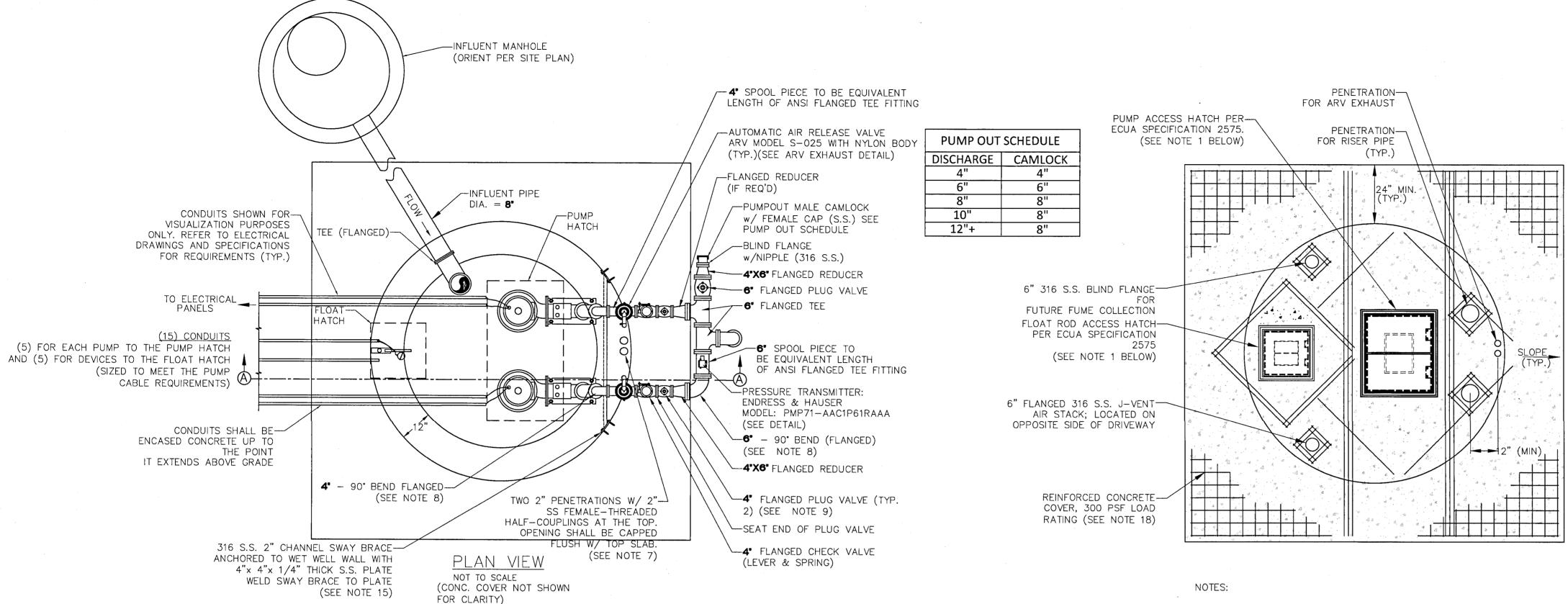
PLOT 3/31/21

SHEET C28 OF C40

DRAWN BY: A. BURKETT D. FITZPATRICK

SIGNATURE & SEAL

PROJECTION 182039 PLOT 3/31/21 SHEET C29 of C40



-4" FLANGED CHECK VALVE

-SEAT END ON CHECK VALVE SIDE

-4" FLANGED PLUG VALVE (TYP. 2) (SEE NOTE 9)

**──6"** - 90° BEND(FLANGED)

—6" 316 S.S. PIPE(FLANGED)

BASE (TYP.)

**-6"** - 90° D.I. BEND

 $(FLANGED \times MJ)$ 

(GREATER THAN 100 HP SHALL HAVE WELDED BRACE)

-GRADED AGGREGATE

SECURE STANDPIPE TO BRACE WITH 316 S.S. U-BOLTS (SEE NOTES 3 & 14)

-2" MIN. 316 S.S. SCH 40 PIPE - DUAL RAIL SYSTEM, BRACE EVERY TEN FEET

-SECOND BRACE TO BE INSTALLED WHEN DEPTH IS GREATER THAN 15'

-4 DIA. 316 S.S. RISER PIPE MUST BE ONE PIECE WITH FLANGED ENDS. (SEE NOTE 4)

----PRESSURE TRANSMITTER W/  $\frac{1}{2}$ " SS VALVE, ENDRESS &

HAUSER MODEL: PMP71-AAC1P61RAAA (SEE DETAIL DS-5)

--INSTALL GATE VALVE

---RESILIENT WEDGE

GATE VALVE & BOX

3' INSIDE PERIMETER FENCE

(LEVER & SPRING)

(SEE

DETAIL)

-FIBERGLASS

└─"C" CHANNELS FOR

EMBEDMENT IN CONCRETE

-316 S.S. 2" CHANNEL SWAY BRACE;

WHEN PUMPS ARE GREATER THAN 10 HP

FIBERGLASS FILLET FABRICATED AT FACTORY

-ANTI-FLOTATION FLANGE (TYP.)

CONCRETE ANTI-FLOTATION BASE

-PUMP MOUNTING BASE PLATE (SEE SHEET

DISCHARGE BASE/ELBOW (SEE NOTE 8)

-OFFSET BUTTED FACE TO FACE (SEE NOTE 4)

1. FAILURE TO PROVIDE HATCHES AS SPECIFIED IN SECTION 2575 WILL RESULT IN ECUA'S REJECTION OF ACCESS HATCH AND/OR WET WELL. 2. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL BE COATED WITH A BITUMASTIC PAINT.

> CONCRETE COVER PLAN NOT TO SCALE

#### **GENERAL LIFT STATION NOTES**

- 1. THE LOCATION OF INFLUENT LINES, WATER SUPPLY, ETC. ARE DRAWN OUT OF ORIENTATION ON SECTIONAL VIEW FOR CLARITY. SEE PLAN VIEW
- 2. ALL PENETRATIONS IN WET WELL WALL FOR PIPING, ELECTRICAL, ETC. SHALL BE SEALED & SLEEVED.
- 3. TO PROTECT RISER PIPE FROM SWAY BRACE, EITHER WRAP PIPE WITH RUBBER SHEETING OR INSERT ALL U-BOLTS THROUGH RUBBER HOSE.
- 4. PIPING WITHIN THE WET WELL SHALL BE FLANGED SCHEDULE 10 316 STAINLESS STEEL. INTERMEDIATE JOINTS SHALL BE WELDED. FITTINGS WITHIN THE WET WELL SHALL BE FLANGED 316 STAINLESS STEEL. ALL NUTS, BOLTS & ACCESSORIES WITHIN THE WET WELL SHALL BE 316 STAINLESS STEEL
- 5. PIPE AND FITTINGS OUTSIDE OF THE WET WELL AND ABOVE GROUND SHALL BE 316 STAINLESS STEEL (FLANGED, SCHEDULE 10). ALL WELD ON FLANGES SHALL BE 125# RF SOCKET- WELD FLANGE OR RF WELD NECK FLANGE (TYPE). ALL BOLTS, WASHERS AND NUTS SHALL BE 316 STAINLESS STEEL AND SHALL BE COATED WITH "NEVER SEIZE" COMPOUND.
- 6. THE ANNULAR SPACE BETWEEN CONCRETE COVER AND RISER PIPE SHALL BE SEALED VIA LINK SEAL
- 7. PROVIDE A 2" PENETRATION WITH A STAINLESS STEEL FEMALE-THREADED HALF-COUPLING AT THE TOP. PENETRATION SHALL BE CAPPED AT THE TOP WITH AN OPEN-ENDED BOTTOM.
- 8. INTERIOR SURFACES OF THE PUMP IMPELLER AND VOLUTE SHALL BE COATED WITH BELZONA 1321CERAMICS-METAL. (UNLESS OTHERWISE SPECIFIED BY OWNER). DO NOT COAT STALNLESS STEEL
- 9. PLUG VALVES SHALL HAVE AN ALLOWABLE FLOW CAPACITY EQUAL TO 100% OF THE ADJACENT PIPE AREA, AND SHALL ALLOW "PIGGING".
- 10. THE INTERIOR OF ALL VALVES SHALL BE COATED.
- 11. CONTRACTOR SHALL PROVIDE (2) 1" CONDUTS (ONE FOR POWER AND ONE FOR SIGNAL) FOR FLOW METER (IF REQUIRED). CONTRACTOR SHALL TERMINATE WIRES IN OWNER PROVIDED ELECTRIICAL CONTROL CABLNET.
- 12. LOW LEVEL ALARM ELEVATION TO BE SET 1' BELOW PLMPS OFF ELEVATION.
- 13. CONNECTION OF SWAY BRACE MOUNTING PLATE SHALL BE PER ECUA SPECIFICATIONS.
- 14. ELECTRICAL CONDUT SHALL BE RIGID ALUMINUM CONDUIT, OR PVC ENCASED IN CONCRETE.
- 15. PROVIDE MINIMUM OF THREE (3) 316 STAINLESS STEEL BRACES, EVENLY SPACED. ADD ADDITIONAL BRACES IF BRACE SPACNG EXCEEDS 10'.
- 16. CONTRACTOR SHALL PROVIDE DESIGN PERFORMED BY FLORIDA LICENSED P.E. AND SHALL INCLUDE DESIGN IN DELEGATED ENGINEERING DOCUMENTS
- 17. FLOAT HATCH SHALL BE 18"X18" UNLESS OTHERWISE SPECIFIED.

#### WET WELL CROSS SECTION A-A NOT TO SCALE

AUTOMATIC AIR RELEASE VALVE ARV MODEL S-025-

90° BEND, FLANGED (SEE NOTE 8)-

S.S. HARDWARE)(SEE NOTE 7)

PUMP ACCESS HATCH (SEE-

DETAILS OF CONCRETE

HATCH REQUIREMENTS)

PVC TEE

RUBBER GROMMET-

LIFTING BALE-

-LEVEL TRANSDUCER INTERNAL TO

STILLING WELL

MANUFACTURER-

(SEE DETAIL)

COVER PLAN FOR

10' DIAMETER

GUIDE RAIL (SEE DETAIL)

WITH NYLON BODY (TYP.)(SEE ARV EXHAUST DETAIL)

TWO 2" PENETRATIONS W/ 2" SS FEMALE-THREADED-

HALF-COUPLINGS AT THE TOP. OPENING SHALL BE

PVC SLEEVE SIZED TO ALLOW PASSAGE OF DISCHARGE-

PIPING FLANGE - SEAL OPENINGS W/ LINK SEAL (316

CAPPED FLUSH W/ TOP SLAB. (SEE NOTE 7)

SPOOL PIECE TO BE EQUIVALENT LENGTH OF ANSI FLANGED TEE—

18"X18" FLOAT-

ACCESS HATCH

POSITIONED OVER

FLOAT ROD AND

316 S.S. BRACKET ANCHORED-

INFLUENT ELEV. = 75.50

DOWN PIECE APPROX. 4' TO 6' LONG WITH 2 S.S BRACES. COORDINATE WITH ECUA LIFT STATION

(BULLETIN-100) OR APPROVED EQUAL LAG PUMP ON ELEV=71.00

PERSONNEL BEFORE INSTALLING

HIGH LEVEL ALARM ELEV=72.00 MERCURY SWITCH CONTROL FLOATS

TO WALL (SEE DETAIL)

LEAD PUMP ON ELEV=70.00

PUMPS OFF ELEV= 68.00

TO WALL (SEE DETAIL)

LOW LEVEL ALARM

(SEE NOTE 13)

316 S.S. BRACKET ANCHORED-

STATION INVERT ELEV= 65.00

24" THICK CONCRETE

(MIN.) SEE NOTE 16

12" COMPACTED BASE↓

(95% MOD. PROCTOR) ⋅

STILLING WELL

(SEE DETAIL)

**ENCLOSURES** 

ELECTRICAL CONDUIT-

(SEE NOTE 16)

REINFORCED CONCRETE-

COVER (SEE NOTE 18).

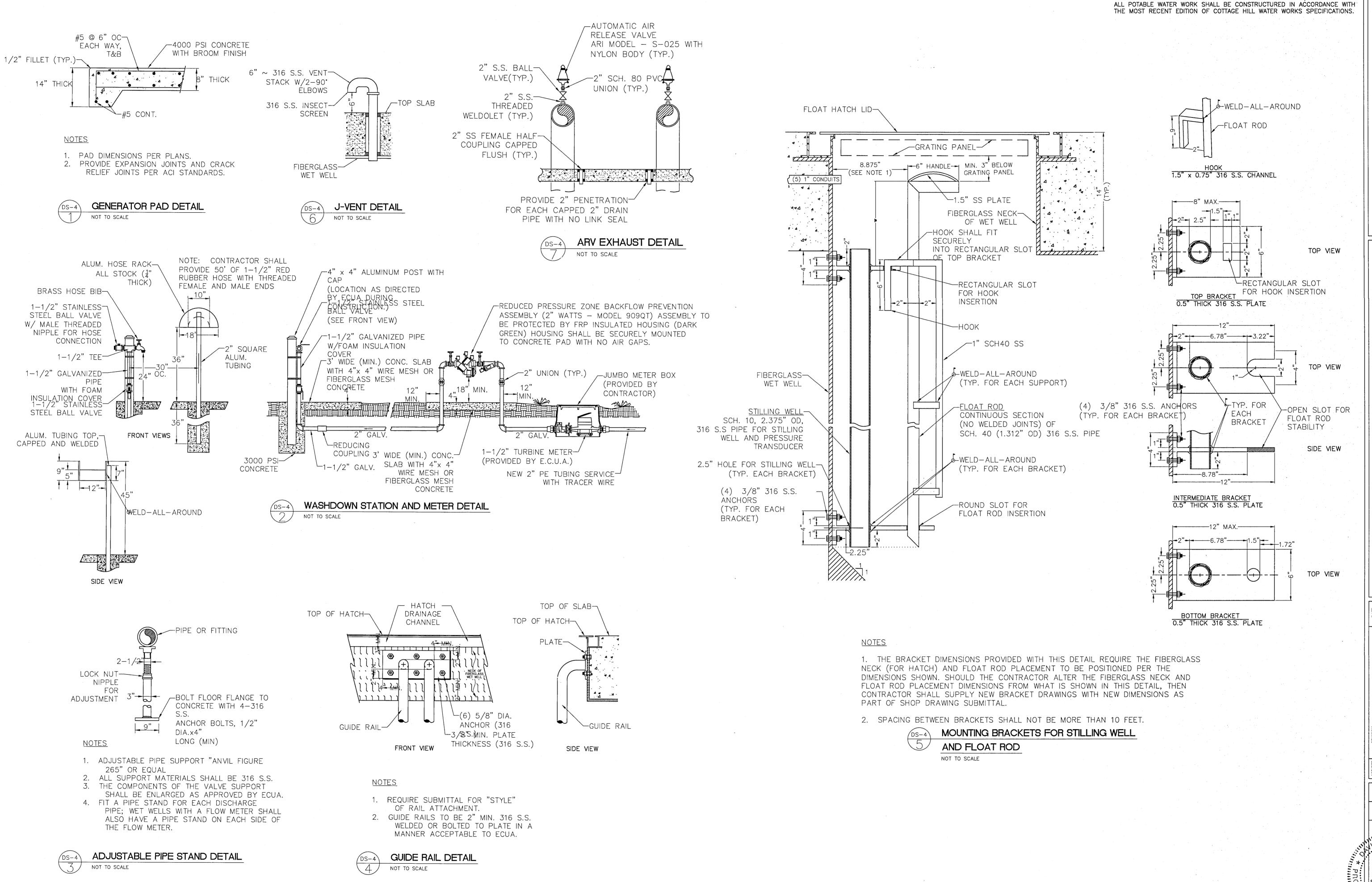
TOP ELEV: = **82.75** 

ELECTRICAL CONTROL-

PANEL FOUNDATION

(SEE NOTE 18).

THIS SHEET CREATED BASED ON ECUA DESIGN STANDARD DRAWING DS-3



THIS SHEET CREATED BASED ON ECUA DESIGN STANDARD DRAWING DS-4

DAVID W. FITZPATR

PROFESSIONAL ENGINEER, P.A.

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ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH

THE MOST RECENT EDITION OF ECUA'S ENGINEERING MANUAL;

TURTLE CREEK

NUMBER REVISION

1 FDOT DRAINAGE COMMENT REVISIONS

2 ECUA COMMENT REVISIONS

3 ESCAMBIA COUNTY COMMENT REVISIONS

3/31/2

DRAWN BY:
A. BURKETT

DESIGNED BY:
D. FITZPATRICK

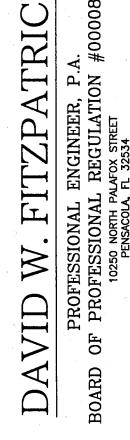
D. FITZPATRICK

SIGNATURE & SEAL

W. FITZPATRICK

ORIDINATE OF STANDING OF STAND

SHEET C30 of C40



RE

5

DRAWN BY: A. BURKETT DESIGNED BY: D. FITZPATRICK

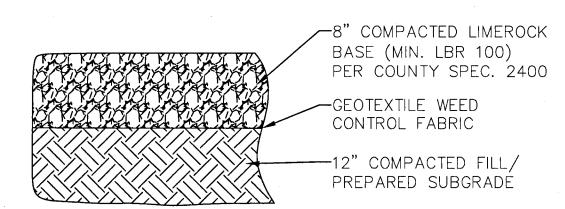
SIGNATURE & SEAL

PROJECT 18-039 PLOT 3/31/21

SHEET C31 of C40

-PRESSURE TRANSMITTER (0-150) ENDRESS HAUSER MODEL: PMP71-AAC1P61RAAA -PRESSURE GAUGE (0-100 PSI)½" S.S. TEE <u></u> BALL VALVE WELDED COUPLING-ON PIPE 316 S.S. PIPE FLOW -

PRESSURE TRANSMITTER DETAIL NOT TO SCALE



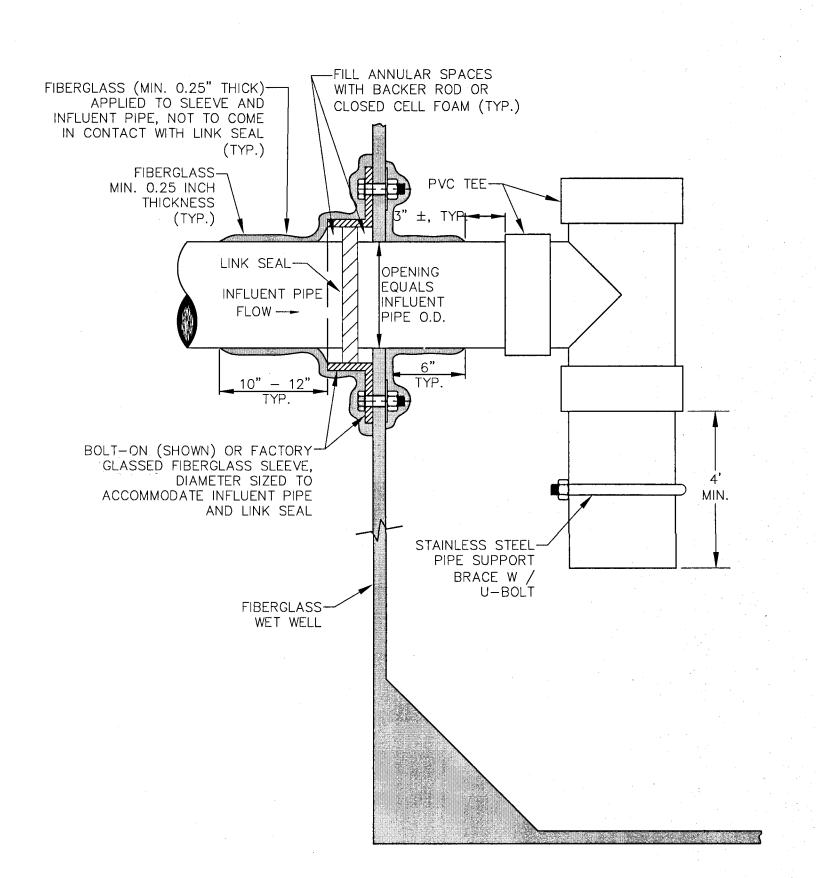
#### NOTES:

1. ALL DEPTHS ARE COMPACTED DEPTHS.

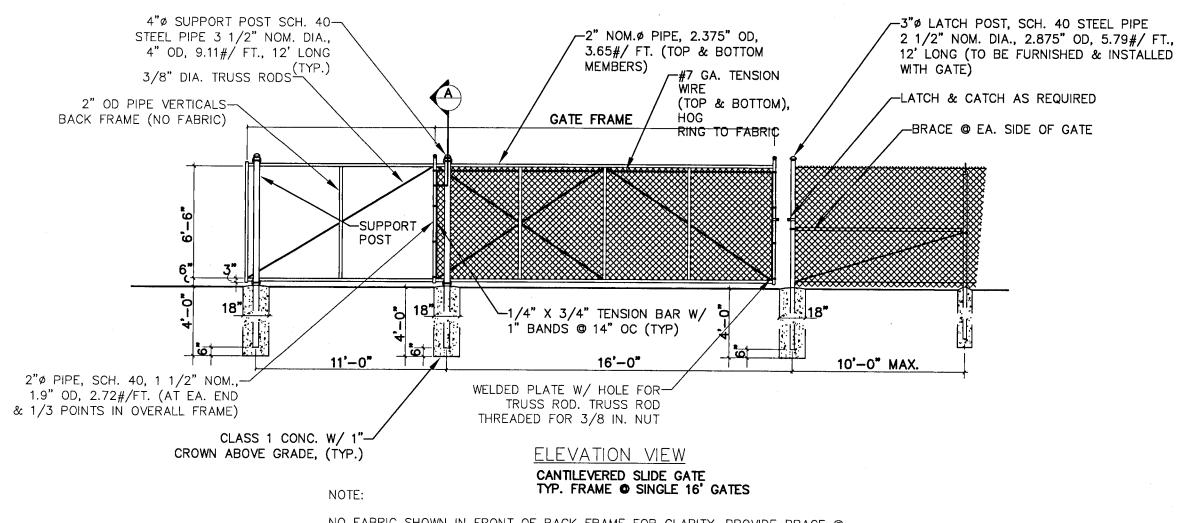
2. PREPARE SUBGRADE BY CLEARING AND GRUBBING, STRIPPING TOPSOIL AND PLACING GEOTEXTILE FABRIC.

3. FILL FOR LIFT STATION SITE SHALL BE SAND MECHANICALLY COMPACTED TO 95% MODIFIED PROCTOR DENSITY IN MAXIMUM 12-INCH LIFTS LOOSE MEASUREMENT TO ACHIEVE CORRECT GRADE.

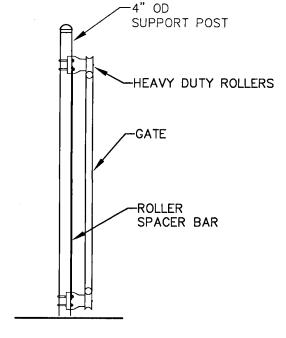




INFLUENT PIPE CONNECTION DETAIL 4/ NOT TO SCALE



NO FABRIC SHOWN IN FRONT OF BACK FRAME FOR CLARITY. PROVIDE BRACE @ MID-POINT EACH SIDE OF GATE WITH 3/8" DIA. TRUSS ROD IN BOTTOM HALF (NOT SHOWN FOR CLARITY)



FENCE POST SCHEDULE SIZE 2-1/2" ø 3" ø LINE POST BRACE POST\*\* 3" ø CORNER POST GATE POST \*\* EVERY 100'

A SIDEVIEW OF GATE POST

**₩**NTS

GATE FRAME DIAGRAM (PER GATE LEAF) SEE ELEVATION THIS SHEET

GATE OPENING BACK FRAME GATE FRAME 16'-3" 11'-0" CANTILEVERED SLIDE GATE DIMENSIONS PER GATE LEAF

FOR ADDITIONAL NOTES.

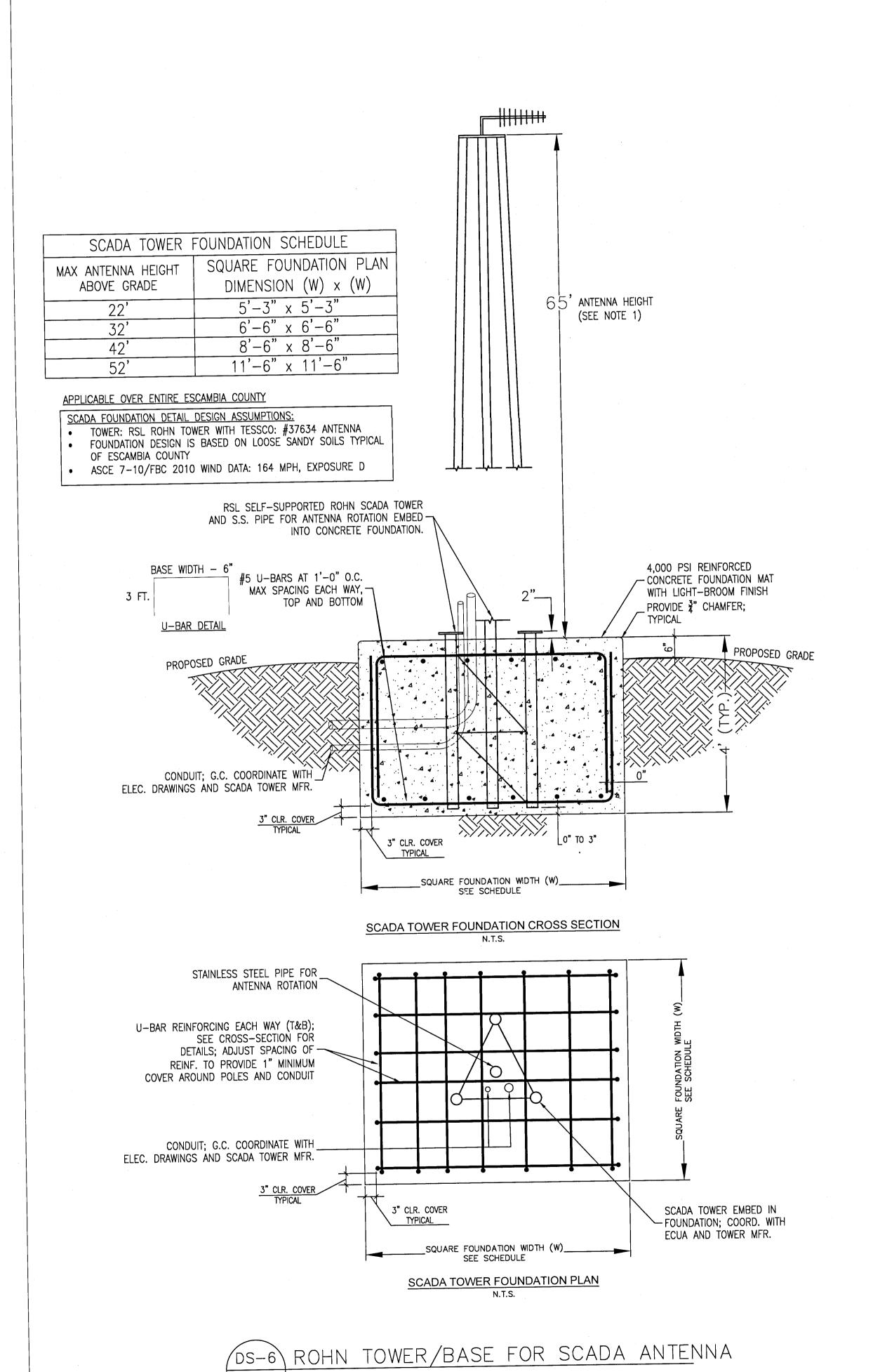
SEE PLANS FOR LOCATION.

10' MAX. SPACING 10' MAX. SPACING 2-1/2"ø BRACE POST-\_1-5/8"ø TOP RAIL (TYP.) 9 GA. GREEN,-∕-3"ø BRACE POST VINYL-CLAD CHAIN LINK FABRIC 3"ø CORNER-\_\_1\_5/8"ø BRACE ROD (TYP.) -6Ga. WIRE TIES 14" MAX. SPACING TYPICAL FINISHED GRADE -3/8"ø ROD W/ 10Ga.TENSION TURNBUCKLE TYP. FOR COR. POST TYP. FOR LINE POST-CANTILEVERED SLIDE GATE & POST SECTION

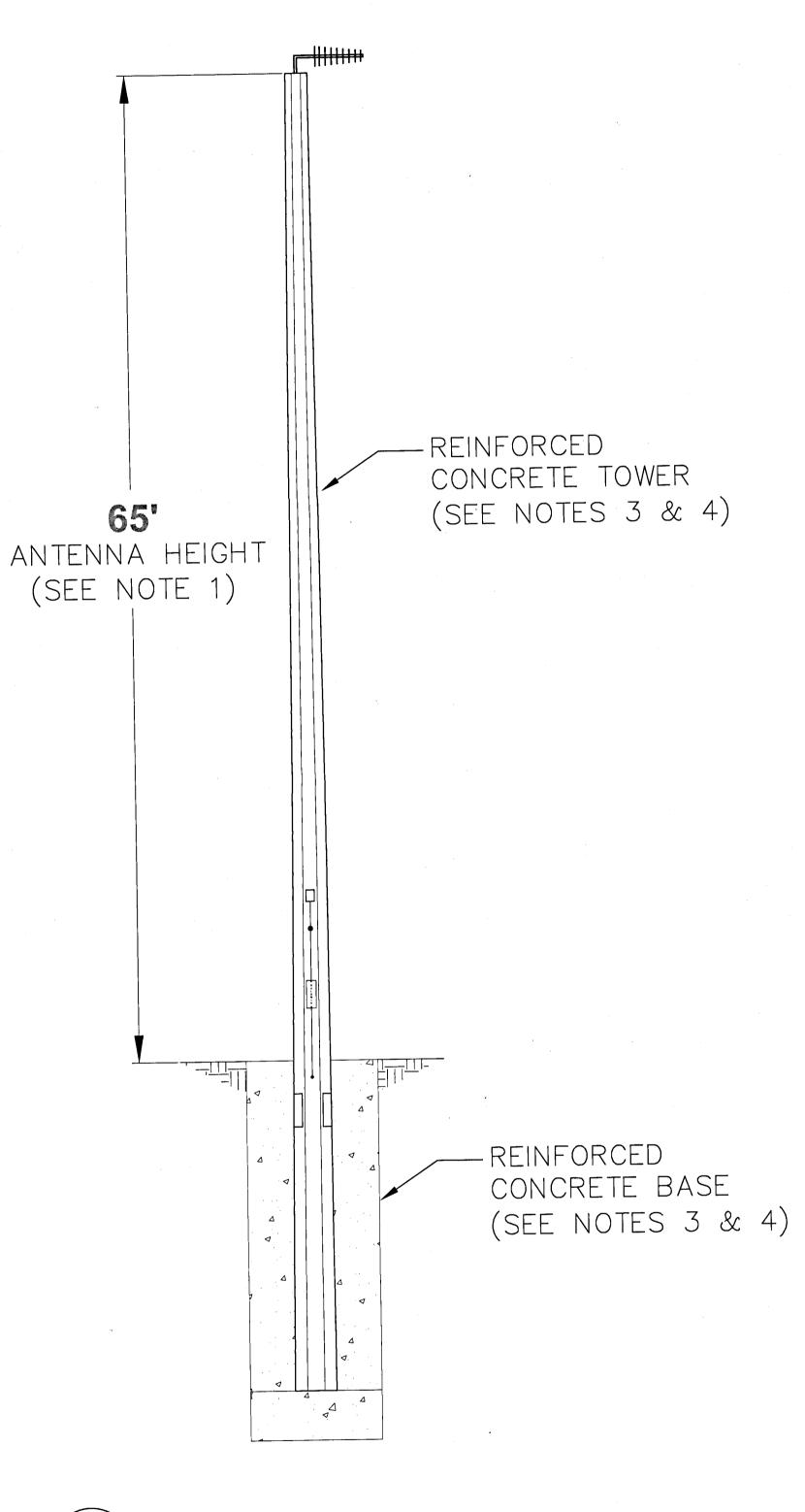
> 6' CHAINLINK FENCE DETAIL NOTE: ALL FENCING ELEMENTS TO BE MANUFACTURER'S

FACTORY-APPLIED DARK GREEN COLOR.

CANTILEVERED GATE + FENCING DETAIL NOT TO SCALE



NOT TO SCALE

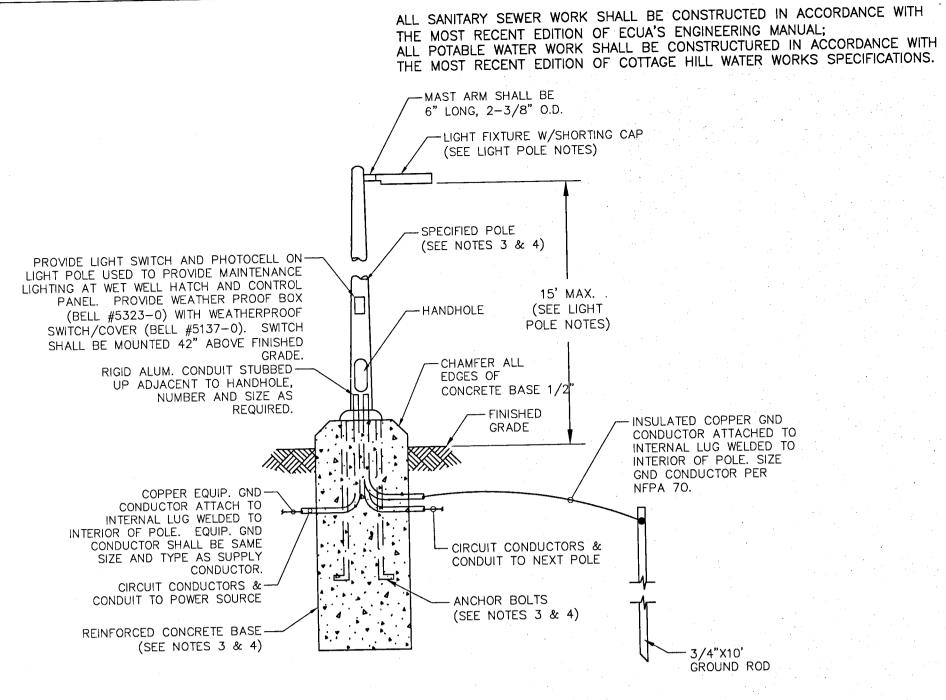


DS-6 CONCRETE TOWER/BASE FOR SCADA ANTENNA

2 NOT TO SCALE

#### NOTES:

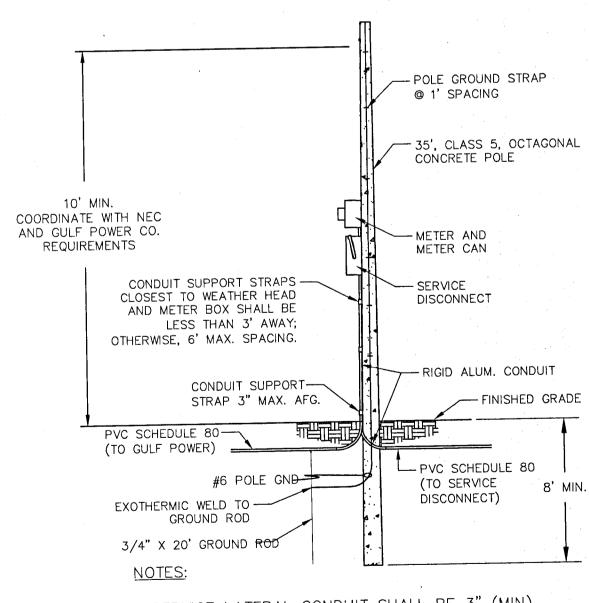
- 1. ANTENNA HEIGHT PER ECUA SUPPLIED RADIO PATH STUDY.
- 2. CONTRACTOR CAN SELECT FROM EITHER ANTENNA TOWER OPTION. ROHN TOWER/BASE SHALL BE CONSTRUCTED PER DETAIL THIS SHEET, CONCRETE TOWER/BASE SHALL BE CONSTRUCTED PER DELEGATED ENGINEERING DOCUMENTS.
- 3. CONTRACTOR SHALL PROVIDE DESIGN PERFORMED BY FLORIDA LICENSED P.E. AND SHALL INCLUDE DESIGN IN DELEGATED ENGINEERING DOCUMENT.
- 4. FOR WIND LOAD CALCULATIONS, ASSUME WIND SPEED OF 164 MPH, EXPOSURE "D" PER ASCE 7-10/FBC 2010 WIND DATA, AS WELL AS LOOSE, SANDY SOILS.



## DS-6 SECURITY LIGHT AND WORK LIGHT DETAIL NOT TO SCALE

#### LIGHT POLE NOTES:

- A. FIXTURE SHALL BE LED, (BEACON, VIPER "L" SERIES), (HOLOPHONE, MONGOOSE LED ROADWAY LIGHTING) 120V, WITH PHOTOCONTROL & SWITCH, POLE MOUNTED @ 42" (OR ENGINEER APPROVED EQUAL)
- B. REFER TO SPECIFICATIONS SECTION 16521 "EXTERIOR LIGHTING" FOR ADDITIONAL REQUIREMENTS.
- C. LIGHT FIXTURES SHALL BE MOUNTED AT 15'-0" (MAXIMUM) ABOVE FINISHED GRADE.
- D. LIGHTING FIXTURE LAYOUT SHALL BE BASED UPON ACHIEVING 20 FOOT CANDLES (+/- 20%) AT THE FRONT OF THE CONTROL PANEL (WORK-PLANE OF 24" AFG) AND AT THE WET WELL ACCESS HATCH (WORKPLANE OF 0" AFG).
- E. GENERAL SECURITY LIGHTING SHALL ENCOMPASS ACCESS GATE AND ALL PIPING/EQUIPMENT AT A MIN: AVERAGE 1 FOOT-CANDLE (+/- 20%, AT WORKPLANE OF 0" AFG).
- F. REFER TO LIGHTING CONTROL DIAGRAM ON SHEET DS-7 FOR ADDITIONAL REQUIREMENTS.



\* SERVICE LATERAL CONDUIT SHALL BE 3" (MIN) SCHEDULE 80 PVC BELOW GRADE AND 3" (MIN) RIGID AL CONDUIT ABOVE GRADE. ANY REQUIREMENTS BY THE UTILITY COMPANY SHALL PREVAIL OVER THE REQUIREMENTS OUTLINED HERE AND SHALL BE COORDINATED BY THE ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION.

DS-6 UTILITY POLE DETAIL

4 NOT TO SCALE

THIS SHEET CREATED BASED ON ECUA DESIGN STANDARD DRAWING DS-6

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TURTLE CREEK

NUMBER REVISION

1 FOOT DRAINAGE COMMENT REVISIONS

2 ECUA COMMENT REVISIONS

331/21

331/21

SIGNATURE & SEAL

NO W. FINANCE

NO PID A

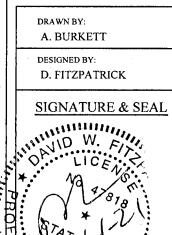
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NUMBER 18-039

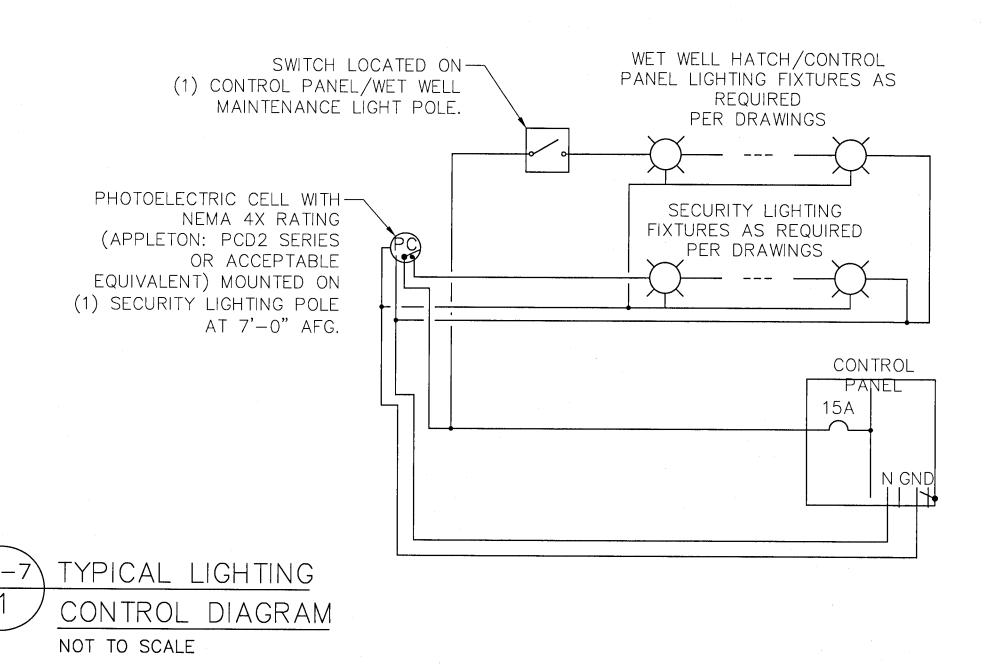
D. FITZPATRICK

PLOT 3/31/21
SHEET C32 OF C40

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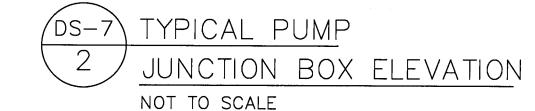


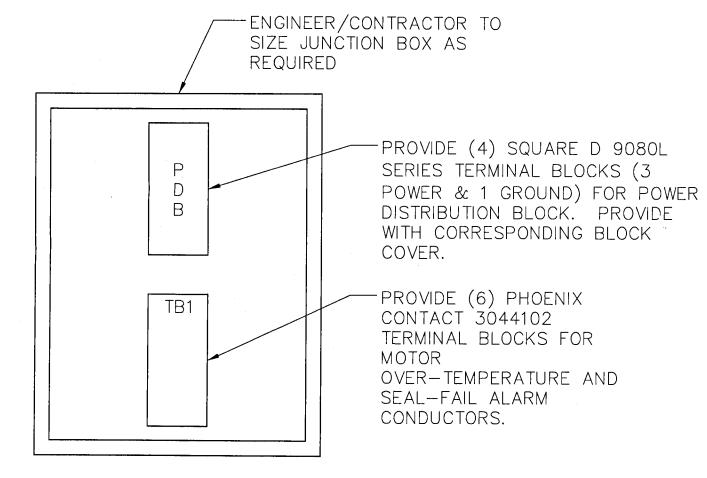
PROJECT ENGLISHONS NUMBER 11:8-039 PLOT 3/31/21 SHEET C33 of C40



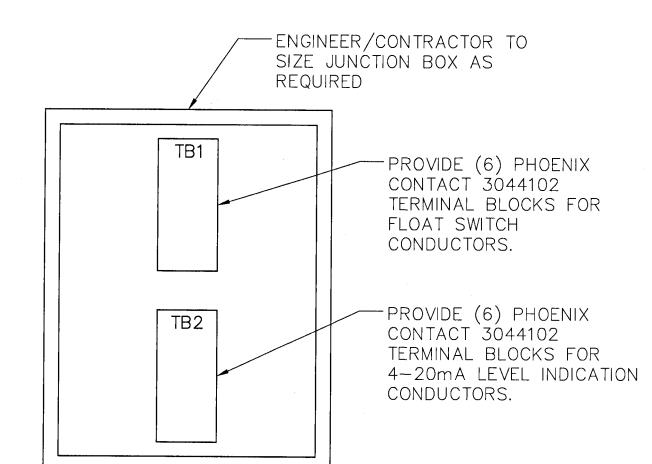
#### DETAIL NOTES:

- 1. ALL TERMINAL BLOCKS SHALL BE PROVIDED WITH CORRESPONDING END BRACKETS AND END COVERS.
- 2. PROVIDE SEPARATE GROUND LUG IN EACH JUNCTION BOX, BONDED TO JUNCTION BOX.





INTERIOR ELEVATION



INTERIOR ELEVATION

### **DETAIL NOTES:**

- 1. ALL TERMINAL BLOCKS SHALL BE PROVIDED WITH CORRESPONDING END BRACKETS AND END COVERS.
- 2. PROVIDE SEPARATE GROUND LUG IN EACH JUNCTION BOX, BONDED TO JUNCTION BOX.
- TYPICAL LEVEL INDICATION JUNCTION BOX ELEVATION NOT TO SCALE

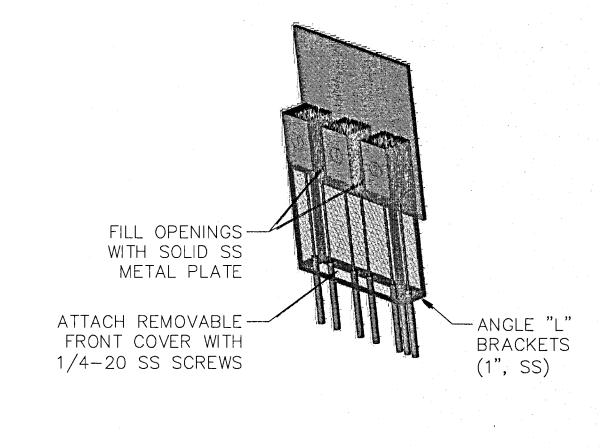
#### DETAIL NOTES:

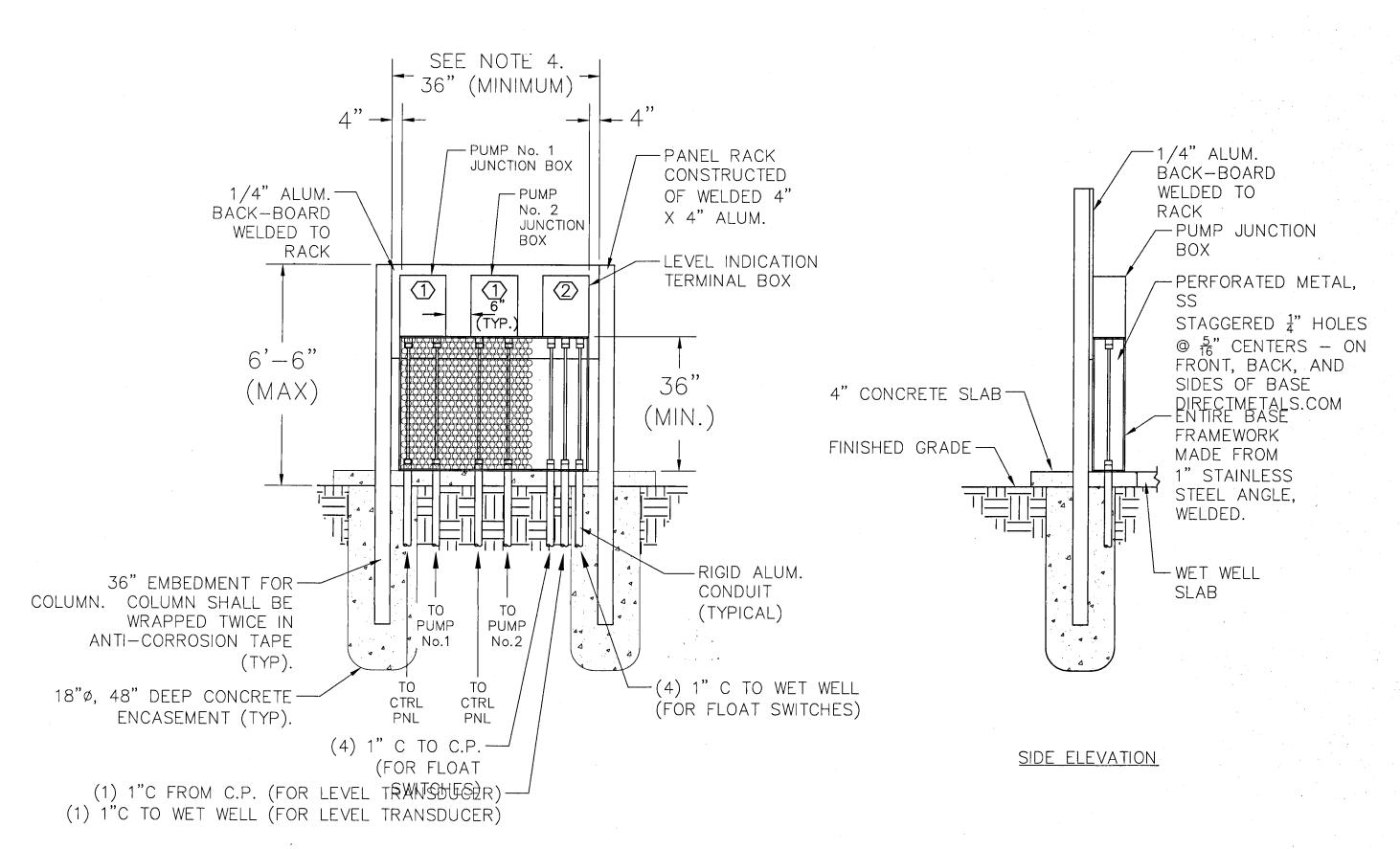
- 1. THIS DETAIL SHALL ONLY APPLY WHEN THE CONTROL PANEL CANNOT BE PLACED WITHIN 10'-0" OF THE WET WELL TO ALLOW FOR CONNECTION OF STANDARD 50 FOOT PUMP CABLE CONNECTIONS.
- 2. BACKBOARD SHALL BE PLACED AT THE EDGE OF THE WET WELL SLAB BETWEEN THE WET WELL AND CONTROL PANEL.
- 3. JUNCTION BOXES SHALL BE MOUNTED SUCH THAT THEY ARE FACING THE WET WELL.
- 4. ENGINEER/CONTRACTOR SHALL SIZE JUNCTION BOXES AND BACKBOARDS BASED UPON INSTALLATION REQUIREMENTS PROVIDED AT TIME OF DESIGN. KEY NOTES:

REFER TO "TYPICAL PUMP JUNCTION BOX ELEVATION"

(THIS SHEET) FOR ADDITIONAL REQUIREMENTS. REFER TO "TYPICAL LEVEL INDICATION JUNCTION

ELEVATION" (THIS SHEET) FOR ADDITIONAL REQUIREMENTS.





NOT TO SCALE

FRONT ELEVATION

TYPICAL PUMP JUNCTION BOXES



# EOR's Summary of Performance and Design Criteria for Contractor's Delegated Engineering Documents

This sheet acts as a summary only. Contractor is required to thoroughly examine the remainder of these plans as well as ECUA's Engineering Manual for all performance and design criteria, which as a whole, is considered sufficient for Contractor's use in bidding and coordinating professional design sevices for the development of Contractor's Delegated Engineering Documents.

Delegated Engineering Design	EOR Supplied Design Criteria	Applicable Design Standards	
Fiberglass Wet Well	Diameter (feet): 10 Depth (feet): 17.75	Plans, ECUA Engineering Manual, ASTM D3753, Fiberglass Manufacturer's Recomendations	
Pump Mounting Baseplate	See Wet Well dimensions above and List of Allowable Pumps on Pump Selection Worksheet	Plans and ECUA Engineering Manual	
Anti-flotation Concrete Base	See Wet Well dimensions above	Plans and ECUA Engineering Manual	
Concrete Cover	See Site Plan for cover dimensions	Plans and ECUA Engineering Manual	
Control Panel Base	See Control Panel information above and Site Plan for location	Plans and ECUA Engineering Manual	
Electrical Control Panels	Panel Layout: ☐ Abutting ➤ Linear Service Voltage: ☐ 480V ➤ 240V Starter Type: ☐ FVNR ☐ RVSS ➤ VFD	Plans, ECUA Engineering Manual, and ECUA Design Standard Drawings DS-xx through DS-xx	
Work/Security Light Poles and Bases	See Plans	Plans and ECUA Engineering Manual	
Concrete Pole and Base for SCADA Antenna (if applicable)	Antenna Height (feet): 65'	Plans and ECUA Engineering Manual	

TURTLE CREEK

 NUMBER
 REVISION
 DATE

 1
 FDOT DRAINAGE COMMENT REVISIONS
 12/14/20

 2
 ECUA COMMENT REVISIONS
 2/26/21

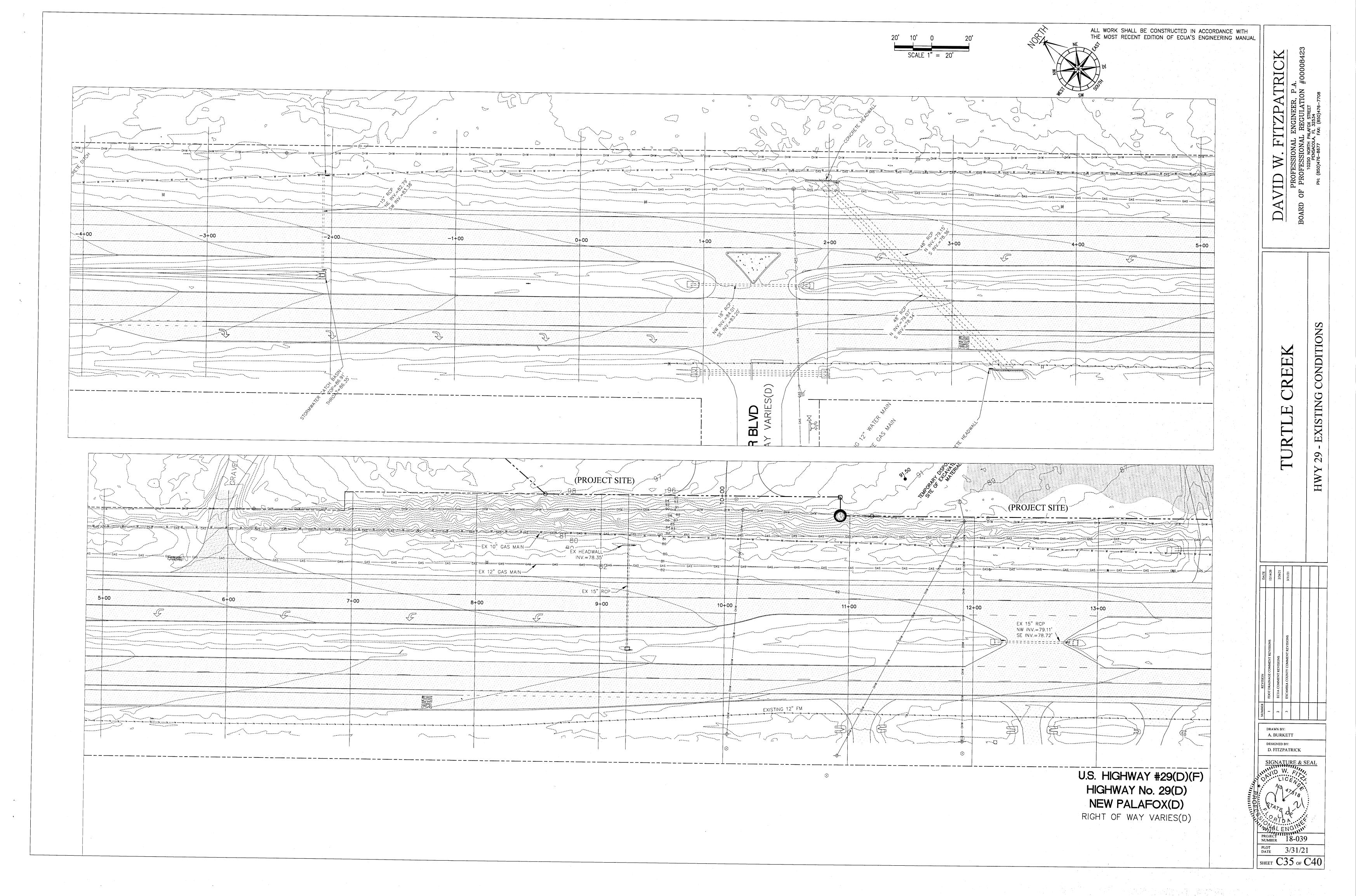
 3
 ESCAMBIA COUNTY COMMENT REVISIONS
 3/31/21

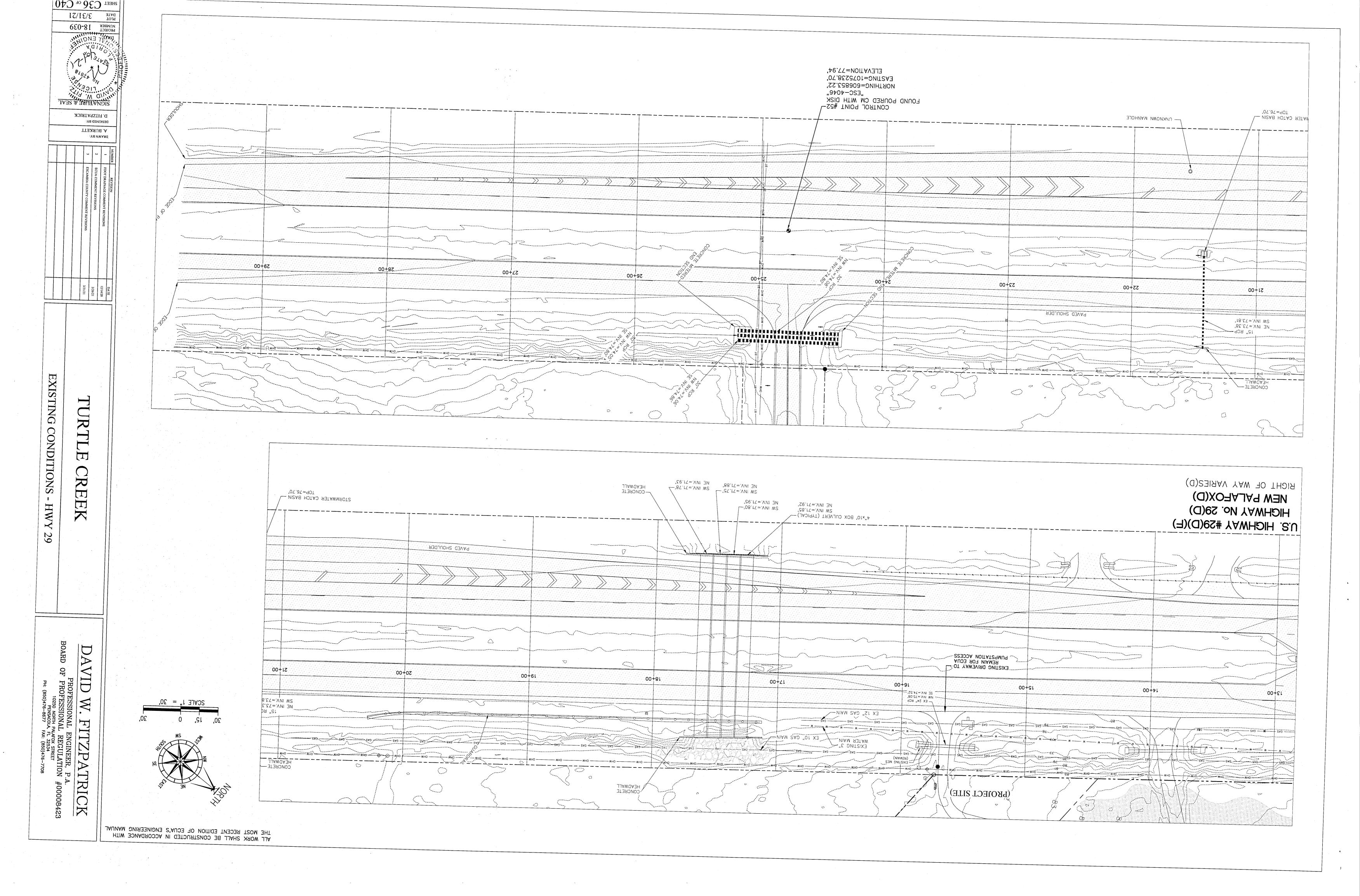
DRAWN BY:
A. BURKETT

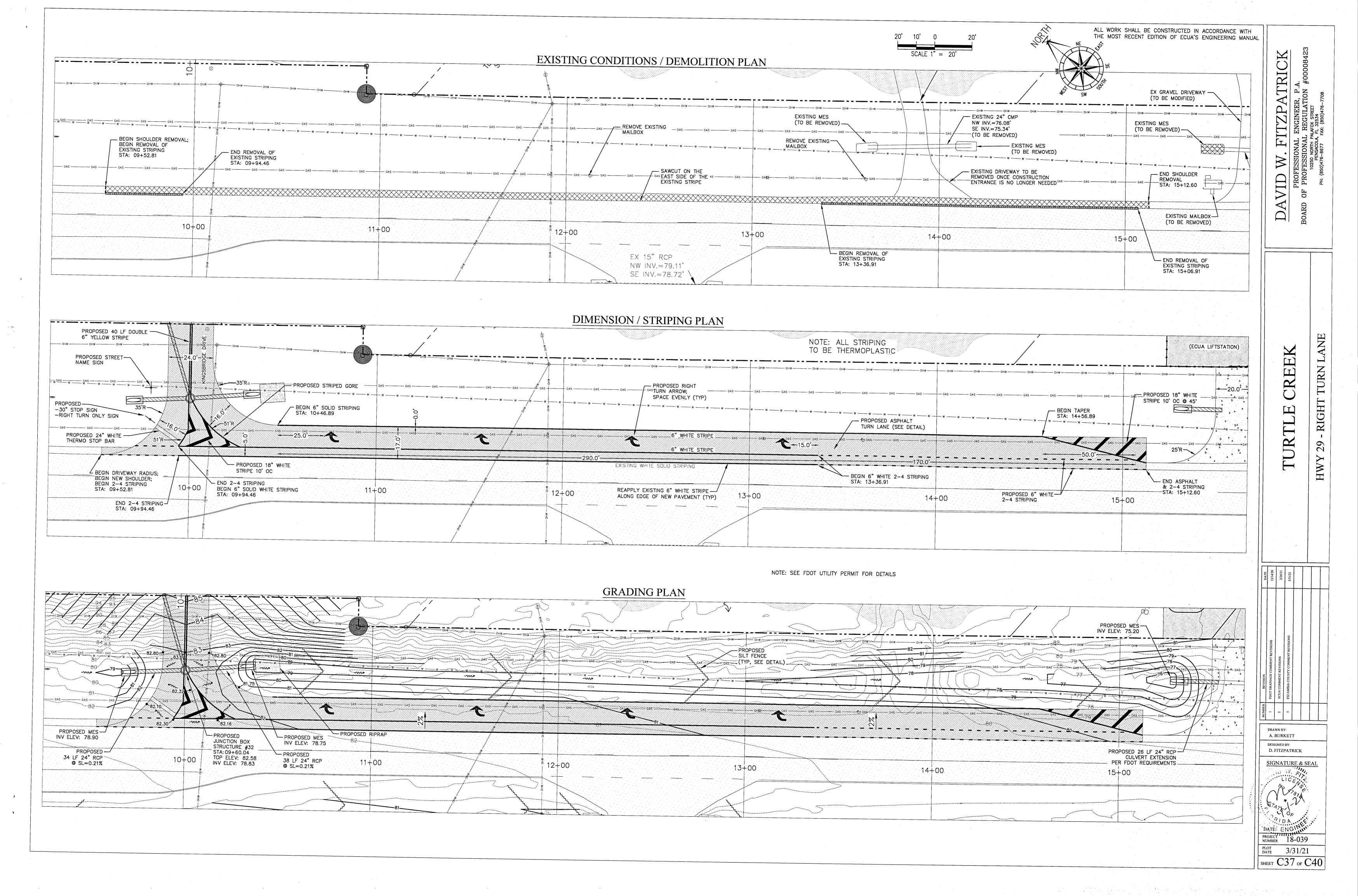
DESIGNED BY:
D. FITZPATRICK

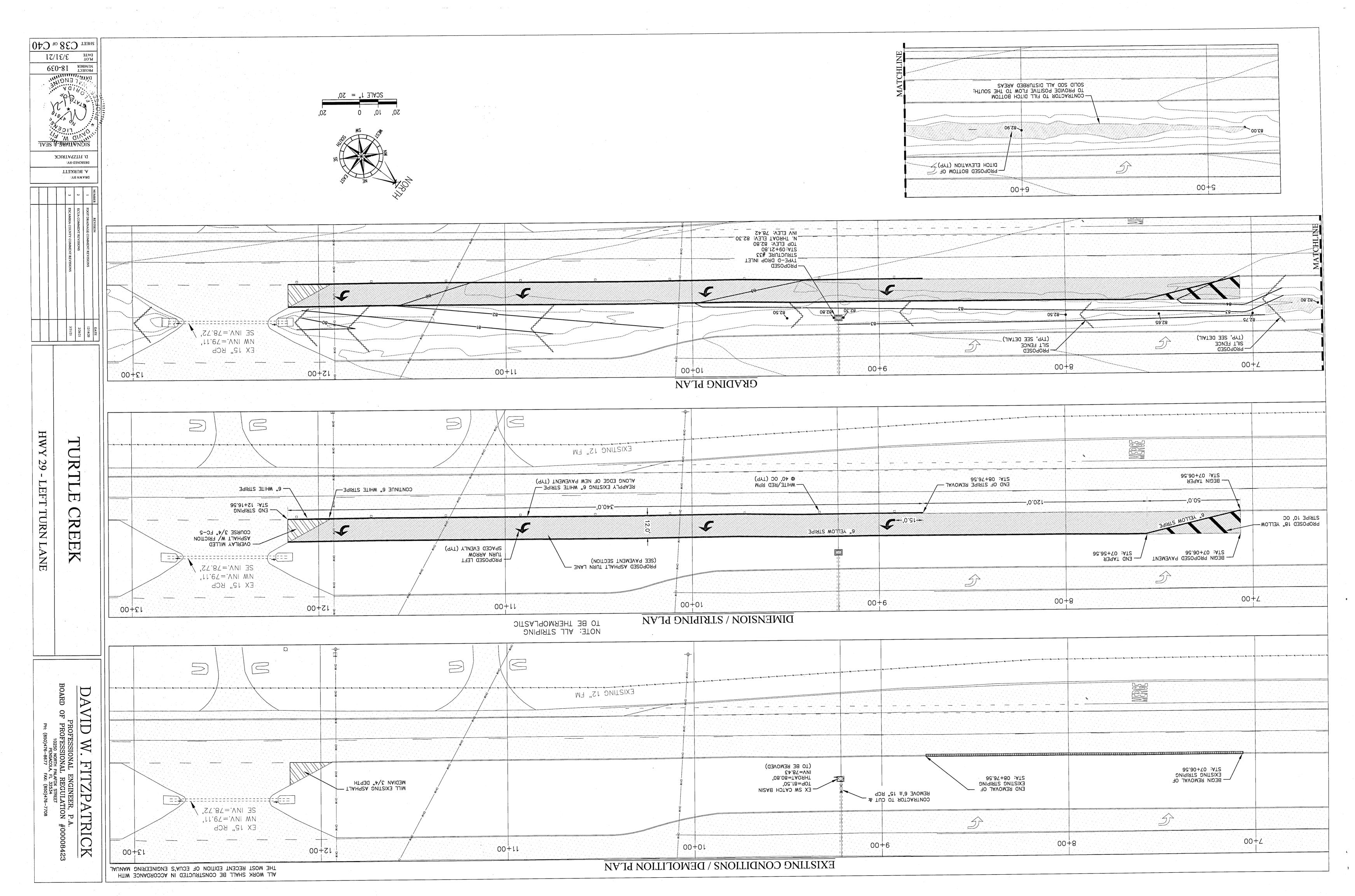
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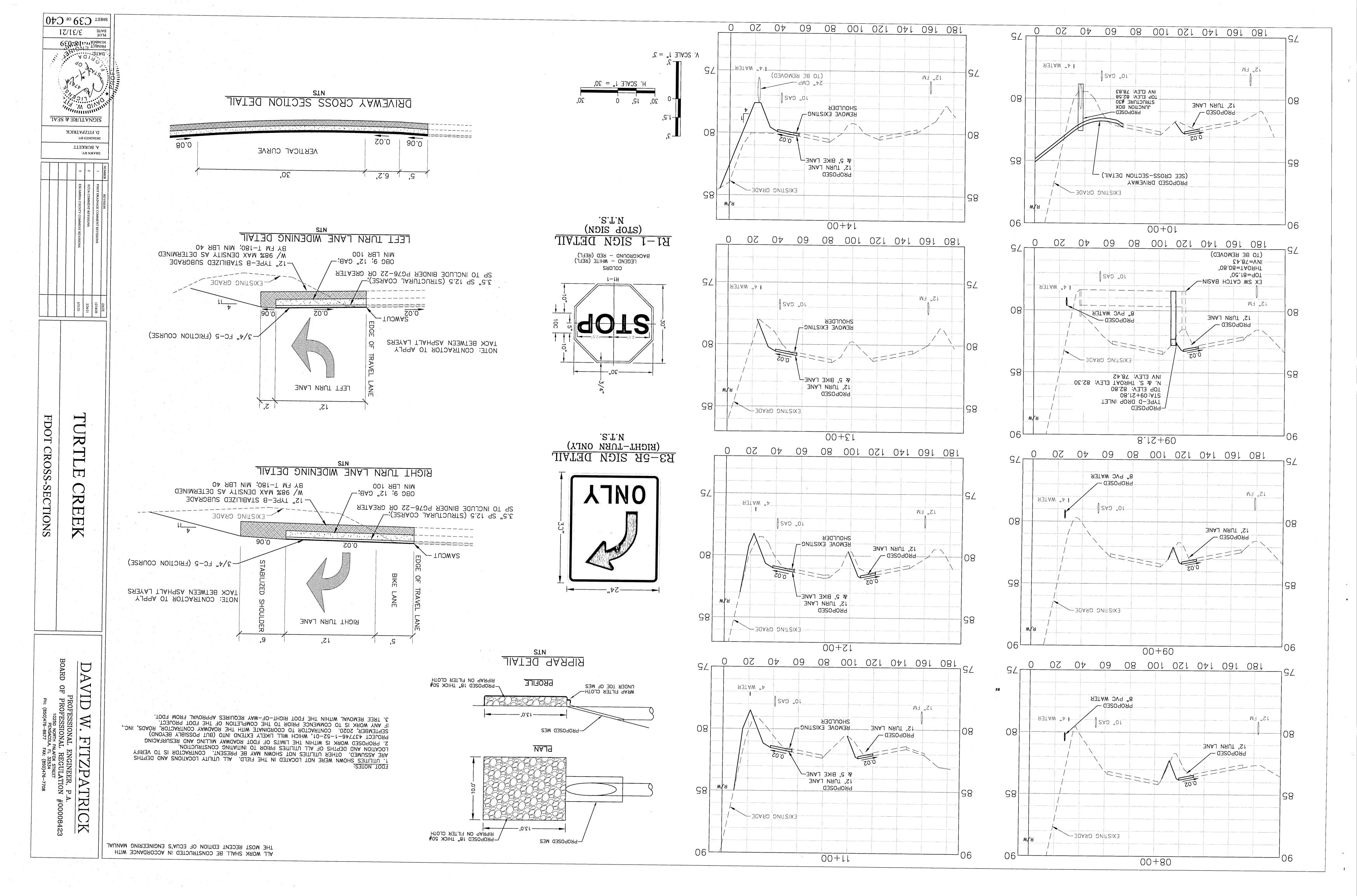
PROJECT NUMBER 18-039
PLOT DATE 3/31/21

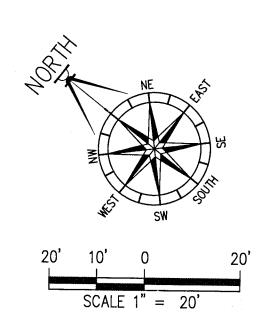


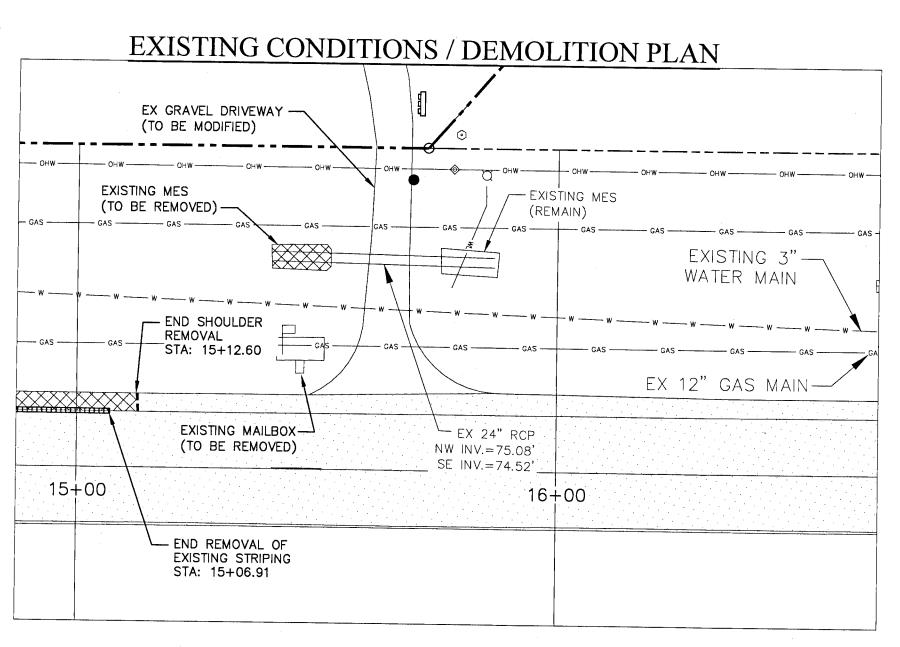


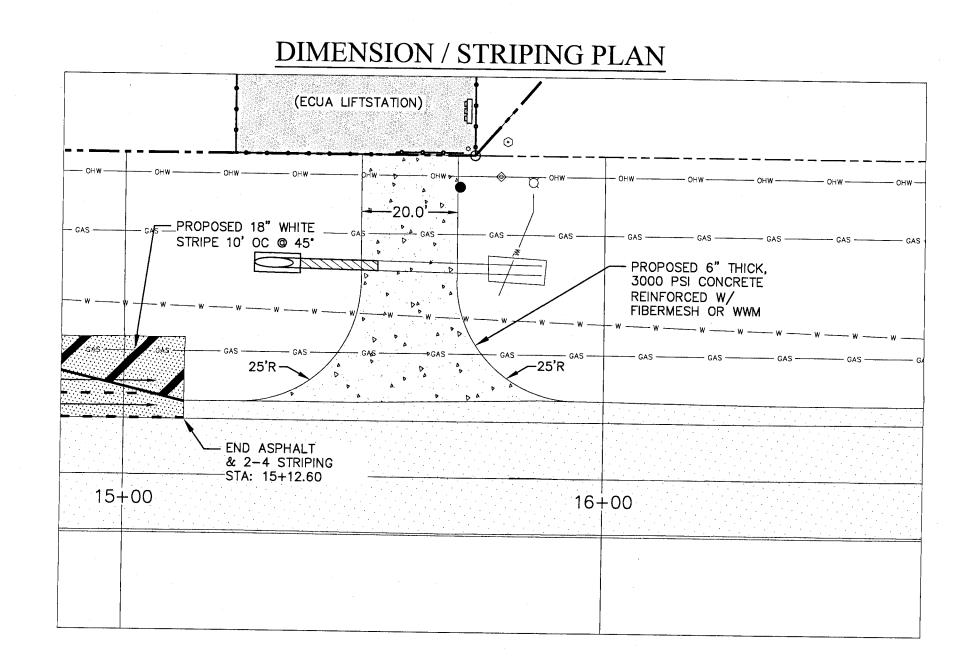


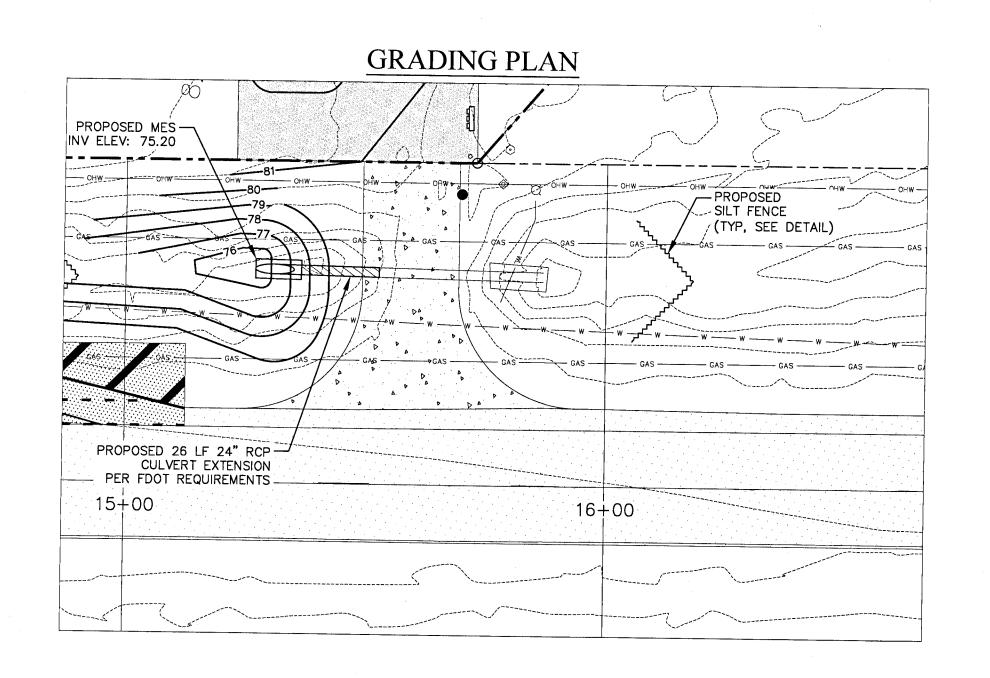


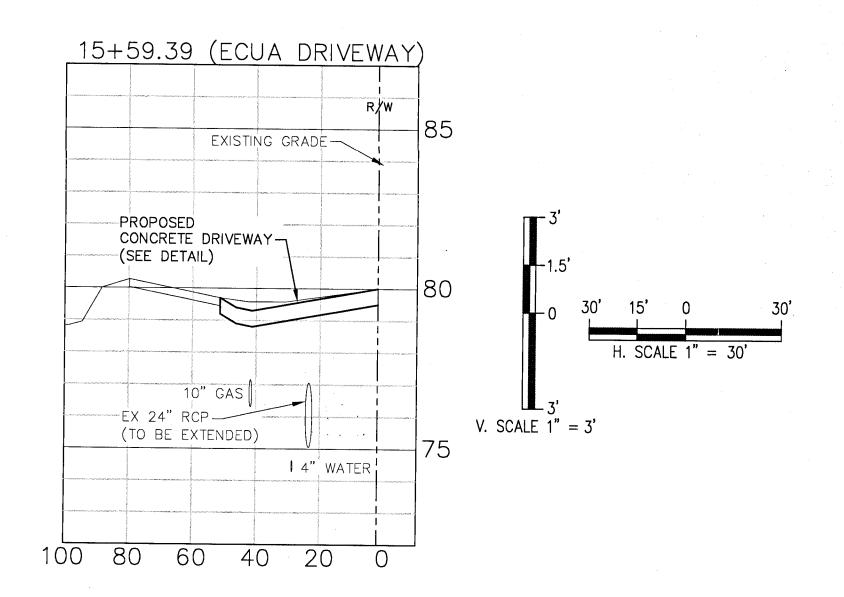


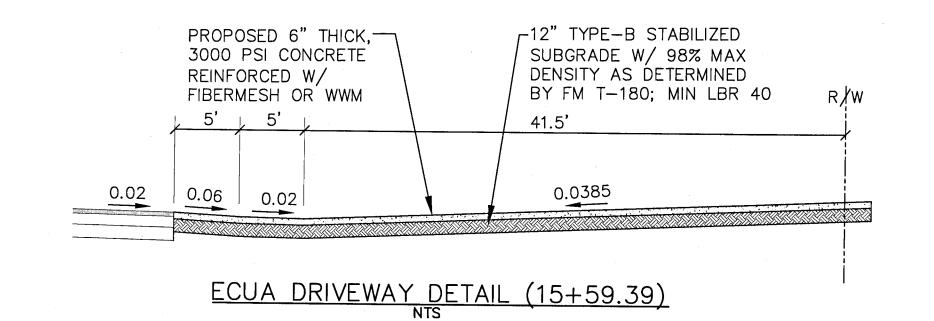












FDOT DRAINAGE COMMENT REVISIONS 12/14/20
ECUA COMMENT REVISIONS 2/26/21
ESCAMBIA COUNTY COMMENT REVISIONS 3/3/1/21

ZPATRICK

DA

CREEK

DRAWN BY:

A. BURKETT

DESIGNED BY:

D. FITZBATBION

D. FITZPATRICK

SIGNATURE & SEAT

SIGNATURE & SEA

NID W. F.

LICEV

NO PROJECT NUMBER 18-039

PLOT 3/31/21

SHEET C40 of C40