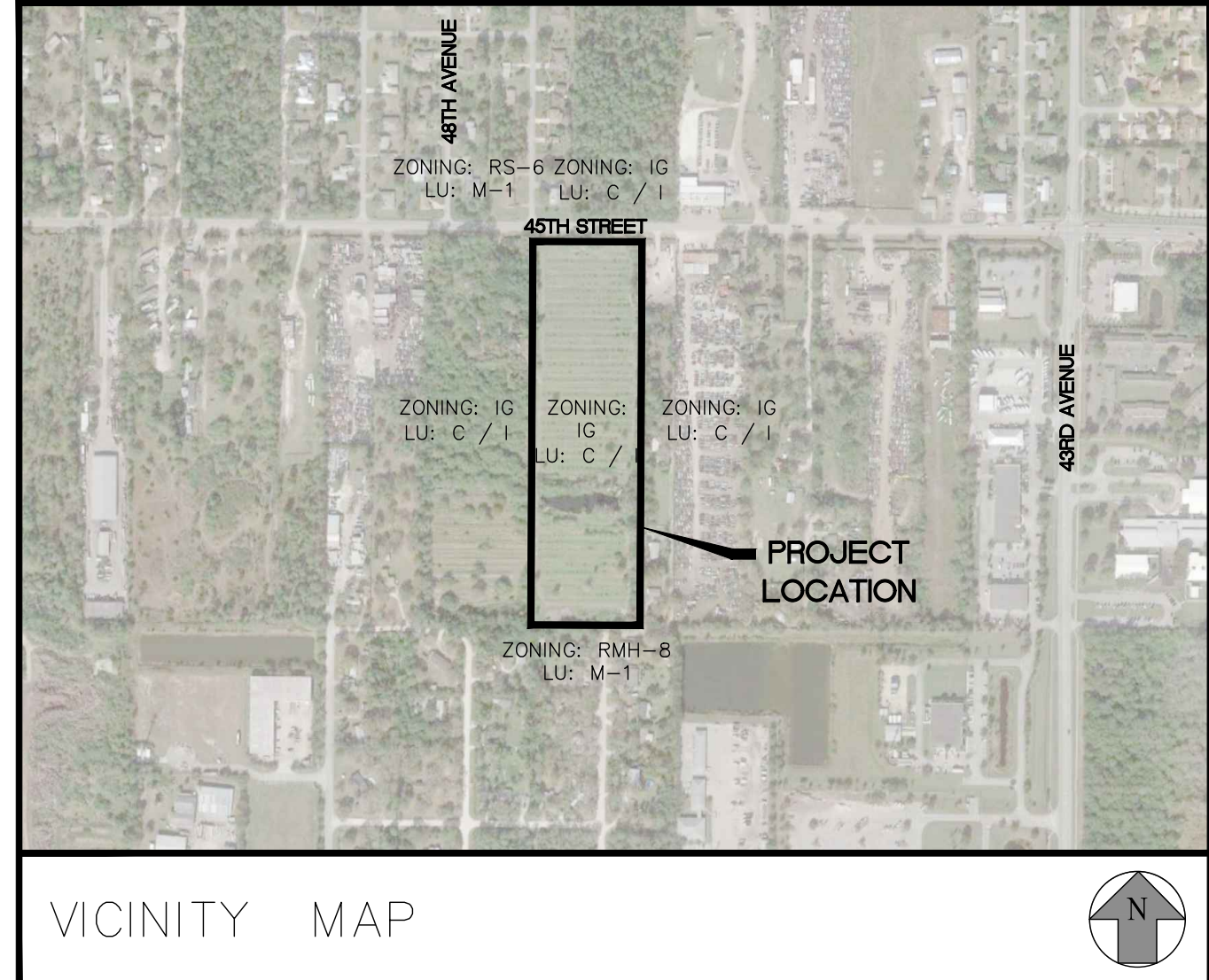
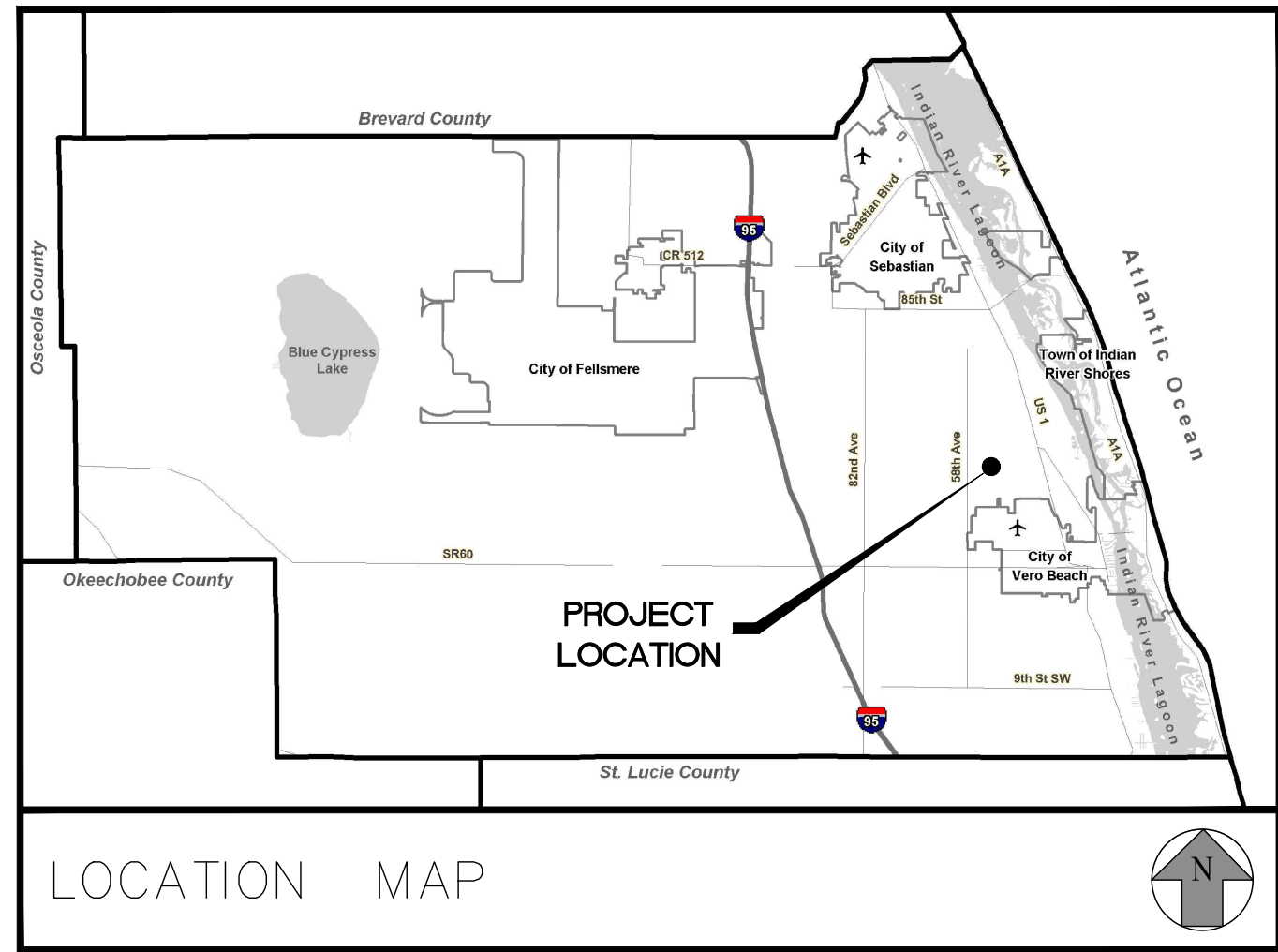


GENESIS INDUSTRIAL

SECTION 28, TOWNSHIP 32S, RANGE 39E
 INDIAN RIVER COUNTY, FLORIDA

NOVEMBER 2021
 REVISED: JUNE 2022
 REVISED: DECEMBER 2022
 REVISED: FEBRUARY 2023



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 PROJECT: 21-0053
 SHEET
C1

PRE-CONSTRUCTION REQUIREMENTS:

1. THE CONTRACTOR IS REQUIRED TO PERFORM HIS WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE VARIOUS PERMITS WHICH WILL BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
2. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE (SEQUENCE OF OPERATIONS) PRIOR TO THE PRE-CONSTRUCTION MEETING.
3. CONTRACTOR WILL ATTEND A PRE-CONSTRUCTION MEETING WITH THE DESIGN ENGINEER, MUNICIPALITY AND/ OR OWNER PRIOR TO LAND DISTURBANCE.
4. SHOP DRAWINGS SHALL BE SUBMITTED BEFORE ORDERING MATERIAL FOR PLANNED PROJECT. CORRESPONDING SHALL BE BETWEEN THE DESIGN ENGINEER AND THE LOCAL GOVERNING AGENCY AND IS THE RESPONSIBILITY OF THE CONTRACTOR.

CONSTRUCTION NOTES:

1. THE CONTRACTOR IS ADVISED TO THOROUGHLY REVIEW THIS PLAN PACKAGE SO AS TO BE TOTALLY PREPARED TO PRESENT HIS BID PRICES IN THE CONTRACT DOCUMENTS. THE PLAN PACKAGE SUFFICIENTLY DELINEATES THE SCOPE AND INTENT OF THE ROADWAY WORK TO BE ACCOMPLISHED. IT WILL, THEREFORE, BE INCUMBERT ON THE CONTRACTOR TO ADJUST HIS FEE DOLLARS TO REFLECT ANY AND ALL ITEMS WHICH MAY NOT BE CLEARLY OUTLINED OR THOSE ITEMS WHICH MAY NOT BE INDICATED BUT WHICH ARE NECESSARY FOR THE SUCCESSFUL COMPLETION OF THIS PROJECT WITHOUT ADDITIONAL COSTS TO THE OWNER.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH INDIAN RIVER COUNTY AND FDOT STANDARDS AND SPECIFICATIONS.
3. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR THE COORDINATION OF UTILITY RELOCATION.
4. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES IN THE FIELD WITH UTILITY OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION, AS REQUIRED BY THE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT. NOTIFY SUNSHINE AT 811.
6. CONTRACTOR SHALL TAKE EXTREME CAUTION WHEN EXCAVATING NEARBY EXISTING UTILITIES.
7. CONTRACTOR SHALL INFORM ENGINEER OF ANY CONFLICT BEFORE ANY FURTHER WORK IS COMPLETED.
8. UTILITIES ARE TO BE ADJUSTED BY UTILITY OWNER OR AS DIRECTED BY THE ENGINEER.
9. SURFACE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FOR USE IN ESTABLISHING DESIGN CRITERIA FOR THE PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND IS NOT TO BE CONSTRUED AS PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INQUIRE OF THE ENGINEER IF ADDITIONAL INFORMATION IS AVAILABLE, TO MAKE ARRANGEMENTS TO REVIEW SAME PRIOR TO BIDDING, AND IS TO MAKE HIS OWN DETERMINATION AS TO ALL SUBSURFACE CONDITIONS.
10. CONTRACTOR SHALL NOTIFY THE ENGINEER IF SOIL OR SUBSURFACE CONDITIONS UNSUITABLE FOR CONSTRUCTION ARE ENCOUNTERED.
11. ALL EXCAVATED SOILS DEEMED SUITABLE AS FILL MATERIAL AS DETERMINED BY THE ENGINEER SHALL BE UTILIZED ON SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. THE EXACT LOCATION OF DELIVERY ON SITE SHALL BE DETERMINED BY THE ENGINEER. ALL EXCAVATED SOILS DEEMED UNSUITABLE SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS OWN EXPENSE.
12. ITEM IN CONFLICT WITH DESIGN SUCH AS EXISTING CURBS AND GUTTERS, SIDEWALKS, DRAINAGE STRUCTURES, PAVEMENT AND EXCESS EXCAVATIONS ARE TO BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT HIS OWN EXPENSE.
13. CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS FOR CONSTRUCTION.
14. IT SHOULD BE NOTED THAT THE OCCUPATIONAL SAFETY AND HEALTH ACT PROHIBITS THE OPERATING OF EQUIPMENT OR MACHINES CLOSER THAN TEN (10) FEET TO ENERGIZED ELECTRIC LINES RATES AT FIFTY KILOVOLTS OR BELOW. ALSO, NO EXCAVATION IS PERMITTED WITHIN FIVE (5) FEET OF POWER POLE FACILITIES.
15. ALL IRONS AND MONUMENTS (P.R.M.'S) SHOWN ON PLANS, OR FOUND, SHALL BE PRESERVED. THOSE SHOWN IN PROPOSED PAVEMENT SHALL BE PROTECTED WITH A CAST IRON VALVE BOX.
16. ANY PUBLIC LAND CORNERS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE CONTRACTOR WILL NOTIFY THE ENGINEER.
17. ALL EXISTING TREES WITHIN THE RIGHT OF WAY ARE TO BE REMOVED AS CLEARING AND GRUBBING UNLESS OTHERWISE NOTED.
18. WHEN REFERENCED TO, FDOT REFERS TO FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS, CURRENT EDITION.
19. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION TO A CONDITION EQUAL TO, OR BETTER THAN THAT WHICH IS NOW EXISTING.
20. BACKFILL, GRADE AND SOD AS REQUIRED AROUND ALL NEW CONSTRUCTION AND ALL DEVELOPED LOTS TO PREVENT EROSION. SEED AND MULCH WILL ONLY BE ALLOWED TO RESTORE UNDEVELOPED LOTS AFFECTED BY CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.
21. SODDING TO BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER. SOD ALL DISTURBED AREAS UPON COMPLETION.
22. ALL EXCESS CONSTRUCTION MATERIAL AND WASTE TO BE HAULED OFF-SITE AND DISPOSED OF PROPERLY AT CONTRACTOR'S EXPENSE.
23. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH FDOT STANDARDS FOR TRAFFIC CONTROL THROUGH WORK ZONES AND MUTCD (PART VI).
24. PROPERTY OWNERS AND BUSINESSES WITHIN THE AREA OF CONSTRUCTION SHALL BE GIVEN ACCESS TO THEIR PROPERTY AT ALL TIMES DURING THE PERIOD OF CONSTRUCTION.
25. ALL MAILBOXES SHALL BE RELOCATED BY THE CONTRACTOR AS DIRECTED BY THE U.S. POSTAL MAIL CARRIER.
26. THE CONTRACTOR SHALL REMOVE, COVER OR OBLITERATE EXISTING ROADWAY SIGN AND PAVEMENT MARKINGS THAT CONFLICT WITH THE CONSTRUCTION TRAFFIC CONTROL PLANS.
27. CONTRACTOR TO PROTECT ALL SPRINKLER HEADS NOT IN CONFLICT WITH DESIGN AND RELOCATE ALL THOSE WHICH ARE IN CONFLICT TO A LOCATION DETERMINED IN FIELD.
28. SOD TWO (2) FEET MINIMUM ALONG SIDE PROPOSED EDGE OF PAVEMENT.
29. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY DRAINAGE MEASURES AS REQUIRED TO ADEQUATELY DRAIN THE PROJECT AND ANY TEMPORARILY TRAVELED ROADWAYS. TEMPORARY DRAINAGE DESIGN, CONSTRUCTION AND MAINTENANCE IS THE CONTRACTOR'S RESPONSIBILITY; HOWEVER, ALL SUCH MEASURES MUST BE APPROVED BY THE ENGINEER.
30. THE EXISTING SIDEWALK SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED.
31. GRADES SHOWN ARE FINISHED GRADES.
32. SAWCUT CONCRETE OR ASPHALT DRIVEWAYS AS REQUIRED FOR REPLACEMENT.
33. ALL ABANDONED UTILITIES (INCLUDING PIPES, CABLES AND STRUCTURES) FOUND IN THE RIGHT OF WAY AND NOT SHOWN ON THE PLANS, ARE TO BE REMOVED AND PROPERLY DISPOSED OF AT THE EXPENSE OF THE CONTRACTOR. THIS INCLUDES ALL EXOTIC PIPES LIKE ASBESTOS-CEMENT PIPE. COST TO BE INCLUDED IN CLEARING AND GRUBBING ITEM.
34. DRIVEWAY LOCATIONS AND WIDTHS ARE APPROXIMATE AND ARE TO BE ADJUSTED AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
35. BENCHMARK DATUM IN NAVD 88.
36. BACKFILL AND SOD AS REQUIRED BEYOND RIGHT OF WAY LINES ON INDIVIDUAL LOTS TO MAINTAIN POSITIVE DRAINAGE FLOW INTO CURB AND GUTTER.
37. GRADE AND SOD SWALES TEN (10) FEET FROM PROPOSED DITCH BOTTOM INLETS AND MITERED END SECTIONS ON SIDE STREETS AS REQUIRED.
38. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN \bar{v} (BASELINE) AND \bar{c} (CENTERLINE) CONSTRUCTION THROUGHOUT THE PROJECT.
39. THE CONTRACTOR SHALL REMOVE DRIVEWAY APRONS AND DRIVEWAY CULVERTS AND SHALL MAINTAIN ROUGH GRADE FOR UTILITY MODIFICATIONS.
40. ALL EXISTING SWALES SHALL BE PROTECTED BY THE CONTRACTOR. ANY DAMAGE TO THE SWALE LINE SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
41. PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL BID ITEMS SHALL BE INCLUDED IN THE CONTRACT PRICES FOR BID ITEMS.
42. MAINTAIN A MINIMUM OF ONE (1) FOOT CLEARANCE BETWEEN POWER POLE AND EDGE OF SIDEWALK.
43. WHEN ALL OTHER PERMANENT CONSTRUCTION IS COMPLETE, THE FINAL SURFACE COURSE SHALL BE PLACED.
44. CONSTRUCTION OPERATIONS FOR PLACEMENT OF THE FINAL SURFACE COURSE SHALL BE LIMITED TO A DISTANCE, AS DIRECTED BY THE ENGINEER, THE CONTRACTOR CAN COMPLETE IN ONE (1) DAY.
45. THE CONTRACTOR SHALL IMPLEMENT TEMPORARY PAVEMENT MARKINGS UNTIL THE FINAL SURFACE COURSE HAS CURED (MINIMUM THIRTY (30) DAYS AFTER FINAL SURFACE COURSE PLACEMENT). ANY TEMPORARY PAINTED MARKINGS PLACED ON THE FINAL.
46. PAVEMENT TRANSITION SHALL BE MADE IN ACCORDANCE WITH PAVEMENT TRANSITION DETAIL.
47. ALL APPROVED PERMIT CONDITIONS, INCLUDING BUT NOT LIMITED TO FDOT, FDEP AND INDIAN RIVER COUNTY, SHALL BE MET BY CONTRACTOR PRIOR TO CERTIFICATION OF COMPLETION BY ENGINEER.

ROADWAY SPECIFICATIONS

GENERAL

IT IS INTENDED THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" MOST CURRENT EDITION BE USED WHERE APPLICABLE FOR VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THAT WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY, THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT.

IF WITHIN THAT PARTICULAR SECTION ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE A PART OF THE STANDARD SPECIFICATIONS ALSO.

THE CONTRACTOR SHALL GIVE THE ENGINEER 48 HOURS NOTICE PRIOR TO REQUESTING INSPECTIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.

THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF TWO YEARS FROM THE DATE OF PROJECT ACCEPTANCE, DURING WHICH ALL FAULTY CONSTRUCTION AND/OR MATERIALS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

GRADING

THE CONTRACTOR SHALL PERFORM ALL GRADING NECESSARY TO ACHIEVE THE PROPOSED PLAN GRADES INCLUDING TYPICAL SECTIONS.

ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS.

STAKING

CONSTRUCTION STAKING WILL BE PERFORMED BY THE CONTRACTOR.

STABILIZING

STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO THE FLORIDA BEARING VALUE AS PER PLAN FOR THE DEPTH AND LIMITS SHOWN ON THE PLAN, AND IN ACCORDANCE WITH SECTION 160 OF THE STANDARD SPECIFICATIONS.

(TYPE C STABILIZATION). ALL STABILIZED AREAS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

BASE COURSE

THE BASE SHALL BE CONSTRUCTED OF EITHER LIMEROCK MATERIAL IN ACCORDANCE WITH SECTION 911 OR CEMENTED COQUINA SHELL MATERIAL IN ACCORDANCE WITH SECTION 915 OF THE STANDARD SPECIFICATIONS.

LIMEROCK BASE AND CEMENTED COQUINA SHELL BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE ROCK PIT CERTIFICATION FOR CEMENTED COQUINA SHELL MATERIAL. BASE SHALL BE COMPACTED BY AT LEAST 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. BASE SHALL BE APPROVED PRIOR TO PRIME COAT.

PRIME AND TACK COAT

PRIME AND TACK COAT FOR THE BASE SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

ASPHALTIC CONCRETE SURFACE COURSE (A.C.S.C.)

TYPE S-III ACSC SHALL BE CONSTRUCTED FOR THE DEPTH AND LIMITS SHOWN ON THE PLAN, IN ACCORDANCE WITH SECTIONS 320, AND 330 OF THE STANDARD SPECIFICATIONS.

TESTING

THE CONTRACTOR SHALL RETAIN THE SERVICES OF AN APPROVED INDEPENDENT TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS ON SUBGRADE, BASE AND SURFACE COURSE MATERIALS. TEST RESULTS MUST BE SUBMITTED PRIOR TO ANY REQUEST FOR PAYMENT ON THE ABOVE ITEMS.

THE SCHEDULE FOR TESTING OF THE ROAD CONSTRUCTION SHALL BE AS FOLLOWS:

A. SUBGRADE:

1. FLORIDA BEARING VALUE TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 200 FEET, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN SUBSOIL CONDITIONS.
2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 200 FEET OR CLOSER AS MIGHT BE NECESSARY.

B. BASE:

1. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 500 FEET OR CLOSER AS MIGHT BE NECESSARY.

ALL TESTING SHALL BE TAKEN IN A STAGGERED SAMPLING PATTERN FROM A POINT 1 1/2 INCHES INSIDE THE LEFT EDGE, TO THE CENTER, TO A POINT 12 INCHES INSIDE THE RIGHT EDGE OF THE ITEM TESTED.

IF ANY TEST INDICATES THAT THE WORK DOES NOT MEET THE SPECIFICATIONS, THE SUBSTANDARD AREA SHALL BE REWORKED OR CORRECTED AND RETESTED, AT THE CONTRACTOR'S EXPENSE, UNTIL THE PROVISIONS OF THESE SPECIFICATIONS ARE MET.

ALL PASSING TESTS SHALL BE PAID FOR BY THE OWNER. ALL FAILING TESTS SHALL BE PAID FOR BY THE CONTRACTOR.

CLEAN-UP

THE CONTRACTOR MUST PROVIDE CLEAN-UP OF EXCESS CONSTRUCTION MATERIAL UPON COMPLETION OF THE PROJECT. THE SITE MUST BE LEFT IN A NEAT, CLEAN, GRADED CONDITION.

CONSTRUCTION IN STREETS AND ROAD RIGHT-OF-WAYS

1. OPEN ROAD CUTS REQUIRES PRIOR APPROVAL OF THE CITY, COUNTY, STATE OR ANY OTHER AGENCY WHICH MAY HAVE JURISDICTION.
2. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND STANDARDS.
3. ALL AREAS IN EXISTING RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION SHALL RECEIVE SOLID SOD.
4. STREET RESTORATION TO BE DONE AS PER INDIAN RIVER COUNTY STANDARDS.
5. THE CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF THE STATE, COUNTY AND CITY AUTHORITIES REGARDING CLOSING OR RESTRICTING THE USE OF PUBLIC STREETS OR HIGHWAYS.
6. TRAFFIC CONTROL ON ALL COUNTY AND STATE HIGHWAY RIGHT-OF-WAYS SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION.

DRAINAGE SPECIFICATIONS

STORM INLETS AND MAN-HOLES SHALL BE CONSTRUCTED IN GENERAL ACCORDANCE WITH SECTION 425 OF THE STANDARD SPECIFICATIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION.

CONCRETE SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 3000 PSI.

ALL REINFORCING STEEL TO BE ASTM A 615-72 GRADE 40, FYP = 40,000 PSI, AND SHALL BE HANDLED AND PLACED IN ACCORDANCE WITH ACI 318-71.

PRECAST CONCRETE MANHOLES AND STORM INLETS MAY BE USED UPON THE ENGINEER'S APPROVAL OF THE MANUFACTURER'S SHOP DRAWINGS.

STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 430 AND RELATED SECTIONS OF THE STANDARD SPECIFICATIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION.

CONCRETE

UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI. ALL WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE AND THE APPLICABLE BUILDING CODES HAVING JURISDICTION IN THE AREA.

CULVERT PIPES

REINFORCED CONCRETE PIPE (R.C.P.) SHALL BE IN ACCORDANCE WITH SECTION 449 OF THE STANDARD SPECIFICATIONS.

PRECAST CONCRETE DRAINAGE PRODUCTS

ALL PRECAST CONCRETE DRAINAGE PRODUCTS (INCLUDING BUT NOT LIMITED TO ROUND CONC. PIPE, ELLIPTICAL CONC. PIPE, UNDERDRAINS, MANHOLES, INLETS, ENDWALLS, JUNCTION BOXES, THREE SIDED CONC. CULVERTS, AND CONC. BOX CULVERTS) SHALL BE IN ACCORDANCE WITH SECTION 449 OF THE STANDARD SPECIFICATIONS.

GROUNDWATER

GROUNDWATER MAY BE ENCOUNTERED ON THIS SITE. THE CONTRACTOR IS TO PLAN ACCORDINGLY.

RECORD DRAWINGS

CONTRACTOR SHALL KEEP AND MAINTAIN RECORD DRAWINGS ON THE PROJECT SITE AT ALL TIMES WHICH SHALL BE ANNOTATED BY THE CONTRACTOR DEPICTING ANY CHANGES MADE IN THE FIELD WHICH DIFFER FROM THE CONTRACT DRAWINGS. RECORD DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, INVERT AND TOP ELEVATIONS OF CULVERTS AND INLET STRUCTURES. CONTRACTOR SHALL SUBMIT COMPLETE AND FINAL RECORD DRAWINGS TO ENGINEER UPON COMPLETION OF PROJECT AND PRIOR TO FINAL INSPECTION AND FINAL PAYMENT.

INSPECTION

MINIMUM CONSTRUCTION INSPECTION CHECKPOINTS

THE ENGINEER SHALL BE NOTIFIED:

1. PRIOR TO ANY MAJOR DEVIATION FROM THE APPROVED PLANS.
2. PRIOR TO BACKFILLING ANY PIPE TRENCHES.
3. UPON COMPLETION OF SUBGRADE GRADING AND COMPACTION.
4. UPON BEGINNING OF SPREADING OF ROCK BASE MATERIAL.
5. UPON COMPLETION OF GRADING AND COMPACTION OF THE BASE MATERIAL AND PRIOR TO PRIMING.
6. IMMEDIATELY PRIOR TO AND UPON APPLICATION OF A.C.S.C.
7. UPON COMPLETION OF CONSTRUCTION.

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.
2. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
3. ALL WORK SHALL BE IN WORKMANLIKE MANNER AND SHALL CONFORM WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED TO BEGIN WORK.
4. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH REQUIREMENTS OF THE INDIAN RIVER COUNTY, WATER MANAGEMENT DISTRICT, FDEP AND THESE PLANS AND SPECIFICATIONS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE FOR CONSTRUCTION OPERATIONS.
6. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
7. CONTRACTOR SHALL SUPPLY DENSITY TESTS TO ENGINEER ON ALL SUB-GRADE AND BASE. TESTS SHALL BE PREPARED PER AASHTO T-180 METHOD.
8. SLOPE GRADES FROM ELEVATIONS SHOWN TO EXISTING GRADE AT PROPERTY LINE. MAXIMUM SLOPE 4:1.
9. ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR ANY INSPECTION.
10. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH M.U.T.C.D. STANDARDS, INDIAN RIVER COUNTY AND F.D.O.T.
11. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
12. THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTORS BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE. WHEN GROUNDWATER IS ENCOUNTERED THE CONTRACTOR SHALL PLAN ACCORDINGLY.
13. ALL INLETS SHALL HAVE A 6" MIN. SUMP BELOW LOWEST INVERT.
14. EROSION CONTROL FENCING MUST BE IN PLACE PRIOR TO GRADING.
15. PIPE LENGTHS AND SLOPES SHOWN ARE APPROXIMATE.
16. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
17. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUDED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
18. CONTRACTOR SHALL ADJUST INLET/STRUCTURE OR CONNECTION LOCATION AS REQUIRED TO ENSURE PROPOSED STRUCTURES AND PIPES ARE IN PROPER ALIGNMENT AND MATCH SLOPE OF EXISTING PIPES OR CONNECTIONS.
19. THIS PLAN CONTEMPLATES ACCESS CONNECTIONS TO ADJACENT ROADS AS SHOWN.
20. FILL MATERIAL MAY NOT BE STOCKPILED HIGHER THAN SIX (6) VERTICAL FEET ON SITE PER INDIAN RIVER COUNTY.
21. DIMENSIONS SHOWN ARE TO EDGE OF GUTTER OR PAVEMENT, RADII SHOWN ARE TO FACE OF CURB.
22. ALL SIGNS SHALL BE PER M.U.T.C.D. STANDARDS.
23. ALL PAVEMENT MARKINGS, EXCEPT PARKING STALL STRIPING, SHALL BE THERMOPLASTIC PER INDIAN RIVER COUNTY REQUIREMENTS.
24. THE USES PROPOSED AS PART OF THIS PLAN DO NOT REQUIRE A SUBMITTAL OF A RISK MANAGEMENT PLAN PURSUANT TO U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGULATIONS AND SHALL NOT EXCEED THE EPA'S RMP THRESHOLD QUANTITIES OF LISTED SUBSTANCES.
25. WATER FOR FIRE FIGHTING PURPOSES SHALL BE INDICATED WITH A BLUE ROADWAY REFLECTOR. PLACE ONE FOOT OFF OF THE CENTERLINE OF THE ROAD FACING THE FIRE HYDRANT. THIS INCLUDES NEW AND EXISTING SOURCES.
26. REGARDLESS OF PRIVATE OR PUBLIC DEDICATIONS, THERE SHALL BE NO UTILITY CONNECTIONS, METER BOXES OR VALVE BOXES IN EXISTING OR PROPOSED SIDEWALK OR DRIVEWAY AREAS.
27. CONTRACTOR SHALL ADJUST INLET/STRUCTURE OR CONNECTION LOCATION AS REQUIRED TO ENSURE PROPOSED STRUCTURES AND PIPES ARE IN PROPER ALIGNMENT AND MATCH SLOPE OF EXISTING PIPES OR CONNECTIONS.
28. ANY STATE AND FEDERAL PERMITS THAT MAY BE REQUIRED AS A RESULT OF LAND CLEARING AND LANDSCAPING ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
29. CONTRACTOR IS RESPONSIBLE TO PROTECT AND/OR REPLACE ALL SURVEY MONUMENTATION BY A LICENSED SURVEYOR IN THE STATE OF FLORIDA.
30. ALL HANDICAPPED PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FDOT STANDARD INDEX 711-001, LATEST EDITION.
31. COMMERCIAL/MULTI-FAMILY BUILDINGS SHALL POST A MINIMUM 6 INCH NUMERICAL ADDRESS.
32. THERMOPLASTIC PAVEMENT MARKINGS SHALL BE REQUIRED ON EXISTING / PROPOSED DRIVEWAYS THAT CONNECT TO THE COUNTY RIGHT-OF-WAY (ROW) AND PROPOSED PAVEMENT MARKINGS WITHIN 25' OF EDGE OF PAVEMENT.
33. ALL SUBDIVISION CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE INDIAN RIVER COUNTY ORDINANCES.
34. ALL NUISANCE EXOTIC VEGETATION EXISTING WITHIN DEVELOPMENT PROJECT SITE PROPERTY MUST BE REMOVED IN CONJUNCTION WITH SITE DEVELOPMENT.

NOTE:
THIS SITE IS SUBJECT TO THE SPECIFIC LIMITATIONS AND / OR ADDITIONAL CRITERIA FOR CERTAIN TYPES OF USES, AS LISTED IN SECTION 911.23 OF THE INDIAN RIVER COUNTY LAND DEVELOPMENT REGULATIONS (LDR'S).

PRIMARY BENCHMARK:
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 REFERENCING INDIAN RIVER COUNTY BENCHMARK BM072010 AT AN ELEVATION OF 24.40 FEET (NAVD88)

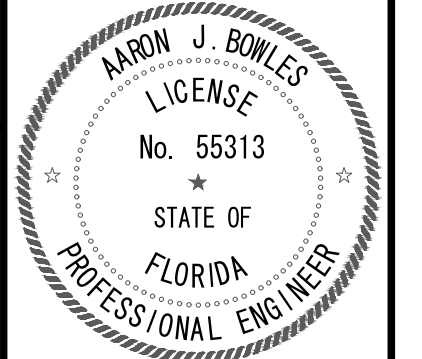
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7	GWR	
6	DRAWN	
5	GWR	
4	DATE	NOVEMBER 2021
3	TRC COMMENTS	11-22-2022
2	TRC COMMENTS	06-21-2022
1	REVISIONS PER ITC	AJB
		6/6/2023
		DATE ISSUED

MBV ENGINEERING, INC.
MOA BOWLES VILLALBAZAR & ASSOCIATES
CIVIL ENGINEERING CA #57328
VPO MARCH 4, 2016
1085 20TH STREET
FT. PIERCE, FL 34915
TEL: (888) 333-3333
FX: (888) 778-3411

GENERAL NOTES

GENESIS INDUSTRIAL

INDIAN RIVER COUNTY



AARON J. BOWLES
FL. P.E. #55313

SHEET

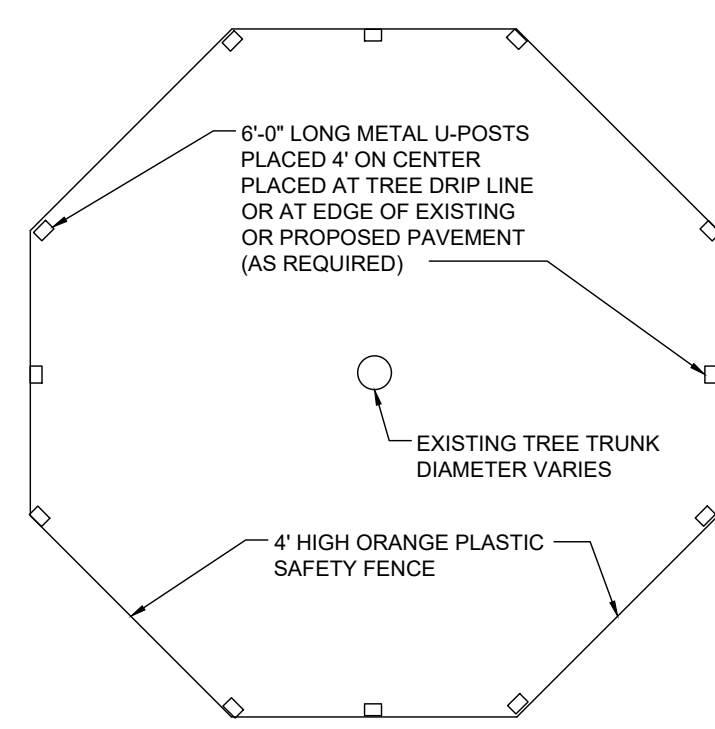
C2

21-0053

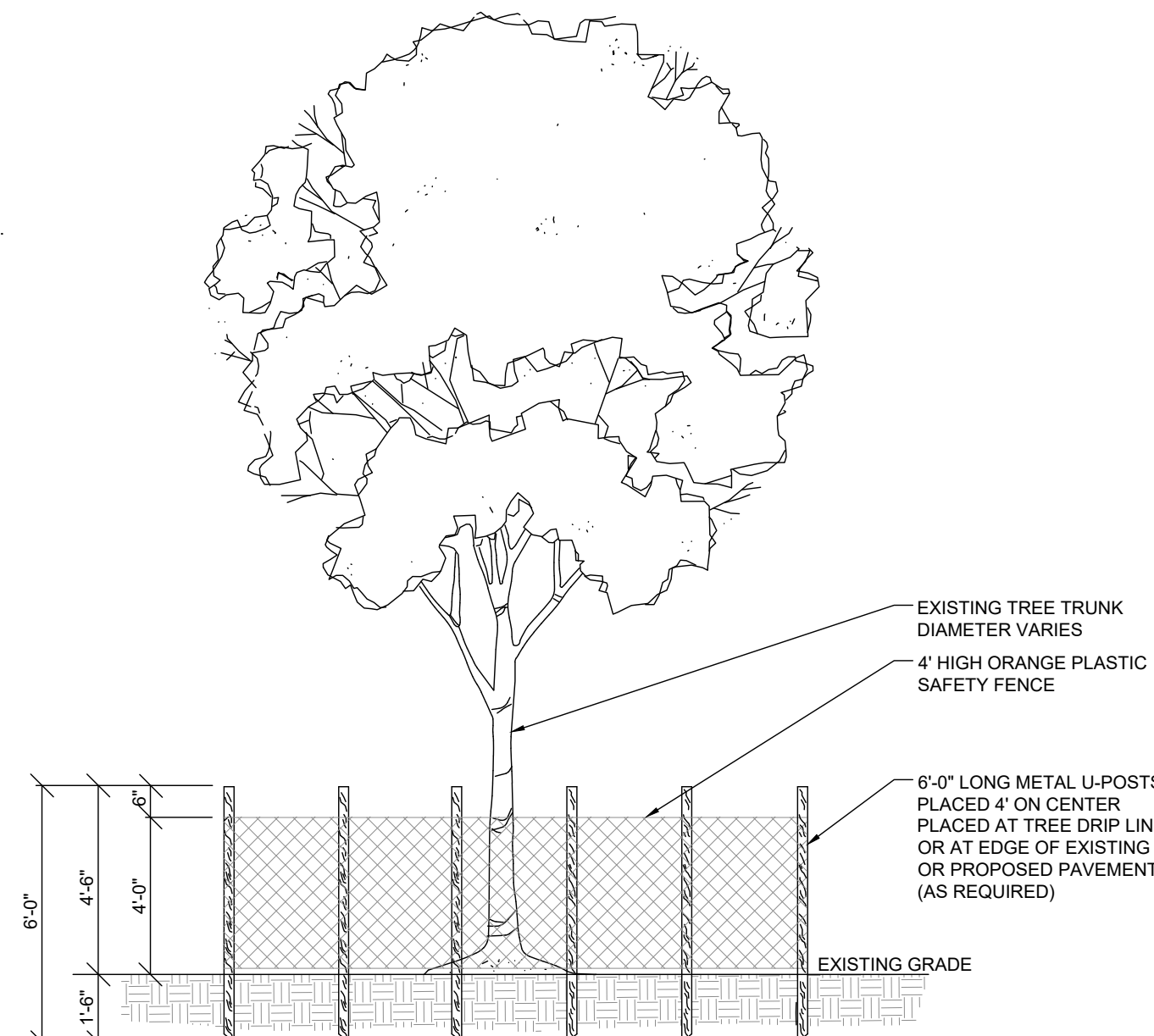
LEGAL DESCRIPTION:

COMMENCING AT THE NORTHEAST CORNER OF TRACT 2, SECTION 28, TOWNSHIP 32 SOUTH, RANGE 39 EAST, ACCORDING TO THE LAST GENERAL PLAT OF LANDS OF THE INDIAN RIVER FARMS COMPANY, FILED IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF ST. LUCIE COUNTY, FLORIDA IN PLAT BOOK 2, PAGE 25, SAID LAND NOW LYING AND BEING IN INDIAN RIVER COUNTY, THENCE ALONG THE EAST LINE OF SAID TRACT 2 SOUTH 00°18'45" WEST TO THE SOUTH LINE OF INDIAN RIVER FARMS WATER CONTROL DISTRICT SUB-LATERAL A7, A DISTANCE OF 30.00 FEET, THENCE ALONG SAID SOUTH LINE OF SUB LATERAL A7 NORTH 89°48'52" WEST, A DISTANCE OF 114.49 FEET TO THE POINT OF BEGINNING, THENCE ON A LINE PARALLEL WITH SAID EAST LINE OF TRACT 2, SOUTH 00°18'45" WEST TO THE SOUTH LINE OF TRACT 2, A DISTANCE OF 1301.61 FEET, THENCE ALONG SAID SOUTH LINE NORTH 89°44'09" WEST, A DISTANCE OF 370.28 FEET, THENCE PARALLEL TO SAID EAST LINE NORTH 00°18'45" EAST TO SAID SOUTH LINE OF SUB LATERAL A7, A DISTANCE OF 1301.10 FEET, THENCE ALONG SAID SOUTH LINE OF SUB LATERAL A7 SOUTH 89°48'52" EAST, A DISTANCE OF 370.28 FEET TO THE PLACE AND POINT OF BEGINNING.

- TREE PROTECTION NOTES:**
1. ALL TREES RETAINED ON A SITE SHALL BE PROTECTIVELY BARRICADED BEFORE AND DURING CONSTRUCTION ACTIVITIES.
 2. UNDERGROUND UTILITY LINES SHALL BE ROUTED AROUND EXISTING TREES TO THE OUTSIDE OF THE DRIPLINE WHERE ABLE.
 3. INSTALLATION OF FENCES AND WALLS SHALL TAKE INTO CONSIDERATION THE ROOT SYSTEMS OF EXISTING TREES.
 4. FENCES/BARRICADE SHALL BE INSTALLED AT PERIMETER OF ALL TREES OR GROUP OF TREES TO BE PRESERVED. FENCE SHALL BE MAINTAINED DURING CONSTRUCTION.



PLAN VIEW



ELEVATION

TREE PROTECTION BARRIER DETAIL

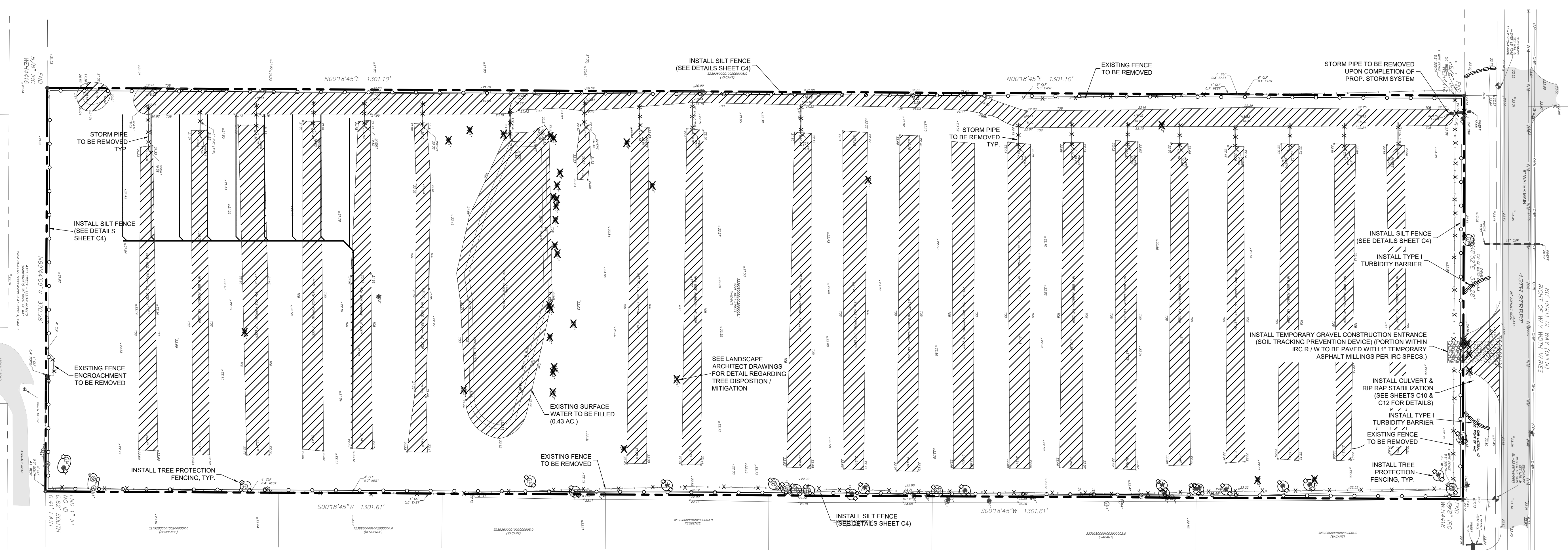
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DEMOLITION NOTES

1. ALL EXOTIC AND INVASIVE SPECIES TO BE REMOVED CONGRUENT WITH DEVELOPMENT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE ATTAINMENT OF ALL DEMOLITION PERMITS NECESSARY FOR PROPOSED CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY / ALL NECESSARY EROSION CONTROL MEASURES AS PRESENTED ON THIS SHEET AND INCLUDED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
4. ALL BARRIERS AND PROTECTION MEASURES FOR TREES BEING SAVED SHALL BE PLACED BEFORE ANY DEMOLITION ACTIVITY BEGINS. LARGE TREES ON ADJACENT PROPERTIES, NEAR THE PROPERTY LINE, SHOULD ALSO BE PROTECTED.
5. SEE LANDSCAPE ARCHITECT SPECIFICATIONS FOR SPECIFIC INFORMATION REGARDING TREE REMOVAL / MITIGATION.

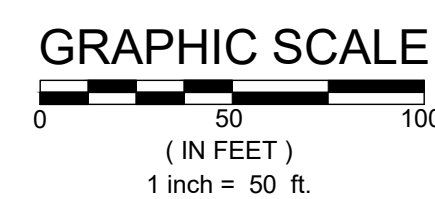
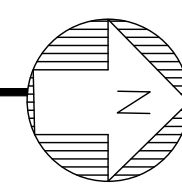
LEGEND

BFP = BACKFLOW PREVENTER	PG. = PAGE
BOC = BACK OF CURB	POB = POINT OF BEGINNING
BWF = BARBED WIRE FENCE	POC = POINT OF COMMENCEMENT
CLF = CHAIN LINK FENCE	PSM = PROFESSIONAL SURVEYOR AND MAPPER
CM = CONCRETE MONUMENT	PVC = POLY VINYL CHLORIDE
CMP = CORRUGATED METAL PIPE	RCP = REINFORCED CONCRETE PIPE
CONC. = CONCRETE	(S) = SURVEYED
COVD. = COVERED	TOB = TOP OF BANK
(D) = DESCRIPTION	TOS = TOP OF SLOPE
ECMP = ELLIPTICAL CORRUGATED METAL PIPE	TRANS = TRANSFORMER
EDR = EDGE OF DIRT DRIVE	UG = UNDERGROUND
EL = ELEVATION	WDF = WOODEN FENCE
EM = ELECTRIC METER	WL = WATER LINE
FFE = FINISHED FLOOR ELEVATION	⊕ = FIRE HYDRANT
FM = FORCE MAIN	⊕ = GUY ANCHOR
FND = FOUND	⊕ = UTILITY POLE
GV = GATE VALVE	⊕ = WATER GATE VALVE
HW = HEADWALL	⊕ = WELL
ID = IDENTIFICATION	⊕ = WATER METER
IP = IRON PIPE	⊕ = OAK TREE DIA. IN INCHES (38) OAKS
IR = IRON ROD	⊕ = PALM TREE DIA. IN INCHES (36) PALMS
IRC = IRON ROD WITH CAP	⊕ = PINE TREE DIA. IN INCHES (10) PINES
LB = LICENSED BUSINESS	
LS = LICENSED SURVEYOR	
OHW = OVERHEAD WIRES	
O.R.B. = OFFICIAL RECORD BOOK	
(P) = PLAT	
P.B. = PLAT BOOK	



EXISTING CONDITIONS, DEMOLITION AND EROSION CONTROL PLAN

SCALE: 1" = 50'



LEGEND

- EXISTING ASPHALT
- PROPOSED TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
- PROPOSED TEMPORARY ASPHALT MILLINGS CONSTRUCTION ENTRANCE
- EXISTING DITCHES AND POND TO BE FILLED
- EXISTING TREE TO BE REMOVED
- SILT FENCE
- TREE PROTECTION FENCE

MOT NOTES

1. TRUCK ENTERING HIGHWAY SIGNAGE SHALL BE INSTALLED BOTH DIRECTIONS IN ADVANCE OF THE CONSTRUCTION ACCESS PER MUTCD. CONTRACTOR SHALL SUBMIT A MOT PLAN FOR REGULATORY REVIEW PRIOR TO COMMENCEMENT OF CONSTRUCTION.

NO.	REVISIONS	DATE
1	REVISED PER IRC	06-21-2022
2	TFC COMMENTS	11-22-2022
3	TFC COMMENTS	02-06-2023
4		
5		
6		
7		
8		

JOB NO.	DESIGNED	DRAWN	DATE	CHECKED	DATE ISSUED
21-0053	GWR	GWR	NOVEMBER 2021	AIB	6/6/2023

MBV ENGINEERING, INC.
 MOYA BOWLES VILLAMIZAR & ASSOCIATES
 CONSULTING ENGINEERING CA #2728
 1801 S. 30TH STREET
 FT. PENCE, FL 32110
 TEL: (772) 786-8117

EXISTING CONDITIONS, DEMOLITION AND EROSION CONTROL PLAN

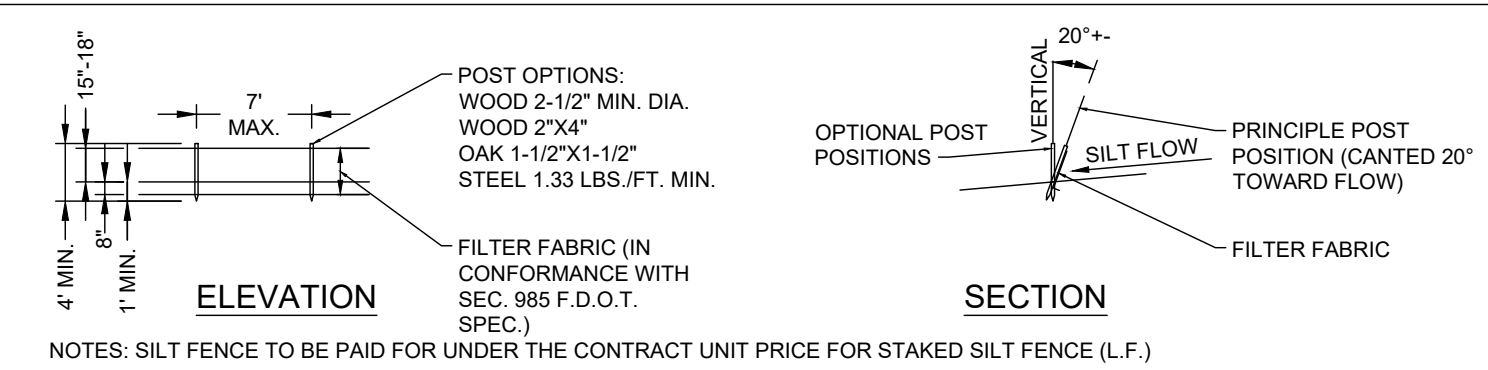
GENESIS INDUSTRIAL
 FLORIDA
 INDIAN RIVER COUNTY

AARON J. BOWLES
 LICENSE No. 55313
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

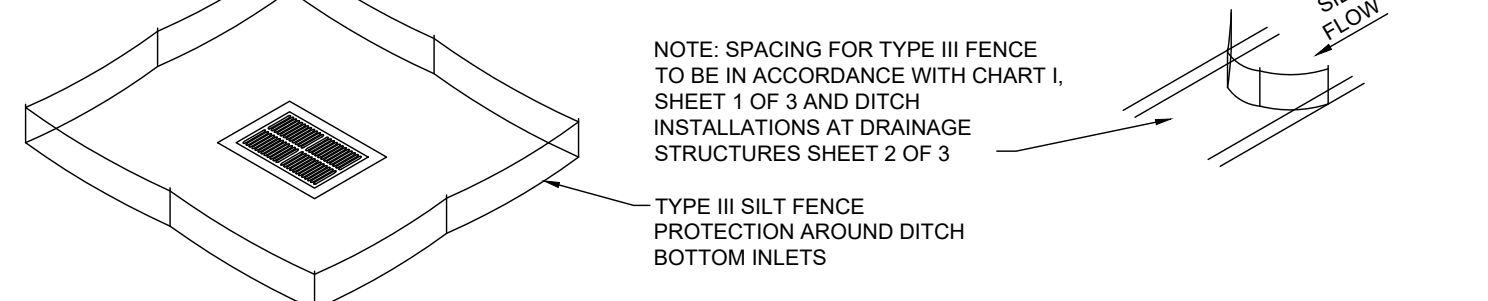
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72 HOURS BEFORE DIGGING
 CALL TOLL FREE
811
 Know what's below.
 Call before you dig.



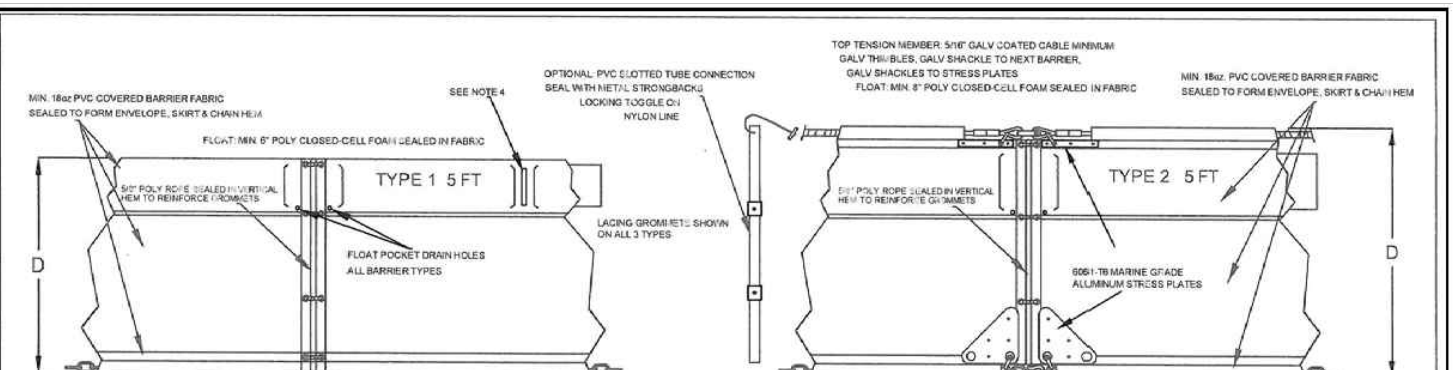
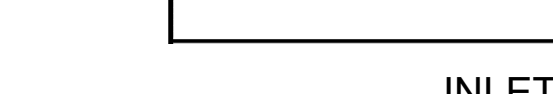
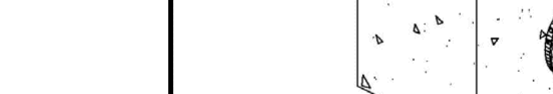
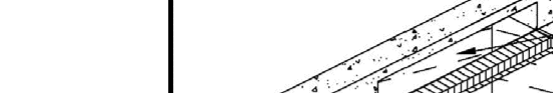
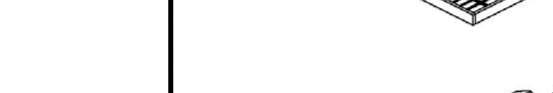
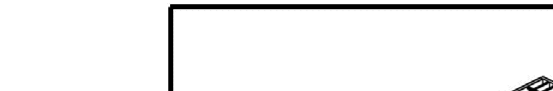
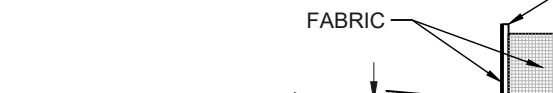
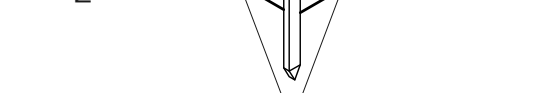
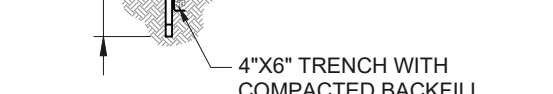
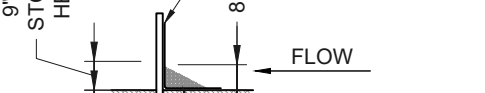
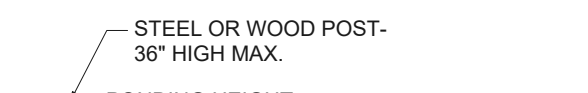
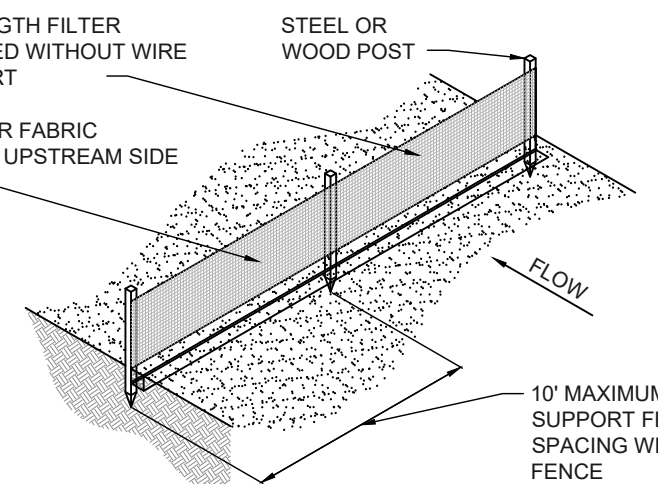
TYPE III SILT FENCE



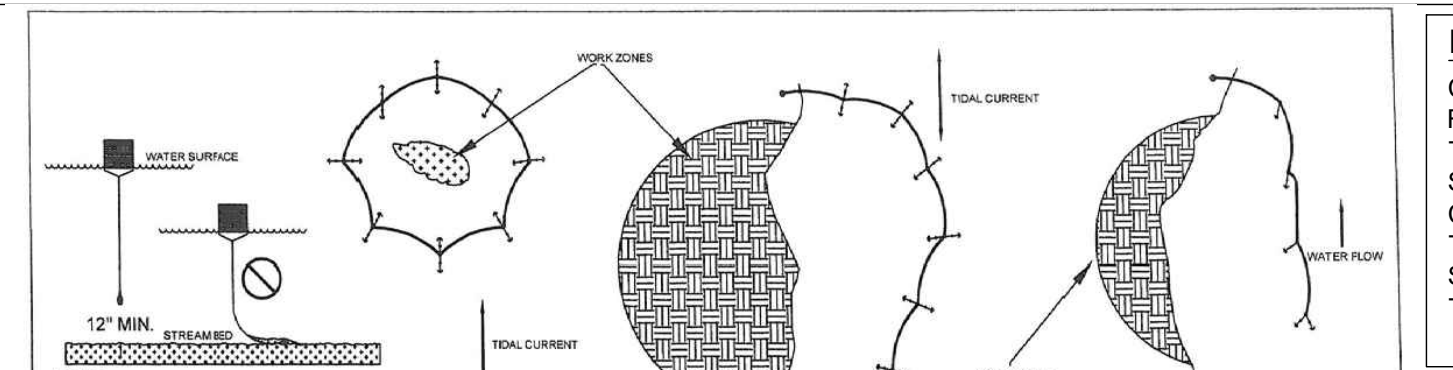
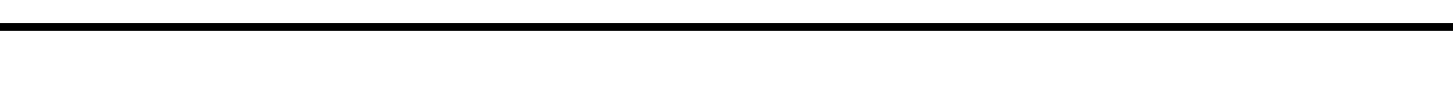
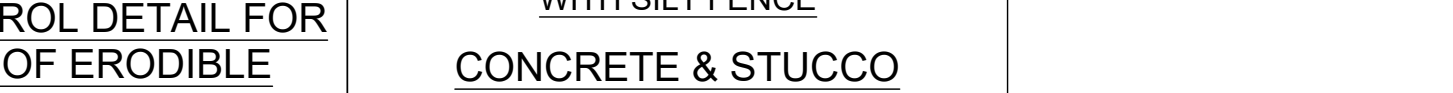
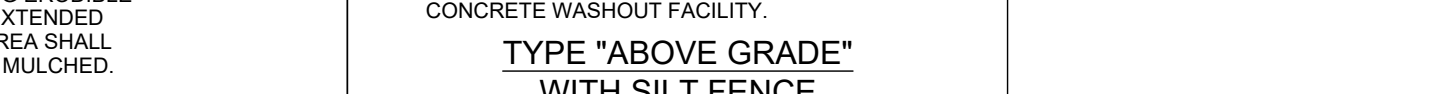
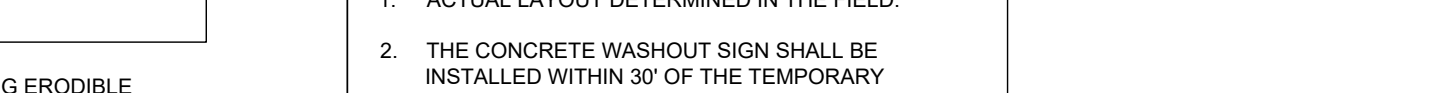
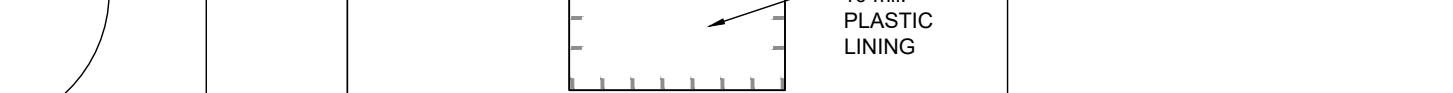
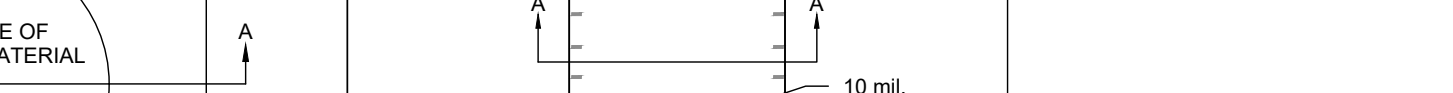
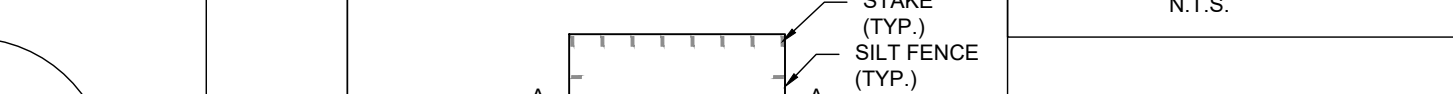
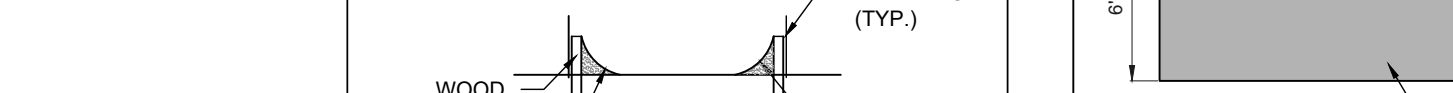
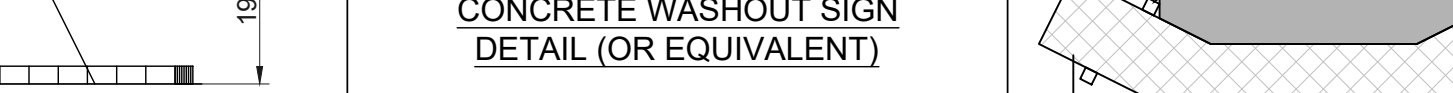
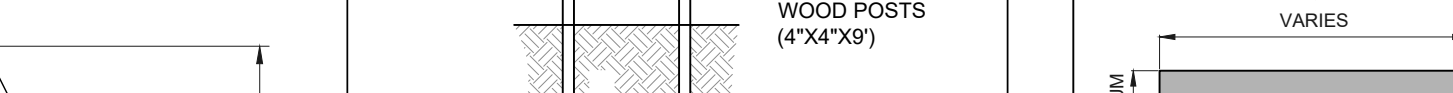
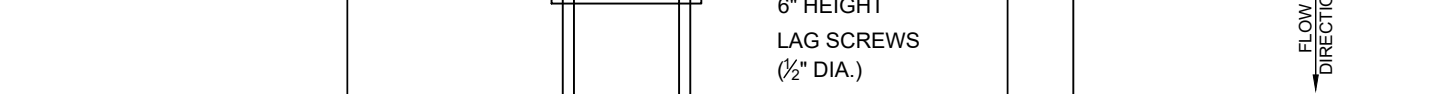
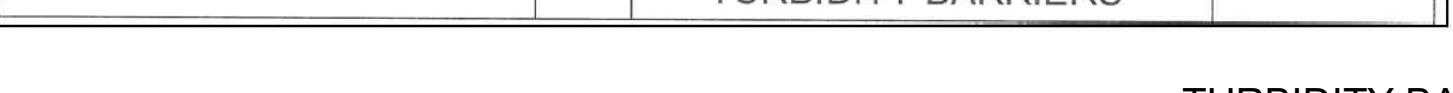
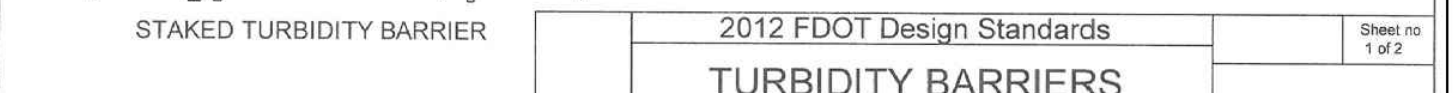
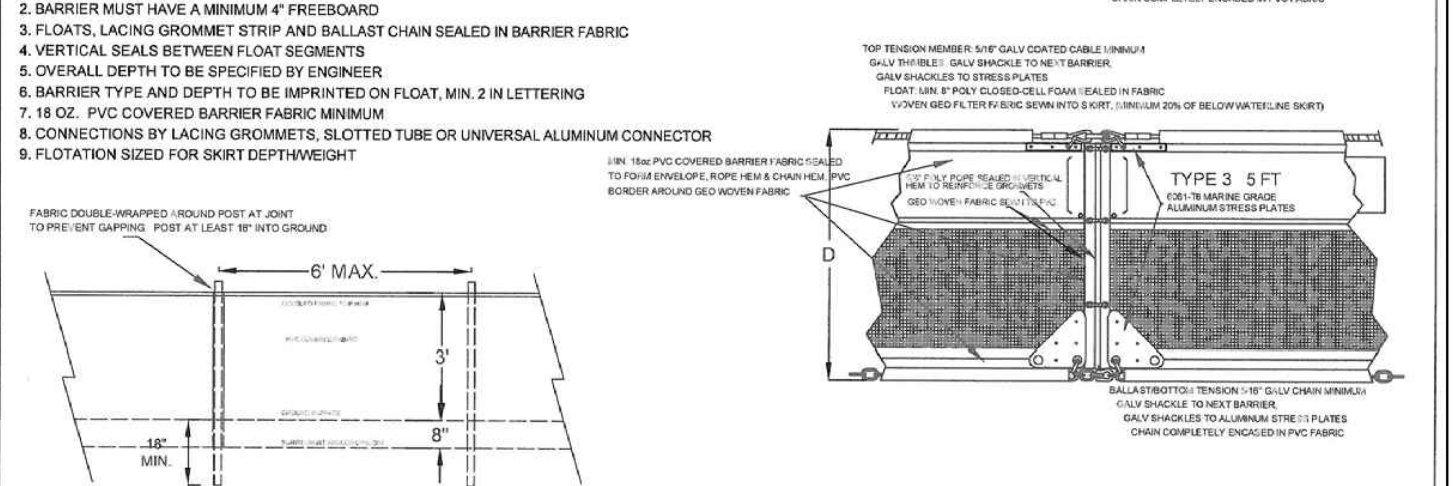
DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE APPLICATIONS

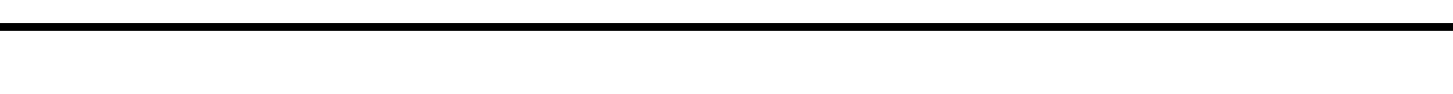
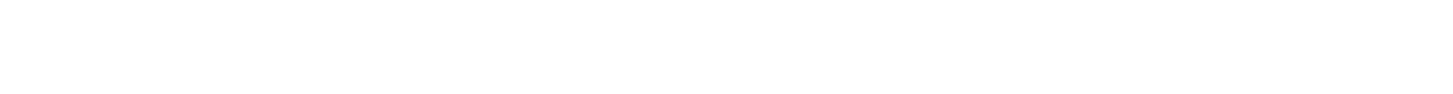
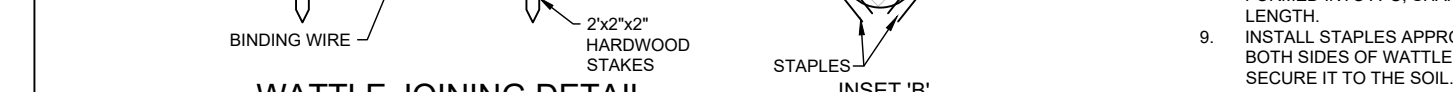
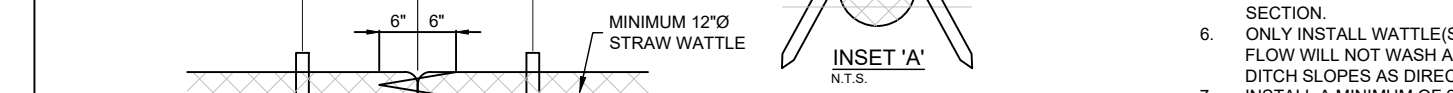
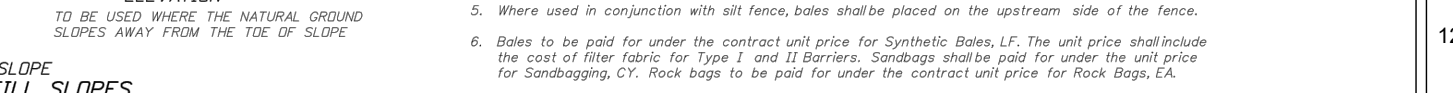
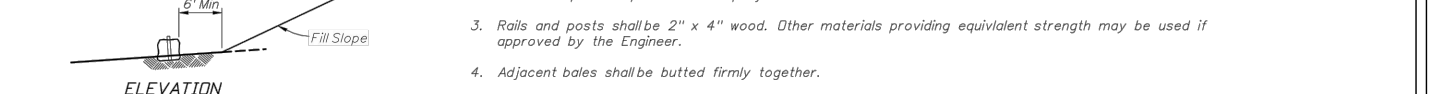
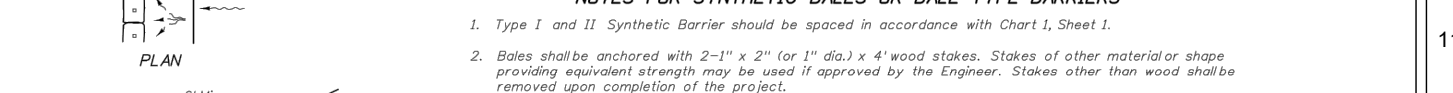
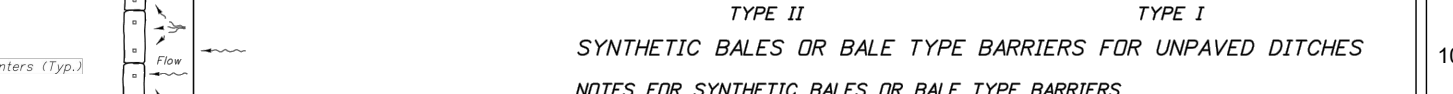
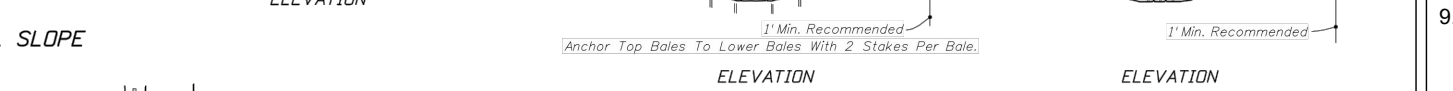
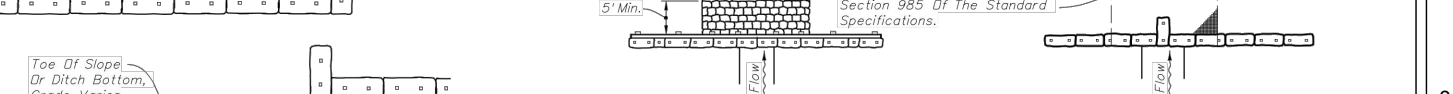
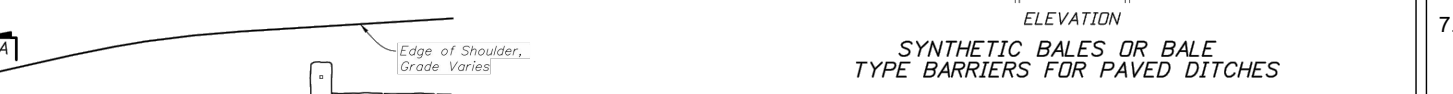
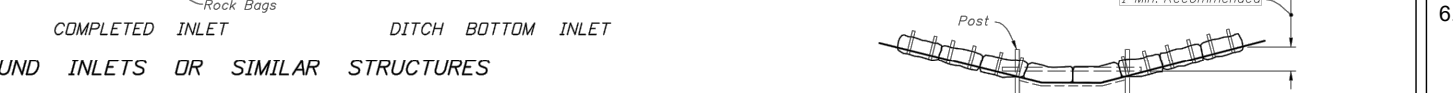
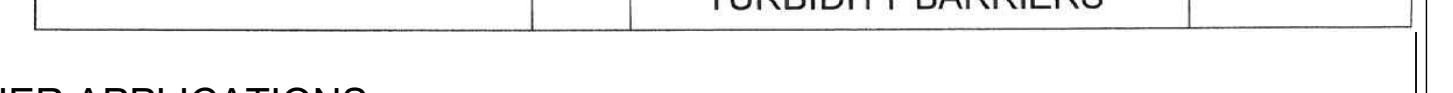
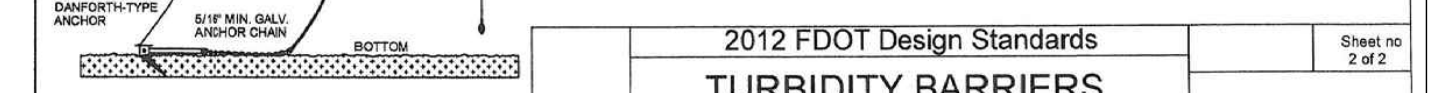
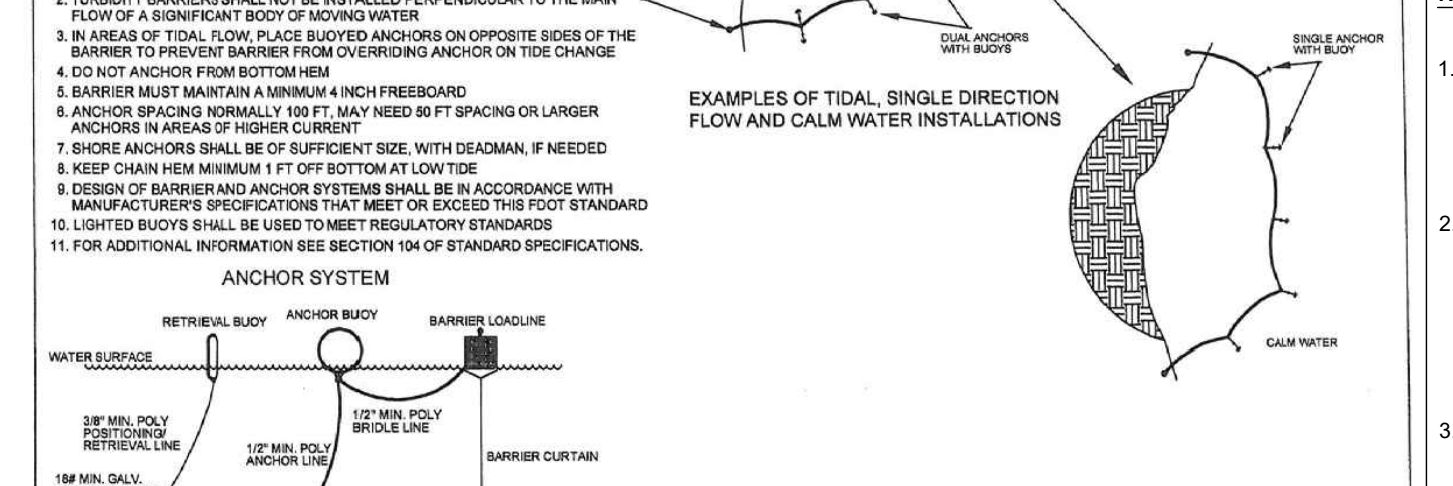
- SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
- INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9' MAXIMUM RECOMMENDED STORAGE HEIGHT.
- REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.



TURBIDITY BARRIERS



TURBIDITY BARRIERS



EROSION AND SEDIMENTATION CONTROL NOTES
 CONSTRUCTION ACTIVITIES CAN RESULT IN THE GENERATION OF POLLUTANTS WHICH MAY REACH SURFACE OR GROUND WATERS. ONE OF THE PRIMARY POLLUTANTS OF SURFACE WATERS IS SEDIMENT DUE TO EROSION. EXCESSIVE QUANTITIES OF SEDIMENT WHICH REACH WATER BODIES OF FLOOD PLAINS HAVE BEEN SHOWN TO ADVERSELY AFFECT THEIR PHYSICAL, BIOLOGICAL AND CHEMICAL PROPERTIES. TRANSPORTED SEDIMENT CAN OBSTRUCT STREAM CHANNELS, REDUCE HYDRAULIC CAPACITY OF WATER BODIES OF FLOOD PLAINS, REDUCE THE DESIGN CAPACITY OF CULVERTS AND OTHER WORKS, AND ELIMINATE BENTHIC INVERTEBRATES AND FISH SPAWNING SUBSTRATES BY SILTATION. EXCESSIVE SUSPENDED SEDIMENTS REDUCE LIGHT PENETRATION AND THEREFORE, REDUCE PRIMARY PRODUCTIVITY.

MINIMUM STANDARDS

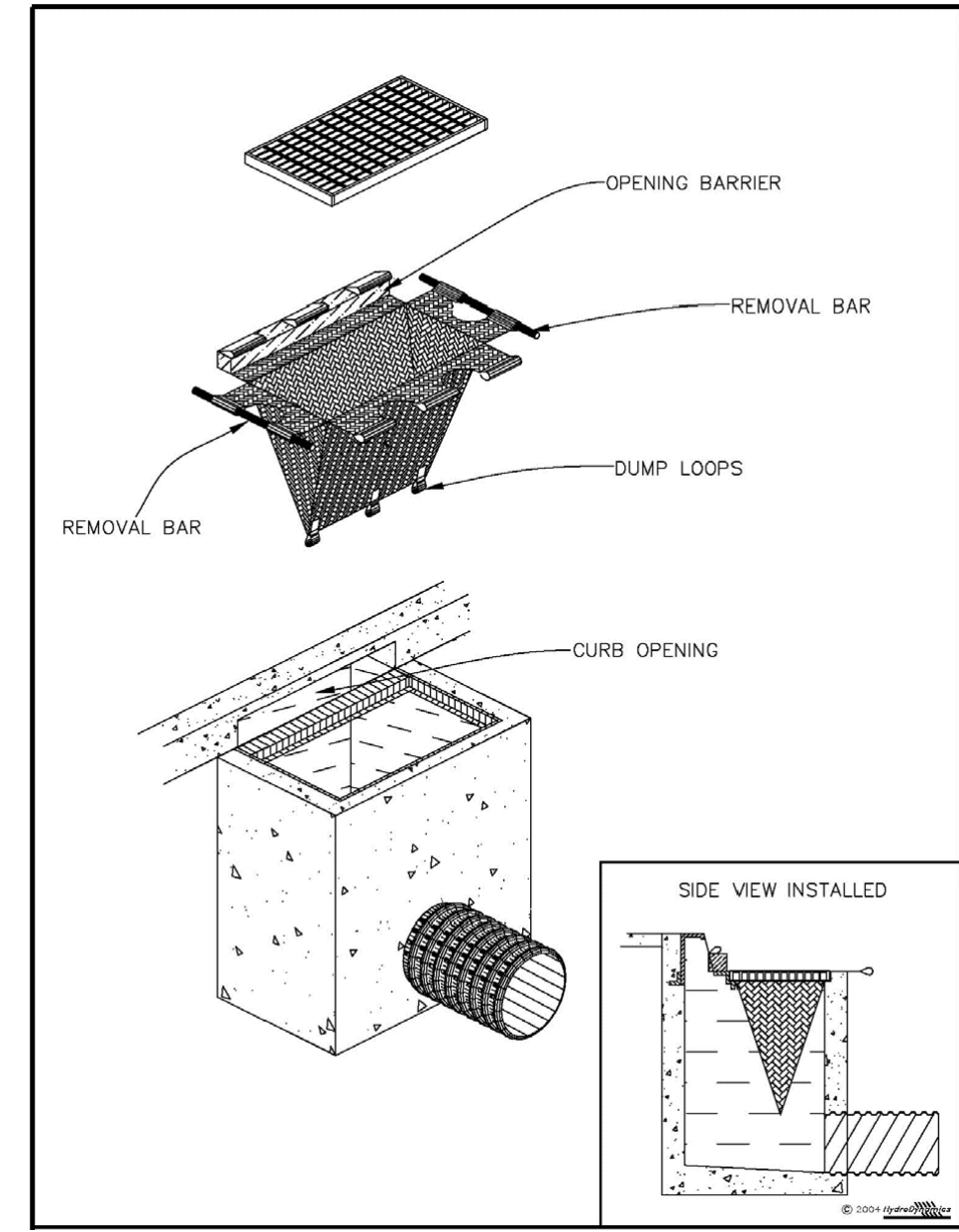
- SEDIMENT BASIN AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UNSLOPE LAND DISTURBANCE TAKES PLACE.
- ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
- PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENuded AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENuded AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
- DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENuded AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE REVIEWER, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
- STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE SEDIMENT BASIN SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE ANTICIPATED SEDIMENT LOADING FROM THE LAND-DISTURBING ACTIVITY. THE OUTFALL DEVICE OR SYSTEM DESIGN SHALL TAKE INTO ACCOUNT THE TOTAL DRAINAGE AREA FLOWING THROUGH THE DISTURBED AREA TO BE SERVED BY THE BASIN.
- AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY, ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAIN SYSTEM, DITCH OR CHANNEL. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- BEFORE TEMPORARY OR NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTFALL PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
- WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
- PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
- UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
 - NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
 - EFFLUENT FROM Dewatering OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
 - RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
- WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE WITH CURBS AND GUTTERS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, IN THE OPINION OF THE REVIEWER. DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITE SHALL BE PROTECTED FROM SEDIMENT DISPOSITION AND EROSION.
- PHASED PROJECTS SHOULD BE CLEARED IN CONJUNCTION WITH CONSTRUCTION OF EACH PHASE.
- EROSION CONTROL, DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN INDEX NOS. 104 AND 105 OF FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.
- THE REVIEWER MAY APPROVE MODIFICATIONS OR ALTER PLANS TO THESE EROSION CONTROL CRITERIA DUE TO SITE SPECIFIC CONDITIONS.

JOB NO.	DESIGNED	DRAWN	DATE	CHECKED	DATE ISSUED
21-0053	GWR	GWR	NOVEMBER 2021	AJB	06/20/23
8	7	6	5	4	3
TRC COMMENTS	NOVEMBER 2021	NOVEMBER 2021	NOVEMBER 2021	NOVEMBER 2021	NOVEMBER 2021
REVISIONS PER IFC	1	1	1	1	1

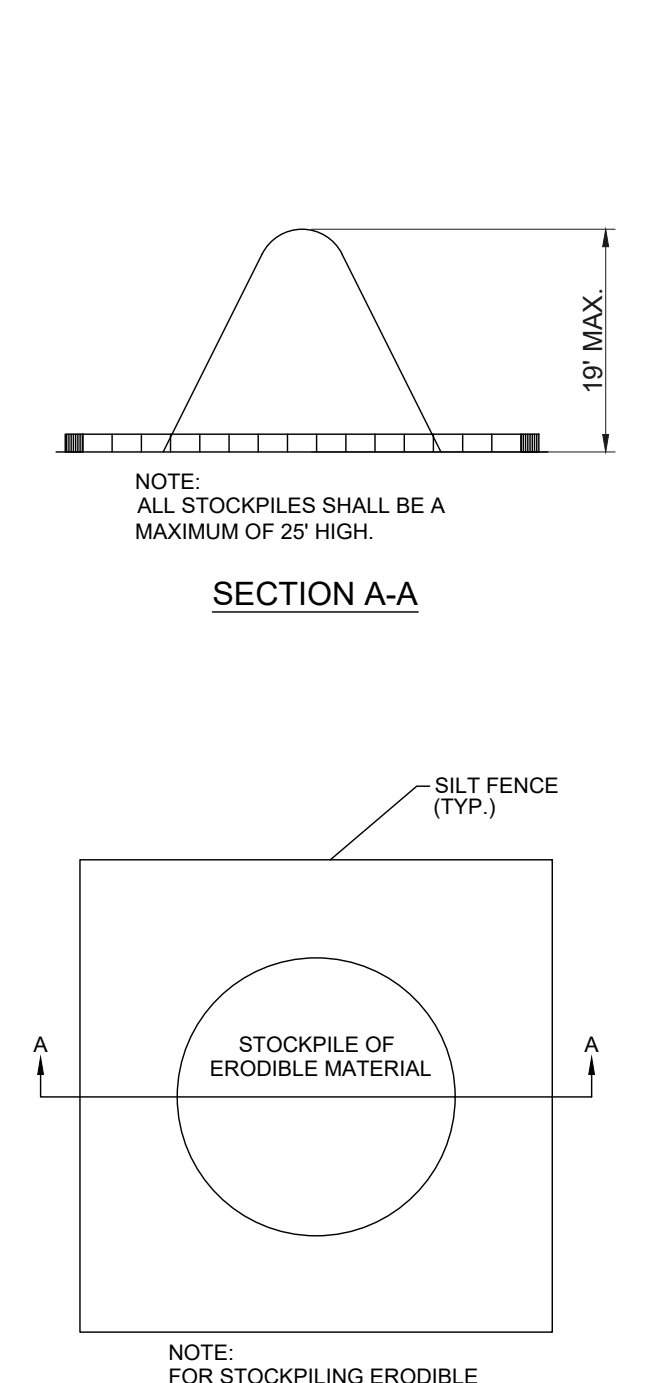
NO.	DATE	DESCRIPTION
1	06-21-2022	ISSUED FOR PERMITS
2	11-22-2023	TRC COMMENTS
3	02-06-2023	TRC COMMENTS
4	02-06-2023	TRC COMMENTS
5	02-06-2023	TRC COMMENTS
6	02-06-2023	TRC COMMENTS
7	02-06-2023	TRC COMMENTS
8	02-06-2023	TRC COMMENTS

MBV ENGINEERING, INC.
 MOHA BOWLES VILLAMIZAR & ASSOCIATES
 CIVIL ENGINEERING
 1000 W. STATE ST. SUITE 200
 TAMPA, FL 33606
 TEL: (813) 333-1111
 FAX: (813) 333-1111

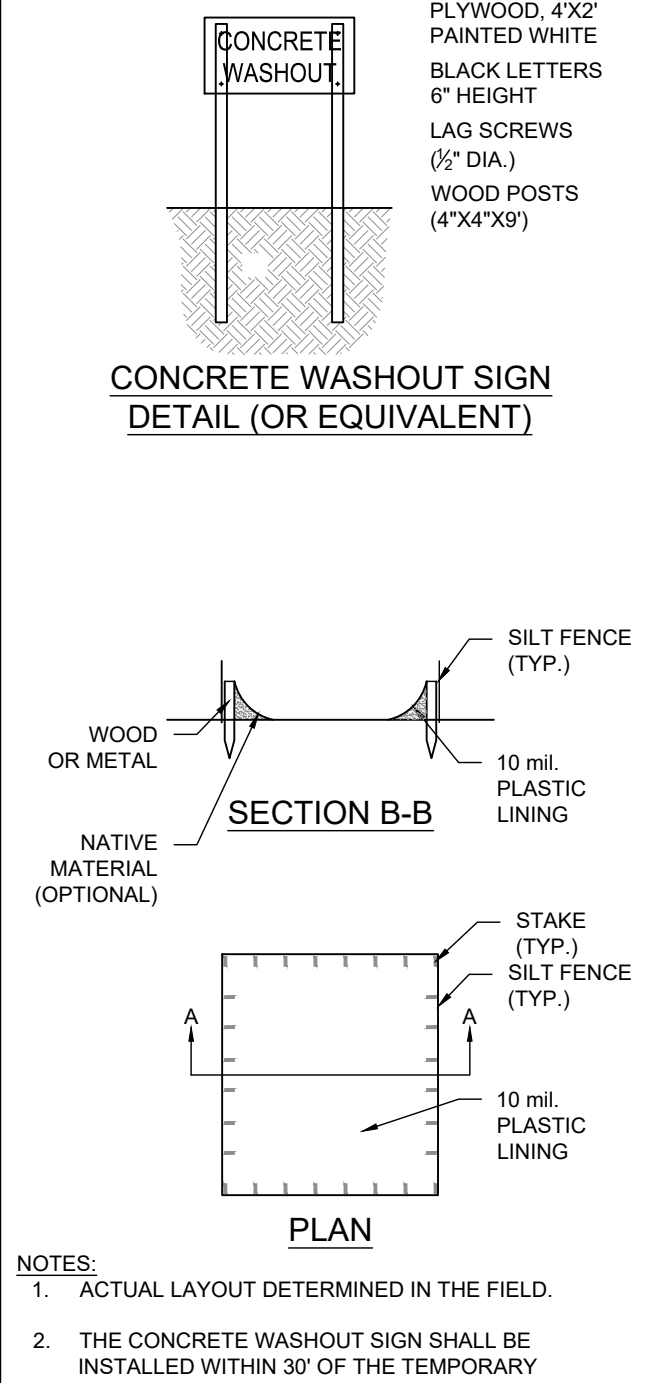
EROSION CONTROL DETAILS
 GENESIS INDUSTRIAL
 INDIAN RIVER COUNTY
 FLORIDA



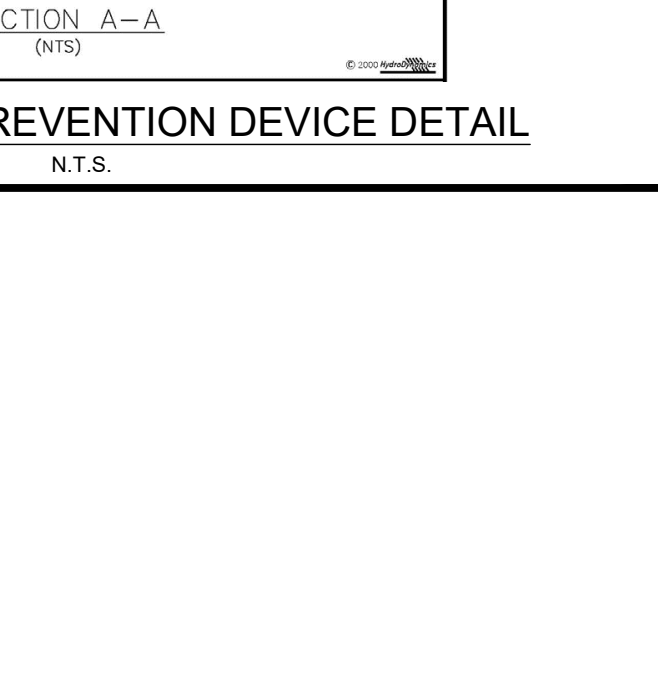
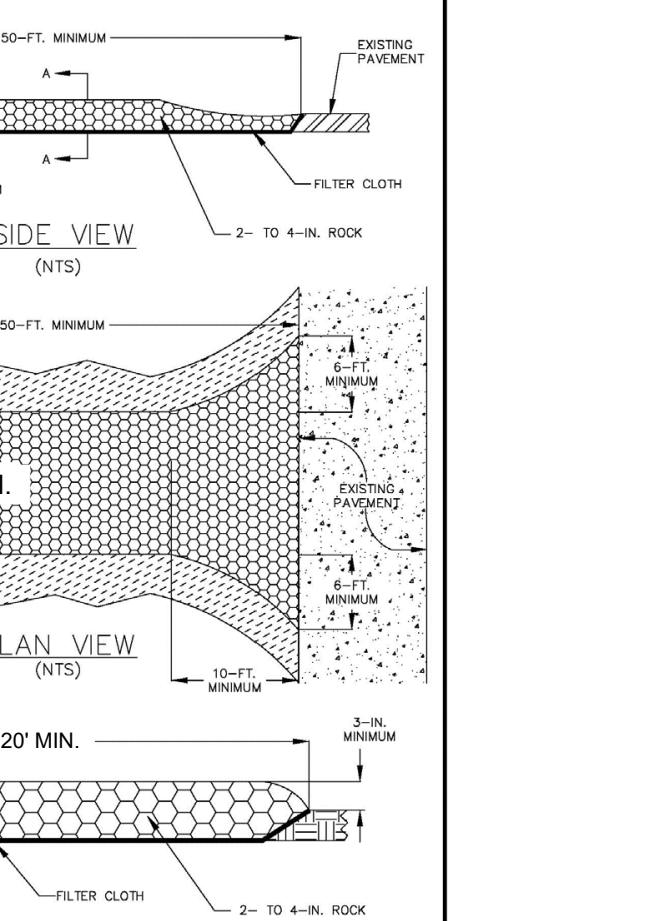
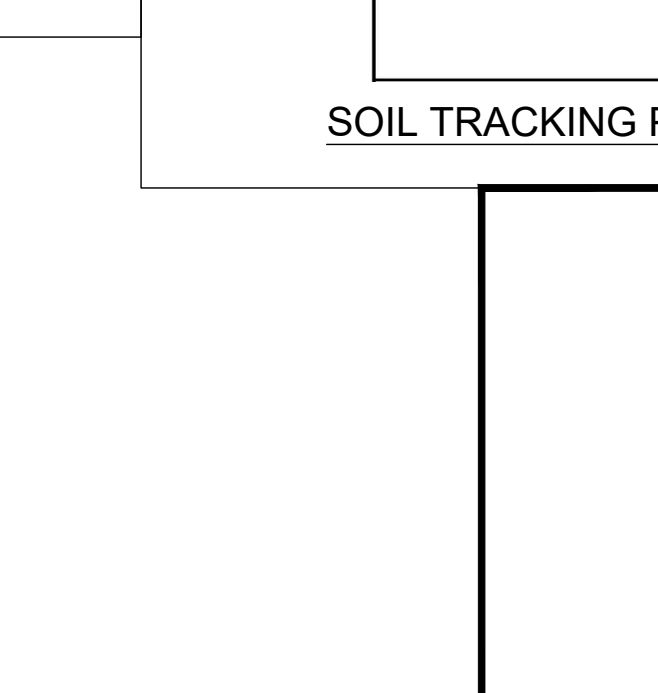
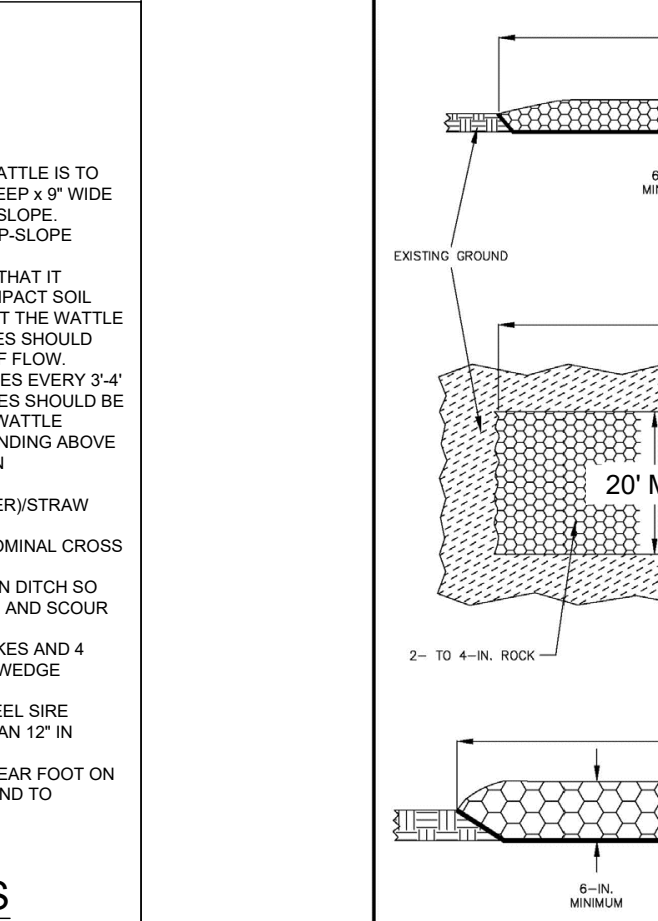
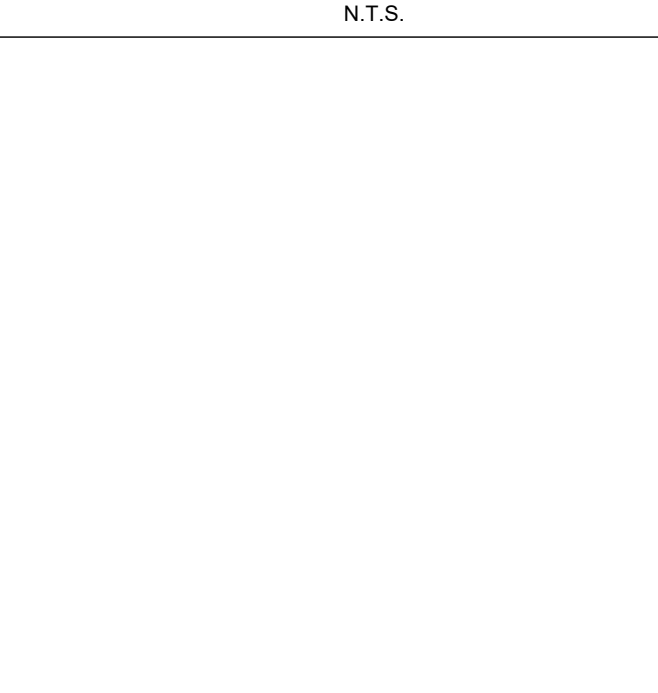
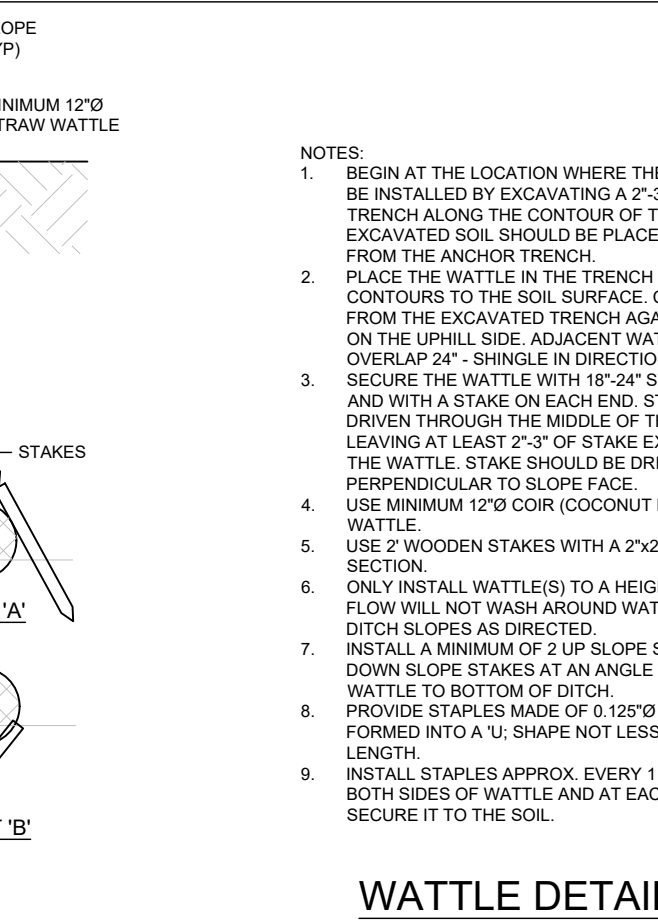
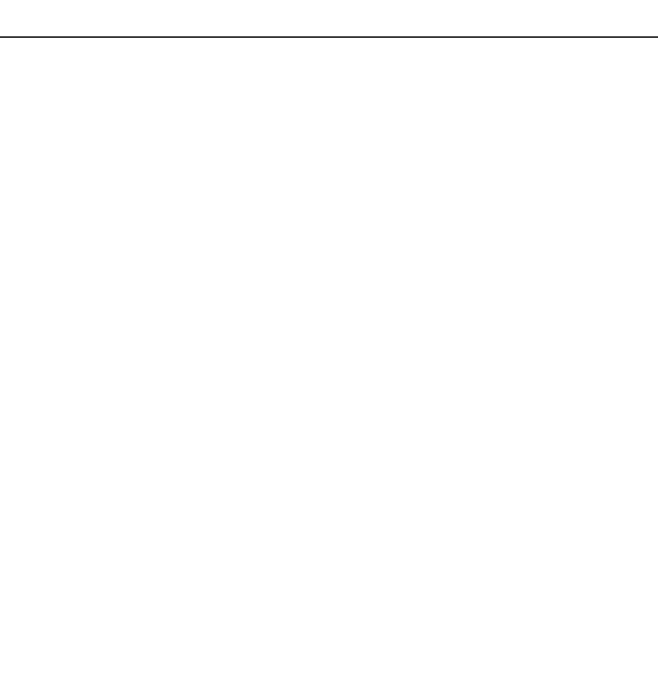
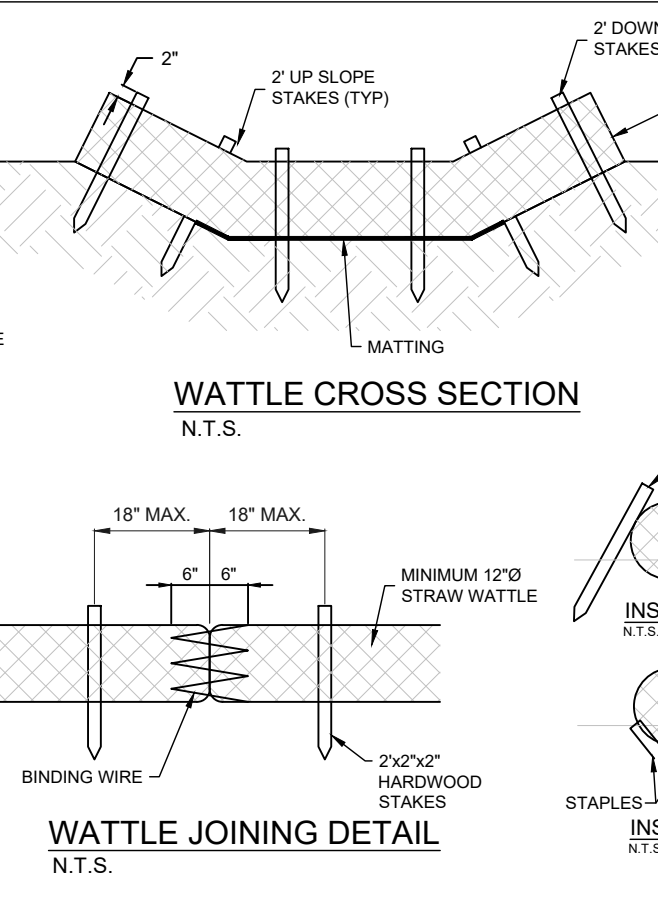
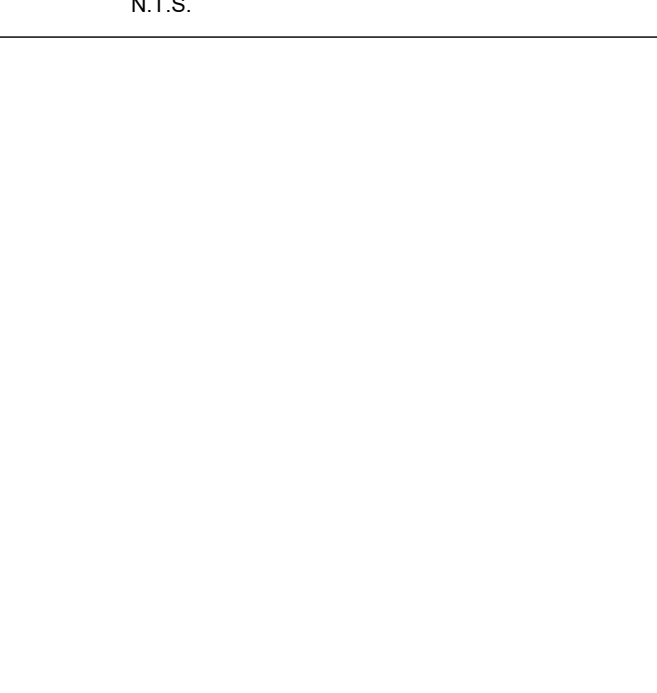
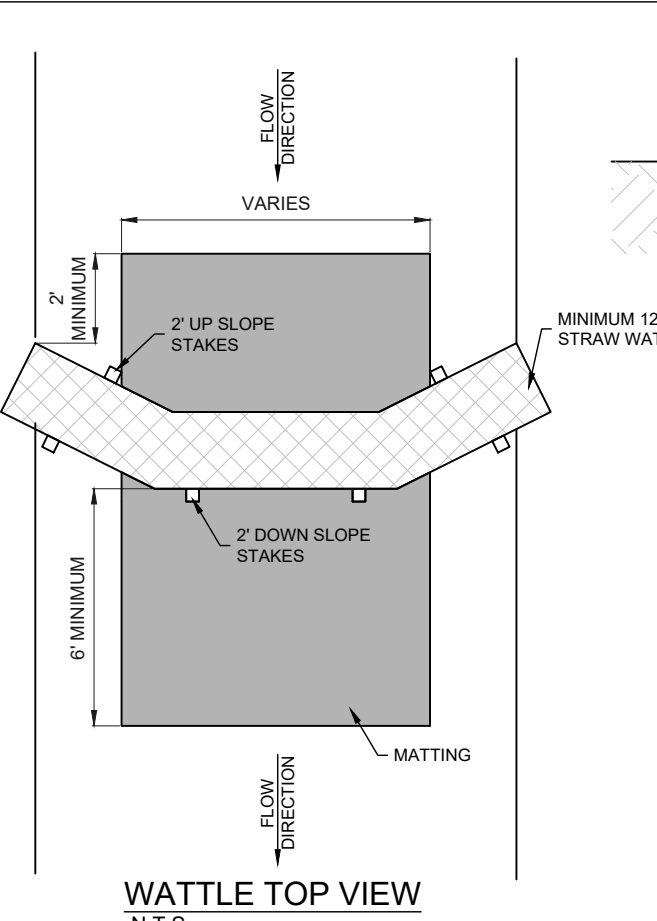
INLET INSERT SEDIMENT CONTAINMENT SYSTEM



SEDIMENT CONTROL DETAIL FOR STOCKPILING OF ERODIBLE MATERIAL



CONCRETE & STUCCO WASTE MANAGEMENT



GENESIS INDUSTRIAL
 INDIAN RIVER COUNTY
 FLORIDA

AARON J. BOWLES
 LICENSE No. 55313
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

SHEET
C4
 21-0053

NO.	DATE	DESCRIPTION
1	08-21-2022	REVISIONS PER IRC
2	11-22-2022	TRC COMMENTS
3	NOVEMBER 2021	TRC COMMENTS
4		
5		
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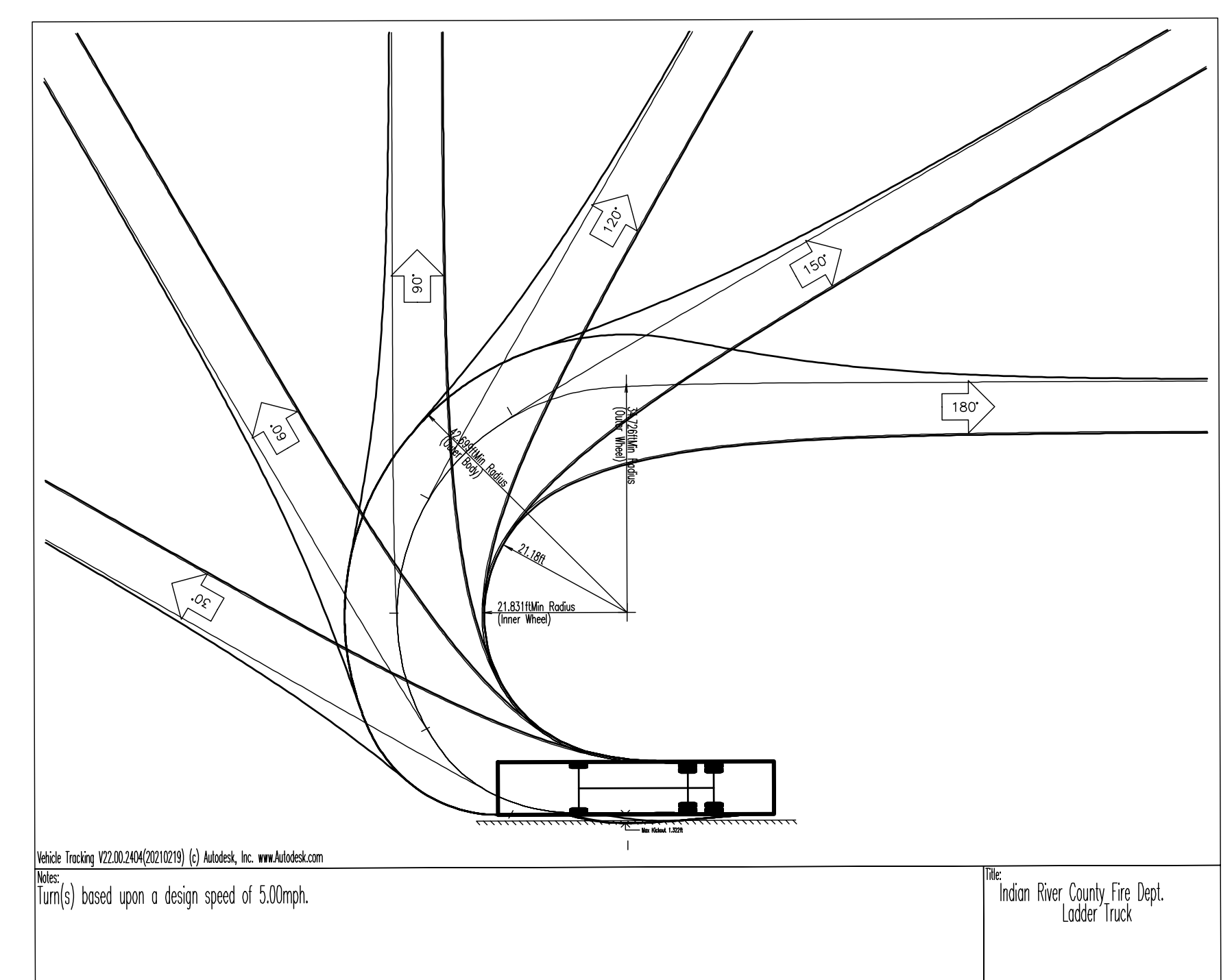
MBV
ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728
1800 S. 30TH STREET
PHOENIX, AZ 85034
TEL: (602) 944-8330
FAX: (602) 944-8317
HELDORNE, FL - PH (351) 351-1100
T. PERCELE, FL - PH (772) 466-9002

EMERGENCY VEHICLE TRACKING EXHIBIT

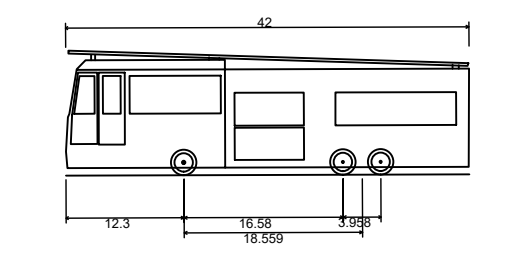
GENESIS INDUSTRIAL
INDIAN RIVER COUNTY
FLORIDA

AARON J. BOWLES
LICENSE
No. 55313
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL P.E. #55313
SHEET
C5A
21-0053



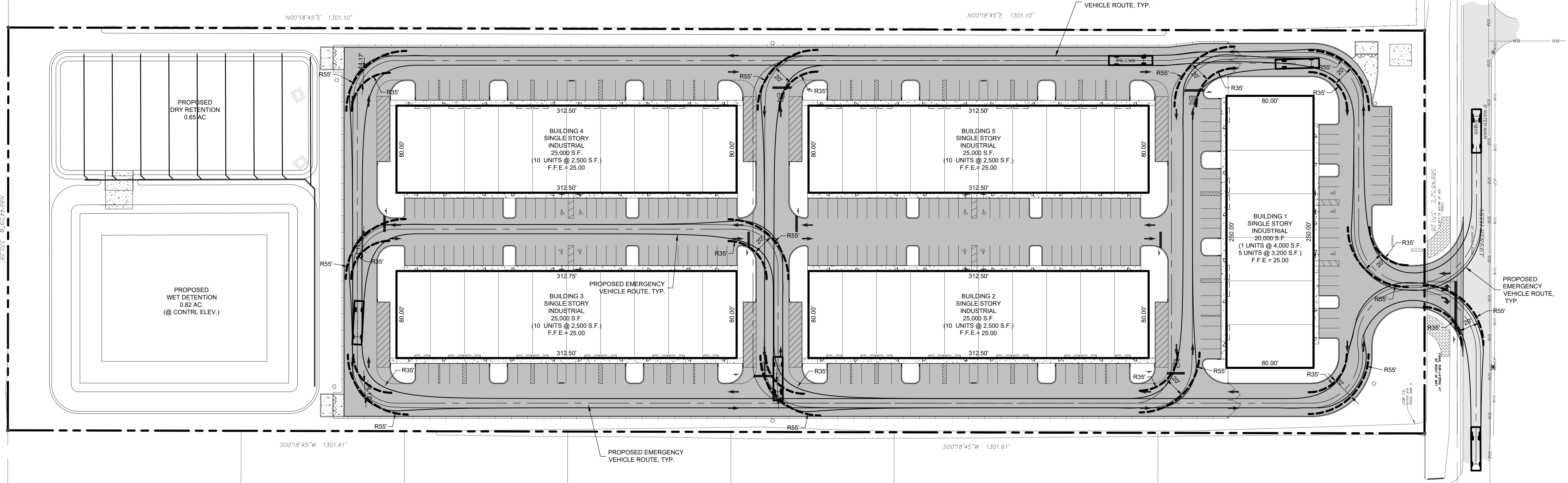
VEHICLE TRACKING DETAIL
N.T.S.



Indian River County Fire Dept. Ladder Truck
Overall Length 42.00ft
Overall Width 8.00ft
Overall Body Height 13.00ft
Min Body Ground Clearance 0.75ft
Track Width 7.54ft
Lock-to-lock time 6.90s
Max Wheel Angle 40.00°

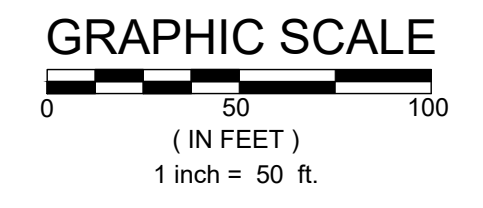
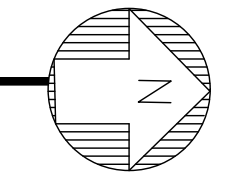
Vehicle Tracking 10210.0404(20210218) (c) Autodesk, Inc. www.Autodesk.com
Note:
Turn(s) based upon a design speed of 5.00mph.

Indian River County Fire Dept.
Ladder Truck



EMERGENCY VEHICLE TRACKING EXHIBIT

SCALE: 1" = 50'



LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE

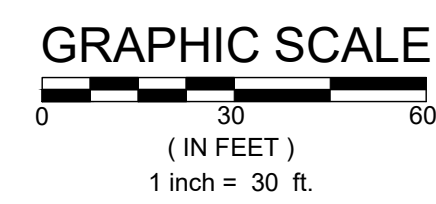
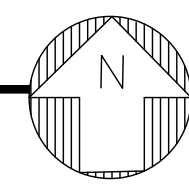
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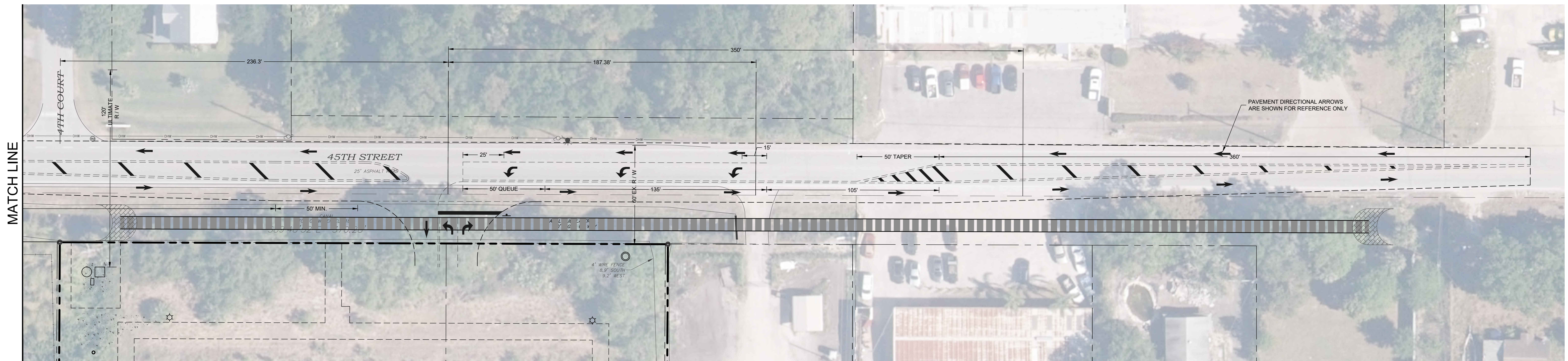
CONCEPTUAL OFFSITE TURN LANE IMPROVEMENTS PLAN

SCALE: 1" = 30'



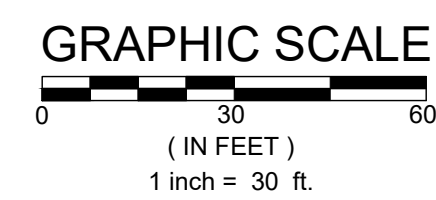
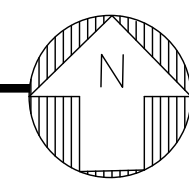
LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE



CONCEPTUAL OFFSITE TURN LANE IMPROVEMENTS PLAN

SCALE: 1" = 30'



LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE

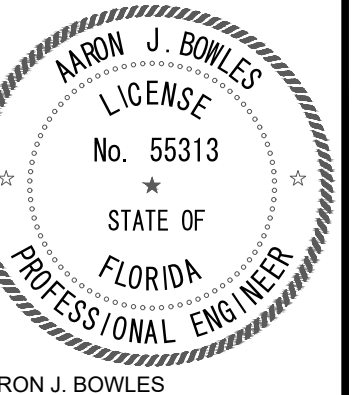
NO.	DATE	REVISIONS
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30		

JOB NO.	DESIGNED	DRAWN	DATE	CHECKED	DATE /ISSUED
21-0053	GWR	GWR	NOVEMBER 2021	AJB	6/6/2023

MBV ENGINEERING, INC.
 MOJA BOWLES VILLAMIZAR & ASSOCIATES
 CONSULTING ENGINEERING CA #3728
 1800 S. 30TH STREET
 FT. WORTH, TEXAS 76104
 TEL: (817) 444-4330
 FAX: (817) 444-4331

CONCEPTUAL OFFSITE TURN LANE IMPROVEMENTS PLAN

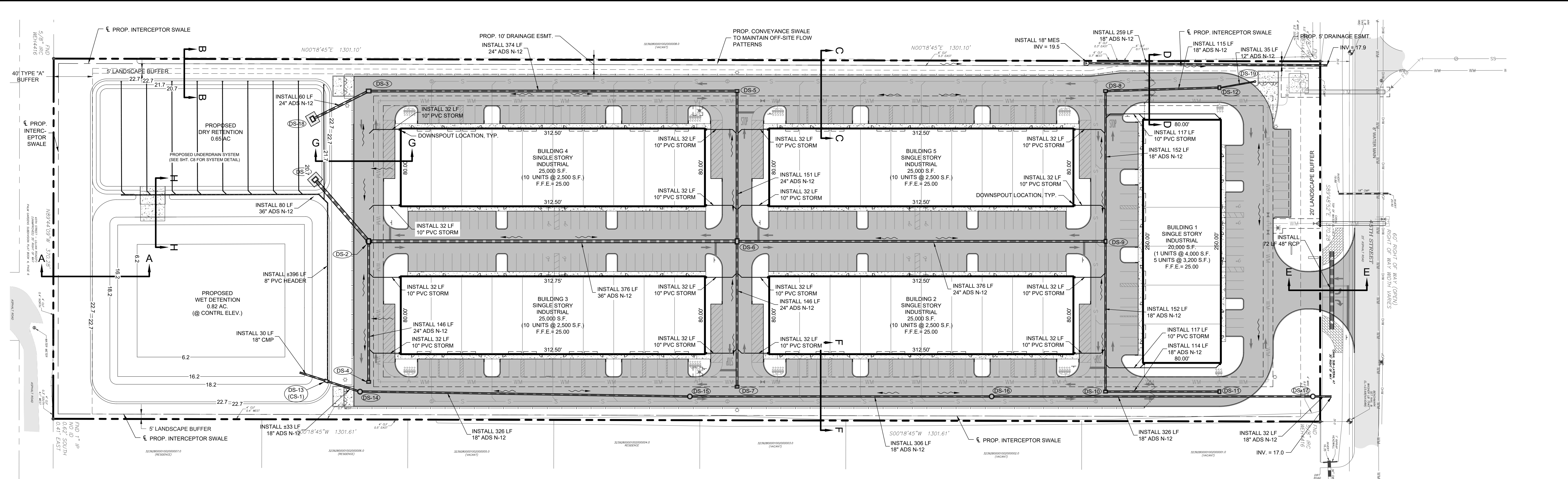
GENESIS INDUSTRIAL
 INDIAN RIVER COUNTY
 FLORIDA



AARON J. BOWLES
 FL. P.E. #55313
 SHEET
C5B
 21-0053

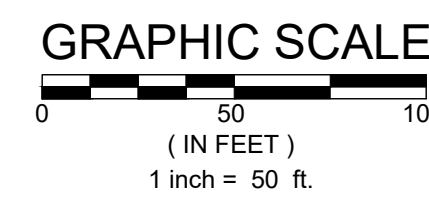
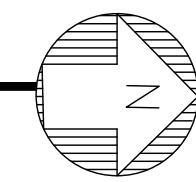
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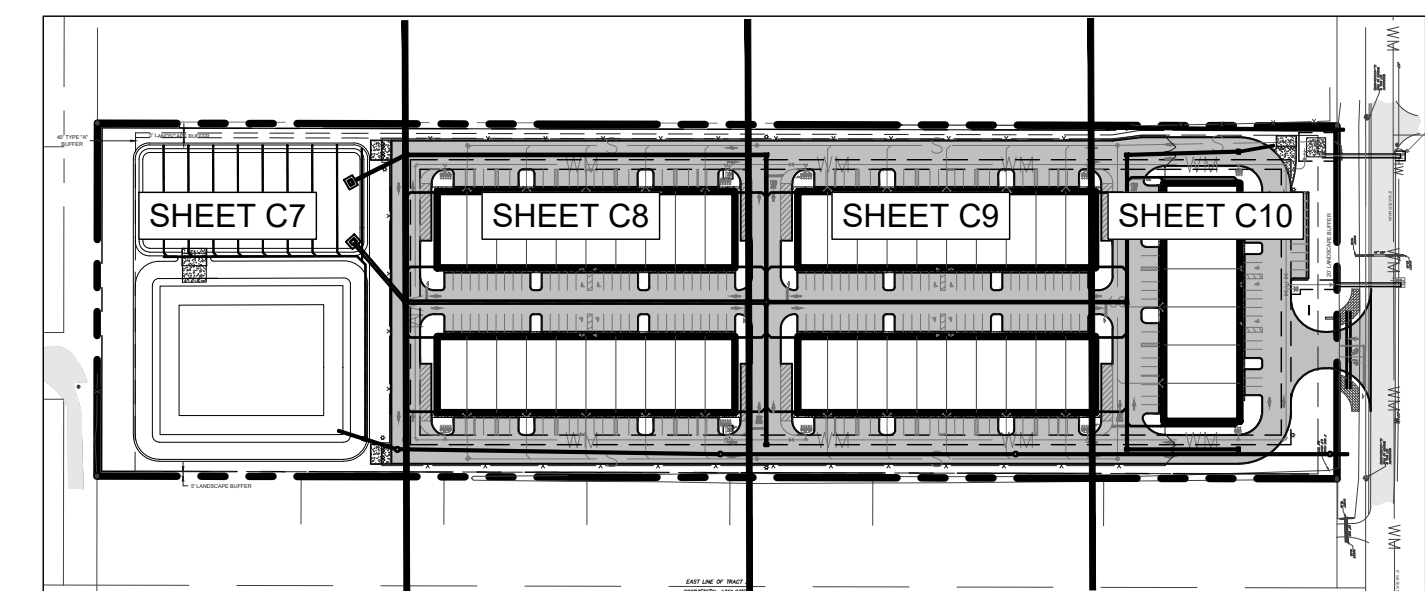
OVERALL PAVING, GRADING AND DRAINAGE PLAN

SCALE: 1" = 50'



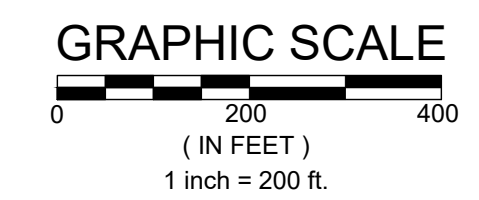
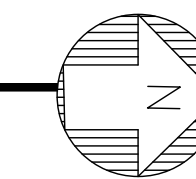
LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE

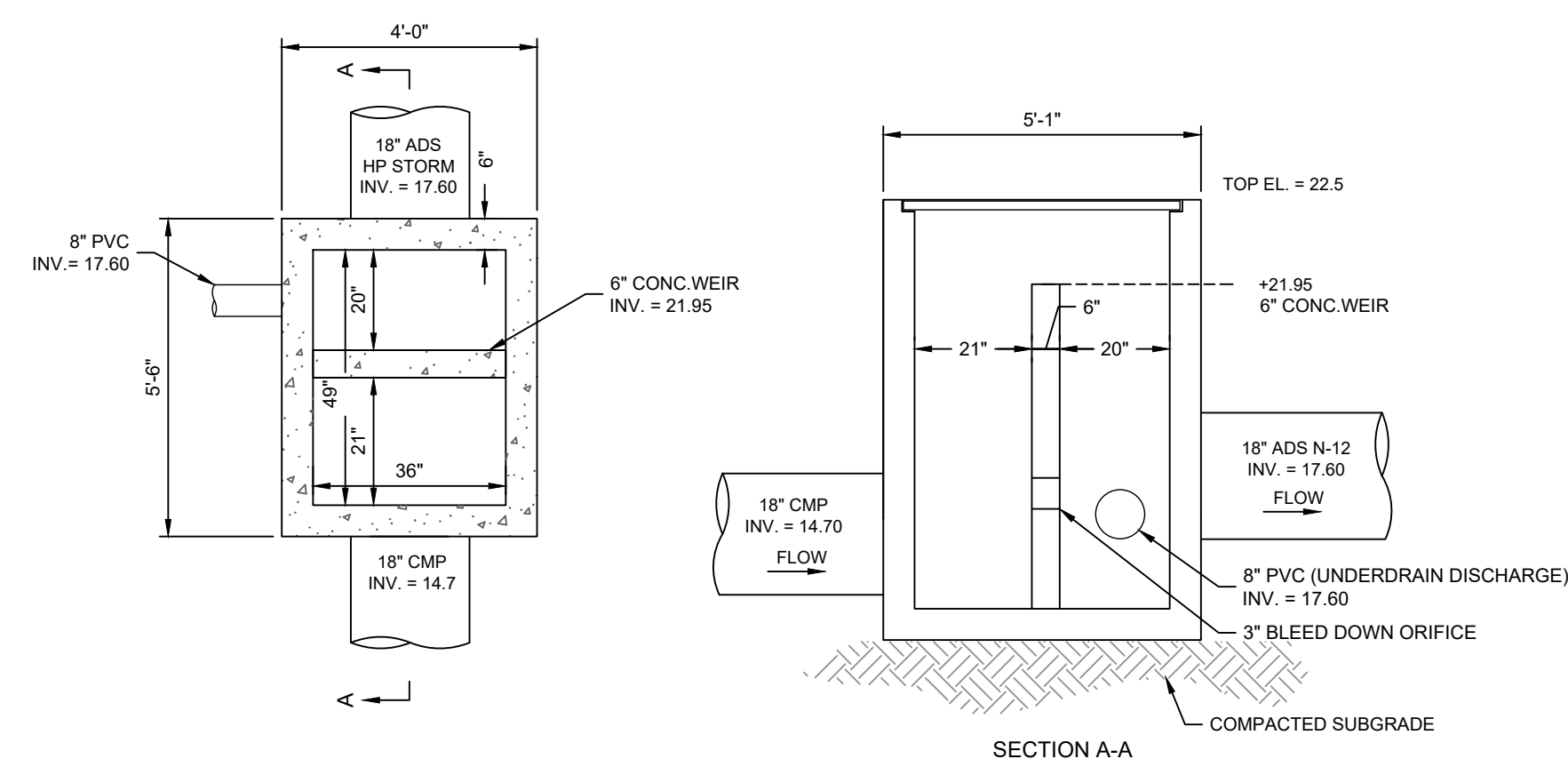


KEY MAP FOR DETAILED GRADING

SCALE: 1" = 200'



STRUCTURE NUMBER	DS-1	DS-2	DS-3	DS-4	DS-5	DS-6	DS-7	DS-8	DS-9	DS-10	DS-11	DS-12	DS-13 (CS-1)	DS-14	DS-15	DS-16	DS-17	DS-18	DS-19	DS-20	DS-21	DS-22	STRUCTURE NUMBER	
	FOOT INDEX #	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	NA
DESCRIPTION	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DSI W/8" STRUCT.	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	MODIFIED TYPE "D" CONTROL STRUCTURE	STORM MH (4' DA)	STORM MH (4' DA)	STORM MH (4' DA)	STORM MH (4' DA)	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	STORM MH (4' DA)	STORM MH (4' DA)	STORM MH (4' DA)	15" IN-LINE DRAIN BASIN	DESCRIPTION
RIM ELEV.	20.70	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	23.00	23.20	23.20	23.30	20.70	20.50	23.50	24.00	23.30	23.30	12.00	RIM ELEV.
PIPE DIA.	36.00	36.00	24.00	24.00	24.00	36.00	24.00	18.00	24.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	24.00	18.00	18.00	18.00	18.00	12.00	PIPE DIA.
COVER	3.70	2.65	4.50	4.52	3.00	2.65	3.01	3.45	3.55	3.45	3.00	3.00	2.50	3.50	3.90	3.50	4.40	2.70	1.50	5.30	4.65	3.80	4.65	COVER
INVERT ELEVATION	N	14. N	14.25 N	-	-	15.75 N	-	17.85 N	-	17.85 N	-	-	18.2 N	17.55 N	17.35 N	17.2 N	17.1 N	16. N	17.5 N	16.6 N	17.85 N	-	N	INVERT ELEVATION
	S	14.25 S	-	-	15.75 S	-	17.25 S	-	18.30 S	18.30 S	-	-	17.55 S	17.35 S	17.20 S	17.10 S	-	-	16.70 S	16.50 S	18.50 S	-	S	
	E	17.15 E	16.30 E	-	17.80 E	-	17.85 E	-	17.25 E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E
	W	-	-	16.28 W	-	17.15 W	17.79 W	-	17.25 W	17.85 W	-	-	-	-	-	-	-	-	-	-	-	-	-	W
BOTTOM ELEV.	13.50	13.75	15.80	15.78	17.30	15.25	17.29	17.35	16.75	17.35	17.80	17.80	17.70	17.50	17.30	17.10	16.90	15.50	17.00	16.10	16.00	18.00	18.00	BOTTOM ELEV.



(CS-1) MOD. TYPE "D" CONTROL STRUCTURE

N.T.S.

NO.	DATE	REVISIONS
1	06-21-2022	1 REVISIONS PER IFC
2	11-22-2022	3 TRC COMMENTS
3	02-06-2023	3 TRC COMMENTS

MBV ENGINEERING, INC.
 MOIA BOWLES VILLAMIZAR & ASSOCIATES
 CONSULTING ENGINEERING CA #2728
 180 S 30TH STREET
 FT. PIERCE, FL 34947
 TEL: (888) 888-8888
 FAX: (888) 888-8888

OVERALL PAVING, GRADING AND DRAINAGE PLAN

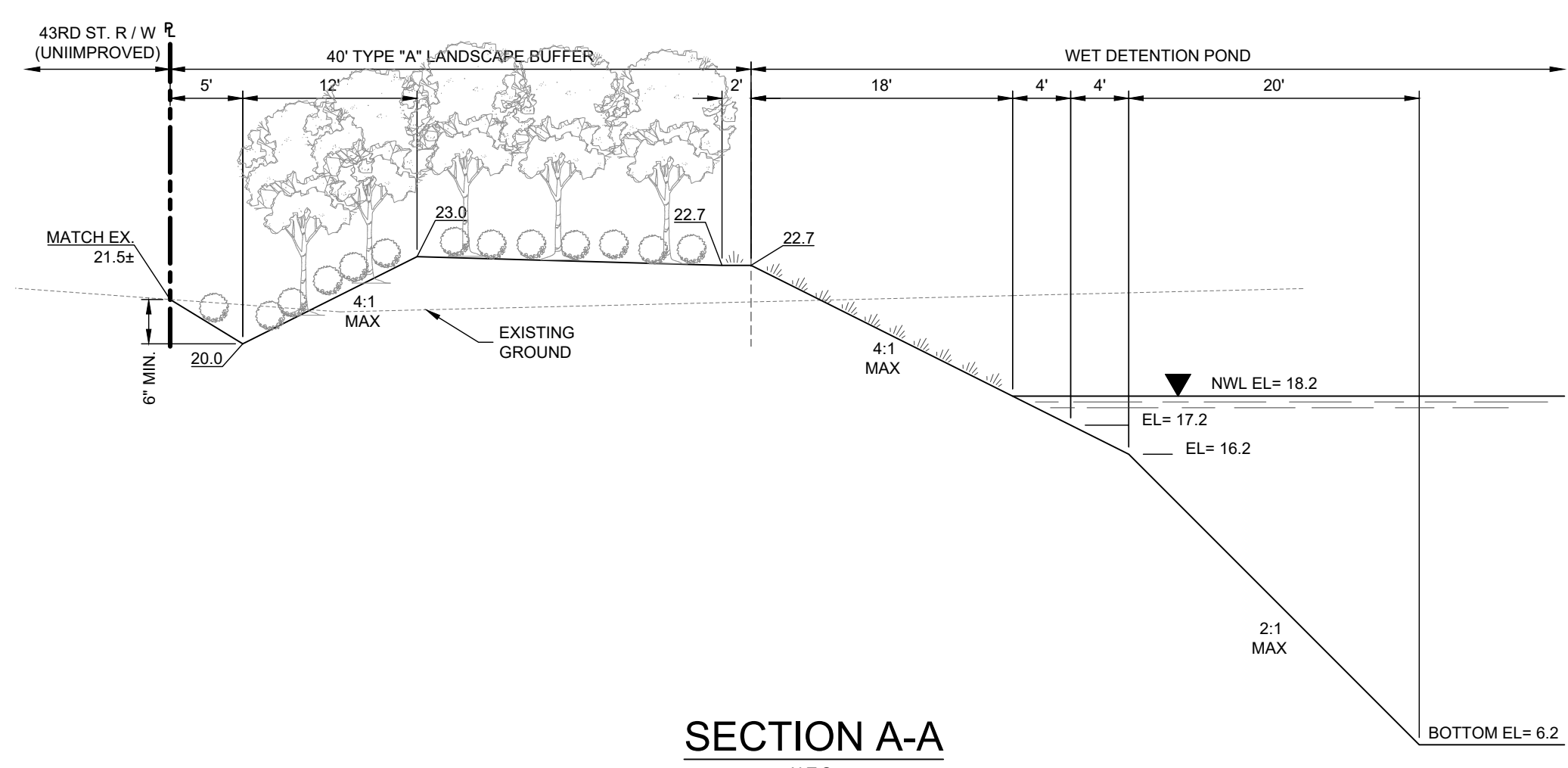
GENESIS INDUSTRIAL
 INDIAN RIVER COUNTY
 FLORIDA

AARON J. BOWLES
 LICENSE No. 55313
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

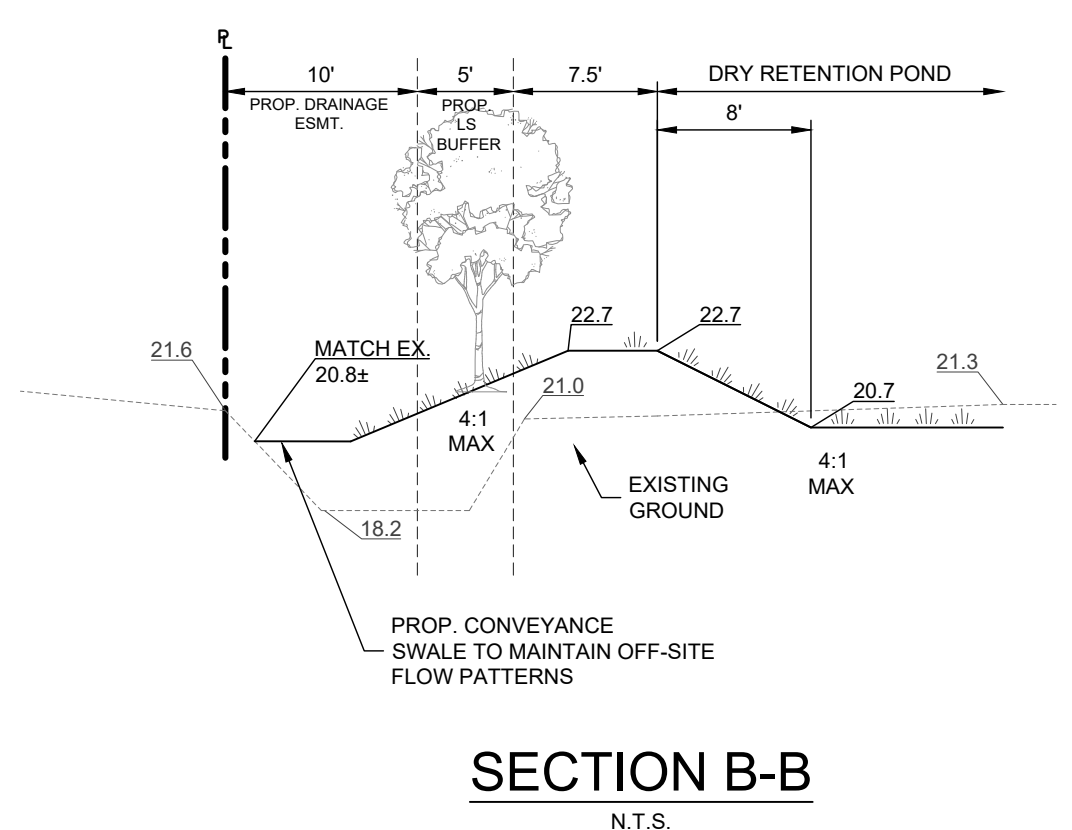
SHEET
C6
 21-0053

01-DRAWING: 202101-0053-Genesis Industrial - Overall Paving, Grading and Drainage Plan - 06/2023 2:10 PM

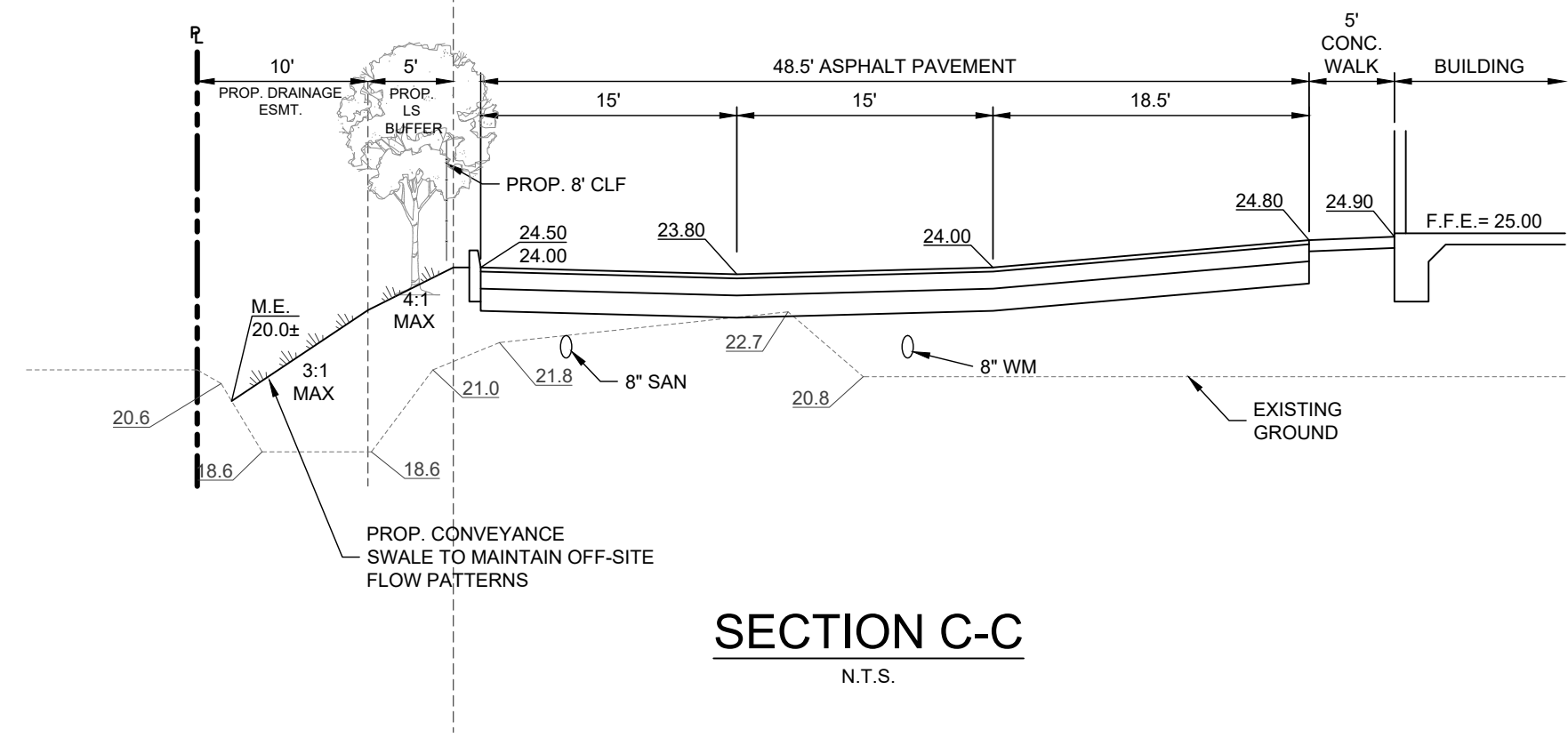
72 HOURS BEFORE DIGGING
 CALL TOLL FREE
811
 Know what's below.
 Call before you dig.



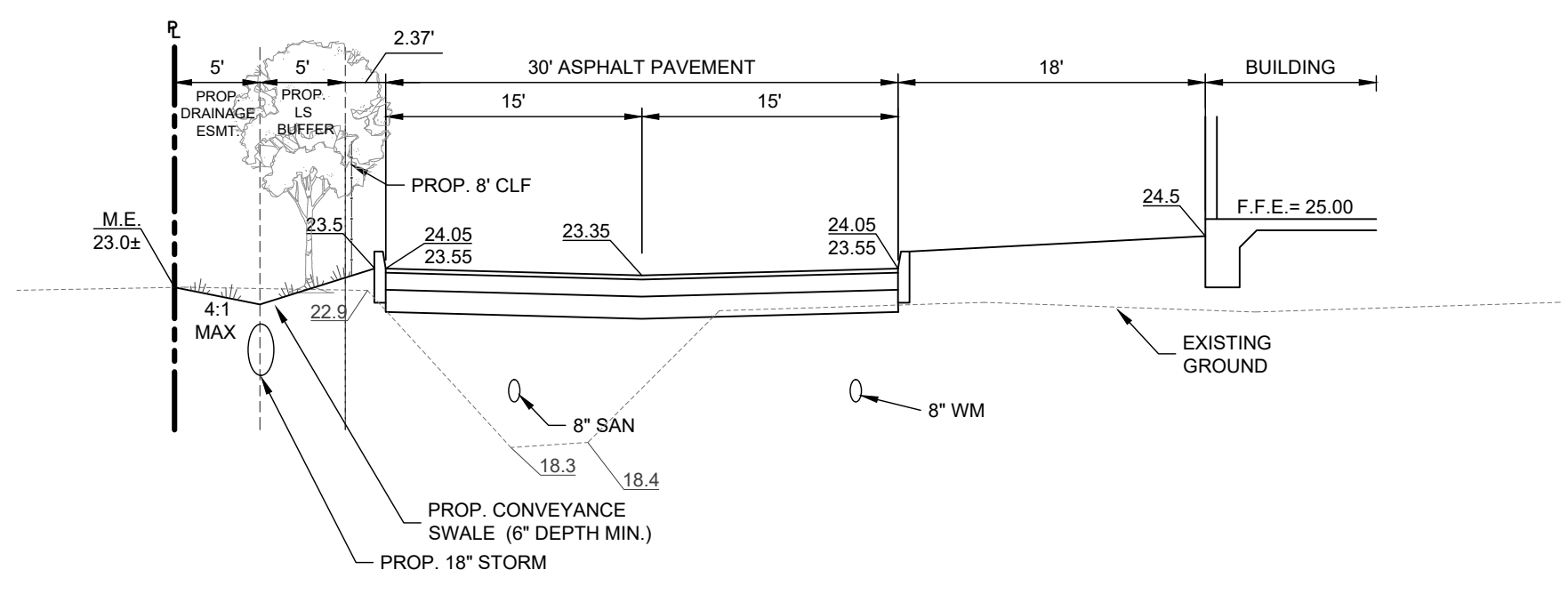
SECTION A-A
N.T.S.



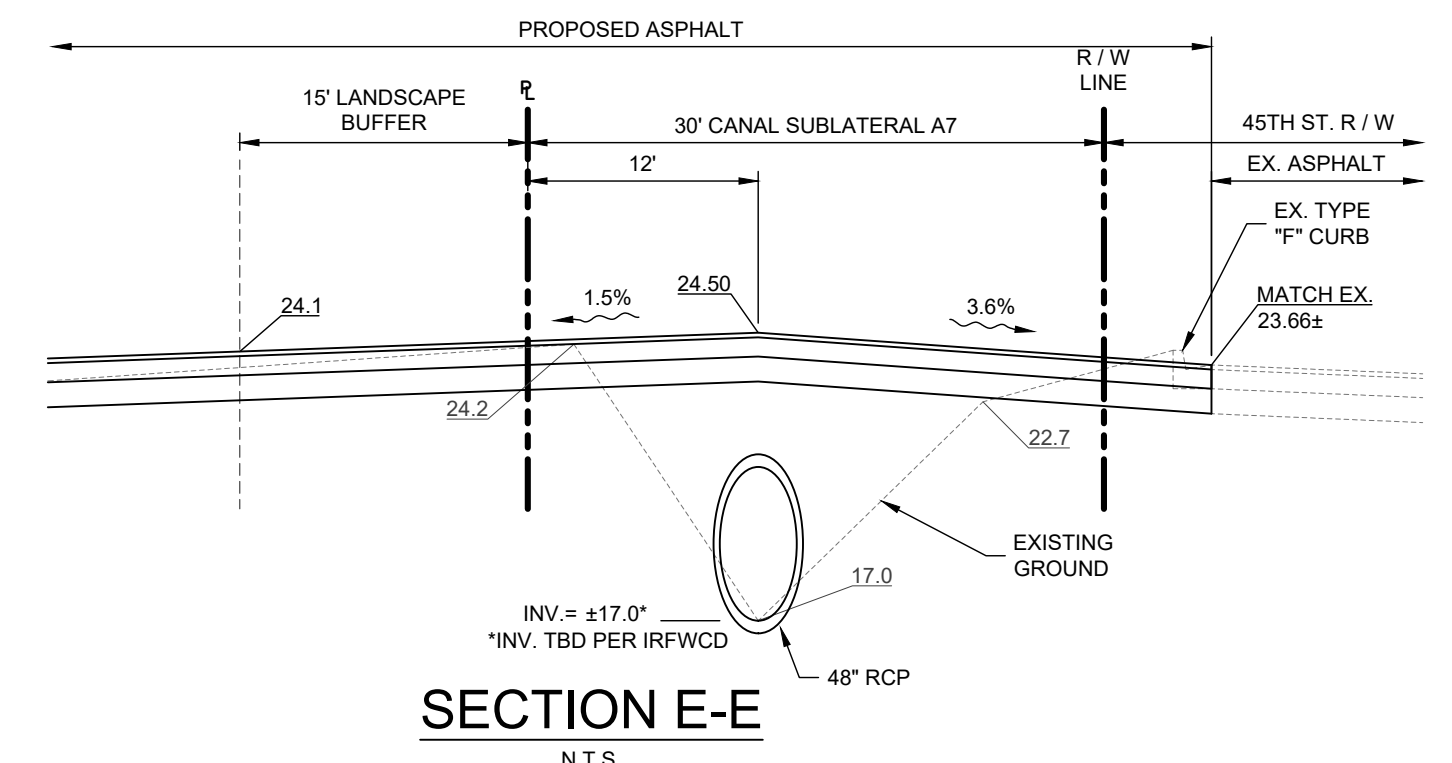
SECTION B-B
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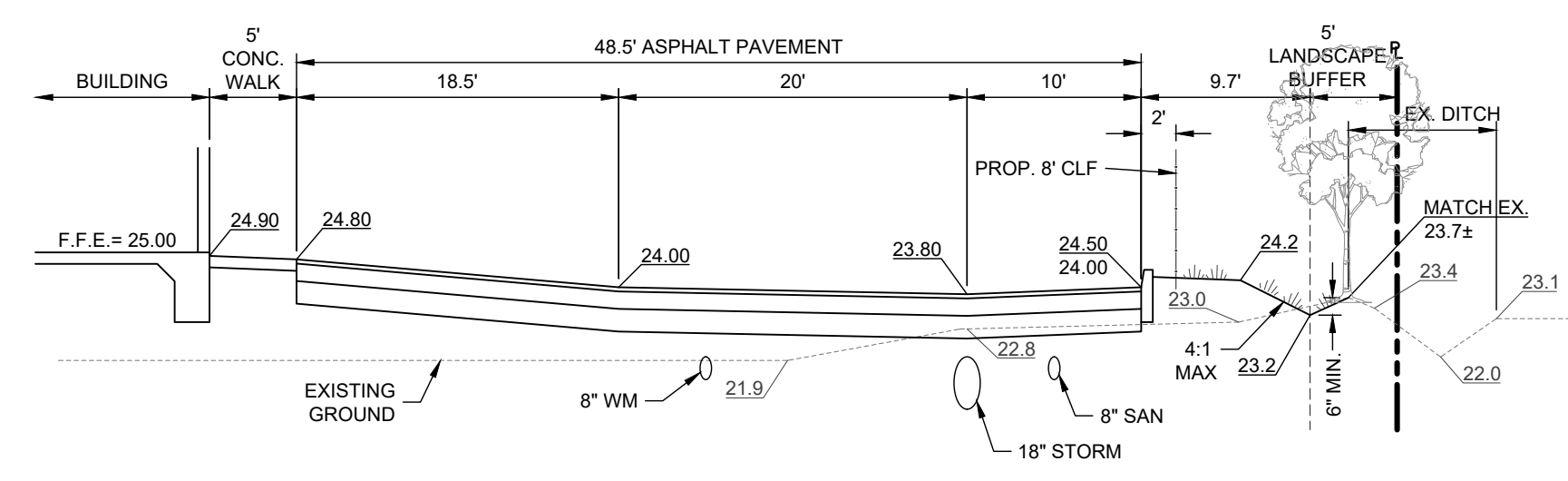
SECTION C-C
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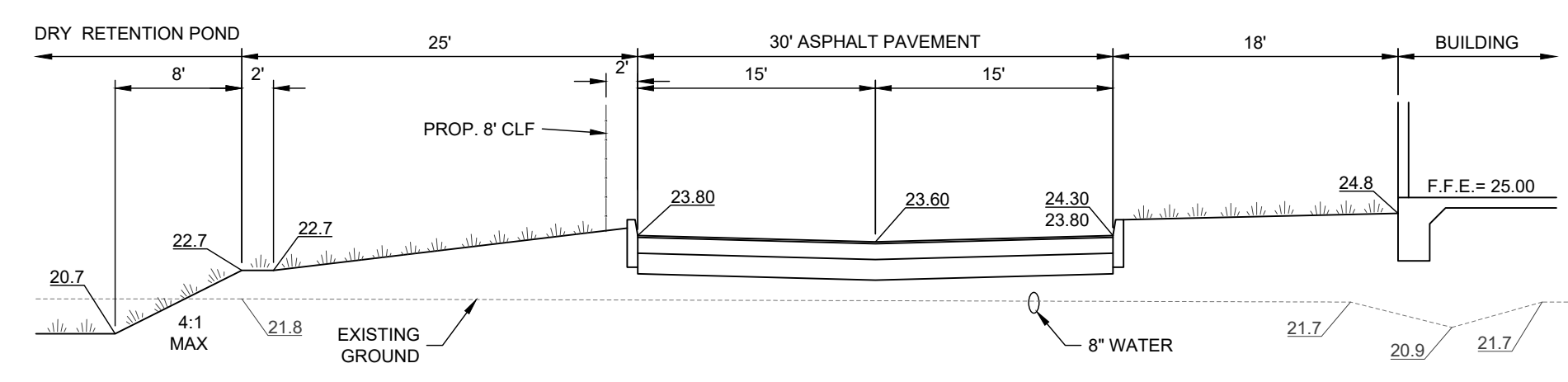
SECTION D-D
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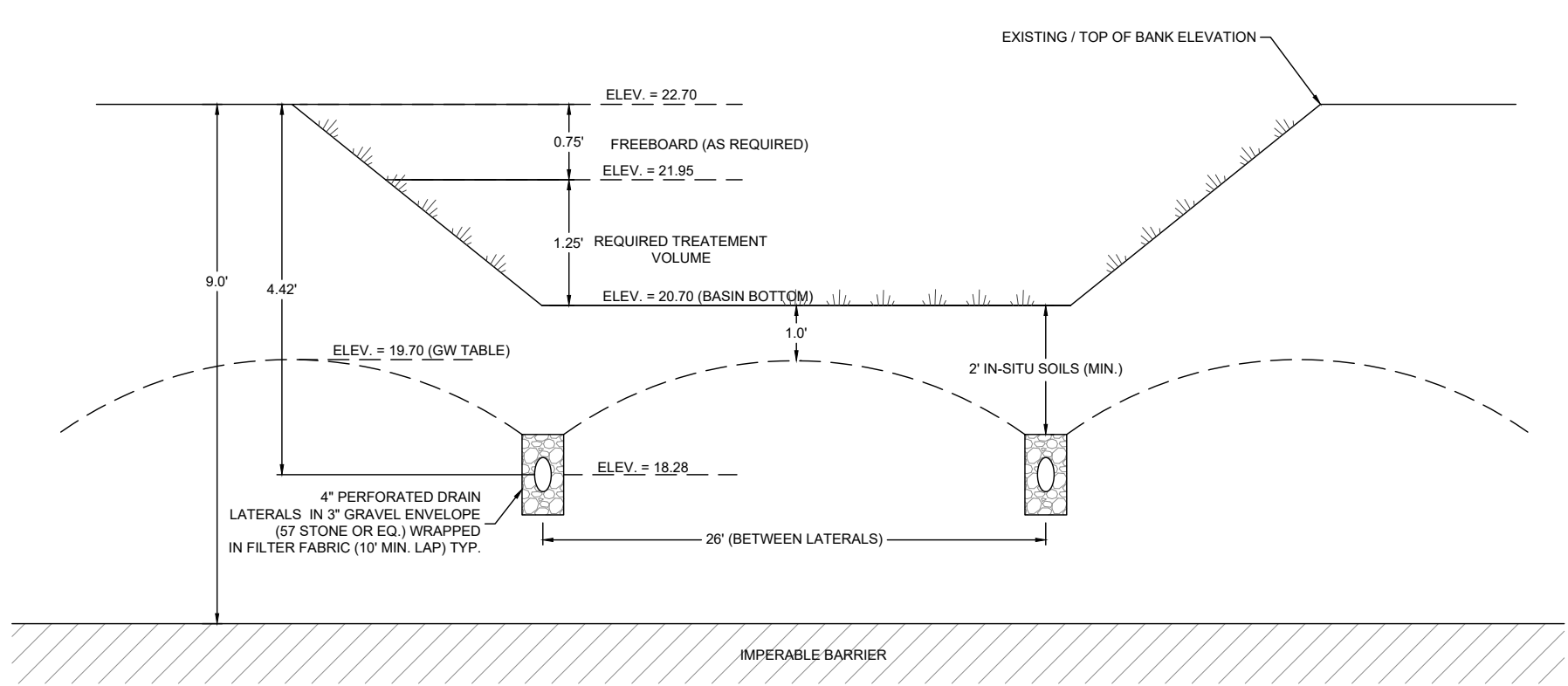
SECTION E-E
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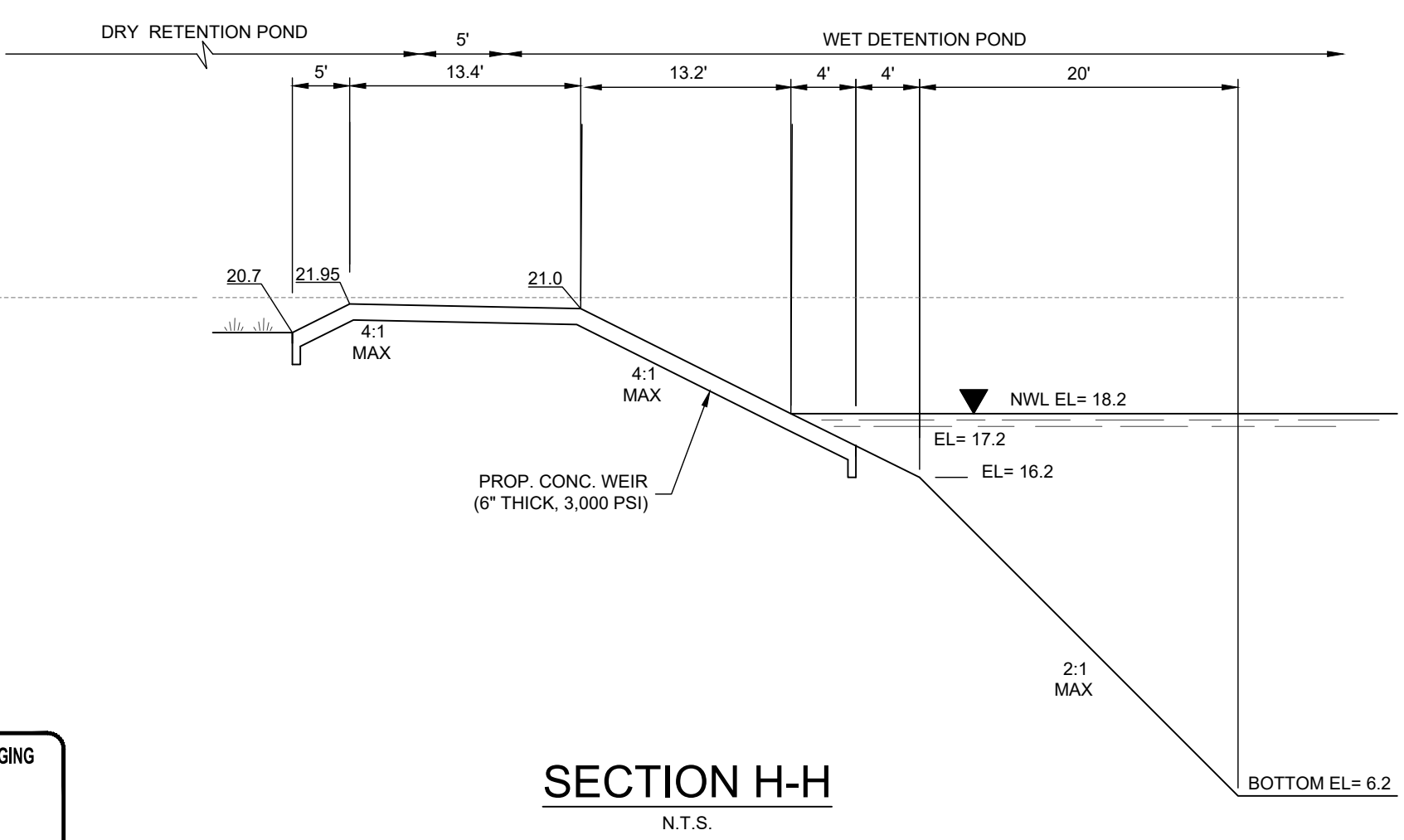
SECTION F-F
N.T.S.



SECTION G-G
N.T.S.



UNDERDRAIN SECTION DETAIL
N.T.S.



SECTION H-H
N.T.S.

NO.	REVISIONS	DATE
1	REVISED PER IRC	08-21-2022
2	TRC COMMENTS	11-29-2022
3	TRC COMMENTS	02-06-2023

JOB NO.	DESIGNED	DRAWN	DATE	CHECKED	DATE ISSUED
21-0053	GWR	GWR	NOVEMBER 2021	AJB	6/6/2023

MBV ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
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1805 S. 30TH STREET
PHOENIX, AZ 85041
TEL: (602) 998-8317
FAX: (602) 998-8317
HOLDING: EL-191 (031) 391-1510
FL PERCE: EL-191 (031) 391-1510

CROSS SECTIONS

GENESIS INDUSTRIAL
FLORIDA
INDIAN RIVER COUNTY

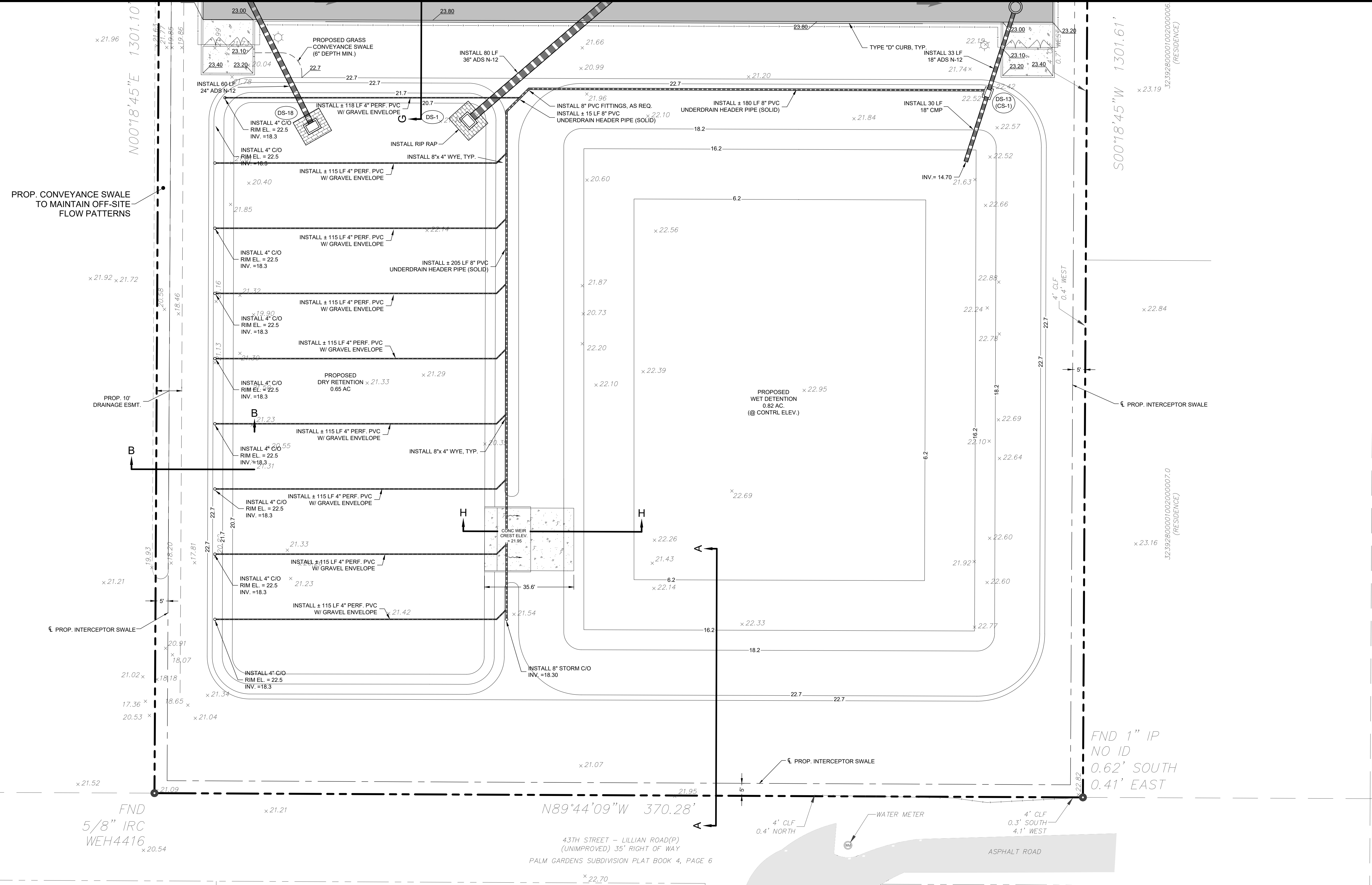
AARON J. BOWLES
LICENSE
No. 55313
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL P.E. #55313
SHEET
C7
21-0053

C:\DRAWINGS\2021\10053_Genesis Industrial - Dwg\21-0053_CROSS SECTIONS\21-0053_CROSS SECTIONS.dwg 6/6/2023 2:10 PM

72 HOURS BEFORE DIGGING
CALL TOLL FREE
811
Know what's below.
Call before you dig.

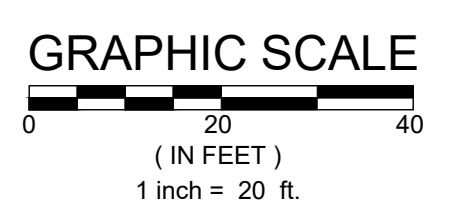
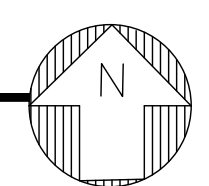
MATCH LINE "A"



STRUCTURE NUMBER	DS-1	DS-2	DS-3	DS-13 (CS-1)	DS-18
	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052
DESCRIPTION	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DBI W/6" TYPE "F" STRUCT.	TYPE "F" DITCH BOTTOM INLET	MODIFIED TYPE "D" CONTROL STRUCTURE	TYPE "F" DITCH BOTTOM INLET
RIM ELEV.	20.70	22.80	22.80	22.20	20.70
PIPE DIA.	36.00	36.00	24.00	18.00	24.00
COVER	3.70	2.65	4.50	2.50	2.70
INVERT ELEVATION	N	14. N	14.25 N	-	18.2 N
	S	-	14.25 S	-	-
	E	-	17.15 E	16.30 E	-
	W	-	-	-	-
BOTTOM ELEV.	13.50	13.75	15.80	17.70	15.50

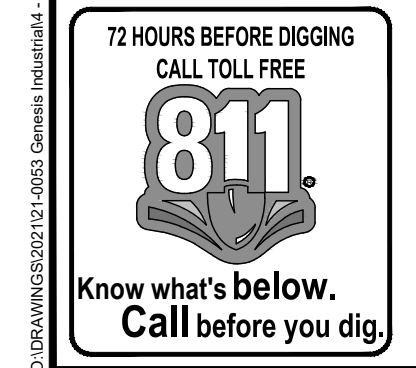
PAVING, GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'



LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- EXISTING ELEVATION
- PROPOSED ELEVATION
- DRAINAGE FLOW



NO.	DATE	REVISIONS
1	02-06-2023	TFC COMMENTS
2	11-22-2022	TFC COMMENTS
3	08-21-2022	TFC COMMENTS
4	08-21-2022	1 REVISIONS PER IRC

MBV ENGINEERING, INC.
 MOIA BOWLES VILLAMIZAR & ASSOCIATES
 CONSULTING ENGINEERING CA #3728
 1805 S. 30TH STREET
 FT. PIERCE, FL. 34947
 TEL: (888) 888-8888
 FAX: (888) 888-8888

PAVING, GRADING AND DRAINAGE PLAN

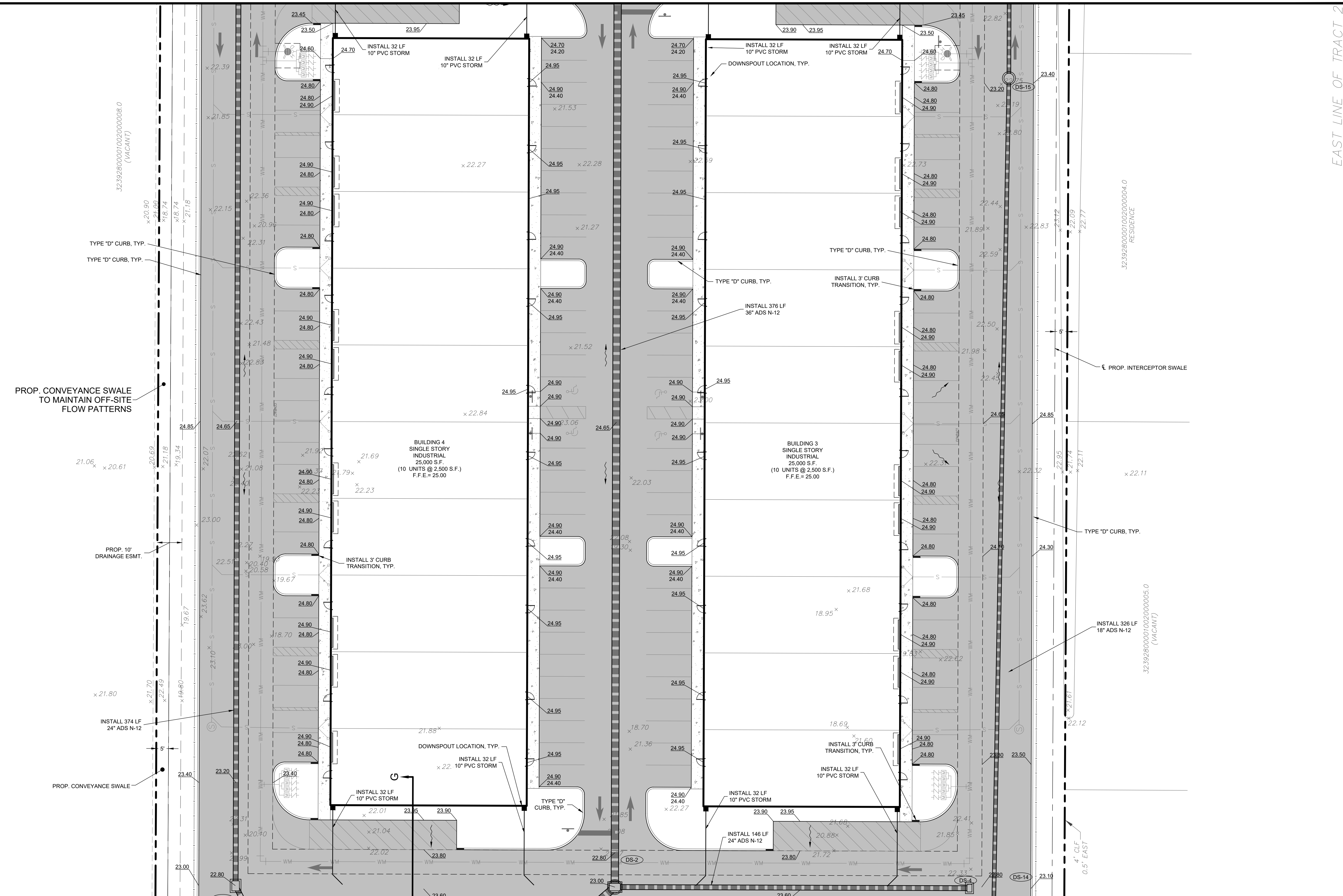
GENESIS INDUSTRIAL
 FLORIDA
 INDIAN RIVER COUNTY

AARON J. BOWLES
 LICENSE No. 55313
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

SHEET
C8
 21-0053

MATCH LINE "B"

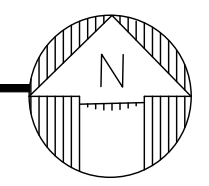
EAST LINE OF TRACT 2



MATCH LINE "A"

PAVING, GRADING AND DRAINAGE PLAN

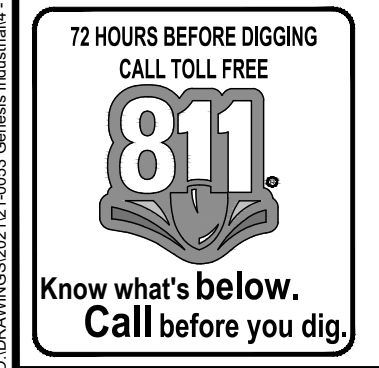
SCALE: 1" = 20'



LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- x 22.57 EXISTING ELEVATION
- 22.80 PROPOSED ELEVATION
- DRAINAGE FLOW

STRUCTURE NUMBER	DS-2	DS-3	DS-4	DS-14	DS-15
	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052
DESCRIPTION	TYPE "F" DBI W/6" TYPE "J" STRUCT.	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	STORM MH (4' DIA)	STORM MH (4' DIA)
RIM ELEV.	22.80	22.80	22.80	23.00	23.20
PIPE DIA.	36.00	24.00	24.00	18.00	18.00
COVER	2.65	4.50	4.52	3.50	3.90
INVERT ELEVATION	N	14.25 N	-	-	17.55 N
	S	14.25 S	-	-	17.55 S
	E	17.15 E	16.30 E	-	-
	W	-	-	16.28 W	-
BOTTOM ELEV.	13.75	15.90	15.78	17.50	17.30

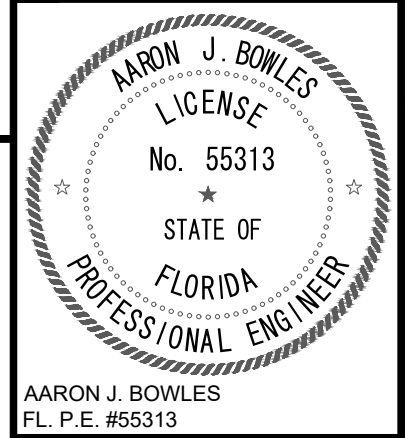


NO.	DATE	REVISIONS
6	02/06/2023	TFC COMMENTS
5	11/29/2022	TFC COMMENTS
4	09/21/2022	1 REVISIONS PER IRC
3	NOVEMBER 2021	A/B
2	NOVEMBER 2021	A/B
1	NOVEMBER 2021	A/B

MBV ENGINEERING, INC.
 MOYA BOWLES VILLAMIZAR & ASSOCIATES
 CONSULTING ENGINEERING CA #3728
 1885 SOUTH STREET
 FT. PIERCE, FL. 34947
 TEL: (888) 888-8888
 FAX: (888) 888-8888

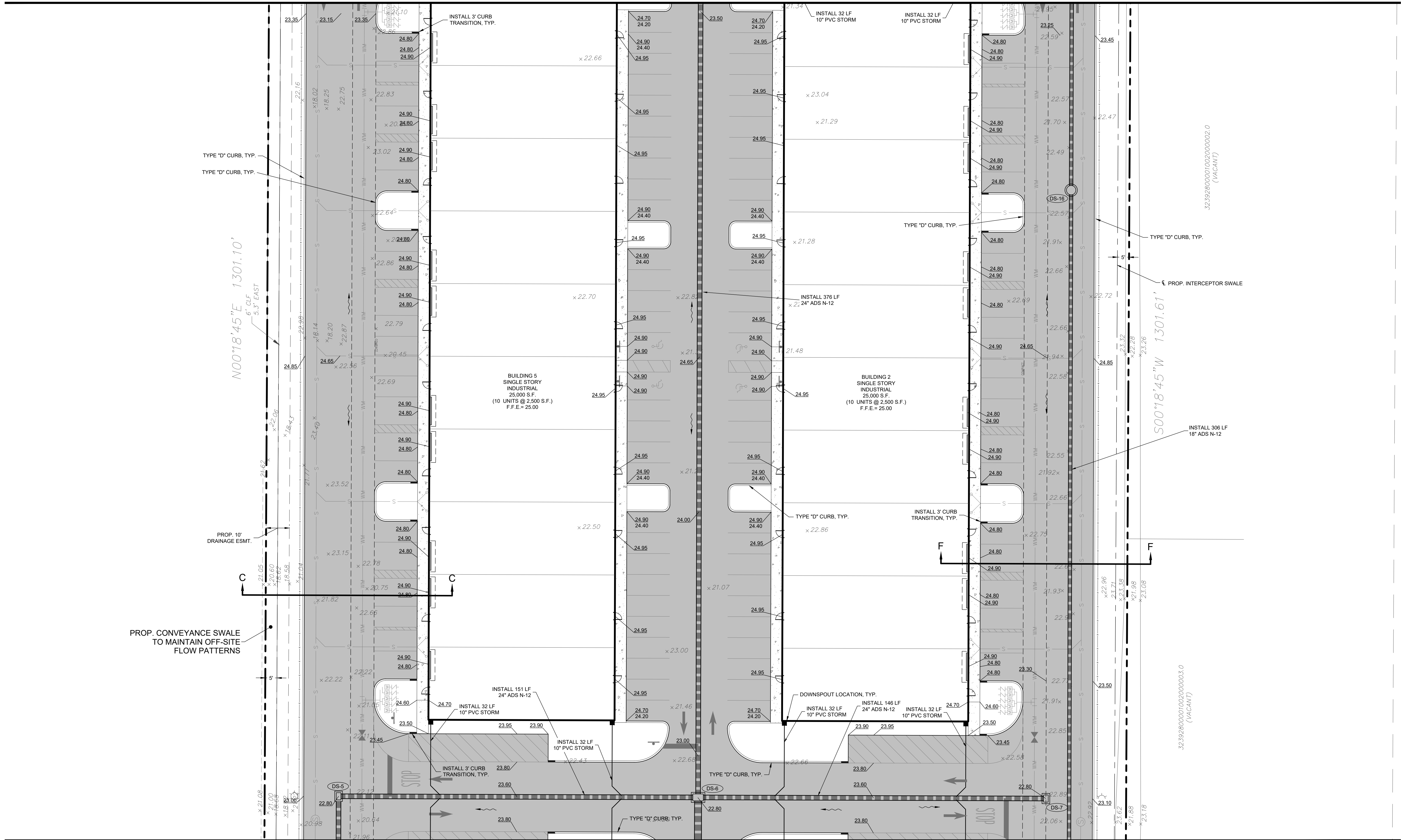
PAVING, GRADING AND DRAINAGE PLAN

GENESIS INDUSTRIAL
 INDIAN RIVER COUNTY
 FLORIDA



SHEET
C9
 21-0053

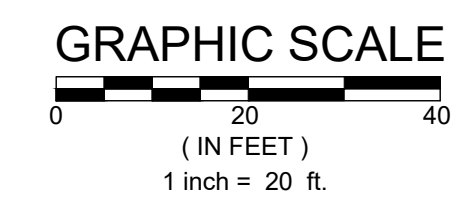
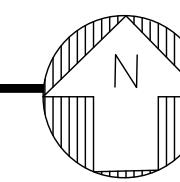
MATCH LINE "C"



MATCH LINE "B"

PAVING, GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'



LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- EXISTING ELEVATION
- PROPOSED ELEVATION
- DRAINAGE FLOW

STRUCTURE NUMBER	DS-5	DS-6	DS-7	DS-16	DS-19
	FOOT INDEX #	# 425-052	# 425-052	# 425-052	# 425-052
DESCRIPTION	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	STORM MH (4' DIA) INLET	TYPE "F" DITCH BOTTOM INLET
RIM ELEV.	22.80	22.80	22.80	22.60	20.50
PIPE DIA.	24.00	36.00	24.00	18.00	18.00
COVER	3.00	2.65	3.01	3.50	1.50
INVERT ELEVATION	N	-	15.75 N	-	17.2 N
	S	-	15.75 S	-	17.20 S
	E	17.80 E	17.15 E	-	-
	W	17.15 W	17.79 W	-	-
BOTTOM ELEV.	17.30	15.25	17.29	17.10	17.00

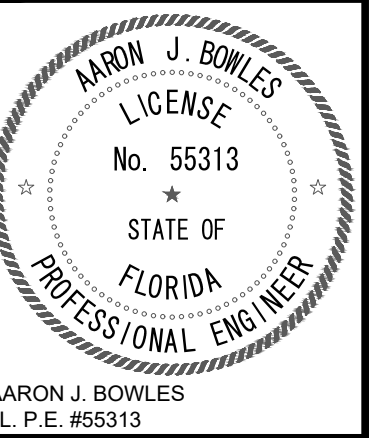


JOB NO.	DESIGNED	DRAWN	DATE	CHECKED	DATE ISSUED	REVISIONS	DATE
21-0053	GWR	GWR	NOVEMBER 2021	AJB	6/6/2023	1	06-21-2022
						2	11-22-2022
						3	02-06-2023
						1	06-21-2022

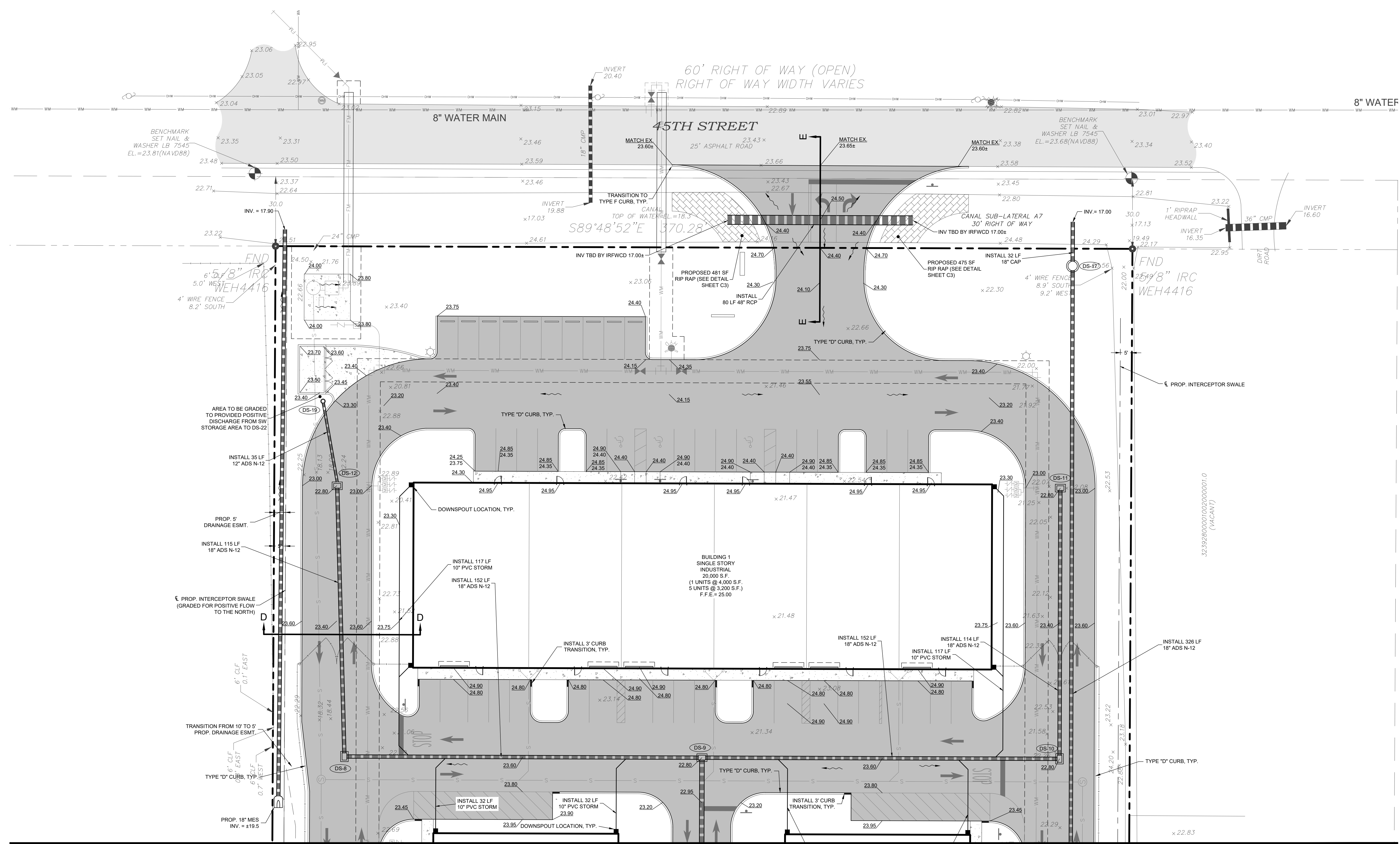
MBV ENGINEERING, INC.
MOJA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728
1800 S. 10TH STREET
PH: (772) 644-8330
FX: (772) 783-8117
HELORDALE, FL - PH: (351) 381-1510
FT. PIERCE, FL - PH: (772) 466-9005

PAVING, GRADING AND DRAINAGE PLAN

GENESIS INDUSTRIAL
INDIAN RIVER COUNTY
FLORIDA

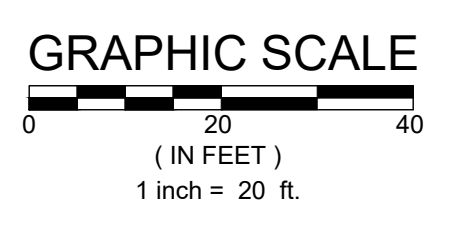
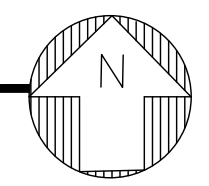


SHEET
C10
21-0053



MATCH LINE "C"
PAVING, GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'



LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- EXISTING ELEVATION
- PROPOSED ELEVATION
- DRAINAGE FLOW

STRUCTURE NUMBER	DS-8	DS-9	DS-10	DS-11	DS-12	DS-17	DS-19
	FDOT INDEX #	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052	# 425-052
DESCRIPTION	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	STORM MH (4' DIA)	TYPE "F" DITCH BOTTOM INLET
RIM ELEV.	22.80	22.80	22.80	22.80	22.80	23.30	20.50
PIPE DIA.	18.00	24.00	18.00	18.00	18.00	18.00	18.00
COVER	3.45	3.55	3.45	3.00	3.00	4.40	1.50
INVERT ELEVATION	N	17.85 N	-	17.85 N	-	-	17.1 N
	S	-	17.25 S	-	18.30 S	18.30 S	17.10 S
	E	17.85 E	17.25 E	-	-	-	-
	W	-	17.25 W	17.85 W	-	-	-
BOTTOM ELEV.	17.35	16.75	17.35	17.80	17.80	16.90	17.00



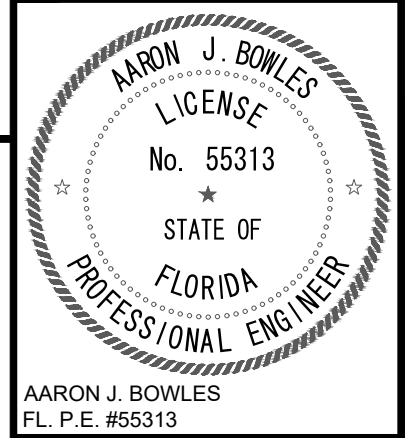
JOB NO.	DESIGNED	DRAWN	DATE	CHECKED	DATE ISSUED
21-0053	GWR	GWR	NOVEMBER 2021	AJB	6/6/2023

NO.	DATE	REVISIONS
1	02-06-2023	TRC COMMENTS
2	11-22-2022	TRC COMMENTS
3	06-21-2022	REVISIONS PER IRC

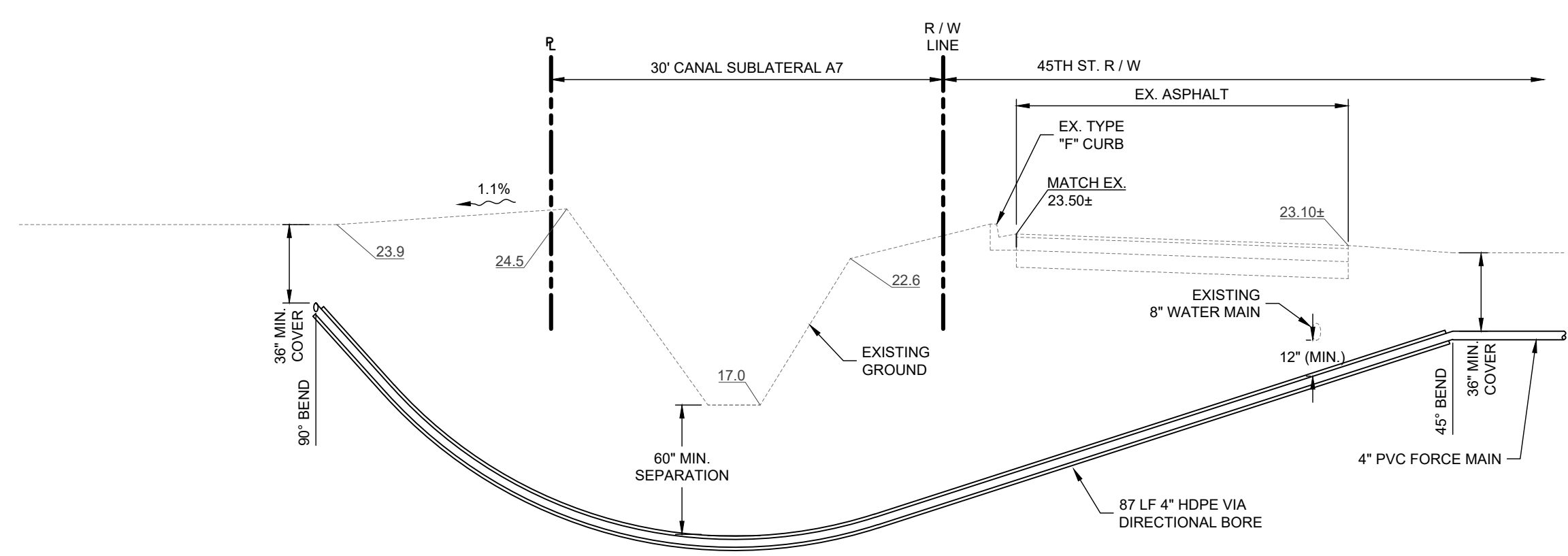
MBV ENGINEERING, INC.
 MOYA BOWLES VILLAMIZAR & ASSOCIATES
 CONSULTING ENGINEERING CA #3728
 1805 S 10TH STREET
 FT. PIERCE, FL 34947
 TEL: (888) 888-8888
 FAX: (888) 888-8888

PAVING, GRADING AND DRAINAGE PLAN

GENESIS INDUSTRIAL
 INDIAN RIVER COUNTY
 FLORIDA

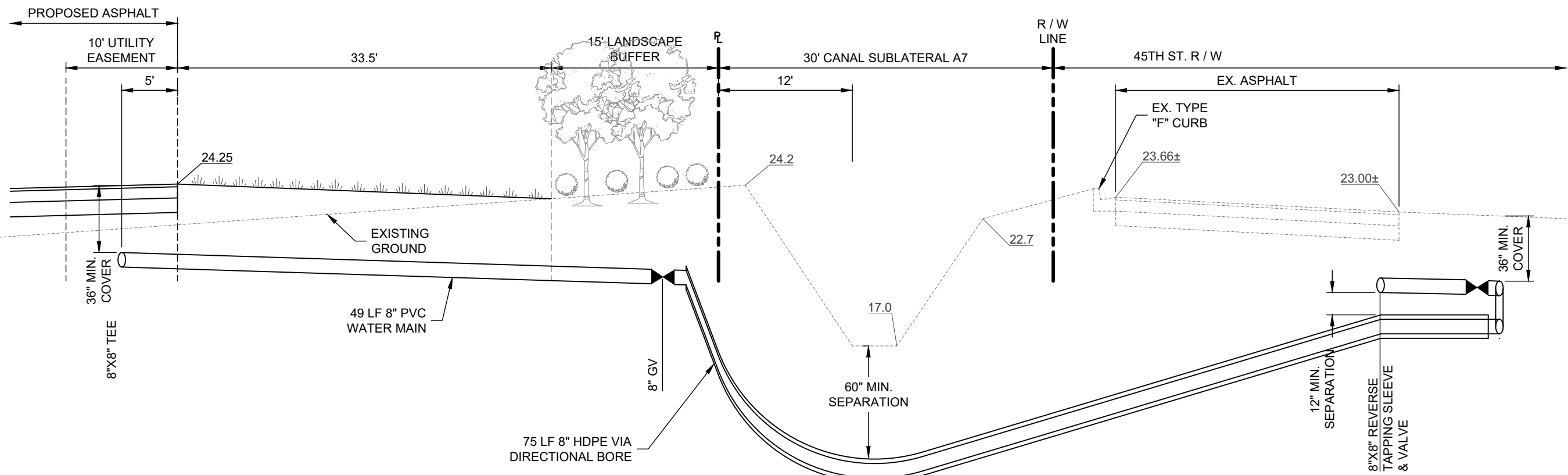


SHEET
C11
 21-0053



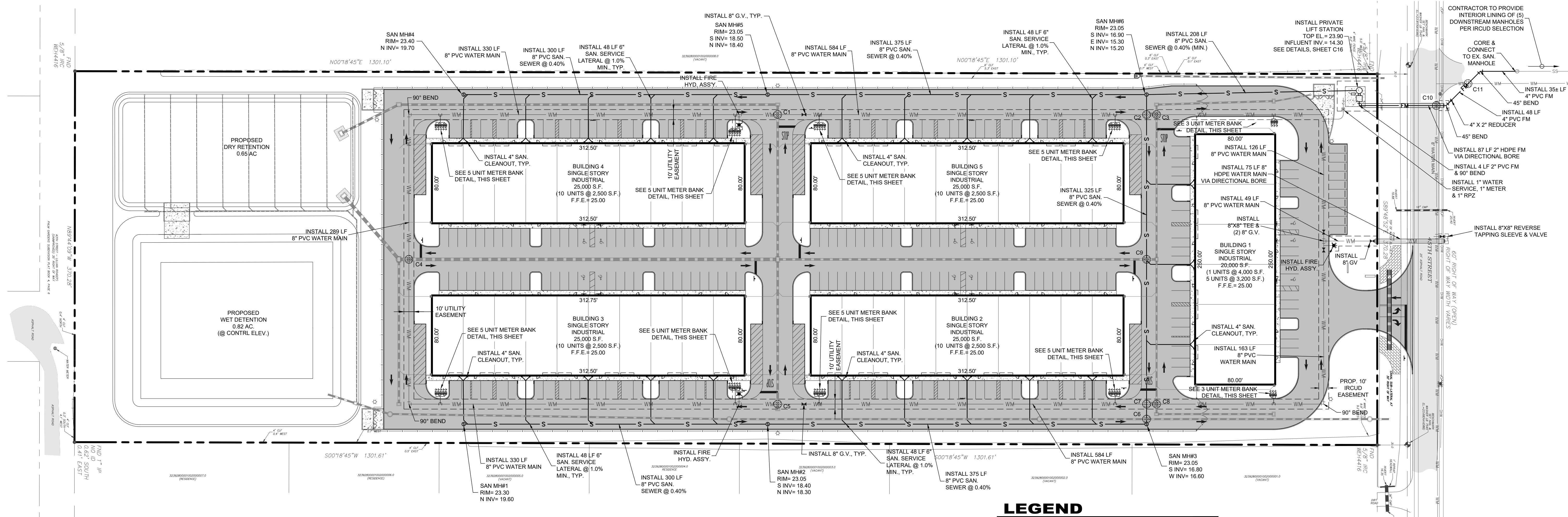
FORCE MAIN EXTENSION PROFILE

N.T.S.



WATER MAIN EXTENSION PROFILE

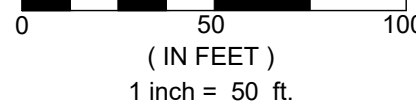
N.T.S.



UTILITY PLAN

SCALE: 1" = 50'

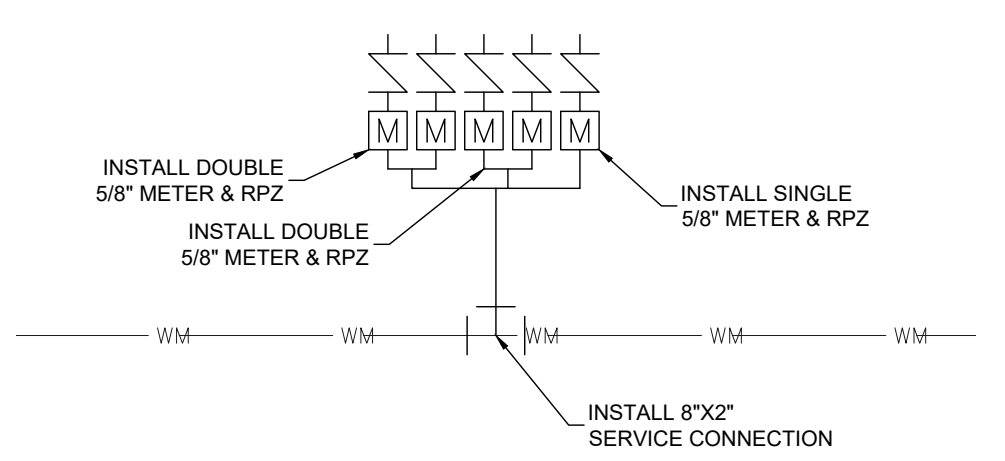
GRAPHIC SCALE



LEGEND

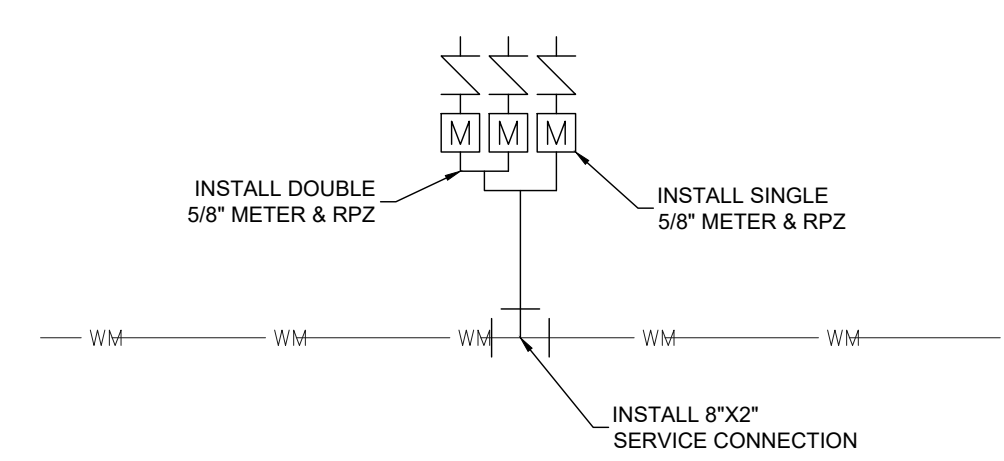
- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- CONFLICT LOCATION

		C1	C2	C3	C4	C5	C6	C7	C8
CONFLICT NUMBER		C1	C2	C3	C4	C5	C6	C7	C8
GROUND ELEVATION		22.9'	23.0'	22.9'	22.9'	22.9'	22.9'	22.9'	23.0'
COVER (UPPER)		2.9'	3.1'	3.4'	3.1'	2.7'	3.6'	3.0'	3.5'
Upper Pipe	PIPE SIZE	24"	8"	18"	8"	24"	18"	8"	18"
	MATERIAL	ST (ADS)	WTR(PVC)	ST (ADS)	WTR(PVC)	ST (ADS)	ST (ADS)	WTR(PVC)	ST (ADS)
	INV. ELEV	17.7'	19.2'	17.8'	19.1'	17.8'	17.6'	19.2'	17.8'
Lower Pipe	PIPE SIZE	8"	8"	8"	36"	8"	8"	8"	8"
	MATERIAL	WTR(PVC)	SS(PVC)	WTR(PVC)	ST (ADS)	WTR(PVC)	SS(PVC)	SS(PVC)	WTR(PVC)
	INV. ELEV	15.6'	15.3'	15.9'	14.3'	15.8'	16.2'	16.1'	15.9'
WALL THICKNESS		0.32"	0.32"	0.32"	3.00"	0.32"	0.32"	0.32"	0.32"



5 UNIT METER BANK DETAIL

N.T.S.



3 UNIT METER BANK DETAIL

N.T.S.

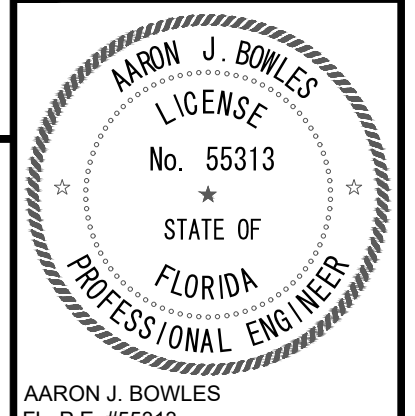


NO.	DATE	REVISIONS
1	08-21-2022	1 REVISIONS PER IRC
2	11-22-2022	3 TRC COMMENTS
3	NOVEMBER 2021	GWR
4		GWR
5		GWR
6		

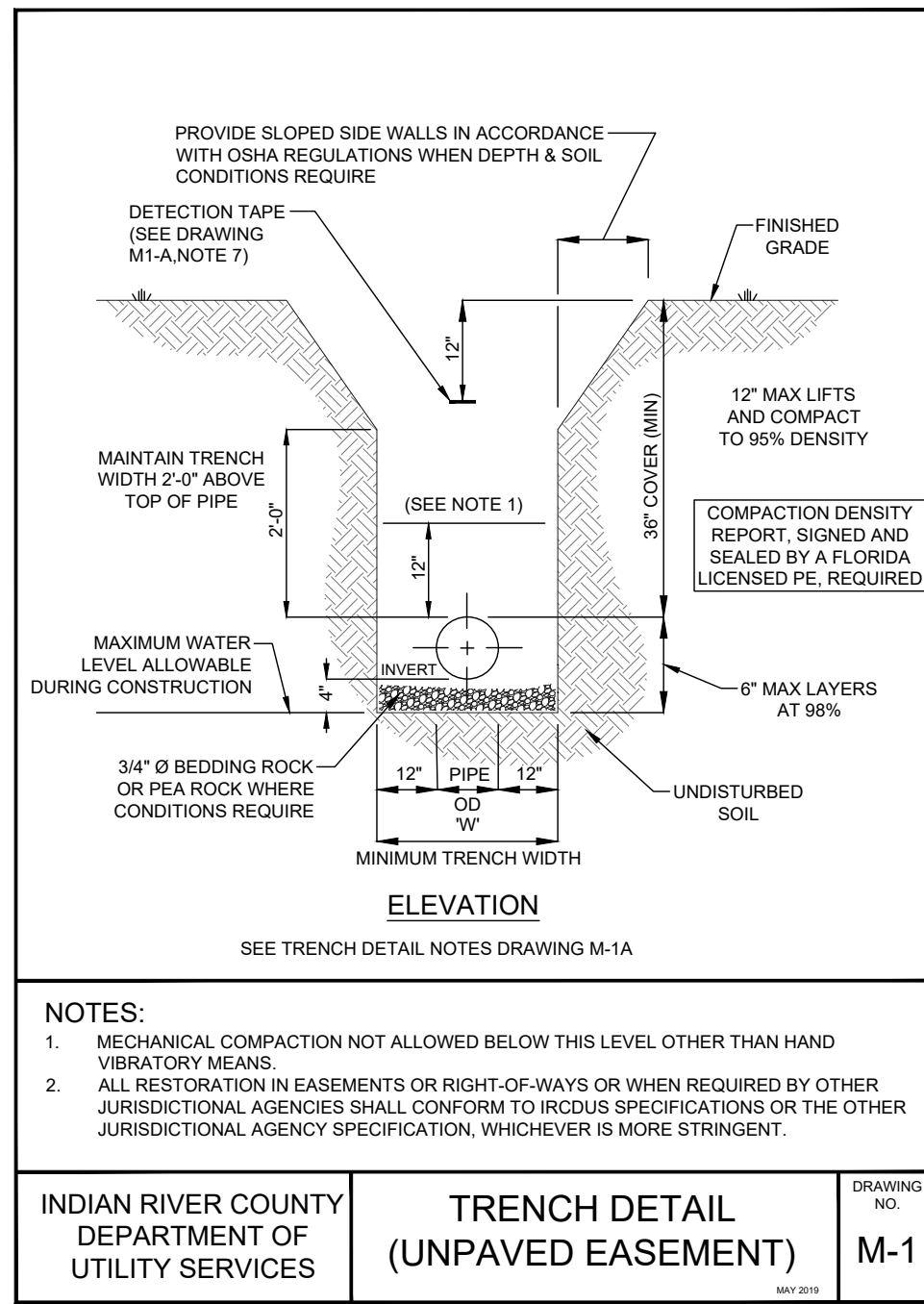
MBV ENGINEERING, INC.
 MOIA BOWLES VILLAMIZAR & ASSOCIATES
 CONSULTING ENGINEERING CA #3728
 1800 S. 10TH STREET
 FT. PIERCE, FL 34947
 PHONE: (888) 444-3330
 FAX: (888) 444-3330
 E-MAIL: INFO@MBV-INC.COM

UTILITY PLAN

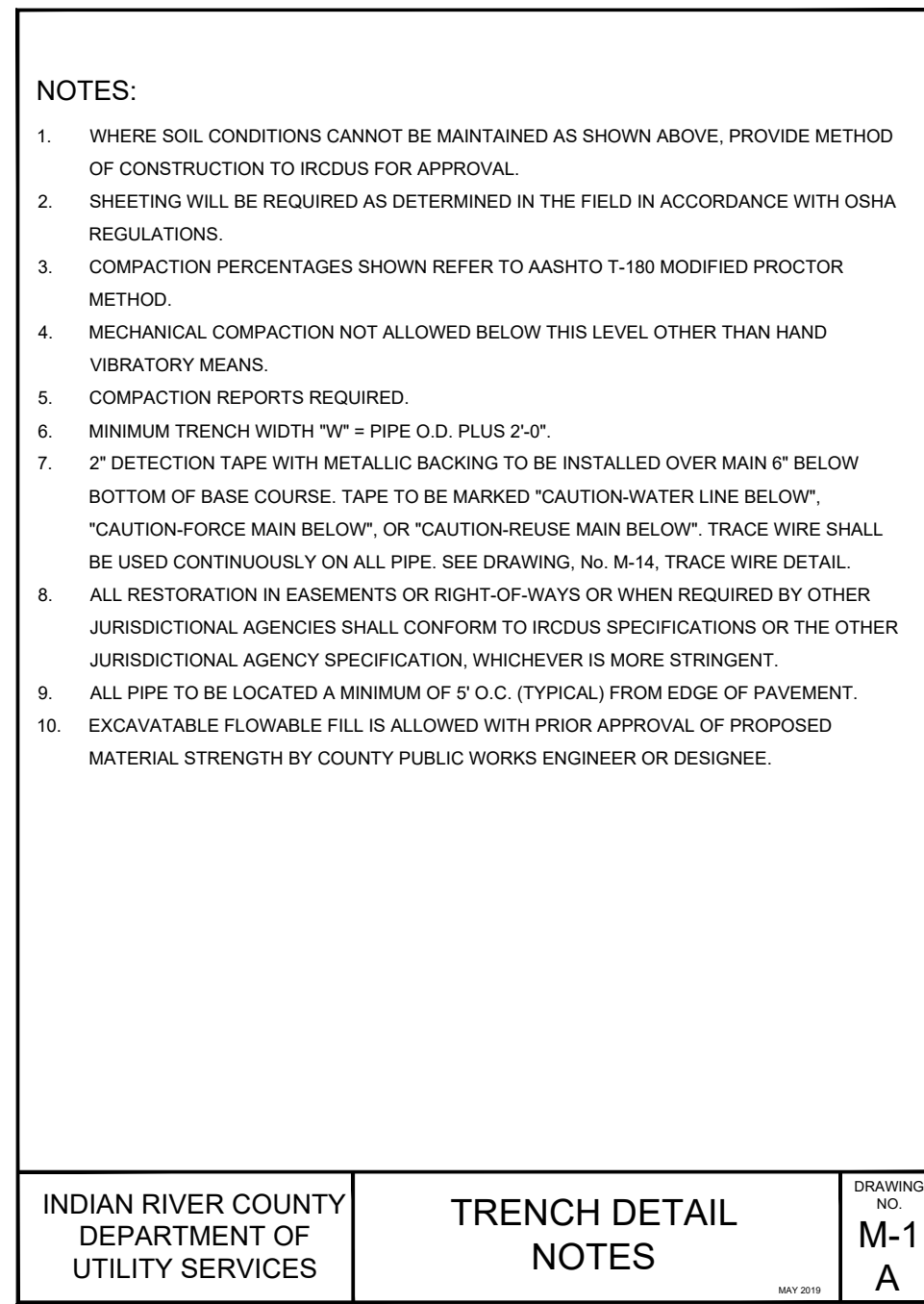
GENESIS INDUSTRIAL
 FLORIDA
 INDIAN RIVER COUNTY



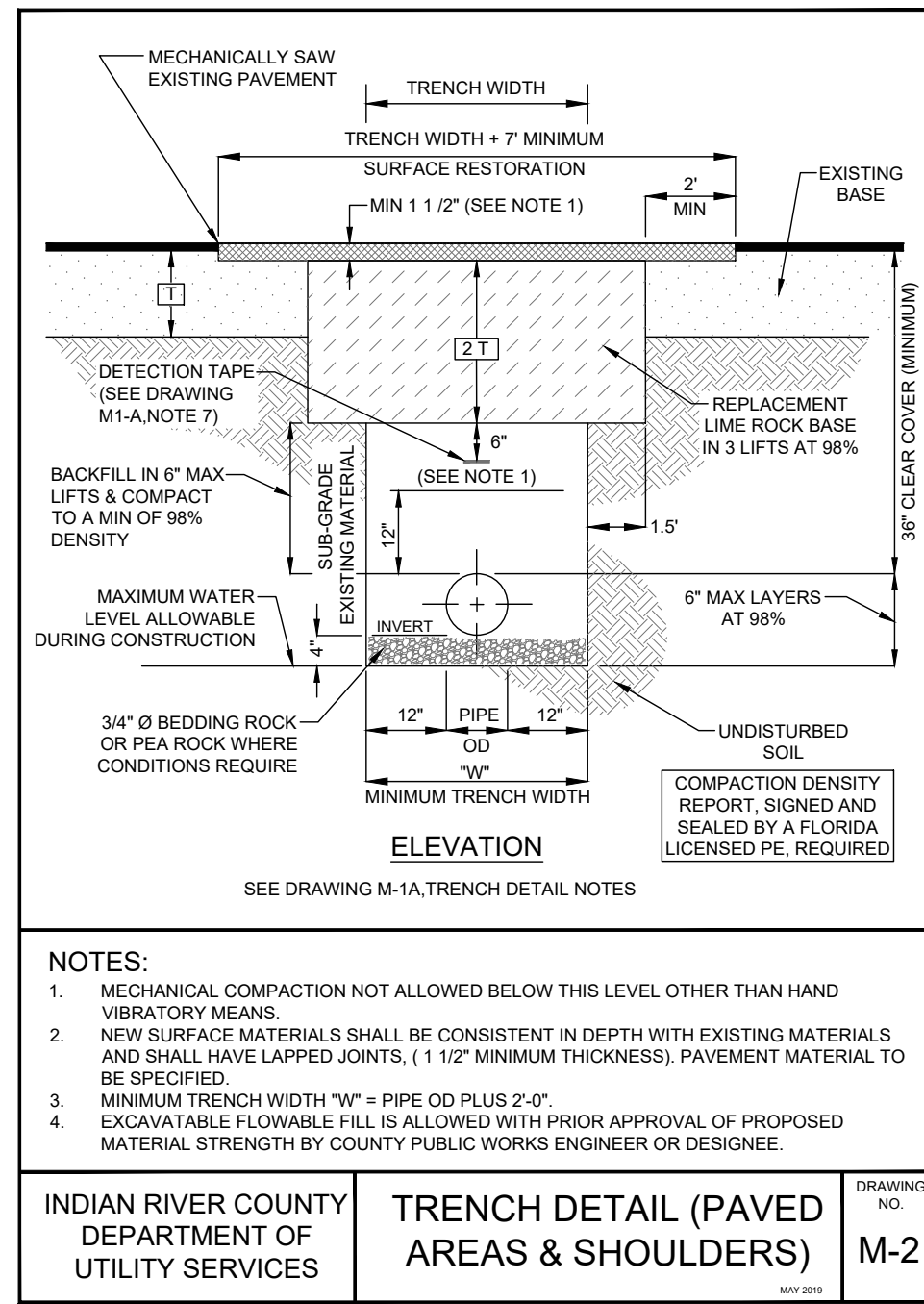
SHEET
C12
 21-0053



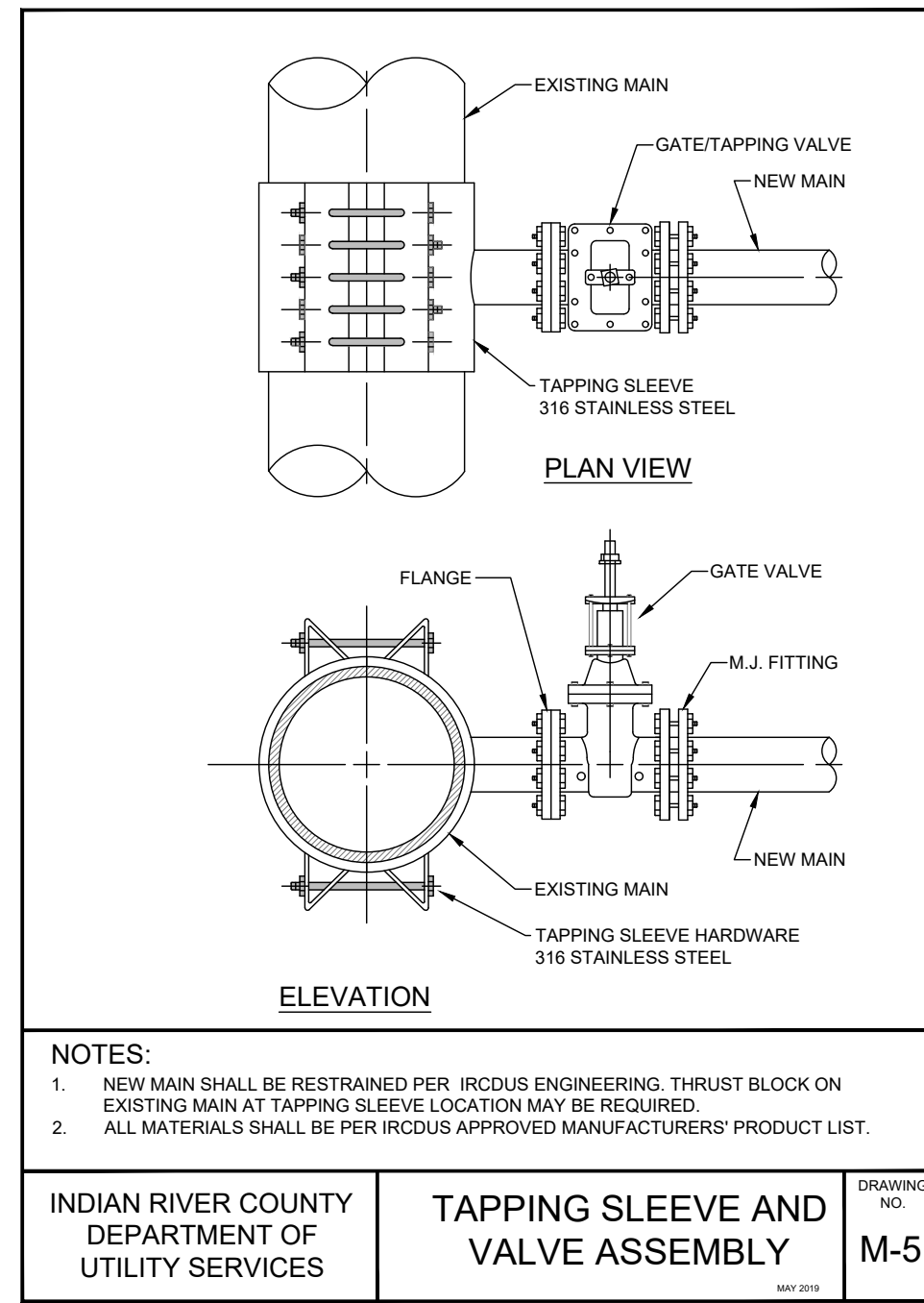
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
TRENCH DETAIL (UNPAVED EASEMENT)
 DRAWING NO. M-1



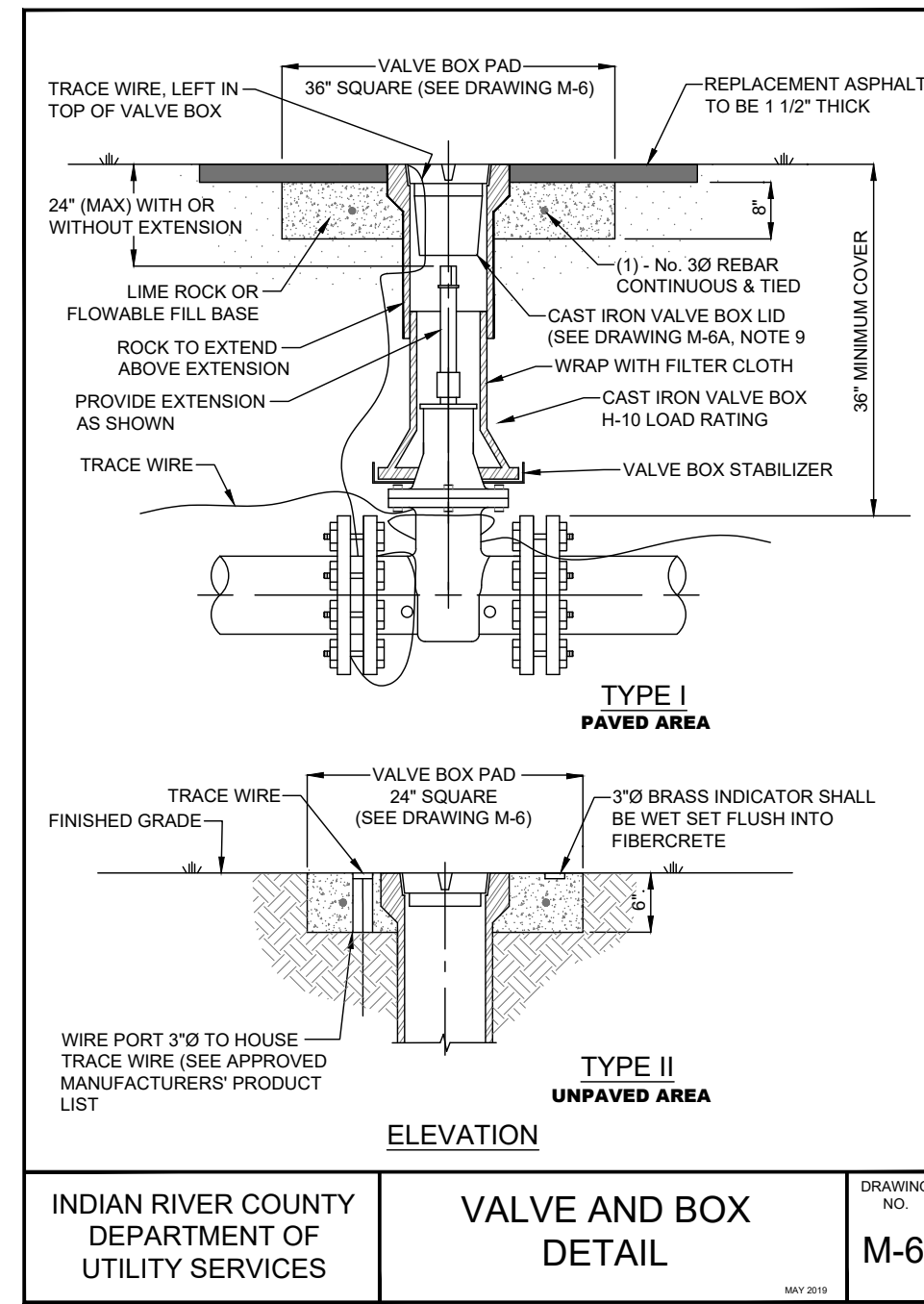
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
TRENCH DETAIL NOTES
 DRAWING NO. M-1 A



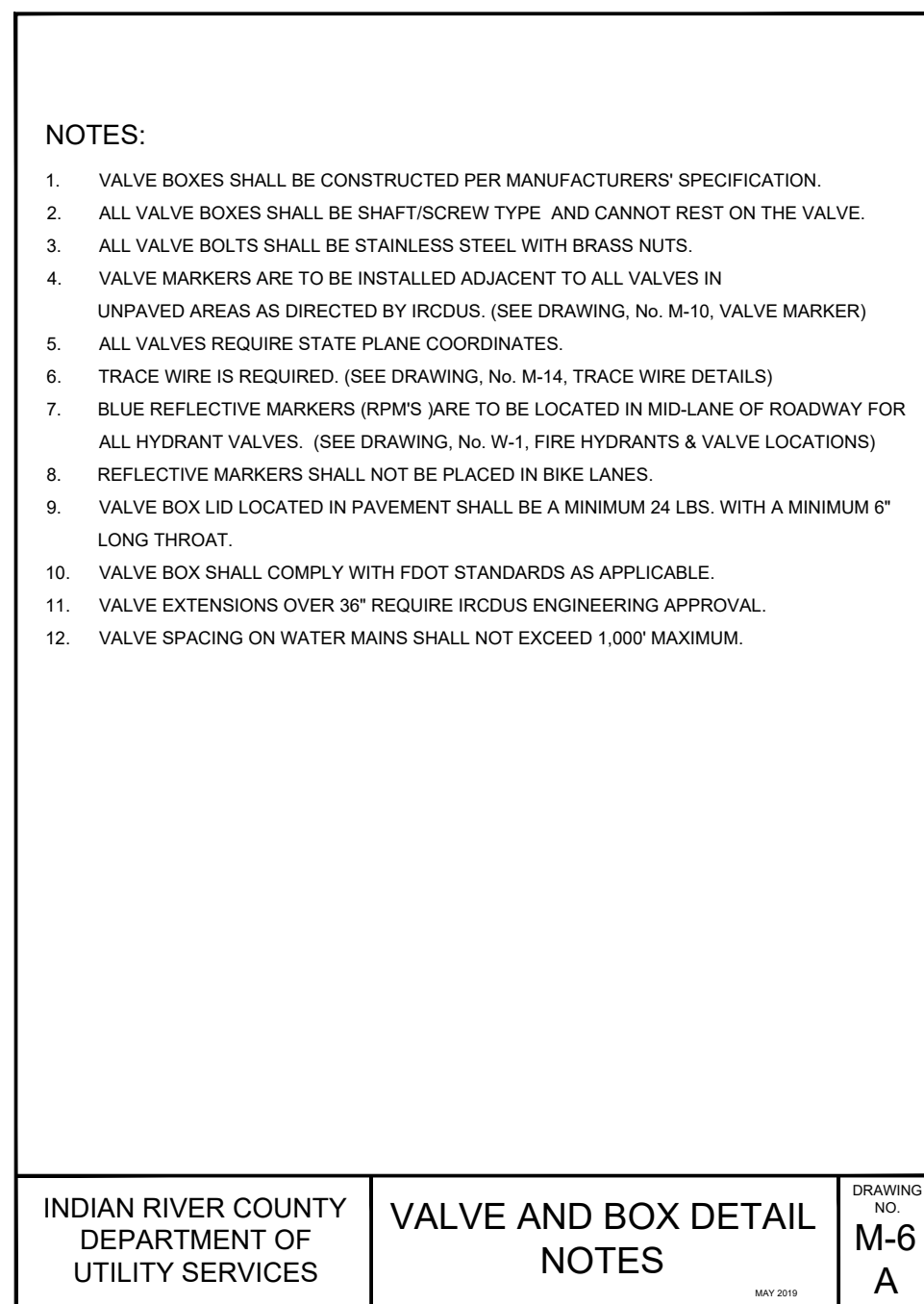
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
TRENCH DETAIL (PAVED AREAS & SHOULDERS)
 DRAWING NO. M-2



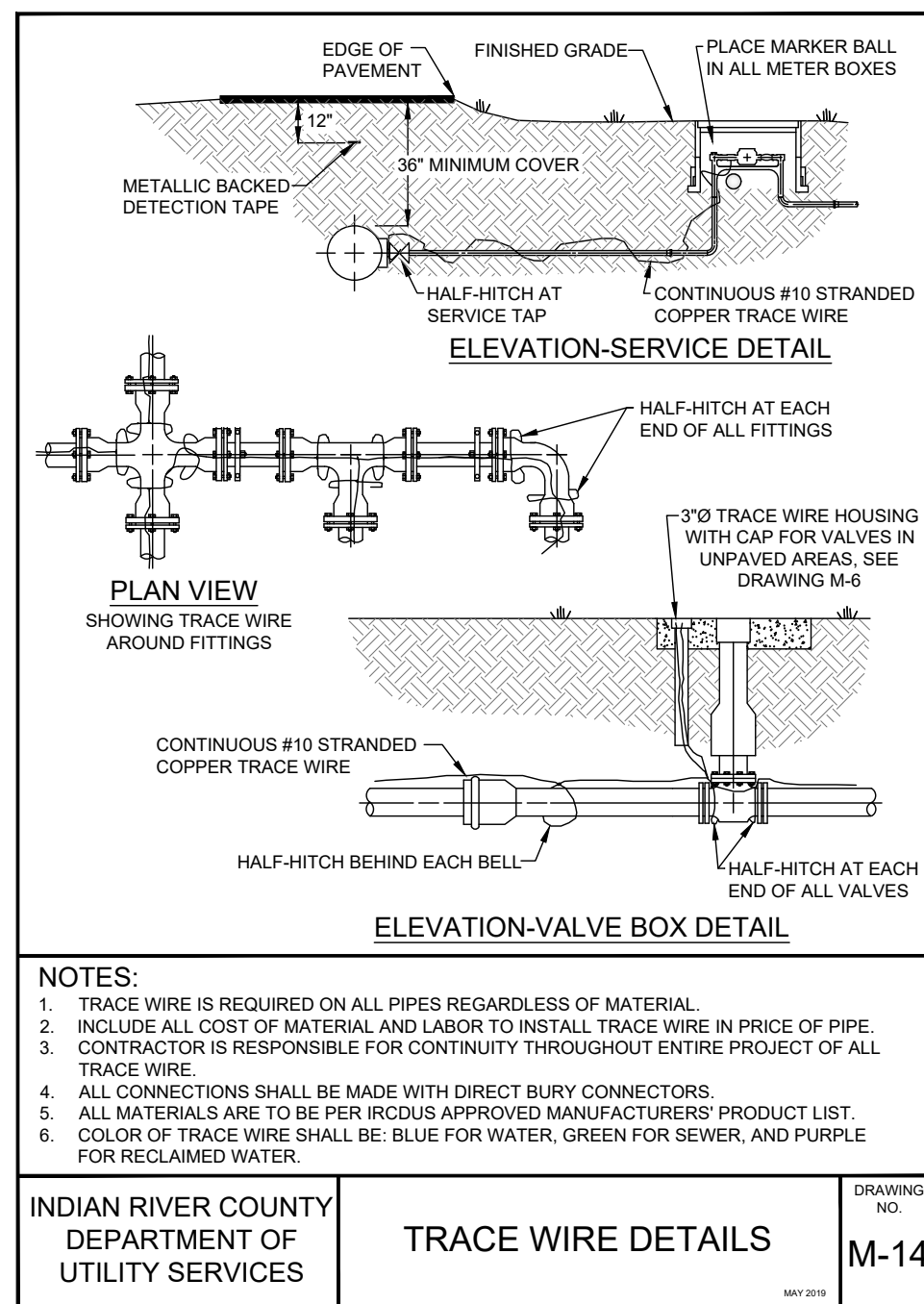
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
TAPPING SLEEVE AND VALVE ASSEMBLY
 DRAWING NO. M-5



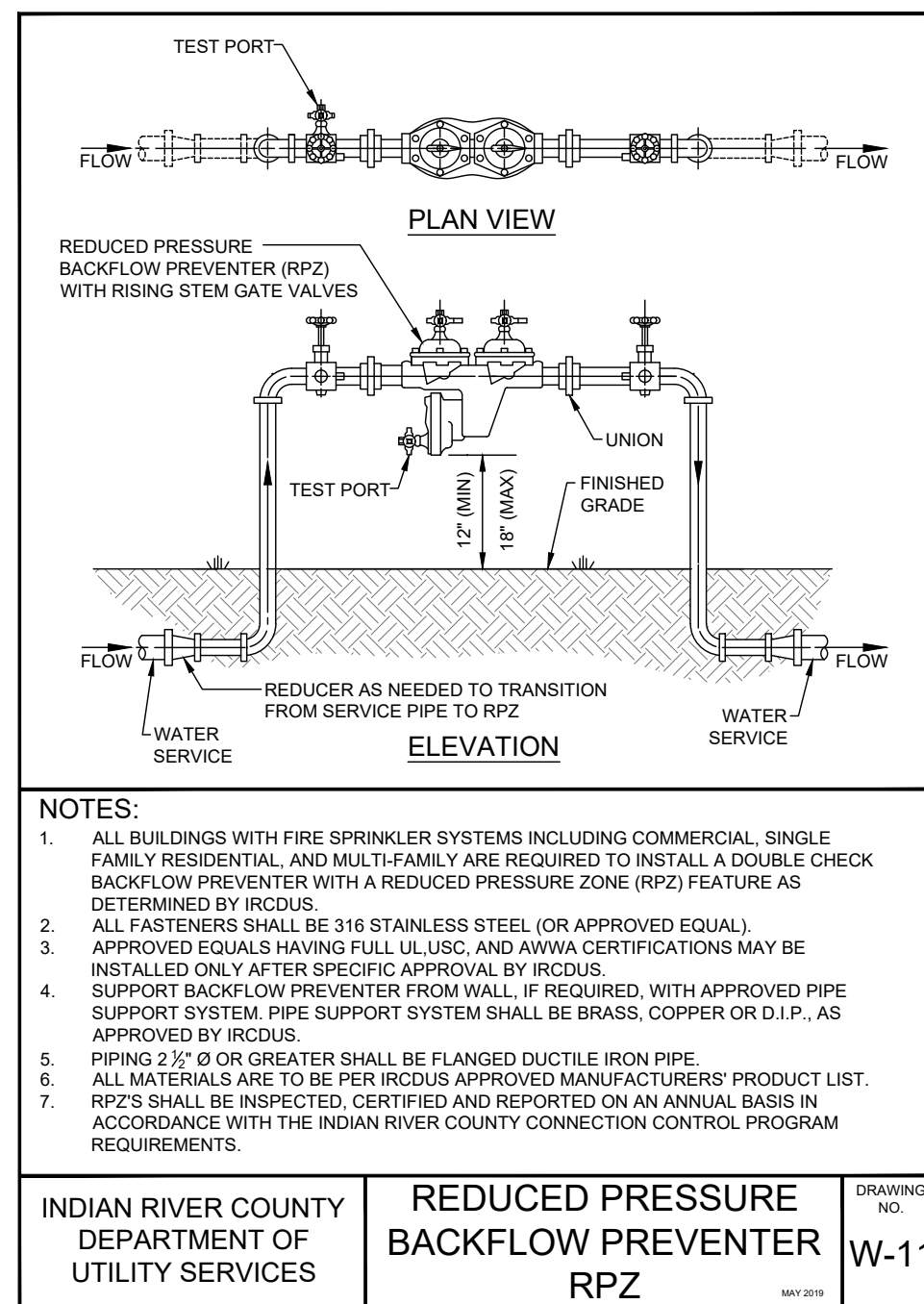
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
VALVE AND BOX DETAIL
 DRAWING NO. M-6



INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
VALVE AND BOX DETAIL NOTES
 DRAWING NO. M-6 A



INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
TRACE WIRE DETAILS
 DRAWING NO. M-14



INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
REDUCED PRESSURE BACKFLOW PREVENTER RPZ
 DRAWING NO. W-11

NO.	REVISIONS	DATE
8		
7		
6		
5		
4		
3	TRC COMMENTS	02-06-2023
2	TRC COMMENTS	11-22-2022
1	REVISIONS PER IRC	06-21-2022

JOB NO. 21-0053

DESIGNED GMR

DRAWN GWR

DATE NOVEMBER 2021

CHECKED AJB

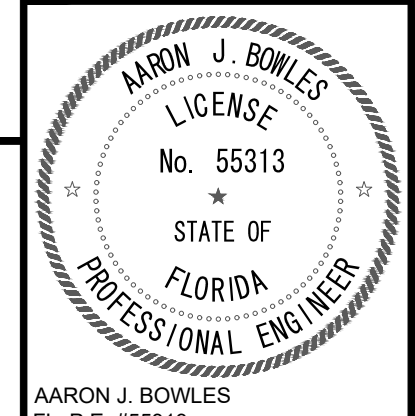
DATE ISSUED 6/6/2023

MBV ENGINEERING, INC.
 MOA BOWLES-VILLAMIZAR & ASSOCIATES
 CIVIL & MECHANICAL ENGINEERING CA #5728
 1005 W. US HWY 1, SUITE 200
 FT. PIERCE, FL 34945
 TEL: (888) 333-3333
 FAX: (888) 333-3333

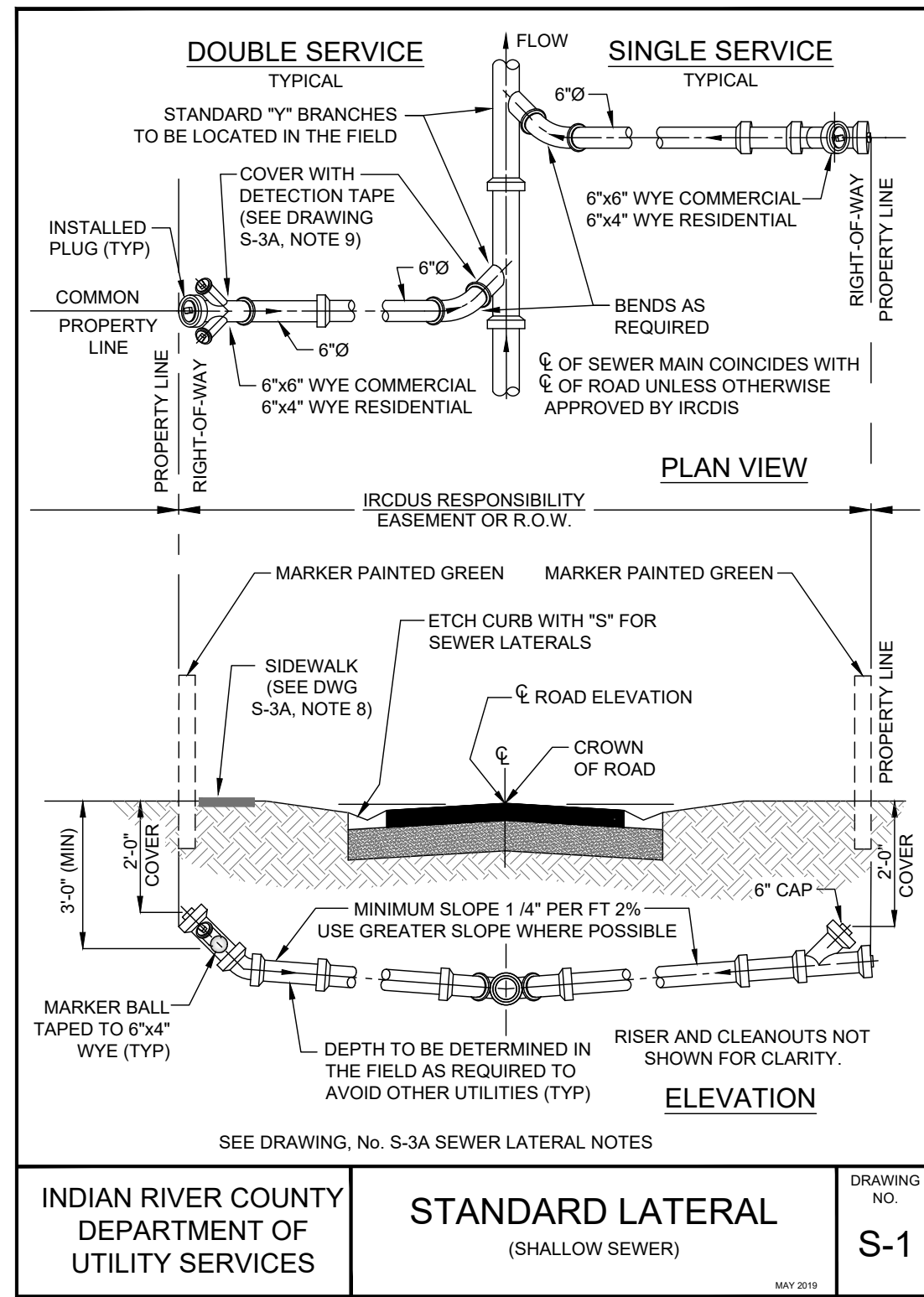
UTILITY DETAILS

GENESIS INDUSTRIAL

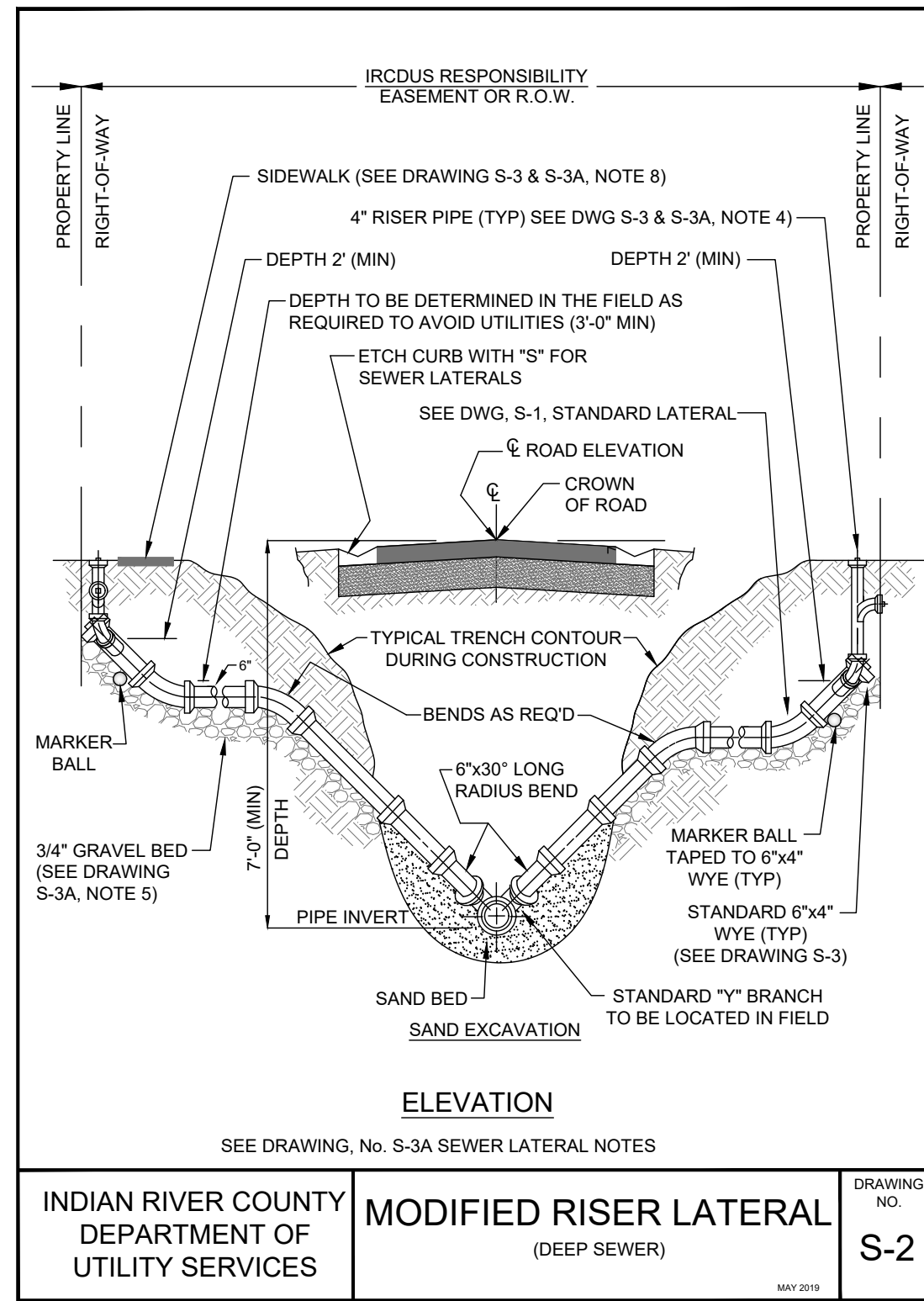
INDIAN RIVER COUNTY, FLORIDA



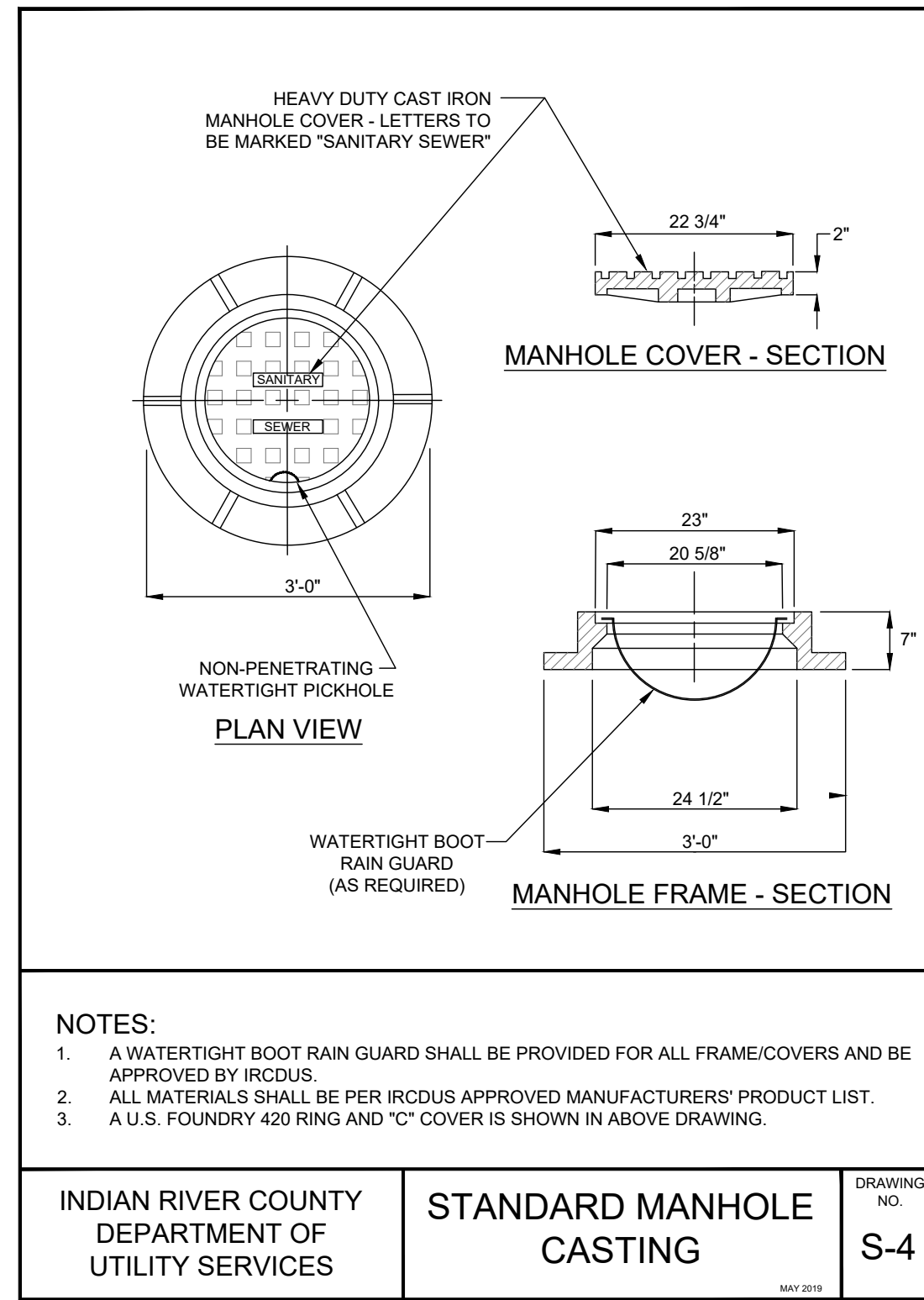
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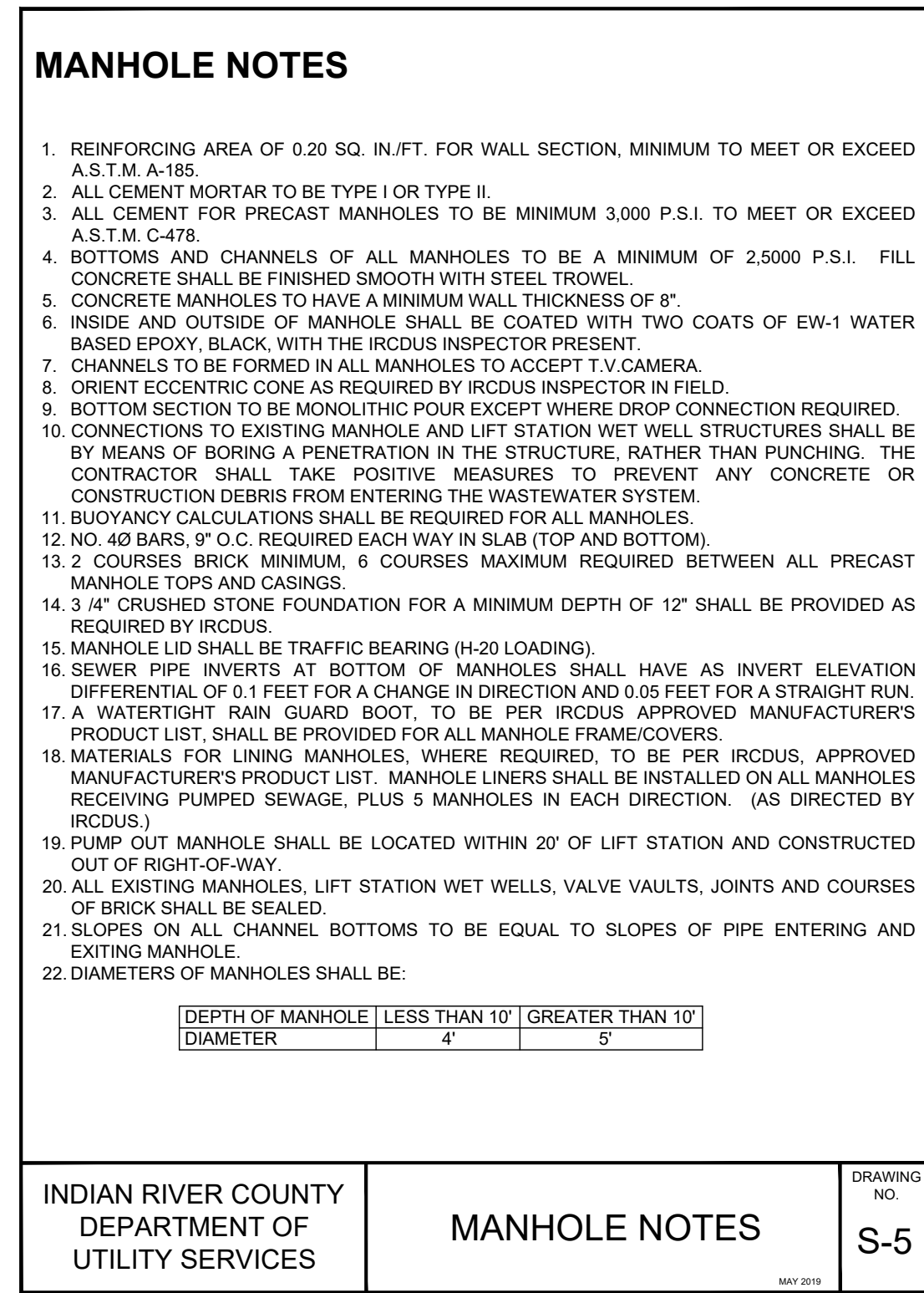
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
STANDARD LATERAL (SHALLOW SEWER)
DRAWING NO. S-1



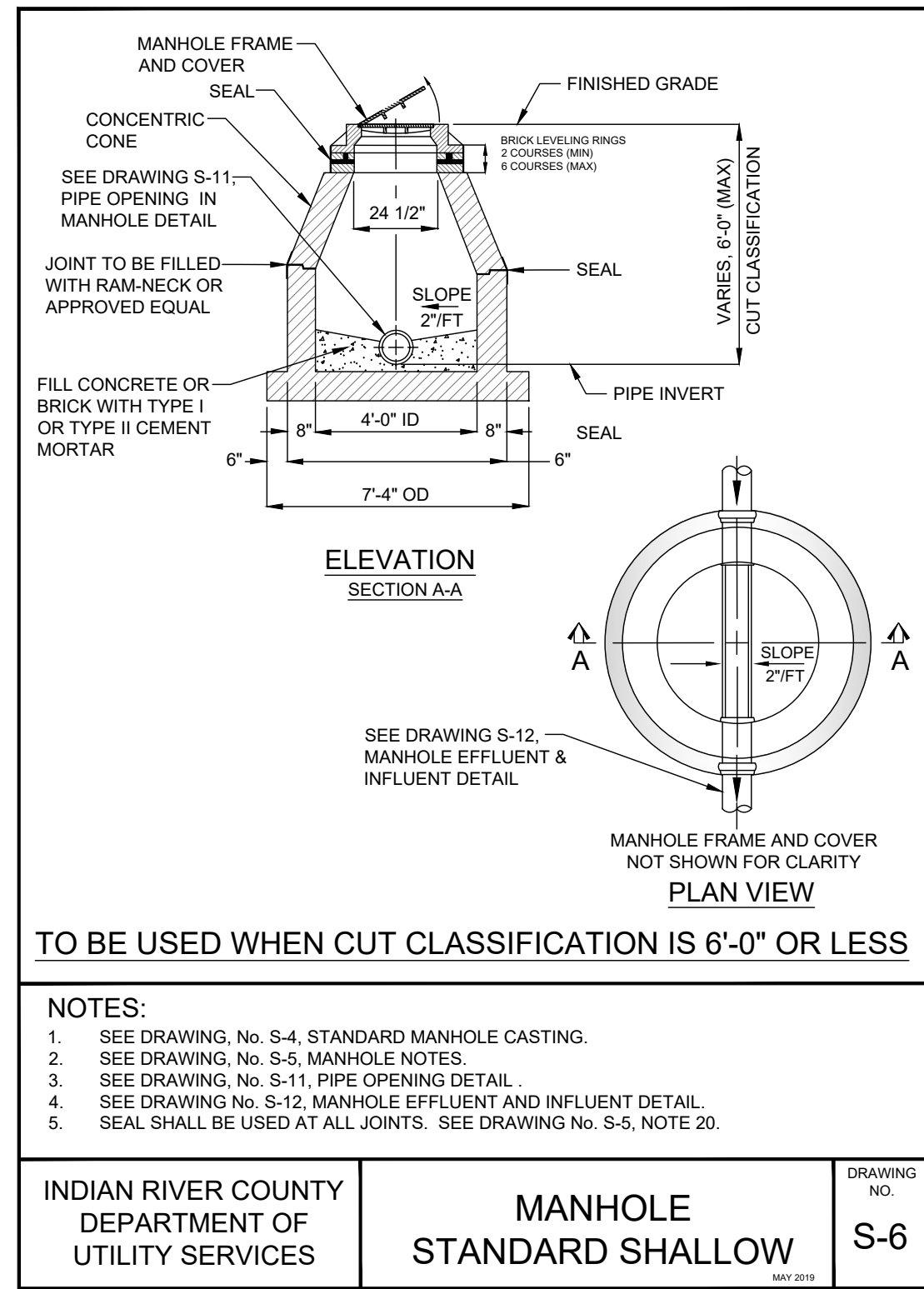
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
MODIFIED RISER LATERAL (DEEP SEWER)
DRAWING NO. S-2



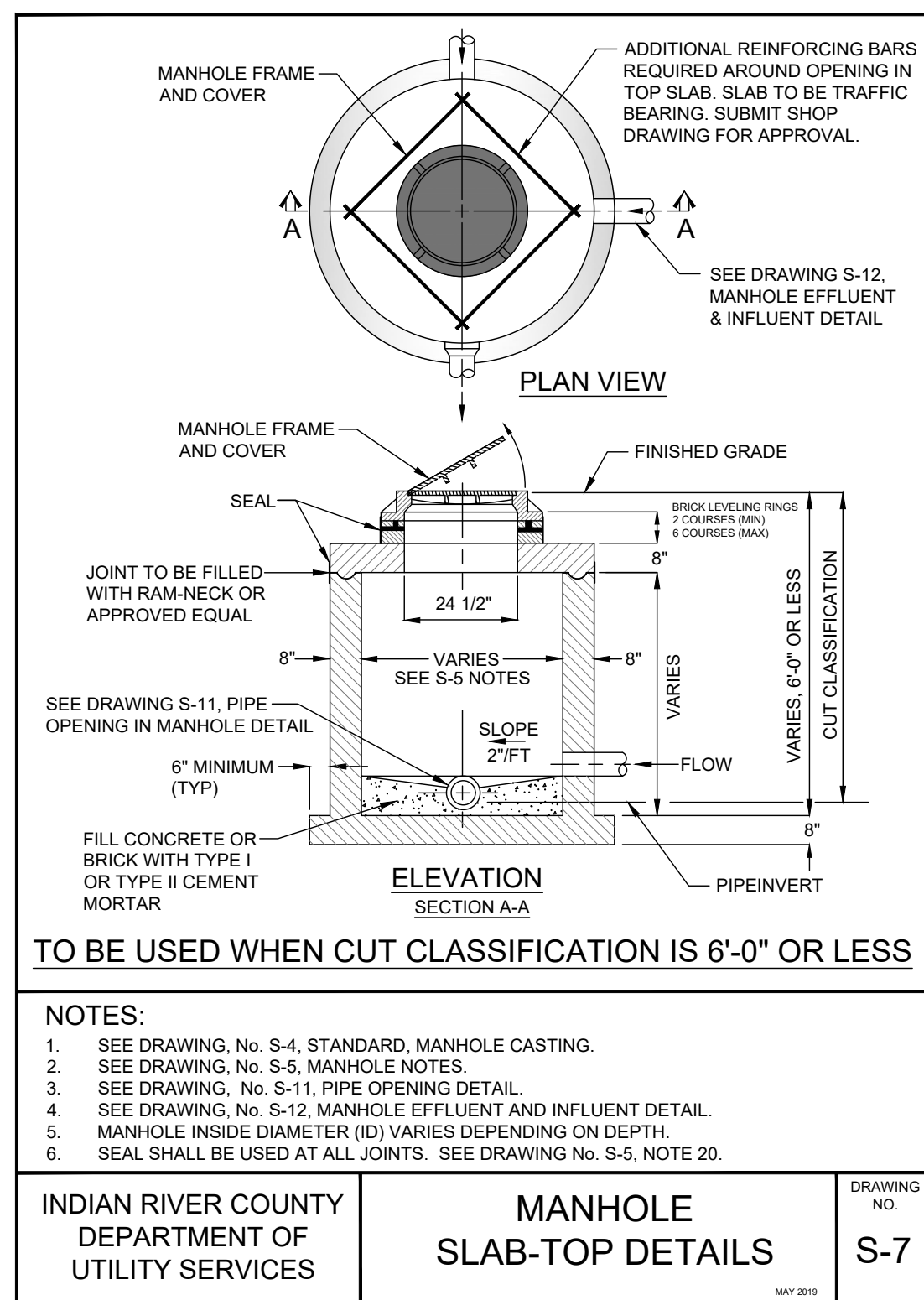
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
STANDARD MANHOLE CASTING
DRAWING NO. S-4



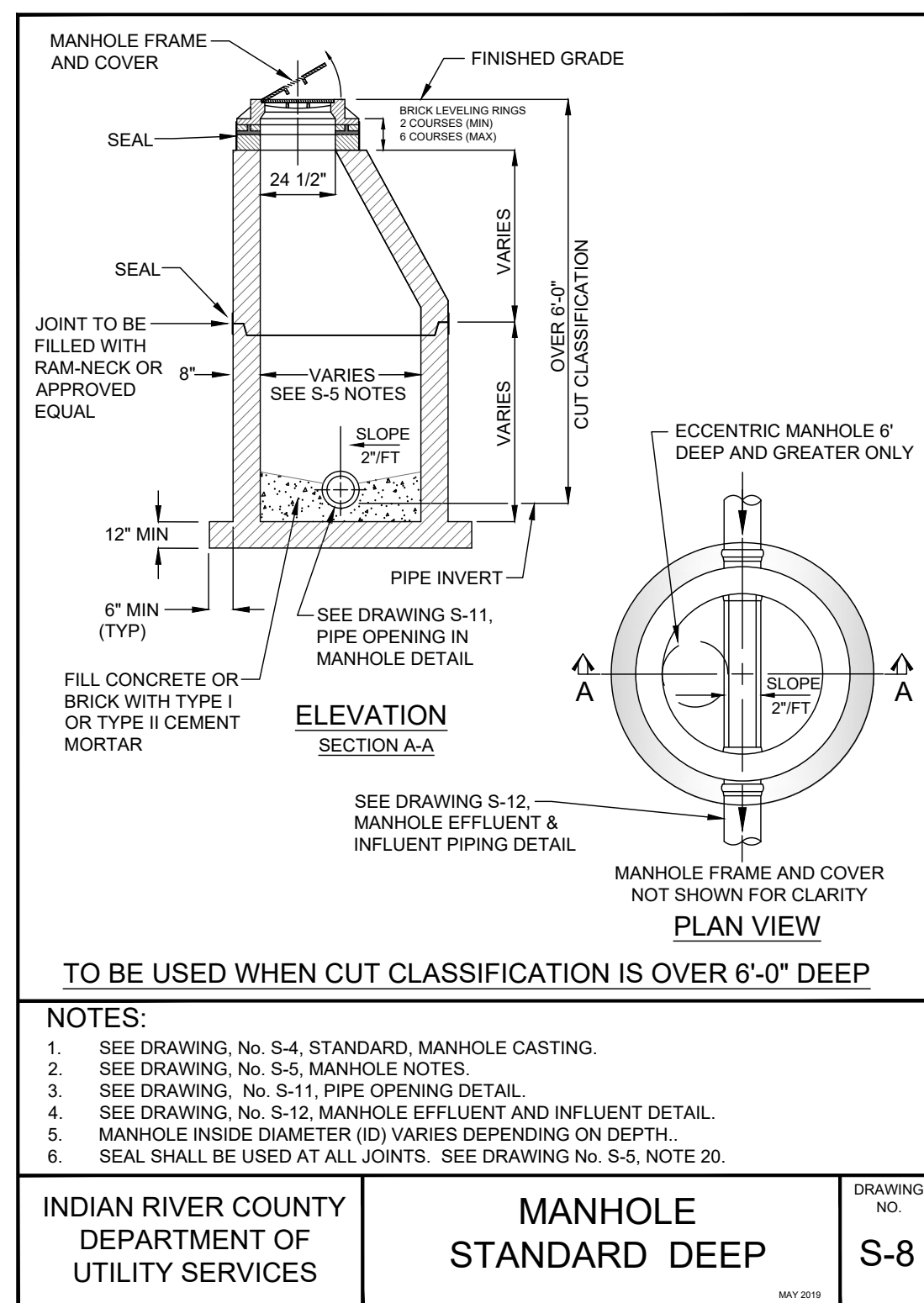
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
MANHOLE NOTES
DRAWING NO. S-5



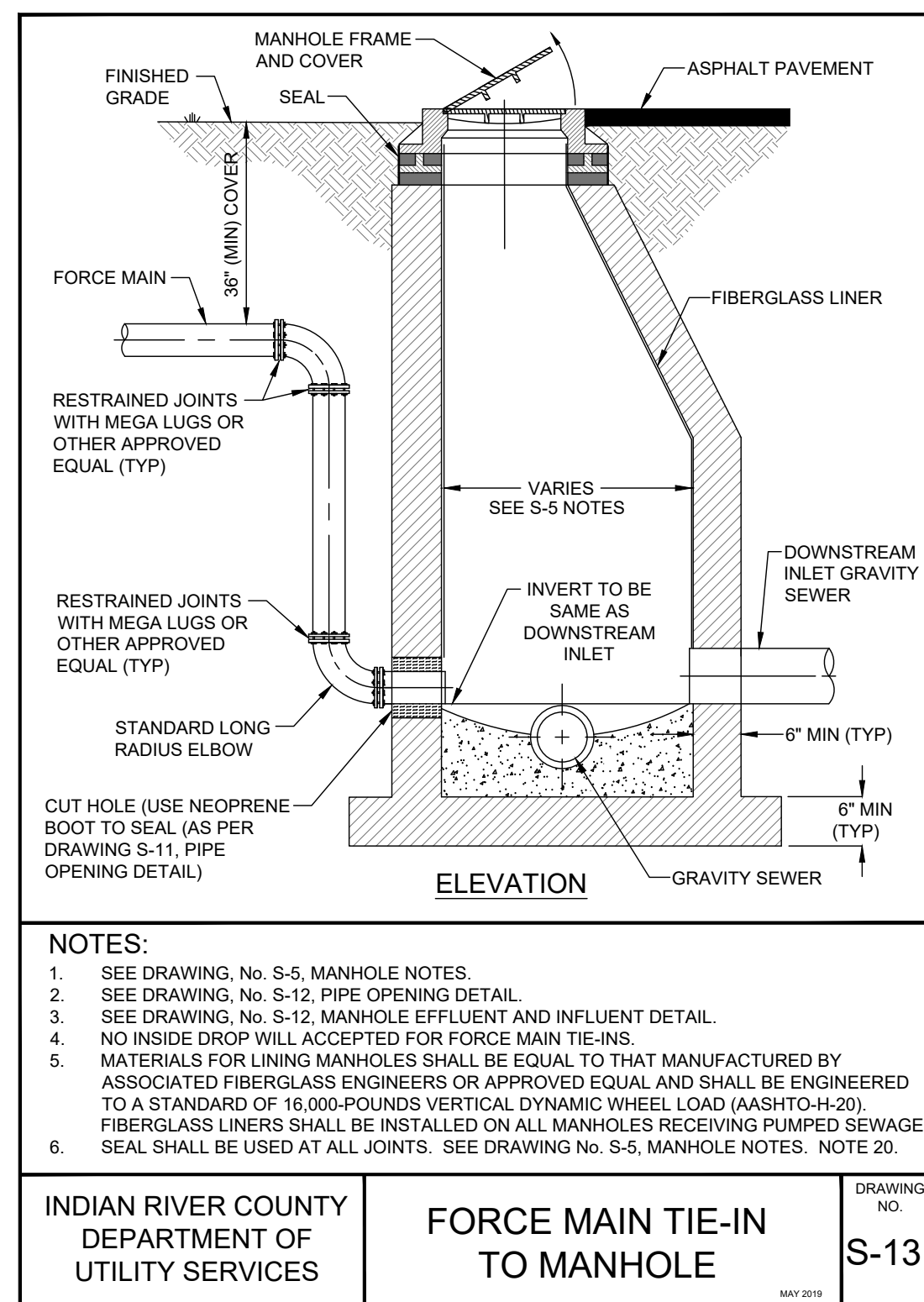
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
MANHOLE STANDARD SHALLOW
DRAWING NO. S-6



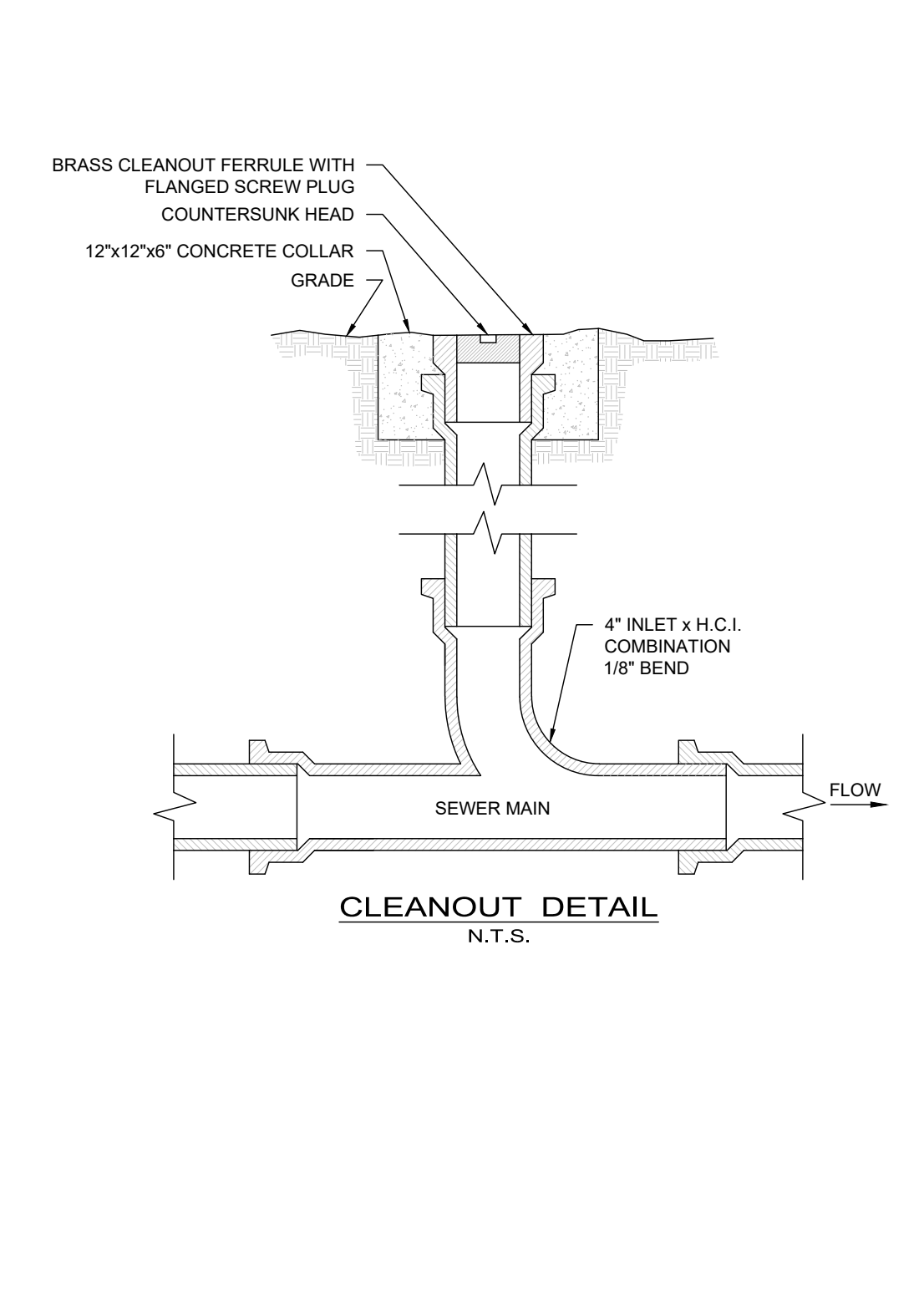
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
MANHOLE SLAB-TOP DETAILS
DRAWING NO. S-7



INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
MANHOLE STANDARD DEEP
DRAWING NO. S-8



INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
FORCE MAIN TIE-IN TO MANHOLE
DRAWING NO. S-13



INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
CLEANOUT DETAIL
DRAWING NO. S-15

JOB NO.	DESIGNED	DRAWN	DATE	CHECKED	DATE ISSUED	REVISIONS	DATE
21-0053	GWR	GWR	NOVEMBER 2021	AJB	6/6/2023	1	02-06-2023
						2	11-22-2022
						3	06-21-2022

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES
GENESIS INDUSTRIAL
AARON J. BOWLES
FL. P.E. #55313

MBV ENGINEERING, INC.
MOA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING
1005 30TH STREET
VERO BEACH, FL 33460
TEL: 888-333-3333
FL. PERM. # 17218-AR-0015

UTILITY DETAILS

INDIAN RIVER COUNTY, FLORIDA

GENESIS INDUSTRIAL

AARON J. BOWLES
LICENSE
No. 55313
STATE OF FLORIDA
PROFESSIONAL ENGINEER

SHEET
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