

# ESTES RESERVE SUBDIVISON PRELIMINARY PLAT PLANS

## PROJECT TEAM

<b>CIVIL ENGINEERING</b> <b>GERMANA ENGINEERING AND ASSOCIATES, LLC.</b> CONTACT: CHRISTOPHER M. GERMANA, PE 1120 WEST MINNEOLA AVENUE CLERMONT, FLORIDA 34711 (352) 242-9329	<b>OWNER/DEVELOPER</b> <b>BURGLAND INVESTMENTS, LLC</b> CONTACT: FRANK BOMBEECK 1810 WEST KENNEDY BLDV, SUITE 232 TAMPA, FLORIDA 33606 (813) 321-1984
<b>SURVEYING</b> <b>BENCHMARK SURVEYING &amp; MAPPING, LLC.</b> CONTACT: BILLY JOE JENKINS, PSM # 5205 POST OFFICE BOX 771065 KISSIMMEE, FLORIDA 34746 (407) 654-6183	<b>GEOTECHNICAL ENGINEERING</b> <b>POINT FOUR ENGINEERING</b> CONTACT: MICHAEL D. SIMS, PE 193 WEST NEW YORK AVENUE LAKE HELEN, FLORIDA 32744 (407) 260-9449

## GENERAL NOTE

THE PLANS WERE PREPARED ACCORDING TO AVAILABLE INFORMATION BASED ON THE CONDITIONS AS THEY EXISTED AT THE TIME OF PLAN PREPARATION. THE CONDITIONS OF THE PROPERTY MAY HAVE CHANGED SINCE PROJECT DESIGN. THE CONTRACTOR SHALL VERIFY AND CONFIRM ALL EXISTING CONDITIONS AND SHALL CONTACT THE PROJECT ENGINEER IMMEDIATELY IF CONDITIONS HAVE CHANGED FROM WHEN THE PLANS WERE PREPARED.

## ACCESSIBILITY NOTE

THE SITE SHALL COMPLY WITH THE FLORIDA BUILDING CODE (FBC) 2020 ACCESSIBILITY CODE.

## PROPERTY LEGAL DESCRIPTION (PER SURVEY)

PROPERTY DESCRIPTION PARCEL "D"

THAT PART OF LOTS 9 AND 10, OF R. C. TREMAIN'S SUBDIVISION, UNRECORDED, SECTION 5, TOWNSHIP 19 SOUTH, RANGE 27 EAST, IN LAKE COUNTY, FLORIDA, BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 5, TOWNSHIP 19 SOUTH, RANGE 27 EAST, AND RUN NORTH 00°36'44" WEST, ALONG THE WEST LINE OF THE SOUTHWEST 1/4, A DISTANCE OF 25.01 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF BATES AVENUE, SAID RIGHT-OF-WAY BEING 50 FEET IN WIDTH; THENCE NORTH 87°38'34" EAST, ALONG THE NORTH RIGHT-OF-WAY LINE OF BATES AVENUE, A DISTANCE OF 338.51 FEET; THENCE NORTH 00°43'28" WEST, 629.69 FEET; THENCE NORTH 88°12'54" EAST, 337.19 FEET, TO THE POINT OF BEGINNING OF THIS DESCRIPTION; FROM SAID POINT OF BEGINNING; RUN NORTH 00°50'17" WEST, 325.50 FEET; THENCE NORTH 88° 30'58" EAST, 631.37 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF ESTES ROAD, SAID RIGHT-OF-WAY BEING 66 FEET IN WIDTH; THENCE SOUTH 01°09'S1" EAST, ALONG THE WEST RIGHT-OF-WAY LINE OF ESTES ROAD 322.15 FEET; THENCE SOUTH 88°12'54" WEST, 633.25 FEET TO THE POINT OF BEGINNING.

PROJECT SITE

## VICINITY MAP



ESTES ROAD  
EUSTIS, FLORIDA 32736  
SECTION 05, TOWNSHIP 19 SOUTH, RANGE 27 EAST

## SHEET LIST

- C1 COVER SHEET
- C2 CONSTRUCTION NOTES
- C3 DEMOLITION PLAN
- C4 SUBDIVISION SITE PLAN
- C5 SUBDIVISION GRADING AND DRAINAGE PLAN
- C6 SUBDIVISION UTILITY PLAN
- C7 OFF-SITE UTILITY PLAN
- C8 STORMWATER POLLUTION PREVENTION PLAN
- C9 DARBY COURT PLAN AND PROFILE -0+10 TO 5+97
- C10 DARBY COURT CROSS SECTIONS 0+55 TO 5+41
- C11 CONSTRUCTION DETAILS
- C12 CITY OF EUSTIS CONSTRUCTION DETAILS

## DATUM NOTE

ELEVATIONS SHOWN ON THE PLAN SET ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (PER SURVEY)

## PERMIT NOTE

SEPERATE PERMITS ARE REQUIRED FOR THE FOLLOWING (IF APPLICABLE):

- CONSTRUCTION TRAILERS
- LIFT STATIONS
- RETAINING WALLS
- ACCESS GATES
- GENERATORS
- AWNNINGS
- ETC.
- DUMPSTER ENCLOSURES
- SIGNS
- ENTRY WALL FEATURES
- SITE LIGHTING
- FENCES
- WALK-IN COOLERS

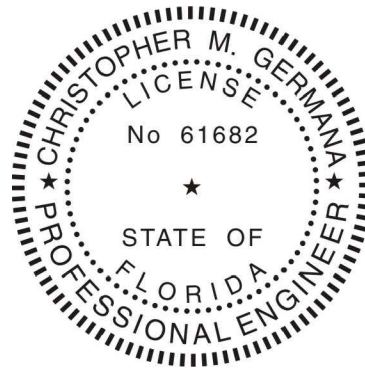
## FIRE NOTE

SITE TO CONFORM TO FLORIDA FIRE PREVENTION CODE 7TH EDITION (2020)

SEPERATE PERMITS ARE REQUIRED FOR THE FOLLOWING (IF APPLICABLE):

- FIRE SPRINKLERS
- FIRE ALARM MONITORING
- DUMPSTER ENCLOSURE
- FIRE ALARMS
- FIRE UNDERGROUND

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by Christopher  
M Germana  
Date: 2023.04.19  
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CHRISTOPHER M. GERMANA, P.E.  
FLORIDA PROFESSIONAL ENGINEER # 61682  
ENGINEERING FIRM REGISTRY # 29279

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ENGINEERING FIRM REGISTRY NUMBER: 29279  
1120 WEST MINNEOLA AVENUE  
CLERMONT, FLORIDA 34711  
PHONE: (352) 242-9329  
WWW.GERMANAENGINEERING.COM

CALL 48 HOURS  
BEFORE YOU DIG



IT'S THE LAW!  
DIAL 811

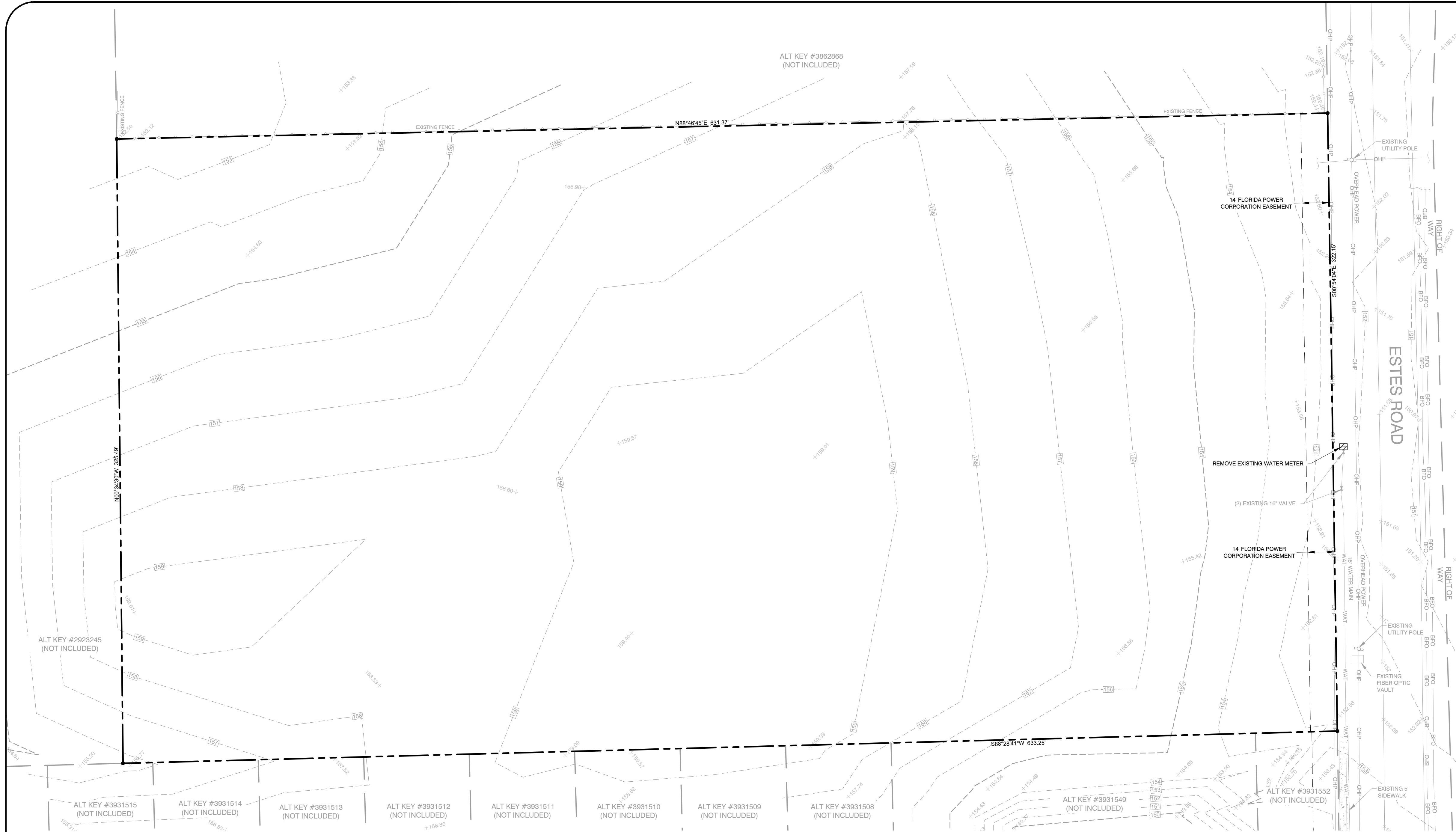
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

ISSUE DATE: 03-24-2023









- NOTES**
1. TREE REMOVAL ON THE SITE SHALL BE UNDER A SEPARATE PERMIT (BY OTHERS)
  2. BOUNDARY AND RIGHT-OF-WAY INFO SHOWN ON THIS SHEET AND ENTIRE PLAN SET WAS PROVIDED BY BENCHMARK SURVEYING & MAPPING, LLC. ISSUED DATE OF JUNE 10, 2022.

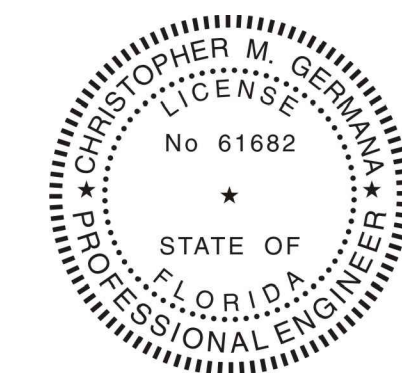
**\*\*CAUTION\*\***

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- LEGEND**
- PROJECT PROPERTY LINE
  - EXTERIOR PARCEL LINE
  - EASEMENT LINE
  - EXISTING CONTOUR
  - EXISTING CONCRETE
  - EXISTING WATER MAIN
  - EXISTING OVERHEAD POWER
  - EXISTING BURIED FIBER OPTIC CABLE

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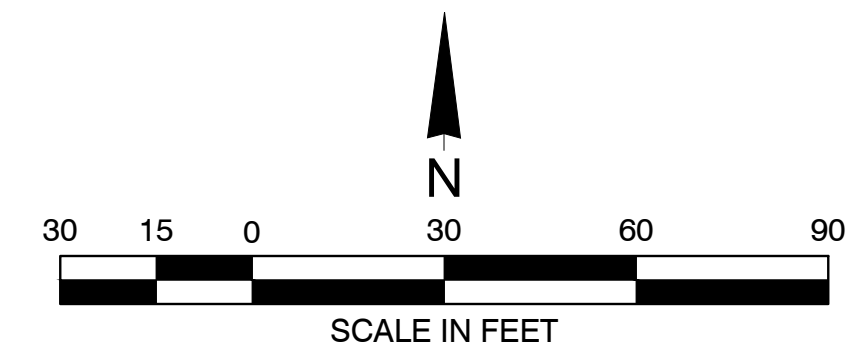


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GERMANA ENGINEERING AND ASSOCIATES, LLC 1120 WEST MINNEOLA AVENUE CLERMONT, FL 34711 (852) 242-8828 WWW.GERMANAENGINEERING.COM ENGINEERING FIRM REGISTRY # 29279		ESTES RESERVE SUBDIVISION		DEMOLITION PLAN			
SCALE: 1" = 30'		PROJECT # GE0152021		EUSTIS, FLORIDA			
DATE: 03-24-2023						REVISIONS	
SHEET						DATE	
C3						#	



ALT KEY #3862868  
(NOT INCLUDED)



### SUBDIVISION SITE DATA

- SITE AREA** = 4.70 AC / 204,742 SF
- SITE LOCATION**

ESTES ROAD  
EUSTIS, FLORIDA 32736  
SECTION 05, TOWNSHIP 19 SOUTH, RANGE 27 EAST  
TAX PARCEL #3862867  
DESIGN DISTRICT: SUBURBAN NEIGHBORHOOD  
FUTURE LAND USE: SUBURBAN RESIDENTIAL
- SITE REQUIREMENTS (PER LAND USE)**

DENSITY: 5 DU/AC MAX  
BLDG HEIGHT: 1-STORY / 35' MAX  
OPEN SPACE (LDR SEC. 109-3): 25% MIN. (1.18 AC)  
ISR (LDR SEC. 109-3): 40% MAX.  
MIN. PARK SIZE: 1/4 ACRE (<25 LOTS)  
ESTES ROAD BUFFER: 29'  
STREET SETBACK: 25'  
COMMON LOT SETBACK: 5'  
REAR LOT SETBACK: 35'
- SUBDIVISION DATA**

NUMBER OF LOTS: 18  
CLASSIFICATION: SINGLE FAMILY RESIDENTIAL  
DENSITY: 3.83 DU/ACRE  
TYPICAL LOT SIZE: 55 X 120' (6,600 SF)  
SCHOOL AGE POPULATION: 65 X 18 = 12 CHILDREN  
WETLANDS: NONE ON SITE  
FLOOD ZONES: NONE ON SITE  
ROAD TYPE: RESIDENTIAL STREET  
PROPOSED LOT TYPE: HOUSE LOT  
PARK TYPE: GREENWAY (0.36 AC)
- UTILITY DATA**

WATER: CITY OF EUSTIS  
SEWER: CITY OF EUSTIS  
ELECTRICITY: SECO ENERGY  
TELEPHONE: CENTURY LINK
- IMPERVIOUS DATA**

LOTS	= 1.26 AC (3,049 SF/LOT)
ROADWAY	= 0.46 AC
SIDEWALK	= 0.16 AC
ON-SITE IMPERVIOUS	= 1.88 AC / 40.00%
PERVIOUS AREA	= 2.82 AC / 60.00%

### NOTES

- THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILE WILL BE PROVIDED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN THE AUTOCAD FILES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.
- PROJECT SITE SHALL COMPLY WITH THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FBC) 2020 EDITION
- UTILITY EASEMENTS TO BE DEDICATED TO THE CITY OF EUSTIS.
- DRAINAGE UTILITIES TO BE DEDICATED TO THE HOME OWNERS ASSOCIATION.
- THE HOME OWNERS ASSOCIATION SHALL MAINTAIN ALL COMMON AREAS, FENCES, AND RETENTION AREAS.
- ALL SIDEWALKS CONSTRUCTED THROUGHOUT THE ENTIRE SITE SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE CITY OF EUSTIS LAND DEVELOPMENT REGULATIONS AND SPECIFICATIONS.
- POND TRACT SHALL BE DEDICATED TO THE HOME OWNERS ASSOCIATION.
- WALLS, FENCES, AND SIGNS SHALL BE OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION.
- BOUNDARY AND RIGHT-OF-WAY INFO SHOWN ON THIS SHEET AND ENTIRE PLAN SET WAS PROVIDED BY BENCHMARK SURVEYING & MAPPING, LLC. ISSUED DATE OF JUNE 10, 2022
- ALL HOUSES SHALL HAVE GARAGES IN ACCORDANCE TO EUSTIS LAND DEVELOPMENT REGULATIONS SEC. 110-5.8 - GARAGES.
- ALL DRIVEWAYS SHALL CONFORM TO CITY OF EUSTIS REQUIREMENTS AND DESIGN STANDARDS.

## ESTES RESERVE SUBDIVISION

EUSTIS, FLORIDA

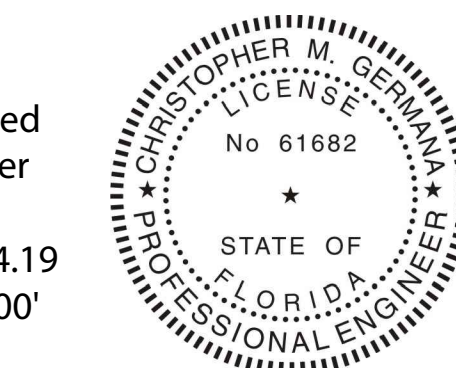
**GERMANA ENGINEERING  
AND ASSOCIATES, LLC**  
1120 WEST MINNEOLA AVENUE  
CLERMONT, FL 34711  
WWW.GERMANAENGINEERING.COM  
ENGINEERING FIRM REGISTRY # 29279

SCALE: 1" = 30'

DATE: 03-24-2023

SHEET

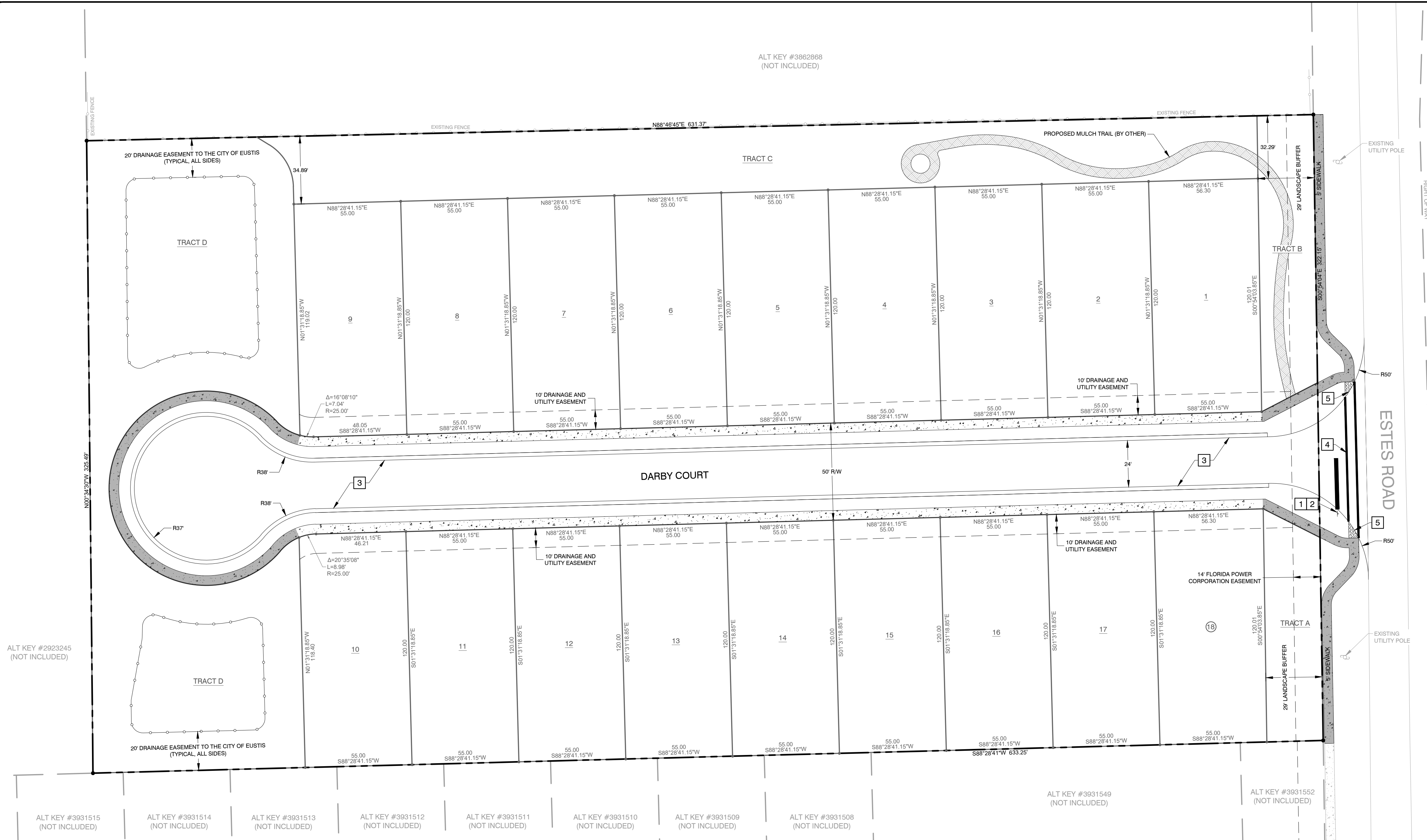
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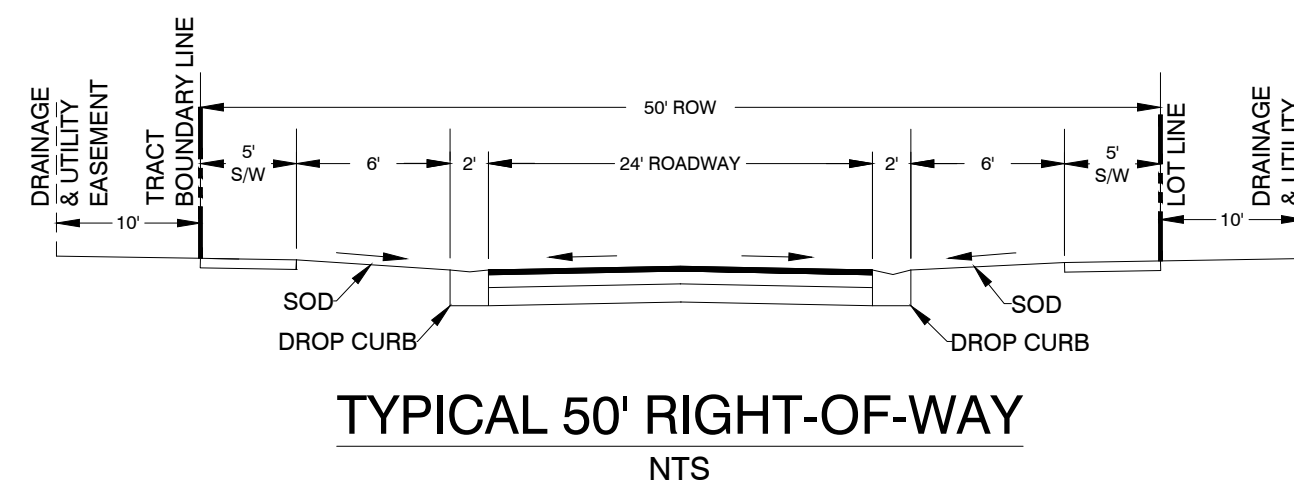
### LEGEND

- PROJECT PROPERTY LINE
- EXTERIOR PARCEL LINE
- EASEMENT LINE
- EXISTING FENCE
- PROPOSED FENCE
- PROPOSED CONCRETE
- PROPOSED CONCRETE TO BE CONSTRUCTED WITH THIS PROJECT (TYPICAL, SEE SHEET C11 FOR DETAILS)
- PROPOSED MULCH TRAIL (BY OTHERS)

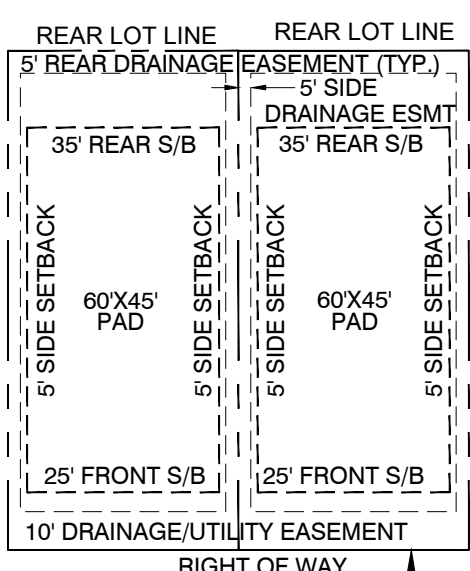
### KEY LEGEND

- 24' WHITE PAINTED STOP BAR
- 30' STOP SIGN (R1-1) AND STREET SIGN
- DROP CURB PER FDOT INDEX, 300
- 12' WHITE PAINTED CROSSWALK
- DETECTABLE WARNING MAT IN BRICK RED

TRACT TABLE					
TRACT	USE	OWNERSHIP	ACREAGE	% OVERALL	OPEN SPACE
N/A	SINGLE FAMILY LOTS	-	2.73 AC	58.10%	0.00 AC
N/A	RIGHT-OF-WAY	CITY OF EUSTIS	0.79 AC	16.88%	0.00 AC
TRACT A	LANDSCAPE BUFFER	H.O.A.	0.07 AC	1.59%	0.07 AC
TRACT B	LANDSCAPE BUFFER	H.O.A.	0.10 AC	2.06%	0.10 AC
TRACT C	GREENWAY	H.O.A.	0.39 AC	8.21%	0.39 AC
TRACT D	STORMWATER	H.O.A.	0.62 AC	13.16%	0.62 AC
<b>TOTAL</b>			<b>4.70 AC</b>	<b>100.00%</b>	<b>1.18 AC</b>

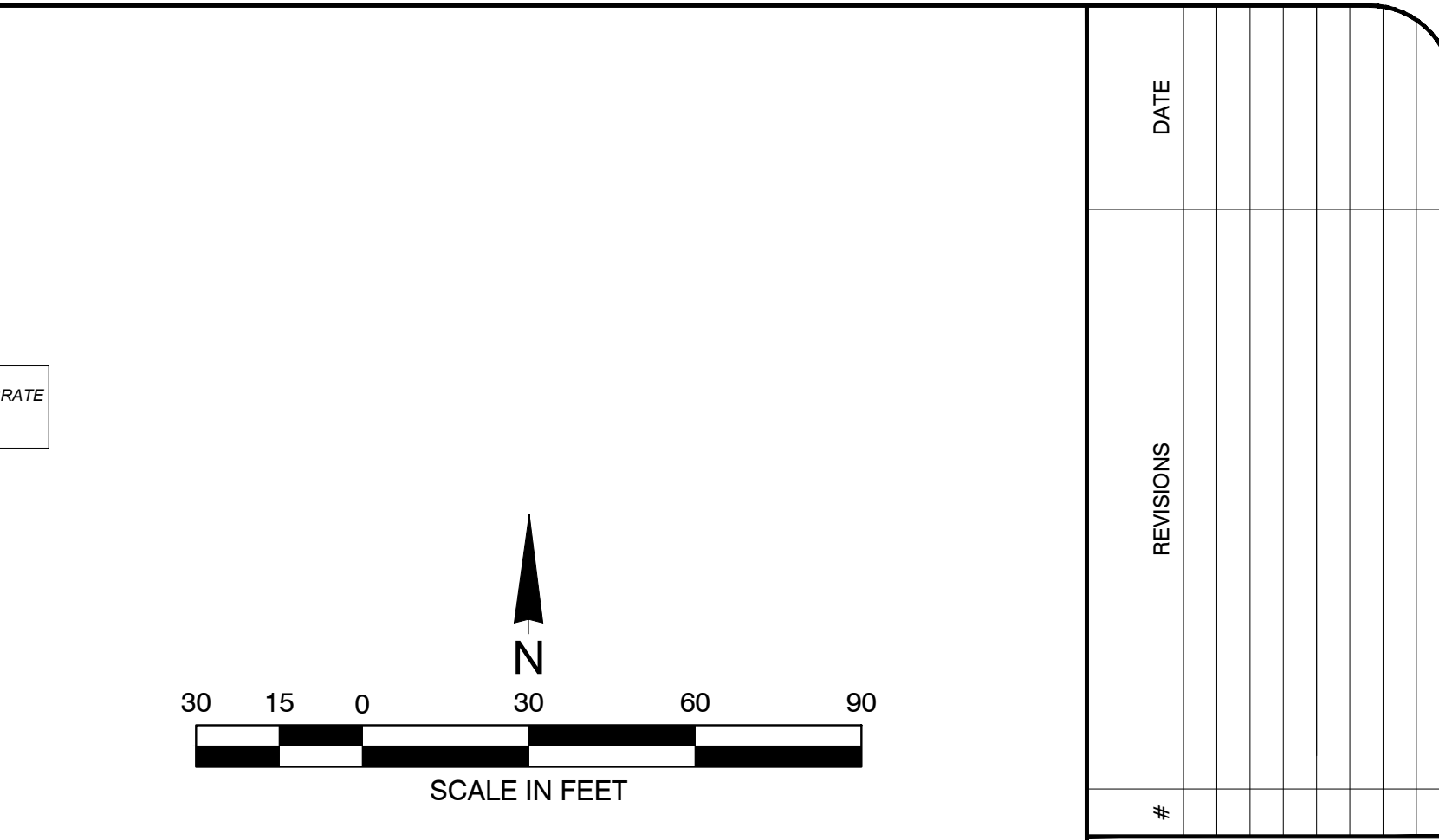


TYPICAL 50' RIGHT-OF-WAY  
NTS





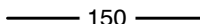
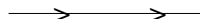


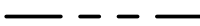

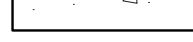


TYPICAL LOT LAYOUT  
NTS

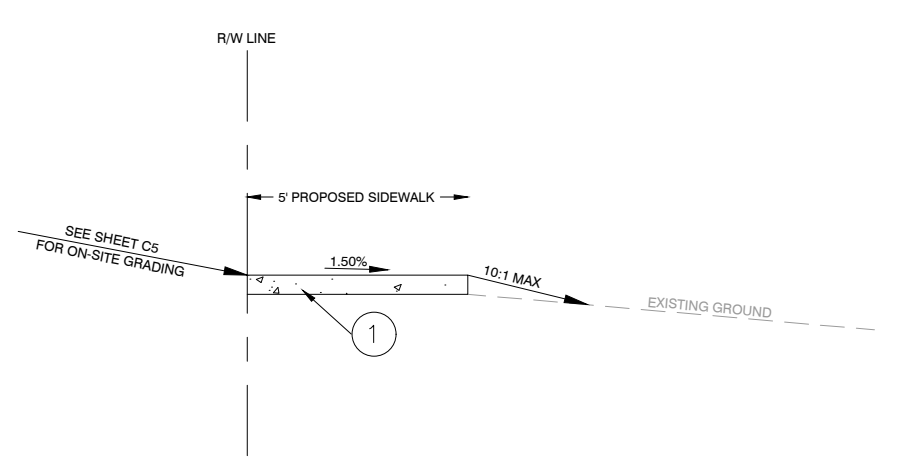




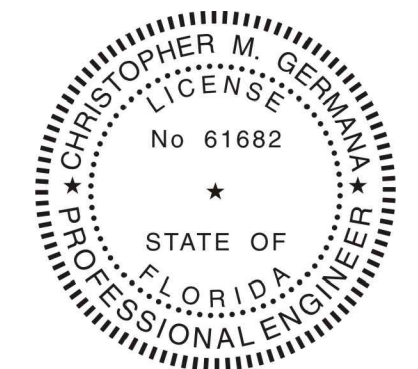
# LEGEND

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	PROPOSED 45' X 60' BUILDING PAD
	EXISTING CONTOUR
	PROPOSED CONTOUR
	SWALE FLOW LINE
	PROPOSED SPOT ELEVATION
	PROPOSED STORMWATER PIPE
	PROPERTY LINE
	EXTERIOR PARCEL LINE
	PROPOSED CONCRETE
	STEM WALL (DESIGNED BY OTHERS WITH BUILDING PERMIT)
	PROPOSED FENCE



TYPICAL ESTES ROAD SIDEWALK SECTION



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ENGINEERING FIRM REGISTRY # 29279



ALT KEY #3862868  
(NOT INCLUDED)

ALT KEY #2923245  
(NOT INCLUDED)

ALT KEY #3931515  
(NOT INCLUDED)

ALT KEY #3931514  
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ALT KEY #3931519  
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ALT KEY #3931520  
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## LEGEND

—RW—	EXISTING RECLAIMED WATER MAIN	—SAN—	EXISTING SANITARY LINE
—RW—	PROPOSED RECLAIMED WATER MAIN	—SAN—	PROPOSED SANITARY LINE
—WAT—	EXISTING WATER MAIN	—	PROPOSED SANITARY SERVICE (TYPICAL)
—WAT—	PROPOSED WATER MAIN	—	EXTERIOR PARCEL LINE
—OHP—	EXISTING OVERHEAD POWER	—	EXISTING CONCRETE
—BFO—	EXISTING BURIED FIBER OPTIC CABLE	—	PROPOSED CONCRETE
—	PROPOSED WATER SERVICE (TYPICAL)	—	PROJECT PROPERTY LINE
—	PROPOSED RECLAIMED SERVICE (TYPICAL)	—	PROPOSED FENCE
—	PROPOSED FIRE HYDRANT ASSEMBLY		

### \*\*CAUTION\*\*

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## NOTES

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- ALL UTILITY CONSTRUCTION TO CONFORM TO THE CITY OF EUSTIS' CONSTRUCTION AND ENGINEERING DESIGN STANDARDS.
- THE MINIMUM FIRE FLOW AND FLOW DURATION REQUIREMENTS FOR ONE- AND TWO-FAMILY DWELLINGS HAVING A FIRE FLOW AREA THAT DOES NOT EXCEED 5000FT<sup>2</sup> SHALL BE 1000 GPM FOR 1 HOUR. (NFPA 18.4.5.1.1)
- NEWLY INSTALLED FIRE HYDRANTS MUST BE FLOW TESTED AND SHALL BE WITNESSED (FEE APPLIES) BY LAKE COUNTY FIRE INSPECTOR PRIOR TO APPROVAL OF FINAL PLAT AND ANY BUILDING PERMITS.
- FIRE PROTECTION WATER SUPPLY WILL BE AVAILABLE PRIOR TO AND DURING CONSTRUCTION.
- BOUNDARY AND RIGHT-OF-WAY INFO SHOWN ON THIS SHEET AND ENTIRE PLAN SET WAS PROVIDED BY BENCHMARK SURVEYING & MAPPING, LLC ISSUED DATE OF JUNE 10, 2022

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ESTES RESERVE  
SUBDIVISION

SUBDIVISION  
UTILITY PLAN

DATE  
04-19-2023

REVISIONS  
1. REVISED NOTES AND OFFSITE SANITARY LINE

#

SHEET

C6

SCALE: 1" = 30'

DATE: 03-24-2023

PROJECT # GE0152021

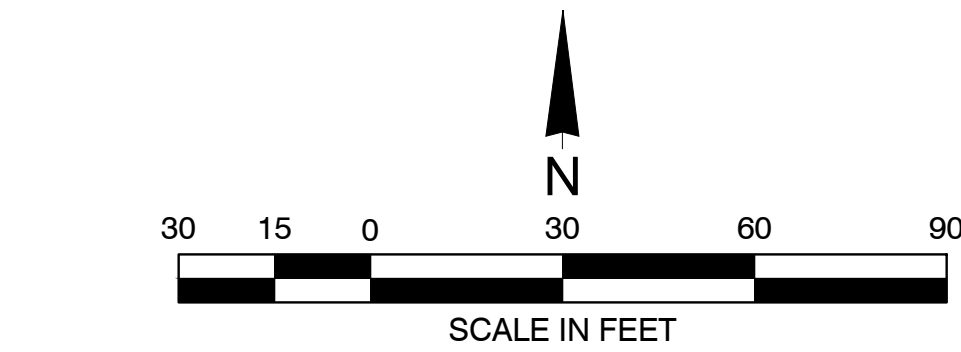
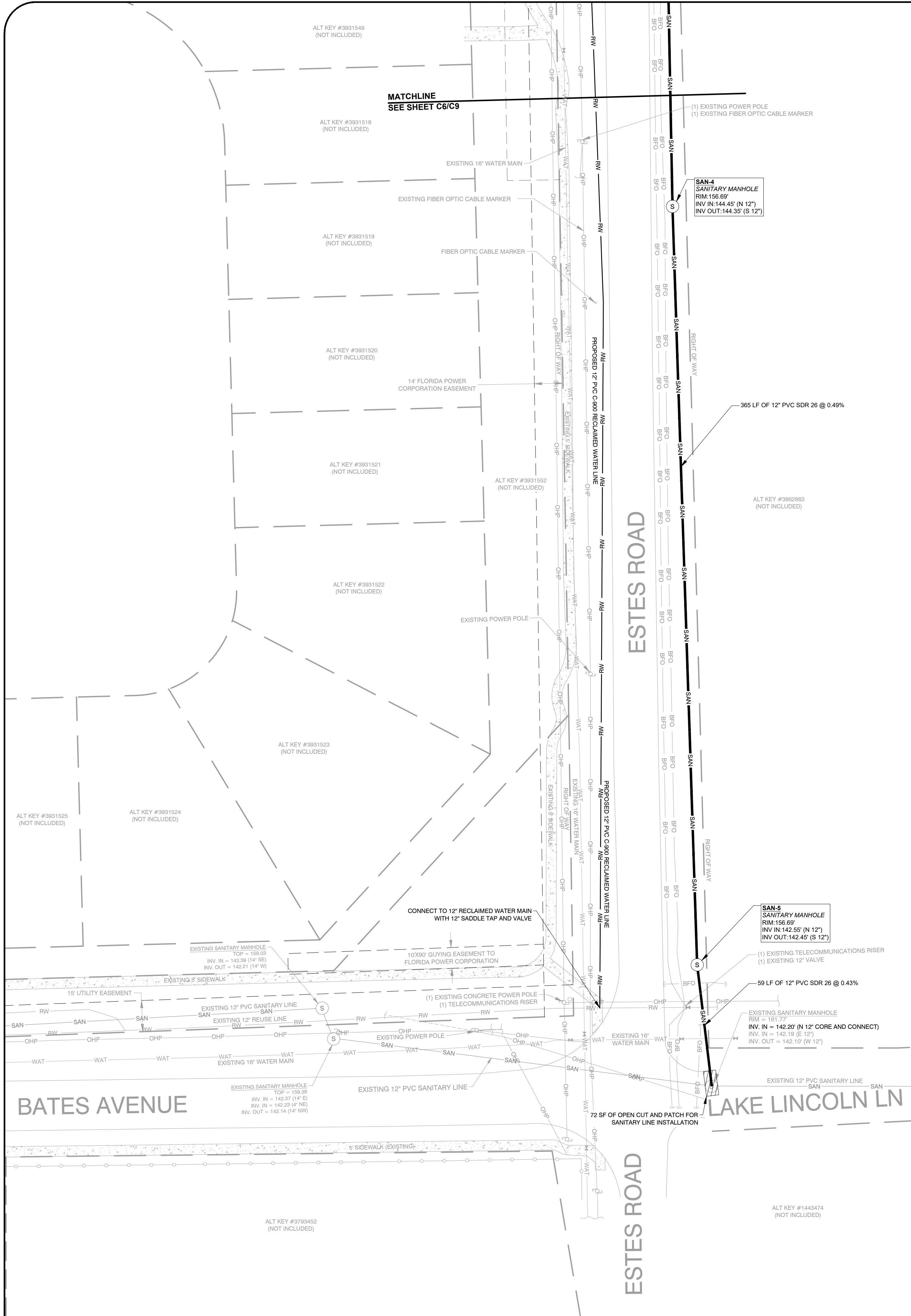
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LEGEND

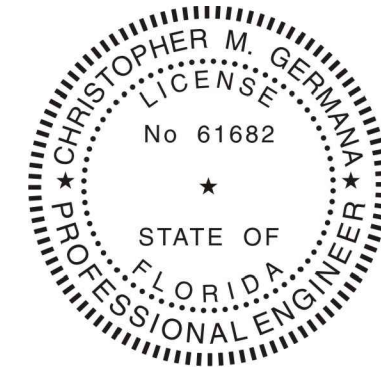
- EXISTING RECLAIMED WATER MAIN
- PROPOSED RECLAIMED WATER MAIN
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- EXISTING OVERHEAD POWER
- EXISTING BURIED FIBER OPTIC CABLE
- PROPOSED WATER SERVICE (TYPICAL)
- PROPOSED IRRIGATION SERVICE (TYPICAL)
- PROPOSED FIRE HYDRANT ASSEMBLY
- EXISTING SANITARY LINE
- PROPOSED SANITARY LINE
- PROPOSED SANITARY SERVICE (TYPICAL)
- EXTERIOR PARCEL LINE
- EXISTING CONCRETE
- PROPOSED CONCRETE
- PROJECT PROPERTY LINE

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- FIRE PROTECTION WATER SUPPLY WILL BE AVAILABLE PRIOR TO AND DURING CONSTRUCTION.

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ENGINEERING FIRM REGISTRY # 29279

DATE  
04-19-2023

REVISIONS  
1. REVISED SANITARY MAIN SIZE

#

OFF-SITE  
UTILITY PLAN

ESTES RESERVE  
SUBDIVISION

PROJECT # GE0152021

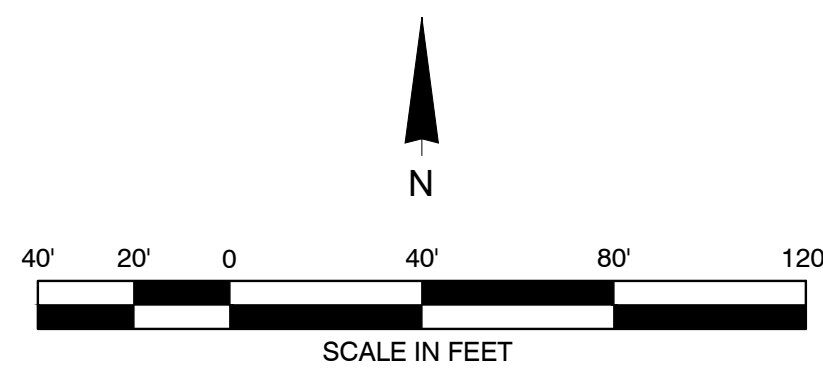
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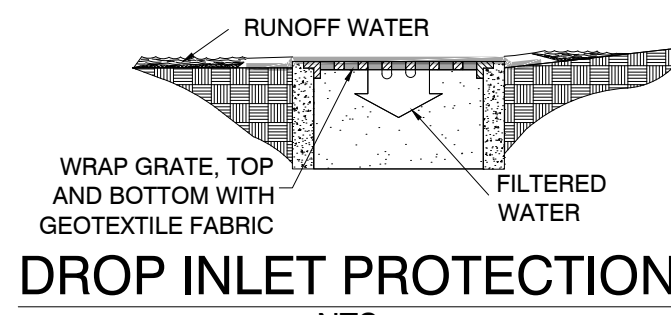
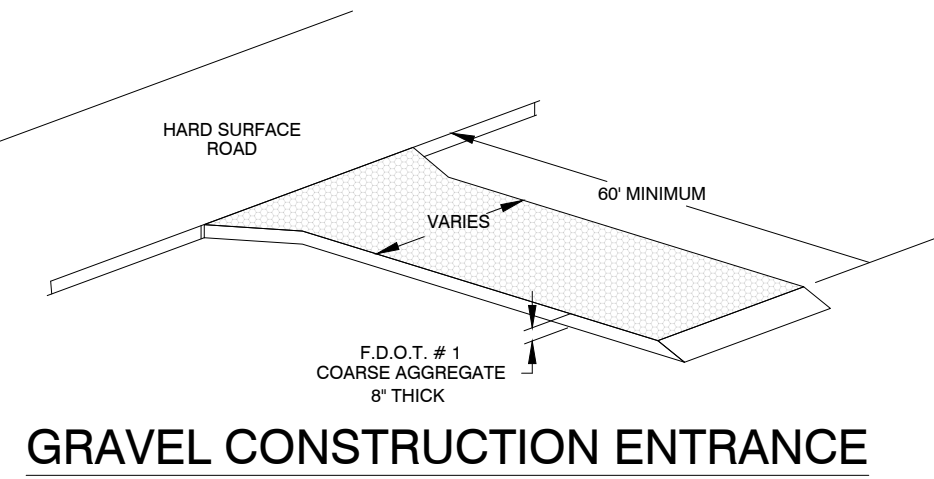
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SHEET  
C7

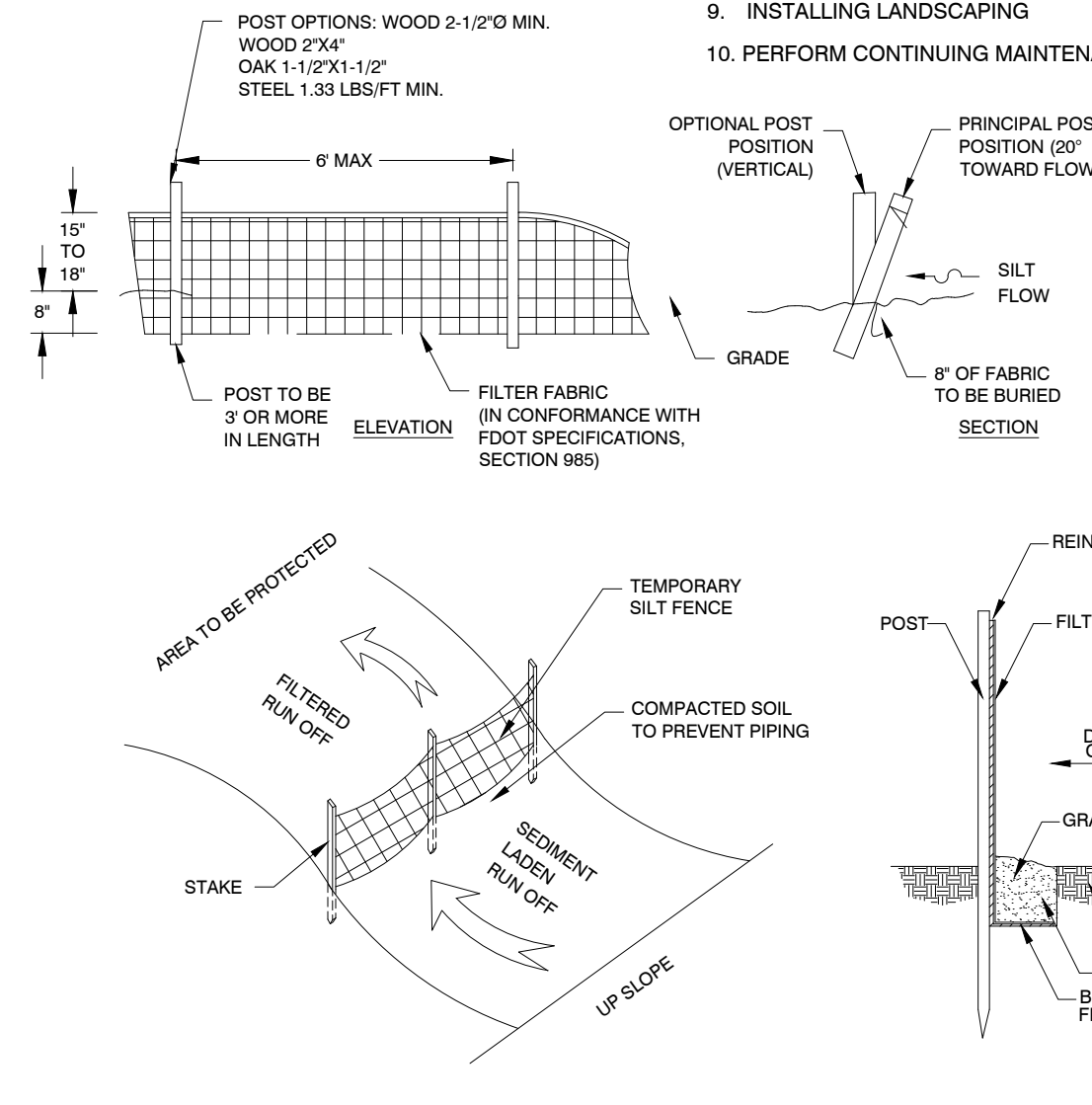
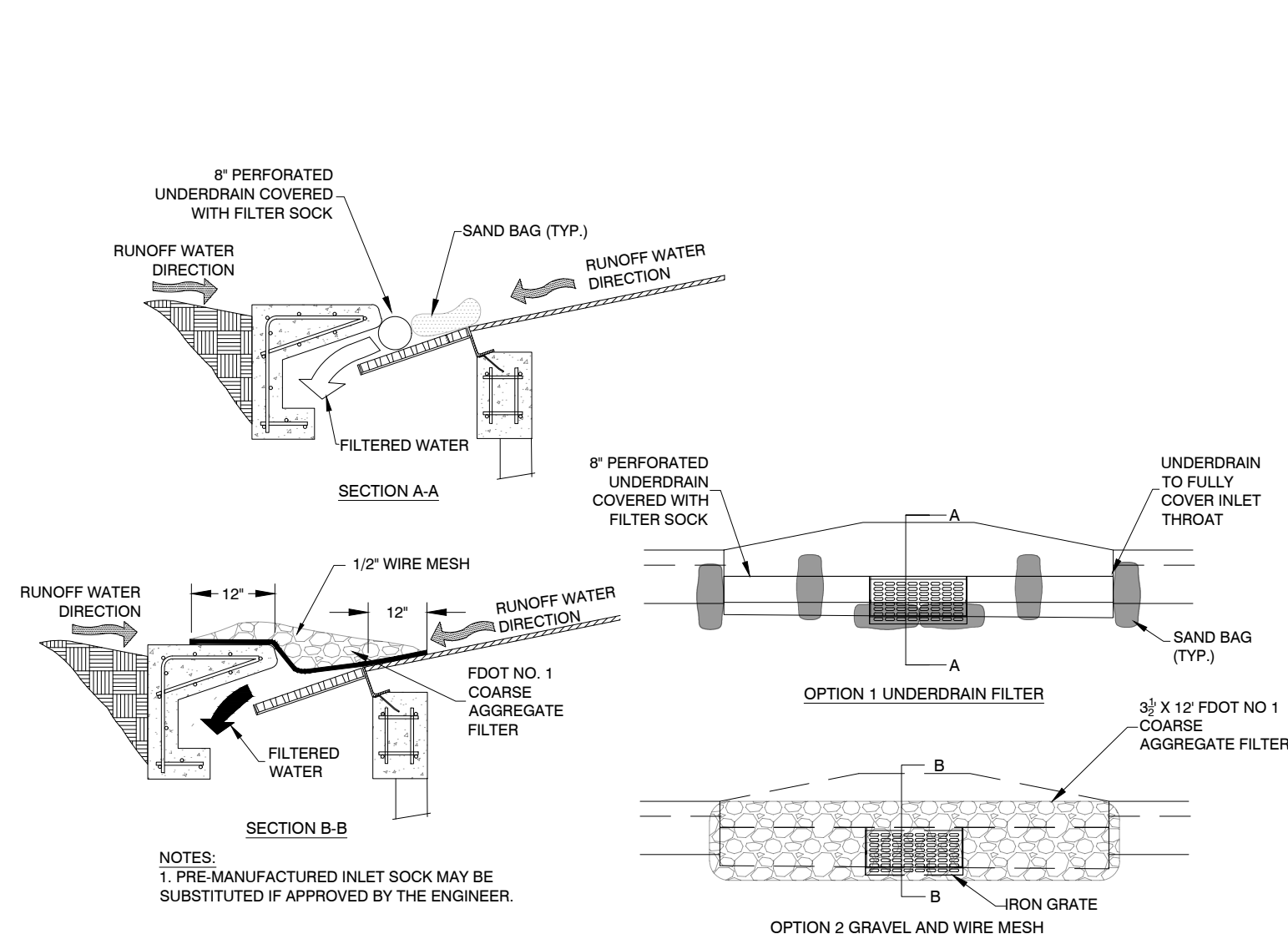




- LEGEND**
- PROPOSED INLET PROTECTION
  - PROPOSED SILT FENCE
  - PROPOSED STORMWATER LINE
  - PROJECT PROPERTY LINE
  - EXTERIOR PARCEL LINE
  - EXISTING CONCRETE
  - PROPOSED CONCRETE
  - PROPOSED FENCE



- CONSTRUCTION SEQUENCE**
1. INSTALL SEDIMENT CONTROL MEASURES
  2. ROUGH GRADE SITE & STOCKPILE TOPSOIL
  3. TEMPORARY VEGETATION
  4. INSTALL STORM WATER MANAGEMENT MEASURES
  5. INSTALL ROAD & PARKING BASE
  6. SURFACE ROADS & PARKING
  7. FINAL GRADING
  8. PERMANENT VEGETATION
  9. INSTALLING LANDSCAPING
  10. PERFORM CONTINUING MAINTENANCE



## EROSION CONTROL NOTES

### STORMWATER POLLUTION PREVENTION PLAN

1. ATTENTION IS DRAWN TO THE FACT THAT THIS PROJECT IS PERMITTED UNDER THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE REQUIREMENTS OF THIS PERMIT, AND TO UNDERTAKE ANY MEASURES NECESSARY TO COMPLY WITH SAID REQUIREMENTS.
2. IT MAY BE NECESSARY, DUE TO WEATHER CONDITIONS, PHASING OF CONSTRUCTION ACTIVITIES, QUANTITY AND TYPE OF MATERIALS, ETC., TO TAKE ADDITIONAL MEASURES TO COMPLY WITH THE N.P.D.E.S. PERMIT THAT ARE NOT OUTLINED IN THESE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR IMPLEMENTATION OF WHATEVER MEANS ARE NECESSARY TO PREVENT THE DISCHARGE OF POLLUTANTS, INCLUDING BUT NOT LIMITED TO TURBID WATER RUNOFF, AND FUGITIVE AIRBORNE PARTICULATE POLLUTANTS.
3. THE CONTRACTOR IS FURTHER ADVISED THAT A SEPARATE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.) HAS BEEN PREPARED FOR THIS PROJECT AND IS HEREBY MADE PART OF THE CONSTRUCTION DOCUMENTS.
4. THIS INFORMATION REPRESENTS THE MINIMUM AMOUNT OF EROSION AND SEDIMENT CONTROL MEASURES. IN THE OPINION OF THE ENGINEER, THAT MAY BE NECESSARY FOR ANY ADDITIONAL MEASURES OR PRACTICES THAT MAY BE NECESSARY TO CONTROL EROSION, TURBID DISCHARGE, FUGITIVE PARTICULATES, ETC. TO FULLY COMPLY WITH ALL GOVERNMENTAL RULES AND/OR PERMIT REQUIREMENTS.

### GENERAL NOTES

1. THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF-SITE SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT.
2. TEMPORARY EROSION CONTROL TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY THE ENGINEER OR AREAS ON SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY THE ENGINEER.
3. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PRACTICAL TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT OR THE INITIAL WORK AREA TO PROTECT THE PROJECT, ADJACENT PROPERTIES AND WATER RESOURCES.
4. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL, EFFECTIVE, AND CONTINUOUS CONTROL THROUGHOUT THE CONSTRUCTION PHASE. TEMPORARY MEASURES SHALL NOT BE CONSTRUCTED FOR EXPEDIENCY IN LIEU OF PERMANENT MEASURES.
5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT.
6. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.
7. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
8. MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCKPILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATERCOURSE BY RUNOFF OR HIGH WATER.
9. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED, AND SEEDED.

### SEDIMENT FENCE

1. THE SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED.
2. THE HEIGHT OF A SEDIMENT FENCE SHALL NOT EXCEED 36 INCHES (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).
3. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED.
4. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.
5. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
6. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1-INCH LONG. TIE WIRES, OR HOG RINGS, THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLES OR WIRED TO THE FENCE, AND 8-INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
8. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSURE POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED IN SUCH A CASE. THE FILTER FABRIC IS STAPLED OR WIRE DIRECTLY TO THE POSTS WITH ALL OTHER PROVISION OF ITEM NO. 6 APPLYING.
9. THE TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE FILTER FABRIC.
10. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

### SEDIMENT FENCE MAINTENANCE

1. SEDIMENT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SEDIMENT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SEDIMENT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED, AND SEEDED.

### DITCH BARRIERS

1. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PERPENDICULAR TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.
2. THE REMAINING STEPS FOR INSTALLING A STRAW BALE BARRIER FOR SHEET FLOW APPLICATIONS APPLY HERE, WITH THE FOLLOWING ADDITION.
3. THE STRAW BALES SHALL BE INSTALLED SUCH THAT UNDERCUTTING BENEATH THE BALES IS MINIMIZED BY THE USE OF ROCK CHECK DAMS PLACED ADJACENT TO THE STRAW BALES.
4. THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE TO ASSURE THAT SEDIMENT-LADEN RUNOFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT NOT AROUND IT.

### DITCH BARRIER MAINTENANCE

1. STRAW BALES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS, AND UNDERCUTTING BENEATH BALES.
3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

### TIMING OF SEDIMENT CONTROL PRACTICES

1. SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL THROUGHOUT EARTH DISTURBING ACTIVITY.
2. SETTLING FACILITIES, PERIMETER CONTROLS, AND OTHER PRACTICES INTENDED TO TRAP SEDIMENT SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UPSLOPE DEVELOPMENT AREA IS RE-STABILIZED.

### STABILIZATION OF NON-STRUCTURAL PRACTICES

1. CONTROL PRACTICES SHALL PRESERVE EXISTING VEGETATION WHERE ATTAINABLE AND DISTURBED AREAS SHALL BE RE-VEGETATED AS SOON AS IT IS PRACTICAL AFTER GRADING OR CONSTRUCTION.
2. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN FOURTEEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE, AND SHALL ALSO BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE, WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED.

### MAINTENANCE

1. TEMPORARY EROSION CONTROL FEATURES SHALL BE ACCEPTABLY MAINTAINED AND SHALL BE REMOVED OR REPLACED BY THE ENGINEER AT NO COST TO THE OWNER. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS.

### SEDIMENT BARRIERS

1. SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY SEDIMENT BARRIERS. SEDIMENT BARRIERS SUCH AS A SEDIMENT FENCE OR DIVERSIONS TO SETTLING FACILITIES SHALL PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SEDIMENT TRANSPORTED BY SHEET FLOW.

### STOCKPILES

1. ALL SOIL STOCKPILES SHALL BE PROTECTED FROM EROSION BY PERIMETER CONTROL DEVICES SUCH AS STRAW BALE DIKES OR FILTER FABRIC FENCES. AND THESE PERIMETER CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.

### INSPECTION SCHEDULE

1. DIVERSION SWALE AND STRUCTURAL PROTECTION - INSPECT EVERY 7 DAYS OR AFTER EACH RAINSTORM PRODUCING RUNOFF. REPAIR AS REQUIRED.
2. INLET PROTECTION - INSPECT FOR SEDIMENT ACCUMULATION AFTER EACH RAINFALL AND DAILY DURING CONTINUED RAINFALL. REPAIR OR REPLACE WHEN WATER FLOW IS RESTRICTED BY SEDIMENT.
3. VEGETATIVE PLANTING - INSPECT AFTER SPROUTING OCCURS AND REPLANT BARE AREAS. INSPECT ESTABLISHED COVER EVERY 15 DAYS FOR DAMAGE; REPLANT AS REQUIRED. MAINTAIN ESTABLISHED COVER AT MAXIMUM 6\"/>

### INLET PROTECTION

1. ALL STORM SEWER INLETS WHICH ACCEPT WATER RUNOFF FROM THE DEVELOPMENT AREA SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER WILL NOT ENTER THE STORM SYSTEM WITHOUT FIRST BEING PONDED AND FILTERED

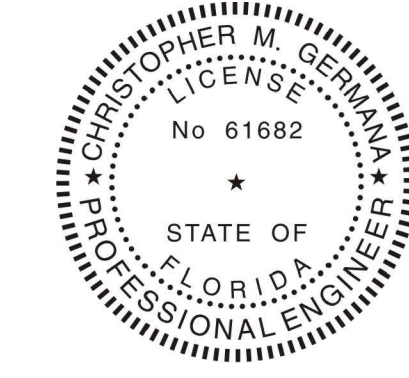
### CONSTRUCTION ACCESS ROUTES

1. MEASURES SHALL BE TAKEN TO PREVENT SOIL TRANSPORT ONTO SURFACES OR PUBLIC ROADS WHERE RUNOFF IS NOT CHECKED.

### PERMANENT VEGETATION

1. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED WHICH, IN THE OPINION OF THE ENGINEER, PROVIDES ADEQUATE COVER AND IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY AND TO SURVIVE ADVERSE WEATHER CONDITIONS.

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Date: 2023.04.19 13:08:03 -04'00'



CHRISTOPHER M. GERMANA, P.E.  
FLORIDA PROFESSIONAL ENGINEER # 61682  
ENGINEERING FIRM REGISTRY # 29279

## STORMWATER POLLUTION PREVENTION PLAN

## ESTES RESERVE SUBDIVISION

## GERMANA ENGINEERING AND ASSOCIATES, LLC

SCALE: 1" = 40'

DATE: 03-24-2023

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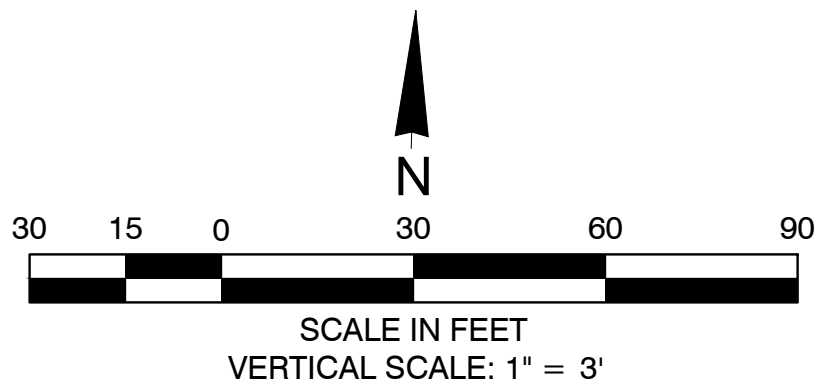
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PROJECT # GE0152021

EUSTIS, FLORIDA



ALT KEY #3862868  
(NOT INCLUDED)



**\*\*CAUTION\*\***  
EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE LOCATED WITHIN THE PROJECT AREA.  
THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THESE PLANS IS FOR REFERENCE  
INFORMATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT  
HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.

#### LEGEND

- RW — EXISTING RECLAIMED WATER MAIN
- RW — PROPOSED RECLAIMED WATER MAIN
- WAT — EXISTING WATER MAIN
- WAT — PROPOSED WATER MAIN
- S — PROPOSED WATER SERVICE (TYPICAL)
- S — PROPOSED RECLAIMED SERVICE (TYPICAL)
- SAN — PROPOSED SANITARY LINE
- SAN — PROPOSED SANITARY SERVICE (TYPICAL)
- SW — PROPOSED STORMWATER LINE
- PP — PROJECT PROPERTY LINE
- EL — EXTERIOR PARCEL LINE
- FG — PROPOSED FENCE
- GR — PROPOSED GUARDRAIL
- EX — EXISTING CONCRETE
- PR — PROPOSED CONCRETE

### NELLIE CROSSING CIRCLE PLAN AND PROFILE -0+10 TO 5+97

### ESTES RESERVE SUBDIVISION

PROJECT # GE015021

EUSTIS, FLORIDA

**GERMANA ENGINEERING  
AND ASSOCIATES, LLC**  
1120 WEST MINNEOLA AVENUE  
CLERMONT, FL 34711  
WWW.GERMANAENGINEERING.COM  
ENGINEERING FIRM REGISTRY # 28279

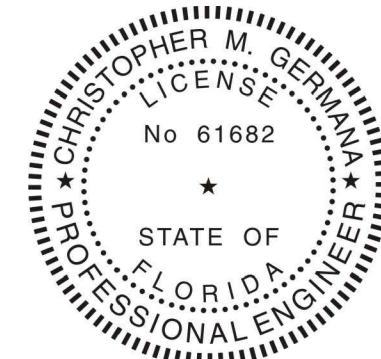
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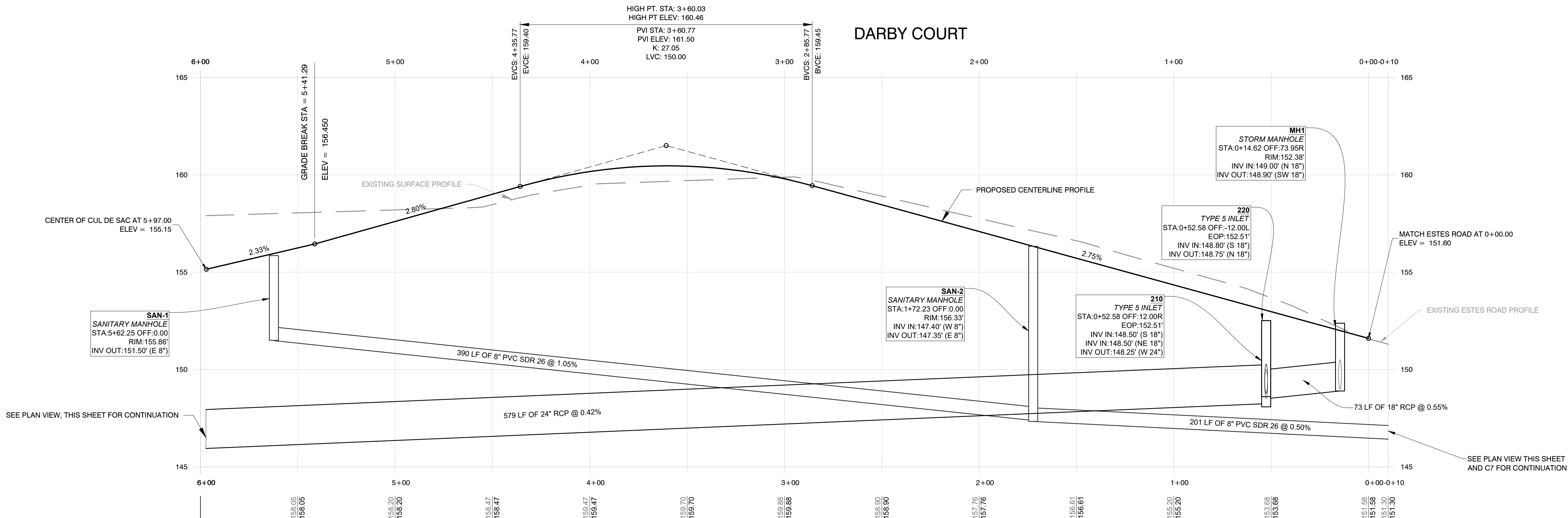
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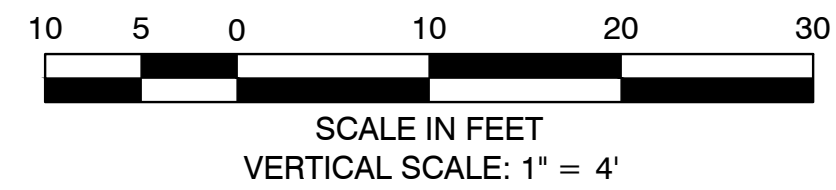
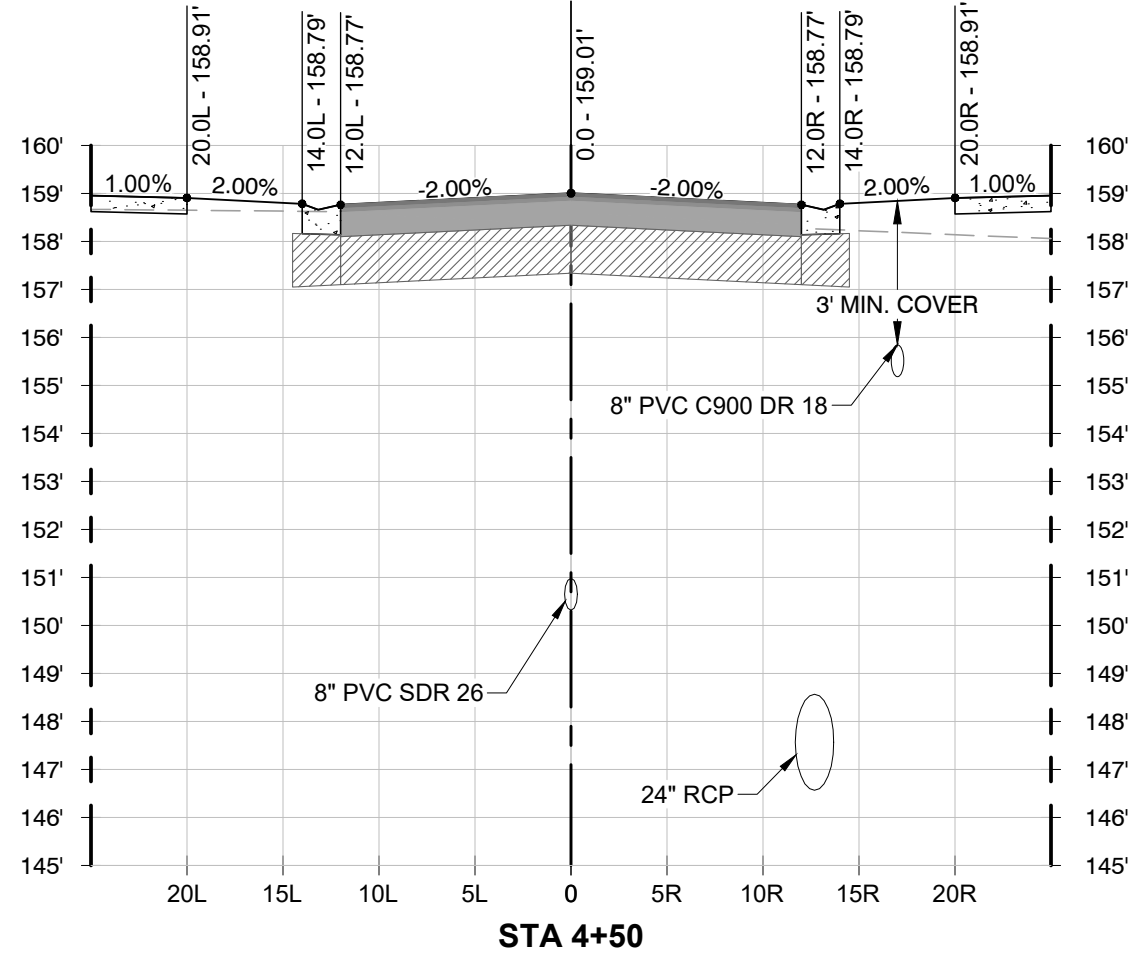
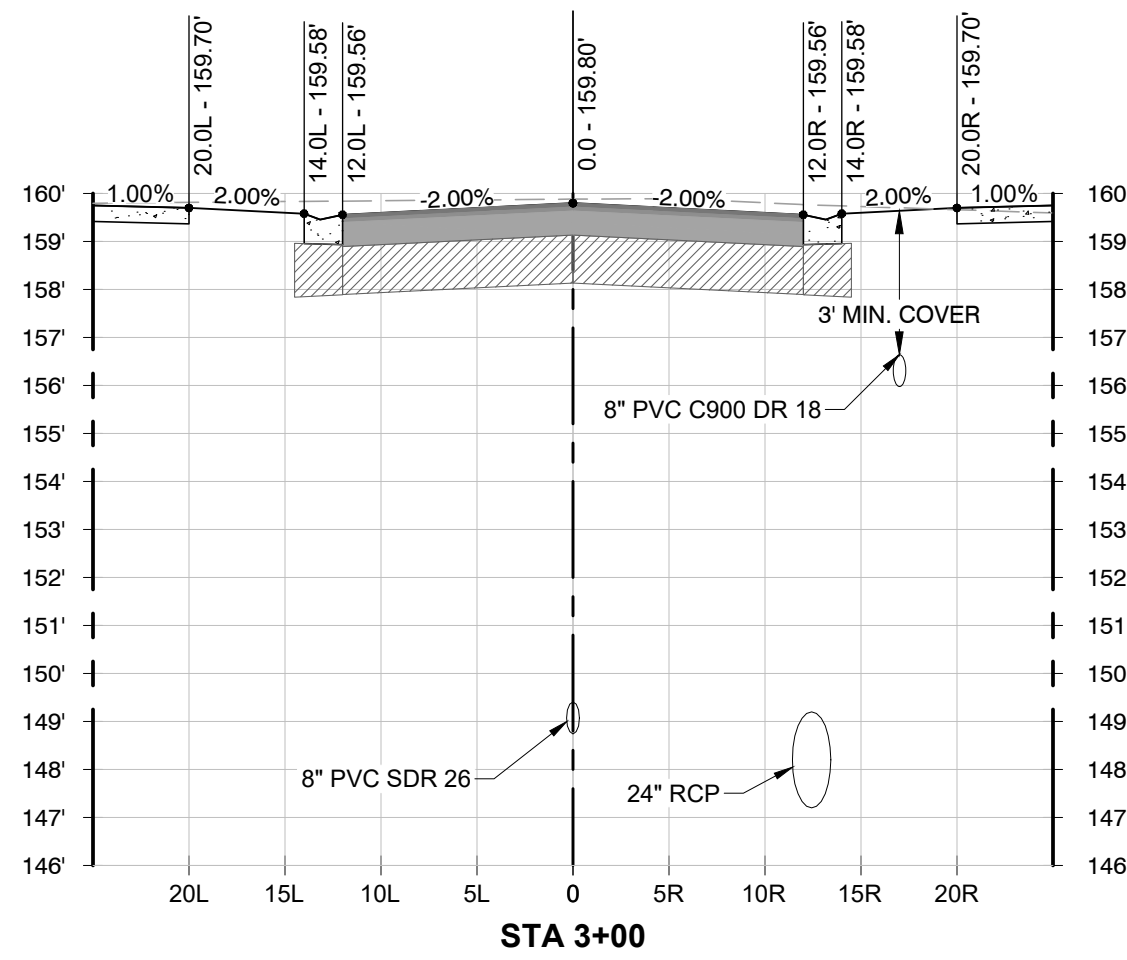
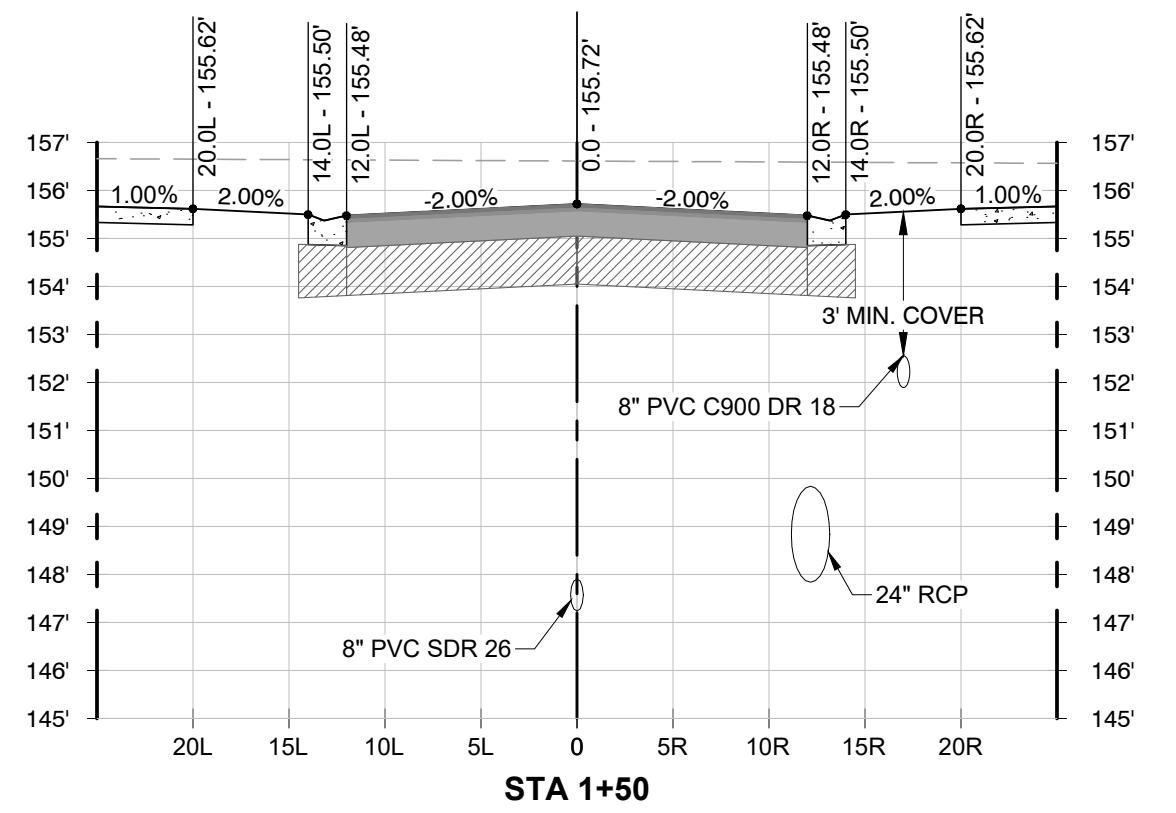
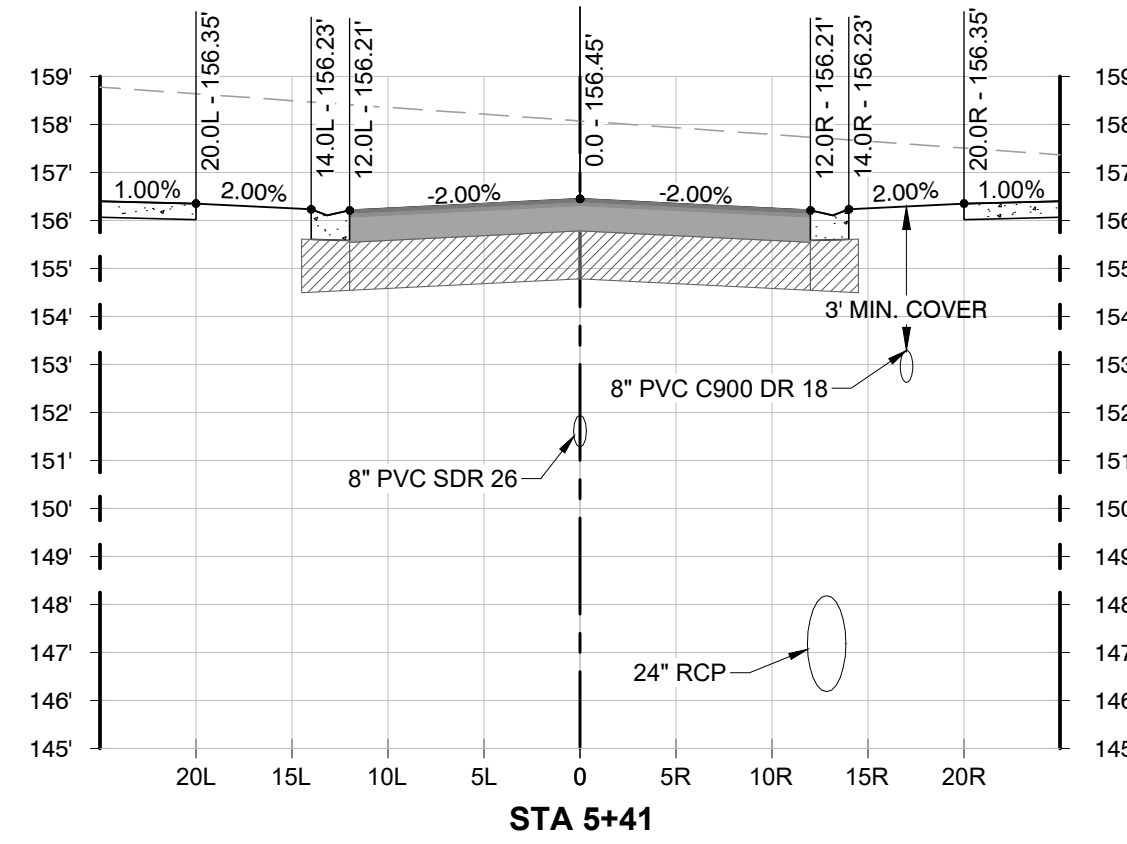
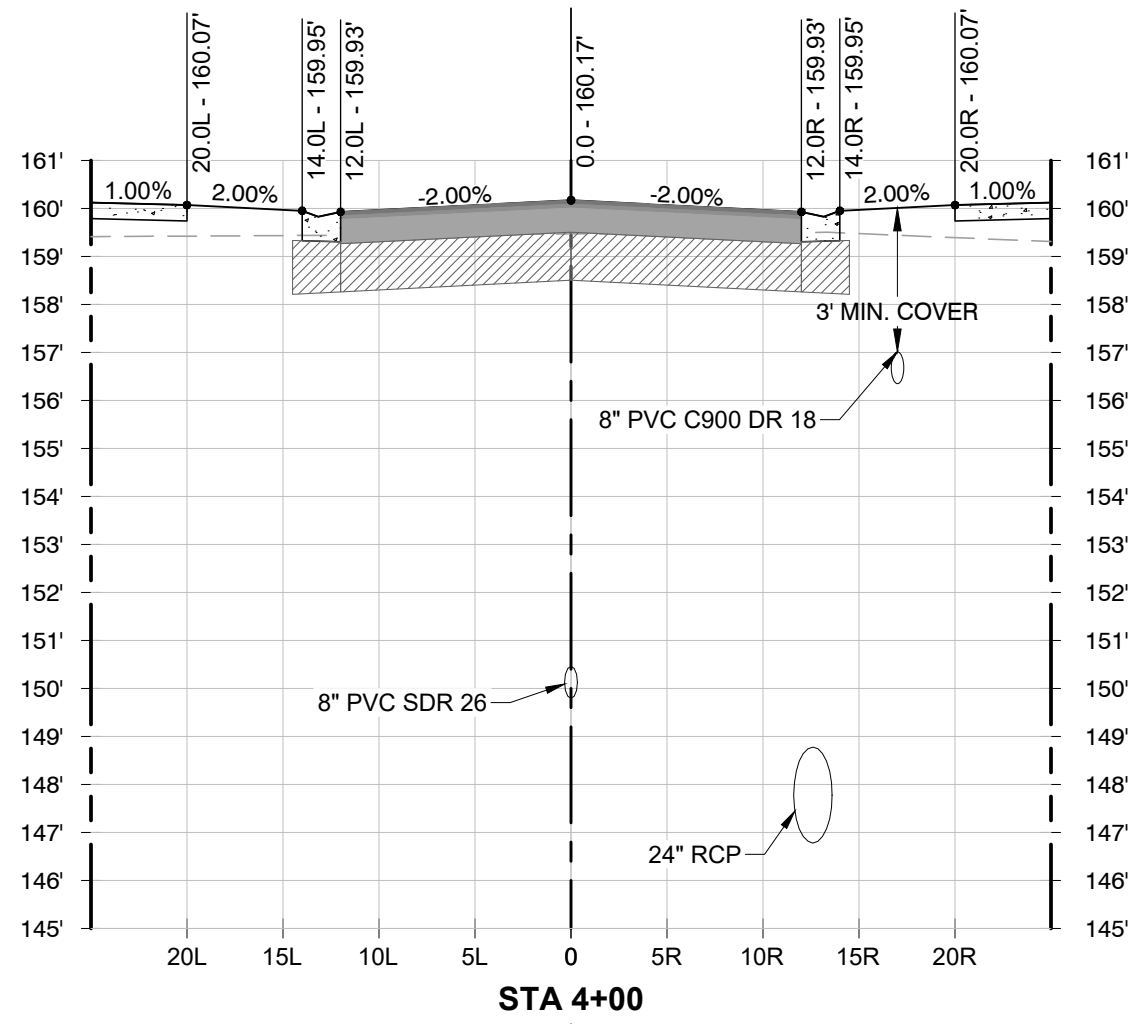
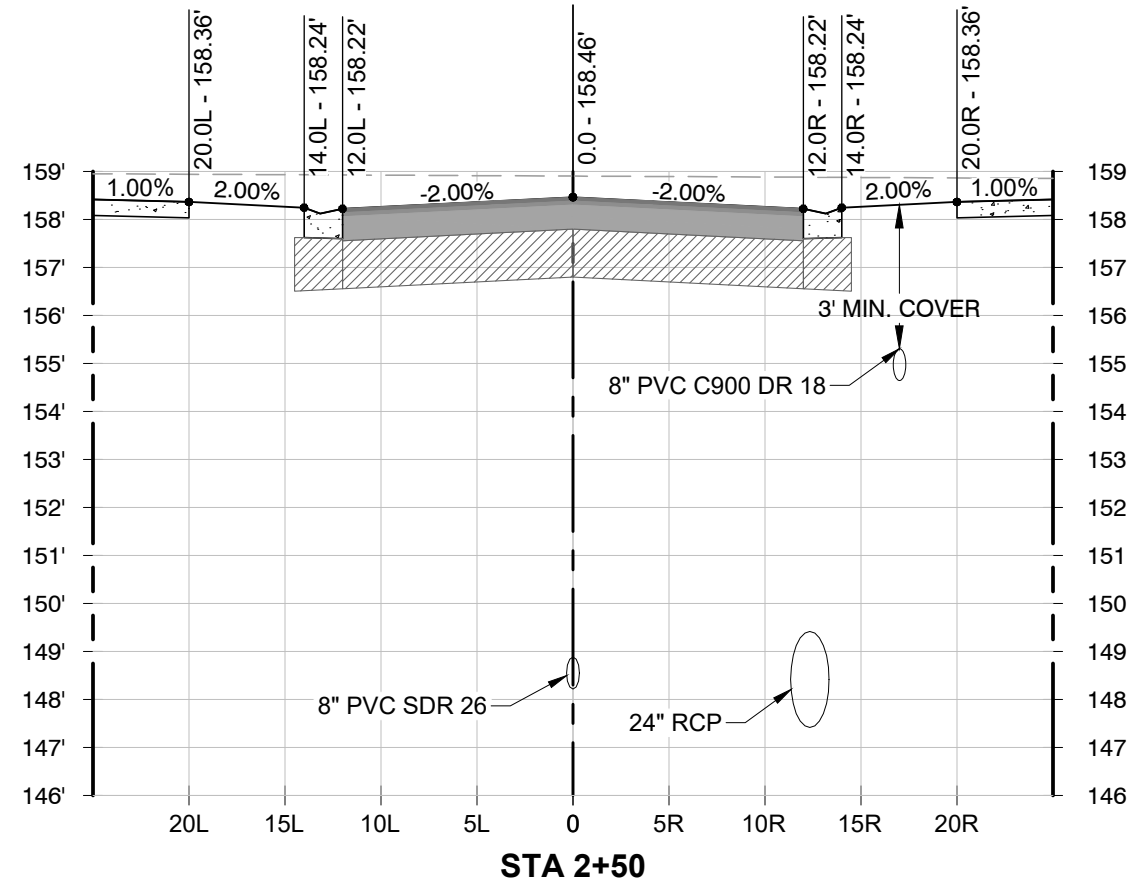
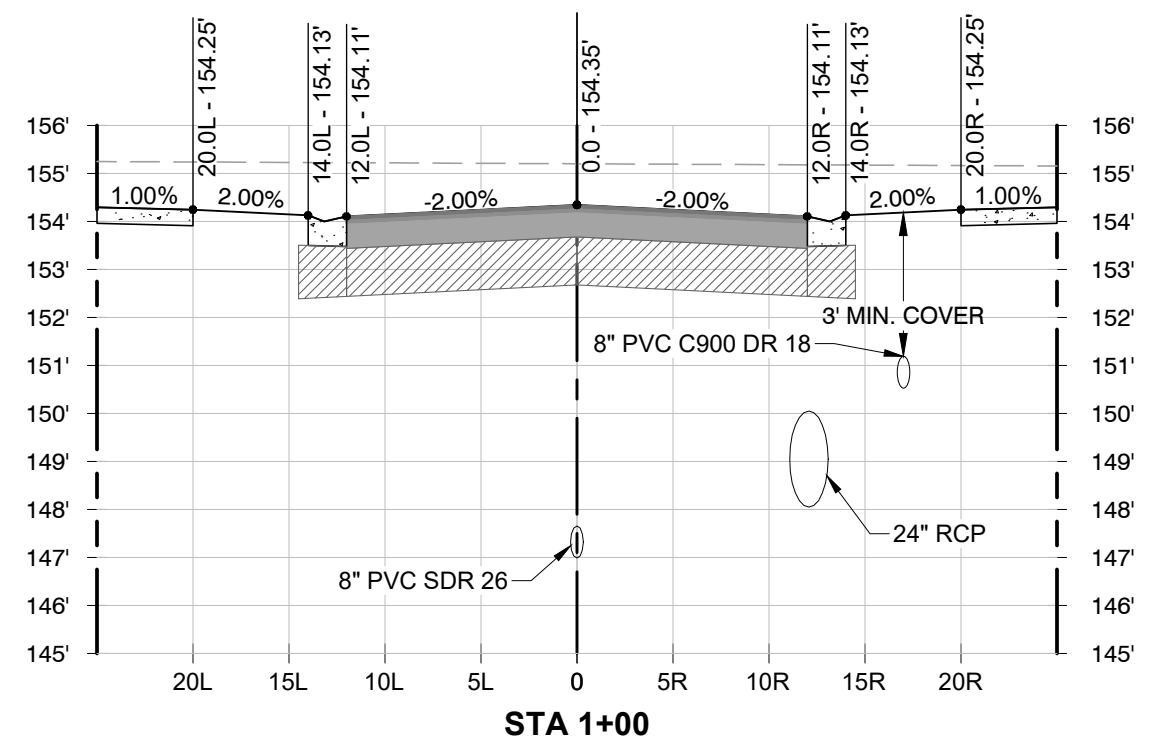
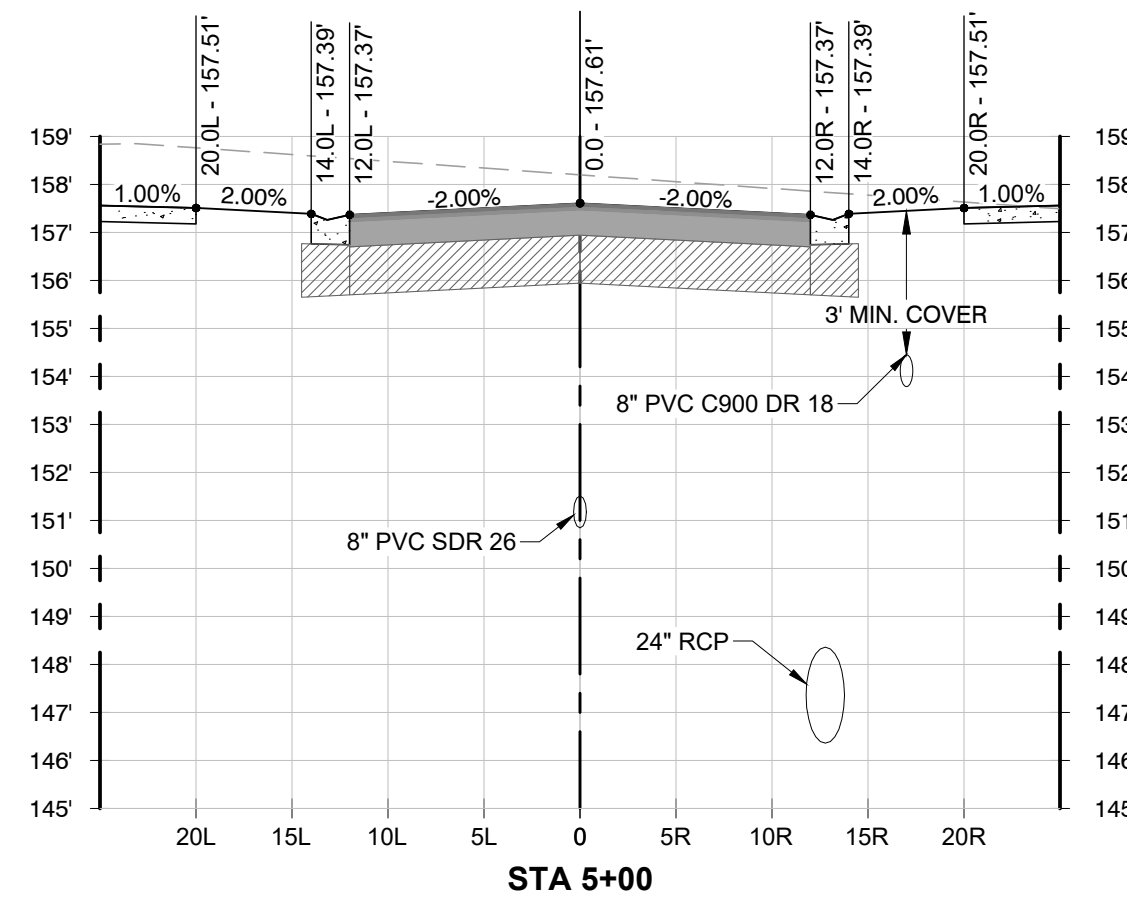
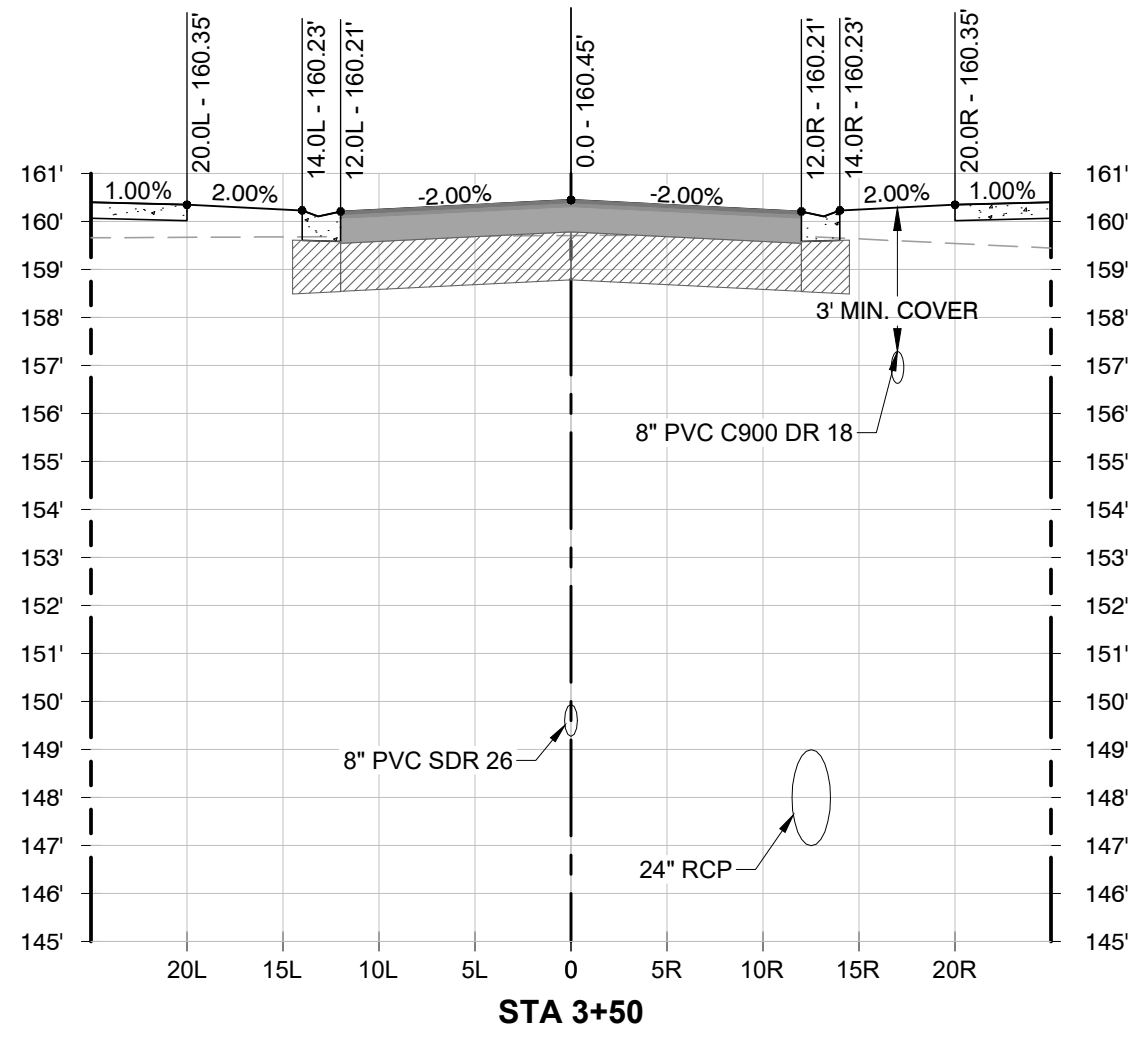
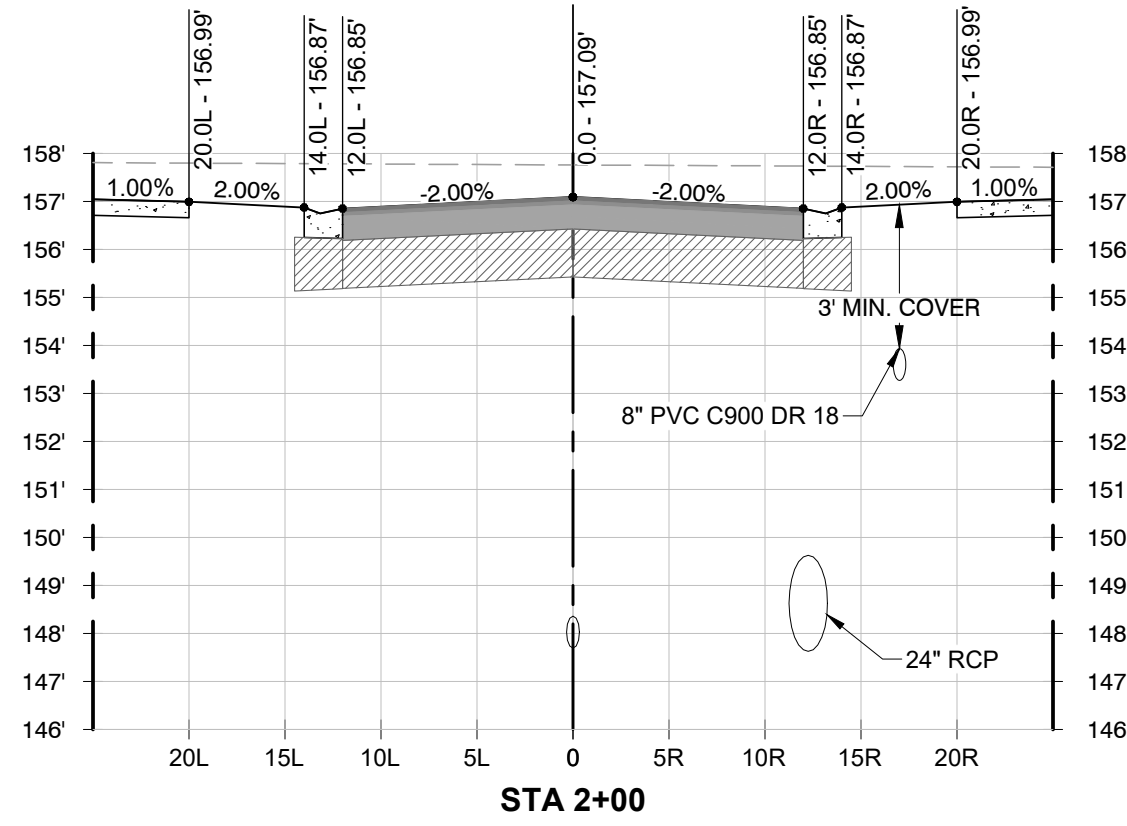
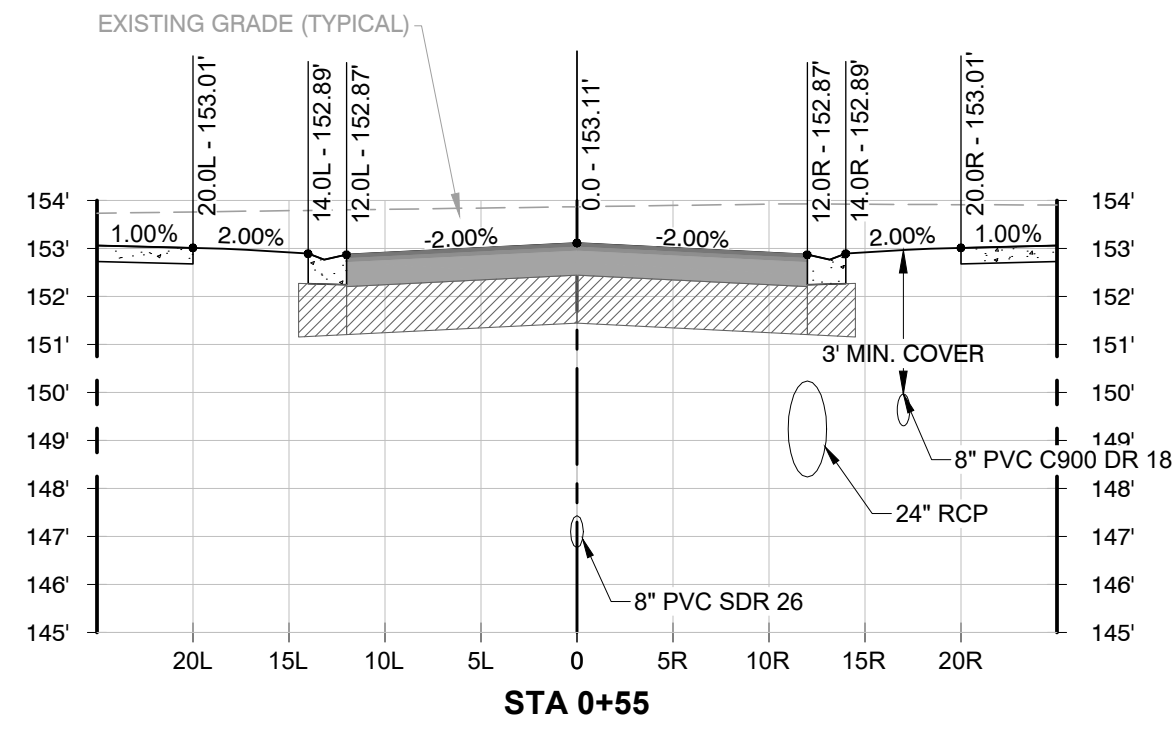


CHRISTOPHER M. GERMANA, P.E.  
FLORIDA PROFESSIONAL ENGINEER # 61682  
ENGINEERING FIRM REGISTRY # 29279

#### DARBY COURT

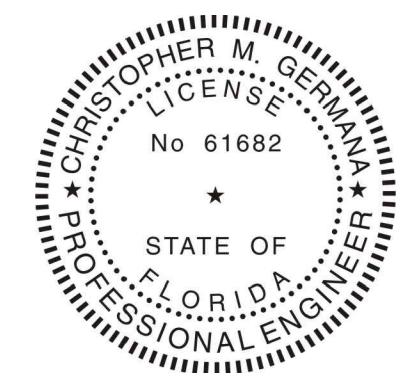






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by Christopher  
M Germana  
Date: 2023.04.19  
13:09:10 -04'00'



CHRISTOPHER M. GERMANA, P.E.  
FLORIDA PROFESSIONAL ENGINEER # 61682  
ENGINEERING FIRM REGISTRY # 29279

DARBY COURT  
CROSS SECTIONS  
0+55 TO 5+41

ESTES RESERVE  
SUBDIVISION

GERMANA ENGINEERING  
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1120 WEST MINNIEOLA AVENUE  
CLERMONT, FL 34711  
WWW.GERMANAENGINEERING.COM  
ENGINEERING FIRM REGISTRY # 29279

SCALE: NTS

DATE: 03-24-2023

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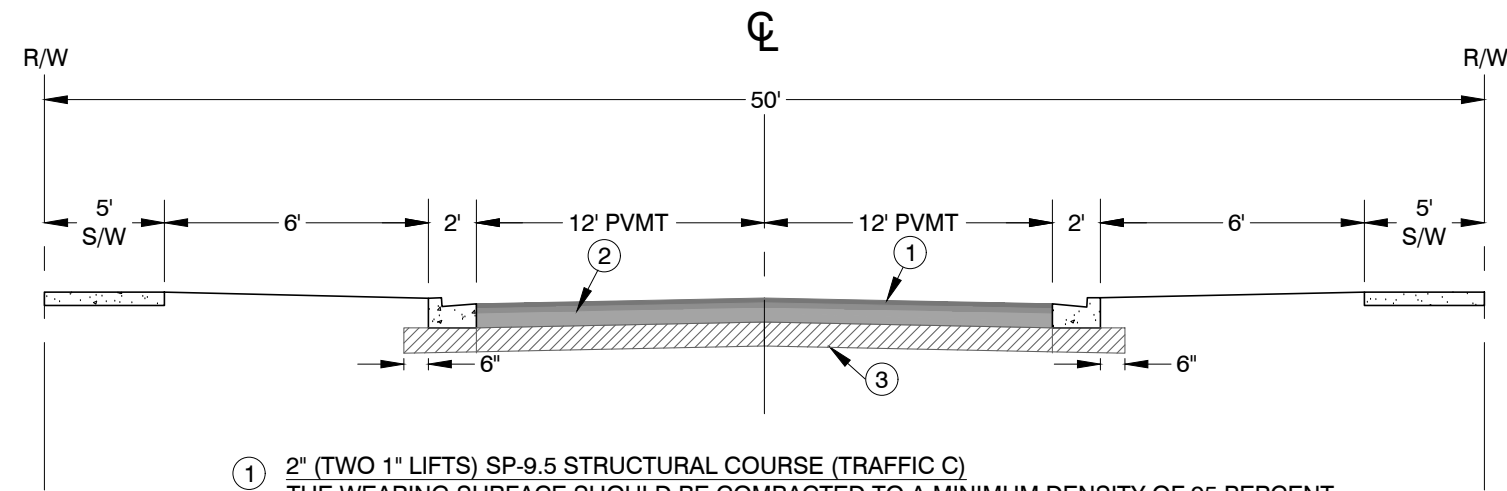
REVISIONS

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PROJECT # GE0152021

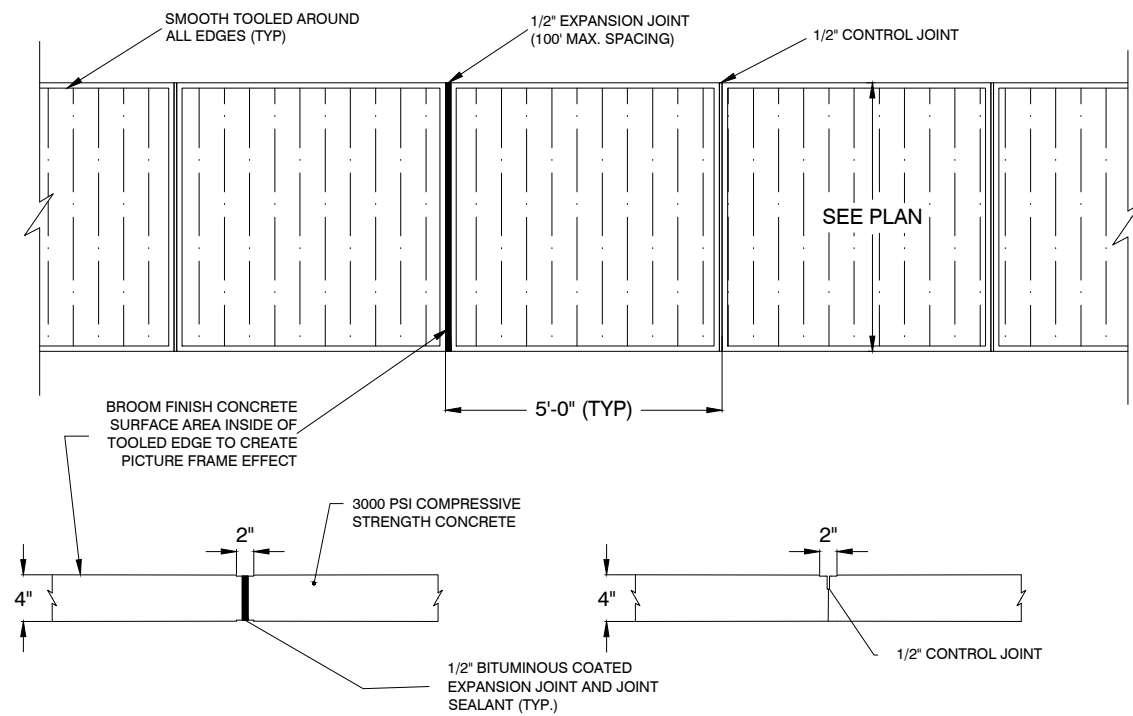
EUSTIS, FLORIDA



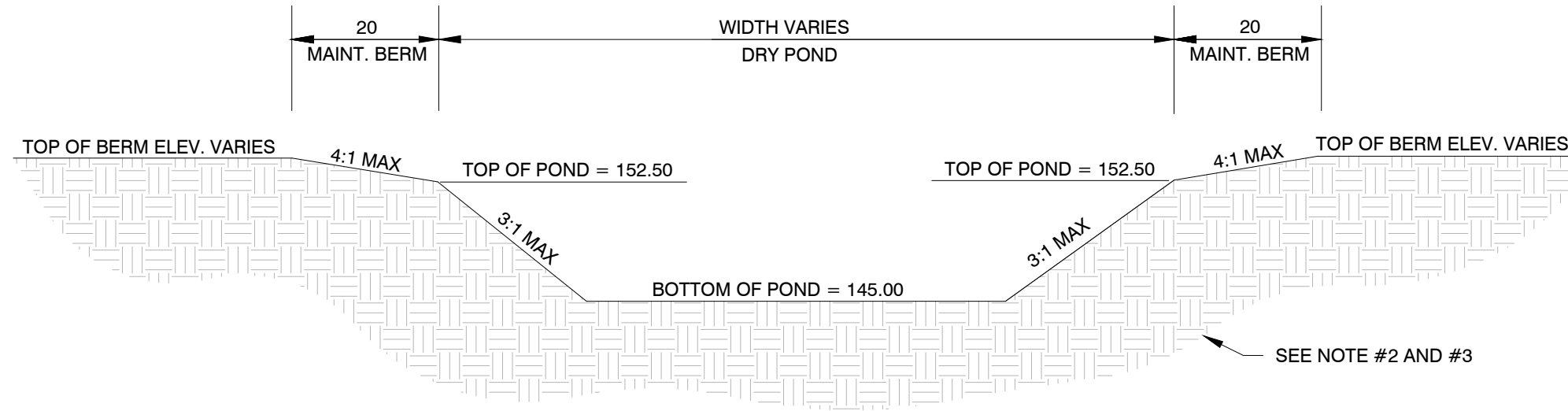


- ① 2" (TWO 1" LIFTS) SP-9.5 STRUCTURAL COURSE (TRAFFIC C)  
THE WEARING SURFACE SHOULD BE COMPACTED TO A MINIMUM DENSITY OF 95 PERCENT OF THE LABORATORY DENSITY AS DETERMINED BY THE MARSHALL STABILITY TEST METHOD (AASHTO T-245).
- ② 6" LIMEROCK BASE (LBR 100)  
QUALITY OF LIMEROCK TO BE IN ACCORDANCE WITH CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND COMPACTED TO A MINIMUM DENSITY EQUIVALENT TO 95 PERCENT OF THE MODIFIED PROCTOR (AASHTO T-180), PRIMED, COMPACTED TO 98% OF THE MAXIMUM DENSITY, PER AASHTO T-180.
- ③ 12" TYPE B STABILIZED SUBGRADE (LBR 40)  
THE SUBGRADE SHOULD BE COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T-180) FOR A DEPTH OF 1 FOOT BELOW PAVEMENT SUBGRADE.

**TYPICAL R/W DETAIL**  
NTS

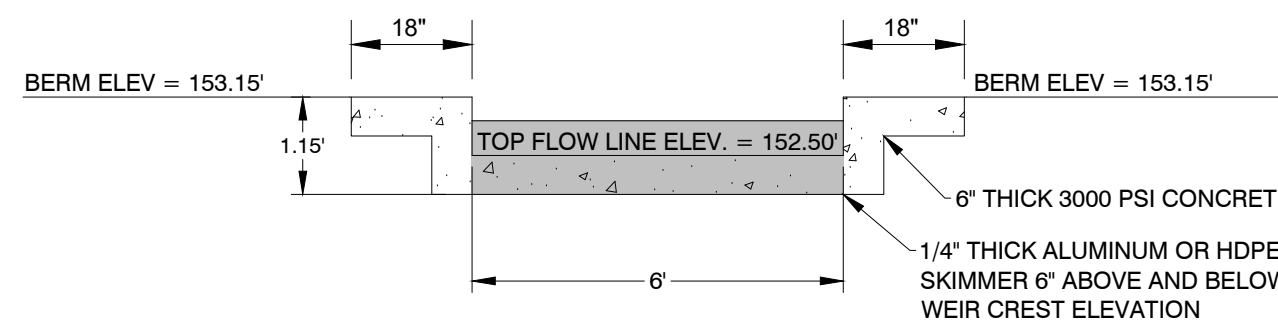


**SIDEWALK DETAIL**  
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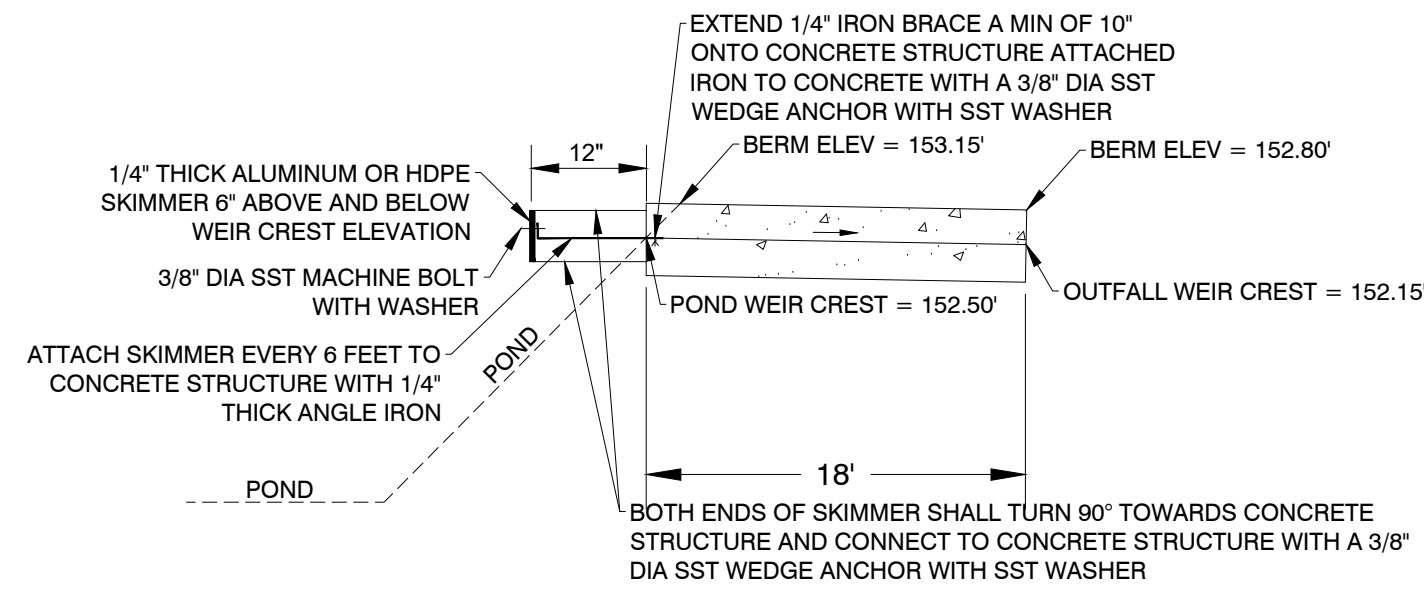


- NOTES
- BAHIA SOD SHALL BE USED ON POND SIDE SLOPES AND BERM. NON-MUCK GROWN SOD SHALL BE INSTALLED.
  - THE POND BOTTOM AREA SHOULD BE STRIPPED AND CLEARED OF TREES, SURFACE VEGETATION, TOP SOIL, ROOT LADEN SOILS, DEBRIS, AND ANY DELETERIOUS OR CLAYEY MATERIAL. POND BOTTOM TO BE SEEDED WITH ARGENTINE BAHIA SEEDS.
  - IF CLAYEY SOILS ARE ENCOUNTERED DURING GRADING OF THE POND, IT SHOULD BE OVER EXCAVATED TO A DEPTH OF 3 FEET BELOW THE POND BOTTOM AND REPLACED WITH CLEAN FINE SANDS. ALL FILL SHALL BE GRANULAR SOIL WITH LESS THAN 5% PASSING THROUGH THE NUMBER 200 SIEVE AT A MINIMUM PERMEABILITY RATE OF 10 FT/DAY.
  - CONTRACTOR TO OVER-EXCAVATE THE POND BOTTOM TO AN ELEVATION OF 142.50' TO ENSURE NO CLAY IS BENEATH THE POND TO ELEVATION 142.50'. CONTRACTOR TO EXCAVATE ANY CLAY FOUND AND FILL WITH CLEAN FINE SAND WITH LESS THAN 5% PASSING THROUGH THE NUMBER 200 SIEVE AT A MINIMUM PERMEABILITY RATE OF 10 FEET PER DAY.

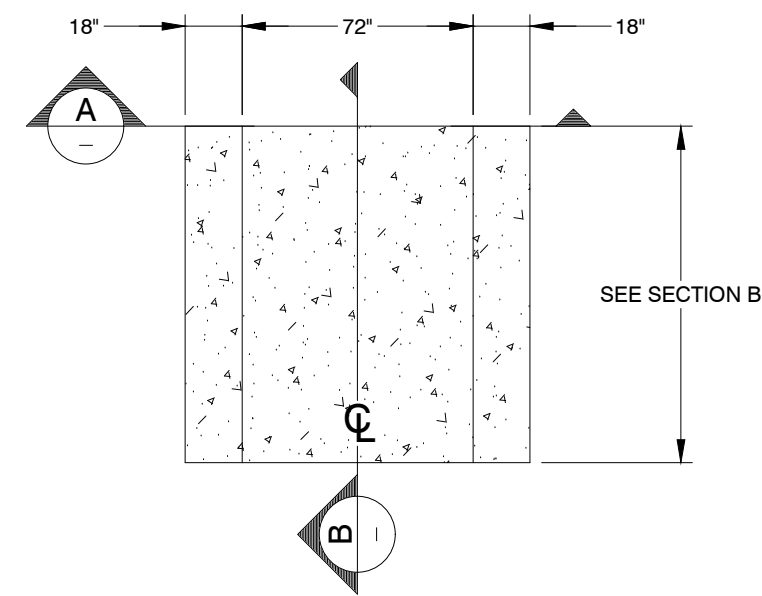
**TYPICAL DRY POND DETAIL**  
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**SECTION A**  
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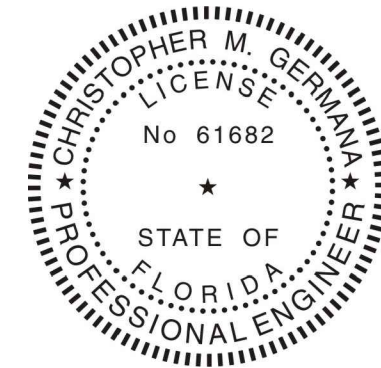
**SECTION B**  
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**POND EMERGENCY OVERFLOW WEIR DETAIL**  
NTS

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by Christopher  
M Germana  
Date: 2023.04.19  
13:09:44 -04'00'



CHRISTOPHER M. GERMANA, P.E.  
FLORIDA PROFESSIONAL ENGINEER # 61682  
ENGINEERING FIRM REGISTRY # 29279

CONSTRUCTION  
DETAILS

ESTES RESERVE  
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EUSTIS, FLORIDA



