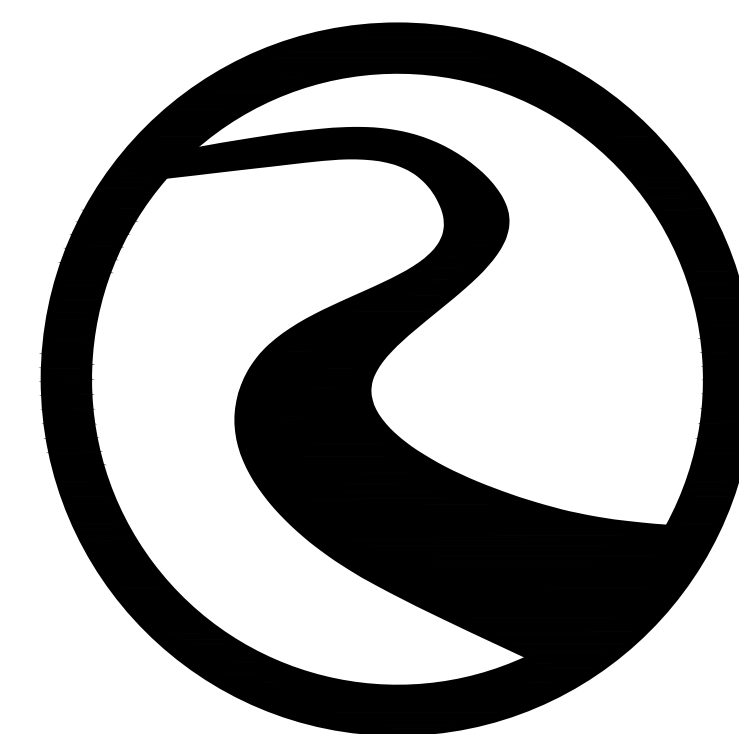


# SITE CONSTRUCTION PLANS

## SAND HILL COMPLEX ,DRIVEWAY ENHANCEMENTS ,EFFINGHAM COUNTY

PREPARED FOR:  
EFFINGHAM COUNTY COMMISSIONERS,  
804 SOUTH LAUREL STREET, SPRINGFILED,  
GEORGIA 31329



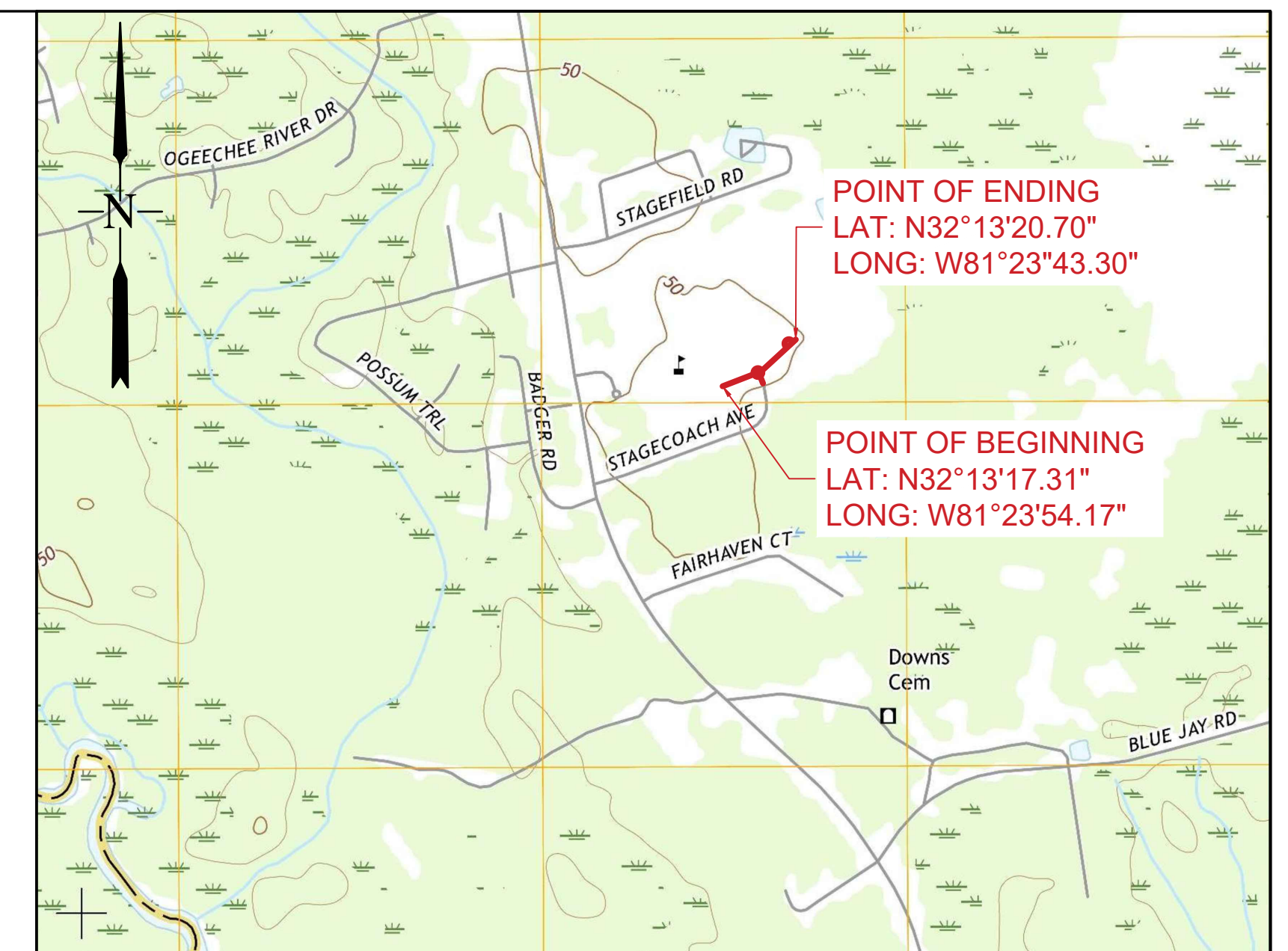
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WWW.ROBERTSCIVILENGINEERING.COM

301 SEA ISLAND ROAD, SUITE 10  
ST. SIMONS ISLAND, GA 31522  
912-638-9681

6001 CHATHAM CENTER DRIVE, SUITE 255  
SAVANNAH, GA 31405  
912-298-7006

14600 WHIRLWIND AVENUE, SUITE 119A  
JACKSONVILLE, FL 32218  
904-741-0099

4000 FABER PLACE DRIVE, SUITE 300  
NORTH CHARLESTON, SC 29405  
843-323-4224



VICINITY MAP NTS

SAND HILL COMPLEX ,DRIVEWAY  
ENHANCEMENTS ,EFFINGHAM COUNTY

OWNER  
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CONTACT  
912/547-9477  
EMAIL  
astanley@effinghamcounty.org

ENGINEER  
JOHNATHAN ROBERTS  
CONTACT  
912/638-9681  
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jroberts@robertscivilengineering.com

#	REVISIONS
1	
2	
3	
4	
5	

11/8/22: ORIGINAL ISSUE DATE RCE PROJECT NUMBER: 00000

### CONTENTS

SHEET		DATE
0	COVER	11/8/22
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COVER

**GENERAL NOTES:**

- CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO APPLICABLE FEDERAL, STATE, AND LOCAL LAWS.
- PERMITS NECESSARY FOR CONSTRUCTION SHALL BE OBTAINED BY CONTRACTOR.
- DEVIATIONS FROM PLANS ARE PROHIBITED WITHOUT WRITTEN CONSENT OF THE ENGINEER.
- CONTRACTOR IS TO IMMEDIATELY CONTACT ENGINEER IF ANY UNFORESEEN CONDITIONS OR DISCREPANCIES OCCUR.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION OF UTILITIES ON SITE WITH APPROPRIATE PROVIDER (I.E., POWER, PHONE, CABLE, ETC.).
- ENGINEER IS NOT RESPONSIBLE FOR PHYSICAL CONSTRUCTION OF SITE.
- CONTRACTOR SHALL MAINTAIN A SAFE SITE AND MEET APPROPRIATE REGULATIONS CONCERNING SAFETY.
- SURVEY DATA PROVIDED BY ATLAS SURVEYING.  
A. DATE OF SURVEY MARCH 2022
- EXISTING SURVEY INFORMATION TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER OF DISCREPANCIES IN FIELD OBSERVATIONS VERSUS SURVEY DATA.
- CONTRACTOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION BY CALLING "CALL BEFORE YOU DIG" HOTLINE: 811.
- HORIZONTAL DATUM BASED ON GEORGIA STATE PLANE COORDINATE SYSTEM, EAST ZONE NAD83. VERTICAL DATUM BASED ON NAVD88.

**EARTHWORK AND PAVING:**

- UPPER 6 INCHES OF SUBGRADE BELOW PAVEMENT AND BUILDINGS SHALL BE SCARIFIED AND RECOMPACTED TO 100% STANDARD PROCTOR MAX DRY WEIGHT DENSITY WITH A MOISTURE CONTENT WITHIN 2% OF OPTIMUM MOISTURE CONTENT.
- CONTRACTOR TO PROVIDE TEST RESULTS OF SUBGRADE AND BASE COURSE COMPACTION TO ENGINEER INCLUDING VOLUME ESTIMATES OF ANY UNSUITABLE SOILS TO BE REMOVED AND REPLACED THAT WERE IDENTIFIED DURING COMPACTION OPERATIONS PER ITEM NO. 1 ABOVE. IF ANY, CONTRACTOR SHALL NOT PROCEED WITH OVER-EXCAVATION AND REPLACEMENT OF UNSUITABLE SOILS WITHOUT WRITTEN AUTHORIZATION FROM ENGINEER OR OWNER.
- FOR APPROVED AREAS OF OVER-EXCAVATION AND REPLACEMENT, CONTRACTOR TO REMOVE IDENTIFIED UNSUITABLE MATERIAL TO A DEPTH OF 3 FEET AND REPLACE WITH STRUCTURAL FILL.
- IN AREAS WHERE STRUCTURAL FILL IS REQUIRED, FILL SHALL BE PLACED IN LIFTS OF 6 INCHES AND BE COMPACTED TO 100% STANDARD PROCTOR MAX DRY WEIGHT DENSITY. STRUCTURAL FILL SHALL CONSIST OF GRANULAR SOIL CONTAINING LESS THAN 10% MATERIAL PASSING THE NO 200 SIEVE
- GRADING COMPLETE IS TO INCLUDE THE LAY OUT OF ALL REQUIRED PROPOSED CONSTRUCTION.

COUNTY: EFFINGHAM COUNTY

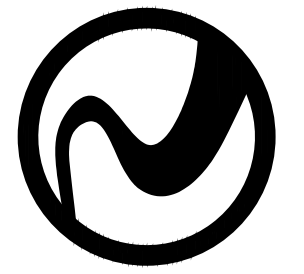
PROJECT NUMBER: \*\*\*\*\*

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
000-0000	THERMOPLASTIC HATCH SOLID TRAF STRIPE, 5 IN, YELLOW	SY	119		
000-0001	SIGNAGE	EA	3		
402-3141	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL	TN	344		
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL& H LIME	TN	409		
310-5063	GR AGGR BASE CRS, 6 INCH, INCL MATL - IP	SY	792		
441-0764	CONCRETE MEDIAN, 10 IN	SY	140		
441-6012	CONC CURB & GUTTER, 6 IN X 24 IN, TP 2	LF	145		
413-1000	BITUM TACK COAT	GL	215		
706-1001	TURF ESTABLISHMENT, TP A	AC	0.3		
210-0200	GRADING PER MILE	LM	0.24		
652-0110	PAVEMENT MARKING, ARROW	EA	6		
652-2501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	LF	2,676		
653-1604	THERMOPLASTIC SOLID TRAF STRIPE, 18 IN, WHITE	LF	75		
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	LF	2569		
<b>GRAND TOTAL:</b>					

NOT RELEASED FOR CONSTRUCTION

REVISIONS

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15 GARDNER SQUARE, SAVANNAH, GEORGIA 31401  
WWW.ROBERTSCIVILENGINEERING.COM

GENERAL NOTES  
SHEET 1 OF 6

SAND HILL PARK  
EFFINGHAM COUNTY  
PREPARED FOR:  
EFFINGHAM COUNTY

DATE: 11/8/22  
PROJECT NUMBER: 00000

DRAWN BY: DUF  
CHECKED BY: JLJ  
SCALE: NTS (FOR 24"x36" PLOT)

1

SHEET:



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1700 N. SAGE | SUITE 100 | WASHINGTON, PA 15387  
WWW.ROBERTSCIVILENGINEERING.COM

EXISTING CONDITIONS AND DEMOLISHING PLAN  
SHEET 2 OF 6

SAND HILL PARK  
EFFINGHAM COUNTY  
PREPARED FOR:  
EFFINGHAM COUNTY

DATE: 11/8/22  
PROJECT NUMBER: 00000

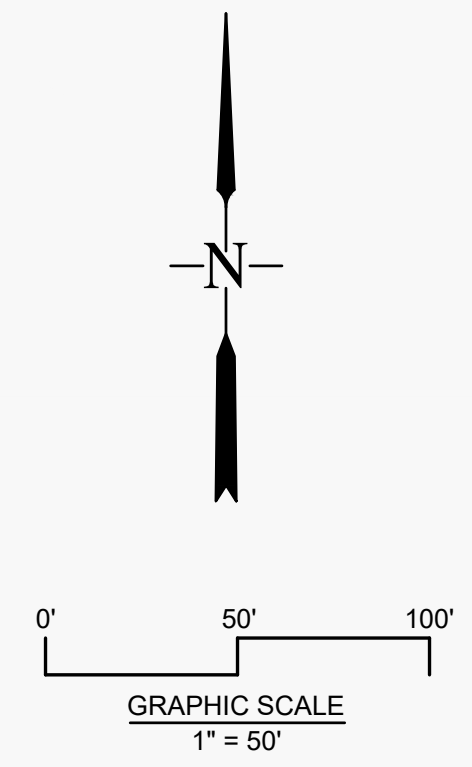
DRAWN BY: DUF  
CHECKED BY: JLW

SCALE: 1" = 50' (FOR 24"X36" PLOT)

2

SHEET:

Know what's below.  
Call before you dig.



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STAKING PLAN  
SHEET 3 OF 6

SAND HILL PARK  
EFFINGHAM COUNTY  
PREPARED FOR:  
EFFINGHAM COUNTY

DATE: 11/8/22  
PROJECT NUMBER: 00000  
DRAWN BY: DUF  
CHECKED BY: JLV  
SCALE: 1" = 50' (FOR 24"x36" PLOT)

3

SHEET:



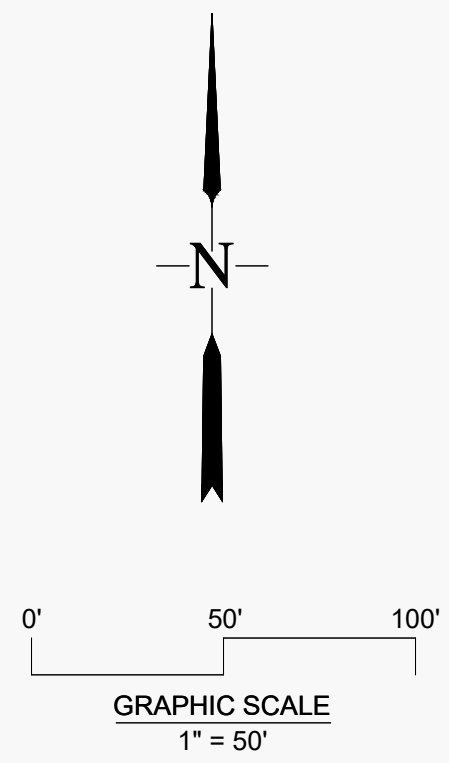
SAND HILL ELEMENTARY SCHOOL

SAND HILL ELEMENTARY SCHOOL RD		
Number	Radius	Length
L2		163.62'
C2	842.22'	153.94'
C3	409.00'	147.99'
C4	7888.62'	148.52'
C5	636.94'	128.29'
L4		231.32'

**NOTE**  
REFER TO TYPICAL SECTION SHEET (4) FOR PAVEMENT THICKNESS DETAILS

**LEGEND**

	PROPOSED ASPHALT PAVEMENT
	PROPOSED CONCRETE PAVEMENT
	PROPOSED SHOULDER



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REVISIONS



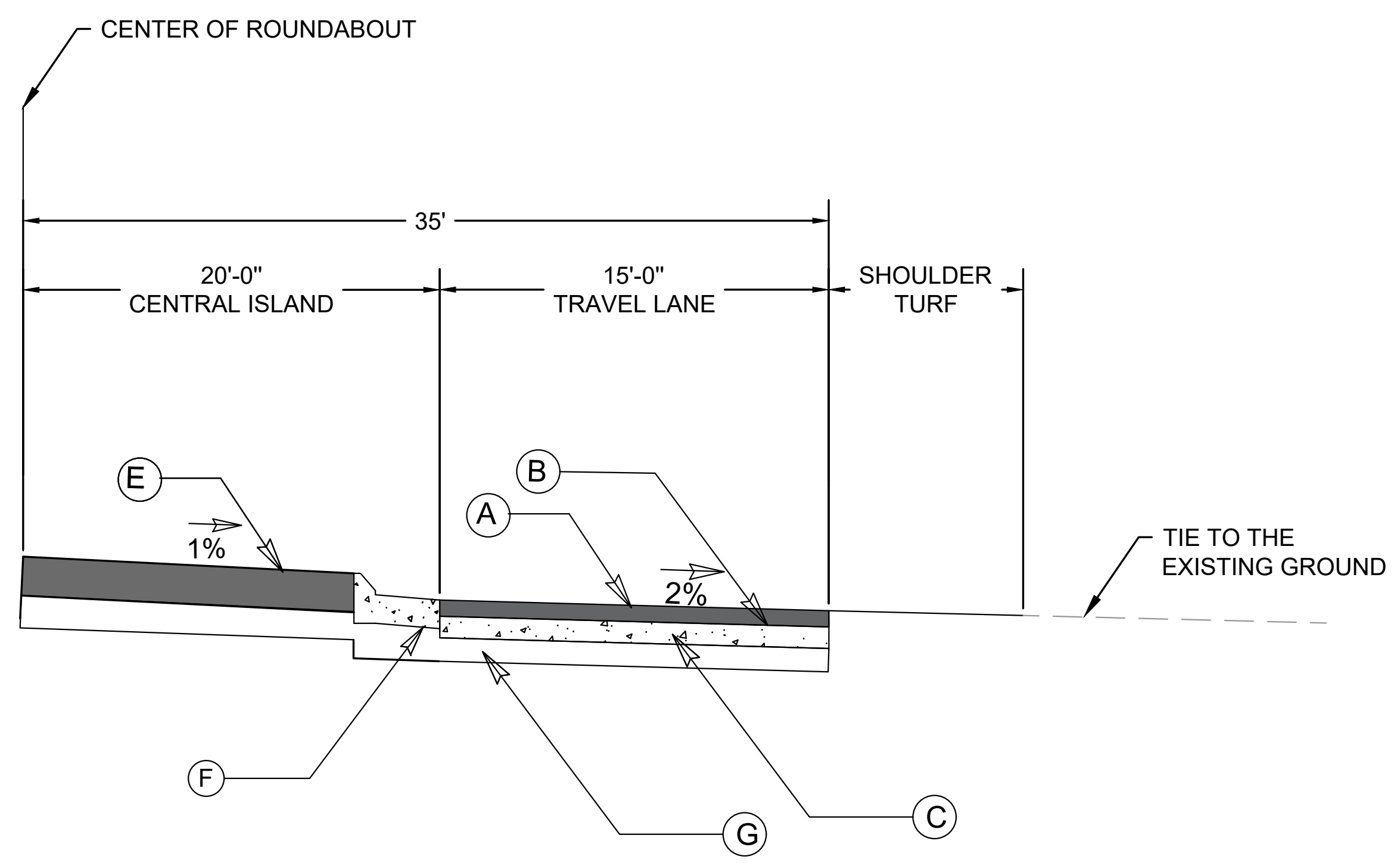
TYPICAL SECTION SHEET 4 OF 6

SAND HILL PARK  
 EFFINGHAM COUNTY  
 PREPARED FOR:  
 EFFINGHAM COUNTY

DATE: 11/8/22  
 PROJECT NUMBER: 00000  
 DRAWN BY: DUF  
 CHECKED BY: JLV  
 SCALE: NTS (FOR 24"x36" PLOT)

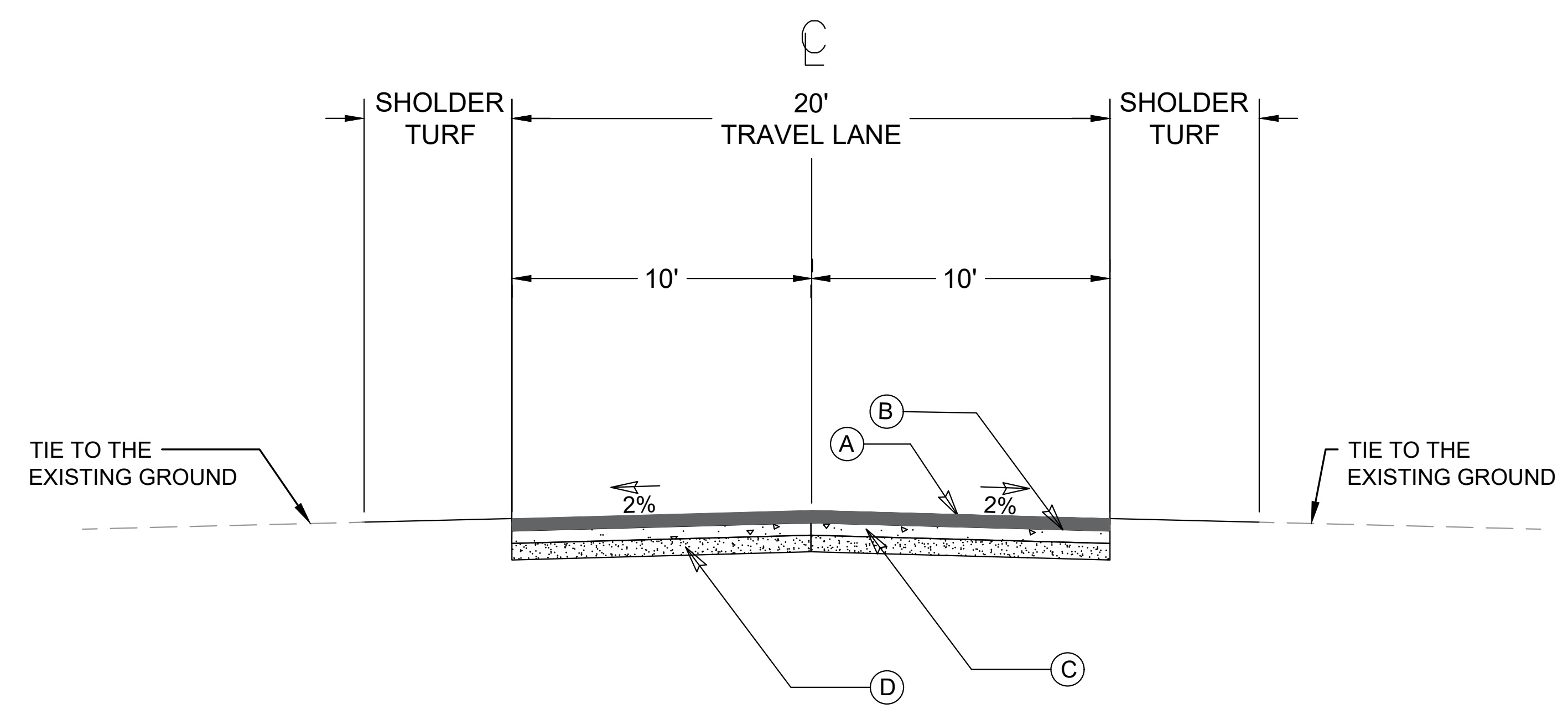
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SHEET:

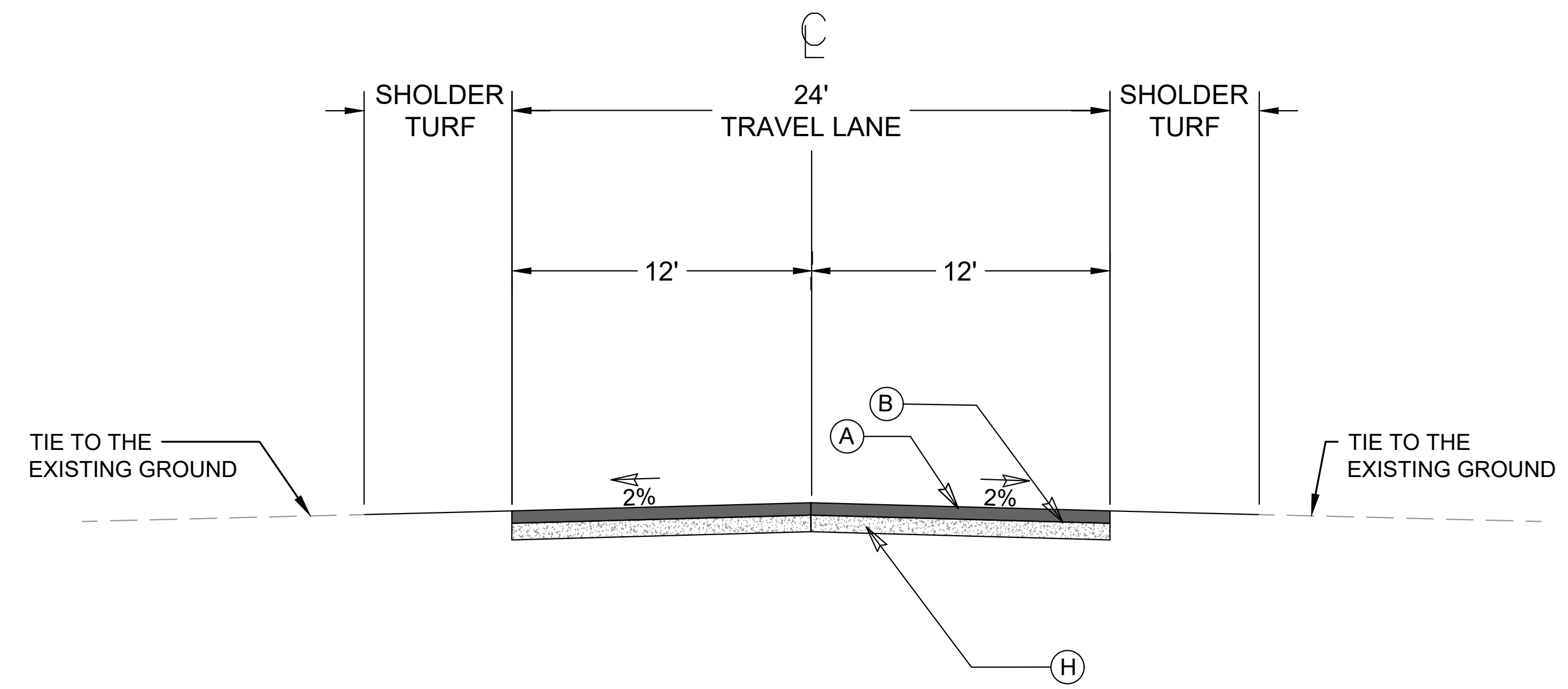


**TYPICAL GRADE, BASE & SURFACE SECTION FOR MINI ROUNDABOUT**  
 NTS

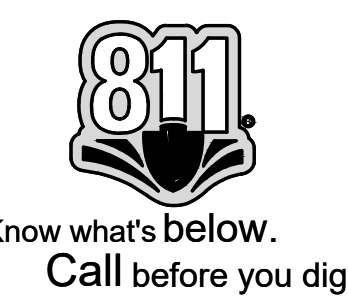
- (A) 1.5" RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL
- (B) TACK COAT
- (C) 2" ASPHALT BINDER COURSE 19 MM SUPERPAVE
- (D) 1.5" EXISTING SAND ASPHALT
- (E) CONCRETE MEDIAN, 10 IN
- (F) CONC CURB & GUTTER, 6 IN X 24 IN, TP 2
- (G) 6" CRUSHED CONCRETE OR GARDED AGGREGATE BASE COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY WEIGHT DENSITY
- (H) EXISTING PAVEMENT



**TYPICAL GRADE, BASE & SURFACE SECTION SAND HILL ELEMENTARY SCHOOL RD FROM 1+00.00 TO 5+10.00 & FROM 5+66.00 TO 11+13.00**  
 NTS

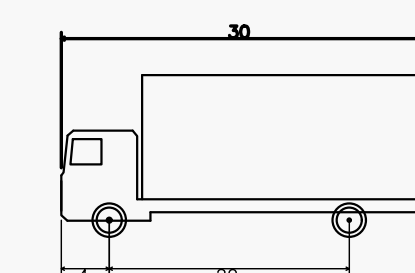


**TYPICAL GRADE, BASE & SURFACE RESURFACING SECTION STAGECOACH AVE FROM 2+00.00 TO 3+84.00**  
 NTS



**LEGEND**

- SWEEP PATH ENVELOPE (FORWARD)
- SWEEP PATH ENVELOPE (REVERSE)
- 1.65R VEHICLE SWEEP PATH CLEARANCE ENVELOPE
- PROPOSED LINE MARKING
- PROPOSED KERB



SU-30 SINGLE UNIT TRUCK (30 ft)

Width	: 8.00
Tract	: 8.00
Lock to Lock Time	: 5.00s
Steering Angle	: 31.80°

**NOTE:**

ALL TURN PATHS ARE BASED ON AASHTO 2011 VEHICLES  
AT A DESIGN SPEED OF 20 mph UNLESS NOTED OTHERWISE.



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SWEPT PATH SINGLE UNIT TRUCK (SU-30)  
SHEET 5 OF 6

SAND HILL PARK  
EFFINGHAM COUNTY  
PREPARED FOR:  
EFFINGHAM COUNTY

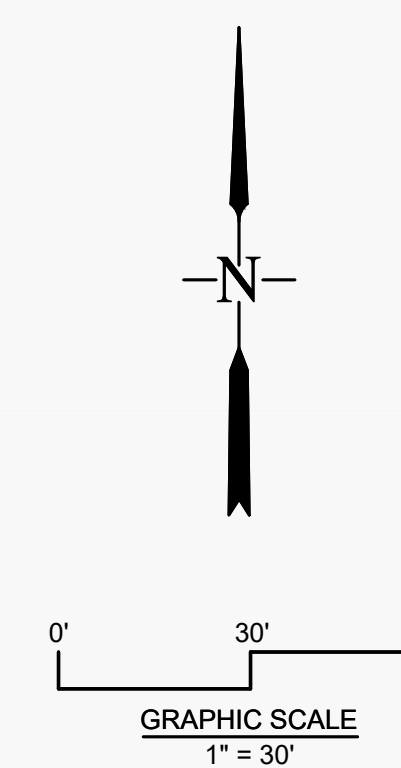
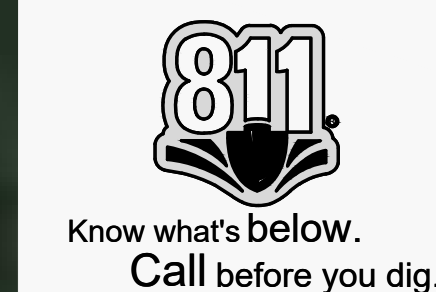
DATE: 11/8/22

PROJECT NUMBER: 00000

DRAWN BY: DUF

CHECKED BY: JLV

SCALE: 1"=30' (FOR 24"x36" PLOT)

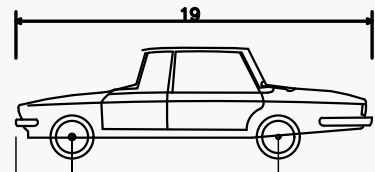


**5**

SHEET:

**LEGEND**

- SWEEP PATH ENVELOPE (FORWARD)
- SWEEP PATH ENVELOPE (REVERSE)
- 1.65R VEHICLE SWEEP PATH CLEARANCE ENVELOPE
- PROPOSED LINE MARKING
- PROPOSED KERB



**P PASSENGER CAR (19 ft)**

Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 4.00s
Steering Angle	: 31.60°

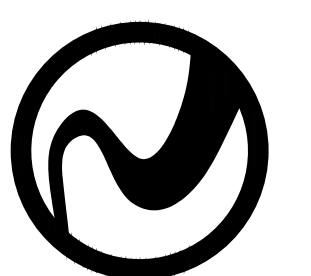
**NOTE:**

ALL TURN PATHS ARE BASED ON AASHTO 2011 VEHICLES  
AT A DESIGN SPEED OF 20 mph UNLESS NOTED OTHERWISE.



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FOR  
CONSTRUCTION

REVISIONS

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SWEPT PATH PASSENGER CAR  
SHEET 6 OF 6

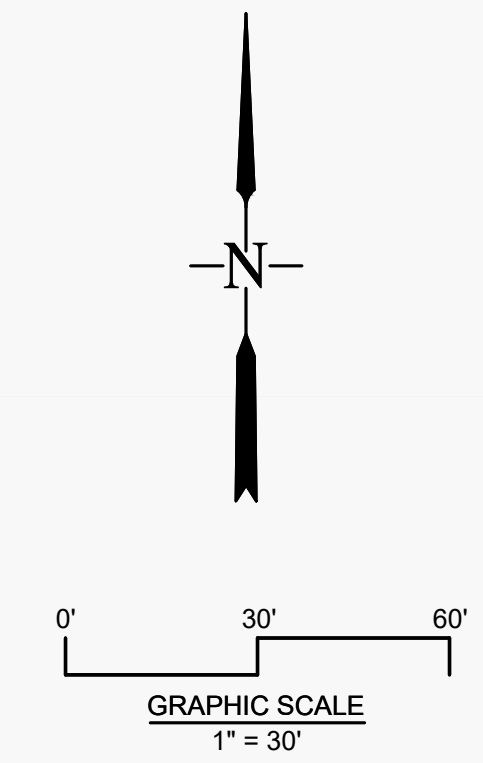
SAND HILL PARK  
EFFINGHAM COUNTY  
PREPARED FOR:  
EFFINGHAM COUNTY

DATE: 11/8/22  
PROJECT NUMBER: 00000

DRAWN BY: DUF

CHECKED BY: JLV

SCALE: 1"=30' (FOR 24"x36" PLOT)



6

SHEET: