

# CITY OF LAGRANGE, GEORGIA

## BUSCH DRIVE SEWER,

## LIFT STATION & FORCE MAIN

PROJECT  
LOCATION



VICINITY MAP  
N.T.S

BUSCH DRIVE SEWER, LIFT  
STATION & FORCE MAIN

GPS LOCATIONS:

BEGINNING POINT : N 33.036688  
W 84.988456  
ENDING POINT : N 33.040055  
W 84.9993.061

CITY OF LAGRANGE  
200 RIDLEY AVENUE  
LAGRANGE, GEORGIA 30240  
TROUP COUNTY, GEORGIA

MAYOR  
JIM THORNTON

CITY COUNCIL  
JIM ARRINGTON  
W.T. EDMONDSON  
NATHAN GASKIN  
TOM GORE  
MARK MITCHELL

CITY MANAGER  
MEG KELSEY

DIRECTOR OF UTILITIES  
PATRICK BOWIE

PREPARED BY:  
CITY OF LAGRANGE ENGINEERING  
DEPARTMENT  
200 RIDLEY AVENUE  
LAGRANGE, GEORGIA  
TROUP COUNTY, GEORGIA  
February 2022

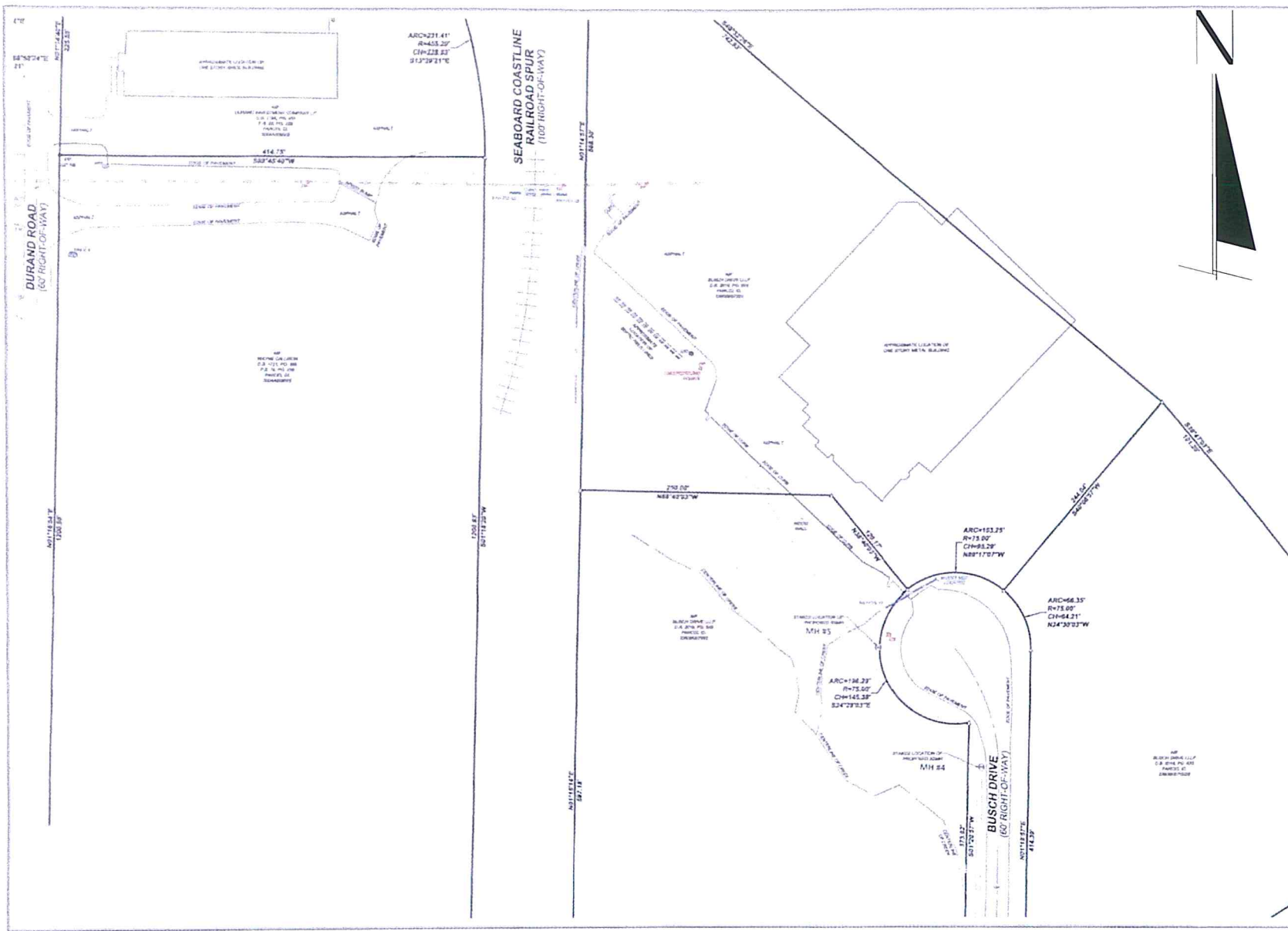
INDEX OF SHEETS	
SHEET	TITLE
A-1	COVER SHEET/ INDEX
A-2	GENERAL NOTES, CONSTRUCTION NOTES & LEGEND
B-1	SITE PLAN, 8" PVC GRAVITY SEWER, (LIFT STATION TO MH#4)
B-2	SITE PLAN, 8" PVC GRAVITY SEWER, (MH#4 TO MH#5)
B-3	8" PVC GRAVITY SEWER PROFILE
G-1	STREAM BUFFER ENCROACHMENT L.S. TO MH3
G-2	STREAM BUFFER ENCROACHMENT MH3 TO MH4
G-3	STREAM BUFFER ENCROACHMENT MH5
G-4	EROSION CONTROL PLAN L.S. TO MH3 CONSTRUCTION PHASE
G-5	EROSION CONTROL PLAN MH3. TO MH4 CONSTRUCTION PHASE
G-6	EROSION CONTROL PLAN MH4. TO MH5 CONSTRUCTION PHASE
G-7	EROSION CONTROL PLAN L.S. TO MH3 FINAL PHASE
G-8	EROSION CONTROL PLAN MH3. TO MH4 FINAL PHASE
G-9	EROSION CONTROL PLAN MH4. TO MH5 FINAL PHASE
G-10	EROSION CONTROL DETAILS
G-11	EROSION CONTROL NOTES
G-12	EROSION CONTROL NOTES
S-1	CIVIL / SITEWORK DETAILS
S-2	SEWER AND FORCE MAIN DETAILS

NO.	DATE	BY	DESCRIPTION

PROJECT #	
DATE	2/28/2022
SCALE	NTS
DESIGN BY	
DRAWN BY	
CHECKED	
SHEET:	A-1







**LAGRANGE**  
 CITY OF LAGRANGE  
 Zoning Department  
 2100 Kelsey Ave  
 Lagrange, GA 30240  
 (706) 881-2331

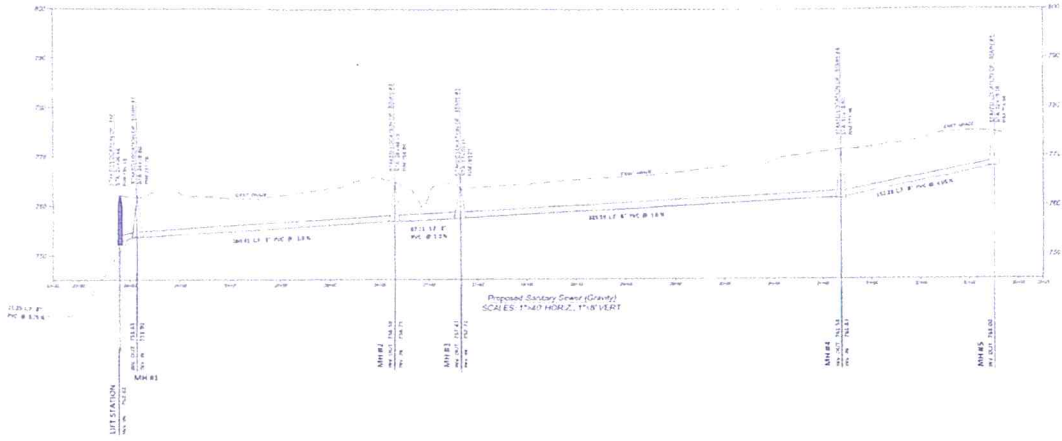
**SITE PLAN**  
**8" PVC GRAVITY SEWER**  
**MH #4 TO MH #5**

NO.	DATE	DESCRIPTION



PROJECT # \_\_\_\_\_  
 DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_  
 DESIGN BY \_\_\_\_\_  
 DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 SHEET  
**B-2**

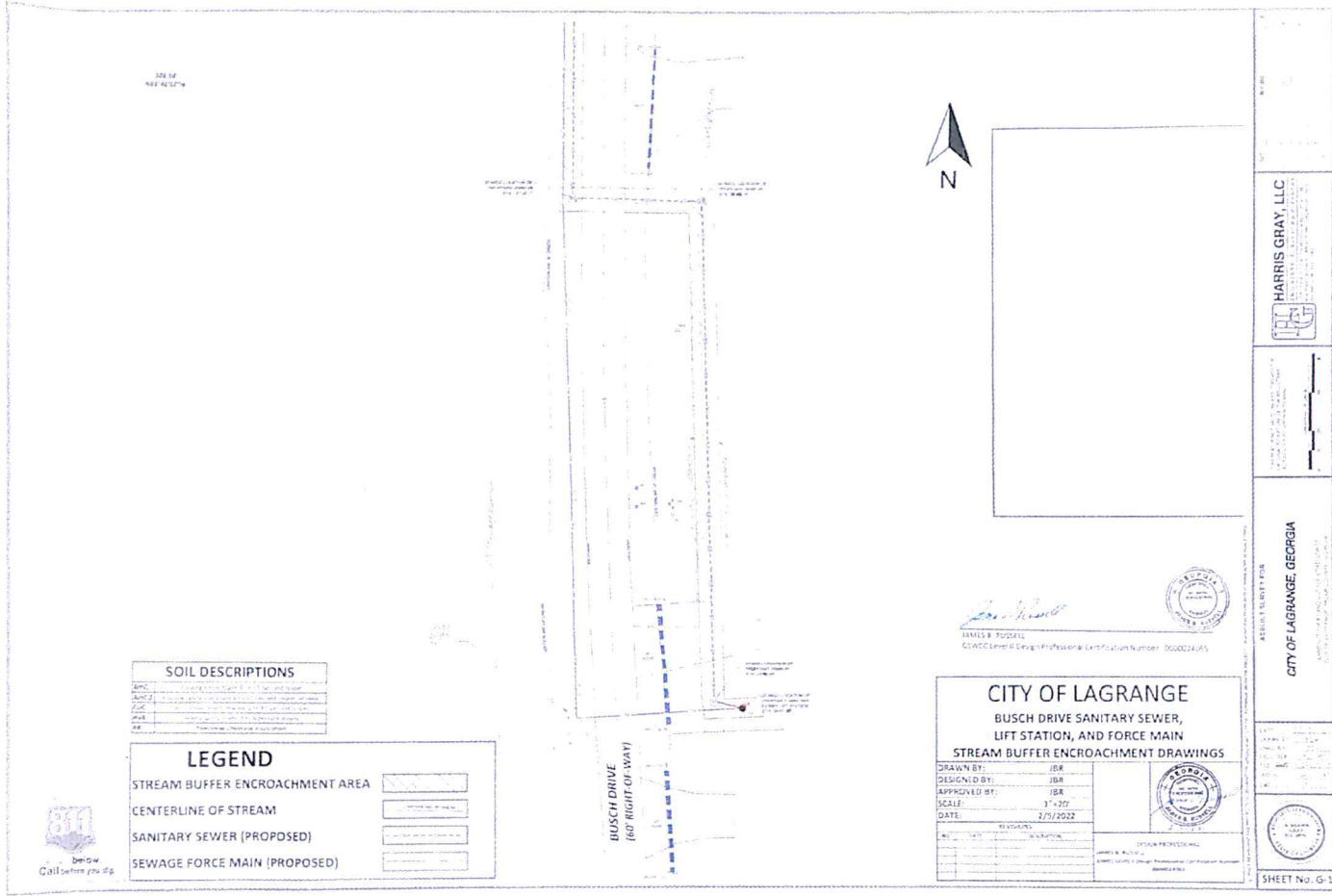




L. GRANGE  
 ENGINEERS, INC.  
 1000 W. 10th Street  
 Lincoln, NE 68502  
 (402) 441-1111

8" PVC GRAVITY SEWER PROFILE

DATE	
PROJECT	
CLIENT	
SCALE	
DESIGNER	
CHECKER	
IN CHARGE	
PROJECT NO.	
SHEET	B-3

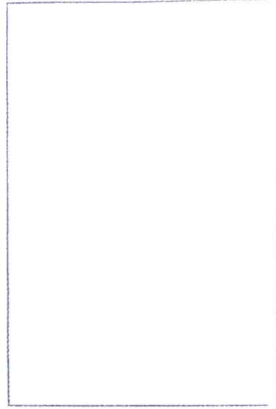


**SOIL DESCRIPTIONS**

APC	Very fine sand to fine sand, 10 to 15% silt and clay
APC-2	Very fine sand to fine sand, 10 to 15% silt and clay, with 5 to 10% gravel
CP	Clayey sand to silty sand, 10 to 15% silt and clay, with 5 to 10% gravel
SP	Sandy silt to silty sand, 10 to 15% silt and clay, with 5 to 10% gravel
SM	Medium sand to coarse sand, 10 to 15% silt and clay

**LEGEND**

STREAM BUFFER ENCROACHMENT AREA	
CENTERLINE OF STREAM	
SANITARY SEWER (PROPOSED)	
SEWAGE FORCE MAIN (PROPOSED)	



DAVID B. BUSCH  
 CIVIL ENGINEER  
 Georgia Professional Certification Number: 000029-AS

**CITY OF LAGRANGE**  
 BUSCH DRIVE SANITARY SEWER,  
 LIFT STATION, AND FORCE MAIN  
 STREAM BUFFER ENCROACHMENT DRAWINGS

DRAWN BY:	JBR
DESIGNED BY:	JBR
APPROVED BY:	JBR
SCALE:	3" = 30'
DATE:	2/15/2022

REVISED:

NO.	DATE	DESCRIPTION

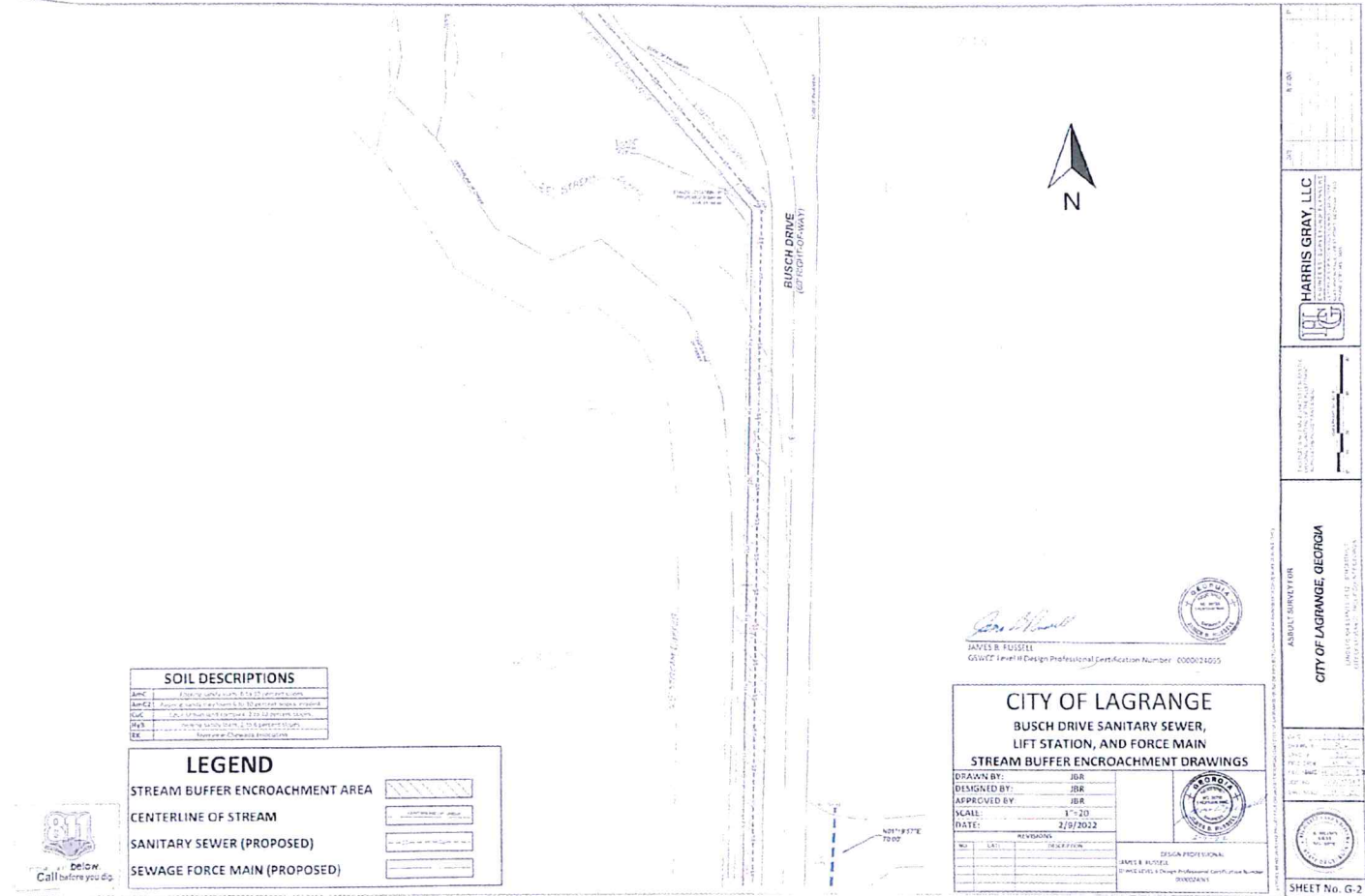
DAVID B. BUSCH  
 CIVIL ENGINEER  
 Georgia Professional Certification Number: 000029-AS

HARRIS GRAY, LLC

CITY OF LAGRANGE, GEORGIA

AGREED TO CITY FOR

SHEET No. G-1



**SOIL DESCRIPTIONS**

AmC	Clayey sand, silty, non-plastic
AmCz	Clayey sand, silty, non-plastic, zone with mottled appearance
ScC	Clayey sand, silty, non-plastic, zone with mottled appearance
Scz	Clayey sand, silty, non-plastic, zone with mottled appearance
St	Clayey sand, silty, non-plastic, zone with mottled appearance

**LEGEND**

STREAM BUFFER ENCROACHMENT AREA	
CENTERLINE OF STREAM	
SANITARY SEWER (PROPOSED)	
SEWAGE FORCE MAIN (PROPOSED)	

**CITY OF LAGRANGE**  
 BUSCH DRIVE SANITARY SEWER,  
 LIFT STATION, AND FORCE MAIN  
 STREAM BUFFER ENCROACHMENT DRAWINGS

DESIGNED BY: JBR  
 CHECKED BY: JBR  
 SCALE: 1"=20'  
 DATE: 2/9/2022

DESIGN PROFESSIONAL:  
 JAMES B. RUSSELL  
 0000024005

ASBUILT SURVEY FOR  
**CITY OF LAGRANGE, GEORGIA**  
 ENGINEER: JAMES B. RUSSELL  
 PROFESSIONAL CERTIFICATION NUMBER: 0000024005

**HARRIS GRAY, LLC**  
 1000 W. BROADWAY, SUITE 100  
 LAGRANGE, GA 30243  
 (770) 438-1100  
 www.harrisgray.com

SHEET No. G-2





374 1/2  
N 88° 42' 30" W



ESCHANGÉ

City of Eschango  
1000 Main Street  
Eschango, NY 12052

CITY OF ESCHANGO, NY  
BUSCH DRIVE SEWER LIFT STATION & FORCE MAIN  
SEWER CONTROL PLAN  
E.S. TO 1041 CONSTRUCTION PHASE



NOTES:  
1. ALL DISTANCES UNLESS OTHERWISE SPECIFIED ARE IN FEET AND DECIMALS THEREOF.  
2. ALL DIMENSIONS TO CENTER UNLESS OTHERWISE SPECIFIED.

**EROSION AND SEDIMENT CONTROL LEGEND**

- Sd1-S** SEDIMENT BARRIER - SIX FEET FIVE TENSILE DOUBLE RIBB
- Sd2-FS** FREET SEDIMENT TRAP
- Sd3** CHECK DAM - STONE, AS REQUIRED
- Ds1** DISTURBED AREA STABILIZATION - MOUNDING ONLY
- Ds2** DISTURBED AREA STABILIZATION - TEMPORARY GRASSING
- Ds3** DISTURBED AREA STABILIZATION - PERMANENT VEGETATION
- Ss** SLOPE STABILIZATION - AS REQUIRED

NOTES:  
1. THE ENGINEER HAS AUTHORITY TO REQUIRE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES, AS DETAIL FOR THE EROSION CONTROL, CLEANING, CONSTRUCTION AND FINAL PLANS, IF THE PROJECT SO REQUIRES TO PREVENT AND CONTROL EROSION AND SEDIMENT CONTROL.



Sd1S

Sd1S

Ds1 Ds2

Sd1S

Sd1S

Ds1 Ds2

Sd1S

Ds1 Ds2

606 37'  
101° 14' 37" W

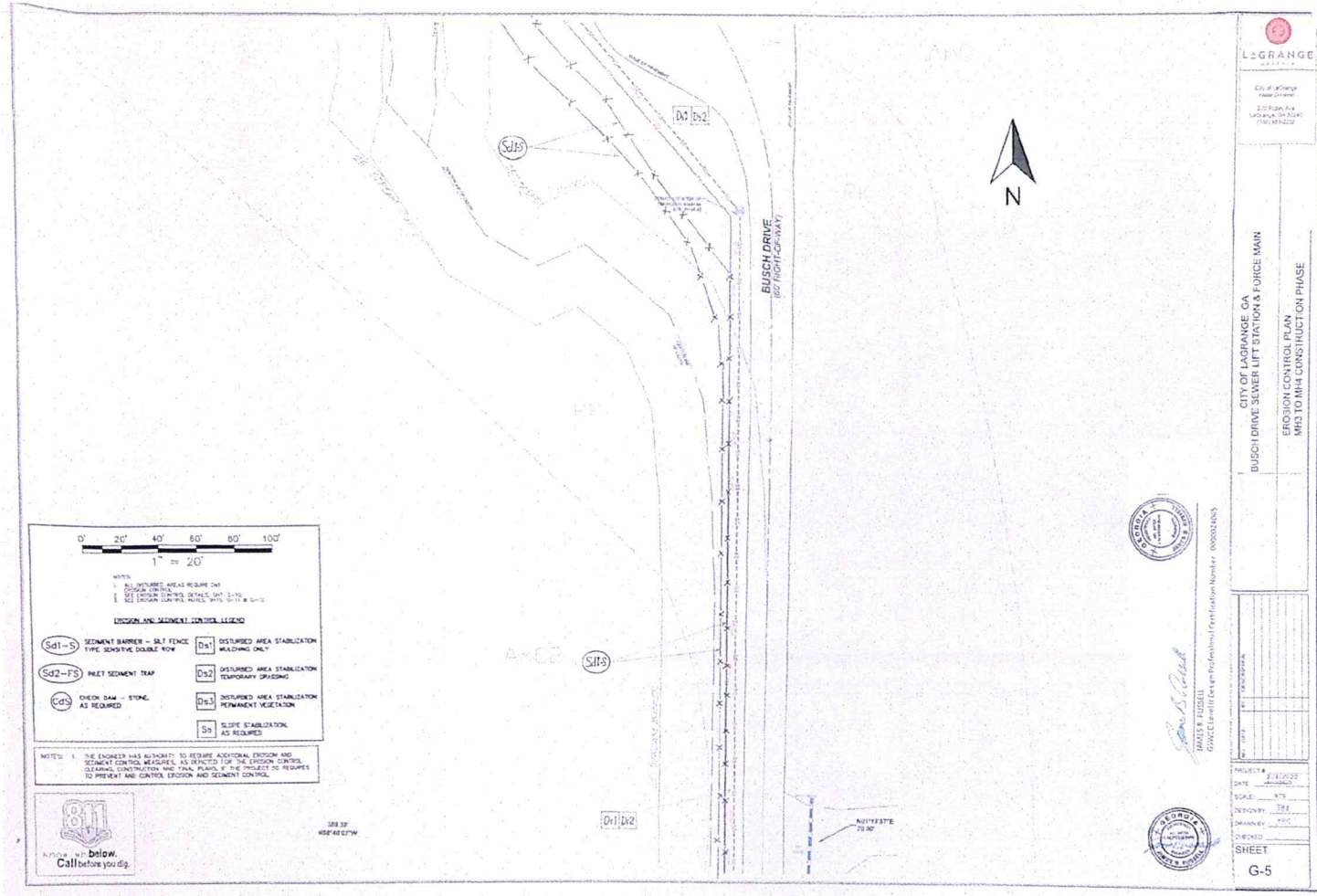
*JAMES B. PRUSSELL*

JAMES B. PRUSSELL  
Civil Engineer  
Professional Certification Number: 0559614265



PROJECT NO.	1041-02
DATE	10/20/11
DESIGNED BY	J.P.
DRAWN BY	J.P.
CHECKED BY	J.P.
DATE	10/20/11

G-4



0' 20' 40' 60' 80' 100'

1" = 20'

NOTES:

- 1. DISTURBED AREAS REQUIRE DA1
- 2. SBT EROSION CONTROL DETAILS SHD 5-10
- 3. EROSION CONTROL MEASURES SHD 5-11 & 5-12

**EROSION AND SEDIMENT CONTROL LEGEND**

<b>Sd1-S</b> SEDIMENT BARRIER - SALT FENCE TYPE SENSITIVE DOUBLE ROW	<b>Da1</b> DISTURBED AREA STABILIZATION MULCHING ONLY
<b>Sd2-FS</b> INLET SEDIMENT TRAP	<b>Da2</b> DISTURBED AREA STABILIZATION TEMPORARY GRASSING
<b>Cd</b> CHECK SAW - STONE AS REQUIRED	<b>Da3</b> DISTURBED AREA STABILIZATION PERMANENT VEGETATION
	<b>Ss</b> SLOPE STABILIZATION AS REQUIRED

NOTES: 1. THE ENGINEER HAS AUTHORITY TO REQUIRE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS DEPICTED UPON THE EROSION CONTROL, CLEARING, CONTROL AND FINAL PLANS, IF THE PROJECT OR REQUIRES TO PREVENT AND CONTROL EROSION AND SEDIMENT CONTROL.



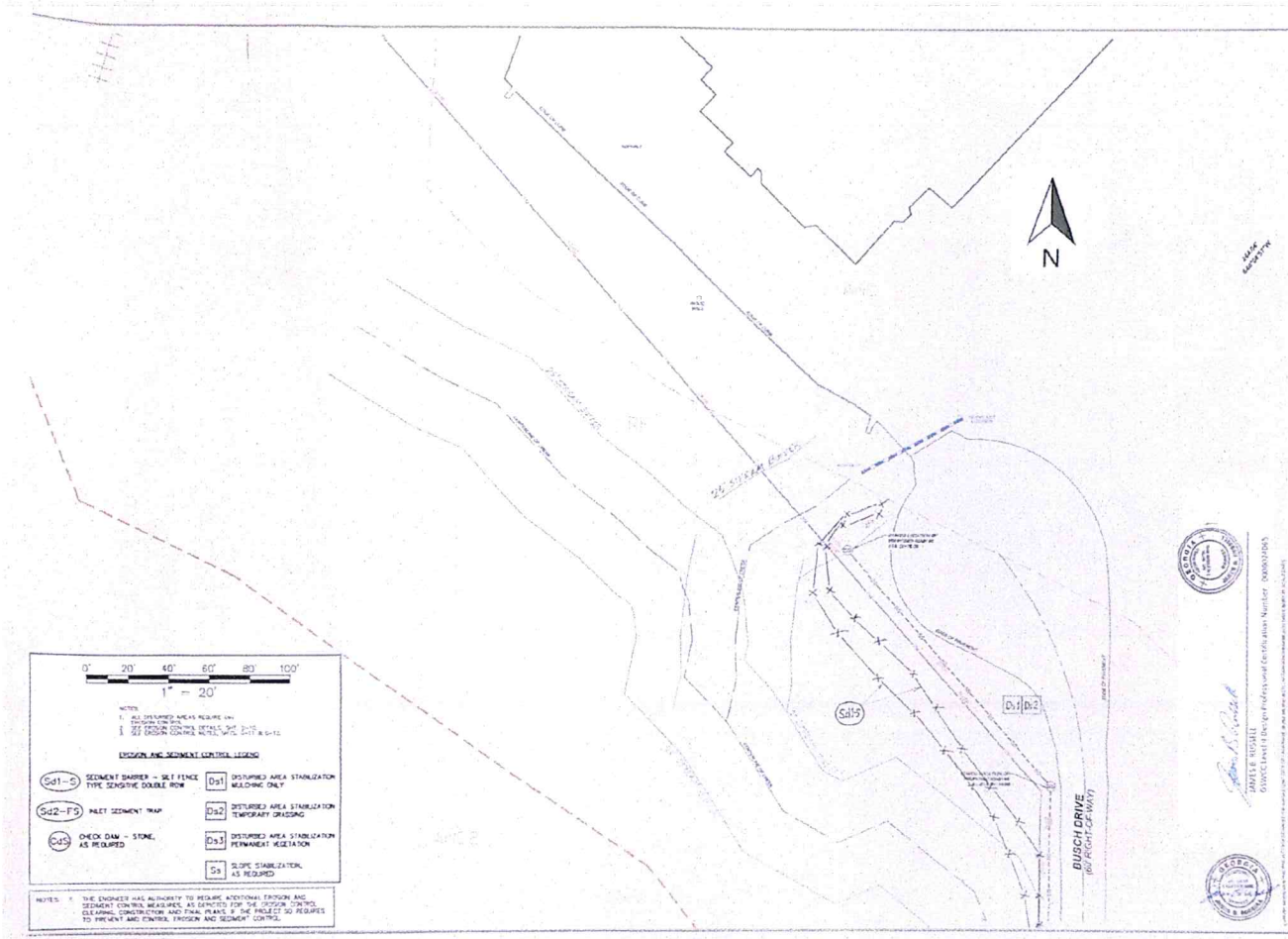
**L-GRANGE**  
CITY OF LAGRANGE  
220 HADLEY AVE  
LAGRANGE, GA 30241  
(770) 487-2222

CITY OF LAGRANGE, GA  
BUSCH DRIVE SEWER LIFT STATION & FORCE MAIN  
EROSION CONTROL PLAN  
M33 TO M14 CONSTRUCTION PHASE

*James R. Fugelli*  
JAMES R. FUGELLI  
GWCC (Professional Engineer) (Cert. Expiration Number: 0000024205)



PROJECT #	21-000000
DATE	01/20/2021
SCALE	AS SHOWN
DESIGNER	GWCC
DRAWN BY	GWCC
CHECKED BY	GWCC
SHEET	G-5



0' 20' 40' 60' 80' 100'

1" = 20'

NOTES:

- ALL DISTURBED AREAS REQUIRE AN EROSION CONTROL PLAN.
- SEE EROSION CONTROL MANUAL, SECTIONS 5-10 & 5-12.

**EROSION AND SEDIMENT CONTROL LISTING**

<b>Sd1-S</b>	SEDIMENT BARRIER - SELF FENCE TYPE SEALING DOUBLE ROW	<b>Ds1</b>	DISTURBED AREA STABILIZATION SEEDING ONLY
<b>Sd2-FS</b>	INLET SEDIMENT TRAP	<b>Ds2</b>	DISTURBED AREA STABILIZATION TEMPORARY SEEDING
<b>Cd1</b>	CHECK DAM - STONE, AS REQUIRED	<b>Ds3</b>	DISTURBED AREA STABILIZATION PERMANENT VEGETATION AS REQUIRED
		<b>Ss</b>	SLOPE STABILIZATION AS REQUIRED

NOTES:

- THE ENGINEER HAS AUTHORITY TO REQUIRE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS DEEMED FOR THE PROTECTING, CLEARING, CONSTRUCTION AND FINAL PHASES IF THE PROJECT SO REQUIRES TO PREVENT AND CONTROL EROSION AND SEDIMENT CONTROL.

**LAGRANGE**  
EST. 1842

City of LAGRANGE  
Public Works  
220 Main St.  
LAGRANGE, GA 30240  
770.486.1000

CITY OF LAGRANGE, GA  
BUSCH DRIVE SEWER LIFT STATION & FORCE MAIN  
EROSION CONTROL PLAN  
MHA TO MFD CONSTRUCTION PHASE

PROJECT NO. 200803005

DATE: 11/11/08

SCALE: 1"=20'

DRAWN BY: JAC

CHECKED BY: JAC

INCHES: 11.00

FEET: 220.00

SHEET  
G-6

JOB #  
DATE

S113



15  
L18RANGE

DATE  
SCALE

CITY OF LAGRANGE, GA  
BUZZI DRIVE SEWER LIFT STATION & FORCE MAIN  
EROSION CONTROL PLAN  
L18 TO WH1 FINAL PHASE

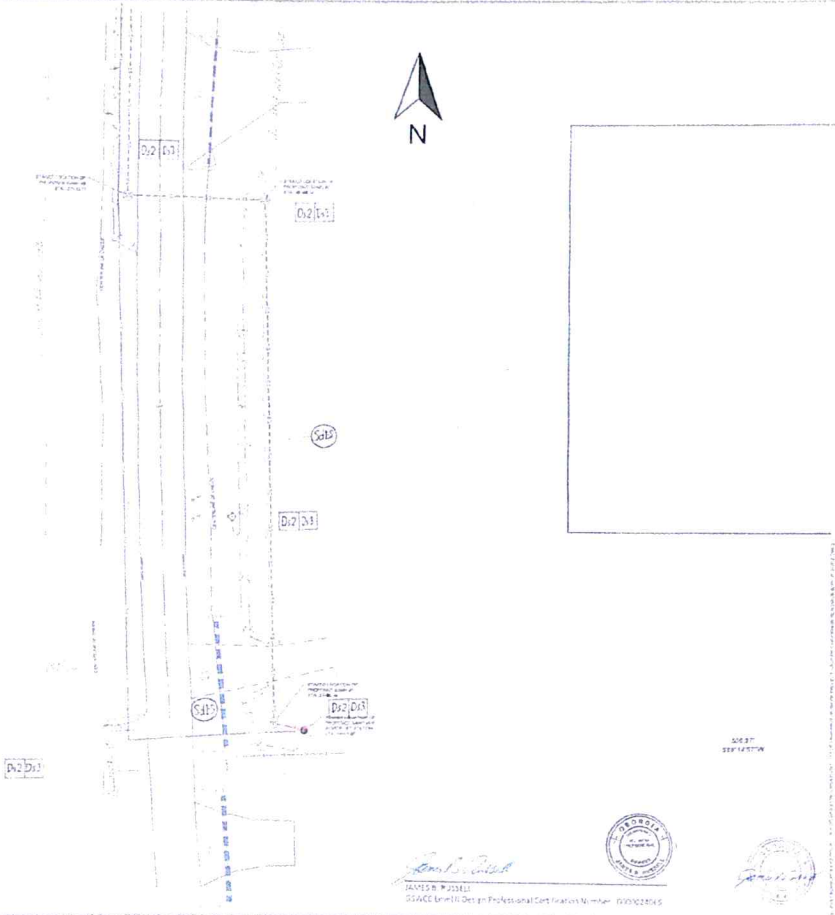
0' 20' 40' 60' 80' 100'  
1" = 20'

NOTES:  
1. ALL DISTANCES ARE TO BE MEASURED BY THE CENTERLINE UNLESS OTHERWISE NOTED.  
2. ALL DISTANCES SHOWN ARE TO BE MEASURED TO THE CENTERLINE UNLESS OTHERWISE NOTED.

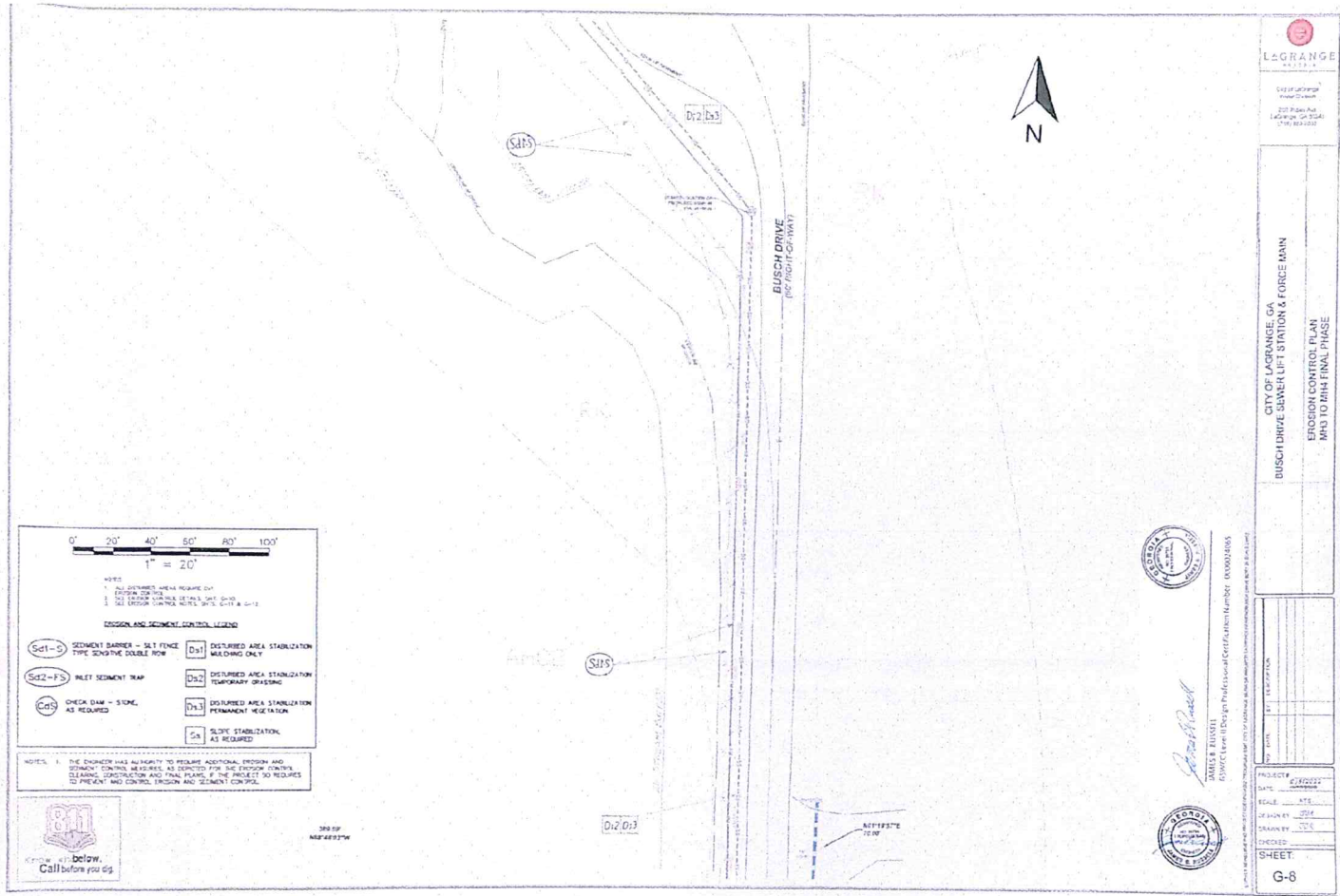
**EROSION AND SEDIMENT CONTROL LEGEND**

Sd1 - S	SEDIMENT BARRIER - SLE FENCE TYPE SLOPING SOURCE ROW	D11	DISTURBED AREA STABILIZATION MAINTAINING ONLY
Sd2 - FS	INLET SEDIMENT TRAP	D22	DISTURBED AREA STABILIZATION TEMPORARY GRASSING
Cc9	CHECK DAM - STONE AS REQUIRED	D33	DISTURBED AREA STABILIZATION PERMANENT VEGETATION
		S5	EROSION STABILIZATION AS REQUIRED

NOTES:  
THE ENGINEER HAS A DUTY TO REQUIRE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED FOR THE PROJECT ON THE EROSION CONTROL AND SEDIMENTATION PLAN. IF THE PROJECT IS REQUIRED TO PREVENT AND CONTROL EROSION AND SEDIMENTATION.







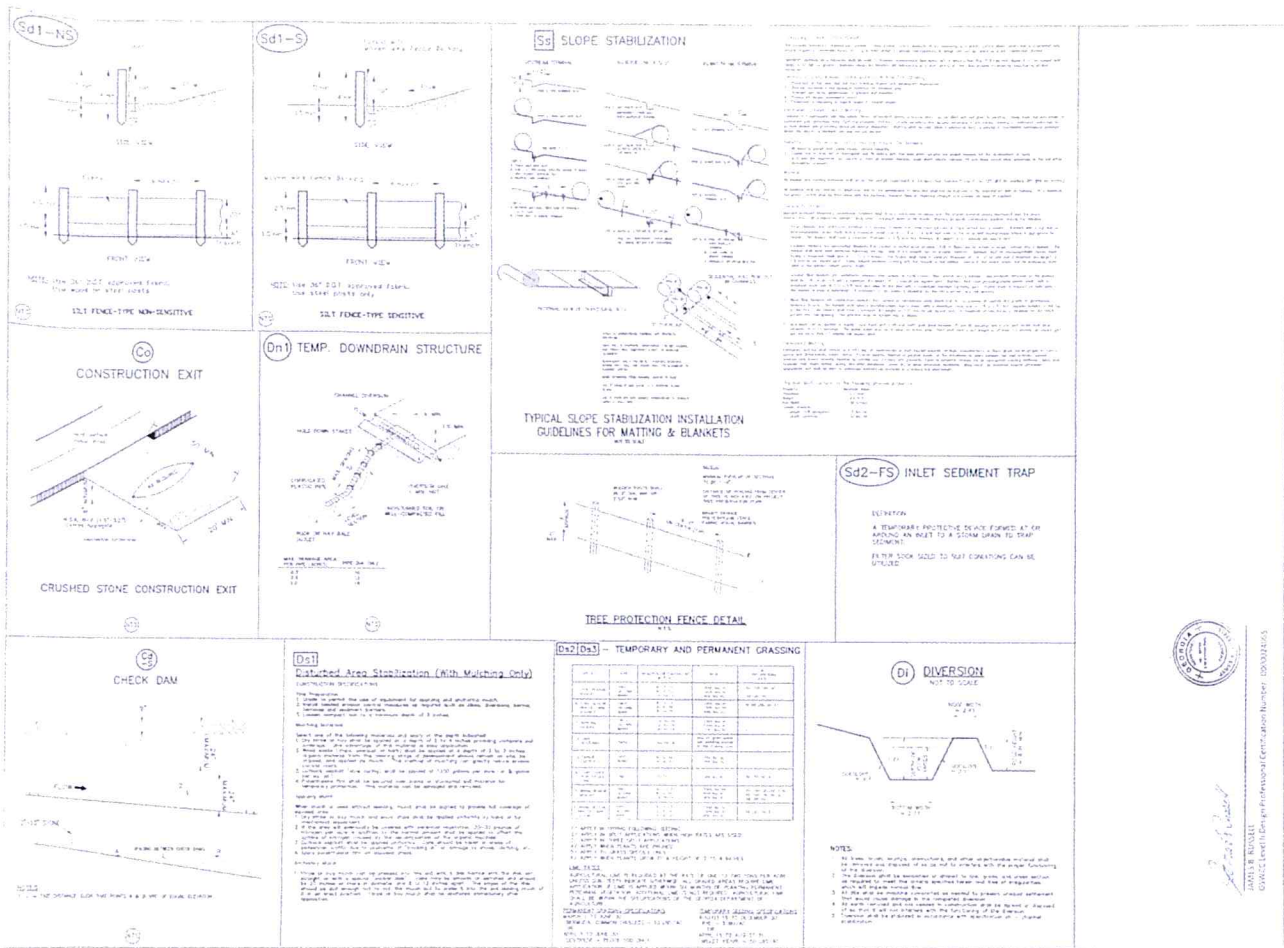
**LA GRANGE**  
 CITY OF LA GRANGE, GA  
 200 Peachtree Parkway, Suite 200  
 La Grange, GA 30240  
 (770) 884-2000

**CITY OF LA GRANGE, GA**  
**BUSCH DRIVE GUTTER LIFT STATION & FORCE MAIN**  
**EROSION CONTROL PLAN**  
**PHASE TO 2014 FINAL PHASE**

PROJECT NO. 14-00000000  
 DATE: 6/14/2014  
 SCALE: ATE  
 DRAWN BY: JBE  
 CHECKED BY: JBE  
 SHEET: G-8







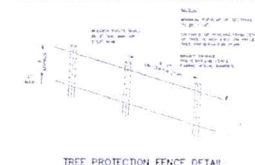
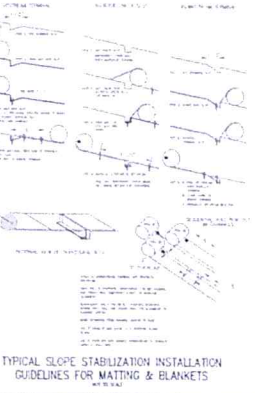
CITY OF LAGRANGE, GA  
BUSCH DRIVE SEWER LIFT STATION #6  
FENCE MAIN  
EROSION CONTROL PLAN DETAILS

Project No.	100
Sheet No.	111
Scale	AS SHOWN
Date	05/07/12
By	05/07/12

No.	DESCRIPTION



**Ss SLOPE STABILIZATION**



**INSTALLATION**

1. Slope stabilization matting and blankets shall be installed on slopes of 1:1 or steeper. The matting and blankets shall be installed in a staggered fashion, with each matting or blanket overlapping the adjacent matting or blanket by a minimum of 12 inches.

2. The matting and blankets shall be secured to the slope by using 1/2" x 4" x 8" wooden stakes driven into the ground at a maximum spacing of 4 feet.

3. The matting and blankets shall be installed in a manner that allows for water to infiltrate the slope.

4. The matting and blankets shall be installed in a manner that allows for the growth of vegetation.

5. The matting and blankets shall be installed in a manner that allows for the installation of a permanent slope stabilization structure.

6. The matting and blankets shall be installed in a manner that allows for the installation of a permanent slope stabilization structure.

7. The matting and blankets shall be installed in a manner that allows for the installation of a permanent slope stabilization structure.

8. The matting and blankets shall be installed in a manner that allows for the installation of a permanent slope stabilization structure.

9. The matting and blankets shall be installed in a manner that allows for the installation of a permanent slope stabilization structure.

10. The matting and blankets shall be installed in a manner that allows for the installation of a permanent slope stabilization structure.

**Sd2-FS INLET SEDIMENT TRAP**

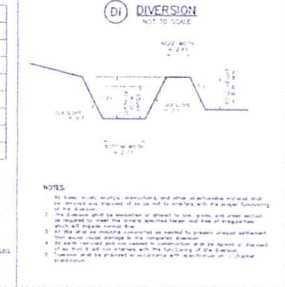
**DEFINITION**

A temporary protective device formed at or around an inlet to a storm drain to trap sediment.

FOR EACH SIZE TO THAT OPERATIONS CAN BE SYNCHRONIZED.

**Dd2/Dd3 - TEMPORARY AND PERMANENT GRASSING**

Grass Species	Establishment Rate (%)	Soil Erosion Control (%)	Soil Stabilization (%)	Soil Improvement (%)
1. Bahia	95	95	95	95
2. Bermuda	95	95	95	95
3. Centennial	95	95	95	95
4. Coastal	95	95	95	95
5. Dallis	95	95	95	95
6. Floridana	95	95	95	95
7. Guinea	95	95	95	95
8. Hybrid	95	95	95	95
9. Johnsongrass	95	95	95	95
10. Kentucky	95	95	95	95
11. Mowry	95	95	95	95
12. Orchardgrass	95	95	95	95
13. Perennial Ryegrass	95	95	95	95
14. Paspalum	95	95	95	95
15. St. Augustine	95	95	95	95
16. Tall Fescue	95	95	95	95
17. Timothy	95	95	95	95
18. Zoysia	95	95	95	95



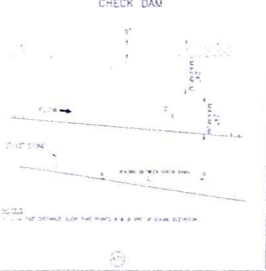
**Dd1 Mulched Area Stabilization (With Mulching Only)**

**DEFINITION**

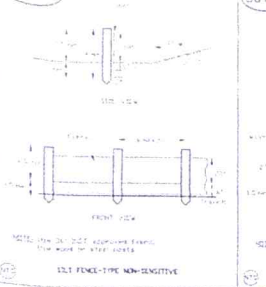
A temporary protective device formed at or around an inlet to a storm drain to trap sediment.

FOR EACH SIZE TO THAT OPERATIONS CAN BE SYNCHRONIZED.

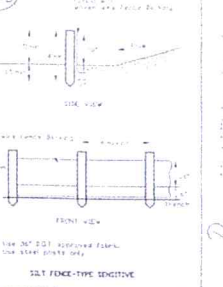
**Cc CHECK DAM**



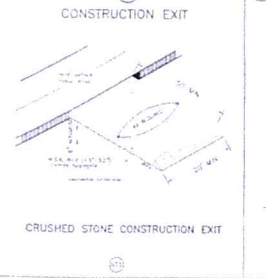
**Sd1-NS SALT FENCE-TYPE NON-SENSITIVE**



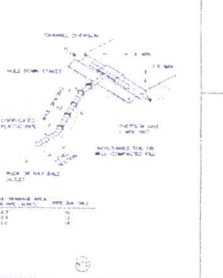
**Sd1-S SALT FENCE-TYPE SENSITIVE**



**Cc CONSTRUCTION EXIT**



**Dn1 TEMP. DOWNDRAIN STRUCTURE**





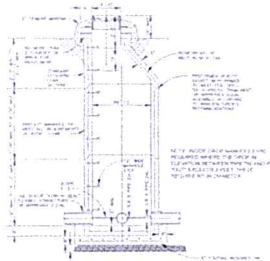




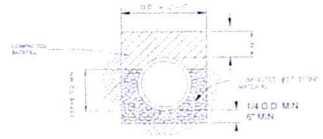




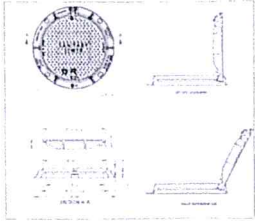
1. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 3. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.



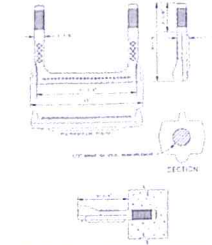
PRECAST CONCRETE MANHOLE



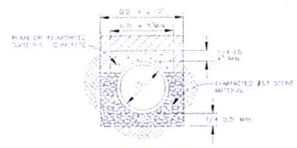
MINIMUM P.V.C PIPE BEDDING



STANDARD MANHOLE FRAME AND HINGED COVER



MANHOLE STEP DETAIL



CONCRETE ARCH  
 CLASS A BEDDING



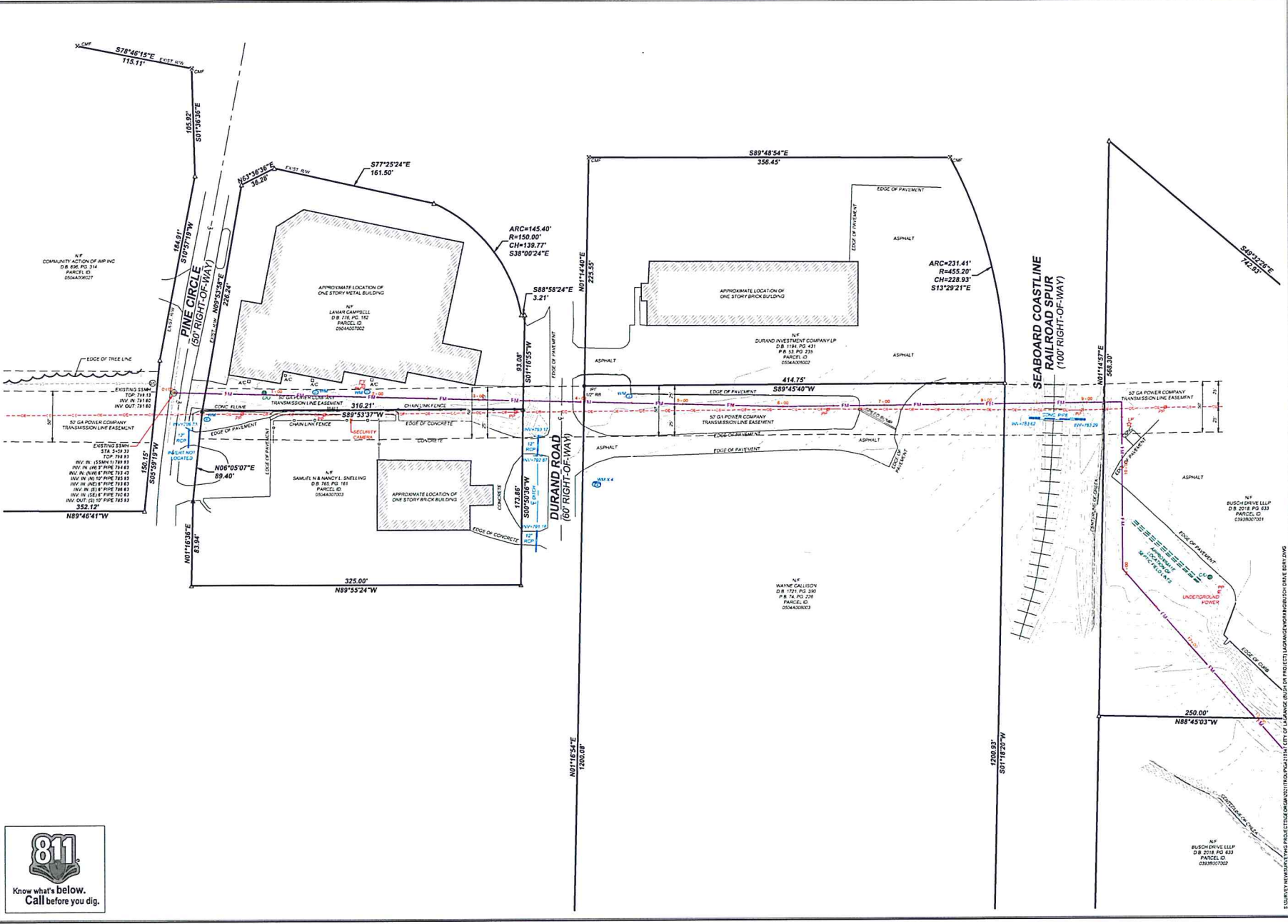
PIPE ADAPTER  
 JOINS 2 DIFFERENT TYPES OF PIPE

LEGRANCE	TYPICAL PIPE ADAPTER	REVISED	DATE
----------	----------------------	---------	------

**LEGRANCE**

SEWER AND FORCE MAIN DETAILS

PROJECT	DATE
NO.	DATE
REVISION	DATE
BY	DATE
CHECKED	DATE
APPROVED	DATE
SHEET	
S-2	



DATE	12/16/2021
DRAWN BY	SLV
CHKD BY	BSS
FIELD CREW	KLMP
FILE NAME	BUSCH DRIVE 805
JOB NO	GA210347
DWG SCALE	1" = 42'

ASBUILT SURVEY FOR  
**CITY OF LAGRANGE, GEORGIA**  
 LAND LOT 184 & LAND LOT 171, 8TH DISTRICT,  
 CITY OF LAGRANGE, TROUP COUNTY, GEORGIA

DATE: 12/16/2021  
 ENGINEERS - SURVEYORS - PLANNERS  
**HARRIS GRAY, LLC**  
 CERTIFICATE OF AUTHORIZATION NO. LP 80134  
 CENTRE POINT, GEORGIA 30131  
 PHONE: (770) 445-5338

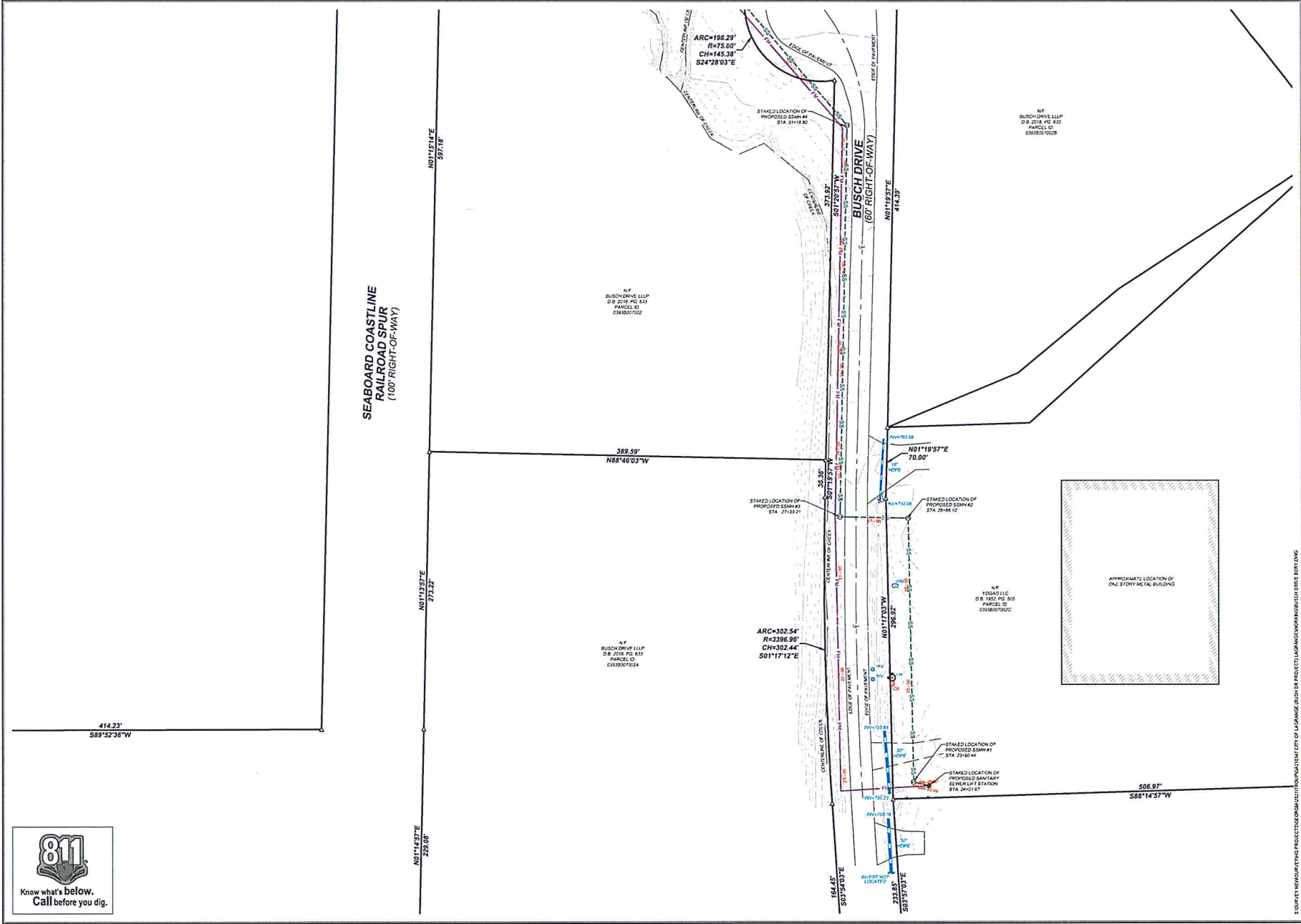
THIS PLAN HAS BEEN PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF IT COMES INTO ACCORDANCE WITH THE ORIGINAL SURVEY DATA AND THE REQUIREMENTS OF THE REGISTERED PROFESSIONAL ENGINEERING SEAL.

SCALE: 1" = 42'

REGISTERED PROFESSIONAL ENGINEER  
**HARRIS GRAY**  
 NO. 1874  
 STATE OF GEORGIA

SHT. 1 OF 5





**ASBUILT SURVEY FOR**

**CITY OF LAGRANGE, GEORGIA**

LANDS OF 0.14 LAKESIDE, 0.10 RICHFIELD  
CITY OF LAGRANGE, DEKALB COUNTY, GEORGIA

SURVEY NUMBER: 21575 PROJECT: SBARR#1 (SEWER) PROJECT LOCATION: BUSH DRIVE, LAGRANGE, GA

NO.	REVISIONS	DATE

THIS PLAN IS NOT VALID UNLESS IT BEARS THE ORIGINAL SIGNATURE OF THE REGISTRANT ACROSS THE REGISTRANT'S SEAL.

**HARRIS GRAY, LLC**  
ENGINEERS - SURVEYORS - PLANNERS  
CERTIFICATE OF AUTHORIZATION NO. LP 20118  
1111 FIFTH STREET, SUITE 200  
ATLANTA, GEORGIA 30309  
PHONE: (770) 447-1444

DATE: 12/16/2021  
DRAWN BY: RLW  
CHECKED BY: RLW  
FIELD CREW: K. LEO  
FILE NAME: BUSH DRIVE SBARR#1  
JOB NO.: GA210317  
DWG SCALE: 1" = 42'